



APPENDIX M

Construction Cost Estimate

ROAD NAME: Derry Road (Reg. Rd. 7)		Imp. Type: Alternative 4 (Preferred Alternative)	
From: Milborough Line		To: McNiven Road	
Road Length (m):	1370	ROW Width (m):	
Number of Lanes:	2	Lane Width (m):	
Flush Median Width (m):		Raised Median Width (m):	
CROSS-SECTION FOR LEFT SIDE:		CROSS-SECTION FOR RIGHT SIDE:	
Cross-Section (Rural/Urban):	Rural	Cross-Section (Rural/Urban):	Rural
Paved Road Width (m):	3.65	Paved Road Width (m):	3.65
Paved Shoulder Width (m):	1.0	Paved Shoulder Width (m):	1.0
Granular Shoulder Width (m):	1.5	Granular Shoulder Width (m):	1.5
Sidewalk Width (m):	0	Sidewalk Width (m):	0
Bike Path Width (m):	0	Bike Path Width (m):	0
Street Lighting (Y/N):	No	Street Lighting (Y/N):	No

No.	Item	Unit	Estimated Quantity	Unit Price	Total	150m section just west of McNiven Road
A ROADWORKS & DRAINAGE						
1	Clearing and Grubbing	ha.	0.548	\$10,660.00	\$5,841.68	10.95%
2	Remove Ex. Asphalt (Full Depth)	m ²	0	\$6.93	\$0.00	\$639.60
3	Remove Ex. Asphalt (Partial Depth)	m ²	0	\$5.86	\$0.00	
4	Earth Excavation	m ³	0	\$15.99	\$0.00	
5	Earth Borrow	m ³	0	\$8.53	\$0.00	
6	Granular A (150 mm depth)	tonnes	5498.63	\$23.45	\$128,953.75	\$14,119.02
7	Granular B (600 mm depth)	tonnes	21994.50	\$20.25	\$445,476.60	\$48,774.81
8	Granular A below Asphalt Splash Pad (150 mm depth)	m ²	0	\$15.99	\$0.00	
9	Surface Course Asphalt (50 mm depth)	tonnes	1401.51	\$95.94	\$134,460.87	\$14,721.99
10	Base Course Asphalt (100 mm depth)	tonnes	822.8	\$86.35	\$71,045.49	\$7,778.70
11	Asphalt Splash Pad (0.5 m width, 50 mm depth)	m ²	0	\$53.30	\$0.00	
12	Concrete Curb and Gutter (All types)	m	630	\$58.63	\$36,936.90	\$36,936.90
13	Sod c/w 100 mm Topsoil	m ²	0	\$6.93	\$0.00	
14	Seeding c/w 100 mm Topsoil	m ²	10960	\$5.33	\$58,416.80	\$6,396.00
15	Single Steel Beam Guide Rail	m	300	\$106.60	\$31,980.00	\$31,980.00
16	End Treatment for Steel Beam Guide Rail	ea.	4	\$5,330.00	\$21,320.00	\$21,320.00
17	300 mm Storm Sewer Laterals	m	30	\$266.50	\$7,995.00	\$7,995.00
18	375 - 600 mm Storm Sewer	m	400	\$399.75	\$159,900.00	\$159,900.00
19	675 - 900 mm Storm Sewer	m	0	\$373.10	\$0.00	
20	975 - 1200 mm Storm Sewer	m	0	\$533.00	\$0.00	
21	150 mm Subdrain	m	630	\$27.72	\$17,461.08	\$17,461.08
22	Single Catchbasins	ea.	6	\$2,132.00	\$12,792.00	\$12,792.00
23	Double Catchbasins	ea.	0	\$3,198.00	\$0.00	
24	Storm Maintenance Holes/MHCs	ea.	5	\$5,010.20	\$25,051.00	\$25,051.00
25	300 mm CSP Culvert	m	0	\$133.25	\$0.00	
26	375 - 600 mm CSP Culvert	m	0	\$213.20	\$0.00	
27	675 - 1200 mm CSP Culvert	m	64	\$373.10	\$23,878.40	\$23,878.40
28	1350 - 1800 mm CSP Culvert	m	0	\$533.00	\$0.00	
29	Precast Concrete Box Culvert	m	0	\$2,132.00	\$0.00	
30	Oil/Grit Separator	ea.	0	\$63,960.00	\$0.00	
31	Stormwater Outfall Structure (Headwall)	ea.	1	\$15,990.00	\$15,990.00	\$15,990.00
32	Storm Water Management Pond	ea.	0	\$26,650.00	\$0.00	
33	Upgrade/Modify Intersections (incl. turn lanes)	ea.	0	\$319,800.00	\$0.00	
34	Additional turn lanes	ea.	0	\$26,650.00	\$0.00	
35	Entrance Modifications/Regrading	L.S.	0	\$26,650.00	\$0.00	
36	Major Fill - Structure Approaches (Assumed 3% of structure cost)	L.S.	0	3.0%	\$0.00	
37	Minor Roadworks & Drainage Items (10% of major roadworks items) (incl. clearing & grubbing, ditching, topsoil stripping, minor earth borrow, breaking into ex. pipe/structure, pavement markings, signage, proof rolling, tack coat, silt fence, tree protect)			10.0%	\$119,749.96	\$13,111.31
Subtotal A					\$1,317,249.53	\$458,845.82
38	Reconstruction Costs (incl. sawcutting, pulverizing, asphalt removal, MH/CB/WV/VCH adjustments, culvert removal, CB removal, curb removal, traffic control, etc.)			3.75%	\$49,396.86	\$5,408.42
Subtotal Roadworks & Drainage					\$1,366,646.39	\$464,254.24
B STRUCTURES						
39	Structure Removal/Demolition	ea.	0	\$95,940.00	\$0.00	
40	Grade Separation Overpass (road over rail)	m ²	0	\$3,411.20	\$0.00	
41	Grade Separation Underpass (road under rail)	m ²	0	\$4,264.00	\$0.00	
42	Grade Separation Retaining Walls	m ²	0	\$1,279.20	\$0.00	
43	Railway Detour	ea.	0	\$2,665,000.00	\$0.00	
44	Bridge over Watercourse Crossing	m ²	0	\$3,411.20	\$0.00	
45	Bridge over other roadway	m ²	0	\$3,411.20	\$0.00	
46	Bridge Retaining Walls	m ²	380	\$1,172.60	\$445,588.00	\$445,588.00
Subtotal Structures					\$445,588.00	\$445,588.00
C LANDSCAPING/MITIGATION						
47	Deciduous Trees (30 m spacing)	ea.	0	\$533.00	\$0.00	
48	Mitigation and Compensation for Watercourse Crossings	m	50	\$1,066.00	\$53,300.00	\$53,300.00
Subtotal Landscaping/Mitigation					\$53,300.00	\$53,300.00
D ELECTRICAL						
49	Traffic Signalization (per intersection)	ea.	0	\$213,200.00	\$0.00	
50	Modifications to Ex. Traffic Signalization (per intersection)	ea.	0	\$127,920.00	\$0.00	
51	Street Lighting (per pole)	ea.	0	\$5,330.00	\$0.00	
Subtotal Electrical					\$0.00	\$0.00
E UTILITIES & SERVICES						
52	Bell	L.S.	1	\$50,000.00	\$50,000.00	\$5,474.45
53	Hydro	L.S.	1	\$50,000.00	\$50,000.00	\$5,474.45
54	Gas	L.S.	0		\$0.00	
55	Cable	L.S.	0		\$0.00	
56	Oil Pipelines	L.S.	0		\$0.00	
57	Hydro One	L.S.	0		\$0.00	
Subtotal Utilities					\$128,541.67	\$39,490.57
SUBTOTAL ALL ITEMS (1)					\$1,994,076.06	\$1,002,632.81
20% Contingency					\$398,815.21	\$200,526.56
SUBTOTAL (2)					\$2,392,891.27	\$1,203,159.37
15% Engineering					\$358,933.69	\$180,473.91
SUBTOTAL ALL ITEMS					\$2,751,824.96	\$1,383,633.27
F PROPERTY						
58	Existing Urban Residential/Commercial Lands (Non-vacant)	acre	0.4490	\$799,500.00	\$358,960.07	\$39,302.20
59	Vacant Urban Lands (Residential, Commercial, etc)	acre	0	\$639,600.00	\$0.00	
60	Storm Water Management Ponds	acre	0	\$639,601.07	\$0.00	
61	Flood Plain Lands	acre	0	\$10,660.00	\$0.00	
62	Rural Lands	acre	0	\$133,250.00	\$0.00	
Subtotal Property					\$358,960.07	\$39,302.20
TOTAL ESTIMATED PROJECT COST (excl. GST)					\$3,110,785.03	\$1,422,935.47
LOCAL MUNICIPALITY ITEMS						
63	Asphalt Path	m ²	0	\$56.50	\$0.00	
64	Concrete Sidewalk	m ²	0	\$63.96	\$0.00	
TOTAL ESTIMATED LOCAL MUNICIPALITY ITEMS (excl. GST)					\$0.00	\$0.00
Rounded Estimate					\$3,110,785.03	\$1,422,935.47
Rounded Estimate					\$3,100,000	\$1,400,000