# US Highway 50/Missouri Flat Road

# **Interchange Feasibility Study**



## Prepared for El Dorado County Department of Transportation



Ву



January 11, 2018





PROJECT ENGINEER

DATE

Acceptance by:

El Dorado County Department of Transportation

DATE



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## Introduction

The interchange at Missouri Flat Road and US Highway 50 (US 50) was originally constructed in the 1970's with Type L-8 and Type L-1 configurations on the north and south sides, respectively. To accommodate increasing traffic demands, the interchange was reconstructed in 2008 (Phase 1) to include the following:

- Type L-1 Configuration on both sides including widening of Missouri Flat Road to 6 total lanes (4 through and 2 left) and providing multi-lane ramps for sufficient vehicle storage at ramp intersections
- 2) New Overcrossing structure along Missouri Flat Road to accommodate additional lanes, Class 2 bicycle lanes, and sidewalks
- 3) Flexibility to accommodate a future upgrade (Phase 2) of the interchange to either of the following:
  - a. 6-Lane Tight Diamond This would expand the Phase 1 configuration by widening Missouri Flat Road to 8 total lanes (6 through and 2 left) as well as adding additional storage lanes to the ramps. This future upgrade is known as Phase 2a.
  - b. Single Point Diamond (SPDI) configuration (Type L-13) This would combine the ramp intersections into a single intersection in the center of the overcrossing structure. This future upgrade is known as Phase 2b. Phase 2a does not preclude the later construction of Phase 2b.

## Purpose

The purpose of this analysis is to re-evaluate the configuration of Phase 2 based on updated funding availability and changes in Caltrans policies. With respect to the latter, Caltrans standards have changed since Phase 1 was constructed and standards on auxiliary lanes (300' minimum aux lane is now required) and the accommodation of pedestrians and bicycles have become more restrictive. In addition, the most updated Caltrans policies allow for a more expanded toolbox of interchange configurations such as the Diverging Diamond configuration. As a result, a re-evaluation of the Phase 2 configuration is appropriate to determine the optimal recommendation for the ultimate interchange configuration.

## Methodology

The methodology of this analysis preserves the primary original project objective – to accommodate future growth in the most cost-effective manner. As a result, the existing overcrossing structure will not be reconstructed and right of way acquisition will be minimized or avoided, if possible.

The approach to this study includes the following:

- Consider all possible interchange configuration alternatives for Phase 2
- Screen alternative list based on fatal flaws such as inability to meet project objective or not feasible on an engineering basis.
- Develop remaining alternatives to a point where each can be evaluated based on performance and cost
- Compare alternatives based on value and provide a recommendation



## **Key Considerations**

Several important factors should be considered during alternative development such as the following.

<u>Existing Overcrossing Structure –</u> The existing overcrossing bridge structure was constructed as part of Phase 1 to replace the original structure and is structurally adequate to remain in service for up to 75 years. It was also configured to accommodate a future expansion for a Phase 2a and/or 2b. As a result, it is important to preserve this structure and avoid it reconstruction.

<u>Intersection Spacing –</u> Providing adequate spacing between signalized intersections – both "ramp-toramp" and "ramp-to-local" – is an extremely important factor in minimizing congestion. The minimum standard Caltrans intersection spacing is 400', while 500' is preferred. The construction of Phase 1 improved the intersection spacing to Plaza Drive on the north side from 250' to 500', but did not change the 100' spacing on the south side to Mother Lode Drive.

<u>Adjacent Development –</u> Several developments exist in the southwest quadrant of the interchange and abut directly to Missouri Flat Road such as Best Western Inn Hotel, Casa Ramos Restaurant, and Park & Ride lot. Each of these currently get their only access via Mother Lode Drive. It is possible to relocate the Park & Ride Lot to the southeast quadrant to the flat area adjacent to Perks Court. Considerable commercial development exists on the north side of the interchange including many shopping areas, fast food restaurants, and gas stations – all of which are accessible via Plaza Drive.

<u>Motherlode Drive Relocation –</u> To provide adequate intersection spacing on the south side of the interchange, Mother Lode Drive would require relocation at least 400' southward (See Attachment A). However, this would require significant retaining walls due to the 80' tall hillside in the southwest quadrant. Right of Way acquisition from the Best Western and Casa Ramos would be required as well. This relocation, though helpful in reducing congestion is costly (approximately \$7 Million) which alone exceeds the cost of most interchange alternatives considered in this analysis.

<u>Southeast Quadrant –</u> Perks Court is a frontage road that closely parallels the eastbound (EB) on-ramp and US 50 in the southeast quadrant of the interchange. The topography south of Perks Court drops off steeply down to 70' below the grade of Perks Court and serves as a local low point in the area comprising of dense tree vegetation. It is anticipated that significant wetland presence exists in this area.

<u>NB to EB Bypass Lane</u> – The movement from northbound (NB) Missouri Flat Road to EB US 50 is served by a free right turn lane which bypasses the EB ramp intersection. Pedestrians must yield to vehicles while crossing this bypass lane. Updated Caltrans standards do not permit the use of free right turn lanes and as a result, any alternative that impacts this bypass lane would be required to either remove it or process a design exception.

<u>Rejected Alternatives</u> – Based on the above considerations, alternatives which exhibited any of the below characteristics were initially considered, but not developed for further consideration

- Loop off-ramps in Northwest (NW) Quadrant Providing loops in the Northwest Quadrant would reduce the north intersection spacing from 500' to 250' thereby severely reducing the effectiveness the signal operations.
- Loop off-ramps in SE Quadrant Providing loops in the SE Quadrant would require significant embankment and/or retaining walls in the local low area. There would also be excessive right of way and environmental impacts as well.
- Loop on-ramps in NE Quadrant Providing loops in the NE Quadrant would require significant right of way acquisition from numerous commercial developments. Because



of the increase in footprint, there would be no opportunity for nearby relocation leading to a loss of local economic revenue.

These factors were considered fatal flaws and as a result rejected for inclusion in any further considered alternatives.

## **Alternative Development**

Based on the project objectives and key considerations, the below alternatives were developed for further evaluation. All alternatives meet all Caltrans and County standards unless otherwise stated and provide standard Class 2 bicycle facilities and sidewalks.

Two types of alternatives were considered – short term and long term. The former are low cost alternatives designed to extend the period of acceptable traffic operations for the existing interchange by an incremental amount. Long term alternatives are intended to provide acceptable operations for the interchange for a period of at least 20 years. The implementation of short term alternatives do not preclude the implementation of long term alternatives. As a result, it is possible to implement a short term alternative and then at a later date replace it with a long term alternative.

## **Short-Term Alternatives**

Short-term alternatives considered include the following:

Lane Reconfiguration #1 (See Attachment B)— This alternative restripes lanes on Missouri Flat Road from 12' in width to 11' to provide an additional NB lane as well as storage for the NB to WB on-ramp movement. This alternative extends the period of acceptable traffic operations for the existing interchange by approximately 5 years – well below the desired 20-year period of the project objectives. This project would require design exceptions for 11' lane widths as well as reduction of shoulders from 8' to 5'. Class 2 bike lanes would be reduced to 5', but is still considered a standard width.

Lane Reconfiguration #2 (See Attachment C)— This alternative restripes lanes on Missouri Flat Road from 12' in width to 11' to provide an additional SB lane as well as storage for the SB to EB on-ramp movement. This alternative extends the period of acceptable traffic operations for the existing interchange by approximately 3 years – well below the desired 20-year period of the project objectives. This project would require design exceptions for 11' lane widths as well as reduction of shoulders from 8' to 5'. Class 2 bike lanes would be reduced to 5', but is still considered a standard width.

## Long-Term Alternatives

Long-term alternatives considered include the following:

<u>Hook Ramps (See Attachment D)</u> This alternative replaces the existing EB Off-ramp with a Type L-6 configuration (aka "hook ramps") connecting into Mother Lode Drive. Traffic operations are improved due to the removal of the 100' intersection spacing on the south side. The Park and Ride lot would require relocation to the SE quadrant. Due to the limited distance between the SB to EB & NB to EB on-ramps, a 300' auxiliary lane could not be accommodated and would require a design exception to Caltrans standards. In addition, the Type L-6 configuration is highly undesirable to Caltrans policies and as a result, the probability of the approval of this configuration is low.

<u>Partial Cloverleaf (See Attachment E)</u> This alternative replaces the existing EB Off-ramp with a Type L-9 configuration (aka "Partial Cloverleaf") requiring the relocation of Mother Lode Drive. Traffic operations are improved due to the removal of the 100' intersection spacing on the south side and the modification of the EB ramp intersection to a two-phase operation. The Park and Ride lot would



require relocation to the SE quadrant. Due to the limited distance between the SB to EB & NB to EB on-ramps, a 300' auxiliary lane could not be accommodated and would require a design exception to Caltrans standards. This configuration is highly desirable to Caltrans policies and as a result, the probability of the approval of this configuration is very high.

<u>Roundabout Intersections (See Attachment F)</u> This alternative replaces the existing ramp intersections with unsignalized roundabouts. Mother Lode Drive would be preserved in its current configuration and connect into the EB ramp intersection on a fifth leg. As a result, traffic operations are improved due to the removal of the 100' intersection spacing on the south side and the general efficiencies of a roundabout as opposed to a conventional intersection. The Park and Ride lot would not require relocation. There is precedent for this configuration in the area and as a result, it is acceptable to Caltrans policies. The probability of the approval of this configuration is high.

<u>Diverging Diamond (See Attachment G & H)–</u> This alternative reconfigures Missouri Flat Road and the ramp intersections to a diverging diamond (DDI) configuration. The overcrossing structure would be widened to accommodate 6 lanes on Missouri Flat Road. Traffic operations are improved due to the general efficiencies of two-phase signals at the ramp intersections. The Park and Ride lot would not require relocation. Although there have been approximately 60 DDI's constructed in the United States, this configuration is relatively new to Caltrans as the first one in the state is being constructed in 2018. The probability of the approval of this configuration is high. Mother Lode Drive could either be preserved or relocated and as a result, two variations are considered for this configuration. In the event Mother Lode Drive remains, its access would be limited to right-in/right-out and a design exception for intersection spacing to Mother Lode Drive will be required.

<u>6-Lane Tight Diamond (See Attachment I)</u> Also known as Phase 2a, this alternative is one of the possible ultimate configurations for Phase 2. It widens Missouri Flat Road to 8 total lanes (6 through and 2 left) and adds a lane onto each off-ramp. Traffic operations are improved due to the increased capacity. The Park and Ride lot would not require relocation. The overcrossing structure will require widening to add one lane on each side. The probability of the approval of this configuration is high, but will require a design exception for intersection spacing to Mother Lode Drive.

<u>Single Point Diamond (See Attachment J)</u> Also known as Phase 2b, this alternative is one of the possible ultimate configurations for Phase 2. Traffic operations are improved due to the removal of the 100' intersection spacing on the south side, the increase of intersection spacing on the north side to 700', and the general efficiencies of combining the ramp intersections into a single point. The Park and Ride lot would not require relocation. The overcrossing structure will require widening to triple its current area which leads to a significant cost. The probability of the approval of this configuration is high as it has already gained Caltrans approval as part of Phase 1.

All long-term alternatives were developed for preliminary geometry, right of way impacts, environmental impacts, and cost.

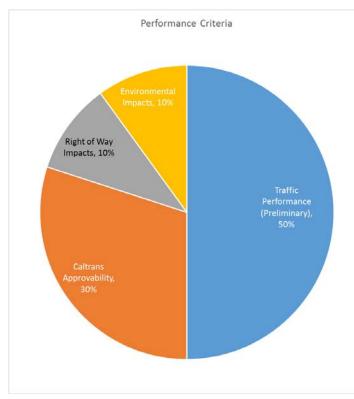


## **Alternatives Comparison**

The alternatives were compared to each other based on the following weighted criterion and a value index developed for each based on performance/cost.

(Value Index = Performance/Cost)

First, the major performance criteria was defined as follows to determine the relative importance of each criterion.



Thereafter, the performance of each alternative was calculated. Finally, a value index score was determined to compare overall value of each alternative.

	Traffic Performance (Preliminary)	Caltrans Approvability	Right of Way Impacts	Environmental Impacts	Performance Score (1000 Max)	Cost	Value Index = (Score/Cost) *1,000,000
Weighting	50%	30%	10%	10%			
No-Build	1	10	10	10	550	\$0	N/A
Hook Ramps	6	1	6	6	450	\$3,000,000	150
Partial Cloverleaf	6	4	2	5	490	\$11,750,000	42
Diverging Diamond	7	8	9	8	760	\$4,600,000	165
Diverging Diamond (Relocate Mother Lode)	9	9	2	8	820	\$11,300,000	73
Roundabout	3	9	7	7	560	\$3,800,000	147
6-Lane Tight Diamond	5	9	9	8	690	\$4,500,000	153
Single Point Diamond	5	10	10	9	740	\$25,750,000	29



### Programming

Additional Costs associated with further project development are shown below.

Weichéan	Construction Cost	Project Management 8%	Engineering (PR, PS&E) 30%	Environmental Mitigation Varies	Construction Management 15%	Total Cost
Weighting						
No-Build	\$0	\$0	\$0	\$0	\$0	\$0
Hook Ramps	\$3,000,000	\$240,000	\$900,000	\$120,000	\$450,000	\$4,710,000
Partial Cloverleaf	\$11,750,000	\$940,000	\$3,525,000	\$587,500	\$1,762,500	\$18,565,000
Diverging Diamond	\$4,600,000	\$368,000	\$1,380,000	\$92,000	\$690,000	\$7,130,000
Diverging Diamond (Relocate Mother Lode)	\$11,300,000	\$904,000	\$3,390,000	\$226,000	\$1,695,000	\$17,515,000
Roundabout	\$3,800,000	\$304,000	\$1,140,000	\$114,000	\$570,000	\$5,928,000
6-Lane Tight Diamond	\$4,500,000	\$360,000	\$1,350,000	\$90,000	\$675,000	\$6,975,000
Single Point Diamond	\$25,750,000	\$2,060,000	\$7,725,000	\$257,500	\$3,862,500	\$39,655,000

### Recommendation

Based on this analysis, the Diverging Diamond (with no relocation of Mother Lode Drive) provides the best value and is significantly less costly than the SPDI alternative.

#### Attachments

Attachment A – Mother Lode Drive Relocation

Attachment B – Lane Reconfiguration #1

Attachment C – Lane Reconfiguration #2

Attachment D – Hook Ramps

Attachment E – Partial Cloverleaf (with Mother Lode Relocation)

Attachment F – Roundabouts

Attachment G – Diverging Diamond

Attachment H – Diverging Diamond (with Mother Lode Relocation)

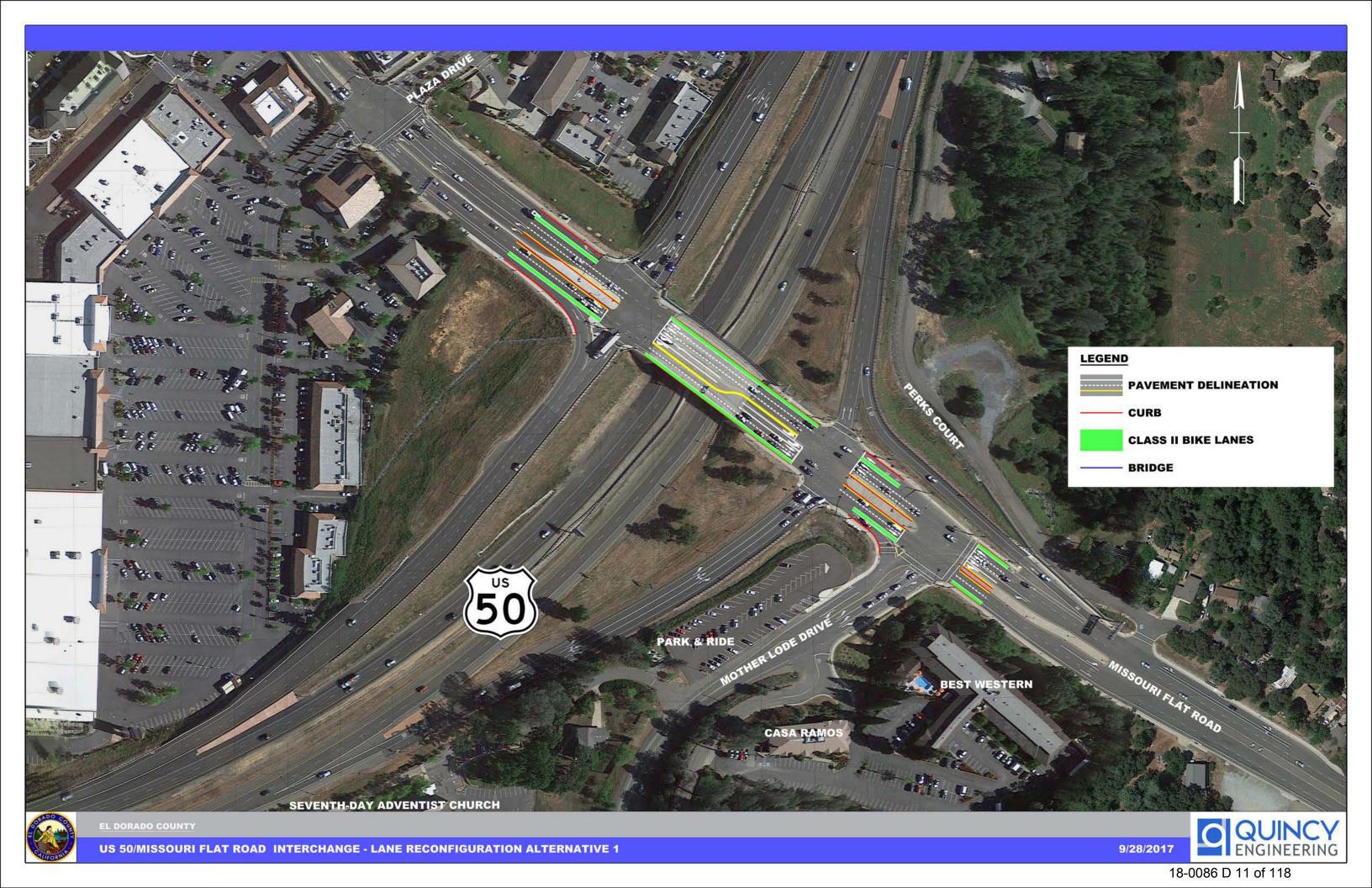
Attachment I – 6-Lane Tight Diamond

Attachment J – Single Point Diamond

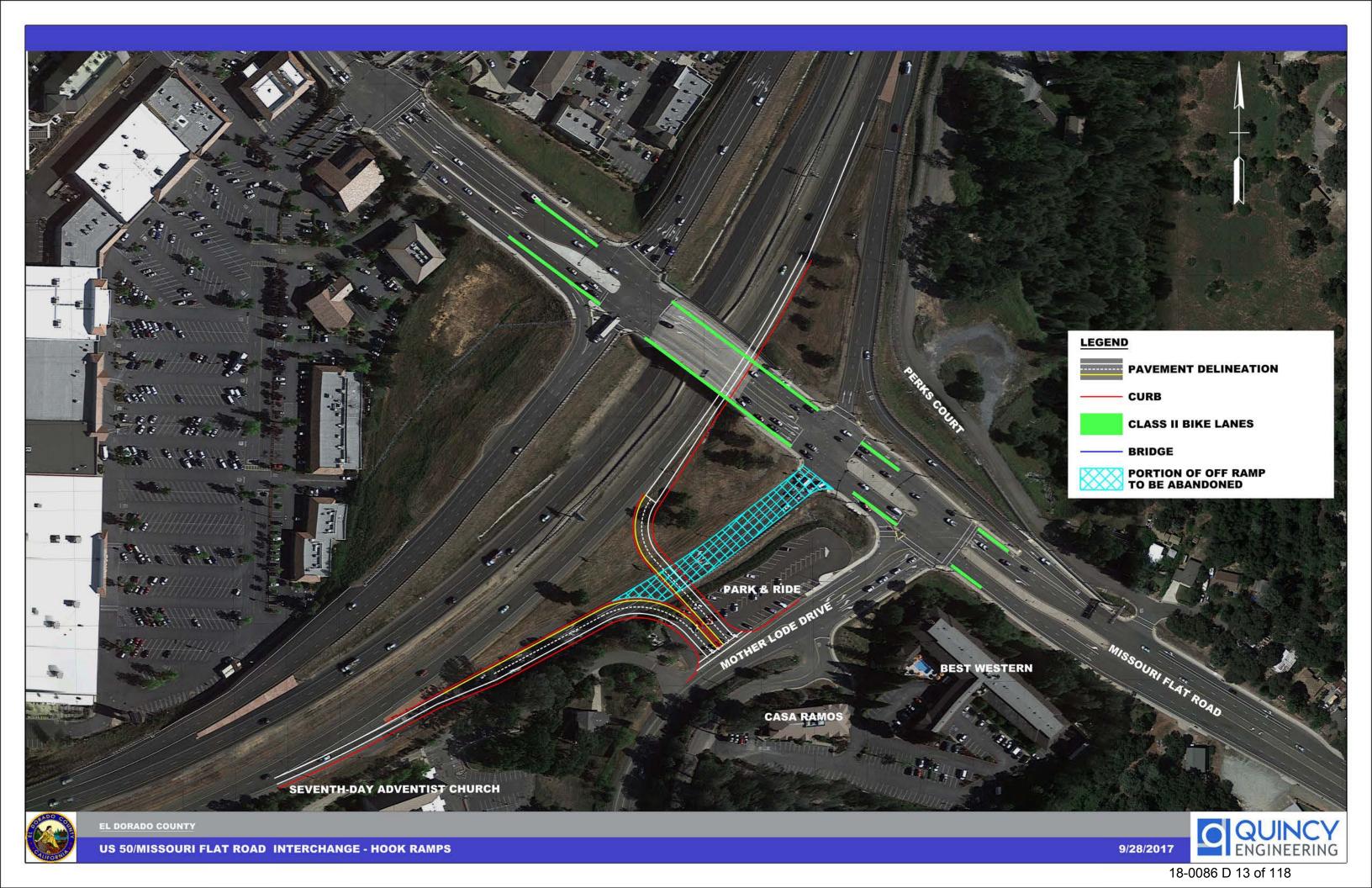
Attachment K – Cost Estimates

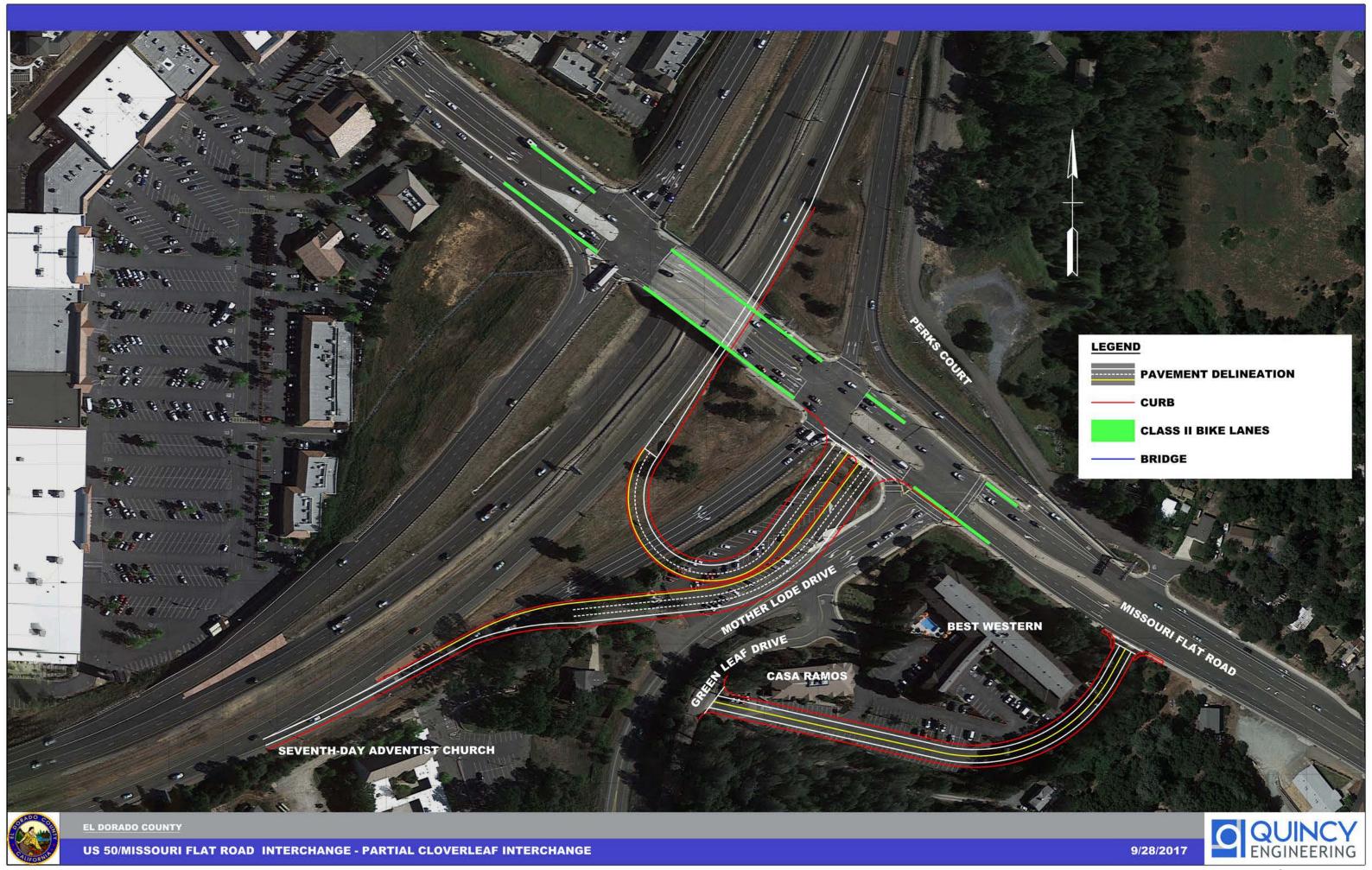




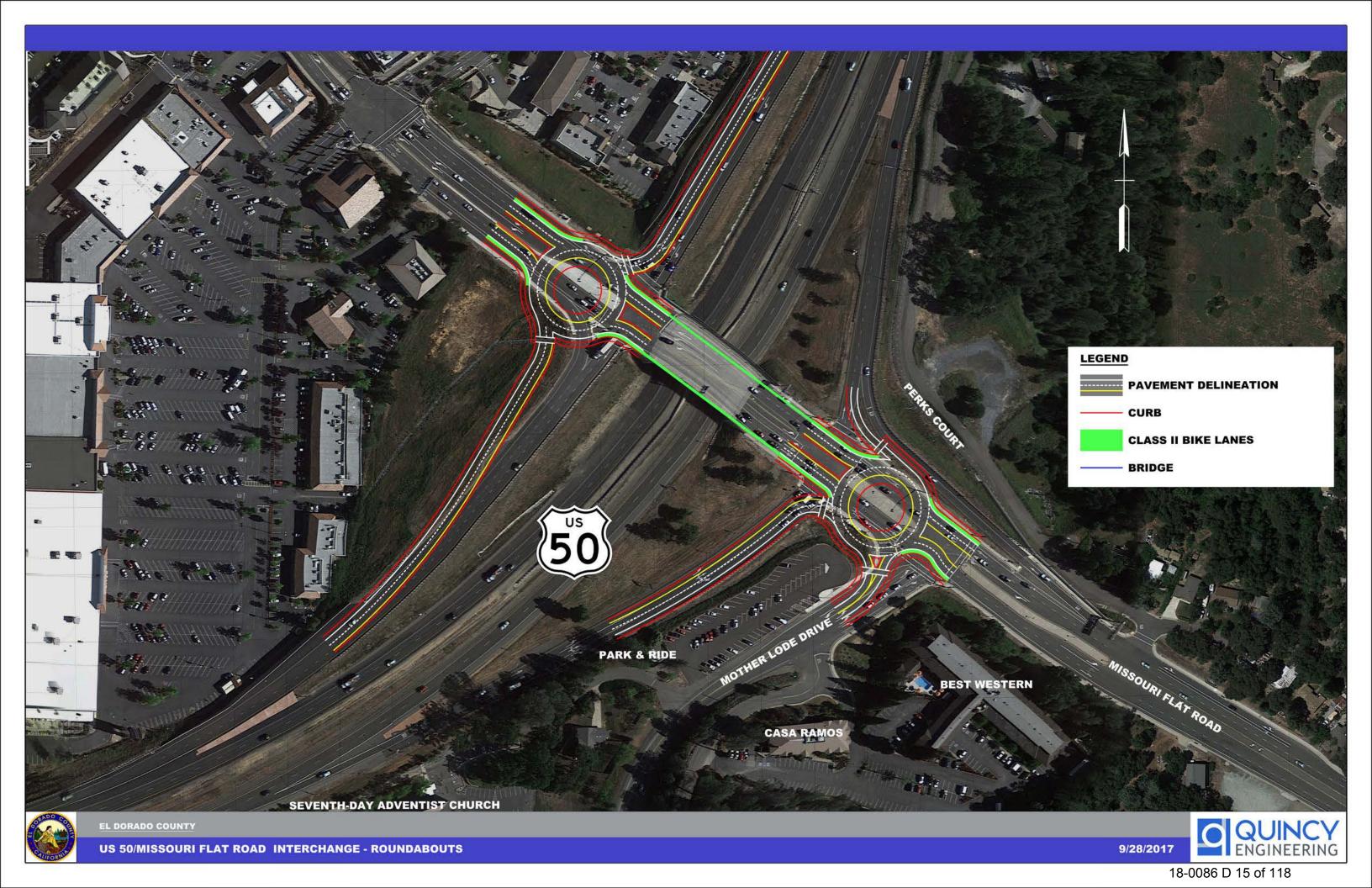


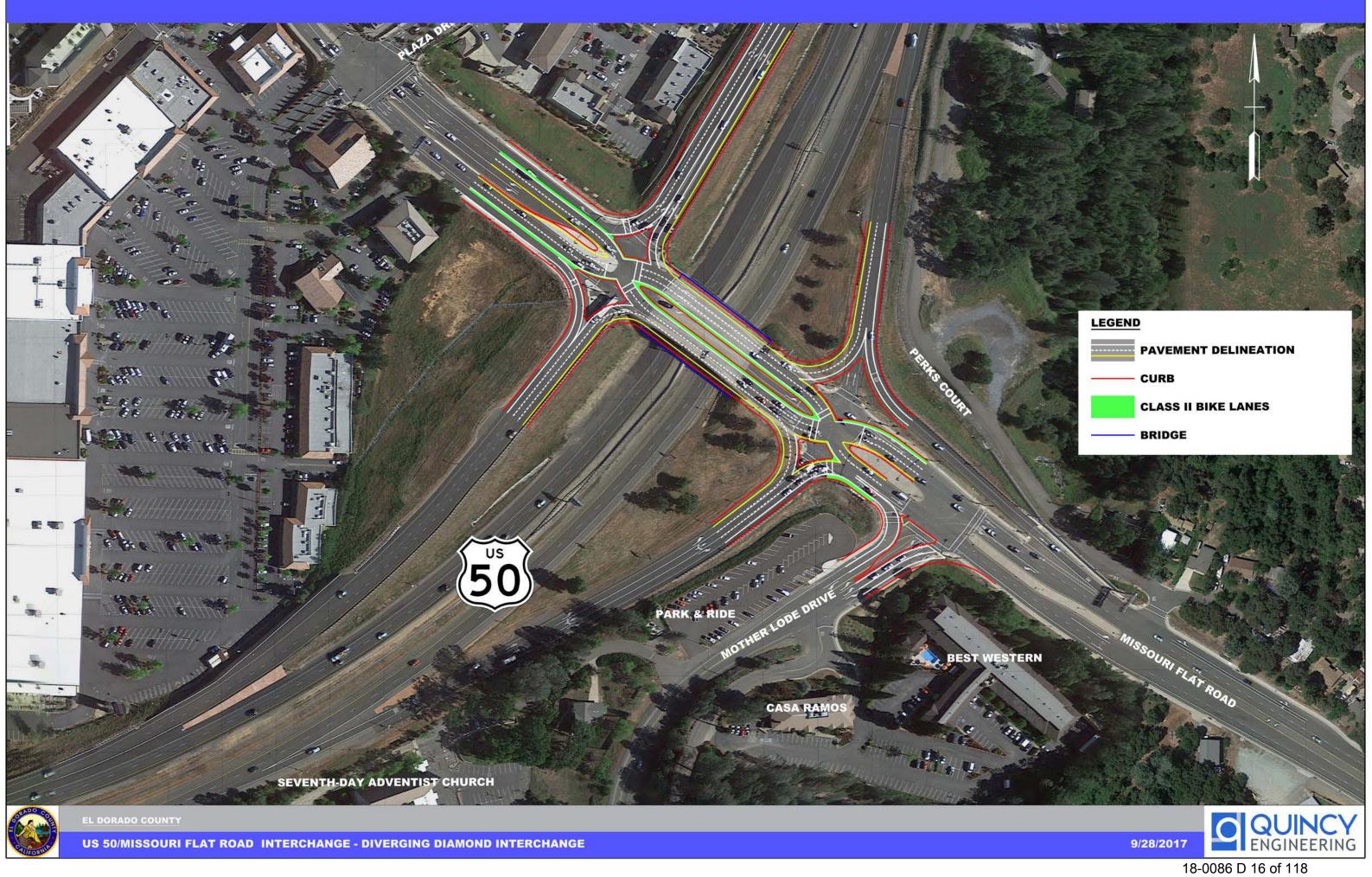


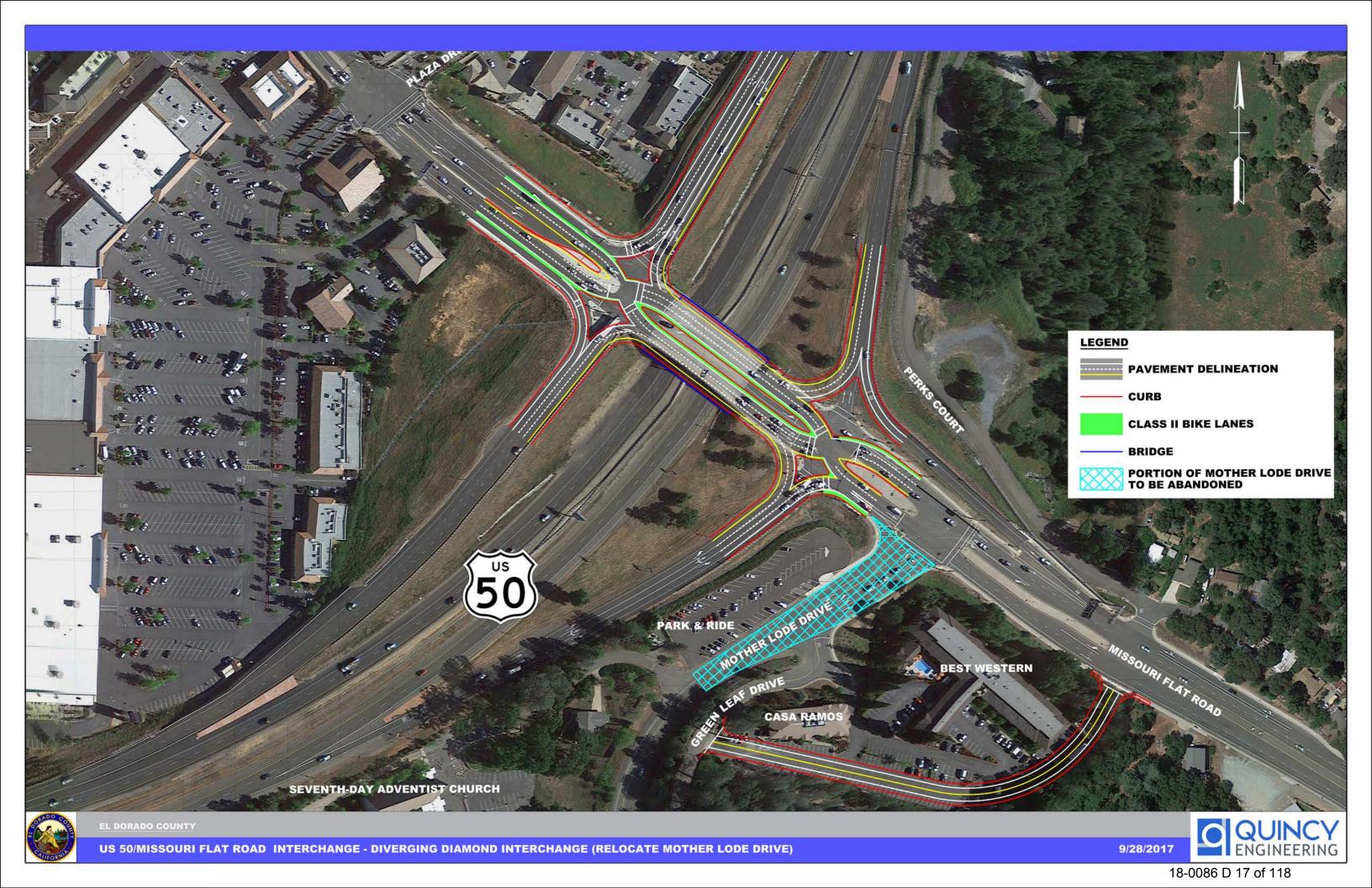


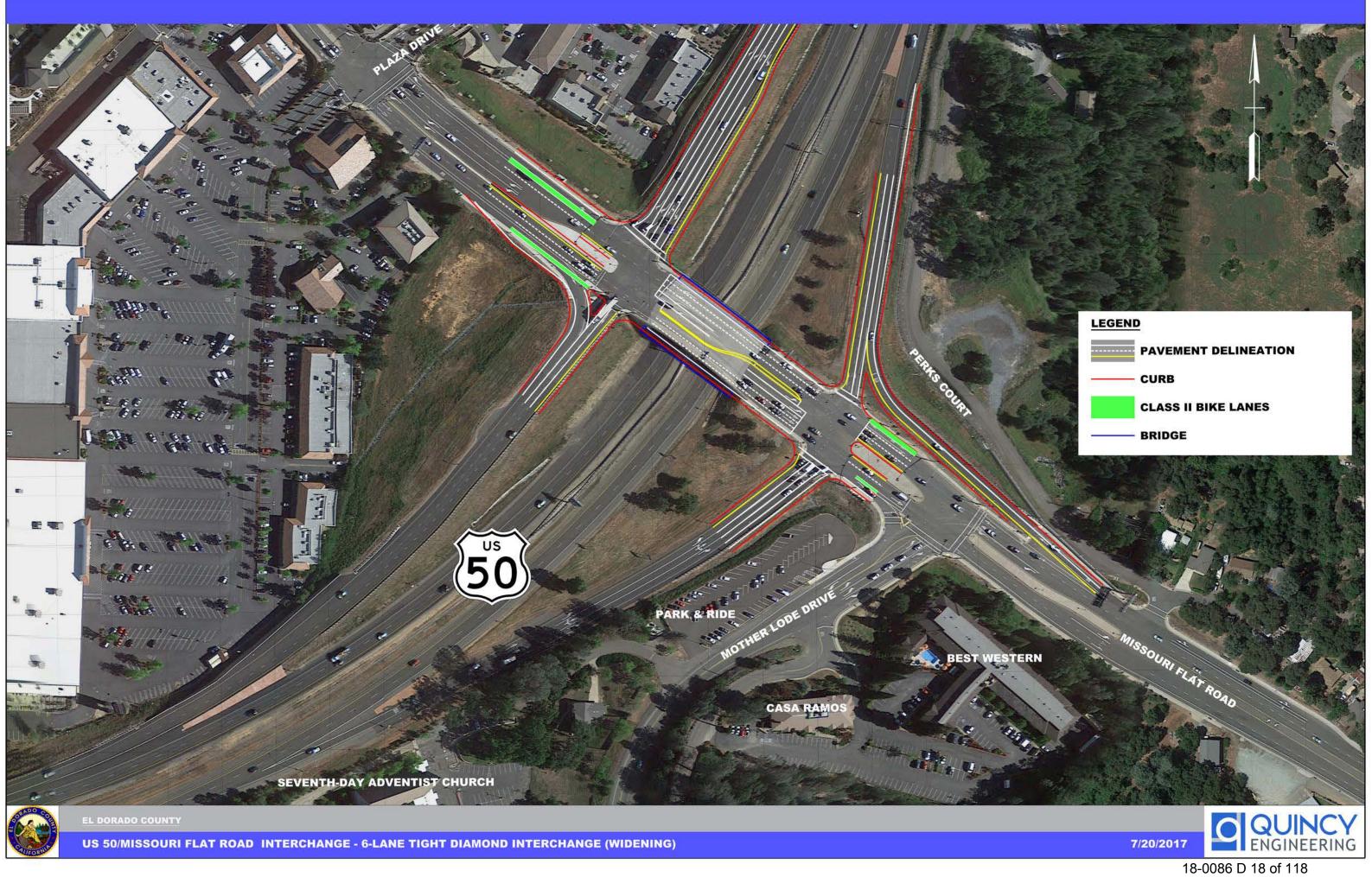


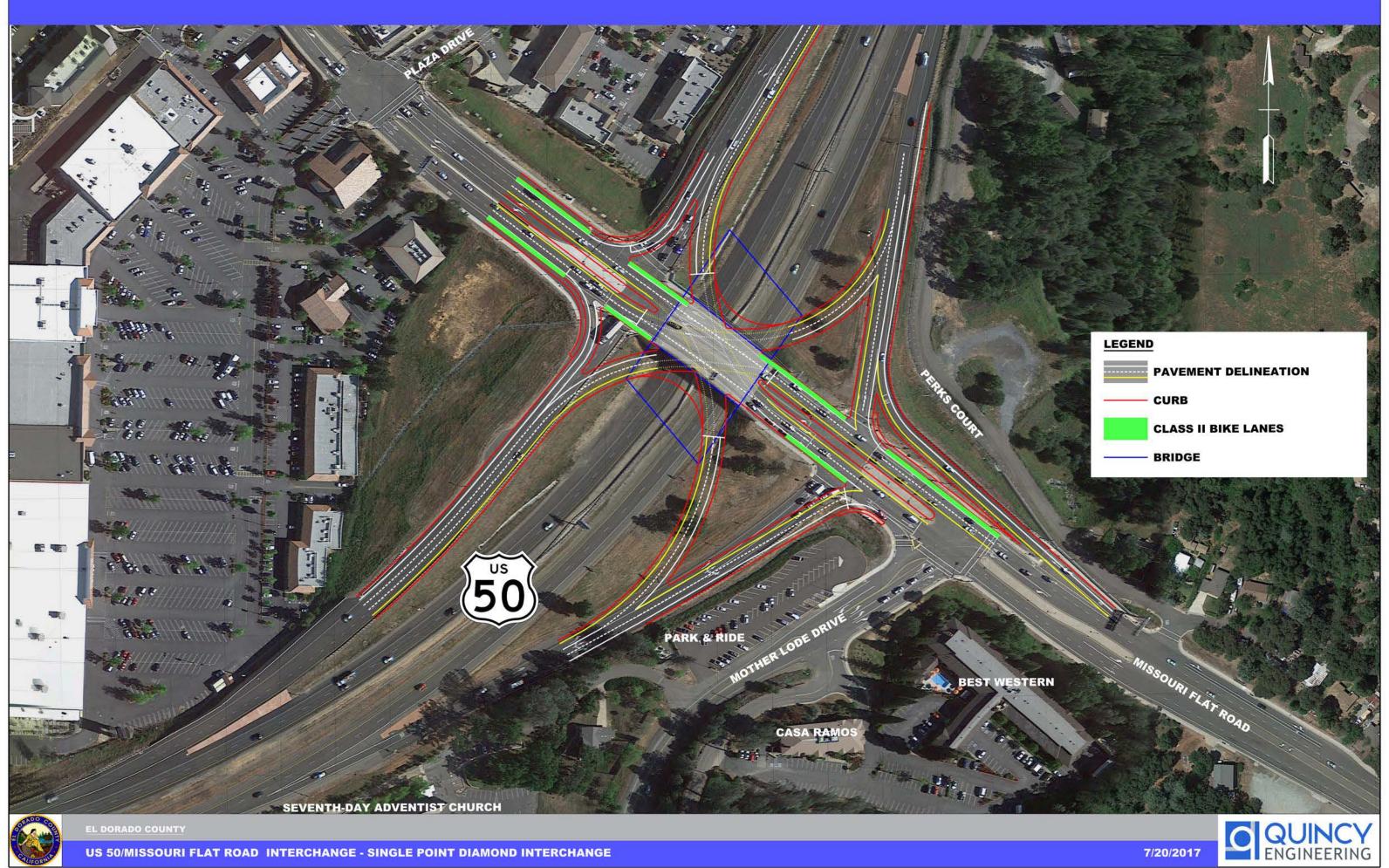
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## **Preliminary Cost Estimate**

## **Project ID:**

Type of Estimate :

Program Code : Project Limits :

Description:

Scope :

Alternative :

Lane Reconfiguration - Alternative 1

		Current Cost	Esc	alated Cost
ROADWAY ITEMS	\$	674,400	\$	674,400
STRUCTURE ITEMS	\$	-	\$	-
SUBTOTAL CONSTRUCTION COST	\$	674,400	\$	674,400
<b>RIGHT OF WAY</b>	\$	-	\$	-
TOTAL CAPITAL OUTLAY COST	\$	675,000	\$	675,000
PR/ED SUPPORT	\$	-	\$	-
PS&E SUPPORT	\$	-	\$	-
RIGHT OF WAY SUPPORT	\$	-	\$	-
CONSTRUCTION SUPPORT	\$	-	\$	-
TOTAL CAPITAL OUTLAY SUPPORT COST*	\$	-	\$	-
TOTAL PROJECT COST	\$	675,000	\$	675,000
If Project has been programm	ned er	nter Programmed Amount	\$	-

		Month	/ Year
	Date of Estimate (Month/	'Year)	/
	Estimated Date of Construction Start (Month/	Year)	/
	Number of Working	g Days Month	Working Days / Year
	Estimated Mid-Point of Construction (Month/		
	Number of Plant Establishment	t Days	Days
	Estimated Project Schedule		
	PID Approval		
	PA/ED Approval		
	PS&E		
	RTL		
	Begin Construction		
Approved by Project Manager		(1	xxx) xxx-xxxx
	Project Manager	Date	Phone

## I. ROADWAY ITEMS SUMMARY

	Section		Cost
1	Earthwork	\$	
2	Pavement Structural Section	\$	-
3	Drainage	\$	<u> </u>
4	Specialty Items	\$	144,000
5	Environmental	\$	
6	Traffic Items	\$	350,000
7	Detours	\$	<u> </u>
8	Minor Items	\$	<u> </u>
9	Roadway Mobilization	\$	-
10	Supplemental Work	\$	24,700
11	State Furnished	\$	<u> </u>
12	Contingencies	\$	155,700
13	Overhead	\$	<u> </u>
	TOTAL ROADWAY	ITEMS \$	674,400
Estimate Prepa	red By Name and Title	Date	Phone
Estimate Revie	wed By Name and Title	Date	Phone

By signing this estimate you are attesting that you have discussed your project with all functional units and have incorporated all their comments or have discussed with them why they will not be incorporated.

## SECTION 1: EARTHWORK

Item code	Unit	Quantity		Unit Price (\$)		Cost	
Roadway Excavation	CY	0	х	40.00	=	\$	-
			х		=	\$	-
			х		=	\$	-
			х		=	\$	-
			х		=	\$	-
			х		=	\$	-
			х		=	\$	-
			х		=	\$	-
			х		=	\$	-
			х		=	\$	-
			х		=	\$	-
			Х		=	\$	-

TOTAL EARTHWORK SECTION ITEMS \$

-

## SECTION 2: PAVEMENT STRUCTURAL SECTION

Item code	Unit (	Quantity	Unit Price (\$)		Cost	
Pavement	SF	0 >	< 10.00	=	\$-	
		)		=	\$-	
		>	K	=	\$-	
		>	κ	=	\$-	
		>		=	\$-	
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		TOTAL	STRUCTURAL	SE	CTION ITEMS \$	
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### SECTION 3: DRAINAGE

Item code	Unit	Quantity		Unit Price (\$)		Cost
Drainage	LS	0	х	100,000.00	=	\$ -
5			х		=	\$ -
			х		=	\$ -
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			х		=	\$ -
			х		=	\$ -

Unit

CY

#### TOTAL DRAINAGE ITEMS \$

-

#### SECTION 4: SPECIALTY ITEMS

Item code

Curb

Quantity		Unit Price (\$)			Cost	
180	х	800.00	=	\$	144,000	
	х		=		-	
	х		=	\$	-	
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	х		=	\$	-	
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	х		=	\$	-	
		TOTAL SF	PEC	IAL	TY ITEMS	\$ 144,000

## SECTION 5: ENVIRONMENTAL

#### **5A - ENVIRONMENTAL MITIGATION**

Item code	Unit	Quantity	Unit Price (\$)		Cost	
		>	κ	=	\$	-
		>	(	=	\$	-

Subtotal Environmental	\$ -

#### **5B - LANDSCAPE AND IRRIGATION**

Item code	Unit	Quantity		Unit Price (\$)		Cost	
Landscape and Irrigation	LS	0	х		=	\$	-
			х		=	\$	-
			х		=	\$	-
			х		=	\$	-
			х		=	\$	-
			х		=	\$	-
			х		=	\$	-
			х		=	\$	-
			х		=	\$	-
			х		=	\$	-
			х		=	\$	-
			x		=	\$	-

Subtotal Landscape and Irrigation \$ -

5C - NPDES

Item code	Unit	Quantity		Unit Price (\$)		Cost
		-	х	=	= \$	; -
			Х	=	- \$	; -
			х	=	= \$	-
			х	=	= \$	-
			х	=	= \$	-
			х	=	= \$	-
			Х	=	= \$	-
			Х	=	= \$	-
			Х	=	= \$	-
			х	=	= \$	-
			х	=	= \$	-
			Х	=		-
			Х	=	= \$	) -
Supplemental Work for NPDES	<b>.</b> .					
(These costs are not accounted in total here but under	Supple	mental wo		on sheet 7 of 11).	-	
			Х	=	= \$	-
			Х	=		-
			Х	=	= \$	) -
		Subtotal N	IPE	DES (Without Sup	plen	nental Work) <u>\$</u>
*Applies to all SWPPPs and those WPCPs with sediment control or s	oil stabiliz	ation BMPs.				
**Applies to both SWPPPs and WPCP projects.						

\*\*\* Applies only to project with SWPPPs.

TOTAL ENVIRONMENTAL \$

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## SECTION 6: TRAFFIC ITEMS

#### 6A - Traffic Electrical

Item code	Unit	Quantity		Unit Price (\$)		Cost
Traffic Signal	EA	2	х		=	\$ 200,000
-			х	=		\$ -
			х	=	=	\$-
			х	=	-	\$-
			х	=	=	\$-
			х	=	-	\$-
			х	=	•	\$-
			х	=	=	\$-
			х	=	=	\$-
			х	=	=	\$-
			х	=	•	\$-
			х	=	•	\$-
			х	=	•	\$-
			х	=	=	\$-
			х	=	=	\$-

Subtotal Traffic Electrical \$ 200,000

#### 6B - Traffic Signing and Striping

Item code	Unit	Quantity		Unit Price (\$)			Cost		
Pavement Delineation	LS	1	х	25,000.00	=	\$	25,000		
Roadside Signs	LS	1	х	5,000.00	=	\$	5,000		
Overhead Signs	LS	1	х	100,000.00	=	\$	100,000		
			х		=	\$	-		
			х		=	\$	-		
			х		=	\$	-		
			х		=	\$	-		
			х		=	\$	-		
			х		=	\$	-		
			Х		=	\$	-		
			Х		=	\$	-		
			Х		=	\$	-		
			Х		=	\$	-		
			Sul	btotal Traffic Sig	gnin	g ar	nd Striping	\$ 130,	000

#### 6C - Stage Construction and Traffic Handling

Item code	Unit	Quantity		Unit Price (\$)		Cost
Traffic Control Systems	LS	1	х	20,000.00	=	\$ 20,000
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -

Subtotal Stage Construction and Traffic Handling \$ 20,000

TOTAL TRAFFIC ITEMS	\$	350,000
---------------------	----	---------

#### SECTION 7: DETOURS

Include constructing, maintaining, and removal Item code	11	0		unit Duine (ft)		0	
	Unit	Quantity		Init Price (\$)	۴	Cost	
0713XX Temporary Fence (Type X)	LF		х	=	\$	-	
07XXXX Temporary Drainage	LS		х	=	\$	-	
120143 Temporary Pavement Delineation			X	=	¢	-	
1286XX Temporary Signals	EA		х	=	\$	-	
129000 Temporary Railing (Type K)	LF		Х	=	\$	-	
190101 Roadway Excavation	CY		X	=	¢ ¢	-	
198001 Imported Borrow	CY		х	=	Ъ Ф	-	
198050 Embankment	CY		Х	=	\$	-	
250401 Class 4 Aggregate Subbase	CY		X	=	\$	-	
260201 Class 2 Aggregate Base	CY		X	=	\$	-	
390132 Hot Mix Asphalt (Type A) XXXXXX Some Item	TON LS		X	=	¢ Q	-	
	LS		х	=	\$	-	
				TOTAL DE	του	RS	\$ -
				SUBTOTAL S	ECT	IONS 1-7	\$ 494,000
SECTION 8: MINOR ITEMS							
8A - Americans with Disabilities Act Items							
ADA Items				0.0%	\$	-	
8B - Bike Path Items							

 Bike Path Items
 0.0%
 \$

 8C - Other Minor Items
 0.0%
 \$

 Other Minor Items
 0.0%
 \$

 Total of Section 1-7
 \$
 494,000
 x
 0.0%
 =
 \$

#### SECTIONS 9: MOBILIZATION

Item					
999990	Total Section 1-8	\$ 494,000	x 10%	бо = \$	-

#### SECTION 10: SUPPLEMENTAL WORK

Item code	Unit	Quantity	Unit Price (\$)			Cost	
066015 Federal Trainee Program	LS	-	x	=	\$	-	
066063 Traffic Management Plan - Public Informatic	LS	2	x	=	\$	-	
066090 Maintain Traffic	LS	:	x	=	\$	-	
066094 Value Analysis	LS	:	x	=	\$	-	
066204 Remove Rock & Debris	LS	:	x	=	\$	-	
066222 Locate Existing Cross-Over	LS	:	x	=	\$	-	
066670 Payment Adjustments For Price Index Fluct	LS	:	x	=	\$	-	
066700 Partnering	LS	:	x	=	\$	-	
066866 Operation of Existing Traffic Management S	LS	:	x	=	\$	-	
066920 Dispute Review Board	LS	:	x	=	\$	-	
XXXXXX Some Item		1	x	=	\$	-	
Cost of NPDES Sup	<u>olementa</u>	al Work specifie	ed in Section 5C	Ξ	\$	-	
Total Section 1-8	\$	494,000	5%	=	\$	24,700	
			TOTAL SUPPL	EMI	ENT	AL WORK	\$ 24,700

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-

\$

-

-

TOTAL MINOR ITEMS

TOTAL MOBILIZATION \$

## SECTION 11: STATE FURNISHED MATERIALS AND EXPENSES

Item code	Unit	Quantity	Ur	nit Price (\$	5)	Cos	t
066063 Public Information	LS		х		=		\$0
066105 RE Office	LS		х		=		\$0
066803 Padlocks	LS		х		=		\$0
066838 Reflective Numbers and Edge Sealer	LS		х		=		\$0
066901 Water Expenses	LS		х		=		\$0
066062A COZEEP Expenses	LS		х		=		\$0
06684X Ramp Meter Controller Assembly	LS		х		=		\$0
06684X TMS Controller Assembly	LS		х		=		\$0
06684X Traffic Signal Controller Assembly XXXXXX Some Item	LS		х		=		\$0
Total Section 1-8	\$	494,000		0%	=	\$	-
				TOTAL S	STATI	EFURNIS	SHED

## SECTION 12: TIME-RELATED OVERHEAD

Estiamted Time-Releated Overhead (TRO) Percentage (0% to 10%) = 5%

Item code	Unit	Quantity	l	Jnit Price (\$	)	Cost	
070018 Time-Related Overhead	WD	0	Х	#DIV/0!	=	\$0	
		-	ΓΟΤΑ	L TIME-REL	ATED	OVERHEAD	\$0

SECTION 13: CONTINGENCY

(Pre-PSR 30%-50%, PSR 25%, Draft PR 20%, PR 15%, after PR approval 10%, Final PS&E 5%)

Total Section 1-11 \$ 518,700 x 30% = \$155,610

TOTAL CONTINGENCY \$155,700

## **II. STRUCTURE ITEMS**

Retaining Walls
-----------------

	Retaining Walls		
DATE OF ESTIMATE Building Name Bridge Number Structure Type Width (Feet) [out to out] Total Building Length (Feet) Total Area (Square Feet) Structure Depth (Feet) Footing Type (pile or spread) Cost Per Square Foot	00/00/00 xxxxxxxxxxxxxxxxxxxxxx 57-XXX xxxxxxxxxxxxxxxxxxxxxxxx LF LF 0 SQFT LF xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx	00/00/00 xxxxxxxxxxxxxxxxxxxxxxxx 57-XXX xxxxxxxxxxxxxxxxxxxxxxx 0.00 LF 0.00 LF 0 SQFT 0.00 LF xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx	00/00/00 xxxxxxxxxxxxxxxxxxxxxxxx 57-XXX xxxxxxxxxxxxxxxxxxxxxxx 0.00 LF 0.00 LF 0 SQFT 0.00 LF xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
COST OF EACH STRUCTURE	\$0.00	\$0.00	\$0.00

			Ĩ
DATE OF ESTIMATE	00/00/00	00/00/00	00/00/00
Name	xxxxxxxxxxxxxxxxxxx	****	*****
Bridge Number	57-XXX	57-XXX	57-XXX
Structure Type	XXXXXXXXXXXXXXXXXXXXXXXX	*****	*****
Width (Feet) [out to out]	0.00 LF	0.00 LF	0.00 LF
Total Length (Feet)	0.00 LF	0.00 LF	0.00 LF
Total Area (Square Feet)	0 SQFT	0.00 SQFT	0.0 SQFT
Structure Depth (Feet)	0.00 LF	0.00 LF	0.00 LF
Footing Type (pile or spread)	XXXXXXXXXXXXXXXXXXXXXXX	****	*****
Cost Per Square Foot	\$0.00	\$0.00	\$0.00

COST OF EACH STRUCTURE	\$0.00	\$0.00	\$0.00

TOTAL COST OF BRIDGES \$0.00

TOTAL COST OF RETAINING

## TOTAL COST OF STRUCTURES<sup>1</sup>

<sup>1</sup>Structure's Estimate includes Overhead and Mobilization.

Add more sheets if needed. Call them 9a, 9b, 9c, ..., etc

\$0.00

\$0.00

Date

#### DO NOT PRINT THIS SHEET AS PART OF COST ESTIMATE ATTACHMENT TO PROJECT INITIATION OR APPROVAL DOCUMENTS.

## **III. RIGHT OF WAY**

Fill in all of the available information from the Right of Way data sheet.

A)	A1) A2)	Acquisition, including Excess Lan SB-1210	d Purchases, Damages & Goodwill,	\$ \$	0 0
B)	Acquisitio	on of Offsite Mitigation		\$	0
C)	C1) C2)	Utility Relocation (State Share) Potholing (Design Phase)		\$ \$	0 0
D)	Railroad	Acquisition		\$	0
E)	Clearanc	e / Demolition		\$	0
F)	Relocatio	on Assistance (RAP and/or Last Re	sort Housing Costs)	\$	0
G)	Title and	Escrow		\$	0
H)	Environm	nental Review		\$	0
I)		nation Settlements G & H applied to items A + B)	<u>0%</u>	\$	0
J)	Design A	ppreciation Factor	0%	\$	0
K)	Utility Re	location (Construction Cost)		\$	0

L)		TOTAL RIGHT OF WAY ESTIMATE
	(Excluding Item #8 - Hazardous W	

(Excluding Item #8 - Hazardous Waste)

M)

TOTAL R/W ESTIMATE: Escalated

\$0

0

\$0

N)

**Right of Way Support** \$

Support Cost		
Estimate Prepared By	Project Coordinator <sup>1</sup>	Phone
Utility Estimate		
Prepared By	Utiliy Coordinator <sup>2</sup>	Phone
R/W Acquistion		
Estimate Prepared By	Right of Way Estimator <sup>3</sup>	Phone
<sup>1</sup> When estimate has Support C	Costs only <sup>2</sup> When estimate has Utility Relocation	<sup>3</sup> When R/W Acquisition is required

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DO NOT PRINT THIS SHEET AS PART OF COST ESTIMATE ATTACHMENT TO PROJECT INITIATION OR APPROVAL DOCUMENTS.

#### IV. SUPPORT COST ESTIMATE SUMMARY

Please obtain a P3 report (CL#3) from PPM to fill in the support cost for these categories.

SB-45 CATEGORY SUPPORT COST	PREVIOUS	FY 10/11	FY 11/12	FY 12/13	FY 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	FUTURE	P3 To	tal	Support Ratio
PR/ED (PD,PE,PM)											\$	-	0.00%
PS&E (PS)											\$	-	0.00%
R/W (RW)											\$	-	0.00%
CONSTRUCTION (CM)											\$	-	0.00%
Total Support Cost:	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-		\$	-	0.00%

Note: It is assumed that the Support Costs are already escalated by Programming to the year of expenditure. Use project Programming Sheet data.

Total Capital Cost:	\$675,000
Total Capital Outlay Support Cost:	\$0
Overall Percent Support Cost:	0.00%

#### V. ESCALATED CONSTRUCTION COST ESTIMATE SUMMARY

Note: Right of way escalated cost are accounted for on sheet 10 of 11.

Date of Estimate (Month/Year) Estimated Date of Construction Start (Month/Year)	Month 0 0	/ / /	Year 0 0
Number of Working Days	0	WD	
Estimated Mid-Point of Construction (Month/Year)	0	/	0

YEAR FORECASTED	0	1		2	3		4	4	5		6			7	8		9	F	UTURE		
ESCALATION RATE*																					
ESCALATED CONSTRUCTION COSTS	0	1		2	3		2	4	5		6			7	8		9	FI		TOTA ESCA COST	LATED
ROADWAY ITEMS	\$ 674,400	\$ 674,400	\$	674,400	\$ 6	74,400	\$	674,400	\$ 6	74,400	\$ 67	,400	s	674,400	\$ 674,400	s	674,400	\$	674,400	\$	674,400
STRUCTURE ITEMS	\$	\$	Ş	-	\$		\$	-	\$	-	\$	-	\$	-	\$ -	\$	-	\$		\$	

Approved by:

Project Control Engineer

Date

## **Preliminary Cost Estimate**

## **Project ID:**

Type of Estimate :

Program Code :

Project Limits :

Description:

Scope :

Alternative :

Lane Reconfiguration - Alternative 2

		Current Cost	Es	calated Cost
ROADWAY ITEMS	\$	674,400	\$	674,400
STRUCTURE ITEMS	\$	-	\$	-
SUBTOTAL CONSTRUCTION COST	\$	674,400	\$	674,400
<b>RIGHT OF WAY</b>	\$	-	\$	-
TOTAL CAPITAL OUTLAY COST	\$	675,000	\$	675,000
PR/ED SUPPORT	\$	-	\$	-
PS&E SUPPORT	\$	-	\$	-
RIGHT OF WAY SUPPORT	\$	-	\$	-
CONSTRUCTION SUPPORT	\$	-	\$	-
TOTAL CAPITAL OUTLAY SUPPORT COST*	\$	-	\$	-
TOTAL PROJECT COST	\$	675,000	\$	675,000
If Project has been programm	ned e	nter Programmed Amount	\$	-
	Date	of Estimate (Month/Year)	Month	/ Year /

Estimated Date of Construction Start (Month/Year) /
Number of Working Days Working Days

Month / Year Estimated Mid-Point of Construction (Month/Year)

Number of Plant Establishment Days

Estimated Project Schedule

PID Approval PA/ED Approval PS&E RTL Begin Construction

Approved by Project Manager

(xxx) xxx-xxxx

Days

Project Manager

Date

## I. ROADWAY ITEMS SUMMARY

	Section		Cost
1	Earthwork		\$
2	Pavement Structural Section		\$
3	Drainage		\$ -
4	Specialty Items		\$ 144,000
5	Environmental		\$
6	Traffic Items		\$ 350,000
7	Detours		\$
8	Minor Items		\$
9	Roadway Mobilization		\$
10	Supplemental Work	5	\$ 24,700
11	State Furnished	5	\$
12	Contingencies	;	\$ 155,700
13	Overhead		\$
	TOTAL ROADWAY	ITEMS	\$ 674,400
stimate Prepa	red By Name and Title	Date	Phone
stimate Revie	wed By Name and Title	Date	Phone

By signing this estimate you are attesting that you have discussed your project with all functional units and have incorporated all their comments or have discussed with them why they will not be incorporated.

## SECTION 1: EARTHWORK

Item code	Unit	Quantity		Unit Price (\$)		Cost	
Roadway Excavation	CY	0	х	40.00	=	\$	-
			х		=	\$	-
			х		=	\$	-
			х		=	\$	-
			х		=	\$	-
			х		=	\$	-
			х		=	\$	-
			х		=	\$	-
			х		=	\$	-
			х		=	\$	-
			х		=	\$	-
			Х		=	\$	-

TOTAL EARTHWORK SECTION ITEMS \$

-

## SECTION 2: PAVEMENT STRUCTURAL SECTION

Item code	Unit Q	uantity	Unit Price (\$)		Cost	
Pavement	SF	0 x	10.00	=	\$-	
		х		=	\$-	
		х		=	\$-	
		х		=	\$-	
		х		=	\$-	
		х		=	\$-	
		х		=	\$-	
		Х		=	\$-	
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		Х		=	\$-	
		х		=	\$-	
		Х		=	\$-	
		Х		=	\$-	
		х		=	\$ -	
		TOTAL	STRUCTURAL	SE		\$
	·					

-

### SECTION 3: DRAINAGE

Item code	Unit	Quantity		Unit Price (\$)		Cost
Drainage	LS	0	х		=	\$ -
5			х	,	=	\$ -
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -
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			х		=	\$ -
			х		=	\$ -
			х		=	\$ -
			Х		=	\$ -
			Х		=	\$ -
			х		=	\$ -
			х		=	\$ -

Unit

CY

#### TOTAL DRAINAGE ITEMS \$

-

#### SECTION 4: SPECIALTY ITEMS

Item code

Curb

Quantity		Unit Price (\$)			Cost		
180	х	800.00	=	\$	144,000		
	х		=		-		
	х		=	\$	-		
	х		=	\$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$	-		
	х		=	\$	-		
	х		=	\$	-		
	х		=	\$	-		
	х		=	\$	-		
	х		=	\$	-		
	х		=	\$	-		
	х		=	\$	-		
	х		=	\$	-		
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	х		=	\$	-		
	х		=	\$	-		
	х		=	\$	-		
	х		=	\$	-		
	х		=	\$	-		
	Х		=	\$	-		
]				111	TY ITEMS	\$	144,000
		I UTAL 3F	LU			φ	144,000

## SECTION 5: ENVIRONMENTAL

#### **5A - ENVIRONMENTAL MITIGATION**

Item code	Unit	Quantity	Unit Price (\$)		Cost	
		2	x	=	\$	-
		2	x	=	\$	-

Subtotal Environmental	\$ -

#### **5B - LANDSCAPE AND IRRIGATION**

Item code	Unit	Quantity		Unit Price (\$)		Cost	
Landscape and Irrigation	LS	0	х		=	\$	-
			Х		=	\$	-
			Х		=	\$	-
			Х		=	\$	-
			х		=	\$	-
			х		=	\$	-
			Х		=	\$	-
			х		=	\$	-
			Х		=	\$	-
			х		=	\$	-
			х		=	\$	-
			х		=	\$	-

Subtotal Landscape and Irrigation \$ -

5C - NPDES

Item code	Unit	Quantity		Unit Price (\$)		Cost
		-	х	=	= \$	; -
			Х	=	= \$	; -
			х	=	= \$	-
			х	=	= \$	-
			х	=	= \$	-
			х	=	= \$	-
			Х	=	= \$	-
			Х	=	= \$	-
			Х	=	= \$	-
			х	=	= \$	-
			х	=	= \$	-
			Х	=		-
			Х	=	= \$	) -
Supplemental Work for NPDES	<b>.</b> .					
(These costs are not accounted in total here but under	Supple	mental wo		on sheet 7 of 11).	-	
			Х	=	= \$	-
			Х	=		-
			Х	=	= \$	) -
		Subtotal N	IPE	DES (Without Sup	plen	nental Work) <u>\$</u>
*Applies to all SWPPPs and those WPCPs with sediment control or s	oil stabiliz	ation BMPs.				
**Applies to both SWPPPs and WPCP projects.						

\*\*\* Applies only to project with SWPPPs.

TOTAL ENVIRONMENTAL \$

-

## SECTION 6: TRAFFIC ITEMS

#### 6A - Traffic Electrical

Item code	Unit	Quantity		Unit Price (\$)		Cost
Traffic Signal	EA	2	х		=	\$ 200,000
-			х	=		\$ -
			х	=	=	\$-
			х	=	-	\$-
			х	=	=	\$-
			х	=	-	\$-
			х	=	•	\$-
			х	=	=	\$-
			х	=	=	\$-
			х	=	=	\$-
			х	=	•	\$-
			х	=	•	\$-
			х	=	•	\$-
			х	=	=	\$-
			х	=	=	\$-

Subtotal Traffic Electrical \$ 200,000

#### 6B - Traffic Signing and Striping

Item code	Unit	Quantity		Unit Price (\$)			Cost		
Pavement Delineation	LS	1	х	25,000.00	=	\$	25,000		
Roadside Signs	LS	1	х	5,000.00	=	\$	5,000		
Overhead Signs	LS	1	х	100,000.00	=	\$	100,000		
			х		=	\$	-		
			х		=	\$	-		
			х		=	\$	-		
			х		=	\$	-		
			х		=	\$	-		
			х		=	\$	-		
			Х		=	\$	-		
			Х		=	\$	-		
			Х		=	\$	-		
			Х		=	\$	-		
			Sul	btotal Traffic Sig	gnin	g ar	nd Striping	\$ 130,	000

#### 6C - Stage Construction and Traffic Handling

Item code	Unit	Quantity		Unit Price (\$)		Cost
Traffic Control Systems	LS	1	х		=	\$ 20,000
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -

Subtotal Stage Construction and Traffic Handling \$ 20,000

TOTAL	TRAFFIC ITEMS	\$ 350,000

### SECTION 7: DETOURS

Item code	Unit	Quantity	L	Init Price (\$)	Cost	
0713XX Temporary Fence (Type X)	LF	quantity	x	= \$	-	
07XXXX Temporary Drainage	LS		x	= \$	-	
120143 Temporary Pavement Delineation	LF		х	= \$	-	
1286XX Temporary Signals	EA		х	= \$	-	
129000 Temporary Railing (Type K)	LF		х	= \$	-	
190101 Roadway Excavation	CY		х	= \$	-	
198001 Imported Borrow	CY		х	= \$	-	
198050 Embankment	CY		х	= \$	-	
250401 Class 4 Aggregate Subbase	CY		х	= \$	-	
260201 Class 2 Aggregate Base	CY		х	= \$	-	
390132 Hot Mix Asphalt (Type A)	TON		х	= \$	-	
XXXXXX Some Item	LS		х	= \$	-	
				TOTAL DETO	URS	\$ -
				SUBTOTAL SEC	TIONS 1-7	\$ 494,000
SECTION 8: MINOR ITEMS						
8A - Americans with Disabilities Act Items						
ADA Items				0.0% \$	-	
8B - Bike Path Items						

			TOTAL I	MINOR ITEMS	\$	
Total of Section 1-7	\$ 494,000	x	0.0%	= \$	-	
Other Minor Items		_	0.0%	\$	-	
Bike Path Items Bike Path Items C - Other Minor Items			0.0%	\$	-	
i - Rike Path Items						

### SECTIONS 9: MOBILIZATION

8C

Item						
999990	Total Section 1-8	\$ 494,000	х	10%	= \$	-

### SECTION 10: SUPPLEMENTAL WORK

Item code	Unit	Quantity	Unit Price (\$)			Cost	
066015 Federal Trainee Program	LS		X	=	\$	-	
066063 Traffic Management Plan - Public Informatic	LS		х	=	\$	-	
066090 Maintain Traffic	LS		х	=	\$	-	
066094 Value Analysis	LS		х	=	\$	-	
066204 Remove Rock & Debris	LS		х	=	\$	-	
066222 Locate Existing Cross-Over	LS		х	=	\$	-	
066670 Payment Adjustments For Price Index Fluct	LS		х	=	\$	-	
066700 Partnering	LS		х	=	\$	-	
066866 Operation of Existing Traffic Management S	LS		х	=	\$	-	
066920 Dispute Review Board	LS		х	=	\$	-	
XXXXXX Some Item			х	=	\$	-	
Cost of NPDES Sup	<u>olementa</u>	l Work specifie	ed in Section 5C	Ξ	\$	-	
Total Section 1-8	\$	494,000	5%	=	\$	24,700	
		Γ	TOTAL SUPPL	EMI	ENT	AL WORK	\$ 24,700

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TOTAL MOBILIZATION \$

# SECTION 11: STATE FURNISHED MATERIALS AND EXPENSES

Item code	Unit	Quantity	Ur	nit Price (\$	5)	Cos	t
066063 Public Information	LS		х		=		\$0
066105 RE Office	LS		х		=		\$0
066803 Padlocks	LS		х		=		\$0
066838 Reflective Numbers and Edge Sealer	LS		х		=		\$0
066901 Water Expenses	LS		х		=		\$0
066062A COZEEP Expenses	LS		х		=		\$0
06684X Ramp Meter Controller Assembly	LS		х		=		\$0
06684X TMS Controller Assembly	LS		х		=		\$0
06684X Traffic Signal Controller Assembly XXXXXX Some Item	LS		х		=		\$0
Total Section 1-8	\$	494,000		0%	=	\$	-
				TOTAL S	STATI	EFURNIS	SHED

# SECTION 12: TIME-RELATED OVERHEAD

Estiamted Time-Releated Overhead (TRO) Percentage (0% to 10%) = 5%

Item code	Unit	Quantity	ι	Jnit Price (\$	)	Cost	
070018 Time-Related Overhead	WD	0	Х	#DIV/0!	=	\$0	
		-	ΓΟΤΑ	L TIME-REL	ATED	OVERHEAD	\$0

SECTION 13: CONTINGENCY

(Pre-PSR 30%-50%, PSR 25%, Draft PR 20%, PR 15%, after PR approval 10%, Final PS&E 5%)

Total Section 1-11 \$ 518,700 x 30% = \$155,610

TOTAL CONTINGENCY \$155,700

# **II. STRUCTURE ITEMS**

Retaining Walls
-----------------

	Retaining Walls		
DATE OF ESTIMATE Building Name Bridge Number Structure Type Width (Feet) [out to out] Total Building Length (Feet) Total Area (Square Feet) Structure Depth (Feet) Footing Type (pile or spread) Cost Per Square Foot	00/00/00 xxxxxxxxxxxxxxxxxxxxxx 57-XXX xxxxxxxxxxxxxxxxxxxxxxxx LF LF 0 SQFT LF xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx	00/00/00 xxxxxxxxxxxxxxxxxxxxxxxx 57-XXX xxxxxxxxxxxxxxxxxxxxxxx 0.00 LF 0.00 LF 0 SQFT 0.00 LF xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx	00/00/00 xxxxxxxxxxxxxxxxxxxxxxxx 57-XXX xxxxxxxxxxxxxxxxxxxxxxx 0.00 LF 0.00 LF 0 SQFT 0.00 LF xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
COST OF EACH STRUCTURE	\$0.00	\$0.00	\$0.00

			Ĩ
DATE OF ESTIMATE	00/00/00	00/00/00	00/00/00
Name	xxxxxxxxxxxxxxxxxxx	****	*****
Bridge Number	57-XXX	57-XXX	57-XXX
Structure Type	XXXXXXXXXXXXXXXXXXXXXXXX	*****	*****
Width (Feet) [out to out]	0.00 LF	0.00 LF	0.00 LF
Total Length (Feet)	0.00 LF	0.00 LF	0.00 LF
Total Area (Square Feet)	0 SQFT	0.00 SQFT	0.0 SQFT
Structure Depth (Feet)	0.00 LF	0.00 LF	0.00 LF
Footing Type (pile or spread)	XXXXXXXXXXXXXXXXXXXXXXX	****	*****
Cost Per Square Foot	\$0.00	\$0.00	\$0.00

COST OF EACH STRUCTURE	\$0.00	\$0.00	\$0.00

TOTAL COST OF BRIDGES \$0.00

TOTAL COST OF RETAINING

# TOTAL COST OF STRUCTURES<sup>1</sup>

<sup>1</sup>Structure's Estimate includes Overhead and Mobilization.

Add more sheets if needed. Call them 9a, 9b, 9c, ..., etc

Date

\$0.00

\$0.00

#### DO NOT PRINT THIS SHEET AS PART OF COST ESTIMATE ATTACHMENT TO PROJECT INITIATION OR APPROVAL DOCUMENTS.

# **III. RIGHT OF WAY**

Fill in all of the available information from the Right of Way data sheet.

A)	A1) A2)	Acquisition, including Excess Lar SB-1210	\$ \$	0 0	
B)	Acquisiti	on of Offsite Mitigation		\$	0
C)	C1) C2)	Utility Relocation (State Share) Potholing (Design Phase)	\$ \$	0 0	
D)	Railroad	Acquisition		\$	0
E)	Clearanc	ce / Demolition	\$	0	
F)	Relocatio	on Assistance (RAP and/or Last Re	\$	0	
G)	Title and	Escrow		\$	0
H)	Environn	nental Review		\$	0
I)		nation Settlements G & H applied to items A + B)	<u>0%</u>	\$	0
J)	Design A	oppreciation Factor	0%	\$	0
K)	Utility Re	location (Construction Cost)		\$	0

L)		TOTAL RIGHT OF WAY ESTIMATE
	(Excluding Item #8 - Hazardous W	

(Excluding Item #8 - Hazardous Waste)

M)

TOTAL R/W ESTIMATE: Escalated

\$0

0

\$0

N)

Support Cost

**Right of Way Support** \$

Estimate Prepared By	Project Coordinator <sup>1</sup>	Phone
Utility Estimate		
Prepared By	Utiliy Coordinator <sup>2</sup>	Phone
R/W Acquistion		
Estimate Prepared By	Right of Way Estimator <sup>3</sup>	Phone
<sup>1</sup> When estimate has Support 0	Costs only <sup>2</sup> When estimate has Utility Relocation	<sup>3</sup> When R/W Acquisition is required

DO NOT PRINT THIS SHEET AS PART OF COST ESTIMATE ATTACHMENT TO PROJECT INITIATION OR APPROVAL DOCUMENTS.

#### IV. SUPPORT COST ESTIMATE SUMMARY

Please obtain a P3 report (CL#3) from PPM to fill in the support cost for these categories.

SB-45 CATEGORY SUPPORT COST	PREVIOUS	FY 10/11	FY 11/12	FY 12/13	FY 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	FUTURE	P3 T	otal	Support Ratio
PR/ED (PD,PE,PM)											\$	-	0.00%
PS&E (PS)											\$	-	0.00%
R/W (RW)											\$	-	0.00%
CONSTRUCTION (CM)											\$	-	0.00%
Total Support Cost:	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-		\$	-	0.00%

Note: It is assumed that the Support Costs are already escalated by Programming to the year of expenditure. Use project Programming Sheet data.

Total Capital Cost:	\$675,000
Total Capital Outlay Support Cost:	\$0
Overall Percent Support Cost:	0.00%

### V. ESCALATED CONSTRUCTION COST ESTIMATE SUMMARY

Note: Right of way escalated cost are accounted for on sheet 10 of 11.

Date of Estimate (Month/Year) Estimated Date of Construction Start (Month/Year)	Month 0 0	/ / /	Year 0 0
Number of Working Days	0	WD	
Estimated Mid-Point of Construction (Month/Year)	0	/	0

YEAR FORECASTED ESCALATION RATE*	0		1		2	3		4		5		6		7		8		9	F	UTURE		
ESCALATED CONSTRUCTION COSTS	0		1		2	3		4		5		6		7		8		9	F		TOT/ ESC/ COS	ALATED
ROADWAY ITEMS	\$ 674,400	\$	674,400	\$	674,400	\$ 674	1,400	\$ 674,400	\$	674,400	\$	674,400	ş	674,400	\$	674,400	\$	674,400	\$	674,400	\$	674,400
STRUCTURE ITEMS	\$	\$	-	\$	-	\$		s -	\$	-	\$	-	ş		\$	-	\$		\$	-	\$	-
SUBTOTAL	674,400	¢	674,400	~	674.400	¢ 07	1.400	\$ 674.400	¢	674,400	¢	674.400	~	674.400	¢	674,400	<u>,</u>	674,400	¢	674.400	*	674.400

Approved by:

Project Control Engineer

Date

11/15/2017 11:55 AM

# **Preliminary Cost Estimate**

# **Project ID:**

Type of Estimate :

Program Code : Project Limits :

Description:

Scope :

Alternative :

Mother Lode Drive Realignment

		Current Cost	Es	calated Cost
ROADWAY ITEMS	\$	2,664,900	\$	2,664,900
STRUCTURE ITEMS	\$	3,600,000	\$	3,600,000
SUBTOTAL CONSTRUCTION COST	\$	6,264,900	\$	6,264,900
<b>RIGHT OF WAY</b>	\$	416,000	\$	-
TOTAL CAPITAL OUTLAY COST	\$	6,681,000	\$	6,265,000
PR/ED SUPPORT	\$	-	\$	-
PS&E SUPPORT	\$	-	\$	-
RIGHT OF WAY SUPPORT	\$	-	\$	-
CONSTRUCTION SUPPORT	\$	-	\$	-
TOTAL CAPITAL OUTLAY SUPPORT COST*	\$	-	\$	-
TOTAL PROJECT COST	\$	6,700,000	\$	6,300,000
If Project has been programm	ned e	enter Programmed Amount	\$	-

	Date of Estimate	-	Month / Year /
	Estimated Date of Construction Start	(Month/Year)	/
	Number of N	Working Days	Working Days
	Estimated Mid-Point of Construction	-	Month / Year
	Number of Plant Establ	lishment Days	Days
	Estimated Project Schedule		
	PID Approval		
	PA/ED Approval		
	PS&E		
	RTL		
	Begin Construction		
Approved by Project			(xxx) xxx-xxxx
Manager	Project Manager	Date	Phone

# I. ROADWAY ITEMS SUMMARY

	Section		Cost
1	Earthwork		\$ 1,216,000
2	Pavement Structural Section		\$ 351,000
3	Drainage		\$ 350,000
4	Specialty Items		\$ 35,200
5	Environmental		\$ -
6	Traffic Items		\$ -
7	Detours		\$ -
8	Minor Items		\$ -
9	Roadway Mobilization		\$ -
10	Supplemental Work		\$ 97,700
11	State Furnished		\$ -
12	Contingencies		\$ 615,000
13	Overhead		\$ -
	TOTAL ROADWAY I	TEMS	\$ 2,664,900
imate Prepa	red By Name and Title	Date	Phone
imate Revie	wed ByName and Title	Date	Phone

By signing this estimate you are attesting that you have discussed your project with all functional units and have incorporated all their comments or have discussed with them why they will not be incorporated.

# SECTION 1: EARTHWORK

Item code	Unit	Quantity		Unit Price (\$)		Cost
Roadway Excavation	CY	30,400	х	40.00	=	\$ 1,216,000
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -

TOTAL EARTHWORK SECTION ITEMS \$ 1,216,000

# SECTION 2: PAVEMENT STRUCTURAL SECTION

Item code	Unit G	Quantity	Unit Price (\$)		Cost	
Pavement	SF	35,100 x		= \$	351,000	
		, x		= \$	-	
		х	:	= \$	-	
		х		= \$	-	
		х	:	= \$	-	
		х	:	= \$	-	
		х	:	= \$	-	
		х	:	= \$	-	
		х		= \$	-	
		х		= \$	-	
		х		= \$	-	
		х		= \$	-	
		х		= \$	-	
		х		= \$	-	
		х		= \$	-	
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		х		= \$	-	
		х		= \$	-	
		Х		= \$	-	
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		х		= \$	-	
		х		= \$	-	
		х		= \$	-	
		х		= \$	-	
		Х		= \$	-	
		Х		= \$	-	
		х	:	= \$	-	
		TOTAL	STRUCTURAL S	ECTI	ON ITEMS \$	351,000
	·					

### SECTION 3: DRAINAGE

Item code	Unit	Quantity		Unit Price (\$)			Cost
			х			¢	250,000
Drainage	LS	1		350,000.00	=	\$	350,000
			х		=	\$	-
			х		=	\$	-
			х		=	\$	-
			Х		=	\$	-
			Х		=	\$	-
			Х		=	\$	-
			х		=	\$	-
			х		=	\$	-
			х		=	\$	-
			х		=	\$	-
			х		=	\$	-
			х		=	\$	-
			х		=	\$	-
			х		=	\$	-
			x		=	\$	-
			x		_	\$	-
			x		_	\$	-
						\$	-
			X		=		-
			Х		=	\$	-
			х		=	\$	-
			х		=	\$	-
			х		=	\$	-
			х		=	\$	-
			х		=	\$	-
						7	

TOTAL DRAINAGE ITEMS \$

350,000

### SECTION 4: SPECIALTY ITEMS

Item code

### Remove Retaining Wall

Unit	Quantity		Unit Price (\$)			Cost		
LF	440	х	80.00	=	\$	35,200		
		х		=		-		
		х		=	\$	-		
		х		=	\$	-		
		х		=	\$\$\$\$	-		
		х		=	\$	-		
		х		=	\$	-		
		х		=	\$	-		
		Х		=	\$	-		
		Х		=	\$	-		
		Х		=	\$	-		
		Х		=	\$	-		
		Х		=	\$	-		
		Х		=	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	-		
		Х		=	\$	-		
		Х		=	\$	-		
		Х		=	\$	-		
		Х		=	\$	-		
		Х		=	\$	-		
		Х		=	\$	-		
		Х		=	\$	-		
		Х		=	\$	-		
		Х		=	\$	-		
		Х		=	\$	-		
		Х		=	\$	-		
		х		=	\$	-		
		Х		=	\$	-		
	]		TOTAL SE	PEC	141	TY ITEMS	\$	35,200
	l						Ψ	JJ,200

# SECTION 5: ENVIRONMENTAL

#### **5A - ENVIRONMENTAL MITIGATION**

Item code	Unit	Quantity	Unit Price (\$)		Cost	
			х	=	\$	-
			х	=	\$	-

Subtotal Environmental	\$	-
------------------------	----	---

### **5B - LANDSCAPE AND IRRIGATION**

Item code

Unit Quantity	Unit Price (\$)		Cost	
	х	=	\$	-
	х	=	\$	-
	х	=	\$	-
	х	=	\$	-
	х	=	\$	-
	х	=	\$	-
	х	=	\$	-
	х	=	\$	-
	х	=	\$	-
	x	=	\$	-
	х	=	\$	-
	х	=	\$	-

Subtotal Landscape and Irrigation \$

-

-

5C - NPDES

Item code	Unit	Quantity		Unit Price (\$)			Cost
		-	х		=	\$	-
			х		=	\$	-
			х		=	\$	-
			х		=	\$	-
			х		=	\$	-
			х		=	\$	-
			х		=	\$	-
			х		=	\$	-
			х		=	\$	-
			х		=	\$	-
			х		=	\$	-
			х		=	\$	-
			х		=	\$	-
Supplemental Work for NPDES							
(These costs are not accounted in total here but under	Supple	mental Wo	rk	on sheet 7 of 11	).		
•	••		х		=	\$	-
			х		=	\$	-
			х		=	\$	-
		Subtotal N	IPE	DES (Without Su	pple	eme	ental Work) <u>\$</u> -
*Applies to all SWPPPs and those WPCPs with sediment control or se	oil stabiliz	zation BMPs.					
**Applies to both SWPPPs and WPCP projects.							

\*\*\* Applies only to project with SWPPPs.

TOTAL ENVIRONMENTAL \$

# SECTION 6: TRAFFIC ITEMS

#### 6A - Traffic Electrical

Item code	Jnit	Quantity	Unit Price (\$)		Cost	
		х		=	\$	-
		х		=	\$	-
		х		=	\$	-
		х		=	\$	-
		х		=	\$	-
		х		=	\$	-
		х		=	\$	-
		х		=	\$	-
		х		=	\$	-
		х		=	\$	-
		х		=	\$	-
		х		=	\$	-
		х		=	\$	-
		х		=	\$	-
		х		=	\$	-

#### Subtotal Traffic Electrical \$ -

### 6B - Traffic Signing and Striping

Item code

Item code

Unit Quan	tity Unit Price	(\$)	Cost	
	х	= \$	-	
	х	= \$	-	
	х	= \$	-	
	х	= \$	-	
	х	= \$	-	
	х	= \$	-	
	х	= \$	-	
	х	= \$	-	
	х	= \$	-	
	х	= \$	-	
	х	= \$	-	
	х	= \$	-	
	х	= \$	-	

### 6C - Stage Construction and Traffic Handling

Unit Quantity	Unit Price (\$)		Cost
	х	=	\$ -
	x	=	\$ -
	x	=	\$ -
	х	=	\$ -
	х	=	\$ -
	х	=	\$ -

Subtotal Stage Construction and Traffic Handling \$

### TOTAL TRAFFIC ITEMS

\$

-

-

### SECTION 7: DETOURS

Include constructing, maintaining, and removal							
Item code	Unit	Quantity	U	nit Price (\$)	Cost		
0713XX Temporary Fence (Type X)	LF		х	=	\$-		
07XXXX Temporary Drainage	LS		Х	=	\$-		
120143 Temporary Pavement Delineation	LF		Х	=	\$ -		
1286XX Temporary Signals	EA LF		X	=	ծ - «		
129000 Temporary Railing (Type K) 190101 Roadway Excavation	CY		X X	=	φ - ¢ -		
198001 Imported Borrow	CY		x	=	φ \$-		
198050 Embankment	CY		x	=	\$-		
250401 Class 4 Aggregate Subbase	CY		х	=	\$ -		
260201 Class 2 Aggregate Base	CY		х	=	\$-		
390132 Hot Mix Asphalt (Type A)	TON		Х	=	\$-		
XXXXXX Some Item	LS		Х	=	\$-		
					TOURS	¢	_
				TOTAL DE	TOURS	\$	-
					ECTIONS 1-7	<b>\$</b> \$	- 1,952,200
SECTION 8: MINOR ITEMS	_						- 1,952,200
	_						- 1,952,200
8A - Americans with Disabilities Act Items ADA Items	_						- 1,952,200
8A - Americans with Disabilities Act Items	_			SUBTOTAL S	ECTIONS 1-7		-
<ul> <li>8A - Americans with Disabilities Act Items</li> <li>ADA Items</li> <li>8B - Bike Path Items</li> </ul>	_			SUBTOTAL S	ECTIONS 1-7		-
<ul> <li>8A - Americans with Disabilities Act Items ADA Items</li> <li>8B - Bike Path Items Bike Path Items</li> </ul>	_			SUBTOTAL S	ECTIONS 1-7		-

### SECTIONS 9: MOBILIZATION

Item						
999990	Total Section 1-8	\$ 1,952,200 x	10%	= \$	-	

TOTAL MINOR ITEMS

TOTAL MOBILIZATION \$

### SECTION 10: SUPPLEMENTAL WORK

Item code	Unit	Quantity	Unit Price (\$)			Cost		
066015 Federal Trainee Program	LS	-	х	=	\$	-		
066063 Traffic Management Plan - Public Informatic	LS		х	=	\$	-		
066090 Maintain Traffic	LS		х	=	\$	-		
066094 Value Analysis	LS		х	=	\$	-		
066204 Remove Rock & Debris	LS		х	=	\$	-		
066222 Locate Existing Cross-Over	LS		х	=	\$	-		
066670 Payment Adjustments For Price Index Fluct	LS		х	=	\$	-		
066700 Partnering	LS		х	=	\$	-		
066866 Operation of Existing Traffic Management S	LS		х	=	\$	-		
066920 Dispute Review Board	LS		х	=	\$	-		
XXXXXX Some Item			х	=	\$	-		
Cost of NPDES Supp	lementa	al Work speci	fied in Section 5C	Ξ	\$	-		
Total Section 1-8	\$	1,952,200	5%	=	\$	97,610		
	Ŧ	.,,,	0,0		Ŧ	.,		
			TOTAL SUPPL	EMI	ENT	L WORK	\$ 97,70	0

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\$

-

-

# SECTION 11: STATE FURNISHED MATERIALS AND EXPENSES

Item code	Unit	Quantity	Un	it Price (\$)	Cost
066063 Public Information	LS		х	=	\$0
066105 RE Office	LS		х	=	\$0
066803 Padlocks	LS		х	=	\$0
066838 Reflective Numbers and Edge Sealer	LS		х	=	\$0
066901 Water Expenses	LS		х	=	\$0
066062A COZEEP Expenses	LS		х	=	\$0
06684X Ramp Meter Controller Assembly	LS		х	=	\$0
06684X TMS Controller Assembly	LS		х	=	\$0
06684X Traffic Signal Controller Assembly	LS		х	=	\$0
XXXXXX Some Item					
Total Section 1-8	\$	1,952,200		0% = \$	-
				TOTAL STATE	URNISHED

# SECTION 12: TIME-RELATED OVERHEAD

Estiamted Time-Releated Overhead (TRO) Percentage (0% to 10%) = 5%

Item code	Unit	Quantity	ι	Jnit Price (\$	)	Cost	
070018 Time-Related Overhead	WD	0	Х	#DIV/0!	=	\$0	
		-	ΓΟΤΑ	L TIME-REL	ATED	OVERHEAD	\$0

SECTION 13: CONTINGENCY

(Pre-PSR 30%-50%, PSR 25%, Draft PR 20%, PR 15%, after PR approval 10%, Final PS&E 5%)

Total Section 1-11 \$ 2,049,900 x 30% = \$614,970

TOTAL CONTINGENCY \$615,000

# **II. STRUCTURE ITEMS**

### **Retaining Walls**

COST OF EACH STRUCTURE	\$3,600,000.00	\$0.00	\$0.00
Total Area (Square Feet) Structure Depth (Feet) Footing Type (pile or spread) Cost Per Square Foot	36000 SQFT LF xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx	0 SQFT 0.00 LF xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx	0 SQFT 0.00 LF xxxxxxxxxxxxxxxxxxxxxxxx \$0.00
DATE OF ESTIMATE Building Name Bridge Number Structure Type Width (Feet) [out to out] Total Building Length (Feet)	00/00/00 xxxxxxxxxxxxxxxxx 57-XXX xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx	00/00/00 xxxxxxxxxxxxxxxxxxxxx 57-XXX xxxxxxxxxxxxxxxxxxxxxxxxxx 0.00 LF 0.00 LF	00/00/00 xxxxxxxxxxxxxxxxxx 57-XXX xxxxxxxxxxxxxxxxxxxxxxx 0.00 LF 0.00 LF

DATE OF ESTIMATE Name Bridge Number Structure Type Width (Feet) [out to out] Total Length (Feet) Total Area (Square Feet)	00/00/00 xxxxxxxxxxxxxxxxxxxxxxxxxxxxxx	00/00/00 xxxxxxxxxxxxxxxxxxxxxxxxxxxxxx	00/00/00 xxxxxxxxxxxxxxxxxxxxxxxxxxxxx 57-XXX xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
	0.00 =.	0.000	0.00 Ei
Total Area (Square Feet)	0 SQFT 0.00 LF	0.00 SQFT 0.00 LF	0.0 SQFT 0.00 LF
Structure Depth (Feet) Footing Type (pile or spread)			
Cost Per Square Foot	\$0.00	\$0.00	\$0.00

COST OF EACH STRUCTURE	\$0.00		\$0.00		\$0.00
---------------------------	--------	--	--------	--	--------

TOTAL COST OF BRIDGES \$0.00

TOTAL COST OF RETAINING

\$3,600,000.00 \$3,600,000.00

# TOTAL COST OF STRUCTURES<sup>1</sup>

<sup>1</sup>Structure's Estimate includes Overhead and Mobilization.

Add more sheets if needed. Call them 9a, 9b, 9c, ..., etc

Date

#### DO NOT PRINT THIS SHEET AS PART OF COST ESTIMATE ATTACHMENT TO PROJECT INITIATION OR APPROVAL DOCUMENTS.

# **III. RIGHT OF WAY**

Fill in all of the available information from the Right of Way data sheet.

A)	A1) A2)	Acquisition, including Excess Lan SB-1210	d Purchases, Damages & Goodwill,	\$ \$	0 0
B)	Acquisitio	on of Offsite Mitigation		\$	0
C)	C1) C2)	Utility Relocation (State Share) Potholing (Design Phase)		\$ \$	0 0
D)	Railroad	Acquisition		\$	0
E)	Clearanc	e / Demolition		\$	0
F)	Relocatio	n Assistance (RAP and/or Last Re	sort Housing Costs)	\$	0
G)	Title and	Escrow		\$	0
H)	Environm	ental Review		\$	0
I)		nation Settlements G & H applied to items A + B)	<u>0%</u>	\$	0
J)	Design A	ppreciation Factor	0%	\$	0
K)	Utility Re	location (Construction Cost)		\$	0

L)		TOTAL RIGHT OF WAY ESTIMATE	\$416,000
	(Excluding Item #8 - Hazardous W	(aste)	

ıy

M)

TOTAL R/W ESTIMATE: Escalated

\$0

0

N)

**Right of Way Support** \$

Support Cost		
Estimate Prepared By	Project Coordinator <sup>1</sup>	Phone
Utility Estimate		
Prepared By	Utiliy Coordinator <sup>2</sup>	Phone
R/W Acquistion		
Estimate Prepared By	Right of Way Estimator <sup>3</sup>	Phone
		3
When estimate has Support (	Costs only <sup>2</sup> When estimate has Utility Relocation	<sup>3</sup> When R/W Acquisition is required

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DO NOT PRINT THIS SHEET AS PART OF COST ESTIMATE ATTACHMENT TO PROJECT INITIATION OR APPROVAL DOCUMENTS.

#### IV. SUPPORT COST ESTIMATE SUMMARY

Please obtain a P3 report (CL#3) from PPM to fill in the support cost for these categories.

SB-45 CATEGORY SUPPORT COST	PREVIOUS	FY 10/11	FY 11/12	FY 12/13	FY 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	FUTURE	P3 To	tal	Support Ratio
PR/ED (PD,PE,PM)											\$	-	0.00%
PS&E (PS)											\$	-	0.00%
R/W (RW)											\$	-	0.00%
CONSTRUCTION (CM)											\$	-	0.00%
Total Support Cost:	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-		\$	-	0.00%

Note: It is assumed that the Support Costs are already escalated by Programming to the year of expenditure. Use project Programming Sheet data.

Total Capital Cost:	\$6,681,000
Total Capital Outlay Support Cost:	\$0
Overall Percent Support Cost:	0.00%

### V. ESCALATED CONSTRUCTION COST ESTIMATE SUMMARY

Note: Right of way escalated cost are accounted for on sheet 10 of 11.

Date of Estimate (Month/Year) Estimated Date of Construction Start (Month/Year)	Month 0 0	/ / /	Year 0 0
Number of Working Days	0	WD	
Estimated Mid-Point of Construction (Month/Year)	0	/	0

YEAR FORECASTED ESCALATION RATE*	0	1	2	3	4	5	6		7	8	9	FUTURE		
ESCALATED CONSTRUCTION COSTS	0	1	2	3	4	5	6		7	8	9		TOT ESC COS	ALATED
ROADWAY ITEMS	\$ 2,664,900	\$	2,664,900	\$ 2,664,900	\$ 2,664,900	\$ 2,664,900	\$	2,664,900						
STRUCTURE ITEMS	\$ 3,600,000	\$	3,600,000	\$ 3,600,000	\$ 3,600,000	\$ 3,600,000	\$	3,600,000						
SUBTOTAL	\$ 6,264,900	s	6,264,900	\$ 6,264,900	\$ 6,264,900	\$ 6,264,900	\$	6,264,900						

Approved by:

Project Control Engineer

Date

# **Preliminary Cost Estimate**

# **Project ID:**

Type of Estimate : Program Code : Project Limits : Description: Scope :

Hook Ramps

Alternative :

**Current Cost Escalated Cost** 2,585,000 **ROADWAY ITEMS** \$ 2,585,000 \$ STRUCTURE ITEMS \$ 200,000 \$ 200,000 SUBTOTAL CONSTRUCTION COST \$ \$ 2,785,000 2,785,000 **RIGHT OF WAY** \$ \$ 200,000 -\$ 2,785,000 TOTAL CAPITAL OUTLAY COST \$ 2,985,000 **PR/ED SUPPORT** \$ \$ **PS&E SUPPORT** \$ \$ \_ **RIGHT OF WAY SUPPORT** \$ \$ \_ CONSTRUCTION SUPPORT \$ -\$ -TOTAL CAPITAL OUTLAY SUPPORT COST\* \$ \$ --TOTAL PROJECT COST \$ 3,000,000 \$ 2,800,000

	Project Manager	Date	Phone
Approved by Project Manager			(xxx) xxx-xxxx
	Degin Construction		
	RTL Begin Construction		
	PS&E		
	PA/ED Approval		
	PID Approval		
	Estimated Project Schedule		
	Number of Plant Establis	shment Days	Days
	Estimated Mid-Point of Construction (I		in / rear
	Number of W	• •	Working Days
	Estimated Date of Construction Start (I	Month/Year)	/
	Date of Estimate (I		nth / Year /
	If Project has been programmed enter Program	med Amount \$	-

# I. ROADWAY ITEMS SUMMARY

Estimate

Estimate

Section		Cost
Earthwork	\$	231,000
Pavement Structural Section		520,000
Drainage	\$	150,000
Specialty Items	\$	120,000
Environmental	\$	90,000
Traffic Items	\$	618,000
Detours	\$	
Minor Items	\$	
Roadway Mobilization	\$	172,900
Supplemental Work	\$	86,500
State Furnished	\$	
Contingencies	\$	596,600
Overhead	\$	-
TOTAL ROADWAY ITEMS	\$	2,585,000
	EarthworkPavement Structural SectionDrainageSpecialty ItemsEnvironmentalTraffic ItemsDetoursMinor ItemsRoadway MobilizationSupplemental WorkState FurnishedContingencies	Earthwork\$Pavement Structural Section\$Drainage\$Specialty Items\$Specialty Items\$Environmental\$Traffic Items\$Detours\$Minor Items\$Roadway Mobilization\$Supplemental Work\$State Furnished\$Contingencies\$

By signing this estimate you are attesting that you have discussed your project with all functional units and have incorporated all their comments or have discussed with them why they will not be incorporated.

Name and Title

Phone

Date

# SECTION 1: EARTHWORK

Item code Roadway Excavation Imported Borrow Clearing and Grubbing	Unit CY CY LS	<b>Quantity</b> 2,700 5,300 1	x x x x x x x x x x x x x x x x x x x	Unit Price (\$) 45.00 15.00 30,000.00		\$\$\$\$	Cost 121,500 79,500 30,000 - - - - - - - - - - - - - - - - -
						Ξ.	-
			Х		=	\$	-

TOTAL EARTHWORK SECTION ITEMS \$ 231,000

# SECTION 2: PAVEMENT STRUCTURAL SECTION

Item code	Unit	Quantity	Unit Price (\$)		Cost	
Pavement	SF	52,000 x	10.00	= \$	520,000	
	•	x		= \$	-	
		х		= \$	-	
		х		= \$	-	
		х		= \$	-	
		х		= \$	-	
		×		= \$	-	
		×	[	= \$	-	
		×	[	= \$	-	
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		×		= \$	-	
		×		= \$	-	
		×		= \$	-	
		х		= \$	-	
		TOTAL	STRUCTURAL	SECT	ON ITEMS \$	520,000
						-

### SECTION 3: DRAINAGE

Item code	Unit	Quantity		Unit Price (\$)			Cost
Drainage	LS	1	х	150,000.00	=	\$	150,000
Drailago	20	•	x	100,000.00	=	\$	-
			x		=	\$	-
			x		=	\$	-
			x		=	\$	-
			x		=	\$	-
			x		=	\$	-
			x		=	\$	-
			x		=	\$	-
			x		=	\$	-
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			x		=	\$	-
			x		=	\$	-
			x		=	\$	-
			x		=	\$	-
			х		=	\$	-
			х		=	\$	-
			х		=	\$	-
			х		=	\$	-
			х		=	\$	-
			х		=	\$	-
			х		=	\$	-
			х		=	\$	-
			x		=	\$	-
						Ŧ	

#### TOTAL DRAINAGE ITEMS \$

### 150,000

### SECTION 4: SPECIALTY ITEMS

Item code

Guardrail	
Sidewalk, Curb, and Gutter	

Unit	Quantity		Unit Price (\$)			Cost	
LF	1,000	х	20.00	=	\$	20,000	
CY	125	x	800.00	=	\$	100,000	
•		x		=	\$	-	
		х		=	Ś	-	
		х		=	\$ \$ \$	-	
		х		=	Ś	-	
		х		=	Ś	-	
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	_						
			TOTAL SP	PEC	IAL	TY ITEMS	\$ 120,000

# SECTION 5: ENVIRONMENTAL

### **5A - ENVIRONMENTAL MITIGATION**

Item code	Unit	Quantity		Unit Price (\$)		Cost
Erosion Control	LS	1	х	70,000.00	=	\$ 70,000
			х		=	\$ -

Subtotal Environmental \$ 70,000

#### **5B - LANDSCAPE AND IRRIGATION**

Item code	Unit	Quantity		Unit Price (\$)		Cost
Landscape and Irrigation	LS	1	х		=	\$ 20,000
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -
			Х		=	\$ -

Subtotal Landscape and Irrigation \$ 20,000

5C - NPDES

Item code	Unit Quantity Unit Pr	ice (\$) Cost	
	x	= \$ -	
	х	= \$ -	
	Х	= \$ -	
	Х	= \$ -	
	Х	= \$ -	
	Х	= \$ -	
	Х	= \$ -	
	Х	= \$ -	
	Х	= \$ -	
	Х	= \$ -	
	Х	= \$ -	
	Х	= \$ -	
	Х	= \$ -	
Supplemental Work for NPDES (These costs are not accounted in total here but	t under Sunnlemental Work on sheet	7 of 11)	
(These costs are not accounted in total here but	x	= \$ -	
	x	= \$ -	
	X	_ \$ -	
	Ň	- <b>v</b>	
	Subtotal NPDES (With	hout Supplemental Work)	\$
*Applies to all SWPPPs and those WPCPs with sediment co		· · · · · · · · · · · · · · · · · · ·	
**Applies to both SWPPPs and WPCP projects.			
*** Applies only to project with SWPPPs			

\*\*\* Applies only to project with SWPPPs.

TOTAL ENVIRONMENTAL \$ 90,000

# SECTION 6: TRAFFIC ITEMS

#### 6A - Traffic Electrical

Item code Lighting Traffic Signal	Unit LS EA	Quantity 1 1	X X X X X X X X X X X		\$\$\$\$\$	Cost 80,000 300,000 - - - - - - - - - - - - - -
					ֆ Տ	-
			х	=	\$	-
			X X	=	\$ \$	-
			x	=	\$	-
			Х	=	\$	-

Subtotal Traffic Electrical 380,000 \$

### 6B - Traffic Signing and Striping

Item code	Unit	Quantity		Unit Price (\$)			Cost		
Pavement Delineation	LS	1	х	30,000.00	=	\$	30,000		
Roadside Signs	LS	1	х	8,000.00	=	\$	8,000		
Overhead Signs	EA	1	х	100,000.00	=	\$	100,000		
-			х		=	\$	-		
			х		=	\$	-		
			х		=	\$	-		
			х		=	\$	-		
			х		=	\$	-		
			х		=	\$	-		
			х		=	\$	-		
			х		=	\$	-		
			х		=	\$	-		
			х		=	\$	-		
			Sul	btotal Traffic Sig	gnin	g ar	nd Striping	\$ 138,0	000

#### 6C - Stage Construction and Traffic Handling

Item codeUnit QuantityUnit Price (\$)CostTraffic Control SystemsLS1x100,000.00=\$100,0x=\$\$\$\$\$\$\$
x = \$
× = \$
× = \$
x = \$
x = \$
× = \$
× = \$
× = \$

Subtotal Stage Construction and Traffic Handling 100,000 \$

TOTAL TRAFFIC ITEMS \$ 618,000

# SECTION 7: DETOURS

Item code	Unit	Quantity	Unit Price (\$)		Cost	
0713XX Temporary Fence (Type X)	LF	×	1.7	= \$	-	
07XXXX Temporary Drainage	LS	х	[	= \$	-	
120143 Temporary Pavement Delineation	LF	х	I	= \$	-	
1286XX Temporary Signals	EA	х		= \$	-	
129000 Temporary Railing (Type K)	LF	x		= \$	-	
190101 Roadway Excavation	CY	х	[	= \$	-	
198001 Imported Borrow	CY	х	[	= \$	-	
198050 Embankment	CY	х	[	= \$	-	
250401 Class 4 Aggregate Subbase	CY	×		= \$	-	
260201 Class 2 Aggregate Base	CY	×		= \$	-	
390132 Hot Mix Asphalt (Type A)	TON	x		= \$	-	
XXXXXX Some Item	LS	х		= \$	-	
			TOTAL I	DETOU	RS	\$ -
			SUBTOTA	L SECT	IONS 1-7	\$ 1,729,000
SECTION 8: MINOR ITEMS						
<ul> <li>8A - Americans with Disabilities Act Items</li> <li>ADA Items</li> <li>8B - Bike Path Items</li> </ul>			0.0%	\$	-	

Bike Path Items			0.0%	\$	-		
8C - Other Minor Items Other Minor Items		_	0.0%	\$	-		
Total of Section 1-7	\$ 1,729,000	x	0.0%	= \$	-		
			TOTAL N	MINOR ITEMS	6 9	6	-
SECTIONS 9: MOBILIZATION							
item							

999990	Total Section 1-8	\$ 1,729,000	x	10%	= \$	172,900	
				тот	TAL MOB	ILIZATION	\$ 172,900

### SECTION 10: SUPPLEMENTAL WORK

Item code		Unit	Quantity	Unit Price (	5)		Cost	
066015 F	ederal Trainee Program	LS	-	х .		\$	-	
066063 T	raffic Management Plan - Public Informatic	LS		х	=	\$	-	
066090 N	Iaintain Traffic	LS		х	=	\$	-	
066094 V	/alue Analysis	LS		х	=	\$	-	
066204 R	Remove Rock & Debris	LS		х	=	\$	-	
066222 L	ocate Existing Cross-Over	LS		х	=	\$	-	
066670 P	Payment Adjustments For Price Index Fluct	LS		х	=	\$	-	
066700 P	Partnering	LS		х	=	\$	-	
066866 C	Deration of Existing Traffic Management S	LS		х	=	\$	-	
066920 D	Dispute Review Board	LS		х	=	\$	-	
XXXXXX S	Some Item			х	=	\$	-	
	Cost of NPDES Supp	<i>lementa</i>	I Work specit	ied in Section 50	2 =	\$	-	
	Total Section 1-8	\$	1,729,000	5%	=	\$	86,450	
			]	TOTAL SUPP	LEMI	ENT	AL WORK	\$ 86,500

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# SECTION 11: STATE FURNISHED MATERIALS AND EXPENSES

Item code	Unit	Quantity	Uni	t Price (\$)	Cost
066063 Public Information	LS		х	=	\$0
066105 RE Office	LS		х	=	\$0
066803 Padlocks	LS		х	=	\$0
066838 Reflective Numbers and Edge Sealer	LS		х	=	\$0
066901 Water Expenses	LS		х	=	\$0
066062A COZEEP Expenses	LS		х	=	\$0
06684X Ramp Meter Controller Assembly	LS		х	=	\$0
06684X TMS Controller Assembly	LS		х	=	\$0
06684X Traffic Signal Controller Assembly	LS		х	=	\$0
XXXXXX Some Item					
Total Section 1-8	\$	1,729,000		0% = \$	-
				TOTAL STATE F	URNISHED

# SECTION 12: TIME-RELATED OVERHEAD

Estiamted Time-Releated Overhead (TRO) Percentage (0% to 10%) = 5%

Item code	Unit	Quantity		Unit Price (\$	)	Cost	
070018 Time-Related Overhead	WD	500	Х	0	=	\$0	
			ΤΟΤΑ	L TIME-REL	ATED	OVERHEAD	\$0

TOTAL TIME-RELATED OVERHEAD

### **SECTION 13: CONTINGENCY**

(Pre-PSR 30%-50%, PSR 25%, Draft PR 20%, PR 15%, after PR approval 10%, Final PS&E 5%)

Total Section 1-11 \$ 1,988,400 30% \$596,520 х =

> TOTAL CONTINGENCY \$596,600

# **II. STRUCTURE ITEMS**

	Retaining Walls	Bridge 1	Bridge 2
DATE OF ESTIMATE Building Name Bridge Number Structure Type Width (Feet) [out to out] Total Building Length (Feet) Total Area (Square Feet) Structure Depth (Feet) Footing Type (pile or spread) Cost Per Square Foot	00/00/00 XXXXXXXXXXXXXXXXX 57-XXX XXXXXXXXXXXXXX	00/00/00 57-XXX 0.00 LF 0.00 LF 0 SQFT 0.00 LF xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx	00/00/00 57-XXX 0.00 LF 0.00 LF 0 SQFT 0.00 LF xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
COST OF EACH STRUCTURE	\$100,000.00	\$0.00	\$0.00
DATE OF ESTIMATE Name Bridge Number Structure Type Width (Feet) [out to out] Total Length (Feet) Total Area (Square Feet) Structure Depth (Feet) Footing Type (pile or spread) Cost Per Square Foot	00/00/00 xxxxxxxxxxxxxxxxx 57-XXX xxxxxxxxxxxxxxxxxx 0.00 LF 0.00 LF 0 SQFT 0.00 LF xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx	00/00/00 xxxxxxxxxxxxxxxxxxx 57-XXX xxxxxxxxxxxxxxxxxx 0.00 LF 0.00 LF 0.00 SQFT 0.00 LF xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx	00/00/00 xxxxxxxxxxxxxxxxxx 57-XXX xxxxxxxxxxxxxxxxxx 0.00 LF 0.00 LF 0.00 LF 0.00 LF xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
COST OF EACH STRUCTURE	\$0.00	\$0.00	\$0.00

TOTAL COST OF BRIDGES \$0.00

TOTAL COST OF RETAINING

\$100,000.00

\$200,000.00

# TOTAL COST OF STRUCTURES<sup>1</sup>

<sup>1</sup>Structure's Estimate includes Overhead and Mobilization.

Add more sheets if needed. Call them 9a, 9b, 9c, ..., etc

Date

18-0086 D 61 of 118

#### DO NOT PRINT THIS SHEET AS PART OF COST ESTIMATE ATTACHMENT TO PROJECT INITIATION OR APPROVAL DOCUMENTS.

# **III. RIGHT OF WAY**

Fill in all of the available information from the Right of Way data sheet.

A)	A1) A2)	Acquisition, including Excess Lan SB-1210	d Purchases, Damages & Goodwill,	\$ \$	0 0
B)	Acquisitio	on of Offsite Mitigation		\$	0
C)	C1) C2)	Utility Relocation (State Share) Potholing (Design Phase)	\$ \$	0 0	
D)	Railroad	Acquisition		\$	0
E)	Clearanc	e / Demolition	\$	0	
F)	Relocatio	on Assistance (RAP and/or Last Re	sort Housing Costs)	\$	0
G)	Title and	Escrow		\$	0
H)	Environm	nental Review		\$	0
I)		nation Settlements G & H applied to items A + B)	<u>0%</u>	\$	0
J)	Design A	ppreciation Factor	0%	\$	0
K)	Utility Re	location (Construction Cost)		\$	0

L)		TOTAL RIGHT OF WAY ESTIMATE	\$200,000
	(Excluding Item #8 - Hazardous W	(aste)	

M)

TOTAL R/W ESTIMATE: Escalated

\$0

0

N)

**Right of Way Support** \$

Support Cost		
Estimate Prepared By	Project Coordinator <sup>1</sup>	Phone
Utility Estimate		
Prepared By	Utiliy Coordinator <sup>2</sup>	Phone
R/W Acquistion		
Estimate Prepared By	Right of Way Estimator <sup>3</sup>	Phone
When estimate has Support C	Costs only <sup>2</sup> When estimate has Utility Relocation	<sup>3</sup> When R/W Acquisition is required

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DO NOT PRINT THIS SHEET AS PART OF COST ESTIMATE ATTACHMENT TO PROJECT INITIATION OR APPROVAL DOCUMENTS.

#### IV. SUPPORT COST ESTIMATE SUMMARY

Please obtain a P3 report (CL#3) from PPM to fill in the support cost for these categories.

SB-45 CATEGORY SUPPORT COST	PREVIOUS	FY 10/11	FY 11/12	FY 12/13	FY 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	FUTURE	P3 1	lotal	Support Ratio
PR/ED (PD,PE,PM)											\$	-	0.00%
PS&E (PS)											\$		0.00%
R/W (RW)											\$		0.00%
CONSTRUCTION (CM)											\$	-	0.00%
Total Support Cost:	\$ -	\$ -	\$-	\$ -	\$-	\$-	\$ -	\$-	\$-		\$	-	0.00%

Note: It is assumed that the Support Costs are already escalated by Programming to the year of expenditure. Use project Programming Sheet data.

Total Capital Cost:	\$2,985,000
Total Capital Outlay Support Cost:	\$0
Overall Percent Support Cost:	0.00%

### V. ESCALATED CONSTRUCTION COST ESTIMATE SUMMARY

Note: Right of way escalated cost are accounted for on sheet 10 of 11.

Date of Estimate (Month/Year) Estimated Date of Construction Start (Month/Year)	Month 0 0	/ / /	Year 0 0
Number of Working Days	500	WD	
Estimated Mid-Point of Construction (Month/Year)	0	/	0

YEAR		0	1		2	3	4	5	6		7	8		9		FUTURE		
ESCALATION RATE*																		
ESCALATED CONSTRUCTION COSTS		0	1		2	3	4	5	6		7	8		9	F		TOT ESC COS	ALATED
ROADWAY ITEMS	Ş	2,585,000	\$ 2,585,000	\$	2,585,000	\$ 2,585,000	\$ 2,585,000	\$ 2,585,000	\$ 2,585,000	ş	2,585,000	\$ 2,585,000	ş	2,585,000	\$	2,585,000	\$	2,585,000
STRUCTURE ITEMS	\$	200,000	\$ 200,000	s	200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$	200,000	\$ 200,000	\$	200,000	\$	200,000	\$	200,000

Approved by:

Project Control Engineer

Date

# **Preliminary Cost Estimate**

# **Project ID:**

Type of Estimate :

Program Code : Project Limits :

Description:

Descriptio

Scope :

Alternative :

Partial Cloverleaf Interchange

	Current Cost	Es	calated Cost
ROADWAY ITEMS	\$ 4,269,100	\$	4,269,100
STRUCTURE ITEMS	\$ 200,000	\$	200,000
SUBTOTAL CONSTRUCTION COST	\$ 4,469,100	\$	4,469,100
<b>RIGHT OF WAY</b>	\$ 200,000	\$	-
TOTAL CAPITAL OUTLAY COST	\$ 4,670,000	\$	4,470,000
PR/ED SUPPORT	\$ -	\$	-
PS&E SUPPORT	\$ -	\$	-
RIGHT OF WAY SUPPORT	\$ -	\$	-
CONSTRUCTION SUPPORT	\$ -	\$	-
TOTAL CAPITAL OUTLAY SUPPORT COST*	\$ -	\$	-
TOTAL PROJECT COST	\$ 4,700,000	\$	4,500,000

	If Project has been programmed enter Programmed Am	ount §	-
	Date of Estimate (Month/Y		onth / Year /
	Estimated Date of Construction Start (Month/Ye	ear)	1
	Number of Working I	-	Working Days
	Estimated Mid-Point of Construction (Month/Y		onth / Year
	Number of Plant Establishment I	Days	Days
	Estimated Project Schedule		
	PID Approval		
	PA/ED Approval		
	PS&E		
	RTL		
	Begin Construction		
Approved by Project Manager			(xxx) xxx-xxxx
	Project Manager	Date	Phone

# I. ROADWAY ITEMS SUMMARY

	Section		Cost
1	Earthwork		\$ 292,500
2	Pavement Structural Section		\$ 853,000
3	Drainage		\$ 200,000
4	Specialty Items		\$ 640,000
5	Environmental		\$ 120,000
6	Traffic Items		\$ 750,000
7	Detours		\$ _
8	Minor Items		\$ 
9	Roadway Mobilization		\$ 285,600
10	Supplemental Work		\$ 142,800
11	State Furnished		\$ -
12	Contingencies		\$ 985,200
13	Overhead		\$ -
	TOTAL ROADWAY ITEMS	;	\$ 4,269,100
			 .,,
imate Prepa	Name and Title	Date	Phone
mate Review	wed By	Date	Phone

By signing this estimate you are attesting that you have discussed your project with all functional units and have incorporated all their comments or have discussed with them why they will not be incorporated.

Name and Title

Phone

Date

# SECTION 1: EARTHWORK

Item code	Unit	Quantity		Unit Price (\$)		Cost
Roadway Excavation	CY	3,500	х	45.00	=	\$ 157,500
Imported Borrow	CY	7,000	х	15.00	=	\$ 105,000
Clearing and Grubbing	LS	1	х	30,000.00	=	\$ 30,000
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -

TOTAL EARTHWORK SECTION ITEMS \$ 292,500

# SECTION 2: PAVEMENT STRUCTURAL SECTION

Item code		Unit	Quantity		Unit Price (\$)			Cost		
F	Pavement	SF	85,300	х	10.00	=	\$	853,000		
		•	00,000	x		=	\$	-		
				х		=	\$	-		
				х		=	\$	-		
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				х		=	\$	-		
	Г		тоти	۱L :	STRUCTURAL	SE	СТІ	ON ITEMS	\$ 853,	000
	L									

### SECTION 3: DRAINAGE

Item code	Unit	Quantity		Unit Price (\$)			Cost
						¢	000 000
Drainage	LS	1	Х	200,000.00	=	\$	200,000
			х		=	\$	-
			х		=	\$	-
			х		=	\$	-
			х		=	\$	-
			х		=	\$	-
			х		=	\$	-
			х		=	\$	-
			х		=	\$	-
			x		=	\$	-
			x		=	\$	-
			x			\$	_
					=		-
			х		=	\$	-
			Х		=	\$	-
			х		=	\$	-
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			x		=	\$	-
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			x			\$	_
			X		=	φ	-

*Unit* LF CY TOTAL DRAINAGE ITEMS \$

200,000

# SECTION 4: SPECIALTY ITEMS

Item code

Guardrail	
Sidewalk, Curb, and Gutter	

Quantity		Unit Price (\$)			Cost	
2,000	х	20.00	=	\$	40,000	
750	х	800.00	=	\$	600,000	
	х		=	\$	-	
	х		=	\$	-	
	х		=	\$ \$	-	
	х		=	\$	-	
	х		=	\$	-	
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	х		=	\$	-	
	х		=	\$	-	
[		TOTAL SF	PEC	IAL	TY ITEMS	\$ 640,000

# SECTION 5: ENVIRONMENTAL

### **5A - ENVIRONMENTAL MITIGATION**

Item code	Unit	Quantity		Unit Price (\$)		Cost
Erosion Control	LS	1	х	90,000.00	=	\$ 90,000
			Х		=	\$ -

Subtotal Environmental \$ 90,000

#### **5B - LANDSCAPE AND IRRIGATION**

Item code	Unit	Quantity		Unit Price (\$)		Cost
Landscape and Irrigation	LS	1	х		=	\$ 30,000
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -
			Х		=	\$ -

Subtotal Landscape and Irrigation \$ 30,000

5C - NPDES

Item code	Unit Quantity	Unit Price (\$)	Cost
	x	=	\$-
	х	=	\$ -
	х	=	\$-
	Х	=	\$ -
Supplemental Work for NPDES			
(These costs are not accounted in total	here but under Supplemental Work	on sheet 7 of 11).	
	X	=	\$-
	x	=	\$-
	x	=	\$-
	Subtotal NPE	DES (Without Suppl	lemental Work) \$
*Applies to all SWPPPs and those WPCPs with s	ediment control or soil stabilization BMPs.		
**Applies to both SWPPPs and WPCP projects.			
*** Applies only to project with SW/PPPs			

\*\*\* Applies only to project with SWPPPs.

TOTAL ENVIRONMENTAL \$ 120,000

# SECTION 6: TRAFFIC ITEMS

#### 6A - Traffic Electrical

Item code Lighting Traffic Signal	<i>Unit</i> LS EA	Quantity 1 1	x x x x x x x x x x x x x x x x x x x	Unit Price (\$) 100,000.00 300,000.00		\$\$\$\$\$\$\$	Cost 100,000 300,000 - - - - - - - - - - - - - - - - -
						\$	-
			X X		=	\$ \$	-
			x		=	\$	-
			X X		=	\$ \$	-

Subtotal Traffic Electrical 400,000 \$

### 6B - Traffic Signing and Striping

Item code	Unit	Quantity		Unit Price (\$)			Cost		
Pavement Delineation	LS	1	х	40,000.00	=	\$	40,000		
Roadside Signs	LS	1	х	10,000.00	=	\$	10,000		
Overhead Signs	EA	1	х	100,000.00	=	\$	100,000		
			х		=	\$	-		
			Х		=	\$	-		
			х		=	\$	-		
			х		=	\$	-		
			х		=	\$	-		
			Х		=	\$	-		
			Х		=	\$	-		
			Х		=	\$	-		
			Х		=	\$	-		
			х		=	\$	-		
			Suk	btotal Traffic Sig	gnin	g ar	nd Striping	\$ 150,00	<u>0</u>

#### 6C - Stage Construction and Traffic Handling

Item code	Unit	Quantity		Unit Price (\$)		Cost
Traffic Control Systems	LS	1	х		=	\$ 200,000
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -
			Х		=	\$ -
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -

Subtotal Stage Construction and Traffic Handling \$ 200,000

TOTAL TRAFFIC ITEMS \$	750,000	
------------------------	---------	--

### SECTION 7: DETOURS

Include constructing, maintaining, and removal					
Item code	Unit	Quantity U	Init Price (\$)	Cost	
0713XX Temporary Fence (Type X)	LF	x	= \$	-	
07XXXX Temporary Drainage	LS	х	= \$	-	
120143 Temporary Pavement Delineation	LF	х	= \$	-	
1286XX Temporary Signals	EA	х	= \$	-	
129000 Temporary Railing (Type K)	LF	х	= \$	-	
190101 Roadway Excavation	CY	х	= \$	-	
198001 Imported Borrow	CY	х	= \$	-	
198050 Embankment	CY	х	= \$	-	
250401 Class 4 Aggregate Subbase	CY	х	= \$	-	
260201 Class 2 Aggregate Base	CY	х	= \$	-	
390132 Hot Mix Asphalt (Type A)	TON	Х	= \$	-	
XXXXXX Some Item	LS	х	= \$	-	
			TOTAL DETOU	JRS \$	-
			SUBTOTAL SEC	TIONS 1-7 \$	2,855,500
SECTION 8: MINOR ITEMS					

8A - Americans with Disabilities Act Items ADA Items			0.0%	\$	-	
8B - Bike Path Items Bike Path Items			0.0%	\$	-	
8C - Other Minor Items Other Minor Items			0.0%	\$		
Total of Section 1-7	\$ 2,855,500	x	0.0%	= \$	-	
				INOR ITEMS	\$	-

### SECTIONS 9: MOBILIZATION

item code					
999990	Total Section 1-8	\$ 2,855,500 x	10%	= \$	285,550

### SECTION 10: SUPPLEMENTAL WORK

Item code	Unit	Quantity	Unit Prie	ce (\$)		Cost		
066015 Federal Trainee Program	LS	-	х	=	\$	-		
066063 Traffic Management Plan - Public Informatic	LS		х	=	\$	-		
066090 Maintain Traffic	LS		х	=	\$	-		
066094 Value Analysis	LS		х	=	\$	-		
066204 Remove Rock & Debris	LS		х	=	\$	-		
066222 Locate Existing Cross-Over	LS		х	=	\$	-		
066670 Payment Adjustments For Price Index Fluct	LS		х	=	\$	-		
066700 Partnering	LS		х	=	\$	-		
066866 Operation of Existing Traffic Management S	LS		х	=	\$	-		
066920 Dispute Review Board	LS		х	=	\$	-		
XXXXXX Some Item			х	=	\$	-		
Cost of <b>NPDES</b> Supp	olement	al Work specif	ied in Sectic	o <u>n 5C</u> =	\$	-		
Total Section 1-8	\$	2,855,500	5%	. =	\$	142,775		
		Г			NIT		¢	4 4 2 0 0 0
			TOTAL SU	JAAFTEIME	:NI/		2	142,800

TOTAL MOBILIZATION \$ 285,600

# SECTION 11: STATE FURNISHED MATERIALS AND EXPENSES

Item code	Unit	Quantity	UI	nit Price (\$)	Cost
066063 Public Information	LS		х	=	\$0
066105 RE Office	LS		х	=	\$0
066803 Padlocks	LS		х	=	\$0
066838 Reflective Numbers and Edge Sealer	LS		х	=	\$0
066901 Water Expenses	LS		х	=	\$0
066062A COZEEP Expenses	LS		х	=	\$0
06684X Ramp Meter Controller Assembly	LS		х	=	\$0
06684X TMS Controller Assembly	LS		х	=	\$0
06684X Traffic Signal Controller Assembly	LS		х	=	\$0
XXXXXX Some Item					
Total Section 1-8	\$	2,855,500		0% =	\$-
				TOTAL STATE	FURNISHED

# SECTION 12: TIME-RELATED OVERHEAD

Estiamted Time-Releated Overhead (TRO) Percentage (0% to 10%) = 5%

Item code	Unit	Quantity	ι	Unit Price (\$	)	Cost	
070018 Time-Related Overhead	WD	500	Х	0	=	\$0	
			ΤΟΤΑ	L TIME-REL	ATED	OVERHEAD	\$0

TOTAL TIME-RELATED OVERHEAD

### **SECTION 13: CONTINGENCY**

(Pre-PSR 30%-50%, PSR 25%, Draft PR 20%, PR 15%, after PR approval 10%, Final PS&E 5%)

Total Section 1-11 \$ 3,283,900 30% \$985,170 х =

> TOTAL CONTINGENCY \$985,200

# **II. STRUCTURE ITEMS**

	Retaining Walls	Bridge 1	Bridge 2
DATE OF ESTIMATE Building Name Bridge Number	00/00/00 xxxxxxxxxxxxxxxx 57-XXX	00/00/00 57-XXX	00/00/00 57-XXX
Structure Type Width (Feet) [out to out] Total Building Length (Feet) Total Area (Square Feet) Structure Death (Feet)	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	0.00 LF 0.00 LF 0 SQFT	0.00 LF 0.00 LF 0 SQFT
Structure Depth (Feet) Footing Type (pile or spread) Cost Per Square Foot	LF xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx	0.00 LF xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx	0.00 LF xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
COST OF EACH STRUCTURE	\$100,000.00	\$0.00	\$0.00
DATE OF ESTIMATE Name Bridge Number Structure Type Width (Feet) [out to out] Total Length (Feet) Total Area (Square Feet) Structure Depth (Feet) Footing Type (pile or spread) Cost Per Square Foot	00/00/00 xxxxxxxxxxxxxxxxx 57-XXX xxxxxxxxxxxxxx 0.00 LF 0.00 LF 0 SQFT 0.00 LF xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx	00/00/00 xxxxxxxxxxxxxxxxxxxxxxxxxxxxxx	00/00/00 xxxxxxxxxxxxxxxxxx 57-XXX xxxxxxxxxxxxxxxxxx 0.00 LF 0.00 LF 0.00 SQFT 0.00 LF xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
Cost OF FACH	\$0.00	\$0.00	\$0.00

COST OF EACH \$0.00 \$0.00 \$0.00 STRUCTURE

> TOTAL COST OF BRIDGES \$0.00

TOTAL COST OF RETAINING

\$200,000.00

\$100,000.00

# TOTAL COST OF STRUCTURES<sup>1</sup>

<sup>1</sup>Structure's Estimate includes Overhead and Mobilization.

Add more sheets if needed. Call them 9a, 9b, 9c, ..., etc

Date

### DO NOT PRINT THIS SHEET AS PART OF COST ESTIMATE ATTACHMENT TO PROJECT INITIATION OR APPROVAL DOCUMENTS.

### **III. RIGHT OF WAY**

Fill in all of the available information from the Right of Way data sheet.

A)	A1) A2)									
B)	Acquisitio	on of Offsite Mitigation		\$	0					
C)	C1) C2)	Utility Relocation (State Share) Potholing (Design Phase)		\$ \$	0 0					
D)	Railroad	Acquisition		\$	0					
E)	Clearanc	e / Demolition		\$	0					
F)	Relocatio	on Assistance (RAP and/or Last Re	sort Housing Costs)	\$	0					
G)	Title and	Escrow		\$	0					
H)	Environm	nental Review		\$	0					
I)		nation Settlements G & H applied to items A + B)	<u>0%</u>	\$	0					
J)	Design A	ppreciation Factor	0%	\$	0					
K)	Utility Re	location (Construction Cost)		\$	0					

L)		TOTAL RIGHT OF WAY ESTIMATE	\$200,000
	(Excluding Item #8 - Hazardous W	(aste)	

M)

TOTAL R/W ESTIMATE: Escalated

\$0

0

N)

**Right of Way Support** \$

Support Cost		
Estimate Prepared By	Project Coordinator <sup>1</sup>	Phone
Utility Estimate		
Prepared By	Utiliy Coordinator <sup>2</sup>	Phone
R/W Acquistion		
Estimate Prepared By	Right of Way Estimator <sup>3</sup>	Phone
1.00 0 0 0	$P_{\text{costs}}$ and $\frac{2}{3}$ When estimate has Litility Polyastian	<sup>3</sup> When PAV Application is required

<sup>1</sup> When estimate has Support Costs only <sup>2</sup> When estimate has Utility Relocation

<sup>3</sup> When R/W Acquisition is required

DO NOT PRINT THIS SHEET AS PART OF COST ESTIMATE ATTACHMENT TO PROJECT INITIATION OR APPROVAL DOCUMENTS.

### IV. SUPPORT COST ESTIMATE SUMMARY

Please obtain a P3 report (CL#3) from PPM to fill in the support cost for these categories.

SB-45 CATEGORY SUPPORT COST	PREVIOUS	FY 10/11	FY 11/12	FY 12/13	FY 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	FUTURE	P3 To	tal	Support Ratio
PR/ED (PD,PE,PM)											\$	-	0.00%
PS&E (PS)											\$	-	0.00%
R/W (RW)											\$	-	0.00%
CONSTRUCTION (CM)											\$	-	0.00%
Total Support Cost:	\$ -	\$ -	\$-	\$ -	\$-	\$-	\$ -	\$-	\$-		\$	-	0.00%

Note: It is assumed that the Support Costs are already escalated by Programming to the year of expenditure. Use project Programming Sheet data.

Total Capital Cost:	\$4,670,000
Total Capital Outlay Support Cost:	\$0
Overall Percent Support Cost:	0.00%

### V. ESCALATED CONSTRUCTION COST ESTIMATE SUMMARY

Note: Right of way escalated cost are accounted for on sheet 10 of 11.

Date of Estimate (Month/Year) Estimated Date of Construction Start (Month/Year)	Month 0 0	/ /	Year 0 0
Number of Working Days	500	WD	
Estimated Mid-Point of Construction (Month/Year)	0	/	0

YEAR FORECASTED		0	1		2	3	4	5	6		7	8		9	F	FUTURE		
ESCALATION RATE*																		
ESCALATED CONSTRUCTION COSTS		0	1		2	3	4	5	6		7	8		9	F		TOT ESC COS	ALATED
ROADWAY ITEMS	ş	4,269,100	\$ 4,269,100	ş	4,269,100	\$ 4,269,100	\$ 4,269,100	\$ 4,269,100	\$ 4,269,100	ş	4,269,100	\$ 4,269,100	ŝ	4,269,100	\$	4,269,100	\$	4,269,100
STRUCTURE ITEMS	\$	200,000	\$ 200,000	\$	200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$	200,000	\$ 200,000	\$	200,000	\$	200,000	\$	200,000

Approved by:

Project Control Engineer

Date

11/15/2017 10:34 AM

### **Preliminary Cost Estimate**

### **Project ID:**

Type of Estimate :

Program Code : **Project Limits : Description:** Scope : Alternative : **Diverging Diamond Interchange Current Cost Escalated Cost ROADWAY ITEMS** 2,699,600 \$ 2,699,600 \$ STRUCTURE ITEMS \$ 1,900,000 \$ 1,900,000 SUBTOTAL CONSTRUCTION COST \$ \$ 4,599,600 4,599,600 **RIGHT OF WAY** \$ \$ --TOTAL CAPITAL OUTLAY COST \$ 4,600,000 \$ 4,600,000 **PR/ED SUPPORT** \$ \$ **PS&E SUPPORT** \$ \$ **RIGHT OF WAY SUPPORT** \$ \$ **CONSTRUCTION SUPPORT** \$ \$ -\$ **OTAL CAPITAL OUTLAY SUPPORT COST\* \$** --TOTAL PROJECT COST \$ \$ 4,600,000 4,600,000 \$ If Project has been programmed enter Programmed Amount Month / Year Date of Estimate (Month/Year) Estimated Date of Construction Start (Month/Year) Number of Working Days Working Days Month / Year Estimated Mid-Point of Construction (Month/Year) Number of Plant Establishment Days Days Estimated Project Schedule PID Approval PA/ED Approval PS&E RTL **Begin Construction** Approved by Project (xxx) xxx-xxxx Manager **Project Manager** Date Phone

# I. ROADWAY ITEMS SUMMARY

	Section	Cost
1	Earthwork	\$ 44,700
2	Pavement Structural Section	\$ 80,000
3	Drainage	\$ 120,000
4	Specialty Items	\$ 366,000
5	Environmental	\$ 90,000
6	Traffic Items	\$ 1,105,000
7	Detours	\$ -
8	Minor Items	\$ -
9	Roadway Mobilization	\$ 180,600
10	Supplemental Work	\$ 90,300
11	State Furnished	\$ -
12	Contingencies	\$ 623,000
13	Overhead	\$ 
	TOTAL ROADWAY ITEMS	\$ 2,699,600

Estimate Reviewed By

Estimate

Name and Title

Phone

By signing this estimate you are attesting that you have discussed your project with all functional units and have incorporated all their comments or have discussed with them why they will not be incorporated.

### SECTION 1: EARTHWORK

Item code	Unit	Quantity		Unit Price (\$)	)	Cost
Roadway Excavation	CY	770	х	45.00	=	\$ 34,650
Imported Borrow	CY	0	х	15.00	=	\$ -
Clearing and Grubbing	LS	1	х	10,000.00	=	\$ 10,000
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -

TOTAL EARTHWORK SECTION ITEMS \$ 44,700

### SECTION 2: PAVEMENT STRUCTURAL SECTION

Item code	Unit	Quantity	Unit Price (\$)		Cost	
Pavement	SF		< 10.00	= \$	80,000	
	0.		<	= \$	-	
			κ	= \$	-	
			κ	= \$	-	
			<	= \$	-	
			<	= \$	-	
			<	= \$	-	
		2	κ	= \$	-	
		1	K	= \$	-	
		1	K	= \$	-	
		2	K	= \$	-	
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		TOTAL	STRUCTURAL	SECTI	ON ITEMS \$ 80,0	000
	L	IUIAL	CINCOLONAL		€ <u></u>	_

### SECTION 3: DRAINAGE

Drainage LS 1 × 120,000.00 = \$ 120,0 × = \$ × = \$	Item code	Unit	Quantity	Unit Price (\$)			Cost
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	Drainage	1.5		120 000 00	=	\$	120,000
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#### TOTAL DRAINAGE ITEMS \$ 120,000

### SECTION 4: SPECIALTY ITEMS

ltem	code
------	------

Guardrail Sidewalk, Curb, and Gutter

110:4	Quantitu		Unit Dring (C)			Cont		
	Quantity		Unit Price (\$)		۴	Cost		
LF	300	х	20.00	=	\$	6,000		
CY	450	х	800.00	=	\$	360,000		
		х		=	\$	-		
		х		=	\$	-		
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	[		TOTAL SP	FC			\$	366,000
	L		TOTAL SP	20			φ	300,000

### SECTION 5: ENVIRONMENTAL

### **5A - ENVIRONMENTAL MITIGATION**

Item code	Unit	Quantity		Unit Price (\$)		Cost
Erosion Control	LS	1	х	50,000.00	=	\$ 50,000
			х		=	\$ -

Subtotal Environmental \$ 50,000

#### **5B - LANDSCAPE AND IRRIGATION**

Item code	Unit	Quantity		Unit Price (\$)		Cost
Landscape and Irrigation	LS	1	х		= 5	\$ 40,000
			Х		= 5	5 -
			х		= 5	<b>5</b> -
			х		= 5	<b>5</b> -
			х		= 3	<b>-</b>
			х		= 3	<b>-</b>
			х		= 3	<b>-</b>
			х		= 3	6 -
			х		= 3	<b>-</b>
			х		= 3	<b>5</b> -
			х		= 3	6 -
			Х		= 3	- 6

### Subtotal Landscape and Irrigation \$ 40,000

5C - NPDES Item code Unit Quantity Unit Price (\$) Cost \$ = х х = \$ х = \$ \$ х = \$ = Х **Supplemental Work for NPDES** (These costs are not accounted in total here but under Supplemental Work on sheet 7 of 11). \$ х = х = \$ = \$ х Subtotal NPDES (Without Supplemental Work) \$ \*Applies to all SWPPPs and those WPCPs with sediment control or soil stabilization BMPs. \*\*Applies to both SWPPPs and WPCP projects.

\*\*\* Applies only to project with SWPPPs.

TOTAL ENVIRONMENTAL \$ 90,000

### SECTION 6: TRAFFIC ITEMS

### 6A - Traffic Electrical

Item code	Unit	Quantity		Unit Price (\$)		Cost
Lighting	LS	1	х			\$ 100,000
Traffic Signal	EA	2	х	300,000.00	=	\$ 600,000
-			х		=	\$ -
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -

Subtotal Traffic Electrical \$ 700,000

-

\$

=

= \$

### 6B - Traffic Signing and Striping

Item code	Unit	Quantity		Unit Price (\$)			Cost	
Pavement Delineation	LS	1	х	50,000.00	=	\$	50,000	
Roadside Signs	LS	1	х	5,000.00	=	\$	5,000	
Overhead Signs	EA	2	х	100,000.00	=	\$	200,000	
			х		=	\$	-	
			х		=	\$	-	
			х		=	\$	-	
			х		=	\$	-	
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			х		=	\$	-	
			х		=	\$	-	
			Su	btotal Traffic Sig	nin	g ar	nd Striping	\$ 255,000

х

х

### 6C - Stage Construction and Traffic Handling

Item code	Unit	Quantity		Unit Price (\$)		Cost
Traffic Control Systems	LS	1	х		=	\$ 150,000
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -

Subtotal Stage Construction and Traffic Handling \$

150,000

TOTAL TRAFFIC ITEMS \$ 1,105,000

### SECTION 7: DETOURS

Include constructing, maintaining, and removal <b>Item code</b> 0713XX Temporary Fence (Type X) 07XXXX Temporary Drainage 120143 Temporary Pavement Delineation 1286XX Temporary Signals 129000 Temporary Railing (Type K) 190101 Roadway Excavation 198001 Imported Borrow 198050 Embankment 250401 Class 4 Aggregate Subbase 260201 Class 2 Aggregate Base 390132 Hot Mix Asphalt (Type A) XXXXXX Some Item	Unit LF LS LF EA LF CY CY CY CY CY LS	Quantity		Init Price (\$)		\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	Cost - - - - - - - - - - - - - - - - - - -	\$	
				SUBTOTA				\$	1,805,700
				3061017	AL 31	ECT	10113 1-7	φ	1,605,700
SECTION 8: MINOR ITEMS									
<ul> <li>8A - Americans with Disabilities Act Items</li> <li>ADA Items</li> <li>8B - Bike Path Items</li> </ul>				0.0%		\$	-		
Bike Path Items 8C - Other Minor Items				0.0%		\$	-		
Other Minor Items			_	0.0%	_	\$	-		
Total of Section 1-7	\$	1,805,700	x	0.0%	=	\$	-		
				TOTAL M	INO	R IT	EMS	\$	-
SECTIONS & MODILIZATION									
SECTIONS 9: MOBILIZATION									
Item code									
999990 Total Section 1-8	\$	1,805,700	х	10%	=	\$	180,570		
				тот	AL I	NOE	BILIZATION	\$	180,600
SECTION 10: SUPPLEMENTAL WORK									
Item code	Unit	Quantity		Init Price (\$)		¢	Cost		
066015 Federal Trainee Program 066063 Traffic Management Plan - Public Information	LS LS		X X		=	\$ \$	-		
066090 Maintain Traffic	LS		х		=	\$	-		
066094 Value Analysis	LS		х		=	\$	-		
066204 Remove Rock & Debris 066222 Locate Existing Cross-Over	LS LS		X X		=	\$ \$	-		
066670 Payment Adjustments For Price Index Fluct			x		=	\$	-		
066700 Partnering	LS		х		=	\$	-		
066866 Operation of Existing Traffic Management \$ 066920 Dispute Review Board	LS LS		X X		=	\$ \$	-		
XXXXXX Some Item	20		x		=	\$	-		
Cost of NPDES Supp	lement	al Work speci	ified ir	Section 5C	=	\$	_		
		·					00.00-		
Total Section 1-8	\$	1,805,700		5%	=	\$	90,285		
			TO	TAL SUPPL	EME	ENT/	AL WORK	\$	90,300

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### SECTION 11: STATE FURNISHED MATERIALS AND EXPENSES

Item code	Unit	Quantity	Un	it Price (\$)	Cost
066063 Public Information	LS		х	=	\$0
066105 RE Office	LS		х	=	\$0
066803 Padlocks	LS		х	=	\$0
066838 Reflective Numbers and Edge Sealer	LS		х	=	\$0
066901 Water Expenses	LS		х	=	\$0
066062A COZEEP Expenses	LS		х	=	\$0
06684X Ramp Meter Controller Assembly	LS		х	=	\$0
06684X TMS Controller Assembly	LS		х	=	\$0
06684X Traffic Signal Controller Assembly	LS		х	=	\$0
XXXXXX Some Item					
Total Section 1-8	\$	1,805,700		0% = \$	-
				TOTAL STATE	FURNISHED

### SECTION 12: TIME-RELATED OVERHEAD

Estiamted Time-Releated Overhead (TRO) Percentage (0% to 10%) = 5%

Item code	Unit	Quantity	Ur	nit Price (	(\$)	Cost
070018 Time-Related Overhead	WD	500	х	0	=	\$0

TOTAL TIME-RELATED OVERHEAD

\$0

### SECTION 13: CONTINGENCY

(Pre-PSR 30%-50%, PSR 25%, Draft PR 20%, PR 15%, after PR approval 10%, Final PS&E 5%)

		тот		NTINGENCY	\$623.000
Total Section 1-11         \$ 2,076,	,600 x	30%	=	\$622,980	

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## **II. STRUCTURE ITEMS**

	<b>Retaining Walls</b>	Bridge 1	Bridge 2
DATE OF ESTIMATE	00/00/00	00/00/00	00/00/00
Building Name Bridge Number	xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx	57-XXX	57-XXX
Structure Type Width (Feet) [out to out]	xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx	24.00 LF	0.00 LF
Total Building Length (Feet)	LF	180.00 LF	0.00 LF
Total Area (Square Feet)	0 SQFT	4320 SQFT	0 SQFT
Structure Depth (Feet)	LF	0.00 LF	0.00 LF
Footing Type (pile or spread)			
Cost Per Square Foot	\$100.00	\$350.00	\$300.00
		1	1
COST OF EACH STRUCTURE	\$0.00	\$1,512,000.00	\$0.00
DATE OF ESTIMATE			

COST OF EACH STRUCTURE	\$0.00		\$0.00		\$0.00
---------------------------	--------	--	--------	--	--------

TOTAL COST OF BRIDGES \$1,512,000.00

TOTAL COST OF RETAINING

# \$1,900,000.00

\$0.00

TOTAL COST OF STRUCTURES<sup>1</sup>

<sup>1</sup>Structure's Estimate includes Overhead and Mobilization.

Add more sheets if needed. Call them 9a, 9b, 9c, ..., etc

9 of 11

### DO NOT PRINT THIS SHEET AS PART OF COST ESTIMATE ATTACHMENT TO PROJECT INITIATION OR APPROVAL DOCUMENTS.

## **III. RIGHT OF WAY**

Fill in all of the available information from the Right of Way data sheet.

A)	A1) A2)	Acquisition, including Excess Lar SB-1210	nd Purchases, Damages & Goodwill,	\$ \$	0 0
B)	Acquisiti	on of Offsite Mitigation		\$	0
C)	C1) C2)	Utility Relocation (State Share) Potholing (Design Phase)		\$ \$	0 0
D)	Railroad	Acquisition		\$	0
E)	Clearanc	e / Demolition		\$	0
F)	Relocatio	on Assistance (RAP and/or Last Re	esort Housing Costs)	\$	0
G)	Title and	Escrow		\$	0
H)	Environn	nental Review		\$	0
I)		nation Settlements G & H applied to items A + B)	<u>0%</u>	\$	0
J)	Design A	ppreciation Factor	0%	\$	0
K)	Utility Re	location (Construction Cost)		\$	0

L)		TOTAL RIGHT OF WAY ESTIMATE	\$0
	(Excluding Item #8 - Hazardous W	Vaste)	

ſ

M)

### TOTAL R/W ESTIMATE: Escalated

\$0

N)

Right of Way Support \$

Support Cost			
Estimate Prepared By	Project Coordinator <sup>1</sup>	Phone	
Utility Estimate			
Prepared By	Utiliy Coordinator <sup>2</sup>	Phone	
R/W Acquistion			
Estimate Prepared By	Right of Way Estimator <sup>3</sup>	Phone	

<sup>1</sup> When estimate has Support Costs only <sup>2</sup> When estimate has Utility Relocation

0

DO NOT PRINT THIS SHEET AS PART OF COST ESTIMATE ATTACHMENT TO PROJECT INITIATION OR APPROVAL DOCUMENTS.

### IV. SUPPORT COST ESTIMATE SUMMARY

Please obtain a P3 report (CL#3) from PPM to fill in the support cost for these categories.

SB-45 CATEGORY SUPPORT COST	PREVIOUS	FY 10/11	FY 11/12	FY 12/13	FY 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	FUTURE	P3 T	otal	Support Ratio
PR/ED (PD,PE,PM)											\$		0.00%
PS&E (PS)											\$	-	0.00%
R/W (RW)											\$		0.00%
CONSTRUCTION (CM)											\$		0.00%
Total Support Cost:	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-		\$	-	0.00%

Note: It is assumed that the Support Costs are already escalated by Programming to the year of expenditure. Use project Programming Sheet data

Total Capital Cost:	\$4,600,000
Total Capital Outlay Support Cost:	\$0
Overall Percent Support Cost:	0.00%

### V. ESCALATED CONSTRUCTION COST ESTIMATE SUMMARY

Note: Right of way escalated cost are accounted for on sheet 10 of 11.

Date of Estimate (Month/Year) Estimated Date of Construction Start (Month/Year)	Month 0 0	/ /	Year 0 0
Number of Working Days	500	WD	Ū
Estimated Mid-Point of Construction (Month/Year)	0	/	0

YEAR	0	1	2		3		4		5	6		7	8		9		FUTURE		
FORECASTED ESCALATION																			
ESCALATED CONSTRUCTION COSTS	0	1	2		3		4		5	6		7	8		9	I			TAL CALATED STS
ROADWAY ITEMS	\$ 2,699,600	\$ 2,699,600	\$ 2,699,600	\$	2,699,600	\$	2,699,600	\$	2,699,600	\$ 2,699,600	\$	2,699,600	\$ 2,699,600	\$	2,699,600	\$	2,699,600	\$	2,699,600
STRUCTURE ITEMS	\$ 1,900,000	\$ 1,900,000	\$ 1,900,000	\$	1,900,000	\$	1,900,000	\$	1,900,000	\$ 1,900,000	\$	1,900,000	\$ 1,900,000	\$	1,900,000	\$	1,900,000	\$	1,900,000
SUBTOTAL	\$ 4.599.600	\$ 4.599.600	\$ 4,599,600	s	4,599,600	s	4,599,600	s	4,599,600	\$ 4,599,600	s	4,599,600	\$ 4,599,600	s	4,599,600	s	4,599,600	s	4,599,600

Approved by:

Project Control Engineer

# Preliminary Cost Estimate

# **Project ID:**

Program C	mate :					
Project Lin						
Descripti						
Scope	:					
Alternativ	/e :	Roundabouts				
			С	urrent Cost	Es	calated Cost
		ROADWAY ITEMS	\$	3,682,300	\$	3,682,300
		STRUCTURE ITEMS	\$	-	\$	-
	SUB	TOTAL CONSTRUCTION COST	\$	3,682,300	\$	3,682,300
		RIGHT OF WAY	\$	100,000	\$	-
т	OTAL	CAPITAL OUTLAY COST	\$	3,783,000	\$	3,683,000
		PR/ED SUPPORT	\$	-	\$	-
		PS&E SUPPORT	\$	-	\$	-
	F	RIGHT OF WAY SUPPORT	\$	-	\$	-
	C	CONSTRUCTION SUPPORT	\$	-	\$	-
	ITAL C	OUTLAY SUPPORT COST*	\$	_	\$	-
			•		Ψ	
	тот	TAL PROJECT COST	\$	3,800,000	\$	3,700,000
	тот	TAL PROJECT COST	·			3,700,000
	тот		ned enter		\$	<u> </u>
	тот	If Project has been programm	ned enter	Programmed Amount	<b>\$</b> \$	<u> </u>
	тот	If Project has been programm	ned enter Date of I	Programmed Amount Estimate (Month/Year) ion Start (Month/Year)	<b>\$</b> \$	- Year /
	ΤΟΙ	If Project has been programm Estimated Date of C	ned enter Date of I Construct Nu	Programmed Amount Estimate (Month/Year) ion Start (Month/Year) mber of Working Days	<b>\$</b> \$	/ Year / / Working Days
	ΤΟΊ	If Project has been programm Estimated Date of C Estimated Mid-Poin	ned enter Date of f Construct Nu	Programmed Amount Estimate (Month/Year) ion Start (Month/Year) mber of Working Days struction (Month/Year)	\$ \$ Month	/ Year / / Working Days / Year
	ΤΟΊ	If Project has been programm Estimated Date of C Estimated Mid-Poin Numb	ned enter Date of f Construct Nu nt of Con:	Programmed Amount Estimate (Month/Year) ion Start (Month/Year) mber of Working Days	\$ \$ Month	/ Year / / Working Days
	ΤΟΊ	If Project has been programm Estimated Date of C Estimated Mid-Poir Numb Estimated Project S	ned enter Date of f Construct Nu nt of Con:	Programmed Amount Estimate (Month/Year) ion Start (Month/Year) mber of Working Days struction (Month/Year)	\$ \$ Month	/ Year / / Working Days / Year
	ΤΟΊ	If Project has been programm Estimated Date of C Estimated Mid-Poin Numb	ned enter Date of f Construct Nu nt of Con:	Programmed Amount Estimate (Month/Year) ion Start (Month/Year) mber of Working Days struction (Month/Year)	\$ \$ Month	/ Year / / Working Days / Year
	ΤΟΊ	If Project has been programm Estimated Date of C Estimated Mid-Poir Numb <b>Estimated Project S</b> PID Approval PA/ED Approval PS&E	ned enter Date of f Construct Nu nt of Con:	Programmed Amount Estimate (Month/Year) ion Start (Month/Year) mber of Working Days struction (Month/Year)	\$ \$ Month	/ Year / / Working Days / Year
	ΤΟΊ	If Project has been programm Estimated Date of C Estimated Mid-Poir Numb <b>Estimated Project S</b> PID Approval PA/ED Approval PS&E RTL	ned enter Date of f Construct Nu nt of Con:	Programmed Amount Estimate (Month/Year) ion Start (Month/Year) mber of Working Days struction (Month/Year)	\$ \$ Month	/ Year / / Working Days / Year
	TOT	If Project has been programm Estimated Date of C Estimated Mid-Poir Numb <b>Estimated Project S</b> PID Approval PA/ED Approval PS&E	ned enter Date of f Construct Nu nt of Con:	Programmed Amount Estimate (Month/Year) ion Start (Month/Year) mber of Working Days struction (Month/Year)	\$ \$ Month	/ Year / / Working Days / Year
Approved by F Manage	Project	If Project has been programm Estimated Date of C Estimated Mid-Poir Numb <b>Estimated Project S</b> PID Approval PA/ED Approval PS&E RTL	ned enter Date of f Construct Nu nt of Con:	Programmed Amount Estimate (Month/Year) ion Start (Month/Year) mber of Working Days struction (Month/Year)	\$ Month Month	/ Year / / Working Days / Year

# I. ROADWAY ITEMS SUMMARY

	Section		Cost
1	Earthwork	\$	253,000
2	Pavement Structural Section	\$	1,480,000
3	Drainage	\$	150,000
4	Specialty Items	\$	140,000
5	Environmental	\$	130,000
6	Traffic Items	\$	310,000
7	Detours	\$	-
8	Minor Items	\$	-
9	Roadway Mobilization	\$	246,300
10	Supplemental Work	\$	123,200
11	State Furnished	\$	-
12	Contingencies	\$	849,800
13	Overhead	\$	-
	TOTAL ROADWAY ITEMS	\$	3,682,300
repa	red ByName and Title Date	e	Phone

Estimate Reviewed By

Estimate

Name and Title

Phone

By signing this estimate you are attesting that you have discussed your project with all functional units and have incorporated all their comments or have discussed with them why they will not be incorporated.

### SECTION 1: EARTHWORK

Item code Roadway Excavation Imported Borrow Clearing and Grubbing	Unit CY CY LS	<b>Quantity</b> 4,400 3,000 1	x x x x x x x x x	Unit Price (\$) 45.00 15.00 10,000.00		\$\$\$\$\$\$	<b>Cost</b> 198,000 45,000 10,000 - -
			x		_	φ \$	-
			х		=	\$	-
			Х		=	\$	-
			х		=	\$	-
			х		=	\$	-

TOTAL EARTHWORK SECTION ITEMS \$ 253,000

### SECTION 2: PAVEMENT STRUCTURAL SECTION

Item code	Unit	Quantity		Unit Price (\$)			Cost
Pavement	SF	148,000			=	\$	1,480,000
	-	-,	х		=	\$	-
			х		=	\$	-
			х		=	\$	-
			х		=	\$	-
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			Х		=	\$	-
			Х		=	\$	-
			х		=	\$	-
		ΤΟΤΑ	AL :	STRUCTURAL	SE	сті	ON ITEMS \$ 1,480,000

### SECTION 3: DRAINAGE

Item code	Unit	Quantity		Unit Price (\$)			Cost
	LS	Quantity	х		_	¢	150,000
Drainage	LS	I		130,000.00		\$ \$	130,000
			Х		=		-
			Х		=	\$	-
			Х		=	\$	-
			х		=	\$	-
			Х		=	\$	-
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			х		=	\$	-
			х		=	\$	-
			х		=	\$	-
			x		=	\$	-
			~		_	Ψ	

Unit

LF CY TOTAL DRAINAGE ITEMS \$ 150,000

### SECTION 4: SPECIALTY ITEMS

Guardrail Sidewalk, Curb, and Gutter

Quantity		Unit Price (\$)			Cost	
1,000	х	20.00	=	\$	20,000	
150	x	800.00	=	\$	120,000	
	x	000.00	=	ŝ		
	х		=	Š	-	
	х		=	\$	-	
	х		=	\$ \$ \$ \$ \$ \$ \$	-	
	х		=	\$	-	
	x		=	Ŝ	-	
	х		=	\$	-	
	х		=	\$	-	
	х		=	\$	-	
	х		=	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	-	
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	х		=	\$ \$ \$	-	
	х		=	\$	-	
	х		=	\$	-	
F						
		TOTAL SP	EC	IAL	TY ITEMS	\$ 140,000

### SECTION 5: ENVIRONMENTAL

### **5A - ENVIRONMENTAL MITIGATION**

Item code	Unit	Quantity		Unit Price (\$)		Cost
Erosion Control	LS	1	х	80,000.00	=	\$ 80,000
			х		=	\$ -

Subtotal Environmental \$ 80,000

#### **5B - LANDSCAPE AND IRRIGATION**

Item code	Unit	Quantity		Unit Price (\$)		Cost
Landscape and Irrigation	LS	1	х		=	\$ 50,000
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -

### Subtotal Landscape and Irrigation \$ 50,000

5C - NPDES Item code Unit Quantity Unit Price (\$) Cost \$ = х х = \$ х = \$ \$ х = х \$ = \$ х = \$ х = \$ х = \$ = Х **Supplemental Work for NPDES** (These costs are not accounted in total here but under Supplemental Work on sheet 7 of 11). \$ х = х = \$ = \$ х Subtotal NPDES (Without Supplemental Work) \$ \*Applies to all SWPPPs and those WPCPs with sediment control or soil stabilization BMPs. \*\*Applies to both SWPPPs and WPCP projects.

\*\*\* Applies only to project with SWPPPs.

TOTAL ENVIRONMENTAL \$ 130,000

### SECTION 6: TRAFFIC ITEMS

### 6A - Traffic Electrical

Item code	Unit	Quantity		Unit Price (\$)		Cost
Lighting	LS	1	х		=	\$ 100,000
Traffic Signal	EA	0	х	300,000.00	=	\$ -
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -

Subtotal Traffic Electrical \$ 100,000

\$

=

= \$

### 6B - Traffic Signing and Striping

Item code		Unit	Quantity		Unit Price (\$)			Cost		
Pavem	ent Delineation	LS	1	х	50,000.00	=	\$	50,000		
Roadsi	de Signs	LS	1	х	10,000.00	=	\$	10,000		
Overhe	ad Signs	ΕA	0	х	100,000.00	=	\$	-		
				х		=	\$	-		
				х		=	\$	-		
				х		=	\$	-		
				х		=	\$	-		
				х		=	\$	-		
				х		=	\$	-		
				х		=	\$	-		
				х		=	\$	-		
				х		=	\$	-		
				х		=	\$	-		
				Sul	btotal Traffic Sig	gnin	g an	d Striping	\$ 60,	000

х

х

### 6C - Stage Construction and Traffic Handling

Item code	Unit	Quantity		Unit Price (\$)		Cost
Traffic Control Systems	LS	1	х		=	\$ 150,000
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -

Subtotal Stage Construction and Traffic Handling \$

150,000

### TOTAL TRAFFIC ITEMS \$ 310,000

### SECTION 7: DETOURS

Include constructing, maintaining, and removal <b>Item code</b> 0713XX Temporary Fence (Type X) 07XXXX Temporary Drainage 120143 Temporary Pavement Delineation 1286XX Temporary Signals 129000 Temporary Railing (Type K) 190101 Roadway Excavation 198001 Imported Borrow 198050 Embankment 250401 Class 4 Aggregate Subbase 260201 Class 2 Aggregate Base 390132 Hot Mix Asphalt (Type A) XXXXXX Some Item	Unit LF LS LF EA LF CY CY CY CY CY TON LS	Quantity	U × × × × × × × × × × × × × × ×	nit Price (\$,		***	Cost - - - - - - - - - - - - - - - - - - -	
				TOTAL	DET	OU	RS	\$ -
				SUBTOTA	AL SE	ЕСТ	IONS 1-7	\$ 2,463,000
SECTION 8: MINOR ITEMS								
8A - Americans with Disabilities Act Items								
ADA Items 8B - Bike Path Items				0.0%		\$	-	
Bike Path Items 8C - Other Minor Items				0.0%		\$	-	
Other Minor Items				0.0%		\$		
Total of Section 1-7	\$	2,463,000	x	0.0%	=	\$	-	
				TOTAL M	IINO	R IT	EMS	\$ -
SECTIONS 9: MOBILIZATION								
Item code	¢	0 400 000		400/		۴	0.40,000	
999990 Total Section 1-8	\$	2,463,000	x	10%	=		246,300	
				тот	AL N	ЛОВ	BILIZATION	\$ 246,300
SECTION 10: SUPPLEMENTAL WORK								
Item code	Unit	Quantity		nit Price (\$	)		Cost	
066015 Federal Trainee Program	LS	Quantity	x	int i nee (ψ	=	\$	-	
066063 Traffic Management Plan - Public Informati 066090 Maintain Traffic	LS LS		x x		=	\$ \$	-	
066094 Value Analysis	LS		x		=	\$	-	
066204 Remove Rock & Debris	LS		х		=	\$	-	
066222 Locate Existing Cross-Over 066670 Payment Adjustments For Price Index Fluct	LS		x x		=	\$ \$	-	
066700 Partnering	LS		x		=	э \$	-	
066866 Operation of Existing Traffic Management §	LS		х		=	\$	-	
066920 Dispute Review Board XXXXXX Some Item	LS		x x		=	\$ \$	-	
						φ	-	
Cost of NPDES Supp	lement	al Work speci	ified in	Section 5C	Ξ	\$	-	
Total Section 1-8	\$	2,463,000		5%	=	\$	123,150	
			ТО	TAL SUPPL	EME	NT/	AL WORK	\$ 123,200

1/11/2018 12:11 PM

### 18-0086 D 92 of 118

### SECTION 11: STATE FURNISHED MATERIALS AND EXPENSES

Item code	Unit	Quantity	U	nit Price (\$)	Cost
066063 Public Information	LS		х	=	\$0
066105 RE Office	LS		х	=	\$0
066803 Padlocks	LS		х	=	\$0
066838 Reflective Numbers and Edge Sealer	LS		х	=	\$0
066901 Water Expenses	LS		х	=	\$0
066062A COZEEP Expenses	LS		х	=	\$0
06684X Ramp Meter Controller Assembly	LS		х	=	\$0
06684X TMS Controller Assembly	LS		х	=	\$0
06684X Traffic Signal Controller Assembly	LS		х	=	\$0
XXXXXX Some Item					
Total Section 1-8	\$	2,463,000		0% = \$	-
				TOTAL STATE	URNISHED

### SECTION 12: TIME-RELATED OVERHEAD

Estiamted Time-Releated Overhead (TRO) Percentage (0% to 10%) = 5%

Item code	Unit	Quantity	Ur	nit Price (	(\$)	Cost
070018 Time-Related Overhead	WD	500	х	0	=	\$0

TOTAL TIME-RELATED OVERHEAD

\$0

### SECTION 13: CONTINGENCY

(Pre-PSR 30%-50%, PSR 25%, Draft PR 20%, PR 15%, after PR approval 10%, Final PS&E 5%)

			тот	AL CO	NTINGENCY	\$849.800
Total Section 1-11	\$ 2,832,500	х	30%	=	\$849,750	

### **II. STRUCTURE ITEMS**

	Retaining Walls	Bridge 1	Bridge 2
DATE OF ESTIMATE	00/00/00	00/00/00	00/00/00
Building Name	*****		
Bridge Number	57-XXX	57-XXX	57-XXX
Structure Type Nidth (Feet) [out to out]	LF	0.00 LF	0.00 LF
Total Building Length (Feet)	LF	0.00 LF	0.00 LF
Total Area (Square Feet)	0 SQFT	0 SQFT	0 SQFT
Structure Depth (Feet)	LF	0.00 LF	0.00 LF
Footing Type (pile or spread)	****	*****	*****
Cost Per Square Foot	\$100.00	\$120.00	\$300.00
STRUCTURE	\$0.00	\$0.00	\$0.00
OINCOTONE			
DATE OF ESTIMATE	00/00/00	00/00/00	00/00/00
	00/00/00 xxxxxxxxxx	00/00/00 xxxxxxxxxxxx	00/00/00 xxxxxxxxxxxxxxx
DATE OF ESTIMATE Name Bridge Number			
DATE OF ESTIMATE Name Bridge Number Structure Type	xxxxxxxxxxxxxxxxxxxxx 57-XXX xxxxxxxxxxxxxxxxxx	xxxxxxxxxxxxxxxxxxx 57-XXX xxxxxxxxxxxxxxxxx	xxxxxxxxxxxxxxxxxxx 57-XXX xxxxxxxxxxxxxxxxxxx
DATE OF ESTIMATE Name Bridge Number Structure Type Width (Feet) [out to out]	xxxxxxxxxxxxxxxxxx 57-XXX xxxxxxxxxxxxxxxxxx 0.00 LF	xxxxxxxxxxxxxxxxxxx 57-XXX xxxxxxxxxxxxxxxxx 0.00 LF	xxxxxxxxxxxxxxxxxxx 57-XXX xxxxxxxxxxxxxxxxxxxxxxxx 0.00 LF
DATE OF ESTIMATE Name Bridge Number Structure Type Width (Feet) [out to out] Fotal Length (Feet)	xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx	xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx	xxxxxxxxxxxxxxxxxxx 57-XXX xxxxxxxxxxxxxxxxxxx 0.00 LF 0.00 LF
DATE OF ESTIMATE Name Bridge Number Structure Type Vidth (Feet) [out to out]	xxxxxxxxxxxxxxxxxx 57-XXX xxxxxxxxxxxxxxxxxx 0.00 LF	xxxxxxxxxxxxxxxxxxx 57-XXX xxxxxxxxxxxxxxxxx 0.00 LF	xxxxxxxxxxxxxxxxxx 57-XXX xxxxxxxxxxxxxxxxxxxxxxx 0.00 LF

	COST OF EACH STRUCTURE	\$0.00		\$0.00		\$0.00
--	---------------------------	--------	--	--------	--	--------

\*\*\*\*\*

\$0.00

\$0.00 **TOTAL COST OF BRIDGES** 

TOTAL COST OF RETAINING \$0.00

## TOTAL COST OF STRUCTURES<sup>1</sup>

xxxxxxxxxxxxxxxxxxx

\$0.00

Footing Type (pile or spread)

Cost Per Square Foot

<sup>1</sup>Structure's Estimate includes Overhead and Mobilization.

Add more sheets if needed. Call them 9a, 9b, 9c, ..., etc

\$0.00

\$0.00

### DO NOT PRINT THIS SHEET AS PART OF COST ESTIMATE ATTACHMENT TO PROJECT INITIATION OR APPROVAL DOCUMENTS.

## **III. RIGHT OF WAY**

Fill in all of the available information from the Right of Way data sheet.

A)	A1) A2)	Acquisition, including Excess La SB-1210	nd Purchases, Damages & Goodwill,	\$ \$	0 0
B)	Acquisiti	on of Offsite Mitigation		\$	0
C)	C1) C2)	Utility Relocation (State Share) Potholing (Design Phase)		\$ \$	0 0
D)	Railroad	Acquisition		\$	0
E)	Clearand	ce / Demolition		\$	0
F)	Relocatio	on Assistance (RAP and/or Last R	esort Housing Costs)	\$	0
G)	Title and	Escrow		\$	0
H)	Environn	nental Review		\$	0
I)		nation Settlements G & H applied to items A + B)	<u>0%</u>	\$	0
J)	Design A	Appreciation Factor	0%	\$	0
K)	Utility Re	elocation (Construction Cost)		\$	0

L)	TOTAL RIGHT OF WAY ESTIMATE	\$100,000
(Excluding Item	n #8 - Hazardous Waste)	

M)

TOTAL R/W ESTIMATE: Escalated

\$0

N)

Right of Way Support \$

<sup>1</sup> When estimate has Support Costs only <sup>2</sup> When estimate has Utility Relocation

<sup>3</sup> When R/W Acquisition is required

0

DO NOT PRINT THIS SHEET AS PART OF COST ESTIMATE ATTACHMENT TO PROJECT INITIATION OR APPROVAL DOCUMENTS.

### IV. SUPPORT COST ESTIMATE SUMMARY

Please obtain a P3 report (CL#3) from PPM to fill in the support cost for these categories.

SB-45 CATEGORY SUPPORT COST	PREVIOUS	FY 10/11	FY 11/12	FY 12/13	FY 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	FUTURE	P3 T	otal	Support Ratio	
PR/ED (PD,PE,PM)											\$		0.00%	
PS&E (PS)											\$	-	0.00%	
R/W (RW)											\$		0.00%	
CONSTRUCTION (CM)											\$		0.00%	
Total Support Cost:	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-		\$	-	0.00%	

Note: It is assumed that the Support Costs are already escalated by Programming to the year of expenditure. Use project Programming Sheet data

Total Capital Cost:	\$3,783,000
Total Capital Outlay Support Cost:	\$0
Overall Percent Support Cost:	0.00%

### V. ESCALATED CONSTRUCTION COST ESTIMATE SUMMARY

Note: Right of way escalated cost are accounted for on sheet 10 of 11.

	Month	/	Year
Date of Estimate (Month/Year)	0	/	0
Estimated Date of Construction Start (Month/Year)	0	/	0
Number of Working Days	500	WD	
Estimated Mid-Point of Construction (Month/Year)	0	/	0

YEAR FORECASTED ESCALATION	0	1	2	3	4	5	6	7	8	9		FUTURE		
ESCALATED CONSTRUCTION COSTS	0	1	2	3	4	5	6	7	8	9	F		TOT ESC COS	CALATED
ROADWAY ITEMS	\$ 3,682,300	\$	3,682,300	\$	3,682,300									
STRUCTURE ITEMS	\$ -	\$	\$ -	\$ -	\$ -	\$	\$	\$	\$ -	\$ -	\$	-	\$	-
SUBTOTAL	\$ 3,682,300	\$	3,682,300	\$	3,682,300									

Approved by:

Project Control Engineer

### **Preliminary Cost Estimate**

### **Project ID:**

Type of Estimate :

**Program Code : Project Limits : Description:** Scope : Alternative : 6-Lane Tight Diamond Interchange **Current Cost Escalated Cost ROADWAY ITEMS** 2,567,000 \$ 2,567,000 \$ STRUCTURE ITEMS \$ 1,900,000 \$ 1,900,000 SUBTOTAL CONSTRUCTION COST \$ \$ 4,467,000 4,467,000 **RIGHT OF WAY** \$ \$ --TOTAL CAPITAL OUTLAY COST \$ 4,467,000 \$ 4,467,000 **PR/ED SUPPORT** \$ \$ **PS&E SUPPORT** \$ \$ **RIGHT OF WAY SUPPORT** \$ \$ **CONSTRUCTION SUPPORT** \$ \$ -\$ **OTAL CAPITAL OUTLAY SUPPORT COST\* \$** --TOTAL PROJECT COST \$ \$ 4,500,000 4,500,000 \$ If Project has been programmed enter Programmed Amount Month / Year Date of Estimate (Month/Year) Estimated Date of Construction Start (Month/Year) Number of Working Days Working Days Month / Year Estimated Mid-Point of Construction (Month/Year) Number of Plant Establishment Days Days Estimated Project Schedule PID Approval PA/ED Approval PS&E RTL **Begin Construction** Approved by Project (xxx) xxx-xxxx Manager Project Manager Date Phone

# I. ROADWAY ITEMS SUMMARY

Estimate

**Estimate Reviewed By** 

-		
	Earthwork	\$ 46,000
2	Pavement Structural Section	\$ 90,000
3	Drainage	\$ 120,000
4	Specialty Items	\$ 366,000
5	Environmental	\$ 90,000
6	Traffic Items	\$ 1,005,000
7	Detours	\$ -
8	Minor Items	\$ -
9	Roadway Mobilization	\$ 171,700
10	Supplemental Work	\$ 85,900
11	State Furnished	\$ -
12	Contingencies	\$ 592,400
13	Overhead	\$ -
F	TOTAL ROADWAY ITEMS	\$ 2,567,000

By signing this estimate you are attesting that you have discussed your project with all functional units and have incorporated all their comments or have discussed with them why they will not be incorporated.

Name and Title

Phone

### SECTION 1: EARTHWORK

Item code	Unit	Quantity		Unit Price (\$)		Cost
Roadway Excavation	CY	800	х	45.00	=	\$ 36,000
Imported Borrow	CY	0	х	15.00	=	\$ -
Clearing and Grubbing	LS	1	х	10,000.00	=	\$ 10,000
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -

TOTAL EARTHWORK SECTION ITEMS \$ 46,000

### SECTION 2: PAVEMENT STRUCTURAL SECTION

Item code	Unit	Quantity		Unit Price (\$)		Cost
Pavement	SF	9,000	х		\$	90,000
		-,	х	=	\$	-
			х	=	\$	-
			х	=	\$	-
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		ΤΟΤΑ	L :	STRUCTURAL SE	СТІ	ON ITEMS \$ 90,00
	L					

### SECTION 3: DRAINAGE

Drainage LS 1 × 120,000.00 = \$ 120,0 × = \$ × = \$	Item code	Unit	Quantity	Unit Price (\$)			Cost
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	Drainage	1.5		120 000 00	=	\$	120,000
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#### TOTAL DRAINAGE ITEMS 120,000 \$

### SECTION 4: SPECIALTY ITEMS

Item code	
-----------	--

Guardrail Sidewalk, Curb, and Gutter

Unit	Quantity		Unit Price (\$)			Cost			
LF	300	х	20.00	=	\$	6,000			
CY	450	x	800.00	_	\$	360,000			
01	430	x	000.00	_	φ Φ	500,000			
		x		_	Ψ ¢				
		x		_	Ψ ¢	_			
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	]				1.1.1		\$	366,0	00
			TOTAL SP	EC	IAL		Þ	J00,U	00

### SECTION 5: ENVIRONMENTAL

### **5A - ENVIRONMENTAL MITIGATION**

Item code	Unit	Quantity		Unit Price (\$)		Cost
Erosion Control	LS	1	х	50,000.00	=	\$ 50,000
			х		=	\$ -

Subtotal Environmental \$ 50,000

#### **5B - LANDSCAPE AND IRRIGATION**

Item code	Unit	Quantity		Unit Price (\$)		Cost
Landscape and Irrigation	LS	1	х		= 5	\$ 40,000
			Х		= 5	5 -
			х		= 5	<b>5</b> -
			х		= 5	<b>5</b> -
			х		= 3	<b>-</b>
			х		= 3	<b>-</b>
			х		= 3	<b>-</b>
			х		= 3	6 -
			х		= 3	<b>-</b>
			х		= 3	<b>-</b>
			х		= 3	6 -
			Х		= 3	- 6

### Subtotal Landscape and Irrigation \$ 40,000

5C - NPDES Item code Unit Quantity Unit Price (\$) Cost \$ = х х = \$ х = \$ \$ х = \$ = Х **Supplemental Work for NPDES** (These costs are not accounted in total here but under Supplemental Work on sheet 7 of 11). \$ х = х = \$ = \$ х Subtotal NPDES (Without Supplemental Work) \$ \*Applies to all SWPPPs and those WPCPs with sediment control or soil stabilization BMPs. \*\*Applies to both SWPPPs and WPCP projects.

\*\*\* Applies only to project with SWPPPs.

TOTAL ENVIRONMENTAL \$ 90,000

### SECTION 6: TRAFFIC ITEMS

### 6A - Traffic Electrical

Item code	Unit	Quantity		Unit Price (\$)		Cost
Lighting	LS	1	х	100,000.00	=	\$ 100,000
Traffic Signal	EA	2	х	250,000.00	=	\$ 500,000
-			х		=	\$ -
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -

Subtotal Traffic Electrical \$ 600,000

-

\$

=

= \$

### 6B - Traffic Signing and Striping

Item code	Unit	Quantity		Unit Price (\$)			Cost	
Pavement Delineation	LS	1	х	50,000.00	=	\$	50,000	
Roadside Signs	LS	1	х	5,000.00	=	\$	5,000	
Overhead Signs	EA	2	х	100,000.00	=	\$	200,000	
			х		=	\$	-	
			х		=	\$	-	
			х		=	\$	-	
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			х		=	\$	-	
			х		=	\$	-	
			х		=	\$	-	
			х		=	\$	-	
			х		=	\$	-	
			х		=	\$	-	
			Su	btotal Traffic Sig	nin	g ar	nd Striping	\$ 255,000

х

х

### 6C - Stage Construction and Traffic Handling

Item code U	nit	Quantity		Unit Price (\$)		Cost
	S	1	х		=	\$ 150,000
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -
	_					

Subtotal Stage Construction and Traffic Handling \$

\$ 150,000

TOTAL TRAFFIC ITEMS \$ 1,005,000

### SECTION 7: DETOURS

Include constructing, maintaining, and removal Item code 0713XX Temporary Fence (Type X) 07XXXX Temporary Drainage 120143 Temporary Pavement Delineation 1286XX Temporary Signals 129000 Temporary Railing (Type K) 190101 Roadway Excavation 198001 Imported Borrow 198050 Embankment 250401 Class 4 Aggregate Subbase 260201 Class 2 Aggregate Base 390132 Hot Mix Asphalt (Type A) XXXXXX Some Item	Unit LF LS LF EA LF CY CY CY CY CY TON LS	Quantity	U x x x x x x x x x x x x x x	nit Price (\$)		\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	Cost - - - - - - - - - - - - - - - - - - -	\$	
			L						
				SUBTOTA	AL SE	CT	IONS 1-7	\$	1,717,000
SECTION 8: MINOR ITEMS									
<ul> <li>8A - Americans with Disabilities Act Items</li> <li>ADA Items</li> <li>8B - Bike Path Items</li> </ul>				0.0%		\$	-		
Bike Path Items 8C - Other Minor Items				0.0%		\$	-		
Other Minor Items				0.0%		\$	-		
Total of Section 1-7	\$	1,717,000	х	0.0%	=	\$	-		
				TOTAL M	IINOF	R IT	EMS	\$	-
SECTIONS 9: MOBILIZATION									
Item									
code 999990 Total Section 1-8	\$	1,717,000	х	10%	=	\$	171,700		
	τ.	, ,,0	<b></b>			·		\$	171,700
			L	101				ψ	171,700
SECTION 10: SUPPLEMENTAL WORK									
Item code	Unit	Quantity	U	nit Price (\$)	)		Cost		
066015 Federal Trainee Program 066063 Traffic Management Plan - Public Informati	LS LS	-	х		=	\$ \$	-		
066090 Maintain Traffic	LS		x x		=	ъ \$	-		
066094 Value Analysis	LS		х		=	\$	-		
066204 Remove Rock & Debris	LS LS		x		=	\$ ¢	-		
066222 Locate Existing Cross-Over 066670 Payment Adjustments For Price Index Fluct			x x		=	\$ \$	-		
066700 Partnering	LS		X		=	\$	-		
066866 Operation of Existing Traffic Management \$			Х		=	\$	-		
066920 Dispute Review Board XXXXXX Some Item	LS		x x			\$ \$	-		
Cost of NPDES Supp	lement	al Work spec	ified in	Section 50	=	\$	-		
		·					05 050		
Total Section 1-8	\$	1,717,000		5%	=	\$	85,850		
			TO	TAL SUPPL	EME	NTA	L WORK	\$	85,900

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### SECTION 11: STATE FURNISHED MATERIALS AND EXPENSES

Item code	Unit	Quantity	U	Init Price (\$)	Cost	
066063 Public Information	LS		х	=		\$0
066105 RE Office	LS		х	=		\$0
066803 Padlocks	LS		х	=		\$0
066838 Reflective Numbers and Edge Sealer	LS		х	=		\$0
066901 Water Expenses	LS		х	=		\$0
066062A COZEEP Expenses	LS		х	=		\$0
06684X Ramp Meter Controller Assembly	LS		х	=		\$0
06684X TMS Controller Assembly	LS		х	=		\$0
06684X Traffic Signal Controller Assembly XXXXXX Some Item	LS		х	=		\$0
Total Section 1-8	\$	1,717,000		0% =	\$	-
				TOTAL STAT	E FURNISH	IED

### SECTION 12: TIME-RELATED OVERHEAD

Estiamted Time-Releated Overhead (TRO) Percentage (0% to 10%) = 5%

Item code	Unit	Quantity	Ur	nit Price (	\$)	Cost
070018 Time-Related Overhead	WD	500	Х	0	=	\$0

TOTAL TIME-RELATED OVERHEAD

### **SECTION 13: CONTINGENCY**

(Pre-PSR 30%-50%, PSR 25%, Draft PR 20%, PR 15%, after PR approval 10%, Final PS&E 5%)

Total Section 1-11	\$ 1,974,600	х	30%	=	\$592,380	
			тот	AL CO	NTINGENCY	\$592,400

\$0

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## **II. STRUCTURE ITEMS**

	Retaining Walls	Bridge 1	Bridge 2
DATE OF ESTIMATE Building Name	00/00/00 xxxxxxxxxxxxxxx	00/00/00	00/00/00
Bridge Number	57-XXX	57-XXX	57-XXX
Structure Type	xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx	24.00 LF	0.00
Width (Feet) [out to out] Total Building Length (Feet)	LF	24.00 LF 180.00 LF	0.00 LF 0.00 LF
Total Area (Square Feet)	0 SQFT	4320 SQFT	0 SQFT
Structure Depth (Feet)	LF	0.00 LF	0.00 LF
Footing Type (pile or spread)		*****	*****
Cost Per Square Foot	\$100.00	\$350.00	\$300.00
			· ·
COST OF EACH STRUCTURE	\$0.00	\$1,512,000.00	\$0.00
DATE OF ESTIMATE	00/00/00	00/00/00	00/00/00
Name	XXXXXXXXXXXXXXXXXXXXXXX	*****	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
Bridge Number	57-XXX	57-XXX	57-XXX
Structure Type Width (Feet) [out to out]	xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx	0.00 LF	xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
Total Length (Feet)	0.00 LF	0.00 LF	0.00 LF
Total Area (Square Feet)	0 SQFT	0.00 SQFT	0.0 SQFT
Structure Depth (Feet)	0.00 LF	0.00 LF	0.00 LF
Footing Type (pile or spread) Cost Per Square Foot	xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx	xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx	xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

COST OF EACH STRUCTURE	\$0.00		\$0.00		\$0.00
---------------------------	--------	--	--------	--	--------

TOTAL COST OF BRIDGES \$1,512,000.00

TOTAL COST OF RETAINING

# \$1,900,000.00

\$0.00

TOTAL COST OF STRUCTURES<sup>1</sup>

<sup>1</sup>Structure's Estimate includes Overhead and Mobilization.

Add more sheets if needed. Call them 9a, 9b, 9c, ..., etc

9 of 11

### DO NOT PRINT THIS SHEET AS PART OF COST ESTIMATE ATTACHMENT TO PROJECT INITIATION OR APPROVAL DOCUMENTS.

## **III. RIGHT OF WAY**

Fill in all of the available information from the Right of Way data sheet.

A)	A1) A2)	Acquisition, including Excess Lar SB-1210	nd Purchases, Damages & Goodwill,	\$ \$	0 0
B)	Acquisiti	on of Offsite Mitigation		\$	0
C)	C1) C2)	Utility Relocation (State Share) Potholing (Design Phase)		\$ \$	0 0
D)	Railroad	Acquisition		\$	0
E)	Clearanc	ce / Demolition		\$	0
F)	Relocatio	on Assistance (RAP and/or Last Re	esort Housing Costs)	\$	0
G)	Title and	Escrow		\$	0
H)	Environn	nental Review		\$	0
I)		nation Settlements G & H applied to items A + B)	<u>0%</u>	\$	0
J)	Design A	Appreciation Factor	0%	\$	0
K)	Utility Re	elocation (Construction Cost)		\$	0

L)		TOTAL RIGHT OF WAY ESTIMATE \$	0
	(Excluding Item #8 - Hazardous W	(aste)	

M)

### TOTAL R/W ESTIMATE: Escalated

\$0

N)

Right of Way Support \$

Support Cost			
Estimate Prepared By	Project Coordinator <sup>1</sup>	Phone	
Utility Estimate			
Prepared By	Utiliy Coordinator <sup>2</sup>	Phone	
R/W Acquistion			
Estimate Prepared By	Right of Way Estimator <sup>3</sup>	Phone	

<sup>1</sup> When estimate has Support Costs only <sup>2</sup> When estimate has Utility Relocation

0

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DO NOT PRINT THIS SHEET AS PART OF COST ESTIMATE ATTACHMENT TO PROJECT INITIATION OR APPROVAL DOCUMENTS.

### IV. SUPPORT COST ESTIMATE SUMMARY

Please obtain a P3 report (CL#3) from PPM to fill in the support cost for these categories.

SB-45 CATEGORY SUPPORT COST	PREVIOUS	FY 10/11	FY 11/12	FY 12/13	FY 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	FUTURE	P3 T	otal	Support Ratio
PR/ED (PD,PE,PM)											\$		0.00%
PS&E (PS)											\$	-	0.00%
R/W (RW)											\$		0.00%
CONSTRUCTION (CM)											\$		0.00%
Total Support Cost:	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-		\$	-	0.00%

Note: It is assumed that the Support Costs are already escalated by Programming to the year of expenditure. Use project Programming Sheet data

Total Capital Cost:	\$4,467,000
Total Capital Outlay Support Cost:	\$0
Overall Percent Support Cost:	0.00%

### V. ESCALATED CONSTRUCTION COST ESTIMATE SUMMARY

Note: Right of way escalated cost are accounted for on sheet 10 of 11.

	Month	1	Year
Date of Estimate (Month/Year) Estimated Date of Construction Start (Month/Year)	0	1	0
	0	,	0
Number of Working Days	500	WD	
Estimated Mid-Point of Construction (Month/Year)	0	/	0

YEAR	0	1	2	3		4		5	6	7	8		9		FUTURE	
FORECASTED ESCALATION																
ESCALATED CONSTRUCTION COSTS	0	1	2	3		4		5	6	7	8		9	F		 TAL CALATED STS
ROADWAY ITEMS	\$ 2,567,000	\$ 2,567,000	\$ 2,567,000	\$ 2,567,000	\$	2,567,000	\$	2,567,000	\$ 2,567,000	\$ 2,567,000	\$ 2,567,000	\$	2,567,000	\$	2,567,000	\$ 2,567,000
STRUCTURE ITEMS	\$ 1,900,000	\$ 1,900,000	\$ 1,900,000	\$ 1,900,000	ş	1,900,000	\$	1,900,000	\$ 1,900,000	\$ 1,900,000	\$ 1,900,000	s	1,900,000	\$	1,900,000	\$ 1,900,000
SUBTOTAL	\$ 4,467,000	\$ 4,467,000	\$ 4,467,000	\$ 4,467,000	\$	4,467,000	s	4,467,000	\$ 4,467,000	\$ 4,467,000	\$ 4,467,000	s	4,467,000	s	4,467,000	\$ 4,467,000

Approved by:

Project Control Engineer

### **Preliminary Cost Estimate**

### **Project ID:**

Type of Estimate :

Program Code :

**Project Limits :** 

**Description:** 

Scope :

Alternative :

Single Point Diamond Interchange

		Current Cost	Es	scalated Cost
ROADWAY ITEMS	\$	15,637,400	\$	15,637,400
STRUCTURE ITEMS	\$	10,100,000	\$	10,100,000
SUBTOTAL CONSTRUCTION COST	\$	25,737,400	\$	25,737,400
<b>RIGHT OF WAY</b>	\$	-	\$	-
TOTAL CAPITAL OUTLAY COST	\$	25,738,000	\$	25,738,000
PR/ED SUPPORT	\$	-	\$	-
PS&E SUPPORT	\$	-	\$	-
RIGHT OF WAY SUPPORT	\$	-	\$	-
CONSTRUCTION SUPPORT	\$	-	\$	-
TOTAL CAPITAL OUTLAY SUPPORT COST*	\$	-	\$	-
TOTAL PROJECT COST	\$	25,750,000	\$	25,750,000
If Project has been programm	ned e	nter Programmed Amount	\$	-
	Date	of Estimate (Month/Year)	Month	/ Year /
Estimated Date of C	Consti	ruction Start (Month/Year)		/
		Number of Working Days		Working Days
Estimated Mid-Poir	nt of C	Construction (Month/Year)	Month	/ Year
		Plant Establishment Days		Days
<b>Estimated Project S</b> PID Approval	ched	ule		

PA/ED Approval PS&E RTL Begin Construction

Approved by Project (xxx) xxx-xxxx Manager Date

# I. ROADWAY ITEMS SUMMARY

arthworkavement Structural Section	\$	2,199,000
	\$	3,000,000
rainage	\$	1,000,000
pecialty Items	\$	1,254,000
nvironmental	\$	350,000
raffic Items	\$	1,800,000
etours	\$	-
linor Items	\$	-
oadway Mobilization	\$	960,300
upplemental Work	\$	480,200
tate Furnished	\$	-
contingencies	\$	3,608,700
verhead	\$	985,200
TOTAL ROADWAY ITEMS	\$	15,637,400
	nvironmental raffic Items etours inor Items oadway Mobilization upplemental Work tate Furnished ontingencies verhead	nvironmental \$ raffic Items \$ etours \$ inor Items \$ oadway Mobilization \$ upplemental Work \$ tate Furnished \$ ontingencies \$ verhead \$

Estimate Reviewed By

Estimate

Name and Title Date

Phone

By signing this estimate you are attesting that you have discussed your project with all functional units and have incorporated all their comments or have discussed with them why they will not be incorporated.

### SECTION 1: EARTHWORK

Item code	Roadway Excavation Imported Borrow Clearing and Grubbing	Unit CY CY LS	<b>Quantity</b> 29,000 57,600 1	x x x x x x x x x x x x x x x x x x x	Unit Price (\$) 45.00 15.00 30,000.00		\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	Cost 1,305,000 864,000 30,000 - - - - - - - - - - - - - - - - -
				х		=	\$	-
				х		=	\$	-
				х		=	\$	-

TOTAL EARTHWORK SECTION ITEMS \$ 2,199,000

### SECTION 2: PAVEMENT STRUCTURAL SECTION

Item code	Unit	Quantity		Unit Price (\$)			Cost	
Pavement	SF	300,000	х	10.00	=	\$	3,000,000	
i avoinona	01	000,000	x	10.00	=	\$	-	
			x		=	\$	-	
			x		=	\$	-	
			х		=	Š	-	
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			^		-	Ψ	-	
		тот	۹L	STRUCTURAL	SE	СТІ	ON ITEMS	\$ 3,000,000

### SECTION 3: DRAINAGE

Item code	Unit	Quantity		Unit Price (\$)			Cost
Drainage	LS	Quantity 1	x	1,000,000.00	_	\$	
Dramage	20	1	x	1,000,000.00	_	\$	-
			x		_	\$	-
			x		_	\$	-
			x		_	\$	
			x		_	\$	-
			x		_	\$	_
			x		_	\$	-
			x		_	\$	-
			x		_	\$	-
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			x		_	\$	-
			x		_	\$	-
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			x			ֆ \$	-
					=	ֆ \$	-
			х		=	φ	-

*Unit* LF CY TOTAL DRAINAGE ITEMS \$ 1,000,000

### SECTION 4: SPECIALTY ITEMS

Item code

Guardrail	
Sidewalk, Curb, and Gutter	

Quantity		Unit Price (\$)			Cost	
6,700	х	20.00	=	\$	134,000	
1,400	х	800.00	=	\$	1,120,000	
	х		=	\$	-	
	х		=	\$	-	
	х		=	\$	-	
	х		=	\$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$	-	
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Г				-1.4.1	TY ITEMS	\$ 1 254 000
Ĺ		IUTAL SP	-20	JAL	.1111EW3	\$ 1,254,000

### SECTION 5: ENVIRONMENTAL

### **5A - ENVIRONMENTAL MITIGATION**

Item code	Unit	Quantity		Unit Price (\$)		Cost
Erosion Control	LS	1	х	200,000.00	=	\$ 200,000
			х		=	\$ -

Subtotal Environmental \$ 200,000

### **5B - LANDSCAPE AND IRRIGATION**

Item code	Unit	Quantity		Unit Price (\$)		Cost
Landscape and Irrigation	LS	1	х		=	\$ 150,000
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -

Subtotal Landscape and Irrigation \$ 150,000

5C - NPDES

Item code	Unit Quar	tity Unit Pr	rice (\$)	Cost	
		X	= \$	-	
		х	= \$	-	
		х	= \$	-	
		х	= \$	-	
		Х	= \$	-	
		Х	= \$	-	
		Х	= \$	-	
		х	= \$	-	
		х	= \$	-	
		Х	= \$	-	
		х	= \$	-	
		х	= \$	-	
		х	= \$	-	
Supplemental Work for NPDES (These costs are not accounted in total here but under	Supplementa	l Work on shee	t 7 of 11).		
		х	= \$	-	
		х	= \$	-	
		х	= \$	-	
	Subto	tal NPDES (Wit	thout Supplemen	tal Work) <u>\$</u>	
*Applies to all SWPPPs and those WPCPs with sediment control or	soil stabilization B	MPs.			
**Applies to both SWPPPs and WPCP projects.					

\*\*\* Applies only to project with SWPPPs.

TOTAL ENVIRONMENTAL \$ 350,000

### SECTION 6: TRAFFIC ITEMS

### 6A - Traffic Electrical

Item code Lighting Traffic Signal	Unit LS EA	Quantity 1 1	x x x x x x x x x x x x x	Unit Price (\$) 400,000.00 300,000.00		\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	Cost 400,000 300,000 - - - - - - - - - - - - - - - -
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						φ Φ	-
			х		=	\$	-
			Х		=	\$	-
			Х		=	\$	-
			х		=	\$	-
			Х		=	\$	-

Subtotal Traffic Electrical 700,000 \$

### 6B - Traffic Signing and Striping

Item code	Unit	Quantity		Unit Price (\$)			Cost		
Pavement Delineation	LS	1	х	100,000.00	=	\$	100,000		
Roadside Signs	LS	1	х	300,000.00	=	\$	300,000		
Overhead Signs	EA	1	х	100,000.00	=	\$	100,000		
-			х		=	\$	-		
			х		=	\$	-		
			х		=	\$	-		
			х		=	\$	-		
			х		=	\$	-		
			х		=	\$	-		
			х		=	\$	-		
			х		=	\$	-		
			х		=	\$	-		
			х		=	\$	-		
			Sul	btotal Traffic Sig	gnin	g ar	nd Striping	\$ 500,0	000

### 6C - Stage Construction and Traffic Handling

Item code	Unit	Quantity		Unit Price (\$)		Cost
Traffic Control Systems	LS	1	х			\$ 600,000
			Х		=	\$ -
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -
			х		=	\$ -

Subtotal Stage Construction and Traffic Handling 600,000 \$

> TOTAL TRAFFIC ITEMS \$ 1,800,000

### **SECTION 7: DETOURS**

Include constructing, maintaining, and removal							
Item code	Unit	Quantity	U	nit Price (\$)	C	Cost	
0713XX Temporary Fence (Type X)	LF	-	х	=	\$	-	
07XXXX Temporary Drainage	LS		х	=	\$	-	
120143 Temporary Pavement Delineation	LF		х	=	\$	-	
1286XX Temporary Signals	EA		х	=	\$	-	
129000 Temporary Railing (Type K)	LF		х	=	\$	-	
190101 Roadway Excavation	CY		Х	=	\$	-	
198001 Imported Borrow	CY		Х	=	\$	-	
198050 Embankment	CY		Х	=	\$	-	
250401 Class 4 Aggregate Subbase	CY		Х	=	\$	-	
260201 Class 2 Aggregate Base	CY		Х	=	\$	-	
390132 Hot Mix Asphalt (Type A)	TON		Х	=	\$	-	
XXXXXX Some Item	LS		Х	=	\$	-	
				TOTAL DE	FOURS	6	\$ -
				SUBTOTAL S	ECTIO	NS 1-7	\$ 9,603,000
SECTION 8: MINOR ITEMS	_						
8A - Americans with Disabilities Act Items							
ADA Items				0.0%	\$		
8B - Bike Path Items				0.0%	φ	-	
Bike Path Items				0.0%	\$	_	
8C - Other Minor Items				0.070	φ	-	

9,603,000

9,603,000 x

\$

\$

0.0%

0.0%

10%

х

\$

5 = \$ 960,300 TOTAL MOBILIZATION \$

= \$

TOTAL MINOR ITEMS

-

\_

\$

-

960,300

SECTION 10: SUPPLEMENTAL WORK

Total Section 1-8

Total of Section 1-7

Other Minor Items

**SECTIONS 9: MOBILIZATION** 

Item code 999990

Item code		Unit	Quantity	Unit Price (\$)			Cost	
066015 Federal Traine	ee Program	LS	×	(	=	\$	-	
066063 Traffic Manag	ement Plan - Public Informatic	LS	х	(	=	\$	-	
066090 Maintain Traff	ic	LS	х	(	=	\$	-	
066094 Value Analysi	S	LS	х	(	=	\$	-	
066204 Remove Rock	& Debris	LS	х	(	=	\$	-	
066222 Locate Existin	ig Cross-Over	LS	х	(	=	\$	-	
066670 Payment Adju	stments For Price Index Fluct	LS	х	(	=	\$	-	
066700 Partnering		LS	х	(	=	\$	-	
066866 Operation of E	Existing Traffic Management S	LS	х	(	=	\$	-	
066920 Dispute Revie	w Board	LS	х	(	=	\$	-	
XXXXXX Some Item			х	(	=	\$	-	
	Cost of NPDES Supp	olementa	al Work specifie	d in Section 5C	Ξ	\$	-	
Total Se	ection 1-8	\$	9,603,000	5%	=	\$	480,150	
				TOTAL SUPPLI	EME	ENT	AL WORK	\$ 480,200

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### SECTION 11: STATE FURNISHED MATERIALS AND EXPENSES

Item code		Unit	Quantity	U	nit Price (\$	)	Cost
066063	Public Information	LS		х		=	\$0
066105	RE Office	LS		х		=	\$0
066803	Padlocks	LS		х		=	\$0
066838	Reflective Numbers and Edge Sealer	LS		Х		=	\$0
066901	Water Expenses	LS		Х		=	\$0
066062A	COZEEP Expenses	LS		Х		=	\$0
06684X	Ramp Meter Controller Assembly	LS		х		=	\$0
06684X	TMS Controller Assembly	LS		Х		=	\$0
06684X	Traffic Signal Controller Assembly	LS		х		=	\$0
XXXXXX	Some Item						
	Total Section 1-8	\$	9,603,000		0%	= \$	; -
					TOTAL S	TATE	FURNISHED

### SECTION 12: TIME-RELATED OVERHEAD

Estiamted Time-Releated Overhead (TRO) Percentage (0% to 10%) = 5%

Item code	Unit	Quantity	ity Unit Price (\$)			Cost	
070018 Time-Related Overhead	WD	500	х	1970.4	=	\$985,200	
		-	ΤΟΤΑ	L TIME-REL	ATED	OVERHEAD	\$985,200

### SECTION 13: CONTINGENCY

(Pre-PSR 30%-50%, PSR 25%, Draft PR 20%, PR 15%, after PR approval 10%, Final PS&E 5%)

\$

Total Section 1-11

 $12,028,700 \times 30\% = $3,608,610$ 

TOTAL CONTINGENCY \$3,608,700

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## **II. STRUCTURE ITEMS**

	Retaining Walls	Bridge 1	Bridge 2
DATE OF ESTIMATE Building Name Bridge Number Structure Type Width (Feet) [out to out] Total Building Length (Feet) Total Area (Square Feet) Structure Depth (Feet) Footing Type (pile or spread) Cost Per Square Foot	00/00/00 xxxxxxxxxxxxxxxxxx 57-XXX xxxxxxxxxxxxxxxxxxxxxxxx LF LF 5920 SQFT LF xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx	00/00/00 Missouri Flat Road OC 57-XXX CIP Concrete Box 0.00 LF 0.00 LF 35000 SQFT 0.00 LF xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx	00/00/00 Weber Creek Bridge L/R 57-XXX Steel 0.00 LF 9200 SQFT 0.00 LF xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
COST OF EACH STRUCTURE	\$592,000.00	\$4,200,000.00	\$2,760,000.00
DATE OF ESTIMATE Name Bridge Number Structure Type Width (Feet) [out to out] Total Length (Feet) Total Area (Square Feet) Structure Depth (Feet) Footing Type (pile or spread) Cost Per Square Foot	00/00/00 xxxxxxxxxxxxxxxxxxx 57-XXX xxxxxxxxxxxxxxx 0.00 LF 0.00 LF 0 SQFT 0.00 LF xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx	00/00/00 xxxxxxxxxxxxxxxxxx 57-XXX xxxxxxxxxxxxxxxx 0.00 LF 0.00 LF 0.00 SQFT 0.00 LF xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx	00/00/00 xxxxxxxxxxxxxxxxxx 57-XXX xxxxxxxxxxxxxxxxx 0.00 LF 0.00 LF 0.00 SQFT 0.00 LF xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
COST OF EACH STRUCTURE	\$0.00	\$0.00	\$0.00
		TOTAL COST OF B	•
TO'	TAL COST OF STRUCT	URES <sup>1</sup>	\$10,100,000.00
Estimate Prepared By: XXXXXXXXXX <sup>1</sup> Structure's Estimate includes Overhead ar Add more sheets if needed. Call them			Date

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### DO NOT PRINT THIS SHEET AS PART OF COST ESTIMATE ATTACHMENT TO PROJECT INITIATION OR APPROVAL DOCUMENTS.

### **III. RIGHT OF WAY**

Fill in all of the available information from the Right of Way data sheet.

A)	A1) A2)	Acquisition, including Excess Lar SB-1210	d Purchases, Damages & Goodwill,	\$ \$	0 0
B)	Acquisiti	on of Offsite Mitigation		\$	0
C)	C1) C2)	Utility Relocation (State Share) Potholing (Design Phase)		\$ \$	0 0
D)	Railroad	Acquisition		\$	0
E)	Clearand	ce / Demolition	\$	0	
F)	Relocatio	on Assistance (RAP and/or Last Re	\$	0	
G)	Title and	Escrow		\$	0
H)	Environn	nental Review		\$	0
I)		nation Settlements G & H applied to items A + B)	<u>0%</u>	\$	0
J)	Design A	oppreciation Factor	0%	\$	0
K)	Utility Re	location (Construction Cost)		\$	0

L)		TOTAL RIGHT OF WAY ESTIMATE
	(Excluding Item #8 - Hazardous W	

(Excluding Item #8 - Hazardous Waste)

M)

TOTAL R/W ESTIMATE: Escalated

\$0

0

\$0

N)

**Right of Way Support** \$

Support Cost		
Estimate Prepared By	Project Coordinator <sup>1</sup>	Phone
Utility Estimate		
Prepared By	Utiliy Coordinator <sup>2</sup>	Phone
R/W Acquistion		
Estimate Prepared By	Right of Way Estimator <sup>3</sup>	Phone
<sup>1</sup> When estimate has Support C	Costs only <sup>2</sup> When estimate has Utility Relocation	<sup>3</sup> When R/W Acquisition is required

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DO NOT PRINT THIS SHEET AS PART OF COST ESTIMATE ATTACHMENT TO PROJECT INITIATION OR APPROVAL DOCUMENTS.

### IV. SUPPORT COST ESTIMATE SUMMARY

Please obtain a P3 report (CL#3) from PPM to fill in the support cost for these categories.

SB-45 CATEGORY SUPPORT COST	PREVIOUS	FY 10/11	FY 11/12	FY 12/13	FY 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	FUTURE	P3 To	otal	Support Ratio
PR/ED (PD,PE,PM)											\$	-	0.00%
PS&E (PS)											\$	-	0.00%
R/W (RW)											\$	-	0.00%
CONSTRUCTION (CM)											\$	-	0.00%
Total Support Cost:	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-		\$	-	0.00%

Note: It is assumed that the Support Costs are already escalated by Programming to the year of expenditure. Use project Programming Sheet data.

Total Capital Cost:	\$25,738,000
Total Capital Outlay Support Cost:	\$0
Overall Percent Support Cost:	0.00%

### V. ESCALATED CONSTRUCTION COST ESTIMATE SUMMARY

Note: Right of way escalated cost are accounted for on sheet 10 of 11.

Date of Estimate (Month/Year) Estimated Date of Construction Start (Month/Year)	Month 0 0	/ / /	Year 0 0
Number of Working Days	500	WD	
Estimated Mid-Point of Construction (Month/Year)	0	/	0

YEAR FORECASTED ESCALATION RATE*		0	1		2	3	4	5	6		7	8	-	9		FUTURE		
ESCALATED CONSTRUCTION COSTS		0	1		2	3	4	5	6		7	8		9			TOTAL ESCALATED COSTS	
ROADWAY ITEMS	\$	15,637,400	\$ 15,637,400	\$	15,637,400	\$ 15,637,400	\$ 15,637,400	\$ 15,637,400	\$ 15,637,400	ş	15,637,400	\$ 15,637,400	\$	15,637,400	\$	15,637,400	\$	15,637,400
STRUCTURE ITEMS	\$	10,100,000	\$ 10,100,000	\$	10,100,000	\$ 10,100,000	\$ 10,100,000	\$ 10,100,000	\$ 10,100,000	ş	10,100,000	\$ 10,100,000	ŝ	10,100,000	\$	10,100,000	\$	10,100,000
SUBTOTAL	ş	25,737,400	\$ 25,737,400	ş	25,737,400	\$ 25,737,400	\$ 25,737,400	\$ 25,737,400	\$ 25,737,400	\$	25,737,400	\$ 25,737,400	\$	25,737,400	\$	25,737,400	\$	25,737,400

Approved by:

Project Control Engineer