

## **Attachment D**

### **Cost Estimate**

**Planning Cost Estimate**  
**State Route 37 Interim Alternative II (3-Lane MMB, 12' Lanes)**

**Project ID: 0418000329**

**Type of Estimate :** Planning  
**Program Code :**  
**Project Limits :** SR 37 Between SR121 to Mare Island  
**Description:** Install Moveable Median Barrier along existing SR37 between SR121 and Mare Island I/C  
**Scope :** Widen existing SR37 and install Moveable Median Barrier between SR121 and Mare Island Interchange, Widen Tolay Creek and Sonoma Creek Bridges  
**Scenario :** Interim Alt 11: 3 Lanes Reversible with Limited Widening, Standard Lanes, Standard Shoulders w/Fill Slope, Length of Highway = 9.15 mile, Length of Roadway on Fill= 8.79 mile, Length of Structures = 0.36 mile

	<b>Current Cost</b>	<b>Escalated Cost</b>
ROADWAY ITEMS	\$ 110,597,800	\$ 144,305,100
STRUCTURE ITEMS	\$ 14,699,575	\$ 19,179,700
<b>SUBTOTAL CONSTRUCTION COST</b>	<b>\$ 125,297,375</b>	<b>\$ 163,484,800</b>
RIGHT OF WAY	\$ 8,000,000	\$ 8,000,000
<b>TOTAL CAPITAL OUTLAY COST</b>	<b>\$ 133,298,000</b>	<b>\$ 171,485,000</b>
PA/ED SUPPORT	\$ 6,664,900	\$ 6,664,900
PS&E SUPPORT	\$ 10,663,900	\$ 10,663,900
RIGHT OF WAY SUPPORT	\$ 266,600	\$ 266,600
CONSTRUCTION SUPPORT	\$ 13,329,800	\$ 13,329,800
<b>TOTAL CAPITAL OUTLAY SUPPORT COST*</b>	<b>\$ 30,925,200</b>	<b>\$ 30,925,200</b>

<b>TOTAL PROJECT COST</b>	<b>\$ 165,000,000</b>	<b>\$ 203,000,000</b>
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**NOTE: PROJECT COST DOES NOT INCLUDE MAINTENANCE AND OPERATIONS**

*If Project has been programmed enter Programmed Amount*

Month / Year  
7 / 2018

Date of Estimate (Month/Year)

Estimated Date of Construction Start (Month/Year) 1 / 2025

Number of Working Days 400 Working Days

Month / Year

Estimated Mid-Point of Construction (Month/Year) 1 2026

Number of Plant Establishment Days 100 Days

**Estimated Project Schedule**

<i>PID Approval</i>	12/31/2018
<i>PA/ED Approval</i>	02/28/2022
<i>PS&amp;E</i>	12/31/2023
<i>RTL</i>	07/01/24
<i>Begin Construction</i>	01/01/25

Approved by Project  
Manager

(xxx) xxx-xxxx

Project Manager

Date

Phone

## I. ROADWAY ITEMS SUMMARY

Section	Cost
1 Earthwork	\$ 1,409,300
2 Pavement Structural Section	\$ 9,422,700
3 Drainage	\$ 1,949,800
4 Specialty Items	\$ 22,242,000
5 Environmental	\$ 2,935,000
6 Traffic Items	\$ 25,998,000
7 Detours	\$ 1,000,000
8 Minor Items	\$ 6,495,700
9 Roadway Mobilization	\$ 7,145,300
10 Supplemental Work	\$ 3,772,700
11 State Furnished	\$ 1,800,000
12 Contingencies	\$ 22,119,600
13 Overhead	\$ 4,307,700
<b>TOTAL ROADWAY ITEMS</b>	<b>\$ 110,597,800</b>

Estimate Prepared By \_\_\_\_\_  
Name and Title
Date
Phone

Estimate Reviewed 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
160101	Clearing & Grubbing	LS		x	=	\$	-
170101	Develop Water Supply	LS		x	=	\$	-
190101	Roadway Excavation	CY	20,307	x	30.00	= \$	609,210
190103	Roadway Excavation (Type Y) ADL	CY		x	=	\$	-
190105	Roadway Excavation (Type Z-2) ADL	CY		x	=	\$	-
192037	Structure Excavation (Retaining Wall)	CY		x	=	\$	-
193013	Structure Backfill (Retaining Wall)	CY		x	=	\$	-
193031	Pervious Backfill Material (Retaining Wall)	CY		x	=	\$	-
194001	Ditch Excavation	CY		x	=	\$	-
198001	Imported Borrow	CY	10,000	x	30.00	= \$	300,000
198002	Imported Borrow - Intersection	CY		x	=	\$	-
198007	Imported Material (Shoulder Backing)	TON		x	=	\$	-
XXXXXX	Intersection Earthwork	LS	1	x	500,000.00	= \$	500,000

<b>TOTAL EARTHWORK SECTION ITEMS</b>	<b>\$ 1,409,300</b>
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**SECTION 2: PAVEMENT STRUCTURAL SECTION**

Item code		Unit	Quantity		Unit Price (\$)		Cost
150771	Remove Asphalt Concrete Dike	LF		x	=	\$	-
150305	Obliterate Surfacing	SQYD		x	=	\$	-
150860	Remove Base and Surfacing	CY		x	=	\$	-
153103	Cold Plane Asphalt Concrete Pavement	SQYD	71,060	x	3.50	= \$	248,710
153221	Remove Concrete Barrier	LF	45,720	x	20.00	= \$	914,400
250401	Class 4 Aggregate Subbase	CY		x	=	\$	-
260203	Class 2 Aggregate Base	CY	11,810	x	50.00	= \$	590,500
290201	Asphalt Treated Permeable Base	CY		x	=	\$	-
365001	Sand Cover	TON		x	=	\$	-
374002	Asphaltic Emulsion (Fog Seal Coat)	TON		x	=	\$	-
374492	Asphaltic Emulsion (Polymer Modified)	TON		x	=	\$	-
3750XX	Screenings (Type XX)	TON		x	=	\$	-
377501	Slurry Seal	TON		x	=	\$	-
390095	Replace Asphalt Concrete Surfacing	CY		x	=	\$	-
390132	Hot Mix Asphalt (Type A)	TON	61,690	x	100.00	= \$	6,169,000
390136	Minor Hot Mix Asphalt	TON		x	=	\$	-
390137	Rubberized Hot Mix Asphalt (Gap Graded)	TON		x	=	\$	-
393003	Geosynthetic Pavement Interlayer	SQYD		x	=	\$	-
39405X	Shoulder Rumber Strip (HMA, Type XX Inden	STA		x	=	\$	-
394071	Place Hot Mix Asphalt Dike	LF		x	=	\$	-
394090	Place Hot Mix Asphalt (Misc. Area)	SQYD		x	=	\$	-
397005	Tack Coat	TON		x	=	\$	-
401000	Concrete Pavement	CY		x	=	\$	-
401108	Replace Concrete Pavement (Rapid Strength	CY		x	=	\$	-
404092	Seal Pavement Joint	LF		x	=	\$	-
404094	Seal Longitudinal Isolation Joint	LF		x	=	\$	-
413112A	Repair Spalled Joints (Polyester Grout)	SQYD		x	=	\$	-
413115	Seal Existing Concrete Pavement Joint	LF		x	=	\$	-
420102	Groove Existing Concrete Pavement	SQYD		x	=	\$	-
420201	Grind Existing Concrete Pavement	SQYD		x	=	\$	-
731502	Minor Concrete (Misc. Const)	CY		x	=	\$	-
731530	Minor Concrete (Textured Paving)	SQFT		x	=	\$	-
XXXXXX	Intersection Pavement	LS	1	x	1,500,000.00	= \$	1,500,000

<b>TOTAL STRUCTURAL SECTION ITEMS</b>	<b>\$ 9,422,700</b>
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**SECTION 3: DRAINAGE**

Item code		Unit	Quantity	Unit Price (\$)	Cost
150206	Abandon Culvert	LF	x	= \$	-
150805	Remove Culvert	LF	x	= \$	-
150820	Modify Inlet	EA	x	= \$	-
152430	Adjust Inlet	LF	x	= \$	-
155003	Cap Inlet	EA	x	= \$	-
193114	Sand Backfill	CY	x	= \$	-
510502	Minor Concrete (Minor Structure)	CY	x	= \$	-
510512	Minor Concrete (Box Culvert)	CY	x	= \$	-
62XXXX	XXX" APC Pipe	LF	x	= \$	-
64XXXX	XXX" Plastic Pipe	LF	x	= \$	-
65XXXX	XXX" RCP Pipe	LF	x	= \$	-
66XXXX	XXX" CSP Pipe	LF	x	= \$	-
68XXXX	Edge Drain	LF	x	= \$	-
69XXXX	XXX" Pipe Downdrain	LF	x	= \$	-
70XXXX	XXX" Pipe Inlet	LF	x	= \$	-
70XXXX	XXX" Pipe Riser	LF	x	= \$	-
70XXXX	XXX" Flared End Section	EA	x	= \$	-
703233	Grated Line Drain	LF	x	= \$	-
72XXXX	Rock Slope Protection (Type and Method)	CY	x	= \$	-
721420	Concrete (Ditch Lining)	CY	x	= \$	-
721430	Concrete (Channel Lining)	CY	x	= \$	-
729010	Rock Slope Protection Fabric	SQYD	x	= \$	-
750001	Miscellaneous Iron and Steel	LB	x	= \$	-
XXXXXX	Additional Drainage (18% of Section 1 - 2)	LS	1 x	1,949,760	= \$ 1,949,760
XXXXXX	Some Item		x	= \$	-

<b>TOTAL DRAINAGE ITEMS</b>	<b>\$ 1,949,800</b>
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**SECTION 4: SPECIALTY ITEMS**

Item code		Unit	Quantity	Unit Price (\$)	Cost
070012	Progress Schedule (Critical Path Method)	LS	x	= \$	-
150662	Remove Metal Beam Guard Railing	LF	x	= \$	-
150668	Remove Terminal Systems	EA	x	= \$	-
1532XX	Remove Barrier ( <i>Insert Type</i> )	LF	x	= \$	-
153250	Remove Sound Wall	SQFT	x	= \$	-
190110	Lead Compliance Plan	LS	x	= \$	-
49XXXX	CIDH Concrete Piling ( <i>Insert Diameter</i> )	LF	x	= \$	-
510060	Structural Concrete (Retaining Wall)	CY	x	= \$	-
510133	Class 2 Concrete (Retaining Wall)	CY	x	= \$	-
510524	Minor Concrete (Sound Wall)	CY	x	= \$	-
5110XX	Architectural Treatment ( <i>Insert Type</i> )	SQFT	x	= \$	-
511048	Apply Anti-Graffiti Coating	SQFT	x	= \$	-
5136XX	Reinforced Concrete Crib Wall ( <i>Insert Type</i> )	SQFT	x	= \$	-
518002	Sound Wall (Masonry Block)	SQFT	x	= \$	-
520103	Bar Reinf. Steel (Retaining Wall)	LB	x	= \$	-
80XXXX	Fence ( <i>Insert Type</i> )	LF	x	= \$	-
832001	Metal Beam Guard Railing	LF	90,000 x	39.00	= \$ 3,510,000
832002	Metal Beam Guard Railing (Median)	LF	x	= \$	-
839310	Double Thrie Beam Barrier	LF	x	= \$	-
839521	Cable Railing	LF	x	= \$	-
83954X	Transition Railing ( <i>Insert Type</i> )	EA	x	= \$	-
8395XX	Terminal System (Type CAT)	EA	x	= \$	-
8395XX	Alternative Flared Terminal System	EA	x	= \$	-
8395XX	End Anchor Assembly ( <i>Insert Type</i> )	EA	x	= \$	-
839561	Rail Tensioning Assembly	EA	x	= \$	-
839XXX	Crash Cushion ( <i>Insert Type</i> )	EA	10 x	10,000.00	= \$ 100,000
83XXXX	Concrete Barrier ( <i>Type 60 Mod</i> )	LF	x	80.00	= \$ -
839XXX	Moveable Median Barrier	LF	47,600 x	320.00	= \$ 15,232,000
839XXX	Moveable Median Barrier Machine	EA	2 x	1,700,000	= \$ 3,400,000
XXXXXX	Sheet Pile Wall	SF	x	= \$	-

<b>TOTAL SPECIALTY ITEMS</b>	<b>\$ 22,242,000</b>
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**SECTION 5: ENVIRONMENTAL**

**5A - ENVIRONMENTAL MITIGATION**

Item code		Unit	Quantity		Unit Price (\$)		Cost
	Biological Mitigation	LS	1	x	= \$		-
071325	TEMPORARY REINFORCED SILT FENCE	LF	27,000	x	15.00	= \$	405,000
071325	Temporary Fence (Type ESA)	LF	90,000	X	8.00	= \$	720,000
<u>Subtotal Environmental</u>							<u>\$ 1,125,000</u>

**5B - LANDSCAPE AND IRRIGATION**

Item code		Unit	Quantity		Unit Price (\$)		Cost
200001	Highway Planting	LS	1	x	200,000.00	= \$	200,000
20XXXX	XXX (insert type) Conduit (use for	LF		x	= \$		-
20XXXX	XXXXXXXXXX (insert type) Conduit	LF		x	= \$		-
	(Use for Extension of Irrigation System)						
201700	Imported Topsoil	CY		x	= \$		-
2030XX	Erosion Control (Type ___)	SQYD		x	= \$		-
203021	Fiber Rolls	LF		x	= \$		-
203026	Move In/ Move Out (Erosion Control)	EA		x	= \$		-
204099	Plant Establishment Work	LS		x	= \$		-
204101	Extend Plant Establishment (X Years)	LS		x	= \$		-
208000	Irrigation System	LS		x	= \$		-
208304	Water Meter	EA		x	= \$		-
209801	Maintenance Vehicle Pullout	EA		x	= \$		-
XXXXXX	Some Item			x	= \$		-
<u>Subtotal Landscape and Irrigation</u>							<u>\$ 200,000</u>

**5C - NPDES**

Item code		Unit	Quantity		Unit Price (\$)		Cost
074016	Construction Site Management	LS	1	x	200,000.00	= \$	200,000
074017	Prepare WPCP	LS		x	= \$		-
074019	Prepare SWPPP	LS		x	= \$		-
074023	Temporary Erosion Control	SQYD		x	= \$		-
074027	Temporary Erosion Control Blanket	SQYD		x	= \$		-
074028	Temporary Fiber Roll	LF		x	= \$		-
074032	Temporary Concrete Washout Facility	EA		x	= \$		-
074033	Temporary Construction Entrance	EA		x	= \$		-
074035	Temporary Check Dam	LF		x	= \$		-
074037	Move In/ Move Out (Temporary Erosion Control)	EA		x	= \$		-
074038	Temp. Drainage Inlet Protection	EA		x	= \$		-
074041	Street Sweeping	LS		x	= \$		-
074042	Temporary Concrete Washout (Portable)	LS		x	= \$		-
XXXXXX	Construction Site BMPs (1% Roadway	LS	141,000,000	x	1%	= \$	1,410,000
	Items) See 5A above for Bio BMPs						
XXXXXX	Des Pollu Prev & Treatment BMPs	AC	18.4	x	400,000.00	= \$	7,368,000

**Supplemental Work for NPDES**

(These costs are not accounted in total here but under Supplemental Work on sheet 7 of 11).

066595	Water Pollution Control Maintenance Sharing	LS	1	x	100,000.00	= \$	100,000
066596	Additional Water Pollution Control**	LS		x	= \$		-
066597	Storm Water Sampling and Analysis***	LS	1	x	100,000.00	= \$	100,000
XXXXXX	Some Item						

Subtotal NPDES (Without Supplemental Work)    \$ 1,610,000

\*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.

<b>TOTAL ENVIRONMENTAL</b>	<b>\$ 2,935,000</b>
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**SECTION 6: TRAFFIC ITEMS**

**6A - Traffic Electrical**

Item code		Unit	Quantity		Unit Price (\$)		Cost
150760	Remove Sign Structure	EA		x		= \$	-
151581	Reconstruct Sign Structure	EA		x		= \$	-
152641	Modify Sign Structure	EA		x		= \$	-
5602XX	Furnish Sign Structure	LS	1	x	2,600,000.00	= \$	2,600,000
5602XX	Install Sign Structure	LS	1	x	2,600,000.00	= \$	2,600,000
56XXXX	XXX" CIDHC Pile (Sign Foundation)	LF		x		= \$	-
860090	Maintain Existing Traffic Management System Elements During Construction	LS		x		= \$	-
860810	Inductive Loop Detectors	EA		x		= \$	-
86055X	Lighting & Sign Illumination	LS	1	x	1,000,000.00	= \$	1,000,000
8607XX	Interconnection Facilities	LS		x		= \$	-
8609XX	Traffic Monitoring Stations	LS		x		= \$	-
860XXX	Signals & Lighting	LS	1	x	2,000,000.00	= \$	2,000,000
8611XX	Ramp Metering System (Location X)	LS		x		= \$	-
8611XX	Ramp Metering System (Location X)	LS		x		= \$	-
86XXXX	Fiber Optic Conduit System	LS		x		= \$	-
XXXXXX	Managed Lanes System and System Integration	LS	1	x	13,725,000.00	= \$	13,725,000
<i>Subtotal Traffic Electrical</i>							<b>\$ 21,925,000</b>

**6B - Traffic Signing and Striping**

Item code		Unit	Quantity		Unit Price (\$)		Cost
120090	Construction Area Signs	LS	1	x	50,000	= \$	50,000
150701	Remove Yellow Painted Traffic Stripe	LF		x		= \$	-
150710	Remove Traffic Stripe	LF		x		= \$	-
150713	Remove Pavement Marking	SQFT		x		= \$	-
150742	Remove Roadside Sign	EA		x		= \$	-
152320	Reset Roadside Sign	EA		x		= \$	-
152390	Relocate Roadside Sign	EA		x		= \$	-
566011	Roadside Sign (One Post)	EA		x		= \$	-
566012	Roadside Sign (Two Post)	EA		x		= \$	-
560XXX	Furnish Sign Panels	SQFT		x		= \$	-
560XXX	Install Sign Panels	SQFT		x		= \$	-
82010X	Delineator (Class X)	EA		x		= \$	-
840501	Permanent Pavement Delineation	LF	288,000	x	1.00	= \$	288,000
xxxxxxx	Signs (Managed Lanes and Roadside)	LS	1	x	915,000.00	= \$	915,000
<i>Subtotal Traffic Signing and Striping</i>							<b>\$ 1,253,000</b>

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

Item code		Unit	Quantity		Unit Price (\$)		Cost
120100	Traffic Control System	LS	1	x	2,000,000	= \$	2,000,000
120120	Type III Barricade	EA		x		= \$	-
120143	Temporary Pavement Delineation	LF		x		= \$	-
12016X	Channelizer	EA		x		= \$	-
128650	Portable Changeable Message Signs	EA	4	x	5,000	= \$	20,000
129000	Temporary Railing (Type K)	LF	20,000	x	15.00	= \$	300,000
129100	Temp. Crash Cushion Module	EA	5	x	50,000.00	= \$	250,000
129099A	Traffic Plastic Drum	EA		x		= \$	-
839603A	Temporary Crash Cushion (ADIEM)	EA		x		= \$	-
XXXXXX	Railroad Flagging	LS	1	x	250,000.00	= \$	250,000
<i>Subtotal Stage Construction and Traffic Handling</i>							<b>\$ 2,820,000</b>

<b>TOTAL TRAFFIC ITEMS</b>	<b>\$ 25,998,000</b>
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**SECTION 7: DETOURS**

Include constructing, maintaining, and removal

Item code	Unit	Quantity	Unit Price (\$)	Cost
0713XX Temporary Fence (Type X)	LF	x	= \$	-
07XXXX Temporary Drainage	LS	x	= \$	-
120143 Temporary Pavement Delineation	LF	x	= \$	-
1286XX Temporary Signals	EA	x	= \$	-
129000 Temporary Railing (Type K)	LF	x	= \$	-
190101 Roadway Excavation	CY	x	= \$	-
198001 Imported Borrow	CY	x	= \$	-
198050 Embankment	CY	x	= \$	-
250401 Class 4 Aggregate Subbase	CY	x	= \$	-
260201 Class 2 Aggregate Base	CY	x	= \$	-
390132 Hot Mix Asphalt (Type A)	TON	x	= \$	-
XXXXXX Detour Roads	LS	1	x 1,000,000	= \$ 1,000,000

**TOTAL DETOURS \$ 1,000,000**

SUBTOTAL SECTIONS 1-7 \$ 64,956,800

**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 10.0% \$ 6,495,680

Total of Section 1-7 \$ 64,956,800 x 10.0% = \$ 6,495,680

**TOTAL MINOR ITEMS \$ 6,495,700**

**SECTIONS 9: MOBILIZATION**

Item code	Quantity	Unit Price (\$)	Cost
999990 Total Section 1-8	\$ 71,452,500	x 10%	= \$ 7,145,250

**TOTAL MOBILIZATION \$ 7,145,300**

**SECTION 10: SUPPLEMENTAL WORK**

Item code	Unit	Quantity	Unit Price (\$)	Cost
066015 Federal Trainee Program	LS	x	= \$	-
066063 Traffic Management Plan - Public Informatic	LS	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		x	= \$	-

Cost of NPDES Supplemental Work specified in Section 5C = \$ 200,000

Total Section 1-8 \$ 71,452,500 5% = \$ 3,572,625

**TOTAL SUPPLEMENTAL WORK \$ 3,772,700**



**II. STRUCTURE ITEMS**

	<u>Bridge 1</u>	<u>Bridge 2</u>	
DATE OF ESTIMATE	07/02/18	07/02/18	00/00/00
Bridge Name	WIDEN EXISTING TOLAY CREEK BRIDGE BY 10 FEET (61 FT LONG X 42 FT WIDE)	WIDEN EXISTING SONOMA CREEK BRIDGE BY 9 FEET (1804' LONG X 53.5 FT WIDE)	XXXXXXXXXXXXXXXXXXXX
Bridge Number	20-0090	23-0063	57-XXX
Structure Type	PC P/S I-GIRDER	PC PS I-GIRDER	XXXXXXXXXXXXXXXXXXXX
Width (Feet) [out to out]	15.00 LF	9.00 LF	0.00 LF
Total Bridge Length (Feet)	61.00 LF	1804.00 LF	0.00 LF
Total Area (Square Feet)	915 SQFT	16,236 SQFT	- SQFT
Structure Depth (Feet)	0.00 LF	0.00 LF	0.00 LF
Footing Type (pile or spread)	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX
Cost Per Square Foot	\$660.00	\$660.00	\$0.00
Contingency 25%	\$150,975	\$2,678,940	\$0
Bridge Removal (Portion)	\$50,000	\$500,000	\$0

<b>COST OF EACH STRUCTURE</b>	<b>\$804,875</b>	<b>\$13,894,700</b>	<b>\$0</b>
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DATE OF ESTIMATE	00/00/00	00/00/00	00/00/00
Name	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX
Bridge Number	57-XXX	57-XXX	57-XXX
Structure Type	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX
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)	- SQFT	0.00 SQFT	0.0 SQFT
Structure Depth (Feet)	0.00 LF	0.00 LF	0.00 LF
Footing Type (pile or spread)	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX
Cost Per Square Foot	\$0.00	\$0.00	\$0.00
Contingency			
Bridge Removal			

<b>COST OF EACH STRUCTURE</b>	<b>\$0</b>	<b>\$0.00</b>	<b>\$0.00</b>
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<b>TOTAL COST OF BRIDGES</b>	<b>\$14,699,575</b>
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<b>TOTAL COST OF BUILDINGS</b>	<b>\$0.00</b>
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<b>TOTAL COST OF STRUCTURES<sup>1</sup></b>	<b>\$14,699,575</b>
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Estimate Prepared By \_\_\_\_\_ Date \_\_\_\_\_  
 XXXXXXXXXXXXXXXXXXXX ----- Division of Structures

<sup>1</sup>Structure's Estimate includes Overhead and Mobilization.  
 Add more sheets if needed. Call them 9a, 9b, 9c, ..., etc

### III. RIGHT OF WAY

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

A)	A1) Acquisition, including Excess Land Purchases, Damages & Goodwill,		\$	0
	A2) SB-1210		\$	0
B)	Acquisition of Offsite Mitigation (Tolay Cr and Sonoma Crk Br Mitigation)		\$	6,000,000
C)	C1) Utility Relocation (State Share)		\$	0
	C2) Potholing (Design Phase)		\$	0
D)	Railroad Acquisition		\$	0
E)	Clearance / Demolition		\$	0
F)	Relocation Assistance (RAP and/or Last Resort Housing Costs)		\$	0
G)	Title and Escrow		\$	0
H)	Environmental Review		\$	0
I)	Condemnation Settlements	0%	\$	0
	(Items G & H applied to items A + B)			
J)	Design Appreciation Factor	0%	\$	0
K)	Utility Relocation (Construction Cost)		\$	2,000,000

L) 

<b>TOTAL RIGHT OF WAY ESTIMATE</b>	<b>\$8,000,000</b>
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(Excluding Item #8 - Hazardous Waste)

M) 

<b>TOTAL R/W ESTIMATE: Escalated</b>	<b>\$8,000,000</b>
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N) 

<b>Right of Way Support</b>	<b>\$</b>	<b>266,596</b>
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Support Cost Estimate Prepared By	Project Coordinator <sup>1</sup>	Phone
Utility Estimate Prepared By	Utility Coordinator <sup>2</sup>	Phone
R/W Acquisition Estimate Prepared By	Right of Way Estimator <sup>3</sup>	Phone

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

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

**Planning Cost Estimate**  
**State Route 37 Interim Alternative I2 (Convert Shoulder to Travel Lane)**

**Project ID: 0418000329**

**Type of Estimate :** Planning  
**Program Code :**  
**Project Limits :** SR 37 Between SR121 to Mare Island  
 Convert Shoulder to Travel Lane along existing SR37 between SR121 and Mare Island I/C  
**Description:**  
**Scope :** Widen existing SR37 and convert shoulder to travel lane between SR121 and Mare Island Interchange, Widen Tolay Creek Bridge  
**Scenario :** Interim Alt I2: Convert Shoulder to Travel Lane with Limited Widening, 12' Standard Lanes (Length of Highway = 9.15 mile, Length of Roadway on Fill= 8.79 mile, Length of Structures = 0.36 mile)

	<b>Current Cost</b>	<b>Escalated Cost</b>
<b>ROADWAY ITEMS</b>	\$ 83,881,900	\$ 103,164,200
<b>STRUCTURE ITEMS</b>	\$ 855,200	\$ 1,051,800
<b>SUBTOTAL CONSTRUCTION COST</b>	\$ 84,737,100	\$ 104,216,000
<b>RIGHT OF WAY</b>	\$ 3,000,000	\$ 3,000,000
<b>TOTAL CAPITAL OUTLAY COST</b>	\$ 87,738,000	\$ 107,216,000
<b>PA/ED SUPPORT</b>	\$ 3,509,600	\$ 3,509,600
<b>PS&amp;E SUPPORT</b>	\$ 7,019,100	\$ 7,019,100
<b>RIGHT OF WAY SUPPORT</b>	\$ 175,500	\$ 175,500
<b>CONSTRUCTION SUPPORT</b>	\$ 8,773,800	\$ 8,773,800
<b>TOTAL CAPITAL OUTLAY SUPPORT COST*</b>	\$ 19,478,000	\$ 19,478,000

<b>TOTAL PROJECT COST</b>	<b>\$ 108,000,000</b>	<b>\$ 127,000,000</b>
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**NOTE: PROJECT COST DOES NOT INCLUDE MAINTENANCE AND OPERATIONS**

*If Project has been programmed enter Programmed Amount*

Month / Year  
7 / 2018

Date of Estimate (Month/Year)

Estimated Date of Construction Start (Month/Year) 6 / 2023

Number of Working Days 400 Working Days

Month / Year

Estimated Mid-Point of Construction (Month/Year) 6 2024

Number of Plant Establishment Days Days

**Estimated Project Schedule**

<i>PID Approval</i>	12/31/2018
<i>PA/ED Approval</i>	02/28/2022
<i>PS&amp;E</i>	06/31/2022
<i>RTL</i>	01/01/23
<i>Begin Construction</i>	07/01/23

Approved by Project  
Manager

(xxx) xxx-xxxx

Project Manager

Date

Phone

## I. ROADWAY ITEMS SUMMARY

<b>Section</b>	<b>Cost</b>
1 Earthwork	\$ 1,877,000
2 Pavement Structural Section	\$ 10,510,600
3 Drainage	\$ 2,229,800
4 Specialty Items	\$ 6,400,000
5 Environmental	\$ 2,335,000
6 Traffic Items	\$ 25,998,000
7 Detours	\$ 1,000,000
8 Minor Items	\$ 5,035,100
9 Roadway Mobilization	\$ 5,538,600
10 Supplemental Work	\$ 2,969,300
11 State Furnished	\$ 400,000
12 Contingencies	\$ 16,776,400
13 Overhead	\$ 2,812,100
<b>TOTAL ROADWAY ITEMS</b>	<b>\$ 83,881,900</b>

Estimate Prepared By \_\_\_\_\_  
Name and Title Date Phone

Estimate Reviewed 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.**

PRELIMINARY  
PROJECT COST ESTIMATE

**SECTION 1: EARTHWORK**

Item code		Unit	Quantity		Unit Price (\$)		Cost
160101	Clearing & Grubbing	LS		x		= \$	-
170101	Develop Water Supply	LS		x		= \$	-
190101	Roadway Excavation	CY	45,900	x	30.00	= \$	1,377,000
190103	Roadway Excavation (Type Y) ADL	CY		x		= \$	-
190105	Roadway Excavation (Type Z-2) ADL	CY		x		= \$	-
192037	Structure Excavation (Retaining Wall)	CY		x		= \$	-
193013	Structure Backfill (Retaining Wall)	CY		x		= \$	-
193031	Pervious Backfill Material (Retaining Wall)	CY		x		= \$	-
194001	Ditch Excavation	CY		x		= \$	-
198001	Imported Borrow	CY		x	20.00	= \$	-
198002	Imported Borrow - Intersection	CY		x		= \$	-
198007	Imported Material (Shoulder Backing)	TON		x		= \$	-
XXXXXX	Intersection Earthwork	LS	1	x	500,000.00	= \$	500,000

<b>TOTAL EARTHWORK SECTION ITEMS</b>	<b>\$ 1,877,000</b>
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**SECTION 2: PAVEMENT STRUCTURAL SECTION**

Item code		Unit	Quantity		Unit Price (\$)		Cost
150771	Remove Asphalt Concrete Dike	LF		x		= \$	-
150305	Obliterate Surfacing	SQYD		x		= \$	-
150860	Remove Base and Surfacing	CY		x		= \$	-
153103	Cold Plane Asphalt Concrete Pavement	SQYD	60,912	x	3.50	= \$	213,192
153221	Remove Concrete Barrier	LF	45,720	x	20.00	= \$	914,400
250401	Class 4 Aggregate Subbase	CY		x		= \$	-
260203	Class 2 Aggregate Base	CY	28,660	x	50.00	= \$	1,433,000
290201	Asphalt Treated Permeable Base	CY		x		= \$	-
365001	Sand Cover	TON		x		= \$	-
374002	Asphaltic Emulsion (Fog Seal Coat)	TON		x		= \$	-
374492	Asphaltic Emulsion (Polymer Modified)	TON		x		= \$	-
3750XX	Screenings (Type XX)	TON		x		= \$	-
377501	Slurry Seal	TON		x		= \$	-
390095	Replace Asphalt Concrete Surfacing	CY		x		= \$	-
390132	Hot Mix Asphalt (Type A)	TON	64,500	x	100.00	= \$	6,450,000
390136	Minor Hot Mix Asphalt	TON		x		= \$	-
390137	Rubberized Hot Mix Asphalt (Gap Graded)	TON		x		= \$	-
393003	Geosynthetic Pavement Interlayer	SQYD		x		= \$	-
39405X	Shoulder Rumber Strip (HMA, Type XX Indent	STA		x		= \$	-
394071	Place Hot Mix Asphalt Dike	LF		x		= \$	-
394090	Place Hot Mix Asphalt (Misc. Area)	SQYD		x		= \$	-
397005	Tack Coat	TON		x		= \$	-
401000	Concrete Pavement	CY		x		= \$	-
401108	Replace Concrete Pavement (Rapid Strength)	CY		x		= \$	-
404092	Seal Pavement Joint	LF		x		= \$	-
404094	Seal Longitudinal Isolation Joint	LF		x		= \$	-
413112A	Repair Spalled Joints (Polyester Grout)	SQYD		x		= \$	-
413115	Seal Existing Concrete Pavement Joint	LF		x		= \$	-
420102	Groove Existing Concrete Pavement	SQYD		x		= \$	-
420201	Grind Existing Concrete Pavement	SQYD		x		= \$	-
731502	Minor Concrete (Misc. Const)	CY		x		= \$	-
731530	Minor Concrete (Textured Paving)	SQFT		x		= \$	-
XXXXXX	Intersection Pavement	LS	1	x	1,500,000.00	= \$	1,500,000

<b>TOTAL STRUCTURAL SECTION ITEMS</b>	<b>\$ 10,510,600</b>
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**SECTION 3: DRAINAGE**

Item code		Unit	Quantity	Unit Price (\$)	Cost
150206	Abandon Culvert	LF	x	= \$	-
150805	Remove Culvert	LF	x	= \$	-
150820	Modify Inlet	EA	x	= \$	-
152430	Adjust Inlet	LF	x	= \$	-
155003	Cap Inlet	EA	x	= \$	-
193114	Sand Backfill	CY	x	= \$	-
510502	Minor Concrete (Minor Structure)	CY	x	= \$	-
510512	Minor Concrete (Box Culvert)	CY	x	= \$	-
62XXXX	XXX" APC Pipe	LF	x	= \$	-
64XXXX	XXX" Plastic Pipe	LF	x	= \$	-
65XXXX	XXX" RCP Pipe	LF	x	= \$	-
66XXXX	XXX" CSP Pipe	LF	x	= \$	-
68XXXX	Edge Drain	LF	x	= \$	-
69XXXX	XXX" Pipe Downdrain	LF	x	= \$	-
70XXXX	XXX" Pipe Inlet	LF	x	= \$	-
70XXXX	XXX" Pipe Riser	LF	x	= \$	-
70XXXX	XXX" Flared End Section	EA	x	= \$	-
703233	Grated Line Drain	LF	x	= \$	-
72XXXX	Rock Slope Protection (Type and Method)	CY	x	= \$	-
721420	Concrete (Ditch Lining)	CY	x	= \$	-
721430	Concrete (Channel Lining)	CY	x	= \$	-
729010	Rock Slope Protection Fabric	SQYD	x	= \$	-
750001	Miscellaneous Iron and Steel	LB	x	= \$	-
XXXXXX	Additional Drainage (18% of Section 1 - 2)	LS	1 x	2,229,768	= \$ 2,229,768
XXXXXX	Some Item		x	= \$	-

<b>TOTAL DRAINAGE ITEMS</b>	<b>\$ 2,229,800</b>
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**SECTION 4: SPECIALTY ITEMS**

Item code		Unit	Quantity	Unit Price (\$)	Cost
070012	Progress Schedule (Critical Path Method)	LS	x	= \$	-
150662	Remove Metal Beam Guard Railing	LF	x	= \$	-
150668	Remove Terminal Systems	EA	x	= \$	-
1532XX	Remove Barrier (Insert Type)	LF	x	= \$	-
153250	Remove Sound Wall	SQFT	x	= \$	-
190110	Lead Compliance Plan	LS	x	= \$	-
49XXXX	CIDH Concrete Piling (Insert Diameter)	LF	x	= \$	-
510060	Structural Concrete (Retaining Wall)	CY	x	= \$	-
510133	Class 2 Concrete (Retaining Wall)	CY	x	= \$	-
510524	Minor Concrete (Sound Wall)	CY	x	= \$	-
5110XX	Architectural Treatment (Insert Type)	SQFT	x	= \$	-
511048	Apply Anti-Graffiti Coating	SQFT	x	= \$	-
5136XX	Reinforced Concrete Crib Wall (Insert Type)	SQFT	x	= \$	-
518002	Sound Wall (Masonry Block)	SQFT	x	= \$	-
520103	Bar Reinf. Steel (Retaining Wall)	LB	x	= \$	-
80XXXX	Fence (Insert Type)	LF	x	= \$	-
832001	Metal Beam Guard Railing	LF	90,000 x	30.00	= \$ 2,700,000
832002	Metal Beam Guard Railing (Median)	LF	x	= \$	-
839310	Double Thrie Beam Barrier	LF	x	= \$	-
839521	Cable Railing	LF	x	= \$	-
83954X	Transition Railing (Insert Type)	EA	x	= \$	-
8395XX	Terminal System (Type CAT)	EA	x	= \$	-
8395XX	Alternative Flared Terminal System	EA	x	= \$	-
8395XX	End Anchor Assembly (Insert Type)	EA	x	= \$	-
839561	Rail Tensioning Assembly	EA	x	= \$	-
839XXX	Crash Cushion (Insert Type)	EA	10 x	10,000.00	= \$ 100,000
839701	Concrete Barrier (Type 60)	LF	45,000 x	80.00	= \$ 3,600,000
83XXXX	Concrete Barrier (Insert Type)	LF	x	= \$	-
839XXX	Moveable Median Barrier	LF	x	= \$	-
839XXX	Moveable Median Barrier Machine	EA	x	= \$	-
XXXXXX	Some Item		x	= \$	-

<b>TOTAL SPECIALTY ITEMS</b>	<b>\$ 6,400,000</b>
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**SECTION 5: ENVIRONMENTAL**

**5A - ENVIRONMENTAL MITIGATION**

Item code	Unit	Quantity	Unit Price (\$)	Cost
Biological Mitigation	LS	1	x 0 =	\$ -
071325 TEMPORARY REINFORCED SILT FENCE	LF	27,000	x 15.00 =	\$ 405,000
071325 Temporary Fence (Type ESA)	LF	90,000	x 8.00 =	\$ 720,000
<i>Subtotal Environmental</i>				<b>\$ 1,125,000</b>

**5B - LANDSCAPE AND IRRIGATION**

Item code	Unit	Quantity	Unit Price (\$)	Cost
200001 Highway Planting	LS		x =	\$ -
20XXXX XXX" (Insert Type) Conduit (Use for	LF		x =	\$ -
20XXXX Extend XXX" (Insert Type) Conduit	LF		x =	\$ -
201700 Imported Topsoil	CY		x =	\$ -
2030XX Erosion Control (Type __)	SQYD		x =	\$ -
203021 Fiber Rolls	LF		x =	\$ -
203026 Move In/ Move Out (Erosion Control)	EA		x =	\$ -
204099 Plant Establishment Work	LS		x =	\$ -
204101 Extend Plant Establishment (X Years)	LS		x =	\$ -
208000 Irrigation System	LS		x =	\$ -
208304 Water Meter	EA		x =	\$ -
209801 Maintenance Vehicle Pullout	EA		x =	\$ -
XXXXXX Landscape Allowance	LS		x =	\$ -
<i>Subtotal Landscape and Irrigation</i>				<b>\$ -</b>

**5C - NPDES**

Item code	Unit	Quantity	Unit Price (\$)	Cost
074016 Construction Site Management	LS	1	x 200,000.00 =	\$ 200,000
074017 Prepare WPCP	LS		x =	\$ -
074019 Prepare SWPPP	LS		x =	\$ -
074023 Temporary Erosion Control	SQYD		x =	\$ -
074027 Temporary Erosion Control Blanket	SQYD		x =	\$ -
074028 Temporary Fiber Roll	LF		x =	\$ -
074032 Temporary Concrete Washout Facility	EA		x =	\$ -
074033 Temporary Construction Entrance	EA		x =	\$ -
074035 Temporary Check Dam	LF		x =	\$ -
074037 Move In/ Move Out (Temporary Erosion Con	EA		x =	\$ -
074038 Temp. Drainage Inlet Protection	EA		x =	\$ -
074041 Street Sweeping	LS		x =	\$ -
074042 Temporary Concrete Washout (Portable)	LS		x =	\$ -
XXXXXX Construction BMPs(1% of Esc Roadway Items) See 5A above for Bio BMPs	LS	101,000,000	x 1.0% =	\$ 1,010,000
XXXXXX Des Pollu Prev & Treatment BMPs	AC	21.3	x 400,000.00 =	\$ 8,536,000

**Supplemental Work for NPDES**

(These costs are not accounted in total here but under Supplemental Work on sheet 7 of 11).

066595 Water Pollution Control Maintenance Sharing	LS	1	x 100,000.00 =	\$ 100,000
066596 Additional Water Pollution Control**	LS		x =	\$ -
066597 Storm Water Sampling and Analysis***	LS	1	x 100,000.00 =	\$ 100,000
XXXXXX Some Item				

*Subtotal NPDES (Without Supplemental Work)* **\$ 1,210,000**

\*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.

<b>TOTAL ENVIRONMENTAL</b>	<b>\$ 2,335,000</b>
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**SECTION 6: TRAFFIC ITEMS**

**6A - Traffic Electrical**

Item code	Unit	Quantity	Unit Price (\$)	Cost
150760 Remove Sign Structure	EA	x	= \$	-
151581 Reconstruct Sign Structure	EA	x	= \$	-
152641 Modify Sign Structure	EA	x	= \$	-
5602XX Furnish Sign Structure	LS	1 x	2,600,000.00 = \$	2,600,000
5602XX Install Sign Structure	LS	1 x	2,600,000.00 = \$	2,600,000
56XXXX XXX" CIDHC Pile (Sign Foundation)	LF	x	= \$	-
860090 Maintain Existing Traffic Management	LS	x	= \$	-
860810 Inductive Loop Detectors	EA	x	= \$	-
86055X Lighting & Sign Illumination	LS	1 x	1,000,000.00 = \$	1,000,000
8607XX Interconnection Facilities	LS	x	= \$	-
8609XX Traffic Monitoring Stations	LS	x	= \$	-
860XXX Signals & Lighting	LS	1 x	2,000,000.00 = \$	2,000,000
8611XX Ramp Metering System (Location X)	LS	x	= \$	-
8611XX Ramp Metering System (Location X)	LS	x	= \$	-
86XXXX Fiber Optic Conduit System	LS	x	= \$	-
XXXXXX Managed Lanes System and System Integration	LS	1 x	13,725,000.00 = \$	13,725,000
<i>Subtotal Traffic Electrical</i>				<b>\$ 21,925,000</b>

**6B - Traffic Signing and Striping**

Item code	Unit	Quantity	Unit Price (\$)	Cost
120090 Construction Area Signs	LS	1 x	50,000 = \$	50,000
150701 Remove Yellow Painted Traffic Stripe	LF	x	= \$	-
150710 Remove Traffic Stripe	LF	x	= \$	-
150713 Remove Pavement Marking	SQFT	x	= \$	-
150742 Remove Roadside Sign	EA	x	= \$	-
152320 Reset Roadside Sign	EA	x	= \$	-
152390 Relocate Roadside Sign	EA	x	= \$	-
566011 Roadside Sign (One Post)	EA	x	= \$	-
566012 Roadside Sign (Two Post)	EA	x	= \$	-
560XXX Furnish Sign Panels	SQFT	x	= \$	-
560XXX Install Sign Panels	SQFT	x	= \$	-
82010X Delineator (Class X)	EA	x	= \$	-
840501 Permanent Pavement Delineation	LF	288,000 x	1.00 = \$	288,000
xxxxxxx Signs (Managed Lanes and Roadside)	LS	1 x	915,000.00 = \$	915,000
<i>Subtotal Traffic Signing and Striping</i>				<b>\$ 1,253,000</b>

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

Item code	Unit	Quantity	Unit Price (\$)	Cost
120100 Traffic Control System	LS	1 x	2,000,000 = \$	2,000,000
120120 Type III Barricade	EA	x	= \$	-
120143 Temporary Pavement Delineation	LF	x	= \$	-
12016X Channelizer	EA	x	= \$	-
128650 Portable Changeable Message Signs	EA	4 x	5,000 = \$	20,000
129000 Temporary Railing (Type K)	LF	20,000 x	15.00 = \$	300,000
129100 Temp. Crash Cushion Module	EA	5 x	50,000.00 = \$	250,000
129099A Traffic Plastic Drum	EA	x	= \$	-
839603A Temporary Crash Cushion (ADIEM)	EA	x	= \$	-
XXXXXX Railroad Flagging	LS	1 x	250,000.00 = \$	250,000
<i>Subtotal Stage Construction and Traffic Handling</i>				<b>\$ 2,820,000</b>

<b>TOTAL TRAFFIC ITEMS</b>	<b>\$ 25,998,000</b>
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**SECTION 7: DETOURS**

Include constructing, maintaining, and removal

Item code	Unit	Quantity	Unit Price (\$)	Cost
0713XX Temporary Fence (Type X)	LF	x	= \$	-
07XXXX Temporary Drainage	LS	x	= \$	-
120143 Temporary Pavement Delineation	LF	x	= \$	-
1286XX Temporary Signals	EA	x	= \$	-
129000 Temporary Railing (Type K)	LF	x	= \$	-
190101 Roadway Excavation	CY	x	= \$	-
198001 Imported Borrow	CY	x	= \$	-
198050 Embankment	CY	x	= \$	-
250401 Class 4 Aggregate Subbase	CY	x	= \$	-
260201 Class 2 Aggregate Base	CY	x	= \$	-
390132 Hot Mix Asphalt (Type A)	TON	x	= \$	-
XXXXXX Detour Roads	LS	1	x 1,000,000	= \$ 1,000,000
<b>TOTAL DETOURS</b>				<b>\$ 1,000,000</b>

SUBTOTAL SECTIONS 1-7 \$ 50,350,400

**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 10.0% \$ 5,035,040

Total of Section 1-7 \$ 50,350,400 x 10.0% = \$ 5,035,040

**TOTAL MINOR ITEMS \$ 5,035,100**

**SECTIONS 9: MOBILIZATION**

Item code	Unit	Quantity	Unit Price (\$)	Cost
999990 Total Section 1-8		\$ 55,385,500	x 10%	= \$ 5,538,550
<b>TOTAL MOBILIZATION</b>				<b>\$ 5,538,600</b>

**SECTION 10: SUPPLEMENTAL WORK**

Item code	Unit	Quantity	Unit Price (\$)	Cost
066015 Federal Trainee Program	LS	x	= \$	-
066063 Traffic Management Plan - Public Informati	LS	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 &	LS	x	= \$	-
066920 Dispute Review Board	LS	x	= \$	-
XXXXXX Some Item		x	= \$	-
<i>Cost of NPDES Supplemental Work specified in Section 5C</i>				<i>= \$ 200,000</i>
Total Section 1-8		\$ 55,385,500	5%	= \$ 2,769,275
<b>TOTAL SUPPLEMENTAL WORK</b>				<b>\$ 2,969,300</b>



**II. STRUCTURE ITEMS**

	<u>Bridge 1</u>	<u>Bridge 2</u>	
DATE OF ESTIMATE	07/25/17	00/00/00	00/00/00
Bridge Name	WIDEN EXISTING TOLAY CREEK BRIDGE BY 10 FEET (61 FT LONG X 42 FT WIDE)	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX
Bridge Number	20-0090	57-XXX	57-XXX
Structure Type	PC P/S I-GIRDER	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX
Width (Feet) [out to out]	16.00 LF	0.00 LF	0.00 LF
Total Bridge Length (Feet)	61.00 LF	0.00 LF	0.00 LF
Total Area (Square Feet)	976 SQFT	- SQFT	- SQFT
Structure Depth (Feet)	0.00 LF	0.00 LF	0.00 LF
Footing Type (pile or spread)	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX
Cost Per Square Foot	\$660.00	\$0.00	\$0.00
Contingency 25%	\$161,040	\$0	\$0
Bridge Removal (Portion)	\$50,000	\$0	\$0

<b>COST OF EACH STRUCTURE</b>	<b>\$855,200</b>	<b>\$0</b>	<b>\$0</b>
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DATE OF ESTIMATE	00/00/00	00/00/00	00/00/00
Name	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX
Bridge Number	57-XXX	57-XXX	57-XXX
Structure Type	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX
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)	- SQFT	0.00 SQFT	0.0 SQFT
Structure Depth (Feet)	0.00 LF	0.00 LF	0.00 LF
Footing Type (pile or spread)	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX
Cost Per Square Foot	\$0.00	\$0.00	\$0.00
Contingency			
Bridge Removal			

<b>COST OF EACH STRUCTURE</b>	<b>\$0</b>	<b>\$0.00</b>	<b>\$0.00</b>
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<b>TOTAL COST OF BRIDGES</b>	<b>\$855,200</b>
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<b>TOTAL COST OF BUILDINGS</b>	<b>\$0.00</b>
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<b>TOTAL COST OF STRUCTURES<sup>1</sup></b>	<b>\$855,200</b>
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Estimate Prepared By \_\_\_\_\_  
XXXXXXXXXXXXXXXXXXXX ----- Division of Structures

\_\_\_\_\_ Date

<sup>1</sup>Structure's Estimate includes Overhead and Mobilization.  
Add more sheets if needed. Call them 9a, 9b, 9c, ..., etc

### III. RIGHT OF WAY

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

A)	A1) Acquisition, including Excess Land Purchases, Damages & Goodwill,		\$	0
	A2) SB-1210		\$	0
B)	Acquisition of Offsite Mitigation (Tolay Creek Mitigation)		\$	1,000,000
C)	C1) Utility Relocation (State Share)		\$	0
	C2) Potholing (Design Phase)		\$	0
D)	Railroad Acquisition		\$	0
E)	Clearance / Demolition		\$	0
F)	Relocation Assistance (RAP and/or Last Resort Housing Costs)		\$	0
G)	Title and Escrow		\$	0
H)	Environmental Review		\$	0
I)	Condemnation Settlements	0%	\$	0
	(Items G & H applied to items A + B)			
J)	Design Appreciation Factor	0%	\$	0
K)	Utility Relocation (Construction Cost)		\$	2,000,000

L)	<b>TOTAL RIGHT OF WAY ESTIMATE</b>	<b>\$3,000,000</b>
	(Excluding Item #8 - Hazardous Waste)	

M)	<b>TOTAL R/W ESTIMATE: Escalated</b>	<b>\$3,000,000</b>
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N)	<b>Right of Way Support</b>	<b>\$</b>	<b>175,476</b>
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Support Cost	_____	
Estimate Prepared By	Project Coordinator <sup>1</sup>	Phone
Utility Estimate	_____	
Prepared By	Utility Coordinator <sup>2</sup>	Phone
R/W Acquisition	_____	
Estimate Prepared By	Right of Way Estimator <sup>3</sup>	Phone

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

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

***Planning Cost Estimate***  
***State Route 37 Ultimate Alternative U1 (4 Lane Hybrid)***  
**Project ID: 0418000329**

**Type of Estimate :** Planning  
**Program Code :**  
**Project Limits :** SR37 from SR121 to Mare Island Interchange  
**Description:** Widen and Raise SR37 from 2 lanes to 4 lanes between SR121 and Mare Island  
**Scope :** Widen and Raise Highway Adjacent to Existing Alignment between SR121 and Mare Island  
**Scenario:** Ultimate Alt U1 - 4 Lane Hybrid - Raise Highway Adjacent to Existing Alignment (Length of Causeway/Structures= 4.7 miles, Length of Embankment = 4.8 miles )

	<b>Current Cost</b>	<b>Escalated Cost</b>
ROADWAY ITEMS	\$ 711,411,000	\$ 1,108,355,200
STRUCTURE ITEMS	\$ 1,205,873,800	\$ 1,878,712,100
<b>SUBTOTAL CONSTRUCTION COST</b>	<b>\$ 1,917,284,800</b>	<b>\$ 2,987,067,300</b>
RIGHT OF WAY	\$ 234,000,000	\$ 246,833,300
<b>TOTAL CAPITAL OUTLAY COST</b>	<b>\$ 2,151,285,000</b>	<b>\$ 3,233,901,000</b>
PA/ED SUPPORT	\$ 53,782,200	\$ 53,782,200
PS&E SUPPORT	\$ 86,051,400	\$ 86,051,400
RIGHT OF WAY SUPPORT	\$ 10,756,500	\$ 10,756,500
CONSTRUCTION SUPPORT	\$ 75,295,000	\$ 75,295,000
<b>TOTAL CAPITAL OUTLAY SUPPORT COST*</b>	<b>\$ 225,885,100</b>	<b>\$ 225,885,100</b>
<b>TOTAL PROJECT COST</b>	<b>\$ 2,378,000,000</b>	<b>\$ 3,460,000,000</b>

If Project has been programmed enter Programmed Amount \$ -

Date of Estimate (Month/Year) Month / Year  
8 / 2018

Estimated Date of Construction Start (Month/Year) 1 / 2030

Number of Working Days 1200 Working Days  
Month / Year

Estimated Mid-Point of Construction (Month/Year) 6 2032

Number of Plant Establishment Days 200 Days

***Estimated Project Schedule***

PID Approval 12/31/18  
PA/ED Approval 12/31/25  
PS&E 12/31/28  
RTL 07/30/29  
Begin Construction 01/01/30

Approved by Project  
Manager

(xxx) xxx-xxxx

Project Manager

Date

Phone

# I. ROADWAY ITEMS SUMMARY

Section	Cost
1 Earthwork	\$ 260,507,500
2 Pavement Structural Section	\$ 21,637,300
3 Drainage	\$ 4,919,000
4 Specialty Items	\$ 6,169,000
5 Environmental	\$ 44,038,000
6 Traffic Items	\$ 44,695,000
7 Detours	\$ 2,000,000
8 Minor Items	\$ 38,396,600
9 Roadway Mobilization	\$ 42,236,300
10 Supplemental Work	\$ 21,318,200
11 State Furnished	\$ 1,800,000
12 Contingencies	\$ 142,282,200
13 Overhead	\$ 81,411,900
<b>TOTAL ROADWAY ITEMS</b>	<b>\$ 711,411,000</b>

Estimate Prepared By \_\_\_\_\_  
Name and Title
Date
Phone

Estimate Reviewed 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.**

PRELIMINARY  
PROJECT COST ESTIMATE

**SECTION 1: EARTHWORK**

Item code	Unit	Quantity		Unit Price (\$)		Cost
160101 Clearing & Grubbing	LS	1	x	250,000.00	= \$	250,000
170101 Develop Water Supply	LS		x		= \$	-
190101 Roadway Excavation	CY		x		= \$	-
190103 Roadway Excavation (Type Y) ADL	CY		x		= \$	-
190105 Roadway Excavation (Type Z-2) ADL	CY		x		= \$	-
192037 Structure Excavation (Retaining Wall)	CY		x		= \$	-
193013 Structure Backfill (Retaining Wall)	CY		x		= \$	-
193031 Pervious Backfill Material (Retaining Wall)	CY		x		= \$	-
194001 Ditch Excavation	CY		x		= \$	-
198001 Imported Borrow	CY		x		= \$	-
198002 Imported Borrow - Intersection/Ramps	CY	44,150	x	50.00	= \$	2,207,500
198007 Imported Material (Shoulder Backing)	TON		x		= \$	-
XXXXXX Ramp & Intersection Earthwork	LS	1	x	500,000	= \$	500,000
XXXXXX EPS Blocks Embankment System*	LF	25,500	x	10,100	= \$	257,550,000

\* Unit Price includes roadway excavation

<b>TOTAL EARTHWORK SECTION ITEMS</b>	<b>\$ 260,507,500</b>
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**SECTION 2: PAVEMENT STRUCTURAL SECTION**

Item code	Unit	Quantity		Unit Price (\$)		Cost
150771 Remove Asphalt Concrete Dike	LF		x		= \$	-
150305 Obliterate Surfacing	SQYD		x		= \$	-
150860 Remove Base and Surfacing	CY	125,200	x	9.00	= \$	1,126,800
153103 Cold Plane Asphalt Concrete Pavement	SQYD		x		= \$	-
1532XX Remove Concrete (type)	CY		x		= \$	-
250401 Class 4 Aggregate Subbase	CY		x		= \$	-
260201 Class 2 Aggregate Base	CY	137,390	x	50.00	= \$	6,869,500
290201 Asphalt Treated Permeable Base	CY		x		= \$	-
365001 Sand Cover	TON		x		= \$	-
374002 Asphaltic Emulsion (Fog Seal Coat)	TON		x		= \$	-
374492 Asphaltic Emulsion (Polymer Modified)	TON		x		= \$	-
3750XX Screenings (Type XX)	TON		x		= \$	-
377501 Slurry Seal	TON		x		= \$	-
390095 Replace Asphalt Concrete Surfacing	CY		x		= \$	-
390132 Hot Mix Asphalt (Type A)	TON	90,590	x	100.00	= \$	9,059,000
390136 Minor Hot Mix Asphalt	TON		x		= \$	-
390137 Rubberized Hot Mix Asphalt (Gap Graded)	TON	29,850	x	120.00	= \$	3,582,000
393003 Geosynthetic Pavement Interlayer	SQYD		x		= \$	-
39405X Shoulder Rumber Strip (HMA, Type XX Indent	STA		x		= \$	-
394071 Place Hot Mix Asphalt Dike	LF		x		= \$	-
394090 Place Hot Mix Asphalt (Misc. Area)	SQYD		x		= \$	-
397005 Tack Coat	TON		x		= \$	-
401000 Concrete Pavement	CY		x		= \$	-
401108 Replace Concrete Pavement (Rapid Strength (	CY		x		= \$	-
404092 Seal Pavement Joint	LF		x		= \$	-
404094 Seal Longitudinal Isolation Joint	LF		x		= \$	-
413112A Repair Spalled Joints (Polyester Grout)	SQYD		x		= \$	-
413115 Seal Existing Concrete Pavement Joint	LF		x		= \$	-
420102 Groove Existing Concrete Pavement	SQYD		x		= \$	-
420201 Grind Existing Concrete Pavement	SQYD		x		= \$	-
731502 Minor Concrete (Misc. Const)	CY		x		= \$	-
731530 Minor Concrete (Textured Paving)	SQFT		x		= \$	-
XXXXXX Ramp & Intersection Reconstruction	LS	1	x	1,000,000	= \$	1,000,000

<b>TOTAL STRUCTURAL SECTION ITEMS</b>	<b>\$ 21,637,300</b>
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**SECTION 3: DRAINAGE**

Item code	Unit	Quantity	Unit Price (\$)	Cost
150206	Abandon Culvert	LF	x	= \$ -
150805	Remove Culvert	LF	x	= \$ -
150820	Modify Inlet	EA	x	= \$ -
152430	Adjust Inlet	LF	x	= \$ -
155003	Cap Inlet	EA	x	= \$ -
193114	Sand Backfill	CY	x	= \$ -
510502	Minor Concrete (Minor Structure)	CY	x	= \$ -
510512	Minor Concrete (Box Culvert)	CY	x	= \$ -
62XXXX	XXX" APC Pipe	LF	x	= \$ -
64XXXX	XXX" Plastic Pipe	LF	x	= \$ -
65XXXX	XXX" RCP Pipe	LF	x	= \$ -
66XXXX	XXX" CSP Pipe	LF	x	= \$ -
68XXXX	Edge Drain	LF	x	= \$ -
69XXXX	XXX" Pipe Downdrain	LF	x	= \$ -
70XXXX	XXX" Pipe Inlet	LF	x	= \$ -
70XXXX	XXX" Pipe Riser	LF	x	= \$ -
70XXXX	XXX" Flared End Section	EA	x	= \$ -
703233	Grated Line Drain	LF	x	= \$ -
72XXXX	Rock Slope Protection (Type and Method)	CY	x	= \$ -
721420	Concrete (Ditch Lining)	CY	x	= \$ -
721430	Concrete (Channel Lining)	CY	x	= \$ -
729010	Rock Slope Protection Fabric	SQYD	x	= \$ -
750001	Miscellaneous Iron and Steel	LB	x	= \$ -
XXXXXX	Additional Drainage (20% of total Sections 1 and 2 - EPS)	LS	1 x 4,918,960	= \$ 4,918,960
XXXXXX	Some Item		x	= \$ -

<b>TOTAL DRAINAGE ITEMS</b>	<b>\$ 4,919,000</b>
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**SECTION 4: SPECIALTY ITEMS**

Item code	Unit	Quantity	Unit Price (\$)	Cost
070012	Progress Schedule (Critical Path Method)	LS	x	= \$ -
150662	Remove Metal Beam Guard Railing	LF	x	= \$ -
150668	Remove Terminal Systems	EA	x	= \$ -
1532XX	Remove Barrier (Insert Type)	LF	x	= \$ -
153250	Remove Sound Wall	SQFT	x	= \$ -
190110	Lead Compliance Plan	LS	x	= \$ -
49XXXX	CIDH Concrete Piling (Insert Diameter)	LF	x	= \$ -
510060	Structural Concrete (Retaining Wall)	CY	x	= \$ -
510133	Class 2 Concrete (Retaining Wall)	CY	x	= \$ -
510524	Minor Concrete (Sound Wall)	CY	x	= \$ -
5110XX	Architectural Treatment (Insert Type)	SQFT	x	= \$ -
511048	Apply Anti-Graffiti Coating	SQFT	x	= \$ -
5136XX	Reinforced Concrete Crib Wall (Insert Type)	SQFT	x	= \$ -
518002	Sound Wall (Masonry Block)	SQFT	x	= \$ -
520103	Bar Reinf. Steel (Retaining Wall)	LB	x	= \$ -
80XXXX	Fence (Insert Type)	LF	x	= \$ -
832001	Metal Beam Guard Railing	LF	51,000 x 39.00	= \$ 1,989,000
839310	Double Thrie Beam Barrier	LF	x	= \$ -
839521	Cable Railing	LF	x	= \$ -
83954X	Transition Railing (Insert Type)	EA	x	= \$ -
8395XX	Terminal System (Type CAT)	EA	x	= \$ -
8395XX	Alternative Flared Terminal System	EA	x	= \$ -
8395XX	End Anchor Assembly (Insert Type)	EA	x	= \$ -
839561	Rail Tensioning Assembly	EA	x	= \$ -
839XXX	Crash Cushion (Insert Type)	EA	10 x 10,000.00	= \$ 100,000
83XXXX	Concrete Barrier (Type 60)	LF	51,000 x 80.00	= \$ 4,080,000
XXXXXX	Some Item		x	= \$ -

<b>TOTAL SPECIALTY ITEMS</b>	<b>\$ 6,169,000</b>
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**SECTION 5: ENVIRONMENTAL**

**5A - ENVIRONMENTAL MITIGATION**

Item code		Unit	Quantity		Unit Price (\$)		Cost	
	Biological Mitigation	LS		x		=		
071325	Temporary REINFORCED SILT FENCE	LF	30,000	x	15.00	= \$	450,000	
071325	Temporary Fence (Type ESA)	LF	100,000	x	8.00	= \$	800,000	
							<u>Subtotal Environmental</u>	<u>\$ 1,250,000</u>

**5B - LANDSCAPE AND IRRIGATION**

Item code		Unit	Quantity		Unit Price (\$)		Cost	
200001	Highway Planting	LS	1	x	1,000,000.00	= \$	1,000,000	
20XXXX	XXX" (Insert Type) Conduit (Use for Irrigation x-overs)	LF		x		= \$	-	
20XXXX	Extend XXX" (Insert Type) Conduit (Use for Extension of Irrigation x-overs)	LF		x		= \$	-	
201700	Imported Topsoil	CY		x		= \$	-	
2030XX	Erosion Control (Type __)	SQYD		x		= \$	-	
203021	Fiber Rolls	LF		x		= \$	-	
203026	Move In/ Move Out (Erosion Control)	EA		x		= \$	-	
204099	Plant Establishment Work	LS		x		= \$	-	
204101	Extend Plant Establishment (X Years)	LS		x		= \$	-	
208000	Irrigation System	LS		x		= \$	-	
208304	Water Meter	EA		x		= \$	-	
209801	Maintenance Vehicle Pullout	EA		x		= \$	-	
XXXXXX	Some Item						-	
							<u>Subtotal Landscape and Irrigation</u>	<u>\$ 1,000,000</u>

**5C - NPDES**

Item code		Unit	Quantity		Unit Price (\$)		Cost
074016	Construction Site Management	LS	1	x	200,000.00	= \$	200,000
074017	Prepare WPCP	LS		x		= \$	-
074019	Prepare SWPPP	LS		x		= \$	-
074023	Temporary Erosion Control	SQYD		x		= \$	-
074027	Temporary Erosion Control Blanket	SQYD		x		= \$	-
074028	Temporary Fiber Roll	LF		x		= \$	-
074032	Temporary Concrete Washout Facility	EA		x		= \$	-
074033	Temporary Construction Entrance	EA		x		= \$	-
074035	Temporary Check Dam	LF		x		= \$	-
074037	Move In/ Move Out (Temporary Erosion Con	EA		x		= \$	-
074038	Temp. Drainage Inlet Protection	EA		x		= \$	-
074041	Street Sweeping	LS		x		= \$	-
074042	Temporary Concrete Washout (Portable)	LS		x		= \$	-
XXXXXX	Construction BMPs(1% of Esc Roadway Items) See 5A above for Bio BMPs	LS	1,100,000,000	x	1.0%	= \$	11,000,000
XXXXXX	Des Pollu Prev & Treatment BMPs	AC	76.5	x	400,000.00	= \$	30,588,000

**Supplemental Work for NPDES**

(These costs are not accounted in total here but under Supplemental Work on sheet 7 of 11).

066595	Water Pollution Control Maintenance Sharing	LS	1	x	100,000.00	= \$	100,000
066596	Additional Water Pollution Control**	LS		x		= \$	-
066597	Storm Water Sampling and Analysis***	LS	1	x	100,000.00	= \$	100,000
XXXXXX	Some Item						-

Subtotal NPDES (Without Supplemental Work)    \$ 41,788,000

\*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.

<b>TOTAL ENVIRONMENTAL</b>	<b>\$ 44,038,000</b>
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**SECTION 6: TRAFFIC ITEMS**

**6A - Traffic Electrical**

Item code	Unit	Quantity	Unit Price (\$)	Cost
150760 Remove Sign Structure	EA	x	= \$	-
151581 Reconstruct Sign Structure	EA	x	= \$	-
152641 Modify Sign Structure	EA	x	= \$	-
5602XX Furnish Sign Structure	LS	1 x	3,000,000.00 = \$	3,000,000
5602XX Install Sign Structure	LS	1 x	3,000,000.00 = \$	3,000,000
56XXXX XXX" CIDHC Pile (Sign Foundation)	LF	x	= \$	-
860090 Maintain Existing Traffic Management System	LS	x	= \$	-
860810 Inductive Loop Detectors	EA	x	= \$	-
86055X Lighting & Sign Illumination	LS	1 x	2,000,000.00 = \$	2,000,000
8607XX Interconnection Facilities	LS	x	= \$	-
8609XX Traffic Monitoring Stations	LS	x	= \$	-
860XXX Signals & Lighting	LS	1 x	5,000,000.00 = \$	5,000,000
8611XX Ramp Metering System (Mare Island EB On Ramp)	LS	1 x	1,000,000.00 = \$	1,000,000
8611XX Ramp Metering System (Mare Island WB On Ramp)	LS	1 x	1,000,000.00 = \$	1,000,000
86XXXX Fiber Optic Conduit System	LS	x	= \$	-
XXXXXX Managed Lane System & System Integration	LS	1 x	25,000,000.00 = \$	25,000,000
<u>Subtotal Traffic Electrical</u>				<u>\$ 40,000,000</u>

**6B - Traffic Signing and Striping**

Item code	Unit	Quantity	Unit Price (\$)	Cost
120090 Construction Area Signs	LS	1 x	50,000.00 = \$	50,000
150701 Remove Yellow Painted Traffic Stripe	LF	x	= \$	-
150710 Remove Traffic Stripe	LF	x	= \$	-
150713 Remove Pavement Marking	SQFT	x	= \$	-
150742 Remove Roadside Sign	EA	x	= \$	-
152320 Reset Roadside Sign	EA	x	= \$	-
152390 Relocate Roadside Sign	EA	x	= \$	-
566011 Roadside Sign (One Post)	EA	x	= \$	-
566012 Roadside Sign (Two Post)	EA	x	= \$	-
560XXX Furnish Sign Panels	SQFT	x	= \$	-
560XXX Install Sign Panels	SQFT	x	= \$	-
82010X Delineator (Class X)	EA	x	= \$	-
84XXXX Permanent Pavement Delineation	LS	1 x	500,000.00 = \$	500,000
xxxxxxx Signs (Managed Lanes and Roadside)	LS	1 x	950,000.00 = \$	950,000
<u>Subtotal Traffic Signing and Striping</u>				<u>\$ 1,500,000</u>

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

Item code	Unit	Quantity	Unit Price (\$)	Cost
120100 Traffic Control System	LS	1 x	2,000,000.00 = \$	2,000,000
120120 Type III Barricade	EA	x	= \$	-
120143 Temporary Pavement Delineation	LF	x	= \$	-
12016X Channelizer	EA	x	= \$	-
128650 Portable Changeable Message Signs	EA	4 x	5,000.00 = \$	20,000
129000 Temporary Railing (Type K)	LF	5,000 x	15.00 = \$	75,000
129100 Temp. Crash Cushion Module	EA	20 x	5,000.00 = \$	100,000
129099A Traffic Plastic Drum	EA	x	= \$	-
839603A Temporary Crash Cushion (ADIEM)	EA	x	= \$	-
XXXXXX Railroad Flagging	LS	1 x	1,000,000.00 = \$	1,000,000
<u>Subtotal Stage Construction and Traffic Handling</u>				<u>\$ 3,195,000</u>

<b>TOTAL TRAFFIC ITEMS</b>	<b>\$ 44,695,000</b>
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**SECTION 7: DETOURS**

Include constructing, maintaining, and removal

Item code	Unit	Quantity	Unit Price (\$)	Cost
0713XX Temporary Fence (Type X)	LF	x	= \$	-
07XXXX Temporary Drainage	LS	x	= \$	-
120143 Temporary Pavement Delineation	LF	x	= \$	-
1286XX Temporary Signals	EA	x	= \$	-
129000 Temporary Railing (Type K)	LF	x	= \$	-
190101 Roadway Excavation	CY	x	= \$	-
198001 Imported Borrow	CY	x	= \$	-
198050 Embankment	CY	x	= \$	-
250401 Class 4 Aggregate Subbase	CY	x	= \$	-
260201 Class 2 Aggregate Base	CY	x	= \$	-
390132 Hot Mix Asphalt (Type A)	TON	x	= \$	-
XXXXXX Detour Roads	LS	1	x 2,000,000.00	= \$ 2,000,000

<b>TOTAL DETOURS</b>	<b>\$ 2,000,000</b>
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SUBTOTAL SECTIONS 1-7 \$ 383,965,800

**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 10.0% \$ 38,396,580

Total of Section 1-7 \$ 383,965,800 x 10.0% = \$ 38,396,580

<b>TOTAL MINOR ITEMS</b>	<b>\$ 38,396,600</b>
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**SECTIONS 9: MOBILIZATION**

Item code	Unit	Quantity	Unit Price (\$)	Cost
999990 Total Section 1-8		\$ 422,362,400	x 10%	= \$ 42,236,300

<b>TOTAL MOBILIZATION</b>	<b>\$ 42,236,300</b>
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**SECTION 10: SUPPLEMENTAL WORK**

Item code	Unit	Quantity	Unit Price (\$)	Cost
066015 Federal Trainee Program	LS	x	= \$	-
066063 Traffic Management Plan - Public Information	LS	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 Fluctuations	LS	x	= \$	-
066700 Partnering	LS	x	= \$	-
066866 Operation of Existing Traffic Management System I	LS	x	= \$	-
066920 Dispute Review Board	LS	x	= \$	-
XXXXXX Some Item		x	= \$	-

Cost of NPDES Supplemental Work specified in Section 5C = \$ 200,000

Total Section 1-8 \$ 422,362,400 5% = \$ 21,118,200

<b>TOTAL SUPPLEMENTAL WORK</b>	<b>\$ 21,318,200</b>
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## II. STRUCTURE ITEMS

	<u>Bridge 1</u>	<u>Bridge 2</u>	<u>Bridge 3</u>
DATE OF ESTIMATE	06/27/18	06/27/18	06/27/18
Bridge Name	SMART AND TOLAY CREEK CAUSEWAY	RECONSTRUCT SONOMA CREEK BRIDGE	CAUSEWAYS B2, B3, B4, B5, B6
Bridge Number		23-0063	
Structure Type	PRECAST	PRECAST	PRECAST
Width (Feet) [out to out]	96.44 LF	96.44 LF	96.44 LF
Total Bridge Length (Feet)	2900.00 LF	2500.00 LF	17850.00 LF
Total Area (Square Feet)	279,676 SQFT	241,100 SQFT	1,721,454 SQFT
Structure Depth (Feet)	0.00 LF	0.00 LF	0.00 LF
Footing Type (pile or spread)	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX
Cost Per Square Foot	\$385.00	\$385.00	\$385.00
Contingency 25%	\$26,918,820	\$23,205,880	\$165,689,950
Bridge Removal	\$150,000	\$1,000,000	

<b>COST OF EACH STRUCTURE</b>	<b>\$134,744,100</b>	<b>\$117,029,400</b>	<b>\$828,449,700</b>
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	<u>Bridge 4</u>	<u>Bridge 5</u>	<u>Bridge 6</u>
DATE OF ESTIMATE	06/27/18	07/12/18	07/12/15
Bridge Name	CAUSEWAY NAPA RIVER BR APPROACH	RECONSTRUCT WALNUT AVE OVERCROSSING	MARE ISLAND INTERCHANGE RAMPS
Bridge Number		23-0109	
Structure Type	PRECAST	BOX GIRDER	BOX GIRDER
Width (Feet) [out to out]	96.44 LF	75.00 LF	25.00 LF
Total Bridge Length (Feet)	1,530 LF	700.00 LF	2400.00 LF
Total Area (Square Feet)	147,553 SQFT	52,500 SQFT	60,000 SQFT
Structure Depth (Feet)	0.00 LF	0.00 LF	0.00 LF
Footing Type (pile or spread)	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX
Cost Per Square Foot	\$385.00	\$385.00	\$385.00
Contingency 25%	\$14,202,000	\$5,053,130	\$5,775,000
Bridge Removal		\$500,000	

<b>COST OF EACH STRUCTURE</b>	<b>\$71,010,000</b>	<b>\$25,765,600</b>	<b>\$28,875,000</b>
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<b>TOTAL COST OF BRIDGES</b>	<b>\$1,205,873,800</b>
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<b>TOTAL COST OF BUILDINGS</b>	<b>\$0.00</b>
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<b>TOTAL COST OF STRUCTURES<sup>1</sup></b>	<b>\$1,205,873,800</b>
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Estimate Prepared By: \_\_\_\_\_ Date: \_\_\_\_\_  
XXXXXXXXXXXXXXXXXXXX ----- Division of Structures

<sup>1</sup>Structure's Estimate includes Overhead and Mobilization.  
Add more sheets if needed. Call them 9a, 9b, 9c, ...., etc  
Bridge 5 includes Causeways B2 to B5

### III. RIGHT OF WAY

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

A)	A1) Acquisition, including Excess Land Purchases, Damages & Goodwill,		\$	23,000,000
	A2) SB-1210		\$	0
B)	Acquisition of Offsite Mitigation*		\$	201,000,000
C)	C1) Utility Relocation (State Share)		\$	0
	C2) Potholing (Design Phase)		\$	0
D)	Railroad Acquisition		\$	0
E)	Clearance / Demolition		\$	0
F)	Relocation Assistance (RAP and/or Last Resort Housing Costs)		\$	0
G)	Title and Escrow		\$	0
H)	Environmental Review		\$	0
I)	Condemnation Settlements	0%	\$	0
	(Items G & H applied to items A + B)			
J)	Design Appreciation Factor	0%	\$	0
K)	Utility Relocation (Construction Cost)		\$	10,000,000

L) 

<b>TOTAL RIGHT OF WAY ESTIMATE</b>	<b>\$234,000,000</b>
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(Excluding Item #8 - Hazardous Waste)

M) 

<b>TOTAL R/W ESTIMATE: Escalated</b>	<b>\$246,833,251</b>
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N) 

<b>Right of Way Support</b>	<b>\$</b>	<b>10,756,425</b>
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\* Based on 3:1 mitigation for wetlands/bayland @ \$1M/acre and 1:1 mitig for Other Waters (footings only) @ \$1M/ac

Support Cost Estimate Prepared By	Project Coordinator <sup>1</sup>	Phone
Utility Estimate Prepared By	Utility Coordinator <sup>2</sup>	Phone
R/W Acquisition 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

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

***Planning Cost Estimate***  
***State Route 37 Ultimate Alternative U2 (4 Lane CAUSEWAY)***  
**Project ID: 0418000329**

**Type of Estimate :** Planning  
**Program Code :**  
**Project Limits :** SR37 from SR121 to Mare Island Interchange  
**Description:** Widen and Raise SR37 from 2 lanes to 4 lanes between SR121 and Mare Island  
**Scope :** Widen and Raise Highway Adjacent to Existing Alignment between SR121 and Mare Island  
**Scenario:** Ultimate Alternative U2 - 4 Lane CAUSEWAY- Raise Highway Adjacent to Existing Alignment, Length of Causeway/Structure = 8.5 miles, Length of Embankment=1.0 mile

	<b>Current Cost</b>	<b>Escalated Cost</b>
ROADWAY ITEMS	\$ 348,664,200	\$ 543,207,500
STRUCTURE ITEMS	\$ 2,139,678,300	\$ 3,333,549,100
<b>SUBTOTAL CONSTRUCTION COST</b>	<b>\$ 2,488,342,500</b>	<b>\$ 3,876,756,600</b>
RIGHT OF WAY	\$ 166,100,000	\$ 175,027,500
<b>TOTAL CAPITAL OUTLAY COST</b>	<b>\$ 2,654,443,000</b>	<b>\$ 4,051,785,000</b>
PR/ED SUPPORT	\$ 66,361,100	\$ 66,361,100
PS&E SUPPORT	\$ 106,177,800	\$ 106,177,800
RIGHT OF WAY SUPPORT	\$ 13,272,300	\$ 13,272,300
CONSTRUCTION SUPPORT	\$ 92,905,600	\$ 92,905,600
<b>TOTAL CAPITAL OUTLAY SUPPORT COST*</b>	<b>\$ 278,716,800</b>	<b>\$ 278,716,800</b>
<b>TOTAL PROJECT COST</b>	<b>\$ 2,934,000,000</b>	<b>\$ 4,331,000,000</b>

*If Project has been programmed enter Programmed Amount* \$ -

Date of Estimate (Month/Year) Month / Year  
7 / 2018

Estimated Date of Construction Start (Month/Year) 1 / 2030

Number of Working Days 1200 Working Days

Estimated Mid-Point of Construction (Month/Year) Month / Year  
6 2032

Number of Plant Establishment Days 200 Days

***Estimated Project Schedule***

*PID Approval* 12/31/18  
*PAVED Approval* 12/31/25  
*PS&E* 12/31/28  
*RTL* 07/30/29  
*Begin Construction* 01/01/30

Approved by Project  
Manager

(xxx) xxx-xxxx

Project Manager

Date

Phone

## I. ROADWAY ITEMS SUMMARY

<b>Section</b>		<b>Cost</b>
1	Earthwork	\$ 57,497,500
2	Pavement Structural Section	\$ 6,742,700
3	Drainage	\$ 1,940,100
4	Specialty Items	\$ 1,254,600
5	Environmental	\$ 14,618,000
6	Traffic Items	\$ 44,695,000
7	Detours	\$ 2,000,000
8	Minor Items	\$ 12,874,800
9	Roadway Mobilization	\$ 14,162,300
10	Supplemental Work	\$ 7,281,200
11	State Furnished	\$ 1,800,000
12	Contingencies	\$ 69,732,900
13	Overhead	\$ 114,065,100
<b>TOTAL ROADWAY ITEMS</b>		<b>\$ 348,664,200</b>

Estimate Prepared By \_\_\_\_\_  
 Name and Title                      Date                      Phone

Estimate Reviewed 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
160101	Clearing & Grubbing	LS	1	x	250,000.00	= \$	250,000
170101	Develop Water Supply	LS		x		= \$	-
190101	Roadway Excavation	CY		x		= \$	-
190103	Roadway Excavation (Type Y) ADL	CY		x		= \$	-
190105	Roadway Excavation (Type Z-2) ADL	CY		x		= \$	-
192037	Structure Excavation (Retaining Wall)	CY		x		= \$	-
193013	Structure Backfill (Retaining Wall)	CY		x		= \$	-
193031	Pervious Backfill Material (Retaining Wall)	CY		x		= \$	-
194001	Ditch Excavation	CY		x		= \$	-
198001	Imported Borrow	CY		x		= \$	-
198002	Imported Borrow - Intersection/Ramps	CY	44,150	x	50.00	= \$	2,207,500
198007	Imported Material (Shoulder Backing)	TON		x		= \$	-
XXXXXX	Ramp & Intersection Reconstruction	LS	1	x	500,000	= \$	500,000
XXXXXX	EPS Blocks Embankment System	LF	5,400	x	10,100	= \$	54,540,000

<b>TOTAL EARTHWORK SECTION ITEMS</b>	<b>\$ 57,497,500</b>
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**SECTION 2: PAVEMENT STRUCTURAL SECTION**

Item code		Unit	Quantity		Unit Price (\$)		Cost
150771	Remove Asphalt Concrete Dike	LF		x		= \$	-
150305	Obliterate Surfacing	SQYD		x		= \$	-
150860	Remove Base and Surfacing	CY	125,200	x	9.00	= \$	1,126,800
153103	Cold Plane Asphalt Concrete Pavement	SQYD		x		= \$	-
1532XX	Remove Concrete (type)	CY		x		= \$	-
250401	Class 4 Aggregate Subbase	CY		x		= \$	-
260201	Class 2 Aggregate Base	CY	32,350	x	50.00	= \$	1,617,500
290201	Asphalt Treated Permeable Base	CY		x		= \$	-
365001	Sand Cover	TON		x		= \$	-
374002	Asphaltic Emulsion (Fog Seal Coat)	TON		x		= \$	-
374492	Asphaltic Emulsion (Polymer Modified)	TON		x		= \$	-
3750XX	Screenings (Type XX)	TON		x		= \$	-
377501	Slurry Seal	TON		x		= \$	-
390095	Replace Asphalt Concrete Surfacing	CY		x		= \$	-
390132	Hot Mix Asphalt (Type A)	TON	22,100	x	100.00	= \$	2,210,000
390136	Minor Hot Mix Asphalt	TON		x		= \$	-
390137	Rubberized Hot Mix Asphalt (Gap Graded)	TON	6,570	x	120.00	= \$	788,400
393003	Geosynthetic Pavement Interlayer	SQYD		x		= \$	-
39405X	Shoulder Rumber Strip (HMA, Type XX Inden	STA		x		= \$	-
394071	Place Hot Mix Asphalt Dike	LF		x		= \$	-
394090	Place Hot Mix Asphalt (Misc. Area)	SQYD		x		= \$	-
397005	Tack Coat	TON		x		= \$	-
401000	Concrete Pavement	CY		x		= \$	-
401108	Replace Concrete Pavement (Rapid Strength	CY		x		= \$	-
404092	Seal Pavement Joint	LF		x		= \$	-
404094	Seal Longitudinal Isolation Joint	LF		x		= \$	-
413112A	Repair Spalled Joints (Polyester Grout)	SQYD		x		= \$	-
413115	Seal Existing Concrete Pavement Joint	LF		x		= \$	-
420102	Groove Existing Concrete Pavement	SQYD		x		= \$	-
420201	Grind Existing Concrete Pavement	SQYD		x		= \$	-
731502	Minor Concrete (Misc. Const)	CY		x		= \$	-
731530	Minor Concrete (Textured Paving)	SQFT		x		= \$	-
XXXXXX	Ramp & Intersection Reconstruction	LS	1	x	1,000,000	= \$	1,000,000

<b>TOTAL STRUCTURAL SECTION ITEMS</b>	<b>\$ 6,742,700</b>
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**SECTION 3: DRAINAGE**

Item code		Unit	Quantity	Unit Price (\$)	Cost
150206	Abandon Culvert	LF	x	= \$	-
150805	Remove Culvert	LF	x	= \$	-
150820	Modify Inlet	EA	x	= \$	-
152430	Adjust Inlet	LF	x	= \$	-
155003	Cap Inlet	EA	x	= \$	-
193114	Sand Backfill	CY	x	= \$	-
510502	Minor Concrete (Minor Structure)	CY	x	= \$	-
510512	Minor Concrete (Box Culvert)	CY	x	= \$	-
62XXXX	XXX" APC Pipe	LF	x	= \$	-
64XXXX	XXX" Plastic Pipe	LF	x	= \$	-
65XXXX	XXX" RCP Pipe	LF	x	= \$	-
66XXXX	XXX" CSP Pipe	LF	x	= \$	-
68XXXX	Edge Drain	LF	x	= \$	-
69XXXX	XXX" Pipe Downdrain	LF	x	= \$	-
70XXXX	XXX" Pipe Inlet	LF	x	= \$	-
70XXXX	XXX" Pipe Riser	LF	x	= \$	-
70XXXX	XXX" Flared End Section	EA	x	= \$	-
703233	Grated Line Drain	LF	x	= \$	-
72XXXX	Rock Slope Protection (Type and Method)	CY	x	= \$	-
721420	Concrete (Ditch Lining)	CY	x	= \$	-
721430	Concrete (Channel Lining)	CY	x	= \$	-
729010	Rock Slope Protection Fabric	SQYD	x	= \$	-
750001	Miscellaneous Iron and Steel	LB	x	= \$	-
XXXXXX	Additional Drainage (20% of total Sections 1 and 2 - EPS)	LS	1	x 1,940,040	= \$ 1,940,040
XXXXXX	Some Item			x	= \$ -

<b>TOTAL DRAINAGE ITEMS</b>	<b>\$ 1,940,100</b>
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**SECTION 4: SPECIALTY ITEMS**

Item code		Unit	Quantity	Unit Price (\$)	Cost
070012	Progress Schedule (Critical Path Method)	LS	x	= \$	-
150662	Remove Metal Beam Guard Railing	LF	x	= \$	-
150668	Remove Terminal Systems	EA	x	= \$	-
1532XX	Remove Barrier (Insert Type)	LF	x	= \$	-
153250	Remove Sound Wall	SQFT	x	= \$	-
190110	Lead Compliance Plan	LS	x	= \$	-
49XXXX	CIDH Concrete Piling (Insert Diameter)	LF	x	= \$	-
510060	Structural Concrete (Retaining Wall)	CY	x	= \$	-
510133	Class 2 Concrete (Retaining Wall)	CY	x	= \$	-
510524	Minor Concrete (Sound Wall)	CY	x	= \$	-
5110XX	Architectural Treatment (Insert Type)	SQFT	x	= \$	-
511048	Apply Anti-Graffiti Coating	SQFT	x	= \$	-
5136XX	Reinforced Concrete Crib Wall (Insert Type)	SQFT	x	= \$	-
518002	Sound Wall (Masonry Block)	SQFT	x	= \$	-
520103	Bar Reinf. Steel (Retaining Wall)	LB	x	= \$	-
80XXXX	Fence (Insert Type)	LF	x	= \$	-
832001	Metal Beam Guard Railing	LF	5,400	x 39.00	= \$ 210,600
839310	Double Thrie Beam Barrier	LF	x	= \$	-
839521	Cable Railing	LF	x	= \$	-
83954X	Transition Railing (Insert Type)	EA	x	= \$	-
8395XX	Terminal System (Type CAT)	EA	x	= \$	-
8395XX	Alternative Flared Terminal System	EA	x	= \$	-
8395XX	End Anchor Assembly (Insert Type)	EA	x	= \$	-
839561	Rail Tensioning Assembly	EA	x	= \$	-
839XXX	Crash Cushion (Insert Type)	EA	10	x 10,000.00	= \$ 100,000
83XXXX	Concrete Barrier (Type 60)	LF	11,800	x 80.00	= \$ 944,000
XXXXXX	Some Item			x	= \$ -

<b>TOTAL SPECIALTY ITEMS</b>	<b>\$ 1,254,600</b>
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**SECTION 5: ENVIRONMENTAL**

**5A - ENVIRONMENTAL MITIGATION**

Item code		Unit	Quantity		Unit Price (\$)		Cost
	Biological Mitigation	LS	1	x	=		
071325	Temporary REINFORCED SILT FENCE	LF	30,000	x	15.00	= \$	450,000
071325	Temporary Fence (Type ESA)	LF	100,000	x	8.00	= \$	800,000
<u>Subtotal Environmental</u>							<u>\$ 1,250,000</u>

**5B - LANDSCAPE AND IRRIGATION**

Item code		Unit	Quantity		Unit Price (\$)		Cost
200001	Highway Planting	LS	1	x	500,000.00	= \$	500,000
20XXXX	XXX" (Insert Type) Conduit (Use for Irrigation x-overs)	LF		x	=	\$	-
20XXXX	Extend XXX" (Insert Type) Conduit (Use for Extension of Irrigation x-overs)	LF		x	=	\$	-
201700	Imported Topsoil	CY		x	=	\$	-
2030XX	Erosion Control (Type __)	SQYD		x	=	\$	-
203021	Fiber Rolls	LF		x	=	\$	-
203026	Move In/ Move Out (Erosion Control)	EA		x	=	\$	-
204099	Plant Establishment Work	LS		x	=	\$	-
204101	Extend Plant Establishment (X Years)	LS		x	=	\$	-
208000	Irrigation System	LS		x	=	\$	-
208304	Water Meter	EA		x	=	\$	-
209801	Maintenance Vehicle Pullout	EA		x	=	\$	-
XXXXXX	Some Item						-
<u>Subtotal Landscape and Irrigation</u>							<u>\$ 500,000</u>

**5C - NPDES**

Item code		Unit	Quantity		Unit Price (\$)		Cost
074016	Construction Site Management	LS	1	x	200,000.00	= \$	200,000
074017	Prepare WPCP	LS		x	=	\$	-
074019	Prepare SWPPP	LS		x	=	\$	-
074023	Temporary Erosion Control	SQYD		x	=	\$	-
074027	Temporary Erosion Control Blanket	SQYD		x	=	\$	-
074028	Temporary Fiber Roll	LF		x	=	\$	-
074032	Temporary Concrete Washout Facility	EA		x	=	\$	-
074033	Temporary Construction Entrance	EA		x	=	\$	-
074035	Temporary Check Dam	LF		x	=	\$	-
074037	Move In/ Move Out (Temporary Erosion Con	EA		x	=	\$	-
074038	Temp. Drainage Inlet Protection	EA		x	=	\$	-
074041	Street Sweeping	LS		x	=	\$	-
074042	Temporary Concrete Washout (Portable)	LS		x	=	\$	-
XXXXXX	Construction BMPS(1% of esc Roadway Items) See 5A above for Bio BMPS	LS	530,000,000	x	1.0%	= \$	5,300,000
XXXXXX	Des Pollu Prev & Treatment BMPs	AC	18.4	x	400,000.00	= \$	7,368,000

**Supplemental Work for NPDES**

(These costs are not accounted in total here but under Supplemental Work on sheet 7 of 11).

066595	Water Pollution Control Maintenance Sharing	LS	1	x	100,000.00	= \$	100,000
066596	Additional Water Pollution Control**	LS		x	=	\$	-
066597	Storm Water Sampling and Analysis***	LS	1	x	100,000.00	= \$	100,000
XXXXXX	Some Item						-

Subtotal NPDES (Without Supplemental Work)    \$ 12,868,000

\*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.

<b>TOTAL ENVIRONMENTAL</b>	<b>\$ 14,618,000</b>
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**SECTION 6: TRAFFIC ITEMS**

**6A - Traffic Electrical**

Item code	Unit	Quantity	Unit Price (\$)	Cost
150760 Remove Sign Structure	EA	x	= \$	-
151581 Reconstruct Sign Structure	EA	x	= \$	-
152641 Modify Sign Structure	EA	x	= \$	-
5602XX Furnish Sign Structure	LS	1	x 3,000,000.00	= \$ 3,000,000
5602XX Install Sign Structure	LS	1	x 3,000,000.00	= \$ 3,000,000
56XXXX XXX" CIDHC Pile (Sign Foundation)	LF	x	= \$	-
860090 Maintain Existing Traffic Management System	LS	x	= \$	-
860090 Elements During Construction	EA	x	= \$	-
860810 Inductive Loop Detectors	EA	x	= \$	-
86055X Lighting & Sign Illumination	LS	1	x 2,000,000.00	= \$ 2,000,000
8607XX Interconnection Facilities	LS	x	= \$	-
8609XX Traffic Monitoring Stations	LS	x	= \$	-
860XXX Signals & Lighting	LS	1	x 5,000,000.00	= \$ 5,000,000
8611XX Ramp Metering System (Mare Island EB On Ramp)	LS	1	x 1,000,000.00	= \$ 1,000,000
8611XX Ramp Metering System (Mare Island WB On Ramp)	LS	1	x 1,000,000.00	= \$ 1,000,000
86XXXX Fiber Optic Conduit System	LS	x	= \$	-
XXXXX Managed Lane System & System Integration	LS	1	x 25,000,000.00	= \$ 25,000,000
<i>Subtotal Traffic Electrical</i>				<u>\$ 40,000,000</u>

**6B - Traffic Signing and Striping**

Item code	Unit	Quantity	Unit Price (\$)	Cost
120090 Construction Area Signs	LS	1	x 50,000.00	= \$ 50,000
150701 Remove Yellow Painted Traffic Stripe	LF	x	= \$	-
150710 Remove Traffic Stripe	LF	x	= \$	-
150713 Remove Pavement Marking	SQFT	x	= \$	-
150742 Remove Roadside Sign	EA	x	= \$	-
152320 Reset Roadside Sign	EA	x	= \$	-
152390 Relocate Roadside Sign	EA	x	= \$	-
566011 Roadside Sign (One Post)	EA	x	= \$	-
566012 Roadside Sign (Two Post)	EA	x	= \$	-
560XXX Furnish Sign Panels	SQFT	x	= \$	-
560XXX Install Sign Panels	SQFT	x	= \$	-
82010X Delineator (Class X)	EA	x	= \$	-
84XXXX Permanent Pavement Delineation	LS	1	x 500,000.00	= \$ 500,000
xxxxxxx Signs (Managed Lane and Roadside)	LS	1	x 950,000.00	= \$ 950,000
<i>Subtotal Traffic Signing and Striping</i>				<u>\$ 1,500,000</u>

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

Item code	Unit	Quantity	Unit Price (\$)	Cost
120100 Traffic Control System	LS	1	x 2,000,000.00	= \$ 2,000,000
120120 Type III Barricade	EA	x	= \$	-
120143 Temporary Pavement Delineation	LF	x	= \$	-
12016X Channelizer	EA	x	= \$	-
128650 Portable Changeable Message Signs	EA	4	x 5,000.00	= \$ 20,000
129000 Temporary Railing (Type K)	LF	5,000	x 15.00	= \$ 75,000
129100 Temp. Crash Cushion Module	EA	20	x 5,000.00	= \$ 100,000
129099A Traffic Plastic Drum	EA	x	= \$	-
839603A Temporary Crash Cushion (ADIEM)	EA	x	= \$	-
XXXXXX Railroad Flagging	LS	1	x 1,000,000.00	= \$ 1,000,000
<i>Subtotal Stage Construction and Traffic Handling</i>				<u>\$ 3,195,000</u>

<b>TOTAL TRAFFIC ITEMS</b>	<b>\$ 44,695,000</b>
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**SECTION 7: DETOURS**

Include constructing, maintaining, and removal

Item code	Unit	Quantity	Unit Price (\$)	Cost
0713XX Temporary Fence (Type X)	LF	x	= \$	-
07XXXX Temporary Drainage	LS	x	= \$	-
120143 Temporary Pavement Delineation	LF	x	= \$	-
1286XX Temporary Signals	EA	x	= \$	-
129000 Temporary Railing (Type K)	LF	x	= \$	-
190101 Roadway Excavation	CY	x	= \$	-
198001 Imported Borrow	CY	x	= \$	-
198050 Embankment	CY	x	= \$	-
250401 Class 4 Aggregate Subbase	CY	x	= \$	-
260201 Class 2 Aggregate Base	CY	x	= \$	-
390132 Hot Mix Asphalt (Type A)	TON	x	= \$	-
XXXXXX Detour Roads	LS	1	x 2,000,000.00	= \$ 2,000,000
<b>TOTAL DETOURS</b>				<b>\$ 2,000,000</b>

SUBTOTAL SECTIONS 1-7 \$ 128,747,900

**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 10.0% \$ 12,874,790

Total of Section 1-7 \$ 128,747,900 x 10.0% = \$ 12,874,790

**TOTAL MINOR ITEMS \$ 12,874,800**

**SECTIONS 9: MOBILIZATION**

Item code	Quantity	Unit Price (\$)	Cost
999990 Total Section 1-8	\$ 141,622,700	x 10%	= \$ 14,162,270
<b>TOTAL MOBILIZATION</b>			<b>\$ 14,162,300</b>

**SECTION 10: SUPPLEMENTAL WORK**

Item code	Unit	Quantity	Unit Price (\$)	Cost
066015 Federal Trainee Program	LS	x	= \$	-
066063 Traffic Management Plan - Public Informatic	LS	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		x	= \$	-
<i>Cost of NPDES Supplemental Work specified in Section 5C</i>				= \$ 200,000
Total Section 1-8		\$ 141,622,700	5%	= \$ 7,081,135
<b>TOTAL SUPPLEMENTAL WORK</b>				<b>\$ 7,281,200</b>

**SECTION 11: STATE FURNISHED MATERIALS AND EXPENSES**

---

Item code	<i>Unit</i>	<i>Quantity</i>	<i>Unit Price (\$)</i>	<i>Cost</i>
066063 Public Information	LS	1	x 500,000.00 =	\$500,000
066105 RE Office	LS	1	x 1,000,000.00 = \$	1,000,000
066803 Padlocks	LS		x =	\$0
066838 Reflective Numbers and Edge Sealer	LS		x =	\$0
066901 Water Expenses	LS		x =	\$0
066062A COZEEP Expenses	LS	1	x 300,000.00 = \$	300,000
06684X Ramp Meter Controller Assembly	LS		x =	\$0
06684X TMS Controller Assembly	LS		x =	\$0
06684X Traffic Signal Controller Assembly	LS		x =	\$0
XXXXXX Some Item				
Total Section 1-8	\$	141,622,700	0%	= \$ -

<b>TOTAL STATE FURNISHED</b>	<b>\$1,800,000</b>
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**SECTION 12: TIME-RELATED OVERHEAD**

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

Item code	<i>Unit</i>	<i>Quantity</i>	<i>Unit Price (\$)</i>	<i>Cost</i>
070018 Time-Related Overhead	WD	1,200	X 95054.25 =	\$114,065,100

<b>TOTAL TIME-RELATED OVERHEAD</b>	<b>\$114,065,100</b>
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**SECTION 13: CONTINGENCY**

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

Total Section 1-11                      \$    278,931,300    x            25%            =    \$69,732,825

<b>TOTAL CONTINGENCY</b>	<b>\$69,732,900</b>
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**II. STRUCTURE ITEMS**

	<u><b>Bridge 1</b></u>	<u><b>Bridge 2</b></u>	<u><b>Bridge 3</b></u>
DATE OF ESTIMATE	06/27/18	06/27/18	06/27/18
Bridge Name	SMART AND TOLAY CREEK CAUSEWAY	RECONSTRUCT SONOMA CREEK BRIDGE	CAUSEWAYS BB1, BB2, BB3, BB4, BB5, BB6
Bridge Number		23-0063	
Structure Type	PRECAST	PRECAST	PRECAST
Width (Feet) [out to out]	96.44 LF	96.44 LF	96.44 LF
Total Bridge Length (Feet)	2900.00 LF	2500.00 LF	30900.00 LF
Total Area (Square Feet)	279,676 SQFT	241,100 SQFT	2,979,996 SQFT
Structure Depth (Feet)	0.00 LF	0.00 LF	0.00 LF
Footing Type (pile or spread)	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX
Cost Per Square Foot	\$385.00	\$385.00	\$385.00
Contingency 25%	\$26,918,815	\$23,205,875	\$286,824,615
Bridge Removal	\$150,000	\$1,000,000	

<b>COST OF EACH STRUCTURE</b>	<b>\$134,744,100</b>	<b>\$117,029,400</b>	<b>\$1,434,123,100</b>
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	<u><b>Bridge 4</b></u>	<u><b>Bridge 5</b></u>	<u><b>Bridge 6</b></u>
DATE OF ESTIMATE	06/27/18	06/27/18	06/27/18
Bridge Name	CAUSEWAY BB7	RECONSTRUCT WALNUT AVE OVERCROSSING	MARE ISLAND INTERCHANGE RAMPS
Bridge Number		23-0109	
Structure Type	PRECAST	BOX GIRDER	BOX GIRDER
Width (Feet) [out to out]	96.44 LF	75.00 LF	25.00 LF
Total Bridge Length (Feet)	8,600 LF	700.00 LF	2400.00 LF
Total Area (Square Feet)	829,384 SQFT	52,500 SQFT	60,000 SQFT
Structure Depth (Feet)	0.00 LF	0.00 LF	0.00 LF
Footing Type (pile or spread)	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX
Cost Per Square Foot	\$385.00	\$385.00	\$385.00
Contingency 25%	\$79,828,210	\$5,053,125	\$5,775,000
Bridge Removal		\$500,000	

<b>COST OF EACH STRUCTURE</b>	<b>\$399,141,100</b>	<b>\$25,765,600</b>	<b>\$28,875,000</b>
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<b>TOTAL COST OF BRIDGES</b>	<b>\$2,139,678,300</b>
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<b>TOTAL COST OF BUILDINGS</b>	<b>\$0.00</b>
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<b>TOTAL COST OF STRUCTURES<sup>1</sup></b>	<b>\$2,139,678,300</b>
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Estimate Prepared By \_\_\_\_\_  
XXXXXXXXXXXXXXXXXXXX ----- Division of Structures

\_\_\_\_\_ Date

<sup>1</sup>Structure's Estimate includes Overhead and Mobilization.  
Add more sheets if needed. Call them 9a, 9b, 9c, ..., etc  
Bridge 5 includes Causeways B2 to B5

### III. RIGHT OF WAY

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

A)	A1)	Acquisition, including Excess Land Purchases, Damages & Goodwill, Fees	\$	16,000,000
	A2)	SB-1210	\$	0
B)		Acquisition of Offsite Mitigation*	\$	140,100,000
C)	C1)	Utility Relocation (State Share)	\$	0
	C2)	Potholing (Design Phase)	\$	0
D)		Railroad Acquisition	\$	0
E)		Clearance / Demolition	\$	0
F)		Relocation Assistance (RAP and/or Last Resort Housing Costs)	\$	0
G)		Title and Escrow	\$	0
H)		Environmental Review	\$	0
I)		Condemnation Settlements	\$	0
		(Items G & H applied to items A + B)		
J)		Design Appreciation Factor	\$	0
K)		Utility Relocation (Construction Cost)	\$	10,000,000

L) 

<b>TOTAL RIGHT OF WAY ESTIMATE</b>	<b>\$166,100,000</b>
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(Excluding Item #8 - Hazardous Waste)

M) 

<b>TOTAL R/W ESTIMATE: Escalated</b>	<b>\$175,027,479</b>
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N) 

<b>Right of Way Support</b>	<b>\$</b>	<b>13,272,215</b>
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\* Based on 3:1 mitigation for wetlands/bayland at \$1M per acre

Support Cost		
Estimate Prepared By	Project Coordinator <sup>1</sup>	Phone
Utility Estimate Prepared By	Utility Coordinator <sup>2</sup>	Phone
R/W Acquisition 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

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