System Determined POAQC: Non-Exempt

Project Information

Project Name:	**SR 12/29/221 Soscol Junction Interchange Study**				
Sponsor:	**Napa County Transportation Planning Agency**		TIP ID:	**NAP090003**	RTP ID: **94073**
Agency:	**Caltrans**		Mode:	**STATE HIGHWAY**	Sub Mode:
Project Type:	**EXPRESSWAY**	Trans. System: **STATE HWY**	Purpose:	**EXPANSION**	County: **Napa**
Proj. Desc.:	**In Napa County, study alternatives to construct new southbound Route 221 to southbound Route 29 flyover (including auxilary lane to Route 12/Route 29)**				
RTP Tittle:	**Construct a flyover connecting southbound Route 221 to southbond routes 12 and 29 (environmental and design phases)**				

Step 1: Project Identification

1:	Does this project have any federal funding?	**Yes**
2:	Does this project (or any phases of the project) require any federal action (such as federal authorization or approval for funding or environmental review) after December 14, 2010?	**Yes**
3:	Is the project exempt from both regional and project-level air quality conformity under 40 CFR 93.126? Project Type Selected: **None Applies**	**No**
4:	Is the project exempt from regional air quality conformity under 40 CFR 93.127? Project Type Selected: **None Applies**	**No**
5:	Is the project exempt from regional air quality conformity under 40 CFR 93.128? Project Type Selected: **None Applies**	**No**
6:	Does this project meet the definition of a “project of air quality concern” under 40 CFR 93.123(b)(1)? Project Type Selected: **None Applies**	**No**

Dates for Interagency Consultation

Requested Date of Interagency Consultation: **JUL-SEP, 2011**

Meeting Date of PM2.5 consultation via Air Quality Conformity Task Force to determine POAQC:

Action Date of PM2.5 consultation via Air Quality Conformity Task Force to determine POAQC:

Dates for PM2.5 Hot-Spot Analysis

Meeting Date of PM2.5 consultation via Air Quality Conformity Task Force to determine review hot-spot analysis:

Action Date of PM2.5 consultation via Air Quality Conformity Task Force to determine review hot-spot analysis:

$PM_{2.5}$ Project Assessment Form for Interagency Consultation

Project Title: Napa 29/221 Soscol Flyover Project

Project Summary for Air Quality Conformity Task Force Meeting: (June, 2011)

Description

Alternative 5 (Option 1)
Construct a 2-lane flyover from SB 221 to SB 29 and re-align SB 221 connection to SR 29 at the existing SR 29/221/Soscol Ferry Road intersection. Re-stripe the leg of the SB 221 at the intersection from 4 lanes to 2 lanes. Leave the existing signal at SR 29/SR 221/Soscol Ferry Road intersection in place. The dual left-turn traffic at the intersection will be re-routed onto the flyover.

Alternative 5 (Option 2)
Construct a 2-lane left-turn connector, referred to as a flyover, from SB 221 to SB 29 and a single-lane right-turn connector from SB 221 to NB 29. The SR 29 median will be closed. The leg of SR 221 and the existing signal at the SR 29/221/Soscol Ferry Road intersection will be removed. All left-turns and through movements of Soscol Ferry Road at the intersection will be eliminated to facilitate the traffic throughput on SR 29. The existing dual left-turn traffic from SB 221 to SB 29 at the intersection will be re-routed onto the flyover and right-turn traffic from SB 221 to NB 29 will be directed to the single-lane connector.

Background

- The Environmental Impact Report/Environmental Assessment (EIR/EA) is in the Administrative Draft stage.
- The public review for EIR/EA is proposed to start August 2011
- Seeking air quality conformity determination on or before August 1.

Not a Project of Air Quality Concern (40 CFR 93.123(b)(1))

i. The volumes of diesel vehicles on SR 221 and 29 are low and the proposed project would not cause an increase in diesel vehicles using the facilities. The EPA's March 2006 guidance document "Transportation Guidance for Qualitative Hot-spot Analysis in PM2.5 and PM10 Nonattainment and Maintenance Areas" references a two step criteria to identify "a significant volume of diesel truck traffic." The first criterion is facilities with greater than 125,000 AADT volumes. The second criterion is facilities with either higher than 8 percent, or more than 10,000, of diesel truck traffic volumes. With respect to traffic volumes along the SR221 flyover project, both opening year and horizon year AADT volumes (40,000 and 49,000 respectively) are forecasted to be well below the criteria of 125,000 total AADT. Furthermore, the proposed project would have no effect on SR221 and 29 mainline AADT's or truck traffic volumes. As such, the project does not have the potential to result in a substantial increase in the number of diesel vehicles within the project area.

ii. The volumes of diesel vehicles at the intersection within the project area are low and the proposed project would not cause an increase in diesel vehicles at this intersection. As shown in the above tables, the intersection within the project is projected to operate at LOS F under the No Build Alternative in the Opening Year of 2015. The intersection would operate at LOS D in 2015 with the completion of either of the Build Alternatives. In the Horizon Year of 2035, the LOS at the intersection is projected to be F under the No Build and both the Build Alternatives, however vehicle minutes of delay will improve.

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iii. This project is not a new bus or rail terminal, or transfer point.

iv. This project is not an expansion of an existing bus, rail terminal, or transfer point.

v. There is currently no implementation plan for PM2.5 for this region. This project is not in and does not affect areas that will potentially be identified in the PM2.5 implementation plan as sites of violation or possible violation.

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RTIP ID# 94073

TIP ID# NAP090003

Air Quality Conformity Task Force Consideration Date
June 2011

Project Description
To improve traffic operations, a flyover connecting southbound SR 221 to southbound SR 29 has been proposed. The flyover would provide a dedicated southbound left-turn movement and accommodate the existing and projected heavy left-turn movements, which would improve the capacity and operation of the intersection. This would allow southbound (SB) travelers on SR 221 to reach SB 29 via a "flyover" structure rather than having to go through a traffic signal, as is the current condition.

The proposed project is to construct a 1.8 kilometer (km) (1.1 mile (mi)) two-lane flyover from southbound SR 221 to the southbound SR 29/ Soscol Ferry Road intersection in Napa County. The proposed connector consists of a bridge in the middle and roadway embankments on both ends. The dual left-turn traffic at the SR 29/221/Soscol Ferry Road intersection would be re-routed onto the flyover. The proposed project would be constructed in two stages and would take approximately two years to complete. The alternatives under consideration are Alternative 5, Option 1; and Alternative 5, Option 2.

Alternative 5 (Option 1)
Construct a 2-lane flyover from SB 221 to SB 29 and re-align SB 221 connection to SR 29 at the existing SR 29/221/Soscol Ferry Road intersection. Re-stripe the leg of the SB 221 at the intersection from 4 lanes to 2 lanes. Leave the existing signal at SR 29/SR 221/Soscol Ferry Road intersection in place. The dual left-turn traffic at the intersection will be re-routed onto the flyover.

Alternative 5 (Option 2)
The preferred alternative is to construct a 2-lane left-turn connector, referred to as a flyover, from SB 221 to SB 29 and a single-lane right-turn connector from SB 221 to NB 29. The SR 29 median will be closed. The leg of SR 221 and the existing signal at the SR 29/221/Soscol Ferry Road intersection will be removed. All left-turns and through movements of Soscol Ferry Road at the intersection will be eliminated to facilitate the traffic throughput on SR 29. The existing dual left-turn traffic from SB 221 to SB 29 at the intersection will be re-routed onto the flyover and right-turn traffic from SB 221 to NB 29 will be directed to the single-lane connector.

Type of Project: Change to an existing State highway and reconfiguration of an existing intersection.

County	**Narrative Location/Route & Postmiles**
NAPA	04-NAP-29/221 29: PM 5.0/6.7 221: PM 0/0.6 **Caltrans Projects – EA#** 281200

Lead Agency: Caltrans

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Contact Person	**Phone#**	**Fax#**	**Email**
Kelly Hirschberg	510-286-4925	510-286-6031	kelly_hirschberg@dot.ca.gov

Federal Action for which Project-Level PM Conformity is Needed

Categorical Exclusion (NEPA)	X EA or Draft EIS	FONSI or Final EIS	PS&E or Construction	Other

Scheduled Date of Federal Action: 11/17/11

NEPA Delegation – Project Type *(check appropriate box)*

Exempt	Section 6004 –Categorical Exemption	Section 6005 – Non-Categorical Exemption

Current Programming Dates *(as appropriate)*

	PE/Environmental	ENG	ROW	CON
Start	7/1/2001	1/1/2012	TBD	TBD
End	12/31/2011	4/31/2014	TBD	TBD

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Project Purpose and Need (Summary):

Motorists traveling on Route 29 and Route 221 have been experiencing congestion and delays in recent years as commercial and residential developments are clustered along the highways in the southern part of the County while wineries and tourism industries are expanding rapidly in the northern part of the County. Through Napa, there is a large amount of commute cross–valley traffic originating or terminating in Solano, Sonoma and Lake Counties. Coupled with population growth in Solano County to the east and Sonoma County to the west, both highways become major interregional routes serving the neighboring counties and are facing significant increase of traffic congestion. Growth in residential development in the Fairfield / Suisun Valley area in Solano County and industrial and commercial development in the Napa County are expected to continue. The existing highways provide insufficient capacity and routine rehabilitation improvements do not address changes in traffic volume.

Napa County attracts more than 5 million visitors a year-1.7 million of whom stay overnight. Especially on weekends, during the summer, and during the crush-the harvest in September and October-tourists cause severe congestion along Highway 29 and the Silverado Trail. Silverado Trail connects the Route 221 in the north. MTC also noted in the North Bay Corridor Study, dated March 1998, that "population and job growth are expected to continue to intensify along Route 29, Route 101, and Interstate 80. Travel demand is diverse and includes not only weekday commuting, but weekend tourism, truck traffic from agricultural operations, and traffic generated by major events."

According to the MTC's Regional Transportation Plan 2035, daily trips in Napa County from Year 2006 to Year 2035 will experience a 30% increase. The existing intersection currently is experiencing traffic congestion and is operating at a Level of Service (LOS) F during both AM and PM peak periods. As indicated in the January 2007 Operational Analysis report for the Routes 29/221/Soscol Ferry Road intersection, with "no build" alternative, traffic demand for year 2015 would be "sixty and twenty percent higher than the capacity of the intersection during the AM and PM peak hours, respectively." Traffic projections for the left turn movements for southbound Route 221 to southbound Route 29 indicate that PM peak hour traffic volumes will increase by 40% by year 2035. Route 29 through movements in both directions is also high.

The purpose of the project is to alleviate congestion, improve operations, and enhance safety by constructing a flyover from SB 221 to SB 12/29. The flyover will provide two dedicated SB left-turn movements to accommodate the existing and the projected heavy left-turn movements. The median closure on SR 29 at the intersection of SR 221 and Soscol Ferry Road will enhance the traffic throughput on SR 29. It is expected that rear-end accidents, which are normally a consequence of traffic congestion condition, will also be reduced at the intersection when congestion is alleviated by the proposed improvements.

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Surrounding Land Use/Traffic Generators *(especially effect on diesel traffic)*

The rolling terrain on either side of SR 221 and 29 is either open space or being used for agricultural and industrial purposes. There are only a few scattered residences along SR221. The junction of SR 221/29 is generally flat and surrounded by industrial parks.

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Brief summary of assumptions and methodology used for conducting analysis

The Truck percentages were taken from the 2009 Annual Average Daily Truck Traffic on the California State Highway System (December 2010). Association of Bay Area Governments land use forecasts show no change in land use for the project area, so truck percentages are predicted to remain constant. Total volumes are based on a regional transportation demand model for Napa county.

Opening Year: If facility is a highway or street, Build and No Build LOS, AADT, % and # trucks, truck AADT of proposed facility

Roadway Segments	Year	Alternatives	LOS	AADT	%Trucks	Truck AADT
SR 221	2015	No Build	F	40000	6.04%	2430
SR 221	2015	Alt5 Opt1	D	40000	6.04%	2430
SR 221	2015	Alt5 Opt2	D	40000	6.04%	2430

Roadway Segments	Year	Alternatives	LOS	AADT	%Trucks	Truck AADT
SR 29	2015	No Build	F	52000	7.49%	3900
SR 29	2015	Alt5 Opt1	D	52000	7.49%	3900
SR 29	2015	Alt5 Opt2	D	52000	7.49%	3900

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RTP Horizon Year / Design Year: If facility is a highway or street, Build and No Build LOS, AADT, % and # trucks, truck AADT of proposed facility

Roadway Segments	Year	Alternatives	LOS	AADT	%Trucks	Truck AADT
SR 221	2035	No Build	F	49000	6.04%	2950
SR 221	2035	Alt5 Opt1	F	49000	6.04%	2950
SR 221	2035	Alt5 Opt2	F	49000	6.04%	2950

Roadway Segments	Year	Alternatives	LOS	AADT	%Trucks	Truck AADT
SR 29	2035	No Build	F	62000	7.49%	4650
SR 29	2035	Alt5 Opt1	F	62000	7.49%	4650
SR 29	2035	Alt5 Opt2	F	62000	7.49%	4650

Note: For both Build Alternatives, SR 29 and 221 go from LOS D in year 2015 to LOS F in year 2035. However there is an improvement in operations, which is shown by a decrease in minutes of delay from the No-Build to the Build Alternatives.

Roadway Segments	Year	Alternatives	LOS	Minutes of Delay
SR 221	2015	No Build	F	159
SR 221	2015	Alt5 Opt1	D	42
SR 221	2015	Alt5 Opt2	D	38
SR 221	2035	No Build	F	367
SR 221	2035	Alt5 Opt1	F	190
SR 221	2035	Alt5 Opt2	F	187

Opening Year: If facility is an interchange(s) or intersection(s), Build and No Build cross-street AADT, % and # trucks, truck AADT

Levels-of-Service at the SR29/SR221/Soscol Ferry Road (Soscol Junction)

Junction	Year	Alternatives	LOS*
SR29/SR221/Soscol Ferry Road	2015	No Build	F
SR29/SR221/Soscol Ferry Road	2015	Option 1	D
SR29/SR221/Soscol Ferry Road	2015	Option 2	D

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RTP Horizon Year / Design Year: If facility is an interchange (s) or intersection(s), Build and No Build cross-street AADT, % and # trucks, truck AADT

Levels-of-Service at the SR29/SR221/Soscol Ferry Road (Soscol Junction)

Junction	Year	Alternatives	LOS*
SR29/SR221/Soscol Ferry Road	2035	No Build	F
SR29/SR221/Soscol Ferry Road	2035	Option 1	F
SR29/SR221/Soscol Ferry Road	2035	Option 2	F

Opening Year: If facility is a bus, rail or intermodal facility/terminal/transfer point, # of bus arrivals for Build and No Build, % and # of bus arrivals will be diesel buses

N/A

RTP Horizon Year / Design Year: If facility is a bus, rail or intermodal facility/terminal/transfer point, # of bus arrivals for Build and No Build, % and # of bus arrivals will be diesel buses

N/A

Describe potential traffic redistribution effects of congestion relief *(impact on other facilities)*

The proposed project is in a rural area and would not impact other facilities in the region.

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Comments/Explanation/Details

The proposed project is not project of air quality concern (POAQC) as defined in 40 CFR 93.123(b)(1), because:

i. The volumes of diesel vehicles on SR 221 and 29 are low and the proposed project would not cause an increase in diesel vehicles using the facilities. The EPA's March 2006 guidance document "Transportation Guidance for Qualitative Hot-spot Analysis in PM2.5 and PM10 Nonattainment and Maintenance Areas" references a two step criteria to identify "a significant volume of diesel truck traffic." The first criterion is facilities with greater than 125,000 AADT volumes. The second criterion is facilities with either higher than 8 percent, or more than 10,000, of diesel truck traffic volumes. With respect to traffic volumes along the SR221 flyover project, both opening year and horizon year AADT volumes (40,000 and 49,000 respectively) are forecasted to be well below the criteria of 125,000 total AADT. Furthermore, the proposed project would have no effect on SR221 and 29 mainline AADT or truck traffic volumes. As such, the project does not have the potential to result in a substantial increase in the number of diesel vehicles within the project area.

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iii. This project is not a new bus or rail terminal, or transfer point.

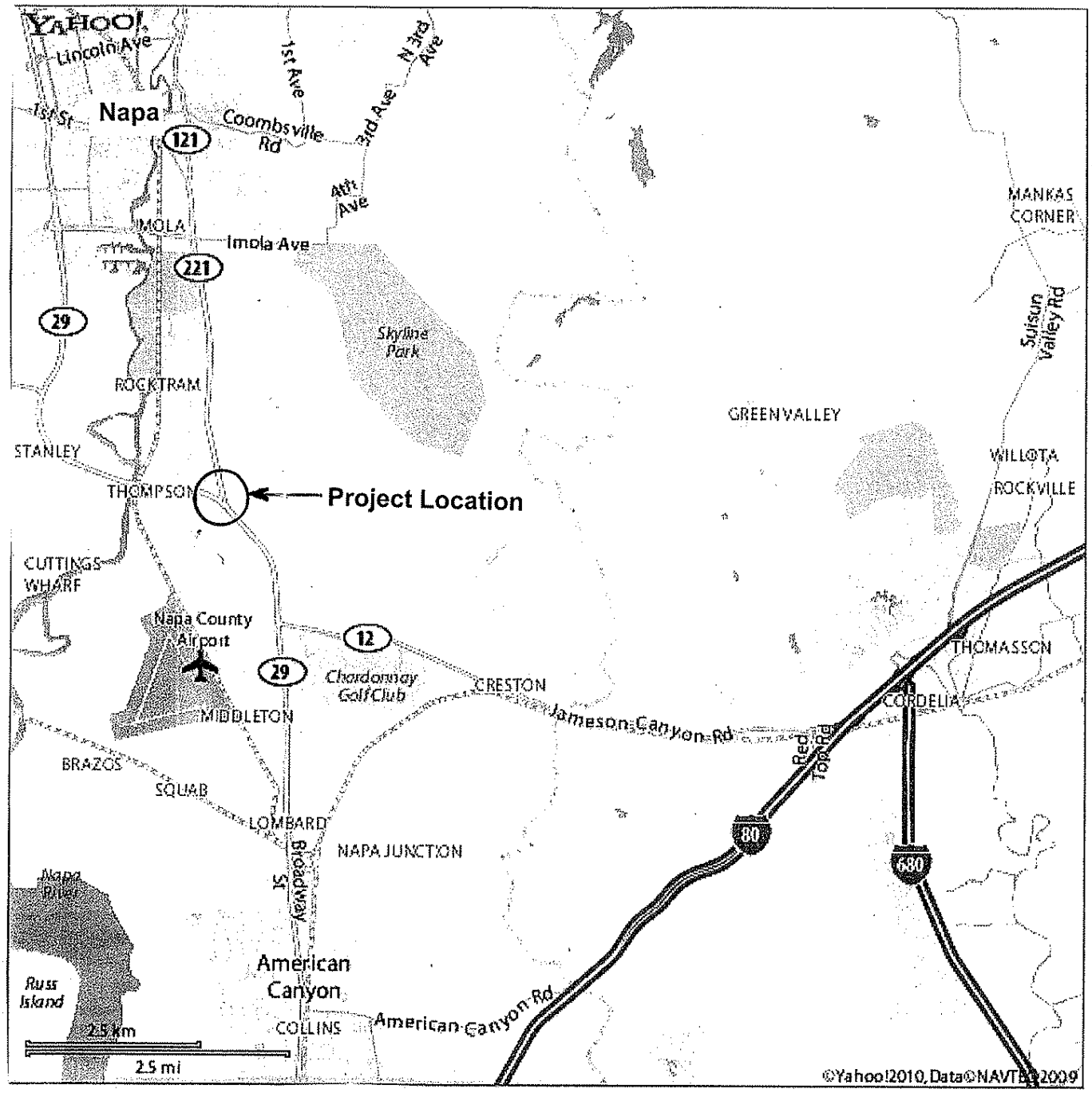
iv. This project is not an expansion of an existing bus, rail terminal, or transfer point.

v. There is currently no implementation plan for PM2.5 for this region. This project is not in and does not affect areas that will potentially be identified in the PM2.5 implementation plan as sites of violation or possible violation.

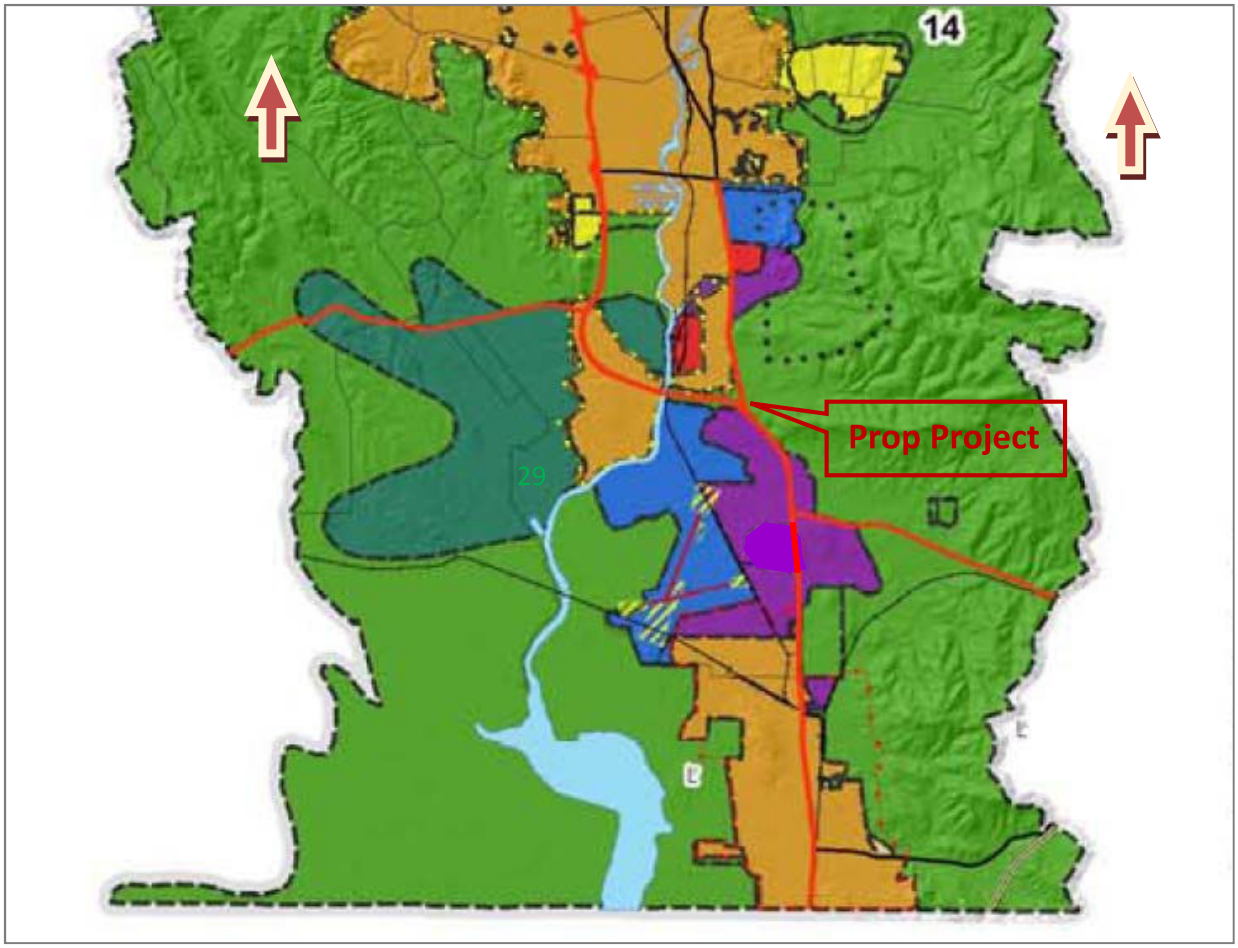
According to the Transportation Conformity Guidance for Qualitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas, this project is not a project of air quality concern under 40 CFR 93.123(b)(1).

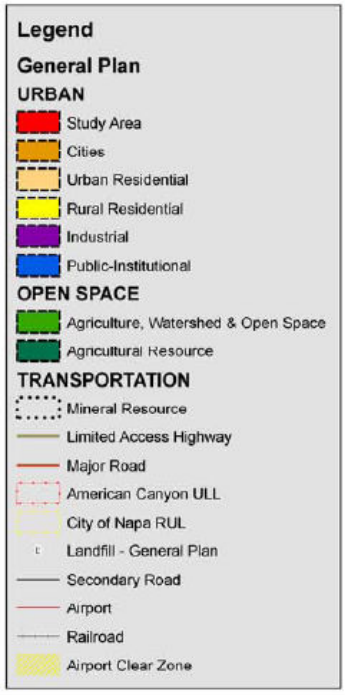
List of Attachments

1. Attachment A-Location Map
2. Attachment B-Land Use Map
3. Attachment C-Project Layout Sheets



Attachment A Location Map





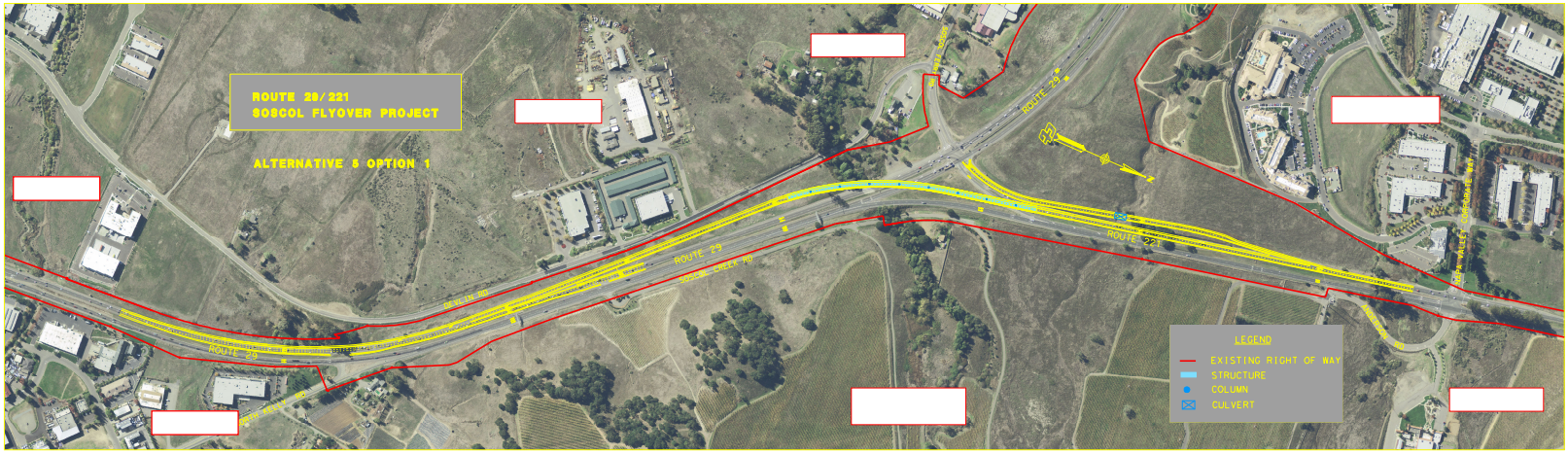
Attachment B

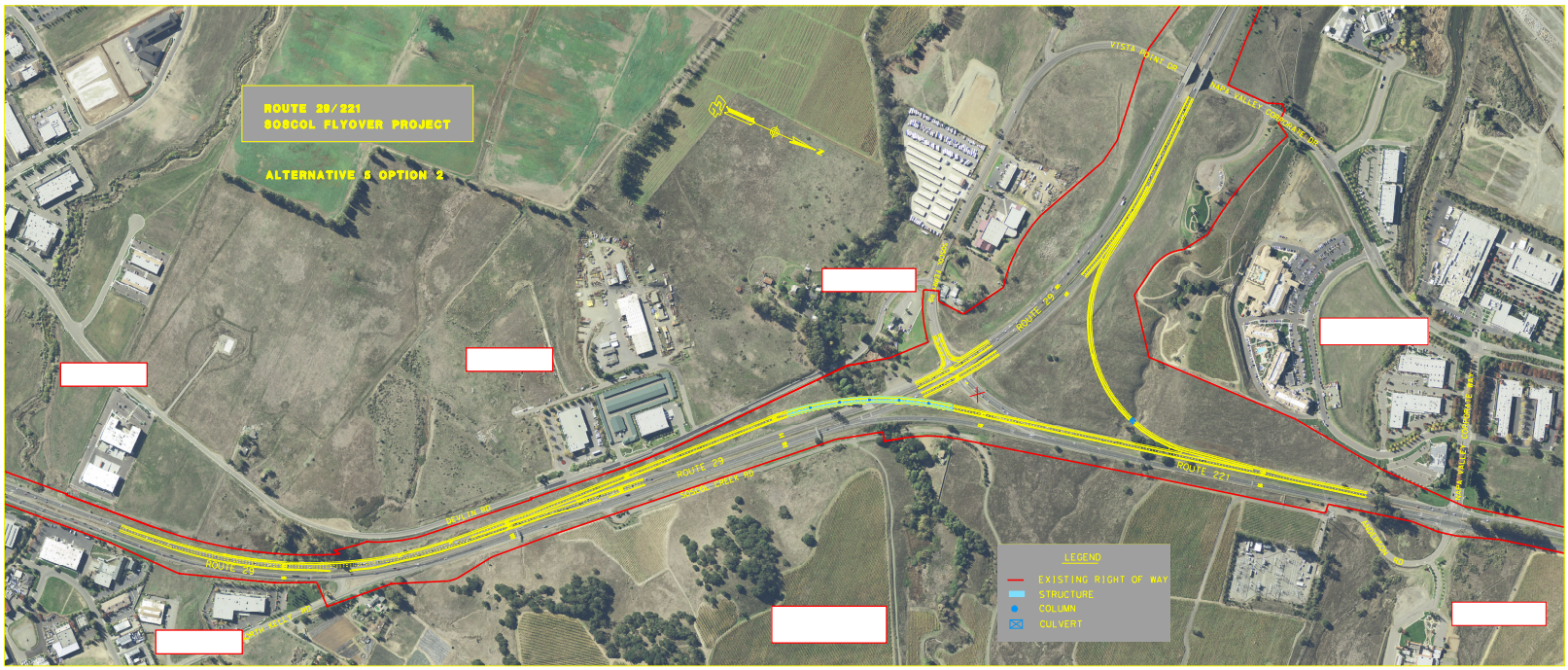
Land Use in Napa County

SR 221 Soscol Flyover Project

(Taken from Napa County General Plan)

Sheet 1 of 1


ROUTE 29/221
GOSCOL FLYOVER PROJECT
ALTERNATIVE 5 OPTION 1
ROUTE 29
ROUTE 29
ROUTE 29
ROUTE 29
ROUTE 29
LEGEND
EXISTING RIGHT OF WAY
STRUCTURE
COLUMN
CULVERT


ROUTE 29/221
SOBCOL FLYOVER PROJECT
ALTERNATIVE 5 OPTION 2
ROUTE 29
ROUTE 221
LEGEND
EXISTING RIGHT OF WAY
STRUCTURE
COLUMN
CULVERT