

3.5 Transportation and Navigation

3.5.1 Introduction

This section analyzes the proposed project's potential impacts related to traffic, transportation, and navigation. It describes existing conditions in the study area, summarizes the overall Federal, state, and local regulatory framework for traffic, transportation, and navigation, and analyzes the potential for the proposed project to affect these resources.

3.5.2 Existing Conditions

For the purposes of the transportation and navigation analysis, the study area consisted of the project area as well as the haul routes between the project area and Parks Bar Quarry, including but not limited to, State Route (SR) 70, SR 20, Parks Bar Road in Smartsville, Woodruff Lane¹, and Pacific Heights Road.

This section discusses the existing conditions related to traffic in the study area, as well as roadways that may provide access to the project area during construction.

Roadways

The study area includes roadways in both Butte and Sutter Counties that each have a different level of service (LOS). LOS is a measure of congestion by which the quality of service on roads or intersections is determined and classified. Table 3.5-1 provides definitions for each level of service used in the study area.

Table 3.5-1. Level of Service Definitions

Level of Service	Definition
A	Complete free flow.
B	Free flow, presence of other vehicles noticeable.
C	Ability to maneuver and select operating speed affected.
D	Unstable flow, speeds, and ability to maneuver restricted.
E	At or near capacity, flow quite unstable.
F	Forced flow, breakdown.

Butte County

The Butte County portion of the study area is served primarily by rural roadways. SRs 70 and 99 are the main highways that provide access to the project area. SR 70 is a two-lane, north-south highway located east of the project area and SR 99 is a two-lane, north-south highway located west of the project area. The highway segments that may provide access to the project area are listed in Table 3.5-2 with their roadway type, average daily traffic (ADT), and LOS.

¹ Use of Woodruff Lane is dependent on the route taken from Parks Bar Quarry to the project area.

Table 3.5-2. Butte County Highway Segments that Provide Access to the Project Area

Road	From	To	Roadway Type	ADT	LOS
SR 70	East Gridley Road/ Stimpson Road	Lower Honcut Road	2-lane arterial	11,800	D
	Lower Honcut Road	Yuba County line	2-lane arterial	12,000	D
SR 99	Sutter County Line	Live Oak Gridley Road	2-lane arterial	15,900	D
	Live Oak Gridley Road	Archer Avenue	4-lane undivided arterial	18,600	D
	Archer Avenue	East Gridley Road	4-lane undivided arterial	19,100	D
	East Gridley Road	Spruce Street	4-lane undivided arterial	22,900	D
	Spruce Street	East Biggs Highway	Major two-lane highway	14,900	D

Source: California Department of Transportation 2014.

ADT = average daily traffic; LOS = level of service; SR = State Route.

Yuba County

Typical haul routes between the project area and Parks Bar Quarry would include SR 70, SR 20, Parks Bar Road in Smartsville, Woodruff Lane¹, and Pacific Heights Road. SR 20 is an east-west highway located southeast of the project area. SR 70 and SR 20 intersect in the City of Marysville. The highway segments that may provide access to the project area site are listed in Table 3.5-3 with their roadway type, ADT, and LOS. Yuba County does not have LOS A and LOS B thresholds for ADT; accordingly, LOS C is the best LOS designation provided.

Woodruff Lane, which connects SR 20 and SR 70, is the only county road that would serve as a potential haul route. Woodruff Lane is categorized by Yuba County as a major rural collector, but no ADT count is available (County of Yuba 2011).

Table 3.5-3. Yuba County Highway Segments that Provide Access to the Project Area

Road	From	To	Roadway Type	ADT	LOS
SR 70	Butte County line	Woodruff Lane	2-lane conventional highway (level terrain)	12,000	D
	Woodruff Lane	Laurellen Road	2-lane conventional highway (level terrain)	12,700	D
	Laurellen Road	24 th Street (Marysville)	2-lane arterial (urban)	13,300	C
	24 th Street (Marysville)	18 th Street (Marysville)	2-lane arterial (urban)	19,500	F
	18 th Street (Marysville)	14 th Street (Marysville)	2-lane arterial (urban)	22,000	F
	14 th Street (Marysville)	SR 20 Junction (Marysville)	4-lane arterial (urban)	14,300	C
SR 20	North SR 70 Junction (Marysville)	Buchanan Street (Marysville)	4-lane arterial (urban)	19,100	C
	Buchanan Street (Marysville)	22 nd Street (Marysville)	2-lane conventional highway (level terrain)	17,000	E
	22 nd Street (Marysville)	Hallwood Boulevard	2-lane conventional highway (level terrain)	12,000	D
	Hallwood Boulevard	Loma Rica Road	2-lane conventional highway (level terrain)	10,000	D
	Loma Rica Road	Marysville Road	2-lane conventional highway (level terrain)	9,000	D
	Marysville Road	Hammonton/Smartville Road	2-lane conventional highway (rolling terrain)	7,600	D

Source: California Department of Transportation 2014, County of Yuba 2011.

ADT = average daily traffic; LOS = level of service; SR = State Route.

Navigation

Navigation in the study area is confined to the Feather River, which forms the northern and western boundaries of the project area.

3.5.3 Regulatory Setting

This section summarizes key Federal, state, and local regulatory information that applies to traffic, transportation, and navigation.

3.5.3.1 Federal

There are no Federal traffic regulations applicable to the proposed project.

3.5.3.2 State

In California, Federal Highway Administration standards are implemented by the California Department of Transportation (Caltrans), which is responsible for planning, designing, constructing, operating, and maintaining all state-owned roadways in the study area. Caltrans also enforces various policies and regulations related to the modification of, or encroachment on, state-owned roadways.

Caltrans Route Concept Report

Caltrans has a completed route concept report for SR 20, SR 70, and SR 99. This report identifies long-range improvements and establishes the “concept”—or desired—LOS for specific corridor segments. The report identifies long-range improvements needed to bring the existing facilities up to the expected standards needed to adequately serve 20-year traffic forecasts. Additionally, the report identifies the ultimate design concept for conditions beyond the immediate 20-year design period (California Department of Transportation 2009, 2010).

3.5.3.3 Local

Transportation analysis in the study area is guided by policies and standards set by local jurisdictions. Because the study area is located in Butte and Yuba Counties, the proposed project would adhere to the adopted county and city transportation policies in the respective general plans.

Butte County General Plan

The Circulation Element of the *Butte County General Plan*, adopted in 2010 and amended in 2012, is concerned with the safe and efficient movement of people and goods in and around the County (County of Butte 2012). The element contains background circulation information for a wide range of existing and planned transportation modes, including roads, transit, non-motorized transportation, rail, and aviation. The following goals and policies are applicable to traffic.

- **Goal CIR-6** Support a balanced and integrated road and highway network that maximizes the mobility of people and goods in a safe, efficient manner.
 - **Policy CIR-P6.1** The LOS for County-maintained roads within the unincorporated areas of the county but outside municipalities’ sphere of influences (SOI) shall be LOS C or better during the PM peak hour. Within a municipality’s SOI, the LOS shall meet the municipality’s LOS policy.
 - **Policy CIR-P6.2** The LOS on State Highways should at least match the concept LOS for the facility, as defined by Caltrans.

Butte County roadway LOS thresholds are provided in Table 3.5-4.

Table 3.5-4. Butte County Roadway Level of Service Thresholds

Facility Type	A	B	C	D	E	F
Minor 2-Lane Highway	0-900	901-2,000	2,001-6,800	6,801-14,100	14,101-17,400	>17,400
Major 2-Lane Highway/ Expressway	0-1,200	1,201-2,900	2,901-7,900	7,901-16,000	16,001-20,500	>20,500
4-Lane, Multi-Lane Highway/ Expressway	0-10,700	10,701-17,600	17,601-25,300	25,301-32,800	32,801-36,500	>36,500
2-Lane Arterial	-	-	0-9,700	9,701-17,600	17,601-18,700	>18,700
4-Lane Arterial, Undivided	-	-	0-17,500	17,501-27,400	27,401-28,900	>28,900
4-Lane Arterial, Divided	-	-	0-19,200	19,201-35,400	35,401-37,400	>37,400
6-Lane Arterial, Divided	-	-	0-27,100	27,101-53,200	53,201-56,000	>56,000
3-Lane Arterial, 1-Way Roadway	-	-	0-13,100	13,101-20,600	20,601-21,700	>21,700
2-Lane Freeway	0-11,110	11,111-20,100	20,101-28,800	28,801-35,700	35,701-40,100	>40,100
2-Lane Freeway + Auxiliary Lane	0-14,100	14,101-25,500	25,501-36,400	36,401-44,900	44,901-50,350	>50,350
3-Lane Freeway	0-17,000	17,001-30,800	30,801-44,000	44,001-54,100	54,101-60,600	>60,600
3-Lane Freeway + Auxiliary Lane	0-20,100	20,101-36,400	36,401-51,800	51,801-63,500	63,501-71,000	>71,000
4-Lane Freeway	0-23,200	23,201-42,000	42,001-59,500	59,501-72,800	72,801-81,400	>81,400
Major 2-Lane Collector	-	-	0-5,550	5,551-11,800	11,801-15,200	>15,200

Source: Transportation Research Board, Highway Capacity Manual 2000.

Yuba County General Plan

The Community Development Element of the *Yuba County 2030 General Plan*, adopted in 2011, pertains to the safe and efficient movement of people and goods in and around the county (County of Yuba 2011:72). The element contains background information for a wide range of existing and planned transportation modes, including roads and transit. The following goal and policy are applicable to traffic.

- **Goal CD16. Level of Service: Roadway System.** Maintain a roadway system that provides adequate level of service, as funding allows, and that is consistent with the County's planning, environmental, and economic policies.
 - **Policy CD16.3.** On County roads in rural areas, Level of Service "D" shall be maintained, as feasible, during the PM Peak Hour.

Yuba County roadway LOS thresholds are provided in Table 3.5-5.

Table 3.5-5. Yuba County Roadway Level of Service Thresholds

Roadway Capacity Class	Maximum Daily Traffic Volume at		
	LOS C	LOS D	LOS E
Freeway – 4 Lanes	63,600	77,400	86,400
Conventional Highway – 6 Lanes	48,000	54,000	60,000
Conventional Highway – 4 Lanes	32,000	36,000	40,000
Conventional Highway – 2 Lanes (Level Terrain)	7,900	13,500	22,900
Conventional Highway – 2 Lanes (Rolling Terrain)	7,100	12,400	20,500
Arterial (Urban) – 2 Lanes	14,400	16,200	18,000
Arterial (Urban) – 4 Lanes	28,800	32,400	36,000
Arterial (Urban) – 6 Lanes	43,200	48,600	54,000
Arterial (Rural) – 2 Lanes	7,100	12,200	20,000
Collector (Urban) or Major Collector (Rural)	7,000	10,000	13,000
Minor Collector	6,700	7,800	8,900

Source: County of Yuba 2011:71

City of Marysville General Plan

The Circulation and Scenic Highways Element of the City of Marysville General Plan, adopted in 1985, is concerned with the safe and efficient transportation of people and goods within and through the City of Marysville (City of Marysville 1985:46). The element contains background circulation information for existing and planned transportation modes, including roads and transit. The following goal is applicable to traffic.

- **Goal:** To provide and maintain a safe and efficient system of streets, highways, and public transportation to service residents' needs, promote sound land use, and protect and enhance scenic highways.
 - **1.** To maintain existing streets in a safe condition and require that new streets be built to city standards.

The City of Marysville General Plan does not identify LOS thresholds.

3.5.4 Environmental Effects

Potential impacts of the proposed project related to traffic, transportation, and navigation are discussed in the context of State CEQA Guidelines Appendix G checklist items.

a. Conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation, including mass transit and non-motorized travel and relevant components of the circulation system, including, but not limited to, intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?

During construction, the movements of crew, equipment, and material would result in temporary increases in traffic. Locally, vehicles associated with construction activities are anticipated to travel on SR 70, SR 99, and SR 20. The first 90 days of construction, which includes Construction Phases 1

and 2, would likely have the greatest effect on localized travel patterns because trucks will be importing construction material from local commercial sources up to 1 hour away.

However, the majority of the equipment entering the construction site during this time would stay onsite until Construction Phases 1 and 2 were complete. The exception would be the haul trucks that would enter and exit the project area daily to import rock slope protection (RSP), aggregate base (AB), and concrete for construction of each of the project components. At the peak of Phase 2, pickup trucks are anticipated to make fewer than 16 trips per day; haul trucks are anticipated to make a total of 4 trips per day. In the final 30 days of construction, which includes Construction Phases 3 and 4, there would be an even lower utilization rate of haul and pickup trucks. Given the low number of trips required to import construction materials, the traffic generated by haul trucks and pickup trucks would not have a significant impact on localized traffic patterns. Road construction would be limited to the project area and would not degrade traffic or conflict with applicable plans, ordinances or policies.

Impact TRA-1: Temporary Impact on Localized Traffic Patterns (less than significant with mitigation for all components)

Localized traffic patterns could be negatively affected by construction activities. This impact would be the same for vegetation management, hydraulic improvements, and recreation features. Implementation of Mitigation Measures TRA-MM-1 and TRA-MM-2 will reduce this impact to a less-than-significant level and ensure that even with the low volume of additional traffic, there will be controls to avoid traffic between cars and haul trucks.

Mitigation Measure TRA-MM-1: Coordinate Truck Routes

Prior to construction, SBFCA or its contractor will coordinate truck routes and construction activities with the appropriate City or County departments. The objective of the coordination is to minimize traffic delays resulting from hauling and construction activities by implementing the traffic control plan developed under mitigation measure TRA-MM-2. The contractor will be required to restore roadways damaged by construction activities and construction-related traffic to pre-project conditions.

Mitigation Measure TRA-MM-2: Develop and Implement a Traffic Control Plan

SBFCA, in coordination with relevant City or County public works departments, will develop and implement traffic control plan(s) for the proposed project.

The traffic control plan(s) will describe the methods of traffic control to be used during construction. All on-street construction traffic will be required to comply with the local jurisdiction's standard construction specifications. The plan will reduce the effects of construction on the roadway system in the study area throughout the construction period. Construction contractors will follow the standard construction specifications of affected jurisdictions and obtain the appropriate encroachment permits, if required. The following measures will be included in the traffic control plan.

- Construction vehicles would not be permitted to block any roadways or driveways.
- Signs and flagpeople will be used as needed to alert motorists, bicyclists, and pedestrians to the presence of haul trucks and construction vehicles at all access points.

- Vehicles would be required to obey all speed limits, traffic laws, and transportation regulations during construction.
- Construction workers would be encouraged to carpool and park in designated staging areas.
- The contractor would be required to repair any roads damaged by construction activities.

At least one lane of traffic will be maintained at all times along major streets. Safe pedestrian and bicyclist access will be maintained in or around the construction areas at all times. Construction areas will be secured as required by the applicable jurisdiction to prevent pedestrians and bicyclists from entering the work site, and all stationary equipment will be located as far away as possible from areas where bicyclists and pedestrians are present. SBFCA or its contractors will notify and consult with emergency service providers to maintain emergency access and facilitate the passage of emergency vehicles on county streets.

b. Conflict with an applicable congestion management program, including, but not limited to, level-of-service standards and travel demand measures or other standards established by the county congestion management agency for designated roads or highways?

As indicated above for checklist item *a*, construction-related traffic impacts are expected to be temporary, and the additional traffic would be minor compared to existing daily and peak-hour traffic volumes on local roadways. All roads that provide access to the project area in Butte County are currently operating at LOS D. According to Yuba County's LOS standards, SR 70 is currently operating at LOS D at the Butte County Line, Woodruff Lane, and Laurellen Road; SR 70 is operating at LOS C from Laurellen Road to 24th Street and LOS F from 24th Street to 18th Street. SR 20 is operating at LOS C at the North SR 70 Junction and Buchanan Street and LOS F at Buchanan Street and 22nd Street. 22nd Street to Hammonton/Smartville Road operates at LOS D.

Butte County Association of Governments is the designated congestion management agency for this region but does not have a congestion management program applicable to the proposed project. The amount of traffic generated during the construction period would be minor compared to existing daily and peak-hour traffic volumes, and would not change the current LOS. However, slow-moving, heavy trucks could affect traffic flow on all haul routes, particularly if numerous trips occur during the morning or afternoon peak traffic periods. There would be no impact.

c. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?

The proposed project would not affect air traffic patterns or cause any air traffic safety risks. There would be no impact.

d. Substantially increase hazards because of a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

The proposed project does not have any design features or incompatible uses that would result in hazardous traffic conditions. Design features would not increase hazards for motorists, bicyclists, or pedestrians. Therefore, there would be no impact.

e. Result in inadequate emergency access?

Impact TRA-2: Inadequate Emergency Access (less than significant with mitigation for all components)

There would be no lane closures involved with the project that would constrict emergency access. However, slow-moving construction and haul vehicles entering and departing the construction area could impair emergency access during the construction period. Implementation of Mitigation Measure TRA-MM-2 described above will reduce this potential impact to a less-than-significant level by providing the mechanism to ensure that emergency access will continue to be available during the construction period.

f. Conflict with adopted policies, plans, or programs regarding public transit, bicycle or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?

Construction of the proposed project would be temporary and would not conflict with any adopted policies, plans, or programs supporting alternative transportation. There would be no impact.