City of Woodland

Meeting Agenda

Planning Commission

City Hall
Council Chambers
300 First Street
Woodland, CA 95695

June 17, 2021
6:30 PM

***Please Note**: The numerical order of items on this agenda is for the convenience of reference; items may be taken out of order. No new items shall begin after 10:30 pm unless unanimous consent exists to continue.*

A. SPECIAL COMMENT:

PLEASE NOTE: The June 16, 2021 Woodland Planning Commission will be conducted pursuant to the Governor's Executive Order N-29-20.

The meeting will be held via teleconference and Commission members and the public will participate via teleconference. Those locations are not listed on the agenda and are not accessible to the public. The public is encouraged to listen to the Planning Commission meeting live on Woodland TV Channel 20 and also by going to the City of Woodland web site at www.cityofwoodland.org/meetings.

If you wish to make a comment during general Public Comment or on a specific agenda item, there are three (3) ways to do that. 1) Join the Zoom Planning Commission meeting remotely by either logging onto the Zoom link located on the meeting agenda (please download the app to your computer or mobile device) and meter the Meeting ID or by calling a listed number and enter the Meeting ID; 2) Leave a voice mail message at (530) 661-5900, press Option 1. All voice mail messages received by 6:30 p.m. will be played during the Planning Commission meeting and read into the record at the appropriate time; 3) If you are watching the live stream and wish to make a comment on an item as it is being heard, you may submit an email to the Planning Commission at the following link planningcommissionmeetings@cityofwoodland.org prior to Public Comment on that item. Email comments submitted to be read into the record shall be no more than three (3) minutes when read aloud. Please include the agenda item in the subject line.

Instructions are provided at the end of the agenda.

Please click the link below to join the Public Comment portion of the meeting:

https://zoom.us/j/92170095836

Or Telephone: Dial 669-900-6833

Webinar ID: 921 7009 5836

B. CALL TO ORDER

C. ROLL CALL

D. PLEDGE OF ALLEGIANCE

E. STAFF AND COMMISSIONER COMMENTS

This is an opportunity for the Planning Commission members and staff to make comments and announcements to express concerns, or to request Commission's consideration of any items a Commission member would like to have discussed at a future Commission meeting.

F. SUBCOMMITTEE REPORTS

G. COMMUNICATIONS FROM THE PUBLIC

H. APPROVAL OF MINUTES

I. PUBLIC HEARING

J. BUSINESS ITEMS

1. SUBJECT: Public Review Draft Woodland Research and Technology Park Specific Plan and Draft Environmental Impact Report

   RECOMMENDATION FOR ACTION: Staff recommends that the Planning Commission: 1) receive a staff report regarding the proposed Woodland Research and Technology Park Specific Plan ("Specific Plan") and Draft Environmental Impact Report ("EIR"); accept public comments on the Draft EIR; and provide comments on the Public Review Draft Specific Plan and the Draft EIR.

K. STAFF OR COMMISSIONER COMMENTS

L. ADJOURNMENT

The Planning Commission of the City of Woodland encourages all parties interested in a matter scheduled to be reviewed, discussed and acted on at a meeting, to participate in the public discourse, which may include the submission of written comments and materials. The Planning Commission notifies the public that those materials received less than 24hours before a meeting date and time may not be able to be considered completely. Further, the Planning Commission encourages interested parties to attend the meeting to discuss any matter of concern and to explain their comments more fully.

TO: THE MEMBERS OF THE PLANNING COMMISSION
AGENDA: Planning Commission Meeting
DATE: June 17, 2021
ITEM #: J.1
SUBJECT: Public Review Draft Woodland Research and Technology Park Specific Plan and Draft Environmental Impact Report

Recommendation for Action: Staff recommends that the Planning Commission: 1) receive a staff report regarding the proposed Woodland Research and Technology Park Specific Plan ("Specific Plan") and Draft Environmental Impact Report ("EIR"); accept public comments on the Draft EIR; and provide comments on the Public Review Draft Specific Plan and the Draft EIR.

Staff Contact:
Erika Bumgardner, Principal Planner/Business Development Liaison, (530) 661-5886, erika.bumgardner@cityofwoodland.org

Background:
On March 6, 2017, the City received Planning Application PLNG17--00017 for the Woodland Research and Technology Park Specific Plan ("Specific Plan"). The Specific Plan area ("Plan Area") is comprised of all or portions of six (6) individual parcels of land encompassing 351 acres and is located adjacent to the Spring Lake Specific Plan neighborhood to the north and east, County Road 25A and the Urban Limit Line to the south, and is bound by State Route (SR 113) to the west, as shown in Exhibit 1, below. The applicant team consists of five property owners, representing all six parcels of land located within the Plan Area.

As described in the 2017 planning application, *"The Specific Plan is proposed as a new type of employment center that also includes a range of housing options, a commercial mixed-use town center focused around a central green and connected by a multi-modal street network and trail system. Although the City anticipates that agricultural-related research will be a major focus of the Specific Plan, the plan will also support an environment of innovation in flexible formats for a wide variety of businesses in medical and veterinary, bio-tech, engineering, and other fields."*

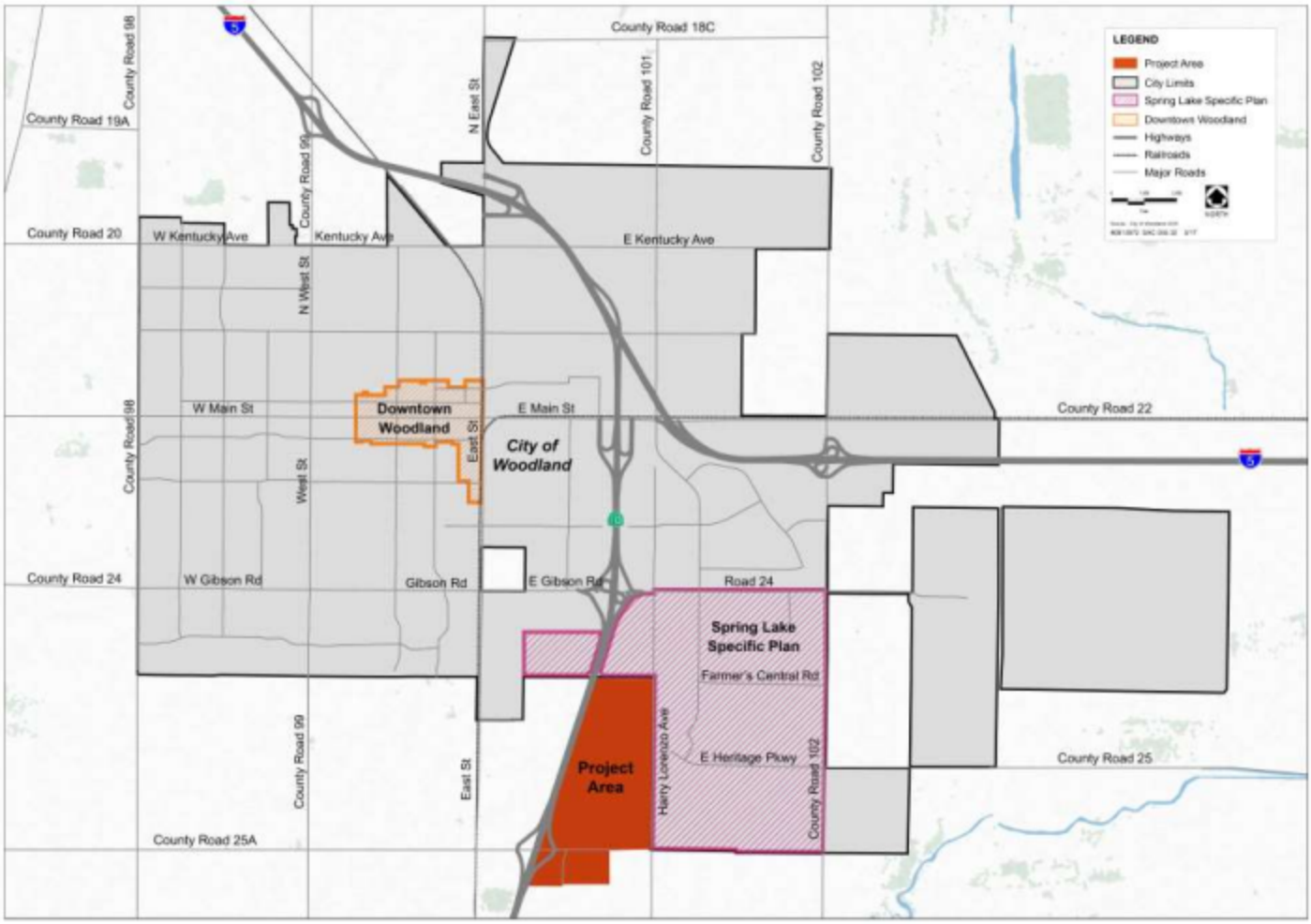

EXHIBIT 1 - Specific Plan Area Vicinity

On June 7, 2017, the City Council voted unanimously to authorize the preparation of the Specific Plan based on a finding of consistency with the vision and policies of the City of Woodland 2035 General Plan for the southern "new growth" area (SP1A). Specifically, the General Plan envisioned development of SP1A as a *"mixed-use neighborhood anchored by a research and technology business park in the 'Southern Gateway'…The highest intensity of development will occur within the business park area, providing a prime opportunity for job creation within Woodland."*

Since City Council's authorization to proceed, the applicant team has worked in partnership with the City to prepare the necessary entitlement package to bring the Specific Plan forward for consideration and adoption. The Public Review Draft Specific Plan was completed and made available for review in November 2020. A copy of the Draft Specific Plan is provided as Attachment 1 to this report and is also available on the city's website at https://www.cityofwoodland.org/ResearchPark or HERE.

The Draft EIR (Attachment 2) was recently completed and made available online on May 14, 2021, on the city's website at: https://www.cityofwoodland.org/585/Documents or HERE. The printed version of the document is also available for review at City Hall, Community Development Department.

Additionally since June 2017, the City has completed several efforts that bear a direct relationship with the adoption and implementation of the Specific Plan including finalizing a tax sharing agreement with the County;

working with Yolo LAFCo to ratify the 2018 Municipal Service Review and Sphere of Influence update; the preparation and adoption of an Agricultural Land Mitigation Ordinance; adoption of the Yolo Habitat Conservation Plan and Natural Community Conservation Plan (HCP/NCCP) and an update of the City's Affordable Housing Ordinance. These provisions provide a foundation for implementation of the Specific Plan. As outlined in Chapter 6 of the draft document, the Specific Plan will comply with the City's Affordable Housing and Agricultural Land Mitigation Ordinances and will incorporate specific environmental protection and mitigation measures consistent with the Yolo HCP/NCCP.

Prior to implementation of a Specific Plan, various entitlements are required and entail action by the Planning Commission, City Council and/or other responsible agencies such as the Yolo Local Agency Formation Commission (LAFCo). The following entitlements (typical of specific plans generally) will apply to the proposed Woodland Research and Technology Park ("WRTP") project:

1. Certification of the Environmental Impact Report (EIR) and Mitigation Monitoring Plan - Planning Commission will take action to recommend to City Council approval and certification of the project EIR and Mitigation Monitoring Program for the Specific Plan. City Council will take final action.

2. Specific Plan Approval and General Plan Amendment - Planning Commission will take action to recommend to City Council approval of the Specific Plan and amend of the General Plan to create a new City of Woodland land use designation of Woodland Research and Technology Park Specific Plan and amend the Woodland City Limit boundary. City Council will take final action.

3. Prezoning - Planning Commission will take action to recommend to City Council approval of the "pre-zoning" of the land within the specific plan boundary based on the approved land plan in preparation of subsequent annexation of the project site into the Woodland City Limit. City Council will take final action.

4. Financing Plan and Development Agreement - No action required by the Planning Commission. City Council will approve a project Financing Plan and Development Agreement for the WRTP to provide certainty and mutual assurances to the City and the project applicant regarding plan implementation and build-out.

5. Annexation - No action required by the Planning Commission. City Council will authorize and direct staff to pursue annexation of the project area into the city limit, which will go before LAFCo for review and approval.

Discussion:

The Planning Commission meeting scheduled for June 17, 2021, is primarily an opportunity for the public and the Planning Commission to provide comments on the Draft EIR; however, the Planning Commission and public will also have an opportunity to provide comments on the Specific Plan itself with staff providing an summary of public outreach to date. Although a public meeting to receive oral comments on Draft EIRs is not a procedural requirement, it is the City's practice to conduct such a meeting for certain projects. Immediate and/or direct answers on questions regarding the Draft EIR will not be provided during the meeting. This information will be provided later in writing as part of the forthcoming Final EIR (Response to Comments) document.

Note: there will be no transcription of oral comments at this meeting. Comments received will be summarized by staff for inclusion in the record and Final EIR. Those who wish to have their oral comments incorporated verbatim into the record and Final EIR must submit their comments in writing by the deadlines described

below.

The state guidelines for determining the adequacy of an EIR indicate the following:

An EIR should be prepared with a sufficient degree of analysis to provide decision makers with information which enables them to make a decision which intelligently takes account of environmental consequences. An evaluation of the environmental effects of a proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in the light of what is reasonably feasible. Disagreement among experts does not make an EIR inadequate, but the EIR should summarize the main points of disagreement among the experts. The courts have looked not for perfection, but for adequacy, completeness, and a good faith effort at full disclosure. (CEQA Guidelines, Section 15151)

The California Environmental Quality Act (CEQA) Guidelines require that formal written responses be prepared and made available for relevant comments received on the Draft EIR, including oral comments. These responses, plus the Draft EIR, will comprise the Final EIR for the Woodland Research and Technology Park Specific Plan project.

Deadline for Comments: The Draft EIR was released on May 14, 2021, for review and comment. Comments will be accepted for a 49-day period that ends on July 2, 2021 at 5:00pm.

Please direct all comments to:

Erika Bumgardner, Business Development Liaison
City of Woodland Economic Development Department
300 First Street
Woodland, CA 95695
Erika.bumgardner@cityofwoodland.org

Response to Comments: A Final EIR (Response to Comments) document will be prepared following public review and comment. This subsequent volume will include responses to comments received on the Draft EIR, errata and/or other changes, modifications, or clarifications of the Draft EIR, identification of any other pertinent data or information, and a mitigation monitoring and reporting plan (MMRP). The City will consider this information when deliberating the project.

CEQA EIR Basics: An EIR is an informational document that examines and discloses the potential for adverse environmental impacts to result from approval and implementation of the proposed project. The Draft EIR provides an analysis of the potential for impacts in 14 topical areas, plus an evaluation of cumulative effects, and other required matters.

The California Environmental Quality Act (CEQA) regulates the EIR process. Pursuant to State law EIRs focus only on significant adverse physical impacts. However, there are other important considerations the Planning Commission and City Council will ultimately consider such as beneficial economic and social factors. CEQA requires “reasonable” analysis – not perfect,

speculative or exhaustive analysis. EIR conclusions do not dictate Planning Commission or City Council action, they are meant to inform decision-making bodies.

For each environmental topic, the DEIR identifies the baseline (existing) condition, the significance threshold (the point at which the impact moves from acceptable to unacceptable), mitigation that would reduce or eliminate the impact, and whether the remaining effect (after mitigation) is acceptable or unacceptable. Here is a summary of some common CEQA terminology:

- Existing condition = setting = baseline for impact analysis
- No impact = no change in outcome from exiting conditions
- Less Than Significant impact = an acceptable outcome
- Significant Impact = an unacceptable outcome = impact that exceeds the significance threshold = adverse
- Mitigatable = a significant impact that will be reduced to less than significant levels by the mitigation
- Unavoidable = a significant impact that will not be reduced to less than significant levels by the mitigation

WRTP Project Description: The WRTP Specific Plan is the overarching policy and planning document for the City's designated new growth area for future specific plan development, SP-1A, as identified in the 2035 General Plan. The WRTP Specific Plan is comprehensive in scope, addressing land use, transportation, community design, housing, conservation of resources, economic development, public facilities and infrastructure, public safety, and open space, among many other subjects. The WRTP Specific Plan would provide for a variety of housing types and non-residential land uses, as well as parks and open space and supportive public facilities and infrastructure. A multi-modal street network and bike-pedestrian trail system in the WRTP Specific Plan have been designed to balance the circulation and flow of vehicular traffic with the provision of safe and accessible facilities for walking, biking, public transit, and ride share drop-off/pick-up. A modified grid street network provides circulation and access within the WRTP Specific Plan Area, to the Spring Lake Specific Plan Area, and adjacent areas of the city. While not a part of the WRTP Specific Plan Area, the Draft EIR also addresses potential impacts associated with off-site improvement areas.

Significant Environmental Effects: The Draft EIR has identified the below-listed environmental issue areas as having potentially significant environmental impacts from implementation of the WRTP Specific Plan. Those resources indicated with an asterisk (*) have been identified as having significant and unavoidable impacts. These findings are consistent with those of the City's 2035 General Plan and Climate Action Plan EIR certified in 2017.

- Aesthetics and Visual Resources*
- Agricultural and Forestry Resources*
- Air Quality*
- Biological Resources
- Cultural and Tribal Cultural Resources*
- Geology, Soils, Minerals, and Paleontological Resources
- Hazards and Hazardous Materials
- Hydrology, Flooding, and Water Quality
- Noise and Vibration*

- Transportation and Circulation

There are no sites in the WRTP Specific Plan area that are listed on the Hazardous Waste and Substances Sites List as set forth in Government Code Section 65962.5.

CEQA Alternatives: As legally required, the Draft EIR considers the no-project scenario that represents the existing conditions, as well as what would reasonably be expected to occur in the foreseeable future if the project were not approved. In this case, this no-project scenario could take two forms: Alternative 1, the "No-Project (No Development) Alternative," as a scenario in which urban development does not occur at all within SP-1A and existing conditions within SP-1A persist; or Alternative 2, the "No-Project (Development) Alternative," a scenario in which development still occurs, consistent with the framework for SP-1A prescribed by the 2035 General Plan and City's planning efforts.

The environmental analysis in the Draft EIR also evaluates two different alternatives, Alternatives 3 and 4, for growth within the WRTP Specific Plan Area, relative to the objectives of the WRTP Specific Plan. These alternatives consider an intensity of development that would still be consistent with the framework for SP-1A prescribed by the 2035 General Plan, but consider whether different layout, mix, and density of land uses, or adjustment to proposed land use designations, would reduce potentially significant impacts. Alternative 3 considers a similar overall amount of development as the proposed WRTP Specific Plan, but would distribute destination land uses within residential areas to facilitate pedestrian and bicycle access for future residents. Alternative 4, would provide an alternative site design, specifically utilizing increased open space to serve as environmental buffers between potential land use conflicts.

For the purposes of the Draft EIR, Alternative 1, the "No-Project (No Development)" Alternative, is environmentally superior. The next most environmentally superior alternative is Alternative 4. Please refer to Chapter 4 of the EIR, "Alternatives," for more detail.

WOODLAND RESEARCH AND TECHNOLOGY PARK SPECIFIC PLAN

Guiding Principles: In May 2017, the City of Woodland adopted a comprehensive update to its General Plan, setting the stage for future growth and development within its Urban Limit Line (ULL) through the year 2035. A key focus of the General Plan is economic development and job growth. The Plan Area is specifically envisioned within the General Plan as a natural extension of the city, ideally located and positioned for jobs and housing development. General Plan Policy 2.L.2 provides further guidance for the Plan Area:

General Plan Policy 2.L.2 - *"Promote development of SP1A as a mixed-use residential district anchored by a research and technology business park in the Southern Gateway area at CR 25A and SR 113. Concentrate the highest intensity of development within and in close proximity to the business park area, with lower density, largely residential uses to the north. Encourage sustainable development through the use of renewable energy sources and water conservation tools with the goal of striving to achieve zero net energy at the building and neighborhood level to the extent feasible."*

Based on this General Plan guidance, the following WRTP Guiding Principles, outlined in Chapter 1 of the Specific Plan, provide the overarching vision and desired outcome for development within the Plan Area:

1. Innovation

The Plan Area will develop as a state-of-the-art innovation center campus for technology, research and

development, and office uses. Flexibility in design and implementation is supported, allowing businesses to respond to market demand through phasing of construction and the ability to offer a variety of building types and sizes. Complementary uses within immediate proximity to the business park, including hotel, commercial, employee-serving retail and recreational opportunities will support day-to-day needs of businesses, their clients and their employees.

2. Technology Capture/Talent Retention

Collaboration with UC Davis, Woodland Community College and others will bolster start-up businesses and growing mid-to-large size companies through technology transfer and IP sourcing. The Plan will accommodate advanced technology-related jobs and training that allow a greater number of Woodland residents and college graduates from the Woodland Community College and throughout the region to live and work in the community, generating an infusion of intellectual capital.

3. Business Partnerships

Companies locating in the Tech Campus will have the opportunity to take positive advantage of the existing and thriving seed, food, and agricultural-based industries currently located and doing business in and around Woodland. Access to additional resources and new markets, new ideas, materials and expertise will grow through strategic partnerships with new and existing businesses in Woodland.

4. Sustainable and Resilient

The Plan Area will lead in energy efficiency and sustainable design. Development within the Plan Area will incorporate cutting edge green building practices. Land use strategies and transportation demand management will reduce vehicle miles traveled and facilitate the use of alternative fuel vehicles. The city's urban forest canopy will be increased and projects will incorporate naturalized stormwater management. These and other measures will contribute to meeting City goals for greenhouse gas reduction by 2035 contained in its 2035 Climate Action Plan.

5. Gathering Place

A successful Village Center and featured 11-acre linear park will provide a mix of social gathering spaces for employees, residents, and visitors to connect, recreate, and relax. These informal networking opportunities will foster greater innovation and engagement among the workforce and allow for the balanced integration of work and life that the next generation of professionals seek.

6. Connectivity/Mobility

A combination of well-designed complete streets, protected bicycle lanes, and pedestrian / bicycle greenways will prioritize the pedestrian experience throughout the Plan Area. Well-connected parks, open spaces and greenbelts will encourage residents and employees to walk, bike, or scooter rather than drive to work, home and play. Existing bike trails and greenbelts will extend from and connect to the adjacent community including nearby schools, community center and shopping center. A shared mobility hub will serve as a point of connection for those arriving and departing the Tech Campus by various forms of alternative transportation – including micro transit stops and fixed bus routes with frequent service to Downtown Woodland and UC Davis. Amenities to support last mile active

transportation alternatives are featured, including bike and scooter share services.

7. Healthy Community

Connected streets with bicycle and pedestrian facilities, trails, accessible parks and open spaces with passive and programmed recreation will facilitate and encourage active, healthy living. Access to healthy foods through community gardens, a farmer's market and/or fresh produce market in the Village Center will be promoted. A mix of social gathering places will enable employees and residents to come together for fun and relaxation, boosting emotional wellness.

8. New Neighborhoods/Seamless Transitions

Diverse, high quality and attractive new neighborhoods and housing options, including single and multi-family residential units and mixed-used projects will allow Tech Park employees to live and work close by and "move up" within the same neighborhood as families grow or nests are emptied. Land use and circulation planning, coupled with design and development standards will ensure a thoughtful transition between the Plan Area and the adjacent Spring Lake neighborhood, complementing the established community.

Implementation Policies derived from these Guiding Principles can be found in Chapter 2 of the Specific Plan. Specific Plan Policies speak to Land Use, Design, Sustainability, Open Space, Streetscape and Mobility, and Economic Development, with several policies closely mirroring those adopted as part of the 2035 General Plan. Consistent with the 2035 General Plan growth assumption for this area (SP1A), the 350 acre Plan Area will accommodate 2.2 million square feet of office, commercial and research/technology space, approximately 1,600 residential housing units and 21 acres of parks and open space, network trails and greenbelts at build out. Approximately 5,000 jobs are anticipated at build-out.

Specific Plan Framework: The Woodland Research and Technology Park Specific Plan, is comprised of seven chapters that work together to guide orderly development of the Plan Area in line with the above listed Guiding Principles, as well as the design and technical guidance to achieve this vision, and the implementation and administrative steps to carry out the project. The Specific Plan document itself is organized as follows:

Chapter 1 - Introduction and Vision: identifies the vision and organizing principles that guide the physical form and development patterns of the Plan Area. In addition to the Guiding Principles listed above, Chapter 1 describes the project's regional context, the many strengths of the Woodland community and its agricultural heritage that make Woodland a natural fit for an innovation campus focused around food, health and life science.

Chapter 2 - Land Use Framework: presents the Specific Plan guiding policies, depicts the overall land use plan and districts that constitute the Plan Area. Chapter 2 describes the three core districts that make up the 350 acre Plan Area, including the Technology Park District, The Village Center District and the residential Villages District and how each of these districts come together to provide a complete and unique "Work, Live, Play" community. The Land Use Plan, also provided in Chapter 2, lays out the land use zones within the three core Districts. The thoughtful layout of zones/uses within the 350 acre Plan Area provides a seamless transition from the Spring Lake neighborhood located immediately east and north of the Plan Area, through to the Technology Park District located adjacent to SR 113 on the west. See Exhibit 2, below, Chapter 2, Section 2.3.1, *Introduction of the Land Use Zones*, and Chapter 3, Section 3.2.4, *Description of Zoning*

Categories, for further description of the Land Plan and zoning designations.

Chapter 3 - Land Use Regulations, Development Standards and Design Guidelines: defines the permitted uses, development standards, regulations and provides design recommendations and guidance for individual projects. Chapter 3 lays out the specific entitlement and design requirements for both commercial and residential development with emphasis on high quality design, pedestrian interaction/interface and appropriate transitions between the various zones and land use within the Plan Area.

Chapter 4 - Mobility and Circulation: describes the network to accommodate the movement of vehicles, pedestrians and bicyclists. A foundational element of the Plan Area, Chapter 4 outlines a circulation program that prioritizes pedestrian, bicycle and other alternative/active transportation modes to encourage fewer automobile dependent trips to work, home and to recreational activities. The project's planned mobility hub, The Union, is described in Chapter 4. At project build out, The Union will serve as *"the nucleus of the alternative transportation system providing integrated access to intra-city as well as inter-city transit service. The Plan Area's seamless network of roads, bike paths, and sidewalks combined with a variety of transportation services will offer multiple choices to support "last mile" connectivity. Located at the Village Center, The Union will be designed to accommodate a range of potential alternative transportation choices..."* See Chapter 4, Section 4.2.2, *Shared Mobility Hub*, for additional facility details.

Chapter 5 - Public Utilities and Services: describes plan-wide utilities of water, wastewater, storm drainage, electric, natural gas, communications and the public services of parks, schools, law enforcement, fire and solid waste. Chapter 5 identifies the backbone infrastructure necessary to serve the Plan Area. Utility infrastructure will be constructed to ensure compliance with all applicable service and improvement standards, and state and federal laws and regulations.

Chapter 6 - Implementation: describes implementation procedures and strategies for financing and maintenance of public facilities and services. California Government Code Section 65451 requires that Specific Plans include programs of implementation strategies related to regulatory changes, programs, financing strategies and public works projects needed to carry out the proposed land use, infrastructure and development standards outlined in the Specific Plan. Chapter 6 provides a summary of the methods by which the Specific Plan will be implemented and provides discussion on the sequencing and financing programs that demonstrate compliance with General Plan policies and the vision, goals and policies of the Specific Plan.

Chapter 7 - Administration: outlines the Specific Plan process and its relationship to the subsequent entitlement processes, describes the administrative procedures to implement and amend, interpret and enforce the Specific Plan.

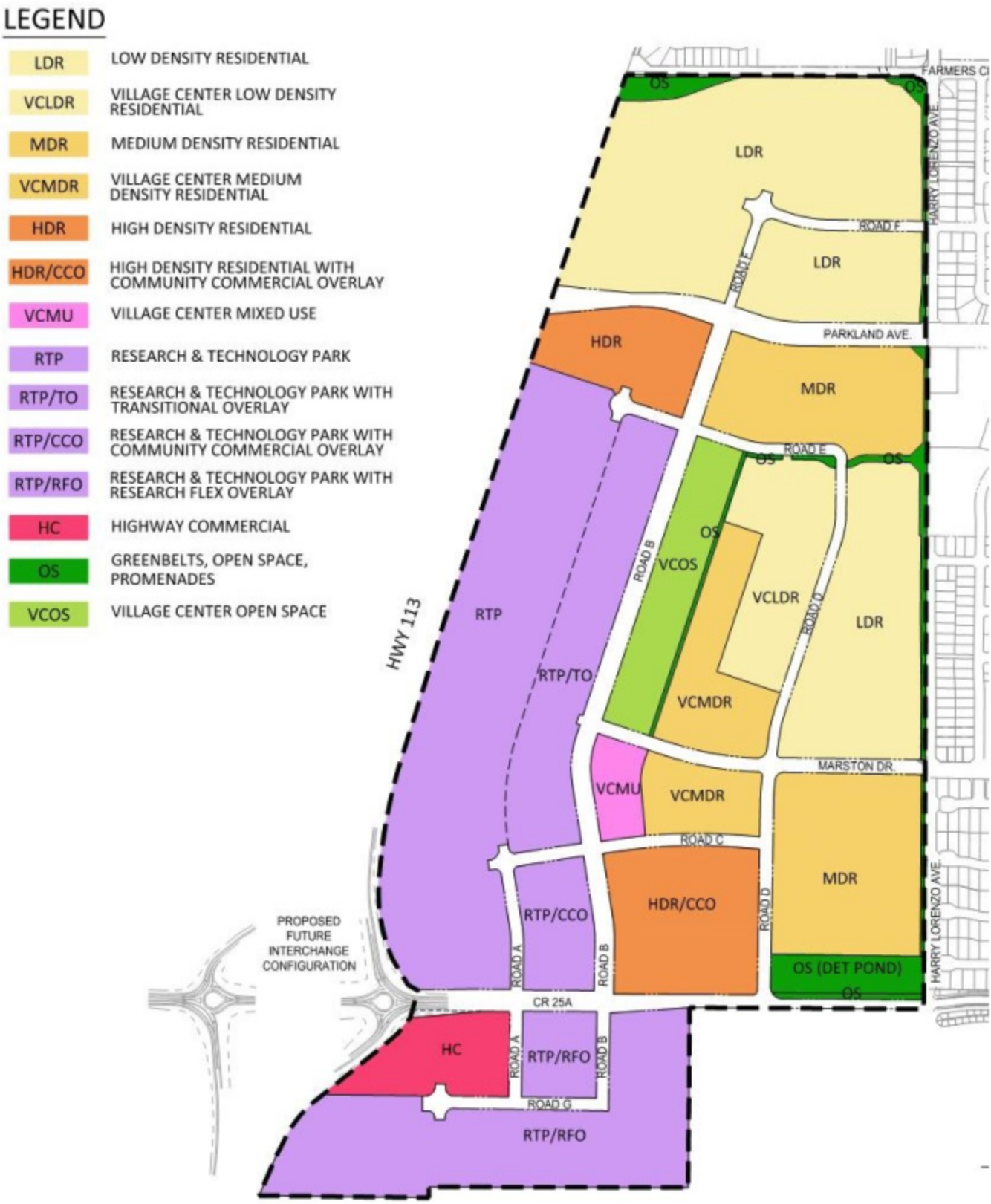

EXHIBIT 2 - Land Use Plan

As noted in the Draft Specific Plan (Chapter 6, Section 6.2.3, *Subsequent Implementation Documents/Analysis*), additional documents will be prepared following adoption of the Specific Plan:

Conceptual Plan for the 11-acre linear park, The Yard, to guide phased park improvements, and ensure

pedestrian and bike paths internal to the park connect to the external network trail and greenbelt system.

Comprehensive planting and street tree palette shall be developed for each District to guide both private and public landscaping improvements. Street Furnishings, Street Lighting Palettes and Gateway monuments (25A/Road B and Road B/Marston) shall be included as part of this effort.

Comprehensive Transportation Demand Management strategy, in conjunction with key stakeholders, and identifying check in points to demonstrate efficacy.

Coordination with the Yolo County Transportation District and UC Davis with policies of the Specific Plan to insure timely provision of transit service and appropriate funding mechanisms in place.

Mobility Hub Master Plan, identifying the dedication of necessary Right of Way with the first tentative map in the location of the planned facility (Road B at the Village Center).

Climate Action Plan Checklist, modified as necessary to achieve Greenhouse Gas Reduction targets.

The provision of these subsequent documents will be outlined in the project Development Agreement including the process by which the documents will be evaluated and approved.

Conclusion:
Staff recommends that the Planning Commission: 1) receive a staff report regarding the proposed Woodland Research and Technology Park Specific Plan ("Specific Plan") and Draft Environmental Impact Report ("EIR"); accept public comments on the Draft EIR; and provide comments on the Public Review Draft Specific Plan and the Draft EIR.

Prepared By: Erika Bumgardner, Business Development Liaison

Reviewed By: Cindy Norris, Principal Planner

Attachments:
1. Public Review Draft Woodland Research and Technology Park Specific Plan
2. Draft Environmental Impact Report Woodland Research and Technology Park Specific Plan

WOODLAND RESEARCH & TECHNOLOGY PARK
Specific Plan

CITY OF WOODLAND | CALIFORNIA

Public Review Draft
NOVEMBER 2020

Adopted XXXX XX, 2021
Resolution #
EIR State Clearinghouse # 2017062042

Lead Agency:
City of Woodland
300 First Street
Woodland, CA 95695

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ES | EXECUTIVE SUMMARY

ES.1 | EXECUTIVE SUMMARY

The Woodland Research and Technology Park (WRTP) Specific Plan guides the development of the 350 acre Plan Area in Woodland, California. The Specific Plan Area is envisioned within the City's 2035 General Plan as a natural extension of the city, ideally located and positioned for jobs and housing development.

The WRTP Specific Plan represents the opportunity to implement the collective vision of the General Plan, the community and City leaders, and the applicants to create a sustainable, healthy and successful community in the southern gateway to the City of Woodland. The establishment of the mixed use Plan Area is a natural progression of the City's long history of innovation and creativity in food and agricultural productivity.

The Plan Area is a self-sustaining, enterprising mixed use community anchored by a technology and innovation campus, with vibrant retail and supporting uses, integrated residential neighborhoods, recreation, open space and public uses. The projected yields, at full build out, would provide up to approximately 2.2 million square feet of employment equating to approximately 5,000 jobs and 1,600 dwelling units in a range of housing types.

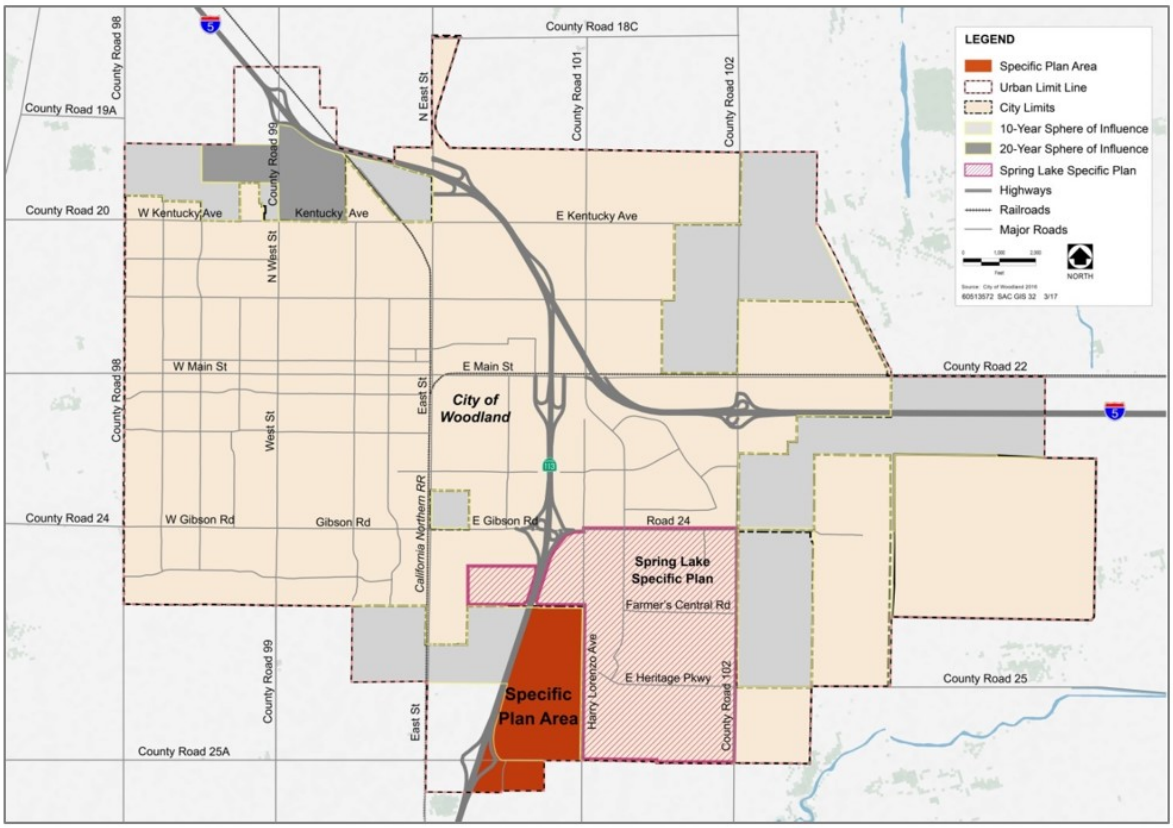


EXHIBIT ES-1: PLAN AREA LOCATION

This specific plan provides an opportunity to creatively implement the intent of the General Plan and serve as a refinement of General Plan policies. The WRTP Specific Plan is the primary land use, policy and regulatory document used to guide development of the Plan Area. The Specific Plan establishes a development framework for land use, community design and character, infrastructure improvements and a subsequent project approval structure for orderly development within the Plan Area. The Specific Plan document is organized as follows:

- **Chapter 1-Introduction and Vision**: identifies the vision and organizing principles that guide the physical form and development patterns of the Plan Area.
- **Chapter 2-Land Use Framework:** presents the Specific Plan Guiding policies, depicts the overall land use plan and districts that constitute the Plan Area.
- **Chapter 3- Land Use Regulations, Development Standards and Design Guidelines**: defines the permitted uses, development standards, regulations and provides design recommendations and guidance for individual projects.
- **Chapter 4-Mobility and Circulation:** describes the network to accommodate the movement of vehicles, pedestrians and bicyclists.
- **Chapter 5-Public Utilities and Services**: describes plan-wide utilities of water, wastewater, storm drainage, electric, natural gas, communications and the public services of parks, schools, law enforcement, fire and solid waste.
- **Chapter 6--Implementation**: describes implementation procedures and strategies for financing and maintenance of public facilities and services.
- **Chapter 7-Administration**: outlines the Specific Plan process and its relationship to the subsequent entitlement processes, describes the administrative procedures to implement and amend, interpret and enforce the Specific Plan.
- **Supporting Documents**: Technical documents/studies provide supporting analysis and detail for many aspects of the Specific Plan, including:
    - Water Technical Memorandum
    - Reclaimed Water Distribution Technical Memorandum
    - Wastewater Collection System Technical Memorandum
    - Stormwater Management Technical Memorandum
    - Traffic Impact Analysis completed for the DEIR dated June 2020.
    - Public Facilities Financing Plan
- **Related City Documents**

Related documents include, but are not limited to:

- Environmental Impact Report
- General Plan and Climate Action Plan
- Zoning Code and Subdivision Ordinance
- Improvement Standards
- Development Agreement

1.0 | Introduction / Vision

1.1 | INTRODUCTION

The Woodland Research and Technology Park (WRTP) Specific Plan guides the development of the 350 acre Plan Area in Woodland, California. The Specific Plan Area is envisioned within the City's 2035 General Plan as a natural extension of the city, ideally located and positioned for jobs and housing development. The establishment of the mixed use Plan Area is a natural progression of the City's long history of innovation and creativity in food and agricultural production.

The foundation for the Specific Plan is defined by a growing recognition that the factors that drive economic development and future growth are rapidly shifting. With the rising importance of innovation and technology development, a region's economic competitiveness increasingly depends on its ability to establish a high-quality system that fosters innovation and promotes the development, transfer, and commercialization of technology. Such innovation ecosystems provide environments in which emerging and existing technology companies can be incubated and grown, researchers and companies can collaborate in a synergistic environment, and access to scientific, engineering, and entrepreneurial talent can be easily facilitated.

WOODLAND RESEARCH AND TECHNOLOGY PARK

BUILDING ON OVER 100 YEARS OF FOOD AND AG INNOVATION IN THE CITY OF WOODLAND

This chapter introduces the Vision for the Plan Area, as influenced by the City's General Plan, the physical attributes of the site and the strengths and opportunities of Woodland and the region. Following the detailed vision, this chapter outlines the Guiding Principles, which serve as the guide for the desired outcome of development within the Plan Area. Next is Plan Area Context, which provides the background and setting. The final sections provide the organization for the Specific Plan, lists the Related Documents and provides the list of Entitlements which were approved in conjunction with the Specific Plan.

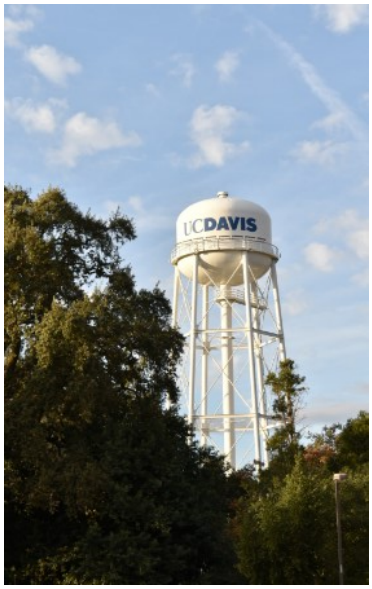
1.2 | VISION

The Woodland Research and Technology Park will serve as a gateway to connect Woodland, a community that has shaped the future of food and agriculture for over a century, with UC Davis, one of the leading agricultural research universities in the world, through the creation of an enterprising mixed use community. The Plan Area is anchored by a technology and innovation campus, with vibrant businesses and integrated residential neighborhoods. A dynamic "work-live-play" environment will attract highly skilled professionals to the region and will provide new housing opportunities and a long-term economic base for Woodland's future generations. The Plan Area will be a place where the existing strengths of the City are combined with the opportunities for the future, capitalizing on the technology transfer and research potential the Plan Area's location and base economy provide.

"Yolo County is a global hub for agricultural research, food production and sustainable technology. The proximity of this site, just five minutes from UC Davis, will offer appropriate facilities for technology startups to put down roots."

Lon Hatamiya, former Secretary of Technology, Trade and Commerce for the State of California

Northern California's agricultural innovation is anchored by the leading edge research and development at UC Davis – the nation's premier agricultural research institution.



This vision and framework responds directly to the 2035 General Plan, Policy 2.L.2, which describes the Plan Area as…"*a mixed-use residential district anchored by a research and technology business park in the Southern Gateway area at CR 25 and SR 113. Concentrate the highest intensity of development within and in close proximity to the business park area, with lower density, largely residential uses to the north."* The development framework of the Plan Area was guided by this policy, translated onto the site to achieve the desired physical form, as shown in Exhibit 1-1, Vision Concept Diagram.

The research/technology campuses are strategically placed on the west edge of the Plan Area to serve as a gateway, the central core provides a village-center focal area with a mix of uses at higher densities (the "urban villages"), and the neighborhoods wrap the east and north edges to provide a compatible transition to the Spring Lake neighborhoods. This framework provides a distinct identity, a well-defined pattern and gradual transitions to the adjacent uses. The three primary districts which evolved from the vision; the Technology Park, the Village Center and The Villages, are introduced in the following section. Chapter 2 provides details on the Land Use Plan and Districts.

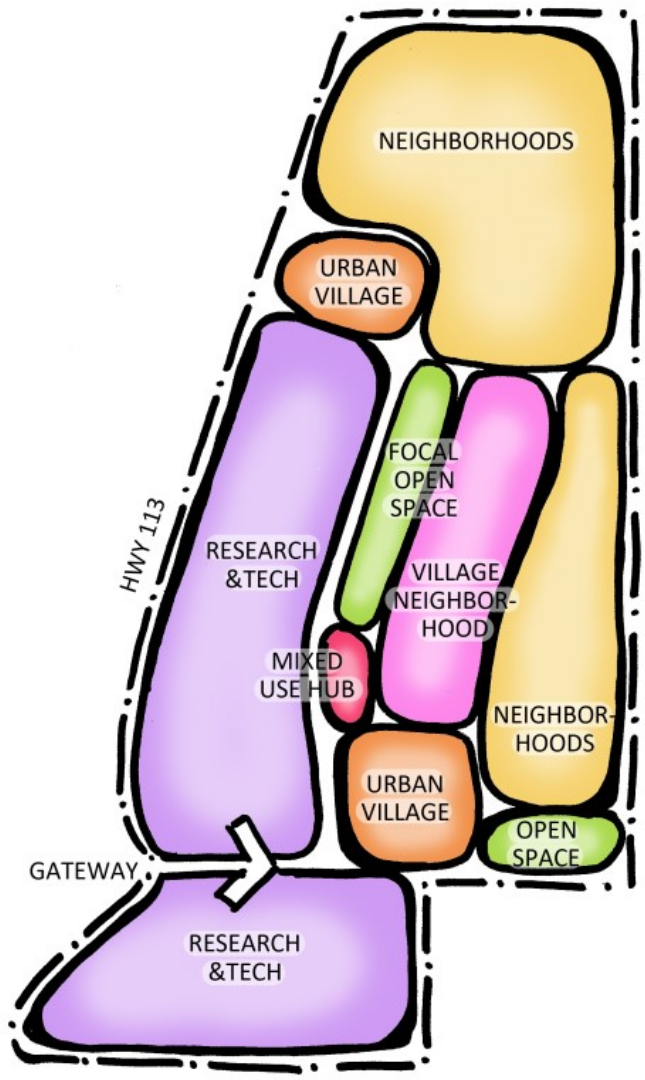


EXHIBIT 1-1: VISION CONCEPT DIAGRAM

This Specific Plan provides the physical and policy framework to implement the vision and serves as a guide for the intentional development of the Plan Area.

More detail on the land use plan and districts is provided in Chapter 2.

TECHNOLOGY PARK

Envisioned as a state-of-the-art technology hub specializing in emerging agricultural technologies and related research in energy, transportation and environmental sciences, the 120 acre research and technology campus will be a place of collaboration and exchange within a campus-like setting. Diverse public and private entities interested in collaborative innovation will be drawn to the unique setting provided in the Plan Area, a place where diverse business, job training, and new products, technologies and innovation can take root.

VILLAGE CENTER

The 45 acre Village Center is envisioned as the heart of the Plan Area, serving as the essential "third place" for residents, workers and employers. Outdoor retail displays, restaurant patios and sidewalk cafés will spill out on to open-air hardscape plazas. An 11-acre park "The Yard" framed by mid-rise townhomes and urban-style lofts will offer Tech Park employees, residents and the community a space to recreate, relax, and connect outside of home and work, steps from adjacent residential neighborhoods and less than a block from work.

THE VILLAGES

The 135 acre Village District provides diverse, high quality and attractive new neighborhoods and housing options, which will allow employees to live and work close by and move up and/or "age in place" within the same neighborhood. The Villages also serve to provide a seamless transition to the adjacent Spring Lake neighborhoods.

1.3 | EPICENTER OF AGRICULTURE & INNOVATION

The City of Woodland is at the epicenter of one of the most productive agricultural regions in the world. Woodland's ideal climate, rich soil, and reliable water supply support a wide variety of crops that sustain a diverse portfolio of businesses. It is home to all facets of the food system from local farms and food processors to seed research and agricultural technology companies.

190 COMPANIES & COUNTING

SEED RESEARCH AND AG TECH
FOOD PRODUCERS AND PROCESSORS
INDUSTRY SUPPORT AND DISTRIBUTION
MARKETS AND RETAILERS

1.3.1 Regional Proximity

Woodland is part of the Greater Sacramento Region, which is home to the capital of the 6th largest economy in the world and part of a larger mega-region that is economically linked to the Bay Area technology hubs, including San Francisco, the Silicon Valley, and the I-680 corridor.

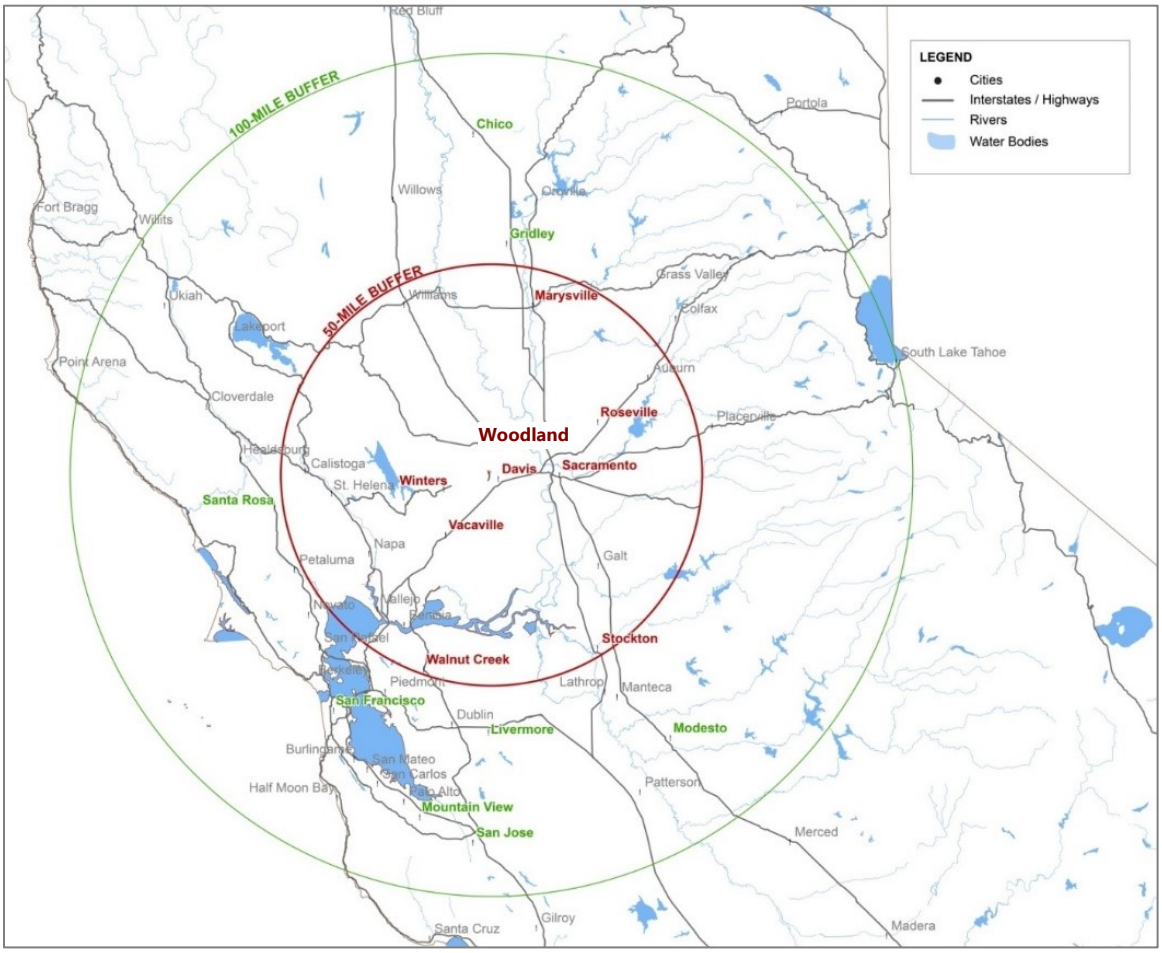


EXHIBIT 1-2: LOCAL REGION PROXIMITY

Woodland is located in the heart of the California Central Valley and at the confluence of abundant natural resources, major interstate highways, an inland port, and international airport. Moreover, one of Woodland's greatest attributes is its proximity to the University of California Davis, a university on the leading edge of research and innovation, affording connectivity to university resources, facilities, faculty, and students. The Plan Area is just seven miles (ten-minutes by ride share or shuttle) from the UC Davis main campus. In addition to UC Davis, nearby universities of Sacramento State, Chico State, UC Berkeley and Stanford generate a continuous stream of talented graduates across all fields of scientific and engineering disciplines.

1.3.2 The Food Front

Launched in 2017, The Food Front initiative brought Woodland's story as the center point of food and agricultural responsibility, to the forefront. The City of Woodland has historically been economically and socially fortified by the fertility of its surrounding farmlands.

Connecting growers, food producers and researchers, The Food Front recognizes the important role Woodland plays in agricultural and food responsibility and seeks to strengthen Woodland's leadership capacity in this realm through continued investment in forward-thinking projects and ideas that will improve how food is grown, harvested, processed and enjoyed.

The Plan Area will provide opportunities to expand on existing initiatives such as Seed Central, AgStart, and The Vine, solidifying Woodland's role as a key place for industry and academia to collaborate in to solve challenges of producing more, healthier food with less impact on natural resources.

1.3.3 Balanced Community- Work, Play, Live

The design framework of the Plan Area is intended to create a place that is authentic, socially engaging and that provides a diversity of experiences within a half-mile radius of the plan's featured 11-acre linear park. The Woodland Research and Technology Park will offer a collaborative business environment with supporting research and development in a setting that encourages innovation and entrepreneurship.

The Woodland Research & Technology Park will offer a collaborative business environment with supporting research and development in a setting that encourages innovation and entrepreneurship.

As a new employment center community, the Plan Area includes a range of housing options within close proximity to jobs and a commercial mixed-use Village Center, focused around a linear park. A multi-modal street network and bike-pedestrian trail system connects the entire Plan Area internally and to adjacent uses, including the neighboring Spring Lake residential community. Employees will be able to walk or bike to and from work and to outdoor recreation, retail and food/café venues, making the Plan Area an attractive place to live, recreate, shop and gather.

Technology Park, Road B & The Yard – Artist Rendering

1.3.4 Local Talent

The Plan Area is well positioned to retain and attract professionals in science and technology related fields to live in Woodland, including within the Plan Area. An increasing number of faculty and executive staff from UC Davis choose to reside in Woodland. Local employment training and workforce development opportunities through partnerships with the Woodland Community College, the Woodland Unified School District and UC Davis, are preparing local talent with the skills needed to support the demands of the technology sector, ensuring a steady and reliable employment base. The Plan Area will provide opportunities to connect industry with established programs, create new collaborations to teach needed skills and inspire Woodland's youth to pursue careers in a wide range of STEM and applied technology fields.

"Greater Sacramento is where innovators are revolutionizing agricultural technology. The region combines agricultural abundance from farmers to processors, highly skilled science and tech talent and the #1 agricultural sciences university in the nation – UC Davis."

Greater Sacramento Economic Council

308K STUDENTS ENROLLED IN A 4 YEAR UNIVERSITY WITHIN 90 MILES

Greater Sacramento Economic Council

1.3.5 Sustainability

The Woodland Research and Technology Park will serve as a leader in eco-innovation and sustainability. Plan Area development will employ sustainable design principles, minimizing impacts of the project on the environment. Sustainable building design, the use of low impact materials and construction techniques, on site water management and planning features that reduce commute trips and vehicle miles traveled will carry through the plan to help ensure the long-term health of the community and the environment.

It is anticipated that progressive companies and businesses locating within the Plan Area will take these efforts to the next level, incorporating sustainability practices in day to day operations through the integration of clean and renewable energy, sustainable sourcing, use of recycled materials and minimization of hazardous chemicals, waste management, green packaging, attention to a sustainable product life cycle, and through the development of energy-efficient "green" products.

The Plan Area, through development policies and standards, will play an important role in furthering the city's greenhouse gas (GHG) reduction goals. It is the goal of the Plan to strive for zero net energy consumption as outlined in the City's 2035 Climate Action Plan. The City's Climate Action Plan provides strategies and tools for addressing GHG emissions from development and aim to reduce Woodland's GHGs by 2020 and 2035 consistent with the State of California's own targets.

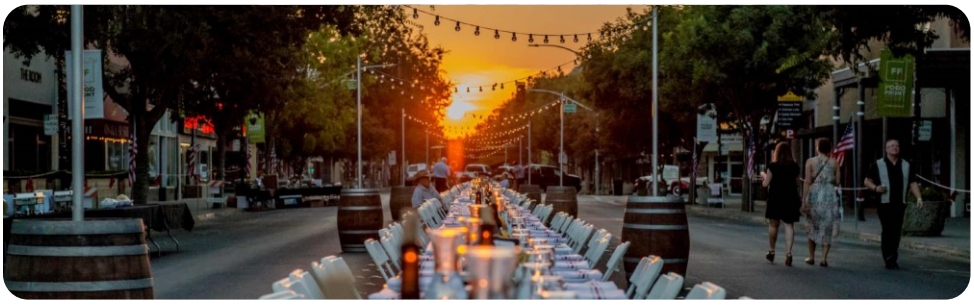
Specific policies and development standards outlined in Chapters 2 and 3 address the sustainability requirements and implementation.

It is the goal of the Plan to strive for zero net energy consumption as outlined in the City's 2035 Climate Action Plan.

1.4 | BUILDING ON LOCAL ASSETS

The Plan Area will provide an attractive place for residents and employees to live, recreate, shop and gather for neighborhood events, while also enjoying the amenities and opportunities a City rich in history, entertainment and community pride has to offer, including the resurgence of its Historic Downtown Main Street.

It is Woodland's rich heritage and small town charm that continue to attract people to the city and the reason so many families have stayed for generations.



Annual Dinner on Main Event

VIBRANT DOWNTOWN

Woodland has experienced a resurgence of investment and planned growth. In particular, Woodland's Historic Downtown has seen many of its historic buildings renovated and given new life. High end home décor and clothing boutiques dot Downtown's "Fabulous First Street," while hip new restaurants representing a variety of tastes stretch from one end of Main Street to the other. The City's *First Friday Art Walk* and *Thursday Night Live at the Plaza* concert series, as well as its annual festivals and holiday events draw thousands to Main Street throughout the year. Woodland's Annual California Honey Festival, spanning five blocks of downtown, draws 30,000 attendees from across the state.

Woodland's 3rd Annual California Honey Festival, spanning five blocks of Main Street, drew over 30,000 attendees from across the state and country in 2019.

Historic and New Neighborhoods

In addition to its historic downtown, Woodland boasts two honorary historic residential districts. Over 20 historic architectural styles are represented, dating from the 1870's to the 1950's and 60's. Spring Lake, located immediately east of the Plan Area, is a master planned community of 4,000 residential homes. Spring Lake carried the traditional neighborhood feel of Woodland's historic districts, through gridded and well connected streets, a mix of residential housing types and interconnected Class 1 bike trails and parks.

The Gable Mansion, built in 1885, is a California Historical Landmark

Prime Location

When it's time to get away, Woodlanders have access to sea or snow within one hour in either direction, east or west. Lake Tahoe, San Francisco and the Napa Valley are all within a two-hour drive. Sacramento, the State's Capital, is located 20 minutes to the east as well as the Golden One Arena where the NBA Kings call home. The Sacramento International Airport is an easy 10-minute drive or ride share from the city.

Velocity Island Wakeboard Park

For those desiring to stay closer to home, the Velocity Island Wake Board Park located in north Woodland, is a great place to cool off during the summer. Other's may choose to explore the Yolo countryside, Dunnigan Hills (an American Viticultural Area, "AVA"), or Capay Valley - the birthplace of the organic food movement, and taste the bounty of fresh, locally grown / made products or simply marvel at the ever-changing agricultural landscape.

1.5 | SPECIFIC PLAN GUIDING PRINCIPLES

In May 2017, the City of Woodland adopted a comprehensive update to its General Plan, setting the stage for future growth and development within its Urban Limit Line (ULL) through the year 2035. A key focus of the General Plan is economic development and job growth. The Plan Area is specifically envisioned within the General Plan as a natural extension of the city, ideally located and positioned for jobs and housing development.

The 2035 General Plan designates the Plan Area as a New Growth Area, SP-1A. Policy 2.L.2 provides further guidance for the Plan Area:

> *"Promote development of SP-1A as a mixed-use residential district anchored by a research and technology business park in the Southern Gateway area at CR 25A and SR 113. Concentrate the highest intensity of development within and in close proximity to the business park area, with lower density, largely residential uses to the north. Encourage sustainable development through the use of renewable energy sources and water conservation tools with the goal of striving to achieve zero net energy at the building and neighborhood level to the extent feasible."*

Based on the guidance provided by the Woodland General Plan and the desired vision of a state of the art technology hub with sustained economic growth and competiveness in today's global, knowledge based economy, the following Guiding Principles provide the envisioned outcome and overarching vision for development within the Plan Area.

1. INNOVATION

The Plan Area will develop as a state-of-the-art innovation center campus for technology, research and development, and office uses. Flexibility in design and implementation is supported, allowing businesses to respond to market demand through phasing of construction and the ability to offer a variety of building types and sizes. Complementary uses within immediate proximity to the business park, including hotel, commercial, employee-serving retail and recreational opportunities will support day–to-day needs of businesses, their clients and their employees.

2. TECHNOLOGY CAPTURE/ TALENT RETENTION

Collaboration with UC Davis, Woodland Community College and others will bolster start-up businesses and growing mid-to-large size companies through technology transfer and IP sourcing. The Plan will accommodate advanced technology-related jobs and training that allow a greater number of Woodland residents and college graduates from the Woodland Community College and throughout the region to live and work in the community, generating an infusion of intellectual capital.

3. BUSINESS PARTNERSHIPS

Companies locating in the Tech Campus will have the opportunity to take positive advantage of the existing and thriving seed, food, and agricultural-based industries currently located and doing business in and around Woodland. Access to additional resources and new markets, new ideas, materials and expertise will grow through strategic partnerships with new and existing businesses in Woodland.

4. SUSTAINABLE AND RESILIENT

The Plan Area will lead in energy efficiency and sustainable design. Development within the Plan Area will incorporate cutting edge green building practices. Land use strategies and transportation demand management will reduce vehicle miles traveled and facilitate the use of alternative fuel vehicles. The city's urban forest canopy will be increased and projects will incorporate naturalized stormwater management. These and other measures will contribute to meeting City goals for greenhouse gas reduction by 2035 contained in its 2035 Climate Action Plan.

5. GATHERING PLACE

A successful Village Center and featured 11-acre linear park will provide a mix of social gathering spaces for employees, residents, and visitors to connect, recreate, and relax. These informal networking opportunities will foster greater innovation and engagement among the workforce and allow for the balanced integration of work and life that the next generation of professionals seek.

6. CONNECTIVITY/MOBILITY

A combination of well-designed complete streets, protected bicycle lanes, and pedestrian / bicycle greenways will prioritize the pedestrian experience throughout the Plan Area. Well-connected parks, open spaces and greenbelts will encourage residents and employees to walk, bike, or scooter rather than drive to work, home and play. Existing bike trails and greenbelts will extend from and connect to the adjacent community including nearby schools, community center and shopping center. A shared mobility hub will serve as a point of connection for those arriving and departing the Tech Campus by various forms of alternative transportation – including micro transit stops and fixed bus routes with frequent service to Downtown Woodland and UC Davis. Amenities to support last mile active transportation alternatives are featured, including bike and scooter share services.

7. HEALTHY COMMUNITY

Connected streets with bicycle and pedestrian facilities, trails, accessible parks and open spaces with passive and programmed recreation will facilitate and encourage active, healthy living. Access to healthy foods through community gardens, a farmer's market and/or fresh produce market in the Village Center will be promoted. A mix of social gathering places will enable employees and residents to come together for fun and relaxation, boosting emotional wellness.

8. NEW NEIGHBORHOODS/SEAMLESS TRANSITIONS

Diverse, high quality and attractive new neighborhoods and housing options, including single and multi-family residential units and mixed-used projects will allow Tech Park employees to live and work close by and "move up" within the same neighborhood as families grow or nests are emptied. Land use and circulation planning, coupled with design and development standards will ensure a thoughtful transition between the Plan Area and the adjacent Spring Lake neighborhood, complementing the established community.

1.6 | PLAN AREA CONTEXT AND CHARACTERISTICS

1.6.1 Plan Area Location

Exhibit 1-3 shows the location of the Specific Plan. The Plan Area is bound on the north and east by the Spring Lake Specific Plan Area, a 4,000-unit residential community. It is bound on the south by CR 25A and the City's Urban Limit Line (ULL) and on the west by State Route 113 (SR 113). The Specific Plan Area consists of approximately 350 acres that are located just outside of the Woodland city limits but within the ULL.

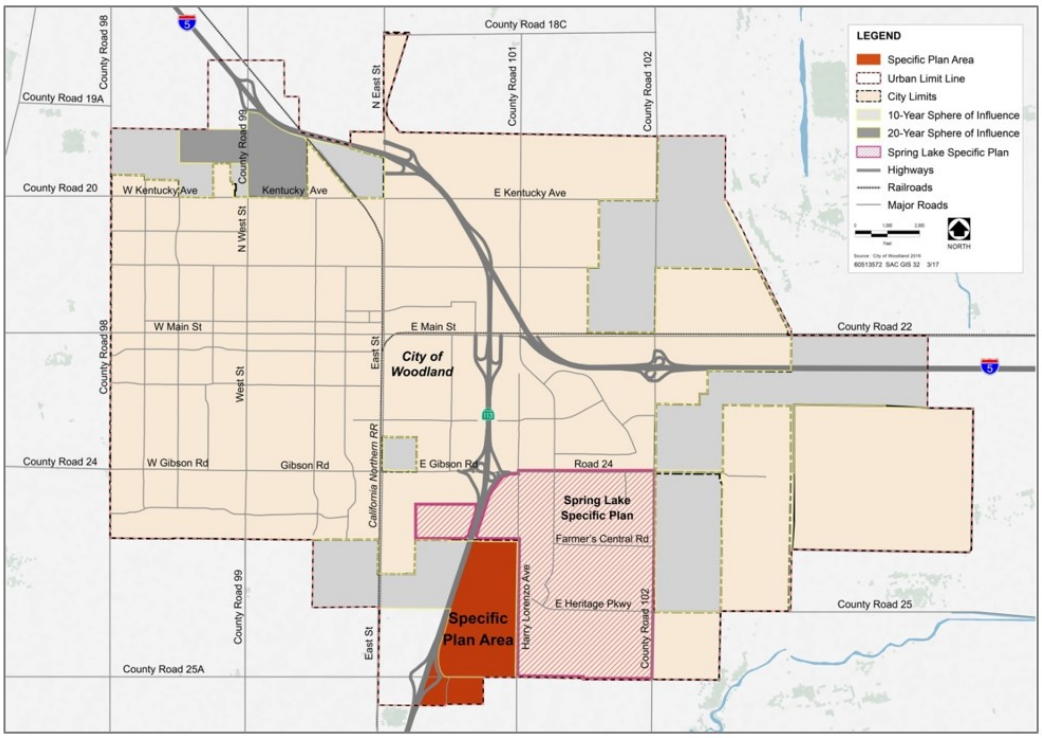


EXHIBIT 1-3: PLAN AREA LOCATION

1.6.2 Pre-Specific Plan Site Conditions

The Plan Area is visible from the SR 113 and is characterized by relatively flat actively farmed agricultural land, with one house and one barn located along County Road (CR) 25A. Lands within and adjacent to the Plan area are classified as Prime Farmland, as determined by the Farmland Mapping and Monitoring Program (FMMP), California Department of Conservation. Pre-Specific Plan access to the Plan area was from Gibson Road to the north and from the CR 25A interchange, via Harry Lorenzo Avenue (portions of which are unimproved). No natural streams, waterways or agricultural drainage canals exist in the Plan Area. Several existing trees in the Plan Area occur mainly adjacent to existing roadways. Existing utility poles, with overhead power lines, are located along SR 113 and Harry Lorenzo Avenue.

1.6.3 Surrounding Uses

The Plan Area is located and surrounded by agricultural land to the south, SR 113 and agricultural land to the west, and urban development within Spring Lake on the north and east. A sports park and the Woodland Community and Senior Center are located within one-half mile west of the northern boundary of the Plan area, from Sports Park Drive.

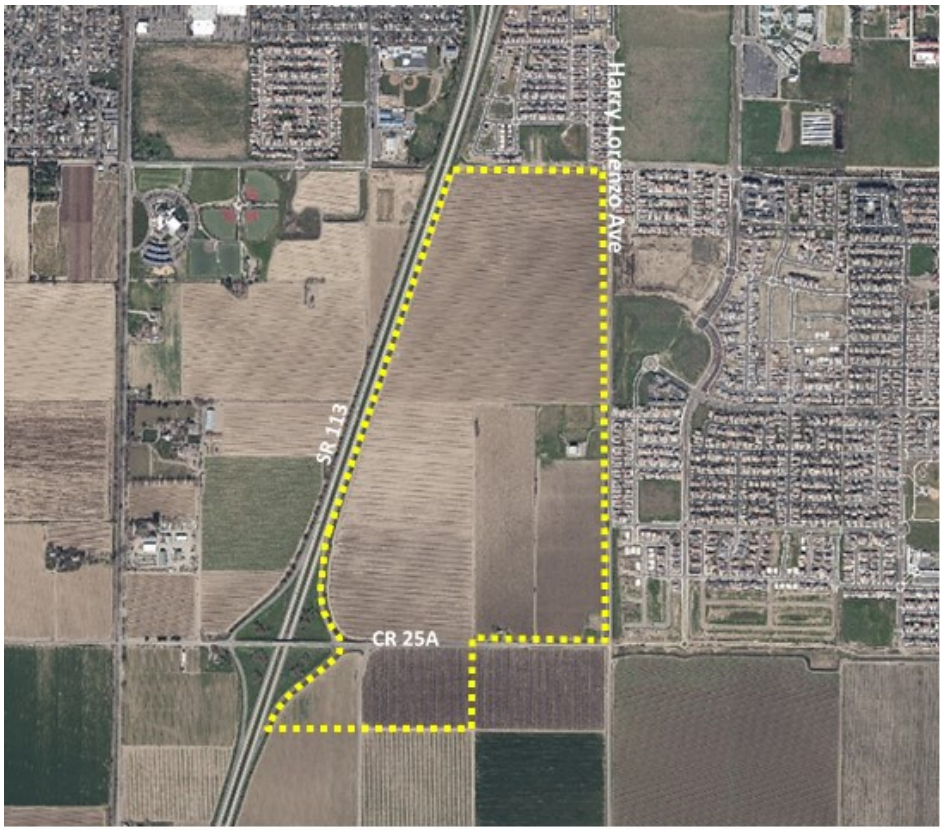


EXHIBIT 1-4: AERIAL PHOTO OF PLAN AREA AND SURROUNDINGS

1.6.4 Adjacent Infrastructure

In anticipation of future development of the Specific Plan, the backbone utility lines in Spring Lake were oversized and stubbed out at the border of the two planning areas, to ensure efficient service to the Plan Area through extension of those backbone utility lines from Spring Lake. Spring Lake's existing and planned bike network was also designed to connect seamlessly with the Plan area and includes a mix of dedicated on-street lanes and off-street paths. Similarly, the Plan Area extends and connects to the bikeways, pedestrian ways and open space corridors within Spring Lake.

1.6.5 General Plan Land Use Designations

The 2035 General Plan designates the Plan Area as one of three subareas in the Specific Plan 1 (SP-1) new growth area, located in the southern part of the City. The Plan Area is classified as Specific Plan (SP-1A) in the General Plan Land Use Diagram, as shown in Exhibit 1.3.

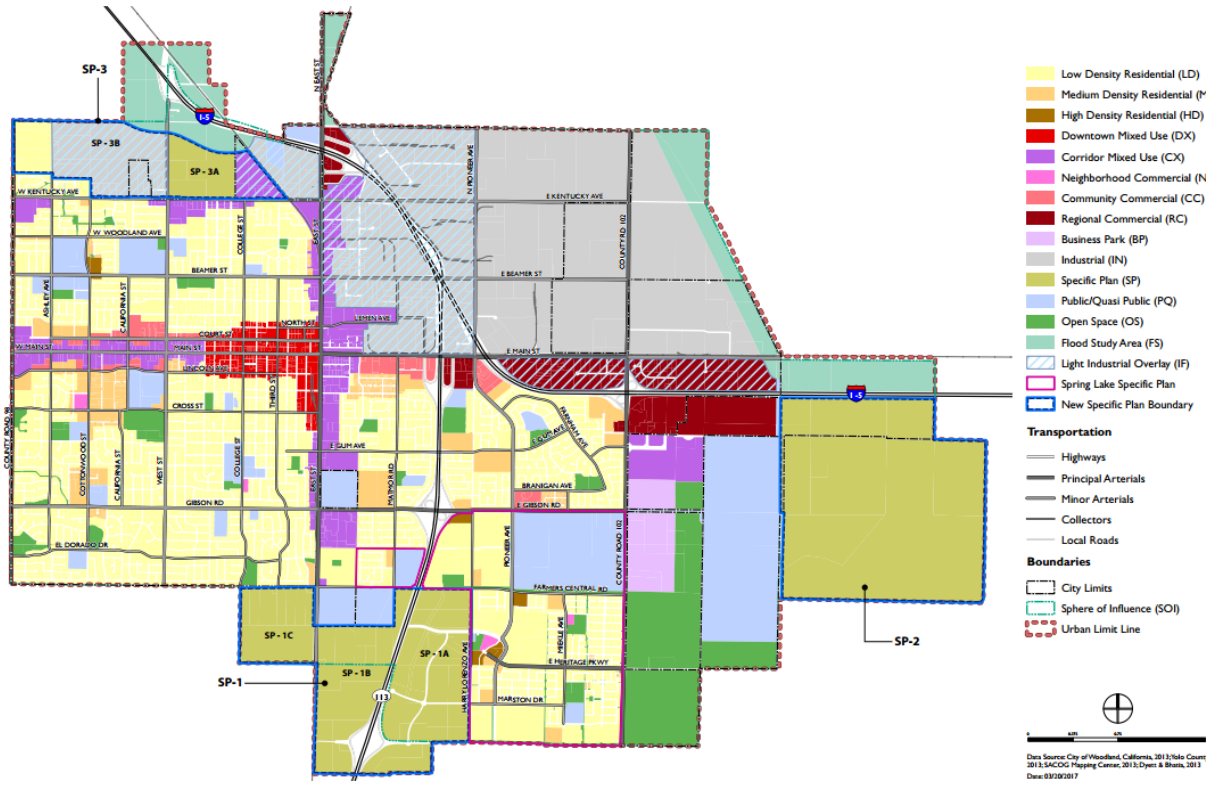


EXHIBIT 1-5: GENERAL PLAN LAND USE DESIGNATIONS

1.7 | PURPOSE AND ORGANIZATION OF SPECIFIC PLAN

The Specific Plan is intended to guide the orderly growth and development of the Plan Area. Under California Government Code, sections 65450 through 65457, and the State General Plan Guidelines prepared by the Office of Planning and Research, a specific plan may be used to implement a general plan and its policies/programs.

Another purpose of the Specific Plan is to exempt from further CEQA review, or limit the scope of subsequent CEQA review, projects undertaken to implement the Plan. Government Code section 65457 provides a CEQA statutory exemption for any residential development project or zone change that is undertaken to implement and is consistent with a specific plan for which an EIR has been certified. In addition, Public Resources Code (Section 21155.4(a)(2)) exempts from

subsequent CEQA review, residential, mixed-use, and employment center/office projects (with floor area ratios of 0.75 or greater) that are consistent with an adopted Specific Plan.

California Government Section 65451(a) defines the following content requirements for specific plans, consisting of text and diagram(s), which specify all of the following:

- The distribution, location, and extent of all land uses, including open space, within the area covered by the Specific Plan (Chapters 1, 2 and 5).
- The proposed distribution, location, extent, and intensity of major components of public and private transportation, sewage, water, drainage, solid waste disposal, energy, and other essential facilities proposed to be located within the area covered by the plan and needed to support the land uses described in the plan (Chapters 4 and 5).
- Standards and criteria by which development will proceed and standards for the conservation, development, and utilization of natural resources, where applicable (Chapters 2, 3 and 6).
- A program of implementation measures, including regulations, programs, public works projects and financing measures necessary to carry out paragraphs 1, 2, and 3 (Chapter 6).

1.8 | RELATED DOCUMENTS

A specific plan works in conjunction with other regulatory documents to implement the development process. The following section provides a brief description of these related documents. Chapter 7, Administration, provides more detail on the functions of these documents.

1. GENERAL PLAN

The California Government Code requires that Specific Plans be consistent with the local jurisdiction's adopted General Plan. The General Plan is a statement of the community's land use values and is the underlying basis for its vision and direction. An analysis of the consistency of the Specific Plan with applicable General Plan policies and actions is provided in the EIR.

2. WOODLAND ZONING CODE

The Specific Plan includes Development Standards and Design Guidelines, which are adopted into Ordinance (Zoning Code Title , Chapter , Article__) These regulations shall govern development, improvements and construction within the Plan Area.

3. IMPROVEMENT STANDARDS

The Improvement Standards establish basic standards and detail sheets for construction of public infrastructure. These standards and specifications apply to all construction within

the Plan Area, unless otherwise addressed herein. To the extent that a component or regulation of the Specific Plan differs from a requirement of the Standards, the Specific Plan will take precedence. Where the Specific Plan is silent, the Standards will be used for purposes of interpretation, and/or directly applied as appropriate.

4. ENVIRONMENTAL IMPACT REPORT

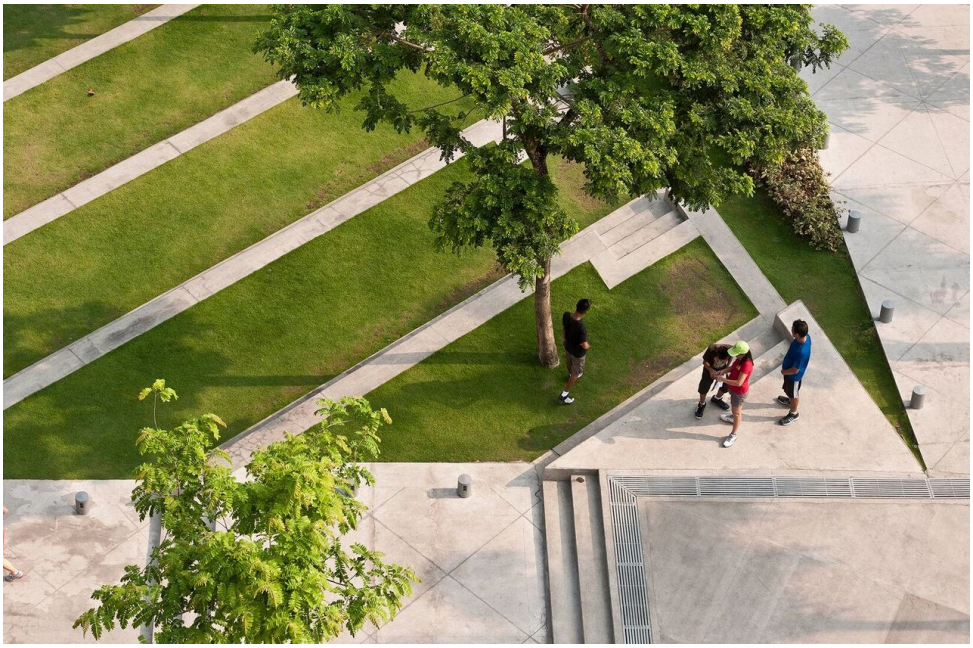
The City of Woodland was the lead agency in the preparation and certification of an Environmental Impact Report (EIR), pursuant to the California Environmental Quality Act (CEQA). The EIR for the WRTP Specific Plan (State Clearinghouse Number #2017062042) examines the environmental impacts of the proposed plan and identifies potential changes in the environment that would result from implementation of the plan. CEQA Guidelines (Title 14, California Code of Regulations) Section 15183 provides that projects consistent with development density, zoning, community planning, and the general plan for which an EIR was certified do not trigger a new environmental review unless there are new impacts that have not already been properly addressed. Section 65457(a) of the California Government Code and CEQA Guidelines Section 15182(a) provide that no EIR or negative declaration is required for any residential project undertaken in conformity with an adopted Specific Plan for which an EIR has been certified.

The EIR for the Specific Plan is intended to qualify subsequent projects within the Plan Area for these exemptions, assuming those projects are consistent with the adopted Specific Plan, and fulfill all applicable conditions and CEQA mitigation measures.

1.9 | PROPOSED ENTITLEMENTS

The Specific Plan and related documents were approved by the City of Woodland as part of the entitlement process. These entitlements included certification of the EIR, adoption of the Specific Plan, approval of a General Plan Amendment, and Pre-Zoning of the Plan. In addition to the above listed entitlements, separate annexation requests to Yolo County Local Agency Formation Commission (LAFCo) are required prior to the processing of individual developments. Individual development projects are subject to review and approval of subsequent permits and entitlements by the City of Woodland, other local, State and Federal agencies. Chapter 7, Administration, provides more detail on the Specific Plan Administration processes.

2.0 | LAND USE FRAMEWORK



2.1 | A FRAMEWORK FOR INNOVATION

The Woodland Research and Technology Park Specific Plan lays the framework for a place-based technology center that will accelerate the exchange of ideas between innovative companies and global research institutions. The convergence of land use types that link progressive work environments with a diversity of housing, retail and recreational opportunities sets the Plan Area apart from other traditional business parks and research centers. The development framework of the Plan Area seeks to capture the energy and excitement embodied within an energetic, urbanized setting while maintaining a feeling and appreciation for the small town charm and rural character that forms the foundation and heart of the Woodland community.

The convergence of land use types that link progressive work environments with a diversity of housing, retail and recreational opportunities sets the Plan Area apart from other traditional business parks and research centers.

The Plan Area consists of 350 acres poised for development of 2.2 million square feet of office, commercial and research/technology space, approximately 1,600 residential housing units and 21 acres of parks and open space, network trails and greenbelts. Approximately 5,000 jobs are anticipated at build-out. The Plan Area will bring new jobs to the City while reducing vehicle use and resultant emissions by providing an employment center and daily amenities within steps of attractive and diverse housing options.

This chapter outlines the Specific Plan Policies, which are used to guide subsequent sections of the Specific Plan including land use, circulation, sustainability and implementation. The Land Use Plan and Land Use Summary are provided in Section 2.3. The Land Use Plan is the "blueprint" of the community, which evolved from the vision, the application of applicable General Plan policies and in response to the opportunities and constraints of the site. The chapter concludes with the Districts, which provide the framework of the Land Use Plan and highlight the unique features that make up the Plan Area community.

350 ACRE PROJECT AREA

±2.2M SF RESEARCH/TECH

±1600 RESIDENTIAL UNITS

21ACRES PARK/OPEN SPACE

5,000+ JOBS

Birdseye view looking north- artist rendering

Multi- Use Trails And Paths **5 Miles**

Dedicated On-Street Bike Lanes **3.5 Miles**

Linear Park & Greenbelts **17.6 acres**

2.2| SPECIFIC PLAN POLICIES

Policies for the development of the Plan Area are derived from the Guiding Principles outlined in Chapter 1.5. Several policies closely mirror those adopted in May 2017 as part of the General Plan 2035 update (as indicated in parentheses), while others are specifically crafted to implement the vision of the Plan Area.

The following land use, design, sustainability, open space, streetscape and mobility, and economic development policies help to define and implement the land use framework outlined in Section 2.4 of this chapter.

2.2.1 Land Use

1. **Epicenter of Food and Agriculture.** Promote the development of the Plan Area as a premier food and agriculture industry hub by providing appropriate infrastructure, adequate land with compatible land uses and by supporting research and innovation. (Policy 2.D.2)

2. **Atmosphere of Collaboration.** Promote an atmosphere of collaboration and innovation by designating an appropriate mix of land uses, building types and formats with an engaging public realm.

3. **Active Ground Floor Uses.** Facilitate the opportunity for active commercial and ground floor uses such as meeting rooms, exhibition and maker-spaces, cafés, fitness studios within the RTP/Transitional Overlay zone fronting Road B. Provide architectural design and streetscape standards and guidelines that help frame the public realm as an inviting urban, walkable environment.

4. **Flexibility within Development Standards Framework.** Include flexible zoning, site and development standards that will allow companies and businesses within the Plan Area to easily adapt to changing market demands and to grow and evolve over time.

5. **Housing Mix.** Design neighborhoods to include a mix of housing types at a range of densities and affordability levels that accommodate residents at all stages of life. Residential uses must achieve an overall minimum average density of eight dwelling units per gross acre across the Plan Area.

6. **Variety and Quality.** Ensure that residential development provides variability and quality design to distinguish individual homes from one another and create identifiable neighborhoods. (Policy 2.M.8)

2.2.2 Design

1. **Compact Form.** The Land Use Plan shall promote compact development patterns, mixed land use, and higher-development intensities that conserve land resources, reduce vehicle trips, improve air quality, and facilitate walking, bicycling, and transit use. (Policy 2.C.1)

2. **View Corridors** Create attractive view corridors that frame the streets with distinctive buildings, trees, and other landscaping complemented by well-designed and integrated signage. At community entry points, provide a clear, physical sense of arrival into the community. (Policy 2.E.5)

3. **Building Facades.** Encourage a mix of building patterns, frontages, ground floor transparency, and the use of horizontal and vertical building articulation to break up building mass, create visual interest and design to activate street level frontages. (Policy 2.E.6/2.I.1)

4. **Transition Areas.** Promote the sensitive design of transition areas between different land uses in order to ensure compatibility, and encourage a gradual and compatible shift in scale between different densities an intensities of various uses. (Policy 2.E.3)

2.2.3 Sustainability

1. **Consistency with the Climate Action Plan** Ensure new development is consistent with the objective and targets of the City's Climate Action Plan with the goal of striving to achieve zero net energy at the building and neighborhood level. (Policy 2.C.2/2.L.2)

2. **Resource Efficiency.** Encourage and incentivize building construction that consumes less energy, water, and other resources; allows natural ventilation; uses daylight effectively; reduces stormwater runoff; and facilitates the use of clean energy whenever possible. Use trees for cooling, energy conservation and to improve air quality. (Policy 2.C.4)

3. **Electric/Alternative Fuel Vehicle Parking**. Parking facilities in non-residential zones shall provide for alternative fueling and electric vehicle charging. Residential development shall provide EV-capable facilities in all garages and parking lots. (Policy 3.H.7)

4. **Agricultural Interface.** Where development within the Plan Area occurs at the edge of the Urban Limit Line adjacent to agricultural land, a buffer of 150-feet shall be incorporated, where feasible, to minimize potential incompatibilities of the adjoining uses. (Policy 7.C.4/7.C.5)

5. **Agricultural Uses**. Where agricultural activity exists within the Plan Area boundary, the agricultural uses shall be permitted to continue until urban development occurs on the active agricultural properties. (Policy 7.C.2)

2.2.4 Open Space

1. **Greenbelt/Trail System.** Extend and integrate a greenbelt/trail system that provides recreational and transportation benefits for residents and employees of the Plan Area. (Policy 2.M.4)

2. **Public Gathering Space.** Provide interesting public gathering spaces and corridors including small public plazas, courtyards, pocket parks and paseos within the North and South Campus and the Village Center to provide opportunities for social interaction within the built environment.

3. **Private Open Space.** Provide private open space as part of large residential, commercial or mixed-use development projects.

2.2.5 Streetscape and Mobility

1. **Bike and Pedestrian-Orientation.** Create walkable, pedestrian-scaled blocks that feature sidewalks and bikeways that are safe, comfortable, and inviting. Encourage site design for mixed use zones to minimize driveway, curb cuts and parking visibility. (Policy 2.E.4/2.I.1)

2. **Green Streets.** Provide continuous shade trees along key corridors, integrate low-impact development (LID) drainage facilities to manage stormwater runoff within the public right-of-way, and include Class I or Class II bike facilities where possible. (Policy 2.I.3)

3. **Multimodal Access.** Require convenient, attractive and safe pedestrian, bicycle and transit connections throughout the Plan Area Districts. (Policy 2.J.6)

4. **Roundabouts.** Provide landscaped roundabouts as an intersection traffic control option with demonstrated air quality and safety benefits, where deemed feasible and appropriate. (Policy 3.B.9)

5. **Parking.** Shared parking facilities are encouraged throughout the Plan Area and shall be designed to reduce heat island effect, providing for significant landscaping and tree canopy. Onsite parking along/adjacent to street frontages, particularly Road B, is strongly discouraged. (Policy 3.H.2/3.H.3/3.H.6)

6. **Transportation Demand Management (TDM).** Businesses within the Research and Technology Park campus should incorporate Transportation Demand Management (TDM) tools and programs to encourage and create incentives for the use of alternative travel modes and disincentivize single-occupancy vehicle use. (Policy 3.A.5)

7. **Emerging Technologies.** Plan for and accommodate next generation transportation technology and advancements, where feasible, in the Plan Area design and street network. (Policy 3.A.6)

8. **Transit Services.** In coordination with the Yolo County Transportation District and UC Davis, plan and implement transit and express-bus service between the Plan Area and UC Davis campuses that is both sustainable and cost-effective. (Policy 3.G.1/3.G.6)

2.2.6 Economic Development

1. **Business Environment.** Support a welcoming business environment within the Technology Park through streamlined and consistent application of regulatory and permitting procedures and through financially feasible development costs. (Policy 4.A.2)

2. **Emerging Industries.** Provide flexible development regulations and guidelines that allow for efficient adaptation and accommodation of emerging industries and new market opportunities. (Policy 4.C.6)

3. **Agricultural Industry.** Accommodate agriculture-related industries through supportive ag policies and programs including ag-technology accelerators, agricultural processing facilities and through coordination with Yolo County, UC Davis, AgStart and other organizations invested in advancing global innovation in ag and food-tech. (Policy 4.C.9)

4. **Workforce Development.** Provide for educational and workforce training opportunities within the Plan Area through partnerships with employers and business educators, the Woodland Community College and the Woodland Joint Unified School District. (Policy 4.C.15/4.G.5)

2.3 | LAND USE PLAN

The Land Use Plan, shown on Exhibit 2-1, illustrates the arrangement of land uses and the transportation network which provides the backbone of the Land Plan. Table 2.1 provides a detailed summary of the land use designations, acres, dwelling units and square footages allocated on the Land Use Plan and evaluated in the EIR analysis. At build out, the land use plan is estimated to result in approximately 2.2 million square feet of research/technology and commercial land uses, producing approximately 5000 jobs and 1,600 residential dwelling units. The mix of land use types and intensities will provide for a vibrant, sustainable and balanced new community addition which complements and supports the surrounding and planned uses within the City of Woodland.

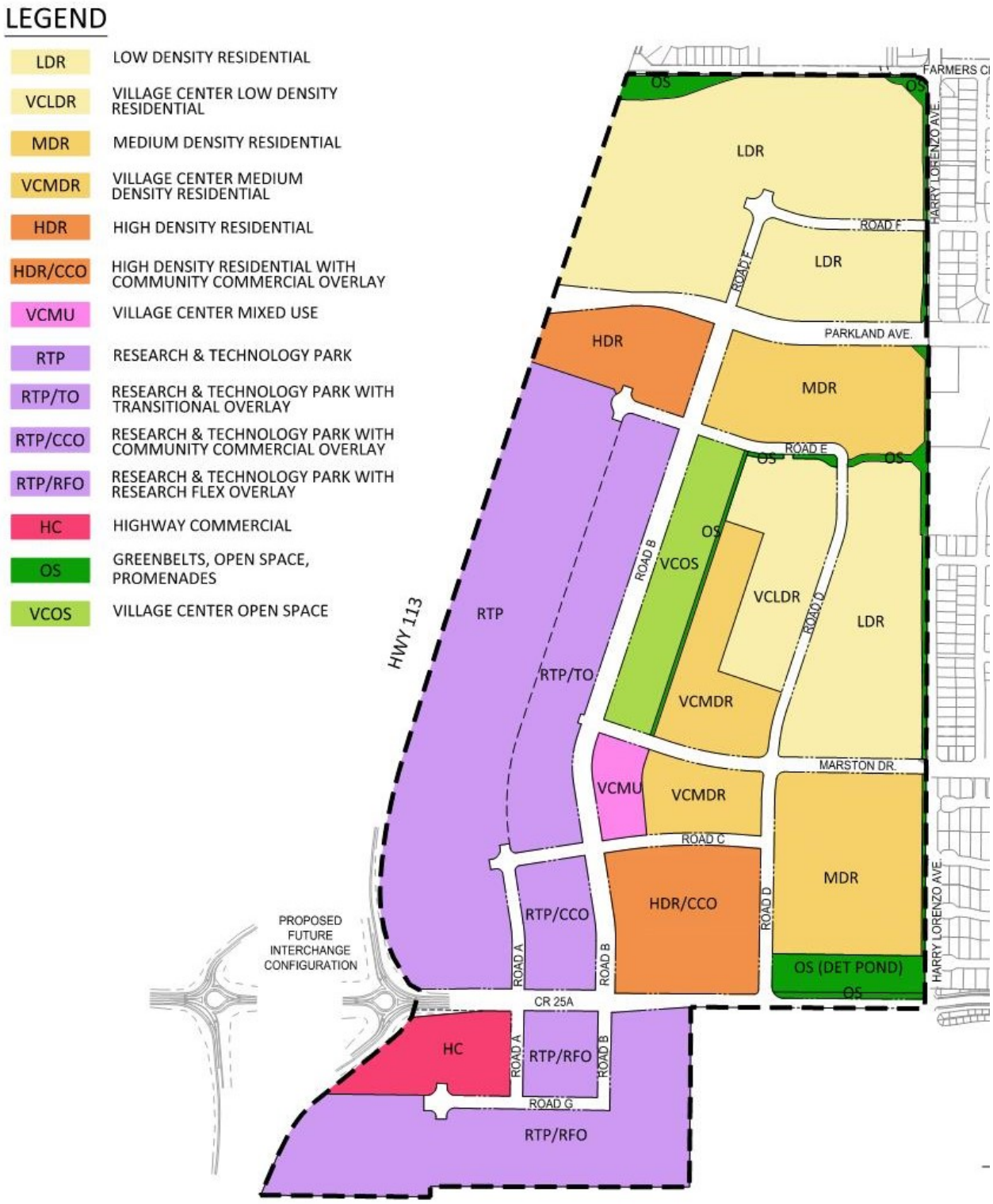


EXHIBIT 2-1: LAND USE PLAN

Table 2.1 Land Use Summary

Land Use Designations	Zones	Gross Acres	Density Range	Floor Area Ratio Range	Estimated Dwelling Units[1]	Estimated Non- Res Square footage[1]
RESIDENTIAL						
Low Density Residential	LDR	74.8	1.0-8.0		500	
Village Center Low Density Residential	VCLDR	13.1	1.0-8.0			
Medium Density Residential	MDR	35.5	8.1-19.9		600	
Village Center Medium Density Residential	VCMDR	16.7	8.1-19.9			
High Density Residential	HDR	9.7	20.0-40.0		500	
High Density Residential/Community Commercial Overlay[2]	HDR-CCO	15.9	20.0-40.0	0.2-2.0		68,000
SUBTOTAL RESIDENTIAL		**165.7**			**1,600**	**68,000**
RETAIL / COMMERICIAL						
Village Center Mixed Use[3]	VCMU	3.5		0.6-4.0		75,000
Highway Commercial	HC	8.2		0.25-2.0		70,000
Subtotal Retail /Commercial		11.7				**145,000**
RESEARCH AND TECHNOLOGY PARK						
Research and Technology Park	RTP	50.3		0.2-2.0		1,955,000
Research and Technology Park/Transitional Overlay	RTP/TO	19.3		0.2-2.0		
Research and Technology Park/ Community Comm. Overlay	RTP/CCO	6.8		0.2-2.0		
Research and Technology Park/ Research Flex Overlay	RTP/RFO	35.9		2.0 max		
Subtotal Research and Technology		**112.3**				**1,955,000**
Subtotal Commercial/RTP		**124.0**				**2,100,000**
PARKS AND OPEN SPACE						
Village Center Open Space (includes Pedestrian Promenade)[4]	VCOS	11.6		0.5		32,000
Open Space	OS	10.2				
Subtotal Parks/OS		**21.8**				**32,000**
RIGHT OF WAY						
Collectors & Arterials	ROW	38.0				
GRAND TOTALS		**349.5**			**1,600**	**2,200,000**

NOTES:

1. Assumed average yields for planning purposes and EIR analysis.
2. 25% (~4.0 Acres) of HDR/CCO Acreage assumed to be developed as Community Commercial
3. Village Center Mixed Use may include residential units not included herein
4. Village Center Open Space allows for 1.5 acres of commercial/retail uses

2.3.1 Introduction of the Land Use Zones

The Land Use Plan identifies the location of the land uses with a zoning designation. In general, the Land Use Plan includes three broad categories of land uses. The Research/Technology Park and Commercial category are the primary employment focused zones. The Residential category is the primary housing zones and the Open Space/Park category includes the open space, parks, recreation and public zones. Chapter 3, Land Use Regulation, Development Standards and Design Guidelines, provides a detailed description of each zone, the allowed density and intensity, the permitted uses and the physical standards such as setbacks, building heights and other development standards.

1. RESEARCH/TECHNOLOGY PARK AND COMMERCIAL ZONES

RTC- Research Technology Park

RTC/TO-Research Technology Park/Transitional Overlay

RTC/CCO-Research Technology Park/Community Commercial Overlay

RTC/RFO-Research Technology Park/Research Flex Overlay

HC-Highway Commercial

VCMU-Village Center Mixed Use

2. RESIDENTIAL ZONES

LDR- Low Density Residential

VCLDR-Village Center Low Density Residential

MDR- Medium Density Residential

VCMDR-Village Center Medium Density Residential

HDR-High Density Residential

HDR/CCO-High Density Residential/Community Commercial Overlay

3. OPEN SPACE/PARK ZONES

VCOS- Village Center Open Space

OS-Greenbelts and Open Space

2.4 | THE DISTRICTS

Districts are used to identify the geographic and form types within the Land Use Plan and embody the overarching theme of work, play, live. The three Planning Districts are the Technology Park, the Village Center and the Villages. Each of the three Districts have sub-districts, as outlined below and described in the following sections. The sub-districts assist in defining desired elements of intensity, scale and form for each sub area. The envisioned form and character of each district is described in the following sections and more detail is provided in Chapter 3, Development Standards and Design Guidelines.

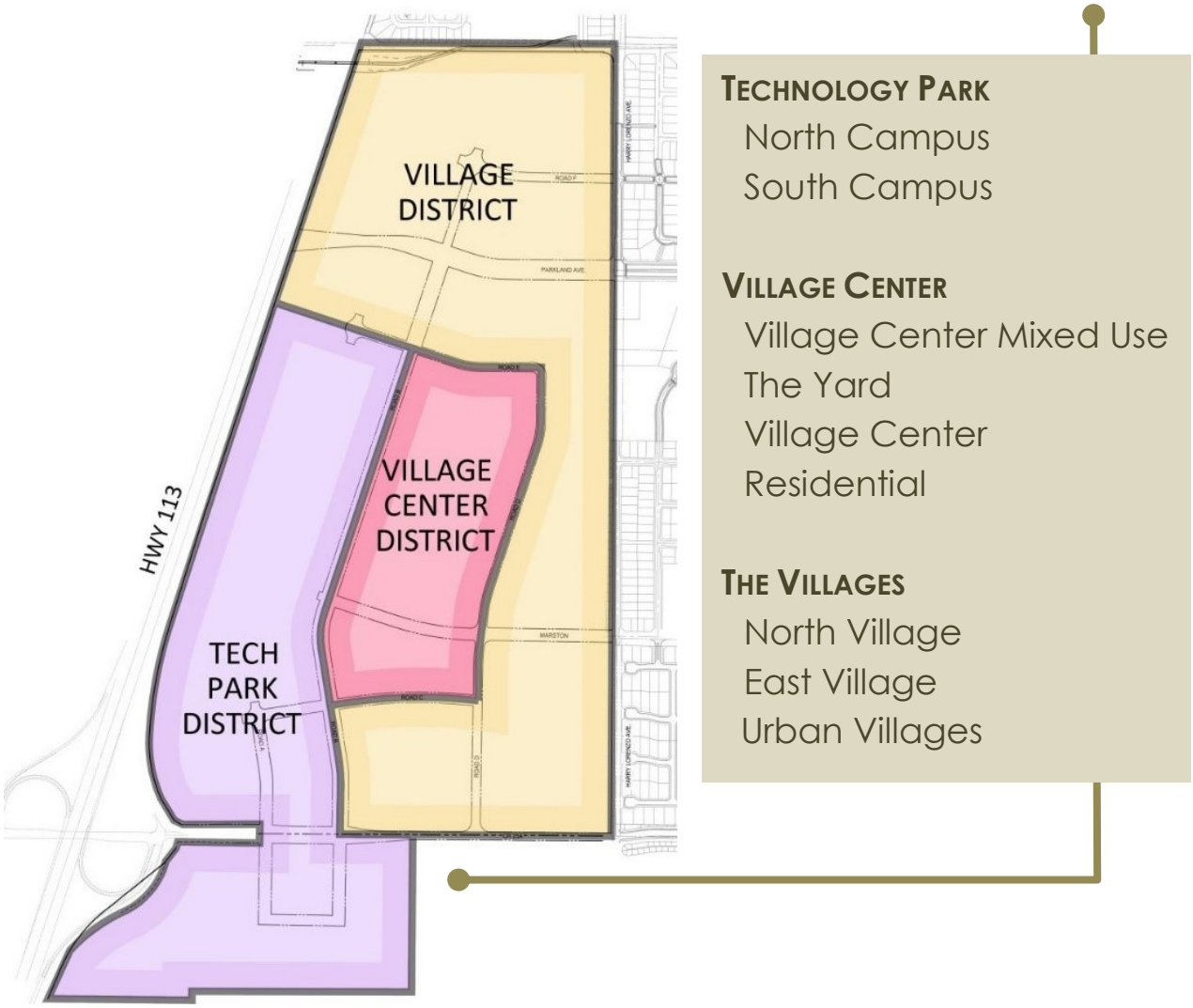
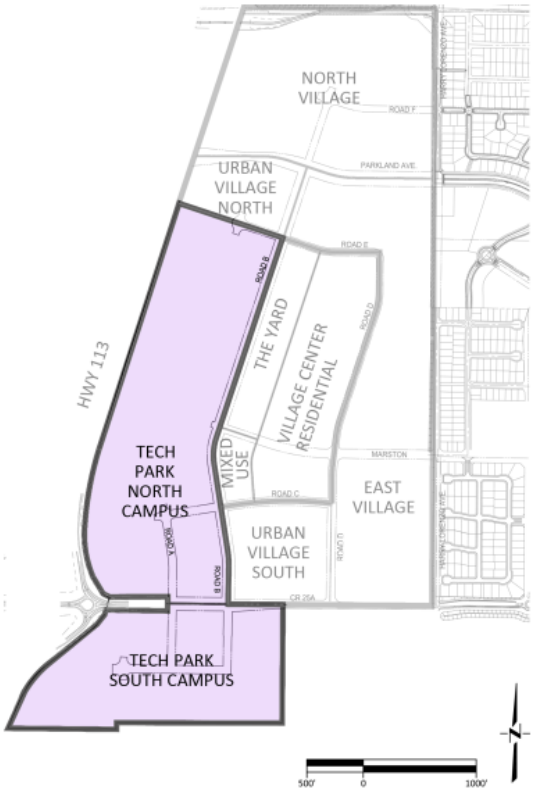


EXHIBIT 2-2: DISTRICTS

WORK ■ LIVE ■ PLAY

2.4.1 Technology Park District



TECHNOLOGY PARK DISTRICT

… North Campus | 76.4 acres

… South Campus | 44.1 acres

TOTAL 120.5 acres

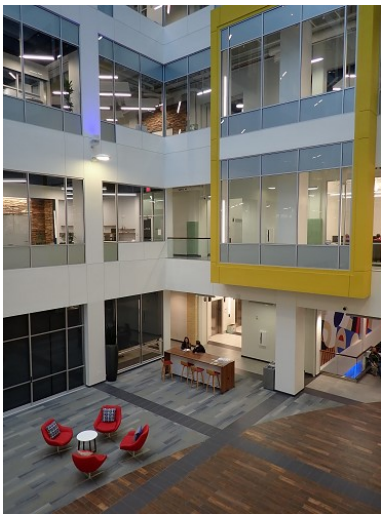
Consisting of a North and South Campus, the Technology Park District will accommodate approximately 2 million square feet of office, research and light industrial "flex" space for a variety of users in a range of sizes and scale. The North Campus, described in detail below, serves as the core business hub for both established and large-scale companies as well as enterprising start-ups and incubator spaces. The South Campus will carry forward this collaborative environment while offering additional opportunity for light manufacturing/industrial flex space and immediate proximity to real-time, field research sites. Sustainability principles will be incorporated throughout the North and South Campus as a key and defining attribute of the Technology Park

District. Energy efficient building design and mobility features that reduce auto dependency will minimize carbon impact with a goal of achieving net-zero energy and safeguarding the long-term health of the environment.

1. NORTH CAMPUS

The North Campus will serve as the primary gateway and innovation hub within the Plan Area. Comprised of approximately 98 acres, the North Campus has a base zoning of Research and Technology Park (RTP). In order to allow flexibility to mix and adapt use types in response to development opportunities and shifting market demands, two areas of the North Campus have an overlay zone of Community Commercial (RTP/CCO) and Transitional (RTP/TO). Detail on the permitted uses within these zones are found in Chapter 3.3.1.

The Tech Campus will house a variety of uses and building types including corporate headquarters and mid- to large sized offices.



The North Campus is intended to evolve as a diverse, leading edge research and technology park designed to support adaptable site and building formats and to accommodate a variety of users in a campus environment. Flexible regulations will allow for innovative design solutions that support evolving trends and advances in the fields of science and technology. Diverse uses and building types, from mid- to large-size offices, corporate headquarters, incubation spaces for small start-up firms, and spaces for the commercial development of pioneering products and technologies will contribute to a broader knowledge ecosystem within the North Campus.

Buildings may require large formats/footprints and range from two to five stories in height, yet the pedestrian experience will remain comfortable and engaging. Frequent street-facing entrances and glazing, active ground floor uses, appropriate building setbacks and properly framed public spaces will enhance the public realm, inspiring creative thinking both within and outside of the built environment. Well designed and landscaped pedestrian paseos including areas for pocket parks and other amenities, will break up longer blocks and encourage pedestrian activity and interaction.

A welcome center, leasing office, technology innovation demonstration areas, landmark and gateway features exhibiting the technology and sustainability themes are envisioned to be located at the main entrance of the North Campus, along Road B. Wayfinding will be integrated throughout the North Campus to ensure easy navigation through the Plan Area starting at the Gateway.

A commercial center including a hotel and conference center is envisioned at the southern end of the district, providing daily service amenities for businesses, visitors, employees and residents.

The incorporation of ground floor commercial and other active uses such as cafés, fitness studios, exhibition and maker-spaces, meeting rooms, and similar uses, will provide a vibrant and engaging building-to-streetscape interface.

The easternmost edge of the North Campus will serve as an important transition zone between the predominantly larger format uses and the mixed-use Village Center and residential areas to the east. A greater emphasis on the pedestrian experience, design and architectural detailing are placed on buildings directly fronting Road B. The incorporation of ground floor commercial and other active uses such as cafés, fitness studios, exhibition and maker-spaces, meeting rooms, and similar uses, will provide a vibrant and engaging building-to-streetscape interface. Appropriate building frontages, massing, setbacks, sidewalk widths, and overhead coverings/awnings in addition to thoughtfully placed street furniture, landscaping and lighting will help frame the public realm as a walkable and comfortable urban environment.

Businesses fronting Road B will have the advantage of being located directly adjacent to and across from The Yard, an 11-acre linear park, providing the associated views and opportunities for enhanced social engagement. Businesses located across from The Yard are encouraged to integrate outdoor seating and gathering spaces that take advantage of the viewshed and further activate the street.

2. SOUTH CAMPUS

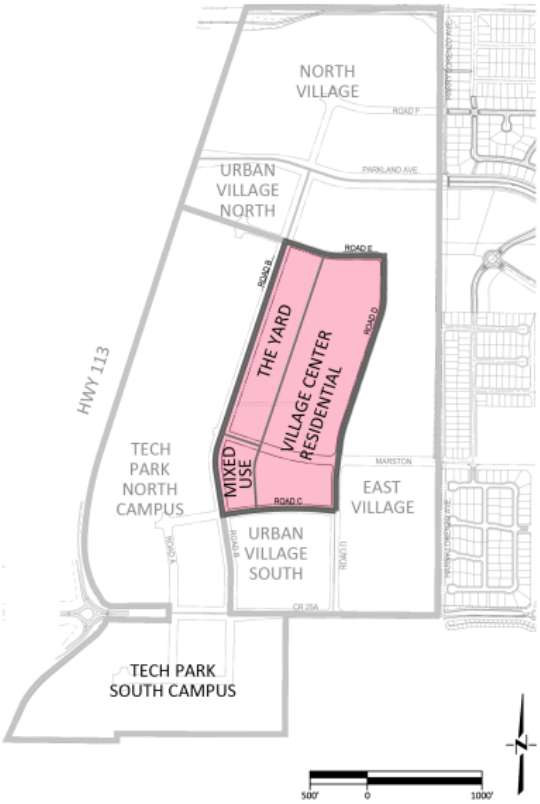
The 44 acre South Campus serves as a continuation of the North Campus, but with a greater emphasis on light manufacturing uses and research facilities and the addition of Highway Commercial zoning. South Campus businesses will benefit from both freeway frontage and immediate proximity to prime agricultural land to the south and east of the Plan Area boundary that will allow field trials to be conducted proximate to research. Approximately 36 acres of the South Campus is zoned Research Flex Overlay (RTP/RFO), which allows flexibility to mix and adapt use types in response to development opportunities and shifting market demands. Detail on the permitted uses within this zone are found in Chapter 3.3.

Approximately 8 acres of Highway Commercial (HC) zoning is provided at the northwest corner of the South Campus allowing commercial uses that serve the traveling public and the community.

Proximity to prime agricultural land will allow for convenient access to field trials and research. Greenhouses are permitted in the South Campus.

WORK ▪ **PLAY** ▪ LIVE

2.4.2 The Village Center



VILLAGE CENTER DISTRICT

… Village Center Mixed Use | 3.5 acres

… Village Center Residential | 29.8 acres

… The Yard | 11.5 acres

TOTAL 44.8 acres

The Village Center, consisting of approximately 45 acres, will provide the essential "third place," for the younger workforce as well as the opportunity for experienced employers to connect with and mentor the next generation of industry leaders and thinkers. Outdoor retail displays, restaurant patios and sidewalk cafés will spill out on to open-air hardscape plazas. An 11-acre park termed "The Yard," framed by mid-rise townhomes and urban-style lofts will offer employees, residents and the community a space to recreate, relax, and connect outside of home and work,

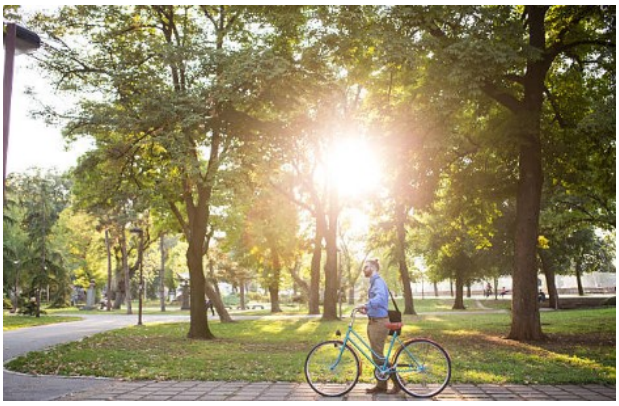
steps from adjacent residential neighborhoods and less than a block from work. A variety of mobility services and amenities will similarly converge at the Village Center Shared Mobility Hub, providing a transit destination in the heart of the Tech Park community.

1. THE VILLAGE CENTER

The place to "see and be seen," employees will find opportunities for social engagement as well as a space to work, collaborate, and think in a vibrant, transparent and inviting setting.

Within the Village Center's 3.5-acre Mixed Use (VCMU) zone, smaller format commercial spaces and mixed-use buildings will house retail/food venues and co-working spaces on the ground floor, with residential and office uses permitted on second and third floors. The place to "see and be seen," employees will find opportunities for social engagement as well as a space to work, collaborate, and think in a vibrant, transparent and inviting setting. Architectural guidelines and development standards call for buildings that promote a positive connection and seamless transition from the built environment to outdoor public spaces.

2. THE YARD



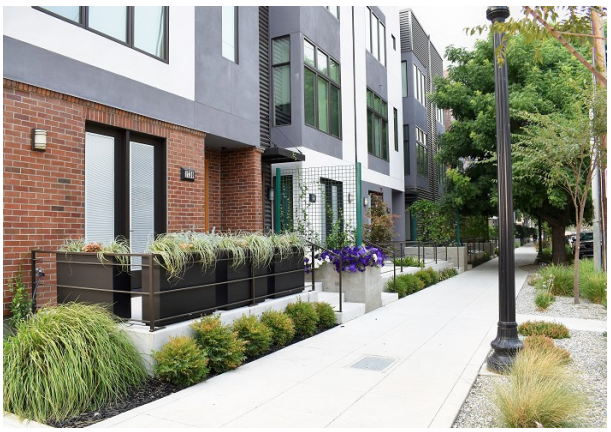
"The Yard," an 11-acre linear park, located immediately north of the mixed-use retail zone, is the physical center and social heart of the Village Center and the broader Plan Area. Envisioned as a largely passive green space, The Yard will serve as a shared "front porch" and lawn for the broader Tech Park community. The relaxed park setting will accommodate both active and passive recreational activities, such as a disc golf pick-up game or yoga class. Flexible seating and movable furniture will allow park users to adapt their park environment for comfortable use as a temporary outdoor office or for an after work gathering space with colleagues. Bike/pedestrian and jogging trails winding through and around the park connect the residential Villages to the east with the Tech Park North Campus on the west. Landscaping throughout The Yard will incorporate native plant species and grasses while a canopy of shade trees will allow for the comfortable enjoyment of the outdoors during hot summer months. The park will support stormwater management within the Plan Area, providing areas of natural biofiltration and retention.

The Yard's central location within the Plan Area also provides for a natural relationship between the park setting and the Village Center's mixed-use retail zone located immediately south of the park. Plaza and courtyard features at the southern end of the park will enable a continuation of the Village Center café and restaurant patio dining experiences as well as a covered pavilion that will host weekly farmer's markets, evening music venues and other community or company sponsored events. Up to 1.5 acres of The Yard will be available for private commercial/retail uses including pop-up coffee kiosks, container breweries and eventual full-scale eateries that complement an urban park setting.

The Yard at the Village Center will include passive recreational opportunities as well as a covered pavilion for a farmer's market and other outdoor events.

Predominantly residential townhomes, walk-ups, and loft style units are envisioned to front on an 18-foot pedestrian promenade running the length of the eastern boundary of the park. The promenade will include enhanced, textured paving providing a distinctive experience that also offers a buffer between the public park and private residential realm. Balconies and porches overlooking the promenade and park will increase activity at night and provide 24-hour "eyes on the park" for added security. Together, the combined Village Center and linear park space will be the pulse of the community; a shared space for intellectual exchange, social engagement and activity.

3. VILLAGE CENTER RESIDENTIAL



A mix of low density (VCLD) and medium density (VCMD) residential units are located on the eastern portion of the Village Center District. Contemporary row house, townhouse, small lot and detached units will provide a variety of housing opportunities for those that desire a more centrally located and lively residential experience. Units will be located within steps of the local café and outdoor recreational opportunities at The Yard and just a block from the Tech Park North Campus. Residential units within the Village Center will help foster an active mixed-use District well past traditional office hours, bolstering the viability of retail and commercial uses.

4. VILLAGE CENTER STREETSCAPE

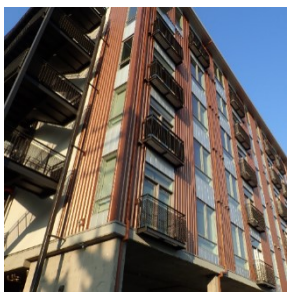
The Village Center streetscapes, including portions of Road B and C and Marston Drive, will transition from the active North Campus Gateway and Tech Park to a calmer, pedestrian-oriented environment. Thoughtfully placed street furniture, public art, landscaping and wide sidewalks designed to accommodate outdoor seating will enhance the public realm within and around the Village Center. Similarly, architectural guidelines will ensure building frontages invite pedestrian activity and reinforce the urban character of the district.

Enhanced intersections and pedestrian mid-block crossings along Road B will allow for safe, high visibility and efficient access to the Village Center from the North Campus. Narrow travel lanes and on-street parking will help calm traffic through the district while minimizing the need for large off-street parking lots. Decorative sidewalk paving and treatment will set the Village Center apart as a recognizable pedestrian dominant district.

Village Center & Mobility Hub – Artist Rendering

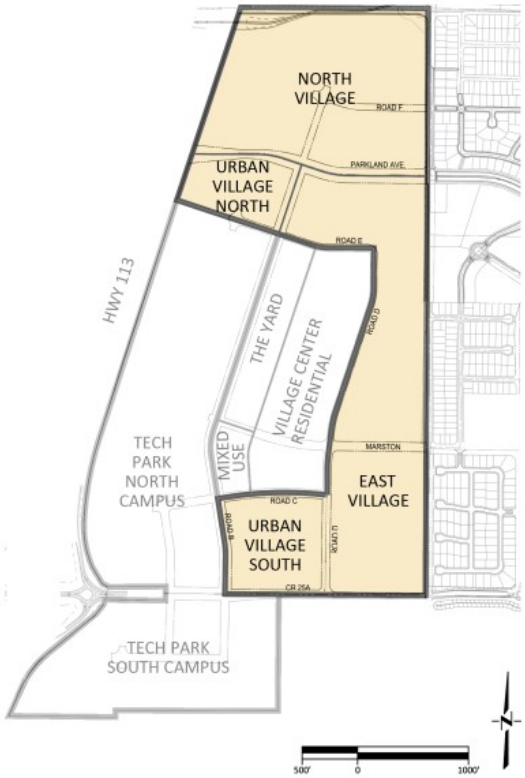
5. SHARED MOBILITY HUB

The Shared Mobility Hub (The Union), located along Road B immediately adjacent to the Village Center commercial zone, will provide an engaging point of arrival or departure from the Tech Park for employees and residents traveling to, from and within the Plan Area. The Union will serve as the point of convergence, seamlessly integrating traditional and innovative modes of travel. For regional trips to/from Sacramento and the Bay Area, the Union will offer a stop for intercity fixed route transit. Higher frequency bus or autonomous shuttle services will use The Union as the primary point of connection between the Tech Park and primary destination points such as UC Davis Campus, the Amtrak Station, and Downtown Woodland. Those arriving to the Village Center will be able to choose from an array of options including micro transit, bike/scooter share or ride hailing service to link their "last mile" whether it be to home or work. The Union's plaza-like "loading zone" will be where it all comes together and where visitors can grab a cup of coffee while they wait for their ride or simply sit and enjoy the energy of the place.



WORK ■ PLAY ■ **LIVE**

2.4.3 The Villages



THE VILLAGES DISTRICT

… North Village | 52.3 acres

… East Village | 58 acres

… Urban Villages | 25.57 acres

TOTAL 135.87 acres

The Villages District features three distinct residential neighborhood types; the North Village, East Village and the Urban Villages. The Village District will accommodate approximately 1,600 residential housing units of varying sizes, densities and product types from detached single family homes to urban style lofts. Plan Area employees will have the opportunity to live within close proximity to their work, in many cases, within a 10-minute walk or less. A network of well-connected streets, bike trails and greenbelts will allow for easy and safe routes to work, home and to the Village Center, reducing long commute times and auto-dependency for a majority of daily trips.

1. NORTH VILLAGE

The Plan Area's North Village will consist primarily of single family homes on a range of lot sizes. Larger lots will accommodate executive and multi-generational style homes as well as "move-up" housing opportunities for those growing families seeking more room to play. Smaller to mid-sized lots will offer housing options for first time homebuyers to empty nesters. Although not strictly prescribed, architectural styles including contemporary farmhouse and cottage will establish a sense of place reminiscent of the area's agricultural roots. A landscaped roundabout centrally located within the North Village along Road F will serve as a focal feature within the neighborhood.

Contemporary farmhouse and cottage style residential design will establish a unique sense of place within the North Village.

Builders are encouraged to explore nontraditional pedestrian pathways and circulation elements within the North Village that incorporate natural drainage, allow for a softer interface between the street and residential lots, while reducing the concrete hardscape typical of traditional sidewalk/curb/gutter schemes.

2. EAST VILLAGE

The East Village, running the length of the Plan Area's eastern boundary, south of Parkland Avenue, is comprised of a mix of low and medium density housing types including detached single family products, alley products, cluster and courtyard homes. Residential densities within the East Village are intended to provide a transition from the Plan Area community to the established Spring Lake neighborhoods to the east.

Non-traditional subdivision design is encouraged in the East Village, including alley load and cluster design, and layouts with shared common space.

A continuous north-south running greenbelt with Class 1 bike path will serve as the adjoining ribbon between the two neighborhoods while Spring Lake bike paths and paseos will extend westward through the Plan Area, connecting the two communities. A stormwater detention basin located at the southern end of the East Village, just north of CR 25A, may dually serve as passive recreational open space.

3. URBAN VILLAGE

High quality apartments and residential lofts will provide housing for young professionals and empty nesters within close proximity to Tech Park jobs.

Two High Density Residential zones within immediate proximity of the North Campus will accommodate urban style, high quality workforce housing for the young professional as well as empty nesters. These units may also serve as temporary housing for researchers and scientists sponsored by companies locating within the district.

The incorporation of thoughtful design elements and consideration of the pedestrian experience will ensure that high-density development remains synonymous with high-quality of life and that the Urban Village actively contributes to a lively and engaging Technology Park campus and environment.

4. INTERNAL STREET NETWORK

The internal street network within each of the Villages will reflect the residential nature of the neighborhoods. Narrow two lane streets will accommodate both vehicles and bicyclists at comfortable speeds. Ample tree canopy along residential street segments will provide shaded sidewalks and walkways during warm summer months.

Roads D and E, which serve as collectors through the Urban and East Village districts, as well as the Village Center residential areas, will similarly reflect the residential make-up of the adjoining land use. These collector roadways will consist of two travel lanes accommodating vehicles as well as bicyclists through the use of painted on-street sharrows/shared lane marking. Traffic calming will be achieved through on-street parking on both sides of the street as well as other measures such as speed tables or enhanced crossings.

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3.1 | PURPOSE AND INTENT

Land use and development within the Plan Area is subject to conformance with the permitted uses, the site development regulations, development standards and design guidelines as outlined in this chapter. The permitted land uses and development standards/design guidelines are informed by the Vision, by the District Concepts, Character and Specific Plan Policies described in Chapters 1 and 2. These elements work together to create a use-compatible, visually distinct and vibrant community while retaining appropriate design flexibility at the project level. Engaging, yet seamless transitions between innovative research spaces, multi-functioning parks and network trails, and new and existing neighborhoods within the Plan Area will result in a sense of place that is both internally distinctive and a natural extension of the Woodland community. The intent is to provide a clear and concise set of regulations, standards and guidelines that builders, developers, property owners and City staff can rely on to implement development within the Plan Area in an efficient manner.

This chapter establishes the permitted land uses and primary development standards within the Plan Area and supersedes the requirements of the Zoning Ordinance (Title 17) of the Woodland Municipal Code (WMC) and the Woodland Community Design Standards. Where direction is not provided in this Specific Plan, the provisions of the WMC may be considered. The Community Development Director shall have the authority to determine the most appropriate zoning correlation between the Specific Plan and WMC where necessary. If an issue or situation arises that is not sufficiently provided for in the Specific Plan, those regulations of the Zoning Ordinance that are most applicable shall be used by the Community Development Director as guidelines to resolve unclear issues. Additional information pertaining to the implementation of this Chapter including interpretations and modifications can be found in Chapter 7, Administration.

3.2 | ZONING CLASSIFICATIONS

3.2.1 Purpose

To carry out the purpose and provisions of the Specific Plan, the Plan Area is divided into land use designations. This chapter contains general information such as statements of purpose and expectations for each land use type. The precise use regulations for each land use designation are found in Section 3.3. The Development Standards are found in Section 3.4.

The Land Use Plan, Exhibit 2.2, depicts the land uses assigned to all portions of the Plan Area. The 14 land use zones fall under 3 sub-categories; Research/Tech Park, Commercial and Mixed Use Zones; Residential Zones and Open Space/Park Zones. A general summary of the zoning designations is provided in Section 3.2.4.

3.2.2 Applicability

No building, structure, vehicle, sign, or area shall be used, altered, moved, enlarged, or stored in any zoning district except as specifically allowed in underlying zoning district and by the regulations of any applicable combining district.

3.2.3 Prohibition

No property in any zoning district shall be used in any manner so as to create problems contrary to public health, safety, or general welfare or so as to constitute a public nuisance.

3.2.4 Description of Zoning Categories

A. Employment: Research Technology Park and Commercial Use Zones

The employment zones include the Research Technology Park, Highway Commercial and Village Center Mixed Use. The Research Technology Park category has the primary zone of RTP and three (3) RTP overlay zones: Transitional, Community Commercial and Research Flex. The purpose of the RTP overlay zones is to "fine-tune" the list of uses and development standards in the designated locations to provide compatibility with surrounding uses and to purposely target specific uses to certain locations within the Technology Park Districts.

- **RTP**-Research Technology Park: The RTP zone provides for a campus-like environment with a variety of parcel sizes designed to accommodate a wide variety of technology and research based businesses, including but not limited to large research and development operations with production and point-of-sale facilities, laboratory, light manufacturing and assembly, professional/corporate offices as well as a limited list of other business support uses.
- **RTP/TO**-Research Technology Park/Transitional Overlay: The RTP/TO zone is similar to the RTP base zone, however with the RTP/TO location more internal to the District and abutting the Village Center, the more intense industrial uses are limited and the professional offices, retail and personal services uses are expanded.
- **RTP/CCO**-Research Technology Park/Community Commercial Overlay: The RTP/CCO zone is similar to the RTP base zone, however the RTP/CCO location at the primary gateway on Road B anticipates integration of commercial uses that complement the RTC uses.
- **RTP/RFO**-Research Technology Park/Research Flex Overlay: The RTP/RFO zone is similar to the RTP base zone with a greater emphasis on light manufacturing uses and research facilities.
- **HC-**Highway Commercial: The HC zone accommodates uses such as hotels, vehicle service stations, restaurants and other retail or service uses serving the Plan Area, surrounding community and region.
- **VCMU**-Village Center Mixed Use: The VCMU zone accommodates smaller format commercial spaces and mixed-use buildings to attract retail/food venues and co-working spaces with integrated residential and office uses permitted. The density range for residential uses in the VCMU is 20.0-40.0 dwelling units per gross acre (du/ac).

B. Residential Zones

The 6 residential zones include 2 types of Low Density Residential, 2 types of Medium Density Residential and 2 types of High Density Residential.

- **LDR**-Low Density Residential: The LDR zone accommodates single family detached homes on standard size lots. Alternative lot configurations such as alley, cluster or halfplex lots may also occur. The density range is 1.0-8.0 dwelling units per gross acre (du/ac).
- **VCLDR**-Village Center Low Density Residential: The VCLDR zone accommodates a variety of home types for those that desire a centralized location in the Town Center. Alternative lot configurations such as alley, cluster or halfplex lots are anticipated in addition to detached standard lots. The density range is 1.0-8.0 dwelling units per gross acre (du/ac).
- **MDR**- Medium Density Residential: The MDR zone accommodates a range of attached and detached housing types, including small-lot subdivisions, duplexes, triplexes, zero-lot-line developments, townhouses and other housing types. The density range is 8.1-19.9 dwelling units per gross acre (du/ac).
- **VCMDR**-Village Center Medium Density Residential: The VCMDR zone accommodates a variety of housing opportunities for those that desire a more centrally located and lively residential experience in the Village Center. Contemporary row houses, townhouse, small lot, cluster and detached units are permitted. The density range is 8.1-19.9 dwelling units per gross acre (du/ac).
- **HDR**-High Density Residential: The HDR zone accommodates a broad range of attached housing types, including triplexes, fourplexes, row houses, and stacked flats (apartments or condominiums). Units can be contained in single structures or in a collection of cohesive structures with common open spaces and amenities. The higher density range provides for the opportunity for multi-story structures with centrally located parking in order to provide urban intensity. The density range is 20.0-40.0 dwelling units per gross acre (du/ac).
- **HDR/CCO**-High Density Residential/Community Commercial Overlay: The HDR/CCO zone accommodates the same uses as described for HDR but additionally permits retail, business and personal services, grocery stores, restaurants to promote a direct, walkable linkage between the adjacent technology park uses and surrounding neighborhoods to enable convenient access to goods and services. The density range is 20.0-40.0 dwelling units per gross acre (du/ac).

C. Open Space/Park Zones

- **VCOS**- Village Center Open Space: The VCOS zone applies to the park, known as The Yard. The uses in the VCOS are primarily recreation, however the zone does allow a variety of commercial uses which complement and support the Village Center.
- **OS**-Greenbelts, Promenades and Open Space: The OS zone applies to the greenbelts, linear open space corridors, the Promenade along the Yard and the detention pond. The uses allowed in the OS are generally passive recreation and stormwater management.

3.3 | PERMITTED USES

The purpose of this section is to establish land use classifications and to explain how land uses are regulated in this document. This section explains the Use Classification system, the allowed use and permit requirements, how uses not listed are regulated, and how similar uses are determined. It is not feasible to list every possible use, so general categories are provided, specific uses are identified as needed, and a process is provided to classify uses that do not clearly fit into a use classification.

In order to simplify land use regulations, land uses listed in the use have been grouped into general categories on the basis of common function, product, or compatibility characteristics. These general allowed use categories are called "Use Classifications." Use classifications describe one or more uses having similar characteristics but do not list every use or activity that may appropriately be within the classification. The following rules apply to use classifications:

A. Illegal Uses. No use that is illegal under local, state, or federal law shall be allowed in any Zone within the Plan Area.

B. Similar Uses. When a use is not specifically listed in this document, it shall be understood that the use may be permitted if the Director determines that the use is similar to other uses listed based on established criteria and required findings. It is further recognized that every conceivable use cannot be identified in this document and, anticipating that new uses will evolve over time, the Director may make a Similar Use Determination to compare a proposed use and measure it against those uses listed.

3.3.1 Permitted Land Uses and Requirements

Table 3.1 identifies permitted uses in each of the zoning designations. Generally, a use is allowed by right, allowed through issuance of a zoning administrator permit, a conditional use permit, is an ancillary use or is not permitted. Refer to the Woodland Municipal Code (WMC) for detailed description of each approval process.

Minimally, staff level Site Plan and Design Review approval is required for all new construction that requires a building permit with the exception of Tenant Improvements not visible from the public right of way. For residential uses, and for non-residential uses that are permitted by-right, Site Plan and Design Review shall be considered a ministerial action for the purposes of CEQA when plans conform to applicable Development and Design Standards. Site Plan and Design Review for non-residential uses that require a Zoning Administrator or Conditional Use Permit will be considered in conjunction with the review of the required permits, which are considered discretionary for the purposes of CEQA.

All uses are subject to the Performance Standards listed in Section 3.3.2 below and shall demonstrate consistency with the 2035 Climate Action Plan (CAP) as outlined in Section 3.3.3.

The permitting requirements identified in these tables are:

A. Permitted (P). A land use shown with a "P" indicates that the land use is permitted by right in the designated Zone, subject to applicable provisions of this Specific Plan (e.g., development standards, Design Review) and subject to the Performance Standards listed in Section 3.3.2.

B. Zoning Administrator (Z). A land use shown with a "Z" indicates that the land use is permitted in the designated Zone upon issuance of a Zoning Administrator Permit from the designated Approving Authority, subject to compliance with all applicable provisions of this Specific Plan (e.g., development standards, Design Review) and subject to the Performance Standards listed in Section 3.3.2.

C. Conditional (C). A land use shown with a "C" indicates that the land use is permitted in the designated Zone upon issuance of a Conditional Use Permit from the designated Approving Authority, subject to compliance with all applicable provisions of this Specific Plan (e.g., development standards, Design Review) and subject to the Performance Standards listed in Section 3.3.2.

D. Ancillary (A). Ancillary to or in support of an approved primary use.

E. Not Permitted (X). A land use shown with an "X" in the table is not allowed in the applicable Zone.

3.3.2 Performance Standards

All uses as described in Section 3.3.1 are subject to the following Performance Standards. Any deviation or requested exceptions for the standards below are subject to elevated discretionary review and/or environmental review; the Community Development Director shall, at his/her discretion, elevate the permit to a Zoning Administrator or Conditional Use Permit. The performance standards are intended to ensure that uses and activities are conducted in a manner that protects the public health and safety and do not produce adverse impacts on surrounding properties or the community at large.

A. Lighting. All lighting, reflective surfaces, or any other sources of illumination shall be designed and located in a manner that produces no substantial glare on public streets or on any other parcel that could impact public safety or the enjoyment of private property. Lights shall be of the minimum illumination necessary for a given application and shall be directed downward and shielded at lot lines so as to confine all direct rays to the premises on which it is located. Exterior lighting shall be shielded as necessary to reduce offsite light/glare impacts.

B. Fire Hazards. The storage, use, transportation, or production of products which, either in the raw or finished state, constitute a flammable or explosive material shall be subject to approval of the Fire Department (as example, flour milling or nut shell processing). Burning of waste materials in open fires or unapproved incinerators is prohibited.

C. Liquid or Solid Waste. The use, handling, storage, and transportation of waste materials, including hazardous wastes, shall comply with the provisions of the California Hazardous Materials Regulations and any other applicable laws. Discharge at any point into a public or private sewage disposal system, stream, or the ground, of any material that could contaminate any water supply, or otherwise cause the emission of dangerous or offensive elements is prohibited. No exceptions are allowed unless in accordance with regulations, licenses or approvals of the various local and state agencies having jurisdiction over such activities.

D. Odor, Particulate Matter and Air Contaminants. No continuous, frequent, or repetitive odors are permitted that are perceptible on or beyond adjacent lot lines or in the public right-of-way with the exception of food/beverage related odors typical of an urban/mixed use setting such as coffee shop, bakery, brewery related odors. An odor detected no more than a total of 15 minutes in any one day shall not be deemed to be continuous, frequent or repetitive as used in this subsection. No dust or particulate matter shall be emitted that is detectable beyond property lines by a reasonable person without instruments. Exhaust air ducts shall be located or directed away from abutting residentially-zoned properties.

E. Vibration. Machinery used for manufacturing and industrial processes, including oil and gas collection, processing, and distribution must be designed and housed to ensure that vibration will be reduced to an amount undiscernible without the aid of instruments by a reasonable person at the lot lines of the site. Vibrations from temporary construction, demolition, and vehicles that enter and leave the subject parcel (e.g., construction equipment, trains, trucks, etc.) are exempt from this standard.

F. Noise Standards. Noise produced by commercial and/or industrial machinery and/or equipment detected at the property line must be restricted to Monday through Saturday and not begin before 7:00AM and must cease after 6:00PM. Applicants for proposed projects may be required to provide evidence that all of the applicable requirements relating to noise may be satisfied by the project prior to approval. Provisions contained in Chapter 8 of the 2035 General Plan shall apply in addition to other applicable sections of the Municipal Code that relate to noise and nuisance considerations. Table 8.6 of the General Plan provides noise level performance standards that apply to the noise sources themselves for new projects and existing non-transportation sources.

3.3.3. Climate Action Plan Consistency

A. All new development projects and major expansion projects shall provide a summary of incorporated conservation measures, consistent with the City's 2035 Climate Action Plan (CAP), adopted with the General Plan in 2017. For each CAP strategy and related "action" relevant to new development projects, the City will determine: (a) the project is consistent; (b) the project with conditions or when modified would be consistent; (c) the strategy is relevant for new development, but not the subject project; or (d) the project includes one or more replacement strategies that would be equally or more effective in reducing GHG emissions and such replacement strategy or strategies are not included in the CAP or required by any other regulation, standard, design criteria, or other existing requirement.

B. All projects shall complete and submit the city's Climate Action Plan Consistency Checklist for review and approval by the city prior to project approval. The CAP Checklist allows proposed development projects to demonstrate consistency with the Climate Action Plan.
C. Consistent with General Plan Policy 2.L.2, all projects shall strive to meet net zero energy consumption through the incorporation of conservation measures above Title 24 standards and shall, at minimum, demonstrate consistency with Cal Green Tier One standards.
D. Additional GHG reductions strategies and sustainability measures shall be considered in major expansion projects and in the ongoing operations and use of all commercial and residential projects within the Plan Area including, but not limited to Energy Conservation, Water Conservation/Quality and Low Water Landscape measures as outlined in Sustainability Guidelines Sections 3.5.3.B for commercial uses and Section 3.5.12.B for residential.

3.3.4 Temporary and Transitional Uses

The following special uses are encouraged in the Plan Area subject to the permitting requirements, performance standards and in the use descriptions below. The following limited term/temporary uses are intended to provide dynamic and diverse retail opportunities and increased foot traffic throughout the Plan Area, while supporting small startup companies, artists and entrepreneurs.

A. Pop-Up Uses and Mobile Food/Retail Vendors

Pop Up uses refer to the temporary activation of a vacant/underutilized storefront or property for commercial/retail or art/design showcase and sales purposes. Food/Retail Vendors refers to food trucks and mobile retailers.

1. Pop-Up uses and mobile food/retail vendors are temporary in nature, and subject to operating guidelines established by the Community Development Department and subject to a Pop Up and/or Mobile Food/Retail Vendor Permit ("Vendor Permit") issued by the Community Development Department.
2. Pop-Up uses located within a permanent structure do not require a final certificate of occupancy, but do require a temporary certificate of occupancy.
3. Unless otherwise approved in writing by the City's Community Development Department, pop-up and mobile vendors shall be located on private property, not within the public right-of-way. A current City business license and all applicable health and safety permits shall be maintained at all times by any pop-up and mobile vendors.
4. Pop-up hours of operation shall generally be limited to 8am to 10pm, unless otherwise approved by the City.
5. The permitted duration of the use shall be outlined in the Vendor Permit based on the type of use, location and whether they are associated with a specific event or function. Generally, mobile food and retail vendors shall be limited to 2 hour parking, unless associated with an event or function of longer duration. Pop-up uses located within permanent or semi-permanent structures may be permitted for up to 1 year, subject to annual renewal.
6. Pop-Up and mobile vendors are not required to provide off-street parking.

7. Pop-Up uses must adhere to Specific Plan Design Standards and Guidelines, Building Code requirements for signage, restroom and life/fire safety and all Fire and Health Code requirements as applicable.

B. Temporary and Transitional Uses

1. Uses such as coffee kiosks, shipping container eateries/beer gardens, and other "low barrier" entry, transitional and temporary uses may be located within the commercial, Research and Technology Park and Village Center Districts subject to a Zoning Administrator Permit and Transitional/Temporary Use Agreement. Such uses are intended to activate underutilized parcels as more permanent projects are completed over time. The Zoning Administrator Permit shall establish the appropriate timeline for such uses.
2. Transitional Temporary uses must adhere to Specific Plan Design Standards and Guidelines, and Building, Fire and Health Code requirements for signage, restroom and life/fire safety as applicable.

TABLE 3.1: PERMITTED USES	ZONING DESIGNATIONS														
USE TYPES	**RESEARCH AND TECH PARK**				**COMMERCIAL/MIXED USE**			**RESIDENTIAL**					**OPEN SPACE**		
LEGEND P= Permitted Z = Zoning Administrator Permit C = Conditional Use Permit A = Ancillary to or in support of an approved primary use Blank-- Not Permitted	**RTP**	**RTP/ TO**	**RTP/ CCO**	**RTP/ RFO**	**HC**	**VCMU**	**HDR/ CCO**	**HDR**	**VCMDR**	**MDR**	**VCLDR**	**LDR**	**VCOS**	**OS/GB**	**Foot notes**
Research/Technology, Light Industrial/Manufacturing/Ag Production and Processing															
Accessory buildings	P/A (1)	P/A (1)	P/A (1)	P/A (1)	P/A (2)	P/A (2)		P (34)	P(34)	P (34)	P (34)	P(34)			1,2,34
Agricultural Production – Light (3)	P/A			P/A											3
Agricultural Uses/Structures (3)	P/A			P/A									P		3
Agricultural or Seed Processing/Packaging and Manufacturing	P	P	P	P											
Brewery/Distillery (see also Microbrewery)	P	P	P	P		P(4)									4
Commercial Cannabis Testing	C(5)			C(5)											5
Commercial Cannabis Manufacturing and/or Distribution				C(5)											5
Hemp Distribution	C(5)			C(5)											5
Employee oriented services/ amenities (e.g. fitness studio, cafeteria, day care center, ATM)	P/A	P/A	P/A	P/A	P/A	P							P (6)		6
Light Industrial	P	P(7)	P(7)	P											7
Medium Industrial	Z(8)			Z											8,9

LEGEND P= Permitted Z = Zoning Administrator Permit C = Conditional Use Permit A = Ancillary to or in support of an approved primary use Blank-- Not Permitted	**RTP**	**RTP/ TO**	**RTP/ CCO**	**RTP/ RFO**	**HC**	**VCM U**	**HDR/ CCO**	**HDR**	**VCMDR**	**MDR**	**VCLDR**	**LDR**	**VCOS**	**OS/GB**	**Foot notes**
Research and Development including agri-tech, seed research, plant breeding, and similar uses	P	P	P	P		P(4)									4
Specialty Food Processing	P	P	P	P											
Warehouse, Storage and Distribution / Logistics	P(10,11)	P/A(10, 11)	P/A(10, 11)	P(10,11)											10,11
Offices, Business and Professional															
Banks		P	P			P	P								
High-Tech Office and Corporate Headquarters	P	P	P	P		P(4)	P(4)								4
Medical or Dental Offices		P/A	P			P(12)	P								12
Professional and Administrative Offices	P	P	P	P	P/A	P	P								
Retail and Personal Services															
Beauty/Salon/Spa		P	P		P/A	P	P	P(24)	Z(13)		Z(13)		P(6)		6,13,24
General Personal Services		P/A	P		P/A	P	P	P(24)					P(6)		6,24
General Retail (small 25,000sf or less)		P/A	P		P/A	P	P	P(24)	Z(13)		Z(13)				13,24
General Retail (large 25,000-60,000sf)		P	P		P	Z(14)	Z(25)								14,25
Health/Fitness/Recreation Facility	P/A	P/A	P	P/A	P	P(15)	P(25)	P(15)	Z(13)		Z(13)				13,15,25
Large Format Retail (over 60,000sf)			Z(16)		P										16
Service/Gas Stations					Z(17,18)										17,18

LEGEND P= Permitted Z = Zoning Administrator Permit C = Conditional Use Permit A = Ancillary to or in support of an approved primary use Blank-- Not Permitted	**RTP**	**RTP/ TO**	**RTP/ CCO**	**RTP/ RFO**	**HC**	**VCMU**	**HDR/ CCO**	**HDR**	**VCMDR**	**MDR**	**VCLDR**	**LDR**	**VCOS**	**OS/GB**	**Foot notes**
Eating and Drinking Establishments															
Bar/Night Club		C/A			C	C									
Micro-brewery/Wine Bar/Brewpub		P	P		P	P	P						P(6)		6
Restaurant/Café		P	P	P/A	P	P	P		Z(13)				P(6)		6,13
Restaurant w/ Drive-Thru					Z										
Food and Beverage Sales															
Convenience Market	P/A	P/A	P	P/A	P/A	P	P								
Farmer's Market / Produce Stands		Z/A(19)	P(19)	Z/A(19)		P/A(19)	P(19)						P(19)		19
General Grocery		P	P			P(20)	P								20
Visitor Accommodations															
Bed and Breakfast						Z		Z	Z						
Conference Center	Z	Z	Z	Z	P										
Homestay or Short Term Rental								Z(21)	Z(21)						21
Hotel	Z	Z	Z	Z	P	P (33)									33
Residential Uses															
Accessory Dwelling Unit							P(36)	P(36)	P(36)	P(36)	P(36)	P(36)			36
Single Family Detached									P	P	P	P			
Single Family Attached									P	P	P	P			
Duplex/Halfplex									P	P	P	P			
Townhouse/Row House						P(22)	P	P	P	P	P	P			22

LEGEND P= Permitted Z = Zoning Administrator Permit C = Conditional Use Permit A = Ancillary to or in support of an approved primary use Blank-- Not Permitted	**RTP**	**RTP/ TO**	**RTP/ CCO**	**RTP/ RFO**	**HC**	**VCMU**	**HDR/ CCO**	**HDR**	**VCMDR**	**MDR**	**VCLDR**	**LDR**	**VCOS**	**OS/GB**	**Foot notes**
Multi-Unit Dwelling (3 or more units)						P(22)	P	P	P	P	P(38)				22,38
Home Occupation,Live/Work							P(35)	P(35)	P(35)	P(35)	P(35)	P(35)			35
Family Day Care Homes Less than 14 Children									P	P	P	P			
Family Day Care Homes More than 14 Children									P	P	P	P			
Public, Education, Civic and Governmental Uses															
Religious Institution							C(23)	Z		Z		C			23
Commercial Daycare	P(26)	P(26)	P(26)	P(26)			P(26)	P(26)	Z	Z	Z	Z	P(6)		26,6
Education and Training Services / Vocational School	P	P	P	P		P(4)	Z(29)								4,29
College/University	P	P	P	P			P								
K-12 Public/Private School										P(28)					28
Parks, Recreation, Open Space															
Public or Private Park/Open Space	P	P	P	P	P	P	P	P	P	P	P	P	P	P	
Water impoundment/detention	P	P	P	P	P									P	
Community Garden							P	P	P	P	P	P	P	P	
Temporary or Other Uses															
Mixed Use	P(27)	P(27)	P(27)	P(27)	P(27)	P(27)	P(27)								27
Mixed Use w/ Residential						P(27)	P(27)	P(27)	P(27)	P(27)	P(27)				27
Outdoor Materials or Vehicle Storage	P/A(30)	P/A(30, 31)		P/A(30)											30,31

LEGEND P= Permitted Z = Zoning Administrator Permit C = Conditional Use Permit A = Ancillary to or in support of an approved primary use Blank-- Not Permitted	**RTP**	**RTP/ TO**	**RTP/ CCO**	**RTP/ RFO**	**HC**	**VCM U**	**HDR/ CCO**	**HDR**	**VCMDR**	**MDR**	**VCLDR**	**LDR**	**VCOS**	**OS/GB**	**Foot notes**
Transportation/Passenger or Park-and-Ride Facility	Z/A	Z/A	Z/A	Z/A		Z/A									
Pop-Up Food/Retail Vendors (i.e. Food Truck/Mobile Retail)	P(37)	P(37)	P(37)	P(37)	P(37)	P(37)	P(37)						P(37)	P(37)	37
Special Events	P(37)	P(37)	P(37)	P(37)	P(37)	P(37)	P(37)						P(37)	P(37)	37

Table 3.1 Footnotes

1. Limited to 25% of the total net leasable building area
2. Limited to 15% of the total net leasable building area
3. Existing agricultural uses may continue until the area is required for the development of infrastructure or other allowed uses. Agricultural operations shall comply with applicable laws and regulations.
4. If less than 10,000 square feet net leasable building area.
5. Subject to applicable Woodland Municipal Code Commercial Cannabis Business provisions
6. Up to 1.5 acres of retail/commercial uses permitted in the park consistent with master park design plan.
7. Outdoor storage/processing shall be located at least 75 feet from Road B, be screened and clearly in support of and incidental to a primary building and use of property.
8. Zoning Administrator Permit required if conducted wholly or partially outdoors
9. Outdoor manufacturing/assembly shall be located at least 75 feet from Road B and shall be screened from Road B.
10. Commercial and/or Private "mini-storage"/"self-storage" is prohibited.
11. Only permitted as incidental/ancillary to primary business/company operations; not more than 50 percent of primary building square footage.
12. If under 5,000sf and part of a mixed-use development project.
13. Adjacent to VCOS/The Yard only; 2,000 s.f. max.
14. Permitted as part of a comprehensive mixed-use project.
15. Maximum 5,000 s.f. In HDR, maximum of 5,000 s.f. and must be ancillary to a multifamily residential project.

16. Permitted as part of a master planned commercial center requiring a Zoning Administrator Permit.
17. A carwash is permitted as an ancillary use to and specifically a component of a permitted gas station. Standalone carwashes are not permitted.
18. A maximum of one service/gas station is permitted within the Highway Commercial Zone.
19. Subject to Woodland Municipal Code Section 5.12, Farmer's Market License.
20. Permitted if under 20,000 s.f. Zoning Administrator Permit required for larger format grocery store up to 50,000 s.f. max.
21. Allowed subject to implementation of citywide ordinance.
22. Residential unit(s) shall be located above ground floor non-residential uses as part of a mixed-use project.
23. Churches/Religious Institutions shall be located along Road D or Road C within the HDR/CCO zone, away from Road B.
24. Commercial/retail uses within the MDR and HDR zones are permitted as part of a mixed-use project along the perimeter of a subdivision/development project, limited to not more than 2,000 s.f. and shall be compatible with residential uses. Appropriate uses include the following or similar: general retail (small format), personal services (i.e. salon/spa, medical clinic), business related services (i.e. mail/copy center, tech retail), professional offices, tech firms, café/restaurant, convenience market. At the discretion of the Community Development Director, conditions that limit noise, odor or other potential impacts to adjoining residential uses may be required and/or the Director may elevate review/approval to a Zoning Administrator Permit or Conditional Use Permit.
25. Large format retail and health/fitness/recreation facilities up to 60,000sf are permitted within the HDR/CCO zone along Road B only.
26. Permitted (ancillary to) as part of a multifamily project or commercial development; not permitted as a standalone use on a parcel.
27. Mixed uses are permitted, consistent with the manner in which the individual uses are otherwise allowed in the zone. The review required will be dependent upon the most restricted use intended for the development.
28. A public school is permitted only within the MDR zone located south of Parkland Avenue, north of Road E, between Road B and the HLA greenbelt.
29. Trade or Professional Schools compatible with adjacent residential uses (i.e. produce low noise, odor, dust, vibration, etc.) are permitted within the HDR/CCO zone along Road B only, subject to a Zoning Administrator Permit.
30. All materials stored outside must be screened from public view.
31. Outdoor storage shall be at least 75 feet from Road B, be screened and be clearly in support of and incidental to a primary building and use of property.
32. Subject to Special Use Regulations outlined in Section 3.3.3.
33. Boutique hotel only.
34. Subject to Woodland Municipal Code Accessory Buildings and Uses provisions.
35. Subject to Woodland Municipal Code Home Occupation provisions.
36. Subject to Woodland Municipal Code Accessory Dwelling Unit provisions.
37. Subject to Woodland Municipal Code Special Events provisions and Special Use Regulations, Section 3.3.3 as applicable.
38. Not more than 4 units shall be permitted on a single parcel.

3.4 | SITE DEVELOPMENT STANDARDS

3.4.1 Format and Use of Development Standards and Design Standards and Design Guidelines

This document provides both **Site Development Standards and Design Standards and Design Guidelines (DS/DG)**. Together, the development standards and DS/DG contained in this chapter seek to promote coordinated, sound development, effective use of land, and high quality site planning that considers the unique character and context of the community. These development standards and DS/DG implement the goals and policies of the WRTPSP and the General Plan.

The **Site Development Standards,** Section 3.4.2, define the dimensional requirements that apply to structures built within each of the land use designations, including required lot sizes, lot coverage; setbacks; building and structure heights; and other requirements related to the building envelope, location, and configuration of buildings and structures which are unique to the Plan Area. The Design Standards and Design Guidelines, found in the following Section 3.5, address the desirable features of the land uses identified in the Specific Plan to achieve a desired level of quality for the physical environment.

3.4.2 Site Development Standards

The site development standards contained herein set the basic, quantitative requirements for development that support the goals and policies of the SP. The site development standards included herein are intended to establish the minimum design parameters. The intent of these standards is to permit flexibility to encourage a wide range of building types and innovative designs. It is anticipated that over the life of the Specific Plan, modifications to development standards and introduction of additional building types may be requested as part of specific site design, tentative map and design review process. Modification(s) to the standards as proposed by a developer/builder during site development and design review of individual Planning Areas and/or Tentative Maps, may be considered subject to the procedures outlined in Chapter 7, Section 7.4.1 via a Specific Plan Amendment or a Minor/Administrative Modification. The Site Development Standards are provided in Tables 3.2 for the Research Technology Park and Commercial Zones and Table 3.3 for Residential Zones.

Table 3.2: Site Development Standards for RTP, Commercial and Mixed Use Zones

ZONING	RTP	RTP/TO	RTP/CCO	RTP/RFO	HC	VCMU
Site and Building Criteria						
Max Lot Coverage(1)	70%	70%	70%	70%	60%	100%
Floor Area Ratio(2)	0.20 min 2.0 max	0.20 min 2.0 max	0.20 min 2.0 max	no min 2.0 max	0.25 min 2.0 max	0.6 min 4.0 max
Max Building Length	650′ (20)	400′ (3)(20)	400′ (3)(20)	650′ (3)(20)	200′	50′ (4)
Min/Max Lot Size	None	None	None	None	None	None
Streetwall Frontage Minimum(10)	None	Road B 60%(20)	Road B 60% (20)	None	None	Road B and Marston 70 %
Minimum Common Open Space(5)	5%	5%	5%	5%	5%	No fixed standard
Setbacks and Separations						
Front Setback(6)(7)	10′ min no max (20)	5′ min (8) 20′ max along Road B(20)	10′ min 25′ max, 20′ max along Road B(20)	10′ min no max(20)	10′ min no max	5′ min 15′ max (8)(9)
Side (interior) and Rear Setback	10′ side and rear (11)(21)	10′ side and rear (21)	10′, 20′ max from Road 25A	10′ (11)(12)	10′	No fixed standard (13)
Building Separation	15′ min (1-3 stories) 30′ min (4+)	15′ min (1-3 stories) 30′ min (4+ stories)	No fixed standard	15′ min (1-3 stories) 30′ min (4+ stories)	No fixed standard	No fixed standard
Building Height(18)						
Min/Max Height (19)	No min 65′ max	25′ min 65′ max	25′ min 65′ max	No min 65′ max	No min 70′ max	25′ min 55′ max
Vehicular and Bicycle Parking						
Vehicle Parking	Per Parking Use and Needs Statement (14)	Per Parking Use and Needs Statement (14)(16)	Per Parking Use and Needs Statement (14)(16)	Per Parking Use and Needs Statement (14)	Per Parking Use and Needs Statement (14)	Per Parking Use and Needs Statement (14)(17)
Bicycle Parking (15)	10% of vehicular spaces	10% of vehicular spaces	10% of vehicular spaces	10% of vehicular spaces	10% of vehicular spaces	10% of vehicular spaces

Table 3.2 Footnotes for RTP and Commercial Zones:

1. Lot coverage shall be determined by the total area of the footprint of all structures on a lot divided by the total gross lot area. Greater lot coverage may be permitted subject to compliance with minimum development standards, including, but not limited to parking, landscaping and storm drainage.
2. Floor Area Ratio (FAR) may be exceeded as determined by the City Council if a proposed project is within 500 feet of publicly accessible and usable open space and/or provides a community benefit not otherwise required by the City, such as additional publicly accessible open space; public art; landscaping that exceeds minimum City requirements; buildings of exceptional architectural quality; building massing and articulation that serves to reduce the visual impact of higher FAR beyond minimum requirements, and/or other community benefits.
3. Buildings over 300' in length shall demonstrate exceptional design and architectural detail where fronting Road B to actively engage the streetwall and pedestrian realm. Enhanced design elements shall include, but are not limited to well-articulated entryways, variation in massing, authentic architectural detailing and transparent glazing at the street level.
4. Maximum distance between building entrances; building breaks not required.
5. Usable open space may include a combination of shared paseos/pathways as well as courtyards/plazas or private greenspace. Calculations based on gross floor area of building(s).
6. Setbacks shall be measured from the edge of the ultimate right-of-way adjoining the lot, as identified by street sections in Chapter 4 of the Specific Plan.
7. Decorative landscaping or enhanced pedestrian walkways/gathering spaces shall be incorporated within front setback.
8. Upper floors over three stories should step back a minimum of 5 feet from the required minimum setback, if fronting Road B.
9. Within the VCMU, the maximum 15-foot front setback may be increased to allow for a well-designed outdoor dining/gathering space that includes vertical and horizontal elements which simulate a streetwall feel such as a pergola, landscaped trellis, umbrellas, and string lights.
10. Zone standard represents the minimum percentage of the parcel/property that shall be developed at the minimum setback line. Flexibility to increase the minimum setback may be granted to allow for well-designed outdoor space that includes vertical and horizontal elements and other circumstances where additional building setback is necessary.
11. Buildings adjacent to Hwy 113 shall maintain a 20-foot landscaped buffer between the building and the Cal Trans right-of-way.
12. A minimum 150-foot buffer is encouraged, where feasible, along the southern edge of the Plan Area, adjacent to agricultural lands along the urban limit line.
13. 10' minimum setback from residential uses on adjacent parcels (i.e. MDR zone)
14. On-site parking shall be determined by business owner/applicant based on information provided by owner/applicant in a parking use and needs statement. Maximums shall be based on the standards outlined in Section 3.5.3.F for RTP/HC, or 3.5.9.G.6 for VCMU.

Table 3.2 Footnotes for RTP and Commercial Zones (Continued):

15. The number of bike parking spaces provided shall be a minimum of 10 percent of the total number of vehicular spaces provided or credited to the project.
16. Not more than 30 percent of the Road B frontage shall be permitted for on-site vehicle parking, including aisles and backup area.
17. On-site parking shall not be permitted along Road B within the VCMU zone.
18. The building height measuring point (BHMP) shall be established at the existing grade at the mid-point of the building façade of the principal building that is closest to a street.
    a) The height of a building with a flat roof shall be measured from the BHMP to the highest point of the roof excluding parapets and balustrades not exceeding 4 ft. in height.
    b) The height of a building with a roof that is not a flat roof shall be measured from the BHMP to the average level between the highest eave, not including the eave of a dormer and the highest point of the roof; and where there are no eaves, the average level shall be measured between the top of the highest wall plate and the highest point of the roof.
19. Height limitations shall not apply to architectural features such as tower elements, cupolas, domes, or similar, or parapets that do not extend more than 10 percent above the height of the building as defined in footnote 18.
20. Exceptions to the Maximum Building Length, Streetwall Frontage and Front Setbacks in the RTP, RTP/TO, RTP/CCO zones may be granted for large RTP users of buildings 100,000 square feet or larger subject to approval of the Planning Commission and a finding of consistency with the Specific Plan goals and policies and with the Specific Plan EIR. Building and site design elements shall include, but are not limited to: well-articulated entryways, inclusion of expansive common open space that provide visual and physical linkages to the VCOS, variation in massing, authentic architectural detailing and transparent glazing at the street level.
21. Parcel and building configurations in the RTP/TO zone may incorporate portions of the RTP zone in order to accommodate larger buildings, provided that the buildings achieve the design objectives of both the RTP and the RTP/TO zone, particularly the street frontage, the relationship to the public realm and creating pedestrian linkages.

TABLE 3.3: SITE DEVELOPMENT STANDARDS FOR RESIDENTIAL ZONES

ZONING	LDR-NORTH VILLAGE	LDR-EAST VILLAGE	VCLDR	MDR	VCMDR	HDR	HDR/ CCO	FOOT NOTES
Site and Building Criteria								
Max Lot Coverage	50%	60%	60%	70%	70%	75%	75%	
Density(dwelling units /gross acre)	1.0-8.0	1.0-8.0	1.0-8.0	8.1 -19.9	8.1 -19.9	20.0-40.0	20.0-40.0	
Min. Lot Width	60'(9)	50'(9)	50'(9)	25'(9)	25'(9)	None	None	
Minimum Lot Size Interior/corner Detached lots	5000 int/ 6000 corner	4000 int/ 5000 corner	4000 int/ 5000 corner	None	None	None	None	
Minimum Lot Size interior/corner Duplex lots	6000 int/ 7000 corner	6000 int/ 7000 corner	6000 int/ 7000 corner	None	None	None	None	
Suggested Block Length/ Maximum	±400' to 600'/ 800' max (4)	±400' to 600'/ 800' max (4)	±400' to 600'/ 800' max (4)	±400'/500' max (4)	±400'/500' max (4)	±400'max (5)	±400'/800' max (5)	4,5
Setbacks and Separations (1,2)								
Front Setback Min/Max (9)	20'/no max	15'/no max	10'/no max (6,8)	10' /20' (7)	5'/20' (6,7,8)	10'/30'	10'/30'	1,2,6,7 ,8,9,18
Min. Side Setback int/corner (9)	5'/15'	5'/15'	5'/15'	0'/10' (13)	0'/5' (13)	10'/10'	10'/10' (14)	1,2,9, 13,14
Min. Rear Setback (9,10)	20' min (16)	15'	15'	5' (15)	5'(15)	0' (16)	10' (17)	1,2,9, 10,15, 16, 17
Minimum Building Separation	n/a	n/a	n/a	10' for 1-2 stories 15' for 3+ stories	10' for 1-2 stories 15' for 3+ stories	10' for 1-2 stories 15' for 3+ stories	10' for 1-2 stories 15' for 3+ stories	
Building Height								
Min/Max (3)	0'/35'	0'/35'	0'/35'	0'/45'(11)	0'/45' (11)	2 story 25'/55'	2 story 25'/55'	3,11
Vehicular Parking								
Minimum spaces	2 garage spaces	2 garage spaces	2 garage spaces	1 garage space per 1 bedrm, 2 spaces /2+ bedroom	1 garage space per 1 bedm, 2 spaces / 2+ bedroom	1 space /studio or 1 bedrm, 1.5 spaces /2 bedrm 2 spaces /3+ bedrm(18)	1 space /studio or 1 bedrm, 1.5 spaces /2 bedrm 2 spaces /3+ bedrm(18)	18
Bicycle Parking								
Minimum spaces	None	None	None	None	None	1/unit	1/unit	

Table 3.3 Residential Site Standards Footnotes:

1. Where applicable (i.e. adjacent to public right-of-way), setbacks shall be measured from the edge of the ultimate roadway right-of-way adjoining the lot, as identified by street sections in Chapter 4 of the Specific Plan.
2. Minimum setbacks shall be governed by the Uniform Building Code and Fire Code for use or occupancy and type of construction.
3. The maximum building height measurement is as noted in the table, except where modifications/exceptions are permitted in the City's Zoning Ordinance for such design features as chimneys, cupolas, flag poles or similar.
4. Where residential block sizes exceed 600 feet in length, a mid-block paseo shall be provided. See Section 3.5.12.A.18.
5. Max 300' between pedestrian access points/mid-block paseo
6. Residential units adjacent to The Yard shall front or appear to front on to the park (i.e. units may include double frontages or provide secondary access from a rear alley.
7. If fronting Marston, min. 15' front setback from back of path, including 2' clear recovery zone (see Chapter 4, Street Section F and C-1).
8. When adjacent to The Yard (VCOS), setback shall be 5' min/15' max as measured from the eastern edge of the Pedestrian Promenade.
9. For rear/alley load garages, courtyard/T style unit layouts or other non-traditional subdivision layout, setback and/or lot width deviations will be considered on a case by case basis based on a finding that adequate unit separation for light, air and ventilation and private open space is still maintained as determined by the Community Development Director. For non-traditional subdivision layout, alleys or shared space may be counted in setback calculations. Where projects are located adjacent to existing residential development, setback standards shall be maintained except as provided for in Chapter 7, Section 7.4.1.2, Minor/Administrative Modification.
10. Residential units shall not back on to greenbelts trails or pedestrian paths/paseos.
11. Maximum height may be increased for exceptional design quality. Massing and design shall consider pedestrian scale and proximity/adjacency to lower story residential units.
12. A minimum of 60 percent of the Road B frontage ground floor uses within the HDR/CCO zone shall consist of commercial/retail uses. Commercial use is required at the corner of CR25 and Road B. See Section 3.5.13.A.3.
13. 5' minimum interior side setback if adjacent to LDR/VCLDR Zone.
14. 20' maximum side yard setback if adjacent to Road B or CR 25A.
15. 10' minimum rear yard setback if abutting LDR/VCLDR zone.
16. 10' minimum rear yard setback if abutting Road B; 30' minimum rear yard setback if abutting Hwy 113.
17. 20' minimum rear yard setback if abutting CR 25A.
18. HDR and HDR/CCO shall provide 1 guest space per every 5 units and 1 manager space.

3.5 | DESIGN STANDARDS AND DESIGN GUIDELINES

3.5.1 Purpose

The design standards and guidelines contained in this chapter seek to encourage innovation in development, to provide a quality community that meets anticipated demands for housing, services and employment while allowing a variety of approaches to design that establishes a sense of place in a healthy, safe and sustainable manner. Together these Design Standards and Design Guidelines (DS/DG) address the desirable features of the land uses identified in the Specific Plan and to achieve a desired level of quality for the physical environment. Design Standards are a set of threshold requirements. Design Guidelines are a set of discretionary statements/ recommendations.

The purpose of the DS/DG is to provide design recommendations and guidance for projects within the Plan Area, with the overarching goal to result in sustainable developments that are cohesive and well designed. The DS/DG inform development in ways that are environmentally conscious, economically sound and, when properly applied, achieve quality design, improve the community's safety, health and livability. The DS/DG emphasize projects that complement the character of the Plan Area and surrounding community, support pedestrian and bicycle friendliness and embrace a broad spectrum of sustainable practices.

3.5.2 Format of the DS/DG

Required Design Standards provided in this section are recognizable by the words "shall". Design Guidelines provide direction and vision for preferred outcomes and are recognizable by the words "should". The DS/DG are organized into three sections by District- Research and Technology Park, Village Center and The Villages. The General DS/DG for each District are provided first, then Special Character Guidelines follow for selected zones within the District. The content is as follows:

Part 1:

- General DS/DG for zones within the Research and Technology Park District (RTP, RTP/TO, RTP/CCO, RTP/RFO, HC)
- Special Character Guidelines for RTP, RTP/TO, RTP/CCO, RTP/RFO, HC

Part 2:

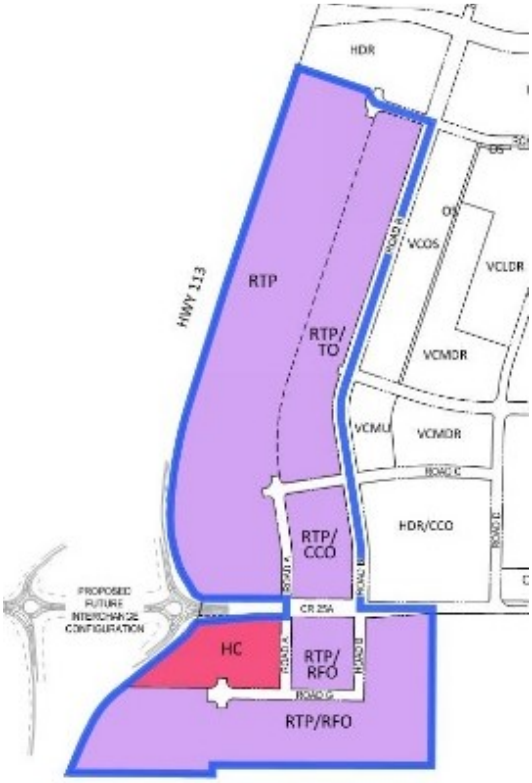
- DS/DG for zones within the Village Center District (VCMU, VCLDR, VCMDR, VCOS)

Part 3:

- General DS/DG for zones within The Villages District (LDR, MDR and HDR, HDR/CCO)
- Special Character Guidelines for HDR, HDR/CCO, MDR and LDR East Village and LDR North Village

PART 1: DESIGN STANDARDS AND DESIGN GUIDELINES FOR RESEARCH AND TECHNOLOGY PARK DISTRICT

The Research and Technology Park District encompasses the North and South Campuses. Section 3.5.3 addresses the general standards and guidelines which apply to all zones within the Research and Technology Park (RTP) District, as shown in the figure to the right. In addition, five (5) Special Character Guideline Sections are provided. Special Character Guidelines address the unique characteristics or features in all 5 zones within the District and are intended to complement and enhance the broader RTP DS/DG in Section 3.5.3. If conflicts arise between the General Guidelines and the Special Character Guidelines, the Special Character Guidelines shall take precedence.



3.5.3 General DS/DG for all Zones within the Research and Technology Park District

The following standards and guidelines apply to all development within the RTP, RTP/TO, RTP/CCO, RTP/RFO and HC zones.

A. Architecture and Massing

Architectural Style and Building Materials

1. Building design within the North and South Campus should incorporate and convey a clean, contemporary, ag-tech/ag-industrial architectural style that takes inspiration from the agricultural roots of Woodland.
2. Simple yet varied architectural design is preferred. Materials and colors should be well thought out to provide a unified and attractive exterior, but should generally be limited to one base material and not more than two accent materials to avoid an overdone or busy appearance.
3. High quality and durable materials such as solid wood, metal, glass, stone, concrete, and brick, shall be used on all buildings, with particular attention paid to finish types and

Buildings within the North and South Campus shall utilize high quality and durable materials and convey a clean, contemporary or ag-tech/ag-industrial style.

surface textures that enhance visual interest and variety particularly at the pedestrian level.

4. Naturally finished metal, concrete (board-formed encouraged), and wood are appropriate as accent materials.
5. The use of stucco siding is permitted but should be limited. Heavy knock-down or "lace" stucco finish is not appropriate.
6. Matte finishes are preferred; highly reflective surfaces are generally not appropriate and should be used sparingly as accents only.
7. A neutral, yet contemporary color scheme that incorporates limited, bold accent colors is encouraged.

Entryways

Building entrances should incorporate distinctive design elements as well as awnings and lighting for employee and visitor comfort and security.

8. Entryways should be harmonious in design with the overall building and have a defined relationship with fronting streets or pedestrian-oriented common areas where secondary access is provided.
9. Building entryways should be distinct, simple and clearly visible to pedestrians.
10. Primary entrances should be recessed with proper overhead covering and lighting as well as distinctive design elements, landscaping or art. Entryways should be properly sized to provide covering and shelter year-round.

Highway 113 Interface

11. Exterior building facades facing SR 113 shall be of the same or similar design quality as the primary building frontage including materials, massing and fenestration to the extent feasible. Long expanses of blank walls and unarticulated facades should be balanced in the overall scale of the building where visible from the public right-of-way.
12. Loading bays and parking areas along SR 113 must be substantially landscaped or screened from public view.

Limit Blank Walls

13. Building facades shall provide distinction and interest through the use of varied wall planes and materials, awnings, fenestration and other appropriately scaled architectural details that create a sense of depth on the wall surface.

Windows

14. For commercial and retail storefronts, windows should be a minimum of 9' feet in height and inset or recessed from the wall plane for visual interest and shadow line.
15. Highly reflective or opaque window glazing is generally not appropriate.
16. Proper glazing should enhance visibility and connection between indoor and outdoor spaces, particularly at the pedestrian/street level.

Proper window glazing should enhance visibility and connection between indoor and outdoor spaces, particularly at the street level.

Rooflines and Cornices

17. Rooflines should be considered in the overall building design and should provide an attractive termination of the building through the use of a decorative cornice or parapet, continuous banding or trim or other architectural features that help clearly define the building edge.
18. Shed and flat roofs are more typical of contemporary buildings, however a simple gable roof can also appear modern with appropriate pitch and use of materials. A mix of simple, projecting cornices and overhangs as well as rooflines that feature a clean edge profile are encouraged.
19. When applicable, decorative parapets should be extended around the sides of a building and contain necessary depth to appear as an integral part of the building design and form.
20. Articulation of the building facade and roof line should be considered when a flat roof is provided to help break up rectangular massing.

Light Fixtures

21. Building and on-site lighting shall reinforce and enhance the architectural style of the development project.
22. Where appropriate and complementary, up-lighting or rooftop lighting is encouraged to accentuate major architectural details, building form and/or landscape elements at night.
23. Lights shall be properly shielded to preserve a "dark sky."
24. Required illumination shall, at minimum, meet Uniform Security Code requirements as set forth in Title 15 of the Woodland Municipal Code.

B. Sustainable Design

Energy Conservation

1. A comprehensive approach to energy conservation should be employed in individual projects (new construction and/or expansion), in ongoing operations and use, as well as in collaboration with other campus-wide initiatives that may be developed, including the following strategies:

- Work spaces should be designed to support direct access to natural light for as many occupants as possible to reduce the demand and use of artificial lighting and improve worker comfort and efficiency.
- Use of street trees, shading devices, cool pavements in parking lots and cool roofs, to reduce heat gain and reduce the urban heat island effect.
- Use of high-performance building envelopes, including insulation of floors, walls, and ceilings that exceed Title 24 standards, use of low-e glass and other high-performance curtain wall or glazing systems.
- Employment of heat recovery ventilation within residential or non-residential buildings, which rather than venting warm exhaust air outside, captures the exhaust air and uses it to preheat incoming air.
- Use of energy-efficient appliances and lighting that meet, at minimum CalGreen Code Tier 1 standards.
- Sustainable, local and renewable building materials should be used whenever feasible.

Natural and energy efficient lighting should be incorporated where feasible to improve building efficiency and employee comfort.

Water Conservation/Quality

Low impact development techniques including bioswales allow for the collection and filtration of stormwater runoff.

The following guidelines are recommended to minimize water use and/or improve water quality:

2. Use high-performance water fixtures that reduce water consumption and reduce demand on the water supply and the amount of waste-water entering the waste-water system.
3. Design streets, parking lots, and building surfaces to collect stormwater run-off using low impact development techniques, such as bioswales or other biofiltration systems.
4. Capture rainwater in cistern or other devices to supply water for landscape irrigation during dry months or channel rainwater from building rooftop drains to landscaping in common areas.

Low-Water Landscape

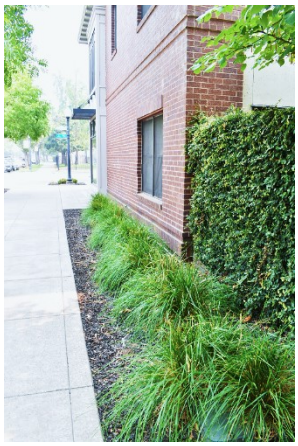
5. Landscaping should consist of climate-appropriate plantings, including drought-tolerant and native species suited to Woodland.
6. Use of permeable and porous pavement in parking areas to treat and attenuate stormwater flows should be used, where feasible, to reduce stormwater run-off. Trees and plants conducive to absorbing stormwater particulates, are encouraged within these planting areas.
7. Landscaping should consist primarily of mulch, flower planting beds, and naturalized groundcovers, including native grasses and shrubs. Non-living groundcovers, such as bark, cobbles, and stones are also encouraged to supplement the primary groundcover and, thereby, reduce maintenance and irrigation demand.
8. Install climate sensitive irrigation systems and other water-efficient bubblers and drip irrigation systems.
9. Coordinate with the City on use and treatment of recycled water for the irrigation of common area landscaping and public parks.

C. Landscaping

Refer to Section 3.5.3.F, Driveways, Parking and Services Aisles for parking lot landscape/shade requirements. Private and public landscaping shall be consistent with the master landscape palette for the Research and Technology Park District.

Native Landscaping

1. A variety of shrubs and groundcover species should be used along the base of buildings to soften and anchor the foundation and along pathways to define edges and transitions.
2. Native plant species should be used whenever possible, including native grasses and shrubs.
3. Pollinator friendly planting and maintenance practices shall be integrated into each site's landscaping.
4. Lawns and highly ornamental landscaping that require frequent pruning and maintenance should be used sparingly to accentuate important public nodes, plazas, gathering areas and where desirable for recreation.



Landscaping shall be provided in setback areas adjacent to the public right of way to soften the transition between the sidewalk and built environment.

Yard Setbacks

5. Setbacks areas, including easements for utilities where feasible, shall incorporate landscaping except where screened from the public right-of-way and public or private open space.
6. Vegetative matter shall be designed to cover 75 percent of required landscaped areas. Exceptions may be granted on a case by case basis.

Trees

7. Tree planter dimensions shall be no less than 6′ x 6′, and should correlate with the ultimate size of the tree species.
8. Soil analysis shall be performed after site grading and paving is complete and any amendments incorporated per recommendation of a licensed landscape architect.
9. Where appropriate and feasible, Valley Oak trees (*Quercus lobata*) shall be incorporated into open space areas, reflective of the City's historic natural landscape.

Where appropriate landscape design should incorporate Valley Oak trees and/or other native trees reflective of Woodland's historic and natural landscape.

Container Size

10. Trees shall be a minimum of 15-gallon size and shrubs a minimum of 5-gallon size at the time of planting.

D. Screening, Walls and Fencing

Outdoor Storage

Outdoor storage of materials shall be attractively screened from public view.

1. Outdoor storage of goods and materials shall generally be screened from public view by way of landscaping, berms, decorative fencing and/or masonry walls, which are architecturally compatible and complementary to the overall project.
2. Where applicable, screen planting shall be designed to achieve a 75 percent summer opacity and 60 percent winter opacity within 3 years of planting.

Mechanical Equipment

3. All utility and mechanical equipment and service areas shall be located generally away from or adequately screened from public view.
4. Backflow prevention devices shall not be located within the public right of way or along primary pedestrian streets. All domestic, fire, and landscape backflow prevention devices shall be screened with landscaping or low fences/walls.

Limited Use of Walls and Fencing

5. Walls and fencing should be limited to specific screening and/or security purposes and should generally not be used for separation of uses/parcels within the North and South Campus.

6. Low decorative walls or fencing may be used in limited capacity to delineate shared or private open space and outdoor dining/patio areas; but should not exceed 36 inches in height within the front setback area or adjacent to public right-of-way.
7. Fencing located outside of the front setback for screening and/or security purposes shall not exceed eight feet in height. All fences over six feet in height require a building permit.

Design

8. Long expanses of fencing or walls visible to the public shall incorporate enhanced detailing, decorative pilasters and/or the height and wall plane shall be varied to minimize a long and monotonous appearance.
9. Where feasible, fencing and walls should be combined with landscaping to soften the overall appearance and discourage graffiti.
10. All wood fences shall be treated with a semi-transparent, pigmented stain and sealant.
11. Standard chain link fencing as well as barbed/concertina wire or similar boundary security materials are not appropriate.

E. Trash and Recycling

Enclosures

1. Trash and recycling enclosures shall consist of the same or similar design and materials as the overall project and shall adhere to City trash and recycle enclosure specifications.
2. Enclosures shall be located to the side or rear of the building, generally away from public view and separated from adjacent parking stalls by a minimum 3-foot-wide planter.
3. Trellis structures and vines are encouraged as a means of screening the sides and rear of trash enclosures.
4. The area around trash enclosures shall be kept free of trash and debris.

F. Driveways

Driveway Location

1. Driveway placement should avoid disrupting the streetwall and pedestrian environment and shall be located behind or to the side of buildings whenever possible.

2. Lots with frontage on arterial streets, including along CR 25A, shall locate driveway access on internal side streets. If the only frontage is on a major access street, consolidated access at a single driveway should be provided, if feasible.

Driveway Spacing

3. The minimum spacing or separation requirements for driveways on local or collector streets shall be as follows, unless otherwise approved by the City's Traffic Engineer:
   Local Streets: 100 feet between driveways; 150 feet from an intersection.
   Collector Streets: 150 feet between driveways; 200 feet from an intersection.
4. Where driveway location standards can't be met for a parcel, the City may require access to that parcel achieved via cross-access over an adjacent parcel.

Driveway Consolidation

5. The consolidation of driveways within adjacent parcels shall occur whenever possible.

Driveway Design

6. Driveways shall be a minimum width of 25 feet and a maximum width of 40 feet at the back of the sidewalk.
7. Driveway width and placement shall accommodate truck turning movement and clearing without blocking roadways.
8. Access driveways shall provide adequate length to accommodate off-street vehicle stacking needs during times of peak use.
9. Driveways should incorporate material changes to alert pedestrians of potential conflict.

G. Vehicle and Bicycle Parking

Off-street Parking

1. Off-street parking shall be determined by the business owner/applicant based on information provided by owner/applicant in a parking use and needs statement, subject to approval by the Community Development Department.

Parking lots shall consist of landscaping, tree canopy and clearly defined pedestrian walkways to adjoining buildings.

2. The maximum number of off-street parking spaces shall not exceed the following amounts, unless otherwise approved by the Community Development Director:
   Hotel: 1 spaces per room, plus 1 space for the manager
   Commercial, Business Support Retail: 1 space per 300 gross square feet
   Office, Flex, Research and Development: 1 space per 300 gross square feet
   Light Industrial: 1 space per 500 gross square feet
   Manufacturing, Storage, Warehouse: 1 space per 2,000 gross square feet
   Restaurants, cafes, micro-brewery: 1 space per 4 seats

On Street Parking

3. On-street parking spaces adjacent to the property street frontage may be considered and counted when determining parking needs.

Shared or District Parking Facilities

4. Multiple buildings within the same cluster or block should be designed to share parking and off-street loading facilities and service areas, to the extent possible.
5. Future parking needs may be phased by allocating space for such needs, but allow for other uses until the parking use is required. Landscaped areas that can be converted to expanded parking or building coverage are preferred in lieu of constructing oversized parking lots.

Reduced Parking Demand

6. Projects shall demonstrate that parking reduction strategies have been incorporated to reduce on-site parking demand through Transportation Demand Management strategies such as but not limited to the following:
   Parking cash-out for employees; Subsidized transit passes or car sharing programs; dedicated parking spaces near building entrances for rideshare and carpools; guaranteed ride home program; alternative work week and flex-time schedules; telecommuting or work-at-home programs; dedicated employee housing; compliance with City VMT/TDM ordinance, as available; participation in City VMT fee program, as available.

Bike Parking Facilities

7. Bicycle racks shall be placed near building entrances, in safe, well-lit locations, and permanently anchored to a hard, dust free surface, preferably asphalt or concrete slab, and installed in a manner which allows adequate space for access to the bicycle and locking device.
8. Covered and secured bike parking shall be incorporated into each project for use by employees and visitors. The use of bike lockers is encouraged where feasible.
9. Facilities such as locker rooms, showers (2 minimum) or similar facilities are required in all general industrial, office and research technology buildings over 50,000 s.f. and encouraged in all other commercial developments.
10. The number of bike parking spaces provided shall be a minimum of 10 percent of the total number of vehicular spaces provided or credited to the project (e.g. 200 vehicle parking spaces provided multiplied by 10 percent = 20 bike parking spaces required).

Bike lockers are encouraged throughout the North and South Campus for use by employees and visitors. Lockers should be located in lighted and highly visible locations.

H. Loading

Service Aisles and Loading Space

1. Loading and service aisles shall be constructed of durable materials and designed to support safe and efficient access for delivery or service trucks.
2. Where loading and service aisles may function as secondary or informal access ways, consideration should be given to design as well as function.
3. Where necessary, screening may be required to reduce noise and visual impacts associated with service aisles.
4. Uses with operations requiring a heavy volume of truck traffic shall have separate truck parking areas that are clearly delineated.
5. Designated pull-out or drop-off locations should be provided such that driveway or access to parking is not impeded.

Loading Area Design Standards

6. Loading bays shall be adequately sized and spaced to provide adequate space for vehicles, whether rear loading or side loading at any loading dock, door, or area, without encroaching into required parking spaces or driveways.
7. Loading bays shall not be less than 10 feet in width, 25 feet in length, and 14 feet in height. For semi-trucks, there shall be at least 85 feet from the edge of the loading dock to the far edge of the maneuvering area. Extended trailers and larger docks may require up to 130 feet.
8. One truck loading and unloading space for buildings with a gross floor area of 7,500 square feet or greater should be provided, plus one additional space for each additional 20,000 square feet or fraction thereof unless otherwise approved by the Community Development Department.
9. Flex office and office condominiums having need for only occasional shipping or receiving of goods may use a portion of the driveway or parking area for temporary loading and unloading.

I. Signage and Wayfinding

Setback, Height and Area Requirements

1. Design Review approval is required for all new signage. Sign setback, height and area requirements are subject to Table 3.4.

Table 3.4 RTP and Commercial Signage Standards

	Max Sign Height		Min Setback from Property Line	Total Sign Area Per Business	Max Total Sign Area Per Business
Zone	**Wall Mounted**	**Ground Mounted**	**Ground Mounted**	**All Permanent Signs**	**All Permanent Signs**
RTP, RTP/RFO	40ft	12ft	10ft	The length of building frontage x 2	300 s.f.
RTP/TO, VCMU	30ft	8ft	3ft	The length of building frontage x 2	175 s.f.
RTP/CCO, HDR/CCO	20ft	12ft	5ft	The length of building frontage x1.5	175 s.f.
HC	30ft, shall not exceed height of hotel	12ft	10ft	The length of building frontage multiplied by 2	200 s.f.
VCOS, OS/GB	Commercial uses permitted with the VCOS (The Yard) shall be subject to the standards and guidelines applicable to the VCMU zone; otherwise signage within the VCOS, OS and GB zones shall be consistent with Park and Greenbelt Master Plan.				

Pedestrian oriented blade signs are encouraged in the Community Commercial Overlay Zones.

Location

2. Signs should be considered during building design and properly scaled and located so as not to dominate or interfere with architectural detailing and overall building façade.
3. In general, signage should not be placed more than 20 feet above the sidewalk or be located above the building streetwall height if upper stories are stepped back.
4. Multi-tenant signage should be coordinated and cohesive in appearance including consistent sizing and lighting requirements.
5. Customized projecting, blade signs or under canopy signs are encouraged within the Community Commercial Zone or where commercial uses are incorporated within mixed use projects. Blades signs must provide at least 8 feet of vertical clearance as measured from the sidewalk to the base of the sign.
6. Signs and structural features shall be subject to cross visibility requirements as outlined in the Woodland Municipal Code and subject to review and approval by the City Traffic Engineer.

Text

5. Signs may only contain the name and logo or symbol of the business and its street address. Trade slogans are not permitted.
6. Logos shall not exceed 4 square feet in size except if it is determined by City Planning staff that building scale or other factors, such as enhanced design and quality, warrant increased logo square footage.

Materials and Design

7. Signs shall be constructed using durable, fade and weather resistant materials such as stone, tile, cast concrete, or other similarly durable masonry, metal or wood materials that complement the architectural design and style of the building.
8. Unique and creative sign design is encouraged to enhance the unique identity of the Plan area.
9. Faded or damaged signs shall be replaced or repaired in a timely manner.
10. Cabinet or box signs, roof mounted signs, window signs above the second floor and pole mounted signs are not permitted.

Unique and creative exterior signage in encouraged within the North and South Campus.

11. Feather signs, flags, banners and other attention getting signs or devices are prohibited except during grand openings, in which case they must be removed within 30 days.

Illumination

12. Signs shall be spot illuminated from the front or consist of letters, numbers, or graphics that are halo backlit. Internally illuminated pan channels letters are not appropriate except within the Community Commercial and Highway Commercial zones. Neon is permitted when integrated into custom designs.
13. Flashing, traveling, animated, or intermittent illumination is prohibited.
14. Exposed conduit, tubing and raceways are prohibited. Transformers and other equipment shall be fully screened/concealed.

Monument Signs

15. Where not governed by a comprehensive sign plan, one monument sign shall be allowed for each street frontage of a lot.
16. Monument signs shall include a decorative or enhanced base and shall be up-lit except for cut-out letters or numbers which may be internally illuminated.

Comprehensive Sign Plan

17. A Comprehensive Sign Plan is encouraged for multi-tenant buildings and for North and South Campus blocks where multiple buildings create a campus like setting.
18. A Comprehensive Sign Plan should consider the need for wayfinding where multiple buildings surround a central common area or where uses may result in multi-location trips for Technology Park visitors.
19. A Comprehensive Sign Plan may be approved by the Community Development Department and should include guidelines pertaining to overall size and square footage of individual tenant and building signs, lettering heights, materials, illumination, monument placement, size and design, and ancillary pedestrian directional or informational signage such as building entrance directories and other wayfinding methods.

Highway 113 Oriented Signage

20. Businesses with building frontage along HWY 113 shall be permitted additional sign area (up to 1.5 times the building's linear freeway frontage) for on-building signage that faces the freeway.
21. Standalone/freestanding monument signs are generally not permitted along SR 113 unless part of a Comprehensive Sign Plan where multiple businesses are represented and where the monument sign(s) are of exceptional design and quality, with material finishes that represent the unique character of the Plan Area. Additional height up to 50 feet may be permitted through Comprehensive Sign Plan review and approval.

J. Public Art

Obligation

1. Public art shall be incorporated within new development projects, including private projects, consistent with the Woodland Municipal Code (WMC), Public Art Ordinance (WMC Section 17.104.200).

Installation

2. The placement and installation of Public Art is encouraged within shared open space areas such as outdoor patios, plazas and courtyards and within view of a large number of people such as along sidewalks, at intersections, within roundabouts, medians or The Yard, and at primary Plan area gateway locations along CR 25A and Road B.

Artwork

3. Public Art should be unique and of high quality design and execution; however, it is encouraged that artwork located within the public realm be of a unified theme reflective of the Research and Technology Park's focus on agricultural and technological innovation.

3.5.4 Special Character Guidelines- Research Technology Park (RTP) Zone

A unique focus of the RTP Zone is the campus-like setting; a place of collaboration and idea exchange within an inspired and forward thinking environment. The following Special Character Guidelines are intended to assist in achieving that vision.

A. Site Design

Courtyards and outdoor seating areas shall be incorporated as a component of site design to help create a campus-like setting in the RTP Zone.

Block Pattern

1. Block lengths will depend on parcelization, however overall site planning shall consider broader connectivity that promotes pedestrian/bike activity by way of paseos, paths and connecting walkways.

Campus-Like Setting

2. Campus building placement/configuration should be promoted whenever possible, creating opportunities for interior courtyards, plazas, seating areas, and other public or semi-public open spaces.

3. Highly visible and well designed secondary building entrances located internally to the site should face onto common open space areas.
4. Paseos and other internal and external walkways shall connect employees and visitors to key pedestrian pathways by and between buildings, through to public right-of-ways, greenbelts and/or the broader bike/pedestrian trail network.

Pedestrian Corridors and Connection

5. Internal pedestrian walkways or multi-use paths shall be incorporated within the North Campus where appropriate. Landscaping shall be provided along a majority of the paths on one or both sides of the walkway. Shaded resting/seating areas shall be appropriately located in visible and lighted locations.
6. Designated pedestrian paseos should be identified to link the North Campus areas from north to south and to Road B, allowing employees and visitors the ability to connect with various businesses/buildings.
7. Pedestrian scale light poles of not more than 16 feet in height or lower level bollard style lighting, or a combination of both, shall be provided at all outdoor walkways, parking, loading and service areas, ramps/stairs, and building entrances.
8. A minimum of 1-foot candle of lighting shall be provided; "hot spots" of 10 foot candles or greater shall not be permitted.

Walkways shall be illuminated with pedestrian scale lighting such as low level bollard lighting.

Common Open Space

9. New development shall provide common, usable open space which may include a combination of shared paseos/pathways as well as courtyards/patios or private greenspace. Amount of common and usable open spaces shall be equivalent to at least 5% of the gross floor area of the building.
10. Common open space should be designed as a component of new development in a manner that can be shared among multiple tenants or employees.
11. Private open space, designed for the exclusive use of building occupants and employees should also be considered and may be separated from publicly accessible spaces as balconies, terraces, or patios by elevation, landscaping, or other means.
12. Shared open space, framed by active building facades, should generally orient toward the public right-of-way or internal pedestrian paseos/pathways. Building windows, balconies or entrances should face the open space for added security and visibility.
13. The use of textured or enhanced paving, incorporation of decorative landscaping and shade elements, and movable tables and chairs that provide an adaptable, attractive and inviting environment are encouraged within shared courtyards, patios and private greenspace.

Adjoining Parcels

14. Where possible, setbacks between adjoining parcels should be treated as a unified public area, designed and landscaped to contribute to the broader open space and pedestrian circulation framework.

B. Architecture and Massing

Ground Floor Articulation and Activity

1. The ground floor of all buildings, particularly those façades facing the public right-of-way, should support activity on the street and bring the life of the building into the public realm through the use of frequent and well defined building entryways, façade transparency at the street level, and through architectural detailing such as awnings, canopies, recesses, and enhanced materials and surface changes that provide an interesting and pleasant employee/public experience.
2. Active uses should be located on the ground floor along the building frontage, visible to the public realm/public right-of-way and may include, but are not limited to community rooms and kitchens, employee support areas, recreational facilities, exhibition space, and lobbies.
3. Articulated wall planes at the ground floor along the public right-of-way or where substantially visible to the public should be offset by at least 2 to 4 feet and may be combined with color or material changes to provide substantial shadow lines and visual interest and allow for enhanced landscaping along the base of the building.

Active Corners

4. Buildings located at corners, intersections or roundabouts should reinforce the streetwall through unique architectural design elements or enhanced façade treatment, fenestration, variation in wall plane, tower elements and interesting signage.
5. Corner buildings should be minimally recessed if at all from the property line/public right-of-way except to allow for enhanced landscaping.

3.5.5 Special Character Guidelines- Research Technology Park/Transitional Overlay Zone (RTP/TO)

The following guidelines provide additional recommendations and standards that ensure the RTP/TO zone will provide an appropriate level of intensity transition between the RTP Zone and the Village Center District to the east. Particular emphasis is placed on the interface between the RTP and the public realm along Road B to ensure building types and uses in the RTP/TO actively contribute to a pleasant, walkable, pedestrian environment. Standards and guidelines in this section shall supersede and take precedence over those in Section 3.5.3, General DS/DG.

A. Site Design

Well Defined Streetwall

1. Building placement along Road B should provide clearly defined edges to the public realm and activate the street.
2. For parcels with frontage along Road B within the RTP/TO, seventy percent (70%) of the property shall be developed at the minimum setback line (development may be phased over time). Flexibility to increase the minimum setback may be granted to allow for well-designed outdoor space that includes vertical and horizontal elements and other circumstances where additional building setback is necessary.

3. Buildings over three stories should stepback or provide a varied wall plane on street facing upper floors (above the third floor) to maintain a human scale streetwall.

Green Wall

4. Landscaping, including hardscape elements, decorative planters, and trellis structures with vines, should serve as a continuation and enhancement of the streetwall, contributing to an attractive public realm which extends and complements the architectural style of the built environment.

Pedestrian Experience

5. Primary building entrances should face on to Road B.
6. Façade treatments, when adjacent to Road B and to common open space areas should support a comfortable pedestrian experience by incorporating architectural features that provide shade, such as canopies, awnings, overhangs, projections, as well as visual interest through the use of articulated bays, material / surface change and textures and distinct entryway details.
7. Canopies and awnings should provide a minimum 8-foot clearance above finished grade and may extend over the public right-of-way.

B. Driveways, Parking and Service Aisles

Driveway Location

1. Driveway placement shall avoid disrupting the streetwall and pedestrian environment and shall be located behind or to the side of buildings whenever possible.
2. Not more than one full-access entrance/drive into the RTP/TO zone shall be permitted along Road B between Marston and Road E (see also Circulation Chapter).
3. It is encouraged that the number of limited access driveways (right-in/right-out) along Road B, along the park (The Yard) frontage be limited to avoid disrupting the streetwall and pedestrian environment.
4. Shared access shall be pursued between adjoining parcels/uses.

Parking Lots

5. On-site parking shall be located behind buildings and away from Road B. Not more than 20 percent of a parcel's frontage on Road B may be used for parking, including aisles and backup areas.

3.5.6 Special Character Guidelines-Research Technology Campus/Community Commercial (RTP/CCO) Zone

The following Special Character guidelines address particular aspects of commercial use and building design within the RTP/CCO zone, located at the intersection of CR 25A and Road B, serving as a "gateway" to the Plan Area. The RTP/CCO guidelines have a specific focus on the prominent gateway location and enhancement of the identity of the Plan Area. The RTP/CCO Zone

allows both commercial and residential uses within a desirable horizontal or vertical mixed-use development project. Standards and guidelines in this section shall supersede and take precedence over those in Section 3.5.3, General DS/DG.

A. Site Design

Well Defined Streetwall

1. Building placement along Road B should provide clearly defined edges to the public realm and activate the street.
2. For parcels with frontage along Road B within the RTP/CCO Zone, sixty percent (60%) of the property shall be developed at the minimum setback line (development may be phased over time). Flexibility to increase the minimum setback may be granted to allow for well-designed outdoor space that includes vertical and horizontal elements and other circumstances where additional building setback is necessary.
3. "Drive-thru" uses shall not be permitted along Road B or CR 25A. Exceptions may be granted for small scale drive-thru facilities such as a coffee kiosk as an ancillary use within a larger commercial center. Such uses should be located internal to the site, away from Road B.
4. The number of limited access (right-in/right-out) driveways shall be restricted from Road B between CR 25A and Road C to minimize disruption to the pedestrian environment.
5. On-site parking shall not be permitted along the Road B frontage.

B. Architecture and Massing

Gateway (Primary)

1. Buildings located at or the near the corner of CR 25A and Road B shall be designed in a manner which provides a sense of arrival and should reflect the distinctive character of the Plan area as an agricultural and technological center for innovation.
2. Enhanced landscaping shall be provided along CR 25A between Highway 113 and Road B with an emphasis at the intersection of CR 25A and Road B to accentuate this location as the primary Plan Area entryway.

Road B Frontage

3. Buildings with frontage along Road B shall be designed in a manner so as to not "back-on" to Road B. Windows, entryways, patios and other design features shall be located along the Road B frontage to give the appearance of a primary building frontage and/or shall activate the streetwall.
4. Utility doors and other back-of-house items shall be avoided along Road B and CR 25A.

Ground Floor Articulation and Activity

5. The ground floor of all buildings, particularly those façades facing the public right-of-way, should support activity on the street and bring the life of the building into the public realm through the use of frequent and well defined building entryways, façade transparency at the street level, and through architectural detailing such as awnings, canopies, recesses, and enhanced materials and surface changes that provide an interesting and pleasant

public experience.

6. Active uses should be located on the ground floor along the building frontage, visible to the public realm/public right-of-way and may include, but are not limited to retail storefronts, cafes/restaurants, community rooms and kitchens, employee support areas, recreational facilities, exhibition space, and lobbies.
7. Articulated wall planes at the ground floor along the public right-of-way or where substantially visible to the public should be offset by at least 2 to 4 feet and may be combined with color or material changes to provide substantial shadow lines and visual interest and allow for enhanced landscaping along the base of the building.

Active Corners

8. Buildings located at corners, intersections or roundabouts should reinforce the streetwall through unique architectural design elements or enhanced façade treatment, fenestration, variation in wall plane, tower elements, outdoor seating/patios and interesting signage.

C. Driveways, Parking and Service Aisles

Driveway Location

1. Driveway placement shall avoid disrupting the streetwall and pedestrian environment and shall be located behind or to the side of buildings whenever possible.

Parking Lots

2. On-site parking shall be located behind buildings and away from CR 25A and Road B.

3.5.7 Special Character Guidelines-Research Technology Park/Research Flex Overlay (RTP/RFO) Zone

The RTP/RFO zone, located in the South Campus, will serve as an extension of the North Campus, while providing opportunities for research and light manufacturing uses, particularly ag tech related, with immediate and convenient access to prime agricultural land for field research and testing. Development guidelines within this zone provide added flexibility for specialized building types such as greenhouses or other research and testing facilities. Standards and guidelines in this section shall supersede and take precedence over those in Section 3.5.3, General DS/DG.

A. Site Design

Block Pattern

1. Block lengths should be no greater than 600 feet. If longer block lengths are required, mid-block paseos or pedestrian paths, connecting walkways, bicycle facilities, and parks or open space should be provided.

Future Use Expansion

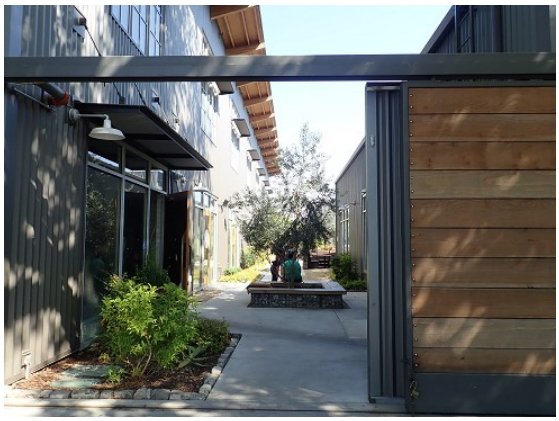
2. Consideration should be given to lot sizes that will allow for future expansion, such as for greenhouse or expanded research facilities.

Campus Setting

3. Where higher employment uses are proposed, a campus style environment should be promoted, creating opportunities for interior courtyards, plazas, seating areas, and other public or semi-public open spaces.
4. Highly visible and well designed, secondary building entrances located internally to the site should face onto common open space areas and parking lots.
5. Paseos and other internal and external walkways shall connect employees and visitors to key pedestrian pathways by and between buildings, through to public right-of-ways, greenbelts and/or the broader bike/pedestrian trail network.
6. Pedestrian scale light poles of not more than 16 feet in height or lower level bollard style lighting, or a combination of both, shall be provided at all outdoor walkways, parking, loading and service areas, ramps/stairs, and building entrances.
7. A minimum of 1-foot candle of lighting shall be provided; "hot spots" of 10 foot candles or greater shall not be permitted.

Common Open Space

8. New development shall provide common, usable open space which may include a combination of shared paseos/pathways as well as courtyards/patios or private greenspace. Amount of common and usable open spaces shall be equivalent to at least 5 percent of the gross floor area of the building.
9. The use of textured or enhanced paving, incorporation of decorative landscaping and shade elements, and movable tables and chairs that provide an adaptable, attractive and inviting environment are encouraged within shared courtyards, patios and private greenspace.



Required open space may be developed as a courtyard or patio and should include landscaping, lighting and outdoor furniture for the enjoyment of employees and visitors.

B. Architecture and Massing

Unique Building Types

1. Unique or nontraditional building types such as greenhouses are permitted within the RTP/RFO Zone but shall be designed with high quality materials and in a manner that does not detract from the overall aesthetic quality of the Plan Area.
2. Where appropriate, landscaping or screening may be required to soften the appearance of a non-traditional building types.

Gateway (Secondary)

3. Buildings located at or the near the corner of CR 25A and Road B shall be designed in a manner which provides a sense of arrival and should reflect the distinctive character of the Plan area as an agricultural and technological center for innovation.
4. Enhanced landscaping shall be provided along CR 25A between Highway 113 and Road B with an emphasis at the intersection of CR 25A and Road B to accentuate this location as a critical gateway to the Plan Area's South Campus.

C. Ag Interface

1. A minimum 150-foot buffer is encouraged, where feasible, along the southern edge of the Plan Area, adjacent to agricultural lands along the urban limit line.
2. Uses within the buffer may include parking, streets, bike / pedestrian multi-use trails, shipping/receiving yards, stormwater management uses/facilities, or uses. Additionally, uses consistent and compatible with agricultural uses, agricultural field research or similar (i.e. greenhouses, field research offices, community gardens or agricultural uses/structures) are permitted within the ag buffer.

3.5.8 Special Character Guidelines-Highway Commercial Zone (HC)

The following special character guidelines are intended to promote an attractive Plan Area gateway that reflects the character of the Research and Technology Campus, while serving both visitors to the Plan Area as well as the traveling public in a convenient and efficient manner. Standards and guidelines in this section shall supersede and take precedence over those in Section 3.5.3, General DS/DG.

A. Site Design

Pedestrian Connection

1. Site design shall consider pedestrian connectivity to adjacent and nearby commercial uses, businesses, bike/pedestrian paths, and mobility hub(s). Pedestrian walkways should be clearly delineated by overhead trellising, shade trees, enhanced paving, landscaped edges or other identifying characteristics. Pedestrian walkways shall be well lit and visible.

B. Architecture and Massing

Architectural Style and Scale

1. Development within the Highway Commercial Zone shall reflect the "ag-tech" character of the Plan Area.
2. Contemporary design styles are encouraged.
3. Hotel(s) shall provide a well-defined, covered entryway for loading and unloading.

Gateway

4. Projects located at the corners of CR 25A and Roads A and B shall include enhanced corner design elements and landscaping to provide a sense of arrival.
5. Buildings with frontage along CR 25A, Road A or Road B shall be designed in a manner so as not to "back-on" to those roadways. Windows, entryways, patios and other design features shall be located along the CR 25A and Road A/B frontages to give the appearance of a primary building frontage.
6. Utility doors and other back-of-house items shall be avoided along CR 25A and Road A/B or appropriately screened from public view.

C. Driveways, Parking and Service Aisles

Driveways

1. Limit driveways to a single right-in right-out on CR 25A.

Drive-Thru Facilities

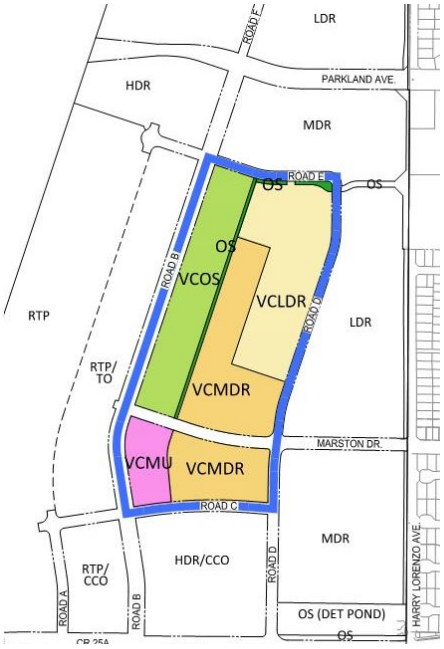
2. Highway Commercial uses that include drive-thru facilities should locate the drive-thru aisle away from CR 25A and Road A where feasible.
3. Not more than one drive-thru facility may be permitted on a single parcel.
4. Drive-thru aisles shall incorporate covered overhangs and/or trellises and be landscaped on both sides of the aisle. Adjacent planter areas/medians shall be at least 5 feet wide and shall include trees or other vertical elements such as landscape screens/walls.
5. Pedestrian pathways on parcels with drive-thru facilities shall be clearly delineated by stamped/decorative, color paving.
6. Outdoor/patio dining areas shall be provided with all drive-thru coffee shops / restaurants.

Gas Station

7. A single service/gas station may be permitted within the Highway Commercial Zone.
8. Fuel pump canopy design shall have similar roof form and design to primary building and be of exemplary architectural design.
9. A minimum of 10' wide landscape area shall be provided along all street frontages.
10. A single monument sign with fuel price may be permitted and shall incorporate architectural treatments consistent with the main building.

PART 2: DESIGN STANDARDS AND DESIGN GUIDELINES FOR THE VILLAGE CENTER DISTRICT

The Village Center District includes Village Center Mixed Use (VCMU) Zone and the Village Center Open Space (VCOS) Zone, The Yard, an 11-acre linear park. Residential Uses in the Village Center District are Village Center Medium Density (VCMDR) and Village Center Low Density (VCLDR) Zones. In this District, the DS/DG provide the comprehensive DS/DG for each zone and no General DG/DG's are provided. However, some standards refer to DS/DG in other sections. The VCMDR and VCLDR zones tier off of the General Residential District DS/DG found in Section 3.5.12.



3.5.9 DS/DG for the Village Center Mixed Use (VCMU) Zone

A. Site Design

Well Defined Streetwall

1. Building placement along Road B and Marston Drive should provide clearly defined edges to the public realm and activate the street.
2. For parcels with frontage along Road B and Marston Drive, seventy percent (70%) of the property shall be developed at the minimum setback line (development may be phased over time). Exceptions may be granted to allow for articulated entryways and well-designed outdoor space that includes vertical and horizontal elements that simulate and maintain the appearance of a streetwall.
3. Where portions of a building other than entryways are setback from the sidewalk, the area should be treated as a courtyard or patio.
4. Buildings over three stories should stepback or provide a varied wall plane on street facing upper floors (above the third floor).
5. On-site parking, if provided, shall be located behind the building and away from Road B and Marston Drive.
6. "Tuck under" parking is encouraged, where feasible, as an alternative to surface parking.

Active Corners

7. Buildings located at Road B and Marston Drive should incorporate unique architectural design elements or enhanced façade treatment, fenestration, variation in wall plane, tower elements and interesting signage.

Pedestrian Experience

Roll up doors are encouraged within the Village Center to allow for greater interaction and interest between the built environment and the pedestrian right of way.

8. Primary entrances and/or outdoor use areas such as patios shall be located at intervals of no more than 50 feet and should face the public right-of-way or public realm which may include an active alley if that is the primary entrance.
9. Primary business entrances shall not face parking lots.
10. Façade treatments, when adjacent to Road B and Marston Drive should support a comfortable pedestrian experience by incorporating architectural features that provide shade, such as canopies, awnings, overhangs, projections, as well as visual interest through the use of articulated bays, material and surface change and textures, and distinct door and window details.
11. Canopies and awnings should provide a minimum 8-foot clearance above finished grade and may extend over the sidewalk/public right of way.
12. Avoid locating residential uses on the ground floor unless a live-work unit. Lobby entries to upper floor units may be provided along the building frontage but should be carefully placed to avoid disrupting the storefront continuity.
13. Pedestrian access should consider and connect thoughtfully to the mobility hub, The Union.

Public and Private Outdoor Space

14. Outdoor dining is encouraged and may take place within the public right-of-way subject to an encroachment permit issued by the Community Development Department.

Outdoor display of merchandise is encouraged within the Village Center. However, a minimum 5-foot clear walk space shall be maintained on all pedestrian paths/sidewalks.

15. Environmental conditions such as sun, shade and prevailing winds should be considered when positioning courtyards and outdoor seating areas.
16. Outdoor patio/dining enclosures (fencing or gates) shall be designed with quality materials and should incorporate landscaping where possible to help soften their appearance.
17. Trees, trellises and other shade structures are encouraged within outdoor courtyards and patios.
18. Outdoor display of merchandise which enhances the appearance and pedestrian experience is permitted, but shall not obstruct the accessible path of travel, any building entrance/exit or accessible ramp. A minimum of 5 feet of clear walk space shall be maintained along all pedestrian paths and public sidewalks.

Multi-Use Design

19. Alleys and paseos should be fully designed to allow for shared uses including primary or secondary access to businesses, outdoor dining and attractive pedestrian walkways.
20. The use of pavers or stamped/colored concrete is encouraged within alleys to provide a durable and attractive passageway and help define a shared pedestrian realm.

B. Architecture and Massing

Solid wood, standing metal seam, stone, concrete and masonry, including red brick, are appropriate materials in the Village Center.

Architectural Style and Building Materials

1. Building design should reflect a more traditional urban center with predominantly two and three story buildings.
2. Simple architectural design is preferred with elements of contemporary farm style, warehouse / loft style, and/or ag/industrial rustic.
3. Materials and colors should be well thought out to provide a unified and attractive exterior, but should generally be limited to one base material and not more than two accent materials to avoid a busy appearance.
4. High quality and durable materials such as solid wood, standing metal seam, quarry stone, concrete and masonry, shall be used on all buildings, with particular attention paid to finish types and surface textures that enhance visual interest and variety particularly at the pedestrian level. Innovative "green" materials and/or "green walls" are encouraged.
5. Naturally finished metal, and wood are appropriate as accent materials. The use of stucco siding is permitted but should be limited and applied as smooth texture.
6. Matte finishes are preferred; highly reflective surfaces are generally not appropriate and should be used sparingly as accents only.
7. A rich contemporary color scheme is encouraged.
8. Building lighting, including illumination and fixture style, as well as landscape pallet and location should be considered early in the design process. Lighting and landscaping should be well integrated into the overall project site plan and complementary to the building design and proposed architectural style.
9. Design elements such as roll up doors, string lights, upper level decks, balconies and finished roof tops that can support outdoor gathering/dining opportunities are encouraged to promote a lively urban environment.

Ground Level Façade

10. Facades at the ground level, particularly those facing the public right-of-way, should include frequent entrances and display windows, and should be visually distinguishable from upper levels through the use of architectural detail, awnings, canopies, or by recessing upper floors above the second floor.

11. A majority of ground floor storefronts should be transparent and provide opportunity for storefront display area and/or patron seating/dining. Avoid blank walls greater than 12 feet in length.
12. Buildings located at prominent street corners shall include enhanced architectural features at the corner such as towers or variations in building height as well as design primary covered, entrances near or facing the corner.
13. Building windows should be located on both sides of the corner, and architectural features shall be wrapped around all sides of the building where visible to the public.

Enhanced architectural treatment shall be provided at prominent street corners, particularly at the Road B and Marston intersection.

Vertical Mixed Use

14. Upper level residential uses should be compatible with ground floor retail space and may include studio or smaller one- or two-bedroom units. Large three- and four-bedroom apartment units are generally not appropriate.

Windows

Proper window glazing should allow for visibility and connection between indoor uses and the pedestrian right of way.

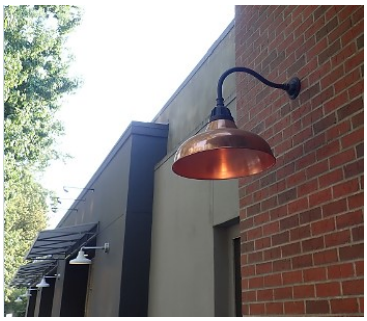
15. Windows should be inset or recessed from the wall plane for visual interest and shadow line.
16. Proper glazing should enhance visibility and connection between indoor and outdoor spaces, particularly at the pedestrian/ground level.
17. Tinted glazing is not permitted.

Rooflines and Cornices

18. Rooflines should be considered in the overall building design and should provide an attractive termination of the building through the use of a decorative cornice or parapet, continuous banding or trim, decorative gables or other architectural features that help clearly define the building edge.
19. A simple rectangular roof line is preferred. Shed or sloping roof lines may be used as accents. A simple gable roof may be considered with appropriate pitch and use of materials that reflect a contemporary or farm style architecture.
20. If used, decorative parapets should be extended around the side of a building and contain necessary depth to appear as an integral part of the building design and form.

Lighting

21. Building and on-site lighting shall reinforce the architectural style of the development and enhance the overall ambience.
22. Where appropriate and complementary, up-lighting or rooftop lighting is encouraged to accentuate major architectural details, building form and/or landscape elements at night, however, excessive light and glare shall be avoided.



Lighting shall reinforce the architectural style of the building.

23. Minimum required illumination shall meet Uniform Security Code requirements as set forth in Title 15 of the Woodland Municipal Code.

C. Sustainability

Projects shall comply with the Sustainability Guidelines outlined in Section 3.5.12.B.

D. Screening, Walls and Fencing

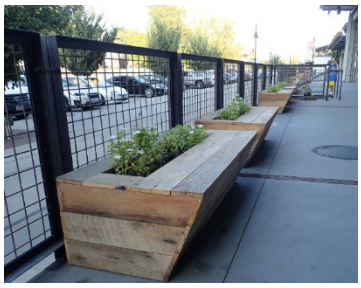
Outdoor Storage

1. Outdoor storage of goods and materials shall be located away from Road B and Marston and shall be screened from public view by way of decorative fencing/trellising, landscaping and/or masonry walls with vines. All requiring screening shall be architecturally compatible and complementary to the overall project.

Mechanical Equipment

2. All utility and mechanical equipment and service areas shall be screened and located away from Road B and Marston Street. Where feasible, mechanical equipment shall be located on top of the building and screened from view with parapet walls.
3. Backflow prevention devices shall not be located within the public right of way or along primary pedestrian streets and be screened with landscaping or low fencing/walls.

Limited Use of Walls and Fencing



Low decorative fencing and walls may be used in limited capacity to delineate shared open spaces and outdoor dining areas.

4. Low decorative walls or fencing may be used in limited capacity to delineate shared or private open space and outdoor dining/patio areas; but should not exceed 36 inches in height within the front setback area or adjacent to public right-of-way.
5. Fencing located outside of the front setback for screening and/or security purposes shall not exceed eight feet in height. All fences over six feet in height require a building permit.)

6. Standard chain link fencing as well as barbed/concertina wire or similar boundary security materials are prohibited within the Village Center District.

E. Trash and Recycling

Enclosures

1. Trash and recycling enclosures shall consist of the same or similar design and materials as the overall project and shall adhere to City trash and recycle enclosure specifications.
2. Enclosures shall be located to the side or rear of the building, away from public view and should be separated from adjacent parking stalls by a minimum 3-foot-wide landscaped planter where applicable.
3. Trellis structures and vines are encouraged as a means of screening the sides and rear of trash enclosures.
4. The area around trash enclosures shall be kept free of trash and debris.

F. Commercial and Residential Compatibility

Commercial / Residential Interface

1. Where commercial and residential uses are located on the same block or combined as part of a mixed-use project, efforts should be taken to minimize potential conflicts between the two uses including locating commercial uses that may generate loud noise, fumes, light, etc., along the street frontage, and residential uses on upper floors away from more intense commercial activity. Rooftops should be considered for commercial exhaust vents and generators.
2. A buffer of lower intensity commercial uses such as office or storage space located between residential units and more intense commercial uses can help minimize potential conflicts between the two.

G. Driveways, Parking and Service Aisles

Driveway Location

1. Driveway placement shall avoid disrupting the streetwall and pedestrian environment and shall be located behind or to the side of buildings. On-site parking, when necessary, shall be accessed from the rear of the property.
2. Minimize the number of driveways to avoid loss of on-street parking spaces.

Driveway Design

3. Driveways should incorporate material changes to alert pedestrians of potential conflict and shall provide good visibility of pedestrians from adjacent roadways and exit points.

Required Parking

4. On-site parking lots/areas shall be located behind buildings, away from Road B and Marston Drive.
5. A common shared parking area is encouraged for employee and customer use for businesses within the Village Center. Undeveloped lots within or adjacent to the Village Center may be used as temporary parking areas in the early phases of the project build

out prior to development and service to the Mobility Hub.

6. The maximum number of off-street parking spaces shall not exceed the following amounts, unless otherwise approved by the Community Development Director:
   Commercial, Retail, Service: 1 space per 500 gross square feet
   Office, Flex, Research and Development: 1 space per 500 gross square feet
   Daycare: 1 space per 1,000 gross square feet
   Restaurants, cafes, micro-brewery: 1 space per 4 seats
   Residential: 1 space per studio/1 bedroom unit. 2 spaces per 2 bedroom units or greater.
7. On-site parking, if provided, shall be located behind the building. "Tuck under" parking is encouraged as an alternative to surface parking.

Parking Lot Landscaping and Shading

8. Proper tree variety and placement shall be designed to result in 50 percent parking lot shading within 15 years of installation. Primary entrance roads and driveways not used as back-up areas are exempt from this requirement.
9. Solar and shade covers are permissible, but should not significantly reduce the number of trees otherwise required to provide 50 percent lot shading.
10. Surface parking lots visible from the public right-of-way shall incorporate landscape screening, trellising, low walls/fences at least 36 inches in height to continue a "green wall" and minimize interruption to the streetwall.
11. At least 6 feet of landscaping should separate surface parking from any adjacent sidewalk or public right-of-way.
12. Shaded sidewalks or other pedestrian walkways shall be clearly delineated by way of landscaping and enhanced paving or design and should connect parking areas directly to building entries.

Bike Parking Facilities

13. Bicycle racks shall be placed near building entrances, in safe, well-lit locations, and permanently anchored to a hard, dust free surface, preferably asphalt or concrete slab, and installed in a manner which allows adequate space for access to the bicycle and locking device, and avoid pedestrian conflict.
14. Covered and secured bike parking shall be incorporated into each project for use by residents and employees. The use of bike lockers is encouraged where feasible.

Innovative or artistic bike racks are encouraged within the Village Center provided they remain functional and secure for the user.

Lighting Standards

15. Minimum required illumination shall meet Uniform Security Code requirements as set forth in Title 15 of the Woodland Municipal Code.

H. Signage

Projects within the Village Center District shall comply with the Signage and Wayfinding Guidelines outlined in Section 3.5.3.G (General DS/DG for Research and Technology Park Zones), Additional guidance for the VCMU zone is provided below.

A-Frame Signs

1. In addition to the Signage and Wayfinding guidelines provided for in Section 3.5.3.G, high quality and attractive A-frame signs (4 feet tall by 2 feet wide max) may be located in the public right-of-way in front of small retail, restaurant and café uses when properly weighted or secured to prevent tipping or moving.
2. A-frame signs and similar pedestrian oriented temporary signs may not inhibit accessible travel within the right-of-way and must be brought inside after business hours.

Prohibited Signs

3. Traditional, internally illuminated pan-channel letters and cabinet signs are prohibited with the Village Center. Signage within the Village Center shall be of high quality and custom design and shall contribute to the urban, energized environment envisioned for the District.

I. Public Art

Obligation

1. Public art shall be incorporated within new development projects, including private projects, consistent with the Woodland Municipal Code (WMC), Public Art Ordinance (WMC Section 17.104.200).

Installation

2. The placement and installation of Public Art consistent with the Woodland Public Art Ordinance is encouraged within shared open space areas such as outdoor patios, plazas and courtyards and within view of a large number of people such as along sidewalks, at intersections, within roundabouts and medians, within the VCOS zone (The Yard) and at primary Plan Area gateway locations along CR 25A and Road B.

Artwork

3. Public Art should be unique and of high quality design; however, it is encouraged that artwork located within the public realm be of a unified theme reflective of the Research and Technology Park's focus on agricultural and technological innovation.

3.5.10 DS/DG for Village Center Open Space (VCOS) Zone

A. Site Design

The Yard will serve as a central gathering place for Plan Area employees, visitors and residents. Formal and informal spaces within the park will allow for a variety of uses and activities.

1. The Yard is intended to serve as a both passive and active recreational linear park designed with formal and informal spaces that provide the flexibility to accommodate various activities and user groups.
2. Public plazas within the park shall be designed to accommodate social and employee gatherings, special events, farmers markets, food trucks, mobile retail vendors and other pop-up uses, should consider design features such as an elevated stage for musical/theatrical performances.

Park frontage along Road B shall consider efficient means to accommodate food trucks and other appropriate pop-up uses so as not to obstruct traffic or pedestrian walkways along the western edge of the park.

3. Certain areas of the park should remain open and unobstructed by trees and/or berms to allow for informal pick-up games of soccer, volleyball, disk golf or similar uses. Shade trees should be provided at the periphery of open space areas.

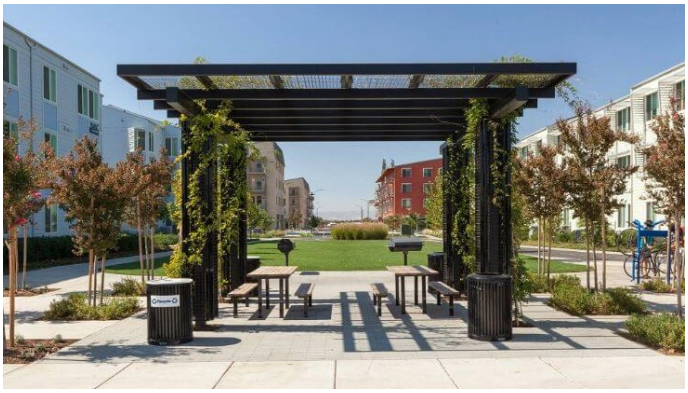
B. Commercial/Retail Use

1. One and a half (1-1/2) acres of commercial/retail development is permitted within The Yard consistent with a master park design plan.
2. Architectural design and site development guidelines/standards outlined in Section 3.5.9 A and B shall generally be applied to commercial/retail buildings or structures within the park, as applicable. Appropriate uses within the park generally include coffee shops/kiosks, farmers market, container style micro-brewery/beer garden, restaurants with patio dining, artist studio, fitness studios, small retail shops (e.g. small nursery, florist, or clothing boutique) willing to showcase goods outdoors.

3. Both hard and soft-scape courtyards, plazas and patios are encouraged as connections to and transitional space between commercial/retail uses and recreational open space in the park.
4. A centrally located, covered plaza is encouraged within close proximity to the Village Center commercial area, which may accommodate bike parking as well as open-air kiosks or seasonal market stands.

A covered pavilion within The Yard will allow for year round open air activities including farmer's markets and craft fairs, as well as covered bike parking.

C. Amenities



Covered seating areas including fixed and movable furniture is encouraged within The Yard.

1. The Yard should include furniture, both fixed and movable, for picnics, rest areas and social gatherings. Both built and natural elements should provide sufficient shade during summer months.
2. Pedestrian and bike pathways shall be provided throughout the park, including soft surfaces such as decomposed granite for jogging, and shall connect to off-site bike and pedestrian networks.
3. Public restroom shall be provided.
4. Bike and scooter parking shall be provided throughout the park in safe and highly visible locations, near activity nodes for the use and convenience of cyclists.

D. Lighting

1. Park lighting shall be provided to ensure safety and security and to allow for continued park use and activity after dark. All pedestrian/bike pathways shall be illuminated by way of pedestrian scale overhead lighting or lower level bollard style lighting.
2. Minimum required illumination shall meet Uniform Security Code requirements as set forth in Title 15 of the Woodland Municipal Code.

E. Landscape

3. Landscaping within The Yard shall feature native ground covers and trees, including Valley Oaks, and pollinator friendly plant species.

3.5.11 DS/DG for Village Center Low and Medium Density Residential Zones (VCLDR, VCMDR)

Projects within the VCLDR and VCMDR zones shall comply with the General Residential District Guidelines outlined in Section 3.5.12, found in Part 3 of this document. The guidelines in this section supplement the general residential guidelines provided in Section 3.5.12 in order to enhance the more urban-like character of the Village Center District, while providing a seamless transition to the adjacent residential neighborhoods in the Villages District and to ensure appropriate and positive transitions.

A. Neighborhood Design

Building Orientation, Setbacks and Park Interface

1. Primary entrances to those residential units located along the eastern boundary of and immediately adjacent to The Yard shall be designed to front or appear to front on the park.
2. Primary doorways, stoops, patios/porches and similar design features shall be included to emphasize a strong relationship to the park. Units may include double frontages or provide secondary access from a rear alley.
3. Residential units fronting the park shall be a minimum of two stories in height and shall be setback a minimum of 10 feet, but not more than 20 feet from the Promenade on eastern boundary/right-of-way. Setback areas may include a low fence (36" if solid or 42" if open) or a decorative low wall to delineate private residential property.
4. Public access to The Yard from the VCLDR and VCMDR neighborhoods shall be provided by mid-block paseos, a minimum of 20 feet wide with a minimum 8-foot-wide accessible sidewalk or pathway, every approximately 300 feet between residential units fronting the park.

B. Architecture and Massing

Building Form and Massing

1. Residential units fronting The Yard are encouraged to incorporate design elements such as balconies and roof-top patios/gardens to further activate the park, to allow units to take advantage of park views and to enhance visibility and "eyes on the park" for safety.
2. VCMDR multi-family units fronting The Yard shall convey, through modulation or offset planes, individual residential units. Urban-style row- or townhouses with walk up front stoops that help elevate the units above the ground level are encouraged.

Articulated and/or elevated entryways provide a clear and distinct differentiation of public and private space.

3. Vertical articulation at the front elevation is encouraged to minimize dominant unbroken exterior wall planes.
4. Small lot and higher density residential units shall provide distinguishable and articulated entryways including recessed doorways, overhead projection/awnings, elevated stoops and/or unique paving to differentiate private space from the public sidewalk/pathway.
5. Where live-work or mixed-use retail/residential projects are located adjacent to the park, the ground floor retail/commercial use shall be visually separated and identifiable from upper residential units by way of differentiated façade treatment, articulated wall plane, awnings or other design elements.

<u>Medium- to Low-Density Residential Transition</u>

6. The design and massing of medium- and low-density residential development within the Village Center District should contribute to a unique and unified urban district.
7. Transitional areas should be seamless between the two residential zones through appropriate transition of scale and massing. The height differential between any two adjacent parcels shall be no more than two stories or 25 feet, whichever is less, within 25 feet of the parcel line.

Proper scale and massing will allow for a seamless transition between residential zones of varying densities.

8. Innovative "outdoor rooms" which foster social and neighborhood interaction and include a mix of hard and soft-scape for outdoor seating, fire rings, and patios rather than traditional front yards are encouraged within the district.

Design

9. Medium- and low-density residential units within the Village Center District shall incorporate contemporary and/or modern design elements such as flat parapets, metal awnings and clean lines. Traditional suburban architecture and building forms should be avoided.
10. Appropriate building materials include, but are not limited to, wood, glass, brick, metal, cement board siding, stucco or tile. Finishes shall be smooth or near smooth.

Modern design elements are encouraged within the Village Center Residential Zones including flat parapets, smooth finish stucco and metal awnings.

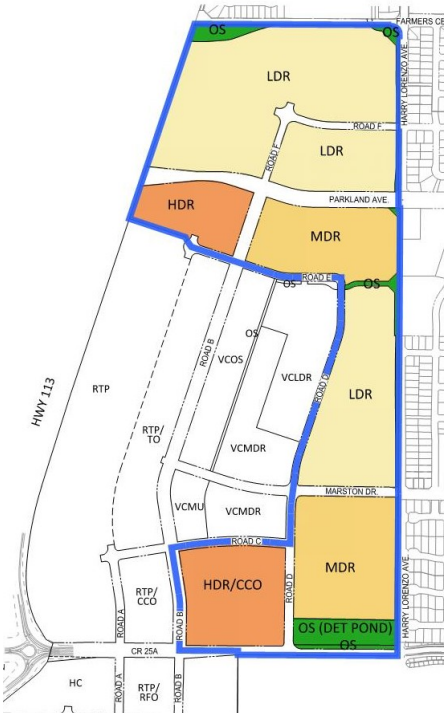
Garages and Driveways

11. Garages and driveways are not permitted along The Yard frontage. Garages, driveways and parking for those residential units with park frontage shall be located behind the unit away from the park.
12. Alley-load and non-traditional subdivision layouts that minimize automobile prominence and create a more urban and active environment are encouraged within the Village Center Low- and Medium Density residential zones.
13. Deviations from setback requirements will be considered on a case-by-case basis to allow for innovative subdivision layout that meet these objectives based on a finding that adequate unit separation for light, air and ventilation and private open space is still maintained as determined by the Community Development Director. Where projects are located adjacent to existing residential development, setback standards shall be maintained except as provided for in Chapter 7, Section 7.4.1.2, Minor/Administrative Modifications.

Alley-load design is encouraged within the Village Center Residential Zones to minimize vehicle prominence and enhance the pedestrian realm. Alley design should include landscaping and decorative fencing, taking into account waste bins and other elements that may require screening or storage.

PART 3: DESIGN STANDARDS AND DESIGN GUIDELINES FOR THE VILLAGES DISTRICT

The following guidelines provide site planning and design direction for all land use zones within The Villages District. These zones include LDR, MDR, HDR and HCR/CCO. Section 3.5.11 provides standards and guidelines that apply broadly to all residential zones, In addition, 3 sections of Special Character Guidelines are provided for zones of HDR, HDR/CCO, for MDR and LDR sites located in East Villages and for LDR sites located in the North Village. The "Special Character" guidelines are intended to enhance or in some cases supersede the broader Residential District guidelines. If conflicts arise between the General Guidelines and the Special Character Guidelines, the Special Character Guidelines shall take precedence.



3.5.12 General DS/DG for all Residential District Zones (LDR, MDR, HDR, HDR/CCO)

A. Neighborhood/Site Design

Building Orientation and Setbacks

Subdivisions designed around and fronting shared open space are encouraged within the Village District.

1. Homes, including multifamily projects, should be oriented to the street, open space, or common areas. All structures should have one primary entry that faces the street; additional entrances may be located to the side or rear.
2. Within Medium and High Density Residential zones, buildings should be located at or near the required minimum setback to enhance the streetwall and activate the public realm.
3. Front yard setbacks along a street may vary by up to 25 percent, subject to the setback requirements for residential uses, to create an interesting and attractive street edge and support visual continuity on the block.
4. Active living spaces including community spaces, recreation rooms and gyms should be oriented to the front of the home/unit and at the ground level in multifamily projects.

5. Enhanced entryway features such as porches, stoops, balconies, decorative landscaping/paving at entryways, windows, and other architectural elements should be incorporated to enhance the pedestrian-scale and character of the street.
6. For multifamily housing development, the minimum building separation should be maintained to provide sufficient privacy between units, private outdoor open space and balconies. Windows, balconies, patios, and courtyards should be oriented to protect the privacy of users and reduce unwanted noise between units.

Elevated front stoops help distinguish between the public and private realm.

Lot and Building Variations

7. For detached single family lots in MDR and LDR zones, building elevations should be varied to create interest along the street and include:
   - A mix of single, two and three-story units along a block, where appropriate;
   - Variation in the homes along the same street with different building heights, setbacks, massing, and roof shapes;
   - Avoidance of repetition of identical floor plans or elevations in homes next to each other;
   - Street corners suited for architectural treatments that engage the street, such as windows, wrap around porches, and other ground floor building articulation.
8. For multifamily housing in MDR and HDR zones, building design should incorporate varied wall planes, scale and massing.
9. Where adjacent to single family or lower-density residential development, building scale and massing should be compatible with the character, rhythm, height, and massing of adjoining single family or lower density development. The height differential between any two adjacent parcels shall be no more than two stories or 25 feet, whichever is less, within 25 feet of the parcel line.

Varied wall planes, scale and massing should be used to break up and add interest to multi-unit residential buildings.

Common and Private Open Space within Multifamily Residential Developments

Multifamily residential units should be designed around common open space incorporating walking paths, garden boxes and seating areas for resident enjoyment.

11. Arrange multi-family residential buildings to provide functional public and private outdoor space for residents.
12. Common open space areas and facilities should be conveniently and centrally located to serve the majority of units. Amenities such as pools, club houses, or other recreation areas, common patios or greens, seating, picnic spots, tot lots, community garden boxes, and walking paths should be incorporated, where appropriate, to serve different age groups and/or the anticipated residents of the development.
13. Private open space, such as front yard area patios, stoops, porches, backyards, and balconies (for upper story units) is encouraged, contiguous to the units it serves.
14. Private open space, where provided, should be a minimum of 50 square feet and provide functional and comfortable outdoor living, including appropriate depths to accommodate chairs and small tables. Personal storage spaces can be designed as an extension of the private open space, but shall not count toward meeting private open space requirements for each dwelling unit.
15. Private open space should be integrated into the design of building and designed and located to take advantage of the winter sun and/or shade and breezes in the summer months, to the extent possible.

Connectivity

16. For multifamily development projects, an on-site pedestrian circulation system should connect residents internally within the development to parking areas and open space, as well as to neighborhood sidewalks, paths and transit stops.

17. Adjacent commercial and retail uses should be easily accessible by way of internal and/or mid-block paseos and pathways that connect residents to such amenities without requiring residents to walk to the perimeter of the block.

Pedestrian walkways should connect residents to adjacent common areas, parks, parking areas, or other amenities.

18. Where residential block sizes exceed 600 feet in length, a mid-block paseo, a minimum of 20 feet wide with a minimum 8-foot-wide accessible sidewalk or pathway, shall be provided to facilitate better internal connection for area residents.
19. Along pedestrian paths and paseos, provide pedestrian amenities, such as shade trees, seating, lighting, and landscaping, to extend the open space area and support safe pedestrian use.

B. Architecture and Massing

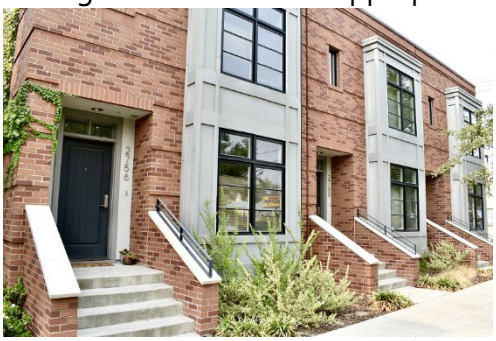
Building Materials

1. Building materials, textures, colors and treatments should be varied to avoid a dull monotonous façade, but should correspond to variations in mass and wall plane.
2. Materials should appear substantial and integral to the structure. Materials shall be durable to withstand weathering with age. Non-durable materials, such as plastic, tin, and vinyl shall be avoided, as well as highly reflective materials.
3. When applicable, masonry must be applied authentically. Masonry shall wrap corners and terminate at inside corners. Other material changes shall occur at an inside corners or other appropriate transition elements, such as a fence line.
4. Stucco finishes shall be smooth or very light sand finish. Stucco foam trim, where used, shall be smooth finish or shall incorporate a natural woodgrain texture where appropriate.
5. Heavy knock down or "lace" stucco is not appropriate.

Exterior building materials should be high quality and correspond to changes in massing and wall plane.

Building Form and Architectural Style

6. Where the distance between multi-family buildings is 15 feet or greater, all elevations shall be articulated with windows, frames, shutters, and/or other architectural treatments consistent with the primary elevation. At corner lots, side yard facades should maintain the same level of architectural detail as the front/primary façade.
7. Multi-family buildings should convey, through modulation or offset planes, individual residential uses. Porches, stoops and balconies may be used to orient the building and residential units toward the street.



Multifamily buildings can convey individual residential uses through variation in wall plane, massing, materials and design elements such as elevated front entryways.

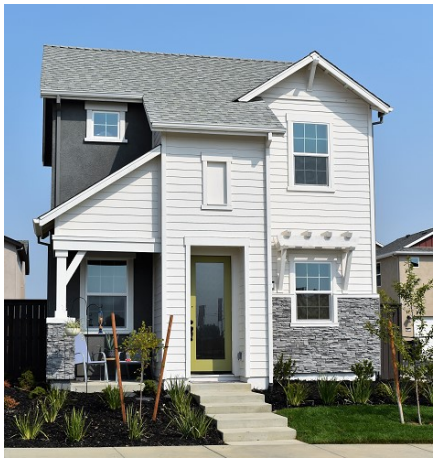
8. Long multifamily buildings should appear as distinct and articulated smaller buildings that complement the scale and massing of surrounding housing. Create variations in building facades through use of varied massing, shape, materials, and roof forms.
9. Building heights shall transition between larger-scale (medium- and high-density) and smaller-scale (low- and medium-density) projects on adjoining lots or across a shared street. The height differential between any two adjacent parcels shall be no more than two stories or 25 feet, whichever is less, within 25 feet of the parcel line.
10. Shade/shadow impacts shall be minimized by stepping back upper floors above three stories.
11. Windows shall be located in a manner that avoids direct views into adjacent single family yards to respect and maintain privacy to the extent possible.
12. Contemporary cottage, urban farmhouse or similar and/or complementary styles are encouraged within the lower density zones. A mix of modern and traditional architectural styles are appropriate for higher density residential development.

<u>Porches, Entries and Courts</u>

13. Entryways should be appropriately sized to the scale and massing of the home or building and should provide roof cover.
14. Porches, verandas, and other architectural elements such as a sidelight window panel should provide a clear sense of entry and design interest to a home.
15. Porches, patios, and forecourts should have a minimum depth of 6 feet to accommodate circulation and chairs.
16. A pathway separated from the driveway leading from the sidewalk to the entry should be provided.

Doors and Windows

17. Doors and windows should be designed to add visual interest to the building elevation, while complementing the style and architectural features of the home.
18. Windows on street facing units should orient substantially toward the street. Windows should be inset from the wall and designed with high quality trim and details.
19. Exterior doors should include raised panels, glass, transom windows, or other forms of details and articulation and should be inset a minimum of 3 inches from the building façade.



Doors and windows should provide high quality detailing and trim that complement the overall architectural style of the home.

Roofline

20. Variety in roof forms, ridge heights, massing, and overhangs will give individual character to homes and also provide an interesting rhythm and continuity along the street.
21. Where consistent with the architectural style of the home, the roof form should be articulated through use of dormers, bays, porch roofs, clerestories, cross gables, and hip forms that break up the roof and provide interest along the street.
22. Wide overhangs are encouraged, to provide shadow and depth to building elevations.
23. Rooftop gardens, decks or patios are encouraged, in multi- family developments but should take into account sun, and/or shade and breezes in the summer months.

Varied rooflines add interest to a neighborhood and streetscape.

Garages and Driveways

24. Garages in residential neighborhoods should be designed to be subordinate to the main living area, yet consistent in design.
25. Homes with garages facing the street are encouraged to have the garage door offset behind the front façade of the living area and covered porch, where provided. Alternative designs may be appropriate where sufficient and enhanced landscape design creates a usable outdoor living room and minimizes the prominence of a garage forward design.
26. Garage doors should include patterns complementary to the architectural character of the house as well as windows to allow for natural light. Frosted/opaque windows may be used to enhance security.

27. Three car garages must separate and offset the third car garage elevation from the others by at least two feet in width and depth.
28. Use of alternative pavement surfaces, such as concrete pavers, brick, or stone and alternative driveway treatments, such as ribbon driveways are encouraged. Ribbon driveways are made up of two parallel strips of paving, with a strip of grass or pervious pavers between the paving strip, to minimize the impervious driveway surfaces to the area where the vehicle will be driving or parking.

C. Small Lot Development

Entryways

1. Small lot and higher density subdivisions should provide distinguishable and articulated entryways including recessed doorways, overhead projection/awnings, elevated stoops and/or unique paving to differentiate private space from the public sidewalk/pathway.
2. A separation of at least 8 feet shall be provided between the entryway of one unit and the nearest adjacent building wall to allow for sufficient light and ventilation between units. A minimum of 7 feet of the separated distance should be clear to the sky.
3. Address and unit identification as well as decorative low-level lighting shall be provided at the primary entrance.

Small lot residential development should provide distinguishable entryways through small patio spaces, elevated stoops or alternative paving.

Private Outdoor Space

4. Small lot developments should maximize access to private outdoor space, light and air through the use of roof decks and private balconies/patios.

Private courtyards can be incorporated into small lot development through low walls, appropriate vegetation or other design appropriate space delineators.

D. Sustainable Design

Energy Conservation

1. Energy conservation strategies, including window shading devices, selection of colors to reduce heat gain, energy efficient case windows, cool roofs, high-quality insulation and radiant barriers, solar panels, and other features are encouraged to reduce energy consumption associated with heating and air conditioning during winter and summer months, while also contributing to a local community vernacular.

Architectural detailing such as window awnings or overhangs can minimize direct sunlight intrusion in summer months and reduce the need for artificial cooling.

2. All housing units shall be pre-wired for electric vehicle and solar PV systems.
3. Energy-Star rated residential appliances should be incorporated where appropriate.
4. Home and building design and placement should take advantage of passive solar opportunities.
5. Builders are encouraged to use advanced house framing or optimum value engineering to reduce lumber use and waste and improve energy efficiency in a wood framed house.

Water Conservation

Bioswales can serve as natural stormwater filtration and attractive landscaping within a project.

6. Water reduction strategies including the use of high efficiency, low-flow fixtures and tankless water heaters shall be incorporated.
7. Residential projects shall control and treat storm water runoff onsite to the extent feasible through green roof design, onsite bioswales and biofiltration systems or other measures.
8. Recovery of graywater for on-site uses including landscaping is encouraged
9. Residential projects shall connect to the City's reclaimed water system for landscape irrigation.
10. Install climate sensitive irrigation systems and other water-efficient bubblers and drip irrigation systems.

Low Water Landscape

11. Landscaping should consist of climate-appropriate plantings, including drought-tolerant and native species suited to the Woodland community.

Native and drought tolerant landscaping is encouraged throughout the Plan Area.

E. Landscaping

Residential Landscaping

1. Native plant species should be used whenever possible.
2. A variety of shrubs and groundcover species as well as a balance of hardscape and paving should be used within common open space areas and courtyards within multifamily projects and along pedestrian pathways and paseos.
3. Lawns and highly ornamental landscaping that require frequent pruning and maintenance should be used sparingly.
4. The design and location of trees and landscaping for homes should consider opportunities for solar access and solar panels, as well as, shading and ventilation on hot summer months.
5. Trees shall be a minimum of 15-gallon size and shrubs a minimum of 5-gallon size at the time of planting.
6. Soil amendments shall be applied to support plant health and longevity.

Landscaping Adjacent to SR 113

7. Landscaping along SR 113 shall consist of a mix of trees, low groundcover and vine training on all sound walls or highway adjacent perimeter fencing.

F. Walls and Fencing

Height requirements

1. Interior and Corner Lots. Only fences or walls at or under three feet, six inches (3′-6″) in height may be placed along the front yard property line or within the front yard setback area.
2. Interior Lots. Fences or walls at or under eight feet (8′-0″) in height may be placed within the rear yard or interior side yard setback areas.
3. Corner lots. Fences and walls greater than three feet, six inches (3′-6″) in height up to a maximum of eight feet (8′-0″) in height shall maintain a minimum setback of five feet from the street side property line. Only fences and walls three feet, six inches (3′-6″) in height or less may be located within five feet of the street side property line of corner lots.

General

4. All fences over six feet in height require a building permit.
5. For swimming pool fencing, refer to WMC Section 17.104.100(E)
6. Solid masonry or block walls in the community will be limited to those areas requiring sound attenuation to achieve noise standards and screening from unsightly elements, such as trash areas. Sound walls are not expected to be required within the Plan Area, except where necessary along SR 113 where adjacent to residential development.

Vines and landscaping help soften retaining walls and masonry walls required for sound attenuation.

7. The preferred edge treatment along CR 25A adjacent to residential uses is an open style fence softened with landscaping to provide security and privacy to residences.
8. Where long expanses of wall or fences are determined to be unavoidable, based on a noise analysis, articulation of the wall with offsets or landscaping shall be implemented.
9. Vines shall be planted and trained on all masonry walls.
10. Walls or fences along CR 25A should not exceed a maximum unbroken length of 400 feet, without an opening for pedestrian access.
11. Allowable materials for walls include:
    - Stamped or embossed concrete or concrete block with patterns and colors that reflect Woodland's local context, such as agriculture, agricultural technology, native trees and grasses, and/or historic themes;
    - Natural or cultured stone; and
    - Brick or similar materials with colors that are compatible with building color themes within the RTP zones.
12. Chain link fences and wrought iron or steel fencing with points or spears are prohibited in all residential areas.
13. All wood fencing shall be protected with a colored, semi-transparent water sealant stain.
14. Wood fencing in residential areas shall include a decorative cap where visible from the public right of way (i.e. not dog eared).

G. Street Lighting

1. Pedestrian-scaled ornamental street lights should be located along public streets and internal walkways between housing units to provide adequate illumination for safety and navigation. Alternatively, bollard lights may also be provided along internal walkways.
2. Lighting shall be directed and shielded to avoid unintended spill over onto adjacent properties. A minimum of 1-foot candle of lighting shall be provided within parking areas, along pedestrian pathways and at building entrances. "Hot spots" of 10-foot candles or more shall be avoided.

3. Required illumination shall at minimum meet Uniform Security Code requirements as set forth in Title 15 of the Woodland Municipal Code.

H. Signage

General

1. Design Review approval is required for all signage.
2. Signage within residential zoning designations is permitted only where commercial uses are also allowed and for multi-family/apartment developments.

Setback, Height and Area Requirements

3. Sign setback, height and area requirements are subject to the Table 3.5:

Table 3.5 Residential Signage Standards

	Max Sign Height		Min Setback from Property Line	Total Sign Area Per Business	Total Sign Area Per Business Cannot Exceed
Zone	**Wall Mounted Signs**	**Ground Mounted Signs**	**Ground Mounted Signs**	**All Permanent Signs**	**All Permanent Signs**
LDR, MDR, VCLDR, VCMDR	12ft	4ft	3ft	-	20ft
HDR, HDR/CCO	20ft	12ft	5ft	The length of building frontage x 1.5	175sf

Location

4. Signs should be considered during building design and properly scaled and located so as not to dominate or interfere with architectural detailing and overall building façade.
5. Signs should consider pedestrian readability and should help identify the location of primary entrances to the building or community.
6. Permanent rental or real-estate signs are not permitted.
7. Cabinet, box-signs and internally illuminated pan-channel letters are prohibited in residential zones and on residential projects. Signage should be of high quality design and materials.
8. Multi-tenant signage within the HDR/CCO zone should be coordinated and cohesive in appearance including consistent sizing and lighting requirements.
9. Customized projecting, blade signs or under canopy signs are encouraged within the HDR/CCO zone. Blades signs must provide at least 8 feet of vertical clearance as measured from the sidewalk to the base of the sign.
10. Signs and structural features shall be subject to cross visibility requirements as outlined in the Woodland Municipal Code and subject to review and approval by the City Traffic Engineer.

Text

11. Signs may only contain the name and logo or symbol of the business/residence and its street address. Trade slogans and commercial advertisements are not permitted.
12. Logos shall not exceed 4 square feet in size except if it is determined by City Planning staff that building scale or other factors, such as enhanced design and quality, warrant increased logo square footage.

Materials and Design

13. Signs shall be constructed using durable, fade and weather resistant materials such as stone, tile, cast concrete, or other similarly durable masonry, metal or wood materials consistent with the architectural design and style of the building.
14. Unique and creative sign design is encouraged to enhance the unique identity of the Plan Area and residential zone.
15. Faded or damaged signs shall be replaced or repaired in a timely manner.
16. Cabinet or box signs, roof mounted signs, window signs above the second floor and pole mounted signs are not permitted.
17. Feather signs, flags, banners and other attention getting signs or devices are prohibited except in the HDR/CCO zone during grand openings, in which case they must be removed within 30 days.

Illumination

18. Signs shall be spot illuminated from the front or consist of letters, numbers, or graphics that are halo backlit. Internally illuminated pan channels letters are not appropriate except within the Community Commercial and Highway Commercial zones. Neon is permitted when integrated into custom designs.
19. Flashing, traveling, animated, or intermittent illumination is prohibited.
20. Exposed conduit, tubing and raceways are prohibited. Transformers and other equipment shall be fully screened/concealed.

I. Trash, Recycling and Enclosures

Mechanical Equipment and Trash Enclosures

1. All mechanical equipment, service areas and trash enclosures shall be located away from or adequately screened from public view by solid fencing, decorative landscaped walls, and/or landscaping. Backflow prevention devices shall not be located within the public right of way or along primary pedestrian streets.

Enclosures - Multifamily

2. Trash and recycling enclosures within multi-family development projects shall consist of the same or similar design and materials as the overall project and shall adhere to City trash and recycle enclosure specifications.
3. Enclosures shall be located to the side or rear of the building, away from public view and should be separated from adjacent parking stalls by a minimum 3-foot-wide landscaped planter where applicable.
4. Trellis structures and vines are encouraged as a means of screening the sides and rear of trash enclosures.
5. The area around trash enclosures shall be kept free of trash and debris.

Trash and recycle enclosures should be designed with similar or complimentary materials as the overall project.

Trash receptacles – Single Family

6. A minimum 3'x10' concreate pad shall be provided behind the fence line and away from public view for single family trash toters and storage containers. A clear/unobstructed path of travel from the pad to the street shall be provided for ease of disposal.

J. Circulation and Parking

Circulation and Parking

Pedestrian paths should provide ease of access to common space, parking areas or other amenities within or adjacent to the project.

1. Whenever possible, separate access for pedestrians from vehicles and high-use pedestrian walkways and crosswalks with color or special paving treatments. Pedestrian access should be prioritized over vehicular access.
2. Street facing driveways should be limited to 20 feet in width or less.
3. The number of driveways should be minimized to avoid loss of on-street parking spaces.
4. Within multi-family housing projects, pedestrian paths should be clear, understandable and easy to navigate, with emphasis on connecting to common open space and adjacent public streets, sidewalks, and local destinations and to amenities such as commercial services, transit facilities, and the open space greenbelt.
5. Minimize the visual prominence of vehicles from the street front by siting parking areas to the side or rear of the property and providing smaller parking areas, rather than one large parking lot.

6. Parking areas including pedestrian walkways shall be illuminated for safety and security.

Parking Lot Landscape and Shading

7. On-site parking in medium- and high-density residential developments should be located internal to the site and away from public roadways. Surface parking lots should be avoided in favor of "tuck under" parking were feasible.
8. Proper tree variety and placement shall be designed to result in 50 percent parking lot shading within 15 years of installation. Primary entrance roads and driveways not used as back-up areas are exempt from this requirement.
9. Solar and shade covers are permissible in medium- and high density developments, but should not significantly reduce the number of trees otherwise required to provide 50 percent lot shading.
10. Surface parking lots visible from the public right-of-way shall incorporate landscape screening, trellising, low walls/fences at least 36 inches in height to continue a "green wall" and minimize interruption to the streetwall.
11. At least 6 feet of landscaping should separate surface parking from any adjacent sidewalk or public right-of-way.
12. Shaded sidewalks or other pedestrian walkways shall be clearly delineated by way of landscaping and enhanced paving or design and should connect parking areas directly to building entries.

Bicycle Parking

13. Bike racks and lockers shall be provided and located within 30 feet of multifamily and mixed-use building entrances, in a safe, well-lit area, and permanently anchored to a hard, dust free surface, preferably asphalt or concrete slab, and installed in a manner which allows adequate space for access to the bicycle and locking device, and avoid pedestrian conflict.

Bike parking facilities should be located in a visible and well-lit area and permanently anchored to a dust free surface.

Alley Access

14. Rear loaded garages with alley access is encouraged where feasible.
15. The use of pavers or stamped/colored concrete shall be provided within alleys to provide a durable and attractive passageway and help define a shared pedestrian experience.
16. Alleys shall include a minimum of 1-foot candle of lighting for safety and security. Address signs shall be illuminated.

3.5.13 Special Character Guidelines for High Density Residential Zones (HDR, HDR/CCO)

A. Site Design

Well Defined Streetwall

1. Building placement along Road B should provide clearly defined edges to the public realm and activate the street.
2. For parcels with frontage along Road B within the HDR/CCO Zone, 60 percent (60%) of the property shall be developed at the minimum setback line (development may be phased over time). Exceptions may be granted to allow for well-designed outdoor space that includes vertical and horizontal elements that simulate and maintain the appearance of a streetwall.
3. Within the HDR/CCO zone, a minimum of 60 percent (60%) of the Road B frontage ground floor uses shall consist of commercial/retail uses.
4. Buildings over three stories should stepback or provide a varied wall plane on street facing upper floors (above the third floor) to maintain a human scale streetwall.
5. The number of limited access (right-in/right-out) driveways shall be limited to one from Road B between CR 25A and Road C unless otherwise approved by the city, to minimize disruption to the pedestrian environment.
6. On-site parking is not permitted along the Road B frontage.
7. Landscaped and illuminated pedestrian connections shall be provided between the HDR zone and the North Campus Research and Technology Park.

B. Architecture and Massing

Gateway (Primary)

1. Buildings located at or the near the corner of CR 25A and Road B should be designed in a manner which provides a sense of arrival and should reflect the distinctive character of the Plan area as an agricultural and technological center for innovation.
2. Enhanced landscaping shall be provided along CR 25A between Road B and Road D with an emphasis at the intersection of CR 25A and Road B to accentuate this location as the primary Plan Area entryway.

Road B Frontage

3. Residential and/or mixed-use residential projects with frontage along Road B in the North or South Urban Village shall be designed in a manner so as to not "back-on" to Road B. Windows, entryways, patios and/or other design features shall be located along the Road B frontage to give the appearance of a primary building frontage.
4. Utility doors and other back-of-house items shall be avoided along Road B and CR 25A or shall be screened from public view by decorative trellising landscaping.

Ground Floor Articulation and Activity

The ground floor of mixed use buildings along Road B shall include retail and commercial uses to bring activity to the public realm.

5. The ground floor of all buildings, particularly those façades facing the public right-of-way, should support activity on the street and bring the life of the building into the public realm through the use of frequent and well defined building entryways, façade transparency at the street level, and through architectural detailing such as awnings, canopies, recesses, and enhanced materials and surface changes that provide an interesting and pleasant public experience.
6. Active uses should be located on the ground floor along the building frontage, visible to the public realm/public right-of-way and may include, but are not limited to retail storefronts, cafes/restaurants, community rooms and kitchens, employee support areas, recreational facilities, exhibition space, and lobbies.
7. Articulated wall planes at the ground floor along the public right-of-way or where substantially visible to the public should be offset by at least 2 to 4 feet and may be combined with color or material changes to provide substantial shadow lines and visual interest and allow for enhanced landscaping along the base of the building.

C. Driveways, Parking and Service Aisles

Driveway Location

1. Driveway placement should avoid disrupting the streetwall and pedestrian environment and should be shared, located behind or to the side of buildings whenever possible.

Parking

2. On-site parking shall be located behind buildings and away from CR 25A and Road B.

D. Commercial and Residential Compatibility

Mixed Use Projects

1. Where mixed-use projects include residential units in the HDR/CCO zone, special consideration should be given to the location of noise or odor generating or visually unappealing equipment, including vents/fans, refrigeration units and trash enclosures.
2. Proper screening, odor reduction and sound attenuation shall be provided to reduce impacts and screen such equipment from residential units/view.
3. Commercial uses along Road B should locate at the ground floor and residential units locate above the ground floor to minimize noise impacts to the residential units and to maintain an active gateway area streetscape.
4. If residential units are located along Road B, a landscape buffer of at least 10 feet shall be provided from back of walk.

3.5.14 Special Character Guidelines for Low Density Residential (LDR-East Village) and Medium Density Residential (MDR) Zones

A. Neighborhood Design

Building Orientation and Setbacks

1. Alley-load and non-traditional subdivision layouts that create a more urban and active environment are encouraged within the East Village Low and Medium Density residential zones.
2. Deviations from setback requirements will be considered on a case-by-case basis to allow for innovative subdivision layout that meet these objectives based on a finding that adequate unit separation for light, air and ventilation and private open space is still maintained as determined by the Community Development Director. Where projects are located adjacent to existing residential development, setback standards shall be maintained except as provided for in Chapter 7, Section 7.4.1.2, Minor/Administrative Modification.

Non-traditional residential design may include alley load and cluster style development. Where appropriate, deviation from traditional setback standards will be considered to support such development.

Adjacency to Harry Lorenzo Greenbelt

3. Residential units within the East Village are encouraged to front onto the Harry Lorenzo greenbelt or are designed in such a manner as to actively engage with the trail system through open style fencing, patio orientation or through the incorporation of accessory dwelling units that front on to the trail.
4. Residential units shall not back on to a greenbelt trail or pedestrian path/paseo and garages/driveways shall not be located adjacent to (or front on to) greenbelt trails/pedestrian paths.
5. Subdivisions between Parkland Avenue and CR 25A within the East Village shall incorporate pedestrian connections via paseos or local roads from the Harry Lorenzo greenbelt to the Village Center District at least every 300 feet.

Adjacency to Marston Road and Parkland Avenue

6. Low density, detached single-family units are discouraged from fronting on to Marston Road or Parkland Avenue.
7. Rowhouse/townhouse style residential design is encouraged in the Medium Density Residential zone where adjacent to Marston Road.
8. Units are encouraged to front Marston Road creating an active, urban streetscape, but may include a secondary alley load entrance away from Marston.
9. No driveways or on-site vehicle parking is permitted along the Marston Road frontage.

10. Walk up stoops or other elements providing a vertical separation between residential units and Marston Road is encouraged.
11. The number of access driveways between Road B and the Harry Lorenzo greenbelt should be limited to avoid disrupting the pedestrian environment.

3.5.15 Special Character Guidelines for Low Density Residential (LDR-North Village) Zone

A. Neighborhood Design

Innovative circulation/infrastructure solutions

1. Innovative neighborhood design concepts are encouraged throughout the Specific Plan's residential districts. In particular, innovative and non-traditional pedestrian paths, landscaping and natural storm drain/water filtration systems that create a distinct, more rural neighborhood character should be considered in the North Village.
2. Curving (non-grid) streets are permitted in the North Village as a means of creating an organic neighborhood design. However, pedestrian connectivity should still be provided throughout the neighborhood and to the Harry Lorenzo greenbelt and to Parkland Avenue.

Adjacency to Hwy 113

3. Residential units that back up to Hwy 113 shall maintain a minimum 30 foot setback from the soundwall/Hwy 113.
4. Single story homes are encouraged where adjacent to Hwy 113.

Adjacency to Harry Lorenzo Greenbelt

5. It is encouraged that residential units within the North Village front onto the Harry Lorenzo greenbelt or are designed in such a manner as to actively engage with the trail system through open style fencing, patio orientation or through the incorporation of accessory dwelling units that front on to the trail.
6. Residential units shall not back on to a greenbelt trail or pedestrian path/paseo and garages/driveways shall not be located adjacent to (or front on to) greenbelt trails/pedestrian paths.

Accessory Dwelling Units are encouraged along the Harry Lorenzo Ave greenbelt to actively engage the trail system.

Adjacency to Parkland Avenue

7. Low density, detached single-family units are discouraged from fronting on to Parkland Avenue.

B. Architecture

Design

Architectural styles within the North Village should help create a distinct neighborhood identity and should generally consist of Urban/Modern Farmhouse, Contemporary Cottage or French Country building forms and elevations.

4.0 | Mobility and Circulation

4.1 | OVERVIEW

The mobility and circulation framework for the Plan Area is a modified grid, complete street system that accommodates all modes of travel in a walkable, urban environment. A seamless network of dedicated bike/pedestrian facilities promotes convenient access between commercial centers, residential neighborhoods, and open spaces, and allows employees, residents and patrons to choose from a range of transportation options. The shared mobility hub creates a central point of connection, integrating a range of transportation choices to accommodate emerging technologies. A hierarchy of street types ensures proper performance for vehicle and alternative modes while encouraging shared mobility options. Streetscape design standards establish the Plan Area as a distinctive place, creating an attractive and engaging public realm.

A seamless network of dedicated bike/pedestrian facilities promotes convenient access between commercial centers, residential neighborhoods, and open spaces, and allows employees, residents and patrons to choose from a range of transportation options.

This chapter describes the transportation modes, circulation networks and standards for Plan Area roadways, public transit, bicycle and pedestrian facilities. Roadways have been designed to balance the circulation and flow of vehicular traffic with the provision of safe and accessible facilities for walking, biking and public transit. A modified grid street network provides circulation and access within the Plan Area, to Spring Lake and adjacent areas of the city and distributes Plan Area traffic to support a walkable and bike friendly community. Plan Area roadways provide circulation and connectivity and incorporate landscape elements which provide aesthetics, shade and stormwater management. Specific guidance for bike paths, sidewalk improvements, medians and parkways, landscaping and other streetscape elements are defined in this chapter.

4.2 | NEXT GENERATION MOBILITY

The digital revolution is opening up new technologies and transforming the way goods are purchased and delivered and how people chose to get from place to place. For the past 75 years, the design of communities has been driven primarily from the perspective of the automobile user. The emergence of the shared economy and advent of autonomous vehicles are disrupting the traditional way of thinking about personalized transportation. How cities adapt to and plan for future transportation innovations is a topic of much discussion.

The Plan Area is designed to accommodate current systems while anticipating emerging technologies that will offer an increasing range of transportation options for both personal and commercial use. The Village Center will serve as a social and functional hub of the Plan Area where all modes intentionally intersect at a "shared mobility hub". Supported by the compact and mixed-use nature of the plan, active transportation modes are prioritized throughout the project to promote biking and walking as a preferred mode of choice. Streets and path facilities are designed to provide efficient movement while creating a stronger sense of place, rather than compromising the human experience. Facilities and programs will be implemented to support a shift away from individual vehicle use and toward active and shared mobility options in order to achieve the General Plan goal of 10% reduction in vehicle miles traveled (VMT).

The Plan Area road network is designed to accommodate alternative modes of transportation and as well as future technologies.

This section summarizes the planned facilities, systems and programs that are contemplated in the Plan Area and will be the focus of the transportation demand management (TDM) program, described in Section 4.2.7. Funding sources and mechanisms for the mobility amenities, programs and services described in the following sections are addressed in the Finance Plan and Development Agreement.

4.2.1 Active Transportation

Supported by a fine grain network of pedestrian / bicycle facilities, the WRTP promotes active and more individualized forms of transportation such as biking, boarding, scootering, and walking. The Plan Area mix of residential, employment, services, recreational uses proximate to each other and

transit services make it convenient to choose alternative transportation choices throughout the day. Active transportation facilities or amenities at the beginning and end of the trip destination are incorporated throughout the Plan Area to further encourage active transportation as a primary means of getting around.

4.2.2 Shared Mobility Hub

The shared mobility hub, named *The Union*, will at project build out, serve as the nucleus of the alternative transportation system providing integrated access to intra-city as well as inter-city transit service. The Plan Area's seamless network of roads, bike paths, and sidewalks combined with a variety of transportation services will offer multiple choices to support "last mile" connectivity. Located at the Village Center, The Union will be designed to accommodate a range of potential alternative transportation choices such as:

The Plan Area road network is designed to accommodate alternative modes of transportation and as well as future technologies.

1. Fixed route bus and micro-transit
2. Car/vanpool\parking
3. Designated car share spaces
4. Electric vehicle charging stations
5. Ride hailing services
6. Bike/scooter share docking stations

Services and amenities at the Village Center such as cafés, a market and co-working spaces will create opportunities to further reduce vehicle miles traveled and enhance The Union as a place of connection.

Development of The Union will occur in phases to correspond with service demand generated as the Plan Area builds out. Meanwhile, an increasing number of UC Davis faculty, staff, and students at UC Davis are choosing to live in Woodland. Campus planners are seeking new ways to promote transit and carpool options for campus-bound commuters and have engaged with the City to explore effective alternatives to single-occupant driving. The Plan Area's strategic location along Highway 113 at the southern-most side of the community, creates a unique opportunity to establish a convenient point of connection for van/carpool and transit services.

Early phases of the Plan Area's shared mobility hub will include park and ride facilities to promote carpooling. An illustrative layout of the shared mobility hub is provided below. As demand grows with the employment and housing development, the full set of transit and shared mobility services will be added at The Union.

Elevated Perspective of the mobility hub "The Union," and Village Center – Artist Rendering

4.2.3 Fixed Route Transit Service

Development of The Union will be planned and coordinated with local and regional transit service providers including YCTD and UC Davis Transportation and Parking Services/Unitrans. The shared mobility hub will be the primary point of connection to fixed route bus service as part of the City's planned pulse route system provided by YCTD's YoloBus service. Additionally, a new bus rapid transit connection providing frequent connection to and from UC Davis and the Davis Amtrak Depot is planned. This service will link into regional transit services connecting into high employment areas such as downtown Sacramento/UC Davis Med Center and the Bay Area. This service will be evaluated as part of the TDM program. Exhibit 4-1 depicts the existing and planned inter and intra city bus routes to serve the Plan Area.

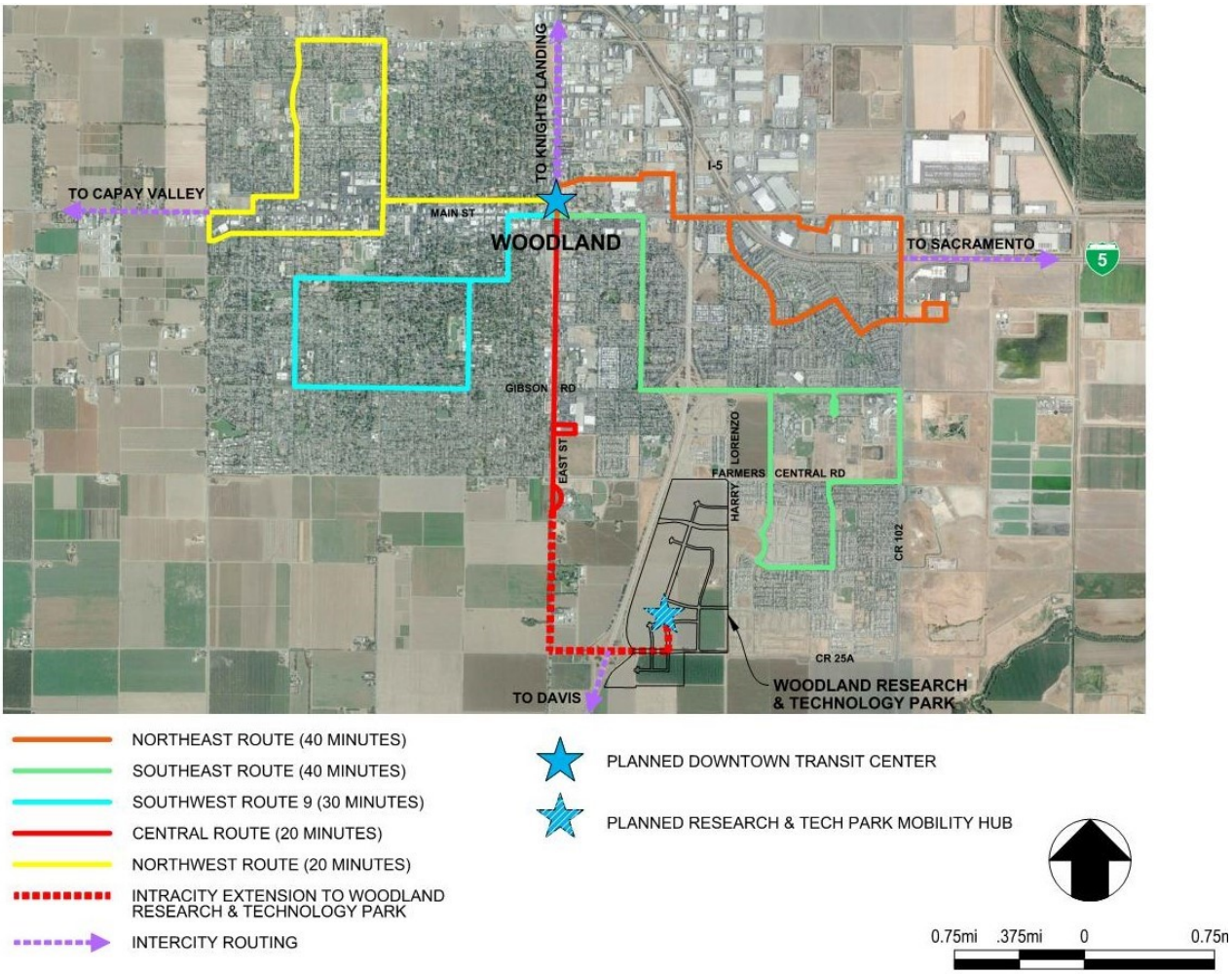


EXHIBIT 4-1: INTER- AND INTRA-CITY BUS ROUTES

4.2.4 Micro-Transit Service

On-demand shuttle services are supplementing, and in some cases replacing, intra-city fixed route transit service in communities across the country. Woodland and YCTD will be piloting a micro-transit service in 2021 which will inform the future application and expansion of this transportation amenity in the community. The Plan Area is planned and designed to anticipate this service which will not only offer an additional option for "last mile" connection to the shared mobility hub but also provide residents and employees with the flexibility to choose alternative transportation options for primary commute trips and utilize on-demand services for ancillary trips throughout the day.

4.2.5 Vanpool/Ride Share

To supplement transit services, particularly in the earlier phases of the Plan Area build out when ridership numbers have not reached critical service demand levels, park and ride lots will be utilized to support vanpools and ride sharing. Additionally, dedicated parking spaces for car/vanpool and ridesharing will be required for large employment uses. Supplemental funding may be needed

initially to subsidize these services and build ridership demand. Funding from UC Davis and the Plan Area's transportation demand management (TDM) program could be key sources of funding to support these services.

4.2.6 Vehicular Travel

The Plan Area accommodates automobiles yet, is intentionally designed to reduce their use through a combination of a modified grid street network and alternative transportation services/amenities that promote alternate mode choices. To further reduce impacts of automobile use, the plan integrates infrastructure and development standards that support zero emission vehicles and car share programs that will reduce reliance on individual vehicle ownership. The following examples of current, and/or future, innovative transportation solutions will be deployed to help reduce vehicular use and GHG emissions.

To reduce impacts of automobile use, the plan integrates infrastructure and development standards that support zero emission vehicles and car share programs that will reduce reliance on individual vehicle ownership.

1. Electric Vehicles. Every parking lot and garage within the Plan Area will be EV ready for the addition of charging facilities. Dedicated EV parking stalls will be placed near primary entrances, key points of destination, and at park and ride/transit stops.
   Car Sharing Services. On and off-street parking spaces in key locations will be dedicated to car sharing, or similar services, in cooperation with existing and future successful private car sharing vendors such as ZipCar, GIG Car and City CarShare.
2. Ride Hailing Services – Designated curbside zones for ride hailing (i.e. Uber/Lyft) will be strategically located at the Union and other locations within the Plan Area.
3. Smart Parking – Use of intelligent parking management technologies, such as Woodland-based JAPA, may be employed in high demand parking areas to monitor utilization, inform drivers of available parking spaces, and offer adaptive time limit and permitting options.

4.2.7 Transportation Demand Management

Reduction of personal vehicle use and an overall vehicle miles reduction travelled by 10% will be achieved through a variety of project features and services such as the ones described in this Chapter. A Transportation Demand Management (TDM) program for the project will be adopted prior to the first tentative map to guide the build out of the Plan Area and the phased implementation of enhanced mobility facilities and programs.

4.3 | MOBILITY AND CIRCULATION NETWORK OVERVIEW

Proposed land uses, densities and the individual district character described in Chapters 2 and 3 have a close connection to streetscape design standards described in this chapter. Together, land use patterns and streetscape contribute to a sense of place by ensuring that local streets are not over- or under-designed to accommodate both local and through traffic, and parking demand generated by development. Further, streetscape design, including greenbelts and pedestrian paseos, help create a cohesive community identity, enhanced with landscaping, street furniture and lighting, entryways and public art.

The street and path networks for the Plan Area have been carefully designed to support the distribution and function of various uses within the land use districts while also serving as a primary place making feature. Each district is associated with unique types of travel demand which is served by a highly connected hierarchy of streets and pedestrian / bicycle paths. The envisioned circulation networks and street hierarchy is shown on Exhibit 4-3, followed by the street cross section designs. As the Plan Area develops, specific street sections may require minor modifications in response to unique or unforeseen circumstances. Minor modifications to the street sections included in Section 4-5 shall be subject to review and approval by the Community Development Director in consultation with the City Traffic Engineer. Providing all modes of mobility equal consideration while emphasizing active and alternative transportation options is a primary goal of the Specific Plan and the 2035 General Plan. Figure 14-16: Table 3-2 from the 2035 General Plan, summarizes the mode priority.

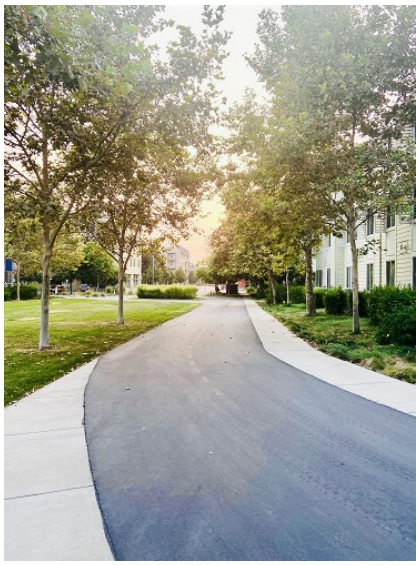
The overall Mobility and Circulation Network and streetscape program consists of the Active Transportation Network and the Roadway Network. The Active Transportation Network includes descriptions of the facilities such as multi use trails, paths, on street bike lanes, shared use marking and pedestrian promenades and sidewalks. The Roadway Networks describes the street hierarchy of Principal Arterial Streets, Minor Arterial Streets, Collector Streets, Local Streets, Alleys as well as Roundabouts / Enhanced Intersections and Streetscape Design Features.

4.4 ACTIVE TRANSPORTATION NETWORK

Dedicated on- and off-street bike facilities will allow both transportation and recreational benefits for Plan Area residents and employees.

The Plan Area's active transportation network is comprised of dedicated on-street and off-street facilities that provide both transportation and recreational benefits, as depicted in Exhibit 4-2, Active Transportation Network. The Plan Area's interconnected system of sidewalks, bike lanes and multi-use trails/paths are intentionally designed to link seamlessly throughout the Plan Area and to the shared mobility hub promoting more active and healthier transportation choices. Enhanced crossing features and roundabouts will be used where the active transportation network intersects with the primary roadway network.

The backbone of the network is the 4.9 miles of Class 1 facilities distributed throughout the Plan Area, creating a system of greenbelt trails and more formal multi-use paths. A primary feature of the network is the north-south greenbelt spine that serves as a key connector of existing and planned trail networks. Abandoned portions of Harry Lorenzo Avenue will be converted to greenbelt and integrated into a linear greenway connecting existing trails that extend east-west along CR 25A, Marston Ave, Parkland Avenue, and Farmer's Central Road.



The planned bike and pedestrian overcrossing at the north boundary of the Plan Area will offer safe and convenient access across HWY 113 and connection to the west side of the community via the Woodland Parkway. The future Parkland Avenue overcrossing will provide an additional Class 1 path creating connection between future development of the Specific Plan 1 Area on the west side of HWY 113. The Plan Area is also a key point of connection to the future Woodland-Davis Bikeway / Alternative Transportation Corridor that is envisioned to provide an off-street path between the two cities.

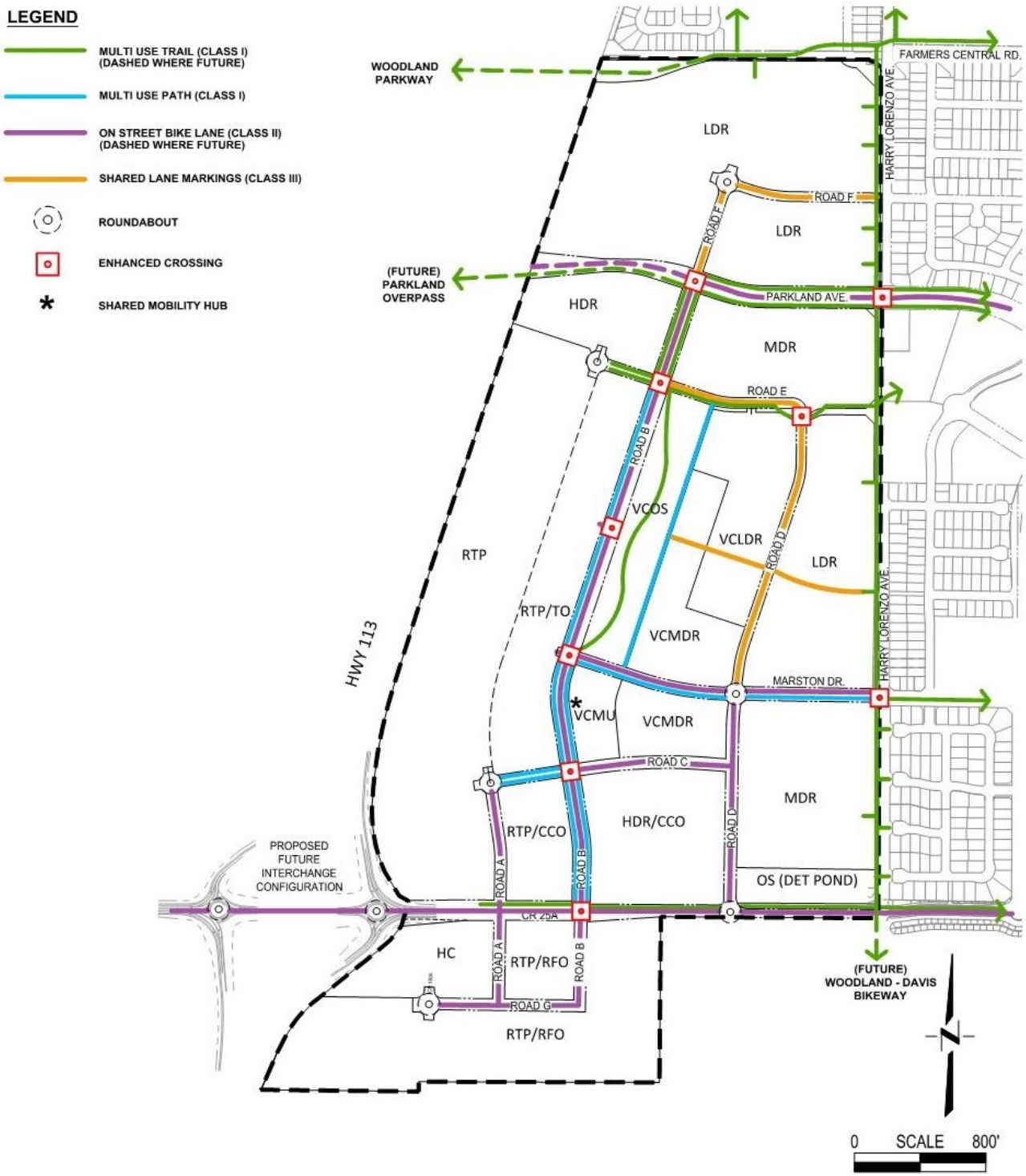


EXHIBIT 4-2: ACTIVE TRANSPORTATION NETWORK

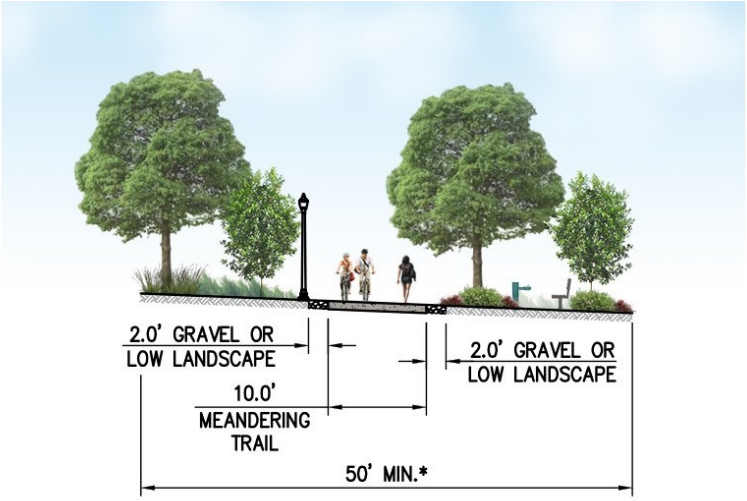
4.4.1 Active Transportation Facility Design

The design of the Plan Area's active transportation facilities have been carefully considered to relate to the street and land use context, reinforcing biking, walking, and other alternative transportation choices as an integral feature of the Plan. The following design standards and section details describe the characteristics of the network's hierarchy of trails, paths, lanes and shared lane markings.

The Plan Area's active transportation network includes 3.1 miles of multi-use trails and greenbelts, allowing residents and employees the ability to travel throughout the plan area comfortably on a bike, walking, or by way of other non-vehicular modes of transportation.

1. MULTI-USE TRAILS

The Plan Area's greenbelt and linear greenway network consists of 3.1 miles of class 1 Multi-Use Trails. These facilities are more informal in nature with a 10-foot wide shared use path that gently meanders through landscaped open spaces. The overall width of the greenbelts and greenways shall vary to reinforce the more informal nature of these spaces. The larger greenbelts are at least 50-feet in width and shall be no less than 24-feet at neighborhood connectors or where located along the street right-of-way. The Multi-Use trails include a 2-foot gravel shoulder or low landscape edge with bi-level motion sensing LED path lighting. Trails will be well shaded with trees and have amenities such as exercise stations, benches, drinking fountains and occasional open turf areas to encourage passive and active recreational use.



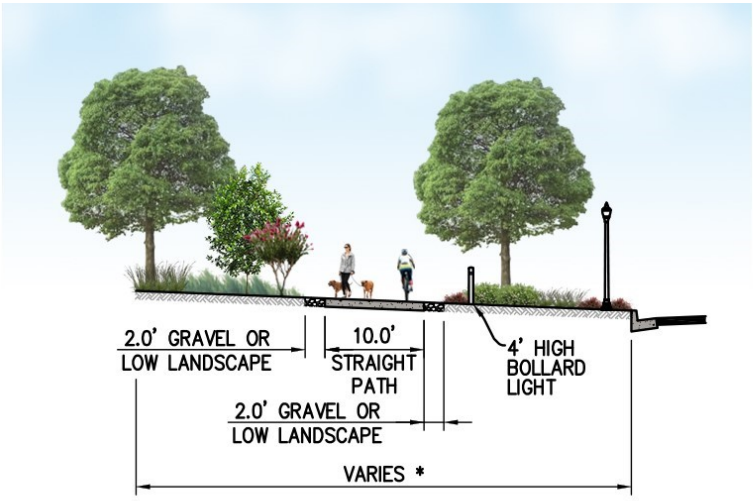
TYPICAL GREENWAY WITH MULTI-USE TRAIL

* 24' MINIMUM WHEN TRAIL IS ADJACENT TO A STREET RIGHT-OF-WAY

2. MULTI-USE PATHS

A more formal and linear network of multi-use paths through the Plan Area's active urban areas anticipate higher utilization by bikes, scooters and pedestrians.

The Plan Area's greenbelt and linear greenway network transitions to a more formal path facility within the more active urban areas of the plan. The 1.8 miles of Multi-Use Paths are a linear 10-foot wide shared use path that anticipates a higher utilization by all modes including bikes, scooters, pedestrians, and other forms of active transportation. A 2-foot clear recovery zone shall be maintained on both sides of the path. Where adjacent to private use, the recovery zone may be incorporated within the front setback and may consist of a clear pedestrian zone, free of street furniture or other fixtures, or low landscaping. Lighting will be integrated with the street lighting system and supplemented with pathway or bollard lighting where needed. Bike parking, scooter docs, and transit shelters will be strategically located along the Paths to support utilization of alternative transportation modes.



TYPICAL GREENWAY WITH MULTI-USE PATH

* 17' MINIMUM WHEN PATH IS ADJACENT TO A STREET RIGHT-OF-WAY

3. THE PROMENADE

The tree-lined Multi-Use Path that runs along the east edge of The Yard is called The Promenade. This Path will serve as a connection for bikes and pedestrians between Road E and Marston Drive. Medium and low density residential units in the Village Center will have front entries facing across The Promenade into The Yard to help create an active and more urban open space. The Promenade will have an accentuated pavement treatment, lower level pathway or bollard lighting, and more frequent placement of benches. Portions of the Promenade may allow limited vehicle access but will be clearly designated predominantly for pedestrian and bicycle use.

4. BIKE LANES

The Active Transportation Network contains 3.5 miles of class II on-street bike lanes. The minimum width of the lanes is 6-feet for designated bike lanes on collector streets. On arterial streets such as Road B, Parkland, and CR 25A where traffic speeds and volumes are higher, bike lanes are 8-feet wide and have a 2-foot buffer on the vehicle lane side. Green lane markings will be used along CR 25A and Road B to further identify the on-street bike facilities.

5. SHARED LANE MARKINGS

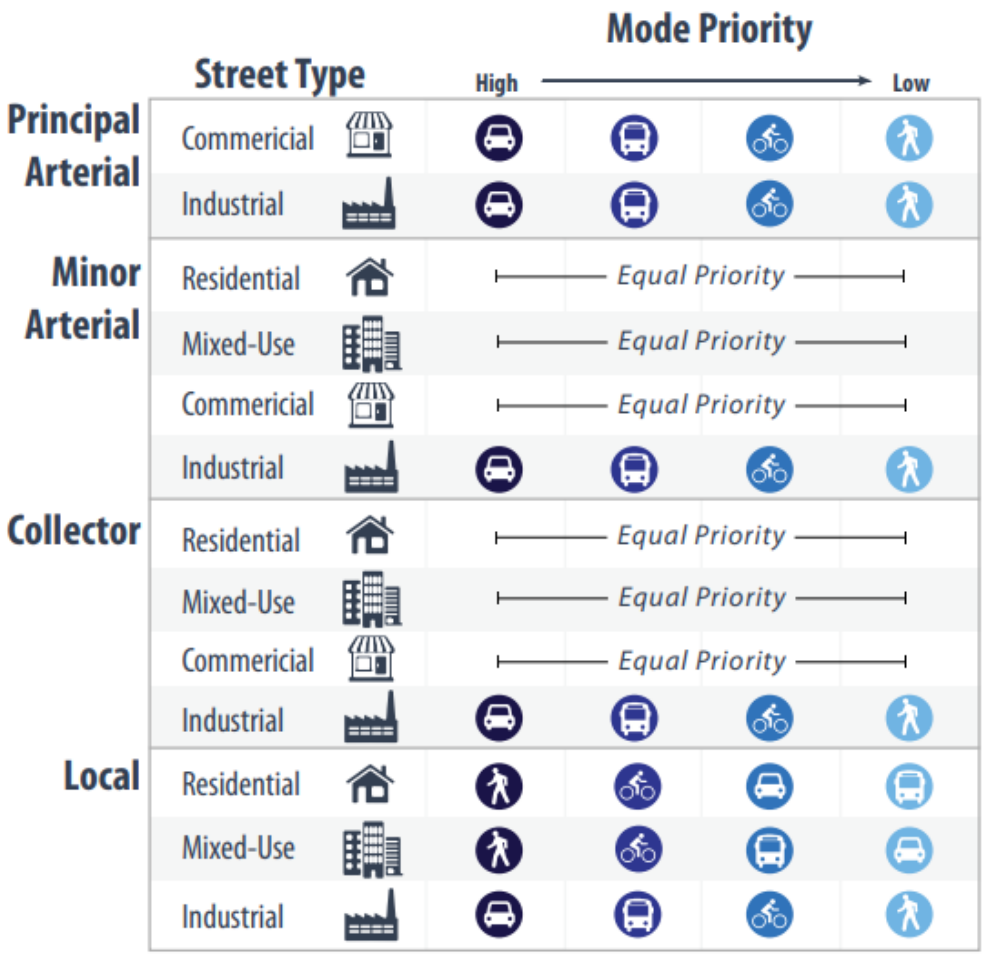
Shared lane markings such as sharrows will be used to accentuate the shared nature of these streets. On collector and local streets within the lower density residential neighborhoods that serve as key bike corridors, shared lane markings consistent with the best practices and standards articulated within the MUTCD will be used.

Class II and III bike facilities will be delineated by street markings using best practices from MUTCD.

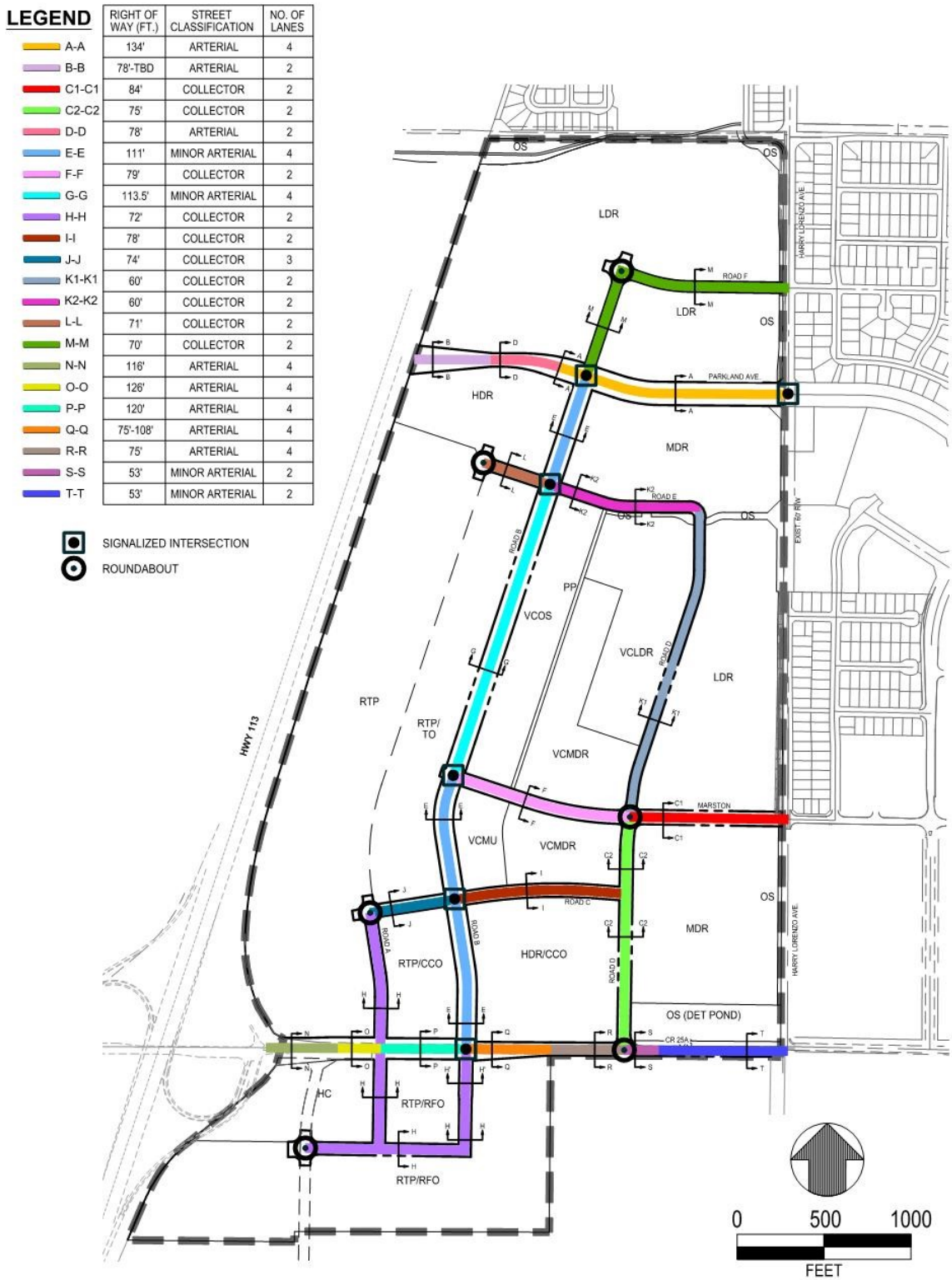
4.5 ROADWAY NETWORK AND STREET HIERARCHY

The Plan Area's roadway network is a hierarchy of Principal Arterial, Minor Arterial, Collector, and Local Streets that provide seamless connection into and out of the Plan Area. Roadways are planned to accommodate the specific travel modes prioritized relative to the land uses they serve. Each roadway is also uniquely designed to reinforce the character of each District and support the creation of a distinctive sense of place. The primary roadway network is shown in Exhibit 4-3.

Street Typology | Street typologies expand upon the functional classification and take into account street context, land use context, and travel mode prioritization. This typology ensures that the application of street standards consider a street's relation to surrounding land uses, appropriate travel speeds, and the need to accommodate multiple travel modes and user abilities.



Equal Priority: Recognize the importance of all transportation modes.



LEGEND	RIGHT OF WAY (FT.)	STREET CLASSIFICATION	NO. OF LANES
A-A	134'	ARTERIAL	4
B-B	78'-TBD	ARTERIAL	2
C1-C1	84'	COLLECTOR	2
C2-C2	75'	COLLECTOR	2
D-D	78'	ARTERIAL	2
E-E	111'	MINOR ARTERIAL	4
F-F	79'	COLLECTOR	2
G-G	113.5'	MINOR ARTERIAL	4
H-H	72'	COLLECTOR	2
I-I	78'	COLLECTOR	2
J-J	74'	COLLECTOR	3
K1-K1	60'	COLLECTOR	2
K2-K2	60'	COLLECTOR	2
L-L	71'	COLLECTOR	2
M-M	70'	COLLECTOR	2
N-N	116'	ARTERIAL	4
O-O	126'	ARTERIAL	4
P-P	120'	ARTERIAL	4
Q-Q	75'-108'	ARTERIAL	4
R-R	75'	ARTERIAL	4
S-S	53'	MINOR ARTERIAL	2
T-T	53'	MINOR ARTERIAL	2

EXHIBIT 4.3: ROAD CIRCULATION DIAGRAM

4.5.1 Principal Arterial Streets

A Principal Arterial Street provides mobility for higher vehicular traffic volumes while maintaining a comfortable bike and pedestrian experience.

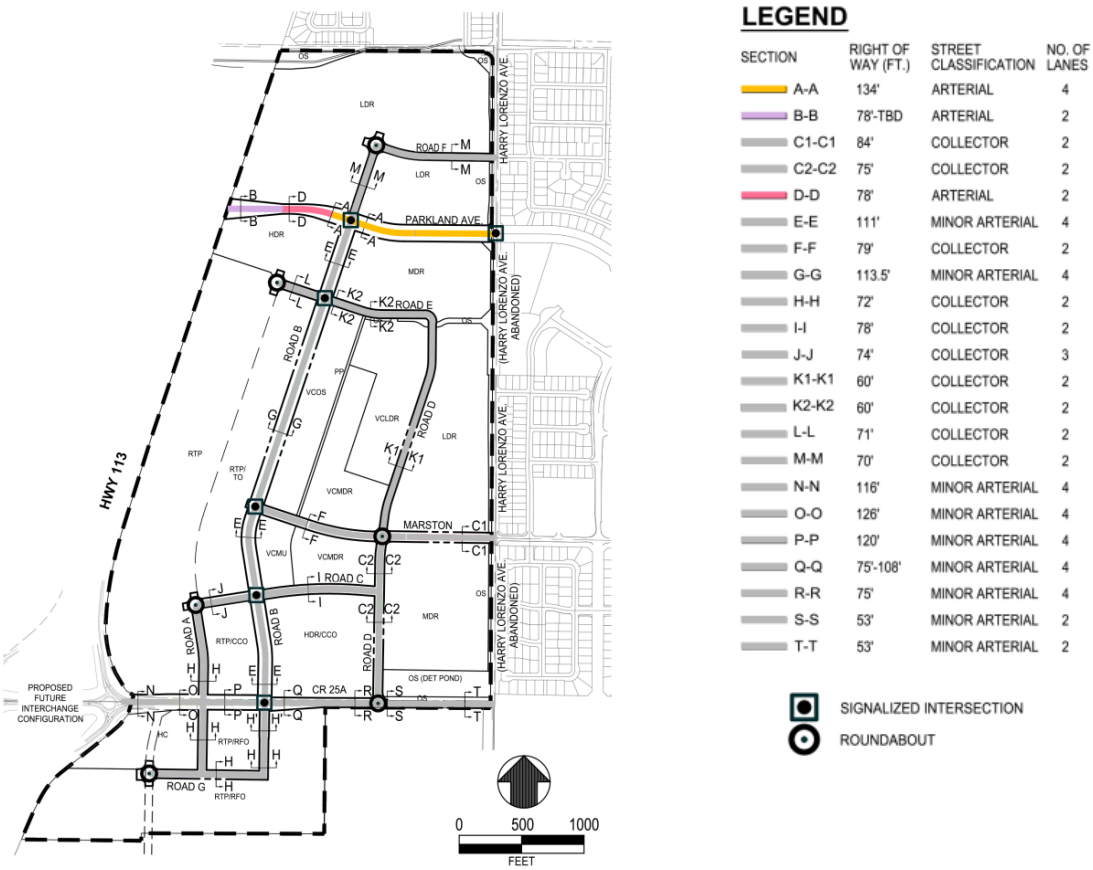


EXHIBIT 4.4: PRINCIPAL ARTERIAL STREETS KEY MAP

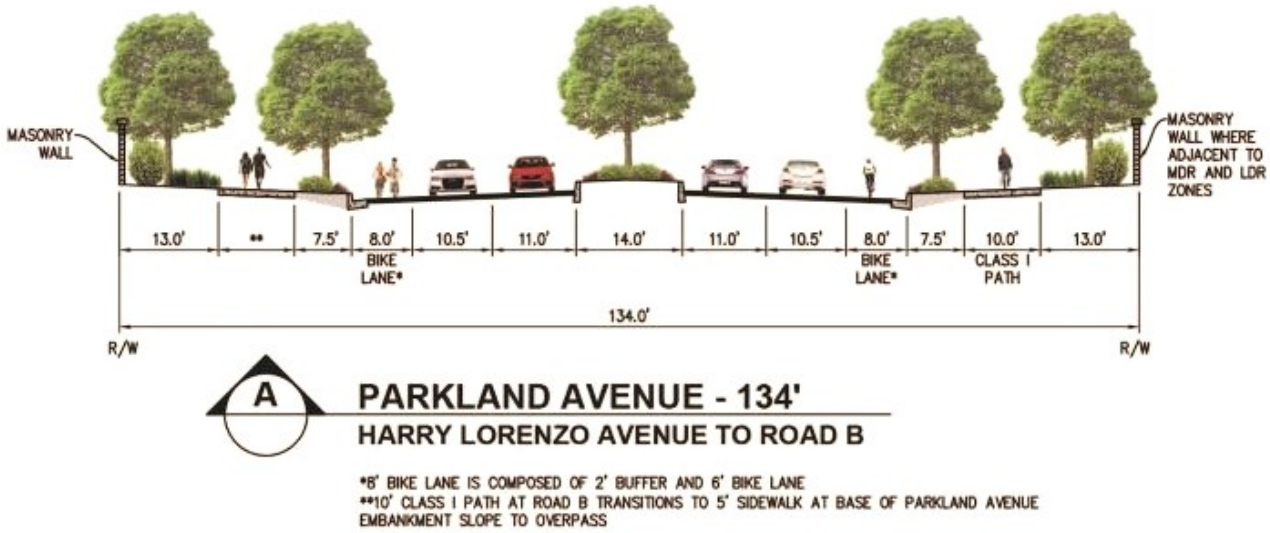
1. PARKLAND AVENUE

Parkland Avenue, depicted on the key map above, is the only principal arterial street within the Plan Area. This street segment is the primary connector into and out of the Plan Area from the north, intersects with Pioneer Avenue and Heritage Parkway at the Spring Lake Village Center, the hub of the arterial network in the Southeast Area.

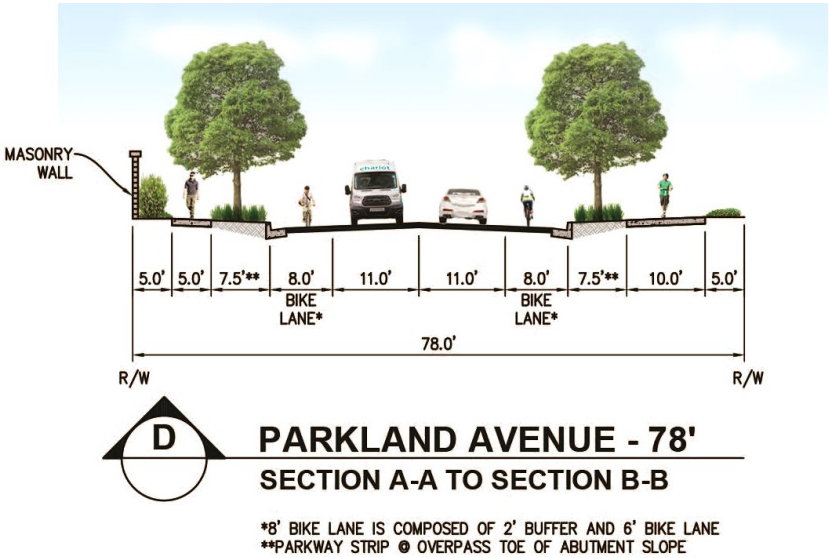
The roadway network will extend Parkland Avenue from Harry Lorenzo Avenue (HLA) to Road B where it will ultimately extend west over Highway 113 (HWY 113). It is anticipated that the segment from Road B to East Street, including the Hwy 113 overpass, will be completed with the build out of General Plan Specific Plan Area 1B, and the necessary right-of-way within the Plan Area will be dedicated as part of the Project infrastructure requirements. Parkland Avenue will continue west from HLA as a 4-lane Principal Arterial with a landscape median, buffered on-street bike lanes, Class 1 bike/pedestrian paths and landscape strips on either side of the paths as illustrated in Section A-A.

Parkland Avenue will serve a primary connector between the existing Spring Lake neighborhood to the east and the Plan Area.

The Parkland Avenue extension will continue with on-street and Class I bike facilities between Harry Lorenzo and the future pedestrian overcrossing.

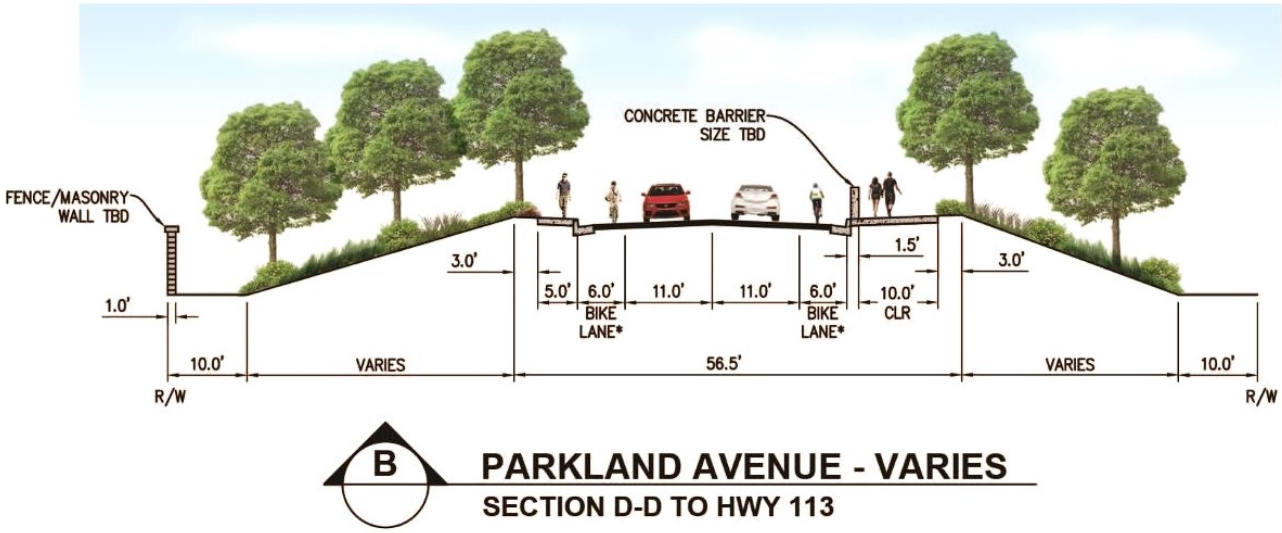


From Road B to HWY 113, Parkland will transition to an overpass, narrowing to two lanes with buffered on-street bike lanes, planting strips and a 10-foot multi-use Class 1 bike/pedestrian path on the south side of the street. This transition is illustrated from east to west via Street Sections D-D and B-B. The western extent of Parkland Avenue and adjacent right-of-way, is designed in anticipation of future extension across HWY 113 to East Street.



The intersection of HLA and Parkland Avenue will be improved with signalized controls and enhanced bike and pedestrian facilities to provide greater safety and comfort to users of the adjacent north-south greenbelt. The signalized intersection at Road B and Parkland Avenue will be similarly improved with features to enhance safety and comfort for bicycles and pedestrians.

Transit (Bus) shelters and turn-outs will be provided between HLA and Road B as required to provide service to planned transit routes.



4.5.2 Minor Arterial Streets

Minor Arterial Streets CR 25A and Road B, as depicted on key map below, provide mobility for higher traffic volumes than local roads, but lower traffic volumes and speeds than Principal Arterial roads. These roadways will serve as critical components of the Alternative Transportation Network, serving as key entryways and placemaking streets as well as the primary transit connections. Access from parcels onto these roadways is limited to reduce points of conflict, smooth the flow of traffic, and enhance urban design.

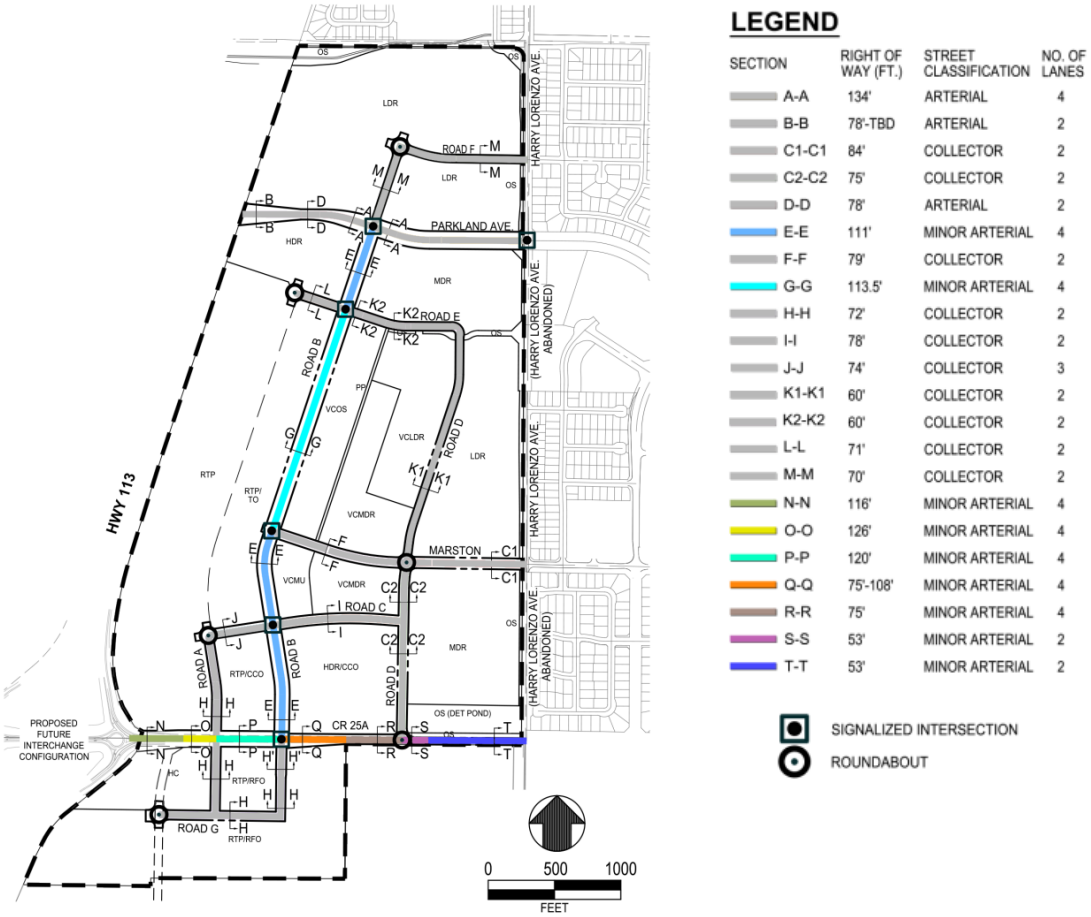
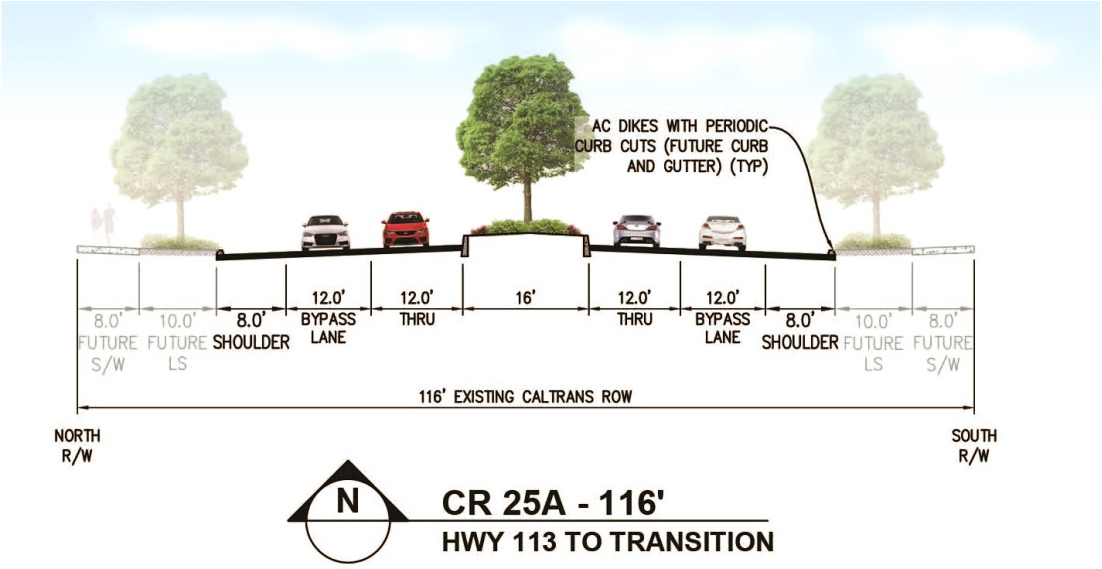


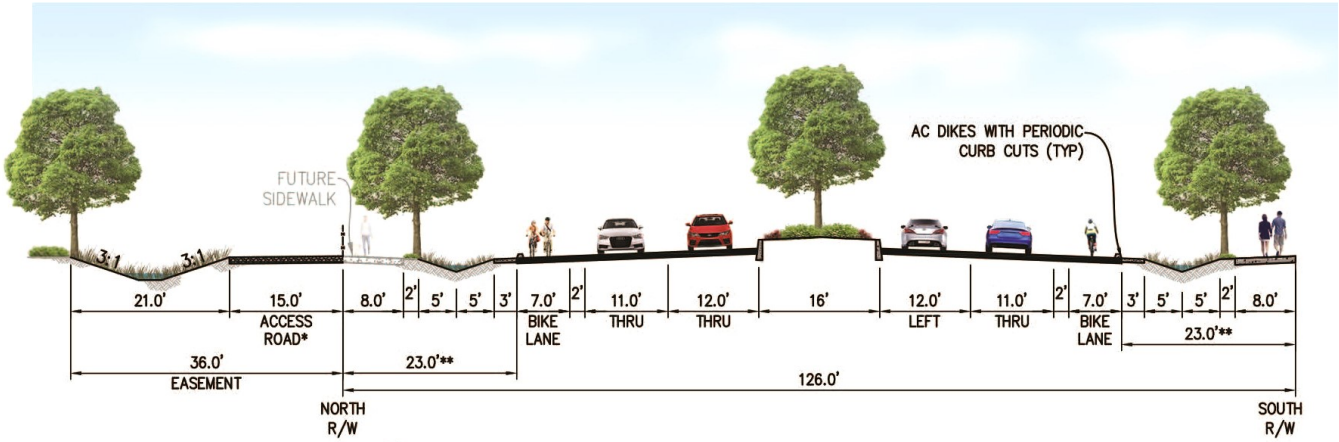
EXHIBIT 4-5: MINOR ARTERIAL STREETS KEY MAP

1. COUNTY ROAD 25A

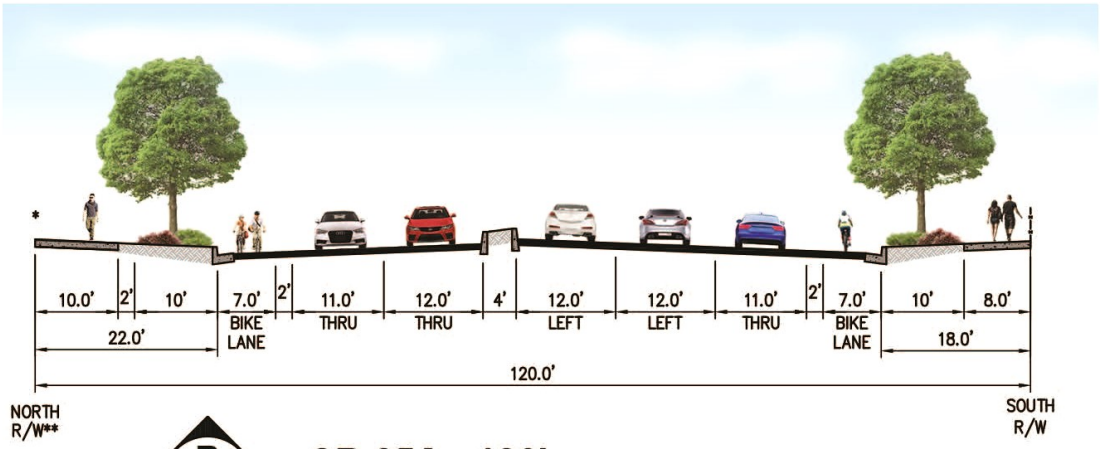
County Road 25A (CR25A) serves a prominent role as the primary entryway into the Research and Technology Park as well as the southernmost gateway to Woodland. As depicted on Exhibit 4-3, Circulation Diagram, roundabouts are proposed on both the east and west sides of the HWY 113 / CR25A interchange to smooth the flow of traffic and create a more distinctive visual entry experience. A Class 1 Multi-Use Trail will be built on the north side of the roadway extending the existing trail in Spring Lake to the embankment approach to the HWY 113 overpass.

The transition from the interchange to CR25A itself will consist of four lanes of traffic with a 16′ wide median as illustrated by Section N-N. Right-of-way for this transition segment is designed to add future pedestrian walkways buffered from the roadway via a tree-lined landscape strip. Between this transition and Road B, CR25A will have four lanes of traffic, turn pockets, buffered on-street bike lanes and a 16′ center median island, illustrated by Sections O-O, P-P, and Q-Q. The signalized intersection of Road B and CR 25A is the main entryway into the Plan Area and will included enhanced pavement and monument features to accentuate its role as a prominent entryway.





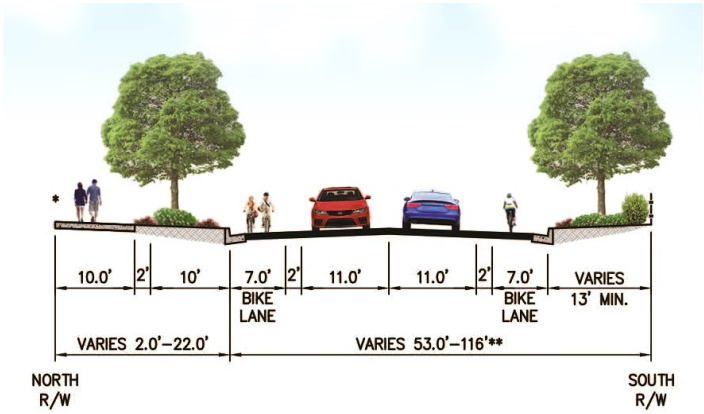
* PRIVATE ACCESS ROAD TO EX. AGRICULTURAL WELL. MAY BE ELIMINATED IN FUTURE IF WELL IS NO LONGER IN USE OR ALTERNATE ACCESS IS PROVIDED.
** RESERVED FOR FUTURE CURB, GUTTER AND 10' MIN LANDSCAPE STRIP



P **CR 25A - 120'**

ROAD A TO ROAD B

*2' CLEAR RECOVERY ZONE WILL BE REQUIRED WITHIN THE PRIVATE LANDSCAPING NORTH OF PATH
**NO DIRECT ACCESS TO CR 25A FROM ABUTTING PROPERTY TO THE NORTH

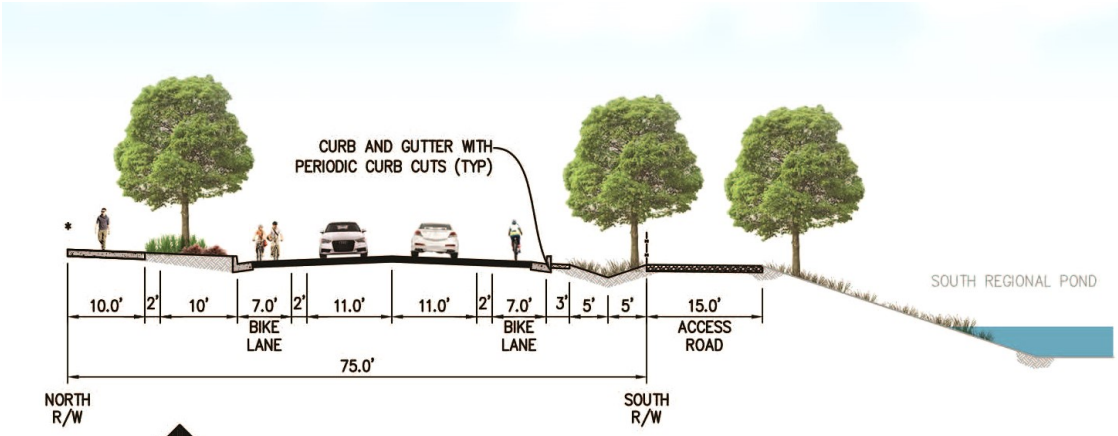


Q **CR 25A - VARIES**

ROAD B TO SOUTH REGIONAL POND - WEST

*2' CLEAR RECOVERY ZONE WILL BE REQUIRED WITHIN THE PRIVATE LANDSCAPING NORTH OF PATH
**ROAD TO INCREASE AT INTERSECTION WITH ROAD B TO ACCOMMODATE THE FOLLOWING LANES: WESTBOUND LEFT TURN, WESTBOUND THROUGH, AND WESTBOUND THROUGH/ RIGHT. TRANSITION LENGTH TO TWO LANES TBD, ESTIMATED TO BE BETWEEN 500–1000'

East of Road B, CR 25A will taper to a two-lane road with roundabout intersection control at Road D, where it will continue east and extend to Parkland Avenue. The two-lane segment within the limits of the Plan Area are illustrated in relation to various adjacent storm water collection facilities, as illustrated by Sections R-R, S-S, and T-T below. The Plan Area infrastructure financing plan will include the completion of CR 25A from Hwy 113 to CR 102.

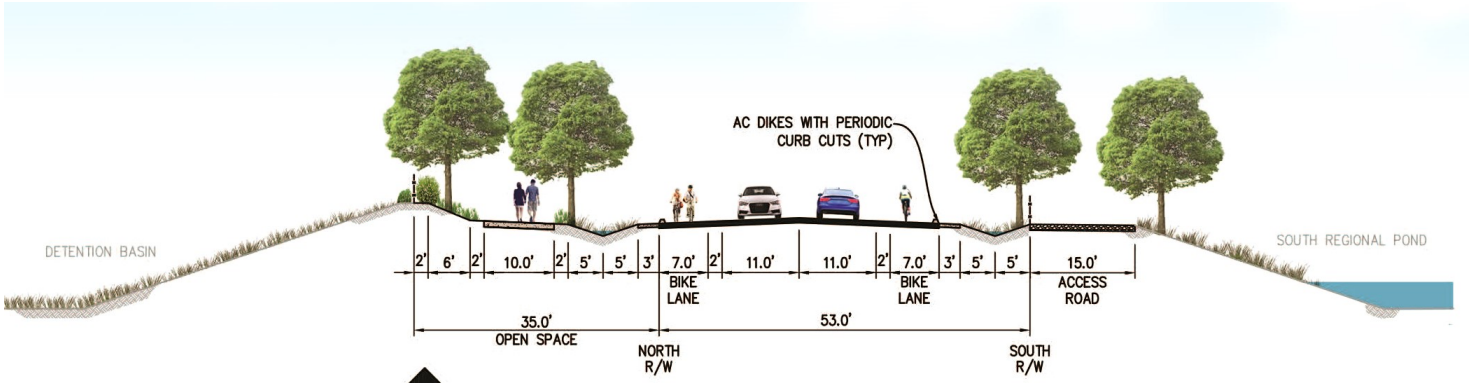


R

CR 25A - 75'

SOUTH REGIONAL POND - WEST TO ROAD D

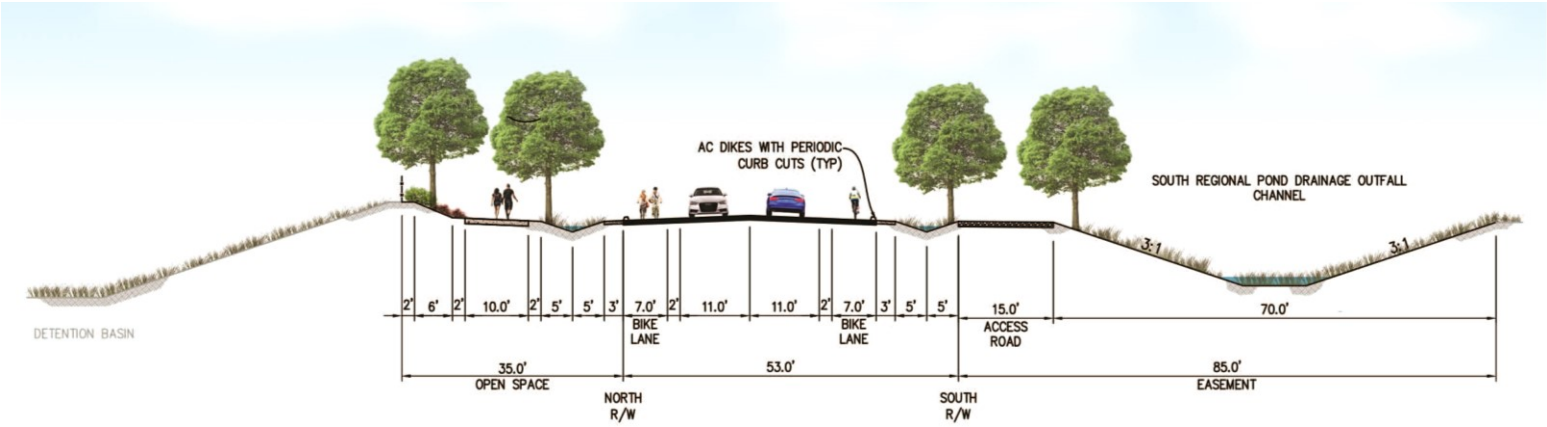
*2' CLEAR RECOVERY ZONE WILL BE REQUIRED WITHIN THE PRIVATE LANDSCAPING NORTH OF PATH



S

CR 25A - 53' (AND 35' OPEN SPACE)

ROAD D TO SOUTH REGIONAL POND - EAST



T

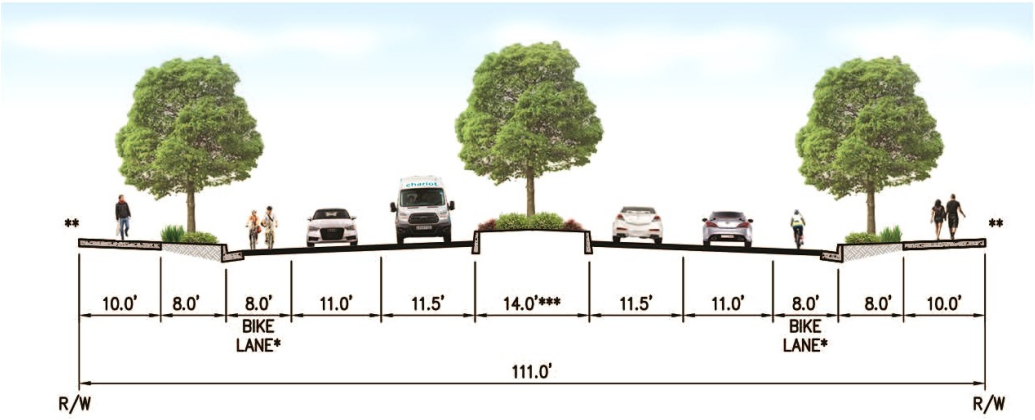
CR 25A - 53' (AND 35' OPEN SPACE)

SOUTH REGIONAL POND - EAST TO HARRY LORENZO AVENUE

2. ROAD B

Road B is a Minor Arterial street that functions as the main spine through the Plan Area linking employment, commercial, residential, and recreational uses. As the most prominent street in the Plan Area, the design and overall experience of Road B for all users is to be distinctive and reinforce, rather than detract from, the sense of place.

All intersections along this roadway are signalized to ensure efficient flow of traffic but also support safe and convenient travel of alternate modes. Enhanced pavement, landscape and aesthetic features will be provided at each of the intersections.



E

ROAD B - 111'

ROAD 25A TO MARSTON DRIVE & ROAD E TO PARKLAND AVE

*8' BIKE LANE IS COMPOSED OF 2' BUFFER AND 6' BIKE LANE
**2' CLEAR RECOVERY ZONE WILL BE REQUIRED WITHIN THE PRIVATE LANDSCAPING
***16' WIDTH AT ROAD B/ CR 25A INTERSECTION, WITH THE LENGTH OF THE WIDENED MEDIAN TO MATCH TURN POCKET LENGTH

CR 25A to Road C. Beginning at the intersection of CR 25A, the primary entryway to the Plan Area, Road B's character is that of a shared use roadway with two vehicle lanes in each direction, buffered on-street bike lanes, and off-street Class 1 Multi Use Paths. A generous 14-foot wide tree lined median extends the length of Road B complemented by 8-foot wide tree lined landscape parkways on both sides of the street separating the roadway from the multi-use path. Driveway access is limited to no more than two right-in and right-out driveways on each side of the road within the block. See Section E-E.

Road C to Marston Drive. The character of Road B between Road C and Marston is similar to the segment to the south but transitions to a more urban character on the east side adjacent to the Village Center. See Section E-E. The shared mobility hub, The Union, is integrated into the 8' wide planter strip zone and provides accommodations for bus transit and ride hailing services. The multi-use path changes in pavement design and is signed to slow bicycle speeds as it passes through The Union The path merges with the on-street bike lane north of The Union where the sidewalk zone transitions to a pedestrian only zone with outdoor dining and other enhanced streetscape features.

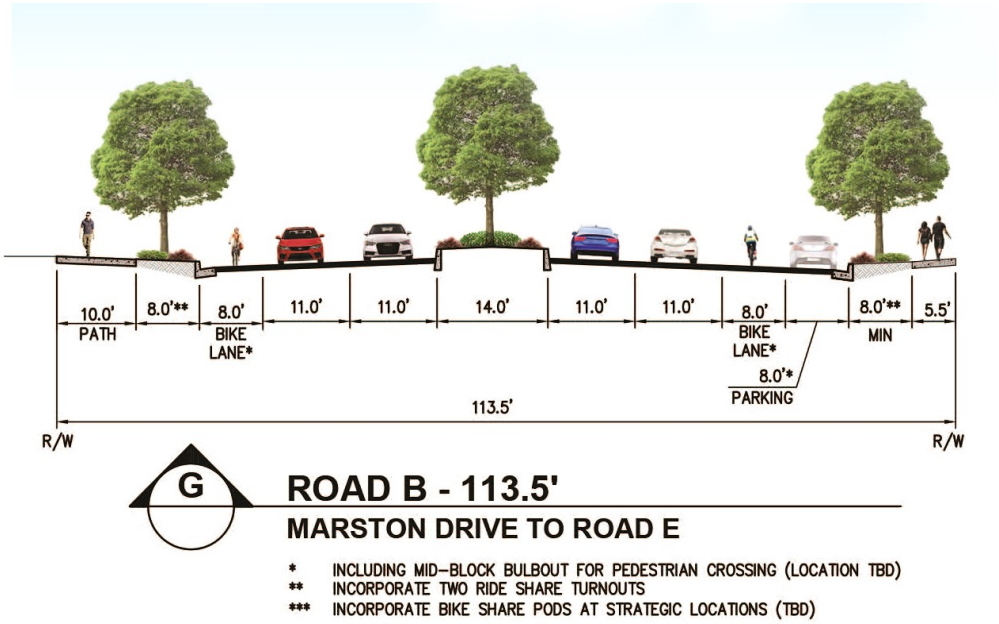
The intersection of Road B and Marston Drive is the heart of the Plan Area plan where the Village Center, The Yard, and the North Campus District meet. Special emphasis on the design of this intersection will be made and will include enhanced pavement treatments to highlight the bike and pedestrian crossings, lighting, landscaping, and architectural/public art features. Driveway access along Road B, from Road C to Marston Drive, is limited to a single right-in and right-out driveway on each side of the block and located to avoid conflict with transit facilities.

An enhanced intersection and mid-block crossings along Road B will offer safer pedestrian access to and from The Yard, Village Center and Tech Park campus.

Marston Drive to Road E. This segment of Road B spans the entire west edge of The Yard and the park facing frontage of the North Campus District. The character of this segment of Road B is significant as it functions as a visual extension of The Yard while maintaining its role as the primary north-south road through the Plan Area. The roadway consists of two vehicle lanes in each direction, buffered on-street bike lanes, and on street parking on the east side. An off-street Class 1 Multi Use Path along the frontage of the North Campus District offers convenient bike and pedestrian access for employees. A 5'6" sidewalk provides pedestrian access along the west side of The Yard which is buffered by 24 feet of bike lane,

parking and planter strip. Further enhancing the corridor and visually extending the park is a generous 14-foot wide tree lined median. See Section G-G.

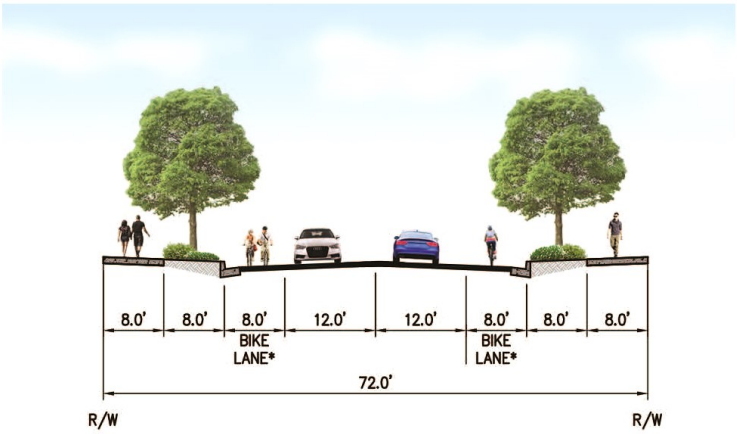
An enhanced intersection is planned midway along this segment of Road B to provide access to the North Campus District and offer controlled access across the roadway for bikes and pedestrians. Additional pedestrian and bike only crossings will be integrated between Marston and Road E to offer safe and convenient access between the North Campus District and The Yard. Driveway access for the Plan Area uses adjacent to this segment of Road B are discouraged and shall be consolidated where needed and restricted to right-in and right-out movements only.



Road E to Parkland Avenue. The segment of Road B from Road E to Parkland Avenue will serve as the primary vehicular access point into the Plan Area from the north. The intersection of Road B and Parkland will be enhanced with pavement markings and gateway features to enhance bike/ pedestrian safety and highlight this location as a point of entry to the Plan Area. To minimize conflicts, driveway access is limited to a single right-in and right-out driveway on each side of the block.

The roadway consists of a 4-lane road with on-street buffered bike lanes, similar to Road B between CR25A and Marston (See Section E-E on page X). A Class I Multi-Use Trail connects the trails on Parkland Avenue to Class I facilities that provide access to heavily used destinations of the North Campus District and The Yard. The design of the roadway is enhanced with by a 14-foot wide tree lined median complimented by 8-foot wide tree lined landscape parkways on both sides of the street.

CR 25 A to Road G. South of CR 25A, Road B transitions to a Collector Street with two travel lanes and buffered on-street bike lanes. The initial 250 (+/-) feet south of CR25A will include a 4′ wide median and 12′ northbound turn pocket at the entry. This segment of Road B serves as the primary entry into the South Campus District where it provides access to Highway commercial and lower intensity research park flex uses. See Section H-H.



H

ROAD A, ROAD B & ROAD G - 72'

SECTION H'- H' (ROAD B, SOUTH OF CR 25A) IS COMPOSED OF THE FEATURES IN SECTION H-H PLUS A 4' WIDE MEDIAN AND A 12' WIDE NORTHBOUND LEFT TURN POCKET FROM CR 25A EXTENDING 250' SOUTH OF THE INTERSECTION - 76'

*** *8' BIKE LANE IS COMPOSED OF 2' BUFFER AND 6' BIKE LANE

4.5.3 Collector Streets

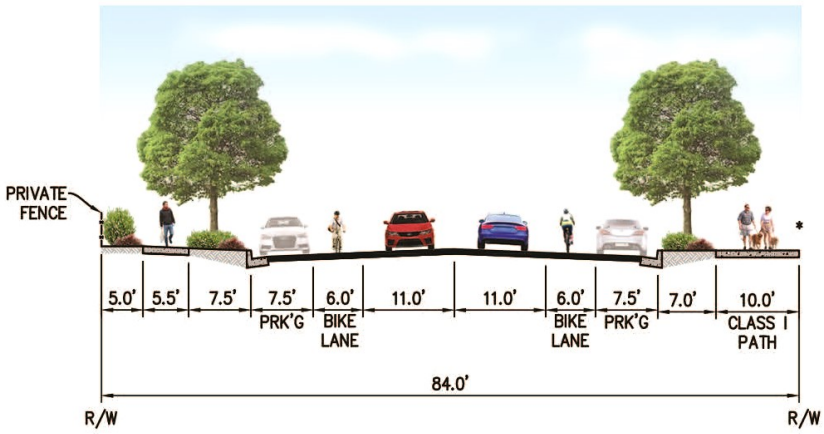
Collector Streets (Marston Drive and Roads A, C, D, E, F, G and B south of CR 25A) provide for relatively short distance travel between and within neighborhoods, and have lower speeds and traffic volumes than arterials. Driveway access to collectors is limited less than on arterials but may still be discouraged on certain segments to limit circulation conflicts. Street design and character of each of the Collector Streets in the Plan Area are described in more detail below.

EXIBIT 4-6: COLLECTOR STREETS KEY MAP

1. MARSTON DRIVE

Marston Drive connects the Village Center of the Plan Area to Spring Lake neighborhoods and provides convenient access for residents of both areas to employment, retail, services, parks and open spaces. Marston Drive transitions in character from that of a residential street in Spring Lake to an urban mixed-use street at the core of the Plan Area. The segment of Marston Drive from Harry Lorenzo Avenue to Road B includes two travel lanes, parking lanes on each side of the roadway, planting strips, a 10-foot Class 1 Multi-Use trail on the south side and a 5½-foot sidewalk on the

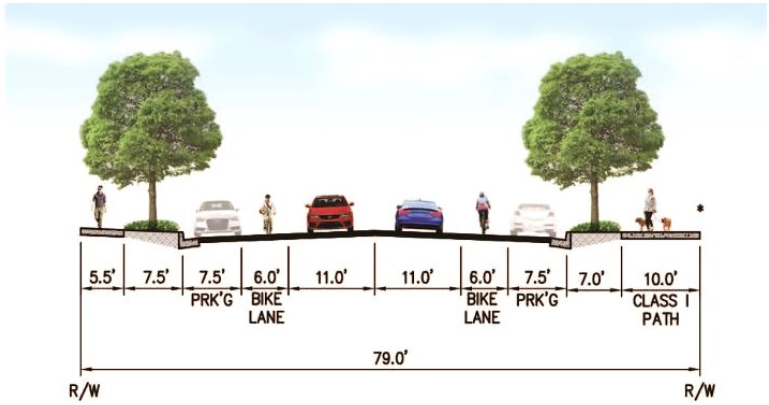
north (Section C1-C1). A roundabout at the intersection of Road D and other traffic calming measures will be utilized to keep speeds low while allowing smooth circulation. Enhanced paving and pedestrian safety features will be installed at the greenbelt crossing to slow traffic and provide for ease of bike and pedestrian connection across Marston Drive. Driveways for single family will not be permitted and all other driveway access points shall be consolidated to minimize ingress and egress conflicts.



C1 MARSTON DRIVE - 84'

HARRY LORENZO AVENUE TO ROAD D

*2' CLEAR RECOVERY ZONE WILL BE REQUIRED WITHIN THE PRIVATE LANDSCAPING SOUTH OF PATH



F MARSTON DRIVE - 79'

ROAD B TO ROAD D

*2' CLEAR RECOVERY ZONE WILL BE REQUIRED WITHIN THE PRIVATE LANDSCAPING SOUTH OF PATH

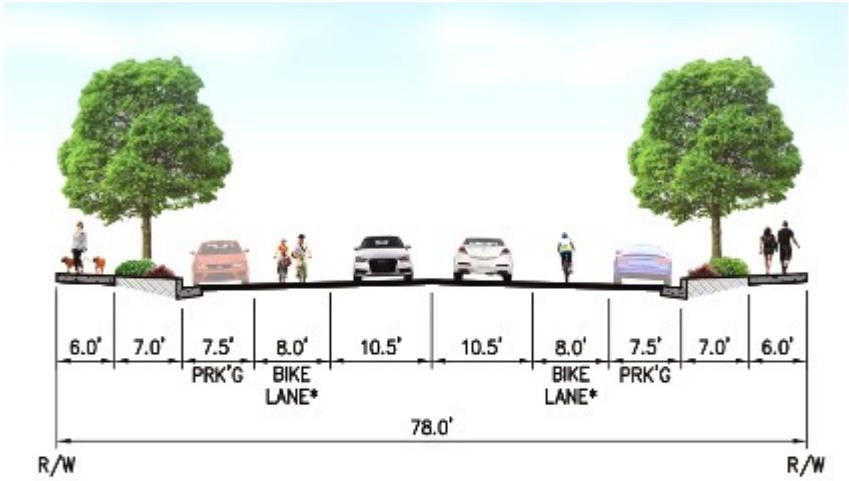
Marston Drive at Road B. The intersection of Marston Drive and Road B is the central intersection of the Plan Area and is the primary point of access to the core of the North Campus District. Careful attention to the design of this intersection will be taken to ensure it enhances and does not detract from the sense of place of the Village Center. (See description of intersection features in Minor Arterial - Road B section above)

2. ROAD A

Road A is a Collector Road providing access to the interchange adjacent to portions of the North and South Campus Districts of the Technology Park. North of CR 25A, Road A is designed as a 2-lane street with buffered bike lanes, planting strips, and widened sidewalks (Section H-H on page X). A roundabout is proposed at the intersection of Road C and access is restricted to right-in and right-out turning movements where Road A connects with CR 25A.

3. ROAD C

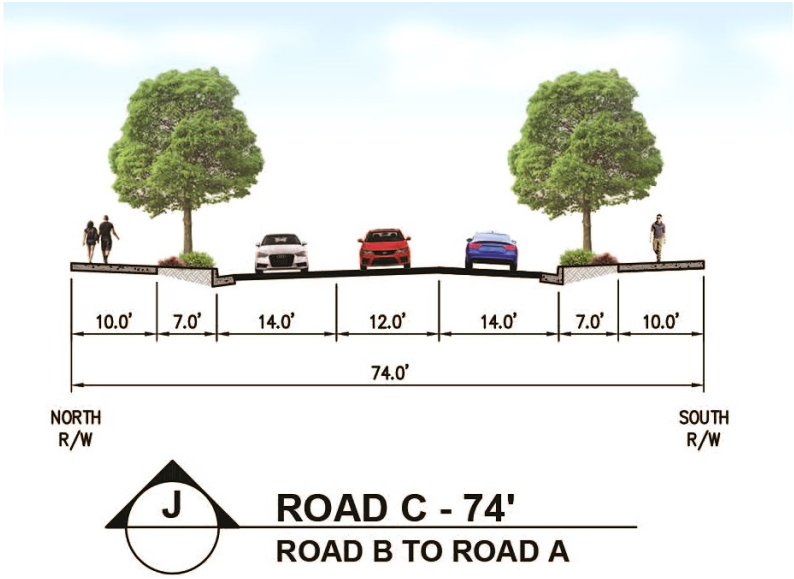
Road C is a collector street that parallels Marston Drive and CR 25A and provides an alternate east-west access between the higher density residential and the Plan Area uses. Between Roads D and B, Road C is designed as a narrower two lane street with on-street parking, bike lanes, planting strips, and 6′-0″ wide sidewalks. Multiple driveway access points will be allowed to serve the mixed commercial and residential uses to minimize the need for driveways on the surrounding arterial roadways.



I **ROAD C - 78'**
ROAD D TO ROAD B

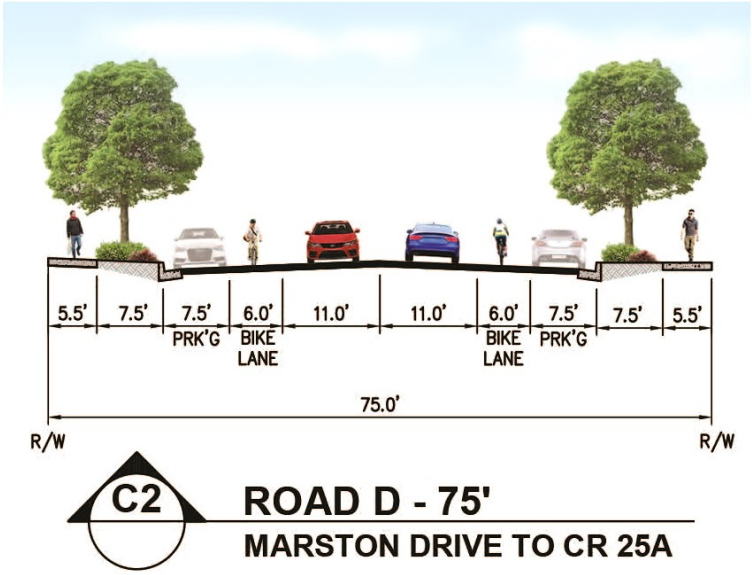
*8' BIKE LANE IS COMPOSED OF 2' BUFFER AND 6' BIKE LANE

The segment of Road C between Roads A and B provides connection to Plan Area uses in the southern area of the North Campus District. The roadway consists of three travel lanes, two westbound and one eastbound. Due to a center median at CR25A and Road A, prohibiting left turns onto Road A from CR25A, the majority of inbound trips will access the North Campus Plan Area via Road B to westbound Road C; hence the two lane westbound Road C design. See Section J-J below. Full access driveways are permitted but restricted to the mid-section of this segment of Road C to avoid intersections conflicts. Planting strips provide street tree canopy and separation for the Class 1 multi-use paths on both sides of the street. A roundabout is proposed at the intersection of Road A to smooth the flow of traffic.

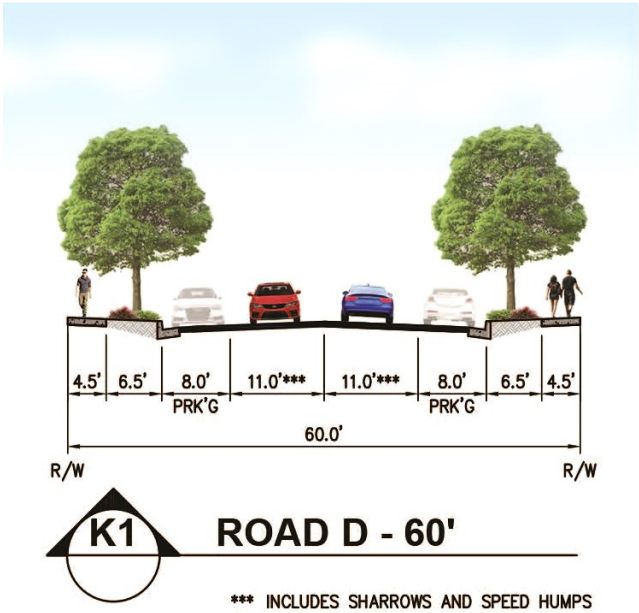


4. ROAD D

Road D parallels Road B through the majority of the Plan Area and is a collector road serving the Village Center District and East Village Districts south of Parkland Avenue. Between CR25A and Marston Drive, Road D is designed as a two lane street with on-street parking, bike lanes, planting strips, and 5'-6" wide sidewalks (Section C2-C2). Multiple driveway access points will be allowed to serve the higher density residential uses and minimize the need for driveways on the surrounding arterial roadways.

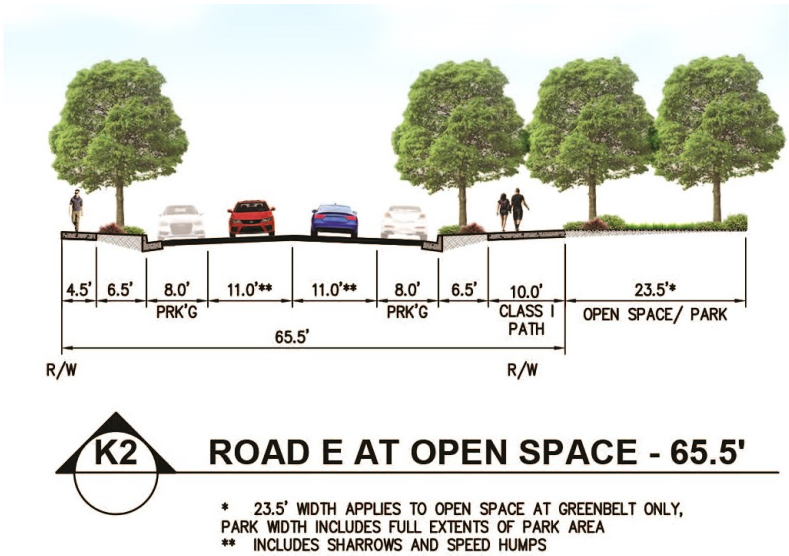


North of the roundabout at Marston Drive, Road D narrows as it transitions into the lower density residential neighborhoods of the Village Center and East Village Districts. The roadway has two travel lanes with on-street parking and detached 4′-6″ wide sidewalks. A 6′-6″ wide planting strip will provide for a tree lined street that offers generous shade canopy. See Section K1-K1. Traffic calming measures will be integrated into the roadway to keep speeds lower and shared lane markings will be installed to accentuate the shared use nature of the road. Enhanced pavement design and pedestrian safety features will be integrated at the north end of Road D where the multi-use trail crosses. Single-family home driveways accessing Road D are discouraged.

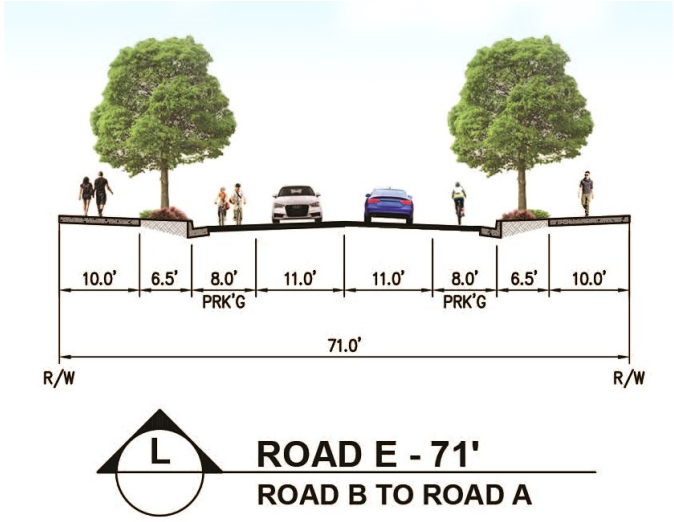


5. ROAD E

Road E runs east-west along the north end of The Yard and connects the Village Center Residential neighborhoods to Road B. Between Road D and Road B, the street consists of a two lane street with on-street parking. A planter strip separates a 4′-6″ wide sidewalk on the north and a 10′ multi-use trail on the south side of the roadway. Single-family home driveways are prohibited on the south side of the road. Access to the medium density residential uses and/or school site on the north side shall be consolidated to reduce the driveways or roadways connecting into this segment of Road E (Section K2-K2).

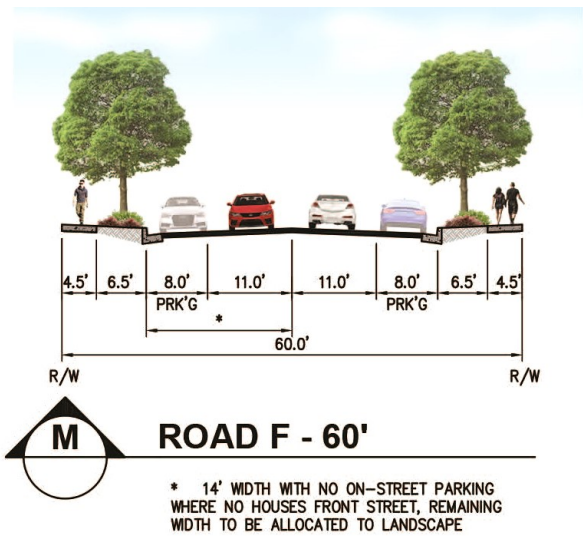


West of Road B, Road E transitions to a more urban mixed character street that serves both high density residential and Plan Area uses. The roadway has two travel lanes with on-street parking and 10 foot wide multi-use paths on both sides of the roadway. A 6′-6″ foot wide planting strip will provide for a tree lined street that offers generous shade canopy. See Section L-L. A roundabout at the end of Road E provides access to both the residential and Plan Area uses.



6. ROAD F

Road F is the primary access for the residential neighborhood at the north end of the Plan Area with connections to both Parkland Avenue and Harry Lorenzo Avenue. Road F consists of a two lane street with on-street parking. A planter strip separates a 4′-6″ wide sidewalk on both sides of the street (Section M-M). Single-family home driveways are discouraged. On street parking may be replaced with on-street bike lanes if lotting patterns result in no driveway access directly onto Road F. An oversized roundabout with a large specimen tree and native plantings provides a focal point of the neighborhood.



An oversized and landscaped roundabout will serve as a focal feature within the North Village similar to the roundabout located in Woodland's historic Beamer Park neighborhood shown here.

7. ROAD G

Road G is an east-west road connecting the south ends of Road A and Road B providing access to the southern most areas of the Plan Area. Road G consists of a two lane street with Class II on-street bike lanes. A planter strip separates an 8' wide sidewalk on both sides of the street (see Section H-H on page 4-25). A roundabout at the west end of Road G provides access to both the Highway Commercial and Plan Area uses and provides a character defining focal point for the South Campus District.

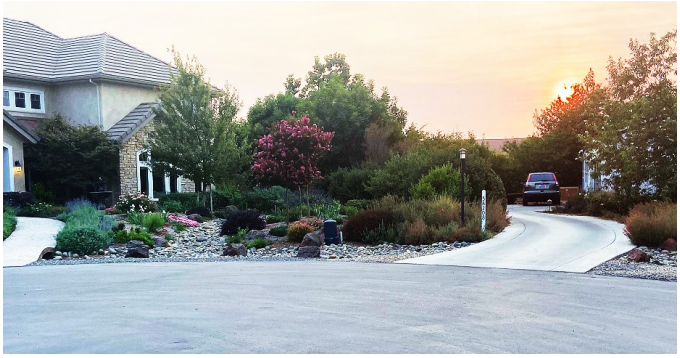
4.5.4 Local Streets

Local Streets in the Village Center residential (VCLDR and VCMDR) and all MDR/HDR residential neighborhoods will be traditional in design, have more linear geometry and include 4'6" minimum wide sidewalks separated by a 6' minimum width street tree planted parkway strip. On street parking is required on both sides of the street.

Local streets in the East and North Villages will include on-street parking, shared bike lanes, attractive landscaping and street trees that provide sidewalk share during summer months.

Local Streets within the East Village and North Village LDR neighborhoods may be less uniform in character reflecting the nature and density of the subdivision within they are located. Where utilized in these neighborhoods, sidewalks shall be a minimum of 4'6" in width; however, they may be attached, separated from the street travel way, or meander. Parkway strips, if utilized, shall be a minimum of 6' in width. With the goal of reducing paved widths, flexibility shall be provided at Tentative Map implementation in regards to on-street parking, use of sidewalks, and the use of drainage swales and alternative parking surfacing in lieu of traditional curbs and gutters, subject to review and approval by the Community Development Director. Travel lane width shall not exceed 10 feet. Additional width may be considered for bike lanes and on-street parking, if deemed necessary by the City Traffic Engineer.

Local Street sections in these two neighborhoods shall be developed to support the character of the neighborhoods and consider the proposed house setbacks, lot widths and sizes, and overall density. All local streets shall contribute to a well landscaped, tree shaded pedestrian friendly environment. Local Street sections are subject to the review and approval of the Community Development Director and shall be publicly maintained.



Alternative pavement and drainage design is encouraged in the North Village to achieve a unique and rural character.

4.5.5 Alleys

Alleys or "rear lanes" serve as accessible rights-of-ways for public and private vehicles, bikes, and pedestrians. In commercial areas, alleys are primarily used for access to parking lots and service areas for businesses but may also incorporate outdoor seating and landscaping where appropriate. Alleys in both commercial and residential areas should be at least 20 feet wide and clear of obstruction between structures to allow for emergency vehicles as well as utility and waste collection vehicles. Design details of the alleys in residential neighborhoods will be defined at the time of Tentative Maps and approved by the city's Fire Department.

Landscaping shall be integrated to visually soften the alleys and provide stormwater runoff collection. Windows and balconies on residential units should be oriented toward the alley to help add interest and eyes on the alley.

Well designed alleys are encouraged within the residential zones and in the Village Center as a means of reducing driveways and parking lots along street frontages.

4.5.6 Roundabouts and Enhanced Intersections

Roundabouts and enhanced intersection treatments are planned at key intersections throughout the Plan Area to improve intersection operation and reduce vehicle speeds. Five roundabouts are proposed on Collector Streets in addition to three along the CR 25A corridor at Road D and the off-ramps of HWY 113. Landscaping and public art will be integrated into the roundabouts to enhance community aesthetics and strengthen sense of place.

Roundabouts at key intersections reduce traffic speeds while improving circulation. Roundabouts in the plan area will include attractive landscaping and/or public art.

Crosswalks along Marston Drive, Road B and other key intersections will include textured paving, flashing lights and/or other features to enhance pedestrian visibility.

Enhanced intersection treatments are proposed at each of the controlled intersections along Road B. Additionally, where the north-south greenbelt crosses Marston Drive and Parkland Avenue, enhanced paving and pedestrian safety features will be installed to slow traffic and provide for ease of bike and pedestrian crossing.

4.5.7 On-street Parking

To maximize utilization of land, the Plan Area development standards require limited amounts of off-street parking, increasing the likely demand for on-street parking. Street designs anticipate the need for on-street parking to support adjacent uses and reinforce the urban character of the project. Managing publicly accessible parking, particularly in the Village Center and commercial areas of the plan, will be important to ensure availability for parking for customers and transit users. Utilization of smart parking management tools such as Woodland based JAPA Parking will be a central part of a Parking Management Plan required to be prepared as part of the Plan Area Transportation Demand Management Plan.

4.5.8 Streetscape Amenities

Streetscape amenities are an essential element to creating a strong a sense of place and are a fundamental feature of the Plan Area streetscape design. The development of a Master Design Manual is required prior to approval of the first Final Map and shall incorporate design standards and construction details for the following features:

1. Gateway / Entry Features

An architectural feature(s) identifying the entryway into the Plan Area on CR 25A and/or at the intersection of Road B, as well as entry features indicating entry points into the North Campus and South Campus Districts shall be integrated into the streetscape design.

2. Public Art

Public art in the form of sculptures or other durable forms of art celebrating creativity, ingenuity, and agricultural heritage. Public art shall be integrated throughout the Plan Area streetscape in center medians, roundabouts, and/or other prominent locations as a way to strengthen community identity and a unique sense of place.

3. Street Trees and Landscape Palette

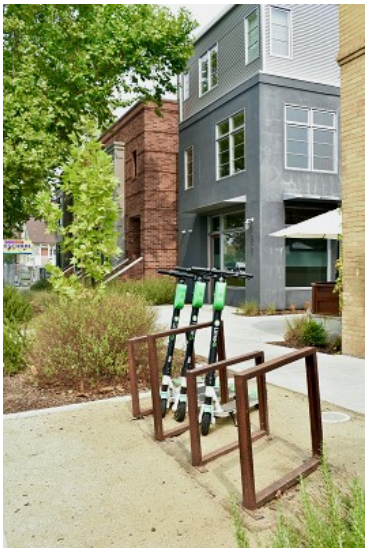
Street trees and plant palette for all landscape installed within the public right-of-way and greenbelt open spaces. Plants shall be appropriately specified to the climatic and soil conditions of the area. Particularly, use of a variety of native oak tree species as well as water-wise and pollinator friendly plants shall be detailed.

4. Stormwater Management

Streetscape design details identifying the use of bio swales and rain gardens along roadways and greenbelts to aid in the treatment and absorption of rain water. Materials and plant species appropriate to the effective functionality and long-term maintenance of these stormwater management features shall be specified.

5. Walls and Fences

The location and design of various walls and fences facing the public right-of-way. Use of walls and fences should be limited to locations where needed for sound attenuation and/or privacy. The type and style of walls/fencing shall be carefully considered to ensure visually cohesive and/or complementary streetscapes. Where walls or fences are to be maintained by the city, durable masonry materials shall be used. Landscaping shall be used to soften the visual presence of walls and fences throughout the project.



6. Street Furniture and Lighting

A design guide specifying the style, material, color, and finish for all furniture including benches, bike racks, trash receptacles, and street signs installed in public right-of-way and greenbelt spaces shall be provided. In limited application, styles of street furniture may vary and correspond to the District where they are specified to reinforce a particular neighborhood character. Similarly, street and pathway lighting shall be uniform throughout the project. Limited variation in style may be proposed to relate to the particular character of the District/neighborhood.

7. LDR and VCLDR Local Street Section Template

Examples of local street design within the LDR and VCLDR zones shall be provided including alternative storm drain design, particularly where traditional sidewalk design is modified. Further, recommendations shall be provided for sidewalk placement in relation to subdivision design and residential setbacks.

5.0 | Public Utilities and Services

5.1 | OVERVIEW

The goal of the Public Utilities and Services chapter is to identify the necessary public utilities and public services required to serve the Plan Area. The first part of this Chapter addresses the required public utilities of water, recycled water, wastewater, drainage/flood control as well as dry utilities of electric, gas and communications. This Chapter identifies the backbone infrastructure necessary to serve the Plan Area. Utility infrastructure will be constructed to ensure compliance with all applicable service and improvement standards, and state and federal laws and regulations.

The coordinated delivery of public services is essential to ensure a complete community, one that provides public safety, recreational, educational and library services for the residents. The Public Services Element of the General Plan provides information and policy guidance to ensure that services are sufficient to support new development in the Plan Area. Infrastructure extension and financing obligations relating to public utilities services are outlined in the Project EIR and Mitigation Monitoring Plan, development agreements and/or in Implementation Chapter 6 of the Specific Plan. Table 5.1, Utility and Service Providers, lists the entities that will serve the Plan Area.

Table 5.1: Utility and Service Providers

Utility	Provider	Service	Provider
Water	City of Woodland	Fire Protection	City of Woodland
Recycled Water	City of Woodland	Law Enforcement	City of Woodland
Wastewater	City of Woodland	Parks and Recreation	City of Woodland
Drainage and Flood Control	City of Woodland	K-12 Schools	Woodland Joint Unified School District
Electric Service	PG & E	Secondary Schools	Woodland Community College
Natural Gas	PG & E	Library	Yolo County
Communications	AT&T, WAVE	Other Services	City of Woodland

5.2 | WATER SUPPLY

The City of Woodland Public Works Department currently provides municipal water to the boundary of the WRTP. Treated Sacramento River water supplied by the Woodland-Davis Clean Water Agency's Regional Water Treatment Facility (RWTF) is the primary source of potable water. The City operates three aquifer storage & recovery wells, which store treated surface water in winter months to supplement RWTF supplied water in summer months. Groundwater is a backup

to the surface water supply and will supplement surface water during times of high demand or reduced surface water availability. The City maintains an Urban Water Management Plan (UWMP) that is updated every five years and describes the current and future water uses, sources of supply and its reliability, and existing and planned conservation measures. The 2015 UWMP was adopted by City Council in June 2016. The City also has a Groundwater Management Plan, adopted in 2010, to manage groundwater resources.

5.2.1 Existing Water Distribution System

The municipal water supply distribution system consists of 260 miles of transmission and distribution lines, a 3-million-gallon ground level storage tank, and a 400,000-gallon elevated storage tank, which is generally sufficient for peak demands and to regulate The Woodland-Davis Clean Water Agency (WDCWA) Intake Facility at the Sacramento River. Woodland has a dedicated capacity of 18-million gallons per day (mgd) of supply from the water treatment plant.

Aquifer Storage & Recovery (ASR) wells are also intended to store large quantities of treated surface water to meet peak summer demands and to prepare for future drought conditions. Three ASR wells are operational and can supply over 8 mgd of water with quality equal to WDCWA supplied water.

Currently there are six agricultural wells in use within the Plan Area: four of them are north of CR 25A and two of them are to the south. The two wells along SR 113, north of CR 25A, are to be preserved until no longer needed for irrigation of the surrounding agricultural land, including fields west of Highway 113 and south of CR 25A. These facilities will be secured and adequate setbacks will be provided. An access road will be maintained along the west boundary of the Plan Area, parallel to SR 113, allowing for routine maintenance of the wells. The remaining wells shall remain in use to irrigate the surrounding agricultural land until development within SP-1A precludes their use or otherwise incorporated into the SP-1A layout for continued irrigation use within or outside the limits of the Plan Area.

Existing facilities in the general vicinity of the Plan Area include the following:

- 30″ east-to-west water transmission main in Farmers Central Road corridor, from RWTF to Ashley Avenue.
- 12″ east-to-west water distribution main in Farmers Central Road corridor, connecting to above- referenced 30″ transmission pipe.
- 12″ north-to-south water main in Harry Lorenzo Avenue, connecting to the above-referenced 12″ pipe, from Farmers Central Road to ±500′ to the south

- 12″ east-to-west water main in Parkland Avenue, assumed to be extended to boundary of WRTP prior to development
- 12″ east-to-west water main in Marston Drive
- 8″ south-to-north water main in Harry Lorenzo Avenue, connecting to the above-referenced 12″ pipe, from Marston Drive to ±1300′ to the north
- 8″ east-to-west water main in CR 25A, stubbed at Harry Lorenzo Ave., assumed to be constructed prior to development.

5.2.2 Proposed Water Distribution System

Potable water will be distributed throughout the WRTP via a pressure system and routed to serve all areas within the plan area, including for irrigation. Once recycled, water from the City Water Pollution Control Facility (WPCF) (See Section 5.2 below) is connected to the WRTP recycled water pipe network, the potable water will be isolated from portions of the plan with public irrigation demands, such as parks, greenbelts, and street medians. Table 5.2 contains an estimate of water demand for the WRTP.

Proposed Water Distribution System, Exhibit 5-1, depicts the backbone infrastructure designed to connect to the existing transmission mains and distribute domestic water throughout the WRTP. The proposed points-of-connection for the system are along the existing 12″ main in Harry Lorenzo Avenue: at Fowler Way (future), Parkland Avenue (future extension of existing 12″ main) and Marston Drive. In addition, there will be a connection at what is the current intersection of CR 25A and Harry Lorenzo Avenue once CR25A is connected to Parkland Avenue by others.

The network leading from these connections was designed in accordance with the City of Woodland Engineering Standards (COWES) to provide looping of the system, and minimum spacing of 12-inch lines at approximate one-half (1/2) mile intervals.

The public water supply pipelines are all located within the right-of-way of public streets or roads, with pipelines larger than 8 inches located in collectors and arterials. Additional pipelines were shown connecting the portion south of CR 25A back to the main network to ensure looping in this branch of the system.

Calculations providing confirmation of adequate supply, flow and pressure within the WRTP will be performed by the City of Woodland. Further details on water supply are contained in the WRTP Water Distribution Memo, prepared 1/7/20.

Table 5.2 Average Day, Maximum Day and Peak Hour Demands

Land Use Designation	Acres	Water Demand Coefficient (gpd/acre)	Addt'l R&D Water Use Demand Factor (gpd/acre)[4]	Average Day Demand (gpm)	Peaking Factor (Average Day to Max Day)	Maximum Day Demand (gpm)	Peaking Factor (Max Day to Peak Hr)	Peak Hour Demand (gpm)
LDR	74.8	3,168	0	165	2.2	362	3.5	576
MDR	35.5	6,480	0	160	2.2	351	3.5	559
[1]HDR	9.7	12,960	0	87	2.2	192	3.5	305
RTP-TO	69.6	1,440	0	70	2.2	153	3.5	243
[5]RTP -RFO	35.9	2,448	490	61	2.2	135	3.5	215
[2]RTP -CCO	6.8	1,728	144	8	2.2	18	3.5	29
VCMU	3.5	2,880	0	7	2.2	15	3.5	25
VCMDR	16.7	6,480	0	75	2.2	165	3.5	263
VCLDR	13.1	3,168	0	29	2.2	64	3.5	101
[3]HDR-CCO	15.9	7,448	0	83	2.2	182	3.5	289
HC	8.2	2,016	0	11	2.2	25	3.5	40
PP	0.8	2,160	0	1	2.2	3	3.5	4
OS	10.2	2,160	0	15	2.2	34	3.5	54
VCOS	10.8	2,160	0	16	2.2	36	3.5	57
Total	**311.4**			**788**		**1734**		**2759**

[1] Demand assumed to be double that of Medium Density Residential.

[2] Land use assumed to be 50% Research and Technology Park and 50% Community Commercial.

[3] Land use assumed to be 50% High Density Residential and 50% Community Commercial.

[4] 20% increase in demand for agricultural research and development tenants in Research Park/Community Commercial and Research Park/Research Flex.

[5] Land use assumed to be 100% Industrial/Agricultural.

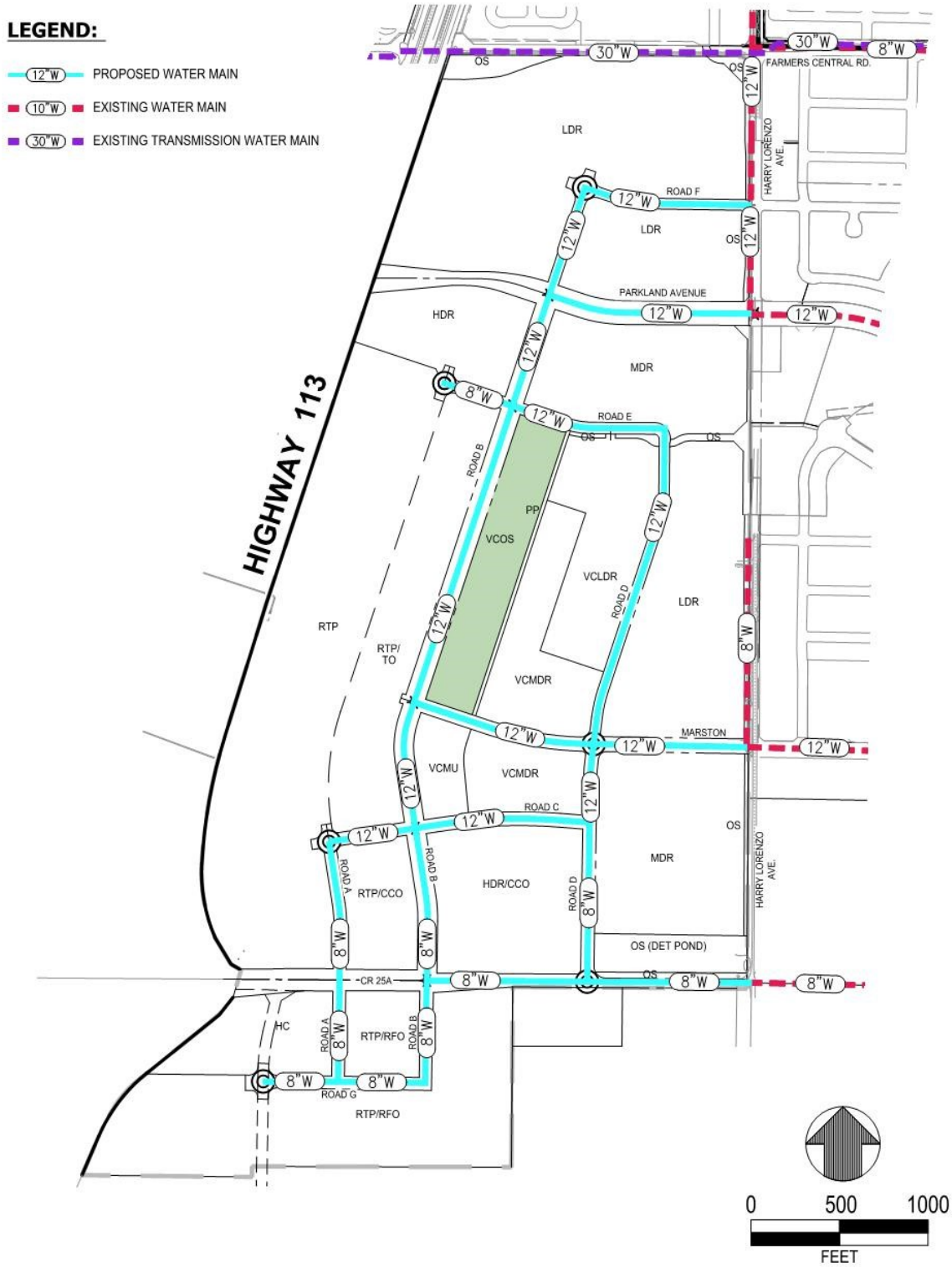


EXHIBIT 5-1: PROPOSED WATER DISTRIBUTION SYSTEM

5.3 | RECYCLED WATER DISTRIBUTION

Recycled water refers to wastewater treatment plant effluent which has received a level of treatment such that it meets the State requirements for direct non-potable use. Recycled water use is regulated by the State Water Resources Control Board which applies stringent water quality, treatment, and disinfection standards. Recycled water in Woodland meets the Title 22 requirements for tertiary level treatment with disinfection.

5.3.1 Existing Recycled Water System

The City of Woodland Public Works Department does not currently provide a continuous recycled water main connection from the Water Pollution Control Facility (WPCF) to the boundary of the WRTP. The recycled water utility currently serves parks and the north industrial area. The recycled water utility is planned to be expanded into the Spring Lake and WRTP areas to serve primarily commercial uses and landscape irrigation.

Additional connections to the recycled water system have been deemed feasible.

5.3.2 Proposed Recycled Water Distribution System

Recycled water will be conveyed to the WRTP via a pressure system and routed to serve areas with commercial and public irrigation demands. Once the WRTP network and adjoining main is installed, it will go unused until the existing main - installed in Harry Lorenzo Avenue between Farmers Central Road and Gibson Road - is connected to the WPCF treated effluent by others.

Tables 5.3 and 5.4 contain estimates of recycled water demand for the WRTP. Further details are contained in the WRTP Recycled Water Distribution Memo, prepared 3/31/20.

Table 5.3 – Recycled Water Demand Coefficients by Land Use Classification

Land Use Code	Land Use Classification	GPM/Gross-Acre
OS	Open Space	1.5

Table 5.4 – Average Day, Max Day and Peak Hour Demands

Land Use	Acres	Average Day Demand Factor (gpd/acre)	Average Day Demand (gpd)	Average Day Demand (gpm)	Peaking Factor (Average Day to Max Day)	Max Day Demand (gpm)	Peaking Factor (Max Day to Peak Hr)	Peak Hour Demand (gpm)
Park (OS)	10.8	2,160	23,263	16.2	2.2	35.5	3.5	56.5
Greenway (OS)	6.0	2,160	12,982	9.0	2.2	19.8	3.5	31.6
Median (OS)	1.6	2,160	3,456	2.4	2.2	5.3	3.5	8.4
Total	**18.4**		**39,701**	**27.6**		**60.7**		**96.5**

The recycled water network within the project is designed to provide service to areas with commercial and public irrigation demands such as medians, parks, and greenways. Due to the nature of this development, a main is planned to be stubbed south of CR 25A to provide service for potential future demands of the agricultural research that is anticipated to be conducted in the Research Flex Overlay land use. The public recycled water supply pipelines are all planned to be located within the right-of-way of public streets and greenways.

The preliminary recycled water layout in Exhibit 5-2 depicts the backbone infrastructure designed to connect to the existing transmission mains and to distribute recycled water throughout the WRTP. The proposed point-of-connection for the system is at the existing 8-inch main south of Osborn Drive and Farmers Central Road.

The main will then be routed south down the greenway along the west side of Harry Lorenzo Avenue, terminating at Marston Drive where it will connect to existing recycled pipelines within the Spring Lake Specific Plan area. From Harry Lorenzo, the WRTP network will extend along Parkland Avenue Marston Drive, and Road B. Since the recycled distribution system is unlikely to be operational at the initial occupancy of the WRTP, due to the absence of a connection to the WPCF, the backbone domestic water network was designed considering these additional interim irrigation demands. Refer to the Water Distribution technical memorandum for more details.

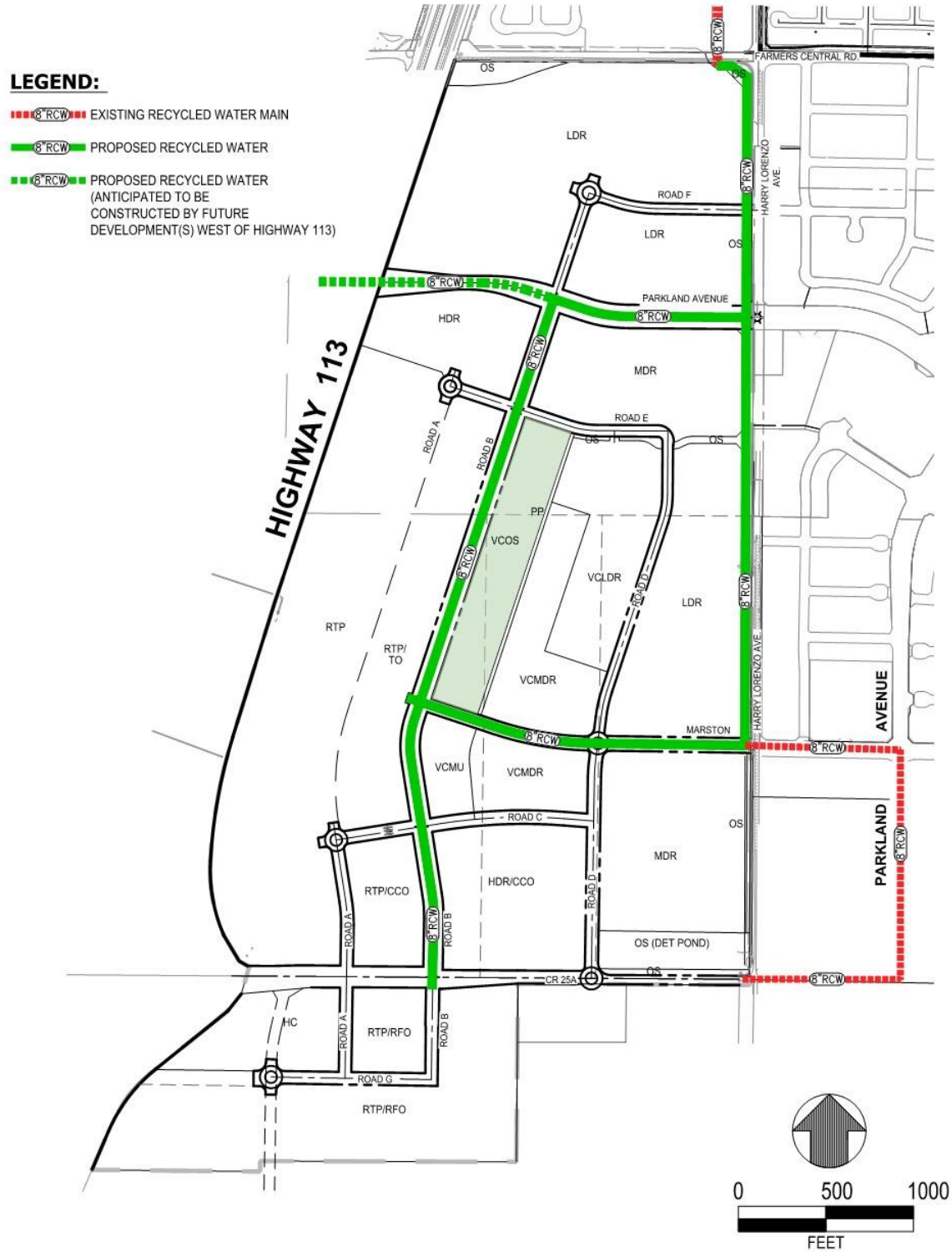


EXHIBIT 5-2: PROPOSED RECYCLED WATER DISTRIBUTION SYSTEM

5.4 | WASTEWATER

The City of Woodland provides wastewater collection and treatment throughout the City limits. The City constructed the current WPCF in 1989. Since that time, the City has upgraded the facility three times—once in 1999 and a second time in 2006, when the City expanded and upgraded the treatment plant's hydraulic capacity from 7.8-mgd to 10.4-mgd. The City expanded the plant a third time in 2016 to increase solids handling capacity among other upgrades. In recent years, hydraulic inflows to WPCF have gone down due to water conservation and the City's efforts to reduce infiltration and inflow, through sewer collection system rehab projects.

5.4.2 Existing Wastewater System

The City of Woodland's Public Works Department is the community's wastewater service provider. Woodland's wastewater collection system conveys wastewater by gravity pipelines to the WPCF located east of the city along CR 103, where it is treated and then discharged to a large unimproved channel. Treated wastewater eventually drains to the Tule Canal on the east side of the Yolo Bypass. Woodland's wastewater collection system consists of 270 miles of sewer main and 80 miles of service line. Projected future flows to the WPCF are about 9.2-mgd for average wastewater flows, which could serve up to 105,000 residents.

Downstream existing facilities in the general vicinity of the Plan Area include the following:

- 2 x 12" force mains, from the SLSP Pump station at Farmers Central Road and Miekle Avenue, west-to-east on Farmers Central Road, south-to-north on CR 102 and west-to-east on Gibson Road to the WPCF
- 15" to 21" west-to-east sewer main in Farmer's Central Road corridor, from SR 113 to the SLSP Pump Station at Miekle Avenue
- 15" west-to-east main in Heritage Parkway. This will need to be extended from the terminus of Heritage Parkway to the east edge of the WRTP. It is essential that an easement be reserved for the proposed 15" sanitary sewer pipe extending from Heritage Parkway.
- 10" west-to-east main in Marston Drive.

The Spring Lake Specific Plan (SLSP) Pump Station was constructed at the intersection of Farmers Central Road and Miekle Avenue in order to get the wastewater from Spring Lake to the WPCF, a regional pumping station. The facility is designed to run at maximum design capacity of 6.1-million gallons per day (mgd). There are currently no wastewater mains or services located within the Plan Area.

5.4.3 Proposed Wastewater System

A combination of gravity and pressure sewers will be required to convey new wastewater flows to the WPCF. Upgrades made to the WPCF since 1989 will allow the facility to accept the project flows. The SLSP Pump Station has the capacity for the wastewater flows at buildout of the WRTP; however, there are portions of SP-1A and SP-1B that will require a lift/pump station in order to convey wastewater runoff to the existing gravity main in SLSP.

The Proposed Wastewater System, Exhibit 5-3, shows the components of the proposed backbone infrastructure locations and sizing to convey the wastewater produced by the WRTP to the WPCF depicting the sizing and locations of major onsite wastewater collection facilities.

The proposed points-of-connection for the system are at the existing 8" main in Harry Lorenzo Avenue at Fowler Way (future), the proposed 15" main extending from Heritage Parkway, and the existing 10" main in Marston Drive. It is essential that an easement is reserved for the proposed 15" main extending from the future Heritage Parkway in the event that the pipeline is not constructed prior to initiating development of the WRTP.

The WRTP site is relatively flat, (elevation drop of about 10 feet west-to east and negligible elevation change north-to-south). With these general grades driving the proposed gravity sewer network design, the proposed points-of-connection are located along the eastern boundary of the WRTP. Preserving the existing drainage patterns of the site, the overall shed has been divided into three main lines: Line J, Line I and Line U. Line designations have been selected to coincide with the 2004 SLSP Infrastructure Study Report. Because of the flat topography within the Site, it is expected that grading plans and street profiles will generally be undular, with alternating shallow crests and sags. It is essential that sufficient cover is provided for the wastewater pipes at the roadway sags.

The SLSP Pump Station, located at Farmers Central Road and Miekle Avenue, has the capacity for 6.1- mgd of wastewater at buildout utilizing two 90 horsepower (HP) pumps with an additional pump for redundancy. The facility was not originally designed for the updated Urban Limit Line (ULL). An analysis of projected flows from the SLSP, SP-1A (including the updated ULL), the Community Center, and the Prudler Subdivision, prepared by the Project Applicant's engineer (Cunningham Engineering Company) indicated that upon buildout of these areas the cumulative peak wastewater flow would be 5.45-mgd. The limits of the properties that account for the projected 5.45 mgd of wastewater flows are depicted below in Exhibit 5.4. Based on that analysis, it was concluded that the SLSP pump station, as it is currently designed, would have adequate capacity for the SLSP and SP-1A.

Subsequent peer review by City wastewater consultant (Water Works Engineers), identified that the City Design Standards methodology used by the Project Applicant's engineer to calculated anticipated water infiltration and inflow (I&I) was not applicable to existing development within the Spring Lake Specific Plan development. Rather, the City's current methodology for determining I&I for existing development is to use the rain derived inflow and infiltration (RDII) via the "RTK" hydrological analysis using 5yr return 24hr duration design storm conditions. In using the 5yr/24hr RTK RDII methodology for existing development (approx. 680 acres) it was determined that projected build-out flows of Spring Lake Specific Plan and WRTP (SP-1A) would be approximately 7.4 mgd, which exceeds the current capacity of the SLSP Pump Station.

The existing pump station is currently operating with 2 aging 90 HP pumps, which have always been anticipated to be replaced at the end of their useful life of approximately 20 years. Installed in 2004, they will require replacement in the next 3 to 5 years.

Water Works Engineers prepared a Spring Lake Pump Station Capacity Enhancement Assessment Technical Memorandum wherein they identified alternatives to for increasing the capacity of the pump station through pump replacement, pump upsizing, and electrical upgrades. The report included the following conclusions:

- Existing flows from Spring Lake are nearing the capacity of the existing pumps operating one at a time; hence, without the installation of a planned third pump, the pump station will no longer have redundancy.
- Replacing the existing 2 pumps with modern 90 HP, efficient pumps will increase the capacity to approximately 3.7 mgd with redundancy for the current measured flows.
- New rain gauges have been installed that will provide updated information for future analysis.
- Adding a 3rd new 90 HP pump will increase the pump station capacity to approximately 7.5 mgd with the 3rd pump providing redundancy.

The timing of pump replacements and additions will be determined by the City based on the recommendations presented by Water Works Engineers; however, addition of a 3rd pump for backup redundancy will be required to develop SP-1A. Additional pump station upgrades will need to be analyzed in the future, or an alternative solution provided for subsequent SP-1B and/or SP-1C developments.

The discussion above focuses on the capacity of the SLSP Pump Station. An analysis was also conducted to determine if future wastewater generated from properties located within the ULL update area, specifically the portion of the Plan Area south of CR 25A could be conveyed via gravity flow. , The area hatched in the southwest corner of the Proposed Wastewater System (Exhibit 5.3)

(approximately 7.3 acres) will require either a lift station or several feet of fill soil to convey wastewater runoff to the existing gravity main in SLSP. The pump size for a lift station option has not yet been determined and would need to be based on wastewater flow rate generated by the land use at the time of site design.

The area in SP-1B that cannot be serviced via gravity in SP-1A is shown in Exhibit 5-4. A pump station along 25A and 3,000 LF of force main will be required to connect SP-1B development to the WPCF. Further details on the wastewater system are contained in the WRTP Wastewater Collection System Memo, prepared 3/31/20.

5.5 | STORMWATER MANAGEMENT

The proposed onsite drainage system will consist of collection and conveyance facilities that will carry stormwater via gravity generally from west to east through the SLSP area. Wherever feasible, storm drain pipes have been designed to flow full under gravity in the 10-year storm. Based on peak flow in major storm drain pipes during a 10-year storm, the existing downstream conveyance system has adequate capacity to accept the stormwater generated from the WRTP.

5.5.1 Existing Conditions and Stormwater Management System

The WRTP is relatively flat, with an elevation drop of about 10 feet west-to-east and a negligible elevation change north-to-south. West-to-east ground slopes range from 0.2% to 0.4%.

There are no natural streams or waterways on the WRTP, nor is there currently a developed onsite drainage system capable of managing future flows from development of the WRTP. Minor roadside ditches accept runoff from county roadways, and agricultural ditches and culverts currently manage local agricultural runoff within the Plan Area.

Under developed conditions, the drainage from the project site can be divided into six main sheds, as shown in Figure 5-5, the WRTP Stormwater Management Memo (1/31/20). The limit lines of the six proposed sheds are generally consistent with the shed limits originally identified in the 2004 Spring Lake Specific Plan (SLSP) Infrastructure Study Report (ISR) and reflected in subsequent updates to the City's South Urban Growth Area SDFMP.

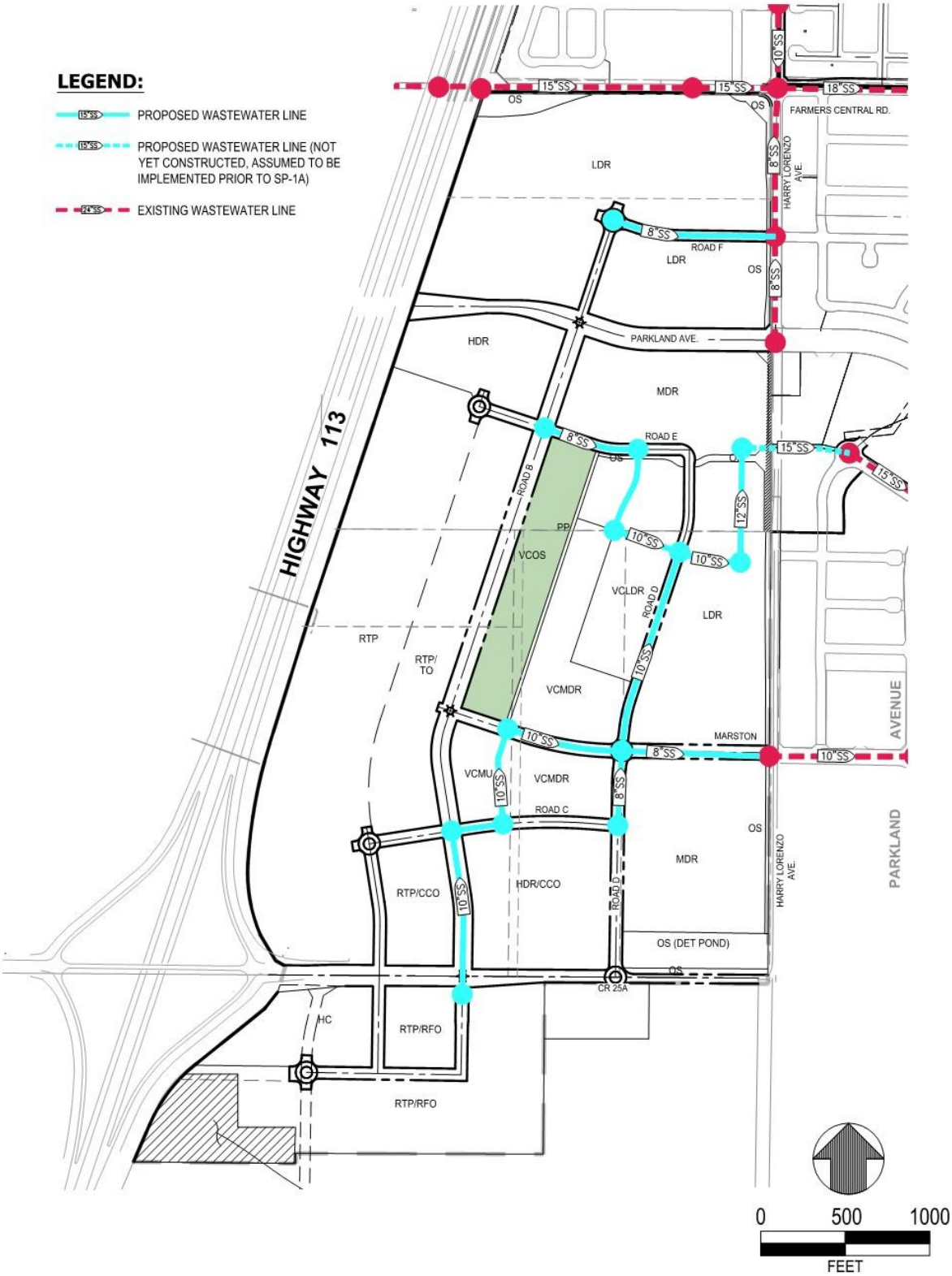


EXHIBIT 5-3: PROPOSED WASTEWATER SYSTEM

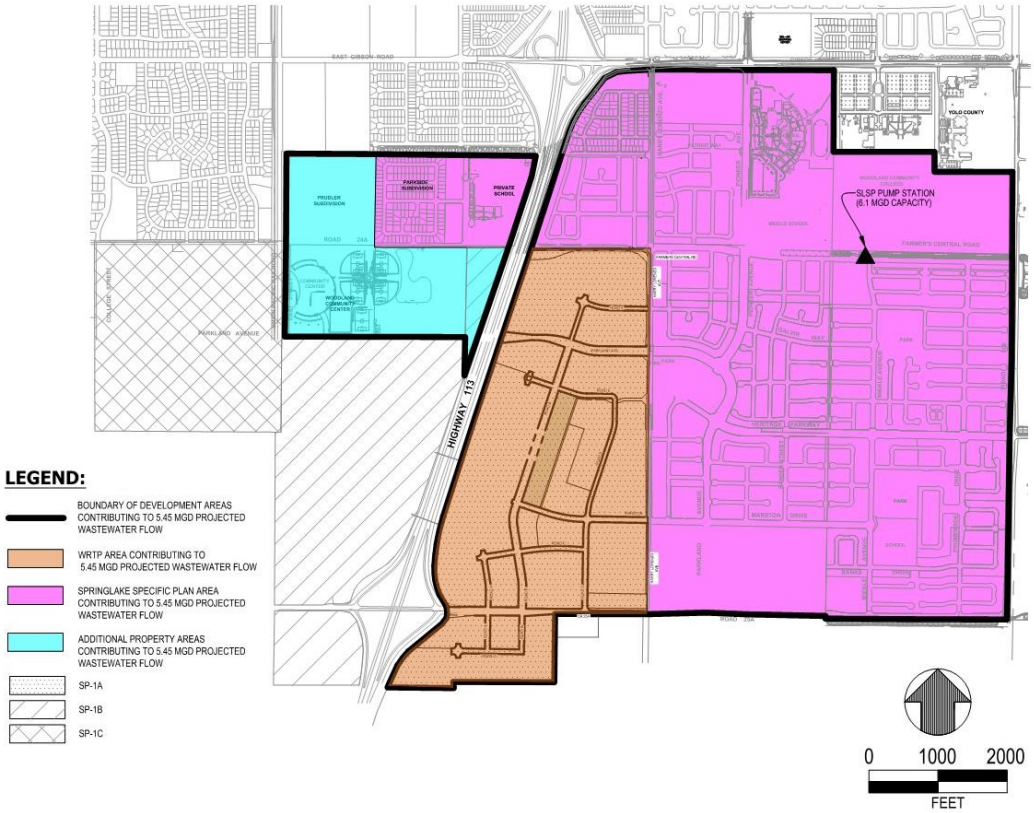


EXHIBIT 5-4: WASTEWATER CONTRIBUTING PROPERTIES

Along the east boundary of the Plan Area, an existing north-to-south channel runs along the west side of Harry Lorenzo Avenue (HLA) from Diggs Street to Marston Drive. This channel was constructed to intercept and convey agricultural runoff around the Solara Ranch development. The channel terminates in a culvert, outflowing to a channel on the western boundary of the Oyang South development, and eventually connecting to the unlined channel along the CR 25A corridor.

The South Urban Growth Area Storm Drain Facilities Master Plan (SDFMP) identifies two offsite sheds located west of SR 113 that drain to the WRTP site; 'HW20' (north of CR25A) and Shed 'SB1C1' (south of CR25A). The highway embankment of SR 113 forms a north-south barrier to agricultural drainage runoff originating from the west. As development of the WRTP proceeds, existing agricultural flows from west of SR 113 will, in general, continue to be routed around the south side of the WRTP along CR25A. As upstream existing agricultural areas are gradually replaced by development, agricultural drainage will diminish.

The Federal Emergency Management Agency (FEMA) delineates the boundaries of the FEMA 100-year floodplain on the basis of hydrology, topography, and modeling of flows during specified design rainstorms. The maps indicate that the WRTP is located in Zone X, which depicts areas determined to be outside the 0.2% chance annual floodplain. There are no special development considerations or insurance requirements affecting the site.

According to the Natural Resources Conservation Service (NRCS) Soils Survey, the site area contains soils classified as Hydrologic Soil Group (HSG) 'B' (56% of site area) and HSG 'C' (41%), together with a small pocket of HSG 'A" (3%). North of Parkland Avenue, virtually all the site area is mapped as having HSG 'B' soils. South of Parkland, HSG 'B' predominates on the western portion of the site; HSG 'C' on the easterly portion.

5.5.2 Adjacent/Downstream Drainage Facilities

Downstream existing drainage facilities in the general vicinity of the WRTP include the following:

- 60" to 72" west-to-east storm drain pipe in Farmers Central Road corridor, from SR 113 to the head of the Farmers Central Channel (FCC) near Pioneer Avenue.
- 30" to 48" south-to-north storm drain pipe in Harry Lorenzo Avenue (HLA), draining to the above- referenced 72" pipe.
- 60" to 66" south-to-north storm drain in Pioneer Avenue, draining to FCC (with an upstream 54" to 60" pipe proposed between HLA and Pioneer).
- 48" to 2-66" west-to-east storm drain pipe in Heritage Parkway, plus a 30" west-to-east storm drain pipe extension which may be installed prior to initial construction of the WRTP. If it is not constructed by others prior to SP-1A, then an easement will need to be reserved for a proposed 30" storm drain pipe extending from Heritage Parkway.
- 42" north-to-south storm drain within the existing right-of-way of HLA extending from the south side of CR25A approximately 40 north of the northern 25A right-of-way. Said pipe outfalls into an unlined channel located along the south side of CR 25A (see next item below).
- West-to-east unlined channel along the south side of the CR 25A corridor, beginning east of HLA and continuing east.

5.5.3 Proposed Stormwater Management System

The proposed onsite drainage system will consist of a system of collection and conveyance facilities, which will carry stormwater via gravity generally from west to east towards HLA. From there, existing offsite facilities will convey runoff to the east through the SLSP area.

Major constraints affecting storm drainage for the WRTP include limited fall for gravity drainage, (particularly in a north/south direction), and a significant upstream area discharging agricultural runoff through the development area.

1. PROPOSED CONVEYANCE SYSTEM

The major parameters to be used in the design of storm drainage facilities for the WRTP will include the computed peak flow rates and runoff volumes for selected design. For the onsite conveyances, the key parameter is the peak runoff rate (10-year for pipes, 100-year for channels and overland release). For offsite conveyances (such as those originating from SP-1B), the key parameter is the 100-year peak runoff rate. For regional detention facilities, key sizing parameters are the 100-year peak flow and runoff volume.

10-Year Storm Routing. Developed on-site flows will be conveyed generally from west to east through new storm drainage pipes. Pipes will usually be located in public streets or in proposed storm drain easements. Storm drain pipes will be designed to flow full under gravity in the 10-year storm. In general, the 10-year hydraulic grade line (HGL) is typically contained within the pipe wherever feasible. If the 10-year HGL rises above the pipe soffit, designs will seek to maintain the HGL at least 1 foot below finish grade.

100-Year Storm Routing and Release Point. The downstream (east) edge of the overall WRTP shed lies along the HLA corridor, and 100-year release points from the overall shed are in general expected to be along HLA between CR 25A and the FCC.

Within the Plan Area, on-site flows in excess of pipe capacities (i.e. in excess of the 10-year flows) will be conveyed overland via collector and arterial streets, and in greenbelt corridors. Release points for the 100-year storm will be provided for all onsite developed drainage sub-areas. It is expected that the overland flow patterns will generally follow the direction of piped (10-year) flows.

In general, local street profiles are expected to be designed such that low points overflow when the water depth reaches a maximum of 1 foot. Overflows should be able to "cascade" over successive local street high- points to an outlet downstream. Individual development sites (such as single-family subdivisions, multifamily apartment sites, or portions of the research park/business park element) should typically be designed such that their 100-year release points discharge to an abutting collector or arterial street,

Such streets will have an overland flow path to the downstream end of the WRTP. Overland release may also be to an abutting channel, sized for the 100- year/24-hour peak flow with one foot of freeboard. Alternatively, overland flow may be conveyed in greenbelts provided that (a) the greenbelt connects directly to a downstream channel or arterial street, (b) the greenbelt can be shown to have sufficient hydraulic capacity to carry the 100-year flow from its ultimate developed

contributing area, and (c) frequent flows will not compromise the primary function of the greenbelt as an amenity.

Runoff from offsite shed HW20, located west of SR 113 and north of CR 25A, will be intercepted by a proposed onsite interceptor/conveyance channel to run along the east side of SR 113 and then for about 500 LF along the north side of CR25A. It will be sized for the estimated 100-year peak discharge from the existing (undeveloped) HW20 shed.

Allowance will be made on one side of the channel for a 12- foot maintenance/access road. The downstream segment of the swale along CR 25A will discharge to a proposed 66" to 72" storm drain pipe just west of the proposed intersection of CR25A with WRTP Road 'A'. The pipe, to be sized for the 100-year peak flow from HW20 plus contributing areas in the WRTP, will cross onto the south side of CR 25A and continue east to the proposed South Regional Pond (SRP).

The SRP will be located east of SR113, just south of CR25A. Adequate storage should be provided to manage development from a portion of the sheds located east of SR113. The sizing of the pond is currently shown on Figure 5-5 as approximately 4.5 acres. This sizing is preliminary and will be refined in conjunction with the design of backbone infrastructure for the southern portion of the WRTP.

2. STORMWATER QUALITY, LOW IMPACT DEVELOPMENT (LID) AND HYDROMODIFICATION CONSIDERATIONS

Based on the requirements of the State Water Resources Control Board (SWRCB) NPDES General Permit, water quality (WQ) treatment design for the WRTP will be addressed by implementing LID measures, standard Treatment Control BMPs, and 'end-of-pipe' WQ storage within existing and proposed detention basins and upland LID-style runoff-reduction measures and end-of-pipe detention storage within existing and/or proposed detention basins. Key LID elements will include:

At-source drainage management. This entails integration of small-scale distributed drainage management features such as shallow, decentralized surface detention areas and/or infiltration areas that are consciously designed into streetscapes and individual site landscapes throughout the project area. An at-source drainage management approach encourages the use of drainage as a design element, rather than solely as a functional requirement. Landscape and engineering designs for proposed developments within the project site should be developed collaboratively from the outset.

Reduction of new impervious areas. This can be accomplished with compact building footprints, alternative driveway layouts and/or materials, narrower roadway cross-sections (as appropriate),

pervious pavement and efficient parking layouts. For all parking lots, the following elements can help reduce impervious areas:

- Efficient layouts that seek to minimize the overall area of the lot on a per-parking-space basis.
- Examination of parking minima/maxima, with the intention of not 'overparking' site designs.
- Construction of parking areas from pervious materials.
- Exploration of shared parking opportunities for adjacent non-concurrent uses.
- Use of tree canopies for runoff interception.

Disconnection of new impervious areas. This can be accomplished through judicious site design that places pervious areas (landscaping and/or pavement) downstream of a site's impervious surfaces (roofs and conventional pavement), with site grading/landscaping designs that provide for sheetflow from those impervious surfaces onto pervious surface areas. This would include avoidance of direct connection of roof downspouts to the receiving storm drain pipe system and landscaped areas immediately upstream of DI's receiving runoff from new pavement areas. Treatment Control BMP's will typically include:

- Vegetated swales. Swales can be readily integrated into most site developments provided they are planned for at an early stage of the site design. The key is in integrated planning and design collaboration between all members of the site design team.
- Stormwater planters/rain gardens. Similarly, integrated design of site improvements can allow for the incorporation of rain gardens into planned low points in the site landscape areas.
- Pervious pavements. These can be well-suited to parking lots and access drives. They may consist of pervious asphalt, pervious concrete or pavers.
- End-of-Pipe Water Quality Storage. Proposed detention basins serving the Site will include a water quality component, typically a shallow (roughly 1' to 3' deep) water-quality retention pool below the detention storage pool.

5.5.3 Phasing of Drainage Facilities

Phasing of drainage facilities within the Plan Area will be mostly guided by development phasing. However, installation of major facilities to serve the Plan Area is expected to proceed from downstream to upstream (i.e. east-to-west from HLA towards SR113).

The SDFMP estimates that 30 cfs of pumping and construction of the North Regional Pond will accommodate the buildout of the SLSP plus approximately 80 additional acres of currently unbuilt

residential development, flowing to the existing Farmers Central Channel, in addition to the SLSP. These improvements have recently been constructed. Since these improvements benefit other properties, the WRTP will be required to contribute a pro rata financial share toward the construction of these regional facilities. It is assumed that non-residential development could alternatively be accommodated, as long as the development acreage is hydrologically equivalent to 80 acres of residential use. Development of more than the equivalent of 80 acres within the WRTP will trigger further improvements to the new pump station, the East Main Channel and the Yolo Bypass Outfall.[1]

As a result of modeling being performed for the City's North Area, by the City's drainage consultant (Wood Rodgers) it has been determined that a greater allowable flow over the downstream High Line Ditch than previously modeled is likely. With the recently installed downstream infrastructure upgrades described above and an assumed higher allowable spill over the High Line Ditch, it is anticipated that more development in the Plan Area can occur before triggering additional Plan Area or downstream improvements.

Revised baseline conditions modeling and detailed information defining the operational capacity of the recently installed infrastructure will need to be determined prior to allowing development beyond 80 residential equivalent acres to proceed.

5.5.4 Land Acquisition for Drainage Easements

Land acquisition or easement requirements for regional drainage facilities will consist of:

- An easement on the Beeman property south of CR25A for the proposed SRP.
- Easement for a north-to-south interceptor/conveyance and gravel access road along the east side of SR 113 (north of CR25A), and a west-to east conveyance and gravel access road along CR25A to convey runoff from SDFMP subshed 'HW20' to the SRP.
- Easement for a south-to-north conveyance east of SR113 (south of CR25A) to convey runoff from SDFMP subshed 'SB101' to the SRP.

Exhibit 5-5 depicts the proposed backbone infrastructure for drainage and stormwater management. More detailed information is contained in the WRTP Stormwater Management Memo (1/31/20).

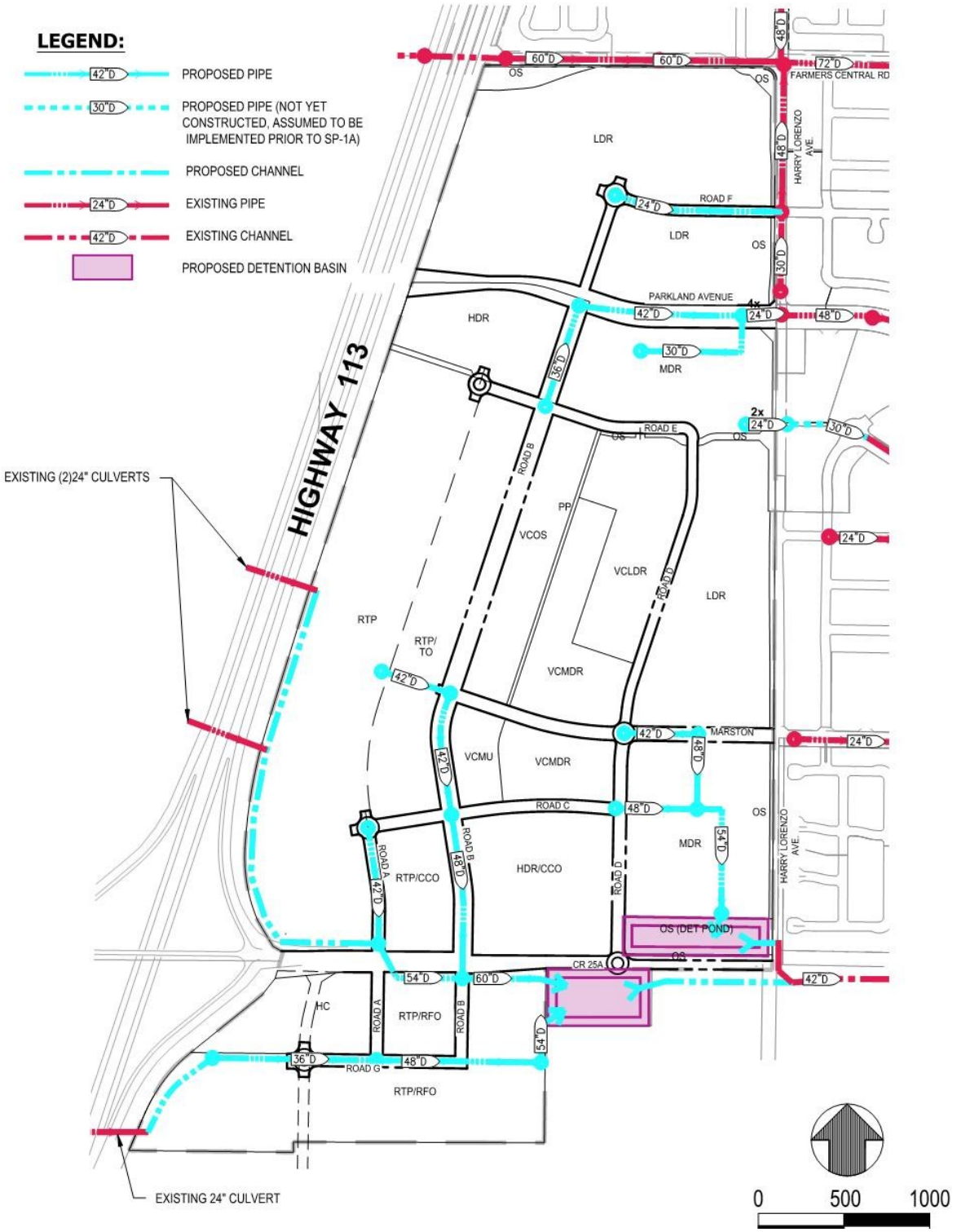


EXHIBIT 5-5: PROPOSED DRAINAGE AND STORMWATER SYSTEM

5.6 | ELECTRIC POWER

5.6.1 Existing Conditions

Pacific Gas and Electric (PG&E) provides electricity and gas to the City. In June 2018 Valley Clean Energy began providing electricity in Woodland as "cleaner energy" alternative; however, distribution of said electricity remains the responsibility of PG&E.

PG&E operates and maintains a 60 kV electric transmission line, along with corresponding distribution facilities, adjacent or within the project site boundaries. Land uses are restricted along the transmission facilities.

The 60kV electric transmission line is located immediately north of the WRTP within the Farmers Central utility corridor. Generally, it is considered infeasible to underground high voltage electric transmission lines; however, the poles are located along the northern portion of the Farmers Central utility corridor and are not anticipated to be an impact to developing the project.

A 12kV overhead electric distribution line currently exists along the east boundary of the WRTP along Harry Lorenzo Avenue from Farmer's Central Road to and continuing south of CR 25A. The poles are located along the west side of Harry Lorenzo Avenue from Farmers Central Road and transition to the east side of the roadway approximately ½-mile to the south. A service pole line extends into the interior of the WRTP approximately 2,300 feet north of Harry Lorenzo Avenue to provide power to the agricultural buildings.

Similarly, there is another 12kV distribution line along the north side of CR25A which continues northwards within the WRTP adjacent to the Highway 113 northbound onramp, to a point approximately 1,000 feet north of 25A where it provides power to an irrigation well prior to crossing HWY 113 toward the west. A second irrigation well located approximate 3,100 feet north of 25A along HWY 113 receives power from a service line from the west side of the highway, terminating at the well.

5.6.2 Planned Improvements

Implementation of the Specific Plan will require expansion of electrical distribution and transmission lines and related facilities. In addition to adding new distribution feeders, the range of electric system improvements needed to accommodate new growth may also include upgrading existing substation and transmission line equipment, expanding existing substation(s) to their ultimate build-out capacity, building new substations, and interconnecting transmission lines. The new development will be responsible for the costs associated with the necessary expansion and upgrading of the systems. Any authorized provider may provide the service.

More specifically, existing 12kV overhead electric distribution lines along Harry Lorenzo Avenue and/or CR25A may remain in place until adjacent property within the Plan Area is developed, at which time they shall either be placed underground or eliminated if the development is served from an alternative corridor. Similarly, as existing facilities within the Plan Area are taken offline overhead services to them shall be removed and new underground service in a joint trench shall be provided for the WRTP facilities.

5.7 | NATURAL GAS

5.7.1 Existing Conditions

PG&E operates and maintains an 8-inch gas transmission line, within and extending south of the project site along the west side of Harry Lorenzo Avenue.

Implementation of the Specific Plan will require the expansion of distribution and gas transmission lines, and related facilities to serve the WRTP. The new development will be responsible for the costs associated with the necessary expansion and upgrading of these systems. Any authorized provider may provide the service.

5.7.2 Planned Improvements

Initial gas service will likely be extended from gas distribution mains installed for the Spring Lake Specific Plan. Tying into the existing 8-inch gas transmission line would likely require the installation of a regulation station. The service provider will determine the desired distribution system.

Preliminary information regarding the depth of the 8-inch main indicates that it is likely to be necessary to be lowered to accommodate the proposed outfall conveyance ditch from the South Regional Detention Pond.

5.8 | TELECOMMUNICATIONS

5.8.1 Existing Conditions

AT&T provides telephone service to existing land uses within the WRTP boundaries. Implementation of the Specific Plan will require the expansion of telephone system to serve the WRTP Area. The new development will be responsible for the costs associated with the necessary expansion and upgrading of any authorized system. Initial service will likely be extended into the WRTP along Harry Lorenzo Avenue.

Wave Broadband provides television cable and broadband to the Plan Area.

5.9 | FIRE PROTECTION

The project site is within the jurisdiction of the Woodland Fire Department which provides fire protection services and emergency medical services within the City and to unincorporated areas in the vicinity. The City of Woodland serves its community with three permanent fire stations, each of which is staffed by firefighters 24 hours a day, 7 days a week.

The closest station to the Plan Area is Station Three located at 1550 Springlake Court, on the east side of SR 113, approximately 2 miles north of the Plan Area. The Departments' current Insurance Services Office (ISO) rating is three, with one indicating excellent service and ten indicating minimal or no protection. ISO ratings reflect firefighting personnel, equipment, and response times. The City has a maximum "first response" standard of four minutes.

The City plans to relocate Fire Station Three to the former Willow Spring Elementary school site, which is located at the northwest corner of Bourn Drive and Gibson Road., as shown on Exhibit 5-6, Public Services Proximity. The future Fire Station Three, located approximately one-half mile north of the Plan Area, will provide service to the Plan Area.

5.10 | LAW ENFORCEMENT

The Woodland Police Department will provide law enforcement services in the Plan Area. The Department currently services the community through a four police beat deployment model. With the geographic expansion of the city as the General Plan Growth areas build out, a fifth police beat is planned to be added; however, it is not anticipated to be located within the Plan Area. The existing Police Station and Administration building at Lincoln Avenue and 6th Street is sufficiently sized to provide Police service levels through build out of the Plan Area. The Police Department also provides parking enforcement services for the community. With the mixed use and denser nature of the project, the need for permit parking and time parking zones is likely. In the event this occurs, use of new technologies will be utilized to reduce resources needed for enforcement and monitoring.

5.11 | PARKS, RECREATION FACILITIES, AND PROGRAMS

Parks and recreational facilities and programs are provided by the City's Community Services Department. The Community Services Department also provides recreation programs to City residents and visitors. Examples of programs include youth sports, adult sports, youth and adult aquatics classes, senior services, youth and adult enrichment programs and various other leisure and recreation opportunities. Plans for the development, operation, improvement, and

maintenance of park and recreational facilities are detailed in the City's Parks, Recreation, and Community Services Master Plan.

The City of Woodland proudly provides more than 394 acres of parks and recreation facilities, including 149 acres of developed parkland and 24 acres of other facilities, including mini neighborhood and community parks, a community sports park, a 50-meter aquatics complex, and six recreational facilities, including the 13-acre Woodland Community & Senior Center. Park sites within proximity to the Plan Area are shown on Exhibit 5-6.

The City's General Plan establishes a goal of providing 6.0 acres of parks for every 1,000 residents and encourages the distribution of parks such that every residence is within a one-quarter mile of a neighborhood park. Based on average person per household factor, the Specific Plan would result in a build-out population of 4,386 which equates to providing approximately of 26.3 acres of parks, as shown in Table 5.5.

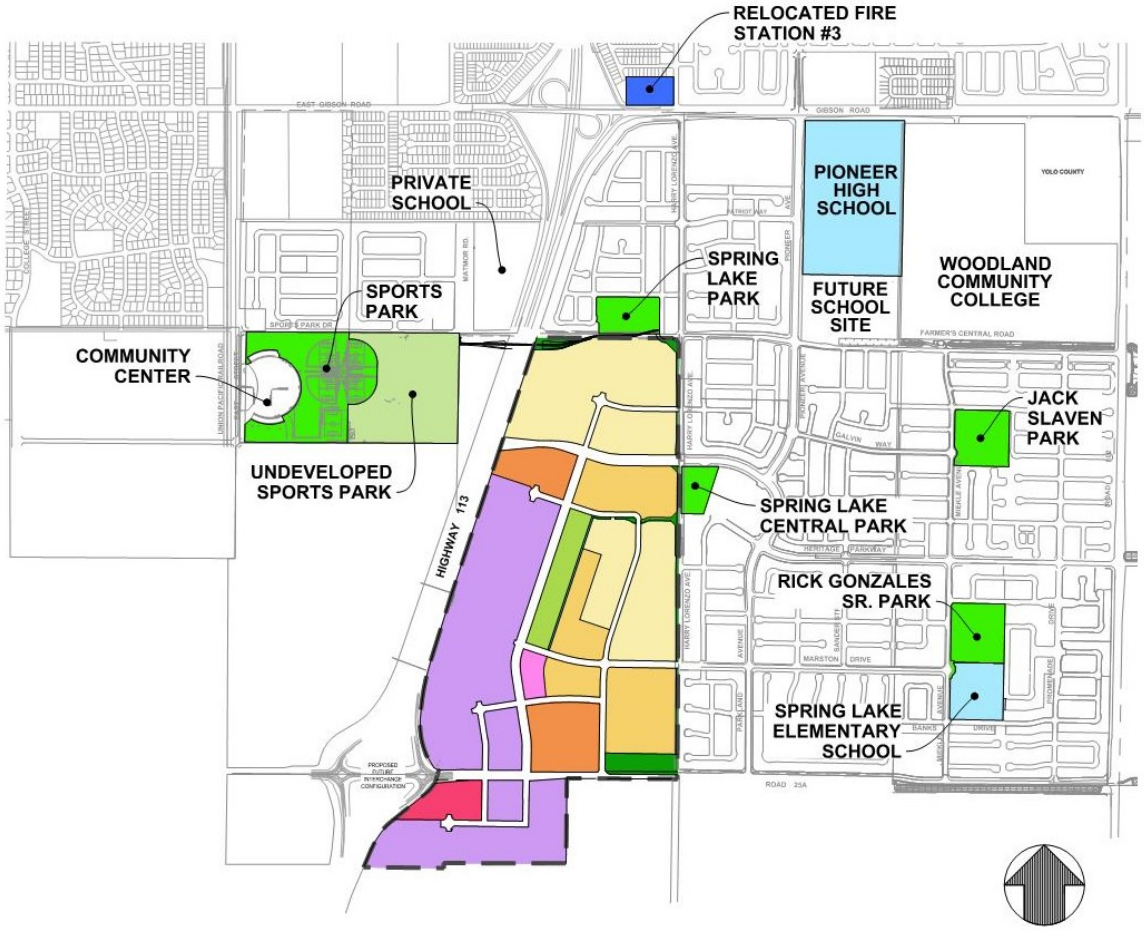


EXHIBIT 5-6: PUBLIC SERVICES FACILITIES PROXIMITY

5.11.1 Proposed Park and Recreation Facilities

The parks and open space system is a key feature required in order to meet the health, wellness and support of community values envisioned for the Plan Area. The interconnected open space, active and passive recreation facilities will provide ample places for physical activity and provide places for residents to meet, socialize and play. Together, the park and open space amenities provide a full range of active and passive recreation opportunities to help form a unifying element of the community. The land use plan allocates 11.6 acres of park and 10.2 acres of open space and greenbelts. Park and open space acreage calculations are shown in Table 5.6.

Table 5.5 Estimated Park Land Requirements

Land Use	Estimated D.U.	PPH Factor	Population	Plan Area Park Acres 6 acres*/1000
Low Density	500	3.01	1,505	
Medium Density	600	3.01	1,806	
High Density	500	2.15	1,075	
Total units	**1,600**		**4,386**	**26.316 acres**

Source for Population per household factors is WMC Section 16.48.020.

Parks and open space provided in the Plan Area are shown on Exhibit 5-7 and include the following park classifications:

1. MINI/POCKET PARKS AND PLAZAS

Mini/pocket parks, plazas, courtyards and common areas, typically range from 0.1 to 1.0 acres, and serve as amenities within the Plan Area neighborhoods, multi-family developments and within the RTP and commercial zones. A 0.5-acre pocket park, located east of Road E along the HLA greenbelt, will function as a neighborhood amenity, a trailhead and provide a connector between the Plan Area and the adjacent Spring Lake Community Park.

2. NEIGHBORHOOD PARKS

Neighborhood parks provide mostly passive recreation uses, serving neighborhoods within a range of about one-half mile (or a 10-minute walking distance). The 11.8 acre park, named The Yard, is designated as the neighborhood park to serve the Plan Area.

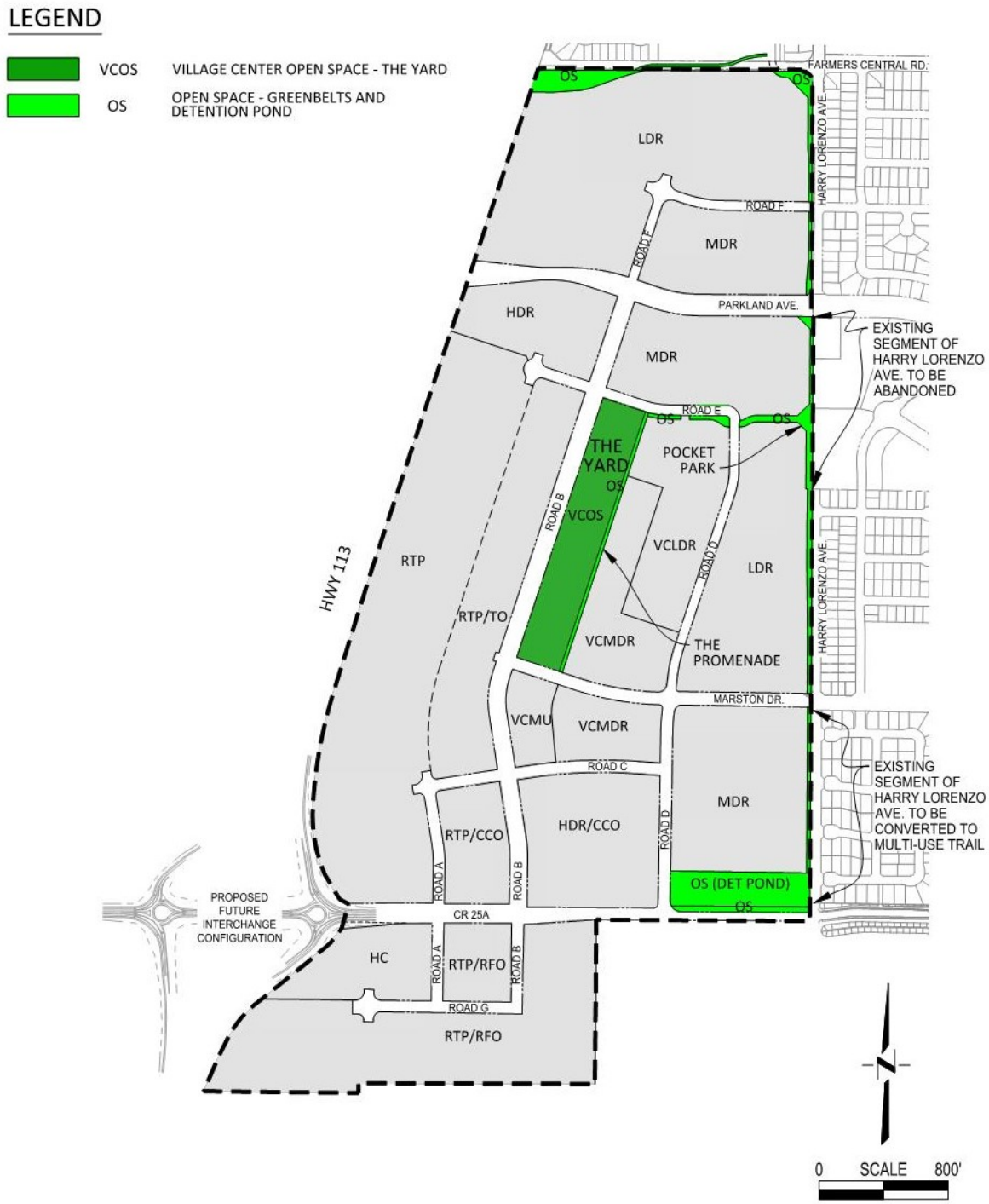


EXHIBIT 5-7: PROPOSED PARKS/OPEN SPACE SITES

3. LINEAR PARKS/GREENBELTS AND MULTI-USE TRAILS/PATHS

Linear parks and greenbelts are envisioned as landscaped, open space areas to be used for recreation and non-motorized transportation. Greenbelts may be designed to include playgrounds, open turf or planted areas, shade trees, plazas, picnic areas, and are connected by bike/walking paths. Greenways for the WRTP also provide stormwater management, including drainage and connections to open space areas used for stormwater detention/retention. The Land Plan allocates a total of 10.2 acres of open space for linear parks, as shown in Exhibit 5-7. Additionally, the Plan includes 5 miles of multi-use trails and paths that along with the greenbelts and parks, create a network of off-street biking and walking paths.

The linear parks/greenbelts provide vital pedestrian and non-motorized connectivity within the Plan Area and to the adjacent land uses. The primary linear parks/greenbelt facilities in the Plan Area are located along Harry Lorenzo Avenue, along the extension of Farmer's Central Road and as a connection from the proposed Spring Lake Central Park to the Plan Area's Central Green.

Eastern Greenway Connector – Harry Lorenzo Multi-Use Trail

A greenway along the eastern edge of the Plan Area will serve as a central spine, connecting the Plan Area to the existing Spring Lake development to the east. Located along the western edge of Harry Lorenzo Avenue, the greenway will extend the entire length of the Plan Area between CR 25A and Farmers Central Road. South of Marston Drive, the existing pavement in Harry Lorenzo Ave will be removed and the existing right-of-way will be utilized for the greenway. This facility will be more informal in nature with a 10-foot wide shared use path that gently meanders through landscaped open spaces. Multiple trail connections to Plan Area subdivisions will be provided to connect pedestrian and bicycle traffic to the linear greenway and to/from the adjacent Spring Lake community. Intersections with Marston, Parkland, and Road F will be designed with a distinctive treatment to clearly delineate each crossing.

PG&E maintains and operates an existing high-pressure gas transmission main within the corridor. Landscaping within the vicinity of the transmission main shall conform with PG&E planting zone guidelines. The planting zones are identified as the Pipe Safety Zone, the Border Zone, and the Outer Zone. Generally allowable groundcovers, shrubs, and tree sizes for each zone are defined below:

Pipe Safety Zone: Lawns, flowers, low=profile grasses and low-growing herbaceous plants.

Border Zone: Small to medium shrubs with a trunk or main branch less than 8" in diameter at full maturity, measured at 4.5 feet from the ground.

Outer Zone: Large shrubs and small trees with a trunk less than 36" at full maturity measured at 4.5 feet from the ground.

The relationship of the path location relative to the gas main and the corresponding landscape zones are depicted on the following Sections U-U through Y-Y. The path and greenbelt amenities shall be designed in accordance with the Multi-Use Trail section in Chapter 4.

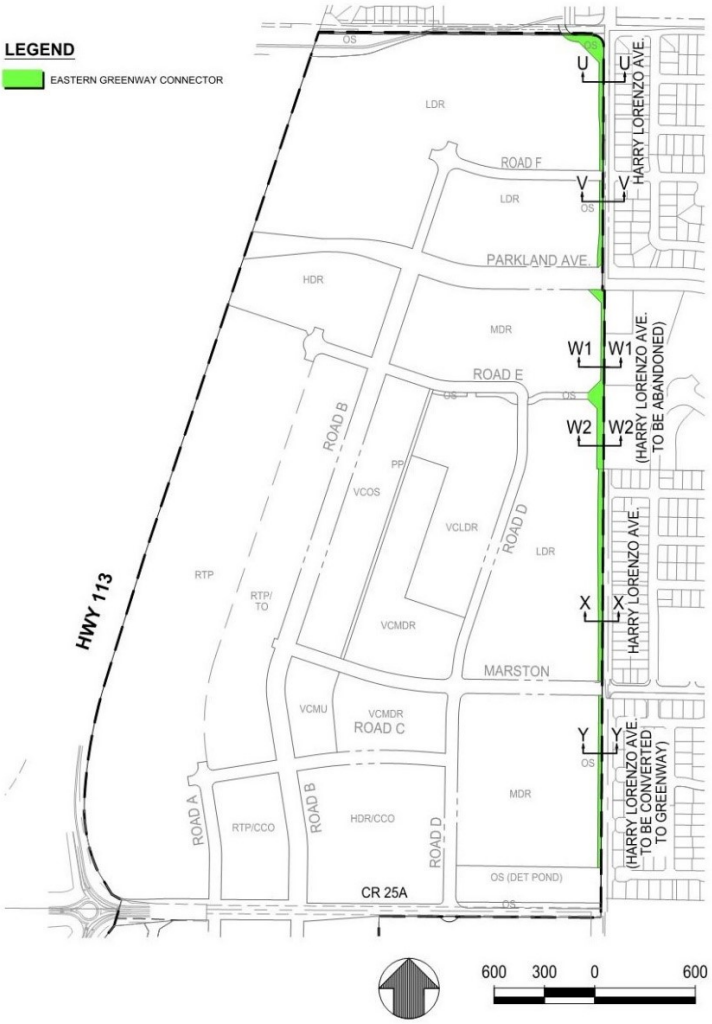
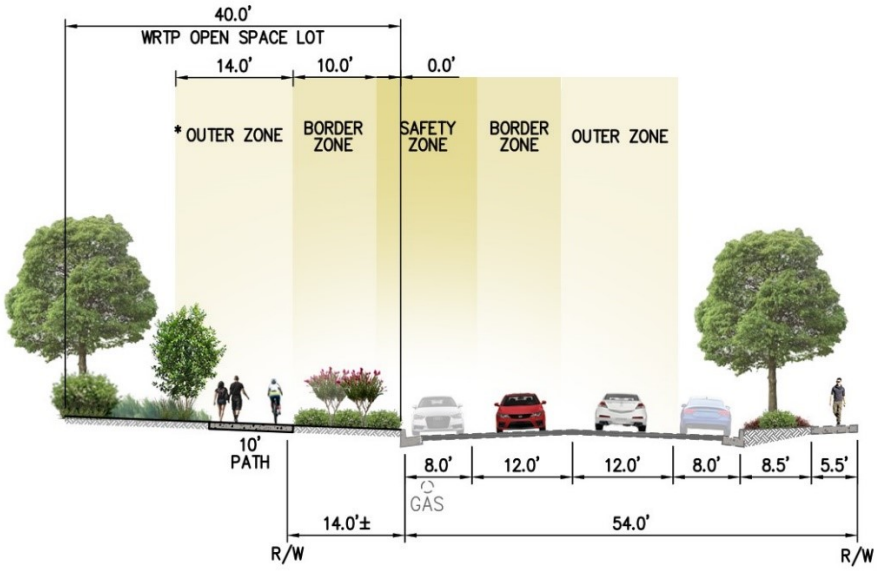


EXHIBIT 5-8: EASTERN GREENWAY CONNECTOR

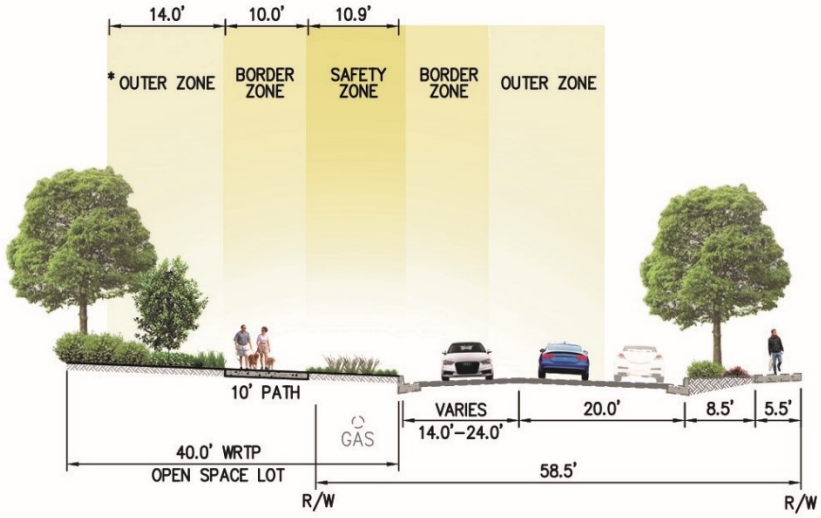


U

HARRY LORENZO AVENUE

ADJACENT TO HEIDRICK RANCH, PH 2 & 3

* PG&E RESTRICTED PLANTING ZONES – SEE SPECIFIC PLAN TEXT FOR MORE INFORMATION

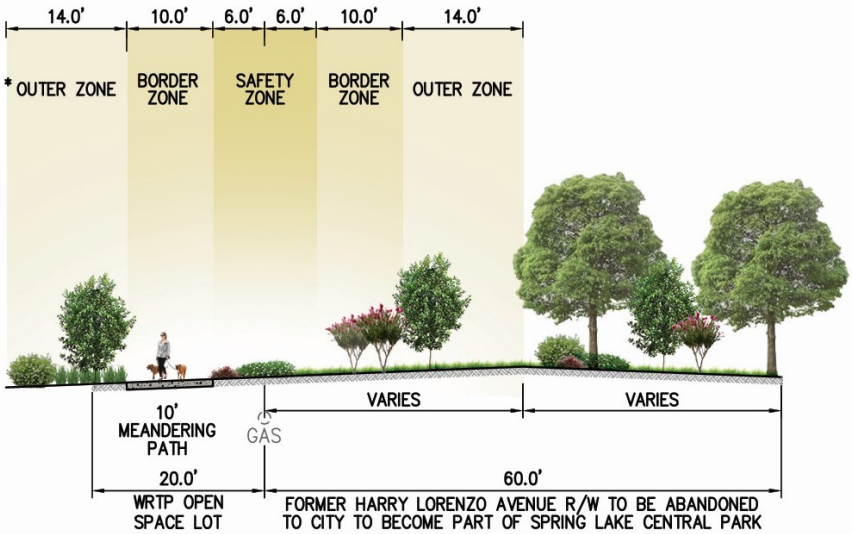


V

HARRY LORENZO AVENUE

ADJACENT TO SPRING LAKE CENTRAL - PHASE 3

* PG&E RESTRICTED PLANTING ZONES – SEE SPECIFIC PLAN TEXT FOR MORE INFORMATION

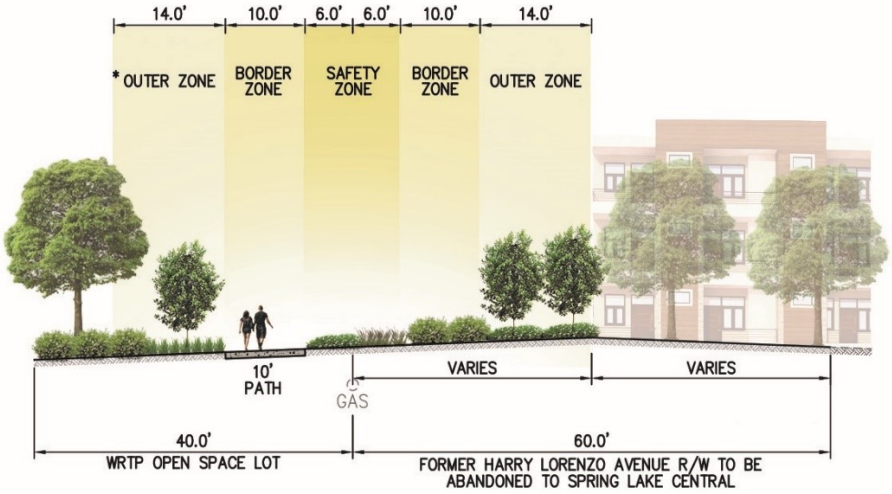


W1

HARRY LORENZO AVENUE

ADJACENT TO SPRING LAKE CENTRAL PARK

* PG&E RESTRICTED PLANTING ZONES – SEE SPECIFIC PLAN TEXT FOR MORE INFORMATION

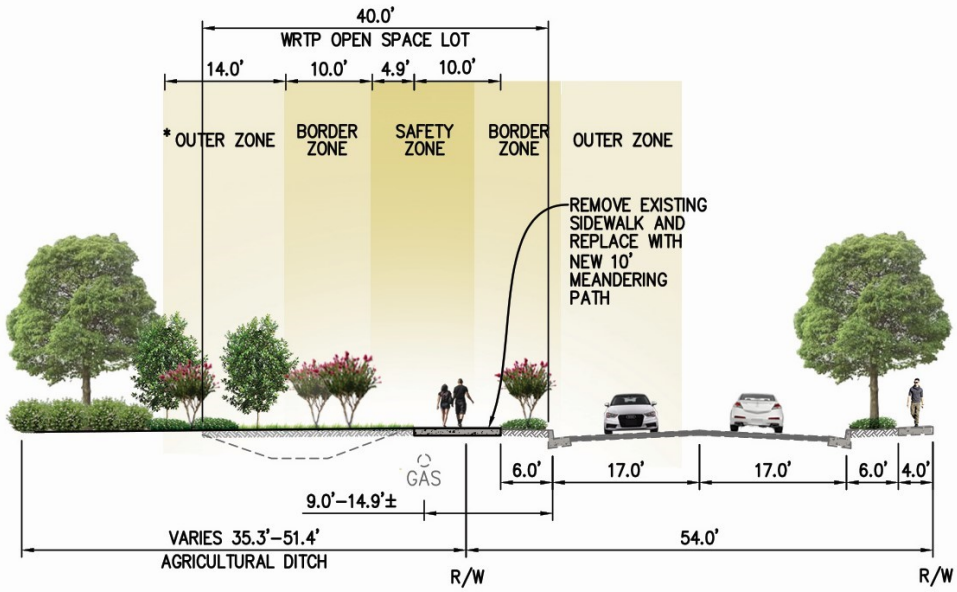


W2

HARRY LORENZO AVENUE

ADJACENT TO SPRING LAKE CENTRAL MULTI-FAMILY SITE

* PG&E RESTRICTED PLANTING ZONES – SEE SPECIFIC PLAN TEXT FOR MORE INFORMATION

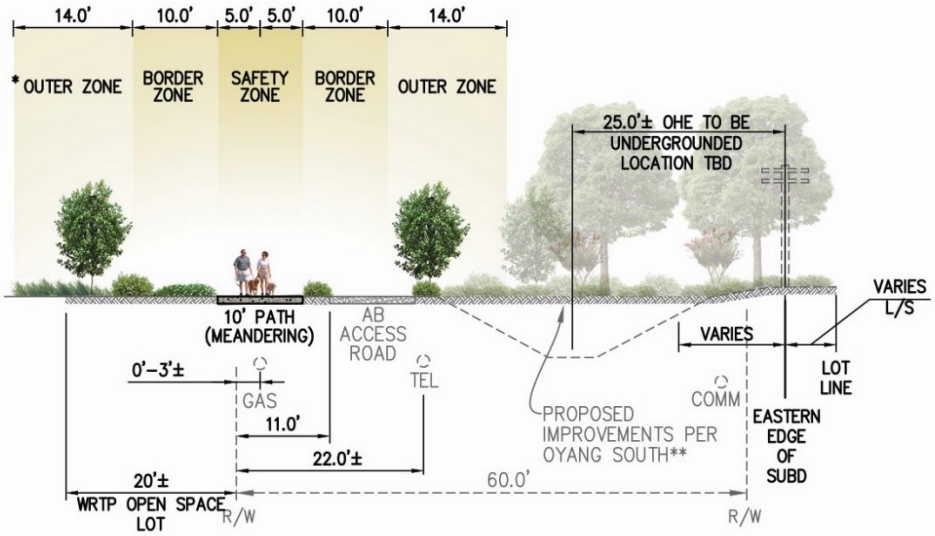


X

EX. HARRY LORENZO AVENUE

ADJACENT TO SPRING LAKE CENTRAL - SOLARA RANCH

* PG&E RESTRICTED PLANTING ZONES – SEE SPECIFIC PLAN TEXT FOR MORE INFORMATION



Y

EX. HARRY LORENZO AVENUE

ADJACENT TO SPRING LAKE CENTRAL - OYANG NORTH

* PG&E RESTRICTED PLANTING ZONES – SEE SPECIFIC PLAN TEXT FOR MORE INFORMATION
** IF NO LONGER REQUIRED FOR STORMWATER CONVEYANCE OR STORAGE, DITCH MAY BE FILLED IN AND PLANTED WITH SHRUBS AND TREES

4. DETENTION BASIN/OPEN SPACE

A 4.2-acre open space located at the southeast corner of the Plan Area, at CR-25A and Harry Lorenzo Avenue is planned as a stormwater basin for hydromodification and stormwater quality purposes. The basin is connected to the greenbelt system for the Plan Area. While serving as a detention basin, it would also be improved and used for scenic beauty and passive use. The precise location and configuration of the pond shall be determined with the first tentative map that encompasses a portion of the drainage shed from which it is receiving runoff (Shed No. 6 as identified in the WRTP Stormwater Management Memo (1/31/20).

Table 5.6 Park/Open Space Provided

Parks	Zone	Acres
Neighborhood Park- The Yard	VCOS	10.8
The Promenade*	VCOS	0.8
SUBTOTAL		**11.6**
Open Space/Greenbelts	Zone	Acres
Greenbelts	OS	6.0
Detention Basin/Open Space	OS	4.2
SUBTOTAL		**10.2**
TOTAL PARKS/OS ACRES PROVIDED		**21.8**

*Designated as Pedestrian Promenade on the Land Use Plan Layout to denote specific location of hardscape. Designated herein as VCOS because it is part of The Yard.

Additional parks, open space, mini parks and public or private plazas may be identified within individual developments and with Tentative Subdivision Maps. The Specific Plan will meet its park obligation through a combination of park land development and through project impact fees.

5.12 | SCHOOLS

The Woodland Joint Unified School District (WJUSD) provides public education from kindergarten through 12th grade within Woodland, as well as nearby unincorporated areas of Knight's Landing, Yolo, and Zamora. The District includes 11 elementary schools, one charter elementary school, two middle schools, two comprehensive senior high schools for grades 9-12, and one continuation high school. Additionally, there are three alternative education programs, six pre-schools, three infant-toddler programs, and an adult education center.

The Plan Area is located in close proximity to the Woodland Community College, at 2300 East Gibson Road, within the Spring Lake Specific Plan Area. The Community College has been at this location since 1990. The Community College offers associate degrees and continuing education

certificates in Agriculture and Agricultural Engineering/Technologies; Advanced Technology, Manufacturing, Clean Economy, Food Production clusters, Business Administration logistics, Culinary Arts, Elementary Education and Health Care.

Table 5.7 shows the estimated number of students to be generated from the Plan Area. The WJUSD will evaluate the attendance boundaries of existing and planned schools in the Plan Area to determine the school locations for Plan Area students. Existing schools in the Plan Area vicinity are Pioneer High School and Spring Lake Elementary School.

WJUSD owns a 20-acre Future School Site located directly south of Pioneer High School, approximately one-half mile from the Plan Area. The City and District have entered into an agreement to allocate 2 acres of this vacant property for the purpose of the City constructing and operating a second community swimming pool and aquatic facility. WJUSD has requested that the Specific Plan identify an alternative site for an elementary school, should it be needed. Up to a 10-acre portion of the MDR parcel located at the southwest corner of Parkland Avenue and Harry Lorenzo Avenue will be reserved for a potential school site, in accordance with the terms of the development agreement.

Table 5.7 Estimated Student Generation/School Site Demands

Land Use	Estimated D.U.	K-6 Factor	Total K-6	7-8 Factor	Total 7-8	9-12 Factor	Total 9-12
Singe Family	1,100	0.2233	246	0.0619	68	0.1413	155
Multi Family	500	0.2596	130	0.0711	36	0.1342	67
Total units	**1,600**						
Total students			**376**		**104**		**222**

Source: Residential and Commercial/Industrial Development School Fee Justification Study for the Woodland Joint Unified School District, by Cooperative Strategies, April 6, 2020

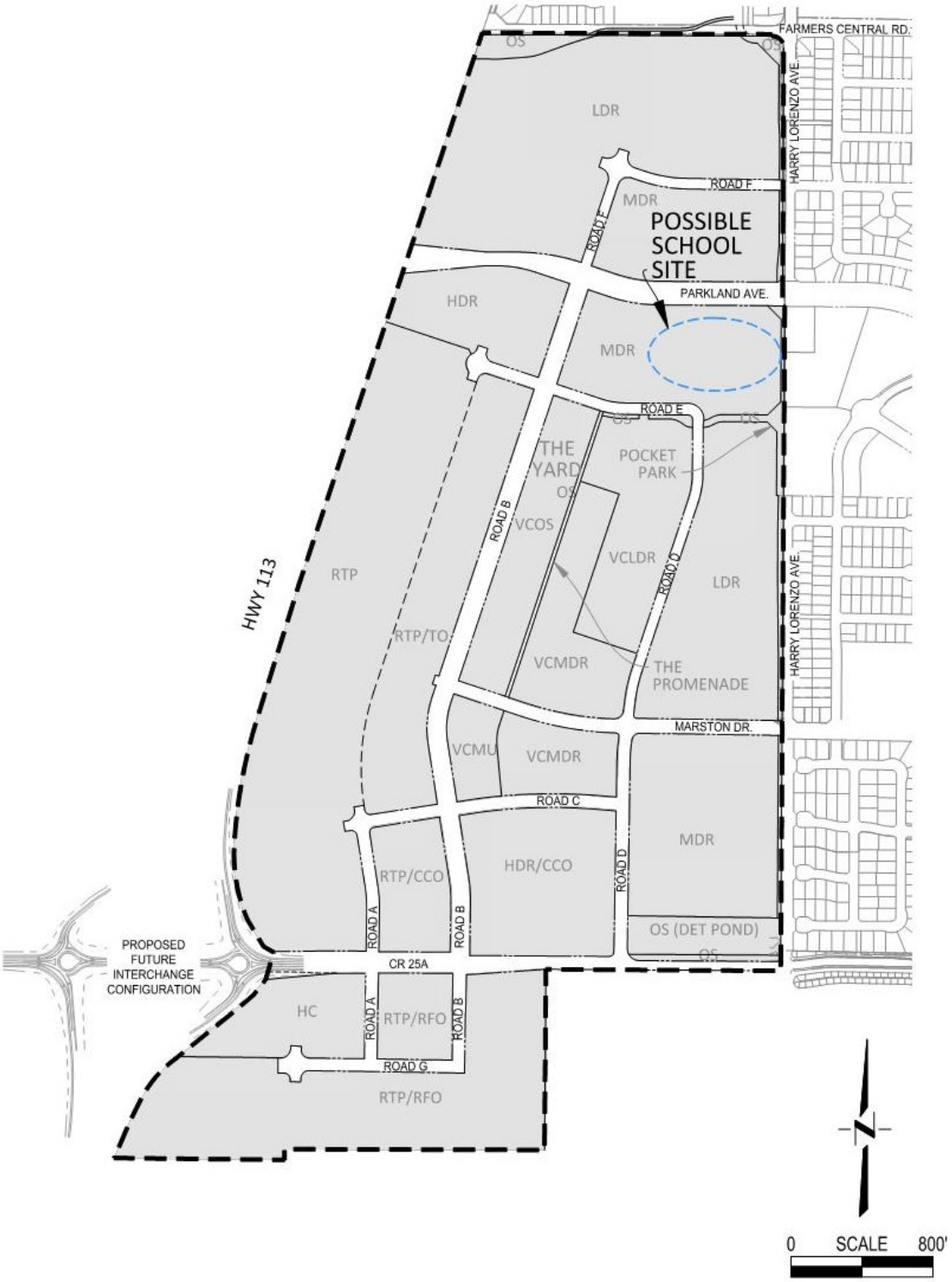


EXHIBIT 5-9: POSSIBLE SCHOOL SITE

5.13 | LIBRARY SERVICES

Library services are provided to the City of Woodland through the Yolo County Library System. The Woodland Public library is in central Woodland at 250 First Street. This facility will provide library access, including expanded virtual programming, youth activities, and e-book check out for Plan Area residents.

5.14 | OTHER GOVERNMENT SERVICES

City governmental services (e.g. planning department, building inspection, public works administration, city manager and city council, etc.) are provided primarily at City Hall at 300 First Street in downtown Woodland. As population increases so do the demands on these general government services. These services are paid for primarily from discretionary funds in the City's general fund.

5.15 | SOLID WASTE

Solid waste and yard waste collection and disposal and curbside recycling in Woodland are provided by a franchise agreement with Waste Management, with disposal and material processing at Yolo County Central Landfill. The General Plan policies ensure a consistent, citywide level of service for refuse collection, neighborhood cleanup, sanitization enforcement, and recycling programs. Existing waste disposal facilities are adequate to maintain a sufficient level of service for Specific Plan build out.

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6.0 | IMPLEMENTATION

6.1 | OVERVIEW

California Government Code Section 65451 requires that Specific Plans include programs of implementation strategies related to regulatory changes, programs, financing strategies and public works projects needed to carry out the proposed land use, infrastructure and development standards outlined in the Specific Plan.

This chapter provides a summary of the methods by which the Specific Plan will be implemented and provides discussion on the sequencing and financing programs that demonstrate compliance with General Plan policies and the vision, goals and policies of the Specific Plan.

The goal of this chapter is to describe how infrastructure and public facilities will be constructed and how public services will be delivered in a timely manner. The purpose of the implementation procedures is to ensure orderly development of the Plan Area over a multi-year time frame in coordination with the provision of the necessary infrastructure and services and with sufficient flexibility to respond to fluctuations in the economy, market demand, and evolving innovation in transportation opportunities. To achieve this intent, the Specific Plan includes a conceptual program for development sequencing and financing of infrastructure to support development in logical increments. Implementation of the Specific Plan will occur in accordance with the terms and conditions of several related planning and program documents, including the Development Agreement, Environmental Impact Report and associated Mitigation Monitoring Program, Financing Plan and the Woodland General Plan.

6.2 | IMPLEMENTATION AND PROGRAMMATIC STEPS

The Specific Plan provides for a comprehensively planned infrastructure system with the coordinated extension of infrastructure and the construction of facilities. In order to achieve the vision and goals of the Specific Plan, a number of Technical Memorandums were prepared in conjunction with or prior to adoption of the Specific Plan, and others shall be prepared and adopted subsequent to Specific Plan adoption.

6.2.1 Background on Pre-Specific Plan Actions

The City of Woodland adopted its General Plan on May 16, 2017, which identified the Plan Area as New Growth Area, SP-1A. The Plan Area is specifically envisioned within the General Plan as a natural extension of the city, ideally located and positioned for jobs and housing development. Subsequently, as part of the implementation program for the General Plan, the City petitioned to and LAFCo has amended Woodland's Sphere of Influence (SOI) to include all land within the Urban Limit Line (which includes the Plan Area) and negotiated a tax sharing agreement with Yolo County that addresses anticipated annexation of various lands including SP-1A (WRTP). The City has also

updated its Major Projects Financing Plan, adopted an interim zoning ordinance, revised the Affordable Housing Ordinance, approved the Agricultural Mitigation Ordinance, and joined the Yolo Habitat Conservation Plan/Natural Community Conservation Plan. These actions provide the foundation for implementation of the Specific Plan.

The Plan Area is located directly adjacent to the Spring Lake Specific Plan, abutting along the entire eastern edge. In anticipation of future development of the WRTP Plan Area, connection points for all municipal utilities, streets and bicycle and pedestrian connections were provided as part of the overall development for the neighboring Spring Lake Specific Plan. These connection points are stubbed at the east and north boundaries of the Plan Area.

6.2.2 Plan Area Infrastructure Planning

The coordinated delivery of public services is essential to ensure a complete community, one that provides public safety, recreational, educational and library services for the residents. The proposed public utility and public service providers are identified in Chapter 5, Public Utilities and Services. Technical Memorandums, listed below, provide the additional detail for the identified infrastructure improvements to support Plan Area development. Chapter 4, Mobility and Circulation, describes the comprehensive transportation network featuring a hierarchy of complete streets and off street bike paths. These studies may need to be updated or future studies may be prepared to inform the successful buildout of the Specific Plan, as required. Specifically, timing for certain off-site infrastructure components will need to be monitored to ensure timely completion of those facilities/improvements and adequate capacity at all stages of development.

The WRTP Infrastructure Technical Memorandums include:

- Water Technical Memorandum dated January 7, 2020.
- Reclaimed Water Distribution Technical Memorandum dated March 31 2020.
- Wastewater Collection System Technical Memorandum dated March 31, 2020.
- Stormwater Management Technical Memorandum dated January 1, 2020.
- Traffic Impact Analysis completed for the DEIR dated June 2020.

A Public Facilities Financing Plan will be prepared to demonstrate how the infrastructure requirements and the associated costs are reasonably balanced throughout each segment of development and that the provision of services, as well as the operations and maintenance costs, are in sync as development progresses. The Public Facilities Financing Plan will be an Appendix to the Final Specific Plan. The Public Facilities Financing Plan is described in Section 6.4.

PLEASE NOTE, text underlined on this page was added after initial release of the Public Review Draft Specific Plan to clarify project requirements around TDM policy. Edits are intended to clarify and not substantively change the meaning or intent of the section 6.2.3.

6.2.3 Subsequent Implementation Documents/Analysis

The following supplemental plans must be prepared either prior to approval of the first development application or tentative map or as otherwise required by the conditions of approval and/or Environmental Impact Report and associated Mitigation Monitoring Program, or by the Community Development Director, as appropriate:

- Conceptual Plan for The Yard to guide phased park improvements, and ensure pedestrian and bike paths internal to the park connect to the external network trail and greenbelt system, shall be prepared no later than prior to the first tentative map that fronts on The Yard.
- Comprehensive planting and street tree palette shall be developed for each District to guide both private and public landscaping improvements. Street Furnishings, Street Lighting Palettes and Gateway monuments (25A/Road B and Road B/Marston) shall be included as part of this effort.
- Comprehensive Transportation Demand Management/Vehicle Miles Traveled Reduction Program ("TDM/VMT Program") ~~strategy, in conjunction with key stakeholders, and identifying check in points to demonstrate efficacy~~. The Master TDM/VMT Program shall: 1) establish transportation strategies, programs, facilities or services for the purpose of VMT reduction that are financed by and consistent with the strategies and requirements of the Development Agreement;[1] and 2) provide project specific VMT reduction strategies that all property owners/tenants shall be required to implement through individual Project-level TDM Plans consistent with the Master TDM Program. These measures shall in combination achieve a 10 percent reduction in Plan Area VMT per capita compared to baseline conditions by 2035. The Master TDM/VMT Program will include a monitoring plan for collecting VMT data in the interim years to 2035, every five years as input to citywide GHG monitoring, so that the effectiveness of the VMT reduction strategies can be confirmed and any required strategy adjustments made to reach project VMT reduction targets. Monitoring reports shall be reviewed by the City who may make adjustments to reach project VMT reduction targets, as necessary.

[1] / In order to specify the manner in which the necessary infrastructure, public facilities, and other programs or services as provided in this Specific Plan will be constructed and/or operated and financed, among other matters, the City and the project applicant intend to enter a development agreement. The terms and conditions of the development agreement will be consistent with the goals and policies of this Specific Plan and shall set forth and require financing strategies, sources, and mechanisms to ensure short-term and long-term funding for implementation and monitoring of the TDM/VMT measures.

- Coordination with the Yolo County Transportation District, Yolobus and UC Davis with policies of the Specific Plan to insure timely provision of transit service and appropriate funding mechanisms in place.
- Mobility Hub Master Plan, identifying the dedication of necessary Right of Way with the first tentative map in the location of the planned facility (Road B at the Village Center).
- Climate Action Plan Checklist, modified as necessary to achieve Greenhouse Gas Reduction targets.

6.3 | INFRASTRUCTURE SEQUENCING

The City of Woodland General Plan has a strong focus on economic development for the future of Woodland, in order to achieve sustainable development through continued jobs housing balance in the community. The Woodland Research and Technology Park is a key component in providing the means and opportunity to achieve this goal. Facilitation of early or "first-in" development of the Research and Technology Park (RTP) parcels is a key strategy of the Plan Area implementation, as described in the Financing Plan and the Development Agreement.

This section describes, rather than dictates, how connections to existing circulation and infrastructure improvements can physically be provided to serve the various areas of the Specific Plan. Actual extension of infrastructure and development within the Specific Plan will be determined by factors such as market demand, financial feasibility, infrastructure constraints, project Development Agreement terms, and City policy relating to jobs-housing goals. In general, development sequencing strategy is structured to advance the backbone infrastructure improvements needed to support associated development, in compliance with City policies and standards, and to ensure that the development area can support the costs of the required improvements.

6.3.1 Sequencing Approach

The overarching approach to development of the Plan Area is measured flexibility. From a physical standpoint, the Plan Area can begin development in any geographic area of the Plan Area and areas can be developed simultaneously. Development may move forward independently provided that parcels can meet the public services requirements, the guiding policies and development standards outlined in the Specific Plan, the development agreement and are to the satisfaction of the City of Woodland Community Development Department. All public utilities were stubbed in multiple connection points along the eastern Plan Area boundary with the adjacent Spring Lake development and were sized with capacity to accommodate the Plan Area utility demands. The Plan Area has the ability to develop in sequential increments yet provides some flexibility for individual development areas to progress independently.

In addition to the planned infrastructure connection points, there are additional offsite infrastructure components which require ongoing monitoring and evaluation to determine triggers for the timing of improvements. Timing for these off-site infrastructure components will need to be monitored to ensure that adequate capacity is available. These include wastewater and stormwater improvements, described in Sections 5.4.3 and 5.5.3 respectively, and the future improvements to the Hwy 113/25A interchange, described below.

Traffic Impact Analysis prepared for the EIR indicates State Route 113 and Road 25A interchange will ultimately require improvements prior to full build-out of the Plan Area. Ramp and intersection improvements are anticipated to be in place prior to approval of the first development project in the Specific Plan. Analysis prepared by the City's traffic consultant indicates capacity for 380,000 square feet of non-residential land uses and 200 residential units at the southern end of the Plan Area, based on currently planned improvements to the interchange, without triggering need to design and implement the future improvements.

Subsequent development projects within the Plan Area shall be required to prepare a project specific traffic analysis to the satisfaction of the Community Development Director or City Engineer.

6.3.2 Sequencing Principles and Policies

Infrastructure requirements for each phase of development include on-site backbone infrastructure and off-site facilities necessary for each phase to proceed. Each improved area shall include roadway, sanitary sewer, water, recycled water, storm drainage, dry utilities, other facilities and improvements. All in-tract sewer, storm drain, water and dry utilities will be installed as part of individual project improvements. The listing and specific details relating to the on- site and off-site improvements required to serve the Plan Area are included in the infrastructure technical memorandums for water, reclaimed water, wastewater and drainage and in Specific Plan development agreement(s).

In some instances, selected off-site infrastructure items, roads, and/or advancement of public services may be needed to serve a project area, while some items may be deferred to a later project area to develop. The general sequencing policies are as follows:

- At a minimum, two points of vehicular access are required for each project area. One of the accesses may be temporary emergency vehicle access subject to the Community Development Director.
- A looped water system is required for each project area.
- All roadways, pedestrian facilities, and bicycle routes shall be constructed in logical segments to provide safe and adequate access with each project area.

- Improvements constructed along the boundary of a project area shall include utility stubs to the adjacent phase for subsequent connection by the future area(s).
- Development of a non-contiguous project area will require the construction of backbone utility infrastructure not contained within defined area in order to connect to existing "downstream" infrastructure per the routing shown in the infrastructure technical memorandums. These improvements will be subject to reimbursements and fair share costs as outlined in the Financing Plan.
- A requirement to grant easements for on-site roadway and utility infrastructures required for a non-contiguous area shall be included in the development agreements for the Specific Plan, with reimbursements as incorporated into the Financing Plan.

6.4 | FINANCING AND MAINTENANCE OF PUBLIC FACILITIES

The construction of public facility improvements to serve the Plan Area will be funded by a variety of mechanisms. Specific financing requirements, improvement obligations, fees, reimbursements, land and easement dedications and conveyances, maintenance, and other financing and improvement related obligations are detailed in the development agreement, PFFP and any reimbursement agreements.

Funding of public improvements necessary to implement the Specific Plan will include a variety of mechanisms including city and school impact fees, special funding districts, developer financing and other potential methods. A separate Financing Plan is being prepared for the Woodland Research and Technology Park that details the costs for construction and operation of backbone infrastructure, public facilities, and operational costs necessary for development anticipated under the Specific Plan. New development within the Plan Area shall be fiscally and financially neutral. both in terms of capital costs (financing of infrastructure) and ongoing costs (generation of sufficient general fund revenue to support ongoing maintenance and operational costs) to the greatest extent feasible.

The Financing Plan will serve as a framework to guide and support the objectives of the Specific Plan. As development progresses, the timing and mix of cost and funding sources may change. The assumptions and results are estimates at this time. Regardless of the extent to which certain financing mechanisms are used or funding sources are available, the overall cost burden has been calculated for the purpose of determining the most appropriate and feasible financing strategies and mechanisms to proceed with development under the Specific Plan. Specifically, the Financing Plan will:

- Describe the project and sequencing of needed infrastructure.

- Provide a summary of the infrastructure and public facility requirements to serve future development within the Plan Area.
- Include infrastructure cost estimates by land use and by development phase per acre, and the estimated infrastructure cost at build-out of the Plan Area.
- Include summarized costs for infrastructure and public facilities needed to serve the Specific Plan, including costs needed to serve the Plan Area at buildout.
- Review and include existing fees, taxes and assessments which may be applicable to the Specific Plan.
- Present cost estimates for operating and maintaining the required infrastructure and for ongoing municipal services.
- Identify potential funding sources for both the construction of infrastructure and provision of municipal services,
- Present the overall cost burden by land use and by development area on a per acre basis.
- Provide recommended action steps for implementation of the infrastructure financing.

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7.0 | ADMINISTRATION

7.1 | OVERVIEW

This chapter outlines the Specific Plan process and its relationship to the subsequent entitlement processes that are necessary to allow construction of individual projects. This chapter also describes the administrative procedures that will occur to implement, amend, interpret and enforce the Specific Plan.

7.2 | SPECIFIC PLAN PROCESS AND RELATED ENTITLEMENTS

This section describes the project entitlements, the relationship between the concurrent approvals which occurred with the adoption of the Specific Plan and the subsequent entitlement process to occur after the WRTP Specific Plan adoption.

7.2.1 Specific Plan and Concurrent Approvals/Actions

Approval of the Specific Plan included the following entitlements and related actions:

1. Final Environmental Impact Report (FEIR)
2. Adoption of the Specific Plan
3. Approval of a General Plan Amendment and Pre Zoning
4. LAFCo Approval and Annexation
5. Approval of a Development Agreement by and between the City and the landowners.
6. Approval of a Public Facilities Financing Plan for the Specific Plan that describes a Capital Improvement Program and a funding and financing strategy for planned improvements.

7.2.2 Subsequent Entitlements/Actions

Individual development projects are subject to review and approval of subsequent permits and entitlements by the City of Woodland and other agencies. Once the actions described in Section 7.2.1 have occurred, landowners may submit and process applications for subsequent entitlements, as required, to implement the Specific Plan. Future approvals may include, but are not limited to:

1. Tentative Subdivision Maps
2. Tentative Parcel Maps
3. Lot Line Adjustments
4. Site Plan Review/Design Review
5. Use Permits
6. Variances

7.2.3 Environmental Clearance

An Environmental Impact Report (EIR) was prepared for this Specific Plan and was certified concurrent with the approval of the Specific Plan. The EIR serves as the base environmental document for subsequent entitlement approvals within the Plan Areas. Section 65457(a) of the California Government Code and Regulations Section 15182 and 15183 of Title 14 of the California Code of Regulations (pertaining to the California Environmental Quality Act ("CEQA")) provide that no EIR or negative declaration is required for any residential project undertaken in conformity with an adopted Specific Plan for which an EIR has been certified. Moreover, no additional environmental review is required for projects that are consistent with the zoning for which an EIR was certified, except as might be necessary to examine whether there are project-specific effects that are peculiar to the project or its site. The EIR certified for this project has been written to qualify all future residential projects for these exemptions, assuming they are consistent with the adopted Specific Plan and fulfill all conditions and CEQA mitigation measures outlined in the EIR. Non-residential projects may also rely upon the EIR assuming they are consistent with the adopted Specific Plan and fulfill all conditions and CEQA mitigation measures.

The City will assess consistency of each development application within the Specific Plan area with the Environmental Review and determine whether additional review is required under CEQA Section 15183 and 15182(a), or whether no further review is required.

Additional CEQA review may be required in the following instances: substantial changes to the Specific Plan are proposed, substantial changes occur to the circumstances under which the project is being undertaken, or new information becomes available that could not have been known upon certification of the Environmental Review. A supplemental review or an addendum may be required if any of these circumstances ensue.

The Specific Plan allows for a range of densities and intensities of development consistent with the goals and policies of the 2035 General Plan. However, it is anticipated that the Specific Plan area at build out will realize approximately 1,600 residential units and 2.2 million square feet of non-residential uses including business park, light industrial, retail and hospitality related commercial uses. Similarly, the EIR for the WRTP Specific Plan anticipates and analyzed these yields for purposes of environmental impacts. Should development within the Specific Plan exceed the anticipated residential or commercial development yields as analyzed within the EIR, discretionary review of such project(s) shall be required. The project proponent may be required to submit documentation substantiating said development is in conformance with the Specific Plan, EIR, its mitigation monitoring program, the General Plan, and Municipal Code, or a subsequent EIR may be required.

A mitigation monitoring program has been adopted with the EIR in accordance with Public Resources Code 21081.6 to ensure implementation of EIR mitigation measures.

7.2.4 Specific Plan Findings

Approval of all land division, planning entitlements and building permits shall be contingent upon a determination of substantial compliance with the provisions of this Specific Plan, the City of Woodland General Plan and with applicable provisions of the Zoning and Subdivision Ordinances. All proposed development projects or subdivision applications shall demonstrate the following:

1. Consistency with the goals and policies of the Specific Plan and all applicable laws and regulations.
2. Consistency with the overall intensity of land uses as provided for in the Specific Plan
3. Consistency with the Specific Plan implementation strategy and availability of infrastructure to serve the development.
4. The project will not degrade services and/or facilities beyond the capacities approved by the Specific Plan.
5. Consistency with the project scope and impacts addressed in the Specific Plan EIR or that environmental impacts of the project are addressed in subsequent environment impact studies that may be required under the California Environmental Quality Act (CEQA).

7.3 | SUBSEQUENT ENTITLEMENTS

Following adoption of the Specific Plan, subsequent development and/or proposed land use, including tentative map applications, within the Plan Area will be reviewed for consistency and compliance with the Specific Plan and any other City regulations in effect at the time of development. Application and processing requirements shall be in accordance with the City's Zoning Ordinance and other regulations, unless otherwise modified by this Specific Plan. In acting to approve a project or permit, the City may impose conditions as are reasonably necessary to ensure that the project is in substantial compliance with the Specific Plan and all applicable plans and regulations.

7.4 | SPECIFIC PLAN ADMINISTRATION

The Specific Plan serves as an implementing tool of the Woodland 2035 General Plan, which provides the foundational elements, vision and direction for the Specific Plan. As an implementing tool, the Specific Plan establishes zoning, land use and development standards for projects within the Plan Area boundary.

Upon adoption of the Specific Plan, all land use regulations, development standards, and design guidelines of this Specific Plan shall supersede those of the Zoning Ordinance and Community Design Standards. Where direction is not provided in this Specific Plan, the standards of the City's Zoning Ordinance shall apply including use permit, variance, public notice and hearing and appeals provisions.

The City's Subdivision Ordinance will regulate individual requests for land divisions within the Specific Plan Area, unless otherwise addressed herein. To the extent that a component or regulation of the Specific Plan differs from a requirement of the Ordinance, the Specific Plan will take precedence. Where the Specific Plan is silent or vague, the Subdivision Ordinance will be used for the purpose of interpretation, and/or directly applied as appropriate.

Unless otherwise approved as part of the Specific Plan, off-site improvements under the control of the City shall be subject to City of Woodland regulations and requirements in effect at the time the improvement plans are submitted. Improvements not under the control of the City (e.g. improvements to State highways) shall be subject to the regulations and requirements of the responsible agency.

7.4.1 Specific Plan Amendments, Minor/Administrative Modifications

During the long-term build out of the Plan Area, amendments to the adopted Specific Plan may be necessary because of changed circumstances. Additionally, because of unforeseen circumstances, some design guidelines or development standards may not be feasible on a particular parcel or may hinder innovative design concepts. In these situations, the procedures listed below will be followed to amend the adopted Specific Plan or allow for minor/administrative modification from development or design standards.

1. SPECIFIC PLAN AMENDMENTS

Any changes proposed to the Specific Plan that could significantly increase environmental impacts or result in any of the following substantive changes shall require a Specific Plan amendment:

1. Substantively change the boundaries of the Specific Plan.
2. Substantively change the text, figures, or table of the Specific Plan.
3. Substantially change the location of planning districts or key elements of the Plan including the linear park.
4. Substantively change any element of the Plan or implementing documents (infrastructure plans, design guidelines, capital improvement plan, and financing plan) such that they would be inconsistent with Specific Plan policy, text or land use.

The Specific Plan may be amended by the same procedure as the Plan was adopted and shall require a recommendation of approval by the Planning Commission and approval by the City Council. An amendment may be initiated by the City Council, the Community Development Director (Director), property owner or any authorized agent of the property owner. Any amendment requested by a property owner or project applicant may be subject to the fee schedule adopted by City Council. Any amendment to the Specific Plan must be consistent with the City's General Plan.

2. MINOR/ADMINISTRATIVE MODIFICATIONS

Modification(s) to the standards as proposed by a developer/builder during site development and design review of individual Planning Areas and/or Tentative Maps, may be considered subject to the following provisions. A minor/administrative modification to Specific Plan design and/or development standards may be considered and approved or conditionally approved by the Community Development Director if it is determined by the Director that the revision is in substantial conformance with all of the applicable criteria:

1. The Director determines that the modification does not have a significant impact on the character of the Plan.
2. The proposed modification to the development standards or design guidelines are offset by the merits of the design and do not significantly change the anticipated physical characteristics of the development.
3. The proposed modification to the development standards further the goals of the Specific Plan and enhance the appearance or functionality of the project, while remaining compatible with and not detrimental to adjacent properties or uses.
4. The proposed modification does not modify or exceed the original standard by more than 10 percent.
5. The proposed changes to the alignment of streets or street sections, which if adopted, would not substantially alter the overall land use and will continue to support the circulation concepts set forth in this Specific Plan.
6. Adverse environmental impacts are not significantly increased, as defined by the CEQA Guidelines Sections 15162, 15182 and 15183, as a result of the proposed variance.

In granting a Minor / Administrative Modification, the Community Development Director may impose conditions to safeguard public health and safety and to ensure development remains consistent with the objectives and intent of the Specific Plan.

At the discretion of the Community Development Director, any proposed minor/administrative modification may be referred to the Planning Commission and/or City Council for action. An administrative modification may be appealed to the Planning Commission or City Council, as applicable, consistent with the provisions of the Woodland Municipal Code for Zoning Administrator Appeals.

7.5 | INTERPRETATIONS

The Director shall have the responsibility to interpret the provisions of this Specific Plan. If an issue or situation arises that is not sufficiently provided for or is not clearly understandable, those General Plan policies and/or regulations of the Zoning Ordinance that are most applicable and relevant may be used as a guide for resolving the issue.

In determining land use where a specific use is not listed, the Director shall have the authority to make an interpretation as to whether the use is similar to other allowed uses in a particular zoning district, or whether such use should not be permitted based on the guiding principles and vision for a particular development district within the Plan Area. The Director may refer any matter for interpretation to the Planning Commission for their consideration or the Director's interpretation may be appealed to the Planning Commission. The Planning Commission's decision, when applicable, may be appealed to the City Council. The City shall keep records of the official determinations on file for future reference and to ensure consistency of interpretations over time.

7.6 | SEVERABILITY AND ENFORCEMENT

If any regulation, condition, program or portion of the Specific Plan is held invalid by a California or Federal Court of competent jurisdiction, such portions shall be deemed separate, distinct, and independent provisions, and the invalidity of such provisions shall not affect the validity of the remaining provisions thereof.

Any person who violates a requirement of this Specific Plan or fails to obey an order issued by the City or comply with a condition of approval of any permit or entitlement issued under this Specific Plan shall be subject to the penalty provisions as provided in the City of Woodland Municipal Code.

Draft
Environmental Impact Report
Woodland Research & Technology Park Specific Plan

State Clearinghouse #2017062042

May 2021

Draft

Environmental Impact Report

Woodland Research & Technology Park Specific Plan

May 2021

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LIST OF ACRONYMS AND ABBREVIATIONS

2014 Scoping Plan Update	First Update to the Climate Change Scoping Plan: Building on the Framework
2017 Scoping Plan Update	*California's 2017 Climate Change Scoping Plan: The Strategy for Achieving California's 2030 Greenhouse Gas Target*
AADT	Annual Average Traffic Volume
AB	Assembly Bill
ACMs	asbestos-containing materials
ADA	Americans with Disabilities Act
AEP	annual exceedance probability
afy	acre-feet of water per year
ALUC	Airport Land Use Commissions
ALUCP	airport land use compatibility plan
AMMs	avoidance and minimization measures
A-N	Agricultural Intensive
ANSI S1.4	American National Standards Institute for Class 1 sound level meters
APS	alternative planning strategy
AQAP	Air Quality Attainment Plan
ARB	California Air Resoruces Board
ASR	Aquifer Storage and Recovery
ASTM	American Society for Testing and Materials
ASTs	aboveground storage tanks
ATCM	Airborne Toxic Control Measure
B.P.	Before Present
Basin Plan	*Water Quality Control Plan for the Sacramento River and San Joaquin River Basins*
BIOS	Biogeographic Information and Observation System
BMP	Bikeway Master Plan
BMPs	best management practices
Btu	British thermal units
CAA	Clean Air Act
CAAQS	California ambient air quality standards
CAFE	Corporate Average Fuel Economy
CAL 200	Larson Davis Laboratories Model
CAL FIRE	California Department of Forestry and Fire Protection
Cal/OSHA	California Division of Occupational Safety and Health
CalARP	California Accidental Release Prevention program
CalEEMod	California Emissions Estimator Model
CALGreen	California Green Building Standards Code
CALGreen Code	California Green Building Standards Code
CalRecycle	California Department of Resources Recycling and Recovery
Caltrans	California Department of Transportation
CAP	Climate Action Plan
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board

CASGEM	California Statewide Groundwater Elevation Monitoring
CASQA	California Stormwater Quality Association's
CBC	California Building Standards Code
CCR	California Code of Regulations
CDBG	Community Development Block Grant
CDE	California Department of Education
CDFW	California Department of Fish and Wildlife
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFC	California Fire Code
CFNR	California Northern Railroad
CFR	Code of Federal Regulations
CGS	California Geological Survey
CIWMA	California Integrated Waste Management Act
CLG	Certified Local Government
CNDDB	California Natural Diversity Database
CNEL	Community Noise Equivalent Level
CNPS	California Native Plant Society
CO	carbon monoxide
COA	Comprehensive Operational Analysis
Code	Municipal Code
Construction General Permit	*General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities*
COWES	City of Woodland Engineering Standards
CPTED	Crime Prevention Through Environmental Design
CPUC	California Public Utilities Code
CR	County Road
CRHR	California Register of Historical Resources
CRPR	California Rare Plant Rank
CTR	California Toxics Rule
CUPA	Certified Unified Program Agency
CVRWQCB	Central Valley Regional Water Quality Control Board
CWA	Clean Water Act
DBH	diameter at breast height
DDT	dichlorodiphenyltrichloroethane
DNL	Day-Night Average Level
DOF	California Department of Finance
DPM	diesel PM
DTSC	Department of Toxic Substances Control
DWR	California Department of Water Resources
EDD	Employment Development Department
EO	Executive Order
EPA	U.S. Environmental Protection Agency

EPCRA	Emergency Planning Community Right-to-Know Act
ESA	Federal Endangered Species Act
ESA	Environmental Site Assessment
EV	electric vehicle
FAA	Federal Aviation Administration
FAR	Federal Aviation Regulations
Farmland	Prime Farmland, Unique Farmland, or Farmland of Statewide Importance
FEMA	Federal Emergency Management Agency
FFY	federal fiscal years
FHA	Federal Highway Administration
FHWA-RD-77-108	Federal Highway Administration's traffic noise prediction model
FIRM	Flood Insurance Rate Map
FIS	Flood Insurance Study
FMMP	Farmland Mapping and Monitoring Program
FR	Federal Register
FSRS	Fire Suppression Rating Schedule
FTA	Federal Transit Administration
Geocon	Geocon Consultants, Inc.
GHG	greenhouse gas
GIS	geographic information system
gpm/acre	gallons per minute per acre
GSA	Groundwater Sustainability Agency
GSP	Groundwater Sustainability Plan
GWh	gigawatt hours
Handbook	*Air Quality and Land Use Handbook: A Community Health Perspective*
HAPs	hazardous air pollutants
HDR	high density residential
HHWE	Household Hazardous Waste Element
HMBP	Hazardous Materials Business Plan
HMTA	Hazardous Materials Transportation Act
hp	horsepower
HSWA	Hazardous and Solid Waste Act
HUD	U.S. Department of Housing and Urban Development
Hz	Hertz
I-	Interstate
in/sec	inches per section
IPaC	Information, Planning, and Conservation System
ISO	Insurance Services Office
ISR	Indirect Source Review
IX	internal-external
kBtu/year	thousand British thermal units per year
kV	kiloVolt
KWh/year	kilowatt-hours per year
LAFCo	Local Agency Formation Commission

lbs/day	pounds per day
LDL	Larson Davis Laboratories
L_{dn}	Day-Night Average Level
LEAs	local enforcement agencies
LED	light-emitting diode
L_{eq}	Equivalent Sound Level
L_{eq}[h]	1-hour, A-weighted equivalent sound level
LID	low impact development
L_{max}	Maximum Sound Level
L_n	Percentile-Exceeded Sound Level
LOS	Level of Service
MAP-21	Moving Ahead for Progress in the 21st Century Act
MBTA	Migratory Bird Treaty Act
MDR	medium density residential
MEP	maximum extent practicable
MERV	Minimum Efficiency Reporting Value
mgd	million gallons per day
MM therms	million therms
MMBtu	million British thermal units
MPOs	metropolitan planning organizations
MRZ	mineral resource zone
MS4s	Municipal Separate Storm Sewer Systems
MT CO_2e	metric tons of carbon dioxide equivalents
MTIP	Metropolitan Transportation Improvement Program
MTP	Metropolitan Transportation Plan
MUN	Municipal and Domestic Supply
MW	megawatts
NAAQS	national ambient air quality standards
NAC	noise abatement criteria
NAHC	Native American Heritage Commission
NCIC	North Central Information Center
NDFE	Non-Disposal Facility Element
NFPA	National Fire Protection Association
NHTSA	National Highway Traffic Safety Administrative
NO_2	nitrogen dioxide
NOP	Notice of Preparation
NO_X	nitrogen oxides
NPDES	National Pollutant Discharge Elimination System
NRCS	U.S. Natural Resources Conservation Service
NRHP	National Register of Historic Places
NTR	National Toxics Rule
OEHHA	Office of Environmental Health Hazard Assessment
OPR	California Office of Planning and Research
OSHA	federal Occupational Safety and Health Administration

Parks Master Plan	*Parks, Recreation and Community Services Master Plan*
PCBs	polychlorinated biphenyls
PG&E	Pacific Gas and Electric Company
PGA	peak horizontal ground acceleration
PM	particulate matter
PM_{10}	PM of diameter equal to or less than 10 micrometers
$PM_{2.5}$	PM of diameter equal to or less than 2.5 micrometers
Porter-Cologne Act	Porter-Cologne Water Quality Control Act
ppd	pounds per day
PPV	peak particle velocity
RCEM	Road Construction Emissions Model
RCRA	Resource Conservation and Recovery Act of 1976
RECs	recognized environmental conditions
RFO	Research Flex Overlay
RFS	Renewable Fuel Standard
RHNA	Regional Housing Needs Allocation
RHNP	Regional Housing Needs Plan
RMPP	Risk Management and Prevention Program
ROG	reactive organic gases
ROW	Right-of-Way
RPS	renewable portfolio standard
RTAC	Regional Targets Advisory Committee's
RTP	Research and Technology Park
RWQCB	Regional Water Quality Control Boards
RWTF	Regional Water Treatment Facility
SACOG	Sacramento Area Council of Governments
SAFE	Safer Affordable Fuel-Efficient
SARA	Superfund Amendments and Reauthorization Act
SB	Senate Bill
SB 375	Sustainable Communities and Climate Protection Act of 2008
Scoping Plan	Climate Change Scoping Plan
SCS	Sustainable Communities Strategy
SGMA	Sustainable Groundwater Management Act
SHS	State Highway System
SIP	State Implementation Plan
SLSP	Spring Lake Specific Plan
SMF	Sacramento International Airport
SO_2	sulfur dioxide
SOI	Sphere of Influence
SO_X	oxides of sulfur
SP	Service Population
SP-1	Specific Plan 1
Specific Plan	Woodland Research & Technology Park Specific Plan
SR	State Route

SRAs	State Responsibility Areas
SVP	Society of Vertebrate Paleontology
SWAT	special weapons and tactics
SWMP	Storm Water Management Program
SWPPP	Stormwater Pollution Prevention Plans
SWRCB	State Water Resources Control Board
TACs	toxic air contaminants
TDM	Transportation Demand Management
Technical Advisory	*Technical Advisory: Strategies to Reduce Air Pollution Exposure Near High-Volume Roadways*
TMDLs	Total Maximum Daily Loads
tpd	tons per day
tpy	tons per year
TRUs	transportation refrigeration units
U.S.C.	United States Code
UC Davis	University of California, Davis
UCMP	University of California, Berkeley Museum of Paleontology
UFMP	Urban Forest Master Plan
ULL	Urban Limit Line
USACE	U.S. Army Corps of Engineers
USFS	U.S. Forest Service
USFWS	U.S. Fish and Wildlife Service
UWMP	Urban Water Management Plan
VCE	Valley Clean Energy
VCMU	Village Center Mixed Use
VELB	Valley Elderberry Longhorn Beetle
VMT	vehicle miles traveled
WDCWA	Woodland-Davis Clean Water Agency's
WDRs	Waste Discharge Requirements
WJUSD	Woodland Joint Unified School District
WPCF	Water Pollution Control Facility
WRTP	Woodland Research & Technology Park Specific Plan
XI	one-half of external-internal
YCTD	Yolo County Transportation District
Yolo HCP/NCCP	Yolo Habitat Conservation Plan/Natural Community Conservation Plan
Yolobus	Yolo County Transportation District public transit service
YSAQMD	Yolo-Solano Air Quality Management District
$\mu g/m^3$	micrograms per cubic meter

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0 EXECUTIVE SUMMARY

0.1 INTRODUCTION

This summary provides an overview of the Environmental Impact Report (EIR) for the Draft *Woodland Research and Technology Park Specific Plan* (referred to as the "WRTP Specific Plan").

The WRTP Specific Plan is summarized here (with more detail in Chapter 2 of this EIR, "Project Description"), along with alternatives to the Proposed Project, which are described in detail in Chapter 4 of this EIR, "Alternatives." Table ES-1, at the end of this section, summarizes the environmental impacts identified for the WRTP Specific Plan in each of the environmental issue sections of this EIR. These impacts are described in detail throughout Chapter 3 of this EIR, "Environmental Impact Analysis." The summary table at the end of this Chapter outlines environmental impacts, the significance without mitigation, proposed mitigation measure(s), and the significance of the impact with implementation of identified mitigation measures.

0.2 PURPOSE AND INTENDED USE OF THE EIR

0.2.1 PURPOSE

The California Environmental Quality Act Guidelines (CEQA Guidelines) charge public agencies with the responsibility of avoiding or minimizing environmental damage that could result from implementation of a project, where feasible. As part of this responsibility, public agencies are required to balance various public objectives, including economic, environmental, and social issues.

The purpose of an EIR is neither to recommend approval nor denial of a project but rather to provide substantial evidence to support such a decision. An EIR is an informational document used in the planning and decision-making process by the lead agency and responsible and trustee agencies. An EIR describes the significant environmental impacts of a project, identifies potentially feasible measures to mitigate significant impacts, and describes potentially feasible alternatives to the project that can reduce or avoid significant environmental effects. CEQA requires decision-makers to balance the benefits of a project against its unavoidable environmental effects in deciding whether to carry out a project.

The lead agency is the public agency with primary responsibility over the proposed project. In accordance with CEQA Guidelines Section 15051(b)(1), "[t]he lead agency will normally be the agency with general governmental powers, such as a city or county, rather than an agency with a single or limited purpose." The City of Woodland (City), as the lead agency, has prepared this EIR to evaluate the environmental impacts of implementation of the WRTP Specific Plan. The EIR was prepared under the direction of the City and is provided for review by both the public and public agencies, as required by CEQA. The City Council must certify the Final EIR before adopting the final WRTP Specific Plan.

The 2035 General Plan and CAP EIR addresses impacts of development of the City's Planning Area, including the WRTP Specific Plan Area. Consistent with Section 15183(b) of the CEQA Guidelines, the analysis contained within this EIR focuses on project-specific significant effects of the WRTP Specific Plan that: a) are peculiar to the WRTP Specific Plan or the site; b) were not addressed in the 2035 General Plan and CAP EIR (including off-site or cumulative impacts); or c) would be more severe than previously described based on substantial new

information. Pursuant to CEQA Guidelines Section 15150, relevant information from the 2035 General Plan and CAP EIR (State Clearinghouse Number 2013032015) has been incorporated by reference into this EIR, and should be considered as part of the information upon which the proposed WRTP Specific Plan EIR is based. The 2035 General Plan, Climate Action Plan, and 2035 General Plan and CAP EIR are available for public review on the City of Woodland Planning Division website at: https://www.cityofwoodland.org/1000/Documents, or in person at the City's Community Development Department at 300 First Street, Woodland, CA 95695.

If significant environmental effects are identified, the lead agency must adopt "findings" indicating whether feasible mitigation measures or alternatives exist that can avoid or reduce those effects. If the significant environmental impacts are identified as significant and unavoidable, the lead agency may still approve the project if it determines that social, economic, legal, technological, or other factors override the unavoidable impacts. The lead agency would then be required to prepare a "Statement of Overriding Considerations" that discusses the specific reasons for approving the project, based on information in the EIR and other information in the record.

In making its decision about the WRTP Specific Plan, the City considers the information in this EIR, comments received on the EIR, and responses to those comments, along with other available information and technical analysis.

0.2.2 INTENDED FUTURE USE

One of the City's goals in preparing the WRTP Specific Plan and EIR is to minimize the amount of new information that would be required to approve future projects that are consistent with the WRTP Specific Plan. Accordingly, the WRTP Specific Plan and this EIR anticipate the effects of subsequent projects proposed within the WRTP Specific Plan Area, as well as off-site infrastructure required to serve future development within the WRTP Specific Plan Area. The City will make full use of existing streamlining provided by CEQA, and will make use of streamlining techniques, as appropriate. Future projects that are consistent with the WRTP Specific Plan would either require no further environmental analysis or only focused, supplemental environmental analysis pursuant to CEQA and the CEQA Guidelines. The City will examine projects proposed under the WRTP Specific Plan to determine whether or not additional CEQA analysis will be necessary.

0.3 EIR SCOPE AND CONTENT

This EIR was prepared in compliance with CEQA (Public Resources Code Section 21000 *et seq.*) and the CEQA Guidelines (California Code of Regulations Section 15000 *et seq.*). This EIR evaluates the environmental impacts that could result from implementation of the WRTP Specific Plan.

The geographic scope that could be affected by a proposed project varies depending on the issue topic. The geographic area associated with different environmental effects was used to define the area considered for impact analysis. The geographic scope for air pollutant impact analysis, such as those related to emissions of ozone precursors, is very broad, encompassing large areas within the same air basin. The geographic scope for stationary source noise impacts, on the other end of the spectrum, is relatively narrow, since noise attenuates substantially with distance, making impacts more localized. The environmental impact analysis throughout this EIR describes the environmental impacts of implementing the WRTP Specific Plan throughout the WRTP Specific Plan Area as well as, where relevant and as defined, a wider geographical context.

This EIR analyzes impacts of the WRTP Specific Plan relative to current conditions. In accordance with Section 15125 of the CEQA Guidelines, and unless otherwise noted, the discussion of the physical environment describes existing conditions within the WRTP Specific Plan Area at the time the Notice of Preparation (NOP) was published.

Environmental review in compliance with CEQA (Public Resources Code Sections 21000 et seq.) is required as part of the City's consideration of the WRTP Specific Plan. This EIR has been prepared in accordance with CEQA, including the CEQA statutes (Public Resources Code Sections 21000 *et seq*.), CEQA Guidelines (California Code of Regulations, Title 14, Sections 15000 *et seq*.), and relevant court decisions. This EIR includes an evaluation of all required environmental topic areas, as well as other CEQA-mandated sections, as presented below:

- 0 Executive Summary
- 1 Introduction
- 2 Project Description
- 3 Environmental Impact Analysis
  - 3.1 Aesthetics and Visual Resources
  - 3.2 Agriculture and Forestry Resources
  - 3.3 Air Quality
  - 3.4 Biological Resources
  - 3.5 Climate Change, Greenhouse Gas Emissions, and Energy
  - 3.6 Cultural and Tribal Cultural Resources
  - 3.7 Geology, Soils, Minerals, and Paleontological Resources
  - 3.8 Hazards and Hazardous Materials
  - 3.9 Hydrology, Flooding, and Water Quality
  - 3.10 Land Use Planning, Population, and Housing
  - 3.11 Noise and Vibration
  - 3.12 Public Services and Recreation
  - 3.13 Transportation and Circulation
  - 3.14 Utilities
- 4 Alternatives
- 5 Other CEQA Considerations
- 6 References
- 7 List of Preparers

Cumulative impacts are discussed within the resource-specific topic areas of each sub-section of Chapter 3. Chapter 4 of this EIR, "Alternatives," includes an analysis of a range of reasonable alternatives to the proposed WRTP Specific Plan, as required by Section 15126.6 of the CEQA Guidelines. As described in more detail below, Chapter 4 analyzes the environmental impacts of the alternatives presented and compares them to the environmental impacts of the proposed WRTP Specific Plan.

Other CEQA-mandated issues discussed within the context of this EIR are growth-inducing impacts, irreversible environmental effects, and significant and unavoidable adverse impacts (Chapter 5 of this EIR, "Other CEQA Considerations"). Chapter 6 of this EIR, "References," identifies the references and citations used in drafting the EIR, and Chapter 7 of this EIR, "List of Preparers," lists the preparers of the EIR.

0.4 RELATIONSHIP WITH THE GENERAL PLAN

The City's General Plan requires that substantial new residential development on "greenfield" or previously undeveloped land be planned through the specific plan process, as has been done in the past with Spring Lake, the Southeast area, and others. Addressed in Government Code Section 65450, a specific plan is a comprehensive planning and zoning document for a defined geographic region. It implements the general plan by providing a special set of development policies and standards that are applied to the specific plan area, and by specifying zoning, needed infrastructure, and an infrastructure financing plan to facilitate implementation.

Per the City of Woodland 2035 General Plan, adopted May 16, 2017,[1] Woodland has designated three new growth areas for future specific plan development: SP-1 in the south, SP-2 in the east, and SP-3 in the north. SP-1 is further separated into three sub-areas. SP-1A, which is the area covered by the WRTP Specific Plan, encompasses approximately 350 acres and is located on the eastern portion of SP-1 between State Route (SR) 113 and the Spring Lake Specific Plan Area. SP-1B is located between East Street and SR 113, covering 248 acres. SP-1C is the smallest of the three at 151 acres and is located west of East Street.

Referred to as "SP-1A" in the General Plan, the City "envisions the [WRTP] Specific Plan Area to develop as a mixed-use neighborhood anchored by a research and technology business park in the 'Southern Gateway' [to the city] located at CR 25A and SR 113" (City of Woodland 2017, page LU 2-55). According to direction in the 2035 General Plan, for SP-1A (the WRTP Specific Plan Area):

> "The highest intensity of development will occur within the business park area, providing a prime opportunity for job creation within Woodland. The remainder of SP-1A will be largely residential with some open space and recreation areas."

As directed by the General Plan (Policy 2.L.2, page LU 2-77), the City will:

> Promote development of SP-1A as a mixed-use residential district anchored by a research and technology business park in the Southern Gateway area at CR 25 and SR 113. Concentrate the highest intensity of development within and in close proximity to the business park area, with lower-density, largely residential uses to the north. Encourage sustainable development through the use of renewable energy sources and water conservation tools with the goal of striving to achieve zero net energy at the building and neighborhood level to the extent feasible.

Appendix B to the General Plan identifies assumed growth of 2.16 million square feet of nonresidential building space and 1,600 housing units will be developed within the WRTP Specific Plan (SP-1A) Area (City of Woodland 2017, Table B-1, page B-2). These assumptions serve to inform related planning efforts and the analysis of environmental impact of the General Plan – these assumptions were not adopted as a part of the 2035 General Plan. The City Council will consider consistency of the WRTP Specific Plan with the 2035 General Plan as a part of its actions on the WRTP Specific Plan.

[1] The City's 1996 General Plan (amended in 2002) also included 316 acres of the WRTP Specific Plan Area in City's Planning Area and Urban Limit Line (ULL).

0.5 WRTP SPECIFIC PLAN PURPOSE AND OBJECTIVES

An early step in the WRTP Specific Plan process was the development of a vision for the future and guiding principles to inform the method to achieve that vision. The vision statement is an aspirational description of what the WRTP Specific Plan would be like in the future. Guiding principles are shared values that will be used to develop the WRTP Specific Plan that would, once implemented, achieve the vision. The vision statement and guiding principles are outlined below. The guiding principles serve as the Project Objectives for this EIR.

The WRTP Specific Plan is envisioned as a new technology hub for the City of Woodland, intended to serve an array of research and technology companies interested in locating and growing near U.C. Davis, and other research and technology institutions within the Sacramento region. The WRTP Specific Plan will offer a unique business environment, supporting research and development, technology, and science and engineering-based companies. The WRTP Specific Plan is proposed as a new type of employment center that also includes a range of housing options, and a commercial mixed-use town center focused around a central green and connected by a multi-modal street network and trail system. Although the City anticipates that agricultural-related research will be a major focus at the WRTP Specific Plan, the plan will also support an environment of innovation in flexible formats for a wide variety of businesses in medical and veterinary, bio-tech, engineering, and other fields. The WRTP Specific Plan will also provide incubation spaces for small start-up firms, facilities for established mid-size or large-size companies that require larger floorplates, flexible building spaces for high-tech research, and light manufacturing/flex space for product testing and development. Employee-support services and retail will create an active landscape for collaboration and innovation.

The following principles provide the envisioned outcome and overarching vision for development within the WRTP Specific Plan Area:

- **Innovation** – The Specific Plan Area will develop as a state-of-the-art innovation center campus for technology, research and development, and office uses. Flexibility in design and implementation is supported, allowing businesses to respond to market demand through phasing of construction and the ability to offer a variety of building types and sizes. Complementary uses within immediate proximity to the business park, including hotel, commercial, employee-serving retail and recreational opportunities will support day-to-day needs of businesses, their clients, and their employees.

- **Technology Capture / Talent Retention** – Collaboration with University of California, Davis (UC Davis), Woodland Community College and others will bolster start-up businesses and growing mid-to-large size companies through technology transfer and IP sourcing. The Specific Plan will accommodate advanced technology-related jobs and training that allow a greater number of Woodland residents and college graduates from the Woodland Community College and throughout the region to live and work in the community, generating an infusion of intellectual capital.

- **Business Partnerships** – Companies locating in the Tech Campus will have the opportunity to take positive advantage of the existing and thriving seed, food, and agricultural-based industries currently located and doing business in and around Woodland. Access to additional resources and new markets, new ideas, materials, and expertise will grow through strategic partnerships with new and existing businesses in Woodland.

- **Sustainable and Resilient** – The Specific Plan Area will lead in energy efficiency and sustainable design. Development within the Specific Plan Area will incorporate cutting edge green building practices. Land use strategies and transportation demand management will reduce vehicle miles traveled and facilitate the use of alternative fuel vehicles. The city's urban forest canopy will be increased and projects will incorporate naturalized stormwater management. These and other measures will contribute to meeting City goals for greenhouse gas reduction by 2035 contained in its 2035 Climate Action Plan.

- **Gathering Place** – A successful Village Center and featured 11-acre linear park will provide a mix of social gathering spaces for employees, residents, and visitors to connect, recreate, and relax. These informal networking opportunities will foster greater innovation and engagement among the workforce and allow for the balanced integration of work and life that the next generation of professionals seek.

- **Connectivity / Mobility** – A combination of well-designed complete streets, protected bicycle lanes, and pedestrian / bicycle greenways will prioritize the pedestrian experience throughout the Specific Plan Area. Well-connected parks, open spaces and greenbelts will encourage residents and employees to walk, bike, or scooter rather than drive to work, home, and play. Existing bike trails and greenbelts will extend from and connect to the adjacent community including nearby schools, community center and shopping center. A shared mobility hub will serve as a point of connection for those arriving and departing the Tech Campus by various forms of alternative transportation – including micro transit stops and fixed bus routes with frequent service to Downtown Woodland and UC Davis. Amenities to support last mile active transportation alternatives are featured, including bike and scooter share services.

- **Healthy Community** – Connected streets with bicycle and pedestrian facilities, trails, accessible parks, and open spaces with passive and programmed recreation will facilitate and encourage active, healthy living. Access to healthy foods through community gardens, a farmer's market and/or fresh produce market in the Village Center will be promoted. A mix of social gathering places will enable employees and residents to come together for fun and relaxation, boosting emotional wellness.

- **New Neighborhoods / Seamless Transitions** – Diverse, high quality, and attractive new neighborhoods and housing options, including single- and multi-family residential units and mixed-used projects will allow Tech Park employees to live and work close by and "move up" within the same neighborhood as families grow or nests are emptied. Land use and circulation planning, coupled with design and development standards will ensure a thoughtful transition between the Specific Plan Area and the adjacent Spring Lake neighborhood, complementing the established community.

0.6 SUMMARY OF PROJECT DESCRIPTION

The WRTP Specific Plan is the overarching policy and planning document for the City's designated new growth area for future specific plan development, SP-1A, as identified in the 2035 General Plan. The WRTP Specific Plan is comprehensive in scope, addressing land use, transportation, community design, housing, conservation of resources, economic development, public facilities and infrastructure, public safety, and open space, among many other subjects.

The Specific Plan chapters include:

- Chapter 1, "Introduction and Vision"
- Chapter 2, "Land Use Framework"
- Chapter 3, "Land Use Regulations, Development Standards & Guidelines"
- Chapter 4, "Circulation and Mobility"
- Chapter 5, "Public Utilities and Services"
- Chapter 6, "Implementation"
- Chapter 7, "Administration"

The WRTP Specific Plan would provide for a variety of housing types and non-residential land uses, as well as parks and open space and supportive public facilities and infrastructure. As described in Section 2.3 of the WRTP Specific Plan, "Land Use Plan," and for the purpose of analysis in this EIR, at build out, the land use plan is estimated result in the development of approximately 1,600 new dwelling units, 2.2 million square feet of non-residential building space, the opportunity for up to 5,000 employees, and 21.8 acres of parks and other types of open space. The total number of dwelling units, the number of units shown for each land use designation, total square footage, and number of employees that could be accommodated are all *assumptions* used for the purposes of informing related planning efforts and the analysis of environmental impact of the WRTP Specific Plan.

In addition to the land use designations and zones, the WRTP Specific Plan delineates the Planning Area into three Planning Districts, each of which have sub-districts. The three Planning Districts are: (1) Technology Park, which contains two sub-districts of North Campus and South Campus, (2) the Village Center, which contains the sub-districts of the Village Center Mixed Use, The Yard, and the Village Center Residential, and (3) the Villages, which contains the sub-districts of the North Villages, East Villages, and Urban Villages. The Planning Districts are used to identify the geographic and form types within the Land Use Plan. The WRTP Specific Plan contains design standards and guidelines that are defined in the WRTP Specific Plan and organized by Planning District, with special character guidelines for selected zones within each District. The design standards are a prescribed set of threshold requirements for development, while the design guidelines are a set of discretionary recommendations for preferred outcomes of development. Together, the design standards and guidelines address the desirable features of the land uses identified in the WRTP Specific Plan within each Planning District, while informing development in ways that reduce environmental impacts and provide economic benefits.

In addition, the WRTP Specific Plan provides for additional parks and recreational facilities, school facilities, open space for conservation and for passive recreational use, open space buffers, drainage areas and non-vehicular trails, public infrastructure, and other improvements.

A multi-modal street network and bike-pedestrian trail system in the WRTP Specific Plan have been designed to balance the circulation and flow of vehicular traffic with the provision of safe and accessible facilities for walking, biking, public transit, and ride share drop-off/pick-up. A modified grid street network provides circulation and access within the WRTP Specific Plan Area, to the Spring Lake Specific Plan Area, and adjacent areas of the city.

While not a part of the WRTP Specific Plan Area, this EIR also addresses potential impacts associated with off-site improvement areas. Off-site improvement areas include a proposed approximately four-acre detention pond (i.e., South Regional Pond) that was not considered as part of the 2035 General Plan and CAP EIR and would be

immediately south of the WRTP Specific Plan Area and adjacent to CR 25A, and the Caltrans Off-site Improvement Area, at which improvements would be made to the SR 113/CR 25A interchange adjacent to the southwest corner of the WRTP Specific Plan Area.

Adoption and implementation of the WRTP Specific Plan will include, but is not limited to the following actions by the City of Woodland:

- Adopt a resolution certifying the Final Environmental Impact Report for the WRTP Specific Plan, adopting Findings of Fact, and adopting a Statement of Overriding Considerations;
- Adopt a resolution adopting the WRTP Specific Plan;
- Approve an amendment to the City's General Plan to reflect the new City limits following annexation of the WRTP Specific Plan Area; and
- Adopt Chapter 3, "Land Use Regulations, Development Standards & Guidelines," of the WRTP Specific Plan by ordinance, as Section 17.58 of the Zoning Ordinance (Chapter 17 of the Woodland Municipal Code).

0.7 PROJECT ALTERNATIVES

As legally required, this EIR considers the no-project scenario that represents the existing conditions, as well as what would reasonably be expected to occur in the foreseeable future if the project were not approved. In this case, this no-project scenario could take two forms: Alternative 1, the "No-Project (No Development) Alternative," as a scenario in which urban development does not occur at all within SP-1A and existing conditions within SP-1A persist; or Alternative 2, the "No-Project (Development) Alternative," a scenario in which development still occurs, consistent with the framework for SP-1A prescribed by the 2035 General Plan and City's planning efforts.

The environmental analysis in this EIR also evaluates two different alternatives, Alternatives 3 and 4, for growth within the WRTP Specific Plan Area, relative to the objectives of the WRTP Specific Plan. These alternatives consider an intensity of development that would still be consistent with the framework for SP-1A prescribed by the 2035 General Plan, but consider whether different layout, mix, and density of land uses, or adjustment to proposed land use designations, would reduce potentially significant impacts. Alternative 3 considers a similar overall amount of development as the proposed WRTP Specific Plan, but would distribute destination land uses within residential areas to facilitate pedestrian and bicycle access for future residents. Alternative 4, would provide an alternative site design, specifically utilizing increased open space to serve as environmental buffers between potential land use conflicts.

For the purposes of this EIR, Alternative 1, the "No-Project (No Development)" Alternative, is environmentally superior. The next most environmentally superior alternative is Alternative 4. Please refer to Chapter 4 of this EIR, "Alternatives," for more detail.

0.8 AREAS OF CONTROVERSY AND ISSUES TO BE RESOLVED

Section 15123(b)(2) and (3) require the EIR summary to address areas of controversy know by the City including issue raised by agencies and the public, and issues to be resolved including the choice among alternatives and whether and how to mitigate significant effects.

Issues raised during the NOP comment period include:

- Agricultural conversion
- Climate change
- Consistency with regional transportation plans
- Development adjacent to agricultural land
- Housing needs
- Increased impervious surfaces
- Multi-modal transit
- Native American consultation
- Noise, land use, and air quality concerns
- Water quality and water availability

All of these issues have been addressed within various sections of this EIR. In addition Chapter 3, "Environmental Impact Analysis," addresses mitigation for significant effects and Chapter 4, "Alternatives," addresses choices to be made by the City among alternatives. Other areas of controversy and/or issues to be resolved may emerge during the course of the public review and decision-making process.

0.8.1 SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Information in Table ES-1, "Summary of Environmental Impacts and Mitigation Measures," has been organized to correspond with the environmental issues discussed in Chapter 3 of this EIR, "Environmental Impact Analysis." This summary table is arranged in four columns: Impacts; Level of Significance before Mitigation; Mitigation Measures; and Level of Significance after Mitigation. For each impact found to be significant and unavoidable, a note is included in the "Impacts" column that explains whether this finding is consistent with that of the 2035 General Plan and CAP EIR.

This EIR also provides an analysis of cumulative impacts of the WRTP Specific Plan, taken together with other past, present, and probable future projects producing related impacts, as required by Section 15130 of the CEQA Guidelines. Cumulative impacts are described in detail within each respective resource section of Chapter 3 of this EIR, and growth-inducing impacts and significant irreversible environmental changes as described in Chapter 5, "Other CEQA Considerations," of this EIR; each of these topics are also summarized below.

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Table ES-1. Summary of Impacts and Mitigation Measures

Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
3.1 Aesthetics and Visual Resources **IMPACT 3.1-1. Substantially Degrade the Existing Visual Character or Quality of the Site and its Surroundings.** Implementation of the WRTP Specific Plan and the off-site South Regional Pond would substantially change the existing visual character from agricultural cropland to a mix of urban land uses and supporting infrastructure. The proposed WRTP Specific Plan and off-site improvement areas would be visually incompatible with surrounding agricultural land to the west, south, and southeast. Consistent with the findings of the 2035 General Plan and CAP EIR, this impact is considered significant.	S	None available.	SU
IMPACT 3.1-2. Create a New Source of Substantial Light or Glare Which Would Adversely Affect Day or Nighttime Views in the Area. The WRTP Specific Plan would require nighttime lighting of new streets and buildings for security purposes near existing and proposed sensitive receptors, which could cause increased light and glare that could adversely affect day or nighttime views in the area effects. Consistent with the findings of the 2035 General Plan and CAP EIR, this impact would be significant.	S	None available.	SU
3.2 Agriculture and Forestry Resources **IMPACT 3.2-1. Loss of Important Farmland and Conversion of Agricultural Land to Nonagricultural Urban Uses.** Implementation of the WRTP Specific Plan and off-site improvements would result in the permanent conversion agricultural land, including Important Farmland, to urban uses. Consistent with the findings of the 2035 General Plan and CAP EIR, this impact is considered significant.	S	None available.	SU
IMPACT 3.2-2. Conflict with Existing Zoning for Agricultural Use. Implementation of the WRTP Specific Plan would occur on land currently zoned for agricultural use in unincorporated Yolo County. Conflicts with the Yolo County General Plan are addressed through the City's review and processing of the WRTP Specific Plan, which includes prezoning and annexation. There are no adverse physical environmental impacts related to Yolo County policies or standards that are not comprehensively considered throughout the other sections of this EIR. This impact is considered less than significant.	LTS	No mitigation is required.	LTS
IMPACT 3.2-3. Conflict with Existing On-Site and Off-Site Agricultural Operations. Implementation of the WRTP Specific Plan would locate residential land uses adjacent to existing on-site and off-site agricultural lands, resulting in potential conflicts with adjacent agricultural operations. Consistent with the findings of the 2035 General Plan and CAP EIR, this impact is considered significant.	S	None available.	SU
3.3 Air Quality **IMPACT 3.3-1. Conflict with or Obstruct Implementation of the Applicable Air Quality Plan.** YSAQMD and other air districts in the SVAB developed air quality plans to enable the region to achieve attainment of the NAAQS and CAAQS for ozone and PM. These air quality plans are based on an inventory of existing emission sources, as well as projections about the future level of land use development in the SVAB. Because the levels of growth associated with the construction and operation of future land uses anticipated under the WRTP Specific Plan were not accounted for in these projections of emissions-generating activity, and emissions could exceed the YSAQMD quantitative thresholds for short-term and long-term emissions, the WRTP Specific Plan could conflict with or obstruct the applicable air quality plan. Consistent with the findings of the 2035 General Plan and CAP EIR, the impact is considered significant.	S	**Mitigation Measure 3.3-1a – Implement Mitigation Measures 3.3-2a through 3.3-2d**	SU
IMPACT 3.3-2. Result in a Cumulatively Considerable Net Increase of Criteria Air Pollutant and Precursor Emissions. Construction associated with future development of the WRTP Specific Plan Area and off-site improvement areas would generate emissions of criteria air pollutants that could violate an ambient air quality standard or contribute substantially to an existing or predicted air quality violation through incremental emissions of PM and ozone precursors (ROG and NO_X). Future development in the WRTP Specific Plan Area would also result in long-term emissions generated from day-to-day operational activities associated with residential and non-residential land uses. Operational emissions are anticipated to exceed YSAQMD thresholds of significance for ozone precursors, ROG, and NO_X. YSAQMD recommends that all incremental emission sources be mitigated to the greatest extent possible in order to achieve and maintain ambient air quality standards. YSAQMD provides recommended construction mitigation measures for lead agencies to incorporate, to the extent feasible. WRTP Specific Plan consistency with 2035 General Plan and CAP policies would reduce potentially significant impacts, but not to a level that would be below relevant thresholds. Consistent with the findings of the 2035 General Plan and CAP EIR, the impact is considered significant.	S	**Mitigation Measure 3.3-2a – Implement Construction Best Management Practices.** New development shall incorporate the following construction best management practices, those included in an updated set of mitigation recommendations prepared by the YSAQMD, or those determined by the City to be as effective: a. Water all active construction areas at least twice daily. b. Haul trucks shall maintain at least two feet of freeboard. c. Cover all trucks hauling soil, sand, and other loose materials. d. Apply non-toxic binders (e.g., latex acrylic copolymer) to exposed areas after cut-and-fill operations and hydroseed area. e. Apply chemical soil stabilizers on inactive construction areas (disturbed lands within construction projects that are unused for at least four consecutive days). f. Plant vegetative ground cover in disturbed areas as soon as possible. g. Cover inactive storage piles.	SU

LTS = less than significant PS = potentially significant S = significant SU = significant and unavoidable

Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
		h. Sweep streets if visible soil material is carried out from the construction site. i. Treat accesses to a distance of 100 feet from the paved road with a 6-inch layer of gravel. j. Limit all idling of vehicles and equipment that use gasoline or diesel fuel to five minutes maximum. k. Use alternative power source, such as electricity, for construction equipment or use reformulated and emulsified fuels, incorporate catalyst and filtration technologies, and generally modernize the equipment fleet with cleaner and newer engines. **Mitigation Measure 3.3-2b: Construction-Related Mobile Emissions Reductions for NO_X and PM_{10} Emissions.** Construction contractors shall adhere to the following requirements: a. Maintain all construction equipment properly according to manufacturer's specifications. b. Fuel all off-road and portable diesel-powered equipment with CARB-certified motor vehicle diesel fuel (non-taxed version suitable for use off-road). c. Comply with the State On-Road Regulation by using on-road heavy-duty equipment that meet or exceed CARB's Tier 4 standard for on-road heavy-duty diesel engines. **Mitigation Measure 3.3-2c: Require the Use of Ultra-Low VOC (10 g/L or less) Architectural Coatings for Construction-related Application** Construction contractors shall be required to use architectural coatings that are ultra-low VOC (10 g/L or less) in all possible applications. These products are identified by manufacturers as "super-compliant." For construction-related applications, the product manufacturer, product name, product code, and intended use shall be identified on the construction design drawings for approval prior to the issuance of a building permit. **Mitigation Measure 3.3-2d: Ban Wood-burning Stoves and Fireplaces in New Development** Wood burning or pellet stoves and fireplaces shall not be permitted. Natural gas or propane fired fireplaces shall be clearly delineated on plans submitted to obtain building permits.	
IMPACT 3.3-3. Expose Sensitive Receptors to Substantial Pollutant Concentrations. WRTP Specific Plan-related vehicle trips would contribute vehicles to local intersections that could cause a CO hotspot (i.e., exceedance of the CO ambient air quality standard). However, it is not anticipated that the WRTP Specific Plan's land uses would contribute substantial vehicle volumes to existing or future intersections that could cause a CO hotspot. During construction and operation of anticipated land uses within the WRTP Specific Plan Area, localized emissions of Toxic Air Contaminants would be generated that could affect existing and proposed sensitive receptors. Existing regulations and policies and implementation programs would reduce potential exposure to substantial pollutant concentrations. This impact is potentially significant.	PS	**Mitigation Measure 3.3-3a: Implement Mitigation Measure 3.3-2b - Construction-Related Mobile Emissions Reductions for NOX and PM_{10} emissions.** **Mitigation Measure 3.3-3b: Implement Guidelines in the California Air Resources Board's Air Quality and Land Use Handbook: A Community Health Perspective, and subsequent Technical Advisory.** New development that would result in substantial TAC emissions directly or indirectly (e.g., industrial sources) or that would expose sensitive receptors to substantial TAC concentrations (e.g., residential land uses located near existing TAC sources) shall implement CARB's Air Quality and Land Use Handbook: A Community Health Perspective (Handbook) guidance concerning land use compatibility with regard to sources of TAC emissions, or CARB guidance as it may be updated in the future. **Mitigation Measure 3.3-3c: Conduct Project-Level Analysis and Implement Mitigation for Sources of TACs.** For projects with the potential to generate substantial TAC emissions or expose sensitive receptors to substantial TAC pollutant concentrations, the City will require a site-specific analysis for construction and/or operational activities, and appropriate mitigation, as necessary, to ensure that sensitive receptors are not exposed to substantial pollutant concentrations. In communication with the YSAQMD, the City will require, if necessary, a site-specific analysis for operational activities to determine whether health risks attributable to future proposed projects in relation to proposed, planned, and/or existing sensitive receptors would exceed applicable thresholds of significance. Site-specific analysis may include screen level analysis, dispersion modeling, and/or a health risk assessment, consistent with applicable guidance from the YSAQMD. Analyses shall take into account regulatory requirements for proposed uses. The City will require the project applicant(s) to identify and implement feasible mitigation measures to reduce any potentially significant effect and communicate with the YSAQMD to identify measures to reduce exposure of sensitive receptors to substantial pollutant concentrations to levels consistent with thresholds recommended by the YSAQMD applicable at the time the project is proposed. If the YSAQMD does not have applicable thresholds at the time of this analysis, the thresholds will be a probability of contracting cancer for the Maximally Exposed Individual equal to 10.0 in a million or more attributable to the project, or a non-cancer risk of 1.0 Hazard Index (chronic or acute) or more attributable to the project. If the project would exceed applicable thresholds recommended by the YSAQMD or the substitute thresholds outlined above, mitigation will be	LTS

LTS = less than significant PS = potentially significant S = significant SU = significant and unavoidable

Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
		required to reduce the impact to a less-than-significant level. Agreed upon feasible mitigation actions shall be documented as a project condition of approval. If the results of analysis for the operational activities of any future development project within the WRTP Specific Plan Area determine that the performance standard for this mitigation would be exceeded, actions shall be taken to reduce potential operational impacts which may include, but not necessarily be limited to: • locating air intakes and designing windows to reduce particulate matter exposure by, for example, not allowing windows facing the source to open; • providing electrification hook-ups for TRUs to avoid diesel-fueled TRUs continuing to operate at loading docks during loading and unloading operations; • requiring the TAC-generating activity (e.g., loading docks) be located away from sensitive receptors; • incorporating exhaust emission controls on mobile and/or stationary sources (e.g., filters, oxidizers); • develop and implement a dock management system at the time of occupancy to minimize on-site idling below regulatory limits; • require all on-site user owned and operated trucks with transportation refrigeration units to be capable of plugging into power at loading docks and require plug-in when at the loading dock; • utilize on-site cargo and material handling equipment that is the lowest emitting equipment available at the time of occupancy; • evaluate the potential to electrify a portion of entirety of an on-site user-owned and operated truck fleet; • evaluate the potential to consolidate delivery or haul truck trips to increase the load and decrease vehicle trips; • provide building air filtration units with a Minimum Efficiency Reporting Value (MERV) that is adequate to address adjacent sensitive land uses according to performance standards of this mitigation measure; • ensure adequate distance between existing and planned sensitive receptors and gasoline dispensing facilities, based on the proposed size and design of any gasoline-dispensing facilities; • utilize vegetated buffers between substantial TAC-generating source locations and sensitive receptors. If analysis demonstrates that construction activities associated with development of on-site WRTP Specific Plan land uses or off-site improvement components would exceed the performance standards identified in this mitigation measure, actions shall be taken to reduce potential construction-related impacts which may include, but not necessarily be limited to: • installing diesel particulate filters or implementing other CARB-verified diesel emission control strategies on all construction equipment to reduce diesel PM emissions; • using equipment during time when receptors are not present (e.g., when school is not in session or during non-school hours, or when office buildings are unoccupied); • establishing staging areas for the construction equipment that are as far as possible from sensitive receptors; • rerouting construction trucks away from congested streets or sensitive receptor areas; • communicating requirements through daily kick-off meetings and signage that off-road diesel equipment operators shut down their engines rather than idle for more than five minutes; • documenting that all off-road equipment is compliant with the CARB in-use off-road diesel vehicle regulation; • establishing an electrical supply to the construction site and use electric-powered equipment instead of diesel-powered equipment or generators, where feasible; • using haul trucks with on-road engines instead of off-road engines; • equipping nearby buildings with High Efficiency Particle Arresting (HEPA) filters systems at all mechanical air intake points to the building to reduce the levels of diesel PM that enter buildings; • planning construction phasing so that future construction activities continue to move further away from occupied land uses; and • planning construction phasing to complete mass site grading, which typically generates the largest portion of diesel PM emissions, prior to occupancy of the project site.	

LTS = less than significant PS = potentially significant S = significant SU = significant and unavoidable

Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
IMPACT 3.3-4. Generation of Other Emissions (Such as Those Leading to Odors) Adversely Affecting a Substantial Number of People. Future development in the WRTP Specific Plan Area could result in short-term odorous emissions from diesel exhaust generated by on-site construction equipment or from asphalt paving and architectural coating activities; this would be temporary and intermittent in nature and dissipate rapidly from the source. Operational activities of future land uses within the WRTP Specific Plan Area could involve odor sources. The WRTP Specific Plan would implement measures that would avoid exposure of a substantial number of people to objectionable odors. This impact is considered potentially significant.	PS	**Mitigation Measure 3.3-4: Reduce Exposure of Sensitive Receptors to Odorous Emissions.** The City of Woodland shall require, as part of plans for development within the WRTP Specific Plan Area, the implementation of strategies to avoid exposure of sensitive receptors to objectionable odors: a. Project applicant(s) for residential development in areas adjacent to ongoing agricultural operations shall include a disclosure clause advising buyers and tenants of the potential adverse odor impacts in the deeds to all residential properties. Residential subdivisions shall provide notification to buyers in writing of odors associated with existing dairies, agricultural burning, and decay of agricultural waste. b. For existing odor-producing sources, sensitive receptors shall be sited as far away as possible from the existing sources. c. For new project-generated odor-producing sources, sensitive receptors shall be sited as far away as possible from the new sources. d. Apply SMAQMD Recommended Odor Screening Distances in the siting of land uses. e. As an alternative to these buffer distances, indoor air filtration systems could be implemented to reduce exposure to odors. For odor-producing sources, activities would be maintained within and enclosed space and appropriate air filtration systems would be implemented to reduce odors expelled from the building. For developments that would host sensitive receptors, design would include air site layout, landscaping, and indoor air filtration systems to minimize exposure to odors.	LTS
<u>3.4 Biological Resources</u> **IMPACT 3.4-1. Impacts on Special-Status Species: Swainson's Hawk, White-tailed Kite, and Burrowing Owl.** WRTP Specific Plan implementation would result in loss of suitable nesting and foraging habitat for Swainson's hawk, white-tailed kite, and burrowing owl. Construction could disturb active nests on or near the construction area, potentially resulting in nest abandonment by the adults and mortality of chicks and eggs. This impact is considered potentially significant.	PS	Mitigation for impacts to nesting common raptors is included under Mitigation Measure 3.4-2a (Avoid Direct Loss of Protected Bird Nests). **Mitigation Measure 3.4-1a: Minimize Take and Adverse Effects on Habitat of Swainson's Hawk and White-Tailed Kite** a. In accordance with AMM 16 of the Yolo HCP/NCCP, the City will require project proponent/s to retain a qualified biologist to conduct species-specific surveys and identify any nesting habitat present within 1,320 feet of the footprint of a proposed project, prior to any ground disturbing activities necessary to implement proposed development and infrastructure projects. Adjacent parcels under different land ownership will be surveyed only if access is granted or if the parcels are visible from authorized areas. b. If a construction project cannot avoid potential nest trees (as determined by the qualified biologist) by 1,320 feet, the City will require project proponent/s to retain a qualified biologist to conduct preconstruction surveys for active nests consistent with guidelines provided by the Swainson's Hawk Technical Advisory Committee (2000), between March 1 and August 30, within 15 days prior to the beginning of the construction activity. The results of the survey will be submitted to the Yolo Habitat Conservancy and CDFW. If active nests are found during preconstruction surveys, a 1,320-foot initial temporary nest disturbance buffer shall be established. If project-related activities within the temporary nest disturbance buffer are determined to be necessary during the nesting season, then the qualified biologist will monitor the nest and will, along with the City, consult with CDFW to determine the best course of action necessary to avoid nest abandonment or take of individuals. Work may be allowed only to proceed within the temporary nest disturbance buffer if Swainson's hawk or white-tailed kite are not exhibiting agitated behavior, such as defensive flights at intruders, getting up from a brooding position, or flying off the nest, and only with the agreement of CDFW. The designated on-site biologist/monitor shall be on-site daily while construction-related activities are taking place within the 1,320-foot buffer and shall have the authority to stop work if raptors are exhibiting agitated behavior. Up to 20 Swainson's hawk nest trees (documented nesting within the last 5 years) may be removed during the permit term, but they must be removed when not occupied by Swainson's hawks. c. For covered activities that involve pruning or removal of a potential Swainson's hawk or white-tailed kite nest tree, the City will require project proponent/s to conduct preconstruction surveys that are consistent with the guidelines provided by the Swainson's Hawk Technical Advisory Committee (2000). If active nests are found during preconstruction surveys, no tree pruning or removal of the nest tree will occur during the period between March 1 and August 30 within 1,320 feet of an active nest, unless a qualified biologist determines that the young have fledged and the nest is no longer active.	LTS

LTS = less than significant PS = potentially significant S = significant SU = significant and unavoidable

Mitigation Measure 3.4-1b: Comply with Yolo HCP/NCCP Requirements for Compensation for Loss of Swainson's Hawk Foraging Habitat

Before any ground-disturbing activities, the City will require project proponent/s to identify and quantify (in acres) Swainson's hawk habitat (as defined in the Yolo County HCP/NCCP Appendix A, Covered Species Accounts [Yolo HCP/NCCP 2018]) in and within 1,320 feet of a project footprint. The City will require project proponent/s to submit the Yolo HCP/NCCP *Application Form* for non-member agency projects and *Member Agency Reporting Form* for member agency projects, as applicable, and will pay applicable fees to the Yolo Habitat Conservancy as specified in the appropriate form.

Mitigation Measure 3.4-1c: Minimize Take and Adverse Effects on Western Burrowing Owl

Suitable habitat for the western burrowing owl is present within the WRTP Specific Plan Area and the Caltrans off-site improvement area. There is no suitable habitat for burrowing owl in the South Regional Pond off-site improvement area. In accordance with AMM18 of the Yolo HCP/NCCP, the City will require project proponent/s to retain a qualified biologist to conduct species-specific surveys within 30-days but no less than 14 days prior to any ground disturbing activities necessary to implement proposed development and infrastructure projects, consistent with Appendix L of the Yolo HCP/NCCP, which follows CDFW guidelines.

If burrowing owls are identified during the species-specific pre-project survey, the City will require project proponent/s to minimize activities that will affect occupied habitat, as follows. Occupied habitat is considered fully avoided if the project footprint does not impinge on a non-disturbance buffer around the suitable burrow. For occupied burrowing owl nest burrows, this non-disturbance buffer could range from 150 to 1,500 feet (Table 4-2 of the Yolo HCP/NCCP, Recommended Restricted Activity Dates and Setback Distances by Level of Disturbance for Burrowing Owls), depending on the time of year and the level of disturbance, based on current guidelines. A copy of this table is provided below in Section 3.4 of this EIR, as Table 3.4-8. .

Table 3.4-8. Recommended Restricted Activity Dates and Setback Distances by Level of Disturbance for Burrowing Owls (Yolo HCP/NCCP 2018)

Time of Year	Low (Feet)	Medium (Feet)	High (Feet)
April 1 – April 15	600	1,500	1,500
August 16 – October 15	600	600	1,500
October 16 – March 31	150	300	1,500

Source: Yolo Habitat Conservancy 2018

The Yolo HCP/NCCP generally defines low, medium, and high levels of disturbances of burrowing owls as follows.

- Low: Typically 71-80 dB, generally characterized by the presence of passenger vehicles, small gas-powered engines (e.g., lawn mowers, small chain saws, portable generators), and high tension power lines. Includes electric hand tools (except circular saws, impact wrenches and similar). Management and enhancement activities would typically fall under this category. Human activity in the immediate vicinity of burrowing owls would also constitute a low level of disturbance, regardless of the noise levels.
- Moderate: Typically 81-90 dB, and would include medium- and large-sized construction equipment, such as backhoes, front end loaders, large pumps and generators, road graders, dozers, dump trucks, drill rigs, and other moderate to large diesel engines. Also includes power saws, large chainsaws, pneumatic drills and impact wrenches, and large gasoline-powered tools. Construction activities would normally fall under this category.
- High: Typically 91-100 dB, and is generally characterized by impacting devices, jackhammers, compression ("jake") brakes on large trucks, and trains. This category includes both vibratory and impact pile drivers (smaller steel or wood piles) such as used to install piles and guard rails, and large pneumatic tools such as chipping machines. It may also include large diesel and gasoline engines, especially if in concert with other impacting devices. Felling of large trees (defined as dominant or subdominant trees in mature forests), truck horns, yarding tower whistles, and muffled or underground explosives are also included. Very few covered activities are expected to fall under this category, but some construction activities may result in this level of disturbance.

In accordance with AMM18 of the Yolo HCP/NCCP, the project proponent may qualify for a reduced buffer size, based on existing vegetation, human development, and land use, if agreed upon by CDFW and USFWS (Yolo Habitat Conservancy 2018).

LTS = less than significant PS = potentially significant S = significant SU = significant and unavoidable

Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
		If the project does not fully avoid direct and indirect effects on nesting sites (i.e., if the project cannot adhere to the buffers described above), the City will require the project proponent/s to retain a qualified biologist to conduct preconstruction surveys and document the presence or absence of western burrowing owls that could be affected by the covered activity. Prior to any ground disturbance related to covered activities, the qualified biologist will conduct the preconstruction surveys within three days prior to ground disturbance in areas identified in the planning-level surveys carried out in preparation of this EIR as having suitable burrowing owl burrows, consistent with CDFW preconstruction survey guidelines (Appendix L of the Yolo HCP/NCCP, *Take Avoidance Surveys*) (Yolo Habitat Conservancy 2018). The qualified biologist will conduct the preconstruction surveys three days prior to ground disturbance. Time lapses between ground disturbing activities will trigger subsequent surveys prior to ground disturbance. If the biologist finds the site to be occupied by western burrowing owls during the breeding season (February 1 to August 31), the City will require project proponent/s to avoid all nest sites, based on the buffer distances described above, during the remainder of the breeding season or while the nest is occupied by adults or young (occupation includes individuals or family groups that forage on or near the site following fledging; occupancy of burrowing owl habitat during preconstruction surveys is confirmed at a site when at least one burrowing owl or sign (fresh whitewash, fresh pellets, feathers, or nest ornamentation) is observed at or near a burrow entrance). Construction may occur inside of the disturbance buffer during the breeding season if the nest is not disturbed and the project proponent develops an AMM plan that is approved by the Conservancy, CDFW, and USFWS prior to project construction, based on the following criteria: • The Conservancy, CDFW, and USFWS approves the AMM plan provided by the project proponent. • A qualified biologist monitors the owls for at least three days prior to construction to determine baseline nesting and foraging behavior (i.e., behavior without construction). • The same qualified biologist monitors the owls during construction and finds no change in owl nesting and foraging behavior in response to construction activities. • If the qualified biologist identifies a change in owl nesting and foraging behavior as a result of construction activities, the qualified biologist will have the authority to stop all construction-related activities within the non-disturbance buffers described above. The qualified biologist will report this information to the Conservancy, CDFW, and USFWS within 24 hours, and the Conservancy will require that these activities immediately cease within the non-disturbance buffer. Construction cannot resume within the buffer until the adults and juveniles from the occupied burrows have moved out of the project site, and the Conservancy, CDFW, and USFWS agree. If monitoring indicates that the nest is abandoned prior to the end of nesting season and the burrow is no longer in use by owls, the project proponent may remove the nondisturbance buffer, only with concurrence from CDFW and USFWS. If the burrow cannot be avoided by construction activity, the biologist will excavate and collapse the burrow in accordance with CDFW's 2012 guidelines to prevent reoccupation after receiving approval from the wildlife agencies. If evidence of western burrowing owl is detected outside the breeding season (December 1 to January 31), the City will require the project proponent/s to establish a non-disturbance buffer around occupied burrows, consistent with Table 4-2 of the Yolo HCP/NCCP (Yolo Habitat Conservancy 2018), as determined by a qualified biologist. Construction activities within the disturbance buffer are allowed if the following criteria are met to prevent owls from abandoning important overwintering sites: A qualified biologist monitors the owls for at least three days prior to construction to determine baseline foraging behavior (i.e., behavior without construction). The same qualified biologist monitors the owls during construction and finds no change in owl foraging behavior in response to construction activities. • If there is any change in owl roosting and foraging behavior as a result of construction activities, these activities will cease within the buffer. If the owls are gone for at least one week, the project proponent may request approval from the Conservancy, CDFW, and USFWS for a qualified biologist to excavate and collapse usable burrows to prevent owls from reoccupying the site if the burrow cannot be avoided by construction activities. The qualified biologist will install one-way doors for a 48-hour period prior to collapsing any potentially occupied burrows. After all usable burrows are excavated, the buffer will be removed and construction may continue.	

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Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
		Monitoring must continue as described above for the nonbreeding season as long as the burrow remains active. A qualified biologist will monitor the site, consistent with the requirements described above, to ensure that buffers are enforced and owls are not disturbed. If burrowing owls are detected during the nonbreeding season, instead of establishing buffers and monitoring for behavior, the qualified biologist in consultation with the Conservancy may determine that passive relocation (i.e., exclusion) of owls is necessary, in which case the project proponent will develop a burrowing owl exclusion plan in consultation with CDFW biologists. Exclusion and burrow closure will not be conducted during the breeding season for any occupied burrow. The methods will be designed, as described in the species monitoring guidelines (California Department of Fish and Game 2012) and consistent with the most up-to-date checklist of passive relocation techniques maintained by the Yolo Habitat Conservancy. This may include the installation of one-way doors in burrow entrances by a qualified biologist during the nonbreeding season. These doors will be in place for 48 hours and monitored twice daily to ensure that the owls have left the burrow, after which time the biologist will collapse the burrow to prevent reoccupation. Burrows will be excavated using hand tools. During excavation, an escape route will be maintained at all times. This may include inserting an artificial structure, such as piping, into the burrow to prevent collapsing until the entire burrow can be excavated and it can be determined that no owls are trapped inside the burrow. The Yolo Habitat Conservancy may allow other methods of passive or active relocation, based on best available science, if approved by the wildlife agencies. Artificial burrows will be constructed prior to exclusion and will be created less than 300 feet from the existing burrows on lands that are protected as part of the reserve system.	
IMPACT 3.4-2. Impacts on Special-Status Species: Special-status and Migratory Nesting Birds and Raptors. WRTP Specific Plan implementation would result in potential loss of wintering habitat for mountain plover and loss of potential foraging habitat for tricolored blackbird and loss of potential nesting and foraging habitat for common migratory birds and raptors. Construction could disturb active nests on or near the construction area, potentially resulting in nest abandonment by the adults and mortality of chicks and eggs. This impact is considered potentially significant.	PS	**Mitigation Measure 3.4-2a: Avoid Direct Loss of Protected Bird Nests** While not required as mitigation for a significant impact under CEQA, the following would be required for compliance with the MBTA and California Fish and Game Code: • To the extent feasible, the City will require that construction activities be carried out during the nonbreeding season (between September 1 and January 31) for protected bird species in this region to avoid and minimize impacts to common migratory nesting birds. • For any ground disturbance activity necessary to implement proposed development and infrastructure projects that would occur during the nesting season (between February 1 and August 31), the City will require the project applicant to conduct a preconstruction survey. The preconstruction survey shall be conducted by a qualified biologist before any activity occurring within 500 feet of suitable nesting habitat for any protected bird species. The survey shall be timed to maximize the potential to detect nesting birds, and should be repeated within 10 days of the start of project-related activity. • If an active common bird species protected by the Migratory Bird Treaty Act or California Fish and Game Code nest is found, the qualified biologist shall establish a buffer around the nest. No project activity shall commence within the buffer area until a qualified biologist confirms that the nest is no longer active. The size of the buffer shall be determined in consultation with CDFW. Buffer size is anticipated to range from 50 to 500 feet, depending on the nature of the project activity, the extent of existing disturbance in the area, and other relevant circumstances as determined by a qualified biologist in consultation with CDFW. • Monitoring of all protected nests by a qualified biologist during construction activities will be required if the activity has potential to adversely affect the nest. If construction activities cause the nesting bird to vocalize, make defensive flights at intruders, get up from a brooding position, or fly off the nest, then the no-disturbance buffer shall be increased until the agitated behavior ceases. The exclusionary buffer will remain in place until the chicks have fledged or as otherwise determined by a qualified biologist. **Mitigation Measure 3.4-2b: Implement Mitigation Measure 3.4-1b**	LTS
IMPACT 3.4-3. Impacts on Special-Status Species: Loss of Valley Elderberry Longhorn Beetle (VELB) Larvae and Habitat. WRTP Specific Plan implementation could result in the loss of elderberry found in the WRTP Specific Plan Area. The elderberry shrub is potential habitat for valley elderberry longhorn beetle and removal of the shrub could result in direct loss of VELB larvae and habitat. This impact is considered potentially significant.	PS	**Mitigation Measure 3.4-3: Minimize Take and Adverse Effects on Habitat of Valley Elderberry Longhorn Beetle** • In accordance with AMM 12 of the Yolo HCP/NCCP, the City will require project proponent/s to retain a qualified biologist who is familiar with valley elderberry longhorn beetle and evidence of its presence (i.e., exit holes in elderberry shrubs) to map all elderberry shrubs in and within 100 feet of a proposed project footprint with stems that are greater than one inch in diameter at ground level during the project design phase. To avoid take of valley elderberry longhorn beetle fully, the City will require project proponent/s to design projects to avoid mapped elderberry shrubs, if feasible. To avoid effects on shrubs, the City will require that project proponent/s maintain a buffer of at least 100 feet from any elderberry shrubs with stems	LTS

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Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
		greater than one inch in diameter at ground level. AMM1 of the Yolo HCP/NCCP, *Establish Buffers*, describes that a lesser buffer may be approved by the Conservancy, USFWS, and CDFW if they determine that the covered species is avoided to an extent that is consistent with the project purpose. • For elderberry shrubs that cannot be avoided with a designated buffer distance as described above, the qualified biologist will quantify the number of stems one inch or greater in diameter to be affected, and the presence or absence of exit holes. The Conservancy will use this information to determine the number of plants or cuttings to plant on a riparian restoration site to help offset the loss, consistent with Section 6.4.2.4.1 *Valley Elderberry Longhorn Beetle,* of the Yolo HCP/NCCP (Yolo Habitat Conservancy 2018). Additionally, prior to construction, the City will require that the project proponent/s transplant elderberry shrubs identified within the project footprint that cannot be avoided. • Transplantation will only occur if a shrub cannot be avoided and, if indirectly affected, the indirect effects would otherwise result in the death of stems or the entire shrub. If the project proponent/s choose/s, in coordination with a qualified biologist and the City, not to transplant the shrub because the activity would not likely result in death of stems of the shrub, then the qualified biologist will monitor the shrub annually for a five-year monitoring period. The monitoring period may be reduced with concurrence from the wildlife agencies if the latest research and best available information at the time indicates that a shorter monitoring period is warranted. If death of stems at least one inch in diameter occurs within the monitoring period, and the qualified biologist determines that the shrub is sufficiently healthy to transplant, the City will require the project proponent/s to transplant the shrub as described in the following paragraph, in coordination with the qualified biologist. If the shrub dies during the monitoring period, or the qualified biologist determines that the shrub is no longer healthy enough to survive transplanting, then the Conservancy will offset the shrub loss consistent with the preceding paragraph. • The City will require project proponent/s to transplant the shrubs into a location in the HCP/NCCP reserve system that has been approved by the Conservancy. Elderberry shrubs outside the project footprint but within the 100-foot buffer will not be transplanted. Transplanting will follow the following measures: 1. <u>Monitor</u>: A qualified biologist will be on-site for the duration of the transplanting of the elderberry shrubs to ensure the effects on elderberry shrubs are minimized. 2. <u>Timing:</u> The project proponent will transplant elderberry plants when the plants are dormant, approximately November through the first two weeks of February, after they have lost their leaves. Transplanting during the non-growing season will reduce shock to the plant and increase transplantation success. 3. <u>Transplantation procedure</u>: a. Cut the plant back three to six feet from the ground or to 50 percent of its height (whichever is taller) by removing branches and stems above this height. Replant the trunk and stems measuring one inch or greater in diameter. Remove leaves that remain on the plants. **b.** Relocate plant to approved location in the reserve system, and replant as described in Section 6.4.2.4.1, *Valley Elderberry Longhorn Beetle* of the Yolo HCP/NCCP (Yolo Habitat Conservancy 2018).	
IMPACT 3.4-4. Impacts on Special-Status Species: Loss of Bat Roosts, and Special-status Bats. WRTP Specific Plan implementation would allow development that could result in the removal of human-made structures and trees that may support bat roosts. If these structures or trees are used by bats as a day roost, hibernation roost, or maternity colony roost, implementation of the WRTP Specific Plan could result in loss of a roost, or injury and mortality of pallid bat or western red bat. This impact is considered potentially significant.	PS	**Mitigation Measure 3.4-4: Avoid Direct Loss of Bat Roosts and Special-status Bats** For any project activity necessary to implement proposed development and infrastructure projects that would require removal of roost habitat (i.e. trees or structures) and would occur during the maternity season (between May 1 and August 31), the City will require the project applicant to conduct a preconstruction survey for special-status bats. Camera inspection as well as an emergence (exit survey with night optics) and/or acoustic survey shall be conducted in the summer prior to construction/land disturbance, which provides the best opportunity to determine if roosting bats are present. If bats are found during the preconstruction survey(s), then removal of roost habitat will be delayed until the end of maternity season (August 31) or until the young are capable of flights, as determined by a qualified bat biologist and in consultation with CDFW. Any removal of highly suitable roost habitat should be conducted during the shoulder season, September 1 to October 31, to avoid harm to the species. If a highly suitable roost tree or structure is to be removed, trees and/or structures surrounding the roost habitat should be removed first, allowing any bats that may be present time to leave the area. A qualified monitor shall be present during removal of the habitat tree or structure.	LTS

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Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
IMPACT 3.4-5. Impacts on Wetlands: Loss and Degradation of State or Federally Protected Wetlands. Implementing the WRTP Specific Plan could result in conversion of land that currently supports waterways to developed land. These waters may be subject to USACE jurisdiction under the CWA and/or may be considered waters of the state by the Central Valley RWQCB. This impact is considered potentially significant.	PS	**Mitigation Measure 3.4-5: Avoid Loss of and Degradation of Federally Protected Waters** • If the implementation of the WRTP Specific Plan would result in ground disturbance on the agricultural or roadside ditches, the City will require project proponent/s to conduct a delineation of waters of the United States according to U.S. Army Corps of Engineers' methods, and to submit the completed delineation to the U.S. Army Corps of Engineers for jurisdictional determination. • If implementation of the WRTP Specific Plan would result in fill of waters of the United States, the City will require that project proponent/s obtain a Section 404 Clean Water Act permit from the U.S. Army Corps of Engineers and water quality certification from the Regional Water Quality Control Board pursuant to Section 401 of the Clean Water Act. • If implementation of the WRTP Specific Plan involves work in areas containing waters disclaimed by the USACE, the City will require that the applicant obtain a Waste Discharge Requirement permit from the Regional Water Quality Control Board pursuant to the Porter Cologne Act. • The City will require that the applicant obtain all needed permits prior to project implementation, to abide by the conditions of the permits, including all mitigation requirements, and to implement all requirements of the permits in the timeframes required therein.	LTS
IMPACT 3.4-6. Impacts on Migratory Corridors and Nursery Sites: Interference with Wildlife Movement Corridors and Nursery Sites. The WRTP Specific Plan Area and off-site improvement areas are within the Pacific flyway, a major bird migration route. However, buildout of the WRTP Specific Plan would not create a barrier to movement of migratory species or alter the character of existing habitat available to migrating birds such that it would no longer function as a migratory corridor. The WRTP Specific Plan Area and off-site improvement areas do not currently provide an important connection between any areas of natural habitat that would otherwise be isolated. This impact is considered less than significant.	LTS	No mitigation is required.	LTS
IMPACT 3.4-7. Consistency with Local Policies and Ordinances: Conflict with Local Ordinances Protecting Biological Resources. The WRTP Specific Plan would comply with the 2035 General Plan policies and compliance with the City ordinance would reduce potential impacts on protected trees. The impact is considered less than significant.	LTS	No mitigation is required.	LTS
IMPACT 3.4-8. Conflict with an Adopted Habitat Conservation Plan: Conflict with an Adopted Habitat Conservation Plan / Natural Community Conservation Plan. The avoidance, minimization, and mitigation measures in this EIR are consistent with the Yolo HCP/NCCP. This impact is considered less than significant.	LTS	No mitigation is required.	LTS
<u>3.5 Climate Change, Greenhouse Gas Emissions, and Energy</u> **IMPACT 3.5-1. Result in Potentially Significant Environmental Impact Due to Wasteful, Inefficient, or Unnecessary Consumption of Energy Resources during Project Construction or Operations.** Implementation of the WRTP Specific Plan would result in energy consumption for the duration of construction. Following construction of individual land uses, energy could also be consumed in the forms of fossil fuels and electricity for operational phases. Implementation of the WRTP Specific Plan would not generate substantial renewable energy that would reduce reliance on fossil fuels, but it does include several policies that promote energy conservation and savings that would reduce energy demand and associated environmental effects and would not result in an unnecessary or wasteful use of energy. This impact would be less than significant.	LTS	No mitigation is required.	LTS
IMPACT 3.5-2. Conflict with or Obstruct a State or Local Plan for Renewable Energy or Energy Efficiency. Implementation of the WRTP Specific Plan would include buildout of planned land uses that would involve GHG emissions associated with short-term construction and infrastructure improvements, along with long-term operational emissions. WRTP Specific Plan consistency with the City of Woodland 2035 General Plan policies and CAP strategies would help to reduce energy demand and require implementation of land use planning and transportation strategies consistent with State and local plans for renewable energy and energy efficiency. The impact is less than significant.	LTS	No mitigation is required	LTS
<u>3.6 Cultural and Tribal Cultural Resources</u> **IMPACT 3.6-1. Cause a Substantial Adverse Change in the Significance of Archaeological Resources as defined in CEQA Guidelines Section 15064.5.** The WRTP Specific Plan plans for the construction of new buildings and structures. Although there are no previously recorded archaeological resources within the WRTP Specific Plan Area or off-site improvement areas, implementation of the WRTP Specific Plan has the potential to damage or destroy subsurface archaeological resources that may qualify as archaeological resources under CEQA. The significance of such resources could be materially impaired because their ability to convey significance could be destroyed or diminished. Consistent with the findings of the 2035 General Plan and CAP EIR, this impact is considered significant.	S	**Mitigation Measure 3.6-1: Treatment of Unanticipated Archaeological Discoveries** Project applicants for future projects proposed under the WRTP Specific Plan would be required to implement the following procedures during and ground-disturbing activities: a. Prior to ground-disturbing activities necessary to implement proposed development and infrastructure projects, contractors shall receive cultural resource sensitivity training to identify potential archaeological resources and that all work should cease within 150 feet of prehistoric cultural resources that may be discovered during project implementation. b. During ground-disturbing activities necessary to implement proposed development and infrastructure	SU

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Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
		projects, if any prehistoric or historic subsurface resources are discovered, all work within 150 feet of the resources shall be halted and a qualified archaeologist shall be consulted within 24 hours to assess the significance of the find, according to CEQA Guidelines Section 15064.5, and implement, as applicable, CEQA Guidelines Sections 15064.5(d), (e), and (f). • The California Office of Historic preservation utilizes the Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation as found in Code of Federal Regulations, 36 CFR Part 61. The minimum professional qualifications in archeology are a graduate degree in archeology, anthropology, or closely related field plus: 1. At least one year of full-time professional experience or equivalent specialized training in archeological research, administration or management; 2. At least four months of supervised field and analytic experience in general North American archeology; and 3. Demonstrated ability to carry research to completion. In addition to these minimum qualifications, a professional in prehistoric archeology shall have at least one year of full-time professional experience at a supervisory level in the study of archeological resources of the prehistoric period. A professional in historic archeology shall have at least one year of full-time professional experience at a supervisory level in the study of archeological resources of the historic period. c. If any find is determined to be a unique archaeological resource according to CEQA Guidelines Section 15064.5, representatives from the City and the archaeologist shall meet to determine the appropriate avoidance measures or other appropriate mitigation. Cultural resources shall be recorded on appropriate Department of Parks and Recreation forms, and all significant cultural materials recovered shall be, as necessary and at the discretion of the qualified archaeologist and in consultation with the local Native American community if the discovery is prehistoric in age, subject to scientific analysis, professional curation, and documentation according to professional standards. If it is determined that the proposed development or infrastructure project could damage a historical resource or a unique archaeological resource (as defined pursuant to the CEQA Guidelines), mitigation shall be implemented in accordance with Section 21083.2 of the California Public Resources Code and CEQA Guidelines Section 15126.4, with a preference for preservation in place. Work may proceed on other parts of the project site while mitigation for historical resources or unique archaeological resources is being carried out. Preservation in place may be accomplished by planning construction to avoid the resource; incorporating the resource within open space; capping and covering the resource; or deeding the site into a permanent conservation easement. d. If avoidance is not feasible, the qualified archaeologist shall develop and oversee the execution of a treatment plan. The treatment plan shall include, but shall not be limited to, data recovery procedures based on location and type of archaeological resources discovered and a preparation and submittal of report of findings to the Northwest Information Center of the California Historical Resources Information System. Data recovery shall be designed to recover the significant information the archaeological resource is expected to contain, based on the scientific/historical research questions that are applicable to the resource, what data classes the resource is expected to possess, and how the expected data classes would address the applicable resource questions. Data recovery, in general, should be limited to the portions of the historical property that could be adversely affected by project proponents' actions. Destructive data recovery methods shall not be applied to portions of the archaeological resources if nondestructive methods are practical.	
IMPACT 3.6-2. Disturb Human Remains, including those Interred Outside of Formal Cemeteries. The WRTP Specific Plan would result in development and infrastructure improvement projects throughout the WRTP Specific Plan Area and off-site improvement areas that would involve earthmoving activities that could impact human remains. There is the potential for discovery of human remains during construction. This impact is considered potentially significant.	PS	**Mitigation Measure 3.6-2: Treatment of Human Remains** Consistent with Health and Safety Code, Section 7050 through 7052 and Health and Safety Code Section 8010 through 8030, in the event of the accidental discovery or recognition of any human remains in any location other than a dedicated cemetery during construction, the City and contractor/s shall take the following steps: (1) No further excavation or disturbance of the project site or any nearby area reasonably suspected to overlie adjacent human remains will occur until: (A) the coroner of Yolo County has been contacted to determine that no investigation of the cause of death is required, and (B) if the coroner determines the remains to be Native American: 1. the coroner shall contact the Native American Heritage Commission within 24 hours; 2. the Native American Heritage Commission shall identify the person or persons it believes to be the most likely descendant from the deceased Native American; and 3. the most likely descendant may make recommendations to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate	LTS

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Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
		dignity, the human remains and any associated grave goods, as provided in Section 5097.98 of the Public Resources Code; or (2) Where the following conditions occur, the landowner or his or her authorized representative shall rebury the Native American remains and associated grave goods with appropriate dignity on the property in a location not subject to further subsurface disturbance: (A) the Native American Heritage Commission is unable to identify a most likely descendant or the most likely descendant fails to make a recommendation within 24 hours after being notified by the commission; (B) the most likely descendant identified fails to make a recommendation; or (C) the landowner or his or her authorized representative rejects the recommendation of the most likely descendant, and mediation by the Native American Heritage Commission fails to provide measures acceptable to the landowner.	
3.7 Geology, Soils, Minerals and Paleontological Resources **IMPACT 3.7-1. Possible Damage to or Destruction of Unique Paleontological Resources.** Most of the WRTP Specific Plan Area and all of the proposed SR 113/County Road 25A interchange area are underlain by Holocene-age rock formations, which are not paleontologically sensitive. However, the southern portion of the WRTP Specific Plan Area and the proposed South Regional Pond would be constructed in paleontologically sensitive rock formations. This impact is considered potentially significant.	PS	**Mitigation Measure 3.7-1: Conduct Construction Personnel Education, Stop Work if Paleontological Resources are Discovered, Assess the Significance of the Find, and Prepare and Implement a Recovery Plan, as Required.** To minimize the potential for destruction of, or damage to potentially unique, scientifically important paleontological resources during earth-moving activities, the measures described below shall be implemented by project applicants and contractors for future projects proposed under the WRTP Specific Plan within the Riverbank or Modesto Formations (in the southern portion of the WRTP Specific Plan Area and the proposed South Regional Pond area) before and during construction activities. • Prior to the start of earthmoving activities that would disturb 1 acre of land or more within the Riverbank or Modesto Formations (in the southern portion of the WRTP Specific Plan Area and the proposed South Regional Pond area), inform all construction personnel involved with earthmoving activities regarding the possibility of encountering fossils, the appearance and types of fossils likely to be seen during construction, and proper notification procedures should fossils be encountered. This worker training may either be prepared and presented by an experienced field archaeologist at the same time as construction worker education on cultural resources or prepared and presented separately by a qualified paleontologist. • If paleontological resources are discovered during earthmoving activities, the construction crew shall immediately cease work in the vicinity of the find and notify the City of Woodland Community Development Department. Retain a qualified paleontologist to evaluate the resource and prepare a recovery plan. The recovery plan may include, but is not limited to, a field survey, construction monitoring, sampling and data recovery procedures, museum curation for any specimen recovered, and a report of findings. Recommendations in the recovery plan that are determined by the City to be necessary and feasible shall be implemented before construction activities can resume at the site where the paleontological resources were discovered.	LTS
3.8 Hazards and Hazardous Materials **IMPACT 3.8-1. Create a Significant Hazard to the Public or the Environment through Reasonably Foreseeable Upset and Accident Conditions Involving the Release of Hazardous Materials into the Environment.** The WRTP Specific Plan Area includes above-ground storage tanks containing fuels and chemicals; several small sheds; a large building where equipment is stored and maintained; water wells and associated equipment; residual pesticides from agricultural activities in soils; and a residence with an on-site septic system and the potential for asbestos and lead-based paint. Construction of the off-site improvements could result in exposure to lead-based paint, aerially-deposited lead in soils, chemically-treated wood residue, and residual pesticides from agricultural activities in soils. Therefore, workers and members of the public could be exposed to hazards during construction activities from accidental releases of hazardous materials. This impact is considered potentially significant.	PS	**Mitigation Measure 3.8-1: Prepare a Remedial Action Plan, and Conduct Phase I and/or II Environmental Site Assessments and Implement Required Measures if Stained or Odiferous Soil is Discovered.** To reduce health hazards associated with potential exposure to hazardous substances in the WRTP Specific Plan Area and the off-site South Regional Pond, implement the following measures before the start of ground-disturbing activities in areas of debris piles, pole-mounted transformers, where demolition will occur, and other areas where evidence of hazardous materials contamination is observed or suspected through either obvious or implied evidence (i.e., stained or odorous soil): • Prepare a remedial action plan that identifies any necessary remediation activities including excavation and removal of contaminated soils and redistribution of clean fill material at the diesel above-ground storage tank associated with the agricultural well on the East Central Parcel, and other areas within the WRTP Specific Plan Area, if necessary. All above-ground storage tanks shall be removed in accordance with State and local regulations. The remedial action plan shall include measures for the safe transport, use, and disposal of contaminated soil and building debris removed from the project site. During construction, project applicants for future projects proposed under the WRTP Specific Plan and	LTS

LTS = less than significant PS = potentially significant S = significant SU = significant and unavoidable

Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
		the off-site South Regional Pond shall be required to comply with the remedial action plan and all applicable federal, State, and local laws. The remedial action plan shall outline measures for specific handling and reporting procedures for hazardous materials and disposal of hazardous materials removed from the project site at an appropriate off-site disposal facility. • In the event that contaminated groundwater is encountered during site excavation activities, the contractor shall report the contamination to the appropriate regulatory agencies, dewater the excavated area, and treat the contaminated groundwater to remove contaminants before discharge into the sanitary sewer system. • If stained or odiferous soil is discovered during project-related construction activities, project applicants for future projects proposed under the WRTP Specific Plan and the off-site South Regional Pond shall retain a registered environmental assessor to conduct a Phase I ESA, and if necessary, Phase II ESAs and/or other appropriate testing. Recommendations in the Phase I and II ESAs to address any contamination that is found shall be implemented before initiating ground-disturbing activities in these areas. • Notify the appropriate federal, State, and local agencies if evidence of previously undiscovered soil or groundwater contamination (e.g., stained soil, odorous groundwater) or if known or previously undiscovered underground storage tanks are encountered during construction activities. Any contaminated areas shall be remediated in accordance with recommendations made by the EMD, Central Valley RWQCB, DTSC, and/or other appropriate federal, State, or local regulatory agencies. • Retain a licensed contractor to remove all septic systems in accordance with local, State, and federal regulations. • Retain a Cal-OSHA certified Asbestos Consultant before demolition of any buildings in the WRTP Specific Plan Area to investigate whether any asbestos-containing materials or lead-based paints are present, and could become friable or mobile during demolition activities. Provide a copy of the report to YSAQMD. If any materials containing asbestos or lead-based paints are found, they shall be removed by an accredited contractor in accordance with EPA and Cal-OSHA standards as required by YSAQMD. In addition, all activities (construction or demolition) in the vicinity of these materials shall comply with Cal-OSHA asbestos and lead worker construction standards. The materials containing asbestos and lead shall be disposed of properly at an appropriate off-site disposal facility. • Properly close and abandon all on-site groundwater wells in accordance with Yolo County requirements	
IMPACT 3.8-2. Emit Hazardous Emissions or Handle Hazardous or Acutely Hazardous Materials, Substances, or Waste within One-Quarter Mile of an Existing or Proposed School. Existing schools are located approximately 300 feet and 0.3 mile from the WRTP Specific Plan boundary. The WRTP Specific Plan accommodates up to 10 acres for a future school in the medium density residential zone at the southwestern corner of Parkland Avenue and Harry Lorenzo Avenue. The WRTP Specific Plan also includes retail, commercial, and light industrial land uses that may use and store hazardous materials. Because the exact types of businesses and the exact types and quantities of hazardous materials that may be used by these businesses in the future cannot be known at this time, this impact is considered potentially significant.	PS	**Mitigation Measure 3.8-2: Notify and Consult with Affected Schools, and Implement a Hazardous Materials Business Plan (if Required).** Project applicants for future retail, commercial, or industrial projects proposed under the WRTP Specific Plan and supportive infrastructure improvements that would involve the long-term use of hazardous materials for project operation shall notify the Woodland Christian School, the Pioneer High School, and the Woodland Joint Unified School District, as appropriate based upon project location relative to school locations, in writing, and shall consult with appropriate school or district personnel about the types of activities that would occur and their estimated timing. Examples of the types of hazardous materials that could be used during proposed operational activities shall be provided. The written notification shall be provided at least 30 days before the commencement of any construction activities. Future businesses within the WRTP Specific Plan Area that handle and/or store a hazardous material or a mixture containing a hazardous material in amounts greater than the specified threshold quantities in Chapter 6.95, Section 25505 of the California Health & Safety Code shall prepare a Hazardous Materials Business Plan. The plan shall provide emergency plans and procedures that the businesses will follow in the event of a release or threatened release of a hazardous material, along with the other requirements of Section 25505 including an inventory of hazardous materials, site plan showing material storage areas and ingress and egress points for emergency vehicles, and employee safety training.	LTS
IMPACT 3.8-3. Result in a Safety Hazard for People Residing or Working in a Project Area Located in the Vicinity of a Private Airstrip. The WRTP Specific Plan and the proposed off-site South Regional Pond are approximately 1.4 miles from the north end of the runway at Medlock Field. However, buildings in the WRTP Specific Plan Area would not exceed 7065 feet, and would be located on flat ground. Furthermore, the Specific Plan and the proposed off-site South Regional Pond would	LTS	No mitigation is required.	LTS

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Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
not include substantial new sources of open water retained for long periods of time that could attract hazardous wildlife, and future businesses are not expected to handle large quantities of acutely hazardous materials that could result in an explosion hazard. Finally, the WRTP Specific Plan boundary is located adjacent to existing urban development that already emits nighttime lighting at the same distance from Medlock Field, and would comply with all City Engineering Standards and City Community the WRTP Specific Plan Performance Standards and Design Standards and Design Guidelines to shield and direct lighting downward. Therefore, this impact would be less than significant.			
3.9 Hydrology, Flooding, and Water Quality **IMPACT 3.9-1. Substantially Increase the Rate or Amount of Surface Runoff Resulting in Flooding, Create or Contribute Runoff Water which would Exceed the Capacity of Existing or Planned Stormwater Drainage Systems, Provide Substantial Additional Sources of Polluted Runoff.** Implementation of the WRTP Specific Plan and the off-site supporting infrastructure would increase the rate and amount of surface water runoff (primarily from construction of new impervious surfaces), which could exceed the capacity of stormwater conveyance systems, result in on-site or off-site flooding, and result in additional sources of polluted runoff. This impact is considered potentially significant.	PS	**Mitigation Measure 3.9-1: Prepare Additional Storm Drainage Analysis for determining Amount of New Development Acreage Beyond the Previously Identified 80 Residential Acres Allowable in the South Urban Growth Area and Submit to the City for Review and Approval.** The WRTP shall be required to fund an additional stormwater drainage analysis that utilizes the revised baseline conditions modeling and includes detailed information defining the operational capacity of the newly-installed infrastructure. A model will then be created that incorporates the pump station, detention, and conveyance improvements that have already been constructed, and then incorporates the full buildout of the Spring Lake Specific Plan Development. At that point, the fully developed acreage of the WRTP Specific Plan will be added to determine the new developable acreage (in terms of stormwater drainage) that can be accommodated with current infrastructure. The additional drainage analysis will also be required to determine what additional storm drainage infrastructure is needed to support full buildout of the WRTP Specific Plan. Building permits for development beyond the identified currently developable acreage will only be approved with confirmation that the required storm drainage and water quality treatment infrastructure is in place.	LTS
3.10 Land Use Planning, Population, and Housing **IMPACT 3.10-1 Conflict with the Woodland 2035 General Plan and Municipal Code.** Implementation of the WRTP Specific Plan could be inconsistent with policies adopted to avoid or mitigate an environmental impact. The impact is considered less than significant.	LTS	No mitigation is required.	LTS
IMPACT 3.10-2 Potential conflicts with the SACOG MTP/SCS. The MTP/SCS showed the WRTP Specific Plan Area as a Developing Community. The impact is considered less than significant.	LTS	No mitigation is required.	LTS
IMPACT 3.10-3 Potential conflicts with the LAFCo Policies, Standards, and Procedures Guidelines. Future construction in the WRTP Specific Plan Area would be compared to LAFCo Policies, Standards, and Procedures at that time. The impact is considered less than significant.	LTS	No mitigation is required.	LTS
3.11 Noise and Vibration **IMPACT 3.11-1. Generation of a Substantial Temporary (Construction-related) Increase in Ambient Noise Levels in the Vicinity of the Project in Excess of Standards Established in the Local General Plan or Noise Ordinance, or Applicable Standards of Other Agencies**. Future development and implementation of the WRTP Specific Plan would result in exposure of existing and anticipated noise sensitive land uses (if occupied during construction of the remaining properties within the WRTP Specific Plan Area) to noticeable increases from construction activities. Consistent with the findings of the 2035 General Plan and CAP EIR, this impact is considered significant.	S	**Mitigation Measure 3.11-1– Implement Construction Noise Reduction Strategies** a. Demolition, construction, site preparation, and related activities that would generate noise perceptible at the property line of the subject property are limited to the hours between 7:00 A.M. and 6:00 P.M. on Monday through Saturday and between 9:00 A.M. and 6:00 P.M. on Sunday and federal holidays. The building inspector may issue an exception to this limitation on hours in cases of urgent necessity where the public health and safety will not be substantially impaired. b. Idling times for noise-generating equipment used in demolition, construction, site preparation, and related activities shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes. c. Demolition, construction, site preparation, and related activities that do not involve pile driving proposed within 445 feet from the edge of properties with existing, occupied noise-sensitive uses shall incorporate all feasible strategies to reduce noise exposure for noise-sensitive uses, including: • Provide written notice to all known occupied noise-sensitive uses within 400 feet of the edge of the project site boundary at least 2 weeks prior to the start of each construction phase of the construction schedule; • Ensure that construction equipment is properly maintained and equipped with noise control components, such as mufflers, in accordance with manufacturers' specifications; • Re-route construction equipment away from adjacent noise-sensitive uses; • Locate noisy construction equipment away from surrounding noise-sensitive uses; • Use sound aprons or temporary noise enclosures around noise-generating equipment; • Position storage of waste materials, earth, and other supplies in a manner that will function as a noise barrier for surrounding noise-sensitive uses; • Use the quietest practical type of equipment;	SU

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Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
		• Use electric powered equipment instead of diesel or gasoline engine powered equipment; • Use shrouding or shielding and intake and exhaust silencers/mufflers; and • Other effective and feasible strategies to reduce construction noise exposure for surrounding noise-sensitive uses. d. For construction of buildings that require the installation of piles, an alternative to installation of piles by hammering shall be used. This could include the use of augured holes for cast-in-place piles, installation through vibration or hydraulic insertion, or another low-noise technique.	
IMPACT 3.11-2. Generation of a Substantial Permanent (Long-term Operations) Increase in Ambient Noise Levels in the Vicinity of the Project in Excess of Standards Established in the Local General Plan or Noise Ordinance, or Applicable Standards of Other Agencies. Land uses contemplated under the WRTP Specific Plan could potentially expose existing or anticipated noise-sensitive uses to noise levels that exceed standards. Consistent with the findings of the 2035 General Plan and CAP EIR, this impact is considered significant.	S	**Mitigation Measure 3.11-2– Reduce Noise Exposure from Transportation and Non-Transportation Sources** Future development within the WRTP Specific Plan Area shall be required to meet allowable outdoor and indoor noise exposure standards. Noise mitigation measures that may be approved to achieve these noise level targets include but are not limited to the following: • Construct facades with sound insulation to achieve acceptable interior noise; • Use sound-rated windows for primary sleeping and activity areas; • Use sound-rated doors for all exterior entries at primary sleeping and activity areas; • Use setbacks and/or sound barriers where applicable, feasible, and reasonable; • Use acoustic baffling of vents for chimneys, attic and gable ends; • Install a mechanical ventilation system that provides fresh air under closed window conditions; and • Maximize site design so that buildings shelter outdoor areas	SU
IMPACT 3.11-3. Generation of Vibration. Construction of projects under the WRTP Specific Plan could cause temporary, short-term disruptive vibration for locations near sensitive receptors within and adjacent to the WRTP Specific Plan Area. Under the WRTP Specific Plan, new vibration-sensitive uses could locate in areas exposed to vibration. Consistent with the findings of the 2035 General Plan and CAP EIR, this impact is considered significant.	S	**Mitigation Measure 3.11-3a – Implement Vibration Reduction Measures** a. New development that proposes the use of piles for foundations shall include all feasible measures necessary with the goal to ensure that vibration exposure for adjacent buildings is less than 0.5 PPV and less than 80 VdB for adjacent vibration-sensitive uses and less than 0.2 PPV for adjacent historic buildings. These performance standards shall take into account the reduction in vibration exposure that would occur through coupling loss provided by each affected building structure. If it is determined necessary to avoid damage, the project applicant shall coordinate with the Chief Building Official to implement corrective actions, which may include, but is not limited to building protection or stabilization. b. New developments that would generate substantial long-term vibration shall provide analysis and mitigation, as feasible, to achieve velocity levels, as experienced at habitable structures of vibration-sensitive land uses, of less than 80 vibration decibels. **Mitigation Measure 3.11-3b – Implement Mitigation Measure 3.11-1**	SU
<u>3.13 Transportation and Circulation</u> **IMPACT 3.13-1. Conflict with A Program, Plan, Ordinance, or Policy Addressing the Circulation System, including Transit, Roadway, Bicycle, and Pedestrian Facilities.** Implementation of the WRTP Specific Plan would not result in conflicts with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities. The impact is less than significant.	LTS	**Mitigation Measure 3.13-1a: The Draft WRTP Specific Plan Finance Plan shall incorporate a Transit Contribution.** While not required as mitigation for a significant impact under CEQA, the following would be required for planning purposes to ensure transit equipment, infrastructure, and service is adequately funded to provide necessary service to the WRTP Specific Plan Area: The project applicant shall contribute its fair-share of the cost associated with providing transit service to the WRTP Specific Plan Area. It is anticipated that new transit vehicles may be required to provide additional service to the WRTP Specific Plan Area. However, the final determination of additional capital equipment or other costs shall be determined by the City of Woodland in coordination with YCTD and as identified in the Master TDM/VMT Program. The fair-share cost or a plan for providing the fair-share cost over time shall demonstrate funding is adequate to provide the necessary transit service or range of services required to meet the demand in the WRTP Specific Plan Area, as determined through the WRTP Specific Plans required coordination with YCTD and UC Davis. The funding mechanism(s) for transit and other TDM measures shall be outlined in the WRTP Specific Plan Finance Plan, and development projects shall be required to commit to contributing fair-share costs prior to the issuance of respective building permits by the City of Woodland.	LTS

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Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
		Mitigation Measure 3.13-1b: On-site Transit Stops. While not required as mitigation for a significant impact under CEQA, the following would be required for planning purposes to ensure proposed transit infrastructure provides for adequate service to the WRTP Specific Plan Area: The WRTP Specific Plan calls for development of a shared mobility hub in the Village Center. The project applicant shall develop detailed plans, to be reviewed and approved by the City of Woodland and YCTD and construct the shared mobility hub improvements in the Village Center and identify the specific locations of sheltered transit stops with bus turnouts at other locations. It is anticipated that other stops would be located near the business park uses north and west of the Village Center. The City of Woodland and YCTD shall approve the location, design, and implementation timing of the sheltered transit stops and bus turnouts prior to the prior to approval of the first final map or as otherwise required by the City. If transit stops are located on-street for segments of roadways that do not have designated curbside on-street parking that can be designated for a bus stop (i.e., only travel lanes, bike lanes), the street cross-sections shall be modified to provide for a curbside bus stop, or multiple stops if needed for bus operations.	
IMPACT 3.13-2. Substantially Increase Hazards Due to a Design Feature or Incompatible Uses. Construction vehicles and equipment associated with development of the WRTP Specific Plan Area and off-site improvement areas would result in utilize local roadways, which could cause disruptions to the transportation network and degradation to the roadways. Implementation of the WRTP Specific Plan will modify the existing transportation network to accommodate existing and future users that could change existing travel patterns or traveler expectations. This impact is considered potentially significant.	PS	**Mitigation Measure 3.13-2: Implement a Construction Traffic Control Plan** Prior to any construction activities for the WRTP Specific Plan, the 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, Yolobus, and local emergency service providers for their input prior to approving the Plan. The plan shall ensure that acceptable operating conditions on local roadways and freeway facilities are maintained during 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. 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 a 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 • Maintain safe and efficient access routes for farming equipment and vehicles • Manual traffic control when necessary • Proper advance warning and posted signage concerning street closures • Provisions for pedestrian safety	LTS
IMPACT 3.13-3. Result in Inadequate Emergency Access. Implementation of the WRTP will alter land use patterns and increase travel demand on the transportation network, which may influence emergency access. This impact is considered less than significant.	LTS	No mitigation is required	LTS
3.14 Utilities **IMPACT 3.14-1. Increased Demand for Water Supply Conveyance Facilities.** Implementation of the proposed WRTP Specific Plan would require construction of on-site water supply conveyance facilities. Sufficient on-site water supply facilities would be designed and sized to provide adequate service to the WRTP Specific Plan would be constructed. Physical impacts associated with construction and operations of utilities are evaluated throughout this EIR. There is no impact beyond those comprehensively considered throughout the other sections of this EIR. This impact is considered less than significant.	LTS	**Mitigation Measure 3.14-1: Prepare and Submit A Water Supply Conveyance Improvement Plan in Compliance with Applicable Standards and Construct Water Supply Conveyance Infrastructure Prior to Occupancy.** While not required as mitigation for a significant impact under CEQA, the following would be required for planning purposes to ensure the water supply infrastructure is designed and sized to provide adequate service to the WRTP Specific Plan: Before approval of the final subdivision map and issuance of building permits, project applicants for projects proposed under the WRTP Specific Plan shall prepare a detailed water conveyance infrastructure improvement plan that depicts the locations and appropriate sizes of all required conveyance infrastructure, in conjunction with	LTS

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Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
		other site-specific improvement plans. Proposed on-site water facilities shall be designed and sized to provide adequate service to the project site for the amount of development identified in the tentative subdivision map, based on City of Woodland Engineering Standards. A final water conveyance infrastructure improvement plan shall be approved by the City of Woodland Engineering Division before approval of the final subdivision map by the City of Woodland Planning Division and issuance of building permits from the City of Woodland Building Division. All required infrastructure shall be in place prior to occupancy of development anticipated under the proposed project.	
IMPACT 3.14-2. Increased Demand for Wastewater Collection and Conveyance Facilities. Implementation of the proposed WRTP Specific Plan would require construction of on-site wastewater collection and conveyance facilities and off-site facility upgrades. On-site and off-site wastewater collection and conveyance facilities would be designed and sized to provide adequate service to the WRTP Specific Plan. Physical impacts associated with construction and operations of utilities are evaluated throughout this EIR. There is no impact beyond those comprehensively considered throughout the other sections of this EIR. This impact is considered less than significant.	LTS	**Mitigation Measure 3.14-2: Prepare Additional Analysis to Verify the Spring Lake Specific Plan Pump Station Capacity Prior to Development Beyond 87 Percent of the WRTP Specific Plan Area.** While not required as mitigation for a significant impact under CEQA, the following would be required for planning purposes to ensure the existing wastewater conveyance infrastructure has the capacity to provide adequate service to the WRTP Specific Plan Area: Prior to any development beyond 87 percent of the WRTP Specific Plan, the WRTP shall fund additional analysis to verify that the Spring Lake Specific Plan Pump Station has adequate capacity to provide for sewer flows from full buildout of the WRTP Specific Plan. If additional capacity is required, it may be provided by upsizing the pumps as part of the City's regular maintenance work of replacing the pumps. If the increased capacity is not provided by the City's maintenance work, then the WRTP Specific Plan will be responsible for funding improvements at the pump station to provide the additional required capacity.	LTS

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0.8.2 CUMULATIVE IMPACTS

As detailed in Chapter 5 of this EIR, "Other CEQA Considerations," the Cumulative Scenario of the Proposed Project, taken together with other past, present, and probable future projects producing related impacts, would have a significant impact in the following areas:

- Aesthetics and Visual Resources
- Agriculture and Forestry Resources
- Air Quality
- Hydrology, Flooding, and Water Quality
- Land Use Planning, Population, and Housing
- Utilities

0.8.3 GROWTH-INDUCING IMPACTS

As stated in Chapter 5 of this EIR, "Other CEQA Considerations," the development framework for the WRTP Specific Plan Area was guided by Policy 2.L.2 of the 2035 General Plan, which specifically anticipates development of the currently undeveloped SP-1A new growth area. The land use mix and intensity are consistent with the general growth anticipated for this WRTP Specific Plan Area in the 2035 General Plan. The additional population associated with the WRTP Specific Plan could spur an increase in demand for goods and services in the surrounding area, which could potentially result in additional development to satisfy this demand. However, it would be speculative to attempt to predict if or where and when any such new services would be developed beyond those planned for as part of the WRTP Specific Plan. Because implementation of the WRTP Specific Plan would not involve more employment generating land uses or residential development and population than anticipated under the City's 2035 General Plan, the WRTP Specific Plan would not induce unplanned population growth.

The WRTP Specific Plan will provide roadway and other multi-modal connections to surrounding existing and planned neighborhoods within the City's Planning Area, but these areas have been planned for eventual development as a part of the City's 2035 General Plan. In addition, in anticipation of future development of the WRTP Specific Plan Area, the backbone utility lines in the Spring Lake area were oversized and stubbed out at the border of the two planning areas, to ensure efficient service to the WRTP Specific Plan Area through extension of those backbone utility lines. New stormwater facilities and on-site water and wastewater infrastructure required to serve the WRTP Specific Plan Area would be sized to accommodate WRTP Specific Plan Area-related demands and pre-development flows generated upgradient of the WRTP Specific Plan Area; it is assumed that development west of the WRTP Specific Plan Area in new growth areas identified as SP-1B and SP-1C would include implementation of stormwater management features to reduce future post-development flows to their respective pre-development flows. Because the infrastructure that would be provided for the WRTP Specific Plan Area would be consistent with that anticipated under the 2035 General Plan, the WRTP Specific Plan would not result in indirect growth-inducing effects by increasing infrastructure capacity that could serve additional development in excess of that anticipated under the City's 2035 General Plan.

0.8.4 SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES

Detailed assessments for each of the environmental topics are provided throughout Chapter 3 of this EIR, "Environmental Impact Analysis," inclusive of cumulative impacts associated with each of these topics. The City acknowledges that there could be significant irreversible environmental changes.

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1 INTRODUCTION

This Environmental Impact Report (EIR) evaluates the impacts of the Draft *Woodland Research and Technology Park (WRTP) Specific Plan* (referred to henceforth as the WRTP Specific Plan). This EIR was prepared in compliance with the California Environmental Quality Act (CEQA) of 1970 (Public Resources Code Section 21000 *et seq*.) and the CEQA Guidelines (California Code of Regulations, Title 14, Section 15000 *et seq*.).

1.1 INTENDED USES AND PURPOSE OF THE EIR

1.1.1 PURPOSE

This EIR presents an analysis of the environmental impacts of adoption and implementation of the WRTP Specific Plan. Specifically, it evaluates the physical and land use changes from potential development that could occur with adoption and implementation of the WRTP Specific Plan. The California Environmental Quality Act Guidelines (CEQA Guidelines) require the environmental analysis for an EIR to include an evaluation of impacts associated with a proposed project and to identify mitigation for any potentially significant impacts. CEQA Guidelines Section 15126.2(a) states:

> An EIR shall identify and focus on the significant environmental effects of the proposed project. In assessing the impact of a proposed project on the environment, the lead agency should normally limit its examination to changes in the existing physical conditions in the affected area as they exist at the time the notice of preparation is published, or where no notice of preparation is published, at the time environmental analysis is commenced. Direct and indirect significant effects of the project on the environment shall be clearly identified and described, giving due consideration to both the short-term and long-term effects. The discussion should include relevant specifics of the area, the resources involved, physical changes, alterations to ecological systems, and changes induced in population distribution, population concentration, the human use of the land (including commercial and residential development), health and safety problems caused by the physical changes, and other aspects of the resource base such as water, historical resources, scenic quality, and public services. The EIR shall also analyze any significant environmental effects the project might cause by bringing development and people into the area affected.

The CEQA Guidelines charge public agencies with the responsibility of avoiding or minimizing environmental damage that could result from implementation of a project, where feasible. As part of this responsibility, public agencies are required to balance various public objectives, including economic, environmental, and social issues.

The purpose of an EIR is neither to recommend approval nor denial of a project. An EIR is an informational document used in the planning and decision-making process by the lead agency and responsible and trustee agencies. An EIR describes the significant environmental impacts of a project, identifies potentially feasible measures to mitigate significant impacts, and describes potentially feasible alternatives to the project that can reduce or avoid significant environmental effects. CEQA requires decision-makers to balance the benefits of a project against its unavoidable environmental effects in deciding whether to carry out a project.

The lead agency is the public agency with primary responsibility over the proposed project. In accordance with CEQA Guidelines Section 15051(b)(1), "[t]he lead agency will normally be the agency with general governmental powers, such as a city or county, rather than an agency with a single or limited purpose." The City, as the lead agency, has prepared this EIR to evaluate the environmental impacts of implementation of the WRTP Specific Plan.

The EIR was prepared under the direction of the City and is provided for review by both the public and public agencies, as required by CEQA. The City Council must certify the Final EIR before adopting the WRTP Specific Plan. The 2035 General Plan and CAP EIR addresses impacts of development of the City's Planning Area, including the WRTP Specific Plan Area. Consistent with Section 15183(b) of the CEQA Guidelines, the analysis contained within this EIR focuses on project-specific significant effects of the WRTP Specific Plan that: a) are peculiar to the WRTP Specific Plan or the site; b) were not addressed in the 2035 General Plan and CAP EIR (including off-site or cumulative impacts); or c) would be more severe than previously described based on substantial new information. Pursuant to CEQA Guidelines Section 15150, relevant information from the 2035 General Plan and CAP EIR (State Clearinghouse Number 2013032015) has been incorporated by reference into this EIR, and should be considered as part of the information upon which the proposed WRTP Specific Plan EIR is based. The 2035 General Plan, Climate Action Plan, and 2035 General Plan and CAP EIR are available for public review on the City of Woodland Planning Division website at: https://www.cityofwoodland.org/1000/Documents, or in person at the City's Community Development Department at 300 First Street, Woodland, CA 95695.

If significant environmental effects are identified, the lead agency must adopt "findings" indicating whether feasible mitigation measures or alternatives exist that can avoid or reduce those effects. If the environmental impacts are identified as significant and unavoidable, the lead agency may still approve the project if it determines that social, economic, legal, technological, or other factors override the unavoidable impacts. The lead agency would then be required to prepare a "statement of overriding considerations" that discusses the specific reasons for approving the project, based on information in the EIR and other information in the record.

In making its decision about the proposed project, the City considers the information in this EIR, comments received on the EIR, and responses to those comments, along with other available information and technical analysis.

1.1.2 Intended Future Use

One of the City's goals in preparing the WRTP Specific Plan and EIR is to minimize the amount of new information that would be required to approve future projects that are consistent with the WRTP Specific Plan. Accordingly, the WRTP Specific Plan and this EIR anticipate the effects of subsequent projects proposed within the WRTP Specific Plan Area, as well as off-site infrastructure required to serve future development within the WRTP Specific Plan Area. Future projects that are consistent with the WRTP Specific Plan would either require no further environmental analysis or only focused, supplemental environmental analysis pursuant to CEQA and the CEQA Guidelines. The City will examine projects proposed under the WRTP Specific Plan to determine whether or not additional CEQA analysis will be necessary.

Site-specific approvals may be streamlined pursuant to the rules for tiering and exemptions set forth in Public Resources Code Section 21083.3 and Section 15182 of the CEQA Guidelines. CEQA Guidelines Section 15182 provides a CEQA exemption for certain residential, mixed-use, and commercial projects that are consistent with a specific plan for which an EIR has been prepared. Future projects may be able to implement this exemption if, pursuant to CEQA Guidelines Section 15182(b) and (c), the future project:

- is a residential or mixed-use project, or is a project with a floor area ration of at least 0.75 on commercially zoned property, including any required subdivision or zoning approvals;
- is located within a transit priority area as defined in Public Resources Code section 21099(a)(7); and

- is consistent with the general use designation, density, building intensity, and applicable policies specified for the project area in either a sustainable communities strategy or an alternative planning strategy for which the State Air Resources Board has accepted the determination that the sustainable communities strategy or an alternative planning strategy would achieve the applicable greenhouse gas emissions reduction targets.

The City will conduct a consistency review for each future project to determine compliance with the criteria of Section 15182 and applicability of the CEQA exemption. If the analysis finds that the future project meets these criteria, the City will further determine if any of the events specified in the CEQA Guidelines Section 15162 would occur with respect to the future project, including the following:

- Substantial changes are proposed in the project that will require major revisions of the EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;

- Substantial changes with respect to the circumstances under which the project is being undertaken that will require major revisions of the EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or

- New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the EIR was certified as complete, shows any of the following:

  - The project will have one or more significant effects not discussed in the EIR;

  - Significant effects previously examined will be substantially more severe than shown in the EIR;

  - Mitigation measures or alternatives previously found to not be feasible would be feasible and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measures or alternative; or

  - Mitigation measures or alternatives which are considerably different from those analyzed in the EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

The City would conduct further environmental review if any of these conditions would occur as a result of the implementation of future projects associated with the WRTP Specific Plan. If additional environmental analysis is required, it may be streamlined from this EIR by additional tiering mechanisms pursuant to CEQA Guidelines.

Section 15152 of the CEQA Guidelines provides that where a first-tier EIR has "adequately addressed" the subject of cumulative impacts, such impacts need not be revisited in second- and/or third-tier documents. According to Section 15152(f)(3), significant effects identified in a first-tier EIR are adequately addressed, for purposes of later approvals, if the lead agency determines that such effects have been either:

> "mitigated or avoided as a result of the prior [EIR] and findings adopted in connection with that prior [EIR]"; or

> "examined at a sufficient level of detail in the prior [EIR] to enable those effects to be mitigated or avoided by site-specific revisions, the imposition of conditions, or by other means in connection with the approval of the later project."

This EIR will help determine the need for subsequent environmental documentation, as well as dictate the scope of project-level CEQA review.

The City intends to use this Specific Plan EIR to streamline future environmental review and approval of private and public projects, as well as implementation actions such as updates to zoning that are consistent with the WRTP Specific Plan.

The City intends to make full use of the streamlining allowed under Public Resources Code 21083.3 and CEQA Guidelines 15183. Under this provision, CEQA only applies to issues "peculiar to the site." Public agencies can use uniformly applied policies or standards to mitigate effects of future projects, precluding the need to analyze these effects, unless new information arises that changes the impact analysis (Public Resources Code Section 21083.3 [d]). The design guidelines and development standards of the WRTP Specific Plan that would reduce impacts, as described in this EIR, would generally be considered uniformly applied development standards for future projects entitled under the WRTP Specific Plan. This EIR demonstrates how these design guidelines and development standards would substantially mitigate the effects of future projects (*CEQA Guidelines,* Section 15183[f]). Similarly, the General Plan Update process was used to investigate policies and implementation programs that can serve as uniformly applied standards and substantially limit the scope of analysis for projects consistent with the 2035 General Plan. This EIR includes references to WRTP Specific Plan policies, design standards and design guidelines, as well as General Plan policies and implementation programs, where appropriate, to address environmental impacts. Future CEQA documents may reference the same WRTP Specific Plan and General Plan policies, standards, and implementation programs, where appropriate, to demonstrate less-than-significant impacts and that later project-level issues are not "peculiar to the parcel" if they have been substantially mitigated by the WRTP Specific Plan and General Plan policies, standards, and implementation programs (uniformly applied development policies).

1.2 SCOPE OF THE EIR

1.2.1 GEOGRAPHIC SCOPE

The geographic scope that could be affected by a proposed project varies depending on the issue topic. The geographic area associated with different environmental effects was used to define the area considered for impact analysis. The geographic scope for air pollutant impact analysis, such as those related to emissions of ozone precursors, is very broad, encompassing large areas within the same air basin. The geographic scope for stationary source noise impacts, on the other end of the spectrum, is relatively narrow, since noise attenuates substantially with distance, making impacts more localized. The environmental impact analysis throughout this EIR describes the environmental impacts of implementing the WRTP Specific Plan throughout the WRTP Specific Plan Area as well as, where relevant and as defined, a wider geographical context.

This EIR analyzes impacts of the WRTP Specific Plan relative to current conditions. In accordance with Section 15125 of the CEQA Guidelines, and unless otherwise noted, the discussion of the physical environment describes existing conditions within the WRTP Specific Plan Area at the time the Notice of Preparation (NOP) was published.

1.2.2 TOPICAL SCOPE

Environmental review in compliance with CEQA (Public Resources Code Sections 21000 *et seq*.) is required as part of the City's consideration of the WRTP Specific Plan. This EIR has been prepared in accordance with CEQA, including the CEQA statutes (Public Resources Code Sections 21000 *et seq*.), CEQA Guidelines (California Code of Regulations, Title 14, Sections 15000 *et seq*.), and relevant court decisions. This EIR includes an evaluation of all required environmental topic areas, as well as other CEQA-mandated sections, as presented below:

- 0 Executive Summary
- 1 Introduction
- 2 Project Description
- 3 Environmental Impact Analysis
  - 3.1 Aesthetics and Visual Resources
  - 3.2 Agricultural Resources
  - 3.3 Air Quality
  - 3.4 Biological Resources
  - 3.5 Climate Change, Greenhouse Gas Emissions, and Energy
  - 3.6 Cultural Resources
  - 3.7 Geology, Soils, Mineral Resources, and Paleontological Resources
  - 3.8 Hazards, Hazardous Materials and Wildfires
  - 3.9 Hydrology, Flooding, and Water Quality
  - 3.10 Land Use Planning, Population, and Housing
  - 3.11 Noise and Vibration
  - 3.12 Public Services and Recreation
  - 3.13 Transportation and Circulation
  - 3.14 Utilities and Service Systems
- 4 Alternatives
- 5 Other CEQA Considerations
- 6 References
- 7 List of Preparers

Cumulative impacts are discussed within the resource-specific topic areas of each sub-section of Chapter 3. Chapter 4 of this EIR, "Alternatives," includes an analysis of a range of reasonable alternatives to the proposed WRTP Specific Plan, as required by Section 15126.6 of the CEQA Guidelines. As described in more detail below, Chapter 4 analyzes the environmental impacts of the alternatives presented and compares them to the environmental impacts of the proposed WRTP Specific Plan. Other CEQA-mandated issues discussed within the context of this EIR are growth-inducing impacts, irreversible environmental effects, and significant and unavoidable adverse impacts (Chapter 5 of this EIR, "Other CEQA Considerations"). Chapter 6 of this EIR, "References," identifies the references and citations used in drafting the EIR, and Chapter 7 of this EIR, "List of Preparers," lists the preparers of the EIR.

1.3 ENVIRONMENTAL REVIEW PROCESS

1.3.1 OVERVIEW

The CEQA Guidelines have specific requirements for EIRs related to description of the project, environmental setting, and impact analysis. Table 1-1 identifies the required elements of an EIR (with CEQA Guidelines sections referenced) and the corresponding chapters or sections in which each item is discussed in this document.

Table 1-1. Analyses Required by the CEQA Guidelines

Required Description and Analysis	EIR Chapter or Section
Summary (Section 15123)	ES
Project Description (Section 15124)	2
Description of the Existing Setting (Section 15125)	3
Environmental Impacts (Sections 15126 and 15143)	3
Alternatives (Section 15126.6)	4
Cumulative Impacts (Section 15355)	3
Growth-Inducing Impacts (Section 15126[d])	5
Irreversible Environmental Effects (Section 15126.2[c])	5
Significant Environmental Effects Which Cannot be Avoided (Section 15126.2[b])	5

1.3.2 NOTICE OF PREPARATION

To assist the City in determining the focus and scope of analysis for this EIR, pursuant to the provision of Section 15082 of the CEQA Guidelines, the City circulated a NOP dated June 16, 2017 to government agencies, special service districts, organizations, and individuals with an interest in or jurisdiction over the project. The NOP is a brief notice sent by the lead agency to inform the public, interested parties, responsible agencies, trustee agencies, and potentially affected federal, state, and local agencies that the lead agency plans to prepare an EIR. The NOP also seeks comments regarding the scope and content of the EIR. The City held a public scoping meeting for the project on June 26, 2017.

The NOP is contained in Appendix A of this Draft EIR. In response, the City received comments on the scope and content of the EIR as summarized below. The comment letters are provided in Appendix A of this Draft EIR.

The NOP comment letters and comments at the scoping meeting suggest that the following topics related to adverse physical environmental impacts should be particular areas of focus for the City's environmental analysis[1]:

- Agricultural conversion
- Development adjacent to agricultural land
- Climate change
- Consistency with regional transportation plans
- Direct and cumulative state highway system impacts
- Housing needs
- Increased impervious surfaces
- Multi-modal transit
- Native American consultation
- Noise, land use, and air quality concerns
- Water quality and water availability

[1] CEQA Guidelines Section 15123 requires than an "EIR shall contain a brief summary of the proposed action and its consequences" and the "summary shall identify: […] (2) Areas of controversy known to the Lead Agency including issues raised by agencies and the public; and (3) Issues to be resolved including the choice among alternatives and whether or how to mitigate the significant effects." Comments received on the Notice of Preparation, along with additional review by the City, helped to inform the areas of controversy and issues to be resolved and were taken into account when developing the WRTP Specific Plan and alternatives and conducting the analysis of potential impacts.

1.3.3 NATIVE AMERICAN CONSULTATION

The City of Woodland conducted Native American consultation that met the requirements of Assembly Bill (AB) 52 for the WRTP Specific Plan. The Yocha Dehe tribe responded to the project notification on May 19, 2017 requesting a site visit to evaluate their cultural concerns. A site visit was conducted on July 13, 2017 of the WRTP Specific Plan Area. Following this visit, the Yocha Dehe tribe sent a letter to the City indicating that they are not aware of any cultural resources or tribal cultural resources near the WRTP Specific Plan Area and no tribal monitors are required. However, the tribe did recommend cultural sensitivity training and that all work should cease within 150 feet of human remains or prehistoric cultural resources that may be discovered during project implementation. This recommendation is included within this section's mitigation measures identified in Section 3.6 of this EIR.

1.4 ORGANIZATION OF THE EIR

This EIR is organized as follows:

- **Chapter 0, "Executive Summary,"** provides an overview of the findings and conclusions of this EIR.
- **Chapter 1, "Introduction,"** describes the type of EIR prepared for the WRTP Specific Plan; the purpose, intended uses, and geographic and environmental scope of the EIR; the environmental review process; subsequent actions required; and the EIR comment process.
- **Chapter 2, "Project Description,"** describes the project location, project objectives, project characteristics, the WRTP Specific Plan adoption and implementation process, and other agencies expected to use this EIR.
- **Chapter 3, "Environmental Impact Analysis,"** evaluates in detail the environmental effects of the WRTP Specific Plan and identifies mitigation for potentially significant and significant effects. Each subsection also includes the resource-specific analysis of cumulative impacts.
- **Chapter 4, "Alternatives,"** provides a summary of the relative environmental impacts of alternatives that could address potentially significant effects and the No Project Alternative. This chapter also describes alternatives that were considered but eliminated from detailed consideration in the EIR and identifies the "environmentally superior" alternative.
- **Chapter 5, "Other CEQA Considerations,"** This chapter provides a summary of significant irreversible environmental impacts, significant and unavoidable impacts, and growth-inducing effects of the WRTP Specific Plan.
- **Chapter 6, "References,"** lists the sources of information cited throughout the EIR.
- **Chapter 7, "List of Preparers,"** lists the individuals who contributed to preparation of the EIR.
- **Appendices** include notices and other procedural documents pertinent to the EIR, as well as technical material prepared to support the analysis.

1.5 SUBSEQUENT ACTIONS REQUIRED

Further actions or procedures required to allow implementation of the WRTP Specific Plan may include revisions to zoning, tentative maps, site plans, building permits, grading permits, and other actions. Future development

project proposals, public investments, and other actions would also be subject to CEQA requirements, as appropriate. The WRTP Specific Plan serves as an implementing tool of the City's 2035 General Plan. As such, the WRTP Specific Plan establishes zoning, including land use and development standards for projects within the WRTP Specific Plan Area. Upon adoption of the WRTP Specific Plan, all land use regulations, development standards, and design guidelines of the WRTP Specific Plan shall supersede those of the Zoning Ordinance and Community Design Standards for the WRTP Specific Plan Area. Where direction is not provided in the WRTP Specific Plan, the standards of the City's Zoning Ordinance shall apply, including use permit, variance, public notice and hearing and appeals provisions.

Unless otherwise approved as part of the WRTP Specific Plan, off-site improvements under the control of the City shall be subject to City of Woodland regulations and requirements in effect at the time the improvement plans are submitted. Improvements not under the control of the City (e.g. improvements to State highways) shall be subject to the regulations and requirements of the responsible agency.

1.6 MITIGATION MEASURES

CEQA Guideline section 15370 defines mitigation to include:

(a) "Avoiding the impact altogether by not taking a certain action or parts of an action.

(b) Minimizing impacts by limiting the degree or magnitude of the action and its implementation.

(c) Rectifying the impact by repairing, rehabilitating, or restoring the affected environment.

(d) Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action.

(e) Compensating for the impact by replacing or providing substitute resources or environments."

During development of the WRTP Specific Plan, the City took into account the potential impacts discussed in this EIR and included design guidelines and development standards in the WRTP Specific Plan that would reduce potential impacts. In some instances, additional feasible mitigation measures are proposed in the EIR to clarify WRTP Specific Plan design guidelines or development standards as they relate to environmental effects and to further reduce potentially significant impacts.

CEQA requires the adoption of a mitigation monitoring program for all adopted mitigation measures. The mitigation monitoring plan must be designed to ensure compliance during project implementation (Public Resources Code Section 21081.6, CEQA Guidelines Section 15097).

1.7 AVAILABILITY OF THE EIR

Copies of the WRTP Specific Plan, and this EIR are available through the City of Woodland Community Development Department. The City has circulated the document to public agencies, other public and private organizations, property owners, developers, and other interested individuals. Detailed information related to the WRTP Specific Plan and this EIR are available at the City of Woodland City Hall and online at the project webpage: https://www.cityofwoodland.org/585/Documents. The General Plan, Climate Action Plan and related EIR are also available online at the General Plan Update Website: https://www.cityofwoodland.org/1000/Documents.

Comments on the EIR are invited in writing or via email to:

Erika Bumgardner, Business Development Liaison
City of Woodland Economic Development Department
300 First Street
Woodland, CA 95695
Erika.bumgardner@cityofwoodland.org

Comments should be focused on the adequacy and completeness of the EIR, or should address questions about the environmental consequences of project implementation. "Adequacy" is defined as the thoroughness of the EIR in addressing significant adverse physical environmental effects, identifying mitigation measures for those impacts, and supplying enough information for public officials to make decisions about the merits of the project.

After the close of the public review period, a Response to Comments document will be prepared, containing all the comments received during the public review period, responses to those comments, and other information the City deems relevant. This document will be made available for review before the City certifies it as complete. The Response to Comments document, the Draft EIR, and any changes to the Draft EIR together will comprise the Final EIR.

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2 PROJECT DESCRIPTION

2.1 INTRODUCTION

The following describes the proposed project that is the subject of analysis in this EIR, the Woodland Research & Technology Park (WRTP) Specific Plan (referred to henceforth as "the WRTP Specific Plan"). Along with a description of the WRTP Specific Plan, this chapter provides a description of the location and objectives of the proposed project, the relationship to the City's General Plan, agencies that may use this EIR for other approvals, and environmental review and consultation requirements.

2.2 REGIONAL LOCATION AND SETTING

The City of Woodland is the county seat of Yolo County and is located in California's Sacramento Valley. The City is located approximately 20 miles northwest of Sacramento, 8 miles west of the Sacramento International Airport, and 12 miles north of the city of Davis at the intersection of Interstate 5 (I-5) and State Route 113 (SR 113). Exhibit 2-1 shows the regional location of the City's Planning Area. The WRTP Specific Plan Area is an approximately 350-acre area located in the southern-central portion of the City's Planning Area, south of Farmers Central Road, east of SR 113, west of Harry Lorenzo Avenue, and north of the Urban Limit Line (ULL). Exhibit 2-2 shows the location of the WRTP Specific Plan Area relative to the City's Planning Area.

2.2.1 EXISTING LAND USES

The WRTP Specific Plan Area encompasses approximately 350 acres consisting primarily of row crops, and a small almond orchard in the southeastern corner. The WRTP Specific Plan Area also contains a single-family residence and barn, and a storage building. Several agricultural and residential groundwater wells, overhead power lines on wood poles, dirt agricultural access roads, aboveground storage tanks, and irrigation ditches are scattered throughout the WRTP Specific Plan Area. No natural streams, waterways, or agricultural drainage canals exist in the WRTP Specific Plan Area. Several existing trees in the WRTP Specific Plan Area occur mainly adjacent to existing roadways, including along County Road 25A (CR 25A), Harry Lorenzo Avenue, and SR 113. A few trees occur along the property lines between some of the WRTP Specific Plan Area parcels. Existing utility poles with overhead power lines are located along SR 113 and Harry Lorenzo Avenue.

The WRTP Specific Plan Area is surrounded by agricultural land to the south, SR 113 and agricultural land to the west, and urban development within the Spring Lake Specific Plan Area on the north and east. A sports park and the Woodland Community and Senior Center are located within one-half mile west of the northern boundary of the WRTP Specific Plan Area.

2.2.2 RELATIONSHIP WITH THE GENERAL PLAN

The City's General Plan requires that substantial new residential development on "greenfield" or previously undeveloped land be planned through the specific plan process, as has been done in the past with Spring Lake, the Southeast area, and others. Addressed in Government Code Section 65450, a specific plan is a comprehensive planning and zoning document for a defined geographic region. It implements the general plan by providing a special set of development policies and standards that are applied to the specific plan area, and by specifying zoning, needed infrastructure, and an infrastructure financing plan to facilitate implementation.

Per the City of Woodland 2035 General Plan, adopted May 16, 2017,[1] Woodland has designated three new growth areas for future specific plan development: SP-1 in the south, SP-2 in the east, and SP-3 in the north. SP-1 is further separated into three sub-areas. SP-1A, which is the area covered by the WRTP Specific Plan, encompasses approximately 350 acres and is located on the eastern portion of SP-1 between SR 113 and the Spring Lake Specific Plan Area. SP-1B is located between East Street and SR 113, covering 248 acres. SP-1C is the smallest of the three at 151 acres and is located west of East Street. The City's Planning Area and the designated Specific Plan areas and subareas are shown in Exhibit 2-2.

SP-1A and SP-1B are envisioned to develop as mixed-use neighborhoods anchored by a research and technology business park in the "Southern Gateway" located at CR 25 and SR 113. SP-1C will be entirely residential, with a lower-density residential profile containing executive homes and rural estates on larger lots. Referred to as "SP-1A" in the General Plan, the City "envisions the [WRTP] Specific Plan Area to develop as a mixed-use neighborhood anchored by a research and technology business park in the 'Southern Gateway' [to the city] located at CR 25A and SR 113" (City of Woodland 2017, page LU 2-55). According to direction in the 2035 General Plan, for SP-1A (the WRTP Specific Plan Area):

> "The highest intensity of development will occur within the business park area, providing a prime opportunity for job creation within Woodland. The remainder of SP-1A will be largely residential with some open space and recreation areas."

As directed by the General Plan (Policy 2.L.2, page LU 2-77), the City will:

> Promote development of SP-1A as a mixed-use residential district anchored by a research and technology business park in the Southern Gateway area at CR 25 and SR 113. Concentrate the highest intensity of development within and in close proximity to the business park area, with lower-density, largely residential uses to the north. Encourage sustainable development through the use of renewable energy sources and water conservation tools with the goal of striving to achieve zero net energy at the building and neighborhood level to the extent feasible.

Appendix B to the General Plan identifies assumed growth of 2.16 million square feet of nonresidential building space and 1,600 housing units will be developed within the WRTP Specific Plan (SP-1A) Area (City of Woodland 2017, Table B-1, page B-2). These assumptions serve to inform related planning efforts and the analysis of environmental impact of the General Plan – these assumptions were not adopted as a part of the 2035 General Plan. The City Council will consider consistency of the WRTP Specific Plan with the 2035 General Plan as a part of its actions on the WRTP Specific Plan.

2.3 PROJECT OBJECTIVES

An early step in the WRTP Specific Plan process was the development of a vision for the future and guiding principles to inform the method to achieve that vision. The vision statement is an aspirational description of what the WRTP Specific Plan would be like in the future. Guiding principles are shared values that will be used to develop the WRTP Specific Plan that would, once implemented, achieve the vision. The vision statement and guiding principles are outlined below. The guiding principles serve as the Project Objectives for this EIR.

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[1] The City's 1996 General Plan (amended in 2002) also included 316 acres of the WRTP Specific Plan Area in City's Planning Area and Urban Limit Line (ULL).

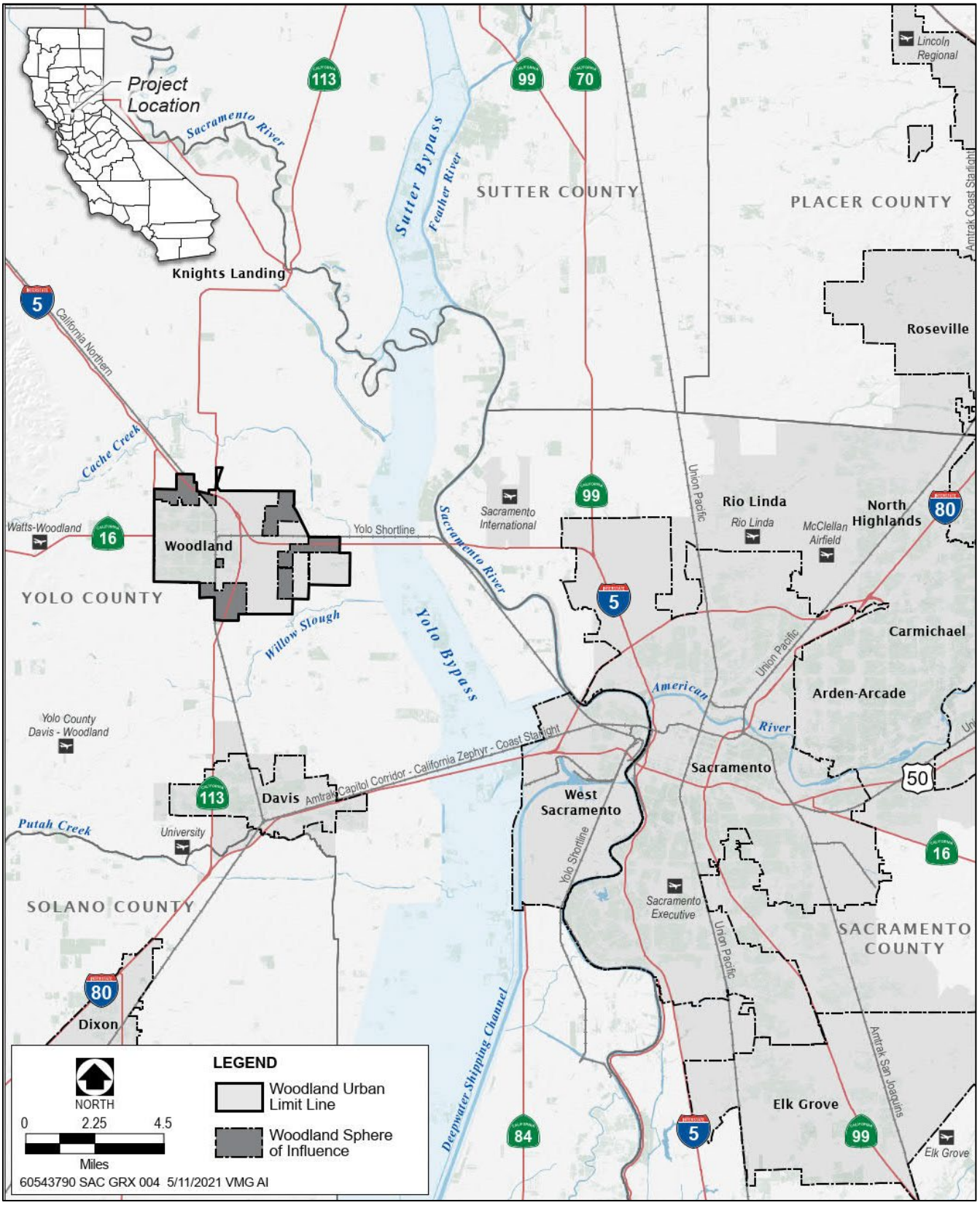

Exhibit 2-1. Regional Location, Woodland Planning Area

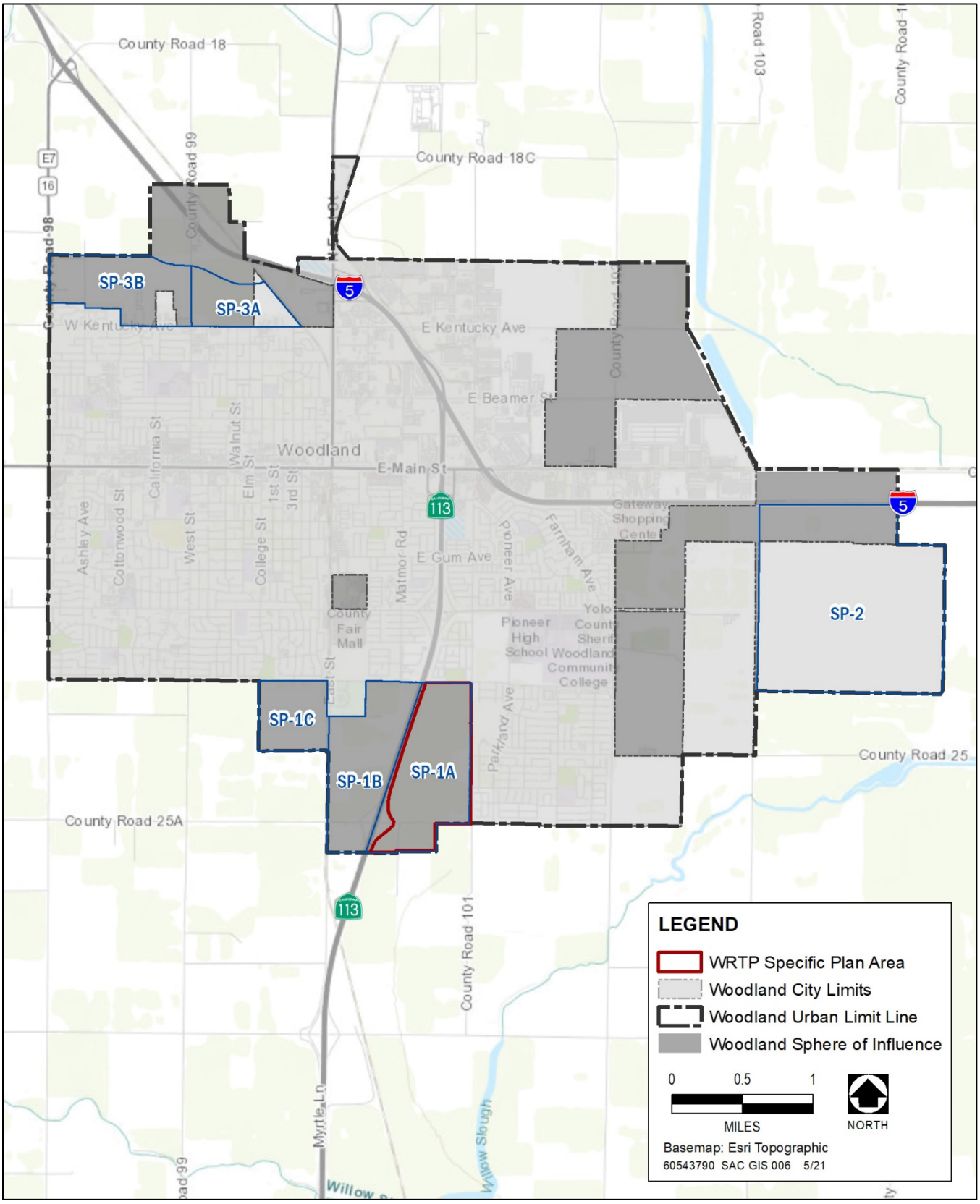

Exhibit 2-2. Location of WRTP Specific Plan Area

2.3.1 VISION STATEMENT

The WRTP Specific Plan is envisioned as a new technology hub for the City of Woodland, intended to serve an array of research and technology companies interested in locating and growing near U.C. Davis, and other research and technology institutions within the Sacramento region. The WRTP Specific Plan will offer a unique business environment, supporting research and development, technology, and science and engineering-based companies. The WRTP Specific Plan is proposed as a new type of employment center that also includes a range of housing options, and a commercial mixed-use town center focused around a central green and connected by a multi-modal street network and trail system. Although the City anticipates that agricultural-related research will be a major focus at the WRTP Specific Plan, the plan will also support an environment of innovation in flexible formats for a wide variety of businesses in medical and veterinary, bio-tech, engineering, and other fields. The WRTP Specific Plan will also provide incubation spaces for small start-up firms, facilities for established mid-size or large size companies that require larger floorplates, flexible building spaces for high-tech research and light manufacturing/flex space for product testing and development. Employee-support services and retail will create an active landscape for collaboration and innovation.

2.3.2 GUIDING PRINCIPLES

The following principles provide the envisioned outcome and overarching vision for development within the WRTP Specific Plan Area:

- **Innovation** – The Specific Plan Area will develop as a state-of-the-art innovation center campus for technology, research and development, and office uses. Flexibility in design and implementation is supported, allowing businesses to respond to market demand through phasing of construction and the ability to offer a variety of building types and sizes. Complementary uses within immediate proximity to the business park, including hotel, commercial, employee-serving retail and recreational opportunities will support day-to-day needs of businesses, their clients, and their employees.

- **Technology Capture / Talent Retention** - Collaboration with University of California, Davis (UC Davis), Woodland Community College and others will bolster start-up businesses and growing mid-to-large size companies through technology transfer and IP sourcing. The Specific Plan will accommodate advanced technology-related jobs and training that allow a greater number of Woodland residents and college graduates from the Woodland Community College and throughout the region to live and work in the community, generating an infusion of intellectual capital.

- **Business Partnerships** - Companies locating in the Tech Campus will have the opportunity to take positive advantage of the existing and thriving seed, food, and agricultural-based industries currently located and doing business in and around Woodland. Access to additional resources and new markets, new ideas, materials, and expertise will grow through strategic partnerships with new and existing businesses in Woodland.

- **Sustainable and Resilient** - The Specific Plan Area will lead in energy efficiency and sustainable design. Development within the Specific Plan Area will incorporate cutting edge green building practices. Land use strategies and transportation demand management will reduce vehicle miles traveled and facilitate the use of alternative fuel vehicles. The city's urban forest canopy will be increased and projects will incorporate naturalized stormwater management. These and other measures will contribute to meeting City goals for greenhouse gas reduction by 2035 contained in its 2035 Climate Action Plan.

- **Gathering Place** - A successful Village Center and featured 11-acre linear park will provide a mix of social gathering spaces for employees, residents, and visitors to connect, recreate, and relax. These informal networking opportunities will foster greater innovation and engagement among the workforce and allow for the balanced integration of work and life that the next generation of professionals seek.

- **Connectivity / Mobility** - A combination of well-designed complete streets, protected bicycle lanes, and pedestrian / bicycle greenways will prioritize the pedestrian experience throughout the Specific Plan Area. Well-connected parks, open spaces and greenbelts will encourage residents and employees to walk, bike, or scooter rather than drive to work, home and play. Existing bike trails and greenbelts will extend from and connect to the adjacent community including nearby schools, community center and shopping center. A shared mobility hub will serve as a point of connection for those arriving and departing the Tech Campus by various forms of alternative transportation – including micro transit stops and fixed bus routes with frequent service to Downtown Woodland and UC Davis. Amenities to support last mile active transportation alternatives are featured, including bike and scooter share services.

- **Healthy Community** - Connected streets with bicycle and pedestrian facilities, trails, accessible parks and open spaces with passive and programmed recreation will facilitate and encourage active, healthy living. Access to healthy foods through community gardens, a farmer's market and/or fresh produce market in the Village Center will be promoted. A mix of social gathering places will enable employees and residents to come together for fun and relaxation, boosting emotional wellness.

- **New Neighborhoods / Seamless Transitions** - Diverse, high quality and attractive new neighborhoods and housing options, including single and multi-family residential units and mixed-used projects will allow Tech Park employees to live and work close by and "move up" within the same neighborhood as families grow or nests are emptied. Land use and circulation planning, coupled with design and development standards will ensure a thoughtful transition between the Specific Plan Area and the adjacent Spring Lake neighborhood, complementing the established community.

2.4 PROJECT CHARACTERISTICS

2.4.1 CHAPTERS OF THE WRTP SPECIFIC PLAN

The WRTP Specific Plan is organized into the following chapters.

- Chapter 1, "Introduction and Vision," identifies the vision and guiding principles that guide the physical form and development patterns of the WRTP Specific Plan Area.

- Chapter 2, "Land Use Framework," presents the WRTP Specific Plan guiding policies and depicts the overall land use plan and districts that constitute the WRTP Specific Plan Area.

- Chapter 3, "Land Use Regulations, Development Standards & Guidelines," describes the permitted uses, development standards, and regulations, as well as provides design recommendations and guidance for individual projects, that will regulate and guide development in the WRTP.

- Chapter 4, "Circulation and Mobility," describes the network to accommodate the movement of vehicles, pedestrians and bicyclists.

- Chapter 5, “Public Utilities and Services,” describes the plan-wide utilities of water, wastewater, storm drainage, , electric, natural gas, communication, and the public services of parks, schools, law enforcement, fire and solid waste.

- Chapter 6, “Implementation,” describes phasing, implementation procedures and strategies for financing and maintenance of public facilities and services.

- Chapter 7, “Administration,” outlines the WRTP Specific Plan process and its relationship to the subsequent entitlement process, and describes the administrative procedures to implement and amend, interpret and enforce the WRTP Specific Plan.

2.4.2 LAND USE PLAN AND PROGRAM

The proposed WRTP Specific Plan Land Use Diagram, Exhibit 2-3, identifies land use designations as defined in Section 3.2, "Zoning Classifications," of the WRTP Specific Plan. Table 2-1 summarizes the proposed land uses. The WRTP Specific Plan would provide for a variety of housing types and non-residential land uses, as well as parks and open space and supportive public facilities and infrastructure. As described in Section 2.3 of the WRTP Specific Plan, “Land Use Plan,” and for the purpose of analysis in this EIR, at build out, the land use plan is estimated result in the development of approximately 1,600 new dwelling units, 2.2 million square feet of non-residential building space, the opportunity for up to 5,000 employees, and 21.8 acres of parks and other types of open space. The total number of dwelling units, the number of units shown for each land use designation in Table 2-1, total square footage, and number of employees that could be accommodated are all *assumptions* used for the purposes of informing related planning efforts and the analysis of environmental impact of the WRTP Specific Plan. Development will be phased, and is anticipated to occur over approximately two decades. Future developments within the WRTP Specific Plan Area will be reviewed against the development standards and guidelines in the WRTP Specific Plan and analysis in this EIR to ensure consistency. The proposed project includes establishing prezoning consistent with the draft Specific Plan to support annexation, a General Plan land use designation change to Open Space (OS) for the South Regional Pond area, and prezoning of the South Regional Pond area as O-S OPEN SPACE ZONE.

In addition to the land use designations and zones, the WRTP Specific Plan delineates the Planning Area into three Planning Districts, each of which have sub-districts. The three Planning Districts are: (1) Technology Park, which contains two sub-districts of North Campus and South Campus, (2) the Village Center, which contains the sub-districts of the Village Center Mixed Use, The Yard, and the Village Center Residential, and (3) the Villages, which contains the sub-districts of the North Villages, East Villages, and Urban Villages. The Planning Districts are used to identify the geographic and form types within the Land Use Plan. The WRTP Specific Plan contains design standards and guidelines that are defined in the WRTP Specific Plan and organized by Planning District, with special character guidelines for selected zones within each District. The design standards are a prescribed set of threshold requirements for development, while the design guidelines are a set of discretionary recommendations for preferred outcomes of development. Together, the design standards and guidelines address the desirable features of the land uses identified in the WRTP Specific Plan within each Planning District, while informing development in ways that reduce environmental impacts and provide economic benefit.

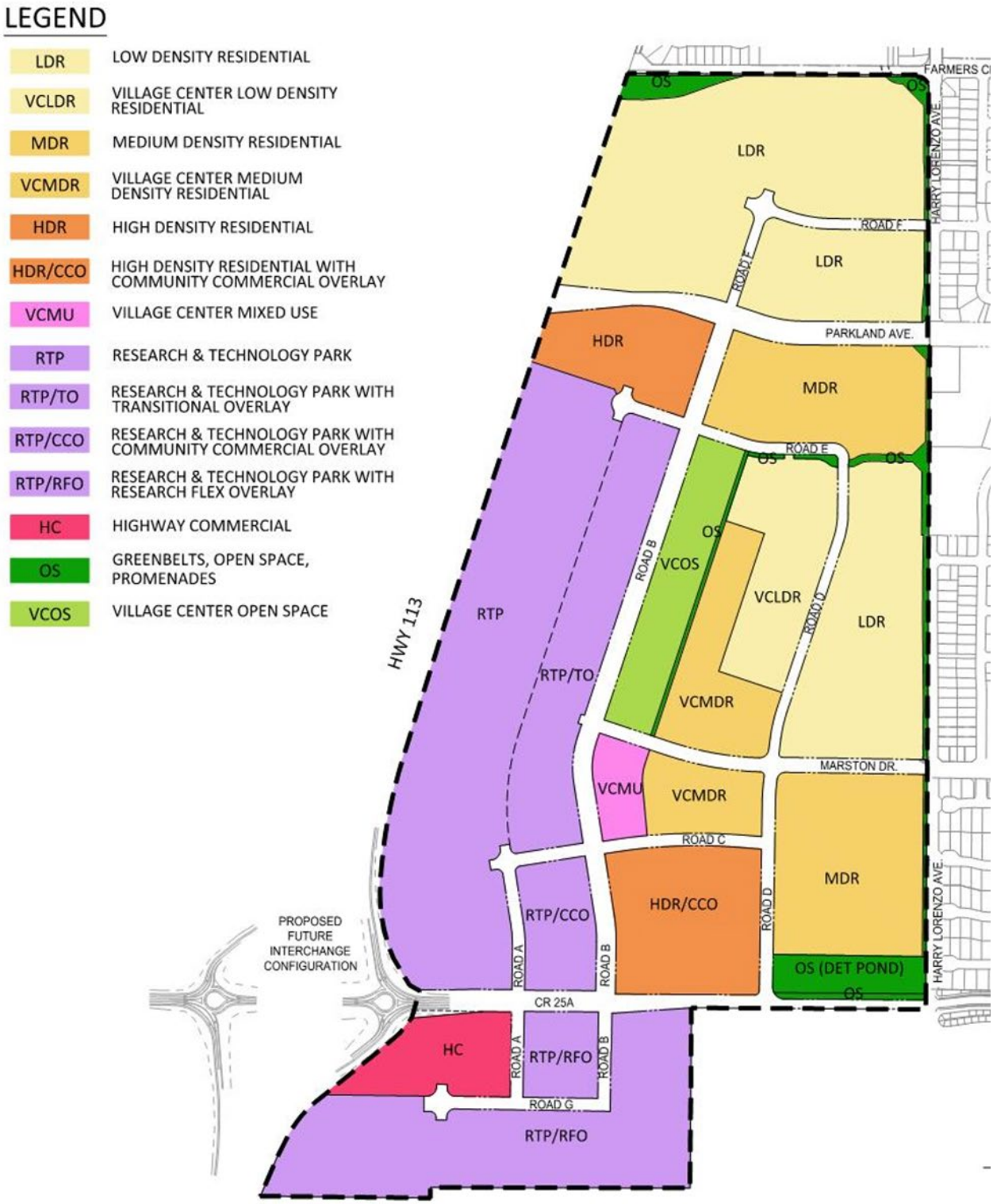

Exhibit 2-3 WRTP Specific Plan Area Land Use Plan

Table 2-1. WRTP Specific Plan Land Use Program

Land Use Designation (Zone)	Land Uses	Assumed Residential Density (units / acre)	Land Area (gross acres)	Assumed Floor Area Ratio	Dwelling Units	Non-residential Square Footage[1]
Low Density Residential (LDR)	Detached and attached single-family dwelling units, including duplex, halfplex, alley and cluster lots.	1.0 to 8.0	74.8		500	**n/a**
Village Center Low Density Residential (VCLDR	Centralized detached and attached single-family dwelling units, including duplex, halfplex, alley and cluster lots.	1.0 to 8.0	13.1		500	**n/a**
Medium Density Residential (MDR)	Attached and detached homes, including small-lot subdivisions, duplexes, triplexes, zero-lot-line homes, and townhouses.	8.1 to 19.9	35.5		600	**n/a**
Village Center Medium Density Residential (VCMDR)	Row houses, townhouse, small-lot, cluster and detached housing units in a more centralized location.	8.1 to 19.9	16.7		600	**n/a**
High Density Residential (HDR)	Attached housing units, including triplexes, fourplexes, row houses, and stacked flats (multi-story apartments or condominiums).	20.0 to 40.0	9.7		500	**n/a**
High Density Residential/Community Commercial Overlay (HDR-CCO)[2]	The HDR housing uses, in addition to retail, business and personal services, grocery, and restaurants, offices and similar commercial uses.	20.0 to 40.0	15.9	0.2 to 2.0	500	68,000
Subtotal Residential	**n/a**	**n/a**	**165.7**	**n/a**	**1,600**	**68,000**
Village Center Mixed Use (VCMU)[3]	Smaller format commercial spaces and mixed-use buildings, including retail, restaurant, offices and similar land uses.	**n/a**	3.5	0.6 to 4.0	**n/a**	75,000
Highway Commercial (HC)	Hotels, vehicle service stations, restaurants and other retail or service uses.	**n/a**	8.2	0.25 to 2.0	**n/a**	70,000
Subtotal Retail / Commercial	**n/a**	**n/a**	**11.7**	**n/a**	**n/a**	**145,000**
Research and Technology Park (RTP)	Research and development, laboratory, light manufacturing and assembly, offices, business support uses, and other technology and research-based businesses.	n/a	50.3	0.2 to 2.0	n/a	1,955,000
Research and Technology Park/Transitional Overlay (RTP/TO)	Similar to the RTP, but with more limited industrial uses and expanded office, retail, and personal service uses.	n/a	19.3	0.2 to 2.0	n/a	Included in area listed as RTP above.

Land Use Designation (Zone)	Land Uses	Assumed Residential Density (units / acre)	Land Area (gross acres)	Assumed Floor Area Ratio	Dwelling Units	Non-residential Square Footage[1]
Research and Technology Park/ Community Comm. Overlay (RTP/CCO)	Similar to the RTP, but with more commercial uses.	n/a	6.8	0.2 to 2.0	n/a	Included in area listed as RTP above.
Research and Technology Park/ Research Flex Overlay (RTP/RFO)	Similar to the RTP, but with more light manufacturing and research.	n/a	35.9	2.0 maximum	n/a	Included in area listed as RTP above.
Subtotal Research and Technology	**n/a**	**n/a**	**112.3**	**n/a**	**n/a**	**1,955,000**
Subtotal Commercial / RTP	**n/a**	**n/a**	**124.0**	**n/a**	**n/a**	**2,100,000**
Village Center Open Space (includes Pedestrian Promenade) (VCOS)[4]	Primarily recreation, with some commercial uses allowed.	n/a	11.6	0.5	n/a	32,000
Open Space (OS)	Parks, open spaces, and greenways primarily for the use of passive recreation and stormwater management.	n/a	10.2	n/a	n/a	n/a
Subtotal Parks / Open Space	**n/a**	**n/a**	**21.8**	**n/a**	**n/a**	**32,000**
Collectors & Arterials (Right-of-Way)	Public facilities.	**n/a**	38.0	**n/a**	**n/a**	**n/a**
Total	**WRTP Specific Plan Area**	**n/a**	**349.5**	**n/a**	**1,600**	**2,200,000**

Notes: n/a = not applicable

1. Average yields are estimated for planning purpose and impact analysis in this EIR.
2. Twenty-five percent (about 4 acres) of High Density Residential / Community Commercial Overlay acreage is assumed to be developed as Community Commercial.
3. Village Center Mixed Use may include residential unites not included herein.
4. Village Center Open Space allows for 1.5 acres of commercial/retail uses.

2.4.3 MOBILITY AND CIRCULATION

A multi-modal street network and bike-pedestrian trail system in the WRTP Specific Plan have been designed to balance the circulation and flow of vehicular traffic with the provision of safe and accessible facilities for walking, biking, public transit and ride share drop-off/pick-up. A modified grid street network provides circulation and access within the WRTP Specific Plan Area, to the Spring Lake Specific Plan Area and adjacent areas of the city. WRTP Specific Plan roadways not only provide circulation and connectivity but also incorporate landscape improvements that provide aesthetics, shade, and stormwater management.

A network of bike/pedestrian trails connecting from a linear open space system throughout the WRTP Specific Plan Area provide access between businesses, commercial centers, and residential areas throughout the WRTP Specific Plan Area as well as to the adjoining Spring Lake residential community. The WRTP Specific Plan provides for pedestrian and bicycle circulation, both in-street (sidewalks and bike lanes) and off-street (pedestrian/bicycle trails and paths). The WRTP Specific Plan provides for bicycle and pedestrian facilities on all streets, consistent with guidance from the General Plan and the function of each street (Principal or Minor Arterial, Collector, Local).

The proposed bicycle network is based on the classification system defined in the City's General Plan:

- Class I Bikeway – A bicycle or multi-use path that is separated from vehicle traffic.
- Class II Bikeway – An on-street striped lane designated for one-way bicycle traffic. A bike lane typically provides at least 5 feet in width for bicycle travel.
- Class III Bikeway – A marked on-street bike route that promotes shared use with motor vehicle traffic. Typically bike routes are shared paved services marked with signage on streets with a low vehicle volume.

The proposed street hierarchy includes:

- One Principal Arterial (Parkland Avenue) that provides mobility between the Spring Lake Specific Plan Area, the WRTP Specific Plan Area, and future development west of SR 113.
- Two Minor Arterials (CR 25A and Road B) that provide mobility for higher traffic volumes than local roads, but lower traffic volumes and speeds than Principal Arterial roads. Access from parcels onto these roadways is limited to reduce points of conflict, smooth the flow of traffic, and enhance urban design.
- Collectors (Marston Drive and Roads A, C, D, E, F, G and B south of CR 25A) that provide for relatively short distance travel between and within neighborhoods, and generally have lower speeds and traffic volumes than arterials. Driveway access to collectors is limited less than on arterials but may still be discouraged on certain segments to limit circulation conflicts.
- Local Streets (unnamed and planned throughout the WRTP Specific Plan Area) that provide direct roadway access to abutting land uses and serve short distance trips within neighborhoods. Traffic volumes and speed limits on local streets are low, and these roadways have no more than two travel lanes.
- Alleys or "rear lanes" that serve as accessible rights-of-way for public and private vehicles, bikes, and pedestrians, and as service access to parking lots and businesses. One or more alleys may be proposed in the WRTP Specific Plan Area for planned medium density residential (MDR), high density residential (HDR) development, and/or mixed-use development (with both housing and commercial uses).

The proposed street system includes traffic calming and other design features that seek to enhance safety. These design features include roundabouts, varying roadway and traffic lane widths, on-street parking, off-street paths, and landscaping. Five roundabouts are proposed at key intersections of Collector streets and three along CR 25A at the intersection with Road D and the off-ramps of SR 113 to enhance intersection safety and reduce speeds, thereby avoiding the need for signalized intersections. Enhanced intersection treatments are proposed at each of the controlled intersections along Road B and where the north-south greenbelt crosses Marston Drive and Parkland avenue, providing enhanced paving and pedestrian safety features to slow traffic and provide for ease of bike and pedestrian crossing.

Bus transit service is provided adjacent to the WRTP Specific Plan Area by Yolobus, operated by the Yolo County Transportation District (YCTD). The WRTP Specific Plan Area is located along bus route 242 (the Woodland Commute) and route 243 (the Spring Lake Commute), connecting to U.C. Davis and operating during the weekday during peak commute hours; intercity bus routes 42A and 42B, which provide counterclockwise and clockwise connections between Davis, Woodland, the Sacramento International Airport, Downtown Sacramento, and West

Sacramento; intercity express service from Spring Lake to Sacramento along routes 45X and 46; and adjacent to local routes 210, 211, 212, 214, and 215 located at the County Fair Mall Transit Center, northwest of the WRTP Specific Plan Area.

Bus service to the WRTP Specific Plan Area, including local, express, and intercity bus service, shuttle, and/or other potential future circulator for the WRTP Specific Plan Area and Spring Lake Specific Plan Area, will be coordinated with the YCTD and UC Davis Transportation and Parking Services/Unitrans to support the transit demands of the WRTP Specific Plan Area as it builds out.

To address both inter-city and intra-city public transit needs, the WRTP Specific Plan proposes development of a shared mobility hub along within the Village Center Planning District, with passenger drop-off and pick-up locations for bus and other transportation forms, such as carshare, local shuttle, and ride hailing services, as well as car and vanpool parking, electric vehicle charging stations, and bicycle and scooter share docking stations. The shared mobility hub will be the primary point of connection to fixed route bus service as part of the City's planned pulse route system provided by YCTD's YoloBus service. Precise locations will be determined as the WRTP Specific Plan Area builds out and street sections are finalized. The precise locations and timing for development of the shared mobility hub will correspond with service demand as the WRTP Specific Plan Area builds out. Early phases of the shared mobility hub will include park and ride facilities to promote carpooling and, as demand grows with the employment and housing development, the full set of transit and shared mobility services will be added.

2.4.4 PARKS/OPEN SPACE

Parks and recreational facilities and programs are provided by the City's Community Services Department. The Community Services Department also provides recreation programs for City residents and visitors. The City of Woodland provides more than 394 acres of parks and recreation facilities, including 149 acres of developed parkland and 24 acres of other facilities. City facilities include mini neighborhood and community parks, a community sports park, a 50-meter aquatics complex, and six recreational facilities, including the 13-acre Woodland Community & Senior Center.

The City's 2035 General Plan establishes a parkland requirement of 6.0 acres of parks for every 1,000 residents and encourages the distribution of parks such that every residence is within one-quarter mile of a neighborhood park. The City will require the WRTP Specific Plan to meet these 2035 General Plan requirements.

The WRTP Specific Plan proposes the following:

- Mini/Pocket Parks and Plazas, which also include courtyards and common areas, typically range from 0.1 to 1 acre, and will be provided as a neighborhood amenity within the WRTP Specific Plan Area neighborhoods and multi-family developments, as well as the Research and Technology Park and commercial zones. A 0.5-acre pocket park is planned east of Road E along the HLA greenbelt.

- Neighborhood Parks provide mostly passive recreation uses, serving neighborhoods within a range of about one-half mile, or a 10-minute walking distance. An 11.8-acre central linear green space, "The Yard," is planned as the neighborhood park to serve the WRTP Specific Plan Area, inclusive of a pedestrian promenade. With its unique location central to the Village Center and the broader WRTP Specific Plan Area, The Yard will serve as a gathering space for WRTP Specific Plan Area employees, residents, and visitors, providing both passive

and active recreational opportunities convenient to both residential neighborhoods and the Research and Technology Park, as well as the village center mixed-use zone immediately south.

- Linear Parks and Greenbelts are envisioned as landscaped, open space areas to be used for recreation and non-motorized transportation. Greenbelts may be designed to include playgrounds, open turf or planted areas, shade trees, plazas, and picnic areas, and are connected by bike/walking paths. Greenways for the WRTP Specific Plan Area also provide stormwater management, including drainage and connections to open space areas used for stormwater detention/retention. Linear parks and greenbelts in the WRTP Specific Plan include:
  - the eastern and northern boundaries of the WRTP Specific Plan Area;
  - along the south side of Road E, between a proposed 0.5-acre park at Harry Lorenzo Avenue and The Yard; and
  - along the north side of CR 25A, between the eastern boundary of the WRTP Specific Plan Area and Road D.

Other WRTP Specific Plan open spaces include:

- A 4.2-acre green space located at the southeastern corner of the WRTP Specific Plan Area, at CR 25A and Harry Lorenzo Avenue. This area is reserved as a stormwater detention basin, requiring minimal maintenance and set aside for passive uses, scenic beauty, and relief from developed areas. This detention basin is connected to the greenway/open space system for the WRTP Specific Plan Area.

2.4.5 PUBLIC UTILITIES AND INFRASTRUCTURE

Infrastructure to support the WRTP Specific Plan Area will include drainage, sewer, water, and dry utilities, as summarized below.

2.4.5.1 STORMWATER MANAGEMENT

There are no natural streams or waterways within the WRTP Specific Plan Area, nor is there currently a developed on-site drainage system capable of managing future flows with development of the WRTP Specific Plan Area. Minor roadside ditches accept runoff from county roadways, and agricultural ditches and culverts currently manage local agricultural runoff within the WRTP Specific Plan Area. Along the eastern boundary of the WRTP Specific Plan Area, an existing north-to-south channel runs along the west side of Harry Lorenzo Avenue from Diggs Street to Marston Drive. This channel was constructed to intercept and convey agricultural runoff around the Solara Ranch development. The channel terminates in a culvert, outflowing to a channel on the western boundary of the Oyang South development, and eventually connecting to the unlined channel along the CR 25A corridor. As development of the WRTP Specific Plan proceeds, existing off-site agricultural flows from west of SR 113 will, in general, continue to be routed around the south side of the WRTP Specific Plan Area along CR 25A. As upstream, existing off-site agricultural areas are gradually replaced by development (as envisioned in the General Plan), agricultural drainage will diminish.

The proposed on-site drainage system will consist of a system of collection and conveyance facilities, which will carry stormwater via gravity generally from west to east toward Harry Lorenzo Avenue. From there, existing off-site facilities will convey runoff to the east through the Spring Lake Specific Plan Area. Developed on-site flows

will be conveyed generally from west to east through new storm drainage pipes. Pipes will usually be located in public streets or in proposed storm drain easements. Storm drain pipes will be designed to carry flow full under gravity in the 10-year storm. The downstream (east) edge of the overall WRTP Specific Plan Area shed lies along the Harry Lorenzo Avenue corridor, and 100-year release points from the overall shed are expected to be along Harry Lorenzo Avenue between CR 25A and the Farmers Central Channel.

Within the WRTP Specific Plan Area itself, on-site flows in excess of pipe capacities (i.e., in excess of the 10-year flows) will be conveyed overland via collector and arterial streets, and in greenbelt corridors. Release points for the 100-year storm will be provided for all on-site developed drainage sub-areas. It is expected that the overland flow patterns will generally follow the direction of piped (10-year) flows. Streets will have an overland flow path to the downstream end of the WRTP Specific Plan Area. Overland release may also be to an abutting channel, sized for the 100- year/24-hour peak flow with one foot of freeboard. Alternatively, overland flow may be conveyed in greenbelts provided that (1) the greenbelt connects directly to a downstream channel or arterial street, (2) the greenbelt can be shown to have sufficient hydraulic capacity to carry the 100-year flow from its ultimate developed contributing area, and (3) frequent flows will not compromise the primary function of the greenbelt as an amenity.

Based on the requirements of the State Water Resources Control Board National Pollutant Discharge Elimination System (NPDES) General Permit, water quality treatment design for the WRTP Specific Plan will be addressed by implementing Low Impact Development (LID) measures; standard Treatment Control Best Management Practices (BMPs); end-of-pipe water quality storage within existing and proposed detention basins; and upland LID-style, runoff-reduction measures and end-of-pipe detention storage within existing and/or proposed detention basins. Key LID elements will include:

- At-source drainage management. This entails integration of small-scale distributed drainage management features, such as shallow, decentralized surface detention areas and/or infiltration areas that are consciously designed into streetscapes and individual site landscapes. An at-source drainage management approach encourages the use of drainage as a design element, rather than solely as a functional requirement.

- Reduction of new impervious areas. This can be accomplished with compact building footprints, alternative driveway layouts and/or materials, narrower roadway cross-sections (as appropriate), pervious pavement, and efficient parking layouts.

- Disconnection of new impervious areas. This can be accomplished through judicious site design that places pervious areas (landscaping and/or pavement) downstream of a site's impervious surfaces (roofs and conventional pavement), with site grading and landscaping designs that provide for sheetflow from those impervious surfaces onto pervious surface areas.

Treatment Control BMPs will typically include vegetated swales, stormwater planters/rain gardens, pervious pavements, and end-of-pipe water quality storage (detention basins).

Runoff from the off-site shed west of SR 113 and north of CR 25A will be intercepted by a proposed on-site interceptor/conveyance channel sized for the 100-year peak flow from the existing off-site HW20 shed; the channel will run along the east side of SR 113 and then along the north side of CR 25A for about 500 linear feet. The downstream segment of the swale along CR 25A will discharge to a storm drain pipe that will be sized for the 100-year peak flow from the off-site HW20 shed and contributing areas in the WRTP Specific Plan Area; the pipe will

extend to the south side of CR 25A and continue east to the proposed South Regional Pond located off-site east of SR 113 and just south of CR 25A, adjacent to the southernmost border of the WRTP Specific Plan Area.

Phasing of drainage facilities will be mostly guided by development phasing. However, installation of major facilities to serve the WRTP Specific Plan Area is expected to proceed from downstream to upstream (i.e., east-to-west from Harry Lorenzo Avenue to SR 113). Downstream capacity exists in the East Regional Pond, which is located approximately one mile east of the WRTP Specific Plan Area, to accommodate about 80 acres of unbuilt residential development (or hydrologically equivalent land uses)[2].

2.4.5.2 WATER SUPPLY AND DISTRIBUTION

The City of Woodland Public Works Department currently provides municipal water to the boundary of the WRTP Specific Plan Area. Treated Sacramento River water supplied by the Woodland-Davis Clean Water Agency's Regional Water Treatment Facility (RWTF) is the primary source of potable water. Groundwater is a backup to the surface water supply and will supplement surface water during times of high demand or reduced surface water availability.

The WRTP Specific Plan water system will connect to nearby existing transmission mains and distribute domestic water throughout the WRTP Specific Plan Area. The proposed points-of-connection for the system are along the existing 12-inch main in Harry Lorenzo Avenue. The preliminary network leading from these connections was designed in accordance with the City of Woodland Engineering Standards to provide looping of the system, and minimum spacing of 12-inch lines at approximate one-half-mile intervals.

The public water supply pipelines are all located within the right-of-way of public streets or roads, with pipelines larger than 8 inches located in collectors and arterials. Additional pipelines will connect the portion of the system south of CR 25A back to the main network to ensure looping in this branch of the system.

Recycled water refers to wastewater treatment plant effluent which has received a level of treatment such that it meets the State requirements for direct non-potable use. The City of Woodland Public Works Department does not currently provide a continuous recycled water main connection from the Water Pollution Control Facility (WPCF) to the boundary of the WRTP Specific Plan Area. The City evaluated the feasibility of recycled water and confirmed the need for a new recycled water utility. The recycled water utility is planned to be expanded to convey recycled water to the WRTP Specific Plan Area via a pressure system and routed to serve primarily industrial uses and irrigation demands. Due to the nature of the WRTP Specific Plan development, a recycled water main is planned to be stubbed south of CR 25A to provide service for potential future demands of the agricultural research that is anticipated to be conducted in the Research and Technology Park/Research Flex Overlay land use. The public recycled water supply pipelines are all planned to be located within the right-of-way of public streets and greenways. The proposed point-of-connection for the system is at the existing 8-inch main south of Osborn Drive and Farmers

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[2] As a result of modeling being performed for the City's North Area by the City's drainage consultant (Wood Rodgers) it has been determined that a greater allowable flow over the downstream High Line Ditch than previously modeled is likely. With the recently installed downstream infrastructure upgrades described above and an assumed higher allowable spill over the High Line Ditch, it is anticipated that more development in the Plan Area can occur before triggering additional Plan Area or downstream improvements. Revised baseline conditions modeling and detailed information defining the operational capacity of the recently installed infrastructure will need to be determined prior to allowing development beyond 80 residential equivalent acres to proceed.

Central Road. The main will then be routed south down the greenway along the west side of Harry Lorenzo Avenue, terminating at Marston Drive, where it will connect to existing pipelines within the Spring Lake Specific Plan Area. From Harry Lorenzo, the WRTP network will extend along Parkland Avenue, Marston Drive, and Road B. The recycled water distribution system is unlikely to be operational at the initial occupancy of the WRTP Specific Plan Area due to the absence of a connection to the WPCF; as such, the domestic water network was designed considering these additional interim irrigation demands.

2.4.5.3 WASTEWATER

The City of Woodland provides wastewater collection and treatment throughout the City limits. The City constructed the current WPCF in 1989. Since that time, the City has upgraded the facility twice—once in 1999 and a second time in 2006, when the City expanded and upgraded the treatment plant's hydraulic capacity from 7.8 million gallons per day (mgd) to 10.4 mgd. The City expanded the plant a third time in 2016 to increase solids handling capacity among other upgrades. In recent years, hydraulic inflows to WPCF have gone down due to water conservation and the City's efforts to reduce infiltration and inflow through sewer collection system rehab projects.

The City of Woodland's Public Works Department is the community's wastewater service provider. There are currently no wastewater mains or services located within the WRTP Specific Plan Area. In order to get the wastewater from the Spring Lake Specific Plan Area to the WPCF, a regional pumping station, the Spring Lake Specific Plan Pump Station, was constructed at the intersection of Farmers Central Road and Miekle Avenue. The facility is designed to run at maximum design capacity of 6.1 mgd, utilizing two 90-horsepower pumps with an additional pump for redundancy. Analysis of projected flows indicated that flows from the Spring Lake Specific Plan Area and WRTP Specific Plan Area would be approximately 7.4 mgd, which exceeds the current capacity of the Spring Lake Specific Plan Pump Station (Water Works 2020). The 90-horsepower pumps currently operating the existing Spring Lake Specific Plan Pump Station were anticipated to be replaced at the end of their useful life of approximately 20 years; installed in 2004, they will require replacement in 3 to 5 years. The most recent assessment of the Spring Lake Specific Plan Pump Station capacity identified alternatives for increasing the capacity of the pump station through pump replacement, pump upsizing, and electrical upgrades (Water Works 2020). The report included the following conclusions:

- Existing flows from Spring Lake are nearing the capacity of the existing pumps operating one at a time; hence, without the installation of a planned third pump, the pump station will no longer have redundancy.
- Replacing the existing two pumps with modern 90-horsepower, more efficient pumps will increase the capacity to approximately 3.7 mgd with redundancy for the current measured flows.
- New rain gauges have been installed that will provide updated information for future analysis.
- Adding a 3rd new 90 HP pump will increase the pump station capacity to approximately 7.5 mgd, with the 3rd pump providing redundancy.

The timing of pump replacements and additions will be determined by the City based on these recommendations; however, addition of a third pump for backup redundancy will be required prior to any development within the WRTP Specific Plan Area.

A combination of gravity and pressure sewers will be required to convey new wastewater flows from the WRTP Specific Plan Area to the WPCF. Upgrades made to the WPCF since 1989 will allow the facility to accept the WRTP Specific Plan flows. As noted, the SLSP Pump Station will require a third pump be installed in order to provide adequate capacity for the wastewater flows from development within the WRTP Specific Plan Area. In addition, a 7.3-acre area within the WRTP Specific Plan Area will require either a lift station or several feet of fill soil to convey wastewater runoff to the existing gravity main in SLSP. The pump size for a lift station option has not yet been determined and would need to be based on wastewater flow rate generated at the time of site design. Pump station upgrades will need to be timed with development phasing.

The proposed points-of-connection for the WRTP Specific Plan wastewater conveyance system are at the existing 8-inch main in Harry Lorenzo Avenue at Fowler Way (future), the proposed 15-inch main extending from the future Heritage Parkway, and the existing 10-inch main in Marston Drive.

2.4.5.4 ELECTRICITY

Pacific Gas and Electric Company (PG&E) provides electricity and gas to the city. In June 2018, Valley Clean Energy began providing electricity in Woodland as a "cleaner energy" alternative; however, distribution of said electricity remains the responsibility of PG&E.

PG&E operates and maintains a 60-kiloVolt (kV) electric transmission line, along with corresponding distribution facilities adjacent or within the WRTP Specific Plan Area. The 60-kV electric transmission line is located immediately north of the WRTP Specific Plan Area within the Farmers Central utility corridor. A 12-kV overhead electric distribution line currently exists along Harry Lorenzo Avenue from Farmer's Central Road to, and continuing south of, CR 25A. Similarly, there is another 12-kV distribution line along the north side of CR 25A that continues north within the WRTP Specific Plan Area adjacent to the SR 113 northbound on-ramp, to a point approximately 1,000 feet north of CR 25A.

Implementation of the WRTP Specific Plan will require expansion of electrical distribution and transmission lines and related facilities. In addition to adding new distribution feeders, the range of electric system improvements needed to accommodate new growth may also include upgrading existing substation and transmission line equipment, expanding existing substation(s) to their ultimate build-out capacity, building new substations, and interconnecting transmission lines. Existing overhead electric distribution lines along Harry Lorenzo Avenue and/or CR 25A will remain in place until adjacent property within the WRTP Specific Plan Area is developed, at which time they shall either be placed underground or eliminated if the development is served from an alternative corridor. Similarly, as existing facilities within the WRTP Specific Plan Area are taken offline, overhead services to them will be removed and new underground service in a joint trench will be provided for WRTP Specific Plan Area facilities.

2.4.5.5 NATURAL GAS

PG&E operates and maintains an 8-inch gas transmission line, within and extending south of the WRTP Specific Plan Area along the west side of Harry Lorenzo Avenue.

Implementation of the WRTP Specific Plan will require the expansion of distribution and gas transmission lines and related facilities to serve the WRTP Specific Plan Area. Initial gas service will likely be extended from gas

distribution mains installed for the Spring Lake Specific Plan. Tying into the existing 8-inch gas transmission line would likely require the installation of a regulation station.

2.4.5.6 COMMUNICATIONS

AT&T provides telephone service to the area. Implementation of the WRTP Specific Plan will require the expansion of a telephone system to serve the WRTP Specific Plan Area. Initial service will likely be extended into the WRTP Specific Plan Area along Harry Lorenzo Avenue. Wave Broadband provides television cable and broadband.

2.4.5.7 FIRE PROTECTION

The WRTP Specific Plan Area is within the jurisdiction of the Woodland Fire Department. The City of Woodland serves its community with three permanent fire stations, each of which is staffed by firefighters 24 hours a day, 7 days a week. The closest station to the WRTP Specific Plan Area is Station Three, which is located along Pioneer Avenue on the east side of SR 113, approximately two miles north of the WRTP Specific Plan Area. The Department's current Insurance Services Office (ISO) rating is two, with one indicating excellent service and 10 indicating minimal or no protection. ISO ratings reflect firefighting personnel, equipment, and response times. The City has a maximum "first response" standard of four minutes.

The City is planning to relocate Fire Station Three to the former Willow Spring Elementary school site located at the northwestern corner of Bourn Drive and East Gibson Road, just east of Highway 113. This site is located approximately one-half mile north of the WRTP Specific Plan Area and will provide service to the WRTP Specific Plan Area.

2.4.5.8 LAW ENFORCEMENT

The Woodland Police Department and the County Sheriff's Department both provide law enforcement services in the WRTP Specific Plan Area. Annexation and development will bring the WRTP Specific Plan Area within the jurisdiction of the City.

2.4.5.9 SCHOOLS

The Woodland Joint Unified School District (WJUSD) provides public education from kindergarten through 12th grade in Woodland, as well as nearby unincorporated areas of Knight's Landing, Yolo, and Zamora. The District includes 11 elementary schools, one charter elementary school, two middle schools, two comprehensive senior high schools for grades 9-12, and one continuation high school. Additionally, there are three alternative education programs, six part-day and 2 full-day pre-schools, and an adult education center.

Spring Lake Elementary School (located at 2209 Miekle Avenue) is less than a one mile walking/biking/driving distance from the eastern boundary of the WRTP Specific Plan Area and is currently open to transitional kindergarten through 3rd grade classes; WJUSD is planning for phase 2 of construction of the school, which could include the classrooms for grades 4 through 6. There are other elementary and middle schools approximately 1.5–2 miles from the boundaries of the WRTP Specific Plan Area. In addition, Pioneer High School (1400 Pioneer Avenue) is approximately one-half mile walk/bike/drive from the northeastern corner of the WRTP Specific Plan Area. Woodland Community College is located less than a mile northeast of the WRTP Specific Plan Area.

The WRTP Specific Plan has identified an optional site for an elementary school, should it be needed. Up to a 10-acre portion of the Medium Density Residential zone at the southwest corner of Parkland Avenue and Harry Lorenzo Avenue will be reserved for a potential school site.

2.4.5.10 OFF-SITE IMPROVEMENT AREAS

While not a part of the WRTP Specific Plan Area, this EIR also addresses potential impacts associated with off-site improvement areas. Off-site improvement areas include a proposed approximately four-acre detention pond (i.e., South Regional Pond) that was not considered as part of the 2035 General Plan and CAP EIR and would be immediately south of the WRTP Specific Plan Area and adjacent to CR 25A, the Caltrans Off-site Improvement Area, at which improvements would be made to the SR 113/CR 25A interchange adjacent to the southwest corner of the WRTP Specific Plan Area, and pump replacements and additions to the Spring Lake Specific Plan Pump Station. Although the Spring Lake Specific Plan Pump Station improvements were not specifically anticipated under the 2035 General Plan and CAP EIR, these improvements would be to an existing pump station and the existing aging pumps have always been anticipated to be replaced at the end of their useful life of approximately 20 years; these improvements are further detailed in Section 2.4.5.3, "Wastewater," of this EIR.

There are two alternative footprints for the Caltrans Off-site Improvement Area that are currently under analysis. Alternative 1 consists of approximately 37 acres to construct new on- and off-ramp configurations. This alternative would include widening on the overcrossing for the westbound lane, constructing a southbound loop on-ramp, and modifications to the southbound/northbound on-ramp and off-ramp and at the ramp terminus for intersections to accommodate lane configurations. Alternative 2 consists of approximately 24 acres to modify the intersections to single-lane roundabouts; it would not require widening of the existing overcrossing structure or construction of a southbound loop on-ramp. Both of the interchange improvement alternatives consist of permanent and temporary impact areas in the Caltrans right-of-way and adjacent areas outside of the Caltrans right-of-way. The proposed SR 113/CR 25A interchange modifications would serve transportation demand generated by implementation of the WRTP Specific Plan, as well as by other existing and future development including the Spring Lake Plan Area. The two alternatives for the SR 113/CR 25A interchange modifications are shown in Exhibits 2-5a and 2-5b.

2.5 ADOPTION AND IMPLEMENTATION

Adoption and implementation of the WRTP Specific Plan will require (but not be limited to) the following actions by the City of Woodland:

- Adopt a resolution certifying the Final Environmental Impact Report for the WRTP Specific Plan, adopting Findings of Fact, and adopting a Statement of Overriding Considerations;
- Adopt a resolution adopting the WRTP Specific Plan;
- Approve an amendment to the City's General Plan to reflect the new City limits following annexation of the WRTP Specific Plan Area and the Open Space (OS) land use designation for the South Regional Pond area; and
- Adopt Chapter 3, "Land Use Regulations, Development Standards and Guidelines, of the WRTP Specific Plan by ordinance, as Section 17.58 of the Zoning Ordinance (Chapter 17 of the Woodland Municipal Code).

2.5.1 SUBSEQUENT PROJECT REVIEW

Further actions or decisions required to support implementation of the WRTP Specific Plan may include project-level approvals such as site plan reviews, tentative maps, building permits, grading permits, and other actions.

The WRTP Specific Plan permitted land use and design and development standards will be adopted by ordinance as part of the WRTP Specific Plan. The design and development standards supersede the City of Woodland Zoning Ordinance (Chapter 17 of the Municipal Code). Where a standard is not provided in the WRTP Specific Plan, the standards of the City's Zoning Ordinance and/or Standards and Specifications will apply.

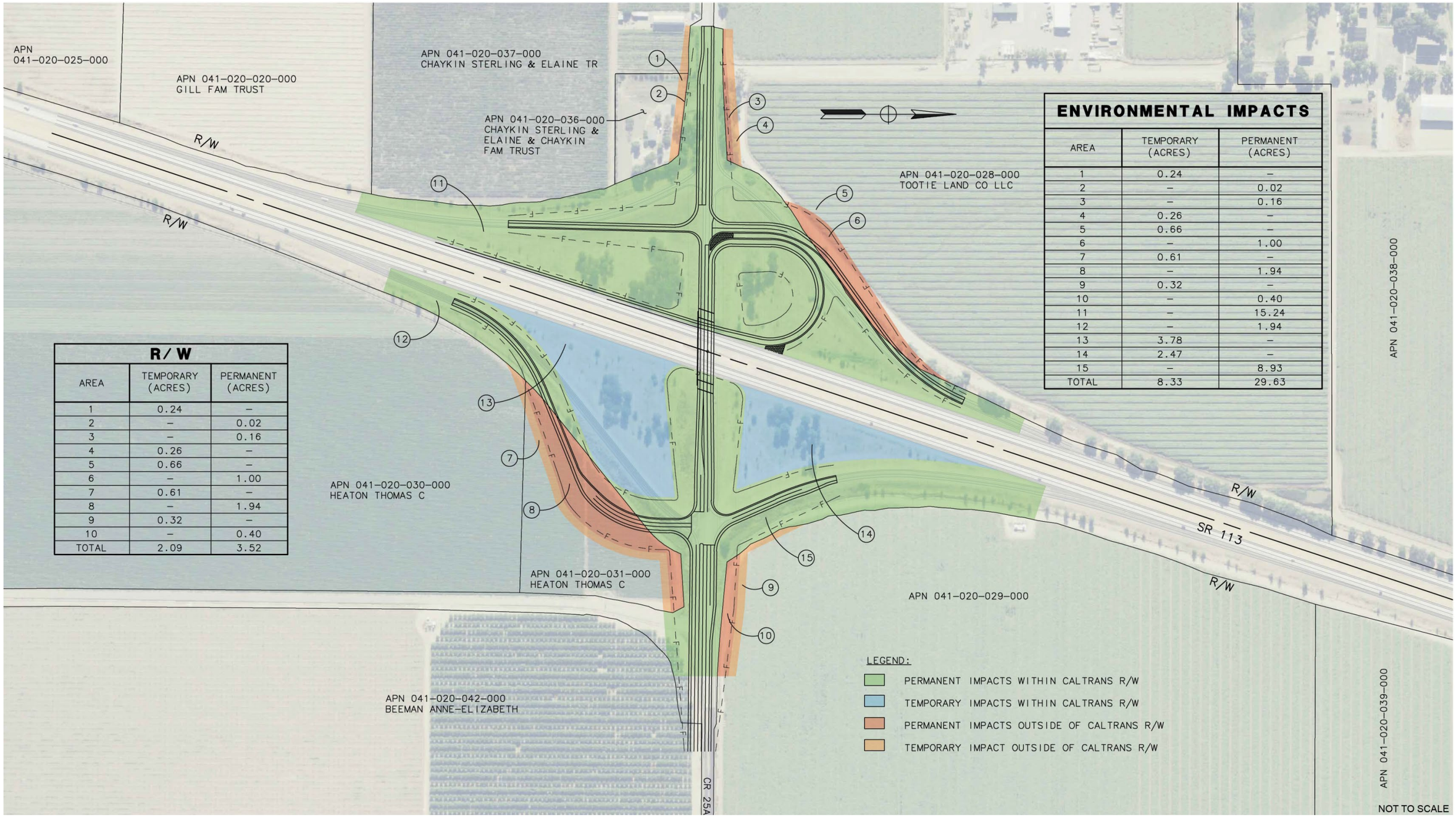
The on-site and off-site public improvements necessary to serve the WRTP Specific Plan Area will be designed in adherence with applicable provisions of the City's Zoning and Subdivision Ordinances and the Design Standards and Design Guidelines provided in Section 3 of the WRTP Specific Plan, as applicable. Plans will include an infrastructure sequencing program that coordinates with and allows for orderly development. Building permits will not be issued until the City Engineer determines that proposed improvement plans are complete (engineered and approved) and found to be consistent with the WRTP Specific Plan and Financing Plan.

2.6 AGENCIES EXPECTED TO USE THIS EIR

A number of other agencies may have responsibility for approving aspects of future development under the WRTP Specific Plan and, as a result, may use this EIR to support their actions. They include, but are not limited to:

- Yolo/Solano Air Quality Management District (authority to construct permits);
- Yolo Local Agency Formation Commission (LAFCo) (approve annexation to the City and prezoning);
- California Department of Transportation (encroachment permits and approval of SR 113/CR 25A interchange modifications);
- Central Valley Regional Water Quality Control Board (RWQCB) (National Pollutant Discharge Elimination System construction stormwater permits, discharge permit for stormwater, water quality certification pursuant to Section 401 of the Clean Water Act)

In addition to these agencies, the U.S. Army Corps of Engineers may use environmental information in the EIR for permitting decisions in the case that, for example, a Section 404 Clean Water Act permit is required for discharge of dredged or fill material into waters of the United States.



R/W

AREA	TEMPORARY (ACRES)	PERMANENT (ACRES)
1	0.24	–
2	–	0.02
3	–	0.16
4	0.26	–
5	0.66	–
6	–	1.00
7	0.61	–
8	–	1.94
9	0.32	–
10	–	0.40
TOTAL	2.09	3.52

ENVIRONMENTAL IMPACTS

AREA	TEMPORARY (ACRES)	PERMANENT (ACRES)
1	0.24	–
2	–	0.02
3	–	0.16
4	0.26	–
5	0.66	–
6	–	1.00
7	0.61	–
8	–	1.94
9	0.32	–
10	–	0.40
11	–	15.24
12	–	1.94
13	3.78	–
14	2.47	–
15	–	8.93
TOTAL	8.33	29.63

Exhibit 2-5a SR 113/CR 25A Alternative 1

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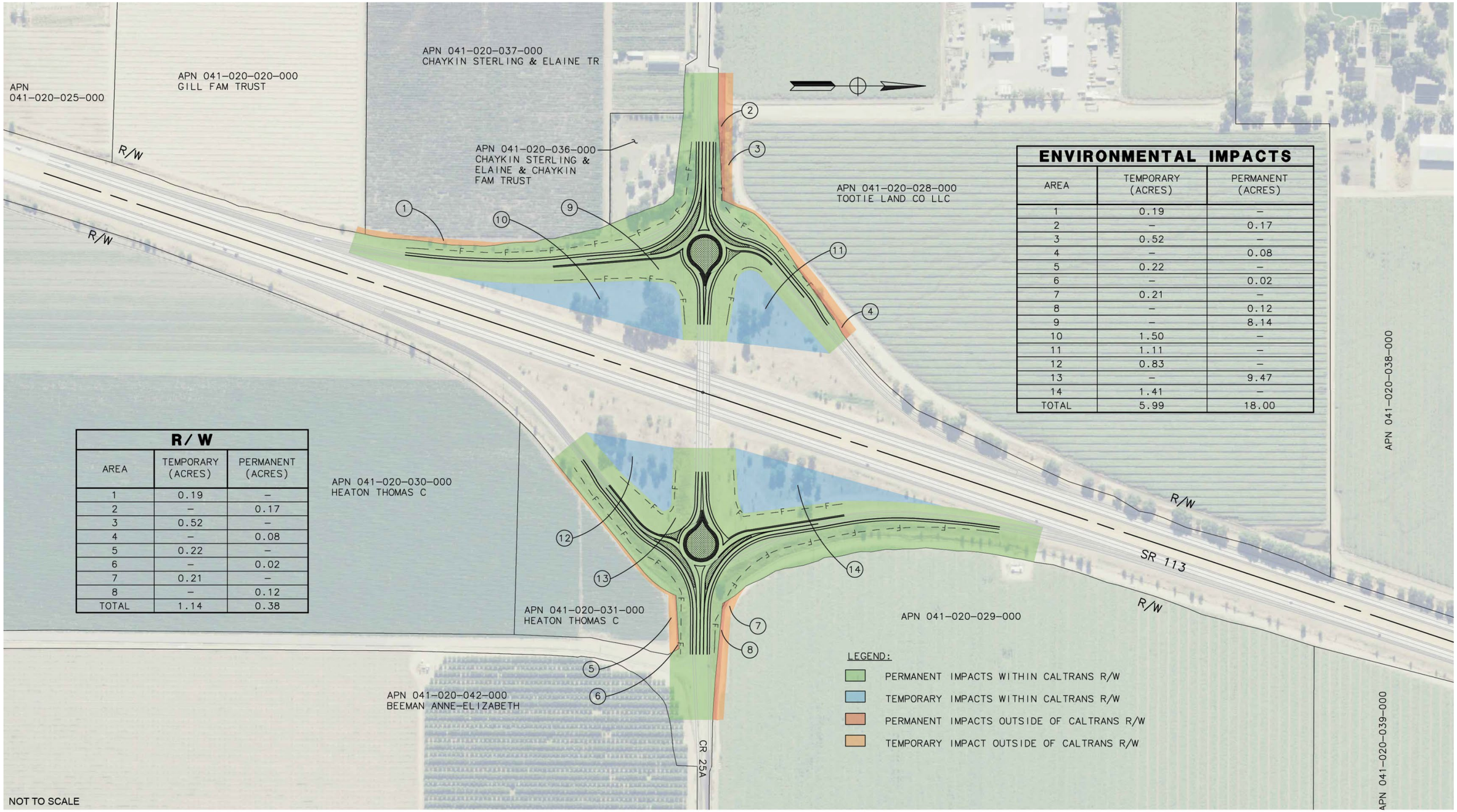

ENVIRONMENTAL IMPACTS

AREA	TEMPORARY (ACRES)	PERMANENT (ACRES)
1	0.19	–
2	–	0.17
3	0.52	–
4	–	0.08
5	0.22	–
6	–	0.02
7	0.21	–
8	–	0.12
9	–	8.14
10	1.50	–
11	1.11	–
12	0.83	–
13	–	9.47
14	1.41	–
TOTAL	5.99	18.00

R/W

AREA	TEMPORARY (ACRES)	PERMANENT (ACRES)
1	0.19	–
2	–	0.17
3	0.52	–
4	–	0.08
5	0.22	–
6	–	0.02
7	0.21	–
8	–	0.12
TOTAL	1.14	0.38

Exhibit 2-5b SR 113/CR 25A Alternative 2

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3 ENVIRONMENTAL IMPACT ANALYSIS

3.0 APPROACH TO THE ENVIRONMENTAL IMPACT ANALYSIS

In accordance with the CEQA Guidelines, this EIR includes an evaluation of potentially significant effects on the physical environment associated with implementing the proposed WRTP Specific Plan, and identifies feasible mitigation for those effects. CEQA Guidelines Section 15126.2 states that:

> An EIR shall identify and focus on the significant effects of the proposed project on the environment. In assessing the impact of a proposed project on the environment, the lead agency should normally limit its examination to changes in the existing physical conditions in the affected area as they exist at the time the notice of preparation is published, or where no notice of preparation is published, at the time environmental analysis is commenced. Direct and indirect significant effects of the project on the environment shall be clearly identified and described, giving due consideration to both the short-term and long-term effects. The discussion should include relevant specifics of the area, the resources involved, physical changes, alterations to ecological systems, and changes induced in population distribution, population concentration, and human use of the land (including commercial and residential development), health and safety problems caused by the physical changes, and other aspects of the resource base such as water, historical resources, scenic quality, and public services. The EIR shall also analyze any significant environmental effects the project might cause or risk exacerbating by bringing development and people into the area affected.

The following discussion introduces Chapter 3 of this EIR, which addresses the environmental setting, regulatory framework, environmental impacts, and mitigation measures for each environmental resource area, and explains the organization used in the analysis. Specific assumptions and methodology and significance criteria (thresholds of significance) used in the analysis and determination of significance of impacts are contained in each individual environmental resource subsection of this Chapter of the EIR.

3.0.1 SCOPE OF ANALYSIS

Sections 3.1 through 3.14 of this EIR present the environmental impact analysis for the anticipated effects of implementation of the Woodland Research and Technology Park (WRTP) Specific Plan. The environmental topics addressed in these sections are as follows:

3.1 Aesthetics and Visual Resources
3.2 Agriculture and Forestry Resources
3.3 Air Quality
3.4 Biological Resources
3.5 Climate Change, Greenhouse Gas Emissions, and Energy
3.6 Cultural and Tribal Cultural Resources
3.7 Geology, Soils, Minerals, and Paleontological Resources
3.8 Hazards and Hazardous Materials
3.9 Hydrology, Flooding, and Water Quality
3.10 Land Use Planning, Population, and Housing
3.11 Noise and Vibration
3.12 Public Services and Recreation

3.13 Transportation and Circulation
3.14 Utilities

This EIR presents a discussion of cumulative impacts within the resource-specific topic areas of each subsection of Chapter 3. Alternatives analysis is presented in Chapter 4 of this EIR, "Alternatives." Other analyses required under CEQA (including growth-inducing impacts, irreversible environmental effects, and significant and unavoidable adverse impacts) are provided in Chapter 5 of this EIR, "Other CEQA Considerations."

3.0.2 ORGANIZATION OF THE ENVIRONMENTAL IMPACT ANALYSES

As described in Chapter 1 of this EIR, "Introduction," the City's 2035 General Plan and CAP EIR addresses impacts of development of the City's Planning Area, including the WRTP Specific Plan Area. Consistent with Section 15183(b) of the CEQA Guidelines, the analysis contained within this EIR focuses on project-specific significant effects of the WRTP Specific Plan that: a) are peculiar to the WRTP Specific Plan or the site; b) were not addressed in the 2035 General Plan and CAP EIR (including off-site or cumulative impacts); or c) would be more severe than previously described based on substantial new information. Pursuant to CEQA Guidelines Section 15150, relevant information from the 2035 General Plan and CAP EIR (State Clearinghouse Number 2013032015) is incorporated by reference into this EIR, and should be considered as part of the information upon which the proposed WRTP Specific Plan EIR is based.

The goals and policies defined in Chapter 2 of the WRTP Specific Plan; land use regulations, development standards and design guidelines defined in Chapter 3 of the WRTP Specific Plan; and implementation strategies detailed in Chapter 6 of the WRTP Specific Plan reduce some impacts associated with implementation of the WRTP Specific Plan. For some potential impacts, mitigating policies, standards, and implementation strategies of the Specific Plan reduce the impacts to a less-than-significant level, whereas in other cases, mitigating policies, standards, and implementation strategies are added or revised in order to further reduce impacts. These mitigating policies, standards, and implementation strategies are considered uniformly applied development standards, as defined in Public Resources Code Section 21083.3 and CEQA Guidelines Section 15183, that will streamline and substantially limit the scope of analysis for future projects that are consistent with the WRTP Specific Plan.

Chapter 3 of this EIR is organized by environmental resource area, generally corresponding to topics in the CEQA Environmental Checklist (CEQA Guidelines Appendix G, as amended). Each subsection in Chapter 3 of this EIR presents a detailed evaluation of a particular environmental topic, including potential environmental impacts, mitigation measures proposed to reduce significant environmental impacts (where necessary), and a determination of the level of significance after mitigation measures are implemented. As described below, each section follows the same fundamental format.

3.0.2.1 ENVIRONMENTAL SETTING

This subsection provides relevant information about the existing physical environment related to the particular environmental topic. In accordance with Section 15125 of the CEQA Guidelines, the discussion of the physical environment describes existing conditions within the WRTP Specific Plan Area and relevant area of influence at the time the NOP was filed (2017), unless otherwise noted. The relevant area of influence associated with potential impacts for each resource area may differ, and is defined, as needed, for each resource area subsection of Chapter 3.

3.0.2.2 REGULATORY FRAMEWORK

This subsection describes federal, State, regional, and local plans, policies, regulations, and laws that may apply to the environmental topic under evaluation.

3.0.2.3 ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

This subsection focuses on an analysis of the potential environmental impacts of the WRTP Specific Plan, as described in Section 2, "Project Description," of this EIR. The subsection summarizes the methods used to conduct the impact analysis, and identifies the thresholds of significance used to determine the significance of potential environmental impacts of the WRTP Specific Plan. Following this is an analysis of the potential environmental impacts. Specifically, this analysis uses the following format:

An impact analysis describes potential adverse physical environmental effects associated with implementation of the WRTP Specific Plan. An impact statement at the beginning of each impact discussion summarizes the potential impact of the WRTP Specific Plan and its level of significance under CEQA, based on the identified thresholds of significance. Relevant policies, standards, and implementation strategies of the WRTP Specific Plan that would reduce or avoid impacts are described, and the finding of significance of a relevant impact accounts for adherence to these policies and programs.

During development of the WRTP Specific Plan, the City took into account the potential impacts discussed in this EIR and included policies, standards, and implementation strategies in the WRTP Specific Plan that would reduce potential impacts. When necessary and feasible, the analysis of the impact is followed by a description of one or more proposed mitigation measures. Mitigation measures are required by the CEQA Guidelines when a significant impact is identified.

The following provides the breakout of discussion as provided in the Environmental Impacts and Mitigation Measures subsection:

- **Methodology** – This section describes the methods, process, procedures, and/or assumptions used to formulate and conduct the impact analysis, as well as identifies supporting studies used to inform the analysis, where relevant.

- **Thresholds of Significance** – This section identifies the criteria established by the City, for a given environmental impact, to define the level of effect above which such as impact would be considered significant and below which it would be considered less than significant, in accordance with CEQA. Thresholds may be defined as quantitative or qualitative standards, as most applicable to each individual impact. The City, as the lead agency, has the discretion to set its own significance thresholds. Generally, however, the thresholds of significance used are derived from Appendix G of the CEQA Guidelines, as amended, and regulatory standards of federal, State, regional, and local agencies.

- **Impacts Not Discussed Further** – The section summarized impacts of the WRTP Specific Plan that are not discussed further in this EIR because either, a) there is no impact, or b) none of the factors triggering additional environmental review (as found in Section 15183(b)) exist because an impact was addressed as a part of the 2035 General Plan and CAP EIR and/or substantially mitigated by uniformly applied development standards (CEQA Guidelines Section 15183[f]).

- **Project Impacts** – This section describes potential adverse physical environmental effects associated with implementation of the WRTP Specific Plan, and provides the evidence on which the determination of level of significance is made based on the identified threshold of significance. The impacts are listed numerically and sequentially throughout each section. For example, impacts in Section 3.1 are identified as 3.1-1, 3.1-2, and so on. An impact title that is reflective of the applicable threshold and impact statement precede the discussion of each impact and provides a summary of the impact. The discussion that follows the impact statement includes the evidence on which the impact conclusion (i.e., significance determination) is based.

- **Mitigation Measures** – If the impact is found to be less than significant, no mitigation measures are required. In each case for which a significant or potentially significant impact is identified, mitigation measures are identified to avoid, minimize, reduce, or compensate for the identified impact(s). Mitigation measures, where needed, are identified numerically to correspond with the number of the impact being reduced by the measure (i.e., Mitigation Measure 3.1-1 would mitigate Impact 3.1-1). In the case of multiple mitigation measures for one impact, the mitigation measures are further identified alphabetically (i.e., Mitigation Measure 3.1-1a and Mitigation Measure 3.1-1b would mitigate Impact 3.1-1).

- **Significance After Mitigation** – This text provides a summary of the impact, assuming mitigation is implemented. There are two different outcomes:

  - Less than significant with mitigation incorporated: this would be the finding if the incorporation of all mitigation measures indicated above reduced the impact to less than significant.

  - Significant and unavoidable: this would be the finding if the City has presented all feasible mitigation and the impact is still significant.

  Significant and unavoidable impacts are also summarized in Chapter 5, "Other CEQA Considerations," under the subsection "Significant and Unavoidable Adverse Impacts."

- **Cumulative Impacts** – Cumulative impacts are those impacts of the WRTP Specific Plan that would result from the incremental effect of implementing the WRTP Specific Plan in combination with other past, present, and reasonably foreseeable future projects producing related impacts, and which are cumulatively considerable.

3.0.3 TERMINOLOGY USED TO DESCRIBE IMPACTS

For each potential environmental impact identified in this EIR, a statement of the level of significance of the impact is provided. Impacts are assessed as one of the following categories:

The term "no impact" is used when the environmental resource being discussed would not be adversely affected by implementation of the WRTP Specific Plan. This impact level does not need mitigation.

A "less-than-significant impact" would cause a minor, but acceptable change in the physical environment. This impact level does not require mitigation, even if feasible, under CEQA. In certain cases, mitigation may be incorporated for planning purposes, even when not required under CEQA for a less-than-significant impact; these situations are clearly identified and the incorporation of mitigation for planning purposes is noted.

A “significant impact” would have a substantial adverse effect on the physical environment, but can be reduced to a less-than-significant level with mitigation. Impacts may also be considered “potentially significant” if the analysis cannot definitively conclude that an impact would occur as a result of the implementation of the WRTP Specific Plan. Under CEQA, mitigation measures must be provided, where feasible, to reduce the magnitude of significant or potentially significant impacts.

A “significant and unavoidable impact” would cause a substantial adverse effect on the environment, and no known feasible mitigation measures are available to reduce the impact to a less-than-significant level. Under CEQA, a project with significant and unavoidable impacts may be approved, but the lead agency (in this case, the City) must prepare a “statement of overriding considerations” in accordance with Section 15093 of the CEQA Guidelines, explaining how the benefits of the project outweigh the potential for significant impacts.

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3.1 AESTHETICS AND VISUAL RESOURCES

3.1.1 INTRODUCTION

This section describes potential impacts related to visual resources and aesthetic character in the WRTP Specific Plan Area and off-site improvement areas. To provide context for the impact analysis, this section begins with an environmental setting describing the existing conditions in the project area related to visual character. Next, the regulatory framework is described, which informs the selection of the significance thresholds used in the impact analysis. The regulatory framework also includes existing General Plan policies related to the impact analysis of this section. The section concludes with the applicable significance thresholds, the impacts of the proposed project, recommended mitigation measures, and the significance conclusions.

The CEQA Guidelines note that comments received during the NOP scoping process can be helpful in "identifying the range of actions, alternatives, mitigation measures, and significant effects to be analyzed in depth in an EIR and in eliminating from detailed study issues found not to be important." (CEQA Guidelines Section 15083). As part of the impact analysis, Notice of Preparation (NOP) comments were reviewed to help guide analyses, and any comments were integrated into the relevant analyses. However, no NOP comments related to aesthetics were received. Appendix A to this EIR includes copies of all NOP comments received.

3.1.2 ENVIRONMENTAL SETTING

VISUAL RESOURCE EVALUATION CONCEPTS AND TERMINOLOGY

Both natural and created features in a landscape contribute to its visual character. Landscape characteristics influencing visual character include geologic, hydrologic, botanical, wildlife, recreation, and urban features. The basic elements that comprise the visual character of landscape features are form, line, color, and texture. The appearance of the landscape is described in terms of the dominance of each of these elements.

Several sets of criteria have been developed for defining and evaluating visual quality. The criteria developed by the Federal Highway Administration (FHA) (FHA 1988) and the U.S. Forest Service (USFS) (USFS 1995), which are used in this analysis, include the concepts of vividness, intactness, and unity. According to these criteria, none of these is itself equivalent to visual quality; all three must be considered high to indicate high quality visual resources. These terms are defined below.

- "Vividness" is the visual power or memorability of landscape components as they combine in striking and distinctive visual patterns.
- "Intactness" is the visual integrity of the natural and human-built landscape and its freedom from encroaching elements.
- "Unity" is the visual coherence and compositional harmony of the landscape considered as a whole.

Viewer sensitivity, also considered in relation to visual quality, depends on the number and type of viewers and the frequency and duration of views. Visual sensitivity is also affected by viewer activity, awareness, and expectations in combination with the number of viewers and the duration of the view. The viewer's distance from landscape elements plays an important role in the determination of an area's visual quality. Landscape elements are considered

higher or lower in visual importance based on their proximity to the viewer. Generally, the closer a resource is to the viewer, the more dominant, and therefore visually important, it is to the viewer.

EXISTING VISUAL RESOURCES IN THE WRTP SPECIFIC PLAN AREA

Visual Character

The WRTP Specific Plan Area and off-site improvement areas are located within the flat alluvial plain of the Sacramento Valley, approximately 7 miles west of the Sacramento River. The WRTP Specific Plan Area encompasses 350 acres consisting primarily of row crops, and a small almond orchard in the southeastern corner. It also contains an older single-family residence and barn, and an approximately 1,500-square-foot, 2-story white storage building that was constructed in 1990. Several agricultural and residential groundwater wells, overhead power lines on wood poles, dirt agricultural access roads, aboveground storage tanks (ASTs), and irrigation ditches are scattered throughout the WRTP Specific Plan Area. The topography throughout the WRTP Specific Plan Area is level.

The WRTP Specific Plan Area is bordered by State Route (SR) 113 on the west side, which is elevated on a berm above the surrounding properties at the southern end of the WRTP Specific Plan Area around the County Road (CR) 25A interchange. The SR 113 road grade transitions downward to a level that is nearly even with the surrounding properties approximately 0.5 mile north of CR 25A. A few scattered deciduous trees are present on the east side of SR 113, but views of the WRTP Specific Plan Area to the east from SR 113 are generally unobstructed and consist of cultivated row crops, with houses in the Spring Lake development in the background. The SR 113/CR 25A interchange consists of paved on- and off-ramps that transition gradually in elevation from SR 113 to the elevated CR 25A overcrossing. The areas between the ramps and SR 113 consist of primarily of grass (which is green in the spring but brown for most of the year), along with scattered shrubs and trees.

As shown in Viewpoint 1, the WRTP Specific Plan Area is flat and essentially featureless, presenting as a flat plain that appears parallel with the horizon. During the growing season, the area appears green in color; during the winter months when crops are fallow and deciduous almond trees are bare, the area appears brown. The white rectangular shapes of housing in the background contrast with the green and brown colors within the WRTP Specific Plan Area, but are only visible in background landscape views from SR 113. The flat, horizontal lines associated with the row crops also contrast strongly with the upright rounded forms of trees on the east and west sides of the WRTP Specific Plan Area, and the white 2-story storage shed and wellhead casing within the WRTP Specific Plan Area.

A portion of CR 25A bisects the southern portion of the WRTP Specific Plan Area from east to west. This two-lane local roadway is paved, and overhead power lines on wood poles, along with scattered trees, are present along the sides of the roadway within the WRTP Specific Plan Area. Motorists traveling on CR 25A have views to the south of the nut tree orchard on the WRTP Specific Plan Area , and fields with row crops to the north along with scattered trees surrounding the on-site rural residence on the north side of the roadway (see Viewpoint 2). Traffic along SR 113 to the northwest is clearly visible from this southern portion of the WRTP Specific Plan Area. As shown in Viewpoint 3, the south side of CR 25A, which includes the southern portion of the WRTP Specific Plan Area and the planned South Regional Pond area, consists of an orchard. The vertical, upright form and coarse texture of the trees contrasts strongly with the flat, linear nature of the roadway and the cropland present on the north side of CR 25A. The orchard trees are in bloom in the spring, and are green throughout the summer. The trees are deciduous, and therefore have a brown color in the winter. As shown in Viewpoints 2 and 3, the WRTP Specific Plan Area and the off-site South Regional Pond area present a typical view of rural farmland in Yolo County.

Source: Google Earth 2018

Viewpoint 1 – Looking northeast from SR 113 northbound. Pavement on SR 113, scattered deciduous trees and grass, fencing, and a dirt road within the WRTP Specific Plan Area are visible in the foreground. Row crops and a large white storage shed are visible in the middleground, along with a group of deciduous trees along the west side of CR 101. Housing in the Spring Lake Specific Plan Area along the norther border of the WRTP Specific Plan Area is visible in the background.

Source: AECOM 2017

Viewpoint 2 – Looking northeast from CR 25A. A drainage ditch, pavement on CR 25A, and a wood power pole with overhead power lines are visible in the foreground. Row crops within the WRTP Specific Plan Area are visible in the middleground. Vehicles traveling on SR 113, along with trees (primarily on the west side) of SR 113 are visible in the background. A large round white aboveground storage tank, white agricultural water well casing, and power poles at the west edge of the WRTP Specific Plan Area are also visible in the background.

Source: Google Earth 2019

Viewpoint 3 – Looking southeast from County Road 25A. Roadway pavement, a drainage ditch, wood power poles, and cropland and orchard trees in the WRTP Specific Plan Area are visible in the foreground. Wood power poles and landscape trees associated with the on-site rural residence are visible in the middleground. Housing in the Spring Lake Specific Plan Area is visible in the background.

CR 101 forms the eastern boundary of the WRTP Specific Plan Area. Sensitive viewers, in the form of new residences, have been developed east of the WRTP Specific Plan Area on the east side of CR 101. Motorists traveling in both directions on CR 101 currently have unobstructed views looking westward towards the WRTP Specific Plan Area. Motorists traveling on CR 101 and adjacent residents have views of overhead power lines and wood power poles along CR 101, row crops and the large white storage shed within the WRTP Specific Plan Area, and the line of trees along both sides of SR 113 in the background. On a clear day, the Coast Ranges are visible from the southern end of CR 101; however, it does not stand out in the landscape. The linear, horizontal nature of the hay crops contrasts with the upright, rounded forms of deciduous trees along SR 113 and provides a pleasing variety of form. When the hay crops are growing, this viewshed has a lush green appearance and a soft texture that blends with the green (during spring and summer) deciduous trees along SR 113. During the remainder of the year, this viewshed has a brown appearance resulting from the vegetative stubble and exposed soil and the leafless trees along SR 113. This portion of the viewshed presents a harmonious and cohesive landscape-level view looking westward. As shown in Viewpoint 4, high mast light standards that provide nighttime lighting for sporting events at the Woodland Sports Park are visible from the WRTP Specific Plan Area and from the housing at the western edge of the Spring Lake Specific Plan Area.

Source: AECOM 2017

Viewpoint 4 – Looking west from CR 101. Hay crops within the WRTP Specific Plan Area are visible in the foreground and middleground. Vehicles traveling on SR 113, and deciduous trees, primarily on the west side of SR 113, are visible in the background. Also visible in the background at the right side of the photo are the tall, thin, silver-metallic light standards that provide lighting for nighttime sporting events at the Woodland Sports Park (on the west side of SR 113).

Sensitive viewers, in the form of new residences, have been developed north of the WRTP Specific Plan Area, north of Farmers Central Road, as part of the Spring Lake Specific Plan. Views of the WRTP Specific Plan Area looking southward from this portion of the Spring Lake Specific Plan Area include a row of overhead power lines and wood power poles along the right-of-way for Farmers Central Road to the west and along CR 101 to the south, along with row crops and a large white 2-story storage shed within the WRTP Specific Plan Area (see Viewpoint 5). From this viewpoint, the WRTP Specific Plan Area appears flat and is lacking in any notable scenic features. The large white, 2-story storage shed and adjacent aboveground storage tank within the WRTP Specific Plan Area are clearly visible in this viewshed, and they contrast strongly with the flat, horizontal row crops.

The project viewshed from the north, east, and south is dominated by row crops and the line of trees adjacent to SR 113. The viewshed from the west is dominated by row crops and housing in the Spring Lake Specific Plan Area.

Source: AECOM 2017

Viewpoint 5 – Looking south from the planned western extension of Farmers Central Road. Hay crops within the WRTP Specific Plan Area are visible in the foreground. Hay crops, a line of wood power poles with overhead power lines along CR 101, the large white storage shed, a wellhead casing and power pole, and a large deciduous tree are visible middleground. Houses in the Spring Lake Specific Plan Area to the southeast, and trees along SR 113 to the southwest, are visible in the background.

Visual Quality

Vividness—The flat land at the WRTP Specific Plan Area and off-site South Regional Pond proposed location is composed of row crops, hay fields, and nut trees that are green during the growing season and brown during the remainder of the year. Views of scattered trees and agricultural buildings within the WRTP Specific Plan Area and to the north, flat agricultural land cultivated in row crops to the north and an orchard to the south, are typical of agricultural land throughout Yolo County. The viewshed is typical of a developing area where rural, open space meets urban development. Considered as a whole, the viewshed does not form a striking or distinctive visual pattern, and therefore vividness at the WRTP Specific Plan Area is considered moderate.

Intactness—The row crops, hayfields, and nut orchard at the WRTP Specific Plan Area and the off-site South Regional Pond proposed location provide a typical view of Yolo County farmland. Views of the WRTP Specific Plan Area from all directions generally present a low level of visual integrity due to the presence of numerous visually intrusive elements such as the large white 2-storage storage shed, power poles with overhead power lines, and white aboveground storage tanks and wellhead casings.

Unity—Considered as a whole, particularly during the spring and summer months when the viewshed is green, the row crops and hayfields within the WRTP Specific Plan Area and the trees along SR 113 and CR 101 blend together to provide a pleasing and harmonious visual pattern. The residences in the Spring Lake Specific Plan Area are visible only in background views from SR 113, at a distance of approximately 0.5 mile. The row crops and trees from viewpoints in all directions dominate the viewshed and provide a sense of visual coherence and compositional

harmony in the landscape that is typical of farmland in Yolo County. Therefore, the WRTP Specific Plan Area viewshed has a moderate degree of unity.

Viewer Sensitivity—Viewer sensitivity is considered high for all parts of the WRTP Specific Plan Area. Public views of the WRTP Specific Plan Area, the off-site South Regional Pond proposed location, and the off-site SR 113/CR 25A interchange are available from a variety of locations. Residents in the Spring Lake housing development east and north of the WRTP Specific Plan Area have either full or partial views of the WRTP Specific Plan Area from a distance as close as 100 feet. SR 113, which is immediately adjacent to the WRTP Specific Plan Area to the west, is considered to be the southern gateway to the City of Woodland; the WRTP Specific Plan Area represents the first views of the City within the Urban Limit Line for thousands of motorists traveling north on SR 113 every day. In addition, local residents travel on County Roads 101 and 25A, which border and/or cross through the WRTP Specific Plan Area. Residents in the adjacent housing developments and the motorists traveling along these local roadways have a higher sensitivity to visual change. Therefore, viewer sensitivity is considered high for all groups viewing the various project components.

In summary, considering the high degree of viewer sensitivity, low degree of intactness and the moderate degree of vividness and unity, the viewshed of the WRTP Specific Plan Area and the off-site improvement areas is considered to be of moderate visual quality.

3.1.3 REGULATORY FRAMEWORK

The 2035 General Plan and CAP EIR summarizes the federal, State, regional, and local regulatory framework on pages 4.1-9 through 4.1-19. In addition to the regulatory background provided in the 2035 General Plan and CAP EIR, those aspects of the existing regulatory framework that are relevant to potential impacts of the WRTP Specific Plan are briefly highlighted below. Please see Section 4.1.3 of the 2035 General Plan and CAP EIR for more detail.

FEDERAL PLANS, POLICIES, REGULATIONS AND LAWS

There are no federal plans, policies, regulations, or laws that apply to the proposed WRTP Specific Plan.

STATE PLANS, POLICIES, REGULATIONS, AND LAWS

There are no State plans, policies, regulations, or laws that apply to the proposed WRTP Specific Plan.

REGIONAL AND LOCAL PLANS, POLICIES, REGULATIONS, AND ORDINANCES

City of Woodland 2035 General Plan

The *City of Woodland General Plan Update 2035* (City of Woodland 2017) identifies the following policies that are applicable to the proposed WRTP Specific Plan.

Land Use, Community Design, and Historic Preservation Element

- **Policy 2.A.1 Urban Limit Line**. A permanent Urban Limit Line (ULL) is established around Woodland to permanently circumscribe urban development and comply with provisions for agricultural lands. Public services and facilities shall not extend beyond the permanent Urban Limit Line. The City shall take such administrative steps as may be required to implement Policy 2.A.1. The City shall also identify funding for

implementing a permanent urban limit line, including mitigation for developing on agricultural land. The City shall continually reevaluate residential land use densities, housing policies, and zoning to determine the potential for increased residential densities for both infill sites and undeveloped land within the Urban Limit Line. The City shall continually review existing non-residential zoning to determine the potential for conversion to higher density residential uses within the permanent Urban Limit Line. The City will encourage and support appropriately located agricultural and wildlife conservation easements to support implementation of the permanent urban limit line.

This policy enacts Woodland Measure A (Ballot of June 2006), Urban Limit Line, and can only be modified by the voters.

- **Policy 2.A.8 Gateways and Corridors.** Transform the city's main corridors to become lively, mixed use places that connect the city's neighborhoods. Create distinctive, thriving gateway centers at I-5 and SR 113 that serve as inviting entrances to the city while maximizing the economic potential of these assets.

- **Policy 2.E.2 Responsiveness to Context**. Encourage high-quality new development that enhances and blends with the established fabric of the natural, social and built environment, while allowing for innovative architectural styles.

- **Policy 2.E.5 View Corridors.** Create attractive view corridors that frame the streets with distinctive buildings, trees, and other landscaping complemented by well-designed and integrated signage. At community entry points, provide a clear, physical sense of arrival into the community.

- **Policy 2.E.6 Building Street Facades**. Encourage the use of horizontal and vertical building articulation to break up building mass, create visual interest, and design to activate street level frontages.

- **Policy 2.E.7 Public Safety and Community Design.** Promote design that enhances public safety and discourages crime by providing buildings that engage the street, as well as adequate lighting and sight lines.

- **Policy 2.F.1 Development Regulations**. Promote design excellence by ensuring that development regulations clearly express both desired and intended outcomes in addition to those that may be prohibited or undesired.

- **Policy 2.F.3 Design Review**. Require design review as appropriate that focuses on achieving form and function for new, reuse and reinvestment projects to promote creativity, innovation and design quality.

- **Policy 2.F.4 Light Pollution**. Control artificial lighting to avoid spill-over lighting and preserve the night sky.

- **Policy 2.F.5 Glare**. Control artificial lighting to prevent glare.

- **Policy 2.G.2 Sensitive New Development**. Require new construction, additions, renovations, and infill to be physically compatible with neighborhood context, historic development patterns, and building form and scale.

- **Policy 2.I.1 Building and Site Design**. Require buildings located along corridors be designed to define the public realm and promote multimodal mobility and sidewalk activity that provides eyes on the street. Key components of good design should include:
  - Mix of building patterns
  - Building frontages located directly adjacent to the sidewalk where appropriate, especially on West Main Street; minimal setbacks on other corridors
  - Ground floor transparency to encourage activity
  - Minimize driveways, curb cuts, and parking visibility
  - Pedestrian-oriented elements, including public outdoor spaces
- **Policy 2.I.3 Green Streets.** Provide continuous shade trees along Woodland's key corridors, integrate low-impact development (LID) drainage facilities to manage stormwater runoff within the public right-of-way, and include Class I or Class II bike facilities where possible.

► **Goal 2.J Commercial Centers**. Promote the development of distinct, well-designed commercial centers that serve neighborhood residents, community members, and/or the region at large.

- **Policy 2.J.2 Design of New Neighborhood and Community Commercial Centers**. Facilitate the development of new neighborhood and community commercial centers that feature good urban design with elements such as inviting entryways, articulated building facades and rooflines, attractive landscaping, shaded walkways, plazas and public art.
- **Policy 2.J.3 Design of New Regional Commercial Centers.** Employ high quality, durable materials and best practices in sustainability in the design of new regional commercial centers, promoting them as desirable regional destinations.
- **Policy 2.K.1 Quality Design**. Require new and renovated business parks, public buildings, and industrial properties to feature elements such as attractive entrances, articulated building facades and rooflines, attractive landscaping, and shaded walkways.
- **Policy 2.M.8 Variety and Quality.** Ensure that new residential development provides variability and high quality design to distinguish individual homes from one another and create identifiable neighborhoods.

Transportation and Circulation Element

- **Policy 3.E.7 Lighting**. Maintain adequate pedestrian-scale lighting near sidewalks, trails, and parking lots to improve visibility of pedestrians and provide a safe walking environment.
- **Policy 3.E.8 Active Design**. Design buildings so that the architecture enhances and encourages pedestrian travel. Provide clear internal pedestrian routes and avoid "blank walls" to maintain a visually engaging walking environment.

- **Policy 3.H.3 Parking Lot Design**. Require that parking lots be designed to minimize heat island effects, have significant tree canopies with ample landscape areas designed to pre-treat storm water runoff where feasible, and ensure pedestrian access.

- **Policy 3.H.8 Parking Lot Placements**. Strongly discourage the design and construction of parking lots along street frontages except in auto-oriented areas where they shall be well designed to reduce their visual impact and maximize pedestrian and bicycle compatibility and safety.

Sustainability, Conservation, and Open Space Element

- **Policy 7.B.8 Native and Compatible Non-Native Plant Species.** Require developers to use native and compatible non-native species, especially drought-resistant species, to the extent possible in order to preserve the visual integrity of the landscape, provide benefits for native wildlife, and ensure that a variety of plants suited to the region are maintained.

- **Policy 7.B.9 Tree Canopy.** Manage, enhance, and improve the city's tree canopy as a valuable ecological resource.

- **Policy 7.B.11 Sensitive Site Planning.** Site new development to maximize the protection of native tree species and special-status plants and wildlife habitats.

City of Woodland Community Design Standards

The City of Woodland's Community Design Standards were adopted in 1998 and updated in 2004. The Design Standards define the City's image and clarify a shared vision for new, and modifications to existing, development in Woodland. Specifically, the Community Design Standards are used by the City Council and Planning Commission in the design review process for projects requiring discretionary approval and by City staff for projects that do not require discretionary approvals. While Chapter 3 of the WRTP Specific Plan contains site development regulations, development standards and design guidelines that supersede the requirements of the Zoning Ordinance (Title 17) of the Woodland Municipal Code and the Woodland Community Design Standards, the provisions of the Woodland Municipal Code, which contains the Community Design Standards, may be considered where direction is not otherwise provided in the WRTP Specific Plan. The Community Design Standards address the below design topics. For each of the design topics, the Community Design Standards establish mandatory elements and techniques, as well as recommended elements or desirable features.

- Site planning and architectural design standards for new residential, commercial, and industrial development and modifications to existing buildings;
- Landscaping and screening techniques to preserve and enhance views along a corridor;
- Signs for new development;
- Landscaping and signage at entryways;
- Streetscape improvements such as street trees, landscaped medians and street furnishings to help improve the appearance of the corridor; and
- Lighting standards.

Woodland Building Code, Chapter 15 of the Municipal Code

In addition to development patterns, location of development, and landscaping, light and glare can affect aesthetics and visual character. The City's Municipal Code does not have a specific section dedicated to prevention of nuisance light and glare, although there are regulations regarding light and glare from specific uses. The Municipal Code requires a certain amount of light outside of residential and commercial uses and in parking lots during the night, as established in Section 1020 Residential Buildings and in Section 1021 Commercial Buildings (Woodland Municipal Code, Chapter 15 Buildings and Construction, Sec. 15.04.090).

Trees, Chapter 12.48 of the Municipal Code

Chapter 12.48 of the Woodland Municipal Code regulates trees in the city. Under this chapter, the Director of Public Works is required to issue a tree permit for any activity that will interfere with, endanger, or result in the destruction of a street tree. Chapter 12.48 requires that all development projects include a tree plan with specific contents, and all street trees and heritage or landmark trees over 6-inches in diameter that are removed as a result of a development project must be replaced.

Spring Lake Specific Plan

The Spring Lake Specific Plan was adopted in 2001 (most recently updated in 2019) to provide policy and land use regulations and to identify infrastructure, phasing, and financing for development of the Spring Lake Specific Plan Area encompassing 1,097 acres of mixed uses including houses, schools, parks, and small neighborhood commercial centers. In addition, the Spring Lake Specific Plan includes design standards (City of Woodland 2003) for site planning and layout, detached housing, multi-family attached housing, neighborhood commercial standards, the Spring Lake Village Center, street design, and public facilities. The Spring Lake Specific Plan Area is located adjacent to and immediately east and north of the WRTP Specific Plan Area.

3.1.4 Environmental Impacts and Mitigation Measures

Methodology

The 2035 General Plan and CAP EIR addresses impacts of development of the City's Planning Area, including the WRTP Specific Plan Area. Consistent with Section 15183(b) of the CEQA Guidelines, the following analysis focuses on project-specific significant effects of the WRTP Specific Plan and off-site improvements that: a) are peculiar to the WRTP Specific Plan or the project site; b) were not addressed in the 2035 General Plan and CAP EIR (including off-site or cumulative impacts); or c) would be more severe than previously described based on substantial new information.

The aesthetic value of an area is a measure of the variety and contrast of the area's visual features, the character and quality of those features, and the scope and scale of the scene, combined with the anticipated viewer response. The analysis of visual resources for this project uses a qualitative approach for characterizing and evaluating the visual resources of the areas that could be affected by the project. Identification of the project's aesthetics effects were based on the three steps listed below.

1. An objective inventory of the visual features or visual resources that comprise the landscape.

2. An assessment of the character and quality of the visual resources in the context of the overall character of the regional visual landscape.

3. A determination of the importance to viewers (i.e., sensitivity of the viewers) and the potential viewer response, to the identified visual resources in the landscape.

The above factors were considered in combination with the proposed project elements, and the type and duration of anticipated construction activities.

THRESHOLDS OF SIGNIFICANCE

The proposed WRTP Specific Plan may have a significant impact related to aesthetics if it would:

1. have a substantial adverse effect on a scenic vista;

2. substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway;

3. substantially degrade the existing visual character or quality of public views of the site and its surroundings (public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality; or

4. create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

IMPACTS NOT DISCUSSED FURTHER

The following discussion summarizes the impacts of the WRTP Specific Plan that are not discussed further in this document because either, a) there is no impact, or b) none of the factors triggering additional environmental review (as found in Section 15183(b)) exist because an impact was addressed as a part of the 2035 General Plan and CAP EIR and/or substantially mitigated by uniformly applied development standards (CEQA Guidelines Section 15183[f][7]). Uniformly applied development standards include the 2035 General Plan, the CAP, existing City regulations and standards, design review requirements, and impact fee programs.

Substantial Adverse Effect on a Scenic Vista (Significance Threshold 1) — As discussed in the 2035 General Plan and CAP EIR Impact 4.1-1 (pages 4.1-20 through 4.1-22) (City of Woodland 2016b), Woodland's relatively flat topography results in few scenic vistas. Views consist mainly of the farmland surrounding the built environment seen from some adjacent properties at the urban edge. The 2035 General Plan and CAP EIR concluded that although views may be obstructed in localized areas due to proposed new development, views would not be affected on an area-wide basis. Furthermore, since there are no new growth areas proposed along the western edge of the City's Planning Area, where views of the Coastal Ranges are more dominant, new development, including that of the WRTP Specific Plan Area, was not expected to affect views of the Coast Ranges.

As noted, development of the WRTP Specific Plan Area was planned for in the 2035 General Plan and CAP EIR and determined to result in a less-than-significant impact on scenic vistas. And, while the proposed South Regional Pond was not considered in the 2035 General Plan and CAP EIR, the row crops and nut tree orchard, including the areas south of CR 25A that include the southern portion of the WRTP Specific Plan Area and the proposed South Regional Pond, are typical of farmland throughout Yolo County and northern California as a whole. Furthermore, only a small portion of the Coast Ranges is visible in background views to the west, and only from a portion of the houses along the western margin of the Spring Lake development. The WRTP Specific Plan Area and the off-site improvement areas are of moderate visual quality and do not represent scenic vistas. There are no impacts that are peculiar to the WRTP Specific Plan that were not addressed in the 2035 General Plan and CAP EIR. As provided by CEQA Guidelines Section 15183(b), no additional CEQA review is required.

Damage to Scenic Resources in a State Scenic Highway (Significance Threshold 2) — There are no State-designated scenic highways in Yolo County (California Department of Transportation 2017). Old River Road, locally designated as a scenic highway by Yolo County, parallels the west side of the Sacramento River from the southern end of the Sacramento Bypass north to the Fremont Weir and is approximately 6.75 miles east of the WRTP Specific Plan Area (Yolo County 2009). Because of the flat topography in the region, Old River Road is not visible from the WRTP Specific Plan Area of the off-site improvement areas. Since there are no designated scenic highways in the vicinity from which the WRTP Specific Plan Area or off-site improvement areas would be visible, there would be no impact and this issue is not evaluated further in this EIR.

PROJECT IMPACTS AND MITIGATION MEASURES

IMPACT 3.1-1 **Substantially Degrade the Existing Visual Character or Quality of Public Views of the Site and its Surroundings (Significance Threshold 3).** *Implementation of the WRTP Specific Plan and the off-site South Regional Pond would substantially change the existing visual character from agricultural cropland to a mix of urban land uses and supporting infrastructure. The proposed WRTP Specific Plan and off-site improvement areas would be visually incompatible with surrounding agricultural land to the west, south, and southeast. This impact is considered* ***significant****.*

As discussed in the 2035 General Plan and CAP EIR Impact 4.1-3 (pages 4.1-25 through 4.1-31) (City of Woodland 2016b), much of the new development in the City would be of a similar type and mass, and of an equal or higher quality design than the development that already exists. New development of high quality design can enhance the built environment with new architecture that is in character with, or complements existing structures. The General Plan and CAP EIR addressed impacts associated with new development in the South Growth Area in the area designated as SP-1. SP-1A is currently agricultural land and is visible from the adjacent neighborhoods in the Spring Lake development and from motorists traveling on SR 113. The proposed SR 113 interchange improvements would be designed in compliance with Caltrans standards and, at the completion of construction, would be visually similar to the existing interchange and other interchanges in the project area. New growth in SP-1A was anticipated in the General Plan and CAP EIR to provide 23 percent of the City's new housing units and 13 percent of the City's new commercial and industrial square footage (see 2035 General Plan and CAP EIR Table 4.1-5, page 4.1-28).

The WRTP Specific Plan Site Development Standards and Design Standards and Design Guidelines, as detailed in Section 3.4 of the WRTP Specific Plan, reduce impacts on the visual character and quality of the city by establishing site planning and architectural design standards for new development and modifications to existing buildings. These development standards and design standards and design guidelines implement the goals and policies of the 2035

General Plan for application within the WRTP Specific Plan Area and for anticipated land uses. Therefore, attractive visual character would be ensured by requiring high-quality design for new development, corridors, commercial centers, industrial properties, and business parks; and by requiring design review that focuses on creativity, innovation, and design quality. While new development in Woodland would change the existing visual character, as noted in the General Plan and CAP EIR, the extent of potential impact is confined by General Plan policy. In addition, although development within the WRTP Specific Plan Area would block views of farmland to the southwest from houses at the western edge of the Spring Lake development, existing farmland that provides rural views from houses directly south of the Spring Lake development is not proposed for development and would be preserved. The proposed 4-acre South Regional Pond would be adjacent to, but south of, the Specific Plan Area, and was not considered in the 2035 General Plan and CAP EIR; it would be southwest of the southern boundary of the Spring Lake Specific Plan Area and, once constructed, would be visually similar to other ponds in rural areas, such as stock watering ponds and ponds supplied by agricultural irrigation return water.

The 2035 General Plan and CAP EIR concluded that, despite proposed policies and implementation programs, implementation of the 2035 General Plan would still accommodate development in new growth areas that would inherently change Woodland's visual character. The City presented all feasible mitigation in the form of policies and programs in the 2035 General Plan, and concluded that there is no additional feasible mitigation available that would avoid this impact without significantly altering the City's objectives for the General Plan. The 2035 General Plan and CAP EIR determined that the impact was significant and unavoidable.

The General Plan includes numerous policies that promote high quality design to ensure that new urban development in the City is visually attractive and aesthetically pleasing (see Section 3.1.2, "Regulatory Framework," above). For example, General Plan Policy 2.E.2 encourages high-quality new development that enhances and blends with the established fabric of the natural, social and built environment, while allowing for innovative architectural styles. Plan Policy 2.E.5 requires creation of attractive view corridors that frame the streets with distinctive buildings, trees, and other landscaping complemented by well-designed and integrated signage. Policy 2.I.1 requires design components such as a mix of building patterns; building frontages located directly adjacent to the sidewalk where appropriate; ground floor transparency to encourage activity; minimize driveways, curb cuts, and parking visibility; include pedestrian-oriented elements, including public outdoor spaces. Policy 2.J.2 requires the development of new neighborhood and community commercial centers that feature good urban design with elements such as inviting entryways, articulated building facades and rooflines, attractive landscaping, shaded walkways, plazas, and public art. Policy 2.K.1 requires new business parks and industrial properties to feature elements such as attractive entrances, articulated building facades and rooflines, attractive landscaping, and shaded walkways. Policy 2.M.8 requires that new residential development provide variability and high-quality design to distinguish individual homes from one another and create identifiable neighborhoods. Policy 2.N.2 requires a system of greenways and/or greenbelts as a component of new Specific Plan Areas. General Plan Policies 7.B.8, 7.B.9, and 7.B.11 require maintenance and enhancement of urban street trees and planting of compatible native species to preserve visual quality in existing and new development.

The Spring Lake Specific Plan envisioned urban development of the proposed WRTP Specific Plan Area and planned for joint underground sewer, water, and storm drainage capacity for both the Spring Lake Specific Plan Area and the WRTP Specific Plan. As required by General Policy 2.E.2, the Spring Lake Specific Plan Design Standards (City of Woodland 2003) promote attractive tree-lined streets with curbside planting strips, neighborhoods with homes facing the street, generous windows, and functioning porches. Development in the Spring Lake Specific Plan Area include internal trails (landscaped linear open space connections separate from

sidewalks, paths, and landscaping in street right-of-way) that allow for pedestrian and bicycle circulation and that provide greater connectivity to the planned off-street pedestrian/bicycle loop pathway system, including connectivity with the proposed WRTP Specific Plan Area. Similarly, the WRTP Specific Plan Site Development Standards and Design Standards and Design Guidelines, contained in Chapter 3 of the WRTP Specific Plan, require that new streets in the WRTP Specific Plan Area be designed to connect to the Spring Lake development and provide direct access to parks, transit facilities, and commercial uses for pedestrians and bicyclists.

To foster a pedestrian-focused environment in the WRTP Specific Plan Area, site development regulations, development standards, and design guidelines outlined in Chapter 3 of the WRTP Specific Plan require that the ground floors of buildings would be designed to support activity on the street and bring the life of the building into the public realm through the use of building entries, façade transparency at street level, and a comfortable landscape buffer between the street and the building frontages. Buildings would have an articulated ground floor with greater architectural detailing. The Yard would consist of a mix of formal and informal spaces that provide a variety of recreation opportunities, such as plazas and playgrounds adjacent to the Village Center and informal picnic and play areas to the north. Bicycle and walking paths and trails within The Yard would connect to existing and future greenways, bike and pedestrian facilities in Spring Lake, and to citywide bike and pedestrian networks (WRTP Specific Plan Exhibit 4-2). Large canopy shade trees would be provided along all major arterial and collector streets, to shade road surfaces and reduce urban heat island effect. Planting strips and open space areas designed as vegetated swales and bioretention facilities would be used for stormwater treatment throughout the WRTP Specific Plan Area. Complementary landscape materials, colors, and forms would be used to define primary gateway entries and entry corridors in the WRTP Specific Plan Area, to support the distinct character of the Research and Technology Park and residential neighborhood areas of the community. Residences would be oriented to the streets and open space areas, and would include active living spaces oriented to the front of the home with features such as entryways, porches, stoops, and balconies. Residential designs would include variation in the homes along the same street with different building heights, setbacks, massing, and roof shapes. Finally, development within the WRTP Specific Plan Area would be required to comply with the WRTP Specific Plan Site Development Standards and Design Standards and Design Guidelines, contained in Chapter 3 of the WRTP Specific Plan, which implement the goals and policies of the WRTP Specific Plan and the 2035 General Plan.

If an elementary school were to be developed within the WRTP Specific Plan Area, it would be designed according to the California Department of Education (CDE) school facility design standards and the requirements of the Division of the State Architect. CDE school facility design standards focus on modern design that meets the needs of today's students, including interconnecting classrooms with open space, outdoor learning areas, and water-efficient landscape design.

However, implementation of the WRTP Specific Plan and the off-site South Regional Pond would still result in conversion of agricultural land to urban development, which would inherently change the visual character in this portion of the City. Therefore, this impact is considered **significant**.

Mitigation Measure

No additional feasible mitigation measures are available.

Significance after Mitigation

All feasible mitigation in the form of policies and programs in the 2035 General Plan, as well as the WRTP Specific Plan (Chapter 2, "Specific Plan Concepts" and Chapter 3, "Land Use, Development Standards, and Design Guidelines"), are presented herein. No additional feasible mitigation measures are available that would avoid this impact without fundamentally changing the purpose of the WRTP Specific Plan. Therefore, and consistent with the findings of the 2035 General Plan and CAP EIR, this impact would be **significant and unavoidable**.

IMPACT 3.1-2 **Create a New Source of Substantial Light or Glare Which Would Adversely Affect Day or Nighttime Views in the Area (Significance Threshold 4).** *The WRTP Specific Plan would require nighttime lighting of new streets and buildings for security purposes near existing and proposed sensitive receptors, which could cause increased light and glare that could adversely affect day or nighttime views in the area. This impact would be* ***significant****.*

As discussed in the 2035 General Plan and CAP EIR Impact 4.1-4 (pages 4.1-32 through 4.1-33) (City of Woodland 2016b), development in new growth areas would produce light and glare in areas that currently do not experience these effects. Parking lots, commercial buildings, and signs often emit light 24 hours per day. In contrast, most residential buildings produce limited light during the night. In addition, new buildings with reflective surfaces, such as office buildings with glazed windows, may add daytime glare in new development areas. General Plan Policy 3.E.7 requires that adequate pedestrian-scale lighting be provided near sidewalks, trails, and parking lots to improve visibility of pedestrians and provide a safe walking environment. General Plan Policy 2.B.1 requires that new Specific Plans must examine impacts on the completion of infrastructure and amenities within existing Specific Plan Areas that are still developing. Policy 2.E.2 encourages high-quality new development that enhances and blends with the established fabric of the natural, social and built environment, while allowing for innovative architectural styles. However, since new development would add to the overall amount of lighting and glare in the City, the 2035 General Plan and CAP EIR concluded that impacts from new sources of light and glare would be significant. Mitigation measures recommending new General Plan Policies 2.F.4 and 2.F.5 (requiring that artificial lighting be controlled to avoid spill-over lighting, preserve the night sky, and prevent glare) were adopted as part of the 2035 General Plan. Because additional nighttime lighting would still occur and no other feasible mitigation measures were available, the 2035 General Plan and CAP EIR concluded that impacts from new sources of light and glare would be significant and unavoidable.

The WRTP Specific Plan would not be implemented in a "dark sky" area; rather, existing nighttime lighting is already generated by the Woodland Sports Park west of SR 113 (see Viewpoint 3, above), from street lighting along the east and west sides of SR 113 on the west side of the WRTP Specific Plan Area, and from street and residential lighting in the adjacent Spring Lake development to the east. Additional nighttime lighting will be present in the future in the planned Spring Lake development to the north and east. Because the WRTP Specific Plan Area would be developed with a mix of urban uses, this would create new sources of additional nighttime lighting that would be visible to adjacent residents in the Spring Lake development, as well as motorists traveling on SR 113 and County Roads 25A and 101. WRTP Specific Plan implementation could also create new sources of daytime glare from new buildings. As discussed above, General Plan policies 2.F.4 and 2.F.5 require that artificial lighting be controlled to avoid spill-over lighting, preserve the night sky, and prevent glare.

The WRTP Specific Plan Performance Standards and Design Standards and Design Guidelines, contained in Sections 3.3.2 and 3.5.2, respectively, of the WRTP Specific Plan, state that lighting would include of a variety of

types and styles designed to illuminate the intended surfaces or spaces, avoid light spillover and glare into surrounding areas, reduce night sky pollution, and contribute to the City's Climate Action Plan objectives for reducing energy use. A common overall theme, material, and color palette would be considered for the entire WRTP Specific Plan Area, except that the Research and Technology Park may have different but complementary lighting and street furnishings, to create a unified identity throughout the WRTP Specific Plan Area. Pedestrian-scaled pathway lighting would be provided in both residential and non-residential zoning districts. Exterior lighting on individual lots, particularly with the Research and Technology Park campus, would emphasize lighting entries, walkways, parking and loading, and service areas. Lighting on buildings would be designed to reinforce the architectural design of the building, including lighting of building entries, landscape elements, and major architectural features, and would contribute to enhancing the safety and security within the Research and Technology Park, as well as the remainder of the community.

A comprehensive signage plan would be implemented for the entire Research and Technology Park that governs the location, size, height, color, lighting, orientation, and type of signs to be permitted. Energy-efficient exterior lighting fixtures, such as LED or other energy-efficient lighting technologies, would be used throughout the WRTP Specific Plan Area. Furthermore, the Design Standards and Design Guidelines provided in Section 3.5.2 of the WRTP Specific Plan also state that proposed land uses may not create new sources of glare, and that signs shall be spot illuminated from the front or consist of letters, numbers, or graphics that are halo backlit and may not cast a glare that is visible from any street or adjacent lot. (The potential for nighttime lighting within the WRTP Specific Plan Area to result in airport safety hazards is discussed in Section 3.8, "Hazardous Materials and Toxics.") The proposed off-site South Regional Pond would not require nighttime lighting and would not represent a new source of daytime or nighttime glare. The existing SR 113/CR 25A interchange is currently lighted with high-mast light standards that are shielded and direct the lighting downward; the proposed interchange improvements would include the continued use of shielded, directional high-mast light standards, but would not substantially change the amount of skyglow that is already emitted as compared to the existing interchange.

Where direction is not otherwise provided in the WRTP Specific Plan, development in the WRTP Specific Plan Area must be designed in accordance with City of Woodland regulations and requirements, including the City's *Engineering Standards: Design Standards, Standard Details and Construction Specifications* (City of Woodland 2016a). Section 9 of the Engineering Standards describes typical design practices for new or modified street lighting systems within the City. The Engineering Standards include requirements for lighting values for each type of street; street light locations, types, and spacing; poles; mast arm lengths; service connections; pull boxes; and conductors. The Engineering Standards require that all street lights be equipped with light-emitting diode (LED) lights. Furthermore, the developer must prepare and submit improvement plans to the City for review that show existing and proposed street lighting locations, along with the following details:

- existing City-owned electrical facilities and electrical conduits;
- proposed street light types, locations, conduit sizes and locations, service locations, pull boxes, mast arm lengths, and light pattern to be installed;
- rights-of-way and easements;
- subdivision and lot details; and

- amount and type of luminaires on each new or existing service, the service location and voltage, the number of lights removed or added from an existing service, and any other pertinent information affecting the service load.

Finally, the Engineering Standards require that master planning be employed in the determination of street light locations so that an overall uniform street light system meeting minimum City requirements is achieved.

If an elementary school were to be developed in the WRTP Specific Plan Area, it would not include nighttime outdoor sports events and therefore would not include lighted outdoor sports fields. Minor nighttime security lighting for school buildings and parking lots would be provided. This lighting would be shielded and directed downward to avoid light spillover and nighttime glare effects, as required by CDE school facility design standards and the Division of the State Architect.

Therefore, as discussed above, the WRTP Specific Plan would employ all feasible measures to avoid light spillover and glare into surrounding areas, and reduce night sky pollution. However, WRTP Specific Plan implementation would still add to the overall amount of lighting and glare in the City; therefore, this impact is considered **significant**.

Mitigation Measure

No additional feasible mitigation measures are available.

Significance after Mitigation

All feasible mitigation in the form of policies and programs in the 2035 General Plan and the WRTP Specific Plan Design Standards, are presented herein. No additional feasible mitigation measures are available that would avoid this impact without fundamentally changing the purpose of the WRTP Specific Plan. Therefore, and consistent with the findings of the 2035 General Plan and CAP EIR, this impact would be **significant and unavoidable**.

3.1.5 CUMULATIVE IMPACTS

The 2035 General Plan and CAP EIR (pages 6-9 and 6-10) (City of Woodland 2016b) determined that new development throughout the region would result in substantial changes to the regional visual character, including views of agricultural land. As development occurs throughout the region, substantial changes in visual conditions would continue as open viewsheds are replaced by urban development, including both higher-density development and tall buildings that are visible from longer distances, as well as rural and lower-density development with one- and two-story buildings that are only visible from adjacent public viewing areas or transportation corridors. Many changes in the aesthetic environment are only experienced locally, and would not tend to combine with nearby development to create cumulative impacts that are more severe than the sum of individual plans and projects. However, cumulative development within the region also adds additional lighting, which combines together to create skyglow effects that obscure views of the night sky. Future development in nearby cities and the surrounding unincorporated County land would lead to a more intense nighttime glow, which would be perceptible throughout the region. Therefore, the changes in scenic vistas, visual character, and nighttime skyglow from projects considered in the cumulative impact analysis would be substantial, and were considered in the 2035 General Plan and CAP EIR to have significant cumulative impacts in and of themselves.

ADVERSE EFFECTS ON SCENIC VISTAS

Because there are few scenic vistas in the City of Woodland, and it was determined that new views would compensate for—and be very similar to—any lost views, the 2035 General Plan and CAP EIR found that a less-than-cumulatively considerable impact to scenic vistas from new development would occur.

As described in this aesthetics analysis, the WRTP Specific Plan viewshed, including the off-site South Regional Pond proposed location and the SR 113/CR 25A intersection, is of moderate visual quality and does not contain any scenic vistas. Because the WRTP Specific Plan Area and the off-site improvement areas are of moderate visual quality and do not represent scenic vistas, and because blockage of the limited background views of the Coast Ranges from the western edge of the Spring Lake development due to development of the proposed WRTP Specific Plan Area was planned for in the 2035 General Plan and CAP EIR (and determined to represent a less-than-significant impact), the impacts of development of the WRTP Specific Plan Area and the off-site improvements would not be cumulatively considerable, and would represent a **less-than-cumulatively considerable impact**.

Therefore, implementing the WRTP Specific Plan in conjunction with development of related projects would result in a less-than-cumulatively considerable contribution to the significant cumulative impact related to changes in scenic vistas.

DEGRADATION OF VISUAL CHARACTER

New development envisioned by the 2035 General Plan would allow for greater density and development intensity in certain areas. However, new buildings do not necessarily constitute an adverse visual impact, and policies in the 2035 General Plan establish high standards for design and compatibility with a project's surroundings. In addition to adding uses and density, new investment in urban infill areas typically improves visual quality by developing vacant or underutilized properties and improving maintenance of existing structures and yards. However, implementing new development would change the visual character of the Planning Area, which would be perceived within the Planning Area, as well as from adjacent areas. The 2035 General Plan and CAP EIR found that even with implementation of all feasible measures in the form of policies and programs in the 2035 General Plan and the City's *Community Design Standards*, new development would make a cumulatively significant and unavoidable contribution to the significant cumulative impact related to degradation of visual character.

The WRTP Specific Plan is designed in compliance with the 2035 General Plan, which includes numerous policies that promote high quality design to ensure that new urban development in the City is visually attractive and aesthetically pleasing (see Section 3.1.2, "Regulatory Framework," above). The Spring Lake development, which is immediately adjacent to the proposed WRTP Specific Plan Area to the north and east, envisioned urban development of the WRTP Specific Plan Area and planned for joint underground sewer, water, and storm drainage capacity for both specific plan areas. The WRTP Specific Plan Design Standards and Design Guidelines incorporate requirements similar to the Spring Lake Specific Plan Design Standards (City of Woodland 2003). The standards and guidelines for both Specific Plans promote attractive tree-lined streets with curbside planting strips, neighborhoods with homes facing the street, front-facing windows, and functioning porches. Residential subdivisions would include internal trails (landscaped linear open space connections separate from sidewalks, paths, and landscaping in street right-of-way) that allow for pedestrian and bicycle circulation within and between subdivisions, and that provide greater connectivity to the planned off-street pedestrian/bicycle loop pathway system including connectivity with the proposed WRTP Specific Plan Area. The WRTP Specific Plan Area would be consistent with General Plan Policy 2.E.2, which encourages high-quality new development that enhances and

blends with the established fabric of the natural, social and built environment, while allowing for innovative architectural styles. The Design Standards and Design Guidelines, in addition to the Land Use Plan and Mobility and Circulation Network, detailed in the WRTP Specific Plan require that streets in the WRTP Specific Plan Area be designed to connect to the Spring Lake development and provide direct access to parks, transit facilities, and commercial uses for pedestrians and bicyclists. The proposed off-site SR 113/CR 25A interchange improvements would be designed in accordance with Caltrans standards, and at the conclusion of construction activities, would appear visually similar to the existing interchange. The off-site South Regional Pond would be designed in accordance with the City's *Engineering Standards: Design Standards, Standard Details, and Construction Specifications* (City of Woodland 2016a) and standard engineering practices for design of detention basins, and at the conclusion of construction activities, would appear visually similar to other ponds and detention basins in the project region, and would not detract from the existing visual character.

However, project implementation would still result in conversion of rural agricultural land to new urban development on approximately 350 acres, and the off-site South Regional Pond would convert 4 acres of orchard to a detention basin, which would inherently change the visual character in this portion of the City. Therefore, the WRTP Specific Plan and the off-site South Regional Pond would make a cumulatively considerable contribution to this cumulatively significant impact. Because all feasible mitigation measures in the form of policies and programs in the 2035 General Plan and the WRTP Specific Plan Design Standards and Guidelines have already been incorporated, implementation of the WRTP Specific Plan in conjunction with development of related projects would result in a **cumulatively significant and unavoidable contribution** to the significant cumulative impact related to degradation of visual character.

LIGHTING AND GLARE EFFECTS

The 2035 General Plan and CAP EIR found that new development envisioned under the General Plan would contribute nighttime light to the already increasing amount of light pollution in the region, and therefore would make a cumulatively significant and unavoidable contribution to this significant cumulative impact even after implementation of new General Plan Policies 2.F.4 and 2.F.5 (which were adopted as part of the 2035 General Plan).

Because the WRTP Specific Plan Area would be developed with commercial, light industrial, and residential uses, implementation of the WRTP Specific Plan would create new sources of additional nighttime lighting that would be visible to adjacent residents in the Spring Lake development as well as motorists traveling on SR 113 and County Roads 25A and 101. As shown in Viewpoint 3, existing nighttime lighting for sporting events at the Woodland Sports Park is visible from the WRTP Specific Plan Area and from homes along the western edge of the Spring Lake development. Furthermore, existing nighttime lighting is already present adjacent to and west of the WRTP Specific Plan Area along SR 113, and adjacent to and east of the WRTP Specific Plan Area in the Spring Lake development. Street lighting in the WRTP Specific Plan Area must be designed in accordance with the lighting standards contained in Section 9 of the City's *Engineering Standards: Design Standards, Standard Details and Construction Specifications* (City of Woodland 2016a). The WRTP Specific Plan Design Guidelines state that development may not create new sources of glare, and include lighting design requirements that are designed to comply with 2035 General Plan Policies such as 2.F.4 and 2.F.5. Therefore, the WRTP Specific Plan would employ all feasible measures to avoid light spillover and glare into surrounding areas, and reduce night sky pollution. The off-site South Regional Pond would not require nighttime lighting. The existing SR 113/CR 25A interchange is lighted with high-mast light standards that are shielded and direct the lighting downward; the proposed interchange

improvements would include the continued use of shielded, directional high-mast light standards, and would not substantially change the amount of lighting that is already emitted as compared to the existing interchange. However, WRTP Specific Plan implementation would still add to the overall amount of nighttime lighting and potential night sky pollution effects in the City and the region. Therefore, the WRTP Specific Plan would make a cumulatively considerable contribution to this significant cumulative impact. Because all feasible mitigation measures in the form of policies and programs in the 2035 General Plan and the WRTP Specific Plan Design Standards and Design Guidelines have already been incorporated, implementation of the WRTP Specific Plan in conjunction with development of related projects would result in a **cumulatively significant and unavoidable contribution** to the significant cumulative impact related to nighttime lighting and glare effects.

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3.2 AGRICULTURE AND FORESTRY RESOURCES

3.2.1 INTRODUCTION

This section describes potential impacts related to agricultural and forestry resources in the WRTP Specific Plan Area and off-site improvement areas. To provide context for the impact analysis, this section begins with an environmental setting describing the existing conditions in the WRTP Specific Plan Area and off-site improvement areas related to agricultural resources. Next, the regulatory framework is described, which informs the selection of the significance thresholds used in the impact analysis. The regulatory framework also includes existing General Plan policies related to the impact analysis of this section. The section concludes with the applicable significance thresholds, the impacts of the proposed project, recommended mitigation measures, and the significance conclusions.

The CEQA Guidelines note that comments received during the NOP scoping process can be helpful in "identifying the range of actions, alternatives, mitigation measures, and significant effects to be analyzed in depth in an EIR and in eliminating from detailed study issues found not to be important." (CEQA Guidelines Section 15083). Neither the CEQA Guidelines nor Statutes require a lead agency to respond directly to comments received in response to the NOP, but they do require that the comments be considered. Consistent with these requirements, these comments have been carefully reviewed and considered by the City and are reflected in the analysis of impacts in this section. The Yolo Local Agency Formation Commission (LAFCo) submitted comments pertaining to potential impacts to agricultural resources from developing the project itself, plus the continued productivity and viability of surrounding agricultural lands. Yolo LAFCo further commented that the project should include 500-foot buffers as required by the County Agricultural Commissioner. The County Agricultural Commissioner's 500-foot buffers are applicable to agricultural areas where there is aerial pesticide spraying. A comment letter was also provided by a representative of the USDA Natural Resources Conservation Service pertaining to the conversion of prime agricultural land and the loss of food production. The commenter provided a Land Evaluation and Site Assessment for the WRTP Specific Plan Area and requested mitigation for the loss of prime farmland and the loss of food production. Appendix A of this EIR includes copies of all NOP comments received.

3.2.2 ENVIRONMENTAL SETTING

Within Yolo County approximately 544,723 acres of land are designated for agricultural use (Yolo County 2009). Yolo County's agricultural landscape is dominated by field crops, particularly alfalfa and rice crops. The total gross valuation for all agricultural commodities produced in Yolo County in 2019 was approximately $765 million. This value represents an increase of approximately 13 percent above 2018's values of $675 million (Yolo County Agricultural Commissioner 2019). In 2019, almonds had the highest crop value ($158 million). Wine grapes are the number two commodity at $108 million, followed by tomatoes ($108 million), rice ($57 million), and walnuts ($36 million) (Yolo County Agricultural Commissioner 2019).

YOLO COUNTY FARMLAND CONVERSION

The California Department of Conservation's Important Farmland classifications—Prime Farmland, Farmland of Statewide Importance, Unique Farmland, and Farmland of Local Importance—identify the land's suitability for agricultural production by considering physical and chemical characteristics of the soil, such as soil temperature range, depth of the groundwater table, flooding potential, rock fragment content, and rooting depth. The

classifications also consider location, growing season, and moisture available to sustain high-yield crops. (See "Regulatory Framework" below, for detailed descriptions of Important Farmland classifications.)

Table 3.2-1 summarizes acreages of agricultural land in Yolo County between 2008 and 2016 and shows the net change in acreage over the eight-year period. The Department of Conservation estimated that Yolo County included 536,044 acres of agricultural land in 2008, of which 378,081 acres were identified as Important Farmland and 157,963 acres were identified as Grazing Land (City of Woodland 2016). By 2016, Yolo County included 532,266 acres of agricultural land, of which 365,539 acres were identified as Important Farmland and 166,413 acres were identified as Grazing Land (DOC 2016). Overall, the total acreage of Important Farmland decreased by approximately 3.2 percent over the 8-year period between 2008 and 2016, while the total acreage of agricultural land decreased by 0.7 percent (Table 3.2-1).

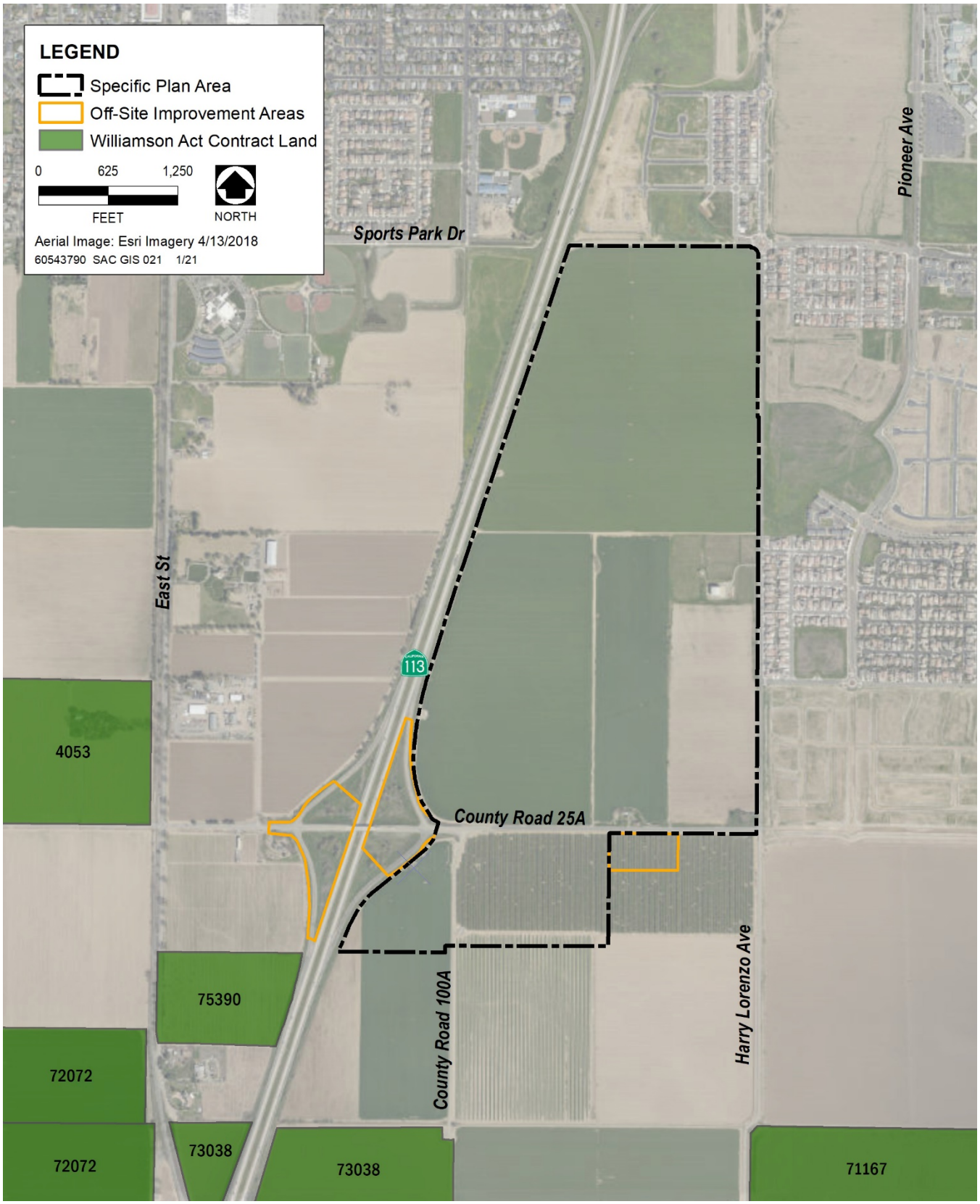
Table 3.2-1. Agricultural Land in Yolo County Between 2008 and 2016

Agricultural Land Category	Acres in 2008	Acres in 2010	Acres in 2012	Acres in 2014	Acres in 2016	Net Change in Acres (2008–2016)	Net Change in Percent (2008–2016)
Prime Farmland	255,193	252,081	250,693	250,345	250,558	-4,635	-1.8
Farmland of Statewide Importance	16,793	16,412	17,298	18,862	19,529	2,736	16.3
Unique Farmland	45,750	43,629	42,403	44,604	46,095	345	0.8
Farmland of Local Importance	60,345	62,413	58,137	51,728	49,671	-10,674	-17.7
Important Farmland Subtotal	**378,081**	**374,535**	**368,531**	**365,539**	**365,853**	**-12,228**	**-3.2**
Grazing Land	157,963	160,449	163,639	166,367	166,413	8,450	5.3
Agricultural Land Total	**536,044**	**534,984**	**532,170**	531,902	**532,266**	**-3,778**	-0.7

Source: City of Woodland 2016, California Department of Conservation 2016

WILLIAMSON ACT

Under the California Land Conservation Act of 1965, also known as the Williamson Act and explained further in Section 3.2.3, Regulatory Framework, local governments can enter into contracts with private property owners to protect land (within agricultural preserves) for agricultural and open space purposes. None of the WRTP Specific Plan Area or off-site improvement areas are under Williamson Act contracts (Exhibit 3.2-1).



Source: Yolo County 2020

Exhibit 3.2-1. Williamson Act Lands

EXISTING AGRICULTURAL USES

City of Woodland

Table 3.2-2 summarizes the acreages of the Department of Conservation's Farmland Mapping and Monitoring Program (FMMP) land use categories within the City's Planning Area.[1] As shown in Table 3.2-2, the City's Planning Area included 4,215 acres of agricultural land (33 percent of the Planning Area), of which 3,247 acres were identified as Important Farmland (i.e., Prime Farmland, Farmland of Statewide Importance, Unique Farmland, and Farmland of Local Importance), 355 acres were identified as Grazing Land, and 614 acres were identified as Farmland of Local Potential.[2] The majority of this farmland, 86 percent, is located outside the Woodland city limits along the northwestern, northeastern, and southern boundaries of the city. Farmland located inside the city limits is primarily located in the western portion of the Spring Lake Specific Plan area and in the eastern-most portion of the city. There are 1,545 acres of Prime Farmland, the majority of which is located within the SP-1 area in the southern portion of the Planning Area and the SP-3 area and Flood Study Area in the northwestern portion of the Planning Area.

Table 3.2-2. Summary of the California Department of Conservation Land Use Categories in the City of Woodland Planning Area

Category	Acres	Percent of Total Farmland in Planning Area	Percent of Total Land in Planning Area
Prime Farmland	1,544.6	37	12
Farmland of Statewide Importance	401.1	10	3
Unique Farmland	434.9	10	3
Farmland of Local Importance	865.9	21	7
Important Farmland Subtotal	**3,246.5**	85	28
Grazing Land	354.73	8	3
Farmland of Local Potential[1]	614.2	15	5
Agricultural Land Subtotal	**4,215.4**	100	33
Urban and Built-Up Land	7,912.6	-	62
Other Land	652.5	-	5
Total	**12,780.7**	**-**	100

Source: City of Woodland 2016

[1] In Yolo County, there is an additional categorization of farmland—Farmland of Local Potential—which is identified as a subcategory under Farmland of Local Importance and refers to land that contains prime or statewide soils that are not presently irrigated or cultivated.

WRTP Specific Plan Area

The WRTP Specific Plan Area consists primarily of row crops, and a small almond orchard in the southeastern corner. Areas south, southeast, and west of the WRTP Specific Plan Area consist largely of agricultural production, including commercial almond orchards and open field crops.

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1 The City's Planning Area consists of all of the land within the voter approved Urban Line Limit (i.e., City limits and Sphere of Influence).

2 In Yolo County, there is an additional categorization of farmland—Farmland of Local Potential—which is identified as a subcategory under Farmland of Local Importance and refers to land that contains prime or statewide soils that are not presently irrigated or cultivated.

According to the Yolo County Important Farmland map, published by the California Division of Land Resource Protection (DOC 2016), approximately 346 acres (99 percent) of land within the WRTP Specific Plan Area is designated as Prime Farmland. Additional land designated as Prime Farmland is located south and west of the WRTP Specific Plan Area (Exhibit 3.2-2). Active agricultural land uses on and adjacent to the WRTP Specific Plan Area coincide with this farmland designation.

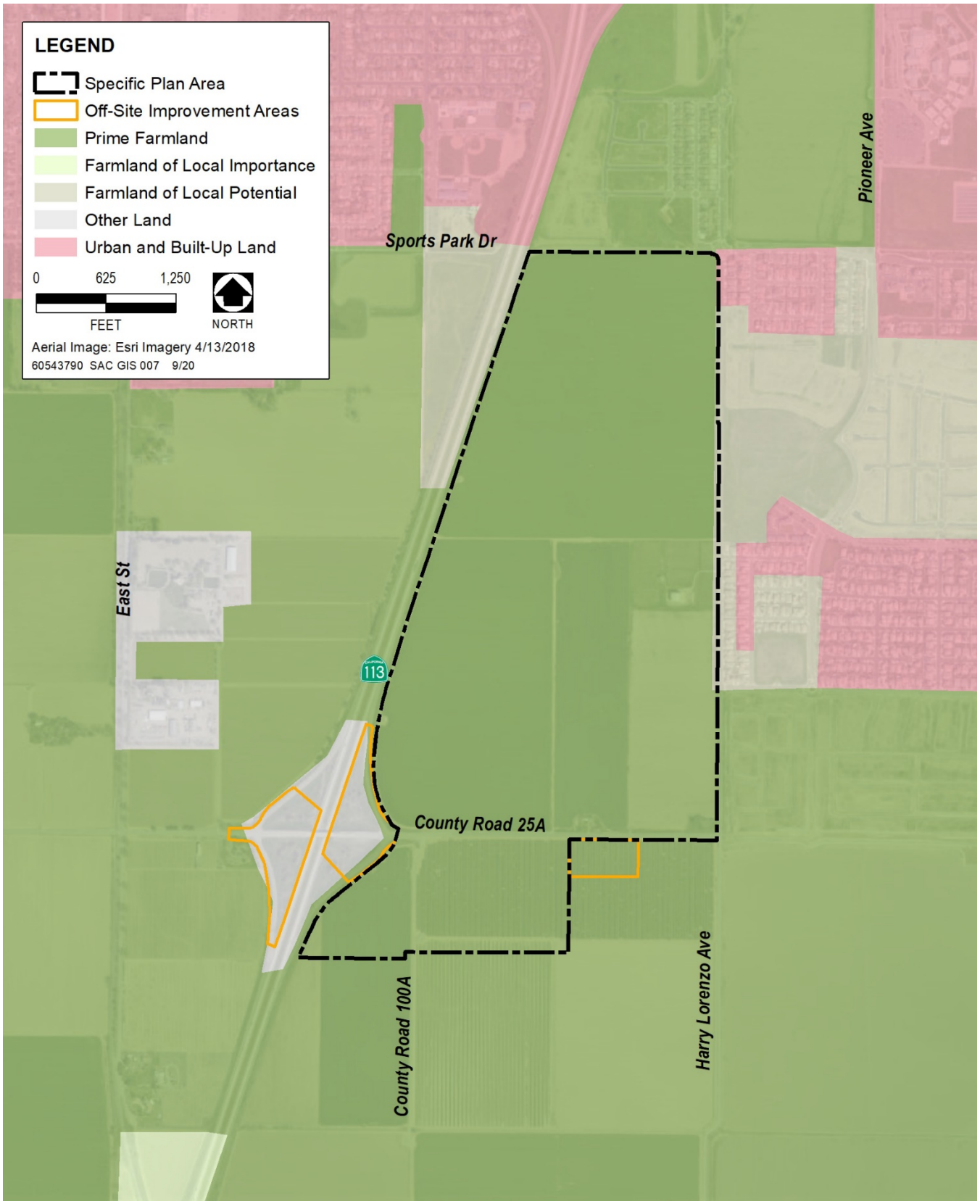
Approximately 3 acres of land within the WRTP Specific Plan Area is designated as Farmland of Local Potential and 1 acre of land is designated as Urban and Built-Up Land.

Off-Site Improvement Areas

Off-site improvement areas include a proposed drainage area (i.e., South Regional Pond) immediately south of the WRTP Specific Plan Area, and adjacent to CR25A, and improvements to the SR 113/CR25A interchange adjacent to the southwestern corner of the WRTP Specific Plan Area (Caltrans Off-site Improvement Area). There are two alternative footprints for the Caltrans Off-site Improvement Area that are included in the analysis presented in this section. The Caltrans Off-site Improvement Area Alternative 1 consists of approximately 37 acres of disturbance to construct new on- and off-ramps, and the Caltrans Off-site Improvement Area Alternative 2 consists of approximately 24 acres of disturbance. Both of the Caltrans Off-site Improvement Area alternatives consist of permanent and temporary impact areas in the Caltrans right-of-way and adjacent areas outside of the Caltrans right-of-way. Yolo County Important Farmland map designates the land within the proposed South Regional Pond area as Prime Farmland and the Caltrans Off-site Improvement Area as Other Land (Exhibit 3.2-2).

Agricultural Zoning

The WRTP Specific Plan Area, off-site improvement areas, and parcels east and west of the WRTP Specific Plan Area are zoned by Yolo County as Agriculture Intensive (A-N). The A-N zoning designation is applied to preserve lands best suited for intensive agricultural uses typically dependent on higher quality soils, water availability, and relatively flat topography. The purpose of the zone is to promote intensive agricultural uses while preventing the encroachment of nonagricultural uses. Uses in the A-N zone are primarily limited to intensive agricultural production, such as orchards, vineyards, and dryland farming, and other activities compatible with agricultural uses, such as agricultural processing centers; goat, sheep, and hog farms; and dairies (Yolo County 2018).



Source: DOC 2016

Exhibit 3.2-2. Important Farmland Map

3.2.3 REGULATORY FRAMEWORK

The 2035 General Plan and CAP EIR summarizes the federal, State, regional, and local regulatory framework on pages 4.2-11 through 4.2-27. Those aspects of the existing regulatory framework that are relevant to potential impacts of the WRTP Specific Plan are briefly highlighted below. Please see Section 4.2.3 of the 2035 General Plan and CAP EIR for more detail.

FEDERAL PLANS, POLICIES, REGULATIONS AND LAWS

There are no federal plans, policies, regulations, or laws that apply to the proposed WRTP Specific Plan.

STATE PLANS, POLICIES, REGULATIONS, AND LAWS

California Important Farmland Inventory System and Farmland Mitigation and Monitoring Program

The FMMP was established by the State of California in 1982 to continue the Important Farmland mapping efforts begun in 1975 by the U.S. Soil Conservation Service (now called the Natural Resources Conservation Service, under the U.S. Department of Agriculture). The intent was to produce agricultural resource maps, based on soil quality and land use across the nation. The Department of Conservation sponsors the FMMP and also is responsible for establishing agricultural easements, in accordance with California Public Resources Code Sections 10250–10255.

The Department of Conservation FMMP maps are updated every two years with the use of aerial photographs, a computer mapping system, public review, and field reconnaissance. The following list provides a comprehensive description of all the categories mapped by the Department of Conservation (DOC 2020):

- **Prime Farmland**—Land that has the best combination of physical and chemical features able to sustain long-term agricultural production. This land has the soil quality, growing season, and moisture supply needed to produce sustained high yields.
- **Farmland of Statewide Importance**—Land similar to Prime Farmland but with minor shortcomings, such as greater slopes or less ability to store soil moisture.
- **Unique Farmland**—Land of lesser quality soils used for the production of the state's leading agricultural cash crops. This land is usually irrigated, but may include non-irrigated orchards or vineyards as found in some climatic zones in California.
- **Farmland of Local Importance**—Land that is of importance to the local agricultural economy, as defined by each county's local advisory committee and adopted by its board of supervisors. The Stanislaus County Board of Supervisors has defined Farmland of Local Importance to consist of farmlands growing dryland pasture, dryland small grains, and irrigated pasture.
- **Grazing Land**—Land with existing vegetation that is suitable for grazing.
- **Urban and Built-Up Lands**—Land that is used for residential, industrial, commercial, institutional, and public utility structures and for other developed purposes.

- **Other Lands**—Land that does not meet the criteria of any of the previously described categories and generally includes low-density rural developments, vegetative and riparian areas not suitable for livestock grazing, confined-animal agriculture facilities, strip mines, borrow pits, and vacant and nonagricultural land surrounded on all sides by urban development. In Stanislaus County, Other Land is further divided into five subcategories: Rural Residential Land, Semi-Agricultural and Rural Commercial, Vacant and Disturbed Land, Defined Animal Agriculture, Nonagricultural and Natural Vegetation.

Important Farmland is classified by the Department of Conservation as Prime Farmland, Farmland of Statewide Importance, Unique Farmland, and Farmland of Local Importance. Under CEQA, the designations for Prime Farmland, Farmland of Statewide Importance, and Unique Farmland are defined as "agricultural land" or "farmland" (Public Resources Code Sections 21060.1 and 21095, and CEQA Guidelines Appendix G).

Williamson Act Contracts

The California Land Conservation Act of 1965, commonly known as the Williamson Act, enables local governments to form contracts with private landowners to promote continued agricultural or related open space uses. In return, landowners receive property tax assessments that are based on farming and open space uses rather than full market value and development potential. Local governments receive an annual subvention (subsidy) of forgone property tax revenues from the State via the Open Space Subvention Act of 1971. The contracts are annually renewable and may restrict the land to agricultural use for at least 10 years. The landowner may end the contract by submitting a Notice of Nonrenewal, which starts a 9-year nonrenewal period during which the annual tax assessment continually increases until it is equivalent to current tax rates. The contract is then terminated. Contract cancellation involves an extensive review and approval process. In addition, the landowner may be required to pay a fee of up to 12.5 percent of the property value. The local jurisdiction approving the cancellation must find that the cancellation is consistent with the purpose of the California Land Conservation Act or is in the public interest (California Government Code Section 51282).

Regional and Local Plans, Policies, Regulations, and Ordinances

Yolo Local Agency Formation Commission

California Government Code Section 56377 mandates LAFCo consider the following factors. In reviewing and approving or disapproving proposals which could reasonably be expected to induce, facilitate, or lead to the conversion of existing open-space lands to uses other than open-space uses, the commission shall consider all of the following policies and priorities:

a) Development or use of land for other than open-space uses shall be guided away from existing prime agricultural lands in open-space use toward areas containing non-prime agricultural lands, unless that action would not promote the planned, orderly, efficient development of an area.

b) Development of existing vacant or non-prime agricultural lands for urban uses within the existing jurisdiction of a local agency or within the sphere of influence of a local agency should be encouraged before any proposal is approved which would allow for or lead to the development of existing open-space lands for non-open-space uses which are outside of the existing jurisdiction of the local agency or outside of the existing sphere of influence of the local agency.

LAFCo Agricultural Conservation Policy

Review Criteria

The Yolo County LAFCo considers the following six aspects of project proposals during proposal reviews (Yolo LAFCo 2019a):

1. Existing developed areas should be maintained and renewed.
2. Vacant land within developed areas should be developed before agricultural land is annexed for non-agricultural purposes.
3. Land substantially surrounded by existing agency boundaries should be annexed before other lands.
4. Urban development should be restricted in agricultural areas. For example, agricultural land should not be annexed for nonagricultural purposes when feasible alternatives exist.
5. The continued productivity and viability of agricultural land surrounding existing communities should be promoted, by preventing the premature conversion of agricultural land to other uses and, to the extent feasible, minimizing conflicts between agricultural and other land uses.
6. Development near agricultural land should not adversely affect the economic viability or constrain the lawful, responsible practices of the agricultural operations.

In addition, the policy encourages the protection of Prime Farmland during annexations and the adoption of local policies that result in "efficient, coterminous and logical growth patterns within their general plan and sphere of influence areas," and it establishes an agricultural mitigation program required for annexation of prime agricultural lands.

The Commission encourages local agencies to identify the loss of prime agricultural land as early in their processes as possible, and to work with applicants to initiate and execute plans to mitigate for that loss, in a manner that is consistent with this Policy, as soon as feasible. Local agencies may also adopt their own agricultural conservation policies, consistent with this Policy, in order to better meet their own circumstances and processes.

Standards for Annexations Involving Prime Agricultural Land

Annexation of prime agricultural lands shall not be approved unless the following factors have been considered:

a) There is insufficient marketable, viable, less prime land available in the subject jurisdiction for the proposed land use.

b) The adoption and implementation of effective measures to mitigate the loss of agricultural lands, and to preserve adjoining lands for agricultural use to prevent their premature conversion to other uses. Such measures may include, but need not be limited to: the acquisition and dedication of farmland, development rights, open space and conservation easement to permanently protect adjacent and other agricultural lands within the county; participation in other development programs (such as transfer or purchase of development rights); payments to responsible, recognized government and non-profit organizations for such purposes; the establishment of open space and similar buffers to shield agricultural operations from the effects of development.

c) Less prime agricultural land generally should be annexed and developed before prime land is considered for boundary changes. The relative importance of different parcels of prime agricultural land shall be evaluated based upon the following (in a descending order of importance):

- Soil classification shall be given the utmost consideration, with Class I or II soil receiving the most significance, followed by the Storie Index Rating.

- Consideration shall also be given to the land's economic viability for continued agricultural use.

LAFCo will approve a change of organization which will result in the conversion of prime agricultural land in open space use to other uses only if the LAFCo finds that the proposal will lead to planned, orderly, and efficient development. The following factors shall be considered:

a) Contiguity of the subject land to developed urban areas.

b) Receipt of all other discretionary approvals for changes of boundary, such as prezoning, environmental review, and service plans as required by the Executive Officer before action by LAFCo. If not feasible before LAFCO acts, the proposal can be made contingent upon receipt of such discretionary approvals within not more than one (1) year following LAFCo action.

c) Consistency with existing planning documents of the affected local agencies, including a service plan of the annexing agency or affected agencies.

d) Likelihood that all or a substantial portion of the subject land will develop within a reasonable period of time for the project's size and complexity.

e) The availability of less prime land within the sphere of influence of the annexing agency that can be developed, and is planned and accessible, for the same or a substantially similar use.

f) The proposal's effect on the physical and economic viability of other agricultural operations. In making this determination, LAFCo will consider the following factors:

- The agricultural significance of the subject and adjacent areas relative to other agricultural lands in the region.

- The existing use of the subject and adjacent areas.

- Whether public facilities related to the proposal would be sized or situated so as to facilitate the conversion of adjacent or nearby agricultural land, or will be extended through or adjacent to, any other agricultural lands which lie between the project site and existing facilities.

- Whether natural or man-made barriers serve to buffer adjacent or nearby agricultural land from the effects of the proposed development.

- Provisions of the General Plan's open space and land use elements, applicable growth management policies, or other statutory provisions designed to protect agriculture. Such provisions may include, but not be limited to, designating land for agriculture or other open space uses on that jurisdiction's

general plan, adopted growth management plan, or applicable specific plan; adopting an agricultural element to its general plan; and acquiring conservation easements on prime agricultural land to permanently protect the agricultural uses of the property.

- The establishment of measures to ensure that the new property owners shall recognize the rights of adjacent property owners conducting agricultural operations and practices in compliance with the agricultural zone in accordance with the Right to Farm Ordinance adopted by the Yolo County Board of Supervisors.

Agricultural Mitigation

Annexation of prime agricultural lands shall not be approved unless one of the following mitigations has been instituted, at not less than a 1:1 replacement ratio:

a) The acquisition and dedication of farmland, development rights, and agricultural conservation easements to permanently protect adjacent and other agricultural lands within the County.

b) The payment of fees that are sufficient to fully fund the acquisition and maintenance of such farmland, development rights or easements. The per acre fees shall be specified by a Fee Schedule or Methodology, which may be periodically updated at the discretion of the Commission (Refer to the Yolo County LAFCO 'Payment In-Lieu Fee Methodology').

c) Any such measures must preserve prime agricultural property of reasonably equivalent quality and character that would otherwise be threatened, in the reasonably foreseeable future, by development and/or other urban uses.

The loss of fewer than twenty (20) acres of prime agricultural land generally shall be mitigated by the payment of in lieu fees as mitigation rather than the dedication of agricultural conservation easements. The loss of twenty (20) acres or more of prime agricultural land generally may be mitigated either with the payment of in lieu fees or the dedication of agricultural conservation easements. In all cases, the Commission reserves the right to review such mitigation on a case-by-case basis" (Yolo County LAFCo 2019).

YOLO COUNTY AGRICULTURAL COMMISSIONER

According to the California Food and Agriculture Code, the regulation of pesticide use in California occurs at the County level, thus the Yolo County Agricultural Commissioner regulates and enforces use of pesticides. Pesticide use is enforced through permitting the use of restricted and non-restricted pesticides; enforcing worker safety laws; inspecting pesticide equipment and applications; auditing records of growers, pest control operators, dealers and pest control advisors; and additional strategies.

The Yolo County Agricultural Commissioner releases conditions covering the use of restricted materials, annually. The 2016 use conditions prohibit any restricted materials, except for registered pesticides that are least toxic to humans, fish and wildlife, from being used in close proximity to environmentally sensitive areas such as residential areas and parks. The County Agricultural Commissioner has established minimum distances that must be maintained between environmentally sensitive areas and areas where restricted pesticides are applied. The minimum distances are 500 feet for aerial applications, 300 feet for air blast orchard applications, and 100 feet for ground applications (Yolo County Agricultural Commissioner 2020).

Agricultural Conservation Easement Program, Section 8-2.404 of Yolo County Code

Section 8-2.404 of the Yolo County Code establishes an Agricultural Conservation and Mitigation Program with the following purpose: "to implement the agricultural land conservation policies contained in the Yolo County General Plan with a program designed to permanently protect agricultural land located within the unincorporated area." To facilitate reliable conservation, the Code provides standards for conservation easements in the County.

The mitigation program established in this section of the Code requires projects that convert land from agricultural use to non-agricultural use to mitigate their impacts by conserving land. The mitigation ratio for projects that convert Prime Farmland is three acres of conserved farmland to one acre of converted land. The ratio for projects that convert other types of farmland is two acres to one. There are some exceptions to the mitigation program requirements, including for affordable housing projects and public uses. In addition, this section of the County Code allows for Yolo County or other entities to establish a local farmland mitigation bank by which small projects of less than 20 acres must pay an in-lieu fee rather than conserve farmland directly.

Pursuant to Section 8-2.404, Section 8-2.405 of the Yolo County Code establishes an In-Lieu Agricultural Mitigation Fee. The fees are collected by Yolo County and must be used for acquiring and maintaining agricultural conservation easements. Table 3.2-3 shows the cost of the in-lieu agricultural mitigation fee as of January 2021.

Table 3.2-3. In-Lieu Agricultural Mitigation Fee

Cost Component	Per Acre Fee
Easement Acquisition Cost	$8,400
Transaction Cost	$420
Monitoring Endowment	$880
Administrative Costs	$280
Contingency	$115
Total (rounded)	**$10,100**

Source: Yolo County Municipal Code Section 8-2.405.

City of Woodland Municipal Code

Right to Farm

Chapter 9.52, "Right to Farm," of Title 9 requires a right to farm deed restriction on any transfer of property within 500 feet of agricultural land or agricultural operations. The deed restriction notifies prospective purchasers and users of property near or adjacent to agricultural operations of the sounds, odors, dust and chemicals that may accompany agricultural operations. The Right to Farm ordinance also establishes a procedure for settling disputes regarding agricultural operations.

Agricultural Mitigation

The City of Woodland adopted Ordinance 1642 on May 16, 2017, which added Chapter 15.33, "Agricultural Mitigation," to Title 15 of the City of Woodland Municipal Code. Chapter 15.33 implements agricultural land conservation policies contained in the City of Woodland 2035 General Plan with a program designed to permanently protect agricultural land located in Yolo County.

Mitigation Requirements

Chapter 15.33 identifies the following mitigation for the loss of agricultural land whenever the City Council approves a General Plan amendment and/or rezone for urban development on agricultural land or farmland:

- For every acre converted to urban development, one acre of mitigation shall be required (1:1 ratio), except as otherwise required in this chapter (as described below in Adjustment Factors).
- Agricultural mitigation land shall be of same quality of land or higher than the land being converted. Determination of quality shall be based on the most current classification from the Farmland Mapping and Monitoring Program of the California Department of Conservation, Division of Land Resource Protection and take into consideration any utilization of the property that may have changed the farmland quality. The City may require assessment such as Revised Storie Index Rating or Use of Land Evaluation and Site Assessment be conducted to determine the quality of converted and/or agricultural mitigation land to ensure equivalent quality of the agricultural mitigation land.

Mitigation Implementation

- **Location, Generally.** Agricultural mitigation lands shall be located wholly within Yolo County.
- **Adjustment Factors.** The following adjustment factors shall be applied, where relevant, to modify the base ratio:

  (1) Mitigation of agricultural land or farmland occurring on lands beyond four miles from the urban limit line of the City of Woodland shall be mitigated at a ratio of two acres of conservation for every acre converted (2:1 ratio).

  (2) Mitigation of agricultural land or farmland consisting of an agricultural easement on land that is determined to be of lesser quality than the land being converted, but not lower than level of Statewide Importance, shall require a mitigation ratio of two acres of conservation for every acre converted (2:1 ratio).

  (3) Mitigation of agricultural land or farmland that meets both factors above shall require a mitigation of three acres of conservation for every acre converted (3:1 ratio).

  (4) For projects that are required under CEQA to mitigate for habitat loss associated with conversion of agricultural land and that mitigate for such impact by providing a habitat conservation easement on agricultural land in a priority habitat conservation area and in a manner consistent with the Yolo Habitat Conservation Plan, shall receive one acre of agricultural mitigation credit for every one acre of habitat conservation easement that meets this criteria. To receive the credit, the habitat conservation easement lands must first be approved by the Yolo Habitat Conservancy Board. The City shall then make a determination whether the easement property meets the definition of agricultural land.

City of Woodland 2035 General Plan

The *City of Woodland General Plan Update 2035* (City of Woodland 2017) identifies the following policies that are applicable to the proposed WRTP Specific Plan.

Land Use, Community Design, and Historic Preservation Element

- **Policy 2.A.1 Urban Limit Line**. A permanent Urban Limit Line (ULL) is established around Woodland to permanently circumscribe urban development and comply with provisions for agricultural lands. Public services and facilities shall not extend beyond the permanent Urban Limit Line. The City shall take such administrative steps as may be required to implement Policy 2.A.1. The City shall also identify funding for implementing a permanent urban limit line, including mitigation for developing on agricultural land. The City shall continually reevaluate residential land use densities, housing policies, and zoning to determine the potential for increased residential densities for both infill sites and undeveloped land within the Urban Limit Line. The City shall continually review existing non-residential zoning to determine the potential for conversion to higher density residential uses within the permanent Urban Limit Line. The City will encourage and support appropriately located agricultural and wildlife conservation easements to support implementation of the permanent urban limit line.

  This policy enacts Woodland Measure A (Ballot of June 2006), Urban Limit Line, and can only be modified by the voters.

- **Policy 2.A.3 Agricultural Mitigation.** For impacts to agricultural land within the ULL, require one acre to be permanently conserved for every acre converted to urban development (1:1 ratio). The farmland being conserved must be of the same Farmland Mapping and Monitoring Program type (Prime Farmland, Farmland of Statewide Importance, Unique Farmland, Farmland of Local Importance) as the farmland that is being converted, or of a type of higher quality, and the conserved farmland should be located outside of, but as close to the Woodland Urban Limit Line as possible.

Economic Development Element

- **Policy 4.C.9 Importance of Agricultural Industry.** Recognize the importance of agriculture-related business and industries to the City and region, and support the continuation and development of agriculture and agriculture-related enterprises in and around Woodland by:

  - Accommodating agriculture-related industries in Industrial and Business Park districts;

  - Promoting locally-grown and produced agricultural goods and value-added foods and beverages, and the image of Woodland and Yolo County as an agricultural region; and coordinating with the County on agriculture-supporting policies and programs, including ag-technology accelerators, agricultural processing facilities, and flood control and water management.

- **Policy 4.G.2 Strategic Partnerships for Biotech and Seed Industry.** Foster partnerships with educational institutions, private sector entities, and public agencies—such as UC Davis and Next Economy—to support biotech, agricultural, and seed industries in Woodland; ensure that adequate land, infrastructure, and amenities are available in Woodland to attract potential businesses associated with these industries.

Sustainability, Conservation, and Open Space Element

- **Policy 7.C.1 Annexation.** Annex land to the City only as it is needed for development of designated growth areas. Annexation of agricultural land will not be permitted except in conjunction with approved urban development consistent with the General Plan.

- **Policy 7.C.2 Agricultural Uses Within the ULL.** Where agriculture exists within the ULL, support existing agricultural uses until urban development (consistent with the General Plan) occurs on these properties.

- **Policy 7.C.4 Compatibility.** Ensure that urban development within the ULL does not affect the economic viability of adjacent agricultural practices located outside the ULL.

- **Policy 7.C.5: Agricultural Buffer.** Require new development that occurs at the edge of the ULL to be set back a minimum of 150 feet from adjacent agricultural land where possible. Equivalent means of providing agricultural buffers may be considered by the Planning Commission on a case by case basis for parcels where development potential would be precluded or severely limited as a result of the required buffer size. The buffer shall be landscaped/vegetated and may include public right of way.

Safety Element

- **Policy 8.G.10 Right-to-Farm Ordinance**. Support the City and County's right-to-farm ordinances, especially as they relate to noise emanating from agricultural operations adjacent to urban uses, by requiring notification of the potential impacts to adjacent property owners, purchasers, residents, and users.

3.2.4 Environmental Impacts and Mitigation Measures

Methodology

The 2035 General Plan and CAP EIR addresses impacts of development of the City's Planning Area, including the WRTP Specific Plan Area. Consistent with Section 15183(b) of the CEQA Guidelines, the following analysis focuses on project-specific significant effects of the WRTP Specific Plan and off-site improvements that: a) are peculiar to the WRTP Specific Plan or the project site; b) were not addressed in the 2035 General Plan and CAP EIR (including off-site or cumulative impacts); or c) would be more severe than previously described based on substantial new information.

The evaluation of the potential impacts of the WRTP Specific Plan on agricultural resources was based on a review of field conditions, aerial photographs, and policy guidance from the *City of Woodland General Plan* (City of Woodland 2017).

The Important Farmland Map for Yolo County, produced by the Department of Conservation Division of Land Resource Protection (DOC 2016), was used to evaluate the agricultural significance of the lands within the WRTP Specific Plan Area and off-site improvement areas. Geographic information systems (GIS) data were used to determine the potential acreage of designated farmland affected by implementation of the WRTP Specific Plan and off-site improvements. Appendix G of the CEQA Guidelines focuses the analysis on conversion of agricultural land on Prime Farmland, Farmland of Statewide Importance, or Unique Farmland; therefore, any conversion of these lands would be considered a significant impact under CEQA.

Thresholds of Significance

The proposed WRTP Specific Plan may have a significant impact related to agricultural and forestry resources if it would:

1. convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the FMMP of the California Resources Agency, to nonagricultural use;

2. conflict with existing zoning for agricultural use or a Williamson Act contract;

3. conflict with existing zoning for, or cause rezoning of, forestland (as defined in Public Resources Code Section 12220[g]), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104[g]);

4. result in the loss of forestland or conversion of forestland to nonforest use; or

5. involve other changes in the existing environment that, because of their location or nature, could result in conversion of Farmland to nonagricultural use or conversion of forest land to nonforest use.

IMPACTS NOT DISCUSSED FURTHER

The following discussion summarizes the impacts of the WRTP Specific Plan that are not discussed further in this document because either, a) there is no impact, or b) none of the factors triggering additional environmental review (as found in Section 15183(b)) exist because an impact was either addressed as a part of the 2035 General Plan and CAP EIR and/or substantially mitigated by uniformly applied development standards (CEQA Guidelines Section 15183[f][7]). Uniformly applied development standards include the 2035 General Plan, the CAP, existing City regulations and standards, design review requirements, and impact fee programs.

Conflict with Existing Williamson Act Contract (Significance Threshold 2) — No lands are under Williamson Act contract on the WRTP Specific Plan Area. Therefore, implementing the WRTP Specific Plan would not conflict with an existing Williamson Act contract, and this issue is not addressed further in this EIR.

Conflict with Existing Zoning for, or Cause Rezoning of, Forest Land, Timberland, or Timberland Zoned Timberland Production (Significance Threshold 3) — The WRTP Specific Plan Area and off-site improvement areas are not zoned as forestland, timberland, or a Timberland Production Zone. Thus, the WRTP Specific Plan would not conflict with existing zoning for, or cause rezoning of, forestry resources and this issue is not addressed further in this EIR.

Result in the Loss of Forest Land or Conversion of Forest Land to Non-Forest Use (Significance Thresholds 4 and 5) — The WRTP Specific Plan Area and off-site improvement areas do not contain timberland as defined by Public Resources Code Section 4526 or contain 10 percent native tree cover that would be classified as forestland under Public Resources Code Section 12220(g). Thus, the WRTP Specific Plan would not result in conversion of forest land to non-forest use. Therefore, this issue is not addressed further in this EIR.

PROJECT IMPACTS

IMPACT 3.2-1 **Loss of Important Farmland and Conversion of Agricultural Land to Nonagricultural Urban Uses (Significance Threshold 1)**. *Implementation of the WRTP Specific Plan and off-site improvements would result in the permanent conversion agricultural land, including Important Farmland, to urban uses. This impact is considered* ***significant****.*

As discussed in the 2035 General Plan and CAP EIR Impact 4.2-1 (pages 4.2-28 through 4.1-36) (City of Woodland 2016), development in new growth areas would convert farmland, including Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, to urban land uses. General Plan Policy 2.A.1 establishes an ULL that permanently circumscribes urban development and complies with provisions for protection of agricultural lands. The WRTP Specific Plan Area is located in an area planned for development that is inside the ULL. The 2035 General Plan and CAP EIR concluded that, despite proposed policies, implementation of the 2035 General Plan would still accommodate development in new growth areas that would convert farmland, including Important Farmland, defined as Prime Farmland, Farmland of Statewide Importance, Unique Farmland, and Farmland of Local Importance, to urban uses. Mitigation Measure 4.2-1 recommending new General Plan Policy 2.A.3 (requiring for every acre of farmland that is converted, an acre of that same type (or better) of farmland will be conserved) was adopted as part of the 2035 General Plan. However, the 2035 General Plan and CAP EIR concluded that there is no additional feasible mitigation available that would mitigate the loss of Important Farmland and conversion of agricultural land to nonagricultural urban uses, and the impact was significant and unavoidable.

Yolo LAFCo prepared a municipal service review and sphere of influence study for the City of Woodland (Yolo LAFCo 2019b). The Yolo LAFCo determined that:

> "Development of the proposed SOI would result in the loss of prime agricultural land. However, most of Yolo County is fertile agricultural soils and it is difficult to expand the City's footprint without impacting agricultural land and the City's Urban Limit Line preempts any uncontrolled sprawl. The City's General Plan Environmental Impact Report mitigates for this loss consistent with LAFCo policies and concludes that this loss is significant and unavoidable."

Chapter 15.33 of the City of Woodland Municipal Code implements Policy 2.A.3 of the 2035 General Plan. As described above, the Chapter 15.33 requires that for every acre converted to urban development, one acre of mitigation will be required (1:1 ratio); agricultural mitigation land must be of same quality of land or higher than the land being converted; and specified agricultural mitigation lands must be located wholly within Yolo County. [3]

General Plan Policy 2.A.1 establishes the ULL that permanently circumscribes urban development and complies with provisions for protection of agricultural lands. The WRTP Specific Plan Area is located in an area planned for development that is inside the ULL. The 2035 General Plan included site-specific conversion of this farmland to urban land uses as shown in Figure 2-5, "Land Use Diagram" (page LU 2-33 of the 2035 General Plan). As discussed in Chapter 2, "Project Description," the City promotes development of SP-1A [the WRTP Specific Plan Area] as a mixed-use residential district anchored by a research and technology business park in the Southern Gateway area at CR 25 and SR 113 (page LU 2-77 of the 2035 General Plan). The proposed South Regional Pond would be adjacent to, but south of, the Specific Plan Area, and existing agricultural lands in this off-site improvement area were not considered in the 2035 General Plan and CAP EIR.

[3] Chapter 15.33 states that the determination of quality will be based on the most current classification from the FMMP of the California Department of Conservation, Division of Land Resource Protection and take into consideration any utilization of the property that may have changed the farmland quality.

Agricultural uses within the WRTP Specific Plan Area would be converted to urban land uses from implementation of the WRTP Specific Plan and the proposed 4-acre South Regional Pond. Based on analysis of the Yolo County Important Farmland map (DOC 2016), approximately 346 acres of Prime Farmland and 3 acres of Farmland of Local Potential within the WRTP Specific Plan Area would be directly and permanently converted to urban uses.[4] Off-site improvements, specifically the proposed South Regional Pond, would directly and permanently convert approximately 4 acres of Prime Farmland to a detention pond for stormwater management. There is no Farmland of Statewide Importance or Unique Farmland identified within the WRTP Specific Plan Area or off-site improvement areas. In 2016, approximately 250,588 acres of Prime Farmland existed in Yolo County, of which 1,545 acres were located in the City's Planning Area (Tables 3.2-1 and 3.2-2). A conversion of approximately 350 acres of Prime Farmland would account for less than one percent of the total Prime Farmland in Yolo County as a whole, but approximately 23 percent of total Prime Farmland in the City's Planning Area. Project applicants for future projects proposed within the WRTP Specific Plan Area are required to comply with Municipal Code Chapter 15.33, which requires replacement of Prime Farmland at a 1:1 ratio. In addition, the South Regional Pond development area would not be annexed to the City. Therefore, this use would require compliance with the County's agricultural conservation ordinance (Section 8-2.404 and Section 8.2-405 of the Yolo County Code), which requires replacement of Prime Farmland at a ratio of three acres of conserved farmland to one acre of converted land and replacement of other types of farmland at a ratio of two acres to one; small projects of less than 20 acres may pay an in-lieu fee rather than conserve farmland directly.

While the WRTP Specific Plan would comply with City and County municipal code requirements for the loss of farmland that require permanent protection of agricultural land proportional to that proposed for conversion to urban use, 1:1 for the City and 3:1 for the County, as detailed, above, no new farmland would be made available, and a net loss of Important Farmland would occur as a result of development under the WRTP Specific Plan. This impact is considered **significant**.

Mitigation Measure

No additional feasible mitigation measures are available.

Significance after Mitigation

All feasible mitigation in the form of policies in the 2035 General Plan, as well as the City's Municipal Code Chapter 15.33 and Yolo County Code Section 8-2.404 and 8-2.405, are presented herein. No additional feasible mitigation measures are available that would avoid this impact without fundamentally changing the purpose of the WRTP Specific Plan. Therefore, and consistent with the findings in the 2035 General Plan and CAP EIR, impacts related to the conversion of Important Farmland to urban uses would be **significant and unavoidable**.

IMPACT 3.2-2 **Conflict with Existing Zoning for Agricultural Use (Significance Threshold 2).** *Implementation of the WRTP Specific Plan would occur on land currently zoned for agricultural use in unincorporated Yolo County. Conflicts the Yolo County General Plan are addressed through the City's review and processing of the WRTP Specific Plan, which includes prezoning and annexation. There are no adverse physical*

[4] Appendix G of the CEQA Guidelines focuses the analysis on conversion of agricultural land on Prime Farmland, Farmland of Statewide Importance, or Unique Farmland; therefore, any conversion of these lands would be considered a significant impact under CEQA. Conversion of Farmland of Local Potential would not be considered a significant impact under CEQA Guidelines.

environmental impacts related to Yolo County policies or standards that are not comprehensively considered throughout the other sections of this EIR. This impact is considered ***less than significant****.*

The WRTP Specific Plan and off-site improvement areas are zoned by Yolo County as Agricultural Intensive (A-N). The A-N zoning designation is intended to promote intensive agricultural uses while preventing the encroachment of nonagricultural uses. The Yolo County Zoning Regulations (Chapter 2 of Title 8 of the Yolo County Code) state that privately-owned ponds for agricultural-related use are an allowable use in the A-N zoning designation (Yolo County 2020). Development of the WRTP Specific Plan Area will require annexation into the City and pre-zoning prior to development. The WRTP Specific Plan will also require amending the City's Zoning Ordinance to reference the WRTP Specific Plan for allowable land use, development standards, performance standards, and design guidelines. With approval of the WRTP Specific Plan, annexation of the WRTP Specific Plan Area into the City of Woodland, and associated zoning changes, development of the WRTP Specific Plan Area would not conflict with zoning for agricultural use. Land for the proposed South Regional Pond would not be annexed to the City and would remain within Yolo County jurisdiction in land designated as A-N. The balance of the parcel on which the South Regional Pond would be located is in agricultural use and the WRTP Specific Plan would not propose to change that. While this proposed land use could conflict with existing zoning, any potential adverse physical impacts associated with construction and operation of the South Regional Pond, such as loss of farmland, changes to the visual character, and other potential physical impacts, have been comprehensively analyzed throughout this EIR. Potential impacts associated with development of the South Regional Pond would be mitigated through implementation of mitigation measures presented in this EIR and through uniformly applied City-administered development standards. There is no impact beyond those comprehensively considered throughout the other sections of this EIR. This impact is considered **less than significant**.

IMPACT 3.2-3 **Conflict with Existing On-Site and Off-Site Agricultural Operations (Significance Threshold 5).** *Implementation of the WRTP Specific Plan would locate residential land uses adjacent to existing on-site and off-site agricultural lands, resulting in potential conflicts with adjacent agricultural operations. This impact is considered* ***significant****.*

As discussed in the 2035 General Plan and CAP EIR Impact 4.2-1 (pages 4.2-38 through 4.2-41) (City of Woodland 2016), urban development can result in direct and indirect impacts on agricultural. Urban development has the potential to divide large tracts of agricultural land leaving smaller, less viable tracts of land for farming. Urban development can result in conflicts at the urban edge with adjacent agricultural practices, and lead to restrictions on the use of agricultural chemicals, complaints regarding noise, dust and odors, trespassing, and vandalism. The Yolo County Agricultural Commissioner requires a buffer between pesticide application and environmentally sensitive areas, including residential developments, as explained in the Regulatory Framework. Unless otherwise provided, the farmer has responsibility for providing this buffer, and therefore the buffer potentially limits the amount of land that can be used for agriculture. These conflicts may increase costs of agricultural operations and, together with other factors, encourage the conversion of additional farmland to urban uses. In addition, urban growth may increasingly compete with agriculture for the use of water resources and may conflict with farm-to-market use and/or operational use of area roadways. The 2035 General Plan and CAP EIR concluded that impacts related to conflicts with existing agricultural operations and urban land uses would be significant.

The 2035 General Plan includes policies to support agriculture in Woodland and minimize conflicts between urban and agricultural uses. 2035 General Plan Policy 7.C.4 requires the City to ensure that urban development within the ULL does not affect the economic viability of adjacent farms outside of the ULL. 2035 General Plan Policies 4.G.2

and 4.C.9 help strengthen specific segments of the agricultural industry and explicitly supports the continuation and development of the agricultural industry in Woodland, and Policy 8.G.10 requires the City's support for both the City's and the County's right to farm ordinances. Policy 7.C.2 helps protect existing agriculture within the ULL.

Although proposed policies will reduce the impact that development and other changes to the existing environment would have on existing agricultural uses and support the continued viability of the agricultural industry in Woodland, it cannot be guaranteed that farmland would not be indirectly impacted by development envisioned in the 2035 General Plan. Mitigation Measure 4.2-3 recommending new General Plan Policy 7.C.5 (requiring new development that occurs at the edge of the ULL to be set back a minimum of 150 feet from adjacent agricultural land where possible) was adopted as part of the 2035 General Plan. However, the 2035 General Plan and CAP EIR concluded that there is no additional feasible mitigation available that would mitigate the potential conflicts of future development with existing agricultural uses, and the impact was significant and unavoidable.

The WRTP Specific Plan is consistent with 2035 General Plan Policies 7.C.2, 7.C.4, 4.C.9 and 4.G.2, which support existing agricultural uses and the development of agricultural-related industries. As noted in Impact 3.2-1, development of the WRTP Specific Plan Area is envisioned as part of the 2035 General Plan and would occur in phases; Chapter 3 of the WRTP Specific Plan states that "existing agricultural uses may be permitted to continue until the area is required for the development of infrastructure or other allowed uses. Agricultural operations shall comply with applicable local, state, and federal laws and regulations." As discussed in Chapter 2 of this EIR, the City anticipates that agricultural-related research will be a major focus at the WRTP Specific Plan. In addition, one of the WRTP Specific Plan's Guiding Principles would be to take positive advantage of the existing and thriving seed, food, and agricultural-based industries currently located and doing business in and around Woodland.

Chapter 9.52, "Right to Farm," of the Woodland Municipal Code protects the rights of agricultural property owners and farmers to continue agricultural operations on their land, even if it is adjacent to other land uses. The ordinance requires a right-to-farm deed restriction on any transfer of property within 500 feet of agricultural land or agricultural operations. The deed restriction notifies prospective purchasers and users of property near or adjacent to agricultural operations of the sounds, odors, dust and chemicals that may accompany agricultural operations. The Right to Farm ordinance also establishes a procedure for settling disputes regarding agricultural operations.

Residential land uses would be developed in phases on the WRTP Specific Plan Area and agricultural production could potentially continue within the WRTP Specific Plan Area until these lands are ready to be developed, resulting in potential conflicts when the development edge is adjacent to ongoing agricultural operations on undeveloped portions of the WRTP Specific Plan Area. No buffers or other features are proposed, other than those encouraged by the WRTP Specific Plan, that would separate urban land uses from ongoing agricultural operations on undeveloped portions of the WRTP Specific Plan Area, resulting in potential agricultural-urban interface conflicts. However, these conflicts would be resolved as the WRTP Specific Plan Area is developed to urban uses.

In addition, land use conflicts could occur where the development edge within the WRTP Specific Plan Area is adjacent to off-site agricultural operations south of the WRTP Specific Plan Area along the ULL. In order to be consistent with 2035 General Plan Policy 7.C.5, which implements the 2035 General Plan and CAP EIR Mitigation Measure 4.2-3, the WRTP Specific Plan policy encourages a minimum 150-foot buffer, where feasible, along the southern edge of the Plan Area, adjacent to agricultural lands along the ULL, as stated in the WRTP Specific Plan Policies in section 2.2.3 of the WRTP Specific Plan as well as in the Site Development Standards detailed in Section 3.4 of the WRTP Specific Plan. Buffers may include parking, streets, bike/pedestrian multi-use trails,

shipping/receiving yards, stormwater management uses/facilities, or uses. Additionally, uses consistent and compatible with agricultural uses, such as agricultural field research or similar (i.e. greenhouses, field research offices, community gardens or agricultural uses/structures), are permitted within the agricultural buffer.

Areas identified for medium density residential development in the southeastern corner of the WRTP Specific Plan Area along the border of the ULL would be buffered from on-going agricultural operations by an on-site detention pond and the 4-acre South Regional Pond south of the WRTP Specific Plan Area. These buffers would reduce the conflicts associated with on-going offsite agricultural operations within the ULL. Prospective residents within 500 feet of agricultural uses would be notified of potential land use conflicts associated with agricultural activities as required by the Chapter 9.52, "Right to Farm," of the Woodland Municipal Code and a buffer zone would be established between the edge of development and adjacent off-site agricultural land. Conflicts could still occur between agricultural and urban land uses, particularly in areas where the development edge is adjacent to ongoing agricultural operations on undeveloped portions of the WRTP Specific Plan Area. This impact is considered **significant**.

Mitigation Measure

No additional feasible mitigation measures are available.

Significance after Mitigation

All feasible mitigation in the form of policies and programs in the 2035 General Plan are presented herein. No additional feasible mitigation measures are available that would avoid this impact without fundamentally changing the purpose of the WRTP Specific Plan. Therefore, and consistent with the findings in the 2035 General Plan and CAP EIR, this impact would be **significant and unavoidable**.

3.2.5 CUMULATIVE IMPACTS

The 2035 General Plan and CAP EIR (pages 6-13 and 6-14) (City of Woodland 2016) determined that new development throughout the region would convert agricultural land, including Important Farmland, to non-agricultural uses resulting in a significant cumulative impact.

New development envisioned by the 2035 General Plan would convert all of the farmland in the Planning Area to non-agricultural uses (see Table 6-5 of the 2035 General Plan and CAP EIR). The proposed South Regional Pond would be adjacent to, but south of, the WRTP Specific Plan Area, and was not considered in the 2035 General Plan and CAP EIR. Multiple policies are identified in the 2035 General Plan to manage agricultural land conversion, including an urban limit line that is designed to protect agricultural land surrounding the city limits, which would reduce the potential impact associated with conversion of agricultural land. The 2035 General Plan also requires mitigation for lost farmland within the ULL at a rate of one acre of permanently conserved farmland for every acre converted to urban development or non-agricultural uses. The 2035 General Plan and CAP EIR found that even with implementation of all feasible measures in the form of policies and programs in the 2035 General Plan new development would make a cumulatively significant and unavoidable contribution to the significant cumulative impact related to the loss of farmland, including Important Farmland.

As described in Section 3.2.4, future development under the WRTP Specific Plan would result in conversion of approximately 346 acres of Prime Farmland to new urban development, the off-site South Regional Pond would

convert 4 acres of Prime Farmland to a detention basin. The proposed WRTP Specific Plan and the off-site SR 113/County Road 25A are within the City's Planning Area and therefore were included as part of the cumulative analysis contained in 2035 General Plan and CAP EIR, and there are no substantial changes to environmental conditions, regulatory updates, or the WRTP Specific Plan that require additional cumulative analysis or mitigation. Although the off-site South Regional Pond was not included within the 2035 General Plan and CAP EIR analysis, 2035 General Plan policies would be applicable to the South Regional Pond, similar to the WRTP Specific Plan Area. Therefore, implementation of the WRTP Specific Plan and off-site improvements, in conjunction with development of related projects, would result in a **cumulatively considerable and unavoidable contribution** to the significant cumulative impact related to conversion of farmland, including Important Farmland, to nonagricultural uses.

3.3 AIR QUALITY

3.3.1 INTRODUCTION

This section describes the existing local and regional air quality conditions in the vicinity of the WRTP Specific Plan Area, summarizes applicable regulations, and analyzes the potential air quality impacts attributable to implementation of the WRTP Specific Plan. Existing air quality conditions were obtained from various sources including the Yolo-Solano Air Quality Management District (YSAQMD), California Air Resources Board (CARB), and other specific studies evaluating air quality emission sources within the WRTP Specific Plan Area.

The CEQA Guidelines note that comments received during the NOP scoping process can be helpful in "identifying the range of actions, alternatives, mitigation measures, and significant effects to be analyzed in depth in an EIR and in eliminating from detailed study issues found not to be important." (CEQA Guidelines Section 15083). Neither the CEQA Guidelines nor Statutes require a lead agency to respond directly to comments received in response to the NOP, but they do require that the comments be considered. Consistent with these requirements, these comments have been carefully reviewed and considered by the City and are reflected in the analysis of impacts in this section.

YSAQMD provided a response to the City's NOP recommending emissions of air pollutants associated with construction and operations from implementation of the WRTP Specific Plan should be evaluated against the YSAQMD-recommended thresholds of significance, and the EIR should describe how emissions from construction and operational activities would be mitigated to the extent feasible, specifically mitigating on-site emissions produced by the combustion of diesel fuel use to power construction equipment, and implementing on-site fugitive dust control practices such as those provided in the YSAQMD *CEQA Handbook for Assessing and Mitigating Air Quality Impacts*. In addition, YSAQMD recommends using the CalEEMod emission modeling software. YSAQMD also indicated that a discussion of mobile sources, toxic air contaminants, and odors should be included in the EIR. Appendix A of this EIR includes copies of all NOP comments received.

3.3.2 ENVIRONMENTAL SETTING

The City of Woodland 2035 General Plan and CAP EIR summarizes the environmental setting in the vicinity of the City's Planning Area as it pertains to Air Quality on pages 4.3-1 through 4.3-13. The environmental setting for the WRTP Specific Plan Area as it relates to air quality has not changed since the 2035 General Plan and CAP EIR was prepared in a way that would affect any of the findings of this section. Those aspects of the environmental setting that are relevant to potential impacts of the WRTP Specific Plan are highlighted below.

CLIMATE, TOPOGRAPHY, AND METEOROLOGY

The WRTP Specific Plan Area is located in the southern portion of the City's Planning Area in Yolo County, which is part of the Sacramento Valley Air Basin. Air quality is defined as the concentration of pollutants in relation to their impact on human health. Ambient concentrations of air pollutants are determined by the amount of emissions released by pollutant sources and the ability of the atmosphere to transport and dilute such emissions. Natural factors that affect transport and dilution include terrain, wind, atmospheric stability, and the presence of sunlight. Therefore, existing air quality conditions in the WRTP Specific Plan Area are influenced by factors such as topography, meteorology, and climate, as well as the quantity emissions released by air pollutant sources. The Sacramento Valley Air Basin climate is characterized by hot, dry summers and cool, rainy winters. Typically, winds transport air pollutants northward out of the Sacramento Valley Air Basin; however, during approximately half of the time

from July to September, the wind pattern shifts southward, blowing air pollutants back into the Sacramento Valley Air Basin and exacerbating the concentration of air pollutant emissions in the air basin. In addition, between winter storms, high pressure and light winds contribute to low-level temperature inversions and stable atmospheric conditions, resulting in the concentration of air pollutants.

CRITERIA AIR POLLUTANTS

Federal and State air quality standards have been established by the U.S. Environmental Protection Agency (EPA) and at the state level by the CARB, respectively, for six common air pollutants, known as criteria air pollutants. The criteria pollutants include particulate matter (PM) (which is further subdivided into PM of diameter equal to or less than 10 micrometers [PM_{10}] and PM of diameter equal to or less than 2.5 micrometers [$PM_{2.5}$]), ground-level ozone, carbon monoxide (CO), sulfur dioxide (SO_2), nitrogen dioxide (NO_2), and lead. The following provides a brief description of these criteria air pollutants, including their source types and health effects.

Ozone

Ozone is the primary component of urban smog. It is not emitted directly into the air, but is formed through a series of reactions involving reactive organic gases (ROG) and nitrogen oxides (NO_X) in the presence of sunlight. ROG emissions result primarily from incomplete combustion and the evaporation of chemical solvents and fuels. NO_X includes various combinations of nitrogen and oxygen, including nitric oxide, nitrogen dioxide (NO_2), and others, typically resulting from the combustion of fuels.

Emissions of both ROG and NO_X are considered critical to ozone formation. Therefore, either ROG or NO_X can limit the rate of ozone production. When the production rate of NO_X is lower, indicating that NO_X is scarce, the rate of ozone production is NO_X-limited. Under these circumstances, ozone levels could be most effectively reduced by lowering current and future NO_X emissions (from fuel combustion), rather than by lowering ROG emissions. Rural areas tend to be NO_X-limited, while areas with urban populations tend to be ROG-limited. Both ROG and NO_X reductions provide ozone benefits in the region, but the Sacramento Federal Nonattainment Area, which includes Yolo County, exhibits a NO_X-limited regime; therefore, NO_X reductions (such as those available through reducing mobile source emissions) are more effective than ROG reductions on a tonnage basis (SMAQMD et al. 2017).

Ozone concentrations reflect an interplay of emissions of ozone precursors, transport, meteorology, and atmospheric chemistry. Meteorology and terrain play a major role in ozone formation. Generally, low wind speeds or stagnant air, coupled with warm temperatures and clear skies provide the optimum conditions for formation. As a result, summer is generally the peak ozone season. Because of the reaction time involved, peak ozone concentrations often occur far downwind of the precursor emissions. Therefore, ozone is a regional pollutant that often affects large areas.

Individuals exercising outdoors, children, and people with lung disease, such as asthma and chronic pulmonary lung disease, are considered to be the most susceptible subgroups for ozone effects. Short-term ozone exposure (lasting for a few hours) can result in changes in breathing patterns, reductions in breathing capacity, increased susceptibility to infections, inflammation of lung tissue, and some immunological changes. In recent years, a correlation has also been reported between elevated ambient ozone levels and increases in daily hospital admission rates and mortality (EPA 2020a). An increased risk of asthma has been found in children who participate in multiple sports and live in communities with high ozone levels.

Emissions of the ozone precursors ROG and NO_X have decreased in the past several years. According to the most recently published edition of CARB's California Almanac of Emissions and Air Quality, NO_X and ROG emissions levels in the Sacramento metropolitan area are projected to continue to decrease through 2035, largely because of more stringent motor vehicle standards and cleaner burning fuels, as well as rules for controlling ROG emissions from industrial coating and solvent operations (CARB 2013).

Carbon Monoxide

CO is produced primarily by the incomplete burning of carbon in fuels, primarily from mobile (transportation) sources. Other emissions sources include fires (both wildfires and prescribed fires), releases from vegetation and soil, wood-burning stoves, incinerators, and industrial sources. Relatively high concentrations are typically found near crowded intersections and along high-volume roadways carrying slow-moving traffic. Even under the most severe meteorological and traffic conditions, high concentrations of CO are limited to locations within a relatively short distance (300–600 feet) of high-volume roadways. Vehicular traffic emissions can cause localized CO impacts, and severe vehicle congestion at major signalized intersections can generate elevated CO levels, called "hot spots," which can be hazardous to human receptors adjacent to the intersections. Overall, CO emissions are decreasing, in part because the Federal Motor Vehicle Control Program has mandated increasingly lower emission levels for vehicles manufactured since 1973.

CO enters the bloodstream through the lungs by combining with hemoglobin, which normally supplies oxygen to the cells. However, CO combines with hemoglobin much more readily than oxygen does, drastically reducing the amount of oxygen available to the cells. Adverse health effects from exposure to high CO concentrations, which typically can occur only indoors or within similarly enclosed spaces, include dizziness, headaches, and fatigue. CO exposure is especially harmful to individuals who suffer from cardiovascular and respiratory diseases (EPA 2020b).

Nitrogen Dioxide

NO_2 is one of a group of highly reactive gases known as oxides of nitrogen, or NO_X. NO_2 is formed when ozone reacts with nitric oxide (i.e., NO) in the atmosphere and is listed as a criteria pollutant because NO_2 is more toxic than nitric oxide. The major human-made sources of NO_2 are combustion devices, such as boilers, gas turbines, and mobile and stationary reciprocating internal combustion engines. The combined emissions of nitric oxide and NO_2 are referred to as NO_X and reported as equivalent NO_2. Because NO_2 is formed and depleted by reactions associated with ozone, the NO_2 concentration in a geographical area may not be representative of local NO_X emission sources. NO_X also reacts with water, oxygen, and other chemicals to form nitric acids, contributing to the formation of acid rain.

Inhalation is the most common route of exposure to NO_2. Breathing air with a high concentration of NO_2 can lead to respiratory illness. Short-term exposure can aggravate respiratory diseases, particularly asthma, resulting in respiratory symptoms (such as coughing, wheezing, or difficulty breathing), hospital admissions, and visits to emergency rooms. Longer exposures to elevated concentrations of NO_2 may contribute to the development of asthma and potentially increase susceptibility to respiratory infections. Larger decreases in lung functions are observed in individuals with asthma or chronic obstructive pulmonary disease (e.g., chronic bronchitis, emphysema) than in healthy individuals, indicating a greater susceptibility of these subgroups (EPA 2016).

Sulfur Dioxide

SO_2 is one component of the larger group of gaseous oxides of sulfur (SO_X). SO_2 is used as the indicator for the larger group of SO_X, as it is the component of greatest concern and found in the atmosphere at much higher concentrations than other gaseous SO_X. SO_2 is typically produced by such stationary sources as coal and oil combustion facilities, steel mills, refineries, and pulp and paper mills. The major adverse health effects associated with SO2 exposure pertain to the upper respiratory tract. On contact with the moist mucous membranes, SO2 produces sulfurous acid, a direct irritant. Concentration rather than duration of exposure is an important determinant of respiratory effects. Children, the elderly, and those who suffer from asthma are particularly sensitive to effects of SO_2 (EPA 2019).

SO_2 also reacts with water, oxygen, and other chemicals to form sulfuric acids, contributing to the formation of acid rain. SO_2 emissions that lead to high concentrations of SO_2 in the air generally also lead to the formation of other SO_X, which can react with other compounds in the atmosphere to form small particles, contributing to particulate matter pollution, which can have health effects of its own.

Particulate Matter

PM is a complex mixture of extremely small particles and liquid droplets made up of several components, including acids (such as nitrates and sulfates), organic chemicals, metals, and soil or dust particles. Natural sources of particulates include windblown dust and ocean spray. The major areawide sources of $PM_{2.5}$ and PM_{10} are fugitive dust, especially from roadways, agricultural operations, and construction and demolition. Other sources of PM_{10} include crushing or grinding operations. $PM_{2.5}$ sources also include all types of combustion, including motor vehicles, power plants, residential wood burning, forest fires, agricultural burning, and some industrial processes. Exhaust emissions from mobile sources contribute only a very small portion of directly emitted $PM_{2.5}$ and PM_{10} emissions. However, they are a major source of ROG and NO_X, which undergo reactions in the atmosphere to form PM, known as secondary particles. These secondary particles make up the majority of PM pollution.

The size of PM is directly linked to its potential for causing health problems. EPA is concerned about particles that are 10 micrometers in diameter or smaller, because these particles generally pass through the throat and nose and enter the lungs. Once inhaled, these particles can affect the heart and lungs and cause serious health effects, even death. The adverse health effects of PM_{10} depend on the specific composition of the particulate matter. For example, health effects may be associated with metals, polycyclic aromatic hydrocarbons, and other toxic substances adsorbed onto fine PM (referred to as the "piggybacking effect"), or with fine dust particles of silica or asbestos. Effects from short- and long-term exposure to elevated concentrations of PM_{10} include respiratory symptoms, aggravation of respiratory and cardiovascular diseases, a weakened immune system, and cancer (WHO 2018). $PM_{2.5}$ poses an increased health risk because these very small particles can be inhaled deep in the lungs and may contain substances that are particularly harmful to human health.

Direct emissions of $PM_{2.5}$ in the Sacramento Metropolitan Area, which for this data compiled by CARB is inclusive of Yolo County, decreased between 2000 and 2010, but are projected to increase very slightly through 2035. Similarly, emissions of diesel PM (DPM) decreased from 2000 through 2010 because of reduced exhaust emissions from diesel mobile sources. These emissions are anticipated to continue to decline through 2035 (CARB 2013).

Lead

Lead is a highly toxic metal that may cause a range of human health effects. Lead is found naturally in the environment and is used in manufactured products. Previously, the lead used in gasoline anti-knock additives represented a major source of lead emissions to the atmosphere. Soon after its inception, EPA began working to reduce lead emissions, issuing the first reduction standards in 1973. Lead emissions have decreased substantially as a result of the near elimination of leaded gasoline use. Metal processing is currently the primary source of lead emissions. The highest levels of lead in air are generally found near lead smelters. Other stationary sources are waste incinerators, utilities, and lead-acid battery manufacturers. Although the ambient lead standards are no longer violated, lead emissions from stationary sources still pose "hot spot" problems in some areas. As a result, CARB has identified lead as a toxic air contaminant (TAC).

Fetuses, infants, and children are more sensitive than others to the adverse effects of lead exposure. Exposure to low levels of lead can adversely affect the development and function of the central nervous system, leading to learning disorders, distractibility, inability to follow simple commands, and lower intelligence quotients. In adults, increased lead levels are associated with increased blood pressure. Lead poisoning can cause anemia, lethargy, seizures, and death, although it appears that lead does not directly affect the respiratory system.

Local and Regional Air Pollutant Monitoring Data and Attainment Status

Concentrations of criteria air pollutants are measured at several monitoring stations in the Sacramento Valley Air Basin. Table 3.3-1 summarizes the air quality data from the closest stations to the WRTP Specific Plan Area. Ozone, PM_{10}, and $PM_{2.5}$ readings are from the 41929 East Gibson Road monitoring station located approximately 0.50 mile north of the WRTP Specific Plan Area's northern limits. The 41929 East Gibson Road monitoring station does not monitor for NO_2; therefore ambient monitoring data for this pollutant was obtained from the next closest monitoring station, the UC Davis campus station, which is located approximately 6.75 miles south of the WRTP Specific Plan Area's southern border.

Monitoring stations in the Sacramento Valley Air Basin have not monitored for CO or SO_2 in the past 3 years. However, monitoring data are available for both CO and SO_2 for 2012 and prior years. Monitoring data are available for CO from the Goldenland Court monitoring station located at 68 Goldenland Court in Sacramento, which is nearly 13 miles east of the WRTP Specific Plan Area. These monitoring data show a declining trend in CO concentrations over time. The maximum registered CO concentration in the past 10 years is 1.94, approximately 22 percent of the 8-hour standard. The nearest available monitoring station to the project site with SO_2 data is the Sacramento–Del Paso Manor station, which is nearly 21 miles west southwest of the WRTP Specific Plan Area. The highest measurement at this site in the past 10 years is 0.004, less than 10 percent of the state 24-hour average standard. Therefore, it is highly unlikely that any exceedances of CO or SO_2 have occurred near the project site in the past 3 years (CARB 2018).

As noted above, federal and State standards referred to as the national ambient air quality standards (NAAQS) and the California ambient air quality standards (CAAQS), respectively, were established to protect the public with a margin of safety from adverse health impacts caused by exposure to air pollution. Both CARB and EPA use monitoring data to designate areas according to attainment status for criteria air pollutants published by the agencies. The purpose of these designations is to identify areas with air quality problems and thereby initiate planning efforts for improvement. Yolo County's attainment status for the NAAQS and CAAQS has not changed since 2035 General Plan and CAP EIR was prepared. Yolo County currently meets the NAAQS for all criteria air pollutants except

ozone and $PM_{2.5}$, and currently meets the CAAQS for all criteria air pollutants except ozone and PM_{10}. For all other CAAQS and NAAQS, the area is designated as attainment or unclassifiable (YSAQMD 2019).

Table 3.3-1. Ambient Air Quality Data (2014–2016) [1]

Pollutant and Related Standard	2014	2015	2016
Ozone			
Maximum concentration – State (1-hour/8-hour, ppm) [2]	0.082/0.072	0.086/0.072	0.095/0.076
Maximum concentration – National (8-hour, ppm) [2]	0.071	0.071	0.075
Number of days state standard exceeded (1-hour/8-hour)	0/1	0/4	1/4
Number of days national standard exceeded (8-hour) [3]	0/1	0/3	0/4
Carbon Monoxide (CO) [4]			
Not Available	N/A	N/A	N/A
Nitrogen Dioxide (NO_2) [5]			
Maximum concentration (1-hour, ppb) (national/California)	41.8/41	31.0/31	38.2/38
Number of days standard exceeded (national/California)	0/0	0/0	0/0
Annual average (ppm) (California)	5	5	–
Sulfur Dioxide (SO_2) [4]			
Not Available	N/A	N/A	N/A
Fine Particulate Matter ($PM_{2.5}$)			
Maximum concentration (µg/m^3) (national/California) [6]	14.6/14.6	29.4/29.4	16.4/16.4
Number of days national standard exceeded (measured/estimated) [7]	0/0.0	0/0.0	0/0.0
Annual average (µg/m^3) (national/California)	5.9/–	7.5/7.6	6.3/6.4
Respirable Particulate Matter (PM_{10})			
Maximum concentration (µg/m^3) (national/California) [6]	45.0/47.5	70.8/69.4	69.4/98.7
Number of days national standard exceeded (measured/estimated) [7]	0/0.0	0/0.0	0/0.0
Number of days state standard exceeded (measured/estimated) [7]	0/0.0	2/12.2	2/12.2
Annual average (µg/m^3) (national/California)	17.2/17.4	21.5/21.8	19.2/19.7

Notes: µg/m^3 = micrograms per cubic meter; ppm = parts per million; – = data not available or insufficient data to determine value

1 Measurements were recorded at the Gibson Road monitoring station unless noted otherwise.

2 State and national statistics may differ for the following reasons: National 8-hour averages are truncated to three decimal places; State 8-hour averages are rounded to three decimal places. State criteria for ensuring that data are sufficiently complete for calculating 8-hour averages are more stringent than the national criteria.

3 The 8-hour national ozone standard was revised to 0.075 ppm in March 2008 and then again to 0.070 in October 2015.

4 Carbon monoxide and sulfur dioxide are not currently monitored at any station in the Sacramento Valley Air Basin.

5 Measurements were recorded at the Davis-UCD Campus monitoring station located on Campbell Road in Davis, which is approximately 6.75 miles south of the WRTP Specific Plan Area.

6 State and national statistics may differ for the following reasons: State statistics are based on California-approved samplers, whereas national statistics are based on samplers using federal reference or equivalent methods. State and national statistics may therefore be based on different samplers. State statistics are based on local conditions while national statistics are based on standard conditions. State criteria for ensuring that data are sufficiently complete for calculating valid annual averages are more stringent than the national criteria.

7 Measured days are those days that an actual measurement was greater than the level of the state daily standard or the national daily standard. Measurements are typically collected every 6 days. Estimated days are the estimated number of days that a measurement would have been greater than the level of the standard had measurements been collected every day. The number of days above the standard is not necessarily the number of violations of the standard for the year.

Source: CARB 2018

TOXIC AIR CONTAMINANTS

In addition to criteria air pollutants, the U.S. EPA and the California Air Resources Board also regulate hazardous air pollutants, also known as TACs. The term TAC collectively refers to a diverse group of air pollutants that may cause or contribute to an increase in chronic (i.e., long-duration) and acute (i.e., severe but short-term) adverse effects on human health. There are hundreds of different types of toxic air contaminants with varying degrees of toxicity. The health risks of individual toxic air contaminants vary greatly; at a given level of exposure, one toxic air contaminant may pose a hazard that is many times greater than another. TACs are identified and their toxicity is studied by the California Office of Environmental Health Hazard Assessment (OEHHA).

TACs are usually present in minute quantities in the ambient air; however, their toxicity or health risk may pose a threat to public health even at low concentrations. TACs can be separated into carcinogens and noncarcinogens, based on the nature of the effects associated with exposure to the pollutant. For regulatory purposes, carcinogens are assumed to have no safe threshold below which health impacts would not occur. Noncarcinogens differ in that there is generally assumed to be a safe level of exposure below which no negative health impact is believed to occur. These levels are determined on a pollutant-by-pollutant basis.

TACs may be emitted by stationary, area, or mobile sources. Common stationary sources of TAC emissions include gasoline stations, dry cleaners, and diesel backup generators, which are subject to the requirements of local air districts' permits. The other, often more substantial, sources of TAC emissions are motor vehicles on freeways, on high-volume roadways, or in other areas with high numbers of diesel vehicles, such as distribution centers. Off-road mobile sources are also major contributors of toxic air contaminant emissions and include construction equipment, ships, and trains. According to the *California Almanac of Emissions and Air Quality* (CARB 2009), most of the estimated health risk from TACs can be attributed to relatively few compounds, the most important being particulate matter from diesel-fueled engines (i.e., DPM). Other TACs for which data are available that pose the greatest existing ambient risk in California are benzene, 1,3-butadiene, acetaldehyde, carbon tetrachloride, hexavalent chromium, para-dichlorobenzene, formaldehyde, methylene chloride, and perchloroethylene.

DPM differs from other TACs because it is not a single substance, but a complex mixture of hundreds of substances. Although DPM is emitted by diesel-fueled internal combustion engines, the composition of the emissions varies depending on engine type, operating conditions, fuel composition, type of lubricating oil, and presence or absence of an emission control system. Unlike the other TACs, no ambient monitoring data are available for DPM because no routine measurement method currently exists. However, emissions of DPM are forecasted to decline; it is estimated that emissions of DPM in 2035 will be less than half those in 2010, further reducing statewide cancer risk and non-cancer health effects (CARB 2020).

Just west of the WRTP Specific Plan Area is State Route (SR) 113, which handles heavy-duty diesel trucks with emissions that can expose nearby sensitive receptors to TAC emissions; however it is important to note that this roadway is not considered a high-volume roadway (high-volume roadways are those that, on an average day, have traffic in excess of 50,000 vehicles in a rural area and 100,000 vehicles in an urban area [California Public Resources Code Section 21151.8]); in proximity to the WRTP Specific Plan Area at the intersection with County Road (CR) 25A, annual average daily traffic volumes range from approximately 24,000 to 26,000 vehicles (Caltrans 2017). Also within the WRTP Specific Plan Area, DPM emissions are generated by existing diesel-fueled agricultural vehicles and equipment and backup generators to serve agricultural wells; these equipment and vehicles are present as part of existing agricultural operations. Within the city of Woodland are existing TAC sources, including mobile,

stationary, and areawide sources. Stationary sources that would generate TACs are permitted by YSAQMD; the YSAQMD issues permits and monitors new and modified sources of air pollutants to ensure compliance with national, state, and local emissions standards that govern TAC sources.

ODORS

The ability to detect odors varies considerably among the population and is subjective. Offensive odors can affect human health in several ways. First, odorant compounds can irritate the eye, nose, and throat, which can reduce respiratory volume. Second, the VOCs that cause odors can stimulate sensory nerves to cause neurochemical changes that might influence health, for instance, by compromising the immune system. Finally, unpleasant odors can trigger memories or attitudes linked to unpleasant odors, causing cognitive and emotional effects, such as stress.

Several examples of common land use types that generate substantial odors are wastewater treatment plants, landfills, composting/green waste facilities, recycling facilities, petroleum refineries, chemical manufacturing plants, painting/coating operations, rendering plants, and food packaging plants. In addition, odors can be caused by agricultural activities, such as dairy operations; horse, cattle, or sheep (livestock) grazing; fertilizer use; and aerial crop spraying.

Agricultural uses within and to the west and south of the WRTP Specific Plan Area can generate odors from a variety of processes, such as agricultural burning, livestock pens, fertilization, and composting, among others. To the north and east, the WRTP Specific Plan Area is surrounded by the Spring Lake Specific Plan Area that, in the vicinity of the WRTP Specific Plan Area, consists primarily of various densities of residential development, and small areas of open and public space and neighborhood commercial. The City of Woodland and YSAQMD work in cooperation with industrial facilities and agricultural producers to limit the odor emissions associated with manufacturing processes and agricultural burning.

SENSITIVE RECEPTORS

Some land uses are generally considered more sensitive to air pollution than others, because of the types of population groups or activities involved. Children, pregnant women, the elderly, those with existing health conditions, and athletes or others who engage in frequent exercise are especially vulnerable to the effects of air pollution. Accordingly, land uses that are typically considered sensitive receptors include schools, daycare centers, parks and playgrounds, and medical facilities.

Residential areas are considered sensitive to air pollution because residents (including children and the elderly) tend to be at home for extended periods of time, resulting in sustained exposure to the pollutants present. Recreational land uses are considered moderately sensitive to air pollution. Exercise places a high demand on respiratory functions, which can be impaired by air pollution, even though exposure periods during exercise are generally short. In addition, noticeable air pollution can detract from the enjoyment of recreation. Industrial and commercial areas are considered the least sensitive to air pollution. Exposure periods are relatively short and intermittent, as the majority of the workers tend to stay indoors most of the time.

The WRTP Specific Plan Area is bordered by the Spring Lake Specific Plan Area to the north and east, which includes residential development and open space immediately adjacent to the WRTP Specific Plan Area. To the west is SR 113, with open space and agricultural land uses to the south and opposite SR 113. The nearest existing sensitive receptors are those residential neighborhoods within the Spring Lake development area adjacent to Harry

Lorenzo Avenue (the eastern perimeter of the WRTP Specific Plan Area) and Farmers Central Road (the northern perimeter of the WRTP Specific Plan Area). As the WRTP Specific Plan buildout occurs, sensitive land uses would be developed within the WRTP Specific Plan Area, including residential uses and parks and recreational facilities. These land uses could be built within proximity to other future construction sites as well as operations of emissions-generating activities from surrounding land uses.

3.3.3 REGULATORY FRAMEWORK

The 2035 General Plan and CAP EIR summarizes the federal, State, regional, and local regulatory framework pertaining to air quality on pages 4.3-14 through 4.3-18. Those aspects of the existing regulatory framework that are relevant to potential impacts of the WRTP Specific Plan are briefly highlighted below. Please see Section 4.3.2 of the 2035 General Plan and CAP EIR for more detail.

FEDERAL PLANS, POLICIES, REGULATIONS AND LAWS

Clean Air Act, 42 U.S.C. §7401 et seq.

EPA's air quality mandates to implement national air quality programs are drawn primarily from the Clean Air Act. This includes, but is not limited to, the establishment of primary and secondary NAAQS, review and approval of State Implementation Plans (SIPs), identification and establishment of national emissions standards for hazardous air pollutants (HAPs), and issuance of vehicle and fuel standards to limit mobile-source emissions of toxics.

Corporate Average Fuel Economy (CAFE) Standards and the Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule

U.S. Environmental Protection Agency (EPA) and the National Highway Traffic Safety Administration set CAFE standards for passenger cars and for light trucks (collectively, light-duty vehicles), and separately sets fuel efficiency standards for passenger cars and light trucks (collectively, light-duty vehicles) for model years 2012 through 2025.

The Safer Affordable Fuel Efficient (SAFE) Vehicles Rule, proposed by the United States Department of Transportation and EPA in 2018, would amend the existing CAFE standards and establish new standards for model years 2021 through 2026. The proposed rule would retain the model year 2020 standards through model year 2026.

In response to the proposed SAFE Vehicles Rule, on July 25, 2019, automobile manufactures Ford, Volkswagen, Honda, and BMW entered into a voluntary framework agreement with CARB to set fuel economy and carbon dioxide limits at levels between the existing federal standards and the standards proposed by the SAFE Vehicles Rule. Under this framework, the auto companies' party to the voluntary agreement would only sell cars in the United States that meet these levels.

On September 27, 2019, the EPA and the National Highway Traffic Safety Administration published the "SAFE Vehicles Rule Part One: One National Program" (84 Fed. Reg. 51310). The Part One Rule revokes California's authority to set its own greenhouse gas (GHG) emissions standards and set zero-emission vehicle mandates in California. Part 2 of the regulations, which, if implemented, would address fuel efficiency standards for light-duty vehicles model years 2021 through 2026, have not been drafted as of the writing of this document.

STATE PLANS, POLICIES, REGULATIONS, AND LAWS

California Clean Air Act, H&S § 39600 et seq.

CARB is responsible for coordination and oversight of state and local air pollution control programs in California and for implementing the California Clean Air Act, adopted in 1988. Requirements under the California Clean Air Act include, but are not limited to, establishment of CAAQS, maintenance of air quality monitoring stations throughout California, classification of air basin attainment status with respect to each air pollutant and monitoring of progress in attaining air quality standards, review and approval of air district or other agency air quality attainment plans or air quality management plans for California, development of the SIP in California,

In 2017, CARB adopted the *Revised Proposed 2016 State Strategy for the State Implementation Plan*, describing the proposed commitment to achieve the reductions necessary from mobile sources, fuels, and consumer products to meet federal ozone and $PM_{2.5}$ standards over the next 15 years (CARB 2017a).

California Exhaust Emission Standards and Test Procedures

California gasoline specifications are governed by both state and federal agencies, which have imposed numerous requirements on the production and sale of gasoline in California during the past 18 years. In addition, EPA and CARB have established emissions standards for vehicles sold in California and for various types of equipment, creating increasingly stringent standards for mobile emissions, in particular NO_X and PM.

In 2000, CARB approved the Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles. CARB regulations on diesel emissions include the On-Road Heavy Duty Diesel Vehicle (In Use) Regulation, the On-Road Heavy Duty (New) Vehicle Program, the In-Use Off-road Diesel Vehicle Regulation, and the New Off-road Compression Ignition Diesel Engines and Equipment Program. State of California regulations to reduce DPM emissions applicable to the proposed project include Title 13, Sections 2485 and 2449, of the California Code of Regulations, which limit idling time for heavy-duty commercial diesel vehicles and off-road diesel-fueled construction vehicles, respectively.

Strategies to Reduce Community Health Impacts from Freight Activity

CARB is working to reduce air pollution emissions and minimize community health impacts from freight operations including seaports, railyards, warehouses, and distribution centers. At the March 2018 Board Meeting, staff provided an informational update on actions to minimize emissions and community health impacts from freight facilities. This update described staff's evaluation of potential concepts to reduce emissions from large freight facilities, including Indirect Source Review (ISR) rules and other measures capable of achieving similar levels of emission reductions. Staff proposed a path forward with additional CARB regulations and other actions, beyond those included in the State Implementation Plan (SIP), to further cut emissions. Such actions may require earlier implementation in the most impacted communities or regions. Finally, staff proposed to provide an annual update to the Board on freight activities to reflect the latest developments.

In 2017, Senate Bill 1 (the Road Repair and Accountability Act of 2017) was passed, which, in addition to funding transportation-related projects, requires the Department of Motor Vehicles to refuse registration or renewal or transfer of registration for certain diesel-fueled vehicles, based on weight and model year, that are subject to specified provisions relating to the reduction of emissions of diesel particulate matter, oxides of nitrogen, and other

criteria pollutants from in-use diesel-fueled vehicles. As of January 1, 2020, compliance with the CARB Truck and Bus regulation is now automatically verified by the California DMV as part of the vehicle registration process.

In June 2020, CARB approved the Advanced Clean Trucks regulation, requiring truck manufacturers to transition from diesel-powered trucks and vans to electric zero-emission trucks beginning in 2024 with phasing in of increasingly stringent requirements through 2045. By 2045, under the Advanced Clean Trucks regulation, every new truck sold in California will be zero-emission. This is a key element of CARB's strategy to achieve a transition in California's last mile delivery and local trucks from the use of conventional combustion technologies to zero emission everywhere feasible and near-zero emission powered by clean, low-carbon renewable fuels everywhere else. Promoting the development and use of advanced clean trucks will help CARB achieve its emission reduction strategies as outlined in the State Implementation Plan (SIP), Sustainable Freight Action Plan, Senate Bill 350, and Assembly Bill 32.

CARB Air Quality and Land Use Handbook

The *Air Quality and Land Use Handbook: A Community Health Perspective*, published by CARB, provides guidance on land use compatibility with sources of TACs (CARB 2005). The handbook is not a law or adopted policy but offers advisory recommendations for the siting of sensitive receptors near uses associated with TACs, such as freeways and high-traffic roads, commercial distribution centers, rail yards, ports, refineries, dry cleaners, gasoline stations, and industrial facilities. While the handbook is advisory and not regulatory, it offers the following recommendations that are pertinent to future development within the WRTP Specific Plan Area:

- Avoid siting new sensitive land uses within 500 feet of a freeway, urban roads carrying 100,000 vehicles per day, or rural roads carrying 50,000 vehicles per day.
- Avoid siting new sensitive land uses within 1,000 feet of a major service and maintenance rail yard.
- Avoid siting new sensitive land uses within 300 feet of a large gasoline station (defined as a facility with a throughput of 3.6 million gallons per year or greater). A 50-foot separation is recommended for typical gasoline dispensing facilities.
- Avoid siting new sensitive land uses within 300 feet of any dry-cleaning operation using perchloroethylene. For operations with two or more machines, provide 500 feet. For operations with three or more machines, consult the local air district. Do not site new sensitive land uses in the same building with dry-cleaning operations that use perchloroethylene.

Since the 2005 publication of the Handbook, CARB also published a Technical Advisory as a supplement to the Handbook to provide information on scientifically based strategies to reduce exposure to traffic emissions near high-volume roadways in order to protect public health (CARB 2017b). This Technical Advisory demonstrates that reduced exposure to traffic-related pollution can also be achieved while pursuing infill development that independently provides public health benefits, such as reduce vehicle miles travelled and increased physical activity. Strategies identified to reduce air pollution exposure near roadways in the Technical Advisory include those to reduce traffic emissions, such as incorporation of roundabouts for speed reduction, traffic signal management, and speed limit reductions on high-speed roadways (those greater than 55 miles per hour); strategies that reduce the concentrations of traffic pollution, such as urban design to promote air flow, solid barriers to pollution, and vegetation to reduce pollutant concentrations; and strategies that remove pollution from indoor air such as through

high efficiency filtration. This Technical Advisory does not negate the CARB Handbook, but offers multiple variables for consideration when planning development and proximity of receptors.

REGIONAL AND LOCAL PLANS, POLICIES, REGULATIONS, AND ORDINANCES

YSAQMD CEQA Handbook for Assessing and Mitigating Air Quality Impacts (Air Quality Handbook)

YSAQMD is the agency primarily responsible for assuring that national and state ambient air quality standards are attained and maintained in Yolo County and the northeastern Solano County portion of the Sacramento Valley Air Basin. The YSAQMD Air Quality Handbook contains guidance for projects and programs to evaluate potential air quality impacts.

1991 Air Quality Attainment Plan (AQAP)

Updated in compliance with the California Clean Air Act requirements, the most current version was adopted in July 2016 (YSAQMD 2016).

Sacramento Regional 8-Hour Ozone Attainment and Reasonable Further Progress Plan in February 2009

Adopted by the air districts within the Sacramento Federal Nonattainment Area, including YSAQMD, in February 2009. In June 2010, EPA approved reclassification of the Sacramento Federal Nonattainment Area from "serious" to "severe" for the 8-hour ozone nonattainment area with an associated attainment deadline of June 15, 2019 (SMAQMD 2017).

YSAQMD Rules and Regulations

All construction and operational activities occurring within YSAQMD's jurisdiction are subject to YSAQMD rules and regulations. Rules and regulations that may apply to projects under the WRTP Specific Plan include, but are not limited to the following: Rule 2.3 (Ringelmann Chart); Rule 2.5 (Nuisance); Rule 2.11 (Particulate Matter Concentration); Rule 2.14 (Architectural Coatings); Rule 2.28 (Cutback and Emulsified Asphalts); Rule 2.37 (Natural Gas-Fired Water Heaters and Small Boilers); Rule 2.40 (Wood Burning Appliances); Rule 3.1 (General Permit Requirements); Rule 3.4 (New Source Review); and Rule 3.13 (Toxics New Source Review).

City of Woodland 2035 General Plan

The *City of Woodland General Plan Update 2035* (City of Woodland 2017) identifies the following policies related to air quality that are applicable to the WRTP Specific Plan.

Land Use, Community Design, and Historic Preservation Element

- **Policy 2.A.5. Complete and Well Designed Neighborhoods:** Promote the development of complete neighborhoods with a physical layout and land use mix that allows for a diversity of incomes; puts residents in close proximity to services and amenities; promotes walking, biking, and transit use; fosters community pride; enhances neighborhood identity; ensures public safety; and meets the needs of all ages and abilities.

- **Policy 2.C.1. Compact Form:** Promote compact development patterns, mixed land use, and higher-development intensities that conserve land resources, reduce vehicle trips, improve air quality, and facilitate

walking, bicycling, and transit use. Achieving the benefits of compact development as supported in this General Plan may result in potential tradeoffs related to traffic, noise, open space, and privacy. Sensitive design and appropriate performance standards may assist in mitigating these concerns. Where growth and increased density is allowed pursuant to this General Plan, these issues are acknowledged and accepted.

- **Policy 2.C.3. Alternative Transportation:** Actively support and facilitate mixed-use retail, employment, schools, and residential development around existing and future transit stops, bike routes, and pedestrian paths.
- **Policy 2.C.4: Resource Efficiency:** Encourage and incentivize buildings to be constructed so that they consume less energy, water, and other resources; allow natural ventilation; use daylight effectively; reduce stormwater runoff; and facilitate the use of clean energy whenever possible.
- **Policy 2.E.2. Safe and Comfortable Sidewalk Design:** Develop safe and pleasant sidewalks in compliance with adopted design standards to accommodate all users, including persons with disabilities, and complement the form and function of the land uses adjacent to each street segment.
- **Policy 2.E.3. Off-Street Pedestrian Paths:** Continue to develop off-street pedestrian paths for access to schools, recreation facilities, and neighborhood services in existing and future neighborhoods in the city.
- **Policy 2.I.3. Green Streets:** Provide continuous shade trees along Woodland's key corridors, integrate low-impact development (LID) drainage facilities to manage stormwater runoff within the public right-of-way, and include Class I or Class II bike facilities where possible.
- **Policy 2.M.1. Compact Form:** Promote the development of compact, complete neighborhoods that locate services and amenities within walking and biking distance of neighborhood residents, reducing the need to travel by car.
- **Policy 2.M.2. Mixed Uses:** Require neighborhood design that incorporates a mix of residential and non-residential development that addresses the basic daily needs of residents and employees. Each new growth area must incorporate some new employment generating uses.
- **Policy 2.M.3. Housing:** Design neighborhoods to include a mix of housing types at a range of densities and affordability levels that accommodate residents at all stages of life. Residential uses must achieve an overall minimum average density of eight dwelling units per gross acre across the Specific Plan.
- **Policy 2.M.4. Pedestrian and Bike Mobility:** Design streets to facilitate pedestrian and bicycle mobility in order to reduce automobile dependence and vehicle miles travelled. Utilize a traditional street grid with walkable blocks. Integrate a seamless greenbelt/trail system that provides recreational and transportation benefits.
- **Policy 2.M.5. Efficiency:** Strive for net zero energy development by encouraging buildings to be constructed so that they consume less energy, water, and other resources; allow natural ventilation; use daylight effectively; and facilitate the use of clean energy whenever possible.

- **Policy 2.M.6. Green Building:** Encourage sustainable, "green" building practices and construction techniques so that structures are designed, built, and renovated in a sustainable and resource-efficient manner.

Transportation and Circulation Element

- **Policy 3.A.4. Reduce Vehicle Miles Traveled (VMT):** Require new development projects to achieve a 10 percent reduction in VMT per capita or VMT per service population compared to the general plan 2035 VMT performance, or a 10 percent reduction compared to baseline conditions for similar land uses when measuring transportation impacts for subsequent projects and making General Plan consistency findings. Reducing peak period VMT in particular is desirable due to the added benefit of minimizing severe congestion and reducing emissions. Use of VMT reduction strategies such as those in Chart 6-2 below taken from Quantifying Greenhouse Gas Mitigation Measures, California Air Pollution Control Officers Association (CAPCOA), 2010 or similar professional research documents is encouraged.

- **Policy 3.A.7. Street Grid Network and Density:** Promote the use of grid and modified grid street patterns in new residential, commercial, or mixed-use development that propose to construct new streets. Modified grids may include combinations of grid and curvilinear streets. Greenbelts may intersect street grid to create an interconnected trail network that encourages biking and walking. The density of new streets should be similar to the existing residential neighborhoods in Woodland that have approximately nine centerline miles or arterials and collectors per square mile.

- **Policy 3.A.11. New Development:** Require all new development to provide convenient bicycle and pedestrian environments and access through building orientation, site layout, traffic management, and connections to transit service and local commercial and community facilities. Development must provide appropriate pedestrian amenities such as street lighting, benches, arcades, canopies, shade trees, art, and seating areas.

- **Policy 3.B.1 Complete Street Requirements and Green Streets:** To the extent feasible, all new street construction and reconstruction shall be designed to achieve complete streets. Designs should consider the needs of all roadway users, bicyclists, pedestrians, transit vehicles, and motorists, appropriate to the function and context of the facility. The needs of all roadway users including vulnerable populations such as young children, seniors, and people with disabilities when determining roadway widths and other barriers to travel, especially near schools, parks, senior centers, community centers, and other activity hubs. Require street design to incorporate adequate landscaping, including street trees and landscaped medians and/or parkway strips, in order to increase shade, minimize runoff, and create a comfortable and visually attractive environment.

- **Policy 3.B.3. Connectivity and Balance:** Preserve and continue to develop a comprehensive, integrated, and connected network of streets that balance walking and bicycling with transit, automobiles, and trucks.

- **Policy 3.B.5. New Developments.** Require new developments to provide interconnected street networks with walkable blocks that allow and encourage active multimodal transportation.

- **Policy 3.F.2. Bikeway Network:** Promote the development of a comprehensive system of recreational and commuter bicycle routes that provide safe and convenient connections between the city's major employment

and housing areas; existing and planned bikeways; and schools, parks, retail shopping, and residential neighborhoods.

- **Policy 3.F.3. Bicycle Parking:** Encourage the development of convenient and secure bicycle parking and establish minimum parking standards at employment centers, schools, recreational facilities, transit terminals, commercial businesses, the Downtown core area, and other locations where people congregate.

- **Policy 3.F.4. Bicycle Facilities:** Require residential, commercial, and industrial developments to include bicycle lanes or pathways in accordance with the Bikeway Master Plan or Specific Plans when constructing new roadways or upgrading existing streets.

- **Policy 3.G.2 Right-of-way Preservation.** Consider the need for future transit right-of-way in reviewing and approving plans for development. Rights-of-way may either be exclusive or shared with other vehicles.

- **Policy 3.G.9. Bike and Pedestrian Connections:** Ensure transit stops are connected to an integral part of the city's pedestrian and bicycle network.

- **Policy 3.H.7 Electric/Alternative Fuel Vehicle Parking.** Require new large commercial and retail developments, large employment centers, high-use public buildings, and parking structures to provide parking for alternative fuel vehicles including charging stations for electric vehicles. Require electric vehicle charging outlets in garages of all new single family residential homes.

Sustainability, Conservation, and Open Space Element

- **Policy 7.F.2. Best Management Practices:** Require all projects to implement Best Management Practices (BMPs) for reducing air pollutant emissions associated with the construction and operation of development projects as a standard City condition of approval.

- **Policy 7.F.3. Protect Sensitive Receptors:** For the purposes of environmental review of potential toxic air contaminant impacts, consider residentially designated land uses, hospitals and other medical facilities, residential care facilities, schools, day care centers, and playgrounds to be "sensitive receptors." Discourage the location of new sensitive receptor uses within 500 feet of a limited access state highway (SR 113 and I-5). Implement applicable buffer distances recommended by the California Air Resources Board between sensitive uses and sources of substantial pollutant concentrations.

- **Policy 7.F.4. Landscaping to Improve Air Quality:** Promote the increase of community-wide tree canopy and the use of plants and trees that are efficient pollutant absorbers.

- **Policy 7.F.5 Electric Equipment.** Promote inclusion of features such as exterior electrical outlets in new residential development to encourage the use of electric and other alternative fuel equipment.

- **Policy 7.F.8 Reduce Vehicle Miles Travelled.** Continue to work in conjunction with the YSAQMD and other agencies to establish and implement additional transportation control measures that will reduce vehicle travel and improve air quality.

3.3.4 ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

METHODOLOGY

The 2035 General Plan and CAP EIR addresses impacts of development of the City's Planning Area, including the WRTP Specific Plan Area. Consistent with Section 15183(b) of the CEQA Guidelines, the following analysis focuses on project-specific significant effects of the WRTP Specific Plan that: a) are peculiar to the WRTP Specific Plan or the site; b) were not addressed in the 2035 General Plan and CAP EIR (including off-site or cumulative impacts); or c) would be more severe than previously described based on substantial new information.

Proposed development in the WRTP Specific Plan Area would generate air quality emissions as a result of short-term construction and long-term operational activities. Construction-related emissions would be generated throughout the buildout of the WRTP Specific Plan Area and would vary based on the intensity and duration of construction activities, which are, in part, dependent upon market conditions. For purposes of modeling emissions associated with operation of future development of the WRTP Specific Plan, full operations are assumed to occur in 2035.

For the purposes of this analysis, and to ensure conservative results, 25 percent of the land uses that would be constructed as part of the WRTP Specific Plan were assumed to be under construction in the earliest possible construction year (2021). Assuming the earliest date possible provides a conservative estimate of the construction-related emissions associated with buildout of the WRTP Specific Plan because emission factors for construction equipment and vehicles decrease over time due to turnover in vehicle and equipment fleets, advancements in emission technology, and increasingly stringent emissions standards. Assuming 25 percent of the WRTP Specific Plan land uses are under construction simultaneously provides conservative results, as well, since the actual buildout of the WRTP Specific Plan will occur more gradually than this.

Construction emissions associated with development of the WRTP Specific Plan Area and off-site South Regional Pond were modeled using the California Emissions Estimator Model (CalEEMod) Version 2016.3.2, which is the most current version of the YSAQMD-recommended model for estimating construction and operational emissions for development projects. Emissions associated with construction of right-of-way within the WRTP Specific Plan Area, as well as the Caltrans off-site interchange improvements, were modeled using the Road Construction Emissions Model (RCEM) developed by SMAQMD for roadway projects; for modeling purposes, it was assumed that up to 10 percent of the maximum potential area of disturbance for roadway improvements could be disturbed in a given day. CalEEMod includes default assumptions for construction parameters, such as construction equipment, haul trucks, and worker trips, which were used to model the proposed WRTP Specific Plan's construction-related emission. Likewise, CalEEMod also allows the user to input project-specific parameters. In this case, project-specific construction inputs included site acreage for proposed land uses and a construction schedule, among others. Where project-specific information was not available, default parameters provided by the model were used. Default assumptions provided by the model are typically conservative to avoid underestimating emissions. Although it is unlikely that the most intensive days of construction would occur concurrently, to conservatively estimate maximum potential daily emissions, it is assumed that these various construction activities could occur concurrently throughout the WRTP Specific Plan Area during a year of maximum-potential development. Construction-related emissions associated with buildout of the WRTP Specific Plan and off-site improvement areas are compared with the applicable YSAQMD thresholds of significance to determine significance.

Operational emissions would be generated by area-, energy-, and mobile-sources. Area sources would include those such as hearths (fireplaces), consumer products, periodic architectural coatings and landscape equipment for residential and non-residential land uses. Energy sources would include natural gas combustion for space and water heating in residential and non-residential buildings. based on the assumed land use acreages and building square footage. In order to account for 2019 Title 24, Part 6 standards, the Title 24 energy intensity factors in CalEEMod were adjusted to account for an estimated 7-percent energy reduction in new-construction nonresidential buildings and 53-percent energy reduction in new-construction residential buildings compared to the 2016 Title 24, Part 6 standards that were in place at the time of the CalEEMod Version 2016.3.2 model release (CEC 2020). Mobile sources would involve vehicle trips associated with residential (e.g., work, shopping, and other trips) and non-residential (e.g., customers, employees, and material delivery trips) activities. Mobile-source emissions were modeled using CalEEMod, which uses emission factors from the most current EPA-approved version of CARB's on-road emissions inventory model, EMFAC2017.[1] The WRTP Specific Plan's operational emissions are compared with YSAQMD thresholds of significance to determine significance.

THRESHOLDS OF SIGNIFICANCE

The WRTP Specific Plan may have a significant impact related to air quality if it would:

1. conflict with or obstruct implementation of the applicable air quality plan;
2. result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in nonattainment under an applicable NAAQS or CAAQS (including releasing emissions that exceed quantitative thresholds for ozone precursors);
3. expose sensitive receptors to substantial pollutant concentrations; or
4. result in other emissions (such as those leading to odors) adversely affecting a substantial number or people.

Pursuant to the YSAQMD-recommended thresholds for evaluating project-related air quality impacts, implementation of the WRTP Specific Plan would be considered significant if it would (YSAQMD 2007):

- generate construction-related criteria air pollutant or precursor emissions that exceed the YSAQMD-recommended thresholds of 10 tons per year (tpy) of ROG, 10 tpy of NO_X, and 80 pounds per day (lbs/day) of PM_{10}, or result in a violation of the CO CAAQS;

[1] As a result of the SAFE Vehicles Rule, proposed by the United States Department of Transportation and EPA, EMFAC emissions factors for gasoline-powered light-duty vehicles (cars and light trucks) may not reflect the future fleet mix and fuel efficiency. Based upon adjustment factors developed by CARB (November 2019) in response to the SAFE Vehicles Rule Part One, gasoline-powered light-duty vehicle emissions factors for NO_X, Total Organic Gases (a subset of which is ROG), and PM_{10} exhaust may be approximately 0.8 percent, 0.6 percent, and 2 percent higher, respectively, than currently estimated by the EMFAC model. As gasoline-powered light-duty vehicles only account for a portion of the total anticipated fleet mix, the impact on total emissions would be less than these respective percentages. The exact impact on total future emissions is speculative. President Biden signed an Executive Order directing the heads of all agencies to immediately review and consider suspending, revising, or rescinding all existing regulations, orders, guidance documents, policies, and any other similar agency actions (agency actions) promulgated, issued, or adopted between January 20, 2017, and January 20, 2021, that are inconsistent with President's Biden policy to support public health, environmental justice, and economic development as set forth in Section 1 of this Executive Order. This includes the SAFE Vehicles Rule Part One and the SAFE Vehicles Rule for Model Years 2021–2026 Passenger Cars and Light Trucks.

- generate long-term regional criteria air pollutant or precursor emissions that exceed the YSAQMD-recommended thresholds of 10 tpy of ROG, 10 tpy of NO_X, and 80 lbs/day of PM_{10}, or result in a violation of the CO CAAQS;

- expose the maximally exposed individual to TAC emissions that exceed an incremental increase in cancer risk of more than 10 in one million[2] and/or a ground-level concentration of non-carcinogenic TAC emissions that would result in a Hazard Index equal to 1 or greater; or

- generate odorous emissions in such quantities as to cause detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which may endanger the comfort, repose, health, or safety of any such person or the public, or which may cause, or have a natural tendency to cause, injury or damage to business or property.

For cumulative impacts, YSAQMD has established that if a project would be significant on the project-level (i.e., exceed any threshold listed above), it would also be considered significant on a cumulative level (YSAQMD 2007).

IMPACTS NOT DISCUSSED FURTHER

All impacts related to air quality are discussed in detail below.

PROJECT IMPACTS

IMPACT 3.3-1 **Conflict with or Obstruct Implementation of the Applicable Air Quality Plan (Significance Threshold 1).** *YSAQMD and other air districts in the SVAB developed air quality plans to enable the region to achieve attainment of the NAAQS and CAAQS for ozone and PM. These air quality plans are based on an inventory of existing emission sources, as well as projections about the future level of land use development in the SVAB. Because the levels of growth associated with the construction and operation of future land uses anticipated under the WRTP Specific Plan were not accounted for in these projections of emissions-generating activity, and emissions could exceed the YSAQMD quantitative thresholds for short-term and long-term emissions, the WRTP Specific Plan could conflict with or obstruct the applicable air quality plan. This impact is considered* ***significant****.*

A project is non-conforming with an air quality plan if it conflicts with or delays implementation of any applicable attainment or maintenance plan. YSAQMD recommends that an evaluation for consistency with AQAP and SIP consider consistency with the AQAP and SIP population and vehicle use projections and AQAP and SIP transportation control measures, as well as a consideration of buffer zones around sources of odors and toxics (YSAQMD 2007). The most current update for YSAQMD AQAP to address the regional nonattainment status for CAAQS was adopted in July 2016. The most current plan for the Sacramento Federal Nonattainment Area, within which the WRTP Specific Plan Area is located and YSAQMD is included, is the Sacramento Regional 8-Hour Ozone Attainment and Reasonable Further Progress Plan updated in 2017. The AQAP specifically addresses the area's nonattainment status for ozone and, to a lesser extent, CO and PM_{10}. The AQAP stresses attainment of ozone

[2] The YSAQMD notes that this threshold was adopted specifically for the evaluation of stationary source impacts and that it believes that this threshold can provide an accurate and conservative assessment of the significance of mobile source-related impacts from air toxics from mobile sources, such as diesel PM. The YSAQMD also notes that no specific threshold of significance for toxic impacts has been adopted for mobile sources and that the 10 in one million threshold has been used by lead agencies for assessing mobile source impacts.

standards and focuses on strategies to reduce emissions of ozone precursors (ROG and NO_X). The AQAP promotes active public involvement, enforcement of compliance with district rules and regulations, and public education in both the public and private sectors. It also urges development and promotion of transportation and land use programs designed to reduce vehicle miles traveled within the region and implementation of stationary- and mobile-source control measures.

Emissions inventory forecasts for both the YSAQMD AQAP and the Sacramento Regional 8-Hour Ozone Attainment and Reasonable Further Progress Plan incorporate population and VMT projections, in part, based on data from the SACOG Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS) for the region. SACOG developed population and employment projections that inform transportation planning throughout the region and that are based, in part, on land use information from General Plans. According to the projections available to inform development of the most recently adopted air quality plans, the city's population was expected to increase to 66,041 people in 2035, the number of housing units to increase to 24,452, and employment in the city to increase to 33,368 jobs (City of Woodland 2013). As indicated in Table 4.10-4 of the 2035 General Plan and CAP EIR, the population, housing, and employment projections under the 2035 General Plan are higher than the SACOG projections for 2035. Although the WRTP Specific Plan Area was identified as a new growth area, SACOG growth projections at the time of development of the relevant air quality plans did not assume full development of the WRTP Specific Plan Area within the MTP planning horizon. The methodology and purpose of the City's estimate of development capacity under the 2035 General Plan is different from the methodology and purpose of SACOG's forecast for the purposes of the MTP/SCS. The SACOG projections are market-based growth estimates that project the amount and location of likely growth in the region based on a variety of socio-economic factors that are updated every four years. The City's General Plan and this WRTP Specific Plan serve as long-range planning tools that seek to create opportunities for growth and provide a range of land use options to encourage economic investment and promote other City policy objectives. Given these different purposes, it is expected that there would be variations in the growth forecasts between the two.

Future development and operations under the WRTP Specific Plan would be required to comply with all applicable rules and regulations, including YSAMD Rules and Regulations and permitting requirements for any stationary sources, adopted for the purposes of reducing air pollutant emissions and supporting regional attainment of the CAAQS and NAAQS pursuant to the AQAP and SIP. As detailed in Section 6.2.3 of the WRTP Specific Plan, a Comprehensive Transportation Demand Management strategy, in conjunction with key stakeholders that identifies check-in points to demonstrate consistency, as well as a Mobility Hub Master Plan, shall be prepared no later than prior to the approval of the first development application or tentative map or as otherwise required by the City's Community Development Director. Similarly, coordination with the Yolo County Transportation District, Yolobus, and University of California, Davis, on policies of the WRTP Specific Plan will be required to ensure timely provision of transit service and appropriate funding mechanisms in place. As shown in Exhibit 4-2 of the WRTP Specific Plan, a network of bike/pedestrian trails connecting from a linear open space system throughout the WRTP Specific Plan Area provides access to planned businesses, commercial centers, and residential areas, as well as to the adjoining Spring Lake residential community. The detailed planning and policies of the WRTP Specific Plan are consistent with the intent of the transportation control measures of the AQAP and SIP to reduce regional mobile-source emissions of criteria air pollutants and ozone precursors.

Adopted YSAQMD rules and regulations, as well as the YSAQMD-recommended thresholds of significance, have been developed with the intent to ensure continued attainment, or work toward attainment, of the NAAQS and CAAQS, consistent with the air quality plans. By exceeding the YSAQMD's mass emission thresholds, a project

may be considered to conflict with or obstruct implementation of the YSAQMD air quality planning efforts. As detailed in Impact 3.3-2 below, construction and operation of future development under the WRTP Specific Plan could exceed the YSAQMD mass emissions thresholds of significance for criteria air pollutants and ozone precursors.

Although the WRTP Specific Plan is designed and includes polices to minimize air pollutant emissions, implementation of the WRTP Specific Plan would result in population growth beyond that contemplated under the current AQAP and SIP planning efforts, and short-term and long-term emissions generated by future development under the WRTP Specific Plan could exceed YSAQMD thresholds of significance. Therefore, implementation of the WRTP Specific Plan is considered to potentially conflict with the applicable air quality plans and, consistent with the findings of the 2035 General Plan and CAP EIR, this impact is considered **significant**.

Mitigation Measures

Mitigation Measure 3.3-1a – Implement Mitigation Measures 3.3-2a through 3.3-2d

Significance after Mitigation

Mitigation Measure 3.3-2a would reduce emissions of fugitive dust PM and exhaust emissions that would be generated during construction of future development in the WRTP Specific Plan Area and off-site improvement areas. Implementation of Mitigation Measure 3.3-2b, would require the use of heavy-duty equipment powered with engines that meet CARB Tier 4 emissions standards, and thereby further reduce construction-related exhaust emissions, particularly NO_X. Mitigation Measure 3.3-2c would require the use of ultra-low VOC architectural coatings in all possible applications during construction, thereby further reducing ROG emissions from this construction-related source. Mitigation Measure 3.3-2d would reduce operational emissions of ROG and PM associated with wood burning stoves and fireplaces.

However, emissions of criteria air pollutants and precursors could still exceed significance thresholds. In addition, although the regional planning efforts and relevant air quality plans are updated on a regular basis and it is, therefore, reasonable to assume that future air quality plans will account for development of the WRTP Specific Plan Area, growth projections used for the purposes of the relevant air quality plans do not currently account for development of the WRTP Specific Plan Area. As such, implementation of the WRTP Specific Plan could conflict with or obstruct implementation of the applicable air quality plan. There are no additional feasible mitigation measures available to address this impact. This impact is **significant and unavoidable.**

IMPACT 3.3-2 **Result in a Cumulatively Considerable Net Increase of Criteria Air Pollutants and Precursor Emissions (Significance Threshold 2).** *Construction associated with future development of the WRTP Specific Plan Area and off-site improvement areas would generate emissions of criteria air pollutants that could violate an ambient air quality standard or contribute substantially to an existing or predicted air quality violation through incremental emissions of PM and ozone precursors (ROG and NOX). Future development in the WRTP Specific Plan Area would also result in long-term emissions generated from day-to-day operational activities associated with residential and non-residential land uses. Operational emissions are anticipated to exceed YSAQMD thresholds of significance for ozone precursors, ROG, and NOX. YSAQMD recommends that all incremental emission sources be mitigated to the greatest extent possible in order to achieve and maintain ambient air quality standards. YSAQMD provides recommended construction*

mitigation measures for lead agencies to incorporate, to the extent feasible. WRTP Specific Plan consistency with 2035 General Plan and CAP policies would reduce potentially significant impacts, but not to a level that would be below relevant thresholds. The impact is considered ***significant****.*

The 2035 General Plan and CAP EIR discussed potential impacts related to generation of short-term construction-related and long-term operational emissions of criteria air pollutants and precursors from implementation of the General Plan, inclusive of assumed development within the WRTP Specific Plan Area. While general development assumptions for SP-1A under the 2035 General Plan and CAP EIR are consistent with the proposed intensity of development under the WRTP Specific Plan, the WRTP Specific Plan contains a more detailed land use plan and details of off-site improvements that are now available to provide for a more detailed analysis potential air pollutant emissions. In addition, this analysis provides for additional discussion of regional health impacts associated with project-generated emissions of criteria air pollutants, informed by the SMAQMD *Guidance to Address the Friant Ranch Ruling for CEQA Projects in the Sac Metro Air District* (SMAQMD 2020b), which provides a screening level analysis estimating the health effects of criteria ai pollutants and their precursors.

Construction

The 2035 General Plan and CAP EIR (pages 4.3-21 to 4.3-25) discusses potential impacts related to generation of short-term construction-related emissions of criteria air pollutants and precursors from implementation of the General Plan. The EIR estimates the maximum daily and annual criteria air pollutant and precursor construction emissions associated with implementation of the General Plan and CAP using the assumption that 25 percent of all land uses within the City's Planning Area are developed in the earliest possible construction year (2017 for the General Plan). The 2035 General Plan and CAP EIR identifies existing regulations and 2035 General Plan policies that would reduce construction-related emissions, including General Plan Policy 7.F.2 that is designed to reduce emissions by encouraging implementation of best management practices during construction activities. The 2035 General Plan and CAP EIR also required Mitigation Measures 4.3-1a and 4.3-1b to require implementation of feasible construction mitigation strategies and best management practices. However, because the mitigation strategies and best management strategies have a range of effectiveness and because timing and level of construction associated with buildout of the City's Planning Area is subject to market conditions and not possible to predict, the 2035 General Plan and CAP EIR determined that construction-related emissions from buildout of the General Plan could exceed the YSAQMD thresholds of significance and contribute substantially to an existing or projected air quality violation, and found this impact to be significant and unavoidable.

The WRTP Specific Plan Area was assumed as part of the land use development anticipated under the 2035 General Plan. However, the General Plan EIR assessed emissions for all proposed development within the City's Planning Area and not individually for the specific proposed land uses and implementation timeline of the WRTP Specific Plan. Due to the size of the WRTP Specific Plan Area and variability of land uses, as well as the uncertainty of the construction timing, it was assumed that different types of construction activities (i.e. site grading, trenching, asphalt paving, building construction, and application of architectural coatings) could occur simultaneously at various locations within the WRTP Specific Plan Area. Modeling of construction emissions was conducted for the year 2021, as this is assumed to be the earliest year during which construction would occur for the future development of the WRTP Specific Plan Area. For purposes of modeling emissions associated with construction of future development of the WRTP Specific Plan, it is conservatively assumed that up to 25 percent of all land uses within the WRTP Specific Plan Area could be developed within the earliest possible construction year (2021). Table 3.3-

2 summarizes the modeled emissions of ROG, NO_X, and PM_{10} associated with construction within the WRTP Specific Plan Area and off-site improvement areas. Refer to Appendix B for model output files and assumptions.

Table 3.3-2. Maximum Criteria Air Pollutant and Precursor Construction-Related Emissions[1]

Emissions Source and Threshold Consideration	ROG Emissions (tons per year)	NO_X Emissions (tons per year)	ROG Emissions (pounds per day)	NO_X Emissions (pounds per day)	$PM_{2.5}$ Emissions (pounds per day)	PM_{10} Emissions (pounds per day)
WRTP Specific Plan Area + Off-site South Regional Pond Development in the Year 2021 [2]	11	24	90	197	48	240
Caltrans Off-site Improvement Area	1	5	6	62	18	77
YSAQMD Threshold of Significance	10	10	-	-	-	80
Exceeds Threshold?	Yes	Yes	NA	NA	NA	Yes

Notes: lb/day = pounds per day; ROG = reactive organic gases; NO_X = oxides of nitrogen; PM_{10} = respirable particulate matter; $PM_{2.5}$ = fine particulate matter; YSAQMD = Yolo-Solano Air Quality Management District

[1] Emissions are rounded to the nearest whole number.

[2] Construction emissions of WRTP Specific Plan Area assume that 25 percent of all land uses are developed in the earliest possible construction year (2021).

Source: Modeled by AECOM 2020; See Appendix B for detailed construction assumptions and modeling output files.

As shown in Table 3.3-2, based on the conservative assumptions made for the purpose of this analysis, emissions associated with construction for implementation of the WRTP Specific Plan and off-site South Regional Pond could exceed YSAQMD thresholds of significance. The Caltrans Off-site Improvement Area is not anticipated to be constructed in the first year of construction, but was conservatively modeled using emissions factor for this earliest year. Emissions shown in Table 3.3-2 are for Caltrans Off-site Improvement Area Alternative 1, with a maximum environmental impact area of approximately 37 acres; emissions associated with Alternative 1 would not exceed the YSAQMD thresholds of significance, and Caltrans Off-site Improvement Area Alternative 2 would have a smaller area of disturbance and thereby likely generate fewer construction-related emissions. While it would not on its own exceed the YSAQMD thresholds of significance, in conjunction with other development within the WRTP Specific Plan Area, it could result in an exceedance of YSAQMD PM_{10} threshold. In addition, according to the YSAQMD Air Quality Handbook, all incremental emission sources must be mitigated to the greatest extent possible in order to achieve and maintain ambient air quality standards. Thus, construction of future development within the WRTP Specific Plan Area and off-site improvement areas could exceed or contribute substantially to an existing or projected air quality violation due to incremental contribution to PM and ozone precursor emissions.

The YSAQMD thresholds of significance are considered the allowable amount of emissions each project can generate without resulting in a cumulatively considerable net increase of criteria air pollutants and precursor emissions. Consequently, because implementation of the WRTP Specific Plan, including the construction of off-site improvement areas, could generate construction-related emissions that exceed the YSAQMD thresholds, this impact is considered **significant**.

Operations

The 2035 General Plan and CAP EIR (pages 4.3-25 to 4.3-33) discusses potential impacts related to generation of long-term operations-related emissions of criteria air pollutants and precursors from implementation of the General Plan. The EIR estimates the maximum daily and annual criteria air pollutant and precursor emissions that would be generated by daily activities associated with the operation of land uses proposed within the City's Planning Area,

including mobile, energy, and area sources. The 2035 General Plan and CAP EIR also acknowledges that implementation could involve new stationary sources that would generate long-term operational emissions above those estimated for the development of proposed land uses within the City's Planning Area. The 2035 General Plan and CAP EIR incorporated Mitigation Measures 4.3-2 to require the use of best management practices to reduce operational emissions. The 2035 General Plan and CAP also both included several strategies and policies associated with reducing mobile- and energy-source emissions; these strategies and policies serve as the framework for, and direct implementation of future operations within the City's Planning Area. However, the 2035 General Plan and CAP EIR determined that it is likely that operational emissions of criteria air pollutants and precursors could still exceed the YSAQMD thresholds of significance and contribute substantially to an existing or projected air quality violation, and found this impact to be significant and unavoidable.

Development of the WRTP Specific Plan Area was assumed as part of the development anticipated under the 2035 General Plan. However, the General Plan EIR assessed emissions for all proposed development within the City's Planning Area and not individually for the anticipated land uses and implementation timeline of the WRTP Specific Plan. Buildout of the WRTP Specific Plan is anticipated to occur in phases over approximately two decades. For purposes of modeling emissions associated with operation of future development of the WRTP Specific Plan, full operations are modeled for the year 2035, consistent with the City's planning horizon of the 2035 General Plan; this is considered a conservative assumption, as it is unlikely that the entire Specific Plan will be built out in 2035 and emissions from building operations and mobile sources would likely be reduced in future years due to increasingly stringent regulatory requirements and technological advances to reduce emissions. Table 3.3-3 summarizes the modeled emissions of ROG, NO_X, and PM_{10} associated with long-term operations of land uses anticipated within the WRTP Specific Plan Area at buildout. Refer to Appendix B for model output files and assumptions.

As summarized in Table 3.3-3, operations of proposed development under the WRTP Specific Plan would generate long-term emissions that would exceed YSAQMD thresholds of significance. Area emissions and related threshold exceedances of ROG and PM_{10} are primarily driven by the assumed use of wood burning fireplaces in new residential developments. The NO_X threshold exceedance is driven by mobile source emissions. It should be noted that, as detailed in Section 3.5.4 of the Climate Change, Greenhouse Gas Emissions & Energy section of this EIR, implementation of the WRTP Specific Plan would achieve a 10 percent reduction in VMT; this would be achieved through a Comprehensive Transportation Demand Management/Vehicle Miles Traveled Reduction Program (TDM/VMT Program) to be prepared prior to approval of the first development application of tentative map. As the TDM/VMT Program may include a range of transportation strategies, programs, facilities, or services for the purpose of VMT reduction, it is speculative at this time to attempt to quantify the reduction in criteria air pollutant emissions that would be achieved. However, it is reasonable to consider the mobile source emissions presented in Table 3.3-3 as a conservative (higher than anticipated) representation.

The YSAQMD thresholds of significance are considered the allowable amount of emissions each project can generate without resulting in a cumulatively considerable net increase of criteria air pollutants and precursor emissions. Consequently, because operational activities associated with buildout of the WRTP Specific Plan could generate emissions that exceed the YSAQMD thresholds, this impact is considered **significant**.

Table 3.3-3. Maximum Criteria Air Pollutant and Precursor Operations-Related Emissions[1]

Emissions Source and Threshold Consideration	ROG Emissions (tons per year)	NO_X Emissions (tons per year)	ROG Emissions (pounds per day)	NO_X Emissions (pounds per day)	$PM_{2.5}$ Emissions (pounds per day)	PM_{10} Emissions (pounds per day)
Area	131	2	2832	50	479	479
Energy	0.3	3	2	14	1	1
Mobile	5	52	37	340	49	179
Total Operational Emissions [2]	136	57	2870	404	529	659
YSAQMD Threshold of Significance	10	10	-	-	-	80
Exceeds Threshold?	Yes	Yes	NA	NA	NA	Yes

Notes: lb/day = pounds per day; ROG = reactive organic gases; NO_X = oxides of nitrogen; PM_{10} = respirable particulate matter; $PM_{2.5}$ = fine particulate matter; YSAQMD = Yolo-Solano Air Quality Management District

[1] Emissions are rounded to the nearest whole number, unless less than one (1).

[2] Operational emissions were modeled for year 2035, consistent with the City's 2035 General Plan Horizon Year. Totals do not add due to rounding.

Source: Modeled by AECOM 2020; See Appendix B for detailed construction assumptions and modeling outputs.

In addition to the emissions from mobile, energy, and area sources, it is possible that operational activities within the WRTP Specific Plan Area could include new stationary sources, which also generate long-term operational emissions. For example, agricultural processing and manufacturing uses, which are a conditionally allowed use, could potentially include stationary emissions sources. Any such stationary sources would be required to obtain permits from YSAQMD, which are issued with the intent of reducing air pollution and attaining (or maintaining) the ambient air quality standards. Permitted stationary-source facilities are required to implement BACT, which may include the installation of emissions control equipment or implementation of administrative practices to reduce emissions. Stationary-source facilities may also be required to offset their emissions of criteria air pollutants in order to be permitted. Information on operations of stationary sources within the WRTP Specific Plan Area is not available at this time and associated emissions have not been estimated. These emissions would be in excess of those shown in Table 3.3-3.

Consistent with General Plan Policy 2.L.2, the WRTP Specific Plan is intended to be implemented in a manner that encourages "sustainable development through the use of renewable energy sources and water conservation tools with the goal of striving to achieve zero net energy at the building and neighborhood level to the extent feasible." Section 2.2.3 of the WRTP Specific Plan outlines the WRTP Specific Plan's sustainability principles and consistency with related policies of the 2035 General Plan and CAP. In particular, these policies require new development be consistent with the City's Climate Action Plan, including the goal of achieving zero net energy at the building and neighborhood level, using trees for cooling and related energy conservation, providing for alternative fueling and electric vehicle charging throughout residential and non-residential garages and parking lots, incorporation of Transportation Demand Management tools and programs to overall land use planning to reduce total VMT generated by operations within the WRTP Specific Plan Area. Applying these policies to implementation of the WRTP Specific Plan would result in a reduction of long-term emissions of criteria air pollutants, particularly from energy and mobile sources. While YSAQMD Rule 2.40 bans interior open hearth fireplaces for new developments – wood burning fireplaces overall are not banned.

While compliance with YSAQMD and WRTP Specific Plan policies and implementation of land use planning strategies to reduce VMT would reduce overall operational emissions, emissions associated with operations of future development of the WRTP Specific Plan could exceed or contribute substantially to an existing or projected air quality violation. This impact is considered **significant**.

Health Effects of Criteria Air Pollutants

As discussed in Section 3.3.2, "Environmental Setting," health effects associated with ozone include respiratory symptoms, worsening of lung disease, and damage to lung tissue. In recent years, a correlation has also been reported between elevated ambient ozone levels and increases in daily hospital admission rates and mortality (EPA 2020a). ROG and NOx are precursors to ozone, for which the SVAB is designated as nonattainment with respect to the NAAQS and CAAQS. The contribution of ROG and NOx to regional ambient ozone concentrations is the result of complex photochemistry. The increases in ozone concentrations in the SVAB due to ozone precursor emissions tend to be found downwind of the source location because of the time required for the photochemical reactions to occur. Further, the potential for exacerbating excessive ozone concentrations would also depend on the time of year that the emissions would occur, because exceedances of the ozone NAAQS and CAAQS tend to occur between when solar radiation is highest. Due to the lack of quantitative methods to assess this complex photochemistry, the holistic effect of a single project's emissions of ozone precursors is speculative. That being said, because implementation of the WRTP Specific Plan would result in exceedances of the YSAQMD ROG and NOx thresholds, the WRTP Specific Plan could contribute to regional health effects associated with ozone.

Health effects associated with CO include dizziness, headaches, and fatigue. CO exposure is especially harmful to individuals who suffer from cardiovascular and respiratory diseases (EPA 2020b). CO tends to be a localized impact associated with congested intersections. The potential for CO hotspots is discussed below as a part of Impact 3.3-3 and determined to be less than significant. Thus, the WRTP Specific Plan's CO emissions would not contribute to significant health effects associated with CO.

Health effects associated with NOx and NO_2 include aggravating of existing respiratory diseases, particularly asthma, resulting in respiratory symptoms (such as coughing, wheezing, or difficulty breathing), hospital admissions, and visits to emergency rooms. Longer exposures to elevated concentrations may contribute to the development of asthma and potentially increase susceptibility to respiratory infections. Because the SVAB is a designated attainment area for NO_2 (and NO_2 is a constituent of NO_X) and the existing NO_2 concentrations in the area are well below the NAAQS and CAAQS standards, it is not anticipated that the WRTP Specific Plan would cause an exceedance of the NAAQS and CAAQS for NO_2 or result in potential health effects associated with NO_2. Nonetheless, because implementation of the WRTP Specific Plan could exceed the YSAQMD mass daily NO_X threshold, the WRTP Specific Plan could contribute to health effects associated with NOx and NO_2.

Health effects associated with short- and long-term exposure to elevated concentrations of PM_{10} include respiratory symptoms, aggravation of respiratory and cardiovascular diseases, a weakened immune system, and cancer (WHO 2018). $PM_{2.5}$ poses an increased health risk because these very small particles can be inhaled deep in the lungs and may contain substances that are particularly harmful to human health. Operation of the WRTP Specific Plan would exceed the YSAQMD threshold for PM_{10}. As such, the WRTP Specific Plan would potentially contribute to exceedances of the NAAQS and CAAQS for particulate matter and obstruct the SVAB from coming into attainment for these pollutants. Because the WRTP Specific Plan has the potential to contribute substantial particulate matter emissions, the WRTP Specific Plan could result in associated health effects.

Recent rulings from the California Supreme Court (including the *Sierra Club v. County of Fresno*, 2018, 6 Cal. 5th 502 case regarding the proposed Friant Ranch Project) have underscored the need for evaluation of potential health impacts resulting from the emissions of criteria pollutants during operations of proposed projects. Although the analysis of project-level health risks related to the emissions of CO and TACs has long been incorporated under CEQA, the analysis of health impacts due to individual projects resulting from emissions of criteria air pollutant emissions has long been focused on a regional or air basin-wide level, typically evaluated through regional air quality planning efforts, such as under AQAPs and the SIP. This is because the complex reactions and conditions that lead to the formation of ozone and PM in the atmosphere can result in the transport of pollutants over wide aeras and result in health impacts from criteria air pollutants being experienced on a regional scale such as the SFNA, whereas TACs and CO act on a more localized scale in proximity to emissions source locations. The potential for criteria air pollutant emissions to be transported over wide areas means that the emissions of ozone precursor pollutants, such as ROG and NO_X, from a project site or even plan area like the WRTP Specific Plan Area does not necessarily translate directly into a specific concentration of ozone or a specific health risk in that same area.

Per the California Supreme Court's ruling on *Sierra Club v. County of Fresno*, 2018, an EIR "must provide an adequate analysis to inform the public how its bare numbers translate to create potential adverse impacts or it must explain what the agency does know and why, given existing scientific constraints, it cannot translate potential health impacts further." Currently, YSAQMD, CARB, and EPA have not approved a quantitative method to meaningfully and consistently translate the mass emissions of criteria air pollutants from a project to quantified health effects. As explained in the amicus brief filed by the South Coast Air Quality Management District (SCAQMD) in the *Sierra Club v. County of Fresno* (2014) 26 Cal.App.4th 704*,* it "takes a large amount of additional precursor emissions to cause a modeled increase in ambient ozone levels" (SCAQMD 2015).

In 2020, SMAQMD published *Guidance to Address the Friant Ranch Ruling for CEQA Projects in the Sac Metro Air District* (SMAQMD 2020b), which provides a screening level analysis estimating the health effects of criteria ai pollutants and their precursors, as well as provides guidance for conducting a health effects analysis of a project that satisfies the requirements of the Friant Ranch court decision. The Guidance was prepared by conducting regional photochemical modeling and relies on the EPA's Benefits Mapping and Analysis Program to assess health impacts from ozone and $PM_{2.5}$. Analysis was conducted to estimate the level of health effects for a proposed project that has emissions at the maximum SMAQMD-recommended thresholds of significance using 41 hypothetical project locations, as well as a screening model conducted to estimate potential health effects for strategic areas where growth is anticipated to exceed thresholds of significance. The results were used to develop two screening tools intended to support individual projects in analyzing health risks from criteria pollutants: the Minor Project Health screening Tool for projects with criteria pollutant emissions below SMAQMD's adopted thresholds of significance, and the Strategic Area Project Health Screening Tool for projects with emissions between two and six times the SMAQMD threshold levels.

The modeling results support a conclusion that any one proposed project in the SFNA with emissions at or below the maximum SMAQMD threshold of significance levels for criteria air pollutants does not on its own lead to sizeable health effects. The findings of the SMAQMD screening modeling indicate that the mean health incidence for a project emitting at the threshold of significance levels at all 41 representative locations was less than 3 per year for mortality and less than 1.5 per year for other health outcomes evaluated. At the strategic area locations, as expected, mean health incidences are higher than the Minor Projects Health Effects Screening Tool. The maximum reported mortality rate is 22 incidences per year and all other health outcomes evaluated are under 9 per year from

a project emitting 656 pounds/day of each NO_X, ROG, and $PM_{2.5}$ at the downtown Sacramento location. While this tool was developed with discussion of emissions levels as they relate to the SMAQMD thresholds of significance, the findings are still relevant for projects within the YSAQMD, as it is within the SFNA.

As shown in Tables 3.3-2 and 3.3-3, development of the WRTP Specific Plan Area would exceed the YSAQMD thresholds of significance. Specifically, construction-related emissions could be approximately 95 pounds per day of ROG, 259 pounds per day of NO_X, and 66 pounds per day of $PM_{2.5}$, and operational emissions at full build out could be as high as 2,870 pounds per day of ROG, 404 pounds per day of NO_X and 529 pounds per day of $PM_{2.5}$. Although emissions would exceed the upper limit of the SMAQMD Strategic Area Project Health Screening Tool, it is important to note that formation of ozone in the SFNA is typically NOx-limited. Emissions of both ROG and NO_X are considered critical to ozone formation; therefore, either ROG or NO_X can limit the rate of ozone production. When the production rate of NO_X is lower, indicating that NO_X is scarce, the rate of ozone production is NO_X-limited. Under these circumstances, ozone levels could be most effectively reduced by lowering current and future NO_X emissions (from fuel combustion), rather than by lowering ROG emissions. Both ROG and NO_X reductions provide ozone benefits in the region, but the SFNA, which includes Yolo County, exhibits a NO_X-limited regime; therefore, NO_X reductions are more effective than ROG reductions on a tonnage basis (SMAQMD et al. 2017).

For illustrative purposes for this impact analysis, the SMAQMD Strategic Area Project Health Screening Tool was used to evaluate the potential regional effect of the WRTP Specific Plan on regional health. Assuming the upper limit of emissions of all ROG, NO_X, and $PM_{2.5}$. the screening tool estimates that a project at the strategic growth area location of Woodland, emitting 656 lbs/day for ROG, NO_X, and $PM_{2.5}$ (which represents lower emissions than the modeled ROG emissions, but conservatively higher NO_X and $PM_{2.5}$ emissions), would result in 2.3 premature deaths per year or a 0.0051-percent increase from background health incidences across the five-air-district region due to the increase in PM, and 0.14 premature deaths per year or a 0.00047-percent increase from background health incidences across the five-air-district region due to an increase in ozone. As discussed above, the nature of criteria pollutants is such that the emissions from an individual project cannot be directly identified as responsible for health impacts within any specific geographic location. As a result, attributing health risks at any specific geographic location to a single proposed project is not feasible. Nonetheless, the results of the Strategic Area Project Health Screening Tool have been presented for informational purposes. The modeling results support a conclusion that the WRTP Specific Plan does not, on its own, lead to sizeable regional health effects from the emissions of criteria air pollutants and precursors (note that the discussion of TAC and CO emissions as they relate to localized health risks is addressed in the sub-section above). However, as the ROG emissions are well above the screening tool maximum limits, and emissions overall exceed the YSAQMD thresholds of significance set with consideration of attaining the CAAQS and NAAQS for the region, implementation of the WRTP Specific Plan could result in a cumulatively considerable net increase of emissions of criteria air pollutants for the region and this impact is considered **potentially significant**.

Mitigation Measures

Mitigation Measure 3.3-2a – Implement Construction Best Management Practices.

New development shall incorporate the following construction best management practices, those included in an updated set of mitigation recommendations prepared by the YSAQMD, or those determined by the City to be as effective:

a. Water all active construction areas at least twice daily.

b. Haul trucks shall maintain at least two feet of freeboard.

c. Cover all trucks hauling soil, sand, and other loose materials.

d. Apply non-toxic binders (e.g., latex acrylic copolymer) to exposed areas after cut-and-fill operations and hydroseed area.

e. Apply chemical soil stabilizers on inactive construction areas (disturbed lands within construction projects that are unused for at least four consecutive days).

f. Plant vegetative ground cover in disturbed areas as soon as possible.

g. Cover inactive storage piles.

h. Sweep streets if visible soil material is carried out from the construction site.

i. Treat accesses to a distance of 100 feet from the paved road with a 6-inch layer of gravel.

j. Limit all idling of vehicles and equipment that use gasoline or diesel fuel to five minutes maximum.

k. Use alternative power source, such as electricity, for construction equipment or use reformulated and emulsified fuels, incorporate catalyst and filtration technologies, and generally modernize the equipment fleet with cleaner and newer engines.

Mitigation Measure 3.3-2b: Construction-Related Mobile Emissions Reductions for NO_X and PM_{10} Emissions.

Construction contractors shall adhere to the following requirements:

a. Maintain all construction equipment properly according to manufacturer's specifications.

b. Fuel all off-road and portable diesel-powered equipment with CARB-certified motor vehicle diesel fuel (non-taxed version suitable for use off-road).

c. Comply with the State On-Road Regulation by using on-road heavy-duty equipment that meet or exceed CARB's Tier 4 standard for on-road heavy-duty diesel engines.

Mitigation Measure 3.3-2c: Require the Use of Ultra-Low VOC (10 g/L or less) Architectural Coatings for Construction-related Application

Construction contractors shall be required to use architectural coatings that are ultra-low VOC (10 g/L or less) in all possible applications. These products are identified by manufacturers as "super-compliant." For construction-related applications, the product manufacturer, product name, product code, and intended use shall be identified on the construction design drawings for approval prior to the issuance of a building permit.

Mitigation Measure 3.3-2d: Ban Wood-burning Stoves and Fireplaces in New Development

Wood burning or pellet stoves and fireplaces shall not be permitted. Natural gas or propane fired fireplaces shall be clearly delineated on plans submitted to obtain building permits.

Significance after Mitigation

Construction

As proposed within the 2035 General Plan and CAP EIR, Mitigation Measures 3.3-2a is consistent with General Plan Policy 7.F.2 and would reduce potentially significant impacts related to fugitive dust PM and exhaust emissions that would be generated during construction of future development in the WRTP Specific Plan Area and off-site improvement areas. Mitigation Measure 3.3-2a will reduce construction-related emissions impacts. These dust control BMPs are identified by YSAQMD and the effectiveness of such practices is estimated to range from 4 up to 99 percent effective, depending on the details of the site and project at hand (YSAQMD 2007). When multiple measures are applied to the same source of particulates, the effectiveness of a second measure would be based on the amount of dust that remains after implementing the first measure.

Implementation of Mitigation Measure 3.3-2b, would require the use of heavy-duty equipment powered with engines that meet CARB Tier 4 emissions standards, and thereby further reduce construction-related exhaust emissions generated from use of heavy-duty construction equipment. Mitigation Measure 3.3-2c would require the use of ultra-low VOC architectural coatings in all possible applications during construction, thereby further reducing ROG emissions from this construction-related source.

All construction contractors would comply with the California Code of Regulations Title 14, Sections 2449(d) and 2485, which would limit heavy-duty construction truck and equipment idling time to five minutes or less. In addition, according to the YSAQMD Air Quality Handbook, all incremental emission sources must be mitigated to the greatest extent possible in order to achieve and maintain ambient air quality standards.

Table 3.3-4 presents estimated mitigated construction-related emissions from development of up to 25 percent of the WRTP Specific Plan Area and off-site South Regional Pond, as well as all of the Caltrans Off-site Improvement Area, within the earliest possible year of construction; applied mitigation measures include watering all exposed active construction areas at least two times daily, reducing vehicle speeds on unpaved roadways to 15 miles per hour, and use of heavy-duty construction equipment (greater than 50 horsepower) that meet Tier 4 emissions standards.

Table 3.3-4. Mitigated Maximum Criteria Air Pollutant and Precursor Construction-Related Emissions[1]

Emissions Source and Threshold Consideration	ROG Emissions (tons per year)	NO_X Emissions (tons per year)	ROG Emissions (pounds per day)	NO_X Emissions (pounds per day)	$PM_{2.5}$ Emissions (pounds per day)	PM_{10} Emissions (pounds per day)
WRTP Specific Plan Area + Off-site South Regional Pond Development in the Year 2021 [2]	2	5	14	41	23	135.0
Caltrans Off-site Improvement Area	0.3	0.6	5	52	12	37
YSAQMD Threshold of Significance	10	10	-	-	-	80
Exceeds Threshold?	No	No	NA	NA	NA	Yes

Notes: lb/day = pounds per day; ROG = reactive organic gases; NO_X = oxides of nitrogen; PM_{10} = respirable particulate matter; $PM_{2.5}$ = fine particulate matter; YSAQMD = Yolo-Solano Air Quality Management District

[1] Emissions are rounded to the nearest whole number, unless less than one (1).

[2] Construction emissions of WRTP Specific Plan Area assume that 25 percent of all land uses are developed in the earliest possible construction year (2021).

Source: Modeled by AECOM 2020; See Appendix B for detailed construction assumptions and modeling output files.

As shown in Table 3.3-4, implementation of Mitigation Measures 3.3-2a, 3.3-2b and 3.3-2c would substantially reduce PM and ozone precursor emissions. Annual emissions of ROG and NO_X are anticipated to be less than YSAQMD thresholds of significance, which is a result of Mitigation Measure 3.3-2b (use of Tier 4 equipment) and Mitigation Measure 3.3-2c (use of ultra-low VOC architectural coatings). However, PM_{10} emissions would still exceed YSAQMD thresholds. In addition, although ROG emissions would be reduced substantially as a result of implementation of Mitigation Measure 3.3-2c to use ultra-low VOC architectural coatings wherever possible, there may be instances in which the necessary application is not available as an ultra-low VOC product, and emissions could be higher than modeled. However, even without the use of ultra-low VOC architectural coatings, implementation of Mitigation Measures 3.3-2 a and 3.3-2b, alone, reduces emissions to just over 10 tons per year, so use of ultra-low VOC architectural coatings for the majority of applications, with some required use of higher VOC architectural coatings, would still substantially reduce ROG emissions from construction to below the YSAQMD annual threshold for ROG. Because the assumptions used to estimate potential construction-related emissions are conservative, it is possible that construction related to implementation of the WRTP Specific Plan would not exceed YSAQMD thresholds of significance. However, since the timing and level of construction activities each year is unknown, it is not possible to refine these assumptions and determine the extent to which additional reduction strategies are feasible or would result in emission reductions. Therefore, it is conservatively assumed that construction-related emissions could exceed significance thresholds and, consistent with the findings of the 2035 General Plan and CAP EIR, this impact is **significant and unavoidable**.

Operations

Implementation of Mitigation Measure 3.3-2d would reduce area source emission, particularly ROG and PM. Table 3.3-5 presents estimated mitigated operations-related emissions associated with buildout of the WRTP Specific Plan.

Table 3.3-5. Mitigated Maximum Criteria Air Pollutant and Precursor Operations-Related Emissions[1]

Emissions Source and Threshold Consideration	ROG Emissions (tons per year)	NO_X Emissions (tons per year)	ROG Emissions (pounds per day)	NO_X Emissions (pounds per day)	$PM_{2.5}$ Emissions (pounds per day)	PM_{10} Emissions (pounds per day)
Area	22	1	163	29	76	76
Energy	0.3	3	2	14	1	1
Mobile	5	52	37	340	49	179
Total Operational Emissions [2]	27	56	202	383	126	256
YSAQMD Threshold of Significance	10	10	-	-	-	80
Exceeds Threshold?	Yes	Yes	NA	NA	NA	Yes

Notes: lb/day = pounds per day; ROG = reactive organic gases; NO_X = oxides of nitrogen; PM_{10} = respirable particulate matter; $PM_{2.5}$ = fine particulate matter; YSAQMD = Yolo-Solano Air Quality Management District

[1] Emissions are rounded to the nearest whole number, unless less than one (1).

[2] Operational emissions were modeled for year 2035, consistent with the City's 2035 General Plan Horizon Year. Totals do not add due to rounding.

Source: Modeled by AECOM 2020; See Appendix B for detailed construction assumptions and modeling outputs.

Mitigated emissions are substantially reduced compared to unmitigated. In addition, as explained above for Table 3.3-3, the mobile source emissions estimates would likely be lower than as estimated due to the WRTP Specific Plan's TDM/VMT Program. However, because the specific development projects within the WRTP Specific Plan Area cannot be defined at the time of this analysis, precise effectiveness and feasibility of these measures cannot be determined for individual future projects, and operational emissions of criteria air pollutants and precursors could

still exceed significance thresholds. As such, emissions could exceed or contribute substantially to an existing or projected air quality violation and thereby could conflict with or obstruct implementation of the applicable air quality plan. There are no additional feasible mitigation measures available to address this impact. Therefore, and consistent with the findings of the 2035 General Plan and CAP EIR, this impact is **significant and unavoidable.**

Health Effects of Criteria Air Pollutants

As detailed in Tables 3.3-4 and 3.3-5, emissions would be substantially reduced as a result of implementation of Mitigation Measures 3.3-2a through 3.3-2d. In particular, long-term maximum daily ROG emissions would be reduced to 202 pounds per day, NO_X to 383 pounds per day, and $PM_{2.5}$ to 126 pounds per day. These emissions would fall within the SMAQMD Strategic Area Project Health Screening Tool limits. When applying these maximum daily emissions estimates for the strategic growth area location of Woodland, the screening tool estimates that an increase of 0.65 premature deaths per year or a 0.0015-percent increase from background health incidences across the five-area-district region due to the increase in PM concentrations, and 0.082 premature deaths per year or a 0.00027-percent increase from background health incidences across the five-area-district region due an increase in ozone. As discussed above, the nature of criteria pollutants is such that the emissions from an individual project cannot be directly identified as responsible for health impacts within any specific geographic location. As a result, attributing health risks at any specific geographic location to a single proposed project is not feasible. Nonetheless, the results of the Strategic Area Project Health Screening Tool have been presented for informational purposes. The modeling results support a conclusion that the proposed WRTP Specific Plan does not, on its own, lead to sizeable regional health effects from the emissions of criteria air pollutants and precursors (note that the discussion of TAC and CO emissions as they relate to localized health risks is addressed in the sub-section above). It should also be noted that this screening evaluation applied the maximum daily emissions to simulate a full year of exposure, thereby assuming that the maximum daily emissions would in fact be the average daily emissions over each operational year. As a result, the actual health effects potentially related to implementation of the WRTP Specific Plan would be less because the maximum daily emissions are conservatively modeled to represent a worst-case scenario and are considered higher than average daily conditions. Therefore, criteria air pollutants generated as a result of the proposed WRTP Specific Plan would not result in the exposure of sensitive receptors to substantial criteria air pollutant concentrations and this impact would be **less than significant with mitigation.**

IMPACT 3.3-3 **Expose Sensitive Receptors to Substantial Pollutant Concentrations (Significance Threshold 3).** *WRTP Specific Plan-related vehicle trips would contribute vehicles to local intersections that could cause a CO hotspot (i.e., exceedance of the CO ambient air quality standard). However, it is not anticipated that the WRTP Specific Plan's land uses would contribute substantial vehicle volumes to existing or future intersections that could cause a CO hotspot. During construction and operation of anticipated land uses within the WRTP Specific Plan Area, localized emissions of Toxic Air Contaminants would be generated that could affect existing and proposed sensitive receptors. Existing regulations and policies and implementation programs would reduce potential exposure to substantial pollutant concentrations. The impact is* ***potentially significant.***

Construction activities and the operational phase of the WRTP Specific Plan could involve activities that could expose sensitive receptors to substantial pollutant concentrations. The WRTP Specific Plan Area is bordered by the Spring Lake Specific Plan development area to the north and east, which includes residential development and open space immediately adjacent to the WRTP Specific Plan Area. To the west is SR 113, with open space and agricultural land uses to the south and opposite SR 113. As the WRTP Specific Plan buildout occurs, sensitive land

uses would be developed within the WRTP Specific Plan Area, including residential uses and parks and recreational facilities. These land uses could be built within proximity to other future construction sites, as well as operations of emissions generating activities from surrounding existing and future land uses.

CO Hotspots

The 2035 General Plan and CAP EIR (pages 4.3-33 to 4.3-35) discusses potential impacts related to generation of local mobile-source emissions of CO near roadway intersections within the General Plan. Although transport of CO is extremely limited because it disperses rapidly with distance from the source under normal meteorological conditions, under specific meteorological conditions, CO concentrations near roadways may reach unhealthy levels for local sensitive land uses.

YSAQMD recommends a screening approach to estimate whether a project's traffic impact would cause a potential CO hotspot at any given intersection. If either of the following criteria is met, then the project could have the potential to create a violation of the CO standard.

- A traffic study for the project indicates that the peak-hour Level of Service (LOS) on one or more streets or at one or more intersections in the project vicinity will be reduced to an unacceptable LOS (typically LOS E or F); or
- A traffic study indicates that the project will substantially worsen an already existing peak-hour LOS F on one or more streets or at one or more intersections in the project vicinity. "Substantially worsen" includes situations where delay would increase by 10 seconds or more when project-generated traffic is included.

The EIR applied YSAQMD screening criteria to estimate whether a project's traffic impact would cause a potential CO hotspot at any roadway or intersection and requires further analysis. Using these criteria, the EIR identified three roadway segments that would operate at LOS E or worse under the 2035 General Plan East Alternative and 2 roadway segments that would operate at LOS E or worse under the South Alternative.

YSAQMD works closely with the SMAQMD due to their proximity and similar air quality issues. SMAQMD provides additional screening methods to determine if a project would have the potential to create a violation of the CO standard. As YSAQMD screening criteria would be exceeded, further analysis was warranted and performed using SMAQMD methodology to determine if a project would have the potential to create a violation of the CO standard. If all of the following criteria are met, implementation of the General Plan would result in a less-than-significant impact on air quality for local CO:

- The project would not result in an affected intersection experiencing more than 31,600 vehicles per hour.
- The project would not contribute traffic to a tunnel, parking garage, bridge underpass, urban street canyon, below-grade roadway, or other locations where horizontal or vertical mixing of air would be substantially limited.
- The mix of vehicle types at the intersection is not anticipated to be substantially different from the County average.

Based on this analysis, increased traffic volumes from implementation of the General Plan were determined to meet applied screening criteria and not substantially contribute to emissions concentrations that exceed the CO ambient

air quality standards. The 2035 General Plan and CAP EIR determined that impact from potential CO hotspots would be less than significant.

Development within the WRTP Specific Plan Area was assumed as a contributing factor to the traffic analysis used to inform the 2035 General Plan and CAP EIR analysis of potential CO hotspots. Additional traffic analysis has been performed specifically for implementation of the WRTP Specific Plan and is considered here to reconfirm analysis performed in support of the 2035 General Plan and CAP EIR. This analysis found that, with existing plus project conditions, one roadway segment and 10 intersections would operate at LOS E or worse with implementation of the WRTP Specific Plan, thereby exceeding the first-tier screening level.

The June 2020 update of the SMAQMD CEQA Guide no longer includes this specific screening approach. The current guidance does acknowledge that land use development projects do not typically have the potential to result in localized concentrations of criteria air pollutants that expose sensitive receptors to substantial pollutant concentrations, in part, because the predominant source of these pollutants is typically in the form of mobile-source exhaust from vehicle trips that occur throughout a network of roads and are not concentrated in a single location.

Emissions and ambient concentrations of CO have decreased substantially throughout California in the past three decades. The national statewide CO standard is attained statewide in California, and an exceedance of NAAQS or CAAQS in the region was last recorded in 1993. This is primarily attributable to requirements for cleaner vehicle emissions. The Federal Motor Vehicle Control Program has mandated increasingly lower emission levels for vehicles manufactured since 1973. Between 2000 and 2019, national average CO concentrations, as well as regional average CO concentrations in the California and Nevada region, have decreased by approximately 65 percent (EPA 2020c).

Local mobile-source emissions of CO near roadway intersections are a direct function of traffic volume, speed, and delay. CO typically disperses rapidly with distance from the source under normal meteorological conditions. Under specific meteorological conditions, CO concentrations near roadways and/or intersections may reach unhealthy levels for local sensitive land uses such as residential units, hospitals, schools, and childcare facilities. CO hot spots are typically observed at heavily congested roadway intersections where a substantial number of gasoline-powered vehicles idle for prolonged durations throughout the day. Construction sites are less likely to result in localized CO hot spots due to the nature of construction activities, which normally utilize diesel-powered equipment for intermittent or short durations.

While ambient CO concentrations in the region have not exceeded NAAQS or CAAQS in many years, localized CO concentrations could still occur, particularly at intersections of high-volume roadways. Relevant screening metrics that serve as indicators of potential CO hotspots include whether a project would contribute to substantial traffic delays at or along high-volume intersections and roadways or contribute additional traffic to a unique setting in which mixing of air, and therefore pollutant dispersion, would be substantially limited, such as within a tunnel, underpass, urban street canyon, below-grade roadway, or other similar setting. Several air districts, including the surrounding Bay Area Air Quality Management District, San Joaquin Valley Unified Air Pollution Control District, and Placer County Air Pollution Control District provide recommended screening methodologies as a conservative indication of whether implementation of a proposed project would result in localized CO emissions that would generate a hotspot and potentially significant impact. If all screening criteria are met, a proposed project is considered to result in a less-than-significant impact to air quality with respect to concentrations of local CO;

projects that exceed these screening thresholds would be required to further quantify CO emissions and conduct modeling to determine localized CO concentrations with implementation of the proposed project.

The Bay Area Air Quality Management District screening criteria requires the following metrics be met (BAAQMD 2017):

- Project is consistent with an applicable congestion management program established by the county congestion management agency for designated roads or highways, regional transportation plan, and local congestion management agency plans;
- The project traffic would not increase traffic volumes at affected intersections to more than 44,000 vehicles per hour; and
- The project traffic would not increase traffic volumes at affected intersections to more than 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited (e.g., tunnel, parking garage, bridge underpass, natural or urban street canyon, below-grade roadway).

Placer County Air Pollution Control District-recommended criteria identify a project as having a potential CO impact if (PCAPCD 2017):

- The project's CO emissions from vehicle operation would be more than 550 pounds per day (lb/day); ***and***
- Traffic generated by a proposed project would result in deterioration of intersection peak-hour level of service (LOS) from an acceptable peak-hour LOS (e.g., A, B, C, or D) to an unacceptable LOS (e.g., E or F); or
- project would contribute additional traffic that would substantially worsen and already existing unacceptable peak-hour LOS on one or more intersections in the project vicinity. "Substantially worsen" is defined by PCAPCD as a situation where a delay would increase by 10 seconds or more when project-generated traffic is included.

Similarly, the San Joaquin Valley Unified Air Pollution Control District considers a project to have a potentially significant impact if it would reduce the LOS on one or more streets or at one or more intersections in the project vicinity to LOS E or F, or substantially worsen the traffic at a location within the project vicinity already operating at LOS F (SJVAPCD 2015).

Although this screening criteria is no longer a part of the SMAQMD CEQA Guide, it is provided here as a reference for how the above noted indicators have typically been used to determine potential CO hotspot impacts within the project vicinity. The first tier states that the project's CO impact would be less than significant if:

- Traffic generated by a proposed project would not result in deterioration of intersection LOS to LOS E or F; and
- A project would not contribute additional traffic to an intersection that already operates at LOS of E or F.

If the first tier of screening criteria is not met, SMAQMD provides a second tier screening step which states that the project's CO impacts would be less than significant if:

- The project would not result in an affected intersection experiencing more than 31,600 vehicles per hour.
- The project would not contribute traffic to a tunnel, parking garage, bridge underpass, urban street canyon, below-grade roadway, or other locations where horizontal or vertical mixing of air would be substantially limited.
- The mix of vehicle types at the intersection is not anticipated to be substantially different from the County average.

As noted above and according to the traffic impact study conducted in support of this EIR and for planning purposes for future development of the WRTP Specific Plan Area (see Appendix E), under existing plus full development of the WRTP Specific Plan Area, most of the study roadway segments and intersections would continue to operate acceptably at LOS D or better, except for one roadway segment and 10 identified intersections, which would operate at LOS E or F with future development of the WRTP Specific Plan Area. However, peak-hour roadway segment traffic volumes would range from approximately 370 vehicles per hour during peak hour at the lowest-volume roadway segment to 2,020 vehicles per hour during peak hour at the heaviest-traveled roadway segment (Fehr & Peers 2021). This is substantially less than the historical SMAQMD second-tier screening criterion of 31,600 vehicles per hour, as well as the above noted BAAQMD screening criterion of 44,000 vehicles per hour. In addition, the future development within the WRTP Specific Plan Area would not contribute to a tunnel, parking garage, bridge underpass, urban street canyon, below-grade roadway, or other locations where horizontal or vertical mixing of air would be substantially limited, and the mix of vehicle types at the intersections is not anticipated to be substantially different from the County average. Finally, these roadway volumes do not distinguish among vehicle category, but Chapter 2 of the WRTP Specific Plan contains sustainability policies that include the requirement of non-residential zones and residential developments to provide for alternative fueling and electric vehicle charging, consistent with General Plan Policy 3.H.7. This policy would further reduce the exhaust emissions associated with future traffic generated by development of the WRTP Specific Plan Area by encouraging and providing for increased use of alternative fuel and electric vehicles as compared to the regional fleet average. Therefore, emissions of CO from local mobile sources generated by operations with future development of the WRTP Specific Plan Area would not result in, or substantially contribute to, emissions concentrations that exceed the ambient air quality standards for CO. Therefore, and consistent with the findings of the 2035 General Plan and CAP EIR, this impact from potential CO hotspots would be **less than significant**.

Construction-Related TACs

Heavy-duty construction equipment, haul trucks, on-site generators, and construction worker vehicles associated with construction could generate diesel PM (DPM), which the CARB has identified as a TAC. The 2035 General Plan and CAP EIR (pages 4.3-35 to 4.3-36) discusses potential impacts related to exposure of sensitive receptors to construction-related TACs due to buildout of the General Plan. Although transport of TACs is extremely limited because it disperses rapidly with distance from the source and exposure duration would be limited to temporary periods of construction, the exact location with respect to sensitive receptors and length of construction activities could not be determined at the time of the analysis of the General Plan. Therefore, it was conservatively assumed that certain construction activities could expose sensitive receptors to substantial TAC concentrations and this impact of the General Plan was considered potentially significant.

Implementation of the WRTP Specific Plan and off-site improvement areas would result in the construction of new buildings, structures, paved areas, roadways, utilities, and other improvements. Generation of DPM from

construction projects typically occurs in a single area (e.g., at the project site) for a short period of time, but could also include linear infrastructure projects to support new land uses. Concentrations of mobile-source DPM emissions are typically reduced by 70 percent at a distance of approximately 500 feet (CARB 2005). Therefore, even in intensive phases of construction, any potential substantial DPM concentrations would be limited to the immediate vicinity of the construction site. In addition, the dose to which receptors are exposed is the primary factor used to determine health risk. Dose is a function of the concentration of a substance in the environment and the extent of exposure a person has with the substance; a longer exposure period to a fixed amount of emissions would result in higher health risks for the maximally exposed individual. According to the Office of Environmental Health Hazard Assessment (OEHHA), health risk assessments used to determine the exposure of sensitive receptors to TAC emissions should be based on a 30-year exposure period. However, such assessments should also be limited to the period/duration associated with construction activities. OEHHA recommends that construction activities for individual projects that are longer than 2 months be evaluated for potential cancer risks (OEHHA 2015).

For buildout of the WRTP Specific Plan Area and off-site improvement areas, construction activities and related emissions would vary depending on the phase of construction (e.g., grading, building construction), and therefore, the construction-related emissions to which nearby receptors are exposed would also vary throughout the construction period. Although the location and timing of construction for development within the WRTP Specific Plan Area and off-site improvement areas is notionally determined, the exact duration and location with respect to sensitive receptors still cannot be determined at the time of this analysis. Existing off-site residents and other sensitive receptors would only be within close proximity to construction activities associated with development near the perimeter of the WRTP Specific Plan Area. Potential future on-site receptors are unknown at this time, but it is reasonable to assume future sensitive receptors may at some time be located in close proximity to future construction activities associated with buildout of the WRTP Specific Plan Area. Therefore, it is conservatively assumed that certain construction activities would result in the exposure of sensitive receptors to substantial TAC concentrations. This impact from construction-related TACs is considered **potentially significant**.

It is important to note that emissions from construction equipment would be reduced over the duration of the buildout of the WRTP Specific Plan. The use of newer off-road equipment is also effective in reducing PM emissions from off-road equipment used during construction; while not required, these vehicles are increasingly in use in construction equipment fleets. In January 2001, EPA promulgated a final rule to reduce emissions standards for heavy-duty diesel engines in 2007 and subsequent model years. These emissions standards represented a 90 percent reduction in NO_X emissions, 72 percent reduction of non-methane hydrocarbon emissions, and 90 percent reduction of PM emissions in comparison to the emissions standards for the 2004 model year. In December 2004, CARB adopted a fourth phase of emission standards (Tier 4) in the Clean Air Non-road Diesel Rule that are nearly identical to those finalized by EPA on May 11, 2004. As such, engine manufacturers were required to meet after-treatment-based exhaust standards for NO_X and PM starting in 2011 that are more than 90 percent lower than 2004 levels, putting emissions from off-road engines virtually on par with those from on-road heavy-duty diesel engines. More recently, Senate Bill 1 was passed in 2017 and further enforces adherence to emissions regulations for diesel-fueled vehicles. In addition to funding transportation-related projects, Senate Bill 1 requires the Department of Motor Vehicles to refuse registration or renewal or transfer of registration for certain diesel-fueled vehicles, based on weight and model year, that are subject to specified provisions relating to the reduction of emissions of DPM, oxides of nitrogen, and other criteria pollutants from in-use diesel-fueled vehicles. As construction equipment continues to turnover and/or be retrofitted over time, DPM emissions associated with construction will continue to decrease.

Operational TACs

Certain land uses are more likely than others to generate substantial TAC emissions due to allowable activities within those land use designations. Residential land uses do not typically generate substantial TAC emissions. Commercial land uses may potentially include stationary sources of TACs, such as dry-cleaning establishments and diesel-fueled back-up generators. Land uses that are more likely to generate substantial TAC emissions include industrial land uses that involve stationary sources and manufacturing processes. In addition, heavily trafficked roadways can serve as a TAC source due to the vehicle emissions, particularly DPM.

The 2035 General Plan and CAP EIR (pages 4.3-37 to 4.3-45) discusses potential impacts related to exposure of sensitive receptors to operational TACs. To analyze potential impacts due to proximity of sensitive receptors to roadways, the General Plan EIR used the SMAQMD *Recommended Protocol for Evaluating the Location of Sensitive Land Uses Adjacent to Major Roadways* guidance, which is consistent with the CARB recommendations in the CARB *Air Quality and Land Use Handbook: A Community Health Perspective* (CARB 2005), and with detailed guidance for the Sacramento region (SMAQMD 2011). The protocol states that if the nearest sensitive receptor's increase in individual cancer risk is lower than the evaluation criterion of 276 cases per million, no further roadway-related air quality evaluation is recommended. Based on analysis within the 2035 General Plan and CAP EIR, the General Plan was found to be consistent with the protocol recommendations, and no adverse health risks were anticipated from the roadways in the City's Planning Area.

The 2035 General Plan and CAP EIR also discusses potential impacts related to exposure of sensitive receptors to operational TACs due to proximity to operational sources of TACs associated with specific future land uses. Operational activities that require the use of diesel-fueled vehicles for extended periods, such as commercial trucking facilities or delivery/distribution areas, may generate emissions that could expose sensitive receptors to DPM emissions. In addition, it is possible that projects developed under the General Plan would include stationary sources of TACs, such as gasoline-dispensing facilities and diesel-fueled backup generators. Stationary sources in the City's Planning Area would be permitted and regulated to prevent land use compatibility conflicts with existing uses. However, because the actual proposed uses had not been determined at the time of the analysis for the General Plan, it was assumed possible that future development planned under the General Plan could generate substantial TAC emissions as a result of long-term operations and that existing and future sensitive land uses could be exposed to substantial TAC concentrations and this impact of the General Plan was considered potentially significant.

Future development within the WRTP Specific Plan Area is anticipated to include mixed-use, residential, retail, commercial and industrial uses, as well as parks and open space. Commercial land uses may potentially include stationary sources of TACs, such as dry-cleaning establishments and diesel-fueled back-up generators. Land uses that are more likely to generate substantial TAC emissions include industrial land uses that involve stationary sources and manufacturing processes. Existing sources of DPM emissions within the WRTP Specific Plan Area include diesel-fueled agricultural vehicles and equipment and backup generators that serve agricultural wells. While these vehicles and equipment may continue as part of existing and ongoing agricultural operations until the land is developed, these sources are limited and would, at the most, generate intermittent emissions proximate to future development. These uses are not considered a substantial TAC emissions source. The Land Use Plan in Chapter 2 of the WRTP Specific Plan identifies the land uses with a zoning designation allowable within the WRTP Specific Plan Area. Compatibility of proposed land use designations in proximity to one another is a component of the planning that went in to developing of the Land Use Plan for the WRTP Specific Plan Area; while mixed-use development is a key component of the Land Use Plan, heavier industrial uses are zoned toward the western and

southern portions of the WRTP Specific Plan Area, with retail and commercial uses primarily toward the center, surrounded by mixed use and residential uses primarily to the northern and eastern portions of the WRTP Specific Plan Area. Land use and development within the WRTP Plan Area is subject to conformance with the permitted uses, the site development regulations, development standards and design guidelines as outlined in Chapter 3 of the WRTP Specific Plan, *Land Use Regulation, Development Standards and Design Guidelines*.

As described above, CARB's Handbook provides guidance concerning land use compatibility with regard to sources of TAC emissions (CARB 2005). The recommendations relevant to the future development of the WRTP Specific Plan Area include:

- Avoid siting new sensitive land uses within 500 feet of a freeway, urban roads carrying 100,000 vehicles per day, or rural roads carrying 50,000 vehicles per day.
- Avoid siting new sensitive land uses within 1,000 feet of a major service and maintenance rail yard.
- Avoid siting new sensitive land uses within 300 feet of a large gasoline station (defined as a facility with a throughput of 3.6 million gallons per year or greater). A 50-foot separation is recommended for typical gasoline dispensing facilities.
- Avoid siting new sensitive land uses within 300 feet of any dry-cleaning operation using perchloroethylene. For operations with two or more machines, provide 500 feet. For operations with three or more machines, consult the local air district. Do not site new sensitive land uses in the same building with dry-cleaning operations that use perchloroethylene.
- Avoid the siting of new commercial trucking facilities that accommodate more than 100 trucks per day, or 40 trucks equipped with transportation refrigeration units (TRUs), within 1,000 feet of sensitive receptors (e.g., residences).

With consideration of more recent scientific analysis, CARB's published a 2017 *Technical Advisory: Strategies to Reduce Air Pollution Exposure Near High-Volume Roadways (Technical Advisory);* with careful evaluation of exposure, health risks, and affirmative steps to reduce risk, CARB outlines strategies that would allow infill development, mixed use, higher density, transit-oriented development, and/or other development types that benefit regional air quality to be compatible with protecting the health of individuals at the neighborhood level. There are many recognized benefits of compact development, such as promotion of physical activity, support of transit development and other VMT reducing design features, and facilitation of community connectivity. To attain these benefits, among others, while minimizing potential health risks due to TAC exposure, CARB's *Technical Advisory* provides a compilation of CARB-recommended strategies to reduce exposure to traffic-related pollution that are not exclusively based on maintaining minimum distances between a source and receptor.

SMAQMD has developed the *Recommended Protocol for Evaluating the Location of Sensitive Land Uses Adjacent to Major Roadways* guidance, consistent with the CARB recommendations, and with detailed guidance for the Sacramento region (SMAQMD 2011). As Woodland is within the Sacramento Valley Air Basin and the YSAQMD has similar conditions to that of the SMAQMD region, this protocol is appropriate to consider for the WRTP Specific Plan Area, as well. The protocol includes screening tables based on peak hourly volumes that can be used to evaluate the cancer risk associated with major roadways. Development within the WRTP Specific Plan Area

would contribute vehicle traffic on these roadways, which could increase the potential health risk for sensitive receptors that are located immediately adjacent to high-volume roadways.

In the vicinity of the WRTP Specific Plan Area, the California Northern Railroad runs to west of SR 113, approximately 1,500 feet from the western perimeter of the WRTP Specific Plan Area at the closest point, and this portion of the rail line does not include any rail service or maintenance operations that would result in substantial train idling or other similar increased emissions. The CARB Handbook also recommends avoiding the siting of new sensitive land uses within 500 feet of a freeway, urban roads carrying 100,000 vehicles per day, or rural roads carrying 50,000 vehicles per day. There are no such roadways in the vicinity of the WRTP Specific Plan Area. SR 113 in the vicinity of the WRTP Specific Plan Area carries approximately 20,000 to 24,000 trips per day and I-5 in the Woodland area carries approximately to 34,000 to 67,000 trips per day (Caltrans 2017). I-5 is more than 7,000 feet north of the WRTP Specific Plan Area.

As noted above with regard to the discussion of potential CO emissions, the highest volume roadways segment would generate approximately 2,020 vehicles per hour during the peak hour on CR 25A between SR 113 northbound ramps and Road A; average daily traffic volumes on this roadway segment with existing conditions plus full buildout of the WRTP Specific Plan would be approximately 20,600 vehicles per day. Daily roadway volumes would be well below the CARB Handbook threshold. Based upon peak hourly traffic volumes and screening analysis from SMAQMD, the incremental risk at 10 feet of from CR 25A between SR 113 northbound ramps to Road A would be approximately 188 cases in a million downwind. The protocol states that if the nearest sensitive receptor's increase in individual cancer risk is lower than the evaluation criterion of 276 cases per million, no further roadway-related air quality evaluation is recommended. While the specific location of future sensitive receptors is still undefined, it is reasonable to assume that a minimum buffer distance of at least 10 feet would separate potential future sensitive receptors from roadway TAC sources. Since conditions with implementation of the WRTP Specific Plan would be consistent with the protocol recommendations, no adverse health risks are anticipated from the roadways in or adjacent to the WRTP Specific Plan Area, even in this worst-case location.

Additional mobile sources of TACs from future development within the WRTP Specific Plan Area could include operational activities associated with planned land uses could require the use of diesel-fueled vehicles for extended periods, such as commercial trucking facilities or delivery/distribution areas, and thereby generate emissions that could expose sensitive receptors to DPM emissions. The DPM emissions generated by these uses could be produced primarily at single locations on a regular basis (e.g., loading dock areas). Occupants of nearby existing and proposed residences or other sensitive land uses could be exposed to DPM emissions on a recurring basis. CARB has adopted an idling restriction Airborne Toxic Control Measure (ATCM) for large commercial diesel-powered vehicles. In accordance with this measure, affected vehicles are required to limit idling to no longer than 5 minutes, under most circumstances. In addition, projects that utilize TRUs as part of their operations or facilities that meet the required number of loading docks would be required to comply with the CARB's Transport Refrigeration Unit ATCM, which sets in-use emission performance standards for TRUs to limit DPM emissions.

Although commercial and industrial uses that would be developed under the WRTP Specific Plan have not been specifically identified, it is possible that uses developed under the WRTP Specific Plan could have tenants that would emit TACs during operations, such as through the operations of gasoline-dispensing facilities or diesel-fueled backup generators. Stationary sources that may emit TACs would be subject to YSAQMD rules and regulations. Rule 3.4 requires any new or modified stationary source that generates emissions that exceed established emissions limits for each pollutant to comply with Best Available Control Technology and emissions offset requirements.

Rule 3.13 requires any constructed or reconstructed major source of TACs to install best available control technology for toxics.

Exposure of existing or future sensitive receptors to operational TACs could occur due to proximity to operational sources of TACs associated with specific future land uses. Although land use designations within the WRTP Specific Plan Area are defined in Chapter 2 of the WRTP Specific Plan, specific proposed uses have not been determined at the time of this analysis. The Land Use Plan Layout for the WRTP Specific Plan generally separates incompatible land uses and applies permitting conditions to those that could have external effects. In addition, as detailed in Table 3.1 of the WRTP Specific Plan, specific land uses have been identified as permitted, subject to conditions, allowed as ancillary use, and not allowed within the WRTP Specific Plan Area. Adherence to these allowed uses during siting and permitting of future development within the WRTP Specific Plan Area would reduce potential impacts to sensitive receptors that could otherwise reside or spend other time in proximity to operational sources of TACs. Future development within the WRTP Specific Plan Area is assumed to include mixed-use, residential, retail, commercial service, and industrial uses, as well as parks and open space. Land uses that would be in proximity to existing sensitive receptors associated with residential and open space land uses to the east and north of the WRTP Specific Plan Area are proposed to be mixed-use and residential land uses, which would not be anticipated to generate substantial TAC emissions. Automobile service and/or gas stations are only allowable within the Highway Commercial designated area, which is adjacent to and southeast of the SR 113/CR 25A intersection and surrounded by Research and Technology Park designated areas.

In addition, Section 3.3.2 of the WRTP Specific Plan contains performance standards, including Performance Standard D, with regard to odor, particulate matter, and air contaminants. This performance standard restricts the emissions of dust and particulate matter to the property lines from which it is generated, and requires that exhaust air ducts be located or directed away from abutting residentially-zoned properties. In addition, as described in Chapter 3 of the WRTP Specific Plan, large canopy shade trees will be provided along all major arterial and collector streets, to shade road surfaces and reduce the urban heat island effect. The design and location of trees and landscaping for homes shall consider opportunities for solar access and solar panels, as well as address shading and ventilation needs during hot summer months. Adjacent to SR-113, a landscaped buffer (20-foot when adjacent to commercial zones and 30-foot when adjacent to residential zones) shall be maintained, consisting of a mix of trees, low groundcover and vine training on all sound walls or highway adjacent perimeter fencing, further reducing the potential for exposure by sensitive land uses to substantial pollutant concentrations.

Due to uncertainty associated with specific development within each land use type identified within the WRTP Specific Plan, it is possible that development within the WRTP Specific Plan Area could general substantial TAC emissions as a result of long-term operations. It is possible that sensitive receptors could be located at distances from stationary sources that would expose them to substantial TAC concentrations. This TAC impact is considered **potentially significant**.

Mitigation Measures

Mitigation Measure 3.3-3a: Implement Mitigation Measure 3.3-2a and 3.3-2b - Construction-Related Mobile Emissions Reductions for NO_X and PM_{10} emissions.

Mitigation Measure 3.3-3b: Implement Guidelines in the California Air Resources Board's Air Quality and Land Use Handbook: A Community Health Perspective, and subsequent Technical Advisory.

New development that would result in substantial TAC emissions directly or indirectly (e.g., industrial sources) or that would expose sensitive receptors to substantial TAC concentrations (e.g., residential land uses located near existing TAC sources) shall implement CARB's *Air Quality and Land Use Handbook: A Community Health Perspective* (Handbook) guidance concerning land use compatibility with regard to sources of TAC emissions, or CARB guidance as it may be updated in the future.

Mitigation Measure 3.3-3c: Conduct Project-Level Analysis and Implement Mitigation for Sources of TACs.

For projects with the potential to generate substantial TAC emissions or expose sensitive receptors to substantial TAC pollutant concentrations, the City will require a site-specific analysis for construction and/or operational activities, and appropriate mitigation, as necessary, to ensure that sensitive receptors are not exposed to substantial pollutant concentrations. In communication with the YSAQMD, the City will require, if necessary, a site-specific analysis for operational activities to determine whether health risks attributable to future proposed projects in relation to proposed, planned, and/or existing sensitive receptors would exceed applicable thresholds of significance. Site-specific analysis may include screen level analysis, dispersion modeling, and/or a health risk assessment, consistent with applicable guidance from the YSAQMD. Analyses shall take into account regulatory requirements for proposed uses.

The City will require the project applicant(s) to identify and implement feasible mitigation measures to reduce any potentially significant effect and communicate with the YSAQMD to identify measures to reduce exposure of sensitive receptors to substantial pollutant concentrations to levels consistent with thresholds recommended by the YSAQMD applicable at the time the project is proposed. If the YSAQMD does not have applicable thresholds at the time of this analysis, the thresholds will be a probability of contracting cancer for the Maximally Exposed Individual equal to 10.0 in a million or more attributable to the project, or a non-cancer risk of 1.0 Hazard Index (chronic or acute) or more attributable to the project. If the project would exceed applicable thresholds recommended by the YSAQMD or the substitute thresholds outlined above, mitigation will be required to reduce the impact to a less-than-significant level. Agreed upon feasible mitigation actions shall be documented as a project condition of approval.

If the results of analysis for the operational activities of any future development project within the WRTP Specific Plan Area determine that the performance standard for this mitigation would be exceeded, actions shall be taken to reduce potential operational impacts which may include, but not necessarily be limited to:

- locating air intakes and designing windows to reduce particulate matter exposure by, for example, not allowing windows facing the source to open;
- providing electrification hook-ups for TRUs to avoid diesel-fueled TRUs continuing to operate at loading docks during loading and unloading operations;

- requiring the TAC-generating activity (e.g., loading docks) be located away from sensitive receptors;
- incorporating exhaust emission controls on mobile and/or stationary sources (e.g., filters, oxidizers);
- develop and implement a dock management system at the time of occupancy to minimize on-site idling below regulatory limits;
- require all on-site user owned and operated trucks with transportation refrigeration units to be capable of plugging into power at loading docks and require plug-in when at the loading dock;
- utilize on-site cargo and material handling equipment that is the lowest emitting equipment available at the time of occupancy;
- evaluate the potential to electrify a portion of entirety of an on-site user-owned and operated truck fleet;
- evaluate the potential to consolidate delivery or haul truck trips to increase the load and decrease vehicle trips;
- provide building air filtration units with a Minimum Efficiency Reporting Value (MERV) that is adequate to address adjacent sensitive land uses according to performance standards of this mitigation measure;
- ensure adequate distance between existing and planned sensitive receptors and gasoline dispensing facilities, based on the proposed size and design of any gasoline-dispensing facilities;
- utilize vegetated buffers between substantial TAC-generating source locations and sensitive receptors.

If analysis demonstrates that construction activities associated with development of on-site WRTP Specific Plan land uses or off-site improvement components would exceed the performance standards identified in this mitigation measure, actions shall be taken to reduce potential construction-related impacts which may include, but not necessarily be limited to:

- installing diesel particulate filters or implementing other CARB-verified diesel emission control strategies on all construction equipment to reduce diesel PM emissions;
- using equipment during time when receptors are not present (e.g., when school is not in session or during non-school hours, or when office buildings are unoccupied);
- establishing staging areas for the construction equipment that are as far as possible from sensitive receptors;
- rerouting construction trucks away from congested streets or sensitive receptor areas;
- communicating requirements through daily kick-off meetings and signage that off-road diesel equipment operators shut down their engines rather than idle for more than five minutes;
- documenting that all off-road equipment is compliant with the CARB in-use off-road diesel vehicle regulation;

- establishing an electrical supply to the construction site and use electric-powered equipment instead of diesel-powered equipment or generators, where feasible;
- using haul trucks with on-road engines instead of off-road engines;
- equipping nearby buildings with High Efficiency Particle Arresting (HEPA) filters systems at all mechanical air intake points to the building to reduce the levels of diesel PM that enter buildings;
- planning construction phasing so that future construction activities continue to move further away from occupied land uses; and
- planning construction phasing to complete mass site grading, which typically generates the largest portion of diesel PM emissions, prior to occupancy of the project site.

Significance after Mitigation

Mitigation Measures 3.3-3a and 3.3-3b would reduce impacts associated with construction-related mobile emissions from construction equipment and heavy-duty trucks, and operational TAC sources, respectively. The WRTP Specific Plan would be compliant with General Plan Policy 7.F.3 that would discourage development in locations that would conflict with the buffer recommendations in the CARB *Air Quality and Land Use Handbook*. The buffer distances incorporated into Mitigation Measure 3.3-3b are consistent with guidance from CARB.

Implementation of Mitigation Measure 3.3-3c would ensure that future development that could generate TAC emissions during operations would evaluate and mitigate TAC emissions to ensure that sensitive receptors are not exposed to substantial TAC concentrations. This evaluation and mitigation design is only possible once project-specific details for the TAC-generating use and the sensitive receptors are known. With the feasible actions outlined that have been demonstrated to substantially reduce exposure to TAC emissions and the clear performance standards included in this mitigation, with implementation of mitigation, this impact would be reduced to a **less-than-significant** level.

IMPACT 3.3-4 **Generation of Other Emissions (Such as Those Leading to Odors) Adversely Affecting a Substantial Number of People (Significance Threshold 4).** *Future development in the WRTP Specific Plan Area could result in short-term odorous emissions from diesel exhaust generated by on-site construction equipment or from asphalt paving and architectural coating activities; this would be temporary and intermittent in nature and dissipate rapidly from the source. Operational activities of future land uses within the WRTP Specific Plan Area could involve odor sources. The WRTP Specific Plan would implement measures that would avoid exposure of a substantial number of people to objectionable odors. This impact is considered potentially* ***significant****.*

YSAQMD has developed a list of facilities that are known producers of odors where more analysis may be warranted or where greater distance should separate a project from the odor source. Those facilities include, but are not limited to, wastewater treatment facilities, chemical manufacturing, sanitary landfills, transfer stations, painting/coating operations (e.g., auto body shops), and food processing facilities.

The 2035 General Plan and CAP EIR (pages 4.3-45 to 4.3-48) discusses potential impacts related to exposure of a substantial number of people to objectionable odors. The General Plan EIR identified construction of proposed land uses as well as diesel-fueled trucks traveling on local roadways as a minor source of odors that would generate exhaust odors from diesel engines. The construction activities would also generate VOC emissions associated with

asphalt paving and the application of architectural coatings, which may be considered offensive odors to some individuals. However, because odors associated with diesel fumes would be temporary and would disperse rapidly with distance from the source, construction-generated and mobile-source odors would not result in the frequent exposure of on-site receptors to objectionable odor emissions. The General Plan EIR also identified operational sources of odors, such as garbage collection areas and charbroilers associated with commercial uses as potential minor sources of odors relevant that may be relevant to the WRTP Specific Plan. These are known to have some temporary, less concentrated odorous emissions, but not uses that are typically associated with numerous odor complaints. The General Plan EIR concluded that compliance with permitting requirements, air district rules and regulations, and state and local requirements would reduce potential odor-related impacts and this impact would be less than significant.

The WRTP Specific Plan was assumed as part of the Planning Area within the 2035 General Plan. However, the General Plan EIR assessed potential odor impacts for the entire Planning Area and not individually for the specific proposed land uses of the WRTP Specific Plan of off-site improvement areas. As noted within the 2035 General Plan and CAP EIR, potential sources that may emit odors during construction activities include equipment and vehicle diesel exhaust. Odors from these sources would be localized and generally confined to the immediate area surrounding the development area. Exhaust odors from diesel engines, as well as ROG emissions associated with asphalt paving and the application of architectural coatings may be considered offensive to some individuals. Similarly, diesel-fueled trucks traveling on local roadways would produce associated diesel exhaust emissions. However, odors associated with diesel fumes, asphalt paving, and architectural coatings would be temporary and would disperse rapidly with distance from the source. Furthermore, YSAQMD Rule 2.5 (Nuisance) and Rule 2.14 (Architectural Coatings) help to ensure that odors generated by short-term construction activities would not affect a substantial number of people. Therefore, construction-generated odors would not result in frequent exposure of sensitive receptors to objectionable odor emissions. As a result, this impact would be **less than significant**.

Future development under the WRTP Specific Plan is assumed to include mixed-use, residential, retail, commercial service, and industrial uses, as well as parks and open space. As described in Chapter 3 of the WRTP Specific Plan, allowable uses within the WRTP Specific Plan Area do not include wastewater treatment facilities, chemical manufacturing, sanitary landfills or transfer stations. Food processing facilities, as well as industrial, testing, and manufacturing land uses, including cannabis processing facilities, are limited to within the Research and Technology Park land use designated areas. Existing agricultural uses may continue within the WRTP Specific Plan Area until the area is required for the development of infrastructure or other allowed uses, and light agricultural production and agricultural uses and structures are allowed within the Research and Technology Park and Village Center Open Space land use designated areas, and are required to comply with applicable local, state, and federal laws and regulations. Multi-family dwellings, hotels, and education services are also allowed uses within the Village District along the northern and eastern portions of the WRTP Specific Plan Area. YSAQMD recommends that the most effective measure to reduce odor impacts is the establishment of a buffer between the odor source and nearest receptor. YSAQMD does not have established buffer distances, and it is dependent upon site specific conditions, SMAQMD provides recommended odor screening distances (SMAQMD 2009). In addition, Section 3.3.2 of the WRTP Specific Plan contains performance standards, including Performance Standard D, with regard to odor, particulate matter and air contaminants. This performance standard restricts the continuous, frequent, or repetitive release of other emissions leading to odors that are perceptible on or beyond adjacent property lines from which it is generated or in the public right-of-way to less than 15 minutes in any one day, and requires that exhaust air ducts be located or directed away from abutting residentially-zoned properties. This performance standard makes exception for this standard for food and beverage related odors, such as coffee shop, bakery, and brewery related

odors, as these are typical of an urban and mixed-use setting, as intended by the design of the WRTP Specific Plan Area. Eating and drinking establishments, including restaurants, cafés, breweries, distilleries, and similar land uses are planned for in the WRTP Specific Plan Area, but are limited to the Research and Technology Park designated land use areas, as well as the Commercial Mixed Use, Highway Commercial, Village Center Mixed Use, Village Center Medium Density Residential, and High Density Residential/Community Commercial Overlay land uses; as such, these uses complement and support the Research and Technology Park employment center and Village Center, but ensure an appropriate separation of the non-mixed use residential neighborhoods and those commercial and retail land uses typical of mixed-use urban centers. Due to uncertainty associated with specific development within the land use types identified within the WRTP Specific Plan, it is possible that development within the WRTP Specific Plan Area could include agricultural processing that would generate substantial odors that would affect a substantial number of surrounding receptors. This impact is considered **potentially significant**.

Mitigation Measure

Mitigation Measure 3.3-4: Reduce Exposure of Sensitive Receptors to Odorous Emissions.

The City of Woodland shall require, as part of plans for development within the WRTP Specific Plan Area, the implementation of strategies to avoid exposure of sensitive receptors to objectionable odors:

a. Project applicant(s) for residential development in areas adjacent to ongoing agricultural operations shall include a disclosure clause advising buyers and tenants of the potential adverse odor impacts in the deeds to all residential properties. Residential subdivisions shall provide notification to buyers in writing of odors associated with existing dairies, agricultural burning, and decay of agricultural waste.

b. For existing odor-producing sources, sensitive receptors shall be sited as far away as possible from the existing sources.

c. For new project-generated odor-producing sources, sensitive receptors shall be sited as far away as possible from the new sources.

d. Apply SMAQMD Recommended Odor Screening Distances in the siting of land uses.

e. As an alternative to these buffer distances, indoor air filtration systems could be implemented to reduce exposure to odors. For odor-producing sources, activities would be maintained within and enclosed space and appropriate air filtration systems would be implemented to reduce odors expelled from the building. For developments that would host sensitive receptors, design would include air site layout, landscaping, and indoor air filtration systems to minimize exposure to odors.

Significance after Mitigation

Implementation of Mitigation Measure 3.3-4 would reduce impacts related to other emissions, such as those leading to odors, because siting measures imposed would avoid conflicts between odor emissions and sensitive receptors. Therefore, and consistent with the findings of the 2035 General Plan and CAP EIR, this impact would be **less than significant**.

3.3.5 CUMULATIVE IMPACTS

The geographic scope for air quality consists of the Sacramento Valley Air Basin. The 2035 General Plan and CAP EIR (pages 6-14 through 6-18) (City of Woodland 2016) analyzed cumulative impacts to air quality. The proposed

WRTP Specific Plan Area was included as part of the cumulative analysis contained in Chapter 6 of the 2035 General Plan and CAP EIR.

Generation of Short-Term Construction and Long-Term Operational Emissions of Criteria Air Pollutants and Precursors, or Conflict with or Obstruct an Air Quality Plan

By its nature, air pollution is largely a cumulative impact. The implementation of plans and projects within the Sacramento Valley Air Basin would contribute to this impact on a cumulative basis. The emissions of an individual project may be individually limited but cumulatively considerable when taken in combination with past, present, and future development projects. All new development that would result in an increase in air pollutant emissions would contribute to cumulative construction air quality impacts. The nonattainment status of regional pollutants is a result of past and present development within the air basin, and this regional impact is a **significant cumulative** impact.

The 2035 General Plan and CAP EIR determined that short-term construction and long-term operational criteria pollutant and precursor emissions from implementation of the General Plan (under either alternative) would exceed YSAQMD's thresholds of significance for ROG, NO_X, and PM_{10}, and that the cumulative scenario of additional development within the Sacramento Valley Air Basin would also generate additional construction-related criteria air pollutant and ozone precursor emissions. This was considered a cumulatively considerable contribution to a significant cumulative impact.

As shown in Tables 3.3-2 and 3.3-4 above, construction-related criteria pollutant and precursor emissions from development within the WRTP Specific Plan Area and off-site improvement areas would exceed YSAQMD's thresholds of significance for ROG, NO_X, and PM_{10} without mitigation and for PM_{10} with mitigation. In addition, as shown in Tables 3.3-3 and 3.3-5 above, long-term operational emissions associated with future land uses in the WRTP Specific Plan Area would exceed YSAQMD thresholds of significance for ROG, NO_X, and PM_{10}. Mitigation Measures 3.3-2a and 3.3-2b would reduce PM and ozone precursor emissions from construction-related activities. However, PM_{10} emissions from construction activities would still exceed YSAQMD thresholds. Mitigation Measure 3.3-2c would reduce operational emissions of ROG and PM. In addition, WRTP Specific Plan Policy 2.2.3, *Sustainability,* in Chapter 2 of the WRTP Specific Plan requires new development be consistent with the objectives and targets of the City's Climate Action Plan (consistent with the 2035 General Plan Policies 2.C.2 and 2.L.2); this policy, along with compliance with YSAQMD Rules and Regulations and State regulations, will help to reduce short-term and long-term emissions, but it is not possible to determine at this time whether mitigation, WRTP Specific Plan policies, and compliance with local rules and regulations would reduce emissions to a less-than-significant level.

As described in Impact 3.3-2 above, the nature of criteria pollutants is such that the emissions from an individual project cannot be directly identified as responsible for health impacts within any specific geographic location. As a result, attributing health risks at any specific geographic location to a single proposed project is not feasible. Nonetheless, the results of the Strategic Area Project Health Screening Tool have been presented for informational purposes and the modeling results support a conclusion that the proposed WRTP Specific Plan does not, on its own, lead to sizeable regional health effects from the emissions of criteria air pollutants and precursors. However, YSAQMD considers that if a project's impacts would be significant at the project-level, it could also be considered significant on a cumulative level. Even with all feasible mitigation, construction-related and operational emissions could still result in a net increase of ROG, NO_X, and PM_{10} emissions. The implementation of regional and local development within the Sacramento Valley Air Basin would generate increased short-term construction and long-

term operational emissions that may cumulatively exceed regional thresholds and conflict with or obstruct implementation of the applicable air quality plan. Even if emissions associated with implementation of the WRTP Specific Plan and off-site improvement areas are reduced to levels that are below YSAQMD thresholds, the WRTP Specific Plan would still contribute to increased overall emissions throughout the Sacramento Valley Air Basin. There is no additional feasible mitigation available that would avoid these impacts. The WRTP Specific Plan could make a **cumulatively considerable contribution** to **significant cumulative** air quality impacts.

Exposure of Sensitive Receptors to Substantial Pollutant Concentrations

Exposure of sensitive receptors to substantial pollutant concentrations, such as TACs and CO generally occurs on a localized rather than regional basis. As discussed in Impact 3.3-3 above, implementation of the WRTP Specific Plan would not expose sensitive receptors to substantial concentrations of CO. Because site-specific details of development are not known at the present time and construction at the WRTP Specific Plan Area and off-site improvement areas could occur in phases adjacent to existing and future sensitive receptors, implementation of Mitigation Measures 3.3-3a, 3.3-3b and 3.3-3c are necessary to ensure impacts would be less than significant. Since there are no other known projects among those considered as part of this cumulative analysis that are both large enough and would involve construction in close enough proximity to these rural residences to result in TAC impacts, the cumulative contribution would be **less than cumulatively considerable.**

Other Emissions Such as Those Leading to Odors

Odor impacts are generally localized and do not combine with odor impacts in nearby jurisdictions to increase the severity of impacts. Implementation of Mitigation Measure 3.3-4 would avoid conflicts between potential land use-generated odor emissions and sensitive receptors. Therefore, the impact of exposing populations to substantial other emissions, such as those leading to odors, is **less than cumulatively considerable**.

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3.4 BIOLOGICAL RESOURCES

3.4.1 INTRODUCTION

This section addresses known or potential biological resources in the WRTP Specific Plan Area and off-site improvement areas (collectively known as "the study area" in this section). The analysis includes a description of the existing environmental conditions at the time of the NOP, the methods used for assessment, the impacts associated with implementing the proposed WRTP Specific Plan, and mitigation measures proposed to reduce potentially significant impacts. This section also includes a brief overview of the federal, State, and local laws and regulations pertaining to the protection of biological resources in Yolo County.

The biological resources information presented in this section is based on review of available background reports; previous studies conducted in or near the WRTP Specific Plan Area and off-site improvement areas; biological resource databases, including the California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDB), Biogeographic Information and Observation System (BIOS), and the California Native Plant Society (CNPS) Inventory; aerial photography interpretation; an official species list obtained from the U.S. Fish and Wildlife Service Information, Planning, and Conservation System (IPaC); the City of Woodland General Plan 2035 (City of Woodland 2017), General Plan Background Reports, the Yolo Habitat Conservation Plan/Natural Community Conservation Plan (Yolo HCP/NCCP) (Yolo Habitat Conservancy 2018), and reconnaissance-level site surveys conducted by an AECOM biologist on August 31, 2017 and November 8, 2019 for the WRTP Specific Plan Area and off-site improvement areas, respectively.

The CEQA Guidelines note that comments received during the NOP scoping process can be helpful in "identifying the range of actions, alternatives, mitigation measures, and significant effects to be analyzed in depth in an EIR and in eliminating from detailed study issues found not to be important." (CEQA Guidelines Section 15083). Neither the CEQA Guidelines nor Statutes require a lead agency to respond directly to comments received in response to the NOP, but they do require that the comments be considered. Consistent with these requirements, NOP comments have been carefully reviewed and considered by the City. However, no NOP comments pertaining to biological resources were received. Appendix A of this EIR includes copies of all NOP comments received.

3.4.2 ENVIRONMENTAL SETTING

The approximately 350-acre WRTP Specific Plan Area is located in the southern portion of the City's Planning Area, adjacent to the existing City limits, in an area bound by Farmers Central Road to the north, County Road 101 (Harry Lorenzo Avenue) to the east, State Route 113 (SR 113) to the west, and County Road 25A to the south (portions of the WRTP Specific Plan Area extend approximately 1,000 feet south of County Road 25A).

Off-site improvement areas include a proposed drainage area (i.e., South Regional Pond) immediately south of the WRTP Specific Plan Area and adjacent to County Road (CR) 25A, and improvements to SR 113/CR 25A interchange adjacent to the southwestern corner of the WRTP Specific Plan Area (CalTrans 2013) (Caltrans Off-site Improvement Area). There are two alternative footprints for the Caltrans Off-site Improvement Area that are included in the analysis presented in this section, both of which were surveyed in 2019. Alternative 1 consists of approximately 37 acres of disturbance to construct new on- and off-ramps, and Alternative 2 consists of approximately 24 acres of disturbance to construct roundabouts. Both of the Caltrans alternatives consist of permanent and temporary impact areas in the Caltrans right-of-way and adjacent areas outside of the Caltrans right-of-way.

The biological study area includes the WRTP Specific Plan Area, off-site improvement areas, and adjacent buffer areas (i.e., line of sight and up to 250 feet, where accessible). In addition, aerial imagery was used to assess surrounding lands within a one-quarter mile radius for suitable nesting habitat for several species of special-status birds.

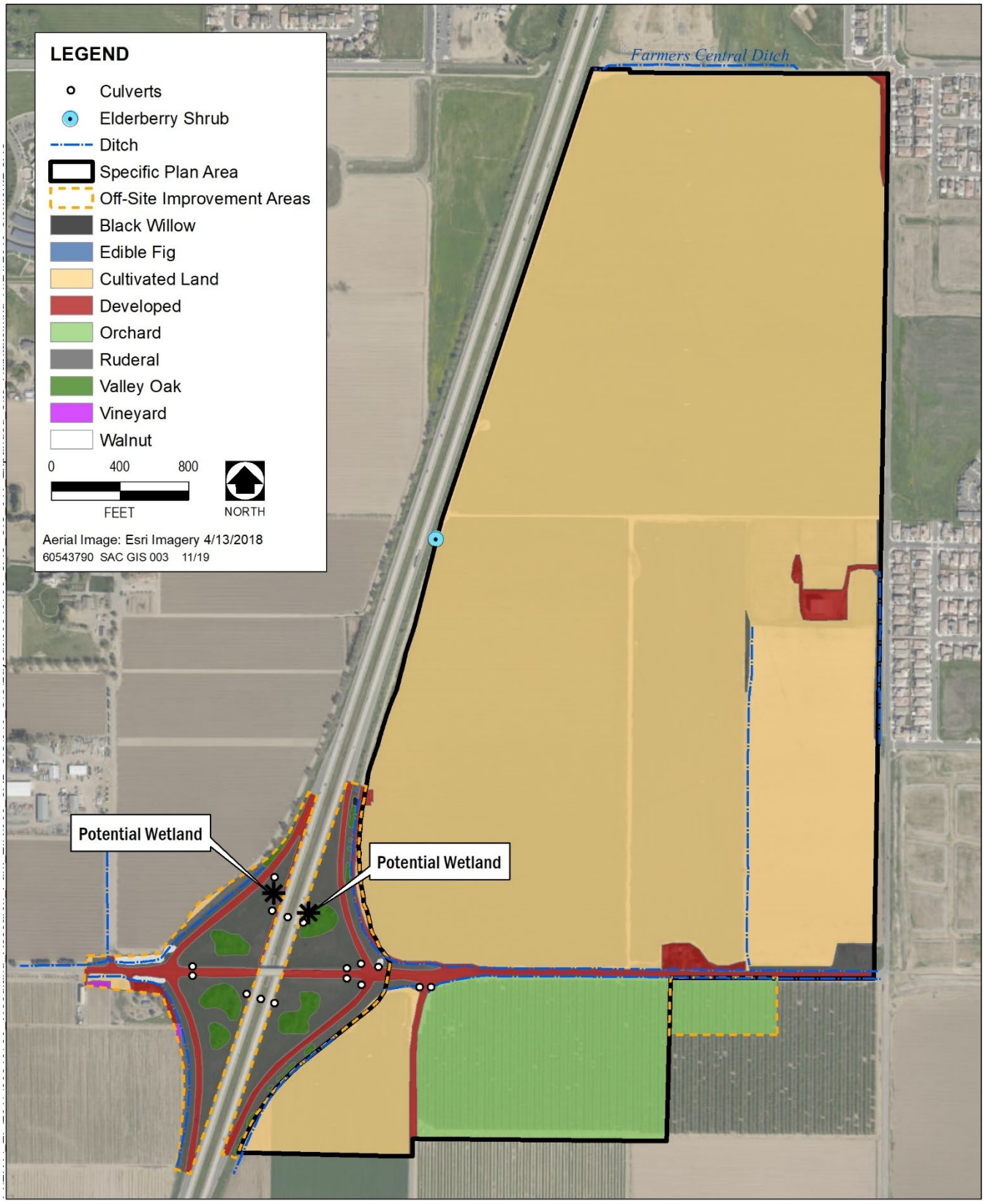
Surrounding land uses include the City's Spring Lake Specific Plan Area to the east and north, the Woodland Sports Park to the northwest, and agricultural lands, including cultivated fields and vineyards, to the west. Almond orchards extend to the south and east of the WRTP Specific Plan Area. Agricultural land, particularly cultivated fields, provides important habitat value for certain wildlife species, including foraging habitat for Swainson's hawk (*Buteo swainsonii*), a state-listed threatened species.

Habitat types in the WRTP Specific Plan Area and off-site improvement areas consist of cultivated crops (e.g., sunflowers and corn), almond orchards, vineyards, and development comprised of a single residence, a warehouse, the SR113/CR 25A interchange and median landscaping, and a sidewalk and landscaping in the northeastern corner of the WRTP Specific Plan Area, on the west side of Harry Lorenzo Avenue. Aquatic features present on the site consist of irrigation and roadside ditches, as well as two potential man-made seasonal wetlands associated with drainage culverts in the SR 113/CR 25A traffic medians. Patches of ruderal vegetation are present surrounding and within the agricultural fields and in the SR 113/CR 25A traffic medians. There is limited native vegetation, consisting mainly of a row of valley oak (*Quercus lobata*) trees between the on/off ramps for SR 113/CR 25A and adjacent fields in the southwestern half of the WRTP Specific Plan Area and patches of valley oak trees planted in the SR 113/CR 25A traffic medians, and other scattered native trees, including interior live oak (*Quercus wislizeni*), black willow (*Salix gooddingii*), and black walnut (*Juglans hindsii*).

The closest sensitive habitats supporting a number of important biological resources are found in and around Cache Creek, located approximately 2.5 miles northeast of the WRTP Specific Plan Area, Willow Slough, located approximately 1.2 miles east and south of the WRTP Specific Plan Area, and Woodland Regional Park and Alkali Grasslands Preserve, located approximately 1 mile east of the WRTP Specific Plan Area.

VEGETATION

Vegetation in the study area is comprised almost exclusively of cultivated crops including alfalfa, row crops, and an almond orchard (Exhibit 3.4-1). Except for the almond orchard, various crops are rotated in the agricultural lands, with fields sometimes allowed to lay fallow, resulting in different land cover types in different years (i.e., field crops such as corn or sunflower rotated to truck/berry crops, such as tomatoes or cucumber, then to grain/hay crops). As a result, all non-orchard lands were classified as cultivated lands, rather than by crop type. At the time of the 2017 reconnaissance survey, the southern fields were planted in tomatoes and sunflowers. The area surrounding the warehouse appeared to have been planted in grain or hay crops in the past, but at the time of the 2017 survey, this area was fallow and composed of ruderal vegetation.



Source: AECOM 2019

Exhibit 3.4-1. Habitat Types in the WRTP Specific Plan Area and Off-site Improvement Areas

During the 2019 reconnaissance survey of off-site improvement areas, the cultivated fields in the southwest portion of the WRTP Specific Plan Area (i.e., west of Road 101 and southwest of the CR 25A/CR 100A junction) were fallow and recently disked, but showed evidence of having been planted with sunflowers. To the east of CR 100A and including the proposed off-site South Regional Pond improvement area, the land consists entirely of an almond orchard. The Caltrans off-site improvement area is an existing interchange with developed roadways, roadside ditches, culverts, and four traffic medians. The traffic medians are comprised entirely of ruderal vegetation interspersed with landscape-planted trees and shrubs, including several patches of medium-sized valley oak trees. The Caltrans off-site improvement area is bordered by the Satiety Winery and vineyards to the southwest and cultivated fields to the northwest that were fallow at the time of the survey but appeared to have been planted with corn.

Ruderal vegetation is characteristic of areas that receive regular disturbance, such as mowing, disking, and/or spraying with herbicides. Ruderal vegetation is present between the agricultural fields, along irrigation ditches, adjacent to the agricultural field south of CR 25A and east of SR 113, throughout traffic medians, and adjacent to roadways and on/off-ramps. The ruderal vegetation throughout the study area is characterized by primarily annual, nonnative grasses and forbs, including wild oat (*Avena* sp.), Italian ryegrass (*Festuca perennis*), barnyard grass *(Echinochloa crus-galli*), Johnsongrass (*Sorghum halapense*), prickly lettuce (*Lactuca serriola*), blessed milk thistle (*Silybum marianum*), mustard (*Brassica* sp. and *Hirschfeldia incana*), cheeseweed mallow (*Malva parviflora*), yellow star thistle (*Centaurea solstitialis*), Russian thistle (*Salsola tragus*), field bindweed (*Convolvulus arvensis*), Bermuda grass (*Cynodon dactylon*), winter vetch (*Vicia villosa*), and perennial pepperweed (*Lepidium latifolium*). Several non-native trees also occur in ruderal vegetation adjacent to the intersection of Harry Lorenzo Road and CR 25A, including almond (*Prunus dulcis*), date palm (*Phoenix* sp.), and black locust (*Robinia pseudoacacia*).

Ornamental plants, some ruderal vegetation, and native oaks are present within the single private residence. Several patches of medium-sized valley oak trees are present within the SR 113/CR 25A traffic medians, and rows of valley oak trees are located along the southern half of the western boundary of the WRTP Specific Plan Area, adjacent to SR 113. During the 2017 reconnaissance survey, a single elderberry shrub (*Sambucus nigra* ssp. *caerulea*) was identified among the oaks to the north of the SR 113/CR 25A interchange. Immediately west of the SR 113/CR 25A interchange and bordering CR 25A on the north and south are two rows of planted walnut trees. In addition, several almond trees are present in a strip of vegetation between two agricultural fields. Roadside ditches are also present north and south of CR 25A, and irrigation ditches border part of the west boundary of the agricultural fields. In addition, a 10-foot wide drainage ditch (Farmers Central Ditch) is adjacent to and outside of the north boundary of the WRTP Specific Plan Area, as well as along the western boundary of the Caltrans off-site improvement area. Ditch vegetation throughout the study area is dominated by cheeseweed mallow, field bindweed, Johnsongrass, Bermuda grass, and bentgrass (*Agrostis* sp.).

Agricultural use accounts for 98 percent of the WRTP Specific Plan Area and proposed South Regional Pond area and other habitats make up less than 2 percent of the land cover (Table 3.4-1). Habitat types present in the two alternative Caltrans off-site improvement area footprints are shown in Table 3.4-2. Habitat types in the WRTP Specific Plan Area and off-site improvement areas are shown in Exhibit 3.4-1.

Table 3.4-1. Habitat Types in the WRTP Specific Plan Area and Proposed South Regional Pond Off-Site Improvement Area

Habitat	Acres
Cultivated Land (other than orchard)	306
Orchard	37
Developed	8
Ruderal	3
Total	**355**

Note: Figures may not total due to rounding.

Source: Data Compiled by AECOM 2018, 2019.

Table 3.4-2. Habitat Types in the State Route 113/County Road 25A Off-Site Improvement Area, Alternative 1 and Alternative 2

Land Cover	Acres for Alternative 1	Acres for Alternative 2
Cultivated Land (other than orchard)	4.1	1.1
Orchard	0.3	0.2
Vineyard	0.2	0.1
Native Oak Tree Stands[1]	3.9	2.8
Non-Oak Tree Stands[2]	0.6	0.6
Developed	9.0	6.8
Ruderal	19.3	12.4
Total	**37.4**	**24.1**

Note: Figures may not total due to rounding.

[1] Stands of native valley oak and interior live oak trees are present along farm roads and in traffic medians. These stands consist of planted and volunteer trees in highly disturbed areas. Total acres in the study area are based on total estimated canopy width of all valley oak and interior live oak trees combined.

[2] Stands of nonnative trees include planted and volunteer hybrid walnut, black willow, and edible fig trees that are present on road edges. Total acres in project area are based on total estimated canopy width of all trees combined.

Source: AECOM 2018, 2019.

General Wildlife Usage in the WRTP Specific Plan Area and Off-Site Improvement Areas

The majority of the study area is characterized by agricultural and ruderal lands that typically provide low-value habitat for most wildlife species because of an overall lack of native vegetation and natural communities, and a high level of disturbance. Birds and mammals that occur in these areas typically include common and introduced species adapted to human habitation, such as mourning dove (*Zenaida macroura*), American crow (*Corvus branchyrhychos*), house finch (*Carpodacus mexicanus*), house sparrow (*Passer domesticus*), and raccoon (*Procyon lotor*). Agricultural lands, however, can provide important habitat for some special-status species, such as Swainson's hawk, and generally provide greater habitat values than urban areas and developed land. Alfalfa, disked fields, fallow fields, dry-land pasture, beets, tomatoes, irrigated pasture, grain and hay, and other row crops tend to support large rodent populations and therefore provide good foraging habitat for Swainson's hawk, white-tailed kite (*Elanus leucurus*), northern harrier (*Circus cyaneus*), and more common raptors, such as American kestrel (*Falco sparverius*), great horned owl (*Bubo virginianus*), and red-tailed hawk (*Buteo jamaicensis*). The large trees present

in the ruderal patch on the southeast corner of the WRTP Specific Plan Area, in the SR 113/CR 25A traffic medians, at the single residence, the small row of trees between agricultural fields, and the row of valley oaks adjacent to SR 113 along the western boundary of the WRTP Specific Plan Area all provide nesting opportunities for raptors and other birds.

Small mammal burrows indicative of Botta's pocket gopher (*Thomomys bottae*) and California vole (*Microtus californicus*) activity are present along the interior slopes of all the traffic medians in the Caltrans off-site improvement area, as well as in the upper slopes of the ditch that borders the almond orchard in the southern portion of the WRTP Specific Plan Area and overlaps with the proposed South Regional Pond off-site improvement area. Scattered ground squirrel (*Otospermophilus beecheyi*) burrows are present along the northern and western fence lines bounding the fallow field in the southwest portion of the WRTP Specific Plan Area. There is also a large ground squirrel burrow complex in the understory of valley oak trees in the traffic median to the east of SR 113 and south of CR 25A within the Caltrans off-site improvement area, and additional large burrows along the northeastern interior slope of this median. Other ground squirrel complexes are present in the southern and eastern slopes of the Farmers Central Ditch: one colony is just outside the north boundary of the WRTP Specific Plan Area, and another is along the western boundary of the Caltrans off-site improvement area. Ground squirrel burrows and complexes could support burrowing owl (*Athene cunicularia*), a CDFW species of special concern. Other portions of the study area that could support burrowing owl include small culverts and piles of broken concrete or other debris where interstitial spaces are large enough for burrowing owls to enter, but small enough to preclude predators. One such pile of broken concrete is present in the northern portion of the traffic median west of SR 113 and south of CR 25A in the Caltrans off-site improvement area.

The various irrigation, roadside, and drainage ditches present in the study area provide limited habitat for wildlife due to constant human manipulation of these systems, except for the ground squirrel complexes along the slopes of the Farmers Central Ditch that could support burrowing owl.

SPECIAL-STATUS SPECIES

Special-status species include plants and animals in the following categories:

- species officially listed by the State of California or the federal government as endangered, threatened, or rare;
- candidates for state or federal listing as endangered or threatened;
- taxa (i.e., taxonomic categories or groups) that meet the criteria for listing, even if not currently included on any list, as described in Section 15380 of the CEQA Guidelines;
- species identified by the CDFW as species of special concern;
- species listed as Fully Protected under the California Fish and Game Code;
- species afforded protection under local or regional planning documents; and
- taxa considered by CDFW to be "rare, threatened, or endangered in California" and assigned a California Rare Plant Rank (CRPR). The CDFW system includes six rarity and endangerment ranks for categorizing plant species of concern, which are summarized as follows:

- CRPR 1A - Plants presumed to be extinct in California;
- CRPR 1B - Plants that are rare, threatened, or endangered in California and elsewhere;
- CRPR 2A - Plants presumed to be extinct in California, but more common elsewhere;
- CRPR 2B - Plants that are rare, threatened, or endangered in California, but more common elsewhere;
- CRPR 3 - Plants about which more information is needed (a review list); and
- CRPR 4 - Plants of limited distribution (a watch list).

All plants with a CRPR are considered "special plants" by CDFW. The term "special plants" is a broad term used by CDFW to refer to all of the plant taxa inventoried in CDFW's CNDDB, regardless of their legal or protection status. Plants ranked as CRPR 1A, 1B, 2A, and 2B may qualify as endangered, rare, or threatened species within the definition of CEQA Guidelines Section 15380. CDFW recommends that potential impacts to CRPR 1 and 2 species be evaluated in CEQA documents. In general, CRPR 3 and 4 species do not meet the definition of endangered, rare, or threatened pursuant to CEQA Guidelines Section 15380. However, these species may be evaluated by the lead agency on a case-by-case basis.

A list of special-status species that could potentially occur in the study area, provided suitable habitat conditions were present, was developed through review of available background reports; previous studies conducted in or near the study area; biological resource databases, including the CNDDB and CNPS Inventory; an official list obtained from the U.S. Fish and Wildlife Service Information, Planning, and Conservation System (IPaC); and the Yolo HCP/NCCP (Yolo Habitat Conservancy 2018).

Special-Status Plants

Based on the database searches and literature review, seven special-status plant species have been documented or reported to occur within two miles of the study area (Table 3.4-3). One species, palmate-bracted bird's beak, is federally and state listed as endangered and is also a covered species under the Yolo HCP/NCCP. The other six special-status species have California Rare Plant Ranks (CRPR) of 1B, indicating that these species are considered rare or endangered and tracked by CDFW and CNPS. All these species are restricted to alkaline sinks and flats, vernal pools, or other wetland or grassland habitats that do not occur in the study area.

No protocol special-status plant surveys have been conducted on the site, but the entire study area has been altered by human activities and is subject to ongoing vegetation management and surface soil manipulation. These activities, which include plowing, disking, mowing, herbicide application, and driving, preclude the establishment of natural plant communities. Therefore, there is no potential habitat for special-status plant species within the study area.

Table 3.4-3. Special-Status Plant Species with Potential to Occur within the WRTP Specific Plan Area and Off-site Improvement Areas

Species	Federal[1]	State[2,3]	Habitat	Potential for Occurrence in the WRTP Specific Plan Area and Off-site Improvement Areas
Alkali milk-vetch *Astragalus tener* var. *tener*	—	1B.2	Alkaline soils within playas, vernal pools, and adobe clay valley and foothill grassland habitats; 0 to 196-foot elevation. Bloom: March–June	**Unlikely to occur.** Suitable habitat is not present in the study area. One occurrence is documented within 2 miles of the study area.
Brittlescale *Atriplex depressa*	—	1B.2	Alkaline clay soils within chenopod scrub, meadow and seeps, playas, vernal pools, and valley and foothill grassland habitats; 0 to 1,050-foot elevation. Bloom: April–October	**Unlikely to occur.** Suitable habitat is not present in the study area. Two occurrences documented within 2 miles of the study area.
Palmate-bracted bird's beak* *Chloropyron palmatum*	E	E 1B.1	Alkaline soils in seasonally flooded lowlands; 16 to 510-foot elevation. Bloom: May–October	**Unlikely to occur.** Suitable habitat is not present in the study area. Two occurrences documented within 2 miles of the study area.
San Joaquin spearscale *Extriplex joaquinana*	—	1B.2	Alkaline soils on chenopod scrub, meadow and seeps, playas, and valley and foothill grassland; 3 to 2,740-foot elevation. Bloom: April–October	**Unlikely to occur.** Suitable habitat is not present in the study area. Two occurrences documented within 2 miles of the study area.
Heckard's pepper-grass *Lepidium latipes* var. *heckardii*	—	1B.2	Alkaline flats in valley and foothill grassland; 6 to 656-foot elevation. Bloom: March–May	**Unlikely to occur.** Suitable habitat is not present in the study area. Two occurrences documented within 2 miles of the study area.
California alkali grass *Puccinellia simplex*	—	1B.2	Saline flats, mineral springs; below 3,000 feet elevation. Bloom: March–May.	**Unlikely to occur.** Suitable habitat is not present in the study area. One occurrence is documented within 2 miles of the study area.
Saline clover *Trifolium hydrophilum*	—	1B.2	Marshes and swamps, vernal pools, and mesic, alkaline valley and foothill grassland; 0 to 984-foot elevation. Bloom: April–June	**Unlikely to occur.** Suitable habitat is not present in the study area. One occurrence documented within 2 miles of the study area.

Notes:

[1] Federal:
E = Listed as endangered under ESA.

[2] State:
E = Listed as endangered under CESA.

* Designated as a covered species under the Yolo Habitat Conservation Plan/Natural Community Conservation Plan (Yolo Habitat Conservancy 2018).

[3] California Rare Plant Ranks and extensions
1B = Rare or endangered in California and elsewhere.
.1 = Seriously endangered in California (>80 percent of occurrences are threatened and/or high degree and immediacy of threat).
.2 = Fairly endangered in California (20 to 80 percent of occurrences are threatened).

Sources: USFWS 2017a, CNDDB 2017, CNPS 2017; compiled by AECOM in 2017.

Special-Status Wildlife

Based on the database searches and literature review, 28 special-status wildlife species, have been documented or reported to occur in the study area or nearby within Yolo County. These species are listed below in Table 3.4-4, along with their status, habitat, and potential to occur in the study area. As noted in the Woodland General Plan supporting documents, the majority of special-status wildlife species known to occur in Yolo County are associated with vernal pool, alkali sink and flats, or grassland habitats located east of the WRTP Specific Plan Area or are associated with wetland habitats such as Cache Creek, Willow Slough, or the Yolo Bypass.

The following species were eliminated from further evaluation in this document because they are restricted to particular habitat types (e.g., grassland, vernal pools, alkali sinks and flats, streams and rivers, marsh, riparian woodland and forest) that are not present in the study area or because the study area is outside of their known geographic range:

- vernal pool fairy shrimp (*Branchinecta lynchi*)
- vernal pool tadpole shrimp (*Lepidurus packardi*)
- California tiger salamander (*Ambystoma californiense*)
- California red-legged frog (*Rana draytonii*)
- western pond turtle (*Emys marmorata*)
- least bittern (*Ixobrychus exilis)*
- western snowy plover (*Charadrius alexandrinus nivosus)*
- western yellow-billed cuckoo (*Coccyzus americanus occidentalis*)
- grasshopper sparrow (*Ammodramus savannarum*)
- bank swallow (*Riparia riparia)*
- yellow-headed blackbird (*Xanthocephalus xanthocephalus)*
- loggerhead shrike (*Lanius ludovicianus)*
- yellow-breasted chat (*Icteria virens*)
- yellow warbler (*Setophaga petechial)*
- least Bell's vireo (*Vireo bellii pusillus*)
- American badger (*Taxidea taxus)*
- Delta smelt (*Hypomesus transpacificaus*)
- steelhead – Central Valley Distinct Population Segment (*Oncorhynchus mykiss irideus*)

Of the species listed above, five (i.e., California tiger salamander, western pond turtle, least Bell's vireo, bank swallow, and western yellow-billed cuckoo) are designated as Covered Species under the Yolo HCP/NCCP. Modeled habitats for these five species are restricted to areas outside of the study area (Yolo Habitat Conservancy 2018). The WRTP Specific Plan Area is in Planning Unit 19, which was excluded from the Yolo HCP/NCCP modeled habitat for California tiger salamander due to lack of suitable aquatic and nonbreeding habitats. Similarly, there are no suitable aquatic habitats for western pond turtle in the study area (i.e., open water, bulrush-cattail wetland, bulrush-cattail fresh water marsh, alkali bulrush-bulrush brackish marsh, or rice), and there are no natural vegetation types within 1,312 feet and 1,640 feet of suitable aquatic habitat that could be used as nesting or overwintering habitat, respectively (Yolo Habitat Conservancy 2018). Furthermore, urban and agricultural vegetation types, of which the study area is comprised entirely, are excluded from the western pond turtle habitat model (Yolo Habitat Conservancy 2018). Finally, habitats for the least Bell's vireo, bank swallow, and yellow-billed cuckoo in the Yolo HCP/NCCP area are restricted to riparian corridors that are outside the study area (Yolo

Habitat Conservancy 2018). There are no special-status fish species that are known to occur in the study area. Two fish species listed as threatened under the Federal Endangered Species Act (ESA), Delta smelt (*Hypomesus transpacificaus*) and steelhead (*Oncorhynchus mykiss*), are identified on the USFWS official list of species that could be affected by projects in the study area. However, the study area is outside of the known range of delta smelt, which is restricted to San Francisco Bay and the Sacramento–San Joaquin Delta, and there are no waterways in the study area that could support steelhead or other special-status fish species. No critical habitat for special-status species is found in the study area or the surrounding radius of two miles. The nearest designated critical habitat (Chinook salmon and steelhead critical habitat) is located over five miles east of the study area (USFWS 2017a).

Table 3.4-4. Special-Status Wildlife Species with Potential to Occur within the WRTP Specific Plan Area and Off-site Improvement Areas

Species	Listing Status – Fed.[1]	Listing Status – State[2]	Habitat	Potential for Occurrence in the WRTP Specific Plan Area and Off-site Improvement Areas
Invertebrates Valley elderberry longhorn beetle* *Desmocerus californicus dimorphus*	T	_	Elderberry shrubs (the host plant species), typically as an abundant component in dense riparian habitat below 3,000 feet in elevation; on slightly higher and older floodplain surfaces without saturated soils (Vaghti et al. 2009).	**Could occur.** An elderberry shrub that could support valley elderberry longhorn beetle was identified during the 2017 reconnaissance survey along the western boundary of the WRTP Specific Plan Area. Nearest known records are from Cache Creek approximately 5.4 miles northwest of the WRTP Specific Plan Area.
Amphibians and Reptiles Giant garter snake* *Thamnophis gigas*	T	T	Cultivated rice, freshwater marsh, and slow moving streams, ditches, or canals.	**Unlikely to occur.** Suitable habitat, including rice fields or marsh is not present. Although there are ditches present, they are lacking suitable emergent vegetation, or are too heavily vegetated, only hold water during precipitation events, and/or are subject to frequent disturbance. The study area is outside of modeled habitats for the giant garter snake (Yolo Habitat Conservancy 2018). There are no occurrences documented within two miles of the study area. There are a total of 54 CNDDB occurrence records documented in Yolo County.
Birds** Swainson's Hawk* *Buteo swainsoni* (nesting)	_	T	Nests in riparian forest and isolated trees, open woodlands, and woodland margins; nests and forage in grasslands and agricultural fields.	**Known to occur.** Suitable nesting and foraging habitat are present. Two occurrences documented in the study area. There are 17 CNDDB occurrence records within 2 miles of the study area. A single Swainson's hawk was observed in the WRTP Specific Plan Area during the 2017 reconnaissance survey.
Northern harrier *Circus cyaneus* (nesting)	_	SSC	Nests and forages in grasslands, agricultural fields, and marshes. Nests on the ground within patches of dense, often tall, vegetation in undisturbed areas (Smith et. al 2011).	**Unlikely to nest.** Suitable nesting habitat is not present in the study area. Foraging habitat is present in and adjacent to the study area. There is one CNDDB occurrence record of this species in Yolo County.

Species	Listing Status – Fed.[1]	Listing Status – State[2]	Habitat	Potential for Occurrence in the WRTP Specific Plan Area and Off-site Improvement Areas
White-tailed kite* *Elanus leucurus* (nesting)	_	FP	Forages in grasslands and agricultural fields; nests in riparian zones, oak woodlands, and isolated trees.	**Could occur.** Suitable nesting and foraging habitat is present in and adjacent to the study area. There are five CNDDB occurrence records of this species in Yolo County.
Mountain plover *Charadrius montanus* (wintering)	_	SSC	Forages in short grasslands and plowed agricultural fields where vegetation is sparse, and trees are absent.	**Could occur.** There are no occurrences documented within the study area. There are a total of 11 CNDDB records of this species in Yolo County.
Song sparrow – "Modesto" population (*Melospiza melodia*) (year round)	_	SSC	Nests and forages primarily in emergent marsh, riparian scrub, and early successional riparian forest habitats in the north-central portion of the Central Valley; infrequently in mature riparian forest and sparsely vegetated ditches and levees. Forages primarily on exposed ground or in leaf litter.	**Unlikely to occur.** This species is unlikely to occur in the study area due to a lack of marsh and riparian habitat. There are four documented occurrences in Yolo County.
Purple martin *Progne subis* (nesting)	_	SSC	Nests in tree cavities, bridges, freeway overpasses, utility poles, lava tubes, and buildings. Forages in foothill and low montane oak and riparian woodlands; less frequently in coniferous forests and open or developed habitats.	**Unlikely to occur.** This species could potentially nest under the CR 25A overpass within the Caltrans off-site improvement area. However, the only known breeding colony in the region is in the City of Sacramento where they nest in weep holes in a hollow-box bridge over Interstate (I-)5.
Tricolored Blackbird* *Agelaius tricolor* (nesting)	_	C	Forages in agricultural lands and grasslands; nests in marshes, riparian scrub, and other areas that support cattails or dense thickets of shrubs or herbs.	**Unlikely to nest.** There is no suitable breeding habitat in the study area or within 1,300 feet of the study area but could forage in the study area. A large, active nesting colony is documented southeast of the study area on the north side of Willow Slough, approximately 2 miles from the Specific Plan Area. There are 23 CNDDB occurrence records of this species in Yolo County.
Burrowing owl* *Athene cunicularia* (year-round)	_	SSC	Nests and forages in grasslands, agricultural lands, open shrublands, and open woodlands with existing ground squirrel burrows or friable soils.	**Could occur.** Suitable burrow habitat is present in the slopes of a ditch adjacent to the north boundary of the WRTP Specific Plan Area and west boundary of the Caltrans off-site improvement area, along the fenceline of the cultivated field in the southwest portion of the Plan Area, and in the southeast and southwest traffic medians in Caltrans off-site improvement area. There is one occurrence documented approximately 2.5 miles southeast of the study area. There have been 39 CNDDB occurrences of this species documented in Yolo County.

Species	Listing Status – Fed.[1]	Listing Status – State[2]	Habitat	Potential for Occurrence in the WRTP Specific Plan Area and Off-site Improvement Areas
Mammals Pallid bat *Antrozous pallidus*	_	SSC	Deserts, grasslands, shrublands, woodlands, and forests. Most common in open, dry habitats with rocky areas for roosting. Roosts in rock crevices, oak hollows, bridges, or buildings.	**Could occur.** This species could roost in man-made structures in the study area. There is one CNDDB record of this species in the WRTP Specific Plan Area from 1957.
Western red bat *Lasiurus blossevilli*	_	SSC	Roosts primarily in dense tree foliage, especially in cottonwood, sycamore, and other riparian trees or orchards (Pierson et al. 2006). Prefers habitat edges and mosaics with trees that are protected from above and open below and open areas for foraging, including grasslands, shrublands, and open woodlands.	**Could occur.** This species may roost in orchard habitat in the study area. The only recent record of this species in the area is a 1999 record from the Sacramento River near Knights Landing.

Notes:

[1] Federal:
T = Listed as threatened under ESA
E = Listed as endangered under ESA

[2] State:
T = Listed as threatened under CESA
E = Listed as endangered under CESA
C = Candidate for listing under CESA
F = Fully Protected under California Fish and Game Code
SSC = Considered a species of special concern by CDFW

* Species designated as Covered Species by the Yolo Habitat Conservation Plan/Natural Community Conservation Plan (Yolo Habitat Conservancy 2018).

** Because the distribution and abundance of individual bird species varies seasonally, the season, or life phase, during which the species is of conservation concern in California is provided in parentheses beneath the bird species scientific name. There is potential for any of these bird species to fly over or pass through the WRTP Specific Plan Area, however, these species would not be at risk of adverse effects unless nesting on or otherwise residing in the WRTP Specific Plan Area during the season or life phase when the species is of conservation concern in California.

Source: CNDDB 2017, USFWS 2017a,b; Vaghti, et al. 2009; Smith, et al. 2011; Pierson, et al. 2006; compiled by AECOM in 2017.

SENSITIVE HABITATS

Sensitive habitats include those that are of special concern to the resource agencies or that are specifically evaluated under CEQA, Section 1602 of the California Fish and Game Code, Section 404 of the Clean Water Act, or the State's Porter-Cologne Water Quality Control Act. Sensitive habitats may be of special concern because of their locally or regionally declining status, or because they provide important habitat to common and special-status species.

The study area does not have natural wetland features or sensitive natural communities. Farmer's Central Ditch occurs immediately adjacent to the northern boundary of the WRTP Specific Plan Area and the western portion of the Caltrans off-site improvement area. The reconnaissance surveys also identified several other agricultural and roadside ditches within the study area (Exhibit 3.4-1). These ditches do not provide suitable aquatic habitat for special-status species because they lack vegetation, contain dense upland vegetation, only convey water during precipitation events, are subject to frequent disturbance, or otherwise lack specific characteristics that provide high quality aquatic habitat. One of these ditches is an approximately 10-foot wide isolated ditch on the eastern boundary of the WRTP Specific Plan Area, adjacent to Harry Lorenzo Avenue, and is heavily vegetated with weeds. At the time of the surveys, this ditch was dry. The irrigation ditches within the study area contain little to no vegetation, have steep sides, and are, on average, four feet wide. The roadside ditches within the study area are V-ditches, and generally contain minimal vegetation. These ditches average two feet wide.

3.4.3 REGULATORY FRAMEWORK

FEDERAL

Endangered Species Act, 16 U.S.C. Section 1531 et seq

Pursuant to the ESA (16 United States Code [U.S.C.] Section 1531 et seq.), U.S. Fish and Wildlife Service (USFWS) has regulatory authority over species listed or proposed for listing as endangered or threatened. USFWS and the National Marine Fisheries Service have authority over projects that may result in take of a species listed as threatened or endangered under ESA (i.e., a federally listed species). In general, persons subject to ESA (including private parties) are prohibited from "taking" endangered or threatened fish and wildlife species on private property, and from "taking" endangered or threatened plants in areas under federal jurisdiction or in violation of state law.

Under Section 9 of the ESA, the definition of "take" is to "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." USFWS has also interpreted the definition of "harm" to include significant habitat modification that could result in take.

The take prohibition of ESA Section 9 applies only to listed species of fish and wildlife. Section 9(a)(2)(B) describes federal protection for endangered plants. In general, ESA does not protect listed plants located on nonfederal land (i.e., areas not under federal jurisdiction), unless such species are already protected by state law.

Section 7 of the ESA outlines procedures for federal interagency cooperation to protect and conserve federally listed species. Section 7(a)(2) requires federal agencies to consult with USFWS to ensure that they are not undertaking, funding, permitting, or authorizing actions likely to jeopardize the continued existence of listed species or destroying or adversely modifying designated critical habitat.

For projects where federal action is not involved and take of a listed species may occur, a project proponent may seek an incidental take permit under section 10(a) of the ESA. Section 10(a) of ESA allows USFWS to permit the incidental take of listed species if such take is accompanied by a habitat conservation plan that ensures minimization and mitigation of impacts associated with the take.

Clean Water Act, 33 U.S.C. Section1251 et seq.

Section 404 Permit Program

Section 404 of the Federal Clean Water Act (CWA) requires a project applicant to obtain a permit from the U.S. Army Corps of Engineers (USACE) before engaging in any activity that involves any discharge of dredged or fill material into waters of the United States, including wetlands. Fill material is material placed in waters of the United States where the material has the effect of replacing any portion of a water of the United States with dry land, or changing the bottom elevation of any portion of a water of the United States. Waters of the United States include navigable waters of the United States; interstate waters; all other waters where the use, degradation, or destruction of the waters could affect interstate or foreign commerce; tributaries to any of these waters, and wetlands adjacent to these waters. Wetlands are defined as those areas that are inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Potentially jurisdictional wetlands must meet three wetland delineation criteria: hydrophytic vegetation, hydric soil types, and wetland hydrology. Wetlands that meet the delineation criteria may be jurisdictional under Section 404 of CWA pending USACE and U.S. Environmental Protection Agency (EPA) review.

As part of the review of a project, USACE must ensure compliance with applicable federal laws, including EPA's Section 404(b)(1) Guidelines. USACE regulations require that impacts to waters of the United States are avoided and minimized to the maximum extent practicable, and that unavoidable impacts are compensated (33 Code of Federal Regulations [CFR] 320.4[r]).

In 2008, USACE and EPA issued regulations governing compensatory mitigation for activities authorized by permits issued by USACE (33 CFR 332). The rule establishes a preference for the use of mitigation banks because they provide established wetland habitats that have already met success criteria thereby reducing some of the risks and uncertainties associated with compensatory mitigation involving creation of new wetlands that cannot yet demonstrate functionality at the time of project implementation. The rule also establishes a preference for providing compensatory mitigation within the affected watershed. Ideally, compensatory mitigation would take place at a mitigation bank within the same watershed as the waters to be replaced. If mitigation banks are not available within the affected watershed, then compensatory mitigation involving creation or restoration within the affected watershed may be preferable to using a mitigation bank outside the affected watershed.

Section 401 Water Quality Certification

Under Section 401 of the CWA, an applicant for a Section 404 permit must obtain a certificate from the appropriate state agency stating that the intended dredging or filling activity is consistent with the state's water quality standards and criteria. In California, the authority to grant water quality certification is delegated by the State Water Resources Control Board to the nine Regional Water Quality Control Boards (RWQCBs).

Migratory Bird Treaty Act, 16 U.S.C. Section 703, et seq.

The Migratory Bird Treaty Act (MBTA) (16 U.S.C. Section 703, et seq.), first enacted in 1918, provides for protection of international migratory birds and authorizes the Secretary of the Interior to regulate the taking of migratory birds. The MBTA provides that it shall be unlawful, except as permitted by regulations, to pursue, take, or kill any migratory bird, or any part, nest, or egg of any such bird. This prohibition includes both direct and indirect acts, although harassment and habitat modification are not included unless they result in direct loss of birds,

nests, or eggs. The current list of species protected by the MBTA can be found in Title 50 of the CFR, Section 10.13 (50 CFR 10.13). The list includes nearly all birds native to the United States.

STATE

California Endangered Species Act, California Fish and Game Code Section 2050, *et seq.*

California Endangered Species Act (CESA) directs state agencies not to approve projects that would jeopardize the continued existence of an endangered or threatened species or result in the destruction or adverse modification of habitat essential to the continued existence of a species. Furthermore, CESA states that reasonable and prudent alternatives shall be developed by the California Department of Fish and Wildlife (CDFW), together with the project proponent and any state lead agency, consistent with conserving the species, while at the same time maintaining the project purpose to the greatest extent possible. Under CESA, project-related impacts of the authorized take must be minimized and fully mitigated, and adequate funding to implement those mitigation measures and monitor compliance with and the effectiveness of the measures must be ensured. Standard CESA issuance requirements can include land acquisition, permanent protection and management, and/or funding in perpetuity of compensatory lands.

A "take" of a species, under CESA, is defined as an activity that would directly or indirectly kill an individual of a species. The CESA definition of take does not include "harm" or "harass" as is included in the federal act. As a result, the threshold for a take under CESA may be higher than under ESA because habitat modification is not necessarily considered take under CESA. The take of State-listed species incidental to otherwise lawful activities requires a permit, pursuant to Section 2081(b) of CESA. The State has the authority to issue an incidental take permit under California Fish and Game Code Section 2081, or to coordinate with USFWS during the Section 10(a) process to make the federal permit consistent with CESA.

As under federal law, listed plants have considerably less protection than fish and wildlife under California State law. The California Native Plant Protection Act (California Fish and Game Code Section 19000 et seq.) allows landowners to take listed plant species from, among other places, a canal, lateral ditch, building site, or road, or other right-of-way, provided that the owner first notifies CDFW and gives the agency at least 10 days to come and retrieve (and presumably replant) the plants before they are plowed under or otherwise destroyed.

Porter-Cologne Water Quality Control Act, California Water Code Section 13000, *et seq.*

The Porter-Cologne Act (California Water Code Section 13000, *et seq.*) requires that each of the state's nine RWQCBs prepare and periodically update basin plans for water quality control. Each basin plan sets forth water quality standards for surface water and groundwater and actions to control nonpoint and point sources of pollution to achieve and maintain these standards. Basin plans offer an opportunity to protect wetlands through the establishment of water quality objectives. The RWQCB's jurisdiction includes federally protected waters, as well as areas that meet the definition of "waters of the state." Waters of the state is defined as any surface water or groundwater, including saline waters, within the boundaries of the state. The RWQCB has the discretion to take jurisdiction over areas not federally regulated under Section 401 provided they meet the definition of waters of the state. Mitigation requiring no net loss of wetlands functions and values of waters of the state is typically required by the RWQCB.

Fully Protected Species, California Fish and Game Code Sections 3511, 4700, 5050, and 5515

Four sections of the California Fish and Game Code (Fish and Game Code Sections 3511, 4700, 5050, and 5515) list 37 fully protected species. These statutes prohibit take or possession at any time of fully protected species. CDFW is unable to authorize incidental take of fully protected species when activities are proposed in areas inhabited by those species. CDFW has informed nonfederal agencies and private parties that they must avoid take of any fully protected species in carrying out projects.

Protection of Bird Nests and Raptors, California Fish and Game Code Section 3503

Section 3503 of the Fish and Game Code states that it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird. Section 3503.5 of the California Fish and Game Code states that it is unlawful to take, possess, or destroy any raptors (i.e., species in the orders Falconiformes and Strigiformes), including their nests or eggs. Typical violations include destruction of active nests as a result of tree removal and failure of nesting attempts, resulting in loss of eggs and/or young. These violations can be caused by disturbance of nesting pairs by nearby human activity.

REGIONAL

Yolo Habitat Conservation Plan/Natural Community Conservation Plan

The WRTP Specific Plan Area is within the Yolo HCP/NCCP coverage area, which encompasses the whole of Yolo County. The Yolo HCP/NCCP was adopted in 2018, and incidental take permits were issued in 2019 (CDFW 2019). The Yolo HCP/NCCP is an HCP under the ESA and a NCCP under the California Natural Community Conservation Act. The 12 species covered under the plan are species that have potential to occur in the plan area that are currently listed as threatened or endangered under ESA or CESA, or that have potential to become listed during the 50-year life of the Plan. The Yolo HCP/NCCP allows Yolo County, the Yolo Habitat Conservancy (formerly the Yolo HCP/NCCP Joint Powers Authority), and the cities of Woodland, Davis, Winters, and West Sacramento to receive incidental take permits under the ESA and CESA for activities and projects they conduct and those under their jurisdiction. The Yolo HCP/NCCP provides a framework to improve conservation of natural resources, including endangered species habitat, while streamlining the permitting process for planned development, infrastructure, and maintenance activities by replacing the individual project system of permitting and mitigation with a countywide mitigation and conservation program that comprehensively coordinates the implementation of permit requirements. This approach benefits natural resources and project proponents by addressing project effects and mitigation requirements comprehensively in a way that is more efficient and effective for sensitive species and their essential habitats and creating habitat reserves that will be larger in scale, more ecologically valuable, and easier to manage than individual mitigation sites created under the current approach.

LOCAL

City of Woodland 2035 General Plan

The City's General Plan was adopted in May 2017 and includes goals, policies, and implementation programs to protect environmental resources – water, air, vegetation, wildlife, and open space – that contribute to the city's economy and are important elements in the quality of life of Woodland's residents. Key mitigating policies include:

- **7.A.4. Best Management Practices**. Continue to require the use of feasible and practical best management practices (BMPs) and promote Low Impact Development to protect receiving waters from the adverse effects of construction activities and urban and agricultural runoff.

- **7.B.1. Habitat Conservation Plan/Natural Community Conservation Plan**. Continue to participate in the planning process for the countywide Habitat Conservation Plan/Natural Community Conservation Plan. Once adopted, fully implement the Plan to mitigate the impacts of growth projected under the General Plan on plant and wildlife habitats in the Woodland area. Evaluate the opportunity for adoption and implementation of a Local Conservation Plan to provide additional clearance under the California Environmental Quality Act (CEQA) for general biological resource impacts.

- **7.B.2. Sensitive Habitat Types**. Support and cooperate with efforts of other local, State, and Federal agencies and private entities engaged in the preservation and protection of sensitive habitat types from incompatible land uses and development. Sensitive habitat types include alkali sink, freshwater wetlands, freshwater marsh, riparian forest, drainages, riverine habitat, and lakes.

- **7.B.3. Special-Status Species.** Support preservation of the habitats of Federally- or State-listed rare, threatened, endangered, and/or other special status species. Encourage Federal and State agencies, as well as other resource conservation organizations, to acquire and manage endangered species' habitats.

- **7.B.4. Fish and Wildlife.** Support the management efforts of the California Department of Fish and Wildlife to maintain and enhance the productivity of important wildlife species by protecting identified critical habitat for these species from incompatible suburban, rural residential, or recreational development.

- **7.B.8. Native and Compatible Non-Native Plant Species**. Require developers to use native and compatible non-native species, especially drought-resistant species, to the extent possible in order to preserve the visual integrity of the landscape, provide benefits for native wildlife, and ensure that a variety of plants suited to the region are maintained.

- **7.B.9. Tree Canopy.** Manage, enhance, and improve the city's tree canopy as a valuable ecological resource.

- **7.B.11. Sensitive Site Planning**. Site new development to maximize the protection of native tree species and special-status plant and wildlife habitats.

City of Woodland Tree Ordinance, Woodland Municipal Code Chapter 12.48

The City of Woodland Tree Ordinance (Woodland Municipal Code Chapter 12.48) governs the planting, removal, and preservation of the following trees on public property and specified private property within the City:

- heritage trees, which are defined as any valley oak tree with a diameter at breast height (DBH) of 30 inches or greater that is of good quality in terms of its health, vigor, growth, and conformity to generally accepted horticultural standards of shape for its species;

- specimen trees, which is any tree of interest because of its size or unusual species, other than a heritage tree, that is of good quality in terms of health, vigor, growth, and conformity to generally accepted horticultural standards of shape for its species, as designated by the City Council upon recommendation of the tree commission;

- landmark trees, which are defined as a tree or stand of trees of historical or public significance as designated by the City Council upon recommendation of both the tree commission and the historical preservation commission; and

- street trees, which are defined as any tree growing in the tree maintenance strip (strip of land parallel to a public street and adjacent thereto), whether or not planted by the City.

The City Tree Ordinance makes it unlawful to move, remove, top, cut down, poison, set fire to or permit fire to burn in proximity to, or perform any act that results in the unnatural death or destruction of a street tree; perform any activity that will interfere with or retard the natural growth of any street tree; perform any work or permit any work to be performed within the drip line of a street tree that would endanger the tree; or perform major maintenance on a street tree without a tree permit from the director of public works.

The City Tree Ordinance also requires that applications for development projects be accompanied by a tree plan containing the following information:

- the location, size, species, and condition of all existing trees on the project site;

- identification of trees proposed to be removed and those proposed to be preserved and the reason for any proposed tree removal;

- a program for the preservation of street trees, heritage, specimen, landmark trees, and trees with aesthetic value (i.e., trees with a 9-inch diameter or larger measured at 44 inches above the ground, in healthy condition) during and after completion of the project, as required in the City standard specifications, engineering design standards, Section 8, grading and erosion control;

- a program for the replacement of any trees proposed to be removed, as required by Section 12-48-100; and

- any change in the trees to be removed and/or saved as designated on the approved development plan shall only be permitted upon the written approval of the director (Ordinance No. 1230, Section 4 [part]; Ordinance No. 1300, Section 4 [part]).

3.4.4 Environmental Impacts and Mitigation Measures

The 2035 General Plan and CAP EIR addresses impacts of development of the City's Planning Area, including the entire WRTP Specific Plan Area. Consistent with Section 15183(b) of the CEQA Guidelines, the following analysis focuses on project-specific significant effects of the WRTP Specific Plan that: a) are peculiar to the WRTP Specific Plan or the site; b) were not addressed in the 2035 General Plan and CAP EIR (including off-site or cumulative impacts); or c) would be more severe than previously described based on substantial new information.

Potential impacts on biological resources resulting from implementation of the proposed WRTP Specific Plan were determined by mapping and quantifying common and sensitive habitats and by evaluating potential effects to common and special-status species that could result from loss of these habitats and from other potential direct and indirect effects. It is conservatively assumed for purposes of this analysis that all existing vegetation, including mature trees at the existing residence, could be removed as a result of the project and that all existing habitat functions would be lost.

THRESHOLDS OF SIGNIFICANCE

CEQA Guidelines Section 15065(a)(1) states that a lead agency shall find that a project may have a significant effect on the environment where there is substantial evidence that the project has the potential to (1) substantially reduce the habitat of a fish or wildlife species; (2) cause a fish or wildlife population to drop below self-sustaining levels; or (3) substantially reduce the number or restrict the range of an endangered, rare, or threatened species. This section (Biological Resources) of the EIR fully addresses any impacts that might relate to the reduction of the fish or wildlife habitat, the reduction of fish or wildlife populations, and the reduction or restriction of the range of special-status species as a result of project implementation. The thresholds for determining the significance of impacts for this analysis are based on the environmental checklist in Appendix G of the CEQA Guidelines, as amended. The proposed WRTP Specific Plan and off-site improvement areas would result in a significant impact related to biological resources if they would do any of the following:

1. have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by CDFW or USFWS;

2. have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by CDFW or USFWS;

3. have a substantial adverse effect on State or federally protected wetlands (including but not limited to marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;

4. interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;

5. conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; or

6. conflict with the provisions of an adopted HCP, natural community conservation plan, or other approved local, regional, or state HCP.

ANALYSIS METHODOLOGY

The WRTP Specific Plan has the potential to adversely affect common and sensitive biological resources. Construction required to implement the WRTP Specific Plan would result in ground-disturbing activities that could degrade and remove wildlife habitat, result in impacts on aquatic resources from direct removal and/or sediment runoff, and result in auditory disturbance to wildlife. Once built out, the WRTP Specific Plan could result in impacts on common and special-status birds and bats that are ongoing.

Potential impacts of the proposed WRTP Specific Plan on biological resources were determined by:

- results of reconnaissance-level site surveys conducted by an AECOM biologist on August 31, 2017 and November 8, 2019 for the WRTP Specific Plan Area and off-site improvement areas, respectively;

- overlaying the proposed project footprint, including permanent and temporary disturbance areas within the Caltrans off-site improvement area and proposed South Regional Pond, with maps of biological resources in the study area in geographic information system (GIS);
- determining impact acreages on the ground by habitat type through GIS calculations;
- distinguishing between direct impacts (e.g., construction of residential and commercial lots, roads, and other facilities) and indirect impacts (impacts resulting from habitat disturbance and introduction of human activities during construction and following buildout);
- distinguishing between permanent impacts (built environment) and temporary impacts (during construction) for the Caltrans off-site improvement area; and
- where applicable, applying species-specific protocols to assess impacts.

Details on the nature of the analysis and impact determination for each species are provided in the section below for each specific impact topic. Tables 3.4-5, 3.4-6, and 3.4-7 provide an overview of impacts by wildlife habitat type for the WRTP Specific Plan Area/South Regional Pond Off-site Improvement Area, the Caltrans Off-site Improvement Area Alternative 1, and the Caltrans Off-site Improvement Area Alternative 2, respectively. Habitat types mapped in the study area are cross-walked to Yolo HCP/NCCP land cover types that most closely resemble the vegetation types present. In several cases, the habitat type includes more than one HCP/NCCP land cover type. For example, various crops are rotated in the agricultural fields resulting in different land cover types in different years. As a result, all non-orchard lands were classified as cultivated lands, defined as the Cultivated Lands Seminatural Community under the Yolo HCP/NCCP (Yolo Habitat Conservancy 2018), rather than broken out by crop type.

The WRTP Specific Plan's potential primary direct impacts on biological resources include habitat loss, habitat fragmentation, disturbance, and injury and mortality of common and special-status species. Loss of habitat would result from construction of all components, including residential, commercial, industrial, and transportation infrastructure. Permanent habitat loss would occur in the permanent footprint of project infrastructure within the WRTP Specific Plan Area and off-site improvement areas, while temporary habitat loss would occur during construction and while habitats are restored and returned to their preconstruction condition within the Caltrans off-site improvement area (CalTrans 2013). Disturbance to wildlife could occur temporarily during construction if activities create visual or audible disturbances that would affect wildlife behavior in a way that would reduce their ability to forage, reproduce, and/or move through the area. Ongoing impacts on wildlife following buildout could also occur as a result of increased human presence and activities in the area, including visual and noise disturbance, as well as direct impacts related to traffic collisions and interactions with humans and pets.

Table 3.4-5. Wildlife Habitat Types Mapped within the WRTP Specific Plan Area/South Drainage Pond Off-site Improvement Area, by Disturbance Type

Land Cover Type	Cross-Walk to Yolo HCP/NCCP Land Cover Type (Vegetation Detail) *	Disturbance Type in Acres		Total Acreage
Cultivated Lands	Alfalfa, Field Crops (Corn, Sunflowers), Truck/Berry Crops (Tomatoes), and Grain/Hay Crops	Residential[1]	147	**306**
		Commercial[2]	39	
		Research Technology Park[3]	49	
		Mixed Use[4]	19	
		Public/Quasi-Public[5]	3	
		Open Space	15	
		Roads	34	
Developed	Developed (Urban, Vegetated Corridor) and Barren (Anthropogenic)	Residential	2	8
		Commercial	1	
		Research Technology Park	0	
		Mixed Use	1	
		Public/Quasi-Public	0	
		Open Space	0	
		Road Right-of-Way (ROW)	5	
Orchard	Deciduous Fruits/Nuts (Almonds)	Residential	0	37
		Commercial	27	
		Research Technology Park	0	
		Mixed Use	0	
		Public/Quasi-Public	5	
		Open Space	0	
		Road ROW	5	
Ruderal	Developed (Urban Ruderal) and Semiagricultural/Incidental to Agriculture	Residential	0	3
		Commercial	0	
		Research Technology Park	0	
		Mixed Use	0	
		Public/Quasi-Public	1	
		Open Space	2	
		Road ROW	0	
LAND COVER TYPE	**TOTAL[6]**	Residential	149	355
		Commercial	68	
		Research Technology Park	49	
		Mixed Use	19	
		Public/Quasi-Public	9	
		Open Space	18	
		Road ROW	43	

* Based on the land cover classification system provided in the Yolo Habitat Conservation Plan/Natural Community Conservation Plan (Yolo Habitat Conservancy 2018).

1 Residential includes low-, medium-, and high-density residential.

2 Commercial includes highway commercial, RTP/RFO, RTP/CCO, RTP, TO, and pedestrian promenade.

3 Research Technology Park Industrial RTP-only designations.

4 Mixed Use includes HDR/CCO and VCMU.

5 Public/Quasi Public includes detention pond and South Regional Pond.

6 Total acreage varies slightly from totals presented in Table 2-1, primarily due to rounding; this does not substantively change the analysis herein.

Sources: AECOM 2019; Yolo Habitat Conservancy 2018

Table 3.4-6. Wildlife Habitat Types Mapped within the Caltrans Off-site Improvement Area Alternative 1, by Disturbance Type

Habitat Type	Cross-Walk to Yolo HCP/NCCP Land Cover Type (Vegetation Detail) *	Disturbance Type in Acres		Total Acreage
Cultivated Fields	Field Crops (Corn, Sunflowers)	Temporary	1.0	4.1
		Permanent	3.1	
Developed	Developed (Urban) and Barren (Anthropogenic)	Temporary	0.5	8.9
		Permanent	8.4	
Orchard	Deciduous Fruits/Nuts (Almonds)	Temporary	0.0	0.3
		Permanent	0.3	
Ruderal	Developed (Urban Ruderal) and Semiagricultural/Incidental to Agriculture	Temporary	4.4	19.3
		Permanent	14.9	
Oak Tree Stands	Developed (Vegetated Corridor)	Temporary	1.5	3.9
		Permanent	2.4	
Vineyard	Vineyards	Temporary	0.1	0.2
		Permanent	0.1	
Non-Oak Tree Stands	Developed (Vegetated Corridor)	Temporary	0.1	0.6
		Permanent	0.5	
HABITAT TYPE	**TOTAL**	Temporary	**7.7**	**37.4**
		Permanent	**29.7**	

* Based on the land cover classification system provided in the Yolo Habitat Conservation Plan/Natural Community Conservation Plan (Yolo Habitat Conservancy 2018).

Sources: AECOM 2019; Yolo Habitat Conservancy 2018

Table 3.4-7. Wildlife Habitat Types Mapped within the Caltrans Off-site Improvement Area Alternative 2, by Disturbance Type

Habitat Type	Cross-Walk to Yolo HCP/NCCP Land Cover Type (Vegetation Detail) *	Disturbance Type in Acres		Total Acreage
Cultivated Fields	Field Crops (Corn, Sunflowers)	Temporary	0.3	1.1
		Permanent	0.8	
Developed	Developed (Urban) and Barren (Anthropogenic)	Temporary	0.2	6.9
		Permanent	6.7	
Orchard	Deciduous Fruits/Nuts (Almonds)	Temporary	0.00	0.2
		Permanent	0.2	
Ruderal	Developed (Urban Ruderal) and Semiagricultural/Incidental to Agriculture	Temporary	3.0	12.4
		Permanent	9.4	
Oak Tree Stands	Developed (Vegetated Corridor)	Temporary	2.4	2.8
		Permanent	0.4	
Vineyard	Vineyards	Temporary	0.01	0.1
		Permanent	0.1	
Non-Oak Tree Stands	Developed (Vegetated Corridor)	Temporary	0.2	0.6
		Permanent	0.4	
HABITAT TYPE	**TOTAL**	Temporary	**6.1**	**24.1**
		Permanent	**18.0**	

* Based on the land cover classification system provided in the Yolo Habitat Conservation Plan/Natural Community Conservation Plan (Yolo Habitat Conservancy 2018).

Sources: AECOM 2019; Yolo Habitat Conservancy 2018

Consistency with the Yolo Habitat Conservation Plan/Natural Community Conservation Plan

According to the Yolo HCP/NCCP Handbook Permitting Guide, the HCP/NCCP defines two types of planning-level surveys: (1) surveys conducted to assess land cover types and covered species habitat, and (2) surveys to determine the presence/absence of covered species through species-specific protocol surveys (Yolo Habitat Conservancy 2019). Biological surveys conducted to support this EIR assessed land cover types and covered species habitat within the WRTP Specific Plan Area and off-site improvement areas, conforming to the first type of planning-level survey listed above. Results of these surveys are provided in Section 3.4.1 of this document and are intended to provide information about land cover types and covered species habitat on site in order to help determine fees, identify the need for species surveys, develop appropriate mitigation measures, and track loss of natural communities and covered species habitat as a result of buildout of the WRTP Specific Plan. Each project proposed as a part of the WRTP Specific Plan may use this EIR to satisfy planning-level survey requirements provided that the appropriate information, as listed in Table 6-2 of the Permitting Guide, is included herein and the information is still valid at the time of applications (i.e., conditions have not changed to the extent that the information is no longer accurate). No protocol-level species-specific surveys have been conducted for the WRTP Specific Plan Area. Therefore, each project will be required to carry out species-specific preconstruction surveys in accordance with the mitigation measures provided in the sections below.

Impacts Not Discussed Further

The following discussion summarizes the impacts of the WRTP Specific Plan that are not discussed further in this document because either, a) there is no impact, or b) none of the factors triggering additional environmental review (as found in Section 15183(b)) exist because an impact was identified as not peculiar to the project were either addressed as a part of the 2035 General Plan and CAP EIR and/or are substantially mitigated by uniformly applied development standards (CEQA Guidelines Section 15183[f][7]). Uniformly applied development standards include the 2035 General Plan, the CAP, existing City regulations and standards, design review requirements, and impact fee programs.

Substantial adverse effects on special-status plant species (Significance Threshold 1) — The WRTP Specific Plan Area and off-site improvement areas do not provide habitat for special-status plant species. Because the WRTP Specific Plan and off-site improvements would not affect special-status plants, this issue is not discussed further.

Substantial adverse effects on riparian habitat, or other sensitive natural community (Significance Threshold 2) — The WRTP Specific Plan Area and off-site improvement areas do not contain any riparian habitat or other sensitive natural communities (alkali prairie habitat) identified in the 2035 General Plan and CAP EIR or other local or regional plans. Because the WRTP Specific Plan and off-site improvements would not affect sensitive habitats, this issue is not discussed further.

Project Impacts and Mitigation Measures

Since the adoption of the 2035 General Plan and CAP EIR, the Yolo HCP/NCCP was adopted in 2018, and incidental take permits were issued in 2019 (CDFW 2019). Because the WRTP Specific Plan Area is within the Yolo HCP/NCCP coverage area, each project within the WRTP Specific Plan Area and Off-site Improvement Areas must apply for HCP/NCCP coverage prior to grading permit issuance. Developers for each individual project within the WRTP Specific Plan Area are responsible for applying for the HCP/NCCP coverage and payment of relevant fees. Each project proponent will be required to carry out species-specific preconstruction surveys in accordance

with the mitigation measures provided in the sections below. Mitigation measures for Covered Species will rely on the HCP/NCCP, with all relevant avoidance and minimization measures (AMMs) from the HCP/NCCP incorporated into the mitigation measures described in the sections below. Special-status species covered by the Yolo HCP/NCCP and that are potentially impacted by the proposed WRTP Specific Plan include the Swainson's hawk, white-tailed kite, burrowing owl, tricolored blackbird, and valley elderberry longhorn beetle.

Impacts on Special-Status Species

Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by CDFW or USFWS. (Significance Threshold 1)

IMPACT 3.4-1 **Swainson's Hawk, White-tailed Kite, and Burrowing Owl.** *WRTP Specific Plan implementation would result in loss of suitable nesting and foraging habitat for Swainson's hawk, white-tailed kite, and burrowing owl. Construction could disturb active nests on or near the construction area, potentially resulting in nest abandonment by the adults and mortality of chicks and eggs. This impact is considered* ***potentially significant****.*

Implementing the WRTP Specific Plan and off-site improvement areas would result in removal of up to approximately 310 acres of cultivated land under Caltrans Off-site Improvement Area Alternative 1 (i.e., 306 acres from the WRTP Specific Plan Area, plus up to 4.1 acres of impact related to the Caltrans Off-site Improvement Area Alternative 1), or up to 307 acres under Caltrans Off-site Improvement Area Alternative 2 (i.e., 306 acres from the WRTP Specific Plan Area, plus up to 1.1 acre of impact related to the Caltrans Off-site Improvement Area Alternative 2) that may provide suitable foraging habitat for Swainson's hawk, white-tailed kite, and burrowing ow, which are covered under the Yolo HCP/NCCP. This habitat type is classified under the Cultivated Lands Seminatural Community under the Yolo HCP/NCCP, and includes lands that are cultivated for alfalfa, field crops, truck/berry crops, and grain/hay crops. Trees that provide potential nest sites for Swainson's hawk, white-tailed kite, and other raptors (discussed under Impact 3.4-2) would also be removed. All raptors and their nests are protected under Section 3503.5 of the California Fish and Game Code. Common raptors that could nest on or near the WRTP Specific Plan Area include red-tailed hawk, great horned owl, and barn owl. Impacts to and mitigation measures for common raptors are provided under Impact 3.4-2.

No burrowing owl were observed during the reconnaissance visits; however, ground squirrel burrows were observed along the southern slope of the Farmers Central Ditch near the western boundary of the Caltrans off-site improvement area, and under valley oak trees in the traffic median immediately southeast of the CR 25A overpass. Burrowing owl could also use a debris pile observed in the vicinity of a warehouse within the WRTP Specific Plan Area, and a pile of broken concrete in the southwest traffic median in the Caltrans off-site improvement area, as nesting and cover habitat. Furthermore, small mammal burrows (gopher/vole sized) were found in friable soils along the slopes of a ditch immediately adjacent to, but outside of the WRTP Specific Plan Area, within the dry roadside ditches along CR 25A and along the interior slopes of the SR 113/CR 25A traffic medians that could be used by burrowing owls in the future.

Burrowing owls need burrows at all times to survive, and displacing individuals from their burrows can result in indirect impacts such as predation, increased energetic costs, increased stress, and risks associated with having to find and compete for burrows, all of which can lead to take or reduced reproduction.

Vegetation removal, grading, and other construction activities could result in mortality of burrowing owl individuals and nest abandonment. If trees are to be removed during the breeding season for Swainson's hawk and white-tailed kite, mortality of eggs and chicks could result if an active nest were present. In addition, project construction could disturb active nests near the construction area, potentially resulting in nest abandonment by the adults and mortality of chicks and eggs. Swainson's hawks generally nest within two miles of suitable foraging habitat, which consists of alfalfa, disked fields, fallow fields, dry-land pasture, beets, tomatoes, irrigated pasture, grains, other row crops, and uncultivated grasslands (Estep 1989, Estep pers. comm. 2007, Estep 2009). The most important foraging habitat lies within a one-mile radius of each nest (City of Sacramento et. al 2003: Appendix H, page 5-29). However, Swainson's hawks have been recorded foraging up to 18.6 miles from nest sites (Estep 1989) and foraging habitat within 10 miles of an active nest is generally considered to be important to supporting the reproductive success of that pair. According to the Yolo HCP/NCCP, the WRTP Specific Plan Area is within modeled agricultural foraging and nesting habitat for Swainson's hawk, and secondary foraging habitat for white-tailed kite (Yolo Habitat Conservancy 2018).

There are 17 nesting Swainson's hawk records within 2 miles of the study area. There is one occurrence of an active nest (within the last 5 years) within 1 mile of the WRTP Specific Plan Area. The loss of up to 307 to 310 acres (the greater of which is due to Caltrans Off-site Improvement Area Alternative 1 resulting in 4.1 acres of impact as opposed to Alternative 2 resulting in 1.1 acres of impact) of foraging habitat (i.e., cultivated fields) from the WRTP Specific Plan Area and off-site improvement areas could affect nesting success, survival rates, and availability of prey for the local population, or result in displacement of nesting pairs of Swainson's hawk or white-tailed kite. Therefore, the loss of foraging habitat resulting from development of the WRTP Specific Plan Area is considered a **potentially significant** impact.

Project construction could result in direct destruction of an active Swainson's hawk, white-tailed kite, burrowing owl, or other raptor nest or disturb nesting raptors located on or near the WRTP Specific Plan and off-site improvement areas, resulting in nest abandonment by adult birds and abandonment of chicks and eggs, causing mortality. Direct and indirect impacts on active raptor nests or burrows are considered **potentially significant**. Mitigation for impacts to nesting common raptors is included under Mitigation Measure 3.4-2a (Avoid Direct Loss of Protected Bird Nests).

Mitigation Measure 3.4-1a: Minimize Take and Adverse Effects on Habitat of Swainson's Hawk and White-Tailed Kite

a. In accordance with AMM 16 of the Yolo HCP/NCCP, the City will require project proponent/s to retain a qualified biologist to conduct species-specific surveys and identify any nesting habitat present within 1,320 feet of the footprint of a proposed project prior to any ground disturbing activities necessary to implement proposed development and infrastructure projects. Adjacent parcels under different land ownership will be surveyed only if access is granted or if the parcels are visible from authorized areas.

b. If a construction project cannot avoid potential nest trees (as determined by the qualified biologist) by 1,320 feet, the City will require project proponent/s to retain a qualified biologist to conduct preconstruction surveys for active nests consistent with guidelines provided by the Swainson's Hawk Technical Advisory Committee (2000), between March 1 and August 30, within 15 days prior to the beginning of the construction activity. The results of the survey will be submitted to the

Yolo Habitat Conservancy and CDFW. If active nests are found during preconstruction surveys, a 1,320-foot initial temporary nest disturbance buffer shall be established. If project-related activities within the temporary nest disturbance buffer are determined to be necessary during the nesting season, then the qualified biologist will monitor the nest and will, along with the City, consult with CDFW to determine the best course of action necessary to avoid nest abandonment or take of individuals. Work may be allowed only to proceed within the temporary nest disturbance buffer if Swainson's hawk or white-tailed kite are not exhibiting agitated behavior, such as defensive flights at intruders, getting up from a brooding position, or flying off the nest, and only with the agreement of CDFW. The designated on-site biologist/monitor shall be on-site daily while construction-related activities are taking place within the 1,320-foot buffer and shall have the authority to stop work if raptors are exhibiting agitated behavior. Up to 20 Swainson's hawk nest trees (documented nesting within the last 5 years) may be removed during the permit term, but they must be removed when not occupied by Swainson's hawks.

c. For covered activities that involve pruning or removal of a potential Swainson's hawk or white-tailed kite nest tree, the City will require project proponent/s to conduct preconstruction surveys that are consistent with the guidelines provided by the Swainson's Hawk Technical Advisory Committee (2000). If active nests are found during preconstruction surveys, no tree pruning or removal of the nest tree will occur during the period between March 1 and August 30 within 1,320 feet of an active nest, unless a qualified biologist determines that the young have fledged and the nest is no longer active.

Mitigation Measure 3.4-1b: Comply with Yolo HCP/NCCP Requirements for Compensation for Loss of Swainson's Hawk Foraging Habitat

Before any ground-disturbing activities, the City will require project proponent/s to identify and quantify (in acres) Swainson's hawk habitat (as defined in the Yolo County HCP/NCCP Appendix A, Covered Species Accounts [Yolo HCP/NCCP 2018]) in and within 1,320 feet of a project footprint. The City will require project proponent/s to submit the Yolo HCP/NCCP *Application Form* for non-member agency projects and *Member Agency Reporting Form* for member agency projects, as applicable, and will pay applicable fees to the Yolo Habitat Conservancy as specified in the appropriate form.

Mitigation Measure 3.4-1c: Minimize Take and Adverse Effects on Western Burrowing Owl

Suitable habitat for the western burrowing owl is present within the WRTP Specific Plan Area and the Caltrans off-site improvement area. There is no suitable habitat for burrowing owl in the South Regional Pond off-site improvement area. In accordance with AMM18 of the Yolo HCP/NCCP, the City will require project proponent/s to retain a qualified biologist to conduct species-specific surveys and within 30-days but no less than 14 days prior to any ground disturbing activities necessary to implement proposed development and infrastructure projects, consistent with Appendix L of the Yolo HCP/NCCP, which follows CDFW guidelines.

If burrowing owls are identified during the species-specific pre-project survey, the City will require project proponent/s to minimize activities that will affect occupied habitat, as follows. Occupied habitat is considered fully avoided if the project footprint does not impinge on a non-disturbance buffer around the

suitable burrow. For occupied burrowing owl nest burrows, this non-disturbance buffer could range from 150 to 1,500 feet (Table 4-2 of the Yolo HCP/NCCP, Recommended Restricted Activity Dates and Setback Distances by Level of Disturbance for Burrowing Owls), depending on the time of year and the level of disturbance, based on current guidelines. A copy of this table is provided below as Table 3.4-8.

Table 3.4-8. Recommended Restricted Activity Dates and Setback Distances by Level of Disturbance for Burrowing Owls (Yolo HCP/NCCP 2018)

Time of Year	Level of Disturbance (Feet) from Occupied Burrows –Low	Level of Disturbance (Feet) from Occupied Burrows–Medium	Level of Disturbance (Feet) from Occupied Burrows–High
April 1 – April 15	600	1,500	1,500
August 16 – October 15	600	600	1,500
October 16 – March 31	150	300	1,500

Source: Yolo Habitat Conservancy 2018

The Yolo HCP/NCCP generally defines low, medium, and high levels of disturbances of burrowing owls as follows.

- Low: Typically 71-80 dB, generally characterized by the presence of passenger vehicles, small gas-powered engines (e.g., lawn mowers, small chain saws, portable generators), and high tension power lines. Includes electric hand tools (except circular saws, impact wrenches and similar). Management and enhancement activities would typically fall under this category. Human activity in the immediate vicinity of burrowing owls would also constitute a low level of disturbance, regardless of the noise levels.

- Moderate: Typically 81-90 dB, and would include medium- and large-sized construction equipment, such as backhoes, front end loaders, large pumps and generators, road graders, dozers, dump trucks, drill rigs, and other moderate to large diesel engines. Also includes power saws, large chainsaws, pneumatic drills and impact wrenches, and large gasoline-powered tools. Construction activities would normally fall under this category.

- High: Typically 91-100 dB, and is generally characterized by impacting devices, jackhammers, compression ("jake") brakes on large trucks, and trains. This category includes both vibratory and impact pile drivers (smaller steel or wood piles) such as used to install piles and guard rails, and large pneumatic tools such as chipping machines. It may also include large diesel and gasoline engines, especially if in concert with other impacting devices. Felling of large trees (defined as dominant or subdominant trees in mature forests), truck horns, yarding tower whistles, and muffled or underground explosives are also included. Very few covered activities are expected to fall under this category, but some construction activities may result in this level of disturbance.

In accordance with AMM18 of the Yolo HCP/NCCP, the project proponent may qualify for a reduced buffer size, based on existing vegetation, human development, and land use, if agreed upon by CDFW and USFWS (Yolo Habitat Conservancy 2018).

If the project does not fully avoid direct and indirect effects on nesting sites (i.e., if the project cannot adhere to the buffers described above), the City will require the project proponent/s to retain a qualified biologist

to conduct preconstruction surveys and document the presence or absence of western burrowing owls that could be affected by the covered activity. Prior to any ground disturbance related to covered activities, the qualified biologist will conduct the preconstruction surveys within three days prior to ground disturbance in areas identified in the planning-level surveys carried out in preparation of this EIR as having suitable burrowing owl burrows, consistent with CDFW preconstruction survey guidelines (Appendix L of the Yolo HCP/NCCP, *Take Avoidance Surveys*) (Yolo Habitat Conservancy 2018). The qualified biologist will conduct the preconstruction surveys three days prior to ground disturbance. Time lapses between ground disturbing activities will trigger subsequent surveys prior to ground disturbance. If the biologist finds the site to be occupied[1] by western burrowing owls during the breeding season (February 1 to August 31), the City will require project proponent/s to avoid all nest sites, based on the buffer distances described above, during the remainder of the breeding season or while the nest is occupied by adults or young (occupation includes individuals or family groups that forage on or near the site following fledging). Construction may occur inside of the disturbance buffer during the breeding season if the nest is not disturbed and the project proponent develops an AMM plan that is approved by the Conservancy, CDFW, and USFWS prior to project construction, based on the following criteria:

- The Conservancy, CDFW, and USFWS approves the AMM plan provided by the project proponent.
- A qualified biologist monitors the owls for at least three days prior to construction to determine baseline nesting and foraging behavior (i.e., behavior without construction).
- The same qualified biologist monitors the owls during construction and finds no change in owl nesting and foraging behavior in response to construction activities.
- If the qualified biologist identifies a change in owl nesting and foraging behavior as a result of construction activities, the qualified biologist will have the authority to stop all construction-related activities within the non-disturbance buffers described above. The qualified biologist will report this information to the Conservancy, CDFW, and USFWS within 24 hours, and the Conservancy will require that these activities immediately cease within the non-disturbance buffer. Construction cannot resume within the buffer until the adults and juveniles from the occupied burrows have moved out of the project site, and the Conservancy, CDFW, and USFWS agree. If monitoring indicates that the nest is abandoned prior to the end of nesting season and the burrow is no longer in use by owls, the project proponent may remove the nondisturbance buffer, only with concurrence from CDFW and USFWS. If the burrow cannot be avoided by construction activity, the biologist will excavate and collapse the burrow in accordance with CDFW's 2012 guidelines to prevent reoccupation after receiving approval from the wildlife agencies. If evidence of western burrowing owl is detected outside the breeding season (December 1 to January 31), the City will require the project proponent/s to establish a non-disturbance buffer around occupied burrows, consistent with Table 4-2 of the Yolo HCP/NCCP (Yolo Habitat Conservancy 2018), as determined by a qualified biologist. Construction activities within the disturbance buffer are allowed if the following criteria are met to prevent owls from abandoning important overwintering sites: A qualified biologist monitors the owls for at least three days prior to construction to determine baseline foraging behavior (i.e., behavior without construction). The same

[1] Occupancy of burrowing owl habitat during preconstruction surveys is confirmed at a site when at least one burrowing owl or sign (fresh whitewash, fresh pellets, feathers, or nest ornamentation) is observed at or near a burrow entrance.

qualified biologist monitors the owls during construction and finds no change in owl foraging behavior in response to construction activities.

- If there is any change in owl roosting and foraging behavior as a result of construction activities, these activities will cease within the buffer. If the owls are gone for at least one week, the project proponent may request approval from the Conservancy, CDFW, and USFWS for a qualified biologist to excavate and collapse usable burrows to prevent owls from reoccupying the site if the burrow cannot be avoided by construction activities. The qualified biologist will install one-way doors for a 48-hour period prior to collapsing any potentially occupied burrows. After all usable burrows are excavated, the buffer will be removed and construction may continue.

Monitoring must continue as described above for the nonbreeding season as long as the burrow remains active. A qualified biologist will monitor the site, consistent with the requirements described above, to ensure that buffers are enforced and owls are not disturbed.

If burrowing owls are detected during the nonbreeding season, instead of establishing buffers and monitoring for behavior, the qualified biologist in consultation with the Conservancy may determine that passive relocation (i.e., exclusion) of owls is necessary, in which case the project proponent will develop a burrowing owl exclusion plan in consultation with CDFW biologists. Exclusion and burrow closure will not be conducted during the breeding season for any occupied burrow. The methods will be designed, as described in the species monitoring guidelines (California Department of Fish and Game 2012) and consistent with the most up-to-date checklist of passive relocation techniques maintained by the Yolo Habitat Conservancy. This may include the installation of one-way doors in burrow entrances by a qualified biologist during the nonbreeding season. These doors will be in place for 48 hours and monitored twice daily to ensure that the owls have left the burrow, after which time the biologist will collapse the burrow to prevent reoccupation. Burrows will be excavated using hand tools. During excavation, an escape route will be maintained at all times. This may include inserting an artificial structure, such as piping, into the burrow to prevent collapsing until the entire burrow can be excavated and it can be determined that no owls are trapped inside the burrow. The Yolo Habitat Conservancy may allow other methods of passive or active relocation, based on best available science, if approved by the wildlife agencies. Artificial burrows will be constructed prior to exclusion and will be created less than 300 feet from the existing burrows on lands that are protected as part of the reserve system.

Significance after Mitigation

Implementing Mitigation Measures 3.4-1a through 3.4-1c would reduce significant impacts on Swainson's hawk, white-tailed kite, and burrowing owl to a **less-than-significant** level because it would ensure that these species are not disturbed during nesting so that project construction would not result in nest abandonment and loss of eggs or young and implementation of the WRTP Specific Plan would not result in decreased reproductive success of Swainson's hawks. These measures would also ensure that Swainson's hawk foraging habitat would be preserved at the appropriate ratio of habitat value lost, consistent with the conservation strategy of the Yolo HCP/NCCP (Yolo Habitat Conservancy 2018). The in-lieu fees paid by the City for loss of Swainson's hawk foraging habitat would help achieve the Yolo HCP/NCCP Goal SH1 to provide for the conservation of Swainson's hawk in the Plan Area. The WRTP Specific Plan will be implemented in accordance with the Yolo HCP/NCCP avoidance and minimization measures. Through payment of HCP/NCCP fees or equivalent mitigation, the WRTP Specific Plan

will contribute to the HCP/NCCP's conservation strategy, thereby benefiting the above-listed covered species. Therefore, with incorporation of HCP/NCCP fees or equivalent mitigation and adherence to other HCP/NCCP avoidance and minimization measures, the WRTP Specific Plan's individual impacts and its contribution to cumulative impacts to covered species are **less than significant**.

IMPACT 3.4-2 **Special-status and Migratory Nesting Birds and Raptors.** *WRTP Specific Plan implementation would result in potential loss of wintering habitat for mountain plover and loss of potential foraging habitat for tricolored blackbird and loss of potential nesting and foraging habitat for common migratory birds and raptors. Construction could disturb active nests on or near the construction area, potentially resulting in nest abandonment by the adults and mortality of chicks and eggs. This impact is considered* ***potentially significant.***

Mountain plover may winter in mowed ruderal areas (i.e., urban ruderal and semiagricultural/incidental to agriculture land cover types under the Yolo HCP/NCCP) and cultivated lands in the WRTP Specific Plan Area and off-site improvement areas. Tricolored blackbirds nest colonially in marshes, riparian scrub, and other areas that support cattails or dense thickets of shrubs or herbs, such as blackberry. Ideal breeding habitats consist of a suitable nesting substrate surrounded by foraging habitats in annual grasslands, shrublands, or agricultural fields that produce large numbers of grasshoppers, dragonflies, and other large insects, with a source of surface water nearby (Beedy and Hamilton 1999, Meese 2014, cited in Beedy and Meese 2015). Tricolored blackbirds are known to forage up to 3 miles from active breeding colonies (Beedy and Meese 2015). No suitable nesting habitat for tricolored blackbird was observed within the study area or in a 1,300-foot buffer the study area during biological surveys. According to the Yolo HCP/NCCP tricolored blackbird modeled habitat, there is no nesting habitat within the WRTP Specific Plan Area, but suitable foraging habitat is present (Yolo Habitat Conservancy 2018). The closest known active breeding colony is located approximately 2 miles east of the WRTP Specific Plan Area and was estimated to contain a breeding colony of 7,000 tricolored blackbirds in 2014 (CNDDB 2017). Implementing the WRTP Specific Plan would result in removal of up to approximately 310 acres of cultivated lands that may provide potential suitable foraging habitat for tricolored blackbird and wintering habitat for mountain plover. Loss of this cultivated land would not substantially affect nesting success or survival rates of tricolored blackbird and survival rates of mountain plover because approximately 5 miles south and at least 7 miles east and west of the WRTP Specific Plan Area consists of agricultural land that provides many times the acres of potential foraging habitat for tricolored blackbird and wintering habitat for mountain plover than that provided in the WRTP Specific Plan Area. Therefore, the loss of foraging habitat resulting from development of the WRTP Specific Plan Area is considered a **less-than-significant** impact.

All raptors and their nests are protected under Section 3503.5 of the California Fish and Game Code. Common raptors that could nest on or near the WRTP Specific Plan Area and off-site improvement areas include red-tailed hawk, great horned owl, and barn owl. If trees are to be removed during the raptor breeding season (February – August), mortality of eggs and chicks of tree-nesting raptors could result if an active next were present. In addition, project construction could disturb active nests near the construction area, potentially resulting in nest abandonment by the adults and mortality of chicks and eggs.

Construction resulting from implementation of the WRTP Specific Plan could disturb active bird nests in and near the construction area, potentially resulting in nest abandonment by the adults and mortality of chicks and eggs. Tree and vegetation removal and structure removal could result in the direct destruction of active nests of birds protected under the MBTA and California Fish and Game Code. Loss of common migratory birds and raptors (those not

meeting the definition of special-status as provided above) would not be a significant impact under CEQA, but mitigation to avoid the loss of active nests of these species *is* required for compliance with the MBTA and California Fish and Game Code.

Mitigation Measure 3.4-2a: Avoid Direct Loss of Protected Bird Nests

While not required as mitigation for a significant impact under CEQA, the following would be required for compliance with the MBTA and California Fish and Game Code:

- To the extent feasible, the City will require that construction activities be carried out during the nonbreeding season (between September 1 and January 31) for protected bird species in this region to avoid and minimize impacts to common migratory nesting birds.

- For any ground disturbance activity necessary to implement proposed development and infrastructure projects that would occur during the nesting season (between February 1 and August 31), the City will require the project applicant to conduct a preconstruction survey. The preconstruction survey shall be conducted by a qualified biologist before any activity occurring within 500 feet of suitable nesting habitat for any protected bird species. The survey shall be timed to maximize the potential to detect nesting birds, and should be repeated within 10 days of the start of project-related activity.

- If an active common bird species protected by the Migratory Bird Treaty Act or California Fish and Game Code nest is found, the qualified biologist shall establish a buffer around the nest. No project activity shall commence within the buffer area until a qualified biologist confirms that the nest is no longer active. The size of the buffer shall be determined in consultation with CDFW. Buffer size is anticipated to range from 50 to 500 feet, depending on the nature of the project activity, the extent of existing disturbance in the area, and other relevant circumstances as determined by a qualified biologist in consultation with CDFW.

- Monitoring of all protected nests by a qualified biologist during construction activities will be required if the activity has potential to adversely affect the nest. If construction activities cause the nesting bird to vocalize, make defensive flights at intruders, get up from a brooding position, or fly off the nest, then the no-disturbance buffer shall be increased until the agitated behavior ceases. The exclusionary buffer will remain in place until the chicks have fledged or as otherwise determined by a qualified biologist.

Mitigation Measure 3.4-2b: Implement Mitigation Measure 3.4-1b

Significance after Mitigation

Implementing Mitigation Measure 3.4-2 would avoid disturbing birds during nesting so that project construction would not result in nest abandonment and loss of eggs or young and would ensure compliance with the MBTA and California Fish and Game Code. Loss of common migratory birds and raptors (those not meeting the definition of special-status as provided above) would not be a significant impact under CEQA, but mitigation would avoid the loss of active nests of these species, consistent with the requirements of the MBTA and California Fish and Game Code. Mitigation Measure 3.4-2b would require developers for each individual project within the WRTP Specific Plan Area are responsible for applying for the HCP/NCCP coverage and payment of development-based fees to fund mitigation that will offset losses of land cover types, covered species habitat, and other biological values.

These one-time fees pay for the full cost of mitigating project effects on the covered species and natural communities. Implementing Mitigation Measure 3.4-2b would reduce significant impacts on foraging habitat for tricolored blackbird and wintering habitat for mountain plover to a **less-than-significant** level because it would ensure that foraging habitat (i.e., 310 acres of cultivated lands) would be preserved at the appropriate ratio of habitat value lost, consistent with the conservation strategy of the Yolo HCP/NCCP (Yolo Habitat Conservancy 2018).

IMPACT 3.4-3 **Loss of Valley Elderberry Longhorn Beetle (VELB) Larvae and Habitat.** *WRTP Specific Plan implementation could result in the loss of elderberry shrub in the WRTP Specific Plan Area. The elderberry shrub is potential habitat for valley elderberry longhorn beetle and removal of the shrub could result in direct loss of VELB larvae and habitat. This impact is considered* ***potentially significant.***

A single elderberry shrub was identified along the western boundary of the WRTP Specific Plan Area during the 2017 reconnaissance survey that has the potential to support valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*). Additional elderberry shrubs could become established in the WRTP Specific Plan Area by the time future construction projects are implemented. This species is entirely dependent on its host plant, the elderberry shrub (*Sambucus* spp.), during its life cycle. The majority of the species' life is spent in larval form within the stem of an elderberry plant. If an elderberry shrub is removed as part of the WRTP Specific Plan implementation – either the existing shrub or one that becomes established in the future, loss of valley elderberry longhorn beetle larvae and loss of habitat could occur. Indirect impacts from ground-disturbing activities or use of herbicides could also result if the health of elderberry shrubs containing valley elderberry longhorn beetle larvae is adversely affected. This impact is considered **potentially significant**.

The U.S. Fish and Wildlife Service's Framework for Assessing Impacts to the Valley Elderberry Longhorn Beetle (*Desmocerus californicus dimorphus*) (2017b), recommends conducting a habitat assessment and appropriate surveys to determine VELB occupancy of elderberry shrubs(s) in a project site. This includes assessing potential habitat within the range of VELB to determine if the habitat is riparian or non-riparian habitat and conducting exit hole surveys to further determine potential occupancy. The elderberry shrub in the WRTP Specific Plan Area is in non-riparian habitat. Mitigation Measure 3.4-3 is consistent with the VELB AMM described in the Yolo HCP/NCCP (Yolo Habitat Conservancy 2018).

Mitigation Measure 3.4-3: Minimize Take and Adverse Effects on Habitat of Valley Elderberry Longhorn Beetle

- In accordance with AMM 12 of the Yolo HCP/NCCP, the City will require project proponent/s to retain a qualified biologist who is familiar with valley elderberry longhorn beetle and evidence of its presence (i.e., exit holes in elderberry shrubs) to map all elderberry shrubs in and within 100 feet of a proposed project footprint with stems that are greater than one inch in diameter at ground level during the project design phase. To avoid take of valley elderberry longhorn beetle fully, the City will require project proponent/s to design projects to avoid mapped elderberry shrubs, if feasible. To avoid effects on shrubs, the City will require that project proponent/s maintain a buffer of at least 100 feet from any elderberry shrubs with stems greater than one inch in diameter at ground level. AMM1 of the Yolo HCP/NCCP, *Establish Buffers*, describes that a lesser buffer may be approved by the Conservancy, USFWS, and CDFW if they determine that the covered species is avoided to an extent that is consistent with the project purpose.

- For elderberry shrubs that cannot be avoided with a designated buffer distance as described above, the qualified biologist will quantify the number of stems one inch or greater in diameter to be affected, and the presence or absence of exit holes. The Conservancy will use this information to determine the number of plants or cuttings to plant on a riparian restoration site to help offset the loss, consistent with Section 6.4.2.4.1 *Valley Elderberry Longhorn Beetle,* of the Yolo HCP/NCCP (Yolo Habitat Conservancy 2018). Additionally, prior to construction, the City will require that the project proponent/s transplant elderberry shrubs identified within the project footprint that cannot be avoided.

- Transplantation will only occur if a shrub cannot be avoided and, if indirectly affected, the indirect effects would otherwise result in the death of stems or the entire shrub. If the project proponent/s choose/s, in coordination with a qualified biologist and the City, not to transplant the shrub because the activity would not likely result in death of stems of the shrub, then the qualified biologist will monitor the shrub annually for a five-year monitoring period. The monitoring period may be reduced with concurrence from the wildlife agencies if the latest research and best available information at the time indicates that a shorter monitoring period is warranted. If death of stems at least one inch in diameter occurs within the monitoring period, and the qualified biologist determines that the shrub is sufficiently healthy to transplant, the City will require the project proponent/s to transplant the shrub as described in the following paragraph, in coordination with the qualified biologist. If the shrub dies during the monitoring period, or the qualified biologist determines that the shrub is no longer healthy enough to survive transplanting, then the Conservancy will offset the shrub loss consistent with the preceding paragraph.

- The City will require project proponent/s to transplant the shrubs into a location in the HCP/NCCP reserve system that has been approved by the Conservancy. Elderberry shrubs outside the project footprint but within the 100-foot buffer will not be transplanted. Transplanting will follow the following measures:

    1. <u>Monitor</u>: A qualified biologist will be on-site for the duration of the transplanting of the elderberry shrubs to ensure the effects on elderberry shrubs are minimized.

    2. <u>Timing:</u> The project proponent will transplant elderberry plants when the plants are dormant, approximately November through the first two weeks of February, after they have lost their leaves. Transplanting during the non-growing season will reduce shock to the plant and increase transplantation success.

    3. <u>Transplantation procedure</u>:

        a. Cut the plant back three to six feet from the ground or to 50 percent of its height (whichever is taller) by removing branches and stems above this height. Replant the trunk and stems measuring one inch or greater in diameter. Remove leaves that remain on the plants.

        b. Relocate plant to approved location in the reserve system, and replant as described in Section 6.4.2.4.1, *Valley Elderberry Longhorn Beetle* of the Yolo HCP/NCCP (Yolo Habitat Conservancy 2018).

Significance after Mitigation

Implementing Mitigation Measure 3.4-3 would reduce potentially significant impacts on VELB to a **less-than-significant** level because all elderberry shrubs would be mapped and impacts would be avoided and if impacts cannot be avoided, compensatory mitigation will be required. The WRTP Specific Plan will be implemented in accordance with the Yolo HCP/NCCP avoidance and minimization measures. Therefore, with incorporation of HCP/NCCP equivalent mitigation and adherence to other HCP/NCCP avoidance and minimization measures, WRTP Specific Plan's individual impacts and its contribution to cumulative impacts to covered species would be **less than significant**.

IMPACT 3.4-4 **Loss of Bat Roosts, and Special-status Bats.** *WRTP Specific Plan implementation would allow development that could result in the removal of human-made structures and trees that may support bat roosts. If these structures or trees are used by bats as a day roost, hibernation roost, or maternity colony roost, implementation of the WRTP Specific Plan could result in loss of a roost, or injury and mortality of pallid bat or western red bat. This impact is considered* ***potentially significant.***

The almond orchard (i.e., the deciduous fruits/nuts land cover type under the Yolo HCP/NCCP) and other trees in the WRTP Specific Plan Area and off-site improvement areas could provide day, hibernation, or maternity roosting habitat for western red bat and other common foliage roosting bat species. Several structures in the WRTP Specific Plan Area, including an old barn and trailer, could also provide day, hibernation, or maternity roosting habitat for pallid bat or other common bat species. Both the western red bat and pallid bat are CDFW species of special concern. Direct adverse effects on these special-status bat species may occur during construction, when tree removal and road improvements occur. The bat maternity season is from May 1 to August 31 and the overwintering season from November 1 to March 15. Loss of a maternity roost, regardless of species, could adversely affect a regional population of a species that reproduces very slowly. This impact is considered **potentially significant**.

Mitigation Measure 3.4-4: Avoid Direct Loss of Bat Roosts and Special-status Bats

For any project activity necessary to implement proposed development and infrastructure projects that would require removal of roost habitat (i.e., trees or structures) and would occur during the maternity season (between May 1 and August 31), the City will require the project applicant to conduct a preconstruction survey for special-status bats. Camera inspection as well as an emergence (exit survey with night optics) and/or acoustic survey shall be conducted in the summer prior to construction/land disturbance, which provides the best opportunity to determine if roosting bats are present.

If bats are found during the preconstruction survey(s), then removal of roost habitat will be delayed until the end of maternity season (August 31) or until the young are capable of flights, as determined by a qualified bat biologist and in consultation with CDFW. Any removal of highly suitable roost habitat should be conducted during the shoulder season, September 1 to October 31, to avoid harm to the species. If a highly suitable roost tree or structure is to be removed, trees and/or structures surrounding the roost habitat should be removed first, allowing any bats that may be present time to leave the area. A qualified monitor shall be present during removal of the habitat tree or structure.

Significance after Mitigation

Implementing Mitigation Measure 3.4-4 would reduce potentially significant impacts on bat roosts and special-status bat species, including pallid bat and western red bat, to a **less-than-significant** level because appropriate avoidance and minimization measures will be implemented.

Impacts on Wetlands

Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means. (Significance Threshold 3)

IMPACT 3.4-5 ***Loss and Degradation of State or Federally Protected Wetlands.*** *Implementing the WRTP Specific Plan could result in conversion of land that currently supports waterways to developed land. These waters may be subject to USACE jurisdiction under the CWA and/or may be considered waters of the state by the Central Valley RWQCB. This impact is considered* ***potentially significant****.*

Implementing the WRTP Specific Plan would allow development in areas that currently support agricultural and roadside ditches. Impacts on waters could occur through habitat conversion, encroachment, routine maintenance, or other activities in the immediate vicinity of waterways. Land conversion could result in direct fill of waters. Indirect impacts could result from adjacent development that leads to habitat modifications, such as changes in hydrology and reduction in water quality caused by urban runoff, erosion, and siltation. It is possible that some waterways in the WRTP Specific Plan Area and off-site improvement areas would qualify as waters of the United States due to hydrological connectivity to navigable waters (e.g., the Sacramento River via Willow Slough) or adjacency to other waters of the United States; however, some waters may be disclaimed by the USACE as isolated waters or may be excluded from regulation under the Clean Water Act. Ditches, including agricultural ditches that were not constructed in streams, are not modified streams, do not drain wetlands, and have only ephemeral or intermittent flow are generally excluded from the Clean Water Act according to the Clean Water Rule issued July 13, 2015 (80 Federal Register [FR] 37053). The *Navigable Waters Protection Rule: Definition of "Waters of the United States"* (2020 Final Rule) (85 Federal Register [FR] 22250) outlines four clear jurisdictional categories of waters considered "waters of the United States." These four categories are defined as follows:

- *Territorial Seas and Traditional Navigable Waters* (*TNWs)*—all waters subject to the ebb and flow of the tide, or waters that are presently used, have been used in the past, or may be used in the future to transport interstate or foreign commerce, and all waters that are navigable in fact under federal law for any purpose;

- *Tributaries*— rivers, streams, or similar naturally occurring surface water channels that contribute surface water flow in a typical year either directly or indirectly through another water, including an impoundment or adjacent wetlands, to a TNW, interstate waters or wetlands, or a territorial sea. A tributary must be perennial or intermittent in a typical year;

- *Lakes and Ponds, and impoundments of jurisdictional waters* - standing bodies of open water that contribute surface water flow in a typical year either directly or indirectly through another water to a TNW, interstate waters or wetlands, or a territorial sea.

- *Adjacent Wetlands*—waters bordering, contiguous with, or neighboring jurisdictional waters, including waters separated by natural river berms, banks, dunes or similar natural feature, or constructed dikes or barriers or the like, so long as that structure allows for a direct hydrologic surface connection between the wetlands and the waters in a typical year, such as through a culvert, flood or tide gate, pump, or similar artificial feature. An adjacent wetland is jurisdictional in its entirety when a road or similar artificial structure divides the wetland, as long as the structure allows for a direct hydrologic surface connection through or over that structure in a typical year.

Any waters disclaimed by the USACE would still be subject to regulation by Central Valley RWQCB as waters of the state, and impacts to waters of the state would require mitigation.

For work in the Caltrans right-of-way at the Caltrans off-site improvement area, standard BMPs will be implemented as required under the Construction General Permit and Caltrans MS4 Permit. Compliance with the requirements of these permits and adherence to the conditions would reduce or avoid potentially significant construction-related impacts in this off-site improvement area (Caltrans 2013). For other portions of the study area where implementation of the WRTP Specific Plan could result in development of land that currently supports waterways the impact is **potentially significant**.

Mitigation Measure 3.4-5: Avoid Loss of and Degradation of Federally Protected Waters

- If the implementation of the WRTP Specific Plan would result in ground disturbance on the agricultural or roadside ditches, the City will require project proponent/s to conduct a delineation of waters of the United States according to U.S. Army Corps of Engineers' methods, and to submit the completed delineation to the U.S. Army Corps of Engineers for jurisdictional determination.

- If implementation of the WRTP Specific Plan would result in fill of waters of the United States, the City will require that project proponent/s obtain a Section 404 Clean Water Act permit from the U.S. Army Corps of Engineers and water quality certification from the Regional Water Quality Control Board pursuant to Section 401 of the Clean Water Act.

- If implementation of the WRTP Specific Plan involves work in areas containing waters disclaimed by the USACE, the City will require that the applicant obtain a Waste Discharge Requirement permit from the Regional Water Quality Control Board pursuant to the Porter Cologne Act.

- The City will require that the applicant obtain all needed permits prior to project implementation, to abide by the conditions of the permits, including all mitigation requirements, and to implement all requirements of the permits in the timeframes required therein.

Significance after Mitigation

Implementing Mitigation Measure 3.4-5 would reduce potentially significant impacts on potentially jurisdictional water features, to a **less-than-significant** level because implementation of the BMPs, and permit conditions, and mitigation requirements will avoid, minimize and mitigate for impacts on jurisdictional waters.

Impacts on Migratory Corridors and Nursery Sites

Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites. (Significance Threshold 4)

IMPACT 3.4-6 **Interference with Wildlife Movement Corridors and Nursery Sites.** *The WRTP Specific Plan Area and off-site improvement areas are within the Pacific flyway, a major bird migration route. However, buildout of the WRTP Specific Plan would not create a barrier to movement of migratory species or alter the character of existing habitat available to migrating birds such that it would no longer function as a migratory corridor. The WRTP Specific Plan Area and off-site improvement areas do not currently provide an important connection between any areas of natural habitat that would otherwise be isolated. This impact is considered* ***less than significant.***

The city of Woodland is located within the Pacific flyway, which is a major north-south route for migratory birds along western North America. Large numbers of waterfowl and shorebirds may move through the area seasonally and may congregate and forage in wetlands, grasslands, and agricultural fields during winter or use them as resting grounds during longer migrations from the Arctic to Central or South America.

Land use changes would allow development to occur in the agricultural habitats within the WRTP Specific Plan Area and off-site improvement areas within the Pacific flyway, but this development would not create a barrier to movement of migratory species or alter the character of existing habitat available to migrating birds such that it would no longer function as a migratory corridor because there still would be abundant agricultural habitat of equal or better value to migrating birds surrounding the WRTP Specific Plan Area and off-site improvement areas and this agricultural habitat, along with Cache Creek, Willow Slough, and the Yolo Bypass would continue to support the needs of migratory birds and provide wildlife movement opportunities for other native resident or migratory wildlife species in the area. Development of the WRTP Specific Plan Area and off-site improvement areas would not cause any areas of natural habitat to become isolated. Waterways consist of agricultural and roadside ditches that do not support riparian vegetation that would provide cover for wildlife movement.

The WRTP Specific Plan Area and off-site improvement areas do not currently provide an important connection between any areas of natural habitat that would otherwise be isolated, and the WRTP Specific Plan Area and off-site improvement areas are not located within any of the ecological corridors identified in the Yolo HCP/NCCP as important to maintaining connectivity between communities, habitat patches, species populations, or the Yolo HCP/NCCP proposed reserve system. No native wildlife nursery sites have been identified in the WRTP Specific Plan Area or off-site improvement areas. Therefore, implementing the WRTP Specific Plan would not interfere substantially with the movement of any native resident or migratory species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites. The impact is **less than significant**.

Mitigation Measures

No mitigation is required.

Consistency with Local Policies and Ordinances

Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. (Significance Threshold 5)

IMPACT 3.4-7 **Conflict with Local Ordinances Protecting Biological Resources.** *The WRTP Specific Plan would comply with the 2035 General Plan policies and compliance with the City ordinance would reduce potential impacts on protected trees. The impact is considered* ***less than significant.***

Although a tree inventory has not been completed for the WRTP Specific Plan Area, the reconnaissance surveys confirmed several trees are present in the WRTP Specific Plan Area and off-site improvement areas. Implementing the proposed WRTP Specific Plan would allow development in the WRTP Specific Plan Area and off-site improvement areas, and several of these trees could be potential, heritage trees or other trees protected under the City of Woodland Tree Ordinance (Woodland Municipal Code Chapter 12.48). However, the City will require compliance with the Tree Ordinance as a part of WRTP Specific Plan implementation. The impact is **less than significant**.

Mitigation Measures

No mitigation is required.

Conflict with an Adopted Habitat Conservation Plan

Conflict with the provisions of an adopted HCP, natural community conservation plan, or other approved local, regional, or state HCP. (Significance Threshold 6)

IMPACT 3.4-8 **Conflict with an Adopted Habitat Conservation Plan / Natural Community Conservation Plan.** *The avoidance, minimization, and mitigation measures in this EIR are consistent with the Yolo HCP/NCCP. This impact is considered* ***less than significant****.*

The avoidance, minimization, and mitigation measures included in this EIR are consistent with the Yolo HCP/NCCP (Yolo Habitat Conservancy 2018). In addition, the WRTP Specific Plan would comply with the 2035 General Plan policies and implementation programs and these maintain consistency with the Yolo HCP/NCCP. The proposed WRTP Specific Plan and 2035 General Plan were designed for consistency with the Yolo HCP/NCCP. Goal 7.B of the 2035 General Plan is to maintain and protect natural habitats throughout the Planning Area, especially types that are considered sensitive by the Yolo HCP/NCCP, and Policy 7.B.1 of the 2035 General Plan requires full implementation of the Yolo HCP/NCCP, once adopted, to mitigate the impacts of growth projected under the General Plan on plant and wildlife habitats in the Woodland area (City of Woodland 2017). There are no sensitive habitats or other lands in the WRTP Specific Plan Area or off-site improvement areas that are identified in the Yolo HCP/NCCP as a part of the future reserves system. Therefore, implementing the WRTP Specific Plan would not reduce the effectiveness of the Yolo HCP/NCCP conservation strategy and would not interfere with attaining the overall biological goals and objectives of the Yolo HCP/NCCP. The City of Woodland is a permittee and participant of the Yolo HCP/NCCP, and will avoid, minimize, and mitigate impacts on covered species and habitats consistent with the Yolo HCP/NCCP conservation strategy, as described above. The impact is **less than significant**.

Mitigation Measures

No mitigation is required.

CUMULATIVE IMPACTS

As demonstrated in Chapter 2 of this EIR, "Project Description," the entire WRTP Specific Plan boundary falls within the area analyzed in the 2035 General Plan and CAP EIR, and land uses proposed in the WRTP Specific Plan are consistent with the development assumptions of the 2035 General Plan and CAP EIR. The proposed South Regional Pond would be adjacent to, but south of, the WRTP Specific Plan Area, and was not considered in the 2035 General Plan and CAP EIR. The proposed South Regional Pond area does not provide habitat for special-status plant species, contain any riparian habitat or other sensitive natural communities (alkali prairie habitat) identified in the 2035 General Plan and CAP EIR or other local or regional plans, nor provide habitat for burrowing owl. As detailed in the above analysis, development of the South Regional Pond would not result in any significant impacts not already addressed in the 2035 General Plan and CAP EIR with regard to development within the WRTP Specific Plan Area, or otherwise mitigable.

The majority of the WRTP Specific Plan Area and the proposed off-site improvement areas consist of agricultural land that provides limited habitat values to most species; however, certain agricultural crops found in the WRTP Specific Plan Area and off-site improvement areas provide important habitat for the State-listed Swainson's hawk, as well as other special-status wildlife species. Swainson's hawk, the most vulnerable species that occurs in the WRTP Specific Plan Area, may be adversely affected by cumulative impacts through permanent loss of agricultural land that serves as foraging habitat for Swainson's hawk and could reduce reproductive success. As discussed on pages 6-18 through 6-24 of the City's 2035 General Plan and CAP EIR, this is a significant cumulative impact.

However, successful implementation of mitigation, as described in the above impact analyses, and compliance with existing State and federal regulations, would ensure implementation of the proposed WRTP Specific Plan and off-site improvements would not have a cumulatively considerable contribution to the significant cumulative impact on Swainson's hawk because these policies, mitigation, and regulations require that unavoidable loss of habitat for this species be fully compensated. Therefore, impacts associated with the loss of Swainson's hawk and their habitats are **less than cumulatively considerable.** This analysis is consistent with the cumulative effect discussion (pages 6-23 to 6-24) of the 2035 General Plan and CAP EIR.

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3.5 CLIMATE CHANGE, GREENHOUSE GAS EMISSIONS & ENERGY

3.5.1 INTRODUCTION

This section provides background information about greenhouse gas (GHG) emissions and climate change. Emissions of GHGs have the potential to adversely affect the environment because such emissions contribute cumulatively to global climate change. Cumulative emissions from many projects and activities affect global GHG concentrations and the climate system. Unlike criteria air pollutants and toxic air contaminants that tend to have more localized or regional impacts, GHG emissions tend to disperse more broadly and are more of a global concern because of their relatively longer atmospheric lifetimes compared to air pollutant emissions. Therefore, the total amount and types of GHG emissions, regardless of their location, have the most significant effect on climate change globally. Energy use (and efficiency) is an important indicator of GHG emissions and is therefore analyzed in this section in conjunction with the GHG analyses.

The CEQA Guidelines note that comments received during the NOP scoping process can be helpful in "identifying the range of actions, alternatives, mitigation measures, and significant effects to be analyzed in depth in an EIR and in eliminating from detailed study issues found not to be important." (CEQA Guidelines Section 15083). Neither the CEQA Guidelines nor Statutes require a lead agency to respond directly to comments received in response to the NOP, but they do require that the comments be considered. Consistent with these requirements, these comments have been carefully reviewed and considered by the City and are reflected in the analysis of impacts in this section.

An individual submitted comments pertaining to the ability of agricultural soils to sequester carbon dioxide and that Prime Farmland is being converted for development annually throughout California. The conversion of farmland and relevant mitigation is discussed in Section 3.2, "Agricultural Resources." No other comments were received that addressed climate change, greenhouse gas emissions, and energy. Appendix A of this EIR includes copies of all NOP comments received.

3.5.2 ENVIRONMENTAL SETTING

The 2035 General Plan and CAP EIR summarizes the environmental setting in the vicinity of the City's Planning Area as it pertains to GHG emissions and energy on pages 4.5-2 through 4.5-8. Those aspects of the environmental setting that are relevant to potential impacts of the WRTP Specific Plan are briefly highlighted below.

GREENHOUSE GASES

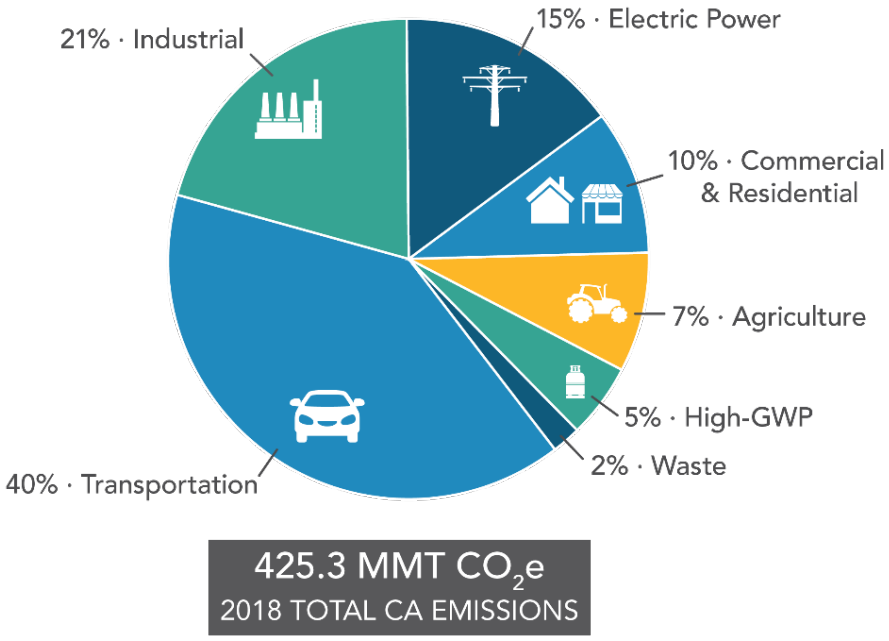
GHGs typically persist in the atmosphere for extensive periods time, long enough to be dispersed throughout the globe and result in long-term global impacts. As such, implementation of the WRTP Specific Plan and off-site improvement areas will not, by itself, contribute significantly to climate change; however, cumulative emissions from many projects and plans all contribute to global GHG concentrations and the climate system. Accordingly, this section considers the cumulative contribution of implementation of the WRTP Specific Plan and off-site improvement areas to the significant cumulative impact of climate change.

The California Air Resources Board (CARB) prepares an annual, statewide GHG emissions inventory, including an analysis of emissions by sector, or type of activity. The 2019 GHG inventory is the most recent produced by CARB for the State. While the data below is updated since the 2035 General Plan and CAP were produced, the emissions trends are similar. As shown in Exhibit 3.5-1, California produced 425.3 million metric tons of carbon

dioxide equivalents (MT CO_2e) in 2018 (the latest available full year of reporting). Combustion of fossil fuel in the transportation sector was the single largest source of California's GHG emissions in 2018, accounting for 40 percent of total GHG emissions. Transportation was followed by industry, which accounted for 21 percent, and then the electricity sector (including in-state and out-of-state sources) accounted for 15 percent of total GHG emissions (CARB 2020).

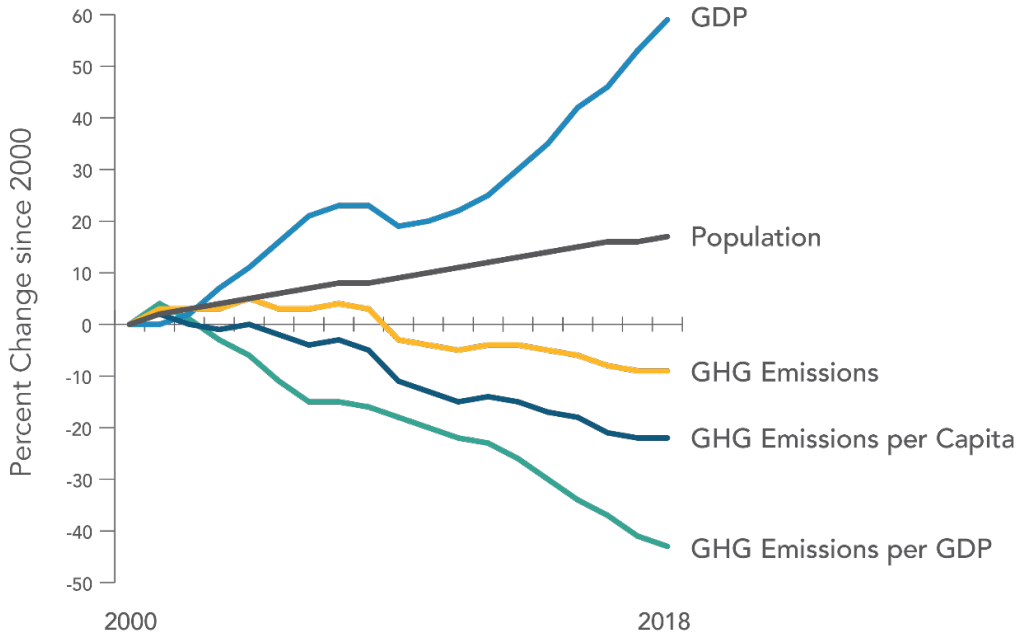
California has implemented several programs and regulatory measures to reduce GHG emissions. Exhibit 3.5-2 demonstrates California's progress in achieving statewide GHG emissions reduction targets. Since 2007, California's GHG emissions have been declining; GHG emissions have continued to decline even as population and gross domestic product have increased.

The City of Woodland conducted a GHG emissions inventory for the year 2005, which serves as the City's baseline emissions inventory year. The City's 2005 emissions inventory is detailed in the 2035 General Plan and CAP EIR. Total emissions were estimated to be 566,389 MT CO_2e. For Woodland, as for California as a whole, transportation is the top source of emissions, accounting for 65 percent of the total, followed by residential and commercial energy use (29 percent). The City of Woodland adopted its Climate Action Plan (CAP) in May 2017 in conjunction with the 2035 General Plan Update. The 2035 General Plan and CAP EIR determined that implementation of the CAP would achieve local annual reductions that, when combined with estimated future statewide reductions, will achieve an efficiency level of 2.25 MT CO_2e per service population per year, which is consistent with what the State of California would need to achieve goals for the State government under AB 32, Executive Order B-30-15, SB 32, and Executive Order S-3-05.



Source: CARB 2020

Exhibit 3.5-1. California 2018 GHG Emissions Inventory by Sector



Source: CARB 2020

Exhibit 3.5-2. Trends in California GHG Emissions (Years 2000 to 2018)

ENERGY

Pacific Gas & Electric Company (PG&E) is the electricity and natural gas provider for the City's Planning Area, including the WRTP Specific Plan Area. In 2016, PG&E delivered approximately 83,408 gigawatt-hours (GWh) of electricity within its service area (CEC 2020a). Of this total, approximately 1,705 gigawatt hours (GWh) of electricity was consumed in Yolo County (including incorporated and unincorporated areas) (CEC 2020b). In 2018, PG&E received 39 percent of its electricity from eligible renewable resources, such as wind, geothermal, biomass, solar, and small hydroelectric power plants that generate 30 megawatts (MW) or less of electricity; 34 percent from non-emitting nuclear generation; 15 percent from natural gas-fired power plants; and 13 percent from large hydroelectric power plants (CEC 2019a). In total, that equates to approximately 85 percent of PG&E's base power mix being generated by GHG-free and/or renewable energy resources. PG&E reached California's 2020 renewable energy target three years ahead of schedule and are working to meet the State's 60 percent by 2030 renewable energy target. PG&E also offers electricity supply options to its customers that are 100 percent solar-generated and 50 percent solar-generated.

In 2019, PG&E delivered approximately 4,942 million therms (MM therms) of natural gas throughout its service area (CEC 2020c). Of this total, the Yolo County received 62 MM therms, which accounted for approximately 1.25 percent of the total natural gas deliveries within the PG&E service area (CEC 2020d).

Gasoline and diesel fuel constitute 83 and 17 percent of petroleum-based fuels sold in California, respectively. In 2018, sales of diesel fuel to California end users was approximately 1,187,100 gallons per day (gpd) and sales of gasoline to California end users was approximately 455,900 gpd (CEC 2019b, 2019c). While gasoline and diesel fuel remain the primary fuels fused for transportation in California, the types of transportation fuel have diversified in California and elsewhere. Various statewide regulations and plans (e.g. Low Carbon Fuel Standard, AB 32

Scoping Plan) encourage the use of a variety of alternatives are used to reduce demand for petroleum-based fuel. Depending on the vehicle capability, conventional gasoline and diesel are increasingly being replaced by alternative transportation fuels including biodiesel, electricity, ethanol, hydrogen, natural gas, and other synthetic fuels. California has a growing number of alternative fuel vehicles through the joint efforts of the California Energy Commission (CEC), CARB, local air districts, federal government, transit agencies, utilities, and other public and private entities.

Environmental effects associated with the use of energy in the transportation sector are evaluated in this section, as well as Section 3.3 of this EIR, "Air Quality." Section 3.13 of this EIR, "Transportation and Circulation," summarizes the traffic analysis prepared to support this EIR.

3.5.3 REGULATORY FRAMEWORK

The 2035 General Plan and CAP EIR summarizes the federal, State, regional, and local regulatory framework on pages 4.5-8 through 4.5-15. Those aspects of the existing regulatory framework that are relevant to potential impacts of the WRTP Specific Plan are briefly highlighted below. Please see Section 4.5.2 of the 2035 General Plan and CAP EIR for more detail.

FEDERAL PLANS, POLICIES, REGULATIONS AND LAWS

While there are no federal GHG-related requirements that directly apply to the WRTP Specific Plan, the information below is helpful for understanding the overall context for GHG emissions impacts and strategies to reduce GHG emissions.

Clean Air Act, 42 U.S.C. §7401 et seq.

The U.S. Environmental Protection Agency (EPA) is the agency responsible for implementing the Clean Air Act (CAA). On April 2, 2007, the U.S. Supreme Court held that the EPA must consider regulation of motor vehicle GHG emissions. The 2009 EPA "Endangerment" and "Cause or Contribute" findings regarding GHGs under Section 202(a) of the CAA applied to the federal government's ability to regulate GHG emissions.

Mandatory Greenhouse Gas Reporting Rule and Clean Power Plan

EPA adopted the GHG Mandatory Reporting Rule and Clean Power Plan. Under the Clean Power Plan, EPA issued regulations to control CO_2 emissions from new and existing coal-fired power plants. However, on February 9, 2016, the Supreme Court issued a stay of these regulations pending litigation. Former EPA Administrator Scott Pruitt also signed a measure to repeal the Clean Power Plan. The fate of the proposed regulations is uncertain given the change in federal administrations and the pending deliberations in federal courts.

U.S. Environmental Protection Agency and National Highway Traffic Safety Administration Standards

As discussed in Chapter 3.3, "Air Quality", the National Highway Traffic Safety Administrative (NHTSA) sets the Corporate Average Fuel Economy Standards (CAFÉ) standards to improve the average fuel economy and reduce GHG emissions generated by cars and light duty trucks. Through the Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule, NHTSA and EPA proposed to amend the current fuel efficiency standards for passenger cars and light trucks and establish new standards covering model years 2021 through 2026 by maintaining the current model

year 2020 standards through 2026. Part 1 of the SAFE Vehicles Rule went into effect in November 2019, but is currently subject to litigation.

Energy Independence and Security Act, Public Law 110-140

Created the Renewable Fuel Standard (RFS) program in 2005 (further amended in 2007), which is implemented by EPA in consultation with the U.S. Department of Agriculture and the Department of Energy. The program established requirements for volumes of renewable fuel to replace or reduce the quantity of petroleum-based fuels. Obligated parties under the RFS program are refiners or importers of gasoline or diesel fuel.

STATE PLANS, POLICIES, REGULATIONS AND LAWS

The State's legal framework for GHG emission reductions has come about through Executive Orders, legislation, regulations, and court decisions. The State has a related focus on energy efficiency and planning for energy resources at a statewide level, with influences local planning efforts. Some of the major components of California's climate change and energy efficiency initiatives are highlighted below.

Assembly Bill 1493, California Health and Safety Code Sections 42823 and 43018.5

AB 1493 required that the CARB develop and adopt, by January 1, 2005, regulations that achieve "the maximum feasible reduction of greenhouse gases emitted by passenger vehicles and light-duty trucks and other vehicles determined by CARB to be vehicles whose primary use is noncommercial personal transportation in the state." This prompted amendments to the CCR to include GHG emission standards for motor vehicle emission standards, as well as CARB regulations under the Low-Emission Vehicle element of the Advanced Clean Cars program to merge GHG emissions with all other tailpipe emissions into one set of requirements.

Executive Order S-3-05

In 2005, established the following statewide GG emissions reduction targets: by 2010, reduce GHG emissions to 2000 levels; by 2020, reduce GHG emissions to 1990 levels; and by 2050, reduce GHG emissions to 80 percent below 1990 levels.

Executive Order S-3-05 (2005) and Assembly Bill (AB) 32 (2006)

Executive Order (EO) S-3-05 established progressive GHG emission reduction targets for the State, as follows:

- By 2010, reduce GHG emission to the year 2000 level;
- By 2020, reduce GHG emissions to the year 1990 level; and,
- By 2050, reduce GHG emissions to 80 percent below the 1990 level.

The California Global Warming Solutions Act of 2006, commonly known as AB 32, further detailed and put into law the midterm GHG reduction target established in EO S-3-05 to reduce statewide GHG emissions to 1990 levels by 2020 and created a comprehensive, multi-year program to reduce GHG emissions in California. AB 32 also directed CARB to accomplish the following core tasks:

- Establish the statewide goal of reducing GHG emissions.
- Establish a mandatory reporting system to track and monitor emissions levels.
- Develop various compliance options and enforcement mechanisms.

EO B-30-15 (2014) and Senate Bill 32

EO B-30-15 established a statewide GHG reduction goal of 40 percent below 1990 levels by 2030. This emission reduction goal serves as an interim goal between the AB 32 target to achieve 1990 emission levels by 2020 and the long-term goal set by EO S-3-05 to reduce statewide emissions 80 percent below 1990 levels by 2050. In addition, the executive order aligned California's 2030 GHG reduction goal with the European Union's 2030 reduction target that was adopted in October 2014.

SB 32 signed into law the emissions goal of EO B-30-15, extending the provisions of AB 32 from 2020 to 2030 with the target of 40 percent below 1990 levels by 2030.

Executive Order B-55-18 (2018)

Executive Order B-55-18 acknowledges the environmental, community, and public health risks posed by future climate change. It further recognizes the climate stabilization goal adopted by 194 states and the European Union under the Paris Agreement. Based on the worldwide scientific agreement that carbon neutrality must be achieved by midcentury, Executive Order B-55-18 establishes a new state goal to achieve carbon neutrality as soon as possible and no later than 2045, and to achieve and maintain net negative emissions thereafter. The Executive Order charges the CARB with developing a framework for implementing and tracking progress towards these goals. Executive Order B-55-18 is only binding on state agencies.

Climate Change Scoping Plan

Pursuant to AB 32, CARB adopted the initial Climate Change Scoping Plan (Scoping Plan) in December 2008, identifying measures to meet the 2020 GHG reduction target. The Scoping Plan encourages local governments to align land use, transportation, and housing plans to minimize vehicle trips.

CARB is required to update the Scoping Plan at least once every five years to evaluate progress and develop future inventories that may guide this process. The First Update to the Climate Change Scoping Plan: Building on the Framework (2014 Scoping Plan Update) determined that the state was on schedule to achieve the 2020 target. However, an accelerated reduction in GHG emissions would be required to achieve the EO S-3-05 emissions reduction target for 2050.

In November 2017, CARB released its second update to the Scoping Plan, *California's 2017 Climate Change Scoping Plan: The Strategy for Achieving California's 2030 Greenhouse Gas Target* (2017 Scoping Plan Update) (CARB 2017). The 2030 target of a 40 percent reduction in GHG emissions below 1990 statewide GHG emissions (consistent with Executive Order B-30-15, which is outlined below) guides the 2017 Scoping Plan Update (CARB 2017). The 2017 Scoping Plan Update establishes a plan of action, consisting of a variety of strategies to be implemented rather than a single solution, for California to reduce statewide emissions by 40 percent by 2030 compared to 1990 levels (CARB 2017).

Senate Bill 97, California Public Resources Code Section 21083.05

Signed in 2007, directed the California Office of Planning and Research (OPR) to prepare, develop, and transmit to the California Natural Resources Agency guidelines for the feasible mitigation of GHG emissions or the effects of GHG emissions.

Renewables Portfolio Standard

SB 1078, SB 107, EO S-14-08, SB X1-2, and SB 100 have established increasingly stringent renewable portfolio standard (RPS) requirements for California's utility companies. RPS-eligible energy sources include wind, solar, geothermal, biomass, and small-scale hydro projects.

SB 1078 (Chapter 516, Statutes of 2002) required retail sellers of electricity, including investor-owned utilities and community choice aggregators, to provide at least 20 percent of their supply from renewable sources by 2017. SB 107 (Chapter 464, Statutes of 2006) changed the target date to 2010.

Executive Order S-14-08 expanded the State's Renewable Portfolio Standard to 33 percent renewable power by 2020. Executive Order S-21-09 directs CARB under its AB 32 authority to enact regulations to help the State meet its Renewable Portfolio Standard goal of 33 percent renewable energy by 2020.

The 33 percent-by-2020 goal and requirements were codified in April 2011 with SB X1-2. This new Renewable Portfolio Standard applies to all electricity retailers in the State, including publicly owned utilities, investor-owned utilities, electricity service providers, and community choice aggregators. SB 350 (2015) increased the renewable requirement to 50 percent by 2030.

Senate Bill (SB) 100 was adopted in September of 2018 and increased the RPS to 60 percent by 2030 and requires that 100 percent of retail sales of electricity to be generated from renewable or zero-carbon emission sources of electricity by 2045. SB 100 supersedes the renewable energy requirements set by SB 350, SB 1078, SB 107, and SB X1-2.

These requirements reduce the carbon content of electricity generation associated with both existing and new development, including that within the WRTP Specific Plan Area.

Sustainable Communities and Climate Protection Act of 2008 (SB 375)

The Sustainable Communities and Climate Protection Act of 2008 (SB 375) built upon the existing framework of regional planning. In 2010, CARB adopted regional GHG targets for passenger vehicles and light trucks for 2020 and 2035 for the 18 metropolitan planning organizations (MPOs) in California. In 2018, CARB updated these targets. Under this legislation, each MPO is required to incorporate these GHG emissions targets into the regional transportation planning process and adopt either a "sustainable communities strategy" or an "alternative planning strategy" as part of its regional transportation plan to identify land use, housing, and transportation strategies that will achieve the regional GHG reduction targets.

California Code or Regulations, Title 20 and 24

New buildings constructed in California must comply with the standards contained in California Code of Regulations (CCR) Title 20, Energy Building Regulations, and Title 24, Energy Conservation Standards.

Title 20 standards range from power plant procedures and siting to energy efficiency standards for appliances, ensuring reliable energy sources are provided and diversified through energy efficiency and renewable energy resources. California's 2009 Appliance Efficiency Regulations (20 CCR 1601–1608) were adopted by the CEC on December 3, 2008, and approved by the California Office of Administrative Law on July 10, 2009. The regulations include standards for both federally regulated appliances and non-federally regulated appliances.

Title 24 requires the design of building shells and building components to conserve energy. The Energy Conservation Standards for new residential and nonresidential buildings were established by the CEC in June 1977 June 1977 and were most recently revised in 2019 (Title 24, Part 6 of the California Code of Regulations [Title 24]). Title 24 governs energy consumed by commercial and residential buildings in California. This includes the HVAC system; water heating; and some fixed lighting. Non-building energy use, or "plug-in" energy use, is not covered by Title 24. The standards are updated periodically to allow for consideration and possible incorporation of new energy efficiency technologies and methods. California's Building Energy Efficiency Standards are updated on an approximate 3-year cycle. The most recent update was in 2019and took effect July 1, 2020. One of the improvements included within the 2019 Building Energy Efficiency Standards is the requirements that certain residential developments, including some single-family and low-rise residential development, include on-site solar energy systems capable of producing 100 percent of the electricity demand of the residences. With implementation of solar photovoltaic systems with new residential development, homes built under the 2019 standards will use approximately 53 percent less energy than those under the 2016 standards. Nonresidential buildings are anticipated to consume 30 percent less energy as compared to nonresidential buildings constructed under the 2016 California Energy Code, primarily through prescriptive requirements for high-efficiency lighting (CEC 2018). The Energy Code is enforced through the local plan check and building permit process. Local government agencies may adopt and enforce additional energy standards for new buildings as reasonably necessary related to local climatologic, geologic, or topographic conditions, provided that these standards exceed those provided in the California Energy Code. The City has adopted these energy efficiency standards and the City's Climate Action Plan requires compliance with the Tier 1 set of energy efficiency standards in the California Green Building Standards Code (CALGreen).

CALGreen (24 CCR Part 11) is intended to enhance the design and construction of buildings through the use of building concepts that benefit the environment and public health and encourage sustainability in construction and operations of a building. The provisions of the code apply to the planning, design, construction, use and occupancy of all newly constructed buildings and structures throughout California. Some key provisions of the code include, but are not limited to, requirements related to the installation of electric vehicle charging infrastructure in residential and nonresidential developments, establishment of maximum fixture water use rates to reduce indoor water use consumption, diversion of 65 percent of construction and demolition waste from landfills, and mandatory use of low-pollutant emitting interior finish materials such as paints, carpet, and flooring.

Executive Order B-18-12

Executive Order B-18-12 orders all new State buildings and major renovations beginning design after 2025 be constructed as Zero Net Energy facilities. The Executive Order sets an interim target for 50 percent of new facilities beginning design after 2020 to be Zero Net Energy. It directs State agencies to take measures toward achieving Zero Net Energy for 50 percent of the square footage of existing State-owned building area by 2025.

Regional and Local Plans, Policies, Regulations and Laws

YSAQMD

The Yolo-Solano Air Quality Management District (YSAQMD) is responsible for maintaining and attaining ambient air quality standards in the project area. YSAQMD provided guidance for projects to analyze air pollutant emissions under CEQA. YSAQMD has not yet developed formal guidance for evaluating GHG emissions. Rather,

YSAQMD recommends that projects consider guidance resources from the California Air Pollution Control Officers Association (CAPCOA) to assist with evaluations.

Sacramento County Area Council of Governments (SACOG) Metropolitan Transportation Plan/Sustainable Communities Strategy for 2035 (the MTP/SCS)

SACOG is the MPO for the Sacramento region, maintaining a regional transportation plan in coordination with each of the local 28 member cities and counties, including Woodland. Per SB 375, each of the state's MPOs, including SACOG, is required to include a sustainable communities strategy to achieve GHG emission reduction targets set by CARB as part of its regional transportation plan. SACOG's updated 2020 MTP/SCS was adopted in November 2019. The 2020 MTP/SCS lays out a plan that links land use, air quality, and transportation needs.

City of Woodland 2035 General Plan

The *City of Woodland General Plan Update 2035* (City of Woodland 2017) identifies the following policies related to GHG emissions and energy that are applicable to the WRTP Specific Plan. Consistency of the WRTP Specific Plan with the following measures can be found in Table 3.5-1 below.

- **Policy 2.A.5 Complete and Well Designed Neighborhoods.** Promote the development of complete neighborhoods with a physical layout and land use mix that allows for a diversity of incomes; puts residents in close proximity to services and amenities; promotes walking, biking, and transit use; fosters community pride; enhances neighborhood identity; ensures public safety; and meets the needs of all ages and abilities.

- **Policy 2.C.1 Compact Form.** Promote compact development patterns, mixed land use, and higher-development intensities that conserve land resources, reduce vehicle trips, improve air quality, and facilitate walking, bicycling, and transit use. Achieving the benefits of compact development as supported in this General Plan may result in potential tradeoffs related to traffic, noise, open space, and privacy. Sensitive design and appropriate performance standards may assist in mitigating these concerns. Where growth and increased density is allowed pursuant to this General Plan, these issues are acknowledged and accepted.

- **Policy 2.C.2 Consistency with the Climate Action Plan.** Ensure that new development is consistent with the objectives and targets of the City's Climate Action Plan.

- **Policy 2.C.3 Alternative Transportation.** Actively support and facilitate mixed-use retail, employment, schools, and residential development around existing and future transit stops, bike routes, and pedestrian paths.

- **Policy 2.C.4 Resource Efficiency.** Encourage and incentivize buildings to be constructed so that they consume less energy, water, and other resources; allow natural ventilation; use daylight effectively; reduce stormwater runoff; and facilitate the use of clean energy whenever possible.

- **Policy 2.E.4 Bike and Pedestrian Orientation.** Create walkable, pedestrian-scaled blocks that feature sidewalks and bikeways that are safe, comfortable, and inviting.

- **Policy 2.J.6 Multimodal Access.** Require convenient, attractive, and safe pedestrian, bicycle, and transit connections both within commercial centers and between centers and surrounding neighborhoods and other destinations.

- **Policy 2.K.7 Alternate Transportation Modes.** Promote attractive, and safe pedestrian, bicycle, and transit connections both within employment centers and between centers and surrounding uses.

- **Policy 2.L.2 Specific Plan-1A (SP-1A).** Promote development of SP-1A as a mixed-use residential district anchored by a research and technology business park in the Southern Gateway area at CR 25 and SR 113. Concentrate the highest intensity of development within and in close proximity to the business park area, with lower density, largely residential uses to the north. Encourage sustainable development through the use of renewable energy sources and water conservation tools with the goal of striving to achieve zero net energy at the building and neighborhood level to the extent feasible.

- **Policy 2.M.1 Compact Form.** Promote the development of compact, complete neighborhoods that locate services and amenities within walking and biking distance of neighborhood residents, reducing the need to travel by car.

- **Policy 2.M.2 Mixed Uses.** Require neighborhood design that incorporates a mix of residential and non-residential development that addresses the basic daily needs of residents and employees. Each new growth area must incorporate some new employment generating uses.

- **Policy 2.M.4 Pedestrian and Bike Mobility.** Design streets to facilitate pedestrian and bicycle mobility in order to reduce automobile dependence and vehicle miles travelled. Utilize a traditional street grid with walkable blocks. Integrate a seamless greenbelt/trail system that provides recreational and transportation benefits.

- **Policy 2.M.5 Efficiency.** Strive for net zero energy development by encouraging buildings to be constructed so that they consume less energy, water, and other resources; allow natural ventilation; use daylight effectively; and facilitate the use of clean energy whenever possible.

- **Policy 2.M.6 Green Building.** Encourage sustainable, "green" building practices and construction techniques so that structures are designed, built, and renovated in a sustainable and resource-efficient manner.

- **Policy 3.A.4 Reduce Vehicle Miles Traveled (VMT).** Require new development projects to achieve a 10 percent reduction in VMT per capita or VMT per service population compared to the general plan 2035 VMT performance, or a 10 percent reduction compared to baseline conditions for similar land uses when measuring transportation impacts for subsequent projects and making General Plan consistency findings. Reducing peak period VMT in particular is desirable due to the added benefit of minimizing severe congestion and reducing emissions. Use of VMT reduction strategies such as those in the chart [in the 2035 General Plan] (taken from Quantifying Greenhouse Gas Mitigation Measures, CAPCOA, 2010) or similar professional research documents is encouraged.

- **Policy 3.A.5 Transportation Demand Management (TDM).** Utilize TDM tools and programs (e.g. alternative work schedules, telecommuting, ridesharing, or parking pricing) to encourage and create incentives for the use of alternative travel modes.

- **Policy 3.A.7 Street Grid Network and Density.** Promote the use of grid and modified grid street patterns in new residential, commercial, or mixed-use development that propose to construct new streets. Modified

grids may include combinations of grid and curvilinear streets. Greenbelts may intersect street grid to create an interconnected trail network that encourages biking and walking. The density of new streets should be similar to the existing residential neighborhoods in Woodland that have approximately nine centerline miles or arterials and collectors per square mile.

- **Policy 3.A.11 New Development.** Require all new development to provide convenient bicycle and pedestrian environments and access through building orientation, site layout, traffic management, and connections to transit service and local commercial and community facilities. Development must provide appropriate pedestrian amenities such as street lighting, benches, arcades, canopies, shade trees, art, and seating areas.

- **Policy 3.B.1 Complete Street Requirements and Green Streets.** To the extent feasible, all new street construction and reconstruction shall be designed to achieve complete streets. Designs should consider the needs of all roadway users, bicyclists, pedestrians, transit vehicles, and motorists, appropriate to the function and context of the facility. The needs of all roadway users including vulnerable populations such as young children, seniors, and people with disabilities when determining roadway widths and other barriers to travel, especially near schools, parks, senior centers, community centers, and other activity hubs. Require street design to incorporate adequate landscaping, including street trees and landscaped medians and/or parkway strips, in order to increase shade, minimize runoff, and create a comfortable and visually attractive environment.

- **Policy 3.B.5 New Developments.** Require new developments to provide interconnected street networks with walkable blocks that allow and encourage active multimodal transportation.

- **Policy 3.E.3 Off-Street Pedestrian Paths.** Continue to develop off-street pedestrian paths for access to schools, recreation facilities, and neighborhood services in existing and future neighborhoods in the city.

- **Policy 3.E.4 Interconnected Network.** Require new development to create complete pedestrian networks with linkages such as walkways, paseos, and shared-use paths that interconnect pedestrian facilities.

- **Policy 3.F.2 Bikeway Network.** Promote the development of a comprehensive system of recreational and commuter bicycle routes that provide safe and convenient connections between the city's major employment and housing areas; existing and planned bikeways; and schools, parks, retail shopping, and residential neighborhoods.

- **Policy 3.F.3. Bicycle Parking.** Encourage the development of convenient and secure bicycle parking and establish minimum parking standards at employment centers, schools, recreational facilities, transit terminals, commercial businesses, the Downtown core area, and other locations where people congregate.

- **Policy 3.F.4. Bicycle Facilities.** Require residential, commercial, and industrial developments to include bicycle lanes or pathways in accordance with the Bikeway Master Plan or Specific Plans when constructing new roadways or upgrading existing streets.

- **Policy 3.H.1 Parking Footprint.** Strive to reduce the amount of land devoted to parking through such measures as development of consolidated parking facilities/structures, the application of shared parking for

mixed-use developments, car share programs, alternative investment in bike and pedestrian facilities, and the implementation of Transportation Demand Management plans to reduce parking needs.

- **Policy 3.H.7. Electric/Alternative Fuel Vehicle Parking.** Require new large commercial and retail developments, large employment centers, high-use public buildings, and parking structures to provide parking for alternative fuel vehicles including charging stations for electric vehicles. Require electric vehicle charging outlets in garages of all new single family residential homes.

- **Policy 7.F.5 Electric Equipment.** Promote inclusion of features such as exterior electrical outlets in new residential development to encourage the use of electric and other alternative fuel equipment.

City of Woodland Climate Action Plan (CAP)

The City's CAP was adopted in 2017 in conjunction with the 2035 General Plan Update. The CAP is a planning document that provides a roadmap for reducing GHG emissions consistent with state goals for addressing California's contributions to climate change. The CAP includes 24 recommended community GHG emissions reduction strategies and 5 municipal GHG reduction strategies. The combined implementation of these strategies, alongside local reductions resulting from state programs, achieve the City's 2020 and 2035 reduction targets (City of Woodland 2016). The CAP was prepared consistent with CEQA Guidelines 15183.5(b)(1) and can be relied on for CEQA review of subsequent plans and projects that are consistent with the GHG reduction strategies and targets in the CAP.

3.5.4 Environmental Impacts and Mitigation Measures

Methodology

The 2035 General Plan and CAP EIR addresses impacts of development of the City's Planning Area, including this WRTP Specific Plan Area. Consistent with Section 15183(b) of the CEQA Guidelines, the following analysis focuses on project-specific significant effects of the WRTP Specific Plan that are, a) peculiar to the WRTP Specific Plan or the site; b) were not addressed in the 2035 General Plan and CAP EIR (including off-site or cumulative impacts); or c) would be more severe than previously described based on substantial new information.

GHG emissions have the potential to adversely affect the environment because such emissions contribute cumulatively to global climate change. It is unlikely that a single project will contribute significantly to climate change, but cumulative emissions from many projects could affect global GHG concentrations and the climate system. Therefore, impacts are analyzed within the context of the potential contribution to the cumulatively significant impact of climate change. Proposed development in the WRTP Specific Plan Area would generate GHG emissions and an increase in energy (e.g., natural gas, electricity, and fuel) demand as a result of short-term construction and long-term operational activities.

As provided in more detail below in the explanation of Thresholds of Significance, a plan for the reduction of GHG emissions (also known as a climate action plan) may be used for the cumulative GHG emissions impact analysis for later projects (CEQA Guidelines Section 15183.5). As noted elsewhere, the City's CAP demonstrates reduction strategies that meet Woodland's fair-share reductions of the state's GHG targets. As such, for the purposes of analysis in this EIR, evaluation of consistency of the WRTP Specific Plan with the City's 2035 CAP was performed to determine significance.

Energy impacts were analyzed by assessing energy usage associated with construction and operation of projects developed as a part of buildout of the WRTP Specific Plan. Future energy demands were modeled using the same methods and assumptions as those described in Section 3.3 of this EIR, "Air Quality." The California Emissions Estimator Model (CalEEMod) Version 2016.3.2 and Road Construction Emissions Model (RCEM) estimate energy consumption, in addition to criteria air pollutant and precursor emissions. The output from this modeling is provided in Appendix B.

THRESHOLDS OF SIGNIFICANCE

For the purposes of this analysis, an impact is considered significant if implementation of the implementation of the WRTP Specific Plan would:

1. generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment;
2. conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases;
3. result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation;
4. conflict with or obstruct a State or local plan for renewable energy or energy efficiency.

The California Supreme Court's decision in *Center for Biological Diversity, et al. v. California Department of Fish and Wildlife* reinforced that there are multiple potential pathways for evaluating GHG emissions consistency with CEQA. Various thresholds that have been established by air quality management districts for the purpose of evaluating impacts of GHG emissions under CEQA include the use of numerical thresholds (e.g., a bright-line or efficiency-based threshold), performance-based standards, compliance with a qualified GHG reduction strategy, or compliance with Cap-and-Trade (applicable to projects directly regulated under the Cap-and-Trade program). In this decision, the California Supreme Court noted that lead agencies have several options for evaluating GHG emissions including analyzing a project's compliance with regulatory programs designed to reduce GHG emissions from particular activities, utilizing previously adopted local plans created to evaluate GHG emissions for the relevant area, or relying on existing numerical thresholds of significance for GHG emissions adopted, for example, by local air districts for the relevant area.

OPR acknowledges that the State Legislature encourages lead agencies to tier or streamline their environmental documents whenever feasible, and that the GHG emissions may be best analyzed and mitigated at the programmatic level (California Office of Planning and Research 2018). A GHG reduction plan may be used in the impact analysis for later projects. CEQA Guidelines Sections 15183.5 (b) and 15064.4 provide recommended content for GHG reduction plans. Section 15183.5 also specifies that a later project's CEQA analysis "must identify those requirements specified in the plan that apply to the project, and, if those requirements are not otherwise binding and enforceable, incorporate those requirements as mitigation measures applicable to the project." A GHG reduction plan, once adopted, can be used in the cumulative analysis of GHG impacts of later projects (CEQA Guidelines Section 15183.5[b][2]).

As noted by the Natural Resources Agency in the Final Statement of Reasons for the changes to the CEQA Guidelines, including the changes that added 15183.5 on GHG reduction programs, "the addition of GHG emissions reduction plans and regulations for the reduction of GHG emissions reflects the view of both the OPR and the

Resources Agency that the effects of GHG emissions resulting from individual projects are best addressed and mitigated at a programmatic level" and the "Legislature has created several tiering and streamlining methods, reflected in various provisions of the existing State CEQA Guidelines, that can reduce duplication in the analysis of GHG emissions. Subdivision (a) clarifies that existing provisions in the State CEQA Guidelines regarding tiering and streamlining may be applied to the analysis of GHG emissions."

The City of Woodland's CAP was adopted in parallel with the 2035 General Plan and analyzed under CEQA in the 2035 General Plan and CAP EIR. The City's CAP (and EIR) includes each of the "Plan Elements" spelled out in CEQA Guidelines Section 15183.5(b)(1): complete a baseline emissions inventory and project future emissions; identify a community-wide reduction target; prepare a CAP to identify strategies and measures to meet the reduction target; monitor effectiveness of reduction measures and adapt the plan to changing conditions; adopt the CAP in a public process following environmental review. As detailed in Chapters 3 through 5 of the City's 2035 CAP, the CAP addresses each of these recommended plan elements, and, therefore, will be used to streamline review of projects that are consistent with the CAP. The City's CAP Checklist serves to apply the relevant 2035 General Plan and CAP policies and reduction measures through a streamlined review process for proposed new development projects that are subject to discretionary review and that trigger environmental review under CEQA. Projects that are consistent with the General Plan and demonstrate consistency with the CAP may use this consistency determination in lieu of a project-specific GHG emissions analysis to address potential GHG emissions impacts. Therefore, construction and operational GHG emissions generated from implementation of the WRTP Specific Plan are evaluated based upon compliance with the City's CAP.

IMPACTS NOT DISCUSSED FURTHER

The following discussion summarizes the impacts of the WRTP Specific Plan that are not discussed further in this document because either, a) there is no impact, or b) none of the factors triggering additional environmental review (as found in Section 15183[b]) exist because an impact was addressed as a part of the 2035 General Plan and CAP EIR and/or substantially mitigated by uniformly applied development standards (CEQA Guidelines Section 15183[f]). Uniformly applied development standards include the 2035 General Plan, the CAP, existing City regulations and standards, design review requirements, and impact fee programs.

Generation of Greenhouse Gas Emissions or Conflict with an Applicable Plan, Policy, or Regulation Adopted for the Purpose of Reducing the Emissions of Greenhouse Gases (Significance Thresholds 1 and 2) — The 2035 General Plan and CAP EIR Impact 4.5-1 (pages 4.5-20 to 4.5-41) discusses potential impacts related to generation of GHG emissions from implementation of the 2035 General Plan and CAP. The EIR estimates the maximum annual and total GHG emissions from development throughout the City's Planning Area anticipated under the 2035 General Plan, in addition to short-term emissions associated with equipment upgrades, renewable energy facility installations, energy efficiency building upgrades, tree planting, and other measures included in the City's 2035 CAP. Maximum annual emissions (operations plus amortized annual construction emissions) and the projected service population within the City's Planning Area for the year 2035 were used to estimate the GHG efficiency rate for implementation of the 2035 General Plan and CAP.

The General Plan contains several policies that promote mixed-use and infill development and site residents, jobs, and retail amenities in proximity of each other to reduce the need for motor vehicle travel. Many policies through various mechanisms also support development of pedestrian and bicycle facilities and encourage alternative transportation and transit that would promote non-vehicular modes of travel. General Plan policies also encourage

minimizing water use and wastewater generation and encourage methods to minimize solid waste generation and increase waste diversion systems. Policy 2.C.2 also requires new development to be consistent with the objectives and targets of the City's CAP[1], and Policy 7.F.9 requires the CAP be implemented to achieve the City's GHG reduction targets by 2020, 2035, and 2050. Policies commit the City to implementing a CAP, including targets for 2020 and 2035. In addition the 2035 General Plan and CAP EIR identified Mitigation Measure 4.5-1a to ensure that the City maintain and update its GHG inventory and CAP as new information becomes available and to ensure the City stays on target to achieve is GHG emissions targets for future years.

Ultimately, the 2035 General Plan and CAP EIR determined that implementation of the CAP would achieve local annual reductions that, when combined with estimated future anticipated statewide reductions, would achieve a GHG efficiency per service population that would contribute a fair share of the emissions reductions required by the State's emissions reductions consistent with AB 32, EO B-30-15 (since signed into law by SB 32), and Executive Order S-3-05 emissions reductions. The 2035 General Plan and CAP EIR found this impact to be less than cumulatively considerable with mitigation.

The WRTP Specific Plan was assumed as part of the development proposed under the 2035 General Plan and CAP EIR, and therefore considered in the growth projections upon with the CAP modeling is based. As noted above, projects that are consistent with the General Plan and demonstrate consistency with the CAP may use this consistency determination in lieu of a project-specific GHG emissions analysis to address potential GHG emissions impacts.

As discussed in Section 3.10 of this EIR, "Land Use Planning, Population, and Housing," implementation of this WRTP Specific Plan would be consistent with the 2035 General Plan land use policies and General Plan Policy 2.L.2, which envisioned the WRTP Specific Plan Area as mixed-use residential district anchored by a research and technology business park in the Southern Gateway area at CR 25 and SR 113, with the highest intensity of development concentrated within and in close proximity to the business park area, and lower density, largely residential uses to the north. In addition, land use development anticipated under the General Plan in specific plan areas SP-1B and SP-1C are anticipated to have a lesser intensity of development, with SP-1C anticipated as entirely residential, with a lower-density residential profile. The WRTP Specific Plan Area (SP-1A) provides the additional job opportunities in close proximity to existing and future residential development within the City's Planning Area, thereby supporting the City's overall ability to reduce VMT per capita and associated mobile-source emissions.

As detailed in Table 3.5-1 below, as well as Table 3.10-4 in Section 3.4, "Land Use Planning, Population, and Housing," of this EIR, implementation of the WRTP Specific Plan would be consistent with the 2035 General Plan. In addition, the WRTP Specific Plan contains several policies that would promote mixed-use development; site residents, jobs, and amenities in proximity of each other to reduce the demand for motor vehicle travel; encourage the use of alternative modes of transportation; and support development of pedestrian, bicycle, and transit facilities that would facilitate reduced VMT associated with future development of the WRTP Specific Plan Area.

[1] The City of Woodland 2035 CAP establishes GHG emissions targets for the years 2020 and 2035 for the City's Planning Area. The 2020 target of the 2035 CAP was set to achieve emissions 15 percent below 2005 levels. The 2035 target of the 2035 CAP was developed to achieve an emissions efficiency level of 2.25 MT CO_2e per service population (residents + employees).

Table 3.5-1. WRTP Specific Plan Consistency with the City of Woodland 2035 General Plan Policies

General Plan Policy Number	Text	Consistency Discussion
2.A.5 – Complete and Well-Designed Neighborhoods	Promote the development of complete neighborhoods with a physical layout and land use mix that allows for a diversity of incomes; puts residents in close proximity to services and amenities; promotes walking, biking, and transit use; fosters community pride; enhances neighborhood identity; ensures public safety; and meets the needs of all ages and abilities.	Consistent: As detailed in Chapter 2 of the WRTP Specific Plan, the Land Use Plan for the WRTP Specific Plan Area provides for a range of housing options, and a commercial mixed-use town center focused around a central green and connected by a multi-modal street network and trail system. The WRTP Specific Plan plans for a Village Center Shared Mobility Hub that would provide a transit destination in the heart of the Research and Technology Park community. A network of bike/pedestrian trails connecting from a linear open space system throughout the WRTP Specific Plan Area provides access to businesses, commercial centers, and residential areas.
2.C.1 – Compact Form	Promote compact development patterns, mixed land use, and higher-development intensities that conserve land resources, reduce vehicle trips, improve air quality, and facilitate walking, bicycling, and transit use. Achieving the benefits of compact development as supported in this General Plan may result in potential tradeoffs related to traffic, noise, open space, and privacy. Sensitive design and appropriate performance standards may assist in mitigating these concerns. Where growth and increased density is allowed pursuant to this General Plan, these issues are acknowledged and accepted.	Consistent: Per WRTP Specific Plan Policies in Section 2.2.2 of the WRTP Specific Plan, the Land Use Plan shall promote compact development patterns, mixed land use, and higher development intensities that conserve land resources, reduce vehicle trips, improve air quality, and facilitate walking, bicycling, and transit use. Most residences are planned within walking distance (1/2 mile or less) of the Research and Technology Park and Village Center. This land use layout promotes fewer vehicle miles travelled, reducing mobile-related GHG emissions. See also, response to Policy 2.A.5.
2.C.2 – Consistency with the Climate Action Plan	Ensure that new development is consistent with the objectives and targets of the City's Climate Action Plan.	Consistent: Policy 1 in Section 2.2.3, "Sustainability," of the WRTP Specific Plan, and Policy 3.3.3. of the WRTP Specific Plan, require consistency with the City's Climate Action Plan, which includes several strategies to increase energy and resource efficiency of the built environment of the City's Planning Area, inclusive of the WRTP Specific Plan Area. In addition, Chapter 3 of the WRTP Specific Plan contains Design Standards and Design Guidelines for consistency with the City's Climate Action Plan, requiring all development in the WRTP Specific Plan Area comply with relevant GHG reduction strategies consistent with the City's Climate Action Plan and CAP Consistency Checklist.
2.C.3 - Alternative Transportation	Actively support and facilitate mixed-use retail, employment, schools, and residential development around existing and future transit stops, bike routes, and pedestrian paths.	Consistent: The WRTP Specific Plan is proposed as a new employment center that also includes a range of housing options and a commercial mixed-use village center connected by a multi-modal street network and trail system. As described in Section 4 of the WRTP Specific Plan, "Circulation and Mobility," a network of bike/pedestrian trails connecting from a linear open space system throughout the WRTP Specific Plan Area will promote convenient access to businesses, commercial centers, and residential areas and allow employees, residents, and patrons to arrive by bike, foot, or transit.
2.C.4 - Resource Efficiency	Encourage and incentivize buildings to be constructed so that they consume less energy, water, and other resources; allow natural ventilation; use daylight effectively; reduce stormwater runoff; and facilitate the use of clean energy whenever possible	Consistent: WRTP Specific Plan Policy 2 in Section 2.2.3, "Sustainability," of the WRTP Specific Plan is "Resource Efficiency" and is specifically consistent with General Plan Policy 2.C.4. In addition, Chapter 3 of the WRTP Specific Plan contains Design Standards and Design Guidelines energy efficiency in design and construction of land uses within the WRTP Specific Plan Area. See also response to Policy 2.C.2.

General Plan Policy Number	Text	Consistency Discussion
2.E.4 – Bike and Pedestrian Orientation	Create walkable, pedestrian-scaled blocks that feature sidewalks and bikeways that are safe, comfortable, and inviting.	Consistent: WRTP Specific Plan Policy 1 in Section 2.2.5, "Streetscape and Mobility," requires bike and pedestrian-orientation be consistent with General Plan Policy 2.E.4. Design Standards and Design Guidelines in Chapter 3 of the WRTP Specific Plan also provide for setback distances, landscaping requirements, building orientation, and other design guidelines to ensure implementation of this policy is achieved.
2.J.6 – Multimodal Access	Require convenient, attractive, and safe pedestrian, bicycle, and transit connections both within commercial centers and between centers and surrounding neighborhoods and other destinations.	Consistent: WRTP Specific Plan Policy 4 in Section 2.2.4, "Open Space," requires convenient, attractive and safe pedestrian, bicycle and transit connections throughout the WRTP Specific Plan Area Districts. In addition, the WRTP Specific Plan plans for a Village Center Shared Mobility Hub that would provide a transit destination in the heart of the Research and Technology Park community. As shown in Exhibit 4-2 of the WRTP Specific Plan, a network of bike/pedestrian trails connecting from a linear open space system throughout the WRTP Specific Plan Area provides access to businesses, commercial centers, and residential areas as well as to the adjoining Spring Lake residential community.
2.K.7 – Alternate Transportation Modes	Promote attractive, and safe pedestrian, bicycle, and transit connections both within employment centers and between centers and surrounding uses.	Consistent: See response to Policy 2.J.6.
2.L.2 – Specific Plan-1A (SP-1A)	Promote development of SP-1A as a mixed-use residential district anchored by a research and technology business park in the Southern Gateway area at CR 25 and SR 113. Concentrate the highest intensity of development within and in close proximity to the business park area, with lower density, largely residential uses to the north. Encourage sustainable development through the use of renewable energy sources and water conservation tools with the goal of striving to achieve zero net energy at the building and neighborhood level to the extent feasible.	Consistent: See the land use designations in Chapter 2.0, "Project Description," of this EIR. The WRTP Specific Plan used the General Plan to guide the mix of uses and overall amount of development. See also response to Policy 2.C.4 with regard to resource efficiency and conservation.
2.M.1 - Compact Form	Compact Form: Promote the development of compact, complete neighborhoods that locate services and amenities within walking and biking distance of neighborhood residents, reducing the need to travel by car.	Consistent: See response to Policy 2.C.1.
2.M.2 – Mixed Uses	Require neighborhood design that incorporates a mix of residential and non-residential development that addresses the basic daily needs of residents and employees. Each new growth area must incorporate some new employment generating uses.	Consistent: The WRTP Specific Plan will accommodate approximately 5,000 jobs, over 1,600 housing units, and includes a Village Center with space for retail, service, and other commercial uses. The Village Center, along with planned commercial space immediately adjacent to the Woodland Research Park in Spring Lake, will be designed to support residents in both communities with complementary retail and service uses. This land use layout will promote fewer vehicle miles travelled, reducing mobile-related GHG emissions.
2.M.4 - Pedestrian and Bike Mobility	Design streets to facilitate pedestrian and bicycle mobility in order to reduce automobile dependence and vehicle miles travelled. Utilize a traditional street grid with walkable blocks. Integrate a seamless greenbelt/trail system that provides recreational and transportation benefits.	Consistent: The WRTP Specific Plan includes a modified traditional street grid consisting of collector streets fed by local streets with walkable blocks. Streets will be connected through a system of sidewalks, bicycle lanes, and bicycle/pedestrian paths.

General Plan Policy Number	Text	Consistency Discussion
2.M.5 - Efficiency	Strive for net zero energy development by encouraging buildings to be constructed so that they consume less energy, water, and other resources; allow natural ventilation; use daylight effectively; and facilitate the use of clean energy whenever possible.	Consistent: Chapter 3 of the WRTP Specific Plan contains sustainable design standards and design guidelines, including requiring that all development strives to meet net zero energy consumption through incorporation of conservation measures above Title 24 standards. See also response to Policy 2.C.2 with regard to consistency with the City's Climate Action Plan, which contains energy efficiency and conservation strategies, as well as Policy 2.C.4, with regard to resource efficiency in design and construction within the WRTP Specific Plan Area.
2.M.6 – Green Building	Encourage sustainable, "green" building practices and construction techniques so that structures are designed, built, and renovated in a sustainable and resource-efficient manner.	Consistent: As described in Chapter 1 of the WRTP Specific Plan, one of the Guiding Principles of the WRTP Specific Plan is "Sustainable and Resilient" design and development, incorporating green building practices. The WRTP Specific Plan will incorporate features that encourage energy- and resource-efficient site planning, landscaping, and building design, including siting uses and development to take advantage of passive and active heating and cooling; incorporation of naturalized stormwater systems and use of recycled water in public parks, open space, and public realm landscape areas. See also response to Policy 2.M.5 with regard to energy efficiency in building design and construction.
3.A.4 – Reduce Vehicle Miles Traveled (VMT)	Require new development projects to achieve a 10 percent reduction in VMT per capita or VMT per service population compared to the general plan 2035 VMT performance, or a 10 percent reduction compared to baseline conditions for similar land uses when measuring transportation impacts for subsequent projects and making General Plan consistency findings. Reducing peak period VMT in particular is desirable due to the added benefit of minimizing severe congestion and reducing emissions. Use of VMT reduction strategies such as those taken from Quantifying Greenhouse Gas Mitigation Measures, CAPCOA, 2010 or similar professional research documents is encouraged.	Consistent: Section 3.13, "Transportation," of this EIR describes the Specific Plan's consistency with the City's VMT reduction target. The land use mix and density for development within the WRTP Specific Plan Area and the proposed transportation and circulation network within the WRTP Specific Plan (Chapter 4) are consistent with the assumptions applied to the analysis in support of the 2035 General Plan and CAP EIR. In addition, as detailed in Section 6.3.2 of the WRTP Specific Plan, the WRTP Specific Plan includes a TDM/VMT Program and funding to achieve a 10 percent VMT reduction for the WRTP Specific Plan Area. As a project that is consistent with the 2035 General Plan land use program and circulation element, and includes a TDM/VMT Program and funding to achieve the 10 percent VMT reduction required, the WRTP Specific Plan is consistent with the 2035 General Plan Policy 3.A.4. .
3.A.5 – Transportation Demand Management (TDM)	Utilize TDM tools and programs (e.g. alternative work schedules, telecommuting, ridesharing, or parking pricing) to encourage and create incentives for the use of alternative travel modes.	Consistent: WRTP Specific Plan Policy 6 of Section 2.2.5, "Streetscape and Mobility," states that businesses within the Research and Technology Park campus should incorporate TDM tools and programs to encourage and create incentives for the use of alternative travel modes and disincentivize single-occupancy vehicle use. Chapter 4, "Mobility and Circulation," of the WRTP Specific Plan describes planned facilities, systems and programs that are contemplated in the WRTP Specific Plan Area in support of a TDM program. See also Section 3.13 of this EIR, "Transportation," which includes Mitigation Measure 3.13-2 requiring the development of a TDM program for the entire WRTP Specific Plan Area prior to the first building permit for the first phase of development. See also response to Policy 2.C.3 with regard to the promotion of alternative transportation under the WRTP Specific Plan and Policy 2.J.6 with regard to multimodal access, both of which put in place features within the WRTP Specific Plan Area that would support TDM tools and programs.

General Plan Policy Number	Text	Consistency Discussion
3.A.7 – Street Grid Network and Density	Promote the use of grid and modified grid street patterns in new residential, commercial, or mixed-use development that propose to construct new streets. Modified grids may include combinations of grid and curvilinear streets. Greenbelts may intersect street grid to create an interconnected trail network that encourages biking and walking. The density of new streets should be similar to the existing residential neighborhoods in Woodland that have approximately nine centerline miles or arterials and collectors per square mile.	Consistent: As described in detail in Chapter 4, "Mobility and Circulation," of the WRTP Specific Plan, the mobility and circulation framework for the Plan Area is a modified grid, complete street system that accommodates all modes of travel and provides access within the WRTP Specific Plan Area and to Spring Lake and adjacent areas of the city. The active transportation network, as shown in Exhibit 4-2 of the WRTP Specific Plan, depicts the greenbelts and interconnected trail/pathway network that aligns with the street grid.
3.A.11 – New Development	Require all new development to provide convenient bicycle and pedestrian environments and access through building orientation, site layout, traffic management, and connections to transit service and local commercial and community facilities. Development must provide appropriate pedestrian amenities such as street lighting, benches, arcades, canopies, shade trees, art, and seating areas.	Consistent: Chapter 3 of the WRTP Specific Plan provides design standards and guidelines with regard to the bicycle and pedestrian environments and access within the WRTP Specific Plan Area. Pedestrian connection is encouraged through overhead trellising, shade trees, enhanced paving, landscaped edges, or other identifying characteristics in the Research and Technology Park and commercial zones. Within the Research and Technology Park, overall site planning is required to promote pedestrian and bicycle activity by way of paseos, paths, and connecting walkways that connect employees and visitors to key pedestrian pathways within the District and through to public rights-of-way, greenbelts, or the broader bike and pedestrian trail network. Design Guidelines also require that pedestrian walkways be well lit and visible. As detailed in Section 3.5.12 of the WRTP Specific Plan, multifamily development should incorporate an on-site pedestrian circulation system that connects residents internally within the development to neighborhood sidewalks, paths, and transit facilities, as well as to amenities and commercial services. See also, response to Policy 2.M.4.
3.B.1 - Complete Street Requirements and Green Streets	To the extent feasible, all new street construction and reconstruction shall be designed to achieve complete streets. Designs should consider the needs of all roadway users, bicyclists, pedestrians, transit vehicles, and motorists, appropriate to the function and context of the facility. The needs of all roadway users including vulnerable populations such as young children, seniors, and people with disabilities when determining roadway widths and other barriers to travel, especially near schools, parks, senior centers, community centers, and other activity hubs. Require street design to incorporate adequate landscaping, including street trees and landscaped medians and/or parkway strips, in order to increase shade, minimize runoff, and create a comfortable and visually attractive environment.	Consistent: As shown in Exhibit 4-2 of the WRTP Specific Plan, the mobility and circulation framework for the Plan Area is a modified grid, complete street system that accommodates all modes of travel. Future development within the WRTP Specific Plan will be required to comply with City street design standards and relevant provisions of the ADA. Development and design standards detailed in Chapter 3 of the WRTP Specific Plan, which govern the entire WRTP Specific Plan Area, provide for area specific design guidelines including accessibility and safety of sidewalks and paths. Street design is detailed in Chapter 4 of the WRTP Specific Plan and includes tree-lined and/or landscaping along medians and the sides of the streets where possible.
3.B.5 – New Developments	Require new developments to provide interconnected street networks with walkable blocks that allow and encourage active multimodal transportation.	Consistent: Exhibit 4-2 of the WRTP Specific Plan presents the active transportation network that provides for an interconnected street network with an aligning system of sidewalks, bike lanes, and multi-use trails and paths proposed within the WRTP Specific Plan Area. See also, response to Policy 2.J.6.
3.E.2 – Safe and Comfortable Sidewalk Design	Develop safe and pleasant sidewalks in compliance with adopted design standards to accommodate all users, including persons with disabilities, and complement the form and function of the land uses adjacent to each street segment.	Consistent: The WRTP Specific Plan promotes features of traditional neighborhoods through standards and guidelines that support walkable neighborhood blocks with relatively wider sidewalks and narrower local streets.

General Plan Policy Number	Text	Consistency Discussion
3.E.3 – Off-Street Pedestrian Paths	Continue to develop off-street pedestrian paths for access to schools, recreation facilities, and neighborhood services in existing and future neighborhoods in the city.	Consistent: As described in detail in Chapter 4 of the WRTP Specific Plan, the circulation system proposed provides for off-street Class 1 multi-use paths along Road B, which functions as the main north-south minor arterial street through the WRTP Specific Plan Area linking employment, commercial, residential, and recreational uses. Similarly, a Class 1 multi-use trail will be built on the north side of CR 25A, the south side of Marston Drive, and both sides of Road C, buffered from the roadway via a tree-lined landscape strip. As shown in Exhibit 4-2 of the WRTP Specific Plan, the proposed circulation network extends and connects to bikeways, pedestrian ways, and open space corridors within Spring Lake.
3.E.4 - Interconnected Network	Require new development to create complete pedestrian networks with linkages such as walkways, paseos, and shared-use paths that interconnect pedestrian facilities.	Consistent: The proposed layout of the WRTP Specific Plan is a well-connected grid of collector streets and a finer-grained network of local streets with bicycle lanes, bike/ped trails, and sidewalks. The layout of the WRTP Specific Plan is designed to create a well-connected circulation network for all modes of travel that allow for easy access to all parts of the WRTP Specific Plan Area and connect to the Spring Lake Specific Plan Area. See also, response to Policy 3.E.3.
3.F.2 – Bikeway Network	Promote the development of a comprehensive system of recreational and commuter bicycle routes that provide safe and convenient connections between the city's major employment and housing areas; existing and planned bikeways; and schools, parks, retail shopping, and residential neighborhoods.	Consistent: See response to Policies 3.E.3.
3.F.3 – Bicycle Parking	Encourage the development of convenient and secure bicycle parking and establish minimum parking standards at employment centers, schools, recreational facilities, transit terminals, commercial businesses, the Downtown core area, and other locations where people congregate.	Consistent: Minimum bicycle parking standards are defined to be a minimum of 10 percent of the total number of vehicular spaces provided or credited to development within the Research & Technology Park, Commercial, and Mixed Use zones, as detailed in Table 3.2 of the WRTP Specific Plan. Design Guidelines for these zones, as detailed in Chapter 3 of the WRTP Specific Plan, also describe requirements for the design of bike parking facilities with regard to convenient location and safety features.
3.F.4 – Bicycle Facilities	Require residential, commercial, and industrial developments to include bicycle lanes or pathways in accordance with the Bikeway Master Plan or Specific Plans when constructing new roadways or upgrading existing streets.	Consistent: Exhibit 4-2 of the WRTP Specific Plan depicts the planned active transportation network within the WRTP Specific Plan Area, which includes either Class I, II, or III bicycle paths and lanes.
3.G.3- Bike and Pedestrian Connections	Ensure transit stops are connected to an integral part of the city's pedestrian and bicycle network.	Consistent: Design Standards and Design Guidelines in Chapter 3 of the WRTP Specific Plan require that, for multifamily development projects, an on-site pedestrian circulation system should connect residents internally within the development to parking areas and open space, as well as to neighborhood sidewalks, paths, and transit stops. See also, response to Policy 3.A.11.
3.H.7 – Electric / Alternative Fuel Vehicle Parking	Require new large commercial and retail developments, large employment centers, high-use public buildings, and parking structures to provide parking for alternative fuel vehicles including charging stations for electric vehicles. Require electric vehicle charging outlets in garages of all new single family residential homes.	Consistent: Policy 3 in Section 2.2.3, "Sustainability," of the WRTP Specific Plan requires parking facilities in non-residential zones provide for alternative fueling and electric vehicle charging, and residential development provide EV-capable facilities in all garages and parking lots.
7.F.5 – Electric Equipment	Promote inclusion of features such as exterior electrical outlets in new residential development to encourage the use of electric and other alternative fuel equipment.	Consistent: Policy D.2 in Section 3.5.12 of the WRTP Specific Plan requires that all housing units be pre-wired for electric vehicle and solar photovoltaic systems.

The WRTP Specific Plan Design Standards and Design Guidelines require specific sustainability and energy and resource efficiency and conservation measures that would ensure future development is consistent with related CAP objectives and strategies. Moreover, all uses under the WRTP Specific Plan are subject to the Performance Standards listed in Section 3.3.2 of the WRTP Specific Plan, and are required to demonstrate consistency with the 2035 CAP, as outlined in Section 3.3.3 of the WRTP Specific Plan. Section 3.3.3 of the WRTP Specific Plan requires the following to ensure development under the WRTP Specific Plan would be consistent with the City's 2035 CAP:

(A) All new development projects and major expansion projects shall provide a summary of incorporated conservation measures, consistent with the City's 2035 Climate Action Plan (CAP), adopted with the General Plan in 2017. For each CAP strategy and related "action" relevant to new development projects, the City will determine: (a) the project is consistent; (b) the project with conditions or when modified would be consistent; (c) the strategy is relevant for new development, but not the subject project; or (d) the project includes one or more replacement strategies that would be equally or more effective in reducing GHG emissions and such replacement strategy or strategies are not include in the CAP or required by any other regulations, standards, design criteria, or other existing requirement.

(B) All projects shall complete and submit the City's CAP Consistency Checklist for review and approval by the City prior to project approval. The CAP Consistency Checklist allows proposed development projects to demonstrate consistency with the CAP.

(C) Consistent with General Plan Policy 2.L.2, all projects shall strive to meet net zero energy consumption through the incorporation of conservation measures above Title 24 standards and shall, at minimum, demonstrate consistency with CalGreen Tier 1 Standards.

(D) Additional GHG reductions strategies and sustainability measures shall be considered in major expansion projects and in the ongoing operations and use of all commercial and residential projects within the [WRTP Specific] Plan Area including, but not limited to, Energy Conservation, Water Conservation/Quality and Low Water Landscape measures as outlined in [the WRTP Specific Plan] Sustainability Guidelines Sections 3.5.3.B for commercial uses and Section 3.5.12.B for residential.

To further ensure development under the WRTP Specific Plan would be consistent with the City's 2035 CAP, including achieving the necessary VMT reductions, Chapter 6, "Implementation," of the WRTP Specific Plan requires that a Comprehensive Transportation Demand Management/Vehicle Miles Traveled Reduction Program (TDM/VMT Program) be prepared prior to approval of the first development application of tentative map. The Master TDM/VMT Program shall: 1) establish transportation strategies, programs, facilities or services for the purpose of VMT reduction that are financed by and consistent with the strategies and requirements of the Development Agreement[2]; and 2) provide project specific VMT reduction strategies that all property owners/tenants shall be required to implement through individual Project-level TDM Plans consistent with the Master TDM Program. These measures shall in combination achieve a 10 percent reduction in Plan Area VMT per capita compared to baseline conditions by 2035. The Master TDM/VMT Program will include a monitoring plan for collecting VMT data in the interim years to 2035, every five years as input to citywide GHG monitoring, so that the effectiveness of the VMT reduction strategies can be confirmed and any required strategy adjustments made to reach project VMT reduction targets. Monitoring reports shall be reviewed by the City, which may make adjustments to reach project VMT reduction targets, as necessary. Table 3.5-2 outlines the City's Climate Action

[2] In order to specify the manner in which the necessary infrastructure, public facilities, and other programs or services as provided in this Specific Plan will be constructed and/or operated and financed, among other matters, the City and the project applicant intend to enter a development agreement. The terms and conditions of the development agreement will be consistent with the goals and policies of this Specific Plan and shall set forth and require financing strategies, sources, and mechanisms to ensure short-term and long-term funding for implementation and monitoring of the TDM/VMT measures.

Plan policies as relevant to the WRTP Specific Plan, and provides a brief discussion of the WRTP Specific Plan's consistency with each of these policies.

Table 3.5-2. WRTP Specific Plan Consistency with the City of Woodland Climate Action Plan

CAP Strategy Number	Actions	Consistency Discussion
E-1 Lighting Efficiency Upgrades	Require that new construction include LED lights, solar tubes or skylights in windowless internal rooms, and consideration of room orientation to maximize the use of natural lighting.	Consistent: Per the Design Standards and Design Guidelines contained in WRTP Specific Plan Section 3.5.12 for all residential district zones, standard D.4. states that home and building design and placement should take advantage of passive solar opportunities. In addition, standard B.1. of the Design Standards and Design Guidelines contained in WRTP Specific Plan Section 3.5.3, for all zones within the Research and Technology Park District, states that "[a] comprehensive approach to energy conservation should be employed in individual projects (new construction and/or expansion), in ongoing operations and use, as well as in collaboration with other campus-wide initiatives that may be developed, including the following strategies:" and goes on to identify suggested strategies including the design of work places to support direct access to natural light for as many occupants as possible and the use of energy-efficient appliances and lighting that meet, at a minimum, CalGreen Code Tier 1 standards.
E-3 Comprehensive Building Efficiency	Promote sustainable construction and development practices contained in the CalGreen Code, such as using cool roofs, vegetation, and permeable or other special pavements where appropriate to reduce heat-island effects on and around buildings.	Consistent: See consistency discussion for CAP Strategy E-1. An additional energy conservation strategy provided in Section 3.5.3 of the WRTP Specific Plan includes the use of street trees, shading devices, cool pavements in parking lots, and cool roofs for all zones within the Research and Technology Park District, to reduce heat gain and reduce the urban heat island effect. Similarly, standard D.1. of WRTP Specific Plan Section 3.5.12 for all residential district zones encourages "[e]nergy conservation strategies including window shading devices, selection of colors to reduce heat gain, energy efficient case windows, cool roofs, high-quality insulation and radiant barriers, solar panels, and other features".
E-4 Improved Building Temperature Controls	Encourage innovative site designs and building orientations for new construction that incorporate passive and active solar designs and natural cooling techniques. Require that natural temperature-control factors, such as cross ventilation, wind protection, and shade, be considered in site and building design for new construction.	Consistent: See consistency discussion for CAP Strategy E-3.
E-6 Renewable Energy Generation and Procurement	Encourage initial residential sizing of solar installations at 3 kW or larger to accommodate EV charging and achieve net zero carbon footprint without future need to increase inverter. Increase the percentage of homes in new development that are solar ready and/or that have solar water heaters, up to 100% by 2020.	Consistent: WRTP Specific Plan standard D.1 of Section 3.5.12 states that "[a]ll housing unites shall be pre-wired for electric vehicle and solar PV systems." In addition, Specific Plan Policy 2.2.3(3) requires all residential development provide EV-capable facilities in all garages and parking facilities. In addition, Chapter 3 of the WRTP Specific Plan contains sustainable design standards and design guidelines, including requiring that all development strives to meet net zero energy consumption through incorporation of conservation measures above Title 24 standards.

CAP Strategy Number	Actions	Consistency Discussion
T/LU-5 Increased Mass Transit Use, Walking, and Bicycling	Provide a reduction of parking requirements to employers who effectively plan for and implement programs for alternative commute transportation. Require new multi-family developments to provide secure bicycle storage options and/or bicycle-share programs.	Consistent: Standard G.6 of WRTP Specific Plan Section 3.5.3 provides for reduced parking demand, stating that "Projects shall demonstrate that parking reduction strategies have been incorporated to reduce on-site parking demand through Transportation Demand Management strategies such as but not limited to the following: Parking cash-out for employees; Subsidized transit passes or car sharing programs; dedicated parking spaces near building entrances for rideshare and carpools; guaranteed ride home program; alternative work week and flex-time schedules; telecommuting or work-at-home programs; dedicated employee housing; compliance with City VMT/TDM ordinance, as available; and participation in City VMT fee program, as available.
T/LU-7 Increased Use of Alternative-Fuel Vehicles	Encourage developers to include EV charging infrastructure in new residential developments.	Consistent: WRTP Specific Plan standard D.1 of Section 3.5.12 states that "[a]ll housing units shall be pre-wired for electric vehicle and solar PV systems." In addition, Specific Plan Policy 2.2.3(3) requires that all residential development provide EV-capable facilities in all garages and parking facilities.
UF-2 Increased Tree Planting	Require home construction in new developments to include two shade trees per home on the east, west, or south face of the home to provide energy savings, with trees located to prevent interference with solar Photo-Voltaic production.	Consistent: WRTP Specific Plan Policy E.4 of Section 3.5.12 states that "[t]he design and location of trees and landscaping for homes should consider opportunities for solar access and solar panels, as well as, shading and ventilation on hot summer months.
Zero Net Energy Building Standards[1]	Develop, adopt, and enforce zero net energy building standards for new residential construction starting in 2025 through which total net building energy requirements can be met through on-site renewable energy systems.	Consistent: WRTP Specific Plan standard D.1 of Section 3.5.12 states that "[a]ll housing units shall be pre-wired for electric vehicle and solar PV systems." In addition, Specific Plan Policy 2.2.3(3) requires that all residential development provide EV-capable facilities in all garages and parking facilities. In addition, Chapter 3 of the WRTP Specific Plan contains sustainable design standards and design guidelines, including requiring that all development strives to meet net zero energy consumption through incorporation of conservation measures above Title 24 standards.
Land Use-Based VMT Reductions[1]	Implement a standard or standards in new development to reduce vehicle miles traveled (VMT) by a minimum of 10 percent per service population by reducing vehicular trip distances or increasing the mode share for transit, walking, and bicycling.	Consistent: This is further discussed in Section 3.13, "Transportation and Circulation," of this EIR. The WRTP Specific Plan is consistent with the 2035 General Plan land use program, including residential density and population estimates and non-residential building square footage, and transportation network. In addition, Section 6.3.2 of the WRTP Specific Plan requires a TDM/VMT Program and funding to achieve a 10-percent VMT reduction.

Notes:

[1] These CAP Strategies are identified as Additional Actions. If the result of the CAP progress review finds that statewide actions (combined with the CAP strategies presented throughout the focus area sections) will not achieve the 2035 target, as assumed, the City will implement one or all of the following additional strategies or other new strategies that are demonstrated to close any remaining emissions reductions gap.

EPA and CARB regulations targeting the reduction of GHG emissions from mobile sources results in overall reduced emissions per unit of fuel consumed, and would therefore reduce overall mobile emissions from future vehicle miles traveled associated with implementation of the WRTP Specific Plan. In addition, there are existing statewide actions that will result in additional reductions. For example, updates to the State's building code will further reduce energy emissions from new construction and qualifying retrofits. Building code revisions occur on an approximately five-year cycle, so additional revisions between now and 2035 are likely. Further, in June 2020, CARB approved the Advanced Clean Trucks regulation, requiring truck manufacturers to transition from diesel-powered trucks and vans to electric zero-emission trucks beginning in 2024 with phasing in of increasingly stringent requirements through 2045. This is a key element of CARB's strategy to achieve its emission reductions pursuant to the Scoping Plan. As energy efficiency requirements in the State building code are updated, future projects within the WRTP Specific Plan area seeking building permits will be required to comply with these updated standards. Similarly, as CARB and the EPA adopt updated clean vehicle standards, anticipated to be increasingly stringent over time, new vehicles produced and purchased will be required to meet those standards, including new vehicles that would be used by residents, employees, visitors, and businesses within the WRTP Specific Plan Area. These, among other statewide actions can reduce anticipated emissions associated with future operations within the WRTP Specific Plan Area.

Ongoing City Action to Reduce Greenhouse Gas Emissions

Since the adoption of the General Plan and CAP, the City has implemented several actions to reduce GHG emissions associated with the City's Planning Area. The following list summarizes key actions. The WRTP Specific Plan Area will also benefit from implementation of these actions, as they will be applicable to future operations within the WRTP Specific Plan Area and further reduce future operational GHG emissions within the WRTP Specific Plan Area.

Waste Reduction and Diversion

- In compliance with AB 1826, in January 2017 the City established a commercial organics recycling program to divert food scraps and food-soiled paper from the landfill.
- In March 2018, the City launched a residential organics recycling program to divert food scraps and food-soiled paper from the landfill. Residents are encouraged to place food scraps and food-soiled paper in their green waste (organics) bin along with yard trimmings to reduce landfill waste and GHG emissions.

Urban Forestry

- The Urban Forest Master Plan (UFMP) was adopted by the City Council in February 2019. Staff is beginning to implement the goals identified in the plan, such as cyclical tree pruning and developing an annual work plan.
- The Cal Fire grant that funded the development of the UFMP also funded the planting of 1,200 trees between 2017 and 2019.

Energy Reductions

- In June 2017, the City became a member of the Valley Clean Energy Alliance Joint Powers Authority, which established a Community Choice Energy program, Valley Clean Energy (VCE), in Yolo County, the City of

Davis, and the City of Woodland. The mission of VCE is to deliver cost-competitive clean electricity, product choice, price stability, energy efficiency, and greenhouse gas emission reductions to its customers. VCE's current power mix as the default option for all customers is 42 percent renewable and 75 percent carbon free power. VCE also offers customers the option to opt-up to 100 percent renewable and 100 percent carbon-free power.

- By 2017, the City had replaced approximately 70 percent of the lamps in city-owned streetlights with LED bulbs. Since 2017, more than 70 percent of the lamps in city-owned streetlights have been replaced with LED bulbs as the City has continued the lamp replacements. LEDs have also been installed in city facilities to replace incandescent and fluorescent lights. Motion sensors are installed at all city facilities to conserve energy when rooms and hallways are not in use.

Mobile Source Reductions

- As of August 2019, the City has replaced nine gasoline vehicles with nine hybrids and three diesel tree maintenance trucks with one hybrid truck that has the capabilities of all three diesel vehicles. The City is currently in the process of replacing one hybrid sedan with one electric sedan, five gasoline vehicles with three hybrids and two electric vehicles for fiscal year 2019 to 2020.

- By 2017, the City had installed three dual electric vehicle (EV) charging stations and one single EV charging station in three public parking lots in Downtown Woodland at and near City Hall and the Woodland Public Library as well as one dual EV charging station at the Municipal Service Center and at the Water Pollution Control Facility. Since then, the City has installed two dual EV charging stations in the gated parking lot at the Police Department and anticipates installing about five EV charging stations for public use within the next 18 months as part of a county-wide collaborative "Electrify Yolo" grant awarded through SACOG's Green Region Program.

Other Actions

- In March 2019, City Council established a Sustainability Advisory Committee with the purpose of helping the City to achieve state mandated conservation goals and the goals of the City's Climate Action Plan (CAP) and providing recommendations to City Council regarding sustainability policy.

- In October 2019, the City created a CAP Consistency Checklist to allow proposed development projects that are subject to CEQA to demonstrate consistency with Woodland's CAP. The Checklist also identifies GHG reduction strategies that may be incorporated into all proposed development projects.

Analysis within the 2035 General Plan and CAP EIR (page 4.5-39) determined that the 2035 CAP would achieve local annual GHG reductions that, when combined with estimated future statewide reductions, would achieve necessary GHG reductions to meet the City's fair-share reductions towards the State's GHG targets, based on the contemplated land use within the 2035 General Plan. Achieving this level of GHG emissions efficiency in Woodland for the 2035 General Plan horizon year demonstrates the City's share of the State's emissions targets for 2020, 2035, and 2050. The WRTP Specific Plan requires development consistent with the CAP, and WRTP Specific Plan Design Standards and Design Guidelines ensure that the design, construction, and operation of future development projects within the WRTP Specific Plan are consistent with General Plan Policies, that future projects include unique requirements for the WRTP Specific Plan Area to promote energy and resource efficiency, that

future projects reduce VMT consistent with City policy, and that future projects demonstrate consistency with the City's 2035 CAP, as detailed above.

CEQA Guidelines 15183.5(b) states "a lead agency may determine that a project's incremental contribution to a cumulative effect is not cumulatively considerable if the project complies with the requirements in a previously adopted plan or mitigation program under specified circumstances." The WRTP Specific Plan is consistent with the City's 2035 CAP, and the CAP identifies reduction measures that would achieve reductions that would, based on substantial evidence, avoid a cumulatively considerable contribution to the significant cumulative impact of global climate change. Therefore, as provided by CEQA Guidelines section 15183.5(b), the WRTP Specific Plan would not result in an incremental contribution to a cumulative effect and no additional CEQA review is required**.**

PROJECT IMPACTS

IMPACT 3.5-1 **Result in Potentially Significant Environmental Impact Due to Wasteful, Inefficient, or Unnecessary Consumption of Energy Resources during Project Construction or Operations (Significance Threshold 3).** *Implementation of the WRTP Specific Plan would result in energy consumption for the duration of construction. Following construction of individual land uses, energy could also be consumed in the forms of fossil fuels and electricity for operational phases. Implementation of the WRTP Specific Plan would not generate substantial renewable energy that would reduce reliance on fossil fuels, but it does include several policies that promote energy conservation and savings that would reduce energy demand and associated environmental effects and would not result in an unnecessary or wasteful use of energy. This impact would be* ***less than significant****.*

The 2035 General Plan and CAP EIR (pages 4.5-43 to 4.5-63) discusses potential impacts related to the consumption of energy from implementation of the 2035 General Plan and CAP. The EIR estimated the maximum annual energy demand in the form of natural gas, electricity, and fuel associated with future operations within the City's Planning Area with implementation of the 2035 General Plan. The 2035 General Plan and CAP EIR also discussed the anticipated construction-related energy demand associated with development with implementation of the General Plan.

With regard to construction-related energy consumption, the 2035 General Plan and CAP determined that the Planning Area and anticipated development do not have any unusual characteristics that would necessitate the use of construction equipment or methods that would be less energy-efficient than at comparable construction sites in the City. With regard to operational transportation and building energy consumption, the General Plan contains several policies that promote mixed-use and infill development and site residents, jobs, and retail amenities in proximity of each other to reduce the need for motor vehicle travel. Many policies through various mechanisms also support development of pedestrian and bicycle facilities and encourage alternative transportation and transit that would promote non-vehicular modes of travel. General Plan policies also encourage minimizing energy and water demand and wastewater generation and encourage methods to minimize solid waste generation and increase waste diversion systems. Policy 2.C.2 also requires new development to be consistent with the objectives and targets of the City's CAP, which specifically provides objectives, strategies, and implementation measures to reduce energy demand associated with the City's Planning Area. The 2035 General Plan and CAP EIR determined that implementation of the General Plan, for either alternative, would improve overall energy efficiency on a per-service population bases compared to existing conditions. The 2035 General Plan and CAP EIR found this impact to be less than significant.

WRTP Specific Plan Construction-Related Energy Consumption

Implementation of the WRTP Specific Plan and off-site improvement areas would increase consumption of energy in the form of electricity, natural gas, and fossil fuels (e.g., gasoline, diesel fuel) for the duration of construction. The primary energy demands during construction would be associated with construction equipment and vehicle fueling. During this period, energy (fuel) would be consumed by construction vehicles and equipment operating on-site, trucks delivering equipment and supplies to the project site, and construction workers driving to and from the site. Table 3.5-2 presents the total fuel consumption anticipated for the proposed construction activities, shown both for the total construction of the WRTP Specific Plan Area and off-site improvement areas, and amortized over an assumed 30-year period of operation. The data in Table 3.5-2 are based on the emissions calculations for proposed construction activities (using both CalEEMod and RCEM, as detailed in the methodology section above) and application of standard CO2 emissions coefficients for diesel and gasoline fuel to estimate fuel consumption for each phase of construction activities. Refer to Appendix B for detailed model inputs, assumptions and calculations.

Energy consumption would vary depending on the type of construction activities. For example, during construction equipment-intensive phases, such as site grading, daily fuel use would be higher than during less intensive phases, such as building construction. A WRTP Specific Plan is a long-term planning document, and exact buildout schedules cannot be determined. Therefore, for the purposes of this EIR, a maximum annual construction level was estimated to be buildout of up to 25 percent of the WRTP Specific Plan Area in the earliest possible year of construction (2021). Realistically, development will occur over the duration of the planning horizon, at least through 2035. Estimating fuel use based on the vehicle and equipment fleet mix in 2021 provides a conservative estimate of total construction-related fuel demand, as vehicle and equipment fuel intensity is anticipated to decrease over time with the influx of new vehicles in the fleet mix that are designed to adhere to increasingly stringent emissions and fuel efficiency standards. Because of these conservative assumptions, actual construction-related energy consumption could be less than those estimated. If construction is delayed or occurs over a longer period, fuel use could be reduced because of a more modern and fuel efficient construction equipment fleet mix.

Fuel consumed during construction would be temporary in nature and would not represent a significant demand on available fuel, beyond normal construction fuel usage. The City does not anticipate unusual characteristics that would necessitate the use of construction equipment that would be less energy-efficient than at comparable construction sites in the region or state.

WRTP Specific Plan Building Operations-Related Energy Consumption

Operation of land uses and infrastructure and facilities in the Planning Area would consume energy for multiple purposes including, but not limited to, building heating and cooling, refrigeration, lighting, electronics, office equipment and commercial machinery. Projects under the WRTP Specific Plan would be constructed to meet currently-applicable energy efficiency standards at the time of construction. As discussed in the Regulatory Framework, energy efficiency requirements have and will continue to become more stringent over time. In accordance with California Code of Regulations Title 20 and Title 24, development under the WRTP Specific Plan will be required to comply with the building energy standards and California Building Standards Code, including CALGreen. This includes meeting energy standards for water and space heating and cooling equipment, insulation for doors, pipes, walls, and ceilings, and appliances, and other requirements. The CEC projects that the 2019 Building Energy Efficiency Standards will reduce energy demand of new residential construction by 53 percent and

Table 3.5-2. Energy Demand, Construction

Construction Source[1]	MT CO_2e/yr [a] (For Buildout of Entire WRTP Specific Plan Area and Off-site Improvement Areas)	Predominant Fuel Type	Factor (MT CO_2/gallon) [b]	Gallons/ year
Site Prep Offroad Equip	1,814	Diesel	0.01016	178,523
Site Prep Hauling	-	Diesel	0.01016	-
Site Prep Vendor	-	Diesel	0.01016	-
Site Prep Worker	63	Gas	0.008887	7,066
Grading Offroad Equip	4,321	Diesel	0.01016	425,257
Grading Hauling	-	Diesel	0.01016	-
Grading Vendor	-	Diesel	0.01016	-
Grading Worker	152	Gas	0.008887	17,068
Structural Construction Offroad Equip	2,351	Diesel	0.01016	231,358
Structural Construction Hauling	-	Diesel	0.01016	-
Structural Construction Vendor	3,036	Diesel	0.01016	298,834
Structural Construction Worker	2,238	Gas	0.008887	251,780
Paving Offroad Equip	1,211	Diesel	0.01016	119,157
Paving Hauling	-	Diesel	0.01016	-
Paving Vendor	-	Diesel	0.01016	-
Paving Worker	68	Gas	0.008887	7,676
Architectural Coating Offroad Equip	133	Diesel	0.01016	13,090
Architectural Coating Hauling	-	Diesel	0.01016	-
Architectural Coating Vendor	-	Diesel	0.01016	-
Architectural Coating Worker	435	Gas	0.008887	48,948
Caltrans Off-site Offroad Equip	700	Diesel	0.01016	68,928
Caltrans Off-site Hauling	-	Diesel	0.01016	-
Caltrans Off-site Vendor	-	Diesel	0.01016	-
Caltrans Off-site Worker	50	Gas	0.008887	5,653
Total of All Offroad, Hauling, and Vendor	13,565	Diesel	0.01016	**1,335,149**
Total of All Worker	3,006	Gasoline	0.008887	**332,538**
Total of All Offroad, Hauling, and Vendor (Amortized over 30 years)	452	Diesel	0.01016	**44,505**
Total of All Worker (Amortized over 30 years)	76	Gasoline	0.008887	**11,085**

Notes:

CO_2 = carbon dioxide; CO_2e = carbon dioxide equivalent; MT = metric tons

[1] All listed construction sources are for the entire WRTP Specific Plan Area and off-site South Regional Pond, unless otherwise listed as Caltrans, in which it is for the Caltrans Off-Site Improvement Area.

Sources:

[a] Modeled by AECOM in 2020

[b] U.S. Energy Information Administration 2016

that of new nonresidential development by 30 percent relative to comparable buildings constructed under the 2016 California Energy Code, and more so for older buildings (CEC 2018). Implementing these provisions would increase energy efficiency. Furthermore, the PG&E base power mix is approximately 39 percent eligible renewable resources and PG&E offers power mixes to consumers from 50 and 100% renewable sources, ensuring that electricity consumption in the WRTP Specific Plan Area relies heavily on renewable sources.

Using CalEEMod, electrical and natural gas demands were modeled to estimate energy use, as shown below in Table 3.5-3.

Table 3.5-3. Energy Demand, Building Operations

Land Use Category	Electrical Demand (kWh/year)	Natural Gas Demand (kBtu/year)
Residential - High Density	2,140,810	6,013,140
Residential - Medium Density	3,211,850	10,622,300
Residential - Low Density	4,346,970	12,976,000
Research & Technology Park	16,209,160	22,882,200
Retail / Commercial	1,632,450	1,762,870
Total	**27,518,700**	**54,256,510**

Notes: kWh = kilowatt-hours; kBtu = thousand British thermal unit
Source: AECOM 2020

Policy 1 in Section 2.2.3, "Sustainability," of the WRTP Specific Plan, and WRTP Specific Plan Policy 3.3.3 (detailed above in the discussion of Impacts Not Discussed Further), require consistency of future projects under the WRTP Specific Plan with the City's CAP, which includes several strategies to increase energy and resource efficiency of the built environment of the City's Planning Area, inclusive of development anticipated under the WRTP Specific Plan. Chapter 3 of the WRTP Specific Plan contains Design Standards and Design Guidelines for consistency with the City's CAP, requiring all development in the WRTP Specific Plan Area comply with relevant GHG reduction strategies consistent with the City's CAP and CAP Consistency Checklist. Therefore, development in the WRTP Specific Plan Area, in compliance with the City's CAP, would be more energy efficient than existing buildings and potentially than new construction in the region that is not otherwise required to exceed existing regulatory building energy requirements and standards.

As a result, new projects would be more energy efficient than existing projects of the same type within the City that were constructed prior to the existence of energy efficiency standards or under previous less stringent energy efficiency standards. In addition, older buildings tend to decrease in energy efficiency as infrastructure begins to degrade with time. Therefore, the space heating and cooling, lighting, and other operational-related energy uses under the WRTP Specific Plan would tend to have lower per-capita energy consumption in association with building energy needs that buildings of similar design and operation in the City.

WRTP Specific Plan Transportation-Related Energy Consumption

Transportation is, by far, the largest energy consuming sector in California, accounting for approximately 40 percent of all energy use in the state (U.S. Energy Information Administration 2020). Since transportation accounts for more energy consumption than heating, cooling, and powering of buildings, powering industry, or any other use, the travel demand reducing features of the Specific Plan are important for consideration in an assessment of energy efficiency.

The Specific Plan Area is located in what is known as the Southern Gateway to Woodland, adjacent to and east of SR 113 and along CR 25A, and adjacent to the developing Spring Lake neighborhood. SR 113 is a north-south running state highway that serves as a connecting route between I-80 and I-5, as well as connects the Specific Plan Area to the downtown center of Woodland in the north and to Davis in the south. I-80 and I-5 provide the primary

routes to the more urban center of Sacramento as well as surrounding areas. Proposed land uses within the Specific Plan provide employment, neighborhood and community-serving retail and services, housing, and recreational opportunities. Development within the Specific Plan Area will include a mixed-use residential district anchored by a research and technology business part in the Southern Gateway area. The Specific Plan calls for complete streets and an interconnected transportation network, such that the overall circulation system would support alternative forms of transportation and reduced vehicle miles travelled and corresponding reductions in transportation energy use.

Transportation fuel consumption generated by operations of development within the WRTP Specific Plan Area was estimated based on the CalEEMod emissions calculations for operational mobile activities associated with land uses as anticipated within the WRTP Specific Plan Area, the EMFAC2017 vehicle fleet mix for Yolo County, and application of standard CO_2 emissions coefficients to estimate total fuel consumption. Table 3.5-4 presents the estimate of diesel and gasoline fuel consumption during project operations.

As explained in Section 3.13 of this EIR, "Transportation and Circulation," the WRTP Specific Plan is required to reduce VMT consistent with General Plan Policy 3.A.4, and requires a comprehensive Transportation Demand Management/Vehicle Miles Traveled Reduction Program prior to approval of the first development application or tentative map, or as otherwise required by the Community Development Director. In addition, the WRTP Specific Plan provides for a shared mobility hub to support increased accessibility to alternative modes of transportation, requires electric/alternative fuel vehicle parking (per WRTP Specific Plan Policy 2.2.3), and incorporates active transportation facilities as integral to the mobility and circulation network (see Exhibit 4-2 of the WRTP Specific Plan). These WRTP Specific Plan features and policies will ultimately result in transportation-related fuel demand that are lower than those presented below in Table 3.5-4 and will increase overall energy efficiency associated with transportation needs with buildout of the WRTP Specific Plan.

Table 3.5-4. Energy Demand, Operational Transportation

Fuel Type	Gallons per Year[a]	MMBtu per Year[b]
Diesel	331,065	45,719
Gasoline	2,618,095	327,262
Fuel Type Total	N/A	**372,980**

Notes: MMBtu= Million British thermal units
Sources:
[a]EMFAC2017 web database;
[b]U.S. Energy Information Administration 2016 (https://www.eia.gov/environment/emissions/co2_vol_mass.php)
Modeled by AECOM in 2020

Summary of Impact Analysis

Energy would be consumed through all phases of project construction and operations. Energy-requiring activities range from equipment operation during construction, to building operations, to transportation during all phases of the WRTP Specific Plan implementation. Table 3.5-5 summarizes total energy requirements for development under the WRTP Specific Plan. For comparison purposes, Table 3.5-5 shows conversion of all energy requirements to a common energy unit of British thermal units (Btu) per year.

Table 3.5-5. Summary of WRTP Specific Plan Area and Off-site Improvement Energy Requirements

Energy Consuming Activity	Diesel Consumption (gallons/year)	Gasoline Consumption (gallons/year)	Electricity Consumption (KWh/year)	Natural Gas Consumption (kBtu/year)	Annual Energy Consumption (MMBtu)
Construction *(amortized over 30 years)*	44,505	11,085	n/a	n/a	7,531
Building Operations	n/a	n/a	27,518,700	54,256,510	148,178
Operational Transportation	331,065	2,618,095	n/a	n/a	372,980
Total	**375,570**	**2,629,180**	**27,518,700**	**54,256,510**	**528,690**

Notes: kBtu/year = thousand British thermal units per year; KWh/year = kilowatt-hours per year; MMBtu = million British thermal units

Totals do not add due to rounding.

Sources: Modeled by AECOM in 2020; U.S. Energy Information Administration 2016

Operational transportation would be the greatest energy consuming factor associated with implementation of the WRTP Specific Plan. The WRTP Specific Plan provides for employment-generating land uses as well as a range of housing options, and implements land use and transportation planning strategies that would reduce the demand for motor vehicle travel, and thereby minimize overall transportation energy (fuel) demands. Building operations would account for approximately 30 percent of the energy consumption for the WRTP Specific Plan Area. Compliance with existing regulations would ensure that the proposed facilities would be more energy efficient than existing, average, similar-use buildings, as energy efficiency requirements have become more stringent over time. In addition, the implementation of the WRTP Specific Plan would be consistent with the City's 2035 General Plan and, as described above in Table 3.5-1 and further detailed in Section 3.10, "Land Use Planning, Population, and Housing," of this EIR. As detailed in the Design Standards and Design Guidelines in Chapter 3 of the WRTP Specific Plan, building design and construction of development under the WRTP Specific Plan will incorporate features that achieve energy and resource efficiencies. Considering this information, the WRTP Specific Plan would not be expected to cause inefficient, wasteful, or unnecessary consumption of energy and this impact is considered **less than significant**. No mitigation is required.

Energy efficiency is a possible indicator of environmental impacts. The actual adverse physical environmental effects associated with energy use and the efficiency of energy use are detailed throughout this EIR in the environmental topic–specific sections. For example, the use of energy for transportation leads to air pollutant emissions, the impacts of which are addressed in Section 3.3 of this EIR. There is no physical environmental effect associated with energy use that is not addressed in the environmental topic–specific sections of this EIR.

Mitigation Measures

No mitigation is required.

IMPACT 3.5-2 **Conflict with or Obstruct a State or Local Plan for Renewable Energy or Energy Efficiency (Significance Thresholds 4).** *Implementation of the WRTP Specific Plan would include buildout of planned land uses that would involve GHG emissions associated with short-term construction and infrastructure improvements, along with long-term operational emissions. WRTP Specific Plan consistency with the City of Woodland 2035 General Plan policies and CAP strategies would help to reduce energy demand and require implementation of land use planning and transportation strategies consistent with State and local plans for renewable energy and energy efficiency. The impact is* ***less than significant.***

As described above in the discussion of Impact 3.5-1, implementation of the WRTP Specific Plan would result in the development of new land uses that would induce new demand for electricity and natural gas, as well as induce additional VMT that would result in the consumption of fossil fuels. However, design and construction of buildings would comply with the most recently adopted California Building Energy Efficiency Standards Code and California Green Building Standards Code (CalGreen), and the City's CAP. This would ensure that future development would consume energy efficiently through the incorporation of such features as efficient water heating systems, high performance attics and walls, and high efficacy lighting. The Design Standards and Design Guidelines in Chapter 3 of the WRTP Specific Plan also promote energy efficient design standards and transportation systems, promote energy efficiency in new construction that meet or exceed State Building Energy Efficiency Standards, promote energy efficiency and conservation programs associated with utilities, and require compliance with federal, State, and local energy-related regulations. Therefore, implementation of the WRTP Specific Plan would not conflict with or obstruct a State or local plan for renewable energy or energy efficiency. This impact is **less than significant**.

3.5.5 CUMULATIVE IMPACTS

CLIMATE CHANGE AND GREENHOUSE GAS EMISSIONS

GHG emissions typically persist in the atmosphere for extensive periods time—long enough to be dispersed globally and result in long-term global climate change and related impacts. As such, implementation of the WRTP Specific Plan will not, by itself, contribute significantly to climate change; however, cumulative emissions from many projects and plans all contribute to global GHG concentrations and the climate system. As such, impacts associated with GHG emissions are inherently cumulative; the discussion of the potential for implementation of the WRTP Specific Plan to generate GHG emissions is discussed above under "Impacts not Discussed Further," finding that the WRTP Specific Plan is consistent with the City's 2035 CAP, which was found under the 2035 General Plan and CAP EIR to result in less than cumulatively considerable generation of GHG emissions. This analysis considers the cumulative contribution of implementation of the City's 2035 General Plan and CAP, inclusive of development under the WRTP Specific Plan, to the significant cumulative impact of climate change, and concludes that impacts are **less than cumulatively considerable**.

ENERGY

As discussed in the cumulative analysis contained in the 2035 General Plan and CAP EIR (pages 6-26 to 6-28), Increased demand for electrical and natural gas supplies and infrastructure is a byproduct of all future land uses and development in the City of Woodland, Yolo County, and the region. Energy is consumed for heating, cooling, and electricity in homes and businesses; for public infrastructure and service operations; and for agriculture, industry, and commercial uses. Each service provider is responsible for ensuring adequate provision of these utilities within their jurisdictional boundaries and would be responsible for upgrading their existing electrical and natural gas distribution systems or constructing new distribution systems to meet the demands of individual projects. Yolo County and the cities within the county implement general plans that include goals and policies to reduce energy demands through the use of design features, building materials, and building practices; encourage the use of renewable energy sources; promote land uses and patterns that would not cause wasteful, inefficient, and unnecessary consumption of energy; and ensure adequate electricity and natural gas and related distribution systems are available to meet energy demands. In addition, service providers encourage energy conservation through programs, such as offering rebates for installation of energy efficient appliances and lighting fixtures. The California Public Utilities Commission and California Energy Commission have roles in regulating energy supply and

ensuring reliable and sufficient supplies as the state grows. The 2035 General Plan and CAP EIR determined that overall energy efficiency (energy demand per unit of development) would improve and cumulative development would not be expected to cause the inefficient, wasteful, or unnecessary consumption of energy, and found this impact to be less than cumulatively considerable.

As noted above, transportation is, by far, the largest energy consuming sector in California, accounting for approximately 40 percent of all energy use in the state (U.S. Energy Information Administration 2020). Since transportation accounts for more energy consumption than heating, cooling, and powering of buildings, powering industry, or any other use, the overall efficiency of energy use in the region will depend importantly on the ability of local lead agencies to plan in a way that reduces travel demand. The 2035 General Plan and CAP EIR noted that SACOG's 2016 MTP/SCS demonstrates an increase in energy efficiency through 2035 in relation to transportation energy use – household generated VMT per capita is forecast to decrease by more than 8 percent and that SACOG also estimates that total VMT will decrease by almost 7 percent during the 2016 MTP/SCS planning period (SACOG 2016, Chapter 5B, page 91). Since regional transportation and building energy use will become more efficient over the SACOG MTP/SCS planning and City's planning horizon, the 2035 General Plan and CAP EIR determined there to be no significant cumulative impact.

The WRTP Specific Plan Area was considered as part of the anticipated development under the 2035 General Plan Update. In addition, the off-site improvement areas, while not a part of the original WRTP Specific Plan Area, would consume energy during construction that is consistent with typical construction projects in the region, and would require minimal energy associated with maintenance and operations over time. The energy efficiency of the built environment and transportation has continued to increase since the adoption of the 2035 General Plan. As discussed above, the WRTP Specific Plan would comply with relevant State and local statutes and regulations related to energy efficiency, including the California Code of Regulations (CCR) Title 20, Building Energy Regulations, and Title 24, Energy Conservation Standards, as well as WRTP Specific Plan Design Standards and Design Guidelines in Chapter 3 of the WRTP Specific Plan developed to reduce energy demand of the WRTP Specific Plan Area and provide consistency with the General Plan and City's CAP. The California Green Building Standards Code is updated over time and in each instance, the energy efficiency standards are increased. Similar to the SACOG 2016 MTP/SCS, the 2020 MTP/SCS, lower VMT per capita is anticipated for the region, with a secondary result of reduced per-capita use of energy and fuel. Because regional transportation and building energy use will become more efficient between present and the SACOG MTP/SCS planning horizon, the regional planning efforts would result in a less-than-cumulatively considerable impact. Therefore, the WRTP Specific Plan is consistent with the 2035 General Plan and CAP EIR planning assumptions and cumulative scenario, and cumulative effects from implementing the WRTP Specific Plan in conjunction with development of related projects, with regard to the inefficient, wasteful, or unnecessary consumption of energy and conflict with or obstruction of plans for renewable energy or energy efficiency, would be **less-than-cumulatively considerable.**

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3.6 CULTURAL AND TRIBAL CULTURAL RESOURCES

3.6.1 INTRODUCTION

This section addresses known or potential cultural resources and tribal cultural resources in the WRTP Specific Plan Area and off-site improvement areas (collectively known as "the study area" in this section). Cultural resources include historic-age (45 years and older) buildings and structures, historic districts, historic sites, prehistoric and historical archaeological sites, tribal cultural resources, and other prehistoric and historic objects and artifacts. This section includes a general discussion of the research conducted and methods employed for the cultural resource investigations documented in the *Woodland Research & Technology Park Specific Plan Cultural Resources Inventory Report, Yolo County, California* (City of Woodland 2018), review of existing information including previous Caltrans investigations for the Caltrans Off-site Improvement Area (Caltrans 2013), Native American consultation, and intensive pedestrian field survey of the WRTP Specific Plan Area and off-site improvement areas on August 31, 2017, and November 8, 2019, by AECOM cultural resources staff.

The CEQA Guidelines note that comments received during the NOP scoping process can be helpful in "identifying the range of actions, alternatives, mitigation measures, and significant effects to be analyzed in depth in an EIR and in eliminating from detailed study issues found not to be important." (CEQA Guidelines Section 15083). Neither the CEQA Guidelines nor Statutes require a lead agency to respond directly to comments received in response to the NOP, but they do require that the comments be considered. Consistent with these requirements, these comments have been carefully reviewed and considered by the City and are reflected in the analysis of impacts in this section. One NOP comment pertaining to cultural and cultural tribal resources was received from the Native American Heritage Commission (NAHC) summarizing the existing requirements contained in Assembly Bill (AB) 52, Senate Bill (SB) 18, and suggestions for early tribal consultation. Appendix A includes copies of all NOP comments received.

3.6.2 ENVIRONMENTAL SETTING

The cultural resources study area includes the WRTP Specific Plan Area and off-site improvement areas.

PREHISTORY AND ETHNOGRAPHY CONTEXT

The following text is derived from the City of Woodland *2035 General Plan and Climate Action Plan Public Review Draft EIR* (City of Woodland 2016), and the *Woodland Research & Technology Park Specific Plan Cultural Resources Inventory Report, Yolo County, California* (City of Woodland 2018), unless otherwise noted.

Before the settlement of the area by Europeans, the area west of the Sacramento River and north of Suisun Bay, which includes Woodland, was occupied by linguistically and culturally related groups or "tribelets" that appeared to lack political unity or collective identity. However, because of their linguistic similarities, Powers referred to them as Patwin, the term each group used to identify themselves. The Patwin occupied a strip of land about 60 kilometers wide that extended approximately 150 kilometers along the lower Sacramento River and the eastern foothills of the North Coast Range, terminating at San Pablo and Suisun Bays to the south. The Woodland area was populated by the Poo-e-win, a dialect group of the Hill Patwin Native Americans. Like most Patwin groups, the Poo-e-win occupied the major river courses and tributary drainages of their territory, such as the Sacramento River, Cache and Putah Creeks, and in some cases, springs. Only places high enough to keep them above the rising waters of seasonal floods were selected for permanent villages, or tribelets, consisting of a primary village and several

smaller associated villages with each village was under the direction of a chief, who attained his office through paternal descent. Settlement size was generally large, with villages usually located along river or stream banks, or the borders of seasonal lakes. In the vicinity of Woodland, the nearest mapped village location (*Churup*) was located along Cache Creek, less than three miles northwest of the city. The Poo-e-win tribelet of Yo'doi at one time occupied the present site of Knights Landing, and probably occupied the Woodland area in seasonal camps for hunting and seed gathering. Of special importance to the Poo-e-win and their neighbors was a main trading trail which followed the course of Cache Creek. This trade route served as an important means of cultural and social interchange in addition to a vital economic supply line for the Patwin and their neighbors – the Nomlaki to the north, the Nisenan to the east, and the Pomo to the west.

Euro-American contact with the Patwin began with Spanish missionaries and explorers in the late eighteenth century. By the middle of the nineteenth century, many Patwin had been relocated to mission settlements, local ranches, or small reservations. Three missions drew in Patwin peoples from the surrounding landscape: Mission Dolores, San José, and Sonoma. Old World diseases decimated much of the Patwin population at this time, and it is estimated that as much as 75 percent of the Native American population in this area died from the 1833 malaria epidemic, most likely introduced by the John Work expedition, and the 1837 smallpox outbreak. Euro-American influences within Patwin territory increased dramatically as ranching and farming became popular in the area. Euro-American settlers, especially within the Sacramento Valley, quickly made inroads into lands occupied by Native Americans. Conflicts increased, and Patwin populations continued to decline from military skirmishes, vigilante raids, and other causes.

In 1972, the Bureau of Indian Affairs listed only 11 remaining Patwin descendants. Despite the massive decline in population, the Patwin still reside in Yolo County, and many intermarried with the Wintu. No prehistoric resources have been formally recorded in Woodland, and evidence of early native peoples who occupied the area is scarce, therefore any artifacts or information is valuable.

HISTORICAL CONTEXT

In the winter of 1853, Henry Wyckoff settled in a dense grove of oak trees and opened a small store in Yolo City (now Woodland). Within a couple of years, other businesses were established in the area. The favorable soil attracted other settlers who found farming a profitable venture. Woodland has benefited greatly from the success of the agricultural industry by serving as a center for banking, shops, education, and in some instances by housing farmers and their help. Irrigation was and still is a major contributor to the agricultural success of the area. The first irrigation canal was developed in 1856 by James Moore, who owned exclusive water rights to Cache Creek.

Among the early settlers was Major F.S. Freeman. Freeman opened a store and later offered free lots to persons who would clear the land and build a home. In 1858, Major Freeman gained permission for a Federal Post Office to be built in the town and Yolo City was renamed Woodland. On June 25, 1863, Major Freeman recorded the first plat of the City. By 1870, the year after the California Pacific Railroad Company completed the construction of a rail line between Davisville and Marysville with a Woodland station, the population of Woodland was estimated to be 1,600 residents and a year later the City was incorporated.

Money earned in the gold fields of California financed the purchase of much of the farmland around Woodland. Initially sheep and cattle grazing, grain, fruit and nut orchards, and dairy farms were the early agricultural endeavors, until crops became highly diversified into the 20th and 21st centuries. Rice, sugar beets, tomatoes, seeds, wine grapes,

and organic produce are commonplace today and several wineries in the county produce wine, vinegar, and brandy (City of Woodland 2018).

Development of the WRTP Specific Plan Area and Vicinity

The WRTP Specific Plan Area, including off-site South Regional Pond and Caltrans Off-site Improvement areas, have historically been used for farming. The WRTP Specific Plan Area with existing historic-age built environment was part of a larger 480-acre farm once owned by William M. Jackson who settled in the area in 1860. The Jackson home ranch was located at the current State Route 113 alignment and is no longer extant. Upon Jackson's death in 1874, his wife continued the family farm until their son took over operations before her death in 1903. Between 1891 and 1900, 90 acres at the corner of what is now CR 25A and Harry Lorenzo Avenue / CR 101 were sold and subdivided into two smaller parcels of 40 and 50 acres. The 40-acre parcel is now 40766 CR 25A and the 50-acre parcel is 40966 CR 25A.

The 50-acre parcel at 40966 CR 25A was owned by Nora Jackson in 1900 and a house was built on the parcel by 1905. A barn was removed by 1968 and the house was demolished sometime between 1993 and 1995. The 40-acre parcel at 40766 CR 25A has a barn constructed sometime between 1915 and 1937. The parcel appears to have been used for hay, and the barn is assumed to have been used for hay storage and for livestock. A small house was built on the property in 1935 and was later expanded to its present size between 1957 to 1968. Today, the property is still used as a residence and was planted to tomatoes during August 2017.

Review of historic maps and aerials reveals that the WRTP Specific Plan Area south of Woodland city limits was sparsely populated with settlement occurring along roadways that followed section lines. The region was planted to row crops and some scattered orchards in the late 1930s and 1950s. When the 40-acre parcel at 40766 CR 25A was developed as a rural residential farm in the mid-1930s, Yolo County was experiencing an increase in farm development. Between 1932 and 1937, the number of farms in the county increased from 1,641 to 1,844. There was a small increase in full-ownership farms from 918 to 978, while the biggest increase was the number of tenant farmers from 365 to 538. Barley was the primary field crop in the county, in terms of acreage and value for decades until rice became the most valuable field crop by the late 1960s. By the 1940s, tomatoes were the most valuable vegetable crop in the county, and this is still true today. As of 2016, tomatoes, almonds, wine grapes, organic crops, and rice are the top value commodities in the county.

The South Regional Pond off-site area is just south of the WRTP Specific Plan Area and south of County Road 25A. The South Regional Pond off-site area has been planted to row crops for decades with no known built environment.

3.6.3 REGULATORY FRAMEWORK

The 2035 General Plan and CAP EIR summarizes the federal, State, regional, and local regulatory framework on pages 4.6-10 through 4.6-16. In addition to the regulatory background provided in the 2035 General Plan and CAP EIR, those aspects of the existing regulatory framework that are relevant to potential impacts of implementation of the WRTP Specific Plan are briefly highlighted below. Please see Section 4.6 of the 2035 General Plan and CAP EIR for more detail.

FEDERAL PLANS, POLICIES, REGULATIONS AND LAWS

There are no federal plans, policies, regulations, or laws that are relevant to the proposed WRTP Specific Plan.

STATE PLANS, POLICIES, REGULATIONS, AND LAWS

California Environmental Quality Act Guidelines, CEQA Guidelines Section 15064.5(b)

Under the provisions of the California Environmental Quality Act (CEQA), "A project with an effect that may cause a substantial adverse change in the significance of a historical resource is a project that may have a significant effect on the environment" (CEQA Guidelines Section 15064.5[b]).

CEQA defines a "historical resource" as a resource which meets one or more of the following criteria:

- Listed in, or eligible for listing in, the California Register of Historical Resources (CRHR);
- Listed in a local register of historical resources (as defined at Public Resources Code Section 5020.1[k]) or identified as significant in a historical resource survey meeting the requirements of Section 5024.1(g) of the Public Resources Code; or
- Determined to be a historical resource by a project's lead agency (CEQA Guidelines Section 15064.5[a]).

Properties that are listed in or eligible for listing in the National Register of Historic Places (NRHP) are considered eligible for listing in the CRHR and thus are significant historical resources for the purpose of CEQA (Public Resources Code Section 5024.1[d][1]).

A historical resource consists of any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California. Generally, a resource shall be considered by the lead agency to be 'historically significant' if the resource meets the criteria for listing in the California Register of Historical Resources" (CEQA Guidelines Section 15064.5[a][3]).

CEQA requires consideration of historical and archaeological resource impacts (CEQA Guidelines Section 15064.5; Public Resources Code Section 21083.2). If feasible, adverse effects to the significance of historical resources must be avoided, or the effects mitigated (CEQA Guidelines Section 15064.5[b][4]).1

California Register of Historical Resources, California Public Resources Code Section 5024.1

The California Register of Historical Resources (CRHR) is "an authoritative listing and guide to be used by state and local agencies, private groups, and citizens in identifying the existing historical resources of the state and to indicate which resources deserve to be protected, to the extent prudent and feasible, from substantial adverse change" (Public Resources Code Section 5024.1[a]). The criteria for eligibility to the CRHR are consistent with the NRHP criteria (Public Resources Code Section 5024.1[b]). Certain resources are determined by the statute to be

[1] The significance of an historical resource is impaired when a project demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and that justify its eligibility for the California Register of Historical Resources. If there is a substantial adverse change in the significance of a historical resource, the preparation of an environmental impact report may be required (CEQA Guidelines Section 15065[a]).

automatically included in the CRHR, including California properties that are formally determined eligible for, or listed in, the NRHP.

To be eligible for the CRHR, an historical resource must be significant at the local, state, and/or federal level under one or more of the following criteria:

1) is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;

2) is associated with the lives of persons important in our past;

3) embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or

4) has yielded, or may be likely to yield, information important in prehistory or history (Public Resources Code Section 5024.1[c]).

For a resource to be eligible to the CRHR, it also must retain enough integrity to be recognizable as a historical resource and to convey its significance. The seven aspects or qualities of integrity are defined as location, design, setting, materials, workmanship, feeling, and association.

Forty-five years is the recommended standard-age threshold used by the Office of Historic Preservation for determining potential historical significance, unless it is determined that a property has exceptional significance despite its age. As such, any property located in the WRTP Specific Plan Area built before 1975 could be eligible for listing in the CRHR if it meets any one of the four criteria listed above and retains sufficient integrity to convey its historical significance.

Assembly Bill AB 52, Public Resources Code Section 21074

With the adoption of AB 52 (effective 2015), impacts to tribal cultural resources must also be addressed under CEQA. As defined in Public Resources Code Section 21074, a tribal cultural resource is a site, feature, place, cultural landscape, sacred place, or object with cultural value to a "California Native American tribe," that is either on, or eligible for inclusion in, the California Register of Historical Resources or a local historic register, or is a resource that the lead agency (in this case the City of Woodland), at its discretion and supported by substantial evidence, determines should be treated as a tribal cultural resource. Assembly Bill 52 also provides both federal and non-federally recognized tribes the right to formal consultation with project lead agencies.

Health and Safety Code, Health and Safety Code Section 7050 through 7052

Section 7052 of the Health and Safety Code states that disturbance of Native American cemeteries is a felony. Section 7050.5 requires that construction or excavation be stopped in the vicinity of discovered human remains until the coroner can determine whether the remains are those of a Native American. If determined to be Native American, the coroner must contact the California Native American Heritage Commission (NAHC) in accordance with the Public Resources Code Section 5097 (see below).

California Native American Graves Protection and Repatriation Act, Health and Safety Code Section 8010 through 8030

In the California Health and Safety Code, Division 7, Part 2, Chapter 5 broad provisions are made for the protection of Native American cultural resources. The Act sets the state policy to ensure that all California Native American human remains and cultural items are treated with due respect and dignity. The Act also provides the mechanism for disclosure and return of human remains and cultural items held by publicly funded agencies and museums in California. Likewise, the Act outlines the mechanism with which California Native American tribes not recognized by the federal government may file claims to human remains and cultural items held in agencies or museums.

Native American Historic Resource Protection Act, Public Resources Code 5097

Section 5097 of the Public Resources Code addresses archaeological resources. Archaeological resources that are not "historical resources" may be "unique archaeological resources" as defined in Public Resources Code Section 21083.2, which also generally provides that "non-unique archaeological resources" are not analyzed under CEQA. Public Resources Code Section 21083.2, subdivision (g), defines "unique archaeological resource" as an archaeological artifact, object, or site that does not merely add to the current body of knowledge, but has a high probability of meeting any of the criteria identified in this section. If an archaeological resource is neither a unique archaeological nor a historical resource, the effects of the project on that resource will not be considered a significant effect on the environment. It is sufficient that the resource and the effects on it be noted in an EIR, but the resource need not be considered further in the CEQA process.

Additional applicable sections of the Public Resources Code include:

- **Section 5097.5:** Provides that any unauthorized removal or destruction of archaeological or paleontological resources on sites located on public lands is a misdemeanor. As used in this section, "public lands" means lands owned by, or under the jurisdiction of, the State, or any city, county, district, authority, or public corporation, or any agency thereof.

- **Section 5097.98:** Prohibits obtaining or possessing Native American artifacts or human remains taken from a grave or cairn, and sets penalties for such acts.

State Senate Bill 18, Chapter 905, Statutes of 2004

California State Senate Bill 18 (SB 18), signed into law in September 2004 and implemented March 1, 2005, requires cities and counties to notify and consult with California Native American Tribes about proposed local land use planning decisions for the purpose of protecting Traditional Tribal Cultural Places (also referred to as Traditional Cultural Properties). This law directed an amendment to the General Plan Guidelines to require consultation with, and advice from California Native American Tribes. According to the Tribal Consultation Guidelines, SB 18 "requires local governments to involve California Native Americans in early stages of land use planning, extends to both public and private lands, and includes both federally recognized and non-federally recognized tribes."

REGIONAL AND LOCAL PLANS, POLICIES, REGULATIONS, AND ORDINANCES

City of Woodland 2035 General Plan

The City's General Plan was adopted in May 2017 and includes goals, policies, and implementation programs to protect to accommodate growth while maintaining aspects of the built environment that enhances the City's quality of life through its unique historical and architectural heritage. Although no prehistoric archaeological resources have been formally recorded in Woodland, policies in the General Plan seek to identify and preserve any archaeological resources that may be disturbed by development activity. Following are policies from the General Plan intended to address historic-age built environment resources and archaeological resources.

- **Policy 2.P.1 Historic Resources Inventory.** Maintain and regularly update an inventory of the city's Historic Resources that includes all historically and architecturally significant buildings, sites, landscapes, signs, and features within the city limits.

- **Policy 2.P.2 Environmental Review.** Require that environmental review be conducted for alterations and/or demolition of buildings designated as, or potentially eligible for designation as, historic structures as required by Chapter 12A [current code Chapter 15.24 per 2019 Municipal Code update] of the Municipal Code and CEQA regulations.

- **Policy 2.P.4 California Historical Building Code.** Train local building officials to use the California Historical Building Code as a tool to foster appropriate and efficient rehabilitation of historic buildings.

- **Policy 2.P.5 Certified Local Government (CLG) Program.** Become a Certified Local Government (CLG), through the State Office of Historic Preservation, to assist historic preservation programs in Woodland

- **Policy 2.Q.1 Education.** Work with Woodland schools and local history groups to provide opportunities for education about Woodland's architectural history and resources.

- **Policy 2.Q.2 Historic Markers.** Continue to promote the Woodland Historic Landmarks program and develop a model for historic markers and signs for historic sites and buildings.

- **Policy 2.Q.3 Awards.** Continue to formally recognize private and public quality rehabilitation and restoration work through ceremonies (e.g., Heritage Home awards, Preservation Award, Certificates of Appreciation for commercial and public building rehabilitation work).

- **Policy 2.Q.4 Workshops.** Coordinate with the Woodland Public Library and the Historic Preservation Commission to hold occasional public workshops, lectures, and slide shows on historic preservation and restoration.

- **Policy 2.Q.5 Promotion of Historic Resources and Events.** Continue promoting historic resources and preservation events, such as the annual "Stroll Through History" program.

- **Policy 2.Q.6 Historic Museum.** Encourage the formation of a historic museum or facility in or near the Downtown that celebrates local and regional historic resources.

- **Policy 7.E.1 Potentially Significant Sites.** Ensure that development avoids potential impacts to sites determined to be archaeologically, paleontologically, or culturally significant.

- **Policy 7.E.2 Discovery of Resources.** If cultural, archaeological, or paleontological resources are discovered during construction, ensure their evaluation and protection, as appropriate, in accordance with applicable Federal and State laws and regulations.

- **Policy 7.E.3 Tribal Cultural Resources.** Ensure required tribal consultation regarding tribal cultural resources.

City of Woodland Municipal Code, Chapter 15.24 Historical Landmarks, Districts and Resources

Chapter 15.24 (Prior code § 12A-1-1) of the City of Woodland's Municipal Code (Code) is intended to preserve areas and the physical representations of its cultural, social, economic, political, and architectural history. Further, the City's Code is intended to promote use for education, encourage tourism, and provide construction code allowances and financing aids when buildings have designated historical landmark status or lie within a designated historical district. In addition to describing the makeup and responsibilities of the Woodland Historical Preservation Commission, the Code also outlines the criteria for identification of locally recognized historic resources, which are outlined below.

Historical Importance

In order to be eligible for the local register, the building, structure, object, particular place, vegetation or geology, must have character, interest of value, as part of the development, heritage or cultural characteristics of the City, State or Nation; or is the site of an historic event with an effect upon society; or is identified with a person or group of persons who had some influence society; or exemplifies the cultural, political, economic, social or historic heritage of the community (Chapter 15.24.030[A][1][a])

Architectural Significance

In order to be eligible for the local register, the building, structure, object, or particular place must exemplify the environment of a group of people in an era of history characterized by distinctive architectural style; or embodies those distinguishing characteristics of an architectural type specimen; or is the work of an architect or master builder whose individual work has influenced the development of the area; or contains elements of architectural design, detail, materials or craftsmanship which represent a significant innovation (Chapter 15.24.030[A][1][b]).

Designation Process

The Code stipulates that the City Council shall approve and maintain a formal historical resources list if it satisfies the Historical Preservation Commission's historical resources inventory study list evaluation criteria (Chapter 15.24.030[A][3]).

The Code also outlines the processes for designation of historical landmarks, historical districts, and historical resources. The Historical Preservation Commission by resolution may recommend to the City Council designation of a landmark or historical district, or an addition to the historical resources list, upon compliance using prescribed procedures. Upon receipt of the recommendation from the Historical Preservation Commission, the City Council

shall approve, modify, or disapprove the recommendation upon compliance under prescribed procedures (Chapter 15.24.030[B][1-2] through [C][1-2]).

The Code also stipulates that no person shall demolish, remove, move, or make alterations which affect the exterior appearance of, or cause excavations which affect the exterior appearance of, a designated historical landmark, or undertake the same with respect to any structure located in a designated historical district, without first obtaining approval from the Historical Preservation Commission; excepting therefrom maintenance or repair work that does not change the design, material, or exterior appearance thereof, or work authorized by the Building Official upon written approval of the Community Development Department for protection of public safety. A property owner who desires to construct, alter, move, remove, or demolish a designated historical landmark or any structure within a designated historical district, or who desires to demolish a designated historical resource, shall file an application with the Community Development Department upon a form prescribed by the City. The application shall include all necessary information required by the rules of the Historical Preservation Commission. When the application is filed, it shall be referred to the Historical Preservation Commission. Upon the filing of an application, the Historical Preservation Commission shall cause an appropriate level of review to be conducted pursuant to the California Environmental Quality Act ("CEQA"). After such review has been completed, the secretary of the Historical Preservation Commission shall set the matter for hearing and shall give written notice to the applicant and shall cause publication of notice in a newspaper of general circulation in the City of the date, time, and place of the hearing. The Commission shall hold a public hearing and shall make its decision within six months from the date the application is filed with the Community Development Department if an EIR is required or within three months if a negative declaration is required or if the proposal is determined to be exempt from CEQA. Approval of the application shall require an affirmative vote of a majority of the Commission members present. If the Commission fails to act within the foregoing time periods, the application shall be considered approved unless the applicant and the Commission agree to an extension of time. At the conclusion of the hearing, the Commission shall make its decision and shall file a certificate of approval with the Building Official, or deny the application. No person may do any work upon a designated historical landmark or any structure within a designated historical district, or proceed to demolish a designated historical resource, which is the subject of an application, and the Building Official may not issue a building permit, until the Commission files a certificate of approval. Approved work shall be completed within one year from the date of approval unless substantially undertaken before such period has elapsed and diligently pursued thereafter (Chapter 15.24.040[A][1-2] through [C][1-3]).

3.6.4 Environmental Impacts and Mitigation Measures

Methodology

The 2035 General Plan and CAP EIR addresses impacts of development of the City's Planning Area, including the WRTP Specific Plan Area. Consistent with Section 15183(b) of the CEQA Guidelines, the following analysis focuses on impacts of the WRTP Specific Plan Area and off-site improvement areas that: a) are peculiar to the WRTP Specific Plan or the site; b) were not addressed in the 2035 General Plan and CAP EIR (including off-site or cumulative impacts); or c) would be more severe than previously described based on substantial new information.

Cultural resource investigations for the WRTP Specific Plan Area and off-site improvements areas are documented in the *Woodland Research & Technology Park Specific Plan Cultural Resources Inventory Report, Yolo County, California* (City of Woodland 2018) (see Appendix C).

Cultural Resources Data Sources

Research consisted of a record search of the WRTP Specific Plan Area and a one-mile search buffer, which included the proposed South Regional Pond and Caltrans off-site improvement areas, at the North Central Information Center of the California Historical Resources Information System on March 29, 2013 (File No. 12-1086). A review of historical maps was conducted to define past landscape conditions and determine what buildings, structures, or other built environment elements may have existed within or near the WRTP Specific Plan Area. This review indicated that one cultural resources investigation had occurred within the WRTP Specific Plan Area and no cultural resources have been previously recorded within the WRTP Specific Plan Area, South Regional Pond, or Caltrans improvement off-site areas. A separate cultural resource record search was conducted for the Caltrans Off-site Improvement Area by Caltrans and no previous cultural resources were identified (Caltrans 2013).

Native American Correspondence

The City of Woodland conducted Native American consultation that met the requirements of Assembly Bill (AB) 52 for the WRTP Specific Plan. The Yocha Dehe tribe responded to the project notification on May 19, 2017 requesting a site visit to evaluate their cultural concerns. A site visit was conducted on July 13, 2017 of the WRTP Specific Plan Area. Following this visit, the Yocha Dehe tribe sent a letter to the City indicating that they are not aware of any cultural resources or tribal cultural resources near the WRTP Specific Plan Area and no tribal monitors are required. However, the tribe did recommend cultural sensitivity training and that all work should cease within 150 feet of human remains or prehistoric cultural resources that may be discovered during project implementation. This recommendation is included within this section's mitigation measures.

THRESHOLDS OF SIGNIFICANCE

The proposed WRTP Specific Plan would result in a significant impact related to cultural resources if it would:

1. cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5.

2. cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5.

3. disturb any human remains, including those interred outside of formal cemeteries.

In addition, the 2019 CEQA Appendix G has identified Tribal Cultural Resources as a separate environmental factor that could potentially be affected by projects. The proposed WRTP Specific Plan would result in a significant impact related to tribal cultural resources if it would:

4. cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

    a. listed or eligible for listing in the CRHR, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k); or

b. a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

IMPACTS NOT DISCUSSED FURTHER

The following discussion summarizes the impacts of the WRTP Specific Plan that are not discussed further in this document because either, a) there is no impact, or b) none of the factors triggering additional environmental review (as found in Section 15183(b)) exist because an impact was either addressed as a part of the 2035 General Plan and CAP EIR and/or substantially mitigated by uniformly applied development standards (CEQA Guidelines Section 15183[f][7]). Uniformly applied development standards include the 2035 General Plan, the CAP, existing City regulations and standards, design review requirements, and impact fee programs.

Cause a Substantial Adverse Change in the Significance of Historical Resources as defined in CEQA Guidelines Section 15064.5 (Significance Threshold 1) — Based on review of background research, combined with cultural resources pedestrian surveys, and Native American correspondence, two previously unrecorded cultural resources were identified in the WRTP Specific Plan Area that may be potentially affected by the proposed project: a historic-age site with house foundations and associated refuse deposit, and two historic-age buildings consisting of a barn and residence on a single parcel. These resources are not considered significant under CRHR criteria or as City of Woodland historical resources. None of the cultural resources were identified as meeting the eligibility requirements to be considered historical resources for the purposes of CEQA. Therefore, further discussion of impacts to historical resources as defined in CEQA Guidelines Section 15064.5 is not discussed further.

Cause a Substantial Adverse Change in the Significance of a Tribal Cultural Resources as defined in Public Resources Code Section 21074 (Significance Threshold 4) — There are no known tribal cultural resources that would be impacted resulting from implementation of WRTP Specific Plan or off-site improvement areas. Per AB 52 consultation for the WRTP Specific Plan and this EIR, the Yocha Dehe tribe sent a letter to the City indicating that they are not aware of any tribal cultural resources near the WRTP Specific Plan Area. Therefore, further discussion of impacts to tribal cultural resources as defined in Public Resources Code Section 21074 is not discussed further.

PROJECT IMPACTS AND MITIGATION MEASURES

IMPACT 3.6-1 **Cause a Substantial Adverse Change in the Significance of Archaeological Resources as defined in CEQA Guidelines Section 15064.5 (Significance Threshold 2).** *The WRTP Specific Plan plans for the construction of new buildings and structures. Although there are no previously recorded archaeological resources within the WRTP Specific Plan Area or off-site improvement areas, implementation of the WRTP Specific Plan has the potential to damage or destroy subsurface archaeological resources that may qualify as archaeological resources under CEQA. The significance of such resources could be materially impaired because their ability to convey significance could be destroyed or diminished. This impact is considered* ***significant****.*

The 2035 General Plan and CAP EIR (pages 4.6-21 to 4.6-23) discusses potential impacts related to the discovery of archaeological resources from implementation of the General Plan. The 2035 General Plan EIR identifies existing

regulations and includes 2035 General Plan Goal 7.E and Policies 7.E.1, 7.E.2, and 7.E.3 that would reduce impacts to unanticipated finds. However, the 2035 General Plan and CAP EIR determined that potential impacts to previously undiscovered archaeological resources could be significant and, even with implementation of Mitigation Measure 4.6-1d, the impact would be significant and unavoidable.

Implementation of the WRTP Specific Plan, inclusive of off-site improvement areas, could result in significant impacts to archaeological resources through either direct physical impacts or by changes to the setting. Direct physical impacts would result from activity such as excavation, demolition, grading, or ground compaction required for construction of new land uses. For resources that qualify as archaeological resources, such damage would be significant if it diminished the qualities that contribute to the significance of these resources. Changes to the setting would occur where new land uses and built environment features are placed on rural, undeveloped land. Changes to the setting could result in significant impacts where the natural or undeveloped setting forms part of the significance or integrity of a resource. Though record searches did not identify known archaeological resources in the WRTP Specific Plan Area or off-site improvement areas, the broader area does have an elevated sensitivity for archaeological resources, due to the long-standing Native American inhabitation and past historical agricultural and settlement uses. It is reasonable to assume that the area may contain resources not yet identified but that would qualify as archaeological resources under CEQA.

Ground-disturbing construction would result from buildout in the WRTP Specific Plan Area and off-site improvement areas. These areas have historically been used for, and are currently utilized primarily for, agricultural purposes consisting of relatively large, rural, open, and minimally developed parcels and agricultural fields. In these areas, implementation of the WRTP Specific Plan would involve development of a mix of uses, including research and technology facilities, light industrial, commercial, retail and residential uses, public facilities (e.g., schools and parks), supporting infrastructure (e.g. roadways, utilities), and preserved open space that may also include some habitat restoration activities. Off-site improvements include the proposed South Regional Pond (a stormwater detention pond) within an agricultural field adjacent to, but south of, the WRTP Specific Plan Area, which was not considered in the 2035 General Plan and CAP EIR, and the Caltrans Off-site Improvement Area. There is a moderate to low likelihood that archaeological resources may be present in the WRTP Specific Plan Area and South Regional Pond off-site area and implementation of the WRTP Specific Plan has the potential to affect such unidentified archaeological resources through ground-disturbing activities. The Caltrans Intersection Off-site Improvement Area is assumed to be imported fill with no archaeological sensitivity.

With implementation of policies in the 2035 General Plan and CAP EIR, combined with current laws, regulations, and policies, including Public Resources Code 5097, the impact on cultural resources would be reduced. However, implementation of the WRTP Specific Plan would involve grading, trenching, excavation, soil stockpiling, and other earthmoving activities that could impact previously unknown archaeological resources. Potential impacts to previously undiscovered archaeological resources are considered **potentially significant**.

Mitigation Measure

Mitigation Measure 3.6-1: Treatment of Unanticipated Archaeological Discoveries

Project applicants for future projects proposed under the WRTP Specific Plan would be required to implement the following procedures during and ground-disturbing activities:

a. Prior to ground-disturbing activities necessary to implement proposed development and infrastructure projects, contractors shall receive cultural resource sensitivity training to identify potential archaeological resources and that all work should cease within 150 feet of prehistoric cultural resources that may be discovered during project implementation.

b. During ground-disturbing activities necessary to implement proposed development and infrastructure projects, if any prehistoric or historic subsurface resources are discovered, all work within 150 feet of the resources shall be halted and a qualified archaeologist[2] shall be consulted within 24 hours to assess the significance of the find, according to CEQA Guidelines Section 15064.5, and implement, as applicable, CEQA Guidelines Sections 15064.5(d), (e), and (f).

c. If any find is determined to be a unique archaeological resource according to CEQA Guidelines Section 15064.5, representatives from the City and the archaeologist shall meet to determine the appropriate avoidance measures or other appropriate mitigation. Cultural resources shall be recorded on appropriate Department of Parks and Recreation forms, and all significant cultural materials recovered shall be, as necessary and at the discretion of the qualified archaeologist and in consultation with the local Native American community if the discovery is prehistoric in age, subject to scientific analysis, professional curation, and documentation according to professional standards. If it is determined that the proposed development or infrastructure project could damage a historical resource or a unique archaeological resource (as defined pursuant to the CEQA Guidelines), mitigation shall be implemented in accordance with Section 21083.2 of the California Public Resources Code and CEQA Guidelines Section 15126.4, with a preference for preservation in place. Work may proceed on other parts of the project site while mitigation for historical resources or unique archaeological resources is being carried out. Preservation in place may be accomplished by planning construction to avoid the resource; incorporating the resource within open space; capping and covering the resource; or deeding the site into a permanent conservation easement.

d. If avoidance is not feasible, the qualified archaeologist shall develop and oversee the execution of a treatment plan. The treatment plan shall include, but shall not be limited to, data recovery procedures based on location and type of archaeological resources discovered and a preparation and submittal of report of findings to the Northwest Information Center of the California Historical Resources Information System. Data recovery shall be designed to recover the significant information the archaeological resource is expected to contain, based on the scientific/historical research questions that are applicable to the resource, what data classes the resource is expected to possess, and how the expected data classes would address the applicable resource questions. Data recovery, in general, should be limited to the portions of the historical property that could be adversely affected by project

[2] The California Office of Historic preservation utilizes the Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation as found in Code of Federal Regulations, 36 CFR Part 61. The minimum professional qualifications in archeology are a graduate degree in archeology, anthropology, or closely related field plus: 1. At least one year of full-time professional experience or equivalent specialized training in archeological research, administration or management; 2. At least four months of supervised field and analytic experience in general North American archeology; and 3. Demonstrated ability to carry research to completion. In addition to these minimum qualifications, a professional in prehistoric archeology shall have at least one year of full-time professional experience at a supervisory level in the study of archeological resources of the prehistoric period. A professional in historic archeology shall have at least one year of full-time professional experience at a supervisory level in the study of archeological resources of the historic period.

proponents' actions. Destructive data recovery methods shall not be applied to portions of the archaeological resources if nondestructive methods are practical.

Significance after Mitigation

Implementation of Mitigation Measure 3.6-1 provides for the identification and evaluation in the case that a potential archaeological resource is discovered during ground disturbing activities associated with construction of future projects under the WRTP Specific Plan, as well as for the assessment of potential impacts to such resources and the development of mitigation strategies.

Although Mitigation Measure 3.6-1 will help to avoid impacts to archaeological resources and minimize the severity of potentially significant impacts associated with implementation of the WRTP Specific Plan, impacts may occur that cannot be reduced to a less-than-significant level through mitigation. Beyond existing regulations that protect cultural resources and the proposed mitigation, no further mitigation is available. Consistent with findings of the 2035 General Plan and CAP EIR, this impact is considered **significant and unavoidable**

IMPACT 3.6-2 **Disturb Human Remains, including those Interred Outside of Formal Cemeteries.** *The WRTP Specific Plan would result in development and infrastructure improvement projects throughout the WRTP Specific Plan Area and off-site improvement areas that would involve earthmoving activities that could impact human remains. There is the potential for discovery of human remains during construction. This impact is considered* ***potentially significant****.*

The 2035 General Plan and CAP EIR (pages 4.6-29 to 4.6-32) discusses potential impacts related to the disturbance of human remains from implementation of the General Plan. The 2035 General Plan EIR identifies existing regulations and includes 2035 General Plan Goal 7.E and Policies 7.E.1 and 7.E.2 that would reduce impacts. However, the 2035 General Plan and CAP EIR determined that potential impacts related to the discovery of human remains during implementation of the General Plan, even with implementation of Mitigation Measure 4.6-2, would be significant and unavoidable.

The WRTP Specific Plan plans for development and infrastructure improvement projects throughout the WRTP Specific Plan Area and off-site improvement areas that would involve grading, trenching, excavation, soil stockpiling, and other earthmoving activities that could impact human remains. Although there is presently no indication that any particular area in the WRTP Specific Plan Area or off-site improvement areas has been used for human burial purposes outside of designated cemeteries in the recent or distant past, there is nonetheless the potential for discovery during construction of development and infrastructure under the WRTP Specific Plan.

As described, these existing regulations will reduce potential impacts associated with implementation of the WRTP Specific Plan by requiring a stop to potentially damaging excavation. However, human remains can occur below ground with little or no surface manifestation. Therefore, the potential for the WRTP Specific Plan to result in the disturbance of human remains is considered **potentially significant.**

Mitigation Measure

Mitigation Measure 3.6-2: Treatment of Human Remains

Consistent with Health and Safety Code, Section 7050 through 7052 and Health and Safety Code Section 8010 through 8030, in the event of the accidental discovery or recognition of any human remains in any

location other than a dedicated cemetery during construction, the City and contractor/s shall take the following steps:

(1) No further excavation or disturbance of the project site or any nearby area reasonably suspected to overlie adjacent human remains will occur until:

(A) the coroner of Yolo County has been contacted to determine that no investigation of the cause of death is required, and

(B) if the coroner determines the remains to be Native American:

1. the coroner shall contact the Native American Heritage Commission within 24 hours;

2. the Native American Heritage Commission shall identify the person or persons it believes to be the most likely descendant from the deceased Native American; and

3. the most likely descendant may make recommendations to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods, as provided in Section 5097.98 of the Public Resources Code; or

(2) Where the following conditions occur, the landowner or his or her authorized representative shall rebury the Native American remains and associated grave goods with appropriate dignity on the property in a location not subject to further subsurface disturbance:

(A) the Native American Heritage Commission is unable to identify a most likely descendant or the most likely descendant fails to make a recommendation within 24 hours after being notified by the commission;

(B) the most likely descendant identified fails to make a recommendation; or

(C) the landowner or his or her authorized representative rejects the recommendation of the most likely descendant, and mediation by the Native American Heritage Commission fails to provide measures acceptable to the landowner.

Significance after Mitigation

Mitigation Measure 3.6-2 would reduce the potential impacts in the event of the accidental discovery or recognition of any human remains. In addition, records searches, Native American consultation, and intensive pedestrian field survey did not indicate that the WRTP Specific Plan Area or off-site improvement areas are sensitive for buried human remains. Therefore, although human remains can occur below ground with little or no surface manifestation, encountering such during buildout of the WRTP Specific Plan is considered unlikely, . If buried human remains are encountered during construction without prior discovery, implementation of Mitigation Measure 3.6-2 and compliance with regulatory requirements reduce this impact to a **less-than-significant** level.

3.6.5 CUMULATIVE IMPACTS

Per the 2035 General Plan, no prehistoric resources have been formally recorded in Woodland, and evidence of early native peoples who occupied the area is scarce, therefore any artifacts or information is valuable. Cultural resources in the larger region generally consist of prehistoric sites, historical archaeological sites, historic-age buildings and structures, and isolated artifacts. During the 19th and 20th centuries, localized urbanization and intensive agricultural use in the region caused the destruction or disturbance of numerous prehistoric sites, while many structures now considered to be historic were erected. From the latter half of the 20th century to the present, prehistoric archaeological sites and historic structures have been disturbed and destroyed. During this period, the creation and enforcement of various regulations protecting cultural resources have substantially reduced the rate and intensity of these impacts. However, even with these regulations, cultural resources are still degraded or destroyed as cumulative development in the region proceeds.

As detailed in Section 3.6.4 with regard to the project-level analysis of implementation of the WRTP Specific Plan and off-site improvement areas, while mitigation has been imposed that would reduce impacts, there is still the potential to adversely affect unknown archaeological resource and human remains. As described in Section 6.1.3.6 of the General Plan and CAP EIR, these cultural resources impacts were considered significant and unavoidable. The proposed WRTP Specific Plan and the off-site SR 113/County Road 25A are within the City's Planning Area and therefore were included as part of the cumulative analysis contained in 2035 General Plan and CAP EIR, and there are no substantial changes to environmental conditions, regulatory updates, or the WRTP Specific Plan that require additional cumulative analysis or mitigation. Although the off-site South Regional Pond was not included within the 2035 General Plan and CAP EIR analysis, 2035 General Plan policies would be applicable to the South Regional Pond, similar to the WRTP Specific Plan Area. The policies of the 2035 General Plan and mitigation proposed in Section 4.6 of the 2035 General Plan and CAP EIR, "Cultural Resources," are relevant to the implementation of the WRTP Specific Plan Area and off-site improvements. These policies and mitigation, when coupled with cultural resources mitigation measures, will minimize the severity of significant impacts that may result from the discovery of undocumented subsurface cultural resources or unmarked historic-era or prehistoric Native American human burials; however, these impacts would not be entirely unavoidable, but could be mitigated to less than significant. Therefore, implementation of the WRTP Specific Plan and off-site improvements, in conjunction with development of related projects, would result in a **less than cumulatively considerable** contribution to the significant cumulative impact related to archaeological resources and human remains.

3.7 GEOLOGY, SOILS, MINERALS, AND PALEONTOLOGICAL RESOURCES

3.7.1 INTRODUCTION

This section describes potential impacts related to geology, soils, minerals, and paleontological resources in the WRTP Specific Plan Area and off-site improvement areas. To provide context for the impact analysis, this section begins with an environmental setting describing the existing conditions. Next, the regulatory framework is described, which informs the selection of the significance thresholds used in the impact analysis. The regulatory framework also includes existing General Plan policies related to the impact analysis of this section. The section concludes with the applicable significance thresholds, the impacts of the proposed project, recommended mitigation measures, and the significance conclusions.

The CEQA Guidelines note that comments received during the NOP scoping process can be helpful in "identifying the range of actions, alternatives, mitigation measures, and significant effects to be analyzed in depth in an EIR and in eliminating from detailed study issues found not to be important." (CEQA Guidelines Section 15083). Neither the CEQA Guidelines nor Statutes require a lead agency to respond directly to comments received in response to the NOP, but they do require that the comments be considered. Consistent with these requirements, these comments have been carefully reviewed and considered by the City. However, no NOP comments related to geology, soils, minerals, or paleontological resources were received. Appendix A of this EIR includes copies of all NOP comments received.

3.7.2 ENVIRONMENTAL SETTING

GEOLOGY AND PALEONTOLOGICAL RESOURCES

The WRTP Specific Plan Area and off-site improvement areas are located in the southern Sacramento Valley, on a flat alluvial plain composed of Pleistocene (2.6 million years Before Present [B.P.] to 11,700 years B.P.) and Holocene (11,700 years B.P. and younger) age deposits. These sediments overlie the thick sequence of sedimentary rock units that form the deeply buried bedrock units in the mid-basin areas of the valley.

Based on a review of regional geologic mapping prepared by Wagner et al. (1981), surficial deposits within the WRTP Specific Plan Area consist of Holocene Levee, Channel, and Basin deposits, and a mixture of the Pleistocene-age Modesto and Riverbank Formations. The results of soil borings performed for the *Final Geotechnical Design and Materials Report* (Crawford & Associates 2020) prepared for the Caltrans Off-site Improvement Area of the SR 113/County Road 25A interchange indicate that the interchange area is composed of Holocene-age alluvial deposits. The proposed off-site South Regional Pond is mapped as the Modesto-Riverbank Formations (Wagner et al. 1981). Exhibit 4.7-1 (page 4.7-3) in the 2035 General Plan and CAP EIR (City of Woodland 2016b) shows the surficial geologic formations in the WRTP Specific Plan Area and the off-site improvement areas.

In addition to a review of published geologic maps and paleontological literature, a paleontological resources records search was performed at the University of California, Berkeley Museum of Paleontology (UCMP) on August 27, 2020. A paleontologically sensitive rock formation is one that is rated high for potential paleontological productivity and is known to have produced unique, scientifically important fossils. The potential paleontological productivity rating of a rock formation exposed in a project site refers to the recorded abundance and types of fossil

specimens, and the number of previously recorded fossil sites. Exposures of a specific rock formation at any given project site are most likely to yield fossil remains representing particular species or quantities similar to those previously recorded from the rock formation in other locations. Therefore, the paleontological sensitivity determination of a rock formation is based primarily on the types and numbers of fossils that have been previously recorded from that rock unit (i.e., the paleontological productivity).

The results of the literature and records search, and the paleontological resource sensitivity assessment for the WRTP Specific Plan Area and the off-site improvement areas, are summarized in Table 3.7-1. As a common industry threshold, a fossil is typically considered a unique paleontological resource if it is more than 11,700 years old (i.e., the generally accepted end of the last glacial period of the Pleistocene Epoch).

Table 3.7-1. Paleontological Resource Sensitivity Assessment

Geologic Formation Name	Geologic Formation Age and Description	Summary Results of Literature and Records Search	Paleontological Resource Sensitivity Rating
Levee and Channel Deposits	Holocene age (11,700 years B.P. to Present Day). Coarse-grained deposits consisting of sand, gravel, and cobbles deposited along the sides of modern watercourses.	Holocene deposits contain only the remains of extant, modern taxa (if any resources are present), which are not considered "unique" paleontological resources.	Low
Basin Deposits	Holocene age (11,700 years B.P. to Present Day). Fine-grained deposits of silt and clay in flood basins between modern watercourses.	Holocene deposits contain only the remains of extant, modern taxa (if any resources are present), which are not considered "unique" paleontological resources.	Low
Modesto Formation	Pleistocene age (upper member 12,000–26,000 years B.P.; lower member 29,000–42,000 years B.P.). Upper member: unconsolidated coarse sand and sandy silt. Lower member: well-sorted silt and fine sand, silty sand, and sandy silt. Forms alluvial terraces, and some alluvial fans and abandoned channel ridges, of major rivers such as the Sacramento and American.	Several recorded vertebrate fossil localities near Davis and Woodland yielded remains of rodents, snakes, horses, antelope, deer, Harlan's ground sloth, mammoth, and saber-toothed tiger. UCMP search results indicate there are several vertebrate fossil localities from the Modesto Formation in Yolo, Fresno, Stanislaus, and San Joaquin Counties.	High
Riverbank Formation	Pleistocene age (130,000 to 450,000 years B.P.). Weathered reddish gravel, sand, and silt. Forms alluvial terraces and fans of major rivers such as the Sacramento and American.	Nine recorded vertebrate fossil localities in the Sacramento area southeast of the WRTP Specific Plan Area yielded remains of mammoth, bison, camel, coyote, horse, Harlan's ground sloth, mammoth, antelope, deer, rabbit, woodrat, fish, mole, mice, squirrel, snake, and gophers, dire wolf, frog, Pacific pond turtle, and the family Anatidae (ducks, geese, and swans). UCMP search results indicate there are several vertebrate fossil localities from the Riverbank Formation in Merced, Stanislaus, Fresno, and Madera Counties, in addition to Sacramento County.	High

Notes: B.P. = Before Present; UCMP = University of California Museum of Paleontology

Sources: Helley and Harwood 1985; Hilton et al. 2000; Jefferson 1991a and 1991b; Kolber 2004; Marchand and Allwardt 1981; University of California, Berkeley Museum of Paleontology 2020

SEISMICITY

Potential seismic hazards resulting from a nearby moderate to major earthquake can generally be classified as primary (surface fault rupture) and secondary (ground shaking, liquefaction, and seismically-induced settlement/subsidence). Because there are no active faults mapped across or in the vicinity of the WRTP Specific Plan Area or off-site improvement areas by the California Geological Survey (CGS) or the U.S. Geological Survey (Jennings and Bryant 2010), and the WRTP Specific Plan Area and off-site improvement areas are not located within or adjacent to an Alquist-Priolo Earthquake Fault Zone (CGS 2017), fault ground rupture is unlikely.

As discussed on page 4.7-5 of the 2035 General Plan and CAP EIR (City of Woodland 2016b), Segment 3a of the Great Valley Fault Zone is located approximately 4 miles west of the WRTP Specific Plan Area (Crawford & Associates 2020). The 1983 earthquake in Coalinga (magnitude 6.4) and the 1985 earthquake in the Kettleman Hills (magnitude 6.1) were likely caused by movement along this fault zone. The Great Valley Fault Zone may also have been the source of the Vacaville-Winters earthquake of 1892 (estimated magnitude of 6.75) (Working Group on Northern California Earthquake Potential 1996). In addition, the Dunnigan Hills Fault, approximately 9.6 miles to the northwest, has exhibited evidence of activity during Holocene time (Jennings and Bryant 2010).

The intensity of ground shaking depends on the distance from the earthquake epicenter to the site, the magnitude of the earthquake, and site soil conditions. Ground motions from seismic activity can be estimated by probabilistic method at specified hazard levels and by site-specific design calculations using a computer model. Crawford & Associates (2020) estimated that the projected peak horizontal ground acceleration (PGA), which correlates to the intensity of ground shaking, at the proposed Caltrans Off-site Improvement Area would be 0.36g. This calculation indicates that the proposed Caltrans Off-site Improvement Area may be subject to moderate level of ground shaking during a large magnitude earthquake (Crawford & Associates 2020). Because the proposed Caltrans Off-site Improvement Area is located in the same geologic formations, and are located the same distance from active seismic sources as compared to the WRTP Specific Plan Area and the proposed off-site South Regional Pond, the WRTP Specific Plan Area and the proposed off-site South Regional Pond would experience a similar level of seismic ground shaking as the Caltrans Off-site Improvement Area.

Liquefaction is a process by which water-saturated materials lose strength and may fail during strong ground-shaking, when granular materials are transformed from a solid state into a liquefied state as a result of increased pore-water pressure. Structures on soil that undergoes liquefaction may settle or suffer major structural damage. Liquefaction is most likely to occur in low-lying areas where the substrate consists of poorly consolidated to unconsolidated water-saturated sediments, recent Holocene-age sediments, or deposits of artificial fill. Although active seismic sources are relatively close and most of the Caltrans Off-site Improvement Area consists of Holocene-age deposits, Crawford & Associates (2020) found these deposits were composed of stiff/dense soil layers, and given that groundwater was encountered at depths of 28.5 to 37.2 feet below the ground surface, they determined that liquefaction likely does not represent a hazard. Due to the proximity to the WRTP Specific Plan Area and similar geological conditions of the areas, the WRTP Specific Plan Area and proposed off-site South Regional Pond would be similar in nature and liquefaction in these areas is not considered a likely hazard.

Subsidence is the gradual settling or sudden sinking of the ground surface resulting from subsurface movement of earth materials. Seismically-induced settlement refers to the compaction of soils and alluvium caused by ground-shaking. Fine-grained soils are subject to seismic settlement and differential settlement. A potential for differential settlement exists where low-density and unconsolidated material is encountered, such as overbank river deposits

(present day and historical) common along the Sacramento River. Subsidence and settlement may also occur from the weight of structures placed on fine-grained, unconsolidated, or water-saturated sediments due to both immediate settlements in granular soils and the consolidation of fine grained soils.

SOILS

Exhibit 4.7-2 (page 4.7-9) of the 2035 General Plan and CAP EIR (City of Woodland 2016b) indicates that, based on U.S. Natural Resources Conservation Service (NRCS) soil survey data, the WRTP Specific Plan Area and the off-site improvement areas are composed of five soil types: Brentwood silty clay loam, Capay silty clay, Reiff very fine sandy loam, Sycamore silty clay loam (drained), and Yolo silt loam. Relevant characteristics of these soils are presented in Table 3.7-2. The shrink-swell potential of soils within the WRTP Specific Plan Area and the off-site improvement areas is also represented graphically on Exhibit 4.7-3 (page 4.7-11) of the 2035 General Plan and CAP EIR (City of Woodland 2016b).

Table 3.7-2. Project Site Soil Characteristics

Soil Map Unit Name	Shrink-Swell Potential[1]	Wind Erosion Hazard[2]	Water Erosion Hazard[3]	Hydrologic Group (Runoff Potential)[4]	NRCS Limitations for Development of Dwellings, Small Commercial Buildings[5], and Roads
Brentwood silty clay loam, 0 to 2 percent slopes	High	6	Moderate	C	Very limited: shrink-swell potential, low bearing strength
Capay silty clay, 0 percent slopes	High	4	Moderate	C	Very limited: ponding, flooding, shrink-swell potential, low bearing strength
Reiff very fine sandy loam	Low	3	Moderate	A	No limitations
Sycamore silty clay loam, drained, 0 percent slopes	Moderate	6	Moderate	C	Somewhat limited: shrink-swell potential, low bearing strength
Yolo silt loam, 0 to 2 percent slopes	Moderate	6	Moderate	B	Very limited: flooding, low bearing strength

Notes: NRCS = U.S. Natural Resources Conservation Service

[1] Based on percentage of linear extensibility. Shrink-swell potential ratings of "moderate" to "very high" can result in damage to buildings, roads, and other structures.

[2] Based on the NRCS wind erodibility groups. The soils assigned to group 1 are the most susceptible to wind erosion, and those assigned to group 8 are the least susceptible.

[3] Based on the NRCS erosion factor "Kw whole soil," which is a measurement of relative soil susceptibility to sheet and rill erosion by water.

[4] Hydrologic soil groups are based on estimated runoff potential: Group A = high infiltration rate and low runoff potential, Group B = moderate infiltration rate and moderate runoff potential, Group C = slow infiltration rate and high runoff potential.

[5] Small commercial buildings are structures that are less than three stories high and do not have basements. The foundation is assumed to consist of spread footings of reinforced concrete built on undisturbed soil at a depth of two feet or at the depth of maximum frost penetration, whichever is deeper.

Source: NRCS 2020

Based on NRCS (2020) soil survey data, the Caltrans Off-site Improvement Area is composed of Sycamore silty clay loam (described in Table 3.7-2). As part of the geotechnical study performed for proposed Caltrans Off-site Improvement Area, six soil borings were performed. Holocene-age alluvial deposits consisting of fine-grain clay and silts and medium dense sands were present in all of the soil borings to the maximum depth of excavation (i.e., 51.5 feet). The existing roadway/embankment fill material generally consist of medium dense to very dense poorly graded sand and sandy silt to a depth approximately of 25 feet below the existing ground surface. Native soils,

consisting of soft to hard clay, silt, sandy clay, silty clay, and clayey silt were encountered at depths of 25 to 51.5 feet below the existing ground surface.

The proposed off-site South Regional Pond is composed of Capay silty clay and Brentwood silty clay loam (described Table 3.7-2) (NRCS 2020).

As shown in Table 3.7-2, most of the soils within the WRTP Specific Plan Area and the off-site improvement areas have a moderate to high shrink-well potential, moderate erosion potential, high stormwater runoff potential, and low soil bearing strength. In addition, the Reiff soil type has high wind erosion potential.

MINERALS

The southern portion of the 2035 General Plan and CAP EIR Planning Area, including the WRTP Specific Plan Area and the Caltrans Off-site Improvement Area, and the proposed South Regional Pond area are outside of the area classified for mineral resources by CGS (see Exhibit 4.7-4 on page 4.7-15 of the 2035 General Plan and CAP EIR) (City of Woodland 2016b). The largest and one of the most important mineral resource sectors within the Sacramento-Fairfield Production-Consumption Region is located along Cache Creek between the towns of Capay and Yolo. The Cache Creek aggregate deposits consist of alluvium derived from the Coast Ranges to the northwest. All of the portland cement concrete-grade aggregate mined from these deposits comes from Pleistocene and Holocene river channel deposits. The Cache Creek aggregate mineral deposits are classified by CGS as mineral resource zone (MRZ)-2, which is defined as "areas where adequate information indicates that significant mineral (aggregate) deposits are present or where it is judged that there is a high likelihood for their presence." Although the WRTP Specific Plan Area and off-site improvement areas contain the same types of rock units as those present in and around the Cache Creek resource sector designated by CGS, the potential presence of aggregate resources is unknown. Dupras (1988) indicates that, in general, the farther away an aggregate deposit is from the active Cache Creek channel, the older the aggregate is and the more probable that weathering processes have substantially diminished the quality (2035 General Plan and CAP EIR pages 4.7-13 and 4.7-14) (City of Woodland 2016b).

Geocon Consultants, Inc. (2018) reviewed California Division of Oil, Gas, and Geothermal Resources data for information regarding the location and status of any oil or natural gas exploration or production at or in the vicinity of the WRTP Specific Plan Area. The results of this review indicated there are no active or abandoned wells within the WRTP Specific Plan Area; the nearest oil/gas wells (dry holes or plugged) are located approximately 0.5 mile to the west and south.

3.7.3 REGULATORY FRAMEWORK

The 2035 General Plan and CAP EIR summarizes the federal, State, regional, and local regulatory framework on pages 4.7-17 through 4.7-22. In addition to the regulatory background provided in the 2035 General Plan and CAP EIR, those aspects of the existing regulatory framework that are relevant to potential impacts of the WRTP Specific Plan are briefly highlighted below. Please see Section 4.7.3 of the 2035 General Plan and CAP EIR (City of Woodland 2016b) for more detail.

FEDERAL PLANS, POLICIES, REGULATIONS AND LAWS

There are no federal plans, policies, regulations, or laws that apply to the proposed project.

STATE PLANS, POLICIES, REGULATIONS, AND LAWS

California Building Standards Code

The State of California provides minimum standards for building design through the California Building Standards Code (CBC) (California Code of Regulations Title 24). The CBC applies to building design and construction in the state and is based on the Federal Uniform Building Code used widely throughout the country (generally adopted on a state-by-state or district-by-district basis). The CBC has been modified for California conditions with numerous more detailed or more stringent regulations. The regulations contained in the CBC apply to all aspects of design and construction of buildings, including excavations for foundations and retaining walls, at the project site. The CBC also regulates grading activities, including drainage, erosion control, and construction on unstable soils (such as expansive soils and areas subject to liquefaction).

National Pollutant Discharge Elimination System and Waste Discharge Requirements for Construction

The State Water Resources Control Board (SWRCB) and Central Valley Regional Water Quality Control Board (CVRWQCB) have adopted specific National Pollutant Discharge Elimination System (NPDES) permits for a variety of activities that have the potential to discharge wastes to waters of the state. The SWRCB's statewide stormwater general permit for construction activity (Order 2009-009-DWQ as amended by Order No. 2012-0006-DWQ) is applicable to all land-disturbing construction activities that would disturb 1 acre or more. The Central Valley RWQCB's general NPDES permit for construction dewatering activity (Order No. R5-2013-0074) authorizes direct discharges to surface waters up to 250,000 gallons per day for no more than a 4-month period each year. All of the NPDES permits involve similar processes, which include submitting a Notice of Intent to CVRWQCB and implementing Stormwater Pollution Prevention Plans (SWPPP) that include Best Management Practices (BMPs) to minimize those discharges. CRWQCB Resolution R5-2003-0008 identifies activities subject to waivers of Waste Discharge Requirements (WDRs), including minor dredging activities and minor construction dewatering activities that discharge to land. The SWRCB has issued a separate NPDES for Caltrans projects (Order No. 2012-0011-DWQ, NPDES No. CAS000003). This NPDES permit regulates construction-related erosion and operational discharge on all Caltrans projects throughout the State. (See Section 3.9, "Hydrology and Water Quality," for additional details.)

REGIONAL AND LOCAL PLANS, POLICIES, REGULATIONS, AND ORDINANCES

City of Woodland 2035 General Plan

The *City of Woodland General Plan Update 2035* (City of Woodland 2017) identifies the following policies that are applicable to the proposed WRTP Specific Plan.

Public Facilities and Services Element

- **Policy 5.I.3 Overland Flow Requirements in New Development.** Require development to provide for the overland flow of stormwater meeting or exceeding the City's standard design capacity of the storm drainage system. Overland flow waters should be conveyed over public streets where possible and should be at least one foot below building pad elevations and contain provisions for removal of silt and other contaminants.

- **Policy 5.I.5 Prohibiting Grading Activities in Rainy Season**. Prohibit grading activities during the rainy season, unless adequately mitigated, to avoid sedimentation of storm drainage facilities.

Sustainability, Conservation, and Open Space Element

- **Policy 7.A.4 Best Management Practices.** Continue to require the use of feasible and practical best management practices (BMPs) and promote Low Impact Development to protect receiving waters from the adverse effects of construction activities and urban and agricultural runoff.

- **Policy 7.E.1. Potentially Significant Sites**. Ensure that development avoids potential impacts to sites suspected of being archeologically, paleontologically, or culturally significant.

- **Policy 7.E.2. Discovery of Resources**. If cultural, archaeological, or paleontological resources are discovered during construction, ensure their evaluation and protection, as appropriate, in accordance with applicable federal and State laws and regulations.

Safety Element

- **Policy 8.A.1 Minimize Seismic Risk**. Continue to maintain and enforce appropriate standards to ensure new development is designed to meet current safety standards associated with seismic activity. Require public and private development to be located, designed, and constructed to minimize the risk of loss of life and injury in the event of a major earthquake or other natural disaster.

- **Policy 8.A.2 Geologic-Seismic Analysis**. Require the preparation of a soils engineering and geologic-seismic analysis prior to permitting development in areas prone to geological or seismic hazards (i.e., groundshaking, liquefaction, expansive soils).

- **Policy 8.A.3 Expansive Soils**. Evaluate and avoid siting of structures across soil materials of substantially different expansive properties. Require appropriate design specification including special slabs where foundations are in areas of expansive soils.

City of Woodland Grading Ordinance, Woodland Municipal Code Chapter 15.12

The City's Grading Ordinance (Woodland Municipal Code Chapter 15.12) establishes standards and procedures for grading and excavation such that projects will be free from harmful effects of runoff (including inundation and erosion), and to protect neighboring and downstream properties from drainage problems resulting from new development. A grading permit is required for construction projects throughout the city. The permit application process includes submittal of grading plans, copies of any necessary State or federal permits, description and quantity of work, and dates when the work will be performed.

City of Woodland Subdivision Ordinance and Standard Specifications and Details, Woodland Municipal Code Chapter 16

The City's Subdivision Ordinance regulates the subdivision of property, requiring applicants to submit exhibits and improvement plans for all street work, drainage channels, structures, and underground utilities that demonstrate, among other items, consistency with the City's Standard Specifications and Details, also known as *Engineering Standards: Design Standards, Standard Details and Construction Specifications* (City of Woodland 2016a). These

standards apply to transportation, storm drainage, sewer, wastewater pumping, water distribution, graywater distribution, underground pipelines, and other improvements, and are designed, in part to avoid impacts related to geologic and seismic constraints.

City of Woodland Urban Storm Water Quality Management and Discharge Control Ordinance, Woodland Municipal Code Chapter 8.08

Chapter 8.08 of the City's Municipal Code regulates discharges into the municipal storm drain system, including compliance with applicable provisions of construction NPDES permit requirements.

3.7.4 Environmental Impacts and Mitigation Measures

Methodology

The 2035 General Plan and CAP EIR addresses impacts of development of the City's Planning Area, including the WRTP Specific Plan Area. Consistent with Section 15183(b) of the CEQA Guidelines, the following analysis focuses on project-specific significant effects of the WRTP Specific Plan and off-site improvements that: a) are peculiar to the WRTP Specific Plan or the project site; b) were not addressed in the 2035 General Plan and CAP EIR (including off-site or cumulative impacts); or c) would be more severe than previously described based on substantial new information.

The analysis prepared for this EIR relied on NRCS soil survey data, published geologic literature and maps, and a review of the *Phase 1 Environmental Site Assessment and Limited Screening-Level Pesticide Assessment* (Geocon 2018). The information obtained from these sources was reviewed and summarized to present the existing conditions and to identify potential environmental impacts, based on the thresholds of significance presented in this section. Impacts associated with geology, soils, and mineral resources that could result from project construction and operational activities were evaluated qualitatively based on site conditions; expected construction practices; and materials, locations, and duration of project construction and related activities.

In its standard guidelines for assessment and mitigation of adverse impacts on paleontological resources, the Society of Vertebrate Paleontology (SVP) (2010) established four categories of sensitivity for paleontological resources: high, low, no, and undetermined. Areas where fossils have been previously found are considered to have a high sensitivity and a high potential to produce fossils. Areas that are not sedimentary in origin and that have not been known to produce fossils in the past typically are considered to have low sensitivity. Areas that are composed of high-grade metamorphic rocks (such as gneisses and schists) and plutonic igneous rocks (such as granites and diorites) are not paleontologically sensitive. Areas that have not had any previous paleontological resource surveys or fossil finds are considered to be of undetermined sensitivity until surveys and mapping are performed to determine their sensitivity. After reconnaissance surveys, observation of exposed cuts, and possibly subsurface testing, a qualified paleontologist can determine whether the area should be categorized as having high or low sensitivity. In keeping with SVP (2010) significance criteria, all vertebrate fossils are generally categorized as being of potentially significant scientific value.

THRESHOLDS OF SIGNIFICANCE

The proposed WRTP Specific Plan may have a significant impact related to geology, soils, and mineral resources if it would:

1. directly or indirectly cause potential substantial adverse impacts, including the risk of loss, injury, or death involving:

    a. rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault;

    b. strong seismic ground shaking;

    c. seismic-related ground failure, including liquefaction; or

    d. landslides;

2. result in substantial soil erosion or the loss of topsoil;

3. be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse;

4. be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property;

5. have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water;

6. directly or indirectly destroy a unique paleontological resource or site or unique geologic feature;

7. result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state; or

8. result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan.

For the purposes of this analysis, a unique paleontological resource or site is one that is considered significant under the following professional paleontological standards. An individual vertebrate fossil specimen may be considered unique or significant if it is identifiable and well preserved, and it meets one of the following criteria:

- a type specimen (i.e., the individual from which a species or subspecies has been described);
- a member of a rare species;
- a species that is part of a diverse assemblage (i.e., a site where more than one fossil has been discovered) wherein other species are also identifiable, and important information regarding life history of individuals can be drawn;

- a skeletal element different from, or a specimen more complete than, those now available for its species; or
- a complete specimen (i.e., all or substantially all of the entire skeleton is present).

The value or importance of different fossil groups varies depending on the age and depositional environment of the rock unit that contains the fossils, their rarity, the extent to which they have already been identified and documented, and the ability to recover similar materials under more controlled conditions (such as for a research project). Marine invertebrates are generally common; the fossil record is well developed and well documented, and they would generally not be considered a unique paleontological resource. Identifiable vertebrate marine and terrestrial fossils are generally considered scientifically important because they are relatively rare.

IMPACTS NOT DISCUSSED FURTHER

The following discussion summarizes the impacts of the WRTP Specific Plan and off-site improvements that are not discussed further in this document because either, a) there is no impact, or b) none of the factors triggering additional environmental review (as found in Section 15183(b)) exist. Impacts identified as not peculiar to the project were either addressed as a part of the 2035 General Plan and CAP EIR and/or are substantially mitigated by uniformly applied development standards (CEQA Guidelines Section 15183[f][7]). Uniformly applied development standards include the 2035 General Plan, the CAP, existing City regulations and standards, design review requirements, and impact fee programs.

Surface Fault Rupture (Significant Threshold 1a) — The WRTP Specific Plan Area and the off-site improvement areas are not located within or adjacent to an Alquist-Priolo Earthquake Fault Hazard Zone, and there is no evidence of any known fault. Therefore, surface fault rupture would not pose a hazard for implementation of the WRTP Specific Plan, and this impact is not addressed further in this EIR.

Landslide Hazards (Significance Threshold 1d) — Slopes within and immediately adjacent to the WRTP Specific Plan Area and off-site improvement areas are nearly flat, ranging from 0–4 percent. Therefore, landslides would not pose a hazard for the proposed project, and this impact is not addressed further in this EIR.

Soil Suitability for Septic Systems (Significance Threshold 5) — Wastewater treatment for the WRTP Specific Plan Area would be provided through connections with the City's existing wastewater conveyance pipelines for treatment at the City's Water Pollution Control Facility. Because septic systems or other forms of on-site wastewater treatment would not be employed under the WRTP Specific Plan, there would be no impact. Therefore, this impact is not addressed further in this EIR.

Loss of Availability of Mineral Resources (Significance Thresholds 7 and 8) — There are no areas of known mineral resources within or immediately adjacent to the WRTP Specific Plan Area (i.e., areas that have been classified as MRZ-2 by CGS), and the WRTP Specific Plan Area and off-site improvement areas are more than 5 miles southeast of the designated Cache Creek mineral resource sector. Therefore, implementation of the WRTP Specific Plan would have no impact related to the loss of availability of mineral resources, and this impact is not addressed further in this EIR.

Seismic Hazards Related to Strong Seismic Ground Shaking and Liquefaction (Significance Thresholds 1b and 1c) — As discussed in the 2035 General Plan and CAP EIR Impact 4.7-1 (pages 4.7-24 through 4.7-27) (City of Woodland 2016b), although there are no faults present within the city of Woodland, people and structures within

the Planning Area could experience seismic shaking or liquefaction as a result of earthquakes in the Sacramento Valley. However, the CBC regulates all aspects of building and foundation design and construction, including regulations that are specifically designed to reduce the risks from seismic hazards to the maximum extent practicable. Compliance with the CBC is required by law. General Plan Policies 8.A.1 and 8.A.2 are also designed to reduce the potential for adverse impacts to people or structures from seismic shaking and liquefaction. The 2035 General Plan and CAP EIR determined that this impact was less than significant.

Crawford & Associates (2020) estimated that the projected PGA at the proposed Caltrans Off-site Improvement Area would be 0.36g. This calculation indicates that the proposed off-site interchange may be subject to moderate level of ground shaking during a large magnitude earthquake. They also determined that although active seismic sources are relatively close and most of the project site consists of Holocene-age deposits, these deposits are composed of stiff/dense soil layers, and given that groundwater is present at depths of 28.5 to 37.2 feet below the ground surface, Crawford & Associates (2020) determined that liquefaction likely does not represent a hazard. Because the Caltrans Off-site Improvement Area is located in the same geologic formations and is the same distance from active seismic sources as compared to the WRTP Specific Plan Area and the proposed off-site South Regional Pond location, the WRTP Specific Plan Area and the proposed off-site South Regional Pond would likely experience a similar level of seismic ground shaking and a similar susceptibility to liquefaction as the Caltrans Off-site Improvement Area.

Design and construction of buildings, foundations, and retaining walls throughout the WRTP Specific Plan Area are subject to the requirements of the CBC. Design and construction of infrastructure in the WRTP Specific Plan Area are regulated by the City's *Engineering Standards: Design Standards, Standard Details and Construction Specifications* (City of Woodland 2016a). Similarly, design and construction of the off-site South Regional Pond is an allowed use under Chapter 2 of Title 8 of the Yolo County Code, and would be subject to the Yolo County permit and ordinance requirements, including Title 7, Building Regulations, of the Yolo County Code. These standards apply to transportation, storm drainage, sewer, wastewater pumping, water distribution, graywater distribution, underground pipelines, and other improvements, and are designed, in part to avoid impacts related to geologic and seismic constraints. Existing seismic safety standards are enforced by the City through requirements that development to be designed to minimize risk related to earthquakes, and that site-specific geotechnical reports be prepared to identify methods to reduce hazards. Design and construction of the off-site SR 113/County Road 25A intersection improvements are regulated by Caltrans, and would comply with requirements contained in the *Standard Plans and Specifications* (Caltrans 2018) and the *Highway Design Manual* (Caltrans 2020).

Therefore, impacts related to seismic hazards from implementation of the WRTP Specific Plan and related off-site infrastructure improvements were addressed in the 2035 General Plan and CAP EIR and are substantially mitigated by City-administered uniformly applied development standards, as provided by CEQA Guidelines Section 15183(f), and no additional CEQA review is required.

Impacts Related to Soil Erosion (Significance Threshold 2) — As discussed in the 2035 General Plan and CAP EIR Impact 4.7-2 (pages 4.7-27 through 4.7-29) (City of Woodland 2016b), construction projects have the potential to cause an increase in soil erosion due to increased grading, excavation, movement of construction vehicles, and other development-related construction activities. As presented above in Table 3.7-2, most soils within the WRTP Specific Plan Area and the off-site improvement areas have a moderate erosion potential and a high stormwater runoff potential. In addition, the Reiff soil type has a high wind erosion potential.

Chapter 15.12 of the City of Woodland Municipal Code addresses erosion and sediment control under the City's Grading Ordinance. Project applicants for future projects proposed under the WRTP Specific Plan, including the off-site South Regional Pond if this feature is constructed by a private entity rather than the City, must obtain a grading permit that includes submittal of a soils engineering report and an engineering geology report specific to the project site, as required by Appendix Chapter 33 of the CBC, Section 3309. Chapter 8.08 of the City's Municipal Code regulates discharges into the municipal storm drain system including compliance with applicable provisions of construction NPDES permit requirements, including design of and discharge from the proposed off-site South Regional Pond. Furthermore, projects with the WRTP Specific Plan Area and the South Regional Pond, because they would disturb more than 1 acre of land, must comply with the requirements in the SWRCB *General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities* (Order 2009-009-DWQ as amended by Order No. 2012-0006-DWQ). The SWRCB general permit contains a numeric, two-part, risk-based analysis process and requires development of a SWPPP and implementation of BMPs. The SWPPP must include a site map and a description of construction activities, and must identify the BMPs that will be employed to prevent soil erosion and discharge of other construction-related pollutants. Project applicants for future projects proposed under the WRTP Specific Plan must comply with the City's *Engineering Standards: Design Standards, Standard Details and Construction Specifications* (City of Woodland 2016a). These standards apply to transportation, storm drainage, sewer, wastewater pumping, water distribution, graywater distribution, underground pipelines, and other improvements, and are designed, in part, to avoid impacts related to geologic and seismic constraints. Design and construction of the off-site South Regional Pond is an allowed use under Chapter 2 of Title 8 of the Yolo County Code, and would be subject to the Yolo County permit and ordinance requirements, including Title 7, Building Regulations, of the Yolo County Code. Design and construction of the off-site SR 113/County Road 25A intersection improvements is regulated by Caltrans, and would comply with requirements contained in the *Standard Plans and Specifications* (Caltrans 2018) and the *Highway Design Manual* (Caltrans 2020). Furthermore, Caltrans has its own NPDES permit issued by SWRCB (Order No. 2012-0011-DWQ, NPDES No. CAS000003), with which all Caltrans projects are required to comply. This NPDES permit regulates construction-related erosion and operational discharge on all Caltrans projects throughout the state. Therefore, implementation of the WRTP Specific Plan and related off-site improvements would be consistent with the 2035 General Plan and CAP EIR, which determined that this impact was less than significant.

Project applicants for future projects proposed under the WRTP Specific Plan, including the off-site South Regional Pond if this feature is constructed by a private entity rather than the City, must implement BMPs and develop and implement SWPPPs, as required by CVRWQCB, and obtain grading permits from the City, all of which are specifically designed to minimize constructed-related soil erosion to the maximum extent feasible. Caltrans also must implement BMPs and develop and implement a SWPPP as required by its agency-specific NPDES permit. Therefore, the soil erosion impact from construction of the WRTP Specific Plan and related off-site infrastructure improvements was addressed by the 2035 General Plan and CAP EIR and is substantially mitigated by City-administered uniformly applied development standards, as provided by CEQA Guidelines Section 15183(f), and no additional CEQA review is required.

Geologic Hazards Related to Unstable and Expansive Soils (Significance Thresholds 3 and 4) — A review of NRCS (2020) soil data (see Table 3.7-2) indicates that most of the soils within the WRTP Specific Plan Area and off-site improvement areas have been rated with severe limitations for construction of buildings and roads because of high shrink-swell potential, low soil strength, and ponding and soil saturation. As discussed in the 2035 General Plan and CAP EIR Impact 4.7-3 (pages 4.7-30 and 4.7-31) (City of Woodland 2016b), construction in unstable and expansive soils could result in structural damage to buildings, roads, and bridges. Expansive soils shrink and swell

as a result of moisture change. These volume changes can result in damage over time to building foundations, underground utilities, and other subsurface facilities and infrastructure if they are not designed and constructed appropriately to resist the damage associated with changing soil conditions. Low soil bearing strength and long periods of soil saturation can result in subsidence from the weight of overlying structures.

However, the CBC regulates all aspects of building and foundation design and construction, including regulations that are specifically designed to reduce or eliminate hazards from construction in expansive soil. Compliance with the CBC, which is required by law, ensures appropriate design and construction of building foundations to resist soil movement. In addition, the CBC also contains drainage-related requirements to reduce seasonal fluctuations in soil moisture content. Construction in soils of low strength is also addressed in the CBC through implementation of soil engineering tests and amending and compacting soils. General Plan Policies such as 8.A.1, 8.A.2, and 8.A.3 are designed to reduce hazards from construction in unstable soils by requiring preparation of a site-specific geotechnical report and incorporating special design requirements in areas of differential settlement. The 2035 General Plan and CAP EIR determined that this impact was less than significant.

Project applicants for future projects proposed under the WRTP Specific Plan are required to comply with design and construction requirements contained in the CBC and the City's *Engineering Standards: Design Standards, Standard Details and Construction Specifications* (City of Woodland 2016a). Similarly, design and construction of the off-site South Regional Pond would be subject to the CBC and Yolo County permit and ordinance requirements including Title 7, Building Regulations, of the Yolo County Code. Project applicants must prepare site-specific geotechnical reports to identify soil constraints such as settlement and shrink-swell potential and implement design specifications to prevent damage associated with these limitations. Design and construction of the off-site SR 113/County Road 25A intersection improvements is regulated by Caltrans, and would comply with requirements contained in the *Standard Plans and Specifications* (Caltrans 2018), which contain provisions to address unstable and expansive soils.

Therefore, impacts from WRTP Specific Plan construction and related off-site infrastructure improvements in unstable and expansive soils are addressed by the 2035 General Plan and CAP EIR and are substantially mitigated by City-administered uniformly applied development standards, as provided by CEQA Guidelines Section 15183(f), and no additional CEQA review is required.

PROJECT IMPACTS AND MITIGATION MEASURES

IMPACT 3.7-1 **Possible Damage to or Destruction of Unique Paleontological Resources (Significance Threshold 6).** *Most of the WRTP Specific Plan Area and all of the proposed SR 113/County Road 25A interchange area are underlain by Holocene-age rock formations, which are not paleontologically sensitive. However, the southern portion of the WRTP Specific Plan Area and the proposed South Regional Pond would be constructed in paleontologically sensitive rock formations. Therefore, this impact is considered* ***potentially significant.***

Most of the WRTP Specific Plan Area is underlain by Holocene-age Levee, Channel, and Basin Deposits. Furthermore, the geotechnical report prepared by Crawford & Associates (2020) demonstrated, based on the results of site-specific soil borings, that only Holocene-age deposits are present at the proposed SR 113/County Road 25A interchange improvements. As a common industry threshold, a fossil is typically considered a unique paleontological resource if it is more than 11,700 years old (i.e., the generally accepted end of the last glacial period

of the Pleistocene Epoch). Holocene deposits contain only the remains of extant, modern taxa (if any resources are present), which are not considered "unique" paleontological resources. Therefore, earth-moving activities in the Levee, Channel, and Basin Deposits throughout most of the WRTP Specific Plan Area, and the entirety of the proposed Caltrans Off-site Improvement Area, would have no impact on unique paleontological resources.

However, a mixture of the Riverbank and Modesto Formations is present in the southern portion of the WRTP Specific Plan Area and at the proposed South Regional Pond. As presented above in Table 3.7-1 and discussed in the 2035 General Plan and CAP EIR Impact 4.7-4 (pages 4.7-33 and 4.7-34) (City of Woodland 2016b), due to the large number of vertebrate fossils recovered from these formations throughout the Sacramento and San Joaquin Valleys, including the vicinity of Woodland, these formations are considered paleontologically sensitive. General Plan Policies 7.E.1 and 7.E.2 are designed to help avoid impacts to paleontological resources. Earth-moving activities in the Riverbank and Modesto formations have the potential to accidentally damage or destroy unique paleontological resources, and the 2035 General Plan and CAP EIR determined that this impact was significant. For the same reasons discussed herein, WRTP Specific Plan and proposed South Regional Pond impacts to unique paleontological resources from earth-moving activities in the Riverbank and Modesto Formations are considered **potentially significant**.

Mitigation Measure

Mitigation Measure 3.7-1: Conduct Construction Personnel Education, Stop Work if Paleontological Resources are Discovered, Assess the Significance of the Find, and Prepare and Implement a Recovery Plan, as Required.

To minimize the potential for destruction of, or damage to potentially unique, scientifically important paleontological resources during earth-moving activities, the measures described below shall be implemented by project applicants and contractors for future projects proposed under the WRTP Specific Plan within the Riverbank or Modesto Formations (in the southern portion of the WRTP Specific Plan Area and the proposed South Regional Pond area) before and during construction activities.

- Prior to the start of earthmoving activities that would disturb 1 acre of land or more within the Riverbank or Modesto Formations (in the southern portion of the WRTP Specific Plan Area and the proposed South Regional Pond area), inform all construction personnel involved with earthmoving activities regarding the possibility of encountering fossils, the appearance and types of fossils likely to be seen during construction, and proper notification procedures should fossils be encountered. This worker training may either be prepared and presented by an experienced field archaeologist at the same time as construction worker education on cultural resources or prepared and presented separately by a qualified paleontologist.

- If paleontological resources are discovered during earthmoving activities, the construction crew shall immediately cease work in the vicinity of the find and notify the City of Woodland Community Development Department. Retain a qualified paleontologist to evaluate the resource and prepare a recovery plan. The recovery plan may include, but is not limited to, a field survey, construction monitoring, sampling and data recovery procedures, museum curation for any specimen recovered, and a report of findings. Recommendations in the recovery plan that are determined by the City to be necessary and feasible shall be implemented before construction activities can resume at the site where the paleontological resources were discovered.

Significance after Mitigation

This mitigation measure is consistent with the 2035 General Plan and CAP EIR Mitigation Measure 4.7-4 (pages 4.7-34 and 4.7-35) (City of Woodland 2016b). Consistent with the findings of the 2035 General Plan and CAP EIR, implementation of Mitigation Measure 3.7-1 would reduce the impacts of WRTP Specific Plan and associated off-site infrastructure implementation on unique paleontological resources to a **less-than-significant** level because construction workers would be alerted to the possibility of encountering paleontological resources and, in the event that resources were discovered, fossil specimens would be recovered and recorded and would undergo appropriate curation.

3.7.5 CUMULATIVE IMPACTS

SEISMIC AND GEOLOGIC HAZARDS

As discussed in the cumulative analysis contained in the 2035 General Plan and CAP EIR (page 6-30) (City of Woodland 2016b), construction of buildings associated with the projects considered in the 2035 General Plan and CAP EIR Cumulative Scenario would result in more construction with more potential exposure to geologic hazards such as seismic ground shaking, liquefaction, and construction in unstable soils. However, all development projects are required by law to comply with the CBC, which includes engineering practices that require special design and construction methods to reduce or eliminate hazards from geologic hazards including seismic ground shaking, liquefaction, and construction in unstable and expansive soils. Construction projects entitled by the City are subject to compliance with General Plan Policies, such as 8.A.1, 8.A.2, and 8.A.3, which are designed to reduce geologic hazards from construction. The 2035 General Plan and CAP EIR determined that cumulative effects related to seismic ground shaking; liquefaction; and geologic hazards related to unstable soils and expansive soils would be less-than-cumulatively considerable.

Project applicants for future projects proposed under the WRTP Specific Plan are required by law to comply with the design and construction requirements of the CBC, which includes engineering practices that require special design and construction methods to reduce or eliminate hazards from geologic hazards including seismic ground shaking, liquefaction, and construction in unstable and expansive soils. Project applicants for the off-site South Regional Pond are required to comply with the Yolo County permit and ordinance requirements, including Title 7, Building Regulations, of the Yolo County Code. The standards apply to transportation, storm drainage, sewer, wastewater pumping, water distribution, graywater distribution, underground pipelines, and other improvements, and are designed, in part to avoid impacts related to geologic and seismic constraints. Design and construction of the off-site SR 113/County Road 25A intersection improvements is regulated by Caltrans, and would comply with requirements contained in the *Standard Plans and Specifications* (Caltrans 2018) and the *Highway Design Manual* (Caltrans 2020). The proposed WRTP Specific Plan and the SR 113/County Road 25A interchange improvements are within the City's Planning Area and therefore were included as part of the cumulative analysis contained in 2035 General Plan and CAP EIR, and there are no substantial changes to environmental conditions, regulatory updates, or the WRTP Specific Plan that require additional cumulative analysis or mitigation. Although the off-site South Regional Pond is not within the City's Planning Area and therefore was not included within the 2035 General Plan and CAP EIR, design and construction of the South Regional Pond is regulated by the City's *Engineering Standards: Design Standards, Standard Details and Construction Specifications* (City of Woodland 2016a). Therefore, and consistent with the 2035 General Plan and CAP EIR, cumulative effects related to seismic ground shaking; liquefaction; and geologic hazards related to unstable soils and expansive soils from the WRTP Specific

Plan and the associated off-site improvements, in conjunction with development of related projects, would be **less-than-cumulatively considerable**.

SOIL EROSION

The 2035 General Plan and CAP EIR Cumulative Scenario (page 6-30) (City of Woodland 2016b) concluded that increased construction associated with the projects considered in the 2035 General Plan and CAP EIR Cumulative Scenario would result in an increased potential for soil erosion along with an increased potential for siltation of local drainages from sediment transport. All applicable projects are required to comply with the City of Woodland Stormwater Management Program and NPDES regulations, including construction site SWPPPs and BMPs designed to control soil erosion at each construction site. Projects must also comply with Chapter 15.12 of the City of Woodland Municipal Code (the City's Grading Ordinance), which requires a grading permit, a soils engineering report, and an engineering geology report specific to the project site, as required by Appendix Chapter 33 of the CBC, Section 3309. Projects must also comply with Chapter 8.08 of the City's Municipal Code, which regulates discharges into the municipal storm drain system, including compliance with applicable provisions of construction NPDES permit requirements. The 2035 General Plan and CAP EIR determined that effects from construction-related soil erosion would be less-than-cumulatively considerable.

Project applicants for future projects proposed under the WRTP Specific Plan and supportive off-site infrastructure improvements are required to comply with CVRWQCB NPDES permit requirements and City General Plan policies. The proposed WRTP Specific Plan and the SR 113/County Road 25A interchange improvements are within the City's Planning Area and therefore were included as part of the cumulative analysis contained in 2035 General Plan and CAP EIR, and there are no substantial changes to environmental conditions, regulatory updates, or the WRTP Specific Plan that require additional cumulative analysis or mitigation. Although the off-site South Regional Pond is not within the City Planning Area and therefore was not included within the 2035 General Plan and CAP EIR, design and construction of the South Regional Pond is regulated by the CVRWQCB NPDES permit requirements. Therefore, and consistent with the 2035 General Plan and CAP EIR, cumulative soil erosion effects from construction of the WRTP Specific Plan and the associated off-site improvements, in conjunction with development of related projects, would be **less-than-cumulatively considerable**.

PALEONTOLOGICAL RESOURCES

The 2035 General Plan and CAP EIR Cumulative Scenario (page 6-31) (City of Woodland 2016b) concluded that increased construction could result in an increased potential for accidental damage to or destruction of unique paleontological resources. Since these resources are buried under the ground surface, it is difficult to predict the location of resources in the context of site planning, and therefore difficult to avoid in project designs. The 2035 General Plan and CAP EIR determined that this would be a significant cumulative impact. However, the City also determined that implementation of 2035 General Plan and CAP EIR Mitigation Measure 4.7-4 would reduce this impact to a level that is less-than-cumulatively considerable through a new implementation program that would require projects that propose earth-moving activities in paleontologically sensitive rock formations to provide construction worker personnel training prior to the start of construction activities, halt of work in the vicinity of any fossil specimen(s) uncovered, and prepare a recovery plan for any uncovered specimen(s).

Because the SR 113/County Road 25A interchange would be constructed in Holocene-age deposits, this off-site improvement would not contribute to this regionally significant cumulative impact. Mitigation Measure 3.7-1 listed above, which would be implemented in the southern portion of the WRTP Specific Plan Area and the South

Regional Pond (where paleontologically sensitive rock formations are located), incorporates guidance from General Plan and CAP EIR Mitigation Measure 4.7-4. This mitigation requires construction worker personnel training prior to the start of construction activities, halting of work in the vicinity of any fossil specimen(s) uncovered, and preparation of a recovery plan for any uncovered specimen(s). The proposed WRTP Specific Plan and the off-site SR 113/County Road 25A are within the City's Planning Area and therefore were included as part of the cumulative analysis contained in 2035 General Plan and CAP EIR, and there are no substantial changes to environmental conditions, regulatory updates, or the WRTP Specific Plan that require additional cumulative analysis or mitigation. Although the off-site South Regional Pond is not within the City Planning Area and therefore was not included within the 2035 General Plan and CAP EIR, Mitigation Measure 3.7-1 would reduce impacts to unique paleontological resources to a less-than-significant level at the South Regional Pond, similar to the WRTP Specific Plan Area. Therefore, and consistent with the 2035 General Plan and CAP EIR, impacts to unique paleontological resources from implementation of the WRTP Specific Plan and the associated off-site improvements, in conjunction with development of related projects, would be **less-than-cumulatively considerable** with mitigation.

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3.8 HAZARDS AND HAZARDOUS MATERIALS

3.8.1 INTRODUCTION

This section discusses and evaluates the potential environmental impacts related to hazardous and hazardous materials that may result from the WRTP Specific Plan. This section describes potential hazards related to hazardous materials, airports, and wildfires, and also includes information about emergency preparedness in Woodland. Geologic and seismic hazards are discussed in Section 3.7 of this EIR, "Geology, Soils, Minerals, and Paleontological Resources." Flood hazards, dam failure, tsunamis, and water quality are discussed in Section 3.9 of this EIR, "Hydrology, Flooding, and Water Quality."

The CEQA Guidelines note that comments received during the NOP scoping process can be helpful in "identifying the range of actions, alternatives, mitigation measures, and significant effects to be analyzed in depth in an EIR and in eliminating from detailed study issues found not to be important." (CEQA Guidelines Section 15083). Neither the CEQA Guidelines nor Statutes require a lead agency to respond directly to comments received in response to the NOP, but they do require that the comments be considered. Consistent with these requirements, these comments have been carefully reviewed and considered by the City. However, no NOP comments related to hazards or hazardous materials were received. Appendix A of this EIR includes copies of all NOP comments received.

3.8.2 ENVIRONMENTAL SETTING

EXISTING USES OF THE PROJECT SITE AND VICINITY

The WRTP Specific Plan Area and the proposed off-site South Regional Pond location have been used for agricultural production (cultivation of row, grain, and hay crops, along with an almond orchard) dating back to at least 1956. The WRTP Specific Plan Area contains a single-family residence (originally constructed in 1935 and modified in the late 1950s), barn (constructed between 1915 and 1937), and an approximately 1,500-square-foot storage building (constructed in 1990). Several agricultural and residential groundwater wells, along with water, fertilizer, and diesel fuel aboveground storage tanks (ASTs), and irrigation lines are located throughout the WRTP Specific Plan Area. In addition, portions of the WRTP Specific Plan Area previously contained greenhouses. The proposed South Regional Pond site currently consists of an almond orchard.

State Route (SR) 113, which is a 4-lane highway, forms the western boundary of the WRTP Specific Plan Area. The existing off-site SR 113/CR 25A interchange, which is proposed for improvements, is immediately adjacent to the southwest side of the WRTP Specific Plan Area. SR 113 was completed as a 4-lane highway between Davis and Woodland in 1990; however, portions of the roadway existed prior to 1990 (California Department of Transportation [Caltrans] 2013). Land to the west (on the west side of SR 113), and immediately adjacent to the WRTP Specific Plan Area to the south and southeast, is still used for cultivation of row crops and orchards. Land adjacent to the WRTP Specific Plan Area to the north, east, and northeast has been developed with urban uses including housing, schools, parks, and small neighborhood commercial centers, as part of the Spring Lake Specific Plan.

KNOWN HAZARDOUS MATERIALS WITHIN THE WRTP SPECIFIC PLAN AREA

Geocon Consultants, Inc. (Geocon) was retained to conduct a Phase I Environmental Site Assessment (ESA) for the WRTP Specific Plan Area in 2018. The purpose of the Phase I ESA was to document recognized environmental

conditions (RECs) related to current and historical uses of the WRTP Specific Plan Area, and to evaluate the potential for releases of hazardous materials from on- or off-site sources that could affect environmental conditions at the project site. A REC is defined as, "The presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to any release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment. De minimis conditions are not recognized environmental conditions." De minimis conditions are those that generally do not present a threat to human health or the environment and that generally would not be the subject of the enforcement action if brought to the attention of appropriate governmental agencies (Geocon 2018:1).

Preparation of the Phase I ESA was guided by standards published by the American Society for Testing and Materials (ASTM). The Phase I ESA included a site visit, records searches, and personal interviews, along with a screening-level pesticide assessment. The results of the Phase I ESA are presented below.

Various registered pesticides and herbicides associated with agricultural crops are applied at the WRTP Specific Plan Area via land and aerial spraying methods. In addition, fuels, lubricants, and other fluids associated with the operation and maintenance of agricultural equipment are used at the project site. The storage of these materials in large quantities, which is necessary for agricultural operations, requires the use of ASTs.

The northern portion of the WRTP Specific Plan Area contains two agricultural water well compounds, including ASTs for fertilizers, and overhead electrical power and associated pole-mounted transformers. A minor amount of oil staining (i.e., de minimis conditions) was observed on the concrete pad at the northern well head (Geocon 2018:12).

The central portion of the WRTP Specific Plan Area contains an agricultural water well with overhead electrical power and an associated pole-mounted transformer, and a residence, well shed, and barn. Geocon was not provided access to the interior of the structures (Geocon 2018:12). The residence was constructed in 1935 and expanded to its current size between 1957 and 1968; the barn was constructed between 1915 and 1937 (see Section 3.6, "Cultural Resources").

The east-central portion of the WRTP Specific Plan Area contains an agricultural water well, generator, and diesel AST, with overhead electrical power and an associated pole-mounted transformer. Geocon reported that the surface soil adjacent to the diesel AST contained a strong petroleum hydrocarbon odor. Surface staining was not apparent since the soil was wet from recent rain events. A 1,500-square-foot storage building (constructed in 1990) is present in the east-central portion of the WRTP Specific Plan Area; at the time of the Geocon site visit, representatives of Pacific Gas & Electric were utilizing the exterior areas of the storage building to stockpile backfill materials. The property owner indicated that the storage building is used to store water trucks, and that no floor drains, oil water separators, underground storage tanks, or other subsurface features or chemical storage exist inside the building. An agricultural water well, associated water tanks, and a shed are located adjacent to and northeast of the storage building. Geocon was not provided access to the interior of the storage building or well shed. Finally, a former home site (demolished between 1993 and 1995) is also present on the southeastern corner of this portion of the WRTP Specific Plan Area. Geocon observed piles of debris and rubble and a suspected water well casing (Geocon 2018:12–13).

The southwestern portion of the WRTP Specific Plan Area contains an agricultural water well with overhead electrical power and an associated pole-mounted transformer (Geocon 2018:13).

The southeastern portion of the WRTP Specific Plan Area consists of an almond orchard with an unimproved access road parallel to the southern boundary. An agricultural water well compound including ASTs to store fertilizer and an overhead electrical line with a pole-mounted transformer, are also present (Geocon 2018:13).

Geocon contracted with Environmental Data Resources, Inc. (EDR) to perform a records search of over 50 federal, State, tribal, and local databases containing information related to the release of hazardous materials. There were no records of any known hazardous materials sites in the WRTP Specific Plan Area (Geocon 2018: Appendix D.)

KNOWN OFF-SITE HAZARDOUS MATERIALS

Geocon (2020) performed an Initial Site Assessment (ISA) of the SR 113/CR 25A interchange improvements, which includes the existing interchange and proposed right-of-way acquisition of adjoining privately-owned parcels. Geocon identified several RECs consisting of: (1) potential historical use of pesticides on adjacent agricultural properties; (2) aerially-deposited lead in soil; (3) lead in paint striping on roadways; and (4) wood-treated waste from guardrail posts. In addition, Geocon noted that concrete, asphalt, and expansion joint fill material at the bridge structure may contain asbestos, and asbestos-containing pipe may be present in the bridge structure.

AECOM performed a site-specific search of several publicly available databases maintained under Public Resources Code Section 65962.5 (i.e., the "Cortese List") to determine whether any known hazardous materials are present either within or immediately adjacent to the WRTP Specific Plan Area or the off-site improvement areas.

The Hazardous Waste and Substances Site List (the "EnviroStor" database) is maintained by the California Department of Toxic Substances Control (DTSC) as part of the requirements of Public Resources Code Section 65962.5. A search of the EnviroStor database indicated that there is one listing of an open, inactive hazardous waste and substances sites approximately 0.9 mile northwest of the WRTP Specific Plan Area, at the Woodland Fairgrounds (DTSC 2020).

The State Water Resources Control Board (SWRCB) maintains the Geotracker database, an information management system for groundwater. Data on leaking underground storage tanks and other types of soil and groundwater contamination, along with associated cleanup activities, are part of the information that the SWRCB must maintain under Public Resources Code Section 65962.5. A search of the Geotracker database (SWRCB 2020) indicated that there are no known open or closed cases of contamination either on or within 0.25 miles of the WRTP Specific Plan Area or the off-site improvement areas. The closest open, active case—known as "Former Service Cleaners"—is located approximately 0.65 miles northwest of the WRTP Specific Plan Area at the County Fair Mall. (See also Table 4.8-1 and Exhibit 4.8-2 in the 2035 General Plan CAP EIR [City of Woodland 2016b], pages 4.8-5 and 4.8-7 through 4.8-10.)

A search of the U.S. Environmental Protection Agency's (EPA) Envirofacts database (which includes records maintained under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 [CERCLA]) indicated that there are no known open, active cases of hazardous material contamination either within or immediately adjacent to the WRTP Specific Plan Area or the off-site improvement areas (EPA 2020). The closest site on the EPA National Priorities List (i.e., Superfund) is located in Davis, approximately 6.5 miles south of the WRTP Specific Plan Area and off-site improvement areas.

LEAD AND ASBESTOS HAZARDS

Lead is a highly toxic metal that was used until the late 1970s in a number of products, most notably paint. The use of lead as an additive to paint was discontinued in 1978 because human exposure to lead was determined by EPA and the Occupational Health and Safety Administration (OSHA) to be an adverse human health risk, particularly to young children. Although lead-based paint in residential structures was banned in 1978, this restriction did not apply to commercial and industrial structures (e.g., buildings and bridges); therefore, any commercial or industrial structure (including facilities used for agricultural production), regardless of construction date, could have surfaces that have been coated with lead-based paint (DTSC 2006). Prior to 1997, Caltrans also used lead-based paint for yellow traffic stripe and pavement markings along roadways (Caltrans 2018). The residue that may be produced from the yellow thermoplastic and yellow paint during road improvement activities may contain lead and chromium. The debris produced during the removal of yellow thermoplastic and yellow paint may need to be disposed of as a state or federal hazardous waste if the concentrations of lead or chromium exceed applicable hazardous waste thresholds. In addition to off-site roadways and bridges, demolition of residential and agricultural structures in the WRTP Specific Plan Area containing lead-based paint requires specific remediation activities regulated by federal, State, and regional and local laws.

In addition to paint, aerially-deposited lead can be present along major roadway corridors. Lead alkyl compounds were first added to gasoline in the 1920s to boost octane levels and improve engine performance. Beginning in 1973, EPA ordered a gradual phase-out of lead from gasoline that substantially reduced the prevalence of leaded gasoline by the mid-1980s. Prior to the 1970s, EPA estimated that vehicles emitted approximately 75 percent of the lead consumed in leaded gasoline as particulate matter in tailpipe exhaust (DTSC 2004). DTSC regulations specify the levels at which lead in soil is considered to be a risk. In areas where road construction will occur, Caltrans has found levels of lead that are higher than DTSC's specifications. The lead is found within 30 feet of the edge of the pavement and within the top 6 inches of the soil. In some cases, lead has been found as deep as 2–3 feet below the surface. Therefore, soils in major roadway corridors have the potential to be contaminated with aerially-deposited lead from car emissions that occurred prior to the elimination of lead in gasoline (DTSC 2016a).

Asbestos is designated as a hazardous substance when the fibers have potential to come in contact with air because the fibers are small enough to lodge in lung tissue and cause health problems. The presence of asbestos-containing materials (ACMs) in existing buildings poses an inhalation threat only if the ACMs are in a friable state. If the ACMs are not friable, then there is no inhalation hazard because asbestos fibers remain bound in the material matrix. People exposed to asbestos may develop lung cancer and mesothelioma. The risk is proportional to the cumulative inhaled dose (quantity of fibers), and also increases with the time since first exposure. Although there are a number of factors that influence the disease-causing potency of any given asbestos (such as fiber length and width, fiber type, and fiber chemistry), all forms are carcinogens. Emissions of asbestos fiber to the ambient air, which can occur during activities such as renovation or demolition of structures made with ACMs (e.g., insulation, surfacing materials, and asphalt and vinyl flooring), are regulated in accordance with EPA's Asbestos National Emission Standards for Hazardous Air Pollutants.

Given the age of the existing on-site residence and associated structures that would be demolished within the WRTP Specific Plan Area, as well as yellow pavement markings and aerially-deposited lead in soils associated with the SR 113/CR 25A interchange improvements, these facilities may contain lead-based paint, lead in the soils, and ACMs.

Pesticide Residues and Other Hazards from Agricultural Land Uses

Prior to 1950, inorganic pesticides that contained elevated concentrations of metals, such as arsenic, were commonly used in California agriculture. After 1950, organochlorine pesticides were commonly used in California agriculture until about the mid-1970s. Arsenic from inorganic pesticides and residues from organochlorine pesticides used in the past have the potential to persist for many decades in shallow soils and can affect human health and the environment (DTSC 2008). This is particularly true for orchards and orchard-cultivated soils where the repeated application of higher levels of agricultural chemicals to fruit or nut trees is required. The storage of agricultural chemicals and fuels in the large quantities necessary for agricultural operations frequently requires the use of aboveground and/or underground storage tanks. These tanks could pose a health hazard to workers and a hazard to the environment if encountered during construction activities.

Airports

Medlock Field is a privately owned and operated airport located approximately 1.3 miles south of the WRTP Specific Plan Area on CR 101. The airport has one paved asphalt runway that is 2,600 feet long by 50 feet wide. The airport contains an administration building, aircraft hangers, maintenance sheds, a fueling station, and parking areas. Approximately 15 single-engine airplanes are based at the airport (AirNav 2020).

The nearest public use airport is the Yolo County Airport located at 25170 Aviation Avenue in Davis, approximately 6.2 miles southwest of the WRTP Specific Plan Area and off-site improvement areas.

Schools

The privately owned and operated Woodland Christian School (grades K–12), located at 1787 Matmor Road, is approximately 300 feet northwest of the WRTP Specific Plan Area and off-site improvement areas, on the west side of SR 113. Pioneer High School (part of the Woodland Joint Unified Public School District), located at 1400 Pioneer Avenue, is approximately 0.3 mile northeast of the WRTP Specific Plan Area and off-site improvement areas.

Wildfire Hazard

Wildland fires represent a substantial threat in California, particularly during the hot, dry summer months in more isolated areas where steep topography, limited access, and heavy fuel loading contribute to hazardous conditions. Wildland fires may be started by natural processes, primarily lightning, or by human activities. The California Department of Forestry and Fire Protection (CAL FIRE) has established a fire hazard severity classification system to assess the potential for wildland fires. The zones depicted on CAL FIRE maps take into account potential fire intensity and speed, production and spread of embers, fuel loading, topography, and climate (e.g., temperature and the potential for strong winds). The classification system provides three classes of fire hazards: Moderate, High, and Very High.

Public Resources Code Sections 4125–4137 require the designation of State Responsibility Areas (SRAs) (based on the amount and type of vegetative cover, beneficial water uses, probable erosion damage, fire risks, and hazards) where the financial responsibility of preventing and suppressing fires falls primarily on the State of California. Fire protection outside the SRAs is the responsibility of local or federal agencies.

As shown on Exhibit 4.8-4 in the 2035 General Plan and CAP EIR (City of Woodland 2016b:4.8-15), the WRTP Specific Plan Area and off-site improvement areas are located in a Local Responsibility Area, and are not located

in a wildland-urban interface fire area. Wildland fire threat is considered low by the local agency responsible for fire protection services (i.e., the City of Woodland).

3.8.3 REGULATORY FRAMEWORK

The 2035 General Plan and CAP EIR summarizes the federal, State, regional, and local regulatory framework on pages 4.8-13 through 4.8-27. Those aspects of the existing regulatory framework that are relevant to potential impacts of the WRTP Specific Plan are briefly highlighted below. Please see Section 4.8.3 of the 2035 General Plan and CAP EIR for more detail.

FEDERAL PLANS, POLICIES, REGULATIONS AND LAWS

Federal Environmental Protection Agency

The Federal Toxic Substances Control Act (1976) and the Resource Conservation and Recovery Act of 1976 (RCRA) established a program administered by the U.S. EPA for the regulation of the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA was amended in 1984 by the Hazardous and Solid Waste Act (HSWA), which focused on waste minimization and phasing out land disposal of hazardous waste as well as corrective action for releases. The HSWA also included increased enforcement authority for EPA, more stringent hazardous waste management standards, and a comprehensive underground storage tank program.

United States Department of Transportation

Transportation of chemicals and hazardous materials are governed by the U.S. Department of Transportation, which stipulates the types of containers, labeling, and other restrictions to be used in the movement of such material on interstate highways.

Emergency Planning and Community Right-To-Know Act

The Emergency Planning Community Right-to-Know Act (EPCRA) of 1986 was included under the Superfund Amendments and Reauthorization Act (SARA) law and is commonly referred to as SARA Title III. EPCRA was passed in response to concerns regarding the environmental and safety hazards proposed by the storage and handling of toxic chemicals. EPCRA establishes requirements for federal, state, and local governments, Indian Tribes, and industry regarding emergency planning and Community Right-to-Know reporting on hazardous and toxic chemicals. SARA Title III requires states and local emergency planning groups to develop community emergency response plans for protection from a list of Extremely Hazardous Substances (40 CFR Appendix B). The Community Right-to-Know provisions help increase the public's knowledge of and access to information on chemicals at individual facilities, their uses, and their release into the environment.

Hazardous Materials Transportation Act

The Hazardous Materials Transportation Act (HMTA) of 1975 was created to provide adequate protection from the risks to life and property related to the transportation of hazardous materials in commerce by improving regulatory enforcement authority of the Secretary of Transportation.

Occupational Safety and Health Administration - Safety and Health Regulations for Construction

The federal Occupational Safety and Health Administration (OSHA) regulates the handling of lead and asbestos during construction activities through 29 CFR Parts 1926.62 and 1926.1101. These statutes establish procedures for determining the risk of exposure, air quality monitoring, personal protective equipment, and proper procedures for handling and disposal.

Federal Aviation Regulations, Part 77

Federal Aviation Regulations (FAR) Part 77, "Objects Affecting Navigable Airspace," has been adopted as a means of monitoring and protecting the airspace required for safe operation of aircraft and airports. Part 77 recognizes that certain safety hazards to aircraft and airport operations may occur where a land use would:

- exceed certain specified height limits
- attract large concentrations of birds within approach/climb out areas,
- produce smoke or flashing lights,
- reflect light or generate electronic interference, or
- use or store large quantities of flammable materials.

Part 77 establishes the following:

- the requirements to provide notice to the Federal Aviation Administration (FAA) of certain proposed construction activities, or the alteration of existing structures;
- the standards used to determine obstructions to air navigation, and navigational and communication facilities; and
- the process for aeronautical studies of obstructions to air navigation or navigational facilities to determine the effect on the safe and efficient use of navigable airspace, air navigation facilities, or equipment.

Objects that exceed certain specified height limits constitute airspace obstructions. FAR Section 77.13 requires that the FAA be notified of proposed construction or alteration of certain objects within a specified distance from an airport, among them the following:

- construction or alteration of more than 200 feet in height above the ground level at its site; or
- construction or alteration of greater height than an imaginary surface extending outward and upward at [a slope of] 100 to 1 for a horizontal distance of 20,000 feet from the nearest point of the nearest runway of each [public-use airport, public-use airport under construction, or military airport] with at least one runway more than 3,200 feet in actual length, excluding heliports.

However, notice does not need to be filed with the FAA for construction of any object that would be shielded by existing permanent, substantial structures or by natural terrain or topographic features of equal or greater height, and that would be located in the congested area of a city, town, or settlement where the shielded structure would not adversely affect air navigation safety.

STATE PLANS, POLICIES, REGULATIONS, AND LAWS

California Occupational Safety and Health Administration

California OSHA (Cal-OSHA) assumes primary responsibility for developing and enforcing workplace safety regulations within California. Cal-OSHA regulations pertaining to the use of hazardous materials in the workplace (Title 8 of the California Code of Regulations [CCR]) include requirements for safety training, availability of safety equipment, accident and illness prevention programs, hazardous substance exposure warnings, and preparation of emergency action and fire prevention plans. Cal-OSHA enforces hazard communication program regulations that contain training and information requirements, including procedures for identifying and labeling hazardous substances, communicating hazard information related to hazardous substances and their handling, and preparation of health and safety plans to protect workers and employees at hazardous-waste sites. The hazard communication program requires that employers make Safety Data Sheets available to employees, and requires documentation of informational and training programs for employees.

Department of Toxic Substances Control

The California Department of Toxic Substances Control (DTSC) has primary regulatory responsibility, with delegation of enforcement to local jurisdictions that enter into agreements with the State agency, for the management of hazardous materials and the generation, transport, and disposal of hazardous waste under the authority of the Hazardous Waste Control Law. Since August 1, 1992, DTSC has been authorized to implement the State's hazardous waste management program for CalEPA.

SB 1889, Accidental Release Prevention Law/Chemical Accident Release Prevention Program, 1996

SB 1889 required California to implement a federally mandated program governing the accidental airborne release of chemicals listed under Section 112 of the Clean Air Act. Effective January 1, 1997, the California Accidental Release Prevention program (CalARP) replaced the previous California Risk Management and Prevention Program (RMPP) and incorporated the mandatory federal requirements. CalARP addresses facilities containing specified hazardous materials that, if involved in an accidental release, could result in adverse off-site consequences. CalARP defines regulated substances as chemicals that pose a threat to public health and safety or the environment because they are highly toxic, flammable, or explosive. Yolo County Environmental Health is responsible for the implementation of CalARP in the county.

SB 1082, California Environmental Protection Agency's Unified Program, 1993

In 1993, Senate Bill 1082 gave CalEPA the authority and responsibility to establish a unified hazardous waste and hazardous materials management and regulatory program, commonly referred to as the Unified Program. The purpose of this program is to consolidate and coordinate six different hazardous materials and hazardous waste programs, and to ensure that they are consistently implemented throughout the state. The Unified Program is overseen by CalEPA with support from DTSC, RWQCBs, the OES, and the State Fire Marshal. The six programs are:

- Hazardous Materials Release Response Plans and Inventories (Business Plans)
- California Accidental Release Prevention Program

- Underground Storage Tank Program
- Aboveground Petroleum Storage Act Program
- Hazardous Waste Generator and Onsite Hazardous Waste Treatment (tiered permitting) Programs
- California Uniform Fire Code: Hazardous Material Management Plans and Hazardous Material Inventory Statements

State law requires county and local agencies to implement the Unified Program. The agency in charge of implementing the program is called the Certified Unified Program Agency (CUPA). The Yolo County Department of Community Services Environmental Health Services Division is the designated CUPA for the county. In addition to the CUPA, other local agencies such as the City of Woodland help to implement the Unified Program.

AB 2185 and AB 2189, Hazardous Materials Business Emergency Response Plan Program, CA Health and Safety Code Chapter 6.95

The State of California requires an owner or operator of a facility to complete and submit a Hazardous Materials Business Plan (HMBP) to the Governor's Office of Emergency Services if the facility handles a hazardous material or mixture containing a hazardous material in amounts greater than specified threshold quantities. Yolo County Environmental Health is responsible for the implementation of the HMBP program in Yolo County.

Chapter 6.95, Section 25505 of the California Health & Safety Code requires any business that handles and/or stores a hazardous material or a mixture containing a hazardous material to establish and implement a HMBP that provides emergency plans procedures that the business will follow in the event of a release or threatened release of a hazardous material, if the business handles hazardous materials in the following "reportable" quantities:

1. Equal to or greater than 500 pounds, 55 gallons, or 200 cubic feet of gas (gas calculated at standard temperature and pressure).
2. Equal to or greater than the applicable federal threshold planning quantity for an extremely hazardous substance listed in Appendix A, Part 355, Title 40, of the Code of Federal Regulations.
3. Radioactive materials that are handled in quantities for which an emergency plan is required to be adopted pursuant to Part 30 (commencing with Section 30.1), Part 40 (commencing with Section 40.1), or Part 70 (commencing with Section 70.1), of Chapter 10 of Title 10 of the Code of Federal Regulations (54 Federal Register 14051), or pursuant to any regulations adopted by the state in accordance with those regulations.

The HMBP is also required to include an inventory of hazardous materials used at the business, site plan showing hazardous material storage areas and ingress and egress points for emergency vehicles, and documentation of employee training in the safe handling of hazardous materials.

Public Resources Code Section 21151.4

Public Resources Code Section 21151.4 regulates hazardous materials near schools. Public Resources Code Section 21151.4 prohibits the certification of an EIR for a project involving the construction or alteration of a facility that might reasonably be anticipated to emit hazardous air emissions or handle extremely hazardous air emissions in a

quantity greater than a certain threshold within one-quarter mile of a school, or create a safety hazard for people working or attending the school.

Hazardous Materials Transport

The California Highway Patrol, Caltrans, and DTSC are responsible for enforcing federal and State regulations pertaining to the transport of hazardous materials. If a discharge or spill of hazardous materials occurs during transportation, the transporter is required to take appropriate immediate action to protect human health and the environment (e.g., notify local authorities and contain the spill); the transporter is also responsible for cleanup (22 Cal. Code Regs. § 66260.10 et seq.).

In addition, Caltrans has its own internal procedures and specifications related to hazardous materials that are implemented at all Caltrans projects. In particular, the *Standard Plans and Specifications* (Caltrans 2018), Section 14-11, contains the specifications related to hazardous waste and contamination. Section 14-11 contains the procedures to be followed for asbestos, lead-based paint, and aerially-deposited lead and other soil contamination.

California State Requirements for Private Use Airports

Private use airports are not regulated by the Federal Aviation Administration; instead, they are regulated at the state level. In California, a State Airport Permit is required to operate most private airports. State Airport Permit requirements are promulgated in California Public Utilities Code (CPUC) Section 21001 et seq. (otherwise known as the State Aeronautics Act), and CCR Title 21, Sections 3525-3560, Airports and Heliports. Permits are obtained from Caltrans' Division of Aeronautics, which considers the following factors during the permit application process.

- The airport site must meet or exceed the minimum airport standards specified by the Division in its rules and regulations.
- Safe air traffic patterns must be established for the proposed airport, and all existing airports and approved airport sites in the vicinity of the proposed airport.
- Safe "zones of approach" for the airport must be engineered in conformity with the provisions of CPUC 21403 (i.e., provides for lawful emergency landings at private airports and requires the airport to be designed in accordance with FAR Part 77, "Objects Affecting Navigable Airspace").
- The advantages to the public in selection of the site of a proposed new airport (or airport expansion) must outweigh the disadvantages to the environment. Environmental considerations include, but are not limited to: noise; air pollution; and the burden upon the surrounding area caused by the airport (or airport expansion), including but not limited to, surface traffic and expense. The standards by which noise considerations are weighed consist of the level of noise acceptable to a reasonable person residing in the vicinity of the airport.
- The Division may impose other reasonable permit conditions that it deems necessary to ensure public safety and environmental considerations.

REGIONAL AND LOCAL PLANS, POLICIES, REGULATIONS, AND ORDINANCES

City of Woodland 2035 General Plan

The *City of Woodland General Plan Update 2035* (City of Woodland 2017) identifies the following policies that are applicable to the proposed project.

Transportation and Circulation Element

- **Policy 3.I.1 Truck Route Designation**. Designate routes for trucks within the city to minimize the impact of truck traffic on residential and mixed use neighborhoods and coordinate with Yolo County to develop a system of truck routes for adjacent areas to the city.

- **Policy 3.I.2 Truck Traffic on Residential Streets**. Continue to enforce the City ordinance restricting through truck traffic on residential streets.

Safety Element

- **Policy 8.D.1 Safety Hazards**. Cooperate with Yolo and Sacramento Counties, and the ALUC, to ensure that new development around airports does not create safety hazards such as lights from direct or reflective sources, smoke, electrical interference, hazardous chemicals, or fuel storage in violation of adopted safety standards.

- **Policy 8.E.1 Coordination**. Coordinate with Yolo County and other relevant agencies to ensure that the manufacture, purchase, use, storage, transportation, and disposal of hazardous materials in the city is conducted in a responsible manner that complies with local, State, and federal safety standards.

- **Policy 8.E.2 Disposal and Storage Plan**. Require that applications for discretionary development projects that will generate hazardous wastes or utilize hazardous materials include a detailed plan for hazardous waste reduction, recycling, and storage.

- **Policy 8.E.3 Buffer Zone**. Require that new development for industries that store and process hazardous materials provide a buffer zone between the installation and the property boundaries sufficient to protect public safety.

- **Policy 8.E.4 Emergency Response**. Coordinate with Yolo County to provide for safe and efficient hazardous waste emergency response and plan for contaminated site cleanup.

- **Policy 8.F.2 Coordination.** Continue to coordinate emergency preparedness, response, recovery, and mitigation activities with Yolo County, special districts, service agencies, voluntary organizations, other cities within the county, surrounding cities and counties, and State and federal agencies. Upon the next update of the Yolo County Operational Area Multi-Jurisdictional Hazard Mitigation Plan, participate in the effort to address topics related to climate change vulnerability, as required by SB 379.

- **Policy 8.F.5 Emergency Access and Evacuation.** Require areas subject to fires, flooding, and other hazards to have emergency access and evacuation routes that are clearly marked with consistent signage. Make evacuation and rescue maps available to the public.

Yolo County Environmental Health HazMat Unit and Multi-Agency Emergency Response Team

The Yolo County Environmental Health Services Division regulates hazardous waste, aboveground petroleum storage and risk management plans, hazardous materials business plans and chemical inventories, risk management plans, and underground storage tanks throughout the County. The Division has an Environmental Health HazMat Unit that responds to emergency spills of hazardous materials. The Yolo County Multi-Agency HazMat Response Team is activated when larger environmental emergencies occur. This team combines the resources of the Yolo County Environmental Health Division, the Cities of Woodland, Davis, and West Sacramento Fire Departments, and UC Davis Fire Department. The Multi-Agency Team responds to incidents and is responsible for eliminating the immediate threat of public exposure to biological, chemical or nuclear agents, fire, or explosion. The Yolo County HazMat Unit subsequently oversees the environmental investigation, monitors the cleanup, and initiates enforcement, if appropriate.

Yolo County Emergency Operations Plan – Base Plan

The Yolo County Emergency Operations Plan (Yolo County 2013) addresses the County's planned responses to extraordinary emergency situations associated with natural disasters, technological incidents, and national security emergencies. The plan focuses on operational concepts and would be implemented relative to large-scale disasters, which can pose major threats to life, property, and the environment requiring unusual emergency responses.

The Emergency Operations Plan accomplishes the following (Yolo County 2013):

- Establishes the emergency management organization required to mitigate any significant emergency or disaster affecting Yolo County.
- Identifies the roles and responsibilities required to protect the health and safety of Yolo County residents, public and private property, and the environmental effects of natural and technological emergencies and disasters.
- Establishes the operational concepts associated with a field response to emergencies, and the County of Yolo Emergency Operations Center activities and the recovery process.

Yolo Operational Area Multi-Jurisdictional Hazard Mitigation Plan

Last updated in 2018, the Hazard Mitigation Plan was prepared based on guidance from the Federal Emergency Management Agency. It identifies hazard risks and vulnerabilities for the Yolo County Operational Area (including the County and the incorporated cities, such as Woodland) and identifies mitigation projects and actions to help reduce those risks. It also provides for the integration and coordination of planning efforts of multiple jurisdictions within Yolo County. The intent of the Hazard Mitigation Plan is to provide direction on how to mitigate against the threat of disaster through effective mitigation strategies and initiatives (Yolo County 2018).

City of Woodland Engineering Standards: Design Standards, Standard Details, and Construction Specifications

Woodland engineering standards require a minimum flow of water for fire protection in accordance with Woodland Fire Department, California Fire Code, and Insurance Services Office standards. For single-family detached houses that are spaced more than 10 feet apart, water mains must provide a flow of 1,000 gallons per minute in addition to

the peak normal maximum daily consumption needs for a neighborhood. For single-family detached homes that are less than or equal to 10 feet apart, water mains must provide an additional flow of 1,500 gallons per minute. The required fire-flow standard for commercial, industrial, and higher-density residential areas, as well as areas with higher-value buildings, varies from 2,500 to 4,000 gallons per minute, in addition to the peak normal daily consumption needs.

Yolo-Solano Air Quality Management District Asbestos Regulations

The Yolo-Solano Air Quality Management District (YSAQMD) has adopted rules and regulations to control air pollutant emissions from a variety of sources within its jurisdiction. All construction and operational activities at the project site are subject to YSAQMD rules and regulations. When a single-family residence is being demolished along with additional older structures on the property, the property owner must fill out and submit a questionnaire to YSAQMD. If YSAQMD determines that a project is exempt, no further actions are required. If YSAQMD determines that a project is not exempt, an asbestos survey must be performed by a certified asbestos consultant licensed by the California Division of Occupational Safety and Health (Cal/OSHA) and who has taken an EPA-approved Building Inspector course. The survey report, a notification form, and fees must be submitted to YSAQMD for a 10-day review period prior to the start of any demolition activities (YSAQMD 2019).

3.8.4 Environmental Impacts and Mitigation Measures

Methodology

The 2035 General Plan and CAP EIR addresses impacts of development of the City's Planning Area, including the WRTP Specific Plan Area. Consistent with Section 15183(b) of the CEQA Guidelines, the following analysis focuses on project-specific significant effects of the WRTP Specific Plan that: a) are peculiar to the WRTP Specific Plan or the site; b) were not addressed in the 2035 General Plan and CAP EIR (including off-site or cumulative impacts); or c) would be more severe than previously described based on substantial new information.

This analysis is based on a review of the *Phase 1 Environmental Site Assessment and Limited Screening-Level Pesticide Assessment* (Geocon 2018); *Initial Site Assessment, State Route 113 and CR 25A Interchange, Woodland, Yolo County, California* (Geocon 2020); along with a review of publicly available databases maintained by SWRCB, DTSC, EPA, and CAL FIRE.

Thresholds of Significance

The proposed WRTP Specific Plan may have a significant impact related to hazardous materials, toxics, and wildfire if it would:

1. create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;

2. create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment;

3. emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school;

4. result in a project located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment;

5. for a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, result in a safety hazard or excessive noise for people residing or working in the project area;

6. result in a safety hazard for people residing or working in a project area located within the vicinity of a private airstrip;

7. impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan;

8. expose people or structures either directly or indirectly to a significant risk of loss, injury, or death involving wildland fires;

9. if located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:

    a. Substantially impair an adopted emergency response plan or emergency evacuation plan?

    b. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

    c. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

    d. Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

IMPACTS NOT DISCUSSED FURTHER

The following discussion summarizes the impacts of the Specific Plan that are not discussed further in this document because either, a) there is no impact, or b) none of the factors triggering additional environmental review (as found in Section 15183(b)) exist because an impact was either addressed as a part of the 2035 General Plan and CAP EIR and/or substantially mitigated by uniformly applied development standards (CEQA Guidelines Section 15183[f][7]). Uniformly applied development standards include the 2035 General Plan, the CAP, existing City regulations and standards, design review requirements, and impact fee programs.

Create a Significant Hazard to the Public or the Environment through the Routine Transport, Use, or Disposal of Hazardous Materials (Significance Threshold 1) — As discussed in the 2035 General Plan and CAP EIR Impact 4.8-1 (pages 4.8-29 through 4.8-32) (City of Woodland 2016b), new land uses would require the routine use, transport, and disposal of hazardous material and waste and may increase exposure to risk of hazards. Construction activities may also generate hazardous materials and waste, such as fuels and oils from construction equipment and vehicles. Federal and State regulations require adherence to specific guidelines regarding the use,

transportation, disposal, and accidental release of hazardous materials, as described in the Regulatory Framework section above. The U.S. EPA is responsible for administering the Federal Toxic Substances Control Act and RCRA, which regulate the generation, transportation, treatment, storage, and disposal of hazardous waste. The Yolo County Department of Community Services Environmental Health Services Division is the CUPA for the County and responsible for implementing hazardous waste and materials State standards, including HMBP, California Accidental Release Prevention Program, and managing fuel storage tanks. The U.S. Department of Transportation, Caltrans, and the California Highway Patrol regulate and manage routine transport of hazardous materials on I-5 and SR 113. The Yolo County Environmental Health HazMat Unit and Multi-Agency Emergency Response Team, which includes the City of Woodland, respond to local hazardous materials emergencies. Furthermore, implementation of General Plan Policies 3.I.1, 3.I.2, 8.E.1, 8.E.2, 8.E.3, and 8.E.4 are also designed to reduce the potential for adverse impacts from routine transport and use of hazardous materials. The 2035 General Plan and CAP EIR determined that this impact was less than significant.

As emphasized by WRTP Specific Plan Performance Standard C, in Section 3.3.2 of the WRTP Specific Plan, all permitted land uses under the WRTP Specific Plan, including industrial and commercial tenants in the WRTP Specific Plan Area, shall comply with the provisions of the California Hazardous Materials Regulations and other federal, State, and local regulations and requirements discussed in the "Regulatory Framework" section above, including preparation of a Hazardous Material Business Plan. Design and construction of the SR 113/CR 25A interchange improvements would be regulated by Caltrans, and hazardous materials at Caltrans projects are address in the *Standard Specifications* (Caltrans 2018).

Impacts from implementation of the WRTP Specific Plan and off-site improvements related to the routine use, transport, and disposal of hazardous materials were addressed as a part of the City's General Plan and CAP EIR and are substantially mitigated by uniformly applied development standards administered at the local, state, and federal level and, as provided by CEQA Guidelines Section 15183(f), no additional CEQA review is required

Be Located on a Hazardous Materials Site Compiled Pursuant to Government Code Section 65962.5 (the Cortese List) (Significance Threshold 4) — The results of records searches of federal, State, local, and tribal databases indicate that the WRTP Specific Plan Area and the off-site improvement areas are not located on a known hazardous materials site on the Cortese List. Thus, there would be no impact and this issue is not evaluated further in this EIR.

Safety Hazards Related to Public Use Airports (Significance Threshold 5) — The WRTP Specific Plan Area and the off-site improvement areas are located 6.2 miles northeast of the nearest public use airport (Yolo County Airport). The WRTP Specific Plan Area and the off-site improvement areas are not located within an Airport Land Use Compatibility Plan area. Thus, there would be no impact related to safety hazards from a public use airport, and this issue is not evaluated further in this EIR. (See Impact 3.8-3 for safety hazards related to the Medlock Field private-use airport.) Airport noise hazards are addressed in Section 3.11, "Noise and Vibration," of this EIR.

Impair Implementation of or Physically Interfere with an Adopted Emergency Response Plan or Emergency Evacuation Plan (Significance Threshold 7) — As discussed in the 2035 General Plan and CAP EIR Impact 4.8-6 (pages 4.8-41 through 4.8-43) (City of Woodland 2016b), new development and population growth would result in an increased population that may require evacuation. The adopted Yolo County Emergency Operations Plan (of which the City is a participant) addresses the County and incorporated Cities' planned response to extraordinary emergency situations associated with any type of natural disaster, technological incident, or state of war emergency.

General Plan Policy 8.F.2 supports the continued coordination between the City and relevant agencies in preparing for and operating during an emergency. The 2035 General Plan and CAP EIR determined that this impact was less than significant. The WRTP Specific Plan and proposed off-site South Regional Pond are subject to design review by the City, and are required to comply with City standards relating to appropriate street design to accommodate emergency vehicles and emergency evacuation thoroughfares. Construction equipment would be staged on site, and therefore would not impede emergency access or emergency evacuation roues on the surrounding local roadways. Design and construction of the SR 113/CR 25A interchange improvements would be regulated by Caltrans, and would be designed for appropriate emergency vehicle access as per the *Highway Design Manual* (Caltrans 2020).

Impacts from implementation of the WRTP Specific Plan and off-site improvements related to interference with an emergency response to evacuation plan were addressed as a part of the City's General Plan and CAP EIR and are substantially mitigated by uniformly applied development standards and, as provided by CEQA Guidelines Section 15183 (f), no additional CEQA review is required.

Exposure to Wildland Fire Hazards (Significance Thresholds 8 and 9) — As shown on General Plan Figure 8-7, "Fire Hazards," and Exhibit 4.8-4 in the 2035 General Plan CAP EIR (City of Woodland 2016b:4.8-15), the WRTP Specific Plan Area and the off-site improvement areas are not located in or near a State Responsibility Area, but are located in a Local Responsibility Area. Furthermore, the WRTP Specific Plan Area and the off-site improvement areas are not located in a high or very high fire hazard severity zone and are not located in a wildland-urban interface fire area. As a result, the wildland fire threat is considered low by the local agency responsible for fire protection services (i.e., the City of Woodland). Furthermore, as discussed above in the "Regulatory Framework" and in Section 3.12, "Public Services and Recreation," the WRTP Specific Plan Area and the off-site improvement areas would be provided with adequate fire suppression services by the City of Woodland, and design of the WRTP Specific Plan Area and the off-site South Regional Pond is required to comply with fire flow requirements contained in the City of Woodland Engineering Standards. Thus, there would be no impact related to wildland fire hazards, and this issue is not evaluated further in this EIR.

PROJECT IMPACTS

IMPACT 3.8-1 **Create a Significant Hazard to the Public or the Environment through Reasonably Foreseeable Upset and Accident Conditions Involving the Release of Hazardous Materials into the Environment (Significance Threshold 2).** *The WRTP Specific Plan Area includes above-ground storage tanks containing fuels and chemicals; several small sheds; a large building where equipment is stored and maintained; water wells and associated equipment; residual pesticides from agricultural activities in soils; and a residence with an on-site septic system and the potential for asbestos and lead-based paint. Construction of the off-site improvements could result in exposure to lead-based paint, aerially-deposited lead in soils, chemically-treated wood residue, and residual pesticides from agricultural activities in soils. Therefore, workers and members of the public could be exposed to hazards during construction activities from accidental releases of hazardous materials. This impact is considered* ***potentially significant****.*

As discussed in the 2035 General Plan and CAP EIR Impact 4.8-2 (pages 4.8-32 through 4.8-34) (City of Woodland 2016b), new commercial and industrial uses such as dry cleaners, gas stations, or manufacturers, could result in upset and accident conditions involving the release of hazardous materials into the environment. For the same reasons described above under the heading "Impacts Not Discussed Further" in the impact related to routine transport, use, or disposal of hazardous materials (2035 General Plan and CAP EIR Impact 4.8-1, pages 4.8-29

through 4.8-32), federal, State, and local regulations and City of Woodland General Plan Policies 3.I.1, 3.I.2, 8.E.1, 8.E.2, 8.E.3, and 8.E.4 (many of which are described in detail in Section 3.8.3, "Regulatory Framework") are designed to reduce the potential for adverse impacts from accidental release of hazardous materials, including risks associated with future operation of the various types of land uses that are proposed as part of the WRTP Specific Plan. The 2035 General Plan and CAP EIR determined that this impact was less than significant.

As described in detail in the "Environmental Setting" above, a search of State and federal hazardous materials databases indicated there are no known hazardous materials sites within 0.5 mile of the WRTP Specific Plan Area, proposed off-site South Regional Pond, or the proposed off-site SR 113/CR 25A interchange improvements (DTSC 2020, SWRCB 2020, EPA 2020).

Caltrans has entered into an agreement with DTSC to ensure the safe reuse of soils contaminated with aerially-deposited lead during construction of highway projects. The agreement requires Caltrans to sample and test soils for lead content, place a certain volume of cover material on top of the soils when the lead content is above specified levels, place the soils only in areas that are at least 5 feet above the maximum water table elevation, cover lead-containing soil stockpiles with plastic until the soil is reused, and properly dispose of excavated soils that are not reused (DTSC 2016a). Because Caltrans is required to implement the conditions of the *Soil Management Agreement for Aerially Deposited Lead-Contaminated Soils* (DTSC 2016b) per California Health and Safety Code 25187(b)(5), impacts from human health and environmental exposure to aerially-deposited lead at the off-site Caltrans SR 113/CR 25A interchange are considered less than significant.

Geocon (2020) noted that concrete, asphalt, and expansion joint fill material at the Caltrans SR 113/CR 25A interchange bridge structure may contain asbestos; asbestos-containing pipe may be also present within the bridge structure; roadway traffic striping at the interchange may contain lead and chromium; and treated-wood guardrail posts are present at the interchange. Asbestos, lead in traffic striping, and treated-wood waste require proper handling and disposal in accordance with State and federal regulatory requirements. Design and construction of the off-site SR 113/CR 25A intersection improvements are regulated by Caltrans, and would comply with requirements related to the proper handling and disposal of hazardous materials contained in the *Standard Plans and Specifications* (Caltrans 2018). Therefore, impacts from human health and environmental exposure to asbestos, lead-based paint, and treated wood at the off-site Caltrans SR 113/CR 25A interchange are considered less than significant.

As described in detail in the "Environmental Setting" above, based on the results of a site-specific Phase I ESA (Geocon 2018:12–13), the WRTP Specific Plan Area includes several above-ground storage tanks containing fuels and fertilizers; a large building where equipment is stored and maintained; several small sheds; numerous agricultural water wells and associated equipment; an older existing residence and barn (with a domestic water well); and a former residence that has been demolished. Although the current property owner indicated that the large storage building is not used to store agricultural chemicals, Geocon was not provided with access to the interior of the 1,500-square-foot storage building or any of the smaller storage sheds.

Since the WRTP Specific Plan Area and the off-site South Regional Pond site, as well as the areas that would be acquired for improvements adjacent to the existing SR 113/CR25A interchange, have been in agricultural use for decades, the potential exists for elevated levels of residual agricultural chemicals to be present in the soil. This is particularly true for the southern portion of the WRTP Specific Plan Area and the off-site South Regional Pond site, which consist of an almond orchard. Orchards and orchard-cultivated soils generally require the repeated application

of higher levels of agricultural chemicals to fruit or nut trees. Geocon conducted a limited Phase II screening-level pesticide assessment for soils in the WRTP Specific Plan Area. Geocon obtained 20 soils samples from locations throughout the WRTP Specific Plan Area, including two soil samples from the southeastern parcel where the almond orchard is located. The results indicated that trace amounts of 4,4′-DDT (dichlorodiphenyltrichloroethane), 4,4′-DDE (dichlorodiphenyldichloroethylene), and dieldrin were present in WRTP Specific Plan Area soils. Because the proposed South Regional Pond and the areas that would be acquired for improvements adjacent to the existing SR 113/CR 25A interchange have also been in agricultural use for decades, it is likely that similar residual pesticides are present in those locations as well. DDT was used as an insecticide prior to 1972, when it was banned by EPA. DDE is a byproduct of the breakdown of DDT. Dieldrin was used as an insecticide on crops until 1974, when it was also banned by EPA. The amounts of DDT, DDE, and dieldrin detected at the WRTP Specific Plan Area do not exceed EPA screening levels for residential land uses, and the same is likely the case for the adjacent South Regional Pond site. The Phase II pesticide assessment also found arsenic in all of the 20 WRTP Specific Plan Area soil samples at concentrations that exceed DTSC's Health and Ecological Risk screening level. However, because arsenic is widely found in soil as a result of the natural geologic weathering cycle, arsenic levels are generally compared to standardized "background" concentration levels as part of a risk assessment. The amount of arsenic in the soil in the WRTP Specific Plan Area does not exceed DTSC's arsenic background screening levels, and the same is likely the case for the off-site improvement areas. Therefore, Geocon determined there is no evidence that a hazard exists to human health or the environment from on-site agricultural chemicals, and further testing in the WRTP Specific Plan Area is not necessary (Geocon 2018:13–15). Based on the similar nature of crops and the time period of agricultural use at the off-site improvement areas, residual metal and pesticide levels are likely similar to those found in the WRTP Specific Plan Area, and thus residual metal (arsenic) and agricultural pesticides in the off-site improvement areas would not represent a human health or environmental hazard.

Geocon noted that any unused agricultural and domestic wells, along with septic systems in the WRTP Specific Plan Area should be properly abandoned per Yolo County permit requirements, which are designed to reduce adverse impacts to the environment such as leaks and spills of hazardous materials during the decommissioning process. Due to the age of the on-site residence and barn, asbestos and lead-based paint could be encountered during demolition activities. Therefore, Geocon recommended that an asbestos-containing materials and lead-based paint survey be completed prior to demolition. Finally, Geocon determined that one REC is present at the project site: the diesel above-ground storage tank associated with the agricultural well on the East Central Parcel in the WRTP Specific Plan Area. Geocon recommended that this tank be removed, replaced with a double-walled tank, or placed within secondary containment to prevent further releases. Because soil staining was observed, soils around the tank should be tested, and if the soil has been contaminated with petroleum hydrocarbons, it should be removed and properly disposed of (Geocon 2018:15). Furthermore, the on-site agricultural residence may have septic system which, if not cleaned and closed properly, could result in exposure of construction workers and future residents to hazardous materials. Therefore, for the reasons stated above, this impact is considered **potentially significant.**

Mitigation Measure

Mitigation Measure 3.8-1: Prepare a Remedial Action Plan, and Conduct Phase I and/or II Environmental Site Assessments and Implement Required Measures if Stained or Odiferous Soil is Discovered.

To reduce health hazards associated with potential exposure to hazardous substances in the WRTP Specific Plan Area and the off-site South Regional Pond, implement the following measures before the start of ground-disturbing activities in areas of debris piles, pole-mounted transformers, where demolition will

occur, and other areas where evidence of hazardous materials contamination is observed or suspected through either obvious or implied evidence (i.e., stained or odorous soil):

- Prepare a remedial action plan that identifies any necessary remediation activities including excavation and removal of contaminated soils and redistribution of clean fill material at the diesel above-ground storage tank associated with the agricultural well on the East Central Parcel, and other areas within the WRTP Specific Plan Area, if necessary. All above-ground storage tanks shall be removed in accordance with State and local regulations. The remedial action plan shall include measures for the safe transport, use, and disposal of contaminated soil and building debris removed from the project site. During construction, project applicants for future projects proposed under the WRTP Specific Plan and the off-site South Regional Pond shall be required to comply with the remedial action plan and all applicable federal, State, and local laws. The remedial action plan shall outline measures for specific handling and reporting procedures for hazardous materials and disposal of hazardous materials removed from the project site at an appropriate off-site disposal facility.

- In the event that contaminated groundwater is encountered during site excavation activities, the contractor shall report the contamination to the appropriate regulatory agencies, dewater the excavated area, and treat the contaminated groundwater to remove contaminants before discharge into the sanitary sewer system.

- If stained or odiferous soil is discovered during project-related construction activities, project applicants for future projects proposed under the WRTP Specific Plan and the off-site South Regional Pond shall retain a registered environmental assessor to conduct a Phase I ESA, and if necessary, Phase II ESAs and/or other appropriate testing. Recommendations in the Phase I and II ESAs to address any contamination that is found shall be implemented before initiating ground-disturbing activities in these areas.

- Notify the appropriate federal, State, and local agencies if evidence of previously undiscovered soil or groundwater contamination (e.g., stained soil, odorous groundwater) or if known or previously undiscovered underground storage tanks are encountered during construction activities. Any contaminated areas shall be remediated in accordance with recommendations made by the EMD, Central Valley RWQCB, DTSC, and/or other appropriate federal, State, or local regulatory agencies.

- Retain a licensed contractor to remove all septic systems in accordance with local, State, and federal regulations.

- Retain a Cal-OSHA certified Asbestos Consultant before demolition of any buildings in the WRTP Specific Plan Area to investigate whether any asbestos-containing materials or lead-based paints are present, and could become friable or mobile during demolition activities. Provide a copy of the report to YSAQMD. If any materials containing asbestos or lead-based paints are found, they shall be removed by an accredited contractor in accordance with EPA and Cal-OSHA standards as required by YSAQMD. In addition, all activities (construction or demolition) in the vicinity of these materials shall comply with Cal-OSHA asbestos and lead worker construction standards. The materials containing asbestos and lead shall be disposed of properly at an appropriate off-site disposal facility.

- Properly close and abandon all on-site groundwater wells in accordance with Yolo County requirements.

Significance after Mitigation

Implementing Mitigation Measure 3.8-1 would reduce the potentially significant impact from accidental release of hazardous materials to a **less-than-significant** level, consistent with the findings of the 2035 General Plan and CAP EIR, because potentially hazardous materials would be identified; a site management plan that specifies remediation activities and procedures to appropriately identify, stockpile, handle, reuse, and/or remove and dispose of hazardous materials would be prepared and implemented; and hazardous materials that are encountered would be removed and properly disposed of or otherwise remediated by licensed contractors in accordance with federal, State, and local laws and regulations.

IMPACT 3.8-2 **Emit Hazardous Emissions or Handle Hazardous or Acutely Hazardous Materials, Substances, or Waste within One-Quarter Mile of an Existing or Proposed School. (Significance Threshold 3).** *Existing schools are located approximately 300 feet and 0.3 mile from the WRTP Specific Plan boundary. The WRTP Specific Plan accommodates up to 10 acres for a future school in the medium density residential zone at the southwestern corner of Parkland Avenue and Harry Lorenzo Avenue. The WRTP Specific Plan also includes retail, commercial, and light industrial land uses that may use and store hazardous materials. Because the exact types of businesses and the exact types and quantities of hazardous materials that may be used by these businesses in the future cannot be known at this time, this impact is considered* ***potentially significant****.*

As discussed in the 2035 General Plan and CAP EIR Impact 4.8-3 (pages 4.8-34 through 4.8-38) (City of Woodland 2016b), there are no existing areas that are currently operated with industrial land uses with one-quarter mile of existing schools. With respect to other intensive uses, there is land designated Regional Commercial within one-quarter mile of Tafoya Elementary School, but this land had been designated as General Commercial in the previous General Plan and therefore was not considered a new or changed land use designation as a part of the last General Plan update. Because lands with the General Commercial designation would not necessarily be expected to accommodate uses that would require handing or emissions of hazardous materials, and because there were no existing industrial uses within one-quarter mile of schools, the 2035 General Plan and CAP EIR determined that this impact was less than significant.

The privately owned and operated Woodland Christian School (grades K–12), located at 1787 Matmor Road, is approximately 300 feet northwest of the WRTP Specific Plan Area, on the west side of SR 113. Pioneer High School (part of the Woodland Joint Unified Public School District), located at 1400 Pioneer Avenue, is approximately 0.3 mile northeast of the WRTP Specific Plan Area.

The WRTP Specific Plan accommodates up to 10 acres for a future school in the medium density residential zone at the southwestern corner of Parkland Avenue and Harry Lorenzo Avenue. The relevant school district (or the private entity responsible for operating the school if it is privately owned) would be responsible for conducting the appropriate site-specific analysis required by the California Department of Education to determine the suitability of the potential school site, before moving forward with improvement plans.

Under Public Resources Code Section 21151.4, unless certain conditions are first met, an EIR or mitigated negative declaration may not be certified or adopted for a project within one-quarter mile of a school if a project would involve constructing or altering facilities that meet any of the following criteria:

- might reasonably be anticipated to emit hazardous air emissions (i.e., toxic air contaminants);
- would handle an extremely hazardous substance or a mixture containing extremely hazardous substances in a quantity equal to or greater than the State threshold quantity specified in Section 25532(j) of the California Health and Safety Code; or
- may pose a health or safety hazard to persons who would attend or would be employed at the school.

For an EIR to be certified or mitigated negative declaration to be adopted for such a project, both of the following must have already occurred:

1. The lead agency preparing the EIR must have consulted with the school district with jurisdiction about the potential impact of the project on the school.
2. The school district must have been notified about the project in writing at least 30 days before the proposed certification of the EIR or adoption of the mitigated negative declaration.

Proposed land uses in the WRTP Specific Plan Area include Village Center (retail or mixed use); Commercial–Business Park, Office, Research, High-Tech, or Light Industrial Flex; and Commercial–Highway. These facilities may handle hazardous substances, although they would not be expected to handle large quantities of acutely hazardous substances since the WRTP Specific Plan Area does not include zoning for heavy industrial land uses. However, because the exact businesses that would be operating in the WRTP Specific Plan Area and the types and quantities of hazardous materials that may be used by those businesses cannot be known at this time, in order to be conservative, this impact is considered **potentially significant.**

Mitigation Measure

Mitigation Measure 3.8-2: Notify and Consult with Affected Schools, and Implement a Hazardous Materials Business Plan (if Required).

Project applicants for future retail, commercial, or industrial projects proposed under the WRTP Specific Plan and supportive infrastructure improvements that would involve the long-term use of hazardous materials for project operation shall notify the Woodland Christian School, the Pioneer High School, and the Woodland Joint Unified School District, as appropriate based upon project location relative to school locations, in writing, and shall consult with appropriate school or district personnel about the types of activities that would occur and their estimated timing. Examples of the types of hazardous materials that could be used during proposed operational activities shall be provided. The written notification shall be provided at least 30 days before the commencement of any construction activities.

Future businesses within the WRTP Specific Plan Area that handle and/or store a hazardous material or a mixture containing a hazardous material in amounts greater than the specified threshold quantities in Chapter 6.95, Section 25505 of the California Health & Safety Code shall prepare a Hazardous Materials Business Plan. The plan shall provide emergency plans and procedures that the businesses will follow in

the event of a release or threatened release of a hazardous material, along with the other requirements of Section 25505 including an inventory of hazardous materials, site plan showing material storage areas and ingress and egress points for emergency vehicles, and employee safety training.

Significance after Mitigation

Implementing Mitigation Measure 3.8-2 along with compliance with other regulations, guidelines, and laws related to hazardous materials use, handling, transport, and disposal (discussed in the "Regulatory Framework" section above) would reduce the impact related to handling of hazardous materials within one-quarter mile of a school to a **less-than-significant** level, consistent with the findings of the 2035 General Plan and CAP EIR, because affected schools would be notified prior to the start of construction activities, and proper hazardous materials spill prevention techniques would be implemented during construction and operational activities. Furthermore, the relevant school district (or the private entity responsible for operating the school if it is privately owned) would be responsible for conducting the appropriate site-specific analysis required by the California Department of Education to determine the suitability of the potential school site, before moving forward with improvement plans.

IMPACT 3.8-3 **Result in a Safety Hazard for People Residing or Working in a Project Area Located in the Vicinity of a Private Airstrip (Significance Threshold 6).** *The WRTP Specific Plan and the proposed off-site South Regional Pond are approximately 1.4 miles from the north end of the runway at Medlock Field. However, buildings in the WRTP Specific Plan Area would not exceed 70 feet, and would be located on flat ground. Furthermore, the Specific Plan and the proposed off-site South Regional Pond would not include substantial new sources of open water retained for long periods of time that could attract hazardous wildlife, and future businesses are not expected to handle large quantities of acutely hazardous materials that could result in an explosion hazard. Finally, the WRTP Specific Plan boundary is located adjacent to existing urban development that already emits nighttime lighting at the same distance from Medlock Field, and would comply with all City Engineering Standards and the WRTP Specific Plan Performance Standards and Design Standards and Design Guidelines to shield and direct lighting downward. Therefore, this impact would be* ***less than significant****.*

The 2035 General Plan and CAP EIR (page 4.8-29) (City of Woodland 2016b) stated that since there are no private airstrips within the General Plan Planning Area, implementation of 2035 General Plan land use changes and policies would have no impact related to the safety hazard for people residing or working in the vicinity of a private airstrip, and this impact was not addressed further in the 2035 General Plan and CAP EIR.

Medlock Field is a privately owned and operated airport located approximately 1.3 miles south of the WRTP Specific Plan Area on CR 101. The north end of the runway is approximately 1.4 miles south of the WRTP Specific Plan and the proposed off-site South Regional Pond. Approximately 15 single-engine airplanes are based at the airport, which includes an administration building, aircraft hangers, maintenance sheds, a fueling station, and parking areas (AirNav 2020).

As discussed above in the "Regulatory Framework," the Caltrans Division of Aeronautics applies the FAA Part 77 height regulations and notice requirements to private use airports. However, the height of buildings within the WRTP Specific Plan Area would have to exceed a slope of 25:1 at the imaginary surface extending outward and upward from the airport runway to the WRTP Specific Plan Area. As detailed in Section 3.4, "Site Development Standards," of the WRTP Specific Plan, buildings constructed within the WRTP Specific Plan Area would not exceed a height of 70 feet, and land within the WRTP Specific Plan Area is flat. Therefore, construction of buildings

within the WRTP Specific Plan Area would not result in a height above the ground surface that would be tall enough to result in a flight hazard at Medlock Field (i.e., would not exceed the 25:1 slope limitation). The WRTP Specific Plan Area would include an approximately 4-acre water quality/hydromodifcation basin the southeastern corner. However, this basin would be used only for detention of stormwater flows, which would be released over a 48-hour period. Therefore, this proposed on-site basin would not result in a large open area of water that would be retained for long periods of time that could attract waterfowl and thereby result in wildlife strike hazards. Proposed land uses in the WRTP Specific Plan Area include Village Center (retail or mixed use); Commercial–Business Park, Office, Research, High-Tech, or Light Industrial Flex; and Commercial–Highway. These facilities may handle hazardous substances, although they would not be expected to handle large quantities of acutely hazardous substances since the WRTP Specific Plan Area does not include zoning for heavy industrial land uses. Therefore, the potential for explosion hazard is minimal.

As discussed in detail in Section 3.1, "Aesthetics," the WRTP Specific Plan would not be implemented in a "dark sky" area; rather, existing nighttime lighting is already generated by the Woodland Sports Park west of SR 113, from street lighting along the east and west sides of SR 113 on the west side of the project site, and from street and residential lighting in the adjacent Spring Lake development to the east. General Plan Policies 2.F.4 and 2.F.5 require that artificial lighting be controlled to avoid spill-over lighting, preserve the night sky, and prevent glare. The proposed land uses in the WRTP Specific Plan Area would not include high mast, high foot-candle-power lighting towers such as those used at the Woodland Sports Park. Rather, standard City street lights would be constructed along the arterial, collector, and residential streets at heights of 31, 28, and 25 feet, respectively, as required by Section 9 of the City's *Engineering Standards: Design Standards, Standard Details and Construction Specifications* (City of Woodland 2016a). The Engineering Standards also direct the maximum allowable amount of foot-candle illumination that may be used for arterial, collector, and residential streets (200, 100, and 70 watts, respectively). Furthermore, the WRTP Specific Plan Performance Standards and Design Standards and Design Guidelines, contained in Sections 3.3.2 and 3.5.2, respectively, of the WRTP Specific Plan also state that proposed land uses may not create new sources of glare, and that sign illumination must be confined to the area of the sign and may not cast a glare that is visible from any street or adjacent lot. The off-site South Regional Pond would not require nighttime lighting. The existing SR 113/CR 25A interchange is lighted with high-mast light standards that are shielded and direct the lighting downward; the proposed interchange improvements would include the continued use of shielded, directional high-mast light standards, but would not substantially change the amount of skyglow that is already emitted as compared to the existing interchange. Therefore, the WRTP Specific Plan and the off-site improvements would not include lighting that could be mistaken for airport lighting and/or cause glare in the eyes of pilots of aircraft using Medlock Field. For the reasons stated above, and consistent with the findings of the 2035 General Plan and CAP EIR, this impact would be **less than significant**.

Mitigation Measure

No mitigation measures are required.

3.8.5 CUMULATIVE IMPACTS

The proposed WRTP Specific Plan was included as part of the hazard materials and toxics cumulative analysis contained in Chapter 4.8 of 2035 General Plan and CAP EIR. The proposed South Regional Pond would be adjacent to, but south of, the Specific Plan Area, and was not considered in the 2035 General Plan and CAP EIR. There are

no substantial changes to environmental conditions, regulatory updates, or the WRTP Specific Plan that require additional cumulative analysis or mitigation.

The 2035 General Plan and CAP EIR (pages 6-31 and 6-32) (City of Woodland 2016b) determined that for the topics evaluated in this hazardous materials and toxics analysis (routine transport use and disposal of hazardous materials, accidental spills of hazardous materials, construction on a site included on the Cortese List, handle hazardous materials within one-quarter mile of a school, airport safety hazards for public-use airports, emergency access, or wildland fire hazard), the related projects considered in the cumulative analysis are site-specific and therefore would not combine to create cumulatively significant impacts in and of themselves. The 2035 General Plan and CAP EIR further determined that although an increase in routine use, transportation, and disposal of hazardous materials, as well as handling of hazardous materials near existing or proposed schools, development of sites on the Cortese List, public airport hazards, and wildland fire hazards would occur, existing federal, State, and local regulations create and enforce standards for these activities regardless of the amount or scale of use and therefore no cumulative impact would occur.

Implementation of the proposed off-site SR 113/CR 25A interchange improvements are regulated by Caltrans, which has formal procedures that are followed to reduce human health and ecological risks from the handling of disposal of hazardous materials and the reuse of soils contaminated with aerially-deposited lead (Caltrans 2018, DTSC 2016b). Implementation of the WRTP Specific Plan could result in human health and ecological risks from exposure to known hazardous materials that are present in the WRTP Specific Plan Area during construction activities. Previously unknown hazardous materials, in the form of underground storage tanks, could be encountered at the off-site South Regional Pond during construction. Implementation of the WRTP Specific Plan could also result in the handling of hazardous materials within one-quarter mile of a school. However, implementing Mitigation Measures 3.8-1 and 3.8-2 would reduce the impacts of the WRTP Specific Plan and the off-site South Regional Pond to a less-than-significant level. Hazardous materials impacts would be site-specific. Implementation of the WRTP Specific Plan and the off-site improvements (with mitigation measures incorporated) in conjunction with development of related projects would not present a public health and safety hazard to people or the environment, and therefore the cumulative contribution of the WRTP Specific Plan and the off-site improvements would be **less-than-cumulatively considerable**.

Implementation of the WRTP Specific Plan and the off-site improvements would result in a less-than-significant impact related to airport hazards from development of buildings approximately 1.4 miles from the runway at the privately owned and operated Medlock Field airport. The WRTP Specific Plan would be constructed at the southwestern edge of the Woodland city limits. Other future development at the same distance from Medlock Field in the adjacent Spring Lake development would also result in a less-than-cumulatively considerable contribution to Medlock Field airport hazards for the same reasons as the WRTP Specific Plan (i.e., buildings would not exceed FAA height restrictions, large new bodies of water that would retain water for long periods of times that could attract wildlife would not be created, and new nighttime lighting would not be mistaken for airport lighting and/or cause glare in the eyes of airplane pilots). The other future cumulative projects would be located more than 2 miles from Medlock Field. Furthermore, the WRTP Specific Plan requires that street lighting conform to the City's Engineering Standards and other types of lighting conform to the City's Community Design Standards. In addition, Caltrans requires that high-mast light standards be shielded and direct the lighting downward. The WRTP Specific Plan does not allow building heights that could present a height hazard to Medlock Field. Therefore, impacts related to airport hazards from implementation of the WRTP Specific Plan and the off-site improvements in conjunction with development of related projects would be **less-than-cumulatively considerable**.

3.9 HYDROLOGY, FLOODING, AND WATER QUALITY

3.9.1 INTRODUCTION

This section describes potential impacts related to hydrology and water quality in the WRTP Specific Plan Area and off-site improvement areas. This section also discusses and evaluates the potential environmental impacts from flooding that may be associated with implementation of the WRTP Specific Plan. Impacts on water supply and wastewater treatment are discussed in Section 3.14 of this EIR, "Utilities."

The CEQA Guidelines note that comments received during the NOP scoping process can be helpful in "identifying the range of actions, alternatives, mitigation measures, and significant effects to be analyzed in depth in an EIR and in eliminating from detailed study issues found not to be important." (CEQA Guidelines Section 15083). Neither the CEQA Guidelines nor Statutes require a lead agency to respond directly to comments received in response to the NOP, but they do require that the comments be considered. Consistent with these requirements, these comments have been carefully reviewed and considered by the City and are reflected in the analysis of impacts in this section. NOP comments were received related to potential permits that may be necessary from the Central Valley Regional Water Quality Control Board (CVRWQCB) and the State Water Resources Control Board (SWRCB). A comment was also submitted related to the potential loss of groundwater recharge from conversion of existing agricultural land to urban development with impervious surfaces, as well as the potential for flooding created by increased stormwater runoff from impervious surfaces. Appendix A of this EIR includes copies of all NOP comments received.

3.9.2 ENVIRONMENTAL SETTING

SURFACE WATER

Drainage and Watersheds

The WRTP Specific Plan Area and the off-site improvement areas are located in the Willow Slough watershed, which includes all land that drains to Willow Slough between Cache Creek in the north and Putah Creek in the south. The western boundary of the watershed is Rocky Ridge, in the Coast Ranges (which is also the boundary between Yolo and Napa Counties). The Yolo Bypass forms the eastern boundary of the watershed. Approximately 30 square miles of the watershed are located east of SR 113, including the WRTP Specific Plan Area and off-site improvement areas. Willow Slough, which drains into the Yolo Bypass, is approximately 1.3 miles southeast of the WRTP Specific Plan Area. Water from the Yolo Bypass discharges into the North Delta near Rio Vista, approximately 30 miles to the south.

The WRTP Specific Plan Area and off-site improvement areas are essentially flat, but slope slightly from west to east. The elevation changes from approximately 54 feet above mean sea level to approximately 49 feet above mean sea level. The WRTP Specific Plan Area has been used for cultivation of row crops for decades. Other than agricultural drainage ditches, there are no surface water bodies on the WRTP Specific Plan Area or off-site improvement areas.

Drainage throughout the city is managed through a system of collection, conveyance, storage, and pumping facilities. The conveyance system consists of pipelines (laterals and trunk lines), detention and retention ponds, and open channels. In the South Urban Growth Area, where the WRTP Specific Plan Area is located, storm drainage is

conveyed northeastward via underground pipelines to the South Canal or the Gibson Canal, and thence to the City's storm drainage pumping facility at the intersection of County Road 103 and East Main Street. From the pumping facility, all City flows are transported eastward through the Outfall Channel, which discharges directly into the Yolo Bypass, approximately 4.5 miles northeast of the WRTP Specific Plan Area (City of Woodland 2006a).

Water Quality

The WRTP Specific Plan Area and off-site improvement areas do not contain any natural stream corridors. The nearest surface water resource is Willow Slough, which receives irrigation tailwater runoff and overland flow from surrounding agricultural land (including the WRTP Specific Plan Area). Willow Slough is included on the Clean Water Act (CWA) Section 303(d) list of impaired waterbodies for boron and toxicity. Total Maximum Daily Loads (TMDLs) have been developed for both of these constituents (State Water Resources Control Board [SWRCB] 2018). As stated above, both Willow Slough and the City's storm drainage system discharge into the Yolo Bypass, which flows southward into the North Delta near Rio Vista. The North Delta waterways are on the CWA Section 303(d) list for chlordane, chlorpyrifos, dichlorodiphenyltrichloroethane (DDT), diazinon, dieldrin, Group A pesticides (e.g., organochlorine compounds such as dieldrin, chlordane, oxychlordane, nonachlor, and heptachlor), invasive species, mercury, polychlorinated biphenyls (PCBs), and toxicity. TMDLs have been developed for each constituent (CVRWQCB 2018).

The Yolo Bypass and the North Delta are regulated by the Central Valley Regional Water Quality Control Board (CVRWQCB), which has established narrative and numeric standards for these waterways in its *Water Quality Control Plan for the Sacramento River and San Joaquin River Basins* (Basin Plan) (CVRWQCB 2018). Willow Slough does not currently have any specific designated beneficial uses attributed to it in the Basin Plan. Consequently, CVRWQCB applies the Basin Plan's "tributary rule" and assigns to this waterbody the beneficial uses designated for the nearest downstream location. CVRWQCB also regulates waste discharges in undesignated streams to ensure that downstream water quality conditions and beneficial uses are not degraded. Thus, Willow

Slough is subject to regulation for the existing designated uses in the receiving waterbody (i.e., the Yolo Bypass). The beneficial uses designated in the Basin Plan for these waterways are shown in Table 3.9-1.

Hydraulics and Flooding

Floodplain designations are important hydraulic engineering considerations when constructing buildings, roads, and bridges. The most recent Federal Emergency Management Agency (FEMA) Flood Insurance Study (FIS) Flood Insurance Rate Map (FIRM), revised May 2012, identifies the WRTP Specific Plan Area and the off-site improvement areas as being located in the unshaded Zone X classification. Unshaded Zone X is an area of minimal flood hazard, located outside the 100-year (0.01 annual exceedance probability [AEP]) floodplain and higher than the elevation of the 500-year (0.2 AEP) floodplain.

Table 3.9-1. Designated Beneficial Uses for the Yolo Bypass/Willow Slough and North Delta Waterways

Yolo Bypass/Willow Slough
Irrigation
Stock Watering
Contact Recreation
Non-Contact Water Recreation
Commercial and Sport Fishing
Warm Freshwater Habitat
Warm Water Migration of Aquatic Organisms
Cold Water Migration of Aquatic Organisms
Wildlife Habitat
North Delta Waterways
Municipal and Domestic Supply
Agricultural Irrigation
Stock Watering
Industrial Service Supply
Industrial Process Supply
Contact Recreation
Non-Contact Water Recreation
Commercial and Sport Fishing
Warm Freshwater Habitat
Cold Freshwater Habitat
Warm Water Migration of Aquatic Organisms
Cold Water Migration of Aquatic Organisms
Warm Water Spawning Habitat
Wildlife Habitat
Navigation

Source: CVRWQCB 2018

Erosion and Runoff Potential

Most soils can be categorized into hydrologic soil groups (which apply only to surface soil layers) based on runoff-producing characteristics. Hydrologic soil groups are factored into calculations of erosion potential when drainage plans are prepared. Based on a review of U.S. Natural Resources Conservation Service ([NRCS] 2020) soil data (see Table 3.7-2 in Section 3.7, "Geology, Soils, Minerals, and Paleontological Resources"), the Reiff soils in the WRTP Specific Plan Area are classified as hydrologic Group A—soils having a high water infiltration rate and low runoff potential. The Yolo soil in the WRTP Specific Plan Area is classified as hydrologic Group B—soils having a moderate water infiltration rate and moderate runoff potential. The Brentwood, Capay, and Sycamore soils in the WRTP Specific Plan Area and the off-site improvement areas are classified as hydrologic Group C; these soils have a layer that impedes the downward movement of water or are composed of soils with a moderately fine or fine texture. Group C soils have a slow infiltration rate when thoroughly wet and therefore have a high runoff potential.

GROUNDWATER

Hydrology

As discussed on page 4.9-5 of the 2035 General Plan and CAP EIR (City of Woodland 2016b), the City of Woodland is located in the Lower Cache-Putah Subarea in the Yolo Subbasin. The Yolo Subbasin (Basin No. 5-21.67) encompasses approximately 400 square miles in the southern portion of the Sacramento Valley Groundwater Basin, primarily in Yolo County (California Department of Water Resources [DWR] 2004). The Yolo Subbasin is bounded on the east by the Sacramento River, on the west by the Coast Ranges, on the north by Cache Creek, and on the south by Putah Creek.

Flood Basin Deposits, found along the eastern margin of the Yolo Subbasin in the project region, have low permeability and generally yield low quantities of water to wells. The quality of groundwater produced from the Basin Deposits is often poor. Older alluvium such as the Modesto and Riverbank Formations, which are also present in the project region, are an important source of fresh water in the subbasin (DWR 2004).

State Well No. 09N02E09B001M is located in the northern portion of the WRTP Specific Plan Area. Depth to groundwater measurements for this well varied from 22 to 36 feet below the ground surface between 2012 and 2017 (Geocon Consultants, Inc. 2018). During soil boring for the *Final Geotechnical Design and Materials Report* prepared for the off-site SR 113/County Road 25A interchange, Crawford & Associates (2020) encountered groundwater at depths of 28.5 to 37.2 feet below the ground surface.

Water Quality

As discussed on page 4.9-14 of the 2035 General Plan and CAP EIR (City of Woodland 2016b), groundwater in the Yolo Subbasin is characterized by a sodium magnesium bicarbonate, calcium magnesium bicarbonate, and magnesium carbonate chemistry. Groundwater quality is generally considered adequate for agricultural and municipal uses, although it tends to be very hard. There are some localized areas throughout the basin that have high concentrations of boron. Electrical conductivity, an indicator of salinity, has continued to increase in Yolo County since 1975 (DWR 2004).

Sustainability

The Sacramento Valley Groundwater Basin – Yolo Subbasin is a high priority basin as designated by DWR, but is not in a state of critical overdraft (DWR 2019). The Yolo Subbasin Groundwater Agency is the Groundwater Sustainability Agency (GSA) responsible for preparation of the required Groundwater Sustainability Plan (GSP). Each of the Member and Affiliated Parties will have initial responsibility for groundwater management within their respective jurisdictional boundaries. Member agencies consist of the cities of Davis, West Sacramento, Winters, and Woodland; Dunnigan Water District, Esparto Community Services District, and Madison Community Services District; Reclamation Districts 108, 537, 827, 730, 765, 787, 785, 1600, 2035; Yocha Dehe Winton Nation; Yolo County Flood Control and Water Conservation District; and Yolo County. The Yolo Subbasin GSP is in process and will be completed by January 1, 2022 as required by DWR (Yolo Subbasin Groundwater Agency 2020).

3.9.3 REGULATORY FRAMEWORK

The 2035 General Plan CAP EIR summarizes the federal, State, regional, and local regulatory framework on pages 4.9-16 through 4.9-31. Those aspects of the existing regulatory framework that are relevant to potential impacts of

the WRTP Specific Plan are briefly highlighted below. Please see Section 4.9.3 of the 2035 General Plan and CAP EIR for more detail (City of Woodland 2016b).

FEDERAL PLANS, POLICIES, REGULATIONS AND LAWS

Clean Water Act, 33 U.S.C. §1251 et seq.

The CWA is the primary federal law that governs and authorizes water quality control activities by the U.S. Environmental Protection Agency (EPA), the lead federal agency responsible for water quality management. EPA has delegated the State of California as the authority to implement and oversee most of the programs authorized or adopted for CWA compliance through the Porter-Cologne Water Quality Control Act (described below).

Clean Water Act Section 303

Section 303 of the CWA requires states to adopt water quality Standards for all surface waters of the U.S. Standards are based on the designated beneficial use(s) of the surface water body. As defined by the CWA, water quality standards consist of two elements: (1) designated beneficial uses of the water body in question, and (2) criteria that protect the designated uses. Beneficial uses serve as a basis for establishing water quality objectives and discharge limits and are designated in the applicable Basin Plan for surface waters and groundwater basins.

Section 303(d)—Impaired Water Bodies and Total Maximum Daily Loads

CWA Section 303(d) requires states to identify waters where the permit standards, any other enforceable limits, or adopted water quality standards are still unattained. The law requires states to develop TMDLs to improve the water quality of impaired water bodies. TMDLs are the quantities of pollutants that can be safely assimilated by a water body without violating water quality standards. TMDLs are developed for impaired water bodies to maintain beneficial uses, achieve water quality objectives, and reduce the potential for future water quality degradation. National Pollutant Discharge Elimination System (NPDES) permits for water discharges must take into account the pollutants for which a water body is listed as impaired.

Section 402—National Pollutant Discharge Elimination System Permit Program

Section 402 of the CWA requires that certain types of construction activity comply with the regulations of the NPDES stormwater program, which was established to regulate municipal and industrial discharges to surface waters of the U.S. NPDES permits generally identify effluent and receiving water limits on allowable concentrations and/or mass emissions of pollutants contained in the discharge; prohibitions on discharges not specifically allowed under the permit; and provisions that describe required actions by the discharger, including industrial pretreatment, pollution prevention, self-monitoring, and other activities.

Phase 2 of the NPDES stormwater permit regulations, which became effective in March 2003, required that NPDES permits be issued for construction activity for projects that disturb 1 acre or more. Phase 2 of the municipal permit system (known as the NPDES General Permit for Small Municipal Separate Storm Sewer Systems [MS4s]) required small municipal areas of less than 100,000 persons to develop stormwater management programs. The nine Regional Water Quality Control Boards (RWQCBs) in California are responsible for implementing the NPDES permit system. The City of Woodland operates its storm drainage system under an MS4 permit.

Federal Antidegradation Policy

The federal Antidegradation Policy, established in 1968, is designed to protect existing uses, water quality, and national water resources. The federal policy directs states to adopt a statewide policy that includes the following primary provisions (40 Code of Federal Regulations [CFR] 131.12):

- Existing instream uses and the water quality necessary to protect those uses shall be maintained and protected.
- Where existing water quality is better than necessary to support propagation of fish, shellfish, and wildlife and recreation in and on the water, that quality shall be maintained and protected unless the state finds that allowing lower water quality is necessary for important local economic or social development.
- Where high-quality waters constitute an outstanding national resource, such as waters of national and state parks, wildlife refuges, and waters of exceptional recreational or ecological significance, that water quality shall be maintained and protected.

STATE PLANS, POLICIES, REGULATIONS, AND LAWS

Porter-Cologne Water Quality Control Act

California's surface water quality is regulated under the Porter-Cologne Water Quality Control Act (Porter-Cologne Act) (California Water Code, Division 7). The Porter-Cologne Act requires the State Water Resources Control Board (SWRCB) and the nine RWQCBs to develop water quality policies, plans, and objectives to protect state waters. The act also requires the RWQCBs to periodically update basin plans to define beneficial uses, water quality objectives, and implementation programs. In addition, the Porter-Cologne Act requires dischargers to notify the RWQCB by filing a report of waste discharge and authorizes the SWRCB and RWQCBs to issue and enforce Waste Discharge Requirements (WDRs), NPDES permits, Section 401 water quality certifications, and other approvals. The RWQCBs also issue WDRs for broad categories of "low threat" discharges that have minimal potential for adverse water quality effects when implemented according to prescribed terms and conditions.

The CVRWQCB Basin Plan outlines water quality attainment strategies, including TMDLs, where necessary and appropriate to ensure attainment and maintenance of water quality standards. The Basin Plan also outlines the Antidegradation Policy (Resolution No. 68-16, "Statement of Policy with Respect to Maintaining High Quality of Waters in California"). Adopted in 1968, this policy requires continued maintenance of existing high-quality waters. It provides conditions under which a change in water quality is allowable.

California Toxics Rule and State Implementation Policy, 40 CFR 131.48

The California Toxics Rule (CTR) was adopted in 2000 in response to requirements of the EPA National Toxics Rule (NTR) and establishes numeric water quality criteria for approximately 130 priority pollutant trace metals and organic compounds. The CTR criteria are regulatory criteria adopted for inland surface waters, enclosed bays, and estuaries in California that are on the CWA Section 303(c) listing for contaminants. The CTR includes criteria for the protection of aquatic life and human health. Human health criteria (water and organism based) apply to all waters with a Municipal and Domestic Water Supply Beneficial Use designation as indicated in the basin plans. The Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California, also known as the State Implementation Plan (SIP), was adopted by the SWRCB in 2000. The SIP

establishes provisions for translating CTR criteria, NTR criteria, and basin plan water quality objectives for toxic pollutants into NPDES permit effluent limits and effluent compliance determinations.

Water Quality Control Plan for the Sacramento–San Joaquin River Basins (Basin Plan)

The *Water Quality Control Plan for the Sacramento–San Joaquin River Basins* (Basin Plan) (CVRWQCB 2018) identifies the beneficial uses of water bodies and provides water quality objectives and standards for waters of the Sacramento River and San Joaquin River hydrologic regions. State and federal laws mandate protecting designated "beneficial uses" of water bodies. State law defines beneficial uses as "domestic; municipal; agricultural and industrial supply; power generation; recreation; aesthetic enjoyment; navigation; and preservation and enhancement of fish, wildlife, and other aquatic resources or preserves" (Water Code Section 13050[f]).

The beneficial uses of any specifically identified water body generally apply to all tributary streams to that water body. Those water bodies not specifically designated for beneficial uses in the Basin Plan are assigned the Municipal and Domestic Supply (MUN) use, in accordance with the State Water Board Resolution No. 88-63. Although specific surface waters have not been identified for groundwater recharge or freshwater replenishment in the Basin Plan, these additional protected beneficial uses are designated in the Basin Plan. Unless otherwise designated by the CVRWQCB, all groundwater is considered suitable or potentially suitable for municipal use, agricultural supply, and industrial process supply.

The Basin Plan describes a set of designated beneficial uses for each water body (see Table 3.9-1). Beneficial uses help to define the resources, services, and qualities of the aquatic systems. Beneficial uses also serve as a basis for establishing water quality objectives and discharge prohibitions. The Basin Plan contains specific numeric water quality objectives that are applicable to each water body or portions of water bodies. Objectives have been established for bacteria, dissolved oxygen, pH, pesticides, electrical conductivity, total dissolved solids, temperature, turbidity, and trace elements. Numerous narrative water quality objectives have also been established. Finally, the Basin Plan contains a set of implementation plans, which represent the CVRWQCB's programs and specific plans of action for meeting water quality objectives and protecting beneficial uses.

National Pollutant Discharge Elimination System Municipal Storm Water Permitting Program

The SWRCB's Municipal Storm Water Permitting Program regulates stormwater discharges from MS4s. MS4 permits require the discharger to develop and implement a stormwater management plan with the goal of reducing the discharge of pollutants to the maximum extent practicable (MEP). "Maximum extent practicable" is the performance standard specified in Section 402(p) of the CWA. The management plans specify what Best Management Practices (BMPs) will be used to address certain program areas—namely, public education and outreach, detection and elimination of illicit discharges, construction and post-construction, and municipal operations. Permit applicants are required to prepare and implement a Stormwater Pollution Prevention Plan (SWPPP) which describes the site; erosion and sediment controls; means of waste disposal; implementation of local plans; control of post-construction sediment and erosion control measures and maintenance responsibilities; and non-stormwater management control.

Stormwater discharges in the City of Woodland are regulated by SWRCB under the MS4 Program, Phase II Small MS4 General Permit (Order No. 2013-0001-DWQ), which was adopted in July 2013.

National Pollutant Discharge Elimination System and Waste Discharge Requirements for Construction

Under the Porter-Cologne Act, the SWRCB and CVRWQCB have adopted specific NPDES permits for a variety of activities that have the potential to discharge wastes to waters of the state. The SWRCB's statewide *General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities* (Order 2009-009-DWQ as amended by Order No. 2012-0006-DWQ) is applicable to all land-disturbing construction activities that would disturb 1 acre or more. The CVRWQCB's General Order for *Dewatering and Other Low Threat Discharges to Surface Waters* (Order No. R5-2013-0074) authorizes direct discharges to surface waters up to 250,000 gallons per day for no more than a 4-month period each year. All of the NPDES permits involve similar processes, which include submitting a Notice of Intent to CVRWQCB and implementing a SWPPP that includes BMPs to minimize those discharges. CVRWQCB Resolution R5-2003-0008 identifies activities subject to waivers of WDRs, including minor dredging activities and minor construction dewatering activities that discharge to land.

The SWRCB has issued a separate NPDES for Caltrans projects (Order No. 2012-0011-DWQ, NPDES No. CAS000003). This NPDES permit regulates construction-related erosion and operational discharge on all Caltrans projects throughout the state (SWRCB 2015).

Dischargers are required to eliminate or reduce non-stormwater discharges to storm sewer systems and other waters. The permits also require dischargers to consider using permanent post-construction BMPs that would remain in service to protect water quality throughout the life of the project. All NPDES permits also have inspection, monitoring, and reporting requirements. In addition, CVRWQCB requires water quality sampling if the activity could result in the discharge of turbidity or sediment to a water body that is listed as impaired under CWA Section 303(d) because of sediment or siltation, or if a release of a nonvisible contaminant occurs. Where such pollutants are known or should be known to be present and have the potential to contact runoff, sampling and analysis is required.

Sustainable Groundwater Management Act

In 2014, the California Legislature enacted a three-bill law (AB-1739, SB-1168, and SB-1319), known as the Sustainable Groundwater Management Act (SGMA). The SGMA was created to provide a framework for the sustainable management of groundwater supplies, and to strengthen local control and management of groundwater basins throughout the state with little state intervention. The SGMA is intended to empower local agencies to adopt groundwater sustainability plans that are tailored to the resources and needs of their communities, such that sustainable management would provide a buffer against drought and climate change, and ensure reliable water supplies regardless of weather patterns. The SGMA and corresponding regulations require that each high and medium priority groundwater basin is operated to a sustainable yield, balancing natural and artificial groundwater recharge with groundwater use to ensure undesirable results such as chronic lowering of groundwater levels, loss of storage, water quality impacts, land subsidence, and impacts to hydraulically connected streams do not occur. The SGMA is considered part of the statewide, comprehensive California Water Action Plan that includes water conservation, water recycling, expanded water storage, safe drinking water, and wetlands and watershed restoration. The SGMA protects existing surface water and groundwater rights and does not affect current drought response measures.

California's 515 groundwater basins are classified into one of four categories; high-, medium-, low-, or very low priority based on components identified in the California Water Code Section 10933(b). Basin priority determines

which provisions of California Statewide Groundwater Elevation Monitoring (CASGEM) and the SGMA apply in a basin. In 2019, DWR completed the first phase of responses to comments and final re-prioritization of groundwater basins in Phase I, along with draft prioritizations of groundwater basins included in Phase II (DWR 2019).

The SGMA requires that local agencies form one or more groundwater sustainability agencies (GSAs) within 2 years (i.e., by June 30, 2017). Agencies located within high- or medium-priority basins must adopt a GSP or Alternative GSP. The time frame for adoption of GSPs in basins determined by DWR to be in a condition of "critical overdraft" is by January 31, 2020; all other high and medium priority basin have until January 31, 2022. Local agencies will have 20 years to fully implement GSPs after the plans have been adopted. Intervention by the SWRCB would occur if a GSA is not formed by the local agencies, and/or if a GSP is not adopted or implemented. GSPs are not required for very low and low priority groundwater basins.

GSPs must define the sustainable yield of the basin, identify what would constitute undesirable results in the basin, and identify the projects and actions (including monitoring) that will be implemented to ensure the basin is managed to avoid undesirable results. DWR evaluates the GSP and provides the GSA with an assessment of the plan and any necessary recommendations every 5 years following its establishment. Reports by the GSA that include monitoring data and information are due annually to DWR. Alternative GSPs may consist of an existing groundwater management plan that demonstrates a reasonable expectation of achieving sustainability within 20 years. It may also consist of a basin adjudication with existing governance and oversight, or a 10-year analysis of basin conditions showing sustainable operations with no undesirable results such as subsidence, saltwater intrusion, or degraded water quality.

Regional and Local Plans, Policies, Regulations, and Ordinances

City of Woodland 2035 General Plan

The *City of Woodland General Plan Update 2035* (City of Woodland 2017) identifies the following policies that are applicable to the proposed WRTP Specific Plan.

Land Use, Community Design, and Historic Preservation Element

- **Policy 2.B.2 Development in the Floodplain**. No specific plan for SP-1, SP-2 or SP-3 may be processed until the designs for projects to provide necessary 200-year flood protection have been approved and the funding for construction has been secured. Any contemplated sale of the City's 900-acre property within SP-2 will require a four-fifths (4/5th) vote of the City Council.

Public Facilities and Services Element

- **Policy 5.G.4 Water Management Plans.** Maintain and every five years update the Urban Water Management Plan and the Groundwater Management Plan. Develop and maintain the Groundwater Sustainability Plan in conjunction with the Yolo Sustainable Groundwater Management Plan. Use available and "state of the practice" tools, such as computerized flow modeling to determine system capacity, as necessary to forecast demand on water production and distribution systems by urban development, and to determine appropriate facility needs.

- **Policy 5.G.5 Recycled Water.** Expand the recycled water system as feasible and in accordance with a Recycled Water System Master Plan, which should provide an evaluation of potential recycled water uses,

facilities planning, distribution service areas, recommended recycled water system, financial modeling, implementation strategies, and the feasibility of forming a recycled water utility.

- **Policy 5.I.1 Storm Drainage System and Cost Recovery.** Continue to maintain and improve the storm drainage system for the existing Woodland community. Ensure that increased storm drainage system capacity is available to serve planned urban development within the Planning Area consistent with this General Plan. Accommodate increase in flows and loadings from the existing community with the capital costs and benefits allocated equitably and fairly between existing users and new users, as authorized by law.

- **Policy 5.I.3 Overland Flow Requirements in New Development.** Require development to provide for the overland flow of stormwater meeting or exceeding the City's standard design capacity of the storm drainage system. Overland flow waters should be conveyed over public streets where possible and should be at least one foot below building pad elevations and contain provisions for removal of silt and other contaminants.

- **Policy 5.I.4 Low Impact Development.** Require new development and redevelopment projects to incorporate site design and low impact development runoff requirements, in accordance with the Municipal Code to reduce runoff rates, filter out pollutants, and facilitate groundwater infiltration. Such features may include, but are not limited to:

  - Canopy trees or shrubs to absorb rainwater;

  - Grading that lengthens flow paths over permeable surfaces and increases runoff travel time to reduce the peak hour flow rate and the number of required drain inlets;

  - Partially removing curbs and gutters from parking areas where appropriate to allow stormwater sheet flow into vegetated areas;

  - Use of permeable paving in parking lots and other areas characterized by significant impervious surfaces;

  - On-site stormwater detention, use of bioswales and bioretention basins to facilitate infiltration;

  - Integrated or subsurface water retention facilities to capture rainwater for use in landscape irrigation and other non-potable uses; and

  - Innovative engineering practices that allow for compact, connected, and walkable urban design.

- **Policy 5.I.5 Prohibiting Grading Activities in Rainy Season**. Prohibit grading activities during the rainy season, unless adequately mitigated, to avoid sedimentation of storm drainage facilities.

- **Policy 5.I.7 Stormwater Detention Facilities.** Use stormwater detention facilities to mitigate drainage impacts and reduce storm drainage system costs. To the extent practical, design stormwater detention facilities for multiple purposes, including recreational use in dry conditions and/or stormwater quality improvement.

Sustainability, Conservation, and Open Space Element

- **Policy 7.A.1 Surface Water Project.** Continue to cooperate with the City of Davis and UC Davis to operate the Surface Water Project in order to balance the groundwater supply, and protect against aquifer overdrafts and water quality degradation.

- **Policy 7.A.2 Groundwater Management.** Support local efforts to establish a Groundwater Sustainability Agency and adopt a Groundwater Management Plan. Ensure that the City of Woodland and local watershed agencies retain local authority to regulate and manage groundwater.

- **Policy 7.A.4 Best Management Practices.** Continue to require the use of feasible and practical best management practices (BMPs) and promote Low Impact Development to protect receiving waters from the adverse effects of construction activities and urban and agricultural runoff.

- **Policy 4.C.12 Water Supply and Infrastructure.** ASR [Aquifer Storage and Recovery] programs support completion of the Davis-Woodland Water Supply Project, Aquifer Storage and Recovery wells, and related local facilities to ensure water supplies are available to serve current and future water needs in Woodland.

City of Woodland Storm Water Management Program

As part of the City's compliance with the CWA, the City prepared a Storm Water Management Program (SWMP) in 2004, and the City's stormwater ordinance and *Post-Construction Standards Plan* were updated in 2015 to comply with the SWRCB's NPDES General Permit for Small MS4s. The SWMP sets forth the program that the City implements to protect and improve stormwater quality.

Projects in the City must comply with the City's *Post-Construction Standards Plan* (City of Woodland 2015), which contains guidance for design of site-specific stormwater site design control measures, source control measures, and treatment control measures to prevent and/or reduce pollutants in stormwater runoff from projects. General site design control measures, such as conserving natural areas and minimizing impervious areas, are required for all categorical new development projects. Source control measures limit the exposure of materials and activities so that potential sources of pollutants are prevented from contacting storm runoff. Treatment control measures are reasonable, engineered systems that provide a reduction of pollutants in runoff to be consistent with the maximum extent practicable (MEP) standards imposed by the federal CWA.

Woodland's *Post-Construction Standards Plan* includes design of post-construction site design requirements through the incorporation of low impact development (LID) standards and hydromodification management techniques to meet the City's Phase II MS4 Permit requirements (City of Woodland 2015). Post-construction requirements must meet the Section E.12 requirements of SWRCB's Order No. 2013-001-DWQ.

City of Woodland Subdivision Ordinance and Standard Specifications and Details, Woodland Municipal Code Chapter 16

The City's Subdivision Ordinance requires project applicants to submit exhibits and improvement plans for all street work, drainage channels, structures, and underground utilities that demonstrate, among other items, consistency with the City's *Engineering Standards: Design Standards, Standard Details and Construction Specifications* (City of Woodland 2016a). Section 4 of the Engineering Design Standards regulates design of storm drainage systems.

City of Woodland Urban Storm Water Quality Management and Discharge Control Ordinance, Woodland Municipal Code Chapter 8.08

The City's Urban Stormwater Quality Management and Discharge Control Ordinance (Chapter 8.08 of the Municipal Code) requires stormwater BMPs to be implemented by all persons where a discharge has the potential to enter the City's storm drainage system, including protection of watercourses, proper waste disposal, cleanup of hazardous material spills, and repair of leaks. New development must comply with the California Stormwater Quality Association's (CASQA) *Construction Best Management Practice Handbook* (2019a) and associated requirements for erosion and sediment controls, soil stabilization, dewatering, source controls, pollution prevention measures, and illicit discharges. In addition, an erosion and sediment control plan is required as a condition of the issuance of a grading or building permit. The erosion and sediment control plan (or a SWPPP) must contain appropriate site-specific construction site BMPs, the rationale used for selecting or rejecting BMPs, a quantification of expected soil loss where necessary, a list of applicable permits directly associated with applicable grading activity, and evidence that those permits have been obtained. BMPs must be implemented to the satisfaction of the City in order to ensure that the discharge of pollutants from a construction site will be effectively prohibited and will not cause or contribute to a condition of pollution or to an exceedance of water quality standards.

Industrial or commercial facilities require appropriate NPDES permits/WDRs, and implementation of BMPs consistent with the CASQA *Industrial & Commercial BMP Handbook* (2019b), or its equivalent. The person responsible for any industrial or commercial facility must enter into an agreement for the operation, maintenance, and annual reporting of any structural control measures and treatment systems and to record such agreement with the County Recorder's Office.

The ordinance also includes post-construction standards and requirements for the use of source control, LID, and hydromodification measures.

3.9.4 Environmental Impacts and Mitigation Measures

Methodology

The 2035 General Plan and CAP EIR addresses impacts of development of the City's Planning Area, including the WRTP Specific Plan Area. Consistent with Section 15183(b) of the CEQA Guidelines, the following analysis focuses on project-specific significant effects of the WRTP Specific Plan and off-site improvements that: a) are peculiar to the WRTP Specific Plan or the project site; b) were not addressed in the 2035 General Plan and CAP EIR (including off-site or cumulative impacts); or c) would be more severe than previously described based on substantial new information.

This analysis relies on information provided by various public agencies, as well as site-specific technical planning studies generated to support the WRTP Specific Plan. Hydrology and drainage-related studies reviewed in support of this analysis include the following documents:

- *Spring Lake Specific Plan, Section 6.0: Public Facilities and Services* (City of Woodland 2001);
- *Storm Drainage Facilities Master Plan Update and Preliminary Engineering, Draft* (City of Woodland 2006a);
- *Technical Guidance Manual for Stormwater Quality Control Measures* (City of Woodland 2006b);

- *Post-Construction Standards Plan: A Guidance Document on Storm Water Post-Construction Design Measures for Developers and Plan Checkers* (City of Woodland 2015);
- *Engineering Standards: Design Standards, Standard Details and Construction Specifications, Section 4 Storm Drainage System Design* (City of Woodland 2016a);
- *Woodland Research and Technology Park Stormwater Management Technical Memorandum* (Cunningham Engineering 2020);
- *Woodland Research and Technology Park Storm Drainage Review Technical Memorandum* (City of Woodland 2020a); and
- *Storm Drainage Facilities Master Plan South Urban Growth Area* (City of Woodland 2017)
- *Woodland Research and Technology Park Specific Plan, Draft* (City of Woodland 2020b).

Impacts associated with drainage, hydrology, and water quality that could result from construction and operational activities related to buildout of the WRTP Specific Plan were evaluated based on expected construction practice, materials to be used, and the assumed locations and duration of activities as described in Chapter 2, "Project Description." The effects of the WRTP Specific Plan were compared to environmental baseline conditions (i.e., existing conditions) to determine the duration and magnitude of impacts.

THRESHOLDS OF SIGNIFICANCE

The proposed WRTP Specific Plan may have a significant impact related to hydrology and water quality if it would:

1. violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality;
2. substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin;
3. substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:
    a. result in substantial erosion or siltation on- or off-site;
    b. substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;
    c. create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or
    d. impede or redirect flood flows;
4. in flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation; or

5. conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

IMPACTS NOT DISCUSSED FURTHER

The following discussion summarizes the impacts of the WRTP Specific Plan that are not discussed further in this document because either, a) there is no impact, or b) none of the factors triggering additional environmental review (as found in Section 15183(b)) exist because an impact was either addressed as a part of the 2035 General Plan and CAP EIR and/or substantially mitigated by uniformly applied development standards (CEQA Guidelines Section 15183[f][7]). Uniformly applied development standards include the 2035 General Plan, the CAP, existing City regulations and standards, design review requirements, and impact fee programs.

Impede or Redirect Flood Flows (Significance Threshold 3d) — General Plan Policy 2.B.2 was not intended to constrain development that is not located in a 200-year floodplain. The WRTP Specific Plan Area and the off-site improvement areas are classified by FEMA (2012) as unshaded Zone X, which is an area of minimal flood hazard that is located outside the 100-year (0.01 AEP) floodplain and is higher than the elevation of the 500-year (0.2 AEP) floodplain. Since the WRTP Specific Plan Area and the off-site improvement areas are not located in a floodplain, there would be no impact and this topic is not evaluated further in this EIR.

Risk Release of Pollutants in a Flood Hazard, Seiche, or Tsunami Zone (Significance Threshold 4) — General Plan Policy 2.B.2 was intended to provide general guidance, and was not intended to constrain development that is not located in a 200-year floodplain. The WRTP Specific Plan Area and the off-site improvement areas are classified by FEMA (2012) as unshaded Zone X, which is an area of minimal flood hazard that is located outside the 100-year (0.01 AEP) floodplain and is higher than the elevation of the 500-year (0.2 AEP) floodplain. Furthermore, there are levees on both the east and west sides of the Yolo Bypass (which is located between the city and the Sacramento River), as well as levees on the west side of the Sacramento River, that were designed and engineered to meet U.S. Army Corps of Engineers standards for levee stability (see Exhibit 4.9-2 on page 4.9-9 of the 2035 General Plan and CAP EIR [City of Woodland 2016b]). Because of the WRTP Specific Plan Area's distance from the Pacific Ocean, tsunamis would not represent a hazard. Seismic seiches have not been recorded in the Sacramento River north of the Delta; furthermore, levees on both sides of the Sacramento River have been designed and engineered to withstand seismic hazards such as seiches. Therefore, because the WRTP Specific Plan Area and the off-site improvement areas are not located in a flood hazard, seiche, or tsunami hazard zone, the WRTP Specific Plan and the off-site improvements would not result in increased risk of release of pollutants, and this impact is not addressed further in this EIR.

Violation of Water Quality Standards (Significance Thresholds 1 and 5) — As discussed in the 2035 General Plan and CAP EIR Impact 4.9-1 (pages 4.9-33 through 4.9-38) (City of Woodland 2016b), land use changes have the potential to alter the types, quantities, and timing of contaminant discharges in stormwater runoff. Sediment, trash, organic contaminants, nutrients, trace metals, pathogens (e.g., bacteria and viruses), and oil and grease compounds are common urban runoff pollutants that can affect receiving water quality. In addition, agricultural runoff commonly contains elevated levels of nutrients, pesticides, and herbicides.

However, before new urban development can proceed, a grading and drainage plan must be submitted to the City Department of Public Works that must incorporate stormwater pollution control as well as storm drainage design features to control increased runoff from the implementation of the WRTP Specific Plan, as required by Municipal

Code Chapter 16. The City's Urban Stormwater Quality Management and Discharge Control Ordinance requires implementation of BMPs where a discharge has the potential to cause or contribute to pollution or contamination of stormwater, the City's storm drainage system, or receiving waters. Urban development projects are also required to comply with the City's *Post-Construction Standards Plan* (2015) to reduce post-construction runoff through the incorporation of BMPs, LID, and hydromodification management techniques. Industrial and commercial facilities require appropriate NPDES permits/WDRs, and implementation of BMPs consistent with the *CASQA Industrial/Commercial BMP Handbook* (2019b) or its equivalent, including annual reporting of any structural control measures and treatment systems. Urban development projects must also comply with the requirements in the SWRCB's *General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities* (Construction General Permit) (Order 2009-009-DWQ as amended by Order No. 2012-0006-DWQ) with requires preparation of a SWPPP and implementation of BMPs designed to reduce erosion and pollutant transport. Furthermore, implementation of General Plan Policies 5.I.5, 5.I.7, and 7.A.4 are also designed to reduce the potential for violation of water quality standards and waste discharge requirements. The 2035 General Plan and CAP EIR included Mitigation Measure 4.9-1 (pages 4.9-38 and 4.9-39), which recommended adoption of General Plan Policy 5.I.4 related to implementation of LID features to improve stormwater quality. The 2035 General Plan and CAP EIR determined that after incorporation of General Plan Policy 5.I.4, the impact would be less than significant.

Since the WRTP Specific Plan Area has been in use for cultivation of row crops for decades, existing stormwater runoff from the WRTP Specific Plan Area, which flows into Willow Slough, likely contains elevated levels of nutrients, pesticides, and herbicides. Project implementation would reduce these agricultural pollutants. However, long-term operational discharges of contaminants into the City's stormwater drainage system and ultimate receiving waters would still occur with development of the WRTP Specific Plan, because conversion to urban land uses would increase the amount of impervious surfaces. Therefore, stormwater runoff that transports pollutants from parking lots, driveways, streets, rooftops, and sidewalks would increase. In addition, the presence of additional industrial, commercial, and other urban land uses that utilize potential pollutants (e.g., cleaning agents, pesticides, oil) could result in discharges if proper storage, application, and/or disposal does not occur. However, project applicants for future projects proposed under the WRTP Specific Plan, as well as the off-site South Regional Pond are required to comply with the stormwater, grading, and erosion control regulations described above and with General Plan Policies 5.I.4, 5.I.5, 5.I.7, 5.I.8, and 7.A.4; all of which are designed to reduce stormwater runoff, improve water quality, and prevent violations of water quality standards and waste discharge requirements as set forth in the Water Quality Control Plan for the Sacramento and San Joaquin River Basins (CVRWQCB 2018).

Design and construction of the off-site SR 113/County Road 25A intersection improvements are regulated by Caltrans, and would comply with requirements contained in the *Standard Plans and Specifications* (Caltrans 2018) and the *Highway Design Manual* (Caltrans 2020). Furthermore, Caltrans has its own NPDES permit issued by SWRCB (Order No. 2012-0011-DWQ, NPDES No. CAS000003), with which all Caltrans projects are required to comply. This NPDES permit regulates construction-related erosion and operational discharge on all Caltrans projects throughout the state (SWRCB 2015).

Therefore, impacts from WRTP Specific Plan construction and related infrastructure improvements related to violation of water quality standards are substantially mitigated by uniformly applied development standards, as provided by CEQA Guidelines Section 15183(f), and no additional CEQA review is required.

Substantial Depletion of Groundwater Supplies or Substantial Interference with Groundwater Recharge such that Sustainable Groundwater Management of the Basin would be Impeded (Significance Thresholds 2 and 5) — As discussed in the 2035 General Plan and CAP EIR Impact 4.9-4 (page 4.9-48) (City of Woodland 2016b), an increase in water demands and associated depletion of groundwater supplies could result from the land use changes throughout the City's Planning Area. In a partnership with the City of Davis, Woodland has secured water rights on the Sacramento River and the Woodland-Davis Clean Water Agency Regional Water Treatment Facility was designed to provide up to 18 million gallons per day (55 acre-feet per day) of surface water to Woodland. As part of the Woodland-Davis Regional Water Supply Project (which was completed in 2016), Woodland now has direct use of surface water, as well as the ability to store some of the treated surface water in the aquifer during low water demand months to be recovered and distributed to customers during high water demand months, under the City's aquifer storage and recovery program. The City also maintains wells for emergency use and for landscape irrigation in City parks. A limited amount of groundwater from three existing City wells is blended with the surface water; by adding surface water as well as recycled water (for industrial use) to the water supply that has previously been entirely dependent on groundwater, the potential for groundwater depletion is decreased even though implementation of the 2035 General Plan would involve projects that could increase water demand. The 2015 Urban Water Management Plan projects zero retail water to come from groundwater sources between 2020 and 2040; 100 percent of water supplies would come from surface water and recycled water supplies. Thus, the addition of surface water to Woodland's water supply portfolio will substantially reduce groundwater extractions, reduce reliance on groundwater resources, as well as improved water quality. The 2035 General Plan and CAP EIR determined that this impact would be less than significant.

The Sacramento Valley Groundwater Basin – Yolo Subbasin is a high priority basin as designated by DWR, but is not in a state of critical overdraft (DWR 2019). The Yolo Subbasin Groundwater Agency is the GSA responsible for preparation of the required GSP. The Yolo Subbasin GSP is in process and will be completed by January 1, 2022, as required by DWR (Yolo Subbasin Groundwater Agency 2020).

As discussed in the 2035 General Plan and CAP EIR Impact 4.9-4 (pages 4.9-47 through 4.9-50) (City of Woodland 2016b), the primary areas of groundwater recharge in the Woodland area are the Sacramento River and other active stream channels. There are no major groundwater recharge areas in the City. Groundwater recharge also occurs as rainfall infiltrating through the soil to the aquifer, particularly in agricultural and open space areas. When impervious surfaces associated with new urban development are constructed on soils with a high water infiltration rate, a localized reduction in groundwater recharge can occur. However, most soils in the City are composed of loams and clays, which typically have low infiltration rates. Furthermore, new urban development projects in the City are required to comply with the City's *Technical Guidance Manual for Stormwater Quality Control Measures* (2006b) and *Post Construction Standard Plan* (2015) and incorporate BMPs, such as conserving natural areas and minimizing impervious area, which would reduce potential project interference with groundwater recharge. In addition, new development is required to comply with General Plan Policy 5.I.4 requiring the implementation of LID features, which could have the potential to locally, and likely minimally, increase groundwater recharge through the construction of infiltrative storm drainage facilities. The 2035 General Plan and CAP EIR determined that this impact would be less than significant.

Implementation of the WRTP Specific Plan would convert a large agricultural area (approximately 350 acres, plus approximately 4 acres for the off-site South Regional Pond) to urban development with new impervious surfaces including streets, parking lots, and commercial, light industrial, and residential buildings. As discussed above, most of the WRTP Specific Plan Area and the off-site improvement areas are composed of hydrologic Group C soils

(i.e., the Brentwood, Capay, and Sycamore soil types), which have a slow infiltration rate when thoroughly wet and therefore have a high runoff potential (NRCS 2020). However, a limited amount of groundwater recharge does occur in the WRTP Specific Plan Area through the Reiff Group A soil and the Yolo Group B soil. As shown in Exhibit 2-8 (Chapter 2, "Project Description") and discussed in the *Woodland Research and Technology Park Specific Plan, Draft* (City of Woodland 2020b), the proposed site design includes approximately 20 acres of landscaped open space. Some of the water applied to landscaping in the open space and in other landscaped areas throughout the WRTP Specific Plan Area (particularly to lawn grass in the residential housing areas), the on-site detention basin, and the on-site conveyance channel along the east side of SR 113 and the north side of County Road 25A, as well as the proposed off-site South Regional Pond would percolate through the soil and reach the groundwater aquifer as recharge. There are no active stream channels or other substantial sources of groundwater recharge in the WRTP Specific Plan Area or the off-site improvement areas. As stated above, the WRTP Specific Plan is required to comply with the City's *Technical Guidance Manual for Stormwater Quality Control Measures* (2006b) and *Post Construction Standard Plan* (2015) and incorporate BMPs, such as conserving natural areas and minimizing impervious area, which would reduce potential project interference with groundwater recharge. The proposed off-site improvements to the existing SR 113/County Road 25A would occur in hydrologic Group C soils and would involve only a minor increase in impervious surfaces. The WRTP Specific Plan is also required to comply with General Plan Policy 5.I.4 requiring the implementation of LID features, could have the potential to locally, and likely minimally, increase groundwater recharge through the construction of infiltrative storm drainage facilities. Because development of the WRTP Specific Plan Area with urban land uses and the SR 113/County Road 25A interchange are planned as part of the City's General Plan, they will be included as part of regional planning efforts for the Sacramento Valley Groundwater Basin – Yolo Subbasin. Therefore, WRTP Specific Plan and associated off-site impacts from substantial depletion of groundwater supplies or substantial interference with groundwater recharge that would impede sustainable groundwater management of the basin are substantially mitigated by City-administered uniformly applied development standards, as provided by CEQA Guidelines Section 15183 (f), and no additional CEQA review is required.

On- and Off-site Erosion Impacts (Significance Threshold 3a) — As discussed in the 2035 General Plan and CAP EIR Impact 4.9-2 (pages 4.9-40 through 4.9-43) (City of Woodland 2016b), earth-moving activities associated with construction of new urban development would result in increased erosion and sedimentation, that could in turn result in degradation of waterways and conflict with beneficial uses, water quality objectives, and standards established in the as set forth in the Water Quality Control Plan for the Sacramento and San Joaquin River Basins (CVRWQCB 2018). In addition, accidental spills of construction-related contaminants (e.g., fuels, oils, paints, solvents, cleaners, concrete) could also occur during construction, thereby degrading water quality. Construction dewatering also has the potential to degrade water quality if proper dewatering procedures are not followed and water is not properly stored and disposed of.

Chapter 15.12 of the City of Woodland Municipal Code addresses erosion and sediment control under the City's Grading Ordinance. Project applicants for future projects proposed under the WRTP Specific Plan and supportive infrastructure improvements must obtain grading permits that include submittal of a soils engineering report and an engineering geology report specific to the project site, as required by Appendix Chapter 33 of the CBC, Section 3309. Chapter 8.08 of the City's Municipal Code regulates discharges into the municipal storm drain system including compliance with applicable provisions of construction NPDES permit requirements. Furthermore, projects that disturb more than 1 acre of land must comply with the requirements in the SWRCB *General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities* (Order 2009-009-DWQ as amended by Order No. 2012-0006-DWQ). The SWRCB general permit contains a numeric, two-part, risk-based

analysis process and requires development of a SWPPP and implementation of BMPs. The SWPPP must include a site map and a description of construction activities, and must identify the BMPs that will be employed to prevent soil erosion and discharge of other construction-related pollutants. Finally, project applicants for future projects proposed under the WRTP Specific Plan and supportive infrastructure improvements must comply with the City's *Engineering Standards: Design Standards, Standard Details and Construction Specifications* (City of Woodland 2016a). These standards apply to transportation, storm drainage, sewer, wastewater pumping, water distribution, graywater distribution, underground pipelines, and other improvements, and are designed, in part to avoid impacts related to geologic and seismic constraints. Furthermore, implementation of General Plan Policies 5.I.3, 5.I.5, and 5.I.7 are also designed to reduce the potential for violation of water quality standards and waste discharge requirements. The 2035 General Plan and CAP EIR included Mitigation Measure 4.9-2 (page 4.9-43), which recommended adoption of General Plan Policy 5.I.4 related to implementation of LID features to improve stormwater quality. The 2035 General Plan and CAP EIR determined that after incorporation of General Plan Policy 5.I.4, the impact would be less than significant.

As presented in Table 3.7-2 of this EIR (see Section 3.7, "Geology, Soils, Minerals, and Paleontological Resources"), most soils in the WRTP Specific Plan Area and the off-site improvement areas have a moderate erosion potential and a high stormwater runoff potential. In addition, the Reiff soil type has a high wind erosion potential. Development of the WRTP Specific Plan must occur in compliance with the existing land use, stormwater, grading, and erosion control regulations described above and must implement applicable General Plan Policies such as 5.I.3, 5.I.4, 5.I.5, and 7.A.4. Project applicants for future projects proposed under the WRTP Specific Plan and the off-site South Regional Pond are required to implement BMPs and develop and implement SWPPPs as required by CVRWQCB, and obtain grading permits from the City, all of which are specifically designed to minimize degradation of water quality to the maximum extent feasible. Design and construction of the off-site SR 113/County Road 25A intersection improvements is regulated by Caltrans, and would comply with requirements contained in the *Standard Plans and Specifications* (Caltrans 2018) and the *Highway Design Manual* (Caltrans 2020). Furthermore, Caltrans has its own NPDES permit issued by SWRCB (Order No. 2012-0011-DWQ, NPDES No. CAS000003), with which all Caltrans projects are required to comply. This NPDES permit regulates construction-related erosion and operational discharge on all Caltrans projects throughout the state (SWRCB 2015).

Therefore, impacts from WRTP Specific Plan construction and related off-site infrastructure improvements from construction-related degradation of water quality are substantially mitigated by uniformly applied development standards, as provided by CEQA Guidelines Section 15183 (f), and no additional CEQA review is required.

PROJECT IMPACTS

IMPACT 3.9-1 **Substantially Increase the Rate or Amount of Surface Runoff Resulting in Flooding, Create or Contribute Runoff Water which would Exceed the Capacity of Existing or Planned Stormwater Drainage Systems, Provide Substantial Additional Sources of Polluted Runoff (Significance Thresholds 3b and 3c).** *Implementation of the WRTP Specific Plan and the off-site supporting infrastructure would increase the rate and amount of surface water runoff (primarily from construction of new impervious surfaces), which could exceed the capacity of stormwater conveyance systems, result in on-site or off-site flooding, and result in additional sources of polluted runoff. This impact is considered* ***potentially significant****.*

As discussed in the 2035 General Plan and CAP EIR Impact 4.9-3 (pages 4.9-43 through 4.9-47) (City of Woodland 2016b), new urban development on currently undeveloped land would result in alteration of site-specific drainage patterns, which in turn could result in erosion, sedimentation, and on-site or downstream flooding. Increased peak flow rates may exceed drainage system capacities, exacerbate erosion in overland flow and drainage swales and creeks, and result in downstream sedimentation. Sedimentation, in turn, could increase the rate of deposition in natural receiving waters and reduce conveyance capacities, resulting in an increased risk of flooding. Erosion of upstream areas and related downstream sedimentation typically leads to adverse changes to water quality and hydrology. The addition of impervious surfaces and drainage infrastructure from urbanization results in increased runoff volumes and dry weather flows, increased frequency and number of runoff events, and increased long-term cumulative duration of flows, as well as increased peak flows.

However, the City of Woodland's *Storm Drainage Facilities Master Plan Update and Preliminary Engineering* (2006a) includes requirements for development to preserve water quality and minimize localized flooding during storm events. It outlines floodplains, design criteria, storm drainage water quality monitoring, and implementation of future facilities. The City's Drainage Master Plan was updated in 2017 to address issues specific to the South Urban Growth Area, particularly as related to additional urban development projected in the City's updated General Plan, in the *Storm Drainage Facilities Master Plan South Urban Growth Area* (City of Woodland 2017). Design Standards include drainage facility capacity criteria designed to ensure the containment and/or conveyance of the design storm. The City's *Engineering Standards: Design Standards, Standard Details and Construction Specifications* (City of Woodland 2016a) include design capacities for storm drains, open channels, bridges, culverts, regional storage facilities, and drains, as well as requirements to ensure access for maintenance and operation of drainage systems. All development projects in the City are required to comply with City's *Post Construction Standard Plan* (2015) to reduce post-construction runoff and control urban runoff pollution in compliance with of the City's Phase II MS4 permit through the incorporation of BMPs, LID, and hydromodification management techniques. This includes the requirement to treat stormwater runoff through evapotranspiration, infiltration, stormwater harvesting and reuse, or biotreatment. Hydromodification management requires regulated projects to slow and minimize the amount of runoff so that there is no net-increase in post-construction runoff flow rate as compared to the pre-construction value for a 2-year, 24-hour storm event (City of Woodland 2015:24). Furthermore, a SWPPP would be required in compliance with the NPDES Construction General Permit and would include BMPs to avoid construction-related erosion and sedimentation on- or off-site. Furthermore, implementation of General Plan Goal 5.I and Policies 5.I.1, 5.I.3, 5.I.4, 5.I.5, 5.I.7, and 7.A.4 are also designed to reduce on-site and downstream erosion and sedimentation and alteration of drainage patterns. The 2035 General Plan and CAP EIR included Mitigation Measure 4.9-3 (page 4.9-47), which recommended adoption of General Plan Policy 5.I.4 related to implementation of LID features to improve stormwater quality. The 2035 General Plan and CAP EIR determined that after incorporation of General Plan Policy 5.I.4, the impact would be less than significant (City of Woodland 2001:Section 6).

The City has determined that a new off-site regional detention basin, called the South Regional Pond, is necessary to detain a portion of the stormwater flows from the WRTP Specific Plan Area as well as future planned growth. The proposed South Regional Pond would detain stormwater flows from a portion of the WRTP Specific Plan Area. The South Regional Pond would be constructed to a size of approximately 4 acres, and would be located adjacent to and east of the southern portion of the WRTP Specific Plan Area, south of County Road 25A (Cunningham Engineering 2020). Because the South Regional Pond is outside of (but adjacent to) the City's Planning Area boundary, it was not included as part of the 2035 General Plan and CAP EIR. Construction of the proposed South Regional Pond would include clearing, excavating, and grading of the basin, and installing inflow and outflow

structures. The City would perform periodic maintenance activities once the basin is operational. The potential environmental impacts of constructing and operating the South Regional Pond are evaluated in all of the topic area sections throughout this EIR.

Preliminary stormwater engineering, in the form of a Stormwater Management Technical Memorandum, has been performed for the WRTP Specific Plan Area and surrounding areas that drain to the WRTP Specific Plan Area (Cunningham Engineering 2020). Stormwater in the northern portion of the WRTP Specific Plan Area drains to the east. As part of the Spring Lake Specific Plan, stormwater from the northerly portion of the WRTP Specific Plan Area was planned for future drainage to and detention in the existing off-site East Regional Pond, which was sized at the time of construction to accommodate flows from this portion of the WRTP Specific Plan Area with proposed development. The East Regional Pond functions as a water quality treatment basin and serves to attenuate post-development peak flows for a 100-year storm/10-day event (as required by the City). Furthermore, underground drainage pipelines adjacent to the WRTP Specific Plan Area to the east, in the Spring Lake development, were sized to accommodate projected future stormwater drainage outflows from development in the northern portion of the WRTP Specific Plan Area. A small portion of the WRTP Specific Plan Area adjacent to SR 113 would be required to completely retain, detain, and treat all of the stormwater flows that are generated within this approximately 30-acre area using LID measures and distributed water quality BMPs (to allow the large central proposed park area to fully function as a park, rather than integrating a detention basin). An existing unlined, on-site drainage channel along the east side of SR 113 would be modified (to a wider and deeper trapezoidal channel) to carry a portion of the WRTP Specific Plan Area's stormwater flows southward to a new underground drainage pipe, that would cross underneath County Road 25A and discharge to the South Regional Pond. An approximately 4-acre on-site water quality and hydromodification basin would be constructed in the southeast corner of the WRTP Specific Plan Area; this basin would receive flows from the southeastern portion of the WRTP Specific Plan Area. A new on-site underground drainage pipeline would be installed south of County Road 25A to convey flows in this area eastward to the proposed South Regional Pond. A network of appropriately sized underground drainage pipelines would be installed throughout the WRTP Specific Plan Area to convey stormwater flows to the on-site and off-site basins. Flows from the proposed on-site basin in the southeast corner and proposed South Regional Pond would be conveyed eastward along County Road 25A to the existing South Canal, where flows are conveyed northward to the City's storm drainage pumping facility at the intersection of County Road 103 and East Main Street. From the East Regional Pond (which would accept stormwater from the northern portion of the WRTP Specific Plan Area as described above), stormwater is conveyed from the pond to the Gibson Canal, then to the South Canal northward to the City's storm drainage pumping facility. From the pumping facility, all City flows are conveyed eastward to an outfall channel that discharges directly into the Yolo Bypass, approximately 4.5 miles northeast of the WRTP Specific Plan Area (City of Woodland 2006a: Map 14).

The City of Woodland *Storm Drainage Facilities Master Plan South Urban Growth Area* (City of Woodland 2017) estimates that 30 cubic feet per second of pumping and construction of the North Regional Pond will accommodate the buildout of the Spring Lake Specific Plan plus approximately 80 additional acres of currently unbuilt residential development, flowing to the existing Farmers Central Channel. It is assumed that non-residential development could alternatively be accommodated, as long as the development acreage is hydrologically equivalent to 80 acres of residential use. Based on the modeling conducted for the *Storm Drainage Facilities Master Plan South Urban Growth Area*, development of more than the equivalent of 80 acres within the WRTP Specific Plan Area would trigger further improvements to the new pump station constructed near the site of the existing South Canal Pump Station, the East Main Channel, and the Yolo Bypass Outfall.

However, in support of the more recent ongoing update of the City's Citywide Storm Drainage Facility Master Plan, Wood Rodgers provided preliminary findings to the City for revised baseline conditions from the overall City modeling being performed for the City's North Area. The findings of this recent downstream analysis indicate that the amount of developable acreage is likely higher without implementation of these downstream improvements. With the full combination of the North and South Areas of the City and the incorporation of the 2009 Yolo County rainfall, the South Area conditions have changed along the High Line Ditch. In the revised simulation, the volume of water spilling over the High Line Ditch under baseline is greater than previously estimated. With the recently installed infrastructure and a higher allowable spill over the High Line Ditch, it is anticipated that more than 80 acres of development in the South Area can occur before triggering new improvements (Nick Ponticello, personal communication, February 22, 2021). To extend development in the WRTP Specific Plan Area beyond the 80-acre residential equivalent, additional study will be necessary, if downstream improvements are not yet operational.

Design and construction of the off-site SR 113/County Road 25A intersection improvements is regulated by Caltrans, and would comply with requirements contained in the *Standard Plans and Specifications* (Caltrans 2018) and the *Highway Design Manual* (Caltrans 2020), as well as the Caltrans NPDES permit issued by SWRCB (Order No. 2012-0011-DWQ, NPDES No. CAS000003). Although only a small amount of additional impervious surfaces would be created by the proposed interchange improvements, the stormwater runoff from these improvements would flow onto the surrounding areas including the WRTP Specific Plan Area, and therefore must be included in stormwater planning for the WRTP Specific Plan.

Operational water quality treatment design for the WRTP Specific Plan Area would be addressed by implementing a combination of LID measures, standard treatment control BMPs, and 'end-of-pipe' temporary water quality storage within existing and proposed detention basins (Cunningham Engineering 2020). The NPDES General Permit also contains requirements related to hydromodification, including matching the post-project 2-year/24-hour peak flows to pre-project levels. The hydromodification requirements would be accomplished via a combination of upland LID-style runoff reduction measures and end-of-pipe detention storage within existing and/or proposed detention basins. As noted by Cunningham Engineering (2020) these measures could include the following:

- Small-scale distributed drainage management features such as shallow, decentralized surface detention areas and/or infiltration areas that are included in streetscapes and individual site landscapes as a design element (in addition to a functional requirement) throughout the WRTP Specific Plan Area;
- Reducing new impervious surfaces, which could be accomplished by using compact building footprints, alternative driveway layouts and/or materials, narrower roadway cross-sections (as appropriate), pervious pavement, and efficient parking to minimize the overall area of the lot on a per-parking-space basis;
- Disconnection of new impervious areas by placing pervious areas (e.g., landscaping and/or pervious pavement) downstream of a site's impervious surfaces (e.g., roofs and conventional pavement), with site grading/landscaping designs that provide for sheet flow from those impervious surfaces onto the pervious surface areas;
- Treatment control BMPs, which could include vegetated swales, stormwater planters, rain gardens, pervious pavement, and inclusion of a water quality treatment component as part of the detention basins.

In accordance with General Plan Policies 5.I.3 and 5.I.7, the *Technical Guidance Manual for Stormwater Quality Control Measures* (City of Woodland 2006b), and the *Engineering Standards: Design Standards, Standard Details*

and Construction Specifications (City of Woodland 2016a), project applicants for future projects proposed under the WRTP Specific Plan are required to design site-specific on-site stormwater systems and submit the proposed designs to the City for approval prior to the start of any construction activities. The WRTP Specific Plan identifies BMPs, LID, and hydromodification management techniques that will be incorporated into the site-specific stormwater system designs and operation as required by the City's *Post Construction Standard Plan* (2015) to reduce post-construction runoff and control urban runoff pollution in compliance with of the City's Phase II MS4 permit.

The proposed development in the WRTP Specific Plan Area would substantially increase the rate or amount of surface runoff, primarily as a result of new impervious surfaces. Because detailed drainage and stormwater flooding calculations and designs for the WRTP Specific Plan Area and the off-site SR 113/County Road 25A interchange improvements have not yet been performed, stormwater generated from implementation of the WRTP Specific Plan and the off-site interchange improvements could result in on- or off-site flooding, create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems, and/or provide substantial additional sources of polluted runoff. Therefore, this impact is considered **potentially significant.**

Mitigation Measures

Mitigation Measure 3.9-1a: Prepare Additional Storm Drainage Analysis for determining Amount of New Development Acreage Beyond the Previously Identified 80 Residential Acres Allowable in the South Urban Growth Area and Submit to the City for Review and Approval.

The WRTP shall be required to fund an additional stormwater drainage analysis that utilizes the revised baseline conditions modeling and includes detailed information defining the operational capacity of the newly-installed infrastructure. A model will then be created that incorporates the pump station, detention, and conveyance improvements that have already been constructed, and then incorporates the full buildout of the Spring Lake Specific Plan Development. At that point, the fully developed acreage of the WRTP Specific Plan will be added to determine the new developable acreage (in terms of stormwater drainage) that can be accommodated with current infrastructure. This additional drainage analysis will also be required to determine what additional storm drainage infrastructure is needed to support full buildout of the WRTP Specific Plan. Building permits for development beyond the identified currently developable acreage will only be approved with confirmation that the required storm drainage and water quality treatment infrastructure is in place.

Significance after Mitigation

Implementation of Mitigation Measure 3.9-1 would reduce the WRTP Specific Plan's impacts from increased stormwater runoff resulting in an increased need for stormwater conveyance, stormwater-related flooding, and stormwater pollutants to a **less-than-significant** level because appropriately sized pipelines and detention basins, along with the appropriate LID features and water quality BMPs, that are specifically engineered to ensure that WRTP Specific Plan Area flows are conveyed such that flooding does not occur and to provide appropriate water quality treatment, would be integrated as part of the design and implementation of the WRTP Specific Plan Area.

3.9.5 CUMULATIVE IMPACTS

WATER QUALITY STANDARDS, EROSION AND SEDIMENTATION, OPERATIONAL STORMWATER RUNOFF, CONVEYANCE CAPACITY, FLOODING, POLLUTANTS, AND REGIONAL BASIN PLANNING

As discussed in the cumulative analysis contained in the 2035 General Plan and CAP EIR (page 6-32) (City of Woodland 2016b), short-term construction and long-term operation of the urban development projects considered in the 2035 General Plan and CAP EIR Cumulative Scenario have the potential to generate impacts related to violation of water quality standards, erosion and sedimentation, construction-related water quality impacts, and alteration of drainages resulting in on-site and/or off-site downstream flooding. The proposed South Regional Pond would be adjacent to, but south of, the Specific Plan Area, and was not considered in the 2035 General Plan and CAP EIR. However, all development projects are required to comply with the SWRCB's statewide NPDES stormwater permit for general construction activity, other necessary site-specific WDRs or waivers under the Porter-Cologne Act, the *Storm Drainage Facilities Master Plan Update and Preliminary Engineering* (City of Woodland 2006a), the *Technical Guidance Manual for Stormwater Quality Control Measures* (City of Woodland 2006b), the *Engineering Standards: Design Standards, Standard Details and Construction Specifications* (City of Woodland 2016a), and the *Post-Construction Standards Plan* (City of Woodland 2015). The treatment component of the City's Phase II MS4 NPDES permit requires that all of the runoff generated by the design storm event from impermeable surfaces be treated on site. All development projects are also required to comply with applicable General Policies such as Goal 5.I and Policies 5.I.1, 5.I.3, 5.I.4, 5.I.5, 5.I.7, and 7.A.4. All of these state and local regulatory controls are designed to improve short-term and long-term water quality, reduce on-site and downstream erosion and sedimentation, and reduce alteration of drainage patterns leading to localized flooding. The 2035 General Plan and CAP EIR determined that cumulative effects related to water quality, erosion, and alteration of drainages would be less-than-cumulatively considerable.

Project applicants for future projects proposed under the WRTP Specific Plan and the off-site South Regional Pond, are required to comply with the State and local regulatory controls listed above, and Caltrans is required to comply with the terms and conditions of the SWRCB's NPDES permit and the Caltrans *Highway Design Manual*, all of which are designed to improve short-term and long-term water quality, and reduce on-site and downstream erosion and sedimentation to comply with regional planning in the Water Quality Control Plan for the Sacramento and San Joaquin River Basins (CVRWQCB 2018). Furthermore, implementation of Mitigation Measure 3.9-1 would require preparation of additional storm drainage analysis to determine the new developable acreage (in terms of stormwater drainage) that can be mitigated with current infrastructure and to identify the required infrastructure improvements required to accommodate full development of the WRTP Specific Plan Area. The storm drainage analysis would be reviewed and approved by the Cit. Building permits for development beyond the identified currently developable acreage will only be approved with confirmation that the required storm drainage and water quality treatment infrastructure is in place. Design and construction of the off-site SR 113/County Road 25A intersection improvements is regulated by Caltrans, and would comply with requirements contained in the *Standard Plans and Specifications* (Caltrans 2018) and the *Highway Design Manual* (Caltrans 2020), as well as the Caltrans NPDES permit issued by SWRCB (2015). The proposed WRTP Specific Plan and the off-site SR 113/County Road 25A interchange improvements were included as part of the cumulative analysis contained in the 2035 General Plan and CAP EIR, and there are no substantial changes to environmental conditions, regulatory updates, or the WRTP Specific Plan that require additional cumulative analysis or mitigation. Therefore, cumulative effects from implementing the WRTP Specific Plan in conjunction with development of related projects related to water quality, erosion and sedimentation, and operational stormwater runoff, conveyance capacity, flooding, pollutants, and regional basin planning would be **less-than-cumulatively considerable**.

GROUNDWATER RECHARGE, GROUNDWATER SUPPLIES, AND REGIONAL SUSTAINABLE GROUNDWATER MANAGEMENT

As discussed in the cumulative analysis contained in the 2035 General Plan and CAP EIR (page 6-33) (City of Woodland 2016b), development throughout the region would add impervious areas, which, depending on the specific location of such development, could adversely affect groundwater recharge. Therefore, projects in the region that are developed in areas of substantial groundwater recharge could result in a cumulatively significant impact. However, the City does not contain any areas of substantial groundwater recharge, such as groundwater recharge banks or active stream channels. Furthermore, most of the soils in the City are loams and clays, which typically have low infiltration rates. Finally, the City's Phase II MS4 permit requirements, the *Technical Guidance Manual for Stormwater Quality Control Measures* (City of Woodland 2006b), the *Engineering Standards: Design Standards, Standard Details and Construction Specifications* (City of Woodland 2016a), the *Post-Construction Standards Plan* (City of Woodland 2015), and General Plan Policy 5.I.4 require that all new urban development incorporate LID features which could have the potential to locally, and likely minimally, increase groundwater recharge through the construction of infiltrative storm drainage facilities. The 2035 General Plan and CAP EIR determined that these requirements would result in a less-than-cumulatively considerable contribution to a significant cumulative impact from reduction in groundwater recharge. However, the 2035 General Plan and CAP EIR also found that, although the City of Woodland has supported efforts to reduce water demand through conservation and other measures and surface water supplied by the Woodland-Davis Clean Water Agency's Regional Water Treatment Facility is the primary source of drinking water within the City's Planning Area, groundwater would still be used to supplement surface water supplies and could account for up to 30 percent of total demand in dry years. Therefore, the 2035 General Plan and CAP EIR determined that future development in the City's Planning Area could result in increased water demand that exceeds supply beyond the year 2035, due to lack of detailed planning beyond that time. Therefore, the 2035 General Plan and CAP EIR determined that future projects within the Planning Area would result in a cumulatively considerable contribution to the need for increased water supply, and that this impact was potentially significant and unavoidable.

The WRTP Specific Plan Area does not contain any active stream channels and most of the WRTP Specific Plan Area soils are rated by NRCS (2020) as hydrologic Group C (slow infiltration rate). Furthermore, project applicants for future projects proposed under the WRTP Specific Plan and the off-site South Regional Pond are required to comply with the same regulatory controls listed above including development of LID stormwater features. Caltrans is required to comply with the terms and conditions of the SWRCB's NPDES permit, and the Caltrans *Highway Design Manual*, both of which include operational stormwater design. The Yolo Subbasin Groundwater Agency is in the process of preparing a GSP, which will be completed by January 1, 2022 as required by DWR (Yolo Subbasin Groundwater Agency 2020). Because development of the WRTP Specific Plan Area with urban land uses and the SR 113/County Road 25A interchange are planned as part of the City's General Plan, they will be included as part of regional planning efforts for the Sacramento Valley Groundwater Basin – Yolo Subbasin. The GSP will incorporate regionally planned existing and future development throughout the Yolo Subbasin, including all of the projects considered in this cumulative analysis. The GSP is required by law to include projects that would be implemented on both a local and regional basis to improve groundwater sustainability, if the results of groundwater modeling performed for the GSP determine that future demand would exceed supply. The City of Woodland is a member of the GSA, and therefore is actively involved in groundwater sustainability planning. The proposed WRTP Specific Plan was included as part of the cumulative analysis contained in 2035 General Plan and CAP EIR, and there are no substantial changes to environmental conditions, regulatory updates, or the WRTP Specific Plan that require additional cumulative analysis or mitigation. Therefore, cumulative effects from implementing the WRTP

Specific Plan in conjunction with development of related projects related to substantial interference with groundwater recharge, depletion of groundwater supplies, or interference with regional groundwater sustainability planning would be **less-than-cumulatively considerable**.

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3.10 LAND USE PLANNING, POPULATION, AND HOUSING

3.10.1 INTRODUCTION

This section presents the environmental setting and evaluates potential impacts related to land use planning attributable to the WRTP Specific Plan. This section also identifies population, housing conditions, and employment in Woodland and analyzes the potential for implementation of the WRTP Specific Plan to have impacts related to population, housing, and employment.

The CEQA Guidelines note that comments received during the NOP scoping process can be helpful in "identifying the range of actions, alternatives, mitigation measures, and significant effects to be analyzed in depth in an EIR and in eliminating from detailed study issues found not to be important." (CEQA Guidelines Section 15083). Neither the CEQA Guidelines nor Statutes require a lead agency to respond directly to comments received in response to the NOP, but they do require that the comments be considered. Consistent with these requirements, these comments have been carefully reviewed and considered by the City and are reflected in the analysis of impacts in this section. The Yolo County LAFCo commented that it has adopted standards of evaluation that would be used to analyze and evaluate future annexation proposals; for the WRTP Specific Plan, the comment specifically identified impacts to agricultural resources, the housing need for the project, and water and water availability as key issues to be addressed. Appendix A of this EIR includes copies of all NOP comments received.

3.10.1 ENVIRONMENTAL SETTING

WRTP SPECIFIC PLAN AREA

The WRTP Specific Plan Area is bounded by the Spring Lake Specific Plan Area on the north and east, CR 25A and the City's Urban Limit Line to the south, and bound by SR 113 to the west (Exhibits 2-1 and 2-2). The WRTP Specific Plan Area consists of approximately 350 acres, outside the City limits but within the City's Sphere of Influence and Urban Limit Line. The WRTP Specific Plan Area consists of six parcels with relatively flat land in agricultural use, including one house and one barn along CR 25A, and is visible from SR 113.

Off-site improvement areas include a proposed drainage area (i.e., South Regional Pond) immediately south of the WRTP Specific Plan Area and adjacent to CR 25A, and improvements to the SR 113/CR 25A interchange adjacent to the southwest corner of the WRTP Specific Plan Area (Caltrans Off-site Improvement Area). There are two alternative footprints for the Caltrans Off-site Improvement Area that are currently under analysis, both of which were surveyed in 2019. Alternative 1 consists of approximately 37 acres of disturbance to construct new on- and off-ramps, and Alternative 2 consists of approximately 24 acres of disturbance to construct roundabouts. Both of the Caltrans alternatives consist of permanent and temporary impact areas in the Caltrans right-of-way and adjacent areas outside of the Caltrans right-of-way; these improvements are outside of the WRTP Specific Plan Area, but within the City's Planning Area. The proposed off-site South Regional Pond is adjacent to but south of the City's Sphere of Influence and Urban Limit Line. Easements will be required on the property south of CR 25A for the proposed South Regional Pond and for the interceptor/ conveyance facilities and access road along the east side of SR 113 and the south side of CR 25A to convey runoff to the proposed South Regional Pond.

The City of Woodland General Plan 2035 designates the WRTP Specific Plan Area as one of three subareas in the Specific Plan 1 (SP-1) new growth area, located in the southern part of the City's Planning Area. The WRTP Specific Plan Area is classified as Specific Plan (SP-1A) by the General Plan Land Use Diagram. Development of

the WRTP Specific Plan Area will require annexation into the City and pre-zoning prior to development. The WRTP Specific Plan will also require amending the City's Zoning Ordinance to reference the WRTP Specific Plan for allowable land use, development standards, performance standards, and design guidelines.

SURROUNDING LAND USES

The WRTP Specific Plan Area is surrounded by agricultural land to the south, SR 113 and agricultural land to the west, and urban development within the Spring Lake Specific Plan area on the north and east. A sports park and the Woodland Community and Senior Center are located within one-half mile west of the northern boundary of the WRTP Specific Plan Area, from Sports Park Drive.

POPULATION

The Sacramento Area Council of Governments (SACOG) estimates that the city of Woodland's total population increased from 49,151 in 2000 to 55,468 in 2010, which is a 12.9-percent increase over this 10-year period (City of Woodland 2013). The California Department of Finance (DOF) estimates that the population of Woodland was 60,742 as of January 2020, or an approximately 9.5-percent increase compared to the 2010 population (DOF 2020).

Based on the most recent long-range population forecasts developed by SACOG in support of the 2016 Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS), the population in the City of Woodland will increase to 66,028 by 2036 (SACOG 2016a). This represents an increase of approximately 19 percent over the 2010 estimated population.

HOUSING

The California Department of Finance estimates that the City of Woodland's total number of housing units increased from 19,806 in 2010 to 21,141 in 2020, or an approximately 7-percent increase over this 10-year period. The number of occupied households increased from 18,721 in 2010 to 20,433 in 2020, which represents an approximately 9-percent increase over this 10-year period. The average household size increased from 2.91 to 2.93 during this 10-year period. Approximately 70 percent of the housing units in 2020 were attached and detached single-family homes (DOF 2020).

SACOG estimates the number of housing units in the city of Woodland is forecast to increase to 24,180 by 2036, which represents an increase of approximately 14 percent over the 2020 estimated number of housing units (SACOG 2016a). SACOG further estimates the number of households is anticipated to increase from approximately 19,870 in 2018 to 23,347 in 2035 (City of Woodland 2013). This is an approximately 18-percent increase in the number of households.

EMPLOYMENT

SACOG estimates that the city of Woodland had 21,347 jobs in 2012 (SACOG 2016b). Based on the current employment totals and projections, the City of Woodland would have approximately 33,368 jobs by 2035 (City of Woodland 2013). This represents an increase of approximately 56 percent over the number of jobs in 2012.

As shown in Table 3.10-1, the city of Woodland has 26,445 employed civilians in the labor force. The largest employment sector for Woodland residents, with 25 percent of the total, is educational, health, and social services.

Retail jobs employ approximately 13 percent of the population and approximately 9 percent work in arts, entertainment, recreation, accommodation, and food services.

Table 3.10-1. City of Woodland Employment by Industry, 2013-2017

Industry	Estimate	Percent
Civilian labor force (16 years and over)	28,402	--
Employed civilian population 16 years and over	26,445	100%
Agriculture, forestry, fishing and hunting and mining	1,986	7.5%
Construction	1,448	5.5%
Manufacturing	2,136	8.1%
Wholesale	870	3.3%
Retail Trade	3,494	13.2%
Transportation and warehousing and utilities	1,317	5.0%
Information	192	0.7%
Finance, insurance, real estate, and rental and leasing	921	3.5%
Professional, scientific, management, administrative, and waste management services	2,053	7.8%
Educational, health, and social services	6,633	25.1%
Arts, entertainment, recreation, accommodation, and food services	2,356	8.9%
Other services (except public administration)	1,264	4.8%
Public administration	1,775	6.7%

Source: U.S. Census Bureau 2018: 2013-2017 American Community Survey, Table DP-03

As of 2019, the largest employers in the city were the Yolo County District Attorney, Target Distribution Center, Woodland Healthcare, Woodland Healthcare Foundation, Rite Aid Distribution Center, and Pacific Coast Producers (EDD 2019).

Approximately 54 percent of employed Woodland residents worked within the city in 2012. The next largest employment destination for residents was the city of Davis, at 10.2 percent, followed by unincorporated Yolo County at 9.2 percent (BAE Urban Economics 2013). A substantial number of people in the city are employed at UC Davis and at the Cache Creek Casino, Yolo County's largest private employer, located in the Capay Valley west of Woodland (BAE Urban Economics 2013).

Employees commuting to jobs in Woodland are from a diverse area, including Sacramento County (14.5 percent), unincorporated Yolo County (7.3 percent), Davis (6.1 percent), and West Sacramento (3.0 percent) (BAE Urban Economics 2013).

Unemployment

Unemployment rates in Woodland have historically exceeded unemployment rates throughout Yolo County and California. In 2018, the unemployment rate for Woodland was 5.3 percent, higher than the County rate of 4.2 percent (Employment Development Department [EDD] 2019). A portion of the city's high unemployment rate is likely attributable to the seasonal nature of activity in the agricultural areas that surround Woodland and that influence businesses located within the city, such as food processors and agricultural services and supplies companies, all of which tend to have lower labor needs during winter months (BAE Urban Economics 2013).

Jobs/Housing Relationship

The relationship between the location of jobs and housing can have important environmental ramifications. A better match between the number and types of jobs and the number of households and interests/skills of the local labor force can help to alleviate traffic congestion, shorten commute times, and reduce vehicle miles traveled (VMT) and the associated air pollutant emissions and noise associated with vehicular travel. Balancing jobs and housing in a smaller area can provide increased opportunities to use transit, bike, or walk to work in-lieu of driving. Commuting can result in more traffic congestion, air quality degradation, greenhouse gas generation, and noise generation.

In the broadest sense, the balance of jobs and housing is defined as an adequate supply of housing for workers employed in a defined geographic area. It is also important to consider the housing types and costs relative to the incomes associated with local jobs. Alternatively, a jobs/housing balance can be defined as adequate provision of employment in a defined area that generates enough local workers to fill the housing supply. An area that has too many jobs relative to its housing supply is likely (in the absence of offsetting factors) to experience substantial in-commuting, escalations in housing prices, and intensified pressure for additional residential development. Conversely, if an area has relatively few jobs in comparison to the number of employed residents, many of the workers are required to commute to jobs outside of their area of residence. In order to maximize the environmental benefits of a jobs/housing balance, there needs to be a nexus between the types and cost of housing proposed to be located near jobs to be provided, the education/skills required by those jobs relative to the local labor force, and the wages associated with those jobs. State law requires cities and counties to address the needs of all income groups in their housing elements. In the Sacramento region, the official definition of these needs is provided by SACOG for each city and county within its geographic jurisdiction, as further discussed in the Regulatory Setting below. As part of the 2035 General Plan Update, the City developed new land use designations for the 2035 General Plan, which accounted for development of the WRTP Specific Plan Area, to increase the number and allowable density of sites for housing development. The City's Housing Element was updated to reflect these changes and make appropriate revisions to the City's policies and programs for implementation, which was subsequently incorporated into the overall 2035 General Plan. The assessment of housing needs, inventory of resources, and constraints relevant to meeting the needs, took place in support of the update to the City's Housing Element in 2016; this assessment took into consideration population and employment trends, housing needs for all income levels, household characteristics, and other factors.

Another subtlety related to jobs-housing balance has to do with the concentration and location of basic (primary, exporting) and non-basic (population based) jobs. As discussed in SACOG's MTP/SCS (SACOG 2016b):

> "At the full regional scale, this principle is discussed as "jobs-housing balance," and means a balance of jobs and households so that the region does not have to import or export either jobs or housing, beyond the normal out- and in-commuting that happens in a mobile society. For the large sub-regions, especially around the three largest employment centers, it is also desirable to attempt to replicate the regional jobs-housing balance number. At smaller scales, sometimes the best, most realistic, mix focuses more on population-serving jobs (e.g., schools, retail, etc.) and less on base, or primary, sector jobs. It is, however, still a worthy goal to try to have a strong jobs-housing mix through as many subareas of the region as possible."

Beyond the relationship between jobs and housing, there is also an important relationship between jobs and workers. The number of housing units in a community has long been used as a representation of the number of workers and

worker residences in that given community. In reality, the number of workers per household varies widely across regions, and different housing types have the capacity for accommodating different numbers of workers. Additionally, workers in areas with a "good" jobs-housing balance may still have longer commutes if available housing in the area is unaffordable to workers filling local jobs.

The simplest measure of jobs/housing balance is an index based on the ratio of housing units (which influences the number of workers) to jobs in the area. Because many households have more than one wage earner, a desirable jobs-housing balance is often defined as a ratio greater than 1 to 1 but less than 2 to 1. An index below 1.0 indicates that there are more employed residents than jobs and may suggest that many residents are commuting to jobs outside the community. An index above 2.0 indicates that there are more jobs than employed residents, and may suggest that many employees are commuting in from outside the community. The six-county SACOG region has a current and projected ratio of 1.2 jobs per household. SACOG's goal is to move communities in each county closer to the regional average ratio of 1.2 jobs per household for growth between 2016 and 2040, including existing and new development (SACOG 2020).

SACOG estimated that total employment in the city of Woodland was 21,347 jobs in 2012, and that there were 20,052 housing units in in the city of Woodland in 2012 (SACOG 2016a), which results in an estimated jobs/housing ratio of 1.1. Based on data from the U.S. Census Bureau, DOF, and technical analysis in support of the 2035 General Plan, the 2035 General Plan projected a jobs/housing ratio of 1.67 at buildout of the General Plan in 2035 (City of Woodland 2017), inclusive of the WRTP Specific Plan Area buildout, indicating job growth would outpace housing growth, but would remain below the 2.0 index that, as noted above, may indicate there are more jobs than employed residents.

3.10.2 REGULATORY FRAMEWORK

The 2035 General Plan CAP EIR summarizes the federal, State, regional, and local regulatory framework on pages 4.10-8 through 4.10-20. Those aspects of the existing regulatory framework that are relevant to potential impacts of the WRTP Specific Plan are briefly highlighted below. Please see Section 4.10.3 of the 2035 General Plan and CAP EIR for more detail.

FEDERAL PLANS, POLICIES, REGULATIONS AND LAWS

There are no relevant laws, policies, plans, or programs that apply to the WRTP Specific Plan.

STATE PLANS, POLICIES, REGULATIONS, AND LAWS

State Housing Law

State law requires that all cities and counties provide a certain amount of housing to accommodate the demands of the growing population. The California Department of Housing and Community Development is responsible for determining the statewide housing need, while local governments and councils of governments determine the specific housing needs within their jurisdictions and prepare a Regional Housing Needs Allocation (RHNA). Construction of new housing is not mandated by the RHNA, which is intended as a planning tool and a guide to an equitable distribution of housing.

The City considered the need for a balance of housing types to meet the needs of existing and future residents as a part of the 2035 General Plan. The WRTP Specific Plan will be required to be consistent with the City's housing policies.

Government Code, Sections 65450 through 65457

Under California Government Code, sections 65450 through 65457, and the State General Plan Guidelines prepared by the Office of Planning and Research, a specific plan may be used to implement a general plan and its policies/programs. California Government Section 65451 mandates that a specific plan be structured as follows:

(a) A specific plan shall include a text and a diagram or diagrams which specify all of the following in detail:

a. The distribution, location, and extent of all land uses, including open space, within the area covered by the plan (see the land use section in Chapter 3 of the WRTP Specific Plan).

b. The proposed distribution, location, extent, and intensity of major components of public and private transportation, sewage, water, drainage, solid waste disposal, energy, and other essential facilities proposed to be located within the area covered by the plan and needed to support the land uses described in the plan (see Chapter 3 of the WRTP Specific Plan).

c. Standards and criteria by which development will proceed and standards for the conservation, development, and utilization of natural resources, where applicable (see Chapter 6 for information on the sequencing of infrastructure and Chapter 7 for administrative actions needed to implement the WRTP Specific Plan).

d. A program of implementation measures, including regulations, programs, public works projects, and financing measures necessary to carry out paragraphs 1, 2, and 3 (see Chapter 5 for design of the infrastructure system and Chapter 7 for WRTP Specific Plan administration and regulation, as well as financing measures for public improvements, needed to serve development within the WRTP Specific Plan Area).

(b) The specific plan shall include a statement of the relationship of the specific plan to the general plan.

This State guidance was used to develop the draft WRTP Specific Plan.

Government Code Sections 65919 to 65919.11

Government Code Sections 65919 to 65919.11 summarize procedures related to interagency referrals for different types of lead agency actions, including general plan updates. Among other referrals, this part of the Government Code provides a procedure and protocols for requesting counties keep cities informed regarding land use actions within the unincorporated portions of spheres of influences and planning areas.

Regional and Local Plans, Policies, Regulations, and Ordinances

Sacramento Area Council of Governments Metropolitan Transportation Plan/Sustainable Communities Strategy

SACOG is the Metropolitan Planning Organization for the Sacramento region (including Yuba, Placer, El Dorado, Sacramento, Yolo, and Sutter counties). The Regional Transportation Plan (called the Metropolitan Transportation

Plan [MTP] in the Sacramento region) is a long-term plan for a region's transportation system adopted by a Metropolitan Planning Organization. It includes a list of specific projects and is a prerequisite for receiving State and federal transportation funding.

Under the California Sustainable Communities and Climate Protection Act of 2008 (SB 375), the State sets target greenhouse gas emissions reductions from passenger vehicles for each region. SB 375 requires each major region in the state to integrate transportation, land use, and climate planning by adding a Sustainable Community Strategy (SCS) to its Regional Transportation Plan. The SCS must demonstrate attainment of regional greenhouse gas (GHG) emissions reduction targets, while accommodating the full projected population of the region. The combined MTP/SCS is federally required to be updated every four years. The region's most recent MTP/SCS was adopted in February 2020.

The land use forecast in the 2020 MTP/SCS is largely based on existing local general plans. The 2020 MTP/SCS land use scenario assumes development in downtown Woodland and in the southern portion of the city. In the MTP/SCS, SACOG categorized the urbanized land within its jurisdiction into four Community Types, according to land use and density/intensity. According to the MTP/SCS, three Community Types are represented in Woodland, as follows:

- **Center and Corridor Communities.** Land uses are typically higher density and more mixed than surrounding land uses. These areas are identified in local plans as historic downtowns, main streets, commercial corridors, rail station areas, central business districts, town centers, or other high density destinations. They typically have more compact development patterns, a greater mix of uses, and a wider variety of transportation infrastructure compared to the rest of the region. ***In Woodland, this Community Type designation is applied to the Downtown and East Street Corridors.***

- **Developing Communities.** These areas are typically, though not always, situated on vacant land at the edge of existing urban or suburban development; they are the next increment of urban expansion. Areas are identified in local plans as special plan areas, specific plans, or master plans and may be residential-only, employment-only, or a mix of residential and employment uses. Transportation options in Developing Communities often depend, to a great extent, on the timing of development. ***In Woodland, this Community Type designation is applied to the WRTP Specific Plan Area and the SP-1B and SP-1C areas west of SR 113, in addition to the Spring Lake Specific Plan Area.***

- **Established Communities.** Typically, these areas are adjacent to, or surrounding, Center and Corridor Communities. Local land use plans aim to maintain the existing character and land use pattern. Land uses are typically made up of existing low- to medium-density residential neighborhoods, office and industrial parks, or commercial strip centers. ***This Community Type represents all areas of Woodland outside those noted in the Community Types above***.

The fourth Community Type, which is not represented in Woodland, is Rural Residential. Rural Residential communities are typically located outside of urbanized areas and are predominately very low-density residential, with some small-scale hobby or commercial farming. While some unincorporated areas within Woodland's Urban Limit Line may currently exhibit characteristics similar to Rural Residential communities (specifically in unincorporated farmland areas), these areas have the potential to transition to higher intensity uses during the

SACOG planning period, as envisioned by the City's General Plan and Land Use Plan, as demonstrated by the growth assumptions in SACOG's 2020 MTP/SCS (SACOG 2019).

SACOG has not identified any Transit Priority Areas within Woodland. These are defined as areas within one-half mile of a rail station stop or a high-quality (minimum headways, or time between trains/buses, of 15 minutes during peak hours) transit corridor. Woodland has no rail transit, and bus headways all exceed 15 minutes.

Regional Housing Needs Plan

SACOG prepares the Regional Housing Needs Plan (RHNP) for the Sacramento region to determine potential locations for future housing stock based on projected population growth, employment trends, and development suitability as forecast in the MTP/SCS. The RHNP allocates to SACOG cities and counties their "fair share" of the region's projected housing needs, known as the Regional Housing Needs Assessment (RHNA). The city of Woodland's RHNA for the planning years 2021 through 2029 projected a need for the construction of an additional 3,087 housing units, allocated as follows: very low income (663 units), low income (399 units), moderate income (601 units), and above moderate income (1,424 units) (Table 3.10-2).

Table 3.10-2. Housing Unit Allocation for the City of Woodland for 2022 through 2029

Income Group	New Units Needed
Very Low	633 (20.5%)
Low	399 (12.9%)
Moderate	601 (19.5%)
Above Moderate	1,424 (46.1%)
Total	**3,087**

Source: SACOG 2020a

Sacramento International Airport Land Use Compatibility Plan

Public Utilities Code Section 21675 requires each airport land use commission to formulate an airport land use compatibility plan (ALUCP). ALUCPs are intended to promote compatibility between airports and the land uses that surround them by addressing noise, overflight, safety, and airspace protection concerns. Each ALUCP prevents exposure to excessive noise and safety hazard within an airport influence area. California Government Code Section 65302.3 further requires that general plans be consistent with an adopted ALUCP. The 2013 Sacramento International Airport (SMF) ALUCP was prepared by SACOG, which serves as the Airport Land Use Commission for the region. The western boundary of the SMF Influence Area travels north-south through Woodland, following the western edge of the property that houses the City's Water Pollution Control Facility (wastewater treatment plant). The Sacramento International Airport ALUCP is described further in Section 3.8.2 Regulatory Framework of Section 3.8 of this EIR.

Local Agency Formation Commission 2018 City of Woodland Municipal Service Review

The Yolo Local Agency Formation Commission (LAFCo) is an independent agency. Yolo County LAFCo is empowered to review, approve, or deny boundary changes, city annexations, consolidations, special district formations, incorporations for cities and special districts, and to establish local Spheres of Influence. The Sphere of Influence for each governmental agency is a plan for its future boundary and service area. The LAFCo function is

outlined in Government Code, Section 56000 et seq., known as the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000. State Government Code Sections 56425 and 56430 require that when the LAFCo updates a Sphere of Influence, a Municipal Service Review must be prepared. The most recent Municipal Services Review for Woodland was prepared in 2018 (adopted in January 2019) for the Sphere of Influence Update that aligned the City's Sphere of Influence with the City's approved Urban Limit Line.

City of Woodland 2035 General Plan

The City of Woodland General Plan (2035) designates the WRTP Specific Plan Area as one of three subareas in the Specific Plan 1 (SP-1) new growth area, located in the southern part of the City's Planning Area. The WRTP Specific Plan Area is classified as Specific Plan (SP-1A) in the General Plan Land Use Diagram. The General Plan contains the overarching vision for the Woodland Research and Technology Park (SP-1A) (New Growth Areas [Planned Development], p. LU-55).

> The General Plan envisions SP-1A to develop as a mixed-use neighborhood anchored by a research and technology business park in the "Southern Gateway" located at CR 25 and SR 113. The highest intensity of development will occur within the business park area, providing a prime opportunity for job creation within Woodland. The remainder of SP-1A will be largely residential with some open space and recreation areas… Sustainable development will be encouraged in SP-1 through the use of renewable energy sources and water conservation tools with the goal of striving to achieve zero net energy at the building and neighborhood level to the extent feasible.

Policy 2.L.2 of the General Plan (Specific Plan-1A) states:

> Promote development of SP-1A as a mixed-use residential district anchored by a research and technology business park in the Southern Gateway area at CR 25 and SR 113. Concentrate the highest intensity of development within and in close proximity to the business park area, with lower density, largely residential uses to the north. Encourage sustainable development through the use of renewable energy sources and water conservation tools with the goal of striving to achieve zero net energy at the building and neighborhood level to the extent feasible.

The WRTP Specific Plan provides for the mix of uses envisioned by the 2035 General Plan.

> The City of Woodland's 2035 General Plan document sets the overall land use and planning policies affecting development in the city, including this Specific Plan. The General Plan establishes the long-term vision for the physical development of the city and outlines the policies, standards, and programs to guide the day-to-day decisions of the city's development through the year 2035. The WRTP Specific Plan is required to be consistent with the General Plan and includes a "statement of the relationship of the specific plan to the general plan" (Government Code Section 65451 [b]).

The 2035 General Plan provides the following guidance for the Woodland SP-1A planning area.

- **Goal 2.L New Growth Areas.** Encourage the creation of well-defined, balanced neighborhoods in new Specific Plan areas.

- **Policy 2.L.2 Specific Plan-1A (SP-1A).** Promote development of SP-1A as a mixed-use residential district anchored by a research and technology business park in the Southern Gateway area at CR 25A and SR 113. Concentrate the highest intensity of development within and in close proximity to the business park area, with lower-density, largely residential uses to the north.

► **Goal 2.M Neighborhoods in New Specific Plan areas.** Create distinctive and sustainable new neighborhoods.

- **Policy 2.M.1. Compact Form.** Promote the development of compact, complete neighborhoods that locate services and amenities within walking and biking distance of neighborhood residents, reducing the need to travel by car.

- **Policy 2.M.2 Mixed Uses.** Require neighborhood design that incorporates a mix of residential and non-residential development that addresses the basic daily needs of residents and employees. Each new growth area must incorporate some new employment-generating uses.

- **Policy 2.M.3 Housing.** Design neighborhoods to include a mix of housing types at a range of densities and cost levels that accommodate residents at all stages of life through the design and location of housing. Residential uses must achieve an overall minimum average density of eight dwelling units per gross acre across the Specific Plan.

- **Policy 2.M.4 Pedestrian and Bike Mobility.** Design streets to facilitate pedestrian and bicycle mobility in order to reduce automobile dependence and vehicle miles travelled. Utilize a modified and traditional street grid with walkable blocks. Integrate a seamless greenbelt/trail system that provides recreational and transportation benefits.

- **Policy 2.M.5 Efficiency.** Strive for net-zero energy development by encouraging buildings to be constructed so that they consume less energy, water, and other resources; allow natural ventilation; use daylight effectively; and facilitate the use of clean energy whenever possible.

- **Policy 2.M.6 Green Building.** Encourage sustainable, "green" building practices and construction techniques so that structures are designed, built, and renovated in a sustainable and resource-efficient manner.

- **Policy 2.M.7 Characteristics of Older Neighborhoods.** Incorporate the best characteristics of older neighborhoods, such as a well-defined street grid with smaller blocks, front porches, shallower front setbacks, historic style lighting and monument features to create a sense of place.

City of Woodland Housing Element

The Housing Element differs from other General Plan elements, which have a longer time horizon. The Housing Element serves as an integral part of the General Plan, but is updated more frequently to ensure its relevancy and accuracy. The City submitted the 2013 Housing Element to the State Department of Housing and Community Development and received a letter dated August 8th, 2013 informing the City that the Housing Element met the statutory requirements of State housing element law. The City Council adopted the 2013 Housing Element on October 15, 2013. As shown in Table 3.10-2, the RHNP was recently updated in 2020, with a revised RHNA. The current Housing Element and Land Use Plan was developed with consideration for the City of Woodland's RHNA

for the planning period of 2013 through 2021 (as shown below in Table 3.10-3), which projected a need for the construction of an additional 1,877 housing units, allocated as follows: 195 extremely low income units, 195 very low income units, 274 low income units, 349 moderate income units, and 864 above moderate income units. It is the responsibility of the local jurisdictions within the SACOG region to adopt a housing element by August 2021 that demonstrates how they can accommodate the most recently assigned RHNA numbers for the years 2022 through 2029 (shown above in Table 3.10-2) through zoning. The City met the rezoning requirement for the 2013-2021 planning period in May 2018 through the adoption of the Interim Zoning Ordinance.

Table 3.10-3. City of Woodland Regional Housing Needs Allocation for 2013–2021

Income Grouping	Projected Housing Units (2013)	Percent of Housing Need
Extremely low[1]	195	10.4
Very low[1]	195	10.4
Low	274	14.6
Moderate	349	18.6
Above-moderate	864	46.0
Total	**1,877**	**100.0**

Notes:

[1] The very low income housing need allocation provided by SACOG was 380 units, and the City has chosen to distribute 50 percent of this total into the extremely low income category.

Source: City of Woodland 2013

The 2013 Housing Element establishes the City's goals, policies, and programs for housing through 2021, focusing on the following:

- promoting the provision of adequate housing for all persons in the City, including those with special housing needs and to emphasize the basic human need for housing as shelter;
- encouraging the preservation, maintenance and improvement of existing housing and the replacement of unsafe or dilapidated housing;
- assuring that housing opportunities are open to all without regard to income, source of income, marital status, familial status, age, sex, sexual orientation, religion, creed, color, race, national origin, ancestry, or disability; and
- establishing development and construction standards which encourage energy conservation and sustainable development practices in residential development.

City of Woodland Municipal Code

Woodland Subdivision Ordinance, Chapter 16 of the Municipal Code

Woodland's Subdivision Ordinance includes regulations for all matters related to the division or subdivision of land in the city. The subdivision regulations found in the Municipal Code meet the requirements of the Subdivision Map Act (Government Code Division 2, Chapter 4, Article 1).

Woodland Zoning Ordinance, Chapter 17 of the Municipal Code

Woodland's Zoning Ordinance is the key regulatory tool meant to implement the General Plan, specifically the Land Use Element. It consists of a zoning map defining the location of districts and a code detailing requirements for each district.

The Zoning Ordinance establishes specific, enforceable standards with which development must comply such as minimum lot size, maximum building height, minimum building setback, and a list of allowable uses. Zoning applies lot-by-lot, whereas the General Plan has a community-wide perspective. State law requires the City's Zoning Ordinance to be consistent with the General Plan. If a property happens to have a zoning designation that is not consistent with the General Plan land use designation, only the General Plan land use designation is enforceable.

Woodland's Zoning Ordinance includes various zones for residential, commercial, industrial, open space, and agricultural uses, as well as several overlay zones that apply to specific conditions (e.g., floodplain overlay, transition overlay, entryway overlay, planned development overlay, and similar). Provisions pertaining to landscaping, signs, and parking are covered in separate sections. The Zoning Ordinance also includes administrative provisions describing the processes for variances, conditional use permits, amendments, and modifications.

The WRTP Specific Plan Area does not have a City zoning designation because it lies outside of the current City limits, within unincorporated Yolo County. Current County land use and zoning designations for the SP-1A area are shown in Exhibit 3.10-1. SP1-A is identified within the 2035 General Plan as "New Growth (Planned Development)" and designated as "Specific Plan."

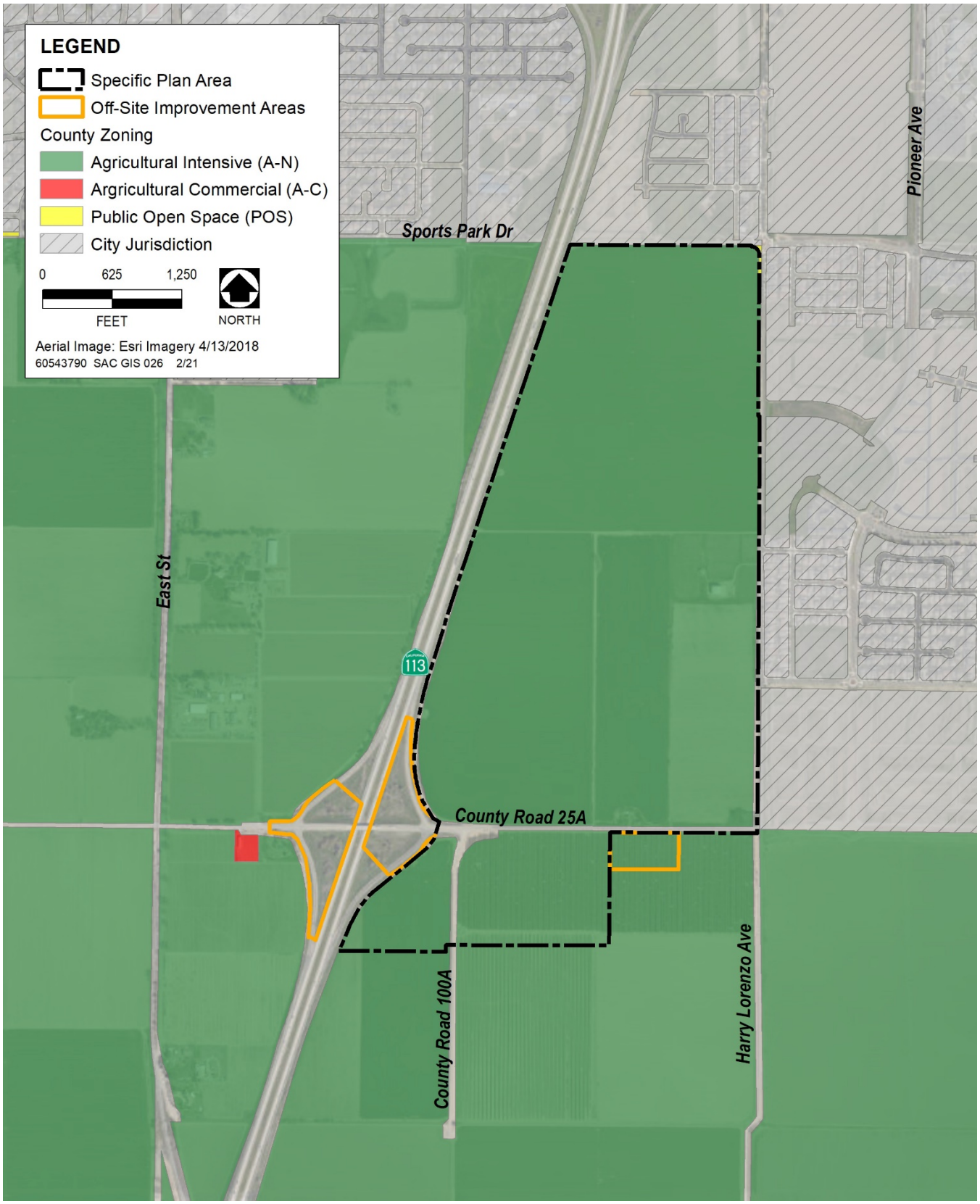
As addressed in Government Code Section 65450, a specific plan is a comprehensive planning and zoning document for a defined geographic region of a city. A specific plan implements the City's general plan by providing a special set of development policies and standards that are applied to the specific plan area, and by specifying zoning, needed infrastructure, and an infrastructure financing plan to facilitate implementation. The 2035 General Plan Update requires that major new residential development on "greenfield" or previously undeveloped land will be planned through the Specific Plan process. This WRTP Specific Plan establishes zoning and development standards for the SP-1A area, consistent with the vision of the 2035 General Plan and the 2035 General Plan Policy 2.L.2.

3.10.3 Environmental Impacts and Mitigation Measures

Methodology

The 2035 General Plan and CAP EIR addresses impacts of development of the City's Planning Area including the WRTP Specific Plan Area. Consistent with Section 15183(b) of the CEQA Guidelines, the following analysis focuses on project-specific significant effects of the WRTP Specific Plan that: a) are peculiar to the WRTP Specific Plan or the site; b) were not addressed in the 2035 General Plan and CAP EIR (including off-site or cumulative impacts); or c) would be more severe than previously described based on substantial new information.

The WRTP Specific Plan was analyzed against existing, on-the-ground land uses to determine impacts related to land use planning and existing communities. The examination of population, employment, and housing impacts is based on information obtained from review of the WRTP Specific Plan and supporting analysis and documentation, as well as a review of available population, employment, and housing projections from the City of Woodland



Source: Yolo County 2021

Exhibit 3.10-1. Yolo County Zoning Designations

General Plan, SACOG, California Department of Finance, U.S. Census, and other sources, as cited. The WRTP Specific Plan was also compared with a variety of adopted plans, policies, and regulations, with a focus on inconsistencies and conflicts that could cause a significant environmental impact beyond that addressed in the environmental topic-specific sections of this EIR.

The WRTP Specific Plan would provide for a variety of housing types and non-residential land uses, as well as parks and open space and supportive public facilities and infrastructure. For the purposes of analysis, this EIR assumes the development of approximately 1,600 new dwelling units, 2.2 million square feet of non-residential building space, the opportunity for up to 5,000 jobs, and 21.8 acres of parks and other types of open space. The total number of dwelling units, the number of units shown for each land use designation, total square footage, and number of employees that could be accommodated are all *assumptions* used for the purposes of informing related planning efforts and the analysis of environmental impact of the Specific Plan. Future developments within the WRTP Specific Plan Area will be reviewed against the development standards and guidelines in the WRTP Specific Plan and analysis in this EIR to ensure consistency with these standards, guidelines, and assumptions.

Specific indirect impacts associated with increased population, housing, and employment, such as traffic congestion, air quality degradation, and noise generation, are addressed in each technical section of this EIR, as appropriate. These technical sections provide a detailed analysis of other relevant environmental effects as a result of development of the proposed WRTP Specific Plan. This section focuses on any additional impacts related to population, employment, or housing not already fully addressed and mitigated, where appropriate, in other sections of this EIR.

THRESHOLDS OF SIGNIFICANCE

The proposed WRTP Specific Plan may have a significant impact related to land use planning, population, and housing if it would:

1. physically divide an established community;

2. cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect;

3. induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure); or

4. displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere.

IMPACTS NOT DISCUSSED FURTHER

The following discussion summarizes the impacts of the WRTP Specific Plan that are not discussed further in this document because either, a) there is no impact, or b) none of the factors triggering additional environmental review (as found in Section 15183(b)) exist because an impact was addressed as a part of the 2035 General Plan and CAP EIR and/or substantially mitigated by uniformly applied development standards (CEQA Guidelines Section 15183[f]). Uniformly applied development standards include the 2035 General Plan, the CAP, existing City regulations and standards, design review requirements, and impact fee programs.

Physically Divide an Established Community (Significance Threshold 1) —The WRTP Specific Plan would not physically divide an established community. Only one rural residence is within the WRTP Specific Plan Area and no residents are within the off-site improvement areas. This residence is not formally or informally known as a community. Implementing the WRTP Specific Plan would not physically divide an established community. Therefore, this issue is not evaluated further in this EIR.

Conflict with an Airport Land Use Compatibility Plan (Significance Threshold 2) — The WRTP Specific Plan Area and off-site improvement areas are outside of the Yolo County Airport and Sacramento International Airport Influence Areas[1]. Issues relating to potential conflicts with an Airport Land Use Compatibility Plan are discussed in Section 3.8, "Hazards and Hazardous Materials," of this EIR. Therefore, this issue is not evaluated further in this section.

Conflict with the Yolo County General Plan and Planning Regulations (Significances Threshold 2) — As discussed in the 2035 General Plan and CAP EIR Impact 4.10-2 (pages 4.10-24 through 4.10-26) (City of Woodland 2016), the 2035 General Plan proposes land use designations for all parcels within the City's Planning Area, including on unincorporated county land. Yolo County has jurisdiction over unincorporated land in the County, including the WRTP Specific Plan Area, but approval and implementation of the WRTP Specific Plan requires no discretionary review by the County once the WRTP Specific Plan Area is annexed into the City's jurisdictional boundary, so the County's policies and standards do not apply.

The South Regional Pond would not be annexed to the City. Land use inconsistencies resulting from development of the South Regional Pond and the Yolo County General Plan policies are not physical effects on the environment under CEQA unless it relates to a physical impact on the environment. Each technical section of this EIR provides a detailed analysis of other relevant physical environmental effects that could result from development of the South Regional Pond, as appropriate. The proposed WRTP Specific Plan would not conflict with the land use designation or zoning for the area proposed for the South Regional Pond in a way that would generate any adverse physical impacts beyond those addressed in detail in the environmental sections of this EIR (air quality, agricultural resources, biological resources, cultural resources, etc.).

The WRTP Specific Plan Area is located outside the current City limits and will require annexation into the City prior to development. The WRTP Specific Plan Area is within the City's Sphere of Influence and Urban Limit Line.

The 2035 General Plan requires annexation before provision of City services to the area.

- **Policy 2.B.6** Other Development in Unincorporated Areas within the Urban Limit Line. Prior to the provision of City services to unincorporated areas within the Urban Limit Line, require those unincorporated properties to be annexed into the City, or that a conditional service agreement be executed agreeing to annex when deemed appropriate by the City.

There are no adverse physical environmental impacts related to Yolo County policies or standards that are not addressed in the General Plan and CAP EIR. Conflicts the Yolo County General Plan are addressed through the

[1] Airport Influence Areas are defined as the area in which current or future airport-related noise, overflight, safety, or airspace protection factors may significantly affect land uses or necessitate restrictions on those uses.

City's review and processing of the WRTP Specific Plan, which includes prezoning and annexation. As provided by CEQA Guidelines Section 15183(f), no additional CEQA review is required.

Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure) (Significances Threshold 3) — As discussed in the 2035 General Plan and CAP EIR Impact 4.10-1 (pages 4.10-26 through 4.10-30) (City of Woodland 2016), the 2035 General Plan anticipates development of currently undeveloped areas, which would result in infrastructure being extended into areas that are currently undeveloped and could result in pressure to plan for and entitle development beyond that anticipated under the 2035 General Plan. General Plan Policy 2.L.2 promotes development of SP-1A (the WRTP Specific Plan Area) as a mixed-use residential district, indicating that population growth in this area was considered. The WRTP Specific Plan Area had been subject to planning prior to the City's General Plan update, as well, as a part of broader planning for the Spring Lake Specific Plan Area and associated infrastructure master planning. More information on consistency with the 2035 General Plan is found below in Impact 3.10-1.

The 2035 General Plan includes specific policies for both infill and new development that would avoid unplanned development that could be induced through infrastructure expansions into new growth areas (Policy 8.C.2 and Policy 8.C.5). This reduces the potential for unplanned, induced growth. In addition, the City's ultimate boundaries are circumscribed by a permanent Urban Limit Line established by a vote of the people in 2006 (Policy 2.A.1). The Urban Limit Line may only be modified by another vote by the people, and the initiative measure also places restrictions on the provision of services outside of the Urban Limit Line. The WRTP Specific Plan Area is within the Urban Limit Line. This provides an effective constraint to induced growth outside of the boundary.

As stated in the 2035 General Plan and CAP EIR, growth inducement may indirectly lead to environmental effects. Such environmental effects may include increased traffic, degradation of air quality, conversion of agricultural land to urban uses directly from population and employment growth and indirectly from development associated with goods and services needed by such growth. Physical impacts associated with development of residential and nonresidential land uses, such as traffic, air quality degradation, noise generation, greenhouse gas emissions, and increased demand for public services and utilities, are evaluated in the respective specific resource areas throughout this EIR. The actual level of buildout and the timing of construction and development activities is subject to market conditions, economic trends, and other factors beyond the City's control. The 2035 General Plan and CAP EIR determined that this impact was less than significant. There are no impacts that are peculiar to the WRTP Specific Plan Area that were not addressed in the 2035 General Plan and CAP EIR. As provided by CEQA Guidelines Section 15183(b), no additional CEQA review is required.

Displace Substantial Numbers of Existing People or Housing (Significance Threshold 4) — As previously stated, only one rural residence is within the WRTP Specific Plan Area. Implementation of the WRTP Specific Plan could potentially result in the demolition of the one residence that is currently located within the WRTP Specific Plan Area. However, the demolition of one residence when compared to the number of existing residences currently located in Woodland and in the unincorporated county is very minimal. Due to the low number of homes that could potentially be demolished with development of WRTP Specific Plan and because numerous homes are available, the City does not consider this level of displacement to be substantial. The WRTP Specific Plan would not displace substantial numbers of existing people or housing. Therefore, this issue is not evaluated further in this EIR.

PROJECT IMPACTS AND MITIGATION MEASURES

IMPACT 3.10-1 **Conflict with the Woodland 2035 General Plan and Municipal Code (Significance Threshold 2).** *Implementation of the proposed WRTP Specific Plan could be inconsistent with policies adopted to avoid or mitigate an environmental impact. This impact is considered* ***less than significant****.*

Specific plans, under State law, are required to be consistent with the relevant jurisdiction's general plan. The environmental topic-specific sections of this EIR include a discussion of relevant General Plan policies and implementation programs, which are used to frame mitigation measures presented throughout this EIR.

The WRTP Specific Plan is one of three subareas designated by the City of Woodland General Plan 2035 within the Specific Plan 1 (SP-1) new growth area. Referred to as "SP-1A" in the General Plan, the City "envisions the Specific Plan to develop as a mixed-use neighborhood anchored by a research and technology business park in the 'Southern Gateway' [to the city] located at CR 25A and SR 113" (City of Woodland 2017, page LU 2-55). According to direction in the General Plan, for the WRTP Specific Plan Area:

> "The highest intensity of development will occur within the business park area, providing a prime opportunity for job creation within Woodland. The remainder of SP-1A will be largely residential with some open space and recreation areas."

As directed by the General Plan (Policy 2.L.2, page LU 2-77), the City will:

> Promote development of SP-1A as a mixed-use residential district anchored by a research and technology business park in the Southern Gateway area at CR 25 and SR 113. Concentrate the highest intensity of development within and in close proximity to the business park area, with lower-density, largely residential uses to the north. Encourage sustainable development through the use of renewable energy sources and water conservation tools with the goal of striving to achieve zero net energy at the building and neighborhood level to the extent feasible.

The WRTP Specific Plan Area is identified "New Growth (Planned Development)" and designated as SP-1A in the General Plan, but does not currently have specific City land use zoning designations. Because the WRTP Specific Plan Area is outside of the current City limits, development of the WRTP Specific Plan will require annexation into the City and pre-zoning prior to development. The WRTP Specific Plan will also require amendment of the City's Zoning Ordinance.

Table 3.10-4 provides a discussion of the WRTP Specific Plan's consistency with the General Plan. Tables 3.5-1 and 3.5-2 in Section 3.5, "Climate Change, Greenhouse Gas and Energy," of this EIR, lists the 2035 General Plan policies relevant to greenhouse gas emissions and the relevant policies of the City's Climate Action Plan, respectively, and briefly explains the WRTP Specific Plan consistency with these policies.

Table 3.10-4. Woodland General Plan Consistency Analysis

Policy No	Text	Consistency Discussion
Policy 2.A.3 Agricultural Mitigation	For impacts to agricultural land within the Urban Limit Line, require one acre to be permanently conserved for every acre converted to urban development (1:1 ratio). The farmland being conserved must be of the same Farmland Mapping and Monitoring Program type (Prime Farmland, Farmland of Statewide Importance, Unique Farmland, Farmland of Local Importance) as the farmland that is being converted, or of a type of higher quality, and the conserved farmland should be located outside of, but as close to the Woodland Urban Limit Line as possible.	**Consistent:** The WRTP Specific Plan is required to implement the City's Agricultural Ordinance, as discussed in Section 3.2, "Agricultural and Forestry Resources," of this EIR.
Policy 2.B.1 Existing Specific Plan Areas	New Specific Plans shall examine impacts on the completion of infrastructure and amenities within existing Specific Plan areas that are still developing.	**Consistent:** As described in Section 3.14, "Utilities," of this EIR, construction of water and wastewater conveyance infrastructure would be required within the WRTP Specific Plan Area; however, surrounding development has been planned with consideration for development within the WRTP Specific Plan Area and provides adequate utility connections, facilities, and supply to provide for existing development, other specific plan areas that are still developing (e.g. Spring Land Specific Plan area), and the proposed development within SP-1A. A technical memorandum (BAE Urban Economics 2020) has been prepared in support of this EIR to assess the potential impacts of the housing components of the proposed WRTP Specific Plan on the continuing buildout of Spring Lake residential units, specifically regarding potential impacts on the timely completion of public improvements specified in the Spring Lake Specific Plan. The technical analysis finds that, based on the current status and projected build out of Spring Lake, the WRTP Specific Plan is not anticipated to delay the timing of completion of remaining infrastructure or amenities to be built as part of the Spring Lake Specific Plan.
Policy 2.C.3 Alternative Transportation	Actively support and facilitate mixed-use retail, employment, schools, and residential development around existing and future transit stops, bike routes, and pedestrian paths.	**Consistent:** The WRTP Specific Plan is an employment center that also includes a range of housing options, and a commercial mixed-use town center focused around a central green and connected by a multi-modal street network and trail system. The WRTP Specific Plan plans for a Village Center Shared Mobility Hub that would provide a transit destination in the heart of the Research and Technology Park community. A network of bike/pedestrian trails connecting from a linear open space system throughout the WRTP Specific Plan Area provides access to businesses, commercial centers, and residential areas as well as to the adjoining Spring Lake residential community. The WRTP Specific Plan provides for pedestrian and bicycle circulation, both in-street (sidewalks and bike lanes) and off-street (pedestrian/bicycle trails and paths) on all streets, consistent with guidance from the General Plan and the function of each street.

Policy No	Text	Consistency Discussion
Policy 2.C.4 Resource Efficiency	Encourage and incentivize buildings to be constructed so that they consume less energy, water, and other resources; allow natural ventilation; use daylight effectively; reduce stormwater runoff; and facilitate the use of clean energy whenever possible.	**Consistent:** Development in the WRTP Specific Plan Area will comply with efficiency measures in the City's 2035 Climate Action Plan, the CalGreen Code, and California's Building Energy Efficiency code. The Specific Plan encourages energy- and resource-efficient site planning, landscaping, and building design, including siting uses and development to take advantage of passive and active heating and cooling; incorporation of naturalized stormwater systems and use of recycled water in public parks, open space, and public realm landscape areas. All development shall comply with the Sustainable Design standards and guidelines outlined in Section 3.5.3.B (for non-residential development) and Section 3.5.12.d (for residential development) of the WRTP Specific Plan, as well as demonstrate consistency with the City's 2035 Climate Action Plan as outlined in Section 3.3.3 of the WRTP Specific Plan, including implementation of conservation measures in exceedance of Title 24 standards to strive to meet net zero energy consumption, use of clean energy whenever possible, incorporation of green building design strategies to conserve energy during construction and operations. The WRTP Specific Plan Design Standards and Design Guidelines also require development to implement, whenever feasible, use of water-efficient fixtures and appliances; energy efficient building materials and resources; renewable or locally available building materials; low VOC paints and adhesives; and other industry standard best practices.
Policy 2.D.1 Jobs/Housing Balance	Promote and support the development of a balance of residential, commercial, and industrial development within the city. Encourage a variety of job and housing types to provide a range of employment and housing opportunities for all city residents. Maintain a jobs to housing ratio citywide of at least 1:1 to optimize the supply and demand for both, reduce commute trips and overall vehicle miles travelled (VMT), and make communities less dependent on single occupancy vehicle trips.	**Consistent:** The WRTP Specific Plan is consistent with the land use and jobs/housing assumptions in the General Plan. As described in Section 3.10.1, "Environmental Setting," the jobs/housing index for the City of Woodland was estimated to be 1.1 in 2012. The WRTP Specific Plan provides opportunities for 5,000 employees, along with approximately 1,600 units. This would be a jobs-to-housing ratio of 3.125:1. While this exceeds the regional jobs/housing balance, the WRTP Specific Plan Area land use mix is consistent with that envisioned in the 2035 General Plan and provides mixed-use neighborhoods anchored by a research and technology business park in the "Southern Gateway" to the City. According to the General Plan, the highest intensity of development within the SP-1A and SP-1B areas will occur within the business park area, and the remainder of these sub-areas will be largely residential with some open space and recreation areas (City of Woodland 2017, pages LU 2-55 and 2-56). SP-1C will be entirely residential, with a lower-density residential profile containing executive homes and rural estates on larger lots. The WRTP Specific Plan provides the additional job opportunities to support existing and future residential development within the City's Planning Area. When considering overall development within the City's Planning Area, buildout of the 2035 General Plan, which assumes development in the WRTP Specific Plan Area consistent with that of the WRTP Specific Plan, results in a jobs/housing ratio of 1.67, thereby providing sufficient job opportunities to support many households with more than one wage earner and reducing the need for local residents to commute outside of the City for employment.

Policy No	Text	Consistency Discussion
Policy 2.D.2 Food and Agriculture Industry Cluster	Develop Woodland into a premier food and agriculture industry cluster by providing appropriate infrastructure and supporting research and innovation.	**Consistent:** The WRTP Specific Plan Vision and Guiding Principles serve as the guide for the desired outcome of development within the WRTP Specific Plan Area. This Vision and the Guiding Principles envision the WRTP Specific Plan Area as a new technology hub for the city of Woodland, intended to serve an array of research and technology companies interested in locating and growing near UC Davis, and other research and technology institutions within the Sacramento region. In accordance with the Guiding Principles of Innovation, Technology Capture / Talent Retention, and Business Partnerships, the WRTP Specific Plan provides a land use mix for development as a state-of-the-art innovation center campus for technology, research and development, and office uses; providing opportunity for collaboration with local educational institutions and others; and offering companies locating in the WRTP Specific Plan's Research and Technology Park zones the opportunity to take positive advantage of the existing and thriving seed, food, and agricultural-based industries currently located and doing business in and around Woodland. See the Vision Statement and Guiding Principles in Chapter 2.0, "Project Description," of this EIR.
Policy 2.E.2 Responsiveness to Context	Encourage high-quality new development that enhances and blends with the established fabric of the natural, social and built environment, while allowing for innovative architectural styles.	**Consistent:** The WRTP Specific Plan contains residential neighborhoods influenced by the traditional neighborhood features and forms of the city's older neighborhoods with an emphasis on energy- and resource-efficient planning and development practices. The WRTP Specific Plan states "New stylistic interpretations of traditional architecture are encouraged, but the fundamental architectural design principles, such as building scale, proportion, shape, and rhythm, existing in traditional homes shall be preserved in all new building designs. Additionally, buildings should be designed to respond to the local climate through incorporation of site and building energy conservation features that will contribute to establishing a local vernacular for the community." Development within the WRTP Specific Plan Area shall be subject to the development standards and design guidelines and design standards detailed in Chapter 3 of the WRTP Specific Plan, which govern the entire WRTP Specific Plan Area, as well as provide for area specific design guidelines.
Policy 2.F.4 Light Pollution	Control artificial lighting to avoid spill-over lighting and preserve the night sky.	**Consistent:** As described in Chapter 3 of the WRTP Specific Plan, light sources must be of the minimum illumination necessary for a given application and be directed downward and shielded at lot lines so as to not illuminate surrounding premises. Street lights will comply with the foot-candle requirements in Section 9, "Street Lighting System Design" of the City's Engineering Standards. Lighting in the WRTP Specific Plan Area shall be designed in accordance with design guidelines and design standards detailed in Chapter 3 of the WRTP Specific Plan, which requires lights to be of the minimum illumination necessary for a given application, be directed downward and shielded at lot lines reduce offsite light/glare impacts, and meet Uniform Security Code requirements set for the in Title 15 of the Woodland Municipal Code.

Policy No	Text	Consistency Discussion
Policy 2.F.5 Glare	Control artificial lighting to prevent glare.	**Consistent:** As described in Chapter 3 of the WRTP Specific Plan, all lighting, reflective surfaces, or any other sources of illumination must be designed and located in a manner that produces no substantial glare on public streets or on any other parcel. See also, response to Policy 2.F.4.
Policy 2.I.3 Green Streets	Provide continuous shade trees along Woodland's key corridors, integrate low-impact development (LID) drainage facilities to manage stormwater runoff within the public right-of-way, and include Class I or Class II bike facilities where possible.	**Consistent:** Chapter 17.112 of the City's Zoning Ordinance includes requirements for tree planting along streets, other public rights-of-way, private properties, and surface parking lots. Landscape design standards are located Chapter 3 of the WRTP Specific Plan, including for parks and open space. As stated in the WRTP Specific Plan, large canopy shade trees shall be provided along all major arterial and collector streets, to shade road surfaces and reduce urban heat island effect. Planting strips and open space areas designed as vegetated swales and bioretention facilities are to be used for stormwater treatment. Bicycle and Pedestrian Circulation are described in Section 4.4 of the WRTP Specific Plan. Exhibit 4-2 in the WRTP Specific Plan shows the proposed bicycle and pedestrian circulation system. The WRTP Specific Plan provides for 4.9 miles of Class I facilities and 3.5 miles of Class II on-street bike lanes throughout the WRTP Specific Plan Area, as well as additional shared lane markings on collector and local streets within the lower density residential neighborhoods that serve as key bike corridors.
Policy 2.J.2 Design of New Neighborhood and Community Commercial Centers	Facilitate the development of new neighborhood and community commercial centers that feature elements such as monumental entryways, articulated building facades and rooflines, attractive landscaping, shaded walkways, plazas, and public art.	**Consistent:** As described in Chapter 2, "Land Use Framework," and Chapter 3, "Land Use Regulations, Development Standards and Guidelines," of the WRTP Specific Plan, activation and articulation of the ground floor, attractive landscaping, shaded walkways, plazas, and public art are prioritized. Examples of entryways and public art are included in the WRTP Specific Plan. In addition, a comprehensive planting and street tree palette shall be developed for each District to guide both private and public landscaping improvements, and Street Furnishings, Street Lighting Palettes and Gateway monuments at the intersections of CR 25A with Road B and Road B with Marston Road shall be included as part of this effort, as detailed in Section 6.2.3 of the WRTP Specific Plan.
Policy 2.K.1 Quality Design	Require new and renovated business parks, public buildings, and industrial properties to feature elements such as monumental entrances, articulated building facades and rooflines, attractive landscaping, and shaded walkways.	**Consistent:** See the discussion related to Policy 2.J.2, above. Section 3.5.3 of the WRTP Specific Plan provides design standards and guidelines that apply to all zones within the Research and Technology Park District, as well as five Special Character Guidelines that address unique characteristics or features in each of the five zones within the District. Section 3.5.3 describes key elements defining the streetscape, including special design treatment of entry gateways and corridors, special landscape treatment and a continuous street canopy to provide shaded walkways, and landscaped parks, open space, and linear greenways that support bike and pedestrian access.

Policy No	Text	Consistency Discussion
Policy 2.L.2 Specific Plan-1A	Promote development of SP-1A as a mixed-use residential district anchored by a research and technology business park in the Southern Gateway area at CR 25 and SR 113. Concentrate the highest intensity of development within and in close proximity to the business park area, with lower-density, largely residential uses to the north. Encourage sustainable development through the use of renewable energy sources and water conservation tools with the goal of striving to achieve zero net energy at the building and neighborhood level to the extent feasible.	**Consistent:** See the land use designations in Chapter 2.0, "Project Description," of this EIR. The WRTP Specific Plan used the General Plan to guide the mix of uses and overall amount of development. The use of renewable energy sources and water conservation is addressed through compliance with the California Building Code. See also, Response to Policy 2.C.4 with regard to energy- and resource-efficient site planning and water-conserving design in new construction. All development shall comply with the Sustainable Design standards and guidelines outlined in Section 3.5.3.B (for non-residential development) and Section 3.5.12.d (for residential development) of the WRTP Specific Plan, as well as demonstrate consistency with the City's 2035 Climate Action Plan as outlined in Section 3.3.3 of the WRTP Specific Plan, including implementation of conservation measures in exceedance of Title 24 standards to strive to meet net zero energy consumption, use of clean energy whenever possible, incorporation of green building design strategies to conserve energy during construction and operations. The WRTP Specific Plan Design Standards and Design Guidelines also require development to implement, whenever feasible, use of water-efficient fixtures and appliances; energy efficient building materials and resources; renewable or locally available building materials; low VOC paints and adhesives; and other industry standard best practices.
Policy 2.M.3 Housing	Design neighborhoods to include a mix of housing types at a range of densities and affordability levels that accommodate residents at all stages of life. Residential uses must achieve an overall minimum average density of eight dwelling units per gross acre across the Specific Plan.	**Consistent:** As described in Chapter 3 of the WRTP Specific Plan, residential zones allow for a variety of housing types, from low-density, single-family residential units to high-density, attached housing types, such as multi-story apartments. Density ranges from 1.0 to 40 dwelling units per gross acre. The WRTP Specific Plan, once fully developed, could provide opportunities for approximately 1,600 new dwelling units on 166 acres of residential land area. This would be approximately 10 units per acre of residential land. The WRTP Specific Plan Area land use mix is consistent with that envisioned in the 2035 General Plan in which the highest intensity of development within the SP-1A and SP-1B areas will occur within the business park area, and the remainder of these sub-areas will be largely residential with some open space and recreation areas (City of Woodland 2017, pages LU 2-55 and 2-56). SP-1C will be entirely residential, with a lower-density residential profile containing executive homes and rural estates on larger lots. The WRTP Specific Plan provides the additional job opportunities to support existing and future residential development within the City's Planning Area.
Policy 2.M.7 Characteristics of Older Neighborhoods	Incorporate the best characteristics of older neighborhoods, such as a well-defined street grid with smaller blocks, front porches, shallower front setbacks, historic style lighting and monument features to create a sense of place.	**Consistent:** As described in the response to Policy 2.E.2, the Specific Plan promotes features of traditional neighborhoods through standards and guidelines that support walkable neighborhood blocks with wider sidewalks and narrower local streets.

Policy No	Text	Consistency Discussion
Policy 3.B.8 Accessibility	Endeavor to ensure that all streets are safe and accessible to people with disabilities and others with limited mobility.	**Consistent:** The WRTP Specific Plan (Chapter 4) implements General Plan policies related to walkability with complete streets, including wider sidewalks, urban trails and paths, pedestrian-friendly streetscapes, enhanced safety features for pedestrians, and enhanced connectivity. Future projects will be required to comply with relevant provisions of the Americans with Disabilities Act (ADA). See also, Response to Policy 3.E.2.
Policy 3.E.2 Safe and Comfortable Sidewalk Design	Develop safe and pleasant sidewalks in compliance with adopted design standards to accommodate all users, including persons with disabilities, and complement the form and function of the land uses adjacent to each street segment.	**Consistent.** Future development within the WRTP Specific Plan will be required to comply with City street design standards and relevant provisions of the ADA. Development and design standards detailed in Chapter 3 of the WRTP Specific Plan, which govern the entire WRTP Specific Plan Area, provide for area specific design guidelines including accessibility and safety of sidewalks and paths. See also, Response to Policy 3.B.8.
Policy 3.F.9 Phasing	Ensure that bikeways connecting to the existing bikeway system be provided in the first phase of all new growth areas.	**Consistent:** Bicycle and Pedestrian Circulation are described in Section 4.3.1 of the WRTP Specific Plan. The Spring Lake Planning Area's existing and planned bike network was also designed to connect seamlessly with the WRTP Specific Plan Area and includes a mix of dedicated on-street lanes and off-street paths. Similarly, the WRTP Specific Plan has potential to extend and connect to the major roadways, bikeways, pedestrian ways, and open space greenways within Spring Lake. In addition, a Conceptual Plan for The Yard to guide phased park improvements, and ensure pedestrian and bike paths internal to the park connect to the external network trail and greenbelt system, shall be prepared no later than prior to the first tentative map that fronts on The Yard, as detailed in Section 6.2.3 of the WRTP Specific Plan.
Policy 4.G.2 Strategic Partnerships for Biotech and Seed Industry	Foster partnerships with educational institutions, private sector entities, and public agencies—such as UC Davis and Next Economy—to support biotech, agricultural, and seed industries in Woodland; ensure that adequate land, infrastructure, and amenities are available in Woodland to attract potential businesses associated with these industries.	**Consistent:** See above in relation to Policy 2.D.2 and the Vision Statement in Chapter 2.0, "Project Description," of this EIR.
Policy 5.A.3 Development Project Requirements	Require development projects to develop and/or fund police facilities, equipment, personnel, and operations and maintenance that maintain the City's standards, as demonstrated through positive fiscal impacts or through specific funding mechanisms in the event of fiscal deficits. New development should not result in a reduction in service levels (or capabilities) to existing service population.	**Consistent:** The proposed WRTP Specific Plan would not affect Woodland Police Department response times or other performance objectives because project applicants for future projects proposed under the WRTP Specific Plan would provide funding to ensure police protection personnel and equipment is provided to meet increased demand for police protection services; funding mechanisms, consistent with General Plan Policy 5.A.3, are further described in Section 6 of the WRTP Specific Plan and detailed in the Finance Plan developed for the WRTP Specific Plan. See also, Section 3.12, "Public Services," of this EIR for more details on existing service levels and capabilities.

Policy No	Text	Consistency Discussion
Policy 5.A.6 Crime Prevention through Design	Consider public safety issues in public facility, commercial, and residential project design, and enhance public safety through implementation of Crime Prevention Through Environmental Design (CPTED) strategies. These include designing the placement of activities and physical features, such as buildings, entrances and exits, corridors, fences, pavement, signs, lighting and landscaping, in such a way as to clearly define public and private space, maximize visibility, control access and circulation and foster positive social interaction.	**Consistent:** Pedestrian-oriented design and other project design measures to enhance public safety are prioritized in the WRTP Specific Plan as design standards, as described in Section 3.5 of the WRTP Specific Plan. Build-to-lines and streetwall requirements are identified in this section to ensure buildings create clearly defined edges to the public realm. Open spaces and trails consider security and safety, including access control, lighting, visibility, and wayfinding. Bike parking is placed near entrances to increase safety and security.
Policy 5.B.4 Development Project Requirements	Require development projects to develop and/or fund fire protection facilities, equipment, personnel, and operations and maintenance that maintain the City's standards, as demonstrated through positive fiscal impacts or through specific funding mechanisms in the event of fiscal deficits.	**Consistent:** The proposed WRTP Specific Plan would not affect Woodland Fire Department response times because project applicants for future projects proposed under the WRTP Specific Plan would provide funding to ensure fire protection personnel and equipment is provided to meet increased demand for fire protection services; funding mechanisms, consistent with General Plan Policy 5.B.4, are further described in Section 6 of the WRTP Specific Plan and detailed in the Finance Plan developed for the WRTP Specific Plan. See also, Section 3.12, "Public Services," of this EIR for more details on existing service levels and capabilities.
Policy 5.B.10 Construction of New Fire Stations	Consider location of existing stations in relation to planned growth, and explore efficacy of current station locations as part of any new fire station location analysis. Consider where a station relocation might preclude need for a new station with a new engine company. Prior to approval and construction of new fire stations, ensure that adequate funding is available for both the construction and the ongoing operation, maintenance, and staffing of future fire stations.	**Consistent:** Existing Woodland Fire Department Station #3 would provide sufficient fire protection services to the WRTP Specific Plan Area (City of Woodland 2018a,b). Project applicants for future projects proposed under the WRTP Specific Plan would be required to submit project design plans to the Woodland Fire Department for review and implement recommended conditions, consistent with General Plan Policy 5.B.8. The proposed WRTP Specific Plan would not affect Woodland Fire Department response times because project applicants for future projects proposed under the WRTP Specific Plan would provide funding to ensure fire protection personnel and equipment is provided to meet increased demand for fire protection services; funding mechanisms, consistent with General Plan Policy 5.B.4, are further described in Section 6 of the WRTP Specific Plan and detailed in the Finance Plan developed for the WRTP Specific Plan. See also, Section 3.12, "Public Services," of this EIR for more details on existing service levels and capabilities.
Policy 5.C.3 Park Acreage Standard	Ensure that the development of parks and recreation facilities keeps pace with development and growth within the city. Of the total acreage, strive to achieve and maintain a standard of 6.0 acres of parks per 1,000 residents for the development of City-owned park facilities.	**Consistent:** The WRTP Specific Plan includes the creation of new on-site parks and recreational facilities to meet the City's General Plan policy and Quimby Act parkland standard of 6.0 acres per 1,000 residents, as well as payment of project impact fees, as required by the City.

Policy No	Text	Consistency Discussion
Policy 5.C.4 New Development Goals	Require that new residential development meet its fair share of the park acreage goal by either dedicating land for new parks, paying a fair share of the costs for new parks and recreation facilities, and/or renovating existing parks and facilities.	**Consistent:** The WRTP Specific Plan is anticipated to serve a projected population of approximately 4,386 residents. Therefore, 28.9 acres of parkland would be required. The proposed WRTP Specific Plan includes approximately 21.8 acres of public parkland, open spaces, and greenways located throughout the plan area. Additional parks, open space, mini parks and public or private plazas may be identified within the individual developments. The WRTP Specific Plan will meet its park obligation through a combination of park land development and through project impact fees. See also, Response to Policy 5.C.3**.**
Policy 5.C.5 Proximity of Parks to Housing	Strive to provide accessible public park, greenbelt, and/or recreational open space within one-quarter mile of all housing, especially in neighborhoods with higher density housing. Require new development in Specific Plan areas to meet this standard in site planning, and pursue opportunities to establish new parkland in proximity to underserved infill areas, as feasible.	**Consistent:** The WRTP Specific Plan includes a central green, called "The Yard," of approximately 11.8 acres that would serve as the primary park/open space feature around which mixed-use land uses with higher density residential, retail and commercial services would be located, as well as the Research and Technology Park. The Yard offers employees, residents and the community a space to recreate, relax, and connect outside of home and work, steps from adjacent residential neighborhoods and less than a block from work. Smaller parks, open spaces, and greenways are proposed throughout the WRTP Specific Plan Area, and additional parks, open space, mini parks and public or private plazas may be identified within individual developments within the WRTP Specific Plan Area.
Policy 5.C.7 Active Linear Park System	Establish and maintain an active linear park system that consists of a combination of existing and new greenbelts, bicycle paths, and pedestrian walkways that provide linkages within the city and allow alternative means of access to parks, schools, public facilities, and shopping.	**Consistent:** See Response to Policies 2.I.3 and 3.F.9. The WRTP Specific Plan includes a linear park system with mini parks/plazas, an 11.8 acre central green called "The Yard," and 10.6 acres of linear parks/greenbelts. The linear parks/greenbelts frame the eastern and northern boundaries of the WRTP Specific Plan Area, and a network of well-connected streets, bike trails and greenbelts throughout the WRTP Specific Plan Area allow for easy and safe routes to work, home and to the Village Center, reducing long commute times and auto-dependency for a majority of daily trips. These linear greens are envisioned as landscaped, open space areas to be used for recreation and non-motorized transportation. Greenbelts may be designed to include playgrounds, open turf or planted areas, shade trees, plazas, and picnic areas, and are connected by bike/walking paths. The design of the WRTP Specific Plan Area's active transportation facilities also include multi-use trails and paths and on-street bike lines that integrate with the linear parks/greenbelts, to reinforce biking, walking, and other alternative transportation choices within the WRTP Specific Plan Area and to surrounding neighborhoods.

Policy No	Text	Consistency Discussion
Policy 5.C.9 Greenbelt Requirements	Require that a minimum of five percent of newly developed residential land within Specific Plan areas be designated for use as linear parks/neighborhood greenbelts. Link new greenbelts to existing or planned greenbelts to create a greenbelt network that connects housing with recreation, commercial and employment areas. Note: Linear parks/neighborhood greenbelts are included in the City's total parkland acreage and count towards the City's parkland standard of 6.0 acres per 1,000 residents.	**Consistent:** Exhibit 2-1 in the WRTP Specific Plan shows streetscape/landscape design features including the linear parks and neighborhood greenbelts. The proposed WRTP Specific Plan includes approximately 17.6 acres of public parkland, open spaces, and greenways (not inclusive of the proposed 4.2-acre detention pond) located throughout the WRTP Specific Plan Area and approximately 166 acres of residential land classifications. Thus, the public parkland is approximately 10 percent of the residential land area. See also, Response to Policy 5.C.7.
Policy 5.C.12 Park Design	Ensure that the City's parks, open space, and recreational resources and facilities include a variety of amenities and features to meet the needs of the diverse Woodland community. Consider the following factors in the design of new and renovated parks and recreation facilities: • Safety • Security • Maintenance • Water conservation / use of recycled water • Urban forest canopy • Accessibility • Travel distance of users • Passive vs. active use areas • Restroom facilities • Drinking fountains • Bike access and accommodations • Citizen input • Adequacy of off-street parking • Flexibility for programming activities • Lighting • Small community gardens, as appropriate.	**Consistent:** The WRTP Specific Plan addresses parks programming generally but does not include a parks master plan. Section 3.3 of the WRTP Specific Plan provides performance standards and Section 3.5 provides design standards and guidelines for the various land use zones within the WRTP Specific Plan Area, including those specific to the parks and open spaces and the active transportation network of mixed-use trails and paths. The linear greens are envisioned as landscaped, open space areas to be used for recreation and non-motorized transportation. Greenbelts may be designed to include playgrounds, open turf or planted areas, shade trees, plazas, and picnic areas, and are connected by bike/walking paths. Greenways for the WRTP Specific Plan Area also provide stormwater management, including drainage and connections to open space areas used for stormwater detention/retention. The Yard could accommodate field or court sports, playgrounds or tot lots, restrooms, picnic tables, shade structures and shaded seating areas, or passive recreation areas. The Yard could also include space for a small concession stand and/or serve as a hub for mobile food vendors. Space for an outdoor public market or market hall could also be provided in the Yard. Smaller parks and open spaces would be designed for a variety of passive and active uses, depending on the size and configuration of the park / open space. A Conceptual Plan for The Yard to guide phased park improvements, and ensure pedestrian and bike paths internal to the park connect to the external network trail and greenbelt system, shall be prepared no later than prior to the first tentative map that fronts on The Yard, as detailed in Section 6.2.3 of the WRTP Specific Plan.

Policy No	Text	Consistency Discussion
Policy 5.H.1 Treatment Capacity and Cost Recovery	Provide wastewater collection and treatment services to the existing Woodland community. Ensure that increased wastewater treatment facility capacity is available to serve planned urban development within the Planning Area consistent with this General Plan. Accommodate increase in flows and loadings from the existing community with the capital costs and benefits allocated equitably and fairly between existing users and new users, as authorized by law.	**Consistent:** The WRTP Specific Plan Area is connected to existing utilities, as described in Section 3.14, "Utilities," of this EIR. As described in Section 3.14 of this EIR, and confirmed by the City's Wastewater Treatment Capacity Verification, the hydraulic capacity of the City's Water Pollution Control Facility (WPCF) is expected to meet exceed the city's projected needs through 2035, including the needs of the Specific Plan (City of Woodland 2019). The Spring Lake Specific Plan Pump Station will require capacity improvements to accommodate the increase in wastewater flow from the WRTP Specific Plan Area and Spring Lake Specific Plan Area, and a lift station will be required to convey wastewater runoff from approximately 7.5 acres within the Specific Plan Area to the existing gravity main (City of Woodland 2019, Water Works Engineers 2020). As detailed in Section 6.4 of the WRTP Specific Plan, Specific financing requirements, improvement obligations, fees, reimbursements, land and easement dedications and conveyances, maintenance, and other financing and improvement related obligations will be detailed in the development agreement, any reimbursement agreements, and the Public Facilities Financing Plan, to ensure that sufficient public facilities and services would be available to serve new development, consistent with General Plan policy.
Policy 5.H.9 Reduce Demand	Reduce wastewater system demand through efficient water use by requiring water-conserving design and equipment in new construction; encouraging retrofitting with water-conserving devices; and designing, constructing, and repairing wastewater systems to minimize inflow and infiltration to the extent economically feasible.	**Consistent:** In recent years, hydraulic inflows to the Water Pollution Control Facility have gone down due to water conservation and the City's efforts to reduce infiltration and inflow, through sewer collection system rehab projects. See also, Response to Policy 2.C.4 with regard to water-conserving design in new construction.
Policy 5.I.3 Overland Flow Requirements in New Development	Require development to provide for the overland flow of stormwater meeting or exceeding the City's standard design capacity of the storm drainage system. Overland flow waters should be conveyed over public streets where possible and should be at least one foot below building pad elevations and contain provisions for removal of silt and other contaminants.	**Consistent:** A discussion of stormwater flow and drainage systems is provided in Section 3.9, "Hydrology, Flooding, and Water Quality," as well as in Section 5.5 of the WRTP Specific Plan. The proposed on-site drainage system consists of a system of collection and conveyance facilities that will carry stormwater via gravity generally from west to east. Preliminary stormwater engineering, in the form of a Stormwater Management Technical Memorandum, has been performed for the project site and surrounding areas that drain to the project site (Cunningham Engineering 2020). Wherever feasible, storm drain pipes have been designed to full flow under gravity in the 10-year storm; however, if flows rise above the pipe soffit, designs maintain at least 1 foot below finish grade. Within the WRTP Plan Area, on-site flows in excess of pipe capacities (i.e. in excess of the 10-year flows) will be conveyed overland via collector and arterial streets, and in greenbelt corridors.

Policy No	Text	Consistency Discussion
Policy 5.I.4 Low Impact Development	Require new development and redevelopment projects to incorporate site design and low impact development runoff requirements, in accordance with the Municipal Code to reduce runoff rates, filter out pollutants, and facilitate groundwater infiltration. Such features may include, but are not limited to: • Canopy trees or shrubs to absorb rainwater; • Grading that lengthens flow paths over permeable surfaces and increases runoff travel time to reduce the peak hour flow rate and the number of required drain inlets; • Partially removing curbs and gutters from parking areas where appropriate to allow stormwater sheet flow into vegetated areas; • Use of permeable paving in parking lots and other areas characterized by significant impervious surfaces; • On-site stormwater detention, use of bioswales and bioretention basins to facilitate infiltration; • Integrated or subsurface water retention facilities to capture rainwater for use in landscape irrigation and other non-potable uses; and • Innovative engineering practices that allow for compact, connected, and walkable urban design.	**Consistent:** The WRTP Specific Plan will implement low impact development measures, standard Treatment Control BMPs, upland low impact development-type runoff reduction measures and end-of-pipe detention storage within existing and proposed detention basis; key elements are detailed in Chapter 5 of the WRTP Specific Plan. Planting strips and open space areas designed as vegetated swales and bioretention facilities are to be used for stormwater treatment. See also, Response to Policy 5.I.3.
Policy 5.I.1 Storm Drainage System and Cost Recovery	Maintain and improve the storm drainage system for the existing Woodland community. Ensure that increased storm drainage system capacity is available to serve planned urban development within the Planning Area consistent with this General Plan. Accommodate increase in flows and loadings from the existing community with the capital costs and benefits allocated equitably and fairly between existing users and new users, as authorized by law.	**Consistent:** See Response to Policy 5.I.3. See also, discussion in Section 3.9, "Hydrology, Flooding, and Water Quality," with regard to existing storm drainage capacity and future improvements. Preliminary stormwater engineering, in the form of a Stormwater Management Technical Memorandum, has been performed for the project site and surrounding areas that drain to the project site (Cunningham Engineering 2020). The City's recent *Storm Drainage Facilities Master Plan South Urban Growth Area* (Wood Rodgers 2017) and is in progress on modeling and analysis of the North Area of the City, which is refining the understanding of how much development within the South Area can occur before triggering new improvements. Mitigation measures are included in Section 3.9 to address required improvements to ensure that increased storm drainage system capacity is available to serve planned urban development within the Planning Area consistent with this General Plan. Impact fees would be paid by future applicants, as required by the City.
Policy 5.I.7 Stormwater Detention Facilities	Use stormwater detention facilities to mitigate drainage impacts and reduce storm drainage system costs. To the extent practical, design stormwater detention facilities for multiple purposes, including recreational use in dry conditions and/or stormwater quality improvement.	**Consistent:** See Response to Policy 5.I.4. Stormwater management systems will be incorporated into public parks and open spaces. Private development will also employ naturalized stormwater management systems to manage drainage needs on site.

Policy No	Text	Consistency Discussion
Policy 7.B.8 Native and Compatible Non-Native Plant Species	Require developers to use native and compatible non-native species, especially drought-resistant species, to the extent possible in order to preserve the visual integrity of the landscape, provide benefits for native wildlife, and ensure that a variety of plants suited to the region are maintained.	**Consistent:** Chapter 3 of the WRTP Specific Plan notes that the streetscape design should be unified by a consistent palette of trees, shrubs, and ground covers. A variety of plants will be selected to create environmental benefits for the community, such as shade, water conservation (with use of native and drought tolerant plants), and stormwater treatment/run-off management. According to Section B.3.a of the WRTP Specific Plan, Landscaping should consist of climate-appropriate plantings, including drought-tolerant and native species suited to the Woodland community and ornamental plants to accentuate important public nodes and plazas. Streetscape design, as described in Section 4 of the WRTP Specific Plan, will incorporate the use of bio swales and rain gardens along roadways and greenbelts to aid in the treatment and absorption of rain water.
Policy 7.B.9 Tree Canopy	Manage, enhance, and improve the city's tree canopy as a valuable ecological resource.	**Consistent:** Chapter 12.48 of the City's Municipal Code contains the City's Tree Ordinance, which includes requirements for tree planting along streets, other public rights-of-way, private properties, and surface parking lots. Landscape design standards are located Chapter 3 of the WRTP Specific Plan, including for parks and open space. As stated in the WRTP Specific Plan, large canopy shade trees shall be provided along all major arterial and collector streets, to shade road surfaces and reduce urban heat island effect.
Policy 7.B.11 Sensitive Site Planning	Site new development to maximize the protection of native tree species and sensitive special-status plant and wildlife habitats.	**Consistent:** It is conservatively assumed for purposes of this analysis that all existing vegetation, including mature trees at the existing residence, could be removed as a result of the project and that all existing habitat functions would be lost. A tree inventory has not been completed for the Planning Area. However, the reconnaissance survey confirmed several trees are present in the Planning area. Several of these trees could be potential street trees, heritage trees, landmark trees, specimen trees, or other trees protected under the City of Woodland Tree Ordinance (Woodland Municipal Code Chapter 12.48). See Section 3.4, "Biological Resources," of this EIR for more information on native tree species and sensitive special-status plant and wildlife habitats. Mitigation measures are included to reduce impacts.
Policy 7.C.2 Agricultural Uses within the ULL [Urban Limit Line]	Where agriculture exists within the ULL, allow uses to continue until urban development (consistent with the General Plan) occurs on these properties.	**Consistent:** Chapter 3 of the WRTP Specific Plan states that "existing agricultural uses may be permitted to continue until the area is required for the development of infrastructure or other allowed uses. Agricultural operations shall comply with applicable local, state, and federal laws and regulations."
Policy 7.C.4 Compatibility	Ensure that urban development within the ULL does not affect the economic viability of adjacent agricultural practices located outside the ULL.	**Consistent:** See the discussion related to Policy 7.C.5.

Policy No	Text	Consistency Discussion
Policy 7.C.5 Agricultural Buffer	Require new development that occurs at the edge of the ULL to be set back a minimum of 150 feet from adjacent agricultural land where possible. Equivalent means of providing agricultural buffers may be considered by the Planning Commission on a case by case basis for parcels where development potential would be precluded or severely limited as a result of the required buffer size. The buffer shall be landscaped/vegetated and may include public right of way.	**Consistent:** As described in the Specific Plan (Section 2.2.3, "Sustainability" of the Specific Plan Policies, and Section 3.5.7(C), "Special Character Guidelines – RTP/RFO Zone"), where feasible, a minimum setback of 150 feet will be provided where development within the WRTP Specific Plan Area occurs adjacent to agricultural lands at the edge of the City's Urban Limit Line. Adjacent to SR 113, in addition to the buffer that SR 113 provides, a 20-foot open space buffer is required adjacent to commercial land uses and 30 feet is required adjacent to residential land uses. Greater setbacks are encouraged for single family residential uses adjacent to SR 113. Open space buffers for agricultural land along the urban limit line may be designed with community gardens or agricultural uses, streets, bike and pedestrian multi-use trails, stormwater management uses/facilities, other passive recreational uses, parks, and other permitted uses in the open space zone. If a setback buffer is not required along the southern edge of the Plan Area, adjacent to agricultural lands along the urban limit line, screen trees and an open post or wrought iron fence shall be provided along the project side of the property line. There will be no other adjacent urban/agricultural interfaces at buildout.
Policy 7.F.3 Protect Sensitive Receptors	For the purposes of environmental review of potential toxic air contaminant impacts, consider residentially designated land uses, hospitals and other medical facilities, residential care facilities, schools, day care centers, and playgrounds to be "sensitive receptors." Discourage the location of new sensitive receptor uses within 500 feet of a limited access state highway (SR 113 and I-5). Implement applicable buffer distances recommended by the California Air Resources Board between sensitive uses and sources of substantial pollutant concentrations.	**Consistent:** California Air Resources Board's Air Quality and Land Use Handbook: A Community Health Perspective provides guidance on land use compatibility with sources of toxic air contaminants. This Handbook recommends avoid siting new sensitive land uses within 500 feet of a freeway, urban roads carrying 100,000 vehicles per day, or rural roads carrying 50,000 vehicles per day. There are no such roadways in the vicinity of the WRTP Specific Plan Area. SR 113 in the vicinity of the WRTP Specific Plan Area carries approximately 20,000 to 24,000 trips per day and I-5 in the Woodland area carries approximately to 34,000 to 67,000 trips per day (Caltrans 2017). I-5 is more than 7,000 feet north of the WRTP Specific Plan Area. See Section 3.3, "Air Quality," of this EIR for more information on air pollutant emissions associated with implementation of the WRTP Specific Plan. Mitigation measures are included to reduce impacts. As detailed in Section 3.3, "Air Quality," there are no carbon monoxide hot spots to which the WRTP Specific Plan would contribute.
Policy 7.F.4 Landscaping to Improve Air Quality	Promote the increase of community-wide tree canopy and the use of plants and trees that are efficient pollutant absorbers.	**Consistent:** As described in Chapter 3 of the WRTP Specific Plan, large canopy shade trees will be provided along all major arterial and collector streets, to shade road surfaces and reduce the urban heat island effect. The design and location of trees and landscaping for homes shall consider opportunities for solar access and solar panels, as well as address shading and ventilation needs during hot summer months. Adjacent to SR-113, a landscaped buffer (20-foot when adjacent to commercial zones and 30-foot when adjacent to residential zones) shall be maintained, consisting of a mix of trees, low groundcover and vine training on all sound walls or highway adjacent perimeter fencing.

Policy No	Text	Consistency Discussion
Policy 8.G.1 Noise Compatibility for Residential Uses	Ensure that existing and planned land uses are compatible with the current and projected noise environment. However, urban development and increased density, as supported by the City in this General Plan, generally results in greater ambient (background) noise than lower density areas. It is the City's intent to meet specified indoor noise thresholds, and to create peaceful backyard living spaces where possible, but particular ambient outdoor thresholds may not always be achievable. Where residential growth is allowed pursuant to this General Plan, these greater noise levels are acknowledged and accepted, notwithstanding the land use noise compatibility standards in Table 8-5.	**Consistent:** Chapter 3 of the WRTP Specific Plan defines permitted uses within each Zoning Designation with consideration of the noise generating potential and sensitive receptors associated with each permitted use. Section 3.3.2 of the WRTP Specific Plan contains Performance Standards intended to ensure compatibility of permitted uses and activities. These standards include noise standards that require consistency with noise level performance standards of the 2035 General Plan and the application of provisions in Chapter 8 of the 2035 General Plan, including Policy 8.G.1. Chapter 3 of the WRTP Specific Plan also contains design guidelines such as building orientation, placement of noise generating equipment, and vertical separation of noise generating sources and sensitive receptors to minimize potential noise conflicts between adjacent land uses. Please see Section 3.11, "Noise and Vibration," of this EIR for additional detail.
Policy 8.G.3 Noise Exposure from Transportation Sources	Require noise-reducing mitigation to meet the maximum allowable outdoor and indoor noise exposure standards from transportation sources in Table 8-6. Noise mitigation measures that may be approved to achieve these noise level targets include but are not limited to the following: • Construct facades with sound insulation to achieve acceptable interior noise; • Use sound-rated windows for primary sleeping and activity areas; • Use sound-rated doors for all exterior entries at primary sleeping and activity areas; • Use setbacks and/or sound barriers where applicable, feasible, and reasonable; • Use acoustic baffling of vents for chimneys, attic and gable ends; • Install a mechanical ventilation system that provides fresh air under closed window conditions; and • Maximize site design so that buildings shelter outdoor areas.	**Consistent:** As detailed in Section 3.11, "Noise and Vibration," of this EIR, development under the proposed WRTP Specific Plan would generate and attract vehicular traffic, which would increase traffic noise levels along existing and future roadways. However, traffic noise levels are not anticipated to exceed the City's noise standards. Regardless, Section 3.3.2 of the WRTP Specific Plan contains Performance Standards intended to ensure compatibility of permitted uses and activities. These standards include noise standards that require consistency with noise level performance standards of the 2035 General Plan and the application of provisions in Chapter 8 of the 2035 General Plan, including Policy 8.G.3. WRTP Specific Plan Section 3.5, "Design Standards and Design Guidelines," which requires the use of proper screening and sound attenuation to reduce impacts associated with noise-generating equipment in mixed-use projects. Please see Section 3.11, "Noise and Vibration," of this EIR for more information.
Policy 8.G.4 Noise-Sensitive Receptors	For the purposes of environmental review, consider residentially designated areas, nursing homes, schools, libraries, and places of worship to be noise-sensitive receptors. The EIR will examine potential effects on noise sensitive land uses.	**Consistent:** Please see Section 3.11, "Noise and Vibration," of this EIR, in which the analysis considers the existing and planned noise sensitive receptors and the potential effects on these receptors of construction and operations with implementation of the WRTP Specific Plan.

Policy No	Text	Consistency Discussion
Policy 8.G.8 Site and Building Design	Orient buildings such that the noise sensitive portions of a project are shielded from noise sources.	**Consistent:** Chapter 3 of the WRTP Specific Plan contains design guidelines such as building orientation, placement of noise generating equipment, and vertical separation of noise generating sources and sensitive receptors to minimize potential noise conflicts between adjacent land uses. Please see Section 3.11, "Noise and Vibration," of this EIR for additional detail.
Policy 8.G.13 Noise Attenuation Barriers	Noise attenuation barriers are strongly discouraged, except to attenuate noise for existing developed uses, and may be used in the context of new developments only when no other approach to noise mitigation is feasible.	**Consistent:** As described in Section 3.5, "Design Standards and Design Guidelines," solid masonry or block walls in the community will be limited to those areas requiring sound attenuation to achieve noise standards. Sound walls are not expected to be required within the WRTP Specific Plan Area, except where necessary along SR 113 where adjacent to residential development. In addition, Chapter 3 of the WRTP Specific Plan contains design guidelines such as building orientation, placement of noise generating equipment, and vertical separation of noise generating sources and sensitive receptors to minimize potential noise conflicts between adjacent land uses. Please see Section 3.11, "Noise and Vibration," of this EIR for additional detail.
Policy 8.G.15 Operational Noise	In new development areas, service, utility, loading areas, roof-mounted equipment, and noise-generating equipment shall be screened, designed, and located to reduce visibility and noise for surrounding properties and pedestrian areas	**Consistent:** Chapter 3 of the WRTP Specific Plan also contains design guidelines such as building orientation, placement of noise generating equipment, and vertical separation of noise generating sources and sensitive receptors to minimize potential noise conflicts between adjacent land uses. Please see Section 3.11, "Noise and Vibration," of this EIR for more information. See also the Response to Policy 8.G.1.

As shown in Table 3.10-1, implementation of the WRTP Specific Plan would be consistent with the 2035 General Plan policies.

As noted in Section 3.10.2 above, and shown in Table 3.10-3, the current Housing Element and Land Use Plan was developed with consideration for the City of Woodland's RHNA for the planning period of 2013 through 2021 (as shown in Table 3.10-3), which projected a need for the construction of an additional 1,877 housing units, allocated as follows: 195 extremely low income units, 195 very low income units, 274 low income units, 349 moderate income units, and 864 above moderate income units. The City met the rezoning requirement for the 2013-2021 planning period in May 2018 through the adoption of the Interim Zoning Ordinance. SACOG's RHNA for the planning years 2021 through 2029 projected a need for the City of Woodland for the construction of an additional 3,087 housing units, allocated as follows: very low income (663 units), low income (399 units), moderate income (601 units), and above moderate income (1,424 units) (Table 3.10-2).

The WRTP Specific Plan, once fully developed, could provide opportunities for approximately 1,673 new dwelling units, helping the City meet the RHNA. The WRTP Specific Plan includes a Housing Mix land use policy (Section 2.2 of the WRTP Specific Plan) to provide a mix of housing types at a range of densities and affordability levels that accommodate residents at all states of life. With densities ranging from less than 8 units per acre to 40 units per acre, a variety of housing types, sizes, and densities are planned, including conventional and small-lot single family homes, accessory dwellings (or secondary units), townhomes, multi-story apartments and condominiums, and live-work units.

WRTP Specific Plan consistency related to environmental topics is addressed in each technical section of this EIR, as appropriate. These technical sections provide a detailed analysis of other relevant physical environmental effects that could result from implementation of the WRTP Specific Plan and identify mitigation measures, as necessary, to reduce impacts. Implementation of the proposed WRTP Specific Plan would not conflict with adopted City General Plan policies, land use designations, or zoning in a way that would generate any adverse physical impacts beyond those addressed in detail in the environmental sections of this EIR (air quality, biological resources, cultural resources, etc.). Therefore, and consistent with the finding in the 2035 General Plan and CAP EIR, this impact is considered **less than significant**.

Mitigation Measure: No mitigation is required.

IMPACT 3.10-2 **Potential Conflicts with the SACOG MTP/SCS (Significance Threshold 2).** *The MTP/SCS showed the WRTP Specific Plan Area as a Developing Community. This impact is considered* ***less than significant****.*

The SACOG MTP/SCS showed the WRTP Specific Plan Area as a Developing Community. According to the MTP/SCS, this community type is "typically, though not always, situated on vacant land at the edge of existing urban or suburban development; they are the next increment of urban expansion. Areas are identified in local plans as special plan areas, specific plans, or master plans and may be residential-only, employment-only, or a mix of residential and employment uses." Although the WRTP Specific Plan Area was identified as a new growth area, only a portion of the WRTP Specific Plan Area is assumed for development within the MTP/SCS horizon of the year 2040. However, the methodology and purpose of the City's estimate of development capacity under the 2035 General Plan is different from the methodology and purpose of SACOG's forecast for the purposes of the MTP/SCS. The SACOG projections are market-based growth estimates that project the amount and location of likely growth in the region based on a variety of socio-economic factors that are updated every four years. The City's general plan

and this WRTP Specific Plan serve as long range planning tools that seek to create opportunities for growth and provides a range of land use options to encourage economic investment and promote other City policy objectives. In addition, the MTP/SCS is updated every four years, and new growth areas, as well as other regulatory and market factors not previously considered, can be considered when creating the land use forecasts for the ensuing MTP/SCS. Given these different purposes, it is reasonable to expect variations in the growth forecasts between the two. Finally, this EIR analyzes full development of the WRTP Specific Plan Area and all direct and reasonably foreseeable effects of implementing the WRTP Specific Plan including impacts related to transportation and greenhouse gas emissions and other topics that are the focus of the MTP/SCS. There is no impact related to plan consistency that is not addressed in the environmental topic-specific sections of this EIR (e.g., air quality, greenhouse gas emissions, etc.). This impact is considered **less than significant**.

Mitigation Measure: No mitigation is required.

IMPACT 3.10-3 **Potential Conflicts with LAFCo Policies, Standards, and Procedures Guidelines (Significance Threshold 2).** *Future construction in the WRTP Specific Plan Area would be compared to LAFCo Policies, Standards, and Procedures at that time. This impact is considered* ***less than significant****.*

LAFCo is charged with applying the policies and provisions of the Cortese-Knox Act (California Government Code Section 56000 et seq.) to its decisions regarding incorporations, reorganizations, and other changes in government organization. This act establishes the process through which a local agency boundary change is made and associated planning authority is transferred from one local agency to another. Generally, LAFCo is responsible for determining whether any incorporations are consistent with the LAFCo objectives and policies of ensuring that services would be available to new development; avoiding premature conversion of farmland; and ensuring planned, logical, and orderly patterns of urban growth.

California Government Code Section 56668 sets forth criteria for evaluation of annexation projects. This statute establishes factors that LAFCo agencies must use in reviewing annexation proposals. Any future urban development within the WRTP Specific Plan Area would require annexation by the City of Woodland and would be subject to this statute. A Municipal Service Review and Sphere of Influence Amendment was conducted for Woodland in 2018. This Municipal Service Review covered the portion of the WRTP Specific Plan Area south of CR 25A and east of SR 113 (Yolo LAFCo 2019). The City created a framework of controlled growth by adopting its voter-approved Urban Limit Line. The General Plan 2035 included policies to ensure that the development of finite land resources will be carefully planned and managed. The WRTP Specific Plan provides controlled, yet flexible, land use planning for development within the WRTP Specific Plan Area, identified as SP-1A in the 2035 General Plan. The WRTP Specific Plan includes non-residential uses that will accommodate advanced technology-related jobs and training that allow a greater number of Woodland residents and college graduates from the Woodland Community College and throughout the region to live and work in the community. The WRTP Specific Plan, once fully developed, could provide opportunities for 1,600 new dwelling units at a range of densities and affordability levels that accommodate residents at all states of life, helping the City meet the RHNA. The WRTP Specific Plan also provides for adequate public facilities and services, and would not exceed the capacity of existing water support or other public resources. There are planned land uses within this portion of the WRTP Specific Plan Area that would create the need for an expanded service area and would result in the loss of prime agricultural land or open space. However, the City's Urban Limit Line preempts any uncontrolled sprawl. Section 3.2, "Agricultural and Forestry Resources," of this EIR discusses this loss and explains that development under the WRTP Specific Plan

shall comply with applicable City and County regulations, including mitigation requirements to address the conversion of farmland to urban uses. The WRTP Specific Plan also includes policy (Section 2.2) requiring a 150-foot buffer from adjacent agricultural land at the Urban Limit Line, where feasible. Detailed discussion of impacts and mitigation measures associated with implementation of the WRTP Specific Plan that would require expansion of the WRTP Specific Plan Area are evaluated throughout other sections of this EIR, including Agricultural Resources; Hydrology, Flooding, and Water Quality; Public Services and Recreation; and Utilities. As described above implementation of the WRTP Specific Plan, is consistent with LAFCo policies. Thus, this impact is considered **less than significant**.

3.10.4 CUMULATIVE IMPACTS

Cumulative development within the region would result in a significant change in land use, and individual projects would need to be considered in context of their compliance with adopted land use plans. Plans with which compliance may be analyzed include general plans and regional transportation plans.

For the WRTP Specific Plan, appropriate plans to consider include Yolo County's General Plan, the Woodland General Plan, and the Sacramento Area Council of Governments' (SACOG) Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS).

The proposed WRTP Specific Plan is required to be consistent with the 2035 General Plan. The WRTP Specific Plan is one of three subareas designated by the City of Woodland General Plan 2035 within the Specific Plan 1 (SP-1) new growth area.

The MTP/SCS is a long-range transportation plan that also includes analysis of greenhouse gas (GHG) emissions associated with passenger vehicle travel. The SACOG MTP/SCS identifies different community types, including "Developing Communities," a designation that includes the WRTP Specific Plan Area. The EIR comprehensively addresses direct and indirect impacts associated with buildout of the WRTP Specific Plan, including various topics that are also addressed in planning documents. There are no additional impacts related to population, employment, or housing not already fully addressed in a topic-specific section of the EIR. As is true for the 2035 General Plan and CAP EIR, for the WRTP Specific Plan, there is **no significant cumulative** impact.

For the purposes of analysis, this EIR assumes the development of approximately 1,600 new dwelling units, 2.2 million square feet of non-residential building space, and 5,000 employees, along with 21.8 acres of parks and other types of open space. Implementation of the proposed WRTP Specific Plan would directly facilitate population growth in the area through the construction of homes and could indirectly facilitate population growth through the development of employment opportunities, which may lead to additional housing demand.

Population growth, by itself, is not an environmental impact. However, the direct and indirect effects, such as housing and infrastructure needs that are related to population growth, can lead to physical environmental effects, the impacts of which are considered throughout the topic-specific technical sections of this EIR. Population growth could result in significant cumulative impacts if population growth were to exceed estimates in the regional plans. However, the development assumptions for the WRTP Specific Plan are within the envelope created by the General Plan, and there is no impact related to population growth that is not fully addressed throughout this EIR in other sections. There is **no significant cumulative** impact.

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3.11 NOISE AND VIBRATION

3.11.1 INTRODUCTION

This section describes the existing conditions and evaluates the potential impacts related to noise and vibration from development of the WRTP Specific Plan Area and off-site improvements.

Baseline conditions were developed using data obtained during noise monitoring in proximity to the WRTP Specific Plan Area, along with research to determine the locations of noise-sensitive receptors and noise-generating land uses. Noise measurements conducted in 2017 were used to support the analysis in this section. For this EIR, conditions for vehicular transportation to inform the analysis of traffic noise are based upon the Traffic Impact Study (Appendix E), which incorporates data collection and field observations from 2017, and impacts attributable to the WRTP Specific Plan are compared to baseline levels.

The CEQA Guidelines note that comments received during the NOP scoping process can be helpful in "identifying the range of actions, alternatives, mitigation measures, and significant effects to be analyzed in depth in an EIR and in eliminating from detailed study issues found not to be important." (CEQA Guidelines Section 15083). Consistent with these requirements, NOP comments have been carefully reviewed and considered by the City. However, no NOP comments related to noise or vibration were received. Appendix A of this EIR includes copies of all NOP comments received.

3.11.2 ENVIRONMENTAL SETTING

The City of Woodland 2035 General Plan and CAP EIR summarizes the environmental setting in the vicinity of the City's Planning Area as it pertains to Noise on pages 4.11-1 through 4.11-28. The environmental setting for the WRTP Specific Plan Area as it relates to noise has not changed since the 2035 General Plan and CAP EIR was prepared in a way that would affect any of the findings of this section. Those aspects of the environmental setting that are relevant to potential impacts of the WRTP Specific Plan are highlighted below.

Primary linear noise sources in the vicinity of the WRTP Specific Plan Area include SR 113, and other local arterials and streets; aircraft overflights from Sacramento International Airport, Yolo County Airport, and Watts-Woodland Airport, and the California Northern Railroad, which is oriented north to south. Other noise sources in the vicinity of the WRTP Specific Plan Area include activities within developed areas to the east and north, agricultural activities, and natural sources (wind, birds, etc.).

3.11.2.1 FUNDAMENTALS OF ENVIRONMENTAL NOISE

Below is a brief description of certain terminology used throughout this report to characterize the noise environment in the vicinity of the WRTP Specific Plan Area.

Sound, Noise, and Acoustics

Sound can be described as the mechanical energy of a vibrating object transmitted by pressure waves through a liquid or gaseous medium (e.g., air). Noise is unwanted sound (i.e., loud, unexpected, or annoying sound). Acoustics is the physics of sound.

In acoustics, the fundamental scientific model consists of a sound (or noise) source, a receiver, and the propagation path(s) between the two. The loudness of the sound source and obstructions or atmospheric factors affecting the propagation of the sound to the receiver determines the sound level and characteristics of the sound perceived by the receiver. Acoustics primarily addresses the propagation and control of sound.

Frequency

The number of sound pressure peaks travelling past a given point in space during a single second is referred to as the frequency, expressed in cycles per second or Hertz (Hz). A given sound may consist of energy at a single frequency (pure tone) or in many frequencies over a broad frequency range (or band). Human hearing is generally affected by sound frequencies between 20 Hz and 20,000 Hz (20 kHz).

A-Weighted Decibels

Exhibit 3.11-1 illustrates sound levels associated with common sound sources. The perceived loudness of sounds is dependent on many factors, including sound pressure level and frequency content. However, within the usual range of environmental sound levels, perception of loudness is relatively predictable, and can be approximated using the A-weighting network. There is a strong correlation between A-weighted sound levels (expressed as dBA) and community response to noise. For this reason, the A-weighted sound level has become the standard descriptor for environmental noise assessment, and noise levels shown in this report are A-weighted.

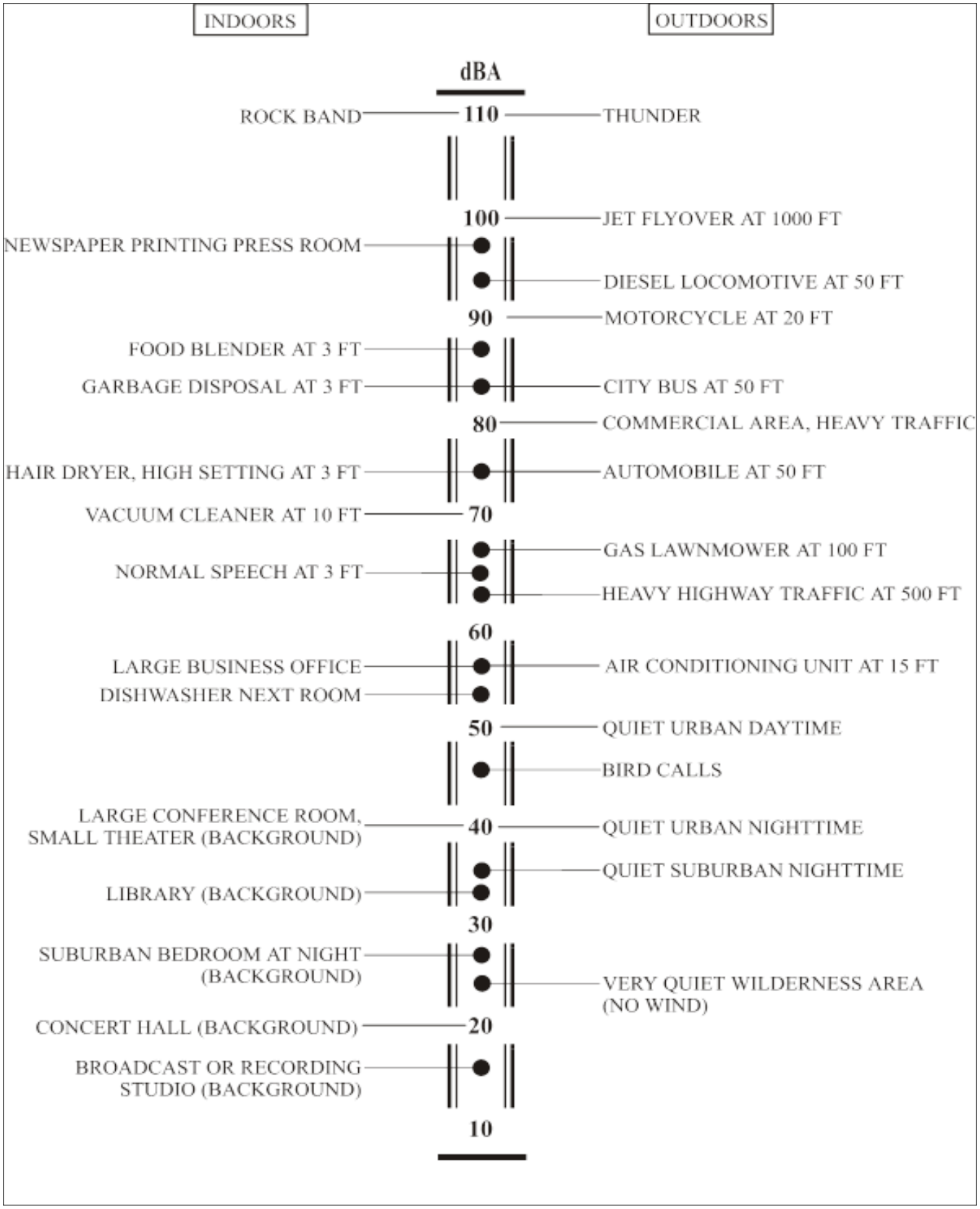
Human Response to Changes in Noise Levels

Under controlled conditions in a laboratory setting, a human is able to discern 1 dB changes in sound levels when exposed to steady, single-frequency ("pure-tone") signals in the mid-frequency range (1,000 Hz-8,000 Hz). In typical noisy environments, changes in noise level of 1-2 dB are generally not perceptible. However, people are able to begin to detect sound level changes of 3 dB in typical environments. A 5-dB change is readily noticeable, a 6-dB change is clearly noticeable, and a 10-dB change is generally perceived as a doubling or halving of loudness (Caltrans 2013a). Table 3.11-1 shows the relationship between increases in environmental noise level and human perception.

Table 3.11-1. Relationship Between Increases in Environmental Noise Level and Human Perception

Noise Level Increase, dB	Human Perception (typical)
0	Reference (no change)
1 to 2	not perceptible
+ 3	barely perceptible increase
+ 5	readily perceptible increase
+ 10	Two times as loud
+ 20	Four times as loud
+ 30	Eight times as loud
+ 40	16 times as loud

Source: Caltrans 2013a



Source: Caltrans, 2013b

Exhibit 3.11-1. Decibel Scale and Common Noise Sources

Noise Descriptors

Noise in our daily environments fluctuates over time. Some fluctuations are minor, but some are substantial. Some noise levels occur in regular patterns, but others are random. Some noise levels fluctuate rapidly, but others fluctuate slowly. Some noise levels vary widely, but others are relatively constant. Various noise descriptors have been developed to help describe noise exposure as it relates to time:

- **Equivalent Sound Level (L_{eq}):** The L_{eq} represents an average of the sound energy occurring over a specified time period. In effect, the L_{eq} is the steady-state sound level containing the same acoustical energy as the time-varying sound that actually occurs during the same period. The 1-hour, A-weighted equivalent sound level (L_{eq}[h]) is the energy average of A-weighted sound levels occurring during a 1-hour period, and is the basis for noise abatement criteria (NAC) used by the California Department of Transportation (Caltrans) and the Federal Highway Administration (FHWA).

- **Percentile-Exceeded Sound Level (L_n):** The L_n represents the sound level exceeded "n" percentage of a specified period.[1]

- **Maximum Sound Level (L_{max}):** The L_{max} is the highest instantaneous sound level measured during a specified period.

- **Day-Night Average Level (L_{dn}):** The L_{dn} (or DNL) is the energy-average of A-weighted sound levels occurring over a 24-hour period, with a 10 dB penalty applied to A-weighted sound levels occurring during nighttime hours (10 p.m.–7 a.m.).

- **Community Noise Equivalent Level (CNEL):** Similar to L_{dn}, CNEL is the energy-average of the A-weighted sound levels occurring over a 24-hour period, with a 10 dB penalty applied to A-weighted sound levels occurring during the nighttime hours (10 p.m.–7 a.m.), and a 5 dB penalty applied to the A-weighted sound levels occurring during evening hours (7 p.m.–10 p.m.). The CNEL is usually within 1 dB of the L_{dn}, and the two are basically interchangeable. As it is easier to compute and of more common use, the L_{dn} is used as the long-term noise measure in this study.

3.11.2.2 Noise-Sensitive Land Uses and Noise Sources

Noise-sensitive land uses are generally defined as locations where people reside or where the presence of unwanted sound could adversely affect the use of the land. Places where people live, sleep, worship, and study are considered to be sensitive to noise because intrusive sound can be disruptive to these activities. Noise-sensitive uses include residentially designated areas, nursing homes, schools, libraries, and places of worship. Noise sources include highway and surface streets, railways, aircraft, and stationary noise sources such as commercial and industrial uses, construction sites, as well as neighborhood parks and schools.

Noise conflicts can occur when larger-scale commercial and industrial uses are located near or adjacent to residential neighborhoods, but recreational and other non-residential land uses can also create conflicts. Whether or not the juxtaposition of different land uses creates a noise conflict depends on the design, scale, character, and operation of both the noise-generating use and the noise-sensitive use.

[1] For example, L_{10} is the sound level exceeded 10 percent of the time, and L_{90} is the sound level exceeded 90 percent of the time.

The nearest existing noise-sensitive land uses to the WRTP Specific Plan Area are residential neighborhoods to the east and north of the WRTP Specific Plan Area associated with the Spring Lake development. Large-scale agricultural uses are south, southeast, and west of the WRTP Specific Plan Area, in an area that is largely separated from most residences. Woodland Christian School located at 1787 Matmor Road is located northwest of the WRTP Specific Plan Area and west of SR 113. In addition, there is a single residence located southwest of the intersection of SR 113 and CR 25A, in proximity to the proposed Caltrans Off-site Improvement Area.

Ambient Noise Level Measurements

A community noise survey was conducted to document noise exposure in areas with noise-sensitive land uses. For the purposes of this analysis, noise-sensitive land uses include residential areas to the east and north of the WRTP Specific Plan Area, the house located southwest of SR 113 and Road 25A interchange, and the school northwest of the WRTP Specific Plan Area west of SR 113. Noise measurement sites were selected to be representative of typical noise conditions at the nearby noise-sensitive uses.

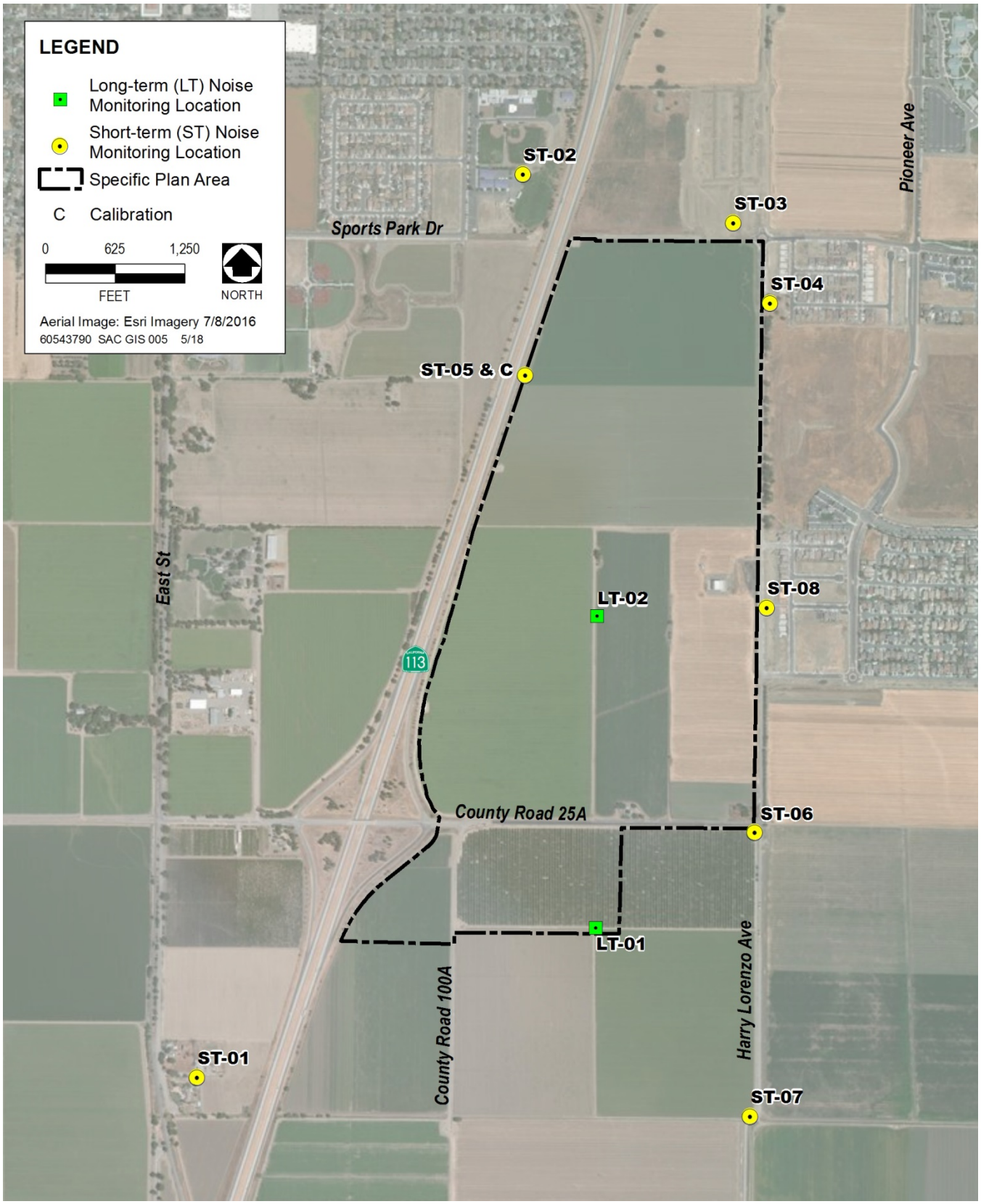
Short-term ambient noise level measurements were conducted at eight sites on August 30–31, 2017.[2] The measurement duration was 15 to 20 minutes. Two continuous 24-hour ambient noise level measurements were completed. These measurements were completed from August 30–31, 2017. Noise measurement sites, measured noise levels, and estimated noise levels for each site are summarized in Table 3.11-2. Noise measurement sites are shown in Exhibit 3.11-2.

Table 3.11-2. Summary of Noise Level Survey Results

Site	Location	Duration	Measured Sound Level, dB - Daytime L_{eq}	Measured Sound Level, dB - Daytime L_{max}	Measured Sound Level, dB - Nighttime L_{eq}	Measured Sound Level, dB - Nighttime L_{max}	Measured Sound Level, dB L_{dn}
LT-01	South-central portion of the WRTP Specific Plan Area, along Road 25A	24 Hours	48	70	49	66	55
LT-02	Central portion of the WRTP Specific Plan Area	24 Hours	55	93	54	71	60
ST-01	Near the residence at 20999 East Street	18 Minutes	58	71	NA	NA	NA
ST-02	Woodland Christian School, 1787 Matmor Road	15 Minutes	59	68	NA	NA	NA
ST-03	Just north of the WRTP Specific Plan Area	18 Minutes	48	64	NA	NA	NA
ST-04	Near single-family homes just east of the northeastern portion of the WRTP Specific Plan Area	15 Minutes	49	65	NA	NA	NA
ST-05	Western portion of the WRTP Specific Plan Area adjacent to SR 113	10 Minutes	73	85	NA	NA	NA
ST-06	Southeastern portion of the WRTP Specific Plan Area at the intersection of Harry Lorenzo Avenue and County Road 25A	15 Minutes	52	67	NA	NA	NA
ST-07	Southeast of the WRTP Specific Plan Area	15 Minutes	50	64	NA	NA	NA
ST-08	Near single-family homes just east of the WRTP Specific Plan Area	20 Minutes	51	67	NA	NA	NA

Note: dB = decibels; L_{dn} = day-night average noise level; L_{eq} = energy-equivalent noise level; L_{max} = maximum sound level; ST = Short Term.
Source: AECOM 2017

[2] Noise level measurements were completed using Larson Davis Laboratories (LDL) Model 820 and 824 precision integrating sound level meters. The meters were calibrated prior to the measurements using an LDL Model (CAL 200) acoustical calibrator. The equipment used complies with all pertinent requirements of the American National Standards Institute for Class 1 sound level meters (ANSI S1.4).



Source: AECOM 2018

Exhibit 3.11-2. Noise Monitoring Locations

The community noise survey results indicate that typical noise levels in noise-sensitive areas range from 48 dB to 73 dB L_{eq} at the noise-sensitive uses around the WRTP Specific Plan Area. The continuous noise level measurement data shows that ambient noise levels at the measurement sites ranged from 55 to 63 dB L_{dn} within the WRTP Specific Plan Area. The L_{eq} values presented in Table 3.11-2 represent the average measured noise levels during the sample periods (15 to 20 minutes). L_{max} values show the maximum noise levels observed during measurement periods. Traffic on local roadways and SR 113, agricultural activities, and neighborhood activities are the controlling factors for background noise levels in the majority of the WRTP Specific Plan Area.

Existing Sources of Noise

Major transportation routes are dominant sources of noise in the vicinity of the WRTP Specific Plan Area. These include traffic on SR 113, and other local arterials and streets; aircraft overflights from Sacramento International Airport, Yolo County Airport, and Watts-Woodland Airport; and train operations on the California Northern Railroad. Stationary sources in the vicinity of the WRTP Specific Plan Area include construction sites and farming activities.

Traffic

Traffic operations data was used to estimate existing traffic noise levels at a distance of 100 feet from the centerline of the studied roadways.[3] Additionally, the 60 dB L_{dn}, 65 dB L_{dn}, and 70 dB L_{dn} traffic noise contour distances were determined. Table 3.11-3 provides a summary of traffic noise levels and contour distances for the existing condition.[4]

Traffic noise contours were prepared in support of the 2035 General Plan and CAP EIR and further in support of this WRTP Specific Plan EIR using the Federal Highway Administration's (FHWA) traffic noise prediction model (FHWA-RD-77-108 [FHA 1978]) for major and minor arterials, and collector roadway segments.

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[3] Existing noise levels in the City have been characterized thru traffic noise modeling. The Federal Highway Administration (FHWA) Highway Traffic Noise Prediction Model (FHWA-RD-77-108 [FHA 1978]), existing traffic volumes, and posted traffic speed, day/night traffic distribution, and assumption regarding the traffic fleet mix (i.e., percentage of automobiles, medium trucks, and heavy trucks) were used to assess existing traffic noise exposure for both highways and major roadways in the City of Woodland General Plan study area. The FHWA Model is the standard model recommended by the FHWA and is the analytical method presently favored for traffic noise prediction by most state and local agencies, including Caltrans. The current version of the Model is based upon the CALVENO noise emission factors for automobiles, medium trucks, and heavy trucks, with consideration given to vehicle volume, speed, roadway configuration, distance to the receiver and the acoustical characteristics of the site. The FHWA Model predicts day-night average noise levels (L_{dn}), and hourly L_{eq} values for free-flowing traffic conditions, and is generally considered to be accurate within 1.5 dB of the measured condition. Traffic data representing average daily traffic volumes for existing conditions were obtained from Caltrans and Fehr & Peers Associates. Day/night traffic distribution for all studied roadways was based upon the day-night average daily traffic volumes. Posted traffic speeds, and vehicle mixes provided by Caltrans (for highways) and observed during the Model calibration noise level measurements, were assumed for the traffic noise modeling effort.

[4] In some cases, the actual distances to noise level contours may vary from the distances predicted by the FHWA Model. Factors such as roadway curvature, roadway grade, shielding from local topography or structures, roadway elevations, or elevation of receivers may affect actual sound propagation. Therefore, the distances reported in Table 3.11-3 are estimates of noise exposure along roadways in the City of Woodland.

Table 3.11-3. Existing Traffic Noise Levels and Contour Distances

ID	Roadway	Roadway Segment	ADT	L_{dn}@ 100 ft	Distance to Contours (feet) 70 dB L_{dn}	Distance to Contours (feet) 65 dB L_{dn}	Distance to Contours (feet) 60 dB L_{dn}
1	CR 25A	From East Street to SR 113 SB Ramps	5,190	62	17	53	168
2	CR 25A	From SR 113 NB Ramps to Road A	2,010	58	7	21	65
3	CR 25A	From Road A to Road B	n/a	n/a	n/a	n/a	n/a
4	CR 25A	From Road B to Road D	n/a	n/a	n/a	n/a	n/a
5	CR 25A	From Road D to CR 102	n/a	n/a	n/a	n/a	n/a
6	Road B	From CR 25A to Road C	n/a	n/a	n/a	n/a	n/a
7	Road B	From Road E to Parkland Avenue	n/a	n/a	n/a	n/a	n/a
8	Pioneer Ave	From Gibson Road to Farmer's Central Rd	8,110	64	26	83	262
9	Heritage Pkwy	From Campos Avenue to CR 102	2,960	60	10	30	96
10	Harry Lorenzo Avenue	From Gibson Road to Farmer's Central Road	n/a	n/a	n/a	n/a	n/a

Notes: dB = decibels; L_{dn} = Day-Night Average sound level; n/a = Roadway segments that do not currently exist, but that would exist and are analyzed under future conditions with buildout of the WRTP Specific Plan Area (Tables 3.11-8a,b and Table 3.11-9). All tables use a consistent segment numbering approach for easier referencing.
Source: Traffic data from Fehr & Peers Associates 2020, noise modeling conducted by AECOM 2020.

Railroads

The City of Woodland has two active rail lines: The California Northern Railroad and the Sierra Northern Railway. Sierra Northern Railway operates the Sacramento River Train, which is not near the Specific Plan Area.

The California Northern Railroad is a freight line that runs through Woodland and Davis, and along I-5 past the City of Corning. California Northern Railroad is located near the WRTP Specific Plan Area from SR 113 south of Sports Park Drive, to the west of SR 113 at approximately 1,000 feet from the southern boundary of the WRTP Specific Plan Area to approximately 3,600 feet from the northern boundary of the WRTP Specific Plan Area. The nearest at-grade rail crossing to the WRTP Specific Plan Area is on the west leg of the intersection of East Street and CR 25A. The freight line schedule varies depending on agricultural/seasonal demands. The rail line carries an average of two trains daily, using between one and 50 rail cars and one or two locomotives, traveling at an average speed of 15 miles per hour. Approximately two to three trains per day originate in Woodland and travel to Davis, while approximately one train per day originates in Woodland and travels to the north. Discussions with representatives from California Northern Railroad indicate that all operations generally occur between the hours of 7:00 am and 7:00 pm. The estimated railroad noise level at 100 feet from the railway centerline is approximately 45 dB L_{dn}. The estimated distances to the 65 and 60 dB L_{dn} contours are 11 and 22 feet from the rail line, respectively.

Aircraft

Aircraft operations in the vicinity of an airport can be a significant source of noise. Medlock Field Airport is located approximately 1.3 miles south of the WRTP Specific Plan Area. The airport is privately owned and for private use, with only 15 single-engine planes based at this airport. The nearest public airport is Watts Woodland Airport, which is located over six miles from the western boundary of the WRTP Specific Plan Area. The Sacramento International Airport is located nearly nine miles northeast and Yolo County Airport more than six miles southwest of the WRTP Specific Plan Area.

Based upon the most recent noise contours for the Watts Woodland and Yolo County Airports contained within the Yolo County 2030 General Plan EIR (April 2009) and recent noise contours obtained from Sacramento International Airport Land Use Compatibility Plan (SACOG 2013), the WRTP Specific Plan Area is located outside of the 60 dB CNEL contours of all three major airports.

Other Stationary and Area Noise Sources

The following provides descriptions of other stationary and area noise sources within and surrounding the WRTP Specific Plan Area. The information is intended to be representative of the noise sources and noise levels associated with such uses.

Landscape and Building Maintenance Activities

Landscape maintenance activities include the use of leaf blowers, power tools, and gasoline-powered lawn mowers, and could result in intermittent noise levels of approximately 88 dB at 6 feet. Based on an equipment noise level of 88 dB, the use of such equipment, assuming a noise attenuation rate of 6 dB per doubling of distance from the source, would result in exterior noise levels of approximately 70 dB at 50 feet. If these activities occur during noise-sensitive hours, such as early in the morning, this results in compatibility issues for nearby noise-sensitive uses.

Mechanical Equipment

The operation of mechanical equipment (e.g., pumps, generators; heating, ventilation, and cooling systems) could result in intermittent noise levels of approximately 90 dB at 3 feet (EPA 1971). Based on this equipment noise level, the operation of such equipment, assuming a noise attenuation rate of 6 dB per doubling of distance from the source, may result in exterior noise levels of approximately 60 dB at 95 feet. These types of equipment are typically shielded from direct exposure (e.g., housed on rooftops, in equipment rooms, or in exterior enclosures), which can help to avoid noise compatibility issues.

Garbage Collection Activities

Garbage collection activities (e.g., emptying large refuse dumpsters and the shaking of containers with a hydraulic lift), could result in instantaneous maximum noise levels of approximately 89 dB L_{max} at 50 feet. Such activities are anticipated to be very brief, intermittent, and would occur during daytime hours, which are considered to be relatively less noise-sensitive times of day. Garbage collection activities are infrequent, and therefore would not be expected to exceed daily noise standards. Noises would typically emanate from public rights-of-way, which would normally be separated from outdoor gathering spaces associated with residential uses. Noise associated with garbage collection would not be expected to create single-event noise that would be substantially disruptive to daily activities or cause sleep disturbance.

Parking Lots

Parking lots and parking structures include noise sources such as vehicles entering/exiting the lot, alarms/radios, and doors slamming. Neither the size (i.e., capacity) or location of parking lots that could be constructed in the WRTP Specific Plan Area is known at this time. However, according to the FHWA, parking lots with a maximum hourly traffic volume of approximately 1,000 vehicles per hour either entering or exiting the lot could result in a peak hour and daily noise levels of approximately 56 dB L_{eq} and 63 dB L_{dn} at 50 feet.

Residential, School, and Recreation Activities and Events

Noise sources typical of residential, school, recreation, and event uses could include voices and amplified music/speaker systems. Such sources could result in noise levels of approximately 60–75 dB L_{eq} at 50 feet.

Although such activities would likely occur primarily during the daytime hours, it is possible that noise levels could exceed the applicable standards at existing and proposed noise-sensitive receptors, especially if such activities were to occur during the more noise-sensitive hours (e.g., evening, nighttime, and early morning) and create a substantial increase in ambient noise levels at existing noise-sensitive receptors. In addition, if such activities were to occur during these more noise-sensitive hours, project-generated noise levels may result in annoyance and/or sleep disruption to occupants of the existing and proposed noise-sensitive land uses.

Agricultural Activities

Agricultural activities within the WRTP Specific Plan Area and its immediate surroundings involve the use of various types of heavy-duty equipment. Agricultural operations involve crop and orchard operations, which can occur during noise sensitive times of the day and involve substantial noise levels. The operation of heavy-duty equipment associated with agricultural activities typically results in noise levels of approximately 75 dB L_{eq} at 50 feet (EPA 1971). As development occurs under the WRTP Specific Plan, existing agricultural activities could potentially continue within the WRTP Specific Plan Area until these lands are ready to be developed, and future noise sensitive uses could be developed adjacent to ongoing agricultural operations on undeveloped portions of the WRTP Specific Plan Area. Areas south, southeast, and west of the WRTP Specific Plan Area consist largely of agricultural production. -The closest distances between proposed noise-sensitive land uses and off-site agricultural land uses would be approximately 50 to 200 feet in several locations to the south, southeast, and west of the WRTP Specific Plan Area. Based on the above noise levels and a typical noise-attenuation rate of 6.0 dB per doubling of distance, exterior noise levels at noise-sensitive receptors approximately 50 to 200 feet from agricultural activities could exceed 75 and 63A dB L_{eq}, respectively. It is important to note that the closest noise-sensitive receptors would not be exposed to this noise level for extended periods, given the mobile nature of agricultural activities (e.g., disking, plowing, harvesting). If, for instance, residential land uses were exposed to 75 dB L_{eq} for one entire hour during the daytime, and ambient noise levels were 50 dB L_{eq} during the rest of the daytime hours and 45 dB L_{eq} during the nighttime hours, the 24-hour noise level would be 62 dB L_{dn}.

3.11.3 REGULATORY FRAMEWORK

Various agencies have established noise guidelines and standards to protect citizens from potential hearing damage and other adverse physiological and social effects associated with noise and vibration. The 2035 General Plan and CAP EIR summarizes the federal, State, regional, and local regulatory framework on pages 4.11-28 through 4.11-36. Those aspects of the existing regulatory framework that are relevant to potential impacts of the WRTP Specific Plan are briefly highlighted below. This information is intended to provide the regulatory context against which existing and future noise conditions can be compared. Please see Section 4.11 of the 2035 General Plan and CAP EIR for more detail.

3.11.3.1 FEDERAL PLANS, POLICIES, REGULATIONS AND LAWS

Although not directly applicable to the WRTP Specific Plan, the research that supported the development of federal community noise standards is broadly applicable in understanding human response to different noise levels and is summarized below for the reader's edification.

U.S. Environmental Protection Agency Noise Control Act (Public Law 92-574)

The federal Noise Control Act of 1972 (Public Law 92-574) established a requirement that all federal agencies administer their programs to promote an environment free of noise that would jeopardize public health or welfare.[5] Although the EPA was given a major role in disseminating information to the public and coordinating federal agencies, each federal agency retains authority to adopt noise regulations pertaining to agency programs.[6]

In 1974, in response to the requirements of the federal Noise Control Act, the EPA identified indoor and outdoor noise level limits to protect public health and welfare (communication disruption, sleep disturbance, and hearing damage). Outdoor and indoor noise exposure limits of 55 dB L_{dn} and 45 dB L_{dn}, respectively, are identified as desirable to protect against speech interference and sleep disturbance for residential, educational, and healthcare areas. The sound-level criterion identified to protect against hearing damage in commercial and industrial areas is 70 dB 24-hour L_{eq} (both outdoors and indoors) (EPA 1974).

U.S. Department of Housing and Urban Development Noise Abatement and Control (24 CFR Part 51, Subpart B)

The U.S. Department of Housing and Urban Development (HUD) has established guidelines for evaluating noise impacts on residential projects seeking financial support under various grant programs (HUD 2015), as summarized below:

- **Acceptable ≤ 65 dB.** Sites are generally considered acceptable for residential use if they are exposed to outdoor noise level of 65 dB L_{dn} or less.
- **Normally Unacceptable 65-75 dB.** Sites are considered "normally unacceptable" if they are exposed to outdoor noise levels of 65-75 dB L_{dn}.
- **Unacceptable > 75 dB.** Sites are considered "unacceptable" if they are exposed to outdoor noise levels above 75 dB L_{dn}.

The HUD goal for the interior noise levels in residences is 45 dB L_{dn} or less.

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5 The U.S. Environmental Protection Agency (EPA) was given the responsibility for providing information to the public regarding identifiable effects of noise on public health and welfare, publishing information on the levels of environmental noise that will protect the public health and welfare with an adequate margin of safety, coordinating federal research and activities related to noise control, and establishing federal noise emission standards for selected products distributed in interstate commerce. The Noise Control Act also directed that all federal agencies comply with applicable federal, State, interstate, and local noise control regulations.

6 The EPA can, however, require other federal agencies to justify their noise regulations in terms of the Noise Control Act policy requirements.

Federal Aviation Administration Airport Noise Compatibility Planning (14 CFR Part 159)

14 CFR Part 150, "Airport Noise Compatibility Planning" prescribes the procedures, standards, and methodology to be applied to airport noise compatibility planning activities. Noise levels below 65 dB L_{dn} are normally considered to be acceptable for noise-sensitive land uses.

Federal Transit Administration Transit Noise and Vibration Impact Assessment (FTA-VA-90-1003-06)

Federal Transit Administration (FTA) procedures for the evaluation of noise from transit projects are specified in the document entitled, "Transit Noise and Vibration Impact Assessment" (FTA 2018). The FTA Noise Impact Criteria address the following categories:

- **Category 1:** Buildings or parks, where quiet is an essential element of their purpose.
- **Category 2:** Residences and buildings where people normally sleep. This includes residences, hospitals, and hotels where nighttime sensitivity is assumed to be of utmost importance.
- **Category 3:** Institutional land uses with primarily daytime and evening use. This category includes schools, libraries, churches, and active parks.

The L_{dn} noise level descriptor is used to characterize noise exposure for residential areas (Category 2). For other noise sensitive land uses, such as outdoor amphitheaters and school buildings (Categories 1 and 3), the maximum hourly L_{eq} during the facility's operating period is used. Noise impacts are identified based on absolute predicted noise levels and increases in noise associated with the subject project.

Although the WRTP Specific Plan is not subject to FTA guidelines, they are relevant nonetheless for assessing impacts. According to FTA guidelines, a vibration-damage criterion of 0.20 inches per section (in/sec) peak particle velocity (PPV) should be considered for non-engineered timber and masonry buildings, and a vibration-damage criterion of 0.50 in/sec PPV for structures or buildings constructed of reinforced concrete, steel, or timber.

To address human response (annoyance) to groundborne vibration, FTA has established vibration thresholds for different land uses. These guidelines recommend 65 VdB or less for land uses where low ambient vibration is essential for interior operations (e.g., hospitals, high-tech manufacturing, laboratory facilities), 80 VdB or less for residential uses and buildings where people normally sleep, and 83 VdB or less for institutional land uses with primarily daytime operations (e.g., schools, churches, clinics, offices) (FTA 2018).

3.11.3.2 STATE PLANS, POLICIES, REGULATIONS, AND LAWS

State of California General Plan Guidelines, Government Code Section 65302 et seq.

In 1971, the State required cities and counties to include noise elements in their general plans (Government Code Section 65302 et seq.). The State of California General Plan Guidelines (Office of Planning and Research 2017) identify guidelines for the noise elements of local general plans, including a sound level/land-use compatibility chart. The noise element guidelines identify the "normally acceptable" range of noise exposure for low-density residential uses as less than 60 dB L_{dn}, and the "conditionally acceptable" range as 55-70 dB L_{dn}. The "normally acceptable" range for high-density residential uses is identified as below 65 dB L_{dn}, and the "conditionally

acceptable" range is identified as 60-70 dB L_{dn}. For educational and medical facilities, levels below 70 dB L_{dn} are considered "normally acceptable," and levels of 60-70 dB L_{dn} are considered "conditionally acceptable." For office and commercial land uses, levels below 70 dB L_{dn} are considered "normally acceptable," and levels of 67.5–77.5 dB L_{dn} are considered "conditionally acceptable." Overlapping noise level ranges are intended to indicate that local conditions (existing sound levels and community attitudes toward dominant sound sources) should be considered in evaluating land use compatibility at specific locations.

Title 24 of the California Code of Regulations, also known as the California Building Standards Code, establishes building standards applicable to all occupancies throughout the state. The code provides acoustical regulations for both exterior-to-interior sound insulation, as well as sound and impact insulation between adjacent spaces of various occupied units. Title 24 regulations state that interior noise levels generated by exterior noise sources shall not exceed 45 dB L_{dn}, with windows closed, in any habitable room for residential uses (OPR 2017).

3.11.3.3 Regional and Local Plans, Policies, Regulations, and Ordinances

City of Woodland Municipal Code

The City's Municipal Code also addresses environmental noise, but with more of a focus on the operation of land uses and ongoing activities (as opposed to the guidance for proposed developments, which is the focus of the General Plan). According to the Municipal Code, "it shall be unlawful for any person to make, continue or cause to be made or continued, any loud, unnecessary, or unusual noise or any noise which either annoys, disturbs, injures or endangers the comfort, repose, health, peace."[7] The following acts, among others, are declared to be loud, disturbing, and unnecessary noises in violation of this section, but such enumeration shall not be deemed to be exclusive, namely:

d) **Construction or Repairing of Buildings.** The erection (including excavation), demolition, alteration, or repair of any building other than between the hours of 7:00 A.M. and 6:00 P.M. on Monday, Tuesday, Wednesday, Thursday, Friday and Saturday, and between 9:00 A.M. and 6:00 P.M. on Sunday, except in case of urgent necessity in the interest of public health and safety, and then only with a permit from the building inspector, which permit may be granted for a period not to exceed three days or less while the emergency continues, and which permit may be renewed for a period of three days or less while the emergency continues. If the building inspector should determine that the public health and safety will not be impaired by the erection, demolition, alteration or repair of any building or the excavation of streets and highways within the hours of 6:00 P.M. and 7:00 A.M. on weekdays and 6:00 P.M. and 9:00 A.M. on Sundays, and if he shall further determine that loss or inconvenience would result to any party in interest, he may grant permission for such work to be done within the hours of 6:00 P.M. and 7:00 A.M. on weekdays and 6:00 P.M. and 9:00 A.M. on Sundays, upon application being made at the time the permit for the work is awarded or during the progress of the work.

e) **Pile Drivers, Hammers, Etc.** The operation between the hours of 10:00 P.M. and 7:00 A.M. of any pile driver, steam shovel, pneumatic hammer, derrick, steam and electric hoist or other appliance, the use of which is attended by loud or unusual noise.

[7] Please refer to Sec. 15-28.090. Loud, unnecessary, etc., noises prohibited; enumeration of such noises for more detail.

f) **Tools.** The use of or operation between the hours of 10:00 P.M. and 7:00 A.M. of any power saw, power planer, or other powered tool or appliance or saw or hammer, or other tool, so as to disturb the quiet, comfort or repose of persons in any dwelling, hotel, apartment or other type of residence, or of any person in the vicinity.

g) **Blowers.** The operating of any noise-creating blower or power fan or any internal combustion engine the operation of which causes noise due to the explosion of operating gases or fluids unless the noise from such blower or fan is muffled and such engine is equipped with a muffler device sufficient to deaden such noise.

h) **Street Sweepers.** The operation of any type of suction sweeper or cleaner between the hours of 10:00 P.M. and 7:00 A.M., the use of which is attended by loud or unusual noise which disturbs the quiet, comfort or repose of persons in any dwelling, hotel, apartment or other type of residence, or of any person in the vicinity.

i) **Exhausts.** The discharge into the open air of the exhaust of any steam engine, stationary internal combustion engine, motor boat or motor vehicle except through a muffler or other device which will effectively prevent loud or explosive noises therefrom.

The City requires a permit for the use of amplification and limits the use of loudspeakers and amplification to the hours between 10:00 A.M. and 10:30 P.M.[8]

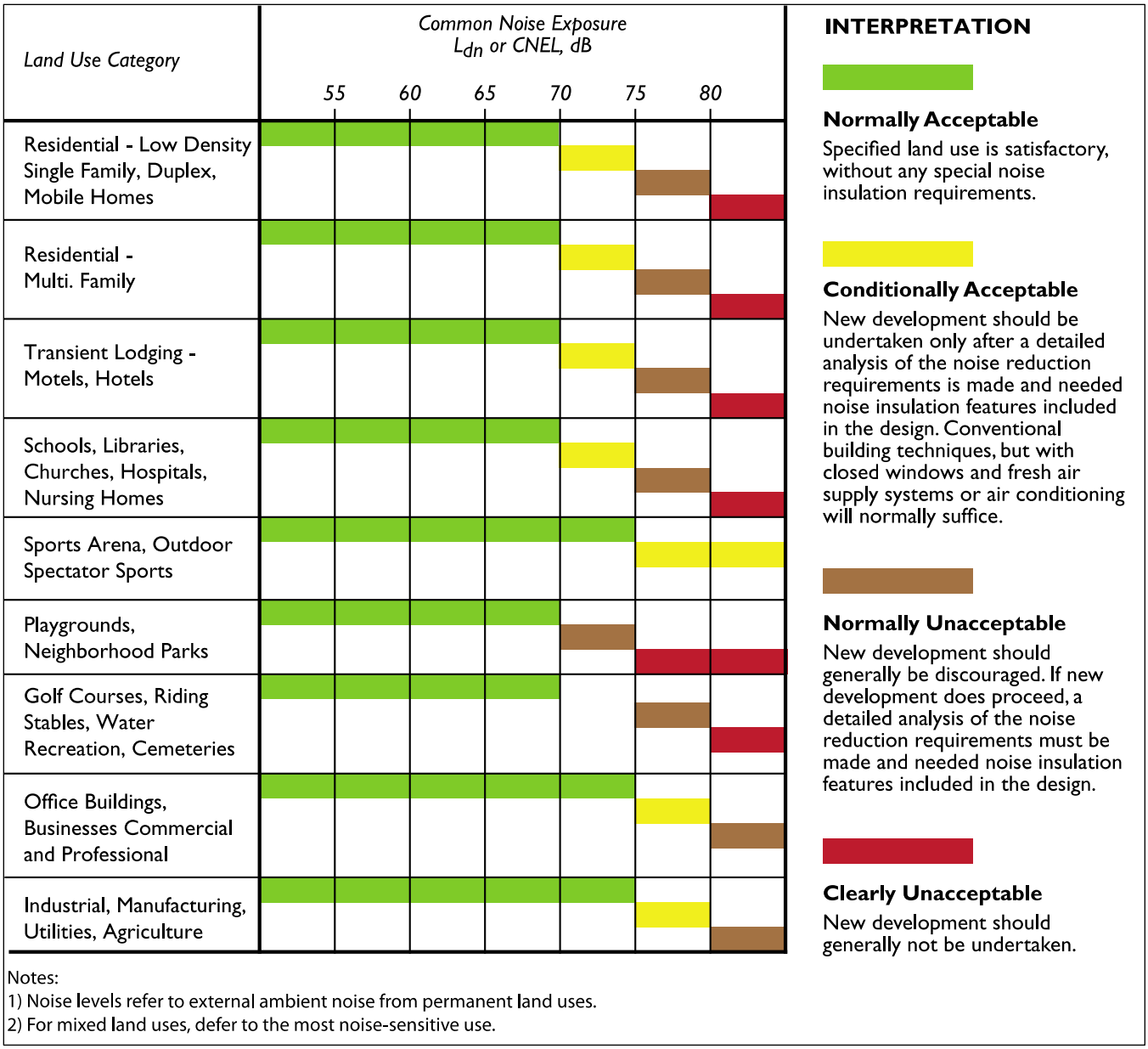
City of Woodland 2035 General Plan

The *City of Woodland General Plan Update 2035* (City of Woodland 2017) identifies the following policies that are applicable to the WRTP Specific Plan Area.

- **Policy 8.G.1 Noise Compatibility for Residential Uses.** Ensure that existing and planned land uses are compatible with the current and projected noise environment. However, urban development and increased density, as supported by the City in this General Plan, generally results in greater ambient (background) noise than lower density areas. It is the City's intent to meet specified indoor noise thresholds, and to create peaceful backyard living spaces where possible, but particular ambient outdoor thresholds may not always be achievable. Where residential growth is allowed pursuant to this General Plan, these greater noise levels are acknowledged and accepted, notwithstanding the land use noise compatibility standards in Table 8-5 of the City's General Plan Safety Element [Exhibit 3.11-3 of this WRTP Specific Plan EIR].

- **Policy 8.G.2 Land Use Noise Compatibility Standards.** Use the Land Use Noise Compatibility Standards, shown in Table 8-5 [Exhibit 3.11-3 of this WRTP Specific Plan EIR], as review criteria for new land uses. For proposed new discretionary development, where it is not possible to reduce noise levels to the "normally acceptable" range using practical application of the best-available noise reduction measures, greater exterior noise levels may be allowed, provided that all available reasonable and feasible exterior noise level reduction measures have been implemented.

[8] From the Woodland Municipal Code Section 15-26: Permit Required. It shall be unlawful for any person to broadcast from a radio, phonograph or similar instrument, using voice or sound amplifiers, either into a public thoroughfare from a fixed location, from a movable vehicle or in connection with any public celebration or public function on public holidays or in connection with the broadcast of events of interest to the general public without first obtaining a permit from the chief of police. Hours of Operation. It shall be unlawful for any person including any service club, church, school and other nonprofit organizations to have in operation or permit to be in operation any loudspeaker or sound-amplifying device or radio, television or musical instrument between the hours of 10:30 P.M., of any day and 10:00 A.M. the following day (Ord. No. 673, § 1).



Source: City of Woodland 2035 General Plan, 2017

Exhibit 3.11-3. (Table 8-5 from the 2035 General Plan) Land Use Noise Compatibility Standards

- **Policy 8.G.3 Noise Exposure from Transportation Sources (***2035 General Plan and CAP EIR Mitigation Measure 4.11-2a)***.** Require noise-reducing mitigation to meet allowable outdoor and indoor noise exposure standards in Table 8-7 [Table 3.11-5 of this Specific Plan EIR]. Noise mitigation measures that may be approved to achieve these noise level targets include but are not limited to the following:

    - Construct facades with substantial weight and insulation;
    - Use sound-rated windows for primary sleeping and activity areas;
    - Use sound-rated doors for all exterior entries at primary sleeping and activity areas;
    - Use minimum setbacks and exterior barriers;
    - Use acoustic baffling of vents for chimneys, attic and gable ends;
    - Install a mechanical ventilation system that provides fresh air under closed window conditions; and

- Maximize site design so that buildings shelter outdoor areas.

- **Policy 8.G.5 New Noise-Sensitive Receptors.** Prohibit development of new noise-sensitive receptors where the noise level due to non-transportation noise sources will exceed the noise level standards of Table 8-6 [Table 3.11-4 of this Specific Plan EIR] as measured immediately within the property line of the new development, unless effective noise mitigation measures have been incorporated into the development design to achieve the standards. Create peaceful outdoor spaces where possible, but acknowledge that particular ambient outdoor thresholds may not always be achievable. Require noise mitigation to assure acceptable interior noise levels appropriate to the land use type:

  - 45 dB L_{dn} for residential, transient lodgings, hospitals, nursing homes, and other uses where people normally sleep; and

  - 45 dB L_{eq} (peak hour) for office buildings and similar uses.

- **Policy 8.G.6 New Non-Transportation Noise Sources.** Require that noise created by new non-transportation noise sources be mitigated so as not to exceed the noise level standards of Table 8-6 [Table 3.11-4 of this Specific Plan EIR] as measured immediately within the property line of lands designated for noise-sensitive receptors.

- **Policy 8.G.7 Roadway Improvements.** Where existing noise-sensitive receptors may be exposed to increased noise levels due to increased roadway capacity and increases in travel speeds associated with roadway improvements, apply the following criteria to determine the significance of increases in noise related to roadway improvement projects:

  - Where existing traffic noise levels are less than 70 dB L_{dn} at the outdoor activity areas of noise-sensitive receptors, a +5 dB L_{dn} increase in noise levels due to a roadway improvement project, will be considered significant; and

  - Where existing traffic noise levels range between 70 and 75 dB L_{dn} at the outdoor activity areas of noise-sensitive receptors, a +3 dB L_{dn} increase in noise levels due to a roadway improvement project will be considered significant; and

  - Where existing traffic noise levels are greater than 75 dB L_{dn} at the outdoor activity areas of noise-sensitive receptors, a +1.5 dB L_{dn} increase in noise levels due to a roadway improvement project will be considered significant.

- **Policy 8.G.8 Site and Building Design.** Orient buildings such that the noise sensitive portions of a project are shielded from noise sources.

- **Policy 8.G.9 Existing Development.** Promote the use of noise attenuation measures to improve the acoustic environment where existing noise sensitive uses are located in noise-impacted environments, such as along arterial streets or adjacent to noise-producing uses. For non-conforming uses, the burden of noise attenuation falls on the non-conforming use. For allowed uses, the burden falls on the newest use, subject to possible later reimbursement based on benefit received by later use. Allowed uses that are developed simultaneously will share the burden of noise attenuation.

- **Policy 8.G.10 Right-to-Farm Ordinance.** Support the City and County's right-to-farm ordinances, especially as they relate to noise emanating from agricultural operations adjacent to urban uses, by requiring notification of the potential impacts to adjacent property owners, purchasers, residents, and users.

- **Policy 8.G.11 Construction Noise.** Consider construction noise to be an acceptable impact that is an expected byproduct of planned growth, so long as the land use is consistent with the General Plan, and noise levels are consistent with the General Plan and Construction Noise Ordinance.

- **Policy 8.G.13 Noise Attenuation Barriers** *(EIR Mitigation Measure 4.11-2b)***.** Noise attenuation barriers are strongly discouraged, expect to attenuate noise for existing developed uses, and may be used in the context of new development only when no other approach to noise mitigation is feasible.

- **Policy 8.G.14 Vehicle Traffic.** *(EIR Mitigation Measure 4.11-2b)***.** New developments shall disperse vehicular traffic onto a network of fully connected smaller roadways and minimize funneling of local traffic onto large-volume, high speed roadways near existing or planned noise-sensitive uses to the maximum extent feasible.

- **Policy 8.G.15 Operational Noise.** *(EIR Mitigation Measure 4.11-2b)***.** In new development areas, service, utility, loading areas, roof-mounted equipment, and noise-generating equipment shall be screened, designed, and located to reduce visibility and noise for surrounding properties and pedestrian areas.

The 2035 General Plan prohibits the development of new noise-sensitive land uses in areas where the maximum noise level attributable to non-transportation noise sources exceeds 75 dB during the day or 65 dB at night, or where the hourly noise level exceeds 60 dB during the day and 45 dB at night (see Table 3.11-4, below). The Safety Element requires that each of the noise levels specified shall be lowered by 5 dB for simple tone noises, noises consisting primarily of speech or music, or for recurring impulsive noises. These noise level standards do not apply to residential units established in conjunction with industrial or commercial uses (e.g., caretaker dwellings). Also, these standards apply to the noise sources themselves; noise caused by motor vehicles traveling to and from the site is exempt from this standard. The General Plan requires acoustical analysis for projects that could generate noise at noise-sensitive land uses in excess of these standards.

Table 3.11-4. Noise Level Performance Standards for New Projects and Non-Transportation Noise Sources[1] (Table 8-6 from the 2035 General Plan)

Noise Level Descriptor	Daytime (7 am to 10 pm)	Nighttime (10 pm to 7 am)
Hourly Equivalent Sound Level (L_{eq}), dB	60	45
Maximum Sound Level (L_{max}), dB	75	65

Notes: dB = decibels; L_{eq} = energy-equivalent noise level; L_{max} = maximum sound level.

Each of the noise levels specified above shall be lowered by 5 dB for simple tone noises, noises consisting primarily of speech or music, or for recurring impulsive noises. These noise level standards do not apply to residential units established in conjunction with industrial or commercial uses (e.g., caretaker dwellings). These standards apply to the noise sources themselves; noise caused by motor vehicles traveling to and from the site is exempt from this standard.

* For the purposes of compliance with the provisions of this section, non-transportation noise sources may include industrial operations, outdoor recreation facilities, HVAC units, and loading docks.

Source: City of Woodland 2017

Table 3.11-5. Maximum Allowable Noise Exposure from Transportation (non-aircraft) Noise Sources (Table 8-7 from the 2035 General Plan)

Noise Sensitive Land Use[2]	Outdoor Activity Areas[1] L_{dn}/CNEL, dB	Interior Spaces L_{dn}/CNEL, dB	Interior Spaces L_{eq}, dB[2]
Residential	70	45	--
Transient Lodging	70	45	--
Hospitals, Nursing Homes	70	45	--
Theaters, Auditoriums, Music Halls	--	--	35
Churches, Meeting Halls	70	--	40
Office Buildings	--	--	45
Schools, Libraries, Museums	--	--	45
Playgrounds, Neighborhood Parks	70	--	--

Notes: dB = decibels; L_{dn} = day-night average noise level; CNEL = Community Noise Equivalent Level; L_{eq} = energy-equivalent noise level.

[1] Outdoor activity areas are considered to be the portion of a property where outdoor activities would normally be expected (i.e., patios of residences and outdoor instructional areas of schools). Outdoor activity areas for the purposes of the 2035 General Plan Safety Element do not include gathering spaces alongside transportation corridors or associated public rights-of-way. Where it is not possible to reduce noise in outdoor activity areas to the levels specified in this table using a practical application of the best-available noise reduction measures, a higher exterior noise level may be allowed provided that interior noise levels are in compliance with this table.[2] As determined for a typical worst-case hour during periods of use.

* For the purposes of compliance with the provisions of this section, the City defines transportation noise sources as traffic on public roadways, railroad line operations, and aircraft in flight. Control of noise from these sources is preempted by Federal and State regulations. Other noise sources are presumed to be subject to local regulations.

Source: City of Woodland General Plan 2035 Update.

3.11.4 Environmental Impacts and Mitigation Measures

Methodology

The 2035 General Plan and CAP EIR addresses impacts of development of the City's Planning Area, including the WRTP Specific Plan Area. Consistent with Section 15183(b) of the CEQA Guidelines, the following analysis focuses on project-specific significant effects of the WRTP Specific Plan and off-site improvements that: a) are peculiar to the WRTP Specific Plan or the project site; b) were not addressed in the 2035 General Plan and CAP EIR (including off-site or cumulative impacts); or c) would be more severe than previously described based on substantial new information.

This EIR considers the impacts associated with implementation of the WRTP Specific Plan, including the development of both noise-sensitive and noise-generating land uses. Noise impacts were identified for new noise-sensitive developments located within the WRTP Specific Plan Area affected by substantial existing or future noise sources (e.g., aircraft, automobile or truck traffic, railroad lines, and industrial uses). Noise impacts were also identified for noise producing land uses proposed near existing or proposed noise-sensitive areas. Finally, noise impacts were evaluated by comparing traffic noise generation associated with implementation of the WRTP Specific Plan to existing conditions.

Baseline conditions were compared to future anticipated conditions with implementation of the WRTP Specific Plan. Information related to the various land uses from Chapter 2 of this EIR, "Project Description," and data obtained during on-site noise monitoring were used to determine the potential locations of noise-sensitive receptors

and noise-generating land uses within and in the vicinity of the WRTP Specific Plan Area. Noise-sensitive land uses and major noise sources were identified based on existing documentation (e.g., equipment noise levels and attenuation rates) and site reconnaissance data. Baseline ambient noise levels to which potential WRTP Specific Plan-generated noise was compared were assumed from the noise surveys. Predictions from traffic noise modeling, and stationary-source noise levels were based on manufacturers' specifications.

The methodology used for this analysis was consistent with approaches recommended by the Federal Transit Administration (FTA), the California Department of Transportation (Caltrans), and the City of Woodland. Noise modeling was conducted using the Federal Highway Administration's (FHWA) traffic noise prediction model (FHWA-RD-77-108 [FHA 1978]) and the FTA's Transit Noise and Vibration Impact Assessment Guidance Manual (FTA 2018). Stationary-source noise levels were obtained from manufacturer specifications and industry-standard technical reports. Furthermore, traffic data from the traffic impact analysis prepared for the WRTP Specific Plan were used to model existing and future traffic noise levels. Detailed noise analytical information is provided in Appendix D.

Construction Noise

To assess the potential short-term noise impacts from construction, sensitive receptors and their relative levels of exposure were identified. Construction noise potentially generated by implementation of the WRTP Specific Plan was predicted using the Transit Noise and Vibration Impact Assessment methodology for construction noise prediction (FTA 2018). The noise emission levels referenced and usage factors are based on FHWA's Roadway Construction Noise Model (FHA 2006). Noise levels of specific construction equipment and resultant noise levels at the locations of sensitive receptors were calculated.

Groundborne vibration impacts were assessed based on FTA methodology for construction (e.g., vibration levels produced by specific construction equipment operations and the distance of sensitive receptors from a given source) and transportation vibration sources (FTA 2018).

Traffic Noise

Noise impacts were also evaluated by comparing traffic noise generation associated with implementation of the WRTP Specific Plan relative to existing conditions. The FHWA Highway Traffic Noise Prediction Model (FHWA-RD-77-108 [FHA 1978]) was used to predict traffic noise levels under existing and future conditions. In addition to the analysis conducted in support of the 2035 General Plan and CAP EIR that assumed development of the WRTP Specific Plan Area and related traffic, focused supplemental analysis was conduced in support of this EIR to address roadways within the WRTP Specific Plan Area that do not currently exist and were previously unidentified, as well as specific surrounding roadways of the WRTP Specific Plan Area. The contribution of the traffic associated with implementation of the WRTP Specific Plan to traffic noise levels along area roadways was determined by comparing the modeled noise levels at 100 feet from the centerline of the roadway. Table 3.11-3 lists the estimated distances to the 60 dB, 65 dB and 70 dB L_{dn} traffic noise contours under existing conditions. Noise estimates took into account different vehicle speeds, but not the effects of existing walls, berms, or other existing intervening structures that may exist along certain street segments.

Stationary Noise

Potential long-term (operational) noise impacts from stationary non-transportation sources (e.g., HVAC, landscape, parking lot, commercial cavities, school activities, and agricultural activities) were assessed based on existing documentation (equipment noise levels) and site reconnaissance data.

THRESHOLDS OF SIGNIFICANCE

The WRTP Specific Plan may have a significant impact if it would:

1. generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies;

2. generate excessive ground-borne vibration or ground-borne noise levels; or

3. for a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, expose people residing or working in the project area to excessive noise levels.

IMPACTS NOT DISCUSSED FURTHER

The following discussion summarizes the impacts of the WRTP Specific Plan that are not discussed further in this document because either, a) there is no impact, or b) none of the factors triggering additional environmental review (as found in Section 15183(b)) exist because an impact was addressed as a part of the 2035 General Plan and CAP EIR and/or substantially mitigated by uniformly applied development standards (CEQA Guidelines Section 15183[f]). Uniformly applied development standards include the 2035 General Plan, the CAP, existing City regulations and standards, design review requirements, and impact fee programs.

Expose People to Excessive Airport Noise (Significance Threshold 3) – The 2035 General Plan and CAP EIR (pages 3.11-63 to 3.11-64) discusses noise impacts from aircraft noise exposure. The EIR determines that the closest airport to the City's Planning Area is the Watts Woodland Airport, which is located 3.7 miles from the western city limits. The Sacramento International Airport is located approximately five miles northeast and Yolo County Airport approximately five miles southwest of the City limits. Based upon the most recent noise contours for the Watts Woodland and Yolo County Airports contained within the Yolo County 2030 General Plan EIR (April 2009) and recent noise contours obtained from Sacramento International Airport Land Use Compatibility Plan (SACOG 2013), areas within the City's Urban Limit Line are located outside of the 60 dB CNEL contours. The WRTP Specific Plan Area is within the City's Urban Limit Line; the only proposed development outside of the Urban Limit Line is the off-site South Regional Pond, which is not considered a sensitive noise receptor. Implementation of the WRTP Specific Plan would result in no different impact conclusion than disclosed in the 2035 General Plan and CAP EIR. This impact is **less than significant**.

PROJECT IMPACTS

IMPACT 3.11-1 **Generation of a Substantial Temporary (Construction-related) Increase in Ambient Noise Levels in the Vicinity of the Project in Excess of Standards Established in the Local General Plan or Noise Ordinance, or Applicable Standards of Other Agencies (Significance Threshold 1)**. *Future development and implementation of the WRTP Specific Plan would result in exposure of existing and*

anticipated noise sensitive land uses (if occupied during construction of the remaining properties within the WRTP Specific Plan Area) to noticeable increases from construction activities. This impact is considered ***significant****.*

The 2035 General Plan and CAP EIR (pages 4.11-47 to 4.11-51) discusses construction noise impacts resulting from construction activities that occur during noise-sensitive times of the day (early morning, evening, or nighttime hours), and when the construction occurs in areas immediately adjoining noise sensitive land uses, or when construction durations last over extended periods of time, and when construction noise occurs in new growth areas, including the City's Specific Plan Areas. The EIR noted that, while most portions of the WRTP Specific Plan Areas are not directly adjacent to existing noise-sensitive uses, they have the ability to accommodate planned noise-sensitive uses, and depending on the timing and location of development, the Specific Plans, including SP-1, could have construction noise occurring near locations that have been developed with noise-sensitive land uses.

As discussed in the 2035 General Plan and CAP EIR, without noise control, typical noise levels generated by large pieces of earth-moving equipment, such as graders, excavators, and dozers, range from approximately 80 dB L_{eq} to 90 dB L_{eq}, measured at a distance of 50 feet, as shown in Table 3.11-6 (assuming no pile driving is required, which would be atypical) (EPA 1971); should the installation of piles for foundations be required, this type of construction activity could produce noise levels of approximately 105 dB L_{eq} at 50 feet. Noise from localized point sources (such as construction sites) typically decrease at a rate of approximately 6 dB with each doubling of distance between the noise source and receptor. Intervening structures would provide shielding from the noise source, resulting in lower noise levels; however, these reductions would vary and are not quantifiable at the plan level. Therefore, the 2035 General Plan and CAP EIR determined that construction within the City's Planning Area could result in the temporary exposure of sensitive receptors to noise levels that would exceed the City's then-existing standards of 45 dB L_{eq} nighttime, 50 dB L_{eq} daytime, 65 dB L_{max} nighttime, 70 dB L_{max} daytime (as shown in Table 3.11-5, the 2035 General Plan increased daytime standards to 60dB L_{eq} and 75 dB L_{max}). Even with implementation of noise-mitigating practices incorporated into construction of future development within the City's Planning Area (now Implementation Program 8.13 of the 2035 General Plan), the 2035 General Plan and CAP EIR determined that that there could still be a noticeable temporary increase in noise levels for noise-sensitive uses that are adjacent to construction sites, and the impact was determined to be significant and unavoidable.

Table 3.11-6. Typical Construction Equipment Noise Levels

Type of Equipment	Noise Level in dB at 50 feet Without Feasible Noise Control	Noise Level in dB at 50 feet with Noise Control [1]
Dozer or Tractor	80	75
Excavator	88	80
Compactor	82	75
Front-end Loader	79	75
Backhoe	85	75
Grader	85	75
Crane	83	75
Generator	78	75
Truck	91	75
Pile Driver	101	-

Note: dB = decibels.

[1] Noise control includes the use of intake mufflers, exhaust mufflers, and engine shrouds in accordance with manufacturer's specifications.

Sources: EPA 1971; FTA 2018.

Construction activities anticipated within the WRTP Specific Plan Area are consistent with those analyzed in the 2035 General Plan and CAP EIR, but also took into consideration construction of the off-site improvements and sensitive land uses that have been constructed or are planned for construction within the Spring Lake Specific Plan Area.

With respect to increase above existing ambient noise levels, as shown in Table 3.11-2 measurement LT-01 represents the WRTP Specific Plan Area south of CR 25A, and Measurement LT-02 represents the WRTP Specific Plan Area north of CR 25A. The measured daytime average ambient noise levels at LT-01 and LT-02 are 48 dB L_{eq} (70 dB L_{max}) and 55 dB L_{eq} (93 dB L_{max}), respectively. The measured nighttime average ambient noise levels at LT-01 and LT-02 are 49 dB L_{eq} (66 dB L_{max}) and 54 dB L_{eq} (71 dB L_{max}), respectively. Construction activities associated with development of the WRTP Specific Plan Area and off-site improvement areas would substantially increase noise-levels above existing ambient conditions. Construction activities within the WRTP Specific Plan Area are anticipated along the eastern and northern boundaries adjacent to existing and potential future residences associated with the Spring Lake development. In addition, as development of the WRTP Specific Plan Area proceeds, construction activities could take place in proximity to future sensitive land uses within the WRTP Specific Plan Area. With respect to the Caltrans Off-site Improvement Area, the nearest construction would occur within approximately 120 feet of the residence southwest of the SR 113/CR 25A interchange. At this distance, assuming an approximately 6dB decrease in noise from construction equipment with each doubling of distance, the estimated average 80 to 90 dB generated by potential construction equipment at 50 feet could still exceed 75 dB. Therefore, construction activities within the WRTP Specific Plan Area and off-site improvement areas could result in exposure of existing and future noise-sensitive land uses to noticeable increases in noise levels. If construction activities were to occur during more noise-sensitive hours, construction source noise levels could also result in annoyance and/or sleep disruption to occupants of existing and proposed noise-sensitive land uses, and could create a substantial temporary increase in ambient noise levels.

Section 9.28.090 of the City's Municipal Code limits noisy construction activities within or near residential areas to weekdays and Saturdays between 7:00 A.M. and 6:00 P.M. and Sundays between 9:00 A.M. and 6:00 P.M. Land use and development under the WRTP Specific Plan will comply with all applicable regulations, including the City's Municipal Code. Compliance with the City's Municipal Code and implementation of the performance standards of the WRTP Specific Plan, which are consistent with the 2035 General Plan policies and Implementation Programs, would reduce the potential for significant noise exposure impacts from the implementation of the WRTP Specific Plan. However, there could still be a noticeable temporary increase above ambient noise levels for noise-sensitive uses that are adjacent to future construction sites. This impact is considered **significant**.

Mitigation Measures

Mitigation Measure 3.11-1– Implement Construction Noise Reduction Strategies

a. Demolition, construction, site preparation, and related activities that would generate noise perceptible at the property line of the subject property are limited to the hours between 7:00 A.M. and 6:00 P.M. on Monday through Saturday and between 9:00 A.M. and 6:00 P.M. on Sunday and federal holidays. The building inspector may issue an exception to this limitation on hours in cases of urgent necessity where the public health and safety will not be substantially impaired.

b. Idling times for noise-generating equipment used in demolition, construction, site preparation, and related activities shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes.

c. Demolition, construction, site preparation, and related activities that do not involve pile driving proposed within 445 feet from the edge of properties with existing, occupied noise-sensitive uses shall incorporate all feasible strategies to reduce noise exposure for noise-sensitive uses, including:

   - Provide written notice to all known occupied noise-sensitive uses within 400 feet of the edge of the project site boundary at least 2 weeks prior to the start of each construction phase of the construction schedule;
   - Ensure that construction equipment is properly maintained and equipped with noise control components, such as mufflers, in accordance with manufacturers' specifications;
   - Re-route construction equipment away from adjacent noise-sensitive uses;
   - Locate noisy construction equipment away from surrounding noise-sensitive uses;
   - Use sound aprons or temporary noise enclosures around noise-generating equipment;
   - Position storage of waste materials, earth, and other supplies in a manner that will function as a noise barrier for surrounding noise-sensitive uses;
   - Use the quietest practical type of equipment;
   - Use electric powered equipment instead of diesel or gasoline engine powered equipment;
   - Use shrouding or shielding and intake and exhaust silencers/mufflers; and
   - Other effective and feasible strategies to reduce construction noise exposure for surrounding noise-sensitive uses.

d. For construction of buildings that require the installation of piles, an alternative to installation of piles by hammering shall be used. This could include the use of augured holes for cast-in-place piles, installation through vibration or hydraulic insertion, or another low-noise technique.

Significance after Mitigation

Mitigation Measure 3.11-1 would reduce construction-related noise exposure. However, since the timing and specific details with regard to equipment use and intensity of future construction activities is unknown, it is not possible to quantify the noise reductions achievable by implementation of this mitigation. Therefore, there could still be a substantial temporary increase in noise levels for existing and future noise-sensitive uses in proximity to construction activities within the WRTP Specific Plan Area and off-site improvement areas, which could lead to adverse noise-related impacts.

The City has accepted the potentially significant outcome of construction noise as a trade-off for promoting compact development. This is communicated in the 2035 General Plan, including Policy 2.C.1, that promotes compact

development patterns, mixed land use, and higher-development intensities that conserve land resources, reduce vehicle trips, improve air quality, and facilitate walking, bicycling, and transit use, but may result in some less desirable impacts, such as increased traffic, greater noise, reduced private residential open space, and reduced privacy than in lower density areas. The City acknowledges that temporary construction noise is a necessary byproduct of meeting the City's objectives for development, resource conservation, air quality and greenhouse gas emission reduction, and related topics. General Plan Policy 8.G.11 considers construction noise to be an acceptable impact that is an expected byproduct of planned growth, so long as the land use is consistent with the General Plan, and noise levels are consistent with the General Plan and Construction Noise Ordinance. Where growth and increased density is allowed pursuant to the City's General Plan, including the WRTP Specific Plan Area, these issues are acknowledged and accepted (please refer to Page 4.11-51 of the 2035 General Plan and CAP EIR for details). There are no additional policies that would reduce the potential environmental impact beyond the analysis presented above. There is no additional feasible mitigation. Therefore, and consistent with the findings of the 2035 General Plan and CAP EIR, this impact is **significant and unavoidable**.

IMPACT 3.11-2 **Generation of a Substantial Permanent (Long-term Operations) Increase in Ambient Noise Levels in the Vicinity of the Project in Excess of Standards Established in the Local General Plan or Noise Ordinance, or Applicable Standards of Other Agencies (Significance Threshold 1).** *Land uses contemplated under the WRTP Specific Plan could potentially expose existing or anticipated noise-sensitive uses to noise levels that exceed standards. The impact is considered* ***significant.***

The 2035 General Plan and CAP EIR (pages 4.11-51 to 4.11-60) analyzed long-term operational noise impacts resulting from the future development, with assumed development within the City's new growth areas, including the WRTP Specific Plan Area. The analysis determined that future development of noise-sensitive uses within the WRTP Specific Plan Area could occur adjacent to areas that are exposed to noise from transportation sources and from non-transportation noise sources, as well as in areas that either are currently exposed to or would be exposed to ambient noise levels that exceed the existing ambient exterior noise levels at noise-sensitive uses. The analysis also determined that future development would include the creation of long-term sources of noise that could increase noise levels above existing ambient levels. Although the General Plan policies were designed to avoid substantial disturbances to noise-sensitive receptors, the City anticipated that, despite implementation of feasible noise reduction strategies, noise-sensitive uses could be exposed to noise in exceedance of the City's standards, including noise generated by new development within the WRTP Specific Plan Area, and concluded in the 2035 General Plan and CAP EIR that impacts related to the generation of a permanent increase in ambient noise levels would be significant and unavoidable.

As a necessary outcome of development allowed under the WRTP Specific Plan, long-term sources of noise would be created. Also, future development of noise-sensitive uses would occur in areas that either are currently exposed to or would be exposed to ambient noise levels that exceed the existing ambient exterior noise levels at noise-sensitive uses. Table 3.11-2 shows the long-term measured ambient noise levels in the vicinity of the WRTP Specific Plan Area. Sources of ambient noise in the vicinity of the WRTP Specific Plan Area are vehicular traffic noise, non-transportation noise sources, as well as noise generated by landscape and building maintenance activities, mechanical equipment, solid waste collection, parking lots, commercial, office, residential, school, and recreation activities and events.

As noted, the WRTP Specific Plan Area was assumed as part of the development anticipated under the 2035 General Plan. Land use contemplated by the WRTP Specific Plan is consistent with the vision of the General Plan for SP-

1A and the 2035 General Plan Policy 2.L.2, which describes the intended land use concept for SP-1A. Although the off-site South Regional Pond was not specifically analyzed in the 2035 General Plan and CAP EIR, the operational noise associated with this land use is negligible as a passive open-space detention pond. Potential increases in noise levels associated with traffic at the SR 113/CR 25A interchange, with implementation of the proposed Caltrans interchange improvements, are detailed below as part of the discussion of "*Transportation Noise*."

Transportation Noise

Development under the WRTP Specific Plan would generate and attract vehicular traffic, which would increase traffic noise levels along existing and future roadways. Analysis in support of the 2035 General Plan and CAP EIR evaluated future highway and roadway (arterials, collectors and local roadways) noise levels anticipated with implementation of the 2035 General Plan, which included assumed development of the WRTP Specific Plan Area. Future noise levels were modeled for buildout of the General Plan in the year 2035 and accounted for traffic volumes assuming full development of the City's Planning Area, including all new growth areas. Based on noise modeling for these conditions, the 2035 General Plan and CAP EIR identified up to 14 roadway segments for which the change in noise levels due to traffic would be perceptible, and up to four roadway segments for which the change would be clearly noticeable (6 dB change or more) (Tables 4.11-11 and 4.11-12 of the 2035 General Plan and CAP EIR, City of Woodland 2017). The analysis also determined that noise-sensitive uses could be developed in areas where transportation-related noise could exceed City's noise standards. One such location proximate to the WRTP Specific Plan Area is along SR 113, at which existing noise levels for modeled segments within the Planning Area were between 75 L_{dn} and 76 L_{dn}. The nearest modeled roadway segment to the WRTP Specific Plan Area was on SR 113 south of East Gibson Road; at this location, existing transportation-related noise was modeled to be 76 L_{dn} and the future condition with implementation of the General Plan, including development of the WRTP Specific Plan Area, was modeled to be 77 L_{dn}.

In order to more specifically evaluate the traffic noise associated with the proposed roadway network under the WRTP Specific Plan, traffic noise was modeled using traffic study conducted in support of this EIR (see Appendix E, *Transportation Impact Study*, Fehr & Peers 2020). As shown in Tables 3.11-8a,b, there are several roadway segments associated with the WRTP Specific Plan's proposed circulation network for which the addition of vehicular trips would increase noise levels so that they would be perceptible (by at least 3 dB) and some roadways where the increase over existing conditions is anticipated to be clearly noticeable (by at least 5 dB). The predicted traffic noise levels shown in Tables 3.11-8a,b represent conservative potential noise exposure associated with roadways within and at the perimeter of the WRTP Specific Plan Area. In reality, noise levels may vary from that represented, since the calculations do not assume natural or artificial shielding or reflection from existing or proposed structures or variations in attenuation rates resulting from changes in intervening surfaces. In addition, noise levels would vary from day to day depending on factors such as local traffic volumes, speed, and meteorological conditions.

Tables 3.11-8a,b lists the predicted distances to the 60 dB, 65 dB, and 70 dB L_{dn} traffic noise contours, and compares projected future traffic noise levels at proposed and existing roadways within and adjacent to the WRTP Specific Plan Area under the buildout of the WRTP Specific Plan to those under existing conditions. These contour distances are used to identify portions of the WRTP Specific Plan Area that could be subject to noise impacts. Table 3.11-9 compares projected future traffic noise levels from approved projects and buildout of the WRTP Specific Plan with existing traffic noise levels. This table provides an evaluation of the changes in traffic noise levels that would result from development of the WRTP Specific Plan and other approved projects. As shown in Tables 3.11-8a,b, traffic

associated with implementation of the WRTP Specific Plan is expected to increase noise levels by 3 to 10 dB from existing condition. The increase of 10 dB would only occur along CR 25A from SR 113 NB Ramps to the proposed Road A; the WRTP Specific Plan land use designations adjacent to this roadway segment are Highway Commercial and Research and Technology Park, in which permitted uses would primarily not accommodate noise sensitive uses, except Highway Commercial does allow for hotels and the Research and Technology Park could accommodate daycare facilities. Also, as shown, existing plus project condition traffic noise would range from 61 to 68 dB at 100 feet. Therefore, traffic noise levels would not exceed the City's noise standards of 70 dB, as shown in Table 3.11-5, for noise-sensitive uses. Although transportation-related noise would be less than the City's standards at existing and planned roadways within and adjacent to the WRTP Specific Plan Area, future development of new noise-sensitive land uses could occur under the WRTP Specific Plan within areas that are currently exposed to noise from transportation sources (e.g., west of SR 113). This impact is **significant.**

Traffic noise due to improvement at the SR 113 and CR 25A interchange was not modeled\evaluated in this analysis. Traffic noise was not computed along SR 113 as the traffic study did not evaluate freeway volume increase along SR 113 due to the project and future conditions. However, Project-related traffic increase along SR 113 would not even cause doubling of the traffic volumes, in which case it would have only caused a 3 dB (barely perceptible) increase in traffic noise. Improvements to the SR 113 and CR 25A interchange would slightly increase traffic noise at the nearest sensitive receiver located to the southwest of the interchange. However, the traffic noise along SR 113 would be the dominant noise source and would mask the slight noise increase due to the interchange movements. Therefore, implementation of the SR 113/CR 25A interchange improvements would result in noise-related impacts that are **less than significant**

Stationary and Area Source Noise

The WRTP Specific Plan would accommodate a variety of land uses, including residential, commercial, retail, light industrial, research facilities within office complexes, open space and recreation; and institutional and public facilities (e.g., electrical substations, wastewater conveyance facilities, and school facilities). The long-term operation of these uses could result in stationary and area source noise from, but not limited to:

- landscape and building maintenance activities (e.g., hand tools, power tools, lawn and garden equipment);
- whistles, amplified voices, and other sounds associated with sporting or other organized activities;
- amplified music;
- mechanical equipment (e.g., pumps, generators heating, ventilation, and cooling systems);
- loading dock activities;
- parking lots;
- safety and warning devices;
- garbage collection; and
- other noise sources.

The 2035 General Plan and CAP EIR determined that the proposed intensification of land uses within the City's Planning Area would result in somewhat greater ambient noise levels. The General Plan included noise performance standards and required feasible mitigation to reduce the potential for significant noise exposure impacts. Performance Standard F of the WRTP Specific Plan (Section 3.3.2.) requires application of the noise-related provisions in Chapter 8 of the General Plan and applicable sections of the City of Woodland Municipal Code that relate to noise and nuisance considerations to all proposed projects within the WRTP Specific Plan Area. The noise

provisions in Chapter 8 of the General Plan are detailed in Section 3.11.3, "Regulatory Framework," above, limiting the maximum noise levels at property lines to not exceed 70 dB L_{dn}.

Similarly, Chapter 3 of the WRTP Specific Plan contains Design Standards and Design Guidelines for ensuring compatibility between adjacent uses with regard to noise and nuisance impactss. For example, Table 3.1 of the WRTP Specific Plan identifies permitted uses within each land use designation, with consideration for, among other factors, noise sources and revievers. Specific commercial and retail uses within the medium-density and high-density residential zones are permitted as part of a mixed-use project along the perimeter of a subdivision/development project, but may be subject to, at the discretion of the Community Development Director, conditions that limit noise, odor, or other potential impacts to adjoining residential uses and/or the Director may elevate review/approval to a Zoning Administrator Permit or Conditional Use Permit. Similarly, Design Guidelines and Special Character Guidelines throughout Chapter 3 provide for building orientation and separation guidelines, as well as consideration of placement and orientation of noise-generating equipment, such as vents/fans and regrigeration units, to minimize potential noise levels at futuer noise-sensitive recievers. Finally, the guidelines provide for set back distances, landscaping, and other noise attenuating recommendations, and standards with regard to solid masonry or block wall, should the be required as a last resort measure for noise attenuation to achieve noise standards; as noted Section 3.5, "Design Standards and Design Guidelines," in the WRTP Specific Plan, sound walls are not expected to be required within the WRTP Specific Plan Area, except where necessary along SR 113 in locations where residential development is planned.

The policies referenced above would reduce long-term noise exposure impacts by establishing noise compatibility standards and requiring new development to include certain measures and strategies to achieve acceptable noise environments, wherever feasible. Although the policies are designed to avoid substantial disturbances to noise-sensitive receptors, despite implementation of feasible noise reduction strategies contained in Chapter 8 of the General Plan and Chapter 3 of the WRTP Specific Plan, noise-sensitive uses could be exposed to noise generated by new development anticipated under the WRTP Specific Plan. This impact is **significant.**

Mitigation Measures

Mitigation Measure 3.11-2– Reduce Noise Exposure from Transportation and Non-Transportation Sources

Future development within the WRTP Specific Plan Area shall be required to meet allowable outdoor and indoor noise exposure standards. Noise mitigation measures that may be approved to achieve these noise level targets include but are not limited to the following:

- Construct facades with sound insulation to achieve acceptable interior noise;
- Use sound-rated windows for primary sleeping and activity areas;
- Use sound-rated doors for all exterior entries at primary sleeping and activity areas;
- Use setbacks and/or sound barriers where applicable, feasible, and reasonable;
- Use acoustic baffling of vents for chimneys, attic and gable ends;
- Install a mechanical ventilation system that provides fresh air under closed window conditions; and
- Maximize site design so that buildings shelter outdoor areas

Significance after Measures

Land use and development within the WRTP Specific Plan Area is subject to conformance with the permitted uses, the site development regulations, development standards, and design guidelines, as outlined in Chapter 3 of the WRTP Specific Plan and inclusive of the General Plan noise mitigating provisions and the City's Municipal Code noise performance standards. Development of the land use plan for the WRTP Specific Plan Area took into consideration land use-noise compatibility, including the potential for noise source and noise sensitive land uses, of allowable land uses within each land use designation and zoning classification. The WRTP Specific Plan requires noise performance standards be met, as outlined in Section 3.3.2 of the WRTP Specific Plan. These standards are consistent with the 2035 General Plan policies described above, and would reduce the potential for significant noise exposure impacts from the implementation of the WRTP Specific Plan. Mitigation Measure 3.11-2 would further ensure implementation of all noise mitigation features and strategies with future development. Although the WRTP Specific Plan policies and Mitigation Measure 3.11-2 are designed to avoid substantial disturbances to noise-sensitive receptors, because the exact location and design of future noise generating sources and noise-sensitive uses is unknown at this time, it cannot be demonstrated at this time that policies in the WRTP Specific Plan and would reduce impacts of the WRTP Specific Plan related to exposure of noise-sensitive uses to transportation- and non-transportation noise sources to a less-than-significant level. There is no additional feasible mitigation available. Therefore, and consistent with the findings of the 2035 General Plan and CAP EIR, this impact is considered **significant and unavoidable**.

IMPACT 3.11-3 **Generation of Vibration (Significance Threshold 2).** *Construction of projects under the WRTP Specific Plan could cause temporary, short-term disruptive vibration for locations near sensitive receptors within and adjacent to the WRTP Specific Plan Area. Under the WRTP Specific Plan, new vibration-sensitive uses could locate in areas exposed to vibration. This impact is considered* ***significant.***

The 2035 General Plan and CAP EIR (pages 4.11-60 to 4.11-63) discusses vibration impacts resulting from operation and construction activities that occur in areas immediately adjoining vibration-sensitive land uses, and when construction vibration occurs in new growth areas, including the WRTP Specific Plan Areas. The 2035 General Plan and CAP EIR anticipated that existing and future vibration-sensitive receptors could be located within close proximity to construction sites that could generate temporary, short-term vibration levels from construction sources that exceed FTA's maximum-acceptable vibration standard of 80 VdB with respect to human response for residential uses (i.e., annoyance) at vibration-sensitive land uses. Table 3.11-7 provides vibration levels for typical construction equipment. If construction activities were to occur during more noise-sensitive hours, vibration from construction sources could annoy and/or disrupt the sleep of occupants of existing and proposed residences and expose persons to excessive groundborne vibration or groundborne noise levels. The 2035 General Plan and CAP EIR also acknowledged that vibration levels from future vibration sources associated with planned development, including within the WRTP Specific Plan Area, could exceed FTA's maximum-acceptable vibration standard of 80 VdB with respect to human response for residential uses (i.e., annoyance) at vibration-sensitive land uses. Vibration from future sources could annoy and/or disrupt the sleep of occupants of existing and proposed residences and expose persons to excessive groundborne vibration or groundborne noise levels if vibration-generating activities were to occur during more noise-sensitive hours. The 2035 General Plan and CAP EIR found that, even with implementation of mitigation that would reduce the level of impact associated with temporary construction-related vibration exposure for sensitive uses, and the potential for vibration levels in areas of new vibration-sensitive land uses, impacts may not be avoidable in all instances, and the impact was determined to be significant and unavoidable.

Table 3.11-7. Typical Vibration Levels for Construction Equipment

Equipment		PPV at 25 Feet (in/sec)	Approximate L_v at 25 Feet
Pile Driver (Impact)	Upper Range	1.518	112
Pile Driver (Impact)	Typical	0.644	104
Pile Driver (Sonic)	Upper Range	0.734	105
Pile Driver (Sonic)	Typical	0.170	93
Large Bulldozer		0.089	87
Drill		0.089	87
Truck		0.076	86
Jackhammer		0.035	79
Small Bulldozer		0.003	58
Significance Threshold		0.2/0.08 [1]	80

Notes: in/sec = inches per second; Lv = the velocity level in decibels referenced to 1 microinch per second and based on the root mean square velocity amplitude; PPV = peak particle velocity

[1] For normal residential buildings and for buildings more susceptible to structural damage, respectively.

Sources: FTA 2018

Implementation of the WRTP Specific Plan would include construction and operation of future land uses within the WRTP Specific Plan Area and off-site improvement areas. Construction activities associated with the off-site improvements would be consistent with other construction proposed throughout the WRTP Specific Plan Area and anticipated under the 2035 General Plan. Implementation of the WRTP Specific Plan would result in no additional or different impact than disclosed in the analysis presented in the General Plan EIR, summarized below.

Construction and demolition activities associated with the WRTP Specific Plan have the potential to result in varying degrees of temporary groundborne vibration, depending on the specific construction equipment used, the location of construction activities relative to sensitive receptors, and operations/activities involved. The required construction equipment for future proposed projects under the WRTP Specific Plan is not known at this time, but could include maximum generation of vibration from pile drivers, trucks, and bulldozers. According to the FTA, vibration levels associated with the use of such equipment would be approximately 0.089 in/sec PPV and 87 VdB at 25 feet, as shown in Table 3.11-7. Using FTA's recommended procedure for applying a propagation adjustment to these reference levels, predicted worst-case vibration levels with respected to construction related to improvements of SR 113 and Road 25A interchange, would be 67 VdB (0.008 in/sec PPV) at the nearest vibration-sensitive use which is located at approximately 120 feet to the southwest of the interchange. Also, the vibration levels would not exceed 0.2 in/sec PPV (Caltrans's recommended standard with respect to the prevention of structural damage for normal buildings) within the WRTP Specific Plan Area, but would exceed 80 VdB (FTA's maximum-acceptable vibration standard with respect to human annoyance for residential uses) within 60 feet of vibration-sensitive receptors. The WRTP Specific Plan provides for multi-story development integrated into the various land use designations, as detailed in Section 3 of the WRTP Specific Plan. Therefore, while unlikely, it is possible that pile-driving could occur at some development sites. This type of construction activity could produce very high vibration levels of approximately 112 VdB (1.518 PPV) at 25 feet, as shown in Table 3.11-7. These vibration levels drop off at a rate of about 9 VdB per doubling of distance between the noise source and receptor.

Vibration levels from construction sources could exceed FTA's maximum-acceptable vibration standard of 80 VdB with respect to human response for residential uses (i.e., annoyance) at vibration-sensitive land uses. More importantly, vibration from construction sources could annoy and/or disrupt the sleep of occupants of existing and proposed residences and expose persons to excessive groundborne vibration or groundborne noise levels if vibration-generating activities were to occur during more noise-sensitive hours. Therefore, vibration levels would exceed the established standards. This impact is **potentially significant.**

Mitigation Measures

Mitigation Measure 3.11-3a – Implement Vibration Reduction Measures

a. New development that proposes the use of piles for foundations shall include all feasible measures necessary with the goal to ensure that vibration exposure for adjacent buildings is less than 0.5 PPV and less than 80 VdB for adjacent vibration-sensitive uses and less than 0.2 PPV for adjacent historic buildings. These performance standards shall take into account the reduction in vibration exposure that would occur through coupling loss provided by each affected building structure. If it is determined necessary to avoid damage, the project applicant shall coordinate with the Chief Building Official to implement corrective actions, which may include, but is not limited to building protection or stabilization.

b. New developments that would generate substantial long-term vibration shall provide analysis and mitigation, as feasible, to achieve velocity levels, as experienced at habitable structures of vibration-sensitive land uses, of less than 80 vibration decibels.

Mitigation Measure 3.11-3b – Implement Mitigation Measure 3.11-1

Significance after Mitigation

Mitigation Measure 3.11-3a requires use of project-specific vibration mitigation measures (preparation of vibration analysis and implementation of vibration abatement measures, as necessary and to the greatest extent feasible) and best practices during construction to mitigate vibration impacts to sensitive land uses. Mitigation Measure 3.11-1 requires noise mitigation measures be implemented during construction, which, in many cases, would also reduce vibration-generation associated with construction activities. Implementation would reduce the potential for vibration levels in areas of new vibration-sensitive land uses and the level of impact associated with temporary construction-related vibration exposure for sensitive uses. However, since the timing and specific details with regard to equipment use and intensity of future construction activities is unknown, it is not possible to quantify the noise reductions achievable by implementation of this mitigation. Therefore, there could still be a substantial temporary increase in noise levels for existing and future noise-sensitive uses in proximity to construction activities within the WRTP Specific Plan Area and off-site improvement areas, which could lead to adverse noise-related impacts. There is no additional feasible mitigation.

Land use and development within the WRTP Specific Plan Area is subject to conformance with the permitted uses, the site development regulations, development standards and design guidelines, as outlined in Chapter 3 of the WRTP Specific Plan. The WRTP Specific Plan requires performance standards be met, as outlined in Section 3.3.2 of the WRTP Specific Plan. These standards are consistent with the 2035 General Plan policies described above, and would reduce the potential vibration levels associated with implementation of the WRTP Specific Plan. However, because the exact location of future vibration generating sources and sensitive uses is unknown at this time, construction associated with future development of the WRTP Specific Plan could cause temporary, short-term disruptive vibration for locations near sensitive receptors and planned vibration-sensitive uses could located in areas exposed to future vibration. There is no additional feasible mitigation. Therefore, and consistent with the findings of the 2035 General Plan and CAP EIR, this impact is considered **significant and unavoidable**.

Table 3.11-8a. Noise at 50 Feet and Distances to 60 dB, 65 dB, and 70 dB L_{dn} Traffic Noise Contours, Existing, and Existing Plus WRTP Specific Plan – Existing Condition

No.	Roadway	Roadway Segment	ADT	Speed (MPH)	dB, L_{dn} at 50 feet	Distance to Contours– 70 dB L_{dn}	Distance to Contours– 65 dB L_{dn}	Distance to Contours– 60 dB L_{dn}
1	CR 25A	From East Street to SR 113 SB Ramps	5,190	45	62	17	53	168
2	CR 25A	From SR 113 NB Ramps to Road A	2,010	45	58	7	21	65
3	CR 25A	From Road A to Road B	n/a	n/a	n/a	n/a	n/a	n/a
4	CR 25A	From Road B to Road D	n/a	n/a	n/a	n/a	n/a	n/a
5	CR 25A	From Road D to CR 102	n/a	n/a	n/a	n/a	n/a	n/a
6	Road B	From CR 25A to Road C	n/a	n/a	n/a	n/a	n/a	n/a
7	Road B	From Road E to Parkland Avenue	n/a	n/a	n/a	n/a	n/a	n/a
8	Pioneer Ave	From Gibson Road to Farmer's Central Rd	8,110	45	64	26	83	262
9	Heritage Pkwy	From Campos Avenue to CR 102	2,960	45	60	10	30	96
10	Harry Lorenzo Avenue	From Gibson Road to Farmer's Central Road	n/a	n/a	n/a	n/a	n/a	n/a

Table 3.11-8b. Noise at 50 Feet and Distances to 60 dB, 65 dB, and 70 dB L_{dn} Traffic Noise Contours, Existing, and Existing Plus WRTP Specific Plan – Existing + Project Condition

No.	Roadway	Roadway Segment	ADT	Speed (MPH)	dB, L_{dn} at 50 feet	Distance to Contours– 70 dB L_{dn}	Distance to Contours– 65 dB L_{dn}	Distance to Contours– 60 dB L_{dn}	Change
1	CR 25A	From East Street to SR 113 SB Ramps	9,100	45	65	29	93	294	3
2	CR 25A	From SR 113 NB Ramps to Road A	20,200	45	68	65	207	653	10
3	CR 25A	From Road A to Road B	18,200	45	68	59	186	589	n/a
4	CR 25A	From Road B to Road D	5,900	45	63	19	60	191	n/a
5	CR 25A	From Road D to CR 102	n/a	n/a	n/a	n/a	n/a	n/a	n/a
6	Road B	From CR 25A to Road C	11,800	45	66	38	121	382	n/a
7	Road B	From Road E to Parkland Avenue	9,900	45	65	32	101	320	n/a
8	Pioneer Ave	From Gibson Road to Farmer's Central Rd	13,900	45	67	45	142	450	3
9	Heritage Pkwy	From Campos Avenue to CR 102	4,800	45	62	16	49	155	2
10	Harry Lorenzo Avenue	From Gibson Road to Farmer's Central Road	3,700	45	61	12	38	120	n/a

Notes: FHWA-RD-77-108 = Federal Highway Administration Highway Traffic Noise Prediction Model (FHA 1978); dB = decibel; dB = decibel; L_{dn} = day-night average noise level; ADT = average daily trips; MPH = Mile Per Hours; route; n/a = Roadway segments that are not currently existing, but were analyzed in the project's traffic impact study for future alternatives. Some of these new segments are included under both alternatives, and some are different between alternatives.

Medium (2 axles) and heavy trucks (3+ axles) produce significantly more noise than passenger vehicles so their percentages are taken into account with heavier weighting when computing traffic noise levels

Source: Fehr & Peers Associates. 2020, Modeling conducted by AECOM 2020

Table 3.11-9. Traffic Noise, Existing, WRTP Specific Plan Plus Approved Projects

No.	Roadway	Roadway Segment	Existing Condition (dB L_{dn})	Existing Plus Approved Projects (dB L_{dn})	Change	Existing Plus Approved Projects Plus WRTP Specific Plan (dB L_{dn})	Change
1	CR 25A	From East Street to SR 113 SB Ramps	62	64	2	66	2
2	CR 25A	From SR 113 NB Ramps to East of SR 113 NB Ramps	58	63	5	69	6
3	CR 25A	From SR 113 NB Ramps to Road A	n/a	63	n/a	68	5
4	CR 25A	From Road A to Road B	n/a	63	n/a	65	2
5	CR 25A	From Road B to Road D	n/a	60	n/a	65	5
6	Road B	From CR 25A to Road C	n/a	n/a	n/a	67	n/a
7	Road B	From Road E to Parkland Avenue	n/a	n/a	n/a	65	n/a
8	Pioneer Ave	From Gibson Road to Farmer's Central Rd	64	68	4	69	1
9	Heritage Pkwy	From Campos Avenue to CR 102	60	62	2	62	0
10	Harry Lorenzo Avenue	From Gibson Road to Farmer's Central Road	n/a	58	n/a	60	2

Notes: dB = decibels; I = Interstate; L_{dn} = day-night average noise level; n/a = Roadway segments that are not currently existing, but were analyzed in the project's traffic impact study for future alternatives. Some of these new segments are included under both alternatives, and some are different between alternatives.

[1] Traffic noise level at 50 feet from roadway centerline in terms of day/night average levels

Source: Modeling conducted by AECOM 2020

3.11.5 CUMULATIVE IMPACTS

As discussed in the cumulative analysis contained in the 2035 General Plan and CAP EIR (pages 6-37) (City of Woodland 2016) noise is generally a localized impact that does not have regional or cumulative considerations. Noise sources associated with past, present, and future development in the region include construction equipment, landscape and building maintenance activities, agricultural equipment and activities, mechanical equipment, solid waste collection, parking lots, commercial, office, and industrial activities, and residential, school, and recreation activities and events. Noise sources that are adjacent to one another could combine to increase cumulative noise levels. However, consistent with the analysis provided in the 2035 General Plan and CAP EIR, stationary noise sources within the WRTP Specific Plan Area would not generally combine with noise sources outside of the WRTP Specific Plan Area to create a cumulative increase in stationary noise. Although ambient noise is increasing in urbanized areas over time as a result of increased development, but there are no cumulative sources of stationary noise in proximity to the WRTP Specific Plan Area and, therefore, there is **no significant cumulative** impact with regard to stationary noise sources.

However, as described in the 2035 General Plan and CAP EIR (pages 6-37 through 6-43), regional development under the cumulative scenario would generate and attract vehicular travel along roadways located throughout the region, including within and near the City's Planning Area, which would combine with traffic associated with development in the Planning Area to increase vehicular traffic noise in areas directly adjacent to travel ways. As described in Section 3.11.4 above, future development under the WRTP Specific Plan would result in traffic levels that would increase noise levels along existing and future roadways. The 2035 General Plan and CAP EIR found that, even with implementation of all feasible measures in the form of policies and Implementation Programs in the 2035 General Plan, new development would result in a cumulatively significant and unavoidable contribution to the significant cumulative impact related to long-term transportation noise levels.

The proposed WRTP Specific Plan Area is within the City's Planning Area and was included as part of the cumulative analysis contained in 2035 General Plan and CAP EIR. As shown in Table 3.11-9, traffic on future roadways within the WRTP Specific Plan Area and existing roadways adjacent to the WRTP Specific Plan Area is expected to increase with implementation of the WRTP Specific Plan and result in an increase in traffic-related noise levels up to 6 dB compared to Existing plus Approved Projects conditions. The increases of 5 to 6 dB would only occur along CR 25A from East of SR 113 NB Ramps to East of SR 113 NB Ramps and from SR 113 NB Ramps to Road A. However, no existing noise sensitive uses would be located along this segment of CR 25 A under the buildout condition of the WRTP Specific Plan Area. Traffic noise increases of less than perceptible level of 3 dB would occur along the roadways planned within the WRTP Specific Plan Area. Also, as shown, traffic noise for the Existing plus Approved Projects Plus WRTP Specific Plan condition would range from 60 to 69 dB at 50 feet, which would not exceed the City's noise standards of 70 dB, as shown in Table 3.11-6, for all noise sensitive uses. Therefore, this impact is considered **less than cumulatively considerable.**

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3.12 PUBLIC SERVICES AND RECREATION

3.12.1 INTRODUCTION

This section describes the conditions of parks, public schools, public safety services, and other public facilities and related impacts related to these services associated with implementation of the WRTP Specific Plan.

The CEQA Guidelines note that comments received during the NOP scoping process can be helpful in "identifying the range of actions, alternatives, mitigation measures, and significant effects to be analyzed in depth in an EIR and in eliminating from detailed study issues found not to be important." (CEQA Guidelines Section 15083). As part of the impact analysis, NOP comments were reviewed to help guide analyses, and any comments were integrated into the relevant analyses. However, no NOP comments related to public services or recreation were received. Appendix A of this EIR includes copies of all NOP comments received.

3.12.2 ENVIRONMENTAL SETTING

FIRE PROTECTION SERVICES

The WRTP Specific Plan Area is within the jurisdiction of the Woodland Fire Department, which provides fire protection services and emergency medical services within the City and unincorporated areas in the vicinity of Woodland. The closest Woodland Fire Department station to the WRTP Specific Plan Area is Station Three, located at 1550 Springlake Court, on the east side of SR 113, approximately 2 miles north of the northern boundary of the WRTP Specific Plan Area. Station Three is staffed with between six and eight firefighters and houses the on-duty Battalion Chief, one engine, and a ladder truck that is used for suppression activities, air support, technical rescue, and light support.

The City staffs three fire stations, with a minimum of 13 personnel on duty per day. This provides enough personnel to meet the National Fire Protection Association's Standard 1910 for residential structure fire responses. The City utilizes robust automatic aid agreements with neighboring jurisdictions to ensure sufficient firefighting personnel arrive at a fire in a commercial building. The City is planning to relocate Fire Station Three to the former Willow Spring Elementary school site, northwest of the intersection of East Gibson Road and Harry Lorenzo Avenue/Bourn Drive, just east of SR 113 (City of Woodland 2018a). Relocation of Station Three is intended to improved service to existing and proposed development within the southeastern portion of the City, including the Spring Lake Specific Plan area and the proposed WRTP Specific Plan Area.

Additionally, Yolo County maintains an agreement with American Medical Response (AMR) to provide advanced life support transport services to the entire County, including the City of Woodland and the WRTP Specific Plan Area. AMR maintains a response time standard of 8 minutes, 90 percent of the time for any incorporated area within the County.

Response Time Standards

The Woodland Fire Department establishes response time standards for its services, measured from the time the unit leaves the station to the time the unit arrives at the scene. In alignment with NFPA 1710 standards, the Fire

Department's standards are an 80-second turnout time[1] for fire and special operations. The first engine should have a travel time of four minutes or less for a fire suppression incident. NFPA standards require that the Woodland Fire Department meet these response time standards 90 percent of the time. Accordingly, the City has a maximum "first response" standard of four minutes, 90 percent of the time. Currently, portions of the southeast area do not fall within this response time standard due to the distance between the current Fire Station Three location, and the most southern areas of the Spring Lake development. The future Fire Station Three, which will serve the WRTP Specific Plan Area, will be located approximately one-half mile north of the WRTP Specific Plan Area, and will ensure that the southeast area, including the WRTP, would fall within the four minute response time standard.

Insurance Service Organization (ISO) Rating

Fire departments are rated by ISO's Public Protection Classification program. The program uses the Fire Suppression Rating Schedule (FSRS), which is comprised of a list of elements a community may use to fight fires effectively. Each element is given a point score. Using the point scores and various formulas, ISO derives a Public Protection Classification rating. ISO ratings range from one to 10, with 1 indicating excellent service and 10 indicating minimal or no protection. ISO ratings assess a range of fire safety factors including; firefighting personnel, equipment, water infrastructure, and response times. The City recently underwent an ISO rating review and improved to a level two rating (Insurance Service Organization 2021).

LAW ENFORCEMENT SERVICES

After annexation, law enforcement facilities and services would be provided to the WRTP Specific Plan Area by the Woodland Police Department. The Woodland Police Department is located at 1000 Lincoln Avenue, approximately 4 miles northwest of the WRTP Specific Plan Area. The department's patrol operations include a patrol unit and special operations consisting of a patrol bureau, K-9 unit, special weapons and tactics (SWAT) team, crisis negotiation team, bike team, community outreach, and crime scene investigations (City of Woodland 2018c). In 2018, the Woodland Police Department began participating in CompStat, an intelligence led policing model (City of Woodland 2018c).

The Woodland Police Department provides a full range of police services with 82 full-time paid employees, including 67 sworn patrol officers and 15 non-sworn support personnel (City of Woodland 2018c). The Woodland Police Department currently staffs four full-time beats in the northeast, northwest, southwest, and southeast quadrants of the city, each with unique characteristics and assigned specific officers to become familiar with the problems in their beats and identify unique solutions to these problems. The Woodland Police Department does not have a service standard based on population. Rather, the department determines staffing needs based on the amount of uncommitted time per officer, number of calls for service per officer per day, and number of major crimes assigned to detectives per day. Patrol officers should average a minimum of 40 percent of unobligated patrol time per shift (City of Woodland 2017).

Response Time Standards

The Police Department dispatches police personnel based on priority level, Priority One being the highest. Priority One calls are major crimes or incidents "In-Progress," requiring immediate dispatch. Priority Two calls are minor

[1] Turnout Time is the time interval that begins when the emergency response facilities and emergency response units notification process begins either by an audible alarm or visual annunciation or both and ends when a unit is en route to the emergency (Fire Protection Research Foundation 2010).

crimes or incidents "In-Progress" or just occurred within 10 minutes. Priority Three calls are any major crimes or incidents that are not "In-Progress." Priority Four calls are any minor crimes or incidents that are not "In-Progress." Lastly, Priority Five calls are the lowest priority call (e.g., follow up on a cold case) that police personnel deal with as time permits.

Standards for response times are based on the dispatch time (measured from the start of the call) until the first unit's arrival. The Police Department's response time standard is five minutes for Priority One calls, six minutes for Priority Two calls, 25 minutes for Priority Three calls, 40 minutes for Priority Four calls, and 45 minutes for Priority Five calls. As shown in Table 3.12-1, in 2020, the Police Department's average actual response time for Priority One and Two calls were about 2.5 minutes longer than the department's standard, while response times for Priority Three and Four calls were within the response time standard.

Table 3.12-1. Woodland Police Department Response Times, 2020

Priority Level	Police Department Standard (minutes)	Average Actual Response Time (minutes)
Priority One	5:00	7:55
Priority Two	6:00	12:51
Priority Three	25:00	19:01
Priority Four	40:00	22:02
Priority Five	45:00	06:49

Source: Kaff, pers. com., 2020

PUBLIC SCHOOLS

The Woodland Joint Unified School District (WJUSD) provides public education from kindergarten through 12th grade in the city of Woodland, as well as nearby unincorporated areas of Knight's Landing, Yolo, and Zamora. WJUSD includes 11 elementary schools, 1 charter elementary school, 2 middle schools, 2 comprehensive senior high schools, and a continuation high school. Additionally, there are three alternative education programs, and an adult education center. WJUSD served approximately 10,000 students in the 2018-2019 school year. The State Preschool program also offers 6 part-day and two full-day preschools, which are available at the WJUSD elementary schools.

The WRTP Specific Plan reserves up to a 10-acre portion of the medium density residential zone south of Parkland Avenue and east of Road B for a potential new elementary school site should a school be needed, as requested by WJUSD. Students occupying the WRTP Specific Plan Area would attend one of the below elementary schools based on attendance boundaries, followed by the listed middle and high schools. In addition to the below-listed schools, WJUSD owns 20 acres in the Spring Lake Specific Plan Area and adjacent to Pioneer High School, which is currently identified as a potential site for a future middle school.

- Spring Lake Elementary School, located at 2209 Miekle Avenue, less than one mile east of the WRTP Specific Plan Area.
- Tafoya Elementary School, located at 720 Homestead Way, approximately 4 miles northeast of the WRTP Specific Plan Area.
- Woodland Prairie Elementary School, located at 1444 Stetson Street, approximately 1.8 miles northwest of the WRTP Specific Plan Area.

- Douglass Middle School, located at 525 Granada Drive, approximately 2.7 miles northwest of the WRTP Specific Plan Area.
- Pioneer High School, located at 1400 Pioneer Road, approximately 3.5 miles northeast of the WRTP Specific Plan Area.

Table 3.12-2 shows 2019-2020 enrollment, design capacity, and estimated remaining capacity for each school. As shown on Table 3.12-2, these schools are currently operating below design capacity.

Table 3.12-2. Woodland Joint Unified School District Enrollment, 2019-2020

School Name	Grade	Enrollment	District Capacity	Estimated Remaining Capacity
Spring Lake Elementary School	TK-4[a]	236	472	312 (472)[b]
Tafoya Elementary School	K-6	794	1,120	324
Woodland Prairie Elementary School	K-6	754	960	200
Douglass Middle School	7-8	850	1,312	433
Pioneer High School	9-12	1,541	2,304	760

Note: Student enrollment in the District changes daily as more students enroll and others leave; therefore, this information does not necessarily reflect exact current enrollment.

[a.] When construction is fully complete, Spring Lake Elementary School will serve grades transitional-kindergarten through sixth grade.

[b.] Capacity shown for Spring Lake Elementary School includes current capacity with Phase 1 of construction complete, as well as increased capacity when construction is fully complete, anticipated for the year 2021.

Source: California Department of Education 2020, City of Woodland 2016

WJUSD Funding

Developer fees represent a major source of funding for WJUSD. As of June 2020, WJUSD's current developer fee rates are $3.79 per square foot for residential construction and additions exceeding 500 square feet, $0.61 per square foot for commercial and industrial construction, $0.065 per square foot for self-storage commercial buildings, and $5.63 per square foot for residential construction in the Spring Lake Subdivision (WJUSD 2020).

PARKS AND RECREATION

The City of Woodland owns and operates numerous parks and recreation facilities, with programming of park resources and maintenance of facilities provided by the Community Services Department. The City has nine mini parks/plazas, 17 neighborhood parks, one community sports park, and six recreational facilities, including the 13-acre Woodland Community and Senior Center. The 28-acre Woodland Sports Park is approximately 0.35 mile west of the WRTP Specific Plan Area, and includes lighted baseball, softball, and soccer fields with shaded spectator seating; concession stand and picnic area; dog park; restrooms; and parking lot. The Woodland Sports Park is planned for expansion in the future. Partially completed in 2018, the 10-acre Rick Gonzales Sr. Park in the Spring Lake development includes barbecues, open turf area, picnic structure, playground, restrooms, and a walking trail and will include ball fields at full completion. The Rick Gonzales Sr. Park is located approximately 0.6 mile east of the WRTP Specific Plan Area. The City also owns a 154-acre undeveloped park site known as Woodland Regional Park, which is located just east of CR 102 and south of CR 25 (approximately 1 mile east of the WRTP Specific Plan Area). The Woodland Regional Park is planned for use as a science and nature preserve that would include a nature center with educational programs and a public trail system.

As of 2018, Woodland had approximately 414 acres of parks and recreation facilities, which, based on the California Department of Finance estimated population of 60,426 in the City of Woodland in 2018 (DOF 2018), provides approximately 6.85 acres of parkland per 1,000 residents; this exceeds the City's parkland standard of 6.0 acres per 1,000 residents. This total includes approximately 150 acres of developed parkland, 240 acres of undeveloped parkland (including undeveloped parks and stormwater detention basins), and 23 acres of other parks and recreational facilities. Parks and recreation facilities in the City are listed in Table 3.12-3. Descriptions of each category of park, including size ranges and general types of facilities, are provided in Table 3.12-4.

The Community Services Department provides recreation programs such as youth sports, adult sports, youth and adult aquatics classes, senior services, youth and adult enrichment programs, and various other leisure and recreation opportunities.

Table 3.12-3. Parks and Recreational Facilities in the City of Woodland

Park Name	Location	Acreage
Mini Parks/Plazas		
Beamer Circle	Palm Avenue	0.5
Heritage Plaza and Parking Lot	713 Main Street	0.7
Heritage Park	Summerset (Spring Lake Area)	1.0
Jeff Roddy Park	264 Mallard Drive	0.5
North Park (small park)	313 Redwing Drive	0.3
North Park L&L (small unnamed park)	Cardinal Drive and Robin Drive	0.3
Traynham Park	313 Redwing Drive	1.1
Tredway Park	1701 Sixth Street	1.2
Woodland West	412 Dove Drive	0.4
Mini Parks/Plazas	***Subtotal***	**6.0**
Neighborhood Parks		
Beamer Park	810 Hollister Road	2.3
Campbell Park	701 Thomas Street	5.6
Christiansen Park	202 Beamer Street	2.0
City Park	629 Cleveland Street	3.9
Cline Park	223 Teton Place	3.8
Crawford Park	1733 College Street	8.3
Everman Park	929 Cottage Drive	3.4
John Ferns Park	750 W. Southwood Drive	9.3
Freeman Park	1001 Main Street	2.3
Harris Park	100 Imperial Street	3.1
Jack Slaven Park	1705 Miekle Drive	8.0
Pioneer Park	1925 Branigan Avenue	10.0
Rick Gonzales Sr. Park (Spring Lake Park N3)	The intersection of Miekle Avenue and Centennial Drive	10.0
Schneider Park (Greenbelt Park)	179 Schuler Ranch Drive	3.2
Southland Park	1310 College Street	4.0

Park Name	Location	Acreage
Spring Lake Park N1	The intersection of Osborn and Shellhammer Drive	2.0
Woodside Park	1615 Cottonwood Street	8.2
Neighborhood Parks	***Subtotal***	**89.4**
Community Sports Parks Sports Park (developed areas)	2001 East Street	17.6
Community Sports Parks	***Subtotal***	**17.6**
Recreational Facilities Camarena / Pedroia Field	202 Beamer Street	3.7
Clark Field	70 Beamer Street	3.5
Community and Senior Center	2001 East Street	12.9
Community Swim Center	155 N. West Street	2.8
Harris Field	Ashley Avenue	2.4
Klenhard Park	1771 East Gum Avenue	7.2
Recreational Facilities	***Subtotal***	**32.5**
Linear Park Spring Lake (Greenbelts)	Various, within Spring Lake	5.0
Linear Park Facilities	***Subtotal***	**5.0**
Developed Parkland	***Total***	**150.5**
Undeveloped Parkland Regional Park	County Road 102 & 25	154.2
Jack Slaven Park (remainder)	1705 Miekle Drive	3.8
Spring Lake Park N1 (remainder)	The intersection of Osborn and Shellhammer Drive	8.0
Greenbelts (undeveloped)	Various	2.0
Sports Park (undeveloped)	2001 East Street	39.5
Undeveloped Parkland	***Subtotal***	**207.5**
Detention Basins Douglass Park (Holding Pond) Detention Basin	827 Saratoga Drive	11.3
Streng Park Pond	Gibson & Columbia Drive	2.5
Sports Park	2001 East Street	5.0
Storz Pond	SR 113 & Saipan Drive	13.8
Detention Basins	***Subtotal***	**32.6**
Undeveloped Parkland	***Total***	**240.1**
Developed and Undeveloped Parkland	***Total***	**390.6**
Other Facilities Woodland Cemetery	800 West Street	23.5
Other Facilities	***Total***	**23.5**
Parks and Recreation Facilities	***Total***	**414.1**

Sources: City of Woodland 2017:PF 5-16 and 5-17; data compiled by AECOM in 2018

Table 3.12-4. Parkland Types and Descriptions

Park Type	Definition	Typical Amenities	Size Range (acres)
Mini Parks/Plazas	A very small area that provides passive recreation for small neighborhood areas.	May include picnic areas, play structures, open lawn and trees, paved areas, and contribute to giving green space to neighborhood streets that would ordinarily be developed all in residential lots. Small hardscaped plazas with seating areas, fountains, public art, or similar amenities may also function as mini parks or plazas in the City's downtown area, along corridors, or in other mixed-use environments.	0.1–2.5
Neighborhood Park	A small, mostly passive recreation area that serves an individual neighborhood with a range of about 0.5 mile (10-minute walking distance).	May have informal multi-use turf areas, a pair of full-court basketball courts, a pair of tennis courts, toddler and youth play areas (separated), group or individual picnic areas, restrooms, and/or a youth sport practice field (multi-use turf area).	2.5–15
Community Park	A large, mostly passive recreation area dominated by open turf, shade trees, picnic areas, plazas, trails, and playgrounds.	Serves multiple neighborhoods, and may have areas for basketball, tennis, handball, bocce, horseshoes, shuffleboard, or other similar activities. A community focal point or point of interest is common and suggested in a community park, such as a swimming pool, water feature, dog park, or amphitheater. Community parks may have a single or pair of active sport fields for competition and/or practice but do not have a concentration of active sports fields, and may contain community recreation buildings parking and restroom buildings.	15–25
Community Sports Park	A large, active, concentrated youth and/or adult sports-oriented park	May include lighted fields and courts, parking areas, restrooms, concessions buildings, maintenance buildings, group picnic areas, bike and pedestrian trails, dog park, and toddler and youth playgrounds.	Acreage varies
Recreational Facilities	A single or multi-active recreational feature	Examples include a swimming pool or ballfield complex with restrooms; may also include a parking lot.	Acreage varies
Linear Park/Greenbelts	A landscaped, linear shaped open area used for recreation and non-motorized transportation.	May have playgrounds, open turf or planted areas, shade trees, plazas, and picnic areas connected by continuous bike/walking paths.	Acreage varies
Open Space	Minimally-maintained, undeveloped areas set aside for passive uses, scenic beauty, and relief from developed areas, and should contain and be accessible by a trail system.	May be part of a habitat conservation easement area and/or include environmental education facilities. Also includes stormwater detention basins, which assist in containing peak storm flows and are publicly accessible when dry.	Acreage varies

Sources: City of Woodland 2017:PF 5-13 and 5-14; data compiled by AECOM in 2018

3.12.3 REGULATORY FRAMEWORK

The 2035 General Plan and CAP EIR summarizes the federal, State, regional, and local regulatory framework on pages 4.12-17 through 4.12-28. Those aspects of the existing regulatory framework that are relevant to potential

impacts of the WRTP Specific Plan are briefly highlighted below. Please see Section 4.12.3 of the 2035 General Plan and CAP EIR for more detail.

FEDERAL PLANS, POLICIES, REGULATIONS AND LAWS

There are no federal plans, policies, regulations, or laws that apply to the proposed project.

STATE PLANS, POLICIES, REGULATIONS, AND LAWS

California Fire Code

The California Fire Code (CFC) contains regulations relating to construction, maintenance, and use of buildings. Topics addressed in the code include fire department access, fire hydrants, automatic sprinkler systems, fire alarm systems, fire and explosion hazards safety, hazardous materials storage and use, provisions intended to protect and assist fire responders, industrial processes, and many other general and specialized fire safety requirements for new and existing buildings and the surrounding premises. The CFC contains specialized technical regulations related to fire and life safety.[2]

Project applicants for future projects proposed under the WRTP Specific Plan will be required to incorporate CFC requirements. These standards address access road length, dimensions, and finished surfaces for firefighting equipment; security gate design requirements; fire hydrant placement; fire flow availability and requirements; and plan submittal requirements.

State School Funding

California Education Code Section 17620 authorizes school districts to levy a fee, charge, dedication, or other requirement against any development project for the construction or reconstruction of school facilities, provided that the district can show justification for levying of fees. California Government Code Section 65995 limits the fee to be collected to the statutory fee unless a school district conducts a School Facility Needs Assessment (California Government Code Section 65995.6) and meets certain conditions.

Senate Bill 50 (Chapter 407, Statutes of 1998) instituted a school facility program by which school districts can apply for state construction and modernization funds. This legislation imposed limitations on the power of cities and counties to require mitigation of school facilities impacts as a condition of approving new development. It also provided the authority for school districts to levy fees.

Quimby Act, California Government Code Section 66477

The 1975 Quimby Act authorizes cities and counties to pass ordinances requiring that developers set aside land, donate conservation easements, or pay fees for park improvements. Under the Quimby Act, fees must be paid and land conveyed directly to the local public agencies that provide park and recreation services communitywide.

[2] An important requirement for fire suppression is adequate fire flow, which is the amount of water, expressed in gallons per minute (gpm), available to control a given fire and the length of time that this flow is available. The availability of sufficient water flows and pressure is a basic requirement of the California Building Standards Code. The total fire flow needed to extinguish a structural fire is based on a variety of factors, including building design, internal square footage, construction materials, dominant use, height, number of floors, and distance to adjacent buildings. Minimum requirements for available fire flow at a given building are dependent on standards set in the California Fire Code. These fire flow requirements are 1,500 gpm for low- and medium-density residential (2-hour duration) and 2,500 gpm for high-density residential (3-hour duration).

Revenues generated through the Quimby Act cannot be used for the operation and maintenance of park facilities. The act states that the dedication requirement of parkland can be a minimum of 3 acres per 1,000 residents or more, and equal to the existing parkland provision (up to 5 acres per thousand residents) if the existing ratio is greater than the minimum standard. In 1982, the act was substantially amended. The amendments further defined acceptable uses of, or restrictions on, Quimby funds, provided acreage/population standards and formulas for determining the exaction, and indicated that the exactions must show a reasonable relationship to a project's impacts, as identified through studies required by CEQA.

It should be noted that the Quimby Act applies only to the acquisition of new parkland; it does not apply to the physical development of new park facilities or associated operations and maintenance costs. Therefore, the Quimby Act effectively preserves open space needed to develop park and recreation facilities, but it does not ensure the development of the land or the provision of park and recreation services to residents. In addition, the Quimby Act applies only to residential subdivisions. Nonresidential projects could contribute to the demand for park and recreation facilities without providing land or funding for such facilities. Quimby Act fees are collected by the local agency (e.g., park district, city, or county) in which the new residential development is located.

REGIONAL AND LOCAL PLANS, POLICIES, REGULATIONS, AND ORDINANCES

City of Woodland 2035 General Plan

The *City of Woodland General Plan Update 2035* (City of Woodland 2017) identifies the following policies that are applicable to the WRTP Specific Plan Area.

Law Enforcement Services

- **Goal 5.A Law Enforcement Services.** Provide a comprehensive program of law enforcement services to deter crime, ensure public safety, and meet the growing demand for police services associated with increasing population and non-residential development.

  - **Policy 5.A.3 Development Project Requirements.** Require development projects to develop and/or fund police facilities, equipment, personnel, and operations and maintenance that maintain the City's standards, as demonstrated through positive fiscal impacts or through specific funding mechanisms in the event of fiscal deficits. New development should not result in a reduction in service levels (or capabilities) to existing service population. Explore new and innovative programs for at-risk youth and a diverse community, including those that employ restorative justice concepts.

  - **Policy 5.A.6 Crime Prevention through Design.** Consider public safety issues in public facility, commercial, and residential project design, and enhance public safety through implementation of Crime Prevention Through Environmental Design (CPTED) strategies. These include designing the placement of activities and physical features, such as buildings, entrances and exits, corridors, fences, pavement, signs, lighting and landscaping, in such a way as to clearly define public and private space, maximize visibility, control access and circulation and foster positive social interaction.

  - **Policy 5.A.7 Development Application Review by Police Department.** Continue Police Department review of all development applications, provide comments, and recommend conditions of approval that will ensure adequate on-site and off-site protection systems and features are provided.

Fire Protection Services

- **Goal 5.B Fire Protection Services.** Provide a comprehensive program of fire protection services to protect residents of and visitors to Woodland from injury and loss of life and to protect property from fires.

  - **Policy 5.B.1 Response Time and Service** Standards**.** Strive to maintain a high level of fire protection service to the community by achieving the following response times:

    - Emergency medical service calls: 60 seconds turnout time, at least 90 percent of the time.
    - Fire and special operations response: 80 seconds turnout time, at least 90 percent of the time.
    - Arrival at fire suppression incident: 4 minutes or less travel time of the first arriving engine, at least 90 percent of the time.
    - Deployment of an initial full alarm assignment: 8 minutes or less travel time, at least 90 percent of the time.
    - Arrival at an emergency medical incident: 4 minutes or less travel time, at least 90 percent of the time.
    - Dispatch call answering time: 15 seconds or less, at least 95 percent of the time, and 40 seconds or less, at least 99 percent of the time.
    - Dispatch call processing time: 60 seconds or less, 90 percent of the time, and 90 seconds or less, 99 percent of the time.

  - **Policy 5.B.4 Development Project Requirements.** Require development projects to develop and/or fund fire protection facilities, equipment, personnel, and operations and maintenance that maintain the City's standards, as demonstrated through positive fiscal impacts or through specific funding mechanisms in the event of fiscal deficits.

  - **Policy 5.B.6 Adequate Infrastructure.** Pursue the provision of adequate water supplies, hydrants, and appropriate property access to allow for adequate fire suppression throughout the city.

  - **Policy 5.B.7 Building Codes.** Adopt and enforce amendments to the City's construction and fire codes, as determined appropriate, to require adequate water infrastructure and automatic fire detection, control, and suppression systems, to systematically reduce the level of risk to life and property from fire, commensurate with the City's fire suppression capabilities.

  - **Policy 5.B.8 Development Application Review by Fire Department.** Continue Fire Department review of all development applications, provide comments, and recommend conditions of approval that will ensure adequate on-site and off-site fire protection systems and features are provided.

Park System

The 2035 General Plan established a goal to provide 6 acres of parks per 1,000 residents.

- **Goal 5.C Park System.** Establish and maintain a complete system of public parks and community and recreational facilities that provides opportunities for both passive and active recreation and is well suited to the needs of Woodland residents, employees, and visitors.

  - **Policy 5.C.3 Park Acreage Standard**. Ensure that the development of parks and recreation facilities keeps pace with development and growth within the city. Of the total acreage, strive to achieve and maintain a standard of 6.0 acres of parks per 1,000 residents for the development of City-owned park facilities.

  - **Policy 5.C.4 New Development Goals**. Require that new residential development meet its fair share of the park acreage goal by either dedicating land for new parks, paying a fair share of the costs for new parks and recreation facilities, and/or renovating existing parks and facilities.

  - **Policy 5.C.5 Proximity of Parks to Housing**. Strive to provide accessible public park, greenbelt, and/or recreational open space within one-quarter mile of all housing, especially in neighborhoods with higher density housing. Require new development in Specific Plan areas to meet this standard in site planning, and pursue opportunities to establish new parkland in proximity to underserved infill areas, as feasible.

  - **Policy 5.C.7 Active Linear Connection System**. Establish and maintain an active linear park system that consists of a combination of existing and new greenbelts, bicycle paths, and pedestrian walkways that provide linkages within the city and allow alternative means of access to parks, schools, public facilities, and shopping.

  - **Policy 5.C.8 Connections to Parks**. Plan connections between linear parks and regional bike routes to provide improved access to neighboring communities.

  - **Policy 5.C.9 Greenbelt Requirements**. Require that a minimum of five percent of newly developed residential land within Specific Plan areas be designated for use as linear parks/neighborhood greenbelts. Link new greenbelts to existing or planned greenbelts to create a greenbelt network that connects housing with recreation, commercial and employment areas. *Note: Linear parks/neighborhood greenbelts are included in the City's total parkland acreage and count towards the City's parkland standard of [6.0] acres per 1,000 residents.*

  - **Policy 5.C.11 Park Development Funding**. Identify appropriate funding mechanisms to adequately fund the development of new parks and recreational facilities; the renovation of existing parks and recreational facilities; and the ongoing preservation, maintenance and repair of the city's existing open space, parks and recreational resources and facilities.

  - **Policy 5.C.12 Park Design**. Ensure that the City's parks, open space, and recreational resources and facilities include a variety of amenities and features to meet the needs of the diverse Woodland community. Consider the following factors in the design of new and renovated parks and recreation facilities:

    - Safety
    - Security
    - Maintenance
    - Water conservation / use of recycled water
    - Urban forest canopy

- Accessibility
- Travel distance of users
- Passive vs. active use areas
- Restroom facilities
- Drinking fountains
- Bike access and accommodations
- Citizen input
- Adequacy of off-street parking
- Flexibility for programming activities
- Lighting
- Small community gardens, as appropriate

- **Policy 5.C.16 Park Safety and Law Enforcement**. Work with law enforcement agencies to create and maintain a safe environment for all users and reduce crime and vandalism at parks and recreation facilities.

- **Policy 5.C.17 Accessibility**. Enhance accessibility to and at parks and recreational facilities to ensure they are available for use by all community members, regardless of ability or income.

City of Woodland Parks, Recreation and Community Services Master Plan

The City's *Parks, Recreation and Community Services Master Plan* (Parks Master Plan) (City of Woodland 2004) identified existing parks and recreation facilities and programs, parks and recreation needs, and implementation recommendations. Its needs assessment was based on a forecasted population of approximately 69,000 residents by the year 2020, and a parkland ratio goal of 6 acres per 1,000 residents from the City's 2001 General Plan. In order to meet this goal, the Parks Master Plan concluded that the City would need to provide approximately 277 additional acres of parkland by 2020. The Parks Master Plan indicated that City would need to construct nine neighborhood parks (64.36 acres), three community parks (64.58 acres) and four community sports parks (80.96 acres). The Parks Master Plan also anticipated that future land developers would install 0.5 acres per 1,000 residents of pocket parks and 0.5 acre per 1,000 residents of greenbelts as part of the City's infrastructure requirements. Together, construction of the City parks and the parks installed by new developers would achieve the parkland ratio goal of 6 acres per 1,000 residents. In addition, the Parks Master Plan recommended increasing the developer impact fees for infill development to cover costs for park construction and maintenance.

3.12.4 Environmental Impacts and Mitigation Measures

Methodology

The 2035 General Plan and CAP EIR addresses impacts of development of the City's planning area including the WRTP Specific Plan Area. Consistent with Section 15183(b) of the CEQA Guidelines, the following analysis focuses on project-specific significant effects of the WRTP Specific Plan that: a) are peculiar to the WRTP Specific Plan or the site; b) were not addressed in the 2035 General Plan and CAP EIR (including off-site or cumulative impacts); or c) would be more severe than previously described based on substantial new information.

Impacts related to fire protection services, police protection services, and school facilities attributable to the proposed WRTP Specific Plan were identified by comparing existing service capacity and facilities against future demand associated with WRTP Specific Plan implementation and identifying reasonably foreseeable service and

facilities expansion required to serve the proposed project. When possible, a quantitative comparison was used to determine future demand. Where this level of detail is not available, impacts were analyzed qualitatively.

Potential parks and recreation impacts were evaluated by comparing the acreage of proposed parks and recreation facilities within the WRTP Specific Plan area to the City's parkland acreage standard of 6 acres per 1,000 residents. In addition, existing parks and recreation facilities were identified, and the duration and extent to which these facilities would be affected by implementation of the WRTP Specific Plan was evaluated.

THRESHOLDS OF SIGNIFICANCE

The proposed WRTP Specific Plan may have a significant impact related to public services and recreation if it would:

1. result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for:

    a. fire protection;
    b. police protection;
    c. schools;
    d. parks; or
    e. other public facilities;

2. increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated; or

3. include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment.

IMPACTS NOT DISCUSSED FURTHER

The following discussion summarizes the impacts of the WRTP Specific Plan that are not discussed further in this document because either, a) there is no impact, or b) none of the factors triggering additional environmental review (as found in Section 15183(b)) exist because an impact was addressed as a part of the 2035 General Plan and CAP EIR and/or substantially mitigated by uniformly applied development standards (CEQA Guidelines Section 15183[f]). Uniformly applied development standards include the 2035 General Plan, the CAP, existing City regulations and standards, design review requirements, and impact fee programs.

Impacts Related to Fire Protection Services (Significance Threshold 1a) — As discussed in the 2035 General Plan and CAP EIR Impact 4.12-1 (pages 4.12-29 through 4.12-32) (City of Woodland 2016), Goal 5.B establishes a comprehensive program of fire protection services as a priority in the 2035 General Plan. Service standards for fire protection are addressed in Policies 5.B.1, which states the City should maintain a response time of 4 minutes or less for fire suppression calls, at least 90 percent of the time. Policy 5.B.4 requires development projects to develop and/or fund fire protection facilities, equipment, personnel, and operations and maintenance that maintain the City's standards. Policies 5.B.2 and 5.B.6 ensure high-quality staff and equipment, including adequate fire suppression throughout the city; Policy 5.B.7 reduces the need for new facilities through enforcement of safe building standards; and Policy 5.B.8 requires review of development applications by the fire department. Policy

5.B.10 of the 2035 General Plan specifically addresses the location of new fire stations in relation to planned growth. The environmental effects from construction and operation of new or expansion of existing fire stations were evaluated programmatically in the 2035 General Plan and CAP EIR throughout the individual environmental topic sections. Individual development projects would be required to conduct environmental review pursuant to CEQA prior to approval. Additionally, any new construction of fire facilities would be subject to construction permitting and Fire and Building Code standards. The 2035 General Plan and CAP EIR concluded that impacts related to fire protection services would be less than significant.

Fire protection services for the WRTP Specific Plan Area would be provided by Station Three currently located at 1550 Springlake Court. As discussed in Section 3.12.1, "Environmental Setting," the City plans to relocate Station Three to improve service to existing and proposed development within the southeast portion of the City, including the WRTP Specific Plan Area. The City would conduct project-level CEQA analysis, if necessary, to analyze specific impacts and identify any required mitigation measures for construction and operation of Station Three. To the extent feasible, the environmental impacts associated with the construction of Station Three would be mitigated to below a level of significance, consistent with CEQA. As concluded in the 2035 General Plan and CAP EIR, if siting and construction practices are consistent with the General Plan's policies and other existing regulatory standards, environmental impacts related to construction and operation of fire protection facilities should be minimal (2035 General Plan and CAP EIR page 3.12-32).

Project applicants for future projects proposed under the WRTP Specific Plan would be required to submit project design plans to the Woodland Fire Department for review and implement recommended conditions (General Plan Policy 5.B.8). The proposed WRTP Specific Plan would not affect Woodland Fire Department response times because project applicants for future projects proposed under the WRTP Specific Plan would provide funding to ensure fire protection personnel and equipment is provided to meet increased demand for fire protection services (General Plan Policy 5.B.4). Incorporation of all California Fire Code, City development standards, and Woodland Fire Department requirements into project designs would reduce the dependence on fire department equipment and personnel by reducing fire hazards.

Therefore, impacts from WRTP Specific Plan construction and related infrastructure improvements related to fire protection services are substantially mitigated by City-administered uniformly applied development standards, as provided by CEQA Guidelines Section 15183(f), and no additional CEQA review is required.

Impacts Related to Police Protection Services (Significance Threshold 1b) — As discussed in the 2035 General Plan and CAP EIR Impact 4.12-2 (pages 4.12-32 through 4.12-35) (City of Woodland 2016), future development consistent with the General Plan is not expected to require new Woodland Police Department facilities, but may require additional staff and policing resources to account for workload and to meet response time standards. Goal 5.A provides for sufficient law enforcement services that will adequately meet the needs of increasing population and non-residential development. Policies 5.A.1 and 5.A.2 require efficient and high-quality service standards. Development projects are required to fund police facilities according to Policy 5.A.3. Policies 5.A.4, 5A.5, 5.A.6, and 5.A.7 reduce the need for additional police services through public safety programs and Crime Prevention through Environmental Design strategies, and development application review by the Police Department. In the event that new police facilities would be needed, they would be located within the development footprint analyzed in the 2035 General Plan and CAP EIR. The environmental effects from construction and operation of new police stations were evaluated programmatically in the 2035 General Plan and CAP EIR throughout the individual environmental topic sections. Individual development projects would be required to

conduct environmental review pursuant to CEQA prior to approval. The 2035 General Plan and CAP EIR concluded that impacts related to police protection services would be less than significant.

Police protection for future development in the WRTP Specific Plan Area would be provided by the Woodland Police Department. Project applicants for future projects proposed under the WRTP Specific Plan would be required to submit project design plans to the Woodland Police Department for review and implement recommended conditions of approval (General Plan Policy 5.A.7). The proposed WRTP Specific Plan would not affect Woodland Police Department response times or other performance objectives because project applicants for future projects proposed under the WRTP Specific Plan would provide funding to ensure police protection personnel and equipment is provided to meet increased demand for police protection services (General Plan Policy 5.A.3).

Therefore, impacts from WRTP Specific Plan construction and related infrastructure improvements related to police protection services are substantially mitigated by City-administered uniformly applied development standards, as provided by CEQA Guidelines Section 15183(f), and no additional CEQA review is required.

Impacts Related to School Services (Significance Threshold 1c) — As discussed in the 2035 General Plan and CAP EIR Impact 4.12-3 (pages 4.12-35 through 4.12-39) (City of Woodland 2016), future development consistent with the General Plan, based on the State's classroom loading factors, would require new schools. Implementation of the 2035 General Plan will reduce the impacts related to school services. Specifically, Goal 5.E and Policy 5.E.2 encourages coordination with WJUSD and other educational institutions regarding future school sites. However, the siting of new schools is regulated by the California Department of Education, not the City of Woodland. As a result, the potential impacts associated with the construction of new schools could not be fully predicted at the time of analysis for the 2035 General Plan; the 2035 General Plan and CAP EIR found this impact to be potentially significant. Funding for new school construction is provided through State and local revenue sources. Senate Bill 50 (Chapter 407, Statutes of 1998) governs the amount of fees that can be levied against new development. Payment of fees authorized by the statute is deemed "full and complete mitigation."[3,4] The 2035 General Plan and CAP EIR concluded that pursuant to State law the impact is considered less than significant after mitigation.

The WRTP Specific Plan Area is located within the WJUSD boundaries and could result in the construction and occupation of approximately 1,600 residential dwelling units. WJUSD uses student generation factors (students per new dwelling units) for single- and multi-family development in order to project student enrollment as shown in Table 3.12-5. Based on student-yield generation rates from WJUSD, implementation of the WRTP Specific Plan would generate approximately 376 new elementary school students (grades K–6), 104 middle school students (grades 7–8), and 222 high school students (grades 9–12). This yield is a general estimate. Actual student generation could be different for different housing types and would vary according to demographic and other influences.

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[3] Senate Bill 50 (Chapter 407, Statutes of 1998) set caps on school fees that cities and counties are permitted to impose on development projects. The statutes state that these fees are "the exclusive methods of mitigating environmental impacts related to the adequacy of school facilities when considering the approval or the establishment of conditions for the approval of a development project…". Accordingly, these fees limit the scope of impact review in an Environmental Impact Report, the mitigation that can be imposed, and the findings a lead agency must make in justifying its approval of a project. Government Code Sections 65995-65996.

[4] Under *Chawanakee Unified School District v. County of Madera* (2011) 196 Cal.App.4th 1016, the impacts of new school construction (including reasonably foreseeable new school construction necessitated by new residential development) on parts of the environment other than school facilities, including such impacts as traffic impacts of increased students driving or bussing to and from a school facility, must be considered, if applicable to a particular project, but the project's impacts in causing school overcrowding or inadequate classroom facilities do not.

Table 3.12-5. Student-Yield Generation Rates for the Woodland Unified School District

Grade Level	Single Family (Students per Dwelling Unit)	Multi-Family (Students per Dwelling Unit)	Total Students[1]
Elementary (K–6)	0.2233	0.2596	376
Middle (7–8)	0.0619	0.0711	104
High (9-12)	0.1413	0.1342	222
Total Students	--	--	**702**

Note: The total number of students is based on construction of 1,100 single-family dwelling units and 500 multi-family dwelling units.
Source: City of Woodland 2020

The WRTP Specific Plan Land Use Plan provides for a new elementary school in the area zoned for medium density residential, south of Parkland Avenue and east of Road B, should it be determined necessary by the WUJSD to support the anticipated student yield from development within the WRTP Specific Plan Area. Should residential development occur within the WRTP Specific Plan Area prior to the construction of this school, students within the WRTP Specific Plan Area would attend Spring Lake Elementary School, Tafoya Elementary School, Woodland Prairie Elementary School, Douglass Middle School, and Pioneer High School. As shown in Table 3.12-2, these schools are substantially below capacity and it is likely that the nearby existing schools could accommodate all anticipated elementary school, middle school, and high school students at build out of the WRTP Specific Plan Area. Therefore, a shortfall of elementary school, middle school, or high school services and facilities would not occur. Depending on the timing of future development within the WRTP Specific Plan Area, future students could potentially be bused or driven to schools within the WJUSD boundaries, resulting in indirect impacts related to transportation, such as air pollutant emissions, greenhouse gas emissions, and transportation noise. These potential impacts were considered in the 2035 General Plan and CAP EIR analysis for the relevant resource areas, and are addressed as part of the impact analyses in each of the environmental topic-specific sections of this EIR.

As noted, in the case that additional students resulting from new residential development within the WRTP Specific Plan Area would exceed the elementary school capacity or an additional school is otherwise determined by the WJUSD and the California Department of Education to be necessary, the WRTP Specific Plan provides for a new elementary school within the Planning Area. The proposed development in the WRTP Specific Plan is consistent with that assumed for analysis in the 2035 General Plan and CAP EIR, including increased students within the school district due to residential development, and planning for additional schools. Funding for new school construction, as provided through fees authorized by SB 50 and identified as mitigation under the 2035 General Plan and CAP EIR would be applicable to development within the WRTP Specific Plan Area. Project applicants for future projects proposed under the WRTP Specific Plan would pay the State-mandated school impact fees to the WJUSD that are being levied at the time of development. The City would determine the assessable square footage that would be subject to the fee at the time of development. The California Legislature has declared that payment of the applicable school impact fee is deemed to be full and adequate mitigation under CEQA for impacts on school facilities (California Government Code Section 65996). Direct effects associated with the construction and operation of a new elementary school within the WRTP Specific Plan Area are addressed in specific resource area analyses, as appropriate, throughout this EIR. The indirect effects associated with transporting students were addressed in the General Plan and CAP EIR and are addressed, as appropriate, in the respective sections throughout this EIR. No additional CEQA review is required.

Impacts Related to Parks and Recreation Services (Significance Threshold 1d and 1e) — As discussed in the 2035 General Plan and CAP EIR Impact 4.12-4 (pages 4.12-39 through 4.12-43) (City of Woodland 2016), 2035

General Plan Policy 5.C.3 states the City will "strive to achieve" 6.0 acres of parkland per 1,000 residents. The Quimby Act authorizes cities and counties to pass ordinances requiring that developers set aside land, donate conservation easements, or pay fees for park improvements. General Plan Policy 5.C.3 requires that the development of parks and recreation facilities keeps pace with development according to the City's parkland standard. Policy 5.C.4 requires that new residential development meet its fair share of the park acreage goal by either dedicating land for new parks, paying a fair share of the costs for new parks and recreation facilities, and/or renovating existing parks and facilities. Policy 5.C.12 requires that the City's parks, open space, and recreational resources and facilities include a variety of amenities and features to meet the needs of the community, and that factors such as water conservation, urban forest canopy, drinking fountains, restrooms, lighting, and parking be considered in the design of new parks and recreation facilities. The 2035 General Plan and CAP EIR states that for any new future master or specific plan area, parkland would be required to support residential development according to the 2035 General Plan standard, which is 6.0 acres of parkland per 1,000 residents. The amount, type, and location of the new parks and recreational facilities are determined during the planning process. The environmental effects from construction and operation of new parkland were evaluated in the 2035 General Plan and CAP EIR throughout the individual environmental topic area sections. The 2035 General Plan and CAP EIR concluded that impacts related to parks and recreation services would be less than significant.

Table 3.12-6 shows the parkland acreage calculations based on the projected new residential population in the WRTP Specific Plan Area.

Table 3.12-6. WRTP Specific Plan Parkland Acreage Calculations

Projected Residential Population	City of Woodland 2035 General Plan Standard (6 acres per 1,000 residents)	Total Proposed Parkland (acres)	Total Surplus (+) or Deficit (-) of Parkland Acreage Compared with Requirement
4,386	26.3	21.8	-4.5

Source: Data compiled by AECOM in 2020

For the purpose of this analysis, it is assumed that the planned residential land use will support a total projected population of approximately 4,386 people. Therefore, assuming 6 acres per thousand residents, 26.3 acres of parkland would be required. As explained in Chapter 5 of the WRTP Specific Plan, additional parks, open space, mini parks and public or private plazas may be identified within individual developments and with Tentative Subdivision Maps. The WRTP Specific Plan will meet its park obligation through a combination of park land development and through project impact fees. Therefore, the WRTP Specific Plan would meet or exceed the City's requirements for new residential development to provide its fair-share of park acreage.

As stated above, General Plan Policy 5.C.12 requires that the City's parks, open space, and recreational resources and facilities include a variety of amenities and features to meet the needs of the community, and that factors such as water conservation, urban forest canopy, drinking fountains, restrooms, lighting, and parking be considered in the design of new parks and recreation facilities. The WRTP Specific Plan includes a central park, "The Yard", of 11.6 acres that would serve as the primary park/open space feature; smaller parks, open spaces, and greenways are proposed throughout the WRTP Specific Plan Area. The Yard would include one or more areas for field and court sports, playgrounds/tot lots, restrooms, picnic tables, shade structures and shaded seating areas, passive recreation areas, and improvements at the southern end to provide a central gathering place for outdoor socializing and events (such as a weekly farmers market). Smaller parks and open spaces would be designed for a variety of passive and active uses, depending on the size and configuration of the park/open space. The interconnected open space, and

thee active and passive recreation facilities will be required to provide ample places for physical activity and recreation. The Design Standards and Design Guidelines in Chapter 3 of the WRTP Specific Plan contain criteria for parkland design related to water conservation, urban forest canopy, drinking fountains, restrooms, lighting, and parking. The environmental effects from construction and operation of the WRTP Specific Plan, including proposed recreational facilities, are evaluated throughout the individual environmental topic area sections in this EIR. There are no other known environmental effects associated with park facilities or services that are beyond the impacts disclosed in the relevant environmental topic area sections of this EIR. Therefore, impacts from WRTP Specific Plan implementation related to parks and recreation services are substantially mitigated by City-administered uniformly applied development standards, as provided by CEQA Guidelines Section 15183(f), and no additional CEQA review is required.

Impacts Related to Increased Use of Existing Parks and Recreational Facilities (Significance Threshold 1d and 1e) — As discussed in the 2035 General Plan and CAP EIR Impact 4.12-6 (pages 4.12-46 through 4.12-48) (City of Woodland 2016), additional population growth would place added physical demands on existing park facilities by increasing the number of people using the parks, lengthening the periods of time during which the parks would be in active use, and/or increasing the intensity of use over the course of a typical day. However, the City also anticipated that new parkland would be created to serve new residential growth areas. Therefore, as additional parkland was added over time with new development, impacts related to use overall would be spread over more facilities, and thus the increased use of existing parks and recreational facilities would not result in substantial physical deterioration of existing facilities. Furthermore, General Plan Policy 5.C.3 requires that the development of parks and recreation facilities keeps pace with development and growth within the city according to the City's parkland standard. General Plan Policy 5.C.4 requires that new residential development meet its fair share of the park acreage goal by either dedicating land for new parks, paying a fair share of the costs for new parks and recreation facilities, and/or renovating existing parks and facilities. Therefore, the 2035 General Plan and CAP EIR concluded that impacts related to increased use of existing parks and recreational facilities would be less than significant.

The WRTP Specific Plan would provide a total of 21.8 acres of parks and open space for the use of new residents, visitors, and employees in the WRTP Specific Plan Area. Parkland created in the WRTP Specific Plan Area would be located in proximity to proposed and existing nearby housing, promoting use of new parkland. In addition, new residents, visitors, and employees may also use existing City park facilities such as the 28-acre Woodland Sports Park approximately 0.35 mile west of the WRTP Specific Plan Area, the 10-acre Rick Gonzales Sr. Park approximately 0.6 mile east of the WRTP Specific Plan Area, and the Woodland Regional Park approximately 1 mile east of the WRTP Specific Plan Area. As the Spring Lake Specific Plan continues to be implemented, additional parks would also be developed north and east of the WRTP Specific Plan Area. Additionally, although it cannot be fully ascertained with any degree of certainty exactly how many residents and with what frequency they would choose to use off-site recreational facilities, General Plan Policy 5.C.11 promotes mechanisms to adequately fund the ongoing maintenance and repair of the City's open space, parks, and recreational resources and facilities. In addition, General Plan Implementation Program 5.2 calls for the production and regular update of the Parks, Recreation, and Community Services Master Plan that would, among other items, identify funding sources for the development and maintenance of parks, recreation centers and open space resources. Therefore, impacts related to increased use of existing parks and recreational facilities from implementation of the WRTP Specific Plan are substantially mitigated by City-administered uniformly applied development standards, as provided by CEQA Guidelines Section 15183(f), and no additional CEQA review is required.

Impacts Related to New Parks and Recreational Facilities (Significance Threshold 1d and 1e) — As discussed in the 2035 General Plan and CAP EIR Impact 4.12-7 (pages 4.12-48 through 4.12-52) (City of Woodland 2016), new recreational facilities would be created to serve new growth. For any new future master or specific plan area, parkland is required to support residential development, and there may be new recreational facilities associated with new parkland. The precise amount, type, and location of the new parks and recreational facilities would be determined during the planning process for individual development projects or Specific Plans, and must be consistent with the requirements of the 2035 General Plan. Any new construction or expansion of recreation facilities would be subject to construction permitting and Fire and Building Code standards. Additionally, General Plan Policy 5.C.3 requires that development of recreation facilities keeps pace with development and growth within the city and Policy 5.C.5 supports the placement of parks and recreational facilities in proximity of housing. New development is required to meet its fair share of the park acreage goal, including greenbelt parks, according to Policies 5.C.4 and 5.C.9. Appropriate funding mechanisms for parks and recreational facilities must be identified according to Policy 5.C.11. Policy 5.C.12 requires that a variety of factors are considered in the design of new and renovated parks and recreational facilities, including flexibility for programming activities, travel distance of users, and citizen input. The 2035 General Plan and CAP EIR concluded that impacts related to creation of new parks and recreational facilities would be less than significant.

The WRTP Specific Plan includes the creation of new on-site parks and recreational facilities, as well as payment of in-lieu fees towards expansion of the Woodland Sports Park, as required by the City. Parkland created in the WRTP Specific Plan Area would be located in proximity to proposed and existing nearby housing. The WRTP Specific Plan Design Standards contained in Chapter 3 of the WRTP Specific Plan require that a variety of factors are considered and incorporated into the new parks, including safety, security, water conservation, urban forest canopy, accessibility, restroom facilities, drinking fountains, and bike access and accommodations. The environmental effects from construction and operation of the WRTP Specific Plan, including proposed recreational facilities, are evaluated throughout the individual environmental topic area sections in this EIR. There are no other known environmental effects associated with park facilities or services that are beyond the impacts disclosed in the relevant environmental topic area sections of this EIR. Thus, no additional CEQA review is required.

PROJECT IMPACTS

There are no project-specific significant effects that are peculiar to the WRTP Specific Plan that (1) were not analyzed as significant effects in the 2035 General Plan and CAP EIR, (2) are potentially significant off-site impacts not discussed in the 2035 General Plan and CAP EIR; or (3) would have a more severe adverse effect than discussed in the 2035 General Plan and CAP EIR (City of Woodland 2016). Therefore, no additional CEQA review is required.

3.12.5 CUMULATIVE IMPACTS

POLICE AND FIRE SERVICES

The 2035 General Plan and CAP EIR (page 6-39) (City of Woodland 2016) noted that public services are generally provided by local governments and/or special districts for areas within their jurisdiction and are not provided on a regional basis. For this reason, the 2035 General Plan and CAP EIR determined fire and police protection services have less than significant cumulative impacts.

The City of Woodland Police Department expects to meet increased demand for services through increased staffing rather than new facilities. The 2035 General Plan and CAP EIR determined additional fire stations would be required to meet demand from future growth. Because the City maintains its own fire department facilities, the construction of additional facilities would not combine with effects in neighboring communities to create cumulative impacts. The 2035 General Plan includes policies to ensure that sufficient facilities and services are provided to serve additional growth. These policies and programs apply to any level of development, and therefore would mitigate potential impacts from development of new facilities and the cumulative impact would be less than significant.

As described above, the project applicants for future projects proposed under the WRTP Specific Plan would comply with 2035 General Plan policies that require review of project designs by the Woodland Fire Department and Woodland Police Department and implementation recommended conditions of approval, as well as provide funding to ensure fire and police protection personnel and equipment is provided to meet increased demand for fire and police protection services. In addition, individual development projects would incorporate California Fire Code and City standards into project designs to reduce the dependence on fire department equipment and personnel by reducing fire hazards. The WRTP Specific Plan's contribution to impacts related to increased fire and police protection services and facilities would be less than cumulatively considerable. Thus, no additional CEQA review is required.

PUBLIC EDUCATION SERVICES

The 2035 General Plan and CAP EIR (page 6-39) (City of Woodland 2016) noted that public schools are provided by school districts to areas within their jurisdictions. While districts may have cross-jurisdictional boundaries, school services are still provided at the local, rather than regional, level. For this reason school services have less-than-significant cumulative impacts.

The 2035 General Plan and CAP EIR found that future growth would increase the student population, creating additional need for public schools. However, implementation of General Plan polices would reduce the impacts related to school services by encouraging coordination with WJUSD and other educational institutions regarding future school sites. The WJUSD operates within the City of Woodland and serves all development in the City, so the construction of additional facilities would not combine with effects in neighboring communities to create cumulative impacts in the region. Therefore, the 2035 General Plan and CAP EIR determined that the future growth would have a less than cumulatively considerable contribution to this impact.

The WRTP Specific Plan would generate approximately 376 new elementary school students (grades K–6), 104 middle school students (grades 7–8), and 222 high school students (grades 9–12) (Table 3.12-5). The WRTP Specific Plan proposes a new elementary school in the area zoned for medium density residential, south of Parkland Avenue and east of Road B. Prior to the construction of this school, students within the WRTP Specific Plan Area would attend Tafoya Elementary School, Woodland Prairie Elementary School, Douglass Middle School, and Pioneer High School, all of which are operating substantially below capacity (Table 3.12-1). The proposed WRTP Specific Plan would pay the State-mandated school impact fees to the WJUSD that are being levied at the time of development. The California Legislature has declared that payment of the State-mandated school impact fee is deemed to be full and adequate mitigation under CEQA (California Government Code Section 65996); therefore, the WRTP Specific Plan's cumulative impacts related to increased demand for school facilities and services would be less than cumulatively considerable. Thus, no additional CEQA review is required.

Depending on the timing of future development within the WRTP Specific Plan Area, future students could potentially be bused or driven to schools within the WJUSD boundaries, resulting in indirect cumulative impacts related to transportation, such as air pollutant emissions, greenhouse gas emissions, and transportation noise. The environmental effects from construction and operation of the WRTP Specific Plan, including proposed school facilities and transportation related to an increased student population associated with proposed residential development, are evaluated throughout the individual environmental topic area sections in this EIR, as well as the cumulative impact analyses contained in each topic area of this EIR. There are no other known environmental effects associated with park facilities or services that are beyond the impacts disclosed in the relevant environmental topic area sections of this EIR. Thus, no additional CEQA review is required.

PARKS AND RECREATION

The 2035 General Plan and CAP EIR (page 6-44) (City of Woodland 2016) noted that counties, cities, and special districts in the region each have their own parkland ratios and standards and are responsible for providing parkland to meet the local demand. Although an increase in regional population could increase demand for parks and recreation facilities and services, these local jurisdictions have authority over land use, set and implement level of service standards, and determine the siting and timing of public service projects. Therefore, the 2035 General Plan and CAP EIR determined that regional parks and recreation impacts would be cumulatively less than significant in and of themselves. The 2035 General Plan and CAP EIR also found that future growth in the City would likely require new park/recreation facilities to achieve the same parkland ratio. However, implementation of relevant policies in the 2035 General Plan related to parkland ratios and funding agreements would reduce environmental impacts, resulting in a less-than-cumulatively considerable contribution to regional parks and recreation impacts. Finally, the 2035 General Plan and CAP EIR determined that construction of any additional parks/recreational facilities in the City would not combine with effects in neighboring communities to create cumulative impacts.

The WRTP Specific Plan includes the creation of new on-site parks and recreational facilities, as well as project impact fees, as required by the City. As described above, the WRTP Specific Plan would comply with all 2035 General Plan policies related to the design and construction of new parks and recreational facilities, resulting in a less-than-cumulatively considerable contribution to regional parks and recreation impacts. The environmental effects from construction and operation of the WRTP Specific Plan, including proposed recreational facilities, are evaluated throughout the individual environmental topic area sections in this EIR, as well as the cumulative impact analyses contained in each topic area of this EIR. There are no other known environmental effects associated with park facilities or services that are beyond the impacts disclosed in the relevant environmental topic area sections of this EIR. Therefore, construction of the new parks/recreational facilities proposed in the WRTP Specific Plan would not combine with effects in neighboring communities to create cumulative impacts. Thus, no additional CEQA review is required.

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3.13 TRANSPORTATION AND CIRCULATION

3.13.1 INTRODUCTION

This section describes potential impacts to the transportation system associated with implementation of the WRTP Specific Plan. The study area was developed based on consideration the following factors: the expected travel characteristics (including number of vehicle trips and directionality of those trips), primary travel routes to and from the WRTP Specific Plan Area vicinity, and a project-area assignment using a modified version of SACOG's regional travel demand forecasting model. The study area for intersections is bounded by East Street to the west, East Main Street to the north, CR 102 to the east, and CR 25A to the south. The impact analysis examines the vehicular, transit, bicycle and pedestrian components of the study area's overall transportation system. The information and analysis in this section draws upon the Traffic Impact Study prepared by Fehr & Peers, in April 2021, to support this EIR (See Appendix E).

The CEQA Guidelines note that comments received during the NOP scoping process can be helpful in "identifying the range of actions, alternatives, mitigation measures, and significant effects to be analyzed in depth in an EIR and in eliminating from detailed study issues found not to be important." (CEQA Guidelines Section 15083.) Neither the CEQA Guidelines nor Statutes require a lead agency to respond directly to comments received in response to the NOP, but they do require that the comments be considered. Consistent with these requirements, these comments have been carefully reviewed and considered by the City and are reflected in the analysis of impacts in this chapter.

Several comments on the NOP relevant to transportation and circulation were received. The California Department of Transportation (Caltrans) submitted comments with the main theme focused on the analyzing the State Highway System, including an estimate of vehicle miles traveled (VMT) generated by implementation of the WRTP Specific Plan and any potential safety issues for all transportation modes. The comment also noted that the analysis should include State Route 113, between Woodland and Davis, the State Route 113 and Interstate 80 interchange, and Interstate 80 within the project vicinity. The transportation assessment in the 2035 General Plan and CAP EIR, certified in 2018, evaluated 203 road segments (including 14 freeway segments on I-5 and SR 113) as well as five intersections. The Traffic Impact Analysis conducted in support of this EIR updated the freeway analysis conducted in the 2035 General Plan and CAP EIR for 2050 cumulative conditions for two segments of SR 113, immediately adjacent to the CR 25A interchange that borders the WRTP Specific Plan Area. A citizen commented that a connection of CR 25 to CR 102 should be implemented sooner than later. This comment is not relevant to the EIR. A meeting was held with Caltrans staff on August 9, 2017, to discuss the general planning context, an overview of the Specific Plan, and the transportation scope for the EIR. In December 2018, major revisions were made to the state's CEQA guidelines as required for implementation of Senate Bill (SB) 743. SB 743 eliminates the use of automobile delay from the CEQA environmental review process and the determination of CEQA transportation impacts. The new metric required by the CEQA Guidelines is VMT. The revised guidelines also indicate that Level of Service (LOS) shall not be considered a significant impact on the environment. The scope for this transportation analysis was modified to reflect the above changes in CEQA guidance. Appendix A of this EIR includes copies of all NOP comments received.

3.13.2 ENVIRONMENTAL SETTING

The City of Woodland 2035 General Plan and CAP EIR summarize the environmental setting for Transportation and Circulation in the vicinity of the City's Planning Area on pages 4.13-1 through 4.13-6. A description of key elements of the regional roadway system, including Interstate (I)-5, SR 113, and SR 16, as well as a description of pedestrian, bicycle, and transit facilities within the City's Planning Area. Most of the transportation network and services described in the setting of the 2035 General Plan and CAP EIR remain unchanged. However, some roads have been extended as planned in the Spring Lake Specific Plan, including Farmer's Central Road, Marston Road, and Parkland Avenue. In addition, the Yolobus bus service eliminated Route 209 (County Fair Mall Transit Center to Spring Lake Community) and added Routes 45X and 46 (Spring Lake Express), and Route 243 (Woodland/UC Davis Commute).

The automobile is the most widely used mode of transportation in Woodland. According to the US Census Bureau, 2010-2014 American Community Survey, about 90 percent of City of Woodland residents commute to work by car, truck, or van.[1] The share of commuters that walk or bike to work in the City of Woodland is about two percent for each mode. Additionally, about three percent of commuters currently use public transportation to get to work.

Data from the 2010–2014 American Community Survey also show the amount of time commuters take to get to work. Based on the data, about 66 percent of workers living in Woodland traveled to work in less than 25 minutes with an average travel time estimated to be 22 minutes.

ROADWAY SYSTEM

The City of Woodland uses a functional classification system to describe and plan its roadway system. Descriptions of each roadway classification are provided below.

- **Freeways**: Provide mobility between Woodland and regional destinations. Freeways are access controlled, divided roadways with at least two lanes in each direction. Freeway access is provided by grade-separated interchanges.
- **Major Two-Lane Highways**: Provide mobility between Woodland and regional destinations. They generally have two travel lanes, periodic passing and climbing lanes, and at-grade intersections.
- **Principal Arterial Streets**: Provide mobility for higher traffic volumes. They typically link freeways to collectors and local streets and generally have higher speeds and more access control, while maintaining a comfortable bike and pedestrian experience.
- **Minor Arterial Streets**: Provide mobility for higher traffic volumes be-tween various parts of the city. They typically have lower speeds and less access control than a Principal Arterial street due to the intensity of the development in the urban environment. Access from parcels onto these roadways is limited to reduce points of conflict, smooth the flow of traffic, and enhance urban design.

[1] U.S. Census Bureau, 2010-2014 American Community Survey 5-Year Estimates.

- **Collector Streets**: Provide for relatively short distance travel between and within neighborhoods, and generally have lower speeds and traffic volumes than arterials. Driveway access to collectors is limited less than on arterials but may still be discouraged.

- **Local Streets**: Provide direct roadway access to adjacent land uses and serve short distance trips within neighborhoods. Traffic volumes and speed limits on local streets are low, and these roadways have no more than two travel lanes.

Woodland's system of arterials, collectors, and local streets connect neighborhoods, employment centers, and other destinations. The following major roadways would provide access to the WRTP Specific Plan Area:

- **I-5** is a north/south freeway facility of the State Highway System, maintained by Caltrans. I-5 provides a major linkage between the City of Woodland and the Sacramento region. I-5 is also a major interstate that links northern California with Southern California, Oregon and Washington and connects Mexico to Canada. The freeway is one of the more significant goods movement routes and serves a number of long-distance truck and recreational trips. Near the WRTP Specific Plan Area, I-5 has a roughly east-west orientation with four lanes, two general purpose lanes in each direction. Access to I-5 in the vicinity of the WRTP Specific Plan Area is provided at CR 102, East Main Street, and SR 113.

- **SR 113** is a north/south route extending from west of Rio Vista to south of Yuba City. The segment between and connecting I-80 and I-5 is four lanes. It continues from I-5 in Woodland to SR 99 as a two-lane undivided highway. SR 113 is a key transportation corridor between the City of Woodland and the City of Davis. Access to SR 113 from the WRTP Specific Plan Area is provided at CR 25A.

- **CR 102** is a north-south principal arterial that links Woodland with Davis to the south and Knights Landing to the north. CR 102 is a two-lane facility from Heritage Parkway to East Gibson Road, and a four lane facility from East Gibson Road to East Main Street.

- **East Main Street** is a four-lane east-west arterial through the study area that divides the City of Woodland from its more industrial land uses in the northeast part of the City. From East Street to CR 102, East Main Street is designated as a principal arterial. East Main Street also provides connectivity between commercial uses along I-5, downtown Woodland, and residential neighborhoods east of SR 113.

- **Gibson Road/ County Road 24** is a four-lane, east-west principal arterial along the segment between East Street and CR 102. West of East Street, Gibson Road is designated as a minor arterial. East Gibson Road connects the Spring Lake Community and the Southeast Area Specific Plan (north of East Gibson Road) with the balance of Woodland located west of SR 113.

- **East Street** is a north-south two-lane road from CR 25A north to just south of Gibson Road, where it transitions to a four-lane road. It is classified as a principal arterial from CR 25A to Gibson Road.

- **Pioneer Avenue** is a four-lane, north-south minor arterial that serves the Spring Lake community residential neighborhoods between Spring Lake and East Main Street, and the industrial area north of East Main Street.

- **County Road 25A** is an east-west two-lane road running from CR 98 to Harry Lorenzo Avenue. It is designated as a minor arterial from East Street to CR 102

- **Harry Lorenzo Avenue (formerly CR 101)** is designated a north-south collector road from East Gibson Road to Parkland Avenue. South of Farmer's Central Road, it forms the eastern boundary of the WRTP Specific Plan Area.
- **Marston Road** is an east-west collector that currently connects Harry Lorenzo Avenue to Miekle Avenue.
- **Parkland Avenue** is a four-lane principal arterial that currently connects Pioneer Avenue to Marston Road.
- **Hays Lane** is an east-west two-lane roadway running from County Road 102 to the west to Hays Antique Truck Museum.
- **Matmor Road** is a two-lane, north-south minor arterial that serves residential neighborhoods between Sports Park Drive and East Main Street.
- **Farmers Central Road** is an east-west two-lane roadway that serves residential neighborhoods between Harry Lorenzo Avenue (formerly CR 101) to the east to County Road 102.
- **East Heritage Parkway** is an east-west two-lane roadway that serves residential neighborhoods to the north and south between Harry Lorenzo Avenue (formerly CR 101) to the east to County Road 102.

PEDESTRIAN FACILITIES

The WRTP Specific Plan Area is currently used for agricultural purposes and there are no sidewalks. There are currently approximately eight-foot shoulders, but no sidewalks on the CR 25A overpass of SR 113. The closest sidewalk is along a developed section of Harry Lorenzo Avenue from Marston Road to approximately one-quarter mile north of Marston Road. Sidewalks are also provided along other nearby streets in the Spring Lake community, including Marston Road, Parkland Avenue, and East Heritage Parkway.

The City has implemented community programs and adopted guidelines to enhance the pedestrian environment and routinely requires new development to finance and install pedestrian facilities. The City has historically received $100,000 per year from the Community Development Block Grant program for curb ramp installation and has developed the Traffic Safety Commission to advise and make recommendations to the City Council on all traffic safety matters within Woodland.

BICYCLE FACILITIES

The 2002 City of Woodland Bicycle Transportation Plan identifies existing and planned bicycle facilities within the city. An updated facilities map and plan was provided in the City of Woodland 2035 General Plan. The primary purpose of the Bicycle Transportation Plan is to identify on-street and off-street bicycle facilities to serve the needs of recreational and commute riders. Fulfilling this purpose is expected to encourage greater levels of bicycling that will contribute to reductions in vehicle travel, air pollution, greenhouse gases (GHGs), and noise pollution. The plan also presents the appropriate design features of bikeways, such as physical dimensions, signs, and markings.

Bikeways in the City of Woodland are classified according to the following three types:

- Class I - off-street bike paths;
- Class II - on-street bike lanes marked by pavement striping and signage; and

- Class III - on-street bike routes that share the road with motorized vehicles.

Many roadways have on-street bike lanes (Class II) or are signed as a bicycle route (Class III). The following bikeways are in proximity to the WRTP Specific Plan Area:

- Class I paths are located on several streets in the Spring Lake community including on both sides of Heritage Parkway, the south side of Gibson Road between Pioneer Avenue and CR 102, the west side of CR 102 from East Gibson Road south to CR 25A, the east side of Pioneer Avenue from Farmer's Central Road to Gibson Road, the north side of Farmer's Central Road from Pioneer Avenue to CR 102, and the south side of Marston Road. A north-south greenbelt path parallels Miekle Avenue between Ortiz Avenue and Marston Road.

- Class II bike lanes are located along East Heritage Parkway, Gibson Road, and County Road 102, as well as on Farmer's Central Road from Pioneer Avenue to Miekle Avenue.

- Class III bike routes are located along East Street from Spork Park Drive to Main Street.

TRANSIT FACILITIES

The Yolo County Transportation District (YCTD) operates Yolobus, which provides local and intercity bus service within the City of Woodland, Yolo County, and to parts of Sacramento County, including West Sacramento, Downtown Sacramento and Sacramento International Airport. All Yolobus buses are equipped with bike racks to help facilitate the use of transit and bicycling for longer distance trips. Buses do not currently run adjacent to the WRTP Specific Plan Area. The nearest bus routes are Route 45X and Route 46 (Spring Lake Express), which provide one morning and one afternoon commute trip each between Woodland and downtown Sacramento. The nearest stop to the WRTP Specific Plan Area is at Farmer's Central Road and Pioneer Avenue.

Service for Patrons with Limited Mobility

Although Yolobus public fixed-route services are accessible to the disabled community, the agency also offers door-to-door service for patrons unable to travel on fixed-route bus lines, as required by the ADA. The complementary Paratransit Service operates within the same times and places as the fixed- route buses. It is provided by Yolobus Special and Davis Community Transit on a prearranged basis for any trips within the designated service area.

RAILWAYS

Railways near the WRTP Specific Plan Area serve as a vital component of goods movement throughout the region. Woodland's industrial sector relies on the railway system to connect it to regional destinations. Two freight railways operate on the current railways including the Sierra Northern Railway and the California Northern Railroad. In proximity to the WRTP Specific Plan Area, the Sierra Northern Railway is located along the north side of East Main Street and the California Northern Railroad rail line is located on the west side of East Street. Advanced pavement markings and signs, gates, and warning lights are present at at-grade street crossings of these rail lines, the nearest of which to the WRTP Specific Plan Area is on the wet leg of the East Street intersection with CR 25A. Additional crossings are located along the East Street Corridor at CR 24A, Gibson Road, and East Main Streets. Along the East Main Street Corridor, at-grade rail crossings are located at Industrial Way/SB SR 113 ramps, Pioneer Avenue, and CR 102.

3.13.3 REGULATORY FRAMEWORK

FEDERAL PLANS, POLICIES, REGULATIONS AND LAWS

No federal plans, policies, regulations, or laws related to transportation and circulation are applicable to the WRTP Specific Plan.

The federal Clean Air Act, the Moving Ahead for Progress in the 21st Century Act (MAP-21), and Americans with Disabilities Act (ADA) may have some relevance or influence for individual projects or actions as part of subsequent WRTP Specific Plan implementation.

STATE PLANS, POLICIES, REGULATIONS AND LAWS

Senate Bill 743

The passage of Senate Bill (SB) 743 (September 27, 2013) changed the method of traffic analysis required through CEQA. The revised CEQA Guidelines that implement this legislation, which were approved on December 28, 2018 and implemented statewide beginning July 1, 2020, state that vehicle level of service (LOS) and similar measures related to delay shall not be used as the sole basis for determining the significance of transportation impacts for land use projects. LOS measures the average amount of delay experienced by vehicle drivers at an intersection during the most congested time of day, while the new CEQA metric (Vehicle Miles Traveled or VMT) measures the total number of daily miles traveled by vehicles on the roadway network and thereby the impacts on the environment from those miles traveled.

This shift in transportation impact criteria is expected to better align transportation impact analysis and mitigation outcomes with the State's goals to reduce GHG emissions, encourage infill development, and improve public health through more active transportation. Specific to SB 743, Section 15064.3(c) of the revised Guidelines states that, "a lead agency may elect to be governed by the provisions of this section immediately. Beginning on July 1, 2020, the provisions of this section shall apply statewide." However, CEQA Statute Section 21099(b)(2) states that, "upon certification of the guidelines by the Secretary of the Natural Resources Agency pursuant to this section, automobile delay, as described solely by level of service or similar measures of vehicular capacity or traffic congestion, shall not be considered a significant impact on the environment pursuant to this division, except in locations specifically identified in the Guidelines."

California Complete Streets Act, AB 1358 (Statutes of 2008)

The California Complete Streets Act requires the legislative body of a city or county, upon revision of the circulation element of their general plan (after January 1, 2011), to identify how the jurisdiction will provide for the routine accommodation of all users of the roadway (i.e., complete streets) including motorists, pedestrians, bicyclists, individuals with disabilities, seniors, and users of public transportation.

Guides and Plans for Operating Conditions of Caltrans Facilities

Caltrans is responsible for planning, designing, constructing, operating, and maintaining the State Highway System. Any improvements or modifications to the State Highway System would need to be approved by Caltrans.

For Caltrans facilities, acceptable operating conditions are defined by the *Caltrans Guide for the Preparation of Traffic Impact Studies* (December 2002), the *State Route 99 & Interstate 5 Corridor System Management Plan* (May 2009), the *Transportation Corridor Concept Report Interstate 5* (September 2010), *Transportation Corridor Concept Report State Route 16* (June 2012), and *Transportation Corridor Concept Report State Route 113* (July 2014).

REGIONAL AND LOCAL PLANS, POLICIES, REGULATIONS AND ORDINANCES

Sacramento Area Council of Governments Metropolitan Transportation Plan/Sustainable Communities Strategy

The Sacramento Area Council of Governments (SACOG) is an association of local governments in the six-county Sacramento Region. Its members include the counties of Sacramento, El Dorado, Placer, Sutter, Yolo, and Yuba as well as 22 cities. SACOG provides transportation planning and funding for the region, and serves as a forum for the study and resolution of regional issues. In addition to preparing the region's long-range transportation plan, SACOG assists in planning for transit, bicycle networks, clean air, and airport land uses.

The 2020 Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS) (SACOG 2019) is a federally mandated long-range fiscally constrained transportation plan for the six-county area. To receive federal funding, transportation projects nominated by cities, counties, and agencies must be consistent with the MTP/SCS.

The Metropolitan Transportation Improvement Program (MTIP) is a list of transportation projects that receive federal funds, require a federal action, or are regionally significant. The 2019-2022 MTIP adopted by SACOG covers four years of programming: federal fiscal years (FFY) 2019 through 2022. The document also identifies prior year funding and estimated future funding (beyond the four program years) for projects for information. SACOG submits this document to Caltrans and amends the program on a quarterly cycle.

City of Woodland 2035 General Plan

The *City of Woodland General Plan Update 2035* (City of Woodland 2017) sets forth overarching goals and objectives related to transportation and circulation in the context of planned land use within the City. The General Plan guides the development of new roads and roadway modifications to serve long-term needs of Woodland. The General Plan also provides direction for multimodal implementation.

The *City of Woodland General Plan Update 2035* (City of Woodland 2017) identifies the following policies that are applicable to the WRTP Specific Plan Area.

- **Goal 3.A – Multimodal Transportation System.** Develop and maintain a multi-modal transportation system that provides for the efficient movement of people and goods, supports vibrant neighborhoods and districts, and reduces air pollution and greenhouse gas emissions.
    - **Policy 3.A.1 Vehicle Level of Service (LOS) Standard.** Strive to develop and manage the roadway system to maintain LOS D or better as defined in the latest edition of the Highway Capacity Manual (Transportation Research Board) during weekday AM and PM peak hour conditions with the following exceptions described below and mapped on Figure 3-1 [of the 2035 General Plan].

- LOS C – Kentucky Ave from East Street to County Road 98. This level of service is required to accommodate the mix of commercial/industrial truck traffic with residential driveways.
- LOS E – Freeway ramp terminal intersections
- LOS F – LOS F is allowed for the following roadway segments and intersections where the City finds that the improvements or other measures required to achieve the LOS standard are unacceptable because of their impact on other community values.
  - Main Street from 6th Street to Cleveland St.
  - Maxwell Ave from Farnham Avenue to County Road 102

- **Policy 3.A.4 Reduce Vehicle Miles Traveled (VMT).** Apply a VMT transportation performance metric threshold of 30 VMT per capita when measuring transportation impacts for subsequent projects and making General Plan consistency findings.
- **Policy 3.A.5 Transportation Demand Management (TDM).** Utilize TDM tools and programs (e.g. alternative work schedules, telecommuting, ridesharing, or parking pricing) to encourage and create incentives for the use of alternative travel modes.
- **Policy 3.A.7 Street Grid Network and Density.** Promote the use of grid and modified grid street patterns in new residential, commercial, or mixed-use developments that propose to construct new streets. Modified grids may include combinations of grid and curvilinear streets. Greenbelts may intersect the street grid to create an interconnected trail network that encourages biking and walking. The density of new streets should be similar to the existing residential neighborhoods in Woodland that have approximately nine centerline miles of arterials and collectors per square mile.
- **Policy 3.A.11 New Development.** Require all new development to provide convenient bicycle and pedestrian environments and access through building orientation, site layout, traffic management, and connections to transit service and local commercial and community facilities. Development must provide appropriate pedestrian amenities such as street lighting, benches, arcades, canopies, shade trees, art, and seating areas.
- **Policy 3.A.14 Regional Transportation Planning.** Continue the City's cooperative participation in the activities and plans of the State, Sacramento Area Council of Governments (SACOG), Yolo County, Yolo County Transportation District, and surrounding jurisdictions.

► **Goal 3.B - Complete Streets.** Provide complete streets that accommodate driving, walking, bicycling, and public transit and that are designed to enable safe, attractive, comfortable access and travel for users of all ages and abilities.

- **Policy 3.B.3 Complete Street Requirements.** To the extent feasible, all new street construction and reconstruction shall be designed to achieve complete streets. Designs should consider the needs of all roadway users including vulnerable populations such as young children, seniors, and people with

disabilities when determining roadway widths and other barriers to travel, especially near schools, parks, senior centers, community centers, and other activity hubs.

- **Policy 3.B.5 New Developments.** Require new developments to provide interconnected street networks with walkable blocks that allow and encourage active multimodal transportation.

- **Policy 3.B.6 Right of Way.** Ensure adequate rights-of-way to accommodate all users and balance the allocation of street right-of-way for all modes.

- **Policy 3.B.7 Minimal Driveways and Curb Cuts.** Strive to minimize the number of driveways and curb cuts along streets to limit unsafe conditions and enhance the experience of walking and bicycling.

- **Policy 3.B.8 Accessibility.** Endeavor to ensure that all streets are safe and accessible to people with disabilities and others with limited mobility.

- **Policy 3.B.9 Roundabouts.** Consider roundabouts as an intersection traffic control option with demonstrated air quality and safety benefits, where deemed feasible and appropriate.

► **Goal 3.C Roadway Functional Classification and Street Typology.** Provide an efficient, interconnected street system that identifies which modes of travel should be accommodated on each street based on its unique geographic setting, adjacent land uses, and functional classification.

- **Policy 3.C.1 Roadway Network.** Plan, design, and regulate the development of roadway network presented in the Circulation Diagram shown in Figure 3-2 [of the 2035 General Plan]. Prioritize modes of travel on the roadway network consistent with Table 3-2 [of the 2035 General Plan].

► **Goal 3.D Residential Streets.** Protect residential areas from high-volume and high-speed traffic and its effects, and promote bicycling and walking on residential streets.

- **Policy 3.D.1 Through-traffic.** Design local streets that primarily serve residential neighborhoods to discourage through-traffic, achieve desired traffic speeds, and maintain pedestrian and bike connectivity

- **Policy 3.D.4 Impacts on Residential Neighborhoods.** Consider the effects of new development on local streets in residential areas and require new development to mitigate significant impacts on residential neighborhoods. Developers shall finance and install pedestrian pathways, bikeways, and multi-purpose paths in new development, in order to facilitate and enhance pedestrian and bike usage, as appropriate.

► **Goal 3.E Comprehensive Pedestrian System.** Provide a comprehensive, and integrated pedestrian system that encourages walking and creates an enjoyable way to experience Woodland.

- **Policy 3.E.3 Off-street Pedestrian Paths.** Continue to develop off-street pedestrian paths for access to schools, recreation facilities, and neighborhood services in existing and future neighborhoods in the city.

- **Policy 3.E.4 Interconnected Network**. Require new development to create complete pedestrian networks with linkages such as walkways, paseos, and shared-use paths that interconnect pedestrian facilities.

- **Goal 3.E Comprehensive Pedestrian System.** Provide a comprehensive, and integrated pedestrian system that encourages walking and creates an enjoyable way to experience Woodland.

  - **Policy 3.E.4 Interconnected Network**. Require new development to create complete pedestrian networks with linkages such as walkways, paseos, and shared-use paths that interconnect pedestrian facilities.

- **Goal 3.F Comprehensive Bicycle System.** Provide a comprehensive and integrated bicycle system that facilitates bicycling as a viable mode of travel for short trips, commute trips, and recreation.

  - **Policy 3.F.1. Bikeway Master Plan.** Maintain a Bikeway Master Plan (BMP) to reflect current best practices for bike facilities and programs as well as bikeway changes to accommodate the cycling public. Figure 3-3 [of the 2035 General Plan] represents the planned routes in the BMP at the time of this General Plan update, but any future update to the BMP is considered the City's official bikeway plan. In the future, transition the BMP to an Active Transportation Plan that considers all forms of active transportation.

  - **Policy 3.F.2 Bikeway Network**. Promote the development of a comprehensive system of recreational and commuter bicycle routes that provide safe and convenient connections between the city's: major employment and housing areas; existing and planned bikeways; and schools, parks, retail shopping, and residential neighborhoods.

  - **Policy 3.F.3 Bicycle Parking**. Encourage the development of convenient and secure bicycle parking and establish minimum parking standards at employment centers, schools, recreational facilities, transit terminals, commercial businesses, the Downtown core area, and other locations where people congregate.

  - **Policy 3.F.4 Bicycle Facilities**. Require residential, commercial, and industrial developments to include bicycle lanes or pathways in accordance with the Bikeway Master Plan or Specific Plans when constructing new roadways or upgrading existing streets.

  - **Policy 3.F.6 Bicycle and Transit Integration**. Work with YCTD to integrate public transportation systems and facilities with bike networks and accommodations.

  - **Policy 3.F.8 Woodland-Davis Bikeway**. Work with Davis and Yolo County to implement the Woodland-Davis Bikeway project and pursue grant funding.

  - **Policy 3.F.9 Phasing**. Ensure that bikeways connecting to the existing bikeway system be provided in the first phase of all new growth areas.

- **Goal 3.G – Effective Transit System.** Promote a transit system that serves as a viable alternative to the automobile for those without access to a vehicle and those that choose to live and work in areas where land use density and intensity are supportive of transit.

  - **Policy 3.G.1 Transit Services**. Work with YCTD to plan and implement transit services that are timely, cost-effective, and responsive to growth patterns and existing and future transit demand.

  - **Policy 3.G.2 Right-of-way Preservation**. Consider the need for future transit right-of-way in reviewing and approving plans for development. Rights-of-way may either be exclusive or shared with other vehicles.

- **Policy 3.G.5 YCTD Service Planning**. Coordinate with YCTD in the bus service planning process to ensure that routes serve areas with greatest demand and that intercity and inter-regional bus service is responsive to local needs.

- **Policy 3.G.9 Bike and Pedestrian Connections**. Ensure transit stops are connected to an integral part of the city's pedestrian and bicycle network.

- **Policy 3.G.10 Private Transit**. Encourage privately-owned transit systems, such as taxicabs, Transportation Network Companies (Uber/Lyft, etc.), employer shuttles, and private bus companies to provide convenient transportation options.

► **Goal 3.H - Managed Parking.** Provide the minimum amount of parking necessary to serve existing and new development throughout the city while balancing competing community values.

- **Policy 3.H.1 Parking Footprint.** Strive to reduce the amount of land devoted to parking through such measures as development of consolidated parking facilities/structures, the application of shared parking for mixed-use developments, car share programs, alternative investment in bike and pedestrian facilities, and the implementation of Transportation Demand Management plans to reduce parking needs.

- **Policy 3.H.2 Shared Parking.** Encourage the use of shared parking facilities and programs as conditions of approval in mixed-use and transit oriented neighborhoods and districts.

- **Policy 3.H.3 Parking Lot Design.** Require that parking lots be designed to minimize heat island effects, have significant tree canopies with ample landscape areas designed to pre-treat storm.

- **Policy 3.H.5 Priority Parking Locations.** Promote priority parking in safe and convenient locations for employee car pools, park-and-ride lots, electric/clean vehicle, and cyclists.

- **Policy 3.H.7. Electric/Alternative Fuel Vehicle Parking.** Require new large commercial and retail developments, large employment centers, high-use public buildings, and parking structures to provide parking for alternative fuel vehicles including charging stations for electric vehicles. Require electric vehicle charging outlets in garages of all new single family residential homes.

► **Goal 3.K Transportation Funding.** Pursue funding to construct, maintain, and operate the transportation system for all travel modes to achieve and maintain the City's transportation goals.

- **Policy 3.K.3 Bicycle Facilities**. Utilize grant monies, license fees, development impact fees and fines, along with capital improvement monies to help fund the development and installation of bikeways and bicycle parking facilities.

- **Policy 3.K.4 Transit Infrastructure**. Require new development to pay a fair share of capital improvements related to transit service.

City of Woodland Engineering Standards: Design Standards, Standard Details, and Construction Specifications

The City's Engineering Standards document was updated in 2016. This document establishes requirements and mandatory guidance in development, design, construction, and operation of public facilities. Developers are required to ensure that all applicable City requirements are met.

Yolo County Transportation District

The Yolo County Transportation District (YCTD) provides public transit service (Yolobus) in the City of Woodland. The 2006 Short Range Transit Plan sets the stage for implementing short-term service improvements while establishing a long-term transit vision. The Short Range Transit Plan does not identify any short-term transit enhancements near the WRTP Specific Plan Area.

YCTD completed the Woodland Transit Study in 2016. The intent of the study was to evaluate the specific needs for transit services within Woodland, as well as to develop plans for improvements and service revisions for Yolobus services which specifically serve Woodland. This study recommended development of a Downtown Transit Center in Woodland, and the City of Woodland and YCTD are proceeding with planning for the new center.

YCTD initiated a Comprehensive Operational Analysis (COA) in 2019, but no documents have yet been released that describe any planned change in service.

3.13.4 Environmental Impacts and Mitigation Measures

Methodology

The 2035 General Plan and CAP EIR addresses impacts of development of the City's Planning Area including this WRTP Specific Plan Area. Consistent with Section 15183(b) of the CEQA Guidelines, the following analysis focuses on project-specific significant effects of the WRTP Specific Plan that are, a) peculiar to the WRTP Specific Plan or the site; b) were not addressed in the 2035 General Plan and CAP EIR (including off-site or cumulative impacts); or c) would be more severe than previously described based on substantial new information.

The transportation assessment in the 2035 General Plan and CAP EIR included an evaluation of VMT associated with buildout of the General Plan, including the WRTP Specific Plan Area. Travel forecasts for all the study scenarios of the 2035 General Plan were prepared using the new City of Woodland citywide travel model developed for the 2035 General Plan and CAP EIR, which tiers off the SACOG regional travel model, with network and land use details for the six county SACOG planning area.

The impact analysis reflects evaluation conducted in support of the Transportation Impact Study (Appendix E of this EIR). The analysis methodology used for the Transportation Impact Study and reflected in this section includes a combination of quantitative and qualitative evaluation of the roadway, transit, bicycle, and pedestrian components of the transportation system, as well as the effect on VMT with implementation of the WRTP Specific Plan. The impact analysis related to roadway, transit, bicycle, and pedestrian systems, as well as VMT, associated with implementation of the WRTP Specific Plan was evaluated for consistency with existing and planned service and facilities as well as consistency with related policies of the City of Woodland and the YCTD. Because the project aligns with the public transportation network improvements and land use intensity assumptions used to inform analysis in the 2035 General Plan and CAP EIR, this analysis references the analysis conducted for the 2035 General

Plan and CAP EIR, but also includes additional focused analysis that draws on changes to the transportation network since analysis was conducted in support of 2035 General Plan and CAP EIR, considers the more recently developed mobility and circulation framework and policies for the WRTP Specific Plan Area, as detailed in Chapters 4 and 6 of the WRTP Specific Plan, as well as provides additional focused cumulative analysis to complement the 2035 General Plan and CAP EIR assessment.

The study area was developed based on consideration the following factors: the project's expected travel characteristics (including number of vehicle trips and directionality of those trips), primary travel routes to/from the project vicinity, and a project-area assignment using a modified version of SACOG's SACMET regional travel demand forecasting model. Analysis of the transportation network were evaluated on the basis of whether implementation of the WRTP Specific Plan would result in a disruption or interference with the physical or operational condition of existing or planned facilities or services.

As noted above, LOS analysis is not required as a basis for evaluating impacts under CEQA. However, it still may be used as one of several collective metrics to plan for and size municipal roadways. Therefore, the Traffic Impact Analysis conducted in support of the WRTP Specific Plan included an evaluation of all of the WRTP Specific Plan study area intersections for consistency with the City of Woodland LOS standards; this evaluation is provided in Section 8 of the Traffic Impact Analysis and provided as Appendix E to this EIR.

THRESHOLDS OF SIGNIFICANCE

For the purposes of this analysis, an impact is considered significant if implementation of the implementation of the WRTP Specific Plan would:

1. conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities;
2. conflict or be inconsistent with State CEQA Guidelines Section 15064.3(b);
3. substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment); or
4. result in inadequate emergency access.

The standards of significance in this analysis are based upon the current practice of the appropriate regulatory agencies. For most areas related to transportation and circulation, policies from the City of Woodland General Plan 2035 have been used.

The Transportation and Circulation Element of the Woodland General Plan 2035 reflects a shift in emphasis away from Level of Service (LOS) to VMT as the State's preferred performance metric for CEQA studies. This study identifies CEQA impacts and mitigations for VMT, but not LOS consistent with new CEQA guidelines. To this end, the WRTP Specific Plan would be responsible for achieving VMT reductions required in the General Plan as well as contributing to planned roadway capacity expansion within the framework (i.e., functional classification and number of future through travel lanes) identified in the General Plan.

Metrics against which Significance Threshold 1 is analyzed include the following:

- An impact to the roadway system would be considered significant if implementation of the WRTP Specific Plan would:
  - create inconsistencies with the road system policies or standards of plans adopted by the City of Woodland, Yolo County, the Yolo County Transportation District (YCTD), or Caltrans, including the Congestion Management Plan;
  - add substantial vehicle trips to a roadway facility that does not meet applicable design standards; or
  - create conflicts between modes (e.g., vehicles and bicycles).
- An impact to the transit system would be considered significant if the WRTP Specific Plan would:
  - create demand for public transit services above that which is provided, or planned to be provided by the YCTD;
  - disrupt existing YCTD transit services or facilities;
  - interfere with planned YCTD transit services or facilities; or
  - create an inconsistency with the transit policies or standards of plans adopted by the City of Woodland, Yolo County, the YCTD, or Caltrans.
- An impact to the bicycle or pedestrian system would be considered significant if the WRTP Specific Plan would:
  - disrupt existing bicycle or pedestrian facilities;
  - interfere with planned bicycle or pedestrian facilities; or
  - create an inconsistency with the bikeway or pedestrian policies or standards of plans adopted by the City of Woodland, Yolo County, the YCTD, or Caltrans.

The metric against which Significance Threshold 2 is analyzed is as follows:

- Policy 3.A.4 in the Woodland General Plan 2035 requires that new development projects achieve a 10 percent reduction in VMT per capita or VMT per service population compared to the General Plan 2035 VMT performance, or a 10 percent reduction compared to baseline conditions for similar land use when measuring transportation impacts for subsequent projects and making General Plan consistency findings. For the WRTP Specific Plan, the relevant metric from the policy is a 10 percent reduction in VMT per service population since the WRTP Specific Plan includes a mix of residential and employment uses. As such, a VMT-related impact would be considered significant if implementation of the WRTP Specific Plan would result in VMT per service population is greater than or equal to 18.1, which is 10 percent less than the General Plan 2035 VMT per service population forecast of 20.1.

IMPACTS NOT DISCUSSED FURTHER

The following discussion summarizes the impacts of the WRTP Specific Plan that are not discussed further in this document because either, a) there is no impact, or b) none of the factors triggering additional environmental review (as found in Section 15183(b)) exist because an impact was addressed as a part of the 2035 General Plan and CAP EIR and/or substantially mitigated by uniformly applied development standards (CEQA Guidelines Section 15183[f]). Uniformly applied development standards include the 2035 General Plan, the CAP, existing City regulations and standards, design review requirements, and impact fee programs.

Conflict or Be Inconsistent with State CEQA Guidelines Section 15064.3(b) (Threshold 2) — The proposed land use types and density and the proposed transportation network for the WRTP Specific Plan are consistent with that anticipated under the 2035 General Plan. The transportation network described in the WRTP Specific Plan is consistent with the planned Citywide Circulation Diagram (Figure 3-2) in the General Plan Transportation and Circulation Element as follows. The General Plan Citywide Circulation Diagram shows planned arterial and collector streets for the South Growth Area (SP-1) in which the WRTP is located. This includes Parkland Avenue (a new east-west principal arterial between East Street and Pioneer Avenue), a new north-south road designated as Road B in the WRTP Specific Plan (a new north-south minor arterial between CR 25A and Parkland Avenue), an extension of Marston Road (east-west collector street, new segment between Parkland Avenue and Road B), and widening of CR 25A (east-west minor arterial, widening between Road B and SR 113). Planned bikeways shown on Figure 3-3 in the General Plan Transportation and Circulation Element include Class I and II facilities on portions of Parkland Avenue, CR 25A, and Road B as well as a Class I bicycle facility on Marston Road. All of these streets and bicycle facilities are included in the WRTP Specific Plan, as shown on the network alignment and street cross-sections.

The WRTP Specific Plan includes a Comprehensive Transportation Demand Management/Vehicle Miles Traveled Reduction Program (TDM/VMT Program) that requires the project "achieve a 10 percent reduction in Plan Area VMT per capita compared to baseline conditions by 2035," as required by the 2035 General Plan Policy 3.A.4 (Reduce Vehicle Miles Traveled [VMT]) for new development, as well as "financing strategies, sources, and mechanisms to ensure short-term and long-term funding for implementation and monitoring of the TDM/VMT Program." As detailed in Section 6.2.3, "Subsequent Implementation Documents/Analysis," of the WRTP Specific Plan, the Master TDM/VMT Program shall: 1) establish transportation strategies, programs, facilities or services for the purpose of VMT reduction that are financed by and consistent with the strategies and requirements of the Development Agreement[2]; and 2) provide project-specific VMT reduction strategies that all property owners/tenants shall be required to implement through individual project-level TDM Plans consistent with the Master TDM Program. These measures are consistent with Policy 3.A.4 of the 2035 General Plan, and shall, in combination, achieve a 10 percent reduction in VMT per capita for the WRTP Specific Plan Area compared to baseline conditions by 2035. The Master TDM/VMT Program will include a monitoring plan for collecting VMT data in the interim years to 2035, every five years as input to citywide GHG monitoring, so that the effectiveness of the VMT reduction strategies can be confirmed and any required strategy adjustments made to reach VMT

[2] In order to specify the manner in which the necessary infrastructure, public facilities, and other programs or services as provided in this Specific Plan will be constructed and/or operated and financed, among other matters, the City and the project applicant intend to enter a development agreement. The terms and conditions of the development agreement will be consistent with the goals and policies of this Specific Plan and shall set forth and require financing strategies, sources, and mechanisms to ensure short-term and long-term funding for implementation and monitoring of the TDM/VMT measures.

reduction targets. Monitoring reports shall be reviewed by the City, which may make adjustments to reach project VMT reduction targets, as necessary.

CEQA Guidelines section 15064.3 establishes VMT as the most appropriate measure of transportation impacts, shifting away from the level of service (LOS) analysis that evaluated a project's impacts on traffic conditions on nearby roadways and intersections. Although the State's Office of Planning and Research (OPR) provides recommendations for adopting new VMT analysis guidelines, lead agencies have discretion in selecting and development a methodology to evaluate VMT. Lead agencies must demonstrate that their selected analysis methodology aligns with SB 743's goals to promote infill development, reduce GHGs, and reduce VMT. OPR Tech Advisory is guidance and not a program, plan, ordinance, or policy. The 2035 General Plan and CAP EIR demonstrated that the mix of actions and policies to reduce emissions, inclusive of a 10 percent reduction in VMT across the City's Planning Area, would achieve the necessary GHG reductions for the City's Planning Area. The City's CAP provides for interim monitoring and reevaluation over time to ensure that reduction targets are being met and to allow for adjustments in reduction strategies and policies if they are not being met.

As the WRTP Specific Plan is consistent with the 2035 General Plan transportation network and land use program, including residential density and population estimates and non-residential building square footage, and includes a TDM/VMT Program and funding to achieve the 10 percent VMT reduction required for new projects per General Plan Policy 3.A.4, there are no impacts that are peculiar to the WRTP Specific Plan that were not addressed in the 2035 General Plan and CAP EIR, and potential impacts are substantially mitigated by uniformly applied development standards, being the WRTP Specific Plan's TDM/VMT Program and funding mechanism. As provided by CEQA Guidelines Section 15183(f), no additional CEQA review is required.

IMPACT ANALYSIS

IMPACT 3.13-1 **Conflict with A Program, Plan, Ordinance, or Policy Addressing the Circulation System, including Transit, Roadway, Bicycle, and Pedestrian Facilities (Significance Threshold 1).** *Implementation of the WRTP Specific Plan would not result in conflicts with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities. The impact is* ***less than significant****.*

As discussed in the 2035 General Plan and CAP EIR Impact 4.13-4 (pages 4.13-23 through 4.13-27), population and employment growth would increase demand for transit, bicycling and pedestrian activity. Goals and policies documented in the 2035 General Plan call for the development of a multi-modal transportation system (Goal 3.A) and providing complete streets (Goal 3.B). Roadway functional classification and street typology are described in Goal 3.C. Other key policies address protecting residential streets (Goal 3.D), providing a comprehensive pedestrian system (3.E) and bicycle system (3.F), promoting an effective transit system (3.G), and maintaining the safe and efficient movement of goods (3.I). The 2035 General Plan also complies with Assembly Bill (AB) 1358 requiring the inclusion of a complete streets policy in city and county general plans to promote balance and compatibility across transportation modes. The 2035 General Plan and CAP EIR determined that the impact related to any conflict with relevant transportation programs, plans, ordinances, or policies was less than significant.

Pedestrian and Bicycle

The mobility and circulation framework for the WRTP Specific Plan Area, as described in detail in Chapter 4 of the WRTP Specific Plan, is a modified grid, complete street system that accommodates all modes of travel. The overall Mobility and Circulation Network and streetscape program consists of the Active Transportation Network

and the Roadway Network. The Active Transportation Network includes descriptions of the facilities such as multi-use trails, paths, on street bike lanes, shared use marking and pedestrian promenades and sidewalks. The Roadway Networks describes the street hierarchy of Principal Arterials Streets, Minor Arterials Streets, Collector Streets, Local Streets, and Alleys, as well as Roundabouts / Enhanced Intersections and Streetscape Design Features. The WRTP Specific Plan promotes active forms of transportation, such as biking, boarding, scootering, and walking with network of active transportation connections between proposed residential areas and destinations within the WRTP Specific Plan Area. The proposed mix of residential, employment, services, recreational uses in proximity to each other provide the opportunity to walk and bicycle to reach destinations and the planned transit service provides another non-automobile option to WRTP Specific Plan Area residents, employees, and visitors.

With respect to bicycle facilities, the 2035 General Plan shows the following planned bicycle facilities both within and immediately adjacent to the WRTP Specific Plan Area.

- Class II bike lane on CR 25A between East Street and Road B,
- Class I path and Class II bike lane along CR 25A between Road B and CR 102,
- Class I path and Class II bike lane on Parkland Avenue from Road B to Pioneer Avenue,
- Class II bike lane on Road B from CR 25A to Parkland Avenue,
- Class I path on Marston Road,
- Class I path along Harry Lorenzo Avenue right-of-way between Parkland Avenue and CR 25A.

Draft street cross-sections for the WRTP Specific Plan Area include all of the bicycle facilities as identified in the 2035 General Plan. Impacts to bicycle facilities from implementation of the WRTP Specific Plan are considered **less-than-significant**. No mitigations are required.

Also, with respect to pedestrian facilities, the WRTP Specific Plan identifies sidewalks on all streets within the WRTP Specific Plan Area, on the north side of CR 25A (southern boundary of the WRTP Specific Plan Area), and on both sides of Parkland Avenue. Sidewalks and paths on streets within the WRTP Specific Plan Area range from 4.5 to 10 feet in width. Impacts to pedestrian facilities from implementation of the WRTP Specific Plan are considered **less-than-significant**. No mitigations are required.

Vehicular Roadway Network

The proposed road network for the WRTP Specific Plan Area is consistent with the functional classification and street typology identified in the General Plan based on proposed street cross-sections for CR 25A, Parkland Avenue, Road B and Marston Avenue. In the vicinity of the WRTP Specific Plan Area, Parkland Avenue is designated as a two-lane principal arterial in the General Plan. CR 25A and Road B are designated as minor arterials, and Marston Avenue is designated as a collector. Goal 3.B (Complete Streets) in the General Plan calls for the provision of "complete streets that accommodate driving, walking, bicycling, and public transit that are designed to enable safe, attractive, comfortable access and travel for users of all ages and abilities." The proposed cross-sections for CR 25A, Parkland Avenue, and Road B include provision of a combination of on-street and off-street bicycle facilities. The proposed cross-section for Marston Avenue includes provision of an off-street bike path. All street cross-sections include new pedestrian facilities.

The WRTP Specific Plan includes roadway and traffic control improvements that would be constructed within the WRTP Specific Plan Area and at its gateway intersections. This includes Road A, Road B, Road D, and an extension of Marston Road, as well as other internal streets. The Land Use Plan Layout and street cross-sections for the WRTP Specific Plan include all the roadway network facilities as identified in the 2035 General Plan. Therefore, the impact related to conflict with the policy direction for the roadway network is considered **less-than-significant**.

In addition, as detailed in Chapter 2 of this EIR, "Project Description," while not a part of the WRTP Specific Plan, this EIR also addresses potential impacts associated with off-site improvement areas, including improvements to the SR 113/CR 25A interchange adjacent to the southwest corner of the WRTP Specific Plan Area. Alternative 1 would include widening on the overcrossing for the westbound lane, constructing a southbound loop on-ramp, and modifications to the southbound/northbound on-ramp and off-ramp and at the ramp terminus for intersections to accommodate lane configurations. Alternative 2 would modify the intersections to single-lane roundabouts; it would not require widening of the existing overcrossing structure or construction of a southbound loop on-ramp. These improvements do not conflict with any relevant policy that would lead to any adverse physical environmental effect.

Transit

With respect to transit, the mix and density of land uses, and the total residential and employment population of the WRTP Specific Plan Area at build-out, would result in a substantial demand for transit service. The WRTP Specific Plan would increase demand for public transit service to an area that is not currently served by Yolobus.

The increase in demand for public transit service in an area not currently served by public transit, and where transit is not planned and programmed consistent with relevant policy direction is considered a significant impact because if transit demand is unmet, this could increase environmental effects associated with vehicular travel, such as criteria air pollutant emissions, greenhouse gas emissions, and transportation noise. The City's General Plan calls for transit within walking distance of Medium Density Residential and High Density Residential designated areas (General Plan, pages LU 2-28 and LU 2-30). The Business Park land use designation in the General Plan, which is similar to some of the WRTP Specific Plan's proposed uses, also identifies the need for transit (General Plan, page LU 2-48). The WRTP Specific Plan designation in the General Plan requires transit within walking distance of neighborhood residents (General Plan, page LU 2-58). Policy 2.J.6 states that the City will "[r]equire convenient, attractive, and safe pedestrian, bicycle, and transit connections both within commercial centers and between centers and surrounding neighborhoods and other destinations. Policy 2.K.7 states that the City will "[p]romote convenient, attractive, and safe pedestrian, bicycle, and transit connections both within employment centers and between centers and surrounding uses." Policy 3.A.11 "[r]equire[s] all new development to provide convenient bicycle and pedestrian environments and access through building orientation, site layout, traffic management, and connections to transit service and local commercial and community facilities."

The WRTP Specific Plan does plan for a shared-mobility hub within the Village Center designated land use that would accommodate a range of alternative transportation choices, including fixed route bus and micro-transit. In coordination with local transit services, the shared mobility hub is planned to serve as the primary point of connection to fixed route bus service as part of the City's planned pulse route system provided by YCTD's YoloBus service. Additionally, a new bus rapid transit connection providing frequent connection to and from UC Davis and the Davis Amtrak Depot is planned to link into regional transit services connecting into high employment areas such as downtown Sacramento/UC Davis Med Center and the Bay Area. Within the WRTP Specific Plan Area, in

addition to the shared-mobility hub, transit (bus) shelters and turn-outs will be provided between Harry Lorenzo Avenue and Road B to provide service to planned transit routes.

As detailed in Section 6.2.3, "Subsequent Implementation Documents/Analysis," of the WRTP Specific Plan, a Mobility Hub Master Plan and a Comprehensive Transportation Demand Management strategy, in conjunction with key stakeholders and identifying check-in points to demonstrate efficacy, shall be required either prior to approval of the first development application or tentative map or as otherwise required by the Community Development Director. In addition, also identified in Section 6.2.3 of the WRTP Specific Plan, coordination shall occur with the YCTD, Yolobus, and University of California, Davis, on the policies of the Specific Plan to ensure timely provision of the transit service and appropriate funding mechanisms in place.

The increase in demand for public transit service in an area not currently served by a public transit system would not conflict with any relevant policy or lead to any adverse physical environmental effect. However, the operating and maintenance requirements of public transit service are funded mainly through a portion of sales tax revenue that is returned to each county through the Transportation Development Act for the purpose of providing transit service. Therefore, implementation of the WRTP Specific Plan would contribute towards operating and maintenance requirements for public transit in the same way as previously approved developments. As such, the following mitigation addresses the costs of providing new service to serve development within the WRTP Specific Plan Area.

Impact Summary

The WRTP Specific Plan does not conflict with adopted policies, plans, or programs for bicycle, transit, or pedestrian facilities, nor would it adversely affect performance or safety of such facilities. The WRTP Specific Plan contains provisions that will enhance these modes to encourage greater use of transit and more walking and bicycling in the future. All new facilities, as proposed in Chapter 4 of the WRTP Specific Plan, "Circulation and Mobility," would be constructed to applicable design standards that have been created to minimize the potential for conflicts or collisions. The impact is considered **less than significant**.

However, as noted above, implementation of the WRTP Specific Plan would be required to contribute towards operating and maintenance requirements for public transit in the same way as previously approved developments. As such, and as outlined in Section 6.3.2 of the Specific Plan to require coordination with the YCTD, Yolobus, and University of California, Davis, on the policies of the Specific Plan to ensure timely provision of the transit service and appropriate funding mechanisms in place, the following mitigation serves as a condition of approval to address the costs associated with providing new service to serve development within the WRTP Specific Plan Area.

Mitigation Measure

Mitigation Measure 3.13-1a: The Draft WRTP Specific Plan Finance Plan shall incorporate a Transit Contribution.

While not required as mitigation for a significant impact under CEQA, the following would be required for planning purposes to ensure transit equipment, infrastructure, and service is adequately funded to provide necessary service to the WRTP Specific Plan Area:

The project applicant shall contribute its fair-share of the cost associated with providing transit service to the WRTP Specific Plan Area. It is anticipated that new transit vehicles may be required to provide additional service to the WRTP Specific Plan Area. However, the final determination of additional capital equipment or other costs shall be determined by the City of Woodland in coordination with YCTD and as identified in the Master TDM/VMT Program. The fair-share cost or a plan for providing the fair-share cost over time shall demonstrate funding is adequate to provide the necessary transit service or range of services required to meet the demand in the WRTP Specific Plan Area, as determined through the WRTP Specific Plan's required coordination with YCTD and UC Davis. The funding mechanism(s) for transit and other TDM measures shall be outlined in the WRTP Specific Plan Finance Plan, and development projects shall be required to commit to contributing fair-share costs prior to the issuance of respective building permits by the City of Woodland.

Mitigation Measure 3.13-1b: On-site Transit Stops.

While not required as mitigation for a significant impact under CEQA, the following would be required for planning purposes to ensure proposed transit infrastructure provides for adequate service to the WRTP Specific Plan Area:

The WRTP Specific Plan calls for development of a shared mobility hub in the Village Center. The project applicant shall develop detailed plans, to be reviewed and approved by the City of Woodland and YCTD and construct the shared mobility hub improvements in the Village Center and identify the specific locations of sheltered transit stops with bus turnouts at other locations. It is anticipated that other stops would be located near the business park uses north and west of the Village Center. The City of Woodland and YCTD shall approve the location, design, and implementation timing of the sheltered transit stops and bus turnouts prior to the approval of the first final map or as otherwise required by the City. If transit stops are located on-street for segments of roadways that do not have designated curbside on-street parking that can be designated for a bus stop (i.e., only travel lanes, bike lanes), the street cross-sections shall be modified to provide for a curbside bus stop, or multiple stops if needed for bus operations.

Significance after Mitigation

The WRTP Specific Plan does not conflict with adopted policies, plans, or programs for bicycle, transit or pedestrian facilities, nor would it adversely affect performance or safety of such facilities. This impact is **less than significant.** Mitigation Measures 3.13-1a and 3.13-1b are not required to address a significant impact under CEQA, but serve as conditions of approval for planning purposes to ensure that adequate funding is contributed by future development within the WRTP Specific Plan Area, as well as provides for a transit infrastructure plan for the WRTP Specific Plan Area.

IMPACT 3.13-2 **Substantially Increase Hazards Due to a Design Feature or Incompatible Uses.** *Construction vehicles and equipment associated with development of the WRTP Specific Plan Area and off-site improvement areas would result in utilize local roadways, which could cause disruptions to the transportation network and degradation to the roadways. Implementation of the WRTP Specific Plan will modify the existing transportation network to accommodate existing and future users that could change existing travel patterns or traveler expectations. The impact is considered* ***potentially significant****.*

The WRTP Specific Plan will modify the existing transportation network generally to expand existing facilities or to construct new facilities to accommodate planned population and employment growth.

Construction vehicles and equipment associated with development in the WRTP Specific Plan Area and off-site improvement areas would maneuver among the general-purpose vehicles on local roads, which could cause safety hazards. The presence of haul trucks and other on-road construction vehicles could increase hazard risks on existing roadways. Construction activities could result in disruptions to the transportation network near project sites, including the possibility of temporary lane closures, street closures, sidewalk closures, and bikeway closures. Also, the use of large trucks to transport equipment and materials to and from the worksite could also affect roadway conditions on the access routes by increasing the rate of roadway wear. The degree to which this impact would occur would depend on the design (pavement type and thickness) and the existing condition of the roadway. This impact is considered **potentially significant.**

The WRTP Specific Plan would not increase hazards due to design features of transportation facilities. Implementation of the Specific Plan will adhere to applicable design standards. All existing facility modifications and new facilities resulting from the circulation diagram proposed improvements would be constructed to the *City of Woodland Engineering Standards: Design Standards, Standard Details and Construction Specifications* (2016), which have been developed to minimize the potential for conflicts or collisions. In addition, the Caltrans off-site improvements would be regulated by Caltrans, and would be designed and constructed in accordance with Caltrans standards and guidelines developed to promote safety. This anticipated increase in traffic during operations and expansion of the transportation network with implementation of the Specific Plan has no potential to substantially increase traffic safety hazards on area roadways, and **no impact** would result from operations under the WRTP Specific Plan.

Mitigation Measures

Mitigation Measure 3.13-2: Implement a Construction Traffic Control Plan

Prior to any construction activities for the WRTP Specific Plan, the 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, Yolobus, and local emergency service providers for their input prior to approving the Plan. The plan shall ensure that acceptable operating conditions on local roadways and freeway facilities are maintained during 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. 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 a 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
- Maintain safe and efficient access routes for farming equipment and vehicles
- Manual traffic control when necessary
- Proper advance warning and posted signage concerning street closures
- Provisions for pedestrian safety

Significance after Mitigation

Mitigation Measures 3.13-2 would reduce the construction-related impacts to the transportation network and roadways to a **less-than-significant** level because the plan shall ensure that acceptable operating conditions on local roadways facilities are maintained during construction.

IMPACT 3.13-3 **Result in Inadequate Emergency Access.** *Implementation of the WRTP Specific Plan will alter land use patterns and increase travel demand on the transportation network, which may influence emergency access. The impact is considered* ***less than significant****.*

The WRTP Specific Plan will modify the existing transportation network generally to expand existing facilities or to construct new facilities to accommodate planned population and employment growth.

Construction of the WTP Specific Plan Area would not require temporary lane or street closures or detours, therefore, would not affect emergency access. In addition, there are no pedestrian and bicycle facilities currently around the site. Construction-related vehicular movements may not need to be restricted or redirected to accommodate material hauling, construction, staging, and modifications to existing infrastructure. This impact would be **less than significant**.

The plan for operations under the WRTP Specific Plan must meet City's standards for turning radii, drive aisle width, and other road geometry and must comply with City landscaping standards requiring that vegetation be set back to maintain the line of sight. Maintaining adequate safety and operation at internal intersections and drive aisles and trimming the shrubbery and landscaping near the internal intersections and site access points would ensure adequate emergency access. Therefore, operational impacts would be **less than significant**.

Mitigation Measures

No mitigation is required.

3.13.5 CUMULATIVE IMPACTS

The 2035 General Plan and CAP EIR (pages 6-44 through 6-46) (City of Woodland 2016) analyzed cumulative impacts to transportation and circulation based on regional growth projections identified in the Sacramento Area Council of Governments' 2016 Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS). The proposed WRTP Specific Plan was included as part of the cumulative analysis contained in Chapter 6 of the 2035 General Plan and CAP EIR.

PROGRAMS, PLANS, ORDINANCES, AND POLICIES ADDRESSING THE CIRCULATION SYSTEM, INCLUDING TRANSIT, ROADWAY, BICYCLE, AND PEDESTRIAN FACILITIES

The General Plan determined that new growth in the region is not expected to conflict with applicable plans, ordinances, or policies establishing measures of effectiveness for the performance. In addition the potential for hazards due to a design feature or incompatible use, inadequate emergency access, and impacts to bicycle and pedestrian facilities, the vehicular roadway network and transit, was determined to be less than cumulatively considerable under the 2035 General Plan and Cap EIR. As described above, the Specific Plan will modify the existing transportation network generally to expand existing facilities or to construct new facilities to accommodate planned population and employment growth. Draft street cross-sections for the Specific Plan include all of the bicycle facilities as identified in the 2035 General Plan. Also, with respect to pedestrian facilities, the Specific Plan identifies sidewalks on all streets within the project site, on the north side of CR 25A (southern project boundary), and on both sides of Parkland Avenue. Sidewalks and paths on streets within the project site range from 4.5 to 10 feet in width. The proposed road network for the project is consistent with the functional classification and street typology identified in the General Plan, and the Land Use Plan Layout and street cross-sections for the Specific Plan include all the roadway network facilities as identified in the 2035 General Plan. Furthermore, implementation of Mitigation Measures 3.13-1a and 3.13-1b would require a pro-rata contribution to transit service so that it is provided to the Specific Plan Area in the future and require for on-site planning of transit stops to ensure adequate provision of transit to serve the WRTP Specific Plan Area. These transportation and circulation elements of the Specific Plan are consistent with the 2035 General Plan and the regional transportation and circulation planning to connect the Specific Plan Area to the surrounding communities. The proposed Specific Plan and the off-site SR 113/County Road 25A interchange improvements were included as part of the cumulative analysis contained in the 2035 General Plan and CAP EIR, and there are no substantial changes to environmental conditions, regulatory updates, or the Specific Plan that require additional cumulative analysis or mitigation. Therefore, cumulative effects from implementing the Specific Plan in conjunction with development of related projects related to the potential to conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities would be **less-than-cumulatively considerable**.

Consistency with State CEQA Guidelines Section 15064.3(b)

The 2035 General Plan and CAP EIR evaluated VMT associated with buildout of the General Plan, including the Specific Plan Area, but the metric was not used to evaluate potential impacts under CEQA, as the CEQA guidelines implementing SB 743 were not implemented until after the adoption of the 2035 General Plan. Under SB 375 (Chapter 728, Statutes of 2008), the California Air Resources Board is responsible for issuing greenhouse gas targets to metropolitan planning organizations that reduce vehicle emissions, consistent with State climate goals, by a future planning horizon compared to an established baseline. SB 375 requires each metropolitan planning organizations to adopt a sustainable communities strategy (SCS) or alternative planning strategy (APS) that shows how a land use/transportation scenario will achieve the assigned greenhouse gas target. The current adopted SACOG 2020

MTP/SCS for the region is for the years 2020 to 2040. For the 2020 MTP/SCS, California Air Resources Board assigned SACOG a target of 19 percent per-capita GHG emissions reduction. The MTP/SCS indicates that VMT per capita in the SACOG region, which dipped significantly during the Great Recession, has increased starting in 2011. The MTP/SCS projects a 10-percent reduction in VMT per capita by 2040 for the SACOG region.

As discussed above, the WRTP Specific Plan is consistent with the 2035 General Plan land use program and circulation network, and includes a TDM/VMT Program and funding to achieve the 10 percent VMT reduction required for new projects in General Plan Policy 3.A.4. The WRTP Specific Plan would be consistent with the City's VMT reduction targets and land use planning in alignment with the intent of SB 743, and there are no impacts that are peculiar to the WRTP Specific Plan that were not addressed in the 2035 General Plan and CAP EIR Therefore, the Specific Plan Area's VMT will not contribute to regional impacts, and impacts would be **less than cumulatively considerable**.

Substantially Increase Hazards or Result in Inadequate Emergency Access

The 2035 General Plan determined that cumulative effects related to increasing hazards due to design features, incompatible uses, or inadequate emergency access would be less than cumulatively considerable. The cumulative environment does not change the conclusions and analysis discussed in the project-specific analysis above. The City's land uses and transportation networks have been comprehensively planned through the Specific Plan process to conform to the City's *Engineering Standards: Design Standards, Standard Details and Construction Specifications* (2016), and establish appropriate and safe designs. Therefore, cumulative effects from implementing the Specific Plan in conjunction with development of related projects related to increasing transportation network hazards or resulting in inadequate emergency access would be **less than cumulatively considerable**.

3.14 UTILITIES

3.14.1 INTRODUCTION

This section describes the conditions of public utilities, including water, wastewater, stormwater, and solid waste disposal in Woodland, and identifies the related potential environmental impacts and development constraints upon implementation of the proposed project.

The CEQA Guidelines note that comments received during the NOP scoping process can be helpful in "identifying the range of actions, alternatives, mitigation measures, and significant effects to be analyzed in depth in an EIR and in eliminating from detailed study issues found not to be important." (CEQA Guidelines Section 15083). Neither the CEQA Guidelines nor Statutes require a lead agency to respond directly to comments received in response to the NOP, but they do require that the comments be considered. Consistent with these requirements, these comments have been carefully reviewed and considered by the City and are reflected in the analysis of impacts in this section. The City received one NOP comment relevant to this section, from the Central Valley Regional Water Quality Control Board, providing an overview of potentially applicable permits to implementation of the WRTP Specific Plan, and recommending that the environmental analysis evaluate potential impacts to both surface and groundwater quality. Appendix A of this EIR includes copies of all NOP comments received.

Impacts and mitigation related to water quality are addressed in Section 3.9 of this EIR, "Hydrology, Flooding, and Water Quality." Electricity and natural gas are discussed in Section 3.5 of this EIR, "Climate Change, Greenhouse Gas Emissions, and Energy."

3.14.2 ENVIRONMENTAL SETTING

WATER SUPPLY

Currently there are six agricultural wells in use on the project site. Four wells are located north of CR 25A and two wells are located south of CR 25A, which may be preserved for irrigation of the remaining agricultural land, including fields west of Highway 113 and south of CR 25A.

The City of Woodland Public Works Department provides municipal water to residents in the city. Treated Sacramento River water supplied by the Woodland-Davis Clean Water Agency's (WDCWA) Regional Water Treatment Facility is the primary source of drinking water. The WDCWA's Davis-Woodland Water Supply Project is a regional surface water supply project, completed in 2016, to supplement local ground water supplies in the region. The WDCWA project includes a river water intake structure and pipeline that transports "raw" water 5.1 miles from the Sacramento River to a 30 million gallons per day (mgd) water treatment plant located south of Woodland (Woodland Davis Clean Water Agency 2020). From there, the treated water travels 1.4 miles to Woodland. The project diverts up to 45,000 acre-feet of water per year (afy) from the Sacramento River and serves more than two-thirds of the urban population of Yolo County, as well as UC Davis as a project partner. Woodland has a dedicated capacity of 18 mgd of supply from the water treatment facility (Woodland Davis Clean Water Agency 2020). WDCWA has also secured a senior Sacramento River water right for 10,000 acre-feet from the Conaway Preservation Group that is limited to the months of April through October (Woodland Davis Clean Water Agency 2020).

In addition to water from the WDCWA Regional Water Treatment Facility, the City has planned for the use of aquifer storage and recovery wells to store treated surface water from excess supply in winter months to supplement supply in peak demand summer months and to prepare for future drought conditions (City of Woodland 2016). Three aquifer storage and recovery wells are operational (City of Woodland 2017a). Ultimately, five aquifer storage and recovery wells are planned for the system (City of Woodland 2016). While groundwater will continue to supplement water supplies when local water demand cannot be met, particularly during summer months and other dry periods when Term 91[1] and Shasta Critical Year Reductions may limit WDCWA's water diversions from the Sacramento River, the City will primarily rely on aquifer storage and recovery wells to meet peak demand.

City of Woodland Water Supply and Demands

The City's Urban Water Management Plan (UWMP), which was adopted by the City Council in June 2016, addresses water supply and demand issues, water supply reliability, water conservation, water shortage contingencies, and recycled water use within the City's service area. In accordance with SBx7-7, the UWMP water demands are based on an estimated gallons per capita per day target chosen by the City.

Groundwater provided the 2015 water supply, but most of the water supply now comes from surface water, supplemented by recycled water, with groundwater to serve as supplemental for emergency conditions. The City's surface water availability is projected to grow to a water supply of approximately 24,650 afy by 2035. Recycled water is projected to provide an additional 800 afy.

The UWMP projections of future population within the City's service area have been made by taking the estimated population projections made in the 2035 General Plan (West Yost and Associates 2016). The water demands for the WRTP Specific Plan Area were accounted for in water demand projections contained in the City's UWMP (West Yost and Associates 2016). The City expects water demands in single-dry years will be the same as normal water years and this would be consistent over multiple-dry years. As shown in Table 3.14-1, water supply is projected to be sufficient to meet demand through 2035 in all water years.

WATER CONVEYANCE, STORAGE, AND TREATMENT

The distribution system consists of 260 miles of transmission and distribution lines, two million gallons in dedicated storage at the Regional Water Treatment Facility; a 3.0-mgd, ground-level storage tank; and a 4.0-mgd elevated storage tank, which is generally sufficient for peak demands and to regulate water pressure (City of Woodland 2016).

There are currently no potable or recycled (referred to herein as reclaimed) water supply transmission facilities located within the WRTP Specific Plan Area. Existing potable water transmission mains in the general vicinity of the WRTP Specific Plan Area include (Cunningham Engineering 2020a):

- a 30-inch transmission main in Famers Central Road, from the Regional Water Treatment Facility to Ashley Avenue;

[1] Term 91 is a water permit condition, which applies to permits issued after 1965, that curtails downstream diverters from taking diversions from streams when the State Water and Central Valley Projects are releasing water from storage to meet water quality standards (SWRCB Office of Delta Watermaster, 2014)

Table 3.14-1. Comparison of Water Supply and Demand, 2015-2035 [1, 2]

Total Water Supplies and Demand[2]	Projected Demands (afy) for 2015	Projected Demands (afy) for 2020	Projected Demands (afy) for 2025	Projected Demands (afy) for 2030	Projected Demands (afy) for 2035
Normal Year					
Total Supply	8,650	20,960	20,960	20,960	25,450
Total Demand	8,650	15,911	17,024	18,217	19,492
Difference (Supply minus Demand)	0	5,049	3,936	2,743	5,958
Single-Dry Year					
Total Supply	8,650	19,990	19,990	19,900	25,080
Total Demand	8,650	15,911	17,024	18,217	19,492
Difference (Supply minus Demand)	0	4,079	2,966	1,773	5,588
Multiple-Dry Year 1					
Total Supply	8,650	21,360	21,360	21,360	25,080
Total Demand	8,650	15,911	17,024	18,217	19,492
Difference (Supply minus Demand)	0	5,449	4,336	3,143	5,588
Multiple-Dry Year 2					
Total Supply	8,650	19,990	19,990	19,900	25,080
Total Demand	8,650	15,911	17,024	18,217	19,492
Difference (Supply minus Demand)	0	4,079	2,966	1,773	5,588
Multiple-Dry Year 3					
Total Supply	8,650	21,360	21,360	21,360	25,080
Total Demand	8,650	15,911	17,024	18,217	19,492
Difference (Supply minus Demand)	0	5,449	4,336	3,143	5,588

Notes: afy = acre-feet per year

[1] The City expects water demands in single-dry years will be the same as normal water years and this would be consistent over multiple-dry years.

[2] Water supplies are projected to be sourced by surface water and recycled water by 2020. Groundwater would serve as supplemental for emergency conditions.

Source: West Yost and Associates 2016; Data compiled by AECOM in 2019

- a 12-inch transmission main in Farmers Central Road, connecting to the above-referenced transmission pipe;
- 8-inch and 12-inch transmission mains in Harry Lorenzo Avenue;
- a 12-inch transmission main in Parkland Avenue, which is planned for an extension to the boundary of the WRTP prior to WRTP Specific Plan development;
- an 8-inch water main in County Road 25A, stubbed at Harry Lorenzo Avenue, planned to be constructed prior to development; and
- a 12-inch transmission main in Marston Drive.

Existing reclaimed water transmission mains in the general vicinity of the WRTP Specific Plan Area include (Cunningham Engineering 2020b):

- an 8-inch reclaimed water main in Harry Lorenzo Avenue, from Gibson Road to Patriot Way and

- an 8-inch reclaimed water main in Osborne Drive, connecting to the 8-inch reclaimed water main in Harry Lorenzo Avenue and extending to the northern boundary of the WRTP.

WASTEWATER COLLECTION, CONVEYANCE, AND TREATMENT FACILITIES

The City of Woodland's Public Works Department is the community's wastewater service provider. Woodland's wastewater collection system consists of 270 miles of sewer main and 80 miles of service line. The City has more than 15,000 wastewater service connections and serves the city of Woodland, as well as a small unincorporated area north of the city called Barnard Court. Woodland's wastewater collection system conveys wastewater by gravity pipelines to the Water Pollution Control Facility (WPCF) located east of the city along CR 103.

There are currently no wastewater mains or services located within the WRTP Specific Plan Area. Existing facilities in the general vicinity of the WRTP Specific Plan Area include (Cunningham Engineering 2020c):

- two 12-inch force mains in Farmers Central Road, CR 102, and Gibson Road to the WPCF;
- a 15- to 21-inch sewer main in Farmers Central Road, from State Route 113 to the Spring Lake Specific Plan (SLSP) Pump Station at Miekle Avenue;
- a 15-inch main in Heritage Parkway, which will need to be extended from the terminus of Heritage Parkway to the eastern boundary of the WRTP; and
- a 10-inch sewer main in Marston Drive.

Wastewater generated by the Specific Plan would be conveyed by existing off-site infrastructure to the SLSP Pump Station, located at Farmers Central Road and Miekle Avenue, which forces wastewater through two mains to the WPCF. The SLSP Pump Station is designed to use three 90-horsepower (hp) pumps to run at maximum design capacity of 6.1-mgd with operational redundancy, or 9.0 mgd without redundancy. The existing pump station is currently operating with two aging 90 hp pumps, which have always been anticipated to be replaced at the end of their useful life of approximately 20 years. Installed in 2004, they will require replacement in the next three to five years. In 2017, approximately 2.9 mgd of wastewater was conveyed to the SLPS (Water Works Engineers 2018). It is anticipated that buildout of the Spring Lake Specific Plan would convey 5.9 mgd to the pump station and would trigger the need for installation of a third stand-by pump (Water Works Engineers 2018). Based on a Water Works SLSP Pump Station Assessment performed in September of 2020, the results show the maximum capability of the existing dual 90 hp submersible pumps at the highest available frequency (60 herz) is approximately 5000 gallons per minute (7.2 mgd) through both forcemains, which is significantly more than the static 6.0 mgd (2 x 3.0 mgd) that has been reported as the previous maximum, but is slightly less than the projected 7.4 mgd peak wet weather flow under the development scenario of Spring Lake Specific Plan buildout plus WRTP Specific Plan buildout (Water Works Engineers 2020b).

Woodland Water Pollution Control Facility

The City constructed the WPCF in 1989. Since that time, the City has upgraded the facility three times—once in 1999, again in 2006, when the City expanded and upgraded the treatment plant's hydraulic capacity from 7.8 mgd to 10.4 mgd (City of Woodland 2016), and most recently in 2016, when improvements were made to treatment processes (City of Woodland 2019a).

In recent years, hydraulic inflows to the WPCF have been reduced due to water conservation, with an average flow to the WPCF of approximately 5.0 mgd in 2015, but the mass loading into the plant mas not decreased and is an important metric of City contributions into the WPCF (City of Woodland 2015). Future average flow to the WPCF is expected to grow moderately, to about 8.3 mgd and approximately 15,000 lbs./day organic loading by 2035 (City of Woodland 2015). The projected future capacity of the WPCF is about 9.2 mgd for average wastewater flows and 19,900 lbs./day organic load capacity, which could serve up to 105,000 residents (City of Woodland 2015).

The City also leases 890 acres adjacent to the WPCF to Pacific Coast Producers, which operates an industrial wastewater treatment process used to treat wastewater from a local tomato processing facility. The City and Pacific Coast Producers are co-permitted and are jointly responsible for maintaining wastewater discharge standards. Treated wastewater is discharged to an unimproved channel, which eventually drains to the Tule Canal on the east side of the Yolo Bypass (City of Woodland 2016).

SOLID WASTE

Solid waste collection service would be provided by a franchise agreement with Waste Management. Refuse would be transported and disposed of at the Yolo County Central Landfill.

Yolo County owns and operates the Yolo County Central Landfill, and the landfill is the primary solid waste disposal facility in the county. The Yolo County Central Landfill is classified as a Class II and III municipal solid waste landfill facility and is permitted to accept general residential, commercial, and industrial refuse for disposal, including municipal solid waste, construction and demolition debris, green materials, agricultural debris, and other nonhazardous designated debris. According to the California Department of Resources Recycling and Recovery (CalRecycle), the Yolo County Central Landfill has a maximum permitted throughput of 1,800 tons per day (tpd), a total maximum permitted capacity of 49.0 million cubic yards, a remaining capacity of approximately 35 million cubic yards, and an anticipated closure date of January 1, 2081 (CalRecycle 2019a).

The California Integrated Waste Management Board of 1989 requires local agencies to implement source reduction, recycling, and composting that would result in a minimum of 50 percent diversion of solid waste from landfills, thereby extending the life of landfills.[2] Woodland has exceeded that goal by diverting 53 percent of waste in 2018, and is continuing to implement educational programs, rebate programs, and services to support and increase waste reduction, materials reuse, recycling and composting, in order to achieve California's diversion goal of 75 percent by 2020, as described in the 2015 AB 341 Report to the Legislature (City of Woodland 2020). For 2018, the target solid waste disposal rate for the City of Woodland is 5.7 pounds per day (ppd) per resident and 14.5 ppd per employee, and the actual measured disposal rate was 5.4 ppd per resident and 12.9 ppd per employee, which is less than the target solid waste generation rate for both residents and employees (CalRecycle 2019b).

The Yolo County 1995 CIWMP fulfills one of the requirements of the California Integrated Waste Management Act (AB 939). There are six jurisdictional areas included in the Yolo CIWMP: Davis, West Sacramento, Winters, Woodland, UC Davis, and unincorporated areas. The CIWMP consists of a Countywide Siting Element, which was amended in August 2012; a Countywide Summary Plan; and three elements from each jurisdiction: (1) a Source Reduction and Recycling Element; (2) a Household Hazardous Waste Element (HHWE); and (3) a Non-Disposal

[2] As of 2007, the 50% diversion requirement is measured in terms of per-capita disposal expressed as pounds per day (ppd) per resident and per employee. The new per capita disposal and goal measurement system uses an actual disposal measurement based on population, disposal rates reported by disposal facilities, and evaluates program implementation efforts.

Facility Element (NDFE).

3.14.3 REGULATORY FRAMEWORK

The 2035 General Plan CAP EIR summarizes the federal, State, regional, and local regulatory framework on pages 4.14-15 through 4.14-31. Those aspects of the existing regulatory framework that are relevant to potential impacts of the WRTP Specific Plan are briefly highlighted below. Please see Section 4.14.3 of the 2035 General Plan and CAP EIR for more detail.

FEDERAL PLANS, POLICIES, REGULATIONS AND LAWS

There are no federal plans, policies, regulations, or laws that apply to the proposed project.

STATE PLANS, POLICIES, REGULATIONS, AND LAWS

Senate Bill 610

The State of California has enacted legislation that is applicable to the consideration of larger projects under CEQA. SB 610 (Chapter 643, Statutes of 2001; Section 21151.9 of the Public Resources Code and Section 10910 et seq. of the Water Code) requires the preparation of "water supply assessments" for large developments (i.e., more than 500 dwelling units or nonresidential equivalent; shopping centers or business establishments employing more than 1,000 persons or having more than 500,000 square feet of floor space; commercial office buildings employing more than 1,000 persons or having more than 250,000 square feet of floor space; or industrial, manufacturing, processing plants, or industrial parks planned to house more than 1,000 persons, occupying more than 40 acres of land, or having more than 650,000 square feet of floor area). These assessments, prepared by "public water systems" responsible for serving project areas, address whether existing and projected water supplies are adequate to serve the project, while also meeting existing urban and agricultural demands and the needs of other anticipated development in the service area in which the project is located. If the UWMP did not account for the project's water demand, or if the public water system has no UWMP, the project's WSA must discuss whether the system's total projected water supplies (available during normal, single-dry, and multiple-dry water years during a 20-year projection) would meet the project's water demand in addition to the system's existing and planned future uses, including agricultural and manufacturing uses.

Assembly Bill 341

In an effort to reduce greenhouse gas emissions from disposing of recyclables in landfills, Assembly Bill (AB) 341 requires local jurisdictions to implement commercial solid waste recycling programs. Businesses that generate four cubic yards or more of solid waste per week or multi-family dwellings of five units or more must arrange for recycling services. In order to comply with AB 341, jurisdictions' commercial recycling programs must include education, outreach, and monitoring of commercial waste generators and report on the process to CalRecycle. Jurisdictions may enact mandatory commercial recycling ordinances to outline how the goals of AB 341 will be reached. For businesses to comply with AB 341, they must arrange for recyclables collection through self-haul, subscribing to franchised haulers for collection, or subscribing to a recycling service that may include mixed waste processing that yields diversion results comparable source separation.

Assembly Bill 1826, Mandatory Commercial Organics Recycling

AB 1826 requires businesses that generate 4 cubic yards or more of waste per week are required to recycle organic wastes through one or any combination of the following steps:[3]

- separate organics from other waste on-site and subscribe to service through a waste hauler that includes the collection and recycling of organic waste;
- subscribe to an organics recycling service that may include mixed-waste processing; and
- recycle organics on site, self-haul organics off-site for recycling, and/or donate organic material.

California Integrated Waste Management Act

The California Integrated Waste Management Act (CIWMA) of 1989 is the result of two pieces of legislation, Assembly Bill (AB) 939 and SB 1322. The CIWMA was intended to minimize the amount of solid waste that must be disposed of by transformation and land disposal by requiring all cities and counties to divert 25 percent of all solid waste from landfill facilities by January 1, 1995, and 50 percent by January 1, 2000.

The CIWMA created the California Integrated Waste Management Board (now known as CalRecycle). CalRecycle is the agency designated to oversee, manage, and track California's 92 million tons of waste generated each year. CalRecycle provides grants and loans to help cities, counties, businesses, and organizations meet the state's waste reduction, reuse, and recycling goals. In addition to many programs and incentives, CalRecycle promotes the use of new technologies for the practice of diverting resources away from landfills. CalRecycle is responsible for ensuring that waste management programs are primarily carried out through local enforcement agencies (LEAs).

The State Water Resources Control Board and the Central Valley Regional Water Quality Control Board also regulate waste disposal (the latter regulated solid waste prior to CalRecycle). Both the County and City are responsible for undertaking the municipal solid waste management planning and compliance efforts required by CalRecycle.

The City would require residents and businesses of the WRTP Specific Plan Area to implement City recycling programs, such as curbside recycling of paper, plastics, bottles, and organics, to ensure that solid waste is reused or recycled.

California Green Building Standards Code

The current standards included in the 2019 California Green Building Standards Code (CALGreen Code) (Title 24, Part 11 of the California Code of Regulations) became effective on January 1, 2020. The CALGreen Code was developed to enhance the design and construction of buildings and the use of sustainable construction practices through planning and design, energy efficiency, water efficiency and conservation, material conservation and resource efficiency, and environmental air quality.

[3] Organic waste refers to food waste, green waste, landscaping and pruning waste, nonhazardous wood waste, and food-soiled paper that is mixed with food waste.

The 2019 CALGreen Code describes measures to reduce indoor demand for potable water by 20 percent and to reduce landscape water use by 65 percent. It also requires separate water meters for non-residential buildings' indoor and outdoor water use, with a requirement for moisture-sensing irrigation systems for larger landscape projects.

The 2019 CALGreen Code requires all construction contractors to reduce construction waste and demolition debris by 65 percent. Code requirements include preparing a construction waste management plan that identifies the materials to be diverted from disposal by efficient usage, recycling, reuse on the project, or salvage for future use or sale; determining whether materials will be sorted on-site or mixed; and identifying diversion facilities where the materials collected will be taken. The code also specifies that the amount of materials diverted should be calculated by weight or volume, but not by both. In addition, the 2019 CALGreen Code requires that 100 percent of trees, stumps, rocks, and associated vegetation and soils resulting primarily from land clearing be reused or recycled.

Projects proposed within the WRTP Specific Plan Area would be required to comply with the building performance standards that are in effect at the time of construction.

REGIONAL AND LOCAL PLANS, POLICIES, REGULATIONS, AND ORDINANCES

City of Woodland 2035 General Plan

The *City of Woodland General Plan Update 2035* (City of Woodland 2017b) identifies the following policies that are applicable to the WRTP Specific Plan Area.

Public Utilities and Services

- **Goal F.1 Public Utilities and Services.** Ensure the timely development of public facilities, provision of public services, and the maintenance of specified service levels for these facilities.
    - **Policy 5.F.1 New Development.** Ensure through the development review process that adequate public facilities and services are available to serve new development. Require that new development pay its fair share of the costs of constructing new public utilities; the costs of providing new public services; and the costs of upgrading of all existing facilities it uses, based on the demand for these facilities attributable to the new development. Exceptions may be made when new development generates significant public benefits (e.g., low-income housing, primary-wage-earner employment) and when alternative sources of funding can be obtained to offset foregone revenues.

Potable Water

- **Goal 5.G Safe, Reliable, and Sufficient Potable Water.** Maintain a safe, reliable, and sufficient potable water supply and delivery system that meets the needs of the city.
    - **Policy 5.G.2 Water Supply Assessment.** Require preparation of a Water Supply Assessment for significant projects consistent with State law.
    - **Policy 5.G.3 Connection to Water System.** Require all potable water users within the City's service area to connect to the City's system, except those areas where the City has determined a connection to the City's potable water system would be infeasible.

- **Policy 5.G.6 Conditions of Approval.** Set appropriate conditions of approval for each new development proposal to ensure that the necessary potable water production and supply facilities and water resources are in place prior to occupancy and that an adequate funding source is in place to finance system development and maintenance.

Wastewater

- **Goal 5.H Wastewater Collection, Treatment, Disposal, and Reuse.** Ensure that adequate wastewater collection, treatment, recycling, and disposal facilities are provided in a timely fashion to serve existing and future needs.

  - **Policy 5.H.6 Connection to Sewer System.** Require all sewage generators within its service area to connect to the City's system, except those areas where the City has determined a connection to the City's sewage collection system would be infeasible.

  - **Policy 5.H.7: Collection Systems.** Require that collection systems be designed on a gravity-flow basis except where sewer depths exceed 14 feet, then an analysis shall be performed to determine whether gravity sewers or a lift station would be most appropriate.

  - **Policy 5.H.9 Reduce Demand.** Reduce wastewater system demand through efficient water use by requiring water-conserving design and equipment in new construction; encouraging retrofitting with water-conserving devices; and designing, constructing, and repairing wastewater systems to minimize inflow and infiltration to the extent economically feasible.

Solid Waste

- **Goal 5.J Solid Waste Collection, Transfer, Recycling, and Disposal.** Provide adequate solid waste services for the collection, transfer, recycling, and disposal of refuse.

  - **Policy 5.J.2 New Development.** Require waste collection in all new development and ensure that all new development complies with applicable provisions of the City of Woodland Source Reduction and Recycling Element and the Yolo County Integrated Waste Management Plan.

  - **Policy 5.J.7 Promote Waste Reduction.** Promote solid waste reduction, recycling, and composting to Woodland residents and business as an important way to conserve limited natural resources. Encourage businesses to use recycled products in their manufacturing processes and consumers to buy recycled products.

3.14.4 Environmental Impacts and Mitigation Measures

Methodology

The following analysis focuses on project-specific significant effects of the proposed WRTP Specific Plan that are peculiar to the WRTP Specific Plan or the site that were not addressed in the 2035 General Plan and CAP EIR, consistent with Section 15183(b) of the CEQA Guidelines.

Impacts related to utilities attributable to the proposed WRTP Specific Plan were identified by comparing existing service capacity and facilities against future demand associated with WRTP Specific Plan implementation and identifying reasonably foreseeable service and facilities expansion required to serve the proposed project that could cause potentially adverse physical environmental effects. When possible, a quantitative comparison was used to determine future demand. Where this level of detail is not available, impacts were analyzed qualitatively. Impacts related to stormwater management are addressed in Section 3.9, "Hydrology, Flooding and Water Quality."

Evaluation of potential utilities impacts was based on a review of the following documents pertaining to the WRTP Specific Plan Area and surrounding area:

- *City of Woodland General Plan Update 2035* (City of Woodland 2017b),
- *2035 General Plan and Climate Action Plan Public Review Draft Environmental Impact Report* (City of Woodland 2016),
- *City of Woodland 2015 Urban Water Management Plan* (West Yost Associates 2016);
- City of Woodland Research and Technology Park Specific Plan SB610/SB221 Water Supply Assessment and Certification Form (City of Woodland 2019b);
- Woodland Research and Technology Park Water Distribution Technical Memorandum (Cunningham Engineering Corporation 2020a);
- Woodland Research and Technology Park Reclaimed Water Distribution Technical Memorandum (Cunningham Engineering Corporation 2020b);
- Woodland Research and Technology Park Wastewater Collection System Technical Memorandum (Cunningham Engineering Corporation 2020c);
- *City of Woodland Research and Technology Park Specific Plan Wastewater Treatment Capacity Verification* (City of Woodland 2019a); and
- *Woodland Research and Technology Park Specific Plan 1A Sanitary Sewer Peer Review* (Water Works Engineers 2018, 2020a).
- *Spring Lake Pump Station Capacity Enhancement Assessment (Water Works 2020b)*

THRESHOLDS OF SIGNIFICANCE

The proposed WRTP Specific Plan may have a significant impact related to utilities if it would:

1. require or result in the relocation or construction of new or expanded water or wastewater treatment facilities, the construction of which could cause significant environmental effects;
2. have insufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years;

3. result in a determination by the wastewater treatment provider that serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments;

4. generate solid waste in excess of State or local standards, or beyond the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals; or

5. violate federal, State, or local management and reduction statutes and regulations related to solid waste.

IMPACTS NOT DISCUSSED FURTHER

The following discussion summarizes the impacts of the WRTP Specific Plan that are not discussed further in this document because either, a) there is no impact, or b) none of the factors triggering additional environmental review (as found in Section 15183(b)) exist because an impact was addressed as a part of the 2035 General Plan and CAP EIR and/or substantially mitigated by uniformly applied development standards (CEQA Guidelines Section 15183[f]). Uniformly applied development standards include the 2035 General Plan, the CAP, existing City regulations and standards, design review requirements, and impact fee programs.

Impacts Related to Increased Demand for Water Supplies (Significance Threshold 2) — As discussed in the 2035 General Plan and CAP EIR Impact 4.14-2 (pages 4.14-37 through 4.14-42) (City of Woodland 2016), additional residential, commercial, and industrial uses would increase demand for water supplies and water treatment facilities. General Plan goals and policies call for reductions in water use and ensure water system facilities are provided. General Plan Goal 5.G is to provide adequate potable water supply and delivery system to meet the needs of the city. General Plan Policy 5.G.1 directs the City to provide an adequate water supply, while Policy 5.G.3 requires connection to the City's water system. Policy 5.G.2 requires preparation of a Water Supply Assessment for significant projects (those larger than a 500-dwelling unit project or 250,000 square foot commercial development), pursuant to Sections 10910 through 10915 of the California Water Code. Policies 5.G.5, 5.G.7, 5.G.9, and 7.A.5 reduce the demand on potable water production and delivery systems by requiring the expansion of the recycled water system, maintenance of existing facilities, coordination with regional partners to improve water efficiency and conservation, and updated landscaping regulations. Policy 7.A.5 encourages efficient use of water in landscaping. CAP Water and Solid Waste Objective 1 promotes reduced water demand, which is supported by a number of Actions outlined in Chapter 4 the CAP. The 2035 General Plan and CAP EIR determined that, based on the supply of surface water and groundwater, the City is expected to successfully meet water demand through 2035 (Table 4.14-3 of the 2035 General Plan and CAP EIR). The environmental effects from placement of infrastructure were evaluated in the 2035 General Plan and CAP EIR throughout the individual environmental topic area sections. The 2035 General Plan and CAP EIR concluded that impacts related to increased demand for water supplies and water treatment facilities would be less than significant.

Development of the proposed WRTP Specific Plan would increase the demand for municipal water supplies. The City of Woodland Engineering Standards water-demand factors were applied to the acreage for each land use designation that generates municipal water use within the city. As shown in Table 3.14-2, the estimated potable

water demand would be approximately 1.14 million gallons per day, which is approximately 1,278 afy at build-out of the WRTP Specific Plan.[4]

Table 3.14-2. Woodland Research and Technology Park Specific Plan Water Demands

Land Use Category	Unit Water Demand Factors (gpm/acre)	Land Use (Acres)	Average Day Demand (mgd)
Low Density Residential	2.2	74.8	0.24
Medium Density Residential	4.5	35.5	0.23
High Density Residential	9.0	9.7	0.13
Research & Technology Park	1.0	50.3	0.07
Research & Technology Park / Transitional Overlay	1.0	19.3	0.03
Research & Technology Park / Research Flex Overlay	1.7	35.9	0.09
Research & Technology Park / Community Commercial Overlay	1.2	6.8	0.01
Village Center Mixed Use	2.0	3.5	0.01
Village Center Medium Density Residential	4.5	16.7	0.11
Village Center Low Density Residential	2.2	13.1	0.04
High Density Residential / Community Commercial Overlay	5.2	15.9	0.12
Highway Commercial	1.4	8.2	0.02
Pedestrian Promenade	1.5	0.8	0.00
Open Space	1.5	10.2	0.02
Village Center Open Space	1.5	10.8	0.02
Water Demand Total	--	**--**	**1.14**

Notes: gpm/acre = gallons per minute per acre; mgd = million gallons per day.

Source: Cunningham Engineering 2020a; Data compiled by AECOM in 2020

Table 3.14-1 identifies water supplies and demand within the City over the UWMP's planning period in normal, single-dry, and multiple-dry years. In all year types, if demand cannot be met from surface water alone, the City plans to meet any additional demand through reclaimed water and groundwater pumping. As stated above and shown in the Table 3.14-1, water supply is projected to be sufficient to meet demand through 2035 in all water years. The future water demands accounted for within the City's UWMP are based upon the population growth rate developed in the City's 2035 General Plan for the anticipated development within the City's Urban Limit Line, which included projections for the WRTP Specific Plan Area (West Yost Associates 2016); for the purposes of analysis, this EIR assumes the mix of land uses and overall amount of development in this WRTP Specific Plan Area of approximately 1,600 dwelling units and 2.2 million square feet of nonresidential building space, consistent with the 2035 General Plan. Therefore, the water demands for the WRTP Specific Plan Area were accounted for in water demand projections contained in the City's UWMP and evaluated in the 2035 General Plan and CAP EIR, and sufficient water supplies would be available to meet the demands of the WRTP Specific Plan.

[4] This water supply demand does not reflect 2019 CALGreen Code (Title 24, Part 11 of the California Code of Regulations) requirements to reduce indoor demand for potable and non-potable water and to reduce landscape water usage, or water conservation measures that may be implemented by future development.

The WRTP Specific Plan provides guidelines and recommendations to reduce water demands through the use high-performance, low-flow water fixtures; minimizing use of lawn and turf grass; the use of native plants and non-living groundcovers; and installation of climate sensitive irrigation systems. A reclaimed water system would be installed to meet landscape irrigation demands for medians, parks, and greenways to further reduce potable water demands. The City Public Works Department completed a Water Supply Assessment for the proposed land use plan contained within the WRTP Specific Plan. As documented in the Water Supply Assessment and Certification Form, the City has sufficient water supplies for the proposed project during normal, single dry, and multiple dry years over a 20-year period (City of Woodland 2019b). Therefore, as with the 2035 General Plan and CAP EIR, the impact related to additional water demand is less than significant.

Impacts Related to Exceedance of Wastewater Treatment Requirements and Increased Demand for Wastewater Treatment Facilities (Significance Threshold 3) — As discussed in the 2035 General Plan and CAP EIR Impact 4.14-1 (pages 4.14-32 through 4.14-36), Impact 4.14-2 (pages 4.14-37 through 4.14-42), and Impact 4.14-5 (pages 4.14-49 through 4.14-51) (City of Woodland 2016), additional residential, commercial, and industrial uses anticipated under the General Plan would generate greater amounts of wastewater effluent compared to existing conditions. General Plan Goal 5.H ensures that wastewater treatment facilities are provided in a timely fashion to serve existing and future needs. General Plan Policy 5.H.6 requires all sewage generators within the Planning Area to connect to the City's system. General Plan Policies 5.F.1 ensures that there would be sufficient public services, including wastewater treatment facility capacity, to serve existing and new development in Woodland. Policies 5.F.2, 5.F.3, 5.F.4, and 5.F.5 address fiscal and funding impacts of new development to ensure there is funding available to support public facilities and services. Policies 5.H.2, 5.H.3, 5.H.4, and 5.H.5 address the need to plan for wastewater needs by requiring updates to the Sanitary Sewer Management Plan, consideration of the wastewater needs in amendments to the adopted General Plan, active planning for maintenance and repairs, and evaluation and updates to the Capital Improvement Program. Policy 5.H.9 requires a reduction in wastewater system demand.

The WPCF was permitted and meeting facility specific permitted conditions under the State Water Resource Control Board National Pollution Discharge Elimination System permit requirements at the time of adoption of the 2035 General Plan, and the permit has been renewed and conditions continue to be met. Implementation of policies in the 2035 General Plan, along with existing local, State, and federal requirements would ensure that the wastewater treatment requirements of the Central Valley Regional Water Quality Control Board would continue to be met for amount of wastewater effluent. In terms of wastewater treatment, the hydraulic capacity of the City's WPCF is expected to meet the city's projected needs through 2035. The environmental effects from placement of infrastructure were evaluated in the 2035 General Plan and CAP EIR throughout the individual environmental topic area sections. The 2035 General Plan and CAP EIR concluded that impacts related to increased demand for wastewater treatment facilities would be less than significant.

Wastewater flows generated by development of the WRTP Specific Plan Area were accounted for in wastewater flow projections contained in the 2035 General Plan and CAP EIR. Land use proposed in the WRTP Specific Plan is consistent with that contemplated for SP-1A in the 2035 General Plan, and therefore anticipated wastewater flows analyzed as part of the General Plan and CAP EIR would be the same, if not less due to recent regulatory changes and conservation measures, as that analyzed in the 2035 General Plan and CAP EIR. As described in the WRTP Wastewater Collection System Technical Memorandum, due to recent regulatory changes and implementation of the Model Calibration and Master Plan Update Recommendations prepared by Water Works Engineers in 2012, the City has reduced residential and commercial wastewater design sanitary sewer flow rate assumptions for the WRTP Specific Plan Area (Cunningham Engineering 2020c). As analyzed in support of the 2035 General Plan and CAP

EIR, future average hydraulic flow to the WPCF would increase to about 8.3 mgd in 2035 with buildout of the General Plan, which is within the capacity of the WPCF (City of Woodland 2015). Similarly, the WPCF organic capacity would not be exceeded with buildout of the 2035 General Plan (City of Woodland 2015). As stated above and confirmed by the City's Wastewater Treatment Capacity Verification, the capacity of the City's WPCF is expected to exceed the city's projected needs through 2035, including the needs of the WRTP Specific Plan (City of Woodland 2019a). Thus, the WPCF would have adequate capacity to treat wastewater flows generated by the WRTP Specific Plan, as well as future development within the WPCF service area.

Therefore, impacts from the WRTP Specific Plan related to exceedances of wastewater treatment requirements and increased demands that would be placed upon existing wastewater treatment facilities were addressed for the proposed WRTP Specific Plan as part of the 2035 General Plan and CAP EIR and are substantially mitigated by City-administered uniformly applied development standards. The 2035 General Plan and CAP EIR determined that this impact was less than significant. There are no impacts that are peculiar to the WRTP Specific Plan Area that were not addressed in the 2035 General Plan and CAP EIR. As provided by CEQA Guidelines Section 15183(f), no additional CEQA review is required.

Impacts Related to Increased Generation of Solid Waste and Compliance with Solid Waste Regulations (Significance Thresholds 5 and 6) —As discussed in the 2035 General Plan and CAP EIR Impacts 4.14-6 and 4.14-7 (pages 4.14-51 through 4.14-56) (City of Woodland 2016), future residential, commercial, and industrial land uses anticipated under the General Plan would increase solid waste generation compared to existing conditions. General Plan Policies 5.J.1 and 5.J.2 require adequate solid waste services and compliance of solid waste collection in new development with local regulations, and Policy 5.J.4 requires compliance with State regulations. The 2035 General Plan and CAP EIR determined that existing State laws and regulations would reduce the potential environmental impact associated with solid waste generation (AB 341's solid waste diversion requirements and AB 1826's mandatory commercial organics recycling requirements). Furthermore, the City of Woodland Municipal Code reduces the potential environmental impact by regulating solid waste receptacles and disposal services, recyclable materials, and construction and demolition debris. The 2035 General Plan and CAP determined existing landfills have sufficient capacity to accommodate the solid waste disposal needs from anticipated future growth. The 2035 General Plan and CAP EIR concluded that impacts related to increased generation of solid waste and compliance with solid waste regulations would be less than significant.

Construction activities for future projects under the WRTP Specific Plan would require site clearing and generate various construction-period wastes, including scrap lumber, scrap finishing materials, various scrap metals, and other recyclable and nonrecyclable construction-related wastes. The 2019 CALGreen Code (Title 24, Part 11 of the California Code of Regulations) requires all construction contractors to reduce construction waste and demolition debris by 65 percent. Code requirements include preparing a construction waste management plan that identifies the materials to be diverted from disposal by efficient usage, recycling, reuse on the project, or salvage for future use or sale; determining whether materials will be sorted on-site or mixed; and identifying diversion facilities where the materials collected will be taken. The code also specifies that the amount of materials diverted should be calculated by weight or volume, but not by both (California Building Standards Commission 2019). In addition, the 2019 CALGreen Code requires that 100 percent of trees, stumps, rocks, and associated vegetation and soils resulting primarily from land clearing be reused or recycled.

In addition, the City requires contractors to comply with the Construction and Demolition Debris Recycling and Diversion Ordinance (Title 13, Chapter 13.40 of the City of Woodland Municipal Code) by reducing project waste

entering landfill facilities by 65 percent as recycling 100 percent of excavated soil and land-clearing debris. Contractors are required to prepare a waste management plan that must be submitted to and approved by City's Community Development Department before issuance of a building permit and waste management logs must be submitted to the City's Community Development Department before final inspections (see Section 3.14.2, "Regulatory Framework," above).

It is estimated the total population and employees resulting from implementation of the WRTP Specific Plan would generate 13.1 tpd and 32.25 tpd of solid waste, respectively.[5,6] These totals do not account for recycling programs required by AB 1826 or other City recycling programs. Therefore, the actual amount of solid waste generated by the proposed WRTP Specific Plan would be less than this estimate.

Solid waste collected from the WRTP Specific Plan Area would be hauled to the Yolo County Central Landfill. The Yolo County Central Landfill has a maximum permitted throughput of 1,800 tpd, a remaining capacity of approximately 35 million cubic yards, and an expected closure date of 2081 (CalRecycle 2019a). The estimated 45.4 tpd of solid waste generated by the proposed project would be approximately two percent of the maximum tpd that could be received at the landfill. Therefore, sufficient landfill capacity would be available to accommodate solid-waste disposal needs for the WRTP Specific Plan.

Development of the WRTP Specific Plan would result in increased long-term generation of solid waste during operation. The City provides recycling programs, such as curbside recycling of paper, plastics, bottles, and organics, to reduce the volume of solid waste transported to landfills. In addition, the Recyclable Materials Ordinance (City Municipal Code Title 13, Chapter 13.36) reduces wastes further by requiring businesses and multi-family residential uses to provide integrated collection areas with recycling components. Furthermore, AB 1826 requires businesses to recycle organic wastes.

Future projects developed under the WRTP Specific Plan will be required to comply with all statutes and regulations related to solid waste. Compliance with the CalGreen Code, the City's Construction and Demolition Debris Recycling and Diversion Ordinance, AB 1826, the City's Recyclable Materials Ordinance, and other City recycling programs would ensure that sufficient landfill capacity would be available to accommodate solid-waste disposal needs for future development. The anticipated increase in solid waste generation of time is based on an increase in population in the county. Per resident and per employee generation rates in the WRTP Specific Plan Area are likely to be less than existing rates as the City continues to implement waste diversion programs to comply with State regulations (AB 341 and AB 1826) and support State goals. Development assumptions and related population growth within the WRTP Specific Plan Area are within the envelope assumed in the 2035 General Plan. Therefore, impacts from WRTP Specific Plan and related infrastructure improvements related to increased generation of solid waste and compliance with solid waste regulations were addressed for the proposed WRTP Specific Plan as part of the 2035 General Plan and CAP EIR and are substantially mitigated by City-administered uniformly applied development standards in the form of 2035 General Plan and CAP EIR policies and implementation programs, or in the form of existing City standards or code requirements. The 2035 General Plan and CAP EIR determined that

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5 Based on CalRecycle's estimated 2018 annual per capita disposal rate of 5.4 pounds per resident per day in Yolo County, the estimated total population associated with implementation of the WRTP Specific Plan (4,837 persons) would generate approximately 26,119 pound per day of solid waste, which equates to 13.1 tpd (CalRecycle 2019b).

6 Based on CalRecycle's estimated 2018 annual per capita disposal rate of 12.9 pounds per employee per day in Yolo County and an estimated 5,000 employees associated with implementation of the WRTP Specific Plan, approximately 64,500 pound per day of solid waste would be generated per day, which equates to 32.25 tpd (CalRecycle 2019b).

this impact was less than significant. There are no impacts that are peculiar to the WRTP Specific Plan Area that were not addressed in the 2035 General Plan and CAP EIR. As provided by CEQA Guidelines Section 15183(f), and no additional CEQA review is required.

PROJECT IMPACTS AND MITIGATION MEASURES

IMPACT 3.14-1 **Increased Demand for Water Supply Conveyance Facilities (Significance Threshold 2).** *Implementation of the proposed WRTP Specific Plan would require construction of on-site water supply conveyance facilities. Sufficient on-site water supply facilities would be designed and sized to provide adequate service to the WRTP Specific Plan would be constructed. Physical impacts associated with construction and operations of utilities are evaluated throughout this EIR. There is no impact beyond those comprehensively considered throughout the other sections of this EIR. The impact is considered* ***less than significant****.*

The 2035 General Plan and CAP EIR states that subsequent CEQA review at the project level may be required to determine whether significant environmental effects would result from the construction of water distribution lines and that project-level environmental review will occur when proposed development plans are prepared (2035 General Plan and CAP EIR page 4.14-31).

Implementation of the WRTP Specific Plan would require construction of on-site water supply conveyance facilities. The on-site water system would consist of a looped trunk line system consisting of 12-inch water mains within road rights-of-way that would connect to the existing 12-inch main in Harry Lorenzo Avenue at Fouler Way (future), Parkland Avenue (future extension of existing 12-inch main), and Marston Drive (see Attachment 2, *Preliminary Water Layout,* of the WRTP Water Distribution Technical Memorandum) (Cunningham 2020a). Water transmission pipelines to distribute the water to individual residences would be constructed and would be required to be sufficiently sized to provide fire flows. The preliminary network leading from these connections was designed in accordance with the City of Woodland Engineering Standards to provide looping of the system, and minimum spacing of 12-inch lines at approximate one-half-mile intervals.

Reclaimed water would be conveyed to the WRTP Specific Plan Area via a pressure system and routed to serve areas with irrigation demands. The reclaimed water network within the WRTP Specific Plan Area is designed to provide service to typical areas with commercial and public irrigation demands such as medians, parks, and greenways (see Exhibit 5-2 of the WRTP Specific Plan). The proposed point-of-connection for the reclaimed water system is at the existing 8-inch main south of Osborn Drive and Farmers Central Road. The main will then be routed south down the greenway along the west side of Harry Lorenzo Avenue, terminating at Marston Drive. From Harry Lorenzo, the WRTP network will connect at Parkland Avenue, Marston Drive, and Road B. A main is planned to be stubbed south of CR 25A to provide service for potential future demands of the agricultural research that is anticipated to be conducted in the Research Flex Overlay land use. The public reclaimed water supply pipelines would be within the right-of-way of public streets and greenways.

Physical impacts associated with construction and operation of utilities is evaluated throughout other sections of this EIR, such as Air Quality, Biological Resources, and Greenhouse Gas Emissions, which specifically analyze the potential for project construction and implementation. Impacts of the WRTP Specific Plan would be mitigated through implementation of mitigation measures presented in this EIR and through uniformly applied City-administered development standards. There is no impact beyond those comprehensively considered throughout the other sections of this EIR. This impact is considered **less than significant**.

The City requires project applicants to demonstrate necessary public facilities are available or adequately financed before approval of proposed development (General Plan Policy 5.F.1). The City will only approve new development that connects to the City's public water supply system (General Plan Policy 5.G.3) and requires project applicants to demonstrate adequate water supply conveyance facilities are in place prior to occupancy and that an adequate funding source is in place to finance system development and maintenance (City General Plan Policy 5.G.6). The following mitigation measure is provided for planning purposes to ensure water supply infrastructure is designed and sized to provide adequate service to the WRTP Specific Plan.

Mitigation Measure

Mitigation Measure 3.14-1: Prepare and Submit A Water Supply Conveyance Improvement Plan in Compliance with Applicable Standards and Construct Water Supply Conveyance Infrastructure Prior to Occupancy.

While not required as mitigation for a significant impact under CEQA, the following would be required for planning purposes to ensure the water supply infrastructure is designed and sized to provide adequate service to the WRTP Specific Plan:

Before approval of the final subdivision map and issuance of building permits, project applicants for projects proposed under the WRTP Specific Plan shall prepare a detailed water conveyance infrastructure improvement plan that depicts the locations and appropriate sizes of all required conveyance infrastructure, in conjunction with other site-specific improvement plans. Proposed on-site water facilities shall be designed and sized to provide adequate service to the project site for the amount of development identified in the tentative subdivision map, based on City of Woodland Engineering Standards. A final water conveyance infrastructure improvement plan shall be approved by the City of Woodland Engineering Division before approval of the final subdivision map by the City of Woodland Planning Division and issuance of building permits from the City of Woodland Building Division. All required infrastructure shall be in place prior to occupancy of development anticipated under the proposed project.

Significance after Mitigation

This impact is **less than significant**. There are no additional significant impacts beyond those comprehensively considered throughout the other sections of this EIR. Mitigation Measure 3.14-1 would ensure adequate water supply conveyance facilities would be documented before approval of the final subdivision map and issuance of building permits.

IMPACT 3.14-2 **Increased Demand for Wastewater Collection and Conveyance Facilities (Significance Threshold 2).** *Implementation of the proposed WRTP Specific Plan would require construction of on-site wastewater collection and conveyance facilities and off-site facility upgrades. On-site and off-site wastewater collection and conveyance facilities would be designed and sized to provide adequate service to the WRTP Specific Plan. Physical impacts associated with construction and operations of utilities are evaluated throughout this EIR. There is no impact beyond those comprehensively considered throughout the other sections of this EIR. This impact is considered* ***less than significant****.*

The 2035 General Plan and CAP EIR states that subsequent CEQA review at the project level may be required to determine whether significant environmental effects would result from the construction of wastewater collection system components and any onsite storage or pumping facilities on development sites and that project-level

environmental review will occur when proposed development plans are prepared (2035 General Plan and CAP EIR page 4.14-31).

There are currently no wastewater mains or services located within the WRTP Specific Plan Area. A combination of on-site gravity and pressure sewers would be required to convey new wastewater flows from the WRTP Specific Plan Area to the SLSP Pump Station located at Farmers Central Road and Miekle Avenue (see Attachment 2, *Wastewater Layout,* of the WRTP Wastewater Collection System Technical Report). The proposed points-of-connection for the WRTP Specific Plan wastewater conveyance system would be at the existing 8-inch main in Harry Lorenzo Avenue at Fowler Way (future), the proposed 15-inch main extending from the future Heritage Parkway, and the existing 10-inch main in Marston Drive (Cunningham Engineering 2020c). A 7.5-acre area within the WRTP Specific Plan Area would require a lift station to convey wastewater runoff to the existing gravity main in SLSP. The pump size has not yet been determined and would need to be based on wastewater flow rate generated at the time of site design. Pump station upgrades will need to be timed with development phasing. As detailed above in the discussion of wastewater, collection, conveyance, and treatment facilities, in Section 3.14.2, "Environmental Setting," the SLSP Pump Station does not have the capacity for the wastewater flows at buildout of the WRTP Specific Plan (Cunningham Engineering 2020c).

Physical impacts associated with construction and operation of utilities is evaluated throughout other sections of this EIR, such as Air Quality, Biological Resources, and Greenhouse Gas Emissions, which specifically analyze the potential for project construction and implementation. Impacts of the WRTP Specific Plan would be mitigated through implementation of mitigation measures presented in this EIR and through uniformly applied City-administered development standards. There is no impact beyond those comprehensively considered throughout the other sections of this EIR. The impact is considered **less than significant**.

The City will only approve new development that connects to the City's sewer system (General Plan Policy 5.H.6) In addition, the City requires project applicants demonstrate necessary public facilities are available or adequately financed to serve new development (General Plan Policy 5.F.1). The following mitigation measure is provided for planning purposes to ensure wastewater conveyance infrastructure is designed and sized to provide adequate service to the WRTP Specific Plan Area.

Mitigation Measure

Mitigation Measure 3.14-2: Prepare Additional Analysis to Verify the Spring Lake Specific Plan Pump Station Capacity Prior to Development Beyond 87 Percent of the WRTP Specific Plan Area.

While not required as mitigation for a significant impact under CEQA, the following would be required for planning purposes to ensure the existing wastewater conveyance infrastructure has the capacity to provide adequate service to the WRTP Specific Plan Area:

Prior to any development beyond 87 percent of the WRTP Specific Plan, the WRTP shall fund additional analysis to verify that the Spring Lake Specific Plan Pump Station has adequate capacity to provide for sewer flows from full buildout of the WRTP Specific Plan. If additional capacity is required, it may be provided by upsizing the pumps as part of the City's regular maintenance work of replacing the pumps. If the increased capacity is not provided by the City's maintenance work, then the WRTP Specific Plan will be responsible for funding improvements at the pump station to provide the additional required capacity.

Significance after Mitigation

This impact is less than significant. There are no additional significant impacts beyond those comprehensively considered throughout the other sections of this EIR. Implementation of Mitigation Measure 3.14-2 requires evaluation of the Spring Lake Specific Plan Pump Station Capacity prior to development and prior to development beyond 87 percent of the WRTP Specific Plan, and specific improvements or funding of improvements to address any capacity shortfall.

3.14.5 CUMULATIVE IMPACTS

WATER SUPPLY

The 2035 General Plan and CAP EIR (pages 6-46 and 6-47) (City of Woodland 2016) analyzed cumulative impacts to water supply based on regional growth projections identified in the Sacramento Area Council of Governments' 2016 Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS). The 2035 General Plan and CAP EIR noted that future growth in the region would result in increased water demand. Because available supply is dictated by water purveyor sources and purveyors who may have different demands, water supplies, water rights, and water quality challenges, the impacts on water supply related to implementation of the Sacramento Area Council of Governments' 2016 MTP/SCS at the regional level are considered cumulatively potentially significant in the 2016 MTP/SCS EIR.

As discussed in the 2035 General Plan and CAP EIR, the City of Woodland has supported efforts to reduce water demand through conservation and other measures, which will lessen the demand for new water treatment facilities. Nevertheless, the City has not undertaken analysis of the availability of water supply beyond the population anticipated from implementation of the General Plan through 2035. Therefore, the 2035 General Plan and CAP EIR determined it is possible the water demand from cumulative growth for the region may exceed supply. Because the City has not analyzed the water supply for cumulative growth for the region and cannot state with any certainty what impact on water supply new development will have, the 2035 General Plan and CAP EIR determined that new development would make a cumulatively potentially significant and unavoidable contribution to the potentially significant cumulative impact.

As described above, the project applicants for future projects proposed under the WRTP Specific Plan would comply with 2035 General Plan and CAP policies, Implementation Programs, and Actions that require implementation of water conservation and preparation of water supply assessments. In addition, a reclaimed water system would be installed to meet landscape irrigation demands for medians, parks, and greenways to further reduce potable water demands. In all year types, if demand cannot be met from surface water alone, the City plans to meet any additional demand through groundwater pumping. As shown in the Table 3.14-1, water supply is projected to be sufficient to meet demand through 2035 in all water years. The water supply demands for the WRTP Specific Plan Area were accounted for in water demand projections contained in the City's UWMP and evaluated in the 2035 General Plan and CAP EIR (City of Woodland 2016, West Yost Associates 2016). The WRTP Specific Plan proposes land uses consistent with those in the 2035 General Plan and, therefore, assumed for the City's UWMP. Therefore, sufficient water supplies would be available to meet the demands of the WRTP Specific Plan as well as existing and future development within the City's service area through 2035.

As noted, the UWMP assessed water demand and supply using land use assumptions in the 2035 General Plan, with which the WRTP Specific Plan is consistent. Therefore, water demand would be the same, if not less than due to

continued conservation measures, as analyzed in the 2035 General Plan and CAP EIR. The 2035 General Plan and CAP EIR concluded that that water demand under the cumulative scenario may exceed demand and determined this to be a cumulatively considerable contribution to a significant and unavoidable impact. Proposed development under the WRTP Specific Plan is consistent with development assumptions in the 2035 General Plan and would contribute to this impact. There are no cumulative impacts related to water supply that are peculiar to the WRTP Specific Plan Area that were not addressed in the 2035 General Plan and CAP EIR and, as provided by CEQA Guidelines Section 15183 (f), no additional cumulative analysis is required.

WASTEWATER TREATMENT FACILITIES

The 2035 General Plan and CAP EIR (page 6-47) (City of Woodland 2016) analyzed cumulative impacts to wastewater treatment facilities based on regional growth projections identified in the 2016 MTP/SCS. The 2035 General Plan and CAP EIR noted that growth in the region is expected to increase demand for wastewater management services because of increased amounts of wastewater effluent. Increased population from cumulative growth may result in the need for construction of new facilities for utilities and service systems. This was identified as a potentially significant impact in the 2016 MTP/SCS EIR, and thus has a potentially significant cumulative impact.

Future growth in the City would result in increased development and therefore greater amounts of wastewater effluent. As discussed above, the future capacity of the WPCF could serve up to 105,000 residents and is sufficient to serve growth projected under the 2035 General Plan. Policy 5.F.1 of the 2035 General Plan ensures that sufficient public facilities and services would be available to serve new development. Policy 5.H.1 requires "that increased wastewater treatment facility capacity is available to serve planned urban development within the Planning Area consistent with this General Plan." This policy applies to all levels of development and therefore provides mitigation for increased demand for wastewater treatment associated with future development. Therefore, the 2035 General Plan and CAP EIR concluded that future development would have a less than cumulatively considerable contribution to the potentially significant cumulative impact.

As stated above, the hydraulic capacity of the City's WPCF is expected to meet the City's projected needs through 2035, including the needs of the WRTP Specific Plan. In addition, the City has reduced residential and commercial wastewater design sanitary sewer flow rate assumptions for the WRTP Specific Plan Area (Cunningham Engineering 2020c). Therefore, the WPCF would have adequate capacity to treat wastewater flows generated by the WRTP Specific Plan, as well as future development within the WPCF service area. The 2035 General Plan and CAP EIR concluded that Policy 5.H.1 provides mitigation for increased demand for wastewater treatment associated with future development and determined that future development under the 2035 General Plan would have a less than cumulatively considerable contribution to a significant and unavoidable impact. Proposed development under the WRTP Specific Plan is consistent with development assumptions in the 2035 General Plan and the Public Facilities Financing Plan will demonstrate how the infrastructure requirements and the associated costs are reasonably balanced throughout each segment of development and ensures that sufficient public facilities and services would be available to serve new development, consistent with General Plan policy.. There are no cumulative impacts related to water supply that are peculiar to the WRTP Specific Plan Area that were not addressed in the 2035 General Plan and CAP EIR and, as provided by CEQA Guidelines Section 15183(f), no additional cumulative analysis is required.

SOLID WASTE

The 2035 General Plan and CAP EIR (page 6-47) (City of Woodland 2016) analyzed cumulative impacts to solid waste disposal based on regional growth projections identified in the 2016 MTP/SCS. The 2035 General Plan and CAP EIR noted that growth in the region is expected to increase demand for solid waste management and recycling due to an increase in the amount of solid waste generated and requiring disposal. Any new landfill would be required to comply with relevant federal, State, and local statutes and regulations related to permitting and operation prior to construction and operation. This is identified as less than significant in the 2016 MTP/SCS EIR, and thus has a less than significant cumulative impact. The 2035 General Plan and CAP EIR concluded that impacts related to construction and operation of new landfills in the region would be cumulatively less than significant

The 2035 General Plan and 2035 CAP EIR determined that the Yolo County Central Landfill's disposal capacity is sufficient to absorb solid waste generated by future development, as well as projected increases from population growth in the rest of the County. Furthermore, the 2035 General Plan and 2035 CAP include policies to reduce solid waste disposal needs through encouraging the development of regional and community-based recycling facilities and secondary resource businesses, and through the promotion of waste reduction measures to Woodland residents and businesses. Therefore, the 2035 General Plan and CAP EIR concluded that future development would have a less than cumulatively considerable contribution to the potentially significant cumulative impacts related to solid waste disposal.

As discussed above, the project applicants for future projects proposed under the WRTP Specific Plan would comply with all statues and regulations related to solid waste. Compliance with the CalGreen Code, the City's Construction and Demolition Debris Recycling and Diversion Ordinance, AB 1826, the City's Recyclable Materials Ordinance, City General Plan policies, and other City recycling programs would ensure that sufficient capacity at the Yolo County Central Landfill would continue be available to accommodate solid-waste disposal needs for future development. There are no cumulative impacts related to solid waste that are peculiar to the WRTP Specific Plan Area that were not addressed in the 2035 General Plan and CAP EIR and, as provided by CEQA Guidelines Section 15183(f), no additional cumulative analysis is required.

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4. ALTERNATIVES

4.1. INTRODUCTION

The California Environmental Quality Act (CEQA) mandates consideration and analysis of alternatives to a proposed project. According to the CEQA Guidelines, the range of alternatives "shall include those that could feasibly accomplish most of the basic purposes of the project and could avoid or substantially lessen one or more of the significant impacts" (CEQA Guidelines Section 15126.6[c]; see also CEQA Guidelines Section 15126.6[a]).

Section 15126.6(a) of the CEQA Guidelines requires EIRs to describe:

> "…a range of reasonable alternatives to the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives. An EIR need not consider every conceivable alternative to a project. Rather it must consider a reasonable range of potentially feasible alternatives that will foster informed decision making and public participation. An EIR is not required to consider alternatives which are infeasible. The lead agency is responsible for selecting a range of project alternatives for examination and must publicly disclose its reasoning for selecting those alternatives. There is no ironclad rule governing the nature or scope of the alternatives to be discussed other than the rule of reason."

In defining "feasibility," CEQA Guidelines Section 15126.6(f)(1) states, in part:

> Among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries (projects with a regionally significant impact should consider the regional context), and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site (or the site is already owned by the proponent). No one of these factors establishes a fixed limit on the scope of reasonable alternatives.

The environmental impacts of alternatives are required to be compared to the proposed project's environmental impacts. This process helps decision makers to consider whether a different project design, location, or other variation on the proposed project would have environmentally superior results. The CEQA Guidelines further require that the alternatives be compared to the proposed project's environmental impacts and that the "no project" alternative be considered (CEQA Guidelines Section 15126.6[e]). The CEQA Guidelines provide guidance on defining and analyzing alternatives. Section 15126.6[b] states:

> "… the discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly."

4.2. SELECTION OF ALTERNATIVES

4.2.1. CRITERIA

Alternatives were selected for evaluation in this EIR based on criteria in the CEQA Guidelines Section 15126.6. These criteria include (1) ability of the alternative to attain most of the basic project objectives; (2) the potential feasibility of the alternative; and (3) ability of the alternative to avoid or substantially reduce one or more significant environmental effects of the proposed project.

The City has evaluated potential alternatives relative to the objectives of the proposed project. Alternatives that would impede to some degree the attainment of the project objectives or would be more costly may also be considered.

4.2.2. PROJECT OBJECTIVES

In determining what alternatives should be considered in the EIR, it is important to analyze the ability of an alternative to achieve most of the basic objectives of the project, in addition to comparing the significant environmental effects of the alternative to the project's significant effects. These factors are crucial to the development of alternatives that meet the criteria specified in CEQA Guidelines Section 15126.6(a). As noted elsewhere in this EIR, the "proposed project" is adoption and implementation of the Woodland Research & Technology Park (WRTP) Specific Plan (or "Specific Plan").

In identifying potentially feasible alternatives to the project, the ability of alternatives to meet most of the project's objectives was considered. As described in Chapter 2, "Project Description," an early step in the Specific Plan process was the development of a vision for the future and guiding principles to inform the method to achieve that vision, which together serve as the proposed project's objectives.

The WRTP is envisioned as a new technology hub for the City of Woodland, intended to serve an array of research and technology companies interested in locating and growing near U.C. Davis, and other research and technology institutions within the Sacramento region. The Specific Plan will offer a unique business environment, supporting research and development, technology, and science and engineering-based companies. The Specific Plan is proposed as a new type of employment center that also includes a range of housing options, and a commercial mixed-use town center focused around a central green and connected by a multi-modal street network and trail system. Although the City anticipates that agricultural-related research will be a major focus at the Specific Plan, the plan also supports an environment of innovation in flexible formats for a wide variety of businesses in medical and veterinary, bio-tech, engineering, and other fields. The Specific Plan will also provide incubation spaces for small start-up firms, facilities for established mid-size or large size companies that require larger floorplates, flexible building spaces for high-tech research and light manufacturing/flex space for product testing and development. Employee-support services and retail will create an active landscape for collaboration and innovation.

The following guiding principles provide the envisioned outcome and overarching vision for development within the Specific Plan Area:

- **Innovation -** The Specific Plan Area will develop as a state-of-the-art innovation center campus for technology, research and development, and office uses. Flexibility in design and implementation is supported, allowing businesses to respond to market demand through phasing of construction and the ability to offer a variety of

building types and sizes. Complementary uses within immediate proximity to the business park, including hotel, commercial, and employee-serving retail and recreational opportunities will support day–to-day needs of businesses, their clients and their employees.

- **Technology Capture / Talent Retention -** Collaboration with UC Davis, Woodland Community College and others will bolster start-up businesses and growing mid-to-large size companies through technology transfer and intellectual property sourcing. The Plan will accommodate advanced technology-related jobs and training that allow a greater number of Woodland residents and college graduates from the Woodland Community College and throughout the region to live and work in the community, generating an infusion of intellectual capital.

- **Business Partnerships -** Companies locating in the Tech Campus will have the opportunity to take positive advantage of the existing and thriving seed, food, and agricultural-based industries currently located and doing business in and around Woodland. Access to additional resources and new markets, new ideas, materials and expertise will grow through strategic partnerships with new and existing businesses in Woodland.

- **Sustainable and Resilient -** The Specific Plan Area will lead in energy efficiency and sustainable design. Development within the Specific Plan Area will incorporate cutting edge green building practices. Land use strategies and transportation demand management will reduce vehicle miles traveled and facilitate the use of alternative fuel vehicles. The city's urban forest canopy will be increased and projects will incorporate naturalized stormwater management. These and other measures will contribute to meeting City goals for greenhouse gas reduction by 2035 contained in its 2035 Climate Action Plan.

- **Gathering Place -** A successful Village Center and featured 11-acre linear park will provide a mix of social gathering spaces for employees, residents, and visitors to connect, recreate, and relax. These informal networking opportunities will foster greater innovation and engagement among the workforce and allow for the balanced integration of work and life that the next generation of professionals seek.

- **Connectivity / Mobility -** A combination of well-designed complete streets, protected bicycle lanes, and pedestrian / bicycle greenways will prioritize the pedestrian experience throughout the Specific Plan Area. Well-connected parks, open spaces and greenbelts will encourage residents and employees to walk, bike, or scooter rather than drive to work, home and play. Existing bike trails and greenbelts will extend from and connect to the adjacent community including nearby schools, community center and shopping center. A shared mobility hub will serve as a point of connection for those arriving and departing the Tech Campus by various forms of alternative transportation – including micro transit stops and fixed bus routes with frequent service to Downtown Woodland and UC Davis. Amenities to support last mile active transportation alternatives are featured, including bike and scooter share services.

- **Healthy Community -** Connected streets with bicycle and pedestrian facilities, trails, accessible parks and open spaces with passive and programmed recreation will facilitate and encourage active, healthy living. Access to healthy foods through community gardens, a farmer's market and/or fresh produce market in the Village Center will be promoted. A mix of social gathering places will enable employees and residents to come together for fun and relaxation, boosting emotional wellness.

- **New Neighborhoods / Seamless Transitions -** Diverse, high quality and attractive new neighborhoods and housing options, including single and multi-family residential units and mixed-used projects will allow Tech

Park employees to live and work close by and "move up" within the same neighborhood as families grow or nests are emptied. Land use and circulation planning, coupled with design and development standards will ensure a thoughtful transition between the Specific Plan Area and the adjacent Spring Lake neighborhood, complementing the established community.

4.3. ALTERNATIVES CONSIDERED BUT REJECTED FOR DETAILED ANALYSIS IN THIS EIR

4.3.1. OFF-SITE DEVELOPMENT ALTERNATIVE

This alternative would envision the Specific Plan Area in continued agricultural use, while density and non-residential development intensity would be increased in undeveloped portions of the Spring Lake Specific Plan Area, other Specific Plan areas (including SP-1B, -1C, and -3), and infill opportunity areas within the City.

While this alternative may reduce the level of impacts identified in this EIR associated with the Specific Plan Area itself, it would shift impacts associated with ground disturbance and new construction to other parts of the City's Planning Area. This alternative would not fulfill project objectives related to creating a centralized hub supporting strategic new employment within immediate proximity to complementary uses, as well as gathering places and new housing to support day–to-day needs of businesses, their clients, and their employees. In addition, the applicant would have no control over the multiple properties that would be required to accommodate this level of development. Therefore, the Off-site Development Alternative was rejected since it is infeasible, and since it would largely shift rather than reduce impacts.

4.4. ALTERNATIVES ANALYZED IN THIS EIR

4.4.1. NO-PROJECT ALTERNATIVES

CEQA Guidelines (Section 1526.6[e]) requires consideration of a no-project alternative that represents the existing conditions, as well as what would reasonably be expected to occur in the foreseeable future if the project were not approved. The no-project alternative could take two forms: one, as a scenario in which urban development does not occur at all within SP-1A and existing conditions within SP-1A persist; or two, a scenario in which development still occurs, consistent with the framework for SP-1A prescribed by the 2035 General Plan and City's planning efforts.

As the Specific Plan Area is planned for development ("SP-1A") under the 2035 General Plan, and the Specific Plan Area is a key element of the development framework envisioned in the 2035 General Plan, it is not considered likely that a no-development scenario would persist well into the future. However, in order to provide the most complete set of information for decision makers, the no-development scenario has been included and analyzed as a no-project alternative.

4.4.1.1. ALTERNATIVE 1: NO-PROJECT (*NO DEVELOPMENT*) ALTERNATIVE

The purpose of this alternative is to allow decision makers to compare the impacts of approving the proposed project with the impacts of not approving the proposed project. This alternative envisions that the proposed WRTP Specific Plan is not approved and development under the 2035 General Plan occurs elsewhere within the City of Woodland.

The Specific Plan Area is currently used for agricultural production, consisting of row crops and pasture, with one existing home and a barn associated with agricultural activities. The No-Project (No Development) Alternative assumes continued agricultural use throughout the Specific Plan Area, and increased residential density and non-residential development intensity in undeveloped portions of the Spring Lake Specific Plan Area, other specific plan areas of the City (including SP-1B, -1C, -2, and -3), and infill opportunity areas within the City. This alternative also assumes no implementation of off-site improvements (i.e., the Caltrans Improvement Area and South Regional Pond).

Ability of Alternative to Meet Project Objectives

This alternative would not meet any of the basic project objectives since it would not create a centralized hub for research and technology to connect the growing U.C. Davis and Sacramento regions. There would be no new advanced technology-related jobs or related training to allow for the expanding number of Woodland residents and college graduates from the Woodland Community College and throughout the region to live and work in the community.

4.4.1.2. ALTERNATIVE 2: NO-PROJECT (*DEVELOPMENT)* ALTERNATIVE

The purpose of this alternative is to allow decision makers to compare the impacts of approving the proposed project with the impacts of not approving the proposed project. This alternative envisions that the proposed WRTP Specific Plan is not approved, but that development would occur within the Specific Plan Area as directed by the 2035 General Plan for SP-1A, but not as designed under the WRTP Specific Plan.

The No-Project (Development) Alternative assumes development within SP-1A in a manner that, like the proposed WRTP Specific Plan, is consistent with the 2035 General Plan and that has a density, layout, and mix of uses more consistent with a typical business park development with supporting land uses in proximity to a highway interchange. As detailed in the 2035 General Plan Policy 2.L.2, SP-1A is to be developed as "as a mixed-use residential district anchored by a research and technology business park in the Southern Gateway area at CR 25A and SR 113." The General Plan directs a specific plan to "concentrate the highest intensity of development within and in close proximity to the business park area, with lower-density, largely residential uses to the north." Consistent with this policy, this No-Project (Development) Alternative assumes the business park would be concentrated in the southwestern portion of the Specific Plan Area near the interchange of SR 113 and CR 25A. The business park is assumed to be developed in a campus-like setting, as described in the 2035 General Plan, and include larger lots with two- to three-story buildings and large parking lots. Also consistent with General Plan direction to focus higher-intensity development around the highway interchange, this alternative includes increased highway commercial acreage. As defined by General Plan Policy 2.L.2, the highest density housing would be close to the business park area, with lower-density residential uses in the northern portion of the Specific Plan Area. The mobility hub proposed as a part of the WRTP Specific Plan is not a part of this alternative. The village center and associated park and residential development proposed as a part of the WRTP Specific Plan is not included under this alternative and, rather than high-density residential with a community commercial overlay along CR 25A, this land would include additional business park and highway commercial uses. The Specific Plan Area would still accommodate approximately 1,600 residential dwelling units and 2.2 million square feet of non-residential uses. However, in order to support the residential units, the high-density residential land uses would be provided in relatively larger blocks surrounding the business park land uses and the single-family land use acreage would be reduced compared to that proposed under the WRTP Specific Plan.

Ability of Alternative to Meet Project Objectives

This alternative would meet land use requirements as defined by the 2035 General Plan, but may not as effectively meet the project objectives developed as guiding principles through the City's detailed planning process for the overarching vision of development within the Specific Plan Area. The business park may still accommodate and attract innovation and technology-related industry. However, it may not provide social gathering spaces for employees, residents, and visitors to connect, recreate, and relax in proximity to their place or work and residence. In addition, the housing mix would include a greater proportion of high-density residential, provided in larger blocks surrounding the business park land uses, which may result in less "seamless transitions," as sought by the project objectives. Finally, the circulation plan could still accommodate well-designed complete streets and pedestrian and bicycle facilities; however, relatively fewer daily needs would be met through walking, bicycling, and transit since commercial uses would be focused in the southwestern edge of the Specific Plan Area and oriented to motorists, and since the mobility hub proposed as a part of the WRTP Specific Plan is not a component of this alternative.

4.4.2. PROJECT ALTERNATIVES

4.4.2.1. ALTERNATIVE 3: REDUCED MOBILE-SOURCE EMISSIONS AND PROXIMITY BETWEEN EMISSIONS SOURCES AND SENSITIVE LAND USES

Alternative 3 would have similar overall amount of development as the proposed Specific Plan, but would shift the land use mix so that destination land uses are balanced and mixed within residential areas to facilitate pedestrian and bicycle access for future residents.

This alternative would adjust the layout, mix, and density of land uses in order to allow a greater number of trips within the Specific Plan Area to occur on foot, by bicycle, or via transit, as well as minimize industrial and warehouse uses in proximity to residential land uses.

This alternative would have a greater proportion of relatively compact housing types focused around the central core (Village Center) of the Specific Plan Area, would remove inclusion of the highway commercial land use designation and would also disperse the retail and commercial services throughout the planned residential neighborhoods so that almost all future residents would be within walking distance (approximately ¼ mile) of these destinations, thereby increasing non-vehicular trips and reducing vehicle trip distances. In addition, the research and technology park land uses would be primarily developed with office uses (which could still accommodate research and technology-related uses, as well as other office-based uses). Permitted land uses for warehousing, storage, distribution, and logistics, agricultural or seed processing, packaging and manufacturing, agricultural production, and brewery/distillery, all of which are likely to attract diesel-powered truck trips, would be limited to the southwestern and southern extremities of the Specific Plan Area, farthest from planned open space and residential land uses. The light and medium industrial uses would remain in the southern extremity of the Specific Plan Area, since these uses have relatively low employment densities and have greater potential to include substantial on-site emissions sources, but office uses, like retail and commercial services, would be located near the residential areas.

Having increased housing density around the central core area could encourage a greater portion of trips on foot and via bicycle from residential areas. The presence of complementary commercial and retail land uses in greater proximity to the residential areas of the Specific Plan Area would make them relatively more accessible by foot or

bike. Limiting high truck trip generating land uses, such as warehousing, storage, distribution, and logistics, and agricultural or seed processing, packaging and manufacturing, to the southern extremity of the Specific Plan Area would minimize the potential for the presence of substantial emissions sources in proximity to sensitive receptors.

The intent of this alternative is to decrease single-passenger vehicle use and related criteria air pollutant emissions and establish a greater level of separation between residential and non-residential emissions sources, and reduce associated adverse physical environmental effects.

Ability of Alternative to Meet Project Objectives

This alternative would meet the majority of the basic project objectives, providing for the new technology-focused employment center, supported by a mixed-use town center and with nearby housing. However, dispersion of the retail and commercial services in the proposed residential neighborhoods would reduce the service opportunities in the central village hub to serve the day-to-day needs of businesses, their clients, and their employees. Similarly, distributing retail and commercial services throughout the residential areas rather than within and around the Village Center would diminish the role of the proposed Village Center as the central gathering for surrounding businesses and related employees. Similarly, the lack of highway commercial would limit the range of uses to support day-to-day needs of businesses, their clients, and their employees in favor of commercial uses that are more directed to serving the needs of Woodland residents. The increased housing density would shift the range of housing options for the Research and Technology Park employees to live and work close by and "move up" within the same neighborhood as families grow; while high- and low-density housing would be similar to the Specific Plan, medium-density residential development would be more limited under this Alternative. Finally, shifting the research and technology park to more office-based employment and limiting some of the permitted uses to the southern portion of the Specific Plan Area could potentially segregate related uses if, for example, future employers within the Specific Plan require both office operations, as well as storage, distribution, or logistics, that would need to be located in different parts of the Specific Plan Area. This could conflict with the project objective to facilitate "[f]lexibility in design and implementation…allowing businesses to respond to market demand through phasing of construction and the ability to offer a variety of building types and sizes."

4.4.2.2. Alternative 4: Utilize Open Space as an Environmental Buffer

This alternative would provide an alternative site design. Residential uses would be located at least 500 feet from SR 113 to provide additional buffer distance between sensitive receptors and mobile sources of emissions along SR 113. Open space or vegetated buffers would be implemented between potential sources of substantial air pollutant emissions and sensitive receptors, in accordance with recommendations of the California Air Resources Board (ARB) *Air Quality and Land Use Handbook: A Community Health Perspective* (2005). Urban development of land uses, other than open space, along the Urban Limit Line would be set back at least 300 feet (500 feet if residential) to provide for an agricultural buffer in compliance with General Plan Policy 7.C.5. Passive open space would be designated at biologically sensitive areas to minimize impacts to biological features and provide additional buffer to sensitive habitat types from surrounding urban development, including a 165-foot setback from the elderberry shrub (valley elderberry longhorn beetle habitat) located along the western boundary the Specific Plan Area and a 300-foot buffer from the northern boundary of the Specific Plan Area to avoid burrowing owl complexes just outside this boundary. The use of shade trees, or similar vegetation that would support local wildlife while also providing air quality and noise mitigating benefits, would be maximized throughout the circulation network and between different land uses; existing native oak trees, such as the row of valley oak trees along the southwestern half of the

Specific Plan Area, would also be maintained. Housing densities would be increased slightly, and retail and commercial space may be reduced, so that the overall number of dwelling units is maintained, while the amount of open space is increased.

The intent of this alternative is to maintain the desired buffer distance between the built environment and surrounding agricultural lands and minimize adverse impacts to biological resources, while also decreasing exposure to adverse air pollutant emissions and noise conditions for future users of the Specific Plan Area.

Ability of Alternative to Meet Project Objectives

This alternative would meet the majority of the basic project objectives, however, as an envisioned technology hub to serve research and technology companies, the increase in passive open space would not serve the anticipated occupants as effectively as the centralized active outdoor gathering spaces envisioned as a part of the proposed Specific Plan. In addition, the increased housing density would reduce the range of housing options for the Research and Technology Park employees to live and work close by and "move up" within the same neighborhood as families grow.

4.5. ALTERNATIVES ANALYSIS

4.5.1. AESTHETICS AND VISUAL RESOURCES

Alternative 1 – No-Project (No Development) Alternative

Alternative 1 envisions continued agricultural production within the Specific Plan Area and off-site proposed South Regional Pond area. With the continuation of existing agricultural uses, it is likely that no visual change would occur, or that any future activities permitted under the zoning and designation such as the construction of minor outbuildings or farming facilities or changes in agricultural operations would not entail a significant change in the visual character of the project site. No damage to scenic vistas or scenic resources within a state scenic highway would occur. There would be no additional sources of light or glare. *[Reduced]*

Alternative 2 – No-Project (Development) Alternative

Alternative 2 envisions that development would occur as directed by the 2035 General Plan for SP-1A, but not as designed under the WRTP Specific Plan. As with implementation of the proposed WRTP Specific Plan, farmland within the WRTP Specific Plan Area and off-site improvement areas would be converted to urban land uses from implementation of Alternative 2. Development under this alternative would also adhere to policies consistent with the 2035 General Plan policies developed to limit the impact on visual character and quality from development within the City's Planning Area. Development within SP-1A under this alternative would include larger parcels in the business park area with two- to three-story buildings and large parking lots to serve businesses, higher-intensity development around the highway interchange, increased highway commercial acreage to serve through-traffic in the area. The high-density residential land uses would be provided in relatively larger blocks surrounding the business park land uses and the single-family acreage would be reduced compared to that proposed in the WRTP Specific Plan. Similar to the proposed WRTP Specific Plan, this No-Project (Development) Alternative would result in a substantial change to the existing visual character from agricultural cropland to a mix of urban land uses, and would still add to the overall amount of lighting and glare in the City. However, the shift in the land use mix under this Alternative compared to the WRTP Specific Plan may also result in increased roadway signage in support of

the business park and highway commercial land uses, larger parking lots to support business park land uses and associated parking and circulation, and reduced low-density residential areas; these changes could ultimately somewhat reduce continuity in scale, form, or overall visual character between SP-1A and the adjacent Spring Lake Specific Plan Area and increased sources of light and glare compared to development under the proposed WRTP Specific Plan. *[Increased]*

Alternative 3 – Reduced Mobile Source Emissions and Proximity between Emissions Sources and Sensitive Land Uses

Alternative 3 would include similar development as the proposed WRTP Specific Plan. As with implementation of the proposed WRTP Specific Plan, farmland within and immediately south (for the proposed South Regional Pond) of the WRTP Specific Plan Area would be converted to urban land uses from implementation of Alternative 3. However, the WRTP Specific Plan Area and the off-site improvement areas are of moderate visual quality and do not represent scenic vistas. While the specific density and mix of land uses may vary somewhat under Alternative 3 compared to the proposed WRTP Specific Plan, and the development of structures and new lighting throughout the WRTP Specific Plan Area would still generate new sources of light and glare. As such, the type of aesthetics impacts would be similar to those of the proposed WRTP Specific Plan. Alternative 3 would alter existing views of, and from, the WRTP Specific Plan Area. Although development under Alternative 3 would also adhere to the WRTP Specific Plan Design Standards and Design Guidelines contained in Chapter 3 of the proposed WRTP Specific Plan, development under Alternative 3 would still result in conversion of agricultural land to urban environment, which, like the proposed WRTP Specific Plan, would substantially alter the visual character of the WRTP Specific Plan Area from both public and private viewing locations. In addition, just as with the proposed WRTP Specific Plan, Alternative 3 would include the construction of new buildings with reflective surfaces that could cause daytime glare and would create new sources of additional nighttime lighting. Alternative 3 would still include the WRTP Specific Plan Design Standards and Design Guidelines contained in Chapter 3 of the proposed WRTP Specific Plan, that further detail requirements within various land use designations to avoid light spillover and glare into surrounding areas and reduce night sky pollution from new light sources. However, as with the proposed WRTP Specific Plan, implementation of Alternative 3 would still add to the overall amount of lighting and glare in the City, specifically within and around the WRTP Specific Plan Area. *[Similar]*

Alternative 4 – Utilize Open Space to Serve as Environmental Buffer

Alternative 4 would include similar development as the proposed WRTP Specific Plan, but arranged differently within the WRTP Specific Plan Area and with increased open space along the northern, western, and southern boundaries of the WRTP Specific Plan Area, and maintaining the planned greenbelt along Harry Lorenzo Avenue. This will increase the distance between existing viewpoints and new sources of light and glare from new development within the WRTP Specific Plan Area. However, the WRTP Specific Plan Area would still be converted from cultivated agricultural land to urban development, simply with additional open space around and throughout the WRTP Specific Plan Area. Development under Alternative 4 would also be subject to the same standards as the proposed Specific Plan and Alternative 3, including the City's *Engineering Standards: Design Standards, Standard Details and Construction Specifications* (City of Woodland 2016a) and the Design Standards and Design Guidelines contained in Chapter 3 of the proposed WRTP Specific Plan. As such, the type and extent of aesthetics impacts would be similar to those of the proposed WRTP Specific Plan. Development under Alternative 4 would still result in conversion of agricultural land to urban environment, which, like the proposed WRTP Specific Plan, would substantially alter the visual character of the WRTP Specific Plan Area from both public and private viewing

locations. The additional use of open space around and throughout the WRTP Specific Plan Area under Alternative 4 would reduce the potential for spillover of new sources of lighting and glare on adjacent properties. However, like the proposed WRTP Specific Plan, Alternative 4 would alter existing views of, and from the WRTP Specific Plan Area, and would substantially alter the visual character of the WRTP Specific Plan Area from both public and private viewing locations. In addition, just as with the proposed WRTP Specific Plan, Alternative 4 would bring sources of nighttime lighting and could construct facilities with reflective surfaces that could cause glare. This would increase ambient nighttime lighting and daytime glare in the vicinity of the WRTP Specific Plan Area, similar to the proposed WRTP Specific Plan. However, with the preservation of additional open space and existing oak trees, the impact would be reduced compared to the proposed WRTP Specific Plan. *[Reduced]*

4.5.2. AGRICULTURE AND FORESTRY RESOURCES

Alternative 1 – No-Project (No Development) Alternative

Based on analysis of the Yolo County Important Farmland map (DOC 2016), approximately 346 acres of Prime Farmland exists within the Specific Plan Area and the approximately 4-acre proposed South Regional Pond area is also considered Prime Farmland. This land within the Specific Plan Area would be directly and permanently converted to urban uses and the approximately four acres south of CR 25A and west of the Specific Plan Area would be directly and permanently converted to a detention basin. Alternative 1 envisions continued agricultural production within the Specific Plan Area and off-site proposed South Regional Pond area. There would be no loss of farmland or conversion of agricultural land to non-agricultural urban uses, and no conflict with existing on-site or off-site agricultural operations. *[Reduced]*

Alternative 2 – No-Project (Development) Alternative

Alternative 2 would involve approximately the same amount of development as the proposed WRTP Specific Plan. Similar to the proposed WRTP Specific Plan, implementation of Alternative 2 would permanently convert an estimated 350 acres of agricultural farmland, including Prime Farmland, to nonagricultural uses. In addition, as with the proposed WRTP Specific Plan, Alternative 2 would locate residential uses adjacent to existing on-site and off-site agricultural lands, resulting in potential conflicts between agricultural and urban land uses. *[Similar]*

Alternative 3 – Reduced Mobile Source Emissions and Proximity between Emissions Sources and Sensitive Land Uses

Alternative 3 would involve approximately the same amount of development as the proposed WRTP Specific Plan. Similar to the proposed WRTP Specific Plan, implementation of Alternative 3 would permanently convert an estimated 350 acres of agricultural farmland, including Prime Farmland, to nonagricultural uses. In addition, as with the proposed Specific Plan, Alternative 3 would locate residential uses adjacent to existing on-site and off-site agricultural lands, resulting in potential conflicts between agricultural and urban land uses. *[Similar]*

Alternative 4 – Utilize Open Space to Serve as Environmental Buffer

Alternative 4 would include similar development as the proposed WRTP Specific Plan, but arranged differently within the WRTP Specific Plan Area. Implementation of Alternative 4 would still permanently convert an estimated 350 acres of agricultural farmland, including Prime Farmland, to nonagricultural uses. Unlike the proposed Specific Plan, Alternative 4 would preclude non-residential development within 300 feet, and residential development within

500 feet, of the Urban Limit Line. This buffer distance would exceed the requirements set under General Plan Policy 7.C.5, and would support increased separation between agricultural pesticide application and future users of the WRTP Specific Plan Area, as recommended by the Yolo County Agricultural Commissioner depending on the form of pesticide application at adjacent agricultural lands. This would reduce the potential for conflict with existing off-site agricultural operations. However, conflicts could still occur between agricultural and urban land uses, particularly in areas where the development edge is adjacent to ongoing agricultural operations on undeveloped portions of the WRTP Specific Plan Area. *[Reduced]*

4.5.3. AIR QUALITY

Alternative 1 – No-Project (No Development) Alternative

Under Alternative 1, the Specific Plan Area would continue to be used for agricultural uses and the off-site South Regional Pond would not be constructed. Existing air pollutant emissions associated with agricultural activities would still occur under Alternative 1. However, since no urban construction or development would occur, the amount of construction-related air pollutants that would be generated under Alternative 1 would be substantially reduced as compared to the proposed WRTP Specific Plan. Operational generation of criteria air pollutants and precursors, as well as exposure to toxic air contaminants, would also be reduced compared to the proposed WRTP Specific Plan. [*Reduced*]

Alternative 2 – No-Project (Development) Alternative

Alternative 2 would involve approximately the same amount of development as the proposed WRTP Specific Plan, but with a different mix and layout. As with the proposed WRTP Specific Plan, Alternative 2 would involve the temporary generation of criteria air pollutants and precursors resulting from construction activities throughout the Specific Plan Area and off-site improvement areas. Constructing Alternative 2 could also expose sensitive receptors to substantial pollutant concentrations during construction, as well as during operations due to the creation of new sources such as at commercial truck docking areas. Overall, short-term construction-related impacts and the potential for exposure to substantial localized pollutant concentrations would be similar compared to the proposed WRTP Specific Plan.

Under Alternative 2, relatively fewer daily needs would be met through walking, bicycling, and transit since commercial uses would be focused in the southwestern edge of the Specific Plan Area and oriented to motorists, and since the mobility hub proposed as a part of the WRTP Specific Plan would not be a component of this alternative. Overall, the shift in development within the Specific Plan Area would increase air pollutant emissions from land use development under Alternative 2 compared to that of the proposed WRTP Specific Plan. *[Increased]*

Alternative 3 – Reduced Mobile Source Emissions and Proximity between Emissions Sources and Sensitive Land Uses

As with the proposed WRTP Specific Plan, Alternative 3 would involve the temporary generation of criteria air pollutants and precursors resulting from construction activities throughout the WRTP Specific Plan Area and off-site improvement areas. Constructing Alternative 3 could also expose sensitive receptors to substantial pollutant concentrations during construction as well as during operations due to the creation of new stationary emissions sources and potential concentrated mobile sources, such as at commercial truck docking areas. Overall, short-term

construction-related impacts and the potential for exposure to substantial localized pollutant concentrations would be similar compared to the proposed WRTP Specific Plan.

Development under Alternative 3 would include a greater proportion relatively compact housing types focused around the central core (Village Center) of the WRTP Specific Plan Area, would remove inclusion of the highway commercial land use designation and would also disperse the retail and commercial services throughout the planned residential neighborhoods, with the intent to increase non-vehicular trips and reducing vehicle trip distances. In addition, the research and technology park land uses would be primarily developed with office uses (which could still accommodate research and technology-related uses, as well as other office-based uses). Permitted land uses for warehousing, storage, distribution, and logistics, agricultural or seed processing, packaging and manufacturing, agricultural production, brewery/distillery, and general light and medium industrial uses, all of which are likely to attract diesel-powered truck trips, would be limited to the southwestern and southern extremities of the WRTP Specific Plan Area, farthest from planned open space and residential land uses; these uses have greater potential to include substantial on-site emissions sources. Having increased housing density around the central core area, and presence of complementary commercial and retail land uses in greater proximity to the residential areas of the WRTP Specific Plan Area, could encourage a greater portion of trips on foot and via bicycle. Limiting high truck trip generating land uses and land uses that typically include substantial pollutant-generating sources to the southern extremity of the WRTP Specific Plan Area would minimize the potential for the presence of substantial emissions sources in proximity to sensitive receptors.

Overall, the shift in development within the WRTP Specific Plan Area would reduce air pollutant emissions from land use development under Alternative 3 compared to that of the proposed WRTP Specific Plan. *[Reduced]*

Alternative 4 – Utilize Open Space to Serve as Environmental Buffer

Alternative 4 would include the same type of development as the proposed WRTP Specific Plan, but with a slightly smaller development footprint, due to increased open space. This increase in open space would reduce construction-related emissions under Alternative 4 compared to the proposed WRTP Specific Plan. However, because potential future on-site receptors are unknown at this time, it is reasonable to assume that construction activities associated with buildout under Alternative 4 could still expose sensitive receptors to substantial pollutant concentrations during construction. As with implementation of the proposed WRTP Specific Plan, construction-related emissions would be substantially reduced with implementation of Mitigation Measures 3.3-2a, 3.3-2b, and 3.3-2c.

As it relates to long-term operational emissions, the use of increased open space as an environmental buffer around future on-site sensitive receptors, such as along the western perimeter of the WRTP Specific Plan Area adjacent to State Route 113, would reduce potential health risks associated with localized air pollutant concentrations and nearby sensitive receptors. The increased use of open space and vegetation can help to disperse localized air pollutants and reduce exposure of sensitive receptors. As with the proposed WRTP Specific Plan, development under Alternative 4 would include commercial and light-industrial land uses, which are more likely to generate substantial toxic air contaminant (TACs) emissions from stationary and manufacturing processes. Land use and development under Alternative 4 would be subject to conformance with the permitted uses, the site development regulations, and development standards and design guidelines as outlined in Chapters 2 and 3 of the proposed WRTP Specific Plan. As with the proposed WRTP Specific Plan, adherence to the WRTP Specific Plan Design Standards and Design Guidelines would reduce the potential for exposure of sensitive receptors to substantial pollutant concentrations. Unlike the proposed WRTP Specific Plan, Alternative 4 would specifically implement

buffer distances between sensitive land uses and sources of TACs, as provided by the CARB *Air Quality and Land Use Handbook: A Community Health Perspective* (2005). In addition, the increased use of open space between substantial pollutant sources and sensitive receptors and adherence to CARB-recommended distances between TAC sources and sensitive receptors would further reduce potential impacts under Alternative 4 as compared to the proposed WRTP Specific Plan. However, due to uncertainty associated with specific development within the WRTP Specific Plan Area, it is still possible that development of commercial or light-industrial land uses under Alternative 4 could generate substantial TAC emissions at a level that could impact nearby sensitive receptors. The same mitigation measures available to the WRTP Specific Plan would also be available to Alternative 4, including Mitigation Measure 3.3-2d to reduce operational emissions, and Mitigation Measures 3.3-3b and 3.3-3c to further reduce the risk of exposure to substantial pollutant concentrations.

Overall, Alternative 4 would be anticipated to reduce emissions generated during construction and operational phases, and reduce proximity between sensitive receptors and substantial emissions sources compared to the proposed WRTP Specific Plan. *[Reduced]*

4.5.4. BIOLOGICAL RESOURCES

Alternative 1 – No-Project Alternative

Because no development would occur under Alternative 1, no impacts to wildlife and their habitats would occur. The users of the land would be required to comply with all applicable State and federal regulations that prohibit impacts to special-status animals and their habitats. *[Reduced]*

Alternative 2 – No-Project (Development) Alternative

Alternative 2 would entail the same amount of development as the proposed WRTP Specific Plan, but with a different mix, layout, and density. Similar to the proposed WRTP Specific Plan, Alternative 2 could potentially result in the loss of suitable nesting and foraging habitat for Swainson's hawk, white-tailed kite, burrowing owl, and other raptors; loss and disturbance of potential nesting and foraging habitat for common migratory birds; removal of elderberry shrub(s) that serve as potential habitat for valley elderberry longhorn beetle and larvae; loss of existing structures, orchard trees, and other trees that may support breeding pallid bats or western red bats; loss and degradation of State or federally protected wetlands. Similar to the proposed WRTP Specific Plan, mitigation measures would be required to reduce or off-set potential impacts in accordance with the Yolo Habitat Conservation Plan/Natural Community Conservation Plan and State and federal regulations. Impacts related to the loss and disturbance of forging and nesting habitat for special-status wildlife, and to the loss and degradation of State or federally protected wetlands, would be similar in type and extent as under the proposed WRTP Specific Plan since the area envisioned for development would be the same. *[Similar]*

Alternative 3 – Reduced Mobile Source Emissions and Proximity between Emissions Sources and Sensitive Land Uses

Alternative 3 would include the same amount of development as the proposed WRTP Specific Plan. Similar to the proposed WRTP Specific Plan, Alternative 3 could potentially result in the loss of suitable nesting and foraging habitat for Swainson's hawk, white-tailed kite, burrowing owl, and other raptors; loss and disturbance of potential nesting and foraging habitat for common migratory birds; removal of elderberry shrub(s) that serve as potential habitat for valley elderberry longhorn beetle and larvae; loss of existing structures, orchard trees, and other trees

that may support breeding pallid bats or western red bats; loss and degradation of State or federally protected wetlands. As with implementation of the proposed WRTP Specific Plan, Mitigation Measures 3.4-1a, 3.4-1b, 3.4-1c, and 3.4-2a would reduce significant impacts on raptors and other birds to a less-than-significant level because these measures would ensure that these species are not disturbed during nesting and would also ensure that Swainson's hawk foraging habitat would be preserved at the appropriate ratio of habitat value lost, consistent with the conservation strategy of the Yolo Habitat Conservation Plan/Natural Community Conservation Plan. Implementing Mitigation Measure 3.4-3 would reduce potentially significant impacts on valley elderberry longhorn beetle to a less-than-significant level because all elderberry shrubs would be mapped and impacts would be avoided and, if impacts cannot be avoided, compensatory mitigation will be required. Implementation of Mitigation Measure 3.4-4 would reduce potentially significant impacts on bat roosts and special status bat species to a less-than-significant level because it would ensure that project construction would not result in bat mortality or abandonment and loss of young. Finally, implementation of Mitigation Measure 3.3-5 would reduce potentially significant impacts on potential jurisdictional water features to a less-than-significant level because implementation of the BMPs, and permit conditions, and mitigation requirements will avoid, minimize, and mitigate for impacts on jurisdictional waters. Impacts related to the loss and disturbance of forging and nesting habitat for special-status wildlife, and to the loss and degradation of State or federally protected wetlands, would be similar in type and extent as under the proposed WRTP Specific Plan since the area envisioned for development would be the same. *[Similar]*

Alternative 4 – Utilize Open Space to Serve as Environmental Buffer

Alternative 4 include a similar mix of land uses as the proposed WRTP Specific Plan, but with an alternative site design that would maintain certain biologically sensitive vegetated areas and increase the use of open space throughout the WRTP Specific Plan Area. Passive open space would be designated at biologically sensitive areas to minimize impacts to biological features and provide additional buffer to sensitive habitat types from surrounding urban development, including a 165-foot setback from the identified elderberry shrub (valley elderberry longhorn beetle habitat) located along the western boundary the WRTP Specific Plan Area and a 300-foot buffer from the northern boundary of the Specific Plan Area to avoid burrowing owl complexes just outside this boundary. The use of shade trees, or similar vegetation would be maximized throughout the circulation network and between different land uses. The row of existing native valley oak trees along the southwestern half of the WRTP Specific Plan Area would be maintained. The increased open space, maintenance of existing trees, and avoidance of other existing known biologically sensitive habitat as described above would reduce impacts to biologically sensitive wildlife and habitat as compared to the proposed WRTP Specific Plan. However, development within the WRTP Specific Plan Area may not be able to avoid all potentially sensitive habitat, as 306 of the 350-acre WRTP Specific Plan Area is cultivated land that may provide suitable foraging habitat for Swainson's hawk, white-tailed kite, and burrowing owl. In addition, construction activities throughout the WRTP Specific Plan Area could occur where there are unknown elderberry shrubs that serve as potential habitat for valley elderberry longhorn beetle and larvae, or in proximity to existing trees that may serve as nesting habitat and the nearby activity could disturb potential nesting activity. Conversion of the cultivated land within the WRTP Specific Plan Area could still potentially result in the loss or disturbance of suitable foraging and nesting habitat for Swainson's hawk, white-tailed kite, burrowing owl, and other raptors; loss and disturbance of potential nesting and foraging habitat for common migratory birds; removal of elderberry shrub; loss or disturbance of existing structures, orchard trees and other trees that may support breeding pallid bats or western red bats; loss and degradation of State or federally protected wetlands. As with implementation of the proposed WRTP Specific Plan and Alternative 3, Mitigation Measures 3.4-1a, 3.4-1b, 3.4-1c, and 3.4-2a would reduce significant impacts on raptors and other birds to a less-than-significant level because these measures would ensure that these species are not disturbed during nesting and would also ensure that

Swainson's hawk foraging habitat would be preserved at the appropriate ratio of habitat value lost, consistent with the conservation strategy of the Yolo Habitat Conservation Plan/Natural Community Conservation Plan. Implementing Mitigation Measure 3.4-3 would reduce potentially significant impacts on valley elderberry longhorn beetle to a less-than-significant level because all elderberry shrubs would be mapped and impacts would be avoided and if impacts cannot be avoided, compensatory mitigation will be required. Implementation of Mitigation Measure 3.4-4 would reduce potentially significant impacts on bat roosts and special status bat species to a less-than-significant level because it would ensure that project construction would not result in bat mortality or abandonment and loss of young. Finally, implementation of Mitigation Measure 3.3-5 would reduce potentially significant impacts on potential jurisdictional water features to a less-than-significant level because implementation of the BMPs, and permit conditions, and mitigation requirements will avoid, minimize, and mitigate for impacts on jurisdictional waters. Impacts related to the loss and disturbance of forging and nesting habitat for special-status wildlife, and to the loss and degradation of State or federally protected wetlands, would be similar in type as under the proposed WRTP Specific Plan, but would be reduced since the area envisioned for development would be reduced and specifically designed to avoid known biologically sensitive wildlife and habitat to the extent feasible. *[Reduced]*

4.5.5. Climate Change, Greenhouse Gas Emissions, and Energy

Alternative 1 – No-Project Alternative

Under Alternative 1, the Specific Plan Area would continue to be used for agricultural uses and the off-site South Regional Pond would not be constructed. Existing greenhouse gas emissions and energy consumption associated with agricultural activities would still occur under Alternative 1. However, since no urban construction or development would occur, the amount of construction-related greenhouse gas emissions that would be generated and energy that would be consumed under Alternative 1 would be substantially reduced as compared to the proposed WRTP Specific Plan. Operational generation of greenhouse gas emissions and energy consumption would also be reduced compared to the proposed WRTP Specific Plan. *[Reduced]*

Alternative 2 – No-Project (Development) Alternative

Alternative 2 would involve approximately the same amount of development as the proposed WRTP Specific Plan. As with the proposed WRTP Specific Plan, Alternative 2 would involve the temporary generation of greenhouse gas emissions and use of fuel as a result of construction activities throughout the Specific Plan Area and off-site improvement areas.

Operations under Alternative 2 would provide for relatively fewer daily needs would be met through walking, bicycling, and transit since commercial uses would be focused in the southwestern edge of the Specific Plan Area and oriented to motorists, and since the mobility hub proposed as a part of the WRTP Specific Plan would not be a component of this alternative, thereby increasing greenhouse gas emissions and fuel consumption associated with vehicle use, which is the biggest source of emissions for development of the Specific Plan Area and the City as a whole. In addition, this Alternative may not include the same emphasis on energy conservation and sustainability as emphasized in the guiding principles of the proposed WRTP Specific Plan. Overall, the shift in development within the Specific Plan Area would increase greenhouse gas emissions and energy consumption from land use development under Alternative 2 compared to that of the proposed WRTP Specific Plan. *[Increased]*

Alternative 3 – Reduced Mobile Source Emissions and Proximity between Emissions Sources and Sensitive Land Uses

As with the proposed WRTP Specific Plan, Alternative 3 would involve the generation of greenhouse gas emissions and energy consumption from temporary construction activities throughout the Specific Plan Area and off-site improvement areas. Alternative 3 would have similar overall amount of development as the proposed Specific Plan. As such, the construction-related impacts associated with greenhouse gas emissions and energy use would be similar to those under the proposed WRTP Specific Plan.

As it relates to long-term operational emissions and energy consumption, Alternative 3 would have a greater proportion of relatively compact housing types focused around the central core (Village Center) of the WRTP Specific Plan Area, would remove inclusion of the highway commercial land use designation, and would also disperse the retail and commercial services throughout the planned residential neighborhoods so that almost all future residents would be within walking distance (approximately ¼ mile) of these destinations; the land use mix and layout for this Alternative would reduce dependence on passenger vehicles, increase non-vehicular trips, and reduce vehicle trip distances, thereby reducing greenhouse gas emissions and fuel consumption from mobile sources compared to the proposed WRTP Specific Plan. Overall, the shift in development within the WRTP Specific Plan Area would reduce greenhouse emissions and fuel use from land use development under Alternative 3 compared to that of the proposed WRTP Specific Plan. *[Reduced]*

Alternative 4 – Utilize Open Space to Serve as Environmental Buffer

Alternative 4 would include the same type of development as the proposed WRTP Specific Plan, but with a slightly smaller development footprint than the proposed WRTP Specific Plan due to increased open space. This increase in open space would reduce construction-related greenhouse gas emissions and energy use under Alternative 4. As it relates to long-term operational emissions and energy consumption, similar to Alternative 3, the additional open space under Alternative 4 would generate minimal greenhouse gas emissions and consume minimal energy compared to equivalent developed land uses under the proposed WRTP Specific Plan, and higher-density development typically results in increased energy efficiencies. Alternative 3 would thereby reduce the associated direct and indirect operational air pollutant emissions within the Specific Plan Area. *[Reduced]*

4.5.6. Cultural and Tribal Cultural Resources

Alternative 1 – No-Project Alternative

Although investigations of the proposed WRTP Specific Plan Area did not identify known significant cultural resources present in the WRTP Specific Plan Area, the broader area does have an elevated sensitivity for archaeological resources, due to the long-standing Native American inhabitation and past historical agricultural and settlement uses. It is reasonable to assume that the area may contain resources not yet identified but that would qualify as archaeological resources under CEQA. Continued agricultural uses, consistent with current land use, on the existing parcels would not meet the definition of a "project" under CEQA and, therefore, a mitigation monitoring plan would not be implemented. However, all property owners would still be required to comply with Section 7050.5 of the Health and Safety Code, which governs the treatment of human remains. In addition, Section 5097.98 of the California Public Resources Code prevents any person from obtaining or possessing Native American artifacts or human remains taken from a grave or cairn.

Because Alternative 1 would entail continued agricultural uses, a very small amount of earth-moving activities would occur as compared to the proposed WRTP Specific Plan. Therefore, the potential for adverse impacts to cultural and tribal cultural resources would be substantially lower. *[Reduced]*

Alternative 2 – No-Project (Development) Alternative

Alternative 2 would entail the same amount of ground disturbance as the proposed WRTP Specific Plan and would be subject to the same regulations protecting cultural resources. Therefore, the potential for adverse impacts to cultural and tribal cultural resources would be similar. *[Similar]*

Alternative 3 – Reduced Mobile Source Emissions and Proximity between Emissions Sources and Sensitive Land Uses

Alternative 3 would entail the same amount of ground disturbance as the proposed WRTP Specific Plan and would be subject to the same regulations protecting cultural resources. Therefore, the potential for adverse impacts to cultural and tribal cultural resources would be similar. *[Similar]*

Alternative 4 – Utilize Open Space to Serve as Environmental Buffer

Alternative 4 would entail similar development and related ground disturbance as the proposed WRTP Specific Plan, but with preservation of biologically sensitive habitat and increased open space. In addition, ground disturbing activities under Alternative 4 would be subject to the same regulations protecting cultural resources as under the proposed WRTP Specific Plan. However, the preservation of existing sensitive biological habitat and increased open space acreage under Alternative 4 would result in less earthmoving activities and therefore reduced potential for accidental disturbance of unknown cultural and tribal cultural resources compared to the proposed WRTP Specific Plan. *[Reduced]*

4.5.7. Geology, Soils, Minerals, and Paleontological Resources

Alternative 1 – No-Project Alternative

Alternative 1 would entail continued agricultural uses. Thus, no site-specific geotechnical reports or grading and erosion control plans would be prepared. A records search indicated that no paleontological resources have been recorded from the Specific Plan Area. Because the southern portion of the Specific Plan Area is composed of a mixture of the Riverbank and Modesto Formations, a paleontologically sensitive rock formation, fossils may be present under the ground surface in this area. Because Alternative 1 would entail continued agricultural, a very small amount of earth-moving activities would occur as compared to the proposed WRTP Specific Plan. Furthermore, ground disturbance associated with continued agricultural activities would not be deep enough to affect any undiscovered subsurface paleontological resources. Therefore, the potential for adverse impacts to paleontological resources would be substantially lower compared to the proposed WRTP Specific Plan. [*Reduced*]

Alternative 2 – No-Project (Development) Alternative

Alternative 2 would result in a similar amount of development as the proposed WRTP Specific Plan. Although the layout and specific land uses would be different under Alternative 2 compared to the proposed WRTP Specific Plan, the area of ground disturbing activities would be similar and therefore the impacts would be similar. *[Similar]*

Alternative 3 – Reduced Mobile Source Emissions and Proximity between Emissions Sources and Sensitive Land Uses

Alternative 3 would result in a similar amount of development as the proposed WRTP Specific Plan. Although the layout and specific land uses would be different under Alternative 3 compared to the proposed WRTP Specific Plan, the area of ground disturbing activities would be similar. The same mitigation measures identified for the proposed WRTP Specific Plan would also be available to Alternative 3, such as incorporating recommendations from site-specific geotechnical reports, grading and erosion control plans, and preservation of paleontological resources if encountered during construction. *[Similar]*

Alternative 4 – Utilize Open Space to Serve as Environmental Buffer

Alternative 4 would entail similar development and related ground disturbance as the proposed WRTP Specific Plan, but with preservation of biologically sensitive habitat and increased open space. In addition, the same mitigation measures identified for the proposed WRTP Specific Plan would also be available to Alternative 4, such as incorporating recommendations from site-specific geotechnical reports, grading and erosion control plans, and preservation of paleontological resources if encountered during construction. However, the preservation of existing sensitive biological habitat and increased open space acreage under Alternative 4 would result in less earthmoving activities and therefore reduced potential for accidental disturbance of unknown paleontological resources compared to the WRTP Specific Plan. *[Reduced]*

4.5.8. HAZARDS AND HAZARDOUS MATERIALS

Alternative 1 – No-Project Alternative

Since Alternative 1 would entail the continuation of existing agricultural land uses, the potential for accidental spills of hazardous materials associated with construction activities or construction workers exposure to hazardous materials would be greatly reduced.

Based on the Phase II screening-level pesticide assessment for soils in the Specific Plan area and off-site proposed South Regional Pond site, residual metal (arsenic) and agricultural pesticides in the off-site improvement areas would not represent a human health or environmental hazard. Ongoing pesticide use could be expected on-site and on the adjacent agricultural lands. Agricultural chemical use represents a potential source of environmental contamination that could pose a human health and environmental hazard during future activities. However, agricultural operations would be required to follow applicable local, State, and federal regulations for the use, storage, and transport of hazardous materials, as well as comply with appropriate Yolo County Agricultural Weights and Measures Department regulations for environmental protections. Therefore, the potential impacts associated with hazards and hazardous materials under Alternative 1 would be reduced relative to the WRTP Specific Plan. *[Reduced]*

Alternative 2 – No-Project (Development) Alternative

Alternative 2 would result in a similar amount of development as the WRTP Specific Plan and in the same location as the WRTP Specific Plan. Although the layout and specific land uses would be different under Alternative 2, the associated potential hazards and use of hazardous materials would be the same. New land uses would require the routine use, transport, and disposal of hazardous material and waste and may increase exposure to risk of hazards.

Construction activities may also generate hazardous materials and waste, such as fuels and oils from construction equipment and vehicles. Workers and members of the public could be exposed to hazards during construction activities from accidental releases of hazardous materials. However, like the proposed WRTP Specific Plan, Alternative 2 would be subject to the federal, State, and local requirements associated with the use, transport and disposal of hazardous materials and waste. Therefore, the potential for impacts related to hazards and hazardous materials would be similar under Alternative 2 as to the proposed WRTP Specific Plan. *[Similar]*

Alternative 3 – Reduced Mobile Source Emissions and Proximity between Emissions Sources and Sensitive Land Uses

Alternative 3 would result in a similar amount of development as the proposed WRTP Specific Plan and in the same location as the proposed WRTP Specific Plan. Although the layout and specific land uses would be different under Alternative 3 compared to the proposed WRTP Specific Plan, the associated potential hazards and use of hazardous materials would be the same. New land uses would require the routine use, transport, and disposal of hazardous material and waste and may increase exposure to risk of hazards. Construction activities may also generate hazardous materials and waste, such as fuels and oils from construction equipment and vehicles. Workers and members of the public could be exposed to hazards during construction activities from accidental releases of hazardous materials. However, like the proposed WRTP Specific Plan, Alternative 3 would be subject to the federal, State, and local requirements associated with the use, transport and disposal of hazardous materials and waste. In addition, the same mitigation measures identified for the proposed WRTP Specific Plan would also be available to Alternative 3, such as identifying potentially hazardous materials; preparing and implementing a site management plan that specifies remediation activities and procedures to appropriately identify, stockpile, handle, reuse, and/or remove and dispose of hazardous materials. Therefore, the potential for impacts related to hazards and hazardous materials would be similar under Alternative 3 as to the proposed WRTP Specific Plan. *[Similar]*

Alternative 4 – Utilize Open Space to Serve as Environmental Buffer

Similar to Alternative 3, Alternative 4 would involve the similar mix of uses and same location as the proposed WRTP Specific Plan, but with increased open space. Therefore, as with Alternative 3, the potential for impacts related to hazards and hazardous materials would be similar to the proposed WRTP Specific Plan. *[Similar]*

4.5.9. Hydrology, Flooding, and Water Quality

Alternative 1 – No-Project Alternative

Under Alternative 1, agricultural production and related activities would continue similar to existing conditions. Specific measures required under the proposed WRTP Specific Plan to address water quality (a grading and erosion control plan, a stormwater pollution prevention plan, a drainage plan, and a best management practice and water quality maintenance plan) would not be implemented for agricultural production—which would allow the use of fertilizers and pesticides. While the City does not have any information to suggest that on-site agricultural operations have or will cause water quality issues, it is possible that agriculture can negatively affect water quality, even when done properly, due to nutrient loads from fertilizer, toxic fecal coliform from animal waste, or increased erosion and runoff. Agricultural uses would be required to comply with appropriate Yolo County Agricultural Weights and Measures Department regulations for environmental protections.

Under Alternative 1, continued agricultural uses would continue to allow irrigation water and stormwater to percolate through the soil to the aquifer. Therefore, Alternative 1 would reduce impacts associated with depletion of groundwater supplies and the increase in surface water runoff as compared to the proposed WRTP Specific Plan. *[Reduced]*

Alternative 2 – No-Project (Development) Alternative

Alternative 2 would result in similar development as the proposed WRTP Specific Plan. Construction and grading activities associated with implementation of Alternative 2 have the potential to cause temporary and short-term increased erosion and sedimentation, similar to the proposed WRTP Specific Plan. The same State and local regulations and best management practices would be required of development under Alternative 2 as the proposed WRTP Specific Plan. As with the proposed WRTP Specific Plan, before new urban development can proceed, a grading and drainage plan must be submitted to the City Department of Public Works that must incorporate stormwater pollution control as well as storm drainage design features to control increased runoff from new development, as well as comply with other City and State requirements pertaining to urban runoff and water quality. As compared to the proposed WRTP Specific Plan, Alternative 2 may result in increased impervious surface area associated with more expansive business park building and parking lot footprints and lack of passive green space, including 'The Yard,' the 11-acre park within the heart of the Specific Plan Area as envisions under the WRTP Specific Plan. Therefore, the peak discharge flows and rate of stormwater runoff generated within the Specific Plan Area would be slightly increased. Thus, Alternative 2 could increase potential effects related to groundwater recharge and increased surface runoff compared to the proposed WRTP Specific Plan. *[Increased]*

Alternative 3 – Reduced Mobile Source Emissions and Proximity between Emissions Sources and Sensitive Land Uses

Alternative 3 would result in similar development as the proposed WRTP Specific Plan. Construction and grading activities associated with implementation of Alternative 3 have the potential to cause temporary and short-term increased erosion and sedimentation, similar to the proposed Specific Plan. As with the proposed Specific Plan, before new urban development can proceed, a grading and drainage plan must be submitted to the City Department of Public Works that must incorporate stormwater pollution control as well as storm drainage design features to control increased runoff from new development, as well as comply with other City and State requirements pertaining to urban runoff and water quality.

The same State and local regulations and best management practices would be required of development under Alternative 3 as the proposed Specific Plan. In addition, mitigation strategies identified for the proposed Specific Plan could also apply to this alternative, such as a storm drainage analysis and identification and implementation of additional storm drainage infrastructure to support full buildout of the WRTP Specific Plan Area including appropriately sized pipelines and detention basins, along with the appropriate low impact development (LID) features and water quality best management practices, that are specifically engineered to ensure that WRTP Specific Plan Area and off-site improvement area flows are conveyed such that flooding does not occur and to provide appropriate water quality treatment. Thus, Alternative 3 would result in similar effects related to hydrology, flooding, and water quality compared to the proposed WRTP Specific Plan. *[Similar]*

Alternative 4 – Utilize Open Space to Serve as Environmental Buffer

Alternative 4 would provide for a similar mix of land use development as the proposed WRTP Specific Plan, but with increased open space. Construction and grading activities associated with implementation of Alternative 4 have the potential to cause temporary and short-term increased erosion and sedimentation, similar to the proposed WRTP Specific Plan. As with the proposed WRTP Specific Plan, before new urban development can proceed, a grading and drainage plan must be submitted to the City Department of Public Works that must incorporate stormwater pollution control, as well as storm drainage design features to control increased runoff from new development, as well as comply with other City and State requirements pertaining to urban runoff and water quality.

The same State and local regulations and best management practices would be required of development under Alternative 4 as the proposed WRTP Specific Plan. Mitigation strategies identified for the proposed WRTP Specific Plan could also apply to this alternative, such as a storm drainage analysis and identification and implementation of additional storm drainage infrastructure to support full buildout of the WRTP Specific Plan Area, including appropriately sized pipelines and detention basins, along with the appropriate LID features and water quality best management practices, specifically engineered to ensure that WRTP Specific Plan Area and off-site improvement area flows are conveyed such that flooding does not occur and to provide appropriate water quality treatment. Alternative 4 would include a greater amount of open space than the proposed WRTP Specific Plan, and therefore reduce the amount of impervious surfaces and decrease the peak discharge flow and rate of stormwater runoff generated within the WRTP Specific Plan Area. Thus, Alternative 4 would also reduce potential effects related to groundwater recharge and increased surface runoff compared to the proposed WRTP Specific Plan. *[Reduced]*

4.5.10. Land Use Planning, Population, and Housing

Alternative 1 – No-Project Alternative

The use of the Specific Plan Area for continued agricultural uses would not affect population or housing. Similar to the proposed Specific Plan, Alternative 1 would not displace substantial numbers of existing people or housing, induce substantial unplanned population growth, or divide an established community. Unlike the proposed Specific Plan, continuation of agricultural uses under Alternative 1 would not require annexation of the Specific Plan Area into the City, nor would it require amending the City's Zoning Ordinance. However, the City of Woodland 2035 General Plan identifies the Specific Plan Area as "SP-1A," a new growth area within the City. As directed by the General Plan (Policy 2.L.2, page LU 2-77), the City will:

> Promote development of SP-1A as a mixed-use residential district anchored by a research and technology business park in the Southern Gateway area at CR 25 and SR 113. Concentrate the highest intensity of development within and in close proximity to the business park area, with lower-density, largely residential uses to the north. Encourage sustainable development through the use of renewable energy sources and water conservation tools with the goal of striving to achieve zero net energy at the building and neighborhood level to the extent feasible.

According to direction in the General Plan, for the Specific Plan Area:

> "The highest intensity of development will occur within the business park area, providing a prime opportunity for job creation within Woodland. The remainder of SP-1A will be largely residential with some open space and recreation areas."

Alternative 1 would not promote development within the Specific Plan Area consistent with the City's 2035 General Plan, and would not accommodate residential and employment growth anticipated within the City's Planning Area and in support of the City's Regional Housing Needs Assessment of the Sacramento Area Council of Governments. Therefore, Alternative 1 would be inconsistent with the City's primary land use planning tool, the 2035 General Plan. *[Increased]*

Alternative 2 – No-Project (Development) Alternative

Alternative 2 would result in new development throughout the same are as that under the proposed WRTP Specific Plan. This Alternative assumes development within the Specific Plan Area in a manner that is consistent with the 2035 General Plan and that has a density, layout, and mix of uses more consistent with a typical business park development with supporting land uses in proximity to a highway interchange. Similar to the proposed WRTP Specific Plan, this development would not displace substantial numbers of existing people or housing, induce substantial unplanned population growth, or divide an established community. In addition, as with the proposed WRTP Specific Plan, Alternative 2 would require the annexation of the Specific Plan Area into the City and amendment of the City's Zoning Ordinance. Therefore, Alternative 2 would be consistent with the City's2035 General Plan, and impacts related to land use, population, and housing under Alternative 2 would be similar to the proposed WRTP Specific Plan. *[Similar]*

Alternative 3 – Reduced Mobile Source Emissions and Proximity between Emissions Sources and Sensitive Land Uses

Alternative 3 would result in new development throughout the same are as that under the proposed WRTP Specific Plan. The land use layout would be shifted under this Alternative compared to the proposed WRTP Specific Plan, but would be generally consistent with the General Plan vision for this Specific Plan Area. Similar to the proposed WRTP Specific Plan, this development would not displace substantial numbers of existing people or housing, induce substantial unplanned population growth, or divide an established community. In addition, as with the proposed WRTP Specific Plan, Alternative 3 would require the annexation of the Specific Plan Area into the City and amendment of the City's Zoning Ordinance. Therefore, Alternative 3 would be consistent with the City's2035 General Plan, and impacts related to land use, population and housing under Alternative 3 would be similar to the proposed Specific Plan. *[Similar]*

Alternative 4 – Utilize Open Space to Serve as Environmental Buffer

Alternative 4 would result in new development throughout the WRTP Specific Plan Area with a similar land use mix as under the proposed Specific Plan, but with increase acreage dedicated to open space. Similar to the proposed WRTP Specific Plan, this development would not displace substantial numbers of existing people or housing, induce substantial unplanned population growth, or divide an established community. In addition, as with the WRTP Specific Plan, Alternative 4 would require the annexation of the WRTP Specific Plan Area into the City and amendment of the City's Zoning Ordinance. Alternative 4 would provide for the new growth within this Specific Plan Area as envisioned under the 2035 General Plan. Therefore, Alternative 4 would be consistent with the City's 2035 General Plan, and impacts related to land use, population and housing under Alternative 4 would be similar to the proposed WRTP Specific Plan. *[Similar]*

4.5.11. NOISE AND VIBRATION

Alternative 1 – No-Project Alternative

Under Alternative 1, noise associated with the use of agricultural equipment would continue throughout the Specific Plan Area and the proposed off-site South Regional Pond area, and could potentially increase or change in type, depending on any changes in agricultural activities, including a change in crops or farming techniques, or other activities that would be permitted under the current zoning and designations. Under the proposed WRTP Specific Plan, agricultural activity, and associated noise and vibration, could also continue on undeveloped areas within the Specific Plan Area. However, with the assumed development under the proposed WRTP Specific Plan, on- and off-site construction and operational noise and vibration would be substantially higher than with Alternative 1. Thus, impacts from noise and vibration under Alternative 1 would be reduced as compared to the proposed WRTP Specific Plan. *[Reduced]*

Alternative 2 – No-Project (Development) Alternative

Alternative 2 would result in new development throughout the same are as that under the proposed WRTP Specific Plan. This Alternative assumes development within the Specific Plan Area in a manner that is consistent with the 2035 General Plan and that has a density, layout, and mix of uses more consistent with a typical business park development with supporting land uses in proximity to a highway interchange. As with the proposed WRTP Specific Plan, Alternative 2 would involve the temporary and short-term noise and vibration resulting from demolition and construction activities. In addition, future operational uses within the WRTP Specific Plan Area could generate noise and vibration in proximity to existing or future noise sensitive receptors, similar to conditions under the proposed WRTP Specific Plan. Overall, impacts would be similar compared to the proposed WRTP Specific Plan. *[Similar]*

Alternative 3 – Reduced Mobile Source Emissions and Proximity between Emissions Sources and Sensitive Land Uses

Alternative 3 would adjust the layout, mix and density of the anticipated land uses within the Specific Plan Area in a manner than would encourage a greater portion of trips on foot and via bicycle, rather than by passenger vehicle, as well as limit high truck trip generating land uses to the southern extremity of the Specific Plan Area. This is anticipated to reduce per-unit travel demand (VMT) compared to the proposed WRTP Specific Plan and increase separation between residential receptors and truck-traffic, thereby reducing associated transportation noise. Transportation-related noise impacts associated with the proposed WRTP Specific Plan are primarily a concern as it relates to existing higher-volume roadways, such as along County Road 25A and State Route 113. As with the proposed WRTP Specific Plan, future development of new noise-sensitive land uses could occur within areas that are currently exposed to noise from transportation sources (e.g., west of SR 113). Therefore, while this alternative would reduce the generation of and exposure to some transportation noise, noise sensitive uses would still be affected by transportation noise. In addition, as with the proposed WRTP Specific Plan, Alternative 3 would involve the temporary and short-term noise and vibration resulting from demolition and construction activities. Overall, impacts would be similar compared to the proposed WRTP Specific Plan. *[Similar]*

Alternative 4 – Utilize Open Space to Serve as Environmental Buffer

Alternative 4 would decrease the amount of land provided for low- and medium-density residential development compared to the proposed WRTP Specific Plan and increase the acreage dedicated to open space. As with the proposed WRTP Specific Plan, Alternative 4 would involve the temporary and short-term noise and vibration resulting from demolition and construction activities. In addition, future operational uses within the WRTP Specific Plan Area could still generate noise and vibration in proximity to existing or future noise sensitive receptors, similar to conditions under the proposed WRTP Specific Plan. However, Alternative 4 would also include a buffer between future residential development within the WRTP Specific Plan Area and existing sources of noise, specifically State Route 113. Future development of new noise-sensitive land uses could occur under the proposed WRTP Specific Plan within areas that are currently exposed to noise from transportation sources (e.g., west of SR 113). The buffer provided under Alternative 4 would be 500 feet between SR 113 and residential development; as detailed in noise modeling conducted for the City's 2035 General Plan, which is still applicable and accounted for development of the WRTP Specific Plan Area, the distance to the 70-decibel traffic noise contour from SR 113 south of East Gibson Road with implementation of the General Plan was determined to be between 257 and 281 feet, depending on the alternative. Therefore, a buffer of 500 feet would reduce traffic noise levels to an acceptable level less than 70 decibels for future sensitive receptors. Therefore, impacts associated with transportation noise would be reduced compared to the proposed WRTP Specific Plan. *[Reduced]*

4.5.12. Public Services and Recreation

Alternative 1 – No-Project Alternative

Alternative 1, which would entail continued agriculture and related uses, would have only a minor, negligible effect related to the provision of law enforcement and fire protection, and no impact on education. In addition, Alternative 1 would not result in the increased use of existing parks or recreational facilities or require the construction or expansion of parks or recreational facilities. However, as opposed to implementation of the proposed WRTP Specific Plan, implementation of Alternative 1 would not include the contribution of funds toward the Woodland Sports Park. This would not result in any increase in an environmental impact relevant to CEQA, but would be a reduced benefit under Alternative 1 as compared to the WRTP Specific Plan. *[Similar]*

Alternative 2 – No-Project (Development) Alternative

Alternative 2 would result in new development throughout the same are as that under the proposed WRTP Specific Plan. This Alternative assumes development within the Specific Plan Area in a manner that is consistent with the 2035 General Plan and that has a density, layout, and mix of uses more consistent with a typical business park development with supporting land uses in proximity to a highway interchange, but likely to accommodate approximately the same number of residential dwelling units and non-residential square feet. As such, the project's law enforcement, fire protection, public school services, and parks and recreational services needs would be similar to the proposed WRTP Specific Plan. Overall, impacts would be similar compared to the proposed WRTP Specific Plan. *[Similar]*

Alternative 3 – Reduced Mobile Source Emissions and Proximity between Emissions Sources and Sensitive Land Uses

Since Alternative 3 would accommodate a similar amount of development and in the same Specific Plan Area and the proposed WRTP Specific Plan, but with an alternative site design. As such, the project's law enforcement, fire protection, public school services, and parks and recreational services needs would be similar to the proposed WRTP Specific Plan. In addition, with the changes to land use under this alternative, the fee contribution of the Specific Plan toward the expansion of the Woodland Sports Park may be different. In addition, since both Alternative 3 and the proposed WRTP Specific Plan would be required to comply with applicable requirements and pay applicable development impact fees, the impact on public services and recreation would be similar under Alternative 3 as the proposed WRTP Specific Plan. *[Similar]*

Alternative 4 – Utilize Open Space to Serve as Environmental Buffer

Since Alternative 4 would accommodate a similar amount of development and in the same Specific Plan Area and the proposed WRTP Specific Plan, but with an alternative site design. As such, the project's law enforcement, fire protection, public school services, and parks and recreational services needs would be similar to the proposed WRTP Specific Plan. Since the mix of uses would be similar to the WRTP Specific Plan, it is reasonable to assume that the fee contribution toward the expansion of the Woodland Sports Park would apply under this alternative, as well, in addition to the planned parks and open space, thereby exceeding the parkland goal. In addition, since both Alternative 4 and the proposed WRTP Specific Plan would be required to comply with applicable requirements and pay applicable development impact fees, the impact on public services and recreation would be similar under Alternative 4 as the proposed WRTP Specific Plan. *[Similar]*

4.5.13. Transportation and Circulation

Alternative 1 – No-Project Alternative

Assuming that agricultural operations would continue consistent with existing operations, no increase in travel demand would occur and no conflicts with transportation-related policies would occur. The development of multi-modal transit hub would not occur and would not provide additional alternative transportation services that would otherwise serve the surrounding neighborhoods, such as the Spring Lake Specific Plan Area and future development of the other Specific Plan areas within the City. This would be a reduced benefit under Alternative 1 as compared to the proposed WRTP Specific Plan. *[Similar]*

Alternative 2 – No-Project (Development) Alternative

Alternative 2 would generate travel demand associated with construction and operations of future development of the Specific Plan Area. This Alternative assumes development within the Specific Plan Area in a manner that is consistent with the 2035 General Plan and that has a density, layout, and mix of uses more consistent with a typical business park development with supporting land uses in proximity to a highway interchange, but likely to accommodate approximately the same number of residential dwelling units and non-residential square feet. Alternative 2 would involve the temporary and short-term generation of trips during demolition and construction activities – since development would be similar in overall scale to the proposed WRTP Specific Plan, construction-related trips are anticipated to be similar. The land use layout may not accommodate non-vehicular transportation through multi-use trails and proximity of complementary land uses that is provided by the proposed WRTP Specific

Plan, thereby increasing operational-related travel demand compared to that of the proposed WRTP Specific Plan. In addition, this Alternative may not be subject to the same Comprehensive Transportation Demand Management/Vehicle Miles Traveled Reduction Program (TDM/VMT Program), developed as part of and detailed in Section 6.2.3, "Subsequent Implementation Documents/Analysis," of the WRTP Specific Plan. While the City may require a similar program to ensure consistency with the General Plan, it may be that this alternative would require off-site, net reductions in VMT if the requisite VMT reductions cannot feasibly be met due to the density, mix, and layout of this alternative. Overall, Alternative 4 is anticipated to generate a similar level of net VMT compared to the proposed Specific Plan, and impacts would be similar to the proposed Specific Plan. *[Similar]*

Alternative 3 – Reduced Mobile Source Emissions and Proximity between Emissions Sources and Sensitive Land Uses

As with the proposed WRTP Specific Plan, Alternative 3 would generate travel demand during construction and long-term operations. Alternative 3 would involve the temporary and short-term generation of trips during demolition and construction activities – since this alternative is very similar in overall scale to the proposed WRTP Specific Plan, construction-related trips are anticipated to be similar, as well. Mitigation Measure 3.13-2 would also be available to this Alternative to reduce potential impacts to the roadway network from construction-related vehicles to a less-than-significant level.

Compared to the proposed WRTP Specific Plan, Alternative 3 would increase housing density around the Village Center. Alternative 3 would also include retail, commercial, and park land uses dispersed within the planned residential neighborhoods so that almost all future residents would be within walking distance (approximately ¼ mile) of these destinations. Finally, the employment generating land use within the Research and Technology Park would be somewhat less focused specifically on research and technology uses, and would accommodate a broader set of office-based uses to focus the additional employment opportunities on the job needs of local residents of Woodland, who may otherwise be commuting longer distances to similar jobs.

Having density around the central core area slightly higher than with the proposed WRTP Specific Plan could encourage a greater portion of trips on foot and via bicycle from residential areas. The presence of complementary commercial and retail land uses in proximity to the residential areas of the WRTP Specific Plan Area would make walking, biking, and transit more feasible, as well as reduce the length of vehicular trips to these destination uses.

As with the proposed WRTP Specific Plan, Alternative 3 would enhance opportunities for greater use of transit and more walking and bicycling in the future. Therefore, similar to the proposed WRTP Specific Plan, Alternative 3 would not conflict with adopted policies, plans, or programs for bicycle, transit, or pedestrian facilities, nor would it adversely affect performance or safety of such facilities.

The land layout would be shifted under this Alternative compared to the proposed WRTP Specific Plan, but would be generally consistent with the General Plan vision for this Specific Plan Area. Alternative 3 incorporates a land use mix and layout that could increase opportunities for walking and biking between destinations within the WRTP Specific Plan Area, thereby reducing operational VMT compared to the proposed WRTP Specific Plan. In addition, implementation of the Specific Plan under Alternative 3 would also be subject to the same or similar standards as the proposed WRTP Specific Plan, including a Comprehensive Transportation Demand Management/Vehicle Miles Traveled Reduction Program (TDM/VMT Program), as detailed in Section 6.2.3, "Subsequent Implementation Documents/Analysis," of the WRTP Specific Plan.

Overall, Alternative 3 incorporates a land use mix and layout that could further reduce operational VMT compared to the proposed WRTP Specific Plan and impacts would be reduced compared to the proposed WRTP Specific Plan. *[Reduced]*

Alternative 4 – Utilize Open Space to Serve as Environmental Buffer

As with the proposed WRTP Specific Plan, Alternative 4 would generate travel demand during construction and long-term operations. As with the proposed WRTP Specific Plan, Alternative 4 would involve the temporary and short-term generation of trips during demolition and construction activities – since this alternative is very similar in overall scale to the proposed WRTP Specific Plan, construction-related trips are anticipated to be similar, as well. Alternative 4 would include the same type of development as the proposed WRTP Specific Plan, but with a slightly smaller development footprint than the proposed WRTP Specific Plan due to increased acreage dedicated to open space. The land layout would be shifted under this Alternative compared to the proposed WRTP Specific Plan, but would be generally consistent with the General Plan vision for this Specific Plan Area and accommodate the same amount of residential and non-residential development. Similar to the proposed WRTP Specific Plan, Alternative 4 would not conflict with adopted policies, plans, or programs for bicycle, transit, or pedestrian facilities, nor would it adversely affect performance or safety of such facilities. In addition, implementation of the Specific Plan under Alternative 4 would also be subject to the same or similar standards as the proposed WRTP Specific Plan, including a Comprehensive Transportation Demand Management/Vehicle Miles Traveled Reduction Program (TDM/VMT Program), as detailed in Section 6.2.3, "Subsequent Implementation Documents/Analysis," of the WRTP Specific Plan. Overall, Alternative 4 is anticipated to generate a similar level of VMT compared to the proposed WRTP Specific Plan, and impacts would be similar to the proposed WRTP Specific Plan. *[Similar]*

4.5.14. UTILITIES

Alternative 1 – No-Project Alternative

Alternative 1 would not increase the demand for water, wastewater service and treatment, electrical services, natural gas services, and communications services. Currently there are six agricultural wells in use in the Specific Plan Area - four wells are located north of CR 25A and two wells are located south of CR 25A. It is anticipated that these wells would continue to provide water to serve continued agricultural production under Alternative 1. Unlike the proposed WRTP Specific Plan, Alternative 1 would not require the construction of water supply conveyance facilities or wastewater collection and conveyance facilities. Overall, impacts related to utilities would be reduced under Alternative 1 compared to the Specific Plan. *[Reduced]*

Alternative 2 – No-Project (Development) Alternative

Alternative 2 would result in new development throughout the same are as that under the proposed WRTP Specific Plan. This Alternative assumes a different land use mix and layout than the proposed WRTP Specific Plan Area, but in a manner that is consistent with the 2035 General Plan and likely to accommodate approximately the same number of residential dwelling units and non-residential square feet as the proposed WRTP Specific Plan. As with the proposed WRTP Specific Plan, Alternative 2 would still require the construction of water supply conveyance facilities and wastewater collection and conveyance facilities to serve the Specific Plan Area. Development under this Alternative would be subject to the same service and improvement standards, and state and federal laws and regulations as the proposed WRTP Specific Plan. As such, the project's utility requirements would be similar to the

proposed WRTP Specific Plan and impacts would be similar compared to the proposed WRTP Specific Plan. *[Similar]*

Alternative 3 – Reduced Mobile Source Emissions and Proximity between Emissions Sources and Sensitive Land Uses

As with the proposed WRTP Specific Plan, Alternative 3 would still require the construction of water supply conveyance facilities and wastewater collection and conveyance facilities to serve the WRTP Specific Plan Area. In addition, Mitigation Measures 3.14-1 and 3.14-2, applicable to the proposed WRTP Specific Plan for long-term planning purposes, would also be applicable to Alternative 3, ensuring water supply conveyance and wastewater infrastructure improvements are designed and sized to provide adequate service to the WRTP Specific Plan Area. In addition, physical impacts associated with construction and operations of utilities, such as new collection and conveyance facilities, are evaluated throughout this EIR and accounted for in the evaluation of alternatives for each resource area in this chapter of the EIR. As such, there is no impact beyond those comprehensively considered throughout the other sections of this EIR. Impacts related to utilities would be similar under Alternative 3 compared to the proposed WRTP Specific Plan. *[Similar]*

Alternative 4 – Utilize Open Space to Serve as Environmental Buffer

Alternative 4 would increase the acreage dedicated to open space within the WRTP Specific Plan Area as compared to the land use plan under the proposed WRTP Specific Plan. This could result in a minor increase in potable water demand and green waste generation for maintenance and security of additional open space. However, this would be offset by the reduced water demand and solid waste generation that would result from increased density of residential development, which would have reduced individual landscaped area per dwelling unit. As with the proposed WRTP Specific Plan, Alternative 4 would still require the construction of water supply conveyance facilities and wastewater collection and conveyance facilities to serve the WRTP Specific Plan Area. Mitigation Measures 3.14-1 and 3.14-2, applicable to the proposed WRTP Specific Plan for long-term planning purposes, would also be applicable to Alternative 4, ensuring water supply conveyance and wastewater infrastructure improvements are designed and sized to provide adequate service to the WRTP Specific Plan Area. In addition, physical impacts associated with construction and operations of utilities, such as new collection and conveyance facilities, are evaluated throughout this EIR and accounted for in the evaluation of alternatives for each resource area in this chapter of the EIR. As such, there is no impact beyond those comprehensively considered throughout the other sections of this EIR. Impacts related to utilities would be generally similar under Alternative 4 compared to the proposed WRTP Specific Plan. *[Similar]*

4.6. ENVIRONMENTALLY SUPERIOR ALTERNATIVE

This section provides an analysis of the potential impacts from implementation of Alternative 1: No-Project (No Development), Alternative 2: No-Project (Development), Alternative 3: Reduced Mobile Source Emissions and Proximity between Emissions Sources and Sensitive Land Uses, and Alternative 4: Utilize Open Space to Serve as Environmental Buffer. CEQA requires that, among the alternatives, an "environmentally superior" alternative be identified and that the reasons for such selection be disclosed. The environmentally superior alternative is the alternative that would generate the fewest or least severe adverse impacts. As shown in Table 4-1, Alternative 1 would have the greatest number of reduced impacts. Therefore, Alternative 1 would be the Environmentally Superior Alternative. This alternative provides the greatest reduction in potential environmental effects of the

proposed project. Other than this No-Project Alternative, Alternative 4 would provide the most benefit relative to reducing environmental effects compared to the proposed WRTP Specific Plan.

Table 4-1 Comparison of Significant Environmental Effects of the Alternatives to the Proposed WRTP Specific Plan

Environmental Topic Area	Alternative 1: No-Project (No Development)	Alternative 2: No-Project (Development)	Alternative 3: Reduced Mobile Source Emissions and Proximity between Emissions Sources and Sensitive Land Uses	Alternative 4: Utilize Open Space as an Environmental Buffer
Aesthetics and Visual Resources	Reduced	Increased	Similar	Reduced
Agriculture and Forestry Resources	Reduced	Similar	Similar	Reduced
Air Quality	Reduced	Increased	Reduced	Reduced
Biological Resources	Reduced	Similar	Similar	Reduced
Climate Change, Greenhouse Gas Emissions, and Energy	Reduced	Increased	Reduced	Reduced
Cultural and Tribal Cultural Resources	Reduced	Similar	Similar	Reduced
Geology, Soils, Minerals, and Paleontological Resources	Reduced	Similar	Similar	Reduced
Hazards and Hazardous Materials	Reduced	Similar	Similar	Similar
Hydrology, Flooding, and Water Quality	Reduced	Increased	Similar	Reduced
Land Use Planning, Population and Housing	Increased	Similar	Similar	Similar
Noise and Vibration	Reduced	Similar	Similar	Reduced
Public Services and Recreation	Similar	Similar	Similar	Similar
Transportation and Circulation	Similar	Similar	Reduced	Similar
Utilities	Reduced	Similar	Similar	Similar

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5 OTHER CEQA CONSIDERATIONS

This chapter addresses California Environmental Quality Act (CEQA) considerations that are required as part of an EIR, including:

- Cumulative Effects (Section 5.1);
- Growth-Inducing Effects (Section 5.2);
- Significant Irreversible Environmental Changes (Section 5.3); and
- Significant and Unavoidable Environmental Effects (Section 5.4).

5.1 CUMULATIVE IMPACTS

Cumulative impacts do not refer to project-related impacts, but the impacts of a proposed project when considered with the impacts of past, present, and probable future projects producing related impacts, as required by Section 15130 of the California Environmental Quality Act Guidelines (*CEQA Guidelines*). Other past, present, and future projects that would contribute to environmental impacts of the proposed project are referred to as "related projects."

The *CEQA Guidelines* require that cumulative impacts be analyzed in an EIR. As set forth in the *CEQA Guidelines* (14 CCR Section 15130[b]), "the discussion of cumulative impacts must reflect the severity of the impacts, as well as the likelihood of their occurrence; however, the discussion need not be as detailed as the discussion of environmental impacts attributable to the project alone. The analysis should be guided by the standards of practicality and reasonableness, and it should focus on the cumulative impacts to which the other identified projects contribute to the cumulative impact."

As stated in CEQA Section 21083(b)(2), a project may have a significant effect on the environment if "its effects are individually limited but cumulatively considerable." According to the CEQA Guidelines Section 15355:

> "Cumulative impacts" refer to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts.
>
> (a) The individual effects may be changes resulting from a single project or a number of separate projects.
>
> (b) The cumulative impact from several projects is the change in the environment, which results from the incremental impact of the project which added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time.

In addition, as per the *CEQA Guidelines*: "The mere existence of significant cumulative impacts caused by other projects alone shall not constitute substantial evidence that the proposed project's incremental effects are cumulatively considerable."

The analysis of cumulative impacts is included in each respective resource area sub-section within Chapter 3 of this EIR.

5.2 GROWTH-INDUCING IMPACTS

CEQA (*CEQA Guidelines,* CCR Section 15126.2[d]) requires an examination of the direct and indirect impacts of the proposed project, including the potential of the project to induce growth leading to changes in land use patterns and population densities and related impacts on environmental resources. Specifically, CEQA states that the EIR shall:

> [d]iscuss ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Included in this are projects that would remove obstacles to population growth (a major expansion of a wastewater treatment plant might, for example, allow for more construction in service areas). Increases in the population may tax existing community service facilities, requiring the construction of new facilities that could cause significant environmental effects. Also discuss characteristics of some projects that may encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively. It must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment.

A project has the potential to induce growth both directly and indirectly. Direct growth-inducement would result if a project involved construction of new housing. Indirect growth-inducement would result, for instance, if implementing a project resulted in any of the following:

- substantial new permanent employment opportunities (*e.g.*, commercial, industrial, or governmental enterprises);
- a construction effort with substantial short-term employment opportunities that indirectly stimulates the need for additional housing and services to support the new temporary employment demand; or,
- removal of an obstacle to additional growth and development, such as removing a constraint on a required public utility or service (*e.g.*, construction of a major sewer line with excess capacity through an undeveloped area) or adding development adjacent to undeveloped land.

Growth-inducement itself is not an environmental effect, but it may lead to foreseeable environmental effects. These environmental effects may include increased demand on other community and public services and infrastructure, increased traffic and noise, degradation of air or water quality, degradation or loss of plant or animal habitats, or conversion of agricultural and open space land to urban uses.

5.2.1 GROWTH INDUCING IMPACTS OF THE PROJECT

The WRTP Specific Plan Area is located outside the existing City limits; however, the WRTP Specific Plan Area would ultimately be annexed to the City and was considered as part of the City's 2035 General Plan, adopted in 2017.

The development framework for the WRTP Specific Plan area was guided by Policy 2.L.2 of the 2035 General Plan, which describes the WRTP Specific Plan Area as "a mixed-use residential district anchored by a research and technology business park in the Southern Gateway area at CR 25 and SR 113" and supports development that would "concentrate the highest intensity development within and in close proximity to the business park area, with lower

density, largely residential uses to the north." The 2035 General Plan designated three subareas within the City's Planning Area for new growth (SP-1, 2, and 3); although specific land use designations were not identified for the WRTP Specific Plan Area, it is one of three subareas (SP-1A) within the designated SP-1 new growth area. As described in Chapter 2, "Project Description," of this EIR, the WRTP Specific Plan Area could accommodate a broad range of uses that could generate approximately 5,000 jobs and 4,823 residents. This is consistent with the general growth anticipated for this WRTP Specific Plan Area in the 2035 General Plan. Because implementation of the WRTP Specific Plan would not involve more employment generating land uses or residential development and population than anticipated under the City's 2035 General Plan, the WRTP Specific Plan would not induce unplanned population growth.

Construction activities associated with future development within the WRTP Specific Plan Area and off-site improvement areas would generate temporary employment, but these construction jobs are anticipated to be filled from the existing local and regional employment pool. In addition, if some nonlocal construction workers were employed for the project, due to the temporary nature of the work, these workers would not typically change residences when assigned to a new construction site. Therefore, construction of future development within the WRTP Specific Plan Area and off-site improvement areas would not indirectly result in a population increase or induce growth by creating permanent new jobs.

The additional population associated with the WRTP Specific Plan could spur an increase in demand for goods and services in the surrounding area, which could potentially result in additional development to satisfy this demand. In this respect, the WRTP Specific Plan would be growth inducing. It would be speculative to attempt to predict where and when any such new services would be developed, and whether or not existing and future planned industrial and commercial development would satisfy additional demand for goods and services created by the project.

The WRTP Specific Plan will provide roadway and other multi-modal connections to surrounding existing and planned neighborhoods within the City's Planning Area, such as the Spring Lake Development to the north and east and future development within SP-1B west of State Route 113, which could be useful to future development, but these areas have been planned for eventual development as a part of the City's 2035 General Plan. In addition, the General Plan anticipated the highest intensity of development for new growth to occur within the SP-1A and SP-1B within the business park area, and the remainder of these sub-areas to be largely residential with some open space and recreation areas (City of Woodland 2017, pages LU 2-55 and 2-56). The WRTP Specific Plan provides the additional job opportunities to support existing and future residential development within the City's Planning Area.

With regard to other infrastructure improvements, in anticipation of future development of the WRTP Specific Plan Area, the backbone utility lines in the Spring Lake area were oversized and stubbed out at the border of the two planning areas, to ensure efficient service to the WRTP Specific Plan Area through extension of those backbone utility lines from Spring Lake. New stormwater facilities and on-site water and wastewater infrastructure required to serve the WRTP Specific Plan Area would be sized to accommodate WRTP Specific Plan Area -related demands. Although the 2035 General Plan anticipates additional development west of the WRTP Specific Plan Area in new growth areas identified as SP-1B and SP-1C, downstream stormwater infrastructure associated with implementation of the WRTP Specific Plan will be designed to accept pre-development flows generated by these areas; it is assumed that development within these areas would include implementation of stormwater management features to reduce future post-development flows to their respective pre-development flows. Infrastructure improvements will be phased with development. Because the infrastructure that would be provided for the WRTP Specific Plan Area

would be consistent with that anticipated under the 2035 General Plan, the WRTP Specific Plan would not result in indirect growth-inducing effects by increasing infrastructure capacity that could serve additional development in excess of that anticipated under the City's 2035 General Plan.

In summary, the WRTP Specific Plan may indirectly induce population growth because the increased population and employment opportunities associated with the future development could increase demand for goods and services, thereby fostering population and economic growth in the City and surrounding unincorporated Yolo County and other nearby communities. It is possible that the WRTP Specific Plan could place pressure on adjacent areas to seek development entitlements or annexation applications. However, WRTP Specific Plan Area, along with other areas planned for development under the City's General Plan, would provide sufficient acreage to accommodate population and employment growth in alignment with the purpose and intent of the 2035 General Plan. Therefore, the WRTP Specific Plan would not induce substantial unplanned growth in the City of Woodland.

5.3 SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES

The CEQA Guidelines require a discussion of the significant irreversible environmental changes that would be caused by project implementation (CEQA Guidelines Section 15126.2[d]). Specifically, the EIR must consider whether "uses of nonrenewable resources during the initial and continued phases of the Project may be irreversible since a large commitment of such resources makes removal or nonuse thereafter unlikely" (CEQA Guidelines Section 15126.2[d]). The irreversible and irretrievable commitment of resources is the permanent loss of resources for future or alternative purposes. Irreversible and irretrievable resources are those that cannot be recovered or recycled, or those that are consumed or reduced to unrecoverable forms. Nonrenewable resources, as used in this discussion, refer to the physical features of the natural environment: land, air, and waterways.

Development of the WRTP Specific Plan Area and off-site improvement areas would use both renewable and nonrenewable natural resources during both construction and operational phases—both within the WRTP Specific Plan Area and also to construct required off-site improvements. Nonrenewable fossil fuels would be used during construction and operation. Other nonrenewable and slowly-renewable resources consumed as a result of development under the WRTP Specific Plan would include, but not necessarily be limited to, lumber and other forest products, sand and gravel, asphalt, petrochemical construction materials, steel, copper, and water. Proposed development would consume energy for multiple purposes including, but not limited to, building heating and cooling, lighting, appliances, electronics, office equipment, and commercial machinery. Energy could also be consumed during each vehicle trip associated with these proposed uses. It is important to note that actual energy usage could vary substantially, depending upon factors such as the type of uses that would occupy the buildings, actual miles driven by future residents and employees, and the degree to which energy conservation measures are incorporated into the design of the various facilities. There are no unusual project characteristics that would necessitate the use of construction equipment that would be less energy-efficient than at comparable construction sites in other parts of the City. Therefore, it is not expected that construction fuel consumption associated with the proposed project would be more inefficient, wasteful, or unnecessary than at other construction sites in the region. In addition, the WRTP Specific Plan requires consistency with the City's Climate Action Plan and includes several policies, development standards, and design guidelines the require implementation of energy reducing and conserving measures in future development within the WRTP Specific Plan Area, thereby promoting reduced operational demand for non-renewable and slowly-renewable resources compared to existing City operations and compared to new development that could occur elsewhere within the region.

Irreversible changes would likely occur as a result of future excavation, grading, and construction activities. Proposed development would also generate additional transportation demand, construction, energy demand, and other activities that would increase emissions of greenhouse gases and other air pollutants, as well as generation of noise. Different air pollutants and different greenhouse gas emissions remain in the atmosphere for different amounts of time, ranging from a few years to thousands of years.

Implementation of the WRTP Specific Plan and off-site improvement areas would permanently convert agricultural land to nonagricultural uses. All agricultural uses within the WRTP Specific Plan Area would be converted to urban uses at buildout of the proposed project. This change in land use would represent a long-term commitment to new land uses, since the potential for developed land to be reverted back to undeveloped land uses is highly unlikely.

Operation of projects in the vicinity could include the use of hazardous materials, which could increase the risk of an accidental spill or release. During construction, equipment would be using various types of fuel and material classified as hazardous. In California, the storage and use of hazardous substances are strictly regulated. The enforcement of these existing regulations would preclude credible significant impacts related to environmental accidents.

The 2035 General Plan and CAP EIR addresses impacts of development of the City's Planning Area, including the WRTP Specific Plan Area. Section 6.3 of the 2035 General Plan and CAP EIR addressed significant irreversible environmental changes that could occur as a result of implementation of the 2035 General Plan. The City acknowledges that there could be significant irreversible environmental changes as a result of implementation of the 2035 General Plan, and similarly, there could be significant irreversible environmental changes as a result of implementation of the WRTP Specific Plan. Detailed assessments, including cumulative impacts, for each of the above-mentioned topics are provided throughout Chapter 3 of this EIR.

5.4 SIGNIFICANT AND UNAVOIDABLE ADVERSE IMPACTS

Section 15216.2(c) of the CEQA Guidelines requires an EIR to include a discussion of any significant environmental impacts that cannot be avoided if the project is implemented.

Chapter 3 of this EIR provides a detailed analysis of all significant and potentially significant environmental impacts related to implementing the proposed project; identifies feasible mitigation measures, where available, that could avoid or reduce these significant and potentially significant impacts; and presents a determination whether these mitigation measures would reduce these impacts to less-than-significant levels.

Following is a listing of significant and unavoidable impacts associated with implementation of the WRTP Specific Plan and off-site improvement areas.

SECTION 3.1, AESTHETICS AND VISUAL RESOURCES

- Impact 3.1-1: Substantially Degrade the Existing Visual Character or Quality of the Site and its Surroundings.
- Impact 3.1-2: Create a New Source of Substantial Light or Glare Which Would Adversely Affect Day or Nighttime Views in the Area.

SECTION 3.2, AGRICULTURE AND FORESTRY RESOURCES

- Impact 3.2-1: Loss of Important Farmland and Conversion of Agricultural Land to Nonagricultural Urban Uses
- Impact 3.2-3: Conflict with Existing On-Site and Off-Site Agricultural Operations

SECTION 3.3, AIR QUALITY

- Impact 3.3-1: Conflict with or Obstruct Implementation of the Applicable Air Quality Plan.
- Impact 3.3-2: Result in a Cumulatively Considerable Net Increase of Long-Term Operational Emissions of Criteria Air Pollutant and Precursor Emissions.

SECTION 3.6, CULTURAL RESOURCES AND TRIBAL CULTURAL RESOURCES

- Impact 3.6-1: Cause a Substantial Adverse Change in the Significance of Archaeological or Historical Resources as defined in CEQA Guidelines Section 15064.5.

SECTION 3.11, NOISE AND VIBRATION

- Impact 3.11-1: Generation of a Substantial Temporary (Construction-related) Increase in Ambient Noise Levels in the Vicinity of the Project in Excess of Standards Established in the Local General Plan or Noise Ordinance, or Applicable Standards of Other Agencies.
- Impact 3.11-2: Generation of a Substantial Permanent (Long-term Operations) Increase in Ambient Noise Levels in the Vicinity of the Project in Excess of Standards Established in the Local General Plan or Noise Ordinance, or Applicable Standards of Other Agencies.
- Impact 3.11-3: Generation of Vibration.

Cumulative Impact Areas

- Aesthetics and Visual Resources
- Agriculture and Forestry Resources
- Air Quality
- Hydrology, Flooding, and Water Quality
- Land Use Planning, Population, and Housing
- Utilities

6 REFERENCES

6.1 EXECUTIVE SUMMARY

None.

6.2 CHAPTER 1. INTRODUCTION

None.

6.3 CHAPTER 2. PROJECT DESCRIPTION

City of Woodland. 2017. City of Woodland General Plan 2035. Available: https://www.cityofwoodland.org/DocumentCenter/View/1180/Final-General-Plan-May-16-2017-PDF. Accessed February 27, 2019.

Water Works Engineers. 2020 (September). *Spring Lake Pump Station Capacity Enhancement Assessment Technical Memorandum*. Prepared for the City Of Woodland. Roseville, CA.

6.4 SECTION 3.1. AESTHETICS AND VISUAL RESOURCES

California Department of Transportation. 2017 (March). Scenic Highway System Lists. Available: http://www.dot.ca.gov/design/lap/livability/scenic-highways/. Accessed July 3, 2018.

Caltrans. *See* California Department of Transportation.

City of Woodland. 2001 (updated 2014 and 2017). *Spring Lake Specific Plan.* Available: http://www.cityofwoodland.org/581/Spring-Lake-Specific-Plan. Accessed June 7, 2018.

———. 2003 (September). *Spring Lake Specific Plan Design Standards.* Prepared by: Williams Paddon Inc. Available: http://www.cityofwoodland.org/DocumentCenter/View/1269/SPRING-LAKE-SPECIFIC-PLAN-design-standards--PDF. Accessed June 7, 2018.

———. 2016a (August). *Engineering Standards: Design Standards, Standard Details and Construction Specifications*. Available: http://www.cityofwoodland.org/civicax/filebank/blobdload.aspx?BlobID=10833. Accessed July 10, 2018.

———. 2016b (September). *2035 General Plan and Climate Action Plan Public Review Draft Environmental Impact Report*. Prepared by: AECOM. State Clearinghouse No. 2013032015. Available: http://www.cityofwoodland.org/563/General-Plan-2035. Accessed May 31, 2018.

———. 2017 (May). *City of Woodland General Plan Update 2035*. Prepared by: Dyett & Bhatia. Available: http://www.cityofwoodland.org/563/General-Plan-2035. Accessed May 31, 2018.

Federal Highway Administration. 1988. *Visual Impact Assessment for Highway Projects*. Publication No. FHWA-HI-88-054. Office of Environmental Policy. Washington, D.C. Available:

http://www.dot.ca.gov/design/lap/landscape-design/via/training/mod_3/images/fhwa.vis.imp.ass.pdf. Accessed July 3, 2018.

FHA. *See* Federal Highway Administration.

U.S.D.A. Forest Service. 1995. *Landscape Aesthetics: A Handbook for Scenery Management*. Agriculture Handbook No. 701. Available: http://www.fs.fed.us/cdt/carrying_capacity/landscape_aesthetics_handbook_701_no_append.pdf. Accessed July 3, 2018.

USFS. *See* U.S.D.A. Forest Service.

Yolo County. 2009 (November). *2030 Countywide General Plan.* Available: http://www.yolocounty.org/general-government/general-government-departments/county-administrator/general-plan-update/adopted-general-plan. Accessed July 3, 2018.

6.5 CHAPTER 3.2. AGRICULTURE AND FORESTRY RESOURCES

California Department of Conservation (DOC). 2016. Yolo County 2014-2016 Land Use Conversion. Available: https://www.conservation.ca.gov/dlrp/fmmp/Pages/Yolo.aspx. Accessed September 13, 2020.

———. 2020. Important Farmland Categories. Available: https://www.conservation.ca.gov/dlrp/fmmp/Pages/Important-Farmland-Categories.aspx. Accessed September 17, 2020.

City of Woodland. 2016 (September). *2035 General Plan and Climate Action Plan Public Review Draft Environmental Impact Report*. Prepared by: AECOM. State Clearinghouse No. 2013032015. Available: http://www.cityofwoodland.org/563/General-Plan-2035. Accessed July 12, 2018.

———. 2017 (May). *City of Woodland General Plan Update 2035*. Prepared by: Dyett & Bhatia. Available: http://www.cityofwoodland.org/563/General-Plan-2035. Accessed July 13, 2018.

DOC. *See* California Department of Conservation

Yolo County. 2009 (November). Yolo County 2030 Countywide General Plan. Available: https://www.yolocounty.org/government/general-government-departments/county-administrator/general-plan/adopted-general-plan. Accessed January 25, 2021.

———. 2020 (July). Zoning Code (Title 8 of the Yolo County Code). Article 3: Agricultural Zones. Available: https://www.yolocounty.org/government/general-government-departments/community-services/planning-division/zoning-code. Accessed February 10, 2021.

Yolo County Agricultural Commissioner. 2019. Yolo County Agricultural Crop Report, 2019. Available: https://www.yolocounty.org/general-government/general-government-departments/agriculture-cooperative-extension/agriculture-and-weights-measures/crop-statistics. Accessed September 11, 2020.

———. 2020 (January). Conditions Covering the Use of Restricted Materials. Available: https://www.yolocounty.org/home/showdocument?id=61922. Accessed September 17, 2020.

Yolo Local Agency Formation Commission (Yolo LAFCo). 2019a. Yolo LAFCo Project Policies. Available: https://www.yololafco.org/yolo-lafco-policies-procedures. Accessed September 11, 2020.

———. 2019b. Municipal Service Review and Sphere of Influence Study for the City of Woodland (LAFCo No S-049).

Yolo LAFCo. *See* Yolo Local Agency Formation Commission

6.6 SECTION 3.3. AIR QUALITY

BAAQMD. *See* Bay Area Air Quality Management District

Bay Area Air Quality Management District (BAAQMD). 2017. California Environmental Quality Act Air Qualiity Guidelines. Available at: https://www.baaqmd.gov/plans-and-climate/california-environmental-quality-act-ceqa/updated-ceqa-guidelines. Accessed August 2020.

California Air Resources Board (CARB). 2005 (April). *Air Quality and Land Use Handbook: A Community Health Perspective.*

_____. 2009. *The California Almanac of Emissions and Air Quality*: 2009 Edition.

_____. 2013. *The California Almanac of Emissions and Air Quality*: 2013 Edition.

_____. 2017a. 2016 State Strategy for the State Implementation Plan for Federal Ozone and PM2.5 Standards (State SIP Strategy). Available: https://www.arb.ca.gov/planning/sip/2016sip/2016sip.htm. Accessed: April 4, 2018.

_____. 2017b. Technical Advisory: Strategies to Reduce Air Pollution Exposure Near High-Volume Roadways. Available: https://www.arb.ca.gov/ch/rd_technical_advisory_final.PDF. Accessed: May 1, 2018.

_____. 2018. Top 4 Summary. Available: https://www.arb.ca.gov/adam/topfour/topfour1.php. Accessed April 3, 2018.

_____. 2019. EMFAC Off-Model Adjustment Factors to Account for the SAFE Vehicle Rule Part One. Available: https://ww3.arb.ca.gov/msei/emfac_off_model_adjustment_factors_final_draft.pdf. Accessed November 27, 2019.

_____. 2020. Overview: Diesel Exhaust and Health. Available: https://ww2.arb.ca.gov/resources/overview-diesel-exhaust-and-health. Accessed September 2020.

California Department of Transportation (Caltrans). 2017. 2017 Traffic Volumes: Route 103-116. Available: https://dot.ca.gov/programs/traffic-operations/census/traffic-volumes/2017/route-103-116. Accessed September 2020.

California Energy Commission (CEC). 2020. 2019 Building Energy Efficiency Standards: Frequently Asked Questions. Available at: https://www.energy.ca.gov/sites/default/files/2020-03/Title_24_2019_Building_Standards_FAQ_ada.pdf. Accessed August 2020.

Caltrans. *See* California Department of Transportation

CARB. *See* California Air Resources Board

CEC. *See* California Energy Commission

City of Woodland. 2013 (August). City of Woodland General Plan 2013 Housing Element. Prepared by AECOM. Sacramento, CA.

———. 2016. *2035 General Plan and Climate Action Plan Public Review Draft Environmental Impact Report*. Prepared by: AECOM. State Clearinghouse No. 2013032015. Available: http://www.cityofwoodland.org/563/General-Plan-2035. Accessed May 2018.

———. 2017 (May). *City of Woodland General Plan Update 2035*. Prepared by: Dyett & Bhatia. Available: http://www.cityofwoodland.org/563/General-Plan-2035. Accessed May 2018.

Fehr & Peers 2021. Woodland Research & Technolocy Park Transportation Impact Study. Prepared for the City of Woodland. March 2021. Woodland, CA.

Office of Environmental Health Hazard Assessment (OEHHA). 2015 (February). *Air Toxics Hot Spots Program: Risk Assessment Guidelines – Guidance Manual for Preparation of Health Risk Assessments.* Available at http://oehha.ca.gov/air/crnr/notice-adoption-air-toxics-hot-spots-program-guidance-manual-preparation-health-risk-0. Accessed November 2017

OEHHA. *See* Office of Environmental Health Hazard Assessment

PCAPCD. *See* Placer County Air Pollution Control District

Placer County Air Pollution Control District (PCAPCD). 2017. Placer County Air Pollution Control District California Environmental Quality Act (CEQA) Handbook. Available at https://www.placer.ca.gov/1801/CEQA-Handbook. Accessed February 2020.

San Joaquin Valley Air Pollution Control District. (SJVAPCD). 2015. SJVAPCD Guidance for Assessing and Mitigating Air Quality Impacts. Available: https://www.valleyair.org/transportation/GAMAQI-2015/FINAL-DRAFT-GAMAQI.PDF. Accessed August 2020.

Sacramento Metropolitan Air Quality Management District (SMAQMD). 2009. SMAQMD's Recommended Odor Screening Distances.

_____. 2011 (March). Recommended Protocol for Evaluating the Location of Sensitive Land Uses Adjacent to Major Roadways: Version 2.4.

_____. 2017. 1-Hour Ozone Attainment Determination Request for the Sacramento Federal Ozone Nonattainment Area (2010). Acailable at http://www.airquality.org/Air-Quality-Health/Air-Quality-Plans/Federal-Planning. Accessed March 2018.

SMAQMD et al. 2017. Sacramento Regional 2008 NAAQS 8-Hour Ozone Attainment and Reasonable Further Progress Plan. https://www.ysaqmd.org/plans-data/ozone/. Accessed May 2018.

SJVAPCD. *See* San Joaquin Valley Air Pollution Control District

United States Environmental Protection Agency (EPA). 2016. Basic Information about NO2. Available: https://www.epa.gov/no2-pollution/basic-information-about-no2. Accessed August 2020.

_____. 2019. Sulfur Dioxide Basics. Available: https://www.epa.gov/so2-pollution/sulfur-dioxide-basics. Accessed August 2020.

_____. 2020a. Ozone Pollution and Your Patients' Health. Available: https://www.epa.gov/ozone-pollution-and-your-patients-health/patient-exposure-and-air-quality-index. Accessed August 2020.

_____.2020b (September 8). Basic Information about Carbon Monoxide (CO) Outdoor Air Pollution. Available: https://www.epa.gov/co-pollution/basic-information-about-carbon-monoxide-co-outdoor-air-pollution. Accessed August 2020.

_____. 2020c. Carbon Monoxide Trends. Available at https://www.epa.gov/air-trends/carbon-monoxide-trends#coreg. Accessed August 2020.

Yolo-Solano County Air Quality Management District (YSAQMD). 2007. Handbook for Assessing and Mitigating Air Quality Impacts. Adopted July 11, 2007. Available at http://www.ysaqmd.org/wp-content/uploads/2016/06/CEQAHandbook2007.pdf. Accessed March 2018.

_____. 2016. Planning for Ozone Standards. Available at https://www.ysaqmd.org/plans-data/ozone/. Accessed: May 9, 2018.

_____. 2019. Attainment Status. Available at https://www.ysaqmd.org/plansdata/attainment/. Accessed: September 2020.

World Health Organization. 2018. Ambient (outdoor) air quality and health. Available: http://www.who.int/mediacentre/factsheets/fs313/en/. Accessed August 2020.

6.7 SECTION 3.4. BIOLOGICAL RESOURCES

Beedy, E.C. and W.J. Hamilton III. 1999. Tricolored Blackbird (*Agelaius tricolor*). *In*: The Birds of North America, No. 423 (A. Poole and F. Gill, Eds). The Birds of North America, Inc. Philadelphia, PA. Cited in Beedy and Meese 2015.

Beedy E.C. and R.J. Meese. 2015. Managing nesting and Foraging Habitats to Benefit Tricolored Blackbirds. *In*: Central Valley Bird Club Bulletin: Special Issue on the Status, Ecology, and Conservation of the Tricolored Blackbird Vol. 17 No. 2-4. Lodi, CA.

California Department of Fish and Wildlife. 2012 (May). Staff Report on Burrowing Owl Mitigation. State of California Natural Resources Agency. Sacramento, CA.

California Department of Fish and Wildlife. 2019. NCCP Plan Summary – Yolo HCP/NCCP. State of California Natural Resources Agency. Sacramento, CA. available at https://www.wildlife.ca.gov/Conservation/Planning/NCCP/Plans/Yolo. Accessed August 1, 2019.

CalTrans. *See* California Department of Transportation

California Department of Transportation. 2013. Mini-Preliminary Environmental Analysis Report – SR-113/CR 25A Interchange and Parkland Ave. Overcrossing. December 2013.

California Natural Diversity Database. 2017. RareFind 5 (Commercial Version): An Internet Application for the Use of the California Department of Fish and Wildlife's Natural Diversity Database. Biogeographic Data Branch, California Department of Fish and Wildlife, Sacramento, CA. Available: http://www.dfg.ca.gov/biogeodata/cnddb/mapsanddata.asp. Accessed August 2017.

California Native Plant Society. 2017. Inventory of Rare and Endangered Plants (online edition, v8-02). Sacramento, CA. Available: http://cnps.web.aplus.net/cgi-bin/inv/inventory.cgi. Accessed August 2017.

CDFG. See California Department of Fish and Game

CDFW. See California Department of Fish and Wildlife

City of Sacramento, Sutter County, and The Natomas Basin Conservancy. 2003. Natomas Basin Habitat Conservation Plan. Available: <http://www.natomasbasin.org/index.php?option=com_content&view=article&id=144&Itemid=118>. Prepared for the U.S. Fish and Wildlife Service. Sacramento, CA.

City of Woodland. 2017. (May). *City of Woodland General Plan Update 2035*. Prepared by: Dyett & Bhatia. Available: http://www.cityofwoodland.org/563/General-Plan-2035. Accessed July 13, 2018.

CNDDB. See California Natural Diversity Database

CNPS. *See* California Native Plant Society

Estep, J. A. 1989. Biology, Movements, and Habitat Relationships of the Swainson's Hawk in the Central Valley of California, 1986-1987. Prepared for the California Department of Fish and Game, Nongame Bird and Mammal Section, Sacramento, CA.

Estep, J. 2007. Principal biologist, Estep Environmental Consulting. Personal communication with Anne King, EDAW, by email regarding optimal Swainson's hawk nesting and foraging habitats on 18 September 2007.

Estep. 2009. The Influence of Vegetation Structure on Swainson's Hawk (*Buteo swainsoni*) Foraging Habitat Suitability in Yolo County, California. Prepared for Technology Associates International Corporation and Yolo Natural Heritage Foundation. Prepared by Estep Environmental Consulting, February 2009.

Meese, R.J. 2014. Results of the 2014 Tricolored Blackbird Statewide Survey. Available from the Tricolored Blackbird Portal at: http://tricolor.ice.ucdavis.edu/reports. Cited in Beedy and Meese 2015.

Pierson, E. D., W. E. Rainey, and C. Corben. 2006 (April 15). Distribution and Status of Western Red Bats (*Lasiurus blossevillii*) in California. California Department of Fish and Game, Habitat Conservation Planning Branch, Species Conservation and Recovery Program Report 2006–04, Sacramento, CA 45 pp.

Smith, K.G., S.R. Wittenberg, R.B. Macwhirter, and K.L. Bildstein. 2011. Northern Harrier (Circus cyaneus), version 2.0. In The Birds of North America (P. G. Rodewald, editor). Cornell Lab of Ornithology, Ithaca, New York, USA. Available at: https://doi.org/10.2173/bna.210

Swainson's Hawk Technical Advisory Committee 2000. Recommended timing and methodology for Swainson's hawk nesting surveys in California's Central Valley.

U.S. Fish and Wildlife Service. 2017a. Information for Planning and Conservation. Available online at: http://ecos.fws.gov/ipac/. Accessed August 2017.

U.S. Fish and Wildlife Service. 2017b. Framework for Assessing Impacts to the Valley Elderberry Longhorn Beetle (*Desmocerus californicus dimorphus*). U.S. Fish and Wildlife Service; Sacramento, California. 28 pp.

USFWS. *See* U.S. Fish and Wildlife Service

Vaghti, M. G., M. Holyoak, A. Williams, T. S. Talley, A. K. Fremier, and S. E. Greco. 2009. Understanding the Ecology of Blue Elderberry to Inform Landscape Restoration in Semiarid River Corridors. Environmental Management 43:28-37.

Yolo Habitat Conservancy. 2018. Yolo Habitat Conservation Plan/Natural Community Conservation Plan – Final. Prepared by ICF. Yolo County, California. April 2018.

Yolo Habitat Conservancy. 2019. Yolo Habitat Conservation Plan/Natural Community Conservation Plan: Implementation Handbook Permitting Guide. Authored by: Consero Solutions, ICF, Alford Environmental, and Tschudin Consulting Group, November 2019. .

6.8 SECTION 3.5. CLIMATE CHANGE, GREENHOUSE GAS EMISSIONS, AND ENERGY

California Air Resources Board (CARB). 2017 Scoping Plan-Identified VMT Reductions and Relationship to State Climate Goals. Available: https://ww2.arb.ca.gov/resources/documents/carb-2017-scoping-plan-identified-vmt-reductions-and-relationship-state-climate. Accessed January 4, 2020.

———. 2020. California Greenhouse Gas Emissions for 2000 to 2018, Trends of Emissions and Other Indicators. Available: https://ww2.arb.ca.gov/ghg-inventory-data.

California Air Pollution Control Officers Associated (CAPCOA). 2010. Quantifying Greenhouse Gas Mitigation Measures. Available at: http://www.capcoa.org/wp-content/uploads/2010/11/CAPCOA-Quantification-Report-9-14-Final.pdf. Accesesd November 2019.

California Energy Commission (CEC). 2018. 2019 Building Energy Efficiency Standards: Frequently Asked Questions. Available at: https://www.energy.ca.gov/sites/default/files/2020-03/Title_24_2019_Building_Standards_FAQ_ada.pdf. Accessed July 2020.

———. 2019a. Pacific Gas & Electric Company 2018 Power Content Label. Available at: https://www.energy.ca.gov/sites/default/files/2020-01/2018_PCL_PG_and_E.pdf. Accessed September 2020.

———. 2019b. California Gasoline Data, Facts, and Statistics. Available at: https://ww2.energy.ca.gov/almanac/transportation_data/gasoline/. Accessed February 2020.

———. 2019c. Diesel Fuel Data, Facts, and Statistics. Available at: https://ww2.energy.ca.gov/almanac/transportation_data/diesel.html. Accessed February 2020.

———. 2020a. Energy Reports: Electricity Consumption by Entity. Available at: http://www.ecdms.energy.ca.gov/gasbycounty.aspx. Accessed September 2020.

———. 2020b. Energy Reports: Electricity Consumption by County. Available at: https://ecdms.energy.ca.gov/elecbycounty.aspx. Accessed September 2020.

———. 2020c. Energy Reports: Gas Consumption by Entity. Available at: http://www.ecdms.energy.ca.gov/gasbycounty.aspx. Accessed September 2020.

———. 2020d. Energy Reports: Gas Consumption by County. Available at: http://www.ecdms.energy.ca.gov/gasbycounty.aspx. Accessed September 2020.

California Governor's Office of Planning and Research. 2018. Technical Advisory on Evaluating Transportation Impacts in CEQA. Available: http://www.opr.ca.gov/docs/20180416-743_Technical_Advisory_4.16.18.pdf. Accessed January 2020.

Crockett, Alexander G. 2011 (January). Addressing the Significance of Greenhouse Gas Emissions under CEQA: California's Search for Regulatory Certainty in an Uncertain World. Golden Gate University Environmental Law Journal. Volume 4. Issue 2, Pacific Region Edition. Article 3. Available: https://digitalcommons.law.ggu.edu/cgi/viewcontent.cgi?referer=https://www.google.com/&httpsredir=1&article=1060&context=gguelj. Accessed August 22, 2020.

City of Woodland. 2016. *2035 General Plan and Climate Action Plan Environmental Impact Report*. Prepared by: AECOM. State Clearinghouse No. 2013032015. Available: http://www.cityofwoodland.org/563/General-Plan-2035. Accessed May 31, 2018.

———. 2017 (May). *City of Woodland General Plan Update 2035*. Prepared by: Dyett & Bhatia. Available: http://www.cityofwoodland.org/563/General-Plan-2035. Accessed May 31, 2018.

Sacramento Area Council of Governments (SACOG). 2019. 2020 Metropolitan Transportation Plan/Sustainable Communities Strategy. Available at: https://www.sacog.org/2020-metropolitan-transportation-plansustainable-communities-strategy-update. Accessed August 2020.

U. S. Energy Information Administration (EIA). 2016. Carbon Dioxide Emissions Coefficients. Available: https://www.eia.gov/environment/emissions/co2_vol_mass.php. Accessed February 2020.

———. 2020. California State Energy Profile Analysis. Available at: https://www.eia.gov/state/analysis.php?sid=CA. Accessed February 2020.

6.9 SECTION 3.6. CULTURAL AND TRIBAL CULTURAL RESOURCES

Caltrans. 2013. *Mini-Preliminary Environmental Analysis Report, SR-113/CR25A Interchange and Parkland Ave. Overcrossing.* December.

City of Woodland. 2016. *2035 General Plan and Climate Action Plan Public Review Draft Environmental Impact Report*. Prepared by AECOM. Available online at: http://www.cityofwoodland.org/civicax/filebank/blobdload.aspx?blobid=18440. Accessed December 29, 2017.

———. 2018. Woodland Research and Technology Park Specific Plan Cultural Resources Inventory Report, Yolo County, California. Prepared by AECOM. January.

6.10 SECTION 3.7. GEOLOGY, SOILS, MINERAL RESOURCES AND PALEONTOLOGICAL RESOURCES

California Department of Transportation. 2018 (August). *Standard Plans and Specifications.* Available: https://dot.ca.gov/programs/design/ccs-standard-plans-and-standard-specifications. Accessed August 27, 2020.

———. 2020 (July). *Highway Design Manual.* Available: https://dot.ca.gov/programs/design/manual-highway-design-manual-hdm. Accessed August 27, 2020.

California Geological Survey. 2017 (June). Alquist-Priolo Earthquake Fault Zone Maps. Available: http://maps.conservation.ca.gov/cgs/informationwarehouse/index.html?map=regulatorymaps. Accessed May 30, 2018.

Caltrans. *See* California Department of Transportation.

City of Woodland. 2016a (August). *Engineering Standards: Design Standards, Standard Details and Construction Specifications*. Available: http://www.cityofwoodland.org/civicax/filebank/blobdload.aspx?BlobID=10833. Accessed May 31, 2018.

———. 2016b (September). *2035 General Plan and Climate Action Plan Public Review Draft Environmental Impact Report*. Prepared by: AECOM. Available: http://www.cityofwoodland.org/563/General-Plan-2035. Accessed May 31, 2018.

———. 2017 (May). City of Woodland General Plan Update 2035. Prepared by: Dyett & Bhatia. Available: http://www.cityofwoodland.org/gov/depts/cd/divisions/planning/generalplan/default.asp. Accessed May 31, 2018.

CGS. *See* California Geological Survey.

Crawford & Associates, Inc. 2020 (April). *Final Geotechnical Design and Materials Report.* Prepared for: Mark Thomas. Crawford & Associates Job No. 19-527.1. Sacramento, CA.

Dupras. 1988. *Mineral Land Classification: Portland Cement Concrete-Grade Aggregate in The Sacramento-Fairfield Production-Consumption Region*. Special Report 156. California Division of Mines and Geology. Sacramento, CA.

Geocon Consultants, Inc. 2018 (February). *Phase I Environmental Site Assessment and Limited Screening-Level Pesticide Assessment. Woodland Research and Technology Park, Woodland, Yolo County, CA*. Geocon Project No. S1485-01-01. Rancho Cordova, CA.

Helley, E. J. and D. S. Harwood. 1985. *Geologic Map of the Late Cenozoic Deposits of the Sacramento Valley and Northern Sierran Foothills, California*. U.S. Geological Survey. Map MF-1790. Reston, VA.

Hilton, R. P., D. C. Dailey, and H. G. McDonald. 2000 (April). A Late Pleistocene Biota from the Arco Arena Site, Sacramento, California. *PaleoBios Abstracts* 20(1).

Jefferson, G. T. 1991a. *Technical Report No. 5: A Catalogue of Late Quaternary Vertebrates from California—Part One, Nonmarine Lower Vertebrate and Avian Taxa*. Natural History Museum of Los Angeles County, CA.

———. 1991b. *Technical Report No. 7: A Catalogue of Late Quaternary Vertebrates from California—Part Two: Mammals*. Natural History Museum of Los Angeles County, CA.

Jennings, C.W. and Bryant, W.A. 2010. *2010 Fault Activity Map of California*. Available: http://maps.conservation.ca.gov/cgs/fam/. Accessed May 30, 2018.

Kolber, M. 2004 (July 27). Mammoth Coup: Discovery of Huge Fossil Near Elk Grove Is a Big Deal for Northern California. *Sacramento Bee*.

Marchand, D. E., and A. Allwardt. 1981. Late Cenozoic Stratigraphic Units, Northeastern San Joaquin Valley, California. U.S. Geological Survey Bulletin 1470. U.S. Government Printing Office, Washington, DC.

NRCS. *See* U.S. Natural Resources Conservation Service.

Society of Vertebrate Paleontology (SVP). 2010. Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources. Available: http://vertpaleo.org/Membership/Member-Ethics/SVP_Impact_Mitigation_Guidelines.aspx. Accessed September 10, 2020.

U.S. Natural Resources Conservation Service. 2020 (June). Web Soil Survey. Available: http://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm. Accessed August 27, 2020.

UCMP. *See* University of California Museum of Paleontology.

University of California Museum of Paleontology. 2020. Paleontological Collections Database. Accessed August 27, 2020.

Wagner, D.L., C.W. Jennings, T.L. Bedrossian, and E.J. Bortugno. 1981. *Geologic Map of the Sacramento Quadrangle, California, 1:250,000.* Regional Geologic Map Series, Map No. 1A. California Division of Mines and Geology. Sacramento, CA.

Working Group on Northern California Earthquake Potential. 1996. *Database of Potential Sources for Earthquakes Larger than Magnitude 6 in Northern California*. Open-File Report 96-705. U.S. Geological Survey. Reston, VA.

6.11 SECTION 3.8. HAZARDOUS MATERIALS AND TOXICS

AirNav. 2020 (September). 69CL Medlock Field Airport, Davis, California. Available: https://www.airnav.com/airport/69CL. Accessed June 8, 2018.

California Department of Toxic Substances Control (DTSC). 2004 (August). *Draft Lead Report.* Available: https://dtsc.ca.gov/wp-content/uploads/sites/31/2018/05/HWMP_REP_dLead-Rep.pdf. Accessed September 18, 2020.

———. 2006. *Interim Guidance Evaluation of School Sites with Potential Soil Contamination as a Result of Lead from Lead-Based Paint, Organochlorine Pesticides from Termiticides, and Polychlorinated Biphenyls from Electrical Transformers*. Available: https://dtsc.ca.gov/dealing-with-lead-based-paint-termiticides-and-electrical-transformers-at-proposed-new-or-expanding-school-sites-fact-sheet/. Accessed September 15, 2020.

———. 2008 (August). *Interim Guidance for Sampling Agricultural Properties (Third Revision).* Available: https://dtsc.ca.gov/wp-content/uploads/sites/31/2020/06/Ag-Guidance-Rev-3-August-7-2008-2_Accessible.pdf. Accessed: September 18, 2020.

———. 2016a (March). *Community Update: Statewide Agreement for Caltrans for Reuse of Aerially Deposited Lead-Contaminated Soils.* DTSC Fact Sheet. Available: https://dot.ca.gov/-/media/dot-media/programs/environmental-analysis/documents/env/f0004055-caltrans-fs-a11y.pdf. Accessed September 18, 2020.

———. 2016b (June). *Soil Management Agreement for Aerially Deposited Lead-Contaminated Soils.* Available: https://dot.ca.gov/programs/environmental-analysis/hazardous-waste/contaminants-waste/aerially-deposited-lead. Accessed September 18, 2020.

———. 2020 (September). EnviroStor. Available: https://www.envirostor.dtsc.ca.gov/public/. Accessed September 15, 2020.

California Department of Transportation. 2018 (August). *Standard Plans and Specifications.* Available: https://dot.ca.gov/programs/design/ccs-standard-plans-and-standard-specifications. Accessed September 15, 2020.

———. 2020 (July). *Highway Design Manual.* Available: https://dot.ca.gov/programs/design/manual-highway-design-manual-hdm. Accessed August 27, 2020.

Caltrans. *See* California Department of Transportation.

City of Woodland. 2016a (August). *Engineering Standards: Design Standards, Standard Details and Construction Specifications*. Available: http://www.cityofwoodland.org/civicax/filebank/blobdload.aspx?BlobID=10833. Accessed July 10, 2018.

———. 2016b (September). *2035 General Plan and Climate Action Plan Public Review Draft Environmental Impact Report*. Prepared by: AECOM. State Clearinghouse No. 2013032015. Available: http://www.cityofwoodland.org/563/General-Plan-2035. Accessed May 31, 2018.

———. 2017 (May). *City of Woodland General Plan Update 2035*. Prepared by: Dyett & Bhatia. Available: http://www.cityofwoodland.org/563/General-Plan-2035. Accessed May 31, 2018.

———. 2020. *Woodland Research and Technology Park Specific Plan, Draft*. Sacramento, CA.

DTSC. *See* California Department of Toxic Substances Control.

EPA. *See* U.S. Environmental Protection Agency.

Geocon Consultants, Inc. 2018 (February). *Phase I Environmental Site Assessment and Limited Screening-Level Pesticide Assessment. Woodland Research and Technology Park, Woodland, Yolo County, CA.* Prepared for: Woodland Business Park Owners Group. Geocon Project No. S1485-01-01. Rancho Cordova, CA.

———. 2020 (September). *Initial Site Assessment. State Route 113 and County Road 25A Interchange, Woodland, Yolo County, California.* Prepared for: AECOM. Geocon Project No. S1485-03-02. Rancho Cordova, CA.

State Water Resources Control Board. 2020. GeoTracker. Available: https://geotracker.waterboards.ca.gov/profile_report.asp?global_id=SL186262983. Accessed September 15, 2020.

SWRCB. *See* State Water Resources Control Board.

U.S. Environmental Protection Agency. 2020 (September).Search for Superfund Sites where you Live. Available: https://www.epa.gov/superfund/search-superfund-sites-where-you-live. Accessed September 15, 2020.

Yolo County. 2013. Yolo County Emergency Operations Plan. Available: https://www.yolocounty.org/government/general-government-departments/office-of-emergency-services/reports-and-publications. Accessed: February 4, 2021.

Yolo County. 2018. 2018 Yolo Operational Area Multi-Jurisdictional Hazard Mitigation Plan. Available: https://www.yolocounty.org/government/general-government-departments/office-of-emergency-services/reports-and-publications. Accessed February 4, 2021.

Yolo Solano Air Quality Management District. 2019. Asbestos. Available: https://www.ysaqmd.org/rules-compliance/asbestos/. Accessed September 18, 2020.

6.12 SECTION 3.9. HYDROLOGY, FLOODING, AND WATER QUALITY

California Department of Transportation. 2018 (August). *Standard Plans and Specifications.* Available: https://dot.ca.gov/programs/design/ccs-standard-plans-and-standard-specifications. Accessed August 27, 2020.

———. 2020 (July). *Highway Design Manual.* Available: https://dot.ca.gov/programs/design/manual-highway-design-manual-hdm. Accessed August 27, 2020.

California Department of Water Resources. 2004 (February). *Sacramento Valley Groundwater Basin, Yolo Subbasin. California's Groundwater Bulletin 118*. Available: https://www.water.ca.gov/LegacyFiles/groundwater/bulletin118/basindescriptions/5-21.67.pdf. Accessed June 4, 2018.

———. 2019. SGMA Basin Prioritization Dashboard. Available: https://gis.water.ca.gov/app/bp-dashboard/final/. Accessed August 28, 2020.

California Stormwater Quality Association. 2019a (December). Construction Best Management Practice Handbook. Available: https://www.casqa.org/resources/bmp-handbooks/construction. September 10, 2020.

———. 2019b (December). Industrial & Commercial Best Management Practice Handbook. Available: https://www.casqa.org/resources/bmp-handbooks/industrial-commercial. Accessed September 10, 2020.Caltrans. *See* California Department of Transportation.

Central Valley Regional Water Quality Control Board. 2018 (May). *Water Quality Control Plan (Basin Plan) for the California Regional Water Quality Control Board Central Valley Region, Fifth Edition, the Sacramento River Basin and the San Joaquin River Basin.* Available: https://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/. Accessed August 28, 2020.

CVRWQCB. *See* Central Valley Regional Water Quality Control Board.

City of Woodland. 2001 (December). *Spring Lake Specific Plan Section 6.0: Public Facilities and Services.* Available: http://www.cityofwoodland.org/581/Spring-Lake-Specific-Plan. Accessed June 5, 2018.

———. 2006a (February). *Storm Drainage Facilities Master Plan Update and Preliminary Engineering, Draft.* Main Report, Volume 1 of 3. Prepared by: Wood Rodgers. Sacramento, CA.

———. 2006b (April). *Technical Guidance Manual for Stormwater Quality Control Measures.* Available: http://www.cityofwoodland.org/DocumentCenter/View/590/Technical-Guidance-Manual-for-Storm-Water-PDF. Accessed June 6, 2018.

———. 2015. *Post-Construction Standards Plan: A Guidance Document on Storm Water Post-Construction Design Measures for Developers and Plan Checkers*. Available:

http://www.cityofwoodland.org/DocumentCenter/View/1006/Post-Construction-Standard-Plan-PDF. Accessed June 5, 2018.

———. 2016a (August). *Engineering Standards: Design Standards, Standard Details and Construction Specifications*. Available: http://www.cityofwoodland.org/DocumentCenter/View/1082/2016-Engineering-Standards-PDF. Accessed May 31, 2018.

———. 2016b (September). *2035 General Plan and Climate Action Plan Public Review Draft Environmental Impact Report*. Prepared by: AECOM. State Clearinghouse No. 2013032015. Available: http://www.cityofwoodland.org/563/General-Plan-2035. Accessed May 31, 2018.

———. 2017 (February). *City of Woodland Update to: Storm Drainage Facilities Master Plan South Urban Growth Area.* Prepared by: Wood Rodgers. Yolo County, CA.

———. 2017 (May). *City of Woodland General Plan Update 2035*. Prepared by: Dyett & Bhatia. Available: http://www.cityofwoodland.org/563/General-Plan-2035. Accessed May 31, 2018.

———. 2020a (May). *Woodland Research and Technology Park Storm Drainage Review Technical Memorandum*. Prepared by: Wood Rodgers. Sacramento, CA.

———. 2020b. *Woodland Research and Technology Park Specific Plan*. Sacramento, CA.

Crawford & Associates, Inc. 2020 (April). *Final Geotechnical Design and Materials Report.* Prepared for: Mark Thomas. Crawford & Associates Job No. 19-527.1. Sacramento, CA.

Cunningham Engineering Corporation. 2020 (January). Technical Memorandum—Woodland Research and Technology Park Stormwater Management. Prepared for: City of Woodland. Davis, CA.

Federal Emergency Management Agency. 2012 (May). Flood Insurance Rate Map No. 06113C0445H. Available: https://msc.fema.gov/portal/search#searchresultsanchor. Accessed June 4, 2018.

FEMA. *See* Federal Emergency Management Agency.

Geocon Consultants, Inc. 2018 (February). *Phase I Environmental Site Assessment and Limited Screening-Level Pesticide Assessment. Woodland Research and Technology Park, Woodland, Yolo County, CA.* Geocon Project No. S1485-01-01. Rancho Cordova, CA.

NRCS. *See* U.S. Natural Resources Conservation Service.

State Water Resources Control Board. 2015 (as amended). *California State Water Resources Control Board Order 2012-0011-DWQ, NPDES No. CAS000003, National Pollutant Discharge Elimination System (NPDES) Statewide Storm Water Permit Waste Discharge Requirements (WDRs) for State of California Department of Transportation*. Available: https://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/wqo15.shtml. Accessed August 27, 2020.

———. 2018 (April). *Final 2014-2016 California Integrated Report (Clean Water Act Section 303(d) List/Section 305(b) List).* Available: https://www.waterboards.ca.gov/centralvalley/water_issues/tmdl/impaired_waters_list/#intrpt2014_2016. Accessed April 27, 2018.

SWRCB. *See* State Water Resources Control Board.

U.S. Natural Resources Conservation Service. 2020 (June). Web Soil Survey. Available: http://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm. Accessed August 27, 2020.

Yolo Subbasin Groundwater Agency. 2020. Yolo Subbasin Groundwater Agency—Sustainable Groundwater Management Act. Available: https://www.yologroundwater.org/sustainable-groundwater-management-act-sgma-553f70b. Accessed August 28, 2020.

6.13 SECTION 3.10. LAND USE PLANNING, POPULATION, AND HOUSING

BAE Urban Economics. 2013 (March). City of Woodland General Plan Update 2035 Economic and Fiscal Background Report.

———. 2020. *Draft Memorandum: Potential Impacts of Woodland Research and Technology Park on Spring Lake.* Prepared by BAE Urban Economics for the City of Woodland. Woodland, CA.

California Department of Transportation (Caltrans). 2017. 2017 Traffic Volumes. Available online: http://www.dot.ca.gov/trafficops/census/volumes2017/Route5-6.html. Accessed May 7, 2019.

CalTrans *See* California Department of Transportation.

City of Woodland. 2013 (August). City of Woodland General Plan 2013 Housing Element. Prepared by AECOM. Sacramento, CA.

———. 2016 (September). *2035 General Plan and Climate Action Plan Public Review Draft Environmental Impact Report*. Prepared by: AECOM. State Clearinghouse No. 2013032015. Available: http://www.cityofwoodland.org/563/General-Plan-2035. Accessed July 12, 2018.

———. 2017 (May). *City of Woodland General Plan Update 2035*. Prepared by: Dyett & Bhatia. Available: http://www.cityofwoodland.org/563/General-Plan-2035. Accessed July 13, 2018.

———. 2018a (July). *Fire Station 3 Relocation Analysis Volume 1 and 2 - Technical Report*. Prepared by: Citygate Associates, LLC.

———. 2018b. Fire Station #3 Relocation. Available: http://www.cityofwoodland.org/974/Fire-Station-3-Relocation. Accessed August 10, 2018.

———. 2019 (November). *City of Woodland Research and Technology Park Specific Plan Wastewater Treatment Capacity Verification.*

California Department of Finance. 2020. E-5 Population and Housing Estimates for Cities, Counties, and the State, January 1, 2011-2018, with 2010 Benchmark. Available: http://www.dof.ca.gov/Forecasting/Demographics/Estimates/E-5/. Accessed April 23, 2019.

DOF. *See* California Department of Finance.

EDD. *See* Employment Development Department.

Employment Development Department. 2019. Monthly Labor Force Data for Cities and Census Designated Places (CDP). Annual Average 2018 – Revised. Available: https://www.labormarketinfo.edd.ca.gov/data/labor-force-and-unemployment-for-cities-and-census-areas.html. Accessed April 23, 2019.

SACOG. *See* Sacramento Area Council of Governments.

Sacramento Area Council of Governments. 2016a SACOG 2016 MTP/SCS Modeling Projections for 2012, 2020 and 2036. February 2016. Available at: https://www.sacog.org/data-library. Accessed July 6, 2020.

———. 2016b (Adopted February 18th). Metropolitan Transportation Plan/Sustainable Communities Strategy.

———. 2019 (Adopted November 18, 2019). SACOG 2020 Metropolitan Transportation Plan/Sustainable Communities Strategy. Available at: https://www.sacog.org/sites/main/files/file-attachments/2020_mtp-scs.pdf?1580330993. Accessed July 2020.

———. 2020. SACOG Regional Housing Needs Plan: Cycle 6 (2021-2029). Available at: https://www.sacog.org/sites/main/files/file-attachments/proposed_rhna_plan_2020-1-27_0.pdf?1588205260. Accessed July 2020.

United States Census Bureau. 2018. 2013-2017 American Community Survey, Table DP-03. Available at: https://data.census.gov/cedsci/table?t=Industry&g=1600000US0686328&tid=ACSST5Y2017.S2405&hidePreview=false. Accessed September 2019.

Yolo LAFCo *see* Yolo Local Agency Formation Commission

Yolo Local Agency Formation Commission (Yolo LAFCo). 2019. 2018 Municipal Service Review and Sphere of Influence Study for the City of Woodland (LAFCo No S-049).

Water Works Engineers. 2020 (September). Spring Lake Specific Plan Pump Station Capacity Enhancement Assessment. Reseville, CA.

6.14 SECTION 3.11. NOISE AND VIBRATION

California Department of Transportation (Caltrans). 2013a. *Technical Noise Supplement*. Sacramento, CA. Prepared by IFC Jones & Stokes, Sacramento, CA. Available at: https://www.gsweventcenter.com/Draft_SEIR_References/2013_09_Tech_Noise_Supp.pdf. Accessed August 2020.

———. 2013b (September). *Transportation and Construction Vibration Guidance Manual*. Division of Environmental Analysis, Environmental Engineering, Hazardous Waste, Air, Noise, Paleontology Office, Sacramento, CA. Available: https://www.cityofdavis.org/home/showdocument?id=4521. Accessed August 2020.

City of Woodland. 2016. 2035 General Plan and CAP EIR, Woodland, CA. Available at: https://www.cityofwoodland.org/DocumentCenter/View/1175/2035-General-Plan-and-Climate-Action-Plan-Final-Environmental-Impact-Report-PDF. Accessed August 2020.

City of Woodland. 2017. City of Woodland General Plan Update 2035. Safety Element. Woodland, CA. Available at: https://www.cityofwoodland.org/DocumentCenter/View/1180/Final-General-Plan-May-16-2017-PDF. Accessed August 2020.

EPA. *See* U.S. Environmental Protection Agency.

Federal Highway Administration (FHA). 1978 (December). *Highway Traffic Noise Prediction Model*. FHWA-RD-77-108. Washington, DC: Office of Research, Office of Environmental Policy. Available at: https://rosap.ntl.bts.gov/view/dot/30259/dot_30259_DS1.pdf. Accessed August 2020.

———. 2006 (January). *Roadway Construction Noise Model User's Guide*. FHWA-HEP-05-054. Washington, DC.https://www.fhwa.dot.gov/Environment/noise/construction_noise/rcnm/rcnm.pdf. Accessed August 2020.

Federal Transit Administration (FTA). 2018 (September). *Transit Noise and Vibration Impact Assessment*. FTA Report No. 0123. Available at:https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf. Accessed August 2020.

Fehr & Peers Associates. 2020. Existing and Future Conditions traffic data for the Specific Plan Area. Woodland, CA.

FHWA. *See* Federal Highway Administration.

FTA. *See* Federal Transit Administration.

Governor's Office of Planning and Research. 2017. *State of California General Plan Guidelines.* Sacramento, CA. Available at: http://opr.ca.gov/docs/OPR_COMPLETE_7.31.17.pdfhttp://opr.ca.gov/docs/OPR_COMPLETE_7.31.17.pdf. Accessed August 2020.

HUD. *See* U.S. Department of Housing and Urban Development.

OPR. *See* Governor's Office of Planning and Research.

SACOG. *See* Sacramento Area Council of Governments.

Sacramento Area Council of Governments (2013). Sacramento International Airport Land Use Compatibility Plan (Adopted December 12, 2013). Available at: https://www.sacog.org/sites/main/files/file-attachments/smf-1-front_chapters_1-2-2013-12-12-complete.pdf?1459965227. Accessed August 2020.

U.S. Department of Housing and Urban Development. 2015. Noise Abatement and Control. 24 CFR Part 51 Subpart B, Noise Guidebook. Available at: https://www.hud.gov/sites/documents/23388_NOISE.PDF. Accessed September 2020.

U.S. Environmental Protection Agency. 1971 (December 31st). Noise from Construction Equipment and Operations, Building Equipment, and Home Appliances. Available at: https://nepis.epa.gov/Exe/ZyPDF.cgi/9101NN3I.PDF?Dockey=9101NN3I.PDF. Accessed August 2020.

U.S. Environmental Protection Agency. 1974 (March). *Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety.* Washington, DC. Available at:https://www.rosemonteis.us/sites/default/files/references/usepa-1974.pdf. Accessed August 2020.

6.15 SECTION 3.12. PUBLIC SERVICE AND RECREATION

California Department of Education. 2020. 2019-2020 Enrollment by Grade: Woodland Joint Unified Report (57-72710). Available at: \\na.aecomnet.com\lfs\AMER\Sacramento-USSCR2\DCS\Projects\ENV_EP\2017\60543790_Woodland_Research_Park_EIR\500 Deliverables\EIR\Admin Record. Accessed June 25, 2020.

California Department of Finance. 2018 (May). E-5 Population and Housing Estimates for Cities, Counties, and the State, January 1, 2011-2018, with 2010 Benchmark. Available: http://www.dof.ca.gov/Forecasting/Demographics/Estimates/E-5/. Accessed April 23, 2019.

City of Woodland. 2004 (October). *Parks, Recreation and Community Services Master Plan 5-Year Update*. Prepared by: RJM Design Group, Inc.

———. 2016 (September). *2035 General Plan and Climate Action Plan Public Review Draft Environmental Impact Report*. Prepared by: AECOM. State Clearinghouse No. 2013032015. Available: http://www.cityofwoodland.org/563/General-Plan-2035. Accessed July 12, 2018.

———. 2017 (May). *City of Woodland General Plan Update 2035*. Prepared by: Dyett & Bhatia. Available: http://www.cityofwoodland.org/563/General-Plan-2035. Accessed July 13, 2018.

———. 2018a (July). *Fire Station 3 Relocation Analysis Volume 1 and 2 - Technical Report*. Prepared by: Citygate Associates, LLC.

———. 2018b. Fire Station #3 Relocation. Available: http://www.cityofwoodland.org/974/Fire-Station-3-Relocation. Accessed August 10, 2018.

———. 2018c. Woodland Police Department 2018 Annual Report. Available: https://www.cityofwoodland.org/1095/Annual-Reports. Accessed June 12, 2020.

———. 2020. Draft Woodland Research and Technology Park Specific Plan.

DOF. *See* California Department of Finance.

Kaff, D. (2020, May 13) Personal communication.

WJUSD. *See* Woodland Joint Unified School District.

Woodland Joint Unified School District. 2020. Developer Fees. Available: https://www.wjusd.org/Departments/Maintenance-Operations-and-Facilities/Developer-Fees/index.html. Accessed June 12, 2020.

6.16 SECTION 3.13. TRANSPORTATION AND CIRCULATION

City of Woodland.2016a (August). *Engineering Standards: Design Standards, Standard Details and Construction Specifications*. Available: http://www.cityofwoodland.org/civicax/filebank/blobdload.aspx?BlobID=10833. Accessed July 10, 2018.

———. 2016b (September). *2035 General Plan and Climate Action Plan Environmental Impact Report*. Prepared by: AECOM. State Clearinghouse No. 2013032015. Available: http://www.cityofwoodland.org/563/General-Plan-2035. Accessed April 10, 2019.

_____. 2017 (May). *City of Woodland General Plan Update 2035*. Prepared by: Dyett & Bhatia. Available: http://www.cityofwoodland.org/563/General-Plan-2035. Accessed April 10, 2019.

Fehr & Peers. 2021. Woodland Research and Technlology Park Specific Plan. Transportation Impact Study. Prepared for the City of Woodland.

Sacramento Area Council of Governments (SACOG). 2019. Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS). Available: https://www.sacog.org/2020-metropolitan-transportation-plansustainable-communities-strategy-update.

6.17 SECTION 3.14. UTILITIES

California Building Standards Commission. 2019. California Green Building Standards Code (CALGreen). Available: http://www.bsc.ca.gov/Home/CALGreen.aspx. Accessed May 15, 2019.

California Department of Resources Recycling and Recovery (CalRecycle). 2019a. Solid Waste Information System. Facility/Site Summary Details: Yolo Central Landfill. (57-AA-0001). Available: https://www2.calrecycle.ca.gov/swfacilities/Directory/57-AA-0001/. Accessed: May 8, 2019.

———. 2019b. Jurisdictional Diversion/Disposal Rate Report. City of Woodland. Yolo County. https://www2.calrecycle.ca.gov/LGCentral/DiversionProgram/JurisdictionDiversionDetail?year=2018&jurisdictionID=583. Accessed: May 6, 2019.

City of Woodland. 2015. Technical Report Evaluating General Plan Impacts on the City's Water Pollution Control Facility. Prepared for City of Woodland Community Development Department. Prepared by NEXGEN Utility Management, Inc.

_____. 2016 (September). *2035 General Plan and Climate Action Plan Public Review Draft Environmental Impact Report*. Prepared by: AECOM. State Clearinghouse No. 2013032015. Available: http://www.cityofwoodland.org/563/General-Plan-2035. Accessed April 10, 2019.

———. 2017a. Annual Water Quality Report. Available: https://www.cityofwoodland.org/529/Drinking-Water. Accessed May 22, 2019.

———. 2017b (May). *City of Woodland General Plan Update 2035*. Prepared by: Dyett & Bhatia. Available: http://www.cityofwoodland.org/563/General-Plan-2035. Accessed April 10, 2019.

———. 2109a (November). *City of Woodland Research and Technology Park Specific Plan Wastewater Treatment Capacity Verification.*

———. 2109b (November). *City of Woodland Research and Technology Park Specific Plan SB610/SB221 Water Supply Assessment and Certification Form.*

———. 2020. City of Woodland Solid Waste and Recycling. Available at: https://www.cityofwoodland.org/493/Solid-Waste-Recycling. Accessed June 18, 2020.

Cunningham Engineering. 2020a. Woodland Research and Technology Park Water Distribution Technical Memorandum. Sacramento, CA.

———. 2020b. Woodland Research and Technology Park Reclaimed Water Distribution Technical Memorandum. Sacramento, CA.

———. 2020c. Woodland Research and Technology Park Wastewater Collection System Technical Memorandum. Sacramento, CA.

State Water Resources Control Board, Office of Delta Watermaster. 2014. Standard Term 91 (Stored Water Bypass Requirements.) Available: http://www.waterboards.ca.gov/water_issues/programs/delta_watermaster/term91.shtml.

Water Works Engineers. 2018. *Woodland Research and Technology Park Specific Plan 1A Sanitary Sewer Peer Review*. Sacramento, CA.

———. 2020a. *Updates to Woodland Research and Technology Park Specific Plan 1A Sanitary Sewer Peer Review*. Sacramento, CA.

———. 2020b. *Spring Lake Pump Station Capacity Enhancement Assessment Technical Memorandum*. Roseville, CA.

West Yost Associates. 2016 (June). City of Woodland 2015 Urban Water Management Plan. Available: https://www.cityofwoodland.org/691/Water. Accessed May 7, 2019.

Woodland Davis Clean Water Agency. 2020. Project Overview. Available at https://www.wdcwa.com/project-overview. Accessed: June 2020.

6.18 CHAPTER 4. ALTERNATIVES

California Department of Conservation (DOC). 2016. Yolo County 2014-2016 Land Use Conversion. Available: https://www.conservation.ca.gov/dlrp/fmmp/Pages/Yolo.aspx. Accessed September 13, 2020.

6.19 CHAPTER 5. OTHER CEQA CONSIDERATIONS

None.

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