

**13656 - 13668 EMIL KOLB PARKWAY
BOLTON VILLAGE - CAMCOS LIVING****TOWN OF CALEDON**

SUMMARY OF COST ESTIMATE

INTERNAL COST ESTIMATE

SECTION "A"	Erosion and Sediment Control	\$ 26,000.00
SECTION "B"	Storm Sewers and Appurtenances	\$ 486,000.00
SECTION "C"	Roadworks to Base Asphalt	\$ 271,000.00
SECTION "D"	Top Asphalt and Aboveground Works	\$ 44,000.00

INTERNAL COST ESTIMATE: \$ 827,000.00

EXTERNAL COST ESTIMATE

SECTION "E"	Storm Sewers and Appurtenances	\$ 26,000.00
SECTION "F"	Roadworks to Base Asphalt	\$ 14,000.00
SECTION "G"	Top Asphalt and Aboveground Works	\$ 3,000.00

EXTERNAL COST ESTIMATE: \$ 43,000.00

SUBTOTAL: \$ 870,000.00

LETTER OF CREDIT SUMMARY:

***LC ENG. SUBTOTAL \$ 413,500.00**

EXTERNAL WORKS TOTAL \$ 43,000.00

****10% CONTINGENCIES \$ 4,300.00**

TOTAL LETTER OF CREDIT REQUIREMENT \$ 460,800.00

*As per Town of Caledon Engineering Securities Policy. Engineering securities to be posted based on 100% of the engineering cost estimate for external works and 50% for the internal works, to a minimum of \$20,000 and a maximum of \$1,000,000

**10% Contingency to only apply to external cost estimate

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SECTION "A" - INTERNAL EROSION AND SEDIMENT CONTROL

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT RATE (\$)	TOTAL (\$)
A-1	Construct Construction Access Mud-Mat including stripping of topsoil, grading, cut and fill, crusher-run limestone and keep in good, clean condition during construction.	202.0	SQ.M.	25.00	5,050.00
A-2	Supply and install Construction Gate	1	EACH	2,500.00	2,500.00
A-3	Construct temporary Cut-off Swale stabilised with erosion blanket and seed or approved equivalent.	202.0	L.M.	25.00	5,050.00
A-4	Supply and install Silt Fence with filter cloth.	343.0	L.M.	15.00	5,145.00
A-5	Supply and install Filtrexx Check Dam	1	EACH	350.00	350.00
A-6	Supply and install Filtrexx SiltSoxx	2	EACH	450.00	900.00
A-7	Supply and construct Sediment Trap	2	EACH	2,500.00	5,000.00
A-8	Supply and install temporary sediment traps, complete as per details shown on drawings: (a) Sediment Trap for Street CB	3	EACH	150.00	450.00
A-9	Supply and install temporary "Truck Entrance" signs as per TC-31 of Ontario Traffic Manual.	2	EACH	450.00	900.00

TOTAL CARRY FORWARD TO SUMMARY

26,000.00

SECTION "B" - INTERNAL STORM SEWERS AND APPURTENANCES

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT RATE (\$)	TOTAL (\$)
B-1	MH 6 - CBMH 5 525Ø Concrete Pipe	15.3	L.M.	400.00	6,120.00
B-2	CBMH 5 - CBMH 3 525Ø Concrete Pipe	25.4	L.M.	400.00	10,160.00
B-3	Extra over and above Item B-2: To supply and install insulation	6.0	L.M.	80.00	480.00
B-4	CBMH 3 - MH 2 300Ø PVC Pipe	2.6	L.M.	280.00	728.00
B-5	MH 2 - CTL. MH 1 300Ø PVC Pipe	5.8	L.M.	280.00	1,624.00
B-6	MH 14 - MH 2 300Ø PVC Pipe	0.4	L.M.	280.00	112.00
B-7	MH 2 - MH 14 250Ø PVC Pipe	0.4	L.M.	250.00	100.00
B-8	CB 1 - 250Ø PVC Pipe 250Ø PVC Pipe	1.8	L.M.	250.00	450.00
B-9	200Ø Plug - MH 4 200Ø PVC Pipe	2.9	L.M.	200.00	580.00
B-10	MH 4 - CBMH 3 250Ø PVC Pipe	12.9	L.M.	250.00	3,225.00
B-11	CB 2 - MH 8 300Ø PVC Pipe	19.4	L.M.	280.00	5,432.00
B-12	MH 8 - CBMH 7 450Ø PVC Pipe	39.8	L.M.	350.00	13,930.00
B-13	Extra over and above Item B-11 to Item B-12: To supply and install insulation	31.4	L.M.	80.00	2,512.00
B-14	CBMH 10 - CBMH 9 375Ø PVC Pipe	72.8	L.M.	325.00	23,660.00
B-15	Extra over and above Item B-14: To supply and install insulation	43.0	L.M.	80.00	3,440.00
B-16	CB 4 - MH 12 250Ø PVC Pipe	12.9	L.M.	250.00	3,225.00

SECTION "B" - INTERNAL STORM SEWERS AND APPURTENANCES

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT RATE (\$)	TOTAL (\$)
B-17	CB 5 - CBMH 11 250Ø PVC Pipe	36.0	L.M.	250.00	9,000.00
B-18	Extra over and above Item B-17: To supply and install insulation	26.5	L.M.	80.00	2,120.00
B-19	CBMH 11 - MH 13 300Ø PVC Pipe	28.3	L.M.	280.00	7,924.00
B-20	MH 13 - MH 12 375Ø PVC Pipe	36.7	L.M.	325.00	11,927.50
B-21	CB 3 - 250Ø PVC Pipe 250Ø PVC Pipe	2.0	L.M.	250.00	500.00
Manholes					
B-22	MH 2 - 1500Ø with Weir Wall	1	EACH	8,500.00	8,500.00
B-23	MH 4 - 1200Ø (Include Drop Pipe and Type A Cover)	1	EACH	7,500.00	7,500.00
B-24	MH 8 - 1200Ø (Include Type A Cover)	1	EACH	7,000.00	7,000.00
B-25	MH 12 - 1200Ø (Include Type A Cover)	1	EACH	7,000.00	7,000.00
B-26	MH 13 - 1200Ø	1	EACH	6,000.00	6,000.00
B-27	MH 14 - 1800Ø (JF 6-5-1)	1	EACH	60,000.00	60,000.00
B-28	CBMH 3 - 1200Ø with Orifice Plate	1	EACH	7,000.00	7,000.00
B-29	CBMH 5 - 1200Ø	1	EACH	6,000.00	6,000.00
B-30	CBMH 7 - 1200Ø	1	EACH	6,000.00	6,000.00
B-31	CBMH 10 - 1200Ø	1	EACH	6,000.00	6,000.00
B-32	CBMH 11 - 1200Ø	1	EACH	6,000.00	6,000.00
B-33	MH 6 - 1200Ø	1	EACH	6,000.00	6,000.00
B-34	CBMH 9 - 1200Ø	1	EACH	6,000.00	6,000.00
B-35	CTL. MH 1 - 1200Ø	1	EACH	6,000.00	6,000.00
Catchbasins					
B-36	Complete with frame and grate as per Town Standards and Specifications. (a) Single	5	EACH	4,500.00	22,500.00

SECTION "B" - INTERNAL STORM SEWERS AND APPURTENANCES

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT RATE (\$)	TOTAL (\$)
INFILTRATION TRENCH					
B-37	Supply and construct Infiltration Trench	43.0	L.M.	<u>250.00</u>	<u>10,750.00</u>
CULTEC STORMWATER CHAMBER					
B-38	Supply and install Cultec Stormwater Chambercomplete as per details shown on drawings.	1	L.S.	<u>200,000.00</u>	<u>200,000.00</u>

TOTAL CARRY FORWARD TO SUMMARY

486,000.00

SECTION "C" - INTERNAL ROADWORKS TO BASE ASPHALT

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT RATE (\$)	TOTAL (\$)
C-1	Supply, place and compact the following as specified; the thickness indicated shall be compacted thickness: Fire Route				
	(a) Fine grading of subgrade prior to placing Subbase Course	2,050.0	SQ.M.	1.50	3,075.00
	(b) 450 mm thick of Granular 'B' Subbase Course	2,050.0	SQ.M.	25.00	51,250.00
	(c) 150 mm thick of Granular 'A' Base Course	1,905.0	SQ.M.	12.50	23,812.50
	(d) 70 mm thick of HL8 Binder Course	1,760.0	SQ.M.	20.00	35,200.00
	Parking Lot				
	(a) Fine grading of subgrade prior to placing Subbase Course	2,100.0	SQ.M.	1.50	3,150.00
	(b) 400 mm thick of Granular 'B' Subbase Course	2,100.0	SQ.M.	22.50	47,250.00
	(c) 150 mm thick of Granular 'A' Base Course	2,100.0	SQ.M.	12.50	26,250.00
	(d) 50 mm thick of HL8 Binder Course	2,100.0	SQ.M.	14.50	30,450.00
C-2	Supply and install Subdrains with 150Ø PVC perforated pipe, pre-wrapped with Geotextile filter fabric including excavation and granular material backfill as per Town Standards and Specifications.	397.0	L.M.	15.00	5,955.00
C-3	Construct in place Concrete Curbs/Curbs and Gutters as per: (a) OPSD-600.110	397.0	L.M.	75.00	29,775.00
C-4	Adjust manhole frames to match proposed base asphalt elevation.	6	EACH	350.00	2,100.00
C-5	Adjust street catchbasin frame to match proposed base asphalt elevations. (a) Single	5	EACH	350.00	1,750.00
C-6	Control mud and dust during underground servicing works and roads to base to the satisfaction of the Municipality and Engineer.	1	L.S.	5,000.00	5,000.00
C-7	CCTV inspection and video recording into CD/DVD media including technical report and necessary flushing prior to inspection and prior to placement of top asphalt. (a) Storm Sewers (b) Street CB	317.9 5	L.M. EACH	5.00 50.00	1,589.50 250.00
C-8	Flush and clean all the following prior to the placement of top asphalt when instructed by the Engineer (Silt to be dumped at site). (a) Storm Sewers (b) Storm Manholes (c) Street CB	317.9 14 5	L.M. EACH EACH	5.00 100.00 50.00	1,589.50 1,400.00 250.00

TOTAL CARRY FORWARD TO SUMMARY

271,000.00

SECTION "D" - INTERNAL TOP ASPHALT AND ABOVEGROUND WORKS

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT RATE (\$)	TOTAL (\$)
D-1	Adjust manhole frames to match proposed top asphalt elevations.	6	EACH	350.00	2,100.00
D-2	Adjust street catchbasin frames to match proposed top asphalt elevations. (a) Single	5	EACH	350.00	1,750.00
D-3	Saw cut and/or grind as per Town Standards and Specifications to match existing pavement and construct step joints.	1	L.S.	1,000.00	1,000.00
D-4	Supply, place and compact 40 mm compacted thickness of HL3 Surface Course including cleaning and applying tack coat of SS1 emulsion at a rate of 0.50 L/m ² .	355.0	TONNE	100.00	35,500.00
D-5	Pavement Markings as per Town Standards and Specifications including parking space markings, centerlines, edge lines, lane lines, stop lines, yield lines, crosswalk, arrows etc. as shown on the drawing.	1	L.S.	3,000.00	3,000.00

TOTAL CARRY FORWARD TO SUMMARY

44,000.00

SECTION "E" - EXTERNAL STORM SEWERS AND APPURTENANCES

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT RATE (\$)	TOTAL (\$)
E-1	CTL. MH 1 - DCBMH 12 300Ø PVC Pipe	17.2	L.M.	280.00	4,816.00
E-2	Extra over and above Item E-1: To supply and install insulation	1.0	L.M.	80.00	80.00
E-3	Extra over and above Item E-1: To install using Vertical Trench Method	17.2	L.M.	500.00	8,600.00
E-4	Extra over and above Item E-1: To supply, place and compact Unshrinkable Backfill.	8	L.M.	500.00	4,000.00
Manholes					
E-5	DCBMH 12 - 1500Ø	1	EACH	8,000.00	8,000.00

TOTAL CARRY FORWARD TO SUMMARY

26,000.00

SECTION "F" - EXTERNAL ROADWORKS TO BASE ASPHALT

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT RATE (\$)	TOTAL (\$)
F-1	Remove and dispose off-site the following existing items including backfilling and compaction if required				
	(a) Curb and Gutter including Subdrain	26.0	L.M.	20.00	520.00
	(b) Sidewalk	23.0	SQ.M.	20.00	460.00
F-2	Supply, place and compact the following as specified; the thickness indicated shall be compacted thickness: Entrance				
	(a) Fine grading of subgrade prior to placing Subbase Course	130.0	SQ.M.	1.50	195.00
	(b) 450 mm thick of Granular 'B' Subbase Course	130.0	SQ.M.	25.00	3,250.00
	(c) 150 mm thick of Granular 'A' Base Course	105.0	SQ.M.	12.50	1,312.50
	(d) 70 mm thick of HL8 Binder Course	80.0	SQ.M.	20.00	1,600.00
F-3	Supply and install Subdrains with 150Ø PVC perforated pipe, pre-wrapped with Geotextile filter fabric including excavation and granular material backfill as per Town Standards and Specifications.	43.0	L.M.	15.00	645.00
F-4	Construct in place Concrete Curbs/Curbs and Gutters as per:				
	(a) OPSD-600.110	43.0	L.M.	75.00	3,225.00
	(b) OPSD-600.010	26.0	L.M.	75.00	1,950.00
F-5	CCTV inspection and video recording into CD/DVD media including technical report and necessary flushing prior to inspection and prior to placement of top asphalt.				
	(a) Storm Sewers	17.2	L.M.	5.00	86.00
F-6	Flush and clean all the following prior to the placement of top asphalt when instructed by the Engineer (Silt to be dumped at site).				
	(a) Storm Sewers	17.2	L.M.	5.00	86.00
	(b) Storm Manholes	1	EACH	100.00	100.00

TOTAL CARRY FORWARD TO SUMMARY

14,000.00

SECTION "G" - EXTERNAL TOP ASPHALT AND ABOVEGROUND WORKS

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT RATE (\$)	TOTAL (\$)
G-1	Supply, place and cast Concrete Sidewalks including driveway depths, preparation of subgrade and formworks	23.0	SQ.M.	100.00	2,300.00
G-2	Supply, place and compact 40 mm compacted thickness of HL3 Surface Course including cleaning and applying tack coat of SS1 emulsion at a rate of 0.50 L/m ² .	7.0	TONNE	100.00	700.00

TOTAL CARRY FORWARD TO SUMMARY

3,000.00