

HAM-75/275 Ramp Study - Conceptual Level Construction Cost Estimates

Category	Pay Item	Unit	Unit Cost	Alternative 1 (35 mph Design Speed)		Alternative 2 (40 mph Design Speed)		Alternative 3 (45 mph Design Speed)		Alternative 4 (35 mph Design Speed)		Alternative 5 (45 mph Design Speed)		Alternative 6 (50 mph Design Speed)	
				Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost
				Roadway	Removal - Pavement	Square Yards	\$8	5841	\$ 46,728	9255	\$ 74,040	9255	\$ 74,040	5023	\$ 40,184
Roadway	Embankment	Cubic Yards	\$10	29815	\$ 298,150	55765	\$ 557,650	37300	\$ 373,000	18220	\$ 182,200	25505	\$ 255,050	29545	\$ 295,450
Erosion Control	Erosion Control	Lump	\$50,000	1	\$ 50,000	1	\$ 50,000	1	\$ 50,000	1	\$ 50,000	1	\$ 50,000	1	\$ 50,000
Drainage	Drainage on Structure	Foot	\$125	1600	\$ 200,000	1900	\$ 237,500	1200	\$ 150,000	1500	\$ 187,500	1715	\$ 214,375	2775	\$ 346,875
Pavement	Full Depth Pavement	Square Yards	\$68	7818	\$ 531,624	13135	\$ 893,180	18929	\$ 1,287,172	4962	\$ 337,416	5815	\$ 395,420	7757	\$ 527,476
Lighting	Partial Interchange	Each	\$300,000	1	\$ 300,000	1	\$ 300,000	1	\$ 300,000	1	\$ 300,000	1	\$ 300,000	1	\$ 300,000
Traffic Control	Signs	Lump	\$40,000	1	\$ 40,000	1	\$ 40,000	1	\$ 40,000	1	\$ 40,000	1	\$ 40,000	1	\$ 40,000
Traffic Control	Edge Line	Miles	\$5,000	1.61	\$ 8,050	2.25	\$ 11,250	2.61	\$ 13,050	1.64	\$ 8,200	1.74	\$ 8,700	2.03	\$ 10,150
Retaining Walls	MSE Wall	Square Feet	\$140	7550	\$ 1,057,000	7550	\$ 1,057,000	10403	\$ 1,456,420	2850	\$ 399,000	2375	\$ 332,500	3175	\$ 444,500
Structures	Bridge Removal	Square Feet	\$22			16875	\$ 371,250		\$ -						
Structures	Multi Span Bridge	Square Feet	\$250	56,000	\$ 14,000,000	85,625	\$ 21,406,250	84,875	\$ 21,218,750	52,500	\$ 13,125,000	60,025	\$ 15,006,250	97,125	\$ 24,281,250
Sub Total					\$ 16,531,552	Sub Total	\$ 24,998,120	Sub Total	\$ 24,962,432	Sub Total	\$ 14,669,500	Sub Total	\$ 16,642,479	Sub Total	\$ 26,335,885
Contingency (35%)					\$ 5,786,043		\$ 8,749,342		\$ 8,736,851		\$ 5,134,325		\$ 5,824,868		\$ 9,217,560
Sub Total					\$ 22,317,595	Sub Total	\$ 33,747,462	Sub Total	\$ 33,699,283	Sub Total	\$ 19,803,825	Sub Total	\$ 22,467,347	Sub Total	\$ 35,553,445
Maintenance of Traffic	MOT	Lump	3.00%	1	\$ 669,528	1	\$ 1,012,424	1	\$ 1,010,978	1	\$ 594,115	1	\$ 674,020	1	\$ 1,066,603
Incidentals	Performance Bond	Lump	0.50%	1	\$ 111,588	1	\$ 168,737	1	\$ 168,496	1	\$ 99,019	1	\$ 112,337	1	\$ 177,767
Incidentals	Mobilization	Lump	\$800,000	1	\$ 800,000	1	\$ 800,000	1	\$ 800,000	1	\$ 800,000	1	\$ 800,000	1	\$ 800,000
Incidentals	Const Layout Stakes	Lump	0.50%	1	\$ 111,588	1	\$ 168,737	1	\$ 168,496	1	\$ 99,019	1	\$ 112,337	1	\$ 177,767
Incidentals	Field Office, Type C	Month	\$2,500	24	\$ 60,000	24	\$ 60,000	24	\$ 60,000	24	\$ 60,000	24	\$ 60,000	24	\$ 60,000
Total					\$ 24,070,299	Total	\$ 35,957,360	Total	\$ 35,907,255	Total	\$ 21,455,978	Total	\$ 24,226,041	Total	\$ 37,835,583

Assumptions:
 1. ODOT's Procedure for Construction Budget Estimating spreadsheet dated May 2013 was the primary source used in developing unit costs.
 2. Costs have not been inflated to reflect anticipated construction year pricing.
 3. Bridge Limits: Alt 1 - STA 316+54 to 332+38 (1600'); Alt 2 - STA 215+45 to 234+62 (1900'); Alt 3 - STA 114+75 to 139+00 (2425'); Alt 4 - STA 26+45 to 40+72 (1500'); Alt 5 - STA 25+41 to 42+56 (1715'); Alt 6 - STA 25+29 to 53+00 (2775').