

QUANTITY SHEETS

CONTRACT NO. 20F1 -I €GH

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W.P. No. 4169-15-00  
Contract No. 2018-4023

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	GRADING
1	Alignment Data



**QUANTITIES - MISCELLANEOUS 1**

W.P. No. 4169-15-00  
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SHEET  
1

MINISTRY OF TRANSPORTATION - ONTARIO

Location and Position	Grubbing	Grubbing (each)											References
Sub - Totals Brought Forward:													
County Road 31													
9+878; 17.1 LT		1											
9+880; 16.5 LT		1											
9+899 - 9+978; 21.3 - 17.8 LT	980												
9+920; 32.6 LT		1											
9+947 - 9+952; 11.3 - 26.7 RT	80												
9+954; 29.5 LT		1											
9+962; 28.0 LT		1											
9+970 - 9+981; 11.0 - 21.8 RT	178												
9+975; 24.3 LT		1											
9+977; 23.2 LT		1											
10+030 - 10+111; 19.1 LT - 25.5 LT	1,500												
10+048; 44.2 LT		1											
10+058 - 10+063; 12.7 - 22.5 RT	50												
10+102; 31.4 LT		1											
10+102; 27.2 LT		1											
10+115; 36.8 LT		1											
10+122; 21.8 LT		1											
10+124; 34.1 LT		1											
Sub - Totals Carried Forward:													
	2,788	13											
	(P)	(P)											
TOTALS													
UNIT	m2 (P)	each (P)											
ITEM No.	1	2											
Reference													

CHKD. \_\_\_\_\_  
APPR. \_\_\_\_\_  
DATE \_\_\_\_\_

Clearing and Grubbing

**QUANTITIES - MISCELLANEOUS 1**

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SHEET  
2

MINISTRY OF TRANSPORTATION - ONTARIO

Location and Position	Grubbing	Grubbing (each)											References
Sub - Totals Brought Forward:	2,788	13											
10+124; 21.1 LT		1											
10+126; 16.4 LT		1											
10+130; 16.0 LT		1											
10+134; 23.7 LT		1											
10+144; 30.9 LT		1											
10+147; 23.3 LT		1											
10+155; 17.6 LT		1											
10+220 - 10+274; 19.0 - 29.9 LT	362												
Sub - Totals Carried Forward:	3,150	20											
(P)		(P)											
TOTALS	3,150	20											
UNIT	m2 (P)	each (P)											
ITEM No.	1	2											
Reference													

CHKD. \_\_\_\_\_  
APPR. \_\_\_\_\_  
DATE \_\_\_\_\_

Clearing and Grubbing

**QUANTITIES - GRADING**

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Contract No. 2018-4023

SHEET  
3

MINISTRY OF TRANSPORTATION - ONTARIO

Description	Earth Excavation (Grading)	Reference	Earth Available	Reference													
Sub - Totals Brought Forward:																	
Stage 1																	
County Road 31																	
9+820 - 9+965																	
Cut	1,019		917														
Fill Stripping	856		428														
10+048 - 10+182																	
Cut	91		82														
Swamp Excavation	8,501																
Stage 1A																	
County Road 31																	
10+182 - 10+445																	
Cut	1,069		962														
Fill Stripping	761		381														
Swamp Excavation	867																
Stage 2																	
County Road 31																	
9+640 - 9+897																	
Cut	537		483														
Fill Stripping	114		57														
10+273 - 10+445																	
Cut	168		151														
Highway 401																	
E-N/S Ramp																	
10+357 - 10+372.641																	
Cut	369		332														
Sub - Totals Carried Forward:																	
	14,352		3,793														

(P)																	
TOTALS																	
UNIT	m3 (P)			m3													
ITEM No.	3																

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

Reference

Total Stripping		2232
Stripping Available	50%	1116
Top Soil Required		93
Stripping Balance		1023

CHKD. \_\_\_\_\_  
APPR. \_\_\_\_\_  
DATE \_\_\_\_\_

Grading



**QUANTITIES - MISCELLANEOUS 1**

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MINISTRY OF TRANSPORTATION - ONTARIO

Location and Position	Granular Sealing (m2) [Hand Sprayed] [Sealant Type I]												References
<b>Sub - Totals Brought Forward:</b>													
County Road 31													
	230												
	147												
	23												
	23												
	23												
	409												
	101												
	144												
	25												
	18												
Highway 401													
	105												
	59												
	63												
	105												
<b>Sub - Totals Carried Forward:</b>		1,498											
(P)													
TOTALS	1,498												
UNIT	m2 (P)												
ITEM No.	4												
Reference													
												CHKD. _____	
												APPR. _____	
												DATE _____	

Granular Sealing



**QUANTITIES - HOT MIX AND GRANULAR**

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SHEET  
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MINISTRY OF TRANSPORTATION - ONTARIO

Description	Tack Coat [Surface Course]	Tack Coat [Binder Course]		Superpave 12.5FC 1 [40mm Surface Course]	Superpave 12.5FC 1 [50mm Surface Course]	Superpave 12.5FC 1 [40mm Binder Course]	Superpave 19.0 [50mm Binder Course]	Superpave 19.0 [50mm Base Course]	Temporary Hot Mix Pavement		Granular A [Roadway]	Granular A [Shoulder]	Granular B, Type II [Fill]	Select Subgrade Material, Compacted	Granular B, Type III [Sub-Base]	References
Sub - Totals Brought Forward:																
Pre-stage 1																
County Road 31																
9+500 - 9+827; 3.9 - 8.0 RT							78	78								
9+744 - 9+753; 8.7 - 26.6 LT							4	4								
9+772 - 9+782; 34.3 - 8.7 LT							6	6								
10+173 - 10+197; 7.0 - 36.0 RT							10	10								
10+203 - 10+212; 26.9 - 26.7 RT							6	6								
10+216 - 10+418; 24.5 - 4.2 RT							76	76								
Highway 401																
12+665 - 12+842; 12.5 - 14.1 RT									34							
12+784 - 12+950; 0.5 - 2.1 LT									32							
Stage 1																
County Road 31																
9+820 - 9+965																
Roadway	1,313	1,313		125			161	161			812			<sup>1</sup> 11,723	2,107	
Shoulders	601			55				70				59				
10+048 - 10+182																
Roadway	1,440	1,440		139			179	179			805			<sup>1</sup> 37,560	2,590	
Shoulders	517			53				69				48				
Stage 1A																
County Road 31																
Sub - Totals Carried Forward:																
	3,871	2,753		372	0	0	520	659	66		1,617	107	0	49,283	4,697	
<div style="display: flex; justify-content: space-between; margin-top: 10px;"> <span>(P)</span> <span>(P)</span> <span>(P)</span> <span>(P)</span> <span>(P)</span> <span>(P)</span> <span>(P)</span> <span>(P)</span> <span>(P)</span> <span>(P)</span> <span>(P)</span> <span>(P)</span> <span>(P)</span> <span>(P)</span> <span>(P)</span> <span>(P)</span> <span>(P)</span> </div>																
<b>TOTALS</b>																
UNIT	m2 (P)	m2 (P)		t	t	t	t	t	t		t	t	t	t	t	
ITEM No.		5			7			8	15			9	10	11	12	
Reference																
Remarks:	1. Also contains Select Subgrade Material quantity for shoulder															
																CHKD. _____
																APPR. _____
																DATE _____

Hot Mix and Granular

**QUANTITIES - HOT MIX AND GRANULAR**

W.P. No. 4169-15-00  
Contract No. 2018-4023

SHEET  
7

Description	Tack Coat [Surface Course]	Tack Coat [Binder Course]		Superpave 12.5FC 1 [40mm Surface Course]	Superpave 12.5FC 1 [50mm Surface Course]	Superpave 12.5FC 1 [40mm Binder Course]	Superpave 19.0 [50mm Binder Course]	Superpave 19.0 [50mm Base Course]	Temporary Hot Mix Pavement		Granular A [Roadway]	Granular A [Shoulder]	Granular B, Type II [Fill]	Select Subgrade Material, Compacted	Granular B, Type III [Sub-Base]	References
<b>Sub - Totals Brought Forward:</b>	3,871	2,753		372	0	0	520	659	66		1,617	107	0	49,283	4,697	
Bridge Deck and Approach Slabs																
9+965 - 10+049	1,021	1,021		112		83	18									
North Abutment																
9+958 - 9+981; 7.6 LT - 6.8 RT													1,804			
Centre Pier																
10+003 - 10+009; 7.0 LT - 7.0 RT													390			
South Abutment																
10+031 - 10+055; 7.6 LT - 6.9 RT													1,907			
10+182 - 10+445																
Roadway	1,739	1,739		170			218	218			989			<sup>1</sup> 17,394	2,619	
Shoulders	670			67				87				67				
Stage 2																
County Road 31																
9+635 - 9+640; 7.1 LT - 6.0 RT				7												
9+640 - 9+897																
Roadway	2,120	2,120		203			261	261			1,658			<sup>1</sup> 741	400	
Shoulders	913			90				116				90				
10+273 - 10+445																
Roadway	834	834		77			99	99			332			<sup>1</sup> 208		
Shoulders	471			47				60				45				
10+445 - 10+450; 6.9 LT - 7.5 RT				89												
Highway 401																
E-N/S Ramp																
9+972 - 10+310; 5.0 LT - 0.7 RT	2,149				257											
10+310 - 10+373																
<b>Sub - Totals Carried Forward:</b>	13,940	8,467		1,152	257	83	1,116	1,500	66		4,596	309	4,101	67,626	7,716	
<b>TOTALS</b>	(P)	(P)														
<b>UNIT</b>	m2 (P)	m2 (P)		t	t	t	t	t	t		t	t	t	t	t	
<b>ITEM No.</b>		5			7			8	15			9	10	11	12	
<b>Reference</b>																
<b>Remarks:</b>	1. Also contains Select Subgrade Material quantity for shoulder															
	CHKD. _____ APPR. _____ DATE _____															

MINISTRY OF TRANSPORTATION - ONTARIO

Hot Mix and Granular

**QUANTITIES - HOT MIX AND GRANULAR**

W.P. No. 4169-15-00  
Contract No. 2018-4023

SHEET  
8

MINISTRY OF TRANSPORTATION - ONTARIO

Description	Tack Coat [Surface Course]	Tack Coat [Binder Course]		Superpave 12.5FC 1 [40mm Surface Course]	Superpave 12.5FC 1 [50mm Surface Course]	Superpave 12.5FC 1 [40mm Binder Course]	Superpave 19.0 [50mm Binder Course]	Superpave 19.0 [50mm Base Course]	Temporary Hot Mix Pavement		Granular A [Roadway]	Granular A [Shoulder]	Granular B, Type II [Fill]	Select Subgrade Material, Compacted	Granular B, Type III [Sub-Base]	References
<b>Sub - Totals Brought Forward:</b>	13,940	8,467		1,152	257	83	1,116	1,500	66		4,596	309	4,101	67,626	7,716	
Roadway	360	360		32			42	42			334			1 2		
Shoulders				21								31				
N/S-W Ramp 10+028 - 10+065																
Roadway	337	337		32			41	41			359			1 419		
Shoulders				12								18				
10+065 - 10+343; 6.1 LT - 0.7 RT	1,754				210											
Stage 3																
County Road 31																
9+780-9+965																
Roadway											52			1 7	85	
Shoulders												38				
10+048 - 10+272																
Roadway				6			8	8			522			1 1,975	803	
Shoulders	196			17				22				31				
Highway 401																
N/S-E Ramp 10+034 - 10+220																
Roadway	1,110	1,110		98			126	126			842			1 3,818	1,675	
Shoulders				61								58				
10+220 - 10+225; 5.8 LT - 2.1 RT	47				6											
W-N/S Ramp 9+955 - 10+100; 5.8 LT - 2.7 RT	1,201				144											
10+100 - 10+318																
Roadway	1,165	1,165		106			138	138			1,059			1 2,694	1,806	
Shoulders				72								82				
<b>Sub - Totals Carried Forward:</b>	20,110	11,439		1,609	617	83	1,471	1,877	66		7,764	567	4,101	76,541	12,085	
	20,110	11,439		1,609	617	83	1,471	1,877			7,764	567				
	(P)	(M)														
<b>TOTALS</b>		31,549			2,309			3,348	66			8,331	4,101	76,541	12,085	
<b>UNIT</b>	m2 (P)	m2 (P)		t	t	t	t	t	t		t	t	t	t	t	
<b>ITEM No.</b>		5			7			8	15			9	10	11	12	
<b>Reference</b>																

Remarks: 1. Also contains Select Subgrade Material quantity for shoulder

CHKD. \_\_\_\_\_  
APPR. \_\_\_\_\_  
DATE \_\_\_\_\_

Hot Mix and Granular

**QUANTITIES - MISCELLANEOUS 1**

W.P. No. 4169-15-00  
Contract No. 2018-4023

SHEET  
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MINISTRY OF TRANSPORTATION - ONTARIO

Location and Position	Asphalt Spillways		Concrete Curb and Gutter [OPSD 600.030] [Straight]	Concrete Curb and Gutter [OPSD 600.060] [Circular]	Concrete Gutter Outlets [OPSD 605.030]								References
Sub - Totals Brought Forward:													
County Road 31													
9+950 - 9+950; 7.6 LT	2												
9+951 - 9+951; 7.1 RT	2												
9+953; 6.0 LT					1								
9+953; 5.6 RT					1								
9+953 - 9+965; 6.0 - 5.9 LT			12										
9+953 - 9+965; 5.6 RT			12										
10+047 - 10+059; 5.6 -5.9 LT			12										
10+048 - 10+060; 5.6 - 6.1 RT			12										
10+059; 5.9 LT					1								
10+060; 6.1 RT					1								
10+061 - 10+061; 7.5 LT	2												
10+063 - 10+063; 7.7 RT	2												
Highway 401													
E-N/S Ramp / N/S-W Ramp													
10+362 - 10+040; 5.1 - 5.5 LT				25									
N/S-E Ramp / W-N/S Ramp													
10+043 - 10+306; 5.0 LT				32									
Sub - Totals Carried Forward:													
	8		48	57	4								
	(P)		(P)	(M)	(P)								
TOTALS	8		48	57	4								
UNIT	m (P)		m (P)	m (P)	each (P)								
ITEM No.	6			13	14								
Reference													
													CHKD. _____ APPR. _____ DATE _____

Asp. Spillways / CGC / CGC Outlets



**QUANTITIES - PIPE CULVERTS**

W.P. No. 4169-15-00  
Contract No. 2018-4023

SHEET  
11

Culvert No	Station	Location and Position	Ext		Skew No	End Finish	Depth to Pipe	Pipe Fill Material			Pipe Joints	Treatment	Inv Elev		900 mm Pipe Culvert S900+00 111211 C900+00 000311	900 mm Pipe Culvert Extension S900+00 000000 C900+00 000301	References
			Left	Right				Bedding	Cover	Backfill			Upstream	Downstream			
Sub - Totals Brought Forward:																	
		Highway 401 N/S-W Ramp															
1	10+040	11.7 - 22.8 RT <sup>1</sup>			90	SqE		A	A	N	L		80.619	80.597		11	
		County Road 31															
2	9+975	20.3 LT - 24.2 RT <sup>1</sup>			84	SqE	1.8	A	A	N			80.835	80.331	45		
3	10+100	12.4 - 25.7 LT <sup>1</sup>			92	SqE		A	A	N	L		80.230	80.163		14	
Sub - Totals Carried Forward:																	
															45	25	

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 - 1.7 m

	(P)	(P)			
<b>TOTALS</b>	45	25			
<b>UNIT</b>	m (P)	m (P)			
<b>ITEM No.</b>	17	18			

1. Estimated invert elevations. Contractor to ensure positive drainage of culvert.

CHKD. \_\_\_\_\_  
 APPR. \_\_\_\_\_  
 DATE \_\_\_\_\_

Pipe Culverts

QUANTITIES - MISCELLANEOUS 1

W.P. No. 4169-15-00  
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MINISTRY OF TRANSPORTATION - ONTARIO

Location and Position	Removal of Asphalt Pavement [100mm], [Surface]	Removal of Asphalt Pavement [170mm], [Surface]	Removal of Asphalt Pavement [180mm], [Surface]	Removal of Asphalt Pavement [185mm], [Surface]	Removal of Asphalt Pavement [200mm], [Surface]	Removal of Asphalt Pavement [225mm], [Surface]		Removal of Asphalt Pavement, Partial Depth [40mm]	Removal of Asphalt Pavement, Partial Depth [50mm]		Removal of Asphalt Pavement from Concrete Surfaces on Structures	References
Sub - Totals Brought Forward:												
County Road 31 - Removal of Prestage Shoulder Strengthening												
9+500 - 9+827; 3.9 - 8.0 RT	628											
9+744 - 9+753; 8.7 - 26.6 LT	27											
9+772 - 9+782; 34.3 - 8.7 LT	46											
10+173 - 10+197; 7.0 - 36.0 RT	80											
10+203 - 10+212; 26.9 - 26.7 RT	46											
10+216 - 10+418; 24.5 - 4.2 RT	611											
County Road 31												
9+635 - 9+640; 7.1 LT - 6.0 RT								65				
9+640 - 9+971; 7.0 LT - 8.0 RT		4,900										
9+971 - 10+042; 7.5 LT - 7.9 RT										1,101		
10+042 - 10+446; 7.5 LT - 7.5 RT		5,121										
10+446 - 10+451; 6.9 LT - 7.5 RT								73				
Highway 401												
E-N/S Ramp												
10+305 - 10+310; 5.0 LT - 0.7 RT									2,149			
10+310 - 10+372; 4.9 LT - 4.0 RT			423									
N/S-W Ramp												
10+029 - 10+065; 9.4 LT - 0.7 RT					295							
Sub - Totals Carried Forward:	1,438	10,021	423	0	295	0		138	2,149		1,101	
	(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)	
ITEM No.		20							21		22	
Reference												

CHKD. \_\_\_\_\_  
APPR. \_\_\_\_\_  
DATE \_\_\_\_\_

Rem. of Asp., F.D. / Rem. of Asp., P.D.







**QUANTITIES - MISCELLANEOUS 1**

W.P. No. 4169-15-00  
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Location and Position	Removal of Ramp Closure Gates	Removal of Delineator Posts [Steel]		Removal of Cable Guide Rail [3 Cable]		Removal of Anchor Blocks		Removal of Steel Beam Guide Rail [Single Rail] [With Channel]	Removal of Steel Beam Guide Rail [Single Rail] [Without Channel]				References
Sub - Totals Brought Forward:													
County Road 31													
10+206; 20.0 RT	1												
9+775; LT		1											
9+785; LT		1											
9+787; RT		1											
10+178; RT		1											
9+785 - 9+937; 11.4 - 10.3 LT				152									
9+785 - 9+937; 10.3 - 9.3 RT				152									
10+075 - 10+417; 9.3 - 8.8 LT				343									
10+080 - 10+182; 9.3 - 10.8 RT				102									
10+233 - 10+412; 7.7 RT				179									
9+785; 11.4 LT						1							
9+785; 10.3 RT						1							
9+937; 10.3 LT						1							
9+937; 9.3 RT						1							
10+075; 9.3 LT						1							
10+080; 9.3 RT						1							
10+182; 10.8 RT						1							
10+233; 7.7 RT						1							
Sub - Totals Carried Forward:													
	1	4		928		8		0	0				
	(P)	(P)		(P)		(P)		(P)	(P)				
TOTALS													
UNIT	each (P)	each (P)		m (P)		each (P)		m (P)	m (P)				
ITEM No.	28	29		30		31		32					
Reference													
													CHKD. _____ APPR. _____ DATE _____

MINISTRY OF TRANSPORTATION - ONTARIO

Rem. of 3CGR / Rem. of ABS / Rem. of SBGR

**QUANTITIES - MISCELLANEOUS 1**

W.P. No. 4169-15-00  
Contract No. 2018-4023

SHEET  
16

Location and Position	Removal of Ramp Closure Gates	Removal of Delineator Posts [Steel]		Removal of Cable Guide Rail [3 Cable]		Removal of Anchor Blocks		Removal of Steel Beam Guide Rail [Single Rail] [With Channel]	Removal of Steel Beam Guide Rail [Single Rail] [Without Channel]				References
Sub - Totals Brought Forward:	1	4		928		8		0	0				
10+265; 9.8 LT						1							
10+275; 9.8 LT						1							
10+369; 7.7 RT						1							
10+395; 8.8 LT						1							
9+927 - 9+967; 12.0 - 9.0 LT								40					
9+928 - 9+968; 10.8 - 8.3 RT								40					
10+045 - 10+084; 8.8 - 11.1 LT								39					
10+046 - 10+082; 8.3 - 9.4 RT								36					
10+408 - 10+446; 9.3 - 8.0 RT								38					
10+417 - 10+444; 8.7 - 8.2 LT								27					
Highway 401													
12+687 - 12+832; 10.5 - 12.1 RT									145				
12+784 - 12+937; 0.3 - 2.0 RT									153				
12+789 - 12+841; 15.7 - 16.3 LT									52				
12+778 - 12+826; 28.3 RT									48				
12+799 - 12+816; 6.4 RT									38				
E-N/S Ramp													
10+305 - 10+360; LT		1											
10+305 - 10+360; RT		4											
Sub - Totals Carried Forward:	1	9		928		12		220	436				
	(P)	(P)		(P)		(P)		(P)	(P)				
TOTALS													
UNIT	each (P)	each (P)		m (P)		each (P)		m (P)	m (P)				
ITEM No.	28	29		30		31			32				
Reference													
													CHKD. _____ APPR. _____ DATE _____

MINISTRY OF TRANSPORTATION - ONTARIO

Rem. of 3CGR / Rem. of ABS / Rem. of SBGR





**QUANTITIES - MISCELLANEOUS 1**

W.P. No. 4169-15-00

Contract No. 2018-4023

SHEET  
19

MINISTRY OF TRANSPORTATION - ONTARIO

Location and Position	Small Signs, Ground Mounted, New	Small Signs, Relocation	Small Signs, Removal		Post Mounted Delineators Type A (125mm x 125mm)	Flexible Delineator Post - Temporary Type A (Fixed Surface Mount Base)	PVMS (Temporary) [English] [Existing Ground]		Temporary Traffic Control Signs	Road Closing / Restriction Notice Signs (TC-64)	Wood Column Non-Breakaway Sign Support Structures	Communication Plan For Traffic Management	References
Sub - Totals Brought Forward:									100 %	14		100 %	
Entire Project									100 %	14		100 %	
At Each Limit of Contract							2						
County Road 31 - Winter Shutdown													
9+548 - 9+612; 5.0 - 7.0 LT						14							
9+627 - 9+741; 16.0 - 11.0 LT						25							
County Road 31													
9+728 Lt Wa13aR	1		1										
9+747 Rt G704	1		1										
9+747 Lt Rb-20	1												
9+747 Lt Rb-19			1										
9+749 Lt Ra-1101	1												
9+749 Lt Ra-101			1										
9+756 Rt G307/G307/G307	1		1										
9+758 Rt M110/M110/M301/M301	1		1										
9+762 Lt Rb-125	1		1										
9+762 Rt M404c	1		1										
9+763 Rt M700c	1		1										
9+770 Rt G128B	1		1										
9+780 Lt Wa33R			1										
Sub - Totals Carried Forward:	10	1	10		0	39	2		100 %	14	0	100 %	
	(P)	(P)	(P)		(P)	(P)	(P)		(P)	(P)			
TOTALS													
UNIT	each (P)	each (P)	each (P)		each (P)	each (P)	each (P)		lump sum	each (P)	each (P)	lump sum	
ITEM No.	36	37	38		39	40	41		42	43	65	66	
Reference													
													CHKD. _____ APPR. _____ DATE _____

Small Signs, New / Small Signs, Rem. / Temp. Traffic Control

**QUANTITIES - MISCELLANEOUS 1**

W.P. No. 4169-15-00

Contract No. 2018-4023

SHEET  
20

MINISTRY OF TRANSPORTATION - ONTARIO

Location and Position	Small Signs, Ground Mounted, New	Small Signs, Relocation	Small Signs, Removal		Post Mounted Delineators Type A (125mm x 125mm)	Flexible Delineator Post - Temporary Type A (Fixed Surface Mount Base)	PVMS (Temporary) [English] [Existing Ground]		Temporary Traffic Control Signs	Road Closing / Restriction Notice Signs (TC-64)	Wood Column Non-Breakaway Sign Support Structures	Communication Plan For Traffic Management	References
Sub - Totals Brought Forward:	10	1	10		0	39	2		100 %	14	0	100 %	
9+805 Lt G128B/G128B	1												
9+790 Lt G128B/G128B			1										
9+827 Lt Wa-23R			1										
9+938 Rt G126B	1		1										
10+072 Lt G126B	1		1										
10+123 Lt Rb-1a	1		1										
10+172 Rt G128B/G128B	1												
10+182 Rt G128B/G128B			1										
10+180 Lt M110	1		1										
10+194 Rt Wa33R			1										
10+205 Lt G128B	1		1										
10+208 Rt Rb-125	1		1										
10+210 Rt Rb-20	1		1										
10+210 Rt Rb-19													
10+217 Lt M110/M110/M301/M301	1		1										
10+218 Lt M404c	1		1										
10+220 Lt G307/G307/G307	1		1										
10+222 Lt G704	1		1										
10+222 Rt Ra-1101	1												
Sub - Totals Carried Forward:	24	1	25		0	39	2		100 %	14	0	100 %	
	(P)	(P)	(P)		(P)	(P)	(P)		(P)	(P)			
TOTALS													
UNIT	each (P)	each (P)	each (P)		each (P)	each (P)	each (P)		lump sum	each (P)	each (P)	lump sum	
ITEM No.	36	37	38		39	40	41		42	43	65	66	
Reference													
													CHKD. _____ APPR. _____ DATE _____

Small Signs, New / Small Signs, Rem. / Temp. Traffic Control

**QUANTITIES - MISCELLANEOUS 1**

W.P. No. 4169-15-00  
Contract No. 2018-4023

Location and Position	Small Signs, Ground Mounted, New	Small Signs, Relocation	Small Signs, Removal		Post Mounted Delineators Type A (125mm x 125mm)	Flexible Delineator Post - Temporary Type A (Fixed Surface Mount Base)	PVMS (Temporary) [English] [Existing Ground]		Temporary Traffic Control Signs	Road Closing / Restriction Notice Signs (TC-64)	Wood Column Non-Breakaway Sign Support Structures	Communication Plan For Traffic Management	References
Sub - Totals Brought Forward:	24	1	25		0	39	2		100 %	14	0	100 %	
10+222 Rt Ra-101			1										
10+222 Rt Rb-20	1												
10+222 Rt Rb-19			1										
10+224 Lt M700c	1		1										
10+253 Rt M110/Custom Tab		1											
10+311 Rt Rb-1a	1		1										
10+374 Rt G707/M314B	1		1										
10+398 Lt G126B	1		1										
Highway 401													
12+767 Rt 8015B		1											
12+798 Rt 8015B		1											
12+840 Lt 8015B		1											
12+849 Lt Morrisburg Sign										1			
E-N/S Ramp													
10+180 Lt Rb-20B	1												
10+180 Rt Rb-20B	1												
10+305 - 10+361; LT					8								
10+305 - 10+361; RT					8								
N/S-W Ramp													
Sub - Totals Carried Forward:	31	5	31		16	39	2		100 %	14	1	100 %	
TOTALS	(P)	(P)	(P)		(P)	(P)	(P)			(P)	(P)		
UNIT	each (P)	each (P)	each (P)		each (P)	each (P)	each (P)		lump sum	each (P)	each (P)	lump sum	
ITEM No.	36	37	38		39	40	41		42	43	65	66	
Reference													
												CHKD. _____	
												APPR. _____	
												DATE _____	

MINISTRY OF TRANSPORTATION - ONTARIO

Small Signs, New / Small Signs, Rem. / Temp. Traffic Control





**QUANTITIES - MISCELLANEOUS 1**

W.P. No. 4169-15-00  
Contract No. 2018-4023

SHEET  
23

MINISTRY OF TRANSPORTATION - ONTARIO

Location and Position	Pavement Marking Obliterating - By Abrasive Blasting												References
Sub - Totals Brought Forward:													
County Road 31													
Prior to Stage 1													
9+448 - 9+600; CL	203												
9+448 - 10+195; RT	747												
9+600 - 9+616; CL	32												
9+625 - 9+753; CL	256												
9+684 - 10+185; LANE	168												
9+772 - 10+199; CL	854												
10+185 - 10+202; LANE	17												
10+212 - 10+446; CL	468												
10+220 - 10+446; RT	226												
Prior to Stage 3													
9+448 - 9+617; LT	180												
9+448 - 9+741; CL	588												
9+448 - 9+780; RT	332												
9+624 - 9+723; LT	110												
9+741 - 9+766; LANE	37												
9+760 - 9+791; LANE	44												
9+773 - 9+850; LT	99												
Sub - Totals Carried Forward:		4,361											
(P)													
TOTALS													
UNIT	m (P)												
ITEM No.	44												
Reference													
												CHKD. _____ APPR. _____ DATE _____	

Pavement Marking, Obliterating



**QUANTITIES - MISCELLANEOUS 1**

W.P. No. 4169-15-00  
Contract No. 2018-4023

SHEET  
25

MINISTRY OF TRANSPORTATION - ONTARIO

Location and Position	Pavement Marking [Solid] [Yellow, 10cm]	Pavement Marking [Double Solid] [Yellow, 10cm]	Pavement Marking [Solid] [White, 10cm]	Pavement Marking [Broken 3-3-3] [White, 10cm]	Pavement Marking, Durable [Solid] [White, 60cm]	Pavement Marking Symbols, Durable [Left Turn Arrow]	Pavement Marking Symbols, Durable [Right Turn Arrow]							References
Sub - Totals Brought Forward:														
Highway 401														
E-N/S Ramp														
9+972 - 10+373; LT	403													
9+972 - 10+373; RT			403											
10+372; STOP BAR					78									
N/S-W Ramp														
10+029 - 10+343; LT	332													
10+029 - 10+343; RT			320											
N/S-E Ramp														
10+033 - 10+225; LT	200													
10+034 - 10+225; RT			199											
W-N/S Ramp														
9+955 - 10+319; LT	366													
9+955 - 10+320; RT			377											
10+319; STOP BAR					144									
County Road 31														
10+224 - 10+446; CL	222													
10+049 - 10+180; CL MEDIAN	266													
9+448 - 9+760; CL		624												
Sub - Totals Carried Forward:	1,789	624	1,299	0	222	0	0							
	(P)	(P)	(P)	(P)	(P)	(P)	(P)							
<b>TOTALS</b>														
UNIT	m (P)	m (P)	m (P)	m (P)	m (P)	each (P)	each (P)							
ITEM No.		45			46		47							
Reference														

CHKD. \_\_\_\_\_  
APPR. \_\_\_\_\_  
DATE \_\_\_\_\_

Pavement Marking

**QUANTITIES - MISCELLANEOUS 1**

W.P. No. 4169-15-00  
Contract No. 2018-4023

SHEET  
26

MINISTRY OF TRANSPORTATION - ONTARIO

Location and Position	Pavement Marking [Solid] [Yellow, 10cm]	Pavement Marking [Double Solid] [Yellow, 10cm]	Pavement Marking [Solid] [White, 10cm]	Pavement Marking [Broken 3-3-3] [White, 10cm]	Pavement Marking, Durable [Solid] [White, 60cm]	Pavement Marking Symbols, Durable [Left Turn Arrow]	Pavement Marking Symbols, Durable [Right Turn Arrow]							References
Sub - Totals Brought Forward:	1,789	624	1,299	0	222	0	0							
9+798 - 10+049; CL		502												
9+448 - 9+609; LT			161											
9+633 - 9+746; LT			113											
9+448 - 10+180; RT			732											
9+786 - 10+446; LT			663											
10+239 - 10+446; RT			208											
9+798 - 9+869; LANE			71											
10+127 - 10+180; LANE			53											
10+224 - 10+275; LANE			51											
9+680 - 9+830; LANE				75										
9+869 - 9+959; LANE				45										
10+275 - 10+435; LANE				81										
10+050 - 10+127; LANE				39										
9+804							1							
9+860							1							
10+111							1							
10+170							1							
10+239						1								
10+289						1								
Sub - Totals Carried Forward:	1,789	1,126	3,351	240	222	2	4							
	1,789	1,126	3,351	240		2	4							
	(P)	(P)	(P)	(P)	(P)	(P)	(P)							
TOTALS		6,506			222		6							
UNIT	m (P)	m (P)	m (P)	m (P)	m (P)	each (P)	each (P)							
ITEM No.		45			46		47							
Reference														

CHKD. \_\_\_\_\_  
APPR. \_\_\_\_\_  
DATE \_\_\_\_\_

Pavement Marking

**QUANTITIES - MISCELLANEOUS 1**

W.P. No. 4169-15-00  
Contract No. 2018-4023

SHEET  
27

MINISTRY OF TRANSPORTATION - ONTARIO

Location and Position	Pavement Marking, Temporary [Double Solid] [Yellow, 10cm]	Pavement Marking, Temporary [Solid] [White, 10cm]	Pavement Marking, Temporary [Broken 3-3-3] [White, 10cm]	Pavement Marking, Temporary [Broken 1-1-1] [White, 20cm]	Pavement Marking, Temporary [Solid] [White, 60cm]	Pavement Marking Symbols, Temporary [Right Turn Arrow]							References
Sub - Totals Brought Forward:													
Stage 1													
County Road 31													
9+448 - 9+741; CL	586												
9+791 - 10+174; CL	766												
10+225 - 10+445; CL	440												
9+448 - 9+615; LT		177											
9+624 - 9+750; LT		155											
9+448 - 10+200; RT		777											
9+770 - 10+445; LT		695											
10+202 - 10+210; RT		64											
10+215 - 10+445; RT		251											
9+741 - 9+765; LANE					38								
9+760 - 9+791; LANE					44								
10+174 - 10+210; LANE					41								
10+205 - 10+225; LANE					25								
10+212 - 10+225; STOP BAR						81							
Stage 3													
Highway 401													
E-N/S Ramp													
Sub - Totals Carried Forward:													
	1,792	2,119	0	148	81	0							
	(P)	(P)	(P)	(P)	(P)	(P)							
TOTALS													
UNIT	m (P)	m (P)	m (P)	m (P)	m (P)	each (P)							
ITEM No.		48				49							
Reference													
													CHKD. _____ APPR. _____ DATE _____

Temporary Pavement Marking



**QUANTITIES - MISCELLANEOUS 1**

W.P. No. 4169-15-00  
Contract No. 2018-4023

SHEET  
29

MINISTRY OF TRANSPORTATION - ONTARIO

Location and Position	Single Rail SBGR [OPSD 912.186]	Single Rail SBGR [MTOD 912.255]	Single Rail SBGR with Channel [OPSD 912.315]	Steel Beam Energy Attenuating Terminal System [50:1 Flare]									References
Sub - Totals Brought Forward:													
County Road 31													
9+727 - 9+742; RT				1									
9+742 - 9+945; 10.0 - 6.5 RT	203												
9+800 - 9+815; LT				1									
9+815 - 9+945; 9.8 - 7.1 LT	130												
9+945 - 9+965; 7.1 - 6.5 LT			20										
9+945 - 9+965; 6.5 RT			20										
10+047 - 10+067; 6.4 - 6.9 LT			20										
10+048 - 10+068; 6.4 - 7.3 RT			20										
10+067 - 10+429; 6.9 - 6.5 LT	362												
10+068 - 10+198; 7.3 - 33.7 RT	141												
10+198; 33.7 - 37.7 RT		4											
10+222 - 10+425; 27.4 - 6.5 RT	127												
10+425 - 10+447; 6.5 - 8.0 RT			22										
10+429 - 10+445; 6.5 - 8.2 LT			16										
Highway 401													
12+722 - 12+737; 12.5 RT				1									
12+737 - 12+830; 12.0 RT	93												
12+789 - 12+841; 15.7 - 16.3 LT	52												
Sub - Totals Carried Forward:													
	1,108	4	118	3									
	(P)	(P)	(P)	(P)									
TOTALS													
UNIT	m (P)	m (P)	m (P)	each (P)									
ITEM No.		50	51	54									
Reference													

CHKD. \_\_\_\_\_  
APPR. \_\_\_\_\_  
DATE \_\_\_\_\_

SBGR / SBEATS





**QUANTITIES - MISCELLANEOUS 1**

W.P. No. 4169-15-00  
Contract No. 2018-4023

SHEET  
31

MINISTRY OF TRANSPORTATION - ONTARIO

Location and Position	Energy Attenuator - Temporary, Narrow [TL-3]	Energy Attenuator - Relocation, Narrow [TL-3]	Temporary Concrete Barrier	Temporary Concrete Barrier, Relocation	Temporary Concrete Barrier Restraint System, Pinned	Temporary Concrete Barrier Restraint System, Strapped	Temporary Transition Connection		Ramp Closure Gates	Concrete in Ramp Closure Gate Support Footings			References
Sub - Totals Brought Forward:													
Highway 401													
Stage 1/1A/2/3													
12+789 - 12+841; 15.6 - 16.3 LT			52										
12+784 - 12+942; 0.2 - 0.3 LT			160										
12+942 - 12+950; 0.3 LT	1												
12+665 - 12+673; 12.5 RT	1												
12+673 - 12+842; 12.5 RT			172										
12+778 - 12+842; 28.2 - 28.7 RT			64										
12+841; 16.3 LT							1						
12+778; 28.2 RT							1						
County Road 31													
Stage 1													
9+810 - 9+964; 5.2 LT			156										
9+964 - 10+048; 5.2 LT						84							
10+048 - 10+192; 5.2 LT					144								
9+803 - 9+810; 5.2 LT	1												
10+192 - 10+200; 5.2 LT	1												
Stage 1A													
10+192 - 10+319; 5.2 - 4.3 LT					136								
Sub - Totals Carried Forward:													
	4	0	604	0	280	84	2		0	0			
	(P)	(P)	(P)	(P)	(P)	(P)	(P)		(P)	(P)			
TOTALS													
UNIT	each (P)	each (P)	m (P)	m (P)	m (P)	m (P)	each (P)		each (P)	each (P)			
ITEM No.	52	53	55	56	57	58	59		60	61			
Reference													
												CHKD. _____ APPR. _____ DATE _____	

EAT-N/EAT, Rel. / TCB / TCB, Rel.

**QUANTITIES - MISCELLANEOUS 1**

W.P. No. 4169-15-00  
Contract No. 2018-4023

SHEET  
32

MINISTRY OF TRANSPORTATION - ONTARIO

Location and Position	Energy Attenuator - Temporary, Narrow [TL-3]	Energy Attenuator - Relocation, Narrow [TL-3]	Temporary Concrete Barrier	Temporary Concrete Barrier, Relocation	Temporary Concrete Barrier Restraint System, Pinned	Temporary Concrete Barrier Restraint System, Strapped	Temporary Transition Connection		Ramp Closure Gates	Concrete in Ramp Closure Gate Support Footings			References
Sub - Totals Brought Forward:	4	0	604	0	280	84	2		0	0			
10+319 - 10+445; 4.3 LT			128										
10+445 - 10+453; 4.3 LT		1											
Stage 2													
To Storage				20									
9+820 - 9+828; 5.2 LT		1											
Stage 3													
9+823 - 9+830; 4.8 RT		1											
10+188; 16.0 RT									1	1			
10+206; 16.0 RT									1	1			
To Storage				172									
9+830 - 9+965; 4.8 - 5.8 RT				136									
10+047 - 10+358; 6.3 - 4.8 RT				312									
10+358 - 10+366; 4.8 RT		1											
Sub - Totals Carried Forward:	4	4	732	640	280	84	2		2	2			
	(P)	(P)	(P)	(P)	(P)	(P)	(P)		(P)	(P)			
TOTALS	4	4	732	640	280	84	2		2	2			
UNIT	each (P)	each (P)	m (P)	m (P)	m (P)	m (P)	each (P)		each (P)	each (P)			
ITEM No.	52	53	55	56	57	58	59		60	61			
Reference													

CHKD. \_\_\_\_\_  
APPR. \_\_\_\_\_  
DATE \_\_\_\_\_

EAT-N/EAT, Rel. / TCB / TCB, Rel.





**QUANTITIES - RIGID DUCTS AND ASSOCIATED WIRING**

W.P. No. 4169-15-00  
Contract No. 2018-4023

Location	From - To OR Station	Distance (m)	UPC No.	Rigid Ducts, Concrete Encased	100 mm	Rigid Ducts, Direct Buried	50 mm	Cable Brick	#4 AWG, Low Voltage Cables, in Ducts	#6 AWG, Insulated Ground Wires						
Sub - Totals Brought Forward:																
Highway 401 North Ramp Terminal at County Road 31																
	HH221 - Ref1	17				17	17		51	17						
	Ref1 - Ref2	8	101	8	8	8	8		24	8						
	Ref2 - Ref3	25							75	25						
	Ref3 - HH222	3				3	3		9	3						
	HH222 - P221	4				4	4	4	12	4						
	HH222 - P222	24				24	24	24	72	24						
Highway 401 South Ramp Terminal at County Road 31																
	EHH205 - Ref4	25							75	25						
	Ref4 - HH223	2				2	2		6	2						
	HH223 - P223	16				16	16	16	48	16						
	EHH205 - Ref5	33							99	33						
	Ref5 - Ref6	8	102	8	8	8	8		24	8						
	Ref6 - HH224	5				5	5		15	5						
	HH224 - P224	7				7	7	7	21	7						
Sub - Totals Carried Forward:					16	16	94	94	51	531	177					
					(P)	(P)	(P)	(P)	(P)	(P)						
TOTALS					16		94		531	177						
UNIT					m (P)	m (P)	m (P)	m (P)	m (P)	m (P)	m (P)					
ITEM No.					68		69		71	75						

MINISTRY OF TRANSPORTATION - ONTARIO

Remarks:

CHKD. \_\_\_\_\_  
APPR. \_\_\_\_\_  
DATE \_\_\_\_\_

Rigid Ducts

### QUANTITIES - POLE ASSEMBLIES AND FOOTINGS

W.P. No. 4169-15-00

Contract No. 2018-4023

Location	Pole No. or Footing No.	Station	Offset (m) to CL of Pole or CL of Footing (Note 1)	#6 AWG, Bare Ground Wires	Ground Electrodes [Rods]	12.0 m, Steel Poles, Base Mounted Octagonal Type <sup>2</sup>	Concrete Footings In Earth [OPSD 2200.010]	Concrete Footings In Rock [OPSD 2200.03]	133 W LED Luminaire 120 V LED Luminaire	2.4 m Al. Tapered Elliptical Bracket <sup>3</sup>	#12 AWG Riser Wires 3 Wires/Pole	Replace LED Roadway Lighting Luminaire 133 W LED Luminaire 120 V LED Luminaire	12 AWG Riser Wires, 3 Wires/Pole				
Sub - Totals Brought Forward:													12				
Highway 401 and County Road 31																	
County Road 31 <sup>1</sup>	P221	9+780	2.0BG			1		1	1	1	15						
County Road 31 <sup>1</sup>	P222	9+752	2.0BG	1	1	1	1		1	1	15						
County Road 31 <sup>1</sup>	P223	10+225	2.0BG			1	1		1	1	15						
County Road 31 <sup>1</sup>	P224	10+195	2.0BG	1	1	1	1		1	1	15						
Highway 401 W-N/S Ramp	EP201	12+488										1	15				
Highway 401 W-N/S Ramp	EP202	12+558										1	15				
Highway 401 W-N/S Ramp	EP203	12+623										1	15				
Highway 401 E-N/S Ramp	EP209	13+022										1	15				
Highway 401 E-N/S Ramp	EP210	13+099										1	15				
Highway 401 E-N/S Ramp	EP211	13+167										1	15				
Sub - Totals Carried Forward:				2	2	4	3	1	4	4	60	6	90				
				(P)	(P)	(P)	(P)	(P)	(P)	(P)	(P)	(P)					
TOTALS				2	2	4	3	1	4	4	60	6	90				
UNIT				m (P)	each (P)	each (P)	each (P)	each (P)	each (P)	each (P)	m (P)	each (P)	m (P)				
ITEM No.				75	77	81	83	84	86			87					

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Pole Assemblies and Footings

Remarks: 1. BG = Installed behind back edge of guide rail  
 2. Pole to be salvaged as part of removals and re-installed in permanent design  
 3. Bracket to be salvaged as part of the removals and re-installed in permanent design

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. 4169-15-00

Contract No. 2018-4023

Location	Structure/Equipment No.	Offset (m) to CL of Structure/Equip't (Note 1)	Signal Head Facing Direction	From - To OR Station	Distance (m)	Rigid Ducts, Direct Buried (Temporary)	50 mm	Cable Brick	#4 AWG, Low Voltage Cables in Ducts [Temporary]	#4 AWG Low Voltage Cables Aerial on Messenger Cable [Temporary]	9 mm, Grade 160 Steel Messenger Cables Aerial [Temporary]	#6 AWG, Insulated, Ground Wire [Temporary]	Ground Electrodes [Temporary] [Rods]	18.5 m, Class 4 Wood Poles Direct Buried in Earth [Temporary]	Guy Anchors (Temporary)	400W HPS Luminaire, 120 V Ballast c/w 400 W HPS Lamp [Temporary]	2.4 m Al. Tapered Elliptical Bracket	#12 AWG Riser Wires 3 Wires/Pole	
Sub - Totals Brought Forward:																			
Highway 401 and County Road 31																			
HH221 - TP221					45	45	45		135			45							
TP221 - TP222					62					186	62								
EHH205-TP223					30	30	30		90			30							
TP223 - TP224					73					219	73								
	TP221	14.5		9 + 799											1	1	1	1	19
	TP222	16		9 + 746								1	1	1	1	1	1	1	19
	TP223	14.5		10 + 172											1	1	1	1	19
	TP224	14.5		10 + 246								1	1	1	1	1	1	1	19
Sub - Totals Carried Forward:						75	75	0	225	405	135	77	2	4	4	4	4	4	76
						(P)			(P)	(P)	(P)	(P)	(P)	(P)	(P)	(P)	(P)	(P)	(P)
TOTALS						75			225	405	135	77	2	4	4	4	4	4	
UNIT						m (P)	m (P)	m (P)	m (P)	m (P)	m (P)	m (P)	each (P)	each (P)	each (P)	each (P)	each (P)	each (P)	m (P)
ITEM No.						70			72	73	74	76	78	80	82	85			

MINISTRY OF TRANSPORTATION - ONTARIO

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 \_\_\_\_\_

Temporary

QUANTITIES - STRUCTURE

31X-0204

W.P. No. 4169-15-00

Contract No. 2018-4023

4415-01-01 - Structural 1	Removal of Bridge Structure	Removal of Bridge Footings	Management and Disposal of Materials Containing Asbestos	Earth Excavation for Structure	Dewatering Structure Excavation	Supply Equipment for Driving Piles	H-Piles - HP 310X110	Rock Points	Concrete in Footings	Concrete in Substructure [(30 mpa)]	Concrete in Deck	Concrete in Parapet Walls	Concrete in Approach Slabs		References
LUMP SUM															
	100 %														
		80													
			100 %												
				1,670											
					100 %										
						100 %									
							427.00								
								36							
									50.00						
										100 %					
											100 %				
												100 %			
													100 %		
	100 %	80	100 %	1,670	100 %	100 %	427.00	36	50.00	100 %	100 %	100 %	100 %		
(P) (P) (P)															
TOTALS	100 %	80	100 %	1,670	100 %	100 %	427.00	36	50.0	100 %	100 %	100 %	100 %		
UNIT	lump sum	m3	lump sum	m3 (P)	lump sum	lump sum	m	each (P)	m3 (P)	lump sum	lump sum	lump sum	lump sum		
ITEM No.	88	89	90	91	92	93	94	95	96	97	98	99	100		
Remarks:														CHKD. _____	
														APPR. _____	
														DATE _____	

MINISTRY OF TRANSPORTATION - ONTARIO

4415-01-01 - Structural 1



