2 EXECUTIVE SUMMARY

2.1 INTRODUCTION

This summary is provided in accordance with the California Environmental Quality Act (CEQA) Guidelines Section 15123. As stated in the State CEQA Guidelines Section 15123(a), "an environmental impact report (EIR) shall contain a brief summary of the proposed actions and its consequences. The language of the summary should be as clear and simple as reasonably practical." As required by the Guidelines, this section includes: (1) a summary description of the proposed project; (2) a synopsis of environmental impacts and recommended mitigation measures; (3) identification of the alternatives evaluated and of the environmentally superior alternative; and (4) a discussion of the areas of controversy associated with the project.

2.2 SUMMARY DESCRIPTION OF THE PROPOSED PROJECT

2.2.1 Background

The proposed project includes two major components on adjacent properties that are, together, known as the Nishi Gateway Project: annexation and development of a site located between UC Davis and Interstate 80, known as the Nishi site, and rezoning and potential redevelopment of property between Richards Boulevard and the Nishi Site, known as the West Olive Drive area.

With respect to West Olive Drive, the City approved the Gateway/Olive Drive Specific Plan, which addresses the West Olive Drive area, in 1996. The plan was later amended in 2002. The vision for West Olive Drive is to maintain and enhance the existing unique character and mix of needed uses. More specifically, service commercial, restaurant, motel, and similar uses would continue with roadway and landscape improvements to upgrade the visual entrance to the city. When adopted, the plan acknowledged future potential development of the Nishi site and potential subsequent redevelopment within West Olive Drive as a result. The Nishi site has been considered for development by the City for the past 20 years, and is included in the Sphere of Influence boundary of the City's General Plan. The site, like most of the undeveloped land in the region, is in predominantly agricultural use.

Prior to 1992, the Nishi site was located within Solano County, but was then annexed by Yolo County as a single parcel. The City of Davis, through the Gateway/Olive Drive Specific Plan, had approved applications for prezoning, annexation, and subdivision of the Nishi site in 1996; however, the entitlements expired and the site was subsequently redesignated for agricultural use. In 2008, the City of Davis Housing Element Steering Committee recommended that the Nishi site be developed with high-density residential through a cooperative plan for development with UC Davis. In November 2012, the City Council approved a Pre-Development Cost Funding and Negotiation Agreement for the Nishi site, with the goal of planning the site as a mix of university-related research park development complemented by high density urban housing. This followed the Council's action on the "Business Park Land Strategy" to pursue (re)development of Downtown and Nishi/Gateway as a dynamic mixed-use innovation district and to initiate planning of the Nishi property as a mix of university-related research park development complemented by high-density urban housing.

2.2.2 Project Location

The project site is composed of two distinctly separate but adjoining areas, totaling approximately 57.7 acres; 10.8 acres (West Olive Drive) are within the City of Davis and 46.9 acres (Nishi) are immediately west of the city limits. The project site is adjacent to downtown Davis and the UC Davis university campus, but is separated by the existing Union Pacific Railroad (UPRR) track. The Nishi annexation/development component is evaluated at a project-level within the EIR. The West Olive Drive rezoning component is less detailed and is evaluated at a program-level.

The Nishi site consists primarily of farmland (approximately 33.5 aces) under dry agricultural production and is bounded by the UPRR track and UC Davis Campus to the northwest, Putah Creek to the northeast, and Interstate 80 (I-80) to the south. The remainder of the Nishi site is currently dirt roads and open space associated with the Putah Creek channel. West Olive Drive is largely developed with commercial uses and is bounded by Richards Boulevard to the northeast, the I-80/Richards Boulevard interchange to the southeast, Putah Creek to the southwest, and the existing railroad to the northwest.

2.2.3 Project Objectives

The City and the applicant have identified the following project objectives for the purposes of this EIR:

- optimize an underutilized infill location within and adjacent to the City of Davis;
- contribute to the overall character and livability of the surrounding neighborhood and UC Davis by facilitating the reuse of property in a manner that enhances the visibility and aesthetic appeal of the city from Richards Boulevard, UPRR, and I-80 and that enhances circulation within the city and to UC Davis;
- develop a mixed-use project with an array of dense, efficient, urban housing types, as well as land for business opportunities;
- provide additional housing near existing mobility infrastructure (i.e., pedestrian and bicycle facilities and transit) to reduce vehicle trips, vehicle miles travelled, and parking demand;
- provide housing density adjacent to the downtown area of the City of Davis and UC Davis to reduce vehicle trips, vehicle miles travelled, and parking demand within the downtown area;
- provide alternative access to UC Davis to minimize congestion along Richards Boulevard at the UPRR undercrossing and at the intersection of Richards Boulevard and 1st Street;
- minimize impacts to on-site environmental resources, including on-site vegetation, potentially historic structures along West Olive Drive, and Putah Creek;
- accommodate high-skilled technology-related jobs that allow a greater number of Davis residents to live and work in the community;
- provide energy-efficient building design, low-water use indoor and outdoor design, and high-quality construction by incorporating national and/or local sustainable design practices;
- promote flexibility in project design and implementation to respond to market demand, through phasing of construction, and offering a variety of building types; and
- collaborate with UC Davis and others to capture startup businesses and growing mid-to-large size companies, reducing the loss of intellectual capital and revenue through out-migration.

2.2.4 Project Characteristics

The project is comprised of two primary components:

1. Annexation and development of the Nishi site with a mixed-use innovation district community that will provide roadway connections to the City of Davis and UC Davis.

2. Rezoning of West Olive Drive to allow for redevelopment of parcels within West Olive Drive.

No new development is currently proposed as part of West Olive Drive, however the rezoning of the parcels within West Olive Drive as part of the project would allow for redevelopment and more intensified uses.

DEVELOPMENT OF THE NISHI SITE

The project would involve the development of a mix of land uses consisting of rental and for-sale, high-density residential uses; research and development (R&D) space; accessory commercial/retail space; on-site stormwater detention; open spaces, including a public park, greenbelts, and private open space for the proposed residential uses; and surface/structure parking with solar panels. The project would include up to 650 residential units (potentially 440 rental and 210 for-sale units), up to 325,000 square feet (sf) of R&D uses, and up to 20,000 sf of accessory retail uses (coffee shop, small café/restaurant, etc.) with a variety of lot sizes and building floor plates. While not proposed at this time, the site could potentially accommodate an extended-stay hotel, which would be subject to subsequent market assessment and discretionary City review and approval with performance standards. This EIR considers two scenarios for vehicular access to the Nishi site: an option with connections to both East Olive Drive and Old Davis Road on the UC Davis campus; and an option with access only to East Olive Drive.

Sustainability Implementation Plan

In 2014, the City was awarded a grant from the Strategic Growth Council (SGC) to assist the City and project applicant with the planning and design of the Nishi Gateway Project with a focus on sustainability and green development. As part of the SGC grant, the City and the applicant prepared a sustainability implementation plan for incorporation to the project to provide a more sustainable development and model for future development within the City and the region. To that end, the City has incorporated the technical studies and analysis into this EIR, and the implementing actions included as part of the sustainability plan have been included as intrinsic project features (e.g., on-site structures would exceed 2013 Title 24 standards by 30%; rooftop and surface-parking solar facilities), or as mitigation measures (e.g., traffic management plans, including educational and incentive programs for alternative transportation).

REDESIGNATION/REZONING OF WEST OLIVE DRIVE

The 10.8-acre West Olive Drive is currently designated as Commercial Service and zoned for Commercial Service and Parks/Recreation uses under the Gateway/Olive Drive Specific Plan, which was adopted by the City of Davis in 1996 and amended in 2002. The project includes redesignation of West Olive Drive to Neighborhood Mixed Use and rezoning to the City zoning designation of Planned Development (P-D) for a mix of uses. Approximately 55,000 net new sf of commercial uses may be developed within West Olive Drive through redevelopment (demolition of some existing buildings, reconstruction and expansion) and may include office, commercial service, and small-scale neighborhood-serving uses. Based on allowable floor-area ratios, structures would likely be two or three stories in height. However, as noted above, no development is currently proposed within West Olive Drive as part of the project and no potential development is anticipated within the near term (i.e., before buildout of the Nishi site). The Embassy Suites development project that is being considered by the City is a separately planned project with its own environmental review and is not included as part of the project, including West Olive Drive, for the purposes of this EIR.

CONSTRUCTION

As noted above, no development within West Olive Drive is currently proposed as part of the project, but could occur at property owner discretion. The following discussion of construction phasing pertains to development of the Nishi site and related improvements. Development of the Nishi site would occur roughly within a 5-7 year timeframe and would be divided into the following two phases of development:

Phase 1

This phase would involve the construction of approximately 130,000 sf of for-sale residential units (~105 units), 231,000 sf of rental units (~220 units), 160,000 sf of R&D space, and the majority of infrastructure for the entire project site. Infrastructure to be constructed would include the northern park; streets (including stormwater conveyance); the extension of West Olive Drive and crossing of the Putah Creek channel; the on-site detention basin; and water/wastewater connections. During construction of this phase of construction, a water truck would be operated and maintained at the project site that would water the site at least twice daily. Frontage improvements associated with the residential and R&D uses constructed under this phase would also be constructed as part of Phase 1. For the purposes of the EIR, it is assumed the demolition of up to two structures along West Olive Drive would also occur as part of this phase. Phase 1 is anticipated to require up to two and a half years of construction, beginning in 2017.

Phase 2

This phase would involve the construction of approximately 145,000 sf of for-sale residential units (~105 units), 231,000 sf of rental units (~220 units), 20,000 sf of retail, 165,000 sf of R&D space, the southerly parking facility, and the grade-separated crossing to UC Davis campus (under the Old Davis Road access scenario). During construction of this phase of construction, a water truck would be operated and maintained at the project site that would water the site at least twice daily. Frontage improvements associated with the residential, retail, and office uses constructed under this phase would also be constructed. This phase is anticipated to require up to two and a half years of construction, beginning in 2019.

2.3 ENVIRONMENTAL IMPACTS AND PROPOSED AND RECOMMENDED MITIGATION

Table 2-2, at the end of this chapter, provides a summary of the environmental impacts of the proposed project, the level of significance of the impact before mitigation, recommended mitigation measures, and the level of significance of the impact after the implementation of the mitigation measures.

Implementation of the proposed development of the Nishi site would result in the following significant unavoidable environmental impacts, following implementation of feasible mitigation measures:

- Impact 4.2-1: Convert 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.
- Impact 4.2-2: Conflict with existing zoning for agricultural use or result in the loss or conversion of agricultural land to non-agricultural use.
- Impact 4.3-5: Land use compatibility with off-site sources of TACs and UFPs.
- Impact 4.7-2: Considerably contribute to climate change through project-generated greenhouse gas emissions during operation.
- Impact 4.8-5: Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan.

- Impact 4.11-1: Generate short-term, construction-related noise on nearby sensitive land uses.
- Impact 4.11-5: Exposure of proposed and existing sensitive receptors to transportation noise sources.
- Impact 4.14-1: Impacts to local intersections outside freeway interchange areas.
- Impact 4.14-2: Impacts to intersections within the Richards Boulevard interchange area.
- Impact 4.14-6: Impacts to emergency vehicle access.

Potential redevelopment of uses within West Olive Drive as a result of the redesignation and rezoning of parcels within West Olive Drive would result in the following significant unavoidable environmental impacts, following implementation of feasible mitigation measures:

- Impact 4.7-2: Considerably contribute to climate change through project-generated greenhouse gas emissions during operation.
- Impact 4.7-3: Conflict with or impede attainment of goals established in applicable climate action plans or greenhouse gas reduction plans.
- Impact 4.14-1: Impacts to local intersections outside freeway interchange areas.
- Impact 4.14-2: Impacts to intersections within the Richards Boulevard interchange area.

Cumulative impacts to Agriculture (conversion of farmland in the region), Greenhouse Gas Emissions (achieving the City of Davis 2050 goal of net zero), and Transportation (intersection and roadway segment operations) would also be significant and unavoidable as a result of implementation of the Nishi Gateway Project.

2.4 ALTERNATIVES TO THE PROPOSED PROJECT

Beyond the two access scenarios identified above, this EIR evaluates four alternatives to the proposed project in Chapter 7. In addition, several alternatives were considered and removed from further consideration, including use of the project site as an open space area and a reduced level of development while maintaining the same mix of uses. Each of these alternatives is described briefly in Chapter 7, along with the reasons they were not considered further.

The following summary provides brief descriptions of the alternatives that were fully considered and compared to the project. Table 2-1 presents a comparison between the alternatives and the proposed project at buildout. For a more thorough discussion of project alternatives, see Chapter 7, “Alternatives.”

ALTERNATIVE 1: NO PROJECT

CEQA Guidelines Section 15126.6(e)(1) requires that the ‘no project’ alternative be described and analyzed “to allow decision makers to compare the impacts of approving the project with the impacts of not approving the project.” Because the site is currently zoned and designated for agriculture under Yolo County’s jurisdiction, the No Project Alternative assumes the project site would not be developed and current dry farm operations would continue. Additionally, rezoning/redesignation of West Olive Drive would not occur.

ALTERNATIVE 2: RESEARCH AND DEVELOPMENT ONLY ALTERNATIVE

Alternative 2 would involve development of the Nishi site with only R&D uses and a similar retail commercial component (approximately 20,000 square feet [sf]). Under Alternative 2, R&D uses would replace residential

uses proposed for the project, and would result in approximately 1,200,000 sf of R&D uses present on the Nishi site. Buildout of the Nishi site under this alternative would be conducted in a manner similar to that of the project (within 5-7 years of project approval) and would depend on the outcome of a Measure J/R vote, similar to the project. Under this alternative, the redesignation and rezoning of West Olive Drive would also occur, thereby resulting in the same 55,000 sf of net new commercial square footage as a result of subsequent redevelopment within West Olive Drive.

ALTERNATIVE 3: ALTERNATIVE LAND USE MIX

Alternative 3 would be similar to the project, except the 70,000 sq. ft. northernmost R&D uses under the project would be replaced with a 125-room hotel (potentially extended stay). It is assumed that surface parking would be necessary to accommodate the parking requirements of the hotel. Buildout of the Nishi site under this alternative would be conducted in a manner similar to that of the project (within 5-7 years of project approval) and would depend on the outcome of a Measure J/R vote, similar to the project. Rezoning and redesignation of West Olive Drive would occur under this alternative, similar to the project.

ALTERNATIVE 4: OFF-SITE ALTERNATIVE

Alternative 4 would involve the redevelopment of the 5th Street Corridor site identified in the Davis Innovation Center Study prepared by Studio 30 (UC Davis Extension) in 2012. The 5th Street Corridor site is approximately 47 acres in size, similar to the Nishi site, and would allow for a similar mix of uses. It is currently developed with a mix of commercial, office, light industrial, and utility uses that would be removed as part of this alternative. For the purposes of this analysis, it is assumed that up to 650 residential units would be located north of 5th Street with podium and surface parking, while all R&D (up to 325,000 sf), retail (up to 20,000 sf), and open space would be located south of 5th Street. Buildout of the Alternative 4 site would be conducted in a manner similar to that of the project (within 5-7 years of project approval) and would not require a Measure J/R vote as the site of Alternative 4 is currently located within the City limits. It is assumed that rezoning and redesignation of West Olive Drive would not occur under this alternative. For the purposes of the evaluation of this alternative, it is assumed that actions/design considerations similar to those identified in the project's Sustainability Implementation Plan would be implemented under this alternative, however, the feasibility of implementing these actions has not been fully evaluated. Should implementation of the project's Sustainability Implementation Plan not occur under this alternative, impacts would likely be greater than those identified below.

The environmentally superior alternative would be either the project or Alternative 4 (Off-Site Alternative), depending on decisions about the priority of types of environmental benefits and adverse effects by the City of Davis. In essence, decision-makers must weigh the relative importance of greater traffic, GHG emissions, and population and housing impacts associated with Alternative 4, compared to the greater agricultural, air quality, and noise impacts associated with the project. Each of these alternatives 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 others.

Table 2-1 Comparison of the Environmental Impacts of the Alternatives in Relation to the Project

Environmental Topic	Project	Alternative 1 No Project, No Development	Alternative 2 R&D Only	Alternative 3 Alternative Land Mix	Alternative 4 Off-Site Alternative
Aesthetics	LTS	<	=	>	=
Agriculture and Forest Resources	S&U	<	=	=	<
Air Quality	LTSM	<	<	<	<
Biological Resources	LTSM	<	=	=	<
Cultural Resources	LTSM	<	=	=	=
Geology, Soils, and Mineral Resources	LTS	<	=	=	=

Table 2-1 Comparison of the Environmental Impacts of the Alternatives in Relation to the Project

Environmental Topic	Project	Alternative 1 No Project, No Development	Alternative 2 R&D Only	Alternative 3 Alternative Land Mix	Alternative 4 Off-Site Alternative
Greenhouse Gas Emissions, Climate Change, and Energy	S&U	<	>	>	>
Hazards and Hazardous Materials	SU	<	=	=	=
Hydrology and Water Quality	LTSM	<	=	=	=
Land Use and Planning	LTS	>	=	=	<
Noise and Vibration	S&U	<	<	>	<
Population and Housing	LTS	<	>	<	>
Public Service and Recreation	LTS	<	<	<	=
Transportation and Circulation	S&U	<	>	<	>
Utilities	LTSM	<	<	<	=
Overall Results		<14 >1	<3 >4 =8	<5 >3 =7	<6 >3 =6

Impact Status:

LTS = Less Than Significant Impact LTS = Less Than Significant Impact

LTSM = LTS with Mitigation LTSM = LTS with Mitigation

PSU = Potentially Significant and Unavoidable PSU = Potentially Significant and Unavoidable

Source: Data compiled by Ascent Environmental in 2015

2.5 AREAS OF CONTROVERSY

In accordance with PRC Section 21092 and CCR Section 15082, a notice of preparation (NOP) was prepared and circulated on January 29, 2015, for a minimum 30-day period of public and agency comment. The NOP was submitted to the State Clearinghouse and Yolo County Clerk-Recorder. A public scoping meeting was conducted by the City on February 23, 2015. Appendix A contains the comment letters submitted in response to the NOP.

Based on the comments received during the NOP comment periods, the major areas of controversy associated with the project are:

- potential exposure of residents at the project site to pollution emissions from I-80,
- effects on Putah Creek,
- whether implementation of the project may have impacts on known sensitive species and potential habitat,
- need for net zero energy or low carbon emission performance,
- exposure to noise levels near the freeway, and
- increased vehicle, bicycle and pedestrian traffic.

All of the substantive environmental issues raised in the NOP comment letters and at the scoping meeting have been addressed or otherwise considered during preparation of this DEIR.

Table 2-2 Summary of Impacts and Mitigation Measures

Impact	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
4.1 Aesthetics and Visual Resources			
Impact 4.1-1: Visual character and quality impacts.			
Nishi Site. Development of the Nishi site would involve the construction of new multi-story buildings and roads on a largely undeveloped site. By providing extensive parks, open space, and greenways throughout the site and open space buffers that would visually separate the new development from existing adjacent developments and I-80, the Nishi site would minimize changes to the visual character and quality of surrounding sites. Further, the proposed development would be visually compatible with surrounding existing development located to the northwest, north, and northeast.	LTS	No mitigation is required.	LTS
West Olive Drive. Potential redevelopment associated with the redesignation/rezoning of parcels within West Olive Drive would alter the visual character and quality of the site. However, potential redevelopment would not substantially degrade the existing visual character or quality of the site and its surroundings. The City would review each redevelopment application within West Olive Drive to ensure consistency with the General Plan policies and design guidelines.	LTS	No mitigation is required.	LTS
Impact 4.1-2: Light and glare impacts.			
Nishi Site. The proposed development at the Nishi site would include indoor lighting and outdoor lighting and solar panels, which could contribute additional light and glare, respectively, to the surrounding area. New sources of night lighting would be similar in scale and intensity to surrounding development. The majority of solar panels at the Nishi site would be installed on building rooftops and above the line of sight of motorists and the built environment. However, depending on the angle of proposed solar panels within on-site surface parking lots motorists along I-80 could experience glare conditions.	PS	**Mitigation Measure 4.1-2:** Within the proposed surface parking lots, the applicant shall select and install solar panels that minimize reflective surfaces, either through glazing or use of non-reflective materials. All surface parking solar facilities shall be installed such that the angle of solar panels does not direct glare at motorists along I-80. The applicant shall prepare a technical report verifying the selected angle and material of the solar panels for review and approval by the City before installation.	LTS
West Olive Drive. Potential redevelopment of West Olive Drive may result in additional development. However, any lighting/glare associated with the potential redevelopment would be installed in a manner consistent with existing lighting sources of commercial uses located within West Olive Drive and the surrounding area. Further, compliance with General Plan Policy UD 3.2 before building permit issuance would ensure that light and glare created by the proposed development would be minimized comparable to that of surrounding development.	LTS	No mitigation is required.	LTS

Table 2-2 Summary of Impacts and Mitigation Measures

Impact	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
Impact 4.1-3: Conflict, or create an inconsistency, with any applicable plan, policy, or regulation adopted for the purpose of avoiding or mitigating environmental effects related to visual resources.			
Nishi Site. Implementation of the project within the Nishi site would be consistent with the policies of the City of Davis General Plan related to visual resources.	LTS	No mitigation is required.	LTS
West Olive Drive. Redevelopment that may occur as a result of the redesignation/rezoning of parcels located in West Olive Drive would be consistent with the policies of the City of Davis General Plan related to visual resources.	LTS	No mitigation is required.	LTS
4.2 Agriculture and Forest Resources			
Impact 4.2-1: Convert 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.			
Nishi Site. The Nishi site is not designated as Prime, Unique, or Farmland of Statewide importance by the FMMP. However, development of the site would result in a loss of farmland that was determined to be of high agricultural importance per the LESA model. Further, development of the site could include decommissioning of the existing well that supplies water to the residence associated with the prime farmland south of I-80, which could indirectly influence conversion of Important Farmlands.	S	**Mitigation Measure 4.2-1:** Prior to removal of the existing well on the Nishi site, the applicant shall install an alternative potable water source (i.e. a new groundwater well) south of I-80, proximate to and with a direct connection to the existing farmland associated with the existing well at the Nishi site, as allowed by the current Grant Deed for the Nishi site. The applicant shall be responsible for procurement of all permits and well installation.	SU
West Olive Drive. The development of West Olive Drive as part of the project would not result in the direct or indirect conversion of Important Farmlands to non-agricultural use.	NI	No mitigation is required.	NI
Impact 4.2-2: Conflict with existing zoning for agricultural use or result in the loss or conversion of agricultural land to non-agricultural use.			
Nishi Site. The development of the Nishi site as part of the project would result in the conversion of agricultural land to non-agricultural uses. The project would require an amendment to the City of Davis General Plan, rezoning of the site to a non-agricultural use, and annexation into the City of Davis. The project would be required to comply with City Municipal Code Article 40A.03 that requires the purchase of compensatory agricultural lands at a 2:1 ratio compared to those lost/converted.	S	No mitigation is available.	SU
West Olive Drive. There are no agricultural resources associated with West Olive Drive. Redevelopment of this portion of the project site would have no impact associated with potential conflict or inconsistency with regulations adopted for the purpose of avoiding or mitigating environmental effects related to agricultural resources.	NI	No mitigation is required.	NI

Table 2-2 Summary of Impacts and Mitigation Measures

Impact	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
Impact 4.2-3: Conflict, or create an inconsistency, with any applicable plan, policy, or regulation adopted for the purpose of avoiding or mitigating environmental effects related to agricultural resources.			
Nishi Site. The development of the Nishi site as part of the project would result in the conversion of agricultural land to non-agricultural uses. The project would require amendment to the City of Davis General Plan, prezoning of the site, and annexation into the City of Davis.	LTS	No mitigation is required.	LTS
West Olive Drive. There are no agricultural resources associated with West Olive Drive. As a result, redevelopment that may occur within this portion of the project site would not conflict or create an inconsistency with regulations adopted for the purpose of avoiding or mitigating environmental effects related to agricultural resources.	NI	No mitigation is required.	NI
4.3 Air Quality			
Impact 4.3-1: Short-term construction-generated emissions of ROG, NO_X, PM_{10}, and $PM_{2.5}$.			
Nishi Site. Short-term construction-generated emissions would not exceed YSAQMD's significance thresholds during construction.	LTS	No mitigation is required.	LTS
West Olive Drive. Construction-related activities associated with the redevelopment of parcels along West Olive Drive would result in temporary, short-term project-generated emissions of ROG, NO_X, and particulate matter. However, specific construction details related to the site are not yet available and would be market dependent. Given that the project would be at least half the size of the Nishi site and would not require new infrastructure development because of existing utilities serving the site, short-term construction related emissions would not be anticipated to exceed YSAQMD thresholds.	LTS	No mitigation is required.	LTS
Impact 4.3-2: Long-term operational emissions of ROG, NO_X, PM_{10}, and $PM_{2.5}$.			
Nishi Site. Operational activities associated with the Nishi-Gateway development would result in long-term project-generated emissions of CAPs, particularly ROG. Long-term, operational emissions could exceed YSAQMD significance thresholds for ROG, but would not exceed YSAQMD thresholds for NO_X and PM_{10}. Thus, long-term operational emissions of NOX could conflict with the air quality planning efforts and contribute substantially to the nonattainment status of Yolo County with respect to the NAAQS and CAAQS for ozone.	S	Implement Mitigation Measure 4.14.5 (Transportation Demand Management program).	LTS

Table 2-2 Summary of Impacts and Mitigation Measures

Impact	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
West Olive Drive. Operational activities associated with the redevelopment of parcels along West Olive Drive would result in long-term project-generated emissions of CAPs that may be greater than current operational emissions. It is anticipated that the net increase in emissions would not exceed YSAQMD thresholds.	LTS	No mitigation is required.	LTS
Impact 4.3-3: Generation of local mobile-source CO emissions.			
Nishi Site. Long-term operation-related local mobile-source emissions of CO generated by the development on the Nishi site would not violate a standard or contribute substantially to an existing or projected air quality violation or expose sensitive receptors to substantial pollutant concentrations.	LTS	No mitigation is required.	LTS
West Olive Drive. Long-term operation-related local mobile-source emissions of CO generated associated with the redevelopment of parcels along West Olive Drive would not violate a standard or contribute substantially to an existing or projected air quality violation or expose sensitive receptors to substantial pollutant concentrations.	LTS	No mitigation is required.	LTS
Impact 4.3-4: Short-term construction emissions of toxic air contaminants.			
Nishi Site. Construction-related activities would result in temporary, short-term project-generated emissions of TACs, particularly diesel PM. However, because of the relatively low mass of diesel PM generated during project construction, the relatively short duration in which construction would occur, the fact that the TAC-emitting construction activity would not be centralized around any single location on the Nishi project site throughout the construction period, and the highly dispersive properties of diesel PM before it reaches nearby sensitive receptors, construction-related TAC emissions would not expose sensitive receptors to an incremental increase in cancer risk that exceeds 10 in one million or a hazard index greater than 1.0.	LTS	No mitigation is required.	LTS
West Olive Drive. Construction-related activities associated with the redevelopment of parcels along West Olive Drive would result in temporary, short-term project-generated emissions of TACs, particularly diesel PM. However, because of the relatively low mass of diesel PM generated during project construction, the relatively short duration in which construction would occur, and the highly dispersive properties of diesel PM before it reaches nearby sensitive receptors, construction-related TAC emissions would not expose sensitive receptors to an incremental increase in cancer risk that exceeds 10 in one million or a hazard index greater than 1.0.	LTS	No mitigation is required.	LTS

Table 2-2 Summary of Impacts and Mitigation Measures

Impact	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
Impact 4.3-5: Land use compatibility with off-site sources of TACs and UFPs. *Nishi Site.* The project would introduce receptors in close proximity to multiple existing sources of TACs and UFPs. The level of health risk associated with exposure to TACs from local stationary sources and train engines passing on the nearby rail line would not be substantial. However, residential receptors located on the Nishi site could be exposed to relatively high concentrations of diesel PM and UFPs generated by vehicles traveling on I-80 resulting in substantial levels of health risk.	S	**Mitigation Measure 4.3-5a.** All residential buildings shall be located as far as feasible from I-80, and no residential buildings shall be located on the southwest portion of the project site along the elevated segment of I-80. Residential buildings shall be sited more distant from I-80 than non-residential buildings, including parking garages, such that the non-residential structures serve as a barrier between I-80 and the residential buildings. In addition, housing where individuals typically reside for a longer period of time, such as for-sale residential units, shall be located more distant from I-80 than other residential units. **Mitigation Measure 4.3-5b.** A comprehensive tree planting and maintenance plan shall be developed and implemented to minimize TAC concentrations levels in outdoor areas of the project site. Development and initial planting required by the plan shall be fully funded by the applicant. The plan shall be performed by a qualified arborist approved by the City. The tree siting and maintenance plan shall be completed and approved by the City before construction. The plan shall include ongoing maintenance requirements and clearly identify the funding mechanism for this maintenance during the life of project. Funding for ongoing maintenance may be sourced from the formation of a homeowners association with required dues, establishment of a community facilities district, or some other mechanism approved by the City. The plan shall consist of a vegetative filtration along I-80 and tree canopy across the project site. These two elements are described in greater detail below: ◢ *Vegetative filtration along Interstate 80.* The plan shall locate trees along the ground level portions of the I-80 right of way to provide vegetative filtration between freeway traffic and the project site. Tree species and spacing shall be selected such that the stand of vegetation should have a minimum year-round width of 5 meters (Islam et al. 2012:2) and be at least 3 meters tall within 15 years of when the first residential dwelling unit on the site is inhabited. A wider barrier results in more deposition (Zhang 2015:14). The stand of vegetation may consist of multiple, staggered rows of trees to eliminate gaps such that a vegetative barrier is achieved. The height of the vegetative stand should be balanced with other site planning considerations, including protection of existing views of the UC Davis campus from I-80, to the extent feasible. If a sound wall is located along I-80 to reduce freeway noise exposure to the project site, the vegetated barrier shall be located on the project side of the sound wall and be as close to the sound wall as feasible such that air passing over the sound	SU

Table 2-2 Summary of Impacts and Mitigation Measures

Impact	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
		wall will immediately come into contact with the trees. If a sound barrier is not constructed then shrubs or other non-tree vegetation can be used to fill gaps between individual trees; however, installation of species that have invasive qualities or would serve as "ladder fuels" in a fire should be avoided. ◢ *Tree Canopy across the Project Site.* Trees shall also be planted throughout the project site to form a canopy that filters emissions flowing from I-80. As part of detailed site design, an arborist shall work with designers to identify all locations where trees should be located, taking into account areas where shade is desired such as along pedestrian and bicycle routes, the locations of solar photovoltaic panels, and other infrastructure. The tree canopy should be designed such that it shades 50 percent of all paved areas, outdoor activity areas, and pedestrian and bicycle routes, within 15 years of when the first residential dwelling unit on the site is inhabited. For both the vegetative filtration along I-80 and the tree canopy throughout the project site, tree selection criteria shall include their ability to filter UFP, $PM_{2.5}$, and PM_{10} during all seasons based on peer-reviewed research in academic journals and reports by EPA and ARB. Tree selection should also consider irrigation needs; maintenance needs (e.g., pruning, leaf litter, replacement planting); hardiness; growth rate; canopy cover; surface drainage characteristics and related grading needs; allergen production; production of biogenic volatile organic compounds; storm water detention needs of the project site; drying effects from traffic-generated turbulence; fire safety needs; vulnerability to physical damage from nearby mowing, chemical applications, or animals; disease and pest resistance; root depths; mulching requirements; staking and eventual stake removal; and water conservation goals. All trees shall be planted in accordance with the planting standards established by the Western Chapter of the International Society of Arboriculture's, *Guideline Specifications for Selecting, Planting, and Early Care of Young Trees* (Kempf and Gilman 2011), including but not limited to standards for root ball management, root pruning, staking, mulching, and irrigation. Tree selection can be performed using the SelecTree tool developed by the Urban Forest Ecosystems Institute at Cal Poly San Luis Obispo (http://selectree.calpoly.edu/). The plan shall also identify the availability of selected tree species from nurseries.	

Table 2-2 Summary of Impacts and Mitigation Measures

Impact	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
		In its contracting language the property owner/applicant shall require its contractor (or planting/ landscaping contractor) to place orders from supply nurseries in advance to ensure that the quantity of selected nursery trees is available to fulfill the requirements of this mitigation measure. **Mitigation Measure 4.3-5c.** The air filtration systems on all residential buildings and buildings in which people work shall 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: ◢ strategically located air intakes pursuant to requirements and recommendations of the American Society of Heating, Refrigeration, and Air-Conditioning Engineers; ◢ positively pressurizing buildings; ◢ double-door entrances at the main entrances to buildings; and/or ◢ 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. 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. Low cost air filtration systems capable of 95 percent efficiency include those developed by the UC Davis DELTA Group, which has designed a high-volume, low-pressure drop system that causes UFP to pass through multiple filters at a slow enough speed such that they attach to the surface of standard electrostatic filters (Cahill et al. 2014:6).	
West Olive Drive. Redevelopment of West Olive Drive is not anticipated to involve new residential receptors. Therefore, no sensitive receptors within West Olive Drive would be exposed to substantial concentrations of diesel PM and UFPs from vehicle activity on I-80.	NI	No mitigation is required.	NI
Impact 4.3-6: Exposure of sensitive receptors to odors. *Nishi Site.* The project would introduce new odor sources into the area (e.g., diesel exhaust emissions from delivery trucks). However, these types of odor sources already operate in and near the project area and do not result in odor complaints. Also, the project would not locate land uses in close proximity to any existing odor sources.	LTS	No mitigation is required.	LTS

Table 2-2 Summary of Impacts and Mitigation Measures

Impact	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
West Olive Drive. Potential redevelopment of West Olive Drive may result in additional commercial space. Similar to development associated with the Nishi site, potential odors associated would be localized and limited largely to specific equipment (e.g., delivery trucks), which are not anticipated to generate substantial odors or result in complaints regarding odor.	LTS	No mitigation is required.	LTS
Impact 4.3-7: Conflict, or create an inconsistency, with any applicable plan, policy, or regulation adopted for the purpose of avoiding or mitigating environmental effects related to air quality.			
Nishi Site. Implementation of the project within the Nishi site would be consistent with the policies of the City of Davis General Plan related to air quality.	LTS	No mitigation is required.	LTS
West Olive Drive. Redevelopment that could occur as a result of the redesignation/rezoning of parcels located in West Olive Drive would be consistent with the policies of the City of Davis General Plan related to air quality.	LTS	No mitigation is required.	LTS
4.4 Biological Resources			
Impact 4.4-1: Disturbance or loss of special-status plants.			
Nishi Site. Development of the Nishi site would result in removal of California black walnut trees and conversion of habitat that provides suitable habitat for California black walnut.	S	The applicant shall implement the following measures to avoid or minimize loss of California black walnut: ◢ Construction activities shall avoid removal of and damage to California black walnut trees that were identified as healthy or requiring training/trimming. Dead trees may be removed and do not require mitigation. The protection of the remaining black walnut trees shall include the prohibition of heavy equipment operation within the drip line of the trees to be preserved. Only hand tools may be used within the drip line. ◢ In the event that a California black walnut tree cannot be avoided, the applicant shall replace the trees such that there is no net loss of California black walnuts. At a minimum, each California black walnut tree will be replaced with 15-gallon California black walnut trees at a 2:1 ratio (two California black walnut trees planted for every California black walnut tree removed). The replacement trees may be incorporated into proposed plantings within designated open space areas on-site or in proximity to the old north fork Putah Creek area. ◢ Success criteria for compensatory California black walnuts shall include:	LTS

Table 2-2 Summary of Impacts and Mitigation Measures

Impact	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
		◤ The extent of occupied area and tree density (number of trees per unit area) in compensatory populations will be equal to or greater than the affected occupied habitat. ◤ 5 years annual monitoring with remedial planting if mortality exceeds 20%. The applicant shall submit annual reports, prepared by a qualified arborist, to the City indicating success metrics for replacement planting. If mortality exceeds 20%, annular reporting shall continue for 5 years after remedial planting until it is demonstrated that replacement criteria stated within this measure is attained. ◢ California black walnut trees recommended for trimming/training by the 2014 arborist report for the Nishi site shall be trimmed/trained prior to initiation of construction.	
West Olive Drive. The redesignation/rezoning of parcels located along West Olive Drive from Commercial Service to Neighborhood Mixed Use would allow for redevelopment of this area that could result in the removal of special-status plants. Because of existing urban/industrial uses and lack of habitat, it is unlikely that special-status herbaceous plants would be present; however special-status trees could occur within West Olive Drive.	PS	Implement Mitigation Measure 4.4-1 (Replacement of California black walnut trees).	LTS
Impact 4.4-2: Impacts to valley elderberry longhorn beetle.			
Nishi Site. Development of the Nishi site would occur in the vicinity of observed elderberry shrubs, which are known to provide habitat for valley elderberry longhorn beetle. Depending on the proximity of construction activities to the existing shrubs, indirect impacts to the shrubs and potential beetles or beetle larvae could occur.	PS	**Mitigation Measure 4.4-2:** The applicant shall implement the following measures to avoid or minimize loss of valley elderberry longhorn beetle: ◢ If elderberry shrubs are 100 feet or more from project activities, no direct or indirect impacts are expected. Shrubs will be protected during construction by establishing and maintaining a high visibility netting at least 100 feet from the drip line of each elderberry shrub with stems 1 inch or greater. If fencing would cut off access to the pedestrian/bicycle trail within the old north fork Putah Creek trail area, high visibility flagging will be used, but all contractors will be briefed as to the limits of construction and the need to avoid the flagged area. ◢ Should construction activities be necessary within 100 feet of existing elderberry shrubs, project activities may occur up to 20 feet from the dripline of elderberry shrubs, pending consultation with the USFWS. At a minimum, the following shall be implemented:	LTS

Table 2-2 Summary of Impacts and Mitigation Measures

Impact	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
		◤ A minimum setback of at least 20 feet from the dripline of each elderberry plant with stems greater than one-inch diameter at ground level will be maintained to avoid direct impacts. The buffer area will be fenced with high visibility construction fencing or flagging before commencement of ground-disturbing activities and will be maintained for the duration of construction activities. The applicant will ensure that ground-disturbing activities on the project site do not alter the hydrology of the site or otherwise affect the likelihood of vigor or survival of elderberry shrubs. ◤ The applicant will ensure that project activities, such as truck traffic or other use of machinery, do 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 ensure that excessive dust is not created. ◤ Areas that are disturbed temporarily will be restored to pre-disturbance conditions. Erosion control measures will be implemented to restore areas disturbed within 100 feet of elderberry shrubs. ◤ No insecticides, herbicides, fertilizers, or other chemicals will be used within 100 feet of elderberry shrubs. Herbaceous vegetation may be mowed or removed using hand tools within 100 feet, but not within 20 feet of the elderberry shrubs. ◤ The applicant or its contractor will ensure that all contractors are briefed on the need to avoid damaging the elderberry plants, the status of the beetle, the need to protect its elderberry plant, and the possible penalties for not complying with these requirements. ◤ The applicant shall erect signs every 50 feet along the edge of the avoidance area with the following information: “This area is habitat of the valley elderberry longhorn beetle, a threatened species, and must not be disturbed. This species is protected by the Endangered Species Act of 1973, as amended. Violators are subject to prosecution, fines, and imprisonment.” The signs should be clearly readable from a distance of 20 feet, and must be maintained for the duration of construction.	

Table 2-2 Summary of Impacts and Mitigation Measures

Impact	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
West Olive Drive. Potential redevelopment of West Olive Drive could result in construction activities occurring proximate to elderberry shrubs located within the Putah Creek Channel. Depending on the proximity of construction activities to the existing shrubs, indirect impacts to the shrubs and potential beetles or beetle larvae could occur.	LTS	Implement Mitigation Measure 4.4-2 (Avoid or minimize loss of valley elderberry longhorn beetle).	LTS
Impact 4.4-3: Impacts to special status bat species.			
Nishi Site. Development of the Nishi site could disturb roosts for special-status bats in the area.	PS	**Mitigation Measure 4.4-3:** The applicant shall implement the following measures to avoid or minimize impacts to special status bat species: ◢ Before ground disturbance, surveys will be conducted to determine if suitable habitat (that would be removed during construction) are occupied by bats. These areas shall be surveyed within 14 days before start of construction. Surveys may consist of daytime pedestrian surveys looking for evidence of bat use (e.g., guano) and/or an evening emergence survey to note the presence or absence of bats. Bat detectors may be used to supplement survey efforts, but are not required. If no evidence of bat roosts are found, then no further study is required. If evidence of bat use is observed, the number and species of bats using the roost will be determined. ◤ If surveys confirm bats daytime-roost will be affected by the project, a Bat Exclusion Plan will be developed by the applicant and submitted to the City for review and approval before its implementation. No bat exclusion will occur between March 1 and August 15 (depending on type of roost and location) which coincides with the maternity season in California. ◤ If a winter roost or a maternity roost is found, a 100 foot buffer will be created around a roost and no project related activities will occur within the buffer until a biologist has determined that the roost is no longer in use.	LTS
West Olive Drive. Redevelopment within West Olive Drive as a result of the proposed redesignation/rezoning could result in impacts to special status bats during construction activities.	PS	Implement Mitigation Measure 4.4-3 (Avoid or minimize impacts to special status bat species).	LTS

Table 2-2 Summary of Impacts and Mitigation Measures

Impact	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
Impact 4.4-4: Impacts to Swainson's hawk. *Nishi Site.* Development of the Nishi site would result in a reduction in available foraging habitat for Swainson's hawk as a result of conversion of agricultural land. Additionally, Swainson's hawk could nest on or near the project, and construction activities associated with the project could result in the direct loss of special-status wildlife or temporary disruption of wildlife feeding and/or breeding behavior.	S	**Mitigation Measure 4.4-4a:** The applicant shall implement the following measures to avoid or minimize impacts to Swainson's hawk within the Nishi site: ◢ For construction activities occurring between February 1 and August 31, the applicant shall retain a qualified biologist to conduct surveys for Swainson's hawk in accordance with the Swainson's Hawk Technical Advisory Committee 2000 guidelines (SHTAC 2000) and/or currently accepted guidance/industry standards, subject to City of Davis review and approval. Surveys shall encompass a minimum of a 0.5-mile radius around the construction area. If nesting Swainson's hawks are detected, a 0.5-mile, no-disturbance buffer shall be established, depending on location. Buffers shall be maintained until a qualified biologist has determined that the young have fledged and are no longer reliant upon the nest or parental care for survival. Buffer distance may be reduced in consultation with CDFW. ◢ Although no Swainson's hawk nests were observed during the initial survey, it is possible that before initiation of construction, a Swainson's hawk may establish a nest within the boundaries of the project site. If a Swainson's hawk nest tree is found within the project site and said nesting tree is to be removed during construction activities, removal will take place outside of Swainson's hawk nesting season. Upon discovery, the applicant shall develop a tree replacement plan, in consultation with CDFW, to replace known active nest trees at a ratio of 3:1. If replacement planting is implemented, monitoring shall be conducted annually for 5 years to ensure the survivability of replacement trees. ◢ Before commencement of construction, the applicant shall provide compensatory mitigation for the loss of approximately 46 acres of Swainson's hawk foraging habitat to the Yolo Habitat Conservancy (formerly HCP/NCCPJPA) in accordance with their Swainson's Hawk Interim Mitigation Program. This program currently requires compensation at a 1:1 ratio and projects over 40 acres are required to provide the conservation land directly. If the project is implemented after adoption of the YNHP, in lieu of this measure, the applicant will comply with the requirements of the YNHP.	LTS

Table 2-2 Summary of Impacts and Mitigation Measures

Impact	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
West Olive Drive. West Olive Drive does not represent potential foraging habitat for Swainson's hawk, however, it is possible that Swainson's hawk may establish a nest(s) in an existing tree within this portion of the project site. Construction activities associated with redevelopment of West Olive Drive could result in the direct loss of disturbance of such a nest.	PS	**Mitigation Measure 4.4-4b:** The applicant shall implement the following measures to avoid or minimize impacts to Swainson's hawk within West Olive Drive: ◢ For construction activities occurring between February 1 and August 31, the applicant shall retain a qualified biologist to conduct surveys for Swainson's hawk in accordance with the Swainson's Hawk Technical Advisory Committee 2000 guidelines (SHTAC 2000) and/or currently accepted guidance/industry standards. Surveys shall encompass a minimum of a 0.5-mile radius around the construction area. If nesting Swainson's hawks are detected, a 0.5-mile, no-disturbance buffer shall be established, depending on location. Buffers shall be maintained until a qualified biologist has determined that the young have fledged and are no longer reliant upon the nest or parental care for survival. Buffer distance may be reduced in consultation with CDFW. ◢ Although no Swainson's hawk nests were observed during the initial survey, it is possible that before initiation of construction, a Swainson's hawk may establish a nest within the boundaries of the project site. If a Swainson's hawk nest tree is found within the project site and said nesting tree is to be removed during construction activities, removal will take place outside of Swainson's hawk nesting season. Upon discovery, the applicant shall develop a tree replacement plan, in consultation with CDFW, to replace known active nest trees at a ratio of 3:1. If replacement planting is implemented, monitoring shall be conducted annually for 5 years to assess the mitigation's effectiveness. The plan shall include a performance standard for the mitigation that results in no net loss of nesting habitat.	LTS
Impact 4.4-5: Impacts to burrowing owl. *Nishi Site.* On-site vegetation within the Nishi site could provide potential nesting habitat for burrowing owl. As a result, construction activities associated with development of the Nishi site could result in the direct loss of burrowing owl and/or temporary disruption of wildlife feeding and/or breeding behavior. The potential impacts from construction activities would vary depending on the location and timing of construction.	PS	**Mitigation Measure 4.4-5a:** The applicant shall implement the following measures to avoid or minimize impacts to burrowing owl: ◢ The applicant shall retain a qualified biologist to conduct pre-construction surveys for burrowing owls in areas supporting potentially suitable habitat (sparsely vegetated areas and those containing suitable burrows) no more than 30 days before the start of construction activities that could affect the subject areas. If ground-disturbing activities are delayed or suspended for more than 30 days after the pre-construction survey, the site shall be resurveyed. The project biologist shall conduct surveys for burrowing owls in accordance with protocols established in the Staff Report on Burrowing Owl Mitigation (CDFG 2012 or current version).	LTS

Table 2-2 Summary of Impacts and Mitigation Measures

Impact	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
		◢ If burrowing owls are detected, disturbance to burrows shall be avoided during the nesting season (February 1 through August 31). Buffers shall be established around occupied burrows in accordance with guidance provided in the Staff Report on Burrowing Owl Mitigation. This guidance includes buffers around occupied burrows shall be a minimum of 656 feet (200 meters) during the nesting season, and 160 feet (100 meters) during the non-breeding season unless otherwise approved by CDFW. ◢ Outside of the nesting season (February 1 through August 31), passive owl relocation techniques shall be implemented if approved by CDFW. Owls would be excluded from burrows in the immediate impact zone within a 160-foot buffer zone by installing one-way doors in burrow entrances. These doors shall be in place at least 48 hours before excavation to insure the owls have departed. ◢ The work area shall be monitored daily for 1 week to confirm owl departure from burrows before any ground-disturbing activities. ◢ Where possible, burrows shall be excavated using hand tools and refilled to prevent reoccupation. Sections of flexible plastic pipe shall be inserted into the tunnels during excavation to maintain an escape route for any animals inside the burrow. **Mitigation Measure 4.4-5b:** If active burrowing owl dens are present and the project would impact active dens, the project applicant shall implement the following: If active burrows are present and the project would impact active burrows, the project applicant shall provide compensatory mitigation for the permanent loss of burrowing owl habitat consistent with the Staff Report on Burrowing Owl Mitigation (CDFG 2012 or current version). Such mitigation may include the permanent protection of land, which is deemed to be suitable burrowing owl habitat through a conservation easement deeded to a non-profit conservation organization or public agency with a conservation mission, or the purchase of burrowing owl conservation bank credits from a CDFW-approved burrowing owl conservation bank. If the same mitigation acreage would be utilized for multiple species (i.e. burrowing owl habitat and Swainson's hawk foraging habitat), the appropriate wildlife agency, in this case CDFW, must approve the mitigation lands and long-term management practices for the mitigation lands as suitable and compatible for all species for which the lands are to provide compensatory mitigation. Proof of CDFW's approval habitat "stacking" shall be provided to the City of Davis.	

Table 2-2 Summary of Impacts and Mitigation Measures

Impact	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
West Olive Drive. The redesignation/rezoning of parcels located along West Olive Drive from Commercial Service to Neighborhood Mixed Use would not result in the removal of potential active burrowing owl nest sites. However, construction associated with redevelopment of West Olive Drive could result in indirect impacts to nearby nesting habitat and potential nests.	PS	**Mitigation Measure 4.4-5c:** The applicant shall implement the following measures to avoid or minimize impacts to burrowing owl: ◢ The applicant shall retain a qualified biologist to conduct pre-construction surveys for burrowing owls in areas supporting potentially suitable habitat (sparsely vegetated areas and those containing suitable burrows) no more than 30 days before the start of construction activities that could affect the subject areas. If ground-disturbing activities are delayed or suspended for more than 30 days after the pre-construction survey, the site shall be resurveyed. The project biologist shall conduct surveys for burrowing owls in accordance with protocols established in the Staff Report on Burrowing Owl Mitigation (CDFG 2012 or current version). ◢ If burrowing owls are detected, disturbance to burrows shall be avoided during the nesting season (February 1 through August 31). Buffers shall be established around occupied burrows in accordance with guidance provided in the Staff Report on Burrowing Owl Mitigation. This guidance includes buffers around occupied burrows shall be a minimum of 656 feet (200 meters) during the nesting season, and 160 feet (100 meters) during the non-breeding season unless otherwise approved by CDFW.	LTS
Impact 4.4-6: Impacts to other special status nesting birds and raptors. *Nishi Site.* Development of the Nishi site would result in impacts to land cover types such as agricultural land, and remnant riparian area that provide nesting opportunities for birds and potential habitat for special status bird and raptor species. Construction activities within the Nishi site, especially vegetation removal, could result in the direct impacts these bird and/or raptor species. The potential impacts from construction activities would vary depending on the location and timing of construction.	PS	**Mitigation Measure 4.4-6:** The applicant shall implement the following measures to avoid or minimize impacts to special-status birds, raptors, or other birds protected under the MBTA: ◢ For construction activities occurring between February 1 and August 31, the applicant shall retain a qualified biologist to conduct surveys for special status nesting birds and raptors no less than 14 days before the start of ground disturbing activities. These surveys can be conducted concurrently with the Swainson's hawk and burrowing owl surveys identified in Mitigation Measures 4.4-4a and 4.4-5a. If no nesting birds are found, no further study is required. ◢ If nests are detected, the project biologist shall establish a minimum 500-foot no-disturbance buffer for raptors and a 100-foot no-disturbance buffer around all other nests until the nest is no longer active or the young have fledged. The size of the buffer may be adjusted by the project biologist if, in consultation with CDFW, it is determined that such as adjustment would not be likely to adversely affect the nest.	LTS

Table 2-2 Summary of Impacts and Mitigation Measures

Impact	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
		◢ Factors to be considered for determining buffer size shall include: the presence of natural buffers provided by vegetation or topography; nest height; locations of foraging territory; and baseline levels of noise and human activity. Buffers shall be maintained until a qualified biologist has determined that young have fledged and are no longer reliant upon the nest or parental care for survival. ◢ Should tricolored blackbird be relisted as a fully-protected species before construction activities associated with the project and tricolored blackbird are found during the preconstruction surveys, a 500-foot no disturbance buffer shall be established around the nesting colony unless otherwise approved by CDFW. The buffer will be maintained until a qualified biologist has determined that the young have fledged and are no longer reliant upon the nest or parental care for survival.	
West Olive Drive. The redesignation/rezoning of parcels located along West Olive Drive from Commercial Service to Neighborhood Mixed Use could result in impacts to existing trees and remnant riparian area that provide habitat for special status bird and raptor species. Construction associated with redevelopment of West Olive Drive could result in direct and indirect impacts to nests that may establish within on-site trees and other areas.	PS	Implement Mitigation Measure 4.4-6 (Pre-construction surveys for special-status birds, raptors, or other birds protected under MBTA).	LTS
Impact 4.4-7: Loss of riparian habitat and fill of waters of the U.S. during construction.			
Nishi Site. Implementation of the proposed development of Nishi site would result in the extension of West Olive Drive over the old north fork of Putah Creek which will require removal of the existing crossing and removal of remnant riparian vegetation. In turn, this could result in the placement of fill material into waters of the U.S. or waters of the State.	PS	**Mitigation Measure 4.4-7:** The applicant shall implement the following measures to avoid, minimize, and mitigate Impacts on sensitive natural communities and compensate for loss of remnant riparian and wetland habitat: ◢ As a first priority, the applicant will minimize wetland and/or riparian impacts through minimizing project footprint during project design and construction ◢ Before any ground breaking activity along the remnant riparian area of the old north fork Putah Creek, the applicant shall retain a qualified wetland specialist who shall prepare a jurisdictional wetland delineation for both waters of the U.S. and waters of the State in sensitive areas that cannot be avoided. The preliminary delineation shall be submitted to USACE for verification.	LTS

Table 2-2 Summary of Impacts and Mitigation Measures

Impact	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
		◢ The creek and associated riparian areas may be subject to CDFW regulation under Section 1602 of the Fish and Game Code and shall be evaluated for CDFW jurisdiction and riparian extent. If determined to be subject to CDFW jurisdiction, CDFW shall be consulted and a Lake and Streambed Alteration Agreement notification shall be prepared. ◢ No grading, fill, or other ground disturbing activities shall occur in proximity to the Putah Creek channel until all required permits, regulatory approvals, and permit conditions for effects on wetland and riparian habitats are obtained. Any additional avoidance, minimization, and conservation measures shall be fulfilled before construction as stipulated by the permits. ◢ For those wetlands and riparian areas that cannot be avoided, the applicant shall commit to replace, restore, or enhance on a "no net loss" basis (in accordance with the USACE permit) the acreage of all wetlands and other waters of the U.S. that would be removed, lost, and/or degraded with project implementation. Wetland habitat shall be restored, enhanced, and/or replaced at an acreage and location and by methods agreeable to USACE, and the RWQCB (if applicable) as appropriate, depending on agency jurisdiction, and as determined during the permitting processes. Similarly all riparian vegetation shall be compensated for, as applicable, in accordance with an obtained CDFW 1602 Streambed Alteration Agreement. ◢ The applicant or its contractor will provide environmental awareness training to all construction workers on-site, conducted by a qualified biologist that includes the following provisions: ◤ The location of the Putah Creek revegetation area and its designation as "environmentally sensitive area." This area will be protected, and no entry by the Contractor or crews will occur unless specifically authorize as per the project plans. ◤ The area will be protected by installing orange construction barrier fence at the limits of the area needed to construction improvements along this area. If needed, the contractor will work with the project biologist to identify the location for the barrier fence. The fencing will be installed before construction activities are initiated and will be maintained throughout the construction period.	

Table 2-2 Summary of Impacts and Mitigation Measures

Impact	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
West Olive Drive. The redesignation/rezoning of parcels located along the north bank of the old north fork of Putah Creek in the West Olive Drive area would allow for redevelopment of this area which could result in construction within the remnant riparian area and Putah Creek channel. As a result, redevelopment of West Olive Drive could result in the placement of fill material into waters of the U.S. or waters of the State.	PS	Implement Mitigation Measure 4.4-7 (Replacement, restoration or enhancement of wetland/riparian habitat).	LTS
Impact 4.4-8: Conflict with local policies or ordinances related to the protection of biological resources.			
Nishi Site. Implementation of the proposed development of Nishi site would result in the removal of City-protected trees. However, consistent with the City's Tree Preservation Ordinance, the project applicant would be required to prepare a tree protection plan, pay applicable fees, and provide replacement trees as required by the City ordinance.	LTS	No mitigation is required.	LTS
West Olive Drive. The redesignation/rezoning of parcels located in the West Olive Drive area from Commercial Service to Neighborhood Mixed Use could result in impacts to City protected trees as redevelopment occurs. Construction activities potentially occurring during redevelopment could result in the direct loss of trees. Redevelopment activities would vary depending on the location and could result in the trimming, damage or removal of City protected trees. As redevelopment occurs within West Olive Drive, the City would review each application and ensure consistency with the requirements of the City of Davis Tree Protection Ordinance.	LTS	No mitigation is required.	LTS
Impact 4.4-9: Conflict, or create an inconsistency, with any applicable plan, policy, or regulation adopted for the purpose of avoiding or mitigating environmental effects related to biological resources.			
Nishi Site. Implementation of the project within the Nishi site would be consistent with the policies of the City of Davis General Plan related to biological resources.	LTS	No mitigation is required.	LTS
West Olive Drive. Redevelopment that could occur as a result of the redesignation/rezoning of parcels located in West Olive Drive would be consistent with the policies of the City of Davis General Plan related to biological resources.	LTS	No mitigation is required.	LTS

Table 2-2 Summary of Impacts and Mitigation Measures

Impact	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
4.5 Cultural Resources			
Impact 4.5-1: Disturb unique archaeological resources. *Nishi Site.* Based on the results of the archaeological records search and survey, there are no known archaeological resources on the Nishi site. Project-related ground-disturbing activities could result in uncovering currently unknown resources and cause a substantial change in the significance of an as yet undiscovered unique archaeological resource as defined in CEQA Guidelines Section 15064.5.	PS	**Mitigation Measure 4.5-1a**: Prior to initiation of vegetation removal/grading, the applicant shall retain a Registered Professional Archaeologist meeting the Secretary of Interior's qualifications standards for prehistoric and historical archaeology to perform auger testing on the Nishi site. The objective of the auger testing is to refine specific areas where monitoring forburied (subsurface) archaeological material within specific areas of the Nishi site shall be required. A series of auger holes will be completed by a manual spiral auger and soil from each auger will be processed through 1/8 inch hardware mesh. All recovered cultural material will be recorded with respect to the specific auger and estimated depth. Excavation results, including soil description, will be recorded on field forms. Following the auger testing, a report will be prepared that describes study methods, recovered data, and conclusions. If the auger testing and associated report reveal any cultural material or areas where soils have been determined likely to conceal cultural deposits, construction monitoring (by both a Native American resources monitor and qualified archaeologist) shall occur in these areas as recommended by a qualified archaeologist. **Mitigation Measures 4.5-1b:** In the event that any prehistoric or historic-era subsurface archaeological features or deposits, including locally darkened soil ("midden"), that could conceal cultural deposits, are discovered during construction, all ground-disturbing activity within 100 feet of the resources shall be halted and a qualified professional archaeologist shall be retained to assess the significance of the find. If the find is determined to be significant by the qualified archaeologist (i.e., because it is determined to constitute either an historical resource or a unique archaeological resource), the archaeologist shall develop appropriate procedures to protect the integrity of the resource and ensure that no additional resources are affected. Procedures could include but would not necessarily be limited to preservation in place, archival research, subsurface testing, or contiguous block-unit excavation and data recovery. If the archaeologist determines that some or all of the affected property qualifies as a Native American Cultural Place, including a Native American sanctified cemetery, place of worship, religious or ceremonial site, or sacred shrine (Public Resources Code §5097.9) or a Native American historic, cultural, or sacred site, that is listed or may be eligible for listing in the California Register of Historical Resources pursuant to Public Resources Code §5024.1, including any historic or prehistoric ruins, any burial ground,	LTS

Table 2-2 Summary of Impacts and Mitigation Measures

Impact	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
		any archaeological or historic site (Public Resources Code §5097.993), the archaeologist shall recommend to the applicant potentially feasible procedures that would preserve the integrity of the site or minimize impacts on it.	
West Olive Drive. Based on the results of the archaeological records search, there are no known archaeological resources within West Olive Drive but a recent monitoring report revealed one potential resource.. Project-related ground-disturbing activities could cause a substantial change in the significance of an as yet undiscovered unique archaeological resource as defined in CEQA Guidelines Section 15064.5.	LTS	Implement Mitigation Measure 4.5-1b (Accidental discovery of archaeological resources during construction).	LTS
Impact 4.5-2: Accidental discovery of human remains.			
Nishi Site. Although records searches revealed no documented graves within the Nishi site, Native American remains have been identified at archaeological sites near the Nishi site. Therefore, construction and excavation activities associated with development of the Nishi Site could unearth previously undiscovered or unrecorded human remains, if they are present.	PS	**Mitigation Measure 4.5-2:** California law recognizes the need to protect Native American human burials, skeletal remains, and items associated with Native American burials from vandalism and inadvertent destruction. The procedures for the treatment of Native American human remains are contained in California Health and Safety Code Sections 7050.5 and 7052 and California Public Resources Code Section 5097. If human remains are discovered during any demolition/construction activities, potentially damaging ground-disturbing activities in the area of the remains shall be halted immediately, and the project applicant shall notify the Yolo County coroner and the NAHC immediately, according to Section 5097.98 of the State Public Resources Code and Section 7050.5 of California's Health and Safety Code. If the remains are determined by the NAHC to be Native American, the guidelines of the NAHC shall be adhered to in the treatment and disposition of the remains. The project applicant shall also retain a professional archaeologist with Native American burial experience to conduct a field investigation of the specific site and consult with the Most Likely Descendant (MLD), if any, identified by the NAHC. Following the coroner's and NAHC's findings, the archaeologist, and the NAHC-designated MLD shall determine the ultimate treatment and disposition of the remains and take appropriate steps to ensure that additional human interments are not disturbed. The responsibilities for acting upon notification of a discovery of Native American human remains are identified in California Public Resources Code Section 5097.94.	LTS
West Olive Drive. Although unlikely, construction and excavation activities associated with project development could unearth previously undiscovered or unrecorded human remains, if they are present.	PS	Implement Mitigation Measure 4.5-2 (Accidental discovery of human remains during construction).	LTS

Table 2-2 Summary of Impacts and Mitigation Measures

Impact	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
Impact 4.5-3: Disturb a unique paleontological resource.			
Nishi Site. The project site is considered to have a low paleontological sensitivity because the site rests on recent alluvial sediments, less than 10,000 years old. No paleontological resources are known to occur within the project site or a one-mile radius of the site.	LTS	No mitigation is required.	LTS
West Olive Drive. The project site is considered to have a low paleontological sensitivity because the site rests on recent alluvial sediments, less than 10,000 years old. No paleontological resources are known to occur within the project site or a one-mile radius of the site.	LTS	No mitigation is required.	LTS
Impact 4.5-4: Conflict, or create an inconsistency, with any applicable plan, policy, or regulation adopted for the purpose of avoiding or mitigating environmental effects related to cultural resources.			
Nishi Site. Implementation of the project within the Nishi site would be consistent with the policies of the City of Davis General Plan related to cultural resources.	LTS	No mitigation is required.	LTS
West Olive Drive. Redevelopment that could occur as a result of the redesignation/rezoning of parcels located in West Olive Drive would be consistent with the policies of the City of Davis General Plan related to cultural resources.	LTS	No mitigation is required.	LTS
4.6 Geology, Soils, and Mineral Resources			
Impact 4.6-1: Seismic hazard impacts.			
Nishi Site. Although the Nishi site would include the construction of residential and commercial buildings in an area that could experience strong seismic shaking, all project components would be required to comply with the seismic design standards of the California Building Code. These standards account for the shaking hazard of an area and the type of occupancy and are designed to minimize the potential risk to life and property.	LTS	No mitigation is required.	LTS
West Olive Drive. Although West Olive Drive would include construction in an area that could experience strong seismic shaking, all project components would be required to comply with the seismic design standards of the California Building Code. These standards account for the shaking hazard of an area and the type of occupancy and are designed to minimize the potential risk to life and property.	LTS	No mitigation is required.	LTS

Table 2-2 Summary of Impacts and Mitigation Measures

Impact	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
Impact 4.6-2: Erosion impacts.			
Nishi Site. The construction activities associated with development of the Nishi site would create ground disturbance and soil compaction which could lead to increased erosion. However, the Nishi site is not located in an area that his highly susceptible to erosion. Additionally, the development of the Nishi site as part of the project would be required to comply with City of Davis construction permitting and Central Valley Regional Water Quality Control Board (RWQCB) NPDES permit conditions requiring temporary and permanent erosion control best management practices (BMPs).	LTS	No mitigation is required.	LTS
West Olive Drive. Construction activities associated with redevelopment of West Olive Drive would create ground disturbance which could lead to increased erosion. However, West Olive Drive does not contain soils that are highly susceptible to erosion. Additionally, redevelopment of the site would require compliance with Central Valley RWQCB NPDES permit conditions and City of Davis Code provisions requiring temporary and permanent erosion control BMPs.	LTS	No mitigation is required.	LTS
Impact 4.6-3: Impacts resulting from unstable or expansive soils.			
Nishi Site. The Nishi site may contain expansive soils or soils with the potential to liquefy during seismic events. However, the proposed development of the Nishi site would include large, multi-story structures which are subject to geotechnical investigations in accordance with the CBC. Through completion of the required geotechnical report and adherence to its recommendations, the potential to expose users to risk related to liquefaction and expansive soils would be minimized.	LTS	No mitigation is required.	LTS
West Olive Drive. West Olive Drive may contain expansive soils or soils with the potential to liquefy during seismic events. However, the potential redevelopment of West Olive Drive would likely include multi-story structures which are subject to geotechnical investigations in accordance with the CBC. Through completion of the required geotechnical report and adherence to its recommendations, the potential to expose users to risk related to liquefaction and expansive soils would be minimized.	LTS	No mitigation is required.	LTS
Impact 4.6-4: Conflict, or create an inconsistency, with any applicable plan, policy, or regulation adopted for the purpose of avoiding or mitigating environmental effects related to geology, soils, or mineral resources.			
Nishi Site. Implementation of the project within the Nishi site would be consistent with the policies of the City of Davis General Plan related to geology, soils, and mineral resources.	LTS	No mitigation is required.	LTS

Table 2-2 Summary of Impacts and Mitigation Measures

Impact	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
West Olive Drive. Redevelopment that could occur as a result of the redesignation/rezoning of parcels located in West Olive Drive would be consistent with the policies of the City of Davis General Plan related to geology, soils, and mineral resources.	LTS	No mitigation is required.	LTS
4.7 Greenhouse Gas Emissions, Climate Change, and Energy			
Impact 4.7-1: Considerably contribute to climate change through project-generated greenhouse gas emissions during construction.			
Nishi Site. Annual GHG emissions from project construction would range from a low of 578 MT CO_2e to a high of 980 MT CO_2e over an estimated 5 year period. Peak-year construction-generated GHG emissions would not exceed YSAQMD's recommended GHG emission threshold of 1,100 MT CO_2e for construction projects.	LTS	No mitigation is required.	LTS
West Olive Drive. Construction-related activities associated with the redevelopment of parcels along West Olive Drive would result in temporary, short-term GHG emissions. However, specific construction details related to the site are not yet available and would be market dependent. Given that the project would be at least half the size of the Nishi site and would not require new infrastructure development due to existing utilities serving the site, short-term construction GHG emissions are not anticipated to exceed YSAQMD thresholds.	LTS	No mitigation is required.	LTS
Impact 4.7-2: Considerably contribute to climate change through project-generated greenhouse gas emissions during operation.			
Nishi Site. Annual GHG emissions from project operation would exceed YSAQMD-recommended emission threshold of 1,100 MT CO_2e/year. Despite the development's energy efficient design and ideal location close to major destinations in the City, such as University of California at Davis (UC Davis) and downtown Davis, there is no guarantee that future emissions generated by the development could be net zero carbon by 2050. Therefore, operation of the project has the potential to result in a substantial contribution to GHG emissions.	PS	Implement Mitigation Measure 4.14-5 (Transportation Demand Management program). **Mitigation Measure 4.7-2a**: Each individual project or subdivision developed/constructed as a part of the Nishi Gateway Project shall demonstrate consistency with the D-CAAP by achieving a downward trajectory in GHG emissions, towards the City goal of zero net GHG emissions by the year 2050. The project must achieve the target in place for the year in which the application (for any development within the Nishi site) is filed. At the City's discretion, compliance with this mitigation measure for different development activities associated with the same approval may occur at different stages in the development process depending on the nature of the project and may be based on the year that physical improvements are anticipated. GHG emissions associated with all activities must demonstrate consistency with this measure at the time of or before building permits are issued. Mitigation for buildings shall occur at the time the building permit is issued, and the amount of mitigation shall be based on the	SU

Table 2-2 Summary of Impacts and Mitigation Measures

Impact	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
		year the building permit is issued. Mitigation for other emissions from a project may occur at an earlier approval but no later than issuance of entitlements. The applicant may file and City may consider and approve a GHG mitigation plan that lays out the mitigation for different stages of development within the same subsequent project approval. 1. Prior to issuance of any subsequent entitlement or permit in the Nishi development, or alternatively prior to any approval taking effect, the applicant shall implement the following steps unless these steps have already been undertaken for the project through a prior approval or action: 2. Using CalEEMod or another model accepted for this purpose by the City, calculate total expected GHG emissions (all sectors) for the proposed project under two scenarios: a) 1990 emissions rates; and, b) emission rates applicable at the time of the application, taking into account applicable building standards and other adopted regulatory requirements, as well as building design, use of renewable energy, etc.Calculate the difference between these two scenarios in step 1 as a percentage of the 1990 project emissions. 3. Compare the difference in emissions from step 2 to the required minimum emissions reduction schedule provided below: Applications Filed On or Before — Minimum Required Reduction in GHG Emissions From Calculated 1990 Emissions 12/31/16 — 22.5 12/31/17 — 25.0 12/31/18 — 27.5 12/31/19 — 30.0 12/31/20 — 32.5 12/31/21 — 35.0 12/31/22 — 37.5 12/31/23 — 40.0 12/31/24 — 42.5 12/31/25 — 45.0 12/31/26 — 47.5 12/31/27 — 50.0 12/31/28 — 52.5 12/31/29 — 55.0 12/31/30 — 57.5... (2.5% increased reduction per year) 12/31/35 — 70.0... (2.5% increased reduction per year) 12/31/40 — 82.5... (2.5% increased reduction per year)	

Table 2-2 Summary of Impacts and Mitigation Measures

Impact	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
		12/31/45 95.0… (2.5% increased reduction per year) 12/31/50 100.0 4. If the difference calculated in step 2 is greater than the required reduction in step 3, the Nishi development may "bank" this as a credit to use with later projects. 5. If the difference calculated in step 2 does not demonstrate the required reduction in step 3, applicant shall identify feasible actions to achieve the required reductions using the following priority: First priority – building specific actions Second priority – onsite (within Nishi site) actions Third priority – community based (within Davis) actions Fourth priority – pay GHG reduction fees (carbon offsets) into a qualified existing local program, if one is in place Fifth priority – other demonstrated method of reducing emissions 6. Calculate, using acceptable methods, the measurable GHG reduction value of each proposed action. 7. Provide a Technical Memorandum of Compliance (TMC) documenting the following minimum items: modeling (step 1); emissions calculations (step 2); applicable reduction (step 3); chosen feasible actions to achieve required reduction (step 4); and measurable GHG reduction value of each action (step 5). The TMC and all steps of the process are subject to review and authorization by the City of Davis Department of Community Development and Sustainability. 8. Implement the authorized actions and provide evidence of this to the City of Davis Department of Community Development and Sustainability. The City upon review and acceptance of implementation, shall issue the subject entitlement, permit, or approval. **Mitigation Measure 4.7-2b:** Every 5 years the Nishi development shall submit a GHG Emissions Reduction Accounting and Program Effectiveness Report for the entire innovation center. The report shall be submitted by 12/31 of each fifth year starting in 2020. First report due by 12/31/20, second report due by 12/31/25, etc., through 2050. The report shall identify the following minimum items. Other documentation requirements may be added by the City if found to be necessary to satisfy this mitigation measure. 1. Projected annual GHG emissions for the Nishi development, total and by sector, from the project EIR	

Table 2-2 Summary of Impacts and Mitigation Measures

Impact	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
		2. GHG emissions from all uses collectively operating at the Nishi development, total and by sector, at the time of reporting. 3. GHG emissions from each occupied building within the Nishi development, total and by sector. 4. Summary of prior TMCs and 5-year reports 5. Running total of Nishi development emissions reductions and reduction credits, in total and by building 6. Comprehensive data base and summary of implemented reduction actions	
West Olive Drive. The operation of potential redevelopment of uses within West Olive Drive could increase GHG emissions compared to existing conditions depending on the type and size of land uses that could be on site as well as the type and size of land use that may be replaced. Redevelopment of West Olive Drive has the potential to increase the intensity of current land uses either by building more densely or just serving a growing population resulting in the potential for increased GHG emissions over existing conditions.	PS	Implement Mitigation Measures 4.14-5 (Transportation Demand Management program), 4.7-2a (GHG Reduction Targets), and 4.7-2b (GHG Reduction Accountability).	SU
Impact 4.7-3: Conflict with or impede attainment of goals established in applicable climate action plans or greenhouse gas reduction plans.			
Nishi Site. Operation of the Nishi development would not conflict with or impede the goals of EO B-30-15 or the D-CAAP. However, unmitigated emissions from the proposed Nishi development would exceed AB 32 2020 reduction targets compared to BAU conditions and SACOG MTP/SCS per capita targets.	PS	Implement Mitigation Measure 4.14-5 (Transportation Demand Management program).	LTS
West Olive Drive. Redevelopment of West Olive Drive has the potential to increase the intensity of current land uses, either by building more densely or serving a growing population. There is no guarantee of whether new land uses would impede or be inconsistent with AB32, EO B-15-30, SACOG MTP/SCS per capita targets, or the D-CAAP.	PS	Implement Mitigation Measures 4.14-5 (Transportation Demand Management program), 4.7-2a (GHG Reduction Targets), and 4.7-2b (GHG Reduction Accountability).	SU
Impact 4.7-4: Result in unnecessary, inefficient, and wasteful use of energy.			
Nishi Site. Development of the Nishi site would increase energy demands as a result of operation of on-site uses. However, compliance with existing City code requirements, as well as efficiency design measures resulting from the sustainability planning effort completed by the City, would ensure that the project would not result in an inefficient or wasteful expenditure of energy.	LTS	No mitigation is required.	LTS

Table 2-2 Summary of Impacts and Mitigation Measures

Impact	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
West Olive Drive. Potential redevelopment of the Nishi site would increase energy demands as a result of operation of on-site uses. However, compliance with existing City code requirements and building standards employed at the time redevelopment is proposed would ensure that the project would not result in an inefficient or wasteful expenditure of energy.	LTS	No mitigation is required.	LTS
Impact 4.7-5: Conflict, or create an inconsistency, with any applicable plan, policy, or regulation adopted for the purpose of avoiding or mitigating environmental effects related to greenhouse gas emissions or energy.			
Nishi Site. Implementation of the project within the Nishi site would be consistent with the policies of the City of Davis General Plan related to energy and GHG emissions.	LTS	No mitigation is required.	LTS
West Olive Drive. Redevelopment that could occur as a result of the redesignation/rezoning of parcels located in West Olive Drive would be consistent with the policies of the City of Davis General Plan related to energy and GHG emissions.	LTS	No mitigation is required.	LTS
4.8 Hazards and Hazardous Materials			
Impact 4.8-1: Create a significant hazard through the routine transport, use, or disposal of hazardous materials.			
Nishi Site. Development and operation of the proposed development on the Nishi site would result in transport, use, and disposal of hazardous materials to and from the project site. The project would adhere to existing regulations and compliance with safety standards related to the transport, use, storage, and disposal of hazardous materials.	LTS	No mitigation is required.	LTS
West Olive Drive. Redevelopment and subsequent operation of West Olive Drive would involve the transport, use, and storage of hazardous materials. The project would adhere to existing regulations and compliance with safety standards related to the transport, use, storage, and disposal of hazardous materials.	LTS	No mitigation is required.	LTS
Impact 4.8-2: Result in the release of hazardous materials from a site of known or potential contamination.			
Nishi Site. Due to the proximity of documented contamination sites, historical land use within the project site, and the site's proximity to a major roadway and the railroad tracks, previously unknown hazardous materials could be encountered during construction.	PS	**Mitigation Measure 4.8-2a:** Prior to initiation of grading or other groundwork, the applicant shall conduct soil sampling within the boundaries of the project site. 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. The assessment will include soil sampling consistent with DTSC's guidelines for development of former agricultural properties. (The investigation is	LTS

Table 2-2 Summary of Impacts and Mitigation Measures

Impact	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
		anticipated to include 57 borings and 15 composite samples for organochlorine pesticides and 15 discrete samples for arsenic, as well as soil sampling within 30 feet of the existing and pre-1974 alignment of I-80, at the edge of the railroad right-of-way, and near the active agricultural well.) 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, the applicant 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 on the project site. The plan shall include measures that ensure the safe transport, use, and disposal of contaminated soil removed from the site. **Mitigation Measure 4.8-2b:** Prior to initiation of grading or other groundwork, the applicant shall provide a hazardous materials contingency plan to YCEHD. 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 constructing the project, evidence of soil and/or groundwater contamination with hazardous material is encountered, the project applicant shall immediately halt construction and contact 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 4.8-2c:** Prior to any ground disturbance activities within 50 feet of the well, the applicant shall hire a licensed well contractor to obtain a well abandonment permit and properly abandon the on-site well, pursuant to review and approval by the City Engineer and the Yolo County Environmental Health Service Department. Well abandonment shall be completed before mass grading within 50 feet of the well.	

Table 2-2 Summary of Impacts and Mitigation Measures

Impact	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
West Olive Drive. Although there is no known contamination within West Olive Drive, established businesses within this portion of the project site include commercial and light industrial uses that are associated with elevated potential for hazardous materials release. In addition, on-site structures may contain potentially hazardous building materials.	PS	Implement Mitigation Measure 4.8-2b (Prepare and Implement a Hazardous Materials Contingency Plan). **Mitigation Measure 4.8-2d:** Minimize potential for accidental release of hazardous materials during demolition. Prior to demolition of existing structures within West Olive Drive, the project applicant shall complete the following: ◢ 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. ◢ Provide written documentation to the County that asbestos testing and abatement, as appropriate, has occurred in compliance with applicable federal, state, and local laws. ◢ Provide written documentation to the County 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, the project applicant shall submit a soil management plan to YCEHD.	LTS
Impact 4.8-3: Expose people or the environment to a significant hazard associated with release of a potentially hazardous substance along existing transportation corridors.			
Nishi Site. Development of the Nishi site as part of the project would result in construction of residences in proximity to the UPRR line, which is used to transport potentially hazardous and flammable materials. Construction and operation of the project 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.	LTS	No mitigation is required.	LTS
West Olive Drive. Redevelopment of uses within West Olive Drive would not increase the potential for release of a hazardous material along an existing transportation corridor.	LTS	No mitigation is required.	LTS

Table 2-2 Summary of Impacts and Mitigation Measures

Impact	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
Impact 4.8-4: Result in a safety hazard for people residing or working in the project area because of proximity to airports.			
Nishi Site. The project site is located approximately 2 miles east of University Airport. Due to the orientation of the runway relative to the project site and the recommended clearance slopes for take-off and approach compared to the proposed height of structures at the Nishi site, implementation of the project is anticipated to have a less-than-significant impact on the safety of people residing or working in the project area.	LTS	No mitigation is required.	LTS
West Olive Drive. West Olive Drive is located more than 2 miles east of University Airport. As a result, redevelopment of West Olive Drive would not be anticipated to increase safety hazards associated with airport operations.	NI	No mitigation is required.	NI
Impact 4.8-5: Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan.			
Nishi Site. The project would not impair implementation of an adopted emergency response or evacuation plan. Once developed, the site would have adequate access to afford evacuation of residents in the event of a hazardous materials event, however, during Phase 2 of construction and under Access Scenario 1, only one emergency vehicle access point may be available. Further, during construction, disruption of area roadways may hinder traffic flow (e.g., Richards Boulevard and intersection of Richards Boulevard and Olive Drive), which could negatively affect emergency response.	PS	Implement Mitigation Measure 4.14-7 (Construction Traffic Management Plan). **Mitigation Measure 4.8-5:** Prior to occupancy of structures within the Nishi site, the City of Davis Department of Community Development and Sustainability, City of Davis Fire Department, and the property owner shall coordinate with UPRR regarding the use of the existing access road within UPRR right-of-way for emergency ingress/egress. Any gating or other security measures related to the granting of access to the City shall be constructed by the applicant pending approval by UPRR.	SU
West Olive Drive. Operation of uses associated with the redevelopment of West Olive Drive would not modify existing emergency access routes or physically interfere with implementation of emergency response plans. However, construction within West Olive Drive could result in short-term, temporary impacts to street traffic because of roadway improvements and potential extension of construction activities into roadway rights-of-way.	PS	Implement Mitigation Measure 4.14-7 (Construction Traffic Management Plan).	LTS
Impact 4.8-6: Conflict, or create an inconsistency with, any applicable plan, policy, or regulation adopted for the purpose of avoiding or mitigating environmental effects related to hazards and hazardous materials.			
Nishi Site. Implementation of the project within the Nishi site would be consistent with the policies of the City of Davis General Plan related to hazards and hazardous materials.	LTS	No mitigation is required.	LTS

Table 2-2 Summary of Impacts and Mitigation Measures

Impact	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
West Olive Drive. Redevelopment that could occur as a result of the redesignation/rezoning of parcels located in West Olive Drive would be consistent with applicable hazard mitigation and emergency response plans and the policies of the City of Davis General Plan related to hazards and hazardous materials.	LTS	No mitigation is required.	LTS
4.9 Hydrology and Water Quality			
Impact 4.9-1: Construction-related water quality impacts.			
Nishi Site. The development of the Nishi site could impact water quality through ground disturbance and erosion leading to sediment delivery, and the potential release of hazardous materials during construction. Compliance with Central Valley WQCB and USACE permit conditions would minimize the potential water quality impacts related to construction activities.	LTS	No mitigation is required.	LTS
West Olive Drive. The potential redevelopment of West Olive Drive may require construction activities including excavation and ground disturbance, demolition and removal of existing structures, and the use of hazardous materials. However, these activities would be subject to protective NPDES permit and building code conditions which would minimize the potential for discharge of contaminated surface water runoff.	LTS	No mitigation is required.	LTS
Impact 4.9-2: Water quality impacts during operation.			
Nishi Site. The development of the Nishi site could result in an increase in pollutants carried in stormwater runoff. However, drainage from the site would not be discharged to a surface water (Putah Creek channel is an abandoned channel which only receives stormwater runoff) and the project would be required to meet the City of Davis stormwater quality management standards, as found in the City's Manual of Stormwater Quality Control Standards for New Development and Redevelopment, which include LID site design, source control, stormwater treatment, and regular maintenance of stormwater system components. Compliance with these standards would minimize potential for stormwater runoff generated by the Nish Site to adversely impact water quality.	LTS	No mitigation is required.	LTS
West Olive Drive. Redevelopment of West Olive Drive would not significantly alter the quality of stormwater runoff from the site. Additionally, potential redevelopment projects within West Olive Drive would be designed to comply with the City of Davis stormwater quality management standards, which would minimize the potential for stormwater runoff from redevelopment uses to adversely affect water quality.	LTS	No mitigation is required.	LTS

Table 2-2 Summary of Impacts and Mitigation Measures

Impact	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
Impact 4.9-3: Impacts to groundwater recharge.			
Nishi Site. Development of the Nishi site would create impervious surfaces which could increase runoff and reduce groundwater recharge within the vicinity of the project. However, the LID stormwater management components of the project would infiltrate precipitation on site would minimize potential impacts to groundwater recharge.	LTS	No mitigation is required.	LTS
West Olive Drive. West Olive Drive is currently developed with limited pervious surfaces. Redevelopment of the area would not significantly alter the rate of groundwater recharge beneath the site.	LTS	No mitigation is required.	LTS
Impact 4.9-4: Drainage and runoff impacts.			
Nishi Site. The existing drainage patterns and stormwater volume would be altered by the development of the Nishi site. The potential downstream impacts would be minimized through mandatory compliance with the City of Davis' stormwater ordinance. Alteration of the existing drainage system could create backwater or flooding conditions for the existing upstream properties.	PS	**Mitigation Measure 4.9-4:** The SWQCP prepared for the City of Davis and before the issuance of building permits shall incorporate provisions to accommodate the existing volume of upstream drainage flows from the I-80 right-of-way and the 58-acre section of the UC Davis campus west of the project area. These flows may be conveyed directly through the site (pass-through) or infiltrated in part or in whole within the Nishi stormwater management system. Development of the Nishi site shall not create backwater conditions or upstream flooding.	LTS
West Olive Drive. Potential redevelopment of uses within West Olive Drive would not substantial increase runoff volumes and would be required to comply with the provisions of the City of Davis stormwater ordinance	LTS	No mitigation is required.	LTS
Impact 4.9-5: Floodwater impacts.			
Nishi Site. A small portion of the northern part of the Nishi site is located in the FEMA 100-year flood zone, however this space would be reserved for parks and greenways and would not be developed. In addition, the existing crossing of Putah Creek channel would be replaced with a bridge structure which would reduce the potential obstruction of flood flows and reduce the potential for flooding. There are no 200- or 500-year floodplains within the project site. Failure of the Monticello dam would inundate the Nishi site with up to two meters of water for a period of approximately 24 hours. However, the dam structure is managed by the BOR's rigorous dam safety program and is capable to withstanding strong seismic shaking in the near vicinity.	LTS	No mitigation is required.	LTS

Table 2-2 Summary of Impacts and Mitigation Measures

Impact	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
West Olive Drive. A portion of the West Olive Drive area is located in the FEMA 100-year flood zone, however this space is reserved for parks and greenways and any redevelopment would comply with the City of Davis flood ordinance. Failure of the Monticello dam would inundate West Olive Drive with up to two meters of water for a period of approximately 24 hours. However, the dam structure is managed by the BOR's rigorous dam safety program and is capable to withstanding strong seismic shaking in the near vicinity.	LTS	No mitigation is required.	LTS
Impact 4.9-6: Conflict, or create an inconsistency, with any applicable plan, policy, or regulation adopted for the purpose of avoiding or mitigating environmental effects related to hydrology and water quality.			
Nishi Site. Implementation of the project within the Nishi site would be consistent with the policies of the City of Davis General Plan related to hydrology and water quality.	LTS	No mitigation is required.	LTS
West Olive Drive. Redevelopment that could occur as a result of the redesignation/rezoning of parcels located in West Olive Drive would be consistent with the policies of the City of Davis General Plan related to hydrology and water quality.	LTS	No mitigation is required.	LTS
4.10 Land Use and Planning			
Impact 4.10-1: Conflict with land use plans, policies, or existing zoning.			
Nishi Site. Construction of a mixed-use development including residential and commercial uses under the project would not be consistent with the current land use and zoning designations for the Nishi site. However, as part of the project, the Nishi site would be annexed from Yolo County to the City of Davis and a General Plan Amendment would be required to redesignate/rezone the Nishi site from agricultural designations to Mixed Use Innovation District and Planned Unit Development, respectively.	LTS	No mitigation is required.	LTS
West Olive Drive. The rezoning and redesignation of West Olive Drive would involve a refinement of allowable uses within West Olive Drive from strictly commercial service to include flexibility for office and small-scale neighborhood serving uses. As implementation of the project would result in modifications of the existing zoning and land use designations for consistency with long-term planning efforts by the City.	LTS	No mitigation is required.	LTS

Table 2-2 Summary of Impacts and Mitigation Measures

Impact	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
Impact 4.10-2: Conflict, or create an inconsistency, with any applicable plan, policy, or regulation adopted for the purpose of avoiding or mitigating environmental effects related to land use and planning.			
Nishi Site. Implementation of the project within the Nishi site would be consistent with the policies of the City of Davis General Plan related to land use and planning.	LTS	No mitigation is required.	LTS
West Olive Drive. Redevelopment that could occur as a result of the redesignation/rezoning of parcels located in West Olive Drive would be consistent with the policies of the City of Davis General Plan related to land and planning.	LTS	No mitigation is required.	LTS
4.11 Noise and Vibration			
Impact 4.11-1: Generate short-term, construction-related noise on nearby sensitive land uses.			
Nishi Site. Project construction activities would involve the use of heavy-duty construction equipment. Construction noise impacts would occur over a 5-year period for off-site sensitive receptors and a 2- to 3-year period for planned on-site receptors. Although construction activities would be conducted in accordance with Davis Municipal Code 24.02.040 (b), construction activities may result in a substantial increase in ambient noise levels, especially to on-site residences during Phase 2 of construction.	S	**Mitigation Measure 4.11-1:** The City shall require the applicant to implement the following noise reduction measures during project construction as directed by the City: ◢ All construction equipment and equipment staging areas shall be located as far as possible from nearby noise-sensitive land uses, and/or located such that existing or constructed topography blocks line-of-site between affected noise-sensitive land uses and construction staging areas. ◢ 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. ◢ 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. ◢ All construction equipment with back-up alarms shall be equipped with either audible self-adjusting backup alarms or alarms that only sound when an object is detected. The self-adjusting backup alarms shall automatically adjust to 5 dBA over the surrounding background levels. All non-self-adjusting backup alarms shall be set to the lowest setting required to be audible above the surrounding noise levels. In addition to the use of backup alarms, the construction contractor shall consider other techniques such as observers and the scheduling of construction activities so that alarm noise is minimized.	SU

Table 2-2 Summary of Impacts and Mitigation Measures

Impact	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
		◢ The applicant or construction contractors shall post visible signs along the perimeter of the construction site that disclose construction times and duration. A contact number for a City of Davis enforcement officer shall be included where noise complaints can be filed and recorded. The applicant will be informed of any noise complaints and responsible for investigating complaints and implementing feasible and appropriate measures to reduce noise levels at receiving land uses. Such measures may include but are not limited to: ◤ Noise-reducing enclosures and techniques shall be used around stationary noise-generating equipment (e.g., concrete mixers, generators, compressors). ◤ Install temporary noise curtains that meet the following parameters: ▪ temporary noise curtains shall be 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). ▪ temporary noise curtains shall 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.	
West Olive Drive. Demolition of existing building and construction of new facilities within the West Olive Drive redevelopment area would comply with City noise policies and would likely be intermittent, be market driven, and would not likely to occur all at once.	LTS	No mitigation is required.	LTS
Impact 4.11-2: Generate short-term, construction-related vibration effects on nearby sensitive land uses.			
Nishi Site. Site preparation and grading activities would likely require the use of construction equipment that would generate ground vibration. However, based on the anticipated equipment for construction of the project and the distance to nearby sensitive land uses, potential impacts to off-site existing residences or on-site proposed residences in use during construction would not be substantial.	LTS	No mitigation is required.	LTS
West Olive Drive. Potential redevelopment of West Olive Drive may require the use of construction equipment that may generate limited vibration. However, construction activities are not anticipated to result in substantial vibration such that damage to existing structures may occur.	LTS	No mitigation is required.	LTS

Table 2-2 Summary of Impacts and Mitigation Measures

Impact	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
Impact 4.11-3: Exposure of existing sensitive receptors to operational project-generated stationary noise. *Nishi Site.* Development of the Nishi site would result in the operation of various new stationary noise sources (e.g., mechanical HVAC equipment, emergency electrical generators, parking lots, and noise from outdoor activity areas). Specific locations for these noise sources are not known at this time. Thus, considering the proposed high density of land development in close proximity to existing sensitive receptors (e.g., the existing Solano Park Apartments), it is possible that new proposed HVAC units and emergency generators could create a noticeable increase from existing noise levels. Consequently, a substantial permanent increase in ambient noise levels (i.e., 5 dB) could occur.	S	**Mitigation Measure 4.11-3:** The project applicant shall implement the following measures to reduce the effect of noise levels generated by on-site stationary noise sources: ◢ All electrical generators shall be equipped with noise control (e.g., muffler) devices in accordance with manufacturers' specifications. ◢ External mechanical equipment, including HVAC units, associated with buildings shall incorporate features designed to reduce noise emissions below the stationary noise source criteria. These 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. ◢ Should R&D tenants require outdoor testing/activities, tenants shall submit exterior noise estimates for long-term and short-term research and development activities to the City for review and approval prior to implementation. Exterior noise levels shall be estimated for receptor distances equivalent to distances from on-site and off-site residential land uses and shall demonstrate compliance with City of Davis noise limits, as applicable.	LTS
West Olive Drive. Unless future redevelopment would result in a three-fold increase or more from existing stationary noise sources (e.g. tripling the number of current HVAC systems), the increase in stationary noise levels would be barely discernable at the closest sensitive receptors.	LTS	No mitigation is required.	LTS
Impact 4.11-4: Exposure of proposed sensitive receptors to operational project-generated stationary noise sources. *Nishi Site.* The proposed development of the Nishi site would include commercial and residential mixed-use land uses including new sensitive receptors (e.g., residential uses). Proposed residential uses (i.e. sensitive receptors) could be located in close proximity to new, on-site, stationary noise sources (e.g., HVAC units, electrical generators, outdoor activity areas, and parking lots), which could expose these receptors to noise in excess of allowable noise levels.	PS	Implement Mitigation Measure 4.11-3 (Reduce On-site Stationary Noise Sources).	LTS

Table 2-2 Summary of Impacts and Mitigation Measures

Impact	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
West Olive Drive. Potential redevelopment within West Olive Drive is not currently anticipated to include residential uses, and as a result, potential exposure of new residential uses to stationary source noise within West Olive Drive would not occur.	NI	No mitigation is required.	NI
Impact 4.11-5: Exposure of proposed and existing sensitive receptors to transportation noise sources.			
Nishi Site. Development of the Nishi site would result in increased traffic volumes along affected roadways and would increase roadway noise levels in the vicinity of the project site. Additionally, the proposed on-site residential and R&D structures would act as both receptors and barriers or reflectors of transportation noise sources. Existing receptors could experience louder train warning horn and pass-by events due to reflection from proposed Nishi residential buildings. Proposed sensitive receptors at the planned residential land uses would be exposed to exterior traffic noise levels that are conditionally acceptable under the City's noise standards, but could also be exposed to significant noise events (i.e. horn blasts) from passing trains that could disturb sleep. Commercial land uses along I-80 would also experience noise levels that would be normally unacceptable under the City's noise standards.	S	**Mitigation Measure 4.11-5a**: Where feasible, locate new sensitive receptors such that the outdoor activity area (e.g., balcony or porch) is on the opposite side of the structure from the UPRR line such that the structure itself would provide a barrier between transportation noise and the outdoor activity areas. **Mitigation Measure 4.11-5b**: The applicant shall work in conjunction with the City of Davis to pursue and establish a Quiet Zone with the Federal Railroad Administration at Arboretum Drive, adjacent to the Nishi property. Upon confirming the assessing and confirming the feasibility of establishing a Quiet Zone, the applicant and City shall proceed to apply for the Quiet Zone designation. The application and procedural steps to establish a Quiet Zone adjacent to the project site shall commence concurrent with the start of initial site grading activities. The project applicant shall fund all studies associated with the application for the establishment of the Quiet Zone. The installation and construction of alternative safety measures associated with the Quiet Zone (including, but not limited to: signage, gates, etc.) shall be implemented by the project applicant. **Mitigation Measure 4.11-5c:** The applicant shall design and construct the residential buildings along the rail line such that train horn events and noise from passing trains would not increase by more than 5dBA SEL from existing SEL levels. These designs can include, but are not limited to: ◢ Incorporation of acoustically absorptive material, shape, angle, or overall design in building façade facing the railroad. ◢ Changing the shape of proposed buildings adjacent to the railroad and Solano Park Apartments such that noises from passing trains, including warning horns, are dispersed and not concentrated on sensitive receptors.	SU
West Olive Drive. Redevelopment of West Olive Drive would not result in the addition of substantial traffic-generating uses such that roadway noise levels would increase substantially. Further, on-site uses that may occur within West Olive Drive are not currently anticipated to include sensitive receptors that may be exposed to noise levels in excess of established standards.	LTS	No mitigation is required.	LTS

Table 2-2 Summary of Impacts and Mitigation Measures

Impact	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
Impact 4.11-6: Expose proposed sensitive receptors to railroad vibrations.			
Nishi Site. Trains passing along the UPRR may generate groundborne vibration levels than are perceptible on the project site. However, the levels of groundborne vibration exposure at the nearest buildings would not exceed the applicable exposure criteria established by FTA or result in structural damage to the buildings.	LTS	No mitigation is required.	LTS
West Olive Drive. No residential units are anticipated as part of the potential redevelopment of West Olive Drive.	NI	No mitigation is required.	NI
Impact 4.11-7: Conflict, or create an inconsistency, with any applicable plan, policy, or regulation adopted for the purpose of avoiding or mitigating environmental effects related to noise.			
Nishi Site. Implementation of the project within the Nishi site would be consistent with the policies of the City of Davis General Plan related to noise.	LTS	No mitigation is required.	LTS
West Olive Drive. Redevelopment that could occur as a result of the redesignation/rezoning of parcels located in West Olive Drive would be consistent with the policies of the City of Davis General Plan related to noise.	LTS	No mitigation is required.	LTS
4.12 Population and Housing			
Impact 4.12-1: Directly or indirectly induce substantial population growth during construction.			
Nishi Site. During the construction period, a maximum of approximately 60 workers are expected on the Nishi site during periods of peak construction. There are enough construction workers in the area and adjacent communities to meet this demand. Furthermore, even if some construction workers from outside the region were employed at the Nishi site, construction workers typically do not change residences when assigned to a new construction site, and substantial permanent relocation of these workers to the area is not anticipated.	LTS	No mitigation is required.	LTS
West Olive Drive. Construction activities associated with the redevelopment of West Olive Drive would create temporary jobs. However, construction workers in the county and adjacent communities would likely be able to meet this demand. Furthermore, even if some construction workers from outside the region were employed at the project site, construction workers typically do not change residences when assigned to a new construction site, and substantial permanent relocation of these workers to the area is not anticipated.	LTS	No mitigation is required.	LTS

Table 2-2 Summary of Impacts and Mitigation Measures

Impact	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
Impact 4.12-2: Induce substantial population growth and housing demand during operation.			
Nishi Site. Implementation of the project would provide additional jobs and residents within the City. However, the potential impacts associated with the projected growth are evaluated throughout this document. Additionally, the project would improve the jobs:housing balance within the City and respond to projected housing needs by the City and UC Davis. No additional impacts related to population growth as a result of the project would occur beyond those acknowledged in this EIR.	LTS	No mitigation is required.	LTS
West Olive Drive. While no development projects have been proposed within West Olive Drive, a net increase of approximately 55,000 sf of commercial uses may occur within West Olive Drive. These types of uses could result in between 93 and 550 new employment opportunities within the City. These jobs would likely be accommodated by students or residents of the City, and would not be substantial when compared to the existing workforce within the City and UC Davis.	LTS	No mitigation is required.	LTS
Impact 4.12-3: Conflict, or create an inconsistency, with any applicable plan, policy, or regulation adopted for the purpose of avoiding or mitigating environmental effects related to population, employment, and housing.			
Nishi Site. Implementation of the project within the Nishi site would be consistent with the policies of the City of Davis General Plan related to population, employment, and housing.	LTS	No mitigation is required.	LTS
West Olive Drive. The West Olive Drive rezoning would allow for redevelopment that would result in new commercial land uses. Potential redevelopment associated with the proposed General Plan Amendment and zoning change of West Olive Drive would not conflict with any regulations established for the protection of population, employment, and housing.	LTS	No mitigation is required.	LTS
4.13 Public Services and Recreation			
Impact 4.13-1: Impact on fire facilities.			
Nishi Site. The project site is within a four-minute travel time of both Station 31 and Station 34, which is consistent with the City's target response time established in the General Plan. Service can be provided at the same level as is provided to the rest of the service area without the need for additional facilities or equipment.	LTS	No mitigation is required.	LTS

Table 2-2 Summary of Impacts and Mitigation Measures

Impact	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
West Olive Drive. Redevelopment of the West Olive Drive portion of the project site would not include uses that would increase demand for fire protection and emergency medical services.	LTS	No mitigation is required.	LTS
Impact 4.13-2: Impact on police facilities.			
Nishi Site. There is no adopted City staffing ratio requiring a prescribed number of police officers per the City's population, and the Davis PD anticipates that the Nishi site would be able to be served by existing facilities.	LTS	No mitigation is required.	LTS
West Olive Drive. The potential redevelopment of West Olive Drive would not include uses such as permanent residences or places where large numbers of people congregate which would increase demand for police services. Further, West Olive Drive is already served by the Davis Police Department and continued service to West Olive Drive would not require the construction of new police facilities.	LTS	No mitigation is required.	LTS
Impact 4.13-3: Impact on schools.			
Nishi Site. Development of the Nishi site would increase potential elementary and high school students within DJUSD. Under the provisions of SB 50, a project's impacts on school facilities are fully mitigated via the payment of the requisite new school construction fees established pursuant to Government Code Section 65995.	LTS	No mitigation is required.	LTS
West Olive Drive. The development of West Olive Drive would not include permanent residences that would generate an increase in student enrollment.	NI	No mitigation is required.	NI
Impact 4.13-4: Impact on parks and recreation facilities.			
Nishi Site. Development of the Nishi site would be required to provide 9.6 acres of parkland and 0.98 acres of open space to comply with the General Plan dedication standard and Quimby Act requirements. The project would include 19.2 acres of public parks and open space. Additionally, a 4.0-acre stormwater detention area would provide additional open space on-site.	LTS	No mitigation is required.	LTS
West Olive Drive. The development of West Olive Drive would not include permanent residences that would increase the need for park facilities.	NI	No mitigation is required.	NI
Impact 4.13-5: Impact on other public facilities.			
Nishi Site. Development of the Nishi site, as proposed, would increase demand for other public facilities within the City of Davis, such as libraries. To address the need for new and maintenance of existing public facilities, the City collects impact fees from new development to offset potential impacts related to the development.	LTS	No mitigation is required.	LTS

Table 2-2 Summary of Impacts and Mitigation Measures

Impact	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
West Olive Drive. The development of West Olive Drive would not include permanent residences that would increase the need for libraries and other community facilities.	NI	No mitigation is required.	NI
Impact 4.13-6: Conflict, or create an inconsistency, with any applicable plan, policy, or regulation adopted for the purpose of avoiding or mitigating environmental effects related to public resources.			
Nishi Site. Implementation of the project within the Nishi site would be consistent with the policies of the City of Davis General Plan related to public services.	LTS	No mitigation is required.	LTS
West Olive Drive. Redevelopment that could occur as a result of the redesignation/rezoning of parcels located in West Olive Drive would be consistent with the policies of the City of Davis General Plan related to public services.	LTS	No mitigation is required.	LTS
4.14 Transportation and Circulation			
Impact 4.14-1: Impacts to local intersections outside freeway interchange areas.			
Nishi Site and West Olive Drive. The addition of project-related traffic would increase delay at local intersections outside Freeway Interchange Areas under Access Scenario 1. While no local intersections would exceed City of Davis LOS standards, the intersection of Old Davis Road/La Rue Road within UC Davis campus under Access Scenario 1 would exceed significance thresholds.	S	**Mitigation Measure 4.14-1:** The project applicant shall fund the design and construction of modifications to the single lane roundabout at the intersection of Old Davis Road/La Rue Road. These modifications will consist of constructing a right-turn bypass lane from southbound La Rue Road to westbound Old Davis Road. Implementation of this mitigation measure will improve LOS to D or better. The roundabout design shall be reviewed and approved by the University before implementation. .	SU
Impact 4.14-2: Impacts to intersections within the Richards Boulevard interchange area.			
Nishi Site and West Olive Drive. The addition of project-related traffic would increase delay at local intersections within the Richards Boulevard Freeway Interchange Areas under Access Scenario 1.	S	**Mitigation Measure 4.14-2:** The project applicant shall implement the following measures related to roadway and intersection widening within the Richards Boulevard interchange area. *Phase 1 Improvements* The project applicant shall either make a fair share contribution for the following Phase 1 improvements prior to initiation of construction of Phase 1 or conduct a focused traffic assessment to provide a more detailed assessment of the mitigation trigger timing. ◢ Richards Boulevard/Olive Drive: ◤ Widen the south leg of Richards Boulevard to add a second northbound left turn lane (from northbound Richards to westbound Olive Drive) with a storage length of approximately 250 feet. Widen the north leg of	SU

Table 2-2 Summary of Impacts and Mitigation Measures

Impact	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
		Richards Boulevard to add a second southbound through/turn lane. The widening of the south leg may require some widening of the approach to the underpass and construction of new retaining walls to support the new turn lane. No modification of the existing underpass is required. ◤ Widen the west leg of West Olive Drive to provide two westbound lanes and three eastbound lanes. The eastbound lanes on West Olive Drive at Richards Boulevard shall include a left turn lane, a through/right lane, and a right turn lane. On-street bike lanes, which may include either a sharrow (shared bike and vehicle lane) or dedicated bike lane, shall be provided on West Olive Drive. ◢ Richards Boulevard/Private Driveways: Place barriers in the median of Richards Boulevard to restrict driveway access, between West Olive Drive and the I-80 westbound ramps, to right-in, right-out movements only. ◢ Richards Boulevard/I-80 Westbound Ramps: Realign the westbound ramps to eliminate the two loop ramps to provide a diamond ramp configuration and install a traffic signal. Provide an exclusive left turn lane and two exclusive right turn lanes on the westbound off-ramp approach. Provide one through lane and two exclusive left turn lanes on the northbound approach. Provide two through lanes and an exclusive right turn lane on the southbound approach. The southbound right turn lane shall extend from just south of the existing Cafe Italia driveway to the new westbound on-ramp entrance. *Phase 2 Improvements* The project applicant shall contribute appropriate funds for the following Phase 2 improvements, which shall be constructed before occupancy of project uses that would generate fifty percent or more of the forecast project a.m. peak hour trips. Alternately, the project applicant may conduct a focused traffic assessment to provide a more detailed assessment of the mitigation trigger timing. ◢ Richards Boulevard/Eastbound Off-Ramp: Widen the eastbound off-ramp to provide a second exclusive left turn lane. Richards Boulevard Bicycle Cycle Track: construct a separated cycle track on the west side of Richards Boulevard from West Olive Drive to Research Park Drive.	

Table 2-2 Summary of Impacts and Mitigation Measures

Impact	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
Impact 4.14-3: Impacts to freeways. *Nishi Site and West Olive Drive.* Implementation of the project would not contribute substantial traffic volumes to freeway segments in the area such that LOS of the freeway segments would be considered unacceptable.	LTS	No mitigation is required.	LTS
Impact 4.14-4: Impacts to local neighborhood street traffic. *Nishi Site and West Olive Drive.* While the project would increase daily trips to and from the project site, the project would not result in a substantial increase in local residential street volumes.	LTS	No mitigation is required.	LTS
Impact 4.14-5: Increase in vehicle miles travelled. *Nishi Site and West Olive Drive.* The project would increase local and regional vehicle miles traveled as a result of people driving to and from the project site on a daily basis. Taking into account local and regional VMT reduction goals, the project may impede the ability of the City/region to achieve established goals.	PS	**Mitigation Measure 4.14-5:** Before issuance of the first building permit, the applicant shall prepare a TDM program, including any anticipated phasing, and submit it to the City Department of Public Works for review and approval. The TDM program must be designed to achieve the following. 1. Reduce trips to achieve one and five-tenths (1.5) AVR in accordance with Davis Municipal Code Section 22.15.060, and 2. Reduce daily and peak hour vehicle trips, as forecast for the project in this transportation impact assessment, by 10 percent for every project phase. The management entity shall be responsible for implementing the TDM Program. (a) The plan shall identify trip reduction/TDM proposed programs and strategies to achieve the above objectives that may include, but are not limited to, the following. The following programs and strategies are described in more detail in the Nishi Gateway Project Sustainability Implementation Plan. (1) Bicycle Infrastructure and Incentives; (2) Transit Infrastructure and Incentives; (3) Work Force Housing; (4) Parking Pricing and Supply Management; (5) Transportation Management Association (TMA) Membership and Program Management; (6) Innovative Electric Vehicle Infrastructure and Shared Fleet; (7) Additional Implementing Actions – Subsidized Bikeshare Membership, Subsidized Carshare Membership, Ride Sharing Program, and Vanpool Program.	LTS

Table 2-2 Summary of Impacts and Mitigation Measures

Impact	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
		(b) Single-phase development projects shall achieve TDM AVR objectives within five (5) years of issuance of any certificate of occupancy. Multi-phased projects shall achieve the objectives for each phase within three (3) years of the issuance of any certificate of occupancy. (c) In conjunction with final map approval, recorded codes, covenants and restrictions (CC&Rs) shall include provisions to guarantee adherence to the TDM objectives and perpetual operation of the TDM program regardless of property ownership, inform all subsequent property owners of the requirements imposed herein, and identify potential consequences of nonperformance. Each space use agreement (i.e., lease document) shall also include TDM provisions for the site as a means to inform and commit tenants to, and participate in, helping specific applicable developments meet TDM performance requirements. (d) Ongoing reporting: (1) **Annual TDM Report.** The Management Entity for the Project shall submit an annual status report on the TDM program to the City Department of Public Works beginning a year after the issuance of any certificate of occupancy and no less than five (5) years after buildout. Data shall be collected in October of each year and the Annual Report submitted by December 31 of each year. The report shall be prepared in the form and format designated by the City, which must either approve or disapprove the program within sixty (60) days. i. The TDM performance reports shall focus on the trip reduction incentives offered by the project, their effectiveness, the estimated greenhouse gas (GHG) emissions generated by the project, and the methods by which Carbon Neutrality will be achieved. The report shall: ◢ report the AVR levels attained; ◢ verify the TDM plan incentives that have been offered; ◢ describe the use of those incentives offered by employers; ◢ evaluate why the plan did or did not work to achieve the AVR targets and explain why the revised plan is more likely to achieve the AVR target levels; ◢ list additional incentives which can be reasonably expected to correct deficiencies; ◢ evaluate the feasibility and effectiveness of trip reduction/TDM program and strategies, as implemented; ◢ estimate the greenhouse gas emissions generated by Project	

Table 2-2 Summary of Impacts and Mitigation Measures

Impact	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
		transportation operations; and ◢ identify off-setting GHG credits to be secured by the Project to achieve carbon neutrality. ii. The Management Entity shall conduct employee travel surveys annually to determine TDM program participation, AVR levels, and estimated mode shares, and monitor weekday a.m. and p.m. peak hour traffic operations every three years at all impact locations identified in this EIR, comparing the operating LOS with the relevant standards in this EIR. The survey instrument and LOS monitoring plan will be reviewed and approved by the City before implementation. iii. The Management Entity shall also develop and implement a program to monitor daily and peak hour traffic volumes entering and exiting the site, to be conducted annually. The monitoring shall demonstrate that the external vehicle trip generation remains below the EIR projection of 425 a.m. peak hour trips and 465 p.m. peak hour trips. The monitoring program may include statistical considerations to ensure that non-statistically significant increases do not constitute violation of the trip ceiling. iv. If the trip ceiling is exceeded for any two consecutive years, the Management Entity will contribute funding to be determined in a separate study, subject to review and approval by the City of Davis, toward the provision of additional or more intensive travel demand management programs, such as enhanced regional transit service to the site, employee shuttles, subsidies for existing transit service, bicycle facilities, and/or make multi-modal street improvement and other potential measures. v. In the event that other TDM objectives are not met as documented in the Annual Monitoring Report submitted by December 31 of each year, the Management Entity shall: Submit to the City within thirty (30) days of submittal of the annual report, a list of TDM measures that will be implemented to meet the TDM objectives within one hundred eighty (180) days of submittal of annual report. At the end of the one-hundred-eighty-day period, the Management Entity shall submit a revised performance report to determine compliance with TDM objectives. No further measures will be necessary if the TDM objectives are met.	

Table 2-2 Summary of Impacts and Mitigation Measures

Impact	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
Impact 4.14-6: Impacts to emergency vehicle access.			
Nishi Site. During Phase 2 of construction of Access Scenario 1 and under Access Scenario 2, only one emergency vehicle access point may be available. Further, during construction, disruption of area roadways may hinder traffic flow (e.g., Richards Boulevard and intersection of Richards Boulevard and Olive Drive), which could negatively affect emergency response..	PS	Implement Mitigation Measure 4.14-7 (Construction Traffic Management Plan) and Mitigation Measure 4.8-5 (Secure Emergency Access along UPRR Access Road).	SU
West Olive Drive. Potential redevelopment of West Olive Drive would not result in inadequate access for emergency vehicles.	LTS	No mitigation is required.	LTS
Impact 4.14-7: Impacts associated with construction vehicle traffic.			
Nishi Site and West Olive Drive. During construction of the project, construction activities and temporary construction vehicle traffic would increase traffic congestion in the area. Depending on the timing and intensity of such activities, this could result in substantial congestion in excess of City standards.	S	**Mitigation Measure 4.14-7:** Before any construction activities for the project site, the project applicant shall prepare a detailed Construction Traffic Control Plan and submit it for review and approval by the City Department of Public Works. The applicant and the City shall consult with Caltrans, Unitrans, Yolobus, and local emergency service providers for their input before approving the Plan. The plan shall ensure that acceptable operating conditions on local roadways and freeway facilities are maintained during construction. At a minimum, the plan shall include: ◢ the number of truck trips, time, and day of street closures; ◢ time of day of arrival and departure of trucks; ◢ limitations on the size and type of trucks, provision of a staging area with a limitation on the number of trucks that can be waiting; ◢ provision of a truck circulation pattern; ◢ provision of driveway access plan so that safe vehicular, pedestrian, and bicycle movements are maintained (e.g., steel plates, minimum distances of open trenches, and private vehicle pick up and drop off areas); ◢ maintain safe and efficient access routes for emergency vehicles; ◢ manual traffic control when necessary; ◢ proper advance warning and posted signage concerning street closures; and ◢ provisions for pedestrian and bicycle safety, including maintaining a clear path for cyclists and pedestrians along the Putah Creek bike path throughout construction. A copy of the construction traffic control plan shall be submitted to local emergency response agencies and these agencies shall be notified at least 14 days before the commencement of construction that would partially or fully obstruct roadways.	LTS

Table 2-2 Summary of Impacts and Mitigation Measures

Impact	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
Impact 4.14-8: Impacts to pedestrian and bicycle facilities.			
Nishi Site and West Olive Drive. The project would increase bicycle and pedestrian traffic to and from the project site, primarily towards Downtown Davis and UC Davis. While the project would provide adequate on-site bicycle and pedestrian facilities, the additional demand for such facilities adjacent to the site as a result of the project is anticipated to increase.	S	Implement Mitigation Measure 4.14-2 (Fair Share Contribution to the Planned Cycle Track)	LTS
Impact 4.14-9: Impacts to transit service.			
Nishi Site and West Olive Drive. The project would increase transit ridership and may require additional improvements/considerations to promote and handle increased transit ridership.	PS	**Mitigation Measure 4.14-9:** If Access Scenario 1 (2 access points) is adopted, the project applicant shall fund and construct new bus stops within the project site on the West Olive Drive Extension, at a central location in the project site upon occupancy of the first building. The improvements can be constructed within the existing right-of-way. The project applicant shall prepare design plans, to be reviewed and approved by the City Public Works Department, and construct bus stops with shelters, paved pedestrian waiting areas, lighting, real time transit information signage, and pedestrian connections between the new bus stops and all buildings on the project site.	LTS
Impact 4.14-10: Conflict, or create an inconsistency, with any applicable plan, policy, or regulation adopted for the purpose of avoiding or mitigating environmental effects related to visual resources.			
Nishi Site and West Olive Drive. Implementation of the project within the Nishi site would be consistent with the policies of the City of Davis General Plan related to transportation and circulation.	LTS	No mitigation is required.	LTS
4.15 Utilities			
Impact 4.15-1: Impacts on water supply.			
Nishi Site. Development of the Nishi site would increase potable water demand within the City. However, adequate water supplies are available to serve the demands at the Nishi site without the need for additional entitlements.	LTS	No mitigation is required.	LTS
West Olive Drive. Potential redevelopment of West Olive Drive could increase potable water demand within the City. However, adequate water supplies are available to serve the potential increase in demands within West Olive Drive without the need for additional entitlements.	LTS	No mitigation is required.	LTS

Table 2-2 Summary of Impacts and Mitigation Measures

Impact	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
Impact 4.15-2: Impacts to water infrastructure.			
Nishi Site. Development of the Nishi site would increase demands on water infrastructure in the vicinity of the project site. Based on modeling conducted of potential fire flow requirements, which would result in the greatest hydraulic demand on local infrastructure, existing water pipelines in the area are anticipated to provide adequate fire flow and daily water supplies to accommodate the demands generated at the Nishi site, however because of the necessity for redundancy, existing pipelines within West Olive Drive are not adequate to provide a secondary method of providing water to the site.	S	**Mitigation Measure 4.15-2:** Prior to approval of improvement plans for construction at the Nishi site, the applicant shall coordinate with the City of Davis Public Works Department to fund and replace approximately 3,000 feet of the existing 6" and 10" water lines within Olive Drive, east of Richards Boulevard, with a 12" pipe. This improvement shall be completed before initiation of operation of land uses within the Nishi site.	LTS
West Olive Drive. West Olive Drive is currently developed with commercial uses that could be redeveloped as part of the project. As West Olive Drive currently meets fire flow requirements within the City, redevelopment of uses within West Olive Drive is not anticipated to substantially increase demands such that existing infrastructure would not be sufficient	LTS	No mitigation is required.	LTS
Impact 4.15-3: Impacts to wastewater infrastructure.			
Nishi Site. Development of the Nishi site would increase wastewater generation and demands on wastewater infrastructure in the vicinity of the project site and in the City. Based on City sewer generation factors, existing sewer pipelines in the area do not have adequate capacity to accommodate peak wet weather flows with operation of the Nishi site.	S	**Mitigation Measure 4.15-3:** Prior to issuance of building permits for the Nishi site, the applicant shall coordinate with the City of Davis Public Works Department and conduct a refined engineering analysis, including flow monitoring, of existing sewer lines between the project site and Sewer Lift Station No. 4 to confirm adequate flow capacity. At a minimum, the applicant shall replace the existing 8" sewer line within Olive Drive with a 12" pipe. Should additional sewer pipe upsizing be deemed necessary through coordination with the City Public Works Department, the applicant shall replace those pipes before operation of on-site uses.	LTS
West Olive Drive. West Olive Drive is currently developed with commercial uses that could be redeveloped as part of the project. The potential redevelopment of on-site uses within West Olive Drive is not anticipated to substantially increase demands such that existing wastewater infrastructure would not be sufficient.	LTS	No mitigation is required.	LTS
Impact 4.15-4: Impacts to solid waste facilities.			
Nishi Site. Development of the Nishi site would increase solid waste generation within the City. However, adequate landfill capacity is available at the Yolo County Central Landfill to accommodate solid waste generated by the project.	LTS	No mitigation is required.	LTS

Table 2-2 Summary of Impacts and Mitigation Measures

Impact	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
West Olive Drive. Development of West Olive Drive would increase solid waste generation within the City. However, adequate landfill capacity is available at the Yolo County Central Landfill to accommodate solid waste generated by the project.	LTS	No mitigation is required.	LTS
Impact 4.15-5: Impacts to electricity and natural gas facilities.			
Nishi Site. Electrical power would be provided to the Nishi site through an existing underground distribution power line adjacent to the project site. A distribution natural gas line would also be extended to the project site from West Olive Drive.	LTS	No mitigation is required.	LTS
West Olive Drive. The redevelopment of West Olive Drive would incrementally increase electrical and natural gas demands but would not require changes to the electrical or natural gas distribution systems.	LTS	No mitigation is required.	LTS
Impact 4.15-6: Conflict, or create an inconsistency, with any applicable plan, policy, or regulation adopted for the purpose of avoiding or mitigating environmental effects related to geology, soils, or mineral resources.			
Nishi Site. Implementation of the project within the Nishi site would be consistent with the policies of the City of Davis General Plan related to utilities.	LTS	No mitigation is required.	LTS
West Olive Drive. Redevelopment that could occur as a result of the redesignation/rezoning of parcels located in West Olive Drive would be consistent with the policies of the City of Davis General Plan related to utilities.	LTS	No mitigation is required.	LTS
Listed below are only those cumulative impacts that were determined to be significant.			
5.3.2 Agriculture and Forest Resources. Development of the Nishi site would involve conversion of approximately 43.5 acres of agricultural land to non-agricultural use. This conversion of agricultural land would be mitigated at a 2:1 ratio, as required by the City of Davis' Municipal Code. However, even with adherence to City Municipal Code requirements, the project would result in a net loss of 43.5 acres of agricultural land and would be considered cumulative considerable with respect to the cumulative loss of agricultural land in the region.	S	No feasible mitigation available.	SU
5.3.7 Greenhouse Gas Emissions, Climate Change, and Energy. Implementation of the project would increase GHG emissions within the City of Davis and the region and may not be able to achieve the City's carbon neutral target by 2050.	S	Implement Mitigation Measures 4.14-5 (Transportation Demand Management Program), 4.7-2a (GHG Reduction Targets), and 4.7-2b (GHG Reduction Accountability)	SU

Table 2-2 Summary of Impacts and Mitigation Measures

Impact	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
5.3.14 Transportation and Circulation			
Under cumulative conditions, the project would contribute additional traffic volumes that would increase delay at local intersections.	S	Implement Mitigation Measure 4.14-2 (Roadway and Intersection Improvements at the Richards Boulevard Interchange). **Mitigation Measure 5.14-1a:** Improvements to the First Street/F Street intersection are not currently included in the City's transportation development fee program. The project applicant shall fund a City-administered engineering analysis to determine a probable estimate of costs and a fair share of the improvements. The City of Davis shall include the project in the development fee program. The project applicant shall contribute appropriate fees for the design and construction of the installation of a traffic signal at the First Street/F Street intersection and the widening of the eastbound lane on First Street, from E Street to just east of F Street, to provide a dedicated eastbound left turn lane and eastbound through lane. Alternately, the left turn movement from eastbound First Street onto northbound F Street could be prohibited, requiring eastbound traffic on First Street to continue on to G Street. The following mitigation measures apply to Access Scenario 1 only. **Mitigation Measure 5.14-1b:** The project applicant shall contribute appropriate fees for the design and construction of the installation of a single lane roundabout, or equivalent measure, at the intersection of Old Davis Road/New Connector Street on the UC Davis campus. The improvement shall be constructed concurrent with completion of the new underpass and roadway that would connect the Nishi Gateway project and the UC Davis campus. The improvement design shall be reviewed and approved by UC Davis staff and the Davis Public Works Department before implementation. **Mitigation Measure 5.14-1c:** The project applicant shall contribute appropriate fees for the design and construction of the installation of a traffic signal at the West Olive Drive/West Olive cul-de-sac intersection located approximately 350 feet west of the Richards Boulevard/Olive Drive intersection.	SU
Under cumulative conditions, the project would contribute additional traffic volumes that would increase delay along local roadway segments.	S	**Mitigation Measure 5.14-2:** The applicant shall contribute appropriate fees for the implementation of travel route management strategies, including changeable message signs with route delay information and downtown parking capacity information, signal coordination and timing plans, and other roadway network management strategies, as appropriate, to efficiently manage the capacities of the various roadways serving as the primary travel corridors in Davis.	SU

Table 2-2 Summary of Impacts and Mitigation Measures

Impact	Significance before Mitigation	Mitigation Measure	Significance after Mitigation
		This project is not currently included in the City's transportation development fee program. The project applicant shall fund a City-administered engineering analysis to determine a probable estimate of costs and a fair share of the improvements. The City of Davis shall include the project in the development fee program. The City, in cooperation with UC Davis, shall implement information systems in South Davis, Downtown Davis, and on the UC Davis campus that inform motorists when Richards Boulevard, between First Street and Research Park Drive, is heavily congested and encourage the use of alternate routes – particularly for through traffic without a destination in Downtown Davis. The information systems shall include vehicle detection equipment at key points on Richards Boulevard in the I-80 interchange and changeable message signs (CMS) with route delay information and downtown parking capacity information. Alternate interchange access points include the I-80/Old Davis Road interchange for campus traffic and the I-80/Mace Boulevard interchange for South Davis traffic.	
5.3.15 Utilities (Wastewater Treatment). Because adequate treatment capacity may not be available to treat wastewater flows from cumulative development, a significant cumulative wastewater treatment impact could occur. Though the project itself would not require new or expanded facilities, the combination of the project with other contemplated development may require the expansion of existing wastewater treatment facilities.	S	**Mitigation Measure 5.15-1:** Prior to approval of improvement plans for each phase of development, the applicant shall provide funding for the City to perform a WWTP analysis to identify the then-current City of Davis WWTP BOD loading capacity. If the WWTP analysis determines that adequate BOD loading capacity exists at the WWTP to serve the project, further action is not required for the phase under review. If the analysis finds that the WWTP BOD loading capacity is not sufficient to serve the particular development phase under review, that phase of development shall not be approved until a plan, for financing and constructing additional BOD loading capacity improvements has been prepared and approved; the additional BOD loading capacity improvements have been constructed; and the City Engineer has verified that sufficient capacity exists to serve said phase.	LTS