CITRUS HEIGHTS
CALIFORNIA
Solid roots. New growth.

Thomas Scheeler, *Chair*
Marcelle Flowers, *Vice Chair*
Scott Kinderwater, *Commissioner*
Al, Alrawi, *Commissioner*
Alan Utzig, *Commissioner*
Andrew Van Duker, *Commissioner*
Scott Kaufman, *Commissioner*

AGENDA
CITY OF CITRUS HEIGHTS
PLANNING COMMISSION MEETING
City Hall Council Chambers
6360 Fountain Square Drive
Tuesday, April 14, 2026, 6:00 p.m.

HOW TO PARTICIPATE:

The Commission may take up any agenda item at any time, regardless of the order listed. Action may be taken on any item on the agenda. The Commission established a procedure for addressing the Commission. Speaker Identification Sheets are provided on the table inside the Council Chambers. If you wish to address the Commission during the meeting, please complete a Speaker Identification Form and give it to the Commission Secretary. Those addressing the Commission are limited to three (3) minutes. The Chair may also reduce the time allowed if there is a lengthy Agenda or a large number of people wanting to address the Commission.

You may also submit your comment via email to planning@citrusheights.net. Written comments received will be distributed to the Planning Commission.

PLANNING COMMISSION MEETING
6:00 PM

April 14, 2026, Planning Commission Meeting Agenda Packet pdf

CALL REGULAR MEETING TO ORDER

1. **FLAG SALUTE**

2. **ROLL CALL** Alrawi, Kaufman, Kinderwater, Utizg, Van Duker, Vice Chair Flowers, Chair Scheeler

3. **CONSENT CALENDAR**
   Approval of minutes for February 24, 2026

4. **PUBLIC COMMENT**
   Under Government Code Section 54954.3, members of the audience may address the Commission on any item within the jurisdiction of the Commission or on any agenda item. Those wishing to speak on non-agenda items will be called upon at the beginning of the meeting. Those wishing to speak for or against an agenda item will be called upon after the presentation by the City Planning Division and the Applicant for that agenda item.

5. PUBLIC HEARING

a. **Gateway Activation Project GAP-** The City is requesting the Planning Commission review the Mitigated Negative Declaration and Mitigation Monitoring Plan, the proposed amendments to the Bikeway Master Plan, Pedestrian Master Plan and General Plan Bikeway Map to incorporate the proposed Gateway Activation Project and forward a recommendation of approval to the City Council. **Project Planner: Director Casey Kempenaar**

6. GENERAL CORRESPONDENCE, PRESENTATIONS AND REPORTS FROM CITY STAFF

a. Selection of Chair and Vice Chair

7. ADJOURNMENT

The agenda for this meeting of the Planning Commission for the City of Citrus Heights was posted at the sites listed below on or before the close of business at 5:00 p.m. on the Friday preceding the meeting.

- City of Citrus Heights 6360 Fountain Square Drive, Citrus Heights, CA
- Rusch Park Community Center, 7801 Auburn Boulevard, Citrus Heights, CA
- Sacramento County Library, Sylvan Oaks Branch, 6700 Auburn Blvd., Citrus Heights, CA

Any writings or documents provided to a majority of the City of Citrus Heights Planning Commission regarding any item on this agenda will be made available for public inspection at City Hall located 6360 Fountain Square Drive, Citrus Heights, CA.

In compliance with the Americans with Disabilities Act, if you need special assistance to participate in this meeting, please contact Stacy Hildebrand at (916) 727-4707. Notification 48 hours prior to the meeting will enable the city to make reasonable arrangements to ensure accessibility to this meeting. TTY/TDD users with questions or comments can call the California Relay Service by dialing 7-1-1.

Pursuant to Sections 65009 (b) (2), of the State Government Code “If you challenge any of the above projects in court, you may be limited to raising only those issues you or someone else raised in the public hearing (s) described in this notice, or in written correspondence delivered to the city Planning Commission at, or prior to, this public hearing.”

City of Citrus Heights
Planning Commission
Meeting Minutes
February 24, 2026
Draft

MEETING CALLED TO ORDER
Chair Sheeler called meeting to order at 6:00 pm

1. **FLAG SALUTE** Commissioner Kaufman led the flag salute.

2. **ROLL CALL** Commission Present: Kaufman, Kinderwater, Al Rawi, Utzig, Chair Scheeler

   ABSENT: (2) Vice Chair Flowers, Van Duker
   STAFF PRESENT: Ashjian, Bermudez, Chevaillier, Hildebrand, Kehrer, Kempenaar, Lui

3. **CONSENT CALENDAR**
   Approval of minutes for December 9, 2025

   MOTION 1: Approval of minutes for December 9, 2025

   M/S: Utzig/Al Rawi
   AYES: (5) Al Rawi, Kaufman, Kinderwater, Utzig, Chair Scheeler
   NOES: (0)
   Abstain: (0)
   ABSENT: (2) Vice Chair Flowers, Van Duker

4. **PUBLIC COMMENT**
   There was no public comment.

5. **REGULAR CALENDAR**

   a. 6941 Sylvan Road APN# 211-0160-022-0000: The project consisted of a lot split of a single 0.42-acre parcel into two parcels. The application includes conceptual plans for future development (one duplex on each lot); however, no development is proposed or submitted as part of this project. The project is categorically exempt from the requirements of the California Environmental Quality Act per Section 15315 of the CEQA Guidelines. **Project Planner: Associate Planner Steffane Lui**

Associate planner Steffane Lui made a presentation to the Commission; Commission discussed the following:

- Location of SMUD power line

- Access to Parcel 2
- Adequate fire truck turn-around

Chair Scheeler opened public hearing.

The following spoke in opposition to the project:

Speaker Paul Reyes: The project applicant has allowed attendees of large Veterans Center Events to park on his vacant lot and the loss of those parking spaces will greatly impact future Veteran's Events.
Speaker Gino (Last name?) – Commented on the impact the loss of parking will have on the Veterans Center
Written comment submitted by Michelle Grant and read into the record also addressed concern over parking and future development on the lot

Chair Scheeler closed public hearing.

The Commission discussed the project and felt that it would be beneficial if the project applicant and the Veterans Center could meet to discuss the development and a possible resolution.

MOTION 1: Move to continue item 5a to allow further evaluation for access compatibility concerns. Item continued to date uncertain.

M/S: AlRawi/Kinderwater
AYES: (5) Al Rawi, Kaufman, Kinderwater, Utzig, Chair Scheeler
NOES: (0)
ABSENT: (2) Vice Chair Flowers, Van Duker
RECUSE: (0)

b. <u>Amendment to Section 106.42.015 of the Citrus Heights Zoning Code:</u> The project amended Section 106.42.015 of the Citrus Heights Zoning Code related to Accessory Dwelling Units (ADUs) and Junior Accessory Dwelling Units (JADUs). The amendments update local regulations to ensure consistency with current California State ADU law, clarify allowable unit types and quantities, remove subjective design standards, and incorporate required State law provisions. The project does not change zoning or land use designations and is intended to maintain compliance with State housing requirements. The Planning Commission will review the amendments and forward a recommendation to the City Council. CEQA Guidelines Section 15061(b)(3) (Common Sense Exemption) **Project Planner: Associate Planner Steffane Lui**

MOTION 1: Recommend the City Council adopt a Resolution finding the proposed amendments exempt from the California Environmental Quality Act (CEQA) pursuant to Section 15061 (b)(3) of the CEQA Guidelines.

M/S: Utzig/AlRawi
AYES: (5) Al Rawi, Kaufman, Kinderwater, Utzig, Chair Scheeler
NOES: (0)
Abstain: (0)
ABSENT: (2) Vice Chair Flowers, Van Duker

MOTION 2: Recommend the City Council adopt an Ordinance amending Section 106.42.015 of Chapter 106 of the Citrus Heights Municipal Code (Zoning Code) as shown in Exhibit A.

M/S: Utzig/AlRawi
AYES: (5) AlRawi, Kaufman, Kinderwater, Utzig, Chair Scheeler
NOES: (0)
Abstain: (0)
ABSENT: (2) Vice Chair Flowers, Van Duker

6. **REGULAR CALENDAR**

a. General Plan Annual Report

MOTION 1: Move to accept the 2025 General Plan Annual Progress Report and direct staff to forward the report to City Council and the appropriate state agencies in accordance with Government Code Section 65400.

M/S: AlRawi/Kinderwater
AYES: (5) AlRawi, Kaufman, Kinderwater, Utzig, Chair Scheeler
NOES: (0)
ABSENT: (2) Vice Chair Flowers, Van Duker
RECUSE: (0)

7. **GENERAL CORRESPONDENCE, PRESENTATIONS AND REPORTS FROM CITY STAFF**

a. Refresher on the California Environmental Quality Act (CEAQ) and applicability to projects within the purview of the Planning Commission

b. Selection of Chair and Vice chair: Item continued to date uncertain

8. **ADJOURNMENT**

Meeting adjourned at 7:02 pm

Respectfully Submitted,

Stacy Hildebrand
Planning Commission Secretary

STAFF REPORT

Community Development Department
Planning Division
6360 Fountain Square Dr.
Citrus Heights, CA 95621
www.citrusheights.net
(916) 727-4740

Hearing Date: April 14, 2026

File Number: PLN-26-01

Application Type: General Plan Amendment, Pedestrian Master Plan Amendment, Bikeway Master Plan Amendment

Assessor's Parcel Number(s): Citywide

Prepared by: Casey Kempenaar, Community Development Director, ckempenaar@citrusheights.net

Project Name: Amendments to the Bikeway Master Plan, Pedestrian Master Plan and General Plan Bikeway Map to incorporate the proposed Gateway Activation Project (GAP)

Project Address: N/A

Gross Acreage: N/A	**Net Acreage:** N/A	**Net Density:** N/A
Current Zoning: N/A	**Proposed Zoning:** N/A	

Surrounding Zoning:	**Surrounding Land Use Designation**	**Actual Use:**
On-site:	Not Applicable Citywide	
North:		
South:		
West:		
East:		

Environmental Status:

() Exempt Section 15061(b)(3)
() Negative Declaration
(X) Mitigated Negative Declaration
() Previous Negative Declaration
() Environmental Impact Report
() Previous Environmental Impact Report

Planning Department Recommendations:

(X)Recommend approval and forward to the City Council for final action
()Approve with conditions
()Denial

Applicant:	City of Citrus Heights Planning Division/General Services Department	**Property Owner:**	Citywide

REQUEST

The City is requesting the Planning Commission review the Mitigated Negative Declaration and Mitigation Monitoring Plan, the proposed amendments to the Bikeway Master Plan, Pedestrian Master Plan and General Plan Bikeway Map to incorporate the proposed Gateway Activation Project and forward a recommendation of approval to the City Council.

SUMMARY RECOMMENDATION

The Planning Division recommends the Planning Commission make the following motion:

MOTION 1: MOVE TO RECOMMEND THAT THE CITY COUNCIL ADOPT RESOLUTION NO. 2026-____, A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF CITRUS HEIGHTS ADOPTING THE MITIGATED NEGATIVE DECLARATION, ADOPTING THE MITIGATION MONITORING PLAN, AND ADOPTING THE UPDATED BIKEWAY MASTER PLAN, PEDESTRIAN MASTER PLAN AND THE GENERAL PLAN BIKEWAY MAP INCORPORATING THE GATEWAY ACTIVATION PROJECT.

BACKGROUND

The City's first Bikeway Master Plan was initiated in the early 2000s to enable the City to be eligible for grant funding for bikeways throughout the City. Between 2003 and 2004, the City conducted public outreach associated with the City's first Bikeway Master Plan via the City's network of Neighborhood Associations.

In August 2011, the City adopted an updated General Plan and Environmental Impact Report that addressed sustainability topics such as climate change, water quality, mobility, and complete streets.

The General Plan includes several goals and policies that encourage improved mobility across the City including several goals and policies related to the City's Creek Corridors:

> Goal 29: Plan, design, construct, and manage a Complete Streets transportation network that accommodates the needs of all mobility types, users, and ability levels.
>
> Policy 29.4: Support safe, complete, and well-connected neighborhood street, bicycle, and pedestrian access and connections that balance circulation needs with the neighborhood context.
>
> Policy 29.4.F: Update the Bikeway Master Plan (BMP) and complete the proposed bikeway network shown in Map 8 within 10 years and prioritize projects that close existing gaps in the network.
>
> Goal 34: Preserve, protect, and enhance natural habitat areas, including creek and riparian corridors, oak woodlands, and wetlands.
>
> Goal 38: Establish a system of creekside trails, passive open space, and parks for public use.
>
> Goal 39: Create open spaces in future urban development with natural features for public use and enjoyment.
>
> Goal 59: Ensure that ample and appropriate parks and recreation facilities and programs are available to all residents.

In 2013 and 2014, the City partnered with Sunrise Recreation and Park District as well as Orangevale Recreation and Park District to evaluate approximately 26 miles of creek and utility corridors in the City of Citrus Heights and a small portion in Orangevale (Sacramento County). The Study (Creek Corridor Trail Project) included Brooktree Creek, Cripple Creek, Arcade Creek and tributaries, and the SMUD corridor.

In 2014, the City Council reviewed and accepted the Creek Corridor Trail Project. The City Council directed staff to incorporate the Priority 1 Trail segments into the City's regulatory documents including the General Plan, Bikeway Master Plan, and Pedestrian Master Plan.

In 2014, the City constructed the Old Auburn Multi-Use trail on the north side of Old Auburn Road between Garry Oak Drive and Robert Creek Court.

In 2015, the City Council adopted amendments to the Bikeway Master Plan and General Plan to include these trails. In 2016, the City Council adopted the Pedestrian Master Plan, including the Priority 1 Trail segments.

In 2022, the City Council authorized the construction of the Arcade Cripple Creek Trail Project, a 2.9-mile multi-use trail following the Sacramento Municipal Utility District (SMUD) overhead transmission corridor between Arcade Creek Park Preserve and Wachtel Way in both Citrus Heights and unincorporated Orangevale in Sacramento County. The Project included a direct connection to the Mitchell Village Trail, and provided access between eight parks, Sunrise Market Place and Woodside K-8 School.

In 2022, the City received a state budget allocation to develop the Gateway Activation Project (GAP) from an allocation supported through former congressman Ken Cooley's Office. The intent of this allocation is to advance a multi-use trail connection between the Old Auburn Multi-Use Trail, the Arcade Cripple Creek Trail, and the future Dry Creek Greenway (in Roseville).

PROJECT LOCATION

The Gateway Activation Project will implement multimodal and roadway improvements along Old Auburn Road and Wachtel Way, connecting to existing multi-modal facilities (See Figure 1, below). This improvement will also provide trail connection to future facilities proposed by adjacent municipalities, including the City of Roseville and Sacramento County.

Figure 1 Project Location



EXISTING CONDITIONS

The existing roadway conditions along Old Auburn Road and Wachtel Way present several operational and safety challenges. Traffic operations are constrained by closely spaced stop-controlled intersections that experience peak-hour Level of Service F conditions, resulting in long vehicle queues that regularly spill back into adjacent intersections and disrupt corridor flow.

Average travel speeds during peak periods are well below the posted speed limits, reflecting frequent stopping, delay, and congestion. For pedestrians and bicyclists, conditions are particularly challenging due to discontinuous sidewalks, limited marked crossings, wide crossing distances, and higher-than-posted vehicle speeds, which together create uncomfortable and unsafe conditions for non-motorized users and contribute to informal, high-risk crossing behavior.

The planned expansion of the regional trail network in this vicinity—including connections to the future Dry Creek Greenway in Roseville and future trail segments in Sacramento County, is expected to significantly increase pedestrian and bicycle activity along Old Auburn Road and Wachtel Way.

As these facilities become more interconnected, the corridor will transition from functioning primarily as a vehicular commuter route to serving as a critical multimodal spine linking neighborhoods, parks, and adjacent jurisdictions. This shift creates new demand for safe, comfortable crossings and continuous facilities that can accommodate users of all ages and abilities.

PROJECT DESCRIPTION

The goal of the project is to develop Complete Street solutions to address safety concerns, increase access and mobility connections for all users, and improve operations.

The project is anticipated to address residents' needs for safe, convenient, and comfortable access to key destinations, including neighborhoods, parks, open spaces, residences, and trail networks within and outside of City limits.

Proposed Project Objectives:

- Complete Street design for Old Auburn Road and Wachtel Way
- Extension of multi-modal facilities on Old Auburn Road to the city's northeastern border
- Extension of multi-modal facilities on Wachtel Way to the Old Auburn Road intersection
- Intersection improvements at Old Auburn Road/Wachtel Way and Old Auburn Road/Oakwood Hills Circle (east)/Linda Creek Court
- Pedestrian crossing and safety improvements at Old Auburn Road and Argo Drive

Proposed Improvements (See Attachment 2):

- Wachtel Way: The bicycle/pedestrian improvements along Wachtel Way will extend from just south of Pitalo Way at Arcade-Cripple Creek Trail to Old Auburn Road. The multi-modal trail will be located on the west side of Wachtel Way.
- Old Auburn Road: Bicycle/pedestrian improvements along Old Auburn Road will extend from Robert Creek Court on the west to the Placer County line on the east. The multi-use trail will connect to the existing trail on the north side of Old Auburn Road, cross at Argo Drive, and continue along the south side of Old Auburn Road to the Roseville City Limits and future Dry Creek Greenway.
- Intersection improvements at Argo Drive/Old Auburn Road will evaluate adding a pedestrian crossing and enhanced safety features.
- Intersection improvements in three locations (Argo Drive, Wachtel Way, and Oakwood Hills Circle (west)/Linda Creek Ct) were evaluated. The project team evaluated various intersection treatments to improve safety, reduce delay, and provide trail connectivity along the corridor. Ultimately, the use of single

lane roundabouts at each of the three intersections best achieves the project objectives of improving safety and circulation and providing trail connectivity.

Alternatives Analysis

As part of the project development, an alternatives analysis (Attachment 3) was conducted to identify alternative options to achieve the project objectives given existing conditions, community feedback and environmental factors.

The alternatives analysis evaluated a range of intersection and corridor improvement options to address documented safety, operational, and multimodal deficiencies along Old Auburn Road and Wachtel Way. Building on existing conditions and community input, the analysis compared feasible traffic control and geometric concepts at key intersections, focusing on their ability to reduce delay and queuing, improve pedestrian and bicycle safety, calm vehicle speeds, and support future regional trail connectivity.

Each alternative was assessed using accepted traffic operation measures, safety considerations, and corridor-level performance to understand tradeoffs and identify solutions that best balance multimodal access with the need to maintain efficient vehicular operations.

Proposed Multi-Modal Trail Improvements

As depicted in Attachment 2, the trail component of the project focuses on creating a continuous, high-comfort active transportation corridor along both Old Auburn Road and Wachtel Way by filling key network gaps and upgrading existing facilities. Along Old Auburn Road, the project proposes extending a Class I shared-use path primarily on the south side of the roadway, connecting the existing trail west of Robert Creek Court to the eastern city boundary.

The trail alignment prioritizes a crossing at a proposed roundabout at Argo Drive because it provides the most direct, logical, and safest opportunity to connect existing and planned trail segments while minimizing out-of-direction travel for users. Argo Drive is centrally located between widely spaced crossings, making it a natural convergence point for pedestrians and bicyclists traveling along Old Auburn Road. Importantly, this location allows trail users to safely transition from the north side of Old Auburn Road to the south side, which is necessary to connect into planned east–west and north–south regional routes leading toward the proposed Dry Creek Greenway and existing Arcade Cripple Creek Trail. Without a protected crossing at Argo Drive, trail users would be forced to either cross Old Auburn Road informally—creating safety risks—or travel long distances out of direction to reach the nearest controlled crossings. By formalizing the crossing at Argo Drive, the project closes a critical network gap, channels trail users to a predictable and safer location, and ensures the corridor functions as a seamless link between Old Auburn Road facilities and the broader regional trail system.

This shared-use path is designed to physically separate pedestrians and bicyclists from vehicle traffic, providing a wider, safer facility suitable for users of all ages and abilities. Where right-of-way constraints exist, the design transitions smoothly to enhanced Class II buffered bike lanes paired with continuous sidewalks to maintain connectivity and comfort.

On Wachtel Way, the project enhances north–south access by improving and extending bicycle and pedestrian facilities the west side of the street, creating a direct, intuitive connection to the Arcade-Cripple Creek Trail.

Intersection crossings are designed to align with the trail facilities, minimizing crossing distances and improving visibility at roundabouts. Overall, the trail design prioritizes consistency, separation from traffic,

and seamless transitions between facility types, transforming the corridor into a cohesive multimodal spine that supports both local trips and regional trail use.

Proposed Roadway Improvements

The proposed roadway improvements are intended to correct existing operational and safety deficiencies while better supporting a growing mix of travel modes. Central to these improvements is the replacement of two closely spaced stop-controlled intersections. The project includes three coordinated roundabouts located at key intersections along Old Auburn Road to address safety, congestion, and multimodal connectivity challenges.

Old Auburn/Argo

The roundabout at Old Auburn Road and Argo Drive is designed to provide a safe pedestrian crossing and gateway treatment while calming vehicle speeds along this portion of the corridor.

Old Auburn/Wachtel

The roundabout at Old Auburn Road and Wachtel Way serves as the primary operational improvement, replacing an all-way stop that currently experiences severe peak-hour delay and queue spillback, and improves access between Old Auburn Road and the north–south multimodal connection on Wachtel Way.

Old Auburn/Oakwood Hills Circle (east)/Linda Creek Court

The roundabout at Old Auburn Road and Oakwood Hills Circle (east)/Linda Creek Court resolves downstream bottlenecks by eliminating stop-and-go conditions that contribute to corridor-wide congestion. Together, the three roundabouts function as an integrated system, smoothing traffic flow, reducing conflict points, shortening pedestrian crossings, and creating a safer, more predictable environment for drivers, cyclists, and pedestrians throughout the corridor.

Roundabouts are the preferred option because they significantly reduce vehicle delay and queue spillback by allowing continuous, low-speed traffic flow rather than forcing all movements to stop. This is especially important in a corridor where congestion at one intersection routinely cascades into others during peak periods, degrading overall performance and reliability. From a safety perspective, roundabouts reduce conflict points and eliminate right-angle and head-on collisions—the crash types most likely to result in serious injury. Lower operating speeds improve driver reaction time and create shorter, more manageable crossings for pedestrians and bicyclists, often with refuge islands that allow users to cross one direction of traffic at a time.

Compared to traffic signals or all-way stops, roundabouts also discourage speeding, reduce stop-and-go noise, and perform more consistently under fluctuating traffic volumes. Collectively, these benefits make roundabouts the most effective solution for improving safety, calming traffic, and maintaining efficient corridor operations while accommodating increased pedestrian and bicycle activity.

BIKEWAY MASTER PLAN, PEDESTRIAN MASTER PLAN AND GENERAL PLAN AMENDMENTS

The Gateway Activation Project necessitates the update of the Pedestrian Master Plan (Exhibit 1C), Bikeway Master Plan (Exhibit 1D), and General Plan Planned Bikeway System Map (Exhibit 1E) to maintain consistency between the City’s regulatory documents. Maps in these documents reflect the addition of the GAP trail improvements.

Proposed Amendments

Section 106.74.060.A of the Zoning Code consists of findings the City Council must make to approve or disapprove an application for a General Plan Amendment, including map amendments. The findings are written below in bold italics and are followed by a review of the proposal against the findings.

1. The amendment is internally consistent with all other provisions of the General Plan

The proposed amendment is internally consistent with all other provisions of the General Plan. In particular the proposed amendment serves to implement several General Plan goals, including:

> **Goal 29:** Plan, design, construct, and manage a Complete Streets transportation network that accommodates the needs of all mobility types, users, and ability levels.
>
> **Policy 29.4**: Support safe, complete, and well-connected neighborhood street, bicycle, and pedestrian access and connections that balance circulation needs with the neighborhood context.
>
> **Policy 29.4.F**: Update the Bikeway Master Plan (BMP) and complete the proposed bikeway network in Map 8 within 10 years and prioritize projects that close existing gaps in the network
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> **Goal 34:** Preserve, protect, and enhance natural habitat areas, including creek and riparian corridors, oak woodlands, and wetlands.
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> **Goal 38**: Establish a system of creekside trails, passive open space, and parks for public use.
>
> **Goal 39**: Create open spaces in future urban development with natural features for public use and enjoyment.
>
> **Goal 59:** Ensure that ample and appropriate parks and recreation facilities and programs are available to all residents.

2. The proposed amendment will not be detrimental to the public interest, health, safety, convenience and welfare of the City.

The proposed amendment will provide for improved multi-modal infrastructure throughout the City enabling residents and visitors to safely travel in the City. The amendment will not be detrimental to the public interest, health, safety, convenience and welfare of the City.

3. The affected sites are physically suitable for the proposed bicycle infrastructure.

The bicycle infrastructure proposed is located at suitable locations which have been analyzed and reviewed as part of the GAP project development. The Mitigation Monitoring Plan provides mitigation to ensure development of the improvements do not impact the environment.

Amendment – *Conclusion*

The proposed amendments are consistent with the direction provided by the City Council during the development of the GAP Project and implements several goals of the General Plan. Based on the above, staff recommends that the Planning Commission recommend approval to the City Council of the proposed amendments.

COMMUNITY ENGAGEGMENT

Community engagement has been a central component in the development of the Gateway Activation Project. Numerous outreach efforts were conducted throughout 2025 and early 2026, including direct mailers to trail adjacent property owners and other interested community members, as well as the creation of a dedicated project webpage providing access to documents, maps, meeting notices, and meeting summaries (www.citrusheights.net/GAP).

Staff also conducted numerous one-on-one meetings with community members seeking additional information about the project. In addition, two well-attended in-person workshops were held, along with a pop-up event in May 2025 along the trail to gather input from trail users.

An overview of outreach activities is provided below:

1. April 29, 2025 – Community Workshop
2. May 7th Pop up along Old Auburn Multi Use Trail
3. June 25, 2025 City Council Meeting
4. Intersection Property Owner Engagement
5. March 5, 2026 Community Update Meeting
6. 500' Mailing for Planning Commission Hearing (Approximately 250 mailers)

ENVIRONMENTAL DETERMINATION

An Initial Study with Proposed Mitigated Negative Declaration (Exhibit A-1) (IS/MND) was prepared for this project. The Draft IS/MND was released for a 30-day review period on February 13, 2026. Approximately 250 notices were mailed to properties within 500' of the project. The comment period ended on March 19, 2026. Six public comments were received during circulation. Primary concerns received were regarding addressing existing noise levels and requests for additional privacy fencing to be installed; however, feedback was overall supportive of the project. Responses to public comments received are included in Appendix F of the Final IS/MND.

The IS/MND provides mitigation for the construction and development of GAP project as well as updating the Bikeway Master Plan, Pedestrian Master Plan, and General Plan Bikeway Map.

The IS/MND and associated Mitigation Monitoring Plan (MMP) includes mitigation for the following environmental categories:

- Biological Resources
- Cultural Resources
- Geology and Soils
- Hazards
- Hydrology
- Population and Housing
- Transportation and Traffic
- Tribal Cultural Resources

As the City identifies funding and begins the final design and construction of the GAP project, these mitigation measures will be incorporated into project plans and construction specifications.

RECOMMENDATION

The Planning Division recommends the Planning Commission make the following motion:

MOTION 1: MOVE TO RECOMMEND THAT THE CITY COUNCIL ADOPT RESOLUTION NO. 2026-____, A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF CITRUS HEIGHTS ADOPTING THE MITIGATED NEGATIVE DECLARATION, ADOPTING THE MITIGATION MONITORING PLAN, AND ADOPTING THE UPDATED BIKEWAY MASTER PLAN, PEDESTRIAN MASTER PLAN AND THE GENERAL PLAN BIKEWAY MAP INCORPORATING THE GATEWAY ACTIVATION PROJECT.

Attachments

1. RESOLUTION NO. 2026-____, A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF CITRUS HEIGHTS ADOPTING THE MITIGATED NEGATIVE DECLARATION, ADOPTING THE MITIGATION MONITORING PLAN, AND ADOPTING THE UPDATED BIKEWAY MASTER PLAN, PEDESTRIAN MASTER PLAN AND THE GENERAL PLAN BIKEWAY MAP INCORPORATING THE GATEWAY ACTIVATION PROJECT.
    a. Mitigated Negative Declaration
    b. Mitigation Monitoring Plan
    c. Pedestrian Master Plan Amendment
    d. Bikeway Master Plan Amendment
    e. General Plan Bikeway Map Amendment
2. Proposed GAP Project Improvements
3. Alternatives Analysis
4. Community Workshop Summary – 4/29/25
5. Community Meeting Summary – 3/5/26
6. Comments Received
    a. Desmond, Nolan, Livaich, & Cunningham Letter – 3/20/26

Attachment 1

RESOLUTION NO. 2026-____

RESOLUTION OF THE CITY COUNCIL OF THE CITY OF CITRUS HEIGHTS, CALIFORNIA, ADOPTING THE INITIAL STUDY/MITIGATED NEGATIVE DECLARATION AND MITIGATION MONITORING PLAN FOR THE GATEWAY ACTIVATION PROJECT; ADOPTING THE UPDATED BIKEWAY MASTER PLAN, THE PEDESTRIAN MASTER PLAN AND THE GENERAL PLAN BIKEWAY MAP TO INCOPRPORATE THE GATEWAY ACTIVATION PROJECT

WHEREAS, the City of Citrus Heights has proposed the Gateway Activation Project (Project), which will construct multimodal and roadway improvements along Old Auburn Road and Wachtel Way;

WHEREAS, the Project will improve a .45-mile section of Old Auburn Road from the Sacramento County line south to Roberts Creek Court and on Wachtel Way from Old Auburn Road south approximately .61 miles to the eastern terminus of the Arcade-Cripple Creek Trail at Wachtel Way;

WHEREAS, the Project will incorporate Complete Street elements to serve bicyclists, pedestrians, and motorists;

WHEREAS, the Project will incorporate intersection improvements to facilitate traffic circulation including the construction of three roundabouts;

WHEREAS, the Gateway Activation Project will amend the city's long-range plans for bicycle and pedestrian improvements as depicted in Exhibits C through E, which include:

- The Citrus Heights Bikeway Master Plan,
- The Pedestrian Master Plan; and
- The Citrus Heights General Plan Bikeway Map

WHEREAS, the city held two community meetings, a pop-up event, a public discussion at a City Council meeting, and met with several individuals to solicit feedback about the proposed project. A public workshop was held for the Gateway Activation Project Mitigated Negative Declaration during the public comment period, which ran between February 13, 2026 and March 19, 2026;

WHEREAS, the Citrus Heights City Council serves as the Lead Agency for the Gateway Activation Project;

WHEREAS, the City Council held a public hearing on May 13, 2026, wherein public testimony was taken and based upon the Initial Study, comments received, and substantial evidence in the whole of the city's administrative record for the Project, the City Council is able to conclude that potential impacts could be avoided or reduced to a level of insignificance by the mitigation measures set forth in the revised Initial Study and Mitigated Negative Declaration; and

WHEREAS, the fees in the amount of $3,093.75 associated with the filing of the Notice of Determination with the County Clerk will be paid for using grant funding

associated with the Project.

NOW, THEREFORE, BE IT RESOLVED AND ORDERED that the Citrus Heights City Council hereby finds as follows:

Findings for a Mitigated Negative Declaration:

1. An Initial Study was prepared for the Gateway Activation Project and proper notice and opportunity for public review and comment was provided in accordance with the California Environmental Quality Act (CEQA) and CEQA Guidelines and local guidelines.

2. That based upon the Initial Study, and the substantial evidence in the city's administrative record, potential impacts resulting from the Project have been identified. Mitigation measures have been proposed in the Initial Study and agreed to by the city as a condition of project approval that will, when implemented, reduce all potential impacts to a less than significant level. In addition, there is no substantial evidence in the record before the city that supports a fair argument that the Project, as conditioned and mitigated, could have any residual significant effect on the environment.

3. That the Project does not have the potential to have a significant adverse impact on wildlife resources as defined in the State Fish and Game Code, either individually or cumulatively and is not exempt from Fish and Game filing fees.

4. That the Project is not located on a site listed on any Hazardous Waste Site List compiled by the State pursuant to Section 65962.5 of the California Government Code.

5. That the City Council reviewed the Initial Study and considered public comments before making a recommendation on the project.

6. That a Mitigation Monitoring Program has been prepared to ensure compliance with the adopted mitigation measures, which Mitigation Monitoring Program was considered by the City Council and which Mitigation Monitoring Program is made a part of this Resolution.

7. That the Initial Study/Mitigated Negative Declaration prepared concerning the Gateway Activation Project reflects the independent judgment and analysis of the City Council of the City of Citrus Heights.

8. The City Council hereby adopts as "final" the Gateway Activation Project Mitigated Negative Declaration comprised of the draft Mitigated Negative Declaration (attached as Exhibit A) with the minor modifications identified below, and the Mitigation Monitoring Plan (attached as Exhibit B)

9. That the record of proceedings of the decision on the Project is available for public review at the City of Citrus Heights Community Development Department, 6360 Fountain Square Drive, Citrus Heights, California during normal business hours.

BE IT FURTHER RESOLVED that the Citrus Heights City Council, in reference to the potential impacts identified in the Initial Study, hereby adopts the Mitigated Negative Declaration prepared for the Gateway Activation Project including the mitigation measures (contained within the attached Mitigated Negative Declaration and Mitigation Monitoring Program) and included in this Resolution by reference.

The City Clerk shall certify the passage and adoption of this Resolution and enter it into the book of original resolutions.

PASSED AND ADOPTED by the City Council of the City of Citrus Heights, California, this ____ day of _____ 2026 by the following vote, to wit:

AYES: **Council Members:**
NOES: **Council Members:**
ABSTAIN: **Council Members:**
ABSENT: **Council Members:**

_____
, Mayor

ATTEST:

_____
Amy Van, City Clerk

Exhibits

A: Initial Study and Mitigated Negative Declaration
B: Mitigation Monitoring Plan
C: Pedestrian Master Plan Amendment
D: Bikeway Master Plan Amendment
E: General Plan Bikeway Map Amendment

Fehr & Peers

Technical Memorandum

Date: January 22, 2026

To: Pamela Dalcin-Walling, PE, QSD/P, Dokken Engineering

From: John Gard, and Mari Ramones, Fehr & Peers

Subject: Project Alternatives Analysis and Recommendations for the Gateway Activation Project in Citrus Heights, CA

Purpose

This technical memorandum recaps the project kickoff, initial community outreach, and intersection alternatives analysis for the Gateway Activation Project (GAP) in Citrus Heights, CA. The City of Citrus Heights staff identified project build alternatives to be evaluated for the primary study intersections at Old Auburn Road/Argo Drive, Old Auburn Road/Wachtel Way, and Old Auburn Road/Oakwood Hills Circle East.

Background

The Citrus Heights Gateway Activation Project (GAP) proposes to extend multi-modal connections along Old Auburn Road from the eastern border of the City of Citrus Heights for about 0.55 miles west. The proposed improvements will connect with existing and planned bicycle and pedestrian improvements to the west and east.

The objectives of the GAP project are to:

- Extend multimodal facilities on Old Auburn Road from the City's eastern boundary to the existing Class I trail to the west (Robert Creek Court)
- Extend multimodal facilities on Wachtel Way south to the Arcade-Cripple Creek Trail
- Upgrade intersections at Old Auburn Road/Wachtel Way and Old Auburn Road/Oakwood Hills Circle East
- Improve pedestrian safety and crossings at multiple points within the study corridor

An existing conditions analysis was conducted in early 2025 to document key characteristics such as existing roadway, bicycle and pedestrian networks, vehicle queuing, vehicle speeds, cut-through travel, and safety. The Existing Conditions Analysis Memorandum can be found in **Appendix A.**

Following the existing conditions analysis, the project team conducted a preliminary analysis of intersection alternatives for the following three study intersections:

1. Old Auburn Road/Argo Drive

2. Old Auburn Road/Wachtel Way
3. Old Auburn Road/Oakwood Hills Circle East

Alternatives at Old Auburn Road/Argo Drive were evaluated based on improving pedestrian safety and creating a crossing to connect the existing Class I trail to the west and the proposed trail to the east. Secondary considerations included traffic control devices that could reduce corridor speeds.

Several intersection controls were evaluated for the Old Auburn Road/Wachtel Way and Old Auburn Road/Oakwood Hills Circle East intersection. After a preliminary alternatives analysis, the project team narrowed down the alternatives to present at a community meeting. The alternatives that were chosen for a more focused analysis are discussed below.

Community Outreach

The project team hosted a kickoff community meeting on April 29, 2025 to introduce the project and gather community input on preliminary design concepts. The meeting began with the project team presenting the project overview and objectives. During the presentation, the team introduced the following geometric options for community input:

1. Two options for a pedestrian crossing at Argo Drive: a Pedestrian Hybrid Beacon (PHB) and a roundabout alternative.
2. Two options for the Old Auburn Road/Wachtel Way intersection: Traffic Signal and Roundabout.
3. Two options for the Old Auburn Road/Oakwood Hills Circle East intersection: Maintain existing All-Way Stop-Control (AWSC) and Roundabout.

The project team presented the safety and operational benefits and drawbacks of each alternative along with various other engineering design aspects.

Community members expressed interest in both the pedestrian hybrid beacon and roundabout options for Argo Drive. For the intersection improvements at Wachtel Way, community members preferred the roundabout alternative over the signal alternative. However, several attendees expressed concerns about the roundabout and the ability for residents to use it safely. At Oakwood Hills Circle East, residents preferred the roundabout to the existing condition of All-Way Stop-Control.

For a detailed description of the community workshop and project alternative exhibits, see the project website at https://www.citrusheights.net/1343/Gateway-Activation-Project-GAP.

Argo Drive Pedestrian Crossing

Fehr & Peers evaluated the appropriate type of traffic control and pedestrian crossing at the Old Auburn Road/Argo Drive intersection. Fehr & Peers documented existing conditions and evaluated potential improvements.

Existing Conditions

The Old Auburn Road/Argo Drive intersection is controlled by stop signs on the two side-street approaches. In this area, Old Auburn Road features one travel lane in each direction separated by a two-way left-turn lane (TWLTL). There are also wide Class II (on-street) bike lanes present in each direction (may have accommodated on-street parking at one time). Just west of the intersection, Old Auburn Road is 71 feet wide, measured from face of curb.

No crosswalks are located at the intersection and the posted speed limit on this section of Old Auburn Road is 40 miles per hour. The nearest crosswalk to this intersection across Old Auburn Road is at Wachtel Way, 900 feet to the east. There are not continuous sidewalks along Old Auburn Road between Argo Drive and Wachtel Way, which requires pedestrians to walk in the shoulder or bike lane. The next closest crossing is 2,300 feet to the west at Wintergreen Drive.

Figure 1 shows the existing AM and PM peak hour traffic volumes at the study intersection based on counts collected on Wednesday, October 30, 2024.

Image 1 is a photo taken in March 2025 of a group of pedestrians beginning to cross Old Auburn Road at Argo Drive. Halfway across, they began jogging/running across the road as vehicles were approaching.

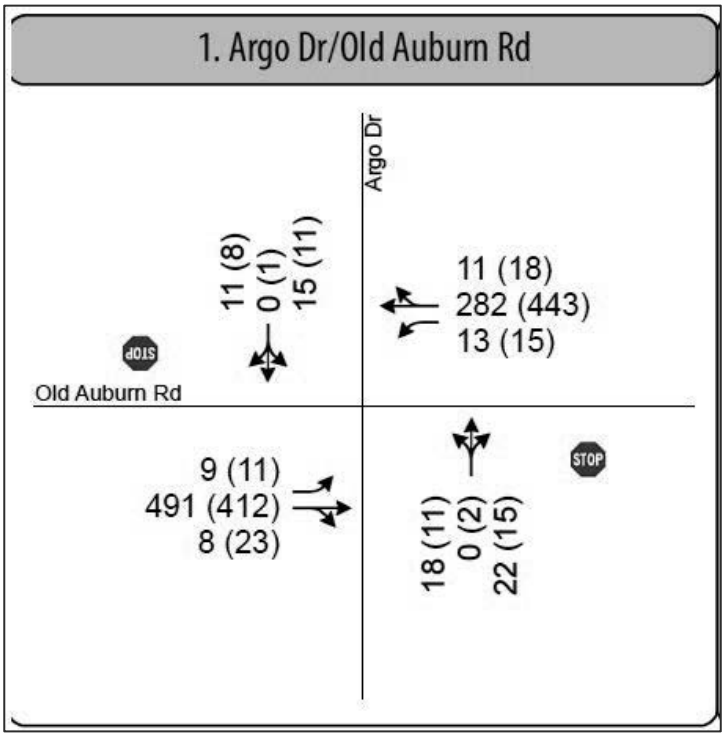


Figure 1: Existing AM (PM) peak hour traffic volumes.



Image 1: View of pedestrians crossing Old Auburn Road at Argo Drive

Warrants Analysis

The *California Manual of Uniform Traffic Control Devices* (Caltrans, 2014) contains several different types of warrants or installation guidelines applicable to the study intersection. They include:

- Traffic Signal Warrants
- Pedestrian Hybrid Beacon Guidelines for Installation

Traffic Signal Warrant Analysis

There are nine (9) traffic signal warrants as shown in **Image 2**. Of these nine, warrants 1, 2, 3, 4, and 7 would be applicable to the study intersection. Warrant 5 is not applicable because the intersection is not an established school crossing. Warrants 6, 8, and 9 are also not applicable for various reasons.

02 **The investigation of the need for a traffic control signal shall include an analysis of factors related to the existing operation and safety at the study location and the potential to improve these conditions, and the applicable factors contained in the following traffic signal warrants:**

Warrant 1, Eight-Hour Vehicular Volume
Warrant 2, Four-Hour Vehicular Volume
Warrant 3, Peak Hour
Warrant 4, Pedestrian Volume
Warrant 5, School Crossing
Warrant 6, Coordinated Signal System
Warrant 7, Crash Experience
Warrant 8, Roadway Network
Warrant 9, Intersection Near a Grade Crossing

Image 2: List of all signal warrants contained in CA MUTCD.

The following conclusions were reached regarding whether the study intersection satisfies any of the applicable CA MUTCD signal warrants:

- **None of the traffic volume-based signal warrants would be satisfied.** This is because the largest hourly side-street traffic volume is 40 vehicles, half of the minimum required for the 4-hour warrant and only 40% of the required volume for the peak hour warrant.
- **The pedestrian volume warrant would not be met.** During the October 2024 counts, only a single pedestrian crossed Old Auburn Road during the five-hour count window.
- **The crash experience warrant would not be met.** Between 2018 and 2023, two reported crashes occurred at the study intersection. This warrant requires five collisions in a 12-month period of a type susceptible to correction by a traffic signal.

Pedestrian Hybrid Beacon Warrant Analysis

Page 973 of the *CA MUTCD* states the following with regard to when pedestrian hybrid beacons (PHBs) should be installed:

> *For a major street where the posted or statutory speed limit or the 85th-percentile speed exceeds 35 mph, the need for a pedestrian hybrid beacon should be considered if the engineering study finds that the plotted point representing the vehicles per hour on the major street (total of both approaches) and the corresponding total of all pedestrians crossing the major street for 1 hour (any four consecutive 15-minute periods) of an average day falls above the applicable curve in Figure 4F-2 for the length of the crosswalk.*

Image 3 shows Figure 4F-2 from the CA MUTCD and indicates that a minimum of 20 pedestrian crossings per hour are suggested by this guideline. **Image 4** shows the pedestrian signal heads visible to motorists at PHBs.

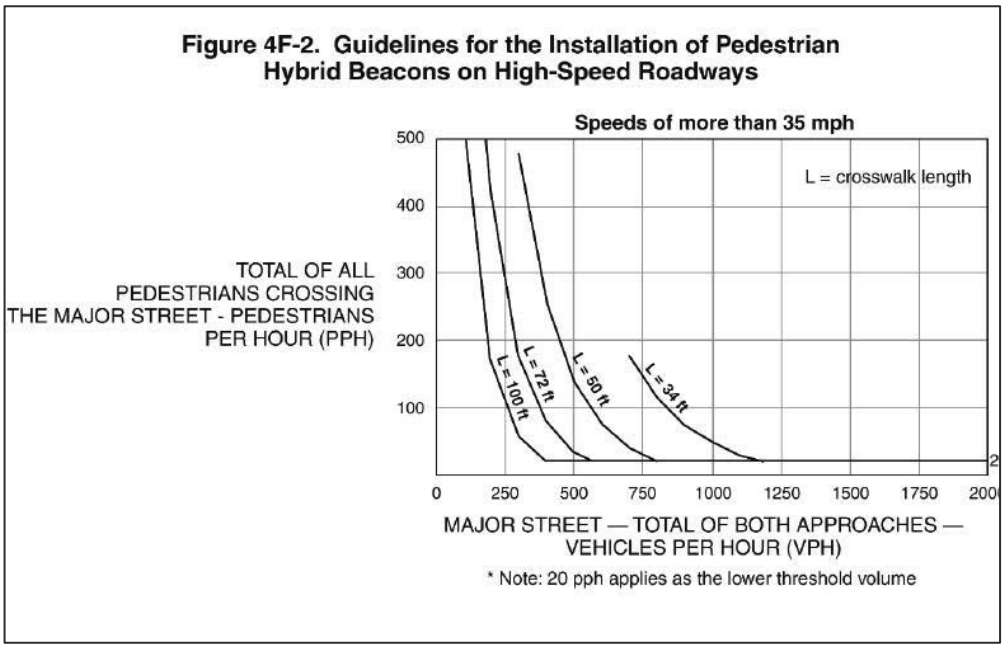


Image 3: Guidelines for installing pedestrian hybrid beacons

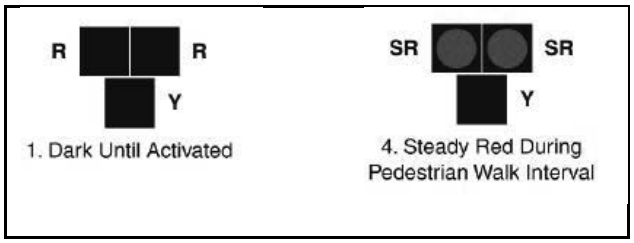


Image 4: pedestrian hybrid beacons signal heads

In summary, the Old Auburn Road/Argo Drive intersection does not currently have a sufficient level of pedestrian crossings to meet the guideline for PHB installation. While such an installation may attract more pedestrians, it is unknown whether at least 20 per hour will occur.

Although the suggested guidelines are not met for pedestrian volumes, the CA MUTCD allows for the installation of a PHB based on an analysis and engineering judgment.

Conclusions

From the aforementioned analyses, it was determined that neither a traffic signal nor a PHB are appropriate solutions for the Old Auburn Road/Argo Drive intersection. However, it is worth noting that the majority of the language related to the signal warrant analysis in the *CA MUTCD* is regulatory and uses wording like "shall". In contrast, language associated with the PHB is primarily optional, guidance, or support, suggesting there may be some flexibility in application and deference given to the lead agency.

Page 973 of the *CA MUTCD* states the following: "A conventional traffic control signal operation with a standard signal face displaying green, yellow and red (steady and/or flashing red) indications, at a mid-block crosswalk is an alternative to the pedestrian hybrid beacon." This type of installation (i.e. a pedestrian signal) is in place in multiple locations in Citrus Heights, such as nearby Woodside Middle School and various locations along Auburn Boulevard and Greenback Lane.

In lieu of the signal alternatives mentioned above, a roundabout was considered.

Image 5 shows Exhibit 8.8 of *NCHRP 1043: Guide for Roundabouts* (2023). This exhibit shows a range of appropriate intersection traffic control treatments across a wide range of traffic volumes. The red 'X" on this image shows the volume at the Old Auburn Road/Argo Drive intersection. The volume is at the cusp of where side-street stop-control or a single-lane roundabout is advised.

A single-lane roundabout would offer several benefits to travelers on the Old Auburn Road corridor including:

1. **Reduced travel speeds**. Motorists would be required to slow down well below the 40 mph posted speed limit in order to navigate the roundabout.
2. **Improved Pedestrian Crossing**: The currently uncontrolled 70-foot wide crossing of Old Auburn Road at Argo Drive would be converted into a much shorter crossing distance (and across one lane at a time with a refuge island in between).
3. **Acceptable traffic operations**: The roundabout would operate with only modest delays and queues.
4. **Improved Corridor Safety**: Roundabouts are known to have lower collision rates than signals or stop signs under most conditions. They are especially effective in reducing fatal or severe injury collisions.

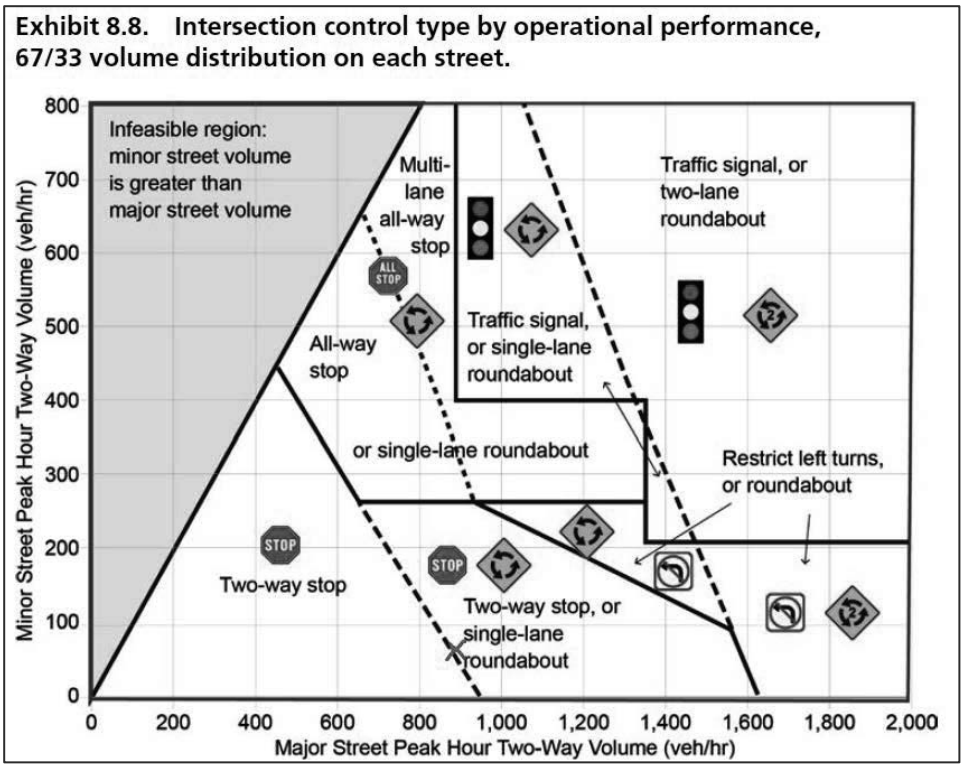


Image 5: Exhibit 8.8 of NCHRP 1043: Guide for Roundabouts (2023)

Alternatives Analysis

The project team considered a range of traffic control alternatives for the remaining two study intersections, Old Auburn Road/Wachtel Way and Old Auburn Road/Oakwood Hills Circle East. These two intersections were analyzed as a pair due to their proximity to each other and the upstream/downstream effects that each control type has on the other intersection. The following alternatives were developed for subsequent analysis:

- Alternative 1 – Consists of a roundabout at the Old Auburn Road/Wachtel Way intersection and maintaining the existing AWSC at the Old Auburn Road/Oakwood Hills Circle East intersection.
  A roundabout was considered due to its ability to reduce vehicle travel speeds and conflict points, and to improve multi-modal crossing conditions at the intersection. **Image 6** shows the configuration at the study intersections under this alternative.
- Alternative 2 – Consists of roundabouts at both study intersections. **Image 7** shows this configuration at the study intersections under this alternative.

- Alternative 3 – Consists of installing a traffic signal at the Old Auburn Road/Wachtel Way intersection with east-west split phasing (i.e., no westbound left-turn lane) and the Old Auburn Road/Oakwood Hills Circle East intersection remain as AWSC. **Image 8** shows the configuration at the study intersections under this alternative.

(Please see "Warrant Analysis at the Old Auburn Road/Oakwood Hills Circle East–Linda Creek Ct Intersection" for a discussion regarding why a traffic signal was not considered at the Old Auburn Road/Oakwood Hills Circle East intersection under any of these alternatives.)

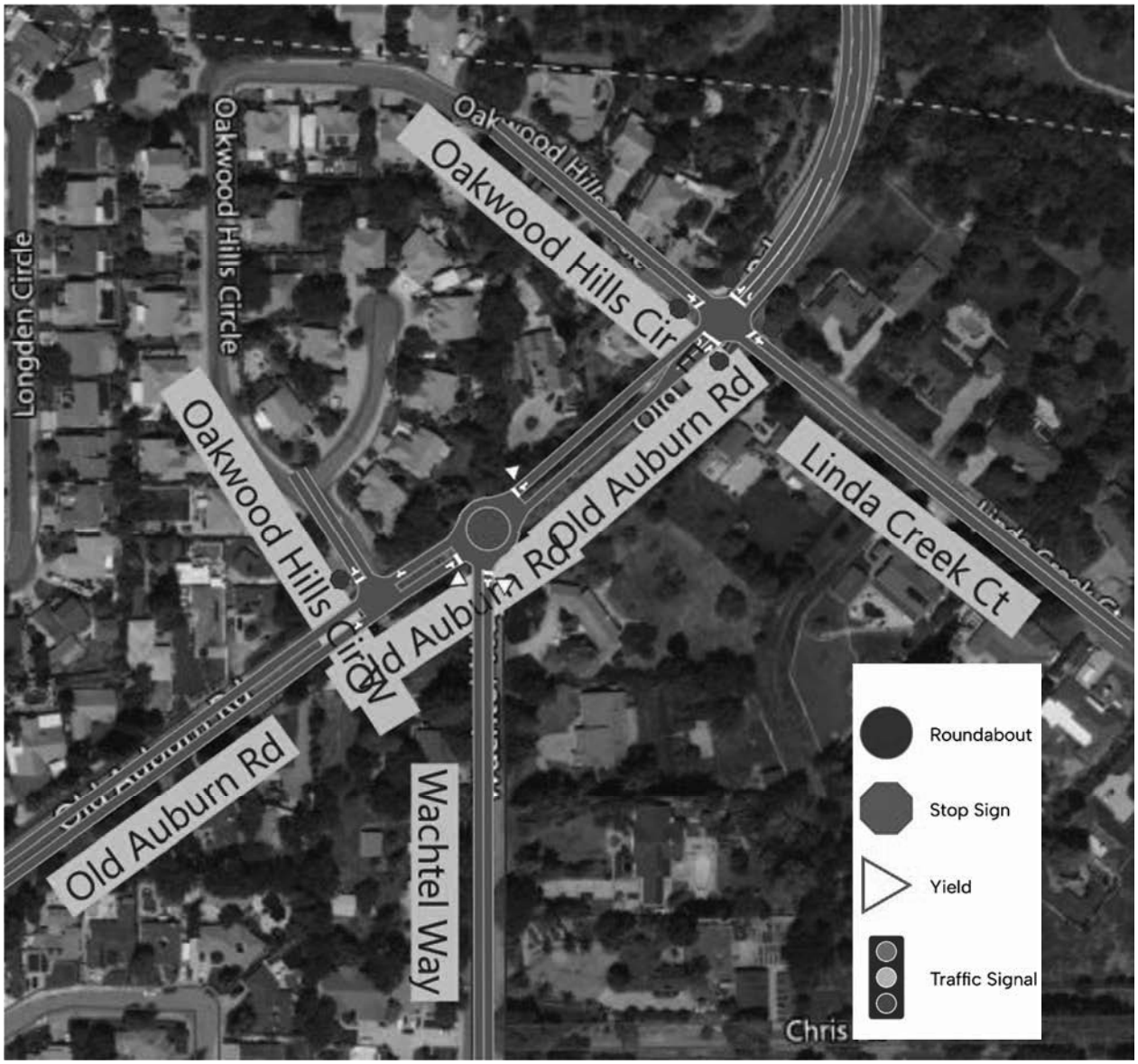


Image 6: Proposed intersection configurations for Alternative 1.

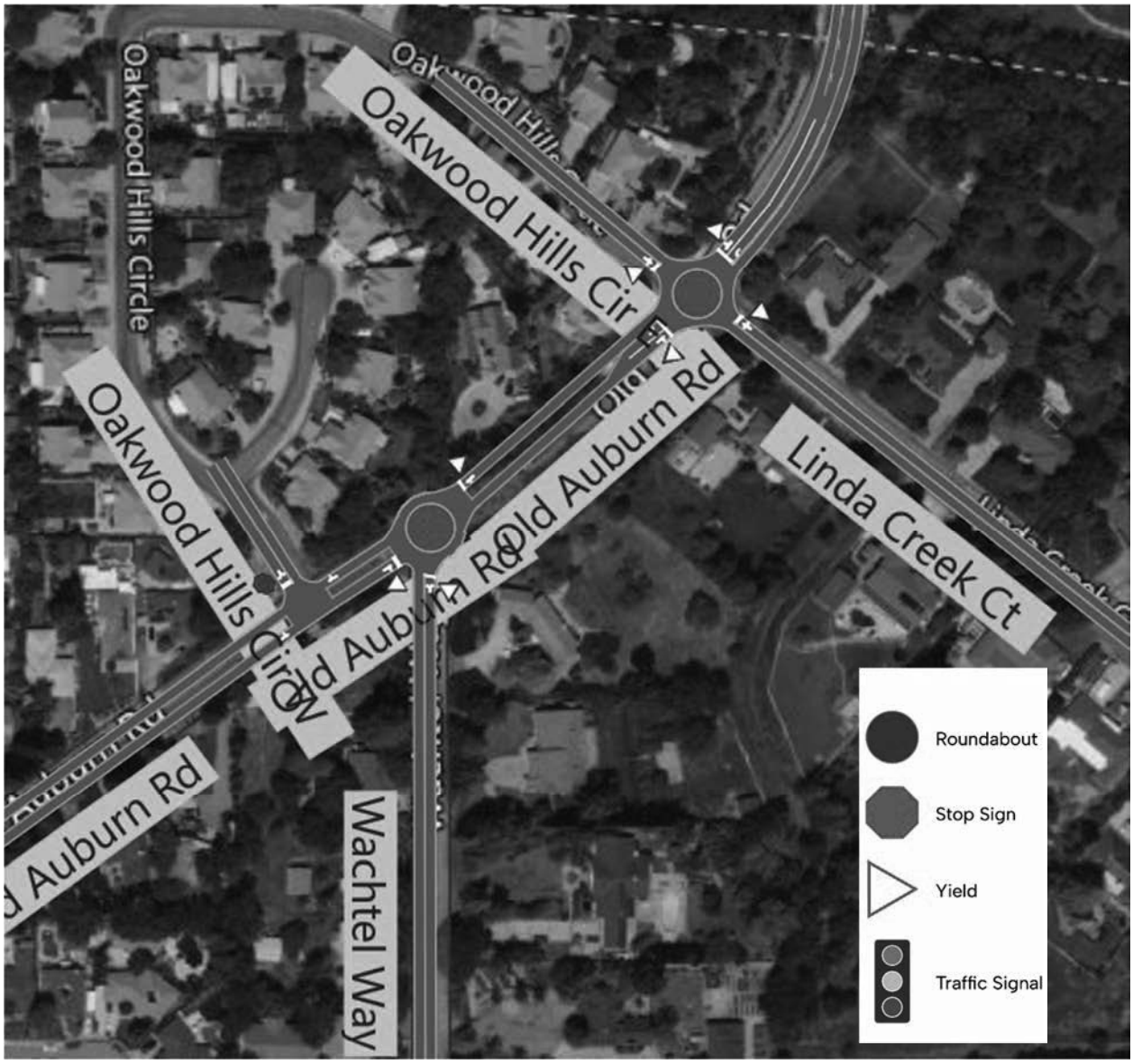


Image 7: Proposed intersection configurations for Alternative 2.



Image 8: Proposed intersection configurations for Alternative 3.

To confirm that a roundabout would be a viable solution for this segment of Old Auburn Road, the project team research locations in the Northern California area with comparable single lane roundabouts. The City of Chico installed a single lane roundabout at the Manzanita Avenue/Vallombrosa Avenue intersection over 10 years ago. This roundabout has comparable ADT volumes of 11,142 vehicles on Manzanita Avenue, similar to Old Auburn Road west of Wachtel Way. Conversations with the City of Chico staff revealed that one collision has been reported at this roundabout in last 7 years. Comparable single-lane roundabouts also exist on Elk Grove Boulevard between Waterman Road and Bradshaw Road in the City of Elk Grove. The existing ADT on Elk Grove Boulevard at this location is about 13,200 vehicles.

Warrant Analysis at the Old Auburn Road/ Oakwood Hills Circle East-Linda Creek Ct Intersection

A traffic signal was evaluated as a potential alternative at the Old Auburn Road/Oakwood Hills Circle East-Linda Creek Ct intersection. Similar to the warrant analysis presented previously at the Old Auburn Road/Argo Drive intersection, warrants 1, 2, 3, 4, and 7 would be applicable to this study intersection.

Based on the results of the warrant analysis, it was determined that the Old Auburn Road/Oakwood Hills Cir E-Linda Creek Ct intersection does not satisfy any of the applicable CA MUTCD signal warrants for the following reasons:

- **None of the traffic volume-based signal warrants would be satisfied.** The largest hourly side-street traffic volume is 5 vehicles, which does not meet the lowest threshold volume for a minor-street approach with one lane.
- **The pedestrian volume warrant would not be met.** During the October 2024 counts, only seven pedestrians crossed Old Auburn Road during the five-hour count window.
- **The crash experience warrant would not be met.** Between 2018 and 2023, one reported crash occurred at the study intersection.

Additionally, installing a traffic signal at this intersection would lead to higher vehicle speeds through the corridor. This could potentially increase the frequency of collisions and street noise on Old Auburn Road. With a traffic signal in place, the eastbound and westbound through movements on Old Auburn Road would receive a green signal indication the vast majority of the day (due to lack of side street traffic). Motorists on Old Auburn Road may become accustomed to the signal being green and consequently drive less cautiously when approaching it. In summary, the installation of a traffic signal is not warranted based on traffic volume and collision history and would be detrimental to overall safety in the corridor.

Intersection Operations

Traffic operations for each alternative were analyzed using delay and Level of Service (LOS) as primary measures of intersection performance. Automobile LOS is a qualitative description of traffic flow from the perspective of motorists. The *Highway Capacity Manual (HCM) 7th Edition* (Transportation Research Board, 2022) defines six levels of service from LOS A representing the least congested traffic conditions to LOS F representing the most congested traffic conditions. These grades represent the perspective of drivers and are an indication of the comfort and convenience associated with driving, as well as speed, travel time, traffic interruptions, and freedom to maneuver.

LOS at signalized and all-way stop-controlled intersections and roundabouts is based on the weighted average control delay measured in seconds per vehicle for all motorists traveling through the intersection. For side-street stop-controlled intersections, this study reports the average control delay for the lane group or movement with the greatest delay, and for the intersection as a whole.

The corridor was analyzed using Synchro's SimTraffic micro-simulation module to apply the methodologies. SimTraffic considers interactions between closely spaced adjacent intersections, turn

lane spillbacks, and upstream/downstream bottlenecks. In this study, given the above guidance, SimTraffic was used to analyze all study intersections.

Table 1 compares the LOS and delay results for the three build alternatives versus existing conditions. Note that the City's General Plan specifies that "the city shall strive to achieve LOS E or better conditions during peak hours". Key findings from this table are:

- The Old Auburn Road/Wachtel Way intersection would continue to operate unacceptably during the AM peak hour under Alternative 1. This occurs because the heavy eastbound travel demand approaching the Old Auburn Road/Oakwood Hills Circle East all-way stop would regularly spill back into the roundabout, locking it up.
- Alternative 2 would provide LOS A or B operations at each intersection during the AM and PM peak hours.
- Alternative 3 would also provide acceptable operations, though delays would be much greater than under Alternative 2.

Table 1. Peak Hour Level of Service – Alternatives Analysis

Alternative	Traffic Control at Wachtel Way	Peak Hour	LOS/Delay (s)	Traffic Control at Oakwood Hills Circle East	LOS/Delay (s)
Existing Conditions	AWSC	AM	**F / 56**	AWSC	E / 38
		PM	B / 14		**F / 75**
1	RAB	AM	**F / 115**	AWSC	D / 33
		PM	B / 12		C / 20
2	RAB	AM	B / 13	RAB	A / 9
		PM	B / 10		A / 8
3	Signal	AM	D / 50	AWSC	C / 20
		PM	D / 52		E / 45

Notes: AWSC = All-Way Stop-Controlled
Bolded numbers indicate deficient operations per City of Citrus Heights General Plan Policy 29.2.
Source: Fehr & Peers, 2025.

Vehicle Queuing Results

Table 2 shows the maximum queue lengths based on SimTraffic results for critical movements at the study intersections. Key findings from this table are summarized below:

1) Alternative 1
   a) Eastbound Old Auburn Road east of Wachtel Way: This alternative would deliver large platoons of traffic departing Wachtel Way. Those vehicles would incur the all-way stop at Oakwood Hills Circle East, which results in vehicle queues spilling back into the Wachtel Way roundabout. This, in turn, causes a lengthy eastbound queue to develop approaching the roundabout.
   b) Westbound Old Auburn Road: This alternative reduces the maximum queue in the westbound direction during the PM peak hour from 1,150 feet (existing) to 400 feet. This occurs because vehicles traveling westbound only have to stop at Old Auburn Road/Oakwood Hills Circle East and are able to travel freely through the roundabout.
   c) Northbound Wachtel Way: Motorists on this approach during the AM peak hour would have a difficult time finding gaps in traffic within the roundabout due to the heavy eastbound travel demand and the queue spill back mentioned above.
2) Alternative 2
   a) Eastbound Old Auburn Road: This alternative reduces the maximum queue in the eastbound direction during the AM peak hour from 850 feet (existing) to 275 feet. This reduction in queuing is due to the constant flow of traffic through the double roundabouts and minimal stopping of vehicles.
   b) Westbound Old Auburn Road: This alternative reduces the maximum queue in the westbound direction during the PM peak hour from 1,150 feet (existing) to 150 feet.
   c) Northbound Wachtel Way: When compared to Alternative 1, motorists on this approach would have a much easier time entering the roundabout, thereby resulting in less delays and shorter queues.
3) Alternative 3
   a) Eastbound Old Auburn Road west of Wachtel Way: When compared to existing conditions, this alternative results in a maximum queue that is slightly less during the AM peak hour, but twice as long during the PM peak hour. This change stems from altered corridor traffic flow characteristics due to the all-way stop at Wachtel Way being replaced by a signal.
   b) Westbound Old Auburn Road: This alternative reduces the maximum queue in the westbound direction during the PM peak hour from 1,150 feet (existing) to 825 feet. Under this alternative, westbound traffic would continue to spill back from Wachtel Way into the Oakwood Hills Circle East intersection. This change stems from altered corridor traffic flow characteristics due to the all-way stop at Wachtel Way being replaced by a signal.

Travel Times and Speeds

Corridor travel times and average travel speeds were compared against existing conditions for each alternative. Existing corridor travel times in the peak direction of travel (i.e., eastbound in the AM peak hour and westbound in the PM peak hour) are shown in **Image 9**. As shown, average travel speeds are in the 11-12 miles per hour (mph) range, which is well below the posted speed limit of 35 mph.

Table 2. Maximum Vehicle Queues

Intersection	Movement	Available Storage (ft)[2]	Maximum Queue (ft)[1]											
			Existing Conditions			Alternative 1			Alternative 2			Alternative 3		
			Control	AM Peak Hour	PM Peak Hour	Control	AM Peak Hour	PM Peak Hour	Control	AM Peak Hour	PM Peak Hour	Control	AM Peak Hour	PM Peak Hour
Old Auburn Road/Wachtel Way	EBT	90	AWSC	**850**	**300**	RAB	**1,125**	**225**	RAB	**275**	**225**	Signal	**775**	**650**
	WB L/T	350		175	**375**		75	175		75	225		**350**	**375**
	NBL	600		275	275		**850**	125		200	125		325	250
	NBR[3]	100		125	100									
Old Auburn Road/Oakwood Hills Circle E/Linda Creek Ct	EBT	350	AWSC	150	125	AWSC	**400**	175	RAB	200	75	AWSC	300	175
	WBT	1,370		125	1,150		200	400		75	150		150	825

Notes:
[1] Results based on SimTraffic. Maximum queue lengths are rounded to nearest 25 feet. All queues are expressed on a "per lane" basis or approach as noted. Includes vehicles that may queue in the taper length of a turn pocket.
[2] Available storage lengths based on review of aerial imagery. Distance is either length of turn lane or distance to nearest upstream intersection.
[3] Existing lane configuration is a shared northbound LT/RT lane. For purposes of the simulation, a small right turn pocket was added to better model vehicle queuing conditions. With signal, this becomes a shared left/right lane.
Bolded text represents a queue that extends into or beyond the nearest upstream intersection.



Image 9: Existing corridor travel times in peak travel direction.

Table 3 compares the travel times and speeds for the proposed alternatives. As shown, Alternative 2 results in the lowest corridor travel time of about 1.5 minutes, or about half of the time it takes to travel under existing conditions. With Alternative 2, there is an increase of 6 mph in the AM peak Hour and 12 mph in the PM peak hour.

Table 3. Corridor Travel Times and Average Speed Comparisons

Scenario	AM Peak Hour	PM Peak Hour
	Eastbound (From Wintergreen Drive to Linda Creek Ct)	Westbound (from South Cirby Way to Argo Drive)
Existing Conditions	185 seconds / 11 mph	184.8 seconds / 12 mph
Alternative 1 (Roundabout/AWSC)	100.4 seconds / 19 mph	89.8 seconds / 23.5 mph
Alternative 2 (Roundabout/Roundabout)	87.3 seconds / 17 mph	82.4 seconds / 24 mph
Alternative 3 (Signal/AWSC)	141.6 seconds / 16 mph	164.9 seconds / 17 mph

Conclusions

Alternative 2 emerged as the preferred alternative when considering traffic operations and safety considerations. The superior benefits of this alternative versus the others is documented below:

- Corridor Travel Delays: Alternative 2 would result in an overall average delay during AM and PM peak hours of 10 seconds per vehicle at the Old Auburn Road/Wachtel Way and Oakwood Hills Circle East intersections. In contrast, Alternatives 1 and 3 would result in overall average delays of about 45 seconds, due to the AWSC at Oakwood Hills Circle East remaining in place under each alternative.
- Corridor Vehicle Queuing: Alternative 2 would have the least amount of vehicle queuing approaching and between the two intersections among the three alternatives studied.
- Corridor Travel Times: Alternatives 1 and 2 would have comparable travel times along Old Auburn Road. However, this metric is a bit misleading because Alternative 1 creates challenges for motorists on northbound Wachtel Way to enter the roundabout, whereas Alternative 2 does not. Thus, Alternative 2 has the least amount of overall travel time on both corridors.
- Safety: Improved safety (over existing conditions and the other alternatives) is one of the primary reasons why the roundabout combination in Alternative 2 is favored. Roundabouts reduce crash severity by eliminating right-angle conflicts, which are the crash type most responsible for fatalities at signalized intersections. Roundabouts are one of FHWA's proven safety countermeasures because they can promote lower speeds, calm traffic, and lead to improved operational performance. Furthermore, the signal at Old Auburn Road/Wachtel Way in Alternative 3 presented safety concerns related to the skewed intersection configuration. It was anticipated that the northbound Wachtel Way to westbound Old Auburn Road left turn movement would present challenges similar to what the City has experienced at the Old Auburn Road/Fair Oaks Boulevard intersection.

.

Appendix A: Existing Conditions Analysis

FEHR PEERS

Memorandum

Date: January 22, 2025

To: Pamela Dalcin-Walling, PE, QSD/P, Dokken Engineering

From: John Gard, PE, and Mari Ramones, Fehr & Peers

Subject: Existing Conditions Analysis for the Citrus Heights Gateway Activation Project

SA24-0281

Introduction

Project Background

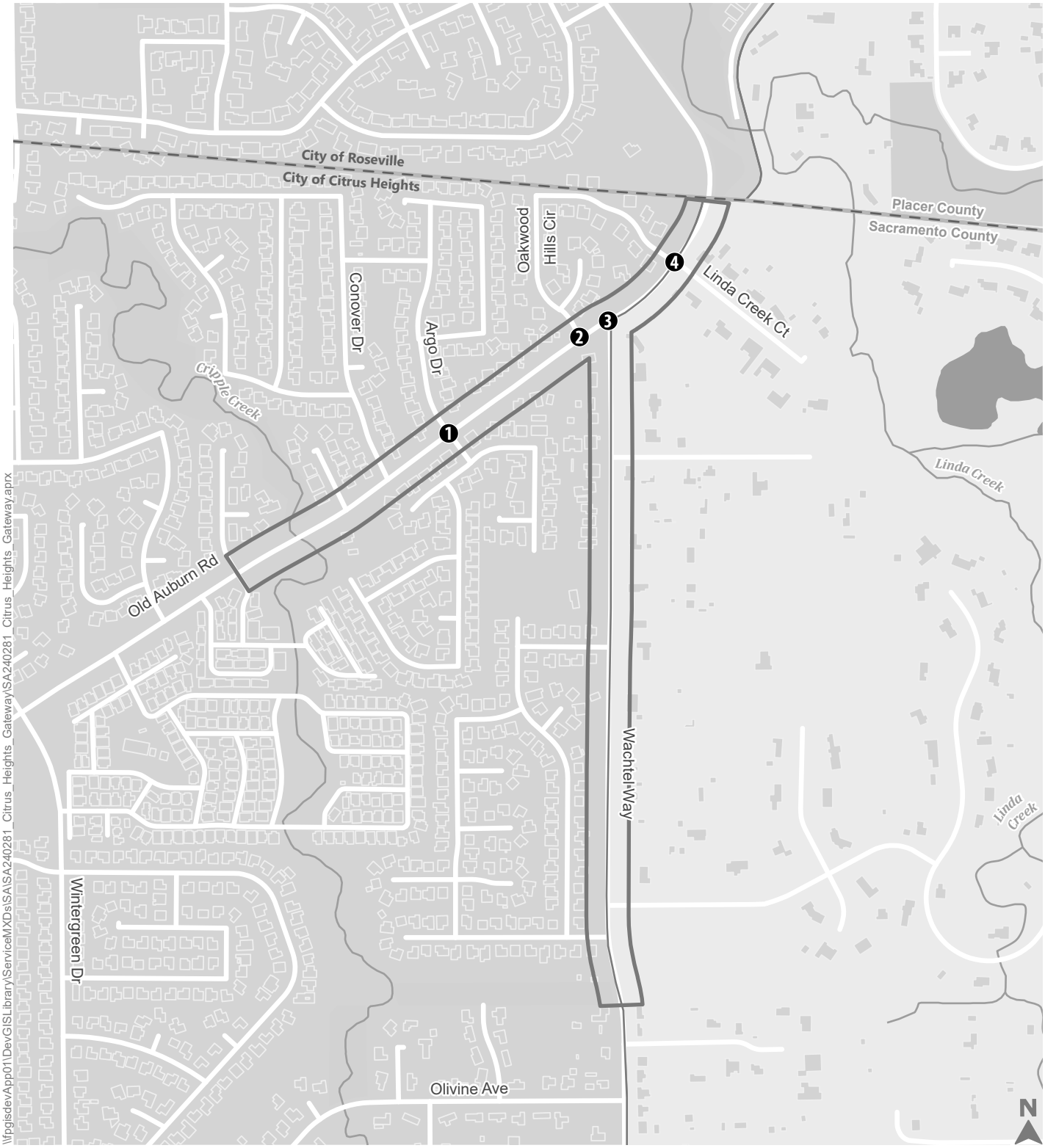
This project will transform Old Auburn Road between the Roseville/Citrus Heights border and Orielle Creek Road (0.55 miles to the west) into a Complete Streets corridor. It would extend multi-modal connections through the corridor to connect with existing and planned improvements to the west and east, addressing documented safety issues. Additionally, the project would make improvements to 0.6 miles of Wachtel Way south of Old Auburn Road for similar purposes and benefits.

Study Area and Time Periods

Figure 1 shows the study area including the four study intersections. Morning (7:00 to 9:00 a.m.) and evening (3:00 to 6:00 p.m.) peak period traffic counts were collected at the following four intersections on Wednesday, October 30, 2024.

1. Old Auburn Road/Argo Drive
2. Old Auburn Road/Oakwood Hills Circle W
3. Old Auburn Road/Wachtel Way
4. Old Auburn Road/Oakwood Hills Circle E/Linda Creek Ct

Schools were in session, weather conditions were sunny, and typical traffic conditions were observed at the time of the counts. **Appendix A** provides the traffic count data sheets.



1 Study Intersection
Study Corridor
City Limits
County Limits
Parks and Open Space

Figure 1

Study Area

Existing Conditions

Existing Roadway Network

The following are descriptions of the primary roadways in the vicinity of the project:

- **Old Auburn Road** is a two-lane east/west major collector, as shown in the City of Citrus Heights General Plan Circulation Map. The two lanes are divided by a Two-Way-Left-Turn-Lane (TWLTL) west of Argo Drive and divided by a striped centerline east of Argo Drive. Old Auburn Road serves a variety of residential and commercial land uses. Within the project vicinity, it has a westbound posted speed limit of 35 miles per hour (mph) east of Wachtel Way, and 40 mph west of Wachtel Way. Eastbound, the posted speed limit is 40 mph throughout the study corridor.
- **Wachtel Way** is a two-lane north/south major collector as per the City of Citrus Heights General Plan Circulation Map. It extends from Old Auburn Road to Oak Avenue, where it becomes Kenneth Avenue. Wachtel Way has a posted speed limit of 35 mph.

Based on a traffic survey collected in September 2021, the existing 85th percentile speed along the section of Old Auburn Road 1200' west of Wachtel Way was 45 mph in the eastbound direction, and 46 mph in the westbound direction. The posted speed liming along this section of the corridor is 40 mph. A speed survey collected in March 2017 determined that the existing 85th percentile speed along Wachtel Way north of Chris Lane was 40 mph in the northbound and southbound directions. The posted speed limit along this section of the corridor is 35 mph.

Existing Bicycle and Pedestrian Network

Figure 2 shows existing bicycle facilities in the study area. As shown, there are Class II Bike Lanes in the study area. Class II Bike Lanes are established along streets to provide a restricted right-of-way designated for the use of bicycles with a striped lane, pavement markings, and signage. Some bike lanes may have striped buffers to add additional space between cyclists and cars, increasing separation from motor vehicles for added bicyclist comfort. Vehicle/pedestrian crossflow may occur at driveways and also where right-turn lanes are developed approaching intersections. Within the study area, Class II bike lanes exist on both sides of Old Auburn Road from Wintergreen Drive to Linda Creek Court. Class II bike lanes with a buffer exist on both sides of Wachtel Way to Pitalo Way, and on the east side of Wachtel Way south of Pitato Way.

Within the study area, sidewalks are present but discontinuous on Old Auburn Road. **Figure 3** shows existing pedestrian facilities in the study area. Continuous sidewalks are present on the north side of Old Auburn Road from Robert Creek Court to about 400 feet east of Argo Drive. This segment of sidewalk connects to the existing shared-use bike/pedestrian trail located west of

Robert Creek Court. Though other sidewalk segments exist along Old Auburn Road and Wachtel Way, they are discontinuous. See Figure 3 for mapped sidewalks along the corridor. There is a marked crosswalk on the west leg of the Old Auburn Road/Wachtel Way intersection which connects only to the Class II buffered bike lane on Wachtel Way, and not to any sidewalks.

During the AM and PM peak hours, pedestrian and bicycle activity was modest at all intersections (i.e. 8 or less pedestrian crossings per hour and 8 or less bicyclists per hour). Field observations revealed some pedestrians walking or running on either side of Old Auburn Road to turn onto Wachtel Way. Some of these movements were likely associated with the connection to the Arcade-Cripple Creek Trail on Wachtel Way.



Study Corridor
Class I Shared-Use Path
Class II Bike Lane
Class II Bike Lane with Buffer
Class III Bike Route
City Limits
County Limits
Parks and Open Space

Figure 2

Existing Bicycle Facilities



Figure 3

Existing Pedestrian Facilities

Existing Transit Facilities and Services

While there are no transit facilities and services directly serving the study area, Roseville Transit and Sacramento Regional Transit (SacRT) operate a few fixed-route bus lines near the study area.

Roseville Transit operates Routes C and F with a stop on S Cirby Way past Rimna Way, approximately 0.56 miles from the Old Auburn Road/Oakwood Hills Circle E/Linda Creek Ct intersection. Both routes have two-hour headways Monday-Friday, departing as early as 6:20 a.m. until 6:43 p.m.

SacRT operates Line 21 with the closest stop to the study area at the Old Auburn Road/Sunrise Boulevard intersection, which is about 1.53 miles away from the Old Auburn Road/Argo Drive intersection. This route operates with 30-minute headways on Monday-Friday, and hour-long headways on the weekend.

Additionally, SacRT operates a program called SacRT Flex, which is a limited-service neighborhood shuttle for a limited group of qualified riders, including seniors (age 62+), low-income individuals, and persons with disabilities. The program serves 9 zones in the Sacramento area, including within the study area up to the City of Citrus Heights boundary. The program operates Monday through Friday between 7 a.m. to 7 p.m., excluding holidays.

Traffic Data Collection

All counts at the four study intersections included vehicle turning movements, heavy vehicles, bicyclists, and pedestrians. Two-day roadway segment traffic counts, including vehicle classification, were collected at the following two segments in the study area on Tuesday, October 29, 2024, and Wednesday, October 30, 2024:

1. Old Auburn Road west of Wachtel Way
2. Wachtel Way south of Old Auburn Road

Table 1 displays the AM peak hour, PM peak hour, and daily volumes for each segment**. Figure 4** shows the average daily traffic at the study area segments. The AM peak hour occurred from 7:30 to 8:30 a.m., and the PM peak hour occurred from 4 to 5 p.m. The peak direction was vehicles traveling eastbound and westbound on Old Auburn Road. Key findings from this figure and table are:

1. The Wednesday count was about 2 to 3% busier than the Tuesday count.
2. Through a process of factoring up existing AM and PM peak hour segment volumes (to daily), the estimated ADT is 14,200 vehicles on Old Auburn Road east of Wachtel Way. As the volume on Old Auburn Road drops precipitously west of Wachtel Way, this indicates that a considerable number of vehicles at the City of Citrus Heights/Roseville border

originate or are destined to/from the south on Wachtel Way (toward unincorporated Sacramento County).



Study Corridor
City Limits
County Limits
Parks and Open Space

X,XXX

Average AM/PM Daily Traffic Volume

Notes: Volumes represent two-way traffic totals and are rounded to the nearest 100. Counts were conducted on Tuesday October 29, 2024 and Wednesday, October 30, 2024.

Volumes on Old Auburn Rd at City of RS/CH Limit is estimated using a k-factor of daily to AM and PM peak period counts from the two counted locations.

Figure 4

Average Daily Traffic Volumes (ADT) - Existing Conditions

Table 1: Roadway Segment Traffic Volumes – Existing Conditions

Roadway Segment	Day 1 / Day 2		
	AM Peak Hour	PM Peak Hour	Daily
Old Auburn Road west of Wachtel Way	941 / 838	890 / 914	10,451 / 10,733
Wachtel Way south of Old Auburn Road	565 / 565	593 / 617	6,666 / 6,795

Notes: All roadway segment traffic volumes summarized are two-way total volumes.
Traffic counts were performed on Tuesday, October 29, 2024, and Wednesday, October 30, 2024.
Source: Fehr & Peers, 2025.

Intersection Operations

This study analyzes traffic operations using delay and LOS as primary measures of intersection performance. Automobile LOS is a qualitative description of traffic flow from the perspective of motorists. The *Highway Capacity Manual (HCM) 7th Edition* (Transportation Research Board, 2022) defines six levels of service from LOS A representing the least congested traffic conditions to LOS F representing the most congested traffic conditions. These grades represent the perspective of drivers and are an indication of the comfort and convenience associated with driving, as well as speed, travel time, traffic interruptions, and freedom to maneuver.

Intersection LOS at signalized and all-way stop controlled intersections and roundabouts is based on the weighted average control delay measured in seconds per vehicle for all motorists traveling through the intersection. For side-street stop-controlled intersections, this study reports the average control delay for the lane group or movement with the greatest delay, and for the intersection as a whole.

Table 2 presents the control delay range for each LOS for signalized and unsignalized intersections. As shown, the delay ranges for signalized intersections are different from unsignalized intersections. The *HCM* anticipates that motorists expect signalized intersections to carry higher traffic volumes that result in greater delay than at an unsignalized intersection and roundabout. Unsignalized intersections are associated with more uncertainty as delays are less predictable, which can reduce users' delay tolerance.

Table 2: Level of Service Definitions – Intersections

Level of Service	Average Control Delay[1]	
	Signalized Intersections	Unsignalized Intersections and Roundabouts
A	≤ 10	≤ 10
B	>10 to 20	>10 to 15
C	>20 to 35	>15 to 25
D	>35 to 55	>25 to 35
E	>55 to 80	>35 to 50
F	>80	>50

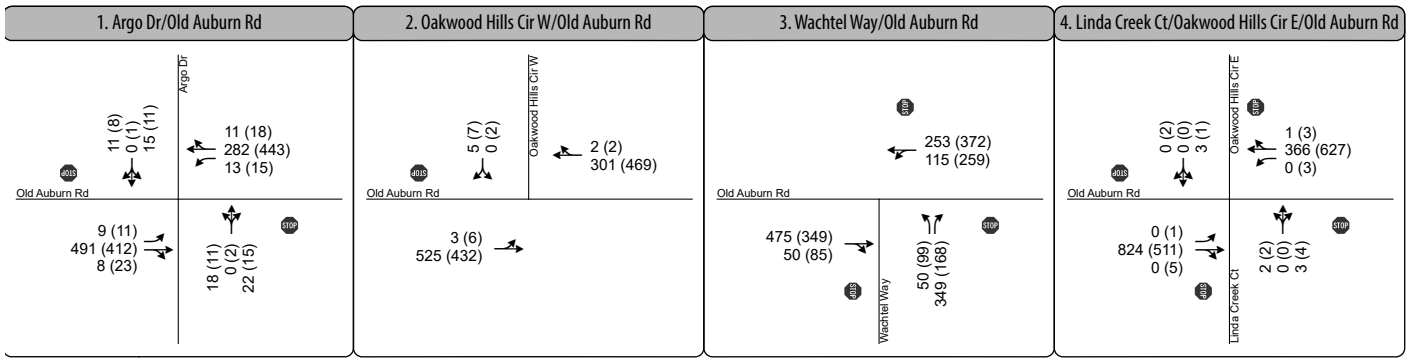
Notes:
1. Average control delay presented in seconds per vehicle. Delay values are rounded to the nearest second and evaluated for LOS based on the above thresholds (i.e., 10 seconds per vehicle = LOS A)
Source: *Highway Capacity Manual 7th Edition*, Transportation Research Board, 2022.

Study intersections are analyzed using Synchro's SimTraffic micro-simulation module to apply the methodologies presented in the *HCM*. Synchro considers traffic volumes, lane configurations, signal timings, and other parameters. SimTraffic additionally considers interactions between adjacent intersections, turn lane spillbacks, coordinated signal timing, and upstream/downstream bottlenecks. SimTraffic is preferable to use when operating conditions are near capacity, turn lane storage exceedance is common, and/or intersections are spaced closely together. In this study, given the above guidance, SimTraffic was used to analyze all study intersections (where vehicle queuing is of particular concern). The Sidra software program is used to analyze roundabouts, if proposed as part of a project alternative.

The system peak hours of the study intersections on Old Auburn Road occurred from 7:30 to 8:30 a.m. and 4 to 5 p.m. Trucks, as defined by the Highway Capacity Manual and its existing national truck classifications, represented about 1% of traffic on Old Auburn Road during the morning and evening peak hours. **Figure 5** presents the existing weekday a.m. and p.m. peak hour traffic volume, lane configurations, and traffic control devices at the study intersections. On the busiest section (Old Auburn Road east of Wachtel Way), nearly 70% of AM peak hour traffic is headed eastbound (into Roseville) while 55% of PM peak hour traffic is headed westbound.

Table 3 displays peak hour intersection operations under existing conditions. See **Appendix B** for technical calculations.





- Study Intersection
- Study Corridor
- City Limits
- County Limits
- Parks and Open Space
- Turn Lane
- AM (PM) Peak Hour Traffic Volume
- Traffic Signal
- Stop Sign

Figure 5

Peak Hour Traffic Volumes and Lane Configurations - Existing Conditions

Table 3: Peak Hour Level of Service – Existing Conditions

	Intersection	Control	Delay/LOS (Worst Movement)[1]	
			AM Peak Hour	PM Peak Hour
1.	Old Auburn Road/Argo Drive	SSSC	4 (24 SBT) / A (C)	3 (11 NBT) / A (B)
2.	Old Auburn Road/Oakwood Hills Circle W	SSSC	**54 (83 EBT) / F (F)**	5 (46 (SBL) / A (E)
3.	Old Auburn Road/Wachtel Way	AWSC	**56 / F**	38 / E
4.	Old Auburn Road/Oakwood Hills Circle E/Linda Creek Ct	AWSC	14 / B	**75 / F**

Notes: SSSC = Side-Street Stop Controlled. AWSC = All-Way Stop-Controlled
[1] For side-street stop controlled and uncontrolled intersections, level of service and delay for the worst movement are reported with the movement listed in parentheses. Delay is reported in seconds per vehicle.
Bolded numbers indicate deficient operations per City of Citrus Heights General Plan policy.
Source: Fehr & Peers, 2025.

Per the City of Citrus Heights General Plan Policy 29.2, the City will strive to achieve LOS E or better conditions for City roadways and intersections during peak hours. As shown, the study intersections do not operate acceptably during the AM and PM peak hours. It should be noted that this policy provides an exception to the LOS E standard for certain roadways (and intersections along them) including Old Auburn Road from Sylvan Road to Fair Oaks Boulevard. Since the study area does not extend that far westerly, an LOS E standard applies for all study facilities. Key findings from Table 3 are as follows:

AM Peak Hour:

1. The all-way stop Old Auburn Road/Wachtel Way intersection operates at LOS F. The eastbound queue spills back through intersection #2 (Oakwood Hills Circle W) causing it to also operate at LOS F.

PM Peak Hour:

1. The all-way stop Old Auburn Road/Wachtel Way intersection operates at LOS E. The westbound queue spills back through the all-way intersection #4 (Oakwood Hills Circle E/Linda Creek Ct) causing it to operate at LOS F.[1]

[1] LOS F operations during the PM peak hour at intersection 4 are not due to the volume of major street versus side street traffic. Rather, it is due to westbound queues spill back from the stop sign at Wachtel Way into this intersection. In reality, capacity constraints at the Old Auburn Road/Wachtel Way intersection are the reason why intersection #4 operates unacceptably.

Vehicle Queuing

Table 4 identifies the maximum queue lengths based on SimTraffic results for critical movements at the study intersections. SimTraffic reported queues were compared to observed queues on the day of the counts to ensure the simulation model is accurately representing existing conditions. Refer to Appendix B for technical calculations.

Table 4: Maximum Vehicle Queues – Existing Conditions

	Intersection	Control	Movement	Available Storage (ft)[2]	Maximum Queue (ft)[1]	
					AM Peak Hour	PM Peak Hour
1.	Old Auburn Road/Argo Drive	SSSC	EBL	300	50	50
			EBT	300	75	-
2.	Old Auburn Road/Oakwood Hills Circle W	SSSC	EB L/T	700	700	200
			WBT	100	**125**	25
			SB Shared	115	50	50
3.	Old Auburn Road/Wachtel Way	AWSC	EBT	90	**850**	300
			WB L/T	350	175	**375**
			NBL	600	275	275
			NBR[3]	100	125	100
4.	Old Auburn Road/Oakwood Hills Circle E/Linda Creek Ct	AWSC	EBT	350	150	125
			WBT	1,370	125	1,150[4]

Notes:
[1] Results based on SimTraffic. Maximum queue lengths are rounded to nearest 25 feet. All queues are expressed on a "per lane" basis or approach as noted. Includes vehicles that may queue in the taper length of a turn pocket.
[2] Available storage lengths based on review of aerial imagery. Distance is either length of turn lane or distance to nearest upstream intersection.
[3] Existing lane configuration is a shared northbound LT/RT lane. For purposes of the simulation, a small right turn pocket was added to better model vehicle queuing conditions.
[4] Analysis is based on 1.0 PHF (per City TIS guidelines), which by definition reports LOS/queuing for an hourly condition and can miss any spikes in travel demand within the peak hour that often cause the worst-case queue.
Bolded text represents a queue that extends past the nearest upstream intersection.

During the field visit, westbound queues on Old Auburn Road during the PM peak hour occasionally extended past Lund Drive (see **Image 1**).



Image 1: View of queued vehicles on westbound Old Auburn Road spilling back from Oakwood Hills Circle E to Lund Drive and beyond (PM peak hour).

Image 2 is a screenshot from the SimTraffic simulation showing the WB queue during the PM peak hour, extending back past the Lund Drive intersection.



Image 2: SimTraffic screenshot of queued vehicles on westbound Old Auburn Road approaching Oakwood Hills Circle E (PM peak hour)

As displayed in Table 4, queuing is minimal on the side street approaches at the study intersections. During the AM peak hour, the eastbound approach sees significant queuing at intersections 2 and 3. The eastbound queue extends back from the Old Auburn Road/Wachtel Way intersection to past the Old Auburn Road/Argo Drive intersection, as shown in **Image 3** below.



Image 3: View of queued vehicles on eastbound Old Auburn Road approaching Wachtel Way (AM peak hour).

During the PM peak hour, queuing was observed for the westbound approach at the Old Auburn Road/Oakwood Hills Circle E/Linda Creek Court, and Old Auburn Road/Wachtel Way intersections. During the field observations, it was noted that the westbound queue sometimes extended from the Old Auburn Road/Oakwood Hills Circle E/Linda Creek Court intersection back to the Old Auburn Road/Cirby Way intersection, a distance of about 1,600 feet. **Image 4** below shows westbound queuing during the PM peak hour along Old Auburn Road, east of Oakwood Hills Circle E/Linda Creek Court.



Image 4: View of queued vehicles on westbound Old Auburn Road approaching Oakwood Hills Circle E (PM peak hour).

Cut-Through Travel on Old Auburn Road

This section discusses the degree to which Old Auburn Road is being used as a cut-through route. In this context, 'cut-through' is defined as a vehicle at the Citrus Heights/Roseville border that does not have a trip origin or destination in Citrus Heights. To conduct this analysis, 'big data' was acquired from StreetLight Data.[2]

[2] Transportation Data Solutions | StreetLight Data

StreetLight Data combines connected vehicle data with machine learning algorithms to understand travel patterns across the country. Trips are created from the location records by starting a trip once a device is traveling at a reasonable speed, snapping records to road network data to create the trip route. A trip end is identified once the device remains stationary within 100 meters for over 5 minutes. Data is validated using permanent traffic counters and embedded sensors, and normalized with multiple data sources, including parcel data, digital road network data, and census information to calculate vehicle volume estimates.

Figure 6 shows the percentage of vehicles that are traveling on Old Auburn Road at Citrus Heights/Roseville border that also travel through the Citrus Heights' southerly and westerly gateway streets into and out of Citrus Heights. As shown, about 25% of trips at the Citrus Heights/Roseville border do not stop in Citrus Heights. Preferred external gateways are: Wachtel Way (8%), Auburn Boulevard south of Greenback Lane (6%) and Sunrise Boulevard south of Madison Avenue (5%).



Study Corridor
County Limits
City Limits
Parks and Open Space

Origin-Destination Segment
X% Origin-Destination Percentage

Note: Values represent approximate percentage of trips using Old Auburn Road as a cut through route, regardless if during AM peak hour, PM peak hour, or daily conditions.

Figure 6

Origin-Destination Analysis on Old Auburn Road

Safety Analysis

Fehr & Peers evaluated the reported collision history within the study area based on the City of Citrus Heights Police Department records. Collisions reported between January 1, 2018, and December 31, 2023, were used for this analysis. Provisional data for 2024 collisions was available but was not included in the analysis. Collisions during this 6-year period were pulled from individual police records.

Collision History

Between 2018 and 2023, there were 16 reported collisions along the study corridor, including 10 collisions involving injuries. One collision involved a bicyclist (resulting in a minor injury). There were no collisions involving pedestrians, and no fatal collisions along the study area.

Table 5 displays the ranked (from most to least common) collision type within the study area. As displayed, rear end collisions are the most common collision type, followed by broadside collisions and hit object collisions. Police record descriptions identify the potential cause for the rear-end collisions was due to drivers traveling at high speeds and not recognizing the stop-and-go traffic at the intersection. The majority of broadside collisions occurred at the Old Auburn Road/Wachtel Way intersection, due to vehicles entering the intersection and failing to yield to the driver already in the intersection. Two of the three hit object collisions were due to driving under the influence (DUI). In all hit object collisions, the driver was traveling at unsafe speeds and collided with power or lighting equipment on the side of the road. It should be noted that these collisions occurred on Old Auburn Road east of Argo Drive heading eastbound. The eastbound direction of this segment features a narrowed bike lane, an open drainage channel, and multiple nearby overhead poles.

Table 5: Type of Collision – January 1, 2018 to December 31, 2023.

Category	Total Collisions	%
Rear end	5	31%
Broadside	5	31%
Hit Object	3	20%
Head-On	1	6%
Sideswipe	1	6%
Overturned	1	6%

Source: City of Citrus Heights Police Department records.

Figure 7 displays the location of all reported collisions on the corridor during the collision analysis period. As displayed, hot spots are located at the Old Auburn Road/Wachtel Way intersection. Half of the 16 total reported collisions occurred at or near this intersection. Of these eight intersection collisions, four were broadside and four were read ends. There were seven collisions along Old Auburn Road. Of those seven collisions, four of those were located at intersections, and four were mid-block. There was one collision on Wachtel Way (located just north of Pitalo Way).

Half of all reported collisions occurred between 2:00 PM and 5:30 PM. This 3.5-hour period of the day sees about 30% of all daily traffic in the study area. Thus, the percentage of all collisions is disproportionately high during this period relative to the amount of daily traffic during this period. This time period experiences considerable congestion and stop-and-go traffic. Reports indicate that rear end collisions occurred because the driver was traveling at high speeds and failed to stop for the stopped vehicle in front, resulting in a rear end.

Of the 16 reported collisions along the study corridor, 31%, or 5 collisions, involved driving under the influence of alcohol or drugs (DUI). These collisions occurred at nighttime and at areas along the corridor with streetlights. This is a high percentage considering that Citywide, 9% of all collisions were due to DUI per the City's Local Road Safety Plan (2021).

Table 6 lists the primary collision factor for all reported collisions in the study area during the analysis period. As shown, DUI and unsafe speed collisions were the most common. Unsafe speed collisions mainly resulted in rear ends. Automobile right of way collisions primarily resulted in

broadside collisions, and improper turning collisions resulted in sideswipe and broadside collisions.



Study Corridor
City Limits
County Limits
Parks and Open Space

Vehicle Collision
Bicycle Involved Collision

Collision data pulled from City of Citrus Heights Police Department records for the six-year period between 2018-2023.

Figure 7

Collisions 2018-2023

Table 6: Primary Collision Factor – January 1, 2018 to December 31, 2023.

Primary Collision Factor (PCF)	Total Collisions	%
Driving Under Influence (DUI)	5	31%
Unsafe Speed	5	31%
Automobile Right of Way	4	25%
Improper Turning	2	13%

Source: City of Citrus Heights Police Department records.

Table 7 shows the lighting conditions for all the reported collisions. As shown, half of the 16 total collisions occurred during daylight, 38% occurred in the dark with streetlights, and the rest occurred in the dark or at dusk. This shows that most collisions in the study area are not caused by a lack of lighting, but because of a lack of clear recovery zone and driver awareness.

Table 7: Lighting Conditions – January 1, 2018 to December 31, 2023.

Lighting	Total Collisions	%
Daylight	8	50%
Dark – Streetlights	6	38%
Dark – No Streetlights	1	6%
Dusk/Dawn	1	6%

Source: City of Citrus Heights Police Department records.

The City of Citrus Heights Local Roadway Safety Plan (LRSP) (2021) identifies two recommendations related to bike and pedestrian safety in the study area. Within the LRSP is an excerpt from the *Safe Routes to School Master Plan Report*, Citrus Heights (2014), from which there are two recommendations related to bike facilities in the study area. The first one is to install 5' or 6' Class II bike lanes or a Class I bike path on Old Auburn Road to improve bike access to the Woodside K-8 school. A westbound Class I bike path exists on Old Auburn Road from Robert

Creek Court to Garry Oak Drive. An extension of the bike path east to the City of Citrus Heights / City of Roseville border would improve connectivity for residents in the study area. The second recommendation is to improve bicyclist crossings of Old Auburn Road at key cross streets such as Wintergreen Drive, Fair Oaks Boulevard, and Wachtel Way. The recommendation lists potential improvements at the intersections like colored pavement, wayfinding and signage, and pavement markings to improve bike access to Woodside K-8 and bike/pedestrian safety at controlled intersections.

Attachment 1
EX A

FINAL INITIAL STUDY/ WITH MITIGATED NEGATIVE DECLARATION

CITRUS HEIGHTS GATEWAY ACTIVATION PROJECT

CITY OF CITRUS HEIGHTS, CALIFORNIA



APRIL 2026

CITRUS HEIGHTS
CALIFORNIA

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FINAL INITIAL STUDY
WITH MITIGATED NEGATIVE DECLARATION

CITRUS HEIGHTS GATEWAY ACTIVATION PROJECT

City of Citrus Heights, California

Submitted to:

City of Citrus Heights
6360 Fountain Square Drive
Citrus Heights, CA 95621

Prepared by:

Dokken Engineering
110 Blue Ravine Road, Suite 200
Folsom, California 95630

April 2026

CITRUS HEIGHTS
CALIFORNIA

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General Information About This Document

The Draft Initial Study/Mitigated Negative Declaration (IS/MND) was circulated for public review for a 30-day period from February 16, 2026, through March 19, 2026, in accordance with the requirements of the California Environmental Quality Act (CEQA). This Final IS/MND incorporates revisions made in response to comments received during the public review period. All changes to the Draft IS/MND are identified using track changes for ease of reference.

For individuals with sensory disabilities, this document can be made available in Braille, in large print, on audiocassette, or on computer disk. To obtain a copy in one of these alternate formats, please call or write to City of Citrus Heights, Planning Division, Attn: Casey Kempenaar, Senior Planner, 6360 Fountain Square Drive, Citrus Heights, CA 95621, (916) 727-4764.

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INTRODUCTION

This Initial Study with Mitigated Negative Declaration was prepared for the Citrus Heights Gateway Activation Project (Project). The Project proposes to construct multimodal and roadway improvements along Old Auburn Road and Wachtel Way in northern Sacramento County (**Figure 1 Project Vicinity**, **Figure 2 Project Location**, and **Figure 3 Project Features**). The Project is intended to provide Complete Street elements to serve bicyclists, pedestrians, and motorists as well as intersection improvements to facilitate traffic circulation along these roads.

The Project proposes improvements on a 0.45-mile section of Old Auburn Road from the Sacramento County line south to Roberts Creek Court and on Wachtel Way from Old Auburn Road south approximately 0.61 miles to the Woodside Oaks Park segment of the Arcade-Cripple Creek Trail. The Project is located within the Folsom USGS 7.5-minute quadrangle, in Sacramento County, specifically in Sections 17, 18, 19, and 20, Township 10 North, Range 7 East.

The City of Citrus Heights is the CEQA lead for this project. This IS/MND relies on CEQA Guidelines §15064 in its determination of the significance of environmental effects. According to §15064, the finding as to whether a project may have one or more significant effects shall be based on substantial evidence in the record, and that controversy alone, without substantial evidence of a significant effect, does not trigger the need for an EIR.

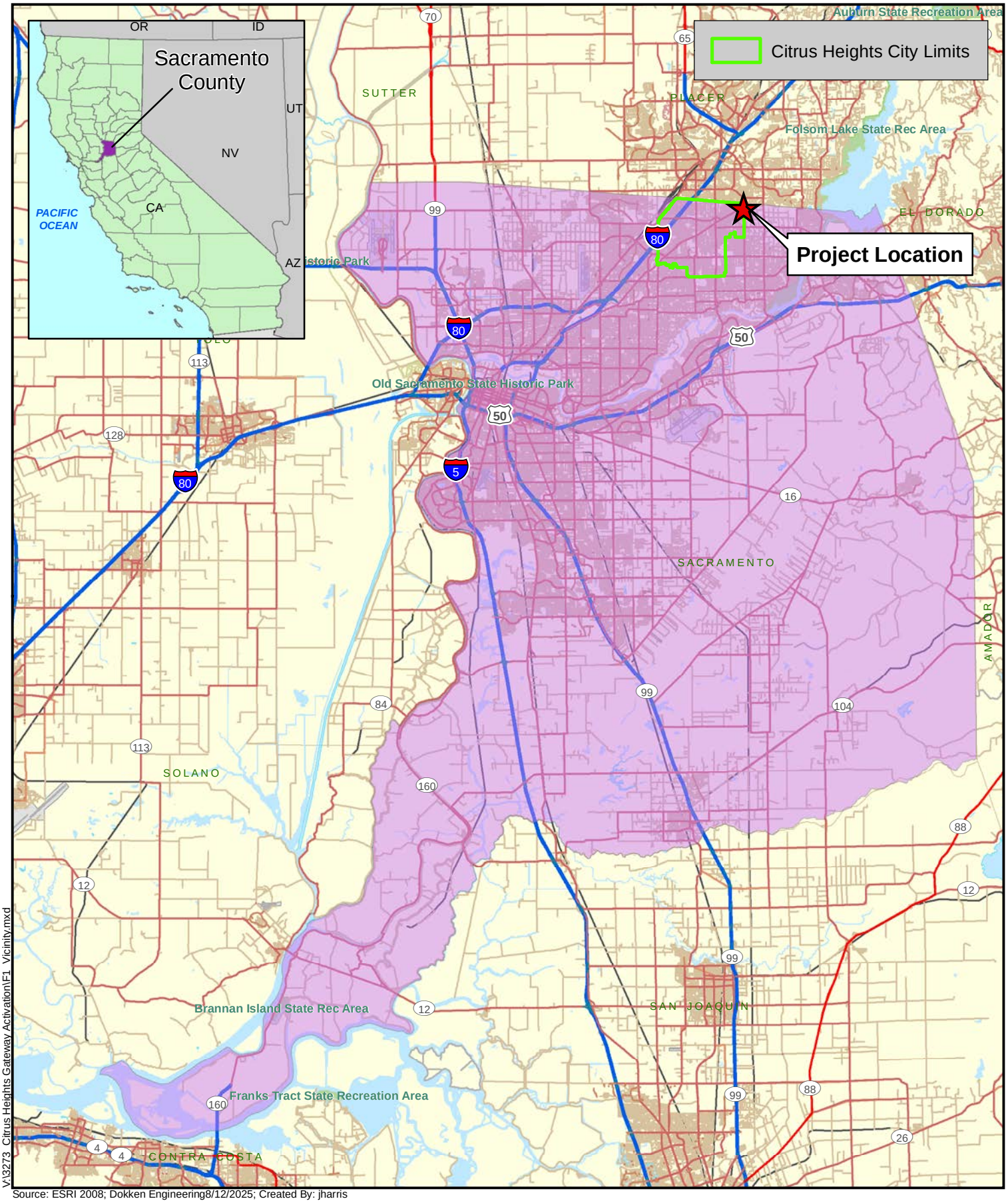
PROJECT BACKGROUND

Purpose

The purpose of the Project is to address traffic congestion and strengthen connectivity along Old Auburn Road and Wachtel Way by improving intersection operations, linking to existing bicycle and pedestrian infrastructure, and establishing future connections to planned facilities in nearby jurisdictions, such as the City of Roseville and Sacramento County. The Project aims to improve vehicular traffic circulation, enhance safety, accessibility, and mobility for all users by incorporating complete street elements that promote convenient and comfortable travel to key destinations, including neighborhoods, parks, open spaces, and regional trail systems. Planned improvements will improve traffic circulation and close gaps in pedestrian and bicycle networks along both roads by installing roundabouts, upgrading intersections, adding pedestrian crossings, enhancing streetscapes, and creating connections to current and future local and regional multi-use paths.

Need

In the City's northeast residential area, ongoing efforts have focused on expanding the bicycle and pedestrian network through new trails, bike lanes, and safer roadway crossings. Aligned with the City's Bicycle and Pedestrian Master Plans, the Project aims to enhance accessibility and safety along key corridors and improve the broader transportation system. Currently, the area has gaps in the regional trail network and limited links between existing and planned bikeways. This Project will address these deficiencies by closing infrastructure gaps, improving mobility and safety, and encouraging non-motorized travel for both commuters and recreational users.



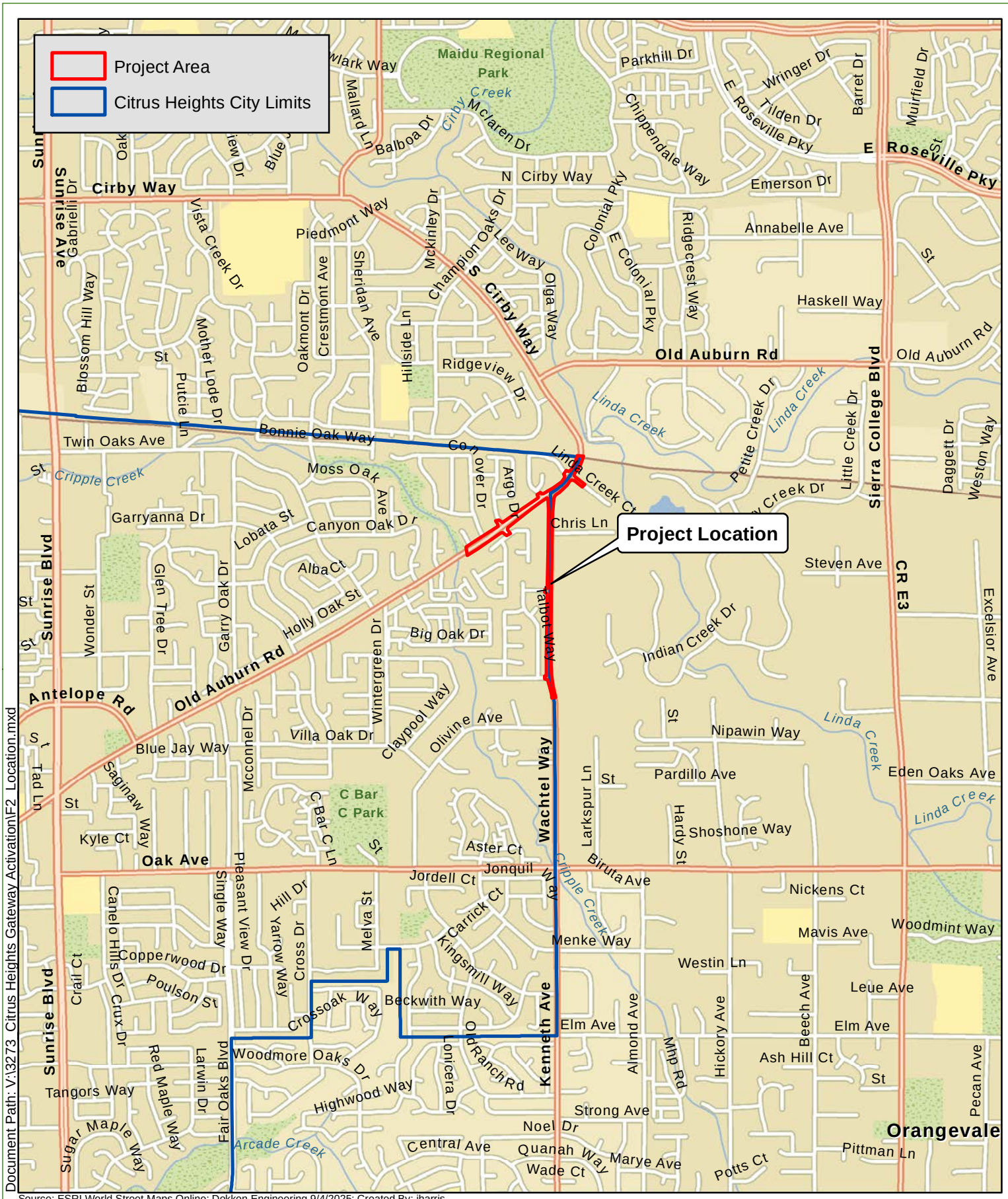
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Source: ESRI 2008; Dokken Engineering8/12/2025; Created By: jharris

0 5 10 15 Miles

FIGURE 1
Project Vicinity

Gateway Activation Project
Citrus Heights, Sacramento County, California



Source: ESRI World Street Maps Online; Dokken Engineering 9/4/2025; Created By: jharris

Document Path: V:\3273 Citrus Heights Gateway Activation\F2 Location.mxd

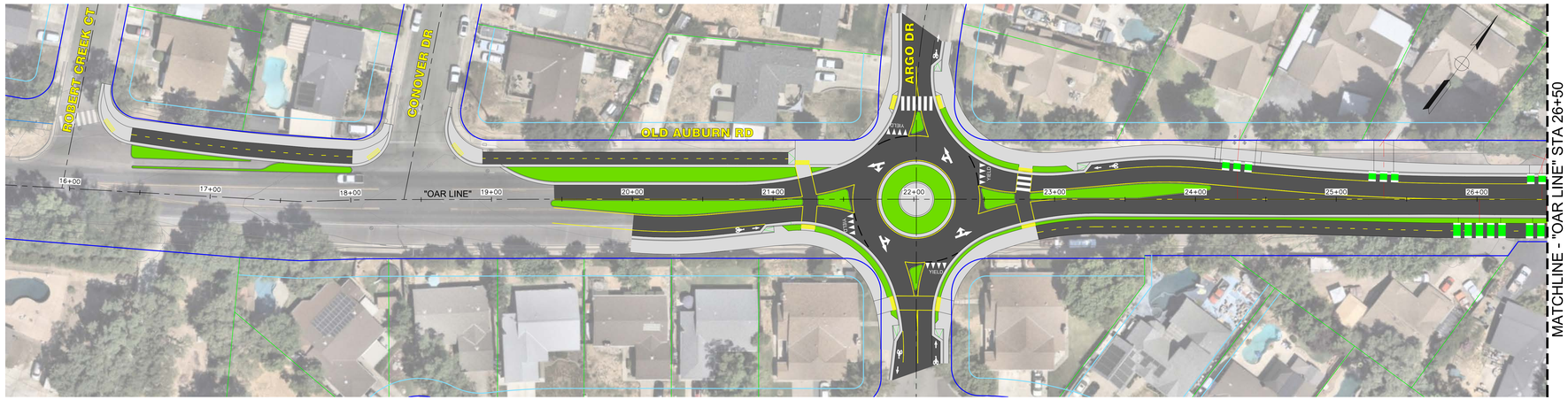
0 0.25 0.5 0.75 1 Miles

FIGURE 2
Project Location

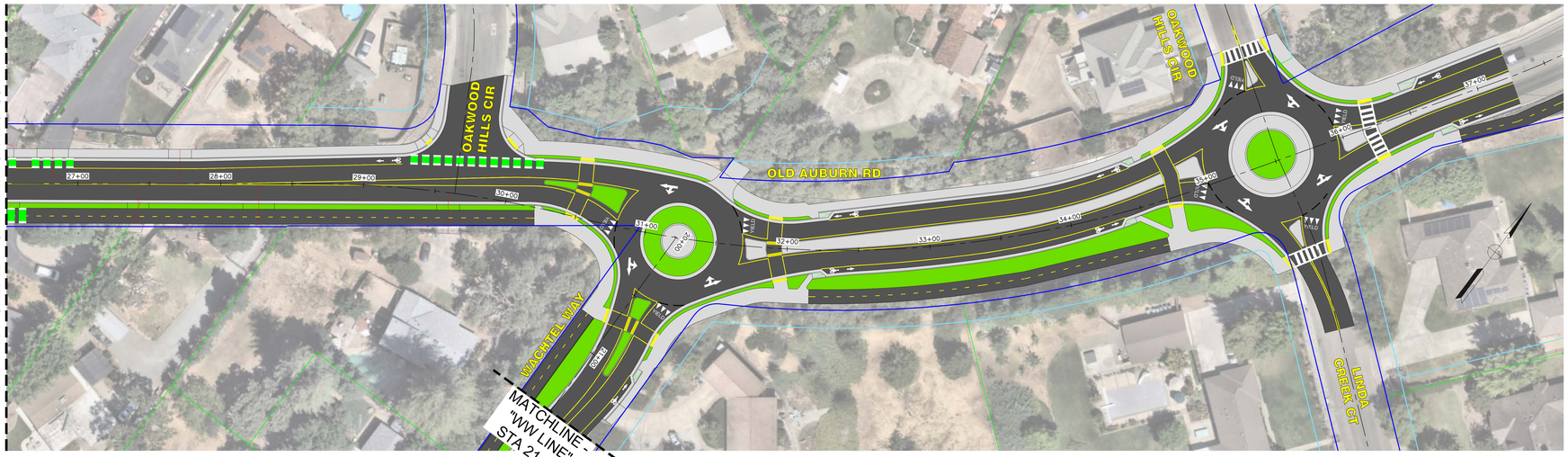
Citrus Heights Gateway Activation Project
Citrus Heights, Sacramento County, California

Figure 3. Project Features

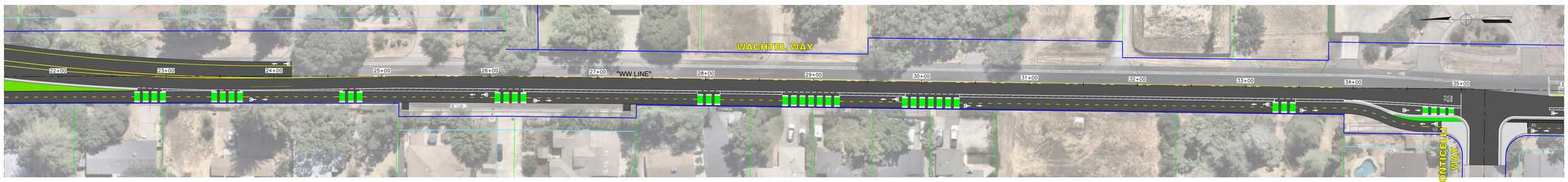
Citrus Heights Gateway Activation Project
Citrus Heights, Sacramento County, Califronia



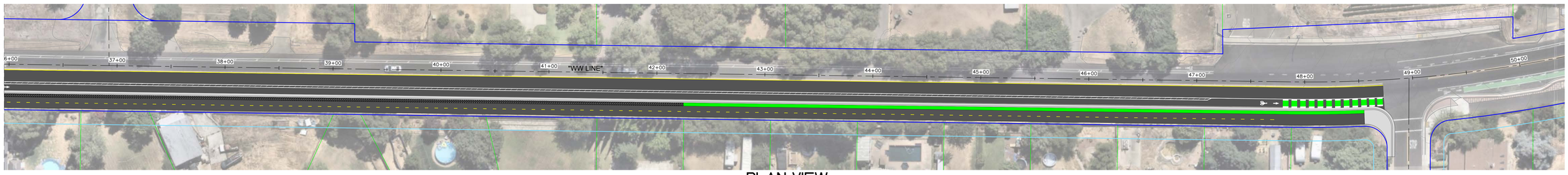
PLAN VIEW
SCALE 1" = 30'



PLAN VIEW
SCALE 1" = 30'



PLAN VIEW
SCALE 1" = 30'



PLAN VIEW
SCALE 1" = 30'

LEGEND:

PROPOSED

- ASPHALT
- SIDEWALK
- LANDSCAPING
- STRIPING
- PAVEMENT MARKINGS
- BIKE LANE
- BIKE RAMP
- PATHWAY
- CURB RAMP

EXISTING

- RIGHT OF WAY
- CENTERLINE
- LOT LINES
- EASEMENTS

0 30 60 Feet

CITY OF CITRUS HEIGHTS

INITIAL STUDY CHECKLIST

CEQA requires the Lead Agency to examine the effects of a project on the physical conditions that exist within the area that would be affected by the project. CEQA also requires a discussion of any inconsistency between the proposed project and applicable general plans and regional plans.

An inconsistency between the proposed project and an adopted plan for land use development in a community would not constitute a physical change in the environment. When a project diverges from an adopted plan, however, it may affect planning in the community regarding infrastructure and services, and the new demands generated by the project may result in later physical changes in response to the project.

In the same manner, the fact that a project brings new people or demand for housing to a community does not, by itself, change the physical conditions. An increase in population may, however, generate changes in retail demand or demand for governmental services, and the demand for housing may generate new activity in residential development. Physical environmental impacts that could result from implementing the proposed project are discussed in the appropriate technical sections.

This section of the initial study identifies the applicable land use designations, plans and policies, and permissible densities and intensities of use, and discusses any inconsistencies between these plans and the proposed project. This section also discusses agricultural resources and the effect of the project on these resources.

For the purposes of this document, the City of Citrus Heights General Plan EIR (2011b) was referenced.

SECTION 1.0 - BACKGROUND

1. Project Title: Citrus Heights Gateway Activation Project

2. Lead Agency:
City of Citrus Heights
Planning Division
6360 Fountain Square Drive
Citrus Heights, CA 95621

3. Contact Person:
Casey Kempenaar, MPA, AICP
Community Development Director
Planning Division
6360 Fountain Square Drive
Citrus Heights, CA 95621
Phone: (916) 727-4764
E-mail: ckempenaar@citrusheights.net

4. Project Location: The Project is located within the City of Citrus Heights in Sacramento County, California. The Project proposes improvements on Old Auburn Road from the Sacramento County line south to Roberts Creek Court and on Wachtel Way from Old Auburn Road south to the Arcade-Cripple Creek Trail. The project lies within the Folsom USGS 7.5-minute quadrangle, in Sacramento County, specifically in Sections 17, 18, 19, and 20, Township 10 North, Range 7 East.

5. Applicant: City of Citrus Heights (City)

6. General Plan: City of Citrus Heights General Plan EIR (2011b).

7. Zoning: The zoning adjacent to Old Auburn Road and Wachtel Way is mostly residential, namely RD2, RD3, and RD5. The zoning in unincorporated Sacramento County east of Wachtel Way is agricultural-residential.

8. Description of Project: The City proposes to construct multimodal and roadway improvements along Old Auburn Road and Wachtel Way in Citrus Heights. The purpose of the Project is to address traffic congestion along Old Auburn Road, enhance connectivity to existing bicycle and pedestrian infrastructure, and provide future linkages to planned facilities in neighboring jurisdictions, including the City of Roseville and Sacramento County.

   The proposed improvements include intersection enhancements such as roundabouts, as well as the installation of pedestrian and bicycle facilities such as multi-use pathways, Class IV bikeways, crosswalks, sidewalks, and Americans with Disabilities Act (ADA)-compliant curb ramps. The Project includes amending the Bikeway Master Plan, Pedestrian Master Plan, and the General Plan Bikeway Map to incorporate these new bicycle and pedestrian segments. These improvements are needed to address traffic congestion along Old Auburn Road as well as current deficiencies in pedestrian and bicycle access along Old Auburn Road and Wachtel Way.

   The proposed Project includes bicycle and pedestrian improvements along Wachtel Way, extending from the Arcade-Cripple Creek Trail just south of Pitalo Way to Old Auburn Road. Along Old Auburn Road, improvements will extend from Robert Creek Court to the boundary line with the City of Roseville. The Project also includes intersection improvements at Argo Drive and Old Auburn Road, focusing on the addition of a pedestrian crossing and enhanced safety features. Additionally, safety and traffic flow improvements have been evaluated at three closely spaced intersections—Oakwood Hills Circle, Wachtel Way, and Oakwood Hills Circle/Linda Creek Court—addressing issues such as intersection interactions and the difficulty of making a left turn from Oakwood Hills Circle onto Old Auburn Road.

   The Project consists of constructing roundabouts at the Argo Drive, Wachtel Way, and Oakwood Hills Circle/Linda Creek Court intersections (**Figure 3. Project Features**). The proposed improvements would involve excavation, limited to areas necessary for constructing roundabouts, street lighting, a retaining wall, and sidewalks, ADA-compliant curb ramps, and bicycle facilities. Proposed grading for the roundabouts, sidewalks, and bike trail construction will range from 1-3 feet deep. Street light foundations, if required depending on alternative, will range between 5-10 feet deep. Any drainage relocations could result in up to 4 feet of ground disturbance. Retaining walls will require up to 8-10 feet of ground disturbance.

   Partial road closures are anticipated during construction; however, access to all residences will be maintained at all times. The Project will require permanent right-of-way (ROW) acquisitions where existing ROW is insufficient to accommodate new facilities. Temporary construction

easements will be required to support construction activities. Utility relocations will be necessary where existing infrastructure conflicts with the proposed improvements. Construction is scheduled to begin in the summer of 2027 and is expected to take approximately six months to complete.

Need

In the City's northeast residential area, ongoing efforts have focused on expanding the bicycle and pedestrian network through new trails, bike lanes, and safer roadway crossings. Aligned with the City's Bicycle and Pedestrian Master Plans, the Project aims to enhance accessibility and safety along key corridors and improve the broader transportation system. Currently, the area has gaps in the regional trail network and limited links between existing and planned bikeways. This Project will address these deficiencies by closing infrastructure gaps, improving mobility and safety, and encouraging non-motorized travel for both commuters and recreational users.

Purpose

The purpose of the Project is to strengthen connectivity within the City by linking to existing bicycle and pedestrian infrastructure and establishing future connections to planned facilities in nearby jurisdictions, such as the City of Roseville and Sacramento County. The Project aims to enhance safety, accessibility, and mobility for all users by incorporating complete street elements that promote convenient and comfortable travel to key destinations, including neighborhoods, parks, open spaces, and regional trail systems. Planned improvements include closing gaps in pedestrian and bicycle networks along both roads, upgrading intersections, adding pedestrian crossings, enhancing streetscapes, and creating connections to current and future local and regional multi-use paths.

Anticipated Construction Equipment

Typical construction equipment would include the following:

- Crane
- Backhoe
- Excavator
- Concrete saw (removal of existing road)
- Cement truck
- Paver
- Rollers
- Motor grader
- Dump truck
- Light tools (i.e., saws, jackhammer)

Most construction related noise would occur during the road improvements. This operation would likely include noise from concrete hammers and jackhammers. All construction work for the project will comply with the City of Citrus Heights Standard Construction Specifications (or Best Management Practices).

Utilities

There are existing overhead utility lines along portions of both Old Auburn Road and Wachtel Way. The utilities include electric (SMUD), gas (PG&E): telecommunication and internet (AT&T, Comcast, and Consolidated Communications); sewer (Sacramento Regional Sanitation District and Sacramento Area Sewer District); storm drain and street lighting (City of Citrus Heights); and water (Citrus Heights Water District). Trenching depths of six (6) feet or more will be required in some locations for underground utilities. Private easements may be required for additional utility company facilities.

Permits

The permits, reviews and approvals listed below in **Table 1** are required for project construction.

Table 1. Required Permits, Reviews and Approvals

Responsible Agency	Permit/Approval	Status
Regional Water Quality Control Board	National Pollutant Discharge Elimination System General Permit 2022-0057-DWQ for Storm Water Discharges Associated with Construction Activity	Coverage will be obtained prior to construction.
City of Citrus Heights	Tree Removal Permit	A tree permit will be obtained for tree removal along the multi-use trail prior to construction.

Coordination Efforts:

The proposed project area exceeds one acre, therefore a National Pollutant Discharge Elimination System (NPDES) 402 General Permit for Storm Water Discharges Associated with construction activity will be obtained prior to construction. No further permits are required for this project.

9. Surrounding Land Uses and Setting:

Old Auburn Road is classified in the General Plan as a major collector street that, east of Fair Oaks Boulevard, is a 2 Lane Moderate Access Control roadway. It is adjacent to local streets and residences.

SECTION 2.0 – ADDITIONAL ENVIRONMENTAL FACTORS AFFECTED

The Initial Study is also intended to assess whether any environmental effects of the project are susceptible to substantial reduction or avoidance by the choice of specific revisions in the project, by the imposition of conditions, or by other means [15152(b)(2)] of the California Environmental Quality Act (CEQA) Guidelines. If such revisions, conditions, or other means are identified, they will be identified as mitigation measures.

This Initial Study relies on State CEQA Guidelines 15064 and 15604.4 in its determination of the significance of environmental effects. According to 15064, the findings as to whether a project may have one or more significant effects shall be based on substantial evidence in the record, and that controversy alone, without substantial evidence of a significant effect, does not trigger the need for an EIR.

This Proposed Mitigated Negative Declaration is a subsequent environmental document that tiers off the General Plan Program EIR, therefore impacts that were adequately addressed in the General Plan EIR do not need to be repeated in this Proposed Mitigated Negative Declaration.

The Citrus Heights Gateway Activation Project Proposed Mitigated Negative Declaration is a subsequent environmental document to the General Plan EIR. As such, this MND incorporates all applicable mitigation measures adopted with the Final EIR for the General Plan. The following is a summary of additional mitigation measures that were not included in the General Plan EIR. These measures, along with applicable measures from the General Plan EIR that are listed in Section 4.0, will be adopted in a Mitigation, Monitoring, and Reporting Plan for the Citrus Heights Gateway Activation Project Proposed Mitigated Negative Declaration.

CCHGP EIR MITIGATION MEASURES INCORPORATED WITHIN THE PROPOSED PROJECT

The following are additional mitigation measures applicable to the proposed project that were not included within the City of Citrus Heights General Plan EIR:

Mitigation Measure 4.7-7: Discovery of Potential Paleontological Resources
If potential paleontological resources are detected by construction workers or City staff during construction of future land uses, work shall stop immediately, and consultation is required to avoid further impacts. Actions after work stoppage will be designed to avoid significant impacts to the greatest extent feasible. These measures could include, but are not limited to, construction worker personnel education, consultation with a qualified paleontologist, coordination with experts on resource recovery and curation of specimens, and/or other measures considered appropriate after further consultation.

ADDITIONAL MITIGATION MEASURES INCORPORATED WITHIN THE PROPOSED PROJECT

The following are additional mitigation measures applicable to the proposed project that were not included within the City of Citrus Heights General Plan EIR:

Air Quality

AQ-1: Implement SMAQMD Basic Construction Emission Control Practices, where feasible:

- Water all exposed surfaces two times daily. Exposed surfaces include (but are not limited to) soil piles, graded areas, unpaved parking areas, staging areas, and access roads.
- Cover or maintain at least 2 feet of freeboard space on haul trucks transporting soil, sand, or other loose material on the site. Any haul trucks that would be traveling along freeways or major roadways shall be covered.
- Use wet power vacuum street sweepers to remove any visible trackout mud or dirt onto adjacent public roads at least once a day. Use of dry power sweeping is prohibited.

- Limit vehicle speeds on unpaved roads to 15 miles per hour.
- All roadway, driveway, sidewalk, and parking lot paving should be completed as soon as possible. In addition, building pads should be laid as soon as possible after grading unless seeding or soil binders are used.
- Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to 5 minutes [required by California Code of Regulations, Title 13, sections 2449(d)(3) and 2485]. Provide clear signage that posts this requirement for workers at the entrances to the site.
- Provide current certificate(s) of compliance for CARB's In-Use Off-Road Diesel-Fueled Fleets Regulation [California Code of Regulations, Title 13, sections 2249 and 2449.1].

Biological Resources

BIO-1: Prior to the start of construction activities, the Project limits within environmentally sensitive areas (oak woodlands), will be marked with high visibility Environmentally Sensitive Area (ESA) fencing or staking to ensure construction will not further encroach into sensitive resources.

BIO-2: Contract specifications will include the following Best Management Practices (BMPs), where applicable, to reduce erosion during construction:

1. Exposed soils and material stockpiles would be stabilized, through watering or other measures, to prevent the movement of dust at the Project site caused by wind and construction activities such as traffic and grading activities;
2. All vehicle and equipment fueling/maintenance would be conducted outside of oak woodland habitat;
3. Equipment used in and around oak woodland habitat must be in good working order and free of dripping or leaking contaminants;
4. Raw cement, concrete or concrete washings, asphalt, paint or other coating material, oil or other petroleum products, or any other substances that could be hazardous to wildlife shall be prevented from contaminating the soil;
5. All erosion control measures would be properly maintained throughout construction;
6. All construction materials would be hauled off-site after completion of construction.

BIO-3: All onsite refueling and maintenance must occur over plastic sheeting, drip pans, or other secondary containment measures to capture accidental spills before they can contaminate the soil. Secondary containment must have a raised edge (e.g. sheeting wrapped around wattles).

BIO-4: A chemical spill kit must be kept onsite at all times during work and must be easily accessible for use in the event of a spill.

BIO-5: In accordance with the City of Citrus Heights Tree Preservation and Protection Regulations, protected trees within the Project footprint will be preserved to the extent feasible. For trees removed for the multiuse trail, a tree permit will be obtained from the City prior to construction. Tree impact and avoidance measures shall be incorporated into the final design of the improvement plans. A certified arborist shall consult and make recommendations for design treatments, modifications, and construction techniques to minimize tree removal and construction impacts.

BIO-6: Prior to arrival at the Project site and prior to leaving the Project site, construction equipment that may contain invasive plants and/or seeds will be cleaned to reduce the spreading of noxious weeds.

BIO-7: If project-related activities, including vegetation removal or initial ground disturbance, are scheduled during the nesting bird season (February 1 – August 31) a pre-construction nesting bird survey must be conducted by a biologist prior to the start of work. The nesting bird survey must include the Project

area plus a 100-foot buffer. Within 2 weeks of the nesting bird survey, all areas surveyed by the biologist must be cleared by the contractor or a supplemental nesting bird survey is required.

An approximate 100-foot no-disturbance buffer will be established around any active nest of migratory birds, and an approximate 300-foot no-disturbance buffer will be established around any nesting birds of prey species. The contractor must immediately stop work in the buffer area until the appropriate buffer is established and is prohibited from conducting work within the buffer until the biologist has determined that the nestlings have fledged and are foraging independently. A reduced buffer, or other avoidance strategies, can be established if deemed appropriate by the City and biologist.

BIO-8: All food-related trash must be disposed of into closed containers and must be removed from the Project area daily. Construction personnel must not feed or otherwise attract wildlife or feral animals to the Project area.

BIO-9: If any wildlife (e.g., amphibians, birds, mammals, reptiles, etc.) are encountered during the course of construction, said wildlife shall be allowed to leave the construction area unharmed.

Cultural Resources

CR-1: Prior to construction, cultural resource awareness and sensitivity training shall be provided to all construction crew members to ensure that the crew members are aware of the potential for sensitive cultural resources to be present onsite. The awareness and sensitivity training would also include an established protocol for informing the resident engineer of any accidentally discovered cultural resources.

Treatment of Discoveries:

CR-2: If significant historical, paleontological, archaeological, or tribal cultural resources are discovered within the APE, ground disturbing activities shall be suspended 100 feet around the resource(s). The archaeological monitor, a representative of the appropriate Native American Tribe(s) (if discovery is prehistoric), and the City shall confer regarding mitigation of the discovered resource(s). All discovered archaeological resources should be documented by field notation, analysis, photography, and GPS mapping. Work shall not resume in the area until mitigation has been completed, or it has been determined that the archaeological resource(s) is not significant.

Disposition of Discoveries:

CR-3: If human remains are encountered, State Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. The County Coroner must be notified of the find immediately. If the remains are determined to be prehistoric, the Coroner would notify the Native American Heritage Commission (NAHC), which would determine and notify a Most Likely Descendant (MLD). With the permission of the landowner or his/her authorized representative, the MLD may inspect the site of the discovery. The MLD shall complete the inspection within 48 hours of notification by the NAHC. The MLD may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials.

CR-4: In the event that Native American cultural resources are inadvertently discovered during the course of construction, the City shall relinquish ownership of all Native American cultural resources, including sacred items, burial goods, and all archaeological artifacts and non-human remains as part of the required mitigation for impacts to Native American cultural resources. Prior to relinquishment, all discovered archaeological resources should be documented by field notation, photography, and GPS mapping. After consultation with the appropriate Native American Tribe(s), non-destructive analysis may be conducted.

Geology and Soils

GEO-1: The Proposed Project will comply with the City's Stormwater Discharge Control Measures, listed in the City's Municipal Code (Chapter 98. Article V), which will adequately control erosion and effectively prohibit non-stormwater discharges (City of Citrus Heights 2025b). To prevent the substantial soil erosion or the loss of topsoil post-construction, the Project design will comply with the Sacramento Stormwater Quality Partnership's Stormwater Quality Design Manual for the Sacramento Region (SQDM) to adequately control erosion.

Hazards and Hazardous Material

HM-1: Any leaking transformers observed during the course of the project should be considered a potential polychlorinated biphenyl (PCB) hazard. Should leaks from electrical transformers (that will either remain within the construction limits or require removal and/or relocation) be encountered during construction, the transformer fluid should be sampled and analyzed by qualified personnel for detectable levels of PCBs. Should PCBs be detected, the transformer should be removed and disposed of in accordance with Title 22, Division 4.5 of the California Code of Regulations and any other appropriate regulatory agency. Any stained soil encountered below electrical transformers with detectable levels of PCB's should also be handled and disposed of in accordance with Title 22, Division 4.5 of the California Code of Regulations and any other appropriate regulatory agency.

HM-2: To avoid impacts from pavement striping during construction it is recommended that removal requirements for yellow striping and pavement marking materials be performed in accordance with Caltrans Standard Special Provision 14-11.07 REMOVE YELLOW TRAFFIC STRIPE AND PAVEMENT MARKING WITH HAZARDOUS WASTE RESIDUE.

HM-3: As is the case for any project that proposes excavation, the potential exists for unknown hazardous contamination to be revealed during project construction (such as previously undetected petroleum hydrocarbon contamination from nearby gas stations). Should any previously unknown hazardous waste/material be encountered during construction, the procedures outlined in Caltrans Hazards Procedures for Construction shall be followed.

HM-4: If the project area changes (due to a change in the proposed project design or staging area), further investigation for potential hazardous waste generators would be required to determine their impact to the revised project limits.

Hydrology/Water Quality

HYD-1: The proposed Project would require coverage under the NPDES General Construction Permit for Discharges of storm water associated with construction activities (2022 Construction Stormwater General Permit, Order 2022-0057-DWQ). A Storm Water Pollution Prevention Plan (SWPPP) would also be developed and implemented as part of the Construction General Permit. This SWPPP will incorporate all applicable BMPs to ensure that adequate measures are taken during construction to minimize impacts to water quality.

Noise

NOI-1: The Contractor shall follow City of Citrus Heights noise ordinance for construction activities:

- Do not exceed 65 dBA at 50 feet from the job site activities from 8 p.m. to 7 a.m.
- Use an alternative waiting method instead of a sound signal unless required by safety laws.
- Equip an internal combustion engine with the manufacturer-recommended muffler.
- Do not operate an internal combustion engine on the job site without the appropriate muffler.

Population and Housing

PH-1: Property Compensation: All real property transactions shall comply with the property acquisition and relocation standards of the State of California. Property owners shall be compensated in accordance with fair market values based on appraisals.

Traffic

TRA-1: Temporary impacts to traffic flow as a result of construction activities would be minimized through construction phasing, signage, and a traffic control plan.

Tribal Cultural Resources

CR-1: Prior to construction, cultural resource awareness and sensitivity training shall be provided to all construction crew members to ensure that the crew members are aware of the potential for sensitive cultural resources to be present onsite. The awareness and sensitivity training would also include an established protocol for informing the resident engineer of any accidentally discovered cultural resources.

Treatment of Discoveries:

CR-2: If significant historical, paleontological, archaeological, or tribal cultural resources are discovered within the APE, ground disturbing activities shall be suspended 100 feet around the resource(s). The archaeological monitor, a representative of the appropriate Native American Tribe(s) (if discovery is prehistoric), and the City shall confer regarding mitigation of the discovered resource(s). All discovered archaeological resources should be documented by field notation, analysis, photography, and GPS mapping. Work shall not resume in the area until mitigation has been completed, or it has been determined that the archaeological resource(s) is not significant.

Disposition of Discoveries:

CR-3: If human remains are encountered, State Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. The County Coroner must be notified of the find immediately. If the remains are determined to be prehistoric, the Coroner would notify the Native American Heritage Commission (NAHC), which would determine and notify a Most Likely Descendant (MLD). With the permission of the landowner or his/her authorized representative, the MLD may inspect the site of the discovery. The MLD shall complete the inspection within 48 hours of notification by the NAHC. The MLD may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials.

CR-4: In the event that Native American cultural resources are inadvertently discovered during the course of construction, the City shall relinquish ownership of all Native American cultural resources, including sacred items, burial goods, and all archaeological artifacts and non-human remains as part of the required mitigation for impacts to Native American cultural resources. Prior to relinquishment, all discovered archaeological resources should be documented by field notation, photography, and GPS mapping. After consultation with the appropriate Native American Tribe(s), non-destructive analysis may be conducted.

SECTION 3.0 - ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

☐ Aesthetics	☐ Agriculture / Forestry Resources	☒ Air Quality
☒ Biological Resources	☒ Cultural Resources	☐ Energy
☒ Geology /Soils	☐ Greenhouse Gas Emissions	☒ Hazards & Hazardous Materials
☒ Hydrology / Water Quality	☐ Land Use / Planning	☐ Mineral Resources
☒ Noise	☒ Population / Housing	☐ Public Services
☐ Recreation	☒ Transportation	☒ Tribal Cultural Resources
☐ Utilities / Service Systems	☐ Wildfire	☒ Mandatory Findings of Significance

Based on the analysis presented in this Initial Study, it has been determined that for resource areas not checked above, the proposed project would not result in any significant impacts that cannot be mitigated to a less-than-significant level or are not sufficiently addressed by the City of Citrus Heights General Plan EIR. This Initial Study has concluded that the project would incrementally contribute to, but not exceed, certain significant impacts previously identified in the General Plan EIR, and that for such impacts, no new mitigation measures, other than those previously identified in the General Plan EIR, are required.

On the basis of this initial evaluation:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the Proposed Project have been made by or agreed to by the applicant. A MITIGATED NEGATIVE DECLARATION will be prepared. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a "Potentially Significant Impact" or "Potentially Significant Unless Mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature	Date
Name	City of Citrus Heights Organization

SECTION 4.0 - ENVIRONMENTAL CHECKLIST

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
I. AESTHETICS – Except as provided in Public Resources Code Section 21099, would the project:				
a. Have a substantial adverse effect on a scenic vista?				X
b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings along a scenic highway?			X	
c. In nonurbanized areas, 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?		X		
d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?			X	

Regulatory Setting

CEQA establishes that it is the policy of the state to take all action necessary to provide the people of the state "with…enjoyment of aesthetic, natural, scenic and historic environmental qualities (CA Public Resources Code Section 21001[b])."

Chapter 106.39 of the Citrus Heights Zoning Code provides regulations for the protection, preservation, and maintenance of protected trees. The ordinance protects native oak trees, oak woodlands, trees of historic or cultural significance, groves and stands of mature trees, and mature trees associated with development proposals.

Affected Environment And Environmental Consequences

The Project area is not located immediately adjacent to any state eligible scenic highways. The CCHGP EIR states that Old Auburn Road "has a rural character that is distinct from Auburn Boulevard. This is especially true for the area located east of its intersection with Auburn Boulevard. The parcels along Old Auburn Road are large single family lots containing tall, mature trees and landscaping. Curbs, gutters and sidewalks along this road are intermittent, mostly occurring adjacent to newer developments" (Citrus Heights 2011b).

The CCHGP EIR evaluated the potential for degradation of the visual character of the City through urban development and redevelopment. The CCHGP EIR concluded that, through the implementation of General Plan policies that the impact to the current visual character present within and surrounding the planning area would be less than significant (Citrus Heights 2011b).

The CCHGP EIR evaluated the potential for impacts due to new sources of light and glare through urban development and redevelopment. Implementation of General Plan policies and actions would ensure that new

lighting and glare sources would be designed and installed in locations that minimize the encroachment of lighting and spillover light and glare onto other properties and into the sky. The CCHGP EIR concluded that, through the implementation of General Plan policies that impacts from new sources of light and glare would be less than significant (Citrus Heights 2011b).

The CCHGP EIR evaluated the potential for impacts due to the loss of native trees and/or heritage trees from the construction of infrastructure, roadways, and buildings. The CCHGP EIR addresses impacts to trees with Draft General Plan policies and actions and the City's Tree Preservation and Protection Ordinance.

Discussion

a. **No Impact.** There are no state or locally designated scenic highways in the vicinity of the proposed project. Old Auburn Road and Wachtel Way are not a designated or eligible scenic highway. The Project would not cause adverse effects on a scenic vista.

b. **Less than Significant.** The Project will require tree removal; however, the portions of the road and trail where trees are required to be removed are not designated as scenic.

c. **Less than Significant with Mitigation Incorporated.** The proposed Project is located in an urbanized area. The Proposed Project does not conflict with applicable zoning or other City regulations governing scenic quality. Mitigation Measure BIO-5 requires the Proposed Project to obtain a City tree permit for trees to be removed for the multiuse trail. Trees will be avoided to the extent feasible. The intersection improvements and additional bicycle lanes do not have the potential to substantially degrade the existing visual character of the site.

d. **Less than Significant.** Streetlights are present on Old Auburn Road and Wachtel Way. The Project will construct sidewalks with streetlights along segments of Old Auburn Road and Wachtel Way that do not currently have sidewalks. The Project would construct three roundabouts at existing Argo Drive, Wachtel Way, and Linda Creek Court/Oakwood Hills Circle intersections on Old Auburn Road. Two additional streetlights will be installed with each roundabout. Lighting would be provided consistent with the Zoning Code, which requires that lights be shielded to avoid excessive off-site glare. The potential impact would be less than significant.

Mitigation Measures from City of Citrus Heights General Plan EIR that apply to the Project

None. The Citrus Heights General Plan EIR Section 4.6-3 concludes that with the implementation of Draft General Plan policies and actions and the City's Tree Preservation and Protection Ordinance, impacts on native trees and/or heritage trees would be prevented or adequate compensation would be provided. For this reason this impact is considered less than significant. The Citrus Heights General Plan EIR Section 4.12-2 determines that new sources of light and glare are less-than-significant.

Additional Project-Level Mitigation Measures

BIO-5: In accordance with the City of Citrus Heights Tree Preservation and Protection Regulations, protected trees within the Project footprint will be preserved to the extent feasible. For trees removed for the multiuse trail, a tree permit will be obtained from the City prior to construction. Tree impact and avoidance measures shall be incorporated into the final design of the improvement plans. A certified arborist shall consult and make recommendations for design treatments, modifications, and construction techniques to minimize tree removal and construction impacts.

Significance Determination with Mitigation Measures

Not applicable.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
II. AGRICULTURE / FORESTRY RESOURCES - In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:				
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				X
b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?				X
c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?				X
d. Result in the loss of forest land or conversion of forest land to non-forest use?				X
e. Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?				X

Discussion

a. **No Impact.** There is no Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) in the project limits.

b. **No Impact.** There are no parcels zoned for agricultural use or land in Williamson Act contracts in the project limits.

c. **No Impact.** There are no parcels zoned for or as forest lands or timberland in the project limits.

d. **No Impact.** There is no forest land in the project limits. The Project will not convert forest land to non-forest use.

e. **No Impact.** The Project would not involve changes in the existing environment that could result in the conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use.

Mitigation Measures from City of Citrus Heights General Plan EIR that apply to the Project

None.

Additional Project-Level Mitigation Measures

None required.

Significance Determination with Mitigation Measures

Not applicable.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
III. AIR QUALITY - Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a. Conflict with or obstruct implementation of the applicable air quality plan?				X
b. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?		X		
c. Expose sensitive receptors to substantial pollutant concentrations?			X	
d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?			X	

Regulatory Setting

Federal and State

Clean Air Act

The United States Environmental Protection Agency (USEPA) is responsible for addressing national and interstate air pollution issues and setting policies. The EPA sets national vehicle and stationary source emission standards, oversees approval of all State Implementation Plans, provides research and guidance for air pollution programs, and sets National Ambient Air Quality Standards (NAAQS), also known as Federal standards. There are Federal standards for the following criteria air pollutants, which were identified from provisions of the Clean Air Act of 1970:

- Ozone;
- Particulate matter (PM10 and PM2.5);
- Nitrogen dioxide;
- Carbon monoxide (CO); and
- Lead; and
- Sulfur dioxide.

Federal standards were set to protect public health, including that of sensitive individuals; thus, the standards continue to change as more medical research is available regarding the health effects of the criteria pollutants. Primary Federal standards are the levels of air quality necessary, with an adequate margin of safety, to protect the public health, per 40 CFR 50.2.

State Implementation Plan

A State Implementation Plan is a document prepared by each state describing existing air quality conditions and measures that would be followed to attain and maintain Federal standards. The State Implementation Plan

for the State of California is administered by the CARB, which has overall responsibility for Statewide air quality maintenance and air pollution prevention. California's State Implementation Plan incorporates individual Federal attainment plans for regional air districts—air districts prepare their Federal attainment plans, which are sent to the CARB to be approved and incorporated into the California State Implementation Plan. Federal attainment plans include the technical foundation for understanding air quality (e.g., emission inventories and air quality monitoring), control measures and strategies, and enforcement mechanisms.

Federal and State Ambient Air Quality Standards

California and the federal government have established standards for several different pollutants. For some pollutants, separate standards have been set for different measurement periods. Most standards have been set to protect public health. For some pollutants, standards have been based on other values (such as protection of crops, protection of materials, or avoidance of nuisance conditions). The pollutants of greatest concern in the Project area are ozone, particulate matter-2.5 microns ($PM_{2.5}$) and particulate matter-10 microns (PM_{10}). **Table 2** shows the state and federal attainment status within Sacramento County for a variety of pollutants.

The Federal Clean Air Act requires the EPA to designate areas as attainment, nonattainment, or unclassified for the NAAQS. These designations are similar to their state-level counterparts. Areas that were nonattainment but have recently achieved attainment are referred to as maintenance areas.

Table 2. NAAQS and CAAQS Attainment Status for Sacramento County

Criteria Pollutants	State Designation	Federal Designation
Ozone	Nonattainment	Nonattainment
PM10	Nonattainment	Attainment
PM2.5	Attainment	Nonattainment
Carbon Monoxide	Attainment	Unclassified/Attainment
Nitrogen Dioxide	Attainment	Unclassified/Attainment
Sulfur Dioxide	Attainment	Unclassified
Sulfates	Attainment	-
Lead	Attainment	Unclassified/Attainment
Hydrogen Sulfide	Unclassified	-
Visibility Reducing Particles	Unclassified	-

Source: California Air Resources Board, 2022
https://www.arb.ca.gov/desig/adm/adm.htm

Table 3 provides a summary of the NAAQS and California Ambient Air Quality Standards (CAAQS) attainment status in the vicinity of the Project.

Table 3. Ambient Air Quality Standards

Ambient Air Quality Standards						
Pollutant	**Averaging Time**	**California Standards [1]**		**National Standards [2]**		
		Concentration [3]	**Method [4]**	**Primary [3,5]**	**Secondary [3,6]**	**Method [7]**
Ozone (O_3)[8]	1 Hour	0.09 ppm (180 µg/m^3)	Ultraviolet Photometry	—	Same as Primary Standard	Ultraviolet Photometry
	8 Hour	0.070 ppm (137 µg/m^3)		0.070 ppm (137 µg/m^3)		
Respirable Particulate Matter (PM10)[9]	24 Hour	50 µg/m^3	Gravimetric or Beta Attenuation	150 µg/m^3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m^3		—		
Fine Particulate Matter (PM2.5)[9]	24 Hour	—	—	35 µg/m^3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m^3	Gravimetric or Beta Attenuation	9.0 µg/m^3	15.0 µg/m^3	
Carbon Monoxide (CO)	1 Hour	20 ppm (23 mg/m^3)	Non-Dispersive Infrared Photometry (NDIR)	35 ppm (40 mg/m^3)	—	Non-Dispersive Infrared Photometry (NDIR)
	8 Hour	9.0 ppm (10 mg/m^3)		9 ppm (10 mg/m^3)	—	
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m^3)		—	—	
Nitrogen Dioxide (NO_2)[10]	1 Hour	0.18 ppm (339 µg/m^3)	Gas Phase Chemiluminescence	100 ppb (188 µg/m^3)	—	Gas Phase Chemiluminescence
	Annual Arithmetic Mean	0.030 ppm (57 µg/m^3)		53 ppb (100 µg/m^3)	Same as Primary Standard	
Sulfur Dioxide (SO_2)[11]	1 Hour	0.25 ppm (655 µg/m^3)	Ultraviolet Fluorescence	75 ppb (196 µg/m^3)	—	Ultraviolet Flourescence; Spectrophotometry (Pararosaniline Method)
	3 Hour	—		—	0.5 ppm (1300 µg/m^3)	
	24 Hour	0.04 ppm (105 µg/m^3)		0.14 ppm (for certain areas)[11]	—	
	Annual Arithmetic Mean	—		0.030 ppm (for certain areas)[11]	—	
Lead[12,13]	30 Day Average	1.5 µg/m^3	Atomic Absorption	—	—	High Volume Sampler and Atomic Absorption
	Calendar Quarter	—		1.5 µg/m^3 (for certain areas)[12]	Same as Primary Standard	
	Rolling 3-Month Average	—		0.15 µg/m^3		
Visibility Reducing Particles[14]	8 Hour	See footnote 14	Beta Attenuation and Transmittance through Filter Tape	**No National Standards**		
Sulfates	24 Hour	25 µg/m^3	Ion Chromatography			
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m^3)	Ultraviolet Fluorescence			
Vinyl Chloride[12]	24 Hour	0.01 ppm (26 µg/m^3)	Gas Chromatography			

See footnotes on next page …

For more information please call ARB-PIO at (916) 322-2990

California Air Resources Board (7/16/24)

1. California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, and particulate matter (PM10, PM2.5, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.

2. National standards (other than ozone, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM10, the 24 hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 $\mu g/m^3$ is equal to or less than one. For PM2.5, the 24 hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact the U.S. EPA for further clarification and current national policies.

3. Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.

4. Any equivalent measurement method which can be shown to the satisfaction of the ARB to give equivalent results at or near the level of the air quality standard may be used.

5. National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.

6. National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

7. Reference method as described by the U.S. EPA. An “equivalent method” of measurement may be used but must have a “consistent relationship to the reference method” and must be approved by the U.S. EPA.

8. On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm.

9. On February 7, 2024, the national annual PM2.5 primary standard was lowered from 12.0 $\mu g/m^3$ to 9.0 $\mu g/m^3$. The existing national 24-hour PM2.5 standards (primary and secondary) were retained at 35 $\mu g/m^3$, as was the annual secondary standard of 15.0 $\mu g/m^3$. The existing 24-hour PM10 standards (primary and secondary) of 150 $\mu g/m^3$ also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.

10. To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 ppb. Note that the national 1-hour standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the national 1-hour standard to the California standards the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.

11. On June 2, 2010, a new 1-hour SO_2 standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO_2 national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.
    Note that the 1-hour national standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.

12. The ARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.

13. The national standard for lead was revised on October 15, 2008 to a rolling 3-month average. The 1978 lead standard (1.5 $\mu g/m^3$ as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.

14. In 1989, the ARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

For more information please call ARB-PIO at (916) 322-2990 **California Air Resources Board (7/16/24)**

Source: CARB 2024c

Local

Sacramento Metropolitan Air Quality Management District

The Sacramento Metropolitan Air Quality Management District (SMAQMD) is the primary agency responsible for planning to meet Federal and State ambient air quality standards in Sacramento County and the larger Sacramento Ozone Nonattainment Area.

The SMAQMD operates monitoring stations in Sacramento County, develops rules, regulations, and CEQA thresholds for stationary sources and equipment, prepares emissions inventory and air quality management planning documents, and conducts source testing and inspections. **Table 4** depicts the SMAQMD Thresholds of Significance for Projects subject to CEQA (SMAQMD 2020). All projects are subject to the adopted SMAQMD rules and regulations.

The SMAQMD's air quality management plans include control measures and strategies to be implemented to attain State and Federal ambient air quality standards in Sacramento County. The SMAQMD then implements these control measures as regulations to control or reduce criteria pollutant emissions from stationary sources or equipment. Applicable SMAQMD attainment plans include:

- An 8-Hour Ozone Attainment and Reasonable Further Progress Plan; and
- Revised 8-Hour Ozone Attainment and Reasonable Further Progress Plan.

The 8-Hour Ozone Attainment and Reasonable Further Program Plan (CARB 2023a) describes measures to be implemented by the air districts in the Sacramento Federal Nonattainment Area (SFNA). This plan includes the information and analyses to fulfill the Federal Clean Air Act (CAA) requirements for demonstrating reasonable further progress and attainment of the 8-hour ozone NAAQS for the Sacramento region. In addition, this plan establishes an updated emissions inventory projected for a 2032 attainment date, provides photochemical modeling results, proposes the implementation of reasonably available control measures, and sets new motor vehicle emission budgets for transportation conformity purposes for the reasonable further progress milestone years and the 2032 attainment year. The emission reduction strategy is based on reductions in both reactive organic gases (ROG) and nitrogen oxide (NOx) emissions.

Future Federal and State control measures include advanced clean fleets regulation, zero-emissions trucks, motorcycle new emissions standards, clean miles standard, cleaner off-road (including zero emissions), consumer products standards, zero-emissions for space and water heaters, locomotive regulations, aviation emission reductions, local mobile source control program, conversion of diesel-powered transport refrigeration units to zero-emission technologies, and other measures (SMAQMD 2024b).

Table 4. SMAQMD Thresholds of Significance

	Construction Phase	Operational Phase
Mass Emission Thresholds		
Nitrogen Oxide (NOx) (Ozone precursor)	85 pounds/day	65 pounds/day
Reactive Organic Gases (ROG) (VOC) (Ozone precursor)	None.	65 pounds/day
Particulate Matter (PM10)	Zero (0). If all feasible best available control technology (BACT) and BMPs are applied, then 80 pounds/day and 14.6 tons/year.	Zero (0). If all feasible BACT and BMPs are applied, then 80 pounds/day and 14.6 tons/year.
Particulate Matter (PM2.5)	Zero (0). If all feasible BACT and BMPs are applied, then 82	Zero (0). If all feasible BACT and BMPs are applied, then 82

	pounds/day and 15 tons/year.	pounds/day and 15 tons/year.
Concentration Thresholds (Based on the California Ambient Air Quality Standard, identical threshold for both phases of development.		
Carbon Monoxide (CO)	20 ppm 1-hour standard (23 mg/m^3); 9 ppm 8-hour (10 mg/m^3)	
Nitrogen Dioxide (NO2)	0.18 ppm 1-hour standard (339 (339 µg/m^3); 0.03 ppm Annual Arithmetic Mean (57 µg/m^3)	
Sulphur Dioxide (SO2)	0.25 ppm 1-hour standard (665 µg/m^3); 0.04 ppm 24-hour standard (105 µg/m^3)	
Lead	1.5 µg/m^3 30-day average	
Visibility Reducing Particles	Extinction coefficient of 0.23 per kilometer - visibility of ten miles or more due to particles when relative humidity is less than 70 percent	
Sulfates	25 µg/m^3 24-hour standard	
Hydrogen Sulfide (H2S)	0.03 ppm (42 µg/m^3) 1-hour standard	
Vinyl Chloride	0.01 ppm (26 µg/m^3) 24-hour standard	

2nd 10-Year PM10 Implementation/Maintenance Plan for Sacramento County

On September 23, 2021, the SMAQMD Governing Board approved the PM10 maintenance plan (SMAQMD 2023b). This plan includes updated emission inventories, demonstrates maintenance of the PM10 standard, provides an updated control measure evaluation, and establishes new motor vehicle emissions budgets (MVEB). The plan was submitted to the USEPA for approval and the Final Rule was published on March 14, 2024, effective April 15, 2024.

2015 Triennial Report and Air Quality Plan Update

This plan is intended to comply with the requirements of the California Clean Air Act (CCAA) as related to bringing the region into compliance with the CAAQS for ozone. The SMAQMD has prepared several triennial progress reports that build upon the 1994 Sacramento Area Regional Ozone Attainment Plan. The 2015 Triennial Report and Air Quality Plan Update (SMAQMD 2015) is the most recent report. The triennial progress report includes a current emission inventory and projected future inventories of ROG and NOx emissions in Sacramento County. The future inventories reflect population growth rates, travel, employment, industrial/commercial activities, and energy use, as well as controls imposed through local, State, and Federal emission reduction measures. The triennial report discusses rules that the SMAQMD has adopted during the previous three years, incentive programs that have been implemented, and other measures that would supplement those in the Ozone Attainment Plan to achieve the required five percent per year reduction required by the CCAA.

The SMAQMD also has several rules that relate to the proposed Project, which are summarized below.

Rule 201 – General Permit Requirements: Requires any Project that includes the use of certain equipment capable of releasing emissions to the atmosphere as part of Project operation to obtain a permit from the SMAQMD prior to operation of the equipment. The applicant, developer, or operator of a Project that includes an emergency generator, boiler, or heater should contact the SMAQMD to determine if a permit is required. Portable construction equipment with an internal combustion engine with over 50 horsepower are required to have a SMAQMD permit or a CARB portable equipment registration.

Rule 401 – Ringelmann Chart: Prohibits individuals from discharging into the atmosphere from any single source of emissions whatsoever any air contaminant whose opacity exceeds certain specified limits.

Rule 402 – Nuisance: To protect the public health, Rule 402 prohibits any person from discharging such

quantities of air contaminants that cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public.

Rule 403 – Fugitive Dust: Requires a person to take every reasonable precaution not to cause or allow the emissions of fugitive dust from being airborne beyond the property line from which the emission originates, from construction, handling or storage activity, or any wrecking, excavation, grading, clearing of land or solid waste disposal operation.

Rule 453 – Cutback and Emulsified Asphalt Paving Materials: Asphalt paving operations that may be associated with implementation of a Project would be subject to Rule 453. This rule applies to the manufacture and use of cutback asphalt and emulsified asphalt for paving and maintenance operations.

Rule 902 – Asbestos: To protect the public health and the environment, Rule 902 sets specific procedures to follow regarding handling, transport, and disposal of asbestos containing materials.

The Guide to Air Quality Assessment in Sacramento County also provides methods to analyze air quality impacts from plans and projects, including screening criteria, thresholds of significance, calculation methods, as well as mitigation measures that help assist lead agencies in complying with the CEQA. These guidelines require that basic construction emission control practices be implemented for emissions regardless of the significance determination.

Toxic Air Contaminants

A toxic air contaminant (TAC) is defined as an air pollutant that may cause or contribute to an increase in mortality or serious illness, or that may pose a hazard to human health. TACs are usually present in minute quantities in the ambient air; however, their high toxicity or health risk may pose a threat to public health even at low concentrations. The California Almanac of Emissions and Air Quality (CARB 2013) present the relevant concentration and cancer risk data for the ten TACs that pose the most substantial health risk in California based on available data. These TACs are as follows: acetaldehyde, benzene, 1.3-butadiene, carbon tetrachloride, hexavalent chromium, para-dichlorobenzene, formaldehyde, methylene chloride, perchloroethylene, and DPM.

Some studies indicate that DPM poses the greatest health risk among the TACs listed above. A 10-year research program (CARB 2024a) demonstrated that DPM from diesel-fueled engines is a human carcinogen and that chronic (long-term) inhalation exposure to DPM poses a chronic health risk. In addition to increasing the risk of lung cancer, exposure to diesel exhaust can have other health effects. Diesel exhaust can irritate the eyes, nose, throat, and lungs, and it can cause coughs, headaches, lightheadedness, and nausea. Diesel exhaust is a major source of fine particulate pollution as well, and studies have linked elevated particle levels in the air to increased hospital admissions, emergency room visits, asthma attacks, and premature deaths among those suffering from respiratory problems.

DPM differs from other TACs in that 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, lubricating oil, and whether an emission control system is present. Unlike the other TACs, however, no ambient monitoring data are available for DPM because no routine measurement method currently exists. The CARB has made preliminary concentration estimates based on a DPM exposure method. This method uses the CARB emissions inventory's PM10 database, ambient PM10 monitoring data, and the results from several studies to estimate concentrations of DPM.

Odors

Odors are generally regarded as an annoyance rather than a health hazard. However, manifestations of a person's reaction to foul odors can range from psychological (e.g., emotional reaction) to physiological (e.g., nausea).

With respect to odors, the human nose is the sole sensing device. The ability to detect odors is subjective and varies considerably among the population. Some individuals have the ability to smell very minute quantities of specific substances; others may not have the same sensitivity but may have sensitivities to odors of other substances. In addition, people may have different reactions to the same odor; an odor that is offensive to one person may be perfectly acceptable to another.

The Sacramento Valley Basinwide Air Pollution Control Council

The Sacramento Valley Basinwide Air Pollution Control Council (Control Council) is authorized pursuant to California Health and Safety Code Section (HSC) section 40900 to carry out the following activities relevant to the Proposed Project pursuant to State Law and the CCR (reference HSC Section 41865 and Section 41866; CCR Section 80100 et seq.):

- Assist Districts in the Sacramento Valley Air Basin in coordinating all air pollution control activities to ensure that the entire Sacramento Valley Air Basin is, or will be, in compliance with the requirements of State and Federal law.

Setting

For the purposes of this document, the City of Citrus Heights General Plan (2011a) and EIR (2011b)was referenced for this section. The proposed project is located within the Sacramento Valley Air Basin (SVAB), in the region administered by the Sacramento Metropolitan Air Quality Management District (SMAQMD), which administers air quality in the City of Citrus Heights. The SVAB has a Mediterranean climate, characterized by hot, dry summers and mild, rainy winters. During the year, the temperature may range from 20 to 115 degrees Fahrenheit with summer highs usually in the 90s and winter lows occasionally below freezing. Average annual rainfall is about 20 inches with snowfall being very rare. Summer high temperatures as measured at the Sacramento Executive Airport Federal Aviation Administration - Flight Service Station (the nearest climatic monitoring station to the Project) average in the low 90s ºF and summer low temperatures average in the upper 50s ºF. Winter conditions are characterized by occasional rainstorms, interspersed with stagnant and sometimes foggy weather. Wintertime high temperatures average in the mid-upper 50s ºF and winter low temperatures average in the high 30s ºF (Western Regional Climate Center 2025).

The mountains surrounding the Sacramento Valley create an airflow barrier, which can trap air pollutants in the valley when meteorological conditions are right, and a temperature inversion exists. Air stagnation in the autumn and early winter occurs when large high-pressure cells lie over the valley. The lack of surface wind during these periods and the reduced vertical flow caused by less surface heating reduces the influx of outside air and allows pollutants to become concentrated in the air. The surface concentrations of pollutants are highest when these conditions are combined with increased levels of smoke or when temperature inversions trap cool air, fog and pollutants near the ground.

The ozone season (May through October) in the Sacramento Valley is characterized by stagnant morning air or light winds with the Delta sea breeze arriving in the afternoon out of the southwest. Usually, the evening breeze transports the airborne pollutants to the north out of the Sacramento Valley. During about half of the days from July to September, however, a phenomenon called the “Schultz Eddy” prevents this from occurring. Instead of allowing for the prevailing wind patterns to move north carrying the pollutants out of the valley, the Schultz Eddy causes the wind pattern and pollutants to circle back southward. This phenomenon’s effect exacerbates the pollution levels in the area and increases the likelihood of violating the federal and state air quality standards.

Sacramento County is located within the boundaries of the Sacramento Valley Air Basin. The Sacramento Valley Air Basin is bounded by the North Coast Ranges on the west and the Northern Sierra Nevada Mountains on the east. The intervening terrain is flat. Sacramento is often described as a bowl shaped valley. The Sacramento Valley’s climate and topography contribute to the formation and transport of photochemical

pollutants throughout the region. The region experiences temperature inversions that limit atmospheric mixing and trap pollutants, resulting in high pollutant concentrations near the ground surface. Generally, the lower the inversion base height from the ground and the greater the temperature increase from base to top, the more pronounced the inhibiting effect of the inversion will be on pollutant dispersion. Consequently, the highest concentrations of photochemical pollutants occur from late spring to early fall when photochemical reactions are greatest because of more intense sunlight and the lower altitude of daytime inversion layers. Surface inversions (those at altitudes of 0–500 ft above sea level) are most frequent during winter, and subsidence inversions (those at 1,000–2,000 ft above sea level) are most common in summer.

Existing air quality conditions in the project area can be characterized in terms of the ambient air quality standards that the state of California (California Ambient Air Quality Standards [CAAQS]) and the federal government NAAQS that have been established for several different pollutants. Most pollutant standards have been established to protect public health. For other pollutants, standards have been based on other values (such as protection of crops, protection of materials, or avoidance of nuisance conditions). Ambient air pollutant concentrations are measured at 35 permanent monitoring stations throughout the Sacramento Valley Air Basin. The federal and state governments have established ambient air quality standards for six criteria pollutants: ozone, CO, NO_2, SO_2, particulate matter ($PM_{2.5}$ and PM_{10}), and lead. Sacramento County is in State designated nonattainment for ozone (8-hour and 1-hour) and PM_{10}. The project location is in attainment or unclassified for all other CAAQS criteria pollutants. **Table 2** summarizes the CAAQS criteria pollutants and the attainment status of the project location.

Standards of Significance

For purposes of this Initial Study, air quality impacts may be considered significant if construction and/or implementation of the Proposed Project would result in the following impacts that remain significant after implementation of General Plan policies or mitigation from the City of Citrus Heights General Plan EIR:

- Construction emissions of NO_x above 85 pounds per day for City of Citrus Heights;
- Operational emissions of NO_x or ROG above 65 pounds per day for City of Citrus Heights;
- Violation of any air quality standard or contribute substantially to an existing or projected air quality violation;
- PM_{10} concentrations equal to or greater than five percent of the State ambient air quality standard (i.e., 50 micrograms/cubic meter for 24 hours) in areas where there is evidence of existing or projected violations of this standard. However, if project emissions of NO_x and ROG are below the emission thresholds given above, then the project would not result in violations of the PM_{10} ambient air quality standards;
- CO concentrations that exceed the 1-hour state ambient air quality standard (i.e., 20.0 ppm) or the 8-hour state ambient standard (i.e., 9.0 ppm); or
- Exposure of sensitive receptors to substantial pollutant concentrations.

Ambient air quality standards have not been established for toxic air contaminants (TAC). TAC exposure is deemed to be significant if:

- TAC exposures create a risk of 10 in 1 million for stationary sources or substantially increase the risk of exposure to TACs from mobile sources.

Summary of Analysis under the City of Citrus Heights General Plan EIR

The General Plan EIR addressed the potential effects of the General Plan on ambient air quality and the potential for exposure of people, especially sensitive receptors such as children or the elderly, to unhealthful pollutant concentrations. See General Plan EIR, Chapter 4.3.

Policies in the General Plan in Environmental Resources were identified as mitigating potential effects of development that could occur under the General Plan, including calling for the City to work with the California Air Resources Board and the Sacramento Metropolitan Air Quality Management District (SMAQMD) to meet state and federal air quality standards. The Master EIR identified exposure to sources of toxic air contaminants (TAC) as a potential effect. Policies in the General Plan would reduce the effect to a less-than-significant level. The policies include requiring consideration of current guidance provided by the Air Resources Board and SMAQMD; requiring development adjacent to stationary or mobile TAC sources to be designed with consideration of such exposure in design, landscaping and filters.

Discussion

a. **No Impact**. A project is considered to conflict with or obstruct implementation of regional air quality plans if it would be inconsistent with the emissions inventories contained in the regional air quality plans. Emission inventories are developed based on projected increases in population growth and vehicle miles traveled (VMT) within the region. The proposed Project would construct intersection enhancements, as well as the installation of pedestrian and bicycle facilities such as multi-use pathways, Class IV bikeways, crosswalks, and Americans with Disabilities Act (ADA)-compliant curb ramps. The Project would serve the existing community and would not result in an increase in population or VMT. Implementation of the proposed Project would increase the connectivity of the City's off-street trail network and encourage the use of alternative modes of transportation, potentially reducing the use of personal motor vehicles. Long-term operation of the proposed Project is anticipated to result in overall beneficial air quality impacts and would not conflict with existing or future air quality planning efforts. Therefore, no impact would occur.

b. **Less than Significant with Mitigation Incorporated.** Sacramento County is currently designated as in "attainment" for all State and federal ambient air quality standards, except ozone (non-attainment status under State and Federal), PM10 (non-attainment status under State), and PM2.5 (non-attainment status under Federal). The current "non-attainment" status for ozone, PM10, and PM2.5 signifies that these pollutant concentrations have exceeded the established standards.

In order to evaluate ozone and other criteria air pollutant emissions and support attainment goals for those pollutants, the SMAQMD developed the Guide to Air Quality Assessment in Sacramento County which has established significance thresholds for emissions of PM2.5 and PM10, and ozone precursors – reactive organic gases (ROG) and nitrous oxides (NOx). The significance thresholds, expressed in pounds per day (lbs./day), listed in **Table 5** below represent the SMAQMD's current established thresholds of significance for use in the evaluation of air quality impacts associated with proposed land development projects. Thus, if the proposed Project's emissions exceed the pollutant thresholds presented in **Table 5**, the Project would have the potential to result in significant effects to air quality and affect the attainment of federal and State Ambient Air Quality Standards.

Table 5. SMAQMD Local Thresholds of Significance

Thresholds of Significance		
Emissions	**SMAQMD Construction Phase Mass Emissions Thresholds (pounds per day)**	**SMAQMD Operational Phase Mass Emissions Thresholds (pounds per day)**
NO_x	85 lbs/day	65 lbs/day
ROG (VOC)	No threshold	65 lbs/day
PM_{10}	**Zero (0)**. If all feasible BACT/BMPs are applied, then 80 pounds/day and 14.6 tons/year	**Zero (0)**. If all feasible BACT/BMPs are applied, then 80 pounds/day and 14.6 tons/year

Thresholds of Significance		
Emissions	**SMAQMD Construction Phase Mass Emissions Thresholds (pounds per day)**	**SMAQMD Operational Phase Mass Emissions Thresholds (pounds per day)**
$PM_{2.5}$	**Zero (0)**. If all feasible BACT/BMPs are applied, then 82 pounds/day and 15 tons/year	**Zero (0)**. If all feasible BACT/BMPs are applied, then 82 pounds/day and 15 tons/year
Source: SMAQMD 2020		

Short-term increases in emissions would occur during construction. The construction period would be limited and temporary. According to SMAQMD CEQA Guidelines, construction-generated NOx and PM emissions shall be evaluated for significance under CEQA on a daily mass emission basis because they are pollutants of regional concern.

Short-term construction-related emissions resulting from the Project construction were estimated using the SMAQMD Road Construction Emissions Model, Version 9.0.0, a spreadsheet-based model specifically designed to estimate emissions for various types of highway improvements projects in the Sacramento region (**Appendix B**). **Table 6** provides the results of the Road Construction Emissions Model for each of the Alternative's construction phase compared to SMAQMD thresholds of significance.

Table 6. Maximum Daily Construction Emissions and Local Thresholds of Significance

Emissions	Project Emissions	SMAQMD Construction Phase Mass Emissions Thresholds (pounds per day)
NO_x	0.42 lbs/day (daily average) 13.57 lbs/day (maximum daily average)	85 lbs/day
ROG (VOC)	0.13 lbs/day (daily average) 4.64 lbs/day (maximum daily average)	No threshold
PM_{10}	20.82 lbs/day (daily average) 0.59 lbs/day (maximum daily average)	**Zero (0)**. If all feasible BACT/BMPs are applied, then 80 pounds/day and 14.6 tons/year
$PM_{2.5}$	4.81 lbs/day (daily average) 0.56 lbs/day (maximum daily average)	**Zero (0)**. If all feasible BACT/BMPs are applied, then 82 pounds/day and 15 tons/year

The Project would be well below emissions levels for NOx. The Project would generate minimal amounts of PM10 and PM2.5 based on the construction emissions model; therefore, SMAQMD Basic Construction Emission Control Practices as described in mitigation measure **AQ-1** should be implemented where feasible. With the implementation of measure **AQ-1**, any potentially significant impacts would be reduced to a less than significant level; therefore, impacts to air quality standards are considered less than significant with mitigation incorporated.

Because construction and operational emissions are temporary and expected to be below the thresholds, the project is not expected to violate any air quality standards. The proposed project would not increase the capacity of the roadway; no additional trips or delays are expected to result from the project. The proposed project would not result in an additional significant impact that was not addressed in the City of Citrus Heights General Plan EIR.

c. **Less than Significant.** The nearest sensitive receptors are residences located directly adjacent to Old

Auburn Road and Wachtel Way. Construction activities, which involve the use of diesel-powered equipment, are short-term and emissions are expected to be well below the thresholds. Operational emissions are not expected to increase, as discussed for Question B. Despite a low-impact expectation for this project, measures for construction activities are still recommended to further reduce impacts on sensitive receptors.

SMAQMD has established screen-level criteria for the assessment of significant impacts from construction-related emissions of fugitive dust. These criteria are based on a project's maximum actively disturbed area. Construction activities that would disturb less than 15.0 acres per day would be required to implement the appropriate level of mitigation, identified as "Basic Construction Emission Control Practices," for all projects to further minimize construction-related impacts regardless of the CEQA significance determination. Because the proposed project would disturb an area less than 15 acres, BMPs have been included from the "Basic Construction Emission Control Practices" to reduce construction-related emissions of fugitive dust (see City Code: 15.40.050 and 15.44.170; SMAQMD Rule 403 (Fugitive Dust) and their Basic Construction Emissions Control Practices).

PM_{10} emissions are assumed to be below the thresholds because Construction NO_x emissions are temporary. There are no construction ROG thresholds, and both NO_x and ROG operational thresholds are not expected to be exceeded. Therefore, the proposed project would not result in an additional significant impact that was not addressed in the City of Citrus Heights General Plan EIR.

SMAQMD defines sensitive receptors as facilities that house or attract children, the elderly, people with illnesses, or others who are especially sensitive to the effects of air pollutants or may experience adverse effects from unhealthful concentrations of air pollutants. Hospitals, clinics, schools, convalescent facilities, and residential areas are examples of sensitive receptors. The nearest sensitive receptors in the vicinity of the project site are residences directly adjacent to the project site.

Construction activities are anticipated to involve the operation of diesel-powered equipment. In 1998, the CARB identified diesel exhaust as a TAC. Cancer health risks associated with exposures to diesel exhaust typically are associated with chronic exposure, in which a 70-year exposure period is often assumed. Although elevated cancer rates can result from exposure periods of less than 70 years, acute exposure (i.e., exposure periods of 2 to 3 years) to diesel exhaust typically is not anticipated to result in an increased health risk because acute exposure typically does not result in exposure concentrations that would represent a health risk.

Health impacts associated with exposure to diesel exhaust from project construction are not anticipated to be significant because the duration of the construction activities is expected to occur well below the 70-year exposure period used in health risk assessments. Construction of the Project is anticipated to last approximately 6 months, with an estimated 130 working days assuming there will be 22 working days a month, which is considerably shorter than the 70-year exposure period used in health risk assessments for health impacts associated with exposure to diesel exhaust from Project construction. Therefore, construction of the project is not anticipated to result in an elevated cancer risk to exposed persons. No mitigation is required. Therefore, the proposed project would not result in an additional significant impact that was not addressed in the City of Citrus Heights General Plan EIR. Overall exposure of sensitive receptors to substantial pollutant concentrations from the proposed Project would be less than significant and no mitigation is required. Overall exposure of sensitive receptors to substantial pollutant concentrations from the proposed Project would be less than significant and no mitigation is required.

d. **Less than Significant.** While offensive odors rarely cause physical harm, they can be unpleasant, leading to annoyance and distress among the public and can generate citizen complaints to local governments and air districts. Project-related odor emissions would be limited to times when equipment

would be utilized for construction and emission from equipment may be evident in the immediate surrounding area. Construction activities would be short-term and would not result in the creation of long-term objectionable odor because they would be quickly dispersed after equipment utilization. Therefore, due to the short-term nature of the construction activities, combined with limited exposure to sensitive receptors, impacts associated with development of the Project are considered less than significant and no mitigation is required.

Mitigation Measures from City of Citrus Heights General Plan EIR that apply to the Project

None.

Additional Project-Level Mitigation Measures

AQ-1: Implement SMAQMD Basic Construction Emission Control Practices, where feasible:

- Water all exposed surfaces two times daily. Exposed surfaces include (but are not limited to) soil piles, graded areas, unpaved parking areas, staging areas, and access roads.
- Cover or maintain at least 2 feet of freeboard space on haul trucks transporting soil, sand, or other loose material on the site. Any haul trucks that would be traveling along freeways or major roadways shall be covered.
- Use wet power vacuum street sweepers to remove any visible trackout mud or dirt onto adjacent public roads at least once a day. Use of dry power sweeping is prohibited.
- Limit vehicle speeds on unpaved roads to 15 miles per hour.
- All roadway, driveway, sidewalk, and parking lot paving should be completed as soon as possible. In addition, building pads should be laid as soon as possible after grading unless seeding or soil binders are used.
- Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to 5 minutes [required by California Code of Regulations, Title 13, sections 2449(d)(3) and 2485]. Provide clear signage that posts this requirement for workers at the entrances to the site.
- Provide current certificate(s) of compliance for CARB's In-Use Off-Road Diesel-Fueled Fleets Regulation [California Code of Regulations, Title 13, sections 2249 and 2449.1].

Significance Determination with Mitigation Measures

Less than significant with mitigation incorporated.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
IV. BIOLOGICAL - Would the project:				
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?		X		
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?			X	
c. 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?				X
d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?		X		
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?		X		
f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				X

Regulatory Setting

The following city, State, and federal statues pertain to the proposed project:

- National Environmental Policy Act (42 USC 4321 et seq.)
- Federal Endangered Species Act (16 USC 1531-1543)
- Section 404 of the Clean Water Act (33 USC 1251-1376)
- Fish and Wildlife Coordination Act (16 USC 661-6660
- Executive Order 11990, Protection of Wetlands (May 24, 1977)
- Migratory Bird Treaty Act of 1918 (USC 703-711)
- California Environmental Quality Act (PRC 21000 et seq.)
- California Endangered Species Act (CDFW Code 2050 et seq.)

- Native Plant Protection Act (CDFW Code 1900-1913)
- City of Citrus Heights Tree Preservation and Protection Ordinance (Code 106.39)

Federal Endangered Species Act

The Federal Endangered Species Act defines 'take' (Section 9) and prohibits 'taking' of a listed endangered or threatened species (16 USC 1532, 50 CFR 17.30. If a federally listed species could be harmed by a project, Section 7 or 10 consultations must be initiated, and an Incidental Take Permit must be obtained (16 USC 1539, 50 CFR 13).

Federal Migratory Bird Treaty Act

Migratory birds are protected under the federal Migratory Bird Treaty Act (MBTA) of 1918 (16 USC 703-711). The MBTA makes it unlawful to take, possess, buy, sell, purchase, or barter any migratory bird listed in 50 CFR Part 10 including feathers or other parts, nests, eggs, or products, except as allowed by implementing regulations (50 CFR 21). All migratory bird species are protected by the MBTA. Any removal of active nests during the breeding season or any disturbance that results in the abandonment of nestlings is considered a 'take' of the species under federal law.

City of Citrus Heights Municipal Code – Tree Preservation and Protection Regulations

The City has adopted Tree Preservation and Protection Regulations to conserve its urban forest, with a particular focus on native oak trees. These regulations require permits for the removal or substantial pruning of protected trees and are intended to balance development with long-term environmental stewardship (City of Citrus Heights 2025a). Pursuant to thew City's Municipal Code Section 106.39.020(c)(5), street widening projects are exempt from these requirements, whereas trail and multimodal projects are subject to the City's tree ordinance. Therefore, the road improvements portion of Project does not require tree removal permits or off-site mitigation for the removal of native oak trees, whereas the trail segments to require tree removal permits.

Setting

For the purposes of this document, the City of Citrus Heights General Plan EIR, and all associated technical studies were referenced for this section. Dokken Engineering biologists prepared a Natural Environment Study (Minimal Impacts) for the Citrus Heights Gateway Activation Project (Dokken 2025) and is included as **Appendix C**.

Regionally, the Project area is located in the northeastern portion of the City of Citrus Heights, California, along the north-central extent of Sacramento County. The Project area lies within the Sacramento Valley Subregion of the Central Western California Floristic Province (Jepson 2025).

The Project area is in an area of mostly residential land uses. Few remnant natural habitats are present in the area immediately adjacent to the roadway. These habitats have been highly disturbed through urbanization and various degrees of landform alteration. Small stands of native oaks trees are found within the Project area. Landscaped areas or areas of ruderal vegetation are most common along the corridor (see **Figure 3, Figure 4,** and **Appendix D. Representative Site Photographs**).

Urban/developed areas comprise most of the land cover within the Project area. This land cover type includes portions of various roadways including Old Auburn Road, Wachtel Way, Linda Creek Court, Oakwood Hills Circle, Argo Drive, Conover Drive and Robert Creek Court. These roadways are paved, heavily trafficked and devoid of vegetation. Also included in this land cover type are residential homes and associated landscaping, including planted ornamental vegetation and lawns.

Biological Study Area (25.47 acres)

Citrus Heights City Limits

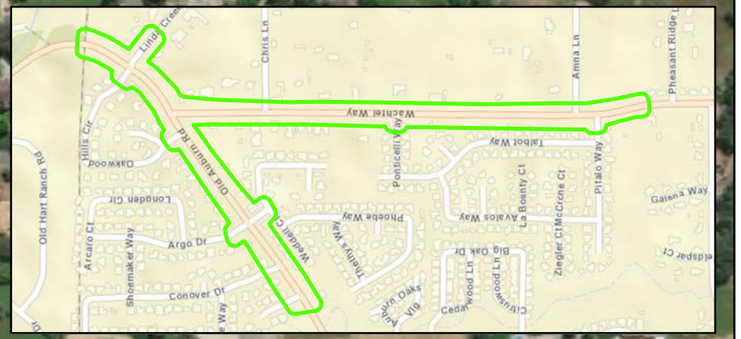
Vegetation Communities

Annual grassland (0.68 acres)

Oak woodland (0.76 acres)

Ruderal (0.40 acres)

Urban/developed (23.63 acres)



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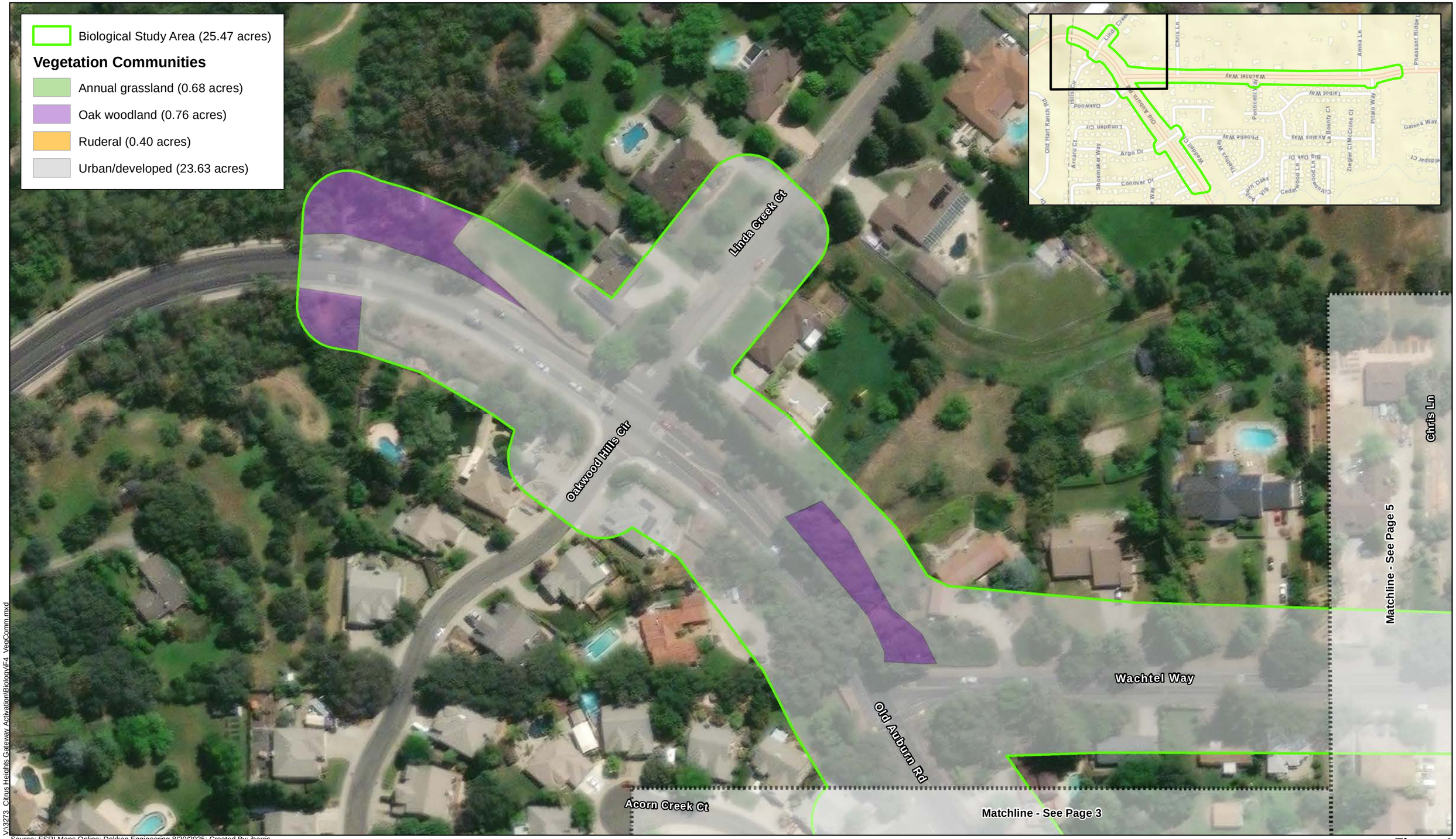
Source: ESRI Maps Online; Dokken Engineering 9/4/2025; Created By: jharris

1 inch = 300 feet

0 150 300 450 600 Feet

Figure 4
Vegetation Communities

Cirtus Heights Gateway Activation Project
Cirtus Heights, Sacramento County, California



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Source: ESRI Maps Online; Dokken Engineering 8/20/2025; Created By: jharris

1 inch = 100 feet

0 50 100 150 200 Feet

Figure 4
Vegetation Communities
Page 2 of 6
Cirtus Heights Gateway Activation Project
Cirtus Heights, Sacramento County, California

Biological Study Area (25.47 acres)

Vegetation Communities

- Annual grassland (0.68 acres)
- Oak woodland (0.76 acres)
- Ruderal (0.40 acres)
- Urban/developed (23.63 acres)



Source: ESRI Maps Online; Dokken Engineering 8/20/2025; Created By: jharris

1 inch = 100 feet

0 50 100 150 200 Feet

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Figure 4
Vegetation Communities

Cirtus Heights Gateway Activation Project
Cirtus Heights, Sacramento County, California

Biological Study Area (25.47 acres)

Vegetation Communities

- Annual grassland (0.68 acres)
- Oak woodland (0.76 acres)
- Ruderal (0.40 acres)
- Urban/developed (23.63 acres)

Matchline - See Page 3

Argo Dr
Weddell Ct
Old Auburn Rd
Tiethys Way
Phoebe Way
Conover Dr
Robert Creek Ct
Newbridge Way



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Source: ESRI Maps Online; Dokken Engineering 8/20/2025; Created By: jharris

1 inch = 100 feet

0 50 100 150 200 Feet

Figure 4
Vegetation Communities

Cirtus Heights Gateway Activation Project
Cirtus Heights, Sacramento County, California

Biological Study Area (25.47 acres)

Vegetation Communities

- Annual grassland (0.68 acres)
- Oak woodland (0.76 acres)
- Ruderal (0.40 acres)
- Urban/developed (23.63 acres)



Matchline - See Page 2

Chris

Wachtel Way

Matchline - See Page 6

Matchline - See Page 3

Talbot Way

Silver Rock Ct

Ponticelli Way

Talbot Way

Bannock Ct

Avalos Way

V:\3273_Citrus Heights Gateway Activation\Biology\F4_VegComm.mxd

Source: ESRI Maps Online; Dokken Engineering 8/20/2025; Created By: jharris

1 inch = 100 feet

0 50 100 150 200 Feet

Figure 4
Vegetation Communities
Page 5 of 6
Cirtus Heights Gateway Activation Project
Cirtus Heights, Sacramento County, California

Biological Study Area (25.47 acres)

Vegetation Communities

- Annual grassland (0.68 acres)
- Oak woodland (0.76 acres)
- Ruderal (0.40 acres)
- Urban/developed (23.63 acres)



Matchline - See Page 5

Wachtel Way

Talbot Way

Bannock Ct

Pitalo Way

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Source: ESRI Maps Online; Dokken Engineering 8/20/2025; Created By: jharris

1 inch = 100 feet

0 50 100 150 200 Feet

Figure 4
Vegetation Communities

Cirtus Heights Gateway Activation Project
Cirtus Heights, Sacramento County, California

Ruderal, primarily composed of non-native weed species, thrives in disturbed areas where natural plant communities have been altered by human or natural disturbances. Within the Project area, it is found in small strips along the edges of the roadway, adjacent to residential parcels.

Annual grassland habitats are open grasslands composed primarily of annual plant species. This habitat type is found in five small patches within the BSA, along Wachtel Way. These areas are comprised of various annual grasses and herbaceous species. Annual grassland habitat could provide suitable foraging habitat for a variety of wildlife including birds, mammals and reptiles.

The biological survey conducted on April 24, 2025, did not identify any jurisdictional waters or wetlands within the Project area; therefore, no impacts to jurisdictional aquatic features are anticipated. Oak woodlands, a habitat of special concern, was observed at the eastern and western extents of the BSA. This habitat type is comprised of a variety of mature oak species including valley oak (*Quercus lobata*), interior live oak (*Quercus wislizeni*), and blue oak (*Quercus douglasii*) trees. The understory is comprised of Himalayan blackberry and various annual grass species including wild oat (*Avena fatua*), ripgut brome (*Bromus diandrus*), and foxtail barley (*Hordeum murinum*). Oak woodlands provide food, habitat and cover for many species of wildlife, including birds and mammals. The Project is expected to result in minor permanent impacts to oak woodlands. No other habitats of special concern were identified within the Project area or will be affected by Project activities.

Prior to field work, literature research was conducted through the USFWS Information for Planning and Consultation (IPaC) official species list generator, the CDFW California Natural Diversity Database (CNDDB), and the California Native Plant Society (CNPS) Electronic Inventory of Rare and Endangered Plants (included in **Appendix C. NES, Dokken 2025b**), to identify habitats and special status species having the potential to occur within the Biological Study Area

Sensitive Habitats

Sensitive habitats include sensitive natural plan communities and other habitats designated and/or regulated by California Department of Fish and Wildlife (CDFW), U.S. Fish and Wildlife Service (USFWS), and U.S. Army Corps of Engineers (USACE). Under Section 404 of the Clean Water Act (CWA), wetlands and other waters of the U.S. are subject to the jurisdiction of USACE. Aquatic habitats may receive protection under California statutes including Section 1602 of the California Fish and Wildlife Code and the California Porter-Cologne Water Quality Control Act.

Special Status Species

Special status species are plants and animals in the following categories:

- Species that are listed under the federal Endangered Species Act (ESA) and/or California Endangered Species Act (CESA) as rare, threatened, or endangered;
- Species considered as candidates and proposed for state or federal listing as threatened or endangered;
- Wildlife designated by CDFW as species of special concern; and
- Plants ranked by CDFW as “rare, threatened, or endangered” in California.

The California Natural Diversity Database (CNDDB), maintained by the CDFW, is considered as the most current and reliable tool for tracking occurrences of special status species in California.

Special Status Species Evaluation

The special status species evaluation considers those species identified as having relative scarcity and/or declining populations by the USFWS or CDFW. Special status species include those formally listed as

threatened or endangered, those proposed for formal listing, candidates for federal listing, and those classified as Species of Concern by USFWS or Species of Special Concern by CDFW. Species considered to be "special animals" or "fully protected" by the CDFW or rare, threatened, or endangered in California by the California Native Plant Society (CNPS) were also included in the evaluation.

Setting and Methods

Plant and animal species have special status if they have been listed as such by Federal or State agencies or by one or more special interest groups, such as CNPS. Prior to the field survey, literature searches were conducted using USFWS IPaC, CDFW CNDDB, and CNPS databases to identify regionally sensitive species with potential to occur within the BSA. The Special Status Species with Potential to Occur in the Project Vicinity (**Appendix C. NES, Special Status Species Potential Table**) provides the list of regional special status species returned by the database searches, describes the habitat requirements for each species, and states if the species was determined to have potential to occur within the BSA. It was determined that no special status plant or wildlife species have the potential to occur within the BSA, due to a lack of suitable habitat communities and/or lack of local occurrences. No special status plant or wildlife species were observed during the April 24, 2025, biological survey.

Wildlife observed within the BSA consisted of locally common bird species such as bushtit (*Psaltriparus minimus*), cedar waxwing (*Bombycilla cedrorum*) and mourning dove (*Zenaida macroura*). Bird activity was mainly observed within large trees within the BSA, where suitable nesting and foraging habitat is available for local bird species.

Standards of Significance

Based on Appendix G of the State CEQA Guidelines, an impact on biological resources is considered significant if implementation of the General Plan would:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in loc8al or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?
- 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?
- 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?
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? or
- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

The City of Citrus Heights General Plan established local policies protecting biological resources. There would be no conflict with any local policies or ordinances protecting biological resources. Compliance with City tree preservation ordinances will be required prior to the start of construction and will be discussed further as a potentially significant impact.

No adopted or planned HCP or NCCP covers the planning area. For this reason, there would be no conflicts

between the proposed project and any HCP or NCCP. This significance criterion is not discussed further in the EIR.

Summary of Analysis under the City of Citrus Heights General Plan EIR

Chapter 4.6.1 of the General Plan EIR evaluated the effects of the General Plan on biological resources within the general plan policy area. The General Plan EIR identified potential impacts in terms of degradation of the quality of the environment or reduction of habitat or population below self-sustaining levels of special status birds, through the loss of both nesting and foraging habitat.

Policies in the General Plan were identified as mitigating the effects of development that could occur under the provisions of the General Plan. Policy ER 34.3 requires the City to consider the potential impact on sensitive plants for each project and to require pre-construction surveys when appropriate.

The General Plan EIR concluded that the cumulative effects of development that could occur under the General Plan would be less than significant as they related to effects on special status plant species, reduction of habitat for special status invertebrates, loss of habitat for special status birds, loss of habitat for special status amphibians and reptiles, loss of habitat for special status mammals, special status fish and, in general, loss of riparian habitat, wetlands and sensitive natural communities.

The General Plan concluded that the cumulative effects of development that could occur under would be less than significant with mitigation incorporated as they related to effects on special status plant species, reduction of habitat for special status invertebrates, loss of habitat for special status birds, loss of habitat for special status amphibians and reptiles, loss of habitat for special status mammals, special status fish and, in general, loss of riparian habitat, wetlands and sensitive natural communities.

Discussion

a. **Less than Significant with Mitigation Incorporated.** No special status species are presumed present within the project area. Considering the amount of development and hardscape in the project area, the current frequency and volume of human activity and the implementation of minimization and avoidance measures incorporated into the project design, the project would not have an adverse effect to special status species. To minimize and avoid potential impacts to potential wildlife, including nesting birds, the project would comply with mitigation measures BIO-1 through BIO-9.

b. **Less than Significant.** As shown in **Figure 4**, riparian habitat was not observed within the project construction limits.

c. **No impact.** The biological survey conducted on April 24, 2025, did not identify any waters or wetlands within the project area.

d. **Less than Significant with Mitigation Incorporated.** No interference would take place with the movement of any native resident or migratory fish or wildlife species or with any established native resident or migratory wildlife corridors. Project construction will take place mostly on landscaped and hardscape area. To protect migratory birds, mitigation measure BIO-7 will be implemented to ensure protection of migratory nesting birds.

e. **Less than Significant with Mitigation Incorporated.** The proposed project is subject to the City of Citrus Heights Tree Ordinance. Trees may be impacted by the proposed project. The trees will be removed prior to construction along the widened road and multiuse pathway. Alternatives 1 and 2 would affect up to 0.19 and 0.11 acres of oak woodland habitat, respectively. According to the City of Citrus Heights Tree Preservation and Protection Regulations, native oak trees are 6 inches or more in

diameter, and mature trees 19 inches or more in diameter are protected and require a permit for removal. Some removals may require the replanting of trees or the payment of a mitigation fee and a report from a certified arborist. An arborist survey will be conducted by a certified arborist to determine species found within the project area, and, if necessary, a tree removal permit will be obtained from both Cities prior to construction. Mitigation measure BIO-1 through BIO-9 will also be implemented to further reduce impacts to vegetation within the project area.

f. **No Impact.** No adopted Habitat Conservation Plans or other similar plan cover the Project area.

Mitigation Measures from City of Citrus Heights General Plan EIR that apply to the Project

None.

Additional Project-Level Mitigation Measures

BIO-1: Prior to the start of construction activities, the Project limits within environmentally sensitive areas (oak woodlands), will be marked with high visibility Environmentally Sensitive Area (ESA) fencing or staking to ensure construction will not further encroach into sensitive resources.

BIO-2: Contract specifications will include the following Best Management Practices (BMPs), where applicable, to reduce erosion during construction:

1. Exposed soils and material stockpiles would be stabilized, through watering or other measures, to prevent the movement of dust at the Project site caused by wind and construction activities such as traffic and grading activities;
2. All vehicle and equipment fueling/maintenance would be conducted outside of oak woodland habitat;
3. Equipment used in and around oak woodland habitat must be in good working order and free of dripping or leaking contaminants;
4. Raw cement, concrete or concrete washings, asphalt, paint or other coating material, oil or other petroleum products, or any other substances that could be hazardous to wildlife shall be prevented from contaminating the soil;
5. All erosion control measures would be properly maintained throughout construction;
6. All construction materials would be hauled off-site after completion of construction.

BIO-3: All onsite refueling and maintenance must occur over plastic sheeting, drip pans, or other secondary containment measures to capture accidental spills before they can contaminate the soil. Secondary containment must have a raised edge (e.g. sheeting wrapped around wattles).

BIO-4: A chemical spill kit must be kept onsite at all times during work and must be easily accessible for use in the event of a spill.

BIO-5: In accordance with the City of Citrus Heights Tree Preservation and Protection Regulations, protected trees within the Project footprint will be preserved to the extent feasible. For trees removed for the multiuse trail, a tree permit will be obtained from the City prior to construction. Tree impact and avoidance measures shall be incorporated into the final design of the improvement plans. A certified arborist shall consult and make recommendations for design treatments, modifications, and construction techniques to minimize tree removal and construction impacts.

BIO-6: Prior to arrival at the Project site and prior to leaving the Project site, construction equipment that may contain invasive plants and/or seeds will be cleaned to reduce the spreading of noxious weeds.

BIO-7: If project-related activities, including vegetation removal or initial ground disturbance, are scheduled during the nesting bird season (February 1 – August 31) a pre-construction nesting bird survey must

be conducted by a biologist prior to the start of work. The nesting bird survey must include the Project area plus a 100-foot buffer. Within 2 weeks of the nesting bird survey, all areas surveyed by the biologist must be cleared by the contractor or a supplemental nesting bird survey is required.

An approximate 100-foot no-disturbance buffer will be established around any active nest of migratory birds, and an approximate 300-foot no-disturbance buffer will be established around any nesting birds of prey species. The contractor must immediately stop work in the buffer area until the appropriate buffer is established and is prohibited from conducting work within the buffer until the biologist has determined that the nestlings have fledged and are foraging independently. A reduced buffer, or other avoidance strategies, can be established if deemed appropriate by the City and biologist.

BIO-8: All food-related trash must be disposed of into closed containers and must be removed from the Project area daily. Construction personnel must not feed or otherwise attract wildlife or feral animals to the Project area.

BIO-9: If any wildlife (e.g., amphibians, birds, mammals, reptiles, etc.) are encountered during the course of construction, said wildlife shall be allowed to leave the construction area unharmed.

Significance Determination with Mitigation Measures

Less than significant with mitigation incorporated.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
V. CULTURAL RESOURCES - Would the project:				
a. Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?			X	
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?		X		
c. Disturb any human remains, including those interred outside of dedicated cemeteries?		X		

Regulatory Setting

CEQA established statutory requirements for establishing the significance of historical resources in PRC Section 21084.1. The CEQA Guidelines (Section 10564.5[c]) also require consideration of potential project impacts to "unique" archaeological sites that do not qualify as historical resources. The statutory requirements for unique archaeological sites that do not qualify as historical resources are established in PRC Section 21083.2. These two PRC sections operate independently to ensure that significant potential effects on historical and archaeological resources are considered as part of a project's environmental analysis. Historical resources, as defined in Section 15064.5 as defined in the CEQA regulations, include 1) cultural resources listed in or eligible for listing in the California Register of Historical Resources; 2) cultural resource included in a local register of historical resources; 3) any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in one of several historic themes important to California history and development.

Under CEQA, a project may have a significant effect on the environment if the project could result in a substantial adverse change in the significance of a resource, meaning the physical demolition, destruction, relocation, or alteration of the resource would be materially impaired. This would include any action that would demolish or adversely alter the physical characteristics of an historic resource that conveys its historic significance and qualify it for inclusion in the CRHR or in a local register or survey that meets the requirements of PRC Section 5020.1(l) and 5024.1(g). PRC Section 5024 also requires state agencies to identify and protect sate-owned resources that meet.

National Register of Historic Place listing criteria. Sections 5024(f) and 5024.5 require state agencies to provide notice to and consult with the State Historic Preservation Officer (SHPO) before altering, transferring, relocation, or demolishing state-owned historical resources that are listed on or are eligible for inclusion in the National Register or are registered or eligible for registration as California Historical Landmarks.

CEQA and the CEQA Guidelines also recommend provisions be made for the accidental discovery of archaeological sites, historical resources, or Native American human remains during construction (PRC Section 21083.2(i) CCR Section 15064.5[d and f]).

Affected Environment

Efforts to identify potential archaeological resources in the Area of Potential Effects (APE) are detailed in this report and include historical research, a search of the Sacred Lands File (SLF) by the Native American Heritage Commission (NAHC), a search of site records and survey reports on file at the North Central Information Center

(NCIC), efforts to coordinate with Native American representatives, and a pedestrian survey. **Figure 5** is the APE map. A search of the California Historical Resources Information System (CHRIS) from the North Central Information Center (NCIC) located at California State University, Sacramento, was conducted on April 8, 2025, which included the entire proposed Project area as well as a half-mile radius.

Results of the record search indicate that four previous studies have been completed within the Project area while an additional 15 studies have been completed previously within a half-mile radius of the Project area. The record search identified nine cultural resources within a 0.5-mile radius of the APE, including historic built environment resources (two railroads and one ranch), two foundations of destroyed historic structures, one multicomponent historic trash scatter and indigenous habitation, one indigenous lithic scatter, one historic trash scatter, and one indigenous habitation site.

The City conducted consultation with Native American tribes under PRC §21080.3.1 (also referred to as AB 52) via certified letter on April 29, 2025. For the United Auburn Indian Community (UAIC), the letter was submitted on April 29, 2025, to the tribe's website portal. The City notified the following tribes of an opportunity to consult with the City regarding the potential for this Project to impact Native American cultural resources: Buena Vista Rancheria of Me-Wuk Indians, Colfax-Todds Valley Consolidated Tribe, Ione Band of Miwok Indians, Nashville Enterprise Miwok-Maidu-Nishinam Tribe, Shingle Springs Band of Miwok Indians, Tsi Akim Maidu, United Auburn Indian Community, and Wilton Rancheria. The UAIC responded to the City via email regarding initial AB 52 consultation, including scheduling a field survey attended by the UAIC and the City's consultant archaeologist.

A pedestrian survey of the APE was conducted by archaeologist from Dokken Engineering on June 12, 2025, for the purpose of identifying and recording archaeological resources. A representative from the United Auburn Indian Community participated in the pedestrian survey. No constraints to the survey were encountered as full access was obtained prior to completing the survey. No indigenous resources were identified as a result of the identification efforts (Dokken 2025a).

On August 31, 2025, an architectural historian from Cogstone surveyed the Project area. The architectural historian photographed and documented the two segments of Old Auburn Way and Wachtel Way and the four private residences at 8201 Argo Drive, 8484 Old Auburn Road, 8501 Linda Creek Court, and 8525 Old Auburn Road. All resources were newly documented in a total of six Department of Parks and Recreation (DPR) 523 forms, evaluated for historic significance, and labeled on Figure 5 as "Map Reference" (MR#1-6).

The historic in age roads will be directly impacted by the Project and include a 2,916.67 foot segment of Old Auburn Road and a 3,172.57 foot segment of Wachtel Way. The four historic in age residences will be indirectly impacted by the Project and are located on Accessor Parcel Numbers (APNs) that have ROW acquisition.

Due to a lack of historic significance and lack of historic integrity, these resources are recommended not eligible for listing in the National Register of Historic Places (NRHP) at the national, state, or local level. No further work pertaining to these six resources is recommended (Cogstone 2025).

Area of Direct Impact
Area of Potential Effects
Built Environment Resource
Citrus Heights City Limits
Parcels

8501 Linda Creek Court (MR#3)

8525 Old Auburn Road (MR#4)

8484 Old Auburn Road (MR#5)

Old Auburn Rd (MR#1)

8201 Argo Drive (MR#6)

Watchel Way (MR#2)

Page 2

Page 3

Page 4

Page 5

Page 6

Source: ESRI Maps Online; Dokken Engineering 9/30/2025; Created By: amyd

1:3,600

0 300 600 900 1,200 1,500 Feet

Area of Potential Effects

CALTRANS District 3 DLAE Date

CALTRANS District 3 PQS Date

Figure 4
Area of Potential Effects
Alternative 2
Page 1 of 6
Citrus Heights Gateway Activation Project
Citrus Heights, Sacramento County, California

Area of Direct Impact
Area of Potential Effects
Built Environment Resource
Citrus Heights City Limits
Parcels

8501 Linda Creek Court (MR#3)

Old Auburn Rd (MR#1)

8525 Old Auburn Road (MR#4)

Watchel Way (MR#2)

8484 Old Auburn Road (MR#5)

Matchline - See Page 3

Matchline - See Page 5

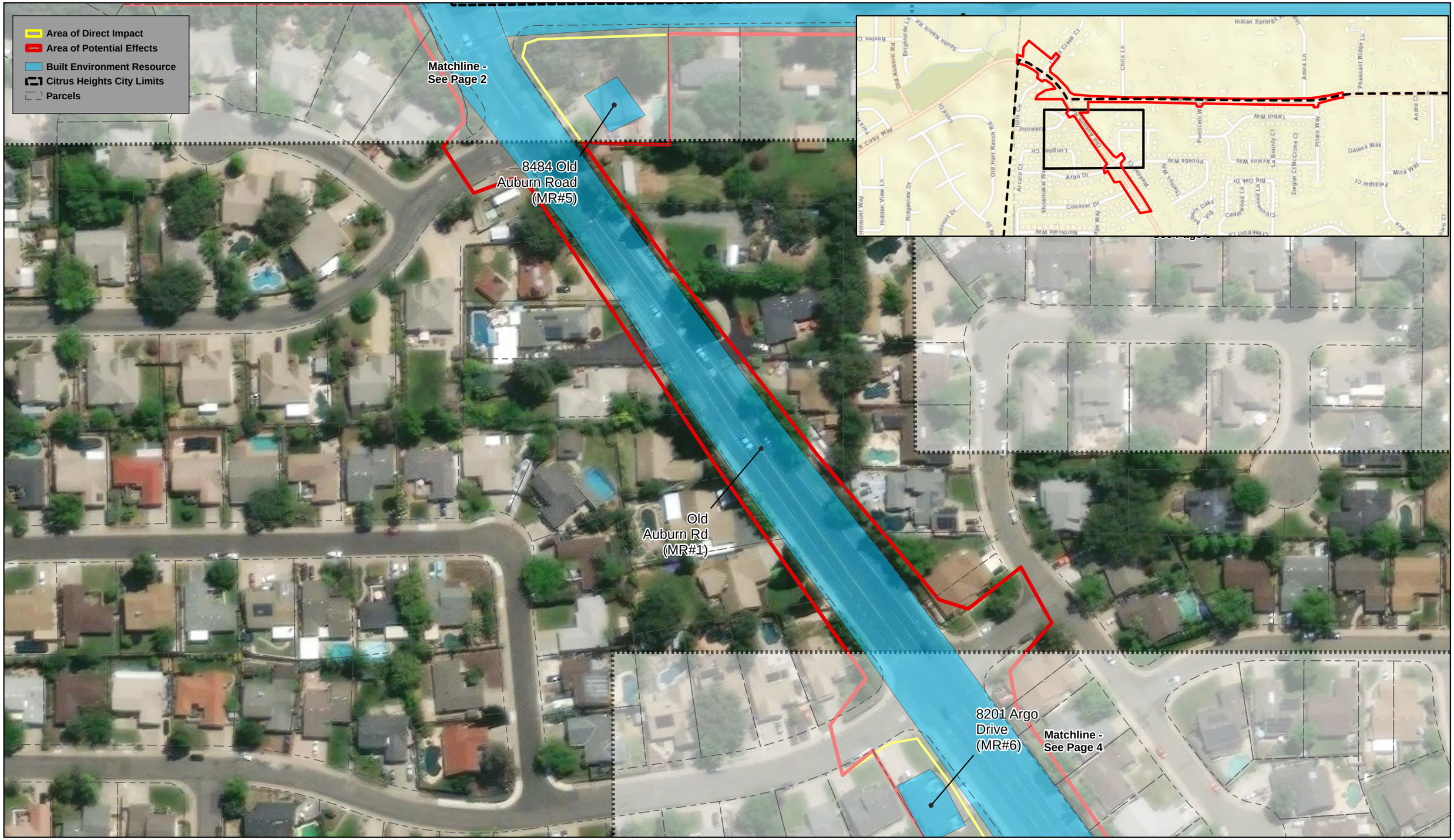
Source: ESRI Maps Online; Dokken Engineering 9/30/2025; Created By: amyd

1:1,200

0 100 200 300 400 500 Feet

Figure 4
Area of Potential Effects
Alternative 2

Citrus Heights Gateway Activation Project
Citrus Heights, Sacramento County, California



Source: ESRI Maps Online; Dokken Engineering 9/30/2025; Created By: amyd

1:1,200

0 100 200 300 400 500 Feet

Figure 4
Area of Potential Effects
Alternative 2

Citrus Heights Gateway Activation Project
Citrus Heights, Sacramento County, California



Source: ESRI Maps Online; Dokken Engineering 9/30/2025; Created By: amyd

1:1,200

0 100 200 300 400 500 Feet

Figure 4
Area of Potential Effects
Alternative 2

Citrus Heights Gateway Activation Project
Citrus Heights, Sacramento County, California

Area of Direct Impact
Area of Potential Effects
Built Environment Resource
Citrus Heights City Limits
Parcels

Matchline - See Page 2

Matchline - See Page 6

Watchel Way (MR#2)

Matchline - See Page 3

Source: ESRI Maps Online; Dokken Engineering 9/30/2025; Created By: amyd

1:1,200

0 100 200 300 400 500 Feet

Figure 4
Area of Potential Effects
Alternative 2

Citrus Heights Gateway Activation Project
Citrus Heights, Sacramento County, California

Area of Direct Impact
Area of Potential Effects
Built Environment Resource
Citrus Heights City Limits
Parcels

Matchline -
See Page 5

Watchel Way
(MR#2)

Source: ESRI Maps Online; Dokken Engineering 9/30/2025; Created By: amyd

1:1,200

0 100 200 300 400 500 Feet

Figure 4
Area of Potential Effects
Alternative 2

Citrus Heights Gateway Activation Project
Citrus Heights, Sacramento County, California

Discussion

a. **Less than Significant**. The two road segments and four houses are potential historic resources. They were evaluated by a professional historian and recommended that the properties were not eligible for listing in the NRHP at the national, state, or local level due to a lack of historic significance and lack of historic integrity.

b. **Less than Significant with Mitigation Incorporated.** Based on the historical research, a search of the Sacred Lands File by NAHC, a search of site records and survey reports on file at the NCIC, efforts to coordinate with Native American representatives, and a pedestrian survey, there are no known archaeological resources within proximity of the Proposed Project. While the APE location is within an area of older Pleistocene aged soils with very low sensitivity for buried archaeological resources, there remains a possibility that an unanticipated discovery of buried cultural materials could be encountered during construction. Impacts to unknown archaeological deposits, which could qualify as historical resources or unique archaeological sites under CEQA, could result in a significant impact under CEQA. Implementation of mitigation measures CR-1 through CR-4 will reduce these potential impacts to a less-than-significant level.

c. **Less than Significant with Mitigation Incorporated.** No human remains or cemeteries were identified within proximity of the Proposed Project. There is potential for earthwork and grading to result in the disturbance of previously unrecorded human remains, which is considered a significant impact. To reduce this impact to a less-than-significant level, the City would implement Mitigation Measure CR-3.

Mitigation Measures from City of Citrus Heights General Plan EIR that apply to the Project

None

Additional Project-Level Mitigation Measures

CR-1: Prior to construction, cultural resource awareness and sensitivity training shall be provided to all construction crew members to ensure that the crew members are aware of the potential for sensitive cultural resources to be present onsite. The awareness and sensitivity training would also include an established protocol for informing the resident engineer of any accidentally discovered cultural resources.

Treatment of Discoveries:

CR-2: If significant historical, paleontological, archaeological, or tribal cultural resources are discovered within the APE, ground disturbing activities shall be suspended 100 feet around the resource(s). The archaeological monitor, a representative of the appropriate Native American Tribe(s) (if discovery is prehistoric), and the City shall confer regarding mitigation of the discovered resource(s). All discovered archaeological resources should be documented by field notation, analysis, photography, and GPS mapping. Work shall not resume in the area until mitigation has been completed, or it has been determined that the archaeological resource(s) is not significant.

Disposition of Discoveries:

CR-3: If human remains are encountered, State Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. The County Coroner must be notified of the find immediately. If the remains are determined to be prehistoric, the Coroner would notify the Native American Heritage Commission (NAHC), which would determine and notify a Most Likely Descendant (MLD). With the permission of the landowner or his/her authorized representative, the MLD may inspect the site of the discovery. The MLD shall complete the inspection within 48 hours of notification by the NAHC. The MLD may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials.

CR-4: In the event that Native American cultural resources are inadvertently discovered during the course of construction, the City shall relinquish ownership of all Native American cultural resources, including sacred items, burial goods, and all archaeological artifacts and non-human remains as part of the required mitigation for impacts to Native American cultural resources. Prior to relinquishment, all discovered archaeological resources should be documented by field notation, photography, and GPS mapping. After consultation with the appropriate Native American Tribe(s), non-destructive analysis may be conducted.

Significance Determination with Mitigation Measures
Less than significant with mitigation incorporated.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
VI. ENERGY - Would the project:				
a. Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?				X
b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?				X

SMUD provides electrical service to the planning area. SMUD generates, transmits, and distributes electric power to a 900-square-mile service area that includes Sacramento County and a small portion of Placer County. SMUD receives its electricity from diverse and competitively priced resources, including hydro generation; cogeneration plants; advanced and renewable technologies such as wind, solar and biomass/landfill gas power; and power purchased on the wholesale market.

Several General Plan policies were specifically designed to lower per-capita energy consumption in the City, including Policy 40.1, Policy 40.2, and Policy 41.1 in the Energy Element. It is also consistent with Policy 29.1 of the Transportation and Mobility Element, which is to strive to provide for the movement of vehicles, commercial trucks, alternative and low energy vehicles, transit, bicyclists and pedestrians appropriate for the road classification and adjacent land use when constructing or modifying transportation facilities (CCHGP EIR 2011b).

Discussion

a. **No Impact.** The Proposed Project will not result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation.

Implementation of the proposed project is consistent with the approved CCHGP EIR and the Bikeway Master Plan. By design, proposed improvements include consistency with the goals and actions identified by the City's General Plan pertaining to sustainability and an overall strategy for reduction of greenhouse gas emissions and air quality improvement. Reductions in greenhouse gas emissions and air quality emissions integrally reduce energy consumption and improve energy efficiency.

This analysis evaluates the use of energy resources (e.g., fuel and electricity) associated with the construction and operation of the project. For construction, the analysis considers whether construction activities would use large amounts of fuels or energy, and whether they would be used in a wasteful manner. For energy used during operation and maintenance, the analysis identifies energy use that would occur with implementation of the project to determine whether large amounts would be used and whether they would be used in a wasteful manner.

Construction of the project would require the use of fossil fuels (primarily gas, diesel, and motor oil) for a variety of activities, such as excavation, grading, demolition, and vehicle travel. The precise amount of construction-related energy consumption is uncertain. Construction would not require a large amount of fuel or energy usage because of the moderate number of construction vehicles and equipment, worker trips, and truck trips that would be required for a project of this scale. In addition, equipment idling times would be minimized either by shutting equipment off when not in use or reducing the maximum idling time to five minutes or less (as required by the California airborne toxics

control measure Title 13, Section 2485 of the California Code of Regulations [CCR]). Therefore, project construction would not encourage activities that would result in the use of large amounts of fuel and energy in a wasteful manner; the impact would be less than significant, and no mitigation is required.

Project operation consists of intersection enhancements such as roundabouts, as well as the installation of pedestrian and bicycle facilities such as multi-use pathways, Class IV bikeways, crosswalks, sidewalks, and Americans with Disabilities Act (ADA)-compliant curb ramps. Additional LED bulb streetlights are consistent with the CCHGP EIR action 4-5.C.A which directs that all street and traffic lights are to be converted to LED bulbs or LED-Solar combined systems and 4-5.C.B which directs the installation of high-efficiency lighting in all City-owned or funded facilities. Therefore, operation of the project would not use large amounts of energy and would not use it in a wasteful manner. The project's operational impact would be less than significant, and no mitigation is required.

b. **No Impact.** The Project supports several General Plan transportation goals and actions aimed at expanding multi-modal transportation options, improving bicycle accessibility, and bridging gaps in the existing bicycle network including Policy 3.5, Policy 7.6, Policy 29.1, Policy 29.2, Policy 29.4, Policy 53.2, Action 29.1.D, and Action 29.4.D. By enhancing energy-efficient transportation choices within the County, the Project would have a positive impact on overall energy efficiency. As a result, the Project would not conflict with or hinder any state or local renewable energy plans, and no impact would occur.

Mitigation Measures from City of Citrus Heights General Plan EIR that apply to the Project

None.

Additional Project-Level Mitigation Measures

None required.

Significance Determination with Mitigation Measures

Less than significant with mitigation incorporated.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
VII. GEOLOGY AND SOILS - Would the project:				
a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				X
i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.				X
ii. Strong seismic ground shaking?				X
iii. Seismic-related ground failure, including liquefaction?				X
iv. Landslides?				X
b. Result in substantial soil erosion or the loss of topsoil?		X		
c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?				X
d. 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?				X
e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?				X
f. Directly or indirectly destroy a unique paleontological resource or site or unique geological feature.		X		

Regulatory Setting

For geologic and topographic features, the key federal law is the Historic Sites Act of 1935, which establishes a national registry of natural landmarks and protects "outstanding examples of major geological features." Topographic and geologic features are also protected under the CEQA. This section also discusses geology, soils, and seismic concerns as they relate to public safety and project design. Earthquakes are prime considerations in the design and retrofit of structures.

Setting

Geology and Topography

The Project area is situated within two geomorphic provinces: the Great Valley Geomorphic Province to the west and Sierra Nevada Geomorphic Province to the east (California Geological Survey 2002). The Great Valley of California, also called the Central Valley, is a nearly flat alluvial plain extending from the Tehachapi Mountains in the south to the Klamath Mountains in the north, and from the Sierra Nevada in the east to the Coast Ranges in the west. The Proposed Project is located in the transition area between the Sacramento Valley and the western foothills of the Sierra Nevada mountain range. The Project area is located on the Turlock Lake geological unit which has been found to contain fossils in other areas of the Central Valley (Citrus Heights 2011b).

Elevation for the project area is ranges from approximately 185 feet above msl at the northern project limit on Old Auburn Road to 215 feet at the southern end of the project limits on Wachtel Way. The overall topography of the City of Citrus Heights, as well as the Proposed Project sites, is relatively flat. As a result, no landslides or landslide deposits have been mapped within the City.

Soil

Soil composition within the BSA consists of Xerofluvents, frequently flooded (~1.1% of the BSA), Fiddyment-Orangevale-Urban land complex (~48.8% of the BSA), Urban land-Xerarents-Fiddyment complex (~46.2% of the BSA), and Xerofluvents, flooded (~3.9% of the BSA) (Dokken 2025).

Discussion

a.i-iv. **No Impact.** The project would not expose people or structures to potential substantial or adverse effects.

i. California Department of Conservation (CDC) California Geological Survey does not list Sacramento County as affected by the Alquist-Priolo Earthquake Fault Zone. According to the Fault Activity Map of California and Adjacent Areas, no active faults are located within the project area.

ii. The proposed project would not expose people or structures to seismic ground shaking due to the lack of active faults within the City and the nature of the proposed project activities.

iii. The project would not create ground failure or liquefaction. Given the soil types and depth to bedrock, the ground at this site is not prone to liquefaction. In addition, the project does not involve the construction of structures which would regularly be occupied by people.

iv. The CDC does not list Sacramento County as an area at risk for Landslides as identified in the California Department of Transportation's (Caltrans) Highway Corridor Mapping project (CDC 2007). The project would not expose people or structures to substantial risk of landslides.

b. **Less than Significant with Mitigation Incorporated.** Stormwater discharges within portions of Sacramento County, including the City, are permitted under Phase II of the NPDES small Municipal Separate Storm Sewer System (MS4) (General Order No. R5-2016-040 / NPDES Permit No. CAS0085324) . The program is part of the Federal Clean Water Act, administered in California by the Regional Water Quality Control Boards. The NPDES regulations require permitted areas to implement specific activities and actions to protect water quality by eliminating non-stormwater discharges and controlling stormwater pollution (CVRWQCB 2025). As a requirement, the Proposed Project would comply with the City's MS4 permit for discharges of urban runoff from, including the implementation of Low Impact Development (LID) practices, where applicable. The Proposed Project would comply with the City's Design and Construction Standards on standard erosion control and BMPs. The Proposed Project will comply with the City's Stormwater Discharge Control Measures, listed in the City's Municipal Code (Chapter 98. Article V), which will adequately control erosion and effectively prohibit non-stormwater discharges (City of Citrus Heights 2025b). The project would comply with the

Sacramento Stormwater Quality Partnership's Stormwater Quality Design Manual for the Sacramento Region (SQDM), which will adequately control all erosion. Implementation of Mitigation Measure GEO-1 would reduce potential impacts from soil erosion to a **less-than-significant** level.

Project construction would not generate soil erosion concerns or the loss of topsoil. Standard BMPs will be implemented during construction. To prevent the substantial soil erosion or the loss of topsoil during construction, the Project will implement Mitigation Measure HYD-1, which requires the Project to obtain coverage under the Construction General Permit and the preparation of a SWPPP.

c. **No Impact.** The project is not 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.

d. **No Impact.** The project is not located on expansive soil. Special design considerations are not required for expansive soils, as they are not located within the project area.

e. **No Impact.** The proposed projects would not use a septic tank system. In addition, sewage is not required for proposed project; therefore, the project will have no impacts related to septic systems.

f. **Less than Significant with Mitigation Incorporated.** Unique paleontological resources or unique geologic features are not documented within the Project Area. There is a possibility of unanticipated and accidental paleontological discoveries during subsurface excavation. Implementation of CCHGP EIR Mitigation Measure 4.7-7 would reduce impacts related to potential damage to unique paleontological resources to a **less-than-significant** level by ensuring that earth disturbing activities cease if any possible resources are uncovered, minimizing potential adverse impacts on unique, scientifically important paleontological resources.

Mitigation Measures from City of Citrus Heights General Plan EIR that apply to the Project

City of Citrus Heights General Plan EIR Mitigation Measure 4.7-7 is applicable to the Proposed Project.

Mitigation Measure 4.7-7: Discovery of Potential Paleontological Resources
If potential paleontological resources are detected by construction workers or City staff during construction of future land uses, work shall stop immediately, and consultation is required to avoid further impacts. Actions after work stoppage will be designed to avoid significant impacts to the greatest extent feasible. These measures could include, but are not limited to, construction worker personnel education, consultation with a qualified paleontologist, coordination with experts on resource recovery and curation of specimens, and/or other measures considered appropriate after further consultation.

Additional Project-Level Mitigation Measures

GEO-1: The Proposed Project will comply with the City's Stormwater Discharge Control Measures, listed in the City's Municipal Code (Chapter 98. Article V), which will adequately control erosion and effectively prohibit non-stormwater discharges (City of Citrus Heights 2025b). To prevent the substantial soil erosion or the loss of topsoil post-construction, the Project design will comply with the Sacramento Stormwater Quality Partnership's Stormwater Quality Design Manual for the Sacramento Region (SQDM) to adequately control erosion.

HYD-1: The proposed Project would require coverage under the NPDES General Construction Permit for Discharges of storm water associated with construction activities (2022 Construction Stormwater General Permit, Order 2022-0057-DWQ). A SWPPP would also be developed and implemented as part of the Construction General Permit. This SWPPP will incorporate all applicable BMPs to ensure that adequate measures are taken during construction to minimize impacts to water quality.

Significance Determination with Mitigation Measures

Not applicable.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
VIII. GREENHOUSE GAS EMISSIONS - Would the project:				
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			X	
b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?			X	

Setting

As part of its action in approving the City of Citrus Heights General Plan, the City Council certified the General Plan EIR that evaluated the environmental effects of development that is reasonably anticipated under the new General Plan. The General Plan EIR includes extensive discussion of the potential effects of greenhouse gas emissions. The General Plan EIR discussions regarding climate change are incorporated here by reference. See, for example:

Final EIR: Greenhouse Gas Reduction Plan
This document is available at http://www.citrusheights.net/203/Greenhouse-Gas-Reduction-Plan and at the offices of City of Citrus Heights at 6237 Fountain Square Drive, Citrus Heights, California.

The proposed project is consistent with the land use designations for the project site. The project would result in the generation of greenhouse gases during construction and operation, as discussed below.

Environmental Consequences

Short-Term Construction Emissions

During construction of the proposed project, temporary GHG emissions would be emitted from the operation of construction equipment and from worker supply vendor vehicles. Emissions from construction equipment are not expected to exceed the threshold of significance.

Long-Term Construction Emissions

Because the proposed project consists of road improvements, and does not increase capacity of the roadway, there are no long-term operational activities associated with the project. The project would not lead to changes in vehicular operations and associated emissions. While there may be maintenance visits to the project site, these visits are expected to be infrequent, and occur for emergency repair or for repaving, which occurs after the lifetime of the installed pavement has been reached. Long term operational emissions are thus expected to be negligible.

Ongoing Activities

City of Citrus Heights
The General Plan includes a Greenhouse Gas Reduction Plan for the City. The Greenhouse Gas Reduction Plan

provided additional guidance, strategies and measures for the City's ongoing efforts to reduce GHG emissions. To prevent the continued escalation of GHG emissions, the Greenhouse Gas Reduction Plan establishes a 2020 target (10 to 15 percent below 2005 levels) to reduce annual emissions levels consistent with state laws and guidelines. According to the Greenhouse Gas Reduction Plan, the actions that could be quantified along with those that could not outline a path to meet the City's 2020 reduction target, consistent with state laws and guidelines. When combined with quantified state and federal legislative reductions, primary actions contained in the Greenhouse Gas Reduction Plan offer a potential reduction of about 145,677 metric tons of carbon dioxide equivalent (CO_2e) annually. This level of reduction will meet the City's 2020 target of 10 to 15 percent and is consistent with state laws.

State and Federal Levels
In addition to the Greenhouse Gas Reduction Plan, GHG-reduction strategies continue at the state and federal level to combat climate change. In December 2009, the EPA listed GHG as harmful emissions under the Clean Air Act. This action could eventually result in regulations with a purpose of reducing such emissions.

The General Plan EIR concluded that GHG emissions that could be emitted by development that is consistent with the General Plan would be less than significant. The General Plan EIR includes a full analysis of GHG emissions and climate change and adequately addresses these issues. As indicated in the General Plan EIR, future development within the City of Citrus Heights will be required to comply with Assembly Bill (AB) 32 and with the Sacramento Area Council of Governments (SACOG) 2035 Metropolitan transportation Plan (MTP). The 2035 MTP is anticipated to meet the AB 32 goal of reaching 1990 transportation emissions by 2020. The City is not anticipating an increase in GHG emission with the incorporation of reduction measures. The proposed project must comply with the General Plan policies and measures for the reduction of GHGs to comply with the 2035 MTP and AB 32. Because the traffic from the proposed project was assumed in the 2035 MTP, and the 2035 MTP is anticipated to meet the goals of AB 32, the proposed project would comply with the 2035 MTP. AB 32 requires an approximate 29 percent reduction from existing emissions on a statewide level in order to achieve the goal of reducing GHG emissions to 1990 levels by 2020.

The General Plan EIR for the City of Citrus Heights allows for periodic maintenance on established arterial streets, such as Old Auburn Road and Wachtel Way, therefore the GHG emissions increase that would occur with implementation of the project has been accounted for in the General Plan. The project would not impede the City's efforts to comply with AB 32 requirements. Therefore, the projects cumulative impacts related to construction and operation of the proposed project conflicting with applicable plans, policies, or regulations adopted for the purpose of reducing GHG emissions would be less than significant. The project would not have any significant additional environmental effects relating to GHG emissions or climate change.

Discussion

a. **Less than Significant.** GHG emissions produced during construction operations are those that result from potentially increased traffic volumes or changes in automobile speeds. The Proposed Project would not increase the number of automobiles in the traffic system or permanently influence automobile speeds. Overall traffic flow is not expected to change; thus, the project is not anticipated to increase CO_2 emissions. Lower speeds, such as those experienced in congested areas, generally result in higher CO_2 emissions rates. The construction activities are temporary and traffic impacts during construction would not result in a potentially significant impact. Traffic delays would be further minimized by implementing traffic control measures as described in Measure **TRA-1** discussed in the Transportation Section. Although the Proposed Project would contribute to GHG levels during construction, construction activities would only be short-term, resulting in negligible GHG emissions from the construction equipment and worker vehicles which would have a less-than-significant impact to generation of GHG emissions in the region. No permanent impacts from GHG emissions or climate change would result from long term operation of the storm drain system. Therefore, the Proposed

Project's contribution to global climate change through GHG emissions would be considered a *Less Than Significant Impact*.

b. **Less than Significant.** The proposed project would not conflict with the City of Citrus Heights Greenhouse Gas Reduction Plan. The proposed project would not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

Mitigation Measures from City of Citrus Heights General Plan EIR that apply to the Project

None.

Additional Project-Level Mitigation Measures

None required.

Significance Determination with Mitigation Measures

Less than significant.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
IX. HAZARDS AND HAZARDOUS MATERIALS - Would the project:				
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?		X		
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?		X		
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?			X	
d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?		X		
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?				X
f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				X
g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?				X

Regulatory Setting

Hazardous materials and hazardous wastes are regulated by many state and federal laws. These include not only specific statutes governing hazardous waste, but also a variety of laws regulating air and water quality, human health and land use.

Federal law covers a number of different activities involving asbestos, including demolition and renovation of structures (40 CFR § 61.145). Federal regulations and regulations adopted by the Sacramento Metropolitan Air Quality Management District Management District (SMAQMD) apply to the identification and treatment of hazardous materials during demolition and construction activities. Failure to comply with these regulations respecting asbestos may result in a Notice of Violation being issued by the AQMD and civil penalties under

state and/or federal law, in addition to possible action by U.S. EPA under federal law.

Hazardous waste in California is regulated primarily under the authority of the federal Resource Conservation and Recovery Act of 1976, and the California Health and Safety Code. Other California laws that affect hazardous waste are specific to handling, storage, transportation, disposal, treatment, reduction, cleanup and emergency planning.

Worker health and safety and public safety are key issues when dealing with hazardous materials that may affect human health and the environment. Proper disposal of hazardous material is vital if it is disturbed during project construction.

SMAQMD Rule 902 and Commercial Structures and Asbestos Demolition Requirements

The work practices and administrative requirements of Rule 902 apply to all commercial renovations and demolitions where the amount of Regulated Asbestos-Containing Material (RACM) is greater than:

- 260 lineal feet of RACM on pipes, or
- 160 square feet of RACM on other facility components, or
- 35 cubic feet of RACM that could not be measured otherwise.

The administrative requirements of Rule 902 apply to any demolition of commercial structures, regardless of the amount of RACM.

Asbestos Surveys

To determine the amount of RACM in a structure, Rule 902 and PCAPCD requirements state that a survey be conducted prior to demolition or renovation unless:

- the structure is otherwise exempt from the rule, or
- any material that has a propensity to contain asbestos (so-called "suspect material") is treated as if it is RACM.

Surveys must be done by a licensed asbestos consultant and require laboratory analysis. Asbestos consultants are listed in the phone book under "Asbestos Consultants." Large industrial facilities may use non-licensed employees if those employees are trained by the U.S. EPA. Questions regarding the use of non-licensed employees should be directed to the AQMD and PCAPCD.

Removal Practices, Removal Plans/Notification and Disposal

If the survey shows that there are asbestos-containing materials present, the SMAQMD and PCAPCD recommends leaving it in place.

If it is necessary to disturb the asbestos as part of a renovation, remodel, repair or demolition, Cal OSHA and the Contractors State License Board require a licensed asbestos abatement contractor be used to remove the asbestos-containing material.

There are specific disposal requirements for friable asbestos-containing material, including disposal at a licensed landfill. If the material is non-friable asbestos, any landfill willing to accept asbestos-containing material may be used to dispose of the material.

Setting

The provisions in Government Code Section 65962.5 are commonly referred to as the “Cortese List” (after the

Legislator who authored the legislation that enacted it). The Department of Toxic Substance Control (DTSC) maintains the EnviroStor website, pursuant to Subsection 65962.5(a). EnviroStor is the DTSC data management system for the Cortese List to track the cleanup, permitting, enforcement, and investigation of hazardous waste facilities and sites with known contamination was queried to determine if there were any sites within one mile of the Project area. The State Water Resources Control Board's GeoTracker tracks sites that require cleanup, such as Leaking Underground Storage Tank (LUST) Sites, Department of Defense Sites, and Cleanup Program Sites as required by Subsection 65962.5(c). . GeoTracker also contains records for various unregulated projects as well as permitted facilities including Irrigated Lands, Oil and Gas production, operating Permitted USTs, and Land Disposal Sites.

A review of the information available through the EnviroStor and Geotracker (2025) indicated that there are numerous current and/or historical clean-up sites within City limits. No current or historical cleanup sites are located within a 1-mile buffer of the Project area.

Naturally Occurring Asbestos (NOA) can occur in serpentine rock. The most common forms of NOA minerals are chrysotile, actinolite, and tremolite. A review of the "General Location Guide for Ultramafic Rocks in California – Areas likely to Contain Naturally Occurring Asbestos" (CGS Open-file Report 2000-19) indicated that NOA was not mapped on, or in the near vicinity of the project site. The nearest ultramafic rock formation which may be associated with naturally occurring asbestos is approximately 7.5 miles east of the project area, along the eastern banks of Folsom Lake (USGS 2015).

Discussion

a-b. **Less than Significant with Mitigation Incorporated.** Based on the site reconnaissance, potential sources of hazardous materials on properties adjacent to the project boundaries include the following:

- Potential for PCBs with existing pole-mounted electrical transformers
- Electrical substation , and
- Lead or chromium in yellow thermoplastic traffic striping.

Pole-mounted electrical transformers were observed on poles both on Old Auburn Road and Wachtel Way. Impacts related to emissions of hazardous materials are significant but can be mitigated to a less than significant level by following the precautions required for construction and demolition activities in areas where contamination may be present.

The proposed roadway improvements on Old Auburn Road and Wachtel Way may involve removal of yellow thermoplastic traffic striping from the existing roadway surface. Yellow traffic stripes may contain heavy metals such as lead and chromium at concentrations in excess of hazardous waste thresholds established by the CCR and may produce toxic fumes when heated. See Mitigation Measures HM-1 through HM-4.

c. **Less than Significant.** The proposed Project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school The closest public schools to the project area are the Crestmont Elementary School located approximately 0.44-mile northwest of Old Auburn Road and the Woodside K-8 School located over 0.5 mile southwest of Wachtel Way.

d. **Less than Significant with Mitigation Incorporated.** No hazardous waste facilities or sites with known contamination were within identified within one mile of the Project area per the EnviroStor and GeoTracker websites.

e. **No Impact.** The project is not located near an airport or airstrip. Since the project site is not located within two miles of an airport or an area for which an Airport Land Use Plan has been prepared, and no public or private airfields are within two miles of the project area, users of the proposed project would not be exposed to hazards due to over flight aircraft. Thus, no significant impact would occur, and no mitigation would be necessary.

f. **No Impact.** The project is not expected to impair the implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan for the City of Citrus Heights. The proposed project would not result in an increased concentration of large numbers of persons in any at-risk location, and the proposed project would not have a significant impact on any emergency plans. Thus, no significant impact would occur, and no mitigation would be necessary.

g. **No Impact.** The proposed project does not present conditions that are subject to wildland fires. There is no potential to expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands. Therefore, no impacts are potential or expected.

Mitigation Measures from the City of Citrus Heights General Plan EIR that apply to the Project

None.

Additional Project Level Mitigation Measures

HM-1: Any leaking transformers observed during the course of the project should be considered a potential polychlorinated biphenyl (PCB) hazard. Should leaks from electrical transformers (that will either remain within the construction limits or require removal and/or relocation) be encountered during construction, the transformer fluid should be sampled and analyzed by qualified personnel for detectable levels of PCBs. Should PCBs be detected, the transformer should be removed and disposed of in accordance with Title 22, Division 4.5 of the California Code of Regulations and any other appropriate regulatory agency. Any stained soil encountered below electrical transformers with detectable levels of PCB's should also be handled and disposed of in accordance with Title 22, Division 4.5 of the California Code of Regulations and any other appropriate regulatory agency.

HM-2: To avoid impacts from pavement striping during construction it is recommended that removal requirements for yellow striping and pavement marking materials be performed in accordance with Caltrans Standard Special Provision 14-11.07 REMOVE YELLOW TRAFFIC STRIPE AND PAVEMENT MARKING WITH HAZARDOUS WASTE RESIDUE.

HM-3: As is the case for any project that proposes excavation, the potential exists for unknown hazardous contamination to be revealed during project construction (such as previously undetected petroleum hydrocarbon contamination from nearby gas stations). Should any previously unknown hazardous waste/material be encountered during construction, the procedures outlined in Caltrans Hazards Procedures for Construction shall be followed.

HM-4: If the project area changes (due to a change in the proposed project design or staging area), further investigation for potential hazardous waste generators would be required to determine their impact to the revised project limits.

Significance Determination with Mitigation Measures

Less than significant with mitigation incorporated.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
X. HYDROLOGY AND WATER QUALITY - Would the project:				
a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?		X		
b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?				X
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would: i) result in substantial erosion or siltation on- or off-site; ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite; iii) 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 iv) impede or redirect flood flows?		X		
d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?				X
e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?			X	

Background

The project area is located within the American River watershed hydrologic unit which feeds into Sacramento County's River Flood Control System. There are no streams or waters within the project area. Two creeks, Cripple Creek and Linda Creek, are in the vicinity of the Project. Cripple Creek flows under Old Auburn Road approximately 200-ft southwest of the southern project limits. Linda Creek originates near the western bank of Folsom Lake in Placer County and flows southwest into Sacramento County. Passing under Hazel Avenue, Linda Creek flows northwest, crossing back into Placer County approximately 700-feet east of Old Auburn Avenue at the county line. Linda Creek is a Regulated Stream under the jurisdiction of the Central Valley Flood Protection Board. A significant source of the summertime flow in both creeks is urban runoff. Sacramento County is not located within one of California's four sole source aquifers.

Standards of Significance

For purposes of this Initial Study, impacts to hydrology and water quality may be considered significant if construction and/or implementation of the Proposed Project would result in the following impacts that remain significant after implementation of General Plan policies or mitigation from the General Plan EIR:

- Substantially degrade water quality and violate any water quality objectives set by the State Water Resources Control Board, due to increases in sediments and other contaminants generated by construction and/or development of the Project, or
- Substantially increase the exposure of people and/or property to the risk of injury and damage in the event of a 100-year flood.

Summary of Analysis under the City of Citrus Heights General Plan EIR

Chapter 4.5 of the General Plan EIR evaluates the potential effects of the General Plan as they relate to surface water, groundwater, flooding, stormwater and water quality. Potential effects include water quality degradation due to construction activities and exposure of people to flood risks (Impacts 4.5-2 through 4.5-6). Policies included in the General Plan, including a directive for regional cooperation, comprehensive flood management, and construction of adequate drainage facilities with new development (Policies 34.2-49.8) were identified that reduced all impacts to a less-than-significant level.

Discussion

a. **Less than Significant with Mitigation Incorporated.** Construction would consist of activities on landscaped and hardscape environments. Construction activities would not substantially degrade water quality and would not violate any water quality objectives by the State Water Resources Control Board. Drainage facilities are located at several locations along Old Auburn Road and Wachtel Way. BMPs will be put in place to prevent sediment and other contaminants generated by construction from impacting the drainages. Mitigation measure HYD-1will be incorporated to further reduce the risk of violating any water quality or waste discharge standards.

b. **No Impact.** No groundwater wells would be drilled as part of the proposed project. The proposed project would not deplete groundwater supplies or interfere substantially with groundwater recharge that would result in a net deficit in aquifer volume or lowering of the local groundwater table level.

c. **Less than Significant with Mitigation Incorporated.** The proposed project would not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site. Construction of the proposed Project will cause vegetation loss and general soil disturbance within the Project area. Up to approximately 0.7 acres of impervious surface will be added through the installation of the intersection improvements, sidewalks and multiuse trail. Construction activities have the potential to degrade water quality by increasing soil erosion and resulting in increased sedimentation of receiving waterbodies, and from accidental spills or discharges of construction-related substances such as solvents, oils, and fuels. In turn, these activities have the potential to violate water quality standards and waste discharge requirements. Mitigation measures GEO-1 and HYD-1 will be incorporated to further reduce the risk of altering the existing drainage patterns.

d. **No Impact.** The FEMA National Flood Hazard Layer FIRMette map (**Appendix E**) for the Project area was obtained from FEMA's online Flood Map Service Center (FEMA 2025). Old Auburn Road is located on panel number 06067C0084J, effective February 22, 2024. Wachtel Way serves at the border between panel number 06067C0084J on the west side and panel number 06067C00103J, effective February 22, 2024. While flood hazard areas are mapped along both creeks, no flood hazard areas are located in the Project area.

e. **Less than Significant.** There will be an increase in impervious surface due to the project. This will result in more runoff water; however, the project includes drainage improvements. The existing drainage facilities within the project have adequate capacity for additional runoff. With adherence to the NPDES General Construction Permit, NPDES area-wide MS4 permit, the City's Design/Construction Standards, and the City's Drainage Policy, the proposed project would not conflict with any water quality control plan or sustainable groundwater management plan. Furthermore, By minimizing disruption to natural drainage systems and implementing proper stormwater controls, the Project will not conflict with the County's SWMP, which outlines strategies for controlling runoff and protecting water quality. With the proposed design features and adherence to regulatory requirements, the Project will not conflict with or obstruct the implementation of any water quality control or stormwater management plans. Therefore, impacts would be less than significant.

Mitigation Measures from City of Citrus Heights General Plan EIR that apply to the Project

None.

Additional Project-Level Mitigation Measures

GEO-1: The Proposed Project will comply with the City's Stormwater Discharge Control Measures, listed in the City's Municipal Code (Chapter 98. Article V), which will adequately control erosion and effectively prohibit non-stormwater discharges (City of Citrus Heights 2025b). To prevent the substantial soil erosion or the loss of topsoil post-construction, the Project design will comply with the Sacramento Stormwater Quality Partnership's Stormwater Quality Design Manual for the Sacramento Region (SQDM) to adequately control erosion.

HYD-1: The proposed Project would require coverage under the NPDES General Construction Permit for Discharges of storm water associated with construction activities (2022 Construction Stormwater General Permit, Order 2022-0057-DWQ). A SWPPP would also be developed and implemented as part of the Construction General Permit. This SWPPP will incorporate all applicable BMPs to ensure that adequate measures are taken during construction to minimize impacts to water quality.

Significance Determination with Mitigation Measures

Less than significant with mitigation incorporated.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XI. LAND USE AND PLANNING - Would the project:				
a. Physically divide an established community?				X
b. 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?				X

Setting

The Proposed Project lies with Neighborhoods 7 and 8 in the northeastern portion of the City of Citrus Heights within Sacramento County. According to the City's 2011 General Plan the project area land uses designations are categorized as low to medium residential areas, general commercial, business professional, public and open areas. Currently, Citrus Heights is about 98% built out, meaning little vacant land remains to be developed. The General Plan Land Use Map was last updated in April 2022 (Citrus Heights 2022). The City of Citrus Heights Land Use Designation is show on **Figure 6** and the zoning is shown on **Figure 7**. The residential zoning along Old Auburn Road and Wachtel Way in the Project area is RD2, RD3, RD4, and RD5; recreational zoning is present on Wachtel Way south of Pitalo Way.

Discussion

a. **No Impact.** The proposed project will take place on and adjacent to an existing transportation facility. The proposed project would not physically divide an established community.

b. **No Impact.** The proposed project will not affect the roadway designation. The proposed project would not change the zoning ordinance within the project area.

Mitigation Measures from City of Citrus Heights General Plan EIR that apply to the Project

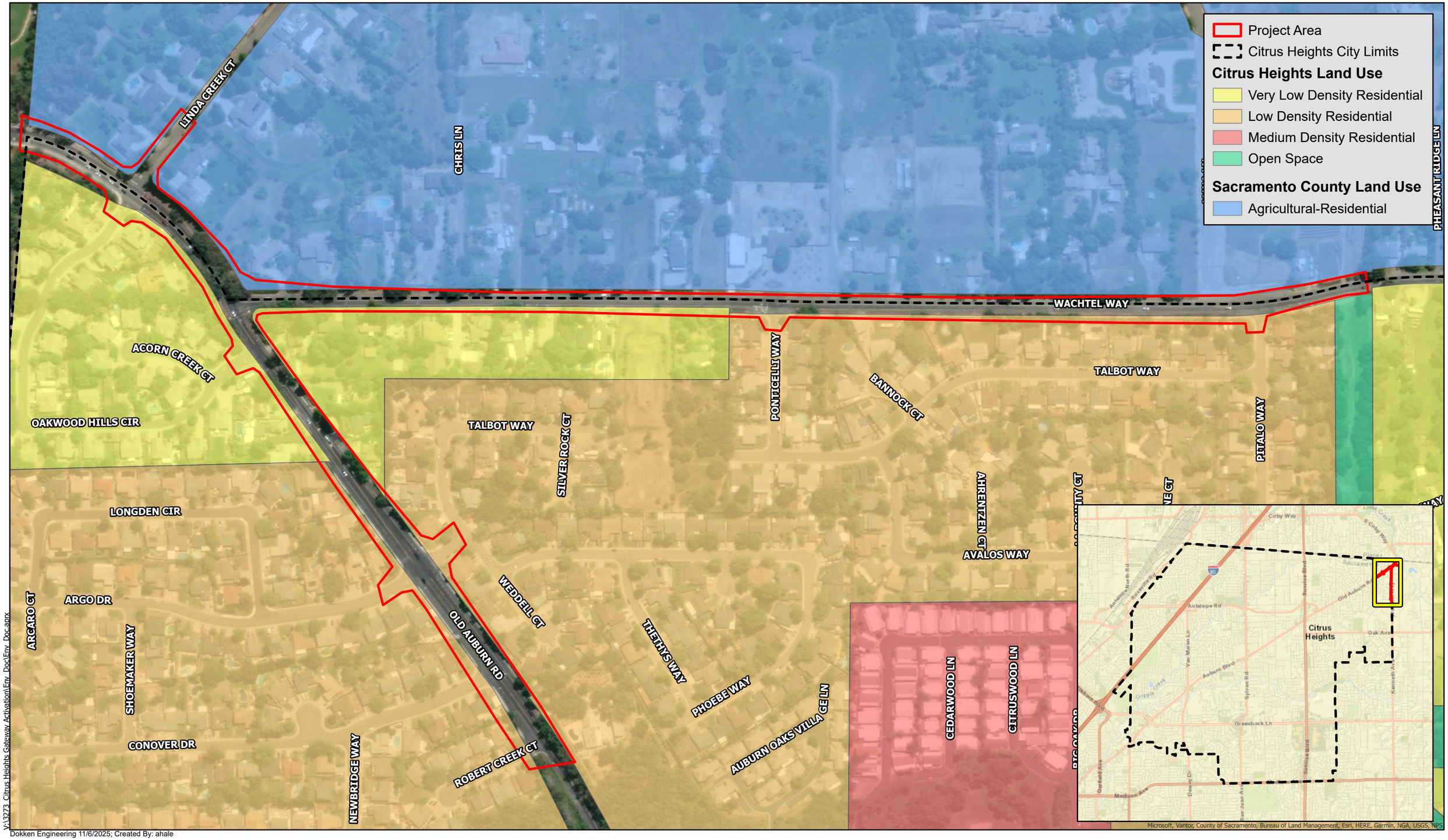
None.

Additional Project-Level Mitigation Measures

None required.

Significance Determination with Mitigation Measures

Not applicable.



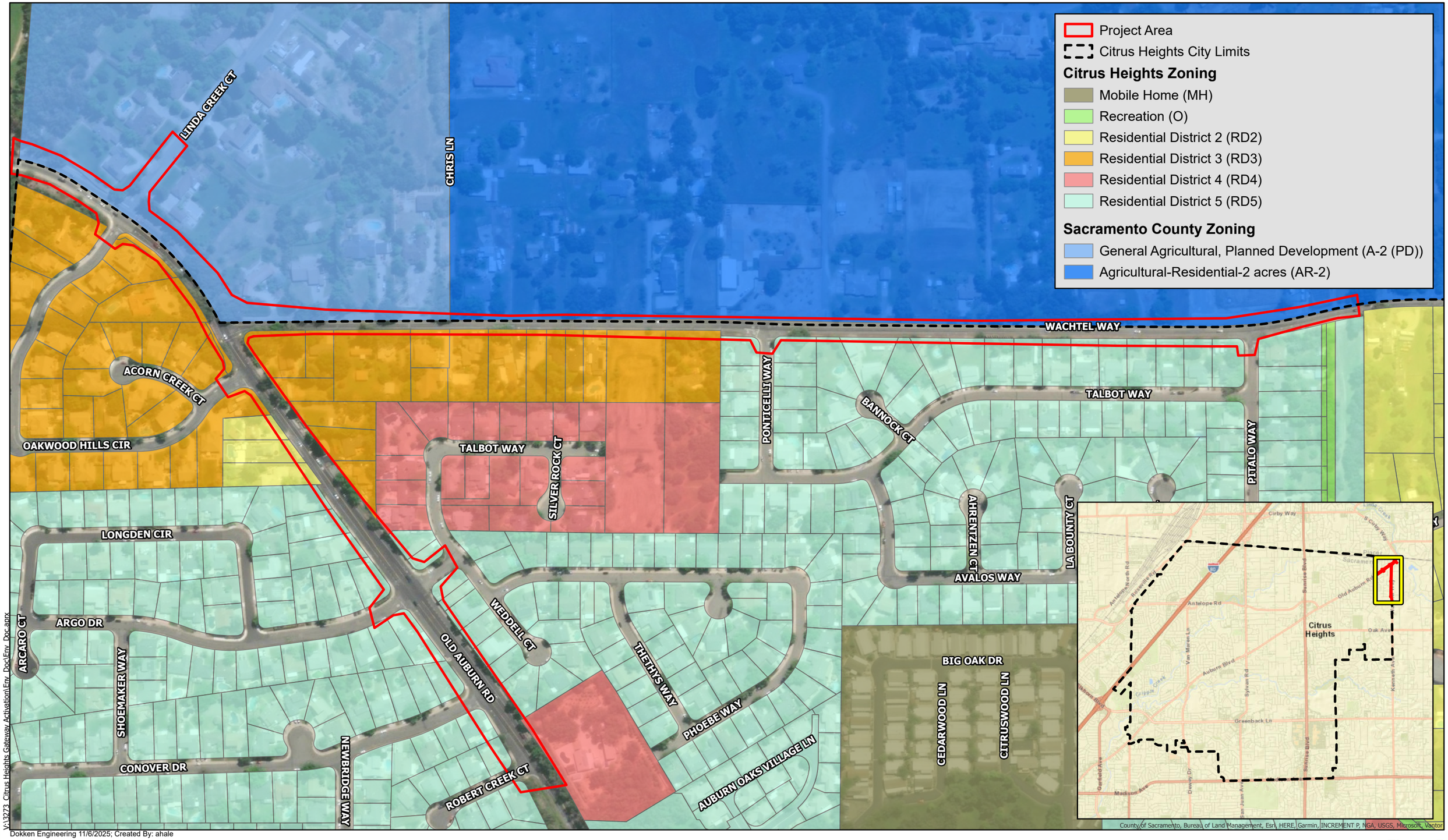
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Dokken Engineering 11/6/2025; Created By: ahale

0 125 250 Feet

Figure 6
Land Use Designation

Citrus Heights Gateway Activation Project
Citrus Heights, Sacramento County, California



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Dokken Engineering 11/6/2025; Created By: ahale

0 125 250 Feet

Figure 7
Zoning

Citrus Heights Gateway Activation Project
Citrus Heights, Sacramento County, California

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XII. MINERAL RESOURCES - Would the project:				
a. 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?				X
b. 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?				X

Discussion

a-b. **No Impact.** No mineral resources are currently being mined or produced in the planning area. The project site has not been identified as containing mineral resources. The City of Citrus Heights planning area is an area where adequate information indicates that no significant mineral deposits are present, or where it is judged that little likelihood exists for their presence. (Citrus Heights 2011b).

Mitigation Measures from City of Citrus Heights General Plan EIR that apply to the Project

None.

Additional Project-Level Mitigation Measures

None required.

Significance Determination with Mitigation Measures

Not applicable.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XIII. NOISE - Would the project result in:				
a. Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?		X		
b. Generation of excessive groundborne vibration or groundborne noise levels?			X	
c. 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, would the project expose people residing or working in the project to excessive noise levels?				X

Regulatory Setting

Federal Regulations
The U.S. Environmental Protection Agency's (EPA's) Office of Noise Abatement and Control was originally established to coordinate federal noise control activities. After its inception, EPA's Office of Noise Abatement and Control issued the Federal Noise Control Act of 1972, establishing programs and guidelines to identify and address the effects of noise on public health, welfare, and the environment. In 1981, EPA administrators determined that subjective issues such as noise would be better addressed at lower levels of government. Consequently, in 1982 responsibilities for regulating noise control policies were transferred to state and local governments. Noise control guidelines and regulations contained in EPA rulings in prior years remain in place by designated federal agencies, allowing more individualized control for specific issues by designated federal, state, and local government agencies.

State Regulations
The State of California has adopted noise standards in areas of regulation not preempted by the federal government. State standards regulate noise levels of motor vehicles, sound transmission through buildings, occupational noise control, and noise insulation.

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 isolation between adjacent spaces of various occupied units. Title 24 regulations state that interior noise levels generated by exterior noise sources shall not exceed 45 dBA Ldn, with windows closed, in any habitable room for general residential uses.

The *State of California General Plan Guidelines*, published by the California Governor's Office of Planning and Research (OPR), provides guidance for the compatibility of projects within areas of specific noise exposure. Table 4.4-1 presents acceptable and unacceptable community noise exposure limits for various land use categories. The guidelines also present adjustment factors that may be used to arrive at noise acceptability standards that reflect the noise control goals of the community, the particular community's sensitivity to noise, and the community's assessment of the relative importance of noise pollution.

City of Citrus Heights General Plan
The General Plan identifies the City's intent to protect city residents from the harmful and annoying effects of exposure to excessive noise. Goal 51, Policy 51.6 is relevant for transportation projects. The Policy says: "Use techniques such as roadway design, traffic signalization and other traffic management techniques (such as limiting heavy truck traffic in residential areas and requiting alternative paving material) to reduce noise caused by speed or acceleration of vehicles."

City of Citrus Heights Noise Ordinance
The City of Citrus Heights Noise Ordinance (Citrus Heights Municipal Code, Chapter 34, Article III) contains performance standards for the purpose of prohibiting unnecessary, excessive, annoying sounds that, at certain levels and frequencies, are detrimental to the health and welfare of the City's residents. The following provisions of the City's Noise Ordinance are applicable to the Draft General Plan.

The exterior noise standards applicable to the Proposed Project for Noise Area 1, which covers the RD2, RD3, RD4, and RD5 land use zones abutting the Proposed Project, are for exterior noise limits of 55 dBA between 7:00 a.m. to 10 p.m. and 50 dBA between 10:00 p.m. to 7:00 a.m.

The Noise Ordinance provides exemptions from the above standards for outdoor school events; outdoor gatherings conducted pursuant to a City permit; activities in parks, playgrounds and school grounds; machinery used in connection with emergency activities; daytime construction noise; daytime agricultural noise; agricultural noise to salvage crops or perform pest control; daytime residential property maintenance; and airport operations and maintenance.

Specifically, the following exemption is provided for daytime construction noise.

> Noise sources associated with construction, repair, remodeling, demolition, paving or grading of any real property, provided the activities do not take place between the hours of 8:00 p.m. and 6:00 a.m. on weekdays and Friday commencing at 8:00 p.m. through and including 7:00 a.m. on Saturday, Saturdays commencing at 8:00 p.m. through and including 7:00 a.m. on the next following Sunday, and on each Sunday after the hour of 8:00 p.m. However, when an unforeseen or unavoidable condition occurs during a construction project and the nature of the project necessitates that work in process be continued until a specific phase is completed, the contractor or owner shall be allowed to continue work after 8:00 p.m. and to operate machinery and equipment necessary until completion of the specific work in progress can be brought to conclusion under conditions which will not jeopardize inspection acceptance or create undue financial hardships for the contractor or owner.

Setting

The project area within the City of Citrus Heights is located in areas designated for Low and Medium Density Residential land uses (Citrus Heights 2011b). Noise sources that contribute to ambient noise levels in and adjacent to the project site include traffic from local streets. As a way to characterize noise levels, **Table 7** summarizes typical ambient noise levels based on population density.

Table 7. Population Density and Associated Ambient Noise Levels

Population Density	dBA, Ldn
Rural Suburban	40–50
Quiet suburban residential or small town	45–50
Normal suburban residential urban	50–55
Normal urban residential	60

Population Density	dBA, Ldn
Noisy urban residential	65
Very noisy urban residential	70
Downtown, major metropolis	75–80
Under flight path at major airport, 0.5 to 1 mile from runway	78–85
Adjoining freeway or near a major airport	80–90
Sources: Cowan 1984, Hoover and Keith 2000	

The vicinity of the project area is most similar to that of "normal urban residential." Normal Urban Residential has a typical noise level of 60 dBA. Sound is a mechanical form of radiant energy, transmitted by a pressure wave through a solid, liquid, or gaseous medium. Sound that is loud, disagreeable, unexpected, or unwanted is generally defined as noise; consequently, the perception of sound is subjective in nature, and can vary substantially from person to person (CCHGP EIR 2011b).

Noise sensitive land-uses include residences, schools, hospitals, churches, and parks. The project would take place near Low Density Residential and Medium Density Residential land uses (Citrus Heights 2011b). Open Space, which includes the Woodside Oaks Park segment of the Arcade-Cripple Creek Trail, is south of the project footprint; however, no impacts to this noise sensitive land-use is anticipated.

Noise levels at construction sites can vary from 55 dBA to a maximum of nearly 96 dBA when heavy equipment is used. Construction noise of this project would be intermittent, and noise levels would vary depending on the type of construction activity. For this project, lowest construction equipment-related noise levels would be 55 dBA at a distance of 50 ft for sound from a pick-up truck. Highest noise levels would be up to 90 dBA (at a distance of 50 ft) for a concrete saw for pavement removal. A jackhammer, which would be up to 89 dBA at a distance of 50 ft, would also be utilized during the proposed project.

Standards of Significance

For purposes of this Initial Study, impacts due to noise may be considered significant if construction and/or implementation of the Proposed Project would result in the following impacts that remain significant after implementation of General Plan policies or mitigation from the General Plan EIR:

- Result in exterior noise levels in the project area that are above the upper value of the normally acceptable category for various land uses due to the project's noise level increases;
- Result in residential interior noise levels of 45 dBA L_{dn} or greater caused by noise level increases due to the project;
- Result in construction noise levels that exceed the standards in the City of Citrus Heights' Noise Ordinance;
- Permit existing and/or planned residential and commercial areas to be exposed to vibration-peak-particle velocities greater than 0.5 inches per second due to project construction;
- Permit adjacent residential and commercial areas to be exposed to vibration peak particle velocities greater than 0.5 inches per second due to highway traffic and rail operations; or
- Permit historic buildings and archaeological sites to be exposed to vibration-peak-particle velocities greater than 0.2 inches per second due to project construction and highway traffic.

Summary of Analysis under the City of Citrus Heights General Plan EIR General Plan

The General Plan EIR evaluated the potential for development under the General Plan to increase noise levels in the community. New noise sources include vehicular traffic, railways, and stationary sources. The general plan policies establish exterior and interior noise standards (Policy 51.1). A variety of policies provide standards

for the types of development envisioned in the general plan. See Policy 52.2 through 52.5, which requires new mixed-use, commercial and industrial development to mitigate the effects of noise from operations on adjoining sensitive land use, and Policy 52.4, which calls for the City to limit hours of operations for parks and active recreation areas to minimize disturbance to nearby residences. Notwithstanding application of the general plan policies, noise impacts for exterior and interior noise levels, and vibration impacts, were found to be significant and unavoidable.

Discussion

a. **Less than Significant with Mitigation Incorporated.** The City of Citrus Heights Municipal Code contains Standards that apply to noise levels allowed within a residential area (City of Citrus Heights, 2008. Section 34-86 of the Municipal Code identifies noise standards of 55 dBA between the hours of 7:00 a.m. to 10:00 p.m. and 50 dBA between the hours of 10:00 p.m. and 7:00 a.m.

Construction Noise Impacts

Implementation of the Proposed would include the construction of intersection enhancements such as roundabouts, as well as the installation of pedestrian and bicycle facilities such as multi-use pathways, Class IV bikeways, crosswalks, sidewalks, and ADA-compliant curb ramps. Construction activities will generate noise, including ground born vibration resulting from the use of heavy construction vehicles and equipment. Construction noise is regulated by the Citrus Heights Noise Ordinance and by Caltrans Standard Specifications Section 14-8.02, "Noise Control," which states that noise levels generated during construction shall comply with applicable local, state, and federal regulations, and that all equipment shall be fitted with adequate mufflers according to the manufacturers' specifications.

The Noise Ordinance represents the community standard for acceptable levels of noise, it follows that bikeway construction noise, although above ambient levels, is not considered to have a substantial effect upon surrounding land uses. This determination is made in consideration of the temporary nature of construction activities. Therefore, this impact is also less than significant.

No adverse noise impacts from construction are anticipated because construction would be conducted in accordance with the Citrus Heights Noise Ordinance and Caltrans Standard Specifications Section 14-8.02. Construction noise would be short-term and intermittent. Further, implementing the measures below would minimize the temporary noise impacts from construction.

The project is exempt from City of Citrus Heights code pertaining to noise regulation due to the Section 34-88 which states that activities involving "Noise sources associated with construction, repair, remodeling, demolition, paving or grading of any real property, provided the activities do not take place between the hours of 8:00 p.m. and 6:00 a.m. on weekdays and Friday commencing at 8:00 p.m. through and including 7:00 a.m. on Saturday, Saturdays commencing at 8:00 p.m. through and including 7:00 a.m. on the next following Sunday, and on each Sunday after the hour of 8:00 p.m. However, when an unforeseen or unavoidable condition occurs during a construction project and the nature of the project necessitates that work in process be continued until a specific phase is completed, the contractor or owner shall be allowed to continue work after 8:00 p.m. and to operate machinery and equipment necessary until completion of the specific work in progress can be brought to conclusion under conditions which will not jeopardize inspection acceptance or create undue financial hardships for the contractor or owner" are exempt from the provisions of the city code.

The proposed project would have a less than significant impact on noise based on: 1) the project is not a capacity increasing project; 2) Proposed construction duration is temporary; and 3) construction of the project would use proposed minimization methods. No adverse noise impacts from construction are anticipated because construction would be conducted in accordance with the Citrus Heights Noise

Ordinance and would be short term and intermittent. Mitigation measure NOI-1 will be implemented to further reduce any noise specific impacts.

Long-Term Operational Noise Impacts

The Project would include the construction of intersection enhancements such as roundabouts, as well as the installation of pedestrian and bicycle facilities such as multi-use pathways, Class IV bikeways, crosswalks, sidewalks, and ADA-compliant curb ramps. The project would not add new travel lanes or increase roadway capacity. As a result, it would not induce additional traffic volumes or alter long-term traffic patterns in a way that would elevate operational noise levels. The roundabouts and associated improvements are designed to accommodate existing traffic demand and maintain traffic flows similar to current conditions. Accordingly, long-term operational noise levels would remain consistent with baseline conditions, and no significant operational noise impacts or noise-related mitigation measures are required.

b. **Less than significant.** The project site is level and does not include buildings or structures that would require unusual construction techniques that would cause substantial vibration. Substantial levels of vibration are not anticipated during operation of the new intersections because traffic volumes will be similar to the existing situation.

The project would generate some vibration due to construction activities, but it would not include construction activities that could generate significant ground vibration, such as pile driving. There are no historic structures within the project area that would be affected by construction-related vibration; therefore, this impact would not exceed the impact disclosed in the City of Citrus Heights General Plan EIR.

c. **No Impact.** The project site is not located near an existing airport and is not within an area covered by an existing airport land use plan. Therefore, no impact would occur.

Mitigation Measures from City of Citrus Heights General Plan EIR that apply to the Project

None.

Additional Project-Level Mitigation Measures

NOI-1: The Contractor shall follow City of Citrus Heights noise ordinance for construction activities:

- Do not exceed 65 dBA at 50 feet from the job site activities from 8 p.m. to 7 a.m.
- Use an alternative waiting method instead of a sound signal unless required by safety laws.
- Equip an internal combustion engine with the manufacturer-recommended muffler.
- Do not operate an internal combustion engine on the job site without the appropriate muffler.

Significance Determination with Mitigation Measures

Less than significant with mitigation incorporated.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XIV. POPULATION AND HOUSING - Would the project:				
a. 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)?		X		
b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?		X		

Setting

The Proposed Project lies with Neighborhoods 7 and 8 in the northeastern portion of the City of Citrus Heights within Sacramento County. According to the City's 2011 General Plan the project area land uses designations are categorized as low to medium residential areas, general commercial, business professional, public and open areas. The zoning along Old Auburn Road and Wachtel Way in the Project area is RD3, RD4, and RD5.

Discussion

a-b **Less than Significant with Mitigation Incorporated.** The proposed Project will not affect population and housing. The project is not capacity enhancing; therefore, it is not growth inducing. The Project does not result in the loss of housing. The Project would not displace housing or necessitate construction of replacement housing. The Project requires the partial acquisition of right-of-way from the following residential parcels. The Sacramento County Assessor's Parcel Numbers (APNs) are identified in **Table 8** below. Implementation of Mitigation Measures PH-1 will reduce the impact to less-than-significant.

Table 8. Parcels with Partial Acquisition

APN	Intersection	Partial Acquisition (Y/N)
224-0413-001	Argo Drive	Y
224-0780-070	Argo Drive	Y
224-0411-045	Argo Drive	Y
224-0780-071	Argo Drive	Y
224-0152-021	Argo Drive	Y
224-0152-001	Wachtel Way	Y
224-0970-027	Oakwood Hills Circle/Wachtel Way	Y
224-0970-026	Oakwood Hills Circle/Wachtel Way	Y
224-0200-033	Oakwood Hills Circle/Wachtel Way	Y
224-0580-007	Oakwood Hills Circle/Wachtel Way	Y
224-0970-011	Oakwood Hills Circle/ Linda Creek Ct	Y
224-0970-032	Oakwood Hills Circle/ Linda Creek Ct	Y
224-0580-006	Linda Creek Ct	Y
224-0210-010	Linda Creek Ct	Y

Mitigation Measures from City of Citrus Heights General Plan EIR that apply to the Project

None.

Additional Project-Level Mitigation Measures

PH-1: Property Compensation: All real property transactions shall comply with the property acquisition and relocation standards of the State of California. Property owners shall be compensated in accordance with fair market values based on appraisals.

Significance Determination with Mitigation Measures

Less than significant with mitigation incorporated.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XV. PUBLIC SERVICES - Would the project:				
a. Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:			X	
Fire protection?			X	
Police protection?			X	
Schools?			X	
Parks?			X	
Other public facilities?			X	

Setting

The Sacramento Metro Fire Station 28 at 8189 Oak Avenue, Citrus Heights, is approximately 0.9 miles southwest of the southern limits of the Wachtel Way Project area. The Roseville Fire Department Station 4 is approximately 1.4 miles north of Old Auburn Road on the county line. The Citrus Heights Civil Police Station is located 2.17 miles west of the Project area. The Roseville Police Station on 5th Street is located 2 miles northwest of Old Auburn Road on the county line. The Kaiser Permanente Roseville Medical Center is located 1.8 miles north Old Auburn Road at the county line.

The utility providers located in the Project area include the following:

- AT&T,
- City of Citrus Heights,
- Citrus Heights Water District,
- Comcast,
- Consolidated Communications,
- County of Sacramento – Traffic Signal and Street Lighting,
- Pacific Gas and Electric (PG&E),
- Sacramento Area Sewer District,
- Sacramento Regional Sanitation District, and
- Sacramento Municipal Utility District (SMUD).

Schools and parks in the vicinity of the Project area include the following:

- Woodside Oaks Park segment of the Arcade-Cripple Creek Trail which connects to Wachtel Way,
- Edgecliff & Cripple Creek Open Space, Sacramento County, 0.15 miles north of Old Auburn Rd,
- Woodside Oaks/ Olivine Drive Open Space, Sacramento County, 0.2 miles west of Wachtel Way,
- Woodside K-8 School, Sacramento County, 0.7 miles west,
- C-Bar-C Park. Sacramento County 0.7-miles southwest,

- Oakview Community Elementary School, Sacramento County, 1.1-miles southeast,
- Crestmont Park, Placer County. 0.6-miles northwest,
- Crestmont Elementary School, Placer County. 0.6-miles northwest,
- Maidu Regional Park, Placer County, 1.2-miles north, and
- Granite Bay Montessori, Placer County. 1.1-miles northeast.

Discussion

a. **Less than Significant.** The project will not adversely affect public services in the area. The project would not contribute to any change in population, traffic circulation, or other land use modifications that would impact local fire or police protection. There will be no permanent road closures during construction. The project improvements will not affect parks or other services. Coordination with utility providers has taken place and will continue throughout construction with the following utility companies: AT&T, City of Citrus Heights, Citrus Heights Water District, Comcast, Consolidated Communications, County of Sacramento – Traffic Signal and Street Lighting, Pacific Gas and Electric (PG&E), Sacramento Area Sewer District, Sacramento Regional Sanitation District, and Sacramento Municipal Utility District (SMUD). No mitigation will be required.

Mitigation Measures from City of Citrus Heights General Plan EIR that apply to the Project

None.

Additional Project-Level Mitigation Measures

None required.

Significance Determination with Mitigation Measures

Not applicable.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XVI. RECREATION				
a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?			X	
b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?			X	

Setting

The Public Services section above lists the recreational facilities in the vicinity of the Project area.

Discussion

a-b. **Less than significant.** The Proposed Project will construct multimodal and roadway improvements that will serve bicyclists, pedestrians, and motorists by closing gaps in the City's pedestrian and bicycle network. The purpose of the Project is to enhance connectivity to existing bicycle and pedestrian infrastructure and provide future linkages to planned facilities in neighboring jurisdictions, including the City of Roseville and Sacramento County. The project would likely result in additional residents and visitors utilizing existing parks because the planned bikeways are intended to provide connections to parks. It would be expected that many of these users would already be utilizing the park and recreation facilities and would simply be using a non-motorized transportation alternative to reach the parks and open spaces.

The project does not propose new residential or commercial developments creating a need for construction or expansion of recreational facilities. The proposed project would increase the use of existing parks and recreation facilities to the extent that the expanded bikeway system will encourage park and open space use for residents who were not previously using these recreational facilities, or additional use by those already using the recreational facilities. This increased use would not be expected to substantially impact the parks and facilities to the extent that physical deterioration would occur, nor would these facilities need to be expanded. Therefore, the project would have a less than significant impact on recreation facilities

Mitigation Measures from City of Citrus Heights General Plan EIR that apply to the Project

None.

Additional Project-Level Mitigation Measures

None required.

Significance Determination with Mitigation Measures

Not applicable.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XVII. TRANSPORTATION/TRAFFIC - Would the project:				
a. Conflict with a program, plan, ordinance, or policy addressing the circulation system including transit, roadway, bicycle and pedestrian facilities?			X	
b. Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?			X	
c. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				X
d. Result in inadequate emergency access?		X		

Setting

The Proposed Project locations are within Citrus Heights residential Neighborhoods 7 and 8. Project locations occur within developed Neighborhoods that contain medium to highly populated areas. Old Auburn Road east of Auburn Boulevard and Wachtel Way are not approved Citrus Heights truck routes (Citrus Heights n.d.). There are no Surface Transportation Assistance Act of 1982 truck routes in the Project area. Old Auburn Road is classified as a major collector street and a low access control facility (CCHGP EIR 2011b).

Fehr & Peers, a traffic engineer firm, conducted an existing conditions analysis and evaluated traffic control and pedestrian crossing for the proposed Project. The analysis included traffic data collection to determine existing conditions. The Average Daily Traffic (ADT) Data for Old Auburn Road east of Wachtel Way is estimated at 14,200 vehicles (Fehr & Peers 2025). The volume of cars on Old Auburn Road drops considerably west of Wachtel Way, indicating that a number of vehicular trips originate or are destined to/from the south of Wachtel Way towards unincorporated Sacramento County.

For the Old Auburn Road/Argo Drive intersection improvements, Fehr & Peers evaluated the applicability of a traffic signal, a pedestrian hybrid beacon, and a single-lane roundabout. A single-lane roundabout would result in reduced travel speeds, improved pedestrian crossing, acceptable traffic operations and improved corridor safety (Fehr & Peers 2025).

The remaining two study intersections, Old Auburn Road/Wachtel Way and Old Auburn Road/Oakwood Hills Circle East, were analyzed as a pair due to their proximity to each other and the upstream/downstream effects that each control type has on the other intersection. The analysis evaluated the proposed Project with roundabouts at each intersection. The study includes a table that compares the LOS and delay results for the proposed Project versus existing conditions. It is included below as **Table 9.**

Table 9. Wachtel Way and Oakwood Hills Circle East Intersections Configuration Analysis

Configuration	Traffic Control at Wachtel Way	Peak Hour	LOS/Delay (s)	Traffic Control at Oakwood Hills Circle East	LOS/Delay (s)
Existing Conditions	All-Way Stop-Controlled	AM PM	**F / 56** B / 14	All-Way Stop-Controlled	E / 38 **F / 75**
Proposed Project	Roundabout	AM PM	B / 13 B / 10	Roundabout	A / 9 A / 8

Bolded numbers indicate deficient operations per City of Citrus Heights General Plan Policy 29.2.
Source: Fehr & Peers, 2025

The proposed Project would provide a level of service (LOS) A or B operations at each intersection during the AM and PM peak hours and reduces the maximum queues and delays as compared to the existing.

The corridor travel times and average speeds for the study intersections are presented in **Table 10** below. The proposed Project has the least amount of overall travel time on both corridors.

Table 10. Corridor Speeds

Scenario	AM Peak Hour	PM Peak Hour
	Eastbound (From Wintergreen Drive to Linda Creek Ct)	Westbound (from South Cirby Way to Argo Drive)
Existing Conditions	185 seconds / 11 mph	184.8 seconds / 12 mph
Proposed Project	87.3 seconds / 17 mph	82.4 seconds / 24 mph

Source: Fehr & Peers, 2025

Discussion

a. **Less than Significant.** The project will not conflict with any applicable plans, ordinances or policies. The project will implement several goals of the General Plan, the Bikeway Master Plan (Citrus Heights 2015), and the Draft Pedestrian Master Plan (Citrus Heights 2016). The Proposed Project does not conflict with the City's Neighborhood Traffic Management Program.

b. **Less than Significant.** The Proposed project is not a capacity increasing project and does not increase vehicle miles traveled. Transportation projects that reduce, or have no impact on, vehicle miles traveled are presumed to cause a less than significant transportation impact.

c. **No Impact.** The design features of the proposed Project would comply with City standards, or as appropriate, would be approved as non-standard features. The project would not increase hazards due to design features or incompatible uses. The project would not substantially increase hazards due to a design features (e.g. sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).

d. **Less than Significant with Mitigation Incorporated.** During construction, the project may have a less-than-significant impact on emergency access. Residential roadways near designated problem locations would remain open throughout construction for through traffic but the reduction to single-lane traffic may cause delays. Response times are not anticipated to be significantly affected during construction. Post-construction, it is anticipated that the improved multi-modal facilities would better serve

emergency vehicles by reducing road hazard conditions. Implementation of **TRA-1** would minimize any potential impacts to emergency access during construction activities.

Mitigation Measures from City of Citrus Heights General Plan EIR that apply to the Project

None.

Additional Project-Level Mitigation Measures

TRA-1: Temporary impacts to traffic flow as a result of construction activities would be minimized through construction phasing, signage, and a traffic control plan.

Significance Determination with Mitigation Measures

Less than significant with mitigation incorporated.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XVIII. TRIBAL CULTURAL RESOURCES -				
a. Would the project 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: i. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or		X		
ii. 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.		X		

Regulatory Setting

Effective July 1, 2015, CEQA was revised to include early consultation with California Native American tribes and consideration of tribal cultural resources (TCRs). These changes were enacted through Assembly Bill 52 (AB 52). By including TCRs early in the CEQA process, AB 52 intends to ensure that local and Tribal governments, public agencies, and project proponents would have information available, early in the project planning process, to identify and address potential adverse impacts to TCRs. CEQA now establishes that a "project with an effect that may cause a substantial adverse change in the significance of a TCR is a project that may have a significant effect on the environment" (PRC § 21084.2).

To help determine whether a project may have such an adverse effect, the PRC requires a lead agency to consult with any California Native American tribe that requests consultation and is traditionally and culturally affiliated with the geographic area of a proposed project. That consultation must take place prior to the determination of whether a negative declaration, mitigated negative declaration, or environmental impact report is required for a project (PRC § 21080.3.1). Consultation must consist of the lead agency providing formal notification, in writing, to the tribes that have requested notification or proposed projects within their traditionally and culturally affiliated area. AB 52 stipulates that the Native American Heritage Commission (NAHC) shall assist the lead agency in identifying the California Native American tribes that are traditionally and culturally affiliated within the project area. If the tribe wishes to engage in consultation on the project, the tribe must respond to the lead agency within 30 days of receipt of the formal notification. Once the lead agency receives the tribe's request to consult, the lead agency must then begin the consultation process within 30 days. If a lead

agency determines that a project may cause a substantial adverse change to TCRs, the lead agency must consider measures to mitigate that impact. Consultation concludes when either: 1) the parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a TCR, or 2) a party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached (PRC § 21080.3.2). Under existing law, environmental documents must not include information about the locations of an archaeological site or sacred lands or any other information that is exempt from public disclosure pursuant to the Public Records act. TCRs are also exempt from disclosure.

For purposes of this study, the term "tribal cultural resource" refers to either of the following:

1. Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following:
    b. Included or determined to be eligible for inclusion in the California Register of Historical Resources
    c. Included in a local register of historical resources as defined in subdivision (k) of California Public Resources Code (PRC) Section 5020.1
2. A resource determined by a California lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of the PRC Section 5024.1.

Setting

In April 2025, the City of Citrus Heights obtained a list of California Native American tribes traditionally and culturally affiliated with the project area from the NAHC. The City then sent initial letters inviting to the tribes detailed on the NAHC list to consult under AB 52 for the proposed project. This initial letter provided a brief project description, project location, lead agency contact information, and a notification that the tribe has 30 days to request consultation. No TCRs were identified within the project area.

Efforts to identify potential cultural resources in the Project area included background research, a search of previously recorded archaeological site records and cultural resource identification reports on file at the California Historical Resources Information System NCIC, coordination with Native American representatives, efforts to coordinate with local historical organizations, and a pedestrian ground surface survey.

The City conducted consultation with Native American tribes under PRC §21080.3.1 (also referred to as AB 52) via certified letter on April 29, 2025. For the United Auburn Indian Community (UAIC), the letter was submitted on April 29, 2025, to the tribe's website portal. The City notified the following tribes of an opportunity to consult with the City regarding the potential for this Project to impact Native American cultural resources: Buena Vista Rancheria of Me-Wuk Indians, Colfax-Todds Valley Consolidated Tribe, Ione Band of Miwok Indians, Nashville Enterprise Miwok-Maidu-Nishinam Tribe, Shingle Springs Band of Miwok Indians, Tsi Akim Maidu, United Auburn Indian Community, and Wilton Rancheria. The UAIC responded to the City via email regarding initial AB 52 consultation, including scheduling a field survey attended by the UAIC and the City's consultant archaeologist.

A pedestrian survey of the APE was conducted by archaeologist from Dokken Engineering on June 12, 2025, for the purpose of identifying and recording archaeological resources. A representative from the United Auburn Indian Community participated in the pedestrian survey. No constraints to the survey were encountered as full access was obtained prior to completing the survey. No indigenous resources were identified as a result of the identification efforts.

Impacts to unknown archaeological deposits, which could qualify as tribal historic resources under CEQA, could result in a significant impact under CEQA. Implementation of mitigation measures CR-1 through CR-4 will reduce these potential impacts to a less-than-significant level.

Discussion

a.i. **Less than Significant with Mitigation Incorporated.** No tribal cultural resources (TCRs) were identified during the tribal consultation. While the APE location is within an area of older Pleistocene aged soils with very low sensitivity for buried archaeological resources, there remains a possibility that an unanticipated discovery of buried cultural materials could be encountered during construction. Impacts to unknown archaeological deposits, which could qualify as tribal cultural resources under CEQA, could result in a significant impact under CEQA. Implementation of mitigation measures CR-1 through CR-will reduce these potential impacts to a less-than-significant level.

a.ii. **Less than Significant with Mitigation Incorporated.** The Project is not anticipated to cause a substantial adverse change to a TCR pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. As described in response to question **a)**, while no impacts to TCRs are anticipated for the Project, with any Project requiring ground disturbance, there is always the possibility that unmarked cultural resources may be unearthed during construction. Furthermore, the United Auburn Indian Community identified the APE as sensitive for tribal cultural resources and recommend that archaeological and tribal monitoring occur during Project-related ground disturbance within native sediments and that interpretive panels be erected along the proposed trail. This impact would be considered potentially significant. Implementation of Mitigation Measures **CR-1** and **CR-4** (listed in section V. Cultural Resources) would reduce this impact to a less than significant level.

Mitigation Measures from City of Citrus Heights General Plan EIR that apply to the Project

None.

Additional Project-Level Mitigation Measures

CR-1: Prior to construction, cultural resource awareness and sensitivity training shall be provided to all construction crew members to ensure that the crew members are aware of the potential for sensitive cultural resources to be present onsite. The awareness and sensitivity training would also include an established protocol for informing the resident engineer of any accidentally discovered cultural resources.

Treatment of Discoveries:

CR-2: If significant historical, paleontological, archaeological, or tribal cultural resources are discovered within the APE, ground disturbing activities shall be suspended 100 feet around the resource(s). The archaeological monitor, a representative of the appropriate Native American Tribe(s) (if discovery is prehistoric), and the City shall confer regarding mitigation of the discovered resource(s). All discovered archaeological resources should be documented by field notation, analysis, photography, and GPS mapping. Work shall not resume in the area until mitigation has been completed, or it has been determined that the archaeological resource(s) is not significant.

Disposition of Discoveries:

CR-3: If human remains are encountered, State Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. The County Coroner must be notified of the find immediately. If the remains are determined to be prehistoric, the Coroner would notify the Native American Heritage Commission (NAHC), which would determine and notify a Most Likely Descendant (MLD). With the permission of the landowner or his/her authorized representative, the MLD may inspect the site of the discovery. The MLD shall complete the inspection within 48 hours of notification by the NAHC. The MLD may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials.

CR-4: In the event that Native American cultural resources are inadvertently discovered during the course of construction, the City shall relinquish ownership of all Native American cultural resources, including sacred items, burial goods, and all archaeological artifacts and non-human remains as part of the required mitigation for impacts to Native American cultural resources. Prior to relinquishment, all discovered archaeological resources should be documented by field notation, photography, and GPS mapping. After consultation with the appropriate Native American Tribe(s), non-destructive analysis may be conducted.

Significance Determination with Mitigation Measures

Less-than-significant.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XIX. UTILITIES AND SERVICE SYSTEMS - Would the project:				
a. Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?			X	
b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?			X	
c. Result in a determination by the waste water treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?			X	
d. Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?			X	
e. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?			X	

Regulatory Settings

Federal and State Regulations

Clean Water Act and State Water Resources Control Board

With regard to wastewater, the Federal CWA and regulations set forth by the California Department of Health Services (CDHS) and SWRCB are aimed primarily at discharges of effluent to surface waters. Title 40 of the Code of Federal Regulations (CFR) Part 503, Title 23 California Code of Regulations, and standards established by the Central Valley Regional Water Quality Control Board regulate the disposal of biosolids generated by wastewater treatment plants. Under the CWA, the Regional Water Quality Control Board administers programs related to wastewater treatment.

Local Regulations

Sacramento County and the City of Citrus Heights submitted Notices of Intent (NOIs) to obtain coverage under the General Permit for Discharges from MS4s, Order R5-2016-0040 issued by the Central Valley Regional Water Quality Control Board (CVRWQCB 2016). After review of the NOIs, CVRWQCB determined that the Cities and County qualify for coverage under the General Order.

The Cities and County submitted a proposed Annual Work Plan with the NOI, which serves as an interim Work Plan until the updated Storm Water Management Plan is adopted by the CVRWQCB. Pursuant to Part V.C.9.c of the General Permit, a Permittee is required to continue implementation of its existing Storm Water Management Program between receipt of an NOA and final approval of a Storm Water Management Plan that meets the requirements laid out in the General Permit.

The City participates in the Sacramento Stormwater Quality Partnership (SSQP) with Sacramento County and the cities of Elk Grove, Folsom, Galt, Rancho Cordova, and Sacramento to coordinate regional drainage strategies. The SSQP has a Stormwater Quality Design Manual (SSQP 2018) that identifies the requirements that apply to land development projects, including roads and paved pathway projects. Streets and roads with an increase of impervious surfaces less than five acres are required to provide source control stormwater quality control measures.

Settings

As discussed in Public Services section, a number of parks and open space areas are located in the vicinity of the Project area. Water, sewer, electric, fiber optic and gas lines are currently located in the project areas. Utility providers include the Citrus Heights Water District, Cal American Water Company, Sacramento Suburban Water District, SMUD, Pacific Gas and Electric, and the Sacramento Regional County Sanitation District.

Discussion

a. **Less than Significant.** The project does not involve the relocation or construction of new or expanded water or wastewater facilities. Therefore, the impacts to water and wastewater facilities would be less than significant.

SMUD overhead and underground electrical facilities are located along Old Auburn Road and Wachtel Way. The City and its contractor would maintain applicable CalOSHA and State of California Public Utilities Commission safety clearances during construction and operation of the project.

Storm water in Citrus Heights is directed via drain inlets into a series of underground pipes within roadways and other public parcels. These pipes outfall into the City creek system, at which point the water flows downstream. The amount of stormwater that enters the creek system increases as undeveloped ground is replaced by impervious surfaces such as paved trails and sidewalks. New or modified drain inlets and pipes will be required because there will be an increase in the amount of impervious surfaces and because existing inlets/outfalls at the intersections are located in areas proposed for widening. The Project's design will ensure that stormwater flows are neither impeded nor redirected by the new paved surfaces.

The Project will increase the amount of impervious surfaces through the construction of road improvements, sidewalks and pathways. With three roundabouts, the Project would increase the area of impervious surfaces by approximately 30,300 square feet. The increase is not expected to substantially alter existing drainage patterns. The Project will comply with applicable stormwater management regulations and the use of BMPs will further minimize potential impacts. The City Construction Standards include Best Management Practices intended to mitigate the environmental effects associated with storm water drainage and would mitigate this potential impact to a less than significant level.

b. **Less than Significant.** The project would not increase water supply demand.

c. **Less than Significant.** The Proposed Project does not produce wastewater that need to be treated.

d. **Less than Significant.** The construction and operation of the Proposed Project will not generate excessive solid waste. The project would generate solid waste during construction, mostly roadway materials (earthwork and asphalt concrete). The solid waste would be disposed of at a waste handling facility, which complies with all federal, state, and local regulations. Active permitted regional landfills include the Forward Landfill, Kiefer Landfill, L&D Landfill, and Western Regional Sanitary Landfill. Solid waste generated during construction and operation of the project would represent a small fraction of the daily permitted tonnage of these facilities. The Project would not generate solid waste during operation. The impact would be less than significant.

e. **Less than Significant.** The project would comply with federal, state, and local statutes and regulations related to solid waste.

Mitigation Measures from City of Citrus Heights General Plan EIR that apply to the Project

None.

Additional Project-Level Mitigation Measures

None required.

Significance Determination with Mitigation Measures

Less than significant with mitigation incorporated.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XX. WILDFIRE – 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?				X
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?				X
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?				X
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?				X

Discussion

a-d. **No Impact.** The proposed Project is not located in a California Department of Forestry and Fire Protection (CAL FIRE) designated moderate, high, or very high Fire Hazard Severity Zone (CAL FIRE 2025). The proposed Project is not subject to risk of downslope or downstream flooding or landslides as a result of runoff, post-fire slope instability, or drainage changes.

Mitigation Measures from City of Citrus Heights General Plan EIR that apply to the Project

None.

Additional Project-Level Mitigation Measures

None required.

Significance Determination with Mitigation Measures

Not applicable.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XXI. MANDATORY FINDINGS OF SIGNIFICANCE				
a. Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?		X		
b. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects).				X
c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?		X		

Discussion

a. **Less than Significant with Mitigation Incorporated.** As discussed in this study, the proposed project could result in impacts on biological and cultural resources. There is no potential for Federal or State threatened or endangered species to occur within the project are and no designated Critical Habitat occurs within the project vicinity. Mitigation measures included in this study would reduce the impacts to less-than-significant levels.

b. **No Impact.** The project does not directly or indirectly contribute to cumulative impacts associated with increased urban development because the impacts have previously been evaluated by the City and considered in development of the City's General Plan.

c. **Less than Significant with Mitigation Incorporated.** As discussed in this study, the proposed project could result in impacts on human beings indirectly due to air quality, geology/soils, hazards and hazardous materials, hydrology/water quality, noise, population/housing, and transportation impacts. Mitigation measures included in this study would reduce impacts to less-than-significant levels.

Mitigation Measures from City of Citrus Heights General Plan EIR that apply to the Project

None.

Additional Project Level Mitigation Measures

None required.

Significance Determination with Mitigation Measures

Less than significant with mitigation incorporated.

SECTION 5.0 - COMMENTS AND COORDINATION

This section summarizes the City of Citrus Heights' efforts to identify, address and resolve Project-related issues through early and continuing coordination.

Consultation and Coordination with Public Agencies

Coordination with the following agencies was initiated for the Citrus Heights Gateway Activation Plan:

- Native American Heritage Commission (NAHC).

Public Participation

The public comment period for the Project provides the opportunity for public comment and participation. The comment period will be properly noticed in the local newspaper and this Initial Study/Proposed Mitigated Negative Declaration will be available at public facilities.

The City has conducted public outreach in the form of public meetings, workshops, on-line surveys, and a project specific webpage on the City's website. On April 29, 2025, a public meeting was held at Big Oak Mobile Home Park. The outreach included a project-specific feedback form with three questions and space for additional comments. More than 48 community members participated in the meeting. A twelve page summary of the meeting is available on the project website.

From June 1 through June 17, 2025, the City of Citrus Heights conducted an online feedback survey to collect input for the Gateway Activation Project (GAP). The survey invited community members to share their ideas, preferences, and priorities for improving the Old Auburn Road and Wachtel Way corridor. The feedback survey generated 86 responses from six zip codes. The two most important project goals were "increasing safety" and "trail connectivity."

In conjunction with the online survey, a "pop-up" event held on the Old Auburn Multi-Use Trail, located across from the Big Oak Mobile Home Park in Citrus Heights, on June 14, 2025. The goal of this event was to meet community members directly in their neighborhood at the project location to share information and encourage participation in the feedback survey, which closes on June 17, 2025. Four display boards were presented: a project overview board, the Wachtel Way intersection board, the Oakwood Hills Circle East intersection board, and a plan view of the Class I pedestrian and bicycle crossing concepts at three locations.

The results of the public outreach were summarized and presented at the City Council meeting on June 25, 2025. Staff recommended roundabouts at Argo Drive, Wachtel Way, and Oakwood Hills Circle. Staff recommended a trail crossing at Argo Drive. The City Council favored staff's recommendation and directed staff to begin environmental review for the project.

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APPENDIX A: Mitigation Monitoring Plan

MITIGATION MONITORING PLAN CHECKLIST FOR THE CITRUS HEIGHTS GATEWAY ACTIVATION PROJECT

Mitigation Measure		Reporting Milestone	Reporting / Responsible Party	VERIFICATION OF COMPLIANCE	
				Initials	Date
City of Citrus Heights General Plan (CCHGP)					
MM 4.7-7:	**Discovery of Potential Paleontological Resources** If potential paleontological resources are detected by construction workers or City staff during construction of future land uses, work shall stop immediately, and consultation is required to avoid further impacts. Actions after work stoppage will be designed to avoid significant impacts to the greatest extent feasible. These measures could include, but are not limited to, construction worker personnel education, consultation with a qualified paleontologist, coordination with experts on resource recovery and curation of specimens, and/or other measures considered appropriate after further consultation.	During Construction	City of Citrus Heights and Contractor		
AIR QUALITY					
AQ-1:	Implement SMAQMD Basic Construction Emission Control Practices, where feasible: • Water all exposed surfaces two times daily. Exposed surfaces include (but are not limited to) soil piles, graded areas, unpaved parking areas, staging areas, and access roads. • Cover or maintain at least 2 feet of freeboard space on haul trucks transporting soil, sand, or other loose material on the site. Any haul trucks that would be traveling along freeways or major roadways shall be covered. • Use wet power vacuum street sweepers to remove any visible trackout mud or dirt onto adjacent public roads at least once a day. Use of dry power sweeping is prohibited. • Limit vehicle speeds on unpaved roads to 15 miles per hour. • All roadway, driveway, sidewalk, and parking lot paving should be completed as soon as possible. In addition, building pads should be laid as soon as possible after grading unless seeding or soil binders are used. • Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to 5 minutes [required by California Code of Regulations, Title 13, sections 2449(d)(3) and 2485]. Provide clear signage that posts this requirement for workers at the entrances to the site. • Provide current certificate(s) of compliance for CARB's In-Use Off-Road Diesel-Fueled Fleets Regulation [California Code of Regulations, Title 13, sections 2249 and 2449.1].	During Construction	City of Citrus Heights and Contractor		

Mitigation Measure		Reporting Milestone	Reporting / Responsible Party	VERIFICATION OF COMPLIANCE	
				Initials	Date
BIOLOGY					
BIO-1:	Prior to the start of construction activities, the Project limits within environmentally sensitive areas (oak woodlands), will be marked with high visibility Environmentally Sensitive Area (ESA) fencing or staking to ensure construction will not further encroach into sensitive resources.	Prior to Construction	City of Citrus Heights and Contractor		
BIO-2:	Contract specifications will include the following Best Management Practices (BMPs), where applicable, to reduce erosion during construction: 1. Exposed soils and material stockpiles would be stabilized, through watering or other measures, to prevent the movement of dust at the Project site caused by wind and construction activities such as traffic and grading activities; 2. All vehicle and equipment fueling/maintenance would be conducted outside of oak woodland habitat; 3. Equipment used in and around oak woodland habitat must be in good working order and free of dripping or leaking contaminants; 4. Raw cement, concrete or concrete washings, asphalt, paint or other coating material, oil or other petroleum products, or any other substances that could be hazardous to wildlife shall be prevented from contaminating the soil; 5. All erosion control measures would be properly maintained throughout construction; 6. All construction materials would be hauled off-site after completion of construction.	Prior to Construction	City of Citrus Heights and Contractor		
BIO-3:	All onsite refueling and maintenance must occur over plastic sheeting, drip pans, or other secondary containment measures to capture accidental spills before they can contaminate the soil. Secondary containment must have a raised edge (e.g. sheeting wrapped around wattles).	Prior to Construction	City of Citrus Heights and Contractor		
BIO-4:	A chemical spill kit must be kept onsite at all times during work and must be easily accessible for use in the event of a spill.	Prior to Construction	City of Citrus Heights and Contractor		

Mitigation Measure		Reporting Milestone	Reporting / Responsible Party	VERIFICATION OF COMPLIANCE	
				Initials	Date
BIO-5:	In accordance with the City of Citrus Heights Tree Preservation and Protection Regulations, protected trees within the Project footprint will be preserved to the extent feasible. For trees removed for the multiuse trail, a tree permit will be obtained from the City prior to construction. Tree impact and avoidance measures shall be incorporated into the final design of the improvement plans. A certified arborist shall consult and make recommendations for design treatments, modifications, and construction techniques to minimize tree removal and construction impacts.	Prior to and During Construction	City of Citrus Heights and Contractor		
BIO-6:	Prior to arrival at the Project site and prior to leaving the Project site, construction equipment that may contain invasive plants and/or seeds will be cleaned to reduce the spreading of noxious weeds.	During Construction	City of Citrus Heights and Contractor		
BIO-7:	If project-related activities, including vegetation removal or initial ground disturbance, are scheduled during the nesting bird season (February 1 – August 31) a pre-construction nesting bird survey must be conducted by a biologist prior to the start of work. The nesting bird survey must include the Project area plus a 100-foot buffer. Within 2 weeks of the nesting bird survey, all areas surveyed by the biologist must be cleared by the contractor or a supplemental nesting bird survey is required. An approximate 100-foot no-disturbance buffer will be established around any active nest of migratory birds, and an approximate 300-foot no-disturbance buffer will be established around any nesting birds of prey species. The contractor must immediately stop work in the buffer area until the appropriate buffer is established and is prohibited from conducting work within the buffer until the biologist has determined that the nestlings have fledged and are foraging independently. A reduced buffer, or other avoidance strategies, can be established if deemed appropriate by the City and biologist.	Prior to and during construction – Mitigation measures shall be included in all construction documents for implementation during construction.	City of Citrus Heights and Contractor		

Mitigation Measure		Reporting Milestone	Reporting / Responsible Party	VERIFICATION OF COMPLIANCE	
				Initials	Date
BIO-8:	All food-related trash must be disposed of into closed containers and must be removed from the Project area daily. Construction personnel must not feed or otherwise attract wildlife or feral animals to the Project area.	During construction -- Mitigation measures shall be included in all construction documents for implementation during construction.	City of Citrus Heights and Contractor		
BIO-9:	If any wildlife (e.g., amphibians, birds, mammals, reptiles, etc.) are encountered during the course of construction, said wildlife shall be allowed to leave the construction area unharmed.	Prior to and during construction -- Mitigation measures shall be included in all construction documents for implementation during construction	City of Citrus Heights and Contractor		
CULTURAL RESOURCES					

Mitigation Measure		Reporting Milestone	Reporting / Responsible Party	VERIFICATION OF COMPLIANCE	
				Initials	Date
CR-1:	Prior to construction, cultural resource awareness and sensitivity training shall be provided to all construction crew members to ensure that the crew members are aware of the potential for sensitive cultural resources to be present onsite. The awareness and sensitivity training would also include an established protocol for informing the resident engineer of any accidentally discovered cultural resources.	Prior to Construction	City of Citrus Heights and Contractor		
CR-2:	Treatment of Discoveries: If significant historical, paleontological, archaeological, or tribal cultural resources are discovered within the APE, ground disturbing activities shall be suspended 100 feet around the resource(s). The archaeological monitor, a representative of the appropriate Native American Tribe(s) (if discovery is prehistoric), and the City shall confer regarding mitigation of the discovered resource(s). All discovered archaeological resources should be documented by field notation, analysis, photography, and GPS mapping. Work shall not resume in the area until mitigation has been completed, or it has been determined that the archaeological resource(s) is not significant.	During Construction	City of Citrus Heights		
CR-3:	Disposition of Discoveries: If human remains are encountered, State Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. The County Coroner must be notified of the find immediately. If the remains are determined to be prehistoric, the Coroner would notify the Native American Heritage Commission (NAHC), which would determine and notify a Most Likely Descendant (MLD). With the permission of the landowner or his/her authorized representative, the MLD may inspect the site of the discovery. The MLD shall complete the inspection within 48 hours of notification by the NAHC. The MLD may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials.	During Construction	City of Citrus Heights		

Mitigation Measure		Reporting Milestone	Reporting / Responsible Party	VERIFICATION OF COMPLIANCE	
				Initials	Date
CR-4:	In the event that Native American cultural resources are inadvertently discovered during the course of construction, the City shall relinquish ownership of all Native American cultural resources, including sacred items, burial goods, and all archaeological artifacts and non-human remains as part of the required mitigation for impacts to Native American cultural resources. Prior to relinquishment, all discovered archaeological resources should be documented by field notation, photography, and GPS mapping. After consultation with the appropriate Native American Tribe(s), non-destructive analysis may be conducted.	During Construction	City of Citrus Heights		
GEOLOGY AND SOILS					
GEO-1:	The Proposed Project will comply with the City's Stormwater Discharge Control Measures, listed in the City's Municipal Code (Chapter 98. Article V), which will adequately control erosion and effectively prohibit non-stormwater discharges (City of Citrus Heights 2025b). To prevent the substantial soil erosion or the loss of topsoil post-construction, the Project design will comply with the Sacramento Stormwater Quality Partnership's Stormwater Quality Design Manual for the Sacramento Region (SQDM) to adequately control erosion.	Prior to Construction	City of Citrus Heights		
HAZARDS					
HM-1:	Any leaking transformers observed during the course of the project should be considered a potential polychlorinated biphenyl (PCB) hazard. Should leaks from electrical transformers (that will either remain within the construction limits or require removal and/or relocation) be encountered during construction, the transformer fluid should be sampled and analyzed by qualified personnel for detectable levels of PCBs. Should PCBs be detected, the transformer should be removed and disposed of in accordance with Title 22, Division 4.5 of the California Code of Regulations and any other appropriate regulatory agency. Any stained soil encountered below electrical transformers with detectable levels of PCB's should also be handled and disposed of in accordance with Title 22, Division 4.5 of the California Code of Regulations and any other appropriate regulatory agency.	Prior to Construction	City of Citrus Heights		
HM-2:	To avoid impacts from pavement striping during construction it is recommended that removal requirements for yellow striping and pavement marking materials be performed in accordance with Caltrans Standard Special Provision 14-11.07 REMOVE YELLOW TRAFFIC STRIPE AND PAVEMENT MARKING WITH HAZARDOUS WASTE RESIDUE.	Prior to Construction	City of Citrus Heights		

Mitigation Measure		Reporting Milestone	Reporting / Responsible Party	VERIFICATION OF COMPLIANCE	
				Initials	Date
HM-3:	As is the case for any project that proposes excavation, the potential exists for unknown hazardous contamination to be revealed during project construction (such as previously undetected petroleum hydrocarbon contamination from nearby gas stations). Should any previously unknown hazardous waste/material be encountered during construction, the procedures outlined in Caltrans Hazards Procedures for Construction shall be followed.	During Construction	City of Citrus Heights and Contractor		
HM-4:	If the project area changes (due to a change in the project design or staging area), further investigation for potential hazardous waste generators would be required to determine their impact to the revised project limits.	Prior to and During Construction	City of Citrus Heights and Contractor		
HYDROLOGY					
HYD-1:	The proposed Project would require coverage under the NPDES General Construction Permit for Discharges of storm water associated with construction activities (2022 Construction Stormwater General Permit, Order 2022-0057-DWQ). A SWPPP would also be developed and implemented as part of the Construction General Permit. This SWPPP will incorporate all applicable BMPs to ensure that adequate measures are taken during construction to minimize impacts to water quality.	During Construction	City of Citrus Heights and Contractor		
NOISE					
NOI-1:	The Contractor shall follow City of Citrus Heights noise ordinance for construction activities: • Do not exceed 65 dBA at 50 feet from the job site activities from 8 p.m. to 7 a.m. • Use an alternative waiting method instead of a sound signal unless required by safety laws. • Equip an internal combustion engine with the manufacturer-recommended muffler. • Do not operate an internal combustion engine on the job site without the appropriate muffler.	During Construction	City of Citrus Heights and Contractor		
POPULATION AND HOUSING					
PH-1:	Property Compensation: All real property transactions shall comply with the property acquisition and relocation standards of the State of California. Property owners shall be compensated in accordance with fair market values based on appraisals.	Prior to Construction	City of Citrus Heights and Contractor		
TRANSPORTATION AND TRAFFIC					
TRA-1:	Temporary impacts to traffic flow as a result of construction activities would be minimized through construction phasing, signage, and a traffic control plan.	Prior to Construction	City of Citrus Heights		

Mitigation Measure		Reporting Milestone	Reporting / Responsible Party	VERIFICATION OF COMPLIANCE	
				Initials	Date
TRIBAL CULTURAL RESOURCES					
CR-1:	Prior to construction, cultural resource awareness and sensitivity training shall be provided to all construction crew members to ensure that the crew members are aware of the potential for sensitive cultural resources to be present onsite. The awareness and sensitivity training would also include an established protocol for informing the resident engineer of any accidentally discovered cultural resources.	Prior to Construction	City of Citrus Heights and Contractor		
CR-2:	Treatment of Discoveries: If significant historical, paleontological, archaeological, or tribal cultural resources are discovered within the APE, ground disturbing activities shall be suspended 100 feet around the resource(s). The archaeological monitor, a representative of the appropriate Native American Tribe(s) (if discovery is prehistoric), and the City shall confer regarding mitigation of the discovered resource(s). All discovered archaeological resources should be documented by field notation, analysis, photography, and GPS mapping. Work shall not resume in the area until mitigation has been completed, or it has been determined that the archaeological resource(s) is not significant.	During Construction	City of Citrus Heights		
CR-3:	Disposition of Discoveries: If human remains are encountered, State Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. The County Coroner must be notified of the find immediately. If the remains are determined to be prehistoric, the Coroner would notify the Native American Heritage Commission (NAHC), which would determine and notify a Most Likely Descendant (MLD). With the permission of the landowner or his/her authorized representative, the MLD may inspect the site of the discovery. The MLD shall complete the inspection within 48 hours of notification by the NAHC. The MLD may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials.	During Construction	City of Citrus Heights		

Mitigation Measure		Reporting Milestone	Reporting / Responsible Party	VERIFICATION OF COMPLIANCE	
				Initials	Date
CR-4:	In the event that Native American cultural resources are inadvertently discovered during the course of construction, the City shall relinquish ownership of all Native American cultural resources, including sacred items, burial goods, and all archaeological artifacts and non-human remains as part of the required mitigation for impacts to Native American cultural resources. Prior to relinquishment, all discovered archaeological resources should be documented by field notation, photography, and GPS mapping. After consultation with the appropriate Native American Tribe(s), non-destructive analysis may be conducted.	During Construction	City of Citrus Heights		

APPENDIX B: Road Construction Emissions Model

The maximum pounds per day in row 11 is summed over overlapping phases, but the maximum tons per phase in row 34 is not summed over overlapping phases.

Road Construction Emissions Model, Version 9.0.0

Daily Emission Estimates for -> Citrus Heights GAP Alt 2

Project Phases (Pounds)	ROG (lbs/day)	CO (lbs/day)	NOx (lbs/day)	Total PM10 (lbs/day)	Exhaust PM10 (lbs/day)	Fugitive Dust PM10 (lbs/day)	Total PM2.5 (lbs/day)	Exhaust PM2.5 (lbs/day)	Fugitive Dust PM2.5 (lbs/day)	SOx (lbs/day)	CO2 (lbs/day)	CH4 (lbs/day)	N2O (lbs/day)	CO2e (lbs/day)
Grubbing/Land Clearing	0.67	14.18	2.87	10.18	0.18	10.00	2.22	0.14	2.08	0.02	2,247.83	0.59	0.04	2,275.62
Grading/Excavation	2.97	59.11	8.05	10.48	0.48	10.00	2.46	0.38	2.08	0.10	9,980.05	2.87	0.17	10,101.36
Drainage/Utilities/Sub-Grade	1.66	34.94	5.09	10.32	0.32	10.00	2.34	0.26	2.08	0.06	5,714.91	1.18	0.08	5,766.84
Paving	0.87	20.36	4.72	0.26	0.26	0.00	0.19	0.19	0.00	0.04	3,630.02	0.75	0.17	3,699.41
Maximum (pounds/day)	4.63	94.05	13.14	20.81	0.81	20.00	4.80	0.64	4.16	0.16	15,694.96	4.05	0.24	15,868.19
Total (tons/construction project)	0.13	2.74	0.41	0.59	0.02	0.56	0.14	0.02	0.12	0.00	460.34	0.12	0.01	465.84

Notes:

Project Start Year ->	2027
Project Length (months) ->	6
Total Project Area (acres) ->	11
Maximum Area Disturbed/Day (acres) ->	1
Water Truck Used? ->	Yes

	Total Material Imported/Exported Volume (yd^3/day)		Daily VMT (miles/day)			
Phase	Soil	Asphalt	Soil Hauling	Asphalt Hauling	Worker Commute	Water Truck
Grubbing/Land Clearing	0	0	0	0	320	40
Grading/Excavation	11	35	30	60	920	40
Drainage/Utilities/Sub-Grade	0	0	0	0	680	40
Paving	0	134	0	210	520	40

PM10 and PM2.5 estimates assume 50% control of fugitive dust from watering and associated dust control measures if a minimum number of water trucks are specified.

Total PM10 emissions shown in column F are the sum of exhaust and fugitive dust emissions shown in columns G and H. Total PM2.5 emissions shown in Column I are the sum of exhaust and fugitive dust emissions shown in columns J and K.

CO2e emissions are estimated by multiplying mass emissions for each GHG by its global warming potential (GWP), 1 , 25 and 298 for CO2, CH4 and N2O, respectively. Total CO2e is then estimated by summing CO2e estimates over all GHGs.

Total Emission Estimates by Phase for -> Citrus Heights GAP Alt 2

Project Phases (Tons for all except CO2e. Metric tonnes for CO2e)	ROG (tons/phase)	CO (tons/phase)	NOx (tons/phase)	Total PM10 (tons/phase)	Exhaust PM10 (tons/phase)	Fugitive Dust PM10 (tons/phase)	Total PM2.5 (tons/phase)	Exhaust PM2.5 (tons/phase)	Fugitive Dust PM2.5 (tons/phase)	SOx (tons/phase)	CO2 (tons/phase)	CH4 (tons/phase)	N2O (tons/phase)	CO2e (MT/phase)
Grubbing/Land Clearing	0.00	0.09	0.02	0.07	0.00	0.07	0.01	0.00	0.01	0.00	14.84	0.00	0.00	13.63
Grading/Excavation	0.09	1.76	0.24	0.31	0.01	0.30	0.07	0.01	0.06	0.00	296.41	0.09	0.00	272.17
Drainage/Utilities/Sub-Grade	0.03	0.69	0.10	0.20	0.01	0.20	0.05	0.01	0.04	0.00	113.16	0.02	0.00	103.59
Paving	0.01	0.20	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	35.94	0.01	0.00	33.23
Maximum (tons/phase)	0.09	1.76	0.24	0.31	0.01	0.30	0.07	0.01	0.06	0.00	296.41	0.09	0.00	272.17
Total (tons/construction project)	0.13	2.74	0.41	0.59	0.02	0.56	0.14	0.02	0.12	0.00	460.34	0.12	0.01	422.60

PM10 and PM2.5 estimates assume 50% control of fugitive dust from watering and associated dust control measures if a minimum number of water trucks are specified.

Total PM10 emissions shown in column F are the sum of exhaust and fugitive dust emissions shown in columns G and H. Total PM2.5 emissions shown in Column I are the sum of exhaust and fugitive dust emissions shown in columns J and K.

CO2e emissions are estimated by multiplying mass emissions for each GHG by its global warming potential (GWP), 1 , 25 and 298 for CO2, CH4 and N2O, respectively. Total CO2e is then estimated by summing CO2e estimates over all GHGs.

The CO2e emissions are reported as metric tons per phase.

APPENDIX C: Natural Environment Study Minimal Impacts

Natural Environment Study (Minimal Impacts)

Citrus Heights Gateway Activation Project

City of Citrus Heights, Sacramento County, California

January 2026

STATE OF CALIFORNIA
Department of Transportation, District 3
City of Citrus Heights

Prepared By: _____ Date: _____
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For individuals with sensory disabilities, this document can be made available in Braille, in large print, on audiocassette, or on computer disk. To obtain a copy in one of these alternate formats, please call or write to Department of Transportation, Dennis Keaton, Caltrans District 3 Public Information Director, 703 B Street, Marysville, CA 95901; (916) 825-5252 (Voice) or use the California Relay Service (800) 735-2929 (TTY to Voice), (800) 735-2922 (Voice to TTY) or 711.

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1. Introduction

The City of Citrus Heights (City) proposes to construct multimodal and roadway improvements along Old Auburn Road and Wachtel Way in northern Sacramento County as part of the Citrus Heights Gateway Activation Project (Project). The Project is intended to provide Complete Street elements to serve bicyclists, pedestrians, and motorists as well as intersection improvements to facilitate traffic circulation along these roads.

The Project is located in the City of Citrus Heights, within the Folsom United States Geological Survey (USGS) 7.5-minute quadrangle, in Sacramento County, specifically in Sections 17, 18, 19, and 20, Township 10 North, Range 7 East (Figure 1. Project Vicinity and Figure 2. Project Location). This Natural Environment Study - Minimal Impacts (NES(MI)) was prepared for the proposed Project and describes the existing biological environment within the Project area of the proposed Project.

1.1 Project History

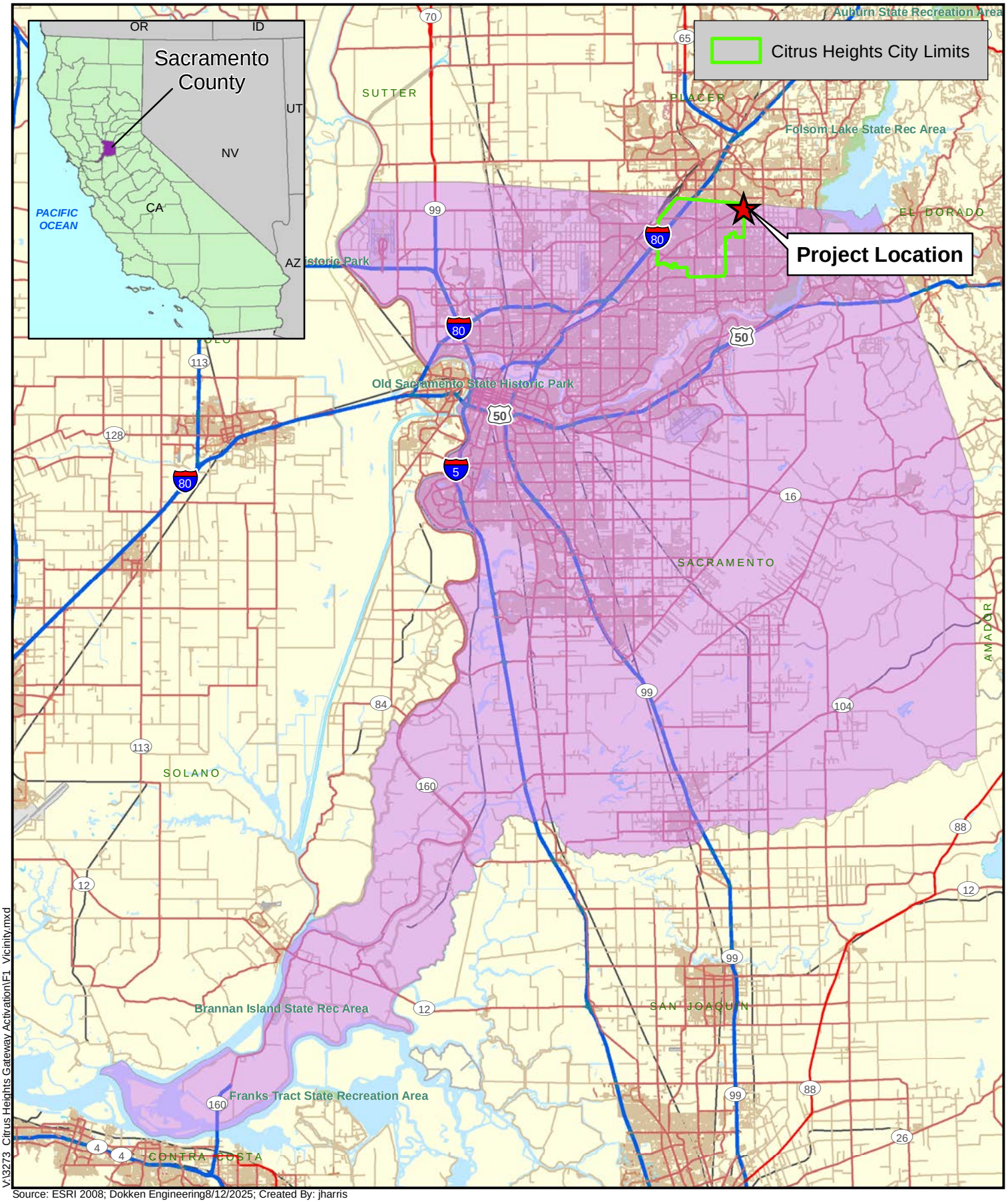
1.1.1 Project Purpose and Need

Purpose

The purpose of the Project is to address traffic congestion and strengthen connectivity along Old Auburn Road and Wachtel Way by improving intersection operations, linking to existing bicycle and pedestrian infrastructure, and establishing future connections to planned facilities in nearby jurisdictions, such as the City of Roseville and Sacramento County. The Project aims to improve vehicular traffic circulation, enhance safety, accessibility, and mobility for all users by incorporating complete street elements that promote convenient and comfortable travel to key destinations, including neighborhoods, parks, open spaces, and regional trail systems. Planned improvements will improve traffic circulation and close gaps in pedestrian and bicycle networks along both roads by installing roundabouts, upgrading intersections, adding pedestrian crossings, enhancing streetscapes, and creating connections to current and future local and regional multi-use paths.

Need

In the City’s northeast residential area, ongoing efforts have focused on expanding the bicycle and pedestrian network through new trails, bike lanes, and safer roadway crossings. Aligned with the City’s Bicycle and Pedestrian Master Plans, the Project aims to enhance accessibility and safety along key corridors and improve the broader transportation system. Currently, the area has gaps in the regional trail network and limited links between existing and planned bikeways. This Project will address these deficiencies by closing infrastructure gaps, improving mobility and safety, and encouraging non-motorized travel for both commuters and recreational users.



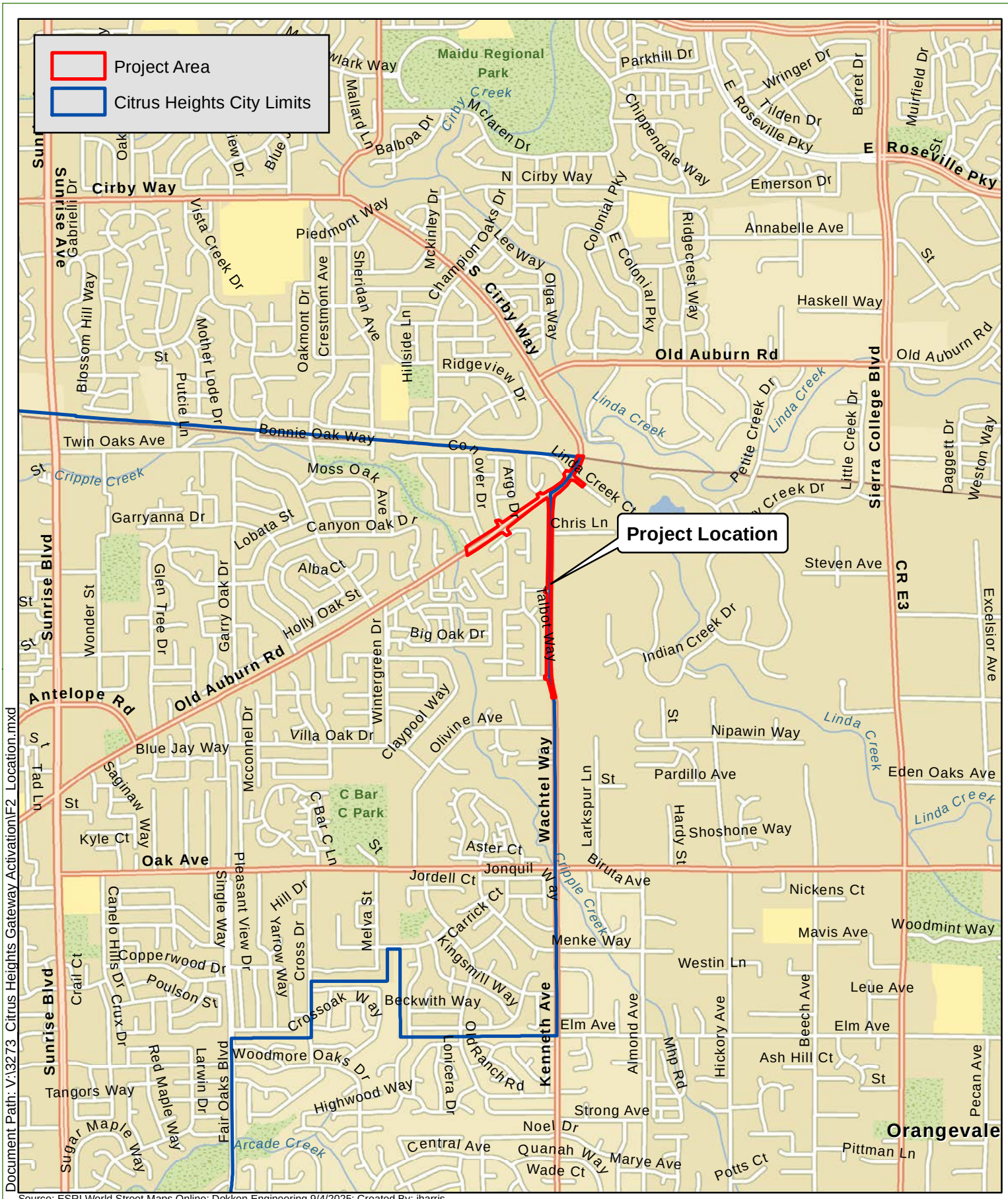
V:\3273_Citrus Heights Gateway Activation\F1_Vicinity.mxd

Source: ESRI 2008; Dokken Engineering8/12/2025; Created By: jharris

0 5 10 15 Miles

FIGURE 1
Project Vicinity

Gateway Activation Project
Citrus Heights, Sacramento County, California



Source: ESRI World Street Maps Online; Dokken Engineering 9/4/2025; Created By: jharris

Document Path: V:\3273 Citrus Heights Gateway Activation\F2 Location.mxd

0 0.25 0.5 0.75 1 Miles

FIGURE 2
Project Location

Citrus Heights Gateway Activation Project
Citrus Heights, Sacramento County, California

1.2 Project Description

The City proposes to construct multimodal and roadway improvements along Old Auburn Road and Wachtel Way in Citrus Heights. The purpose of the Project is to address traffic congestion along Old Auburn Road, enhance connectivity to existing bicycle and pedestrian infrastructure, and provide future linkages to planned facilities in neighboring jurisdictions, including the City of Roseville and Sacramento County.

The proposed improvements include intersection enhancements such as roundabouts, as well as the installation of pedestrian and bicycle facilities such as multi-use pathways, Class IV bikeways, crosswalks, sidewalks, and Americans with Disabilities Act (ADA)-compliant curb ramps. The Project includes amending the Bikeway Master Plan, Pedestrian Master Plan, and the General Plan Bikeway Map to incorporate these new bicycle and pedestrian segments. These improvements are needed to address traffic congestion along Old Auburn Road as well as current deficiencies in pedestrian and bicycle access along Old Auburn Road and Wachtel Way.

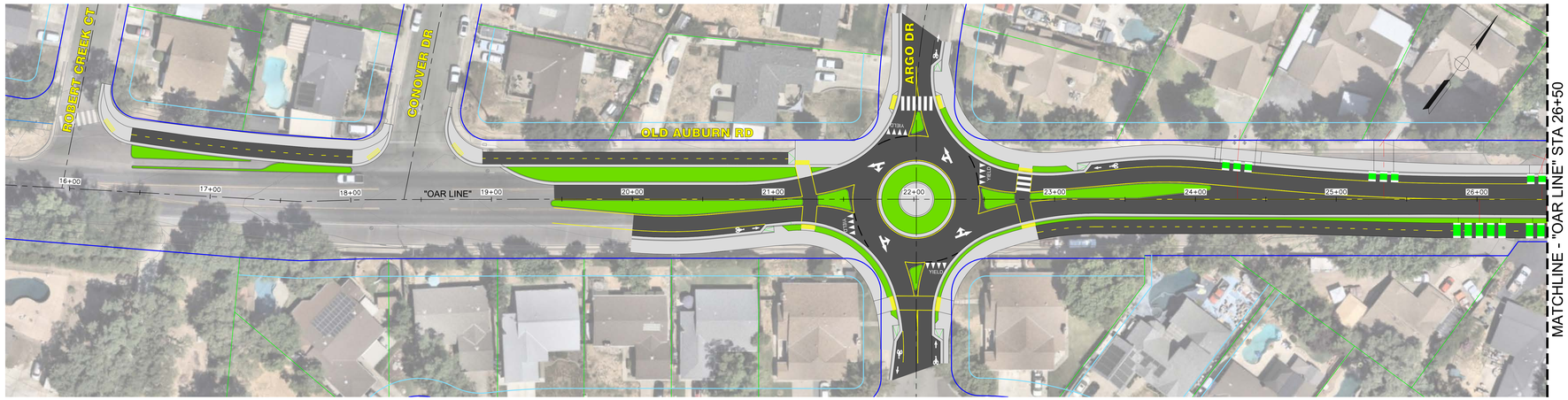
The proposed Project includes bicycle and pedestrian improvements along Wachtel Way, extending from the Arcade-Cripple Creek Trail just south of Pitalo Way to Old Auburn Road. Along Old Auburn Road, improvements will extend from Robert Creek Court to the boundary line with the City of Roseville. The Project also includes intersection improvements at Argo Drive and Old Auburn Road, focusing on the addition of a pedestrian crossing and enhanced safety features. Additionally, safety and traffic flow improvements have been evaluated at three closely spaced intersections—Oakwood Hills Circle, Wachtel Way, and Oakwood Hills Circle/Linda Creek Court—addressing issues such as intersection interactions and the difficulty of making a left turn from Oakwood Hills Circle onto Old Auburn Road.

The Project consists of constructing roundabouts at the Argo Drive, Wachtel Way, and Oakwood Hills Circle/Linda Creek Court intersections. (Figure 3. Project Features). The proposed improvements would involve excavation, limited to areas necessary for constructing a roundabout, street lighting, a retaining wall, and sidewalks, ADA-compliant curb ramps, and bicycle facilities. Partial road closures are anticipated during construction; however, access to all residences will be maintained at all times. The Project will require permanent right-of-way (ROW) acquisitions where existing ROW is insufficient to accommodate new facilities. Temporary construction easements will be required to support construction activities. Utility relocations will be necessary where existing infrastructure conflicts with the proposed improvements. Construction is scheduled to begin in the summer of 2027 and is expected to take approximately six months to complete.

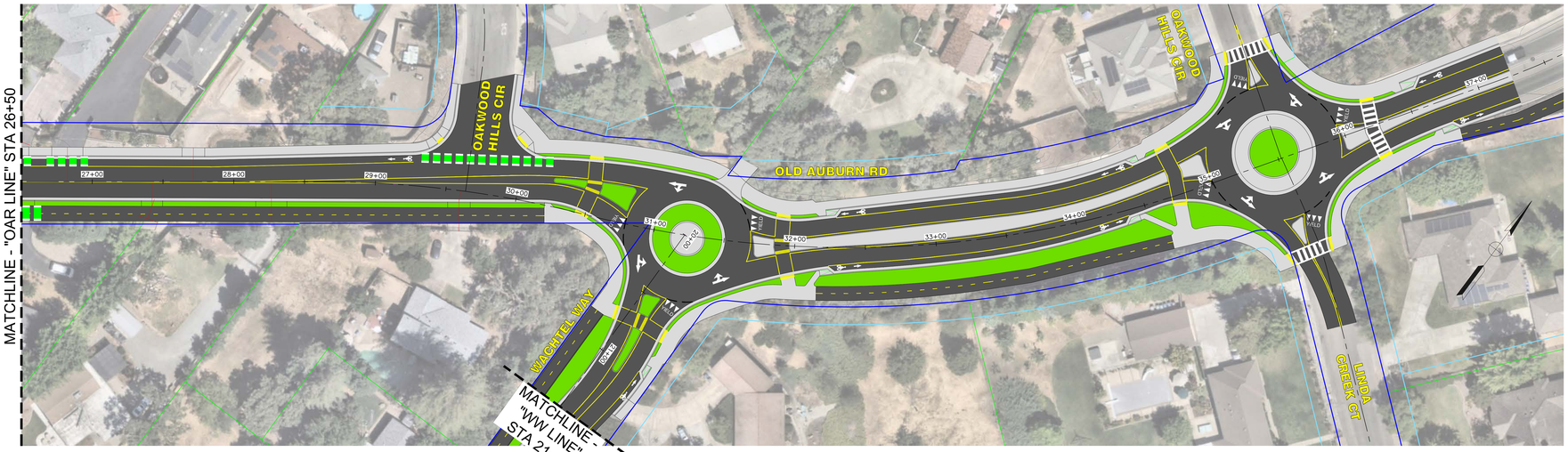
The Project is locally funded through the City, and as such it requires compliance with the California Environmental Quality Act (CEQA). The lead agency for the CEQA compliance is the City.

Figure 3. Project Features

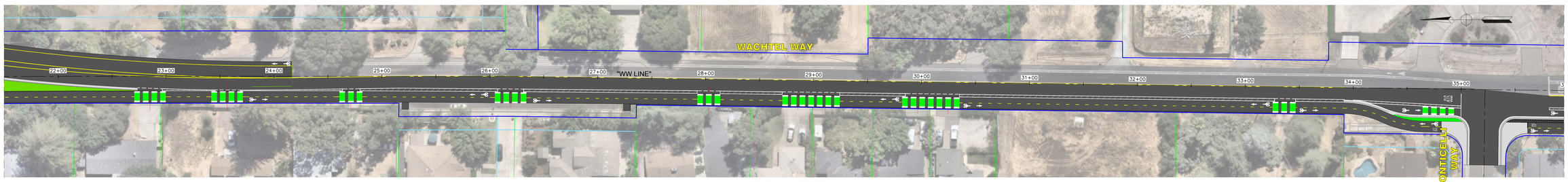
Citrus Heights Gateway Activation Project
Citrus Heights, Sacramento County, Califronia



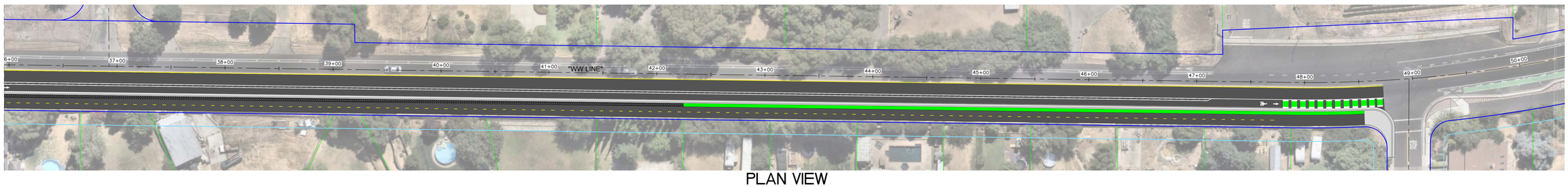
PLAN VIEW
SCALE 1" = 30'



PLAN VIEW
SCALE 1" = 30'



PLAN VIEW
SCALE 1" = 30'



PLAN VIEW
SCALE 1" = 30'

LEGEND:

PROPOSED

- ASPHALT
- SIDEWALK
- LANDSCAPING
- STRIPING
- PAVEMENT MARKINGS
- BIKE LANE
- BIKE RAMP
- PATHWAY
- CURB RAMP

EXISTING

- RIGHT OF WAY
- CENTERLINE
- LOT LINES
- EASEMENTS

0 30 60 Feet

2. Study Methods

2.1 Regulatory Requirements

This section describes the general Federal, State, and local plans, policies, and laws that are relevant to biological resources within the Project area. Applicable approvals that could be required before the construction of the Project are provided in Chapter 5.

Federal Regulations

National Environmental Policy Act

The National Environmental Policy Act (NEPA) provides an interdisciplinary framework for environmental planning by Federal agencies and contains action-forcing procedures to ensure that Federal agency decision makers take environmental factors into account. NEPA applies when a Federal agency proposes an action, grants a permit, or agrees to fund or otherwise authorize any other entity to undertake an action that could possibly affect environmental resources. The City may pursue federal funding for the Project; therefore, environmental clearance under the NEPA, including compliance with the California Department of Transportation (Caltrans) District 3 standards, may be required.

Executive Order 13112: Prevention and Control of Invasive Species

Executive Order (EO) 13112 (signed February 3, 1999) directs all Federal agencies to prevent and control the introduction of invasive species in a cost-effective and environmentally sound manner. The EO and directives from the Federal Highway Administration require consideration of invasive species in NEPA analyses, including their identification and distribution, their potential impacts, and measures to prevent or eradicate them.

Executive Order 13186: Migratory Bird Treaty Act

EO 13186 (signed January 10, 2001) directs each Federal agency taking actions that could adversely affect migratory bird populations to work with United States Fish and Wildlife Service (USFWS) to develop a Memorandum of Understanding that will promote the conservation of migratory bird populations. Protocols developed under the Memorandum of Understanding will include the following agency responsibilities:

- avoid and minimize, to the maximum extent practicable, adverse impacts on migratory bird resources when conducting agency actions;
- restore and enhance habitat of migratory birds, as practicable; and
- prevent or abate the pollution or detrimental alteration of the environment for the benefit of migratory birds, as practicable.

The EO is designed to assist Federal agencies in their efforts to comply with the Migratory Bird Treaty Act (MBTA) (50 Code of Federal Regulations [CFR] 10 and 21) and does not constitute any legal authorization to take migratory birds. Take is defined under the MBTA as "the action of or attempt to pursue, hunt, shoot, capture, collect, or kill" (50 CFR 10.12) and includes intentional take (i.e., take that is the purpose of the activity in question) and unintentional take (i.e., take that results from, but is not the purpose of, the activity in question).

Clean Water Act

The Clean Water Act (CWA) was enacted as an amendment to the Federal Water Pollutant Control Act of 1972, which outlined the basic structure for regulating discharges of pollutants to Waters of the United States (WOTUS). The CWA is the primary federal law protecting the quality of the nation's surface waters, including lakes, rivers, and coastal wetlands. The CWA empowers the United States Environmental Protection Agency (EPA) to set national water quality standards and effluent limitations and includes programs addressing point-source and non-point-source pollution for all WOTUS.

On May 25, 2023, the U.S. Supreme Court issued its ruling on the Sackett v. EPA case redefining WOTUS. The Court's decision holds that "only those relatively permanent, standing or continuously flowing bodies of water forming geographic features that are described in ordinary parlance as streams, oceans, river, and lakes" are considered WOTUS. The ruling limits the scope of WOTUS to those "wetlands with a continuous surface connection to bodies that are WOTUS in their own right."

Section 401

The Regional Water Quality Control Board (RWQCB) has jurisdiction under Section 401 of the CWA and regulates any activity which may result in a discharge to surface waters. Typically, the areas subject to jurisdiction of the RWQCB coincide with WOTUS, including any wetlands. The RWQCB also asserts authority over "waters of the State" under waste discharge requirements pursuant to the Porter-Cologne Water Quality Control Act.

The Project area was evaluated for the presence of jurisdictional WOTUS and Waters of the State. No such features were identified within the Project footprint. As such, permitting under Section 401of the CWA is not warranted.

Section 402

The State Water Resources Control Board (SWRCB) regulates construction projects that involve ground disturbance of one acre or greater. These projects must obtain coverage under the SWRCB General Permit for Storm Water Discharges Associated with Construction Activity. Operators of regulated construction sites are required to develop a Stormwater Pollution Prevention Plan; to implement sediment, erosion, and pollution prevention control measures; and to obtain coverage under the General Construction Permit.

Because the Project will result in ground disturbance of one acre or more, the permittee must obtain coverage under the SWRCB's Construction General Permit and prepare a Stormwater Pollution Prevention Plan.

Section 404

The U.S. Army Corps of Engineers (USACE) regulates discharges of dredged or fill material into WOTUS. These waters include wetlands and non-wetland bodies of water that meet specific criteria, including a direct or indirect connection to interstate commerce. The USACE regulatory jurisdiction pursuant to Section 404 of the CWA is founded on a connection, or nexus, between the water body in question and interstate commerce. This connection may be direct (through a tributary system linking a stream channel with traditional navigable waters used in interstate or foreign commerce) or may be indirect (through a nexus identified in USACE regulations).

Nationwide Permits are a set of streamlined permits issued by the USACE under Section 404 of the CWA, designed to authorize specific activities that have minimal environmental impact on WOTUS. These permits cover a range of activities, such as construction, dredging, and filling, and are subject to general conditions to ensure they do not significantly degrade aquatic resources.

The Project area was evaluated for the presence of jurisdictional WOTUS and Waters of the State. No such features were identified within the Project footprint. As such, permitting under Section 404 of the CWA is not warranted

State Regulations

California Environmental Quality Act

CEQA (California Public Resource Code [PRC] § 21000 et seq) is a statute that requires state and local agencies to identify the significant environmental impacts of their actions and to avoid or mitigate those impacts, if feasible. CEQA applies to certain activities of state and local public agencies. A public agency must comply with CEQA when it undertakes an activity defined by CEQA as a "project." A project is an activity undertaken by a public agency or a private activity which must receive some discretionary approval (meaning that the agency has the authority to deny the requested permit or approval) from a government agency which may cause either a direct physical change in the environment or a reasonably foreseeable indirect change in the environment. The City is the CEQA lead agency for the proposed Project.

Section 1602: Streambed Alteration Agreement

Under California Fish and Game Code (CFG) Section 1602, public agencies are required to notify California Department of Fish and Wildlife (CDFW) before undertaking any project that will divert, obstruct, or change the natural flow, bed, channel, or bank of any river, stream, or lake. Preliminary notification and project review generally occur during the environmental process. When an existing fish or wildlife resource may be substantially adversely affected, CDFW is required to propose reasonable project

changes to protect the resources. These modifications are formalized in a Streambed Alteration Agreement that becomes part of the plans, specifications, and bid documents for the project. As the Project will not divert, obstruct or change the natural flow, bed, channel, or bank of any river, stream or lake, a Streambed Alteration Agreement will not be required.

Porter Cologne Water Quality Control Act

California's Porter-Cologne Act, enacted in 1969, provides the legal basis for water quality regulation within California. The act requires a "Report of Waste Discharge" for any discharge of waste (liquid, solid, or gaseous) to land or surface waters that may impair beneficial uses for surface and/or groundwater of the State. It predates the CWA and regulates discharges to waters of the state. Waters of the state include more than just WOTUS, such as groundwater and surface waters not considered WOTUS. Additionally, it prohibits discharges of "waste" as defined, and this definition is broader than the CWA definition of "pollutant". Discharges under the Porter-Cologne Act are permitted by Waste Discharge Requirements and may be required even when the discharge is already permitted or exempt under the CWA.

The RWQCBs are responsible for establishing the water quality standards (objectives and beneficial uses) required by the CWA and regulating discharges to ensure compliance with the water quality standards. Details regarding water quality standards in an Action Area are contained in the applicable RWQCB Basin Plan. In California, RWQCBs designate beneficial uses for all water body segments in their jurisdictions, and then set criteria necessary to protect these uses. Consequently, the water quality standards developed for particular water segments are based on the designated use and vary depending on such use. In addition, the SWRCB identifies waters failing to meet standards for specific pollutants, which are then state-listed in accordance with CWA Section 303(d). If a state determines that waters are impaired, and the standards cannot be met through point source or non-source point controls (National Pollutant Discharge Elimination System [NPDES] permits or Waste Discharge Requirements), the CWA requires the establishment of total maximum daily loads (TMDLs) which specify allowable pollutant loads from all sources (point, non-point, and natural) for a given watershed.

As there are no Waters of the State within the Project area, the Project will not require a Report of Waste Discharge.

Regional Water Quality Control Boards

The SWRCB adjudicates water rights, sets water pollution control policy, and issues water board orders on matters of statewide application, and oversees water quality functions throughout the state by approving Basin Plans, TMDLs, and NPDES permits. RWQCBs are responsible for protecting beneficial uses of water resources within their regional jurisdiction using planning, permitting, and enforcement authorities to meet this responsibility.

Section 3503 and 3503.5: Birds and Birds of Prey

CFG Code Section 3503 prohibits the destruction of bird nests and Section 3503.5 prohibits the killing of birds of prey and destruction of their nests. Trees and shrubs are present in and adjacent to the study area and could contain nesting sites.

Section 3513: Migratory Birds

CFG Code Section 3513 prohibits the take or possession of any migratory non-game bird as designated in the MBTA or any part of such migratory non-game bird except as provided by rules and regulations adopted by the Secretary of the Interior under provisions of the MBTA.

Local Regulations

City of Citrus Heights Municipal Code – Tree Preservation and Protection Regulations

The City has adopted Tree Preservation and Protection Regulations to conserve its urban forest, with a particular focus on native oak trees. These regulations require permits for the removal or substantial pruning of protected trees and are intended to balance development with long-term environmental stewardship (City of Citrus Heights 2025). Pursuant to thew City's Municipal Code Section 106.39.020(c)(5), street widening projects are exempt from these requirements; therefore, the Project does not require tree removal permits or off-site mitigation for the removal of native oak trees.

2.2 Studies Required

2.2.1 Literature Search

Prior to field work, literature research was conducted through the USFWS Information for Planning and Consultation (IPaC) official species list generator (Appendix A: USFWS Species List), the CDFW California Natural Diversity Database (CNDDB) (Appendix B: CDFW CNDDB Species List), and the California Native Plant Society (CNPS) Electronic Inventory of Rare and Endangered Plants (Appendix C: CNPS Species List), to identify habitats and special status species having the potential to occur within the Biological Study Area (BSA).

2.2.2 Field Reviews

The BSA was defined as the area of direct effects from construction activities, including potential staging/access areas with an approximate 50-foot buffer to account for adjacent biological resources that may be affected by the Project. A field assessment was completed within the BSA to identify and map vegetation communities and identify if habitat for special status species was present.

2.2.3 Survey Methods

Biological surveys were conducted within the BSA on April 24, 2025. Survey methods included walking meandering transects, observing vegetation communities, compiling notes on observed flora and fauna, and assessing the potential for existing habitat to support sensitive plants and wildlife. All plant and wildlife observations were recorded and are discussed in Chapter 3.

2.3 Personnel and Survey Dates

On April 24, 2025, Dokken biologists Jeff Harris and Katie Jacobson conducted a general biological survey to document biological resources within the BSA. Surveys were performed to document existing biological conditions within the BSA and to assess the potential presence of special-status species and sensitive habitats.

2.4 Agency Coordination and Professional Contacts

United States Fish and Wildlife Service

On January 23, 2026, an official species list was obtained from USFWS of federally listed species that could occur in the vicinity of the Project (Appendix A).

California Department of Fish and Wildlife

On January 23, 2026, a four-quadrangle list of species with potential to occur in the Project vicinity was obtained from CDFW's CNDDB (Appendix B).

California Native Plant Society

On January 23, 2026, a four-quadrangle list of plant species with potential to occur in the Project vicinity was obtained from the CNPS Inventory of Rare and Endangered Plants of California (Appendix C).

2.5 Limitations That May Influence Results

The collection of biological field data is normally subject to environmental factors that cannot be controlled or reliably predicted. Consequently, the interpretation of field data must be conservative and consider the uncertainties and limitations imposed by the environment. Biological surveys were conducted in April, which is within the blooming period for most special status plant species. No limitations were present that could influence the results of this document. All surveys were conducted during appropriate weather and temperature conditions.

3. Results: Environmental Setting

3.1 Description of the Existing Physical and Biological Conditions

3.1.1 Study Area

The Project area, defined as the area of direct impact, is approximately 11.36 acres. Prior to field surveys, the BSA was defined as the Project area, plus an approximate 50-foot buffer to account for adjacent biological resources. The BSA was delineated to include the existing roadway footprint along Old Auburn Road and Wachtel Way. The BSA extends from the northern City limit at the northern terminus of the Project, southward along Wachtel Way to Pitalo Way, terminating just before the Arcade-Cripple Creek Trail. The eastern and western boundary of the BSA extends along Old Auburn Road from the City line to Robert Creek Court, respectively, ending just before Cripple Creek. The BSA encompasses all areas where direct and indirect impacts from the proposed Project may occur, including areas subject to vegetation removal, excavation, grading, and staging.

From east to west, the BSA measures approximately 1,900 feet long and measures approximately 60 feet at its widest point. The total area of the BSA is 25.47 acres.

3.1.2 Physical Conditions

Regionally, the BSA is located in the northeastern portion of the City of Citrus Heights, California, along the north-central extent of Sacramento County. The BSA lies within the Sacramento Valley Subregion of the Central Western California Floristic Province (Jepson 2025).

Climate

The City experiences Mediterranean conditions including warm, dry summers and cool, wet winters. The average annual high temperature is approximately 80 degrees Fahrenheit (°F), and the average annual lows reach approximately 52°F, with up to 23 inches of precipitation annually (Weather Spark 2025).

Topography & Drainage Patterns

The BSA ranges between 185 to 215 feet in elevation. The surrounding landscape is entirely developed with residential homes and small patches of annual grasslands between parcels. There are no natural drainage courses within the BSA. No aquatic resources were identified during the biological survey.

Soils

Soil composition within the BSA consists of Xerofluvents, frequently flooded (~1.1% of the BSA), Fiddyment-Orangevale-Urban land complex (~48.8% of the BSA), Urban land-Xerarents-Fiddyment complex (~46.2% of the BSA), and Xerofluvents, flooded

(~3.9% of the BSA) (Natural Resource Conservation Service [NRCS] 2025; Appendix D. NRCS Soil Report). The characteristics of these soils are listed below in Table 1.

Table 1. Soil Characteristics within the BSA

Soil Type	Slopes (%)	Drainage	Depth to Water Table	Depth to Restrictive Feature	Hydric (Yes/No)
Xerofluvents, frequently flooded	0 to 2%	Somewhat poorly drained	30 to 57 inches	>80 inches	Yes
Fiddyment-Orangevale-Urban land complex	2 to 8%	Well drained	>80 inches	28 to 40 inches to duripan; 40 to 44 inches to densic material	No
Urban land-Xerarents-Fiddyment complex	0 to 8%	Well drained	>80 inches	>80 inches	No
Xerofluvents, flooded	0 to 2%	Somewhat excessively drained	>80 inches	>80 inches	Yes

3.1.3 Biological Conditions

Land cover within the BSA includes urban/developed, oak woodland, ruderal, and annual grasslands (Figure 4. Vegetation Communities; Appendix E. Representative Photographs). Plant and wildlife species observed within the BSA during the April 2025 biological survey were used to define habitat types based on composition, abundance, and cover (Table 2. Species Observed During Biological Surveys).

Urban/developed

Urban/developed areas comprise the majority of the land cover within the BSA. This land cover type includes portions of various roadways including Old Auburn Road, Wachtel Way, Linda Creek Court, Oakwood Hills Circle, Argo Drive, Conover Drive and Robert Creek Court. These roadways are paved, heavily trafficked and devoid of vegetation. Also included in this land cover type are residential homes and associated landscaping, including planted ornamental vegetation and lawns. Ornamental vegetation observed within urban/developed areas during the biological survey includes

Biological Study Area (25.47 acres)

Citrus Heights City Limits

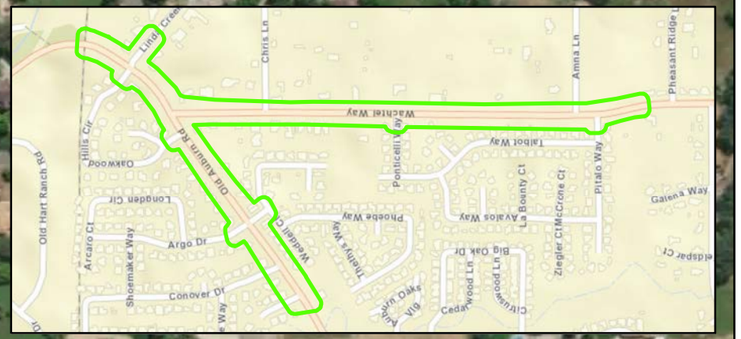
Vegetation Communities

Annual grassland (0.68 acres)

Oak woodland (0.76 acres)

Ruderal (0.40 acres)

Urban/developed (23.63 acres)



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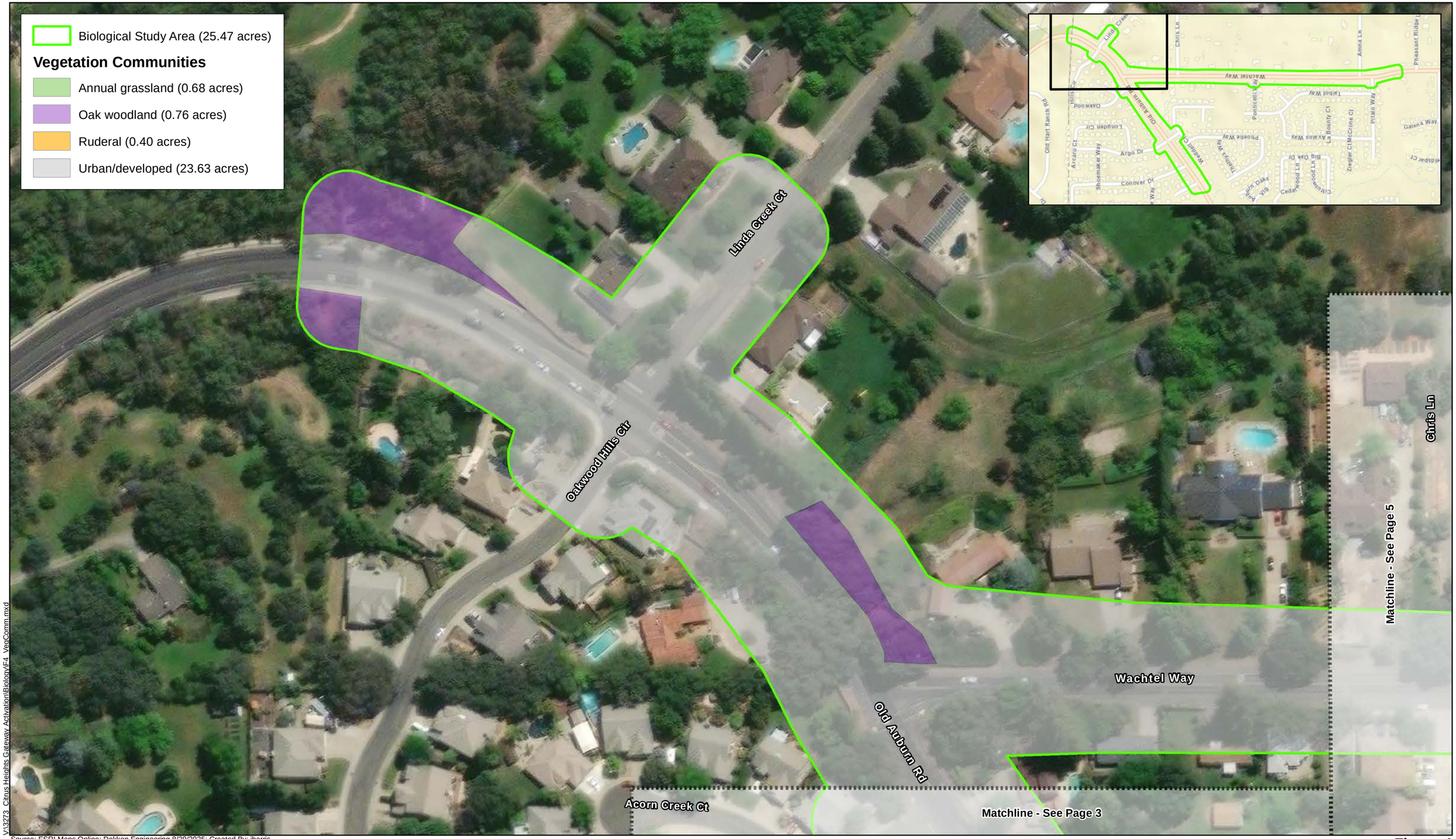
Source: ESRI Maps Online; Dokken Engineering 9/4/2025; Created By: jharris

1 inch = 300 feet

0 150 300 450 600 Feet

Figure 4
Vegetation Communities

Cirtus Heights Gateway Activation Project
Cirtus Heights, Sacramento County, California



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Source: ESRI Maps Online; Dokken Engineering 8/20/2025; Created By: jharris

1 inch = 100 feet

0 50 100 150 200 Feet

Figure 4
Vegetation Communities
Page 2 of 6
Cirtus Heights Gateway Activation Project
Cirtus Heights, Sacramento County, California

Biological Study Area (25.47 acres)

Vegetation Communities

- Annual grassland (0.68 acres)
- Oak woodland (0.76 acres)
- Ruderal (0.40 acres)
- Urban/developed (23.63 acres)



Source: ESRI Maps Online; Dokken Engineering 8/20/2025; Created By: jharris

1 inch = 100 feet

0 50 100 150 200 Feet

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Figure 4
Vegetation Communities

Cirtus Heights Gateway Activation Project
Cirtus Heights, Sacramento County, California

Biological Study Area (25.47 acres)

Vegetation Communities

- Annual grassland (0.68 acres)
- Oak woodland (0.76 acres)
- Ruderal (0.40 acres)
- Urban/developed (23.63 acres)

Matchline - See Page 3

Argo Dr
Weddell Ct
Old Auburn Rd
Tiethys Way
Phoebe Way
Conover Dr
Robert Creek Ct
Newbridge Way



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Source: ESRI Maps Online; Dokken Engineering 8/20/2025; Created By: jharris

1 inch = 100 feet

0 50 100 150 200 Feet

Figure 4
Vegetation Communities

Cirtus Heights Gateway Activation Project
Cirtus Heights, Sacramento County, California

Biological Study Area (25.47 acres)

Vegetation Communities

- Annual grassland (0.68 acres)
- Oak woodland (0.76 acres)
- Ruderal (0.40 acres)
- Urban/developed (23.63 acres)



Matchline - See Page 2

Chris

Wachtel Way

Matchline - See Page 6

Matchline - See Page 3

Talbot Way

Silver Rock Ct

Ponticelli Way

Talbot Way

Bannock Ct

Avalos Way

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Source: ESRI Maps Online; Dokken Engineering 8/20/2025; Created By: jharris

1 inch = 100 feet

0 50 100 150 200 Feet

Figure 4
Vegetation Communities
Page 5 of 6
Cirtus Heights Gateway Activation Project
Cirtus Heights, Sacramento County, California

Biological Study Area (25.47 acres)

Vegetation Communities

- Annual grassland (0.68 acres)
- Oak woodland (0.76 acres)
- Ruderal (0.40 acres)
- Urban/developed (23.63 acres)



Matchline - See Page 5

Wachtel Way

Talbot Way

Bannock Ct

Pitalo Way

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Source: ESRI Maps Online; Dokken Engineering 8/20/2025; Created By: jharris

1 inch = 100 feet

0 50 100 150 200 Feet

Figure 4
Vegetation Communities

Cirtus Heights Gateway Activation Project
Cirtus Heights, Sacramento County, California

crape myrtle (*Lagerstroemia indica*), Japanese cheesewood (*Pittosporum tobira*), Japanese privet (*Ligustrum japonicum*), sweetgum (*Liquidambar styraciflua*), and oriental arborvitae (*Platycladus orientalis*). Additionally, this land cover includes isolated oak trees (*Quercus sp.*), remnants of the oak woodlands that historically covered the area before extensive residential development in the City. Private residential homes are present along both sides of Old Auburn Road and Wachtel Way along the entire alignment of the Project. Urban/developed areas encompass approximately 23.63 acres (94%) of the BSA.

Oak Woodland

Oak woodland habitat is present along the edges of Old Auburn Road in the northeast and southwest corners of the BSA. This habitat type is comprised of a variety of mature oak species including valley oak (*Quercus lobata*), interior live oak (*Quercus wislizeni*), and blue oak (*Quercus douglasii*) trees. The understory is comprised of Himalayan blackberry and various annual grass species including wild oat (*Avena fatua*), ripgut brome (*Bromus diandrus*), and foxtail barley (*Hordeum murinum*). Oak woodlands provide food, habitat and cover for many species of wildlife, including birds and mammals. Within the BSA, oak woodlands comprise approximately 0.76 acres (2%) of the BSA.

Ruderal

Ruderal, primarily composed of non-native weed species, thrives in disturbed areas where natural plant communities have been altered by human or natural disturbances. Within the BSA, it is found in small strips along the edges of the roadway, adjacent to residential parcels. Common ruderal species found in the BSA include white-stemmed filaree (*Erodium brachycarpum*), common bedstraw (*Galium aparine*) ripgut brome, bur chervil (*Anthriscus caucalis*) and common dandelion (*Taraxacum officinale*). Ruderal vegetation covers 0.40 acres (2%) of the BSA.

Annual Grassland

Annual grassland habitats are open grasslands composed primarily of annual plant species. This habitat type is found in five small patches within the BSA, along Wachtel Way. These areas are comprised of various annual grasses and herbaceous species including hairy vetch (*Vicia villosa*), Italian rye grass (*Carduus tenuiflorus*), wild oat, foxtail barley, and Bermuda grass (*Cynodon dactylon*). Annual grassland habitat could provide suitable foraging habitat for a variety of wildlife including birds, mammals and reptiles. Annual grasslands comprise approximately 0.68 acres (3%) of the BSA.

Wildlife

Wildlife observed within the BSA consisted of locally common bird species such as bushtit (*Psaltriparus minimus*), cedar waxwing (*Bombycilla cedrorum*) and mourning dove (*Zenaida macroura*). Bird activity was mainly observed within large trees within the BSA, where suitable nesting and foraging habitat is available for local bird species.

Table 2. Species Observed During Biological Surveys

Common Name	Scientific Name	Native (N) / Non-Native (X)
Plant Species		
Agave	*Agave deserti*	N
Bermuda grass	*Cynodon dactylon*	X [Moderate]
Blue oak	*Quercus douglasii*	N
Bur chervil	*Anthriscus caucalis*	X
Coast redwood	*Sequoia sempervirens*	N
Common bedstraw	*Galium aparine*	N
Common dandelion	*Taraxacum officinale*	X
Common vetch	*Vicia sativa ssp. nigra*	X
Crape myrtle	*Lagerstroemia indica*	X
Curly dock	*Rumex crispus*	X [Limited]
Cutleaf geranium	*Geranium dissectum*	X [Limited]
Deodar cedar	*Cedrus deodara*	X
Foxtail barley	*Hordeum murinum*	X [Moderate]
Hairy vetch	*Vicia villosa*	X
Heavenly bamboo	*Juglans hindsii*	N
Himalayan blackberry	*Rubus armeniacus*	X [High]
Interior live oak	*Quercus wislizeni*	N
Italian thistle	*Carduus tenuiflorus*	X [Limited]
Japanese cheesewood	*Pittosporum tobira*	X
Japanese privet	*Ligustrum japonicum*	X
Lupine	*Lupinus bicolor*	N
Oriental arborvitae	*Platycladus orientalis*	X
Ripgut brome	*Bromus diandrus*	X [Moderate]
Rose clover	*Trifolium hirtum*	X [Limited]
Soft brome	*Bromus hordeaceus*	X [Limited]
Sweetgum	*Liquidambar styraciflua*	X
Tree of heaven	*Ailanthus altissima*	X [Moderate]
Turkey mullein	*Croton setiger*	N
Valley oak	*Quercus lobata*	N
White stemmed filaree	*Erodium brachycarpum*	X
Wild oat	*Avena fatua*	X [Moderate]
Wild radish	*Raphanus sativus*	X [Limited]
Wildlife Species		
Acorn woodpecker	*Melanerpes formicivorus*	N
Bushtit	*Psaltriparus minimus*	N
Cedar waxwing	*Bombycilla cedrorum*	N
Mourning dove	*Zenaida macroura*	N
Red-shouldered hawk	*Buteo lineatus*	N
Spotted towhee	*Pipilo maculatus*	N

[1] California Invasive Plant Council (Cal-IPC) Rating

3.1.4 Habitat Connectivity

The CDFW Biogeographic Information & Observation System (CDFW 2025a) was reviewed to determine if the BSA is located within an Essential Connectivity Area. The BSA is within an area of Terrestrial Connectivity Rank 1 – Limited Connectivity Opportunity. This ranking includes areas where land use may limit options for providing connectivity (e.g., agriculture, urban) or no connectivity importance has been identified in models.

Old Auburn Road and Wachtel Way are located within developed residential areas and do not serve as effective corridors for terrestrial wildlife movement. The Project involves modifications to existing roadways only, with no conversion or disturbance of undeveloped land that could support wildlife habitat. As a result, the Project will not cause permanent fragmentation of natural habitats or disrupt existing habitat connectivity networks.

3.2 Regional Species and Habitats and Natural Communities of Concern

Plant and animal species have special status if they have been listed as such by Federal or State agencies or by one or more special interest groups, such as CNPS. Prior to the field survey, literature searches were conducted using USFWS IPaC, CDFW CNDDB, CNPS, and NMFS databases to identify regionally sensitive species with potential to occur within the BSA.

Table 3. Special Status Species with Potential to Occur in the Project Vicinity provides the list of regional special status species returned by the database searches, describes the habitat requirements for each species, and states if the species was determined to have potential to occur within the BSA. It was determined that no special status plant or wildlife species have the potential to occur within the BSA, due to a lack of suitable habitat communities and/or lack of local occurrences. No special status plant or wildlife species were observed during the April 24, 2025, biological survey.

Table 3. Listed, Proposed Species, Natural Communities, and Critical Habitat Potentially Occurring or Known to Occur in the Project Area

Common Name	Species Name	Status		General Habitat Description	Habitat Present	Potential for Occurrence and Rationale
Amphibian Species						
Western spadefoot	*Spea hamomondii*	Fed: State: CDFW:	PT -- SSC	Inhabits open areas with sandy or gravelly soils within mixed woodlands, grasslands, coastal sage scrub, chaparral, sandy washes, lowlands, river floodplains, alluvial fans, playas, alkali flats, foothills, and mountains. Burrows underground for most of the year and is active above ground during rainfall. Requires vernal, shallow, temporary pools formed by heavy winter rains for reproduction. These pools must be free of bullfrogs, fish, and crayfish. Breeds from late winter to March.	A	**Presumed Absent:** The BSA lacks open areas with sandy or gravelly soils that the species can burrow in. Additionally, it lacks seasonal pools for breeding. The species is presumed absent due to a lack of necessary habitat features.
Bird Species						
Bank swallow	*Riparia riparia*	Fed: State: CDFW:	-- T SSC	A migratory colonial nester inhabiting lowland and riparian habitats west of the deserts during spring through fall. Majority of current breeding populations occur along the Sacramento and Feather Rivers in the north Central Valley. Forages in grassland, brushland, wetlands, and cropland during migration. Requires vertical banks or cliffs with fine textured/sandy soils for nesting (tunnel and burrow excavations). Nests exclusively near streams, rivers, lakes, or the ocean. Breeds from May through July.	A	**Presumed Absent:** The BSA lacks vertical banks or cliffs that are required for nesting. The species is presumed absent due to a lack of potentially suitable nesting habitat.
Burrowing owl	*Athene cunicularia*	Fed: State: CDFW:	-- CE SSC	The species inhabits arid, open areas with sparse vegetation cover such as deserts, abandoned agricultural areas, grasslands, and disturbed	A	**Presumed Absent:** The BSA lacks arid open areas with sparse vegetation cover. No burrows were observed during the biological survey conducted on April

Common Name	Species Name	Status		General Habitat Description	Habitat Present	Potential for Occurrence and Rationale
				open habitats. Can be associated with open shrub stages of pinyon-juniper and ponderosa pine habitats. Nests in old small mammal burrows but may dig own burrow in soft soil. Nests are lined with excrement, pellets, debris, grass, and feathers. The species may use pipes, culverts, and nest boxes, and even buildings where burrows are scarce. Breeding occurs March through August (below 5,300 feet).		24, 2025. The species is presumed absent due to a lack of necessary habitat features.
California black rail	*Laterallus jamaicensis coturniculus*	Fed: State: CDFW:	-- T FP	A rare, yearlong California resident of brackish and freshwater emergent wetlands in delta and coastal locations including the San Francisco Bay area, Sacramento-San Joaquin Delta, Morro Bay, the Salton Sea, and lower Colorado River. More than 90% of the species are found in the tidal salt marshes of the northern San Francisco Bay region, predominantly in San Pablo and Suisun Bays. Smaller populations occur in the San Francisco Bay, the Outer Coast of Marin County, and freshwater marshes in the foothills of the Sierra Nevada. The species is extirpated from San Diego County and the majority of coastal southern California. Occurs in tidal emergent wetlands dominated by pickleweed, in brackish marshes dominated by bulrushes with pickleweed, and in freshwater wetlands dominated by bulrushes, cattails, and salt grass. Species prefers high wetland areas, away from areas experiencing	A	**Presumed Absent:** The BSA lacks emergent wetlands and tidal marshes. The species is presumed absent due to a lack of necessary habitat features.

Common Name	Species Name	Status		General Habitat Description	Habitat Present	Potential for Occurrence and Rationale
				fluctuating water levels. Requires vegetation providing adequate overhead cover for nesting. Eggs are laid from March through June.		
Grasshopper sparrow	*Ammodramus savannarum*	Fed: State: CDFW:	-- -- SSC	Inhabits foothills and lowlands with dry, dense, well-drained grasslands with a variety of grasses, tall forbs, and shrubs for perches. In southern California largely utilizes hillsides, and lower mountain slopes. Nests are composed of grasses and forbs on slight depressions in the ground. Species may form small groups when nesting. Breeds April through July (0-5,000 feet).	A	**Presumed Absent:** The BSA contains a small patch of annual grasslands. However, there are no CNDDB occurrences of the species within a 10-mile radius of the BSA. The species is presumed absent due to a lack of recent local occurrences.
Purple martin	*Progne subis*	Fed: State: CDFW:	-- -- SSC	Present in California as a summer migrant, arriving in March and departing by late September. Inhabits valley foothill and montane hardwood/hardwood-conifer, coniferous habitats, and riparian habitats. Associated with closed-cone pine-cypress, pondorosa pine, Douglas-fir, and redwood. Nests in tall, old, isolated trees or snags in open forest or woodland and in proximity to a body of water. Frequently nests within former woodpecker cavities; may nest in human-made structures such as nesting boxes, under bridges and in culverts. Needs abundant aerial insect prey. Breeds April through August.	A	**Presumed Absent:** The BSA lacks woodlands and riparian habitat as well as nesting boxes, bridges and culverts. The species is presumed absent due to a lack of necessary habitat features.
Swainson's hawk	*Buteo swainsoni*	Fed: State: CDFW:	-- T --	Inhabits grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, and agricultural or ranch lands with groves or lines of	A	**Presumed Absent:** The BSA contains a small patch of annual grassland that is not large enough to support a stable rodent prey base. All CNDDB

Common Name	Species Name	Status		General Habitat Description	Habitat Present	Potential for Occurrence and Rationale
				trees. Requires adjacent suitable foraging areas such as grasslands, alfalfa or grain fields that support a stable rodent prey base. Breeds March to late August.		occurrences of the species within a 10-mile radius of the BSA are located within large patches of annual grasslands with nearby potentially suitable nesting trees. The species is presumed absent due to a lack of potentially suitable nesting habitat adjacent to annual grassland habitat.
Tricolored blackbird	*Agelaius tricolor*	Fed: State: CDFW:	-- T SSC	Inhabits freshwater marsh, swamp and wetland communities, but may utilize agricultural or upland habitats that can support large colonies, often in the Central Valley area. Requires dense nesting habitat that is protected from predators, is within 3-5 miles from a suitable foraging area containing insect prey and is within 0.3 miles of open water. Suitable foraging includes wetland, pastureland, rangeland, at dairy farms, and some irrigated croplands (silage, alfalfa, etc.). Nests in dense cattails, tules, willow, blackberry, wild rose, or tall herbs. Nests mid-March to early August, but may extend until October or November in the Sacramento Valley region.	A	**Presumed Absent:** The BSA lacks freshwater marsh, swamp and wetland communities that could support a large colony of this species. The species is presumed absent due to a lack of potentially suitable nesting habitat.
White-tailed kite	*Elanus leucurus*	Fed: State: CDFW:	-- -- FP	Inhabits rolling foothills and valley margins with scattered oaks and river bottomlands or marshes next to deciduous woodland. Prefers open grasslands, meadows or marshes for foraging close to isolated, dense-topped trees for nesting and perching. In southern California, will roost in saltgrass and Bermuda grass. Often found near agricultural lands. Nests are placed near the tops	A	**Presumed Absent:** The BSA lacks rolling foothills, river bottomlands, marshes, meadows, and grasslands. The species is presumed absent due to a lack of potentially suitable habitat.

Common Name	Species Name	Status		General Habitat Description	Habitat Present	Potential for Occurrence and Rationale
				of dense oak, willow, or other tree stands. Breeds February through October.		
Fish Species						
Central Valley spring run - Chinook salmon	(Oncorhynchus tshawytscha pop. 11	Fed: State: CDFW:	T T --	Spring-run Chinook enter the Sacramento-San Joaquin River system to spawn, requiring larger gravel particle size and more water flow through their redds than other salmonids. Remaining runs occur in Butte, Mill, Deer, Antelope, and Beegum Creeks, tributaries to the Sacramento River. Known to occur in Siskiyou and Trinity counties.	A	**Presumed Absent:** The BSA lacks aquatic features that could support this species.
Steelhead – Central Valley DPS	*Oncorhynchus mykiss irideus pop. 11*	Fed: State: CDFW:	T -- SSC	This species is known to occur along most of the California coast line and inhabits freshwater streams and tributaries in northern and central California. The preferred habitat consists of estuaries, freshwater streams and near shore habitat with productive costal oceans. Spawning occurs in small freshwater streams and tributaries occurs from January through March and could extend into spring. Spawning occurs where cool, well oxygenated water is available year-round. Approximately 550-1,300 eggs are deposited in an area with good intergravel flow. The fry emerge from the gravel about 4-6 six weeks after hatching and remain in shallow protected areas associated with stream margin. Juveniles may remain in freshwater for the rest of their life cycle or return to the ocean. The principal remaining wild populations spawn annually in Deer and Mill	A	**Presumed Absent:** The BSA lacks aquatic features that could support this species.

Common Name	Species Name	Status		General Habitat Description	Habitat Present	Potential for Occurrence and Rationale
				Creeks in Tehama County, in the lower Yuba River, and a small population in the lower Stanislaus River.		
Invertebrate Species						
Conservancy fairy shrimp	*Branchinecta conservatio*	Fed: State: CDFW:	E -- --	Inhabits relatively large and turbid clay bottomed playa vernal pools. Species requires pools to continuously hold water for a minimum of 19 days and must remain inundated into the summer months. Occupied playa pools typically are 1 to 88 acres in size, but species may utilize smaller, less turbid pools. Juveniles are most abundant where there are deep (0.5 to 1+ m), well-shaded pools with plenty of overhead cover.	A	**Presumed Absent:** The BSA lacks vernal pools which are required for the species to persist.
Crotch's bumble bee	*Bombus crotchii*	Fed: State: CDFW:	-- CE --	This species is known to occur in central California, Nevada south to Baja California and into Mexico. Inhabits coastal areas, deserts and the Central Valley. The species nests underground in grassland, shrubland and chaparral habitats. The species has a short tongue and primarily feeds on the following plants Asclepias, Chaenactis, Lupinus, Medicago, Phacelia and Salvia.	A	**Presumed Absent:** Although the BSA features marginally suitable habitat within patches of annual grassland habitat, CNDDB occurrences of the species within a 10-mile radius of the BSA are located in large contiguous patches of annual grassland habitat. The species is presumed absent due to a lack of local occurrences and the fact that annual grasslands within the BSA are dominated by non-native grasses and lack the floral resources necessary to support this species.
Monarch butterfly	*Danuas Plexippus*	Fed: State: CDFW:	PT -- --	Winter roosts along the coast from northern Mendocino to Baja California. Utilizes wind protected tree groves in proximity to nectar and water sources. Host plants include milkweed species such as Asclepias syriaca, A. incarnara, and A.	A	**Presumed Absent:** The BSA lacks wind protected tree groves and large populations of nectar producing plants for the species to feed on. No species from the genus *Asclepias* were observed during the biological survey. The species

Common Name	Species Name	Status		General Habitat Description	Habitat Present	Potential for Occurrence and Rationale
				speciosa. Suitable habitat includes fields, meadows, weedy areas, marshes, and roadsides. Mass adult migrations occur from August to October.		is presumed absent due to a lack of host plants and other nectar producing plants.
Valley elderberry longhorn beetle	*Desmocerus californicus dimorphus*	Fed: State: CDFW:	T -- --	Species requires red or blue elderberry (Sambucus sp.) as host plants. Typically occurs in moist valley oak woodlands associated with riparian corridors in the lower Sacramento River and upper San Joaquin River drainages. Adults are active, feeding, and breeding from March until June (sea level-3,000 feet).	A	**Presumed Absent:** The BSA lacks elderberry shrubs which are required for the larval development of this species. The species is presumed absent due to a lack of suitable host plants within the BSA.
Vernal pool fairy shrimp	*Branchinecta lynchi*	Fed: State: CDFW:	T -- --	In California, species inhabits portions of Tehama County, south through the Central Valley, and scattered locations in Riverside County and the Coast Ranges. Species is associated with smaller and shallower cool-water vernal pools approximately 6 inches deep and short periods of inundation. In the southernmost extremes of the range, the species occurs in large, deep cool-water pools. Inhabited pools have low to moderate levels of alkalinity and total dissolved solids. The shrimp are temperature sensitive, requiring pools below 50 F to hatch and dying within pools reaching 75 F. Young emerge during cold-weather winter storms.	A	**Presumed Absent:** The BSA lacks vernal pools which are required for the species to persist.
Vernal pool tadpole shrimp	*Lepidurus packardi*	Fed: State: CDFW:	E -- --	Inhabits vernal pools and swales containing clear to highly turbid waters such as pools located in grass bottomed swales of unplowed	A	**Presumed Absent:** The BSA lacks vernal pools which are required for the species to persist.

Common Name	Species Name	Status		General Habitat Description	Habitat Present	Potential for Occurrence and Rationale
				grasslands, old alluvial soils underlain by hardpan, and mud-bottomed pools with highly turbid water.		
Mammal Species						
American badger	*Taxidea taxus*	Fed: State: CDFW:	-- -- SSC	Prefers treeless, dry, open stages of most shrub and herbaceous habitats with friable soils and a supply of rodent prey. Species also inhabits forest glades, meadows, marshes, brushy areas, hot deserts, and mountain meadows. Species maintains burrows within home ranges estimated between 338-1,700 acres, dependent on seasonal activity. Burrows are frequently re-used, but new burrows may be created nightly. Young are born in March and April within burrows dug in relatively dry, often sandy, soil, usually in areas with sparse overstory cover. Species is somewhat tolerant of human activity, but is sensitive to automobile mortality, trapping, and persistent poisons (up to 12,000 feet).	A	**Presumed Absent:** The BSA lacks treeless, dry, open meadow habitat, forest glades, meadows, marshes, and deserts. The species is presumed absent due to a lack of potentially suitable habitat.
Pallid bat	*Antrozous pallidus*	Fed: State: CDFW:	-- -- SSC	Inhabits low elevations of deserts, grasslands, shrub lands, woodlands and forests year round. Most common in open, dry habitats with rocky areas for roosting. Forages over open ground within 1-3 miles of day roosts. Prefers caves, crevices, and mines for day roosts, but may utilize hollow trees, bridges and buildings. Roosts must protect bats from high temperatures. Very sensitive to disturbance of roosting sites. Maternity colonies form early	A	**Presumed Absent:** The BSA lacks dry, rocky desert, shrubland, woodland and forest habitats. The BSA does contain a small patch of annual grassland habitat. However, there are no recent occurrences of the species within a 10-mile radius of the BSA. The species is presumed absent due to a lack of recent occurrences and potentially suitable habitat.

Common Name	Species Name	Status		General Habitat Description	Habitat Present	Potential for Occurrence and Rationale
				April and young are born April-July (below 10,000 feet).		
Reptile Species						
Northwestern pond turtle	*Actinemys marmorata*	Fed: State: CDFW:	PT -- SSC	A fully aquatic turtle of ponds, lakes, rivers, streams, creeks, marshes, and irrigation ditches with aquatic vegetation. Suitable habitat includes woodland, forests, and grasslands. Requires logs, rocks, cattail mats, and exposed banks for basking. Suitable upland habitat (sandy banks or grassy open field) is required for reproduction, which begins in April and ends with egg laying as late as August (sea level to 4,700 feet).	A	**Presumed Absent:** The BSA lacks aquatic habitat which is necessary for the persistence of this species. The species is presumed absent due to a lack of aquatic features within the BSA.
Plant Species						
Big-scale balsamroot	*Balsamorhiza macrolepis*	Fed: State: CNPS:	-- -- 1B.2	A perennial herb inhabiting open grassy or rocky slopes and valleys within chaparral, cismontane woodland, valley and foothill grassland communities; sometimes occurs in serpentinite soils. Flowers March-June (300-5,100 feet).	A	**Presumed Absent:** The BSA lacks open grassy or rocky slopes within chaparral, woodlands and grasslands. The species is presumed absent due to the absence of suitable habitat features.
Boggs Lake hedge-hyssop	*Gratiola heterosepala*	Fed: State: CNPS:	-- E 1B.2	An annual herb inhabiting clay soils and shallow waters of marshes, swamps, lake margins, and vernal pools. Flowers April-August (30-7,800 feet).	A	**Presumed Absent:** The BSA lacks marshes, swamps, lake margins and vernal pools. The species is presumed absent due to the absence of suitable habitat communities.
Dwarf downingia	*Downingia pusilla*	Fed: State: CNPS:	-- -- 2B.2	An annual herb inhabiting vernal pools and mesic soils in valley and foothill grassland communities. Flowers March-May (0-1,500 feet).	A	**Presumed Absent:** The BSA lacks vernal pools. The species is presumed absent due to the absence of suitable habitat features.
Hispid salty bird's-beak	*Chloropyron molle ssp. hispidum*	Fed: State: CNPS:	-- -- 1B.1	An annual herb inhabiting moist alkaline soils of saline marshes and flats, meadows and seeps, playas, and valley and foothill grassland communities. Flowers June-July (0-500 feet).	A	**Presumed Absent:** The BSA lacks marshes, flats, meadows, and playas. The annual grasslands within the BSA may support the species. However, there are no recent occurrences of the species within a 10-mile radius of the

Common Name	Species Name	Status		General Habitat Description	Habitat Present	Potential for Occurrence and Rationale
						BSA. The species is presumed absent due to a lack of recent occurrences.
Legenere	*Legenere limosa*	Fed: State: CNPS:	-- -- 1B.1	An annual herb inhabiting wet areas, vernal pools, and ponds. Flowers April-June (0-2,900 feet).	A	**Presumed Absent:** The BSA lacks wet areas, vernal pools and ponds. The species is presumed absent due to the absence of suitable habitat communities.
Pincushion navarretia	*Navarretia myersii ssp. myersii*	Fed: State: CNPS:	-- -- 1B.1	An annual herb native to California inhabiting vernal pool communities, often in acidic soil conditions. Flowers April-May (65-1,080 feet).	A	**Presumed Absent:** The BSA lacks vernal pools. The species is presumed absent due to the absence of suitable habitat communities.
Red bluff dwarf rush	*Juncus leiospermus var. leiospermus*	Fed: State: CNPS:	-- -- 1B.1	An annual herb inhabiting vernally mesic soils of chaparral, cismontane woodland, meadows and seeps, valley and foothill grassland, and vernal pool communities. Flowers April-June (100-4,100 feet).	A	**Presumed Absent:** The BSA lacks chaparral, woodlands, meadows and seeps. The annual grasslands within the BSA may support the species. However, there are no recent occurrences of the species within a 10-mile radius of the BSA. The species is presumed absent due to a lack of recent occurrences.
Sacramento Orcutt grass	*Orcuttia viscida*	Fed: State: CNPS:	E E 1B.1	An annual herb inhabiting vernal pools. Flowers April-July (100-330 feet).	A	**Presumed Absent:** The BSA lacks vernal pools. The species is presumed absent due to the absence of suitable habitat communities.
Sanford's arrowhead	*Sagittaria sanfordii*	Fed: State: CNPS:	-- -- 1B.2	A perennial rhizomatous herb inhabiting freshwater marshes, swamps, ponds, and ditches. Flowers May-October (0-2,130 feet).	A	**Presumed Absent:** The BSA lacks marshes, swamps ponds, and ditches. The species is presumed absent due to the absence of suitable habitat communities.
Spicate calycadenia	*Calycadenia spicata*	Fed: State: CNPS:	-- -- 1B.3	An annual herb found in dry, open meadows, hillsides, grasslands, and openings in foothill woodland habitat communities. Flowers March-September (150-4200 feet).	A	**Presumed Absent:** The BSA lacks dry, open meadows, hillsides, grasslands and woodlands. The species is presumed absent due to the absence of suitable habitat communities.

Federal Designations (Fed): (FESA, USFWS) **E:** Federally listed, endangered **T:** Federally listed, threatened **DL**: Federally listed, delisted C: Candidate	**State Designations (CA):** (CESA, CDFW) **E:** State-listed, endangered **T:** State-listed, threatened CE: Candidate Endangered
Other Designations CDFW_SSC: CDFW Species of Special Concern CDFW_FP: CDFW Fully Protected **California Native Plant Society (CNPS) Designations*:*** ***Note: according to CNPS (Skinner and Pavlik 1994), plants on Lists 1B and 2 meet definitions for listing as threatened or endangered under Section 1901, Chapter 10 of the California Fish and Game Code. This interpretation is inconsistent with other definitions.*** **1A:** Plants presumed extinct in California. **1B:** Plants rare and endangered in California and throughout their range. **2:** Plants rare, threatened, or endangered in California but more common elsewhere in their range. **3:** Plants about which need more information; a review list. **Plants 1B, 2, and 4 extension meanings:** _**.1 Seriously** endangered in California (over 80% of occurrences threatened / high degree and immediacy of threat) _**.2 Fairly** endangered in California (20-80% occurrences threatened) _**.3** Not very endangered in California (<20% of occurrences threatened or no current threats known)	
Habitat Potential Absent [A] - No habitat present and no further work needed. Habitat Present [HP] - Habitat is or may be present. The species may be present. Critical Habitat [CH] – Project is within designated Critical Habitat.	
Potential for Occurrence Criteria: **Present**: Species was observed on site during a site visit or focused survey. **High**: Habitat (including soils and elevation factors) for the species occurs on site and a known occurrence has been recorded within 5 miles of the site. **Low-Moderate**: Either low quality habitat (including soils and elevation factors) for the species occurs on site and a known occurrence exists within 5 miles of the site; or suitable habitat strongly associated with the species occurs on site, but no records were found within the database search. **Presumed Absent**: Focused surveys were conducted, and the species was not found, or species was found within the database search but habitat (including soils and elevation factors) do not exist on site, or the known geographic range of the species does not include the survey area.	
Source: (CDFW 2025b), (CNPS 2025), (Jepson 2025), (USFWS 2025), (NMFS 2025).	

4. Results: Biological Resources, Discussion of Impacts, and Mitigation

4.1 Habitats and Natural Communities of Special Concern

Habitats are considered to be of special concern based on federal, State, or local laws regulating their development; limited distributions; and/or the habitat requirements of special-status plants or animals occurring on site. Wetlands and waters of the United States are also considered sensitive by both federal and State agencies. The biological survey conducted on April 24, 2025, did not identify any jurisdictional waters or wetlands within the BSA; therefore, no impacts to jurisdictional aquatic features are anticipated. One habitat of special concern—oak woodlands—was observed at the eastern and western extents of the BSA. The Project is expected to result in minor permanent impacts to oak woodlands. No other habitats of special concern were identified within the BSA or will be affected by Project activities. A discussion of oak woodland habitat, survey findings, and applicable avoidance and minimization measures is provided below.

4.1.1 Discussion of Oak Woodlands

Oak woodland is a sensitive natural community of regional importance in California, particularly in the Sierra Nevada foothills and Central Valley margins. In Citrus Heights, oak woodland habitat is primarily characterized by remnant patches of native oaks interspersed with residential, commercial, and roadway development. Along Old Auburn Road, oak woodlands are generally confined to roadside corridors, larger residential lots, and undeveloped parcels, where valley oak and interior live oak are the dominant native tree species. While no large stands of oak woodland remain within the BSA, the remaining mature oaks contribute to local habitat complexity and biological diversity.

4.1.2 Survey Results

Oak woodland habitat is present along the edges of Old Auburn Road in the eastern and westernmost extents of the BSA. This habitat type is comprised of a variety of mature oak species including valley oak, interior live oak, and blue oak trees. The understory is comprised of Himalayan blackberry and various annual grass species including wild oat, ripgut brome, and foxtail barley.

Patches of oak woodlands within the BSA exhibit a relatively open canopy and are on the edge of nearby riparian corridors of Linda Creek and Cripple Creek, although these riparian corridors are outside of the boundaries of the BSA. Oak trees located on City parcels within urban or developed land cover, but outside the mapped boundaries of oak woodland habitat, are not considered part of that habitat.

4.1.3 Project Impacts on Oak Woodlands

Minor impacts to oak woodland are anticipated as a result of the Project. The Project would permanently impact 0.19 acres of oak woodland habitat (Figure 5. Project Impacts). These impacts may include the removal or trimming of individual oak trees for safety improvements, roadway widening, or installation of new pedestrian and bicycle infrastructure. Any potential tree removal will be minimized to the greatest extent practicable. In accordance with the City of Citrus Heights Tree Preservation and Protection Regulations, protected trees within the Project footprint will be preserved to the extent feasible. Per the City's Municipal Code Section 106.39.020(c)(5), street widening projects are exempt from the tree ordinance, as such, tree removal permits will not be required for the Project.

4.1.1 Avoidance and Minimization Efforts for Oak Woodlands

The implementation of the following avoidance and minimization measures will minimize disturbance to oak woodland habitat.

BIO-1: Prior to the start of construction activities, the Project limits within environmentally sensitive areas (oak woodlands), will be marked with high visibility Environmentally Sensitive Area (ESA) fencing or staking to ensure construction will not further encroach into sensitive resources.

BIO-2: Contract specifications will include the following Best Management Practices (BMPs), where applicable, to reduce erosion during construction:

- Exposed soils and material stockpiles would be stabilized, through watering or other measures, to prevent the movement of dust at the Project site caused by wind and construction activities such as traffic and grading activities;
- All vehicle and equipment fueling/maintenance would be conducted outside of oak woodland habitat;
- Equipment used in and around oak woodland habitat must be in good working order and free of dripping or leaking contaminants;
- Raw cement, concrete or concrete washings, asphalt, paint or other coating material, oil or other petroleum products, or any other substances that could be hazardous to wildlife shall be prevented from contaminating the soil;
- All erosion control measures would be properly maintained throughout construction;
- All construction materials would be hauled off-site after completion of construction.

Project Area (11.36 acres)

Biological Study Area (25.47 acres)

Citrus Heights City Limits

Project Features

Curb/Gutter

Pavement Marker

Sidewalk Curb

Bike Lane Symbol

Permanent Impacts

Oak Woodlands (0.19 acres)

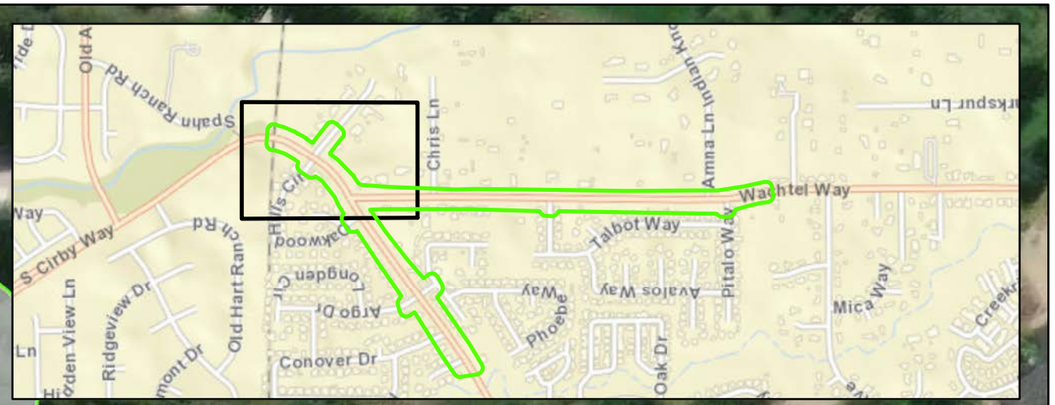
Habitat

Annual grassland

Oak woodland

Ruderal

Urban/barren



Linda Creek Court

Old Auburn Road

Wachtel Way

Oakwood Hills Circle

V:\3273_Citrus Heights Gateway Activation\Biology\F5_Project Impacts.mxd

Source: ESRI Maps Online; Dokken Engineering 9/4/2025; Created By: jharris

1 inch = 75 feet

0 75 150 225 300 375 Feet

Figure 5
Project Impacts

Citrus Heights Gateway Activation Project
Citrus Heights, Sacramento County, California

BIO-3: All onsite refueling and maintenance must occur over plastic sheeting, drip pans, or other secondary containment measures to capture accidental spills before they can contaminate the soil. Secondary containment must have a raised edge (e.g. sheeting wrapped around wattles).

BIO-4: A chemical spill kit must be kept onsite at all times during work and must be easily accessible for use in the event of a spill.

BIO-5: In accordance with the City of Citrus Heights Tree Preservation and Protection Regulations, protected trees within the Project footprint will be preserved to the extent feasible. Tree impact and avoidance measures shall be incorporated into the final design of the improvement plans. A Licensed Arborist shall consult and make recommendations for design treatments, modifications, and construction techniques to minimize tree removal and construction impacts.

4.2 Special Status Plant Species

Plants are considered to be of special concern based on (1) federal, state, or local laws regulating their development; (2) limited distributions; and/or (3) the presence of habitat required by the special-status plants occurring on site. Prior to field surveys, a list of regional special status plant species was compiled from database searches and the potential for each species to occur within the BSA was evaluated. It was determined that no special-status plant species have potential to occur within the BSA, and no impacts to special status plant species are anticipated. Please see Table 3 for rational of why each species is presumed absent.

4.3 Special Status Animal Species

Animals are considered to be of special concern based on (1) federal, state, or local laws regulating their development; (2) limited distributions; and/or (3) the habitat requirements of special-status animals occurring on site. Prior to field surveys, a list of regional special status animal species was compiled from database searches and potential for each species to occur within the BSA was evaluated. It was determined that no special-status wildlife species have potential to occur within the BSA, and no impacts to special status animal species are anticipated. Please see Table 3 for rational of why each species is presumed absent.

5. Conclusions and Regulatory Determinations

5.1 Federal Endangered Species Act Consultation Summary

Table 4 lists the eight federally listed species that were returned via database searches and the effect determinations made for each species. No federally listed species were found to have potential habitat within the BSA, nor were any observed during the April 24, 2025, biological survey. As a result, the Project would have No Effect on federally listed species, and consultation with USFWS or NMFS is not required.

Table 4. Federal Endangered Species Act (FESA) Determinations

Species Name	Federal Status	Potential	Determination
Northwestern pond turtle (*Actinemys marmorata*)	Proposed Threatened	Absent	No Effect
Western spadefoot (*Spea hammondii*)	Proposed Threatened	Absent	No Effect
Monarch butterfly (*Danaus plexippus*)	Proposed Threatened	Absent	No Effect
Valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*)	Threatened	Absent	No Effect
Conservancy Fairy Shrimp (*Branchinecta conservatio*)	Endangered	Absent	No Effect
Vernal pool fairy shrimp (*Branchinecta lynchi*)	Threatened	Absent	No Effect
Vernal pool tadpole shrimp (*Lepidurus packardi*)	Endangered	Absent	No Effect
Sacramento Orcutt grass (*Orcuttia viscida*)	Endangered	Absent	No Effect

5.2 California Endangered Species Act Summary

The Project will not have any anticipated impact to state-listed species covered under California Endangered Species Act (CESA). With avoidance, minimization, and mitigation measures, the Project will not have take of these species and coordination with CDFW under Fish and Game Code Section 2081 is not anticipated.

5.3 Essential Fish Habitat Consultation Summary

The BSA does not include aquatic resources that provide Essential Fish Habitat (EFH). Consultation with NMFS regarding EFH is not required.

5.4 Wetlands and Other Waters Coordination Summary

Land cover types within the Project area include urban and disturbed grassland habitat. No wetlands or other jurisdictional water features were observed within the Project area

during the biological survey conducted on April 24, 2025. As such, the Project will not impact jurisdictional waters and regulatory permits are not required.

5.5 Invasive Species

In February 1999, EO 13112 was signed, requiring Federal agencies to work on preventing and controlling the introduction and spread of invasive species. Measure **BIO-6** will be incorporated into the Project plans to ensure invasive species are not introduced or spread at the Project site:

BIO-6: Prior to arrival at the Project site and prior to leaving the Project site, construction equipment that may contain invasive plants and/or seeds will be cleaned to reduce the spreading of noxious weeds.

5.6 Other

5.6.1 Migratory Birds

A number of bird species have the potential to nest within the BSA within the oak woodland habitat as well as within the ornamental trees along the roadway. Migratory birds are protected during their nesting periods under the provisions of the federal MBTA and CFG Code Sections 3503, 3503.5 and 3513. Measure **BIO-7** will be incorporated into the Project to avoid and minimize potential Project related impacts to nesting birds. The Project will comply with the MBTA and CFG Code Sections 3503, 3503.5 and 3513.

BIO-7: If project-related activities, including vegetation removal or initial ground disturbance, are scheduled during the nesting bird season (February 1 – August 31) a pre-construction nesting bird survey must be conducted by a biologist prior to the start of work. The nesting bird survey must include the Project area plus a 100-foot buffer. Within 2 weeks of the nesting bird survey, all areas surveyed by the biologist must be cleared by the contractor or a supplemental nesting bird survey is required.

An approximate 100-foot no-disturbance buffer will be established around any active nest of migratory birds and an approximate 300-foot no-disturbance buffer will be established around any nesting birds of prey species. The contractor must immediately stop work in the buffer area until the appropriate buffer is established and is prohibited from conducting work within the buffer until the biologist has determined that the nestlings have fledged and are foraging independently. A reduced buffer, or other avoidance strategies, can be established if deemed appropriate by the City and biologist.

5.6.2 General Wildlife

To minimize and avoid potential effects to local wildlife during Project construction, measures **BIO-8** and **BIO-9** will be incorporated into the Project:

BIO-8: All food-related trash must be disposed of into closed containers and must be removed from the Project area daily. Construction personnel must not feed or otherwise attract wildlife or feral animals to the Project area.

BIO-9: If any wildlife (e.g., amphibians, birds, mammals, reptiles, etc.) are encountered during the course of construction, said wildlife shall be allowed to leave the construction area unharmed.

6. References

CDFW 2026a — California Department of Fish and Wildlife. 2026. Biogeographic Information and Observation System Habitat Connectivity Viewer. Available at: <https://wildlife.ca.gov/Data/BIOS> (accessed 1/23/2026).

CDFW 2026b — California Department of Fish and Wildlife. 2026. California Natural Diversity Database. Available at: <http://www.dfg.ca.gov/biogeodata/cnddb/> (accessed 1/23/2026).

City of Citrus Heights 2025 — City of Citrus Heights Municipal Code. 2025. Tree Preservation and Protection Regulations. Available at: <https://www.citrusheights.net/224/Tree-Protection-Regulations> (accessed 5/8/2025).

CNPS 2026 — California Native Plant Society. 2026. Inventory of Rare and Endangered Plants of California. Available at: <http://www.rareplants.cnps.org/> (accessed 1/23/2026).

Jepson 2025 — Jepson eFlora. 2025. Geographic subdivisions. Available at: <https://ucjeps.berkeley.edu/eflora/geography.html> (accessed 5/8/2025).

NMFS 2025 — National Marine Fisheries Service. 2025. NMFS Species List for the Citrus Heights Gap Closure Project (requested: 5/8/2025).

NRCS 2025 — Natural Resource Conservation Service. 2025. Custom Soil Resources Report for Sacramento County, California. Available at: <https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm> (accessed 5/8/2025).

USFWS 2026 — United States Fish and Wildlife Service. 2025. Official Species List: U.S. Department of the Interior – Fish and Wildlife Service: Sacramento Fish and Wildlife Office. (requested: 1/23/2026).

Weather Spark 2025 — Weather Spark 2025. Climate and Average Weather Year Round in Citrus Heights. Available at: <https://weatherspark.com/y/1116/Average-Weather-in-Citrus-Heights-California-United-States-Year-Round> (accessed 5/12/2025).

Appendix A. USFWS Species List

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Sacramento Fish And Wildlife Office
Federal Building
2800 Cottage Way, Room W-2605
Sacramento, CA 95825-1846
Phone: (916) 414-6600 Fax: (916) 414-6713

In Reply Refer To: 01/23/2026 23:54:44 UTC
Project Code: 2025-0083206
Project Name: 3273 Citrus Heights GAP

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)

(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

https://www.fws.gov/sites/default/files/documents/endangered-species-consultation-handbook.pdf

Migratory Birds: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts, see https://www.fws.gov/program/migratory-bird-permit/what-we-do.

It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures, see https://www.fws.gov/library/collections/threats-birds.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit https://www.fws.gov/partner/council-conservation-migratory-birds.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

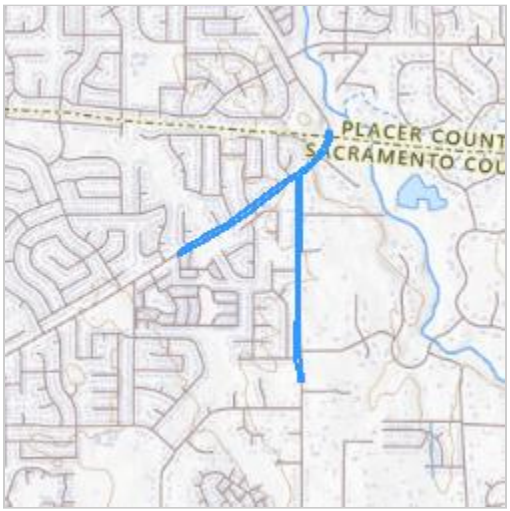
This species list is provided by:

Sacramento Fish And Wildlife Office
Federal Building
2800 Cottage Way, Room W-2605
Sacramento, CA 95825-1846
(916) 414-6600

PROJECT SUMMARY

Project Code: 2025-0083206
Project Name: 3273 Citrus Heights GAP
Project Type: Road/Hwy - New Construction
Project Description: Complete Streets Project
Project Location:

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@38.71302935,-121.24451789999631,14z



Counties: Placer and Sacramento counties, California

ENDANGERED SPECIES ACT SPECIES

There is a total of 8 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

REPTILES

NAME	STATUS
Northwestern Pond Turtle *Actinemys marmorata* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/1111 General project design guidelines: https://ipac.ecosphere.fws.gov/project/KJEN6JN3QZBBZG3V76QIKZG2DA/documents/generated/11271.pdf	Proposed Threatened

AMPHIBIANS

NAME	STATUS
Western Spadefoot *Spea hammondii* Population: Northern DPS No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/5425 General project design guidelines: https://ipac.ecosphere.fws.gov/project/KJEN6JN3QZBBZG3V76QIKZG2DA/documents/generated/11271.pdf	Proposed Threatened

INSECTS

NAME	STATUS
Monarch Butterfly *Danaus plexippus* There is **proposed** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/9743 General project design guidelines: https://ipac.ecosphere.fws.gov/project/KJEN6JN3QZBBZG3V76QIKZG2DA/documents/generated/11271.pdf	Proposed Threatened
Valley Elderberry Longhorn Beetle *Desmocerus californicus dimorphus* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/7850	Threatened

CRUSTACEANS

NAME	STATUS
Conservancy Fairy Shrimp *Branchinecta conservatio* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8246 General project design guidelines: https://ipac.ecosphere.fws.gov/project/KJEN6JN3QZBBZG3V76QIKZG2DA/documents/generated/11271.pdf	Endangered
Vernal Pool Fairy Shrimp *Branchinecta lynchi* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/498	Threatened

NAME	STATUS

General project design guidelines:
https://ipac.ecosphere.fws.gov/project/KJEN6JN3QZBBZG3V76QIKZG2DA/documents/generated/11271.pdf

Vernal Pool Tadpole Shrimp *Lepidurus packardi* — Endangered

There is **final** critical habitat for this species. Your location does not overlap the critical habitat.
Species profile: https://ecos.fws.gov/ecp/species/2246
General project design guidelines:
https://ipac.ecosphere.fws.gov/project/KJEN6JN3QZBBZG3V76QIKZG2DA/documents/generated/11271.pdf

FLOWERING PLANTS

NAME	STATUS

Sacramento Orcutt Grass *Orcuttia viscida* — Endangered

There is **final** critical habitat for this species. Your location does not overlap the critical habitat.
Species profile: https://ecos.fws.gov/ecp/species/5507

CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

IPAC USER CONTACT INFORMATION

Agency: Dokken Engineering
Name: Jeffrey Harris
Address: 110 Blue Ravine Rd #200
City: Folsom
State: CA
Zip: 95630
Email jharris@dokkenengineering.com
Phone: 9167651015

Appendix B. CDFW CNDDB Species List

Selected Elements by Common Name

California Department of Fish and Wildlife

California Natural Diversity Database

Query Criteria: Quad IS (Folsom (3812162) OR Citrus Heights (3812163) OR Rocklin (3812172) OR Roseville (3812173))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Alkali Meadow *Alkali Meadow*	CTT45310CA	None	None	G3	S2.1	
Alkali Seep *Alkali Seep*	CTT45320CA	None	None	G3	S2.1	
American badger *Taxidea taxus*	AMAJF04010	None	None	G5	S3	SSC
American bumble bee *Bombus pensylvanicus*	IIHYM24260	None	None	G3G4	S2	
An andrenid bee *Andrena subapasta*	IIHYM35210	None	None	G1G2	S1S2	
bank swallow *Riparia riparia*	ABPAU08010	None	Threatened	G5	S3	
big-scale balsamroot *Balsamorhiza macrolepis*	PDAST11061	None	None	G2	S2	1B.2
Boggs Lake hedge-hyssop *Gratiola heterosepala*	PDSCR0R060	None	Endangered	G2G3	S2	1B.2
Brandegee's clarkia *Clarkia biloba ssp. brandegeeae*	PDONA05053	None	None	G4G5T4	S4	4.2
burrowing owl *Athene cunicularia*	ABNSB10010	None	Candidate Endangered	G4	S2	SSC
California black rail *Laterallus jamaicensis coturniculus*	ABNME03041	None	Threatened	G3T1	S2	FP
California linderiella *Linderiella occidentalis*	ICBRA06010	None	None	G2G3	S2S3	
Cooper's hawk *Astur cooperii*	ABNKC12040	None	None	G5	S4	WL
Crotch's bumble bee *Bombus crotchii*	IIHYM24480	None	Candidate Endangered	G2	S2	
double-crested cormorant *Nannopterum auritum*	ABNFD01020	None	None	G5	S4	WL
dwarf downingia *Downingia pusilla*	PDCAM060C0	None	None	GU	S2	2B.2
grasshopper sparrow *Ammodramus savannarum*	ABPBXA0020	None	None	G5	S3	SSC
great blue heron *Ardea herodias*	ABNGA04010	None	None	G5	S4	
great egret *Ardea alba*	ABNGA04040	None	None	G5	S4	

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
hispid salty bird's-beak *Chloropyron molle ssp. hispidum*	PDSCR0J0D1	None	None	G2T1	S1	1B.1
legenere *Legenere limosa*	PDCAM0C010	None	None	G2	S2	1B.1
merlin *Falco columbarius*	ABNKD06030	None	None	G5	S3S4	WL
Northern Hardpan Vernal Pool *Northern Hardpan Vernal Pool*	CTT44110CA	None	None	G3	S3.1	
Northern Volcanic Mud Flow Vernal Pool *Northern Volcanic Mud Flow Vernal Pool*	CTT44132CA	None	None	G1	S1.1	
northwestern pond turtle *Actinemys marmorata*	ARAAD02031	Proposed Threatened	None	G2	SNR	SSC
osprey *Pandion haliaetus*	ABNKC01010	None	None	G5	S4	WL
pallid bat *Antrozous pallidus*	AMACC10010	None	None	G4	S3	SSC
pincushion navarretia *Navarretia myersii ssp. myersii*	PDPLM0C0X1	None	None	G2T2	S2	1B.1
purple martin *Progne subis*	ABPAU01010	None	None	G5	S3	SSC
Red Bluff dwarf rush *Juncus leiospermus var. leiospermus*	PMJUN011L2	None	None	G2T2	S2	1B.1
Ricksecker's water scavenger beetle *Hydrochara rickseckeri*	IICOL5V010	None	None	G2?	S2?	
Sacramento Orcutt grass *Orcuttia viscida*	PMPOA4G070	Endangered	Endangered	G1	S1	1B.1
Sanford's arrowhead *Sagittaria sanfordii*	PMALI040Q0	None	None	G3	S3	1B.2
silver-haired bat *Lasionycteris noctivagans*	AMACC02010	None	None	G4	S3S4	
spicate calycadenia *Calycadenia spicata*	PDAST1P090	None	None	G3?	S3	1B.3
steelhead - Central Valley DPS *Oncorhynchus mykiss irideus pop. 11*	AFCHA0209K	Threatened	None	G5T2Q	S2	SSC
stinkbells *Fritillaria agrestis*	PMLIL0V010	None	None	G3	S3	4.2
Swainson's hawk *Buteo swainsoni*	ABNKC19070	None	Threatened	G5	S4	
tricolored blackbird *Agelaius tricolor*	ABPBXB0020	None	Threatened	G1G2	S2	SSC
valley elderberry longhorn beetle *Desmocerus californicus dimorphus*	IICOL48011	Threatened	None	G3T3	S3	

Selected Elements by Common Name

California Department of Fish and Wildlife

California Natural Diversity Database

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Valley Needlegrass Grassland *Valley Needlegrass Grassland*	CTT42110CA	None	None	G3	S3.1	
vernal pool fairy shrimp *Branchinecta lynchi*	ICBRA03030	Threatened	None	G3	S3	
vernal pool tadpole shrimp *Lepidurus packardi*	ICBRA10010	Endangered	None	G3	S3	
western spadefoot *Spea hammondii*	AAABF02020	Proposed Threatened	None	G2G3	S3S4	SSC
white-tailed kite *Elanus leucurus*	ABNKC06010	None	None	G5	S3S4	FP

Record Count: 45

Appendix C. CNPS Species List

CALIFORNIA NATIVE PLANT SOCIETY

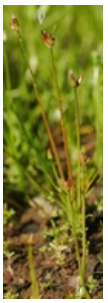
CNPS Rare Plant Inventory

Search Results

13 matches found. Click on scientific name for details

Search Criteria: , Quad is one of [**3812173:3812162:3812163**]

▲ COMMON NAME	SCIENTIFIC NAME	FAMILY	LIFEFORM	BLOOMING PERIOD	FED LIST	STATE LIST	GLOBAL RANK	STATE RANK	CA RARE PLANT RANK	CA ENDEMIC	DATE ADDED	PHOTO
big-scale balsamroot	*Balsamorhiza macrolepis*	Asteraceae	perennial herb	Mar-Jun	None	None	G2	S2	1B.2	Yes	1974-01-01	 ©1998 Dean Wm. Taylor
Boggs Lake hedge-hyssop	*Gratiola heterosepala*	Plantaginaceae	annual herb	Apr-Aug	None	CE	G2G3	S2	1B.2		1974-01-01	 ©2004 Carol W. Witham
Brandegee's clarkia	*Clarkia biloba* ssp. *brandegeeae*	Onagraceae	annual herb	(Mar)May-Jul	None	None	G4G5T4	S4	4.2	Yes	2001-01-01	No Photo Available
dwarf downingia	*Downingia pusilla*	Campanulaceae	annual herb	Mar-May	None	None	GU	S2	2B.2		1980-01-01	 © 2013 Aaron Arthur
hispid salty bird's-beak	*Chloropyron molle* ssp. *hispidum*	Orobanchaceae	annual herb (hemiparasitic)	Jun-Sep	None	None	G2T1	S1	1B.1	Yes	1974-01-01	No Photo Available
legenere	*Legenere limosa*	Campanulaceae	annual herb	Apr-Jun	None	None	G2	S2	1B.1	Yes	1974-01-01	 © 2025 Adam Searcy

pincushion navarretia	*Navarretia myersii* ssp. *myersii*	Polemoniaceae	annual herb	Apr-May	None	None	G2T2	S2	1B.1	Yes	1994-01-01	 © 2020 Leigh Johnson
Red Bluff dwarf rush	*Juncus leiospermus* var. *leiospermus*	Juncaceae	annual herb	Mar-Jun	None	None	G2T2	S2	1B.1	Yes	1974-01-01	 ©2016 Dylan Neubauer
Sacramento Orcutt grass	*Orcuttia viscida*	Poaceae	annual herb	Apr-Jul(Sep)	FE	CE	G1	S1	1B.1	Yes	1974-01-01	 © Rick York and CNPS
Sanford's arrowhead	*Sagittaria sanfordii*	Alismataceae	perennial rhizomatous herb (emergent)	May-Oct(Nov)	None	None	G3	S3	1B.2	Yes	1984-01-01	 ©2013 Debra L. Cook
spicate calycadenia	*Calycadenia spicata*	Asteraceae	annual herb	May-Sep	None	None	G3?	S3	1B.3		2023-04-05	 © 2023 Christopher Bronny
stinkbells	*Fritillaria agrestis*	Liliaceae	perennial bulbiferous herb	Mar-Jun	None	None	G3	S3	4.2	Yes	1980-01-01	 © 2016 Aaron Schusteff
valley brodiaea	*Brodiaea rosea* ssp. *vallicola*	Themidaceae	perennial bulbiferous herb	Apr-May(Jun)	None	None	G4G5T3	S3	4.2	Yes	2019-01-07	 © 2011 Steven Perry

Showing 1 to 13 of 13 entries

Go to top

Suggested Citation:

California Native Plant Society, Rare Plant Program. 2026. Rare Plant Inventory (online edition, v9.5.1). Website https://www.rareplants.cnps.org [accessed 24 January 2026].

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Appendix D. NRCS Soil Survey Report

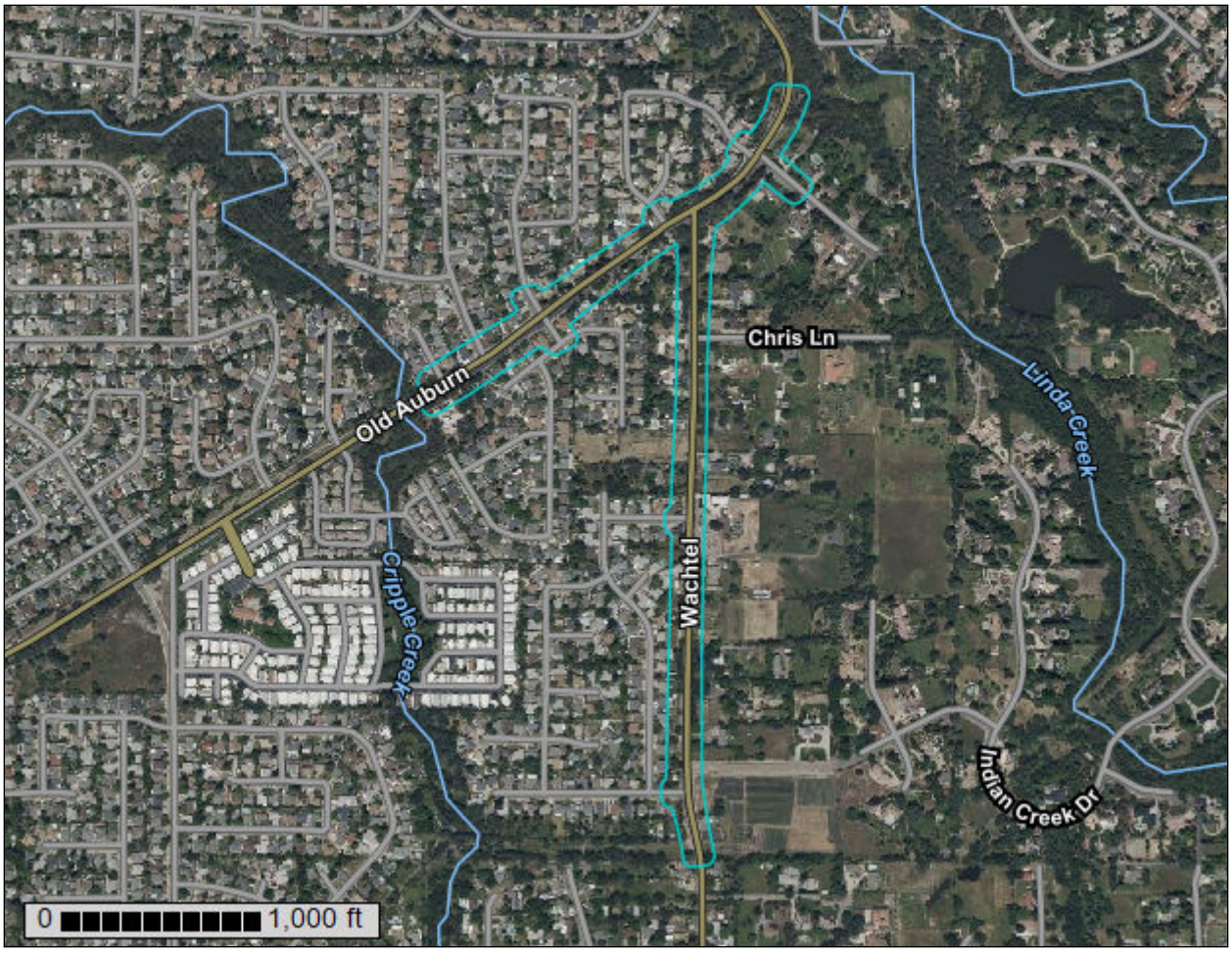
United States Department of Agriculture

NRCS

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Placer County, California, Western Part; and Sacramento County, California



May 8, 2025

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

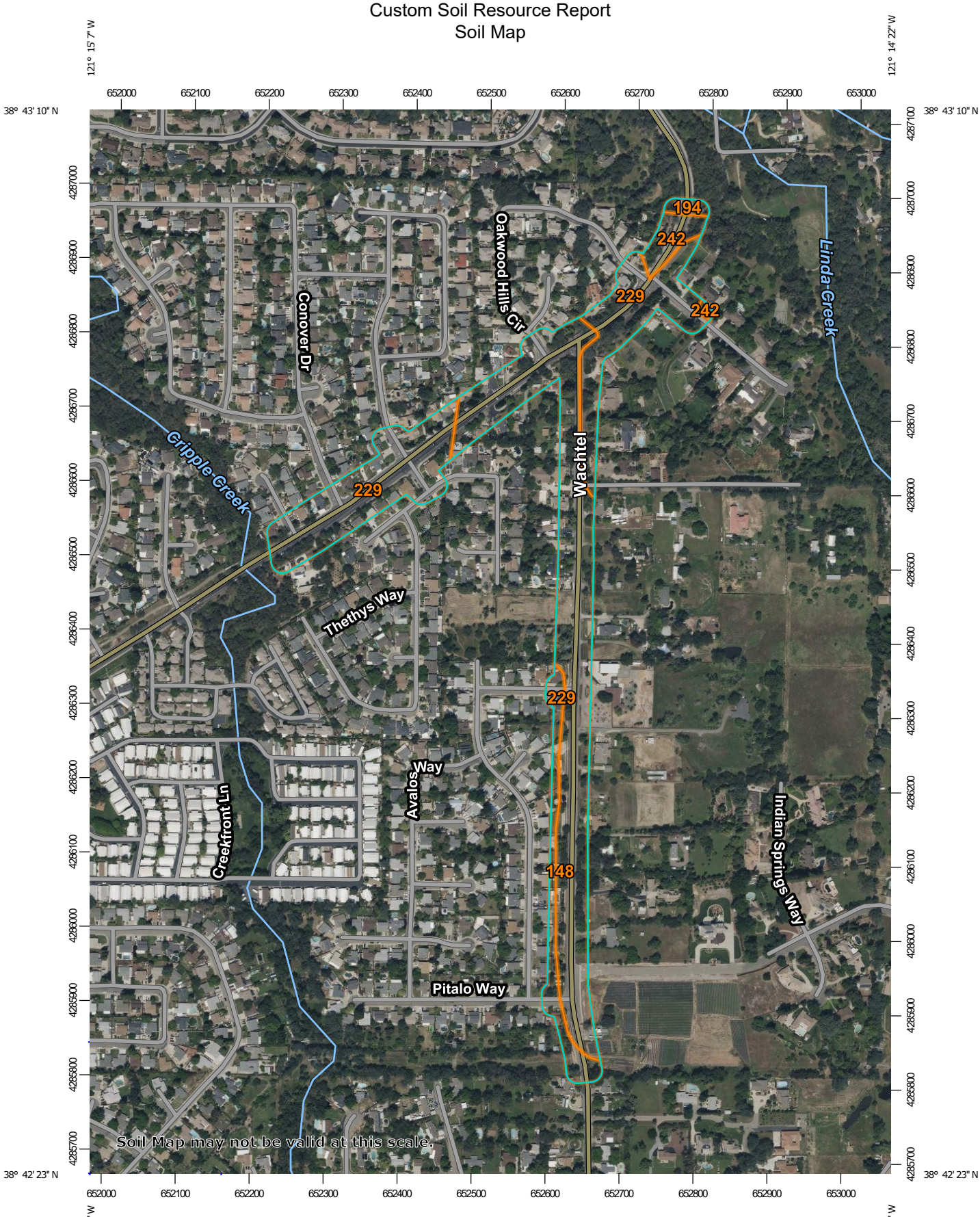
After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report
Soil Map



Map Scale: 1:6,980 if printed on A portrait (8.5" x 11") sheet.

N

Meters: 0 100 200 400 600

Feet: 0 300 600 1200 1800

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 10N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Placer County, California, Western Part
Survey Area Data: Version 16, Aug 30, 2024

Soil Survey Area: Sacramento County, California
Survey Area Data: Version 25, Sep 8, 2024

Your area of interest (AOI) includes more than one soil survey area. These survey areas may have been mapped at different scales, with a different land use in mind, at different times, or at different levels of detail. This may result in map unit symbols, soil properties, and interpretations that do not completely agree across soil survey area boundaries.

MAP LEGEND

MAP INFORMATION

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Apr 23, 2022—Apr 24, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
194	Xerofluvents, frequently flooded	0.3	1.1%
Subtotals for Soil Survey Area		**0.3**	**1.1%**
Totals for Area of Interest		**25.5**	**100.0%**

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
148	Fiddyment-Orangevale-Urban land complex, 2 to 8 percent slopes	12.4	48.8%
229	Urban land-Xerarents-Fiddyment complex, 0 to 8 percent slopes	11.8	46.2%
242	Xerofluvents, 0 to 2 percent slopes, flooded	1.0	3.9%
Subtotals for Soil Survey Area		**25.2**	**98.9%**
Totals for Area of Interest		**25.5**	**100.0%**

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a

given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Placer County, California, Western Part

194—Xerofluvents, frequently flooded

Map Unit Setting

National map unit symbol: hg18
Elevation: 0 to 1,500 feet
Mean annual precipitation: 14 to 20 inches
Mean annual air temperature: 61 to 64 degrees F
Frost-free period: 250 to 270 days
Farmland classification: Not prime farmland

Map Unit Composition

Xerofluvents, frequently flooded, and similar soils: 90 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Xerofluvents, Frequently Flooded

Setting

Landform: Flood plains, flood plains, flood plains
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium

Typical profile

H1 - 0 to 15 inches: stratified loamy sand to fine sandy loam
H2 - 15 to 37 inches: stratified loamy sand to fine sandy loam to silt loam
H3 - 37 to 55 inches: stratified loam to silty clay loam to clay

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat poorly drained
Runoff class: Very low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.20 to 1.98 in/hr)
Depth to water table: About 30 to 57 inches
Frequency of flooding: Frequent
Frequency of ponding: None
Calcium carbonate, maximum content: 5 percent
Available water supply, 0 to 60 inches: Moderate (about 8.1 inches)

Interpretive groups

Land capability classification (irrigated): 4w
Land capability classification (nonirrigated): 4w
Hydrologic Soil Group: B
Ecological site: R017XY903CA - Stream Channels and Floodplains
Hydric soil rating: Yes

Minor Components

Unnamed

Percent of map unit: 10 percent
Landform: Channels, channels, channels

Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: Yes

Sacramento County, California

148—Fiddyment-Orangevale-Urban land complex, 2 to 8 percent slopes

Map Unit Setting

National map unit symbol: hhmr
Elevation: 50 to 280 feet
Mean annual precipitation: 19 to 22 inches
Mean annual air temperature: 61 degrees F
Frost-free period: 230 to 300 days
Farmland classification: Not prime farmland

Map Unit Composition

Fiddyment and similar soils: 40 percent
Orangevale and similar soils: 25 percent
Urban land: 20 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Fiddyment

Setting

Landform: Fan remnants
Landform position (two-dimensional): Summit, backslope
Landform position (three-dimensional): Riser, tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from igneous and metamorphic rock over dense alluvium derived from igneous and metamorphic rock

Typical profile

H1 - 0 to 8 inches: fine sandy loam
H2 - 8 to 15 inches: loam
H3 - 15 to 28 inches: sandy clay loam
H4 - 28 to 40 inches: indurated
H5 - 40 to 44 inches: material

Properties and qualities

Slope: 2 to 8 percent
Depth to restrictive feature: 28 to 40 inches to duripan; 40 to 44 inches to densic material
Drainage class: Well drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 to 0.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Very low (about 2.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: D
Ecological site: R017XY902CA - Duripan Vernal Pools

Hydric soil rating: No

Description of Orangevale

Setting

Landform: Fan remnants
Landform position (two-dimensional): Summit, backslope
Landform position (three-dimensional): Riser, tread
Down-slope shape: Linear
Across-slope shape: Convex
Parent material: Alluvium derived from granite

Typical profile

H1 - 0 to 15 inches: coarse sandy loam
H2 - 15 to 20 inches: coarse sandy loam
H3 - 20 to 72 inches: sandy clay loam
H4 - 72 to 80 inches: coarse sandy loam

Properties and qualities

Slope: 2 to 8 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 5.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: B
Ecological site: R017XY904CA - Subirrigated Deep Alluvial Fans
Hydric soil rating: No

Description of Urban Land

Setting

Landform: Fan remnants
Landform position (two-dimensional): Summit, backslope
Landform position (three-dimensional): Riser, tread
Down-slope shape: Linear
Across-slope shape: Linear

Typical profile

H1 - 0 to 6 inches: variable

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 8
Hydric soil rating: No

Minor Components

Xerarents

Percent of map unit: 6 percent

Landform: Fan remnants
Landform position (two-dimensional): Summit, backslope
Landform position (three-dimensional): Riser, tread
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Kaseberg

Percent of map unit: 6 percent
Landform: Fan remnants
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Unnamed, steeper slopes

Percent of map unit: 3 percent
Landform: Fan remnants
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Riser
Down-slope shape: Linear
Across-slope shape: Concave
Hydric soil rating: No

229—Urban land-Xerarents-Fiddyment complex, 0 to 8 percent slopes

Map Unit Setting

National map unit symbol: hhqc
Elevation: 0 to 2,500 feet
Mean annual precipitation: 19 inches
Mean annual air temperature: 61 degrees F
Frost-free period: 230 to 300 days
Farmland classification: Not prime farmland

Map Unit Composition

Urban land: 40 percent
Xerarents and similar soils: 30 percent
Fiddyment and similar soils: 15 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Urban Land

Setting

Landform: Fan remnants
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Tread

Down-slope shape: Linear
Across-slope shape: Linear

Typical profile
H1 - 0 to 6 inches: variable

Interpretive groups
Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 8
Hydric soil rating: No

Description of Xerarents

Setting
Landform: Fan remnants
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Riser
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from granite

Typical profile
H1 - 0 to 60 inches: variable

Properties and qualities
Slope: 0 to 8 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Very low (about 0.0 inches)

Interpretive groups
Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7e
Ecological site: R017XY905CA - Dry Alluvial Fans and Terraces
Hydric soil rating: No

Description of Fiddyment

Setting
Landform: Fan remnants
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from granite

Typical profile
H1 - 0 to 8 inches: fine sandy loam
H2 - 8 to 15 inches: loam
H3 - 15 to 28 inches: sandy clay loam
H4 - 28 to 40 inches: indurated
H5 - 40 to 50 inches: weathered bedrock

Properties and qualities
Slope: 1 to 8 percent

Depth to restrictive feature: 28 to 40 inches to duripan; 40 to 50 inches to paralithic bedrock
Drainage class: Well drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Very low (about 2.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: D
Ecological site: R017XY902CA - Duripan Vernal Pools
Hydric soil rating: No

Minor Components

Kaseberg

Percent of map unit: 7 percent
Landform: Fan remnants
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Orangevale

Percent of map unit: 6 percent
Landform: Fan remnants
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Unnamed, shallow

Percent of map unit: 2 percent
Landform: Fan remnants
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Riser
Down-slope shape: Convex
Across-slope shape: Convex
Hydric soil rating: No

242—Xerofluvents, 0 to 2 percent slopes, flooded

Map Unit Setting

National map unit symbol: hhqs
Elevation: 20 to 140 feet
Mean annual precipitation: 14 inches
Mean annual air temperature: 61 degrees F
Frost-free period: 250 to 300 days
Farmland classification: Not prime farmland

Map Unit Composition

Xerofluvents and similar soils: 90 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Xerofluvents

Setting

Landform: Flood plains
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium

Typical profile

H1 - 0 to 60 inches: variable

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat excessively drained
Runoff class: Very low
Depth to water table: More than 80 inches
Frequency of flooding: Occasional
Frequency of ponding: None

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6w
Ecological site: R017XY903CA - Stream Channels and Floodplains
Hydric soil rating: Yes

Minor Components

Riverwash

Percent of map unit: 4 percent
Landform: Flood plains
Landform position (three-dimensional): Tread

Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R017XY903CA - Stream Channels and Floodplains
Hydric soil rating: Yes

Xerorthents

Percent of map unit: 3 percent
Landform: Fan remnants
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Tread, riser
Down-slope shape: Linear, convex
Across-slope shape: Linear, convex
Hydric soil rating: No

Rossmoor

Percent of map unit: 3 percent
Landform: Flood-plain steps
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R017XY903CA - Stream Channels and Floodplains
Hydric soil rating: No

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Appendix E. Representative Photographs



Photograph 1. Representative photograph of Old Auburn Way with adjacent oak woodland habitat. Taken facing northeast (4/25/2025).



Photograph 2. Representative photograph of the oak woodland habitat present in the northeastern portion of the BSA. Taken facing northwest (4/25/2025).



Photograph 3. Representative photograph of the annual grassland habitat adjacent to Wachtel Way. Taken facing northwest (4/25/2025).



Photograph 4. Representative photograph of Wachtel Way with ruderal vegetation along the roadway shoulders. Taken facing north (4/25/2025).



Photograph 5. Representative photograph of the urban/developed land cover within the BSA featuring residential homes and landscaping. Taken facing south (4/25/2025).

APPENDIX D: Representative Site Photos



Photograph 1. Representative photograph of Old Auburn Road with adjacent oak woodland habitat. Taken facing northeast near the county line (4/25/2025).



Photograph 2. Representative photograph of the oak woodland habitat present in the northeastern portion of the BSA. Taken facing northwest (4/25/2025).



Photograph 3. Representative photograph of the annual grassland habitat adjacent to Wachtel Way. Taken facing northwest (4/25/2025).



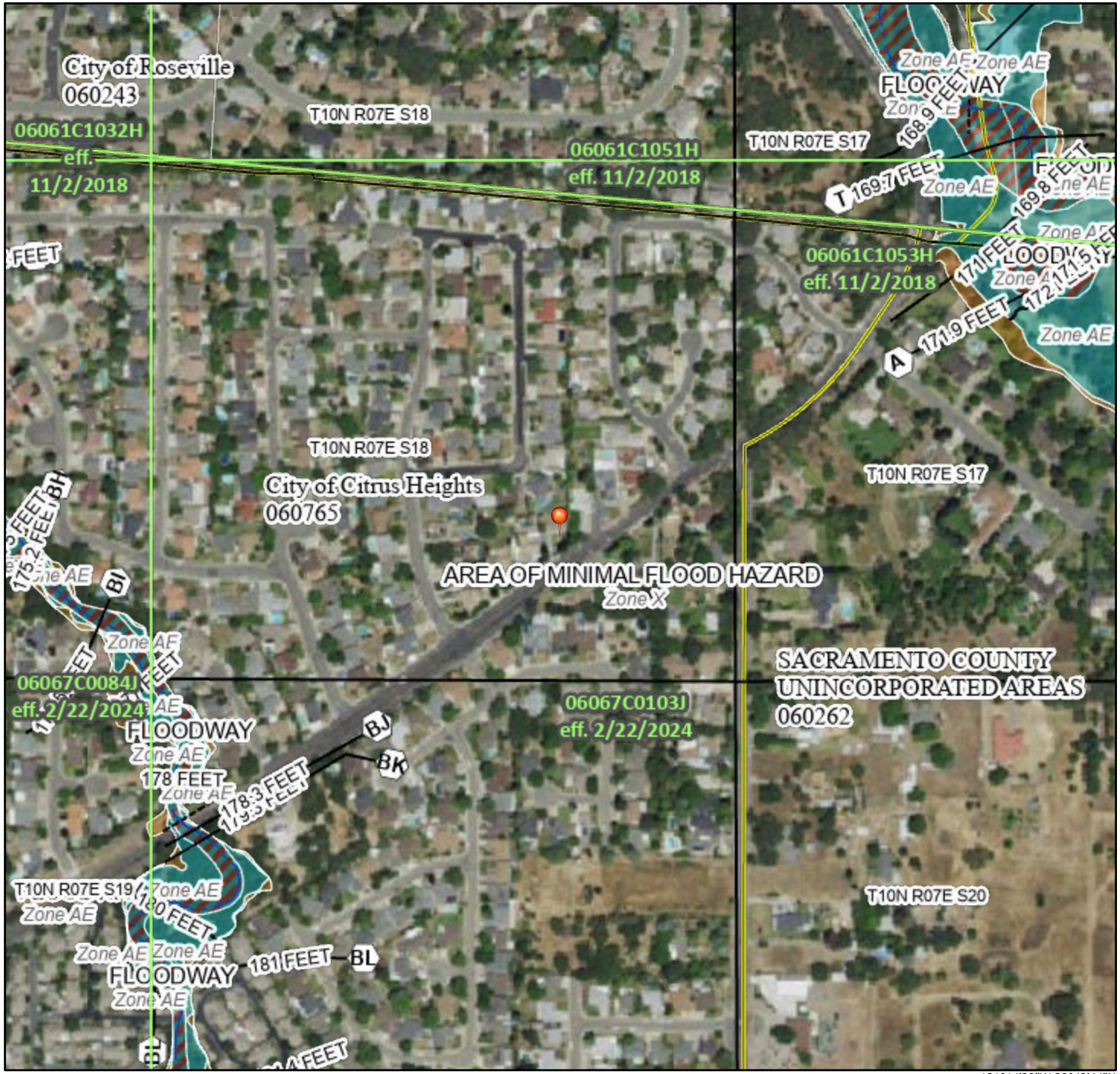
Photograph 4. Representative photograph of Wachtel Way with ruderal vegetation along the roadway shoulders. Taken facing north (4/25/2025).

APPENDIX E: FEMA FIRMette Map

National Flood Hazard Layer FIRMette

FEMA

121°15'5"W 38°43'12"N



121°14'28"W 38°42'44"N

Feet

0 250 500 1,000 1,500 2,000

1:6,000

Basemap Imagery Source: USGS National Map 2023

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 Cross Sections with 1% Annual Chance
- 17.5 Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 10/15/2025 at 7:38 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

APPENDIX F: Public Comments Received

COMMENT CARD

CITRUS HEIGHTS
Solid roots. New growth.

I would like to have the cinder block wall made higher due to the traffic noise and also for privacy. My backyard looks out to Old Auburn's Watchtel. Thank you.

Name: Tim & Jamie Guilfoil
Email Address: [redacted]
Phone Number:

COMMENT CARD

CITRUS HEIGHTS
Solid roots. New growth.

Please make All trail markings the same as Roseville trails. They specifically have WALKers going toward bike traffic. This is just like WALking toward traffic on the roadway. Much safer. Especially with the new electric bikes that you can't hear when the come up behind you very fast.
Thanks

Name: Robin Marks
Email Address: [redacted]
Phone Number:

COMMENT CARD

CITRUS HEIGHTS
Solid roots. New growth.

Are Sidewalks on both Side of the Road being added.

Name: Charles Stone
Email Address:
Phone Number: [redacted]

COMMENT CARD

CITRUS HEIGHTS
Solid roots. New growth.

We are directly impacted by this. Please contact us.

[redacted] Rd

Joe & Felicia Esposito

[redacted]

Name:
Email Address:
Phone Number:

COMMENT CARD

CITRUS HEIGHTS
Solid roots. New growth.

We think this is a great idea. We hope you can implement the project sooner than later.

Jim & Sara MacNicholl

Name: Jim MacNicholl
Email Address: jmacnich@me.com
Phone Number: [redacted]

COMMENT CARD

CITRUS HEIGHTS
Solid roots. New growth.

We live on OAKWOOD Hills & OLD Auburn Rd. Backyard Facing.
The SOUND WALL is NOT TALL Enough to Accomodate privacy in our Houses or Backyards if the Sidewalk is widened.
ALSO The proposed turn lane Headed EAST into Rusch Ln. STILL Would Help Much if NO STOP SIGN turning INTO OAKWOOD Hills.

Name: [redacted]
Email Address: [redacted]
Phone Number: [redacted]

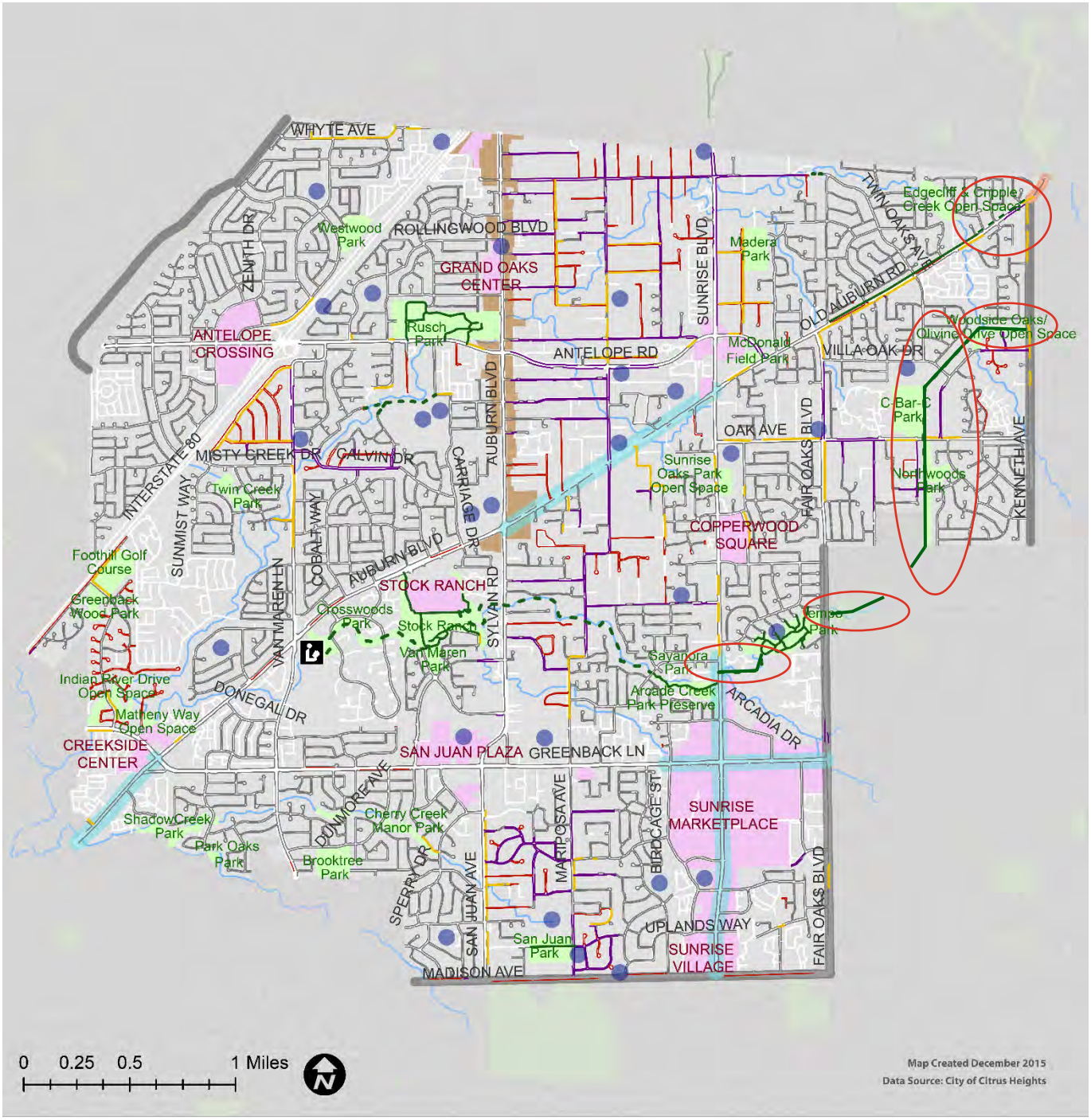


Figure 5-5: Recommended Path, Walkway, and Sidewalk Projects

CITY OF ROSEVILLE

ANTELOPE

ORANGEVALE

FAIR OAKS

CARMICHAEL

Placer County

Sacramento County

ST ALBANS COUNTRY DAY SCHOOL

VALLEY CHRISTIAN ACADEMY

CRESTMONT ELEMENTARY

LICHEN K-8

Westwood Park

TWIN OAKS AVE

Cripple Creek

Madera Park

LICHEN DR

GRAND OAKS ELEMENTARY

Rusch Community Park

MARIPOSA AVENUE ELEMENTARY

Woodside Oaks Open Space

ANTELOPE RD

McDonald Field Park

WOODSIDE K-8

CARRIAGE DRIVE ELEMENTARY

MESA VERDE HIGH

C-Bar-C Park

OAK AVE

OLD AUBURN RD

AUBURN BLVD

SUNRISE BLVD

Northwoods Park

Sunrise Oaks Park

Twin Creeks Park

SYLVAN MIDDLE SCHOOL

VAN MAREN LN

SYLVAN RD

FAITH CHRISTIAN ACADEMY

Greenback Woods Park

Stock Ranch

Arcade Creek

Area Outside City Limits Shown For Reference Only

Crosswoods Park

ARLINGTON HEIGHTS ELEMENTARY

Van Maren Park

Arcade Creek Park Preserve

Mitchell Village Park

Indian River Drive Open Space

Matheny Way Park Site

SAN JUAN HIGH

AUBURN BLVD

Parkwood Estates Greenbelt

GREENBACK LN

Brooktree Creek

MARIPOSA AVE

CAGE ST

FAIROAKS BLVD

Shadowcreek Park

Cherry Creek Manor Park

Brooktree Park

ST MARK'S LUTHERAN ELEMENTARY

KINGSWOOD K-8

SKYCREST ELEMENTARY

DEWEY DR

SAN JUAN AVE

CAMBRIDGE HEIGHTS ELEMENTARY

San Juan Park

MADISON AVE

LEGEND

- City of Citrus Heights
- Other Cities
- County Boundary
- Railroad
- Employment Centers
- End of Trip Parking
- Class I Bike Lane (Existing)
- Class II Bike Lane (Existing)
- Class III Bike Route (Existing)
- Class IV Bike Route (Existing)
- Class I Bike Lane (Proposed)
- Class II Bike Lane (Proposed)
- Class III Bike Route (Proposed)
- Class IV Bike Route (Proposed)
- Existing Bikeways (Other Agencies)
- Proposed Bikeways (Other Agencies)
- Sunrise Recreation and Park District
- San Juan Unified School District
- General Commercial
- Mixed Use
- RT Bus Stops

Notes:

1. The City of Citrus Heights makes no claims as to the safety of any proposed bike facility shown on this map. The purpose of this map is to identify potential bikeways for funding and implementation. For more information please contact the City of Citrus Heights General Services Department at 916-727-4770.

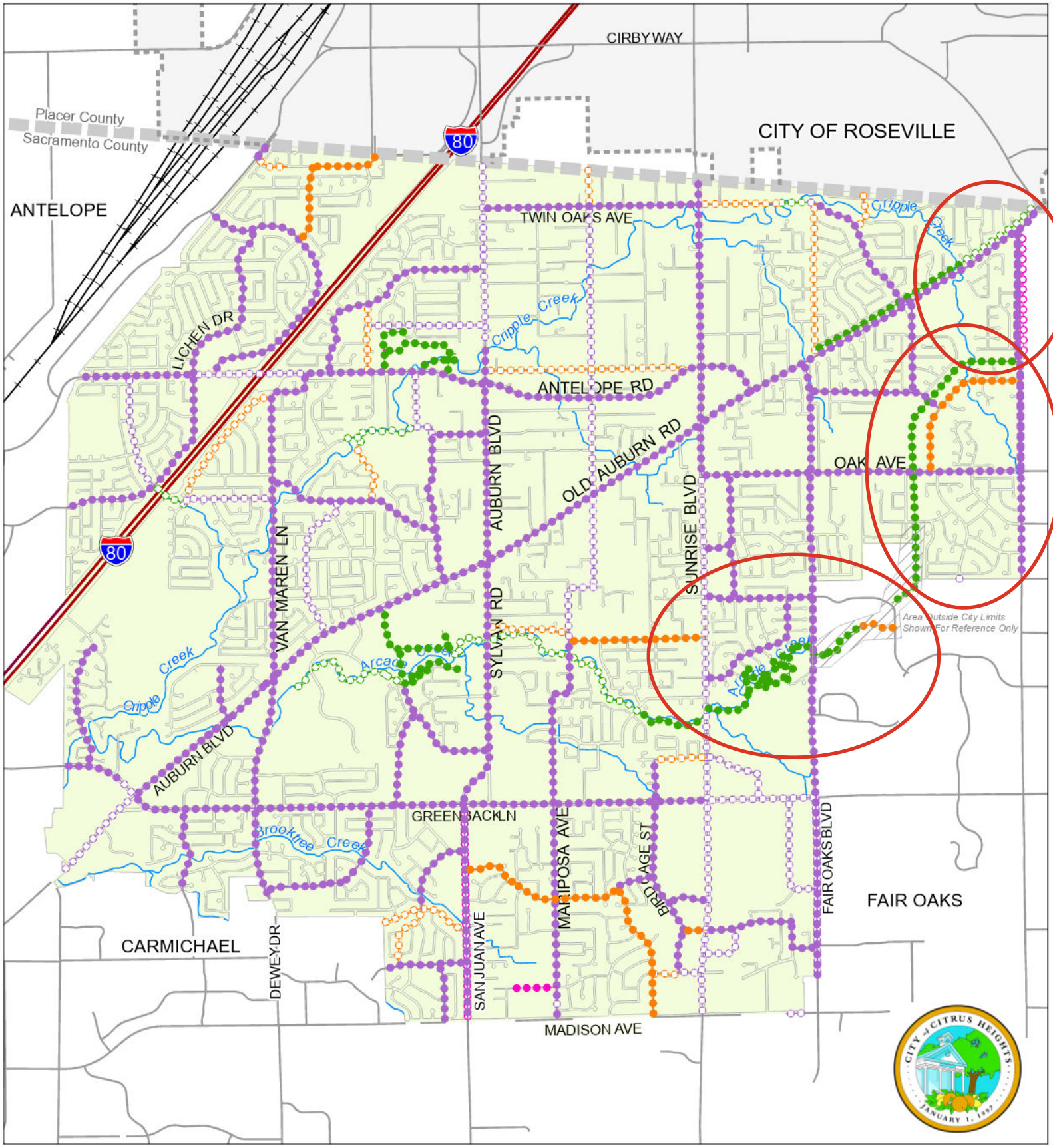
2. The final designation of bikeways on this map may change when detailed technical analysis is developed for individual projects as they advance to implementation.

3. Opportunities to install Class I bike trails adjacent to creeks will be studied on a case-by-case basis. Development near and adjacent to creeks will require dedication of a pedestrian/bikeway easement.

4. For Creek and SMUD Corridor Segments refer to the Creek Corridor Trail Project Feasibility Report for more information.

NO RTH 0 0 1 1 MILES

Proposed Bikeway System
Figure 4



LEGEND

- City of Citrus Heights
- Other Cities
- County Boundary
- Railroad
- Creeks

Proposed Bikeways - Citrus Heights

- Class I Bike Lane (Proposed)
- Class II Bike Lane (Proposed)
- Class III Bike Route (Proposed)
- Class IV Bike Route (Proposed)

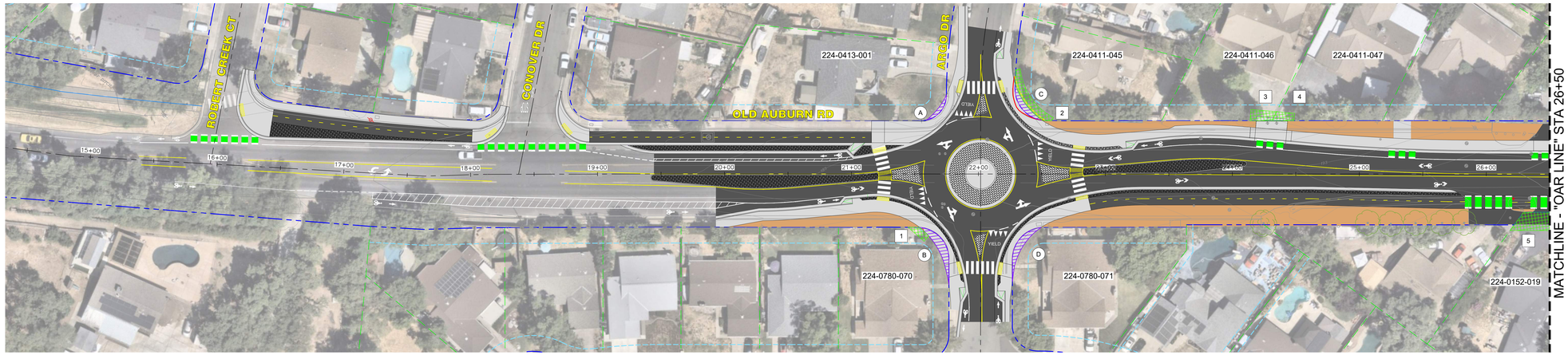
Existing Bikeways - Citrus Heights

- Class I Bike Lane (Existing)
- Class II Bike Lane (Existing)
- Class III Bike Route (Existing)
- Class IV Bike Route (Existing)

NORTH 0 0 1 1 MILES

Existing and Proposed Bikeway Classification (Miles)			
Bikeway Classification	*Existing*	*Proposed*	*Total*
Class I	4.5	4.9	9.4
Class II	40.9	14.5	55.4
Class III	3.5	4.4	7.9
Total	**48.9**	**23.8**	**72.7**

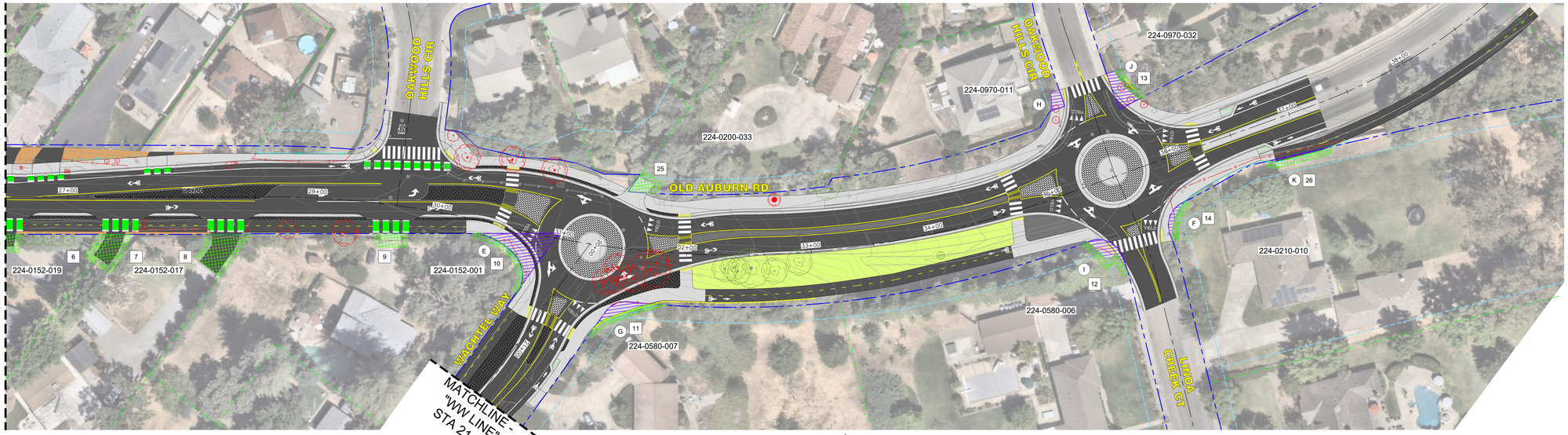
Map 8
Planned Bikeway System



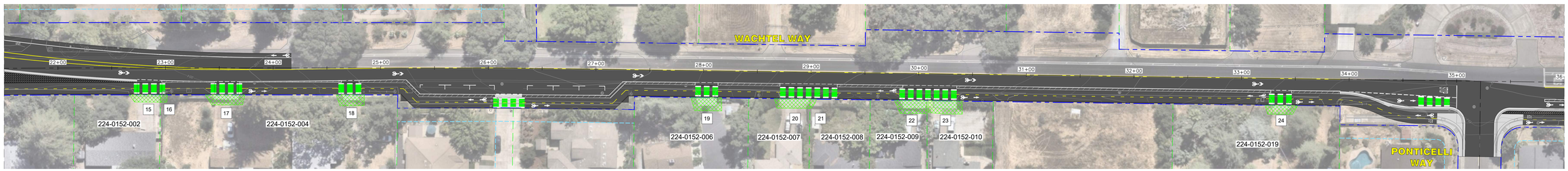
PLAN VIEW
SCALE 1" = 30'

LEGEND:

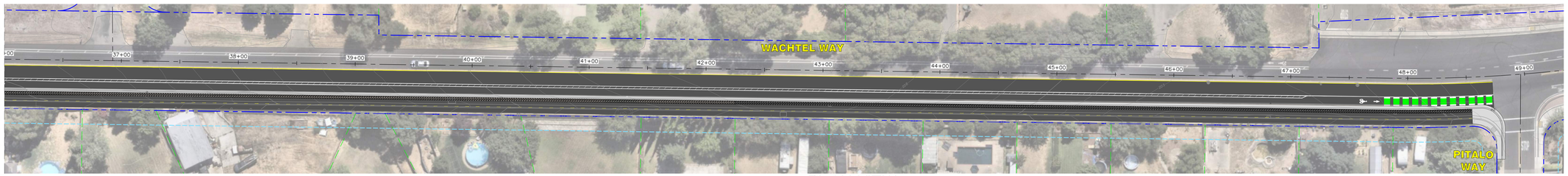
- RIGHT OF WAY ACQUISITION
- TEMPORARY CONSTRUCTION EASEMENT (TCE)
- RELOCATE FENCE
- RELOCATE WALL
- REMOVE TREE
- LANDSCAPING
- DECOMPOSED GRANITE (DG)



PLAN VIEW
SCALE 1" = 30'



PLAN VIEW
SCALE 1" = 30'



PLAN VIEW
SCALE 1" = 30'

0 30 60 Feet
SCALE 1" = 30'

CITRUS HEIGHTS GATEWAY
ACTIVATION PROJECT
PROJECT OVERVIEW EXHIBIT
ALTERNATIVE 1B

PREPARED FOR:
CITY OF CITRUS HEIGHTS
DECEMBER 2025

DOKKEN ENGINEERING
110 BLUE RAVINE ROAD
SUITE 200
FOLSOM, CA 95630
(916) 858-0642

Fehr & Peers

Technical Memorandum

Date: January 22, 2026

To: Pamela Dalcin-Walling, PE, QSD/P, Dokken Engineering

From: John Gard, and Mari Ramones, Fehr & Peers

Subject: Project Alternatives Analysis and Recommendations for the Gateway Activation Project in Citrus Heights, CA

Purpose

This technical memorandum recaps the project kickoff, initial community outreach, and intersection alternatives analysis for the Gateway Activation Project (GAP) in Citrus Heights, CA. The City of Citrus Heights staff identified project build alternatives to be evaluated for the primary study intersections at Old Auburn Road/Argo Drive, Old Auburn Road/Wachtel Way, and Old Auburn Road/Oakwood Hills Circle East.

Background

The Citrus Heights Gateway Activation Project (GAP) proposes to extend multi-modal connections along Old Auburn Road from the eastern border of the City of Citrus Heights for about 0.55 miles west. The proposed improvements will connect with existing and planned bicycle and pedestrian improvements to the west and east.

The objectives of the GAP project are to:

- Extend multimodal facilities on Old Auburn Road from the City's eastern boundary to the existing Class I trail to the west (Robert Creek Court)
- Extend multimodal facilities on Wachtel Way south to the Arcade-Cripple Creek Trail
- Upgrade intersections at Old Auburn Road/Wachtel Way and Old Auburn Road/Oakwood Hills Circle East
- Improve pedestrian safety and crossings at multiple points within the study corridor

An existing conditions analysis was conducted in early 2025 to document key characteristics such as existing roadway, bicycle and pedestrian networks, vehicle queuing, vehicle speeds, cut-through travel, and safety. The Existing Conditions Analysis Memorandum can be found in **Appendix A.**

Following the existing conditions analysis, the project team conducted a preliminary analysis of intersection alternatives for the following three study intersections:

1. Old Auburn Road/Argo Drive

2. Old Auburn Road/Wachtel Way
3. Old Auburn Road/Oakwood Hills Circle East

Alternatives at Old Auburn Road/Argo Drive were evaluated based on improving pedestrian safety and creating a crossing to connect the existing Class I trail to the west and the proposed trail to the east. Secondary considerations included traffic control devices that could reduce corridor speeds.

Several intersection controls were evaluated for the Old Auburn Road/Wachtel Way and Old Auburn Road/Oakwood Hills Circle East intersection. After a preliminary alternatives analysis, the project team narrowed down the alternatives to present at a community meeting. The alternatives that were chosen for a more focused analysis are discussed below.

Community Outreach

The project team hosted a kickoff community meeting on April 29, 2025 to introduce the project and gather community input on preliminary design concepts. The meeting began with the project team presenting the project overview and objectives. During the presentation, the team introduced the following geometric options for community input:

1. Two options for a pedestrian crossing at Argo Drive: a Pedestrian Hybrid Beacon (PHB) and a roundabout alternative.
2. Two options for the Old Auburn Road/Wachtel Way intersection: Traffic Signal and Roundabout.
3. Two options for the Old Auburn Road/Oakwood Hills Circle East intersection: Maintain existing All-Way Stop-Control (AWSC) and Roundabout.

The project team presented the safety and operational benefits and drawbacks of each alternative along with various other engineering design aspects.

Community members expressed interest in both the pedestrian hybrid beacon and roundabout options for Argo Drive. For the intersection improvements at Wachtel Way, community members preferred the roundabout alternative over the signal alternative. However, several attendees expressed concerns about the roundabout and the ability for residents to use it safely. At Oakwood Hills Circle East, residents preferred the roundabout to the existing condition of All-Way Stop-Control.

For a detailed description of the community workshop and project alternative exhibits, see the project website at https://www.citrusheights.net/1343/Gateway-Activation-Project-GAP.

Argo Drive Pedestrian Crossing

Fehr & Peers evaluated the appropriate type of traffic control and pedestrian crossing at the Old Auburn Road/Argo Drive intersection. Fehr & Peers documented existing conditions and evaluated potential improvements.

Existing Conditions

The Old Auburn Road/Argo Drive intersection is controlled by stop signs on the two side-street approaches. In this area, Old Auburn Road features one travel lane in each direction separated by a two-way left-turn lane (TWLTL). There are also wide Class II (on-street) bike lanes present in each direction (may have accommodated on-street parking at one time). Just west of the intersection, Old Auburn Road is 71 feet wide, measured from face of curb.

No crosswalks are located at the intersection and the posted speed limit on this section of Old Auburn Road is 40 miles per hour. The nearest crosswalk to this intersection across Old Auburn Road is at Wachtel Way, 900 feet to the east. There are not continuous sidewalks along Old Auburn Road between Argo Drive and Wachtel Way, which requires pedestrians to walk in the shoulder or bike lane. The next closest crossing is 2,300 feet to the west at Wintergreen Drive.

Figure 1 shows the existing AM and PM peak hour traffic volumes at the study intersection based on counts collected on Wednesday, October 30, 2024.

Image 1 is a photo taken in March 2025 of a group of pedestrians beginning to cross Old Auburn Road at Argo Drive. Halfway across, they began jogging/running across the road as vehicles were approaching.

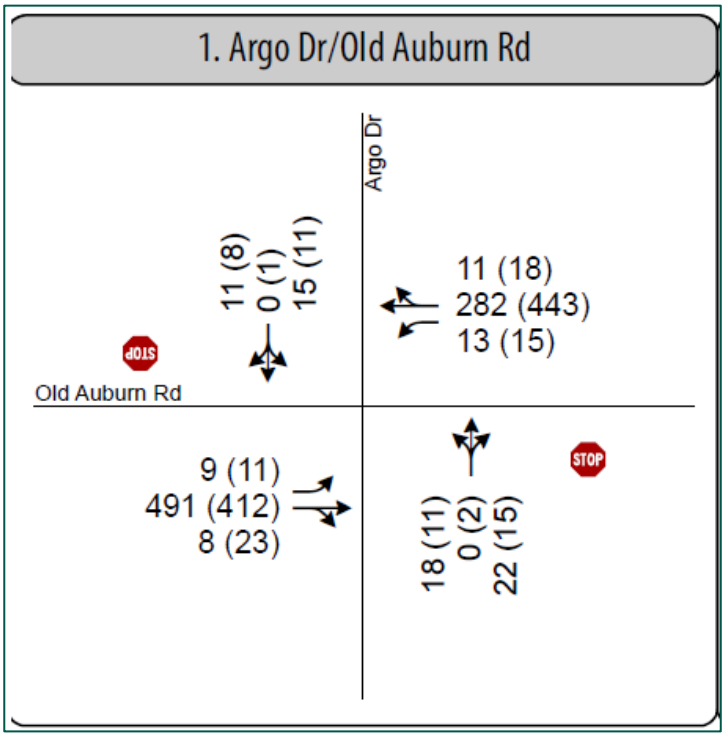


Figure 1: Existing AM (PM) peak hour traffic volumes.



Image 1: View of pedestrians crossing Old Auburn Road at Argo Drive

Warrants Analysis

The *California Manual of Uniform Traffic Control Devices* (Caltrans, 2014) contains several different types of warrants or installation guidelines applicable to the study intersection. They include:

- Traffic Signal Warrants
- Pedestrian Hybrid Beacon Guidelines for Installation

Traffic Signal Warrant Analysis

There are nine (9) traffic signal warrants as shown in **Image 2**. Of these nine, warrants 1, 2, 3, 4, and 7 would be applicable to the study intersection. Warrant 5 is not applicable because the intersection is not an established school crossing. Warrants 6, 8, and 9 are also not applicable for various reasons.

02 **The investigation of the need for a traffic control signal shall include an analysis of factors related to the existing operation and safety at the study location and the potential to improve these conditions, and the applicable factors contained in the following traffic signal warrants:**

Warrant 1, Eight-Hour Vehicular Volume
Warrant 2, Four-Hour Vehicular Volume
Warrant 3, Peak Hour
Warrant 4, Pedestrian Volume
Warrant 5, School Crossing
Warrant 6, Coordinated Signal System
Warrant 7, Crash Experience
Warrant 8, Roadway Network
Warrant 9, Intersection Near a Grade Crossing

Image 2: List of all signal warrants contained in CA MUTCD.

The following conclusions were reached regarding whether the study intersection satisfies any of the applicable CA MUTCD signal warrants:

- **None of the traffic volume-based signal warrants would be satisfied.** This is because the largest hourly side-street traffic volume is 40 vehicles, half of the minimum required for the 4-hour warrant and only 40% of the required volume for the peak hour warrant.
- **The pedestrian volume warrant would not be met.** During the October 2024 counts, only a single pedestrian crossed Old Auburn Road during the five-hour count window.
- **The crash experience warrant would not be met.** Between 2018 and 2023, two reported crashes occurred at the study intersection. This warrant requires five collisions in a 12-month period of a type susceptible to correction by a traffic signal.

Pedestrian Hybrid Beacon Warrant Analysis

Page 973 of the *CA MUTCD* states the following with regard to when pedestrian hybrid beacons (PHBs) should be installed:

> *For a major street where the posted or statutory speed limit or the 85th-percentile speed exceeds 35 mph, the need for a pedestrian hybrid beacon should be considered if the engineering study finds that the plotted point representing the vehicles per hour on the major street (total of both approaches) and the corresponding total of all pedestrians crossing the major street for 1 hour (any four consecutive 15-minute periods) of an average day falls above the applicable curve in Figure 4F-2 for the length of the crosswalk.*

Image 3 shows Figure 4F-2 from the CA MUTCD and indicates that a minimum of 20 pedestrian crossings per hour are suggested by this guideline. **Image 4** shows the pedestrian signal heads visible to motorists at PHBs.

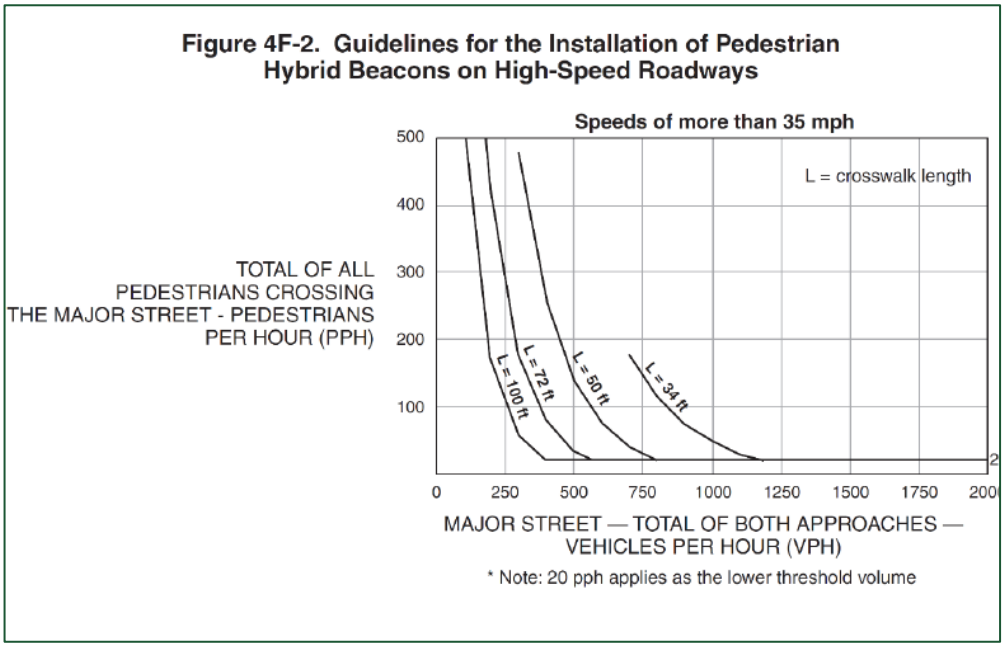


Image 3: Guidelines for installing pedestrian hybrid beacons

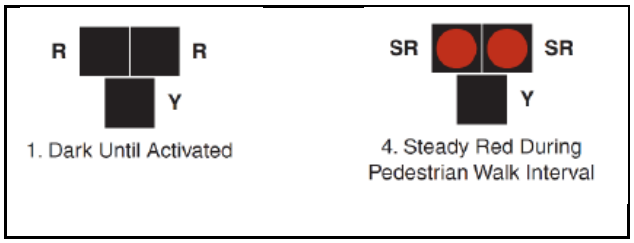


Image 4: pedestrian hybrid beacons signal heads

In summary, the Old Auburn Road/Argo Drive intersection does not currently have a sufficient level of pedestrian crossings to meet the guideline for PHB installation. While such an installation may attract more pedestrians, it is unknown whether at least 20 per hour will occur.

Although the suggested guidelines are not met for pedestrian volumes, the CA MUTCD allows for the installation of a PHB based on an analysis and engineering judgment.

Conclusions

From the aforementioned analyses, it was determined that neither a traffic signal nor a PHB are appropriate solutions for the Old Auburn Road/Argo Drive intersection. However, it is worth noting that the majority of the language related to the signal warrant analysis in the *CA MUTCD* is regulatory and uses wording like "shall". In contrast, language associated with the PHB is primarily optional, guidance, or support, suggesting there may be some flexibility in application and deference given to the lead agency.

Page 973 of the *CA MUTCD* states the following: "A conventional traffic control signal operation with a standard signal face displaying green, yellow and red (steady and/or flashing red) indications, at a mid-block crosswalk is an alternative to the pedestrian hybrid beacon." This type of installation (i.e. a pedestrian signal) is in place in multiple locations in Citrus Heights, such as nearby Woodside Middle School and various locations along Auburn Boulevard and Greenback Lane.

In lieu of the signal alternatives mentioned above, a roundabout was considered.

Image 5 shows Exhibit 8.8 of *NCHRP 1043: Guide for Roundabouts* (2023). This exhibit shows a range of appropriate intersection traffic control treatments across a wide range of traffic volumes. The red 'X" on this image shows the volume at the Old Auburn Road/Argo Drive intersection. The volume is at the cusp of where side-street stop-control or a single-lane roundabout is advised.

A single-lane roundabout would offer several benefits to travelers on the Old Auburn Road corridor including:

1. **Reduced travel speeds**. Motorists would be required to slow down well below the 40 mph posted speed limit in order to navigate the roundabout.
2. **Improved Pedestrian Crossing**: The currently uncontrolled 70-foot wide crossing of Old Auburn Road at Argo Drive would be converted into a much shorter crossing distance (and across one lane at a time with a refuge island in between).
3. **Acceptable traffic operations**: The roundabout would operate with only modest delays and queues.
4. **Improved Corridor Safety**: Roundabouts are known to have lower collision rates than signals or stop signs under most conditions. They are especially effective in reducing fatal or severe injury collisions.

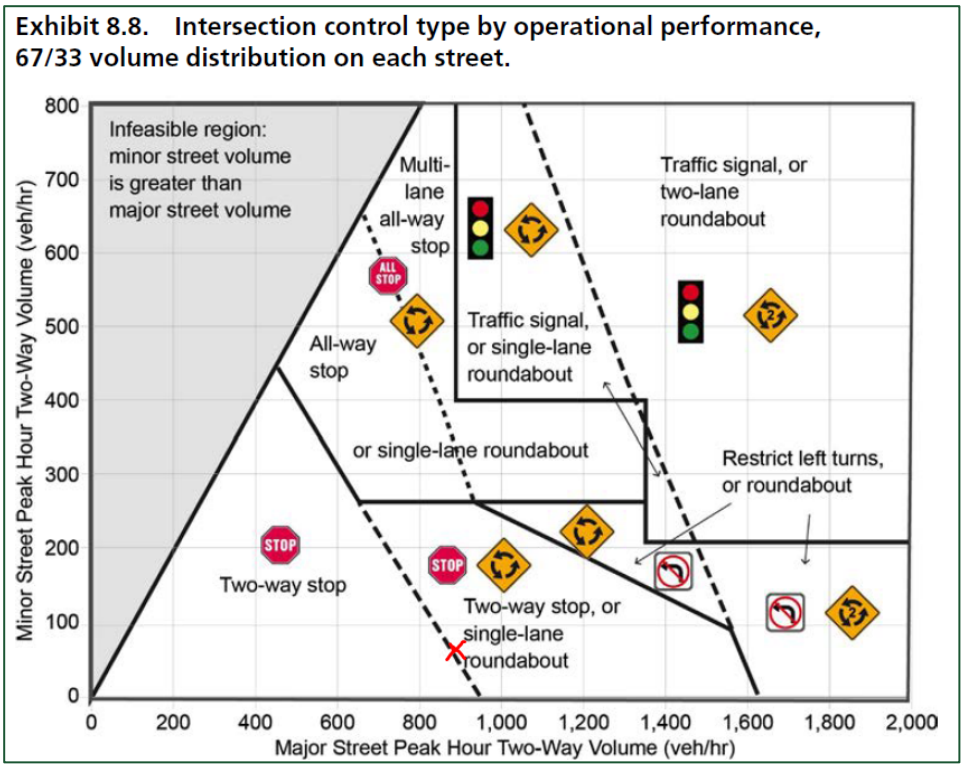


Image 5: Exhibit 8.8 of NCHRP 1043: Guide for Roundabouts (2023)

Alternatives Analysis

The project team considered a range of traffic control alternatives for the remaining two study intersections, Old Auburn Road/Wachtel Way and Old Auburn Road/Oakwood Hills Circle East. These two intersections were analyzed as a pair due to their proximity to each other and the upstream/downstream effects that each control type has on the other intersection. The following alternatives were developed for subsequent analysis:

- Alternative 1 – Consists of a roundabout at the Old Auburn Road/Wachtel Way intersection and maintaining the existing AWSC at the Old Auburn Road/Oakwood Hills Circle East intersection.
  A roundabout was considered due to its ability to reduce vehicle travel speeds and conflict points, and to improve multi-modal crossing conditions at the intersection. **Image 6** shows the configuration at the study intersections under this alternative.
- Alternative 2 – Consists of roundabouts at both study intersections. **Image 7** shows this configuration at the study intersections under this alternative.

- Alternative 3 – Consists of installing a traffic signal at the Old Auburn Road/Wachtel Way intersection with east-west split phasing (i.e., no westbound left-turn lane) and the Old Auburn Road/Oakwood Hills Circle East intersection remain as AWSC. **Image 8** shows the configuration at the study intersections under this alternative.

(Please see "Warrant Analysis at the Old Auburn Road/Oakwood Hills Circle East–Linda Creek Ct Intersection" for a discussion regarding why a traffic signal was not considered at the Old Auburn Road/Oakwood Hills Circle East intersection under any of these alternatives.)



Image 6: Proposed intersection configurations for Alternative 1.

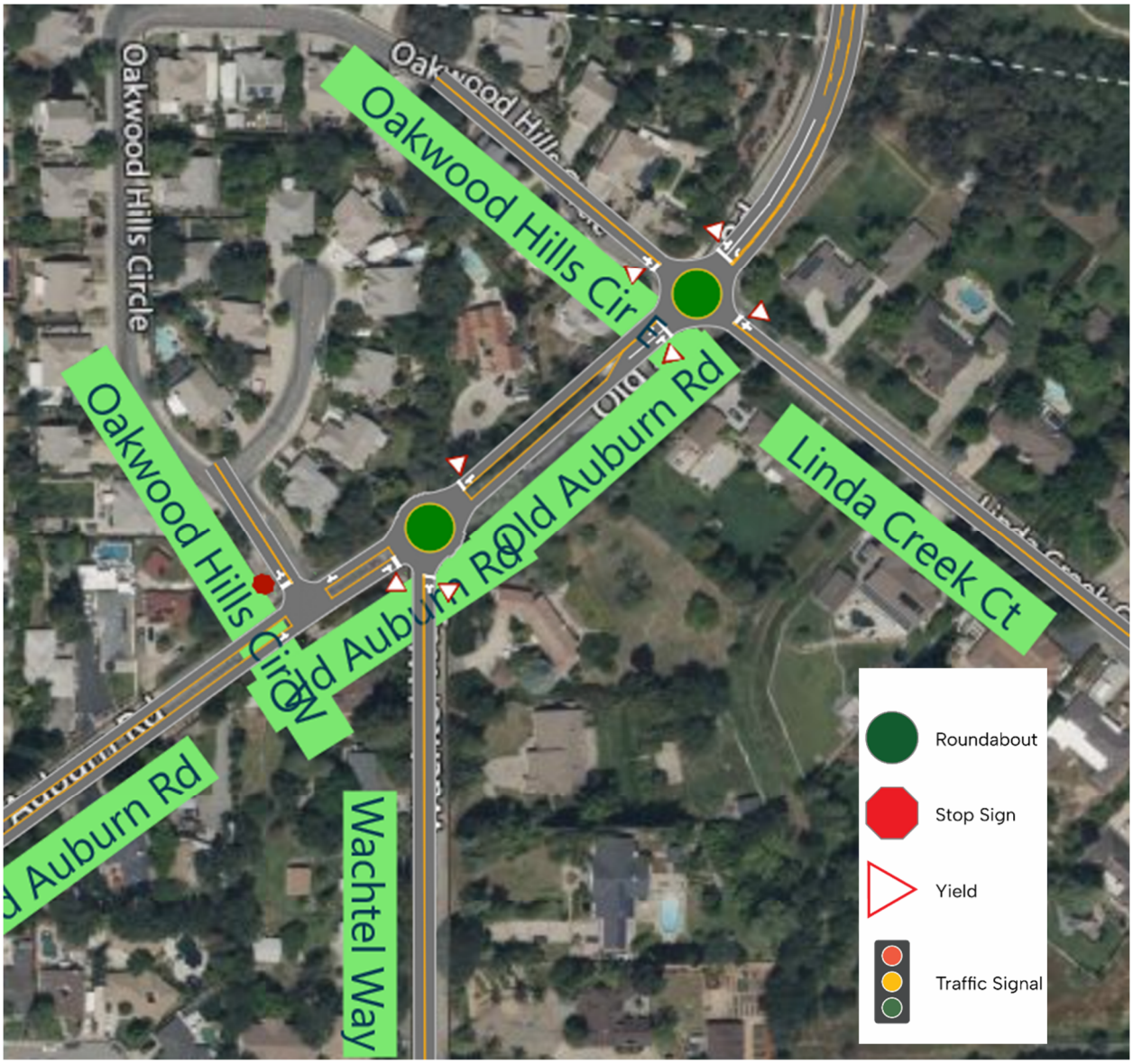


Image 7: Proposed intersection configurations for Alternative 2.

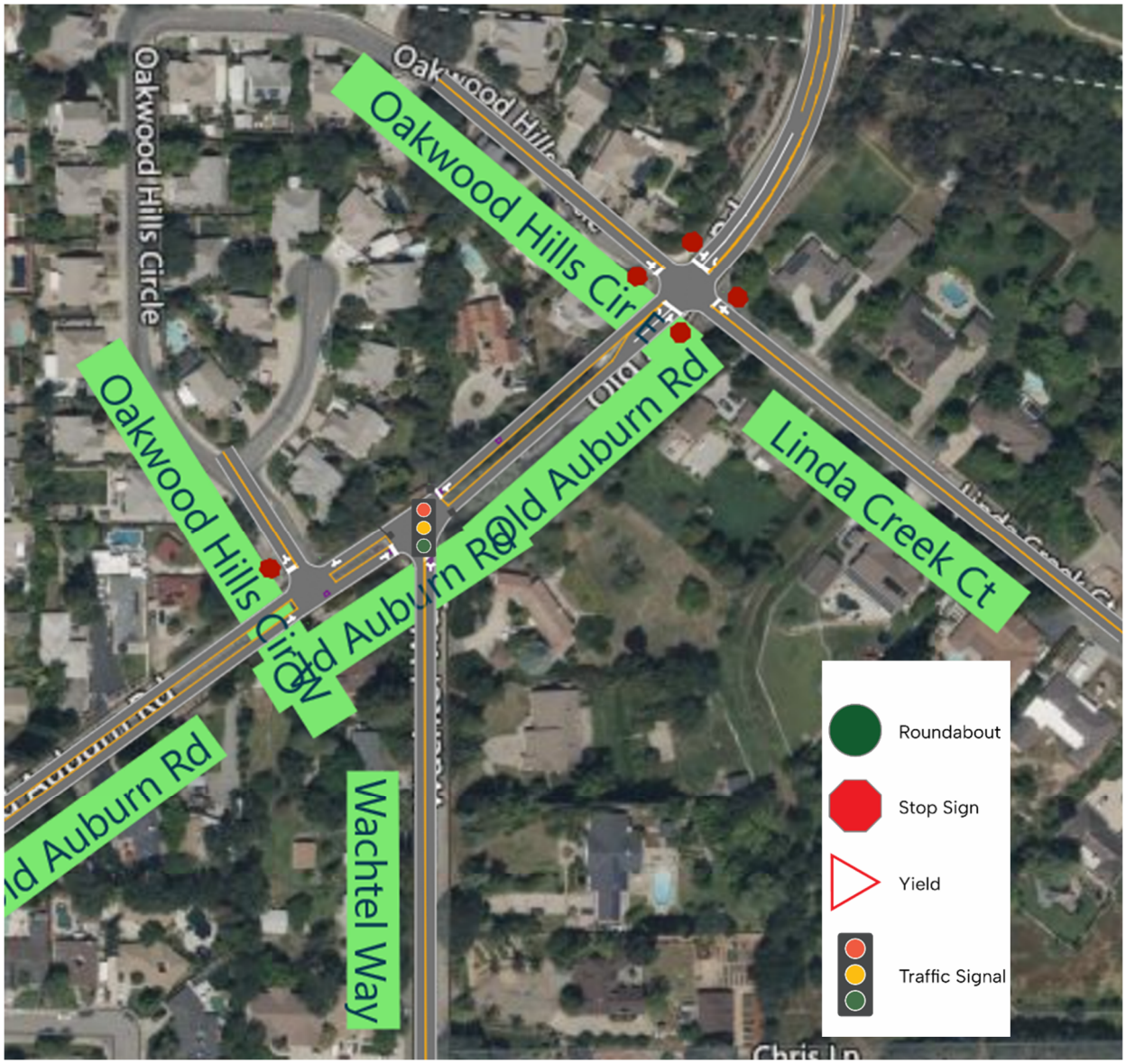


Image 8: Proposed intersection configurations for Alternative 3.

To confirm that a roundabout would be a viable solution for this segment of Old Auburn Road, the project team research locations in the Northern California area with comparable single lane roundabouts. The City of Chico installed a single lane roundabout at the Manzanita Avenue/Vallombrosa Avenue intersection over 10 years ago. This roundabout has comparable ADT volumes of 11,142 vehicles on Manzanita Avenue, similar to Old Auburn Road west of Wachtel Way. Conversations with the City of Chico staff revealed that one collision has been reported at this roundabout in last 7 years. Comparable single-lane roundabouts also exist on Elk Grove Boulevard between Waterman Road and Bradshaw Road in the City of Elk Grove. The existing ADT on Elk Grove Boulevard at this location is about 13,200 vehicles.

Warrant Analysis at the Old Auburn Road/ Oakwood Hills Circle East-Linda Creek Ct Intersection

A traffic signal was evaluated as a potential alternative at the Old Auburn Road/Oakwood Hills Circle East-Linda Creek Ct intersection. Similar to the warrant analysis presented previously at the Old Auburn Road/Argo Drive intersection, warrants 1, 2, 3, 4, and 7 would be applicable to this study intersection.

Based on the results of the warrant analysis, it was determined that the Old Auburn Road/Oakwood Hills Cir E-Linda Creek Ct intersection does not satisfy any of the applicable CA MUTCD signal warrants for the following reasons:

- **None of the traffic volume-based signal warrants would be satisfied.** The largest hourly side-street traffic volume is 5 vehicles, which does not meet the lowest threshold volume for a minor-street approach with one lane.
- **The pedestrian volume warrant would not be met.** During the October 2024 counts, only seven pedestrians crossed Old Auburn Road during the five-hour count window.
- **The crash experience warrant would not be met.** Between 2018 and 2023, one reported crash occurred at the study intersection.

Additionally, installing a traffic signal at this intersection would lead to higher vehicle speeds through the corridor. This could potentially increase the frequency of collisions and street noise on Old Auburn Road. With a traffic signal in place, the eastbound and westbound through movements on Old Auburn Road would receive a green signal indication the vast majority of the day (due to lack of side street traffic). Motorists on Old Auburn Road may become accustomed to the signal being green and consequently drive less cautiously when approaching it. In summary, the installation of a traffic signal is not warranted based on traffic volume and collision history and would be detrimental to overall safety in the corridor.

Intersection Operations

Traffic operations for each alternative were analyzed using delay and Level of Service (LOS) as primary measures of intersection performance. Automobile LOS is a qualitative description of traffic flow from the perspective of motorists. The *Highway Capacity Manual (HCM) 7th Edition* (Transportation Research Board, 2022) defines six levels of service from LOS A representing the least congested traffic conditions to LOS F representing the most congested traffic conditions. These grades represent the perspective of drivers and are an indication of the comfort and convenience associated with driving, as well as speed, travel time, traffic interruptions, and freedom to maneuver.

LOS at signalized and all-way stop-controlled intersections and roundabouts is based on the weighted average control delay measured in seconds per vehicle for all motorists traveling through the intersection. For side-street stop-controlled intersections, this study reports the average control delay for the lane group or movement with the greatest delay, and for the intersection as a whole.

The corridor was analyzed using Synchro's SimTraffic micro-simulation module to apply the methodologies. SimTraffic considers interactions between closely spaced adjacent intersections, turn

lane spillbacks, and upstream/downstream bottlenecks. In this study, given the above guidance, SimTraffic was used to analyze all study intersections.

Table 1 compares the LOS and delay results for the three build alternatives versus existing conditions. Note that the City's General Plan specifies that "the city shall strive to achieve LOS E or better conditions during peak hours". Key findings from this table are:

- The Old Auburn Road/Wachtel Way intersection would continue to operate unacceptably during the AM peak hour under Alternative 1. This occurs because the heavy eastbound travel demand approaching the Old Auburn Road/Oakwood Hills Circle East all-way stop would regularly spill back into the roundabout, locking it up.
- Alternative 2 would provide LOS A or B operations at each intersection during the AM and PM peak hours.
- Alternative 3 would also provide acceptable operations, though delays would be much greater than under Alternative 2.

Table 1. Peak Hour Level of Service – Alternatives Analysis

Alternative	Traffic Control at Wachtel Way	Peak Hour	LOS/Delay (s)	Traffic Control at Oakwood Hills Circle East	LOS/Delay (s)
Existing Conditions	AWSC	AM	**F / 56**	AWSC	E / 38
		PM	B / 14		**F / 75**
1	RAB	AM	**F / 115**	AWSC	D / 33
		PM	B / 12		C / 20
2	RAB	AM	B / 13	RAB	A / 9
		PM	B / 10		A / 8
3	Signal	AM	D / 50	AWSC	C / 20
		PM	D / 52		E / 45

Notes: AWSC = All-Way Stop-Controlled
Bolded numbers indicate deficient operations per City of Citrus Heights General Plan Policy 29.2.
Source: Fehr & Peers, 2025.

Vehicle Queuing Results

Table 2 shows the maximum queue lengths based on SimTraffic results for critical movements at the study intersections. Key findings from this table are summarized below:

1) Alternative 1
   a) Eastbound Old Auburn Road east of Wachtel Way: This alternative would deliver large platoons of traffic departing Wachtel Way. Those vehicles would incur the all-way stop at Oakwood Hills Circle East, which results in vehicle queues spilling back into the Wachtel Way roundabout. This, in turn, causes a lengthy eastbound queue to develop approaching the roundabout.
   b) Westbound Old Auburn Road: This alternative reduces the maximum queue in the westbound direction during the PM peak hour from 1,150 feet (existing) to 400 feet. This occurs because vehicles traveling westbound only have to stop at Old Auburn Road/Oakwood Hills Circle East and are able to travel freely through the roundabout.
   c) Northbound Wachtel Way: Motorists on this approach during the AM peak hour would have a difficult time finding gaps in traffic within the roundabout due to the heavy eastbound travel demand and the queue spill back mentioned above.
2) Alternative 2
   a) Eastbound Old Auburn Road: This alternative reduces the maximum queue in the eastbound direction during the AM peak hour from 850 feet (existing) to 275 feet. This reduction in queuing is due to the constant flow of traffic through the double roundabouts and minimal stopping of vehicles.
   b) Westbound Old Auburn Road: This alternative reduces the maximum queue in the westbound direction during the PM peak hour from 1,150 feet (existing) to 150 feet.
   c) Northbound Wachtel Way: When compared to Alternative 1, motorists on this approach would have a much easier time entering the roundabout, thereby resulting in less delays and shorter queues.
3) Alternative 3
   a) Eastbound Old Auburn Road west of Wachtel Way: When compared to existing conditions, this alternative results in a maximum queue that is slightly less during the AM peak hour, but twice as long during the PM peak hour. This change stems from altered corridor traffic flow characteristics due to the all-way stop at Wachtel Way being replaced by a signal.
   b) Westbound Old Auburn Road: This alternative reduces the maximum queue in the westbound direction during the PM peak hour from 1,150 feet (existing) to 825 feet. Under this alternative, westbound traffic would continue to spill back from Wachtel Way into the Oakwood Hills Circle East intersection. This change stems from altered corridor traffic flow characteristics due to the all-way stop at Wachtel Way being replaced by a signal.

Travel Times and Speeds

Corridor travel times and average travel speeds were compared against existing conditions for each alternative. Existing corridor travel times in the peak direction of travel (i.e., eastbound in the AM peak hour and westbound in the PM peak hour) are shown in **Image 9**. As shown, average travel speeds are in the 11-12 miles per hour (mph) range, which is well below the posted speed limit of 35 mph.

Fehr & Peers

Table 2. Maximum Vehicle Queues

Intersection	Movement	Available Storage (ft)[2]	Maximum Queue (ft)[1]											
			Existing Conditions			Alternative 1			Alternative 2			Alternative 3		
			Control	AM Peak Hour	PM Peak Hour	Control	AM Peak Hour	PM Peak Hour	Control	AM Peak Hour	PM Peak Hour	Control	AM Peak Hour	PM Peak Hour
Old Auburn Road/Wachtel Way	EBT	90	AWSC	**850**	**300**	RAB	**1,125**	**225**	RAB	**275**	**225**	Signal	**775**	**650**
	WB L/T	350		175	**375**		75	175		75	225		**350**	**375**
	NBL	600		275	275		**850**	125		200	125		325	250
	NBR[3]	100		125	100									
Old Auburn Road/Oakwood Hills Circle E/Linda Creek Ct	EBT	350	AWSC	150	125	AWSC	**400**	175	RAB	200	75	AWSC	300	175
	WBT	1,370		125	1,150		200	400		75	150		150	825

Notes:
[1] Results based on SimTraffic. Maximum queue lengths are rounded to nearest 25 feet. All queues are expressed on a "per lane" basis or approach as noted. Includes vehicles that may queue in the taper length of a turn pocket.
[2] Available storage lengths based on review of aerial imagery. Distance is either length of turn lane or distance to nearest upstream intersection.
[3] Existing lane configuration is a shared northbound LT/RT lane. For purposes of the simulation, a small right turn pocket was added to better model vehicle queuing conditions. With signal, this becomes a shared left/right lane.
Bolded text represents a queue that extends into or beyond the nearest upstream intersection.



Image 9: Existing corridor travel times in peak travel direction.

Table 3 compares the travel times and speeds for the proposed alternatives. As shown, Alternative 2 results in the lowest corridor travel time of about 1.5 minutes, or about half of the time it takes to travel under existing conditions. With Alternative 2, there is an increase of 6 mph in the AM peak Hour and 12 mph in the PM peak hour.

Table 3. Corridor Travel Times and Average Speed Comparisons

Scenario	AM Peak Hour	PM Peak Hour
	Eastbound (From Wintergreen Drive to Linda Creek Ct)	Westbound (from South Cirby Way to Argo Drive)
Existing Conditions	185 seconds / 11 mph	184.8 seconds / 12 mph
Alternative 1 (Roundabout/AWSC)	100.4 seconds / 19 mph	89.8 seconds / 23.5 mph
Alternative 2 (Roundabout/Roundabout)	87.3 seconds / 17 mph	82.4 seconds / 24 mph
Alternative 3 (Signal/AWSC)	141.6 seconds / 16 mph	164.9 seconds / 17 mph

Conclusions

Alternative 2 emerged as the preferred alternative when considering traffic operations and safety considerations. The superior benefits of this alternative versus the others is documented below:

- Corridor Travel Delays: Alternative 2 would result in an overall average delay during AM and PM peak hours of 10 seconds per vehicle at the Old Auburn Road/Wachtel Way and Oakwood Hills Circle East intersections. In contrast, Alternatives 1 and 3 would result in overall average delays of about 45 seconds, due to the AWSC at Oakwood Hills Circle East remaining in place under each alternative.
- Corridor Vehicle Queuing: Alternative 2 would have the least amount of vehicle queuing approaching and between the two intersections among the three alternatives studied.
- Corridor Travel Times: Alternatives 1 and 2 would have comparable travel times along Old Auburn Road. However, this metric is a bit misleading because Alternative 1 creates challenges for motorists on northbound Wachtel Way to enter the roundabout, whereas Alternative 2 does not. Thus, Alternative 2 has the least amount of overall travel time on both corridors.
- Safety: Improved safety (over existing conditions and the other alternatives) is one of the primary reasons why the roundabout combination in Alternative 2 is favored. Roundabouts reduce crash severity by eliminating right-angle conflicts, which are the crash type most responsible for fatalities at signalized intersections. Roundabouts are one of FHWA's proven safety countermeasures because they can promote lower speeds, calm traffic, and lead to improved operational performance. Furthermore, the signal at Old Auburn Road/Wachtel Way in Alternative 3 presented safety concerns related to the skewed intersection configuration. It was anticipated that the northbound Wachtel Way to westbound Old Auburn Road left turn movement would present challenges similar to what the City has experienced at the Old Auburn Road/Fair Oaks Boulevard intersection.

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Appendix A: Existing Conditions Analysis

FEHR PEERS

Memorandum

Date: January 22, 2025

To: Pamela Dalcin-Walling, PE, QSD/P, Dokken Engineering

From: John Gard, PE, and Mari Ramones, Fehr & Peers

Subject: Existing Conditions Analysis for the Citrus Heights Gateway Activation Project

SA24-0281

Introduction

Project Background

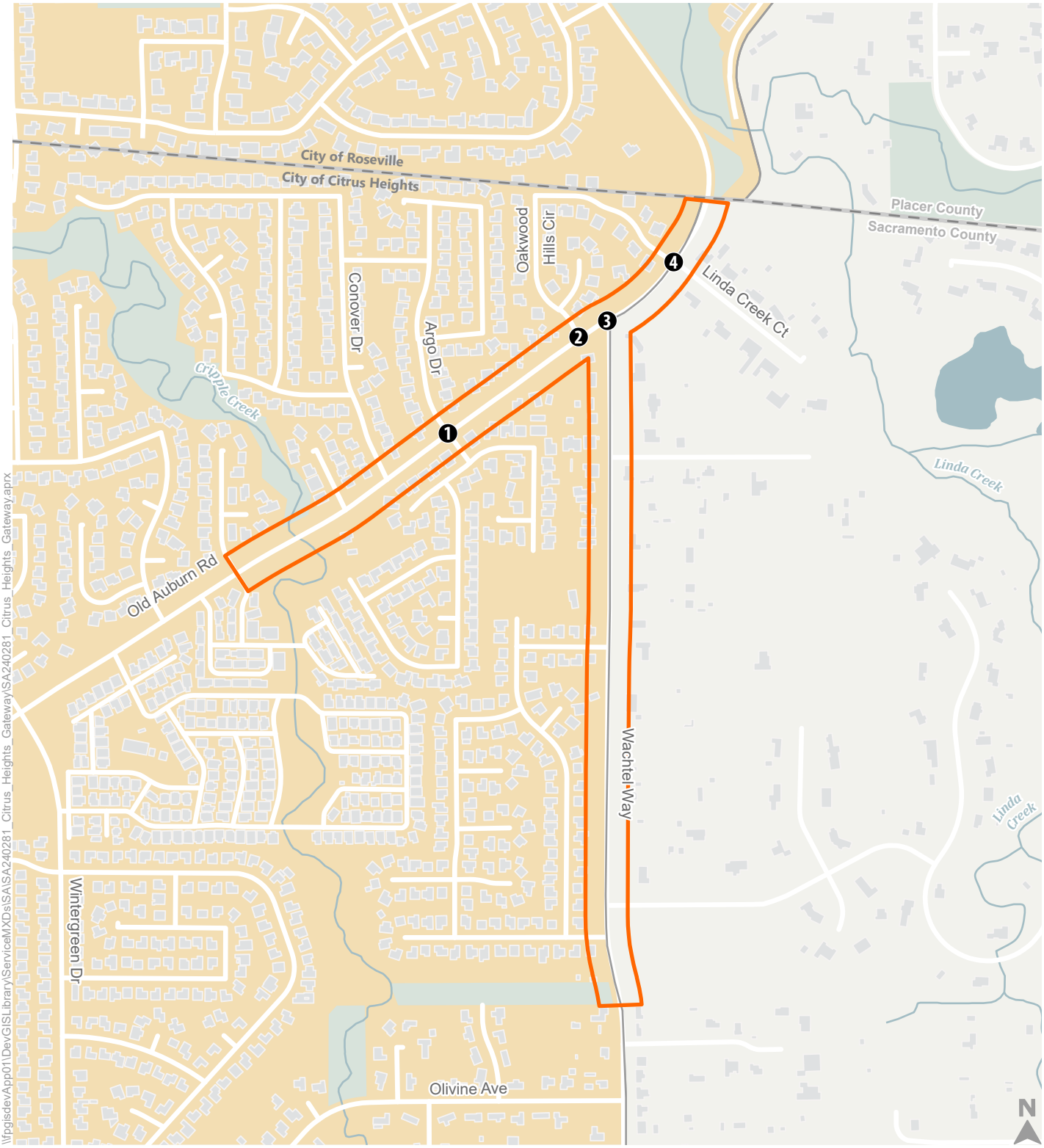
This project will transform Old Auburn Road between the Roseville/Citrus Heights border and Orielle Creek Road (0.55 miles to the west) into a Complete Streets corridor. It would extend multi-modal connections through the corridor to connect with existing and planned improvements to the west and east, addressing documented safety issues. Additionally, the project would make improvements to 0.6 miles of Wachtel Way south of Old Auburn Road for similar purposes and benefits.

Study Area and Time Periods

Figure 1 shows the study area including the four study intersections. Morning (7:00 to 9:00 a.m.) and evening (3:00 to 6:00 p.m.) peak period traffic counts were collected at the following four intersections on Wednesday, October 30, 2024.

1. Old Auburn Road/Argo Drive
2. Old Auburn Road/Oakwood Hills Circle W
3. Old Auburn Road/Wachtel Way
4. Old Auburn Road/Oakwood Hills Circle E/Linda Creek Ct

Schools were in session, weather conditions were sunny, and typical traffic conditions were observed at the time of the counts. **Appendix A** provides the traffic count data sheets.



1 Study Intersection
Study Corridor
City Limits
County Limits
Parks and Open Space

Figure 1

Study Area

Existing Conditions

Existing Roadway Network

The following are descriptions of the primary roadways in the vicinity of the project:

- **Old Auburn Road** is a two-lane east/west major collector, as shown in the City of Citrus Heights General Plan Circulation Map. The two lanes are divided by a Two-Way-Left-Turn-Lane (TWLTL) west of Argo Drive and divided by a striped centerline east of Argo Drive. Old Auburn Road serves a variety of residential and commercial land uses. Within the project vicinity, it has a westbound posted speed limit of 35 miles per hour (mph) east of Wachtel Way, and 40 mph west of Wachtel Way. Eastbound, the posted speed limit is 40 mph throughout the study corridor.
- **Wachtel Way** is a two-lane north/south major collector as per the City of Citrus Heights General Plan Circulation Map. It extends from Old Auburn Road to Oak Avenue, where it becomes Kenneth Avenue. Wachtel Way has a posted speed limit of 35 mph.

Based on a traffic survey collected in September 2021, the existing 85th percentile speed along the section of Old Auburn Road 1200' west of Wachtel Way was 45 mph in the eastbound direction, and 46 mph in the westbound direction. The posted speed liming along this section of the corridor is 40 mph. A speed survey collected in March 2017 determined that the existing 85th percentile speed along Wachtel Way north of Chris Lane was 40 mph in the northbound and southbound directions. The posted speed limit along this section of the corridor is 35 mph.

Existing Bicycle and Pedestrian Network

Figure 2 shows existing bicycle facilities in the study area. As shown, there are Class II Bike Lanes in the study area. Class II Bike Lanes are established along streets to provide a restricted right-of-way designated for the use of bicycles with a striped lane, pavement markings, and signage. Some bike lanes may have striped buffers to add additional space between cyclists and cars, increasing separation from motor vehicles for added bicyclist comfort. Vehicle/pedestrian crossflow may occur at driveways and also where right-turn lanes are developed approaching intersections. Within the study area, Class II bike lanes exist on both sides of Old Auburn Road from Wintergreen Drive to Linda Creek Court. Class II bike lanes with a buffer exist on both sides of Wachtel Way to Pitalo Way, and on the east side of Wachtel Way south of Pitato Way.

Within the study area, sidewalks are present but discontinuous on Old Auburn Road. **Figure 3** shows existing pedestrian facilities in the study area. Continuous sidewalks are present on the north side of Old Auburn Road from Robert Creek Court to about 400 feet east of Argo Drive. This segment of sidewalk connects to the existing shared-use bike/pedestrian trail located west of

Robert Creek Court. Though other sidewalk segments exist along Old Auburn Road and Wachtel Way, they are discontinuous. See Figure 3 for mapped sidewalks along the corridor. There is a marked crosswalk on the west leg of the Old Auburn Road/Wachtel Way intersection which connects only to the Class II buffered bike lane on Wachtel Way, and not to any sidewalks.

During the AM and PM peak hours, pedestrian and bicycle activity was modest at all intersections (i.e. 8 or less pedestrian crossings per hour and 8 or less bicyclists per hour). Field observations revealed some pedestrians walking or running on either side of Old Auburn Road to turn onto Wachtel Way. Some of these movements were likely associated with the connection to the Arcade-Cripple Creek Trail on Wachtel Way.

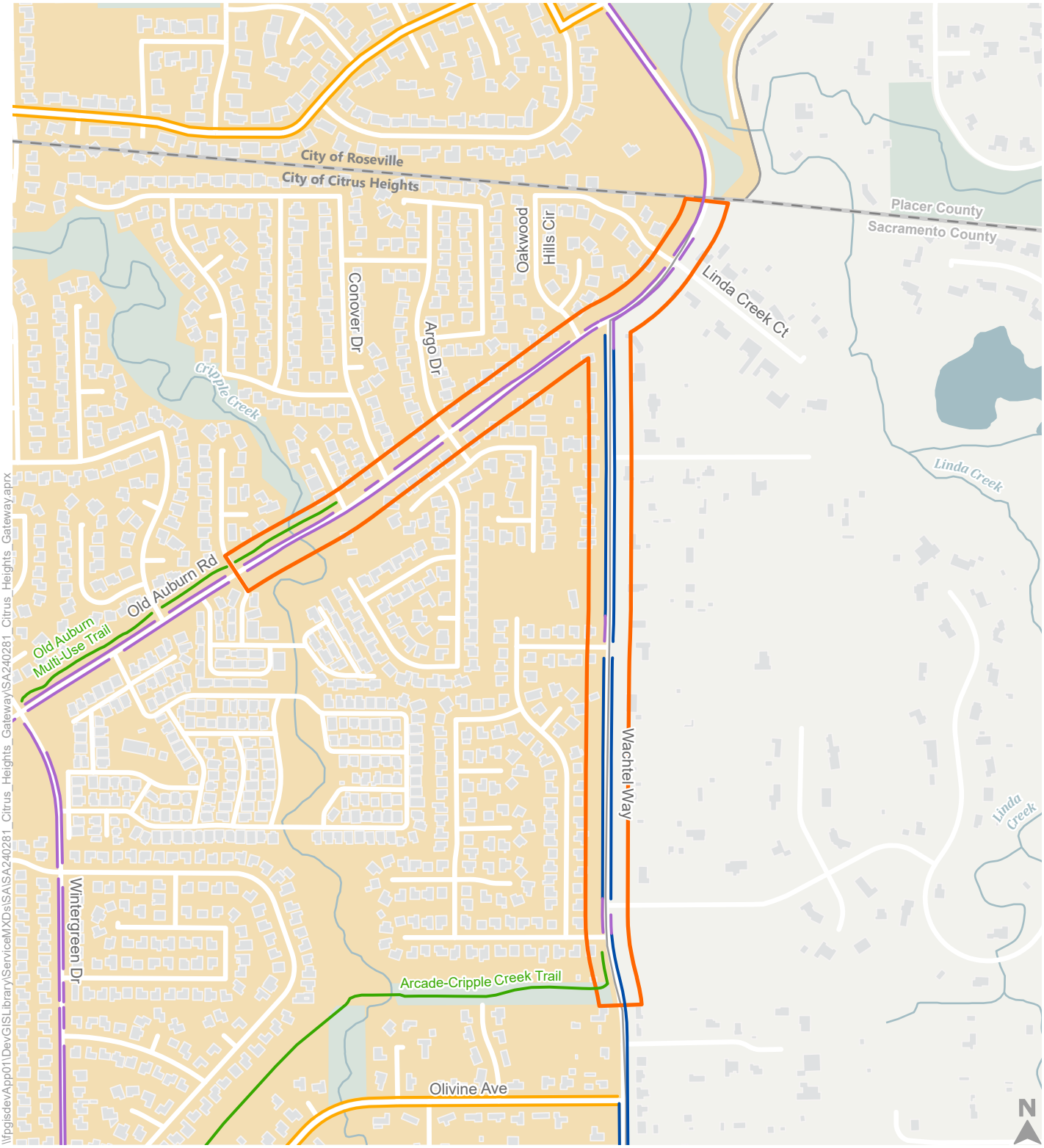


Figure 2

Existing Bicycle Facilities

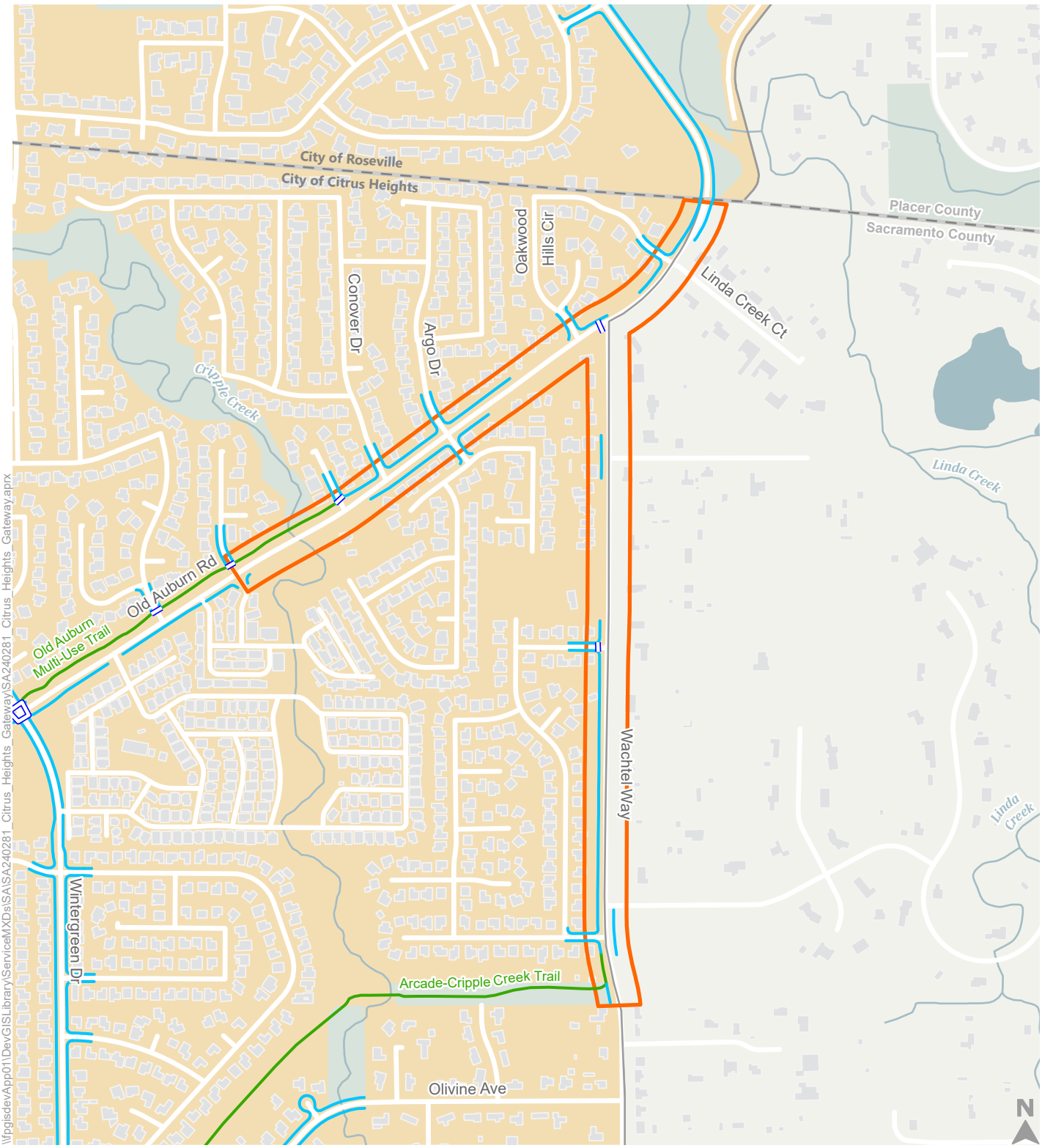


Figure 3

Existing Pedestrian Facilities

Existing Transit Facilities and Services

While there are no transit facilities and services directly serving the study area, Roseville Transit and Sacramento Regional Transit (SacRT) operate a few fixed-route bus lines near the study area.

Roseville Transit operates Routes C and F with a stop on S Cirby Way past Rimna Way, approximately 0.56 miles from the Old Auburn Road/Oakwood Hills Circle E/Linda Creek Ct intersection. Both routes have two-hour headways Monday-Friday, departing as early as 6:20 a.m. until 6:43 p.m.

SacRT operates Line 21 with the closest stop to the study area at the Old Auburn Road/Sunrise Boulevard intersection, which is about 1.53 miles away from the Old Auburn Road/Argo Drive intersection. This route operates with 30-minute headways on Monday-Friday, and hour-long headways on the weekend.

Additionally, SacRT operates a program called SacRT Flex, which is a limited-service neighborhood shuttle for a limited group of qualified riders, including seniors (age 62+), low-income individuals, and persons with disabilities. The program serves 9 zones in the Sacramento area, including within the study area up to the City of Citrus Heights boundary. The program operates Monday through Friday between 7 a.m. to 7 p.m., excluding holidays.

Traffic Data Collection

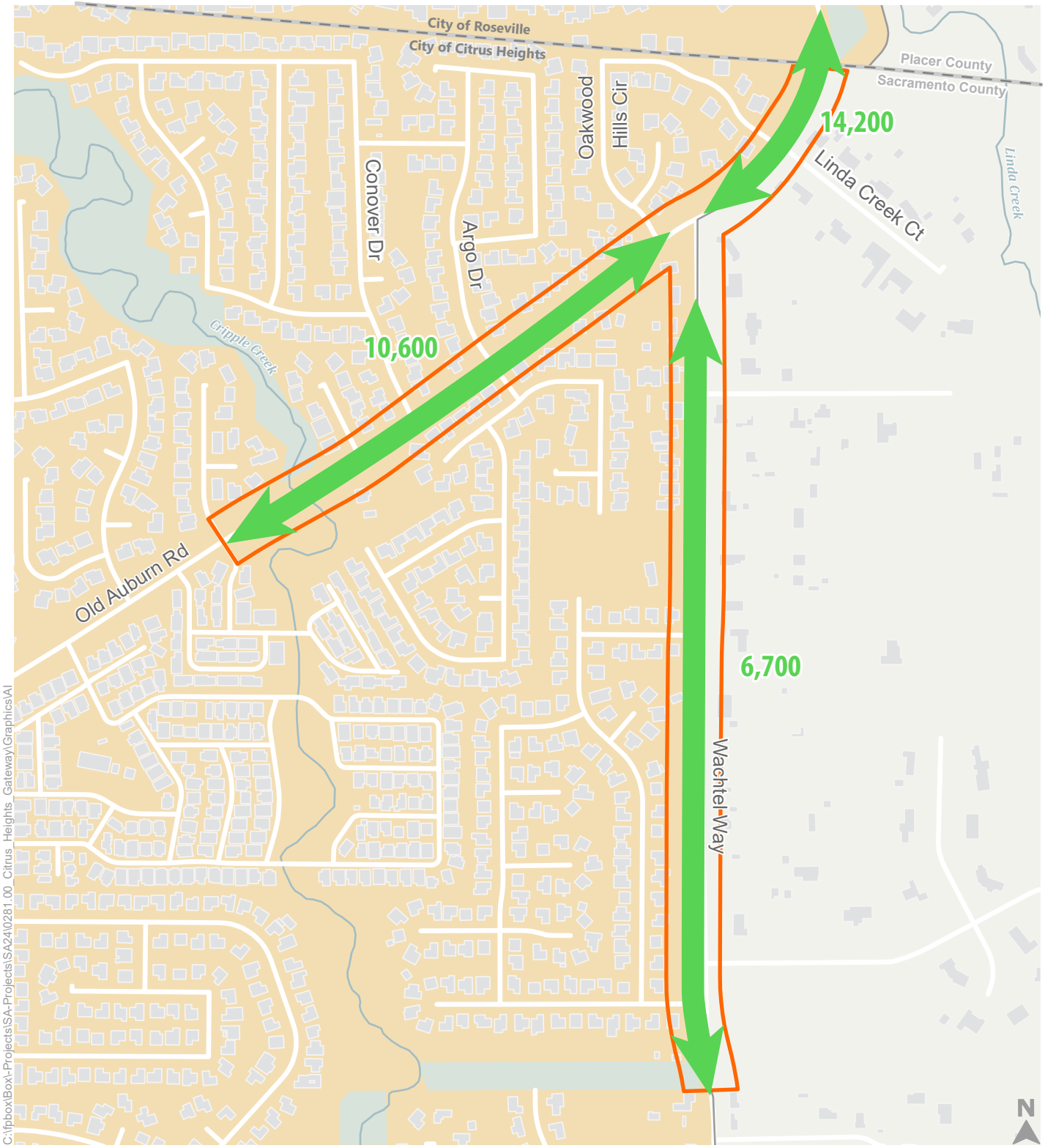
All counts at the four study intersections included vehicle turning movements, heavy vehicles, bicyclists, and pedestrians. Two-day roadway segment traffic counts, including vehicle classification, were collected at the following two segments in the study area on Tuesday, October 29, 2024, and Wednesday, October 30, 2024:

1. Old Auburn Road west of Wachtel Way
2. Wachtel Way south of Old Auburn Road

Table 1 displays the AM peak hour, PM peak hour, and daily volumes for each segment**. Figure 4** shows the average daily traffic at the study area segments. The AM peak hour occurred from 7:30 to 8:30 a.m., and the PM peak hour occurred from 4 to 5 p.m. The peak direction was vehicles traveling eastbound and westbound on Old Auburn Road. Key findings from this figure and table are:

1. The Wednesday count was about 2 to 3% busier than the Tuesday count.
2. Through a process of factoring up existing AM and PM peak hour segment volumes (to daily), the estimated ADT is 14,200 vehicles on Old Auburn Road east of Wachtel Way. As the volume on Old Auburn Road drops precipitously west of Wachtel Way, this indicates that a considerable number of vehicles at the City of Citrus Heights/Roseville border

originate or are destined to/from the south on Wachtel Way (toward unincorporated Sacramento County).



Study Corridor

City Limits

County Limits

Parks and Open Space

X,XXX

Average AM/PM Daily Traffic Volume

Notes: Volumes represent two-way traffic totals and are rounded to the nearest 100. Counts were conducted on Tuesday October 29, 2024 and Wednesday, October 30, 2024.

Volumes on Old Auburn Rd at City of RS/CH Limit is estimated using a k-factor of daily to AM and PM peak period counts from the two counted locations.

Figure 4

Average Daily Traffic Volumes (ADT) - Existing Conditions

Table 1: Roadway Segment Traffic Volumes – Existing Conditions

Roadway Segment	Day 1 / Day 2		
	AM Peak Hour	PM Peak Hour	Daily
Old Auburn Road west of Wachtel Way	941 / 838	890 / 914	10,451 / 10,733
Wachtel Way south of Old Auburn Road	565 / 565	593 / 617	6,666 / 6,795

Notes: All roadway segment traffic volumes summarized are two-way total volumes.
Traffic counts were performed on Tuesday, October 29, 2024, and Wednesday, October 30, 2024.
Source: Fehr & Peers, 2025.

Intersection Operations

This study analyzes traffic operations using delay and LOS as primary measures of intersection performance. Automobile LOS is a qualitative description of traffic flow from the perspective of motorists. The *Highway Capacity Manual (HCM) 7th Edition* (Transportation Research Board, 2022) defines six levels of service from LOS A representing the least congested traffic conditions to LOS F representing the most congested traffic conditions. These grades represent the perspective of drivers and are an indication of the comfort and convenience associated with driving, as well as speed, travel time, traffic interruptions, and freedom to maneuver.

Intersection LOS at signalized and all-way stop controlled intersections and roundabouts is based on the weighted average control delay measured in seconds per vehicle for all motorists traveling through the intersection. For side-street stop-controlled intersections, this study reports the average control delay for the lane group or movement with the greatest delay, and for the intersection as a whole.

Table 2 presents the control delay range for each LOS for signalized and unsignalized intersections. As shown, the delay ranges for signalized intersections are different from unsignalized intersections. The *HCM* anticipates that motorists expect signalized intersections to carry higher traffic volumes that result in greater delay than at an unsignalized intersection and roundabout. Unsignalized intersections are associated with more uncertainty as delays are less predictable, which can reduce users' delay tolerance.

Table 2: Level of Service Definitions – Intersections

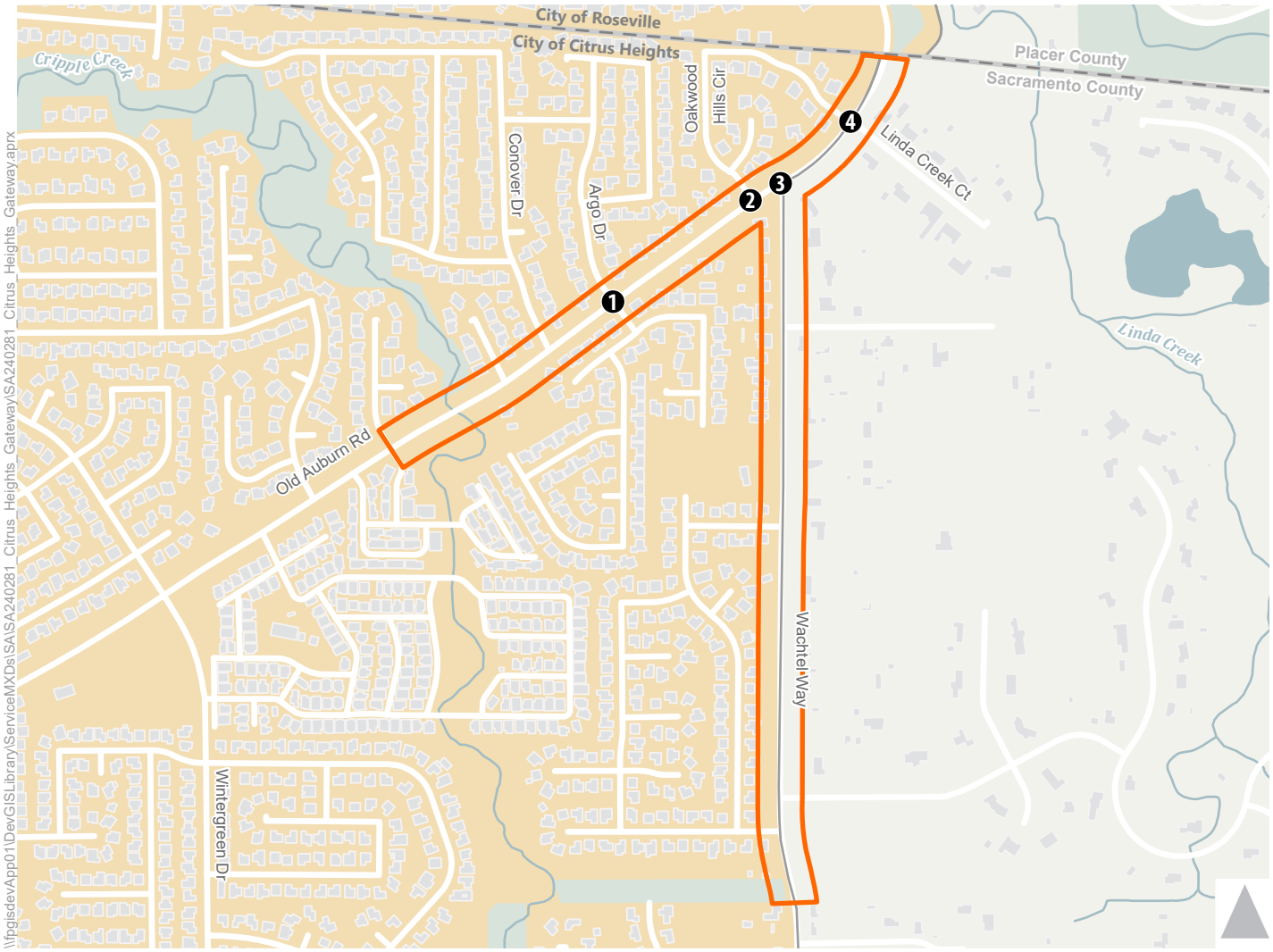
Level of Service	Average Control Delay[1]	
	Signalized Intersections	Unsignalized Intersections and Roundabouts
A	≤ 10	≤ 10
B	>10 to 20	>10 to 15
C	>20 to 35	>15 to 25
D	>35 to 55	>25 to 35
E	>55 to 80	>35 to 50
F	>80	>50

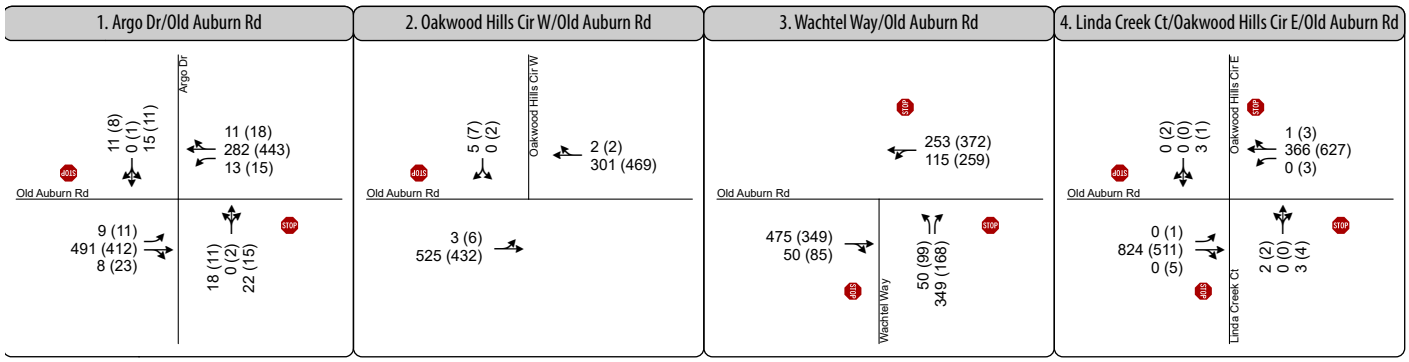
Notes:
1. Average control delay presented in seconds per vehicle. Delay values are rounded to the nearest second and evaluated for LOS based on the above thresholds (i.e., 10 seconds per vehicle = LOS A)
Source: *Highway Capacity Manual 7th Edition*, Transportation Research Board, 2022.

Study intersections are analyzed using Synchro's SimTraffic micro-simulation module to apply the methodologies presented in the *HCM*. Synchro considers traffic volumes, lane configurations, signal timings, and other parameters. SimTraffic additionally considers interactions between adjacent intersections, turn lane spillbacks, coordinated signal timing, and upstream/downstream bottlenecks. SimTraffic is preferable to use when operating conditions are near capacity, turn lane storage exceedance is common, and/or intersections are spaced closely together. In this study, given the above guidance, SimTraffic was used to analyze all study intersections (where vehicle queuing is of particular concern). The Sidra software program is used to analyze roundabouts, if proposed as part of a project alternative.

The system peak hours of the study intersections on Old Auburn Road occurred from 7:30 to 8:30 a.m. and 4 to 5 p.m. Trucks, as defined by the Highway Capacity Manual and its existing national truck classifications, represented about 1% of traffic on Old Auburn Road during the morning and evening peak hours. **Figure 5** presents the existing weekday a.m. and p.m. peak hour traffic volume, lane configurations, and traffic control devices at the study intersections. On the busiest section (Old Auburn Road east of Wachtel Way), nearly 70% of AM peak hour traffic is headed eastbound (into Roseville) while 55% of PM peak hour traffic is headed westbound.

Table 3 displays peak hour intersection operations under existing conditions. See **Appendix B** for technical calculations.





- Study Intersection
- Study Corridor
- City Limits
- County Limits
- Parks and Open Space
- Turn Lane
- AM (PM) Peak Hour Traffic Volume
- Traffic Signal
- Stop Sign

Figure 5

Peak Hour Traffic Volumes and Lane Configurations - Existing Conditions

Table 3: Peak Hour Level of Service – Existing Conditions

	Intersection	Control	Delay/LOS (Worst Movement)[1]	
			AM Peak Hour	PM Peak Hour
1.	Old Auburn Road/Argo Drive	SSSC	4 (24 SBT) / A (C)	3 (11 NBT) / A (B)
2.	Old Auburn Road/Oakwood Hills Circle W	SSSC	**54 (83 EBT) / F (F)**	5 (46 (SBL) / A (E)
3.	Old Auburn Road/Wachtel Way	AWSC	**56 / F**	38 / E
4.	Old Auburn Road/Oakwood Hills Circle E/Linda Creek Ct	AWSC	14 / B	**75 / F**

Notes: SSSC = Side-Street Stop Controlled. AWSC = All-Way Stop-Controlled
[1] For side-street stop controlled and uncontrolled intersections, level of service and delay for the worst movement are reported with the movement listed in parentheses. Delay is reported in seconds per vehicle.
Bolded numbers indicate deficient operations per City of Citrus Heights General Plan policy.
Source: Fehr & Peers, 2025.

Per the City of Citrus Heights General Plan Policy 29.2, the City will strive to achieve LOS E or better conditions for City roadways and intersections during peak hours. As shown, the study intersections do not operate acceptably during the AM and PM peak hours. It should be noted that this policy provides an exception to the LOS E standard for certain roadways (and intersections along them) including Old Auburn Road from Sylvan Road to Fair Oaks Boulevard. Since the study area does not extend that far westerly, an LOS E standard applies for all study facilities. Key findings from Table 3 are as follows:

AM Peak Hour:

1. The all-way stop Old Auburn Road/Wachtel Way intersection operates at LOS F. The eastbound queue spills back through intersection #2 (Oakwood Hills Circle W) causing it to also operate at LOS F.

PM Peak Hour:

1. The all-way stop Old Auburn Road/Wachtel Way intersection operates at LOS E. The westbound queue spills back through the all-way intersection #4 (Oakwood Hills Circle E/Linda Creek Ct) causing it to operate at LOS F.[1]

[1] LOS F operations during the PM peak hour at intersection 4 are not due to the volume of major street versus side street traffic. Rather, it is due to westbound queues spill back from the stop sign at Wachtel Way into this intersection. In reality, capacity constraints at the Old Auburn Road/Wachtel Way intersection are the reason why intersection #4 operates unacceptably.

Vehicle Queuing

Table 4 identifies the maximum queue lengths based on SimTraffic results for critical movements at the study intersections. SimTraffic reported queues were compared to observed queues on the day of the counts to ensure the simulation model is accurately representing existing conditions. Refer to Appendix B for technical calculations.

Table 4: Maximum Vehicle Queues – Existing Conditions

Intersection		Control	Movement	Available Storage (ft)[2]	Maximum Queue (ft)[1]	
					AM Peak Hour	PM Peak Hour
1.	Old Auburn Road/Argo Drive	SSSC	EBL	300	50	50
			EBT	300	75	-
2.	Old Auburn Road/Oakwood Hills Circle W	SSSC	EB L/T	700	700	200
			WBT	100	**125**	25
			SB Shared	115	50	50
3.	Old Auburn Road/Wachtel Way	AWSC	EBT	90	**850**	300
			WB L/T	350	175	**375**
			NBL	600	275	275
			NBR[3]	100	125	100
4.	Old Auburn Road/Oakwood Hills Circle E/Linda Creek Ct	AWSC	EBT	350	150	125
			WBT	1,370	125	1,150[4]

Notes:
[1] Results based on SimTraffic. Maximum queue lengths are rounded to nearest 25 feet. All queues are expressed on a "per lane" basis or approach as noted. Includes vehicles that may queue in the taper length of a turn pocket.
[2] Available storage lengths based on review of aerial imagery. Distance is either length of turn lane or distance to nearest upstream intersection.
[3] Existing lane configuration is a shared northbound LT/RT lane. For purposes of the simulation, a small right turn pocket was added to better model vehicle queuing conditions.
[4] Analysis is based on 1.0 PHF (per City TIS guidelines), which by definition reports LOS/queuing for an hourly condition and can miss any spikes in travel demand within the peak hour that often cause the worst-case queue.
Bolded text represents a queue that extends past the nearest upstream intersection.

During the field visit, westbound queues on Old Auburn Road during the PM peak hour occasionally extended past Lund Drive (see **Image 1**).



Image 1: View of queued vehicles on westbound Old Auburn Road spilling back from Oakwood Hills Circle E to Lund Drive and beyond (PM peak hour).

Image 2 is a screenshot from the SimTraffic simulation showing the WB queue during the PM peak hour, extending back past the Lund Drive intersection.

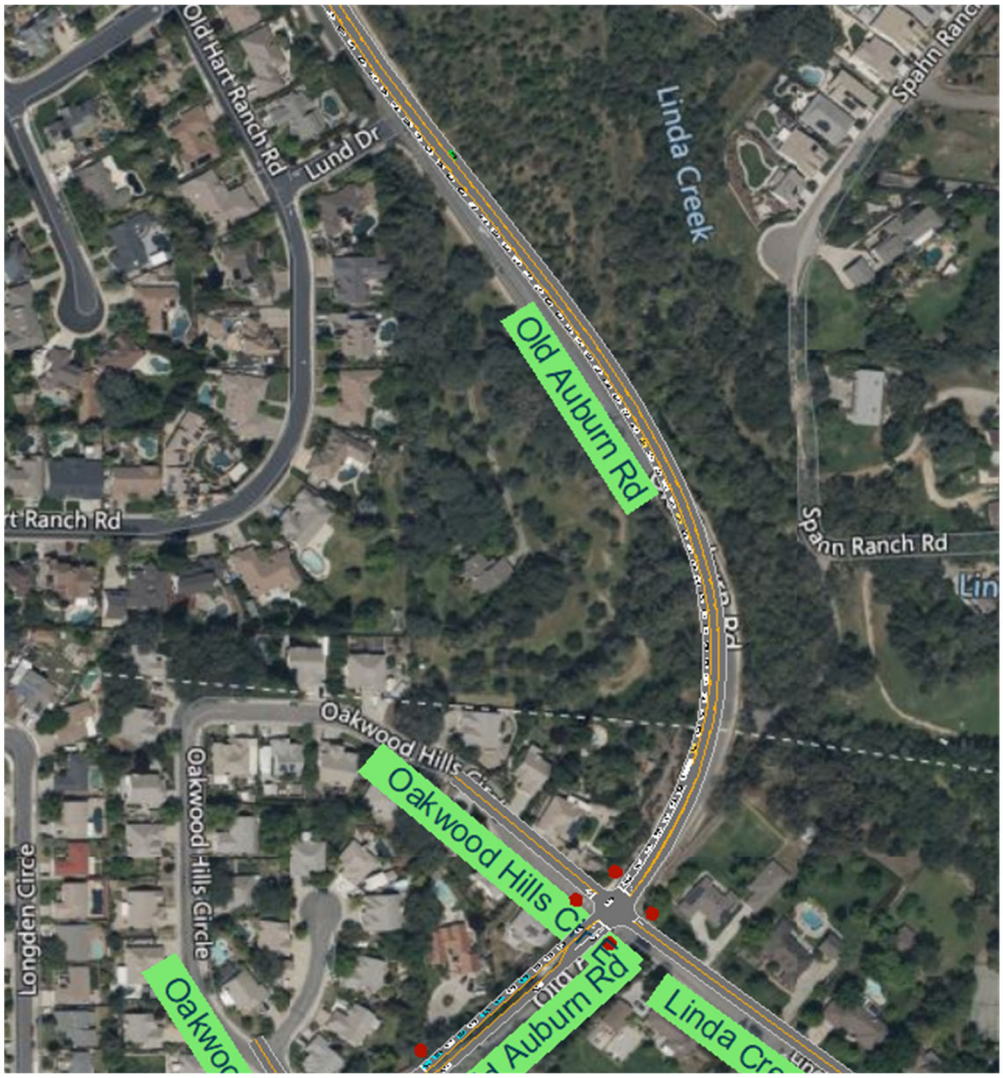


Image 2: SimTraffic screenshot of queued vehicles on westbound Old Auburn Road approaching Oakwood Hills Circle E (PM peak hour)

As displayed in Table 4, queuing is minimal on the side street approaches at the study intersections. During the AM peak hour, the eastbound approach sees significant queuing at intersections 2 and 3. The eastbound queue extends back from the Old Auburn Road/Wachtel Way intersection to past the Old Auburn Road/Argo Drive intersection, as shown in **Image 3** below.



Image 3: View of queued vehicles on eastbound Old Auburn Road approaching Wachtel Way (AM peak hour).

During the PM peak hour, queuing was observed for the westbound approach at the Old Auburn Road/Oakwood Hills Circle E/Linda Creek Court, and Old Auburn Road/Wachtel Way intersections. During the field observations, it was noted that the westbound queue sometimes extended from the Old Auburn Road/Oakwood Hills Circle E/Linda Creek Court intersection back to the Old Auburn Road/Cirby Way intersection, a distance of about 1,600 feet. **Image 4** below shows westbound queuing during the PM peak hour along Old Auburn Road, east of Oakwood Hills Circle E/Linda Creek Court.



Image 4: View of queued vehicles on westbound Old Auburn Road approaching Oakwood Hills Circle E (PM peak hour).

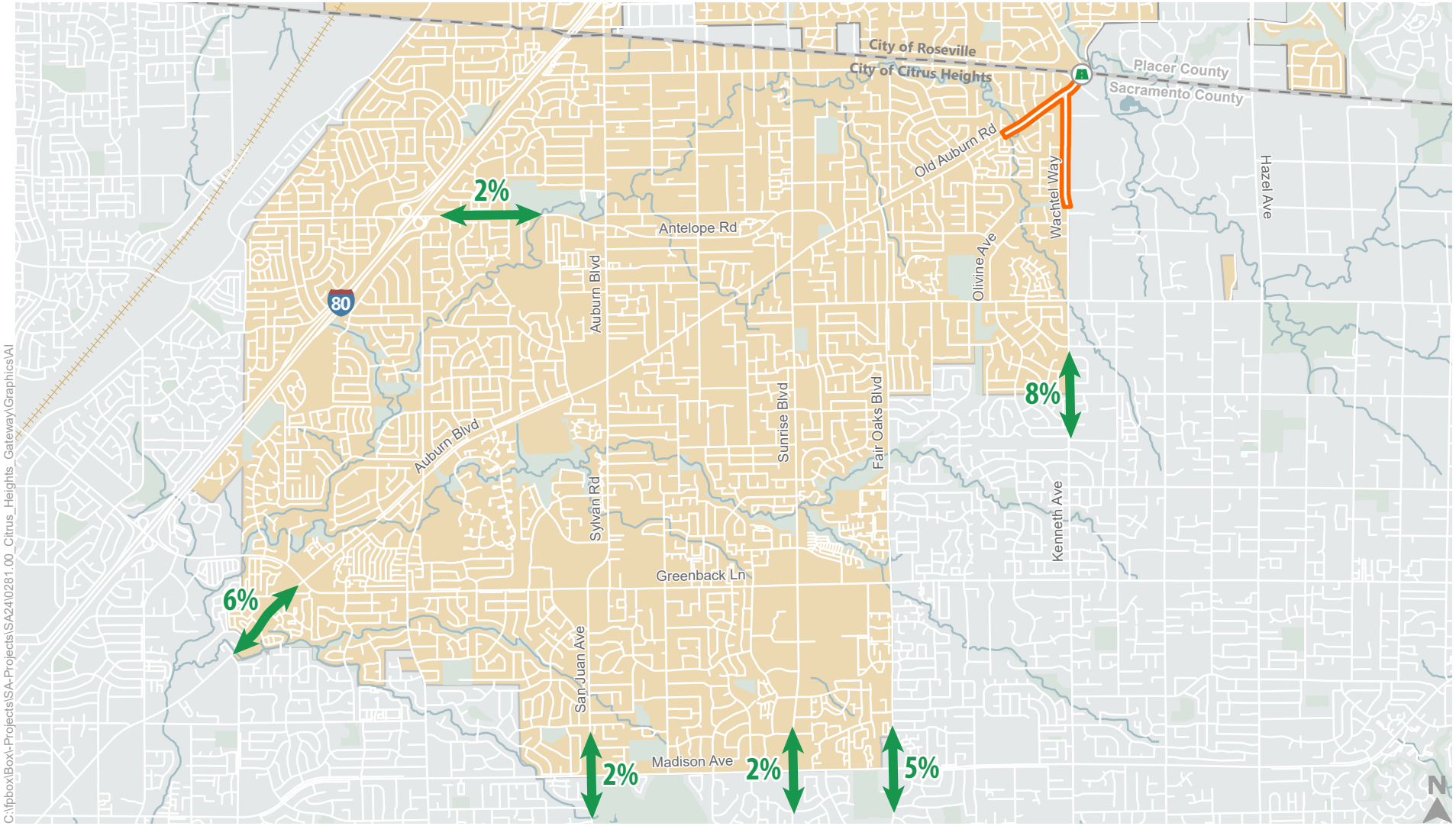
Cut-Through Travel on Old Auburn Road

This section discusses the degree to which Old Auburn Road is being used as a cut-through route. In this context, 'cut-through' is defined as a vehicle at the Citrus Heights/Roseville border that does not have a trip origin or destination in Citrus Heights. To conduct this analysis, 'big data' was acquired from StreetLight Data.[2]

[2] Transportation Data Solutions | StreetLight Data

StreetLight Data combines connected vehicle data with machine learning algorithms to understand travel patterns across the country. Trips are created from the location records by starting a trip once a device is traveling at a reasonable speed, snapping records to road network data to create the trip route. A trip end is identified once the device remains stationary within 100 meters for over 5 minutes. Data is validated using permanent traffic counters and embedded sensors, and normalized with multiple data sources, including parcel data, digital road network data, and census information to calculate vehicle volume estimates.

Figure 6 shows the percentage of vehicles that are traveling on Old Auburn Road at Citrus Heights/Roseville border that also travel through the Citrus Heights' southerly and westerly gateway streets into and out of Citrus Heights. As shown, about 25% of trips at the Citrus Heights/Roseville border do not stop in Citrus Heights. Preferred external gateways are: Wachtel Way (8%), Auburn Boulevard south of Greenback Lane (6%) and Sunrise Boulevard south of Madison Avenue (5%).



Study Corridor
County Limits
City Limits
Parks and Open Space

Origin-Destination Segment
X% Origin-Destination Percentage

Note: Values represent approximate percentage of trips using Old Auburn Road as a cut through route, regardless if during AM peak hour, PM peak hour, or daily conditions.

Figure 6

Origin-Destination Analysis on Old Auburn Road

Safety Analysis

Fehr & Peers evaluated the reported collision history within the study area based on the City of Citrus Heights Police Department records. Collisions reported between January 1, 2018, and December 31, 2023, were used for this analysis. Provisional data for 2024 collisions was available but was not included in the analysis. Collisions during this 6-year period were pulled from individual police records.

Collision History

Between 2018 and 2023, there were 16 reported collisions along the study corridor, including 10 collisions involving injuries. One collision involved a bicyclist (resulting in a minor injury). There were no collisions involving pedestrians, and no fatal collisions along the study area.

Table 5 displays the ranked (from most to least common) collision type within the study area. As displayed, rear end collisions are the most common collision type, followed by broadside collisions and hit object collisions. Police record descriptions identify the potential cause for the rear-end collisions was due to drivers traveling at high speeds and not recognizing the stop-and-go traffic at the intersection. The majority of broadside collisions occurred at the Old Auburn Road/Wachtel Way intersection, due to vehicles entering the intersection and failing to yield to the driver already in the intersection. Two of the three hit object collisions were due to driving under the influence (DUI). In all hit object collisions, the driver was traveling at unsafe speeds and collided with power or lighting equipment on the side of the road. It should be noted that these collisions occurred on Old Auburn Road east of Argo Drive heading eastbound. The eastbound direction of this segment features a narrowed bike lane, an open drainage channel, and multiple nearby overhead poles.

Table 5: Type of Collision – January 1, 2018 to December 31, 2023.

Category	Total Collisions	%
Rear end	5	31%
Broadside	5	31%
Hit Object	3	20%
Head-On	1	6%
Sideswipe	1	6%
Overturned	1	6%

Source: City of Citrus Heights Police Department records.

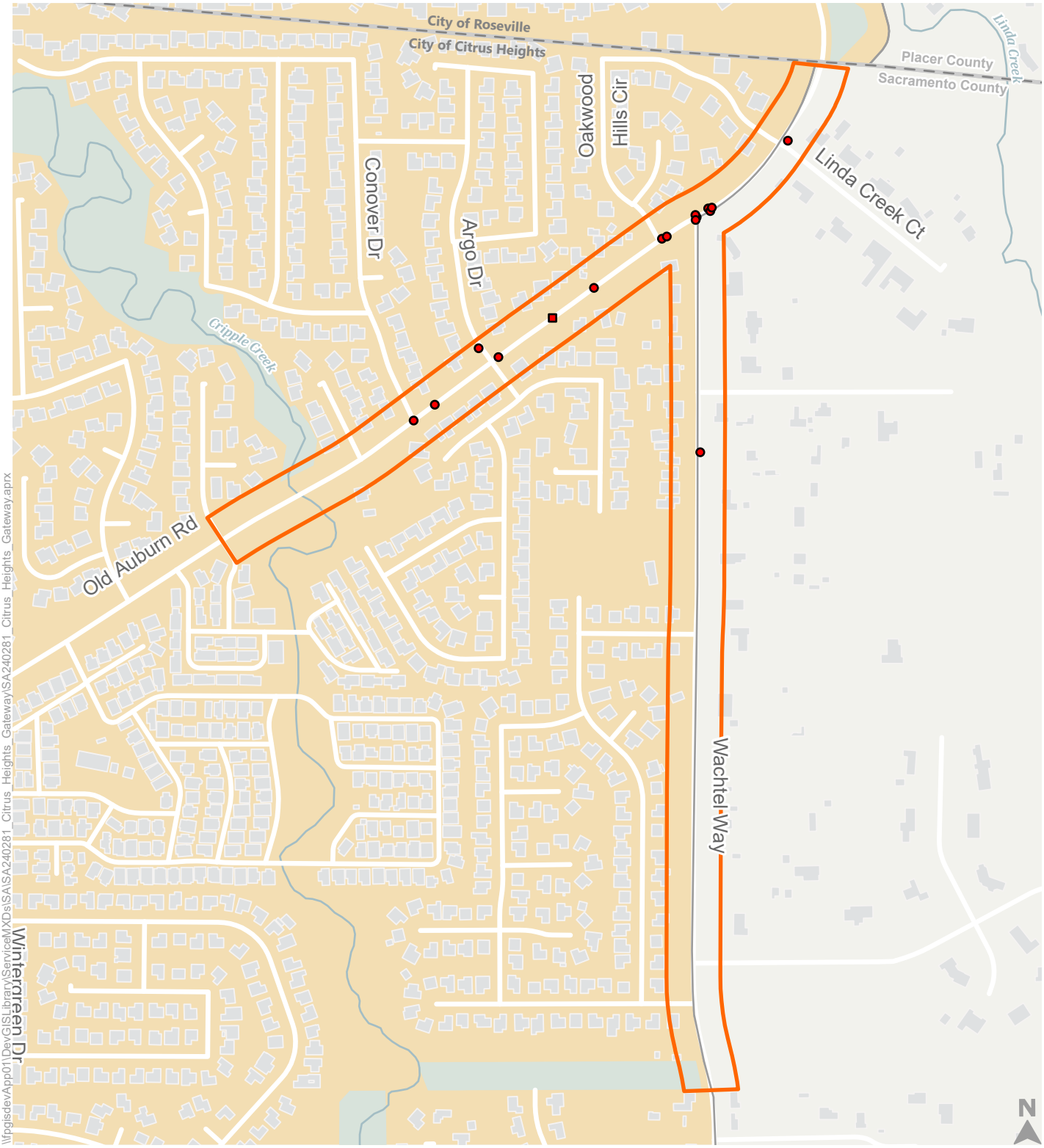
Figure 7 displays the location of all reported collisions on the corridor during the collision analysis period. As displayed, hot spots are located at the Old Auburn Road/Wachtel Way intersection. Half of the 16 total reported collisions occurred at or near this intersection. Of these eight intersection collisions, four were broadside and four were read ends. There were seven collisions along Old Auburn Road. Of those seven collisions, four of those were located at intersections, and four were mid-block. There was one collision on Wachtel Way (located just north of Pitalo Way).

Half of all reported collisions occurred between 2:00 PM and 5:30 PM. This 3.5-hour period of the day sees about 30% of all daily traffic in the study area. Thus, the percentage of all collisions is disproportionately high during this period relative to the amount of daily traffic during this period. This time period experiences considerable congestion and stop-and-go traffic. Reports indicate that rear end collisions occurred because the driver was traveling at high speeds and failed to stop for the stopped vehicle in front, resulting in a rear end.

Of the 16 reported collisions along the study corridor, 31%, or 5 collisions, involved driving under the influence of alcohol or drugs (DUI). These collisions occurred at nighttime and at areas along the corridor with streetlights. This is a high percentage considering that Citywide, 9% of all collisions were due to DUI per the City's Local Road Safety Plan (2021).

Table 6 lists the primary collision factor for all reported collisions in the study area during the analysis period. As shown, DUI and unsafe speed collisions were the most common. Unsafe speed collisions mainly resulted in rear ends. Automobile right of way collisions primarily resulted in

broadside collisions, and improper turning collisions resulted in sideswipe and broadside collisions.



Study Corridor
City Limits
County Limits
Parks and Open Space

Vehicle Collision
Bicycle Involved Collision

Collision data pulled from City of Citrus Heights Police Department records for the six-year period between 2018-2023.

Figure 7

Collisions 2018-2023

Table 6: Primary Collision Factor – January 1, 2018 to December 31, 2023.

Primary Collision Factor (PCF)	Total Collisions	%
Driving Under Influence (DUI)	5	31%
Unsafe Speed	5	31%
Automobile Right of Way	4	25%
Improper Turning	2	13%

Source: City of Citrus Heights Police Department records.

Table 7 shows the lighting conditions for all the reported collisions. As shown, half of the 16 total collisions occurred during daylight, 38% occurred in the dark with streetlights, and the rest occurred in the dark or at dusk. This shows that most collisions in the study area are not caused by a lack of lighting, but because of a lack of clear recovery zone and driver awareness.

Table 7: Lighting Conditions – January 1, 2018 to December 31, 2023.

Lighting	Total Collisions	%
Daylight	8	50%
Dark – Streetlights	6	38%
Dark – No Streetlights	1	6%
Dusk/Dawn	1	6%

Source: City of Citrus Heights Police Department records.

The City of Citrus Heights Local Roadway Safety Plan (LRSP) (2021) identifies two recommendations related to bike and pedestrian safety in the study area. Within the LRSP is an excerpt from the *Safe Routes to School Master Plan Report*, Citrus Heights (2014), from which there are two recommendations related to bike facilities in the study area. The first one is to install 5' or 6' Class II bike lanes or a Class I bike path on Old Auburn Road to improve bike access to the Woodside K-8 school. A westbound Class I bike path exists on Old Auburn Road from Robert

Creek Court to Garry Oak Drive. An extension of the bike path east to the City of Citrus Heights / City of Roseville border would improve connectivity for residents in the study area. The second recommendation is to improve bicyclist crossings of Old Auburn Road at key cross streets such as Wintergreen Drive, Fair Oaks Boulevard, and Wachtel Way. The recommendation lists potential improvements at the intersections like colored pavement, wayfinding and signage, and pavement markings to improve bike access to Woodside K-8 and bike/pedestrian safety at controlled intersections.

Gateway Activation Project
Community Workshop
Tuesday April 29th | 5:30 – 7 pm
Big Oak Senior Mobile Home Park

Citrus Heights - Gateway Activation Project

Community Meeting Summary

Introduction

On Tuesday, April 29, 2025, the City of Citrus Heights hosted a kickoff Community Meeting for the Gateway Activation Project (GAP). The event was held from 5:30 to 7:00 p.m. at the Big Oak Senior Mobile Home Park. More than 48 community members participated in the meeting.



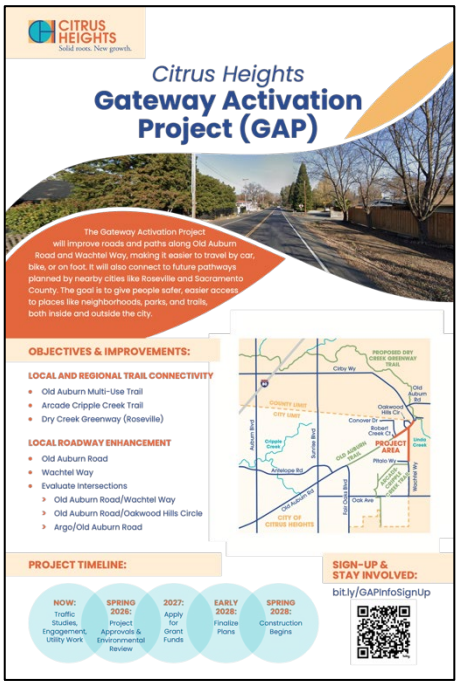
Background

The GAP is focused on implementing multimodal and roadway enhancements along Old Auburn Road and Wachtel Way. These improvements will link to existing transportation infrastructure and support future connections with projects proposed by neighboring jurisdictions, including the City of Roseville and Sacramento County.

The primary goal is to deliver solutions that improve safety, expand access and mobility for all users, and enhance traffic operations. The project seeks to provide safe, convenient, and accessible routes to key destinations such as neighborhoods, parks, open spaces, residences, and trail networks—both within Citrus Heights and beyond city limits.

The proposed objectives of the GAP include:

- Extending multimodal facilities on Old Auburn Road to the city's northern boundary
- Extending multimodal facilities on Wachtel Way to its intersection with Old Auburn Road
- Upgrading intersections at Old Auburn Road/Wachtel Way and Old Auburn Road/Oakwood Hills Circle (potential enhancements include roundabouts or traffic signal improvements)
- Improving pedestrian safety and crossings at Old Auburn Road and Argo Drive



Factsheet Board

Meeting Purpose and Objectives

This workshop marked the official launch of the GAP. It served to introduce the project, present the design team, and gather community input, especially from nearby property owners, on early design concepts at three key intersections.

The specific objectives of the meeting were to:

- Introduce the public outreach process and increase awareness of the project's goals, scope, timeline, and potential funding opportunities

- Engage a diverse cross-section of community members to collect valuable input on traffic analysis and preliminary design concepts
- Gather feedback on proposed safety features, such as roundabouts and protected intersections

Meeting Format

The meeting was held in the multipurpose room at the Big Oak Senior Mobile Home Park. The event began with a presentation by Katie DeMaio, Community Engagement Specialist from AIM; Casey Kempenaar, Community Development Director with the City of Citrus Heights; Mari Ramones from Fehr & Peers and Pamela Dalcin-Walling, Project Manager from Dokken Engineering. Following the presentation, an open house session allowed attendees to speak directly with staff from AIM, Dokken, Fehr & Peers, and the City of Citrus Heights.

Informational exhibits, including intersection treatments and maps of the project corridor, were on display for review and comment. Interactive boards and feedback forms invited attendees to share input on their place of residence, preferred trail crossings, and top project priorities.

Presentation

Below is an overview of the workshop presentation. The full presentation is available in Appendix A.

After attendees were welcomed and seated, Katie from AIM Consulting opened the event by thanking everyone for joining the project team and emphasizing the value of community feedback. She provided a brief overview of the evening's agenda before turning the presentation over to the project team.



Casey Kempenaar presenting to community members

Casey Kempenaar began by outlining the significance of the GAP for the City, highlighting its role in enhancing community connections, improving quality-of-life amenities, and fostering local partnerships. He explained the project's two main goals: strengthening local and regional trail connections—including the Old Auburn Multi-Use Trail, Arcade Cripple Creek Trail, and Dry Creek Greenway—and improving roadway conditions and key intersections along Old Auburn Road and Wachtel Way.

Next, Mari Ramones discussed current traffic conditions, including daily volumes, cut-through traffic, and vehicle queuing. She also shared that the team is evaluating existing bicycle and pedestrian facilities for improvements and invited participants to view a traffic simulation during the open house session.

Project Manager Pamela Dalcin-Walling followed with an overview of the project's engineering aspects. She explained that the plan includes connecting existing and future Class I trails, requiring a crossing at Argo Drive,

Wachtel Way, or Oakwood Hills Circle East. A new bicycle/pedestrian crossing is also proposed on Old Auburn Road at Argo Drive, alongside traffic improvements at major intersections.

Pamela then explored possible designs for the Argo Drive pedestrian crossing, such as a Pedestrian Hybrid Beacon and a Roundabout, as well as potential traffic solutions, including new signals or roundabouts at the Wachtel Way and Oakwood Hills Circle intersections.

To conclude the presentation, Katie returned to reaffirm the ongoing nature of public outreach and planning. She encouraged community members to share their feedback at the information boards and thanked everyone for participating.



Stations and Board Exhibits

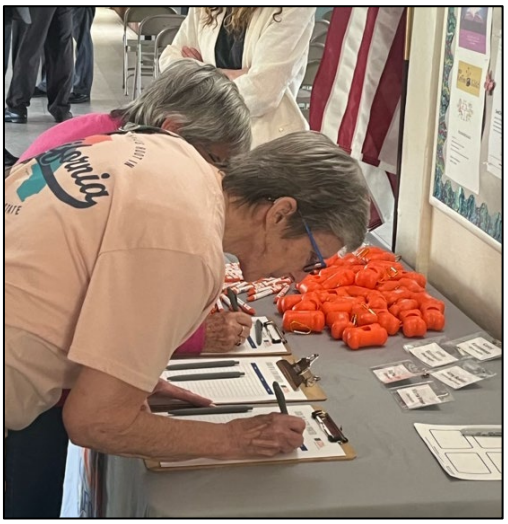
Below is an overview of the stations and board exhibits presented at the event.

Welcome Station

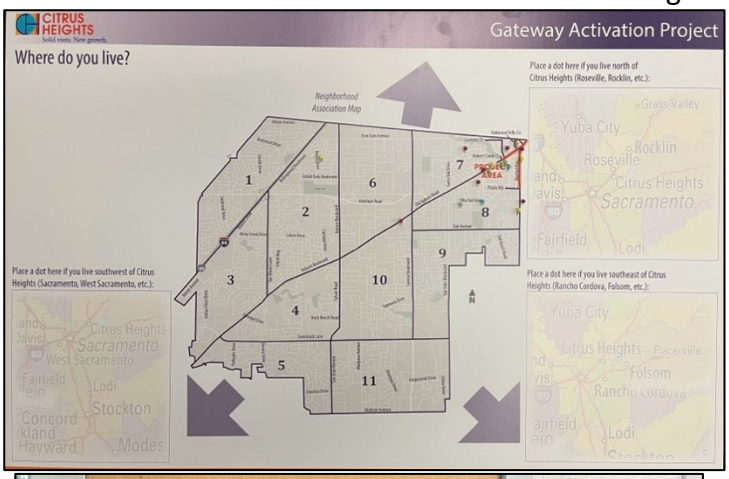
Upon arrival at the workshop, community members were welcomed and invited to sign up with their contact information to receive future project updates and event notifications. A total of 42 community members signed up. They were also offered free giveaway items provided by the City.

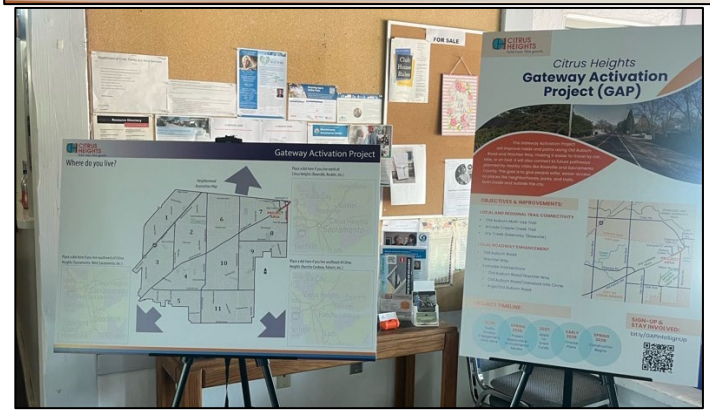
Station 1: Project Introduction (Neighborhood Board and Project Overview Board)

At Station 1, participants were introduced to the Citrus Heights GAP through a project overview board that outlined the project's objectives, planned improvements, timeline, and geographic scope. Attendees also engaged with a neighborhood board displaying the 11 neighborhood areas within Citrus Heights, along with three surrounding areas to the north, southwest, and southeast. Visitors were invited to place a pin on the map to indicate where they currently live.



Community member signing up for project updates





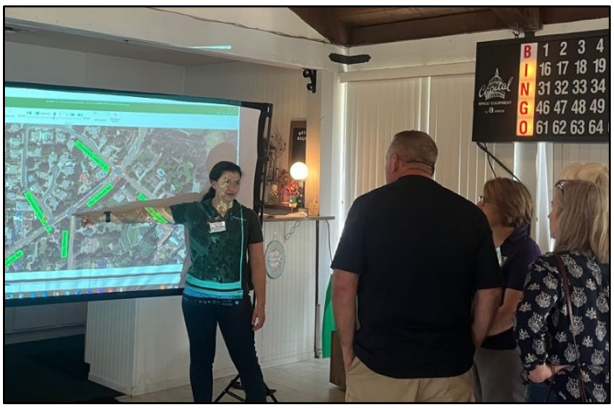
Feedback

Where people live represented by pins:

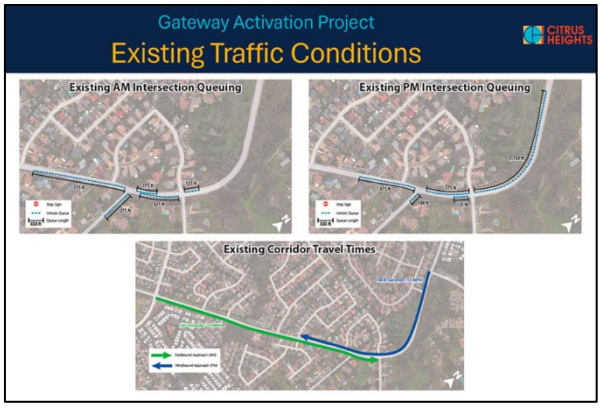
- Neighborhood Association 2: One (1) person
- Neighborhood Association 7: Four (4) people
- Neighborhood Association 8: Twelve (12) people
- Neighborhood Association 10: One (1) person
- Southwest of Citrus Heights (Sacramento, West Sacramento, etc.): Two (2) people
- North of Citrus Heights (Roseville, Rocklin, etc.): One (1) person

Station 2: Traffic Boards

Station 2 featured an *Existing Traffic Conditions* board displaying current AM and PM intersection queuing data, as well as corridor travel times. A projector screen showcased simulation footage of proposed project alternatives, allowing attendees to observe and engage with potential traffic flow scenarios.



Project team member presenting simulation footage to community members.



Existing Traffic Conditions Board.

Station 3: Argo Intersection

Station 3 featured two display boards presenting a plan view and renderings of the Argo intersection. The exhibits included three simulated images illustrating existing conditions, a pedestrian hybrid beacon, and a proposed roundabout. Staff from Dokken Engineering were available to answer questions and collect feedback on the design concepts.



Intersection at Argo Drive – Plan View Board with Sticky Note Feedback.

<u>Intersection at Argo Drive - Plan View Feedback</u>

- Pedestrian Hybrid Beacon
  - This option
  - Yes!
  - No!
  - Yes!
  - No!
- Roundabout
  - Yes roundabouts
  - Yes roundabouts
  - Yes
  - No roundabouts
  - No roundabouts
  - No roundabouts

<u>Intersection at Argo Drive – Rendering Feedback</u>

- Pedestrian Hybrid Beacon

  - Yes!
  - Slow traffic, no!
- Roundabout
  - Yes

Station 4: Wachtel Plan View & Class I Crossing

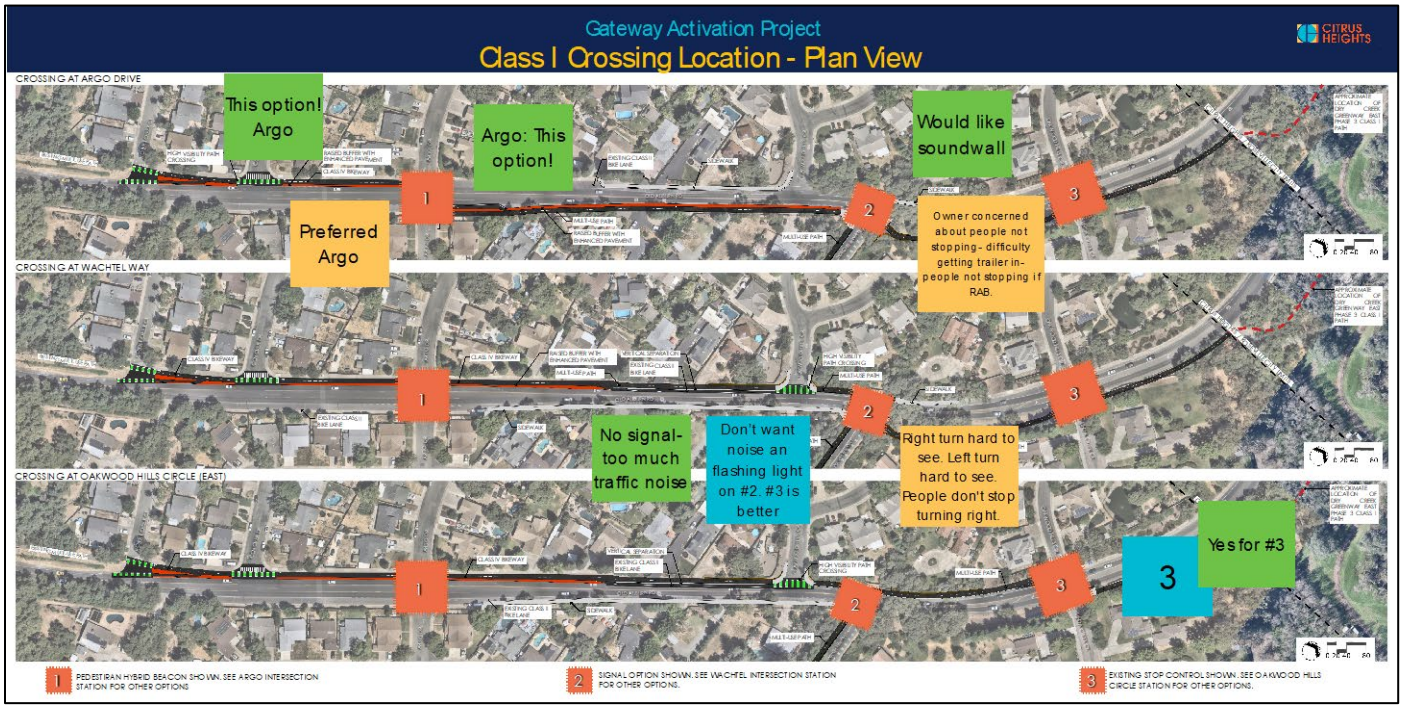
Station 4 included two display boards: the *Wachtel Way – Plan View* board, highlighting proposed plans for Wachtel Way, and the *Class I Crossing – Plan View* board, which presented three options for potential crossings at Argo Drive, Wachtel Way, and Oakwood Hills Circle (East). Dokken Engineering staff assisted community members in providing feedback by encouraging them to place sticky note comments directly on the boards.



Intersection at Argo Drive – Rendering Board with Sticky Note Feedback

Wachtel Way - Plan View Feedback

- Extend South to Oakwood Ave



Class I Crossing Location - Plan View Feedback

- Crossing at Argo Drive
  - This option! Argo
  - Preferred Argo
  - Argo: This option!
  - Would like a soundwall
  - Owner concerned about people not stopping- difficulty getting trailer in- people not stopping if RAB.
- Crossing at Wachtel Way
  - No signal- too much traffic noise
  - Don't want noise and flashing light on #2, #3 is better.
  - Right turn hard to see. Left turn hard to see. People don't stop turning right.
- Crossing at Oakwood Hills Circle (East)
  - 3
  - Yes for #3



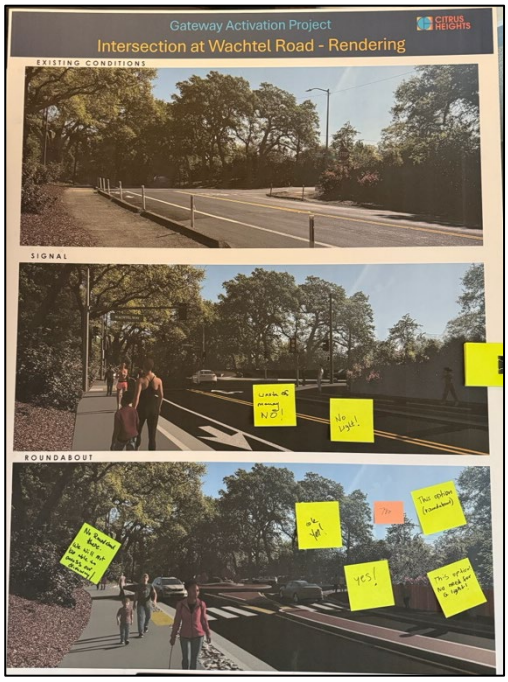
Intersection at Wachtel Way – Plan Board with Sticky Note Feedback

Station 5: Wachtel Intersection

Station 5 featured two display boards presenting a plan view and renderings of the Wachtel intersection. The exhibits included three simulated images illustrating existing conditions, a pedestrian hybrid beacon, and a proposed roundabout.

<u>Intersection at Wachtel Way – Plan Feedback</u>

- Signal
  - Waste of money, no!
  - No
- Roundabout
  - Perfect!
  - Yes! Yes!
  - No roundabout there, this is a residential driveway
  - No
  - Yes!
  - Yes
  - No
  - No
  - No
  - Yes
  - Yes



Intersection at Wachtel Way – Rendering Board with Sticky Note Feedback

- Ensure turn movement in driveways, don't cut Oak.

Intersection at Wachtel Way – Rendering Feedback

- Signal
  - Waste of money, no!
  - No light!
- Roundabout
  - No roundabout there. We will not be able to access our driveway!
  - OK, yes!
  - Yes!
  - No
  - This option (roundabout)
  - This option! No need for a light



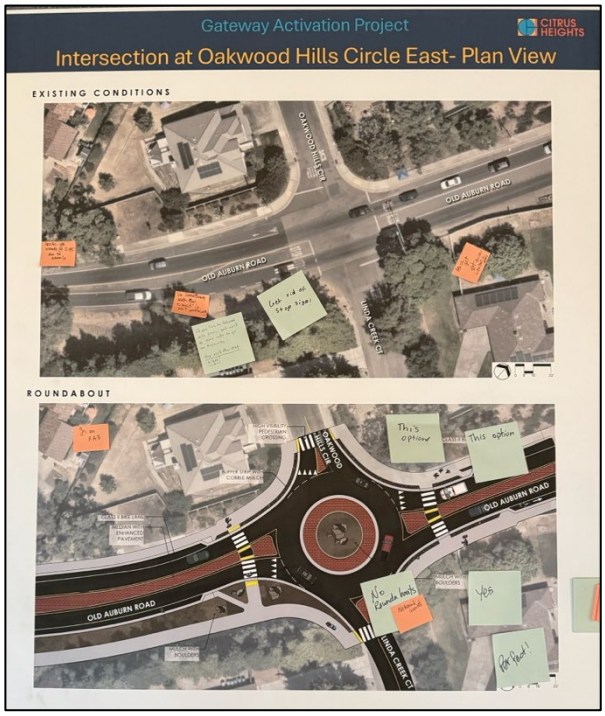
Project team discussing community member feedback.

1. Station 6: Oakwood Hills Circle (East) Intersection

Station 6 featured two display boards presenting a plan view and renderings of the Oakwood Hills Circle (East) intersection. The exhibits included two simulated images illustrating existing conditions and a proposed roundabout.

Intersection at Oakwood Hills Circle East - Plan View Feedback

- Existing Conditions
  - Get rid of stop sign!
  - If you live on Oakwood Hills Circle and need to turn left to go to Roseville…you need the stop signs!
  - Fence got hit twice in the last two years
  - Do something with this, existing is not working
  - Traffic WB streets @ 3:45 due to schools
- Roundabout
  - No roundabouts
  - Perfect!
  - Yes
  - This option
  - This option!
  - Yes on RAB
  - No roundabouts!



Intersection at Oakwood Hills Circle East – Plan view with Sticky Note Feedback

Station 7: Feedback and Project Timeline

The final station featured a board exhibit of the project timeline. Community members were also provided feedback forms that highlighted three multiple-choice

questions and an open-ended comment section. Twenty-three community members filled out the Gateway Activation Project feedback form.

The feedback form questions and results were as follows:

- **Question 1: What are your modes of travel on Old Auburn Road?**
  - Walk; 10 community members
  - Bike; 7 community members
  - Car; 15 community members
  - Transit; 1 community member
  - Other (please list); 2 community members (e.g., "truck/trailer", "access our house Old Auburn/Wachtel")
- **Question 2: Pick two of the following project goals that are most important to you.**
  - Trail connectivity; 11 community members
  - Slowing down traffic; 13 community members
  - Increasing safety; 20 community members
  - Pedestrian improvements; 7 community members
- **Question 3: Which trail cross options would you like to see?**
  - Argo intersection; 9 community members
  - Wachtel intersection; 11 community members
  - Oakwood Hills Circle intersection; 3 community members
- **Comments: Please provide any additional feedback you may have.**





Community members providing feedback on the project board exhibits and feedback forms.

<u>Open-ended Feedback Results:</u>

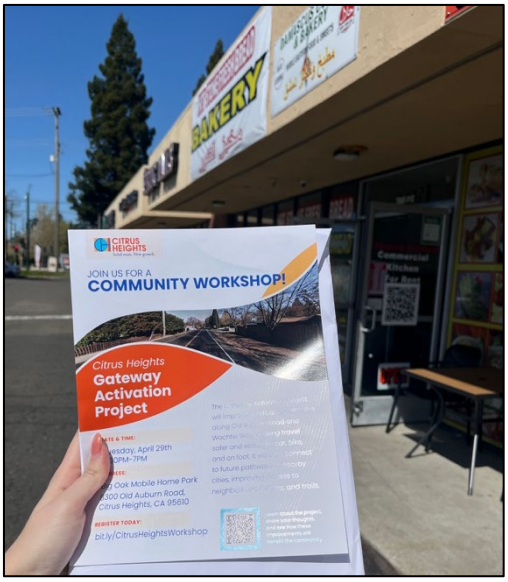
- Roundabouts eliminate Big Rigs and heavy Freight. Signals, such as speeding and pedestrians, give the city of Citrus Heights presence when you enter the city from beautiful Roseville.

- Roundabouts would help traffic flow and slow down traffic. Roundabouts, yes!
- Great presentation. All for roundabouts!
- My property at 8525 Old Auburn Rd has access with a truck and trailer, and getting through traffic requires a roundabout. I definitely would like a sound wall put in the intersections, as they are very noisy.
- We like the roundabouts and trail connectivity. We like the option of the roundabouts at all these intersections. We would like to see an improvement on the noise at the intersection of Wachtel and Old Auburn.
- I like roundabouts and trail connectivity. However, I don't like stop lights and roundabouts at all three intersections. The flashing lights and chirping of crosswalks will bother me. My property backs up to Old Auburn and Wachtel, and the sound at that intersection is currently horrible. A roundabout may help.
- Consider two stop signs at Oakwood Hills Circle intersection and suicide lane for the side streets to enter. The traffic counts entering at the side streets must be very low; you rarely see cars at the side streets unless they are cutting through the neighborhood to skip one of the double stop signs. Speeding up traffic through double stop signs is important to me.
- After watching the simulations, I like the Wachtel and Oakwood Hills traffic circles. I feel they would improve the traffic flow. I appreciate all the thoughtful planning.
- The roundabout options would work better for relieving congestion, especially near Wachtel and Old Auburn.
- Great presentation! Thank you! Being an engineer and understanding your concepts- looking forward to seeing the project underway.
- A roundabout at Wachtel and Old Auburn creates problems with any other residents on the North side of that intersection. Traffic flow will constantly block their driveways. A better alternative is a traffic light that also allows them to come out safely. A crossing at Argo for pedestrians also allows safe crossing on Wachtel. The addition of the bike trail on the West side should help with the visibility of stop signs at Wachtel/Ponticelli.
- Any trail crossing is going to be tricky. Nothing right now makes me feel safe. There is no "right" answer, I suppose.
- Teach drivers how to use roundabouts.
- Totally against roundabouts. Less traffic is important to me.
- Wachtel and Olivine- need either a stop light or flashing lights to highlight the stop sign.
- My concern is the three-way stop at Wachtel and Olivine. It is near impossible to leave Olivine and get out on Wachtel, as so many run the stop sign. You really have to watch and drive with caution.

Public Awareness and Notification

The project team used several different strategies to promote the workshop and garner community participation, including:

- **Email:** Three emails and subsequent reminders regarding the workshop were sent to stakeholders and interested community members, leading up to the event scheduled for April 29th. Additional follow-ups were sent on the 15th and 22nd, as well as on the day of the workshop.
- **Social Media:** Paid advertisements about the workshop were posted on Facebook and Instagram, targeting the project area and a 5-mile radius. The engagement was also posted on 16 Citrus Heights and Sacramento Facebook groups listed below:
    - Citrus Heights Community
    - Citrus Heights Crime Watch Community
    - Good neighborhood and business of Citrus Heights, CA
    - Citrus Heights Live! Non-Restricted
    - BikeParty Sacramento Cyclists
    - 530/916 Street Bike Group
    - Sacramento Women's Hiking & Adventures
    - Citrus Heights Happenings
    - Citrus Heights Area Mom's Group
    - Citrus Heights Live!
    - You know you're from Citrus Heights CA when…
    - Citrus Heights Happenings
    - Citrus Heights CA Neighborhood Watch and Safety
    - Citrus Heights Good Neighbors AND Pets
    - Citrus Heights Deals and Steals
- **Press Release:** The City of Citrus Heights posted an event announcement on their monthly E-Newsletter which was released at the beginning of the month. View the newsletter here.
- **Stakeholder Communications:** The project team reached out via personal calls and emails to representatives of different community organizations, agencies, and transportation groups, requesting them to share the flyer with their members.
- **Flyer Delivery/Signage:** The project team visited local businesses surrounding the project location to distribute flyers about the project and encourage them to attend the workshop. In addition, 15 lawn signs were placed in and around the project area near sidewalks, intersections, and on nearby trails.



Workshop Flyer delivered to nearby businesses



Workshop Lawn Sign placed on nearby trail









Citrus Heights - Gateway Activation Project

Project Update Meeting Summary – March 2026

Introduction

On Thursday, March 5, 2026, the City of Citrus Heights hosted a Project Update Meeting (meeting) for the Gateway Activation Project. The event was held from 5:30 to 7:00 p.m. at the Big Oak Senior Mobile Home Park. A total of 32 community members participated in the meeting.

Background

The Gateway Activation Project focuses on multimodal and roadway improvements along Old Auburn Road and Wachtel Way. These improvements will connect to existing transportation infrastructure and support future regional connections with the City of Roseville and Sacramento County.



Project team discussing board exhibits with community members

The project aims to improve safety, access, and mobility for all users while enhancing traffic operations. It will provide safer, more convenient routes to nearby neighborhoods, parks, open spaces, residences, and trail networks in Citrus Heights and surrounding areas.



Community members viewing board exhibits

Key project objectives include extending multimodal facilities along Old Auburn Road to the city's northern boundary and along Wachtel Way to its intersection with Old Auburn Road, upgrading intersections at Old Auburn Road/Wachtel Way and Old Auburn Road/Oakwood Hills Circle/Linda Creek Court, and improving pedestrian safety and crossings at Old Auburn Road and Argo Drive.

Meeting Purpose and Format

The purpose of the meeting was to provide a project update for the Citrus Heights Gateway Activation Project, encourage community members to review the Draft Initial Study/Mitigated Negative Declaration (IS/MND), and share their feedback. The City prepared the Draft IS/MND

to evaluate potential environmental impacts associated with the project. The document was made available for public review and comment from February 13, 2026, through March 19, 2026, and community members were encouraged to review the materials and submit comments at the meeting and through the project website.

The meeting was held in the multipurpose room at the Big Oak Senior Mobile Home Park. It began with a brief presentation from the project team highlighting key findings from the Draft IS/MND and providing a project update. The presentation was followed by an open house session where attendees could speak directly with staff from AIM Consulting, Dokken Engineering, and the City of Citrus Heights. Informational exhibits and maps of the project corridor were displayed for review, and comment cards were provided for attendees to share feedback.

Presentation

After attendees were welcomed and seated, the presentation opened with an introduction to the Gateway Activation Project and a brief overview of the evening's agenda. The project's purpose and goals were introduced, with a focus on improving connectivity, safety, and mobility along Old Auburn Road and Wachtel Way.



Casey Kempenaar (City of Citrus Heights) presenting to community members

The presentation then summarized the project objectives, including strengthening regional trail connections—such as links to the Old Auburn Multi-Use Trail, Arcade Cripple Creek Trail, and Dry Creek Greenway—and improving roadway conditions and multimodal access in the project area.

Next, proposed improvements were reviewed, including upgrades at key intersections along Old Auburn Road and Wachtel Way, a pedestrian crossing at Argo Drive, and improvements for bicycle and pedestrian facilities. Design concepts focused on the incorporation of roundabouts at the project's key intersections.

The presentation also provided an overview of the environmental review process under the California Environmental Quality Act (CEQA), as well as the findings of the project's Draft IS/MND.

The presentation concluded by highlighting the public review period for the Draft IS/MND and encouraging attendees to review the document and share feedback. Community members were then invited to continue the conversation during the open house portion of the meeting.

Stations and Board Exhibits

Below is an overview of the stations and board exhibits presented at the event.

Welcome Station

Upon arrival at the meeting, community members were welcomed and invited to sign up with their contact information to receive future project updates and event notifications. Free giveaway items were offered and provided by the City.



Community members signing up for project notifications

Station 1: Project Introduction

At Station 1, participants were introduced to the Citrus Heights GAP through a project overview board and a project timeline board outlining the objectives, planned improvements, timeline, and geographic scope.

Station 2: Intersection Boards

This station featured boards illustrating intersection improvements along the project corridor. Exhibits included conceptual roundabout designs/renderings at Argo Drive and Wachtel Way, as well as a plan view of the intersection at Old Auburn Road/Oakwood Hills Circle/Linda Creek Court. These boards showed how proposed configurations could improve traffic operations, enhance safety, and accommodate pedestrians and bicyclists.



Project team discussing board exhibits with community members

Station 3: Environmental Project Impacts/Vegetation Boards

Station 3 included boards describing the environmental review for the Gateway Activation Project and potential environmental considerations within the project corridor. Exhibits outlined the CEQA process and described the Project's purpose and need.

Additional boards highlighted existing vegetation along the corridor and identified areas where tree removal or vegetation changes may occur as part of the proposed improvements. Attendees were encouraged to review the environmental information and provide feedback on potential impacts and environmental considerations.

Station 4: Traffic Simulation

This station featured a projected traffic simulation comparing existing morning traffic conditions with those after the proposed improvements. The simulation illustrated how traffic is expected to move through the corridor and key intersections before and after project changes. Attendees could observe potential improvements to traffic flow and intersection operations and ask questions about how the proposed designs may affect travel through the area.



Community member viewing traffic simulation

Station 5: Document Review/Open Comment

Station 5 provided an opportunity for community members to review a hard copy of the Draft IS/MND and share their input on the project. Attendees were invited to provide open-ended feedback via comment cards, allowing them to share thoughts, concerns, and suggestions regarding the proposed improvements and project concepts.

The feedback collected from these comment cards is summarized below:

- I would like to have the cinder block wall raised higher due to traffic noise and for privacy. My backyard looks out to Old Auburn and Wachtel. Thank you.
- Please make all trail markings the same as Roseville trails. They specifically have walkers going toward bike traffic. This is just like walking toward traffic on the roadway, which is much safer. This is especially important with electric bikes, which can approach quickly and are difficult to hear. Thanks.
- Are sidewalks on both sides of the road being added?
- We are directly impacted by this. Please contact us.
- We think this is a great idea. We hope you can implement the project sooner rather than later.
- We live in Oakwood Hills and Old Auburn. The sound wall is not tall enough to accommodate privacy in our houses or backyards if the sidewalk is wider. Also, the proposed turn lane heads east into Roseville. It would also help if there were no stop signs when turning into Oakwood Hills.

Public Notification

The project team used several strategies to promote the meeting and encourage community participation, including:

- **Email:** Two email blasts were sent via Constant Contact to stakeholder lists and interested community members regarding the meeting and Draft IS/MND. These emails were distributed on February 13 and February 26, 2026, and reached 544 recipients.
- **Press Release:** The City of Citrus Heights promoted the meeting in its monthly E-Newsletter, released on February 5, 2026. View the newsletter here.
- **Previous Workshop Attendees:** The project team also sent personal email invitations to individuals who attended the April 29, 2025, workshop. This outreach reached 33 previous attendees.
- **Direct Mailers:** The Notice of Availability/Notice of Intent to Adopt a Mitigated Negative Declaration and a meeting flyer were mailed to 245 addresses within 500 feet of the project site on February 12, 2026.

Next Steps

Feedback gathered during the Project Update Meeting will be reviewed and compiled by the project team to help inform the refinement of the Gateway Activation Project concepts. The Draft IS/MND was available for public review and comment through March 19, 2026. Comments collected at the meeting will be addressed in the Final IS/MND, which will be presented to the City's Planning Commission and City Council in the coming months.

Community members were encouraged to visit the project website to review project materials and submit additional comments. Further updates and engagement opportunities will be shared with the community as the project advances toward Final Design.

DESMOND, NOLAN, LIVAICH & CUNNINGHAM
ATTORNEYS AT LAW

March 20, 2026 ***Via Email Only***

City of Citrus Heights Planning Division
6360 Fountain Square Drive
Citrus Heights, CA 95621
planning@citrusheights.net

Re: Citrus Heights Gateway Activation Project – Public Comment for Draft IS/MND

To whom it may concern—

This comment is submitted the owner of the real property commonly known as 8500 Linda Creek Court, Orangevale, CA 95662, and identified by Sacramento County Assessor's Parcel Number 224-0580-004 ("Property"). It is our understanding that the City of Citrus Heights plans to take a portion of the northeast corner of the Property for the construction of its Gateway Activation Project ("Project").

The affected corner of the Property is covered by a stand of mature redwood trees that serve various purposes. They help shield the owner's house from unwanted noise, light, and pollution. For instance, if the trees are removed, cars' headlights will shine directly into the owner's home as they go around the new roundabout. The trees also serve aesthetic purposes that cannot be easily replicated. Of particular concern, the trees serve to protect the house on the Property from any vehicles that may lose control while driving fast down Old Auburn Blvd. In fact, these trees will be particularly important for this purpose as residents become accustomed to using the roundabouts—a concern that has been expressed numerous times during project planning. In the event that a car takes the turn too fast, depending on the direction it is driving, it would roll or otherwise lose control right onto the Property threatening the safety of our client and his family.

The recently circulated Project IS/MND states that "protected trees within the Project footprint will be preserved to the extent feasible." (Project IS/MND, Pg. 10, BIO-5.) Taken together with other relevant City documents and guidelines, the preservation of trees is a priority for the City and one that must be considered in the design of the Project. With that in mind, we met at the Property with representatives of the City to discuss how the Project can be redesigned to avoid the trees and, at the meeting, the City identified an alignment that would do just that. While the actual designs for the Project have yet to be completed, we appreciate the City working on plans to avoid

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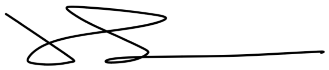
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William C. Livaich
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removing the trees on the Property and we hope that said redesigns will be considered and included in all Project plans moving forward.

Very truly yours,

DESMOND, NOLAN, LIVAICH & CUNNINGHAM



James Silverthorn

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