



## Appendix D

### Detailed Cost Estimate of Preferred Alternative Alignment

## Seven Bends - Alternative Alignment 3 Modified

### Opinion of Probable Project Costs

2021-11-04

Item Number	Item Description					Source of Unit Cost
		Quantity	Unit	Unit Cost <sup>9</sup>	Total Cost	
00110	Clearing and grubbing <sup>8</sup>	4.30	AC	\$40,000.00	\$172,000	District Average
	Seeding	3.20	AC	\$1,500.00	\$4,800	Estimated
00120	Regular Excavation <sup>1</sup>	109,200	CY	\$35.00	\$3,822,000	District Average
00270	Select Matl. TY I CBR-30 <sup>2</sup>	13,900	CY	\$30.00	\$417,000	State Average
	Pollutant Removal Credits	-	LB	\$25,000.00	\$0	Estimated
	SWM/BMP structures	-	EA	\$40,000.00	\$0	Estimated
12020	Std. Curb CG-2	-	LF	\$30.00	\$0	District Average
	Mod. CG-3	-	LF	\$30.00	\$0	State Average
12600	Curb and gutter (cg-6) <sup>8</sup>	-	LF	\$22.00	\$0	District Average
21020	MS-1A <sup>8</sup>	-	SY	\$100.00	\$0	District Average
21215	MS-2 <sup>8</sup>	-	LF	\$20.00	\$0	District Average
27410	Check Dam, Rock TY. I <sup>16</sup>	40	EA	\$500.00	\$20,000	State Average
	Drop Inlets <sup>4</sup>	-	EA	\$6,500.00	\$0	Estimated
	End Sections <sup>5</sup>	-	EA	\$276.00	\$0	Estimated
	Storm sewer <sup>4</sup>	-	LF	\$275.00	\$0	Estimated
	Underdrains <sup>5</sup>	-	LF	\$18.00	\$0	District Average
24410	Pavement Demolition <sup>8</sup>	-	SY	\$20.00	\$0	State Average
	Saw Cut	50	LF	\$10.00	\$500	State Average
10607	SM-12.5A <sup>3&amp;8</sup>	400	TON	\$113.00	\$45,200	District Average
10610	IM-19A <sup>3&amp;8</sup>	600	TON	\$94.00	\$56,400	District Average
10642	BM-25 <sup>3&amp;8</sup>	1,600	TON	\$107.00	\$171,200	District Average
10128	Stone 21B <sup>3&amp;8</sup>	1,200	TON	\$47.00	\$56,400	District Average
27500	Geotextile Fabric	-	SY	\$3.00	\$0	District Average
10628	Flexible Pavement Planning 0"-2"	-	SY	\$6.00	\$0	State Average
10607	SM-12.5A (Overlay) <sup>3&amp;8</sup>	-	TON	\$113.00	\$0	District Average
10881	Reinf. Hydraulic Cement Concrete Pavement (8")	-	SY	\$130.00	\$0	State Average
13222	Hydr. Cement Conc. Sidewalk 7"	-	SY	\$77.00	\$0	District Average
13108	CG-12 Detectable Warning Surface	-	SY	\$155.00	\$0	State Average
54075	Painting/Striping (TY.B Cl. VI 4") <sup>8</sup>	8,000	LF	\$5.00	\$40,000	District Average
	Pavement Messages / Arrows / Stop Bars / Accessible	-	EA	\$125.00	\$0	Estimated
24286	Flexible Post Delineator	-	EA	\$100.00	\$0	District Average
	GUARDRAIL GR-MGS1 <sup>9</sup>	-	LF	\$21.00	\$0	District Average
13286	GUARDRAIL TERMINAL GR-MGS2 <sup>8</sup>	-	EA	\$3,200.00	\$0	District Average
13460	Median Barriers (MB-7D) <sup>8</sup>	-	LF	\$66.00	\$0	District Average
	MSE Walls (length from plans, height from x-section)	-	SF	\$120.00	\$0	Estimated
13530	Retaining Walls (RW-3)	-	CY	\$1,600.00	\$0	State Average
	Bridge (See Bridge Tab for breakdown) <sup>8</sup>	8,500	SF	\$275.00	\$2,337,500	FHWA 2018 Unit Costs
	Bridge Rehabilitation (See Bridge Tab for breakdown) <sup>8</sup>	-	SF	\$107.00	\$0	Estimated
	Pedestrian Signal Equipment Not Included in Signal Replacement or Install	-	LS	\$400,000.00	\$0	Estimated
	New or Replacement Traffic Signal	-	LS	\$500,000.00	\$0	Estimated
	Traffic Signal Modification	-	LS	\$200,000.00	\$0	Estimated
	Lighting	-	LS	\$681,000.00	\$0	Estimated
	Overhead Signs	-	EA	\$75,000.00	\$0	Estimated
<b>Subtotal</b>					<b>\$7,143,000</b>	
	Erosion Control	5%	of Subtotal	\$357,150.00	\$357,150	5% Subtotal
	Unaccounted Items <sup>16</sup>	20%	of Subtotal	\$1,428,600.00	\$1,428,600	20% Subtotal
<b>Total</b>					<b>\$8,928,750</b>	

Additional Project Items			
Mobilization	(TOTAL CN AMOUNT - \$1,000,000) X 5% + \$80,000	of Total Cost	\$476,438
Survey		2% of Total Cost	\$178,575
Construction Contingency		10% of Total Cost	\$892,900
Contract Contingency		5%	\$446,438
Construction Engineering & Inspection		15% of Total Cost	\$1,339,400
<b>Grand Total Construction Cost</b>			<b>\$12,262,500</b>
Right of Way & Utilities	Right-of-Way Estimate <sup>13</sup>	3%	% Risk Level LOW \$367,875
	Utility Relocation Contingency <sup>14</sup>		LS LOW \$200,000
<b>Subtotal Right of Way &amp; Utilities</b>			<b>\$567,875</b>
P.E.			15% OF TOTAL CONSTRUCTION COST \$1,839,375
<b>GRAND TOTAL PROJECT COSTS (2020)</b>			<b>\$14,669,750</b>