

Appendix L

Preliminary Construction Cost Estimate

Appendix L: Preliminary Cost Estimate

Two versions are provided below: one with the Mississauga/Brampton split, and one without.

Mavis Road Class EA Study						City of Mississauga			City of Brampton		
Courtneypark Drive West to Ray Lawson Boulevard						Courtneypark Drive West to North City Limits			North City Limits to Ray Lawson Boulevard		
PRELIMINARY COST ESTIMATE						(Station 10+200 to 12+980)			(Station 12+980 to 14+160)		
No.	Item Description	Total Quantity	Unit	Estimated Unit Price	Total Cost*	Quantity	Unit	Sub-Total	Quantity	Unit	Sub-Total
1	Earth Excavation and Grading	16000	m ³	\$25.00	\$400,000	10000	m ³	\$250,000	6000	m ³	\$150,000
2	Pavement Design for Widening										
	• Hot Mix HL1 (50mm depth)	2000	t	\$100.00	\$200,000	1300	t	\$130,000	700	t	\$70,000
	• Hot Mix HDBC (2 lifts, 120mm depth)	4600	t	\$90.00	\$410,000	3000	t	\$270,000	1600	t	\$140,000
	• Granular A Base (150mm depth)	6000	t	\$22.50	\$140,000	4000	t	\$90,000	2000	t	\$50,000
	• Granular B Type I Subbase (600mm depth) - Northbound Lanes	14000	t	\$20.00	\$280,000	6500	t	\$130,000	7500	t	\$150,000
	• Granular B Type I Subbase (900mm depth) - Southbound Lanes	23000	t	\$20.00	\$460,000	11500	t	\$230,000	11500	t	\$230,000
	• Highway 407 N-E and N-W on-ramp partial replacements	450	m	\$3,200.00	\$1,440,000				450	m	\$1,440,000
3	Rehabilitation of Existing Pavement										
	• Partial Depth Milling	71000	m ²	\$3.50	\$250,000	57000	m ²	\$200,000	14000	m ²	\$50,000
	• HL1 (50mm depth)	9900	t	\$100.00	\$990,000	8000	t	\$800,000	1900	t	\$190,000
	• HDBC (50mm depth)	10800	t	\$90.00	\$970,000	8700	t	\$780,000	2100	t	\$190,000
4	Concrete / Asphalt Treatments										
	• Concrete Curb and Gutter	11900	m	\$70.00	\$830,000	8700	m	\$610,000	3200	m	\$220,000
	• Concrete Median / Splash Strip	11800	m ²	\$75.00	\$880,000	8700	m ²	\$650,000	3100	m ²	\$230,000
	• Concrete Bus Platforms	70	m ²	\$75.00	\$6,000	70	m ²	\$6,000			
	• Concrete Bus Bay (Derry Road SB QJL)	400	m ²	\$140.00	\$60,000	400	m ²	\$60,000			
	• Concrete Sidewalk + Pads at Intersections	2800	m ²	\$75.00	\$210,000	2000	m	\$150,000	800	m	\$60,000
	• Asphalt Pathway (3.5 m Multi-Use Trail)	10800	m ²	\$40.00	\$430,000	7600	m	\$300,000	3200	m	\$130,000
5	Drainage / SWM										
	• Lateral Pipe Connections (300 mm) - extensions & replacements	660	each	\$500.00	\$330,000	660	each	\$330,000			
	• Catch Basins (Curb Inlet)	120	each	\$3,000.00	\$360,000	110	each	\$330,000	10	each	\$30,000
	• Concrete Culvert										
	◦ CV7 Wingwall		L.S.		\$20,000					L.S.	\$20,000
6	Retaining Walls	100	m ²	\$1,500.00	\$150,000	100	m ²	\$150,000			
7	Steel Beam Guide Rail	660	m	\$120.00	\$84,000	200	m	\$24,000	460	m	\$60,000
8	Removals										
	• Removal of Curb and Gutter	10700	m	\$11.50	\$120,000	9000	m	\$100,000	1700	m	\$20,000
	• Removal of Concrete Median / Splash Strip	11300	m ²	\$12.50	\$140,000	9500	m ²	\$120,000	1800	m ²	\$20,000
	• Removal of Concrete Bus Platforms	80	m ²	\$12.50	\$1,000	80	m ²	\$1,000			
	• Removal of Concrete Sidewalk + Pads at Intersections	4000	m ²	\$12.50	\$50,000	4000	m ²	\$50,000			
	• Removal of Existing Catch Basins	120	m	\$600.00	\$76,000	110	m	\$70,000	10	m	\$6,000
	• Removal of Existing Lateral Pipe Connections	660	m	\$75.00	\$50,000	660	m	\$50,000			
	• Removal of Steel Beam Guide Rail	660	m ²	\$21.50	\$14,000	200	m ²	\$4,000	460	m ²	\$10,000
	• Partial removal of Highway 407 N-E and N-W on-ramps	1800	m ²	\$21.22	\$40,000				1800	m ²	\$40,000
9	Landscaping		L.S.		\$560,000		L.S.	\$450,000		L.S.	\$110,000
10	Noise Walls (Replacements)	25	m	\$1,060.00	\$30,000	25	m	\$30,000			
11	Illumination										
	• Light Standard Relocations	16	each	\$6,000.00	\$100,000	5	each	\$30,000	11	each	\$70,000
12	Maintenance of Traffic										
	• Traffic Control		L.S.		\$100,000		L.S.	\$70,000		L.S.	\$30,000
13	Traffic Signals										
	• Temporary	8	each int.	\$100,000.00	\$800,000	6	each int.	\$600,000	2	each int.	\$200,000
	• Permanent	8	each int.	\$200,000.00	\$1,600,000	6	each int.	\$1,200,000	2	each int.	\$400,000
14	Miscellaneous (15%) - includes clearing and grubbing		L.S.		\$1,890,000		L.S.	\$1,240,000		L.S.	\$650,000
	Subtotal (Construction)				\$14,471,000			\$9,505,000			\$4,966,000
15	Structures										
	• 407 Structure Widening		L.S.		\$2,290,000					L.S.	\$2,290,000
16	Utility Relocation - Hydro (Lump-Sum Estimate)		L.S.		\$750,000		L.S.	\$750,000			
17	Utility Relocation - Others (Lump-Sum Estimate)		L.S.		\$250,000		L.S.	\$250,000			
	Contingency (15%)				\$2,670,000			\$1,580,000			\$1,090,000
	Engineering (Detailed Design & CA) (10%)				\$1,680,000			\$960,000			\$730,000
	TOTAL (excluding HST)				\$22,120,000			\$13,045,000			\$9,076,000

*Costs have been rounded to the nearest \$1,000 or \$10,000 where appropriate.

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	• Asphalt Pathway (3.5 m Multi-Use Trail)	10800	m ²	\$40.00	\$430,000
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	• Removal of Existing Lateral Pipe Connections	660	m	\$75.00	\$50,000
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10	Noise Walls (Replacements)	25	m	\$1,060.00	\$30,000
11	Illumination				
	• Light Standard Relocations	16	each	\$6,000.00	\$100,000
12	Maintenance of Traffic				
	• Traffic Control		L.S.		\$100,000
13	Traffic Signals				
	• Temporary	8	each int.	\$100,000.00	\$800,000
	• Permanent	8	each int.	\$200,000.00	\$1,600,000
14	Miscellaneous (15%) - includes clearing and grubbing		L.S.		\$1,890,000
	Subtotal (Construction)				\$14,471,000
15	Structures				
	• 407 Structure Widening		L.S.		\$2,290,000
16	Utility Relocation - Hydro (Lump-Sum Estimate)		L.S.		\$750,000
17	Utility Relocation - Others (Lump-Sum Estimate)		L.S.		\$250,000
	Contingency (15%)				\$2,670,000
	Engineering (Detailed Design & CA) (10%)				\$1,680,000
	TOTAL (excluding HST)				\$22,120,000

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