

Schedule 'C' Municipal Class Environmental Assessment for Merritt Road (Regional Road 37) and Rice Road (Regional Road 54) in the Town of Pelham, the City of Thorold and the City of Welland

APPENDIX

S

Preliminary Cost Estimate

If technical reports are required in an alternative format for accessibility needs, please contact:

Maged Elmadhoon, M.Eng., P.Eng.
Manager, Transportation Planning - Public Works, Niagara Region
Phone: 905-980-6000 ext. 3583
Email: Maged.Elmadhoon@niagararegion.ca

MERRITT ROAD AND RICE ROAD PRELIMINARY COST ESTIMATE

Segment 1: Merritt Road from Rice Road to Cataract Road			20+000	20+970		970	m	
Segment 2: Merritt Road from Cataract Road to Merrittville Highway / Niagara Street			20+970	21+800		830	m	
Segment 3: Merritt Road from Merrittville Highway / Niagara Street to Highway 406 / Kottmeier Road			21+800	23+220		1420	m	
Segment 4: Rice Road from Merritt Road to Quaker Road			10+000	11+300		1300	m	

DESCRIPTION	UNIT	UNIT PRICE	SEGMENT 1 QTY	TOTAL	SEGMENT 2 QTY	TOTAL	SEGMENT 3 QTY	TOTAL	RICE ROAD QTY	TOTAL
General										
Mobilization/ Demobilization	LS		1	\$ 100,000	1	\$ 100,000	1	\$ 100,000	1	\$ 100,000
Construction Layout and Traffic Control	LS		1	\$ 100,000	1	\$ 100,000	1	\$ 100,000	1	\$ 100,000
ESC and Tree Protection	LS		1	\$ 100,000	1	\$ 100,000	1	\$ 100,000	1	\$ 100,000
Contaminated Soils and Excess Soil Management	LS		1	\$ 500,000	1	\$ 500,000	1	\$ 500,000	1	\$ 500,000
Roadworks										
Earth Excavation	m3	\$ 25	2016	\$ 50,400	636	\$ 15,900	8388	\$ 209,700	10956	\$ 273,900
Earth Borrow	m3	\$ 25		\$ -	14592	\$ 364,800	20748	\$ 518,700	4524	\$ 113,100
Granular 'A' Crushed Limestone (525mm)	t	\$ 25	10584	\$ 264,600	11366	\$ 284,150	34020	\$ 850,500	27065	\$ 676,625
Supply and Pave Hot Mix Asphalt - Superpave 12.5 FC2 (50mm)	t	\$ 150	859	\$ 128,850	924	\$ 138,600	2682	\$ 402,300	2337	\$ 350,550
Supply and Pave Hot Mix Asphalt - Superpave 19.0 (105mm)	t	\$ 125	1804	\$ 225,500	1939	\$ 242,375	5632	\$ 704,000	4908	\$ 613,500
Concrete Curb and Gutter	m	\$ 90	1940	\$ 174,600	1660	\$ 149,400	5680	\$ 511,200	2600	\$ 234,000
Concrete Sidewalk	m2	\$ 80		\$ -		\$ -	2556	\$ 204,480	2340	\$ 187,200
Asphalt MUP including 60mm HL-3F Asphalt and 300mm Granular A	m2	\$ 60	2910	\$ 174,600	2490	\$ 149,400	4260	\$ 255,600	3900	\$ 234,000
Sewers and Culverts										
Catchbasins (assumed 60m spacing on both sides)	each	\$ 4,000	34	\$ 136,000	28	\$ 112,000	48	\$ 192,000	44	\$ 176,000
Catchbasin lead	m	\$ 500	340	\$ 170,000	280	\$ 140,000	480	\$ 240,000	440	\$ 220,000
Culverts (All Sizes)	m	\$ 1,500	165	\$ 247,500	100	\$ 150,000		\$ -	170	\$ 255,000
Storm Sewer (All Sizes)	m	\$ 1,000		\$ -		\$ -	830	\$ 830,000		\$ -
Storm Manholes (Assume 90m spacing - All Sizes)	each	\$ 9,000		\$ -		\$ -	10	\$ 90,000		\$ -
Stormwater Management (OGS)	each	\$ 50,000	1	\$ 50,000	1	\$ 50,000	1	\$ 50,000	1	\$ 50,000
Electrical										
Illumination (assume 60m pole spacing on both sides)	each pole	\$ 20,000	34	\$ 680,000	28	\$ 560,000	48	\$ 960,000	44	\$ 880,000
Traffic Signals (per intersection)										
Merritt Rd and Rice Rd	each	\$ 500,000	1	\$ 500,000		\$ -		\$ -		\$ -
Merritt Rd and Cataract Rd	each	\$ 500,000		\$ -	1	\$ 500,000		\$ -		\$ -
Merritt Rd and Niagara St	each	\$ 500,000		\$ -		\$ -	1	\$ 500,000		\$ -
Merritt Rd and Eastman Gtwy	each	\$ 500,000		\$ -		\$ -	1	\$ 500,000		\$ -
Merritt Rd and Grisdale	each	\$ 500,000		\$ -		\$ -	1	\$ 500,000		\$ -
Merritt Rd and Highway 406 Ramp	each	\$ 500,000		\$ -		\$ -	1	\$ 500,000		\$ -
Rice Rd and Quaker Rd	each	\$ 500,000		\$ -		\$ -		\$ -	1	\$ 500,000
SUBTOTAL				\$ 3,502,050		\$ 3,556,625		\$ 8,718,480		\$ 5,463,875
MINOR ITEMS (20%)				\$ 700,410		\$ 711,325		\$ 1,743,696		\$ 1,092,775
CONTINGENCY ALLOWANCES (30%)				\$ 1,050,615		\$ 1,066,988		\$ 2,615,544		\$ 1,639,163
TOTAL CONSTRUCTION				\$ 5,253,075		\$ 5,334,938		\$ 13,077,720		\$ 8,195,813
Additional Costs										
Engineering and Material Testing (Assumed 20%)				\$ 1,050,615		\$ 1,066,988		\$ 2,615,544		\$ 1,639,163
Utility Relocations (Assumed 20%)				\$ 1,050,615		\$ 1,066,988		\$ 2,615,544		\$ 1,639,163
Property (Assumed 25%)				\$ 1,313,269		\$ 1,333,734		\$ 3,269,430		\$ 2,048,953
TOTAL				\$ 8,667,574		\$ 8,802,647		\$ 21,578,238		\$ 13,523,091