

Alternative Access to South Whiskey Island Feasibility Study  
 Total Cost Estimates

7/28/2021

	Alternative 4	Alternative 15	Alternative 16	Alternative 36
Bridge Construction	\$ 15,993,500	\$ 94,041,800	\$ 22,413,900	\$ 22,000,000***
Roadway Construction	\$ 10,820,362	\$ 6,811,390	\$ 3,559,440	\$ 3,362,520
Contingency 30%	\$ 8,044,159	\$ 30,255,957	\$ 7,792,002	\$ 7,608,756
Construction Engineering 15%	\$ 5,228,703	\$ 5,064,801*	\$ 5,064,801	\$ 4,945,691
<b>Subtotal</b>	<b>\$ 40,086,724</b>	<b>\$ 136,173,948</b>	<b>\$ 38,830,143</b>	<b>\$ 37,916,967</b>
Preliminary Engineering 12%	\$ 4,810,407	\$ 4,659,617*	\$ 4,659,617	\$ 4,550,036
Right-of-Way Acquisition	\$ 139,283	\$ 826,278	\$ 1,706,400	\$ 1,571,553
<b>2019 Total</b>	<b>\$ 45,036,413</b>	<b>\$ 141,659,843</b>	<b>\$ 45,196,161</b>	<b>\$ 44,038,556</b>
Inflation (2019-2024) 17.8%	\$ 8,016,482	\$ 25,215,452	\$ 8,044,917	\$ 7,838,863
<b>2024 Total</b>	<b>\$ 53,052,895</b>	<b>\$ 166,875,295</b>	<b>\$ 53,241,077</b>	<b>\$ 51,877,419</b>
Operation and Maintenance	\$ 300,000/yr	\$ 300,000/yr	\$ 300,000/yr	\$ 30,000/yr

\* The Construction and Preliminary Engineering required for Alternative 15 is similar to that of Alternative 16.

For this reason, the Alternative 15 costs for these items were set equal to those values obtained for Alternative

\*\*\* The cost of the noise barrier for the bridge is included in the Roadway Construction cost in this table.

Inflation Rate: 17.80%

REF. NO.	ITEM	PROJECT QUANTITY	DESCRIPTION	UNIT	UNIT PRICE (2019)	PROJECT COST (2019)	UNIT PRICE (2024)	PROJECT COST (2024)
<b>ROADWAY</b>								
1	201	LUMP	CLEARING AND GRUBBING	LS	\$ 10,000.00	\$ 10,000.00	\$ 11,780.00	\$ 11,780.00
					<b>SUBTOTAL</b>	<b>\$ 10,000.00</b>	<b>SUBTOTAL</b>	<b>\$ 11,780.00</b>
<b>EROSION CONTROL</b>								
2	659	2	SOIL ANALYSIS TEST	EACH	\$ 128.24	\$ 257.00	\$ 151.07	\$ 303.00
3	659	7	TOPSOIL	CY	\$ 34.94	\$ 245.00	\$ 41.16	\$ 289.00
4	659	56	SEEDING AND MULCHING, CLASS 1	SY	\$ 4.59	\$ 258.00	\$ 5.41	\$ 303.00
5	659	3	REPAIR SEEDING AND MULCHING	SY	\$ 1.07	\$ 4.00	\$ 1.26	\$ 4.00
6	659	3	INTER-SEEDING	SY	\$ 0.43	\$ 2.00	\$ 0.51	\$ 2.00
7	659	0.01	COMMERCIAL FERTILIZER	TON	\$ 628.26	\$ 7.00	\$ 740.09	\$ 8.00
8	659	0.01	LIME	ACRE	\$ 145.96	\$ 2.00	\$ 171.94	\$ 2.00
9	659	1	WATER	MGAL	\$ 10.63	\$ 11.00	\$ 12.52	\$ 13.00
10	659	1	MOWING	MSF	\$ 20.59	\$ 21.00	\$ 24.26	\$ 25.00
					<b>SUBTOTAL</b>	<b>\$ 807.00</b>	<b>SUBTOTAL</b>	<b>\$ 949.00</b>
<b>PAVEMENT</b>								
11	253	921	PAVEMENT REPAIR	CY	\$ 450.00	\$ 414,450.00	\$ 530.10	\$ 488,223.00
12	254	11,042	PAVEMENT PLANING, ASPHALT CONCRETE	SY	\$ 2.50	\$ 27,605.00	\$ 2.95	\$ 32,519.00
13	441	921	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG64-22	CY	\$ 200.00	\$ 184,200.00	\$ 235.60	\$ 216,988.00
					<b>SUBTOTAL</b>	<b>\$ 626,255.00</b>	<b>SUBTOTAL</b>	<b>\$ 737,730.00</b>
<b>LIGHTING</b>								
14	625	LUMP	LIGHTING, MISC.	LS	\$ 50,000.00	\$ 50,000.00	\$ 58,900.00	\$ 58,900.00
					<b>SUBTOTAL</b>	<b>\$ 50,000.00</b>	<b>SUBTOTAL</b>	<b>\$ 58,900.00</b>
<b>TRAFFIC CONTROL</b>								
15	SPECIAL	LUMP	SIGNS AND SUPPORTS	LS	\$ 20,000.00	\$ 20,000.00	\$ 23,560.00	\$ 23,560.00
16	SPECIAL	LUMP	PAVEMENT MARKINGS	LS	\$ 3,500.00	\$ 3,500.00	\$ 4,123.00	\$ 4,123.00
					<b>SUBTOTAL</b>	<b>\$ 23,500.00</b>	<b>SUBTOTAL</b>	<b>\$ 27,683.00</b>
<b>STRUCTURES</b>								
17	SPECIAL	LUMP	STRUCTURES: EXISTING LIFT BRIDGE REHABILITATION	LS	\$ 15,993,500.00	\$ 15,993,500.00	\$ 18,840,343.00	\$ 18,840,343.00
18	SPECIAL	LUMP	STRUCTURES: TEMPORARY MOVEABLE BRIDGE	LS	\$ 9,000,000.00	\$ 9,000,000.00	\$ 10,602,000.00	\$ 10,602,000.00
					<b>SUBTOTAL</b>	<b>\$ 24,993,500.00</b>	<b>SUBTOTAL</b>	<b>\$ 29,442,343.00</b>
<b>INCIDENTALS</b>								
19	614	LUMP	MAINTAINING TRAFFIC	LS	\$ 50,000.00	\$ 50,000.00	\$ 58,900.00	\$ 58,900.00
20	619	12	FIELD OFFICE, TYPE B	MNTH	\$ 1,400.00	\$ 16,800.00	\$ 1,649.20	\$ 19,791.00
21	623	LUMP	CONSTRUCTION LAYOUT STAKES AND SURVEYING	LS	\$ 12,000.00	\$ 12,000.00	\$ 14,136.00	\$ 14,136.00
22	624	LUMP	MOBILIZATION	LS	\$ 800,000.00	\$ 800,000.00	\$ 942,400.00	\$ 942,400.00
23	SPECIAL	LUMP	PERFORMANCE BOND	LS	\$ 190,000.00	\$ 190,000.00	\$ 223,820.00	\$ 223,820.00
24	SPECIAL	LUMP	RAILROAD INSURANCE BOND	LS	\$ 6,000.00	\$ 6,000.00	\$ 7,068.00	\$ 7,068.00
25	SPECIAL	LUMP	UTILITY RELOCATION	LS	\$ 35,000.00	\$ 35,000.00	\$ 41,230.00	\$ 41,230.00
					<b>SUBTOTAL</b>	<b>\$ 1,109,800.00</b>	<b>SUBTOTAL</b>	<b>\$ 1,307,345.00</b>
Estimated Subtotal						\$26,813,862		\$31,586,730
Contingency (30%)						\$8,044,159		\$9,476,019
<b>Construction Total</b>						<b>\$34,858,021</b>		<b>\$41,062,749</b>

Inflation Rate: 17.80%

REF. NO.	ITEM	PROJECT COST (2019)	PROJECT COST (2024)
<b>STRUCTURAL</b>			
1	SCARIFY & OVERLAY CONCRETE DECK OF FIXED TOWER SPANS	\$ 30,000.00	\$ 35,340.00
2	REPLACE CONCRETE INFILL OF THE OPEN STEEL GRID OVER FLOOR BEAMS AND END OF THE LIFT SPAN	\$ 25,000.00	\$ 29,450.00
3	BLAST CLEAN AND RE-PAINT STRUCTURAL ELEMENTS EXHIBITING COATING FAILURE INCLUDING BUT NOT LIMITED TO THE TWO TOWERS, COUNTERWEIGHT SHEAVES, CANTILEVERED SIDEWALK BRACKETS, TOP FACE OF TRUSS UPPER CHORDS, TOWER SPAN MEMBERS; LOCALIZED AREAS OF DECK STRINGERS; BEARINGS & ALIGNMENT POSTS (EXISTING PAINT SYSTEM HAS LEAD-BASED PRIMER)	\$ 5,000,000.00	\$ 5,890,000.00
4	REPLACE HEAVILY CORRODED FLOOR BEAMS & LOWER LATERAL BRACING DUE TO AREAS OF SUBSTANTIAL SECTION LOSS	\$ 3,000,000.00	\$ 3,534,000.00
5	REPLACE BOLTS FOR LIFT SPAN TOP CHORD SPLICES	\$ 15,000.00	\$ 17,670.00
6	REPLACE DETERIORATED TIMBER FENDER RUB RAILS	\$ 10,000.00	\$ 11,780.00
7	PERFORM CRACK REPAIRS AND SPALL REPAIRS TO PIERS	\$ 200,000.00	\$ 235,600.00
8	REPLACE ANCHOR BOLTS FOR TOWER COLUMN BASEPLATES	\$ 5,000.00	\$ 5,890.00
9	REPLACE OPERATOR CABIN WALKWAY ON NORTH SIDE OF CONTROL TOWER	\$ 30,000.00	\$ 35,340.00
10	REPLACE SERVICE STAIRS & GRATING ON TOWERS	\$ 10,000.00	\$ 11,780.00
11	REMOVE AND REPLACE DETERIORATING COUNTERWEIGHT ADJUSTMENT BLOCKS ON TOP OF COUNTERWEIGHTS AND REMOVE SURROUNDING DEBRIS	\$ 10,000.00	\$ 11,780.00
12	RE-BALANCE SPAN FOR REHABILITATION WEIGHT CHANGES AND STRAIN GAUGE BALANCE TEST TO VERIFY FINAL-BALANCE STATE	\$ 45,000.00	\$ 53,010.00
13	REPAIR CONCRETE CRACK AT THE FOUNDATION OF THE CENTERING DEVICE	\$ 4,000.00	\$ 4,712.00
14	CLEAN AND RE-PAINT SUPPORTS FOR MAIN MOTORS	\$ 1,000.00	\$ 1,178.00
	<b>SUBTOTAL</b>	<b>\$ 8,385,000.00</b>	<b>\$ 9,877,530.00</b>
<b>MECHANICAL</b>			
15	REPLACE TRUNNION BEARING SYSTEMS WITH MODERN VINTAGE ONES AND MODIFY SUPPORTING STRUCTURAL MEMBERS TO ACCOMMODATE (FOUR QUADRANTS) REQUIRES NAVIGATION OUTAGE WITH WORK PERFORMED DURING WINTER PERIOD	\$ 7,000,000.00	\$ 8,246,000.00
16	DEVELOP A COMPREHENSIVE MAINTENANCE PLAN FOR MECHANICAL SYSTEM INCLUDING LUBRICATION CHARTS, TAGS REQUIRED LUBRICATION FREQUENCY AND CHECK SHEET/LOG TRACKING LOG	\$ 15,000.00	\$ 17,670.00
17	PAINT ALL OPERATING MACHINERY COMPONENTS IN ACCORDANCE WITH OSHA/ANSI SPECIFICATIONS	\$ 10,000.00	\$ 11,780.00
18	LUBRICATE MAIN SPAN OPERATING MOTORS	\$ 5,000.00	\$ 5,890.00
19	REALIGN OPERATING AND MACHINERY BRAKE WHEELS FOR EVEN FULL CONTRACT ACROSS BRAKE PADS AND REMOVE/POLISH SURFACE RUST FROM WHEELS	\$ 5,000.00	\$ 5,890.00
20	POLISH SOUTHWEST RING GEAR AND DRIVE PINION TO ADDRESS EXHIBITED PITTING	\$ 5,000.00	\$ 5,890.00
21	REMOVE GREASE BUILD-UP AND CONTAMINATION FROM COUNTERWEIGHT GUIDE-RAIL GUIDES FIXED TO TOP AND BOTTOM OF BOTH SIDES OF EACH COUNTERWEIGHT; LUBRICATE GUIDE RAILS	\$ 4,000.00	\$ 4,712.00
22	REPLACE AIR BUFFER INTAKE AIR FILTER ASSEMBLIES; ADJUST BUFFERS TO BUILD EQUAL PRESSURE BETWEEN ALL CYLINDERS	\$ 5,000.00	\$ 5,890.00
23	PROVIDE A DESICCANT TYPE BREATHER FOR BOTH PRIMARY REDUCERS IN EACH TOWER	\$ 5,000.00	\$ 5,890.00
24	ADJUST THE MANUAL RELEASE MECHANISM FOR THE SOUTHWEST MACHINERY BRAKE	\$ 2,000.00	\$ 2,356.00
25	CLEAN AND RE-LUBRICATE UPPER SHOE OF CENTERING DEVICE ON BOTH THE NORTH AND SOUTH TOWER	\$ 2,000.00	\$ 2,356.00
26	CLEAN AND RE-LUBRICATE AIR BUFFER PISTON RODS	\$ 1,000.00	\$ 1,178.00
27	CLEAN DEBRIS AROUND THE CENTERING DEVICES AND THE AIR BUFFER STRIKE PLATES.	\$ 500.00	\$ 589.00
28	DISASSEMBLE AND CLEAN NORTHEAST CROSS SHAFT COUPLING AND RE-LUBRICATE	\$ 4,000.00	\$ 4,712.00
	<b>SUBTOTAL</b>	<b>\$ 7,063,500.00</b>	<b>\$ 8,320,803.00</b>
<b>ELECTRICAL</b>			
29	REPLACE NAVIGATION LIGHTS WITH MODERN LED TYPE	\$ 15,000.00	\$ 17,670.00
30	REPLACE TRAFFIC WARNING GATES WITH MODERN ONES HAVING LED FLASHING RED LIGHTS AND REFLECTIVE RED STRIPES	\$ 300,000.00	\$ 353,400.00
31	REPLACE ROADWAY LIGHTING SYSTEM ON BRIDGE WITH MODERN EFFICIENT LED TYPE FIXTURES	\$ 10,000.00	\$ 11,780.00
32	PROVIDE LIGHTNING PROTECTION SYSTEM FOR BRIDGE	\$ 60,000.00	\$ 70,680.00
33	CLEAN AND PAINT EXPOSED EXTERIOR ELECTRICAL RACEWAY SYSTEMS	\$ 20,000.00	\$ 23,560.00
34	REPLACE LIGHTING FIXTURES ON THE CATWALK BETWEEN THE TOWER MACHINERY ROOMS	\$ 5,000.00	\$ 5,890.00
35	PROVIDE NEW INTERIOR LIGHTING SYSTEMS FOR THE POORLY ILLUMINATED MACHINERY ROOMS	\$ 7,000.00	\$ 8,246.00
36	UPGRADE BRIDGE FIRE ALARM SYSTEM TO CONFORM TO NFPA NATIONAL FIRE ALARM AND SIGNALING CODE	\$ 10,000.00	\$ 11,780.00
37	UPGRADE THE BRIDGE PUBLIC ADDRESS SYSTEM	\$ 5,000.00	\$ 5,890.00
38	PROVIDE NEW BRIDGE POSITION ROTARY CAM LIMIT SWITCH	\$ 10,000.00	\$ 11,780.00
39	PROVIDE NEW SPAN POSITION TRANSMITTER	\$ 10,000.00	\$ 11,780.00
40	PROVIDE NEW SKEW TRANSMITTERS	\$ 20,000.00	\$ 23,560.00
41	PROVIDE NEW FULLY SEATED PROXIMITY TYPE LIMIT SWITCHES	\$ 5,000.00	\$ 5,890.00
42	PROVIDE AVIATION OBSTRUCTION LIGHTING ON THE BRIDGE	\$ 20,000.00	\$ 23,560.00
43	REPLACE BRIDGE TRAFFIC SIGNALS	\$ 20,000.00	\$ 23,560.00
44	REPLACE STAIRWAY LIGHTING SYSTEM OF THE TOWERS	\$ 5,000.00	\$ 5,890.00
45	CONSTRUCT EXTENSION OF CONCRETE PAD FOR MOTOR CONTROL CENTER IN THE NORTHEAST ELECTRICAL ROOM	\$ 3,000.00	\$ 3,534.00
46	ELECTRICAL BETWEEN TOWERS AND MAIN SPAN	\$ 1,000,000.00	\$ 1,178,000.00
47	ELECTRICAL FOR OPERATOR BUILDING	\$ 300,000.00	\$ 353,400.00
	<b>SUBTOTAL</b>	<b>\$ 525,000.00</b>	<b>\$ 618,450.00</b>
<b>MISCELLANEOUS</b>			
48	REPLACE APPROACH ROADWAY GUARDRAIL	\$ 5,000.00	\$ 5,890.00
49	REGRADE AND PROVIDE ARMORING FOR NORTH SLOPE WALL	\$ 15,000.00	\$ 17,670.00
	<b>SUBTOTAL</b>	<b>\$ 20,000.00</b>	<b>\$ 23,560.00</b>
	<b>Structure Subtotal</b>	<b>\$15,993,500</b>	<b>\$18,840,343</b>



Inflation Rate: 17.80%

REF. NO.	ITEM	PROJECT QUANTITY	DESCRIPTION	UNIT	UNIT PRICE (2019)	PROJECT COST (2019)	UNIT PRICE (2024)	PROJECT COST (2024)
<b>ROADWAY</b>								
1	201	LUMP	CLEARING AND GRUBBING	LS	\$ 20,000.00	\$ 20,000.00	\$ 23,560.00	\$ 23,560.00
2	202	1,882	PAVEMENT REMOVED	SY	\$ 12.00	\$ 22,584.00	\$ 14.14	\$ 26,604.00
3	202	750	CURB REMOVED	FT	\$ 6.15	\$ 4,613.00	\$ 7.24	\$ 5,434.00
4	202	408	FENCE REMOVED	FT	\$ 4.20	\$ 1,714.00	\$ 4.95	\$ 2,019.00
5	203	1,270	EMBANKMENT	CY	\$ 16.07	\$ 20,409.00	\$ 18.93	\$ 24,042.00
6	204	2,724	SUBGRADE COMPACTION	SY	\$ 2.19	\$ 5,966.00	\$ 2.58	\$ 7,028.00
7	204	1,362	EXCAVATION OF SUBGRADE	CY	\$ 16.09	\$ 21,915.00	\$ 18.95	\$ 25,816.00
8	204	1,362	GRANULAR MATERIAL, TYPE B	CY	\$ 36.01	\$ 49,046.00	\$ 42.42	\$ 57,776.00
9	204	1	PROOF ROLLING	HOUR	\$ 220.46	\$ 221.00	\$ 259.70	\$ 260.00
10	204	2,724	GEOGRID	SY	\$ 1.50	\$ 4,086.00	\$ 1.77	\$ 4,814.00
11	608	60	4" ASPHALT CONCRETE WALK	SF	\$ 53.75	\$ 3,225.00	\$ 63.32	\$ 3,800.00
12	SPECIAL	LUMP	SITE SECURITY MEASURES	LS	\$ 100,000.00	\$ 100,000.00	\$ 117,800.00	\$ 117,800.00
					<b>SUBTOTAL</b>	<b>\$ 253,779.00</b>	<b>SUBTOTAL</b>	<b>\$ 298,953.00</b>
<b>EROSION CONTROL</b>								
13	659	2	SOIL ANALYSIS TEST	EACH	\$ 128.24	\$ 257.00	\$ 151.07	\$ 303.00
14	659	80	TOPSOIL	CY	\$ 34.94	\$ 2,796.00	\$ 41.16	\$ 3,293.00
15	659	717	SEEDING AND MULCHING, CLASS 1	SY	\$ 4.59	\$ 3,292.00	\$ 5.41	\$ 3,877.00
16	659	36	REPAIR SEEDING AND MULCHING	SY	\$ 1.07	\$ 39.00	\$ 1.26	\$ 46.00
17	659	36	INTER-SEEDING	SY	\$ 0.43	\$ 16.00	\$ 0.51	\$ 19.00
18	659	0.11	COMMERCIAL FERTILIZER	TON	\$ 628.26	\$ 70.00	\$ 740.09	\$ 82.00
19	659	0.02	LIME	ACRE	\$ 145.96	\$ 3.00	\$ 171.94	\$ 4.00
20	659	3	WATER	MGAL	\$ 10.63	\$ 32.00	\$ 12.52	\$ 38.00
21	659	1	MOWING	MSF	\$ 20.59	\$ 21.00	\$ 24.26	\$ 25.00
22	832	5,000	EROSION CONTROL	EACH	\$ 1.00	\$ 5,000.00	\$ 1.18	\$ 5,890.00
					<b>SUBTOTAL</b>	<b>\$ 11,526.00</b>	<b>SUBTOTAL</b>	<b>\$ 13,577.00</b>
<b>DRAINAGE</b>								
23	605	881	6" BASE PIPE UNDERDRAINS WITH GEOTEXTILE FABRIC	FT	\$ 13.70	\$ 12,070.00	\$ 16.14	\$ 14,219.00
24	611	493	12" CONDUIT, TYPE B	FT	\$ 65.50	\$ 32,292.00	\$ 77.16	\$ 38,040.00
25	611	4	CATCH BASIN, NO. 3	EACH	\$ 3,248.33	\$ 12,994.00	\$ 3,826.53	\$ 15,307.00
26	611	2	MANHOLE, NO. 3	EACH	\$ 3,400.00	\$ 6,800.00	\$ 4,005.20	\$ 8,011.00
					<b>SUBTOTAL</b>	<b>\$ 64,156.00</b>	<b>SUBTOTAL</b>	<b>\$ 75,577.00</b>
<b>PAVEMENT</b>								
27	252	117	FULL DEPTH PAVEMENT SAWING	FT	\$ 4.47	\$ 523.00	\$ 5.27	\$ 617.00
28	253	834	PAVEMENT REPAIR	CY	\$ 450.00	\$ 375,300.00	\$ 530.10	\$ 442,104.00
29	254	10,003	PAVEMENT PLANING, ASPHALT CONCRETE	SY	\$ 2.50	\$ 25,008.00	\$ 2.95	\$ 29,459.00
30	304	461	AGGREGATE BASE	CY	\$ 55.73	\$ 25,692.00	\$ 65.65	\$ 30,265.00
31	441	834	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG64-22	CY	\$ 200.00	\$ 166,800.00	\$ 235.60	\$ 196,491.00
32	452	2,190	12" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC 1P	SY	\$ 92.00	\$ 201,480.00	\$ 108.38	\$ 237,344.00
33	609	776	CURB, TYPE 2-A	FT	\$ 13.95	\$ 10,826.00	\$ 16.43	\$ 12,753.00
					<b>SUBTOTAL</b>	<b>\$ 805,629.00</b>	<b>SUBTOTAL</b>	<b>\$ 949,033.00</b>
<b>LIGHTING</b>								
34	625	LUMP	LIGHTING, MISC.	LS	\$ 50,000.00	\$ 50,000.00	\$ 58,900.00	\$ 58,900.00
					<b>SUBTOTAL</b>	<b>\$ 50,000.00</b>	<b>SUBTOTAL</b>	<b>\$ 58,900.00</b>
<b>TRAFFIC CONTROL</b>								
35	SPECIAL	LUMP	SIGNS AND SUPPORTS	LS	\$ 20,000.00	\$ 20,000.00	\$ 23,560.00	\$ 23,560.00
36	SPECIAL	LUMP	PAVEMENT MARKINGS	LS	\$ 3,500.00	\$ 3,500.00	\$ 4,123.00	\$ 4,123.00
					<b>SUBTOTAL</b>	<b>\$ 23,500.00</b>	<b>SUBTOTAL</b>	<b>\$ 27,683.00</b>
<b>STRUCTURES</b>								
37	202	LUMP	BUILDING DEMOLISHED	LS	\$ 50,000.00	\$ 50,000.00	\$ 58,900.00	\$ 58,900.00
38	SPECIAL	LUMP	STRUCTURES: LIFT BRIDGE ADJACENT TO EXISTING	LS	\$ 94,041,800.00	\$ 94,041,800.00	\$ 110,783,200.00	\$ 110,783,200.00
					<b>SUBTOTAL</b>	<b>\$ 94,091,800.00</b>	<b>SUBTOTAL</b>	<b>\$ 110,842,100.00</b>
<b>INCIDENTALS</b>								
39	614	LUMP	MAINTAINING TRAFFIC	LS	\$ 75,000.00	\$ 75,000.00	\$ 88,350.00	\$ 88,350.00
40	619	12	FIELD OFFICE, TYPE B	MNTH	\$ 1,400.00	\$ 16,800.00	\$ 1,649.20	\$ 19,791.00
41	623	LUMP	CONSTRUCTION LAYOUT STAKES AND SURVEYING	LS	\$ 25,000.00	\$ 25,000.00	\$ 29,450.00	\$ 29,450.00
42	624	LUMP	MOBILIZATION	LS	\$ 4,600,000.00	\$ 4,600,000.00	\$ 5,418,800.00	\$ 5,418,800.00
43	SPECIAL	LUMP	PERFORMANCE BOND	LS	\$ 800,000.00	\$ 800,000.00	\$ 942,400.00	\$ 942,400.00
44	SPECIAL	LUMP	RAILROAD INSURANCE BOND	LS	\$ 6,000.00	\$ 6,000.00	\$ 7,068.00	\$ 7,068.00
45	SPECIAL	LUMP	UTILITY RELOCATION	LS	\$ 30,000.00	\$ 30,000.00	\$ 35,340.00	\$ 35,340.00
					<b>SUBTOTAL</b>	<b>\$ 5,552,800.00</b>	<b>SUBTOTAL</b>	<b>\$ 6,541,199.00</b>
					<b>Estimated Subtotal</b>	<b>\$100,853,190</b>		<b>\$118,807,022</b>
					<b>Contingency (30%)</b>	<b>\$30,256,957</b>		<b>\$35,642,107</b>
					<b>Construction Total</b>	<b>\$131,109,147</b>		<b>\$154,449,129</b>

Inflation Rate: 17.80%

REF. NO.	PROJECT QUANTITY	ITEM	UNIT	UNIT PRICE (2019)	PROJECT COST (2019)	UNIT PRICE (2024)	PROJECT COST (2024)
<b>STRUCTURAL</b>							
1	16139	STEEL H-PILE, DRIVEN	FT	\$ 23.46	\$ 378,700.00	\$ 27.64	\$ 446,100.00
2	173	STEEL PILE SPLICE	EACH	\$ 1,407.70	\$ 243,000.00	\$ 1,658.27	\$ 286,300.00
3	173	PILE SHOE	EACH	\$ 140.77	\$ 24,300.00	\$ 165.83	\$ 28,700.00
4	2153498	REINFORCEMENT STEEL - EPOXY COATED	LB	\$ 1.41	\$ 3,031,500.00	\$ 1.66	\$ 3,571,100.00
5	1619	STRUCTURAL CONCRETE - FOOTING	CY	\$ 1,876.94	\$ 3,037,900.00	\$ 2,211.03	\$ 3,578,700.00
6	2505	STRUCTURAL CONCRETE - PIERS	CY	\$ 1,876.94	\$ 4,701,100.00	\$ 2,211.03	\$ 5,537,900.00
7	LUMP	FENDER SYSTEM	LS	\$ 950,000.00	\$ 950,000.00	\$ 1,119,100.00	\$ 1,119,100.00
8	3303206	STRUCTURAL STEEL - LIFT SPAN	LB	\$ 4.28	\$ 14,128,700.00	\$ 5.04	\$ 16,643,600.00
9	3431571	STRUCTURAL STEEL - TOWERS	LB	\$ 3.09	\$ 10,598,000.00	\$ 3.64	\$ 12,484,500.00
10	126000	STRUCTURAL STEEL FINGER JOINTS	LB	\$ 7.45	\$ 938,500.00	\$ 8.77	\$ 1,105,600.00
11	57997	STRUCTURAL STEEL - MISCELLANEOUS	LB	\$ 2.18	\$ 126,600.00	\$ 2.57	\$ 149,200.00
12	LUMP	STRUCTURAL STEEL PAINTING	LS	\$ 3,709,666.44	\$ 3,709,700.00	\$ 4,369,987.07	\$ 4,370,000.00
13	4	HIGH LOAD MULTI-ROTATIONAL BEARINGS	EACH	\$ 28,154.06	\$ 112,600.00	\$ 33,165.48	\$ 132,700.00
14	LUMP	PLUMBING WORK	LS	\$ 57,246.59	\$ 57,200.00	\$ 67,436.48	\$ 67,500.00
15	LUMP	HVAC WORK	LS	\$ 44,108.03	\$ 44,100.00	\$ 51,959.26	\$ 52,000.00
16	13587	STEEL GRID DECK	SF	\$ 98.54	\$ 1,338,800.00	\$ 116.08	\$ 1,577,200.00
17	2955	BRIDGE SIDEWALK	SF	\$ 187.69	\$ 554,600.00	\$ 221.10	\$ 653,300.00
18	700	FIVE BAR OPEN STEEL PARAPET	FT	\$ 844.62	\$ 591,200.00	\$ 994.96	\$ 696,500.00
19	350	METAL MEDIAN BARRIER	FT	\$ 774.24	\$ 271,000.00	\$ 912.05	\$ 319,300.00
20	LUMP	TEMPORARY BRIDGE OPERATION	LS	\$ 46,923.43	\$ 46,900.00	\$ 55,275.81	\$ 55,300.00
21	LUMP	COUNTERWEIGHTS	LS	\$ 6,611,938.45	\$ 6,611,900.00	\$ 7,788,863.49	\$ 7,788,900.00
22	LUMP	SPAN BALANCING	LS	\$ 117,308.59	\$ 117,300.00	\$ 138,189.51	\$ 138,200.00
23	4	SHEAVE & TRUNNION ASSEMBLY	EACH	\$ 2,227,179.27	\$ 8,908,700.00	\$ 2,623,617.18	\$ 10,494,500.00
24	8	BEARINGS	EACH	\$ 208,798.06	\$ 1,670,400.00	\$ 245,964.11	\$ 1,967,800.00
25	2	FIXED END SPAN GUIDES	EACH	\$ 62,639.42	\$ 125,300.00	\$ 73,789.23	\$ 147,600.00
26	2	EXPANSION END SPAN GUIDES	EACH	\$ 62,639.42	\$ 125,300.00	\$ 73,789.23	\$ 147,600.00
27	8	COUNTERWEIGHT GUIDES	EACH	\$ 90,479.16	\$ 723,800.00	\$ 106,584.45	\$ 852,700.00
28	4	SPAN LOCK ASSEMBLY	EACH	\$ 347,996.76	\$ 1,392,000.00	\$ 409,940.18	\$ 1,639,800.00
29	LUMP	SPAN OPERATION MACHINERY	LS	\$ 6,263,941.69	\$ 6,263,900.00	\$ 7,378,923.31	\$ 7,379,000.00
30	119	WIRE ROPES AND ATTACHMENTS	EACH	\$ 37,538.75	\$ 4,454,400.00	\$ 44,220.64	\$ 5,247,300.00
31	4	BUFFERS	EACH	\$ 34,799.68	\$ 139,200.00	\$ 40,994.02	\$ 164,000.00
32	1	CENTERING DEVICES - FIXED END	EACH	\$ 90,479.16	\$ 90,500.00	\$ 106,584.45	\$ 106,600.00
33	1	CENTERING DEVICES - EXPANSION END	EACH	\$ 90,479.16	\$ 90,500.00	\$ 106,584.45	\$ 106,600.00
34	LUMP	ELECTRICAL WORK - BRIDGE CONTROLS	LS	\$ 6,569,280.78	\$ 6,569,300.00	\$ 7,738,612.76	\$ 7,738,700.00
35	LUMP	ELECTRICAL WORK - COMMUNICATIONS	LS	\$ 370,695.13	\$ 370,700.00	\$ 436,678.86	\$ 436,700.00
36	LUMP	ELECTRICAL WORK - POWER	LS	\$ 1,407,703.02	\$ 1,407,700.00	\$ 1,658,274.16	\$ 1,658,300.00
37	LUMP	TESTING, FINAL ACCEPTANCE	LS	\$ 67,589.75	\$ 67,600.00	\$ 79,597.16	\$ 79,600.00
38	LUMP	STANDBY GENERATOR	LS	\$ 778,929.01	\$ 778,900.00	\$ 917,578.37	\$ 917,600.00
39	LUMP	CONTROL HOUSE	LS	\$ 1,501,549.89	\$ 1,501,500.00	\$ 1,768,825.77	\$ 1,768,900.00
40	LUMP	MACHINERY HOUSE	LS	\$ 3,284,640.39	\$ 3,284,600.00	\$ 3,869,306.38	\$ 3,869,400.00
41	LUMP	GENERATOR HOUSE	LS	\$ 187,693.74	\$ 187,700.00	\$ 221,103.22	\$ 221,200.00
42	LUMP	TOWER ELEVATORS	LS	\$ 797,698.38	\$ 797,700.00	\$ 939,688.69	\$ 939,700.00
43	LUMP	TOWER STAIRS	LS	\$ 1,481,439.85	\$ 1,481,400.00	\$ 1,745,136.14	\$ 1,745,200.00
44	LUMP	LIGHTNING PROTECTION SYSTEM	LS	\$ 73,200.56	\$ 73,200.00	\$ 86,230.26	\$ 86,300.00
45	2	BARRIER GATE	EACH	\$ 610,004.64	\$ 1,220,000.00	\$ 718,585.47	\$ 1,437,200.00
46	2	WARNING GATE	EACH	\$ 351,925.76	\$ 703,900.00	\$ 414,568.54	\$ 829,200.00
					<b>SUBTOTAL</b>		<b>\$ 110,783,200.00</b>
		<b>Structure Subtotal</b>			<b>\$94,041,800</b>		<b>\$110,783,200</b>

Alternative Access to South Whiskey Island Feasibility Study  
ROW Acquisitions

Preliminary Right of Way Cost Estimate

PARCEL ID	AUDITORS PARCEL #	OWNER / ALTERNATIVE '15' NEW LIFT BRIDGE ADJACENT TO EXISTING	ADDRESS	SIDE	WD GROSS	PRO	WD NET TAKE (SF)	TEMP. EASEMENT (SF)	EASEMENT (SF)	R/W ACQUISITION SERVICES COSTS												R/W ACQUISITION COSTS							TOTAL			
										APPRAISALS				TITLES		RELOCATIONS		NEGOTIATIONS	CLOSINGS	MANAGEMENT	SUBTOTAL	Permanent ROW Acquisition Costs		Temporary Easement Cost (18 months @ 10% of Total)	Easement Cost (50% of Total)	Signs	Proximity	Structures		Other	RELOCATION (PERSONAL PROPERTY)	SUBTOTAL
										VALUE ANALYSIS	VALUE FINDING	COMPLETE SUMMARY LAND ONLY	COMPLETE SUMMARY APPRAISALS	42 YEAR	ABBREV	PERSONAL PROPERTY	COMMERCIAL					Unit Cost/Acre	Total Cost									
										\$600	\$1,250	\$3,500	\$6,000	\$600	\$300	\$1,000	\$8,000					\$1,600	\$550									
EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	OWNER	EACH	OWNER																						
00317001		PENNSYLVANIA LINES LLC	0 HEMLOCK AVE				8000	3073				1		1				\$600,000	\$110,195	\$6,349								\$116,544				
00305013		ONTARIO STONE CORP.	2550 RIVER BED				28400	2531				1		1				\$600,000	\$391,181	\$5,229				\$100,000		\$30,000	\$526,411					
		OLD RIVER (BRIDGE OVER)						22,110				1		1				\$600,000									\$152,273					
							36,400	5,604	22,110			\$7,000	\$6,000	\$1,800				\$8,000	\$4,800	\$1,650	\$1,800	\$31,050		\$501,376	\$11,579	\$152,273	\$100,000	\$30,000	\$795,228	\$826,278		

Inflation Rate: 17.80%

REF. NO.	ITEM	PROJECT QUANTITY	DESCRIPTION	UNIT	UNIT PRICE (2019)	PROJECT COST (2019)	UNIT PRICE (2024)	PROJECT COST (2024)
<b>ROADWAY</b>								
1	201	LUMP	CLEARING AND GRUBBING	LS	\$ 20,000.00	\$ 20,000.00	\$ 23,560.00	\$ 23,560.00
2	202	2,313	PAVEMENT REMOVED	SY	\$ 12.00	\$ 27,756.00	\$ 14.14	\$ 32,697.00
3	202	50	FENCE REMOVED	FT	\$ 4.20	\$ 210.00	\$ 4.95	\$ 248.00
4	203	6,105	EMBANKMENT	CY	\$ 16.07	\$ 98,108.00	\$ 18.93	\$ 115,571.00
5	204	6,230	SUBGRADE COMPACTION	SY	\$ 2.19	\$ 13,644.00	\$ 2.58	\$ 16,073.00
6	204	3,115	EXCAVATION OF SUBGRADE	CY	\$ 16.09	\$ 50,121.00	\$ 18.95	\$ 59,042.00
7	204	3,115	GRANULAR MATERIAL, TYPE B	CY	\$ 36.01	\$ 112,172.00	\$ 42.42	\$ 132,138.00
8	204	3	PROOF ROLLING	hour	\$ 220.46	\$ 662.00	\$ 259.70	\$ 780.00
9	204	6,230	GEOGRID	SY	\$ 1.50	\$ 9,345.00	\$ 1.77	\$ 11,009.00
10	608	311	4" ASPHALT CONCRETE WALK	SF	\$ 53.75	\$ 16,717.00	\$ 63.32	\$ 19,692.00
11	SPECIAL	LUMP	CONCRETE BARRIER	LS	\$ 5,000.00	\$ 5,000.00	\$ 5,890.00	\$ 5,890.00
12	SPECIAL	LUMP	SITE SECURITY MEASURES	LS	\$ 250,000.00	\$ 250,000.00	\$ 294,500.00	\$ 294,500.00
<b>SUBTOTAL</b>						<b>\$ 603,735.00</b>	<b>\$ 711,200.00</b>	<b>\$ 711,200.00</b>
<b>EROSION CONTROL</b>								
13	659	2	SOIL ANALYSIS TEST	EACH	\$ 128.24	\$ 257.00	\$ 151.07	\$ 303.00
14	659	127	TOPSOIL	CY	\$ 34.94	\$ 4,438.00	\$ 41.16	\$ 5,228.00
15	659	1,136	SEEDING AND MULCHING, CLASS 1	SY	\$ 4.59	\$ 5,215.00	\$ 5.41	\$ 6,143.00
16	659	57	REPAIR SEEDING AND MULCHING	SY	\$ 1.07	\$ 61.00	\$ 1.26	\$ 72.00
17	659	57	INTER-SEEDING	SY	\$ 0.43	\$ 25.00	\$ 0.51	\$ 29.00
18	659	0.16	COMMERCIAL FERTILIZER	TON	\$ 628.26	\$ 101.00	\$ 740.09	\$ 119.00
19	659	0.03	LIME	ACRE	\$ 145.96	\$ 5.00	\$ 171.94	\$ 6.00
20	659	4	WATER	MGAL	\$ 10.63	\$ 43.00	\$ 12.52	\$ 51.00
21	659	1	MOWING	MSF	\$ 20.59	\$ 21.00	\$ 24.26	\$ 25.00
22	832	5,000	EROSION CONTROL	EACH	\$ 1.00	\$ 5,000.00	\$ 1.18	\$ 5,890.00
<b>SUBTOTAL</b>						<b>\$ 15,166.00</b>	<b>\$ 17,866.00</b>	<b>\$ 17,866.00</b>
<b>DRAINAGE</b>								
23	605	2,042	6" BASE PIPE UNDERDRAINS WITH GEOTEXTILE FABRIC	FT	\$ 13.70	\$ 27,976.00	\$ 16.14	\$ 32,956.00
24	611	1,151	12" CONDUIT, TYPE B	FT	\$ 65.50	\$ 75,391.00	\$ 77.16	\$ 88,811.00
25	611	10	CATCH BASIN, NO. 3	EACH	\$ 3,248.33	\$ 32,483.30	\$ 3,826.53	\$ 38,266.00
26	611	5	MANHOLE, NO. 3	EACH	\$ 3,400.00	\$ 17,000.00	\$ 4,005.20	\$ 20,026.00
<b>SUBTOTAL</b>						<b>\$ 152,851.00</b>	<b>\$ 180,059.00</b>	<b>\$ 180,059.00</b>
<b>PAVEMENT</b>								
27	252	42	FULL DEPTH PAVEMENT SAWING	FT	\$ 4.47	\$ 188.00	\$ 5.27	\$ 222.00
28	253	1,092	PAVEMENT REPAIR	CY	\$ 450.00	\$ 491,400.00	\$ 530.10	\$ 578,870.00
29	254	13,099	PAVEMENT PLANING, ASPHALT CONCRETE	SY	\$ 2.50	\$ 32,748.00	\$ 2.95	\$ 38,577.00
30	304	1,054	AGGREGATE BASE	CY	\$ 55.73	\$ 58,740.00	\$ 65.65	\$ 69,196.00
31	441	1,092	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG64-22	CY	\$ 200.00	\$ 218,400.00	\$ 235.60	\$ 257,276.00
32	452	1,256	8" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC 1P	SY	\$ 64.46	\$ 80,962.00	\$ 75.93	\$ 95,373.00
33	452	2,176	12" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC 1P	SY	\$ 92.00	\$ 200,192.00	\$ 108.38	\$ 235,827.00
34	609	2,169	CURB, TYPE 2-A	FT	\$ 13.95	\$ 30,258.00	\$ 16.43	\$ 35,644.00
<b>SUBTOTAL</b>						<b>\$ 1,112,888.00</b>	<b>\$ 1,310,985.00</b>	<b>\$ 1,310,985.00</b>
<b>LIGHTING</b>								
35	625	LUMP	LIGHTING, MISC.	LS	\$ 50,000.00	\$ 50,000.00	\$ 58,900.00	\$ 58,900.00
<b>SUBTOTAL</b>						<b>\$ 50,000.00</b>	<b>\$ 58,900.00</b>	<b>\$ 58,900.00</b>
<b>TRAFFIC CONTROL</b>								
36	SPECIAL	LUMP	SIGNS AND SUPPORTS	LS	\$ 35,000.00	\$ 35,000.00	\$ 41,230.00	\$ 41,230.00
37	SPECIAL	LUMP	PAVEMENT MARKINGS	LS	\$ 7,000.00	\$ 7,000.00	\$ 8,246.00	\$ 8,246.00
<b>SUBTOTAL</b>						<b>\$ 42,000.00</b>	<b>\$ 49,476.00</b>	<b>\$ 49,476.00</b>
<b>STRUCTURES</b>								
38	SPECIAL	LUMP	STRUCTURES: BASCULE BRIDGE AT MULBERRY AVE.	LS	\$ 22,413,900.00	\$ 22,413,900.00	\$ 26,404,700.00	\$ 26,404,700.00
<b>SUBTOTAL</b>						<b>\$ 22,413,900.00</b>	<b>\$ 26,404,700.00</b>	<b>\$ 26,404,700.00</b>
<b>INCIDENTALS</b>								
39	614	LUMP	MAINTAINING TRAFFIC	LS	\$ 100,000.00	\$ 100,000.00	\$ 117,800.00	\$ 117,800.00
40	619	12	FIELD OFFICE, TYPE B	MNTH	\$ 1,400.00	\$ 16,800.00	\$ 1,649.20	\$ 19,791.00
41	623	LUMP	CONSTRUCTION LAYOUT STAKES AND SURVEYING	LS	\$ 25,000.00	\$ 25,000.00	\$ 29,450.00	\$ 29,450.00
42	624	LUMP	MOBILIZATION	LS	\$ 1,200,000.00	\$ 1,200,000.00	\$ 1,413,600.00	\$ 1,413,600.00
43	SPECIAL	LUMP	PERFORMANCE BOND	LS	\$ 220,000.00	\$ 220,000.00	\$ 259,160.00	\$ 259,160.00
44	SPECIAL	LUMP	RAILROAD INSURANCE BOND	LS	\$ 6,000.00	\$ 6,000.00	\$ 7,068.00	\$ 7,068.00
45	SPECIAL	LUMP	UTILITY RELOCATION	LS	\$ 15,000.00	\$ 15,000.00	\$ 17,670.00	\$ 17,670.00
<b>SUBTOTAL</b>						<b>\$ 1,582,800.00</b>	<b>\$ 1,864,539.00</b>	<b>\$ 1,864,539.00</b>
Estimated Subtotal						\$25,973,340	\$30,597,725	\$30,597,725
Contingency (30%)						\$7,792,002	\$9,179,318	\$9,179,318
<b>Construction Total</b>						<b>\$33,765,342</b>	<b>\$39,777,043</b>	<b>\$39,777,043</b>

Inflation Rate: 17.80%

REF. NO.	PROJECT QUANTITY	ITEM	UNIT	UNIT PRICE (2019)	PROJECT COST (2019)	UNIT PRICE (2024)	PROJECT COST (2024)	
<b>STRUCTURAL</b>								
1	855000	STRUCTURAL STEEL	LB	\$ 6.50	\$ 5,557,500.00	\$ 7.66	\$ 6,546,800.00	
2	LUMP	STRUCTURAL STEEL PAINTING	LS	\$ 500,000.00	\$ 500,000.00	\$ 589,000.00	\$ 589,000.00	
3	96710	TRACK AND TREAD FORGINGS	LB	\$ 18.00	\$ 1,740,800.00	\$ 21.20	\$ 2,050,700.00	
4	1512	CONCRETE SEAL	CY	\$ 400.00	\$ 604,800.00	\$ 471.20	\$ 712,500.00	
5	4120	STRUCTURAL CONCRETE	CY	\$ 750.00	\$ 3,090,000.00	\$ 883.50	\$ 3,640,100.00	
6	368	COUNTERWEIGHT CONCRETE	CY	\$ 650.00	\$ 239,200.00	\$ 765.70	\$ 281,800.00	
7	LUMP	SPAN BALANCING	LS	\$ 150,000.00	\$ 150,000.00	\$ 176,700.00	\$ 176,700.00	
8	344632	REINFORCEMENT, STEEL	LB	\$ 1.35	\$ 465,300.00	\$ 1.59	\$ 548,100.00	
9	LUMP	COFFERDAMS	LS	\$ 1,200,000.00	\$ 1,200,000.00	\$ 1,413,600.00	\$ 1,413,600.00	
10	4820	COFFERDAM EXCAVATION & DISPOSAL	CY	\$ 50.00	\$ 241,000.00	\$ 58.90	\$ 283,900.00	
11	LUMP	FENDER SYSTEM	LS	\$ 950,000.00	\$ 950,000.00	\$ 1,119,100.00	\$ 1,119,100.00	
12	1494	DRILLED SHAFTS 72-INCH IN SOIL	FT	\$ 1,000.00	\$ 1,494,000.00	\$ 1,178.00	\$ 1,760,000.00	
13	144	DRILLED SHAFTS 72-INCH IN ROCK	FT	\$ 1,700.00	\$ 244,800.00	\$ 2,002.60	\$ 288,400.00	
14	3640	STEEL GRID DECK	SF	\$ 105.00	\$ 382,200.00	\$ 123.69	\$ 450,300.00	
15	LUMP	CLOSURES & SEALS (FOR MACH ROOMS IN BASCULE PIERS)	LS	\$ 45,000.00	\$ 45,000.00	\$ 53,010.00	\$ 53,100.00	
16	LUMP	OPERATOR HOUSE ARCHITECTURAL	LS	\$ 300,000.00	\$ 300,000.00	\$ 353,400.00	\$ 353,400.00	
17	LUMP	PLUMBING WORK	LS	\$ 55,000.00	\$ 55,000.00	\$ 64,790.00	\$ 64,800.00	
18	LUMP	HVAC WORK	LS	\$ 40,000.00	\$ 40,000.00	\$ 47,120.00	\$ 47,200.00	
19	6750	RETAINING WALLS ALONG APPROACH ROADWAY	SF	\$ 27.00	\$ 182,300.00	\$ 31.81	\$ 214,700.00	
					<b>SUBTOTAL</b>	<b>\$ 17,481,900.00</b>	<b>SUBTOTAL</b>	<b>\$ 20,594,200.00</b>
<b>MECHANICAL</b>								
20	LUMP	MECHANICAL - OPERATING MACHINERY	LS	\$ 2,400,000.00	\$ 2,400,000.00	\$ 2,827,200.00	\$ 2,827,200.00	
21	LUMP	MECHANICAL - REAR LOCK MACHINERY	LS	\$ 300,000.00	\$ 300,000.00	\$ 353,400.00	\$ 353,400.00	
					<b>SUBTOTAL</b>	<b>\$ 2,700,000.00</b>	<b>SUBTOTAL</b>	<b>\$ 3,180,600.00</b>
<b>ELECTRICAL</b>								
22	LUMP	ELECTRICAL - GENERAL	LS	\$ 600,000.00	\$ 600,000.00	\$ 706,800.00	\$ 706,800.00	
23	LUMP	ELECTRICAL - BRIDGE CONTROL SYSTEM	LS	\$ 350,000.00	\$ 350,000.00	\$ 412,300.00	\$ 412,300.00	
24	LUMP	ELECTRICAL - MOTORS & MOTOR DRIVES	LS	\$ 325,000.00	\$ 325,000.00	\$ 382,850.00	\$ 382,900.00	
25	LUMP	ELECTRICAL - LIMIT SWITCHES AND POSITION SENSORS	LS	\$ 22,000.00	\$ 22,000.00	\$ 25,916.00	\$ 26,000.00	
26	LUMP	ELECTRICAL - BRIDGE TRAFFIC GATES & SIGNALS	LS	\$ 150,000.00	\$ 150,000.00	\$ 176,700.00	\$ 176,700.00	
27	LUMP	ELECTRICAL - SUBMARINE CABLE	LS	\$ 325,000.00	\$ 325,000.00	\$ 382,850.00	\$ 382,900.00	
28	LUMP	ELECTRICAL - NAVIGATIONAL LIGHTING	LS	\$ 45,000.00	\$ 45,000.00	\$ 53,010.00	\$ 53,100.00	
29	LUMP	ELECTRICAL - CCTV SYSTEM (CAMERAS, MONITORS & CONNECTIVITY)	LS	\$ 35,000.00	\$ 35,000.00	\$ 41,230.00	\$ 41,300.00	
30	LUMP	ELECTRICAL - LIGHTING BASCULE SPAN	LS	\$ 55,000.00	\$ 55,000.00	\$ 64,790.00	\$ 64,800.00	
31	LUMP	ELECTRICAL - LIGHTNING PROTECTION & TVSS	LS	\$ 140,000.00	\$ 140,000.00	\$ 164,920.00	\$ 165,000.00	
32	LUMP	ELECTRICAL - AUXILIARY EQUIPMENT	LS	\$ 140,000.00	\$ 140,000.00	\$ 164,920.00	\$ 165,000.00	
					<b>SUBTOTAL</b>	<b>\$ 2,187,000.00</b>	<b>SUBTOTAL</b>	<b>\$ 2,576,800.00</b>
<b>MISCELLANEOUS</b>								
33	LUMP	TRAINING & OPERATING/MAINTENANCE MANUALS	LS	\$ 45,000.00	\$ 45,000.00	\$ 53,010.00	\$ 53,100.00	
					<b>SUBTOTAL</b>	<b>\$ 45,000.00</b>	<b>SUBTOTAL</b>	<b>\$ 53,100.00</b>
<b>Structure Subtotal</b>						<b>\$22,413,900</b>		<b>\$26,404,700</b>



Inflation Rate: 17.80%

REF. NO.	ITEM	PROJECT QUANTITY	DESCRIPTION	UNIT	UNIT PRICE (2019)	PROJECT COST (2019)	UNIT PRICE (2024)	PROJECT COST (2024)
<b>ROADWAY</b>								
1	201	LUMP	CLEARING AND GRUBBING	LS	\$ 30,000.00	\$ 30,000.00	\$ 35,340.00	\$ 35,340.00
2	202	1,744	PAVEMENT REMOVED	SY	\$ 39.71	\$ 69,255.00	\$ 46.78	\$ 81,582.00
3	202	576	CURB REMOVED	FT	\$ 6.15	\$ 3,543.00	\$ 7.24	\$ 4,174.00
4	202	500	FENCE REMOVED	FT	\$ 4.20	\$ 2,100.00	\$ 4.95	\$ 2,474.00
5	203	685	EXCAVATION	CY	\$ 25.00	\$ 17,125.00	\$ 29.45	\$ 20,174.00
6	203	1,263	EMBANKMENT	CY	\$ 16.07	\$ 20,297.00	\$ 18.93	\$ 23,910.00
7	204	7,759	SUBGRADE COMPACTION	SY	\$ 2.19	\$ 16,993.00	\$ 2.58	\$ 20,017.00
8	204	3,880	EXCAVATION OF SUBGRADE	CY	\$ 16.09	\$ 62,430.00	\$ 18.95	\$ 73,542.00
9	204	3,880	GRANULAR MATERIAL, TYPE B	CY	\$ 36.01	\$ 139,719.00	\$ 42.42	\$ 164,589.00
10	204	3	PROOF ROLLING	HOUR	\$ 220.46	\$ 662.00	\$ 259.70	\$ 780.00
11	204	7,759	GEOGRID	SY	\$ 1.50	\$ 11,639.00	\$ 1.77	\$ 13,711.00
12	608	467	4" ASPHALT CONCRETE WALK	SF	\$ 53.75	\$ 25,102.00	\$ 63.32	\$ 29,570.00
13	SPECIAL	LUMP	SITE SECURITY MEASURES	LS	\$ 750,000.00	\$ 750,000.00	\$ 883,500.00	\$ 883,500.00
<b>SUBTOTAL</b>						<b>\$ 1,148,865.00</b>	<b>\$ 1,353,363.00</b>	<b>\$ 1,353,363.00</b>
<b>EROSION CONTROL</b>								
14	659	2	SOIL ANALYSIS TEST	EACH	\$ 128.24	\$ 257.00	\$ 151.07	\$ 303.00
15	659	7	TOPSOIL	CY	\$ 34.94	\$ 245.00	\$ 41.16	\$ 289.00
16	659	56	SEEDING AND MULCHING, CLASS 1	SY	\$ 4.59	\$ 258.00	\$ 5.41	\$ 303.00
17	659	3	REPAIR SEEDING AND MULCHING	SY	\$ 1.07	\$ 4.00	\$ 1.26	\$ 4.00
18	659	3	INTER-SEEDING	SY	\$ 0.43	\$ 2.00	\$ 0.51	\$ 2.00
19	659	0.01	COMMERCIAL FERTILIZER	TON	\$ 628.26	\$ 7.00	\$ 740.09	\$ 8.00
20	659	0.01	LIME	ACRE	\$ 145.96	\$ 2.00	\$ 171.94	\$ 2.00
21	659	1	WATER	MGAL	\$ 10.63	\$ 11.00	\$ 12.52	\$ 13.00
22	659	1	MOWING	MSF	\$ 20.59	\$ 21.00	\$ 24.26	\$ 25.00
23	832	5,000	EROSION CONTROL	EACH	\$ 1.00	\$ 5,000.00	\$ 1.18	\$ 5,890.00
<b>SUBTOTAL</b>						<b>\$ 5,807.00</b>	<b>\$ 6,839.00</b>	<b>\$ 6,839.00</b>
<b>DRAINAGE</b>								
24	605	1,280	6" BASE PIPE UNDERDRAINS WITH GEOTEXTILE FABRIC	FT	\$ 13.70	\$ 17,536.00	\$ 16.14	\$ 20,658.00
25	611	718	12" CONDUIT, TYPE B	FT	\$ 65.50	\$ 47,029.00	\$ 77.16	\$ 55,401.00
26	611	6	CATCH BASIN, NO. 3	EACH	\$ 3,248.33	\$ 19,490.00	\$ 3,826.53	\$ 22,960.00
27	611	3	MANHOLE, NO. 3	EACH	\$ 3,400.00	\$ 10,200.00	\$ 4,005.20	\$ 12,016.00
<b>SUBTOTAL</b>						<b>\$ 94,255.00</b>	<b>\$ 111,035.00</b>	<b>\$ 111,035.00</b>
<b>PAVEMENT</b>								
28	252	35	FULL DEPTH PAVEMENT SAWING	FT	\$ 4.47	\$ 157.00	\$ 5.27	\$ 185.00
29	253	146	PAVEMENT REPAIR	CY	\$ 450.00	\$ 65,700.00	\$ 530.10	\$ 77,395.00
30	254	1,744	PAVEMENT PLANING, ASPHALT CONCRETE	SY	\$ 2.40	\$ 4,186.00	\$ 2.83	\$ 4,931.00
31	304	1,654	AGGREGATE BASE	CY	\$ 55.73	\$ 92,178.00	\$ 65.65	\$ 108,586.00
32	452	672	8" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC 1P	SY	\$ 64.46	\$ 43,318.00	\$ 75.93	\$ 51,028.00
33	452	1,186	12" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC 1P	SY	\$ 92.00	\$ 109,112.00	\$ 108.38	\$ 128,534.00
34	609	1,996	CURB, TYPE 2-A	FT	\$ 13.95	\$ 27,842.00	\$ 16.43	\$ 32,798.00
<b>SUBTOTAL</b>						<b>\$ 342,493.00</b>	<b>\$ 403,457.00</b>	<b>\$ 403,457.00</b>
<b>LIGHTING</b>								
35	625	LUMP	LIGHTING, MISC.	LS	\$ 100,000.00	\$ 100,000.00	\$ 117,800.00	\$ 117,800.00
<b>SUBTOTAL</b>						<b>\$ 100,000.00</b>	<b>\$ 117,800.00</b>	<b>\$ 117,800.00</b>
<b>TRAFFIC CONTROL</b>								
36	SPECIAL	LUMP	SIGNS AND SUPPORTS	LS	\$ 100,000.00	\$ 100,000.00	\$ 117,800.00	\$ 117,800.00
37	SPECIAL	LUMP	PAVEMENT MARKINGS	LS	\$ 3,500.00	\$ 3,500.00	\$ 4,123.00	\$ 4,123.00
<b>SUBTOTAL</b>						<b>\$ 103,500.00</b>	<b>\$ 121,923.00</b>	<b>\$ 121,923.00</b>
<b>STRUCTURES</b>								
38	SPECIAL	LUMP	STRUCTURES: FIXED BRIDGE AT STATE ST.*	LS	\$ 22,000,000.00	\$ 22,000,000.00	\$ 25,916,000.00	\$ 25,916,000.00
39	SPECIAL	400	NOISE BARRIER	FT	\$ 500.00	\$ 200,000.00	\$ 589.00	\$ 235,600.00
<b>SUBTOTAL</b>						<b>\$ 22,200,000.00</b>	<b>\$ 26,151,600.00</b>	<b>\$ 26,151,600.00</b>
<b>INCIDENTALS</b>								
40	614	LUMP	MAINTAINING TRAFFIC	LS	\$ 200,000.00	\$ 200,000.00	\$ 235,600.00	\$ 235,600.00
41	619	24	FIELD OFFICE, TYPE B	MNTH	\$ 1,400.00	\$ 33,600.00	\$ 1,649.20	\$ 39,581.00
42	623	LUMP	CONSTRUCTION LAYOUT STAKES AND SURVEYING	LS	\$ 50,000.00	\$ 50,000.00	\$ 58,900.00	\$ 58,900.00
43	624	LUMP	MOBILIZATION	LS	\$ 800,000.00	\$ 800,000.00	\$ 942,400.00	\$ 942,400.00
44	SPECIAL	LUMP	PERFORMANCE BOND	LS	\$ 200,000.00	\$ 200,000.00	\$ 235,600.00	\$ 235,600.00
45	SPECIAL	LUMP	RAILROAD INSURANCE BOND	LS	\$ 6,000.00	\$ 6,000.00	\$ 7,068.00	\$ 7,068.00
46	SPECIAL	LUMP	UTILITY RELOCATION	LS	\$ 78,000.00	\$ 78,000.00	\$ 91,884.00	\$ 91,884.00
<b>SUBTOTAL</b>						<b>\$ 1,367,600.00</b>	<b>\$ 1,611,033.00</b>	<b>\$ 1,611,033.00</b>
Estimated Subtotal						\$25,362,520	\$29,877,050	\$29,877,050
Contingency (30%)						\$7,608,756	\$8,963,115	\$8,963,115
<b>Construction Total</b>						<b>\$32,971,276</b>	<b>\$38,840,165</b>	<b>\$38,840,165</b>

\* The cost of a 30-car parking lot is included.  
 The cost of a building take, if required, is not included.

