

Project Study Report-Project Development Support (PSR-PDS)

To

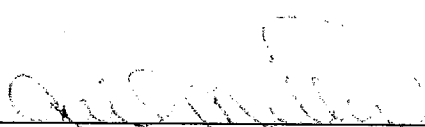
Request Programming for Capital Support (Project Approval and Environmental Document Phase) in a future STIP

On Route 99

Between Post mile 15.49 Chestnut Ave OC



And Post mile 18.58 Jensen Ave UC

APPROVAL RECOMMENDED:



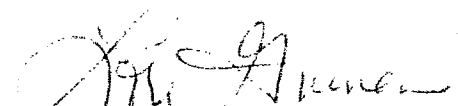
GAIL MILLER, PROJECT SPONSOR, DEPUTY
DISTRICT, PLANNING, LOCAL PROGRAMS AND
ENVIRONMENTAL ANALYSIS

APPROVAL RECOMMENDED:

NEIL BRETZ, PROJECT MANAGER

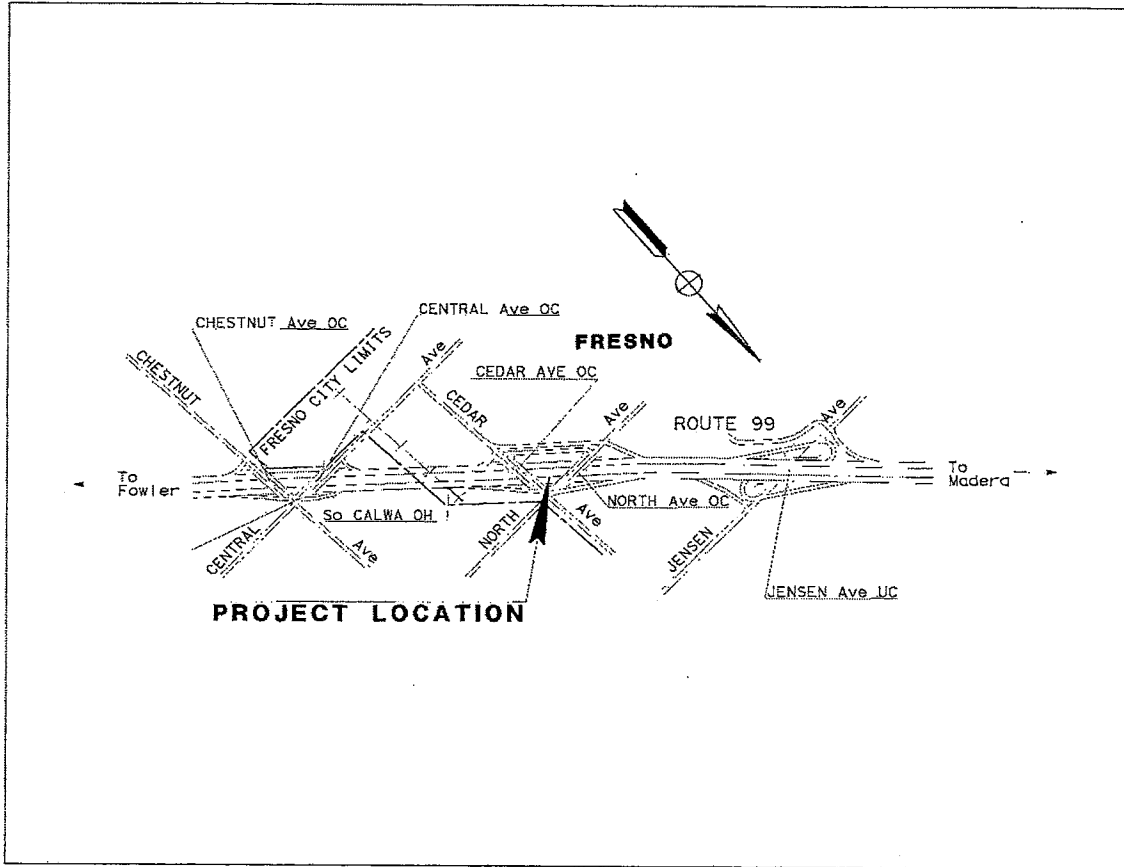
APPROVED:



SHARRI BENDER EHLERT, DISTRICT DIRECTOR

12/6/2016
DATE

Vicinity Map



This project study report-project development support has been prepared under the direction of the following registered civil engineer. The registered civil engineer attests to the technical information contained herein and the engineering data upon which recommendations, conclusions, and decisions are based.

REGISTERED CIVIL ENGINEER

DATE

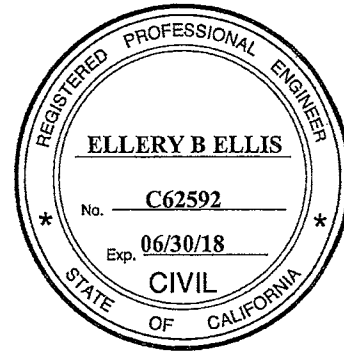


Table of Contents

1. Introduction	1
2. Background	1
3. Purpose and Need Statement	2
4. Traffic Engineering Assessment	2
Traffic Operational Analysis	2
Accident Analysis	4
5. Deficiencies	4
6. Corridor and System Coordination	5
7. Alternatives	5
Viable Alternative	5
8. Right-Of-Way	7
Utilities	7
Railroad	7
High Speed Rail	8
9. Stakeholder Involvement	8
10. Environmental Determination/Documentation	8
11. Funding	8
Capital Outlay Project Estimate	9
12. Schedule	9
13. Risks	9
14. External Agency Coordination	10
15. Project Reviews	10
16. Project Personnel	10
17. Attachments	11

1. INTRODUCTION

Project Description:

It is proposed to modify the existing split interchange at North Avenue and Cedar Avenue on Route 99 in the City of Fresno to increase traffic capacity and improve traffic operations (See Attachment A, "Project Vicinity Map").

See the cost estimate for specific work items included in this project.

Project Limits	06-Fre-99 Postmile 16.9
Number of Alternatives	4 Build Alternatives
Current Capital Outlay Support Estimate for PA&ED	\$2,000,000
Current Capital Outlay Construction Cost Range	\$35,000,000 to \$40,000,000
Current Capital Outlay Right- of-Way Cost Range	\$17,000,000 to \$27,000,000
Funding Source	STIP/Local Funds
Type of Facility	Interchange
Number of Structures	2
Anticipated Environmental Determination or Document	ND-FONSI
Legal Description	Interchange Modification
Project Development Category	4A

The remaining capital outlay support, right-of-way, and construction components of the project are preliminary estimates and are not suitable for programming purposes. Either a project report or a supplemental PID following the format of a PSR will serve as the programming document for the remaining components of the project. A project report will serve as approval of the "selected" alternative.

2. BACKGROUND

Route 99 is an important regional and local facility within the San Joaquin Valley. It is a major truck route, which provides critical access for shipment of agricultural goods to markets outside of the Valley. It also serves as a significant recreational access during the summer months. Regionally, Route 99 extends in the south-north direction to link the San Joaquin and Sacramento Valleys from Interstate 5 approximately 8 miles north of Lebec to a junction with Interstate 5 in Red Bluff. Route 99 is a 6-lane facility throughout the City of Fresno with a posted speed limit of 65 mph. In the project area, the Route 99 travel lanes are 12 feet wide with 5-foot left and 10-foot right paved

shoulder widths. A 46-foot wide median divides the northbound and southbound travelways. The width from the center of the median to the inside edge of the travel way is approximately 23 feet in each direction.

3. PURPOSE AND NEED

Purpose:

The purpose of this project is to modify the existing split interchange at North Ave/ Cedar Avenue and Route 99 to a single interchange at North Avenue eliminating the Cedar Avenue ramps and to accommodate anticipated future traffic at Level of Service (LOS) "D" or better through the year 2045. These modifications will also improve traffic operations at the interchange and improve pedestrian circulation.

Need:

The existing Route 99 six-lane freeway has adequate capacity for the existing traffic. Degradation in level of service below LOS "D" is anticipated at the North Avenue/Cedar Avenue Route 99 interchange within the next few years. The southbound (SB) and northbound (NB) off-ramps with Two-Way Stop Control currently operate at LOS "E" and "B" during peak travel hours respectively. This degradation will continue as the City of Fresno approves industrial and commercial development on either side of the interchange.

4. TRAFFIC ENGINEERING PERFORMANCE ASSESSMENT

An Operational Analysis Report for Route 99 at North Avenue was completed by the Traffic Operations Branch October 4, 2016. The report recommends the following five proposed alternatives. The specific description of each alternative is outlined in Section 7 of this document.

Alternative 1: Standard Partial Cloverleaf Type L-9 Interchange

This alternative would construct a new standard Type L-9 interchange at North Avenue and remove the existing ramps at Cedar Avenue. A 6-lane North Avenue OC would be required. The following Table are the LOS results.

Design Year	AM (PM) Peak Hour LOS			
2045	North/Orange	North/SB ramps	North/NB ramps	North/Cedar
	C (D)	C (B)	B (A)	D (E)

Queuing problems at the eastbound North Avenue to Cedar Avenue and westbound North Avenue to Orange Avenue are expected to occur. An eastbound right-turn

overlap on North Avenue to Cedar Avenue and a westbound left-turn protected permissive on North Avenue to Orange Avenue may reduce the queuing problem.

Alternative 2: Modified Partial Cloverleaf Interchange

This alternative would construct a new Type L-9, modified interchange at North Avenue and remove the existing ramps at Cedar Avenue. A 6-lane North Avenue OC would be required. The following Table are the LOS results.

Design Year	AM (PM) Peak Hour LOS			
2045	North/Orange	North/SB ramps	North/NB ramps	North/Cedar
	C (D)	C (A)	B (A)	D (D)

Queuing problems at the eastbound North Avenue to Cedar Avenue and westbound North Avenue to Orange Avenue are expected to occur. An eastbound right-turn overlap on North to Cedar and a westbound left-turn protected permissive on North to Orange may reduce the queuing problem.

Alternative 3: Modified Spread Diamond Interchange

This alternative would reconstruct the existing interchange to a Modified spread diamond Type L-2 interchange at North Avenue and remove the existing ramps at Cedar Avenue. A 7-lane North Avenue Overcrossing is required. This modified Type L-2 interchange would not provide spaces for the future loop on-ramps. However, the left-turn storage on the OC would be longer than that in the tight diamond interchange. The storage and capacity are limited for this type of interchange. The following Table are the LOS results.

Design Year	AM (PM) Peak Hour LOS			
2045	North/Orange	North/SB ramps	North/NB ramps	North/Cedar
	C (D)	C (B)	B (B)	E (E)

Alternative 4: Diverging Diamond Interchange (DDI)

This alternative would reconstruct the existing interchange to directional crossovers on either side of the interchange on North Avenue. A 5-lane OC (3-lane EB and 2-lane WB) on North Avenue would be required. The following Table are the LOS results.

Design Year	AM (PM) Peak Hour LOS			
2045	North/Orange	North/SB ramps	North/NB ramps	North/Cedar
	D (E)	B (B)	C (C)	C (D)

Because of the 2 phase signal at the crossover intersections, half cycle length would be required. Therefore, a longer cycle length with longer storage at the adjacent intersections (North/Cedar Avenues and North/Orange Avenues) would be required. A

signal modification would improve the intersection operations, such as protected permissive for left-turn lanes, or skipping side street phasing. Additional signals for some ramp locations may be needed. A more detail analysis will need to be conducted during PA&ED phase.

Alternative 5: Single Point Interchange (SPI), Type L-13 (Rejected Alternative)

This alternative would reconstruct the existing interchange ramps to a single point crossing by combining the two separate diamond ramp intersections into one large at-grade intersection. This would increase the intersection spacing on North Avenue between the interchange ramps and Cedar/Orange Avenues. This interchange would require a 7-lane North Avenue OC plus eastbound and westbound right-turn lanes to the on-ramps. Triple left-turn and right-turn lanes on the southbound off-ramps, and 3 eastbound through lanes at Cedar Avenue would be required. The following Table are the LOS results.

Design Year	AM (PM) Peak Hour LOS		
2045	North/Orange	North/NB ramps/SB ramps	North/Cedar
	C (D)	C (C)	C (E)

A back to back left-turn lane on North Avenue between the intersections was analyzed. Queuing on the eastbound left-turn to Cedar and westbound left-turn to Orange may occur. This would need a further signal timing analysis if it is selected. (Rejected Alternative, See Alternative Section).

Accident Analysis

Route 99

The accident history for the highway segment for the most recent three-year study period excluding the ramp accidents (10/1/2010 to 9/30/2013) from PM 16.625 to 17.825, as shown on Table B, indicates that the Actual Fatal, Fatal plus Injury, and Total accident rates are lower than the Statewide Average Fatal, Fatal plus Injury, and Total accident rates for similar roadway with comparable traffic volumes for the northbound Route 99. On the southbound Route 99, the Actual Fatal accident rate is higher than the Statewide Average Fatal accident rate. However, the Actual Fatal plus injury and Total accident rates are lower than the Statewide Average Fatal plus Injury and Total accident rates. The accident rates in accidents per million-vehicle miles (MVM) are as follows:

Highway Segment	Actual (MVM)			Average (MVM)		
	Fatal	F+I	Total	Fatal	F+I	Total
NB Route 99 (PM 16.625/17.825)	0.000	0.17	0.53	0.004	0.20	0.61
SB Route 99 (PM 16.625/17.825)	0.017	0.19	0.51	0.004	0.20	0.61

North and Cedar Avenue Ramps:

The accident history for the same three-year study period for the following Route 99 ramps at North and Cedar Avenues indicates that the Actual Fatal, Fatal plus Injury, and Total accident rates are lower than the Statewide Average Fatal, Fatal plus Injury, and Total accident rates for similar roadway with comparable traffic volumes. The accident rates in accidents per million-vehicles (MV) are:

Route 99 Ramps		Actual			Average		
	PM	Fatal	F + I	Total	Fatal	F + I	Total
SB on-ramp from Cedar Ave	16.698	0.000	0.00	0.41	0.002	0.22	0.63
NB off-ramp to Cedar Ave	16.774	0.000	0.00	0.00	0.003	0.35	1.01
NB on-ramp from North Ave	17.435	0.000	0.00	0.27	0.002	0.22	0.63
SB off-ramp to North Ave	17.479	0.000	0.00	0.55	0.003	0.35	1.01

A majority of the Route 99 accidents were rear-ends. Most of Rear End accidents were related to the traffic congestion during evening commute hours and caused by driver errors. No accident patterns were found.

5. DEFICIENCIES

The existing ramp termini are one-way stop controlled and would not handle project traffic volumes for the design year. Currently the southbound off-ramp operates at LOS"D/E" for peak morning traffic. All four existing intersection termini locations for North Avenue, and Cedar Avenue, are skewed at a less than standard intersection angle. The existing overcrossings at North Avenue and Cedar Avenue do not meet current sight distance standards.

6. CORRIDOR AND SYSTEM COORDINATION

The Ultimate Transportation Concept in the Route 99 Transportation Concept Report (TCR) is an 8-lane freeway with northbound and southbound auxiliary lanes. The proposed alternatives will be able to accommodate the ultimate facility at this interchange location.

7. ALTERNATIVES

Listed below are the four build alternatives. All of the alternatives will require a new bridge structure over Route 99 at North Avenue.

Alternative 1 would construct a Type L-9 Standard Partial Cloverleaf Interchange at the North Avenue Overcrossing at Route 99. This alternative would construct two hook on-ramps and standard off and on ramps at the ramp termini. Due to the operational constraints, the Cedar Avenue and North Avenue intersection would need to be relocated approximately 300 feet east of its existing location. This interchange would

require an additional significant amount of right of way at the northeast and southwest quadrants to accommodate the standard on-ramps.

Alternative 2 would construct a Type L-9 Modified Partial Cloverleaf Interchange at the North Avenue Overcrossing at Route 99. This alternative would construct two hook on-ramps and northbound and southbound on-ramps. The on-ramps would be modified to slip ramps which would require no additional right of way on the northeast quadrant and less right of way on the southwest quadrant.

Alternative 3 would construct a Type L-2 Modified Spread Diamond Interchange at the North Avenue Overcrossing at Route 99. This alternative would reconstruct the existing interchange to a Modified spread diamond Type L-2 interchange at North Avenue and remove the existing ramps at Cedar Avenue. This modified Type L-2 interchange would not provide spaces for the future loop on-ramps. However, the left-turn storage on the OC would be longer than that in the tight diamond interchange. The footprint for this alternative would have similar impacts to Alternative 1. However, the northbound ramp terminal intersection would have sufficient spacing from the existing Cedar Avenue and North Avenue intersection for traffic operation.

Alternative 4 would construct a Diverging Diamond Interchange (DDI) at the North Avenue overcrossing at Route 99. This alternative would construct a five-lane overcrossing. The overcrossing would also have room for shoulders and pedestrian traffic. The footprint for this alternative would have similar impacts to Alternative 2. This alternative would not need hooks ramps. However due to the limited space for the right turn on ramp traffic, retaining walls would need to be incorporated. A retaining wall would also need to be placed in the northeast corner of the interchange area to minimize right of way impacts. It is anticipated that this alternative would require a longer phase time for the adjacent signalized intersections for Cedar Avenue and Orange Avenue. Therefore longer right turns and left turns will be needed along North Avenue to accommodate anticipated storage needs at these locations. A further signal operational analysis will be necessary during the project report phase. Traffic signal operations for DDIs are unique compared to conventional signals.

Rejected Alternative

Alternative 5 would construct a Type L-13 Single-Point interchange at the North Avenue overcrossing at Route 99. This alternative was rejected due the excessive cost. Due to the total number of lanes (12 lanes) required to accommodate left turn movements, northbound and southbound ramp movements, the overcrossing bridge structure needed would need to be more than double the width of the four other viable alternatives. Also, this alternative would have the added expense of the retaining walls similar to Alternative 4. Therefore this alternative was determined to be non-viable.

Listed on the next page is a table outlining the exceptions needed and categorizes the risk level of approval as discussed with the Design Office Chief.

Design Standards Risk Assessment			
Alternative	Design Standard from Highway Design Manual Tables 82.1A & 82.1B	Probability of Design Exception Approval (None, Low, Medium, High,)	Justification for Probability Rating
1	SB off ramp Auxliary Lane HDM 504.3(6)	Low	Specific traffic volumes are needed during PA&ED. Future Traffic Volumes are greater than 900 vph.
2	SB off ramp Auxliary Lane HDM 504.3(6)	Low	Specific traffic volumes are needed during PA&ED. Future Traffic Volumes are greater than 900 vph
3	SB off ramp Auxliary Lane HDM 504.3(6)	Low	Specific traffic volumes are needed during PA&ED. Future Traffic Volumes are greater than 900 vph
4	SB off ramp Auxliary Lane HDM 504.3(6)	Low	Specific traffic volumes are needed during PA&ED. Future Traffic Volumes are greater than 900 vph

8. RIGHT-OF-WAY

A right of way data sheet for each viable alternative is included as Attachment "F". Refer to the data sheet to see a list of assumptions and risks involved with the right of way determination.

Utilities:

A majority of the utilities are adjacent to North Avenue on the south side of the roadway. As described in the Alternative section of this report a new overcrossing for North Avenue will require the relocation of these utilities. It is noted that there is a 16-inch high pressure gas main imbedded in a steel casing and a Fresno City 42-inch sewer line which are located on the southside of North Avenue that will need to be relocated and or additionally protected in the area where structures will be needed. This also may be an added cost to the bridge structure if avoidance measures are needed for the structural design. These preliminary estimates for this project do not take into account the additional costs that may result for such a special design.

Railroad:

There is a Southern Pacific rail line that runs parallel to Cedar Avenue. There are no impacts on the railroad associated with this project, however a Railroad Clearance letter will be required.

High Speed Rail:

The High Speed Rail Facility is currently being constructed east of the proposed North Avenue interchange. The facility traverses in a south westerly direction crossing North Avenue, Cedar Avenue and Route 99 on elevated bents. Special consideration for barrier or end treatment protection will be needed for North Avenue and Cedar Avenue. This will require on-going coordination with the High Speed Rail Authority to insure treatment measures are addressed.

9. STAKEHOLDER INVOLVEMENT

This project is located in the City of Fresno (City). This report is being financed through a cooperative agreement between Caltrans and the Fresno County Transportation Authority. The City is the project sponsor and is in full support of the exploration of the build alternatives.

10. ENVIRONMENTAL COMPLIANCE

The anticipated environmental document for the proposed project is a Mitigated Negative Declaration/Finding of No Significant Impact. This document level has been selected based on the impacts to businesses, hazardous waste, and aesthetics which are anticipated to be mitigated below the threshold of significance as defined by CEQA. Caltrans would act as the lead agency in the preparation of a joint NEPA/CEQA (National Environmental Policy Act/California Environmental Quality Act) environmental document. Caltrans will serve as NEPA lead agency under its assumption of responsibility pursuant to 23 U.S. Code 327. The estimated time to obtain the environmental approval is 36 months from the start of the environmental studies.

It is anticipated that multiple environmental studies and reports will be required for this project including (but not limited to): air quality study, noise study, preliminary site assessment, paleontological identification report, and visual impact assessment. Paleontological monitoring is expected as a requirement of the project along with preconstruction surveys for nesting birds.

In Attachment D the preliminary environmental analysis report, the environmental schedule was based on the assumption the process would begin in January 2017. However, due to funding constraints the process is not scheduled to begin until September 2023.

11. FUNDING

It is anticipated this project will be funded using a combination of STIP and local Measure C funds. The project is currently programmed in the Measure C expenditure Plan with funding available for PA&ED phase in the 23/24 fiscal year. The estimate

for capital outlay support is for planning purposes only and will need to be updated prior to programming the PA&ED in the 23/24 fiscal year.

Capital Outlay Project Estimate

	Description	Total Funds	
		Construction	Right-of-Way
Alternative 1	Type L-9 Standard Partial Cloverleaf	38,026,000	26,783,023
Alternative 2	Type L-9 Modified Partial Cloverleaf	35,919,000	17,829,505
Alternative 3	Type L-2 Modified Spread Diamond	38,123,000	18,209,676
Alternative 4	Diverging Diamond (DDI)	35,596,000	17,210,000

The level of detail available to develop these capital outlay project estimates is only accurate to within the above ranges and is useful for long-range planning purposes only. The capital outlay project estimates should not be used to program or commit State-programmed capital outlay funds.

Capital Outlay Support Estimate

Capital outlay support estimate for programming PA&ED in a future STIP for this project is \$2,000,000.

12. DELIVERY SCHEDULE

Project Milestones		Scheduled Delivery Date (Month/Day/Year)
PROGRAM PROJECT	M015	06/01/23
BEGIN ENVIRONMENTAL	M020	09/01/23
CIRCULATE DED EXTERNALLY	M120	06/01/26
PA & ED	M200	09/01/26

The anticipated funding fiscal year for construction is 2029/30.

13. RISKS

As stated in the the alternative section of this report current projected traffic volumes require an advisory design exception for the accommodation of right of way for a future auxiliary lane for the Southbound off-ramp to North Avenue which has a low probability of approval. However traffic volumes will be updated during Project Approval and Environmental Document phase which could eliminate the need for the advisory exception.

14. EXTERNAL AGENCY COORDINATIONFederal Highway Administration (FHWA)

This project is considered to be an Assigned Project in accordance with the current FHWA and Department of Transportation (Caltrans) Joint Stewardship and Oversight Agreement.

The project requires the Following coordinationThe City of Fresno

Possible relocation and or protection of existing sewer main.

High Speed Rail Authority

Special consideration of barrier or end treatment protection will be needed for North Avenue and Cedar Avenue

Fresno Irrigation District (FID)

An existing FID water canal will need to be relocated. This will require coordination with the agency through a cooperative agreement.

Fresno Metropolitan Flood Control District (FMFCD)

Possible protection of existing storm drain crossing.

15. PROJECT REVIEWS

Field Review		Date 07/01/15
Headquarters Project Delivery Coordinator	Paul Gennaro	Date 10/20/16
Project Manager	Neil Bretz	Date 10/10/16
District Safety Review	Safety Review Committee	Date 10/25/16
Constructability Review	PDT	Date 10/28/16

16. PROJECT PERSONNEL

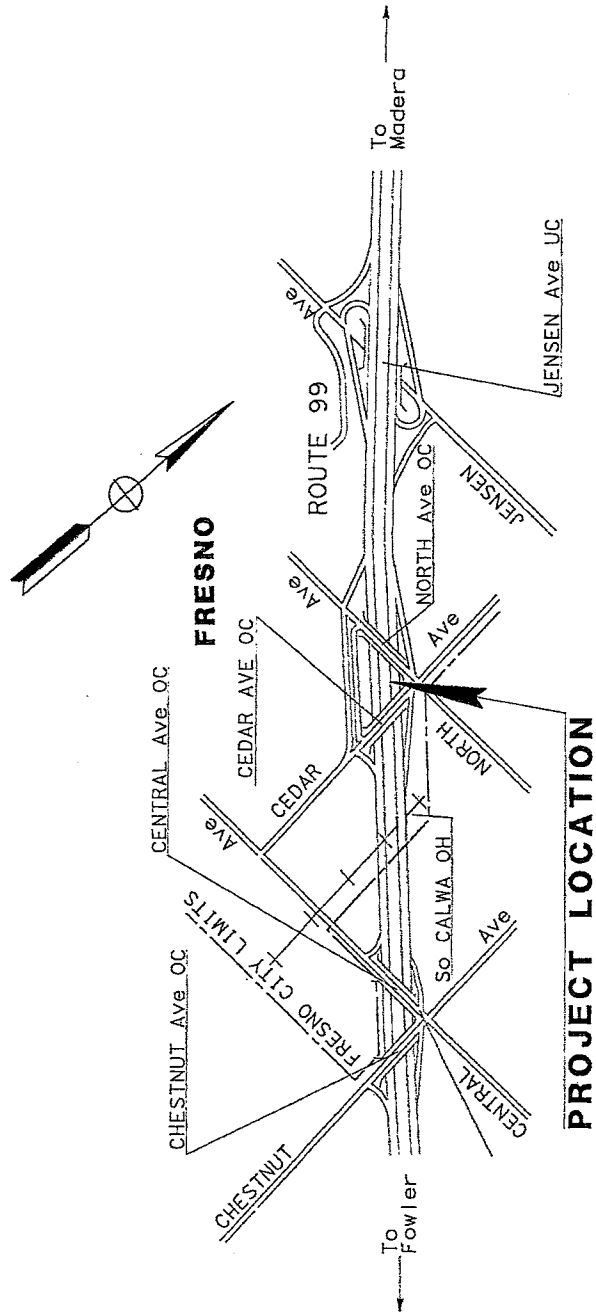
Contact	Function	Phone No.
Neil Bretz	Project Manager	(559) 243-3465
Albert Lee	Traffic Operations Chief	(559) 488-4111
Arthur Ramirez	Design Engineer	(559) 243-3813
Ellery Ellis	Project Engineer	(559) 243-3589
Richard Putler	Environmental Analysis Branch Chief	(559) 445-5286

17. ATTACHMENTS

- A. Location map (1)
- B. Alternative Layouts
- C. Estimate Alternative 1, 2, 3, and 4
- D. PEAR
- E. Right of Way Data Sheet
- F. Traffic Management Plan
- G. Storm Water Data Report-signed cover sheet
- H. Risk Management Plan

ATTACHMENT

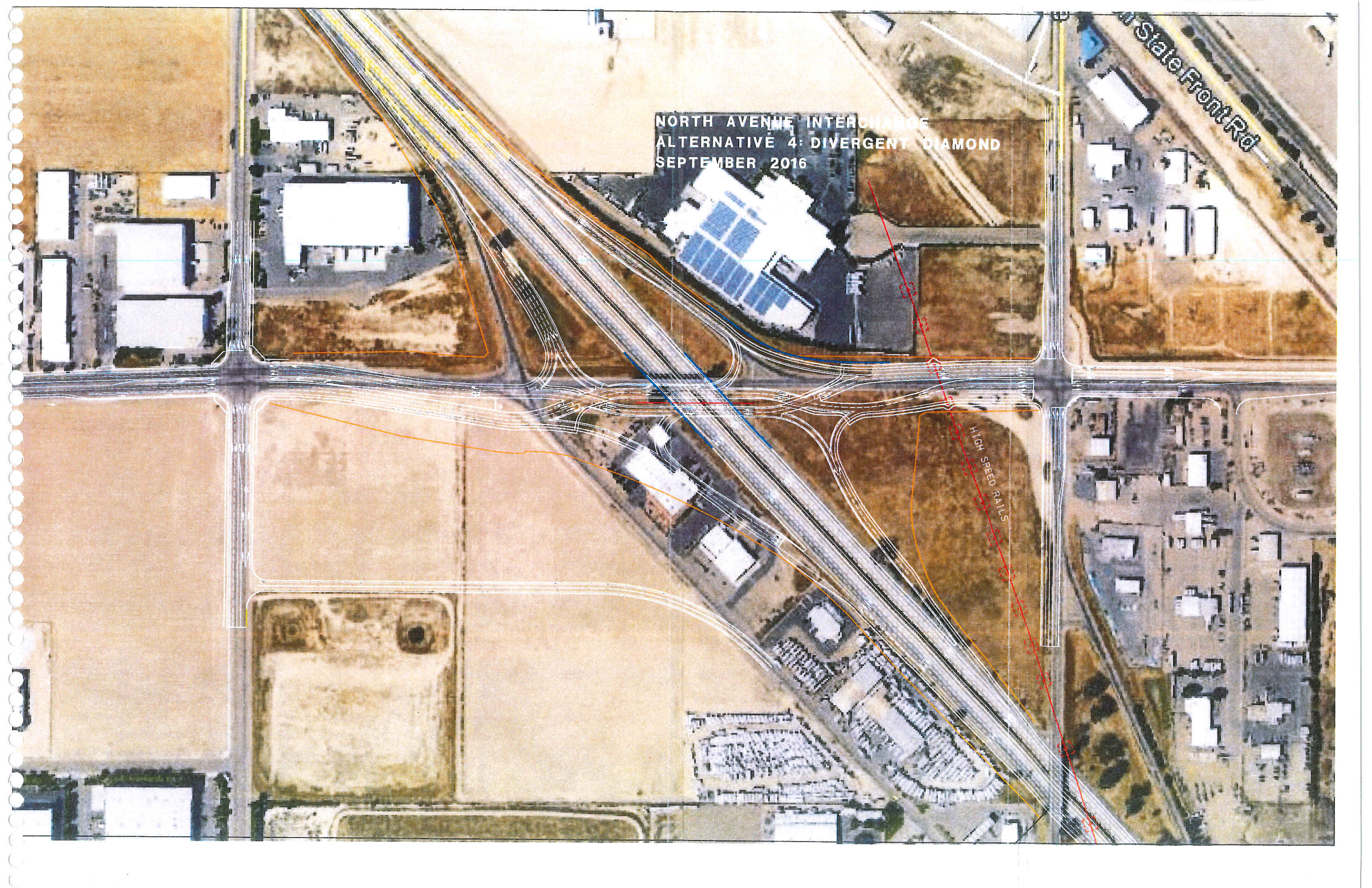
A



ATTACHMENT

B

NORTH AVENUE INTERCHANGE
ALTERNATIVE 4: DIVERGENT DIAMOND
SEPTEMBER 2016



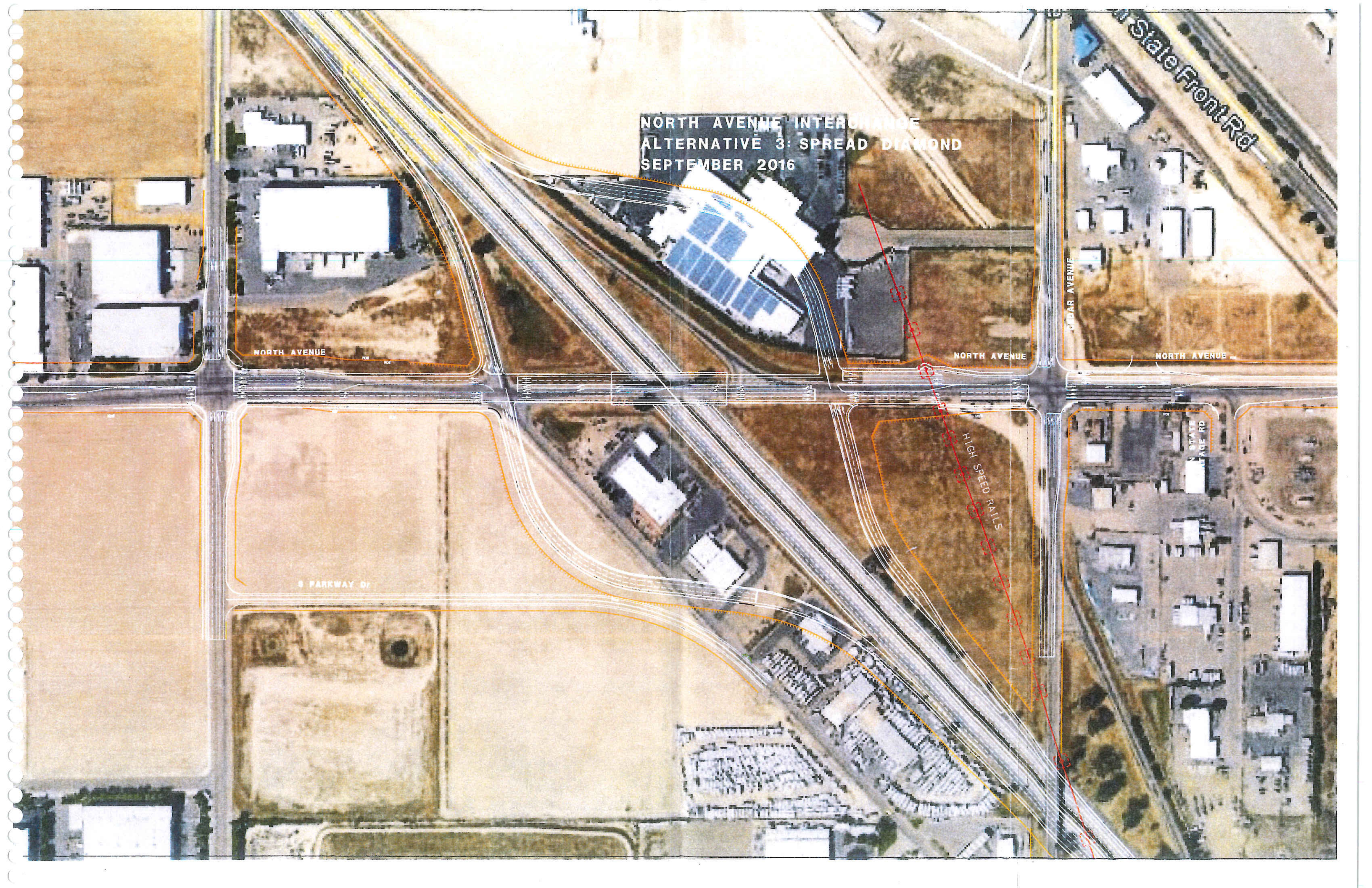
NORTH AVENUE INTERCHANGE
ALTERNATIVE 1: PARTIAL CLOVER LEAF
SEPTEMBER 2016



NORTH AVENUE INTERCHANGE
ALTERNATIVE 2:
PARTIAL CLOVER LEAF/SLIP RAMPS
AUGUST 20



NORTH AVENUE INTERCHANGE
ALTERNATIVE 3: SPREAD DIAMOND
SEPTEMBER 2016



ATTACHMENT

C

PROJECT REPORT COST ESTIMATE



Dist-Co-Rte: 06-Fre-99
PM: 16.6/17.6
EA: 06-0H240
Program Code: 20.10.201.315

PROJECT DESCRIPTION:

Limits: In Fresno County at Route 99 and North Avenue Interchange (PM 16.6/17.6)

Proposed
Improvement:
(Scope of Work)
Interchange (Type L-9)

Alternative: No. 1

SUMMARY OF PROJECT COST ESTIMATE

I. ROADWAY ITEMS	Sections 1 - 5	\$ 13,351,400
II. ROADSIDE ITEMS	Sections 6 - 7	\$ 2,363,750
III. ROADWAY ADDITIONS	Sections 8 - 10	\$ 5,310,000
TOTAL ROADWAY	Total of Sections 1 - 10 shown above	\$ 21,026,000
TOTAL STRUCTURES		\$ 17,000,000
	SUBTOTAL CONSTRUCTION COSTS	\$ 38,026,000
TOTAL RIGHT OF WAY ITEMS (Not Escalated)		\$ 26,783,000
	TOTAL PROJECT CAPITAL OUTLAY COSTS	\$ 64,809,000

Reviewed by
District Program Manager: _____
(Signature) (Date)

Approved by Project Manager: _____
(Signature) (Date)

Phone Number: _____

Form revised 8/21/07

PROJECT REPORT COST ESTIMATE



Dist-Co-Rte: 06-Fre-99

PM: 16.6/17.6

EA: 06-0H240

Program Code: 20.10.201.315

I. ROADWAY ITEMS

[illegible]

* Reference sketch showing typical pavement structural section elements of the roadway. Include (if available) T.I., R-Value and date when tests were performed.

PROJECT REPORT COST ESTIMATE



Dist-Co-Rte: 06-Fre-99

PM: 16.6/17.6

EA: 06-0H240

Program Code: 20.10.201.315

<u>Section 4 - Specialty Items</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Item Cost</u>	<u>Section Cost</u>
Retaining Walls	0		\$0	\$0	
Water pollution Control	1	LS	\$1,000,000	\$1,000,000	
Retaining Walls	0	LS	\$0	\$0	
Equipment/Animal Passes	0		\$0	\$0	
Highway Planting	0		\$0	\$0	
Replacement Planting	0		\$0	\$0	
Irrigation Modification	0		\$0	\$0	
Relocate Private Irrigation	0		\$0	\$0	
Erosion Control	1	LS	\$0	\$0	
Slope Protection	0		\$0	\$0	
Construction Site BMPs	1	LS	\$200,000	\$200,000	
Haz Materials Mitigation	0		\$0	\$0	
Environmental Mitigation	0		\$0	\$0	
Resident Engineer Office	1	LS	\$12,000	\$12,000	
Subtotal Specialty Items:					\$1,212,000

<u>Section 5 - Traffic Items</u>					
Construction Area Signs	1	LS	\$100,000	\$100,000	
Traffic Handling (Includes Detour)	1	LS	\$160,096	\$160,096	
Portable Changeable Message Sign	1	LS	\$40,000	\$40,000	
Roadside Signs	1	LS	\$775,561	\$775,561	
Pavement Delineation	1	LS	\$49,600	\$49,600	
Traffic Signal System	4	EA	\$250,000	\$1,000,000	
Ramp Metering System	4	EA	\$140,000	\$560,000	
CCTV System	2	EA	\$50,000	\$100,000	
Modify CMS System	2	EA	\$250,000	\$500,000	
Modify Highway Advisory Radio System	1	LS	\$50,000	\$50,000	
Traffic Count Station	6	EA	\$10,000	\$60,000	
Fiber Optic Communication Infrastructure	1	LS	\$300,000	\$300,000	
Highway Lighting Sytem	1	LS	\$300,000	\$300,000	
Remove Existing Electrical System	1	LS	\$50,000	\$50,000	
Fiber Optic System	0	LS	\$0	\$0	
Subtotal Traffic Items:					\$4,045,257

TOTAL ROADWAY ITEMS Sections 1 thru 5 \$13,351,412

PROJECT REPORT COST ESTIMATE



Dist-Co-Rte: 06-Fre-99

PM: 16.6/17.6

EA: 06-0H240

Program Code: 20.10.201.315

PROJECT REPORT COST ESTIMATE



Dist-Co-Rte: 06-Fre-99

PM: 16.6/17.6

EA: 06-0H240

Program Code: 20.10.201.315

II. ROADSIDE ITEMS

<u>Section 6 Planting and Irrigation</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Item Cost</u>	<u>Section Cost</u>
Highway Planting	30	ACRES	\$55,000	\$1,650,000	
Replacement Planting	1	LS	\$30,000	\$30,000	
Irrigation Crossover	560	EA	\$55	\$30,800	
Vegetation Control Treatment	0		\$0	\$0	
	0		\$0	\$0	
	0		\$0	\$0	
	0	LS	\$0	\$0	
	0		\$0	\$0	
	0	LS	\$0	\$0	
				\$0	
Subtotal Planting and Irrigation Section:					\$1,710,800

Section 7: Roadside Management and Safety Section

Vegetation Control Treatments	170	SQYD	\$135	\$22,950	
Replacement Planting	0	LS	\$30,000	\$0	
Pavement Beyond the Gore Area	6	EA	\$25,000	\$150,000	
Irrigation Crossovers	0	LF	\$55	\$0	
Errosion Control (Bonded Fiber Matrix)	30	ACRE	\$11,000	\$330,000	
Slope Protection	0	LS	\$0	\$0	
Side Slopes/Embankment Slopes	0	LS	\$0	\$0	
Maintenance Vehicle Pullouts	6	EA	\$25,000	\$150,000	
Off-freeway Access (gates, stairways, etc.)	0	LS	\$0	\$0	
Roadside Facilities (Vista Points, Transit, Park & Ride)	0	LS	\$0	\$0	
Relocating roadside facilities/features	0	LS	\$0	\$0	
	0	LS	\$0	\$0	
	0	LS	\$0	\$0	
	0	LS	\$0	\$0	
Subtotal Roadside Management and Safety Section:					\$652,950

PROJECT REPORT COST ESTIMATE



Dist-Co-Rte: 06-Fre-99

PM: 16.6/17.6

EA: 06-0H240

Program Code: 20.10.201.315

TOTAL ROADSIDE ITEMS Sections 6 thru 7 \$2,363,750

PROJECT REPORT COST ESTIMATE



Dist-Co-Rte: 06-Fre-99
 PM: 16.6/17.6
 EA: 06-0H240
 Program Code: 20.10.201.315

III. ROADWAY ADDITIONS

Section 8 - Minor Items

				<u>Item Cost</u>	<u>Section Cost</u>
	<u>\$15,715,162</u>	x	<u>0.10</u>	=	<u>\$1,571,516</u>
	(Subtotal Sections 1 thru 7)		(5 to 10%)		
				Minor Items:	<u>\$1,571,516</u>

Section 9 - Roadway Mobilization

	<u>\$5,632,146</u>	x	<u>0.05</u>	=	<u>\$281,607</u>
	(Subtotal Sections 1 thru 8)		(5%)		
				Roadway Mobilization:	<u>\$281,607</u>

Section 10 - Supplemental Work & Contingencies

Supplemental Work

	<u>\$17,286,679</u>	x	<u>0.05</u>	=	<u>\$864,334</u>
	(Subtotal Sections 1 thru 8)		(5%)		

Contingencies

	<u>\$17,286,679</u>	x	<u>0.15</u>	=	<u>\$2,593,002</u>
	(Subtotal Sections 1 thru 8)		(**%)		

Supplemental Work & Contingencies: \$3,457,336

TOTAL ROADWAY ADDITIONS Sections 8 thru 10: \$5,310,459

TOTAL ROADWAY: \$21,025,622
 (Subtotal Sections 1 thru 10)

Estimate Prepared

by: Andrew Un (HMA,PCC,AB) Phone: (559) 243-3811 05/08/15
 (Print or Type Name) (Date)

Estimate Checked

by: Ellery Ellis Phone: (559) 243-3811 10/06/16
 (Print or Type Name) (Date)

**Use appropriate percentage per PDPM, Part 3 Chapter 20.

<http://www.dot.ca.gov/hq/oprd/pdpm/pdpm.htm> - pdpm

PROJECT REPORT COST ESTIMATE



Dist-Co-Rte: 06-Fre-99

PM: 16.6/17.6

EA: 06-0H240

Program Code: 20.10.201.315

II. STRUCTURE ITEMS

	STRUCTURE		
	No. 1	No. 2	No. 3
Bridge Name	_____	_____	_____
Structure Type	_____	_____	_____
Width (out to out) - (ft)	<u>0</u>	<u>0</u>	<u>0</u>
Span Length - (ft)	<u>0</u>	<u>0</u>	<u>0</u>
Total Area - ft ²	<u>0</u>	<u>0</u>	<u>0</u>
Footing Type (pile/spread)	_____	_____	_____
Cost Per ft ² (incl. 10% mobilization & 25% contingencies)	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>
Total Cost for Structure	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>
Other	<u>\$17,000,000</u>	<u>\$0</u>	<u>\$0</u>

* Add additional structures as necessary

SUBTOTAL STRUCTURES ITEMS \$17,000,000

Railroad Related Costs (Not incl. in R/W Est) \$0

TOTAL STRUCTURES ITEMS \$17,000,000

COMMENTS:

Estimate Prepared

by:

Ellery Ellis

(Print or Type Name)

Phone: (559) 243-3589

10/06/16

(Date)

(If appropriate, attach additional pages as backup)

PROJECT REPORT COST ESTIMATE



Dist-Co-Rie: 06-Fre-99

PM: 16.6/17.6

EA: 06-0H240

Program Code: 20.10.201.315

III. RIGHT OF WAY ITEMS

	Current Values (Future Use)	Escalation Rates	Escalated Values*
Acquisition, including excess lands and damages to remainder(s) and Goodwill	\$26,783,023	0.0%	\$0
Utility Relocation (State share)	\$0	0.0%	\$0
Clearance/Demolition	\$0	0.0%	\$0
RAP	\$0	0.0%	\$0
Title and Escrow Fees	\$0	0.0%	\$0
Construction Contract Work	\$0	0.0%	\$0
	\$26,783,023		
TOTAL RIGHT OF WAY**			\$0

ESCALLATED VALUE*

Date to which Values are Escalated: 0/0/00

* Escalated to assumed year of advertising.

** Current total value for use on Sheet 1

Estimate Prepared

by:

Ellery Ellis

(Print or Type Name)

Phone: (559) 243-3589

10/06/16

(Date)

(If appropriate, attach additional pages and backup including Right of Way Data Sheet and Environmental Mitigation and Compliance Cost Estimate Sheet).

PROJECT REPORT COST ESTIMATE



Dist-Co-Rte: 06-Fre-99

PM: 16.6/17.6

EA: 06-0H240

Program Code: 20.10.201.315

PROJECT DESCRIPTION:

Limits: In Fresno County at Route 99 and North Avenue Interchange (PM 16.6/17.6)

Proposed Improvement:
(Scope of Work) Modified Interchange (Type L-9)

Alternative: No. 2

SUMMARY OF PROJECT COST ESTIMATE

I. ROADWAY ITEMS	Sections 1 - 5	\$ 11,755,600
II. ROADSIDE ITEMS	Sections 6 - 7	\$ 2,363,750
III. ROADWAY ADDITIONS	Sections 8 - 10	\$ 4,800,000
TOTAL ROADWAY	Total of Sections 1 - 10 shown above	\$ 18,919,000
TOTAL STRUCTURES		\$ 17,000,000
	SUBTOTAL CONSTRUCTION COSTS	\$ 35,919,000
TOTAL RIGHT OF WAY ITEMS (Not Escalated)		\$ 17,829,500
	TOTAL PROJECT CAPITAL OUTLAY COSTS	\$ 53,748,500

Reviewed by

District Program Manager:

(Signature)

(Date)

Approved by Project Manager:

(Signature)

(Date)

Phone Number:

Form revised 8/21/07

PROJECT REPORT COST ESTIMATE



Dist-Co-Rte: 06-Fre-99

PM: 16.6/17.6

EA: 06-0H240

Program Code: 20.10.201.315

I. ROADWAY ITEMS

<u>Section 1 - Earthwork</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Item Cost</u>	<u>Section Cost</u>
Roadway Excavation	<u>18,000</u>	<u>CY</u>	<u>\$16</u>	<u>\$256,000</u>	
Imported Borrow	<u>2,500</u>	<u>CY</u>	<u>\$20</u>	<u>\$50,000</u>	
Clearing & Grubbing	<u>1</u>	<u>LS</u>	<u>\$20,000</u>	<u>\$20,000</u>	
Develop Water Supply	<u>0</u>	<u>LS</u>	<u>\$0</u>	<u>\$0</u>	
				<u>\$0</u>	
				<u>\$0</u>	
				<u>\$0</u>	
				<u>\$0</u>	
			Subtotal Earthwork:		<u>\$326,000</u>
<u>Section 2 - Pavement Structural Section*</u>					
PCC Pvmnt <u>0.85 Depth</u>	<u>3,800</u>	<u>CY</u>	<u>\$250</u>	<u>\$950,000</u>	
PCC Pvmnt <u>Depth</u>	<u>0</u>	<u>CY</u>	<u>\$0</u>	<u>\$0</u>	
HMA	<u>29,844</u>	<u>Tons</u>	<u>\$75</u>	<u>\$2,238,300</u>	
Lean Concrete Base	<u>0</u>	<u>CY</u>	<u>\$0</u>	<u>\$0</u>	
Cement-Treated Base	<u>0</u>	<u>CY</u>	<u>\$0</u>	<u>\$0</u>	
Aggregate Base	<u>19,200</u>	<u>CY</u>	<u>\$100</u>	<u>\$1,920,000</u>	
Treated Permeable Base	<u>0</u>	<u>CY</u>	<u>\$0</u>	<u>\$0</u>	
Aggregate Subbase	<u>0</u>	<u>CY</u>	<u>\$0</u>	<u>\$0</u>	
Minor Concrete (PCC Curb,Gutter, Sidewalk)	<u>2,200</u>	<u>CY</u>	<u>\$370</u>	<u>\$814,000</u>	
Edge Drains	<u>0</u>	<u>FT</u>	<u>\$0</u>	<u>\$0</u>	
			<u>\$0</u>	<u>\$0</u>	
				<u>\$0</u>	
			Subtotal Structural Section:		<u>\$5,922,300</u>
<u>Section 3 - Drainage</u>					
Large Drainage Facilities	<u>0</u>		<u>\$0</u>	<u>\$0</u>	
Storm Drains	<u>1</u>	<u>ls</u>	<u>\$250,000</u>	<u>\$250,000</u>	
Pumping Plants	<u>0</u>		<u>\$0</u>	<u>\$0</u>	
Project Drainage (X-Drains, overside, etc.)	<u>0</u>		<u>\$0</u>	<u>\$0</u>	
CMP	<u>0</u>	<u>YD</u>	<u>\$0</u>	<u>\$0</u>	
RCP	<u>0</u>	<u>YD</u>	<u>\$0</u>	<u>\$0</u>	
			Subtotal Drainage:		\$250,000

* Reference sketch showing typical pavement structural section elements of the roadway. Include (if available) T.I., R-Value and date when tests were performed.

PROJECT REPORT COST ESTIMATE



Dist-Co-Rte: 06-Fre-99

PM: 16.6/17.6

EA: 06-0H240

Program Code: 20.10.201.315

<u>Section 4 - Specialty Items</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Item Cost</u>	<u>Section Cost</u>
Retaining Walls	0		\$0	\$0	
Water pollution Control	1	LS	\$1,000,000	\$1,000,000	
Retaining Walls	0	LS	\$0	\$0	
Equipment/Animal Passes	0		\$0	\$0	
Highway Planting	0		\$0	\$0	
Replacement Planting	0		\$0	\$0	
Irrigation Modification	0		\$0	\$0	
Relocate Private Irrigation	0		\$0	\$0	
Erosion Control	1	LS	\$0	\$0	
Slope Protection	0		\$0	\$0	
Construction Site BMPs	1	LS	\$200,000	\$200,000	
Haz Materials Mitigation	0		\$0	\$0	
Environmental Mitigation	0		\$0	\$0	
Resident Engineer Office	1	LS	\$12,000	\$12,000	
Subtotal Specialty Items:					\$1,212,000
<u>Section 5 - Traffic Items</u>					
Construction Area Signs	1	LS	\$100,000	\$100,000	
Traffic Handling (Includes Detour)	1	LS	\$160,096	\$160,096	
Portable Changeable Message Sign	1	LS	\$40,000	\$40,000	
Roadside Signs	1	LS	\$775,561	\$775,561	
Pavement Delineation	1	LS	\$49,600	\$49,600	
Traffic Signal System	4	EA	\$250,000	\$1,000,000	
Ramp Metering System	4	EA	\$140,000	\$560,000	
CCTV System	2	EA	\$50,000	\$100,000	
Modify CMS System	2	EA	\$250,000	\$500,000	
Modify Highway Advisory Radio System	1	LS	\$50,000	\$50,000	
Traffic Count Station	6	EA	\$10,000	\$60,000	
Fiber Optic Communication Infrastructure	1	LS	\$300,000	\$300,000	
Highway Lighting Sytem	1	LS	\$300,000	\$300,000	
Remove Existing Electrical System	1	LS	\$50,000	\$50,000	
Fiber Optic System	0	LS	\$0	\$0	
Subtotal Traffic Items:					\$4,045,257
TOTAL ROADWAY ITEMS Sections 1 thru 5					\$11,755,557

PROJECT REPORT COST ESTIMATE



Dist-Co-Rte: 06-Fre-99

PM: 16.6/17.6

EA: 06-0H240

Program Code: 20.10.201.315

PROJECT REPORT COST ESTIMATE



Dist-Co-Rte: 06-Fre-99

PM: 16.6/17.6

EA: 06-0H240

Program Code: 20.10.201.315

II. ROADSIDE ITEMS

<u>Section 6 Planting and Irrigation</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Item Cost</u>	<u>Section Cost</u>
Highway Planting	30	ACRES	\$55,000	\$1,650,000	
Replacement Planting	1	LS	\$30,000	\$30,000	
Irrigation Crossover	560	EA	\$55	\$30,800	
Vegetation Control Treatment	0		\$0	\$0	
	0		\$0	\$0	
	0		\$0	\$0	
	0	LS	\$0	\$0	
	0		\$0	\$0	
	0	LS	\$0	\$0	
				\$0	
Subtotal Planting and Irrigation Section:					\$1,710,800

Section 7: Roadside Management and Safety Section

Vegetation Control Treatments	170	SQYD	\$135	\$22,950	
Replacement Planting	0	LS	\$30,000	\$0	
Pavement Beyond the Gore Area	6	EA	\$25,000	\$150,000	
Irrigation Crossovers	0	LF	\$55	\$0	
Erosion Control (Bonded Fiber Matrix)	30	ACRE	\$11,000	\$330,000	
Slope Protection	0	LS	\$0	\$0	
Side Slopes/Embankment Slopes	0	LS	\$0	\$0	
Maintenance Vehicle Pullouts	6	EA	\$25,000	\$150,000	
Off-freeway Access (gates, stairways, etc.)	0	LS	\$0	\$0	
Roadside Facilities (Vista Points, Transit, Park & Ride)	0	LS	\$0	\$0	
Relocating roadside facilities/features	0	LS	\$0	\$0	
	0	LS	\$0	\$0	
	0	LS	\$0	\$0	
	0	LS	\$0	\$0	
Subtotal Roadside Management and Safety Section:					\$652,950

PROJECT REPORT COST ESTIMATE



Dist-Co-Rte: 06-Fre-99

PM: 16.6/17.6

EA: 06-0H240

Program Code: 20.10.201.315

TOTAL ROADSIDE ITEMS Sections 6 thru 7 \$2,363,750

PROJECT REPORT COST ESTIMATE



Dist-Co-Rte: 06-Fre-99

PM: 16.6/17.6

EA: 06-0H240

Program Code: 20.10.201.315

III. ROADWAY ADDITIONS

Section 8 - Minor Items

Item Cost

Section Cost

$$\begin{array}{rclclcl} & \$14,119,307 & \times & 0.10 & = & \$1,411,931 \\ \text{(Subtotal Sections 1 thru 7)} & & & \text{(5 to 10\%)} & & \end{array}$$

Minor Items: \$1,411,931

Section 9 - Roadway Mobilization

$$\begin{array}{rclclcl} & \$5,632,146 & \times & 0.05 & = & \$281,607 \\ \text{(Subtotal Sections 1 thru 8)} & & & \text{(5\%)} & & \end{array}$$

Roadway Mobilization: \$281,607

Section 10 - Supplemental Work & Contingencies

Supplemental Work

$$\begin{array}{rclclcl} & \$15,531,238 & \times & 0.05 & = & \$776,562 \\ \text{(Subtotal Sections 1 thru 8)} & & & \text{(5\%)} & & \end{array}$$

Contingencies

$$\begin{array}{rclclcl} & \$15,531,238 & \times & 0.15 & = & \$2,329,686 \\ \text{(Subtotal Sections 1 thru 8)} & & & \text{(**\%)} & & \end{array}$$

Supplemental Work & Contingencies: \$3,106,248

TOTAL ROADWAY ADDITIONS Sections 8 thru 10: \$4,799,786

TOTAL ROADWAY: \$18,919,093
(Subtotal Sections 1 thru 10)

Estimate Prepared
by:

Andrew Un (HMA,PCC,AB)
(Print or Type Name)

Phone: (559) 243-3811

05/08/15
(Date)

Estimate Checked
by:

Ellery Ellis
(Print or Type Name)

Phone: (559) 243-3811

10/06/16
(Date)

****Use appropriate percentage per PDPM, Part 3 Chapter 20.**

<http://www.dot.ca.gov/hq/oppd/pdpm/pdpm.htm> -pdpm

PROJECT REPORT COST ESTIMATE



Dist-Co-Rte: 06-Fre-99
PM: 16.6/17.6
EA: 06-0H240
Program Code: 20.10.201.315

II. STRUCTURE ITEMS

	STRUCTURE		
	No. 1	No. 2	No. 3
Bridge Name	_____	_____	_____
Structure Type	_____	_____	_____
Width (out to out) - (ft)	<u>0</u>	<u>0</u>	<u>0</u>
Span Length - (ft)	<u>0</u>	<u>0</u>	<u>0</u>
Total Area - ft ²	<u>0</u>	<u>0</u>	<u>0</u>
Footing Type (pile/spread)	_____	_____	_____
Cost Per ft ² (incl. 10% mobilization & 25% contingencies)	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>
Total Cost for Structure	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>
Other	<u>\$17,000,000</u>	<u>\$0</u>	<u>\$0</u>

* Add additional structures as necessary

SUBTOTAL STRUCTURES ITEMS \$17,000,000

Railroad Related Costs (Not incl. in R/W Est) \$0

TOTAL STRUCTURES ITEMS \$17,000,000

COMMENTS:

Estimate Prepared
by:

Ellery Ellis

(Print or Type Name)

Phone: (559) 243-3589

10/06/16

(Date)

(If appropriate, attach additional pages as backup)

PROJECT REPORT COST ESTIMATE



Dist-Co-Rte: 06-Fre-99

PM: 16.6/17.6

EA: 06-0H240

Program Code: 20.10.201.315

III. RIGHT OF WAY ITEMS

	Current Values (Future Use)	Escalation Rates	Escalated Values*
Acquisition, including excess lands and damages to remainder(s) and Goodwill	\$17,829,505	0.0%	\$0
Utility Relocation (State share)	\$0	0.0%	\$0
Clearance/Demolition	\$0	0.0%	\$0
RAP	\$0	0.0%	\$0
Title and Escrow Fees	\$0	0.0%	\$0
Construction Contract Work	\$0	0.0%	\$0
	\$17,829,505		
TOTAL RIGHT OF WAY**			\$0

ESCALLATED VALUE*

Date to which Values are Escalated: 0/0/00

* Escalated to assumed year of advertising.

** Current total value for use on Sheet 1

Estimate Prepared

by:

Ellery Ellis

(Print or Type Name)

Phone: (559) 243-3589

10/06/16

(Date)

(If appropriate, attach additional pages and backup including Right of Way Data Sheet and Environmental Mitigation and Compliance Cost Estimate Sheet).

PROJECT REPORT COST ESTIMATE



Dist-Co-Rte: 06-Fre-99
PM: 16.6/17.6
EA: 06-0H240
Program Code: 20.10.201.315

PROJECT DESCRIPTION:

Limits: In Fresno County at Route 99 and North Avenue Interchange (PM 16.6/17.6)

Proposed Improvement:
(Scope of Work) Modified Interchange (Type L-2)

Alternative: No. 3

SUMMARY OF PROJECT COST ESTIMATE

I. ROADWAY ITEMS	Sections 1 - 5	\$ 12,121,500
II. ROADSIDE ITEMS	Sections 6 - 7	\$ 2,363,750
III. ROADWAY ADDITIONS	Sections 8 - 10	\$ 4,917,000
TOTAL ROADWAY	Total of Sections 1 - 10 shown above	\$ 19,402,000
TOTAL STRUCTURES		\$ 18,720,980
	SUBTOTAL CONSTRUCTION COSTS	\$ 38,122,980
	TOTAL RIGHT OF WAY ITEMS (Not Escalated)	\$ 18,209,700
	TOTAL PROJECT CAPITAL OUTLAY COSTS	\$ 56,332,680

Reviewed by
District Program Manager: _____
(Signature) (Date)

Approved by Project Manager: _____
(Signature) (Date)

Phone Number: _____

Form revised 8/21/07

PROJECT REPORT COST ESTIMATE



Dist-Co-Rte: 06-Fre-99
 PM: 16.6/17.6
 EA: 06-0H240
 Program Code: 20.10.201.315

I. ROADWAY ITEMS

<u>Section 1 - Earthwork</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Item Cost</u>	<u>Section Cost</u>
Roadway Excavation	33,000	CY	\$16	\$528,000	
Imported Borrow	2,500	CY	\$20	\$50,000	
Clearing & Grubbing	1	LS	\$20,000	\$20,000	
Develop Water Supply	0	LS	\$0	\$0	
				\$0	
				\$0	
				\$0	
Subtotal Earthwork:					\$598,000
<u>Section 2 - Pavement Structural Section*</u>					
PCC Pvmnt 0.85 Depth	1,872	CY	\$250	\$468,000	
PCC Pvmnt Depth	0	CY	\$0	\$0	
HMA	31,750	Tons	\$75	\$2,381,250	
Lean Concrete Base	0	CY	\$0	\$0	
Cement-Treated Base	0	CY	\$0	\$0	
Aggregate Base	23,530	CY	\$100	\$2,353,000	
Treated Permeable Base	0	CY	\$0	\$0	
Aggregate Subbase	0	CY	\$0	\$0	
Minor Concrete (PCC Curb,Gutter, Sidewalk)	2,200	CY	\$370	\$814,000	
Edge Drains	0	FT	\$0	\$0	
			\$0	\$0	
				\$0	
Subtotal Structural Section:					\$6,016,250
<u>Section 3 - Drainage</u>					
Large Drainage Facilities	0		\$0	\$0	
Storm Drains	1	ls	\$250,000	\$250,000	
Pumping Plants	0		\$0	\$0	
Project Drainage	0		\$0	\$0	
(X-Drains, overside, etc.)					
CMP	0	YD	\$0	\$0	
RCP	0	YD	\$0	\$0	
Subtotal Drainage:					\$250,000

* Reference sketch showing typical pavement structural section elements of the roadway. Include (if available) T.I., R-Value and date when tests were performed.

PROJECT REPORT COST ESTIMATE



Dist-Co-Rte: 06-Fre-99

PM: 16.6/17.6

EA: 06-0H240

Program Code: 20.10.201.315

<u>Section 4 - Specialty Items</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Item Cost</u>	<u>Section Cost</u>
Retaining Walls	0		\$0	\$0	
Water pollution Control	1	LS	\$1,000,000	\$1,000,000	
Retaining Walls	0	LS	\$0	\$0	
Equipment/Animal Passes	0		\$0	\$0	
Highway Planting	0		\$0	\$0	
Replacement Planting	0		\$0	\$0	
Irrigation Modification	0		\$0	\$0	
Relocate Private Irrigation	0		\$0	\$0	
Erosion Control	1	LS	\$0	\$0	
Slope Protection	0		\$0	\$0	
Construction Site BMPs	1	LS	\$200,000	\$200,000	
Haz Materials Mitigation	0		\$0	\$0	
Environmental Mitigation	0		\$0	\$0	
Resident Engineer Office	1	LS	\$12,000	\$12,000	
Subtotal Specialty Items:					\$1,212,000
<u>Section 5 - Traffic Items</u>					
Construction Area Signs	1	LS	\$100,000	\$100,000	
Traffic Handling (Includes Detour)	1	LS	\$160,096	\$160,096	
Portable Changeable Message Sign	1	LS	\$40,000	\$40,000	
Roadside Signs	1	LS	\$775,561	\$775,561	
Pavement Delineation	1	LS	\$49,600	\$49,600	
Traffic Signal System	4	EA	\$250,000	\$1,000,000	
Ramp Metering System	4	EA	\$140,000	\$560,000	
CCTV System	2	EA	\$50,000	\$100,000	
Modify CMS System	2	EA	\$250,000	\$500,000	
Modify Highway Advisory Radio System	1	LS	\$50,000	\$50,000	
Traffic Count Station	6	EA	\$10,000	\$60,000	
Fiber Optic Communication Infrastructure	1	LS	\$300,000	\$300,000	
Highway Lighting Sytem	1	LS	\$300,000	\$300,000	
Remove Existing Electrical System	1	LS	\$50,000	\$50,000	
Fiber Optic System	0	LS	\$0	\$0	
Subtotal Traffic Items:					\$4,045,257

TOTAL ROADWAY ITEMS Sections 1 thru 5 \$12,121,507

PROJECT REPORT COST ESTIMATE



Dist-Co-Rte: 06-Fre-99

PM: 16.6/17.6

EA: 06-0H240

Program Code: 20.10.201.315

PROJECT REPORT COST ESTIMATE



Dist-Co-Rte: 06-Fre-99

PM: 16.6/17.6

EA: 06-0H240

Program Code: 20.10.201.315

II. ROADSIDE ITEMS

<u>Section 6 Planting and Irrigation</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Item Cost</u>	<u>Section Cost</u>
Highway Planting	30	ACRES	\$55,000	\$1,650,000	
Replacement Planting	1	LS	\$30,000	\$30,000	
Irrigation Crossover	560	EA	\$55	\$30,800	
Vegetation Control Treatment	0		\$0	\$0	
	0		\$0	\$0	
	0		\$0	\$0	
	0	LS	\$0	\$0	
	0		\$0	\$0	
	0	LS	\$0	\$0	
				\$0	
Subtotal Planting and Irrigation Section:					\$1,710,800

Section 7: Roadside Management and Safety Section

Vegetation Control Treatments	170	SQYD	\$135	\$22,950	
Replacement Planting	0	LS	\$30,000	\$0	
Pavement Beyond the Gore Area	6	EA	\$25,000	\$150,000	
Irrigation Crossovers	0	LF	\$55	\$0	
Errrosion Control (Bonded Fiber Matrix)	30	ACRE	\$11,000	\$330,000	
Slope Protection	0	LS	\$0	\$0	
Side Slopes/Embankment Slopes	0	LS	\$0	\$0	
Maintenance Vehicle Pullouts	6	EA	\$25,000	\$150,000	
Off-freeway Access (gates, stairways, etc.)	0	LS	\$0	\$0	
Roadside Facilities (Vista Points, Transit, Park & Ride)	0	LS	\$0	\$0	
Relocating roadside facilities/features	0	LS	\$0	\$0	
	0	LS	\$0	\$0	
	0	LS	\$0	\$0	
	0	LS	\$0	\$0	
Subtotal Roadside Management and Safety Section:					\$652,950

PROJECT REPORT COST ESTIMATE



Dist-Co-Rte: 06-Fre-99

PM: 16.6/17.6

EA: 06-0H240

Program Code: 20.10.201.315

TOTAL ROADSIDE ITEMS Sections 6 thru 7 \$2,363,750

PROJECT REPORT COST ESTIMATE



Dist-Co-Rte: 06-Fre-99
PM: 16.6/17.6
EA: 06-0H240
Program Code: 20.10.201.315

III. ROADWAY ADDITIONS

Section 8 - Minor Items

				<u>Item Cost</u>	<u>Section Cost</u>
	<u>\$14,485,257</u>	x	<u>0.10</u>	=	<u>\$1,448,526</u>
	(Subtotal Sections 1 thru 7)		(5 to 10%)		

Minor Items: \$1,448,526

Section 9 - Roadway Mobilization

	<u>\$5,632,146</u>	x	<u>0.05</u>	=	<u>\$281,607</u>
	(Subtotal Sections 1 thru 8)		(5%)		

Roadway Mobilization: \$281,607

Section 10 - Supplemental Work & Contingencies

Supplemental Work

	<u>\$15,933,783</u>	x	<u>0.05</u>	=	<u>\$796,689</u>
	(Subtotal Sections 1 thru 8)		(5%)		

Contingencies

	<u>\$15,933,783</u>	x	<u>0.15</u>	=	<u>\$2,390,067</u>
	(Subtotal Sections 1 thru 8)		(**%)		

Supplemental Work & Contingencies: \$3,186,757

TOTAL ROADWAY ADDITIONS Sections 8 thru 10: \$4,916,890

TOTAL ROADWAY: \$19,402,147
(Subtotal Sections 1 thru 10)

Estimate Prepared
by:

Andrew Un (HMA,PCC,AB)
(Print or Type Name)

Phone: (559) 243-3811

05/08/15
(Date)

Estimate Checked
by:

Ellery Ellis
(Print or Type Name)

Phone: (559) 243-3811

10/06/16
(Date)

****Use appropriate percentage per PDPM, Part 3 Chapter 20.**

<http://www.dot.ca.gov/hq/oppd/pdpm/pdpm.htm> -pdpm

PROJECT REPORT COST ESTIMATE



Dist-Co-Rte: 06-Fre-99

PM: 16.6/17.6

EA: 06-0H240

Program Code: 20.10.201.315

II. STRUCTURE ITEMS

	STRUCTURE		
	No. 1	No. 2	No. 3
Bridge Name	_____	_____	_____
Structure Type	_____	_____	_____
Width (out to out) - (ft)	<u>0</u>	<u>0</u>	<u>0</u>
Span Length - (ft)	<u>0</u>	<u>0</u>	<u>0</u>
Total Area - ft ²	<u>0</u>	<u>0</u>	<u>0</u>
Footing Type (pile/spread)	_____	_____	_____
Cost Per ft ² (incl. 10% mobilization & 25% contingencies)	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>
Total Cost for Structure	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>
Other	<u>\$18,720,980</u>	<u>\$0</u>	<u>\$0</u>

* Add additional structures as necessary

SUBTOTAL STRUCTURES ITEMS \$18,720,980

Railroad Related Costs (Not incl. in R/W Est) \$0

TOTAL STRUCTURES ITEMS \$18,720,980

COMMENTS:

Estimate Prepared
by:

Ellery Ellis

(Print or Type Name)

Phone: (559) 243-3589

10/06/16

(Date)

(If appropriate, attach additional pages as backup)

PROJECT REPORT COST ESTIMATE



Dist-Co-Rte: 06-Fre-99

PM: 16.6/17.6

EA: 06-0H240

Program Code: 20.10.201.315

III. RIGHT OF WAY ITEMS

	Current Values (Future Use)	Escalation Rates	Escalated Values*
Acquisition, including excess lands and damages to remainder(s) and Goodwill	\$28,122,174	0.0%	\$0
Utility Relocation (State share)	\$0	0.0%	\$0
Clearance/Demolition	\$0	0.0%	\$0
RAP	\$0	0.0%	\$0
Title and Escrow Fees	\$0	0.0%	\$0
Construction Contract Work	\$0	0.0%	\$0
	\$18,209,676		
TOTAL RIGHT OF WAY**			\$0

ESCALLATED VALUE*

Date to which Values are Escalated: 0/0/00

* Escalated to assumed year of advertising.

** Current total value for use on Sheet 1

Estimate Prepared

by:

Ellery Ellis

(Print or Type Name)

Phone: (559) 243-3589

10/06/16

(Date)

(If appropriate, attach additional pages and backup including Right of Way Data Sheet and Environmental Mitigation and Compliance Cost Estimate Sheet).

PROJECT REPORT COST ESTIMATE



Dist-Co-Rie: 06-Fre-99

PM. 16.6/17.6

EA: 06-0H240

Program Code: 20.10.201.315

PROJECT DESCRIPTION:

Limits: In Fresno County at Route 99 and North Avenue Interchange (PM 16.6/17.6)

Proposed
Improvement:
(Scope of Work)

Diverging Diamond Interchange (DDI)

Alternative: No. 4

SUMMARY OF PROJECT COST ESTIMATE

I. ROADWAY ITEMS	Sections 1 - 5	\$ 14,541,500
II. ROADSIDE ITEMS	Sections 6 - 7	\$ 2,363,750
III. ROADWAY ADDITIONS	Sections 8 - 10	\$ 5,691,000
TOTAL ROADWAY	Total of Sections 1 - 10 shown above	\$ 22,596,000
TOTAL STRUCTURES		\$ 13,000,000
	SUBTOTAL CONSTRUCTION COSTS	\$ 35,596,000
TOTAL RIGHT OF WAY ITEMS (Not Escalated)		\$ 17,210,000
	TOTAL PROJECT CAPITAL OUTLAY COSTS	\$ 52,806,000

Reviewed by

District Program Manager:

(Signature)

(Date)

Approved by Project Manager:

(Signature)

(Date)

Phone Number:

Form revised 8/21/07

PROJECT REPORT COST ESTIMATE



Dist-Co-Rte. 06-Fre-99

PIM: 16.6/17.6

EA: 06-0H240

Program Code: 20.10.201.315

I. ROADWAY ITEMS

<u>Section 1 - Earthwork</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Item Cost</u>	<u>Section Cost</u>
Roadway Excavation	33,000	CY	\$16	<u>\$528,000</u>	
Imported Borrow	2,500	CY	\$20	<u>\$50,000</u>	
Clearing & Grubbing	1	LS	\$20,000	<u>\$20,000</u>	
Develop Water Supply	0	LS	\$0	<u>\$0</u>	
				<u>\$0</u>	
				<u>\$0</u>	
				<u>\$0</u>	
				<u>\$0</u>	
				<u>\$0</u>	
			Subtotal Earthwork:		\$598,000

Section 2 - Pavement Structural Section*

PCC Pvmnt	0.85 Depth	1,872	CY	\$250	\$468,000
PCC Pvmnt	Depth	0	CY	\$0	\$0
HMA		29,844	Tons	\$75	\$2,238,300
Lean Concrete Base		0	CY	\$0	\$0
Cement-Treated Base		0	CY	\$0	\$0
Aggregate Base		19,159	CY	\$100	\$1,915,900
Treated Permeable Base		0	CY	\$0	\$0
Aggregate Subbase		0	CY	\$0	\$0
Minor Concrete (PCC Curb, Gutter, Sidewalk)		2,200	CY	\$370	\$814,000
Edge Drains		0	FT	\$0	\$0
				\$0	\$0
					\$0
Subtotal Structural Section:					\$5,436,200

Section 3 - Drainage

Large Drainage Facilities	0		\$0	<u>\$0</u>
Storm Drains	1	ls	\$250,000	<u>\$250,000</u>
Pumping Plants	0		\$0	<u>\$0</u>
Project Drainage (X-Drains, overside, etc.)	0		\$0	<u>\$0</u>
CMP	0	YD	\$0	<u>\$0</u>
RCP	0	YD	\$0	<u>\$0</u>
			Subtotal Drainage:	\$250,000

* Reference sketch showing typical pavement structural section elements of the roadway. Include (if available) T.I., R-Value and date when tests were performed.

PROJECT REPORT COST ESTIMATE



Dist-Co-Rte: 06-Fre-99

PM: 16.6/17.6

EA: 06-0H240

Program Code: 20.10.201.315

<u>Section 4 - Specialty Items</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Item Cost</u>	<u>Section Cost</u>
Retaining Walls	1		\$3,000,000	\$3,000,000	
Water pollution Control	1	LS	\$1,000,000	\$1,000,000	
Retaining Walls	0	LS	\$0	\$0	
Equipment/Animal Passes	0		\$0	\$0	
Highway Planting	0		\$0	\$0	
Replacement Planting	0		\$0	\$0	
Irrigation Modification	0		\$0	\$0	
Relocate Private Irrigation	0		\$0	\$0	
Erosion Control	1	LS	\$0	\$0	
Slope Protection	0		\$0	\$0	
Construction Site BMPs	1	LS	\$200,000	\$200,000	
Haz Materials Mitigation	0		\$0	\$0	
Environmental Mitigation	0		\$0	\$0	
Resident Engineer Office	1	LS	\$12,000	\$12,000	
Subtotal Specialty Items:					\$4,212,000

Section 5 - Traffic Items

Construction Area Signs	1	LS	\$100,000	\$100,000	
Traffic Handling (Includes Detour)	1	LS	\$160,096	\$160,096	
Portable Changeable Message Sign	1	LS	\$40,000	\$40,000	
Roadside Signs	1	LS	\$775,561	\$775,561	
Pavement Delineation	1	LS	\$49,600	\$49,600	
Traffic Signal System	4	EA	\$250,000	\$1,000,000	
Ramp Metering System	4	EA	\$140,000	\$560,000	
CCTV System	2	EA	\$50,000	\$100,000	
Modify CMS System	2	EA	\$250,000	\$500,000	
Modify Highway Advisory Radio System	1	LS	\$50,000	\$50,000	
Traffic Count Station	6	EA	\$10,000	\$60,000	
Fiber Optic Communication Infrastructure	1	LS	\$300,000	\$300,000	
Highway Lighting Sytem	1	LS	\$300,000	\$300,000	
Remove Existing Electrical System	1	LS	\$50,000	\$50,000	
Fiber Optic System	0	LS	\$0	\$0	
Subtotal Traffic Items:					\$4,045,257

TOTAL ROADWAY ITEMS Sections 1 thru 5 \$14,541,457

PROJECT REPORT COST ESTIMATE



Dist-Co-Rte: 06-Fre-99

PM: 16.6/17.6

EA: 06-0H240

Program Code: 20.10.201.315

PROJECT REPORT COST ESTIMATE



Dist-Co-Rte: 06-Fre-99

PM: 16.6/17.6

EA: 06-0H240

Program Code: 20.10.201.315

II. ROADSIDE ITEMS

<u>Section 6 Planting and Irrigation</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Item Cost</u>	<u>Section Cost</u>
Highway Planting	30	ACRES	\$55,000	\$1,650,000	
Replacement Planting	1	LS	\$30,000	\$30,000	
Irrigation Crossover	560	EA	\$55	\$30,800	
Vegetation Control Treatment	0		\$0	\$0	
	0		\$0	\$0	
	0		\$0	\$0	
	0	LS	\$0	\$0	
	0		\$0	\$0	
	0	LS	\$0	\$0	
				\$0	
Subtotal Planting and Irrigation Section:					\$1,710,800

Section 7: Roadside Management and Safety Section

Vegetation Control Treatments	170	SQYD	\$135	\$22,950	
Replacement Planting	0	LS	\$30,000	\$0	
Pavement Beyond the Gore Area	6	EA	\$25,000	\$150,000	
Irrigation Crossovers	0	LF	\$55	\$0	
Errosion Control (Bonded Fiber Matrix)	30	ACRE	\$11,000	\$330,000	
Slope Protection	0	LS	\$0	\$0	
Side Slopes/Embankment Slopes	0	LS	\$0	\$0	
Maintenance Vehicle Pullouts	6	EA	\$25,000	\$150,000	
Off-freeway Access (gates, stairways, etc.)	0	LS	\$0	\$0	
Roadside Facilities (Vista Points, Transit, Park & Ride)	0	LS	\$0	\$0	
Relocating roadside facilities/features	0	LS	\$0	\$0	
	0	LS	\$0	\$0	
	0	LS	\$0	\$0	
	0	LS	\$0	\$0	

Subtotal Roadside Management and Safety Section: \$652,950

PROJECT REPORT COST ESTIMATE



Dist-Co-Rte: 06-Fre-99

PM: 16.6/17.6

EA: 06-0H240

Program Code: 20.10.201.315

TOTAL ROADSIDE ITEMS Sections 6 thru 7 \$2,363,750

PROJECT REPORT COST ESTIMATE



Dist-Co-Rte: 06-Fre-99

PM: 16.6/17.6

EA: 06-0H240

Program Code: 20.10.201.315

III. ROADWAY ADDITIONS

Section 8 - Minor Items

Item Cost

Section Cost

\$16,905,207 x 0.10 = \$1,690,521
(Subtotal Sections 1 thru 7) (5 to 10%)

Minor Items: \$1,690,521

Section 9 - Roadway Mobilization

\$5,632,146 x 0.05 = \$281,607
(Subtotal Sections 1 thru 8) (5%)

Roadway Mobilization: \$281,607

Section 10 - Supplemental Work & Contingencies

Supplemental Work

\$18,595,728 x 0.05 = \$929,786
(Subtotal Sections 1 thru 8) (5%)

Contingencies

\$18,595,728 x 0.15 = \$2,789,359
(Subtotal Sections 1 thru 8) (**%)

Supplemental Work & Contingencies: \$3,719,146

TOTAL ROADWAY ADDITIONS Sections 8 thru 10: \$5,691,274

TOTAL ROADWAY: \$22,596,481
(Subtotal Sections 1 thru 10)

Estimate Prepared
by:

Andrew Un (HMA,PCC,AB)
(Print or Type Name)

Phone: (559) 243-3811

05/08/15
(Date)

Estimate Checked
by:

Ellery Ellis
(Print or Type Name)

Phone: (559) 243-3811

10/06/16
(Date)

****Use appropriate percentage per PDPM, Part 3 Chapter 20.**

<http://www.dot.ca.gov/hq/oprd/pdpm/pdpm.htm> - pdpm

PROJECT REPORT COST ESTIMATE



Dist-Co-Rte: 06-Fre-99

PM: 16.6/17.6

EA: 06-0H240

Program Code: 20.10.201.315

II. STRUCTURE ITEMS

	STRUCTURE		
	No. 1	No. 2	No. 3
Bridge Name	_____	_____	_____
Structure Type	_____	_____	_____
Width (out to out) - (ft)	<u>0</u>	<u>0</u>	<u>0</u>
Span Length - (ft)	<u>0</u>	<u>0</u>	<u>0</u>
Total Area - ft ²	<u>0</u>	<u>0</u>	<u>0</u>
Footing Type (pile/spread)	_____	_____	_____
Cost Per ft ² (incl. 10% mobilization & 25% contingencies)	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>
Total Cost for Structure	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>
Other	<u>\$13,000,000</u>	<u>\$0</u>	<u>\$0</u>

* Add additional structures as necessary

SUBTOTAL STRUCTURES ITEMS \$13,000,000

Railroad Related Costs (Not incl. in R/W Est) \$0

TOTAL STRUCTURES ITEMS \$13,000,000

COMMENTS:

Estimate Prepared

by:

Ellery Ellis

(Print or Type Name)

Phone: (559) 243-3589

10/06/16

(Date)

(If appropriate, attach additional pages as backup)

PROJECT REPORT COST ESTIMATE



Dist-Co-Rte: 06-Fre-99

PM: 16.6/17.6

EA: 06-0H240

Program Code: 20.10.201.315

III. RIGHT OF WAY ITEMS

	Current Values (Future Use)	Escalation Rates	Escalated Values*
Acquisition, including excess lands and damages to remainder(s) and Goodwill	\$28,122,174	0.0%	\$0
Utility Relocation (State share)	\$0	0.0%	\$0
Clearance/Demolition	\$0	0.0%	\$0
RAP	\$0	0.0%	\$0
Title and Escrow Fees	\$0	0.0%	\$0
Construction Contract Work	\$0	0.0%	\$0
	\$17,210,000		
TOTAL RIGHT OF WAY**			\$0

ESCALLATED VALUE*

Date to which Values are Escalated: 0/0/00

* Escalated to assumed year of advertising.

** Current total value for use on Sheet 1

Estimate Prepared
by:

Ellery Ellis

(Print or Type Name)

Phone: (559) 243-3589

10/06/16

(Date)

(If appropriate, attach additional pages and backup including Right of Way Data Sheet and Environmental Mitigation and Compliance Cost Estimate Sheet).

ATTACHMENT

D



Preliminary Environmental Analysis Report

Project Information

District	06	County	FRE	Route	99	Post Mile	16.7/17.5	EA	06-0H240
Project ID#:	06-00020559								
Project Title:	Cedar/North Avenue Interchange Modification								
Project Manager:	Neil Bretz					Phone #:	(559) 243-3465		
Design Manager:	Arthur Ramirez					Phone #:	(559) 243-3813		
Design Engineer:	Ellery Ellis					Phone #:	(559) 243-3589		
Environmental Manager:	Richard Putler					Phone #:	(559) 445-5286		
Environmental Planner:	Jeff Sorensen					Phone #:	(559) 445-5329		

PSR Summary Statement

The anticipated environmental document for the proposed project is a Mitigated Negative Declaration/Finding of No Significant Impact. This document level has been selected based on the impacts to businesses, hazardous waste, and aesthetics which are anticipated to be mitigated below the threshold of significance as defined by CEQA. The California Department of Transportation would act as the lead agency in the preparation of a joint NEPA/CEQA (National Environmental Policy Act/California Environmental Quality Act) environmental document. Caltrans will serve as the NEPA lead agency under its assumption of responsibility pursuant to 23 U.S. Code 327. The estimated time to obtain environmental approval is 36 months from the start of environmental studies. Assuming a start date of January 2017, environmental studies would begin in June 2017 after project preliminary maps are completed. Final environmental document would be anticipated by December 2019.

It is anticipated multiple environmental studies and reports will be required for this project including (but not limited to): air quality study, noise study, preliminary site assessment, paleontological identification report, and visual impact assessment. It is currently estimated that hazardous waste will be the critical path for the delivery of the environmental document. Paleontological monitoring is expected as a requirement of the project with an estimated cost of \$75,000. Preconstruction surveys for nesting birds are expected to be necessary, with an estimated cost of \$108,000.

Project Description

The California Department of Transportation (Caltrans) proposes to modify the Cedar/North Avenue interchange on State Route 99 in south Fresno.

Purpose and Need

The purpose and need for the project is to relieve congestion from heavy truck traffic at the interchange.

Description of Work

Caltrans proposes to reconstruct the Cedar/North Avenue interchange on State Route 99 in south Fresno. Caltrans will be the lead agency for environmental compliance and would design the project.

Alternatives

Three alternatives are being considered: two Build Alternatives and the No-Build. The Build Alternatives would reconstruct the on and off ramps and construct a new North Avenue bridge crossing State Route 99.

Funding

☒ State ☒ Federal

Primary funding for this project will be from the Fresno County Transportation Authority Measure C program. The project is included in the current Measure C expenditure plan. Other State and Federal funding is being assumed at this point, and this project has been included in the Fresno Council of Governments financially constrained 2014 Federal Regional Transportation Improvement Program.

Anticipated Environmental Approval

CEQA

- ☐ Categorical Exemption/Statutory Exemption
☒ Negative Declaration/Mitigated ND (☐ Focused)
☐ Environmental Impact Report

NEPA

- ☐ Categorical Exclusion (☐ 326/☐ 327)
☒ Finding of No Significant Impact
☐ Environmental Impact Statement

Anticipated Environmental Schedule

Total Time for Environmental Approval	36 months
Start Date	January 2017
Begin Environmental	June 2017
Draft Environmental Document	October 2019
Final Environmental Document	December 2019
PA&ED*	December 2019

**PA&ED is generally 1 month following the FED date*

Assumptions and Risks

Risks to the project have been defined in accordance with the Project Risk Management Handbook, May 2, 2007, Second Edition, Rev 0:

Assumptions:

- An Initial Site Assessment and aerially deposited lead studies would take up to eight months to complete; Preliminary Site Investigations could take up to a year to complete.
- Monitoring during construction for paleontological resources would be necessary.
- Due to the nature of the project and the project area, it is not anticipated that there would be an adverse effect on historic properties.

Risks:

- If invasive Permits to Enter cannot be obtained for Preliminary Site Investigation work, court orders would then be required which would affect the schedule. Probability of occurrence is a 4 and impact on schedule is High.
- If historic properties are identified, the environmental document schedule would have to be revisited. Probability of occurrence is a 1 and impact on schedule is Moderate.
- If bats or swallows are found roosting on the overcrossings, exclusion would be necessary which would impact cost and construction schedule. Probability of occurrence is a 2 and impact on schedule is High.
- If nesting bird(s) are found during preconstruction surveys, a delay in construction may occur, which would impact the cost and construction schedule. Probability of occurrence is a 5 and impact on schedule is High.

Risk Probability Ranking	
Ranking	Probability of Risk Event
5	60-99%
4	40-59%
3	20-39%
2	10-19%
1	1-9%

Evaluating Impact of a Threat on Project Objectives						
Impact		Very Low	Low	Moderate	High	Very High
Objectives	Time	Insignificant Schedule Slippage	Delivery Plan Milestone Delay within quarter	Delivery Plan milestone delay of one quarter	Delivery Plan milestone delay of more than 1 quarter	Delivery Plan milestone delay outside fiscal year
	Cost	Insignificant Cost Increase	<5% Cost Increase	5-10% Cost Increase	10-20% Cost Increase	>20% Cost Increase
	Scope	Scope decrease is barely noticeable	Changes in project limits or features with <5% Cost Increase	Changes in project limits or features with 5-10% Cost Increase	Sponsor does not agree that Scope meets the purpose and need	Scope does not meet purpose and need

Mitigation

Right of Way Capital (050)

- California Department of Fish and Wildlife document review fee: \$2,210.00 (2015 dollars).

Construction Capital (042)

- Paleontology monitoring: \$75,000.00 (2015 dollars).
- Preconstruction nesting bird surveys: \$108,000.00 (2015 dollars).

Consultant Task Order (332)

- Bridge survey for hazardous materials: \$15,000 (2015 dollars).

Disclaimer

This report is not an environmental document. Preliminary analysis, determinations, and estimates of mitigation costs are based on the project description provided in this report. The estimates and conclusions provided are approximate and are based on cursory analysis of probable effects. This report is to provide a preliminary level of environmental analysis to supplement the Project Initiation Document. Changes in project scope, alternatives, or environmental laws will require a reevaluation of this report.

Review and Approval

I confirm that environmental cost, scope, and schedule have been satisfactorily completed and that the PEAR meets all Caltrans requirements. Also, if the project is scoped as a routine EA, complex EA, or EIS, I verify that the HQ DEA Coordinator has concurred in the Class of Action.

Approved by:

Richard B. Burt
Environmental Manager

Date: 11-1-16

Wendell J. Taylor
Environmental Office Chief

Date: 11/1/16

Neil Brey
Project Manager

Date: 11/2/16

Environmental Technical Reports or Studies Required

Required—requires analysis including field surveys, database searches, report, or memo to file and brief explanation in the environmental document.

Not Required—Issue is not applicable to the proposed project.

Possible Critical Path—Major issue that has the potential to drive the schedule and determine the length of time to reach P.A.&ED (can be more than one major issue).

	Required	Clearance Memo Received	Not Required	Possible Critical Path
Biology		<input checked="" type="checkbox"/>		<input type="checkbox"/>
Endangered Species (Federal)	<input type="checkbox"/>		<input checked="" type="checkbox"/>	
Endangered Species (State)	<input type="checkbox"/>		<input checked="" type="checkbox"/>	
Species of Concern (CNPS, USFS, BLM, S, F)	<input type="checkbox"/>		<input checked="" type="checkbox"/>	
Wetland Delineation	<input type="checkbox"/>		<input checked="" type="checkbox"/>	
Natural Environment Study	<input type="checkbox"/>		<input checked="" type="checkbox"/>	
Biological Assessment (USFWS, NMFS, State)	<input type="checkbox"/>		<input checked="" type="checkbox"/>	
Cultural Resources				<input type="checkbox"/>
ASR	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
HRER	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
HPSR/HRCR	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
Screening Memo	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
SHPO Concurrence	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
Native American Coordination	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
Finding of Effect Document	<input type="checkbox"/>		<input checked="" type="checkbox"/>	
Treatment Plan & MOA	<input type="checkbox"/>		<input checked="" type="checkbox"/>	
Hazardous Waste		<input type="checkbox"/>		<input checked="" type="checkbox"/>
ISA	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
PSI	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
ADL	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
Air Quality Analysis		<input type="checkbox"/>		<input type="checkbox"/>
Hot Spot Analysis	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
MSAT	<input type="checkbox"/>		<input checked="" type="checkbox"/>	
Noise Study	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Water Quality	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Community Impact Assessment				<input type="checkbox"/>
Environmental Justice	<input type="checkbox"/>		<input checked="" type="checkbox"/>	
Growth Related Impacts	<input type="checkbox"/>		<input checked="" type="checkbox"/>	
Cumulative Impacts	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
Farmland	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
Visual Resources		<input type="checkbox"/>		<input type="checkbox"/>
Scenic Resource Evaluation	<input type="checkbox"/>		<input checked="" type="checkbox"/>	
Visual Impact Assessment	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
Floodplain Evaluation	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
Paleontology	<input checked="" type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
Section 4(f) Evaluation	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
Wild and Scenic River Consistency	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
Geology	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
Topology	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
Soils	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
Greenhouse Emissions	<input checked="" type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>

Permits Anticipated for Construction

	<u>Required</u>	<u>Not Required</u>
401 Permit Coordination (discharge into navigable waters)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
404 Permit Coordination (discharge into waters of the US including wetlands)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/> - Nationwide		
<input type="checkbox"/> - Individual		
1600 Permit (Streambed Alteration)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
City/County Coastal Permit Coordination	<input type="checkbox"/>	<input checked="" type="checkbox"/>
State Coastal Permit Coordination	<input type="checkbox"/>	<input checked="" type="checkbox"/>
NPDES Coordination	<input type="checkbox"/>	<input checked="" type="checkbox"/>
US Coast Guard (Section 10)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Biological Opinion (Section 7)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
State 2081 Permit (State only incidental take of threatened or endangered species)	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion of Technical Review

Biology. The project area consists of disturbed areas with pockets of trees and shrubs that may be suitable for nesting birds and raptors, including Swainson's hawk. Surveys during the nesting season would be required, and coordination with the California Department of Fish and Wildlife would be needed for nesting birds and Swainson's hawk surveys. A Biological Compliance Memorandum would be prepared for this project. Two months for surveys and one week for report writing would be necessary. If trees or other vegetation is to be removed during the nesting season, preconstruction surveys would be required (Biological Resources Scoping Report, July 2015).

Cultural Resources. An archaeological survey and an evaluation of all buildings and structures within the area of potential effect would be required. The project cannot be screened for cultural resources under the Programmatic Agreement; it will require full Section 106 studies and potentially concurrence from the State Historic Preservation Officer. There are no known recorded cultural resources within the project area; however, much of the project area has not been surveyed. Twelve months should be allowed for completion of studies after the project is programmed. Due to the nature of the project and the project area, it is not anticipated that there would be an adverse effect on historic properties by the project. If this assumption proves incorrect, the environmental document schedule would have to be revisited (John Whitehouse email, April 2015).

Hazardous Waste. The project area contains numerous commercial and industrial uses, as well as community water wells, irrigation features, aboveground and underground utilities and storage tanks. A number of properties are on the Cortese List. A bridge survey and aerially deposited lead investigation as well as a thorough Initial Site Assessment are required. Preliminary Site Investigations will be required to clear parcels for purchase. The Initial Site Assessment and aerially deposited lead investigations are expected to take eight months to complete and the Preliminary Site Investigations would require up to a year to complete depending upon granting of invasive permits to enter (Hazardous Waste Scoping, May 2015).

Air Quality Analysis. Although interchange reconfiguration projects are exempt from regional emissions analysis, further analysis is required because the project is located in a non-attainment area (for PM_{2.5}, PM₁₀, and ozone). An air quality study taking four weeks is required (Air, Noise and Water Quality Memorandum, May 2015).

Noise Study. Reconfiguration of an interchange is considered to be a Type I project, requiring full noise analysis. Four to six weeks should be allowed for completion of the noise study (Air, Noise, and Water Quality Memorandum, May 2015).

Water Quality. The project has the potential for short-term impacts during construction; no long-term impacts are anticipated. All short-term impacts would be addressed during design and construction of the project. Best management practices (BMPs) would be selected and implemented in accordance with the Project Planning and Design Guide. The contractor is required to address all potential water quality impacts during construction. No further investigation during the environmental compliance phase of the project is required (Air, Noise and Water Quality Memorandum, May 2015).

Community Impact Assessment. The project area is surrounded by businesses. Right of way would be acquired by the project and several businesses would be displaced (field visit, March 2015 and project description).

Cumulative Impacts. There would be no cumulative impacts from this project (project description).

Farmland. There are no farmlands or timberlands in the project area (field visit, March 2015)

Visual Resources. Highway landscaping would be removed to construct this project. A visual impact assessment would be required (field visit, March 2015).

Floodplain Evaluation. The project area is not located within a 100-year floodplain (FEMA mapping confirmed April 2015).

Paleontology. The surface geology of the project area is Quaternary fan deposits comprised of the Modesto formation. The Modesto Formation is considered to be highly sensitive for paleontological resources. Excavation within the existing below-grade segment of the project will likely impact paleontological resources. A study to determine the project's impacts to high sensitivity resources is required and a Paleontological Identification Report will be prepared during environmental compliance. The estimated cost of monitoring during construction is currently \$75,000 (Scoping Memorandum, April 2015).

Section 4(f) Evaluation. There are no Section 4(f) resources within the project limits (field visit, February 2015).

Wild and Scenic River Consistency. There are no rivers within the project limits (field visit, February 2015).

Geology. Not applicable.

Topology. Not applicable.

Soils. Not applicable.

Greenhouse Emissions. An analysis would be included in the environmental document.

Permits.

- No permits are anticipated.

List of Preparers

Community Impacts by Dan Waterhouse	April 2, 2015
Paleontology by Richard Stewart	April 6, 2015
Hazardous Waste by Susan Greenwood	May 27, 2015
Biology by Sarah Soliman	July 15, 2015
Air, Noise and Water Quality by Cris Timofei	May 5, 2015
Cultural Resources by John Whitehouse	April 13, 2015
Visual Resources by Sherry Alexander	May 10, 2015
Preliminary Environmental Analysis Report by Dan Waterhouse	July 17, 2015

EA	06-OH240	Project Title: Cedar / North Interchange
----	----------	--

[illegible]

[illegible]

EA 06-01240
Proj ID

Attachment B: Resources by WBS Code - Page 2

WBS Task Activity Code	Division Chief	Office Chief	Senior	Env Planner	Biology	Archaeo.	Arch. History	Native American Coord.	Haz. Waste	Socio-Economic	Storm Water	Const. Liaison	Stewardship	Air	Noise	Water	Paleo	QC	Enhancement	Support	Total
Functional Unit Number																					
285.40 - Long Term Env Mgt/Mont after CCA			1421	1421	1672	1659	1670	1391	1410	1421		1415	1671	1414	1414	1414	1412	1418	1419	1420	20
Total for Functional Unit		80	396	1,576	108	74	220	100	315	24		260	590	100	192		64	128	400	54	4,681

WBS Task Activity Code	Functional Unit Number	Gen Consult	Bio Consult	Cultural Consult	Env Tech Consult	Paleo Consult	Other Consult
100 Project Management							
100.10 - Project Management - PA&ED							
100.15 - Project Management - PS&E							
100.20 - Project Management - Construction							
100.25 - Project Management - Right of Way							
160 Perform Preliminary Engineering Studies							
160.05 - Updated Project Information							
160.10 - Engineering Studies							
160.15 - Draft Project Report							
160.30 - Environmental Study Request							
160.40 - NEPA Assignment							
165 Perform Environmental Studies and Prepare							
165.05 - Env Scoping of Alternatives					320		
165.10 - General Env Studies					320		
165.15 - Biological Studies							
165.20 - Cultural Resource Studies							
165.25 - Draft Env Document							
165.30 - NEPA Assignment							
170 Obtain Permits, Licenses, Agreements and							
170.05 - Required PLACs							
170.10 - PLACs							
170.15 - Railroad Agreements							
170.20 - Freeway Agreements							
170.25 - Agreement for Material Sills							
170.30 - Executed Maintenance Agreements							
170.40 - Route Adoptions							
170.45 - MOU from TERC							
170.55 - NEPA Assignment							
175 Circulate Draft Environmental Document and							
175.05 - DEED Circulation							
175.10 - Public Hearing							
175.15 - Public Comment Responses & Corr							
175.20 - Project Preferred Alternative							
175.25 - NEPA Assignment							
180 Prepare and Approve Project Report and							
180.05 - Final Project Report							
180.10 - Final Env Document							
180.15 - Completed Env Document							
180.20 - NEPA Assignment							
205 Obtain Permits, Licenses, Agreements, and							
205.05 - PLACs Determination							
205.10 - PLACs							
205.15 - Railroad Agreements							
205.25 - Agreement for Material Sills							

100

Functional Unit Number	WBS Task Activity Code	Gen Consult	Bio Consult	Cultural Consult	Env Tech Consult	Paleo Consult	Other Consult
205.30	Executed Maintenance Agreements						
205.45	- MOU from TERO						
205.55	- NEPA Delegation						
230	Prepare Draft PS&E						
230.05	- Draft Roadway Plans						
230.10	- Draft Highway Planning Plans						
230.30	- Draft Drainage Plans						
230.35	- Draft Specifications						
230.60	- Updated Project Info for PS&E Pkg						
230.90	- NEPA Assignment						
230.99	- Other Draft PS&E Products						
235	Mitigate Environmental Impacts and Clean-						
235.05	- Environmental Mitigation						
235.10	- Detailed Site Investigation for HW						
235.15	- HW Management Plan						
235.20	- HW PS&E						
235.25	- HW Clean-up						
235.30	- Haz Substances Disclosure Doc						
235.35	- Long Term Mitigation Monitoring						
235.40	- Updated Env Commitments Record						
235.45	- NEPA Assignment						
255	Circulate, Review and Prepare Final District						
255.05	- Circ. & Rev. Draft Dist PS&E Package						
255.10	- Updated PS&E Package						
255.15	- Environmental Reevaluation						
255.20	- Final District PS&E Package						
255.40	- Resident Engineer's Pending File						
255.45	- NEPA Assignment						
260	Contract Bid Documents "Ready to Lig"						
260.75	- Env Cert at RTL						
270	Construction Engineering and Contract						
270.22	- Contract Administration						
280	Administration of Permits, Licenses,		1400				
280.10	- PLAC Compliance		1400				
280.40	- PLAC Violations						
280.50	- Other Environmental Compliance						
280.60	- Other Environmental Violations						
280.70	- Updated ECR						
280.75	- Environmental Reevaluation						
280.80	- Updated PLACs						
295	Accept Contract/Prepare Final Construction						
295.35	- Certificate of Environmental Compliance						
295.40	- Long Term Env Mit/Ment after CCA						
Total for Functional Unit			1400				320

Revised: 11/1/2016

Dist - Co - Rte - PM. 06-FRE-99-16.7 / 17.5

EA: 06-0H240

Alternative #:

Phone Number: 559-445-5286

Phone Number: (559) 243-3465

Date: 10/31/2016

Phone Number: (559) 445-5329

FY

ROW
050 Dollars

FY

Construction
042 Dollars

FY

Monitoring

\$108,000 20/21

Bridge survey

\$15,000 20/21

Monitoring

\$75,000 20/21

CDFW Document Filing Fee

\$2,210 20/21

NOI/NOT (Stormwater)

\$6,226.00 2025

NOI/NOT (Stormwater)

\$6,226.00 2025

\$15,000

\$14,662

\$183,000

Biological monitoring costs are for preconstruction surveys for nesting birds/raptors.

Environmental Branch Chief

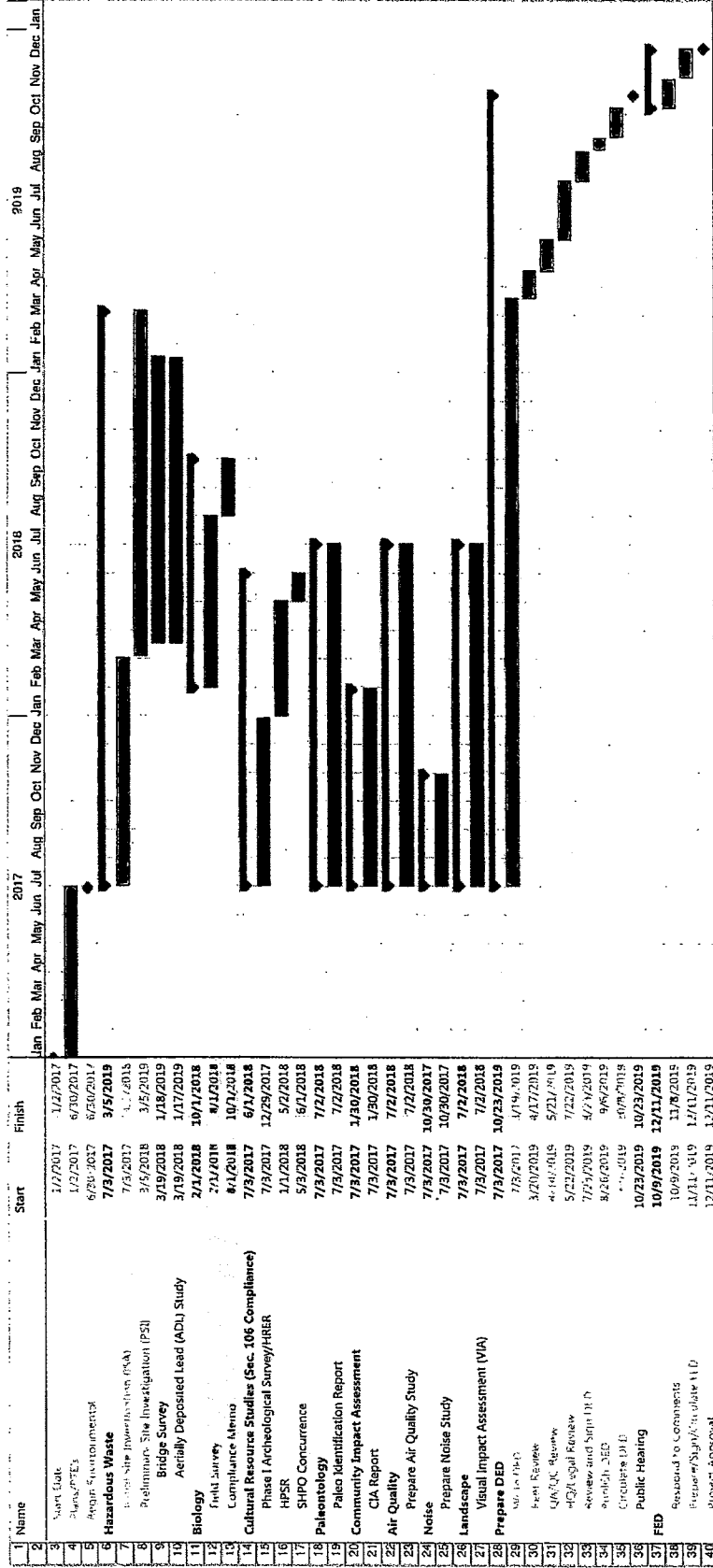
Date: 11-1-11

Environmental Office Chief

Date:

Right-of-Way Office Chief, Mitigation

Date: 11 / 1 / '



ATTACHMENT

E

Memorandum

To: NEIL BRETZ

Date: 11/23/2015

Attn: ELLERY ELLIS

File: CD 06 EA 0H240K

Alt ALT 1

Co FRE RTE 99

ARTHUR RAMIREZ

From: Department of Transportation
Division of Right of Way Central Region**DESCRIPTION:****CONSTRUCT A TYPE L-9 STANDARD PARTIAL
CLOVERLEAF INTERCHANGE AT THE NORTH AVENUE
OVERCROSSING AT ROUTE 99**

Subject: RIGHT OF WAY DATA SHEET

We have completed an estimate of the right of way costs for the above-referenced project based on the Right of Way Data Sheet Request Form dated 9/8/2015

The following assumptions and limiting conditions were identified:**Appraisal**

This project will construct a type L-9 Standard Partial Cloverleaf interchange at North Avenue overcrossing at State Route 99. Required right of consists of impacting approximately 28 parcels. This project has full and part take acquisitions that will impact Heavy Industrial zone parcels. Additional right of way requirements are anticipated, but are not defined in current preliminary design.

Utility

Various facilities are assumed to be impacted and will require relocation. This estimate is based off of limited utility maps, Google Earth search, meeting with design and a field visit. The Master Agreements will apply to this project because it is a Freeway project. Therefore, it is assumed the electric, gas and telephone facilities will be 50% State liability and 50% Owner Liability. It is assumed the remainder of the utilities will be 100% State's liability because it is unclear if each utility is located in easement on private property or in easement or in franchise on City streets. The underground utilities are assumed to be present based on what was seen visually on the site visit. Design was unable to provide detail maps of the underground utilities for the area outside of the current 99 footprint at North Avenue. Therefore, this is a guesstimate of the amount of feet needed to be relocated. The cost of the new canal crossing has been estimated with no detail as to the extent of the relocation work necessary. It is recommended utility verification plans be provided by design so utility verifications can be requested from the utility owners.

Right of Way Lead Time will require a minimum of 30 months after we receive Certified Appraisal Maps and/or Utility Conflict Plans, obtained necessary environmental clearance and applicable freeway agreements have been approved.


SUZIE HOLDRIDGE

Acting Office Chief, Central Region Right of Way

(559) 445-6195

EA: 06-0H240K CO/RTE/PM-PM (Rte 1 and Rte 2) : FRE/99/16.7- & // -
ALT: ALT 1

Request Date: 9/8/2015
Revised Date:

Right Of Way Cost Estimate

	Current Year 2015	Contingency Rate	Right of Way Escalation Rate	Escalated Year 2025
Acquisition:	\$12,689,543	25%	5%	\$20,669,928
Mitigation:	\$2,763	25%	5%	\$4,500
State Share of Utilities:	\$12,205,400	25%	5%	\$19,881,310
Expert Witness:	\$0	25%	5%	\$0
Relocation Assistance:	\$856,563	25%	5%	\$1,395,250
Demolition and Clearance:	\$871,235	25%	5%	\$1,419,150
Title and Escrow:	\$157,520	25%	5%	\$256,584
Ad Signs:	\$0	25%	5%	\$0
Total Current Value:	\$26,783,023			\$43,626,722
If RW Cost Est fields are blank, Costs = \$0				

NOTE: above estimate includes railroad engineering in the amount of: \$0.00

Estimated Construction Contract Work (CCW): 31,080 R/W LEAD TIME/Mo. 24

Cost Break Down

Pot Hole	15,000
Mitigation	
Land	0
Bank	0
Permit Fees	2,210

Parcel Data

# of Parcel Type X:	0		
# of Parcel Type A: less than \$10,000 non-complex	4		
# of Parcel Type B: more than \$10,000 non-complex	14		
# of Parcel Type C: complex, special valuation	4		
# of Parcel Type D: most complex and time consuming	6	# of Duals Needed:	0
Totals:	28	Totals:	0

of Excess Parcels: 5

Misc R/W Work

# of RAP Displacements:	10
# of Clearance/Demos:	13
# of Const Permits:	0
# of Condemnations:	6

RR Involvement

Railroad Facilities or Right of Way Affected?	no
Const/Maint Agreement:	no
Service Contract Count:	0
Right of Entry:	no
Clauses:	no
Estimated Lead-time:	none

Utilities

U4-1: Owner Expense	5
U4-2: State Expense, Conventional no Fed Aid	0
U4-3: State Expense, Freeway no Fed Aid	10
U4-4: State Expense, both with Fed Aid	0
U5-7: Utility verification, no relocation/potholing	0
U5-8: Utility verification, w/ some relocation/potholing	0
U5-9: Utility verifications, relocation/potholing required	15

EA: 05-0H240K ALT: ALT 1

Parcel Area	
Total R/W Required:	29.67
Total Excess Area:	0.58

General Description of R/W and Excess Lands Required (zoning, use, major improvements, critical or sensitive parcels etc.):

Required right of way for Fresno 99 Interchange Modification impacts approximately 28 parcels. This project has full and part take acquisitions zoned M-3 Heavy Industrial District. Heavy Industrial zoned land uses consist of different types of service businesses and vacant land. Addition right of way requirements are anticipated, but are not defined in current preliminary design. Several businesses will require relocation and potential loss of good will could be claimed. Construction contract work is estimated for several driveway approaches and a relocation of a mailbox.

General Description of Utility Involvement:

Highway 99 is designated a Freeway in the project area. In Fresno County, in Fresno, from 0.8 mile south of Cedar Avenue to 0.6 mile north of Avenue. The project proposes to construct a Type I-9 Standard Partial Cloverleaf Interchange at the North Avenue overcrossing at State Route (SR) 99. The utility involvement includes overhead electric lines, hydrants, street lights, telephone pedestals, water pumps, service pedestals, underground electric, underground gas, underground telephone, underground water, underground sewer, manholes and 1 canal crossing. The designer for this project has estimated approximately 30 potholes to identify underground facilities.

Is there a significant effect on assessed valuation:

No

Were any previously unidentified sites with hazardous waste or material found:

No

Are RAP displacements required:

Yes

of single family:

0

of multi-family:

0

of business/nonprofit:

10

of farms:

0

Sufficient replacement housing will be available without last resort housing:

N/A

Are material borrow or disposal sites required:

No

Are there potential relinquishments or abandonments:

Yes

Are there any existing or potential airspace sites:

No

Are environmental mitigation parcels required:

Yes

Data for evaluation provided by:

Estimator:

Cynthia Willems

10/6/2015

Railroad Liaison Agent:

Michelle Hernandez

9/28/2015

Utility Relocation Coordinator:

Nikki Beebe-Pence

10/28/2015

I have personally reviewed this Right of Way Sheet and all supporting information. I find this Data Sheet complete and current, subject to the limiting conditions set forth.

Date

ENTERED PMCS

11/5/2015

BY: SUSAN RAMOS

SUZIE HOLDRIDGE

Acting Office Chief, Central Region Right of Way

Revised: 7/31/2015

Central Region Environmental Division
Mitigation Compliance Cost Estimate (MCCE)

This MCCE is for: **PEAR**

Dist - Co - Rte - PM: 06-FRE-99-16.7 / 17.5

Project Name: Cedar / North Interchange

Project Description: MODIFY INTERCHANGE

Env. Senior: Michelle Ray

Project Manager: Bob Hull

MCCE Prepared By: Dan Waterhouse

Date: 7/17/2015

EA: 06-0H240

Alternative #: _____

Phone Number: 559-445-5286

Phone Number: (559) 243-3443

Phone Number: (559) 445-6451

	PA&ED 232 Dollars	FY	Acres or Credits	ROW 050 Dollars	FY	Construction 042 Dollars	FY
Biological Monitoring						\$108,000	19/20
Hazardous Waste Bridge survey	\$15,000	19/20					
Paleontological Monitoring						\$75,000	19/20
Permit Fees CDFW Document Filing Fee				\$2,210	17/18		
TOTAL	\$15,000			\$2,210		\$183,000	

Comments

Biological monitoring costs are for preconstruction surveys for nesting birds/raptors.

Approved By:

Michelle Ray
Environmental Branch Chief

Date: 07/31/15

If mitigation totals
more than \$1,000,000:

Environmental Office Chief

Date: _____

If Right of Way Capital
(050) is needed:

Right-of-Way Office Chief, Mitigation

Date: _____

Memorandum

To: NEIL BRETZ

Date: 11/25/2015

Attn: ELLERY ELLIS

File: CD 06 EA 0H240K Alt ALT 2
Co FRE RTE 99

ARTHUR RAMIREZ

DESCRIPTION:

CONSTRUCT A TYPE L-9 MODIFIED PARTIAL CLOVERLEAF
INTERCHANGE AT THE NORTH AVENUE OVERCROSSING
AT ROUTE 99. THE NORTHBOUND AND SOUTHBOUND ONFrom: Department of Transportation
Division of Right of Way Central Region

Subject: RIGHT OF WAY DATA SHEET

We have completed an estimate of the right of way costs for the
above-referenced project based on the Right of Way Data Sheet
Request Form dated 9/8/2015

The following assumptions and limiting conditions were identified:

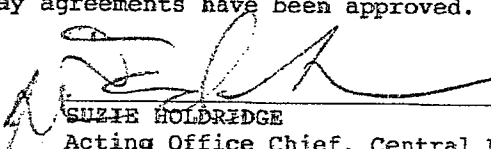
Appraisal

This project will construct a type L-9 Modified Partial Cloverleaf Interchange at North Avenue overcrossing at State Route 99. Required right of consists of impacting approximately 21 parcels. This project has full and part take acquisitions that will impact Heavy Industrial zone parcels. Additional right of way requirements are anticipated, but are not defined in current preliminary design.

Utility

Various facilities are assumed to be impacted and will require relocation. This estimate is based off of limited utility maps, Google Earth search, meeting with design and a field visit. The Master Agreements will apply to this project because it is a Freeway project. Therefore, it is assumed the electric, gas and telephone facilities will be 50% State liability and 50% Owner Liability. It is assumed the remainder of the utilities will be 100% State's liability because it is unclear if each utility is located in easement on private property or in easement or in franchise on City streets. The underground utilities are assumed to be present based on what was seen visually on the site visit. Design was unable to provide detail maps of the underground utilities for the area outside of the current 99 footprint at North Avenue. Therefore, this is a guesstimate of the amount of feet needed to be relocated. The cost of the new canal crossing has been estimated with no detail as to the extent of the relocation work necessary. It is recommended utility verification plans be provided by design so utility verifications can be requested from the utility owners.

Right of Way Lead Time will require a minimum of 30 months after we receive Certified Appraisal Maps and/or Utility Conflict Plans, obtained necessary environmental clearance and applicable freeway agreements have been approved.


SUZIE HOLDRIDGE

Acting Office Chief, Central Region Right of Way

(559)445-6195

EA: 06-0H240K CO/RTE/PM-PM (Rte 1 and Rte 2) : FRE/99/16.7- & //-
ALT: ALT 2

Request Date: 9/8/2015
Revised Date:

Right Of Way Cost Estimate

	Current Year 2015	Contingency Rate	Right of Way Escalation Rate	Escalated Year 2025
Acquisition:	\$4,822,103	25%	5%	\$7,854,697
Mitigation:	\$2,763	25%	5%	\$4,500
State Share of Utilities:	\$12,205,400	25%	5%	\$19,881,310
Expert Witness:	\$0	25%	5%	\$0
Relocation Assistance:	\$514,063	25%	5%	\$837,354
Demolition and Clearance:	\$213,988	25%	5%	\$348,563
Title and Escrow:	\$71,190	25%	5%	\$115,961
Ad Signs:	\$0	25%	5%	\$0
Total Current Value:	\$17,829,505			\$29,042,385
If RW Cost Est fields are blank, Costs = \$0				

NOTE: above estimate includes railroad engineering in the amount of: \$0.00

Estimated Construction Contract Work (CCW): 28,860 RAW LEAD TIME/Mo. 30

Cost Break Down

Pot Hole	15,000
Mitigation	
Land	0
Bank	0
Permit Fees	2,210

Parcel Data

# of Parcel Type X:	0		
# of Parcel Type A: less than \$10,000 non-complex	5		
# of Parcel Type B: more than \$10,000 non-complex	7		
# of Parcel Type C: complex, special valuation	4		
# of Parcel Type D: most complex and time consuming	5	# of Duals Needed:	0
Totals:	21	Totals:	0

of Excess Parcels: 0

Misc R/W Work

# of RAP Displacements:	7
# of Clearance/Demos:	11
# of Const Permits:	0
# of Condemnations:	10

RR Involvement

Railroad Facilities or Right of Way Affected?	no
Const/Maint Agreement:	no
Service Contract Count:	0
Right of Entry:	no
Clauses:	no
Estimated Lead-time:	none

Utilities

U4-1: Owner Expense	5
U4-2: State Expense, Conventional no Fed Aid	0
U4-3: State Expense, Freeway no Fed Aid	10
U4-4: State Expense, both with Fed Aid	0
U5-7: Utility verification, no relocation/potholing	0
U5-8: Utility verification, w/ some relocation/potholing	0
U5-9: Utility verifications, relocation/potholing required	15

EA: 06-0H240K

ALT: ALT 2

Parcel Area

Total R/W Required: 14.81

Total Excess Area: 0.67

General Description of R/W and Excess Lands Required (zoning, use, major improvements, critical or sensitive parcels etc.):

Required right of way for Fresno 99 Interchange Modification impacts approximately 21 parcels. This project has full and part take acquisitions zoned M-3 Heavy Industrial District. Heavy Industrial zoned land uses consist of different types of service businesses and vacant land. Additional right of way requirements are anticipated, but are not defined in current preliminary design. Several businesses will require relocation and potential loss of good will could be claimed. Construction contract work is estimated for several driveway approaches and a relocation of a mailbox.

General Description of Utility Involvement:

Highway 99 is designated a Freeway in the project area. In Fresno County, in Fresno, from 0.8 mile south of Cedar Avenue to 0.6 mile north of Avenue. The project proposes to construct a Type L-9 Modified Partial Cloverleaf Interchange at the North Avenue overcrossing at State Route 99. The northbound and southbound on ramps have been modified to slip ramps. The utility involvement includes overhead electric lines, hydrant street lights, telephone pedestals, water pumps, service pedestals, underground electric, underground gas, underground telephone, underground water, underground sewer, manholes and 1 canal crossing. The designer for this project has estimated approximately 30 potholes to identify underground facilities.

Is there a significant effect on assessed valuation:

No

Were any previously unidentified sites with hazardous waste or material found:

No

Are RAP displacements required:

Yes

of single family:

0

of multi-family:

0

of business/nonprofit:

7

of farms:

0

Sufficient replacement housing will be available without last resort housing:

N/A

Are material borrow or disposal sites required:

No

Are there potential relinquishments or abandonments:

Yes

Are there any existing or potential airspace sites:

No

Are environmental mitigation parcels required:

Yes

Data for evaluation provided by:

Estimator:

Cynthia Willems

10/9/2015

Railroad Liaison Agent:

Michelle Hernandez

9/28/2015

Utility Relocation Coordinator:

Nikki Beebe-Pence

10/28/2015

I have personally reviewed this Right of Way Sheet and all supporting information. I find this Data Sheet complete and current, subject to the limiting conditions set forth.

Date

ENTERED PMCS

BY:

SUZIE HOLDRIDGE

Acting Office Chief, Central Region Right of Way

Memorandum**To:** NEIL BRETZ**Date:** 11/25/2015**Attn** ELLERY ELLIS**File:** CD 06 EA 0H240K Alt ALT 3

Co FRE RTE 99

ARTHUR RAMIREZ

DESCRIPTION:**CONSTRUCT A TYPE L-5 SPREAD DIAMOND INTERCHANGE
AT THE NORTH AVENUE OVERCROSSING AT ROUTE 99****From:** Department of Transportation
Division of Right of Way Central Region**Subject:** RIGHT OF WAY DATA SHEET

We have completed an estimate of the right of way costs for the
above-referenced project based on the Right of Way Data Sheet
Request Form dated 9/8/2015

The following assumptions and limiting conditions were identified:**Appraisal**

This project will construct a type L-5 Spread Diamond Interchange at North Avenue overcrossing at State Route 99. Required right of consists of impacting approximately 24 parcels. This project has full and part take acquisitions that will impact Heavy Industrial zone parcels. Additional right of way requirements are anticipated, but are not defined in current preliminary design.

Utility

Various facilities are assumed to be impacted and will require relocation. This estimate is based off of limited utility maps, Google Earth search, meeting with design and a field visit. The Master Agreements will apply to this project because it is a Freeway project. Therefore, it is assumed the electric, gas and telephone facilities will be 50% State liability and 50% Owner Liability. It is assumed the remainder of the utilities will be 100% State's liability because it is unclear if each utility is located in easement on private property or in easement or in franchise on City streets. The underground utilities are assumed to be present based on what was seen visually on the site visit. Design was unable to provide detail maps of the underground utilities for the area outside of the current 99 footprint at North Avenue. Therefore, this is a guesstimate of the amount of feet needed to be relocated. The cost of the new canal crossing has been estimated with no detail as to the extent of the relocation work necessary. It is recommended utility verification plans be provided by design so utility verifications can be requested from the utility owners.

Right of Way Lead Time will require a minimum of 30 months after we receive Certified Appraisal Maps and/or Utility Conflict Plans, obtained necessary environmental clearance and applicable freeway agreements have been approved.


SUZIE HOLDRIDGE

Acting Office Chief, Central Region Right of Way

(559)445-6195

EA: 06-0H240K CO/RTE/PM-PM (Rte 1 and Rte 2) : FRE/99/16.7- & // -
ALT: ALT 3

Request Date: 9/8/2015
Revised Date:

Right Of Way Cost Estimate

	Current Year 2015	Contingency Rate	Right of Way Escalation Rate	Escalated Year 2025
Acquisition:	\$2,930,765	25%	5%	\$4,773,907
Mitigation:	\$2,763	25%	5%	\$4,500
State Share of Utilities:	\$13,848,250	25%	5%	\$22,557,340
Expert Witness:	\$0	25%	5%	\$0
Relocation Assistance:	\$577,188	25%	5%	\$940,178
Demolition and Clearance:	\$795,154	25%	5%	\$1,295,222
Title and Escrow:	\$55,558	25%	5%	\$90,498
Ad Signs:	\$0	25%	5%	\$0
Total Current Value:	\$18,209,676			\$29,661,644
If RW Cost Est fields are blank, Costs = \$0				

NOTE: above estimate includes railroad engineering in the amount of: \$0.00

Estimated Construction Contract Work (CCW): 26,640 R/W LEAD TIME/Mo. 30

Cost Break Down

Pot Hole	15,000
Mitigation	
Land	0
Bank	0
Permit Fees	2,210

Parcel Data

# of Parcel Type X:	0		
# of Parcel Type A: less than \$10,000 non-complex	7		
# of Parcel Type B: more than \$10,000 non-complex	7		
# of Parcel Type C: complex, special valuation	6		
# of Parcel Type D: most complex and time consuming	4	# of Duals Needed:	0
Totals:	24	Totals:	0

of Excess Parcels: 1

Misc R/W Work

# of RAP Displacements:	6
# of Clearance/Demos:	14
# of Const Permits:	0
# of Condemnations:	6

RR Involvement

Railroad Facilities or Right of Way Affected?	No
Const/Maint Agreement:	no
Service Contract Count:	0
Right of Entry:	no
Clauses:	no
Estimated Lead-time:	none

Utilities

U4-1: Owner Expense	5
U4-2: State Expense, Conventional no Fed Aid	0
U4-3: State Expense, Freeway no Fed Aid	10
U4-4: State Expense, both with Fed Aid	0
U5-7: Utility verification, no relocation/potholing	0
U5-8: Utility verification, w/ some relocation/potholing	0
U5-9: Utility verifications, relocation/potholing required	15

EA: 06-0H240K

ALT: ALT 3

Parcel Area

Total R/W Required:	26.32
Total Excess Area:	1.3

General Description of R/W and Excess Lands Required (zoning, use, major improvements, critical or sensitive parcels etc.):

Required right of way for Fresno 99 Interchange Modification impacts approximately 24 parcels. This project has full and part take acquisitions zoned M-3 Heavy Industrial District. Heavy Industrial zoned land uses consist of different types of service businesses and vacant land. Addition right of way requirements are anticipated, but are not defined in current preliminary design. Several businesses will require relocation and potential loss of good will could be claimed. Construction contract work is estimated for several driveway approaches and a relocation of a mailbox.

General Description of Utility Involvement:

Highway 99 is designated a Freeway in the project area. In Fresno County, In Fresno, from 0.8 mile south of Cedar Avenue to 0.6 mile north of Avenue. The project proposes to construct a Type L-5 Spread Diamond Interchange at the North Avenue overcrossing at State Route (SR) 99. Utility involvement includes overhead electric lines, hydrants, street lights, telephone pedestals, water pumps, service pedestals, underground electric, underground gas, underground telephone, underground water, underground sewer, manholes and 1 canal crossing. The designer for the project has estimated approximately 30 potholes to identify underground facilities.

Is there a significant effect on assessed valuation:

No

Were any previously unidentified sites with hazardous waste or material found:

No

Are RAP displacements required:

Yes

of single family:

0

of multi-family:

0

of business/nonprofit:

6

of farms:

0

Sufficient replacement housing will be available without last resort housing:

N/A

Are material borrow or disposal sites required:

No

Are there potential relinquishments or abandonments:

Yes

Are there any existing or potential airspace sites:

No

Are environmental mitigation parcels required:

Yes

Data for evaluation provided by:

Estimator:

Cynthia Willems

10/8/2015

Railroad Liaison Agent:

Michelle Hernandez

9/28/2015

Utility Relocation Coordinator:

Nikki Beebe-Pence

10/28/2015

I have personally reviewed this Right of Way Sheet and all supporting information. I find this Data Sheet complete and current, subject to the limiting conditions set forth.

Date

ENTERED PMCS

BY:


SUZIE HOLDRIDGE

Acting Office Chief, Central Region Right of Way

Revised: 7/31/2015

Central Region Environmental Division
Mitigation Compliance Cost Estimate (MCCE)

This MCCE is for: **PEAR**

Dist - Co - Rte - PM: 06-FRE-99-16.7 / 17.5

Project Name: Cedar / North Interchange

Project Description: MODIFY INTERCHANGE

Env. Senior: Michelle Ray

Project Manager: Bob Hull

MCCE Prepared By: Dan Waterhouse

Date: 7/17/2015

EA: 06-0H240

Alternative #: _____

Phone Number: 559-445-5286

Phone Number: (559) 243-3443

Phone Number: (559) 445-6451

	PA&ED 232 Dollars	FY	Acres or Credits	ROW 050 Dollars	FY	Construction 042 Dollars	FY
Biological							
Monitoring						\$108,000	19/20
Hazardous Waste							
Bridge survey	\$15,000	19/20					
Paleontological							
Monitoring						\$75,000	19/20
Permit Fees							
CDFW Document Filing Fee				\$2,210	17/18		
TOTAL	\$15,000			\$2,210		\$183,000	

Comments

Biological monitoring costs are for preconstruction surveys for nesting birds/raptors.

Approved By: _____

Environmental Branch Chief

Date: 07/31/15

If mitigation totals
more than \$1,000,000: _____

Environmental Office Chief

Date: _____

If Right of Way Capital
(050) is needed: _____

Right-of-Way Office Chief, Mitigation

Date: _____

Memorandum

To: NEIL BRETZ

Date: 12/13/2016

Attn: ELLERY ELLIS

File: CD 06 EA 0H240K

Alt ALT 4

Co FRE RTE 99

ARTHUR RAMIREZ

From: Department of Transportation
Division of Right of Way Central Region**DESCRIPTION:****INTERCHANGE MODIFICATION
ALTERNATIVE 4 IS TO CONSTRUCT A DIVERGENCE
DIAMOND INTERCHANGE (DDI) AT THE NORTH AVENUE**

Subject: RIGHT OF WAY DATA SHEET

We have completed an estimate of the right of way costs for the above-referenced project based on the Right of Way Data Sheet Request Form dated 11/28/2016

The following assumptions and limiting conditions were identified:**Parcels**

This project will construct a Divergence Diamond Interchange (DDI) at the North Avenue overcrossing at Route 99. Required right of way consists of impacting approximately 21 parcels. This project has full and part take acquisitions that will impact Heavy Industrial zone parcels. Additional right of way requirements are anticipated, but are not defined in current preliminary design.

Utility

Various facilities are assumed to be impacted and will require relocation. This estimate is based on limited mapping, Google Earth search, and a field visit. The Master Agreements will apply to this project because it is a Freeway project. Therefore, it is assumed the electric, gas and telephone facilities will be 50% State liability and 50% Owner Liability. It is assumed the remainder of the utilities will be 100% State's cost because the liability is unclear. The underground utilities are assumed to be present based on what was seen visually on the site visit. Design was unable to provide detail maps of the underground utilities for the area outside of the current 99 footprint at North Avenue. Therefore, this is a guesstimate of the amount of feet needed to be relocated. The cost of the new canal crossing has been estimated with no detail as to the extent of the relocation work necessary. It is recommended utility verification plans be provided by design so utility verifications can be requested from the utility owners.

Right of Way Lead Time will require a minimum of 30 months after we receive Certified Appraisal Maps and/or Utility Conflict Plans, obtained necessary environmental clearance and applicable freeway agreements have been approved.

Recommended for approval by:


DAVID SHERMAN

Senior Right of Way Agent

(559) 445-6225

EA: 06-0H240K CO/RTE/PM-PM (Rte 1 and Rte 2): FRE/99/16.7- & // -
 ALT: ALT 4

Request Date: 11/28/2016
 Revised Date:

Right Of Way Cost Estimate	Current Year 2016	Contingency Rate	Right of Way Escalation Rate	Escalated Year 2025
Acquisition:	\$3,314,709	25%	5%	\$5,142,201
Mitigation:	\$2,763	25%	5%	\$4,286
State Share of Utilities:	\$7,278,125	25%	5%	\$11,290,761
Expert Witness:	\$0	25%	5%	\$0
Relocation Assistance:	\$201,563	25%	5%	\$312,690
Demolition and Clearance:	\$135,344	25%	5%	\$209,963
Title and Escrow:	\$56,116	25%	5%	\$87,054
Ad Signs:	\$0	25%	5%	\$0
Total Current Value: If RW Cost Est fields are blank, Costs = \$0	\$10,988,618			\$17,046,954

NOTE: above estimate includes railroad engineering in the amount of: \$0.00

Estimated Construction Contract Work (CCW): 26,640 R/W LEAD TIME/Mo. 30

Cost Break Down	
Pot Hole	15,000
Mitigation	
Land	0
Bank	0
Permit Fees	2,210

Parcel Data

# of Parcel Type X:	0		
# of Parcel Type A: less than \$10,000 non-complex	6		
# of Parcel Type B: more than \$10,000 non-complex	11		
# of Parcel Type C: complex, special valuation	3		
# of Parcel Type D: most complex and time consuming	1	# of Duals Needed:	0
Totals:	21	Totals:	0

of Excess Parcels: 0

Misc R/W Work

# of RAP Displacements:	2
# of Clearance/Demos:	10
# of Const Permits:	0
# of Condemnations:	10

RR Involvement

Railroad Facilities or Right of Way Affected?	No
Const/Maint Agreement:	No
Service Contract Count:	0
Right of Entry:	No
Clauses:	No
Estimated Lead-time:	None

Utilities

U4-1: Owner Expense	5
U4-2: State Expense, Conventional no Fed Aid	0
U4-3: State Expense, Freeway no Fed Aid	10
U4-4: State Expense, both with Fed Aid	0
U5-7: Utility verification, no relocation/potholing	0
U5-8: Utility verification, w/ some relocation/potholing	0
U5-9: Utility verifications, relocation/potholing required	15

EA: 06-0H240K

ALT: ALT 4

Parcel Area

Total R/W Required:	17.69
Total Excess Area:	0

General Description of R/W and Excess Lands Required (zoning, use, major improvements, critical or sensitive parcels, etc.):

Required right of way for Fresno 99 Interchange Modification impacts approximately 21 parcels. This project has full and part take acquisitions zoned M-3 Heavy Industrial District. Heavy Industrial zoned land uses consist of different types of service businesses and vacant land. Additional right of way requirements are anticipated, but are not defined in current preliminary design. Several businesses will require relocation and potential of loss of good will could be claimed. Construction contract work is estimated for several driveway approaches and a relocation of a mailbox.

General Description of Utility Involvement:

Highway 99 is designated a Freeway in the project area. In Fresno County, in Fresno, from 0.8 mile south of Cedar Avenue to 0.6 mile north of North Avenue. Alternative 4 for this project proposes to construct a Diverging Diamond Interchange (DDI) at the North Avenue overcrossing at Route 99. The utility involvement includes overhead electric lines, hydrants, street lights, telephone pedestals, service pedestals, underground electric, underground gas, underground telephone, underground water, underground sewer, manholes, and 1 canal crossing. The design engineer has estimated approximately 30 potholes to identify underground facilities.

General Description of Railroad Involvement:

No railroad facilities will be affected as the project stops 200' west of centerline of RR tracks.

Is there a significant effect on assessed valuation:

No

Were any previously unidentified sites with hazardous waste or material found:

No

Are RAP displacements required:

No

of single family:

0

of multi-family:

0

of business/nonprofit:

2

of farms:

0

Sufficient replacement housing will be available without last resort housing:

N/A

Are material borrow or disposal sites required:

No

Are there potential relinquishments or abandonments:

Yes

Are there any existing or potential airspace sites:

No

Are environmental mitigation parcels required:

Yes

Data for evaluation provided by:

Estimator:	Cynthia Willems	12/6/2016
Railroad Liaison Agent:	Michelle Hernandez	12/1/2016
Utility Relocation Coordinator:	Jason Aramburu	12/2/2016

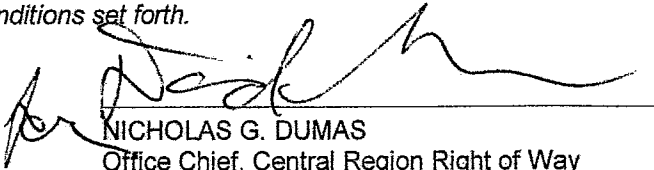
I have personally reviewed this Right of Way Sheet and all supporting information. I find this Data Sheet complete and current, subject to the limiting conditions set forth.

Date

ENTERED PMCS

12/13/2016

BY: SANDRA SIFUENTES


NICHOLAS G. DUMAS

Office Chief, Central Region Right of Way

Revised: 7/31/2015

Central Region Environmental Division Mitigation Compliance Cost Estimate (MCCE)

This MCCE is for: **PEAR**

Dist - Co - Rte - PM: <u>06-FRE-99-16.7 / 17.5</u>		EA: <u>06-0H240</u>
Project Name: <u>Cedar / North Interchange</u>		Alternative #: _____
Project Description: <u>MODIFY INTERCHANGE</u>		
Env. Senior: <u>Michelle Ray</u>		Phone Number: <u>559-445-5286</u>
Project Manager: <u>Bob Hull</u>		Phone Number: <u>(559) 243-3443</u>
MCCE Prepared By: <u>Dan Waterhouse</u>	Date: <u>7/17/2015</u>	Phone Number: <u>(559) 445-6451</u>

	PA&ED 232 Dollars	FY	Acres or Credits	ROW 050 Dollars	FY	Construction 042 Dollars	FY
Biological							
Monitoring						\$108,000	19/20
Hazardous Waste							
Bridge survey	\$15,000	19/20					
Paleontological							
Monitoring						\$75,000	19/20
Permit Fees							
CDFW Document Filing Fee				\$2,210	17/18		
TOTAL	\$15,000			\$2,210		\$183,000	

Comments

Biological monitoring costs are for preconstruction surveys for nesting birds/raptors.

Approved By: _____

Environmental Branch Chief

Date: 07/31/15

If mitigation totals
more than \$1,000,000:

Environmental Office Chief

Date: _____

If Right of Way Capital
(050) is needed:

Right-of-Way Office Chief, Mitigation

Date: 1/13/16

ATTACHMENT

F

Department of Transportation
District 6

TRANSPORTATION MANAGEMENT PLAN DATA SHEET

06-FRE 99-PM 16.9

INTERCHANGE MODIFICATION

PROJECT/EA NO: 0600020559-K/0H240

October 13, 2016

Prepared For: ARTHUR RAMIREZ, Design Senior
Office of Design I, Branch M


Prepared By: FLORENCIA ALLENGER

Concurred By:

Approved By:



JOEL AGUILAR, P.E.
District 6 – Traffic Management Chief



FLORENCIA ALLENGER
District 6 – TMP Manager

This Transportation Management Plan (TMP) data sheet is prepared in response to a request from Office of Design I, Branch M dated October 21, 2016.

Attached is the TMP Data Sheet for the above referenced project. Per Deputy Directive 60-R2, TMP must be considered at the early stage of all projects and activities performed on the State Highway System. The following items shall be included in the project initiation document (PID) and/or Project Report(PR):

- 1) The TMP Data Sheet shall be attached.
- 2) Any costs associated with the traffic impact mitigation measures listed in the TMP Data Sheet shall be included.
- 3) The following statements shall be included:
“Preliminary traffic impacts and mitigation for this project have been outlined in the attached Transportation Management Plan Data Sheet (TMP Data Sheet). Costs associated with the traffic impact mitigation measures listed in the TMP Data Sheet have been included in this documents estimate.”

TMP Data Sheet *Project/EA No. 0600020559/0H240*
Design Senior: Arthur Ramirez
Date: October 13, 2016

Cty/Rte/PM: Fre 99-PM 16.9
Office of Design I, Branch M
Page 2 of 2

“A TMP for this project is required and should be requested when the design is complete enough to determine specific traffic impacts, but yet early enough to make design changes/additions required for traffic mitigation.”

“Lane requirement charts and detailed TMP will be provided during PS&E stage.”

“Lane closures are not allowed when the traffic volume is beyond the capacity of the remaining lanes. Nighttime work outside peak hours is anticipated for this project.”

If you have any questions, please feel free to contact Joel Aguilar at 559-779-6525 or Florencia Allenger at 559-488-4348.

Attachments:

- TMP Data Sheet

DISTRICT 6 - TRANSPORTATION MANAGEMENT PLAN

DATA SHEET

(TMP Elements and Costs)

<i>CO/RTE</i>	FRE	99	PM	16.9	<i>PROJ. NO.</i>	0600020559
					<i>EA. NO.</i>	0H240
<i>PROJECT NAME</i>	Cedar/North Interchange					
<i>PROJECT LIMIT</i>	In Fresno on 99 at the North Avenue Interchange					
<i>PROJECT DESCRIPTION</i>	Interchange Modification					

A) The project includes the following:
(Check all that applicable type of facility closures.)

- | | |
|---|---|
| <input checked="" type="checkbox"/> Highway or Freeway Lanes | <input checked="" type="checkbox"/> Freeway Off-ramps |
| <input checked="" type="checkbox"/> Highway or Freeway Shoulders | <input checked="" type="checkbox"/> Freeway On-ramps |
| <input type="checkbox"/> Freeway Connectors | <input checked="" type="checkbox"/> Local Streets |
| <input checked="" type="checkbox"/> Full/Complete Freeway/Highway Closure | |

B) Are there any construction strategies that can restore existing number of lanes?
☒ No ☐ Yes (Check all applicable strategies.)

- | | |
|--|---|
| <input type="checkbox"/> Temporary Roadway Widening
Structure Involvement? <input type="checkbox"/> Yes | <input checked="" type="checkbox"/> No (If yes, notify Project Manager) |
| <input type="checkbox"/> Lane Restriping (Temporary narrow lane widths) | |
| <input type="checkbox"/> Roadway Realignment (Detour around work area) | |
| <input type="checkbox"/> Median and/or Right Shoulder Utilization | |
| <input type="checkbox"/> Use of HOV lane as Temporary Mixed Flow Lane | |
| <input type="checkbox"/> Staging Alternatives (Explain Below) | |

C) Calculated Delay
(To be performed if construction strategies in Item B do not mitigate congestion resulting from Item A or on all projects along Interstate 5 and Route 99)

- | | |
|--|-----------------|
| 1. Estimated Maximum Individual delay | _____ minutes |
| 2. Existing or Acceptable Individual Vehicle Delay | _____ minutes |
| 3. Estimated Individual Vehicle Delay Requiring Mitigation | _____ minutes |
| 4. Estimate Delay Cost (Most Applicable) | |
| <input type="checkbox"/> Extended Weekend Closure | |
| <input type="checkbox"/> Weekly (7 days) | |
| 5. Estimated Duration of Project Related Delays | _____ # of Days |
| 6. Cost of Construction Related delays | _____ |

TMP Estimates based on X-Number of Working Days
requiring Lane/Shoulder/Ramp/Freeway/Highway Closures: 340 Working Days

Total Working Days to Construct the Project: 440 Working Days

TMP DATASHEET

PAGE 2 OF 2

Date: October 13, 2016

Design Senior: Arthur Ramirez

Branch: M

Office of Design: I

Cnty/Rte: FRE 99

PM: 16.9 99

Project/EA No: 0600020559 0H240

D) Preliminary TMP Elements and cost: (Identify all elements and estimated costs that will be used to mitigate congestion resulting from the proposed construction activities.)

<p>1. Public Information (BEES #066063)</p> <p><input checked="" type="checkbox"/> Brochures & Mailers \$1,000</p> <p><input checked="" type="checkbox"/> Press Release/Media Alerts \$21,000</p> <p><input type="checkbox"/> Paid Advertisements</p> <p><input type="checkbox"/> Public Information Center/Kiosks</p> <p><input type="checkbox"/> Telephone Hotline</p> <p><input checked="" type="checkbox"/> Planned Lane Closure Website \$0</p> <p><input type="checkbox"/> Project Website</p> <p><input type="checkbox"/> Pubic Meetings</p> <p><input checked="" type="checkbox"/> Freight Travel Information \$0</p> <p>2. Motorist Information Strategies</p> <p><input checked="" type="checkbox"/> Traffic Radio Announcements \$0</p> <p><input type="checkbox"/> Fixed CMS</p> <p><input checked="" type="checkbox"/> Portable CMS (BEES #128650) \$119,000</p> <p><input type="checkbox"/> Temporary Motorist Information Signs</p> <p><input checked="" type="checkbox"/> Ground Mounted Signs (Detour) *</p> <p><input type="checkbox"/> Dynamic Speed Message Sign</p> <p><input type="checkbox"/> Highway Advisory Radio</p> <p><input checked="" type="checkbox"/> CT Hwy Infom. Network (CHIN) \$0</p> <p>3. Incident Management</p> <p><input checked="" type="checkbox"/> Transportation Management Center \$0</p> <p><input type="checkbox"/> Traffic Management Team (TMT)</p> <p><input type="checkbox"/> Intelligent Transportation Systems</p> <p><input type="checkbox"/> Traff. Surveillance (Loop & CCTV)</p> <p><input type="checkbox"/> Helicopter Surveillance</p> <p><input type="checkbox"/> Tow/Freeway</p> <p><input checked="" type="checkbox"/> COZEEP (BEES #066062) \$153,000</p> <p>4. Construction Strategies (In Addition to Elements Identified on Item B)</p> <p><input checked="" type="checkbox"/> Lane Requirement Chart \$0</p> <p><input checked="" type="checkbox"/> Construction Staging \$0</p> <p><input checked="" type="checkbox"/> Traffic Handling Plans \$0</p> <p><input type="checkbox"/> Full Facility Closures</p> <p><input checked="" type="checkbox"/> Local Road Closures \$0</p> <p><input type="checkbox"/> Lane Modifications</p> <p><input type="checkbox"/> One-Way Reversing Operation</p>	<p>4. Construction Strategies (In Addition to Elements Identified on Item B)</p> <p><input type="checkbox"/> Two-way Traffic On One Side</p> <p><input type="checkbox"/> Reversible Lanes</p> <p><input checked="" type="checkbox"/> Ramp/Connector Closure \$0</p> <p><input checked="" type="checkbox"/> Night Work \$0</p> <p><input type="checkbox"/> Extended Weekend Work</p> <p><input type="checkbox"/> Ped/Bicycle Access Improvements</p> <p><input type="checkbox"/> Maintain Business Access</p> <p><input checked="" type="checkbox"/> C + T Bidding \$0</p> <p><input type="checkbox"/> Innovative Construction Techniques</p> <p><input checked="" type="checkbox"/> Coordination w/ Adj. Construction Site \$0</p> <p><input type="checkbox"/> Speed Limit Reduction</p> <p><input type="checkbox"/> Traffic Screens</p> <p>5. Demand Management</p> <p><input type="checkbox"/> HOV Lane/Ramps</p> <p><input type="checkbox"/> Variable Work Hours</p> <p><input type="checkbox"/> Telecommuting</p> <p><input type="checkbox"/> Truck/Heavy Vehicle Restrictions</p> <p><input type="checkbox"/> Rideshare Promotions</p> <p><input type="checkbox"/> Ramp Metering</p> <p><input type="checkbox"/> Transit Incentives</p> <p><input type="checkbox"/> Shuttle Services</p> <p><input type="checkbox"/> Ridesharing/Carpooling Incentives</p> <p><input type="checkbox"/> Park & Ride Promotion</p> <p>6. Alternative Route Strategies</p> <p><input type="checkbox"/> Off-site Detours/Use of Alt. Rtes</p> <p><input type="checkbox"/> Signal Timing/Coord. Improvements</p> <p><input type="checkbox"/> Temporary Traffic Signals</p> <p><input type="checkbox"/> Signal Retiming</p> <p><input type="checkbox"/> Street/Intersection Improvements</p> <p><input type="checkbox"/> Turn Restrictions</p> <p><input type="checkbox"/> Parking Restrictions</p> <p>7. Other Considerations</p> <p><input type="checkbox"/> Application of New Technologies</p> <p><input type="checkbox"/> Other</p>
---	---

TOTAL ESTIMATED COST OF TMP \$294,000

PROJECT NOTES:

1. Current dollar values used. Inflation was not factored into the estimate.
2. There are no noise restrictions / moratoriums for night work.
3. Traffic Control/Maintain Traffic costs was not provided. Please consult with the OE or construction office for this estimate.
4. Portable CMS specified for this project by this estimate is designed for congestion relief as outlined by DD-60.
Portable CMS required for other purposes should be included under other specifications.
5. COZEEP specified for this project by this estimate is designated for congestion relief as outlined by DD-60.
COZEEP required for other purposes should be included under other specifications.
6. The TMP is a living document that is subject to change if material changes take place in the final version of the project phase or if changes are required during construction to respond to excessive levels of congestion.

*The estimated cost will depend on the Design Engineer's and Office of Traffic Design's Estimate.

PREPARED BY: Florencia Allenger	OFFICE OF TRAFFIC OPERATIONS	DATE: October 13, 2016
---	-------------------------------------	----------------------------------

ATTACHMENT

G

EA: 06-OH240K

October 2016

Dist-County-Route: 06-Fre-99Post Mile Limits: 16.9/17.5Type of Work: Interchange ModificationProject ID (EA): 0600020559 (06-OH240K)Program Identification: 400.100Phase: ☒ PID☐ PA/ED☐ PS&ERegional Water Quality Control Board(s): Central Valley Region (5F)Total Disturbed Soil Area: 50.54 acres (Alt 1) Post Construction Treatment Area: 38.38 acresAlternative Compliance (acres): NAEstimated Const. Start Date: 12/01/25Estimated Const. Completion Date: 10/18/27Risk Level: RL 1 ☒RL 2 ☐RL 3 ☐WPCP ☐

Other: _____

Is the Project within a TMDL watershed?

Yes ☐No ☒

TMDL Compliance Units (acres): _____

Notification of ADL reuse (if yes, provide date):

Yes ☐

Date: _____

No ☒

This Report has been prepared under the direction of the following Licensed Person. The Licensed Person attests to the technical information contained herein and the date upon which recommendations, conclusions, and decisions are based. Professional Engineer or Landscape Architect stamp required at PS&E.


Ellery Ellis, Registered Project Engineer

10/14/16

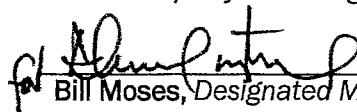
Date

I have reviewed the stormwater quality design issues and find this report to be complete, current and accurate:


Neil Bretz, Project Manager

10/17/16

Date


Bill Moses, Designated Maintenance Representative

10-18-16

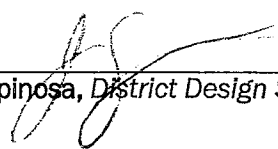
Date


Brad Cole, Designated Landscape Architect Representative

10-18-16

Date

[Stamp Required at PS&E only]


James Espinosa, District Design SW Coordinator

10/27/16

Date

ATTACHMENT

H

PROJECT RISK MANAGEMENT PLAN

Dist - E.A 06-0H240_

Project Name

Co-Rte-PM Fre-99-16.7/17.5

Date 11/4/2016

Project Mngr Neil Bretz

Telephone Number

Priority	Identification					Monitoring and Control
	Status	ID #	Date Identified Project Phase	Functional Assignment	Threat/Opportunity Event	Last date changes made to risk and comments
(1)	(2)	(3)	(4)	(5)	(6)	(18)
	Active	1	11/3/2016 PA&ED	Environmental	If Invasive Permits to Enter cannot be obtained for Preliminary Site Investigation work, court orders would then be required which would possibly affect the schedule	11/3/2016
	Active	2	11/3/2016 PA&ED	Environmental	If historic properties are identified, the environmental document schedule could be delayed.	11/3/2016
	Active	3	11/3/2016 Construction	Environmental	Bats or swallows found roosting on the overcrossings could delay construction schedule.	11/3/2016
	Active	4	11/3/2016 Construction	Environmental	Nesting birds found during preconstruction surveys could delay construction activities.	11/3/2016
		5	11/3/2016 PA&ED	Design	If southbound traffic exceeds 900 vph an auxiliary lane may be required, increasing the cost and R/W required	11/3/2016