

**CALIFORNIA ENVIRONMENTAL QUALITY ACT FINDINGS
AND CERTIFICATION OF EIR IN CONNECTION WITH THE APPROVAL
OF THE 2018 LRDP**

UNIVERSITY OF CALIFORNIA, DAVIS CAMPUS

**I. CERTIFICATION OF THE FINAL ENVIRONMENTAL IMPACT
REPORT**

The University of California (“University”), as the lead agency pursuant to the California Environmental Quality Act (“CEQA”), has prepared a Draft and Final Environmental Impact Report (“Final EIR”) for the proposed University of California, Davis (“UC Davis”) 2018 Long Range Development Plan (“2018 LRDP” or “Project”) and the Orchard Park Redevelopment (“OPR”) and West Village Extension (“WVE”) components of the 2018 LRDP. The 2018 LRDP will be implemented and guide future development of campus uses/improvements at the University of California, Davis campus. The Board of Regents of the University of California (“The Board”) hereby certifies the Final EIR, issues these Findings and concurrently approves the LRDP.

The Final EIR has been assigned State Clearinghouse Number 2017012008. The Final EIR consists of four volumes. The Draft EIR consisting of Volume 1, Programmatic Evaluation of 2018 LRDP and appendices (A through H); Volume 2, West Village Expansion Project EIR; Volume 3, Orchard Park Redevelopment Project EIR. Volume 4 consists of responses to comments, revisions to the Draft EIR, and the mitigation monitoring and reporting program for the 2018 LRDP and two project-level components. Volumes 1-4 are collectively referred to as the “Final EIR”. The Final EIR assesses the potential environmental effects of implementation of the 2018 LRDP, OPR and WVE Projects, identifies the means to eliminate or reduce potentially significant adverse impacts, and evaluates a reasonable range of alternatives to the Project. The Final EIR also responds to comments on the Draft EIR, explains changes made to the text of the Draft EIR, and includes a Mitigation Monitoring and Reporting Program that outlines the substance and timing of mitigation measures required for the Project. Collectively, the Draft and Final EIR, and the administrative record in support thereof, are referred to herein as the “EIR” or “Final EIR”.

Pursuant to Public Resources Code (“PRC”) section 21081 and Title 14, California Code of Regulations Section 15090, The Board hereby certifies that it completed the following activities prior to approving the 2018 LRDP: the Board has received the Final EIR; the Board has reviewed and considered the information contained in the Final EIR and received through public comments; and the Board has considered all additional written and oral statements received prior to or at its public hearing on the Final EIR and on the 2018 LRDP. The Board additionally certifies that the Final EIR was completed in compliance with CEQA, the CEQA Guidelines (Code of Regulations, Title 14, section 15000 et seq.), and the University of California’s policies and procedures for the implementation of CEQA and that the Final EIR reflects the University’s independent judgment and analysis. The

conclusions presented in these Findings are based on the Final EIR and all other evidence in the record of proceeding.

The Board certifies that the Final EIR satisfies the requirements for a Long Range Development Plan EIR prepared under Public Resources Code section 21080.09 and CEQA Guidelines section 15081.5(b). The findings set forth below pertain to the approval of the 2018 LRDP for the UC Davis campus. Future projects that further implement the 2018 LRDP will be considered for approval by the University or UC Davis pursuant to the University's bylaws, standing orders, policies, and delegations of authority. The CEQA analysis for those projects may be tiered from the Final EIR and may be based in whole or in part on the analysis contained within the Final EIR and within any additional project-level review required by CEQA pursuant to Public Resources Code sections 21068.5 and 21093 and CEQA Guidelines sections 15152 and 15385.

II. FINDINGS

Having received, reviewed, and considered the Final EIR and all other information in the administrative record, the Board hereby adopts the following Findings and Statement of Overriding Considerations for the 2018 LRDP in compliance with CEQA, the CEQA Guidelines, and the University's procedures for implementing CEQA. The Board adopts these Findings and Statement of Overriding Considerations in conjunction with its approval of the 2018 LRDP, as set forth in Section III, below.

A. Background and Project Description

The approximately 5,300-acre UC Davis campus is located in Yolo and Solano Counties. The campus comprises four general geographic areas: the central campus, the south campus, the west campus, and Russell Ranch. The campus is surrounded by extensive agricultural uses to the west and south and by residential, institutional, and commercial land uses in the city of Davis to the north and east.

The 2018 LRDP is intended to support the teaching, research, and public service missions of the University. The plan's growth assumptions are based on campus population projections and an understanding of campus needs and goals. The 2018 LRDP represents the long-term planning document for the UC Davis campus, and it involves modifications to the previous land use plan established as part of the 2003 LRDP. The 2018 LRDP proposes general types of campus development and land uses to support projected campus population growth and enable expanded and new program initiatives. Existing land uses are shown in Exhibit 2-3 of the Draft EIR, and the proposed land use scenario for the 2018 LRDP is shown in Exhibit 2-4 of the Draft EIR. The 2018 LRDP identifies the following land use categories to support anticipated campus growth: Academic Land Use Designations; Open Space Land Use Designations; Residential Land Use Designations; and Infrastructural Land Use Designations. The EIR functions as a program EIR for the potential overall enrollment and development proposed in the 2018 LRDP which is analyzed in Volume 1 of the EIR. The EIR is intended to be used as the environmental review for the implementation of the LRDP in accordance with CEQA requirements.

The 2018 LRDP planning effort anticipates that the on-campus student population could grow from approximately 33,825 (2016–2017 academic year) to approximately 39,000 by the 2030–2031 academic year. In response to this potential increase in the student population and anticipated increases in mission-based activities, UC Davis anticipates that its faculty and staff population could increase from approximately 12,365 to approximately 14,500 in the same time frame. To accommodate the increased population and respond to evolving higher education needs at UC Davis, the 2018 LRDP proposes the development of construction of an additional 2 million square feet of academic and administrative building space. Substantial additional on-campus housing will also be developed to accommodate 100 percent of the new students as well as a portion of the existing campus population. Implementation of the 2018 LRDP would provide additional student housing through redevelopment of existing Student Housing–designated areas (e.g., Orchard Park) and designation of other areas (approximately 42 additional acres) of campus as Student Housing. The 2018 LRDP plans land uses to support up to an additional 8,000 students in residence halls and apartments. In 2016-2017, more than 9,800 students lived on campus in Student Housing–designated areas. The 2018 LRDP does not address planning or growth for UC Davis facilities outside of the Davis area, such as at the UC Davis Sacramento Medical Center, Tahoe Environmental Research Center, or Bodega Marine Laboratory.

The EIR also functions as a project EIR for two student housing projects on the UC Davis campus. The first project (West Village Expansion), which is analyzed at a project level in Volume 2 of this EIR, involves constructing and operating student housing at the UC Davis West Village neighborhood. Development of the West Village Expansion component would provide housing for up to a total of 3,800 students, of which 1,200 would be transfer students. The development would include a community center and a one-acre park with active and passive recreational resources for students. For the West Village Expansion project, Volume 2 of the EIR includes analysis of the environmental impacts of a remote parking area south of I-80 located on approximately 20 acres immediately south and east of I-80 and adjacent to Old Davis Road. In Volume 3, the EIR evaluates the second project (Orchard Park Redevelopment), which includes the redevelopment of the 19 acre site of the former Orchard Park Apartments for approximately 200 student family apartments and an additional 1,200 student beds.

B. CEQA Environmental Review Process and Preparation of EIR

UC Davis began the planning process for the 2018 LRDP by engaging various campus stakeholders and the public in a comprehensive community engagement process. Public outreach for the 2018 LRDP began in the fall of 2015 with a series of public open houses at the UC Davis Nelson Hall gallery. The community engagement and public outreach process at the Nelson Hall gallery was well attended and UC Davis received the 2017 merit award for public outreach/best practices, a professional recognition award, from the Sacramento Valley Section of the American Planning Association. In May of 2016, UC Davis released a preliminary planning scenario for the 2018 LRDP and conducted additional outreach with the campus community and within the City of Davis.

Through the summer of 2016, UC Davis campus planners continued to refine the 2018 LRDP planning scenario and then conducted on- and off-campus public outreach in the fall of 2016. During the public outreach process, UC Davis campus planners listened carefully to the concerns and interests of both on- and off-campus commenters. The public feedback allowed UC Davis to incorporate many suggestions and to consider options for certain suggestions that could not be accommodated. Through the public outreach process, UC Davis has made major and minor revisions to the 2018 LRDP planning proposal and issued a series of infographics with each successive version providing an overview of the updated planning effort that identified targeted areas for growth under the plan. The following list provides approximate dates and titles of the graphical summaries of the planning effort at that time:

October 2015	Conceptual Planning Scenario
May 2016	Preliminary Planning Scenario
September 2016	Draft Planning Scenario
December 2016	Updated Draft Planning Scenario
January 2017	2018 LRDP Notice of Preparation Infographic
March 2018	Revised Planning Scenario and Draft 2018 LRDP

Many public comments during the planning efforts mentioned housing location and housing quantities as key concerns. Comments regarding housing location indicated a desire to avoid housing on campus areas known as Toomey Field, Howard Field, and Russell Field in order to maintain these student athletic and recreational spaces. These comments were reactions to the October 2015 and May 2016 planning scenarios that proposed development of these sites for student housing purposes. After consideration of these comments, UC Davis revised the proposed land scenario and removed student housing from these locations. Additional comments during the planning process indicated a desire for more student housing in the 2018 LRDP. UC Davis has continued to evaluate campus land options as described below for additional housing and additional density options that could result in more student housing during the implementation of the 2018 LRDP.

UC Davis released a Notice of Preparation (NOP) on January 4, 2017 for a 30 day comment period. As required by Section 15082(a) of the CEQA Guidelines, UC Davis sent the NOP to the State Office of Planning and Research (“OPR”) and responsible agencies to solicit input on the scope and content of the Draft EIR. In addition, UC Davis sent the NOP to other regional and local agencies, 200 organizations, and individual community members that had previously requested such notice. The local organizations include, but are not limited, to Yocha Dehe Wintun Nation, community activists, attendees of prior LRDP planning workshops, UC Davis students and employees. An open house scoping session was held on January 25, 2017 at which written comments were received. UC Davis received 85 NOP comments. A summary of the relevant NOP comments is provided at the beginning of each topical section in Chapter 3 of each volume of the Draft EIR. UC Davis carefully reviewed all of the agency and public comments when considering plan considerations/revisions and issues to be evaluated

further in the LRDP EIR. The scoping comments included several requests for incorporating additional/modified housing alternatives into the Draft EIR, and the results of these requests are reflected in the EIR and the EIR alternatives section. In addition, after the scoping period, UC Davis continued to interact with commenting and other agencies, including the City of Davis, Yolo County, Yolo County Transportation District, Yolo-Solano Air Quality Management District, and the California Department of Transportation. On-going interaction with these agencies assisted with refining the baseline conditions, developing the impact methodology, and projecting the cumulative conditions in this EIR.

Through 2017, UC Davis continued to refine the draft 2018 LRDP, considering additional options to increase student housing on the campus (an important issue raised by the City of Davis and the Davis community) and maintain flexibility for maximizing housing capacity and density. In May 2017, UC Davis issued a request for proposals (RFP) to enlist a development partner for two new student housing projects. The RFP process identified student housing targets at West Village for 1,875 students and at Orchard Park for 900 students. The RFP identified that the housing targets were flexible; that developers were encouraged to propose housing quantities in excess of the targets; and that the proposed developments contained no height limits and no limits on building density. The RFP respondents proposed a mixture of housing quantities and the selected developer proposed housing for up to 3,800 students at West Village and up to 1,400 students at Orchard Park. In addition, UC Davis increased housing projections for other campus student housing locations. The result of these efforts is an increase in the student housing projection in the 2018 LRDP, from the January 2017 NOP projection of new on-campus housing for 6,200 students to the current planning proposal for new on-campus housing for 9,050 students, a 45% increase in on-campus housing from the original proposal.

An EIR (State Clearinghouse No. 2017012008) was prepared for the Project in accordance with CEQA, the State CEQA Guidelines, and the University's policies and procedures for the implementation of CEQA. As identified in the Notice of Preparation for the Draft EIR, the following resource areas were determined to require analysis as part of the EIR: aesthetics; agricultural and forestry resources; air quality; archaeological, historical, and tribal cultural resources; biological resources; energy; geology, soils, and seismicity; greenhouse gas emissions; hazards and hazardous materials; hydrology and water quality; land use and planning; noise; population and housing; public services; recreation; transportation, circulation, and parking; and utilities and service systems.

The analysis in the EIR identified the following Significant and Unavoidable impacts for the 2018 LRDP even with implementation of mitigation measures:

- ▲ Volume 1, Impact 3.1-1: Result in a substantial adverse effect on a scenic vista.
- ▲ Volume 1, Impact 3.2-1: Convert agricultural uses, including lands designated as Important Farmlands, to non-agricultural use or involve changes in the existing environment that could result in conversion of Important Farmland to non-agricultural use.

- ▲ Volume 1, Impact 3.3-1: Construction-generated emissions of NO_x.
- ▲ Volume 1, Impact 3.3-2: Operational emissions of criteria air pollutants and precursor emissions.
- ▲ Volume 1, Impact 3.3-6: Land use compatibility with off-site sources of toxic air contaminants and ultrafine particulates.
- ▲ Volume 1, Impact 3.4-4: Impacts to historical resources.
- ▲ Volume 1, Impact 3.5-11: Conflict with local policies or ordinances related to the protection of biological resources – Heritage trees.
- ▲ Volume 1, Impact 3.13-1: Directly or indirectly induce substantial population growth and housing demand.

- ▲ Volume 1, Impact 3.16-1: Freeway level of service impacts.
- ▲ Volume 1, Impact 3.16-2: Intersection level of service impacts.
- ▲ Volume 1, Impact 3.16-6: Cumulative impacts to freeway level of service.

Cumulative impacts of the 2018 LRDP to Aesthetics (effects on a scenic vista), Agriculture (conversion of farmland in the region), Air Quality (criteria air pollutant emissions during construction and operation), Historic Resources (alteration of historic structures), Population and Housing (direct population growth), and Transportation (freeways level of service) would also be significant and unavoidable as a result of implementation of the 2018 LRDP.

The analysis in the EIR identified the following significant and unavoidable impacts for the WVE Project even with implementation of mitigation measures:

- ▲ Volume 2, Impact 3.1-1: Result in a substantial adverse effect on a scenic vista.
- ▲ Volume 2, Impact 3.2-1: Convert agricultural uses, including lands designated as Important Farmlands, to non-agricultural use or involve changes in the existing environment that could result in conversion of Important Farmland to non-agricultural use.
- ▲ Volume 2, Impact 3.3-1: Construction-generated emissions of NO_x
- ▲ Volume 2, Impact 3.16-1: Freeway level of service impacts (Project and cumulative).
- ▲ Volume 2, Impact 3.16-2: Intersection level of service impacts.
- ▲ Volume 2, Impact 3.16-4: Impacts to bicycle facilities (Project and cumulative).
- ▲ Volume 2, Impact 3.16-5: Impacts to pedestrian facilities (Project and cumulative)

The analysis in the EIR identified the following significant and unavoidable impacts for the OPR Project even with implementation of mitigation measures:

- ▲ Volume 3, Impact 3.16-1: Freeway level of service impacts.
- ▲ Volume 3, Impact 3.16-4: Impacts to bicycle facilities.

As further discussed in Section III of this document, because unavoidable significant adverse impacts would result from the 2018 LRDP, The Regents, as Lead Agency, must prepare a “Statement of Overriding Considerations” before it can approve the 2018 LRDP.

On April 13, 2018, the Draft EIR was submitted to the State Clearinghouse in the Governor’s Office of Planning and Research (OPR) and was released for public review establishing a 47-day review period concluding May 29, 2018. The Notice of Availability of the Draft EIR, along with a USB drive of the Draft EIR, was provided to approximately 64+ public agencies, and approximately 200 homeowners associations (HOAs), organizations, NOP commenters, and individual community members that previously requested such notice; and was available on the UC Davis campus (at Mrak Hall and Shields library) and website, as well as public libraries within the cities of Davis, West Sacramento, Dixon, Woodland, and Winters. Additionally, the University held a public hearing on the UC Davis International Center located on the UC Davis campus on May 3, 2018, to receive verbal comments on the Draft EIR. The public hearing notice was included in the NOA and was posted in the Davis Enterprise newspaper. To all individuals who had requested notifications regarding the LRDP and EIR, UC Davis emailed public hearing details a second time on April 27, 2017 to help announce the public hearing. The public hearing was attended by approximately 19 individuals (based on the sign-in sheet), including community members, faculty, students, and other interested individuals. 10 of these individuals provided oral comments at the hearing; a transcript of these comments along with responses to the comments is provided in Chapter 2 of Volume 4 of the Final EIR. No public agency representatives attended the public hearing. The University also received 42 individual written comments during the public review period.

The Final EIR contains all of the comment letters, as well as a transcript of oral comments from the public hearing, received during the public comment period. The Final EIR also contains responses to those comments, which the University prepared in accordance with CEQA, the CEQA Guidelines, and the University’s procedures for implementing CEQA. The Board has reviewed the comments received and the responses thereto and finds that the Final EIR provides adequate, good faith, and reasoned responses to those comments.

C. Absence of Significant New Information – No Recirculation Required

CEQA Guidelines Section 15088.5 requires a lead agency to recirculate an EIR for further review and comment when significant new information is added to the EIR after public notice is given of the availability of the draft EIR but before certification. New information includes: (i) changes to the project; (ii) changes in the environmental setting; or (iii) additional data or other information. Section 15088.5 further provides that “[n]ew information added to an EIR is not ‘significant’ unless the EIR is changed in a way that deprives the public of a meaningful opportunity to comment upon a substantial adverse environmental effect of the project or a feasible way to mitigate or avoid such an effect (including a feasible project alternative) that the project’s proponents have declined to implement.”

Comments received on the Draft EIR expressed a range of CEQA and non-CEQA issues, as discussed in Chapter 2 of Volume 4 of the Final EIR. Each comment has been responded to in the Final EIR and none of the comments triggered the need to recirculate the Draft EIR based on the administrative record as a whole and the information in the Final EIR.

Having reviewed the information contained in the Draft and Final EIR, and in the administrative record, including all comments received, as well as the requirements under CEQA Guidelines Section 15088.5 and interpretive judicial authority regarding recirculation of draft EIRs, The Board hereby finds that no significant new information was added to the Draft EIR after the public review period. The Board specifically finds that: no new significant environmental impact would result from the 2018 LRDP or from the implementation of a mitigation measure; no substantial increase in the severity of an environmental impact would result, or if such an increase would result, the University has adopted mitigation measures to reduce the impact to a level of insignificance; the University has not declined to adopt any feasible project alternative or mitigation measures considerably different from others previously analyzed that would clearly lessen the environmental impacts of the 2018 LRDP; and the Draft EIR is not so fundamentally and basically inadequate in nature that it precluded meaningful public review.

Having reviewed the information in the Draft EIR, Final EIR, and the entire administrative record, the Board finds that no new significant information was added to the EIR following public review, and recirculation of the EIR is therefore unnecessary and not required by CEQA.

D. Differences of Opinion Regarding the Project's Impacts

In making its determination to certify the Final EIR and to approve the Project, the Board recognizes that the Project involves several controversial environmental issues and that a range of technical and scientific opinion exists with respect to these issues. Through its review of the Final EIR, the comments received on the Draft EIR, and the responses to comments, the Board has acquired a comprehensive understanding of the scope of such technical and scientific opinion. This has enabled the Board to make fully informed and thoroughly considered decisions after taking into account the various viewpoints on the important environmental issues involved in the Project's implementation. Considering the evidence and analysis presented in the Final EIR and administrative record as a whole, the Board finds that the Findings herein are based on substantial evidence and a full appraisal of all viewpoints expressed throughout the CEQA review process, as well as other relevant information contained in the administrative record.

E. Environmental Impacts Summary – Impacts and Mitigation Measures (Project and Cumulative)

As required by CEQA and the CEQA Guidelines, the following section summarizes the direct and cumulative environmental impacts of the Project identified in the Final EIR and includes the Board's Findings regarding those impacts and any mitigation measures set forth in the Final EIR, are adopted by the Board, and incorporated as requirements of the

Project. These Findings summarize the determinations of the Final EIR with respect to the Project's impacts before and after mitigation and do not attempt to describe the full analysis of each environmental impact considered in the Final EIR. Instead, the Findings provide a summary of each impact, describe the applicable mitigation measures identified in the Final EIR and adopted by the Board, and state the Board's Findings regarding the significance of each impact with the adopted mitigation measures. The Final EIR and the record of proceedings contain a full explanation of each impact, mitigation measure, and the analysis that led the Board to its conclusions on those impacts. These Findings hereby incorporate by reference the discussion and analysis in the Final EIR and the record of proceedings, which support the Final EIR's determinations regarding the Project's environmental impacts and mitigation measures. In making these Findings, the Board ratifies, adopts, and incorporates by reference the Final EIR's analysis, determinations, and conclusions relating to environmental impacts and mitigation measures, except to the extent that any such determinations and conclusions are specifically and expressly modified by these Findings. The substantial evidence supporting these findings and conclusions, and are set forth in the Final EIR and the record of proceedings.

The Regents hereby adopts, and incorporates as conditions of approval, the mitigation measures ("MMs") set forth in the findings below to reduce or avoid the potentially significant and significant impacts of the Project. In adopting the mitigation measures described below, the Board intends to adopt each of the mitigation measures recommended in the Final EIR, except when such mitigation measures are specifically rejected or specifically modified by these findings. Accordingly, in the event that a mitigation measure recommended in the Final EIR has been inadvertently omitted from these Findings, that mitigation measure is hereby adopted and incorporated by reference in the Findings. Additionally, in the event that the description of mitigation measures set forth below fails accurately to capture the substance of a given mitigation measure due to a clerical error (as distinct from specific and express modification by the Board through these Findings), the language of the mitigation measure as set forth in the Final EIR shall govern.

With respect to mitigation measures that were suggested in comments by the public or other public agencies but not included in the Final EIR, the responses to comments explain that the suggested mitigation measures either are already part of the 2018 LRDP and associated CEQA documentation or are infeasible, ineffectual or not required under the law (including CEQA) and thus not recommended for adoption for the reasons outlined in the responses to comments. The Board hereby adopts and incorporates by reference the reasons stated in the responses to comments and the record of proceeding as the basis for finding these suggested mitigation measures unnecessary or inappropriate for inclusion as Project requirements.

1. Significant and Unavoidable Adverse Impacts and Related Mitigation Measures

Pursuant to Public Resources Code section 21081(b) and CEQA Guidelines section 15093, where the lead agency identifies significant adverse environmental impacts that cannot feasibly be mitigated to a less-than-significant level, the lead agency may nonetheless

approve the project if it finds that specific economic, legal, social, technological, or other benefits of the project outweigh the unavoidable significant environmental impacts. This finding of overriding considerations (also called the “statement of overriding considerations”), as applicable to the 2018 LRDP, may be found in Section III, below.

The Final EIR identifies the following significant and unavoidable adverse environmental impacts associated with the approval of the Project. For a detailed description of these impacts and mitigation, please see the relevant sections of the Final EIR and Mitigation Monitoring and Reporting Program.

3.1 Aesthetics

Impact 3.1-1: Result in a substantial adverse effect on a scenic vista.

Implementation of the 2018 LRDP would result in the construction and operation of additional facilities within UC Davis and could result in alteration of views to the coastal range, west of campus. While new construction would be consistent with, and immediately adjacent to, existing development which has already altered long-distance views, further development could further preclude long-distance views. Therefore, this impact would be significant.

Mitigation Measures: The implementation of design review standards under University and UC Davis adopted requirements would address impacts and minimize, where possible, impacts on scenic views. However, no feasible mitigation beyond these adopted required standards is available to reduce this impact to less than significant within west campus.

Finding: The Board finds that the implementation of the 2018 LRDP would cause construction of facilities that would result in a significant impact on the environment. Implementation of Design Review standards and requirements are required of all Projects under University and UC Davis regulations and policies. Implementation of these measures will reduce this impact, but not to a less-than-significant level because new building especially in the West Campus will alter views other the coastal mountains. The implementation of these design review measures does not ensure that the significant impact will be reduced to a less-than-significant impact. There are no other available feasible mitigation measures to reduce this impact. Therefore, the implementation of the 2018 LRDP may result in an impact related to scenic vistas that is significant and unavoidable. The Board finds this remaining significant impact to be acceptable because the benefits of the Project outweigh this and the other significant and unavoidable environmental impacts of the Project for the reasons set forth in the “Statement of Overriding Considerations” in Section III, below.

Cumulative Aesthetics Impact: Result in a substantial adverse effect on a scenic vista.

Implementation of the 2018 LRDP would result in the construction and operation of additional facilities within UC Davis and could result in alteration of views to the coastal range, west of campus. While new construction would be consistent with, and immediately

adjacent to, existing development. However, impacts of further development within the western portion of campus, combined with potential development in the western portion of the City of Davis (e.g., West Davis Active Adult Community, could further detract from long-distance views and would be cumulatively considerable, Therefore, viewshed impacts would be cumulatively considerable and significant.

Mitigation Measures: The implementation of design review standards under University and UC Davis adopted requirements would address impacts and minimize, where possible, impacts on scenic views. However, no feasible mitigation beyond these adopted required standards is available to reduce this impact to less than significant within west campus.

Finding: The Board finds that the implementation of the 2018 LRDP would cause construction of facilities that would result in a significant cumulative impact on the environment. Implementation of Design Review standards and requirements are required of all Projects under University and UC Davis regulations and policies. Implementation of these measures will reduce this impact, but not to a less than cumulatively considerable level because new building especially in the West Campus will alter views other the coastal mountains in combination with other development in the area. The implementation of these design review measures does not ensure that the significant impact will be reduced to less than cumulatively considerable. There are no other available feasible mitigation measures to reduce this impact. Therefore, the implementation of the 2018 LRDP may result in an impact related to scenic vistas that is significant and unavoidable. The Board finds this remaining significant impact to be acceptable because the benefits of the Project outweigh this and the other significant and unavoidable environmental impacts of the Project for the reasons set forth in the “Statement of Overriding Considerations” in Section III, below.

3.2 Agriculture and Forestry Resources

Impact 3.2-1: Implementation of the 2018 LRDP will convert agricultural uses, including lands designated as Important Farmlands, to non-agricultural use or involve changes in the existing environment that could result in conversion of Important Farmland to non-agricultural use. This could result in the conversion of up to approximately 166 acres of Important Farmland to non-agricultural uses. Because implementation of the 2018 LRDP would result in a conversion of Important Farmland, this impact is considered significant.

Mitigation Measure: Mitigation Measure 3.2-1: Preservation of agricultural land.

Prior to conversion of Important Farmland to non-agricultural uses for individual projects proposed under the 2018 LRDP, UC Davis shall preserve, in perpetuity, an equivalent acreage (up to 166 total acres for the 2018 LRDP) of Important Farmland within either Russell Ranch or lands adjacent to UC Davis west or south campus for agricultural purposes (including agricultural teaching and research). If acreage preserved through implementation of this mitigation measure is to also be considered in fulfillment of Mitigation Measure 3.5-4b (Compensation for loss of Swainson’s hawk foraging habitat), it shall not be used as vineyards or orchards in perpetuity.

Finding: The Board finds that the implementation of the 2018 LRDP would convert Important Farmland to non-agricultural uses that would result in a significant impact on the environment. LRDP Mitigation Measure 3.2-1 is hereby adopted and incorporated into the Project. Implementation of this mitigation measure will reduce this impact, but not to a less-than-significant level. Mitigation Measure 3.2-1 would only prevent future loss of Important Farmland and would not replace lands converted to development under the 2018 LRDP. Once development or modifications occur on prime farmland, the underlying soils are no longer available for agricultural activities. It is infeasible to replace lost farmland; replacement of lost agricultural land would require removal of existing on-campus development from prime farmland or the purchase of developed land off-campus and converting it to agricultural land (assuming that underlying soils are considered prime), which are not considered feasible options, partly because of the expense involved. The only other possible option would be conversion of natural lands to agriculture, but this would require mitigation of lost habitat which, in turn, could affect farmland (replacing farmland with natural habitat). The implementation of LRDP Mitigation Measure 3.2-1 thus does not ensure that the significant impact will be reduced to a less-than-significant impact. There are no other available feasible mitigation measures to reduce this impact. Therefore, the implementation of the 2018 LRDP may result in an impact related to agricultural resources that is significant and unavoidable. The Board finds this remaining significant impact to be acceptable because the benefits of the Project outweigh this and the other significant and unavoidable environmental impacts of the Project for the reasons set forth in the “Statement of Overriding Considerations” in Section III, below.

Cumulative Impact due to conversion of Important Farmlands: Implementation of the 2018 LRDP will convert agricultural uses, including lands designated as Important Farmlands, to non-agricultural use or involve changes in the existing environment that could result in conversion of Important Farmland to non-agricultural use. This could result in the conversion of up to approximately 166 acres of Important Farmland to non-agricultural uses. Since 2006, there has been a decline in the acreage of farmland, including prime farmland, unique farmland, and/or farmland of statewide importance, compared to non-agricultural uses in the region. Because implementation of the 2018 LRDP would result in a conversion of Important Farmland, this impact is considered cumulatively considerable and significant.

Mitigation Measure: Mitigation Measure 3.2-1: Preservation of agricultural land. Implement 2018 LRDP Mitigation Measure 3.2-1 which is also applicable to this impact.

Finding: The Board finds that the implementation of the 2018 LRDP would convert Important Farmland to non-agricultural uses that would result in a cumulatively considerable and significant impact on the environment. LRDP Mitigation Measure 3.2-1 is hereby adopted and incorporated into the Project. Implementation of this mitigation measure will reduce this impact, but not to a less than cumulatively considerable level. Mitigation Measure 3.2-1 would only prevent future loss of Important Farmland and would not replace lands converted to development under the 2018 LRDP. Once development or modifications occur on prime farmland, the underlying soils are no longer available for

agricultural activities. It is infeasible to replace lost farmland; replacement of lost agricultural land would require removal of existing on-campus development from prime farmland or the purchase of developed land off-campus and converting it to agricultural land (assuming that underlying soils are considered prime), which are not considered feasible options, partly because of the expense involved. The only other possible option would be conversion of natural lands to agriculture, but this would require mitigation of lost habitat which, in turn, could affect farmland (replacing farmland with natural habitat). The removal of such agricultural land would be considered cumulatively considerable in the context of agricultural lands within Yolo County and, due to similar conditions, Solano County. The implementation of LRDP Mitigation Measure 3.2-1 does not ensure that the significant impact will be reduced to less than cumulatively considerable. There are no other available feasible mitigation measures to reduce this impact. Therefore, the implementation of the 2018 LRDP may result in a cumulative impact related to agricultural resources that is significant and unavoidable. The Board finds this remaining significant impact to be acceptable because the benefits of the Project outweigh this and the other significant and unavoidable environmental impacts of the Project for the reasons set forth in the “Statement of Overriding Considerations” in Section III, below.

3.3 Air Quality

Impact 3.3-1: Construction-generated emissions of NO_x.

Construction-generated emissions would potentially exceed Yolo-Solano Air Quality Management District’s (YSAQMD) significance thresholds for NO_x during construction in 2019. Therefore, this impact would be potentially significant.

Mitigation Measure: Mitigation Measure 3.3-1: Reduce construction-generated emissions of NO_x.

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 off-site 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 off-site runoff as a result of watering for dust control purposes.

Finding: The Board finds that the implementation of the 2018 LRDP would generate construction emissions that would result in a significant impact on air quality due to NO_x emissions. LRDP Mitigation Measure 3.3-1 is hereby adopted and incorporated into the Project. Implementation of this mitigation measure will reduce this impact, but not to a less-than-significant level. Mitigation Measure 3.3-1 will reduce NO_x emissions, but not below YSAQMD significance criteria in 2019. There are no other available feasible mitigation measures to reduce this impact. The implementation of LRDP Mitigation Measure 3.3-1 does not ensure that the significant impact will be reduced to a less-than-significant impact. Therefore, the implementation of the 2018 LRDP may result in an impact related to air quality due to NO_x emissions during construction that is significant and unavoidable. The Board finds this remaining significant impact to be acceptable because the benefits of the Project outweigh this and the other significant and unavoidable environmental impacts of the Project for the reasons set forth in the “Statement of Overriding Considerations” in Section III, below.

Cumulative Impact due Construction-generated emissions of NO_x.

Construction-generated emissions would potentially exceed YSAQMD significance thresholds for NO_x during construction in 2019. The cumulative context for air quality is regional (YSAQMD) for criteria pollutants. YSAQMD considers emissions of NO_x from an individual project that exceed the applicable thresholds to be a substantial contribution to this SVAB-wide (i.e., cumulative) impact (YSAQMD 2007). Therefore, this impact would be cumulatively considerable and significant.

Mitigation Measure: Mitigation Measure 3.3-1: Reduce construction-generated emissions of NO_x. Implement 2018 LRDP Mitigation Measure 3.3-1 which is also applicable to this impact

Finding: The Board finds that the implementation of the 2018 LRDP would generate construction emissions that would result in a significant cumulative impact on air quality due to NO_x emissions. LRDP Mitigation Measure 3.3-1 is hereby adopted and incorporated into the Project. Implementation of this mitigation measure will reduce this impact, but not to a less than cumulatively considerable level. Mitigation Measure 3.3-1

will reduce NO_x emissions, but not below YSAQMD significance criteria in 2019. These thresholds are targeted toward and establish the significance threshold for cumulative emissions impacts. There are no other available feasible mitigation measures to reduce this impact. The implementation of LRDP Mitigation Measure 3.3-1 does not ensure that the significant impact will be reduced to less than cumulatively considerable. Therefore, the implementation of the 2018 LRDP may result in an impact related to air quality due to NO_x emissions during construction that is significant and unavoidable. The Board finds this remaining significant impact to be acceptable because the benefits of the Project outweigh this and the other significant and unavoidable environmental impacts of the Project for the reasons set forth in the “Statement of Overriding Considerations” in Section III, below.

Impact 3.3-2: Operational emissions of ROG and NO_x.

Operational activities associated with the 2018 LRDP would result in long-term project-generated emissions of criteria air pollutants, particularly ROG and NO_x, mostly from mobile sources. Mobile emissions at 2018 LRDP buildout 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. Long-term, operational emissions could exceed YSAQMD significance thresholds for ROG and NO_x, but would not exceed YSAQMD thresholds for PM₁₀ and PM_{2.5}. This would be a potentially significant impact. (Draft EIR pages 3.3-27 through 3.3-30.)

Mitigation Measure 3.3-2: Reduce emissions of ROG and NO_x.

UC Davis shall implement the following measures to reduce operational emissions to the extent feasible:

1) Implement a program that incentivizes employees and students living off-campus to carpool, use EVs, or use public transit to commute to and from the campus. This program shall provide preferential parking to carpool vehicles, vanpool vehicles, and EVs. At a minimum, the program shall include a virtual or real “ride board” for employees and students to organize carpools and incentives for employees using public transit to commute to and from campus. The program shall include, but is not limited to, the following features.

a) Limit parking capacity to meet on-site demand. Provide no more on-site parking spaces than necessary to accommodate the number of employees working at a project site and/or the number of residents living at a project site, as determined by the project size and design.

b) Non-residential land uses with 20 or more on-site parking spaces shall dedicate preferential parking spaces to vehicles with more than one occupant and Zero Emission Vehicles (including battery electric vehicles and hydrogen fuel cell vehicles). The number of dedicated spaces should be no less than two spaces or 5 percent of the total parking spaces on the project site, whichever is greater. These dedicated spaces shall be in preferential locations such as near the main entrances

- to the buildings served by the parking lot and/or under the shade of a structure or trees. These spaces shall be clearly marked with signs and pavement markings. This measure shall not be implemented in a way that prevents compliance with requirements in the California Vehicle Code regarding parking spaces for disabled persons or disabled veterans.
- 2) Work with Unitrans to convert natural gas buses to electric or lower-emission fuels or implement emission control technologies to reduce criteria air pollutant emissions from existing conditions,
 - 3) Implement a program that incentivizes vendors to reduce the emissions associated with vehicles and equipment serving the campus. The goal of the program is to reduce ROG and NO_x emissions from vendors trip by at least 50 percent by 2030 as compared to existing conditions. The program shall implement the following sub-measures to reduce vendor-related, mobile-source emissions.
 - a) Incentivize the use of EVs or other clean fuels in their trucks and equipment to reduce ROG and NO_x emissions.
 - b) Work with vendors, especially those using trucks, to reduce the number of vendor trips made to the campus through trip chaining, reducing the number of shipments, or other methods.
 - 4) Convert landscaping equipment to electric or alternatively-fueled equipment..

Finding: The Board finds that the implementation of the 2018 LRDP would generate operational emissions, mostly from mobile vehicles, that would result in a significant impact on air quality due to ROG and NO_x emissions. LRDP Mitigation Measure 3.3-2 is hereby adopted and incorporated into the Project. Implementation of this mitigation measure will reduce this impact, but not to a less-than-significant level. Mitigation Measure 3.3-2 will reduce ROG and NO_x emissions but not below YSAQMD significance criteria. There are no other available feasible mitigation measures to reduce this impact. The implementation of LRDP Mitigation Measure 3.3-2 does not ensure that the significant impact will be reduced to a less-than-significant impact. Therefore, the implementation of the 2018 LRDP may result in an impact related to air quality due to ROG and NO_x emissions during operations that is significant and unavoidable. The Board finds this remaining significant impact to be acceptable because the benefits of the Project outweigh this and the other significant and unavoidable environmental impacts of the Project for the reasons set forth in the “Statement of Overriding Considerations” in Section III, below.

Cumulative Impact due to Operational emissions of ROG and NO_x.

Operational activities associated with the 2018 LRDP would result in long-term project-generated emissions of criteria air pollutants, particularly ROG and NO_x, mostly from mobile sources. Mobile emissions at 2018 LRDP buildout 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. Long-term, operational emissions could exceed YSAQMD significance thresholds for ROG and NO_x, but would not exceed YSAQMD thresholds for PM₁₀ and PM_{2.5}. The cumulative context for air quality is regional (YSAQMD) for criteria pollutants. YSAQMD considers operational emissions of ROG and NO_x from an individual project that exceed the applicable thresholds to be a substantial contribution to this SVAB-wide (i.e., cumulative) impact (YSAQMD 2007). This would be a cumulatively considerable and significant impact.

Mitigation Measure: Mitigation Measure 3.3-2: Reduce emissions of ROG and NO_x from mobile sources. Implement 2018 LRDP Mitigation Measure 3.3-2 which is also applicable to this impact.

Finding: The Board finds that the implementation of the 2018 LRDP would generate operational emissions, mostly from mobile vehicles, that would result in a significant cumulative impact on air quality due to ROG and NO_x emissions. LRDP Mitigation Measure 3.3-2 is hereby adopted and incorporated into the Project. Implementation of this mitigation measure will reduce this impact, but not to a less than cumulatively considerable level. Mitigation Measure 3.3-2 will reduce ROG and NO_x emissions but not below YSAQMD significance criteria. There are no other available feasible mitigation measures to reduce this impact. The implementation of LRDP Mitigation Measure 3.3-2 does not ensure that the significant impact will be reduced to a less than cumulatively considerable level. Because the SVAB is currently designated as a nonattainment area for ozone, project stationary and mobile-source emissions of ROG and NO_x could contribute on a cumulative basis to pollutant concentrations that exceed the ambient air quality standards because of growth in the area. Therefore, the implementation of the 2018 LRDP may result in an impact related to air quality due to ROG and NO_x emissions during operations that is significant and unavoidable. The Board finds this remaining significant impact to be acceptable because the benefits of the Project outweigh this and the other significant and unavoidable environmental impacts of the Project for the reasons set forth in the “Statement of Overriding Considerations” in Section III, below.

Impact 3.3-6: Land use compatibility with off-site sources of toxic air contaminants and ultrafine particulates.

The project would introduce receptors in close proximity to existing sources of TACs and UFPs. The level of health risk associated with exposure to TACs from on-site and surrounding off-site sources would not be substantial. However, residential receptors located closest to I-80 could be exposed to relatively high concentrations of UFPs generated by vehicles traveling on I-80 resulting in substantial levels of health risk. This would be a potentially significant impact.

Mitigation Measure: Mitigation Measure 3.3-6: Reduce exposure of residences to TACs and UFPs.

For any proposed housing within 1,500 feet of I-80, UC Davis shall:

- 1) During preparation of project-specific environmental review, conduct ambient air measurements at the proposed housing location between January and March (for a period of up to 12 weeks) to determine UFP concentrations at a particular site. If measured concentrations do not exceed 12 µg/m³, no further action is necessary, or
- 2) If concentrations exceed 12 µg/m³ or if no monitoring is conducted, require the air filtration systems on all residential buildings to achieve a minimal removal efficiency of 95 percent for UFP (particulate matter with an aerodynamic diameter of 0.1 microns and smaller). Achieving a minimal removal efficiency of 95 percent may include, but not be limited to, the following:
 - a) strategically located air intakes pursuant to requirements and recommendations of the American Society of Heating, Refrigeration, and Air-Conditioning Engineers;
 - b) double-door entrances at the main entrances to buildings;
 - c) high-volume, low-pressure drop air exchange systems that cause UFP to pass through multiple filters at a slow enough speed such that they attach to the surface of standard electrostatic filters; and/or
 - d) The air filtration and mechanical airflow systems shall be properly maintained and, on an annual basis, tested documented by a qualified professional to ensure that the UFP filtration system is operating at a minimum 95 percent effectiveness.

Finding: The Board finds that the implementation of the 2018 LRDP would result in a significant impact due to land use compatibility with off-site sources of toxic air contaminants and ultrafine particulates. LRDP Mitigation Measure 3.3-6 is hereby adopted and incorporated into the Project. Implementation of this mitigation measure will reduce this impact, but not to a less-than-significant level. Mitigation Measure 3.3-6 will result in substantial reductions to exposure levels of UFPs and TACs. There are no other available feasible mitigation measures to reduce this impact. The implementation of LRDP Mitigation Measure 3.3-6 does not ensure that the significant impact will be reduced to a less-than-significant impact because “safe” levels of UFP exposure have not been identified by any applicable agency or by a consensus of scientific literature and without establish UFP standards. Therefore, the implementation of the 2018 LRDP may result in an impact related to land use compatibility with off-site sources of toxic air contaminants and ultrafine particulates that is significant and unavoidable. The Board finds this remaining significant impact to be acceptable because the benefits of the Project outweigh this and the other significant and unavoidable environmental impacts of the Project for the reasons set forth in the “Statement of Overriding Considerations” in Section III, below.

3.4 Archaeological, Historical, and Tribal Cultural Resources

Impact 3.4-4: Impacts to historical resources.

The 2018 LRDP proposes general types of campus development to support projected campus population growth and to enable expanded and new program initiatives, including the renovation of some existing buildings. This could result in damage to or destruction of a historic building or structure, thereby resulting in a substantial adverse change in the significance of a historical resource as defined in Section 15064.5. This would be a potentially significant impact.

Mitigation Measures: Mitigation Measure 3.4-4: Conduct project-specific level surveys and identify and implement measures to protect identified historic resources.

During project-specific environmental review of development under the 2018 LRDP, the campus shall define the project's area of effect for historic buildings and structures. The campus shall determine the potential for the project to result in historic resource impacts, based on the extent of ground disturbance and site modification anticipated for the proposed project.

Before altering or otherwise affecting a building or structure 50 years old or older, the campus shall retain a qualified architectural historian to record it on a California Department of Parks and Recreation DPR 523 form or equivalent documentation, if the building has not previously been evaluated. Its significance shall be assessed by a qualified architectural historian, using the significance criteria set forth for historic resources under CEQA Guidelines Section 15064.5. The evaluation process shall include the development of appropriate historical background research as context for the assessment of the significance of the structure in the history of the University system, the campus, and the region. For buildings or structures that do not meet the CEQA criteria for historical resource, no further mitigation is required.

For a building or structure that qualifies as a historic resource, the architectural historian and the campus shall consult to consider measures that would enable the project to avoid direct or indirect impacts to the building or structure. These could include preserving a building on the margin of the project site, using it "as is," or other measures that would not alter the building. If the project cannot avoid modifications to a historic building or structure:

- 1) If the building or structure can be preserved on site, but remodeling, renovation or other alterations are required, this work shall be conducted in compliance with the "Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings" (Weeks and Grimmer 1995).
- 2) If a significant historic building or structure is proposed for major alteration or renovation, or to be moved and/or demolished, the campus shall ensure that a qualified architectural historian thoroughly documents the building and associated landscaping and setting. Documentation shall include still and video photography and a written documentary record of the building to the standards of the Historic

- American Building Survey or Historic American Engineering Record, including accurate scaled mapping, architectural descriptions, and scaled architectural plans, if available. A copy of the record shall be deposited with the University archives, Shields Library Special Collections. The record shall be accompanied by a report containing site-specific history and appropriate contextual information. This information shall be gathered through site specific and comparative archival research, and oral history collection as appropriate.
- 3) If preservation and reuse at the site are not feasible, the historical building shall be documented as described in item (2) and, when physically and financially feasible, be moved and preserved or reused.
 - 4) If, in the opinion of the qualified architectural historian, the nature and significance of the building is such that its demolition or destruction cannot be fully mitigated through documentation, the campus 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 structure to be preserved intact. These could include project redesign, relocation or abandonment. If no such measures are feasible, the historical building shall be documented as described in item (2).

Finding: The Board finds that the implementation of the 2018 LRDP may cause impacts to historic resources due to remodeling, construction and potential demolition activities to existing buildings. LRDP Mitigation Measure 3.4-4 is hereby adopted and incorporated into the Project. Implementation of Mitigation Measures 3.4-4 would reduce potentially significant impacts to historic resources because actions would be taken to record, evaluate, avoid, or otherwise treat the resource appropriately, in accordance with pertinent laws and regulations. However, CEQA Guidelines 15126.4(b)(2) notes that, in some circumstances, documentation of an historical resource will not mitigate the effects of demolition of that resource to a less-than-significant level because the historic resources would no longer exist. Therefore, because the potential for permanent loss of a historic resource or its integrity cannot be precluded, the project's impacts would remain significant and unavoidable. There are no other available feasible mitigation measures to reduce this impact. Therefore, the implementation of the 2018 LRDP may result in an impact related to demolition of historic structures that is significant and unavoidable. The Board finds this remaining significant impact to be acceptable because the benefits of the Project outweigh this and the other significant and unavoidable environmental impacts of the Project for the reasons set forth in the "Statement of Overriding Considerations" in Section III, below.

Cumulative Impacts to historical resources.

The 2018 LRDP proposes general types of campus development to support projected campus population growth and to enable expanded and new program initiatives, including the renovation of some existing buildings. This could result in damage to or destruction of a historic building or structure, thereby resulting in a substantial adverse change in the

significance of a historical resource as defined in Section 15064.5. The cumulative context for historical resources is UC Davis, the City of Davis, and the Sacramento Valley where common patterns of historic-era settlement have occurred over roughly the past two centuries. The project impact would be cumulatively considerable and a potentially significant impact.

Mitigation Measures: Mitigation Measure 3.4-4: Conduct project-specific level surveys and identify and implement measures to protect identified historic resources. Implement 2018 LRDP Mitigation Measure 3.4-4 which is also applicable to this impact

Finding: The Board finds that the implementation of the 2018 LRDP may cause impacts to historic resources due to remodeling, construction and potential demolition activities to existing buildings. LRDP Mitigation Measure 3.4-4 is hereby adopted and incorporated into the Project. Implementation of Mitigation Measures 3.4-4 would reduce potentially significant impacts to historic resources because actions would be taken to record, evaluate, avoid, or otherwise treat the resource appropriately, in accordance with pertinent laws and regulations. However, CEQA Guidelines 15126.4(b)(2) notes that, in some circumstances, documentation of an historical resource will not mitigate the effects of demolition of that resource to a less-than-significant level because the historic resources would no longer exist. Therefore, because the potential for permanent loss of a historic resource or its integrity cannot be precluded, the project's impacts would remain cumulatively considerable and significant. Many of the buildings constructed during the early days of development of both the campus and the city of Davis are no longer present, or have been substantially altered for conversion to other uses. Therefore, the cumulative loss of historic resources at UC Davis and the Sacramento Valley is considered significant. Due to potential adverse impacts on historic resources, the implementation of the 2018 LRDP may result in an impact related to demolition of historic structures that is cumulatively considerable and significant and unavoidable. There are no other available feasible mitigation measures to reduce this impact. The Board finds this remaining significant cumulative impact to be acceptable because the benefits of the Project outweigh this and the other significant and unavoidable environmental impacts of the Project for the reasons set forth in the "Statement of Overriding Considerations" in Section III, below.

3.5 Biological Resources

Impact 3.5-11: Conflict with local policies or ordinances related to the protection of biological resources – Heritage trees.

Implementation of the 2018 LRDP could result in the removal of trees recognized to meet UC Davis standards for Heritage trees. Removal of Heritage trees within the plan area would result in a significant impact.

Mitigation Measures: 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).

Finding: The Board finds that the implementation of the 2018 LRDP would result in removal of trees recognized to meet UC Davis standards for important Heritage trees. LRDP Mitigation Measure 3.5-11 is hereby adopted and incorporated into the Project. Implementation of this mitigation measure will reduce this impact, but not to a less-than-significant level for Heritage trees. With respect to Heritage trees, feasible mitigation may not be available to fully mitigate the impact. Heritage trees are large and take a long period of time to reach that size. Replacement trees would not have the habitat value of Heritage trees within the planning horizon. Thus, planting new trees would not fully mitigate for the loss of these important Heritage trees. There are no other available feasible mitigation measures to reduce this impact. The implementation of LRDP Mitigation Measure 3.5-11 does not ensure that the significant impact will be reduced to a less-than-significant impact. Therefore, the implementation of the 2018 LRDP may result in an impact to Heritage trees that is significant and unavoidable. The Board finds this remaining significant impact to be acceptable because the benefits of the Project outweigh this and the other significant and unavoidable environmental impacts of the Project for the reasons set forth in the “Statement of Overriding Considerations” in Section III, below.

3.13 Population and Housing

Impact 3.13-1: Directly or indirectly induce substantial population growth resulting in off-campus impacts, including increased housing demand.

Implementation of the 2018 LRDP would accommodate an increase in student enrollment, non-UC employees, and UC Davis faculty/staff. The 2018 LRDP would provide on-campus housing to accommodate the increase in campus population, as well as to accommodate existing students. There is not sufficient on-campus housing to accommodate new employees. Substantial population growth would, therefore be induced, leading to indirect physical effects on the environment (addressed throughout this EIR),

some of which would be unavoidable. Therefore, this impact would be considered significant.

Mitigation Measures: Mitigation measures to reduce impacts to various resources are identified throughout the EIR and would reduce the indirect off-campus impacts to the extent applicable. No additional feasible mitigation measures beyond those already adopted as part of the 2018 LRDP are available to address off-campus environmental impacts.

Finding: The Board finds that the implementation of the 2018 LRDP would generate student and employee growth. Employee growth may potentially induce the need for employees to look for housing off-campus in neighboring jurisdictions. This, in turn, may indirectly induce potential types of significant physical effects on the environment (described throughout this EIR), some of which would be unavoidable. Overall, the intent of the 2018 LRDP is to strategically locate student and employee housing in areas accessible to alternative transportation, including transit, and encouraging the creation of a more walkable, complete campus. The plan would accommodate all of the projected student population growth on campus and increase the level of student residents on campus. With respect to off-campus population, while there would be an increase in off-campus population levels associated with employment growth, projections are within existing planning efforts and would not cause a substantial increase beyond what is anticipated for the region.

However, as noted in Sections 3.1 through 3.12, Sections 3.14 through 3.17, and Chapters 4 and 5 of this EIR, implementation of the 2018 LRDP would result in certain significant and unavoidable effects as a result of projected growth. Where possible, this EIR identifies potential mitigations related to the local and regional environmental impacts of UC Davis growth associated with 2018 LRDP implementation. Nonetheless, in certain circumstances, these effects are identified as significant and unavoidable. Accordingly, the impact of increased population through implementation of the 2018 LRDP would be considered substantial and significant even with the implementation of LRDP policies, and the above-referenced mitigations.

LRDP Mitigation Measures are hereby adopted and incorporated into the Project. Implementation of these mitigation measures will reduce this impact, but not to a less-than-significant level. There are no other available feasible mitigation measures to reduce this impact. The implementation of the LRDP Mitigation Measures does not ensure that the significant impact will be reduced to a less-than-significant impact. Therefore, the implementation of the 2018 LRDP may result in an impact related to population growth that is significant and unavoidable. There are no other available feasible mitigation measures to reduce this impact. The Board finds this remaining significant impact to be acceptable because the benefits of the Project outweigh this and the other significant and unavoidable environmental impacts of the Project for the reasons set forth in the “Statement of Overriding Considerations” in Section III, below.

Cumulative Impact due to Directly or indirectly induce substantial population growth resulting in off-campus impacts, including increased housing demand.

Implementation of the 2018 LRDP would accommodate an increase in student enrollment, non-UC employees, and UC Davis faculty/staff. The 2018 LRDP would provide on-campus housing to accommodate the increase in student population, as well as to accommodate existing students. There is not sufficient on-campus housing to accommodate new employees. Substantial population growth would, therefore be induced, leading to indirect physical effects on the environment in the region (addressed throughout this EIR), some of which would be unavoidable. Therefore, the project contribution to these impacts may be cumulatively considerable and significant.

Mitigation Measures: Mitigation measures to reduce impacts to various resources are identified throughout the EIR and would reduce the indirect off-campus impacts to the extent applicable. No additional feasible mitigation measures beyond those already adopted as part of the 2018 LRDP are available to address off-campus environmental impacts.

Finding: The Board finds that the implementation of the 2018 LRDP would generate student and employee growth. This, in turn, may indirectly induce potential types of significant physical effects on the environment (described throughout this EIR), some of which would be unavoidable. Overall, the intent of the 2018 LRDP is to strategically locate student and employee housing in areas accessible to alternative transportation, including transit, and encouraging the creation of a more walkable, complete campus. The plan would accommodate all of the projected student population growth on campus and increase the level of student residents on campus. With respect to off-campus population, while there would be an increase in off-campus population levels associated with employment growth, projections are within existing planning efforts and would not cause a substantial increase beyond what is anticipated for the region.

However, as noted in Sections 3.13 and 4.3.13, “Population and Housing,” the 2018 LRDP, in and of itself, induces substantial population growth, the effects of which are evaluated throughout this EIR. Although impacts are mitigated where feasible, implementation of the 2018 LRDP, which would increase campus population over several years, would result in certain significant and unavoidable impacts. For these reasons, the population and housing impacts related to implementation of the 2018 LRDP would result in a considerable contribution to cumulative population and housing impacts. While the 2018 LRDP would result in population growth that would be consistent with growth projections for the region, this would be a significant cumulative impact. Where possible, this EIR identifies potential mitigations related to the local and regional environmental impacts of UC Davis growth associated with 2018 LRDP implementation. Nonetheless, in certain circumstances, these effects are identified as significant and unavoidable. Accordingly, the impact of increased population through implementation of the 2018 LRDP would be considered substantial and cumulatively considerable even with the implementation of LRDP policies, and the above-referenced mitigations.

LRDP Mitigation Measures are hereby adopted and incorporated into the Project. Implementation of these mitigation measures will reduce this impact, but not to a less-than-significant level. There are no other available feasible mitigation measures to reduce this impact. The implementation of the LRDP Mitigation Measures does not ensure that the significant cumulative impact will be reduced to less than cumulatively considerable. Therefore, the implementation of the 2018 LRDP may result in cumulatively considerable contribution to a significant cumulative impact related to population growth that is significant and unavoidable. There are no other available feasible mitigation measures to reduce this impact. The Board finds this remaining significant impact to be acceptable because the benefits of the Project outweigh this and the other significant and unavoidable environmental impacts of the Project for the reasons set forth in the “Statement of Overriding Considerations” in Section III, below.

3.16 Transportation, Circulation, and Parking

Impact 3.16-1: Freeway level of service impacts.

Implementation of the 2018 LRDP would increase local and regional vehicle travel, which would contribute to unacceptable LOS F conditions on I-80. This impact would therefore be significant.

Mitigation Measures: Mitigation Measure 3.16-1: Implement TDM strategies to reduce peak hour vehicle trips on I-80.

UC Davis shall use the 2016-2017 academic year as the baseline by which to determine 2018 LRDP-related growth in peak hour student and employee commute vehicle trips on I-80. During the 2018-2019 academic year and every two years thereafter, UC Davis shall determine the number of peak hour student and employee commute vehicle trips that utilize I-80. In instances where this figure exceeds baseline levels, UC Davis shall institute TDM strategies to reduce campus-related peak hour vehicle trips on I-80. This figure could be estimated from the results of the annual Campus Travel Survey administered by the UC Davis Institute of Transportation Studies. The implementation of TDM strategies shall reduce peak hour student and employee commute vehicle trips on I-80 equal to or below baseline levels.

TDM strategies that would reduce peak hour vehicle trips on I-80 include strategies to reduce commute and business vehicle trips to and from campus using I-80. Specific potential TDM strategies include, but are not limited to, the following:

- ▲ expand public transit service, including additional regional service for UC Davis students and employees living off-campus and outside of Davis,
- ▲ support alternative congestion management policies/projects on I-80, including a toll for all vehicles utilizing I-80 across the Yolo Causeway,

- ▲ implement a fair value commuting program, where fees charged to SOV commuters (e.g., through parking pricing) are tied to UC Davis vehicle trip reduction targets and fee revenue is rebated to non-SOV commuters, or other pricing of vehicle travel and parking,
- ▲ provide carpool and/or vanpool incentive programs,
- ▲ allow flexible work hours and schedule classes to reduce arrivals/departures during peak hours, and
- ▲ offer remote working options.

The TDM strategies implemented to reduce peak hour vehicle trips on I-80 will be consistent with existing and planned TDM programs on campus, including the UC Davis TDM Plan currently in development. If these TDM strategies are not sufficient to reduce peak hour trips to baseline levels, additional TDM measures or adjustments to the measures above shall be implemented.

Finding: The Board finds that the implementation of the 2018 LRDP would generate vehicle trips that would result in significant impacts on I-80. LRDP Mitigation Measure 3.16-1 is hereby adopted and incorporated into the Project. Implementation of this mitigation measure will reduce this impact, but not to a less-than-significant level. Implementation of 2018 LRDP Mitigation Measure 3.16-1 would reduce vehicle travel to and from campus on I-80. However, even with the implementation of these TDM measures and reduction standards, it cannot be guaranteed that the trip reductions due to TDM measures will reduce the additional vehicle trips on I-80 from the 2018 LRDP to less than significant. Caltrans has identified the need for carpool lanes on I-80 between Richards Boulevard in Davis and West Sacramento to accommodate regional traffic growth, which includes the employee and student growth associated with UC Davis. The carpool lane project has already been incorporated into the 2016 SACOG MTP/SCS and is a fully funded project expected to be implemented by 2036. The implementation of LRDP Mitigation Measure 3.16-1 does not ensure that the significant impact will be reduced to a less-than-significant impact. There are no other available feasible mitigation measures to reduce this impact. Therefore, the implementation of the 2018 LRDP may result in an impact to I-80 that is significant and unavoidable. The Board finds this remaining significant impact to be acceptable because the benefits of the Project outweigh this and the other significant and unavoidable environmental impacts of the Project for the reasons set forth in the “Statement of Overriding Considerations” in Section III, below.

Impact 3.16-2: Intersection level of service impacts.

Implementation of the 2018 LRDP would increase local and regional vehicle travel, which would contribute to unacceptable LOS F conditions on the following intersections: SR 113/Hutchison Drive interchange; First Street/D Street; and Russell Boulevard/Fifth Street/B Street. This impact would therefore be significant.

Mitigation Measure: Mitigation Measure 3.16-2a: Implement TDM strategies to reduce peak hour vehicle delay at the Hutchison Drive/SR 113 NB Ramps intersection.

During the 2018-2019 academic year and every two years thereafter, UC Davis shall monitor and analyze traffic conditions at the Hutchison Drive/SR 113 NB Ramps intersection. Additionally, during its standard environmental review process, UC Davis shall forecast and analyze traffic conditions at the Hutchison Drive/SR 113 NB Ramps intersection for individual development projects proposed under the 2018 LRDP that are expected to affect operations at the intersection. When operations at the Hutchison Drive/SR 113 NB Ramps intersection are found to reach an intersection level of service F and the 2018 LRDP represents 10 percent of the total volume or overall intersection delay, or when a project-level analysis indicates the same, UC Davis shall institute TDM strategies to reduce peak hour vehicle trips and, in turn, vehicle delay at the Hutchison Drive/SR 113 NB Ramps intersection.

The implementation of TDM strategies shall reduce peak hour average intersection delay caused by the 2018 LRDP to acceptable levels in accordance with the intersection level of service significance criteria, including the level of service thresholds established by Caltrans or the Yolo County CMP. Since the 2018 LRDP would cause intersection operations at Hutchison Drive/SR 113 NB Ramps to degrade from an acceptable LOS to an unacceptable LOS, TDM strategies would be required to reduce peak hour intersection delay to an acceptable LOS. According to the Yolo County CMP, LOS E or better, or 50 seconds or less, is acceptable for the Hutchison Drive/SR 113 NB Ramps stop-controlled intersection.

The growth at West Village accounts for most of the increase (approximately 280 trips) in the stop-controlled northbound left-turn volume during the p.m. peak hour between 2030 no project and 2030 plus 2018 LRDP conditions. This movement is largely responsible for the high intersection delays. These trips tend to be longer distance commute trips using SR 113 and I-80. As such, TDM strategies that would reduce peak hour intersection delay at this location include strategies to reduce commute and business vehicle trips utilizing the Hutchison Drive/SR 113 interchange as well as strategies to reduce peak hour vehicle trip use of Hutchison Drive between the central campus and west campus. Specific potential TDM strategies include, but are not limited to, the following:

- ▲ expand public transit service, including additional service connecting West Village and the central campus,
- ▲ shift UC Davis service vehicles to use the Garrod Drive overcrossing of SR 113,
- ▲ promote bicycle use between West Village and the central campus,
- ▲ implement a fair value commuting program or other pricing of vehicle travel and parking,
- ▲ provide carpool and/or vanpool incentive programs,

- ▲ allow flexible work hours and schedule classes to reduce arrivals/departures during peak hours, and
- ▲ offer remote working options.

The TDM strategies implemented to reduce peak hour intersection delay at this location will be consistent with existing and planned TDM programs on campus, including the UC Davis TDM Plan currently in development. If these TDM strategies are not sufficient to reduce peak hour intersection delay consistent with the significance criteria, additional TDM measures or adjustments to the measures above shall be implemented.

Mitigation Measure: Mitigation Measure 3.16-2b: Modify SR 113/Hutchison Drive interchange.

During the 2018-2019 academic year and every two years thereafter, UC Davis shall monitor and analyze traffic conditions at the SR 113/Hutchison Drive interchange. Additionally, during its standard environmental review process, UC Davis shall forecast and analyze traffic conditions at the SR 113/Hutchison Drive interchange for individual development projects proposed under the 2018 LRDP that are expected to affect operations at the interchange. When operations at the SR 113/Hutchison Drive ramp terminal intersections are found to reach an intersection level of service F and the 2018 LRDP represents 10 percent of the total volume or overall intersection delay criteria, or when a project-level analysis indicates the same, the SR 113/Hutchison Drive interchange shall be modified to increase the capacity of the ramp terminal intersections and to modify uncontrolled turning movements that conflict with bicycle and pedestrian movements as specified in WVE Mitigation Measure 3.16-4a. Potential modifications include ramp widening and alignment changes plus the addition of ramp approach turn lanes, traffic signals, or roundabouts. Both ramp terminal intersections meet peak hour signal warrants with the project. Implementation of signals alone would be sufficient to provide acceptable peak hour traffic operations. Since the interchange is owned and operated by Caltrans, any improvements will be subject to Caltrans review, project development procedures, and approval.

Mitigation Measure: Mitigation Measure 3.16-2c: Implement TDM strategies to reduce peak hour vehicle delay at the First Street/D Street and Russell Boulevard/Fifth Street/B Street intersections.

The First Street/D Street and Russell Boulevard/Fifth Street/B Street intersections and the adjacent intersections are part of the downtown grid street system. This network is limited in terms of physical modification or expansion due to right-of-way constraints. As such, reducing vehicle delays for these intersections will require UC Davis to implement its TDM program to reduce vehicle travel to and from campus.

During the 2018-2019 academic year and every two years thereafter, UC Davis shall monitor and analyze traffic conditions at the First Street/D Street and Russell Boulevard/Fifth Street/B Street intersections. Additionally, during its standard environmental review process, UC Davis shall forecast and analyze traffic conditions at the First Street/D Street and Russell Boulevard/Fifth Street/B Street intersections for individual development projects proposed under the 2018 LRDP that are expected to affect operations at the intersection. When operations at the First Street/D Street and Russell Boulevard/Fifth Street/B Street intersections are found to reach an intersection level of service F and the 2018 LRDP represents 10 percent of the total volume or overall intersection delay, or when a project-level analysis indicates the same, UC Davis shall institute TDM strategies to reduce peak hour vehicle trips and, in turn, vehicle delay at the First Street/D Street and Russell Boulevard/Fifth Street intersections.

The implementation of TDM strategies shall reduce peak hour average intersection delay caused by the 2018 LRDP to acceptable levels in accordance with the intersection level of service significance criteria, including the level of service thresholds established by the City of Davis. Since the 2018 LRDP would cause intersection operations at First Street/D Street and Russell Boulevard/Fifth Street/B Street to degrade from an acceptable LOS to an unacceptable LOS, TDM strategies would be required to reduce peak hour intersection delay to an acceptable LOS. According to the City of Davis General Plan, LOS E or better, or 80 seconds or less, is acceptable for the First Street/D Street and Russell Boulevard/Fifth Street signalized intersections.

TDM strategies that would reduce peak hour intersection delay at these locations include strategies to reduce vehicle travel to and from campus. Specific potential TDM strategies include, but are not limited to, the following:

- ▲ promote walking and bicycling for student and employee trips between UC Davis, City of Davis residential neighborhoods, and Downtown Davis,
- ▲ shift the timing of service vehicles and/or deliveries from peak periods,
- ▲ expand public transit service, including additional service connecting UC Davis and City of Davis residential neighborhoods,
- ▲ implement a fair value commuting program or other pricing of vehicle travel and parking,
- ▲ provide carpool and/or vanpool incentive programs,
- ▲ allow flexible work hours and schedule classes to reduce arrivals/departures during peak hours, and
- ▲ offer remote working options.

The TDM strategies implemented to reduce peak hour intersection delay at this location will be consistent with existing and planned TDM programs on campus, including the UC Davis TDM Plan currently in development. If these TDM strategies are not sufficient to reduce peak hour intersection delay consistent with the significance criteria, additional TDM measures or adjustments to the measures above shall be implemented.

Finding: For SR 113/Hutchison Drive interchange, the Board finds that the implementation of the 2018 LRDP would generate vehicle trips that would result in a significant impact on the operation of the interchange. LRDP Mitigation Measures 3.16-2a and 3.16-2b are hereby adopted and incorporated into the Project. Implementation of these mitigation measures will reduce this impact, but not to a less-than-significant level. The mitigation measures would improve operating conditions at the Hutchison Drive/SR 113 NB Ramps intersection by instituting TDM measures and expanding the interchange ramp terminal intersection capacity to better accommodate vehicle traffic demands. The proposed mitigations also accounts for improving the bicycle and pedestrian crossings of the interchange ramp terminal intersections such that the mitigation does not create new impacts for those travel modes. However, even with the implementation of these TDM measures and reduction standards, the trip reductions cannot be guaranteed to result in a less than significant impact. Furthermore, while UC Davis expects to fund the proposed physical improvements to the Hutchison Drive/SR 113 interchange, improvements or modifications are subject to final approval and actions by other public agencies and therefore, their implementation cannot be guaranteed. The implementation of LRDP Mitigation Measures 3.16-2a and 3.16-2b does not ensure that the significant impact will be reduced to a less-than-significant impact. There are no other available feasible mitigation measures to reduce this impact. Therefore, the implementation of the 2018 LRDP may result in an impact related to SR 113/Hutchison Drive interchange operation that is significant and unavoidable. The Board finds this remaining significant impact to be acceptable because the benefits of the Project outweigh this and the other significant and unavoidable environmental impacts of the Project for the reasons set forth in the “Statement of Overriding Considerations” in Section III, below.

For First Street/D Street and Russell Boulevard/Fifth Street/B Street intersections, the Board finds that the implementation of the 2018 LRDP would generate vehicle trips that would result in a significant impact on the operation of the intersections. LRDP Mitigation Measures 3.16-2c is hereby adopted and incorporated into the Project. Implementation of this mitigation measure will reduce this impact, but not to a less-than-significant level. The mitigation measures would improve operating conditions at these intersections by intersections by reducing vehicle travel demand through TDM measures. However, even with the implementation of these TDM measures and reduction standards, it cannot be guaranteed that the trip reductions due to TDM measures will reduce the impact to less than significant. Therefore, the implementation of LRDP Mitigation Measure 3.16-2c does not ensure that the significant impact will be reduced to a less-than-significant impact. There are no other available feasible mitigation measures to reduce this impact. Therefore, the implementation of the 2018 LRDP may result in an impact related to the operation of First Street/D Street and Russell Boulevard/Fifth Street/B Street intersections that is significant and unavoidable. The Board finds this remaining significant impact to be acceptable because the benefits of the Project outweigh this and the other significant and unavoidable environmental impacts of the Project for the reasons set forth in the “Statement of Overriding Considerations” in Section III, below.

Impact 3.16-6: Cumulative impacts to freeway level of service.

Implementation of the 2018 LRDP would increase local and regional vehicle travel under cumulative conditions, which would contribute to unacceptable LOS F conditions on I-80. This impact would therefore be a cumulatively considerable contribution to a significant impact.

Mitigation Measures: Mitigation Measure 3.16-6: Implement TDM strategies to reduce vehicle trips on I-80. Implement 2018 LRDP Mitigation Measure 3.16-1 which is also applicable to this impact.

Finding: The Board finds that the implementation of the 2018 LRDP would generate vehicle trips that would result in significant impacts on I-80. 2018 LRDP Mitigation Measure 3.16-1 is hereby adopted and incorporated into the Project. Implementation of this mitigation measure will reduce this cumulative impact, but not to a less-than-significant level. Implementation of 2018 LRDP Mitigation Measure 3.16-1 would reduce vehicle travel to and from campus on I-80. However, even with the implementation of these TDM measures and reduction standards, it cannot be guaranteed that the trip reductions due to TDM measures will reduce the additional vehicle trips on I-80 from the 2018 LRDP to less than significant. Caltrans has identified the need for carpool lanes on I-80 between Richards Boulevard in Davis and West Sacramento to accommodate regional traffic growth, which includes the employee and student growth associated with UC Davis. The carpool lane project has already been incorporated into the 2016 SACOG MTP/SCS and is a fully funded project expected to be implemented by 2036. The implementation of LRDP Mitigation Measure 3.16-1 does not ensure that the significant impact will be reduced to less than cumulatively considerable. There are no other available feasible mitigation measures to reduce this impact. Therefore, the implementation of the 2018 LRDP may result in a cumulative impact to I-80 that is significant and unavoidable. The Board finds this remaining significant impact to be acceptable because the benefits of the Project outweigh this and the other significant and unavoidable environmental impacts of the Project for the reasons set forth in the “Statement of Overriding Considerations” in Section III, below.

2. Issues for which the Project would have a Less-than-Significant Impact with Project-specific Mitigation Measures Incorporated

Pursuant to Public Resources Code section 21081(a)(1) and CEQA Guidelines section 15091(a)(1), the following potentially significant impacts identified in the Final EIR will be reduced to less-than-significant impacts through the implementation of the mitigation measures hereby incorporated into the Project.

3.1 Aesthetics

Impact 3.1-3: Create a new source of light or glare. 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. This impact is considered potentially significant.

Mitigation Measures:

Mitigation Measure 3.1-3a: Building surfaces.

UC Davis shall require the use of textured, non-reflective exterior surfaces and non-reflective (mirrored) glass during design review of all new/redeveloped structures.

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.

Findings: The Board finds that the implementation of the 2018 LRDP could significantly affect the existing visual character and quality of Davis campus by introducing new sources of light and glare. LRDP Mitigation Measures 3.1-3a and 3.1-3b are hereby adopted and incorporated into the Project. The Board finds that implementation of LRDP Mitigation Measures 3.1-3a and 3.1-3b will reduce this potentially significant impact to a less-than-significant impact by ensuring the use of non-reflective surfaces and direction lighting with shielded and cutoff type light fixtures such that light spillover onto adjacent uses and skyglow would not significantly increase over existing conditions. Therefore, the Project with mitigation will not cause significant visual impacts due to light and glare.

Cumulative Impact - Create a new source of light or glare. Implementation of the 2018 LRDP would introduce new sources of light and glare associated with new buildings and facilities. Cumulative effects of lighting are visible over a wide area, because of the potential for lighting from a number of projects to create skyglow. Under existing conditions, the UC Davis campus, and surrounding areas, experience lighting in the form

of streetlights, or illumination for paths, buildings, and other noteworthy structures. The project impact may be cumulatively considerable and is considered potentially significant.

Mitigation Measures:

Mitigation Measure 3.1-3a: Building surfaces and **Mitigation Measure 3.1-3b:** Lighting fixtures. Implement 2018 LRDP Mitigation Measure 3.1-3a and 3.1-3b which are also applicable to this impact.

Findings: The Board finds that the implementation of the 2018 LRDP could significantly affect the existing visual character and quality of Davis campus by introducing new sources of light and glare. This impact may have a cumulatively considerable contribution to the cumulative impact due to skyglow. LRDP Mitigation Measures 3.1-3a and 3.1-3b are hereby adopted and incorporated into the Project. The Board finds that implementation of LRDP Mitigation Measures 3.1-3a and 3.1-3b will reduce this potentially significant impact to less than cumulatively considerable by ensuring the use of non-reflective surfaces and direction lighting with shielded and cutoff type light fixtures such that light spillover onto adjacent uses and skyglow would not significantly increase over existing conditions. Therefore, the Project with mitigation will not cause a significant cumulative visual impacts due to light and glare.

3.3 Air Quality

Impact 3.3-1: Construction-generated emissions of ROG and PM₁₀.

Construction-generated emissions would potentially exceed YSAQMD significance thresholds for ROG and PM₁₀ during construction. Therefore, this impact would be potentially significant.

Mitigation Measure: Mitigation Measure 3.3-1: Reduce construction-generated emissions of ROG and PM₁₀.

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 off-site 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 off-site runoff as a result of watering for dust control purposes.

Finding: The Board finds that the implementation of the 2018 LRDP would generate construction emissions that would result in a significant impact on air quality due to ROG and PM₁₀ emissions. LRDP Mitigation Measure 3.3-1 is hereby adopted and incorporated into the Project. The Board finds that implementation of LRDP Mitigation Measure 3.3-1 will reduce this potentially significant impact to a less-than-significant impact by reducing ROG and PM₁₀ emissions from construction activities to below YSAQMD significance thresholds. Therefore, the Project with mitigation will not cause significant air quality impacts due to ROG and PM₁₀ emissions from construction activities.

Cumulative Impact due to Construction-generated emissions of ROG and PM₁₀.

Construction-generated emissions would potentially exceed YSAQMD significance thresholds for ROG and PM₁₀ during construction. YSAQMD considers emissions of ROG and PM₁₀ from an individual project that exceed the applicable thresholds to be a substantial contribution to this SVAB-wide (i.e., cumulative) impact (YSAQMD 2007). Therefore, this impact would be potentially cumulatively considerable and significant.

Mitigation Measure: Mitigation Measure 3.3-1: Reduce construction-generated emissions of ROG and PM₁₀. Implement 2018 LRDP Mitigation Measure 3.3.1 which is also applicable to this impact

Finding: The Board finds that the implementation of the 2018 LRDP would generate construction emissions that may result in a cumulatively considerable contribution to the cumulative impact on air quality due to ROG and PM₁₀ emissions that exceed YSAQMD significance thresholds. LRDP Mitigation Measure 3.3-1 is hereby adopted and

incorporated into the Project. The Board finds that implementation of LRDP Mitigation Measure 3.3-1 will reduce this potentially significant impact to less than cumulatively considerable by reducing ROG and PM₁₀ emissions from construction activities to below YSAQMD significance thresholds. Therefore, the Project with mitigation will not cause a significant cumulative air quality impacts due ROG and PM₁₀ emissions from construction activities.

Impact 3.3-4: Short-term construction emissions of toxic air contaminants.

Construction-related activities would result in temporary, short-term project-generated emissions of TACs, particularly diesel PM. Overall construction TAC emissions would likely result health risks that are below YSAQMD thresholds. However, because of the variety of sensitive receptors located on the 2018 LRDP area (e.g., child care centers, outdoor athletic facilities), and because TAC-emitting construction activity could occur adjacent to sensitive receptors within the 2018 LRDP area during plan implementation, construction-related TAC emissions could expose sensitive receptors to an incremental increase in cancer risk that exceeds 10 in one million or a HI greater than 1.0. This impact would be potentially significant.

Mitigation Measure: 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 site 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.

Finding: The Board finds that the implementation of the 2018 LRDP would generate construction emissions that would result in a significant impact on air quality due to TAC

emissions. LRDP Mitigation Measure 3.3-4 is hereby adopted and incorporated into the Project. The Board finds that implementation of LRDP Mitigation Measure 3.3-4 will reduce this potentially significant impact to a less-than-significant impact by limiting exposure of on-site sensitive receptors that may be located directly adjacent to construction activity, such that construction activity is either located further away from the receptors or construction activity would not occur while adjacent sensitive receptors are present. Therefore, the Project with mitigation will not cause significant air quality impacts due to TAC emissions from construction activities.

Impact 3.3-7: Exposure of sensitive receptors to odors (project and cumulative impact).

The 2018 LRDP would introduce new odor sources into the area, such as new research facilities, a composting facility, and a biomass boiler. The new odor sources are similar to the type of existing sources that operate in and near the Davis campus; however, depending on their location, the new potential odor sources could result in perceivable odors at nearby receptors. As a result, impacts would be potentially significant.

Mitigation Measure 3.3-7: Odor control for the proposed composting facility, biomass boiler, and expanded wastewater treatment plant.

UC Davis shall implement the following measures for the development of composting facility, biomass boiler, and modifications to the wastewater treatment plant:

- 1) Locate new/modified facilities and any organic matter storage piles, fuel storage, or open-air processes at least 1,000 feet from and downwind of the nearest sensitive receptors and academic building space;
- 2) Include operational provisions to guard against anaerobic activity in organic matter storage piles; and
- 3) Place odor controls surrounding the organic storage piles, as feasible.

Finding: The Board finds that the implementation of the 2018 LRDP would generate odors that would result in a significant impact. LRDP Mitigation Measure 3.3-7 is hereby adopted and incorporated into the Project. The Board finds that implementation of LRDP Mitigation Measure 3.3-7 will reduce this potentially significant impact to a less-than-significant impact by locating organic storage and burning operations away from sensitive receptors so that odors may dissipate before reaching sensitive receptors. Therefore, the Project with mitigation will not cause significant air quality impacts due to odors.

3.4 Archaeological, Historical, and Tribal Cultural Resources

Impact 3.4-1: Impacts to unique archaeological resources.

Future development associated with the 2018 LRDP could be located on properties that contain known or unknown archaeological resources and ground-disturbing activities could result in discovery or damage of yet undiscovered archaeological resources as defined in CEQA Guidelines Section 15064.5. This would be a potentially significant impact.

Mitigation Measure: 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.

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.

Mitigation Measure 3.4-1c: Document unique archaeological resources.

If a significant unique archaeological resource cannot be preserved intact, before the property is damaged or destroyed, the UC Davis Office of Campus Planning and Environmental Stewardship shall ensure that the resource is appropriately documented. For an archaeological site, a program of research-directed data recovery shall be conducted and reported, consistent with Mitigation Measure 3.4-1a.

Finding: The Board finds that the implementation of the 2018 LRDP would potentially significant impacts to archaeological resources. LRDP Mitigation Measures 3.4-1a through 3.4-1c are hereby adopted and incorporated into the Project. The Board finds that

implementation of LRDP Mitigation Measures 3.4-1a through 3.4-1c will reduce this potentially significant impact to a less-than-significant impact by requiring measures to address impacts in coordination with the appropriate federal, state, and/or local agency(ies) and tribes to avoid, move, record, or otherwise treat the archaeological resource appropriately, in accordance with pertinent laws and regulations. Therefore, the Project with mitigation will not cause significant archeological impacts.

Cumulative Impacts to unique archaeological resources.

Future development associated with the 2018 LRDP could be located on properties that contain known or unknown archaeological resources and ground-disturbing activities could result in discovery or damage of yet undiscovered archaeological resources as defined in CEQA Guidelines Section 15064.5. The cumulative context for archaeological resources, human remains, and tribal cultural resources is the former territory of the Southern Wintun, or Patwin. River Patwin occupied the west side of the lower Sacramento River below the mouth of the Feather River and the lower reaches of Cache Creek and Putah Creek in the Sacramento Valley. Because all significant cultural resources are unique and nonrenewable members of finite classes, meaning there are a limited number of significant cultural resources, all adverse effects erode a dwindling resource base. Therefore, the project impact may be a potentially cumulatively considerable contribution to a significant cumulative impact.

Mitigation Measure: **Mitigation Measure 3.4-1a:** Identify and protect unknown archaeological resources, **Mitigation Measure 3.4-1b:** Protect known unique archaeological resources., and **Mitigation Measure 3.4-1c:** Document unique archaeological resources. Implement 2018 LRDP Mitigation Measures 3.4-1a, 3.4-1b, and 3.4-1c which are also applicable to this impact

Finding: The Board finds that the implementation of the 2018 LRDP would potentially result in cumulatively considerable impacts to archaeological resources. LRDP Mitigation Measures 3.4-1a through 3.4-1c are hereby adopted and incorporated into the Project. The Board finds that implementation of LRDP Mitigation Measures 3.4-1a through 3.4-1c will reduce this potentially significant cumulative impact to less than cumulatively considerable by requiring measures to address impacts in coordination with the appropriate federal, state, and/or local agency(ies) and tribes to avoid or mitigate archaeological resources. Therefore, the Project with mitigation will not cause a cumulatively considerable contribution to cumulative significant archeological impacts.

3.5 Biological Resources

Impact 3.5-1: Disturbance or loss of special-status plants.

Species	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
<i>Navarretia leucocephala</i> <i>ssp. bakeri</i>									
California alkali grass <i>Puccinellia simplex</i>									
Solano grass or Crampton's tuctoria <i>Tuctoria mucronata</i>									

Source: Data compiled by Ascent Environmental in 2017

Mitigation Measure 3.5-1b: Special-status plant avoidance.

If special-status plant species are found on a particular project site and are located outside of the permanent footprint of any proposed structures/site features and can be avoided, UC Davis will establish and maintain a 40-foot protective buffer around special-status plants to be retained to ensure avoidance.

Mitigation Measure 3.5-1c: Special-status plant impact minimization measures.

If special-status plants are found during rare plant surveys and cannot be avoided, UC Davis will consult with CDFW and USFWS, as appropriate depending on species status, to determine the appropriate compensation to achieve no net loss of occupied habitat or individuals. Mitigation measures may include, but are not limited to, preserving and enhancing existing populations, creating off-site populations on mitigation sites through seed collection or transplantation at a 1:1 ratio, and restoring or creating suitable habitat in sufficient quantities to achieve no net loss of occupied habitat or individuals. Potential mitigation sites could include suitable locations within or outside of the campus. UC Davis will develop and implement a site-specific mitigation strategy describing how unavoidable losses of special-status plants will be compensated. Success criteria for preserved and compensatory populations will include:

- 1) The extent of occupied area and plant density (number of plants per unit area) in compensatory populations will be equal to or greater than the affected occupied habitat.
- 2) Compensatory and preserved populations will be self-producing. Populations will be considered self-producing when:
 - i) plants reestablish annually for a minimum of five years with no human intervention such as supplemental seeding; and

- ii) reestablished and preserved habitats contain an occupied area and flower density comparable to existing occupied habitat areas in similar habitat types in the project vicinity.
- 3) If off-site mitigation includes dedication of conservation easements, purchase of mitigation credits, or other off-site conservation measures, the details of these measures will be included in the mitigation plan, including information on responsible parties for long-term management, conservation easement holders, long-term management requirements, success criteria such as those listed above and other details, as appropriate to target the preservation of long term viable populations.

Finding: The Board finds that the implementation of the 2018 LRDP could result a significant impact to special-status plants. LRDP Mitigation Measures 3.5-1a, 3.5-1b, and 3.5-1c are hereby adopted and incorporated into the Project. The Board finds that implementation of LRDP Mitigation Measures 3.5-1a, 3.5-1b, and 3.5-1c will reduce this potentially significant impact to a less-than-significant impact by requiring that special-status plants are identified and avoided or that compensation is provided for loss of special-status plants through enhancement of existing populations, creation and management of off-site populations, conservation easements, or other appropriate measures. Therefore, the Project with mitigation will not cause significant impacts on special status species.

Impact 3.5-2: Impacts to giant garter snake and western pond turtle.

Implementation of the 2018 LRDP may involve conversion of ruderal grassland habitat and agricultural lands to urban uses, which could result in loss of upland nesting/overwintering habitat (ruderal grasslands) for giant garter snake and western pond turtle. This impact would be potentially significant.

Mitigation Measures: Mitigation 3.5-2a: Giant garter snake avoidance and exclusion.

For any projects under the 2018 LRDP that would be located within 300 feet of Putah Creek or agricultural ditches, UC Davis will retain a qualified biologist who will conduct a field investigation prior to development to delineate giant garter snake aquatic habitat within a particular project's footprint and adjacent areas within 300 feet of the project's footprint. If it is determined that no giant garter snake habitat is present, then no mitigation is required. If it is determined that giant garter snake habitat is present, the following measures shall be implemented:

- 1) All construction activity within giant garter snake aquatic and upland habitat in and around the project site will be conducted between May 1 and September 15, the active period for giant garter snakes. This would reduce direct impacts on the species because the snakes would be active and respond to construction activities by moving out of the way.

- 2) During construction, an approved biologist experienced with giant garter snake identification and behavior will be on site when construction activities within aquatic habitat or within 300 feet of aquatic habitat are taking place. The biologist will inspect the project site daily for giant garter snake prior to construction activities. The biologist will also conduct environmental awareness training for all construction personnel working on the project site on required avoidance procedures and protocols if a giant garter snake enters an active construction zone.

- 3) If construction activities will occur in giant garter snake aquatic habitat, aquatic habitat will be dewatered and then remain dry and absent of aquatic prey (e.g., fish and tadpoles) for 15 days prior to initiation of construction activities. If complete dewatering is not possible, the project applicant will consult with CDFW and USFWS to determine what additional measures may be necessary to minimize effects to giant garter snake. After aquatic habitat has been dewatered 15 days prior to construction activities, exclusion fencing will be installed extending a minimum of 300 feet into adjacent uplands to isolate both the aquatic and adjacent upland habitat. Exclusionary fencing will be erected 36 inches above ground and buried at least 6 inches below the ground to prevent snakes from attempting to move under the fence into the construction area. In addition, high-visibility fencing will be erected to identify the construction limits and to protect adjacent habitat from encroachment of personnel and equipment. Giant garter snake habitat outside construction fencing will be avoided by all construction personnel. The fencing and the work area will be inspected by the approved biologist to ensure that the fencing is intact and that no snakes have entered the work area before the start of each work day. The fencing will be maintained by the contractor until completion of the project. If a giant garter snake is observed, the biologist will notify CDFW and USFWS immediately. Construction activities will be suspended within a 100-foot radius of the garter snake until the snake leaves the project site on its own volition. If necessary, the biologist will consult with CDFW and USFWS regarding appropriate procedures for relocation. If the animal is handled, a report will be submitted, including date(s), location(s), habitat description, and any corrective measures taken to protect giant garter snake within one business day to CDFW and USFWS. The biologist will report any take of listed species to USFWS immediately. Any worker who inadvertently injures or kills a giant garter snake or who finds one dead, injured, or entrapped must immediately report the incident to the approved biologist.

- 4) All excavated steep-walled holes and trenches more than 6 inches deep will be covered with plywood (or similar material) or provided with one or more escape ramps constructed of earth fill or wooden planks at the end of each work day or 30 minutes prior to sunset, whichever occurs first. All steep-walled holes and trenches will be inspected by the approved biologist each morning to ensure that no wildlife has become entrapped. All construction pipes, culverts, similar structures, construction equipment, and construction debris left overnight within giant garter

- snake modeled habitat will be inspected for giant garter snake by the approved biologist prior to being moved.
- 5) If erosion control is implemented within the project site, non-entangling erosion control material will be used to reduce the potential for entrapment. Tightly woven fiber netting (mesh size less than 0.25 inch) or similar material will be used to ensure snakes are not trapped (no monofilament). Coconut coir matting and fiber rolls containing burlap are examples of acceptable erosion control materials.
 - 6) UC Davis will ensure that there is no-net-loss of giant garter snake habitat by compensating for direct loss of habitat at a ratio of 1:1, either through the purchase of credits from a USFWS-approved conservation bank or on-site restoration/habitat construction within the UC Davis campus.

Mitigation Measure 3.5-2b: Western pond turtle pre-construction surveys and relocation.

Within 24 hours of the commencement of construction activities within 200 feet of suitable aquatic habitat for western pond turtle, a qualified biologist will inspect areas of anticipated disturbance for the presence of western pond turtle. The construction area will be re-inspected whenever a lapse in construction activity of two weeks or more has occurred. If pond turtles are found during the survey or observed within the construction area at any other time, they will be relocated by a qualified biologist to upstream or adjacent aquatic habitat that would not be disturbed by construction activity. If western pond turtle nests are identified in the work area during pre-construction surveys, a 300-foot no disturbance buffer will be established between the nest and any areas of potential disturbance. Buffers shall be clearly marked with temporary fencing. Construction will not be allowed to commence in the exclusion area until hatchlings have emerged from the nest, or the nest is deemed inactive by a qualified biologist (CDFW 2013).

Finding: The Board finds that the implementation of the 2018 LRDP could result a significant impact to the giant garter snake and western pond turtle. LRDP Mitigation Measures 3.5-2a and 3.5-2b are hereby adopted and incorporated into the Project. The Board finds that implementation of LRDP Mitigation Measures 3.5-2a will reduce this potentially significant impact to the giant garter snake to a less-than-significant impact by through avoidance and protection from construction activities and by requiring compensation for loss of suitable occupied habitat because of construction activities. The Board finds that implementation of LRDP Mitigation Measures 3.5-2b will reduce this potentially significant impact to the western pond turtle to less-than-significant impact by requiring preconstruction surveys and relocation of any individuals within the construction area. Therefore, the Project with mitigation will not cause significant impacts on the giant garter snake and western pond turtle.

Impact 3.5-3: Impacts to Chinook salmon.

Although implementation of the 2018 LRDP does not include any direct development or conversion of Putah Creek, it could result in construction activities being conducted within the Putah Creek channel, or the Putah Creek Riparian Reserve surrounding the channel. Additionally, construction activities conducted under the 2018 LRDP could result in the introduction of silt into Putah Creek, which could potentially affect special-status fish species. Impacts to Chinook salmon would be potentially significant.

Mitigation Measure 3.5-3: Chinook salmon avoidance.

For any construction or maintenance work conducted within Putah Creek or the Putah Creek Riparian Reserve, the following measures shall be implemented:

- 1) Work conducted within the creek will take place outside of the migration season (November 1 through December 31) to the extent feasible.
- 2) If construction activities are to be conducted in the water during the migration season:
 - a) Silt curtains will be used at the construction location.
 - b) Water quality will be evaluated during and after all in-water construction. The performance criteria will be no degradation of downstream water quality compared to upstream water quality. Water quality will be evaluated by a qualified environmental monitor using appropriate qualitative or quantitative measurements, including turbidity and temperature. Remedial measures will be implemented if downstream water quality is degraded.. Remedial measures will include the following:
 - i) Modification or suspension of in-water construction activities as appropriate;
 - ii) Installation of additional sediment control devices; and
 - iii) Additional monitoring to evaluate the water quality after measures are implemented.
 - c) Silt fencing will be installed as appropriate along the edges of the creek to prevent excess fill from entering the water. All silt fences will be maintained and checked for efficacy as necessary, but not less frequently than one time per week.

Finding: The Board finds that the implementation of the 2018 LRDP could result a significant impact to Chinook salmon. LRDP Mitigation Measures 3.5-3 is hereby adopted and incorporated into the Project. The Board finds that implementation of LRDP Mitigation Measures 3.5-3 will reduce this potentially significant impact to less-than-significant impact by requiring that construction activities are avoided during the Chinook salmon migration season, and that construction activities conducted during migration season will not result in silt discharge into Putah Creek. Therefore, the Project with mitigation will not cause significant impacts on the Chinook salmon.

Impact 3.5-4: Impacts to Swainson’s hawk and other nesting raptors.

Construction activities associated with implementation of the 2018 LRDP, such as ground disturbance, construction vehicles, and general presence of active construction crews, could disturb nesting Swainson’s hawks, northern harriers, white-tailed kites and other special-status nesting raptors, potentially resulting in nest abandonment or failure, and mortality of chicks and eggs. Implementation of the 2018 LRDP would also involve the conversion of up to 270 acres of agricultural land and undeveloped ruderal grassland to urban uses, thus would result in the permanent loss of suitable foraging habitat for Swainson’s hawk. This impact would be significant.

Mitigation Measures: 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 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.

Mitigation Measure 3.5-4b: Compensation for loss of Swainson’s hawk foraging habitat.

Project implementation under the 2018 LRDP includes conversion of up to approximately 270 acres of suitable foraging habitat for Swainson’s hawk, including 128 acres of agricultural land and 143 acres of ruderal grassland. UC Davis shall mitigate the loss of 270 acres of suitable foraging habitat through establishment of mitigation lands (grassland habitat or agricultural land) near existing mitigation land, potentially at Russell Ranch, at a 1:1 ratio. Surplus acreage post-implementation of mitigation under the 2003 LRDP may be credited towards development under the 2018 LRDP in fulfillment of this mitigation. This mitigation plan is consistent with the Yolo Habitat Conservancy’s Swainson’s Hawk Interim Mitigation Fee Program which requires a 1:1 replacement ratio of foraging habitat acreage.

Finding: The Board finds that the implementation of the 2018 LRDP could result a significant impact to the Swainson’s Hawk and other nesting raptors. LRDP Mitigation Measures 3.5-4a and 3.5-4b are hereby adopted and incorporated into the Project. The Board finds that implementation of LRDP Mitigation Measures 3.5-4a and 3.5-4b will reduce this potentially significant impact to the Swainson’s Hawk and other nesting raptors to less-than-significant impact by requiring that Swainson’s hawk and other raptor nests are avoided and protected from construction activities, and that UC Davis compensates for loss of Swainson’s hawk foraging habitat through habitat restoration and preservation. Therefore, the Project with mitigation will not cause significant impacts on the Swainson’s Hawk and other nesting raptors.

Impact 3.5-5: Impacts to burrowing owl.

Project implementation including construction activities such as ground disturbance, construction vehicles, and presence of construction crews could disturb nesting burrowing owls, potentially resulting in their abandonment, failure, or mortality of chicks and eggs. Project implementation includes conversion of approximately 143 acres of undeveloped ruderal grassland to urban uses, thus would result in the permanent loss of suitable habitat for burrowing owl. This impact would be potentially significant.

Mitigation Measures: **Mitigation Measure 3.5-5a:** Burrowing owl avoidance and compensation.

For any construction projects implemented under the 2018 LRDP, the following measures will be implemented prior to initiation of construction to reduce impacts on burrowing owl:

- 1) UC Davis will retain a qualified biologist to conduct focused breeding and nonbreeding season surveys for burrowing owls in areas of suitable habitat (e.g., ruderal grassland, annual grassland, agricultural land, roadsides) on and within 1,500 feet of pending construction activities for a project under the 2018 LRDP. Surveys will be conducted prior to the start of construction activities and in accordance with Appendix D of CDFW's *Staff Report on Burrowing Owl Mitigation* (CDFW 2012).
- 2) If no occupied burrows are found, a letter report documenting the survey methods and results will be submitted to CDFW and no further mitigation will be required.
- 3) If an active burrow is found within 1,500 feet of pending construction activities that would occur during the nonbreeding season (September 1 through January 31), UC Davis will consult with CDFW regarding protection buffers to be established around the occupied burrow and maintained throughout construction. If occupied burrows are present that cannot be avoided or adequately protected with a no-disturbance buffer, a burrowing owl exclusion plan will be developed, as described in Appendix E of CDFW's 2012 Staff Report. Burrowing owls will not be excluded from occupied burrows until the project's burrowing owl exclusion plan is approved by CDFW. The exclusion plan will include a plan for creation, maintenance, and monitoring of artificial burrows in suitable habitat.
- 4) If an active burrow is found during the breeding season (February 1 through August 31), occupied burrows will not be disturbed and will be provided with a protective buffer unless a qualified biologist verifies through noninvasive means that either: (1) the birds have not begun egg laying, or (2) juveniles from the occupied burrows are foraging independently and are capable of independent survival. The size of the buffer will depend on the time of year and level disturbance as outlined in the CDFW Staff Report (CDFW 2012). The size of the buffer may be reduced if a broad-scale, long-term, monitoring program acceptable to CDFW is implemented so that burrowing owls are not detrimentally affected. Once the fledglings are capable of independent survival, the owls can be evicted and the burrow can be destroyed per the terms of a CDFW-approved burrowing owl exclusion plan developed in accordance with Appendix E of CDFW's 2012 Staff Report.
- 5) If active burrowing owl nests are found on the project site and are destroyed by project implementation, UC Davis will mitigate the loss of occupied habitat in accordance with guidance provided in the CDFW 2012 Staff Report, which states that permanent impacts to nesting, occupied and satellite burrows, and burrowing owl habitat will be mitigated such that habitat acreage and number of burrows are replaced through permanent conservation of comparable or better habitat with similar vegetation communities and burrowing mammals (e.g., ground squirrels) present to provide for nesting, foraging, wintering, and dispersal. UC Davis will retain a qualified biologist to develop a burrowing owl mitigation and management plan that incorporates the following goals and standards:

- a) Mitigation lands will be selected based on comparison of the habitat lost to the compensatory habitat, including type and structure of habitat, disturbance levels, potential for conflicts with humans, pets, and other wildlife, density of burrowing owls, and relative importance of the habitat to the species range wide. Mitigation for loss of burrowing owl habitat under the 2003 LRDP included establishment of mitigation lands within Russell Ranch, which is a feasible option for future mitigation under the 2018 LRDP.
- b) If feasible, mitigation lands will be provided adjacent or proximate to the project site (e.g. Russell Ranch) so that displaced owls can relocate with reduced risk of take. Feasibility of providing mitigation adjacent or proximate to the project site depends on availability of sufficient suitable habitat to support displaced owls that may be preserved in perpetuity.
- c) If suitable habitat is not available for conservation adjacent or proximate to the project site, mitigation lands will be focused on consolidating and enlarging conservation areas outside of urban and planned growth areas and within foraging distance of other conservation lands. Mitigation may be accomplished through purchase of mitigation credits at a CDFW-approved mitigation bank, if available. If mitigation credits are not available from an approved bank and mitigation lands are not available adjacent to other conservation lands, alternative mitigation sites and acreage will be determined in consultation with CDFW.
- d) If mitigation is not available through an approved mitigation bank and will be completed through permittee-responsible conservation lands, the mitigation plan will include mitigation objectives, site selection factors, site management roles and responsibilities, vegetation management goals, financial assurances and funding mechanisms, performance standards and success criteria, monitoring and reporting protocols, and adaptive management measures. Success will be based on the number of adult burrowing owls and pairs using the site and if the numbers are maintained over time. Measures of success, as suggested in the 2012 Staff Report, will include site tenacity, number of adult owls present and reproducing, colonization by burrowing owls from elsewhere, changes in distribution, and trends in stressors.

Mitigation Measure 3.5-5b: Compensation for loss of burrowing owl habitat.
Implement Mitigation Measure 3.5-4b.

Finding: The Board finds that the implementation of the 2018 LRDP could result a significant impact to the burrowing owl. LRDP Mitigation Measures 3.5-5a, 3.5-5b and 3.5-4b are hereby adopted and incorporated into the Project. The Board finds that implementation of LRDP Mitigation Measures 3.5-5a, 3.5-5b and 3.5-4b will reduce this potentially significant impact to the burrowing owl to less-than-significant impact by requiring that burrowing owls are avoided and protected from construction activities, or

that UC Davis compensate for loss of suitable occupied habitat due to construction activities. Implementation of Mitigation Measure 3.5-5b, which requires compensation for loss of Swainson's hawk foraging habitat, would have the secondary effect of compensating/mitigating for impacts to burrowing owl habitat, as burrowing owls would also be expected to use suitable Swainson's hawk foraging habitat. Therefore, the Project with mitigation will not cause significant impacts on the burrowing owl.

Impact 3.5-6: Impacts to other special-status birds.

Development under the 2018 LRDP would not require removal of riparian habitat, however implementation the 2018 LRDP could result in the conversion of approximately 143 acres of undeveloped ruderal grassland and 128 acres of agricultural land to urban uses, resulting in the potential loss of suitable breeding habitat for tricolored blackbird and other nests. This impact would be significant.

Mitigation Measures: 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:

- 1) 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.
- 2) 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.

Finding: The Board finds that the implementation of the 2018 LRDP could result a significant impact to the tricolored blackbird and other bird nests. LRDP Mitigation Measure 3.5-6 is hereby adopted and incorporated into the Project. The Board finds that implementation of LRDP Mitigation Measures 3.5-6 will reduce this potentially significant impact to the tricolored blackbird and other bird nests to less-than-significant

impact by requiring nests are avoided or protected from construction activities. Therefore, the Project with mitigation will not cause significant impacts on the tricolored blackbird and other bird nests

Impact 3.5-7: Impacts to valley elderberry longhorn beetle.

Project construction activities, such as vegetation removal, could result in the loss of elderberry shrubs which are the primary habitat for the federally threatened valley elderberry longhorn beetle. Removal of or damage to elderberry shrubs occupied by valley elderberry longhorn beetle would be a significant impact.

Mitigation Measures: Mitigation Measure 3.5-7: Valley elderberry longhorn beetle avoidance.

The following measures will be implemented to avoid or minimize loss of elderberry shrubs, and valley elderberry longhorn beetle as a result of construction activities associated with the 2018 LRDP:

- 1) Prior to initiation of construction activities for a particular project under the 2018 LRDP, a qualified biologist will conduct surveys for valley elderberry longhorn beetle according to the protocol outlined in USFWS *Framework for Assessing Impacts to the Valley Elderberry Longhorn Beetle* (USFWS 2017b). The biologist will determine if there is a riparian area, elderberry shrubs, or known valley elderberry longhorn beetle records within 800 meters (2,526 feet) of the project site, and whether the project site is continuous with a historical riparian corridor. If the project site does not contain riparian habitat and does not contain elderberry shrubs within 50 feet, then no further action is required.
- 2) If the project site does not contain riparian habitat, but does contain elderberry shrubs, then the elderberry shrubs will be inspected for valley elderberry longhorn beetle exit holes. If exit holes are not present the project applicant will consult with USFWS to discuss project details and potential impacts to elderberry shrubs, and will consider additional information, including occurrences of valley elderberry longhorn beetle within 800 meters of the project site, and proximity of the project site to existing and historic riparian corridors.
- 3) If riparian habitat is present within the project site and elderberry shrubs are present within 50 feet, then it is likely that the site is occupied by valley elderberry longhorn beetle. If the project site contains riparian habitat and elderberry shrubs are not present within 50 feet, the project applicant will consult with USFWS to discuss project details and potential impacts to elderberry shrubs, as presence of riparian habitat is indicative of historic valley elderberry longhorn beetle occupancy.
- 4) Impacts to valley elderberry longhorn beetle will be avoided and minimized by following the Conservation Measures outlined in the USFWS 2017 Framework for

- cases where elderberry shrubs can be retained and protected within 165 feet of the project footprint.
- 5) If elderberry shrubs are 165 feet or more from project activities, direct or indirect impacts are not expected. Shrubs will be protected during construction by establishing and maintaining a high visibility fence at least 165 feet from the drip line of each elderberry shrub.
 - 6) If elderberry shrubs can be retained within the project footprint, project activities may occur up to 20 feet from the dripline of elderberry shrubs if precautions are implemented to minimize the potential for indirect impacts. Specifically, these minimization measures include:
 - a) All areas to be avoided during construction activities will be fenced or flagged as close to construction limits as possible.
 - b) A minimum avoidance area of at least 20 feet from the dripline of each elderberry plant will be maintained to avoid direct impacts that could damage or kill the plant.
 - c) A qualified biologist will provide training for all contractors, work crews, and any on-site personnel on the status of valley elderberry longhorn beetle, its host plant and habitat, the need to avoid damaging the elderberry shrubs, and the possible penalties for non-compliance.
 - d) A qualified biologist will monitor the work area at project-appropriate intervals to assure that all avoidance and minimization measures are implemented. The amount and duration of monitoring will depend on the project specifics and will be discussed with a USFWS biologist.
 - e) As much as feasible, all activities that could occur within 165 feet of an elderberry shrub will be conducted outside of the flight season of the valley elderberry longhorn beetle (March – July).
 - f) Trimming of elderberry shrubs will occur between November and February and will avoid removal of any branches or stems that are greater than or equal to 1 inch in diameter to avoid and minimize adverse effects to valley elderberry longhorn beetle.
 - g) Project activities, such as truck traffic or other use of machinery, will not create excessive dust on the project site, such that the growth or vigor of elderberry shrubs is adversely affected. Enforcement of a speed-limit and watering dirt roadways are potential methods to minimize excessive dust creation.
 - h) Herbicides will not be used within the drip-line of any elderberry shrub. Insecticides will not be used within 98 feet of any elderberry shrub. All chemicals will be applied using a backpack sprayer or similar direct application method. Mechanical weed removal within the drip-line of any elderberry shrub will be limited to the season when adults are not active (August – February) and will avoid damaging the elderberry.

- i) Erosion control will be implemented, and the affected area will be re-vegetated with appropriate native plants.
- 7) If elderberry shrubs cannot be avoided, compliance with the ESA and consultation with USFWS is required and may involve acquiring an incidental take permit through Section 10, or a take exemption through Section 7. All elderberry shrubs with stems greater than 1 inch in diameter that cannot be avoided or have been adversely affected by indirect damage to stems of the entire shrub will be transplanted.
- 8) No elderberry shrub will be removed or transplanted until authorization has been issued by USFWS and the project applicant has abided by all pertinent conditions of the incidental take permit or biological opinion.
- 9) Relocation of existing elderberry shrubs and planting of new elderberry seedlings and associated riparian species will be implemented according to the Framework (USFWS 2017b). The Framework uses presence or absence of exit holes, and whether the affected elderberry shrubs are located in riparian habitat to determine the number of elderberry seedlings or cuttings and associated riparian vegetation that would need to be planted as compensatory mitigation for affected valley elderberry longhorn beetle habitat. Compensatory mitigation may include purchasing credits at a USFWS-approved conservation bank, providing on-site mitigation, or establishing and protecting habitat for valley elderberry longhorn beetle.

Finding: The Board finds that the implementation of the 2018 LRDP could result a significant impact to the Valley elderberry longhorn beetle. LRDP Mitigation Measure 3.5-7 is hereby adopted and incorporated into the Project. The Board finds that implementation of LRDP Mitigation Measures 3.5-7 will reduce this potentially significant impact to the Valley elderberry longhorn beetle to less-than-significant impact by requiring that elderberry shrubs are avoided and protected from construction activities, or that UC Davis compensates for loss of elderberry shrubs due to construction activities. Therefore, the Project with mitigation will not cause significant impacts on the Valley elderberry longhorn beetle.

Impact 3.5-8: Impacts to special-status mammal species.

Construction activities, including conversion of agricultural land to urban uses and removal of vegetation, trees, or buildings associated with projects undertaken consistent with the 2018 LRDP could result in loss of American badger and pallid bat. This impact would be significant.

Mitigation Measures: Mitigation Measure 3.5-8a: American badger preconstruction surveys and avoidance.

Prior to the commencement of construction within suitable grassland or agricultural habitat, a qualified wildlife biologist will conduct surveys of the ruderal grassland habitat and grain fields slated for conversion on-site to identify any American badger burrows/dens. These surveys will be conducted not more than 30 days prior to the start of construction. If occupied burrows are not found, further mitigation will be not required. If occupied burrows are found, impacts to active badger dens will be avoided by establishing exclusion zones around all active badger dens, within which construction related activities will be prohibited until denning activities are complete or the den is abandoned. A qualified biologist will monitor each den once per week to track the status of the den and to determine when a den area has been cleared for construction.

Mitigation Measure 3.5-8b: Bat preconstruction surveys, exclusion, and mitigation.

The following mitigation measure will apply to construction of the project to reduce impacts on bats:

- 1) Before commencing any structure or tree removal activities, a qualified biologist will conduct surveys for roosting bats. If evidence of bat use is observed, the species and number of bats using the roost will be determined. Bat detectors may be used to supplement survey efforts. If no evidence of bat roosts is found, then no further study and no mitigation will be required.
- 2) If pallid bats are found, bats will be excluded from the roosting site before the tree or structure is removed. Exclusion efforts may be restricted during periods of sensitive activity (e.g., during hibernation or while females in maternity colonies are nursing young). Once, it is confirmed that bats are not present in the original roost site, the tree or structure may be removed. A mitigation program identifying exclusion methods and roost removal procedures will be developed by a qualified biologist in consultation with CDFW before implementation.

Finding: The Board finds that the implementation of the 2018 LRDP could result a significant impact to the American badger and pallid bat. LRDP Mitigation Measures 3.5-8a and 3.5-8b are hereby adopted and incorporated into the Project. The Board finds that implementation of LRDP Mitigation Measures 3.5-8a will reduce this potentially significant impact to the American badger to less-than-significant impact through avoidance and protection from construction activities. The Board finds that implementation of LRDP Mitigation Measures 3.5-8b will reduce this potentially significant impact to the pallid bat to less-than-significant impact through avoidance and protection from construction activities. Therefore, the Project with mitigation will not cause significant impacts on the American badger and pallid bat.

Cumulative Impacts to Special status plants and species

The cumulative context for biological resources impacts for the 2018 LRDP is the area included in the proposed Yolo Habitat Conservation Plan/Natural Community Conservation Plan (HCP/NCCP) plan area because this area supports all of the special-

status species and habitats that could potentially be affected by implementation of the 2018 LRDP, contains known and major populations of many of these species, and contains important occupied and potential habitat for these species. Past development in the HCP/NCCP plan area, ranging from conversion of natural land to agricultural production more than a hundred years ago to recent expansion of urban development, has resulted in a substantial loss of native habitat to other uses. Thus, there is a significant cumulative impact on species status plants and species in the region.

Implementation of the 2018 LRDP could result in potentially significant impacts on palmate-bracted bird's beak (discussed under Impact 3.5-1 above), western pond turtle and giant garter snake (discussed under Impact 3.5-2 above), Chinook salmon (discussed under Impact 3.5-3 above), Swainson's hawk and white-tailed kite (discussed under Impact 3.5-4 above), burrowing owl (discussed under Impact 3.5-5 above), western yellow-billed cuckoo, least bell's vireo, and tricolored blackbird (discussed under Impact 3.5-6 above), valley elderberry longhorn beetle (discussed under Impact 3.5-7 above), and special-status mammal species (discussed under Impact 3.5-8 above). Therefore, the project impact may be a potentially cumulatively considerable contribution to a significant cumulative impact on special status plants and species.

Mitigation Measures: Implement Mitigation Measures 3.5-1a – 3.5-1c; 3.5-2a and 3.5-2b; 3.5-3; 3.5-4a and 3.5-4b; 3.5-5a and 3.5-5b; 3.5-6; 3.5-7; and 3.5-8a and 3.5-8b which are applicable to these cumulative impacts.

Finding: The Board finds that the implementation of the 2018 LRDP could result in a cumulatively considerable contribution on the significant cumulative impact on the following special status plants and species: palmate-bracted bird's beak (discussed under Impact 3.5-1 above), western pond turtle and giant garter snake (discussed under Impact 3.5-2 above), Chinook salmon (discussed under Impact 3.5-3 above), Swainson's hawk and white-tailed kite (discussed under Impact 3.5-4 above), burrowing owl (discussed under Impact 3.5-5 above), western yellow-billed cuckoo, least bell's vireo, and tricolored blackbird (discussed under Impact 3.5-6 above), valley elderberry longhorn beetle (discussed under Impact 3.5-7 above), and special-status mammal species (discussed under Impact 3.5-8 above). LRDP Mitigation Measures 3.5-1a – 3.5-1c; 3.5-2a and 3.5-2b; 3.5-3; 3.5-4a and 3.5-4b; 3.5-5a and 3.5-5b; 3.5-6; 3.5-7; and 3.5-8a and 3.5-8b are hereby adopted and incorporated into the Project. The Board finds that implementation of these LRDP Mitigation Measures will reduce the Project's impact to less than cumulatively considerable through avoidance, protection or mitigation. . Therefore, the Project with mitigation will not result in a cumulatively considerable contribution to the cumulative impact on special status plants and species and the impact would be less than significant.

Impact 3.5-9: Disturbance or loss of sensitive habitats (jurisdictional wetlands, riparian vegetation, aquatic habitat).

Although implementation of the 2018 LRDP does not include direct development or conversion of Putah Creek or the Arboretum Waterway, development under the 2018 LRDP, including drainage improvement or maintenance projects, could affect these aquatic features by introducing sediment into Putah Creek or removing or damaging riparian vegetation. Impacts to wetlands, riparian habitat, and aquatic habitat from project construction activities would be potentially significant.

Mitigation Measures: Mitigation Measure 3.5-9a: Delineation of potential waters.

Prior to construction on or within 100 feet of a project site that may contain wetlands, UC Davis will conduct a wetland delineation of the project site if wetlands are potentially present. UC Davis will submit this delineation report to USACE and will request a preliminary jurisdictional determination. Based on the jurisdictional determination, UC Davis will determine the exact acreage of jurisdictional wetlands, if any, would be filled as a result of project implementation. If wetland habitats or natural drainages are not delineated on the site, then further mitigation will not be required. However, if any jurisdictional wetland habitats or natural drainages are delineated on a project site, then Mitigation Measures 3.5-9b, 3.5-9c and 3.5-9d will be required.

Mitigation Measure 3.5-9b: Regulatory authorizations for impacts to jurisdictional wetlands.

Prior to any grading or construction activities within waters of the United States, the appropriate Section 404 permit will be obtained for any project-related impacts. Any waters of the United States that would be affected by project development will be replaced or restored on a “no-net-loss” basis (i.e., a minimum of a 1:1 ratio) in accordance with USACE mitigation guidelines (or the applicable USACE guidelines in place at the time of construction). In association with the Section 404 permit (if applicable) and prior to the issuance of any grading permit, Section 401 Water Quality Certification from the RWQCB will be obtained.

Mitigation Measure 3.5-9c: Regulatory authorizations for impacts to aquatic or riparian habitats within CDFW jurisdiction.

The following measures will be implemented to avoid or compensate for the loss or degradation of stream or riparian habitat, ensure consistency with Fish and Game Code Section 1602, and further reduce potential adverse effects on riparian habitats:

- 1) UC Davis will notify CDFW before commencing any activity within the bed, bank, or riparian corridor of any waterway. If activities trigger the need for a Streambed Alteration Agreement, the proponent will obtain an agreement from CDFW before commencing any ground-disturbing activity that may affect the waterway. UC Davis will conduct construction activities in accordance with the agreement, including implementing reasonable measures in the agreement necessary to protect the fish and wildlife resources, when working within the bed or bank of waterways

- that function as a fish or wildlife resource or in riparian habitats associated with those waterways.
- 2) UC Davis will compensate for permanent loss of riparian habitat at a minimum of a 1:1 ratio through contributions to a CDFW-approved wetland mitigation bank or through the development and implementation of a Compensatory Stream and Riparian Mitigation and Monitoring Plan for creating or restoring in-kind habitat in the surrounding area. If mitigation credits are not available, stream and riparian habitat compensation may include, but are not limited to, the establishment of riparian vegetation on currently unvegetated bank portions of streams affected by the project and/or the enhancement of existing riparian habitat through removal of nonnative species, where appropriate, and planting additional native riparian plants to increase cover, continuity, and width of the existing riparian corridor along streams in the project site and surrounding areas. Construction activities and compensatory mitigation will be conducted in accordance with the terms of a streambed alteration agreement as required under Section 1602 of the Fish and Game Code.
 - 3) The Compensatory Stream and Riparian Mitigation and Monitoring Plan will include the following:
 - a) identification of compensatory mitigation sites and criteria for selecting these mitigation sites;
 - b) in kind reference habitats for comparison with compensatory riparian habitats (using performance and success criteria) to document success;
 - c) monitoring protocol, including schedule and annual report requirements (Compensatory habitat will be monitored for a minimum of 5 years from completion of mitigation, or human intervention (including recontouring and grading), or until the success criteria identified in the approved mitigation plan have been met, whichever is longer.);
 - d) ecological performance standards, based on the best available science and including specifications for native riparian plant densities, species composition, amount of dead woody vegetation gaps and bare ground, and survivorship; at a minimum, compensatory mitigation planting sites must achieve 80% survival of planted riparian trees and shrubs by the end of the five-year maintenance and monitoring period or dead and dying trees will be replaced and monitoring continued until 80 percent survivorship is achieved;
 - e) corrective measures if performance standards are not met;
 - f) responsible parties for monitoring and preparing reports; and
 - g) responsible parties for receiving and reviewing reports and for verifying success or prescribing implementation or corrective actions.

Mitigation Measure 3.5-9d: Avoidance of sensitive habitat.

Before construction activities commence, all sensitive areas (e.g., wetlands, natural drainages, riparian vegetation) located within 100 feet of a particular project's construction site will be flagged or fenced with brightly visible construction flagging and fencing under the direction of the qualified biologist to require that grading, excavation, or other ground-disturbing activities will not occur within these areas. This delineation will be consistent with and incorporate the USACE-approved preliminary jurisdictional determination or verified jurisdictional determination. Foot traffic by construction personnel will also be limited in these areas to prevent the introduction of invasive or weedy species. Periodic inspections during construction will be conducted by the monitoring biologist to maintain the integrity of exclusion fencing/flagging throughout the period of construction involving ground disturbance.

Finding: The Board finds that the implementation of the 2018 LRDP could result a significant impact to sensitive habitats (jurisdictional wetlands, riparian vegetation, aquatic habitat). LRDP Mitigation Measures 3.5-9a, 3.5-9b, 3.5-9c and 3.5-9d are hereby adopted and incorporated into the Project. The Board finds that implementation of LRDP Mitigation Measures 3.5-9a, 3.5-9b, 3.5-9c and 3.5-9d will reduce this potentially significant impact to sensitive habitats (jurisdictional wetlands, riparian vegetation, aquatic habitat) to less-than-significant impact by requiring that sensitive habitats are avoided and protected from construction activities, or that UC Davis mitigates for loss of sensitive habitats due to construction activities in accordance with certain required standards. Therefore, the Project with mitigation will not cause significant impacts on sensitive habitats (jurisdictional wetlands, riparian vegetation, aquatic habitat).

Cumulative Impact due to disturbance or loss of sensitive habitats (jurisdictional wetlands, riparian vegetation, aquatic habitat).

The cumulative context for biological sensitive habitat resources for the 2018 LRDP is the area included in the proposed Yolo Habitat Conservation Plan/Natural Community Conservation Plan (HCP/NCCP) plan area because this area supports all of the special-status species and habitats that could potentially be affected by implementation of the 2018 LRDP, contains known and major populations of many of these species, and contains important occupied and potential habitat for these species. Although implementation of the 2018 LRDP does not include direct development or conversion of Putah Creek or the Arboretum Waterway, development under the 2018 LRDP, including drainage improvement or maintenance projects, could affect these aquatic features by introducing sediment into Putah Creek or removing or damaging riparian vegetation. Impacts to wetlands, riparian habitat, and aquatic habitat from project construction activities could result in a cumulatively considerable contribution to a significant cumulative impact on sensitive habitats.

Mitigation Measures: Implement **Mitigation Measure 3.5-9a:** Delineation of potential waters. **Mitigation Measure 3.5-9b:** Regulatory authorizations for impacts to jurisdictional wetlands. **Mitigation Measure 3.5-9c:** Regulatory authorizations for impacts to aquatic or riparian habitats within CDFW jurisdiction. **Mitigation Measure 3.5-9d:**

Avoidance of sensitive habitat. All these mitigation measures are also applicable to this impact

Finding: The Board finds that the implementation of the 2018 LRDP could result a cumulatively considerable contribution to the significant cumulative impact on sensitive habitats (jurisdictional wetlands, riparian vegetation, aquatic habitat). LRDP Mitigation Measures 3.5-9a, 3.5-9b, 3.5-9c and 3.5-9d are hereby adopted and incorporated into the Project. The Board finds that implementation of LRDP Mitigation Measures 3.5-9a, 3.5-9b, 3.5-9c and 3.5-9d will reduce this potentially significant impact to sensitive habitats (jurisdictional wetlands, riparian vegetation, aquatic habitat) to a less than cumulatively considerable impact by requiring that sensitive habitats are avoided and protected from construction activities, or that UC Davis mitigates for loss of sensitive habitats due to construction activities (no net loss) in accordance with certain required standards. As a result and through implementation of these LRDP Mitigation Measures, the impact of the 2018 LRDP, with respect to sensitive habitat, would not be cumulatively considerable. Therefore, the Project with mitigation will not cause a cumulatively considerable contribution to the significant cumulative impacts on sensitive habitats (jurisdictional wetlands, riparian vegetation, aquatic habitat).

Impact 3.5-11: Conflict with local policies or ordinances related to the protection of biological resources – specimen trees.

Implementation of the 2018 LRDP could result in the removal of specimen trees. Removal of specimen trees within the plan area would result in a significant impact.

Mitigation Measures: 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).

Finding: The Board finds that the implementation of the 2018 LRDP would result in removal of specimen trees. LRDP Mitigation Measure 3.5-11 is hereby adopted and

incorporated into the Project. The Board finds that implementation of LRDP Mitigation Measures 3.5-11 will reduce this potentially significant impact to less-than-significant impact by requiring that trees be relocated, if feasible, or replaced with a tree with the same species or species of comparable value. Therefore, the Project with mitigation will not cause significant impacts on specimen trees.

3.7 Geology, Soils, and Seismicity

Impact 3.7-4: Potential for soil erosion associated with long-term operations and maintenance activities.

Implementation of the project would involve changes to the existing stormwater infrastructure at sites where there is redevelopment, and new stormwater infrastructure at new development sites. While the 2018 LRDP projects, like prior development projects on the UC Davis campus, would be regulated by the Phase II Small MS4 Permit program, this program would not necessarily reduce or eliminate the collection of flows during high precipitation events or during wet times of the year. Large quantities of overland flow could result in rill or gully erosion and decrease soil stability and productivity. This would be a potentially significant impact.

Mitigation Measures: 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.

Finding: The Board finds that the implementation of the 2018 LRDP could result a significant impact due to soil erosion associated with long-term operations and maintenance activities. LRDP Mitigation Measure 3.7-4 is hereby adopted and incorporated into the Project. The Board finds that implementation of LRDP Mitigation Measures 3.7-4 will reduce this potentially significant impact due to soil erosion to a less-than-significant impact by ensuring that necessary stormwater systems and/or on-site detention facilities would be engineered and constructed with appropriate sizing for anticipated storm events. This mitigation would reduce potential impacts associated with long-term exposure to stormwater flow and subsequent erosion. Therefore, the Project

with mitigation will not cause significant impacts due to soil erosion associated with long-term operations and maintenance activities.

3.9 Hazards and Hazardous Materials

Impact 3.9-2: Result in the release of hazardous materials from a site of known or potential contamination.

Due to the proximity of documented contamination sites, historical land use, and proximity to a major roadway and UPRR tracks, there is potential for contamination to be encountered during construction. Because the plan area could be affected by undocumented contamination that has not been characterized or remediated, this would be a potentially significant impact.

Mitigation Measures: 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.

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.

Mitigation Measure 3.9-2c: Minimization of hazards during demolition.

Minimize potential for accidental release of hazardous materials during demolition. Prior to demolition of existing structures, UC Davis shall complete the following:

- 1) Locate and dispose of potentially hazardous materials in compliance with all applicable federal, state, and local laws. This shall include: 1) identify locations that could contain hazardous residues; 2) remove plumbing fixtures known to contain, or potentially containing, hazardous materials; 3) determine the waste classification of the debris; 4) package contaminated items and wastes; and 5) identify disposal site(s) permitted to accept such wastes.
- 2) Provide written documentation to the appropriate County (Yolo or Solano) department that asbestos testing and abatement, as appropriate, has occurred in compliance with applicable federal, state, and local laws.
- 3) Provide written documentation to the appropriate County (Yolo or Solano) department that lead-based paint testing and abatement, as appropriate, has been completed in accordance with applicable state and local laws and regulations. Abatement shall include the removal of lead contaminated soil (considered soil with lead concentrations greater than 400 parts per million in areas where children are likely to be present). If lead-contaminated soil is to be removed, UC Davis shall submit a soil management plan to YCEHD.

Finding: The Board finds that the implementation of the 2018 LRDP could result a significant impact due to the release of hazardous materials from a site of known or potential contamination. LRDP Mitigation Measures 3.9-2a, 3.9-2b and 3.9-2c are hereby adopted and incorporated into the Project. The Board finds that implementation of LRDP Mitigation Measures 3.9-2a will reduce this potentially significant impact due to on-site contaminated soils to less than significant by requiring site surveys and remediation prior to development activities. The Board finds that implementation of LRDP Mitigation Measures 3.9-2b will reduce this potentially significant impact due to on-site contaminated soils or groundwater to less than significant by establishing a contingency plan that would 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. The Board finds that implementation of LRDP Mitigation Measures 3.9-2c will reduce this potentially significant impact due to potential for release of potentially hazardous construction

materials during demolition to less than significant by requiring that asbestos-containing building materials, lead-based paint, and other hazardous substances in building components are identified, removed, packaged, and disposed of in accordance with applicable state laws and regulations. Therefore, the Project with mitigation will not cause significant impacts due to the release of hazardous materials from a site of known or potential contamination.

Impact 3.9-6: Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan.

Implementation of projects identified in the 2018 LRDP 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 which may adversely affect emergency access and routes. Any such impacts would be limited to the construction period and would affect only adjacent streets or intersection. This would be a potentially significant impact.

Mitigation Measures: 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.

Finding: The Board finds that the implementation of the 2018 LRDP could result a significant impact due to short-term, temporary construction impacts to street traffic affecting emergency access (ex. reduction in the number of lanes or temporary closure of certain street segments) due to roadway improvements and potential extension of construction activities into the right-of-way. LRDP Mitigation Measures 3.9-6 is hereby adopted and incorporated into the Project. The Board finds that implementation of LRDP Mitigation Measures 3.9-6 will reduce this potentially significant impact due to conflicts with emergency access and routes by communicating proposed lane and road closures with first responders and allowing first responders to plan accordingly to ensure that emergency response times and adequate emergency access are maintained. Therefore, the Project with mitigation will not cause significant impacts due to conflicts with emergency access and routes.

Cumulative impact due to the release of hazardous materials from a site of known or potential contamination.

There are two contamination sites documented within the plan area. In addition, there are sites known to contain hazardous materials within 1 mile of the plan area (see Draft EIR, Volume 1, Table 3.9-1). Activities involving the assessment, cleanup, and monitoring of these sites would continue regardless of approval of the 2018 LRDP. Contamination typically does not interact in a cumulative manner with other sites of hazardous materials contamination. However, if construction would create a new site of contamination, or contribute substantially to a hazardous condition in the general project area, it could be considered to contribute to a cumulative impact. Therefore, activities under the 2018 LRDP could result in a cumulatively considerable contribution to a significant cumulative impact due to release of hazardous materials.

Mitigation Measures: Mitigation Measure 3.9-2a: Site-specific investigation and work plan implementation; **Mitigation Measure 3.9-2b: Hazardous materials contingency plan.;** and **Mitigation Measure 3.9-2c: Minimization of hazards during demolition.**

Finding: The Board finds that the implementation of the 2018 LRDP could result a cumulative considerable contribution to a cumulative impact due to the release of hazardous materials from a site of known or potential contamination. LRDP Mitigation Measures 3.9-2a, 3.9-2b and 3.9-2c are hereby adopted and incorporated into the Project. The Board finds that implementation of LRDP Mitigation Measures 3.9-2a will reduce this potentially significant cumulative impact due to on-site contaminated soils to less than cumulatively considerable by requiring site surveys and remediation prior to development activities. The Board finds that implementation of LRDP Mitigation Measures 3.9-2b will reduce this potentially significant cumulative impact due to on-site contaminated soils or groundwater to less than cumulatively considerable by establishing a contingency plan that would 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. The Board finds that implementation of LRDP Mitigation Measures 3.9-2c will reduce this potentially significant cumulative impact due to potential for release of potentially hazardous construction materials during demolition to less than cumulatively considerable by requiring that asbestos-containing building materials, lead-based paint, and other hazardous substances in building components are identified, removed, packaged, and disposed of in accordance with applicable state laws and regulations. Given the limited potential for hazardous materials contamination to occur as a result of the construction, the legal requirements to clean up any releases, and the limited potential for any project generated contamination to interact on a cumulative basis with other incidents of contamination, the 2018 LRDP (with implementation of Mitigation Measures 3.9-2a through 3.9-2c) would not make a cumulatively considerable contribution to a significant cumulative impact related to hazardous materials. Therefore, this would be a less-than-significant cumulative impact.

3.10 Hydrology and Water Quality

Impact 3.10-6: On-site and off-site flood-related impacts.

New development on campus would result in an overall increase in impervious surfaces and produce changes to site-specific stormwater infrastructure. If new stormwater infrastructure is not appropriately designed to accommodate site runoff, or existing campus infrastructure cannot accommodate increased flows from new development, impacts related to local and off-site flooding would be significant.

Mitigation Measures: Mitigation Measure 3.10-6: Implement project-level stormwater controls. Implement Mitigation Measure 3.7-4 which is also applicable to this impact.

Finding: The Board finds that the implementation of the 2018 LRDP could result a significant impact due to on-site and off-site flooding. LRDP Mitigation Measure 3.7-4 is hereby adopted and incorporated into the Project. The Board finds that implementation of LRDP Mitigation Measures 3.7-4 will reduce this potentially significant impact due to on-site and off-site flooding by ensuring that necessary stormwater systems and/or on-site detention facilities would be engineered and constructed with appropriate sizing for anticipated storm events to prevent localized flooding. Therefore, the Project with mitigation will not cause significant impacts due to on-site and off-site flooding.

Impact 3.10-7: Placement of housing or other structures within a regulated floodplain.

Portions of the plan area are located within a floodplain, however, no new student, or faculty and staff housing is proposed within the 100-year floodplain. 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. Therefore, the impact associated with a 100-year flood event would be potentially significant.

Mitigation Measures: Mitigation Measure 3.10-7: Design of new construction to minimize the risk of flooding in the event of a 100-year flood.

New construction within the 100-year floodplain shall be designed to be elevated above the base flood elevation predicted under a 100-year flood event. UC Davis shall require site-specific studies to be conducted to ascertain the height to which floodwaters would be expected to rise. These studies shall inform fill and grading requirements for new development within the floodplain and any requirements/recommendations from the site-specific studies shall be incorporated into design. Where elevating projects is not possible, buildings shall be designed to wet floodproof the lowest elevation floors and utility systems.

Finding: The Board finds that the implementation of the 2018 LRDP could result a significant impact due to flooding in the event of a 100-year flood. LRDP Mitigation Measure 3.10-7 is hereby adopted and incorporated into the Project. The Board finds that implementation of LRDP Mitigation Measures 3.10-7 will reduce this potentially

significant impact due to flooding in the event of a 100-year flood to less-than-significant impact by ensure that buildings are elevated appropriately or are floodproofed to withstand a 100-year flood event. Therefore, the Project with mitigation will not cause significant impacts due to flooding in the event of a 100-year flood.

Cumulative Impact due to on-site and off-site flood-related impacts and placement of housing or other structures within a regulated floodplain.

New development on campus would result in an overall increase in impervious surfaces and produce changes to site-specific stormwater infrastructure. If new stormwater infrastructure is not appropriately designed to accommodate site runoff, or existing campus infrastructure cannot accommodate increased flows from new development, impacts related to local and off-site flooding. The 2018 LRDP may involve the construction of additional academic and administrative facilities (but not housing) 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. Therefore, activities under the 2018 LRDP could result in a cumulatively considerable contribution to a significant cumulative impact due to flood-related impacts.

Mitigation Measures: Mitigation Measure 3.7-4: Implement project-level stormwater controls and Mitigation Measure 3.10-7 Placement of housing or other structures within a regulated floodplain which are also applicable to this impact.

Finding: The Board finds that the implementation of the 2018 LRDP could result a cumulatively considerable contribution to a significant cumulative impact due to on-site and off-site flooding. LRDP Mitigation Measures 3.7-4 and 3.10-7 are hereby adopted and incorporated into the Project. The Board finds that implementation of LRDP Mitigation Measures 3.7-4 will reduce this potentially significant cumulative impact due to on-site and off-site flooding to less than cumulatively considerable by requiring drainage studies of projects proposed under the 2018 LRDP and would ensure that necessary stormwater systems and/or on-site detention facilities would be engineered and constructed with appropriate sizing for anticipated storm events. The Board finds that implementation of LRDP Mitigation Measures 3.10-7 will reduce this potentially significant cumulative impact due to flooding in the event of a 100-year flood to less than cumulatively considerable by ensure that buildings are elevated appropriately or are floodproofed to withstand a 100-year flood event. Therefore, the 2018 LRDP with the implementation of Mitigation Measures 3.7-4 and 3.10-7 would not make a cumulatively considerable contribution to a significant cumulative impact related to on-site and off-site flood-related impacts and placement of housing or other structures within a regulated floodplain. Therefore, this would be a less-than-significant cumulative impact.

3.12 Noise

Impact 3.12-1: Construction noise.

Implementation of the 2018 LRDP would result in construction activities associated with the development and modernization of on-campus housing and academic and administrative facilities to accommodate future growth in the student, faculty, and staff populations. Although construction activities would be intermittent and temporary in nature, construction noise levels may still impact nearby noise sensitive land uses and could result in human disturbance. As a result, this impact would be significant.

Mitigation Measures: 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 off-site instead of on-site) 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 sensitive receptors and may result in temporary noise levels in excess of 86 dBA L_{max} at the exterior of the adjacent receptor, 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.

Finding: The Board finds that the implementation of the 2018 LRDP could result a significant impact due to construction noise levels which may impact nearby noise sensitive land uses. LRDP Mitigation Measure 3.12-1 is hereby adopted and incorporated into the Project. The Board finds that implementation of LRDP Mitigation Measures 3.12-1 will reduce this potentially significant impact due to construction noise levels to a less-than-significant impact by maximizing the distance between noise source and receptor, the use of noise attenuating features, and, for nighttime noise, requiring noise monitoring and halting construction where noise levels would exceed 70 dBA L_{max} . Therefore, the Project with mitigation will not cause significant impacts due to construction noise on sensitive receptors.

Impact 3.12-2: Increases in non-transportation noise sources.

New buildings may include new stationary noise sources and equipment (e.g., mechanical equipment, backup generators), and loading docks that, depending on location of new and existing sensitive land uses, could result in noise levels that disturb people while sleeping or substantial increases in noise over existing levels. This impact would be significant.

Mitigation Measures: Mitigation Measure 3.12-2: Reduce noise exposure from new stationary noise sources.

During project design of individual projects proposed under the 2018 LRDP, UC Davis shall review and ensure that external mechanical equipment, including HVAC units associated with new/renovated buildings, incorporates features designed to reduce noise to below 63 dB L_{eq} at any nearby building where people sleep. Design features may include, but are not limited to, locating equipment within equipment rooms or enclosures that incorporate noise reduction features, such as acoustical louvers, and exhaust and intake silencers. Equipment enclosures shall be oriented so that major openings (i.e., intake louvers, exhaust) are directed away from nearby noise-sensitive receptors.

Finding: The Board finds that the implementation of the 2018 LRDP could result a significant impact due to noise from stationary sources on sensitive receptors. LRDP Mitigation Measure 3.12-2 is hereby adopted and incorporated into the Project. The Board finds that implementation of LRDP Mitigation Measure 3.12-2 will reduce this potentially significant impact to less than significant by requiring that all stationary noise sources are oriented, located, and designed in such a way to reduce exterior noise to below 63 dB L_{eq} at any nearby building where people sleep which would result in an interior noise level of 45 dBA CNEL within the receiving land use with standard residential construction methods. Therefore, the Project with mitigation will not cause significant impacts due to noise from stationary sources on sensitive receptors.

Impact 3.12-3: Exposure of sensitive receptors to existing noise and vibration levels.

As explained in the Draft EIR (Volume 1, p. 3.12-25), CEQA does not require the analysis of the effects of the existing environment on the Project unless the project would exacerbate the existing condition. The 2018 LRDP would result in additional development of new buildings, including student housing. The new development would not result in any increase in airport, rail, or stadium noise. Therefore, the analysis of noise impacts from these existing conditions are not required under CEQA. However, although the analysis is not required, UC Davis makes the following findings on the impact of noise and vibration from existing rail lines on residential uses due to potential sleep disturbance.

Mitigation Measures: Mitigation Measure 3.12-3: Reduce vibration and noise effects from existing rail lines on new development.

For any building to be constructed within 750 feet of existing rail lines, and prior to final site plans or construction, a site-specific noise and vibration assessment shall be conducted

by a qualified acoustical engineer or noise specialist to ensure that the proposed land use is compatible with existing noise and vibration levels. Specifically, any residential building where people sleep shall be designed to ensure interior noise levels do not exceed 45 dBA CNEL and interior vibration levels are minimized, in compliance with FTA's recommended levels of 72 VdB. The study shall also evaluate sleep disturbance considering SEL noise levels from trains and horns. Measures that can be incorporated include isolation strip foundations, insulated windows and walls, sound walls or barriers, distance setbacks, or other construction or design features that would reduce vibration and noise to acceptable levels.

Finding: The Board finds that the implementation of the 2018 LRDP could result a significant impact to noise from existing rail lines that could adversely affect nearby residential uses. LRDP Mitigation Measure 3.12-3 is hereby adopted and incorporated into the Project. The Board finds that implementation of LRDP Mitigation Measures 3.12-3 will reduce this potentially significant impact due to rail line noise by requiring an acoustical study to determine appropriate building design features be included in new structures, ensuring interior noise levels would not exceed applicable standards and would minimize the potential for sleep disturbance to occur from the existing rail road. Therefore, the Project with mitigation will not cause significant impacts on residential uses due to railroad noise.

Cumulative Impact due to construction noise and vibration.

Implementation of the 2018 LRDP would result in construction activities associated with the development and modernization of on-campus housing and academic and administrative facilities to accommodate future growth in the student, faculty, and staff populations. Noise and vibration levels associated with construction of new building and university facilities would be intermittent, temporary, and would fluctuate over the years as new buildings are constructed and existing buildings are maintained or repairs. Construction-related noise and vibration is typically considered a localized effect, affecting the land uses closest to construction activities. Given that construction activities associated with 2018 LRDP implementation dispersed throughout a large area (i.e., entire campus), noise and vibration would be localized, and would generally occur during the less-sensitive times of the day, construction activities would not be expected to combine with construction noise and vibration from other construction activities in the area to result in a substantial increase in cumulative noise and vibration levels. Although construction activities would be intermittent and temporary in nature, construction noise levels may result in a cumulatively considerable contribution to cumulative noise impacts on nearby noise sensitive land uses. As a result, this impact could be a significant cumulative impact.

Mitigation Measures: **Mitigation Measure 3.12-1** which is related to this impact.

Finding: The Board finds that the implementation of the 2018 LRDP could result a cumulatively considerable contribution to a significant cumulative impact due to construction noise and vibration levels which may impact nearby sensitive land uses.

LRDP Mitigation Measure 3.12-1 is hereby adopted and incorporated into the Project. The Board finds that implementation of LRDP Mitigation Measures 3.12-1 will reduce the project potentially cumulatively considerable contribution to this potentially significant cumulative impact due to construction noise levels to a less than cumulatively considerable by maximizing the distance between noise source and receptor, the use of noise attenuating features, and, for nighttime noise, requiring noise monitoring and halting construction where noise levels would exceed 70 dBA Lmax. Therefore, the Project with mitigation will not result in a cumulatively considerable contribution to significant cumulative impacts due to construction noise and vibration on sensitive receptors. Therefore, with mitigation, this would be a less-than-significant cumulative impact.

3.16 Transportation, Circulation, and Parking

Impact 3.16-2: Intersection level of service impacts.

Implementation of the 2018 LRDP would increase local and regional vehicle travel, which would contribute to unacceptable LOS F conditions on the following intersections: Old Davis Road between I-80 and First Street, including First Street/A Street, Hutchison Drive/Old Davis Road, Arboretum Drive/Old Davis Road, Old Davis Road/Alumni Lane, Old Davis Road/Mrak Hall Drive, Old Davis Road/Hilgard Lane, Old Davis Road/California Avenue, Old Davis Road/I-80 WB Ramps, and Old Davis Road/I-80 EB Ramps). This impact would therefore be significant.

Mitigation Measures: Mitigation Measure 3.16-2d: Implement TDM strategies to reduce peak hour vehicle delay at study intersections on the Old Davis Road corridor.

During the 2018-2019 academic year and every two years thereafter, UC Davis shall monitor and analyze traffic conditions at the Old Davis Road corridor study intersections between and inclusive of the Old Davis Road/I-80 EB Ramps and First Street/A Street intersections. Additionally, during its standard environmental review process, UC Davis shall forecast and analyze traffic conditions at the Old Davis Road corridor study intersections between and inclusive of the Old Davis Road/I-80 EB Ramps and First Street/A Street intersections for individual development projects proposed under the 2018 LRDP that are expected to affect operations at the intersections. When operations at the Old Davis Road corridor study intersections between and inclusive of the Old Davis Road/I-80 EB Ramps and First Street/A Street intersections are found to reach an intersection level of service F and the 2018 LRDP represents 10 percent of the total volume or overall intersection delay, or when a project-level analysis indicates the same, UC Davis shall institute TDM strategies to reduce peak hour vehicle trips and, in turn, vehicle delay at study intersections located on the segment of Old Davis Road between I-80 and First Street.

The implementation of TDM strategies shall reduce peak hour average intersection delay caused by the 2018 LRDP to acceptable levels in accordance with the

intersection level of service significance criteria, including the level of service thresholds established by UC Davis, the City of Davis, and Caltrans. Every study intersection along this segment of Old Davis Road would operate at LOS F conditions during the p.m. peak hour both with and without the 2018 LRDP. Moreover, the 2018 LRDP would increase delay in excess of 10 percent at each study intersection along the Old Davis Road corridor. Therefore, for each Old Davis Road corridor study intersection between and inclusive of the Old Davis Road/I-80 EB Ramps and First Street/A Street intersections, UC Davis shall implement TDM strategies to reduce the 2018 LRDP's contribution to LOS F conditions until the incremental increase in peak hour intersection volume or delay caused by the 2018 LRDP does not exceed 10 percent compared to 2030 no project conditions.

TDM strategies that would reduce peak hour intersection delay at these locations include strategies to reduce commute and business vehicle trips utilizing the Old Davis Road corridor. Specific potential TDM strategies include, but are not limited to, the following:

- ▲ promote walking and bicycling for student and employee trips during peak periods,
- ▲ shift the timing of service vehicles and/or deliveries from peak periods,
- ▲ expand public transit service, including additional regional service for UC Davis students and employees living off-campus and outside of Davis as well as local service for on-campus residents traveling to nearby destinations on-campus and in Davis,
- ▲ manage parking lot access along Old Davis Road,
- ▲ limit parking supply and/or unbundle parking costs for future student housing located along the Old Davis Road corridor,
- ▲ implement a fair value commuting program or other pricing of vehicle travel and parking,
- ▲ provide carpool and/or vanpool incentive programs,
- ▲ allow flexible work hours and schedule classes to reduce arrivals/departures during peak hours, and
- ▲ offer remote working options.

The TDM strategies implemented to reduce peak hour intersection delay at this location will be consistent with existing and planned TDM programs on campus, including the UC Davis TDM Plan currently in development. If these TDM strategies are not sufficient to reduce peak hour intersection delay consistent with the significance criteria, additional TDM measures or adjustments to the measures above shall be implemented.

Mitigation Measure 3.16-2e:

Implement 2018 LRDP Mitigation Measure 3.16-7, which will monitor traffic volumes and upgrade the segment of Old Davis Road between I-80 and First Street to arterial status under both 2030 and 2036 plus project conditions.

Finding: The Board finds that the implementation of the 2018 LRDP could result a significant impact to intersections on Old Davis Road between I-80 and First Street. LRDP Mitigation Measures 3.16-2d and 3.16-2e are hereby adopted and incorporated into the Project. The Board finds that implementation of LRDP Mitigation Measures 3.16-2d and 3.16-2e will reduce this potentially significant impact to less-than-significant impact by imposing TDM measures and upgrading the roadway to arterial status to better accommodate vehicle, bicycle, and pedestrian traffic demands and improving p.m. peak hour operations to an acceptable LOS D. Therefore, the Project with mitigation will not cause significant impacts on the intersections on Old Davis Road between I-80 and First Street.

Impact 3.16-3: Impacts to transit service and facilities.

Implementation of the 2018 LRDP would increase demand for transit, which may require changes in transit service to maintain the level and quality of service. Failure to maintain quality service could lead to losses of ridership and increases in travel by other modes (e.g., automobiles) that could result in environmental effects such as increased emissions. 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 impact would therefore be significant.

Mitigation Measures: Mitigation Measure 3.16-3a: Monitor transit service performance and support transit improvements.

Currently, Unitrans regularly monitors transit service performance and adjusts service levels, as feasible, according to established service standards. Unitrans shall continue to implement this monitoring and service change process annually over the duration of the 2018 LRDP implementation.

UC Davis shall work with Unitrans staff to identify and support the implementation of transit service and/or facility improvements necessary to adhere to established service standards and, in turn, maintain a high quality customer experience so as not to deter existing and potential ridership. Potential transit improvements include modifying existing transit routes or adding new routes to serve areas of the campus underserved by transit, adding service capacity (through increased headways and/or larger vehicles) to prevent chronic overcrowding, improving terminal facilities to accommodate additional passengers and transit vehicles, and improving coordination between transit providers.

Transit improvements shall result in service performance that meets the capacity standard established in the most up-to-date City of Davis Short Range Transit Plan. Currently, this standard requires Unitrans to maintain acceptable loading conditions (fewer than 150

percent of seated capacity) on more than 95 percent of all bus trips and for more than 90 percent of bus passengers.

Transit facility and roadway improvements shall be designed and constructed in accordance with industry best practices and applicable UC Davis, City of Davis, and State of California standards. Improvements shall be implemented or constructed in a manner that would not physically disrupt existing transit service or facilities (e.g., additional bus service that exceeds available bus stop or transit terminal capacity) or otherwise adversely affect transit operations.

Mitigation Measure 3.16-3b: Monitor transit-related collisions and implement countermeasures to minimize potential conflicts with transit service and facilities.

During the 2018-2019 academic year and every two years thereafter, UC Davis shall record on-campus collisions involving a transit vehicle and establish a transit vehicle collision rate. The rate should be sensitive to transit provider, location context (e.g., campus core area versus West Village) and facility type (e.g., intersection versus segment). UC Davis shall determine the on-campus transit vehicle collision rate as part of its biennial mitigation monitoring program established in the LRDP EIR. In instances where the rate increases from the prior observation period, UC Davis shall develop and implement countermeasures that address collision hot-spots and common primary collision factors. UC Davis shall also identify and develop countermeasures for locations where the change in the mix of travel patterns and behavior is determined to be incompatible with the facility as designed. Potential countermeasures include physically separating modes in shared operating environments, particularly high- versus low-speed travel modes, and increased education and enforcement.

At a minimum, UC Davis shall include the following locations in the mitigation monitoring program:

- Silo Terminal,
- Memorial Union Terminal,
- La Rue Road,
- Hutchison Drive,
- Howard Way,
- Sage Street, and
- Russell Boulevard.

Transit facility and roadway improvements that intend to minimize conflicts between transit vehicles and other travel modes shall be designed and constructed in accordance with industry best practices and applicable UC Davis, City of Davis (for facilities within the City of Davis), and State of California standards. Improvements shall be implemented or constructed in a manner that would not physically disrupt existing transit service or facilities or otherwise adversely affect transit operations.

Finding: The Board finds that the implementation of the 2018 LRDP could result a significant impact due to increased demand for transit. LRDP Mitigation Measures 3.16-3a and 3.16-3b are hereby adopted and incorporated into the Project. The Board finds that implementation of LRDP Mitigation Measures 3.16-3a and 3.16-3b will reduce this potentially significant impact to less than significant by ensuring that transit service is sufficient to accommodate demand, minimizing potential adverse effects on transit operations, and minimizing conflicts between transit and other travel modes.. Therefore, the Project with mitigation will not cause significant impacts on transit services.

Impact 3.16-4: Impacts to bicycle facilities.

Implementation of the 2018 LRDP would increase bicycle travel on the UC Davis campus, which could generate bicycle volumes that physically disrupt the use of existing facilities. 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. As recognized in the UC Davis Bicycle Plan, the high volume of bicycle use already causes mixing of cyclists and pedestrians at certain times of day on existing facilities, which increases the risk of collisions. This impact would therefore be significant.

Mitigation Measures: Mitigation Measure 3.16-4: Monitor bicycle-related collisions to implement countermeasures minimizing potential conflicts with bicycle facilities.

During the 2018-2019 academic year and every two years thereafter, UC Davis shall record on-campus bicycle volumes and collisions involving bicyclists and establish a bicycle collision rate. The rate should be sensitive to context (e.g., campus core area versus West Village) and facility type (e.g., intersection versus segment). UC Davis shall determine the on-campus bicycle collision rate as part of its biennial mitigation monitoring program established in the LRDP EIR. In instances where the rate increases from the prior observation period, UC Davis shall develop and implement countermeasures designed to reduce the rate and primary collision factors. UC Davis shall also identify and develop countermeasures for locations where the change in the mix of travel patterns and behavior is determined to be incompatible with the facility as designed. Potential countermeasures include the following:

- construct physically separated facilities for each mode in shared operating environments (particularly high- versus low-speed travel modes),
- restrict select modes in certain areas where one mode is prioritized over another to minimize collision potential,
- widen existing facilities,
- construct new facilities,
- increase the number of bicycle parking facilities and distribute them to minimize crowding on connecting bicycle facilities,
- consider TDM measures that would alter demand to minimize collision potential,

- enforcement of ‘rules of the road’ per the California Vehicle Code and applicable University policies,
- education of existing and prospective bicyclists to give people the skills and abilities to ride,
- control class schedules and passing periods to minimize effects of peak bicycle traffic, and
- expand core area restrictions on service vehicles.

Anticipated increases in bicycle activity would be concentrated near focal points for students and staff activities, including new on-campus housing developments, existing and new academic and recreational facilities (e.g., classrooms, lecture halls, athletic fields) in the core campus area, off-campus activity centers (e.g., Downtown Davis, University Mall) and along bicycle facilities connecting activity generators. Therefore, at a minimum, UC Davis shall include the following locations in the mitigation monitoring program:

- core campus area;
- La Rue Road between Russell Boulevard and Old Davis Road;
- SR 113 bike/pedestrian overcrossing, Orchard Park Circle, and Orchard Road;
- Sprocket Bikeway;
- California Avenue between Russell Boulevard and Old Davis Road;
- Hutchison Drive between Sage Street and Old Davis Road;
- Old Davis Road between I-80 and First Street;
- Howard Way between Russell Boulevard and North Quad;
- Third Street between A Street and Downtown Davis;
- First Street between A Street and Downtown Davis;
- Russell Boulevard corridor between SR 113 and Downtown Davis (including intersections with north-south roadways, especially those involving campus connections); and
- West Village.
-

Bicycle facility and roadway improvements that intend to minimize conflicts between bicyclists and other travel modes shall be designed and constructed in accordance with applicable UC Davis, City of Davis, and State of California standards.

Finding: The Board finds that the implementation of the 2018 LRDP could result a significant impact due to impacts on bicycle facilities and potential conflicts between bicycles and other transportation modes. LRDP Mitigation Measure 3.16-4 is hereby adopted and incorporated into the Project. The Board finds that implementation of LRDP Mitigation Measure 3.16-4 will reduce this potentially significant impact due to impacts on bicycle facilities and potential conflicts between bicycles and other transportation modes to less than significant by requiring measures to support bicycling on campus and minimizing conflicts between bicycles and other travel modes. Therefore, the Project with mitigation will not cause significant impacts on bicycle facilities and conflicts between bicycles and other transportation modes.

Impact 3.16-5: Impacts to pedestrian facilities.

Implementation of the 2018 LRDP would increase pedestrian travel on and off the UC Davis campus, which could generate pedestrian volumes that physically disrupt the use of existing facilities. 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, which increases the risk of collisions. This impact would therefore be significant.

Mitigation Measures: Mitigation Measure 3.16-5: Monitor pedestrian-related collisions implement countermeasures minimizing potential conflicts with pedestrian facilities.

During the 2018-2019 academic year and each two years thereafter, UC Davis shall record on-campus pedestrian volumes and collisions involving pedestrians and establish a pedestrian collision rate. The rate should be sensitive to context (e.g., campus core area versus West Village) and facility type (e.g., intersection versus segment). UC Davis shall determine the on-campus pedestrian collision rate as part of its biennial mitigation monitoring program established in the LRDP EIR. In instances where the rate increases from the prior observation period, UC Davis shall develop and implement countermeasures to reduce the rate and address primary collision factors. UC Davis shall also identify and develop countermeasures for locations where the change in the mix of travel patterns and behavior is determined to be incompatible with the facility as designed. Potential countermeasures include the following:

- construct physically separated facilities for each mode in shared operating environments (particularly high- versus low-speed travel modes),
- restrict select modes in certain areas where one mode is prioritized over another to minimize collision potential,
- widen existing facilities,
- construct new facilities, and
- consider TDM measures that would alter demand to minimize collision potential.
-

Anticipated increases in pedestrian activity would be concentrated near focal points for students and staff activities, including new on-campus housing developments, existing and new academic and recreational facilities (e.g., classrooms, lecture halls, athletic fields) in the core campus area, off-campus activity centers (e.g., Downtown Davis, University Mall) and along pedestrian facilities connecting activity generators.

Therefore, at a minimum, UC Davis shall include the following locations in the mitigation monitoring program:

- core campus area;
- La Rue Road between Russell Boulevard and Old Davis Road;
- SR 113 bike/pedestrian overcrossing, Orchard Park Circle, and Orchard Road;
- Sprocket Bikeway;
- Hutchison Drive between Sage Street and Old Davis Road;

- Old Davis Road between I-80 and First Street;
- Howard Way between Russell Boulevard and North Quad;
- Third Street between A Street and Downtown Davis;
- First Street between A Street and Downtown Davis;
- Russell Boulevard corridor between SR 113 and Downtown Davis (including intersections with north-south roadways, especially those involving campus connections); and
- West Village.
-

Pedestrian facility and roadway improvements that intend to minimize conflicts between pedestrians and other travel modes shall be designed and constructed in accordance with applicable UC Davis, City of Davis, and State of California standards.

Finding: The Board finds that the implementation of the 2018 LRDP could result a significant impact due to impacts on pedestrian facilities and potential conflicts between pedestrians and other transportation modes. LRDP Mitigation Measure 3.16-5 is hereby adopted and incorporated into the Project. The Board finds that implementation of LRDP Mitigation Measure 3.16-5 will reduce this potentially significant impact due to impacts on bicycle facilities and potential conflicts between bicycles and other transportation modes to less than significant by requiring measures to support walking on campus and minimizing conflicts between pedestrians and other travel modes. Therefore, the Project with mitigation will not cause significant impacts on pedestrian facilities and conflicts between pedestrians and other transportation modes.

Impact 3.16-7: Cumulative impacts to local roadway segment level of service.

Under cumulative conditions, the 2018 LRDP would generate new vehicle trips that would cause an impact to roadway segment LOS on Old Davis Road between I-80 and First Street. Therefore, the project may have a cumulatively considerable and significant contribution to this cumulative impact. Therefore, this impact would be significant.

Mitigation Measures: Mitigation Measure 3.16-7: Upgrade Old Davis Road between I-80 and First Street to an arterial.

During the 2018-2019 academic year and every two years thereafter, UC Davis shall monitor and analyze traffic conditions on Old Davis Road between I-80 and First Street. Additionally, during its standard environmental review process, UC Davis shall forecast and analyze traffic conditions on Old Davis Road between I-80 and First Street for individual development projects proposed under the 2018 LRDP that are expected to affect operations on the roadway segment. When the segment of Old Davis Road between I-80 and First Street is found to reach an intersection level of service F and the 2018 LRDP represents 10 percent of the total volume or overall intersection delay, or when a project-level analysis indicates the same, UC Davis shall upgrade Old Davis Road between I-80 and First Street from collector to arterial status. Physical and operational characteristics of arterial roadways include:

- Improved access control,
- Removal of all-way stops and installation of traffic signals or roundabouts, as warranted, per UC Davis design standards,
- Lane additions at intersection approaches and;
- Enhanced control or physical separation of conflicting vehicular, bicycle, and pedestrian movements.

Examples of specific improvements that would help transition Old Davis Road towards arterial status include the installation of a roundabout at the Old Davis Road/Arboretum Drive intersection and the construction of a grade-separated crossing for the / Arboretum Trail located north of Arboretum Waterway at Old Davis Road (in place of the stop-controlled intersection at Old Davis Road / Hutchison Drive). UC Davis could also consider a realignment of Old Davis Road immediately south of First Street in order to adequately accommodate the arterial roadway features listed above.

Although a significant impact is not identified for the segment of Old Davis Road north of I-80, arterial improvements along this segment would facilitate improved operations at upstream/downstream locations along the corridor.

Finding: The Board finds that the implementation of the 2018 LRDP could result a significant cumulative impact to intersections on Old Davis Road between I-80 and First Street. LRDP Mitigation Measure 3.16-7 is hereby adopted and incorporated into the Project. The Board finds that implementation of LRDP Mitigation Measures 3.16-7 will reduce this potentially significant cumulative impact to less than cumulatively considerable by upgrading the roadway to arterial status to better accommodate vehicle, bicycle, and pedestrian traffic demands and improving p.m. peak hour operations to an acceptable LOS D. Therefore, the Project with mitigation will not cause a cumulatively considerable contribution to the cumulative impact on the intersections on Old Davis Road between I-80 and First Street. Upgrading this segment of Old Davis Road to arterial status would improve p.m. peak hour operations to an acceptable LOS D under cumulative conditions. The ultimate improvements shall be determined through the UC Davis project development process involving alternatives evaluation and any environmental impact review required under CEQA. Cumulative roadway improvements should be designed to operate at the boundary of LOS E/F.

Impact 3.16-8: Cumulative impacts to transit service and facilities.

Under cumulative conditions, the 2018 LRDP would increase demand for transit and could require investments in additional transit service and/or facilities to maintain the level and quality of service necessary to retain and expand ridership. Therefore, the project would have a cumulatively considerable and significant contribution to this cumulative impact..

Mitigation Measures: Mitigation Measure 3.16-8a: Monitor transit service performance and support transit improvements. Implement 2018 LRDP Mitigation Measure 3.16-3a which is also applicable to this impact.

Mitigation Measure 3.16-8b: Monitor transit-related collisions and implement countermeasures to minimize potential conflicts with transit service and facilities. Implement 2018 LRDP Mitigation Measure 3.16-3b which is also applicable to this impact.

Finding: The Board finds that the implementation of the 2018 LRDP could result a cumulatively considerable contribution to a cumulative impact due to increased demand for transit. LRDP Mitigation Measures 3.16-8a and 3.16-8b are hereby adopted and incorporated into the Project. The Board finds that implementation of LRDP Mitigation Measures 3.16-8a and 3.16-8b will reduce this potentially significant cumulative impact to less than cumulatively considerable by ensuring that transit service is sufficient to accommodate demand, minimizing potential adverse effects on transit operations, and minimizing conflicts between transit and other travel modes.. Therefore, the Project with mitigation will not have a cumulatively considerable contribution to cumulative impacts on transit services.

Impact 3.16-9: Cumulative impacts to bicycle facilities.

Under cumulative conditions, the 2018 LRDP would increase bicycle travel and could disrupt the use of existing facilities. Therefore, the project would have a cumulatively considerable and significant contribution to this cumulative impact.

Mitigation Measures: Mitigation Measure 3.16-9: Monitor bicycle-related collisions and implement countermeasures to minimize potential conflicts with bicycle facilities. Implement 2018 LRDP Mitigation Measure 3.16-4 which is also applicable to this impact.

Finding: The Board finds that the implementation of the 2018 LRDP could result a cumulatively considerable contribution to a cumulative impact due to impacts on bicycle facilities and potential conflicts between bicycles and other transportation modes. LRDP Mitigation Measure 3.16-9 is hereby adopted and incorporated into the Project. The Board finds that implementation of LRDP Mitigation Measure 3.16-4 will reduce this potentially significant cumulative impact due to impacts on bicycle facilities and potential conflicts between bicycles and other transportation modes to less than cumulatively considerable by requiring measures to support bicycling on campus and minimizing conflicts between bicycles and other travel modes. Therefore, the Project with mitigation will not have a cumulatively considerable contribution to cumulative impacts on bicycle facilities and conflicts between bicycles and other transportation modes.

Impact 3.16-10: Cumulative impacts to pedestrian facilities.

Under cumulative conditions, the 2018 LRDP would increase pedestrian travel on and off the UC Davis campus and could increase the competition for physical space between other modes of travel. Therefore, the project would have a cumulatively considerable and significant contribution to this cumulative impact.

Mitigation Measures: Mitigation Measure 3.16-10: Monitor pedestrian-related collisions and implement countermeasures to minimize potential conflicts with pedestrian

facilities. Implement 2018 LRDP Mitigation Measure 3.16-5 which is also applicable to this impact.

Finding: The Board finds that the implementation of the 2018 LRDP could result a significant cumulative impact due to impacts on pedestrian facilities and potential conflicts between pedestrians and other transportation modes. LRDP Mitigation Measure 3.16-5 is hereby adopted and incorporated into the Project. The Board finds that implementation of LRDP Mitigation Measure 3.16-5 will reduce this potentially significant cumulative impact due to impacts on pedestrian facilities and potential conflicts between pedestrians and other transportation modes to less than cumulatively considerable by requiring measures to support walking on campus and minimizing conflicts between pedestrians and other travel modes. Therefore, the Project with mitigation will not have a cumulatively considerable contribution to cumulative impacts on pedestrian facilities and conflicts between pedestrians and other transportation modes.

3. Issues for which the Project would have a Less Than Significant Impact or No Impact.

The Final EIR found that the following impacts from the implementation of the 2018 LRDP would be less than significant without mitigation or the LRDP has No Impact, and no mitigation is proposed for these impacts:

3.1 Aesthetics

Impact 3.1-2: Degrade existing visual character or quality (project and cumulative impact).

Implementation of the 2018 LRDP would result in temporary and permanent visual changes throughout the UC Davis campus. New buildings and other development within UC Davis would require design review to ensure consistency with the existing character and quality of the campus and surrounding areas. Therefore, any impacts to visual character or quality would be less than significant on a project level and result in a less than cumulatively considerable contribution to any significant cumulative impact.

3.2 Agriculture and Forestry Resources

Impact 3.2-2: Result in other loss or conversion of existing agricultural use (project and cumulative impact).

Development proposed under the 2018 LRDP could result in the direct loss or conversion of existing agricultural uses within UC Davis. However, because the 2018 LRDP primarily involves land use changes near existing urban areas and away from off-site agricultural areas, it is unlikely that the indirect conversion of land outside of campus boundaries would occur as a result of 2018 LRDP implementation. This impact is considered less than significant on a project level and result in a less than cumulatively considerable contribution to any significant cumulative impact.

3.3 Air Quality

Impact 3.3-3: Mobile-source CO concentrations. (project and cumulative impact)

Long-term operation-related local mobile-source emissions of CO generated by the development on the 2018 LRDP area would not violate a standard or contribute substantially to an existing or projected air quality violation or expose sensitive receptors to substantial pollutant concentrations. As a result, this impact would be less than significant on a project level and result in a less than cumulatively considerable contribution to any significant cumulative impact.

Cumulative Impact due to short-term construction emissions of toxic air contaminants.

Construction-related activities would result in temporary, short-term project-generated emissions of TACs, particularly diesel PM. Overall construction TAC emissions would likely result health risks that are below YSAQMD thresholds. Potential impacts related to TACs generated during construction of on-campus development are not considered cumulatively considerable based on the distance between potential construction efforts at UC Davis and the City of Davis, as well as the distance between sources and potential receptors. As a result, construction of projects under the 2018 LRDP could contribute to temporary concentrations of TACs in excess of YSAMQD significance criteria on-campus, but would not be considered cumulatively considerable with other development in the area, as identified in Table 4-2. This impact would be less than significant.

Impact 3.3-5: Operational emissions of toxic air contaminants. (project and cumulative impact)

The 2018 LRDP would result in additional sources of TACs (e.g., laboratories, boilers); however, the additional risks associated with these sources would not exceed YSAQMD thresholds of 10 in one million for cancer risk and a HI of 1 for the MEI. Therefore, this impact would be less than significant on a project level and result in a less than cumulatively considerable contribution to any significant cumulative impact.

3.4 Archaeological, Historical, and Tribal Cultural Resources (project and cumulative impact)

Impact 3.4-2: Substantial adverse change in the significance of a tribal cultural resource. (project and cumulative impact)

Consultation with the Yocha Dehe Wintun Nation and the Cortina Indian Rancheria of Wintun Indians has resulted in no resources identified as tribal cultural resources as described under AB 52. However, it is possible that tribal cultural resources could be identified during analysis of subsequent projects. Compliance with PRC Section 21080.3.2 and Section 21084.3 (a) would make this impact less than significant on a project level and result in a less than cumulatively considerable contribution to any significant cumulative impact

Impact 3.4-3: Impacts to human remains. (project and cumulative impact)

Although unlikely, construction and excavation activities associated with project development could unearth previously undiscovered or unrecorded human remains, if they are present. Compliance with California Health and Safety Code Sections 7050.5 and 7052 and California Public Resources Code Section 5097 would make this impact less than significant on a project level and result in a less than cumulatively considerable contribution to any significant cumulative impact.

3.5 Biological Resources

Impact 3.5-10: Interference with nurseries and wildlife corridors. (project and cumulative impact)

Implementation of the 2018 LRDP would not result in the direct disturbance or conversion of Putah Creek or its associated riparian habitat, the primary wildlife corridor within the project site, to urban uses. As a result, implementation of the 2018 LRDP is not anticipated to substantially interfere with existing wildlife corridors, and impacts would be less than significant on a project level and result in a less than cumulatively considerable contribution to any significant cumulative impact.

Impact 3.5-12: Conflict with the provisions of an adopted habitat conservation plan. (project and cumulative impact)

Project implementation within the plan area would be consistent with the proposed Yolo County HCP/NCCP and the Solano County MSHCP. This would be a less-than-significant impact on a project level and result in a less than cumulatively considerable contribution to any significant cumulative impact.

3.6 Energy

Impact 3.6-1: Result in unnecessary, inefficient, and wasteful use of energy - (project and cumulative impact)

Implementation of the 2018 LRDP would increase electricity and natural gas consumption at the site relative to existing conditions during construction activities, as well as long-term operational activities. However, the energy needs for construction would be temporary and not require additional capacity or increase peak or base period demands for electricity or other forms of energy. The 2018 LRDP is committed to meeting the UC Sustainable Practices Policy and the UC Davis Campus Design Guidelines (including achievement of LEED Gold) in all new/renovated facilities, which is designed to reduce the wasteful use of materials (through recycling building materials) and increase building energy efficiently. Therefore, implementation of the 2018 LRDP would not result in wasteful, inefficient, and unnecessary consumption of energy, and impacts would be less than significant on a project level and result in a less than cumulatively considerable contribution to any significant cumulative impact.

Impact 3.6-2: 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. (project and cumulative impact)

The 2018 LRDP would be required to comply with increasingly stringent building and vehicle efficiency standards that would reduce energy consumption to be consistent with applicable plans, policies, and regulations. The 2018 LRDP would also include design features that would reflect UC Davis's goal to meet the UC Carbon Neutrality Initiative, as

written into the UC Sustainable Practices Policy Green Building and Climate Action targets. Thus, this impact would be less than significant on a project level and result in a less than cumulatively considerable contribution to any significant cumulative impact.

3.7 Geology, Soils, and Seismicity

Impact 3.7-1: Risk of exposure of people or buildings to seismic ground shaking. (project and cumulative impact)

UC Davis is within the vicinity of areas where large earthquakes may originate, but is not directly in an Alquist-Priolo Earthquake Fault Zone, or a Seismic Hazard Zone mapped pursuant to the Seismic Hazards Mapping Act. In the event of an earthquake strong enough to produce shaking on campus, project components could be subjected to ground shaking. Proposed project structures would be designed and constructed in accordance with the current seismic safety and structural design requirements set forth in the California Building Code (“CBC”). Therefore, there would be no substantial risk of loss, injury, death, or property damage from strong seismic shaking associated with new development under the 2018 LRDP. For these reasons, the project would have a less-than-significant impact related to exposure of people or structures to seismic hazards on a project level and result in a less than cumulatively considerable contribution to any significant cumulative impact.

Impact 3.7-2: Potential for liquefaction caused by an earthquake. (project and cumulative impact)

The UC Davis campus is located in a seismically active area with soils that could be susceptible to liquefaction and structural settlement in the event of an earthquake. The campus eliminates these hazards through compliance with the CBC, which includes geotechnical investigations of sites prior to development; and implementation of structural design features to eliminate the risk of liquefaction. This results in a less-than-significant impact with respect to exposure on a project level and result in a less than cumulatively considerable contribution to any significant cumulative impact.

Impact 3.7-3: Potential for construction activities to disturb soils and result in erosion or loss of topsoil. (project and cumulative impact)

Construction of individual projects would involve clearing and grading at projects sites and trenching in areas where utility infrastructure would be laid. Campus projects would have to comply with relevant National Pollutant Discharge Elimination System (NPDES) permits, including the General Permit for Storm Water Discharges Associated with Construction Activity (General Construction Permit) and the General Permit for Storm Water Discharges from Small Municipal Separate Storm Sewer Systems (Phase II Small MS4 Permit), which require soil erosion control measures. In addition, individual projects would be designed such that there would be minimal disturbance to existing vegetation, especially redevelopment projects where existing landscaping can be preserved or enhanced. The result would be a less-than-significant impact due to soil erosion on a project

level and result in a less than cumulatively considerable contribution to any significant cumulative impact.

Impact 3.7-6: Exposure of campus structures to the effects of subsidence. (project and cumulative impact)

Subsidence on campus related to groundwater withdrawals from the shallow/intermediate aquifers has been observed and documented. While groundwater extractions from the shallow/intermediate aquifer is not expected to increase with implementation of the 2018 LRDP, regional subsidence is expected to continue on a broad scale as groundwater continues to be pumped in California. Subsidence observed over the campus area is regional, and unlike local differential settlement, does not affect building foundations in the same way. Regional subsidence occurs uniformly over a large area, and so areas on the order of size of individual buildings would likely experience uniform settlement and remain structurally sound. Additionally, clay compaction from groundwater withdrawal would be mitigated through compliance with the CBC, which requires geotechnical investigations and appropriate engineering measures including excavation and placement of fill, where appropriate. Consequently, the effects of subsidence on campus would have a less-than-significant impact on a project level and result in a less than cumulatively considerable contribution to any significant cumulative impact.

3.8 Greenhouse Gas Emissions and Climate Change

Impact 3.8-1: Considerably contribute to climate change through plan-generated greenhouse gas emissions - (Cumulative impact)

While the 2018 LRDP would increase development and population within the campus, the 2018 LRDP would result in UC Davis campus emissions four percent below 1990 levels by 2020 and 59 percent below 1990 levels by 2030, which exceeds the state GHG reduction targets proportionally applied to UC Davis. Therefore, the 2018 LRDP contribution to climate change from GHG emissions would be less than significant and result in a less than cumulatively considerable contribution to a significant cumulative impact.

3.9 Hazards and Hazardous Materials

Impact 3.9-1: Create a significant hazard through the routine transport, use, or disposal of hazardous materials. (project and cumulative impact)

Construction and operation of the development identified in the 2018 LRDP would result in transport, use, and disposal of hazardous materials to and from the plan area. Adherence to existing regulations and compliance with safety standards would result in a less-than-significant impact on a project level and result in a less than cumulatively considerable contribution to any significant cumulative impact.

Impact 3.9-3: Expose people or the environment to a significant hazard associated with release of a potentially hazardous substance along existing transportation corridors. (project and cumulative impact)

The 2018 LRDP includes development of academic and administrative land uses, campus infrastructure, and student housing in close proximity to the UPRR line, which is used to transport potentially hazardous and flammable materials. Construction and operation of the 2018 LRDP would not increase the hazard associated with operation of the highway and railroad, but would increase the number of people potentially exposed to hazardous conditions. This would be a less-than-significant impact on a project level and result in a less than cumulatively considerable contribution to any significant cumulative impact.

Impact 3.9-4: Result in handling of hazardous or acutely hazardous materials within 0.25 mile of an existing or proposed school. (project and cumulative impact)

Hazardous materials and waste could be handled within 0.25 mile of an existing or proposed school as a result of implementation of the 2018 LRDP. Handling, storage, and disposal of hazardous materials associated with the 2018 LRDP would be subject to campus safety programs and procedures and federal and state regulations on hazardous materials. This impact would be less than significant on a project level and result in a less than cumulatively considerable contribution to any significant cumulative impact.

Impact 3.9-5: Result in a safety hazard for people residing or working in the plan area because of proximity to airports. (project and cumulative impact)

Safety hazards associated with airports are generally related to construction of tall structures and the creation of wildlife attractants (e.g., wetlands, golf courses, and waste disposal operations) that could interfere with airplane flight paths. Under the 2018 LRDP, no land use conflicts such as tall buildings or wildlife attractants would be constructed. Thus, this impact would be less than significant on a project level and result in a less than cumulatively considerable contribution to any significant cumulative impact.

3.10 Hydrology and Water Quality

Impact 3.10-1: Construction-related water quality impacts. (project and cumulative impact)

Construction activities associated with implementation of the UC Davis 2018 LRDP would expose bare soil to rainfall and stormwater runoff, which could accelerate erosion and result in sedimentation of stormwater and, eventually, waterbodies. The plan would be required to comply with the General Construction Permit and Phase II Small MS4 Permit, and their attendant stormwater protections. In addition, UC Davis provides a comprehensive stormwater program through UC Davis EHS for development projects. This program exists to ensure compliance with applicable laws and implementation of BMPs on the ground during construction. Consequently, implementation of the 2018 LRDP would not be expected to contribute substantial loads of sediment or other pollutants to stormwater or

waterbodies and would result in a less-than-significant impact on a project level and result in a less than cumulatively considerable contribution to any significant cumulative impact.

Impact 3.10-2: Long-term water quality impacts. (project and cumulative impact)

New impervious surfaces from 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, the campus 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. Permit coverage and compliance with the stormwater management program would result in less-than-significant impacts associated with long-term water quality impacts on a project level and result in a less than cumulatively considerable contribution to any significant cumulative impact.

Impact 3.10-3: Violate water quality standards – waste discharge. (project and cumulative impact)

Expansion of the campus population and campus facilities under the 2018 LRDP would result in an increase in the amount of wastewater generated. It is expected that the types of chemical constituents in wastewater would remain approximately the same with implementation of the 2018 LRDP. By continuing to adhere to the provisions of NPDES permit CA0077895, it is expected that the wastewater treatment plant would continue to comply with waste discharge requirements, and therefore impacts associated with water quality standards would be less than significant on a project level and result in a less than cumulatively considerable contribution to any significant cumulative impact.

Impact 3.10-4: Impacts to deep aquifer groundwater supply and recharge. (project and cumulative impact)

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, for campus use. However, campus use of groundwater supplies would not substantially affect the available supplies within or ability for recharge of the deep aquifer. Impacts would be less than significant on a project level and result in a less than cumulatively considerable contribution to any significant cumulative impact.

Impact 3.10-5: Impacts to shallow/intermediate aquifer groundwater supply and recharge. (project and cumulative impact)

While implementation of the 2018 LRDP is not expected to increase groundwater withdrawals from the shallow/intermediate aquifer, recharge infiltration patterns could be affected by the increase in development. However, new impervious surfaces from the conversion of open space to other uses represent a small fraction of total campus lands, and lands within the Putah Creek watershed, which feeds the underlying aquifer through

recharge. Therefore, the result would be a less-than-significant impact on shallow/intermediate aquifer supply and recharge on a project level and result in a less than cumulatively considerable contribution to any significant cumulative impact.

Impact 3.10-8: Dam failure inundation.

Although 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, the dam structure is managed by the state and federal agencies and is capable of withstanding strong seismic shaking. As a result, the risk of inundation from a failure of the Monticello Dam is considered less than significant.

3.11 Land Use and Planning

Impact 3.11-1: Conflict with applicable land use plans, policies, or existing zoning adopted for the purposes of avoiding or mitigation of an environmental effect.

Implementation of the 2018 LRDP would not conflict with existing land use, policies, or zoning. Because the UC holds jurisdiction over campus-related projects, projects carried out by UC Davis would be consistent with the 2018 LRDP. Further, potential conflicts with adjacent land use, policies, or zoning are not anticipated. Therefore, impacts associated with land use, policies, or zoning would be less than significant.

3.12 Noise

Impact 3.12-4: Exposure of new and existing sensitive receptors to operational project-generated traffic noise. (project and cumulative impact)

Population growth and development would result in some increases in traffic on local and regional roadways. New student housing would be located near existing roadways as development of the 2018 LRDP occurs. However, increases in traffic would not result in substantial increases in noise and existing ambient noise levels are below acceptable levels. This impact would be less than significant on a project level and result in a less than cumulatively considerable contribution to any significant cumulative impact.

3.14 Public Services

Impact 3.14-1: Impacts on fire facilities. (project and cumulative impact)

Increased population and development under the 2018 LRDP could increase demand for fire services. However, implementation of the 2018 LRDP would not modify existing service area boundaries such that increases in demand would not result in the need for additional fire protection facilities beyond those anticipated as part of the 2018 LRDP, the construction of which could result in significant environmental impacts. Therefore, this impact would be less than significant on a project level and result in a less than cumulatively considerable contribution to any significant cumulative impact.

Impact 3.14-2: Impacts on police facilities. (project and cumulative impact)

Increased population and development under the 2018 LRDP could increase demand for police services. However, implementation of the 2018 LRDP would not modify existing service area boundaries such that increases in demand would not result in the need for additional police protection facilities beyond those anticipated as part of the 2018 LRDP, the construction of which could result in significant environmental impacts. Therefore, this impact would be less than significant on a project level and result in a less than cumulatively considerable contribution to any significant cumulative impact.

Impact 3.14.3: Impacts on schools. (project and cumulative impact)

The increase in campus population that is expected to occur under the 2018 LRDP would result in an increased demand for schools. However, enrollment for DJUSD has declined in 7 of the last 11 years and existing schools would have adequate capacity to accommodate the increase in students. No new facilities would be needed. Therefore, this impact would be less than significant on a project level and result in a less than cumulatively considerable contribution to any significant cumulative impact.

Impact 3.14-4: Impacts on other public facilities. (project and cumulative impact)

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. However, this increase in demand is covered as part of the 2018 LRDP and is not expected to result in the need for new or expanded public facilities. Therefore, this impact would be less than significant on a project level and result in a less than cumulatively considerable contribution to any significant cumulative impact.

3.15 Recreation

Impact 3.15-1: Impacts on campus recreation facilities. (project and cumulative impact)

The increase in population under the 2018 LRDP would increase demand for recreation facilities. However, maintenance of existing on-campus recreation facilities would be increased as needed, and several new recreation facilities would be constructed as part of the 2018 LRDP to off-set increases in demand for recreational facilities. Therefore, this impact would be less than significant on a project level and result in a less than cumulatively considerable contribution to any significant cumulative impact.

Impact 3.15-2: Impacts on off-campus recreation facilities. (project and cumulative impact)

Because the population growth under the 2018 LRDP would be located on campus, the increased demand for recreation facilities would primarily be for on-campus facilities. The new on-campus population would be adequately served by campus recreation facilities.

Therefore, the 2018 LRDP is not expected to cause substantial deterioration of off-campus recreation facilities. This impact would be less than significant on a project level and result in a less than cumulatively considerable contribution to any significant cumulative impact.

3.17 Utilities and Service Systems

Impact 3.17-1: Impacts on water supply. (project and cumulative impact)

Implementation of the 2018 LRDP would generate an additional demand for water, but would not require water supplies in excess of existing entitlements and resources, or result in the need for new or expanded entitlements. This impact would be less than significant on a project level and result in a less than cumulatively considerable contribution to any significant cumulative impact.

Impact 3.17-2: Require construction of new/expanded water infrastructure. (project and cumulative impact)

Implementation of the 2018 LRDP could require new water connections or expanded water conveyance systems. However, beyond projects identified as part of the plan, the 2018 LRDP would not require or result in the construction of new or expanded water supply or treatment facilities, the construction of which could cause significant environmental effects. This impact is considered less than significant on a project level and result in a less than cumulatively considerable contribution to any significant cumulative impact.

Impact 3.17-3: Require construction of new/expanded wastewater infrastructure to comply with applicable wastewater treatment requirements. (project and cumulative impact)

Implementation of the 2018 LRDP would not exceed the available capacity of existing wastewater infrastructure nor would it require the construction or expansion of wastewater treatment facilities or conveyance systems that could cause significant environmental effects. This impact would be less than significant on a project level and result in a less than cumulatively considerable contribution to any significant cumulative impact.

Impact 3.17-4: Impacts to solid waste facilities and compliance with regulations related to solid waste. (project and cumulative impact)

Implementation of the 2018 LRDP would increase solid waste generation at the campus. However, adequate landfill capacity is available at local and regional landfills to accommodate additional solid waste generated by the project. Compliance with the UC Sustainable Practices Policy would continue to reduce landfill contributions, consistent with CIWMA, AB 341, SB 1374, AB 1826, and SB 1383. This impact would therefore be less than significant on a project level and result in a less than cumulatively considerable contribution to any significant cumulative impact.

Impact 3.17-5: Impacts to chilled water and steam facilities. (project and cumulative impact)

Implementation of the 2018 LRDP would not result in deficiencies and lack of capacity within the UC Davis chilled water and steam infrastructure nor would it require the construction or expansion of existing systems that could cause significant environmental effects. This impact is considered less than significant on a project level and result in a less than cumulatively considerable contribution to any significant cumulative impact.

Impact 3.17-6: Demand for energy services and facilities the construction of which would result in significant environmental impacts. (project and cumulative impact)

Existing on-site electrical infrastructure and natural gas infrastructure is expected to be sufficient to serve the 2018 LRDP. Energy facilities would meet the 2018 LRDP's energy needs. Thus, this impact would be less than significant on a project level and result in a less than cumulatively considerable contribution to any significant cumulative impact.

FINDING: For all of the above impacts listed in this Section II.E.3, no finding is necessary pursuant to Public Resources Code Section 21081(a)(1) and CEQA Guidelines Section 15091(1) because the Project will not result in any potentially significant direct or indirect project or cumulative impacts on the environment; accordingly, no project-specific mitigation is required. Nevertheless, The Board finds that all of the aforementioned environmental impacts would be less than significant without mitigation. Therefore, no mitigation is proposed or required.

NO IMPACT

3.8 Greenhouse Gas Emissions and Climate Change

Impact 3.8-2: Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

Implementation of the 2018 LRDP would achieve targets established in the UC Sustainable Practices Policy through anticipated planning and policy actions. As achievement of the Sustainable Practices Policy would meet or exceed statewide targets for 2030 and not impede the ability to achieve statewide 2050 targets, including continued implementation of SACOG's MTP/SCS, the 2018 LRDP would not conflict with an applicable plan, policy, or regulations intended to reduce GHG emissions.

Finding: For this Impact 3.8-2, no finding is necessary pursuant to Public Resources Code Section 21081(a)(1) and CEQA Guidelines Section 15091(1) because the Project will not result in any potentially significant direct or indirect project or cumulative impacts on the environment; accordingly, no project-specific mitigation is required. The Board finds that the 2018 LRDP would have no impact in this area. Therefore, no mitigation measures are proposed or required.

F. MITIGATION MONITORING AND REPORTING PROGRAM

Public Resources Code section 21081.6 requires the lead agency, when making the findings required by Public Resources Code section 21081(1)(a), to adopt a mitigation monitoring and reporting program that incorporates all of the changes made to the project or any conditions of project approval adopted to mitigate or avoid significant effects on the environment. The University has prepared a Mitigation Monitoring and Reporting Program that requires the University to monitor all of the mitigation measures adopted and made fully enforceable through these Findings and the approval of the 2018 LRDP. The Board finds that the Mitigation Monitoring and Reporting Program has been designed to ensure compliance with the mitigation requirements during project implementation.

The Mitigation Monitoring and Reporting Program defines the responsibility and anticipated timing for implementation of mitigation measures within the University's jurisdiction. The University will ensure the accomplishment of mitigation measures through administrative controls over the Project's implementation, and the University will monitor and enforce the implementation of mitigation measures through verification in periodic mitigation monitoring reports and through periodic inspections by appropriate University personnel. The Mitigation Monitoring and Reporting Program for the 2018 LRDP is included in Chapter 3.0 of Volume 4 of the EIR ("MMRP").

G. ALTERNATIVES

In compliance with CEQA and the CEQA Guidelines, Section 5.0 of the EIR evaluated a reasonable range of alternatives to the 2018 LRDP Project, including the No Project/Development pursuant to the 2003 LRDP, followed by identification of an environmentally superior alternative. The EIR examined each alternative's feasibility, ability to meet the Project Objectives, and environmental impacts compared to the Project. In compliance with CEQA and the CEQA Guidelines, the alternatives analysis included an analysis of a no-project alternative and also identified the environmentally superior alternative.

Potential alternatives found to clearly not to meet the CEQA standards for alternatives, including Central Campus Infill, Targeted South or West Campus Development, and 4 Year Housing Guarantee, were rejected without further environmental review in Section 6.3 of the EIR. The rationale and substantial evidence for rejecting these alternatives for consideration in detail in the EIR is set forth in the Draft EIR and the record of proceedings, as further explained in the responses to comments in the Final EIR, all of which are incorporated herein by reference.

The No Project Alternative and Alternatives that might have been feasible and that would attain many most of the Project Objectives to some extent – including Reduced

Development Program, Net Student Growth Only and 2018 LRDP with Additional Student Housing – were carried forward and analyzed with regard to whether they would reduce or avoid significant impacts of the Project. The EIR’s analysis examined the feasibility of each alternative, the environmental impacts of each alternative, and each alternative’s ability to meet the Project objectives.

In connection with certification of the Final EIR for the LRDP Project, The Regents certifies that it has independently reviewed and considered the information on alternatives provided in the Final EIR and the record of proceedings. The Regents find that no new alternatives that would meet CEQA standards, are needed to constitute a reasonable range of alternatives in the EIR, or are considerably different from those analyzed in the Final EIR have been identified. The analysis in the response to comments on the alternatives proposed in comment letters is incorporated herein by reference and made part of these findings. None of the proposed alternatives are required to be analyzed in detail in a recirculated Draft EIR based on one or more of the following grounds: (1) the proposed alternative was analyzed in the Draft EIR and there is no substantial evidence that the analysis of that alternative was inadequate under CEQA; (2) the proposed alternative is substantially similar and a variant on an alternative already considered in the Draft EIR and presents similar impacts and, therefore, does not need to be analyzed under CEQA standards; (3) the proposed alternative does not substantially lessen the environmental impacts of the proposed project; (4) the proposed alternative is infeasible (as broadly defined under CEQA) based on substantial evidence in the record of proceeding to support infeasibility; (5) the proposed alternative does not further most of the basic Project Objectives; or (6) the proposed alternative is not needed to meet the “reasonable range” requirement under CEQA. With respect to alternatives suggested in comments on the Draft EIR, the responses to comments adequately explain why those suggested alternatives are infeasible or ill-advised other otherwise not required to be analyzed or adopted under CEQA for the reasons stated above (among others) and thus not recommended for adoption. The Board hereby adopts and incorporates by reference the reasons stated in the responses to comments as the grounds for rejecting those alternatives.

The Regents find that a good faith effort was made to evaluate all potentially feasible alternatives in the EIR that are reasonable alternatives to the Project and could feasibly obtain the basic objectives of the Project, even when the alternatives might impede the attainment of some of the Project objectives. As a result, the scope of alternatives analyzed in the EIR satisfies CEQA’s requirements to analyze a reasonable range of alternatives and the alternatives are not unduly limited or narrow. The Regents also find that all reasonable alternatives were reviewed, analyzed and discussed in the review process of the EIR and the ultimate decision on the Project.

FINDING: The Board certifies that it has independently reviewed and considered the information on alternatives provided in the Draft and Final EIR and in the administrative record. For the reasons set forth below, the Board finds that the Alternatives 1, 2, 3 and 4 either fail to avoid or substantially lessen the Project’s significant impacts (and in some cases increase those significant and unavoidable impacts), fails to meet most of the basic

project objectives or meets the basic objectives to a lesser extent than the 2018 LRDP, or are “infeasible” as that term is broadly defined by CEQA and the CEQA Guidelines.

Brief summaries of the evaluated alternatives and findings regarding the alternatives follow the Project Objectives section below.

1. Project Objectives

The Board finds that the objectives for the 2018 LRDP are as described in Section 2.3 of Volume 1 of the EIR. The specific objectives of the 2018 LRDP are as follows

Support the Academic Enterprise

- Create a dynamic environment for learning and discovery.
- Promote compact and clustered development of academic/administrative facilities where possible.
- Provide agricultural and environmental field research facilities close to the UC Davis central campus.
- Maintain a compact and connected academic core with a generous open space network.
- Maintain flexibility to accommodate new or expanded initiatives and programs.

Enrich Community Life

- Promote compact and clustered development of housing facilities where possible.
- Increase on-campus housing opportunities and the proportion of students living on-campus.
- Promote affordable and accessible student and faculty/staff residential communities.
- Protect natural areas, including the Arboretum waterway and Putah Creek Reserve.
- Provide an environment to enrich campus life and serve the greater community.

Create A Sustainable Future

- Further UC Davis as a leader in sustainability and efforts to meet the goals of the UC Sustainable Practices Policy.
- Foster long-term resiliency in response to climate change and the uncertainties of other social, economic, and environmental factors.
- Maximize transit, bike, and pedestrian access to the campus.
- Provide a healthy and interconnected natural and built environment.
- Monitor and adaptively manage future development on campus to reduce temporary construction and long-term impacts on any one particular area on or off campus.

2. Alternative 1 - No Project Alternative

Under the No Project Alternative, it is assumed, additional planned growth of the campus would occur pursuant to the 2003 LRDP. The 2003 LRDP is the existing long-range plan for the campus, and as such, implementation of the current plan would continue if UC Davis does not adopt and begin implementation of the 2018 LRDP or other long-term plan for campus. Within the context of the current plan, additional planned growth of the campus would occur, primarily associated with increases in academic and administrative space. Compared to the 2018 LRDP, on-campus development and growth would be very limited (likely to just the central campus) and is assumed to not exceed 500,000 sf of academic/administrative space development beyond existing conditions.

Alternative 1 is infeasible because it would not meet most of the basic Project objectives. Under this alternative, new student housing would not be provided on campus, which would not achieve several of the objectives identified under UC Davis' goal for enriching community life. Additionally, no increases in student enrollment are anticipated under this alternative, which would be considered counter to the overarching goal of the UC to provide a dynamic learning environment for residents of California. It would also not achieve the same degree of efficiencies associated with locating additional student housing on campus, thereby maximizing potential bicycle and pedestrian traffic by students. Additionally, because this alternative would provide a lesser degree of academic/administrative space, it would limit the ability for UC Davis to continue to create a dynamic environment for learning and discovery through the provision of new academic programs and disciplines. Overall, this alternative would prohibit UC Davis from achieving its objectives, and it would result in a negative impact on UC Davis and the University's ability to further its academic, research, and public services missions.

Although this alternative would have less environmental impacts compared to the 2018 LRDP for most environmental impact areas, it would have greater environmental impacts on population and housing due to not providing any additional on-campus housing.

FINDING: For the reasons set forth above and more fully described in Final EIR and in the record of proceeding, the Board finds that Alternative 1 is infeasible and fails to meet most of the basic project objectives. Therefore, the Board declines to adopt this alternative pursuant to the standards in CEQA and the CEQA Guidelines.

3. Alternative 2 - Reduced Development Program Alternative

Under this alternative, UC Davis would implement a long-range campus plan with an overall reduction in planned campus development compared to 2018 LRDP. Under this alternative, housing for approximately 8,000 students and 500,000 sf of new academic/administrative space would be provided. Redevelopment of the Orchard Park site and further development of West Village would likely be necessary in order to accommodate the additional student needs on-campus. The same projected increase in student enrollment and on-campus employees that would occur under the 2018 LRDP would occur with implementation of this alternative. Compared to the anticipated growth under the 2018 LRDP, this alternative would represent a reduction in on-campus housing for students of 1,050 beds, a reduction of on-campus housing for employees of 485 beds, and a reduction in new academic/administrative space of 1,500,000 sf. In terms of total net reduction in square footage, this alternative would involve the construction of roughly 2,500,000 sf less than the 2018 LRDP. On-campus housing would remain the focus of the long-range campus plan, but with less overall construction.

This Alternative would not avoid or substantially lessen the environmental impacts of the 2018 LRDP Project. This alternative would have greater significant and unavoidable impacts than the 2018 LRDP on Air Quality (operations), Transportation, and Population and Housing. It would only lessen, but not avoid, the environmental impacts relating to Agricultural Resources (remains significant and unavoidable), Air Quality (construction) (remains significant and unavoidable), GHG (construction) and Energy as compared to the 2018 LRDP Project. All other impacts would be similar to those of the 2018 LRDP Project. Therefore, this Alternative would not substantially lessen the environmental impacts of the proposed 2018 LRDP project.

Under this Alternative, new student housing would be provided on-campus, but would only satisfy the projected increase in student enrollment and would meet the housing objective to a lesser degree than the 2018 LRDP. As a result, this alternative would achieve some of the project objectives identified under UC Davis's goal for enriching community life but achieve the housing objective to a lesser degree than the 2018 LRDP. Additionally, because this alternative would provide less academic/administrative space, it would limit the ability for UC Davis to continue to create a dynamic environment for learning and discovery through the provision of new academic programs and disciplines. The primary mission of the University is to provide teaching, research, and public service for the higher education needs of California. This Alternative would provide less academic building space, would impair the ability of the University to achieve this mission and would conflict with portions of the key project objectives related to supporting academic efforts.

Finding: For the reasons set forth above and more fully described in Final EIR and in the record of proceeding, the Board finds that Alternative 2 is infeasible, fails to meet most of the basic project objectives or meets the basic objectives to a lesser extent than the 2018 LRDP, and would not substantially lessen the environmental impacts of the 2018 LRDP. Therefore, the Board declines to adopt this alternative pursuant to the standards in CEQA and the CEQA Guidelines.

4. Alternative 3 - Net Student Growth Only Alternative

This Alternative reduces the anticipated level of development, compared to the 2018 LRDP. Under this alternative, new on-campus housing would focus solely on the net increase in student population anticipated by UC Davis and could be satisfied through the construction and operation of the West Village Expansion and Orchard Park Redevelopment components alone. This alternative would provide up to 5,200 student beds on-campus, which would accommodate the projected increase in student enrollment at UC Davis above 2016-2017 conditions, and up to 500,000 sf of new academic/administrative space. The same projected increase in student enrollment and on-campus employees that would occur under the 2018 LRDP would occur with implementation of this alternative. This would represent a reduction in on-campus housing to be provided for students of 3,850 beds, on-campus housing for employees of 485 beds, and a reduction in new academic/administrative space of 1,500,000 sf compared to the 2018 LRDP. In terms of total net reduction in square footage, this alternative would involve the construction of roughly 3,200,000 sf less than the 2018 LRDP.

This Alternative would not avoid or substantially lessen the environmental impacts of the proposed 2018 LRDP Project. This alternative would have greater significant and unavoidable impacts than the Project on air quality (operations), Transportation, and Population and Housing. It would only lessen, but not avoid, the environmental impacts relating to Agricultural Resources (remains significant and unavoidable), Air Quality (construction) (remains significant and unavoidable), GHG (construction) and Energy as compared to the proposed 2018 LRDP Project. All other impacts would be similar to those of the proposed 2018 LRDP Project. Therefore, this Alternative would not substantially lessen the environmental impacts of the 2018 LRDP project.

Under this Alternative, new student housing would be provided on-campus, but would only satisfy the projected increase in student enrollment and to a lesser degree than the 2018 LRDP. As a lesser development alternative, it would maintain more existing agricultural and environmental field research close to the central campus and maintain the existing academic core to a greater degree. However, it would not achieve the objectives related to promoting a dynamic learning environment or maintaining flexibility for new/expanded initiatives and programs to the extent of the 2018 LRDP. It would also not improve the ratio of students living on-campus compared to students living off campus, thereby not meeting the on-campus housing objective. In general, this alternative would achieve the objectives related to maintaining a rich, academic environment, including natural areas, but would not achieve project objectives related to improving upon existing opportunities to the extent of the 2018 LRDP.

Finding: For the reasons set forth above and more fully described in Final EIR and in the record of proceeding, the s find that Alternative 3 is infeasible, fails to meet most of the basic project objectives or meets the basic objectives to a lesser extent than the 2018 LRDP, and would not substantially lessen the environmental impacts of the 2018 LRDP. Therefore, the Board declines to adopt this alternative pursuant to the standards in CEQA and the CEQA Guidelines.

5. Alternative 4 - 2018 LRDP With Additional Student Housing Alternative

This alternative would include development of campus similar to the 2018 LRDP with additional student housing development (approximately 2,200 beds) at a property known as the Nishi site, located southeast of the central campus, and additional beds at the West Village Expansion (1,800) and Orchard Park Redevelopment (500 beds) beyond the 2018 LRDP. In total, implementation of this alternative would result in approximately 23,400 total student beds within the UC Davis campus, compared to the 18,868 total student beds with implementation of the 2018 LRDP. This alternative would likely increase anticipated housing-related development by approximately 2,000,000 sf, compared to the 2018 LRDP. This estimate is based on the previous square footages estimated by the City of Davis for housing at the Nishi site and anticipated square footages for the West Village Expansion and Orchard Park Redevelopment components evaluated in Volumes 2 and 3 of the Final EIR. Under this Alternative 4, UC Davis could consider development of the Nishi site as a UC Davis or student housing project. The increased student housing also could be achieved by densifying housing development on other on-campus housing sites identified in the 2018 LRDP EIR. The environmental impacts described below would be similar if the increased housing occurred on campus with or without the Nishi site. Similar to Alternatives 2 and 3, the same projected increase in student enrollment that would occur under the 2018 LRDP would occur with implementation of this Alternative.

This Alternative would not avoid or substantially lessen the environmental impacts of the proposed LRDP Project. This alternative would have greater impacts than the Project on Aesthetics (significant and unavoidable), Agricultural Resources (significant and unavoidable), Air Quality (construction (significant and unavoidable)), Greenhouse Gas (construction), and Energy. It would only lessen, but not avoid, the environmental impacts relating to Transportation and Air Quality (operations) as compared to the 2018 LRDP Project. All other impacts would be similar to those of the 2018 LRDP Project. Therefore, this Alternative would not substantially lessen the environmental impacts of the 2018 LRDP project.

This Alternative would meet most of the basic project objectives but would not meet them to the same extent as the 2018 LRDP. Under this Alternative, additional student housing beyond that of the 2018 LRDP would be provided by UC Davis, which would further achieve project objectives related to on-campus student housing and the promotion of compact development, as it would be located proximate to the central campus. However, to the extent this alternative may involve the expansion of campus to the Nishi site, which is currently located outside the current campus boundary and across an existing, active rail

corridor, which is not considered to be directly in line with the goal of increasing on-campus housing opportunities. Further, the Nishi site has adequate but limited access (with one primary new access point for vehicles at the proposed undercrossing; a secondary access point for bicycle, pedestrian, transit, and emergency vehicles at Olive Drive; and a third access point for bicycle and pedestrian traffic along the Putah Creek channel), and is not considered to achieve the project objectives related to access and provision of a healthy, interconnected natural and built environment to the extent of the 2018 LRDP.

This alternative would increase housing density at the Orchard Park site, the West Village site, and potentially at other on-campus housing sites identified in the 2018 LRDP. To achieve these higher densities, taller student housing buildings would be needed. Increased building height could result in higher construction costs on a per-square-foot basis. These higher costs may not be affordable for students and consequently, this Alternative may conflict with the project objective of providing affordable and accessible student residential communities.

Finding: For the reasons set forth above and more fully described in Final EIR and in the record of proceeding, the Regents find that Alternative 4 is infeasible, fails to meet most of the basic project objectives or meets the basic objectives to a lesser extent than the 2018 LRDP, and would not substantially lessen the environmental impacts of the 2018 LRDP. Therefore, the Board declines to adopt this alternative pursuant to the standards in CEQA and the CEQA Guidelines.

6. Environmentally Superior Alternative

CEQA requires the identification of an environmentally superior alternative. Section 15126.6(e)(2) of the CEQA Guidelines states that if the No Project Alternative is the environmentally superior alternative, then the EIR shall also identify an environmentally superior alternative among the other alternatives. The impact of the respective alternatives is identified in Table 6-1 of the EIR, followed parenthetically by the comparison to the impact of the proposed Project.

As shown in the Executive Summary Chapter of this volume of the EIR, there would be significant and unavoidable impacts associated with the project. These impacts are related to aesthetics, agricultural resources, air quality, historic resources, biological resources, population and housing, and transportation. Each of the evaluated alternatives would result in lesser environmental impacts than the 2018 LRDP to some environmental resources and greater impacts to others. None of the alternatives presented would only reduce impacts associated with the 2018 LRDP.

When considering objectives, the 2018 LRDP would best meet the objectives. In contrast, Alternative 1 would not provide additional housing to accommodate any growth in student enrollment, and Alternatives 2 and 3 would not provide additional on-campus housing to the degree of the 2018 LRDP such that the proportion of students living on campus versus off campus would increase. Also, Alternatives 2 and 3 would not provide for sufficient academic facilities to support the University's teaching and research mission. While

Alternative 4 would achieve a greater level of on-campus student housing than the 2018 LRDP, it would likely increase the overall scale of campus development, may require acquisition of additional off-campus property, and further intensify construction activities within UC Davis. Alternative 1 (No Project), which would represent the least amount of development compared to existing conditions and thus, least potential physical environmental impacts, would be considered the environmentally superior alternative.

As required by CEQA Guidelines Section 15126.6 [e][2], because the environmentally superior alternative was identified as the No Project Alternative, another environmentally superior alternative must be identified among the other alternatives considered. Alternatives 2 and 3 would result in less impacts in certain areas as compared to the 2018 LRDP. However, Alternatives 2 and 3 also would result in various environmental effects, some of which would be greater than with implementation of the 2018 LRDP. In particular, both would have potentially greater population and housing, air quality (operations) and traffic impacts compared to the 2018 LRDP. However, when comparing the reductions afforded by Alternative 2 versus Alternative 3 when compared to the 2018 LRDP, Alternative 3 would result in greater impact reductions compared to Alternative 2 due to the overall lesser level of development and is thus considered superior to Alternative 2.

However, on balance, the environmentally superior alternative would be either the 2018 LRDP or Alternative 3, depending on decisions weighing types of environmental benefits and adverse effects by UC Davis. The 2018 LRDP would result in greater construction-related impacts, and Alternative 3 would result in greater operational impacts. In weighing the consideration of the environmentally-superior alternative, decision-makers must weigh the relative importance of greater construction-related impacts associated with the 2018 LRDP, compared to the greater operational impacts associated with Alternative 3. Nonetheless, each of the alternatives considered would result in long-term, significant and unavoidable environmental impacts. Therefore, the environmental impact differences between these two alternatives are not substantial enough that one is clearly superior over the other.

Finding: Based on the foregoing, the Board finds that Alternative 3 and the Project each has varying levels of impacts on different environmental resources, as noted in the Findings above, and Alternative 3 is not superior to the Project for CEQA's purposes. The Board further finds when compared to Alternative 3, the 2018 LRDP Project provides the best available and feasible balance between maximizing attainment of the Project objectives and minimizing significant environmental impacts, and the 2018 LRDP Project is the environmentally superior alternative among those options.

III. STATEMENT OF OVERRIDING CONSIDERATIONS

As discussed above, the EIR has identified that some of the impacts of the 2018 LRDP remain significant following adoption and implementation of the LRDP policies and the Project-specific mitigation measures described in the Final EIR. Section 15093(b) of the CEQA Guidelines provides that when the decision of the public agency results in the occurrence of significant impacts that are not avoided or substantially lessened, the agency must state in writing the reasons to support its actions. The following section describes the benefits of the 2018 LRDP that outweigh its unavoidable adverse effects and provides the specific reasons for considering the 2018 LRDP acceptable even though significant impacts will result from development through its implementation:

A. IMPACTS THAT REMAIN SIGNIFICANT AND UNAVOIDABLE

The 2018 LRDP results in the following significant and unavoidable impacts even with implementation of mitigation measures:

- ▲ Volume 1, Impact 3.1-1: Result in a substantial adverse effect on a scenic vista.
- ▲ Volume 1, Impact 3.2-1: Convert agricultural uses, including lands designated as Important Farmlands, to non-agricultural use or involve changes in the existing environment that could result in conversion of Important Farmland to non-agricultural use.
- ▲ Volume 1, Impact 3.3-1: Construction-generated emissions of NO_x.
- ▲ Volume 1, Impact 3.3-2: Operational emissions of criteria air pollutants and precursor emissions.
- ▲ Volume 1, Impact 3.3-6: Land use compatibility with off-site sources of toxic air contaminants and ultrafine particulates.
- ▲ Volume 1, Impact 3.4-4: Impacts to historical resources.
- ▲ Volume 1, Impact 3.5-11: Conflict with local policies or ordinances related to the protection of biological resources – Heritage trees.
- ▲ Volume 1, Impact 3.13-1: Directly or indirectly induce substantial population growth and housing demand.

- ▲ Volume 1, Impact 3.16-1: Freeway level of service impacts.
- ▲ Volume 1, Impact 3.16-2: Intersection level of service impacts.
- ▲ Volume 1, Impact 3.16-6: Cumulative impacts to freeway level of service.

Cumulative impacts of the 2018 LRDP to Aesthetics (effects on a scenic vista), Agriculture (conversion of farmland in the region), Air Quality (criteria air pollutant emissions during construction and operation), Historic Resources (alteration of historic structures), Population and Housing (direct population growth), and Transportation (freeways level of service) would also be significant and unavoidable as a result of implementation of the 2018 LRDP.

B. OVERRIDING CONSIDERATIONS

In accordance with CEQA Guidelines section 15093, the Board has, in determining whether or not to approve the Project, balanced the economic, legal, social, technological and other benefits of the Project against its significant and unavoidable environmental impacts. The Board has found that, for the reasons set forth below, the benefits of the Project outweigh the Project's significant adverse environmental effects that the University cannot mitigate to less-than-significant levels. This Statement of Overriding Considerations is based on the Board's review of the Final EIR and other information in the administrative record.

The benefits of the Project include the following:

1. The 2018 LRDP, by providing housing for up to 9,000 students and designates land for approximately 500 faculty and staff housing units, enabling the campus to sustain and expand its residential character and provide opportunities for members of the campus community to live locally and participate fully in the life of the campus. Meeting a portion of the increased demand for housing with on campus housing is expected to help the campus recruit high quality faculty and would increase the opportunities for students to live on campus which will enrich campus life and reduce commute times for UC Davis students.
2. The 2018 LRDP Project promotes the academic mission of UC Davis by planning for greater academic and research facilities to accommodate new or expanded initiatives and programs.
3. The 2018 LRDP maintains the compact nature of development on campus and conservation of environmental resources located on campus.
4. The 2018 LRDP will help attain UC Davis' sustainability goals through incorporation of the UC Sustainable Practices Policy into and integration with the Programmatic EIR for the 2018 LRDP EIR.
5. The University is charged, under the California Master Plan for Higher Education, with providing the opportunity for undergraduate education to those California's who graduate in the top one-eighth of their high school class. The University is also charged with admitting those students who complete coursework in the lower division transfer curriculum at community colleges and who meet minimum grade point average requirements. The University serves as the state's primary research agency and is the primary public institution in the state offering doctoral and certain professional degrees. The 2018 LRDP helps achieve these University objectives.

6. The 2018 LRDP will advance California's economic, social and cultural development, which depends upon broad access to an educational system that prepares all of the state's inhabitants for responsible citizenship and meaningful careers.
7. The 2018 LRDP supports the campus in its objective of creating a physical framework to support the teaching, research, and public service mission of the campus, creating a dynamic learning and discovery environment, within a compact and connected academic core, that would enrich community life and create sustainable future.
8. The 2018 LRDP will allow for the development of approximately 2 million square feet of academic and administrative facilities to remedy existing and future space shortages, correct deficiencies and technological obsolescence in existing facilities, accommodate planned program direction in instruction, research and public service functions, and provide capacity for future program requirements.
9. The 2018 LRDP will constitute a significant economic benefit to the Sacramento region. UC Davis has a significant economic impact on the area's economy. The total economic impact of UC Davis in the region is much greater than the sum of the direct expenditures made by UC Davis and its affiliated organizations and populations. Each dollar spent locally by UC Davis cycles through the area economy, generating additional income and employment.
10. UC Davis provides many indirect community contributions in the form of education, recreation, artistic, and cultural enrichment to residents of the Davis area through such functions as extension courses, performing arts events, art exhibits, sporting events, conferences and workshops. As the 2018 LRDP is implemented, the level of these services will grow.
11. The campus is the largest employer in the Davis area and one of the largest employers in the Sacramento Valley. This is particularly significant because of the quality and diversity of new jobs which are related to the implementation of the 2018 LRDP.
12. The increased economic activity resulting from campus growth is also expected to result in secondary growth in non-University businesses in the Davis area. Implementation of the 2018 LRDP will also provide construction employment as individual building projects are developed.
13. When compared to the alternatives analyzed in the Final EIR (including the No Project Alternative), the 2018 LRDP provides the best available balance between maximizing attainment of the project objectives and minimizing significant environmental impacts.

FINDING: Considering all factors and the evidence in the EIR and other relevant documents and information in the administrative record, the Board finds that specific economic, legal, social, technological, and other benefits of the Project listed above outweigh the significant and unavoidable adverse environmental impacts of the Project. The Board therefore finds that those significant adverse impacts are acceptable in the context of the overall Project benefits.

IV. RECORD OF PROCEEDINGS

For purposes of CEQA and these Findings, the record of proceedings for the 2018 LRDP (Record of Proceedings) consists all the documents and evidence relied upon by the University in preparing the proposed 2018 LRDP and the associated EIR, including but not limited to the following documents and other evidence:

- The Notice of Preparation (NOP) distributed January 4, 2017;
- The EIR for the Project, including, without limitation, the Draft EIR, Final EIR, and all of its appendices;
- All studies, EIRs, maps, rules, regulations, guidelines, permits and other documents and materials incorporated by reference in any portion of the EIR;
- All written and oral public testimony presented during every noticed public meeting and public hearing for the Project, and all transcripts, audiotapes, videotapes and digital tapes thereof;
- The Mitigation Monitoring and Reporting Program for the proposed Project (MMRP);
- Matters of common knowledge, including but not limited to federal, state and local laws and regulations, including, without limitation, the University's adopted CEQA Procedures and the University's and UC's Davis' adopted plans, policies and programs;
- Any documents expressly cited in these Findings and/or in the Statement of Overriding Considerations; and
- All materials not otherwise identified which are expressly required to be in the Record of Proceedings by Public Resources Code Section 21167.6(e).

A. Custodian and Location of Records

The documents and other materials which constitute the Record of Proceedings are located at the Campus Planning and Environmental Stewardship, University of California, Davis, One Shields Avenue, Davis, CA 95616. Copies of those documents are and at all relevant times have been and will be available upon request at the offices of the Campus Planning and Environmental Stewardship. The custodian of the Record of Proceedings may be contacted as follows:

Matt Dulcich, AICP
Director of Environmental Planning
Campus Planning and Environmental Stewardship
University of California, One Shields Avenue
Davis, CA 95616

530-752-9597

This information is provided in compliance with Public Resources Code Section 21081.6(a)(2) and Guidelines Section 15091(e).

V. SUMMARY

Based on the foregoing Findings and the information contained in the administrative record, the Board has made one or more of the following Findings with respect to the significant environmental effects of the proposed 2018 LRDP and described in the Final EIR:

- Changes or alterations have been required for, or incorporated into, the Project that avoid or substantially lessen the significant environmental effects on the environment.
- Changes or alterations that are wholly or partially within the responsibility and jurisdiction of another public agency have been, or can and should be, adopted by that other public agency.
- Specific economic, legal, social, technological, or other considerations make infeasible certain mitigation measures and alternatives.

Based on the foregoing findings and the information contained in the record, it is hereby determined that:

These Findings incorporate by reference in their entirety the text of the EIR prepared for the 2018 LRDP, WVE and OPR Project. Without limitation, this incorporation is intended to elaborate on the scope and nature of the 2018 Project, related mitigation measures, and the basis for determining the significance of such impacts

All significant impacts on the environment due to the Project have been eliminated, or substantially lessened, where feasible.

The Project will result in significant and unavoidable environmental effects as described in Section II.E.1 above. These significant and unavoidable impacts are acceptable due to the factors described in the above Statement of Overriding Considerations adopted in connection with the approval of the Project, as described above.

As described in Section II.G above, the alternatives evaluated in the EIR, are rejected as infeasible, failing to meet most of the basic project objectives or meeting the basic objectives to a lesser extent than the 2018 LRDP, and not substantially lessening the environmental impacts of the 2018 LRDP.

CEQA Guidelines section 15074 requires the Lead Agency approving a Project to adopt a mitigation monitoring and reporting program for changes to the Project that it adopts or makes a condition of Project approval in order to ensure compliance during Project implementation. The Regents adopts the mitigation monitoring and reporting program for the 2018 LRDP and the specific MMs will be monitored in conjunction with UC Davis's Final EIR Mitigation Monitoring Program and Reporting process.

This determination reflects The Regents' independent judgment and analysis.

VI. APPROVALS

Based on the foregoing and having considered all of the information in the record, The Board takes the following actions:

1. The Board certifies the Final EIR as described in Section I, above, and finds it has been completed in compliance with CEQA and the CEQA Guidelines.
2. The Board adopts and makes, as a condition of the 2018 LRDP Project, all Project elements, and mitigation measures identified in the Final EIR within the responsibility and jurisdiction of the University set forth in Section II of the Findings, above.
3. The Board hereby adopts the Mitigation Monitoring and Reporting Program for the 2018 LRDP Project as set forth in Chapter 3.0 of Volume 4 of the EIR and discussed in Section II.F of the Findings, above
4. The Board hereby adopts the Findings in their entirety as set forth in Sections I-V, above, including the Statement of Overriding Considerations.
5. Having certified the Final EIR, independently reviewed and analyzed the Final EIR, incorporated mitigation measures into the Project, and adopted

the Mitigation Monitoring and Reporting Program and the foregoing Findings and Statement of Overriding Considerations, The Board hereby:

Approves the 2018 LRDP included as Attachment 1 within the 2018 LRDP approval item dated July 18, 2018 for the Board of Regents.

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