

Quantity Sheets
CONTRACT NO. 2021-5154
Book 1 OF 1

NORTH REGION
NORTHEAST

Ministry of Transportation



QUANTITIES - GRADING

W.P. No. 5217-13-00
Contract No. 2021-5154

SHEET
1

MINISTRY OF TRANSPORTATION - ONTARIO

Description	Earth Excavation (Grading)	Reference	Earth Ditch Cleanup	Reference													
Sub - Totals Brought Forward:																	
HIGHWAY 101																	
CARR TOWNSHIP																	
PDA A																	
13+076 - 13+117 LT DITCH			41														
13+090 - 13+160	158																
PDA B & C																	
13+639 - 13+806 LT & RT	6,276																
14+070 - 14+109 LT			55														
BEATTY TOWNSHIP																	
PDA D																	
10+600 - 10+750 LT & RT	1,247																
10+587 - 10+632 RT DITCH			45														
10+652 - 10+685 LT DITCH			33														
10+669 - 10+691 RT DITCH			22														
10+700 - 10+758 LT DITCH			58														
11+110 - 11+160 RT			50														
11+533 - 11+548 RT			15														
11+574 - 11+589 RT			15														
11+571 - 11+581 LT			10														
11+609 - 11+619 LT			10														
11+868 - 11+883 RT			15														
12+112 - 12+122 LT			10														
12+134 - 12+144 LT			10														
Sub - Totals Carried Forward:																	
	7,681		389														

(P)		(P)															
TOTALS																	
UNIT	m3 (P)			m (P)													
ITEM No.	1			2													

Remarks: Volume adjustment factor for earth have been applied to quantities shown.

Reference

Total Stripping	
Stripping Available	
Top Soil Required	
Stripping Balance	

CHKD. _____
APPR. _____
DATE _____

GRADING

QUANTITIES - GRADING

W.P. No. 5217-13-00
Contract No. 2021-5154

SHEET
2

MINISTRY OF TRANSPORTATION - ONTARIO

Description	Earth Excavation (Grading)	Reference	Earth Ditch Cleanout	Reference													
Sub - Totals Brought Forward:	7,681		389														
PDA E																	
13+843 - 13+871 LT & RT	982																
13+871 - 13+917 RT			46														
13+910 - 13+930 RT			20														
14+474 - 14+489 RT			15														
14+506 - 14+521 RT			15														
14+878 - 14+898 LT			20														
14+880 - 14+900 RT			20														
14+915 - 14+935 LT			20														
14+918 - 14+938 RT			20														
15+014 - 15+065 RT			51														
15+362 - 15+382 RT			20														
15+420 - 15+435 LT			15														
15+435 - 15+465 RT			30														
HISLOP TOWNSHIP																	
10+515 - 10+565 LT			50														
10+515 - 10+615 RT			100														
11+411 - 11+421 LT			10														
11+446 - 11+466 LT			20														
11+753 - 11+778 RT			25														
Sub - Totals Carried Forward:	8,663		886														

(P)		(P)															
TOTALS																	
UNIT	m3 (P)			m (P)													
ITEM No.	1			2													

Remarks: Volume adjustment factor for earth have been applied to quantities shown.

Reference

Total Stripping	
Stripping Available	
Top Soil Required	
Stripping Balance	

CHKD. _____
APPR. _____
DATE _____

GRADING

QUANTITIES - HOT MIX AND GRANULAR

W.P. No. 5217-13-00
Contract No. 2021-5154

SHEET
4

MINISTRY OF TRANSPORTATION - ONTARIO

Description	Tack Coat [Lower Binder Course]	Tack Coat [Upper Binder Course]	Tack Coat [Milled Surface]	Hot Mix Asphalt Miscellaneous	Superpave 12.5 - 40 mm Lift Thickness Upper Binder Course	Superpave 12.5 - 40 mm Lift Thickness Surface Course	Superpave 12.5 - 50 mm Lift Thickness Lower Binder Course	Superpave 12.5 - 50 mm Lift Thickness Upper Binder Course	Superpave 19.0 - 50 mm Lift Thickness Lower Binder Course	Superpave 19.0 - 50 mm Lift Thickness Upper Binder Course	Granular A [Base]	Granular A [Shouldering & Tie-Ins]	Granular B, Type II [Sub-Base or Backfill]			References	
Sub - Totals Brought Forward:																	
HIGHWAY 101																	
CARR TOWNSHIP																	
10+536 - 14+318 LT LANE						15,466											
10+536 - 14+318 RT LANE						15,466											
10+541 - 10+669 LT				64	6												
10+541 - 10+679 LT LANE		483								483							
10+541 - 10+679 RT LANE		552								552							
10+679 - 10+759 LT LANE (BRIDGE)			344														
10+679 - 10+759 RT LANE (BRIDGE)			344														
10+759 - 14+318 LT LANE		14,236								14,574							
10+759 - 14+318 RT LANE		14,236								14,574							
10+772 - 14+318 SHOULDERING LT & RT												1,474					
10+772 - 11+112 RT SHLD						595											
10+786 - 11+047 LT SHLD						457											
10+859 LT - NORTH ROAD		303				303				303							
11+177 LT - PRIVATE ENT.						57											
11+765 CULVERT 7																	
11+800 RT - PRIVATE ENT.						126											
11+974 - 12+139 REST AREA		1,573				1,573				1,573							
12+139 - 12+227 TAPER		167				167				167							
12+242 RT - CEMETERY						96											
Sub - Totals Carried Forward:	0	31,550	688	64	6	34,306	0	0	0	32,226	0	1,474	0				
TOTALS	(P)	(P)	(P)	(P)	(P)	(P)	(P)	(P)	(P)	(P)							
UNIT	m2 (P)	m2 (P)	m2 (P)	m2 (P)	m2 (P)	m2 (P)	m2 (P)	m2 (P)	m2 (P)	m2 (P)	t	t	t				
ITEM No.		3		4		5		6		7		8	9				
Reference																	
Remarks:																CHKD. _____ APPR. _____ DATE _____	

HOT MIX AND GRANULAR

QUANTITIES - HOT MIX AND GRANULAR

W.P. No. 5217-13-00
Contract No. 2021-5154

SHEET
5

Description	Tack Coat	Tack Coat	Tack Coat	Hot Mix Asphalt	Superpave 12.5 - 40 mm	Superpave 12.5 - 40 mm	Superpave 12.5 - 50 mm	Superpave 12.5 - 50 mm	Superpave 19.0 -	Superpave 19.0 -	Granular A	Granular A	Granular B, Type II		References
	[Lower Binder Course]	[Upper Binder Course]	[Milled Surface]	Miscellaneous	Lift Thickness Upper Binder Course	Lift Thickness Surface Course	Lift Thickness Lower Binder Course	Lift Thickness Upper Binder Course	50 mm Lift Thickness Lower Binder Course	50 mm Lift Thickness Upper Binder Course	[Base]	[Shouldering & Tie-Ins]	[Sub-Base or Backfill]		
Sub - Totals Brought Forward:	0	31,550	688	64	6	34,306	0	0	0	32,226	0	1,474	0		
12+350 RT - CEMETERY						96									
12+471 LT - FORESTRY ROAD		309				309				309					
13+051 - 13+324 LT SHLD						478									
PDA A 13+090 - 13+160											346				
13+416 - 13+927 RT SHLD						894									
PDA B & C 13+639 - 13+806 LT LANE 13+639 - 13+806 RT LANE											478 478		5,511 5,511		
14+061 - 14+318 RT SHLD						450									
14+133 LT - DIAMOND ROAD		262				262				262					
ENTRANCE REINSTATEMENT												267			
BEATTY TOWNSHIP															
10+000 - 15+847 SHOULDERING LT & RT												2,318			
10+000 - 15+847 LT LANE 10+000 - 15+847 RT LANE						23,842 23,842									
10+000 - 12+286 LT LANE 10+000 - 12+286 RT LANE		9,144 9,144								9,144 9,144					
10+039 - 10+522 LT SHLD						845									
PDA D 10+600 - 10+750 LT LANE 10+600 - 10+750 RT LANE											463 463		840 840		
12+293 - 12+334 LT LANE (BRIDGE)			205							205					
Sub - Totals Carried Forward:	0	50,409	893	64	6	85,324	0	0	0	51,290	2,227	4,059	12,702		
	(P)	(P)	(P)	(P)	(P)	(P)	(P)	(P)	(P)	(P)	(P)	(P)	(P)		
TOTALS															
UNIT	m2 (P)	m2 (P)	m2 (P)	m2 (P)	m2 (P)	m2 (P)	m2 (P)	m2 (P)	m2 (P)	m2 (P)	t	t	t		
ITEM No.		3		4		5		6		7		8	9		
Reference															
Remarks:														CHKD. _____ APPR. _____ DATE _____	

MINISTRY OF TRANSPORTATION - ONTARIO

HOT MIX AND GRANULAR

QUANTITIES - HOT MIX AND GRANULAR

W.P. No. 5217-13-00
Contract No. 2021-5154

SHEET
6

Description	Tack Coat	Tack Coat	Tack Coat	Hot Mix Asphalt	Superpave 12.5 - 40 mm	Superpave 12.5 - 40 mm	Superpave 12.5 - 50 mm	Superpave 12.5 - 50 mm	Superpave 19.0 -	Superpave 19.0 -	Granular A	Granular A	Granular B, Type II		References
	[Lower Binder Course]	[Upper Binder Course]	[Milled Surface]	Miscellaneous	Lift Thickness Upper Binder Course	Lift Thickness Surface Course	Lift Thickness Lower Binder Course	Lift Thickness Upper Binder Course	50 mm Lift Thickness Lower Binder Course	50 mm Lift Thickness Upper Binder Course	[Base]	[Shouldering & Tie-Ins]	[Sub-Base or Backfill]		
Sub - Totals Brought Forward:	0	50,409	893	64	6	85,324	0	0	0	51,290	2,227	4,059	12,702		
12+293 - 12+334 RT LANE (BRIDGE)			205							205					
12+341 - 15+847 LT LANE		14,024								14,478					
12+341 - 15+847 RT LANE		14,024								14,478					
11+561 RT - SPRUCE ROAD		249				249				249					
11+700 - 11+891 LT SHLD						334									
11+700 - 11+891 RT SHLD						334									
13+036 - 13+413 LT SHLD						660									
13+036 - 13+413 RT SHLD						660									
13+208 LT - BIRCH ROAD NORTH		266				266				266					
13+211 RT - BIRCH ROAD SOUTH		232				232				232					
14+665 - 15+172 RT SHLD						887									
PDA E															
13+843 - 13+871 LT LANE										80			878		
13+843 - 13+871 RT LANE										80			878		
14+853 LT - ASPEN ROAD		351				351				351					
15+247 - 15+566 LT SHLD						558									
15+350 RT - CEMETERY						186									
15+435 CULVERT 25															
ENTRANCE REINSTATEMENT												460			
HISLOP TOWNSHIP															
10+000 - 14+865 SHOULDERING LT & RT												1,728			
10+000 - 12+700 LT LANE										1,366					
Sub - Totals Carried Forward:	0	79,554	1,098	64	6	90,041	0	0	0	81,548	3,754	6,248	14,458		
	(P)	(P)	(P)	(P)	(P)	(P)	(P)	(P)	(P)	(P)	(P)	(P)	(P)		
TOTALS															
UNIT	m2 (P)	m2 (P)	m2 (P)	m2 (P)	m2 (P)	m2 (P)	m2 (P)	m2 (P)	m2 (P)	m2 (P)	t	t	t		
ITEM No.		3		4		5		6		7		8	9		
Reference															
Remarks:														CHKD. _____	
														APPR. _____	
														DATE _____	

MINISTRY OF TRANSPORTATION - ONTARIO

HOT MIX AND GRANULAR

QUANTITIES - HOT MIX AND GRANULAR

W.P. No. 5217-13-00
Contract No. 2021-5154

SHEET
7

Description	Tack Coat [Lower Binder Course]	Tack Coat [Upper Binder Course]	Tack Coat [Milled Surface]	Hot Mix Asphalt Miscellaneous	Superpave 12.5 - 40 mm Lift Thickness Upper Binder Course	Superpave 12.5 - 40 mm Lift Thickness Surface Course	Superpave 12.5 - 50 mm Lift Thickness Lower Binder Course	Superpave 12.5 - 50 mm Lift Thickness Upper Binder Course	Superpave 19.0 - 50 mm Lift Thickness Lower Binder Course	Superpave 19.0 - 50 mm Lift Thickness Upper Binder Course	Granular A [Base]	Granular A [Shouldering & Tie-Ins]	Granular B, Type II [Sub-Base or Backfill]	References
Sub - Totals Brought Forward:	0	79,554	1,098	64	6	90,041	0	0	0	81,548	3,754	6,248	14,458	
10+000 - 12+700 RT LANE											1,366			
10+000 - 14+865 LT LANE						19,460								
10+000 - 14+865 RT LANE						19,460								
10+000 - 14+860 LT LANE		19,440								19,440				
10+000 - 14+860 RT LANE		19,440								19,440				
10+114 - 10+194 TAPER		140				140				140				
10+215 RT - MACEWEN MINE		318				318				318				
12+238 RT - TAMARACK ROAD		240				240				240				
PDA F														
13+271 - 13+307 LT LANE											92	915		
13+271 - 13+307 RT LANE											92	915		
14+460 - 14+860 LT LANE	1,600								1,600					
14+460 - 14+860 RT LANE	1,600								1,600					
ENTRANCE REINSTATEMENT													67	
HIGHWAY 11														
BOWMAN TOWNSHIP														
10+502 - 10+589 LT LANE								500						
10+502 - 10+589 RT LANE								500						
10+502 - 10+513 LT LANE				63										
10+578 - 10+589 RT LANE				63										
10+513 - 10+516 LT LANE	17				17									
10+513 - 10+516 RT LANE	17				17									
10+513 - 10+522 LT LANE		95				52								
10+513 - 10+522 RT LANE		95				52								
Sub - Totals Carried Forward:	3,235	119,322	1,225	64	41	129,763	0	1,001	3,200	121,126	5,304	8,144	14,458	
TOTALS	(P)	(M)	(P)	(P)	(P)	(M)	(P)	(M)	(P)	(M)				
UNIT	m2 (P)	m2 (P)	m2 (P)	m2 (P)	m2 (P)	m2 (P)	m2 (P)	m2 (P)	m2 (P)	m2 (P)	t	t	t	
ITEM No.		3		4		5		6		7		8	9	
Reference														
Remarks:														CHKD. _____ APPR. _____ DATE _____

MINISTRY OF TRANSPORTATION - ONTARIO

HOT MIX AND GRANULAR

QUANTITIES - MISCELLANEOUS 1

W.P. No. 5217-13-00
Contract No. 2021-5154

SHEET
9

Location and Position	In-Place Full-Depth Reclam. of Bituminous Pavement & Underlying Granular [200 mm]	Concrete Curb and Gutter [OPSD 600.040] [Straight]		Temporary Hot Mix Pavement								References
Sub - Totals Brought Forward:												
HIGHWAY 101												
CARR TOWNSHIP												
10+772 - 14+318 LT LANE	15,248											
10+772 - 14+318 RT LANE	15,248											
10+772 - 11+112 RT SHLD	595											
10+786 - 11+047 LT SHLD	457											
11+765 CULVERT 7				6								
11+974 - 12+139 REST AREA	1,573											
12+139 - 12+227 TAPER	167											
PDA A												
13+090 - 13+100 LT LANE				5								
13+090 - 13+160 RT LANE				35								
13+051 - 13+324 LT SHLD	478											
13+416 13+927 RT SHLD	894											
PDA B & C												
13+639 - 13+806 LT LANE				82								
13+639 - 13+806 RT LANE				82								
14+061 - 14+318 RT SHLD	450											
BEATTY TOWNSHIP												
10+000 - 15+847 LT LANE	25,142											
10+000 - 15+847 RT LANE	25,142											
10+039 - 10+522 LT SHLD	845											
Sub - Totals Carried Forward:												
	86,239		0	210								
TOTALS												
UNIT	(P) m2 (P)	(P) m (P)		t								
ITEM No.	10	11		12								
Reference												
												CHKD. _____ APPR. _____ DATE _____

MINISTRY OF TRANSPORTATION - ONTARIO

PROCESSING , CURB AND GUTTER & TEMPORARY HOT MIX PAVEMENT

QUANTITIES - MISCELLANEOUS 1

W.P. No. 5217-13-00
Contract No. 2021-5154

SHEET
11

Location and Position	Clean Out of Pipe Culvert												References
Sub - Totals Brought Forward:													
HIGHWAY 101													
CARR TOWNSHIP													
14+110 CENTRELINE	1												
BEATTY TOWNSHIP	1												
10+048 LT ENTRANCE	1												
10+638 CENTRELINE	1												
11+065 RT ENTRANCE	1												
11+135 CENTRELINE	1												
11+561 RT SPRUCE ROAD	1												
11+595 LT ENTRANCE	1												
12+581 CENTRELINE	1												
13+604 CENTRELINE	1												
14+909 LT ENTRANCE	1												
14+909 RT ENTRANCE	1												
15+075 RT ENTRANCE	1												
15+352 RT CEMETERY	1												
HISLOP TOWNSHIP	1												
10+564 CENTRELINE	1												
10+566 CENTRELINE	1												
Sub - Totals Carried Forward:		17											
		(P)											
TOTALS		17											
UNIT		each (P)											
ITEM No.		13											
Reference													
												CHKD. _____ APPR. _____ DATE _____	

MINISTRY OF TRANSPORTATION - ONTARIO

CULVERT CLEANOUTS

QUANTITIES - PIPE CULVERTS

W.P. No. 5217-13-00
Contract No. 2021-5154

SHEET
12

Culvert No	Station	Location and Position	Ext		Skew No	End Finish	Depth to Pipe	Pipe Fill Material			Pipe Joints	Treatment	Inv Elev		600 mm Pipe Culvert 600 + 0 S 000000 600 + 0 C 000001	800 mm Pipe Culvert 800+25 S 000001 800+0 C 000001	800 mm Pipe Culvert 800+40 S 102002 800+0 C 000002	References
			Left	Right				Bedding	Cover	Backfill			Upstream	Downstream				
Sub - Totals Brought Forward:																		
1	10+859	CARR TOWNSHIP ENT					1.5	N	N	N	S		253.804	252.774	26			
2	11+131	CARR TOWNSHIP (ENT)					1.5	N	N	N	S		261.092	260.605	16			
3	11+164	CARR TOWNSHIP ENT					1.5	N	N	N	S		261.588	261.25	19			
4	11+195	CARR TOWNSHIP ENT					1.5	N	N	N	S		262.25	261.874	19			
5	11+616	CARR TOWNSHIP ENT					1.3	N	N	N	S		260.031	259.493	19			
6	11+645	CARR TOWNSHIP ENT					1.3	N	N	N	S		259.212	259.045	16			
7	11+765	CARR TOWNSHIP CL			80		2.4	A	B	B	S	F	257.13	256.3		26		
8	12+012	CARR TOWNSHIP ENT					1.8	N	N	N	S		259.544	259.379	29			
9	12+220	CARR TOWNSHIP ENT					1.5	N	N	N	S		261.137	261.103	16			
10	12+241	CARR TOWNSHIP ENT					1.5	N	N	N	S		261.29	261.16	17			
11	12+350	CARR TOWNSHIP ENT					1.5	N	N	N	S		261.812	261.754	18			
12	12+416	CARR TOWNSHIP ENT					1.3	N	N	N	S		262.379	262.29	19			
13	12+887	CARR TOWNSHIP ENT					1.5	N	N	N	S		261.02	260.758	18			
14	13+337	CARR TOWNSHIP ENT					1	N	N	N	S		262.907	262.652	18			
Sub - Totals Carried Forward:																		
														250	26	0		

MINISTRY OF TRANSPORTATION - ONTARIO

Pipe Material Code - 6 digits defined as noted below:

1st digit = Concrete
 1 - 50-D or HE-A
 2 - 65-D or HE-I
 3 - 100-D or HE-II
 4 - 140-D or HE-III
 5 - HE-IV

2nd digit = PVC/PP
 1 - PVC
 2 - PP

3rd digit = HDPE
 1 - Open Profile
 2 - Closed Profile

4th digit = Galv; 5th digit = Alum, & 6th digit = Polymer Steel
 1 - 1.6 mm thick
 2 - 2.0 mm thick
 3 - 2.8, 3.0 & 3.18 mm thick
 4 - 3.5, 3.81 & 4.0 mm thick

Note: '0' for any digit means the pipe material is not acceptable. Higher pipe material code values are also acceptable, unless otherwise stated. Galv. means galvanized coating. Alum means aluminized coated or aluminum alloy materials. Polymer means both laminated and coated steel pipes. Applies to circular and non-circular pipes.

Pipe Type

S - Smooth inner wall pipe
C - Corrugated inner wall pipe

Pipe Joints

S - Soil tight
F - Silt/Fines tight
L - Leak tight

Note: S joints is specified if no code is entered.

End Finish (OPSD 801.01 - 02 - 03)

SqE - Square End
B - Bevel
Sk - Skew End
SB - Step Bevel
ES - Steel end section

Note: All pipes are SqE and symmetrical to CL unless otherwise stated.

Treatments

F - Frost Treatment
P - Pave Invert
S - Channel Substrate
B - Fish Baffles

Depth to Pipe is from the surface downward to top of base pipe opening at midpoint by length unless otherwise stated.

Pipe Fill Material

N - Native or Granular
G - Granular A or B Type I, II or III
B - Granular A or B Type II
A - Granular A
U - Unshrinkable fill

Notes: N applies to cover and backfill only. 1 letter specifies material for all pipes. 2 letter codes specifies fill material for rigid and flexible pipes respectively. G for bedding and N for cover and backfill is specified if no code is entered. Embedment material for flexible pipes specified in bedding material column.

Frost Penetration

Frost Penetration depth - 2.4 m

	(P)	(P)	(P)			
TOTALS						
UNIT	m (P)	m (P)	m (P)			
ITEM No.	14		15			

CHKD. _____
 APPR. _____
 DATE _____

PIPE CULVERTS

QUANTITIES - PIPE CULVERTS

W.P. No. 5217-13-00
Contract No. 2021-5154

SHEET
13

Culvert No	Station	Location and Position	Ext		Skew No	End Finish	Depth to Pipe	Pipe Fill Material			Pipe Joints	Treatment	Inv Elev		600 mm Pipe Culvert 600 + 0 S 000000 600 + 0 C 000001	800 mm Pipe Culvert 800+25 S 000001 800+0 C 000001	800 mm Pipe Culvert 800+40 S 102002 800+0 C 000002	References			
			Left	Right				Bedding	Cover	Backfill			Upstream	Downstream							
Sub - Totals Brought Forward:															250	26	0				
15	13+446	CARR TOWNSHIP ENT					1.8	N	N	N	S		264.025	263.867	19						
16	10+015	BEATTY TOWNSHIP ENT					2.5	N	N	N	S		301.108	300.896	28						
17	10+207	BEATTY TOWNSHIP ENT					2	N	N	N	S		269.898	269.282	20						
18	10+694	BEATTY TOWNSHIP ENT					1	N	N	N	S		268.403	267.959	14						
19	10+846	BEATTY TOWNSHIP ENT					1.3	N	N	N	S		270.033	269.352	13						
20	11+043	BEATTY TOWNSHIP ENT					1	N	N	N	S		275.104	274.639	17						
21	11+858	BEATTY TOWNSHIP ENT					1.6	N	N	N	S		265.279	264.856	19						
22	13+173	BEATTY TOWNSHIP ENT					1.7	N	N	N	S		278.078	277.62	13						
23	13+210	BEATTY TOWNSHIP ENT					1.1	N	N	N	S		280.417	279.574	25						
24	13+341	BEATTY TOWNSHIP ENT					1.5	N	N	N	S		284.895	284.053	18						
25	15+435	BEATTY TOWNSHIP CL					2.7	A	B	B	S		291.51	291.21			30				
26	10+212	HISLOP TOWNSHIP ENT					1	N	N	N	S		290.743	290.606	43						
27	11+434	HISLOP TOWNSHIP ENT					2.3	N	N	N	S		294.057	293.717	26						
Sub - Totals Carried Forward:															505	26	30				

MINISTRY OF TRANSPORTATION - ONTARIO

Pipe Material Code - 6 digits defined as noted below:

1st digit = Concrete
 1 - 50-D or HE-A
 2 - 65-D or HE-I
 3 - 100-D or HE-II
 4 - 140-D or HE-III
 5 - HE-IV

2nd digit = PVC/PP
 1 - PVC
 2 - PP

3rd digit = HDPE
 1 - Open Profile
 2 - Closed Profile

4th digit = Galv; 5th digit = Alum, & 6th digit = Polymer Steel
 1 - 1.6 mm thick
 2 - 2.0 mm thick
 3 - 2.8, 3.0 & 3.18 mm thick
 4 - 3.5, 3.81 & 4.0 mm thick

5 - 4.2, 4.45 & 5.0 mm thick
6 - 5.08 & 6.0 mm thick
7 - 5.72 & 7.0 mm thick
8 - 6.35 mm thick

Note: '0' for any digit means the pipe material is not acceptable. Higher pipe material code values are also acceptable, unless otherwise stated. Galv. means galvanized coating. Alum means aluminized coated or aluminum alloy materials. Polymer means both laminated and coated steel pipes. Applies to circular and non-circular pipes.

Pipe Type

S - Smooth inner wall pipe
C - Corrugated inner wall pipe

Pipe Joints

S - Soil tight
F - Silt/Fines tight
L - Leak tight

Note: S joints is specified if no code is entered.

End Finish (OPSD 801.01 - 02 - 03)

SqE - Square End
B - Bevel
Sk - Skew End
SB - Step Bevel
ES - Steel end section

Note: All pipes are SqE and symmetrical to CL unless otherwise stated.

Treatments

F - Frost Treatment
P - Pave Invert
S - Channel Substrate
B - Fish Baffles

Depth to Pipe is from the surface downward to top of base pipe opening at midpoint by length unless otherwise stated.

Pipe Fill Material

N - Native or Granular
G - Granular A or B Type I, II or III
B - Granular A or B Type II
A - Granular A
U - Unshrinkable fill

Notes: N applies to cover and backfill only. 1 letter specifies material for all pipes. 2 letter codes specifies fill material for rigid and flexible pipes respectively. G for bedding and N for cover and backfill is specified if no code is entered. Embedment material for flexible pipes specified in bedding material column.

Frost Penetration

Frost Penetration depth - 2.4 m

	(P)	(P)	(P)			
TOTALS						
UNIT	m (P)	m (P)	m (P)			
ITEM No.	14		15			

CHKD. _____
 APPR. _____
 DATE _____

PIPE CULVERTS

QUANTITIES - MISCELLANEOUS 1

W.P. No. 5217-13-00
Contract No. 2021-5154

SHEET
15

Location and Position	Removal of Asphalt Pavement [85 mm], [As Noted]	Removal of Asphalt Pavement from Concrete Surfaces [90 mm]	Removal of Asphalt Pavement, Partial Depth [40 mm]	Removal of Asphalt Pavement from Concrete Surfaces on Structures	Removal of Concrete Curb and Gutter [Roadway]	Removal of Pipes and Culverts [CSP]	Removal of Energy Attenuators [Eccentric Loaders]	Removal of Cable Guide Rail [3 Cable]	Removal of Anchor Blocks	Removal of Steel Beam Guide Rail [W-Beam] [With Channel]		References
Sub - Totals Brought Forward:												
HIGHWAY 101												
CARR TOWNSHIP												
10+541 - 10+679 LT LANE	483											
10+541 - 10+679 RT LANE	552											
10+541 - 10+669 LT	64											
10+570 RT							1					
10+574 LT							1					
10+679 - 10+759 LT LANE (BRIDGE)			344									
10+679 - 10+759 RT LANE (BRIDGE)			344									
10+759 - 10+772 LT LANE	52											
10+759 - 10+772 RT LANE	52											
10+852 RT							1					
10+859 LT - NORTH ROAD	303											
10+859 CULVERT 1						26						
10+860 LT o/s -26.8							1					
11+131 CULVERT 2						16						
11+177 LT - PRIVATE ENT.	57											
11+164 CULVERT 3						19						
11+195 CULVERT 4						19						
11+616 CULVERT 5						19						
11+645 CULVERT 6						16						
Sub - Totals Carried Forward:												
	1,563	0	688	0	0	115	4	0	0	0		
	(P)	(P)	(P)	(P)	(P)	(P)	(P)	(P)	(P)	(P)		
TOTALS												
UNIT	m2 (P)	m2 (P)	m2 (P)	m2 (P)	m (P)	m (P)	each (P)	m (P)	each (P)	m (P)		
ITEM No.	16	17	18	19	20	21	22	23	24	25		
Reference												
											CHKD. _____	
											APPR. _____	
											DATE _____	

MINISTRY OF TRANSPORTATION - ONTARIO

REMOVALS

QUANTITIES - MISCELLANEOUS 1

W.P. No. 5217-13-00
Contract No. 2021-5154

SHEET
16

Location and Position	Removal of Asphalt Pavement [85 mm], [As Noted]	Removal of Asphalt Pavement from Concrete Surfaces [90 mm]	Removal of Asphalt Pavement, Partial Depth [40 mm]	Removal of Asphalt Pavement from Concrete Surfaces on Structures	Removal of Concrete Curb and Gutter [Roadway]	Removal of Pipes and Culverts [CSP]	Removal of Energy Attenuators [Eccentric Loaders]	Removal of Cable Guide Rail [3 Cable]	Removal of Anchor Blocks	Removal of Steel Beam Guide Rail [W-Beam] [With Channel]			References
Sub - Totals Brought Forward:	1,563	0	688	0	0	115	4	0	0	0			
11+765 CULVERT 7	46					26							
11+800 RT - PRIVATE ENT.	126												
12+012 CULVERT 8						29							
12+220 CULVERT 9						16							
12+241 RT - CEMETERY	167												
12+241 CULVERT 10						17							
12+350 RT - CEMETERY	96												
12+350 CULVERT 11						18							
12+416 CULVERT 12						19							
12+471 LT - FORESTRY ROAD	96												
12+887 CULVERT 13						18							
12+892 LT							1						
12+919 RT							1						
13+144 RT							1						
13+095 LT							1						
13+144 RT							1						
13+337 CULVERT 14						18							
13+446 CULVERT 15						19							
13+601 LT									1				
13+601 - 13+792 LT								191					
13+792 LT									1				
Sub - Totals Carried Forward:	2,094	0	688	0	0	295	9	191	2	0			
	(P)	(P)	(P)	(P)	(P)	(P)	(P)	(P)	(P)	(P)			
TOTALS													
UNIT	m2 (P)	m2 (P)	m2 (P)	m2 (P)	m (P)	m (P)	each (P)	m (P)	each (P)	m (P)			
ITEM No.	16	17	18	19	20	21	22	23	24	25			
Reference													
												CHKD. _____	
												APPR. _____	
												DATE _____	

MINISTRY OF TRANSPORTATION - ONTARIO

REMOVALS

QUANTITIES - MISCELLANEOUS 1

W.P. No. 5217-13-00
Contract No. 2021-5154

SHEET
17

MINISTRY OF TRANSPORTATION - ONTARIO

Location and Position	Removal of Asphalt Pavement [85 mm], [As Noted]	Removal of Asphalt Pavement from Concrete Surfaces [90 mm]	Removal of Asphalt Pavement, Partial Depth [40 mm]	Removal of Asphalt Pavement from Concrete Surfaces on Structures	Removal of Concrete Curb and Gutter [Roadway]	Removal of Pipes and Culverts [CSP]	Removal of Energy Attenuators [Eccentric Loaders]	Removal of Cable Guide Rail [3 Cable]	Removal of Anchor Blocks	Removal of Steel Beam Guide Rail [W-Beam] [With Channel]			References
Sub - Totals Brought Forward:	2,094	0	688	0	0	295	9	191	2	0			
14+133 LT - DIAMOND ROAD	262												
BEATTY TOWNSHIP													
10+015 CULVERT 16						28							
10+207 CULVERT 17						20							
10+231 RT							1						
10+323 LT													
10+499 RT													
10+520 LT													
10+585 RT									1				
10+585 - 10+683 RT								98					
10+683 RT									1				
10+713 RT									1				
10+713 - 10+830 RT								117					
10+830 RT									1				
10+694 CULVERT 18						14							
10+846 CULVERT 19						13							
11+043 CULVERT 20						17							
11+700 - 11+891 LT SHLD	334												
11+700 - 11+891 RT SHLD	334												
11+858 CULVERT 21						19							
12+174 RT									1				
12+174 - 12+259 RT								85					
12+259 RT									1				
Sub - Totals Carried Forward:	3,024	0	688	0	0	406	10	491	8	0			
	(P)	(P)	(P)	(P)	(P)	(P)	(P)	(P)	(P)	(P)			
TOTALS													
UNIT	m2 (P)	m2 (P)	m2 (P)	m2 (P)	m (P)	m (P)	each (P)	m (P)	each (P)	m (P)			
ITEM No.	16	17	18	19	20	21	22	23	24	25			
Reference													

CHKD. _____
APPR. _____
DATE _____

REMOVALS

QUANTITIES - MISCELLANEOUS 1

W.P. No. 5217-13-00
Contract No. 2021-5154

SHEET
18

Location and Position	Removal of Asphalt Pavement [85 mm], [As Noted]	Removal of Asphalt Pavement from Concrete Surfaces [90 mm]	Removal of Asphalt Pavement, Partial Depth [40 mm]	Removal of Asphalt Pavement from Concrete Surfaces on Structures	Removal of Concrete Curb and Gutter [Roadway]	Removal of Pipes and Culverts [CSP]	Removal of Energy Attenuators [Eccentric Loaders]	Removal of Cable Guide Rail [3 Cable]	Removal of Anchor Blocks	Removal of Steel Beam Guide Rail [W-Beam] [With Channel]		References
Sub - Totals Brought Forward:	3,024	0	688	0	0	406	10	491	8	0		
12+252 RT							1					
12+241 LT							1					
12+259 - 12+288 RT										29		
12+272 - 12+286 LT LANE	63											
12+272 - 12+286 RT LANE	63											
12+339 - 12+368 LT										29		
12+341 - 12+355 LT LANE	63											
12+341 - 12+355 RT LANE	63											
12+368 LT							1		1			
12+368 - 12+426 LT								58				
12+426 LT									1			
12+375 LT												
12+387 RT							1					
PDA D												
10+600 - 10+750 LT LANE												
10+600 - 10+750 RT LANE												
11+561 RT - SPRUCE ROAD	249											
12+286 - 12+341 LT LANE			275									
12+286 - 12+341 RT LANE			275									
13+173 CULVERT 22						13						
13+208 LT - BIRCH ROAD NORTH	266											
13+210 RT - BIRCH ROAD SOUTH	232											
13+210 CULVERT 23						25						
13+341 CULVERT 24						18						
Sub - Totals Carried Forward:	4,023	0	1,238	0	0	462	14	549	10	58		
	(P)	(P)	(P)	(P)	(P)	(P)	(P)	(P)	(P)	(P)		
TOTALS												
UNIT	m2 (P)	m2 (P)	m2 (P)	m2 (P)	m (P)	m (P)	each (P)	m (P)	each (P)	m (P)		
ITEM No.	16	17	18	19	20	21	22	23	24	25		
Reference												
											CHKD. _____	REMOVALS
											APPR. _____	
											DATE _____	

MINISTRY OF TRANSPORTATION - ONTARIO

QUANTITIES - MISCELLANEOUS 1

W.P. No. 5217-13-00
Contract No. 2021-5154

SHEET
19

Location and Position	Removal of Asphalt Pavement [85 mm], [As Noted]	Removal of Asphalt Pavement from Concrete Surfaces [90 mm]	Removal of Asphalt Pavement, Partial Depth [40 mm]	Removal of Asphalt Pavement from Concrete Surfaces on Structures	Removal of Concrete Curb and Gutter [Roadway]	Removal of Pipes and Culverts [CSP]	Removal of Energy Attenuators [Eccentric Loaders]	Removal of Cable Guide Rail [3 Cable]	Removal of Anchor Blocks	Removal of Steel Beam Guide Rail [W-Beam] [With Channel]			References
Sub - Totals Brought Forward:	4,023	0	1,238	0	0	462	14	549	10	58			
PDA E													
13+843 - 13+871 LT LANE	112												
13+843 - 13+871 RT LANE	140												
14+627 LT							1						
14+679 RT							1						
14+840 LT							1						
14+880 RT							1						
14+853 LT - ASPEN ROAD	351												
15+247 - 15+566 LT SHLD	558												
15+350 RT - CEMETERY	186												
15+435 CULVERT 25	50					30							
HISLOP TOWNSHIP													
10+000 - 12+700 LT LANE	10,800												
10+000 - 12+700 RT LANE	10,800												
10+114 - 10+194 TAPER	140												
10+212 RT - MACEWEN MINE	318												
10+212 CULVERT 26						43							
11+434 CULVERT 27						26							
11+742 CULVERT 28													
12+238 RT - TAMARACK ROAD	240												
12+238 CULVERT 29						27							
12+745 CULVERT 30						17							
Sub - Totals Carried Forward:	27,718	0	1,238	0	0	605	18	549	10	58			
	(P)	(P)	(P)	(P)	(P)	(P)	(P)	(P)	(P)	(P)			
TOTALS													
UNIT	m2 (P)	m2 (P)	m2 (P)	m2 (P)	m (P)	m (P)	each (P)	m (P)	each (P)	m (P)			
ITEM No.	16	17	18	19	20	21	22	23	24	25			
Reference													
												CHKD. _____	
												APPR. _____	
												DATE _____	

MINISTRY OF TRANSPORTATION - ONTARIO

REMOVALS

QUANTITIES - MISCELLANEOUS 1

W.P. No. 5217-13-00
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SHEET
22

MINISTRY OF TRANSPORTATION - ONTARIO

Location and Position	Small Signs, Ground Mounted, New	Small Signs, Removal	Temporary Traffic Control Signs											References
Sub - Totals Brought Forward:														
HIGHWAY 101														
THROUGHOUT CONTRACT			100 %											
CARR TOWNSHIP														
10+797 LT o/s 3.6	1													
10+797 LT o/s 3.6		1												
10+807 LT o/s 3.9	1													
10+807 LT o/s 3.9		1												
10+956 LT o/s 4.2	1													
10+956 LT o/s 4.2		1												
11++927 RT o/s 3.8	1													
11++927 RT o/s 3.8		1												
11+102 LT o/s 3.2	1													
11+102 LT o/s 3.2		1												
11+165 LT o/s 3.5	1													
11+165 LT o/s 3.5		1												
11+238 LT o/s 2.8	1													
11+238 LT o/s 2.8		1												
11+315 RT o/s 3.1	1													
11+315 RT o/s 3.1		1												
11+423 RT o/s 2.7	1													
11+423 RT o/s 2.7		1												
11+567 RT o/s 4.1	1													
11+567 RT o/s 4.1		1												
12+001 RT o/s 3.8	1													
12+001 RT o/s 3.8		1												
Sub - Totals Carried Forward:	11	11	100 %											
	(P)	(P)												
TOTALS														
UNIT	each (P)	each (P)	lump sum											
ITEM No.	31	32	33											
Reference														
													CHKD. _____	
													APPR. _____	
													DATE _____	

SIGNS

QUANTITIES - MISCELLANEOUS 1

W.P. No. 5217-13-00
Contract No. 2021-5154

SHEET
23

MINISTRY OF TRANSPORTATION - ONTARIO

Location and Position	Small Signs, Ground Mounted, New	Small Signs, Removal		Temporary Traffic Control Signs									References
Sub - Totals Brought Forward:	11	11		100 %									
12+035 LT o/s 2.1	1												
12+035 LT o/s 2.1		1											
12+081 RT o/s 3.6	1												
12+081 RT o/s 3.6		1											
12+117 LT o/s 1.7	1												
12+117 LT o/s 1.7		1											
12+376 RT o/s 4.0	1												
12+376 RT o/s 4.0		1											
12+564 LT o/s 2.5	1												
12+564 LT o/s 2.5		1											
13+500 RT o/s 3.9	1												
13+700 LT o/s 3.9	1												
13+702 RT o/s 3.9	1												
13+876 LT o/s 4.0	1												
14+043 RT o/s 3.3	1												
14+043 RT o/s 3.3		1											
14+247 LT o/s 3.8	1												
14+247 LT o/s 3.8		1											
BEATTY TOWNSHIP													
11+455 RT o/s 3.6	1												
11+455 RT o/s 3.6		1											
11+561 LT o/s 4.0	1												
11+561 LT o/s 4.0		1											
Sub - Totals Carried Forward:	24	20		100 %									
	(P)	(P)											
TOTALS													
UNIT	each (P)	each (P)		lump sum									
ITEM No.	31	32		33									
Reference													

CHKD. _____
APPR. _____
DATE _____

SIGNS

QUANTITIES - MISCELLANEOUS 1

W.P. No. 5217-13-00
Contract No. 2021-5154

SHEET
24

MINISTRY OF TRANSPORTATION - ONTARIO

Location and Position	Small Signs, Ground Mounted, New	Small Signs, Removal		Temporary Traffic Control Signs										References
Sub - Totals Brought Forward:	24	20		100 %										
11+661 LT o/s 3.8	1													
11+661 LT o/s 3.8		1												
12+287 RT o/s 1.7	1													
12+287 RT o/s 1.7		1												
12+288 LT o/s 1.7	1													
12+288 LT o/s 1.7		1												
12+287 RT o/s 3.7	1													
12+287 RT o/s 3.7		1												
12+339 LT o/s 3.1	1													
12+339 LT o/s 3.1		1												
12+340 LT o/s 1.6	1													
12+340 LT o/s 1.6		1												
12+340 RT o/s 1.7	1													
12+340 RT o/s 1.7		1												
13+117 RT o/s 3.4	1													
13+117 RT o/s 3.4		1												
13+133 LT o/s 3.5	1													
13+133 LT o/s 3.5		1												
13+255 RT o/s 3.7	1													
13+255 RT o/s 3.7		1												
13+294 LT o/s 3.2	1													
13+294 LT o/s 3.2		1												
14+743 RT o/s 4.1	1													
14+743 RT o/s 4.1		1												
14+747 RT o/s 3.6	1													
14+747 RT o/s 3.6		1												
Sub - Totals Carried Forward:	37	33		100 %										
	(P)	(P)												
TOTALS														
UNIT	each (P)	each (P)		lump sum										
ITEM No.	31	32		33										
Reference														
													CHKD. _____	
													APPR. _____	
													DATE _____	

SIGNS

QUANTITIES - MISCELLANEOUS 1

W.P. No. 5217-13-00
Contract No. 2021-5154

SHEET
26

Location and Position	Pavement Marking Obliterating - By Abrasive Blasting		Pavement Marking [3-6-3] [Yellow, 10 cm]	Pavement Marking [Solid] [Yellow, 10 cm]	Pavement Marking [Solid] [Yellow, Double 10 cm]	Pavement Marking [Solid] [White, 10 cm]	Pavement Marking [3-3-3] [White, 10 cm]	Pavement Marking, Durable [SOLID] [WHITE, 60 cm]		Pavement Marking, Temporary [Solid] [Yellow, 10cm]	Pavement Marking, Temporary [Solid] [White, 60cm]		References
Sub - Totals Brought Forward:													
HIGHWAY 101													
CARR TOWNSHIP													
10+770 - 11+500 CENTRELINE					1,460								
11+500 - 12+200 CENTRELINE			233	700									
12+200 - 12+450 CENTRELINE					500								
12+490 - 14+110 CENTRELINE					3,240								
14+150 - 14+318 CENTRELINE					336								
10+785 - 11+980 LT EDGE LINE						1,195							
12+020 - 12+115 LT EDGE LINE						95							
12+140 - 12+450 LT EDGE LINE						310							
12+490 - 14+110 LT EDGE LINE						1,620							
14+150 - 14+318 LT EDGE LINE						168							
10+770 - 14+318 RT EDGE LINE						3,548							
NORTH ROAD STOP BAR								30					
TRUCK STOP WEST STOP BAR								120					
TRUCK STOP EAST STOP BAR								54					
TRUCK STOP TAPER							40						
FORESTRY ROAD STOP BAR								48					
BEATTY TOWNSHIP													
Sub - Totals Carried Forward:													
	0		233	700	5,536	6,936	40	252		0	0		
	(P)		(P)	(P)	(P)	(P)	(P)	(P)		(P)	(P)		
TOTALS													
UNIT	m (P)		m (P)	m (P)	m (P)	m (P)	m (P)	m (P)		m (P)	m (P)		
ITEM No.	34			35				36			37		
Reference													
													CHKD. _____ APPR. _____ DATE _____

MINISTRY OF TRANSPORTATION - ONTARIO

PAVEMENT MARKINGS

QUANTITIES - MISCELLANEOUS 1

W.P. No. 5217-13-00
Contract No. 2021-5154

SHEET
27

Location and Position	Pavement Marking Obliterating - By Abrasive Blasting		Pavement Marking [3-6-3] [Yellow, 10 cm]	Pavement Marking [Solid] [Yellow, 10 cm]	Pavement Marking [Solid] [Yellow, Double 10 cm]	Pavement Marking [Solid] [White, 10 cm]	Pavement Marking [3-3-3] [White, 10 cm]	Pavement Marking, Durable [SOLID] [WHITE, 60 cm]		Pavement Marking, Temporary [Solid] [Yellow, 10cm]	Pavement Marking, Temporary [Solid] [White, 60cm]		References
Sub - Totals Brought Forward:	0		233	700	5,536	6,936	40	252		0	0		
10+000 - 10+500 CENTRELINE					1,000								
10+500 - 11+045 CENTRELINE			182	545									
11+045 - 11+550 CENTRELINE					1,010								
11+575 - 11+675 CENTRELINE					200								
11+675 - 12+800 CENTRELINE			375	1,125									
12+800 - 13+050 CENTRELINE			83										
13+050 - 13+195 CENTRELINE			48	145									
13+225 - 13+400 CENTRELINE			58	175									
13+400 - 13+525 CENTRELINE					250								
13+525 - 14+145 CENTRELINE			207	620									
14+145 - 14+835 CENTRELINE					1,380								
14+870 - 15+847 CENTRELINE					1,954								
10+000 - 13+195 LT EDGE LINE						3,195							
13+220 - 14+835 LT EDGE LINE						1,615							
14+870 - 15+847 LT EDGE LINE													
10+000 - 11+550 RT EDGE LINE						1,550							
11+575 - 13+195 RT EDGE LINE						1,620							
13+225 - 15+847 RT EDGE LINE						2,622							
SPRUCE ROAD STOP BAR								54					
Sub - Totals Carried Forward:	0		1,187	3,310	11,330	17,538	40	306		0	0		
	(P)		(P)	(P)	(P)	(P)	(P)	(P)		(P)	(P)		
TOTALS													
UNIT	m (P)		m (P)	m (P)	m (P)	m (P)	m (P)	m (P)		m (P)	m (P)		
ITEM No.	34			35				36			37		
Reference													
													CHKD. _____ APPR. _____ DATE _____

MINISTRY OF TRANSPORTATION - ONTARIO

PAVEMENT MARKINGS

QUANTITIES - MISCELLANEOUS 1

W.P. No. 5217-13-00
Contract No. 2021-5154

SHEET
28

Location and Position	Pavement Marking Obliterating - By Abrasive Blasting		Pavement Marking [3-6-3] [Yellow, 10 cm]	Pavement Marking [Solid] [Yellow, 10 cm]	Pavement Marking [Solid] [Yellow, Double 10 cm]	Pavement Marking [Solid] [White, 10 cm]	Pavement Marking [3-3-3] [White, 10 cm]	Pavement Marking, Durable [SOLID] [WHITE, 60 cm]		Pavement Marking, Temporary [Solid] [Yellow, 10cm]	Pavement Marking, Temporary [Solid] [White, 60cm]		References
Sub - Totals Brought Forward:	0		1,187	3,310	11,330	17,538	40	306		0	0		
BIRCH ROAD NORTH STOP BAR								54					
BIRCH ROAD SOUTH STOP BAR								54					
ASPEN ROAD STOP BAR								42					
HISLOP TOWNSHIP													
CENTRELINE													
10+000 - 10+300 CENTRELINE					600								
10+300 - 10+460 CENTRELINE			53	160									
10+460 - 11+400 CENTRELINE			313										
11+400 - 12+200 CENTRELINE			267	800									
12+200 - 14+575 CENTRELINE			792										
14+575 - 10+910 (GUIBORD) CENTRELINE			95	285	2,000								
10+000 - 10+910 (GUIBORD) LT EDGE LINE							5,860						
10+000 - 12+225 RT EDGE LINE							2,225						
12+250 - 10+910 (GUIBORD) RT EDGE LINE							3,610						
TAMARACK ROAD STOP BAR								64					
HIGHWAY 11													
BOWMAN TOWNSHIP													
10+394 STOP BAR											23		
10+698 STOP BAR											23		
CENTRELINE													
Sub - Totals Carried Forward:	0		2,707	4,555	13,930	29,233	40	520		0	46		
	(P)		(P)	(P)	(P)	(P)	(P)	(P)		(P)	(P)		
TOTALS													
UNIT	m (P)		m (P)	m (P)	m (P)	m (P)	m (P)	m (P)		m (P)	m (P)		
ITEM No.	34			35				36			37		
Reference													

MINISTRY OF TRANSPORTATION - ONTARIO

PAVEMENT MARKINGS

CHKD. _____
APPR. _____
DATE _____

QUANTITIES - MISCELLANEOUS 1

W.P. No. 5217-13-00

Contract No. 2021-5154

SHEET
30

Location and Position	Adjust Cable Guide Rail	Cable Guide Rail Post Replacement	Adjust SBGR, Steel Posts [With Channel] [OPSD 912.145]	Single Rail SBGR with Channel [OPSD 912.315]	Single Rail SBGR, TL-3 [OPSD 912.186]	Energy Attenuator - Temporary, Narrow [TL-3]	Energy Attenuator - Relocation, Narrow [TL-3]	SBEAT System [Parallel to Roadway]	TCB, Freestanding, Category II	Temporary Construction Barrier, Relocation	Temporary Transition Connection		References
Sub - Totals Brought Forward:													
HIGHWAY 101													
CARR TOWNSHIP													
BLACK RIVER BRIDGE													
10+570 RT								1					
10+574 LT								1					
10+790 - 10+860 LT			86										
10+790 - 10+852 RT			62										
10+852 RT								1					
10+860 LT o/s -30.0								1					
11+210 - 11+328 RT	118												
11+228 - 11+367 LT	139												
12+892													
12+892 - 13+086 LT			194					1					
12+919 RT								1					
12+919 - 13+086 RT			167										
PDA A													
13+096 LT								1					
13+140 RT								1					
PDA B & C													
13+600 LT								1					
13+600 - 13+796 LT					196								
13+796 LT								1					
14+066 - 14+111 LT	45												
14+152 - 14+244 LT	92												
BEATTY TOWNSHIP													
10+231 RT													
Sub - Totals Carried Forward:													
	394	0	509	0	196	0	0	10	0	0	0		
	(P)	(P)	(P)	(P)	(P)	(P)	(P)	(P)	(P)	(P)	(P)		
TOTALS													
UNIT	m (P)	each (P)	m (P)	m (P)	m (P)	each (P)	each (P)	each (P)	m (P)	m (P)	each (P)		
ITEM No.	38	39	40	41	42	43	44	45	46	47	48		
Reference													
												CHKD. _____ APPR. _____ DATE _____	

MINISTRY OF TRANSPORTATION - ONTARIO

GUIDE RAIL AND BARRIERS

QUANTITIES - MISCELLANEOUS 1

W.P. No. 5217-13-00
Contract No. 2021-5154

SHEET
31

Location and Position	Adjust Cable Guide Rail	Cable Guide Rail Post Replacement	Adjust SBGR, Steel Posts [With Channel] [OPSD 912.145]	Single Rail SBGR with Channel [OPSD 912.315]	Single Rail SBGR, TL-3 [OPSD 912.186]	Energy Attenuator - Temporary, Narrow [TL-3]	Energy Attenuator - Relocation, Narrow [TL-3]	SBEAT System [Parallel to Roadway]	TCB, Freestanding, Category II	Temporary Construction Barrier, Relocation	Temporary Transition Connection		References
Sub - Totals Brought Forward:	394	0	509	0	196	0	0	10	0	0	0		
10+231 - 10+499 RT 10+499 RT													
10+323 LT 10+323 - 10+520 LT 10+520 LT			197					1					
10+561 - 10+600 LT	39												
PDA D 10+600 - 10+750 LT 10+585 10+585 - 10+685 RT 10+685		39			100			1					
10+713 RT 10+713 - 10+830 RT 10+830 RT					117			1					
10+750 - 10+831 LT	81												
11+896 - 12+016 LT	120												
11+896 - 12+054 RT	158												
SALVE CREEK BRIDGE 12+174 RT 12+174 - 12+259 RT 12+241 LT 12+368 - 12+426 LT 12+426 LT 12+386 RT				20	65			1					
12+499 - 12+638 LT	139			20	38			1					
12+536 - 12+858 RT	322												
12+793 - 13+009 LT	216												
Sub - Totals Carried Forward:	1,469	39	706	40	516	0	0	20	0	0	0		
	(P)	(P)	(P)	(P)	(P)	(P)	(P)	(P)	(P)	(P)	(P)		
TOTALS													
UNIT	m (P)	each (P)	m (P)	m (P)	m (P)	each (P)	each (P)	each (P)	m (P)	m (P)	each (P)		
ITEM No.	38	39	40	41	42	43	44	45	46	47	48		
Reference													
													CHKD. _____ APPR. _____ DATE _____

MINISTRY OF TRANSPORTATION - ONTARIO

GUIDE RAIL AND BARRIERS

QUANTITIES - MISCELLANEOUS 1

W.P. No. 5217-13-00

Contract No. 2021-5154

SHEET
32

Location and Position	Adjust Cable Guide Rail	Cable Guide Rail Post Replacement	Adjust SBGR, Steel Posts [With Channel] [OPSD 912.145]	Single Rail SBGR with Channel [OPSD 912.315]	Single Rail SBGR, TL-3 [OPSD 912.186]	Energy Attenuator - Temporary, Narrow [TL-3]	Energy Attenuator - Relocation, Narrow [TL-3]	SBEAT System [Parallel to Roadway]	TCB, Freestanding, Category II	Temporary Construction Barrier, Relocation	Temporary Transition Connection		References
Sub - Totals Brought Forward:	1,469	39	706	40	516	0	0	20	0	0	0		
13+501 - 13+638 RT	137												
13+526 - 13+675 LT	149												
14+627 LT								1					
14+627 - 14+750 LT			123										
14+677 RT								1					
14+677 - 14+880 RT			203										
14+759 - 14+840 LT			81										
14+840 LT								1					
HIGHWAY 11													
BOWMAN TOWNSHIP													
WATABEAG RIVER BRIDGE													
STAGE 1													
10+458						1			180				
10+458 - 10+638											1		
10+638													
STAGE 2													
10+454						1					163		
10+454 - 10+617													
10+617							1						
Sub - Totals Carried Forward:	1,755	39	1,113	40	516	2	1	23	180	163	1		
TOTALS	1,755	39	1,113	40	516	2	1	23	180	163	1		
UNIT	m (P)	each (P)	m (P)	m (P)	m (P)	each (P)	each (P)	each (P)	m (P)	m (P)	each (P)		
ITEM No.	38	39	40	41	42	43	44	45	46	47	48		
Reference													

QUANTITIES - MISCELLANEOUS 1

W.P. No. 5217-13-00
Contract No. 2021-5154

SHEET
33

Location and Position	Topsoil, Imported	Seed [Standard Roadside Mix]	Matrix		Fibre Roll Barriers								References
Sub - Totals Brought Forward:													
HIGHWAY 101													
CARR TOWNSHIP													
13+076 - 13+117 LT DITCH	4	41	41										
BEATTY TOWNSHIP													
EXCESS MATERIAL MANAGEMENT AREA A													
10+100 - 10+290 RT	105	2,090	2,090										
10+587 - 10+632 RT DITCH	5	45	45										
10+652 - 10+685 LT DITCH	3	33	33										
10+669 - 10+691 RT DITCH	2	22	22										
10+700 - 10+758 LT DITCH	6	58	58										
13+920 CVT OUTLET					5								
EXCESS MATERIAL MANAGEMENT AREA B													
14+515 - 14+775 RT	143	2,860	2,860										
HISLOP TOWNSHIP													
13+289 CVT OUTLET					5								
13+814 LT CVT OUTLET					5								
14+275 LT CVT OUTLET					5								
Sub - Totals Carried Forward:													
	268	5,149	5,149		20								
(P) (P) (P)													
TOTALS	268	5,149	5,149		20								
UNIT	m3	m2 (P)	m2 (P)		m (P)								
ITEM No.	49	50	51		52								
Reference													

MINISTRY OF TRANSPORTATION - ONTARIO

CHKD. _____
APPR. _____
DATE _____

ENVIRONMENTAL

QUANTITIES - MISCELLANEOUS 1

W.P. No. 5217-13-00
Contract No. 2021-5154

Location and Position	Temporary Raised Transverse Rumble Strips												References
Sub - Totals Brought Forward:													
HIGHWAY 11													
WATABEAG RIVER BRIDGE													
TAYLOR TOWNSHIP													
24+606 RT LANE	45												
BOWMAN TOWNSHIP													
10+606 RT LANE	45												
	90												
	90												
	m												
	54												

QUANTITIES - TEMPORARY INSTALLATION

W.P. No. 5217-13-00

Contract No. 2021-5154

Location	Structure/Equipment No.	Offset (m) to CL of Structure/Equip't (Note 1)	Signal Head Facing Direction	From - To OR Station	Distance (m)	Maintenance and Operation For Temporary Traffic Signal System Work	#4 AWG Low Voltage Cables Aerial on Messenger Cable [Temporary]	#8 AWG Low Voltage Cables Aerial on Messenger Cable [Temporary]	7-Cond. Traffic Signal Cables Aerial on Messenger Cable [Temporary]	7 mm, Grade 110 Steel Messenger Cables Aerial [Temporary]	9 mm, Grade 160 Steel Messenger Cables Aerial [Temporary]	ACSR Cables, Aerial 2 AWG, 3 Conductors [Temporary]	#2 AWG, Bare, Ground Wire [Temporary]	#6 AWG, Bare, Ground Wire [Temporary]	#6 AWG, Insulated, Ground Wire [Temporary]	Ground Electrodes [Temporary] [Rods]	Supply Control Cabinet Assemblies [Temporary] Type 1, 1Ph 120/240 V, OPSSD 2440.010	14 m, Class 4 Wood Poles Direct Buried in Earth [Temporary]
Sub - Totals Brought Forward:																		
Hwy 11 at Watabeag River Bridge						100 %												
Highway 11	P101	11.2		10+424														1
Highway 11	P102	10.8		10+424									18			4	1	1
Highway 11	P103	10.6		10+471														1
Highway 11	P104	10.3		10+519														1
Highway 11	P105	10.0		10+586														1
Highway 11	P106	8.5		10+653										1			1	1
Highway 11	P107	9.3		10+653										1			1	1
Highway 11	FB101	4*		10+272														
Highway 11	FB102	4*		10+848														
				EHP101-P102	30							30						
Highway 11			W	P101-P102	22		44	88	22	22	22							
Highway 11				P102-P103	47			94	47		47				22			
Highway 11				P103-P104	48			96	48		48							
Highway 11				P104-P105	67			134	67		67							
Highway 11				P105-P106	67			134	67		67							
			E	P106-P107	18					18	18							
Sub - Totals Carried Forward:						100 %	44	546	251	40	269	30	18	2	22	6	1	7
							44	546		40	269		18	2	22			
							(P)	(P)	(P)	(P)	(P)	(P)	(P)	(P)	(P)	(P)	(P)	(P)
TOTALS						100 %		590	251		309	30		42		6	1	7
UNIT						lump sum	m (P)	m (P)	m (P)	m (P)	m (P)	m (P)	m (P)	m (P)	m (P)	each (P)	each (P)	each (P)
ITEM No.						55		56	57		58	59		60		61	63	64

MINISTRY OF TRANSPORTATION - ONTARIO

Temporary Wiring Traffic Signals

Remarks:

Note: 1 When shown without *, offset is from centre or control line of roadway.
When shown with *, offset is from edge of travelled pavement (EP).

CHKD. _____
APPR. _____
DATE _____

QUANTITIES - TEMPORARY INSTALLATION

W.P. No. 5217-13-00

Contract No. 2021-5154

Location	Structure/Equipment No.	Offset (m) to CL of Structure/Equip't (Note 1)	Signal Head Facing Direction	From - To OR Station	Distance (m)	Guy Anchors (Temporary)	400W HPS Luminaire, 120 V Ballast c/w 250 W HPS Lamp [Temporary]	2.4 m Al. Tapered Elliptical Bracket	#12 AWG Riser Wires, 3 Wires/Pole	Highway Type Signal Heads (Temporary) ³	Riser Wires #14 AWG, 5/C	Flasher Beacons [Temporary] [Electrical Details 1 (Temporary)]	Riser Wires #18 AWG, 2/C	150mmx150mmx5000mm Wooden Post (Temporary) ¹	Traffic Signal Controllers [Temporary] [MTOD 2529.12]	Non-Intrusive Detection System (Temporary)	Non-Intrusive Detection cables ⁴	
Sub - Totals Brought Forward:								2.4	#12									
Hwy 11 at Watabeag River Bridge																		
Highway 11	P101	11.2		10+424		1	1	1	13						1	1		
Highway 11	P102	10.8		10+424		2												
Highway 11	P103	10.6		10+471														
Highway 11	P104	10.3		10+519														
Highway 11	P105	10.0		10+586														
Highway 11	P106	8.5		10+653		2	1	1	1							1		
Highway 11	P107	9.3		10+653		1			3									
Highway 11	FB101	4*		10+272								1		1				
Highway 11	FB102	4*		10+848								1		1				
Highway 11			W	EHP101-P102	30					2	28.0						22	
Highway 11				P101-P102	22													
Highway 11				P102-P103	47												47	
Highway 11				P103-P104	48												48	
Highway 11				P104-P105	67												67	
Highway 11				P105-P106	67				2	25.0							67	
			E	P106-P107	18													
Sub - Totals Carried Forward:						6	2	2	17	4	53.0	2	0		1	2		
						(P)	(P)	(P)	(P)	(P)	(P)	(P)	(P)	(P)	(P)	(P)	(P)	
TOTALS						6	2			4		2		2	1	2	251	
UNIT						each (P)	each (P)	each (P)	each (P)	each (P)	m (P)	each (P)	m (P)	each	each (P)	each (P)	each	
ITEM No.						65	66			67		68			69	72		

MINISTRY OF TRANSPORTATION - ONTARIO

Temporary Wiring Traffic Signals

Remarks: 1. Wooden Post is part of the Signage item (by Others).

4. This item is part of Non-Intrusive detection System.

3. Highway signal heads to be all 30cm lenses (Oversize).

Note: 1 When shown without *, offset is from centre or control line of roadway. When shown with *, offset is from edge of travelled pavement (EP).

CHKD. _____
APPR. _____
DATE _____

QUANTITIES - REMOVAL OF ELECTRICAL EQUIPMENT

W.P. No. 5217-13-00
 Contract No. 2021-5154

Location	Removal Number	Station	Removal of Electrical Equipment [Traffic Count Station]															
Sub - Totals Brought Forward:																		
Hwy 101 (Sta. 12+254 on Left in the Township of Beatty)	R101	As shown	100 %															
Sub - Totals Carried Forward:				100 %														

MINISTRY OF TRANSPORTATION - ONTARIO

UNIT	LUMP SUM
ITEM No.	62

Remarks:

CHKD. _____
 APPR. _____
 DATE _____

Removal

QUANTITIES - MISCELLANEOUS 1

W.P. No. 5217-13-00
 Contract No. 2021-5154

Location and Position	Removal of Asphalt Pavement [80 mm AVG], [Entire Patrol Yard]												References
Sub - Totals Brought Forward:													
HIGHWAY 11													
CARR TOWNSHIP													
MATHESON PATROL YARD	9,931												