

DOCKETED

Docket Number:	23-OPT-02
Project Title:	Darden Clean Energy Project
TN #:	252977
Document Title:	CEC App_Section 5-4_Traffic and Transportation_Darden Clean Energy
Description:	This section discusses the potential effect on traffic and transportation from the Darden Clean Energy Project.
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Submission Date:	11/6/2023 2:57:38 PM
Docketed Date:	11/6/2023

5.4 Traffic and Transportation

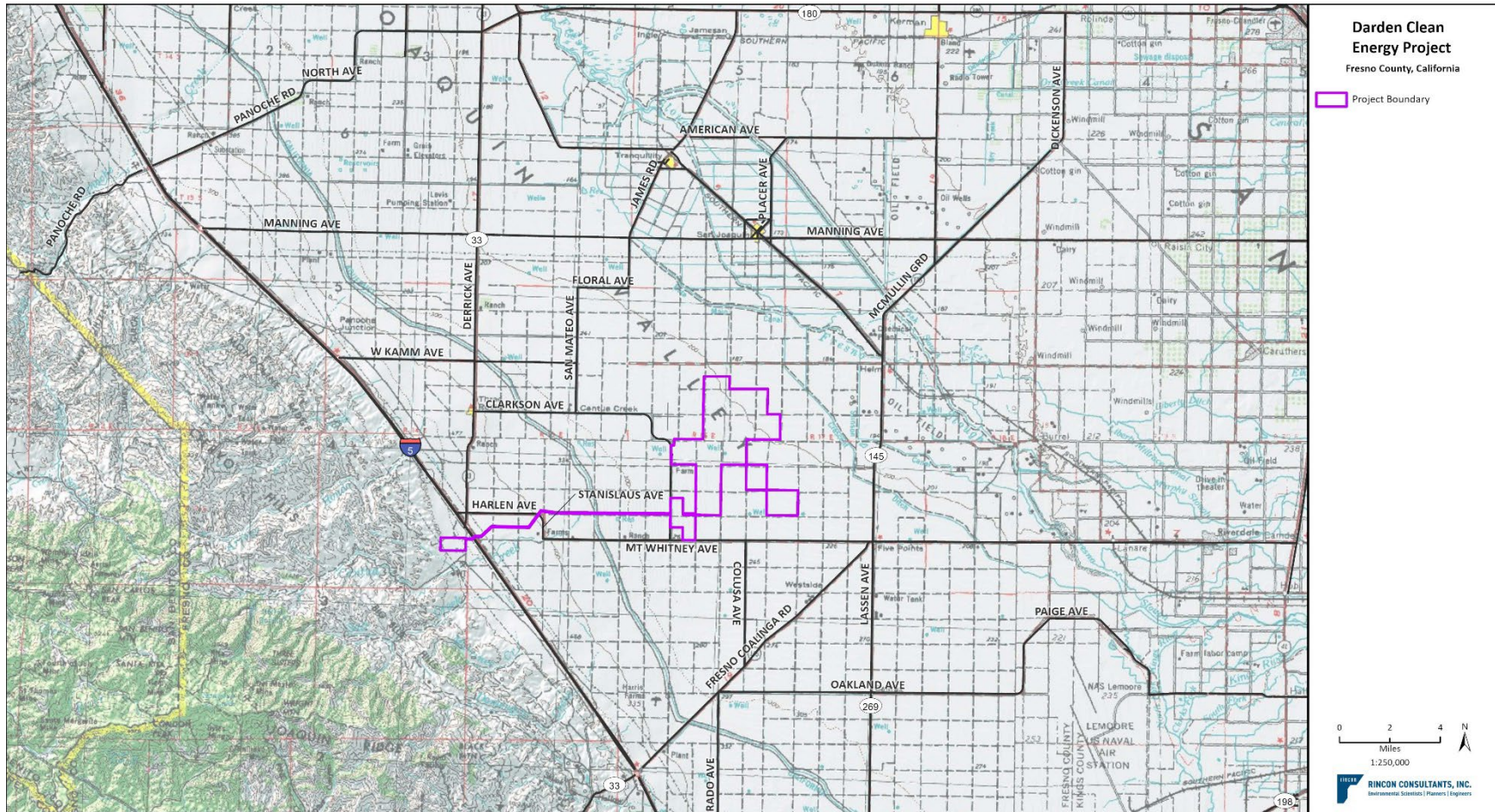
This section discusses the potential effect on traffic and transportation from the Darden Clean Energy Project (Project). Section 5.4.1 describes nearby transportation facilities that might be affected by the Project, including roads, public transportation, rail, air, bicycle, and pedestrian facilities. Section 5.4.2 describes the regulatory setting of the Project in terms of traffic and transportation. Section 5.4.3 presents the impact analysis and Section 5.4.4 presents the cumulative impacts of the Project with respect to traffic and transportation. Section 5.4.5 describes the laws, ordinances, regulations, and standards (LORS) applicable to traffic and transportation for the Project. Section 5.4.6 presents the agencies that have jurisdiction over traffic and transportation and specifies the relevant agency contacts. Section 5.4.7 describes the permits required for traffic and transportation and a schedule for obtaining the permits. Section 5.4.8 provides the references used to prepare this subsection.

5.4.1 Environmental Setting

The Project site is located in an agricultural area of unincorporated Fresno County south of the community of Cantua Creek. The proposed solar facility and Option 1 and Option 2 battery energy storage system (BESS), step-up substation, and green hydrogen component sites would be located on approximately 9,100 acres of land currently owned by Westlands Water District, between South Sonoma Avenue to the west and South Butte Avenue to the east. The proposed approximately 10- to 15-mile generation intertie (gen-tie) line would span west from the intersection of South Sonoma Avenue and West Harlan Avenue to immediately west of Interstate 5 (I-5), where it would connect to the proposed utility switchyard along Pacific Gas and Electric Company's (PG&E) Los Banos-Midway #2 500 kilovolt transmission line. The alternate green hydrogen site being considered is located adjacent to the proposed utility switchyard site. It is anticipated that the Project would be constructed over a period of 18 to 36 months.

The following subsections provide an overview of regional and local transportation facilities within the Project site vicinity, including roadway, pedestrian, bicycle, public transport, rail, and air facilities. Figure 5.4-1 presents a regional overview of major transportation facilities and the Project site, and Figure 5.4-2a through Figure 5.4-2h provide a localized context of transportation facilities within the Project site vicinity. In accordance with the California Energy Commission's (CEC) requirements for Opt-In Applications (Title 20, California Code of Regulations, Section 1704, Appendix B), transportation facilities shown include existing roads, transit bus routes, railroads, pipelines, canals/ditches, canal-related artificial paths, schools, and bus stops.

Figure 5.4-1 Regional Transportation Facilities



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2023 North and Transportation
Fig. 5.4 Transportation Regional Setting

Figure 5.4-2a Local Transportation Facilities Overview

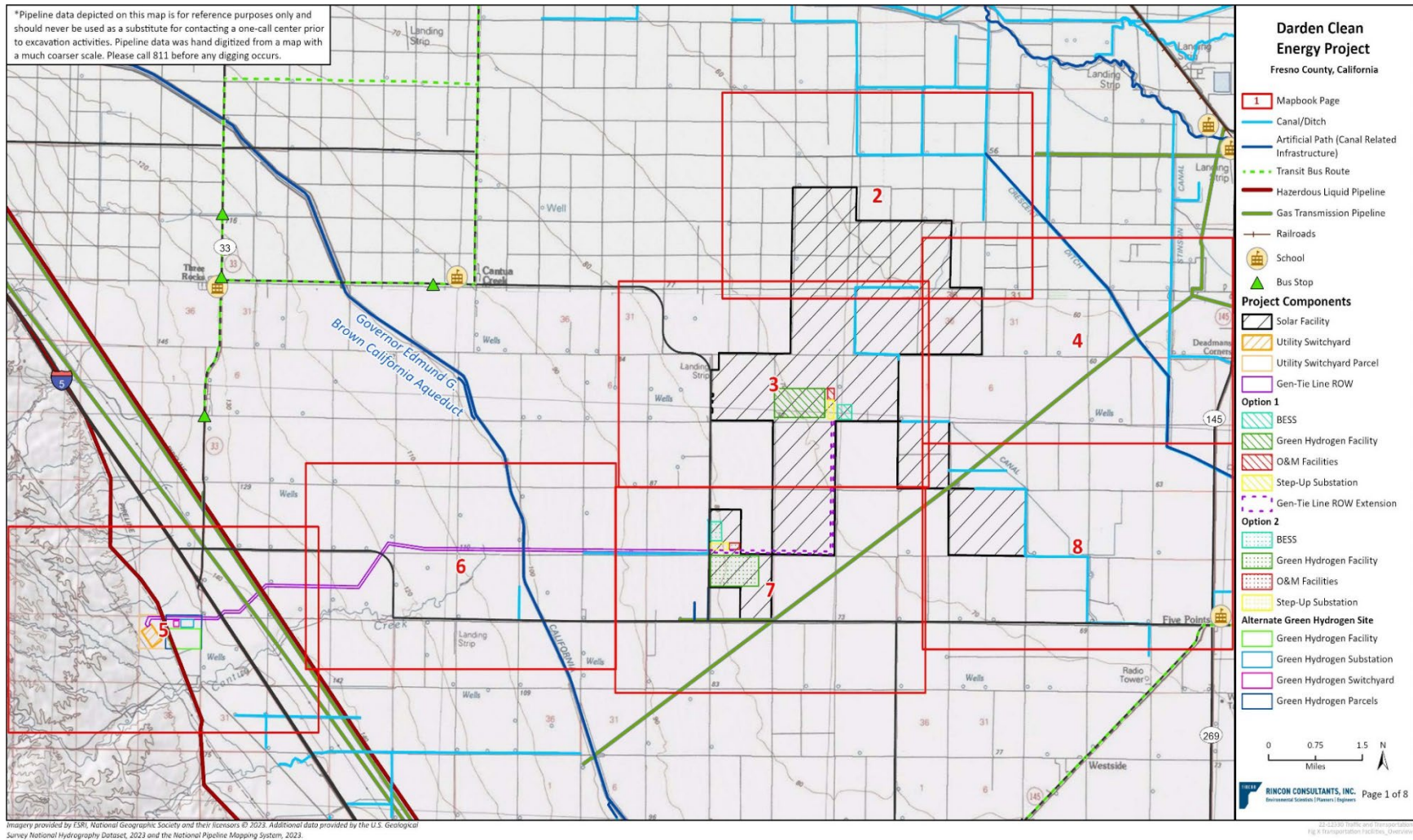
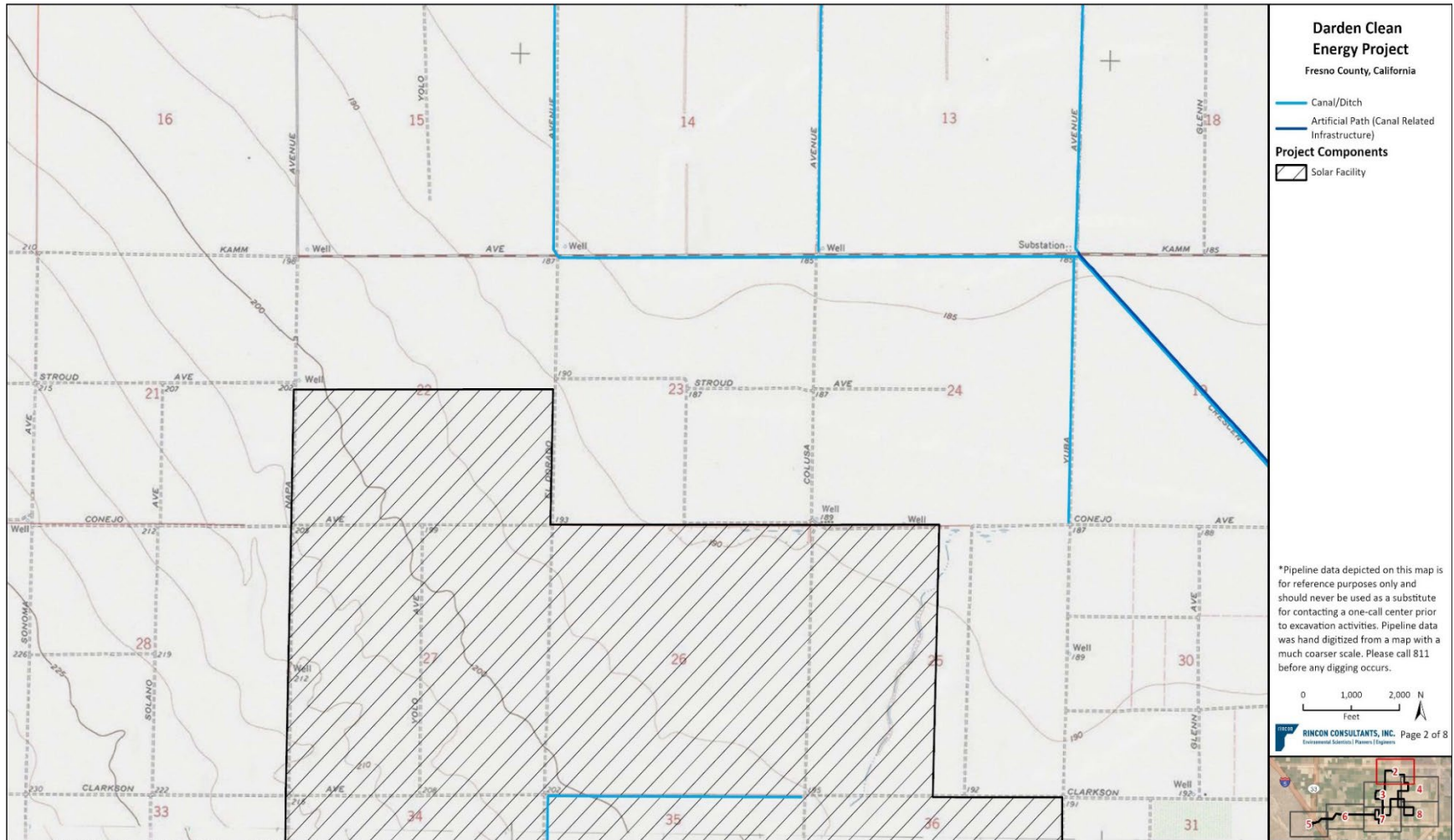


Figure 5.4-2b Local Transportation Facilities (Mapbook Page 2)



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2023-2024 Traffic and Transportation
Fig. 5.4-2b Transportation Facilities

Figure 5.4-2c Local Transportation Facilities (Mapbook Page 3)

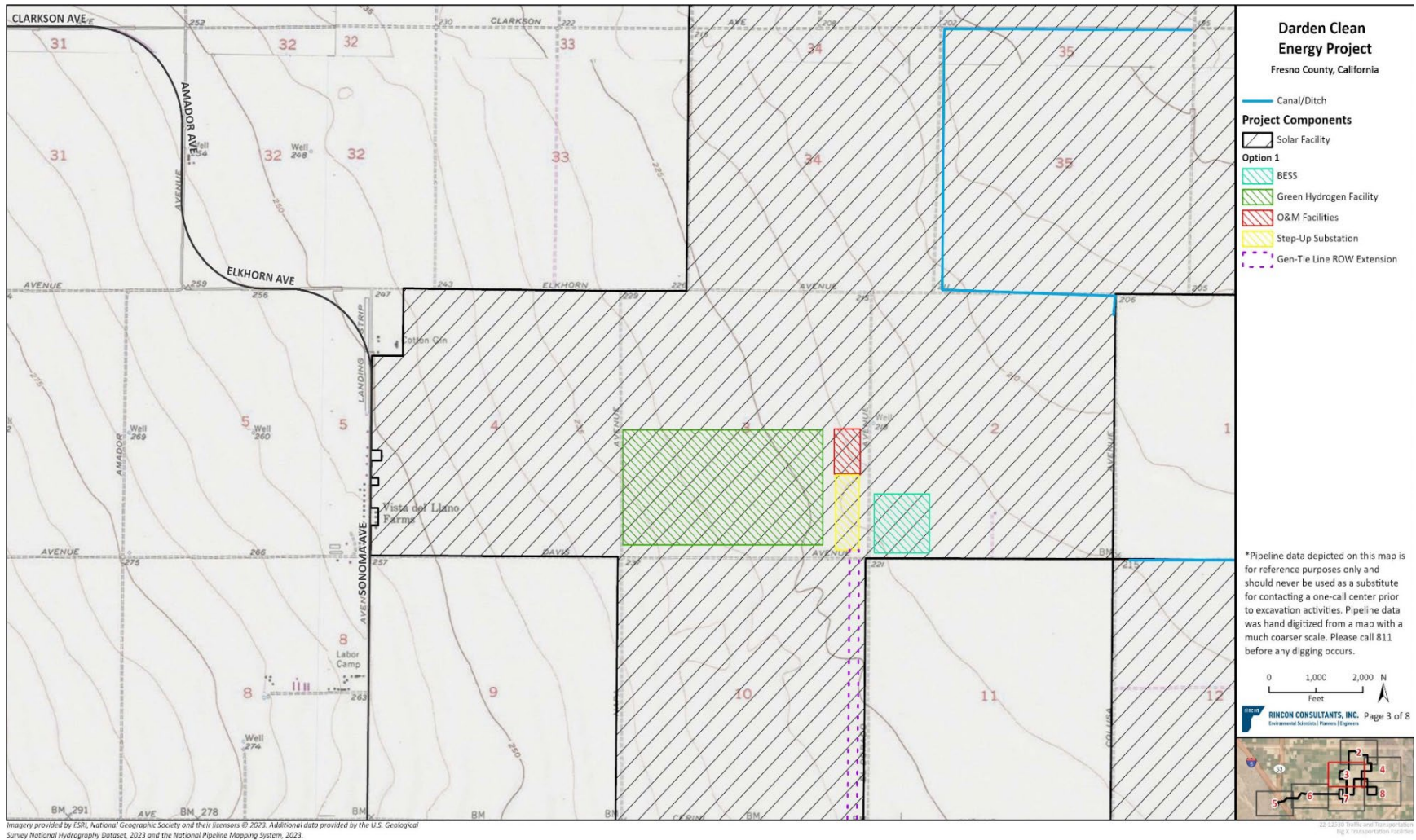


Figure 5.4-2d Local Transportation Facilities (Mapbook Page 4)

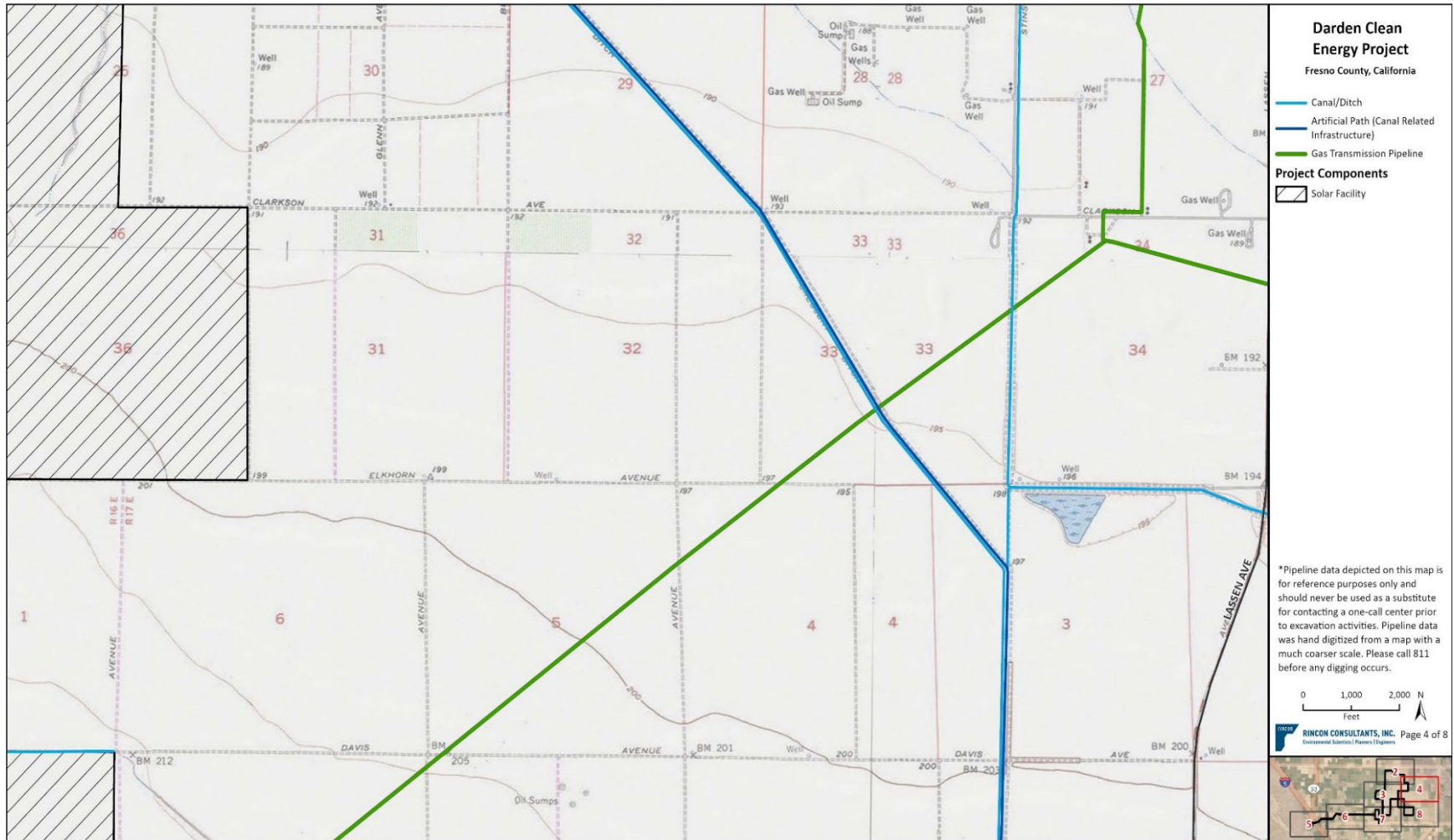


Figure 5.4-2e Local Transportation Facilities (Mapbook Page 5)

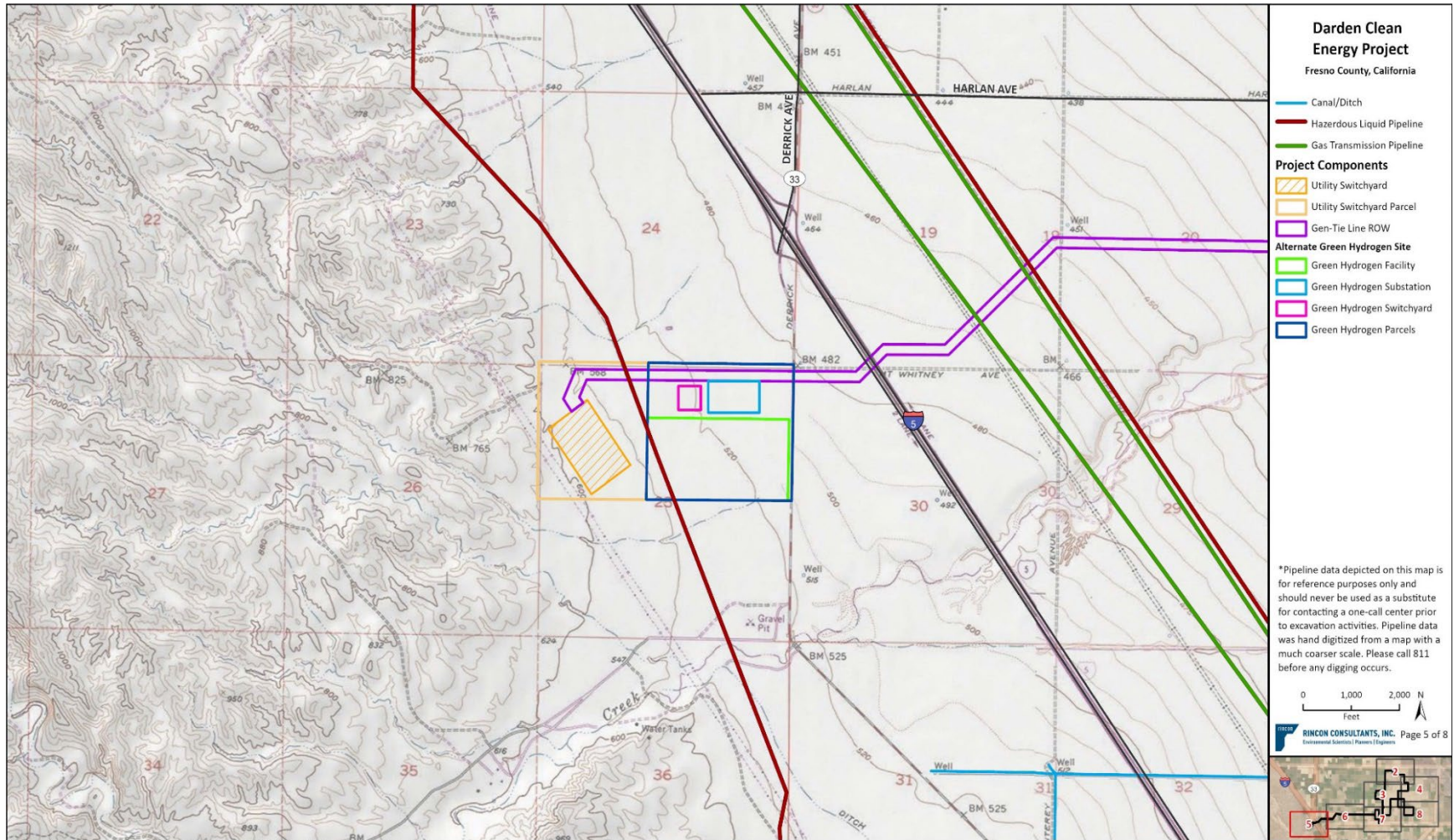


Figure 5.4-2f Local Transportation Facilities (Mapbook Page 6)



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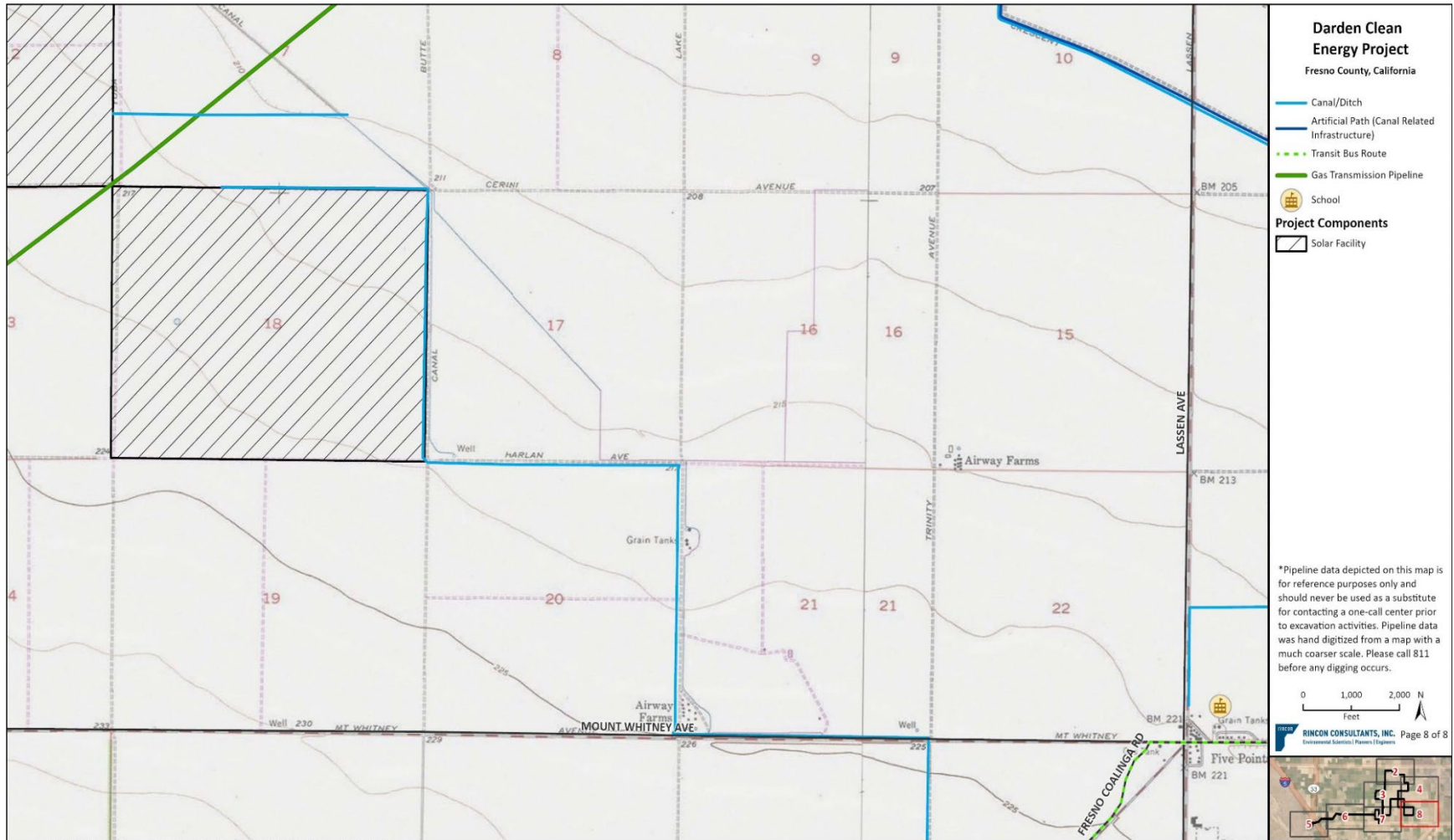
20-02230 Traffic and Transportation
Fig. 5. Transportation Facilities

Figure 5.4-2g Local Transportation Facilities (Mapbook Page 7)



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Figure 5.4-2h Local Transportation Facilities (Mapbook Page 8)



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20-02230 Traffic and Transportation
Fig. 5. Transportation Facilities

5.4.1.1 Existing Regional and Local Transportation Facilities

Roadways

Functional classification is the process by which streets and highways are grouped into classes, or systems, according to the type of service they are intended to provide. Fundamental to this process is the recognition that individual streets and highways do not serve travel independently in any major way. The current hierarchical system of roadways in the Project site area consists of the following six classifications, informed by Fresno County's General Plan Transportation and Circulation Element:

- **Freeways** provide for high-speed through-traffic movement on continuous routes with full access control. Freeways connect points within the county and link the county to other parts of the state.
 - Interstate 5: I-5 is an interstate freeway serving the Project area. I-5 exists on the southern portion of the Project site as a divided four-lane road without bike lanes throughout. The speed limit is 70 miles per hour (mph), and I-5 is entirely grade separated.
 - State Route (SR) 198 (Dorris Avenue): Dorris Avenue is currently an undivided two-lane road in the Project site area. The posted speed limit is 65 mph. This roadway directs traffic towards Visalia.
- **Expressways** provide rapid through-traffic movement on continuous routes which connect the cities and communities within the county with each other, with freeways and other expressways, and with communities in adjoining counties. Expressways provide a high degree of access control.
 - SR 33: SR 33 is an undivided two-lane road in the Project site area. The posted speed limit is 65 mph. This highway directs the traffic towards nearby smaller cities to the north of the Project site.
 - SR 145: SR 145 is an undivided two-lane road in the Project site area. The posted speed limit is 55 mph. This highway directs the traffic towards Fresno.
 - SR 269: SR 269 exists as an undivided two-lane road in the Project site area. The posted speed limit is 55 mph. This highway merges with SR 145 and carries traffic north of the Project site.
 - Mt. Whitney Avenue: Mt. Whitney Avenue exists as an undivided two-lane road in the Project site area. The posted speed limit is 55 mph. This highway continues as Harlan Avenue to merge with SR 33 and carries traffic north of the Project site.
- **Super Arterials** provide for mobility within the county and its cities, carrying through traffic on continuous routes and joining major traffic generators, freeways, expressways, and other arterials. Access to abutting private property and intersecting local streets is restricted. Super arterials do not presently exist within the vicinity of the Project site.
- **Arterials** provide for mobility within Fresno County and its cities, carrying through traffic on continuous routes and joining major traffic generators, freeways, expressways, super arterials, and other arterials. Access to abutting private property and intersecting local streets shall generally be restricted. West Kamm Road, north of Project site, is identified as an arterial road.

- **Collectors** provide for internal traffic movement within communities, and connect local roads to arterials, super arterials, and expressways. Direct access to abutting private property shall generally be permitted. El Dorado Avenue and Oakland Avenue are identified as collector facilities within the vicinity of the Project site.
- **Local Streets** provide direct access to abutting property and connect with other local roads, collectors, arterials, super arterials, and expressways. Local roads are typically developed as two-lane undivided roadways. Access to abutting private property and intersecting streets shall be permitted. Within the Project area, all the nearby streets that carry traffic (except those identified above) are considered to be local streets.

Pedestrian

The Project site is located in a heavily agricultural area, surrounded by agricultural roads. There are no pedestrian facilities, including sidewalks, trails, or other walking areas, within the vicinity of the Project site.

Bicycle Facilities

Bicycle facilities are typically categorized into four classes as follows (Caltrans 2020a):

- **Class I facilities** are bike paths or trails with an exclusive right-of-way (ROW) for bicycles separate from vehicles.
- **Class II facilities** are bike lanes with an exclusive ROW for bicycles designated by roadway striping and signs.
- **Class III facilities** are bike routes signed for shared travel with motorized vehicles, without any striping. In addition, a shared lane marking or sharrow is a street marking placed in the center of a travel lane to indicate that a bicyclist may use the full travel lane.
- **Class IV facilities**, also known as cycle tracks or separated bikeways, are bikeways for the exclusive use of bicycles and include a separation required between the separated bikeway and the through vehicular traffic. The separation may include, but is not limited to, grade separation, flexible posts, inflexible physical barriers, or on-street parking.

Within the Project site vicinity, there are no designated or planned bicycle routes.

Public Transportation

Public transportation in the Project site's regional vicinity consists of bus routes primarily along SR 33 and SR 145. There are no public transportation stops located within or adjacent to the Project site. The following bus stops are located within the regional vicinity of the Project site, including the communities of Three Rocks, Cantua Creek, San Joaquin, Five Points, and Westside (Fresno County Rural Transit Agency 2019):

- Halfway Stop, located at the Giffen Cantua Ranch, provides access to the San Joaquin Intercity Transit system
- Three Rocks Stop, located at the intersection of SR 33 and Clarkson Avenue, provides access to the San Joaquin Intercity Transit system
- El Porvenir Stop, located along SR 33 in the community of Three Rocks, provides access to the San Joaquin Intercity Transit system

- Cantua Creek Stop, located along Clarkson Avenue in the community of Cantua Creek, provides access to the San Joaquin Intercity Transit system
- San Joaquin Stop, located along Colorado Avenue in the community of San Joaquin, provides access to the San Joaquin Intercity Transit system
- Five Points Stop, located at the intersection of SR 145 and Mt. Whitney Avenue in the community of Five Points, provides access to the Coalinga Intercity Transit system
- Five Stars Stop, located along SR 145 in the community of Westside, provides access to the Coalinga Intercity Transit system

From the above list, the nearest bus stop to the Project site is the Five Points Stop, located approximately 3.2 miles southeast of the Project site. No other public transportation stops or facilities exist within the Project site vicinity.

Rail Traffic

A rail line owned by the San Joaquin Valley Railroad is located approximately 4.5 miles northeast of the Project running in a northwest-southeast direction, passing through Helm and adjacent to Colorado Avenue. In addition, the California High Speed Rail Authority is currently planning a high-speed rail system service that would serve new stations in Fresno; however, this rail system would not pass adjacent to or near the Project site. Neither rail facilities would impact transportation considerations for the Project.

Air Traffic

In the central San Joaquin Valley, where the Project site is located, the Fresno Yosemite International Airport serves as the principal passenger airfreight airport. Fresno Yosemite International Airport is located approximately 35 miles northeast of the Project site. Other airports in the Project site's regional vicinity include the San Joaquin Airport (approximately 5.4 miles from the Project site) and the Agro-West Airport (approximately 1.3 miles from the Project site). The Agro-West Airport is a private airport facility that is not subject to the Fresno County Airport Land Use Compatibility Plan, and thus, the airport influence area and airport-related policies are not available for reference. Section 5.5, *Visual Resources*, provides a light and glare analysis for the Project, including Federal Aviation Administration lighting requirements and approval, if determined necessary. Neither the San Joaquin Airport nor the Agro-West Airport have runways greater than 3,200 feet (AirNav 2023a), and thus the Project would not trigger a notice for compliance with Federal Aviation Regulation Part 77 - Objects Affecting Navigable Airspace. The nearest airport with a runway longer than 3,200 feet is the William Robert Johnston Airport, located approximately 18.3 miles from the Project site (AirNav 2023b). The nearest heliport is the PG&E Fresno Service Center Heliport, located approximately 26.8 miles from the Project site.

Pipelines and Canals

In the vicinity of the Project site, a canal intersects Mt. Whitney Avenue and serves as a source of water for agricultural processes. Although no pipelines are visible on the Project site, there is a potential for concealed underground gas and water pipelines. Figure 5.4-2 depicts pipelines and canals in the project vicinity.

5.4.1.2 Existing Traffic Conditions and Level of Service

Existing Roadway Conditions

Traffic conditions on roadways are measured in terms of level of service (LOS), which describe operational conditions within a traffic stream and reflect speed, freedom to maneuver, traffic interruptions, and comfort and convenience. Six LOS are defined for each type of facility, ranging from “A” for the best-operating conditions to “F” for the worst, based on a driver’s perceptions of those conditions. The following street segments near and adjacent to the Project site are expected to carry 10 percent or more of Project traffic and, thus, were analyzed to determine LOS:

- Mt. Whitney Avenue /Stanislaus Avenue /Harlan Avenue between SR 33 and SR 145
- Colusa Avenue between SR 145 and Mt. Whitney Avenue
- SR 145 between I-5 and Colusa Avenue
- SR 145 between Mt Whitney Avenue and SR 180
- SR 269 between SR 198 and Mt. Whitney Avenue

Currently, there are no road features identified along these roadway segments that would pose a threat to public safety (Appendix K). The roadway segment analysis was based on the Modified Highway Capacity Manual-Based LOS Tables, which are widely accepted throughout the Central Valley, including Fresno County (Appendix K). Table 5.4-1 provides average daily traffic (ADT), peak hour traffic, and LOS results for the abovementioned roadway segments, as well as existing traffic flow percentages for passenger vehicles and trucks. ADT and peak hour traffic for county roadways was determined based on new traffic counts conducted by VRPA Technologies, Inc. in September 2023 and traffic counts obtained from Caltrans for state highways (Appendix K). The results of this analysis indicate that all of the studied roadway segments operate at acceptable LOS under existing conditions.

Table 5.4-1 Existing Roadway Segment ADT and Peak Hour Operations

Street Segment	Segment Description	Target LOS	ADT	Peak Hour Traffic	LOS	Estimated Percentage of Existing Traffic Flows	
						Passenger Vehicles	Trucks
Mt. Whitney Avenue							
SR 33 to Colusa Avenue	1 lane	D	1,800	227	C	97%	3%
Colusa Avenue to SR 145	1 lane	D	2,200	227	C	97%	3%
Colusa Avenue							
SR 145 to Mt. Whitney Avenue	1 lane	D	850	106	C	97%	3%
SR 145							
I-5 to Colusa Avenue	1 lane	C	3,300	360	B	90%	10%
Colusa Avenue to Mt. Whitney Avenue	1 lane	C	4,100	447	B	90%	10%
Mt. Whitney Avenue to SR 180	1 lane	C	7,300	694	B	90%	10%
	2 lanes	C	12,000	1,140	B	90%	10%
SR 269							
SR 198 to Mt. Whitney Avenue	1 lane	C	4,100	410	B	90%	10%

Source: Appendix K

Truck Routes – Weight and Load Limitations

Section 11.32.020 of the Fresno County Code of Ordinances states that any person desiring to operate or move over, upon, across or along any county highway a vehicle or combination of vehicles or special mobile equipment of a size or weight of vehicle or load exceeding the maximum specified in the California Vehicle Code (CVC) may file with the director an application in writing, signed by such person, for a special written permit allowing the operation or movement. The County of Fresno has not adopted specific weight and load limitations for County roadways, and instead refers to the CVC specifications. As the Project would involve the transportation of oversized vehicles, the Project applicant would require an Oversize/Overweight Permit in accordance with the Fresno County Code of Ordinances.

CVC Section 35550 provides the following specifications for weight and load limitations:

- a. The gross weight on any one axle shall not exceed 20,000 pounds, and the gross weight upon any one wheel, or wheels, supporting one end of an axle, shall not exceed 10,500 pounds.
- b. The gross weight limit for any one wheel, or wheels, shall not apply to vehicles with loads of livestock.
- c. The maximum wheel load is the lesser of the following:
 1. The load limit established by the tire manufacturer, on the tire sidewall.
 2. A load of 620 pounds per lateral inch of tire width, as determined by the manufacturer's rated tire width on the tire sidewall. The steering axle, however, must go by the load limit by the tire manufacturer.

5.4.1.3 Other Projects

Future Plans and Projects

The current Regional Transportation Plan (RTP) that was adopted by the Fresno Council of Governments (Fresno COG) in 2022 was reviewed to determine whether there were any planned projects relevant to the Project's potential impacts to traffic. The RTP includes roadway shoulder improvements on Mt. Whitney Avenue from SR 145 to Stanislaus Avenue; however, this project would be completed by 2042. The RTP also includes intersection improvements at the SR 145/SR 269 intersection and at the SR 269/SR 198 intersection, both of which would be completed by 2032 (Fresno COG 2022). As the Project would be in operation by 2027 or 2028, these roadway projects are not relevant to this analysis.

5.4.2 Regulatory Setting

A review of existing relevant LORS was conducted to understand the regulatory context for traffic and transportation surrounding the Project. This review of applicable federal, state, and local policies and regulations includes the California Environmental Quality Act (CEQA), Fresno County's General Plan, and the Fresno County Code of Ordinances. LORS applicable to traffic and transportation are detailed in Section 5.4.5.

5.4.3 Impact Analysis

The following subsections discuss the potential direct and indirect impacts related to traffic and transportation from construction and operation (including maintenance) of the Project.

5.4.3.1 Methodology

A review of publicly available information was conducted to identify and assess potential impacts related to traffic and transportation, including the:

- Fresno COG RTP
- Fresno County General Plan
- Fresno County Code of Ordinances
- Fresno County Multi-Jurisdictional Hazard Mitigation Plan

Additionally, a Project-specific Transportation Analysis has been prepared, which includes an analysis of the Project's impacts to LOS on local roadways and is referenced as Appendix K.

5.4.3.2 Impact Evaluation Criteria

The potential for impacts to traffic and transportation were evaluated using the criteria described in the CEQA Environmental Checklist (Appendix G of the CEQA Guidelines. Specific to traffic and transportation, the CEQA Checklist asks, would the project:

- Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities; and/or
- Conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b);
- Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment); and/or
- Result in inadequate emergency access.

In addition, the CEC requirements for Opt-In Applications ask for an evaluation of Project-related hazardous materials to be transported to or from the Project site during construction and operation.

Impact TRA-1

Threshold: Would the project conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

The Project site's circulation system does not contain pedestrian, bicycle, public transportation, railway, or airport facilities. Thus, the Project would be consistent with Fresno County's Regional Bicycle and Trails Master Plan and Regional Active Transportation Plan because no public transportation service or dedicated pedestrian or bicycle facilities exist on roadways that would be used to access the Project site.

The Traffic and Transportation Analysis prepared for the Project (Appendix K) analyzed major roadway segments within the Project site, consistent with CEC requirements. Studied roadways include:

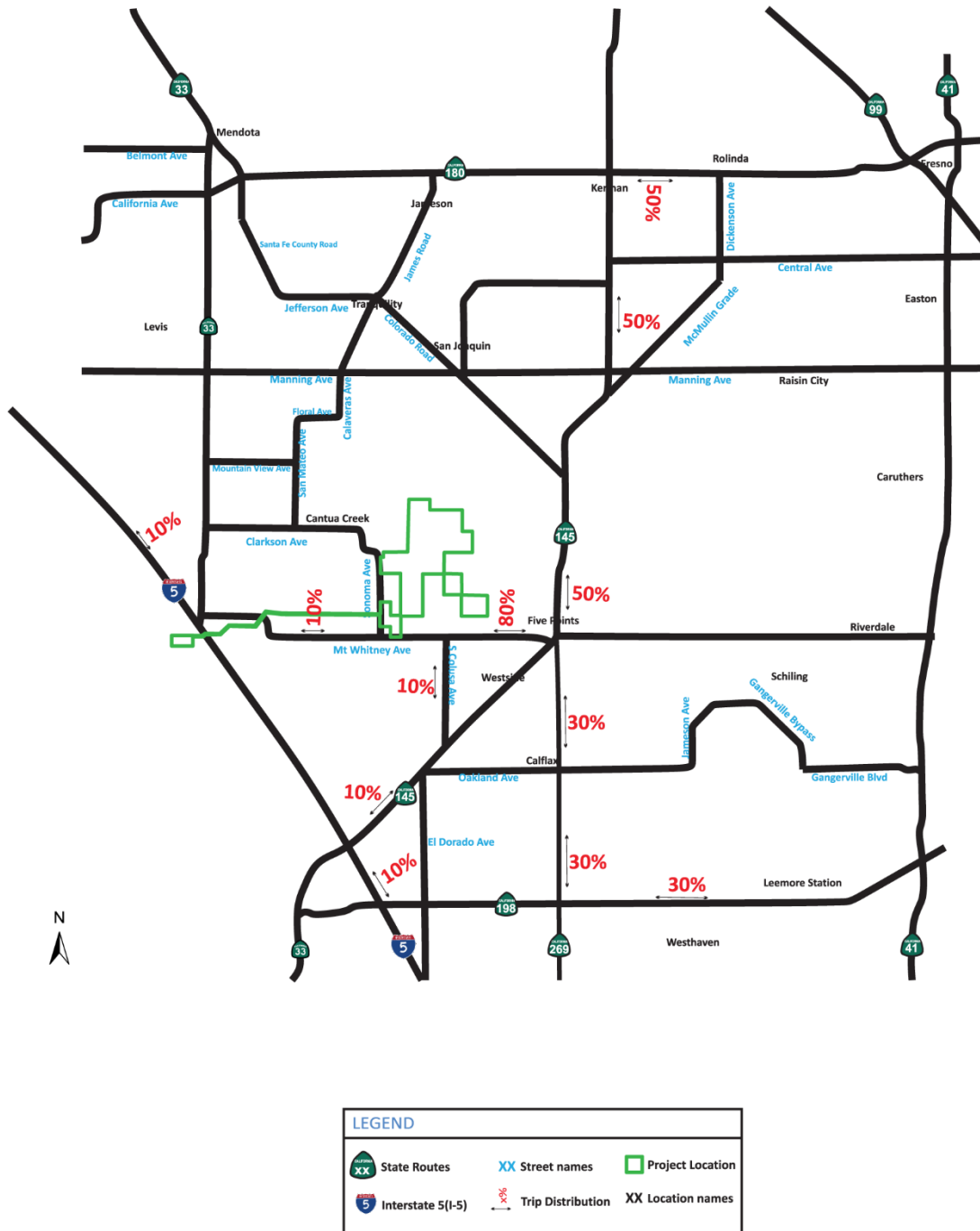
- Mt. Whitney Avenue /Stanislaus Avenue /Harlan Avenue between State Route (SR) 33 and SR 145

- Colusa Avenue between SR 145 and Mt. Whitney Avenue
- SR 145 between I-5 and Colusa Avenue
- SR 145 between Mt Whitney Avenue and SR 180
- SR 269 between SR 198 and Mt. Whitney Avenue

Worker vehicles would primarily access the Project site via major regional roads, including I-5, SR 145, and SR 269. As the Project site is not located along a major regional road, worker vehicles would then use local streets, such as Mt. Whitney Avenue and Colusa Avenue, to access the Project site. The distribution of employee vehicle trips across existing roadways during construction of the Project is shown in Figure 5.4-3.

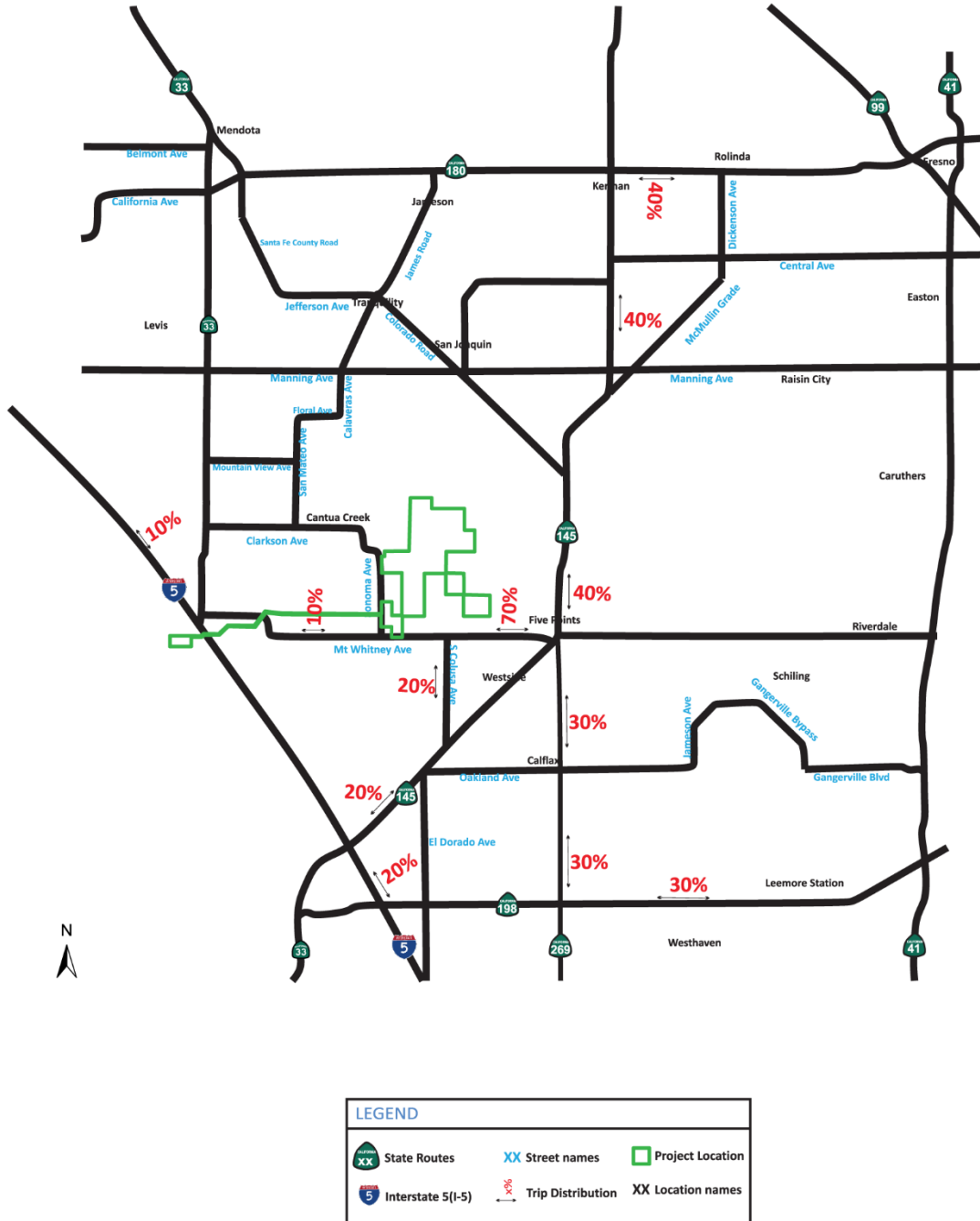
Trucks would access the Project site in a similar manner to worker vehicles. The distribution of truck trips across existing roadways during construction of the Project is shown in Figure 5.4-4.

Figure 5.4-3 Construction Employee Trip Distribution



Source: VRPA Technologies, Inc., 2023.

Figure 5.4-4 Construction Truck Trip Distribution



Source: VRPA Technologies, Inc., 2023.

The following analysis focuses on the Project's potential construction and operation impacts to these roadway facilities. It is anticipated that construction of the Project would occur over a period of 18 to 36 months. An 18-month and 36-month scenario were examined for this analysis to provide a range of potential traffic and transportation impacts. Table 5.4-2 provides ADT and LOS results for the studied roadway segments under the Project's 18-month construction schedule; Table 5.4-3 provides ADT and LOS results for the studied roadway segments under the Project's 36-month construction schedule; and Table 5.4-4 provides ADT and LOS results for the studied roadway segments under the Project's operational conditions in 2028. As shown in Table 5.4-2, Table 5.4-3, and Table 5.4-4, Project-generated traffic would not decrease LOS below the targeted level for each roadway segment. Therefore, the Project would be consistent with LOS and circulation standards within the Fresno County General Plan and Fresno COG RTP.

The existing plus Project roadway segment ADT and peak hour traffic for the 18-month construction schedule and 36-month construction schedule are shown in Figure 5.4-5 and Figure 5.4-6, respectively. The existing plus Project roadway segment ADT for operation of the Project is shown, and Figure 5.4-7.

Table 5.4-2 2023 Existing Plus Project Roadway Segment ADT, 18-Month Schedule

Street Segment	Segment Description	Target LOS	ADT	Existing		Existing Plus Project Construction		
				Peak Hour Traffic	LOS	ADT	Peak Hour Traffic	LOS
Mt. Whitney Avenue								
SR 33 to Colusa Avenue	1 lane	D	1,800	227	C	2,100	269	C
Colusa Avenue to SR 145	1 lane	D	2,200	277	C	4,570	611	C
Colusa Avenue								
SR 145 to Mt. Whitney Avenue	1 lane	D	850	106	C	1,190	153	C
SR 145								
I-5 to Colusa Avenue	1 lane	C	3,300	360	B	3,640	400	B
Colusa Avenue to Mt. Whitney Avenue	1 lane	C	4,100	447	B	4,100	447	B
Mt. Whitney Avenue to SR 180	1 lane	C	7,300	694	B	8,170	850	B
	2 lanes	C	12,000	1,140	B	13,470	1,140	C
SR 269								
SR 198 to Mt. Whitney Avenue	1 lane	C	4,100	410	B	5,000	511	B

Source: Appendix K

Table 5.4-3 2023 Existing Plus Project Roadway Segment ADT, 36-Month Schedule

Street Segment	Segment Description	Target LOS	ADT	Existing		Existing Plus Project Construction		
				Peak Hour Traffic	LOS	ADT	Peak Hour Traffic	LOS
Mt. Whitney Avenue								
SR 33 to Colusa Avenue	1 lane	D	1,800	227	C	2,040	261	C
Colusa Avenue to SR 145	1 lane	D	2,200	277	C	4,090	544	C
Colusa Avenue								
SR 145 to Mt. Whitney Avenue	1 lane	D	850	106	C	1,120	143	C
SR 145								
I-5 to Colusa Avenue	1 lane	C	3,300	360	B	3,570	392	B
Colusa Avenue to Mt. Whitney Avenue	1 lane	C	4,100	447	B	4,100	447	B

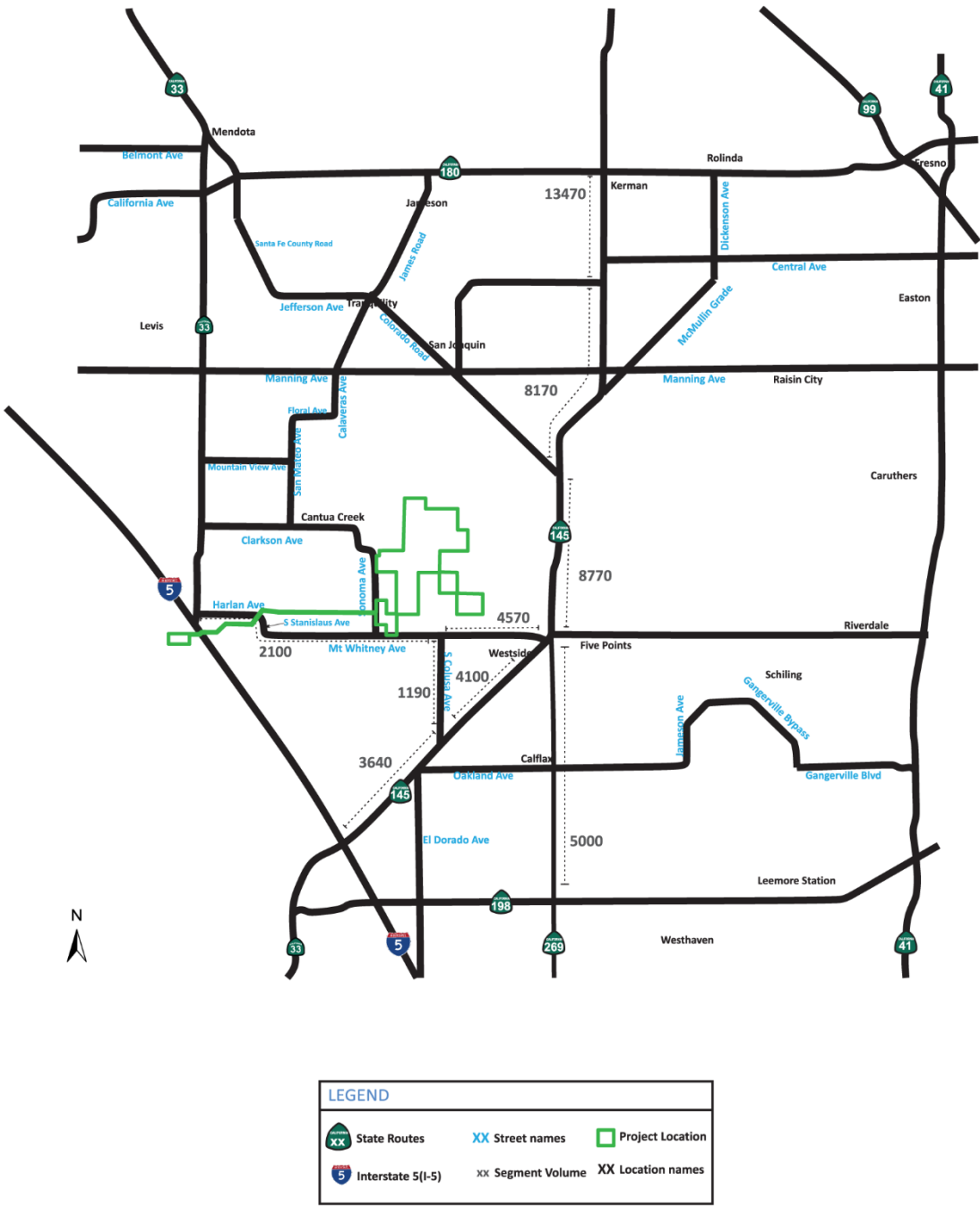
Street Segment	Segment Description	Target LOS	ADT	Existing		Existing Plus Project Construction		
				Peak Hour Traffic	LOS	ADT	Peak Hour Traffic	LOS
Mt. Whitney Avenue to SR 180	1 lane	C	7,300	694	B	8,470	818	B
	2 lanes	C	12,0000	1,140	B	13,170	1,140	C
SR 269								
SR 198 to Mt. Whitney Avenue	1 lane	C	4,100	410	B	4,820	490	B

Source: Appendix K

Table 5.4-4 2028 Projected Traffic Plus Project Roadway Segment ADT Operations

Street Segment	Segment Description	Target LOS	2028 Traffic Plus Project Operations	
			ADT	LOS
SR 33 to Colusa Avenue	1 lane	D	2,000	C
Colusa Avenue to SR 145	1 lane	D	2,500	C
SR 145 to Mt. Whitney Avenue	1 lane	D	950	C
I-5 to Colusa Avenue	1 lane	C	3,650	B
Colusa Avenue to Mt. Whitney Avenue	1 lane	C	4,440	B
Mt. Whitney Avenue to SR 180	1 lane	C	8,100	B
	2 lanes	C	13,290	C
SR 198 to Mt. Whitney Avenue	1 lane	C	4,550	B

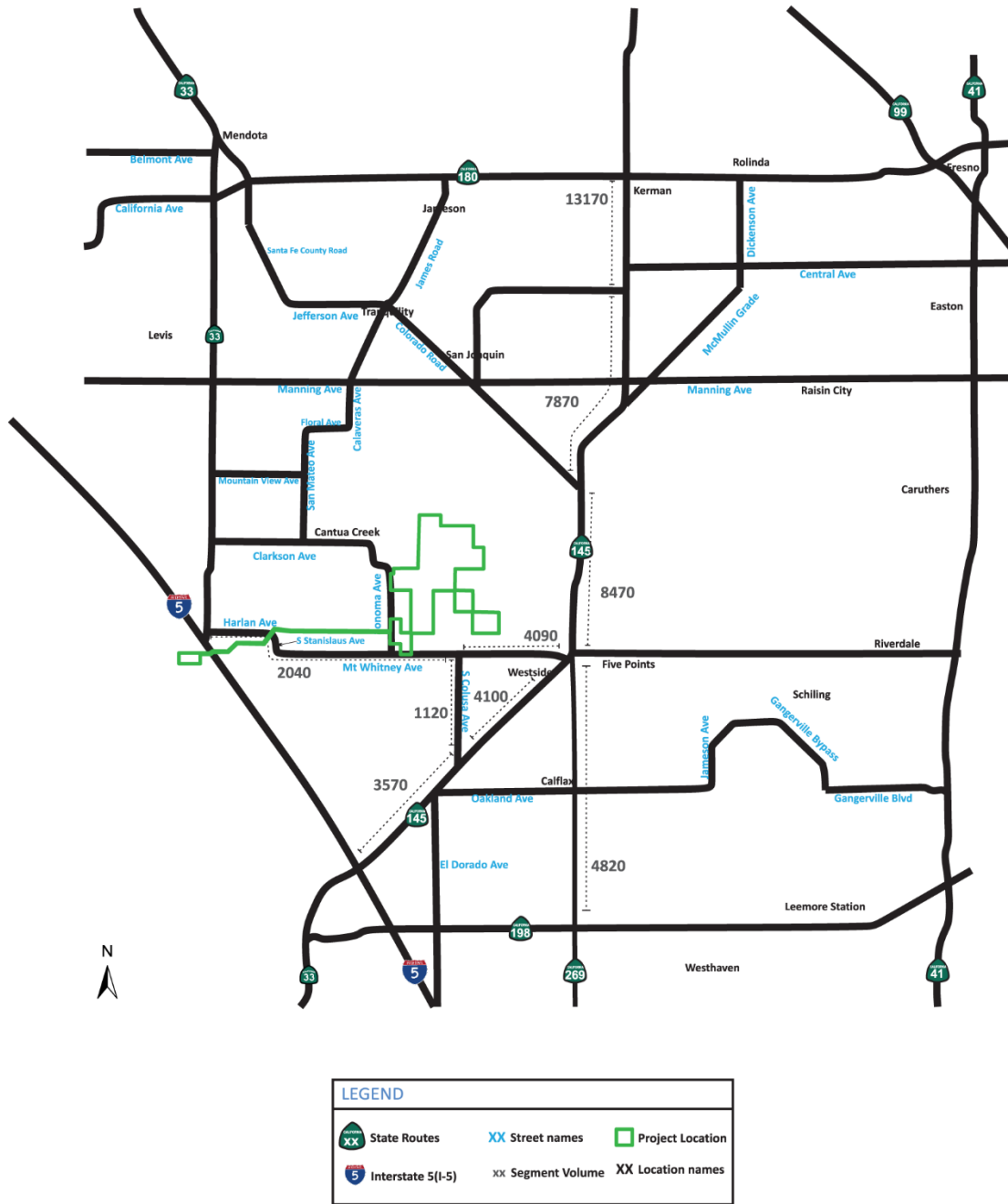
Figure 5.4-5 Existing Plus Project 18-Month Construction Schedule ADT



Note: For East of Mt. Whitney Ave, traffic was added from Mt Whitney west of Colusa Ave and 50% traffic from NB Colusa Ave was assumed to take left turn. Hence they are subtracted twice from total added traffic

Source: VRPA Technologies, Inc., 2023.

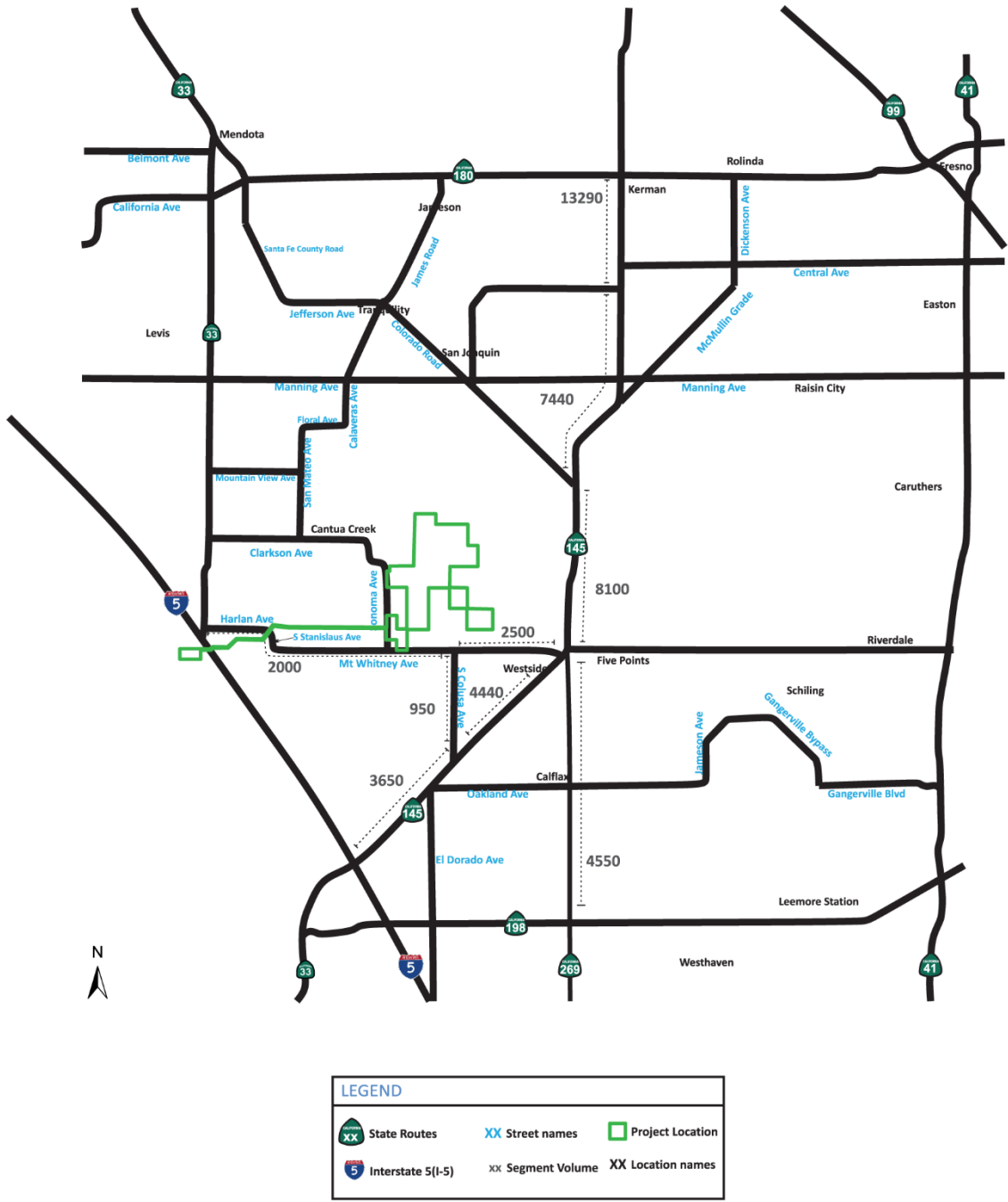
Figure 5.4-6 Existing Plus Project 36-Month Construction Schedule ADT



Note: For East of Mt. Whitney Ave, traffic was added from Mt Whitney west of Colusa Ave and 50% traffic from NB Colusa Ave was assumed to take left turn. Hence they are subtracted twice from total added traffic

Source: VRPA Technologies, Inc., 2023.

Figure 5.4-7 2028 Traffic Plus Project Operations ADT



Note: For East of Mt. Whitney Ave, traffic was added from Mt Whitney west of Colusa Ave and 50% traffic from NB Colusa Ave was assumed to take left turn. Hence they are subtracted twice from total added traffic

Source: VRPA Technologies, Inc., 2023.

Solar Facility, Step-Up Substation, and Gen-Tie

Construction

Less than Significant Impact. Construction of the solar facility, Options 1 and 2 step-up substation, and gen-tie line components would involve daily worker and truck trips to the Project site. Under the 18-month construction schedule, approximately 2,550 worker trips and 178 truck trips would occur during peak construction. Under the 36-month construction schedule, approximately 2,250 worker trips and 140 truck trips would occur during peak construction (Appendix K). As shown in Table 5.4-2 and Table 5.4-3, the addition of worker and truck trips to roadways in the vicinity of the Project site would not represent a substantial addition of vehicles that would interfere with current LOS targets. Therefore, construction of the solar facility, Options 1 and 2 step-up substation, and gen-tie line components would not result in conflict with a program, plan, ordinance, or policy that addresses the circulation system, and impacts would be less than significant.

Operation

Less than Significant Impact. Operation of the solar facility, Options 1 and 2 step-up substation, and gen-tie line components would involve daily worker trips to the Project site. Operation of these Project components would require an average of 12 daily staff. As shown in Table 5.4-4, the addition of operational worker trips to roadways in the vicinity of the Project site would not represent a substantial addition of vehicles that would interfere with current LOS targets. Therefore, operation of the solar facility, Options 1 and 2 step-up substation, and gen-tie line ROW components would not result in conflict with a program, plan, ordinance, or policy that addresses the circulation system, and impacts would be less than significant.

BESS

Construction

Less than Significant Impact. Construction of the Options 1 and 2 BESS component would involve daily worker and truck trips to the Project site. Under the 18-month construction schedule, approximately 300 worker trips and 63 truck trips would occur during peak construction. Under the 36-month construction schedule, approximately 200 worker trips and 50 truck trips would occur during peak construction (Appendix K). As shown in Table 5.4-2 and Table 5.4-3, the addition of worker and truck trips to roadways in the vicinity of the Project site would not represent a substantial addition of vehicles that would interfere with current LOS targets. Therefore, construction of the Options 1 and 2 BESS component would not result in conflict with a program, plan, ordinance, or policy that addresses the circulation system, and impacts would be less than significant.

Operation

Less than Significant Impact. Operation of the Options 1 and 2 BESS component would involve daily worker trips to the Project site. Operation of this Project component would require an average of 4 daily staff. As shown in Table 5.4-4, the addition of operational worker trips to roadways in the vicinity of the Project site would not represent a substantial addition of vehicles that would interfere with current LOS targets. Therefore, operation of the Options 1 and 2 BESS component would not result in conflict with a program, plan, ordinance, or policy that addresses the circulation system, and impacts would be less than significant.

Green Hydrogen Facility

Construction

Less than Significant Impact. Construction of the Options 1 and 2 and alternate green hydrogen component would involve daily worker and truck trips to the Project site. Under the 18-month construction schedule, approximately 400 worker trips and 130 truck trips would occur during peak construction. Under the 36-month construction schedule, approximately 300 worker trips and 100 truck trips would occur during peak construction (Appendix K). As shown in Table 5.4-2 and Table 5.4-3, the addition of worker and truck trips to roadways in the vicinity of the Project site would not represent a substantial addition of vehicles that would interfere with current LOS targets. Therefore, construction of the Options 1 and 2 and alternate green hydrogen component would not result in conflict with a program, plan, ordinance, or policy that addresses the circulation system, and impacts would be less than significant.

Operation

Less than Significant Impact. Operation of the Options 1 and 2 and alternate green hydrogen component would involve daily worker trips to the Project site. Operation of this Project component would require an average of 24 daily staff. As shown in Table 5.4-4, the addition of operational worker trips to roadways in the vicinity of the Project site would not represent a substantial addition of vehicles that would interfere with current LOS targets. Therefore, operation of the Options 1 and 2 and alternate green hydrogen component would not result in conflict with a program, plan, ordinance, or policy that addresses the circulation system, and impacts would be less than significant.

Utility Switchyard

Construction

Less than Significant Impact. Construction of the utility switchyard would involve daily worker and truck trips to the Project site. Under the 18-month construction schedule, approximately 160 worker trips and 17 truck trips would occur during peak construction. Under the 36-month construction schedule, approximately 160 worker trips and 17 truck trips would occur during peak construction (Appendix K). As shown in Table 5.4-2 and Table 5.4-3, the addition of worker and truck trips to roadways in the vicinity of the Project site would not represent a substantial addition of vehicles that would interfere with current LOS targets. Therefore, construction of the utility switchyard would not result in conflict with a program, plan, ordinance, or policy that addresses the circulation system, and impacts would be less than significant.

Operation

Less than Significant Impact. Operation of the utility switchyard would not involve permanent on-site employees and, therefore, would not require any daily worker trips to the Project site. Operation of the utility switchyard would not result in conflict with a program, plan, ordinance, or policy that addresses the circulation system, and impacts would be less than significant.

Overall Project

Less than Significant Impact. Construction and operation of the Project would not result in potential impacts to pedestrian, bicycle, public transportation, railway, or airport facilities, as no such facilities exist in the vicinity of the Project site. As shown in Table 5.4-2, Table 5.4-3, and Table 5.4-4, the addition of both construction and operational worker and truck trips to roadways in the vicinity of the Project site would not represent a substantial addition of vehicles that would interfere with current LOS targets. As the Project would not increase LOS such that roadways would not meet their designated LOS targets, as identified by Fresno County, the Project would not result in potential conflict with existing circulation system programs, plans, ordinances, or policies, and overall impacts would be less than significant.

Impact TRA-2

Threshold: Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?
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California Senate Bill 743 was signed into law in 2013 in order to utilize VMT to review the potential impact of land use projects on the State Highway System. As of July 1, 2020, the state of California has fully adopted a change in the California Environmental Quality Act (CEQA) significant impact methodology for transportation impacts to use VMT as opposed to LOS.

Solar Facility, Step-Up Substation, Gen-Tie, BESS and Green Hydrogen

Construction

Less than Significant Impact with Mitigation. The Project would result in vehicle and worker trips during construction. Truck trips associated with materials and equipment deliveries would likely come from within the Fresno and Visalia areas. As discussed in Section 5.6, *Socioeconomics*, approximately 46 percent of construction laborers, electricians, and construction equipment operators in Fresno County commute for 30 minutes or longer, with construction laborers and equipment operators generally commuting for longer times than electricians. Approximately 50 percent of workers commute 30 minutes or fewer to their job site, and 40 percent commute between 30 and 60 minutes. Approximately 10 percent of workers commute for over an hour. Thus, a maximum drive time of 60 minutes to the Project site would be reasonable for the types of workers the Project would employ in this region.

Under the 18-month schedule, construction of the Project would include a peak of 3,010 worker vehicle trips and 345 truck trips. Under the 36-month schedule, construction of the Project would include a peak of 2,400 worker vehicle trips and 280 truck trips (Appendix K). Per CEQA Guidelines Section 15064.3(b.3), a qualitative vehicle miles travelled (VMT) analysis of construction trips is appropriate. Due to the remote location of the Project site, some construction truck trips may involve high VMT to access the Project site. All construction-related truck trips would be temporary and only in volumes necessary to deliver equipment and materials to the Project site. Upon completion of construction, all truck trips and worker commute trips related to construction would cease. At this time, no known applicable VMT thresholds of significance for temporary construction trips that may indicate a significant impact are available. However, the intent of SB 743 is to align transportation impacts under CEQA with the State's overall goals of increasing long-term sustainability by encouraging infill development, increasing reliance on mass transit, and reducing greenhouse gas (GHG) emissions. As discussed in Appendix N, the Project would result in a less-

than-significant impact related to a potential conflict with an applicable plan, policy or regulation adopted for the purpose of reducing GHG emissions. Further, to ensure VMT is reduced to the extent feasible, Mitigation Measure TRA-1 would require the Applicant to prepare a Construction Traffic Carpool and Trip Reduction Plan for review by the CEC, with the plan providing means to encourage or provide ridesharing opportunities for construction workers and to reduce VMT whenever feasible. Therefore, while the Project would include temporary construction trips that may involve high VMT, the Project would seek to reduce VMT. With implementation of Mitigation Measure TRA-1, construction of each Project component would result in a less than significant impact regarding conflict with CEQA Guidelines section 15064.3, subdivision (b).

Operation

Less than Significant Impact. Once constructed, operation and maintenance of the Project would generate 80 daily worker vehicle trips (Appendix K)¹. Per California Department of Transportation (Caltrans) guidelines, projects that generate or attract fewer than 110 trips per day generally may be assumed to cause a less-than significant operational VMT impact (Caltrans 2020b). With respect to a qualitative analysis for compliance with Fresno COG's Regional Transportation Plan, it is assumed permanent operational workers would either be located in, or seek permanent residence within, a 30-mile commute. Considering the remote location of the Project site, limited residential and public transit opportunities close to the Project site, and the low number of operational daily trips, the Project is not considered to result in high VMT that could adversely affect transit or transportation planning for the area. Therefore, operational-related trips would not affect existing transit uses or corridors and are presumed consistent with regional plans for reducing VMT. Operation of the Project would result in a less than significant impact regarding conflict with CEQA Guidelines section 15064.3, subdivision (b).

Utility Switchyard

Construction and Operation

Less than Significant Impact. Similar to construction of other Project components, all construction-related truck trips for the utility switchyard would be temporary and only in volumes necessary to deliver equipment and materials to the utility switchyard site. Upon completion of construction, all truck trips and worker commute trips related to construction would cease. Mitigation Measure TRA-1 would apply to construction of the utility switchyard, which would reduce construction-related VMT. Operation of the utility switchyard would not require on-site permanent staff and would not require any daily worker trips to the Project site. Therefore, construction and operation of the utility switchyard would result in a less than significant impact regarding conflict with CEQA Guidelines section 15064.3, subdivision (b).

Overall Project

Less than Significant Impact with Mitigation. Construction and operation of the Project would not result in the generation of substantial vehicle trips that could result in conflict with CEQA Guidelines section 15064.3, subdivision (b). Implementation of Mitigation Measure TRA-1 would reduce VMT during construction by requiring a Construction Traffic Carpool and Trip Reduction Plan that would seek to minimize VMT whenever feasible. Operation of the Project would generate approximately 104 daily vehicle trips, which would not exceed the Caltrans significance threshold of 110 trips per

¹ The total number of daily vehicle trips includes truck trips as "passenger car equivalent", meaning each truck would represent 3 vehicles.

day. Therefore, both construction and operation of the Project would not conflict with CEQA Guidelines section 15064.3, subdivision (b), and overall Project impacts would be less than significant.

Mitigation Measures

TRA-1 Construction Traffic Carpool and Trip Reduction Plan

Prior to the start of construction, the Applicant shall submit a Construction Traffic Carpool and Trip Reduction Plan for review and approval by CEC, which shall include, but not be limited to:

- Feasible methods that encourage or provide ridesharing opportunities for construction workers.
- Feasible methods to reduce VMT by both construction employees and construction-related truck trips, such as encouraging hiring of local construction workers.
- Use of rail transport for specialized equipment that may originate from ports or other long distances to reduce VMT associated with vehicle delivery to the Project site, if feasible.
- Define potential methods to coordinate with adjacent solar project developers where Project construction may overlap to potentially provide group ridesharing opportunities for construction workers.
- Means for local hiring practices of operations workers and local procurement of maintenance supplies in efforts to reduce VMT of operations and maintenance trips.

Impact TRA-3

Threshold: Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible use (e.g., farm equipment)?
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Overall Project

No Impact. Construction and operation of the Project would not introduce geometric design features to the existing circulation system. The Project would not involve changes to existing roadways or intersections surrounding the Project site that would introduce hazards and would include the annual reconditioning of surrounding roadways as part of operational site maintenance activities. No impact would occur as a result of the Project.

Impact TRA-4

Threshold: Would the project result in inadequate emergency access?
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Solar Facility, Step-Up Substation, Gen-Tie, BESS and Green Hydrogen

Construction

Less than Significant Impact. Construction of the Project would not result in changes to intersections or the existing roadway system in a manner that could lead to inadequate emergency access. As discussed under Impact TRA-1, construction of the Project would involve vehicle and truck trips. The Project would raise the proportion of trucks utilizing surrounding roadways, potentially leading to alterations in the traffic and truck mix. During the Project's construction

period, the Project would increase existing traffic by approximately 10 percent. Under the 18-month construction schedule, traffic would include 345 trucks and 3,010 worker vehicles at peak volumes; under the 36-month construction schedule, traffic would include 280 trucks and 2,400 worker vehicles at peak volumes (Appendix K). As shown in Table 5.4-2 and Table 5.4-3, the addition of construction vehicles to roadways surrounding the Project site would not decrease LOS of surrounding roadways such that these roadways would fall under their identified LOS target. Therefore, Project construction would not result in the substantial addition of vehicles to surrounding roadways and would not increase local traffic such that emergency access would be impeded or inadequate. Impacts would be less than significant.

Operation

Less than Significant Impact. Operation of the Project would not result in changes to intersections or the existing roadway system in a manner that could lead to inadequate emergency access. As discussed under Impact TRA-1, operation of the Project would involve vehicle and truck trips, for a total of 104 passenger car equivalent daily trips to and from the Project site (Appendix K). As shown in Table 5.4-4, the addition of operational vehicles to roadways surrounding the Project site would not decrease LOS of surrounding roadways such that these roadways would fall under their identified LOS target. Therefore, Project operation would not result in the substantial addition of vehicles to surrounding roadways and would not increase local traffic such that emergency access would be impeded or inadequate. Impacts would be less than significant.

Utility Switchyard

Construction and Operation

Less than Significant Impact. Similar to construction of other Project components, construction of the utility switchyard would not result in changes to intersections or the existing roadway system in a manner that could lead to inadequate emergency access. As shown in Table 5.4-2 and Table 5.4-3, the addition of construction vehicles, including vehicles for the utility switchyard, to roadways surrounding the Project site would not decrease LOS of surrounding roadways such that these roadways would fall under their identified LOS target. Operation of the utility switchyard would not result in changes to intersections or the existing roadway system in a manner that could lead to inadequate emergency access. Operation of the utility switchyard would not involve any daily worker trips to the Project site and would not decrease LOS of surrounding roadways such that these roadways would fall under their identified LOS target. Therefore, construction and operation of the utility switchyard would not result in the substantial addition of vehicles to surrounding roadways and would not increase local traffic such that emergency access would be impeded or inadequate. Impacts would be less than significant.

Overall Project

Less than Significant Impact. Construction and operation of the Project would not result in changes to intersections or the existing roadway system. Vehicle trips generated by Project construction and operation would not constitute a substantial addition of vehicles to local roadways. As shown in Table 5.4-2, Table 5.4-3, and Table 5.4-4, the addition of both construction and operational worker and truck trips to roadways in the vicinity of the Project site would not represent a substantial addition of vehicles that would interfere with current LOS targets. Therefore, the overall Project would not result in the addition of vehicles that would increase traffic and result in inadequate emergency access, and impacts would be less than significant.

Impact TRA-5

Threshold: Would the project result in significantly increased hazards associated with Project-related hazardous materials to be transported to or from the Project site?
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CEC requirements for Opt-In Applications (Title 20, California Code of Regulations, Section 1704, Appendix B Traffic and Transportation Requirement [E]) necessitate a discussion of Project-related hazardous materials to be transported to or from the Project site. The Project would involve the transport of hazardous materials to and from the Project site during both construction and operation.

Hazardous material transport during Project construction and operation would comply with all applicable federal, state, and local laws and regulations, including Code of Federal Regulations (CFR) Title 49 Parts 172, 173, and 179; CFR Title 49 Part 397.9 (Hazardous Materials Transportation Act of 1974); and the Fresno County Multi-Jurisdictional Hazard Mitigation Plan (Refer to Section 5.4.5). Division 13, Section 31303 of the California Vehicle Code stipulates that the transportation of regulated substances and hazardous materials are required to be carried out via the most direct route, using state or interstate highways whenever possible. In accordance with this policy, for the Project, subject to Caltrans approval, the recommended route for delivery of regulated or hazardous materials is via I-5, SR 145, and SR 269.

Additionally, the following hazardous waste transportation requirements and procedures would apply during Project construction and operation:

- **Requirements of haulers:** Qualified haulers would be retained to transport hazardous waste from the Project. The selected haulers would be fully licensed and insured to transport hazardous waste. Haulers would follow all applicable requirements in the CFR with regard to loading, unloading, and general handling, based on transport mode.
- **Truck loading operations:** Trucks would be loaded at designated staging areas for transportation to the designated receiving facility. Stray material on vehicles, tires, or the lip of the container, etc., would be removed manually with a brush. The container of the truck would be covered to prevent release of materials from the truck during transport.
- **Transportation:** Hazardous waste haulers would have a valid Department of Toxic Substances Control registration and would satisfy the following requirements:
 - Vehicles would have passed an annual inspection;
 - Vehicle operators would be trained in the safe handling of the material;
 - Haulers would maintain the ability to pay damages caused by their operations through proper insurance coverage;
 - Haulers would have licenses issued by the California Highway Patrol (CHP) for transportation of hazardous waste;
 - Haulers would have a California Environmental Protection Agency identification number;
 - Haulers would comply with the Uniform Hazardous Waste Manifest System; and,
 - Haulers would take certain actions in response to hazardous waste discharges during transport (e.g., covering the load to prevent the discharge of dust/particulates into the atmosphere during hauling).
- **Route:** In accordance with all applicable laws, hazardous waste transportation routes would be limited to arterial streets and freeways approved for truck traffic to minimize potential impacts

in the local neighborhoods and sensitive receptors. Transportation, as feasible, would be conducted in accordance with the National Hazardous Material Route Registry – United States Department of Transportation (USDOT) – Federal Motor Carrier Safety Administration Hazardous Materials designated, preferred, or prescribed routes for transportation of hazardous waste in California. Truck routes would be determined in advance of any hauling activity once a receiving facility is selected, as necessary. If off-hauling is required, an appropriate off-site facility would be identified, and a haul route would be determined such that impacts to sensitive receptors are minimized.

- **Traffic control procedures:** Hazardous waste to off-site receiving facilities would be transported in trucks from designated staging areas. Prior to loading, trucks would be staged in a controlled and orderly manner to avoid impacts on the local streets. Traffic would be coordinated in such a manner that, at any given time, a limited number of trucks would be at the Project to reduce truck traffic on surrounding surface streets. While at the Project, vehicles would be required to maintain slow speeds (e.g., less than five miles per hour) for safety purposes.
- **Receiving facility:** Waste characterization sampling results would be provided to the receiving facility to profile the waste.
- **Shipping documentation and record keeping:** Hazardous waste transportation would comply with all applicable federal, state, and local laws, including, but not limited to the, USDOT regulations, California Vehicle Code, CHP Regulations, California State Fire Marshall Regulations, and the California Health and Safety Code, to the extent applicable. These requirements include keeping of appropriate records during transportation activities. An authorized representative would be responsible for maintaining a record book of soil management and trucking activities during on-site work. The record book would serve to document observations, on-site personnel, and truck arrival and departure times. The appropriate Uniform Hazardous Waste Manifest would be used to track the movement of hazardous waste, if any, from the point of generation to the receiving facility. Prior to transporting the hazardous waste, if any, off-site, an authorized representative would sign each manifest. Copies of each manifest for each truckload would be maintained in each truck during transport to the receiving facility, as well as on-site.
- **Contingency Plan:** The hauler would be required to have a contingency plan prepared for emergency situations (vehicle breakdown, accident, diesel spill, fire, explosion, etc.) during transportation of hazardous waste, if any, off-site. Once the hauler is selected, a contingency plan would be reviewed and available on-site.

Solar Facility, Step-Up Substation, and Gen-Tie

Construction

Less than Significant Impact. Construction of the solar facility, Options 1 and 2 step-up substation, and gen-tie line components would involve the on-site storage of relatively small quantities of hazardous materials. These hazardous materials would be limited to gasoline, diesel fuel, propane, motor oil, coolant, and hydraulic fluid. No regulated substances, as defined by California’s Health and Safety Code, Section 25531, would be used during construction of the solar facility, Options 1 and 2 step-up substation, and gen-tie line ROW components.

Under the 18-month schedule, construction of the Project would include a peak of 345 truck trips. Under the 36-month schedule, construction of the Project would include a peak of 280 truck trips (Appendix K). These truck trips include deliveries of hazardous materials, and estimated quantities of hazardous materials are provided in Section 5.9, *Hazardous Materials Handling*. During

construction, hazardous materials would be transported solely during delivery and removal from the Project site, on an intermittent basis as needed by construction. All transportation of hazardous substances would occur with USDOT-approved personnel and trucking/transport equipment. The hazardous waste transportation requirements described above would minimize the potential for an accidental release of hazardous materials to occur, and emergency spill and response procedures would be specified within the Project-specific Contingency Plan. Therefore, construction of the solar facility, Options 1 and 2 step-up substation, and gen-tie line components would result in a less than significant impact involving transport of hazardous materials.

Operation

Less than Significant Impact. Operation of the solar facility, Options 1 and 2 step-up substation, and gen-tie line components would involve the use of hazardous materials, including cleaning chemicals/detergents, paint, diesel, adhesives, sealants, hydraulic fluids, sulfur hexafluoride, mineral oil, gasoline, coolants, and lubricants. No regulated substances would be used during operation and maintenance of the solar facility, Options 1 and 2 step-up substation, and gen-tie line ROW components. During operation, procedures for the transport and handling of hazardous materials would be described within the Project-specific hazardous materials handling plans, facility health and safety plans, the Project Hazardous Materials Business Plan (HMBP), and spill prevention, control, and countermeasure (SPCC) plan. Therefore, operation of the solar facility, Options 1 and 2 step-up substation, and gen-tie line components would result in a less than significant impact involving transport of hazardous materials.

BESS

Construction

Less than Significant Impact. Construction of the Options 1 and 2 BESS component would involve the on-site storage of relatively small quantities of hazardous materials. These hazardous materials would be limited to gasoline, diesel fuel, propane, motor oil, coolant, and hydraulic fluid. No regulated substances, as defined by California's Health and Safety Code, Section 25531, would be used during construction of the Options 1 and 2 BESS component.

Under the 18-month schedule, construction of the Project would include a peak of 345 truck trips. Under the 36-month schedule, construction of the Project would include a peak of 280 truck trips (Appendix K). These truck trips include deliveries of hazardous materials, and estimated quantities of hazardous materials are provided in Section 5.9, *Hazardous Materials Handling*. During construction, hazardous materials would be transported solely during delivery and removal from the Project site, on an intermittent basis as needed by construction. All transportation of hazardous substances would occur with USDOT-approved personnel and trucking/transport equipment. The hazardous waste transportation requirements described above would minimize the potential for an accidental release of hazardous materials to occur, and emergency spill and response procedures would be specified within the Project-specific Contingency Plan. Therefore, construction of the Options 1 and 2 BESS component would result in a less than significant impact involving transport of hazardous materials.

Operation

Less than Significant Impact. Operation of Options 1 and 2 BESS component would involve the use of hazardous materials. Hazardous materials used during operation and maintenance activities

would include regulated substances such as sulfuric acid; however, this material would be securely stored in appropriate containers in compliance with 40 CFR Part 262 and 40 CFR 1910.12 and the Applicant would prepare an Risk Management Plan (RMP) that specifies safe handling and emergency response procedures. During operation, procedures for the transport and handling of hazardous materials would be described within the Project-specific hazardous materials handling plans, facility health and safety plans, the Project's HMBP, and the Project's SPCC plan. Therefore, operation of the Options 1 and 2 BESS component would result in a less than significant impact involving transport of hazardous materials.

Green Hydrogen Facility

Construction

Less than Significant Impact. Construction of the Options 1 and 2 and alternate green hydrogen component would involve the on-site storage of relatively small quantities of hazardous materials. These hazardous materials would be limited to gasoline, diesel fuel, propane, motor oil, coolant, and hydraulic fluid. No regulated substances, as defined by California's Health and Safety Code, Section 25531, would be used during construction of the Options 1 and 2 and alternate green hydrogen component.

Under the 18-month schedule, construction of the Project would include a peak of 345 truck trips. Under the 36-month schedule, construction of the Project would include a peak of 280 truck trips (Appendix K). These truck trips include deliveries of hazardous materials, and estimated quantities of hazardous materials are provided in Section 5.9, *Hazardous Materials Handling*. During construction, hazardous materials would be transported solely during delivery and removal from the Project site, on an intermittent basis as needed by construction. All transportation of hazardous substances would occur with USDOT-approved personnel and trucking/transport equipment. The hazardous waste transportation requirements described above would minimize the potential for an accidental release of hazardous materials to occur, and emergency spill and response procedures would be specified within the Project-specific Contingency Plan. Therefore, construction of the Options 1 and 2 and alternate green hydrogen component would result in a less than significant impact involving transport of hazardous materials.

Operation

Less than Significant Impact. Operation of Options 1 and 2 and alternate green hydrogen component would involve the use of hazardous materials. Hazardous materials used during operation and maintenance activities would include regulated substances such as sulfuric acid, hydrogen, and liquid ammonia; however, these materials would be securely stored in an appropriate containers in compliance with 40 CFR Part 262 and 40 CFR 1910.12 and the Applicant would prepare an RMP that specifies safe handling and emergency response procedures. During operation, procedures for the transport and handling of hazardous materials would be described within the Project-specific hazardous materials handling plans, facility health and safety plans, the Project's HMBP, and the Project's SPCC plan. Operation of Options 1 and 2 and alternate green hydrogen component would involve the regular delivery of hydrogen to the Project site, which would comply with the above hazardous waste transportation requirements. Therefore, operation of the Options 1 and 2 and alternate green hydrogen component would result in a less than significant impact involving transport of hazardous materials.

Utility Switchyard

Construction

Less than Significant Impact. Construction of the utility switchyard would involve the on-site storage of relatively small quantities of hazardous materials. These hazardous materials would be limited to gasoline, diesel fuel, propane, motor oil, coolant, and hydraulic fluid. No regulated substances, as defined by California's Health and Safety Code, Section 25531, would be used during construction of the utility switchyard.

Under the 18-month schedule, construction of the Project would include a peak of 345 truck trips. Under the 36-month schedule, construction of the Project would include a peak of 280 truck trips (Appendix K). These truck trips include deliveries of hazardous materials, and estimated quantities of hazardous materials are provided in Section 5.9, *Hazardous Materials Handling*. During construction, hazardous materials would be transported solely during delivery and removal from the Project site, on an intermittent basis as needed by construction. All transportation of hazardous substances would occur with USDOT-approved personnel and trucking/transport equipment. The hazardous waste transportation requirements described above would minimize the potential for an accidental release of hazardous materials to occur, and emergency spill and response procedures would be specified within the Project-specific Contingency Plan. Therefore, construction of the utility switchyard would result in a less than significant impact involving transport of hazardous materials.

Operation

Less than Significant Impact. Operation of the utility switchyard would involve the use of hazardous materials, including cleaning chemicals/detergents, paint, diesel, adhesives, sealants, hydraulic fluids, sulfur hexafluoride, mineral oil, gasoline, coolants, and lubricants. No regulated substances would be used during operation and maintenance of the utility switchyard. During operation, procedures for the transport and handling of hazardous materials would be described within the Project-specific hazardous materials handling plans, facility health and safety plans, the Project's HMBP, and the Project's SPCC plan. Therefore, operation of the utility switchyard would result in a less than significant impact involving transport of hazardous materials.

Overall Project

Less than Significant Impact. The overall Project would involve the transport of hazardous materials during both Project construction and operation. As detailed above, Project construction and operation would follow hazardous waste transportation procedures and applicable procedures from the Project-specific RMP, HMBP, and other hazardous materials handling plans. Therefore, Project impacts involving transport of hazardous materials would be less than significant.

5.4.4 Cumulative Impacts

Overall Project

The geographic scope for cumulative transportation impacts includes the regional and local roadways that may be used to access the Project site, or that could otherwise be impacted by construction of the Project.

Although a substantial number of vehicles would be added to local roads during construction, these would not result in a significant impact. Cumulative projects are not expected to produce substantial traffic that overlaps the construction phase of the Project and traffic associated with construction would be temporary. The Project would not create any inconsistency or conflict with an applicable plan, ordinance or policy that establishes measures of effectiveness, and therefore would not contribute to a cumulatively considerable impact in this regard.

The Project would not conflict or be inconsistent with CEQA Guidelines section 15065.3, subdivision (b), and therefore would not contribute to any cumulatively considerable VMT-related impact.

The Project would not introduce incompatible uses or design features, such as changes to public roads or intersections. Transportation of hazardous substances would occur with USDOT-approved personnel and trucking/transport equipment and the Project would implement hazardous waste transportation requirements that would minimize the potential for an accidental release of hazardous materials to occur. Therefore, the Project would not contribute to any cumulatively considerable impact involving hazards due to a design feature or incompatible uses or transport of hazardous materials.

Project construction activities would occur in remote and largely uninhabited areas; and the Project would not result in inadequate emergency access. Therefore, the Project would have no contribution to cumulatively considerable impacts related to people walking, biking, driving, or taking public transit, walking or biking accessibility, or public transit delay.

Utility Switchyard

Construction and operation of the utility switchyard is considered in the cumulative impact analysis of the overall Project discussed above; therefore, similar to the overall Project, cumulative impacts related to traffic and transportation would be less than significant.

5.4.5 Laws, Ordinances, Regulations, and Standards

Transportation for the Project would be governed by federal, state, and local laws. Applicable laws and regulations address roadway circulation standards and hazardous material transportation requirements. Table 5.4-5 presents a summary of the LORS applicable to Project traffic and transportation.

Table 5.4-5 LORS Applicable to Traffic and Transportation

Jurisdiction	LORS	Applicability	Opt-In Application Reference	Project Conformity
Federal	Code of Federal Regulations (CFR) Title 49, Parts 172, 173, and 179.	Provide standards for the identification, packaging, and transportation of hazardous materials.	Impact TRA-3	The Project would comply with these requirements by appropriately labelling, packaging, and transporting hazardous materials.
Federal	CFR Title 49, Part 397.9 (Hazardous Materials Transportation Act of 1974)	Directs the USDOT to establish criteria and regulations for the safe transportation of hazardous materials.	Impact TRA-3	The Project would comply with this requirement by adhering to all applicable federal regulations involving the transportation of hazardous materials.

Jurisdiction	LORS	Applicability	Opt-In Application Reference	Project Conformity
Federal	CFR Title 49, Parts 350-399 (Federal Motor Carrier Safety Regulations)	Addresses safety considerations for transportation over public highways.	Impact TRA-3	The Project would comply with this requirement by adhering to all applicable federal regulations involving materials transport.
Federal	CFR Title 14, Part 77.9	Requires the Applicant to notify the Federal Aviation Association (FAA) of the construction of structures within 20,000 feet of the nearest point of the nearest runway of an airport with at least one runway longer than 3,200 feet.	Section 5.4.5.1	The Project would not trigger this requirement; thus, the Project would comply and would not need to notify the FAA.
State	CEQA	Requires state and local government agencies to inform decision makers and the public about the potential environmental impacts of the Project and to reduce environmental impacts to the extent feasible	Throughout this Opt-In Application	The Project would comply with CEQA, as required by the CEC’s Opt-In Application process.
State	CVC, Division 15, Chapters 1–5 (Size, Weight, and Load).	Includes regulations pertaining to licensing, size, weight, and load of vehicles operated on highways.	Impact TRA-3	Project vehicles would adhere to all applicable regulations involving licensing, site, weight, and load of highway vehicles, and thus would comply with this requirement.
State	California Streets and Highways Code, Sections 660–711, 670–695.	Requires permits from Caltrans for any roadway encroachment during truck transportation and delivery; includes regulations for the care and protection of state and county highways and provisions for the issuance of written permits; and requires permits for any load that exceeds Caltrans weight, length, or width standards for public roadways.	Section 5.4.7	The Project applicant would obtain all necessary permits from Caltrans prior to construction and would thus comply with this requirement.
Local	Fresno County General Plan: Policies TR-A.2, A.3, A.5, A.7, and A.8	Provide LOS requirements for county roadways, as well as standards for maintenance of circulation during new development.	Impact TRA-1	The Project would maintain acceptable LOS for nearby roadways and would maintain circulation and access, and would thus conform with this requirement.

Jurisdiction	LORS	Applicability	Opt-In Application Reference	Project Conformity
Local	Fresno County Multi-Jurisdictional Hazard Mitigation Plan	Provides policies that minimize the risk of loss of life, injury, serious illness, and damage to property resulting from the transport of hazardous materials and hazardous wastes.	Impact TRA-3	The Project would conform with this requirement by adhering to all applicable federal, state, and local regulations involving hazardous materials transport.
Local	Fresno County Regional Bicycle and Recreational Trails Master Plan	Establishes a framework for future development of Fresno County's bicycle and recreational trail network.	Impact TRA-1	The Project would not adversely impact bicycle and recreational transportation facilities and would thus conform with this requirement.
Local	Fresno County Regional Active Transportation Plan	Outlines the vision for biking, walking, and other human-powered transportation in Fresno County.	Impact TRA-1	The Project would not adversely impact bicycle and recreational transportation facilities and would thus conform with this requirement.
Local	Fresno COG Regional Transportation Plan	Establishes goals, policies, and actions intended to guide development of transportation systems in Fresno County	Impact TRA-1	The Project would not increase LOS on local roadways that would conflict with RTP policies and would thus conform with this requirement.

Source: Fresno County 2000, 2013, 2018a, 2018b; Fresno COG 2022

5.4.5.1 Federal LORS

Code of Federal Regulations

Title 49, Parts 172, 173, and 179

CFR Title 49, Part 172 primarily deals with the labeling, marking, and placarding of hazardous materials for transportation. It establishes standards for how hazardous materials must be labeled and marked on packages, containers, and vehicles to communicate their contents and associated risks effectively.

CFR Title 49, Part 173 focuses on the general requirements for the shipping of hazardous materials. It includes regulations for packaging, including specifications for various types of containers, as well as rules for classifying, describing, and documenting hazardous materials. Section 173 also covers the conditions and exceptions under which certain hazardous materials can be transported and provides guidelines for emergency response information and training.

CFR Title 49, Part 179 pertains to the transportation of hazardous materials in the United States. This section outlines design, construction, and testing standards for portable tanks, as well as operational and maintenance procedures to ensure the safe transport of hazardous materials.

The Project would appropriately label, package, and transport hazardous materials in accordance with CFR Title 49, Parts 172, 173, and 179. Therefore, the Project would comply with these requirements.

Title 49, Part 397.9 (Hazardous Materials Transportation Act of 1974)

The Hazardous Materials Transportation Act of 1974 regulates the transportation of hazardous materials in commerce. This act establishes a framework for the safe and secure handling, labeling, packaging, and transportation of hazardous materials. It empowers the USDOT to develop and enforce regulations to minimize the risks associated with transporting hazardous materials on highways, railways, waterways, and in the air. The act also sets penalties for violations and provides funding for research, training, and emergency response planning related to hazardous materials transportation. The Project would transport hazardous materials in accordance with all applicable federal, state, and local regulations, including the Hazardous Materials Transportation Act of 1974, and thus would comply with this requirement.

Title 49, Parts 350-399 (Federal Motor Carrier Safety Regulations)

The Federal Motor Carrier Safety Regulations oversee and regulate commercial motor carriers, drivers, and the safe operation of commercial motor vehicles. Parts 350-399 address various aspects of motor carrier safety, including driver qualifications, hours of service, vehicle inspections and maintenance, and commercial driver's license requirements. Additionally, these parts also regulate hazardous materials transportation, including the classification, packaging, and labeling of hazardous materials, as well as safety standards for transporting these materials. The Project would transport hazardous materials in accordance with all applicable federal, state, and local regulations, including the Federal Motor Carrier Safety Regulations, and thus would comply with this requirement.

Title 14, Part 77.9

CFR Title 14, Part 77.9 requires an applicant to notify the FAA of the construction of structures exceeding 200 feet above-ground level or exceeding defined imaginary surfaces within 20,000 feet of the nearest point of the nearest runway of an airport with at least one runway longer than 3,200 feet or within 10,000 feet of the nearest point of the nearest runway of an airport with the longest runway no more than 3,200 feet. The Project would not trigger this requirement and would thus conform with CFR Title 14, Part 77.9.

5.4.5.2 State LORS

California Environmental Quality Act

CEQA requires state and local government agencies to inform decision makers and the public about the potential environmental impacts of the Project and to reduce environmental impacts to the extent feasible. Appendix G of the CEQA Guidelines includes recommended criteria for evaluating potential impacts related to traffic and transportation.

California Vehicle Code

The California Vehicle Code consists of a comprehensive set of laws and regulations that govern the operation and use of vehicles on the roadways within the state of California. Specifically, the California Vehicle Code addresses traffic regulations, driver's licensing, vehicle registration, vehicle

equipment, safety regulations, parking and towing, commercial vehicle standards, environmental regulations, and penalties and enforcement. Project vehicular transportation would comply with all applicable federal, state, and local regulations, including the California Vehicle Code, and thus would conform with this requirement.

California Streets and Highways Code

The California Streets and Highways Code specifically pertains to the planning, construction, maintenance, and regulation of streets and highways within the state of California. Specifically, the California Streets and Highways Code includes highway designation, highway construction, highway maintenance, eminent domain, public transportation, bicycle and pedestrian infrastructure, emergency services, and traffic control. Project vehicular transportation would comply with all applicable federal, state, and local regulations, including the California Streets and Highways Code, and thus would conform with this requirement.

5.4.5.3 Local LORS

Fresno County General Plan

California Senate Bill 271 Assembly Bill 2038 required that counties and cities adopt General Plan policies regarding transportation and circulation. The County of Fresno's General Plan provides direction and resources intended to improve transportation and circulation throughout the county. The Fresno County General Plan contains several policies that are applicable to the Project, including, but not limited to:

- **Policy TR-A.2:** The County shall plan and design its roadway system in a manner that strives to meet LOS D on urban roadways within the spheres of influence of the cities of Fresno and Clovis and LOS C on all other roadways in the county.
- **Policy TR-A.3:** The County shall require that new or modified access to property abutting a roadway and to intersecting roads conform to access specifications in the Circulation Diagram and Standards section. Exceptions to the access standards may be permitted in the manner and form prescribed in the Fresno County Zoning and Subdivision Ordinances, provided that the designed safety and operational characteristics of the existing and planned roadway facility will not be substantially diminished.
- **Policy TR-A.5:** The County shall require dedication of ROW or dedication and construction of planned road facilities as a condition of land development, and require an analysis of impacts of traffic from all land development projects including impacts from truck traffic. Each such project shall construct or fund improvements necessary to mitigate the effects of traffic from the project. The County may allow a project to fund a fair share of improvements that provide significant benefit to others through traffic impact fees.
- **Policy TR-A.7:** The County shall assess fees on new development sufficient to cover the fair share portion of that development's impacts on the local and regional transportation system.
- **Policy TR-A.8:** The County shall ensure that land development that affects roadway use or operation or requires roadway access to plan, dedicate, and construct required improvements consistent with the criteria in the Circulation Diagram and Standards section of this element.

Fresno Multi-Jurisdictional Hazard Mitigation Plan

The Fresno County Multi-Jurisdictional Hazard Mitigation Plan is intended to improve the resiliency in the community by identifying hazards present in Fresno County (including transportation hazards), determining the community's vulnerability to each hazard, and identifying development mitigation strategies to reduce vulnerability before emergency situations develop. Fresno County's Multi-Jurisdictional Hazard Mitigation Plan was adopted in 2009 and most recently updated in 2018.

Fresno County Regional Bicycle and Recreational Trails Master Plan

The Fresno County Department of Public Works and Planning adopted the Regional Bicycle and Recreational Trails Master Plan to establish a framework for future development of Fresno County's bicycle and recreational trail network and makes the county eligible for local, state, and federal funding. The Bicycle and Regional Trails Master Plan provides a comprehensive, long-term planning horizon for development of an extensive regional bikeway and recreational trails network that connects cities and unincorporated areas countywide. The plan coordinates the regional bikeway system with existing local bikeway plans that tie into a comprehensive bikeway system; coordinates the Fresno County regional nonmotorized transportation system with adjoining counties; and identifies barriers that inhibit safe and convenient nonmotorized travel and includes a list of corrective measures to remove the barriers. The Project would not adversely impact bicycle or pedestrian transportation facilities and would thus conform with this plan.

Fresno County Regional Active Transportation Plan

The Fresno COG adopted the Fresno County Regional Active Transportation Plan on February 22, 2018. The Active Transportation Plan is a comprehensive guide outlining the vision for biking, walking, and other human-powered transportation in Fresno County and a road map for achieving that vision. The Active Transportation Plan proposes a comprehensive network of countywide bikeways, trails, and sidewalks; crossing improvements at key intersections; and locations for recommended bicycle parking. The Project would not adversely impact bicycle or pedestrian transportation facilities and would thus conform with this plan.

Fresno Council of Governments Regional Transportation Plan

The 2022 RTP was prepared by Fresno COG and adopted in July 2022. The RTP is a blueprint that establishes a set of regional transportation goals, policies, and actions intended to guide development of the planned multimodal transportation systems in Fresno County. The plan was developed through a continuing, comprehensive, and cooperative planning process, and provides for effective coordination between local, regional, state, and federal agencies. The Fresno COG prepared the 2022 RTP to include a sustainable communities strategy, which is intended to show how integrated land use and transportation planning can lead to lower greenhouse gas emissions from autos and light trucks. As discussed under Impact TRA-1, the Project would confirm with applicable measures from the Fresno COG RTP and would not conflict with this plan.

5.4.6 Agencies and Agency Contact

Several agencies regulate traffic and transportation and would be involved in regulating transportation, including transportation of hazardous materials, to and from the Project site. Regulatory agency contacts are shown in Table 5.4-6.

Table 5.4-6 Agency Contacts for Traffic and Transportation

Issue	Agency	Contact
Transportation Permit for Oversized Loads	Caltrans	Caltrans Transportation Permits Issuance Branch 1823 14th Street Sacramento, CA 95814-7119 (916) 322-4958
Hazardous Material Transportation License	CHP	Hazardous Material Licensing P.O. Box 942898 Sacramento, CA 942898-0001 (916) 843-3400
Transportation Permit	Fresno County	Department of Public Works and Planning Maintenance & Operations Division 2220 Tulare Street, 6th Floor Fresno, CA 93721
Safety Permits	Federal Motor Carrier Safety Administration	California Division Office 1325 J Street, Suite 1540 Sacramento, CA 95814-2941 (916) 930-2760

5.4.7 Permits and Permit Schedule

Table 5.4-7 lists the permits related to traffic and transportation and the permit schedule. The vehicles used to transport heavy equipment and construction materials would require transportation permits when they exceed the size, weight, width, or length thresholds set forth in Section 35780 of the CVC, Sections 117 and 660-711 of the California Streets and Highways Code, and Sections 1411.1 to 1411.6 of the California Code of Regulations. Affected vehicles would be required to obtain transportation permits from Caltrans and Fresno County, or from any other affected agency. Transport route arrangements would be required with Caltrans and CHP officials for permitting and escort, as applicable. Transportation of hazardous materials to and from the Project site would be conducted in accordance with CVC Section 31303.

Table 5.4-7 Permits and Permit Schedule for Traffic and Transportation

Permit	Schedule	Status
Transportation Permit for Oversized Loads	Obtain when necessary, 2-hour processing time (single trip) to 2 weeks (annual trip).	Pending
Hazardous Material Transportation License	Obtain when necessary, approximately 2-week processing time.	Pending
Transportation Permit	Obtain when necessary, applications can be processed in a single working day	Pending

5.4.8 References

- AirNav. 2023a. San Joaquin Airport. <https://www.airnav.com/airport/CA32>. (Accessed July 2023).
- _____. 2023b. William Robert Johnston Municipal Airport. <http://www.airnav.com/airport/m90> (Accessed July 2023).
- California Department of Transportation. 2020a. Highway Design Manual, Chapter 100. July 2020. <https://dot.ca.gov/-/media/dot-media/programs/design/documents/chp1000-a11y.pdf> (accessed September 2023).
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- Fresno County Rural Transit Agency. 2019. Services Map. https://www.ruraltransit.org/wp-content/uploads/2021/08/FCRTA-Service-Map_2019.pdf (accessed September 2023).
- Fresno, County of. 2000. Fresno County General Plan. October 2000. <https://www.fresnocountyca.gov/Departments/Public-Works-and-Planning/divisions-of-public-works-and-planning/development-services-division/planning-and-land-use/general-plan-maps> (accessed September 2023).
- _____. 2013. Fresno County Regional Bicycle & Recreational Trails Master Plan. September 2013. <https://www.fresnocountyca.gov/files/sharedassets/county/v/1/vision-files/files/8042-reg-bicycle-and-rec-trails-master-plan.pdf> (accessed September 2013).
- _____. 2018a. Fresno County Regional Active Transportation Plan. January 2018. <https://www.fresnocog.org/project/active-transportation/> (accessed September 2023).
- _____. 2018b. Fresno County Multi-Jurisdictional Hazard Mitigation Plan. May 2018. <https://www.fresnocountyca.gov/files/sharedassets/county/v/1/public-health/fresno-county-hmp-final.pdf> (accessed September 2023).
- Fresno Council of Governments. 2022. 2022 Regional Transportation Plan and Sustainable Communities Strategy. July 2022. <https://www.planfresno.com/sustainable-communities-strategies-fall-outreach/> (accessed September 2023).