CONTRACT DRAWINGS

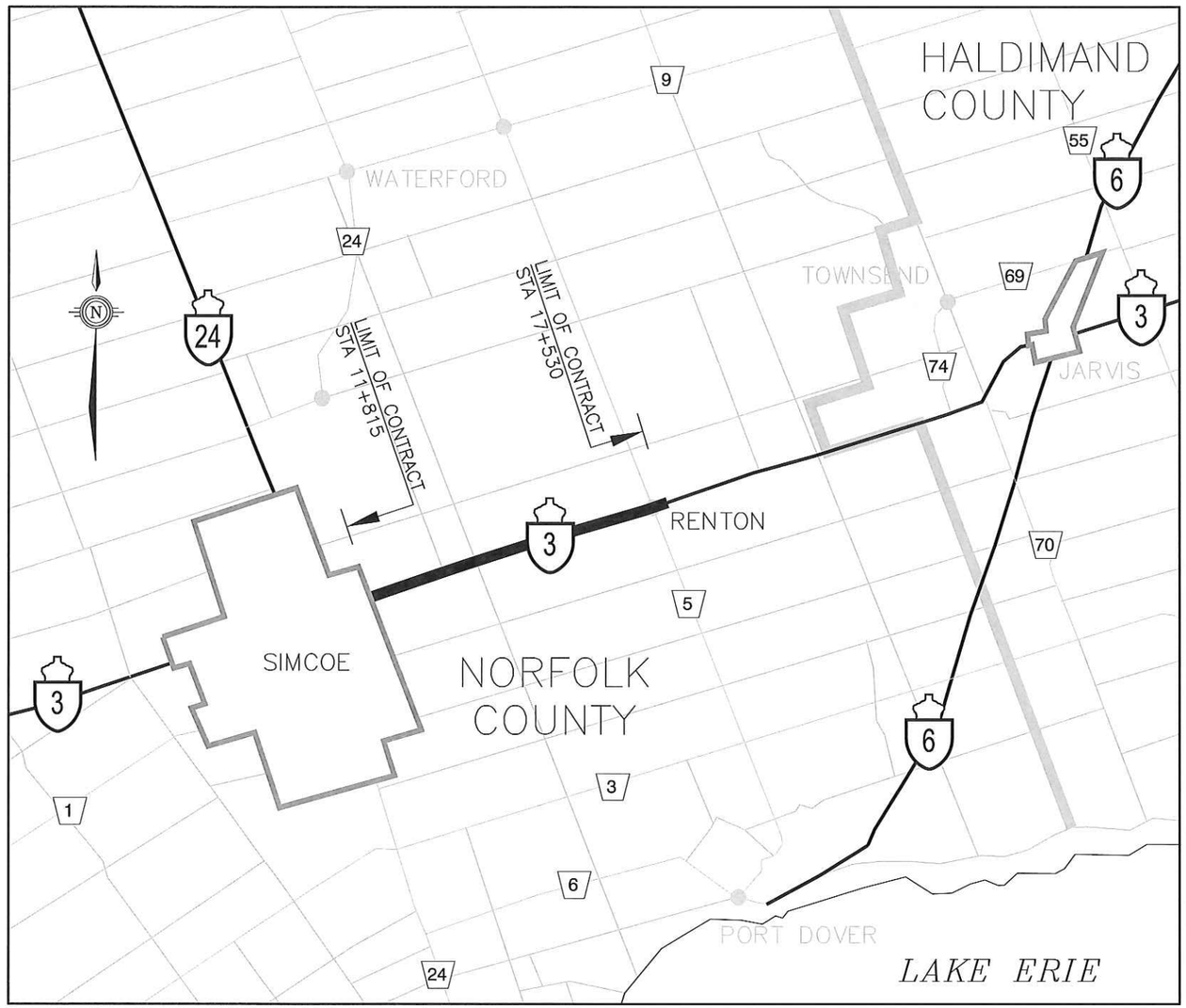
CONTRACT NO. 2018-3010

BOOK 1 OF 1

WEST REGION

Ministry Of Transportation

Ontario



KEY PLAN

1km 0 2km

WP No 3073-14-01
WP No 3073-14-02
GWP No 3062-14-00 Contract No 2018-3010

Work of GRADING, DRAINAGE, GRANULAR, HOT MIX PAVING, ELECTRICAL, AND STRUCTURAL.

Hwy No 3 Region WEST

Location FROM EAST LIMIT OF SIMCOE (IRELAND ROAD) TO 0.3 km EAST OF NORFOLK ROAD 5 (COCKSHUTT ROAD)

Length 5.7 km.

Reference Plans

FEB 8/2019 P. Eng.
Date Manager, Engineering

FEB 12/2019 P. Eng.
Date Regional Director

Ministry of Transportation

Ontario

INDEX

W.P. No. 3062-14-00

Contract No. 2018-3010

Sheet No.	Description
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	COVER SHEET
	KEY PLAN
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10 - 12	HORIZONTAL AND VERTICAL CONTROL
13	STAGING
14	DETOUR
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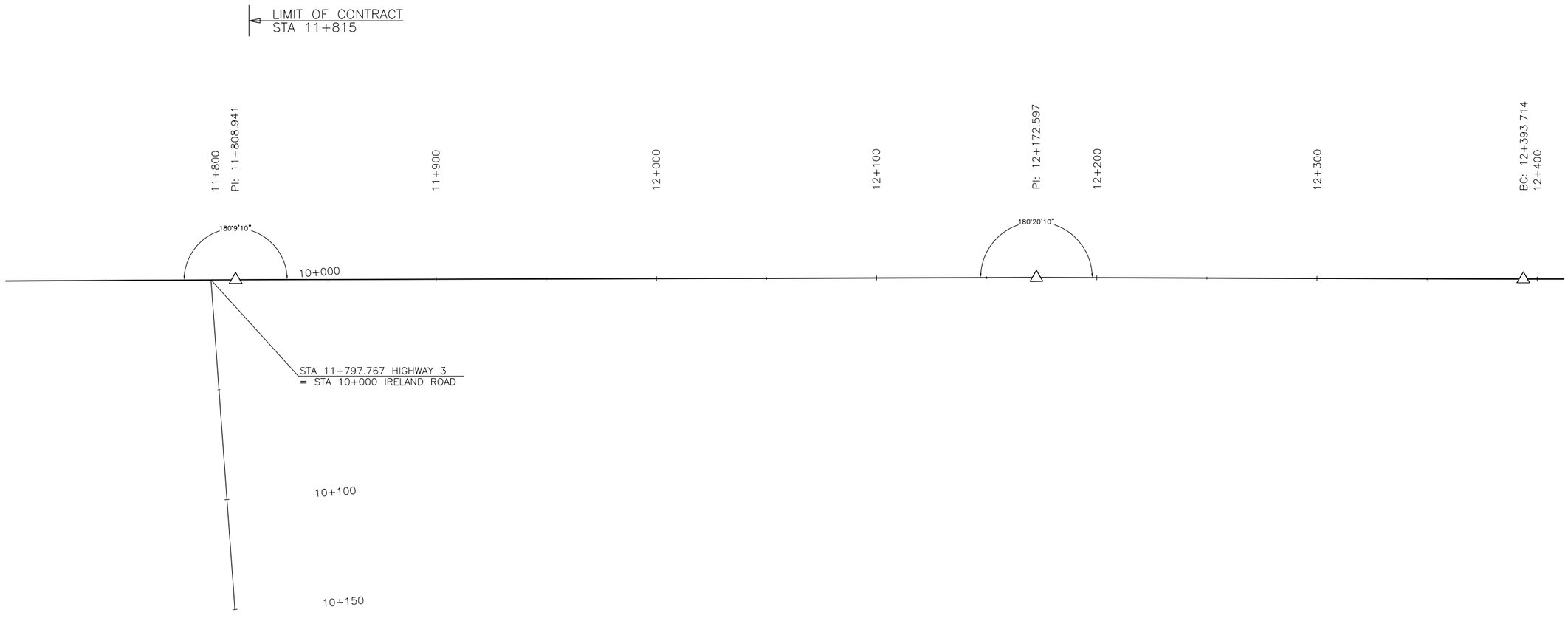
Sheet No.	Description
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METRIC

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ALIGNMENT	SHEET 1
STA 11+700 TO STA 12+400	
Survey JUNE 2015 Revised	

MINISTRY OF TRANSPORTATION, ONTARIO PR-0-707 88-05

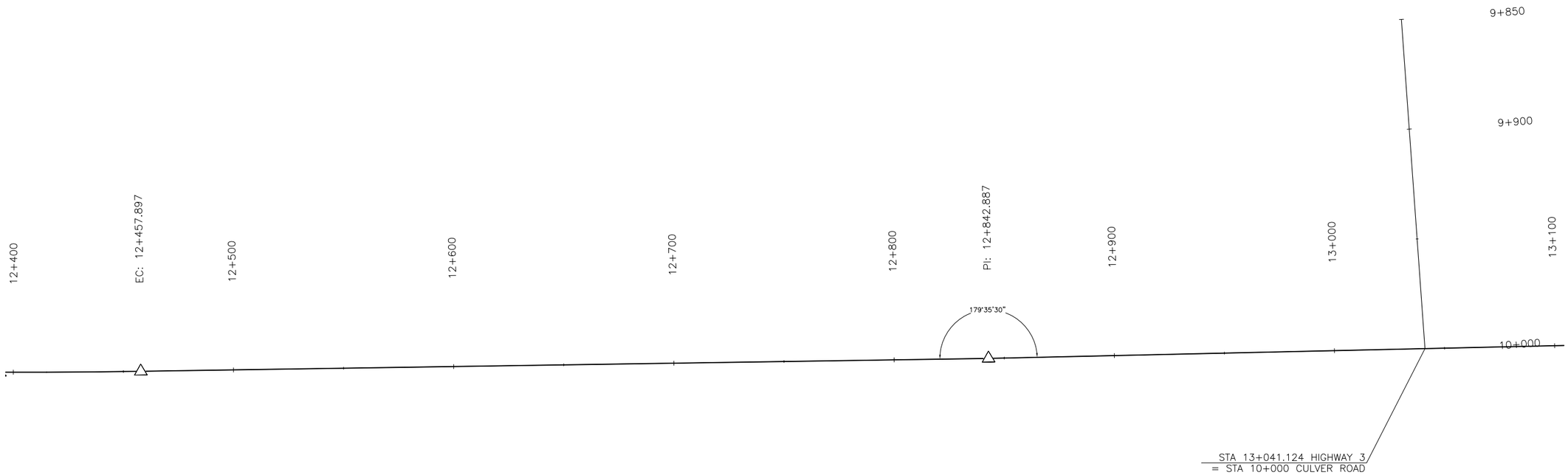


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METRIC

PLATE No	125-3/07-0
CONT	2018-3010
WP	3062-14-00
ALIGNMENT	SHEET 2
STA 12+400 TO STA 13+100	
Survey JUNE 2015 Revised	

MINISTRY OF TRANSPORTATION, ONTARIO PR-D-707 88-05



SCALE

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Horizontal

METRIC

PLATE No 125-3/09-0
CONT 2018-3010
WP 3062-14-00

ALIGNMENT
STA 13+100 TO STA 13+800
Survey JUNE 2015 Revised

SHEET 3

MINISTRY OF TRANSPORTATION, ONTARIO FR-C-707 88-05



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MINISTRY OF TRANSPORTATION, ONTARIO

FP-C-707 88-05

METRIC

PLATE No 125-3/11-0

CONT 2018-3010

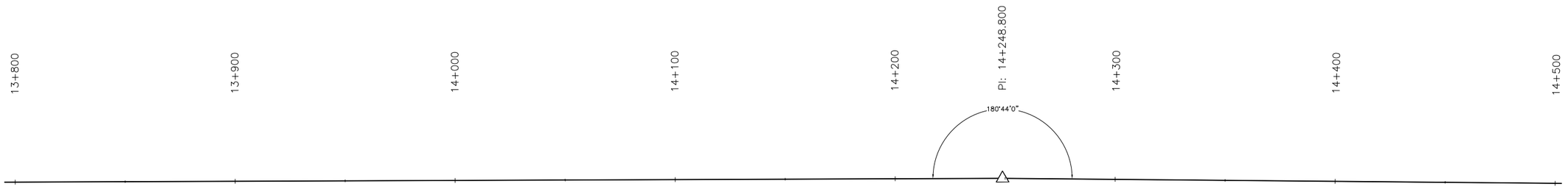
WP 3062-14-00

ALIGNMENT

STA 13+800 TO STA 14+500

Survey JUNE 2015 Revised

SHEET 4



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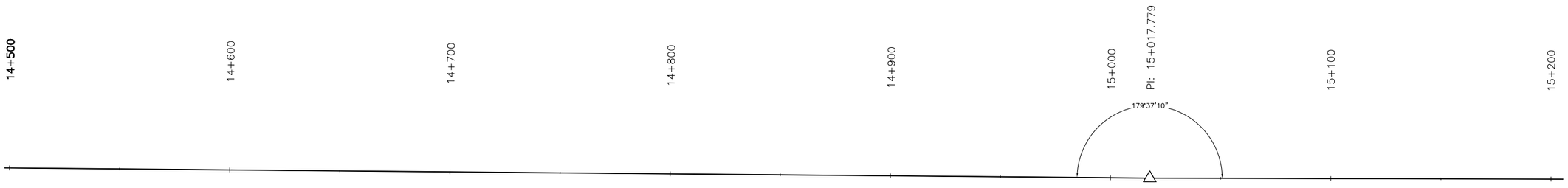
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METRIC

PLATE No 125-3/13-0	
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WP 3062-14-00	
ALIGNMENT	SHEET 5
STA 14+500 TO STA 15+200	
Survey JUNE 2015 Revised	

MINISTRY OF TRANSPORTATION, ONTARIO FR-C-707 88-05



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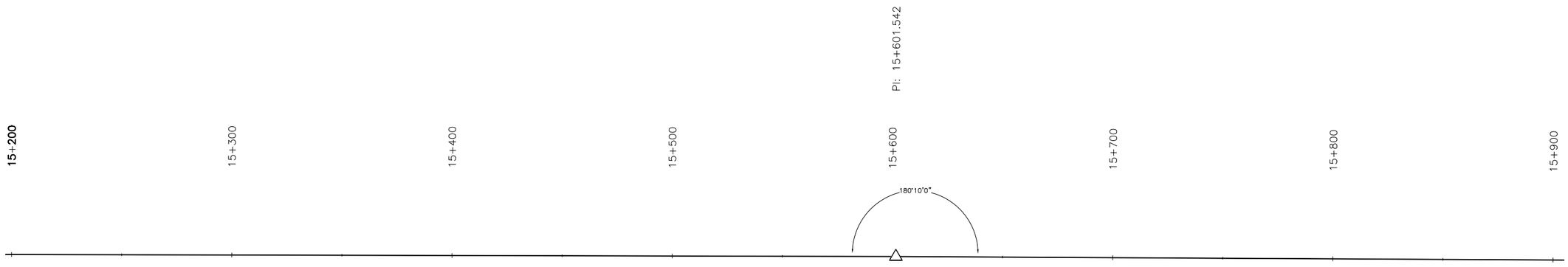
METRIC

PLATE No 125-3/15-0
CONT 2018-3010
WP 3062-14-00

ALIGNMENT
STA 15+200 TO STA 15+900
Survey JUNE 2015 Revised

SHEET 6

MINISTRY OF TRANSPORTATION, ONTARIO PR-D-707 88-05



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METRIC

PLATE No 125-3/17-0

CONT 2018-3010

WP 3062-14-00

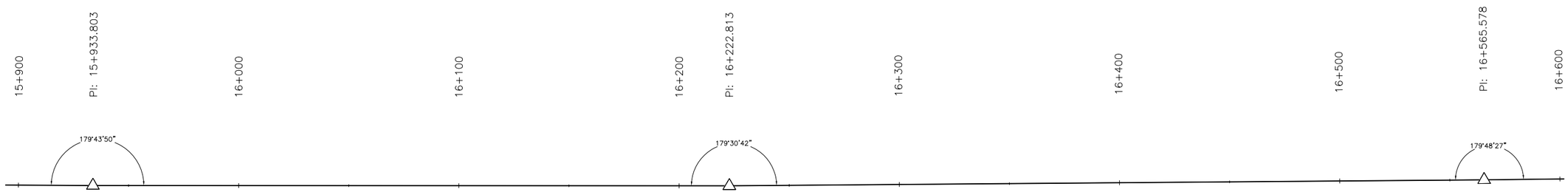
ALIGNMENT

STA 15+900 TO STA 16+600

Survey JUNE 2015 Revised

SHEET 7

MINISTRY OF TRANSPORTATION, ONTARIO PR-0-707 88-05



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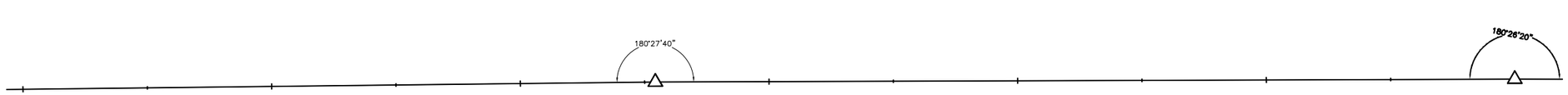
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METRIC

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WP	3062-14-00
ALIGNMENT	SHEET 8
STA 16+600 TO STA 17+200	
Survey JUNE 2015 Revised	

MINISTRY OF TRANSPORTATION, ONTARIO PR-D-707 88-05

16+600 16+700 16+800 PI: 16+854.286 16+900 17+000 17+100 17+200 PI: 17+199.871



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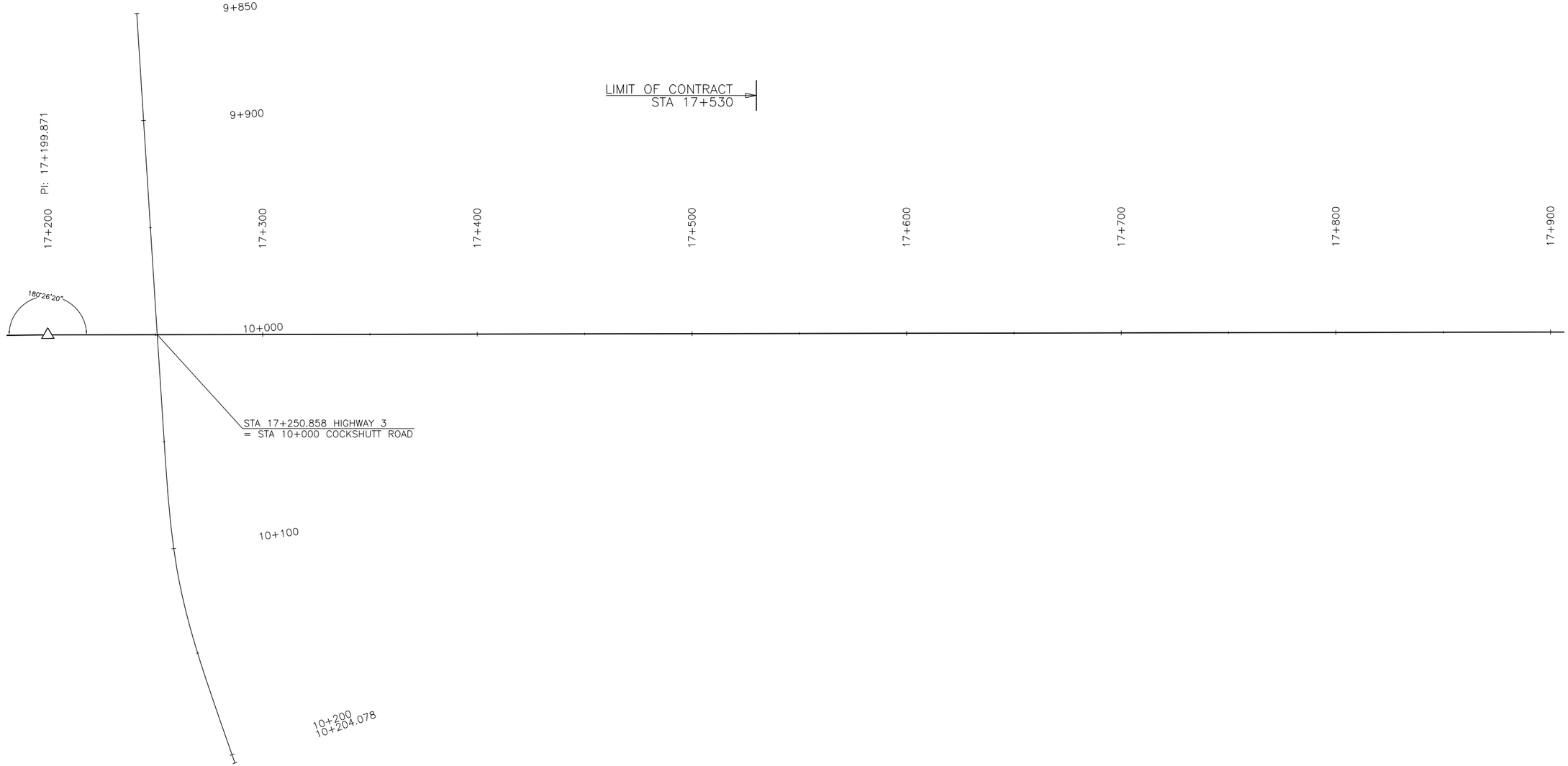
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WP 3062-14-00

ALIGNMENT
STA 17+200 TO STA 17+900
Survey JUNE 2015 Revised

SHEET 9

MINISTRY OF TRANSPORTATION, ONTARIO PR-D-707 88-05



SCALE
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Horizontal

METRIC

PLATE No
CONT 2018–3010
WP 3062–14–00

H & V CONTROL

SHEET 10

MINISTRY OF TRANSPORTATION, ONTARIO PR-D-707 88-05

Horizontal and Vertical Control

Ontario

Highway	3	**From Station**	11+600.000	**Grid Distance CSF**	0.9999177
Township	TOWNSEND	**To Station**	17+500.000	**Survey Date**	01/08/2015
Description	CENTERLINE HIGHWAY 3 TOWNSEND TOWNSHIP	**Zone**	10	**Date Revised**	
Consultant	MTO	**Coordinate System**	MTM NAD83 ORIGINAL		

Plate No. 0125 - 0003 - 050
Contract No.
Sheet No. 050

Prepared For The Ministry Of Transportation

PT	ID	Chainage	Offset	Northing	Easting	Elev	Description	Angle	Bear BK	Bear AH	Curve		
	HOT	11+600.000		4745776.572	240403.184								
810	CM	11+605.039	-15.212	4745792.476	240405.145								
300	VCP	11+784.798	18.252	4745794.877	240587.976	229.780	CC ON SIDEWALK						
100	HCP	11+784.798	18.252	4745794.877	240587.976		CC ON SIDEWALK						
	PI	11+808.941		4745817.506	240608.076								
								179°50'50"	N 78°42'7" E	N 78°51'17" E		Deflection	
301	VCP	12+029.104	-14.408	4745874.198	240821.302	228.789	TOP OF RIB						
101	HCP	12+029.104	-14.408	4745874.198	240821.302		19mm X 2.0m RIB						
	PI	12+172.597		4745887.799	240964.874								
								179°39'50"	N 78°51'17" E	N 79°11'27" E		Deflection	
919710845	HCM	12+224.936	14.439	4745883.431	241018.992		919710845						
302	VCP	12+246.380	-18.156	4745919.469	241033.943	232.415	CC ON LIGHT STANDARD BASE						
102	HCP	12+246.380	-18.156	4745919.469	241033.943		CC ON LIGHT STANDARD BASE						
	BC	12+393.714		4745929.266	241182.068								
832	SIB	12+400.428	15.294	4745915.514	241191.558								
	PI	12+425.807		4745935.285	241213.591								
								181°3'10"	N 79°11'27" E	N 78°8'17" E		Arc	
												ARC	
											R=3493.056		LC=64.183
											TC= 32.092		OC=1°3'10"
835	SIB	12+426.563	-15.081	4745950.364	241211.336								
834	CM	12+441.124	15.262	4745923.522	241231.640								
	EC	12+457.897		4745941.881	241244.998								
303	VCP	12+483.559	14.227	4745933.233	241273.036	234.547	TOP OF RIB						
103	HCP	12+483.559	14.227	4745933.233	241273.036		19mm X 2.0m RIB						
919710846	HCM	12+531.807	-11.231	4745968.065	241315.021		919710846						
838	CM	12+659.146	15.296	4745968.279	241445.093								
104	HCP	12+727.388	-9.532	4746006.604	241506.774		19mm X 2.0m RIB						
304	VCP	12+727.388	-9.532	4746006.604	241506.774	236.563	TOP OF RIB						
951	SIB	12+775.042	-15.227	4746021.973	241552.240								
	PI	12+842.887		4746021.017	241621.766								
								180°24'30"	N 78°8'17" E	N 77°43'47" E		Deflection	
950	SIB	12+849.175	-15.269	4746037.273	241624.666								
819690072	HCM	12+866.118	7.167	4746018.950	241645.990		819690072						
305	VCP	12+973.887	12.954	4746036.199	241752.527	235.841	TOP OF RIB						
105	HCP	12+973.887	12.954	4746036.199	241752.527		19mm X 2.0m RIB						
843	CM	13+088.985	-15.211	4746088.181	241859.010								
347	VCP	13+113.658	-13.811	4746092.057	241883.417	231.862	TOP OF HCM 919710847						
919710847	HCM	13+113.658	-13.811	4746092.057	241883.417		919710847						
	BC	13+114.693		4746078.781	241887.363								
	PI	13+149.918		4746086.267	241921.784								
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METRIC

PLATE No
CONT 2018–3010
WP 3062–14–00

H & V CONTROL

SHEET 11

MINISTRY OF TRANSPORTATION, ONTARIO PR-D-707 88-05

Ontario

Highway 3 **From Station** 11+600.000 **Grid Distance CSF** 0.9999177 **Plate No.** 0125 - 0003 - 051
Township TOWNSEND **To Station** 17+500.000 **Survey Date** 01/08/2015 **Contract No.**
Description CENTERLINE HIGHWAY 3 TOWNSEND TOWNSHIP **Zone** 10 **Date Revised** **Sheet No.** 051
Consultant MTO **Coordinate System** MTM NAD83 ORIGINAL

Prepared For The Ministry Of Transportation

PT	ID	Chainage	Offset	Northing	Easting	Elev	Description	Angle	Bear BK	Bear AH	Curve		
852	CM	13+180.372	15.202	4746077.222	241954.620								
851	CM	13+180.376	-15.242	4746107.088	241948.715								
	EC	13+185.141		4746093.058	241956.349								
306	VCP	13+333.287	14.704	4746107.188	242104.550	226.465	TOP OF RIB						
106	HCP	13+333.287	14.704	4746107.188	242104.550		19mm X 2.0m RIB						
992	CM	13+416.167	-15.291	4746152.597	242180.093								
107	HCP	13+515.748	14.947	4746142.123	242283.636		19mm X 2.0m RIB						
307	VCP	13+515.748	14.947	4746142.123	242283.636	224.631	TOP OF RIB						
856	CM	13+614.279	15.04	4746161.026	242380.337								
990	SIB	13+616.010	-15.399	4746191.227	242376.167								
952	SIB	13+616.027	-15.372	4746191.204	242376.189								
	PI	13+660.016		4746184.600	242422.317								
								180°26'40"	N 78°53'7" E	N 78°26'27" E		Deflection	
108	HCP	13+749.524	-15.234	4746217.461	242506.957		19mm X 2.0m RIB						
308	VCP	13+749.524	-15.234	4746217.461	242506.957	223.238	TOP OF RIB						
953	SIB	13+968.885	15.131	4746231.666	242727.953								
954	SIB	13+970.683	-15.234	4746261.776	242723.630								
109	HCP	13+974.546	-14.376	4746261.709	242727.587		19mm X 2.0m RIB						
309	VCP	13+974.546	-14.376	4746261.709	242727.587	221.477	TOP OF RIB						
310	VCP	14+179.660	13.213	4746275.780	242934.069	220.719	TOP OF RIB						
110	HCP	14+179.660	13.213	4746275.780	242934.069		19mm X 2.0m RIB						
867	CM	14+187.808	-15.19	4746305.240	242936.360								
868	CM	14+187.818	15.167	4746275.500	242942.453								
879	SIB	14+247.593	15.305	4746287.343	243001.043								
878	SIB	14+247.889	19.767	4746283.031	243002.227								
	PI	14+248.800		4746302.579	242999.159								
								179°15'60"	N 78°26'27" E	N 79°10'27" E		Deflection	
311	VCP	14+429.451	-14.925	4746351.169	243173.792	218.828	TOP OF RIB						
111	HCP	14+429.451	-14.925	4746351.169	243173.792		19mm X 2.0m RIB						
955	SIB	14+555.863	19.753	4746340.851	243304.468								
312	VCP	14+664.235	-14.894	4746395.236	243404.403	217.949	TOP OF RIB						
112	HCP	14+664.235	-14.894	4746395.236	243404.403		19mm X 2.0m RIB						
113	HCP	14+818.780	14.503	4746395.389	243561.719		19mm X 2.0m RIB						
313	VCP	14+818.780	14.503	4746395.389	243561.719	217.254	TOP OF RIB						
114	HCP	14+979.919	-14.647	4746454.286	243714.516		19mm X 2.0m RIB						
314	VCP	14+979.919	-14.647	4746454.286	243714.516	216.929	TOP OF RIB						
890	CM	15+017.728	-15.267	4746461.996	243751.536								
	PI	15+017.779		4746447.010	243754.453								
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115	HCP	15+224.387	-14.067	4746500.962	243954.388		19mm X 2.0m RIB						
315	VCP	15+224.387	-14.067	4746500.962	243954.388	217.318	TOP OF RIB						
956	SIB	15+225.767	15.153	4746472.567	243961.420								
889	CM	15+296.728	15.195	4746486.317	244031.037								
6004	HCM	15+387.887	-9.116	4746527.880	244115.733		00820060004 MEASURED VALUES						
							(COSINE VALUES NOT HELD)						
316	VCP	15+387.887	-9.116	4746527.880	244115.733	217.390	TOP OF HCM 00820060004						
957	SIB	15+460.491	15.236	4746518.102	244191.685								

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MINISTRY OF TRANSPORTATION, ONTARIO PR-D-707 88-05

Ontario

Highway 3 **From Station** 11+600.000 **Grid Distance CSF** 0.9999177 **Plate No.** 0125 - 0003 - 052
Township TOWNSEND **To Station** 17+500.000 **Survey Date** 01/08/2015 **Contract No.**
Description CENTERLINE HIGHWAY 3 TOWNSEND TOWNSHIP **Zone** 10 **Date Revised** **Sheet No.** 052
Consultant MTO **Coordinate System** MTM NAD83 ORIGINAL

Prepared For The Ministry Of Transportation

PT	ID	Chainage	Offset	Northing	Easting	Elev	Description	Angle	Bear BK	Bear AH		Curve	
	PI	15+601.542		4746560.460	244327.086								
								179°50'0"	N 78°47'37" E	N 78°57'37" E		Deflection	
894	CM	15+601.577	15.257	4746545.492	244330.042								
117	HCP	15+643.715	14.73	4746554.078	244371.299		19mm X 2.0m RIB						
317	VCP	15+643.715	14.73	4746554.078	244371.299	216.893	TOP OF RIB						
819690070	HCM	15+723.599	7.683	4746576.291	244448.355		819690070						
6003	HCM	15+856.909	-9.533	4746618.716	244575.902		00820060003 MEASURED VALUES						
							(COSINE VALUES NOT HELD)						
318	VCP	15+856.909	-9.533	4746618.716	244575.902	215.441	TOP OF HCM 00820060003						
	PI	15+933.803		4746624.084	244653.199								
								180°16'10"	N 78°57'37" E	N 78°41'27" E		Deflection	
900	CM	16+032.332	15.12	4746628.579	244752.779								
119	HCP	16+120.031	18.968	4746642.003	244839.530		19mm X 2.0m RIB						
319	VCP	16+120.031	18.968	4746642.003	244839.530	213.506	TOP OF RIB						
910	SIB	16+121.923	15.282	4746645.989	244840.662								
919710854	HCM	16+123.324	-15.039	4746675.996	244836.090		919710854						
	PI	16+222.813		4746680.759	244936.596								
								180°29'20"	N 78°41'27" E	N 78°12'7" E		Deflection	
913	CM	16+222.926	-15.3	4746695.758	244933.579								
120	HCP	16+364.669	-14.952	4746724.399	245072.399		19mm X 2.0m RIB						
320	VCP	16+364.669	-14.952	4746724.399	245072.399	215.113	TOP OF RIB						
915	CM	16+390.737	-15.201	4746729.972	245097.866								
916	CM	16+390.778	15.25	4746700.173	245104.131								
	PI	16+565.578		4746750.841	245272.121								
								180°11'50"	N 78°12'7" E	N 78°0'17" E		Deflection	
321	VCP	16+608.399	14.807	4746745.256	245317.084	216.562	TOP OF RIB						
121	HCP	16+608.399	14.807	4746745.256	245317.084		19mm X 2.0m RIB						
322	VCP	16+741.884	14.298	4746773.496	245447.549	215.545	TOP OF RIB						
122	HCP	16+741.884	14.298	4746773.496	245447.549		19mm X 2.0m RIB						
919710856	HCM	16+753.450	-9.332	4746799.014	245453.951		919710856						
	PI	16+854.286		4746810.842	245554.525								
								179°32'20"	N 78°0'17" E	N 78°27'57" E		Deflection	
923	CM	16+854.347	15.229	4746795.933	245557.630								
323	VCP	16+929.042	13.148	4746812.907	245630.400	216.170	TOP OF RIB						
123	HCP	16+929.042	13.148	4746812.907	245630.400		19mm X 2.0m RIB						
921	CM	17+000.289	15.192	4746825.150	245700.617								
920	CM	17+000.395	-15.135	4746854.886	245694.657								
819690069	HCM	17+057.296	-7.512	4746858.795	245751.933		819690069						
324	VCP	17+177.654	14.388	4746861.402	245874.240	217.022	TOP OF RIB						
124	HCP	17+177.654	14.388	4746861.402	245874.240		19mm X 2.0m RIB						
	PI	17+199.871		4746879.942	245893.131								
								179°33'40"	N 78°27'57" E	N 78°54'17" E		Deflection	
930	CM	17+200.046	15.211	4746865.049	245896.230								
325	VCP	17+345.447	-9.241	4746917.025	246034.208	216.000	CC						
125	HCP	17+345.447	-9.241	4746917.025	246034.208		CC						

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PLOTTED: Jan 21, 2019 - 16:12

METRIC

PLATE No
CONT 2018-3010
WP 3062-14-00

CULVERT STAGING

SHEET 13

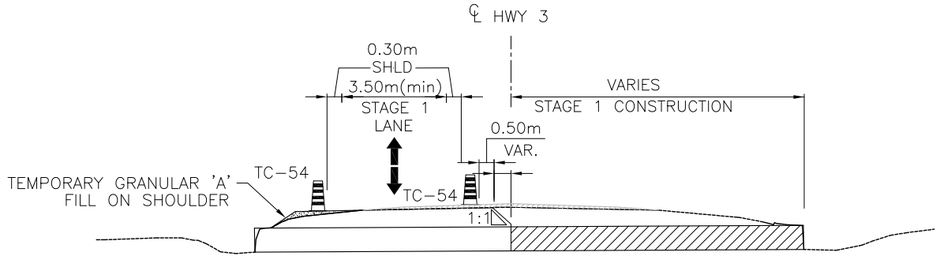
Survey _____ Revised _____

LEGEND

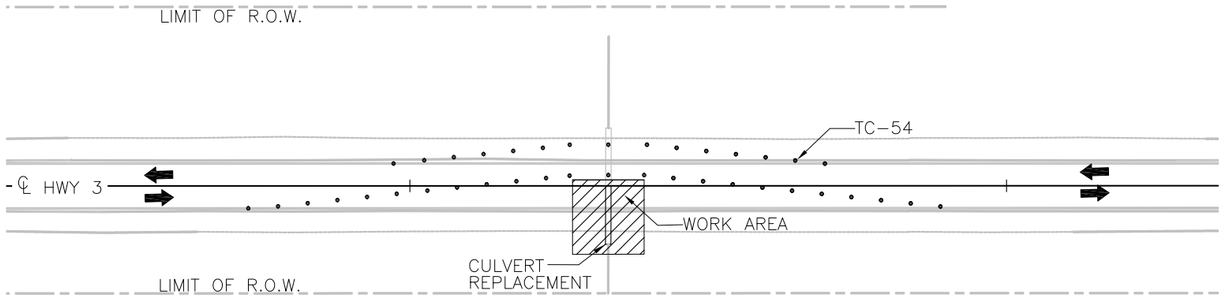
- UNDER CONSTRUCTION
- TEMPORARY GRANULAR
- TRAFFIC FLOW
- TC-54 BARRELS

GENERAL NOTES

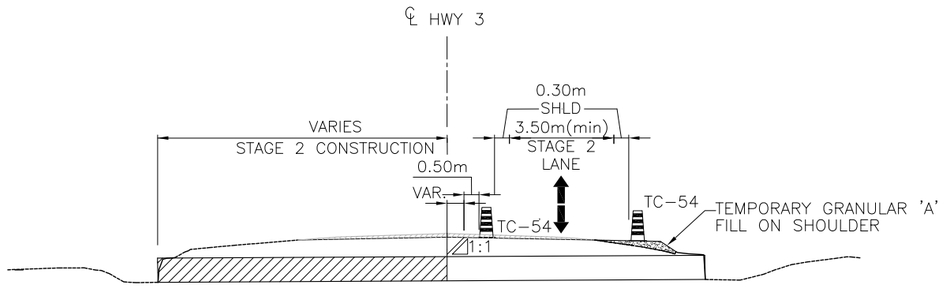
1. ALL LANE CLOSURES TO BE IN ACCORDANCE WITH OTM BOOK 7;
2. TC-54 SPACING TO BE IN ACCORDANCE WITH OTM BOOK 7;
3. TRAFFIC TO BE CONTROLLED IN ACCORDANCE WITH OTM BOOK 7;
4. EXISTING ROADWAY SIGNAGE WITHIN THE CONSTRUCTION ZONE THAT CONFLICTS WITH TEMPORARY SIGNAGE IS TO BE COVERED WITH AN OPAQUE MATERIAL THAT COVERS THE SIGN COMPLETELY AND DOES NOT DAMAGE THE EXISTING SIGN.
5. SEE TYPICAL SECTIONS AND MISCELLANEOUS DETAILS FOR PAVEMENT RESTORATIONS AND FROST TAPER REQUIREMENTS;
6. SINGLE LANE CLOSURES SHOWN ARE FOR ILLUSTRATION PURPOSES ONLY.
7. THIS STAGING METHOD SHALL ALSO APPLY TO SIDEROAD CROSSING CULVERTS



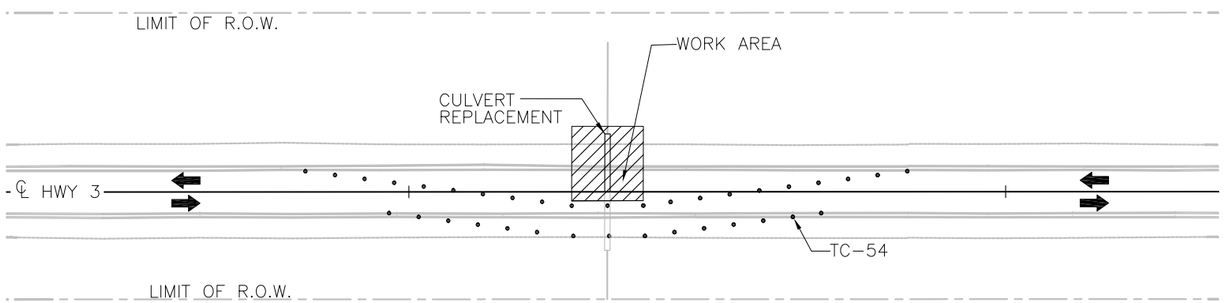
TYPICAL STAGE 1 SECTION



TRAFFIC SHIFT
STAGE 1



TYPICAL STAGE 2 SECTION



TRAFFIC SHIFT
STAGE 2

MINISTRY OF TRANSPORTATION, ONTARIO
PR-D-707 88-05
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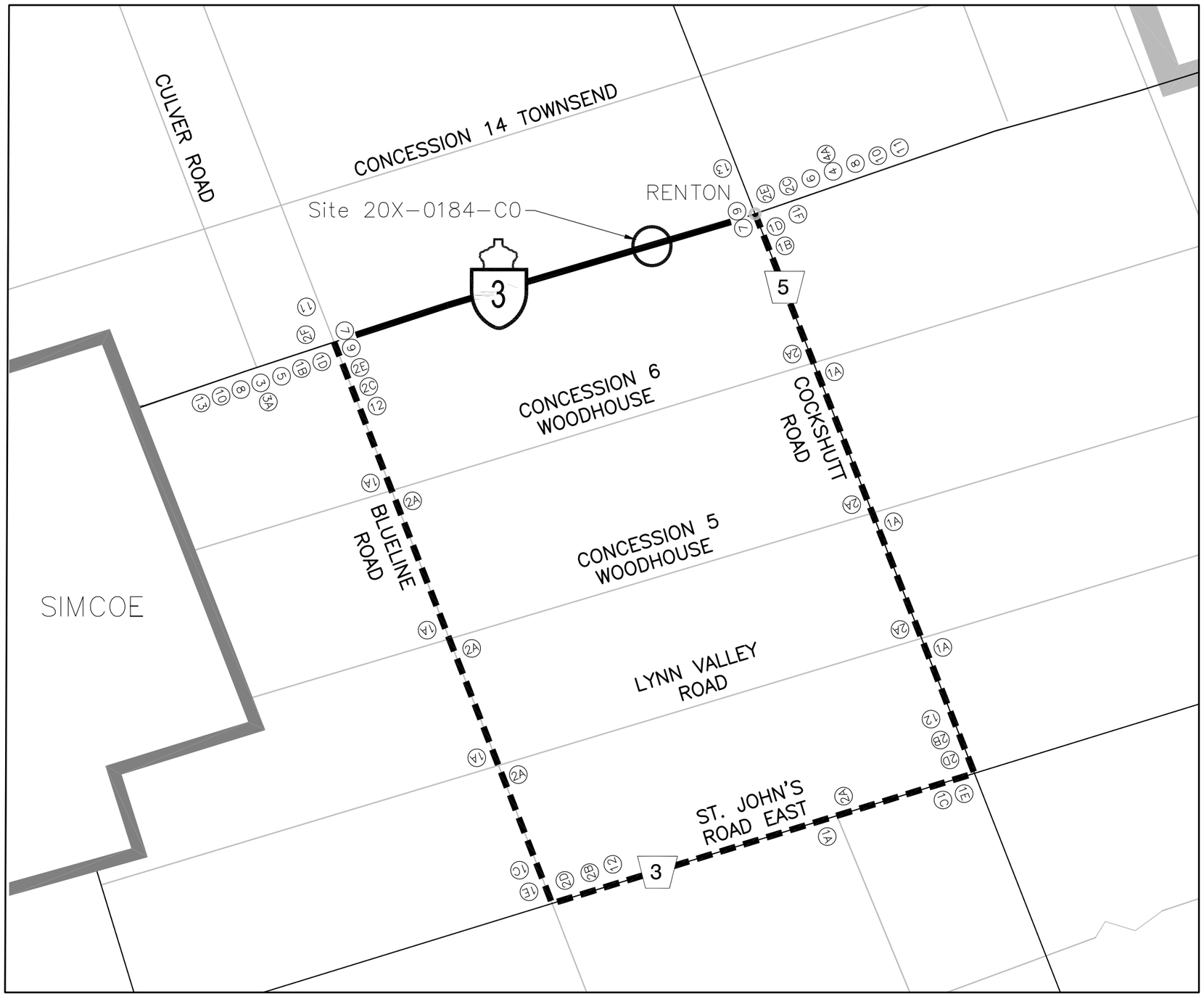
PLATE No	PLATE
CONT	2018-3010
GWP	3062-14-00

DETOUR

STA BLUELINE TO STA COCKSHUTT

Survey SURVEYED Revised REVISED

SHEET 14



NOTE:

1. DETOUR ROUTE SIGNING IS ONLY TO BE DISPLAYED DURING PERMITTED CLOSURE TIMES AS PER THE CONTRACT DOCUMENTS.

2. DETOUR SIGNING DRAWINGS TO BE READ IN CONJUNCTION WITH APPLICABLE ONTARIO TRAFFIC MANUALS, MINISTRY GUIDELINES AND POLICIES. PLACEMENT OF SIGNS CAN BE ADJUSTED AS PER SITE CONDITIONS WITH THE APPROVAL OF CONTRACT ADMINISTRATOR AND REGIONAL TRAFFIC OFFICE.

3. CONTRACTOR MUST REVIEW WORDING AND LAYOUT OF SIGNING WITH CONTRACT ADMINISTRATOR PRIOR TO FABRICATION.

4. DURING DETOUR, "CLOSED" TAB TO REPLACE "TO BE CLOSED" TAB.

5. ALL TC-64 SIGNS SHALL:
-BE 120cmx240cm IN SIZE
-HAVE 200mm (8") FHWA E LETTERING, UNLESS OTHERWISE NOTED.

6. ALL TC-92 SIGNS SHALL BE INSTALLED 75m TO 100m (TURN OFF SIGNS) AND 275m TO 300m (ADVANCE SIGNS) BEFORE THE INTERSECTION, SUBJECT TO OTHER SIGNS, DRIVEWAYS, UTILITIES, ETC.

HIGHWAY 3 DETOUR ROUTE

CLOSED ROAD, LOCAL TRAFFIC ONLY

(#) SIGNS

1A DETOUR D-1 TC-10C
1B DETOUR D-1 TC-10AR
1C DETOUR D-1 TC-10AL
1D DETOUR D-1 TC-10BR
1E D-1 TC-10BL
1F DETOUR D-1 ENDS TC-10D
2A DETOUR D-2 TC-10C
2B DETOUR D-2 TC-10AR
2C DETOUR D-2 TC-10AL
2D DETOUR D-2 TC-10BR
2E DETOUR D-2 TC-10BL
2F DETOUR D-2 ENDS TC-10D

	ADVANCE NOTICE	DURING CONSTRUCTION
	TC-64	
3	Highway 3	
	To Be Closed	Closed
	At Bluelne Road	
3A	Starts (Date)	Follow D#

	TC-64	
4	Highway 3	
	To Be Closed	Closed
	At Cockshutt Road	
4A	Starts (Date)	Follow D#

5 TC-67 ACCESS TO HIGHWAY 3 EAST RENTON / FOLLOW — TC-10

6 TC-67 ACCESS TO HIGHWAY 3 WEST SIMCOE / FOLLOW — TC-10

7 Tc-7 — ROAD CLOSED / LOCAL TRAFFIC ONLY — TC-7tA TC-7tB

8 DETOUR — TC-05

9 NO EXIT — TC-39

10 ROAD CLOSED — RB-92

11 CLEAR VIEW MOTEL / FAIR VIEW INN — TC-92

12 CLEAR VIEW MOTEL / FAIR VIEW INN — TC-92

13 CLEAR VIEW MOTEL / FAIR VIEW INN — TC-92

MINISTRY OF TRANSPORTATION, ONTARIO PR-D-707 88-05

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PLOTTED: Feb 13, 2019-16:02

METRIC

PLATE No	
CONT	2018–3010
WP	3062–14–00

REMOVALS

STA 11+700 TO STA 12+800

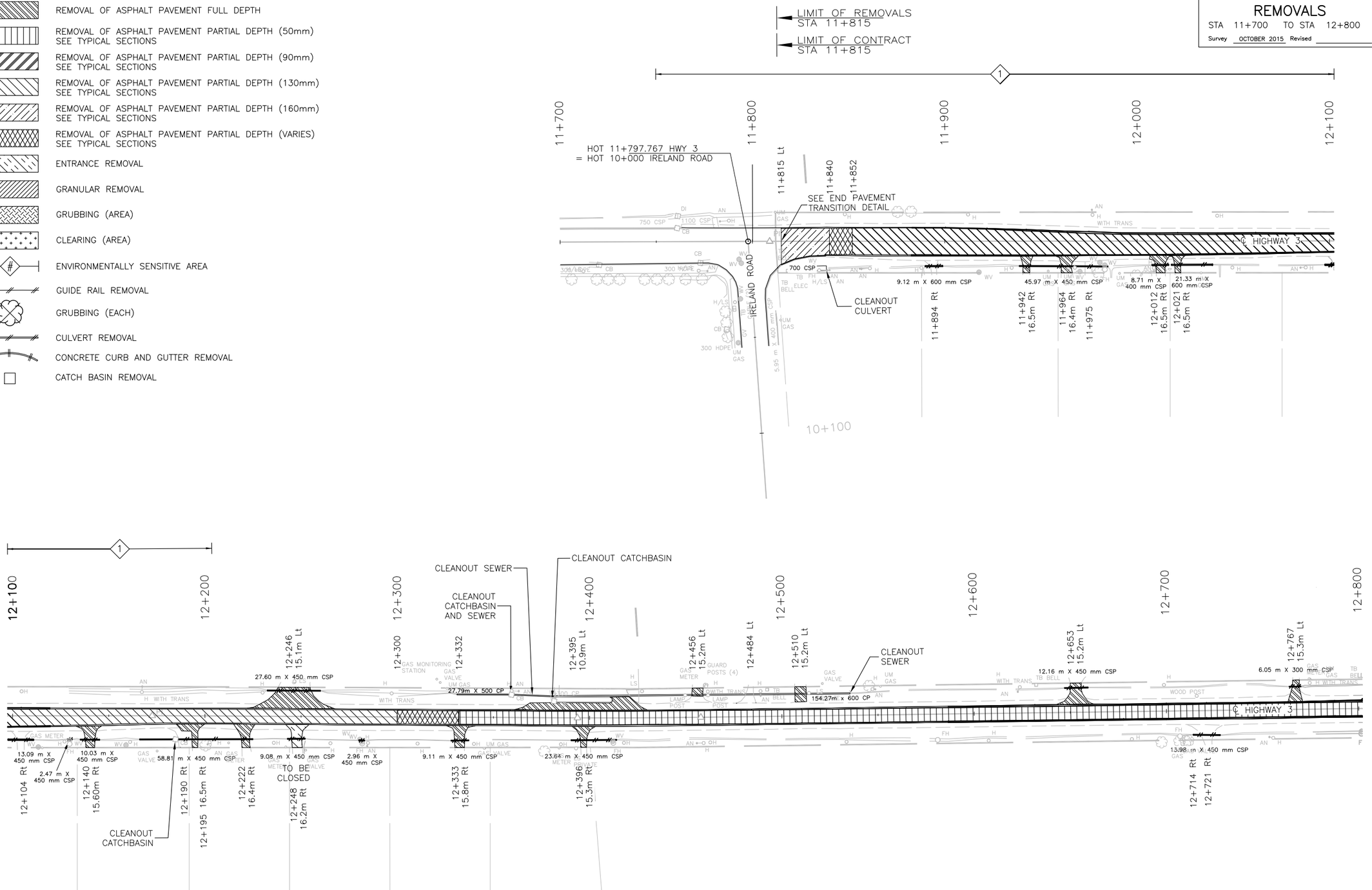
Survey OCTOBER 2015 Revised

SHEET 15

MINISTRY OF TRANSPORTATION, ONTARIO PR-D-707 88-05

LEGEND

- REMOVAL OF ASPHALT PAVEMENT FULL DEPTH
- REMOVAL OF ASPHALT PAVEMENT PARTIAL DEPTH (50mm) SEE TYPICAL SECTIONS
- REMOVAL OF ASPHALT PAVEMENT PARTIAL DEPTH (90mm) SEE TYPICAL SECTIONS
- REMOVAL OF ASPHALT PAVEMENT PARTIAL DEPTH (130mm) SEE TYPICAL SECTIONS
- REMOVAL OF ASPHALT PAVEMENT PARTIAL DEPTH (160mm) SEE TYPICAL SECTIONS
- REMOVAL OF ASPHALT PAVEMENT PARTIAL DEPTH (VARIES) SEE TYPICAL SECTIONS
- ENTRANCE REMOVAL
- GRANULAR REMOVAL
- GRUBBING (AREA)
- CLEARING (AREA)
- ENVIRONMENTALLY SENSITIVE AREA
- GUIDE RAIL REMOVAL
- GRUBBING (EACH)
- CULVERT REMOVAL
- CONCRETE CURB AND GUTTER REMOVAL
- CATCH BASIN REMOVAL



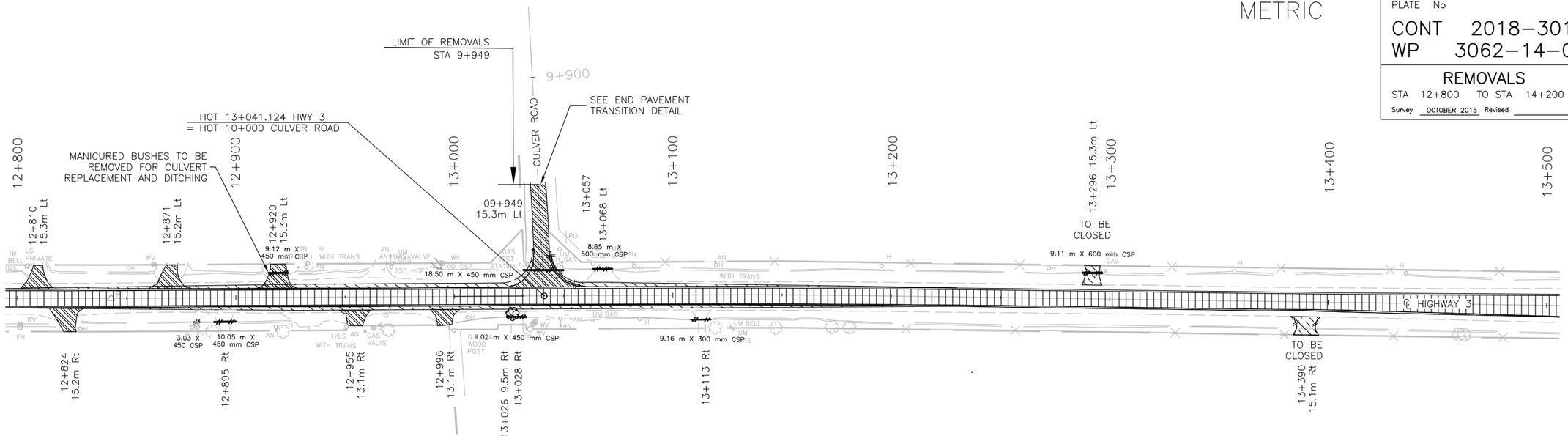
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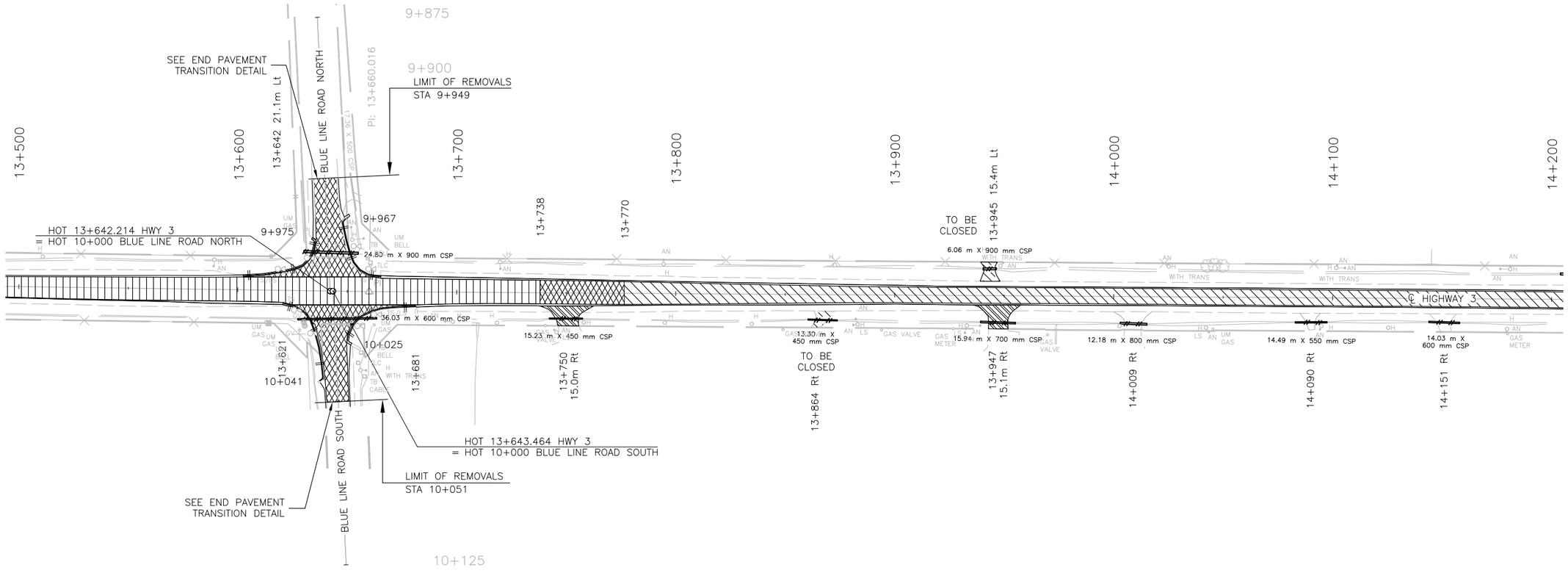
PLATE No
CONT 2018-3010
WP 3062-14-00

REMOVALS
STA 12+800 TO STA 14+200
Survey OCTOBER 2015 Revised

SHEET
16

MINISTRY OF TRANSPORTATION, ONTARIO
PR-D-707 88-05





SCALE
10m 0 20m
HORIZONTAL

METRIC

PLATE No

CONT 2018-3010

WP 3062-14-00

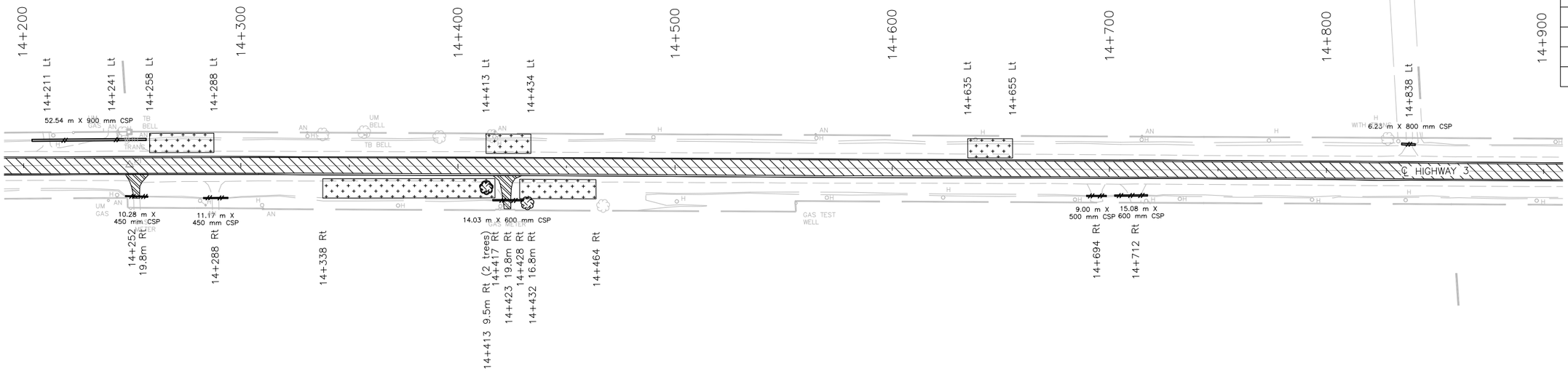
REMOVALS

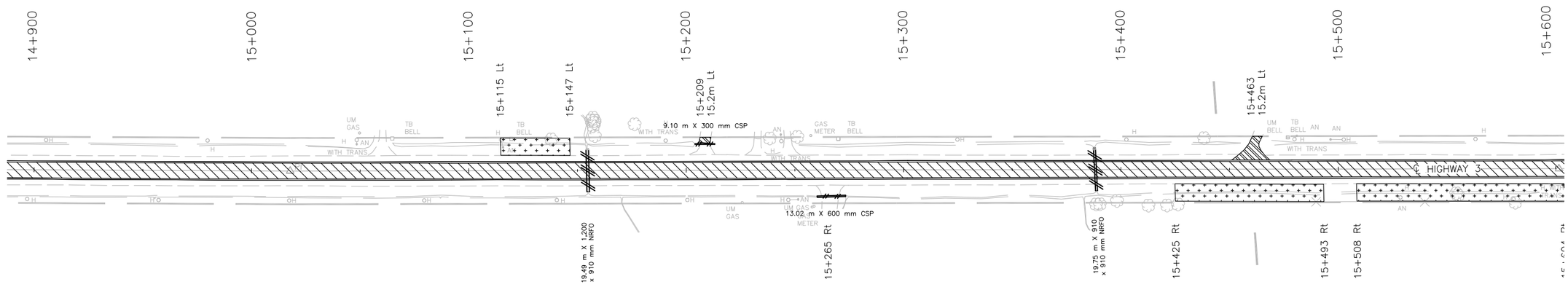
STA 14+200 TO STA 15+600

Survey OCTOBER 2015 Revised

SHEET 17

MINISTRY OF TRANSPORTATION, ONTARIO PR-D-707 88-05





SCALE
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HORIZONTAL

METRIC

PLATE No
CONT 2018-3010
WP 3062-14-00

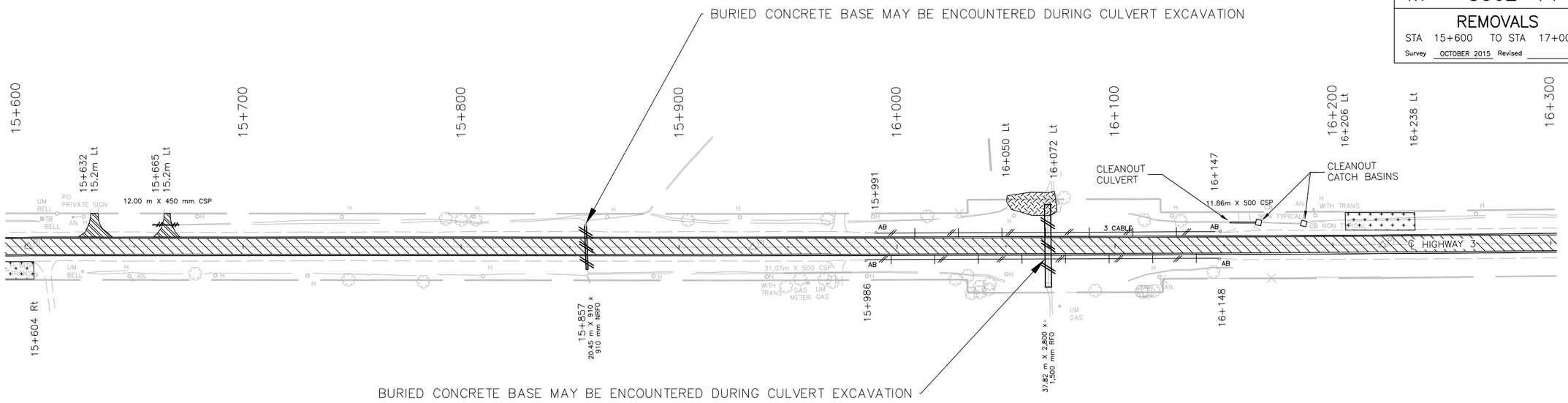
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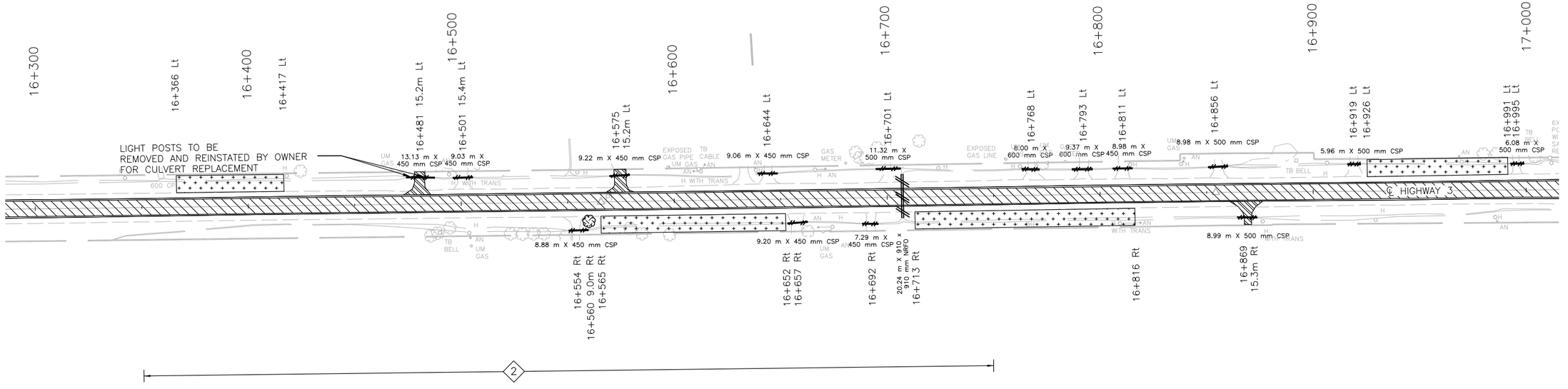
STA 15+600 TO STA 17+000

Survey OCTOBER 2015 Revised

SHEET 18

MINISTRY OF TRANSPORTATION, ONTARIO PR-D-707 88-05





SCALE
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HORIZONTAL

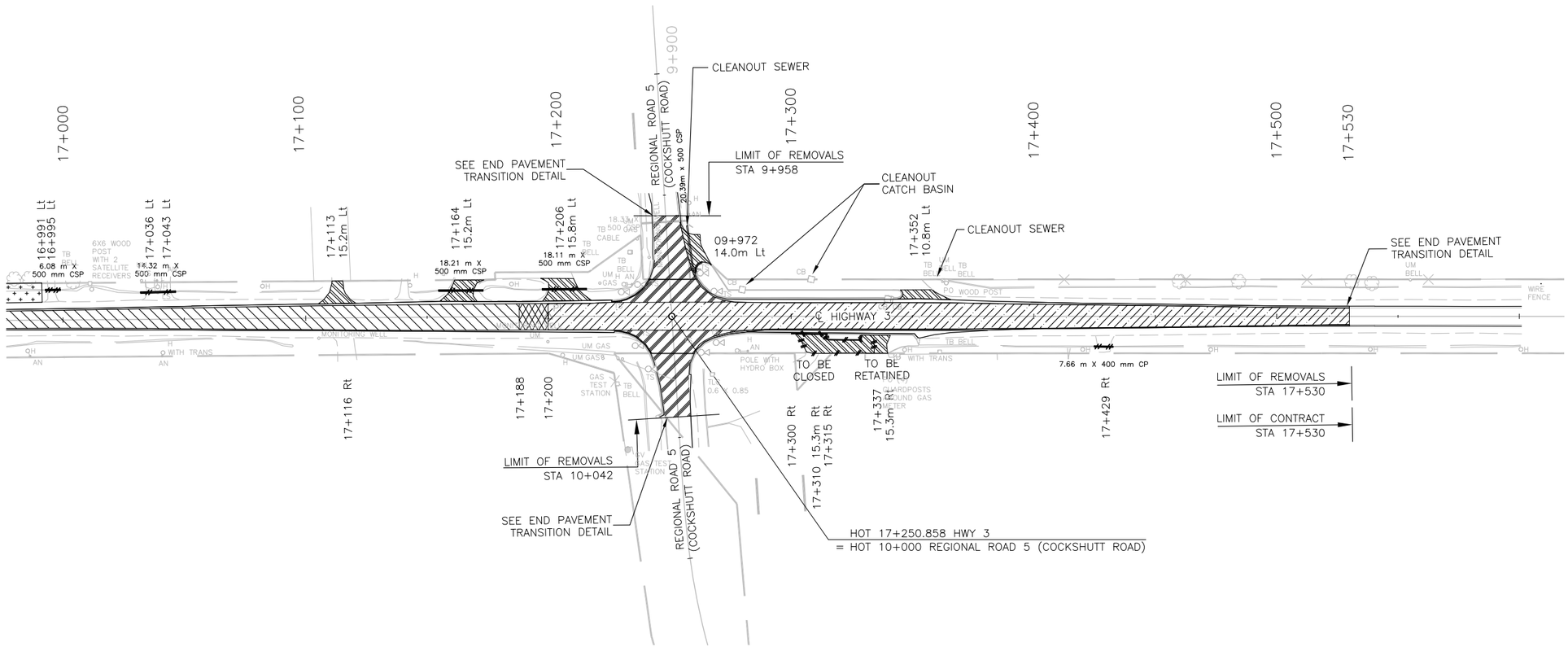
METRIC

PLATE No
CONT 2018-3010
WP 3062-14-00

REMOVALS
STA 17+000 TO STA 17+600
Survey OCTOBER 2015 Revised

SHEET 19

MINISTRY OF TRANSPORTATION, ONTARIO PR-D-707 88-05



SCALE
10m 0 20m
HORIZONTAL

METRIC

PLATE No
CONT 2018-3010
WP 3062-14-00

PAVEMENT DATA CHART
STA TO STA
Survey _____ Revised _____

SHEET 20

PAVEMENT DATA – HIGHWAY 3								
LOCATION (STATION)	SURFACE COURSE	SURFACE COURSE	SURFACE COURSE	UPPER BINDER COURSE	SURFACE COURSE	UPPER BINDER COURSE	LOWER BINDER COURSE	550 mm MINIMUM GRANULAR 'A'
	40 mm SUPERPAVE 12.5 FC1	40 mm SUPERPAVE 12.5	50 mm SUPERPAVE 12.5	50 mm SUPERPAVE 19.0	60 mm SUPERPAVE 12.5	60 mm SUPERPAVE 19.0	60 mm SUPERPAVE 19.0	
MAINLINE								
11+815 TO 17+200	●					●	●	
17+200 TO 17+530	●					●	●	
LANE WIDENING								
11+815 TO 12+172	●					●	●	●
12+770 TO 13+230	●					●	●	●
SIDE ROADS								
CULVER ROAD								
9+949 TO 9+994		●		●				
BLUE LINE ROAD								
9+949 TO 9+995		●		●				
10+005 TO 10+050		●		●				
REGIONAL ROAD 5 [COCKSHUTT ROAD]								
9+958 TO 9+995		●		●				
10+005 TO 10+042		●		●				
FULLY PAVED SHOULDERS								
11+815 TO 13+100					●			
15+990 TO 16+145 Lt					●			
15+986 TO 16+148 Rt					●			
PARTIALLY PAVED SHOULDERS								
11+815 – 17+530 LT	●					●		
11+815 – 17+530 RT	●					●		
ENTRANCES								
COMMERCIAL		●		●				
RESIDENTIAL			●					
MEDIAN ISLANDS								
9+966 TO 9+983 Cockshutt Rd					●			

SCALE
N.T.S.

MINISTRY OF TRANSPORTATION, ONTARIO PR-D-707 88-05

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PRINTED: Jan 21, 2019-16:17

METRIC

PLATE No
CONT 2018-3010
WP 3062-14-00

NEW CONSTRUCTION
STA 11+700 TO STA 12+400
Survey June 2015 Revised

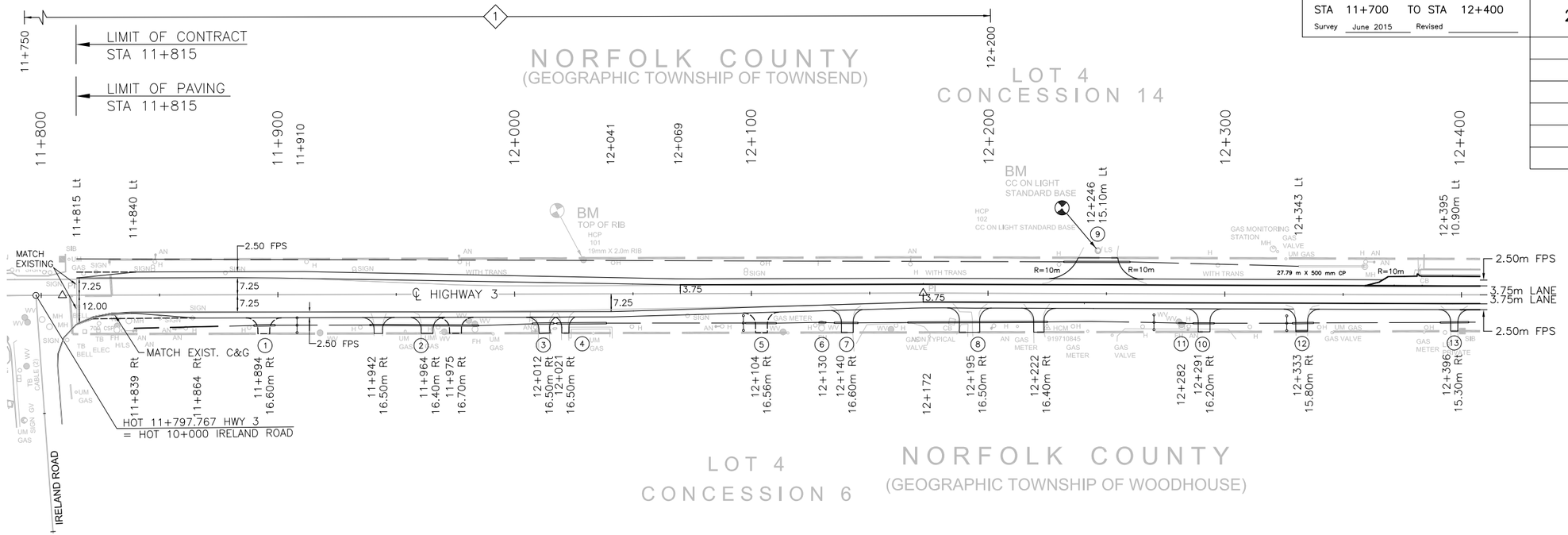
SHEET 21

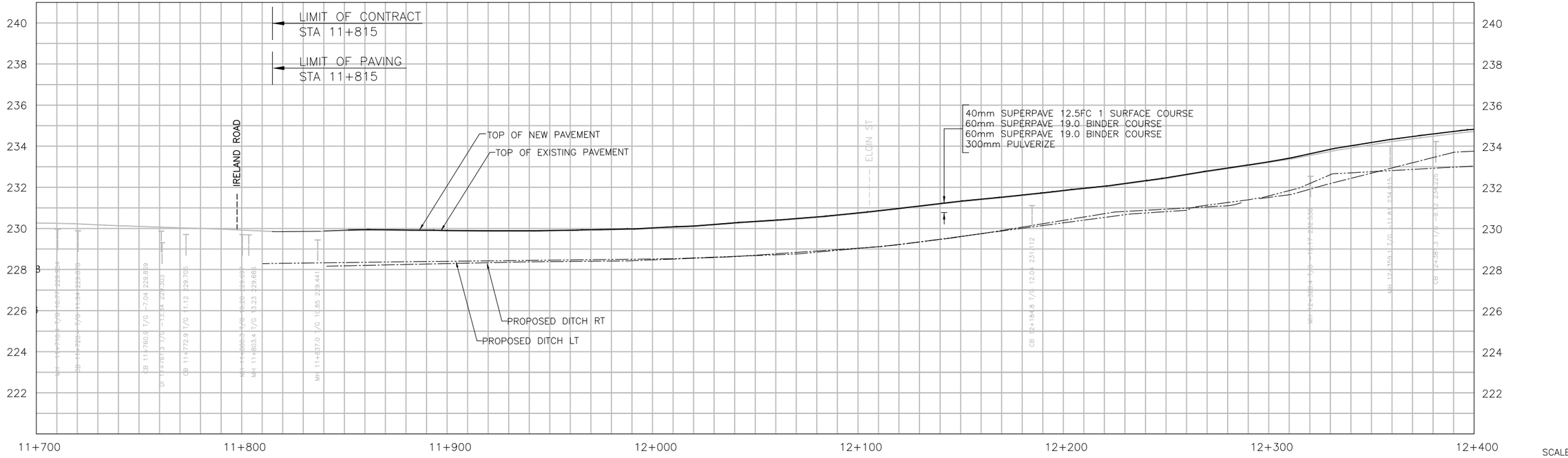
LEGEND

- FIBRE ROLL FLOW CHECK DAMS
- ENVIRONMENTALLY SENSITIVE AREA
- CULVERT
- —S— HEAVY DUTY SILT FENCE BARRIER OPSD 219.130
- HOT MIX MISCELLANEOUS
- DITCHING
- DITCH CLEANOUT
- DIRECTION OF FLOW
- RIP RAP OPSD 810.010 TYPE 'B' UNLESS OTHERWISE NOTED

NOTES:

1. RESIDENTIAL ENTRANCE RADII TO MEET OPSD 301.010 AND 301.020, ASPHALT ENTRACE WIDTH TO MATCH EXISTING ENTRANCE WIDTH AT PROPERTY LINE.
2. SIDE ROAD RADII SHALL MATCH EXISTING UNLESS OTHERWISE NOTED.





SCALES
10m 0 20m
Horizontal
1.0m 0 2.0m
Vertical

MINISTRY OF TRANSPORTATION, ONTARIO
PR-D-707 88-05

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PLOTTED: Jan 29, 2019-11:36

METRIC

PLATE No
CONT 2018-3010
WP 3062-14-00

NEW CONSTRUCTION
STA 12+400 TO STA 13+100
Survey June 2015 Revised

SHEET 22

NORFOLK COUNTY
(GEOGRAPHIC TOWNSHIP OF TOWNSEND)
LOT 5
CONCESSION 14

LIMIT OF PAVING
STA 9+949

SEE END PAVEMENT TRANSITION DETAIL

CULVER ROAD

12+400
12+395 10.90m Lt
12+456 15.20m Lt
12+500
12+510 15.20m Lt
12+535 Lt
12+600
12+653 15.20m Lt
12+700
12+767 15.30m Lt
12+770
12+800
12+810 15.30m Lt
12+871 15.20m Lt
12+900
12+920 15.30m Lt
12+931
12+966 15.35m Lt
13+000
13+068
13+071
13+100

BM TOP OF RIB
HCP 104 19mm X 2.0m RIB

OPSD 600.060

2.50 FPS
2.50 FPS

℄ HIGHWAY 3
7.50

R=10m
R=15m

5.50
5.50

2.50m SHLD
0.50m PPS
3.75m LANE
LANE VARIES
3.75m LANE
0.50m PPS
2.50m SHLD

12+396 15.30m Rt
12+413
12+721 15.24m Rt
12+824 15.20m Rt
12+882
12+895 15.13m Rt
12+955 13.10m Rt
12+996 13.10m Rt
13+028 13.14m Rt
13+113 15.20m Rt

BM TOP OF RIB
HCP 103 19mm X 2.0m RIB

BM TOP OF RIB
HCP 105 19mm X 2.0m RIB

HOT 13+041.124 HWY 3
= HOT 10+000 CULVER ROAD

LOT 5
CONCESSION 6

NORFOLK COUNTY
(GEOGRAPHIC TOWNSHIP OF WOODHOUSE)

40mm SUPERPAVE 12.5FC 1 SURFACE COURSE
60mm SUPERPAVE 19.0 BINDER COURSE
60mm SUPERPAVE 19.0 BINDER COURSE
300mm PULVERIZE

TOP OF NEW PAVEMENT
TOP OF EXISTING PAVEMENT
PROPOSED DITCH RT
PROPOSED DITCH LT

CULVER ROAD

CULVER ROAD

244
242
240
238
236
234
232
230
228
226

12+400 12+500 12+600 12+700 12+800 12+900 13+000 13+100

9+800 9+900 10+000

MH 13-945.4 I/C 15.75 233.85

SCALES
10m 0 20m
Horizontal
1.0m 0 2.0m
Vertical

MINISTRY OF TRANSPORTATION, ONTARIO PR-D-707 88-05

DRAWING LOCATION: W:\PD_WP's\Hwy003\3062-14-00 Simcoe to Renton\Technical Data\Dwg\
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USER NAME: Mark Jones
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PLOTTED: Jan 29, 2019 11:41

METRIC

PLATE No
CONT 2018-3010
WP 3062-14-00

NEW CONSTRUCTION
STA 13+100 TO STA 13+800
Survey June 2015 Revised

SHEET 23

MINISTRY OF TRANSPORTATION, ONTARIO PR-D-707 88-05

NORFOLK COUNTY
(GEOGRAPHIC TOWNSHIP OF TOWNSEND)
LOT 6
CONCESSION 14

LOT 7
CONCESSION 14

LOT 6
CONCESSION 6

LOT 7
CONCESSION 6

NORFOLK COUNTY
(GEOGRAPHIC TOWNSHIP OF WOODHOUSE)

13+100 13+200 13+230 13+300 13+382 13+400 13+500 13+542 13+600 13+602 13+620 13+666 13+681 13+700 13+750 13+759 13+800

HCM 919710847

2.50 SHLD
7.50
7.50
℄ HIGHWAY 3
5.50
5.50
2.50 SHLD

13+113 15.20m Rt (28)

GBM
DHO BM 9-68
232.435
TWO STOREY RED BRICK HOUSE ON THE SOUTH SIDE OF HWY 3, 122 EAST OF CULVER RD AND 40 CM SOUTH OF CENTERLINE OF PAVEMENT. TABLET IS SET HORIZONTALLY IN THE SOUTH (REAR) FACE OF CONCRETE FOUNDATION, 1.83 M EAST OF THE S.W. CORNER.

HCP 106 19mm X 2.0m RIB
BM TOP OF RIB
HCP 107 19mm X 2.0m RIB
BM TOP OF RIB

LIMIT OF PAVING STA 9+949
OPSD 605.030
OPSD 600.060 TYP.
9+977
9+968
SEE END PAVEMENT TRANSITION DETAIL
BLUE LINE ROAD
OPSD 605.030
HOT 13+642.214 HWY 3 = HOT 10+000 BLUE LINE ROAD NORTH
OPSD 600.060 TYP.
OPSD 304.010 TYPE C TYP.
BM TOP OF RIB
HCP 108 19mm X 2.0m RIB
2.50m SHLD
0.50m PPS
3.75m LANE
LANE VARIES
3.75m LANE
0.50m PPS
2.50m SHLD
R=15m
R=10m
(29)
(30)
(66)
10+024
OPSD 600.060 TYP.
10+040
OPSD 600.060 TYP.
HOT 13+643.464 HWY 3 = HOT 10+000 BLUE LINE ROAD SOUTH
OPSD 605.030
OPSD 605.030
SEE END PAVEMENT TRANSITION DETAIL
BLUE LINE ROAD
LIMIT OF PAVING STA 10+051
13+750 15.0m Rt

BLUE LINE ROAD NORTH

BLUE LINE ROAD SOUTH

TOP OF NEW PAVEMENT
TOP OF EXISTING PAVEMENT
PROPOSED DITCH RT
PROPOSED DITCH LT

40mm SUPERPAVE 12.5FC 1 SURFACE COURSE
60mm SUPERPAVE 19.0 BINDER COURSE
60mm SUPERPAVE 19.0 BINDER COURSE
300mm PULVERIZE

BLUE LINE ROAD

T/G -12.11 224.94
T/G -0.85 224.70
T/G 23.50 224.60
T/G -11.45 224.50
18.50 223.87

SCALES
10m 0 20m Horizontal
1.0m 0 2.0m Vertical

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METRIC

PLATE No
CONT 2018-3010
WP 3062-14-00

NEW CONSTRUCTION
STA 13+800 TO STA 14+500
Survey June 2015 Revised

SHEET 24

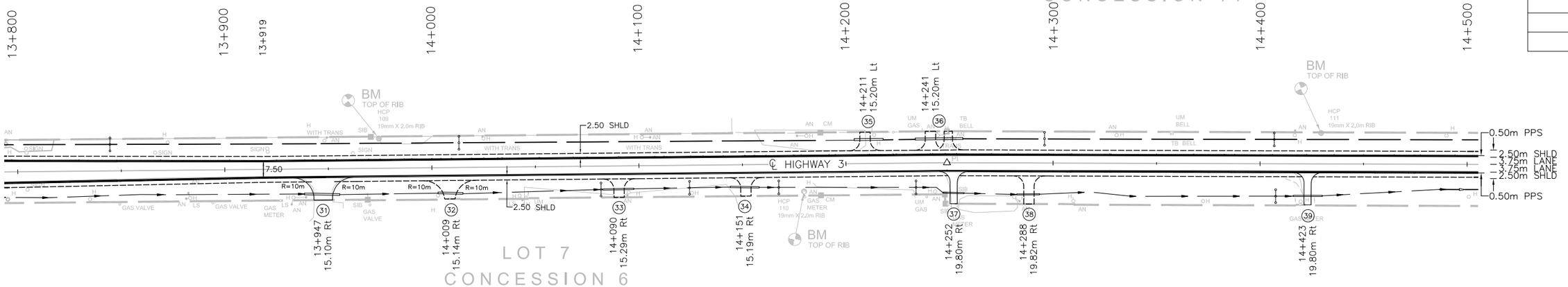
NORFOLK COUNTY
(GEOGRAPHIC TOWNSHIP OF TOWNSEND)
LOT 7
CONCESSION 14

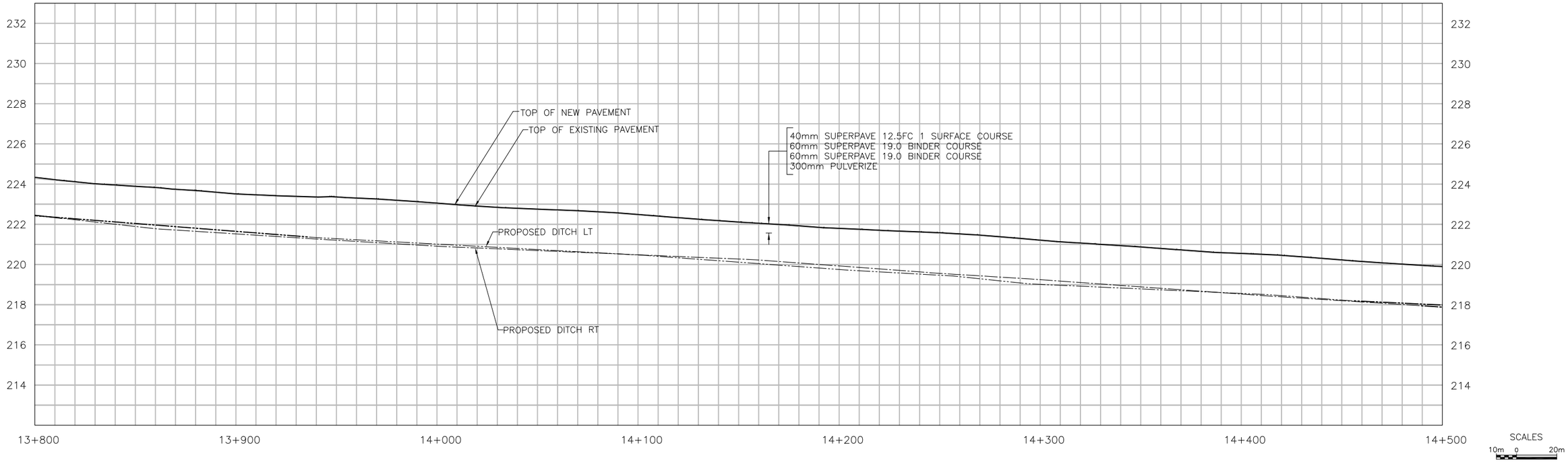
LOT 8
CONCESSION 14

LOT 7
CONCESSION 6

NORFOLK COUNTY
(GEOGRAPHIC TOWNSHIP OF WOODHOUSE)

LOT 8
CONCESSION 6





SCALES
10m 0 20m
Horizontal
1.0m 0 2.0m
Vertical

MINISTRY OF TRANSPORTATION, ONTARIO PR-0-707 88-05

DRAWING LOCATION: N:\PDF\WP\3\3062\03\3062-14-00 Simcoe to Renton\Technical Data\Dwg\
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METRIC

PLATE No
CONT 2018-3010
WP 3062-14-00

NEW CONSTRUCTION
STA 14+500 TO STA 15+200
Survey June 2015 Revised

SHEET 25

MINISTRY OF TRANSPORTATION, ONTARIO PR-D-707 88-05

NORFOLK COUNTY
(GEOGRAPHIC TOWNSHIP OF TOWNSEND)
LOT 9
CONCESSION 14

LOT 8
CONCESSION 14

14+500 14+600 14+700 14+800 14+900 15+000 15+100 15+200

BM TOP OF RIB
HCP 112 19mm X 2.0m RIB

14+838 15.37m Lt (42)

2.50 SHLD

℄ HIGHWAY 3

BM TOP OF RIB
HCP 114 19mm X 2.0m RIB

15+060 15.44m Lt (43)

TEMPORARY LIMITED INTEREST
APRIL 1, 2019 TO
DECEMBER 31, 2019

19.50 m X 1,800 x 900 mm CONCRETE BOX

OPSD 810.010
3.5 X 2.4

0.50m PPS
2.50m SHLD
3.75m LANE
3.75m LANE
2.50m SHLD
0.50m PPS

GAS TEST WELL

2.50 SHLD

14+694 15.27m Rt (40)
14+712 15.14m Rt (41)

BM TOP OF RIB
HCP 113 19mm X 2.0m RIB

OPSD 810.010
3.3 X 2.4

TEMPORARY LIMITED INTEREST
APRIL 1, 2019 – DECEMBER 31, 2019

LOT 8
CONCESSION 6

LOT 9
CONCESSION 6

NORFOLK COUNTY
(GEOGRAPHIC TOWNSHIP OF WOODHOUSE)

228 226 224 222 220 218 216 214 212 210

TOP OF NEW PAVEMENT
TOP OF EXISTING PAVEMENT

40mm SUPERPAVE 12.5FC 1 SURFACE COURSE
60mm SUPERPAVE 19.0 BINDER COURSE
60mm SUPERPAVE 19.0 BINDER COURSE
300mm PULVERIZE

PROPOSED DITCH RT
PROPOSED DITCH LT

19.50 m X 1,800 x 900 mm PRECAST
15+154.5 T/O 9750 L 216.465
15+154.9 T/O 9750 R 216.593

14+500 14+600 14+700 14+800 14+900 15+000 15+100 15+200

SCALES
10m 0 20m Horizontal
1.0m 0 2.0m Vertical

DRAWING LOCATION: N:\PROJECTS\Hwy003\3062-14-00 Simcoe to Renton\Technical Data\Dwg\
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LAYOUT NAME: 14+500 TO 15+200
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LAST MODIFIED: Jan 29, 2019 - 11:34
PLOTTED: Jan 29, 2019 11:44

METRIC

PLATE No
CONT 2018-3010
WP 3062-14-00

NEW CONSTRUCTION
STA 15+200 TO STA 15+900
Survey June 2015 Revised

SHEET 26

MINISTRY OF TRANSPORTATION, ONTARIO PR-D-707 88-05

NORFOLK COUNTY
(GEOGRAPHIC TOWNSHIP OF TOWNSEND)

LOT 9
CONCESSION 14

LOT 10
CONCESSION 14

15+200 15+300 15+400 15+500 15+600 15+700 15+800 15+900

15+209 15.20m Lt
15+233 15.17m Lt
15+247 15.34m Lt
15+265 15.31m Rt
15+463 15.20m Lt
15+611 15.40m Rt
15+632 15.20m Lt
15+665 15.20m Lt

BM TOP OF HCM 00820060004
BM TOP OF RIB
BM TOP OF HCM 00820060003

HCP 115 19mm X 2.0m RIB
HCP 117 19mm X 2.0m RIB

19.75 m X 1,800 x 900 mm CONCRETE BOX
20.45 m X 1,800 x 900 mm CONCRETE BOX

TEMPORARY LIMITED INTEREST APRIL 1, 2019 TO DECEMBER 31, 2019
TEMPORARY LIMITED INTEREST APRIL 1, 2019 – DECEMBER 31, 2019

OPSD 810.010 4.2 X 2.4
OPSD 810.010 3.0 X 2.1
OPSD 810.010 5.3 X 2.1
OPSD 810.010 3.5 X 2.1

2.50 SHLD
2.50 SHLD

℄ HIGHWAY 3

0.50m PPS
2.50m SHLD
3.75m LANE
3.75m LANE
2.50m SHLD
0.50m PPS

HCM 00820060004 (COSINE VALUES NOT HELD)
HCM 00820060003 (COSINE VALUES NOT HELD)
HCM 819000070

NORFOLK COUNTY
(GEOGRAPHIC TOWNSHIP OF WOODHOUSE)

LOT 10
CONCESSION 6

228 226 224 222 220 218 216 214 212 210

TOP OF NEW PAVEMENT
TOP OF EXISTING PAVEMENT

40mm SUPERPAVE 12.5FC 1 SURFACE COURSE
60mm SUPERPAVE 19.0 BINDER COURSE
60mm SUPERPAVE 19.0 BINDER COURSE
300mm PULVERIZE

PROPOSED DITCH RT
PROPOSED DITCH LT

19.75 m X 1,800 x 900 mm PRECAST
15+387.8 I/O 9.875 L 216.929
15+388.8 I/O 9.875 R 216.659

20.45 m X 1,800 x 900 mm PRECAST
15+857.0 I/O 10.225 L 215.116
15+857.8 I/O 10.225 R 215.156

SCALES
10m 0 20m Horizontal
1.0m 0 2.0m Vertical

DRAWING LOCATION: N:\PDI\WP\Vlayout\3062-14-00 Simcoe to Renton\Technical Data\Dwg\
DRAWING NAME: 306214-00_PP15_Dwg
LAYOUT NAME: 15+200 TO 15+900
USER NAME: Jan 29, 2019 11:34
LAST MODIFIED: Jan 29, 2019 11:34
PRINTED: Jan 29, 2019 11:44

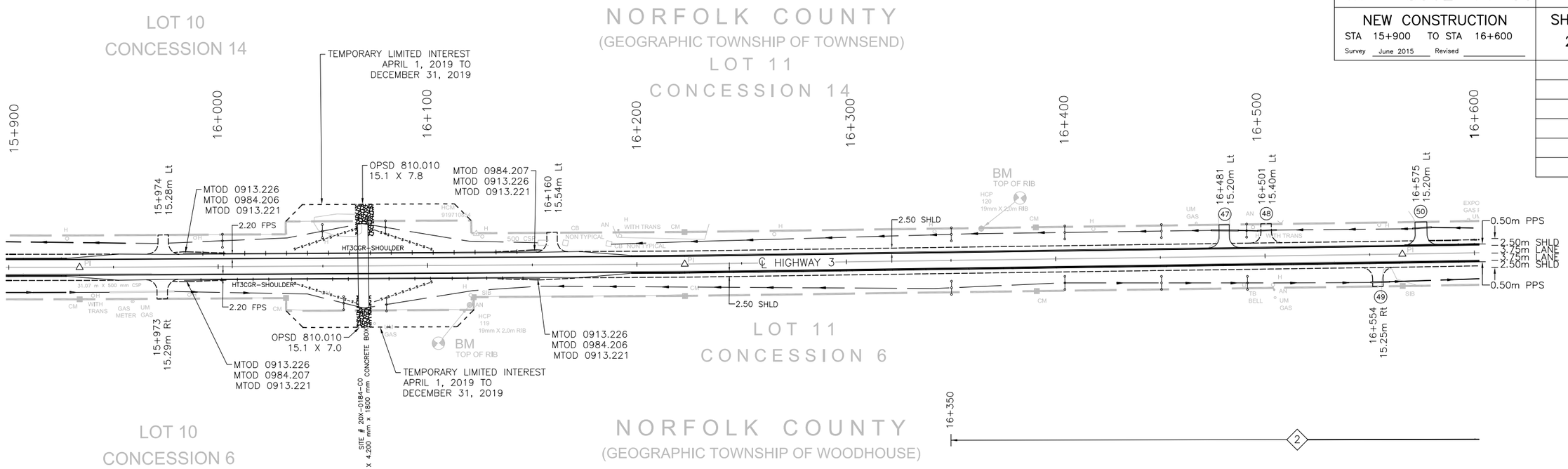
NOTE:
1. HT3CGR SHALL BE INSTALLED AS PER MTOD 913.250 AND MTOD 913.221

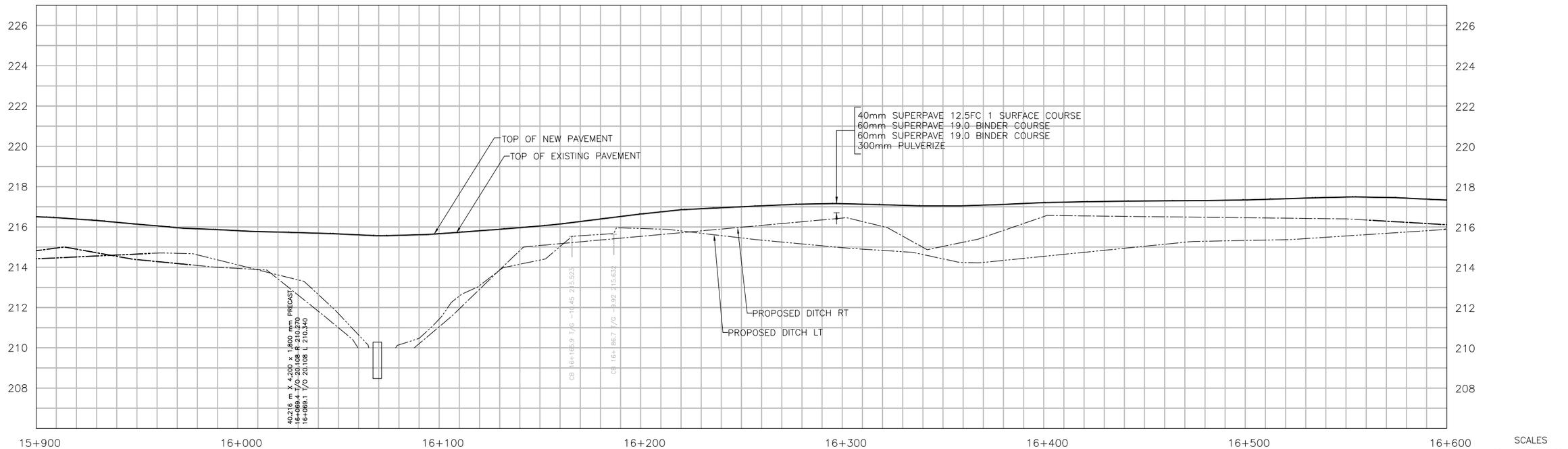
METRIC

PLATE No
CONT 2018-3010
WP 3062-14-00

NEW CONSTRUCTION
STA 15+900 TO STA 16+600
Survey June 2015 Revised

SHEET 27





SCALES
10m 0 20m Horizontal
1.0m 0 2.0m Vertical

MINISTRY OF TRANSPORTATION, ONTARIO PR-D-707 88-05

DRAWING LOCATION: W:\PD\WP'S\Hwy003\3062-14-00 Simcoe to Renton\Technical Data\Dwg\
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PRINTED: Jan 29, 2019-11:45

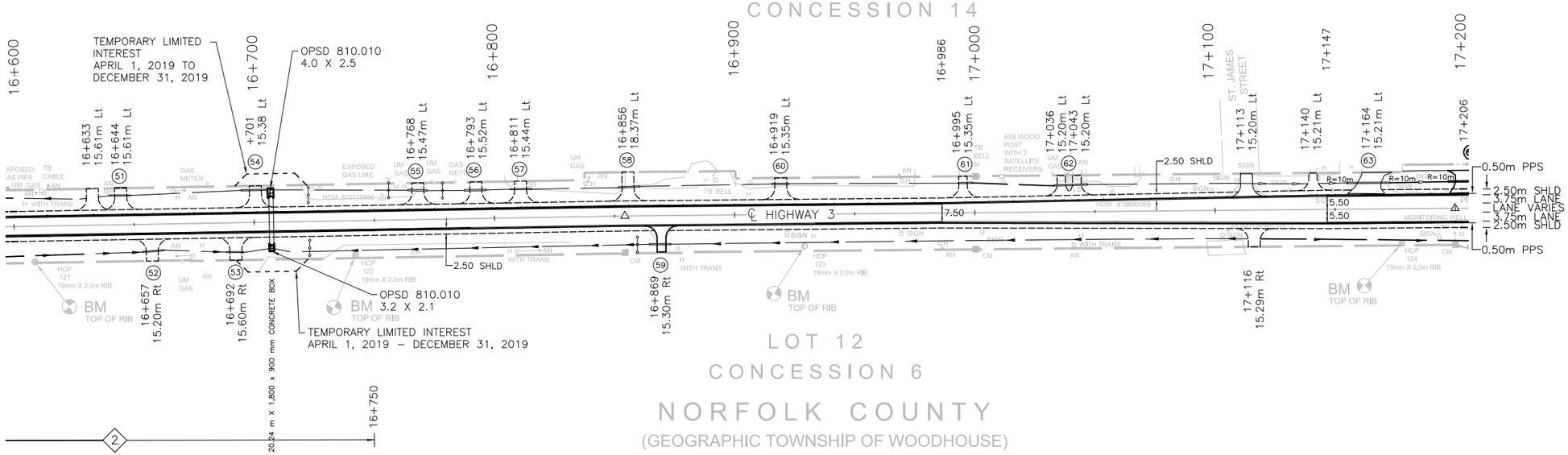
METRIC

PLATE No
CONT 2018-3010
WP 3062-14-00

NEW CONSTRUCTION
STA 16+600 TO STA 17+200
Survey June 2015 Revised

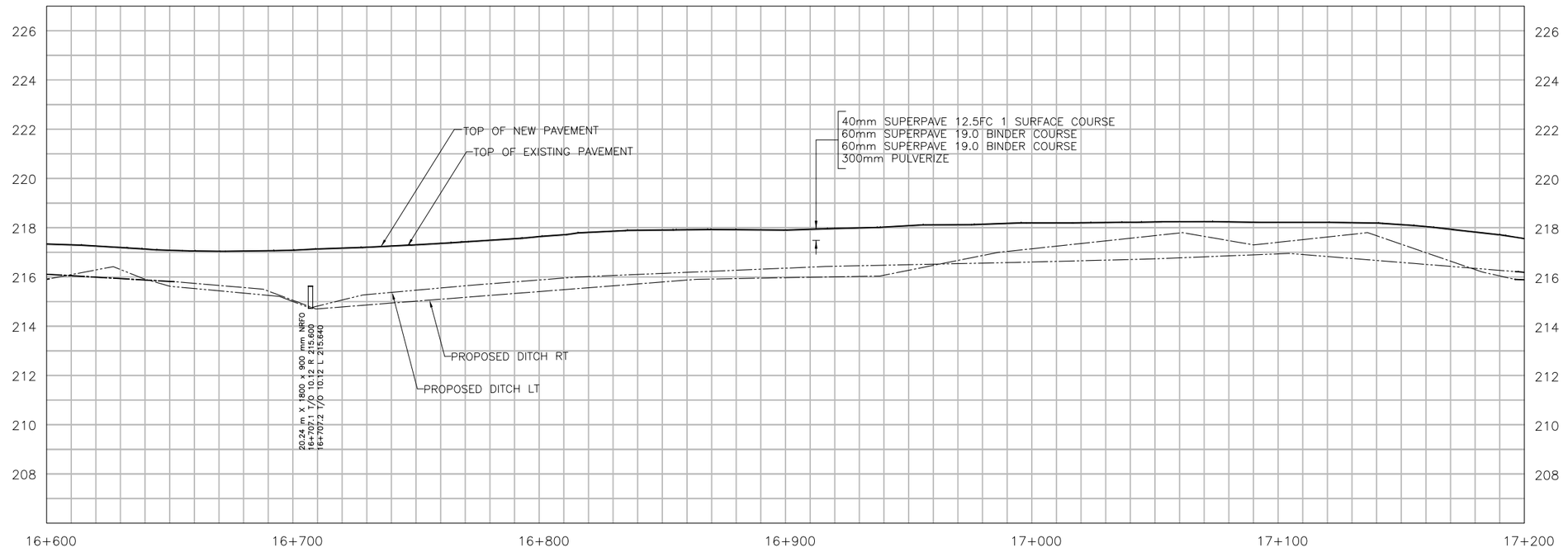
SHEET 28

NORFOLK COUNTY
(GEOGRAPHIC TOWNSHIP OF TOWNSEND)
LOT 12
CONCESSION 14



LOT 12
CONCESSION 6

NORFOLK COUNTY
(GEOGRAPHIC TOWNSHIP OF WOODHOUSE)



SCALES
10m 0 20m
Horizontal
1.0m 0 2.0m
Vertical

MINISTRY OF TRANSPORTATION, ONTARIO PR-D-707 88-05

DRAWING LOCATION: N:\PDL\WP\Vlwp\2013\3062-14-00 Simcoe to Renton\Technical Data\Dwg\
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LAYOUT NAME: 16+600 TO 17+200
USER NAME: Ashley Hoffman
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PRINTED: Jan. 29, 2019 11:45

METRIC

PLATE No

CONT 2018-3010

WP 3062-14-00

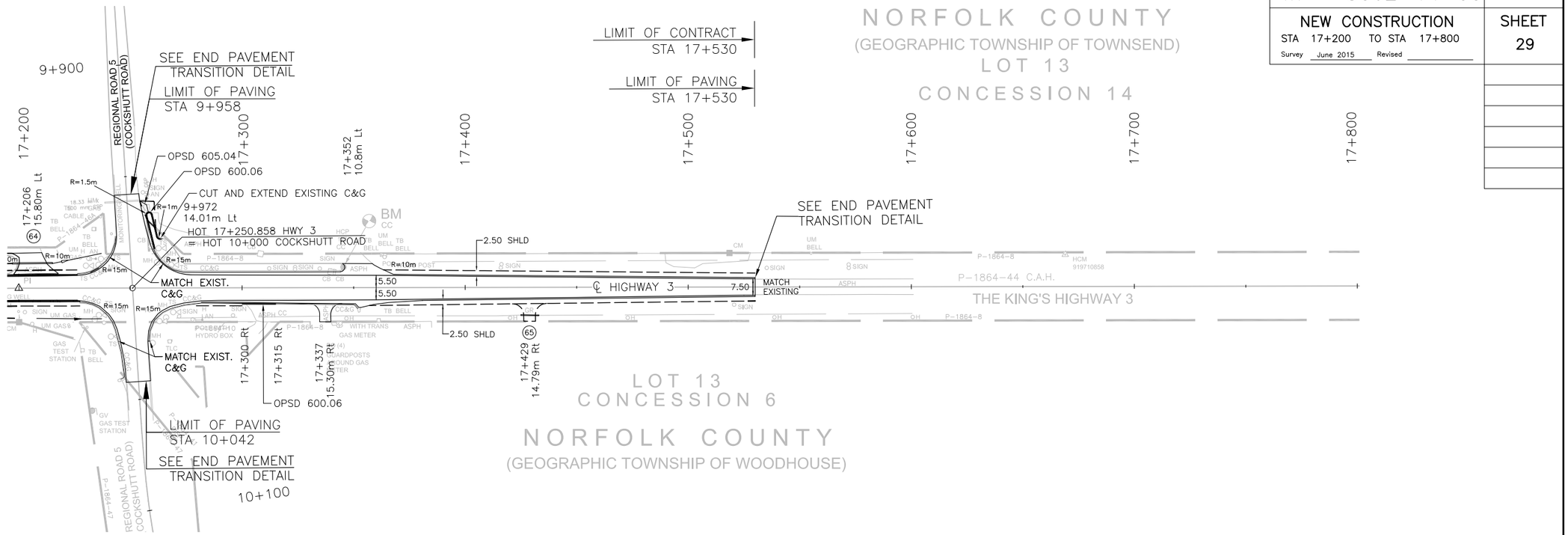
NEW CONSTRUCTION

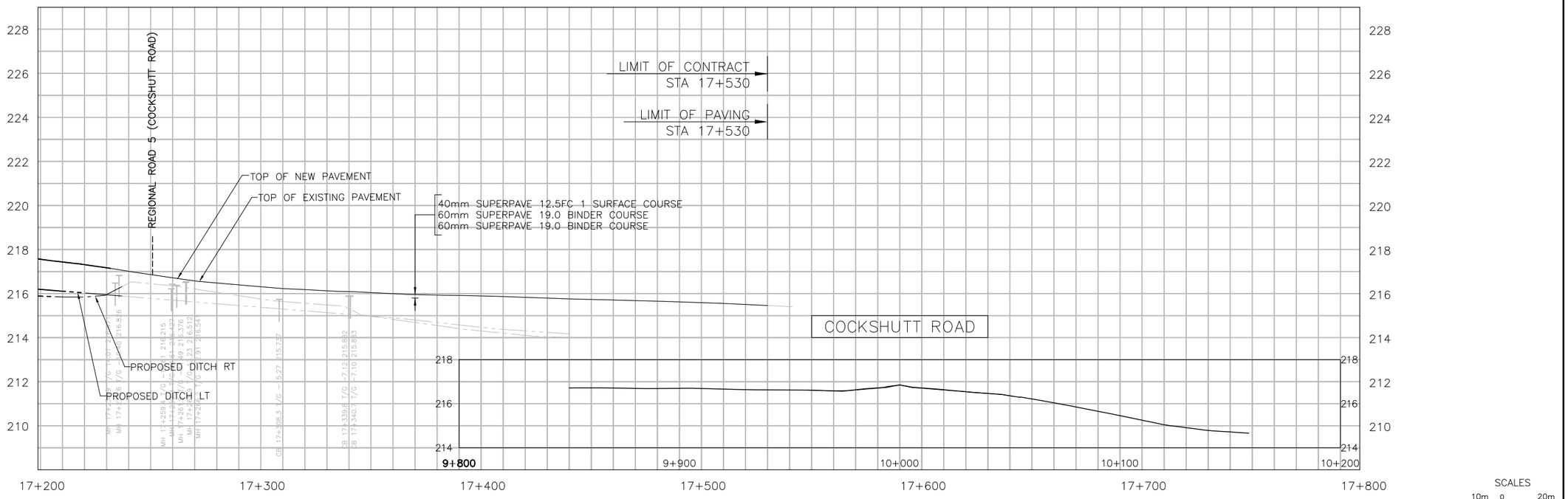
STA 17+200 TO STA 17+800

Survey June 2015 Revised

SHEET 29

MINISTRY OF TRANSPORTATION, ONTARIO PR-D-707 88-05





SCALES

10m 0 20m Horizontal

1.0m 0 2.0m Vertical

DRAWING LOCATION: N:\PW\pwf\Twp\053\3062-14-00 Simcoe to Renton\Technical Data\Dwg\
DRAWING NAME: 17-200 TO 17+800
LAYOUT NAME: 17+200 TO 17+800
LAST MODIFIED: Jan 29, 2019 - 11:34
PRINTED: Jan 29, 2019 - 11:45

METRIC

NOTE:

1. PAVEMENT MARKINGS TO BE PLACED IN ACCORDANCE WITH OTM BOOK 11 AND CONFIRMED BY THE CONTRACT ADMINISTRATOR.
2. ALL PAVEMENT MARKINGS AT SIGNALIZED INTERSECTIONS ARE TO BE PLACED IN ACCORDANCE WITH THE PHM 125 DRAWING PROVIDED.
3. SEE MTOD 101.070 FOR PAVEMENT MARKING LEGEND.
4. STOP BARS AND DIRECTIONAL ARROWS AT UN-SIGNALIZED INTERSECTIONS ARE TO BE PLACED IN ACCORDANCE WITH OTM BOOK 11 REQUIREMENTS.
5. CONTRACTOR SHALL REINSTATE ALL EXISTING PAVEMENT MARKINGS WITHIN THE DESIGNATED CONSTRUCTION ZONE FOLLOWING COMPLETION OF CONTRACT WORK.
6. PAVEMENT MARKINGS BEING APPLIED IN TRAFFIC PAINT ON NEW ASPHALT SURFACES REQUIRE TWO APPLICATIONS OF PAINT PRIOR TO PROJECT COMPLETION.

PLATE No

CONT 2018-3010

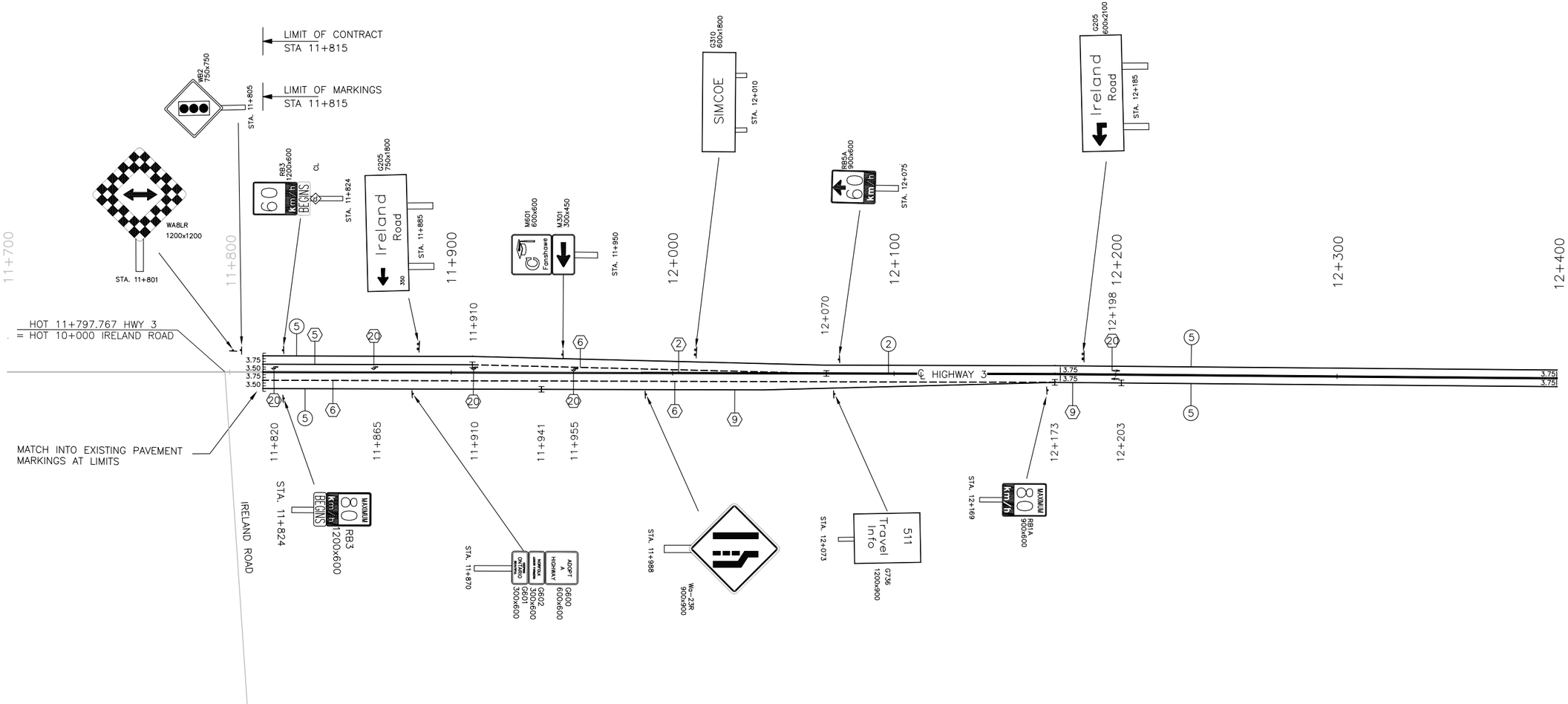
WP 3062-14-00

PAVEMENT MARKINGS

STA 11+700 TO STA 12+400

Survey _____ Revised _____

SHEET 30



SCALE

10m 0 20m

Horizontal

MINISTRY OF TRANSPORTATION, ONTARIO PR-D-707 88-05

DRAWING LOCATION: K:\PD\DWPS\Hwy003\3062-14-00 Simcoe to Renton\Technical Data\Dwg\
DRAWING NAME: Layout1 (Layout1 Model)
LAYOUT NAME: 11+700 TO 12+400
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LAST MODIFIED: Dec. 7, 2018-11:08
PLOTTED: Jan 21, 2019-10:21

METRIC

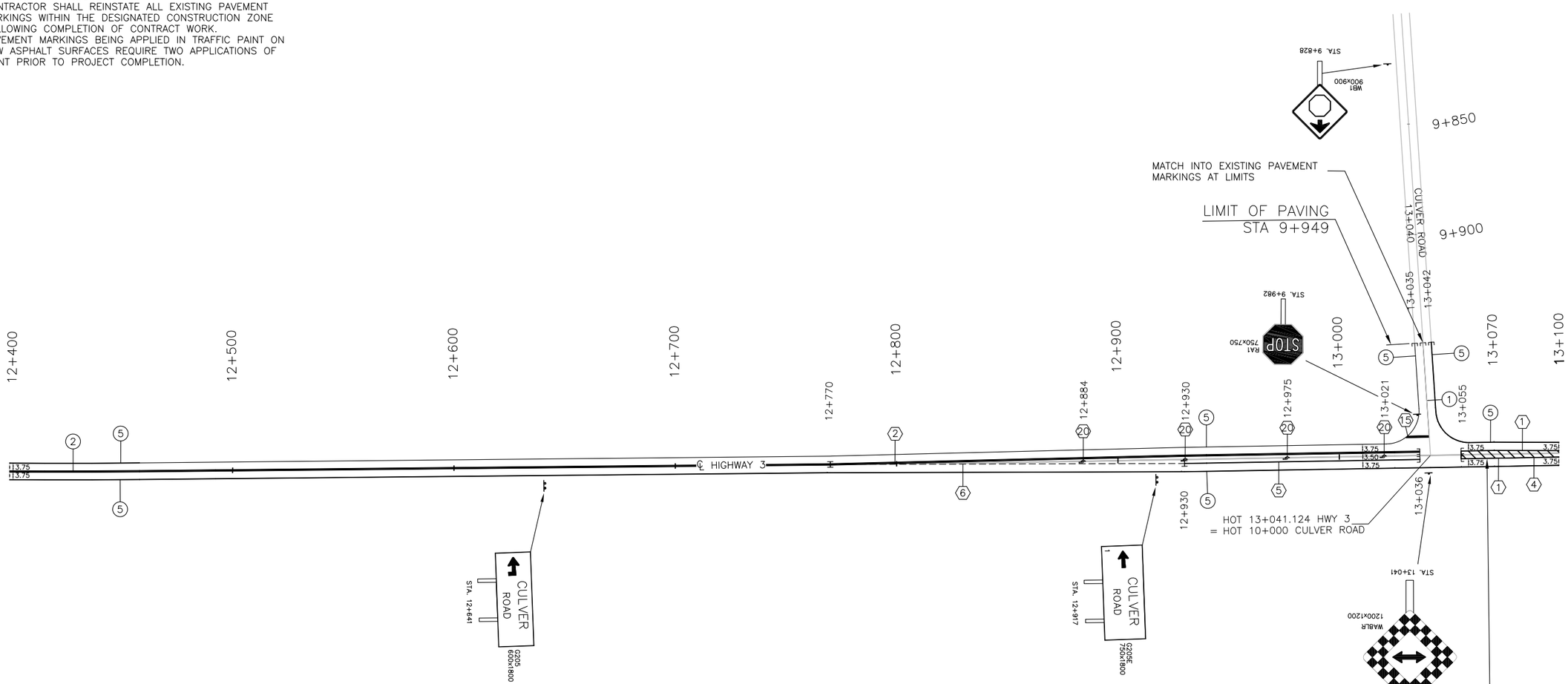
PLATE No
CONT 2018–3010
WP 3062–14–00

PAVEMENT MARKINGS
STA 12+400 TO STA 13+100
Survey _____ Revised _____

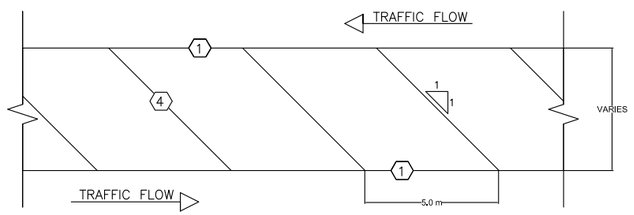
SHEET
31

NOTE:

1. PAVEMENT MARKINGS TO BE PLACED IN ACCORDANCE WITH OTM BOOK 11, WEST REGION DESIGN PREFERENCES FOR PAVEMENT MARKINGS, AND CONFIRMED BY THE CONTRACT ADMINISTRATOR.
2. ALL PAVEMENT MARKINGS AT SIGNALIZED INTERSECTIONS ARE TO BE PLACED IN ACCORDANCE WITH THE PHM 125 DRAWING PROVIDED.
3. SEE MTOD 101.070 FOR PAVEMENT MARKING LEGEND.
4. STOP BARS AND DIRECTIONAL ARROWS AT UN–SIGNALIZED INTERSECTIONS ARE TO BE PLACED IN ACCORDANCE WITH OTM BOOK 11 REQUIREMENTS.
5. CONTRACTOR SHALL REINSTATE ALL EXISTING PAVEMENT MARKINGS WITHIN THE DESIGNATED CONSTRUCTION ZONE FOLLOWING COMPLETION OF CONTRACT WORK.
6. PAVEMENT MARKINGS BEING APPLIED IN TRAFFIC PAINT ON NEW ASPHALT SURFACES REQUIRE TWO APPLICATIONS OF PAINT PRIOR TO PROJECT COMPLETION.



PAVEMENT MARKING HATCHING DETAIL FOR HIGHWAY



N.T.S

SCALE
10m 0 20m
Horizontal

MINISTRY OF TRANSPORTATION, ONTARIO PR-D-707 88-05

DRAWING LOCATION: M:\PD\WP\3xxy\3062-14-00 Simcoe to Renton\Technical Data\Dwg\
DRAWING NAME: Pavement Marking & Signage.dwg
LAYOUT NAME: 12+400 TO 13+100
LAST MODIFIED: Dec 3, 2018–11:08
PLOTTED: Jan 21, 2019–10:22

METRIC

NOTE:

1. PAVEMENT MARKINGS TO BE PLACED IN ACCORDANCE WITH OTM BOOK 11, WEST REGION DESIGN PREFERENCES FOR PAVEMENT MARKINGS, AND CONFIRMED BY THE CONTRACT ADMINISTRATOR.
2. ALL PAVEMENT MARKINGS AT SIGNALIZED INTERSECTIONS ARE TO BE PLACED IN ACCORDANCE WITH THE PHM 125 DRAWING PROVIDED.
3. SEE MTOD 101.070 FOR PAVEMENT MARKING LEGEND.
4. STOP BARS AND DIRECTIONAL ARROWS AT UN-SIGNALIZED INTERSECTIONS ARE TO BE PLACED IN ACCORDANCE WITH OTM BOOK 11 REQUIREMENTS.
5. CONTRACTOR SHALL REINSTATE ALL EXISTING PAVEMENT MARKINGS WITHIN THE DESIGNATED CONSTRUCTION ZONE FOLLOWING COMPLETION OF CONTRACT WORK.
6. PAVEMENT MARKINGS BEING APPLIED IN TRAFFIC PAINT ON NEW ASPHALT SURFACES REQUIRE TWO APPLICATIONS OF PAINT PRIOR TO PROJECT COMPLETION.

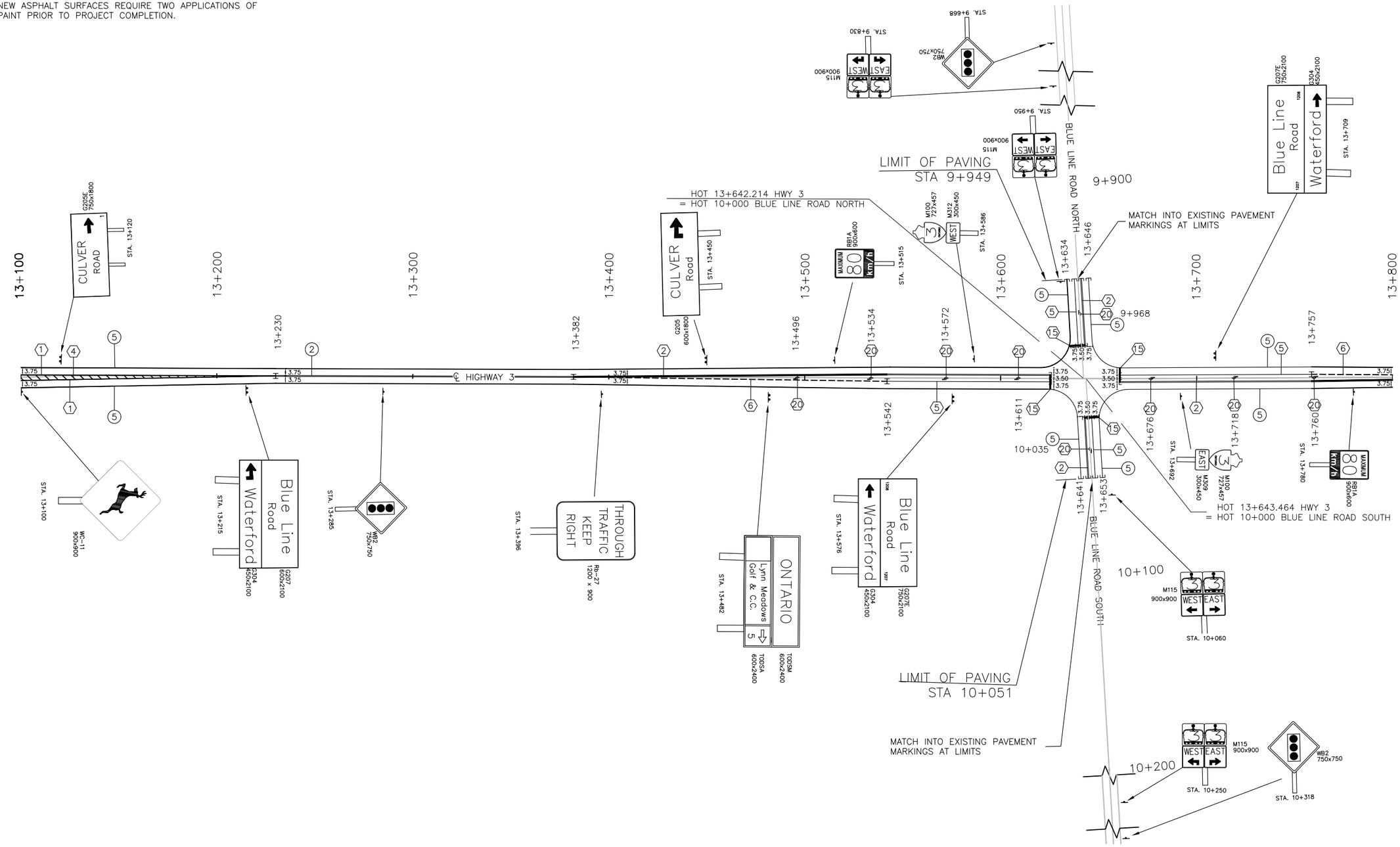
PLATE No
CONT 2018-3010
WP 3062-14-00

PAVEMENT MARKINGS
STA 13+100 TO STA 13+800
Survey _____ Revised _____

SHEET 32

MINISTRY OF TRANSPORTATION, ONTARIO PR-D-707 88-05

DRAWING LOCATION: M:\PD\WP\3\wp3062\3062-14-00 Simcoe to Renton\Technical Data\Dwg\
DRAWING NAME: L: Pavmrk Metric & dgnpgs.dwg
LAYOUT NAME: 13+100 TO 13+800
LAST MODIFIED: Dec 3, 2018-11:08
PLOTTED: Jan 21, 2019-16:22



SCALE
10m 0 20m
Horizontal

NOTE:

1. PAVEMENT MARKINGS TO BE PLACED IN ACCORDANCE WITH OTM BOOK 11, WEST REGION DESIGN PREFERENCES FOR PAVEMENT MARKINGS, AND CONFIRMED BY THE CONTRACT ADMINISTRATOR.
2. ALL PAVEMENT MARKINGS AT SIGNALIZED INTERSECTIONS ARE TO BE PLACED IN ACCORDANCE WITH THE PHM 125 DRAWING PROVIDED.
3. SEE MTOD 101.070 FOR PAVEMENT MARKING LEGEND.
4. STOP BARS AND DIRECTIONAL ARROWS AT UN-SIGNALIZED INTERSECTIONS ARE TO BE PLACED IN ACCORDANCE WITH OTM BOOK 11 REQUIREMENTS.
5. CONTRACTOR SHALL REINSTATE ALL EXISTING PAVEMENT MARKINGS WITHIN THE DESIGNATED CONSTRUCTION ZONE FOLLOWING COMPLETION OF CONTRACT WORK.
6. PAVEMENT MARKINGS BEING APPLIED IN TRAFFIC PAINT ON NEW ASPHALT SURFACES REQUIRE TWO APPLICATIONS OF PAINT PRIOR TO PROJECT COMPLETION.

METRIC

PLATE No

CONT 2018-3010

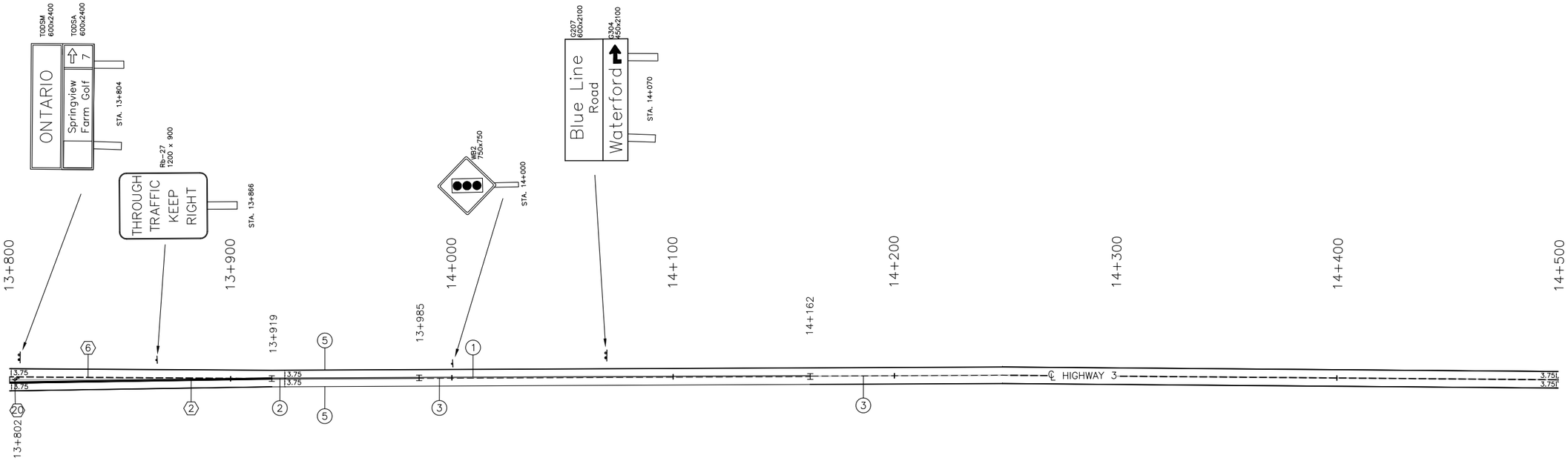
WP 3062-14-00

PAVEMENT MARKINGS

STA 13+800 TO STA 14+500

Survey _____ Revised _____

SHEET 33



SCALE

10m 0 20m

Horizontal

MINISTRY OF TRANSPORTATION, ONTARIO PR-D-707 88-05

DRAWING LOCATION: M:\PD\WP\3xxx\003\3062-14-00 Simcoe to Renton\Technical Data\Dwg\
DRAWING NAME: L:\Planning Design & Signage.dwg
LAYOUT NAME: 13+800 TO 14+500
CREATED: Jan 21, 2019-10:44
LAST MODIFIED: Dec 3, 2018-11:08
PLOTTED: Jan 21, 2019-10:22

NOTE:

1. PAVEMENT MARKINGS TO BE PLACED IN ACCORDANCE WITH OTM BOOK 11, WEST REGION DESIGN PREFERENCES FOR PAVEMENT MARKINGS, AND CONFIRMED BY THE CONTRACT ADMINISTRATOR.
2. ALL PAVEMENT MARKINGS AT SIGNALIZED INTERSECTIONS ARE TO BE PLACED IN ACCORDANCE WITH THE PHM 125 DRAWING PROVIDED.
3. SEE MTOD 101.070 FOR PAVEMENT MARKING LEGEND.
4. STOP BARS AND DIRECTIONAL ARROWS AT UN-SIGNALIZED INTERSECTIONS ARE TO BE PLACED IN ACCORDANCE WITH OTM BOOK 11 REQUIREMENTS.
5. CONTRACTOR SHALL REINSTATE ALL EXISTING PAVEMENT MARKINGS WITHIN THE DESIGNATED CONSTRUCTION ZONE FOLLOWING COMPLETION OF CONTRACT WORK.
6. PAVEMENT MARKINGS BEING APPLIED IN TRAFFIC PAINT ON NEW ASPHALT SURFACES REQUIRE TWO APPLICATIONS OF PAINT PRIOR TO PROJECT COMPLETION.

METRIC

PLATE No

CONT 2018-3010

WP 3062-14-00

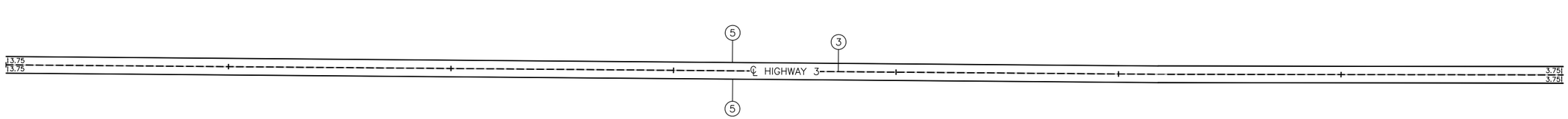
PAVEMENT MARKINGS

STA 14+500 TO STA 15+200

Survey _____ Revised _____

SHEET 34

MINISTRY OF TRANSPORTATION, ONTARIO PR-D-707 88-05



SCALE

10m 0 20m

Horizontal

DRAWING LOCATION: M:\PD\WP3\Hwy003\3062-14-00 Simcoe to Renton\Technical Data\Dwg\
DRAWING NAME: Pavement Markings & Signage.dwg
LAYOUT NAME: 14+500 TO 15+200
LAST MODIFIED: Dec 3, 2019-11:08
PRINTED: Jan 21, 2019-16:23

NOTE:

1. PAVEMENT MARKINGS TO BE PLACED IN ACCORDANCE WITH OTM BOOK 11, WEST REGION DESIGN PREFERENCES FOR PAVEMENT MARKINGS, AND CONFIRMED BY THE CONTRACT ADMINISTRATOR.
2. ALL PAVEMENT MARKINGS AT SIGNALIZED INTERSECTIONS ARE TO BE PLACED IN ACCORDANCE WITH THE PHM 125 DRAWING PROVIDED.
3. SEE MTOD 101.070 FOR PAVEMENT MARKING LEGEND.
4. STOP BARS AND DIRECTIONAL ARROWS AT UN-SIGNALIZED INTERSECTIONS ARE TO BE PLACED IN ACCORDANCE WITH OTM BOOK 11 REQUIREMENTS.
5. CONTRACTOR SHALL REINSTATE ALL EXISTING PAVEMENT MARKINGS WITHIN THE DESIGNATED CONSTRUCTION ZONE FOLLOWING COMPLETION OF CONTRACT WORK.
6. PAVEMENT MARKINGS BEING APPLIED IN TRAFFIC PAINT ON NEW ASPHALT SURFACES REQUIRE TWO APPLICATIONS OF PAINT PRIOR TO PROJECT COMPLETION.

METRIC

PLATE No

CONT 2018-3010

WP 3062-14-00

PAVEMENT MARKINGS

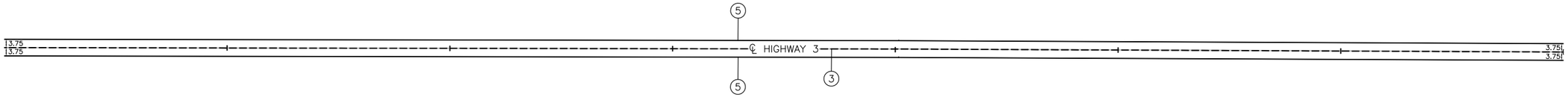
STA 15+200 TO STA 15+900

Survey _____ Revised _____

SHEET 35

MINISTRY OF TRANSPORTATION, ONTARIO PR-D-707 88-05

15+200 15+300 15+400 15+500 15+600 15+700 15+800 15+900



SCALE

10m 0 20m

Horizontal

DRAWING LOCATION: R:\PDT\WP\3\Hwy003\3062-14-00 Simcoe to Renton\Technical Data\Dwg\
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LAYOUT NAME: 15+200 TO 15+900
CREATED: Jan 3, 2014-11:44
LAST MODIFIED: Dec 3, 2018-11:08
PRINTED: Jan 21, 2019-16:23

NOTE:

1. PAVEMENT MARKINGS TO BE PLACED IN ACCORDANCE WITH OTM BOOK 11, WEST REGION DESIGN PREFERENCES FOR PAVEMENT MARKINGS, AND CONFIRMED BY THE CONTRACT ADMINISTRATOR.
2. ALL PAVEMENT MARKINGS AT SIGNALIZED INTERSECTIONS ARE TO BE PLACED IN ACCORDANCE WITH THE PHM 125 DRAWING PROVIDED.
3. SEE MTOD 101.070 FOR PAVEMENT MARKING LEGEND.
4. STOP BARS AND DIRECTIONAL ARROWS AT UN-SIGNALIZED INTERSECTIONS ARE TO BE PLACED IN ACCORDANCE WITH OTM BOOK 11 REQUIREMENTS.
5. CONTRACTOR SHALL REINSTATE ALL EXISTING PAVEMENT MARKINGS WITHIN THE DESIGNATED CONSTRUCTION ZONE FOLLOWING COMPLETION OF CONTRACT WORK.
6. PAVEMENT MARKINGS BEING APPLIED IN TRAFFIC PAINT ON NEW ASPHALT SURFACES REQUIRE TWO APPLICATIONS OF PAINT PRIOR TO PROJECT COMPLETION.

METRIC

PLATE No

CONT 2018-3010

WP 3062-14-00

PAVEMENT MARKINGS

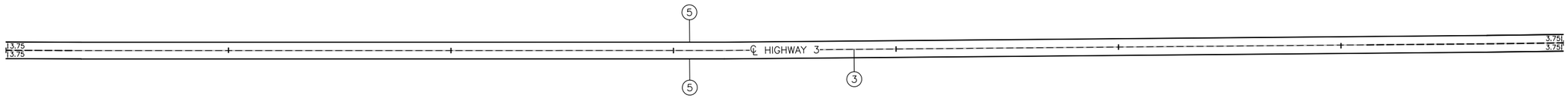
STA 15+900 TO STA 16+600

Survey _____ Revised _____

SHEET 36

MINISTRY OF TRANSPORTATION, ONTARIO PR-D-707 88-05

15+900 16+000 16+100 16+200 16+300 16+400 16+500 **16+600**



SCALE

10m 0 20m

Horizontal

DRAWING LOCATION: R:\PDT\WP\3\1wp003\3062-14-00 Simcoe to Renton\Technical Data\Dwg\
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PRINTED: Jan 21, 2019-16:23

NOTE:

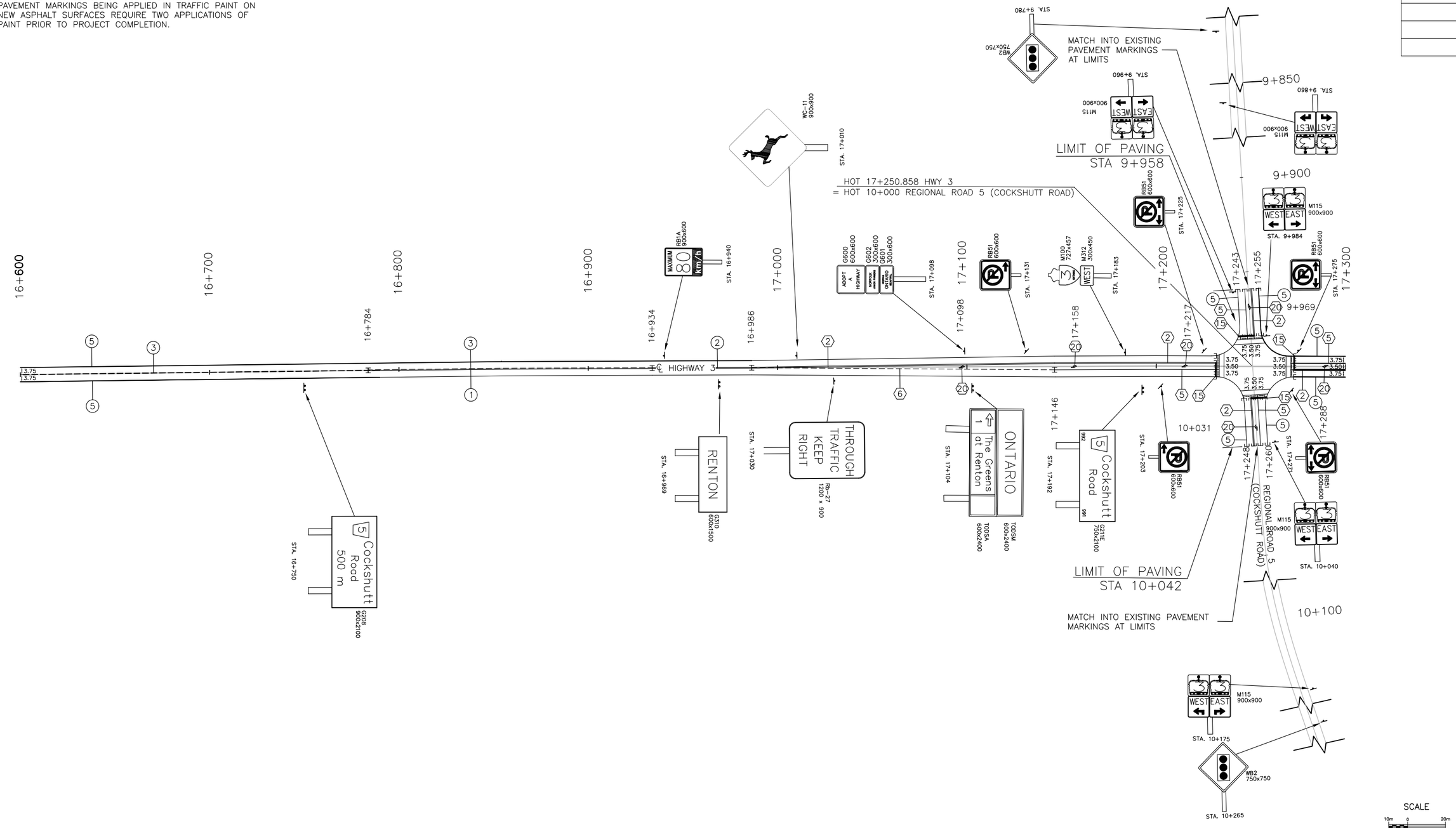
1. PAVEMENT MARKINGS TO BE PLACED IN ACCORDANCE WITH OTM BOOK 11, WEST REGION DESIGN PREFERENCES FOR PAVEMENT MARKINGS, AND CONFIRMED BY THE CONTRACT ADMINISTRATOR.
2. ALL PAVEMENT MARKINGS AT SIGNALIZED INTERSECTIONS ARE TO BE PLACED IN ACCORDANCE WITH THE PHM 125 DRAWING PROVIDED.
3. SEE MTOD 101.070 FOR PAVEMENT MARKING LEGEND.
4. STOP BARS AND DIRECTIONAL ARROWS AT UN-SIGNALIZED INTERSECTIONS ARE TO BE PLACED IN ACCORDANCE WITH OTM BOOK 11 REQUIREMENTS.
5. CONTRACTOR SHALL REINSTATE ALL EXISTING PAVEMENT MARKINGS WITHIN THE DESIGNATED CONSTRUCTION ZONE FOLLOWING COMPLETION OF CONTRACT WORK.
6. PAVEMENT MARKINGS BEING APPLIED IN TRAFFIC PAINT ON NEW ASPHALT SURFACES REQUIRE TWO APPLICATIONS OF PAINT PRIOR TO PROJECT COMPLETION.

METRIC

PLATE No
CONT 2018-3010
WP 3062-14-00

PAVEMENT MARKINGS
STA 16+600 TO STA 17+300
Survey _____ Revised _____

SHEET
37



MINISTRY OF TRANSPORTATION, ONTARIO PR-D-707 88-05

DRAWING LOCATION: M:\PD\WP3\Wwp003\3062-14-00 Simcoe to Renton\Technical Data\Dwg\
DRAWING NAME: 1 Pavement Markings & Signage.dwg
LAYOUT NAME: 16+600 TO 17+300
LAST MODIFIED: Dec 3, 2018-11:08
PLOTTED: Jan 21, 2019-14:23

METRIC

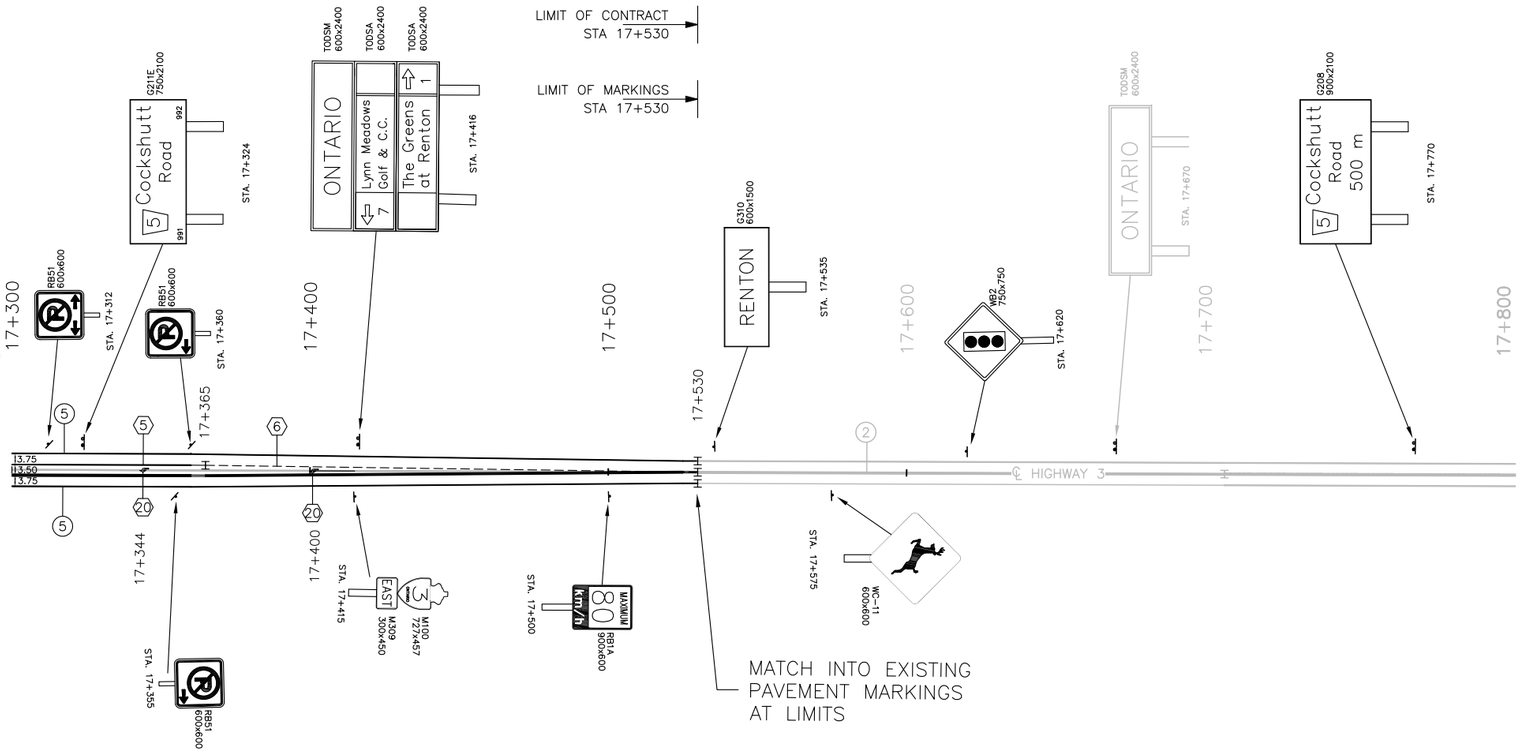
PLATE No
CONT 2018-3010
WP 3062-14-00

PAVEMENT MARKINGS
STA 17+300 TO STA 17+800
Survey _____ Revised _____

SHEET
38

NOTE:

1. PAVEMENT MARKINGS TO BE PLACED IN ACCORDANCE WITH OTM BOOK 11, WEST REGION DESIGN PREFERENCES FOR PAVEMENT MARKINGS, AND CONFIRMED BY THE CONTRACT ADMINISTRATOR.
2. ALL PAVEMENT MARKINGS AT SIGNALIZED INTERSECTIONS ARE TO BE PLACED IN ACCORDANCE WITH THE PHM 125 DRAWING PROVIDED.
3. SEE MTOD 101.070 FOR PAVEMENT MARKING LEGEND.
4. STOP BARS AND DIRECTIONAL ARROWS AT UN-SIGNALIZED INTERSECTIONS ARE TO BE PLACED IN ACCORDANCE WITH OTM BOOK 11 REQUIREMENTS.
5. CONTRACTOR SHALL REINSTATE ALL EXISTING PAVEMENT MARKINGS WITHIN THE DESIGNATED CONSTRUCTION ZONE FOLLOWING COMPLETION OF CONTRACT WORK.
6. PAVEMENT MARKINGS BEING APPLIED IN TRAFFIC PAINT ON NEW ASPHALT SURFACES REQUIRE TWO APPLICATIONS OF PAINT PRIOR TO PROJECT COMPLETION.



1	SOLID YELLOW,10cm
2	SOLID DOUBLE YELLOW,10cm
3	363 BROKEN YELLOW,10cm
4	SOLID YELLOW,20cm
5	SOLID WHITE,10cm
6	333 BROKEN WHITE,10cm
7	363 BROKEN WHITE,10cm
8	393 BROKEN WHITE,10cm
9	SOLID WHITE,20cm
10	111 BROKEN WHITE,20cm
11	333 BROKEN WHITE,20cm
12	333 BROKEN WHITE,30cm
13	SOLID WHITE,30cm
14	SOLID WHITE,45cm
15	SOLID WHITE,60cm
20	SYMBOLS
] [	LIMITS OF MARKINGS

NOTES:

1. 333, 363, 393, Denotes Pavement Marking Spacing (ie., 3 m line, 3 m gap, 3 m line)
2. Use (1) to Denote PAVEMENT MARKING
3. Use [1] to Denote PAVEMENT MARKING, TEMPORARY
4. Use <1> to Denote PAVEMENT MARKING, TEMPORARY-REMOVABLE
5. Use {1} to Denote PAVEMENT MARKING, DURABLE

MINISTRY OF TRANSPORTATION ONTARIO DRAWING	Date	1994 04 01	Rev	
LEGEND PAVEMENT MARKINGS	Issue Date WP Issued By			
	MTOD – 101.070			

SCALE
10m 0 20m
Horizontal

MINISTRY OF TRANSPORTATION, ONTARIO PR-D-707 88-05

DRAWING LOCATION: W:\PD\WP\3\Hwy003\3062-14-00 Simcoe to Renton\Technical Data\Dwg\
DRAWING NAME: 1 Pavement Marking & Signage.dwg
LAYOUT NAME: 17+300 TO 17+800
LAST MODIFIED: Dec 3, 2018-11:08
PLOTTED: Jan 21, 2019-10:23

METRIC

CONT	2018–3010
WP	3062–14–00
SIGN TABLES	SHEET 39

CONTRACT: 2018-3010 **GWP: WP 3062-14-00** **Contract Sign Table Builder**

Highway / Road Name	Travel Dir
Highway 3	WB

Work Details						Sign Details						Support Criteria		
L/R	Final Location	Removal Location	Post Action	Sign Action	Sign Ht (cm)	Sign Code	Sign Size h x w (mm)	Sign Message / Description	Face Dir	Sign Area (m2)	Comments	Support Area (m2)	Total Height	Max B_Dim
R	17+770		NP	NS		G208	900x2100	[5] COCKSHUTT | ROAD | 500 M	E	1.890		1.89	900	2100
R	17+670		EP	ES		TODSM	600x2400	TOURISM ONTARIO MASTHEAD	E	1.440				
R	17+620		RL	RS		WB2	750x750	TRAFFIC SIGNALS AHEAD	E	0.563		0.56	750	750
R		17+572	XP	XS		G208	900x2100	[5] COCKSHUTT | ROAD | 300 m	E					
R	17+535		RL	RS		G310	600x1500	RENTON	E	0.900		0.90	600	1500
R	17+416		EP	ES		TODSM	600x2400	TOURISM ONTARIO MASTHEAD	E	1.440				
				ES		TODSA	600x2400	LYNN MEADOWS | GOLF & C.C. [L:7]	E	1.440				
				ES		TODSA	600x2400	THE GREENS | AT RENTON [R:1]	E	1.440				
R	17+360	17+335	RL	RS		RB51	600x600	NO PARKING: LEFT	E	0.360	ANGLED 30–45 DEGREES TO TRAFFIC	0.36	600	600
R	17+324		RL	RS		G211E	750x2100	[5] COCKSHUTT | ROAD [911 L:991 R:992]	E	1.575		1.58	750	2100
R	17+312		RL	RS		RB51	600x600	NO PARKING: LEFT & RIGHT	E	0.360	ANGLED 30–45 DEGREES TO TRAFFIC	0.36	600	600
R	17+275		NP	NS		RB51	600x600	NO PARKING: L & R	E	0.360	ANGLED 30–45 DEGREES TO TRAFFIC	0.36	600	600
R	17+225		NP	NS		RB51	600x600	NO PARKING: L & R	E	0.360	ANGLED 30–45 DEGREES TO TRAFFIC	0.36	600	600
R	17+183		RL	RS		M100	720x450	HWY SHIELD: 3	E	0.324		0.46	1020	450
				RS		M312	300x450	WEST	E	0.135				
R	17+131		RL	RS		RB51	600x600	NO PARKING: RIGHT	E	0.360	ANGLED 30–45 DEGREES TO TRAFFIC	0.36	600	600
R	17+098		RL	RS		G600	600x600	ADOPT A HIGHWAY	E	0.360		0.72	1200	600
				RS		G602	300x600	GROUP: NORFOLK | JUNIOR FARMERS	E	0.180				
				RS		G601	300x600	KEEPING ONTARIO BEAUTIFUL / MEN AT WORK	E	0.180				
R	17+010		NP	NS		WC11	900x900	DEER CROSSING	E	0.810		0.81	900	900
R	16+940	17+149	RL	RS		RB1A	900x600	MAXIMUM 80 KM/H	E	0.540		0.54	900	600
R	14+070	13+920	RL	RS		G207	600x2100	BLUE LINE | ROAD	E	1.260		2.21	1050	2100
				RS		G304	450x2100	WATERFORD (A: ADV R90)	E	0.945				
R	14+000	13+961	RL	RS		WB2	750x750	TRAFFIC SIGNALS AHEAD	E	0.563		0.56	750	750
R	13+866		RL	RS		RB27	1200x900	THROUGH TRAFFIC KEEP RIGHT	E	1.080		1.08	1200	900
R	13+804		EP	ES		TODSM	600x2400	TOURISM ONTARIO MASTHEAD	E	1.440				
				ES		TODSA	600x2400	SPRINGVIEW | FARM GOLF [R:7]	E	1.440				
R	13+709		RL	RS		G207E	750x2100	BLUE LINE | ROAD [911 L:1207 R:1208]	E	1.575		2.52	1200	2100
				RS		G304	450x2100	WATERFORD (A: R90)	E	0.945				
R	13+586		RL	RS		M100	727x457	HWY SHIELD: 3	E	0.332		0.47	1027	457
				RS		M312	300x450	WEST	E	0.135				
R	13+515	13+504	RL	RS		RB1A	900x600	MAXIMUM 80 KM/H	E	0.540		0.54	900	600
R	13+450		NP	NS		G205	600x1800	CULVER | ROAD (A: ADV R90)	E	1.080		1.08	600	1800
R		13+212	XP	XS		WA13AR	600x600	INTERSECTION: RIGHT	E					
R	13+120	13100	RL	RS		G205E	750x1800	CULVER | ROAD [911 R:1] (A: R90)	E	1.350		1.35	750	1800
R	12+185	12+098	RL	RS		G205	600x2100	IRELAND | ROAD (A: ADV L90)	E	1.260		1.26	600	2100
R	12+075	12+042	RL	ES		RB5A	900x600	60 KM/H AHEAD	E	0.540		0.54	900	600
R	12+010	11+932	RL	RS		G310	600x1800	SIMCOE	E	1.080		1.08	600	1800
R	11+950	11+819	RL	RS		M601	600x600	COLLEGE: FANSHAWE	E	0.360		0.50	900	600
				RS		M301	300x450	ARROW: L90	E	0.135				
R	11+885	11+847	RL	RS		G205	750x1800	IRELAND | ROAD [911 L:350] (A: L90)	E	1.350		1.35	750	1800
R	11+824	11+823	RL	RS		RB3	1200x600	MAXIMUM 60 KM/H BEGINS	E	0.720		0.72	1200	600
				RS		CL	0x0	CONNECTING LINK MARKER	E					
R	11+805	11+878	RL	RS		WB2	750x750	TRAFFIC SIGNALS AHEAD	E	0.563		0.56	750	750
R	11+801		RL	RS		WA8LR	1200x1200	CHECKERBOARD: LEFT & RIGHT	N	1.440		1.44	1200	1200

New	5
Relocate	24
Removal	2

NOTES

EDGE OF PAVEMENT: THE OUTSIDE EDGE OF THE NEAREST SOLID WHITE LANE EDGE LINE, OR, IF ABSENT, THE PHYSICAL EDGE OF PAVEMENT.

SIGN HEIGHT: THE VERTICAL MEASUREMENT AS MEASURED FROM EDGE OF PAVEMENT TO THE BOTTOM OF SIGN SIGN.

TODS = TOURISM DESTINATION SIGNS TO BE RELOCATED BY OTHERS

ACTION CODES

SIGNS:

NS = NEW SIGN BOARD INSTALLATION.

RS = REPLACE SIGN WITH NEW SIGN BEARING SAME MESSAGE. REMOVE & DISPOSE OF EXISTING.

ES = EXISTING SIGN BOARD (ON EXISTING SUPPORT, OR SALVAGED ELSEWHERE IN CONTRACT).

XS = REMOVE & DISPOSE OF SIGN BOARD.

SUPPORTS:

NP = NEW SUPPORT.

RL = RELOCATE SUPPORT AND DISPOSE OF EXISTING.

XP = REMOVE & DISPOSE OF SUPPORT.

EP = EXISTING POST.

MINISTRY OF TRANSPORTATION, ONTARIO PR-0-707 88-05

DRAWING LOCATION: N:\PDV\WP\Live\wp\3062\3062-14-00 Simcoe to Renton\Technical Data\Dwg\
DRAWING NAME: 11_5_Sign Tables.dwg
LAYOUT NAME: Highway 3 WB (01)
CAD SOFTWARE VERSION: AutoCAD 2018
LAST MODIFIED: Nov 19, 2018 - 10:25
PRINTED: Jan 21, 2019 - 16:54

METRIC

CONT	2018-3010
WP	3062-14-00

SIGN TABLES

SHEET 40

CONTRACT: 2018-3010 **GWP: WP 3062-14-00** **Contract Sign Table Builder**

Highway / Road Name	Travel Dir
Highway 3	EB

Work Details						Sign Details						Support Criteria		
L/R	Final Location	Removal Location	Post Action	Sign Action	Sign Ht (cm)	Sign Code	Sign Size h x w (mm)	Sign Message / Description	Face Dir	Sign Area (m2)	Comments	Support Area (m2)	Total Height	Max B_Dim
R	11+324		RL	RS		RB3	1200x600	MAXIMUM 80 KM/H BEGINS	W	0.720		0.72	1200	600
R	11+370	11+850	RL	RS		G600	600x600	ADOPT A HIGHWAY	W	0.360		0.72	1200	600
				RS		G602	300x600	GROUP: NORFOLK | JUNIOR FARMERS	W	0.180				
				RS		G601	300x600	KEEPING ONTARIO BEAUTIFUL / MEN AT WORK	W	0.180				
R	11+988		RL	RS		WA23R	900x900	RIGHT LANE ENDS	W	0.810	near fire hydrant #404 (911 4024)	0.81	900	900
R	12+073		RL	RS		G736	1200x900	511 TRAVEL INFO	W	1.080		1.08	1200	900
R	12+169		RL	RS		RB1A	600x900	MAXIMUM 80 KM/H	W	0.540		0.54	600	900
R	12+341		NP	NS		G205	600x1800	CULVER | ROAD (A: ADV L90)	W	1.080		1.08	600	1800
R		12+859	XP	XS		WA13AL	600x600	INTERSECTION: LEFT	W					
R	12+917		RL	RS		G205E	750x1800	CULVER | ROAD [911 L:1] (A: L90)	W	1.350		1.35	750	1800
R	13+041		RL	RS		WA8LR	1200x1200	CHECKERBOARD - LEFT & RIGHT	N	1.440		1.44	1200	1200
R		13+084	XP	XS		WC11	600x600	DEER CROSSING	W					
R	13+100		NP	NS		WC11	900x900	DEER CROSSING	W	0.810		0.81	900	900
R	13+215	13+346	RL	RS		G207	600x2100	BLUE LINE | ROAD	W	1.260		2.21	1050	2100
				RS		G304	450x2100	WATERFORD (A: ADV L90)	W	0.945				
R	13+285	13+432	RL	RS		WB2	750x750	TRAFFIC SIGNALS AHEAD	W	0.563		0.56	750	750
R	13+396		RL	RS		RB27	1200x900	THROUGH TRAFFIC KEEP RIGHT	W	1.080		1.08	1200	900
R	13+482		EP	ES		TODSM	600x2400	TOURISM ONTARIO MASTHEAD	W	1.440				
				ES		TODSA	600x2400	LYNN MEADOWS | GOLF & C.C. [R:5]	W	1.440				
R	13+576		RL	RS		G207E	750x2100	BLUE LINE | ROAD [911 L:1208 R:1207]	W	1.575		2.52	1200	2100
				RS		G304	450x2100	WATERFORD (A: L90)	W	0.945				
R	13+392		RL	RS		M100	720x450	HWY SHIELD: 3	W	0.324		0.46	1020	450
				RS		M309	300x450	EAST	W	0.135				
R	13+780	13+805	RL	RS		RB1A	900x600	MAXIMUM 80 KM/H	W	0.540		0.54	900	600
R	16+750		NP	NS		G208	900x2100	[5] COCKSHUTT | ROAD | 500 M	W	1.890		1.89	900	2100
R		16+921	XP	XS		G208	900x2100	[5] COCKSHUTT | ROAD | 300 M	W					
R	16+969		RL	RS		G310	600x1500	RENTON	W	0.900		0.90	600	1500
R	17+030	17+003	RL	RS		RB27	1200x900	THROUGH TRAFFIC KEEP RIGHT	W	1.080		1.08	1200	900
R	17+104		EP	ES		TODSM	600x2400	TOURISM ONTARIO MASTHEAD	W	1.440				
				ES		TODSA	600x2400	THE GREENS | AT RENTON [L:1]	W	1.440				
R	17+192		RL	RS		G211E	750x2100	[5] COCKSHUTT | ROAD [911 L:992 R:991]	W	1.575		1.58	750	2100
R	17+203		RL	RS		RB51	600x600	NO PARKING: LEFT	W	0.360	ANGLED 30-45 DEGREES TO TRAFFIC	0.36	600	600
R	17+271		RL	RS		RB51	600x600	NO PARKING: LEFT & RIGHT	W	0.360	ANGLED 30-45 DEGREES TO TRAFFIC	0.36	600	600
R		17+295	XP	XS		RB51	600x600	NO PARKING: LEFT & RIGHT	W		ANGLED 30-45 DEGREES TO TRAFFIC			
R	17+355		NP	NS		RB51	600x600	NO PARKING: RIGHT	W	0.360	ANGLED 30-45 DEGREES TO TRAFFIC	0.36	600	600
R	17+415	17+521	RL	RS		M100	720x450	HWY SHIELD: 3	W	0.324		0.46	1020	450
				RS		M309	300x450	EAST	W	0.135				
R	17+500		NP	NS		RB1A	900x600	MAXIMUM 80 KM/H	W	0.540		0.54	900	600
R	17+575		NP	NS		WC11	600x600	DEER CROSSING	W	0.360		0.36	600	600

New	6
Relocate	19
Removal	4

NOTES

EDGE OF PAVEMENT: THE OUTSIDE EDGE OF THE NEAREST SOLID WHITE LANE EDGE LINE, OR, IF ABSENT, THE PHYSICAL EDGE OF PAVEMENT.

SIGN HEIGHT: THE VERTICAL MEASUREMENT AS MEASURED FROM EDGE OF PAVEMENT TO THE BOTTOM OF SIGN SIGN.

TODS = TOURISM DESTINATION SIGNS TO BE RELOCATED BY OTHERS

ACTION CODES

SIGNS:

NS = NEW SIGN BOARD INSTALLATION.

RS = REPLACE SIGN WITH NEW SIGN BEARING SAME MESSAGE. REMOVE & DISPOSE OF EXISTING.

ES = EXISTING SIGN BOARD (ON EXISTING SUPPORT, OR SALVAGED ELSEWHERE IN CONTRACT).

XS = REMOVE & DISPOSE OF SIGN BOARD.

SUPPORTS:

NP = NEW SUPPORT.

RL = RELOCATE SUPPORT AND DISPOSE OF EXISTING.

XP = REMOVE & DISPOSE OF SUPPORT.

EP = EXISTING POST.

MINISTRY OF TRANSPORTATION, ONTARIO PR-2D-707 88-05

DRAWING LOCATION: N:\PD\LWP'S\Hwy003\3062-14-00 Simcoe to Renton\Technical Data\Dwg\
DRAWING NAME: 11.5_Sign Tables.dwg
LAYOUT NAME: Hwy 3 EB (2)
CREATED: Oct. 20, 2016 - 09:02
LAST MODIFIED: May 9, 2019 - 10:25
PRINTED: Jan. 21, 2019 - 16:24

METRIC

CONT 2018-3010
WP 3062-14-00

SIGN TABLES

SHEET 41

NOTES

EDGE OF PAVEMENT: THE OUTSIDE EDGE OF THE NEAREST SOLID WHITE LANE EDGE LINE, OR, IF ABSENT, THE PHYSICAL EDGE OF PAVEMENT.

SIGN HEIGHT: THE VERTICAL MEASUREMENT AS MEASURED FROM EDGE OF PAVEMENT TO THE BOTTOM OF SIGN SIGN.

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ACTION CODES

SIGNS:

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RL = RELOCATE SUPPORT AND DISPOSE OF EXISTING.

XP = REMOVE & DISPOSE OF SUPPORT.

EP = EXISTING POST.

CONTRACT: 2018-3010 **GWP: WP 3062-14-00** **Intersecting Roads**

Work Details						Sign Details						Support Criteria				
L/R	Final Location	Removal Location	Post Action	Sign Action	Sign Ht (cm)	Sign Code	Sign Size h x w (mm)	Sign Message / Description	Face Dir	Sign Area (m2)	Comments	Support Area (m2)	Total Height	Max B_Dim	Support Options	Exist SupType
CULVER ROAD					**SB**											
R	09+828		RL	RS		WB1	900x900	STOP AHEAD	N	0.810		0.81	900	900	7	
R	09+982		RL	RS		RA1	750x750	STOP	N	0.563		0.56	750	750	5	
BLUE LINE ROAD					**SB**											
R	09+668		RL	RS		WB2	750x750	TRAFFIC SIGNALS AHEAD	N	0.563		0.56	750	750	5	
R	09+830		NP	NS		M115	900x900	HWY: 3 EAST (A: ADV L90) WEST (A: ADV R90)	N	0.810		0.81	900	900	7	
R	09+950		NP	NS		M115	900x900	HWY: 3 EAST (A: L90) WEST (A: R90)	N	0.810		0.81	900	900	7	
R		10+019	XP	XS		M104	450x450	HWY. CROWN: 3	N		[#3 BRACKET] TPOLE					
				XS		M311	450x450	EAST (A: L90)	N							
				XS		M104	450x450	HWY. CROWN: 3	N							
				XS		M314	450x450	WEST (A: R90)	N							
BLUE LINE ROAD					**NB**											
R	10+318		RL	RS		WB2	750x750	TRAFFIC SIGNALS AHEAD	S	0.563		0.56	750	750	5	
R	10+250		NP	NS		M115	900x900	HWY: 3 WEST (A: ADV L90) EAST (A: ADV R90)	S	0.810		0.81	900	900	7	
R	10+060		NP	NS		M115	900x900	HWY: 3 WEST (A: L90) EAST (A: R90)	S	0.810		0.81	900	900	7	
R		09+983	XP	XS		M115	900x900	HWY: 3 WEST (A: L90) EAST (A: R90)	S		TPOLE					
[5] COCKSHUTT ROAD					**SB**											
R	09+780	09+661	RL	RS		WB2	750x750	TRAFFIC SIGNALS AHEAD	N	0.563		0.56	750	750	5	
R	09+860		NP	NS		M115	900x900	HWY: EAST (A: ADV L90) WEST (A: ADV R90)	N	0.810		0.81	900	900	7	
R	09+960	10+020	RL	RS		M115	900x900	HWY: 3 EAST (A: L90) WEST (A: R90)	N	0.810		0.81	900	900	7	
[5] COCKSHUTT ROAD					**NB**											
R	10+265	10+346	RL	RS		WB2	750x750	TRAFFIC SIGNALS AHEAD	S	0.563		0.56	750	750	5	
R	10+175		NP	NS		M115	900x900	HWY: 3 WEST (A: ADV L90) EAST (A: ADV R90)	S	0.810		0.81	900	900	7	
R	10+040		NP	NS		M115	900x900	HWY: 3 WEST (A: L90) EAST (A: R90)	S	0.810		0.81	900	900	7	
R		09+984	XP	XS		M115	900x900	HWY: 3 WEST (A: L90) EAST (A: R90)	S		BANDED TO LT POLE					

MINISTRY OF TRANSPORTATION, ONTARIO
FR-D-707 88-05
DRAWING LOCATION: W:\PD\WP'S\Hwy033\3062-14-00 Simcoe to Renton\Technical Data\Dwg\
DRAWING NAME: 11.5_Sign_Tables.dwg
LAYOUT NAME: Hwy033_Intersecting Roads (03)
CREATED: Oct. 20, 2018-08:05
LAST MODIFIED: Mar. 18, 2019-10:25
PRINTED: Jan. 21, 2019-16:25

METRIC

PLATE No
CONT 2018-3010
WP 3062-14-00

SOILS DATA

Survey

SHEET 42

GEOTECHNICAL SURVEY DATA SHEET DISCLAIMER

GEOTECHNICAL SURVEY DATA	
DATE OF SURVEY	**TYPE OF SURVEY**
March 28th to April 1st 2016.	The investigation of Highway 3 comprised **21** cores, **85** boreholes and core/boreholes; GPR and Pavement and Shoulder Survey, every 1000 m EB and WB.

NOTE:

- CONDITIONS APPLY ONLY TO THE TIME OF THE SURVEY.
- THE BOUNDARIES BETWEEN STRATA HAVE BEEN ESTABLISHED ONLY AT BOREHOLE LOCATIONS. BETWEEN BOREHOLES THE BOUNDARIES ARE ASSUMED.
- SOILS ARE DESCRIBED ACCORDING TO THE MTO CLASSIFICATION SYSTEM.
- DIMENSIONS ARE IN METRES AND/OR MILLIMETRES UNLESS OTHERWISE SHOWN.
- ABBREVIATIONS ARE PER OPSD 100.060

ABBREVIATIONS:

L/M/HSFH	Low /Medium/ High Susceptibility to Frost Heave
MWD	Maximum Wet Density
w	Water Content
w_L	Liquid Limit
I_P	Plasticity Index = $w_L - w_P$
w_{opt}	Optimum Water Content
w_p	Plastic Limit
c_U	Undrained Shear Strength
S_t	Sensitivity = Undrained shear strength / remoulded shear strength

Assignment #6 Part B	**Consultant Agreement #3014-E-0003**	**WP 3062-14-00 – Part B:** Hwy 3 from Town of Simcoe East Limits (Ireland Road) To Renton (Norfolk County Road 5/Cockshutt Road), Sta (11+800 to 17+530), Twp of Townsend - approx 5.8 km

June 2016
Reference Number: TB15300506 - B

MTO West Region Retainer 3014-E-0003
Assign #6: WP 3062-14-00
Part B_Hwy 3 the Town of Simcoe E Limits (Ireland Rd) to Renton (Norfolk CR 5/Cockshutt Rd)
Approx 5.8 km.

BOREHOLE LOG DATA

The limits of investigation for Part B from Station 11+800 – Station 17+530, Twp of Townsend

CBH# 1- EBL — **Sta (12+000), 5.3 m Rt of CL**
MDL — NAD'83 Coordinates: 17 T 558575 4744380

0	-	280	Asph		
280	-	450	Sa & Gr	Moist	(Fill)
450	-	700	Sa some Gr	Moist	(Fill)
700	-	890	Conc		
890	-	1.2 m	Si(y) Sa & Gr	Moist	(Fill)
1.2 m	-	1.5 m	Blk Gry Si(y) Cl W Org	Moist	(Fill)

BH# 2- EBL — **Sta (12+000), 8.4 m Rt of CL**
MSH — NAD'83 Coordinates: 17 T 558577 4744377

0	-	400	Sa & Gr		
400	-	800	Si(y) F Sa	Moist	(Fill)
800	-	1.5	Sa(y) Si(y) Cl Tr Gr (w = 14.3%)	Moist	(Fill)

Sieve	% Pass
4.75 mm	94.3
2.00 mm	92.6
425 µm	84.2
75 µm	61.0
5 µm	18.0
2 µm	12.0
	MSFH
	Soil Classification: CL $W_L/W_P/I_P$= 29/16/13

And > 40%.
Adjective (Si(y), Sa(y) 33-40%
With 20-30%
Some 10-20%
Trace 1-10%

METRIC

PLATE No
CONT 2018-3010
WP 3062-14-00

SOILS DATA

Survey _____

SHEET 43

MTO West Region Retainer 3014-E-0003
Assign #6: WP 3062-14-00
Part B_Hwy 3 the Town of Simcoe E Limits (Ireland Rd) to
Renton (Norfolk CR 5/Cockshutt Rd)
Approx 5.8 km.

BOREHOLE LOG DATA

CBH# 3- WBL — **Sta (12+500), 2.1 m Lt of CL**
MDL — NAD'83 Coordinates: 17 T 559065 4744491

0	-	250	Asph		
250	-	500	Gr(y) Sa some Si (w= 3.0%)	Moist	(Fill)

Sieve	% Pass
19 mm	94.2
13.2 mm	87.2
9.5 mm	80.8
4.75 mm	65.5
1.18 mm	49.1
300 µm	23.6
75 µm	17.1
	Accep. SSM

500	-	760	Sa W Si & Gr	Moist	(Fill)

Sieve	% Pass
19 mm	97.2
13.2 mm	90.6
9.5 mm	83.8
4.75 mm	72.9
1.18 mm	58.0
300 µm	30.3
75 µm	22.0
	Accep. SSM

760	-	1.5 m	Br Si(y) Sa Tr Gr & Cl (w= 11.1%)	Moist	(Fill)

Sieve	% Pass
4.75 mm	99.0
2.00 mm	98.1
425 µm	93.2
75 µm	34.0
5 µm	6.0
2 µm	4.0
	LSFH
	Soil Classification: Non-Plastic

And > 40%.
Adjective (Si(y), Sa(y) 30-40%
With 20-30%
Some 10-20%
Trace 1-10%

MTO West Region Retainer 3014-E-0003
Assign #6: WP 3062-14-00
Part E_Hwy 3 the Town of Simcoe E Limits (Ireland Rd) to
Renton (Norfolk CR 5/Cockshutt Rd)
Approx 5.8 km.

BOREHOLE LOG DATA

BH# 4- WBL — **Sta (12+500), 6.0 m Lt of CL**
MSH — NAD'83 Coordinates: 17 T 559063 4744496

0	-	300	Sa & Gr		
300	-	600	F Sa Tr Gr	Moist	(Fill)
600	-	1.5 m	Br Si(y) F Sa	Moist	(Fill)

BH# 5- EBL — **Sta (12+800), 4.1 m Rt of CL**
EP — NAD'83 Coordinates: 17 T 559350 4744555

0	-	200	Asph		
200	-	460	Sa & Gr	Moist	(Fill)
460	-	750	Gr(y) Sa Tr Cob	Moist	(Fill)
750	-	1.5 m	Si(y) F Sa Tr Gr	Moist	(Native)

BH# 6- EBL — **Sta (12+800), 5.7m Rt of CL**
MSH — NAD'83 Coordinates: 17 T 559351 4744553

0	-	400	Sa & Gr		
400	-	600	Gr(y) Sa	Moist	(Fill)
600	-	1.5 m	Si(y) F Sa Tr Gr	Moist to wet	(Native)

BH# 7- EBL — **Sta (12+800), 9.2 m Rt of CL**
Mid Slope — NAD'83 Coordinates: 17 T 559353 4744550

0	-	200	Tps		
200	-	660	Si(y) F Sa	Moist	(Fill)
660	-	1.5 m	Si(y) F Sa Tr Gr	Moist	(Native)

BH# 8- EBL — **Sta (12+800), 13.2 m Rt of CL**
TOS — NAD'83 Coordinates: 17 T 559353 4744545

0	-	150	Tps Si(y) Sa W Rootlets		
150	-	500	F Sa Tr Gr	Moist	(Fill)
500	-	1.5 m	Gr(y) Sa	Moist	(Native)

BH# 9- WBL — **Sta (12+800), 4.1 m Lt of CL**
EP — NAD'83 Coordinates: 17 T 559351 4744558

0	-	180	Asph		
180	-	460	Sa & Gr	Moist	(Fill)
460	-	800	Gr(y) Sa	Moist	(Fill)
800	-	1.5 m	Si(y) F Sa Tr Gr	Moist	(Native)

And > 40%.
Adjective (Si(y), Sa(y) 30-40%
With 20-30%
Some 10-20%
Trace 1-10%

MTO West Region Retainer 3014-E-0003
Assign #6: WP 3062-14-00
Part B_Hwy 3 the Town of Simcoe E Limits (Ireland Rd) to
Renton (Norfolk CR 5/Cockshutt Rd)
Approx 5.8 km.

BOREHOLE LOG DATA

BH# 10- WBL — **Sta (12+800), 5.5m Lt of CL**
MSH — NAD'83 Coordinates: 17 T 559351 4744558

0	-	350	Sa & Gr		
350	-	700	Gr(y) Sa	Moist	(Fill)
700	-	1.5 m	Si(y) Sa Tr Gr	Moist	(Native)

BH# 11- WBL — **Sta (12+800), 9.1 m Lt of CL**
Mid Slope — NAD'83 Coordinates: 17 T 559348 4744561

0	-	150	Tps		
150	-	500	Sa Tr Gr	Moist	(Fill)
500	-	1.5 m	F Sa Tr Gr	Moist	(Native)

BH# 12- EBL — **Sta (12+800), 11.7 m Rt of CL**
TOS — NAD'83 Coordinates: 17 T 559346 4744563

0	-	150	Tps		
150	-	560	Si(y) F Sa Tr Gr	Moist	(Fill)
560	-	1.5 m	F Sa Tr Gr	Moist	(Native)

BH# 13- EBL — **Sta (12+850), 4.1 m Rt of CL**
EP — NAD'83 Coordinates: 17 T 559399 4744562

0	-	210	Asph		
210	-	460	Gr(y) Sa some Si	Moist	(Fill)

Sieve	% Pass
19 mm	96.9
13.2 mm	87.9
9.5 mm	78.7
4.75 mm	61.6
1.18 mm	39.1
300 µm	20.3
75 µm	12.0
	Accep. SSM

And > 40%.
Adjective (Si(y), Sa(y) 30-40%
With 20-30%
Some 10-20%
Trace 1-10%

MTO West Region Retainer 3014-E-0003
Assign #6: WP 3062-14-00
Part B_Hwy 3 the Town of Simcoe E Limits (Ireland Rd) to
Renton (Norfolk CR 5/Cockshutt Rd)
Approx 5.8 km.

BOREHOLE LOG DATA

460	-	800	Sa W Gr some Si	Moist	(Fill)

Sieve	% Pass
13.2 mm	92.4
9.5 mm	86.6
4.75 mm	72.3
1.18 mm	53.1
300 µm	26.4
75 µm	16.0
	Accep. SSM

800	-	1.5 m	Sa(y) Gr some Si Tr Cl (w = 4.9%)	Moist	(Native)

Sieve	% Pass
4.75 mm	46.8
2.00 mm	40.5
425 µm	31.0
75 µm	11.5
5 µm	4.0
2 µm	2.0
	LSFH
	Soil Classification: Non-Plastic

BH#14- WBL — **Sta (12+850), 4.0 m Lt of CL**
EP — NAD'83 Coordinates: 17 T 559397 4744570

0	-	200	Asph		
200	-	450	Sa & Gr	Moist	(Fill)
450	-	780	Gr(y) Sa	Moist	(Fill)
780	-	1.5 m	Si(y) F Sa Tr Gr	Moist	(Native)

BH# 15- EBL — **Sta (12+900), 4.1 m Rt of CL**
EP — NAD'83 Coordinates: 17 T 559432 4744570

0	-	250	Asph		
250	-	460	Sa & Gr	Moist	(Fill)
460	-	800	Gr(y) Sa	Moist	(Fill)
800	-	1.5 m	Si(y) F Sa Tr Gr	Moist	(Native)

And > 40%.
Adjective (Si(y), Sa(y) 30-40%
With 20-30%
Some 10-20%
Trace 1-10%

METRIC

PLATE No
CONT 2018-3010
WP 3062-14-00

SOILS DATA

Survey _____

SHEET 45

MTO West Region Retainer 3014-E-0003
Assign #6: WP 3062-14-00
Part B_Hwy 3 the Town of Simcoe E Limits (Ireland Rd to
Renton (Norfolk CR 5/Cockshutt Rd)
Approx 5.8 km.

amec foster wheeler

BOREHOLE LOG DATA

BH# 16- EBL — **Sta (12+900), 7.4 m Rt of CL**
SHR — NAD'83 Coordinates: 17 T 559433 4744567

0	-	200	Tps		
200	-	680	Sa & Gr	Moist	(Fill)
680	-	1.5 m	Si(y) F Sa some Gr	Moist	(Native)

BH# 17- EBL — **Sta (12+900), 9.1 m Rt of CL**
Mid Slope — NAD'83 Coordinates: 17 T 559434 4744566

0	-	180	Tps		
180	-	650	Si(y) Sa Tr Gr & Org	Moist	(Fill)
650	-	1.5 m	Si(y) F Sa Tr Gr	Moist	(Native)

BH# 18- EBL — **Sta (12+900), 10.4 m Rt of CL**
TOS — NAD'83 Coordinates: 17 T 559435 4744563

0	-	200	Tps, Dk Br Si(y) Sa W Org & Rootlets		
200	-	380	Si(y) Sa Tr Gr	Moist	(Fill)
380	-	800	Br Si(y) Sa Tr Cob some Gr	Moist	(Fill)
800	-	1.5 m	Br Si(y) Sa some Cob & Gr	Moist	(Fill)

BH# 19- WBL — **Sta (12+900), 4.2 m Lt of CL**
EP — NAD'83 Coordinates: 17 T 559430 4744578

0	-	220	Asph		
220	-	460	Gr(y) Sa	Moist	(Fill)
460	-	700	Sa & Gr	Moist	(Fill)
700	-	1.5 m	Br Si(y) Sa & Gr	Moist	(Native)

BH# 20- WBL — **Sta (12+900), 7.4 m Lt of CL**
SHR — NAD'83 Coordinates: 17 T 559430 4744581

0	-	160	Tps		
160	-	700	Sa & Gr	Moist	(Fill)
700	-	1.5 m	Si(y) Sa Tr Gr & Cob	Moist	(Native)

BH# 21- WBL — **Sta (12+900), 8.6 m Lt of CL**
Mid Slope — NAD'83 Coordinates: 17 T 559431 4744582

0	-	150	Tps		
150	-	650	Si(y) Sa Tr Gr	Moist	(Fill)
650	-	1.5 m	Si(y) F Sa Tr Gr & Cob	Moist	(Native)

And > 40%.
Adjective (Si(y), Sa(y) 30-40%
With 20-30%
Some 10-20%
Trace 1-10%

MTO West Region Retainer 3014-E-0003
Assign #6: WP 3062-14-00
Part B_Hwy 3 the Town of Simcoe E Limits (Ireland Rd; to
Renton (Norfolk CR 5/Cockshutt Rd)
Approx 5.8 km.

amec foster wheeler

BOREHOLE LOG DATA

BH# 22- WBL — **Sta (12+900), 11.4 m Lt of CL**
TOS — NAD'83 Coordinates: 17 T 559431 4744583

0	-	250	Tps, Dk Br Si(y) Sa W Rootlets & Org		
250	-	450	Gr(y) Sa Tr Cob	Moist	(Fill)
450	-	600	Si(y) Sa Tr Gr	Moist	(Fill)
600	-	890	Si(y) Sa Tr Gr Occ Cob	Moist	(Native)
890	-	1.5 m	Si(y) Sa Tr Gr Occ Cob	Moist	(Native)

BH# 23- EBL — **Sta (12+950), 3.9 m Rt of CL**
EP — NAD'83 Coordinates: 17 T 559481 4744580

0	-	260	Asph		
260	-	500	Sa & Gr	Moist	(Fill)
500	-	760	Gr(y) Sa	Moist	(Fill)
760	-	1.5 m	Si(y) F Sa & Gr Tr Cob	Moist	(Native)

BH# 24- WBL — **Sta (12+950), 3.9 m Lt of CL**
EP — NAD'83 Coordinates: 17 T 559479 4744587

0	-	200	Asph		
200	-	400	Sa W Gr some Si (w = 4.6%)	Moist	(Fill)

Sieve	% Pass
19 mm	96.9
13.2 mm	92.4
9.5 mm	87.5
4.75 mm	75.4
1.18 mm	57.3
300 µm	22.5
75 µm	15.0
	Accep. SSM

And > 40%.
Adjective (Si(y), Sa(y) 30-40%
With 20-30%
Some 10-20%
Trace 1-10%

BOREHOLE LOG DATA

400	-	700	Gr(y) Sa some Si	Moist	(Fill)

Sieve	% Pass
19 mm	93
13.2 mm	85.9
9.5 mm	78.7
4.75 mm	69.8
1.18 mm	54.5
300 µm	24.8
75 µm	17.0
	Accep. SSM

700	-	1.0 m	Sa & Gr some Cr Stn	Moist	(Fill)
1.0 m	-	1.5 m	Gr(y) Sa some Si Tr Cl (w = 5.5%)	Moist	(Native)

Sieve	% Pass
4.75 mm	68.0
2.00 mm	58.5
425 µm	33.2
75 µm	15.2
5 µm	5.0
2 µm	3.0
	LSFH
	Soil Classification: Non-Plastic

BH# 25- EBL — **Sta (13+000), 4.2 m Rt of CL**
EP — NAD'83 Coordinates: 17 T 559528 4744591

0	-	200	Asph		
200	-	400	Sa & Gr	Moist	(Fill)
400	-	700	Gr(y) Sa	Moist	(Fill)
700	-	1.5 m	Si(y) F Sa Tr Gr & Cob	wet	(Native)

BH# 26- EBL — **Sta (13+000), 7.2 m Rt of CL**
SHR — NAD'83 Coordinates: 17 T 559529 4744588

0	-	150	Tps		
150	-	480	Gry Si(y) Sa Tr Gr	Moist	(Fill)
480	-	1.5 m	Br Si(y) F Sa Tr Gr	Moist	(Fill)

And > 40%.
Adjective (Si(y), Sa(y) 30-40%
With 20-30%
Some 10-20%
Trace 1-10%

BOREHOLE LOG DATA

BH# 27- EBL — **Sta (13+000), 9.2 m Rt of CL**
Mid Slope — NAD'83 Coordinates: 17 T 559529 4744588

0	-	150	Tps, Br Si(y) Sa W Rootlets		
150	-	500	Br to Gry Si(y) Sa Tr Gr	Moist	(Fill)
500	-	1.5 m	Br Sa W Si Tr Gr & Cl (w = 17.3%)	wet	(Native)

Sieve	% Pass
4.75 mm	92.9
2.00 mm	89.5
425 µm	81.6
75 µm	35.7
5 µm	13.0
2 µm	10.0
	LSFH
	Soil Classification: CL-ML $W_L/W_P/I_P$ = 19/15/4

BH# 28- EBL — **Sta (13+000), 11.2 m Rt of CL**
TOS — NAD'83 Coordinates: 17 T 559530 4744586

0	-	150	Tps		
150	-	450	Sa some Gr	Moist	(Fill)
450	-	1.5 m	Si(y) Sa some Cl Tr Gr	Moist	(Native)

BH# 29- WBL — **Sta (13+000), 4.2 m Lt of CL**
EP — NAD'83 Coordinates: 17 T 559525 4744599

0	-	200	Asph		
200	-	550	Sa some Gr	Moist	(Fill)
550	-	760	Gr(y) Sa	Moist	(Fill)
760	-	1.5 m	Si(y) F Sa Tr Gr	Moist	(Fill)
1.5 m	-	1.5 m	Si(y) F Sa	wet	(Native)

BH# 30- WBL — **Sta (13+000), 6.5m Lt of CL**
MSH — NAD'83 Coordinates: 17 T 559525 4744601

0	-	300	Sa & Gr		
300	-	600	Gr(y) Sa	Moist	(Fill)
600	-	860	Dk Gry Si(y) Sa W Org	Moist	(Fill)
860	-	1.5 m	Br Si(y) F Sa	wet	(Native)

And > 40%.
Adjective (Si(y), Sa(y) 30-40%
With 20-30%
Some 10-20%
Trace 1-10%

METRIC

PLATE No
CONT 2018-3010
WP 3062-14-00

SOILS DATA

Survey

SHEET 47

MTO West Region Retainer 3014-E-0003
Assign #6: WP 3062-14-00
Part B_Hwy 3 the Town of Simcoe E Limits (Ireland Rd) to
Renton (Norfolk CR 5/Cockshutt Rd)
Approx 5.8 km.

BOREHOLE LOG DATA

BH# 31- WBL — **Sta (13+000), 9.4 m Lt of CL**
Mid Slope — NAD'83 Coordinates: 17 T 559525 4744604

0	-	140	Tps		
140	-	680	Si(y) Sa Tr Gr	Moist	(Fill)
680	-	1.5 m	Br Si(y) F Sa	wet	(Native)

BH# 32- WBL — **Sta (13+000), 11.2 m Lt of CL**
TOS — NAD'83 Coordinates: 17 T 559524 4744606

0	-	150	Tps		
150	-	860	Si(y) Sa Tr Rootlets	Moist	(Fill)
860	-	1.5 m	Br Si(y) F Sa	wet	(Native)

BH# 33- EBL — **Sta (13+050), 4.1 m Rt of CL**
EP — NAD'83 Coordinates: 17 T 559577 4744603

0	-	180	Asph		
180	-	430	Sa & Gr	Moist	(Fill)
430	-	700	Gry Si(y) Sa some Org	Moist	(Fill)
700	-	1.5 m	Br Si(y) Cl W Sa, Tr Gr (w = 19%)	wet	(Native)

Sieve	% Pass
4.75 mm	99.2
2.00 mm	98.5
425 µm	96.0
75 µm	70.7
5 µm	16.0
2 µm	12.5
	M-HSFH
	Soil Classification: CL $W_l/W_p/I_p$ = 22/14/8

BH# 34- WBL — **Sta (13+050), 4.1 m Lt of CL**
EP — NAD'83 Coordinates: 17 T 559575 4744611

0	-	150	Asph		
150	-	300	Gr(y) Sa	Moist	(Fill)
300	-	660	Si(y) Sa some Gr	Moist	(Fill)
660	-	1.2 m	Dk Gry Si(y) Sa Tr Gr Some Org	Moist	(Fill)
1.2 m	-	1.5 m	Gry Si(y) F Sa	Moist	(Fill)

And > 40%.
Adjective (Si(y), Sa(y) 33-40%
With 20-30%
Some 10-20%
Trace 1-10%

MTO West Region Retainer 3014-E-0003
Assign #6: WP 3062-14-00
Part B_Hwy 3 the Town of Simcoe E Limits (Ireland Rd) to
Renton (Norfolk CR 5/Cockshutt Rd)
Approx 5.8 km.

BOREHOLE LOG DATA

BH# 35- EBL — **Sta (13+100), 4.0 m Rt of CL**
EP — NAD'83 Coordinates: 17 T 559626 4744614

0	-	250	Asph		
250	-	450	Gr(y) Sa Tr Si	Moist	(Fill)

Sieve	% Pass
19 mm	97.7
13.2 mm	87.9
9.5 mm	78.9
4.75 mm	61.8
1.18 mm	39.8
300 µm	16.7
75 µm	9.0
	Accep. Gran B

450	-	800	Gr & Sa some Si Tr Cob	Moist	(Fill)

Sieve	% Pass
19 mm	93.4
13.2 mm	78.2
9.5 mm	71.1
4.75 mm	60.0
1.18 mm	43.8
300 µm	18.2
75 µm	12.0
	Accep. SSM

800	-	1.5 m	Br Sa W Si Tr Gr & Cl & Cob (w = 11.2%)	Moist to wet	(Fill)

Sieve	% Pass
4.75 mm	95.9
2.00 mm	93.5
425 µm	86.0
75 µm	25.1
5 µm	8.0
2 µm	5.0
	LSFH
	Soil Classification: Non-Plastic

And > 40%.
Adjective (Si(y), Sa(y) 33-40%
With 20-30%
Some 10-20%
Trace 1-10%

METRIC

PLATE No
CONT 2018-3010
WP 3062-14-00

SOILS DATA

SHEET 48

Survey

MTO West Region Retainer 3014-E-0003
Assign #6: WP 3062-14-00
Part B_Hwy 3 the Town of Simcoe E Limits (Ireland Rd to Renton (Norfolk CR 5/Cockshutt Rd)
Approx 5.8 km.

BOREHOLE LOG DATA

BH# 36- EBL — **Sta (13+100), 6.6 m Rt of CL**
SHR — NAD'83 Coordinates: 17 T 559626 4744611

0	-	200	Tps		
200	-	600	Si(y) Sa Tr Gr & Cob	Moist	(Fill)
600	-	1.5 m	Si(y) Sa Tr Gr & Cob	Moist	(Fill)

BH# 37- EBL — **Sta (13+100), 8.1 m Rt of CL**
Mid Slope — NAD'83 Coordinates: 17 T 559625 4744610

0	-	150	Tps		
150	-	680	Br Si(y) Sa Tr Gr some Org	Moist	(Fill)
680	-	1.5 m	Br Si(y) Sa & Gr Tr Org	wet	(Native)

BH# 38- EBL — **Sta (13+100), 10.3 m Rt of CL**
TOS — NAD'83 Coordinates: 17 T 559626 4744608

0	-	200	Tps		
200	-	600	Br Si(y) Sa Tr Gr some Org	Moist	(Fill)
600	-	1.5 m	Br Si(y) Sa & Gr	wet	(Native)
			Water level @ 0.7 m		

BH# 39- WBL — **Sta (13+100), 4.1 m Lt of CL**
EP — NAD'83 Coordinates: 17 T 559623 4744621

0	-	200	Asph		
200	-	430	Sa & Gr	Moist	(Fill)
430	-	730	Gr(y) Sa some Si	Moist	(Fill)
730	-	1.5 m	Br Si(y) F Sa	wet	(Fill)

BH# 40- WBL — **Sta (13+100), 6.6 m Lt of CL**
SHR — NAD'83 Coordinates: 17 T 559624 4744623

0	-	150	Tps, Dk Br Si(y) Sa W Rootlets & Org		
150	-	450	Si(y) Sa Tr Gr	Moist	(Fill)
450	-	1.5 m	Br Si(y) Sa Tr Gr	wet	(Fill)

And > 40%.
Adjective (Si(y), Sa(y) 30-40%
With 20-30%
Some 10-20%
Trace 1-10%

MTO West Region Retainer 3014-E-0003
Assign #6: WP 3062-14-00
Part B_Hwy 3 the Town of Simcoe E Limits (Ireland Rd; to Renton (Norfolk CR 5/Cockshutt Rd)
Approx 5.5 km.

BOREHOLE LOG DATA

BH# 41- WBL — **Sta (13+100), 8.5 m Lt of CL**
Mid Slope — NAD'83 Coordinates: 17 T 559624 4744626

0	-	180	Tps		
180	-	500	Br Si(y) Sa & Gr	wet	(Fill)
500	-	1.0 m	Br Si(y) Sa & Gr	wet	(Fill)
1.0 m	-	1.5 m	Br Si(y) Sa Tr Gr	wet	(Native)

BH# 42- WBL — **Sta (13+100), 10.10 m Lt of CL**
TOS — NAD'83 Coordinates: 17 T 559623 4744628

0	-	200	Tps, Br Si(y) Sa W Org & Rootlets		
200	-	650	Br Si(y) Sa & Gr Tr Cob	wet	(Fill)
650	-	1.5 m	Br Si(y) Sa Tr Gr	wet	(Fill)
			Water level @ 0.4 m		

BH# 43- EBL — **Sta (13+150), 4.0 m Rt of CL**
EP — NAD'83 Coordinates: 17 T 559675 4744627

0	-	180	Asph		
180	-	490	Sa & Gr	Moist	(Fill)
490	-	800	Gr(y) Sa Tr Cob	Moist	(Fill)
800	-	1.5 m	Br Si(y) Sa Tr Gr & Cob	Moist	(Fill)

BH# 44- WBL — **Sta (13+150), 4.1 m Lt of CL**
EP — NAD'83 Coordinates: 17 T 559670 4744632

0	-	120	Asph		
120	-	660	Sa & Gr	Moist	(Fill)
660	-	880	Gr(y) Sa Tr Org	Moist	(Fill)
880	-	1.5 m	Br Si(y) F Sa Tr Gr & Cob	wet	(Fill)

BH# 45- EBL — **Sta (13+200), 4.0 m Rt of CL**
EP — NAD'83 Coordinates: 17 T 559718 4744634

0	-	150	Asph		
150	-	450	Sa some Gr	Moist	(Fill)
450	-	780	Sa & Gr Tr Cob	Moist	(Fill)
780	-	1.5 m	Br Si(y) Sa Tr Gr & Cob	wet	(Fill)

And > 40%.
Adjective (Si(y), Sa(y) 30-40%
With 20-30%
Some 10-20%
Trace 1-10%

MTO West Region Retainer 3014-E-0003
Assign #6: WP 3062-14-00
Part B_Hwy 3 the Town of Simcoe E Limits (Ireland Rd) to
Renton (Norfolk CR 5/Cockshutt Rd)
Approx 5.8 km.

BOREHOLE LOG DATA

BH# 46- EBL — **Sta (13+200), 5.5 m Rt of CL**
MSH — NAD'83 Coordinates: 17 T 559718 4744635

0	-	350	Sa & Gr		
350	-	750	Gr(y) Sa Tr Cob	Moist	(Fill)
750	-	1.5 m	Br Si(y) Sa Tr Gr	wet	(Fill)

BH# 47- EBL — **Sta (13+200), 8.6 m Rt of CL**
Mid Slope — NAD'83 Coordinates: 17 T 559718 4744633

0	-	150	Tps		
150	-	800	Br Si(y) Sa Tr Gr	Moist	(Fill)
800	-	1.5 m	Br Si(y) Sa Tr Gr & Cob	wet	(Fill)

BH# 48- EBL — **Sta (13+200), 10.10 m Rt of CL**
TOS — NAD'83 Coordinates: 17 T 559718 4744630

0	-	200	Tps, Dk Br Si(y) Sa W Org & Rootlets		
200	-	500	Br Si(y) Sa Tr Gr Occ Org	wet	(Fill)
500	-	1.5 m	Br Si(y) Sa Tr Gr	wet	(Native)
			Water level @ 1.0 m		

BH# 49- WBL — **Sta (13+200), 4.0 m Lt of CL**
EP — NAD'83 Coordinates: 17 T 559715 4744644

0	-	150	Asph		
150	-	450	Gr(y) Sa Tr Si (w = 5.1%)	Moist	(Fill)

Sieve	% Pass
19 mm	95.2
13.2 mm	85.8
9.5 mm	77.6
4.75 mm	61.1
1.18 mm	41.3
300 µm	17.8
75 µm	10.0
	Accep. Gran B

And > 40%.
Adjective (Si(y), Sa(y) 30-40%
With 20-30%
Some 10-20%
Trace 1-10%

MTO West Region Retainer 3014-E-0003
Assign #6: WP 3062-14-00
Part B_Hwy 3 the Town of Simcoe E Limits (Ireland Rd) to
Renton (Norfolk CR 5/Cockshutt Rd)
Approx 5.8 km.

BOREHOLE LOG DATA

450	-	780	Sa some Gr & Si Tr Cob	Moist	(Fill)

Sieve	% Pass
19 mm	96.2
13.2 mm	92.8
9.5 mm	88.9
4.75 mm	80.8
1.18 mm	62.5
300 µm	27.1
75 µm	19.0
	Accep. SSM

780	-	1.5 m	Br Sa W Si Tr Gr & Cl (w = 11.6%)	Moist	(Fill)

Sieve	% Pass
4.75 mm	98.3
2.00 mm	96.4
425 µm	85.3
75 µm	31.8
5 µm	9.0
2 µm	6.0
	LSFH
	Soil Classification: Non-Plastic

BH# 50- WBL — **Sta (13+200), 5.3 m Lt of CL**
MSH — NAD'83 Coordinates: 17 T 559715 4744645

0	-	300	Sa & Gr		
300	-	680	Si(y) Sa Tr Gr	Moist	(Fill)
680	-	1.5 m	Si(y) F Sa Tr Org	wet	(Fill)

BH# 51- WBL — **Sta (13+200), 10.0 m Lt of CL**
Mid Slope — NAD'83 Coordinates: 17 T 559714 4744647

0	-	150	Tps		
150	-	550	Br Si(y) Sa Tr Gr some Org	wet	(Fill)
550	-	1.5 m	Br Si(y) Sa Tr Gr & Org	wet	(Fill)

And > 40%.
Adjective (Si(y), Sa(y) 30-40%
With 20-30%
Some 10-20%
Trace 1-10%

METRIC

PLATE No
CONT 2018-3010
WP 3062-14-00

SOILS DATA

SHEET 50

Survey _____

MTO West Region Retainer 3014-E-0003
Assign #6: WP 3062-14-00
Part B_Hwy 3 the Town of Simcoe E Limits (Ireland Rd) to
Renton (Norfolk CR 5/Cockshutt Rd)
Approx 5.8 km.

BOREHOLE LOG DATA

BH# 52- WBL — **Sta (13+200), 10.10 m Lt of CL**
TOS — NAD'83 Coordinates: 17 T 559714 4744650

0	-	220	Tps		
220	-	550	Br Si(y) Sa Tr Gr some Org	wet	(Fill)
550	-	1.5 m	Br Si(y) Sa & Gr Tr Cl	wet	(Native)
			Water level @ 1.0 m		

BH# 53- WBL — **Sta (13+500), 4.0 m Lt of CL**
EP — NAD'83 Coordinates: 17 T 560023 4744711

0	-	205	Asph		
205	-	410	Sa & Gr	Moist	(Fill)
410	-	750	Gr(y) Sa Tr Cob	Moist	(Fill)
750	-	1.5 m	Dk Gry Si(y) Sa W Org	Moist	(Fill)

BH# 54- WBL — **Sta (13+500), 6.9 m Lt of CL**
SHR — NAD'83 Coordinates: 17 T 560022 4744712

0	-	200	Tps		
200	-	500	Br Si(y) Sa Tr Gr	Moist	(Fill)
500	-	1.5 m	Br & Dk Gry Si(y) Sa W Org	wet	(Fill)

CBH# 55- EBL — **Sta (14+000), 2.0 m Rt of CL**
MDL — NAD'83 Coordinates: 17 T 560501 4744808

0	-	300	Asph		
300	-	600	Sa some Gr Tr Si	Moist	(Fill)

Sieve	% Pass
19 mm	100
13.2 mm	97.9
9.5 mm	92.7
4.75 mm	80.5
1.18 mm	52.6
300 µm	17.7
75 µm	9.0
	Accep. Gran B

And > 40%.
Adjective (Si(y), Sa(y) 30-40%
With 20-30%
Some 10-20%
Trace 1-10%

MTO West Region Retainer 3014-E-0003
Assign #6: WP 3062-14-00
Part B_Hwy 3 the Town of Simcoe E Limits (Ireland Rd) to
Renton (Norfolk CR 5/Cockshutt Rd)
Approx 5.8 km.

BOREHOLE LOG DATA

600	-	800	Sa W Gr some Si	Moist	(Fill)

Sieve	% Pass
19 mm	95.3
13.2 mm	92.0
9.5 mm	87.8
4.75 mm	79.7
1.18 mm	64.6
300 µm	24.3
75 µm	13.0
	Accep. SSM

800	-	1.5 m	Si(y) Sa Tr Gr & Cl W Org (w = 15%)	Moist	(Fill)

Sieve	% Pass
4.75 mm	90.9
2.00 mm	87.4
425 µm	78.4
75 µm	42.7
5 µm	12.5
2 µm	9.0
	LSFH
	Soil Classification: ML $W_L/W_P/I_P$ = 21/18/3

BH# 56- EBL — **Sta (14+000), 5.25 m Rt of CL**
MSH — NAD'83 Coordinates: 17 T 560502 4744805

0	-	300	Sa & Gr		
300	-	500	Gr(y) Sa	Moist	(Fill)
500	-	780	Si(y) Sa Tr Gr	Moist to wet	(Fill)
780	-	1.5 m	Sa W Si some Gr Tr Cl (w = 13.9%)	wet to Moist	(Fill)

Sieve	% Pass
4.75 mm	98.8
2.00 mm	78.1
425 µm	54.1
75 µm	34.0
5 µm	6.3
2 µm	5.0
	LSFH
	Soil Classification: ML $W_L/W_P/I_P$ = 17/14/3

And > 40%.
Adjective (Si(y), Sa(y) 30-40%
With 20-30%
Some 10-20%
Trace 1-10%

METRIC

PLATE No
CONT 2018-3010
WP 3062-14-00

SOILS DATA

Survey _____

SHEET 51

MTO West Region Retainer 3014-E-0003
Assign #6: WP 3062-14-00
Part B_Hwy 3 the Town of Simcoe E Limits (Ireland Rd to Renton (Norfolk CR 5/Cockshutt Rd)
Approx 5.8 km.

BOREHOLE LOG DATA

CBH# 57- WBL — **Sta (14+500), 2.1 m Lt of CL**
MDL — NAD'83 Coordinates: 17 T 561023 4744926

0	-	270	Asph		
270	-	500	Sa & Gr	Moist	(Fill)
500	-	700	Gr(y) Sa	Moist	(Fill)
700	-	1.5 m	Br Si(y) Cl some Sa Tr Gr Occ Cob (w = 20.2%)	Moist	(Fill)

Sieve	% Pass
4.75 mm	99.1
2.00 mm	98.4
425 µm	95.3
75 µm	86.3
5 µm	59.0
2 µm	41.0
	LSFH
	Soil Classification: Cl $W_L/W_P/I_P$ = 36/16/20

BH# 58- WBL — **Sta (14+500), 5.4 m Lt of CL**
MSH — NAD'83 Coordinates: 17 T 561023 4744930

0	-	300	Sa & Gr		
300	-	700	Gr(y) Sa	Moist	(Fill)
700	-	1.5 m	Dk Gry Si(y) Cl W Org Tr Cob	wet	(Fill)

BH# 59- EBL — **Sta (15+000), 4.3 m Rt of CL**
EP — NAD'83 Coordinates: 17 T 561546 4745028

0	-	70	Asph		
70	-	350	Sa & Gr	Moist	(Fill)
350	-	800	Gr(y) Sa	Moist	(Fill)
800	-	1.5 m	Dk Gry Si(y) Cl W Org	wet	(Fill)

BH# 60- EBL — **Sta (15+000), 6.9 m Rt of CL**
SHR — NAD'83 Coordinates: 17 T 561546 4745025

0	-	150	Tps		
150	-	440	Sa & Gr	Moist	(Fill)
440	-	860	Sa Tr Gr	Moist	(Fill)
860	-	1.5 m	Dk Gry Si(y) Sa Tr Gr some Cl W Org	wet	(Fill)
			Water level @ 1.2 m		

And > 40%
Adjective (Si(y), Sa(y) 30-40%
With 20-30%
Some 10-20%
Trace 1-10%

MTO West Region Retainer 3014-E-0003
Assign #6: WP 3062-14-00
Part E_Hwy 3 the Town of Simcoe E Limits (Ireland Rd; to Renton (Norfolk CR 5/Cockshutt Rd)
Approx 5.5 km.

BOREHOLE LOG DATA

BH# 61- Culvert — **Sta (15+154), 10.2 m of CL**
Inlet — NAD'83 Coordinates: 17 T 561661 4745047

0	-	200	Tps, Dk Br Si(y) Sa Tr Gr some Org & Rootlets		
200	-	680	Si(y) Sa Tr Gr	Moist to wet	(Fill)
680	-	1.5 m	Br Si(y) Sa Tr Gr	Moist	(Native)

BH# 62- Culvert — **Sta (15+154), 12.3 m of CL**
Outlet — NAD'83 Coordinates: 17 T 561656 4745069

0	-	200	Tps		
200	-	360	Br Si(y) Cl some Sa Tr Org	Moist	(Fill)
360	-	1.5 m	Br Si(y) Cl some Sa Tr Org	Moist	(Native)

BH# 63- Culvert — **Sta (15+154), 4.3 m of CL**
EP-WBL — NAD'83 Coordinates: 17 T 561654 4745062

0	-	180	Asph		
180	-	450	Sa & Gr	Moist	(Fill)
450	-	900	Gr(y) Sa Tr Cob	Moist	(Fill)
900	-	1.5 m	Br Si(y) Cl some Sa	Moist	(Fill)
1.5 m	-	2.6 m	Br Si(y) Cl some Org	Moist	(Fill)
2.6 m	-	3.0 m	Br Si(y) Cl	Moist	(Native)

BH# 64- Culvert — **Sta (15+388), 11.7 m of CL**
Inlet — NAD'83 Coordinates: 17 T 561881 4745118

0	-	210	Tps, Dk Br Si(y) Cl W Org & Rootlets		
210	-	450	Br Si(y) Cl Tr Rootlets	wet	(Fill)
450	-	1.5 m	Br Si(y) Cl Tr Gr	Moist	(Native)

BH# 65- Culvert — **Sta (15+388), 10.3 m of CL**
Outlet — NAD'83 Coordinates: 17 T 561888 4745096

0	-	200	Tps		
200	-	800	Br Si(y) Cl Tr Org	wet	(Fill)
800	-	1.5 m	Br Si(y) Cl	Moist to wet	(Native)

And > 40%
Adjective (Si(y), Sa(y) 30-40%
With 20-30%
Some 10-20%
Trace 1-10%

METRIC

PLATE No
CONT 2018-3010
WP 3062-14-00

SOILS DATA

Survey _____

SHEET 52

MTO West Region Retainer 3014-E-0003
Assign #6: WP 3062-14-00
Part B_Hwy 3 the Town of Simcoe E Limits (Ireland Rd) to
Renton (Norfolk CR 5/Cockshutt Rd)
Approx 5.8 km.

BOREHOLE LOG DATA

BH# 66- Culvert — **Sta (15+388), 4.3 m of CL**
EP-EBL — NAD'83 Coordinates: 17 T 561888 4745099

0	-	300	Sa & Gr		
300	-	710	Gr(y) Sa	Moist	(Fill)
710	-	1.0 m	Br & Gry Si(y) Cl some Sa Tr Gr some Org	wet	(Fill)
1.0 m	-	2.0 m	Br & Gry Si(y) Cl some Sa	wet	(Fill)
2.0 m	-	3.0 m	Br Si(y) Cl some Sa	Moist	(Native)

BH# 67- WBL — **Sta (15+500), 4.0 m Lt of CL**
EP — NAD'83 Coordinates: 17 T 562067 4745151

0	-	160	Asph		
160	-	400	Sa & Gr	Moist	(Fill)
400	-	650	Sa some Gr	Moist	(Fill)
650	-	1.0 m	Br Si(y) Cl some Sa	Moist	(Fill)
1.0 m	-	1.5 m	Dk Gry Si(y) Cl W Org	wet	(Fill)

BH# 68- WBL — **Sta (15+500), 7.0 m Lt of CL**
SHR — NAD'83 Coordinates: 17 T 562066 4745152

0	-	100	Tps		
100	-	450	Sa & Gr	Moist	(Fill)
450	-	650	Gr(y) Sa	Moist	(Fill)
650	-	1.0 m	Br Si(y) Cl some Sa	Moist	(Fill)
1.0 m	-	1.5 m	Dk Gry Si(y) Cl W Org	Moist	(Fill)

BH# 69- Culvert — **Sta (15+857), 11.2 m of CL**
Inlet — NAD'83 Coordinates: 17 T 562348 4745194

0	-	300	Tps, Dk Br Si(y) Cl W Org		
300	-	1.0 m	Br Si(y) Cl Tr Org & Cob	wet	(Fill)
1.0 m	-	1.5 m	Br Si(y) Cl Tr Gr & Rootlets	wet to Moist	(Fill)

BH# 70- Culvert — **Sta (15+857), 11.3 m of CL**
Outlet — NAD'83 Coordinates: 17 T 562342 4745216

0	-	200	Tps, Br Si(y) Cl some Org & Rootlets		
200	-	650	Br Si(y) Cl some Org	wet	(Fill)
650	-	1.5 m	Br Si(y) Cl Tr Org	wet	(Fill)

And > 40%
Adjective (Si(y), Sa(y) 30-40%
With 20-30%
Some 10-20%
Trace 1-10%

MTO West Region Retainer 3014-E-0003
Assign #6: WP 3062-14-00
Part B_Hwy 3 the Town of Simcoe E Limits (Ireland Rd) to
Renton (Norfolk CR 5/Cockshutt Rd)
Approx 5.8 km.

BOREHOLE LOG DATA

BH# 71- Culvert — **Sta (15+857), 4.3 m of CL**
EP-EBL — NAD'83 Coordinates: 17 T 562339 4745211

0	-	150	Asph		
150	-	350	Sa & Gr	Moist	(Fill)
350	-	740	Gr(y) Sa some Cob	Moist	(Fill)
740	-	1.5 m	F Sa Tr Gr	Moist	(Fill)
1.5 m	-	2.0 m	F to M Sa	wet	(Fill)
2.0 m	-	3.0 m	F to M Sa W Si some Cob	wet	(Fill)
			Water level @ 2.0 m		

CBH# 72- WBL — **Sta (16+000), 2.1 m Lt of CL**
MDL — NAD'83 Coordinates: 17 T 562469 4745230

0	-	315	Asph		
315	-	600	Sa W Gr some Si (w = 5.3%)	Moist	(Fill)

Sieve	% Pass
13.2 mm	94.3
9.5 mm	89.0
4.75 mm	77.1
1.18 mm	58.9
300 µm	20.9
75 µm	13.8
	Accep. SSM

600	-	800	F Sa some Si & Gr	Moist	(Fill)

Sieve	% Pass
13.2 mm	97.4
9.5 mm	93
4.75 mm	81.1
1.18 mm	56.4
300 µm	22.0
75 µm	13.4
	Accep. SSM

And > 40%
Adjective (Si(y), Sa(y) 30-40%
With 20-30%
Some 10-20%
Trace 1-10%

MTO West Region Retainer 3014-E-0003
Assign #6: WP 3062-14-00
Part B_Hwy 3 the Town of Simcoe E Limits (Ireland Rd) to
Renton (Norfolk CR 5/Cockshutt Rd)
Approx 5.8 km.

BOREHOLE LOG DATA

800	-	1.5 m	Br & Gry Si(y) Cl some Sa, Tr Gr (w = 21.3%)	Moist	(Fill)

Sieve	% Pass
4.75 mm	99.1
2.00 mm	98.3
425 µm	95.1
75 µm	86.8
5 µm	60.0
2 µm	42.0
	LSFH
	Soil Classification: CI $W_l/W_p/I_p$ = 42/17/25

BH# 73- WBL — **Sta (16+000), 6.0 m Lt of CL**
MSH — NAD'83 Coordinates: 17 T 562470 4745228

0	-	300	Sa & Gr		
300	-	600	Gr(y) Sa Tr Cob	Moist	(Fill)
600	-	1.2 m	Gry & Br Si(y) Cl some Org	Moist	(Fill)
1.2 m	-	1.5 m	Br Si(y) Cl	Moist	(Native)

BH# 74- Culvert — **Sta (16+069), 30 m of CL**
Inlet — NAD'83 Coordinates: 17 T 562551 4745269

0	-	300	Tps		
300	-	600	Br Si(y) Cl Tr Sa	wet	(Fill)
600	-	1.5 m	Gry Si(y) Cl Tr Sa Occ Gr	wet	(Native)

BH# 75- Culvert — **Sta (16+069), 22.2 m of CL**
Outlet — NAD'83 Coordinates: 17 T 562557 4745231

0	-	300	Tps, Dk Br Si(y) Cl some Org		
300	-	700	Dk Br Si(y) Cl some Org	wet	(Fill)
700	-	1.5 m	Lt Gry Si(y) Cl Tr Sa & Gr	wet	(Fill)

And > 40%
Adjective (Si(y), Sa(y) 30-40%
With 20-30%
Some 10-20%
Trace 1-10%

METRIC

PLATE No

CONT 2018-3010
WP 3062-14-00

SOILS DATA

Survey _____

SHEET 53

MTO West Region Retainer 3014-E-0003
Assign #6: WP 3062-14-00
Part B_Hwy 3 the Town of Simcoe E Limits (Ireland Rd) to
Renton (Norfolk CR 5/Cockshutt Rd)
Approx 5.8 km.

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BOREHOLE LOG DATA

BH# 80- Culvert — **Sta (16+707), 11 m of CL**
Inlet — NAD'83 Coordinates: 17 T 563169 4745409

0	-	300	Tps		
300	-	600	Br Si(y) Cl some Sa Tr Rootlets	wet	(Fill)
600	-	1.5 m	Br Si(y) Cl Tr Sa Occ Gr	wet	(Native)

BH# 81- Culvert — **Sta (16+707), 22.2 m of CL**
Outlet — NAD'83 Coordinates: 17 T 563172 4745382

0	-	300	Tps, Dk Br Si(y) Cl W Org		
300	-	900	Br Si(y) Cl some Rootlets	wet	(Fill)
900	-	1.5 m	Br to Gry Si(y) Cl	wet	(Native)

BH# 82- Culvert — **Sta (16+707), 4.1 m of CL**
EP-EBL — NAD'83 Coordinates: 17 T 563170 4745386

0	-	160	Asph		
160	-	460	Sa & Gr		
460	-	1.2 m	Gr(y) Sa	Moist to wet	(Fill)
1.2 m	-	2.0 m	Si(y) Sa & Gr	wet	(Fill)
2.0 m	-	3.0 m	Gry Si(y) Cl some Sa	wet	(Native)

BH# 83- EBL — **Sta (17+000), 4.15 m Rt of CL**
EP — NAD'83 Coordinates: 17 T 563384 4745436

0	-	205	Asph		
205	-	410	Sa & Gr	Moist	(Fill)
410	-	750	Gr(y) Sa	wet	(Fill)
750	-	1.5 m	Dk Gry Si(y) Cl W Org	wet	(Fill)
1.5 m	-	2.0 m	Br Si(y) Cl some Sa	wet	(Fill)

BH# 84- EBL — **Sta (17+000), 6.6 m Rt of CL**
SHR — NAD'83 Coordinates: 17 T 563382 4745433

0	-	100	Tps		
100	-	400	Sa & Gr	Moist	(Fill)
400	-	880	Gr(y) Sa	Moist to wet	(Fill)
880	-	1.5 m	Br Si(y) Cl Tr Sa	wet	(Fill)

And > 40%.
Adjective (Si(y), Sa(y) 30-40%
With 20-30%
Some 10-20%
Trace 1-10%

MTO West Region Retainer 3014-E-0003
Assign #6: WP 3062-14-00
Part B_Hwy 3 the Town of Simcoe E Limits (Ireland Rd) to
Renton (Norfolk CR 5/Cockshutt Rd)
Approx 5.8 km.

BOREHOLE LOG DATA

BH# 76- Culvert — **Sta (16+069), 4.2 m of CL**
EP-EBL — NAD'83 Coordinates: 17 T 562553 4745245

0	-	300	Sa & Gr		
300	-	700	Sa some Gr	Moist	(Fill)
700	-	1.0 m	Br Si(y) Cl Tr Sa & Gr	Moist	(Fill)
1.0 m	-	2.5 m	Dk Gry Si(y) Cl some Org	Moist	(Fill)

BH# 77- EBL — **Sta (16+250), 2.0 m Rt of CL**
MDL — NAD'83 Coordinates: 17 T 562733 4745289

0	-	300	Asph		
300	-	450	Sa & Gr	Moist	(Fill)
450	-	750	Sa some Gr	Moist	(Fill)
750	-	900	Conc		
900	-	1.3 m	Gry Si(y) Sa Tr Gr	Moist	(Fill)
1.3 m	-	1.5 m	Br Si(y) F Sa	wet	(Fill)

CBH# 78- WBL — **Sta (16+500), 1.8 m Lt of CL**
MDL — NAD'83 Coordinates: 17 T 562959 4745347

0	-	300	Asph		
300	-	460	Sa & Gr	Moist	(Fill)
460	-	850	Gr(y) Sa	Moist to wet	(Fill)
850	-	980	Conc		
980	-	1.1 m	Si(y) Sa Tr Gr	Moist	(Fill)
1.1 m	-	1.5 m	Dk Gry Si(y) Cl W Org	Moist	(Fill)

BH# 79- WBL — **Sta (16+500), 5.5 m Lt of CL**
MSH — NAD'83 Coordinates: 17 T 562959 4745350

0	-	300	Sa & Gr		
300	-	680	Gr(y) Sa	Moist	(Fill)
680	-	1.5 m	Dk Gry Si(y) Cl some Org	Moist to wet	(Fill)

And > 40%.
Adjective (Si(y), Sa(y) 30-40%
With 20-30%
Some 10-20%
Trace 1-10%

MTO West Region Retainer 3014-E-0003
Assign #6: WP 3062-14-00
Part B_Hwy 3 the Town of Simcoe E Limits (Ireland Rd) to
Renton (Norfolk CR 5/Cockshutt Rd)
Approx 5.8 km.

BOREHOLE LOG DATA

BH# 85- WBL — **Sta (17+500), 4.0 m Lt of CL**
EP — NAD'83 Coordinates: 17 T 563952 4745567

0	-	190	Asph		
190	-	350	Sa & Gr	Moist	(Fill)
350	-	650	Gr(y) Sa Tr Cob	Moist	(Fill)
650	-	1.0 m	Dk Gry Si(y) Cl W Org	wet	(Fill)
1.0 m	-	1.5 m	Gry Si(y) Cl some Org	wet	(Fill)

BH# 86- WBL — **Sta (17+500), 7.0 m Lt of CL**
SHR — NAD'83 Coordinates: 17 T 563951 4745569

0	-	100	Tps		
100	-	450	Sa some Gr	Moist	(Fill)
450	-	600	Si(y) Sa some Gr Tr Cl	wet	(Fill)
600	-	1.0 m	Br Si(y) Cl Tr Gr	wet	(Fill)
1.0 m	-	1.5 m	Br Si(y) Cl Tr Gr	wet	(Fill)

And > 40%.
Adjective (Si(y), Sa(y) 30-40%
With 20-30%
Some 10-20%
Trace 1-10%

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Table 2.1 Summary of Asphaltic Concrete Thickness for Hwy 3 Mainline

Core #		Location/Station		Northing & Easting	HMA Total (mm)
CBH	1	(12+000)	EBDL	17 T 558575 4744380	280
Core	2	(12+250)	EBDL	17 T 558813 4744435	290
CBH	3	(12+500)	WBDL	17 T 559065 4744491	250
Core	7	(13+750)	WBDL	17 T 560229 4745407	245
CBH	55	(14+000)	EBDL	17 T 560501 4744808	300
Core	8	(14+250)	EBDL	17 T 560761 4744864	275
CBH	57	(14+500)	WBDL	17 T 561023 4744926	270
Core	10	(15+250)	WBDL	17 T 561746 4745080	260
CBH	72	(16+000)	EBDL	17 T 562469 4745230	315
CBH	78	(16+500)	WBDL	17 T 562959 4745347	300
				Minimum	245 mm
				Maximum	315 mm
				Average	280 mm

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Table 2.2 Summary of Asphaltic Concrete Thickness for Shoulders of Hwy 3

Core #		Location/Station		Northing & Easting	HMA Total (mm)
Core	1	(12+000)	EB	17 T 558563 4744388	255 [1]
Core	4	(13+500)	WB	17 T 560026 4744705	270 [1]
Core	9	(15+000)	EB	17 T 561548 4745029	75
Core	11	(16+500)	WB	17 T 563010 4745359	230
Core	14	(17+500)	WB	17 T 564473 4745678	250 [1]

Notes:
[1] Not paved shoulder. Core were taken at EP.
[2] Core 4 – shoulder not paved core taken @ E-N to Blue Lane Rd.

Table 2.3 Summary of Asphaltic Concrete Thickness for Sideroads

Core #		Location/Station		Northing & Easting	HMA Total (mm)
Core	3	Culver Rd 13+040	NB	17 T 559581 4744536	85
Core	5	Blue Ln Rd, 13+550	SB	17 T 560188 4744773	150
Core	6	Blue Ln Rd, 13+550	NB	17 T 560189 4744704	180
Core	12	Cockshutt Rd/Norfolk CR 5, 17+240	NB	17 T 563892 4745540	260
Core	13	Cockshutt Rd/Norfolk CR 5, 17+240	SB	17 T 563710 4745481	130

METRIC

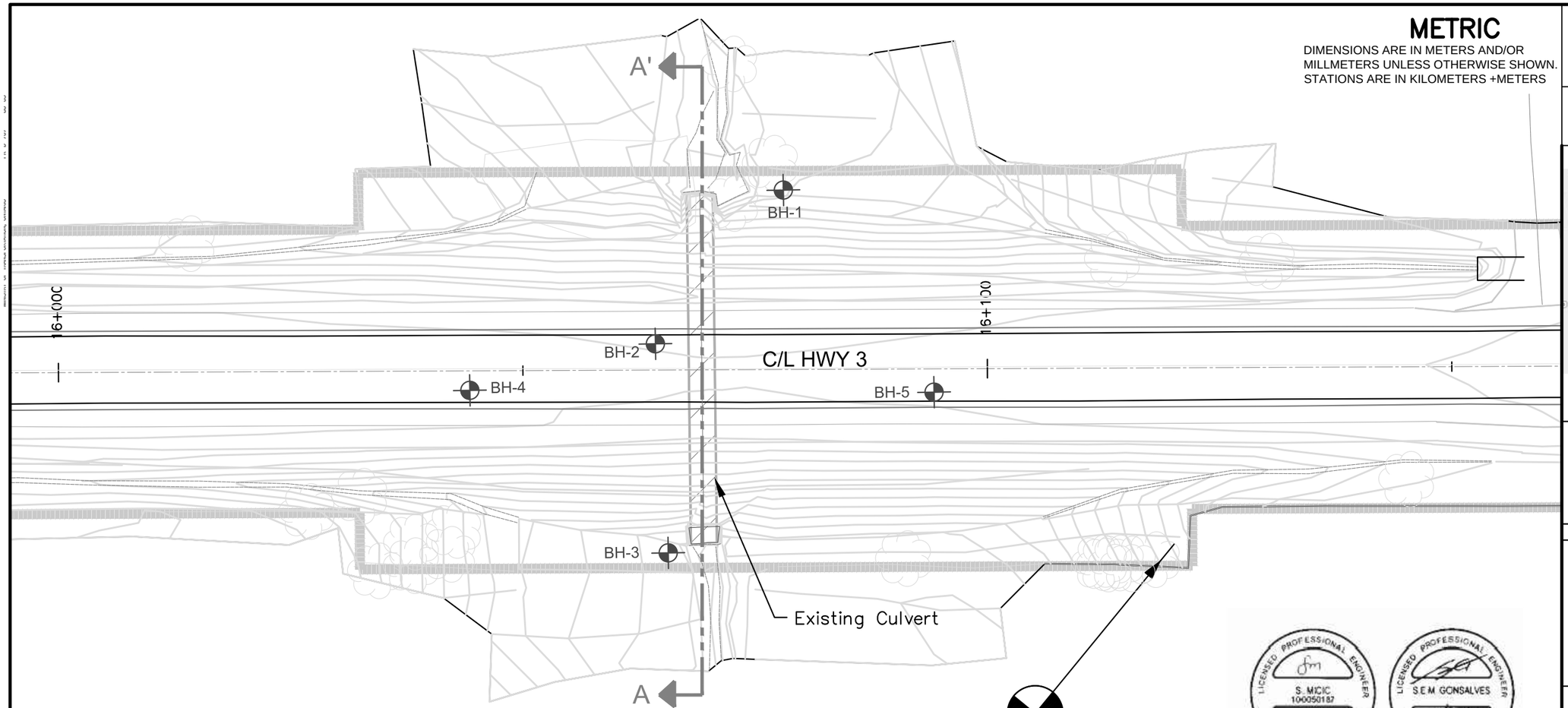
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STATIONS ARE IN KILOMETERS +METERS

PLATE No

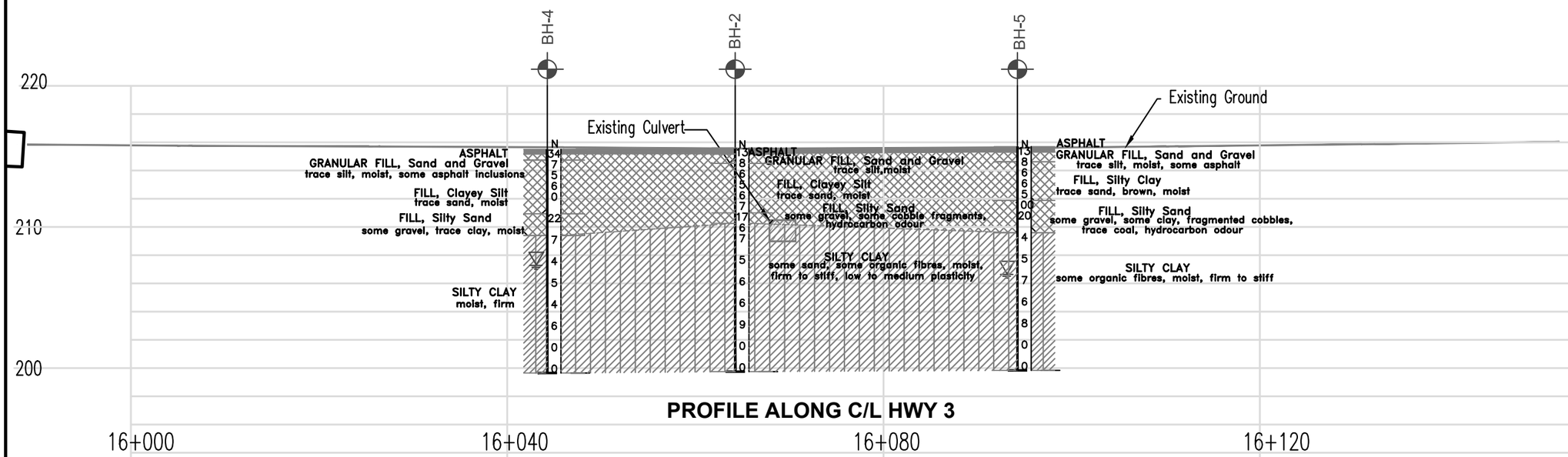
CONT 2018-3010
WP 3062-14-00

SOILS DATA
CULVERT REPLACEMENT-
STATION 16+070 HWY 3- SIMCO TO RENTON
BOREHOLE LOCATION PLAN AND SECTION
Survey _____ Revised _____

SHEET 55



PLAN



PROFILE ALONG C/L HWY 3

KEY PLAN



- Location of Drilled Boreholes
- N Standard Penetration Test (Blows/0.3 m)
- Water Level in Open Borehole

SOIL STRATA SYMBOLS

- ASPHALT
- TOPSOIL
- FILL
- SILTY CLAY

BH No.	APPROX. ELEV.	MTM CO-ORDINATES	
		NORTH	EAST
BH 1	210.1	4746671.32	244790.92
BH 2	215.6	4746652.44	244780.58
BH 3	209.4	4746630.62	244786.26
BH 4	215.5	4746643.69	244761.94
BH 5	215.7	4746653.09	244811.02

NOTE

This drawing is for subsurface information only. The proposed structure details/works are shown for illustration purposes only and may not be consistent with the final design configuration as shown elsewhere in the Contracts Documents

The complete foundation investigation and design report for this project and other related documents may be examined at the Materials Engineering and Research Office, Downsview. Information contained in the report and related documents are specifically excluded in accordance with the conditions of Section GC 2.01 of OPS Gen. Cond.

HOR 0 5 10 15 m
VERT 0 10 m

23/10/2018	SM	SUBMISSION FOR MTO REVIEW
DATE	BY	DESCRIPTION
		GEOCRES NO. **40I16-26**
		PROJECT NO. ADM-00235197-A0

SUBM'D SM	CHECKED SM	DATE	23/10/2018
DRAWN SH	CHECKED SG	APPROVED	DWG. 1

LICENSED PROFESSIONAL ENGINEER
S. MICIC
100050187
23/10/2018
PROVINCE OF ONTARIO

LICENSED PROFESSIONAL ENGINEER
S.E.M. GONSALVES
23/10/18
PROVINCE OF ONTARIO

METRIC

DIMENSIONS ARE IN METERS AND/OR MILLMETERS UNLESS OTHERWISE SHOWN.
STATIONS ARE IN KILOMETERS +METERS

PLATE No

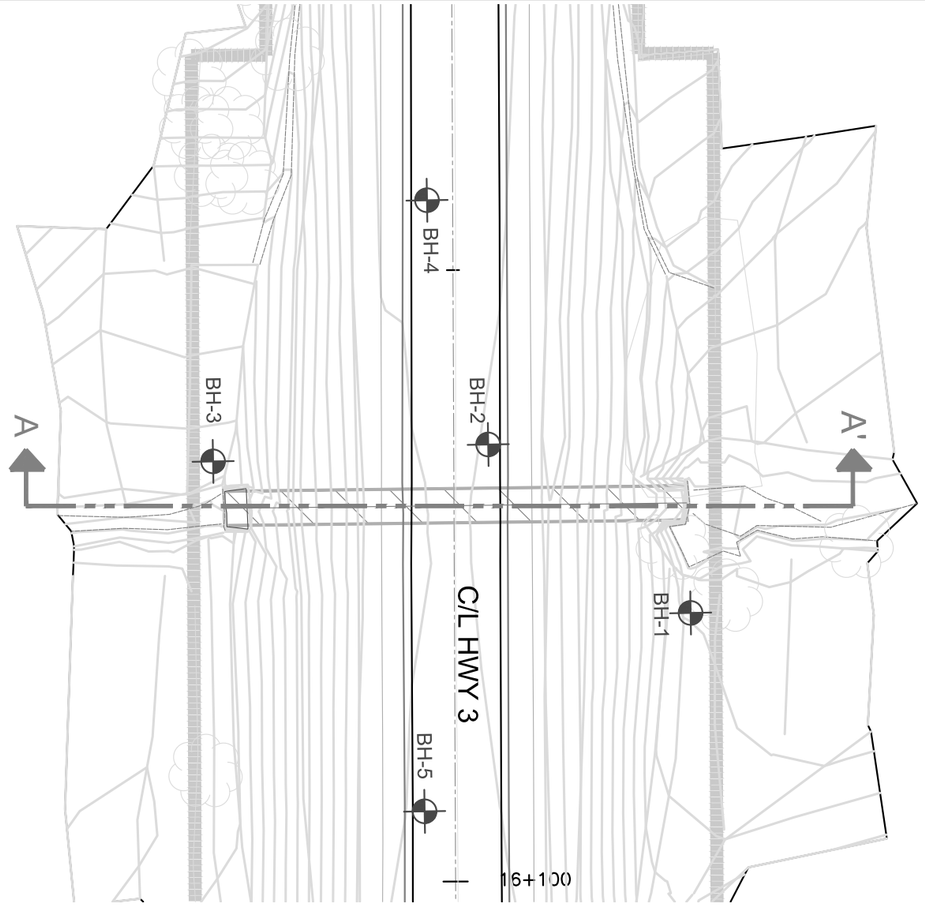
CONT 2018-3010
WP 3062-14-00

SOILS DATA

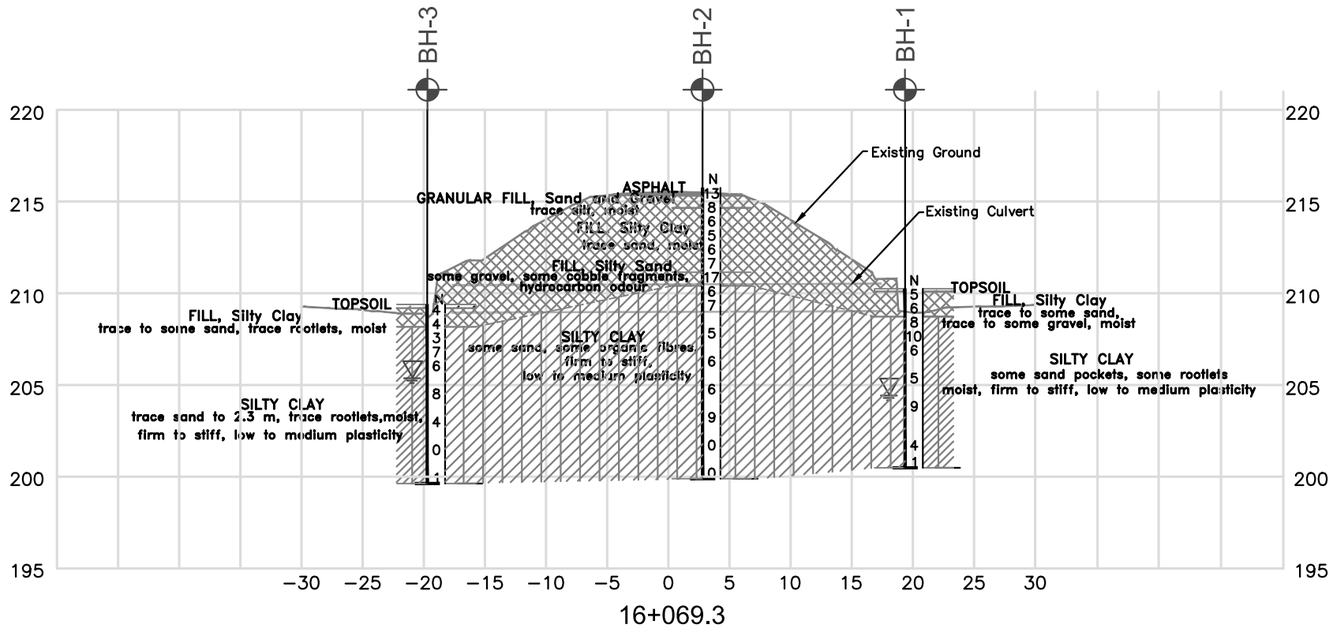
CULVERT REPLACEMENT-
STATION 16+070 HWY 3- SIMCO TO RENTON
BOREHOLE LOCATION PLAN AND SECTION

Survey _____ Revised _____

SHEET 56



PLAN



SECTION A-A' Station 16+069.3

LICENSED PROFESSIONAL ENGINEER
S. MICIC
100050187
23/10/2018
PROVINCE OF ONTARIO

LICENSED PROFESSIONAL ENGINEER
S.E.M. GONSALVES
23/10/18
PROVINCE OF ONTARIO

KEY PLAN



Location of Drilled Boreholes

N Standard Penetration Test (Blows/0.3 m)

Water Level in Open Borehole

SOIL STRATA SYMBOLS

ASPHALT

TOPSOIL

FILL

SILTY CLAY

BH No.	APPROX. ELEV.	MTM CO-ORDINATES NORTH	MTM CO-ORDINATES EAST
BH 1	210.1	4746671.32	244790.92
BH 2	215.6	4746652.44	244780.58
BH 3	209.4	4746630.62	244786.26
BH 4	215.5	4746643.69	244761.94
BH 5	215.7	4746653.09	244811.02

NOTE

This drawing is for subsurface information only. The proposed structure details/works are shown for illustration purposes only and may not be consistent with the final design configuration as shown elsewhere in the Contracts Documents

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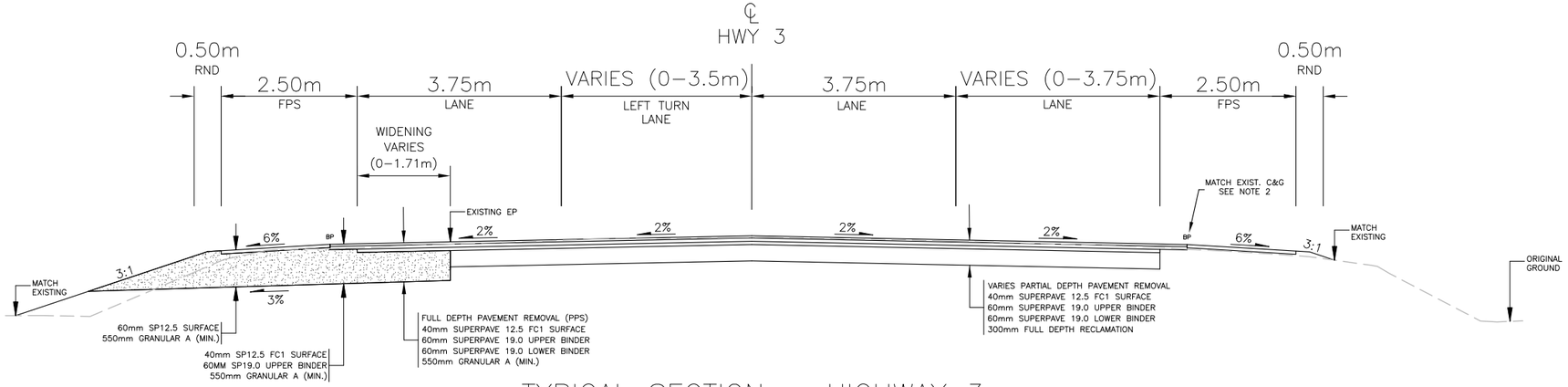
HOR 0 5 10 15 m
VERT 0 10 m

23/10/2018	SM	SUBMISSION FOR MTO REVIEW
DATE	BY	DESCRIPTION
		GEOCRES NO. 40I16-26
		PROJECT NO. ADM-00235197-A0

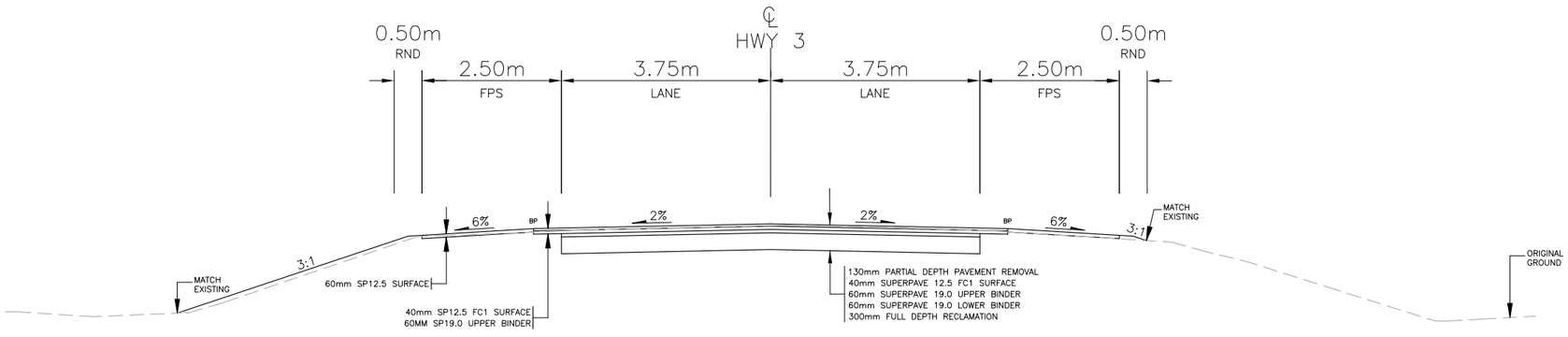
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DRAWN SH	CHECKED SG	APPROVED	DWG. 2

METRIC

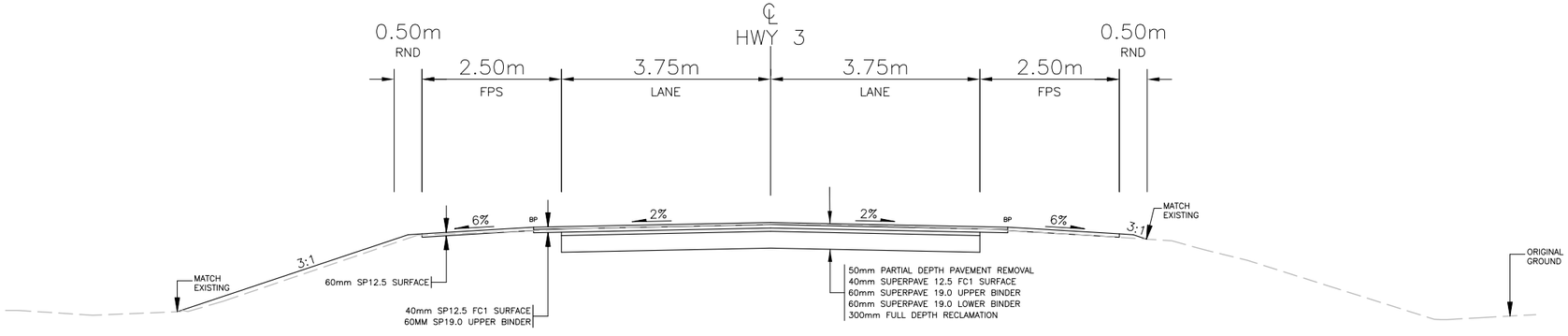
PLATE No	PLATE
CONT	2018-3010
WP	3062-14-00
TYPICALS	SHEET 57



TYPICAL SECTION – HIGHWAY 3
STA 11+815 TO STA 12+172



TYPICAL SECTION – HIGHWAY 3
STA 12+172 TO STA 12+332



TYPICAL SECTION – HIGHWAY 3
STA 12+332 TO STA 12+770

NOTES

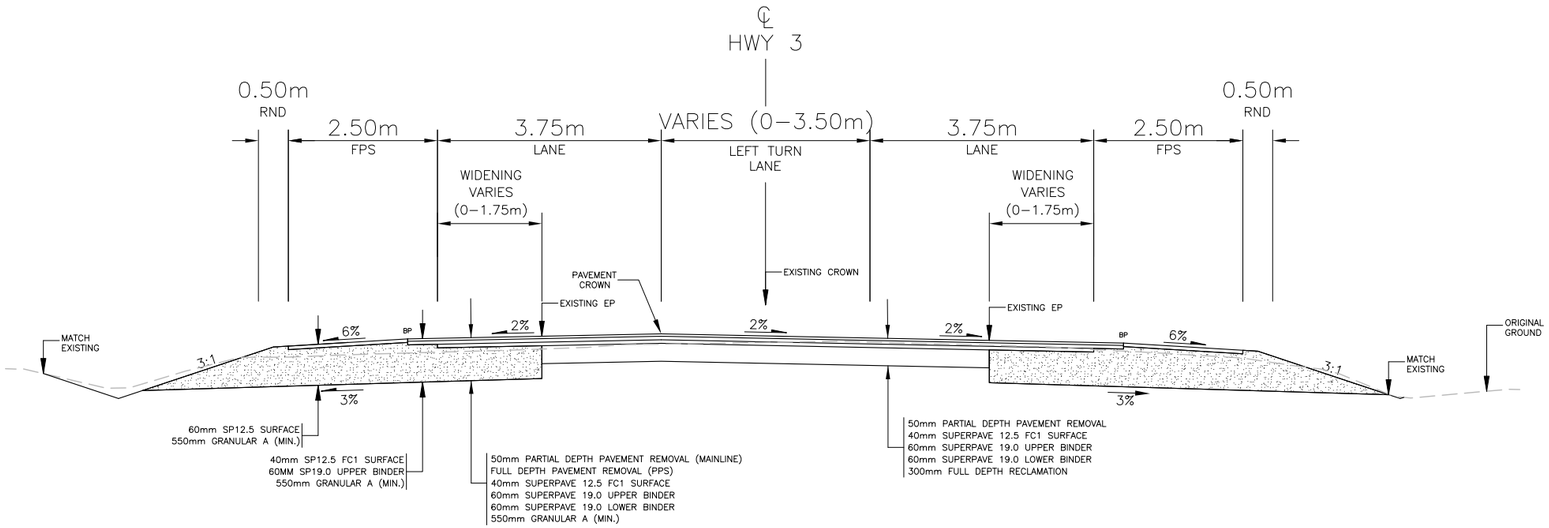
1. FROM STA 11+815 TO 11+838, OMIT FULLY PAVED SHOULDER AND MATCH EXISTING CURB AND GUTTER
2. SEE REMOVALS FOR MILLING DEPTHS
3. SEE NEW CONSTRUCTION DRAWINGS FOR DITCH CLEANOUT / DITCHING LOCATIONS
4. PAVEMENT CROWN TO BE SHIFTED AT CULVER ROAD AS PER TYPICAL SECTIONS, MAINTAIN EXISTING PAVEMENT CROWN AT BLUELINE ROAD AND COCKSHUTT ROAD
5. SHOULDER WIDTHS INCLUDE 0.5m PPS
6. FOLLOWING PULVERIZING, ADJUST PULVERIZED MAT WITH GRANULAR A TO ACHIEVE PROPOSED PROFILE GRADE AND CROSSFALL

MINISTRY OF TRANSPORTATION, ONTARIO PR-D-707 88-05

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LAYOUT NAME: Layout1
CREATED: Dec. 3, 2018-11:18
LAST MODIFIED: Jan. 23, 2019-13:14
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METRIC

PLATE No	PLATE
CONT	2018-3010
WP	3062-14-00
TYPICALS	SHEET 58

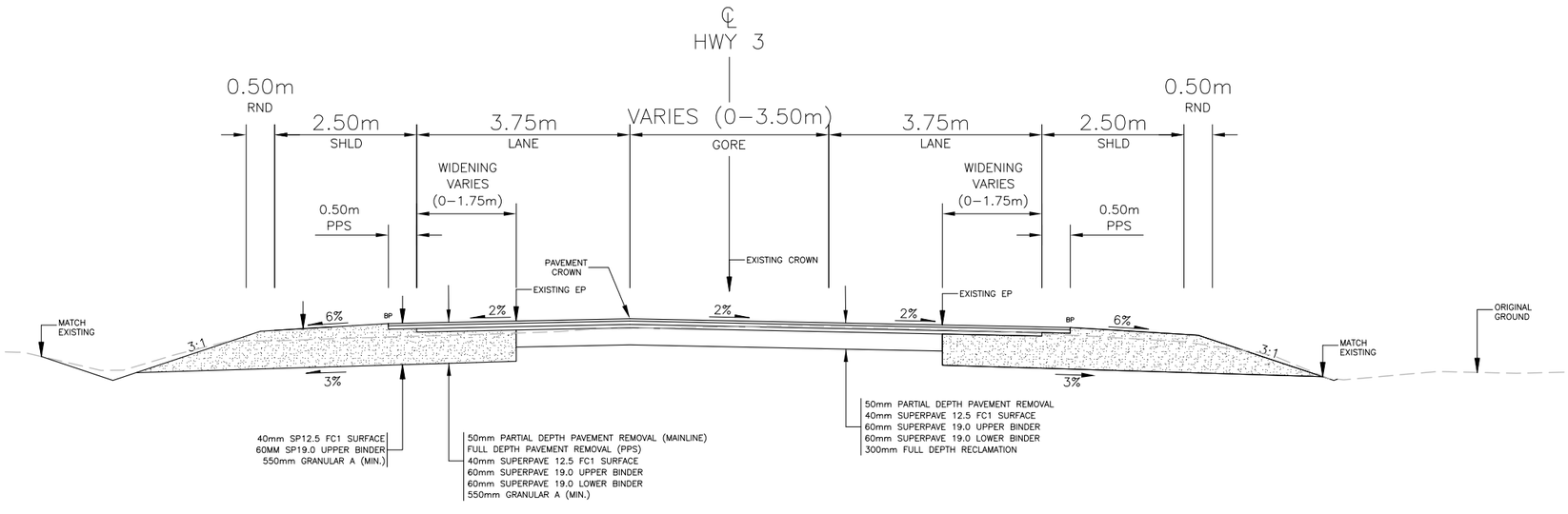


TYPICAL SECTION – HIGHWAY 3

STA 12+770 TO STA 13+100

NOTES

1. FROM STA 11+815 TO 11+838, OMIT FULLY PAVED SHOULDER AND MATCH EXISTING CURB AND GUTTER
2. SEE REMOVALS FOR MILLING DEPTHS
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5. SHOULDER WIDTHS INCLUDE 0.5m PPS
6. FOLLOWING PULVERIZING, ADJUST PULVERIZED MAT WITH GRANULAR A TO ACHIEVE PROPOSED PROFILE GRADE AND CROSSFALL



TYPICAL SECTION – HIGHWAY 3

STA 13+100 TO STA 13+230

MINISTRY OF TRANSPORTATION, ONTARIO PR-D-707 88-05

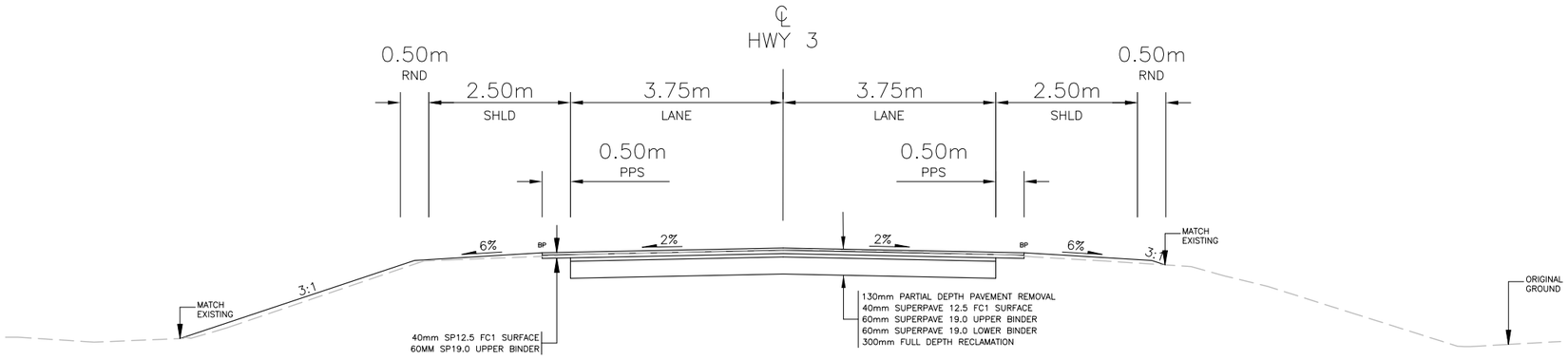
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METRIC

PLATE No	PLATE
CONT	2018-3010
WP	3062-14-00

TYPICALS

SHEET 59



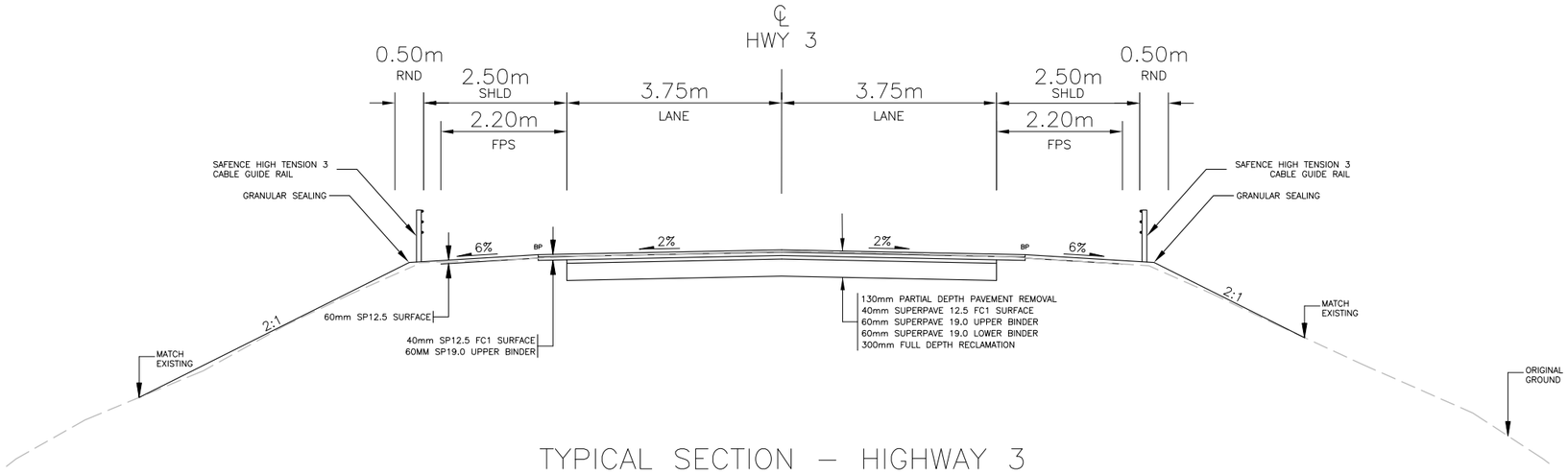
TYPICAL SECTION – HIGHWAY 3

STA 13+919 TO STA 15+927

STA 16+198 TO STA 16+986

NOTES

1. FROM STA 11+815 TO 11+838, OMIT FULLY PAVED SHOULDER AND MATCH EXISTING CURB AND GUTTER
2. SEE REMOVALS FOR MILLING DEPTHS
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6. FOLLOWING PULVERIZING, ADJUST PULVERIZED MAT WITH GRANULAR A TO ACHIEVE PROPOSED PROFILE GRADE AND CROSSFALL



TYPICAL SECTION – HIGHWAY 3

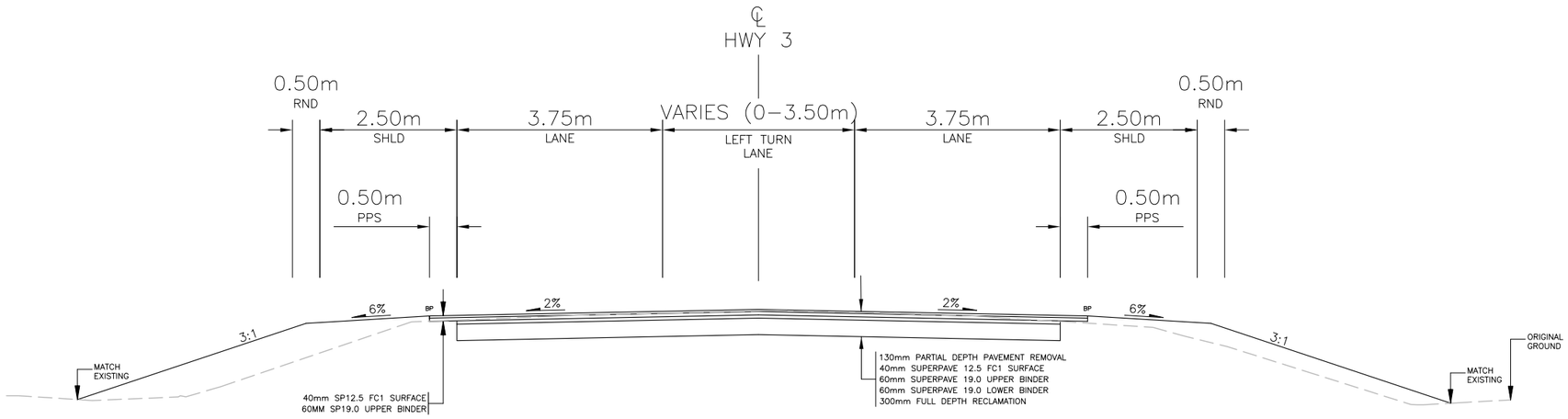
STA 15+927 TO STA 16+198

MINISTRY OF TRANSPORTATION, ONTARIO PR-D-707 88-05

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METRIC

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WP	3062-14-00
TYPICALS	SHEET 60

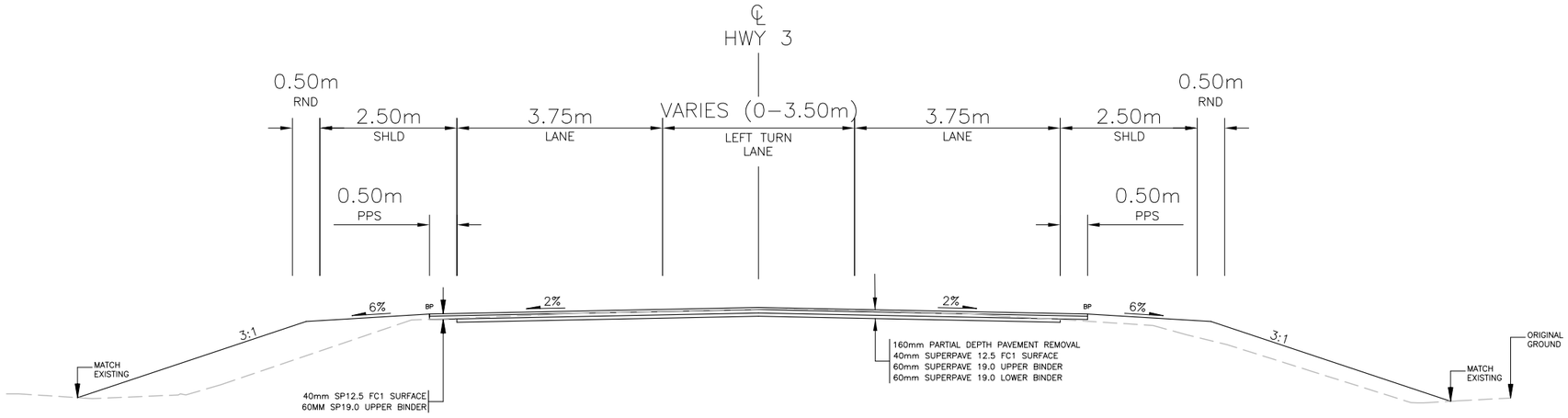


TYPICAL SECTION – HIGHWAY 3

STA 16+986 TO STA 17+200

NOTES

1. FROM STA 11+815 TO 11+838, OMIT FULLY PAVED SHOULDER AND MATCH EXISTING CURB AND GUTTER
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6. FOLLOWING PULVERIZING, ADJUST PULVERIZED MAT WITH GRANULAR A TO ACHIEVE PROPOSED PROFILE GRADE AND CROSSFALL



TYPICAL SECTION – HIGHWAY 3

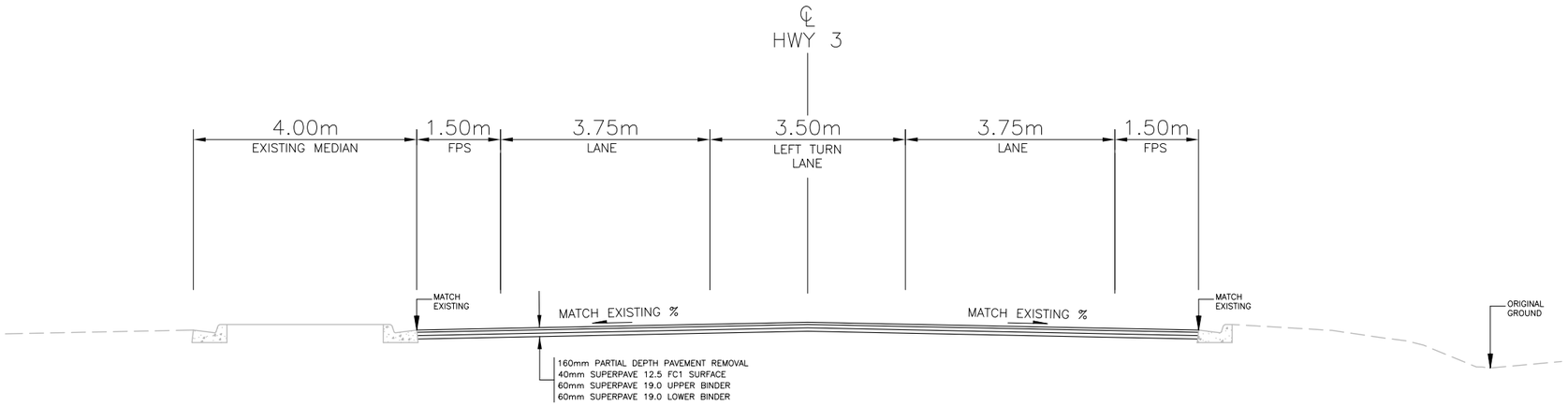
STA 17+200 TO STA 17+220
STA 17+359 TO STA 17+530

MINISTRY OF TRANSPORTATION, ONTARIO PR-D-707 88-05

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LAST MODIFIED: Jan. 23, 2019-13:14
PLOTTED: Jan. 23, 2019-13:16

METRIC

PLATE No	PLATE
CONT	2018-3010
WP	3062-14-00
TYPICALS	SHEET 61

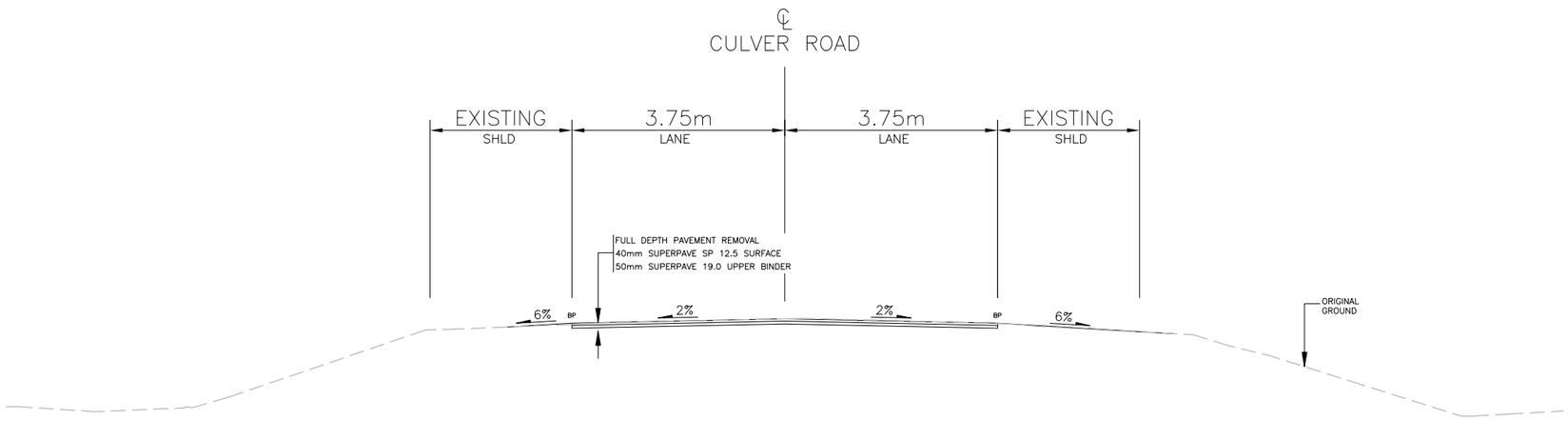


TYPICAL SECTION – HIGHWAY 3 NEAR COCKSHUTT ROAD

STA 17+220 TO STA 17+359

NOTES

1. FROM STA 11+815 TO 11+838, OMIT FULLY PAVED SHOULDER AND MATCH EXISTING CURB AND GUTTER
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6. FOLLOWING PULVERIZING, ADJUST PULVERIZED MAT WITH GRANULAR A TO ACHIEVE PROPOSED PROFILE GRADE AND CROSSFALL



TYPICAL SECTION – CULVER ROAD

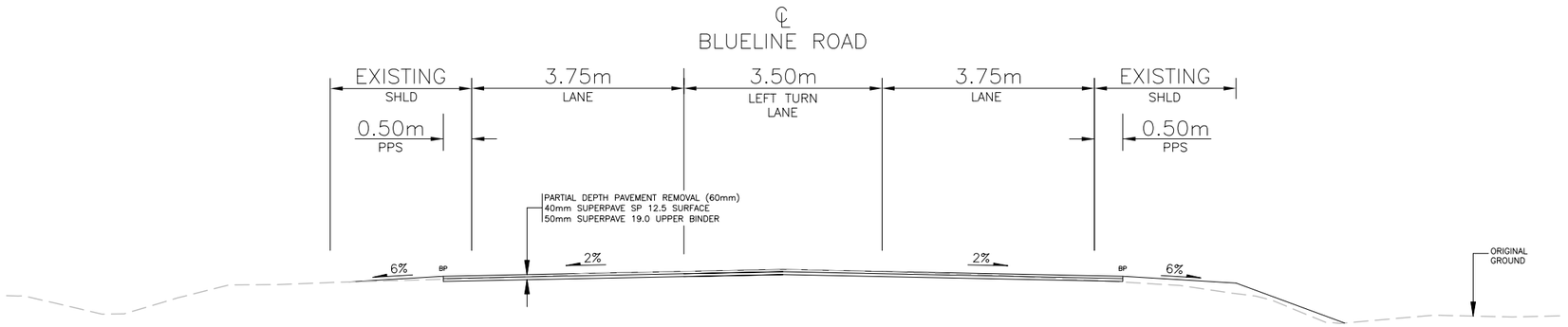
STA 09+949 TO STA 09+994

MINISTRY OF TRANSPORTATION, ONTARIO FR-D-707 88-05

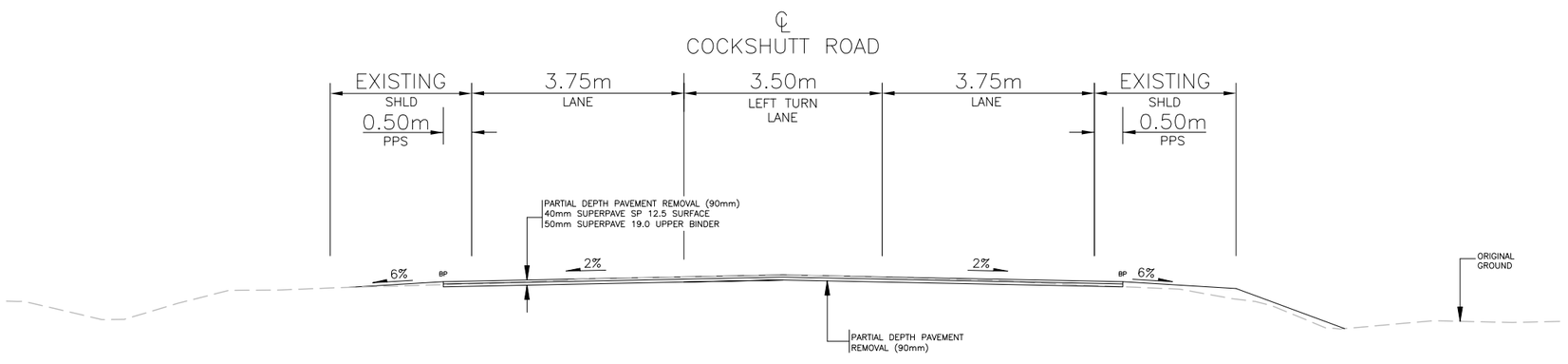
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PLOTTED: Jan. 23, 2019 - 13:16

METRIC

PLATE No	PLATE
CONT	2018-3010
WP	3062-14-00
TYPICALS	SHEET 62



TYPICAL SECTION – BLUELINE ROAD
STA 09+949 TO STA 09+995
STA 10+005 TO STA 10+051



TYPICAL SECTION – COCKSHUTT ROAD
STA 09+958 TO STA 09+995
STA 10+005 TO STA 10+042

NOTES

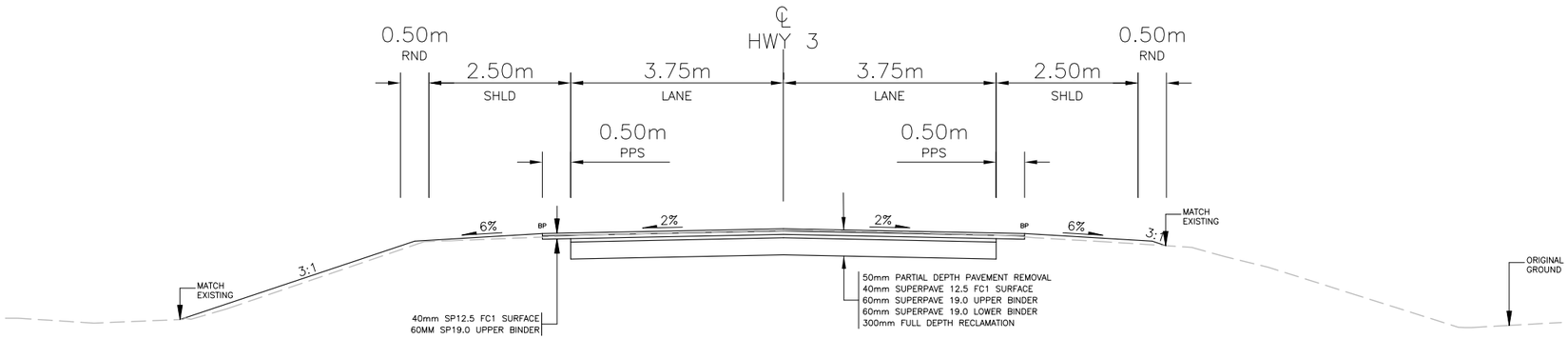
1. FROM STA 11+815 TO 11+838, OMIT FULLY PAVED SHOULDER AND MATCH EXISTING CURB AND GUTTER
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MINISTRY OF TRANSPORTATION, ONTARIO FR-D-707 88-05

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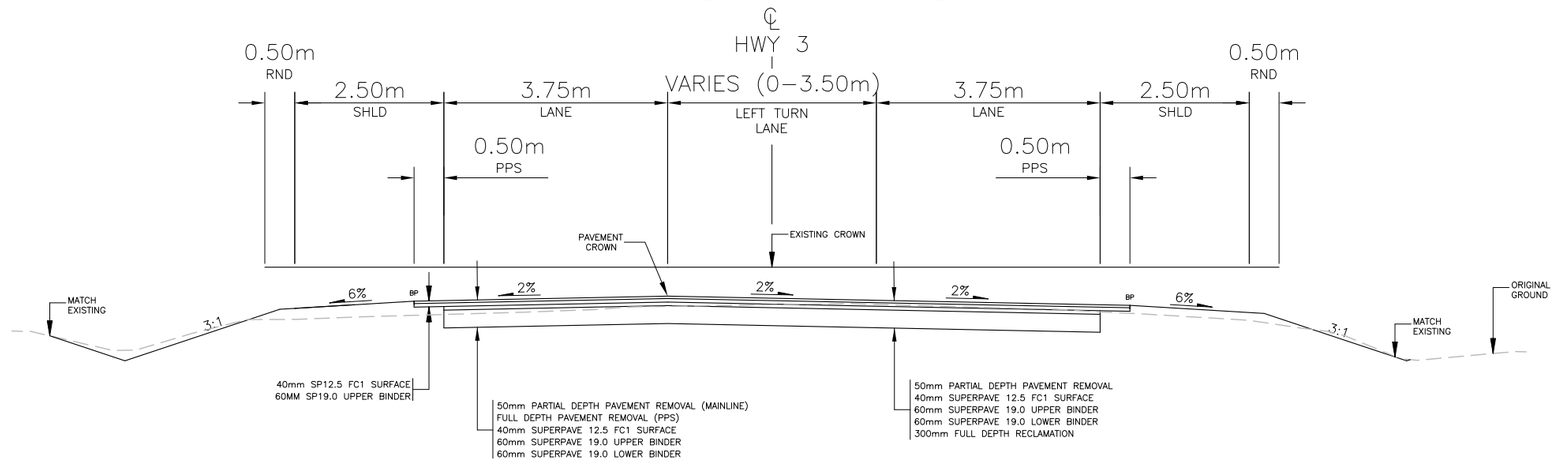
METRIC

PLATE No	PLATE
CONT	2018-3010
WP	3062-14-00
TYPICALS	SHEET 63



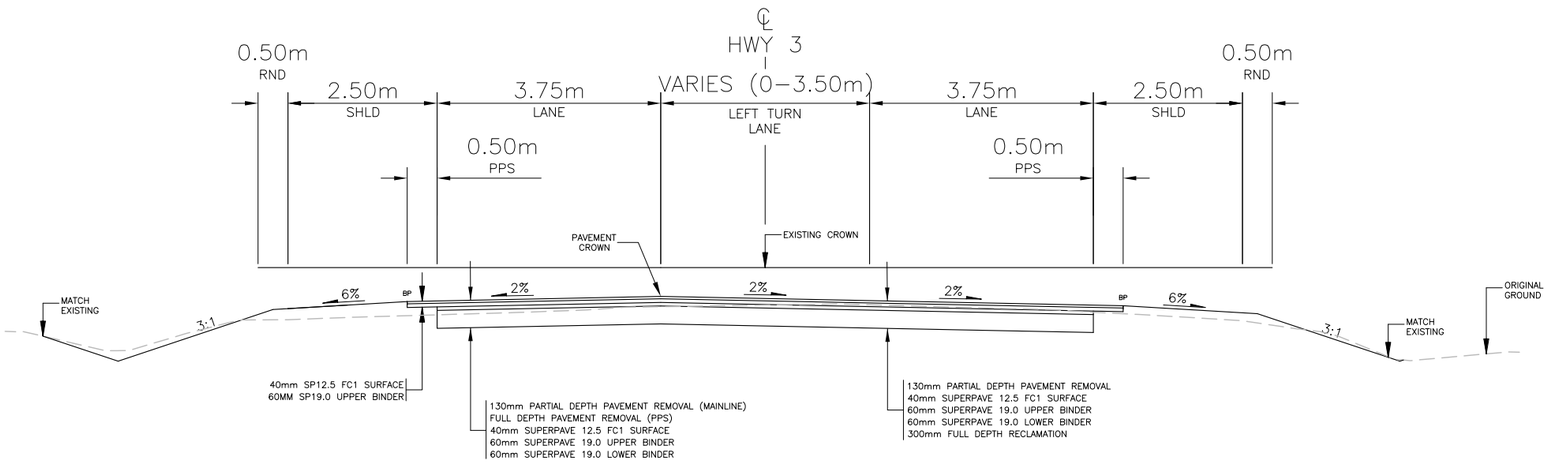
TYPICAL SECTION – HIGHWAY 3

STA 13+230 TO STA 13+382



TYPICAL SECTION – HIGHWAY 3

STA 13+382 to STA 13+770



TYPICAL SECTION – HIGHWAY 3

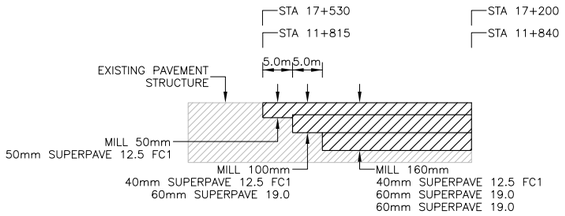
STA 13+770 to STA 13+919

NOTES

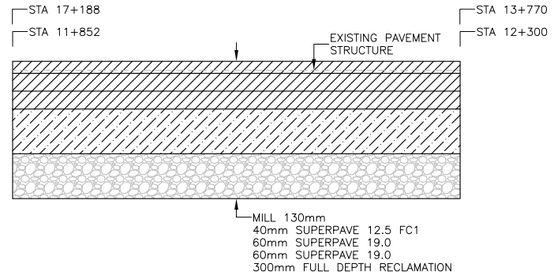
1. FROM STA 11+815 TO 11+838, OMIT FULLY PAVED SHOULDER AND MATCH EXISTING CURB AND GUTTER
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5. SHOULDER WIDTHS INCLUDE 0.5m PPS
6. FOLLOWING PULVERIZING, ADJUST PULVERIZED MAT WITH GRANULAR A TO ACHIEVE PROPOSED PROFILE GRADE AND CROSSFALL

MINISTRY OF TRANSPORTATION, ONTARIO PR-D-707 88-05

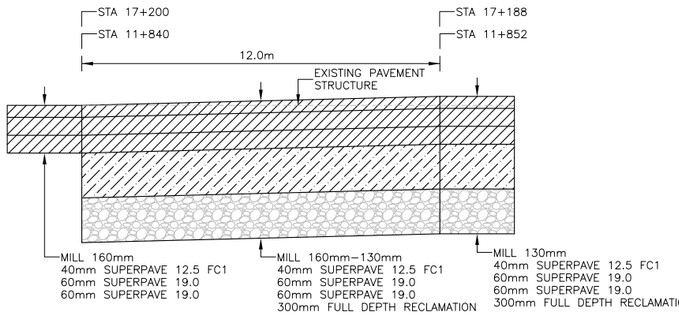
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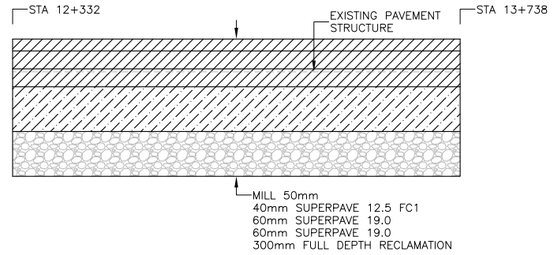
HIGHWAY 3 – END PAVEMENT TRANSITION
STA 11+815 – 11+840
STA 17+200 – 17+530



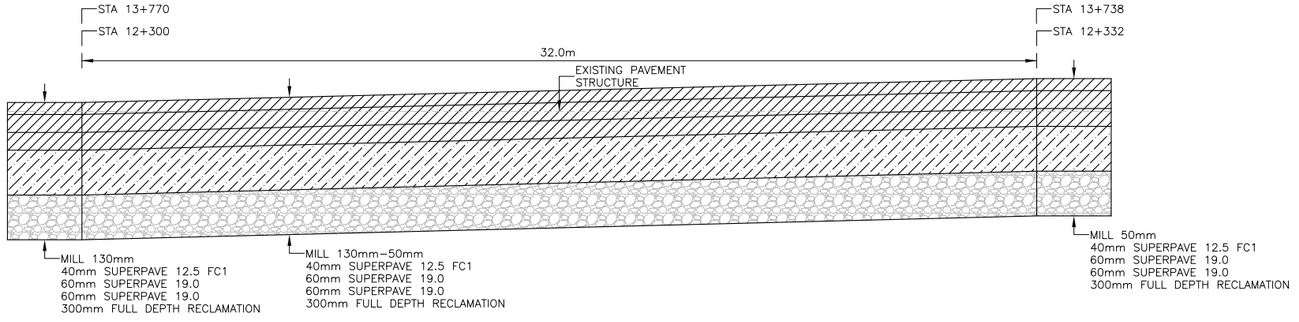
HIGHWAY 3 – PAVEMENT TREATMENT
STA 11+852 – 12+300
STA 13+770 – 17+188



HIGHWAY 3 – MILL 160mm–130mm TRANSITION
STA 11+840 – 11+852
STA 17+188 – 17+200



HIGHWAY 3 – PAVEMENT TREATMENT
STA 12+332 – 13+738



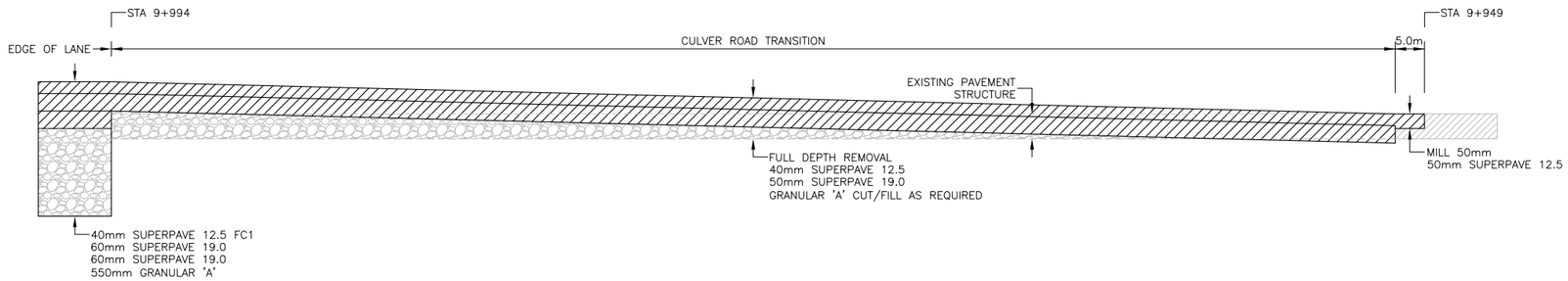
HIGHWAY 3 – MILL 130mm–50mm TRANSITION
STA 12+300 – 12+332
STA 13+738 – 13+770

MINISTRY OF TRANSPORTATION, ONTARIO PR-D-707 88-05

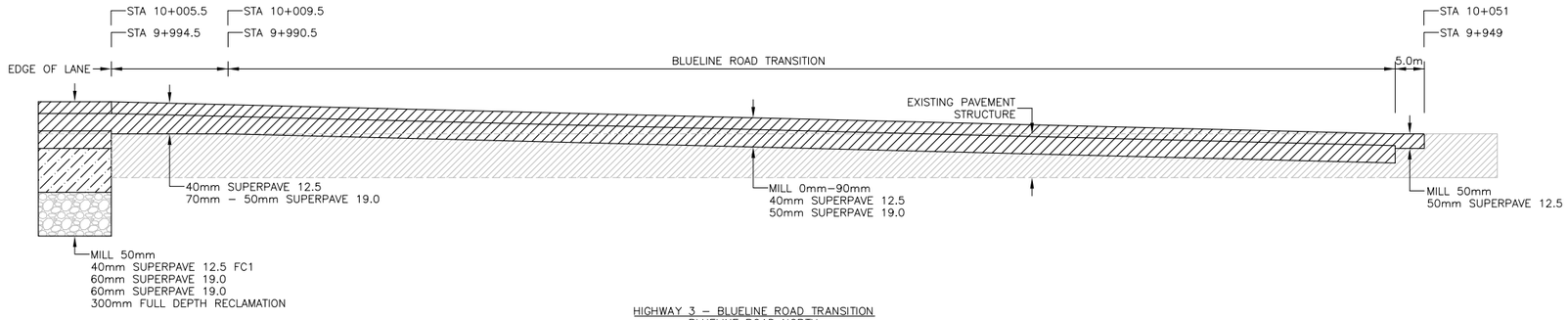
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LAYOUT NAME: Typicals (1)
CREATED ON: Dec 11, 2018-09-43
LAST MODIFIED: Dec 11, 2018-09-35
PRINTED: Jan 22, 2019-09:12

METRIC

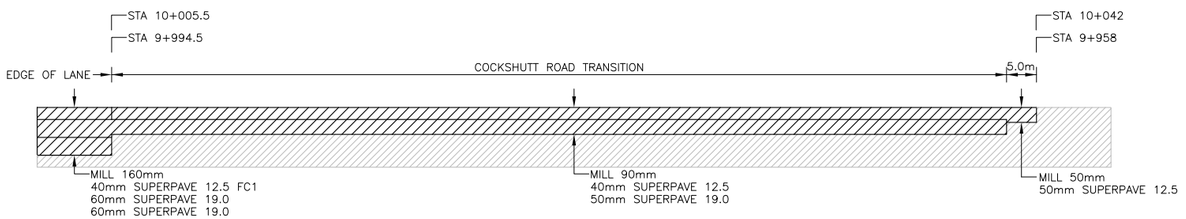
PLATE No	PLATE
CONT WP 3062-14-00	
PAVEMENT TYPICALS	SHEET 65



HIGHWAY 3 – CULVER ROAD TRANSITION
CULVER ROAD NORTH



HIGHWAY 3 – BLUELINE ROAD TRANSITION
BLUELINE ROAD NORTH
BLUELINE ROAD SOUTH



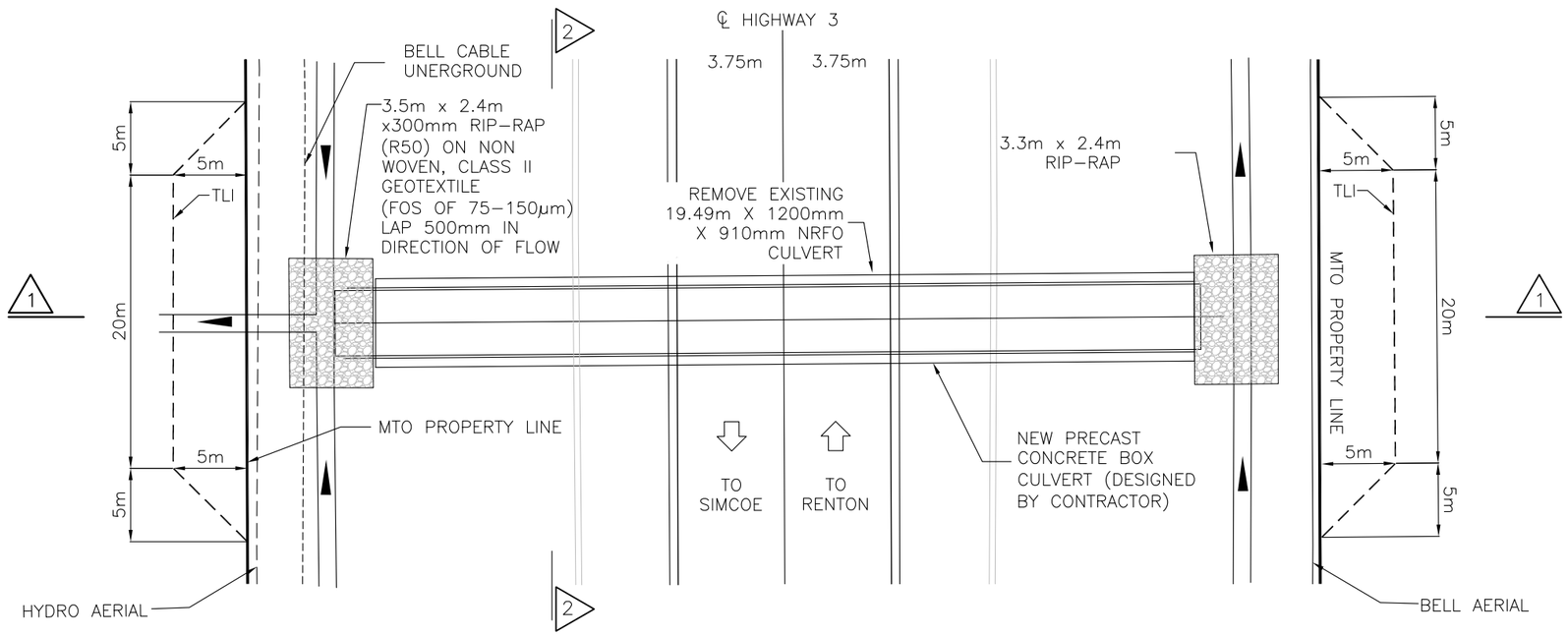
HIGHWAY 3 – COCKSHUTT ROAD TRANSITION
COCKSHUTT ROAD NORTH
COCKSHUTT ROAD SOUTH

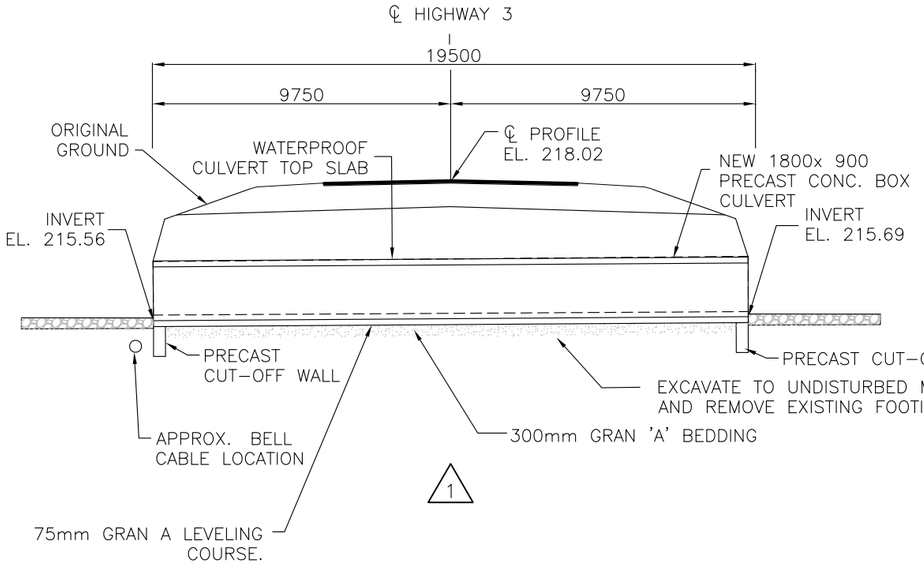
MINISTRY OF TRANSPORTATION, ONTARIO
PR-D-707 88-05
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LAST MODIFIED: Jan 11, 2018 - 09:35
PRINTED: Jan 22, 2019 - 09:12

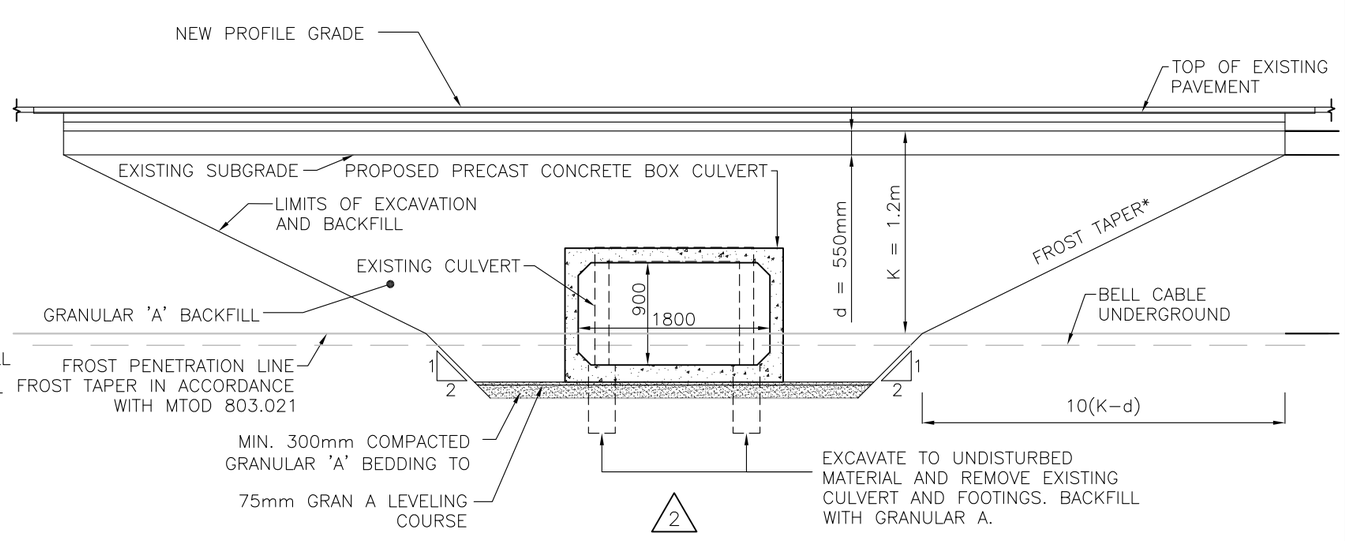
METRIC

NOTE:

1. 2 YEAR DESIGN FLOW = 0.575 cms, ELEV. = 216.11m







*AS PER OPSD 803.010

PLATE No	PLATE
CONT	2018-3010
WP	3062-14-00

CULVERT 15+154

STA TO STA

Survey _____ Revised _____

SHEET 66

GENERAL NOTES

1. CLASS OF CONCRETE- 35MPa
2. NEW PRECAST CULVERT SHALL CONFORM TO OPSS 1821
3. MIN FILL HEIGHT: 600mm, MAX: 1200mm

CONSTRUCTION NOTES

1. SEE ROAD DRAWINGS FOR CONSTRUCTION STAGING ON HIGHWAY 3.
2. CONTRACTOR SHALL VERIFY ALL DIMENSIONS OF THE PROPOSED WORK AND ALL DETAILS ON SITE AND REPORT ANY DISCREPANCIES TO THE CONTRACT ADMINISTRATOR (CA) BEFORE PROCEEDING WITH THE WORK.
3. THE LOCATION OF EXISTING UNDERGROUND UTILITIES IS APPROXIMATE. THE CONTRACTOR SHALL PROTECT THE UTILITIES FROM DAMAGE DURING WORK OPERATIONS.
4. DEBRIS FROM STRUCTURAL REMOVAL SHOULD BE PREVENTED FROM ENTERING THE WATERCOURSE.
5. THE CONTRACTOR SHALL ISOLATE THE WORK ARES FROM THE WATERCOURSE FLOW FOR THE CULVERT REPLACEMENT. CULVERT TIMING RESTRICTIONS ARE OUTLINED ELSEWHERE IN THE CONTRACT.
6. THE BEDDING AND CULVERT SHALL NOT BE PLACED UNTIL THE DEPTH OF THE EXCAVATION AND THE CHARACTER OF THE FOUNDATION HAVE BEEN APPROVED BY THE CONTRACT ADMINISTRATOR.
7. FACTORED DESIGN SOIL BEARING CAPACITIES MUST BE VERIFIED BY THE CONTRACT ADMINISTRATOR ON SITE:
   @ SLS = 150 kPa
   @ ULS = 225 kPa
9. RESTORE ALL AREAS DISTURBED BY CONSTRUCTION WITH 50 mm TOPSOIL, SEED AND COVER.
10. BEDDING TO BE PLACED ON BOTH SIDES OF CULVERT SIMULTANEOUSLY.

SCOPE OF WORK

1. DIVERT TRAFFIC AND INSTALL ENVIRONMENTAL PROTECTION SYSTEM FOR CONSTRUCTION.
2. INSTALL TEMPORARY FLOW PASSAGE SYSTEM, DIVERT FLOW TO THE PASSAGE AND DEWATER THE WORK AREA AS PER OPSS 185.
3. EXCAVATE AND REMOVE EXISTING CULVERT.
4. INSTALL NEW PRECAST CULVERT AND BACKFILL.

MINISTRY OF TRANSPORTATION, ONTARIO PR-D-707 88-05

DRAWING LOCATION: W:\PD\WP\3\hwy003\3062-14-00 Simcoe to Renton\Technical Data\Dwg\
DRAWING NAME: Culvert Typicals.dwg
LAYOUT NAME: Typicals (1)
LAST MODIFIED: Jan 28, 2019-12:09
LAST MODIFIED: Jan 28, 2019-12:09
PRINTED: Jan 28, 2019-12:10

METRIC

NOTE:

1. 2 YEAR DESIGN FLOW = 0.268 cms, ELEV. = 216.39m

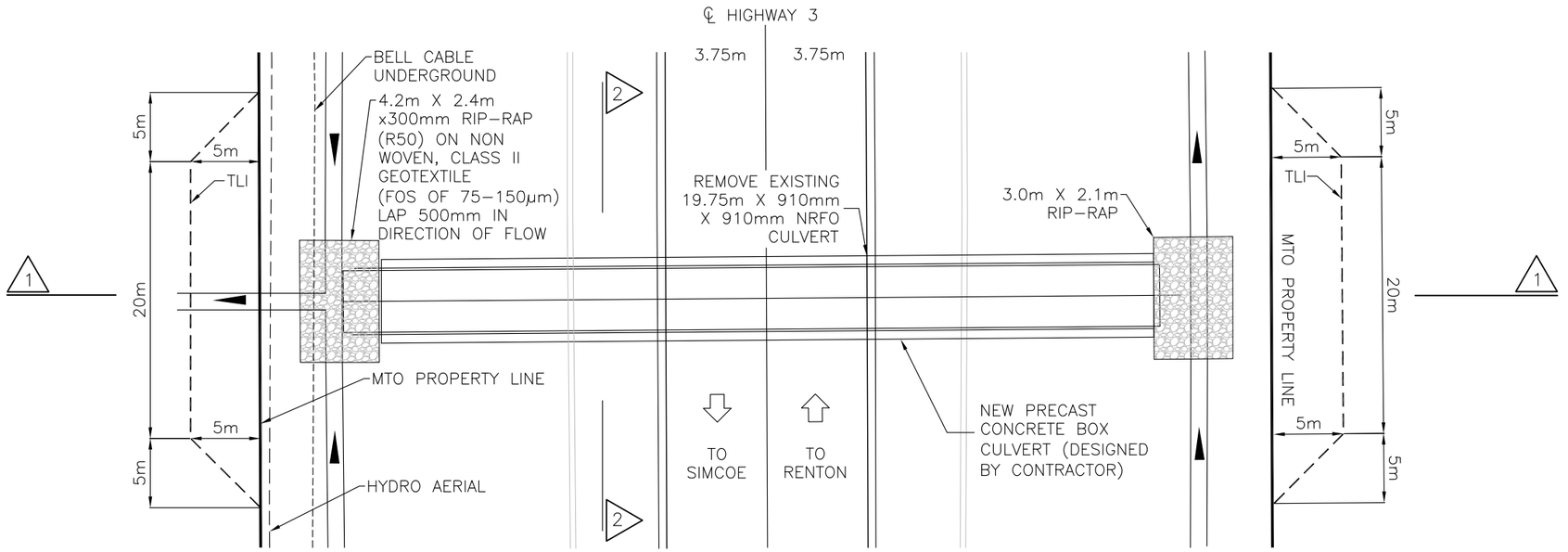


PLATE No	PLATE
CONT	2018-3010
WP	3062-14-00

CULVERT 15+388

STA TO STA

Survey _____ Revised _____

SHEET 67

GENERAL NOTES

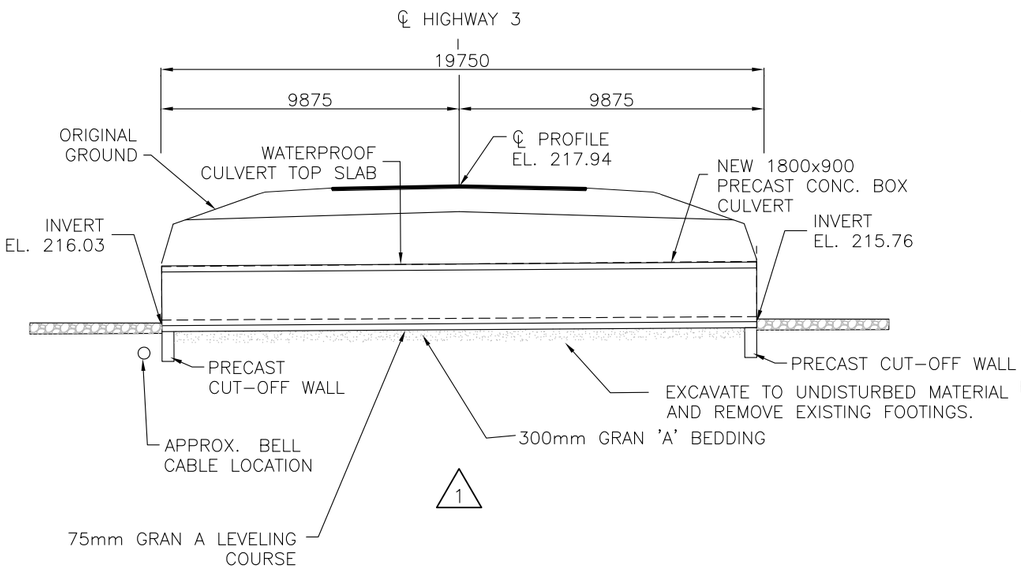
1. CLASS OF CONCRETE- 35MPa
2. NEW PRECAST CULVERT SHALL CONFORM TO OPSS 1821
3. MIN FILL HEIGHT: 600mm, MAX: 1200mm

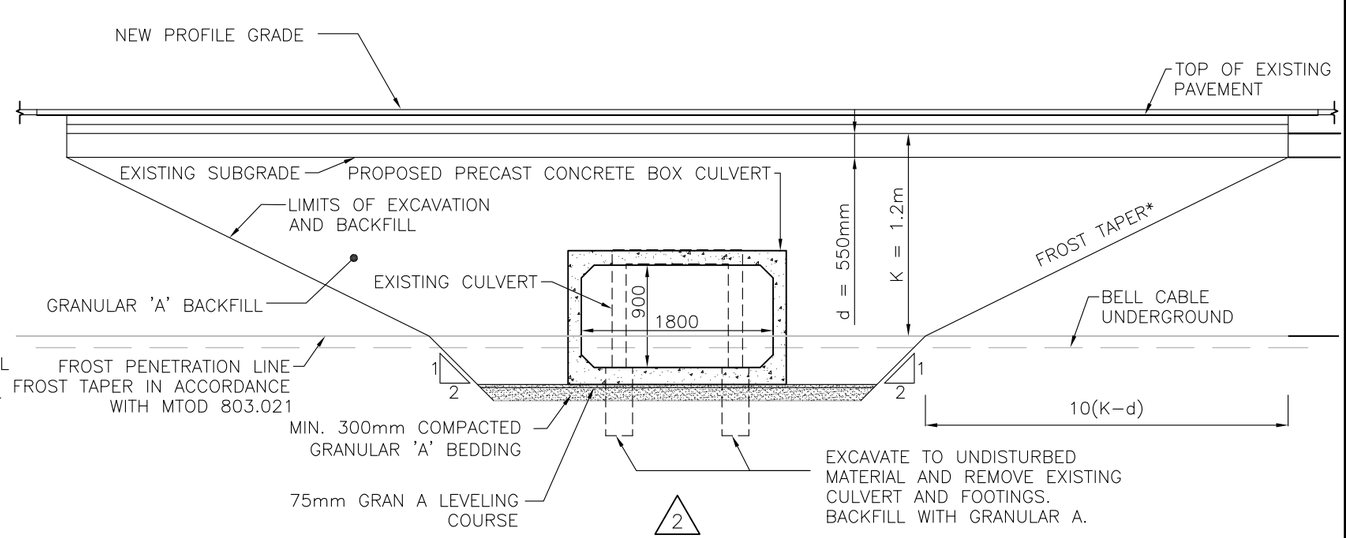
CONSTRUCTION NOTES

1. SEE ROAD DRAWINGS FOR CONSTRUCTION STAGING ON HIGHWAY 3.
2. CONTRACTOR SHALL VERIFY ALL DIMENSIONS OF THE PROPOSED WORK AND ALL DETAILS ON SITE AND REPORT ANY DISCREPANCIES TO THE CONTRACT ADMINISTRATOR (CA) BEFORE PROCEEDING WITH THE WORK.
3. THE LOCATION OF EXISTING UNDERGROUND UTILITIES IS APPROXIMATE. THE CONTRACTOR SHALL PROTECT THE UTILITIES FROM DAMAGE DURING WORK OPERATIONS.
4. DEBRIS FROM STRUCTURAL REMOVAL SHOULD BE PREVENTED FROM ENTERING THE WATERCOURSE.
5. THE CONTRACTOR SHALL ISOLATE THE WORK ARES FROM THE WATERCOURSE FLOW FOR THE CULVERT REPLACEMENT. CULVERT TIMING RESTRICTIONS ARE OUTLINED ELSEWHERE IN THE CONTRACT.
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7. FACTORED DESIGN SOIL BEARING CAPACITIES MUST BE VERIFIED BY THE CONTRACT ADMINISTRATOR ON SITE:
   @ SLS = 150 kPa
   @ ULS = 225 kPa
9. RESTORE ALL AREAS DISTURBED BY CONSTRUCTION WITH 50 mm TOPSOIL, SEED AND COVER.
10. BEDDING TO BE PLACED ON BOTH SIDES OF CULVERT SIMULTANEOUSLY.

SCOPE OF WORK

1. DIVERT TRAFFIC AND INSTALL ENVIRONMENTAL PROTECTION SYSTEM FOR CONSTRUCTION.
2. INSTALL TEMPORARY FLOW PASSAGE SYSTEM, DIVERT FLOW TO THE PASSAGE AND DEWATER THE WORK AREA AS PER OPSS 185.
3. EXCAVATE AND REMOVE EXISTING CULVERT.
4. INSTALL NEW PRECAST CULVERT AND BACKFILL.





*AS PER OPSD 803.010

MINISTRY OF TRANSPORTATION, ONTARIO PR-D-707 88-05

DRAWING LOCATION: W:\PD\WP\3\hwy003\3062-14-00 Simcoe to Renton\Technical Data\Dwg\
DRAWING NAME: 3062-14-00_Culvert_15+388.dwg
LAYOUT NAME: Typical (2)
LAST PLOTTED: Jan 28, 2019-12:09
LAST MODIFIED: Jan 28, 2019-12:09
PRINTED: Jan 28, 2019-12:10

METRIC

PLATE No	PLATE
CONT	2018–3010
WP	3062–14–00

CULVERT 15+857

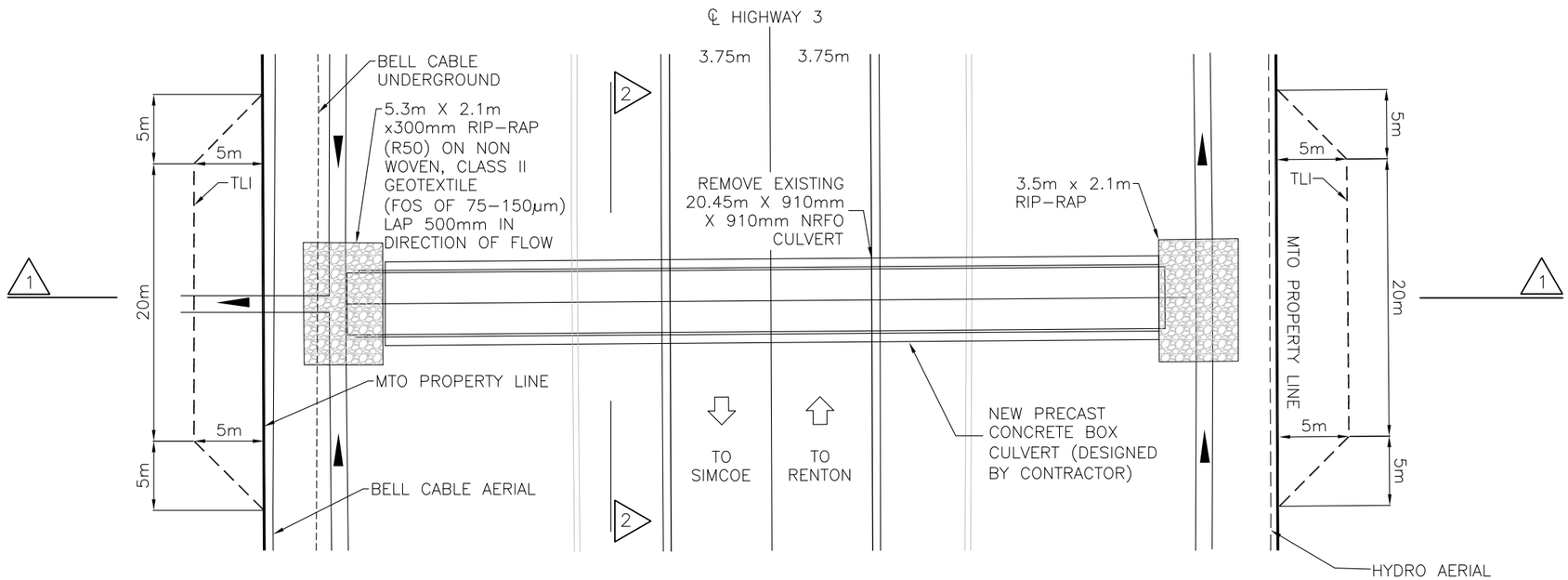
STA TO STA

Survey _____ Revised _____

SHEET 68

NOTE:

1. 2 YEAR DESIGN FLOW = 0.183 cms, ELEV. 214.52m



GENERAL NOTES

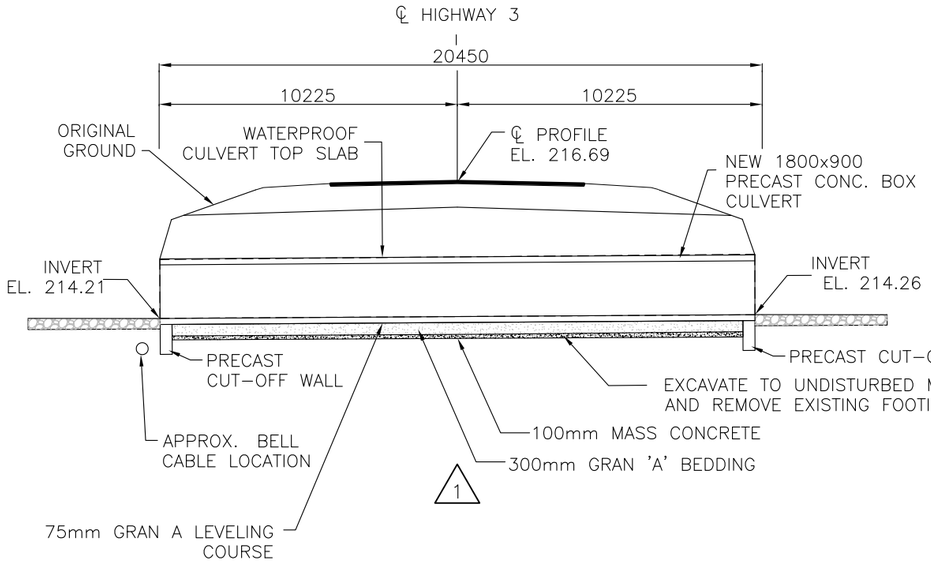
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2. NEW PRECAST CULVERT SHALL CONFORM TO OPSS 1821
3. MIN FILL HEIGHT: 600mm, MAX: 1400mm
4.

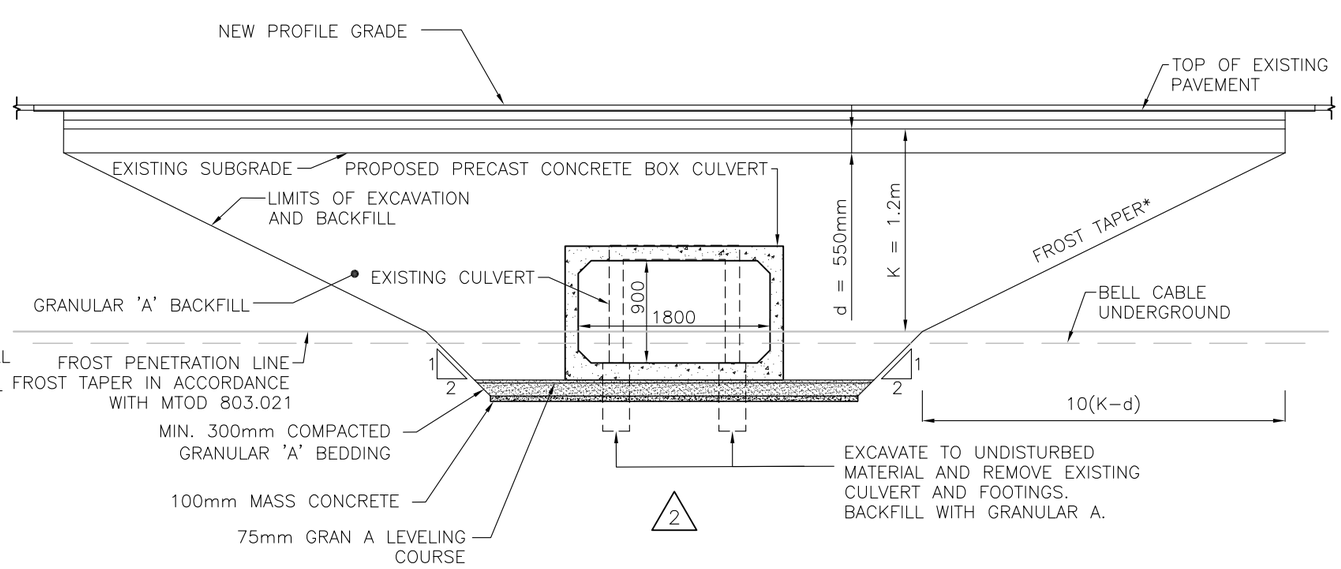
CONSTRUCTION NOTES

1. SEE ROAD DRAWINGS FOR CONSTRUCTION STAGING ON HIGHWAY 3.
2. CONTRACTOR SHALL VERIFY ALL DIMENSIONS OF THE PROPOSED WORK AND ALL DETAILS ON SITE AND REPORT ANY DISCREPANCIES TO THE CONTRACT ADMINISTRATOR (CA) BEFORE PROCEEDING WITH THE WORK.
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   @ SLS = 150 kPa
   @ ULS = 225 kPa
9. RESTORE ALL AREAS DISTURBED BY CONSTRUCTION WITH 50 mm TOPSOIL, SEED AND COVER.
10. BEDDING TO BE PLACED ON BOTH SIDES OF CULVERT SIMULTANEOUSLY.

SCOPE OF WORK

1. DIVERT TRAFFIC AND INSTALL ENVIRONMENTAL PROTECTION SYSTEM FOR CONSTRUCTION.
2. INSTALL TEMPORARY FLOW PASSAGE SYSTEM, DIVERT FLOW TO THE PASSAGE AND DEWATER THE WORK AREA AS PER OPSS 185.
3. EXCAVATE AND REMOVE EXISTING CULVERT.
4. INSTALL NEW PRECAST CULVERT AND BACKFILL.





*AS PER OPSD 803.010

MINISTRY OF TRANSPORTATION, ONTARIO PR-D-707 88-05

DRAWING LOCATION: K:\PD\WP'S\Hwy003\3062-14-00 Simcoe to Renton\Technical Data\Dwg\
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LAYOUT NAME: Typical (3)
ACTIVE XREFS: None
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PRINTED: Jan 28, 2019-12:10

METRIC

PLATE No	PLATE
CONT	2018–3010
WP	3062–14–00

CULVERT 16+707

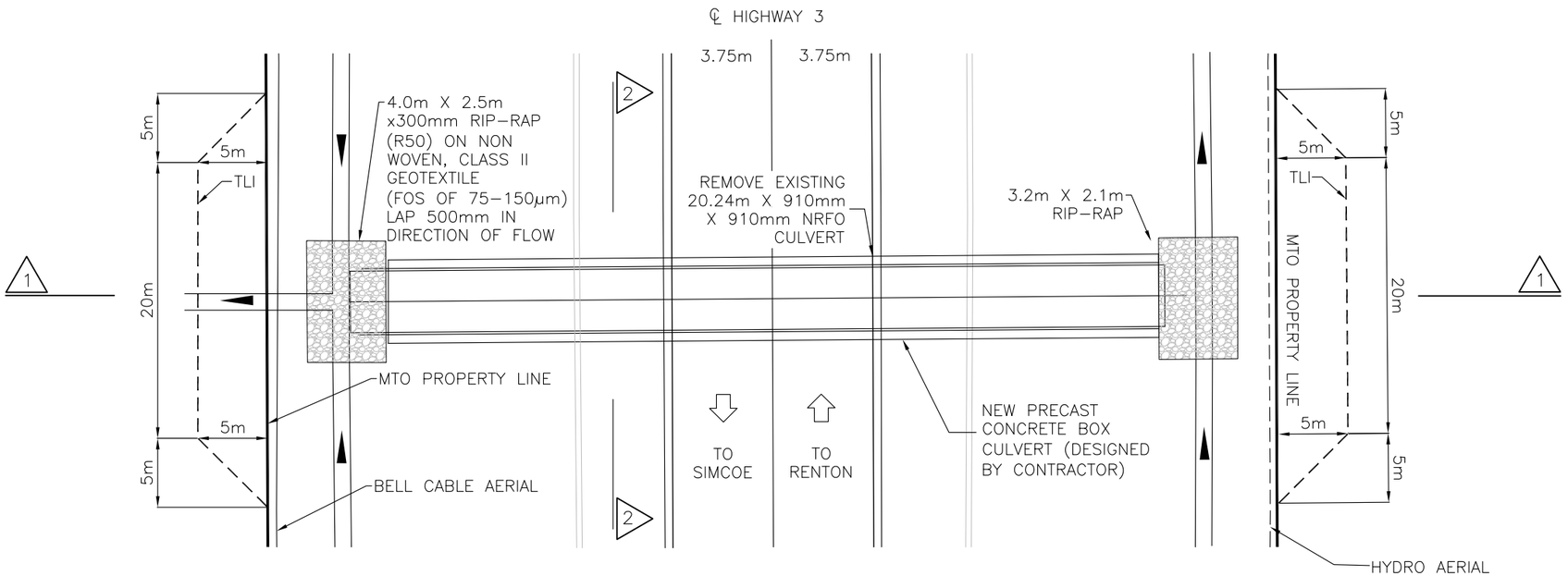
STA TO STA

Survey _____ Revised _____

SHEET 69

NOTE:

1. 2 YEAR DESIGN FLOW = 0.117 cms, ELEV. = 214.96m



GENERAL NOTES

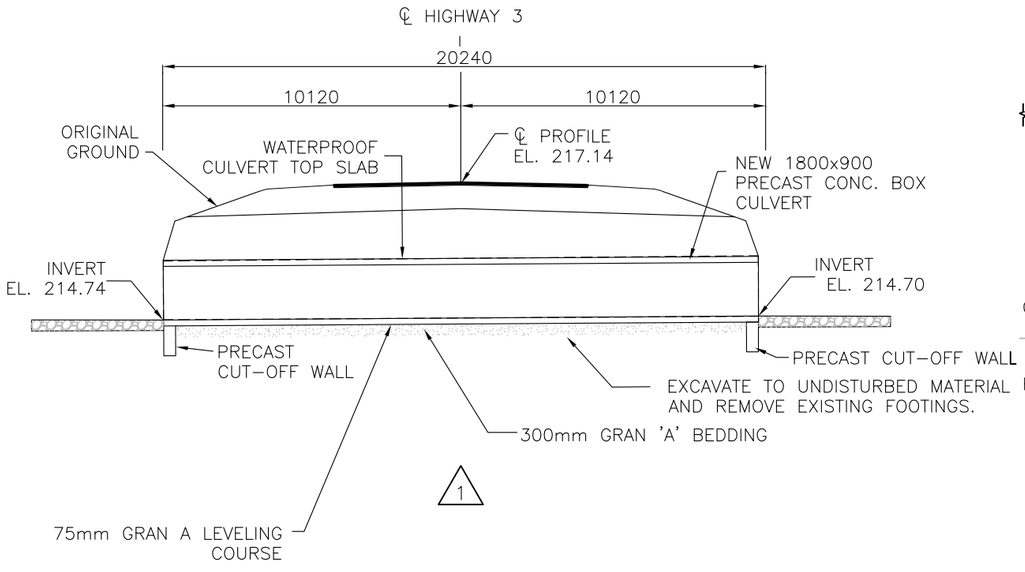
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2. NEW PRECAST CULVERT SHALL CONFORM TO OPSS 1821
3. MIN FILL HEIGHT: 600mm, MAX: 1300mm

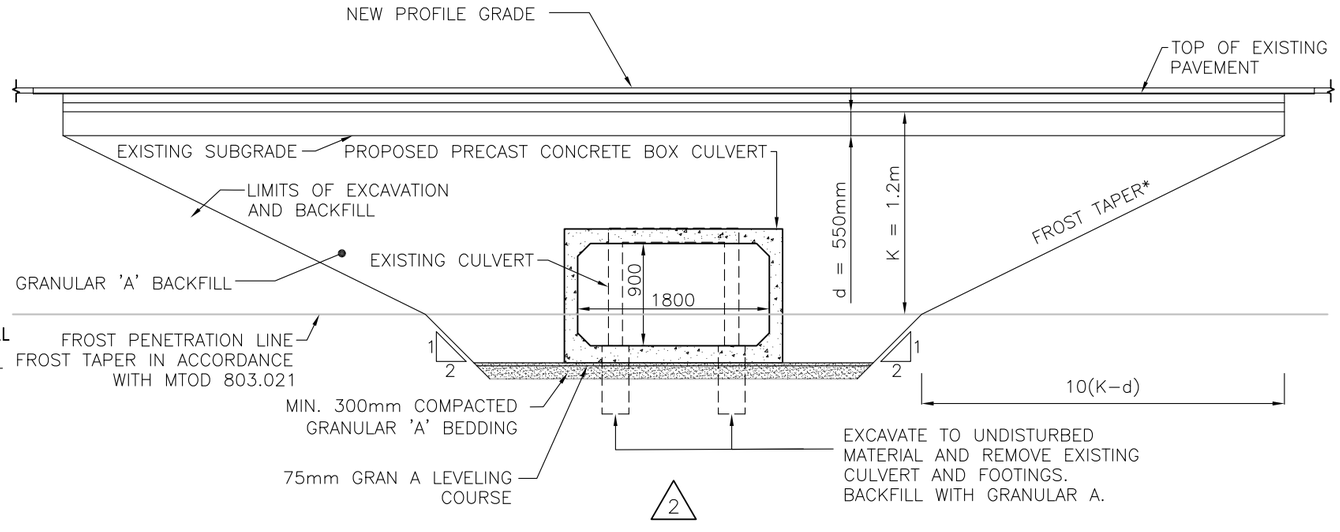
CONSTRUCTION NOTES

1. SEE ROAD DRAWINGS FOR CONSTRUCTION STAGING ON HIGHWAY 3.
2. CONTRACTOR SHALL VERIFY ALL DIMENSIONS OF THE PROPOSED WORK AND ALL DETAILS ON SITE AND REPORT ANY DISCREPANCIES TO THE CONTRACT ADMINISTRATOR (CA) BEFORE PROCEEDING WITH THE WORK.
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10. BEDDING TO BE PLACED ON BOTH SIDES OF CULVERT SIMULTANEOUSLY.

SCOPE OF WORK

1. DIVERT TRAFFIC AND INSTALL ENVIRONMENTAL PROTECTION SYSTEM FOR CONSTRUCTION.
2. INSTALL TEMPORARY FLOW PASSAGE SYSTEM, DIVERT FLOW TO THE PASSAGE AND DEWATER THE WORK AREA AS PER OPSS 185.
3. EXCAVATE AND REMOVE EXISTING CULVERT.
4. INSTALL NEW PRECAST CULVERT AND BACKFILL.





*AS PER OPSD 803.010

MINISTRY OF TRANSPORTATION, ONTARIO PR-D-707 88-05

DRAWING LOCATION: W:\PDI\WP3\Hwy003\3062-14-00 Simcoe to Renton\Technical Data\Dwg\
DRAWING NAME: Culvert Typicals.dwg
LAYOUT NAME: Typicals (4)
LAST MODIFIED: Jan 28, 2019-12:09
PLOTTED: Jan 28, 2019-12:10

MINISTRY OF TRANSPORTATION, ONTARIO PR-D-707 88-05

METRIC

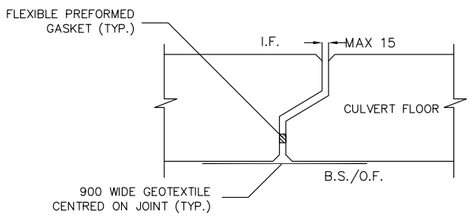
PLATE No	PLATE
CONT	2018-3010
WP	3062-14-00

CULVERT TYPICAL DETAILS

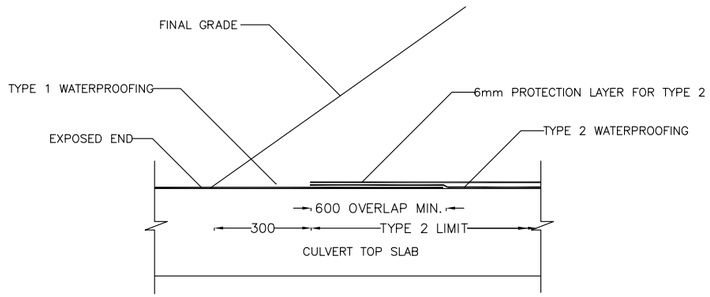
STA TO STA

Survey Revised

SHEET 70



JOINTS IN FLOOR SLAB



WATERPROOFING SPLICE DETAIL

WATERPROOFING SEQUENCE:
1. ABRASIVE BLAST CLEAN CONCRETE SURFACE.
2. PLACE SEALANT IN JOINTS.
3. APPLY PRIMER AND WATERPROOFING MEMBRANE.
4. INSTALL PROTECTION BOARDS, WHERE APPLICABLE
4. PLACE BACKFILL.

WATERPROOFING SHALL BE AS FOLLOWS
EXPOSED CULVERT ENDS:
TYPE 1 – ROLL-ON LIQUID MEMBRANE
BURRIED SECTIONS.
TYPE 2 – SELF ADHESIVE MEMBRANE
WITH PROTECTION BOARD.

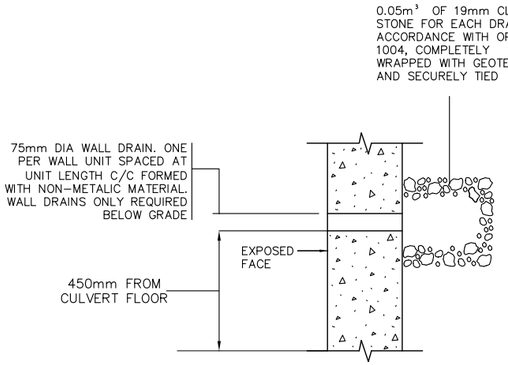
ANY SUBEXCAVATION AS DIRECTED BY THE CONTRACT ADMINISTRATOR FOR REMOVAL OF UNSUITABLE MATERIAL AT FOUNDING LEVEL AND ANY OVEREXCAVATION SHALL BE REPLACED WITH GRANULAR 'A'.
ALL CONCRETE SURFACES TO BE ABRASIVE BLAST CLEANED PRIOR TO WATERPROOFING.

NOTES:

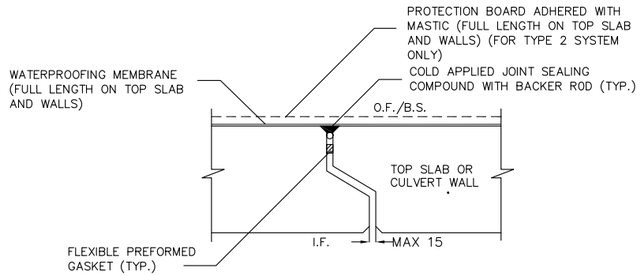
1. THE CONTRACT ADMINISTRATOR SHALL INSPECT THE FOUNDATION PRIOR TO PLACEMENT OF PRECAST UNITS.
2. GROUTING AT THE CUT-OFF WALLS SHALL NOT BE CARRIED OUT UNTIL AFTER COMPLETION OF BACKFILLING OPERATIONS.
3. GEOTEXTILE SHALL BE SECURED TO BOTH SIDES OF JOINT WITH SUITABLE ADHESIVE AS PER GEOTEXTILE MANUFACTURER'S RECOMMENDATIONS.
4. GEOTEXTILE SHALL BE CLASS II, NON-WOVEN, FOS 75-150mm, AND FREE OF FOLDS, TEARS AND WRINKLES.

LEGEND

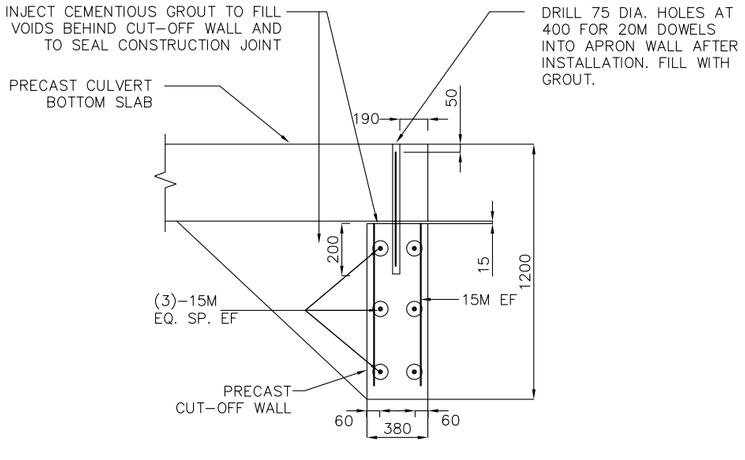
O.F.	DENOTES OUTSIDE FACE OF CULVERT
I.F.	DENOTES INSIDE FACE OF CULVERT
B.S.	DENOTES BACKFILL SIDE OF CULVERT
EQ. SP.	DENOTES EQUALLY SPACED



WALL DRAIN DETAIL



JOINTS IN TOP SLAB OR WALLS



CUT-OFF WALL DETAILS

SCALE NTS

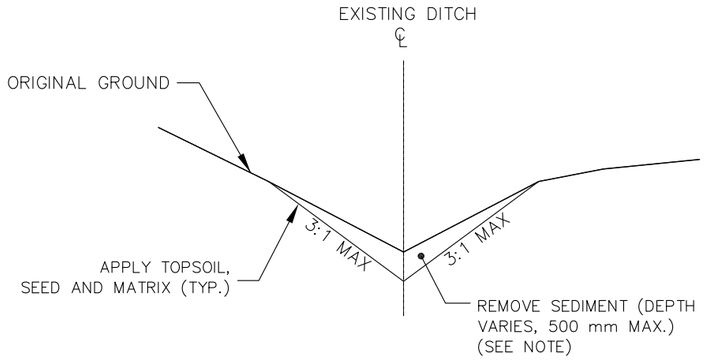
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DRAWING NAME: Culvert Typicals.dwg
LAYOUT NAME: Typicals (5)
LAST MODIFIED: Jan 28, 2019-12:09
LAST MODIFIED: Jan 28, 2019-12:09
PRINTED: Jan 28, 2019-12:10

METRIC

PLATE No
CONT 2018-3010
WP 3062-14-00

MISCELLANEOUS

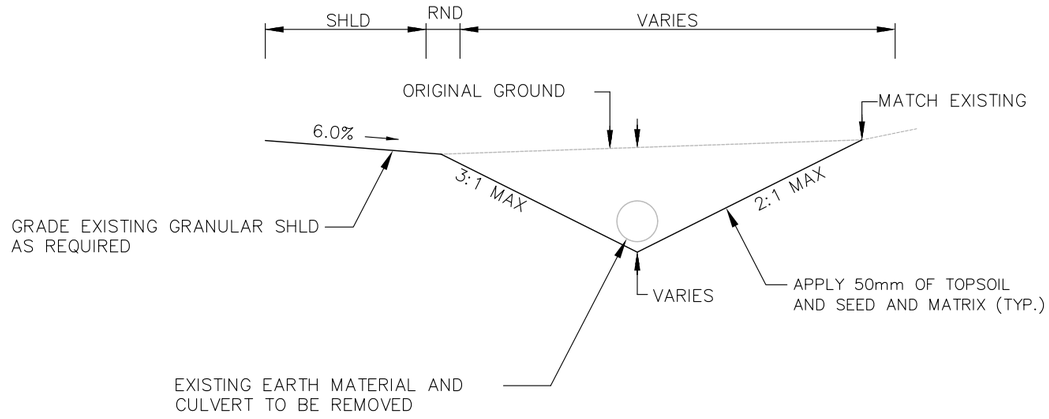
SHEET 71



TYPICAL DITCH CLEANOUT

NOTES:

1. DITCH CLEANOUT IS TO ENSURE POSITIVE DRAINAGE



ENTRANCE REMOVAL EXCAVATION DETAIL

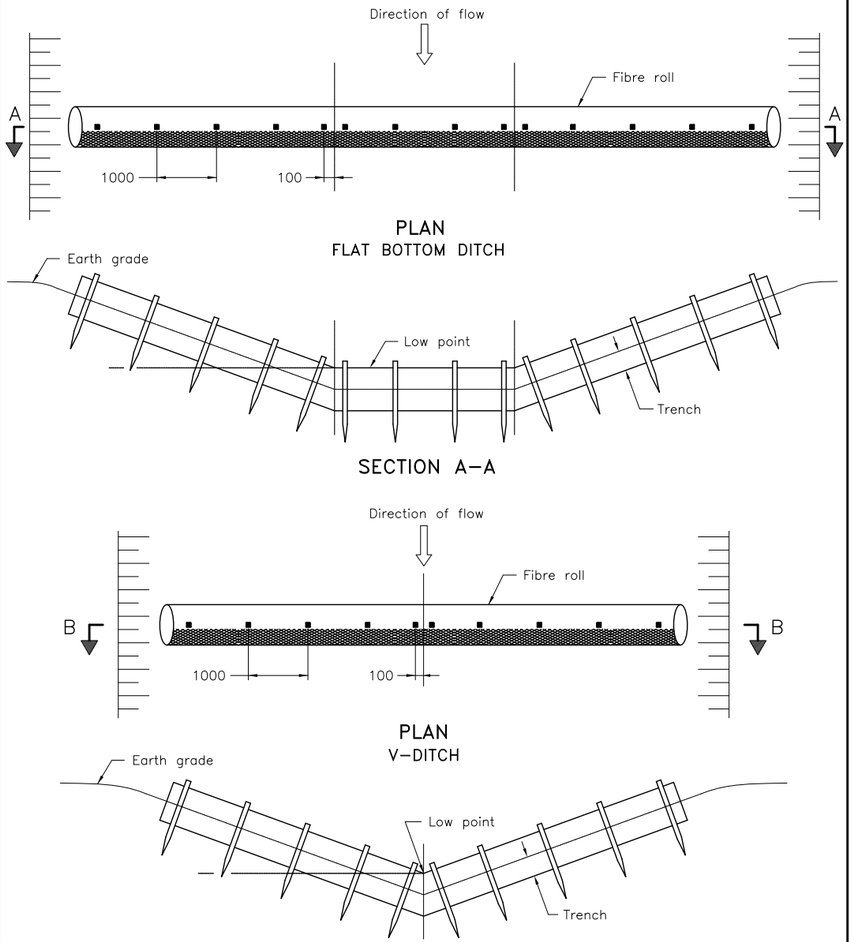
GEOGRAPHIC TOWNSHIP OF TOWNSEND AND WOODHOUSE

SCALE
1.3m 0 2.5m
Horizontal

MINISTRY OF TRANSPORTATION, ONTARIO PR-D-707 88-05

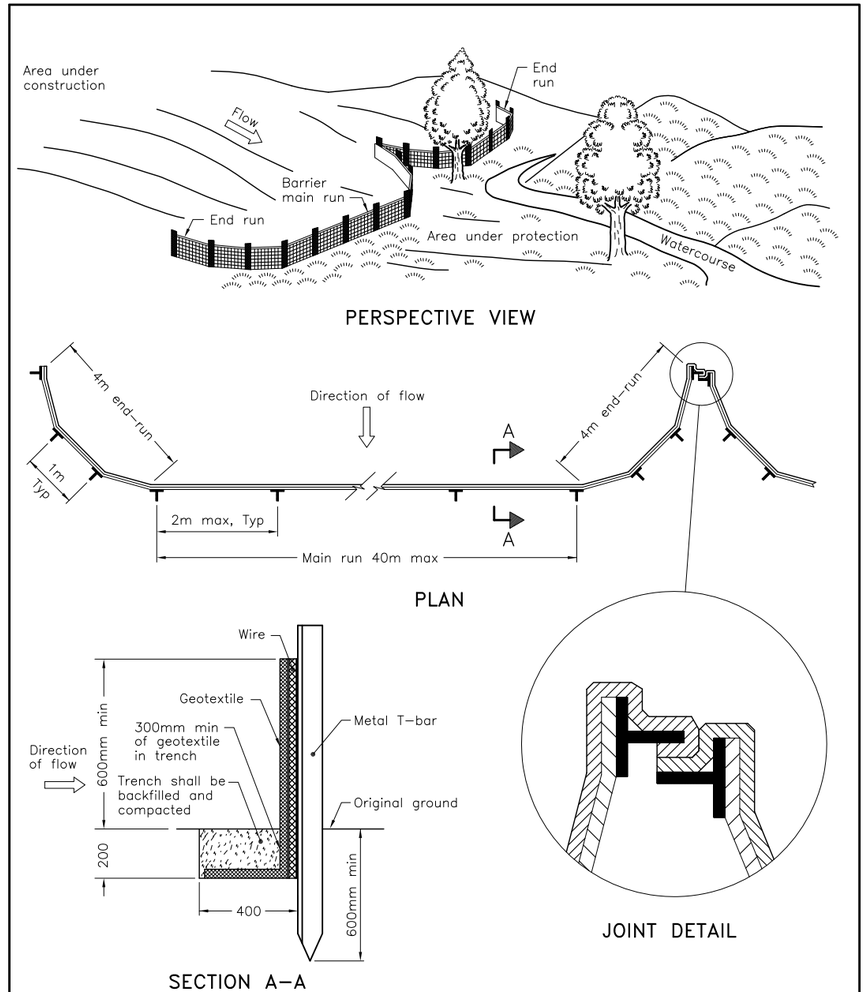
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DRAWING NAME: A_MiscDetails Details.dwg
LAYOUT NAME: MISC
DGN/TEMPLATE: MTO_11-16-11.tbl
LAST MODIFIED: Dec 3, 2018-12:26
PRINTED: Jan 22, 2019-09:15

NOTES:
1. CONTRACTOR TO PLACE FIBRE TUBE FILTRATION CHECK DAMS IN LOCATIONS THAT WILL MAXIMIZE EROSION CONTROL AND SEDIMENT RUN–OFF MEASURES.



NOTES:
A Refer to OPSD 219.120 Section A–A installation detail.
B All dimensions are in millimetres unless otherwise shown.

ONTARIO PROVINCIAL STANDARD DRAWING	Nov 2015	Rev	0
FIBRE ROLL FLOW CHECK DAMS			
	OPSD 219.191		



NOTE:
A All dimensions are in millimetres unless otherwise shown.

ONTARIO PROVINCIAL STANDARD DRAWING	Nov 2015	Rev	0
HEAVY–DUTY WIRE–BACKED SILT FENCE BARRIER			
	OPSD 219.131		

MINISTRY OF TRANSPORTATION, ONTARIO
PR–D–707 88–05
DRAWING LOCATION: M:\PD\WP3\hwy003\3062–14–00 Simcoe to Renton\Technical Data\Dwg\
DRAWING NAME: 4_MiscProvStds Details.dwg
LAYOUT NAME: MISC2
LAST MODIFIED: Dec 3, 2018–12:26
PRINTED: Jan 22, 2019–09:16

METRIC

PLATE No	
CONT	2018–3010
WP	3062–14–00

LANDSCAPE PLAN

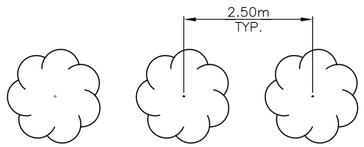
STA 11+800 TO STA 12+300
STA 12+300 TO STA 12+800
Survey Revised

SHEET 73

MINISTRY OF TRANSPORTATION, ONTARIO PR-D-707 88-05

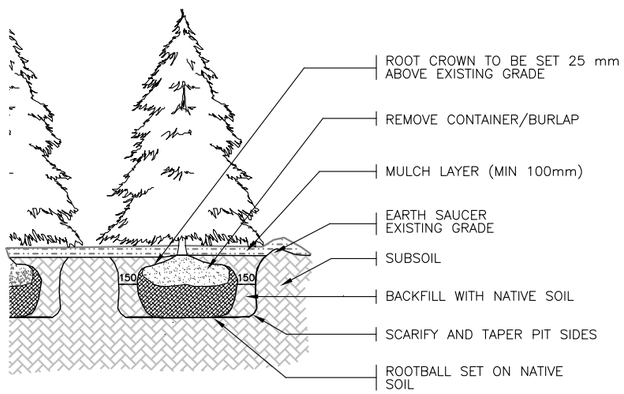
LEGEND

/ ## – PLANT CODE
– NUMBER OF PLANTS



TYPICAL ONE–ROW TREE PLANTING CONFIGURATION
N.T.S.

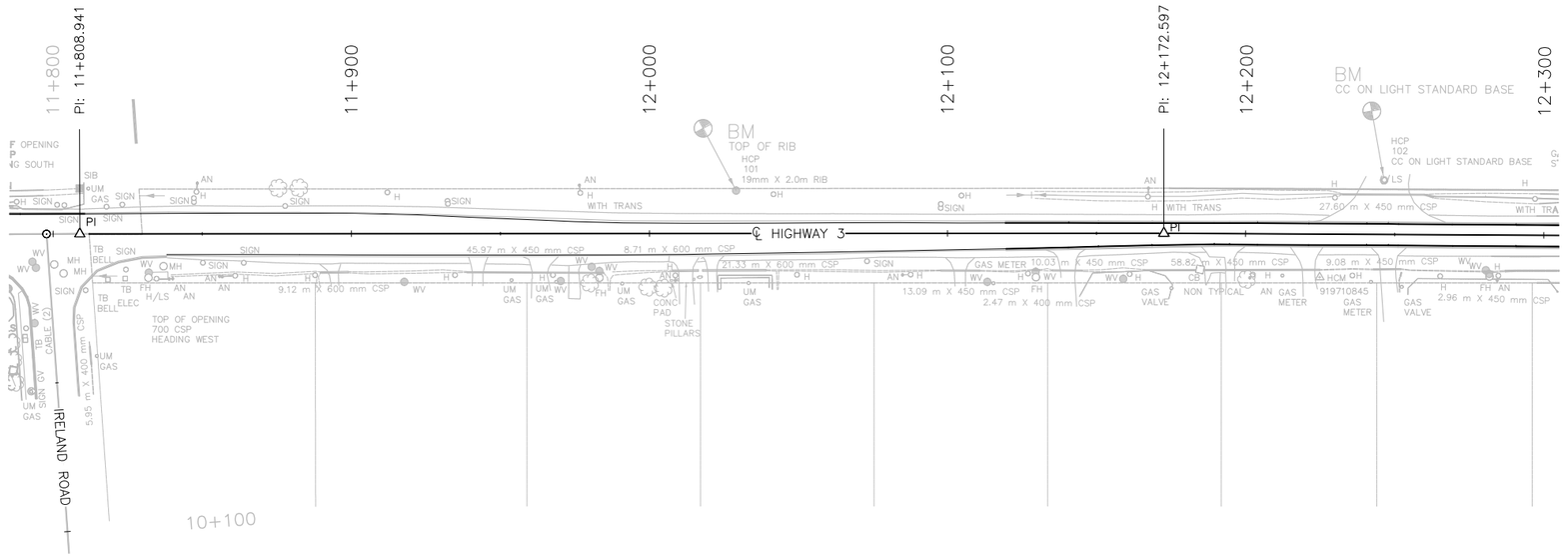
NOTE: TREES SHALL BE PLANTED 0.5m FROM EDGE OF PROPERTY LINE



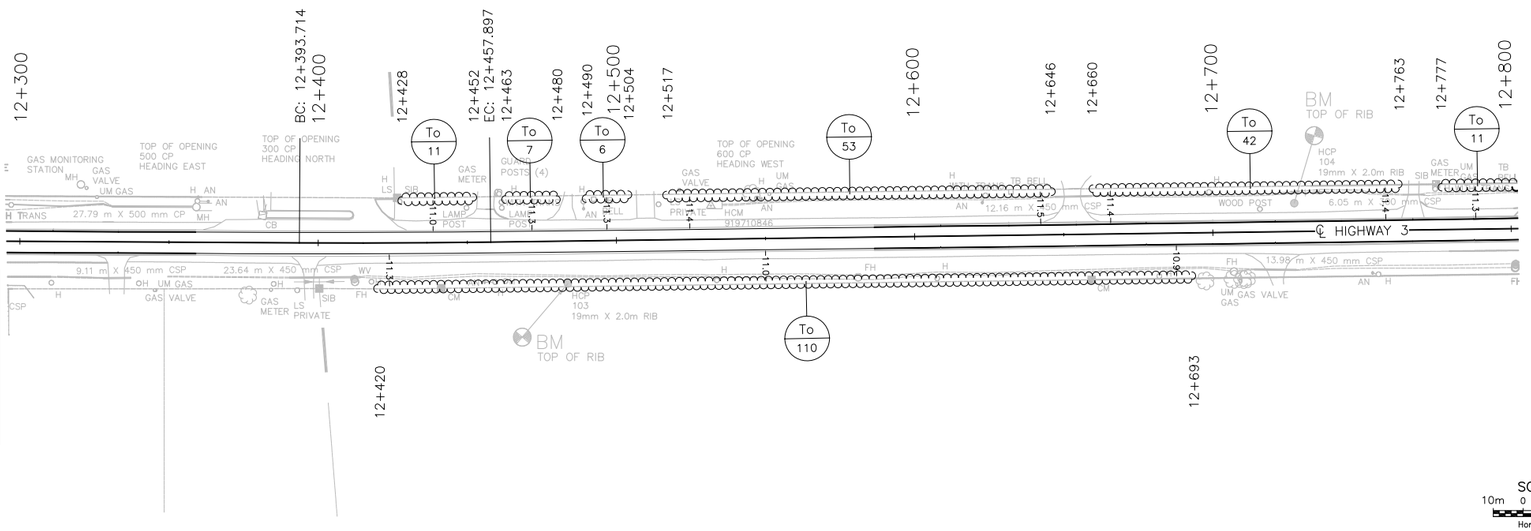
TYPICAL CONIFEROUS TREE PLANTING DETAIL
N.T.S.

PLANT LIST				
CODE	BOTANICAL NAME	COMMON NAME	ROOT CONDITION	REMARKS
Coniferous Trees				
To	Thuja occidentalis	Eastern White Cedar	Container Grown/ Ball and Burlap	Full and equal form

NORFOLK COUNTY
(GEOGRAPHIC TOWNSHIP OF TOWNSEND)
LOT 4
CONCESSION 14



CONCESSION 14



SCALE
10m 0 20m
Horizontal

MODIFIED:
DRAWING NAME:
CREATED:

METRIC

PLATE No
CONT 2018-3010
WP 3062-14-00

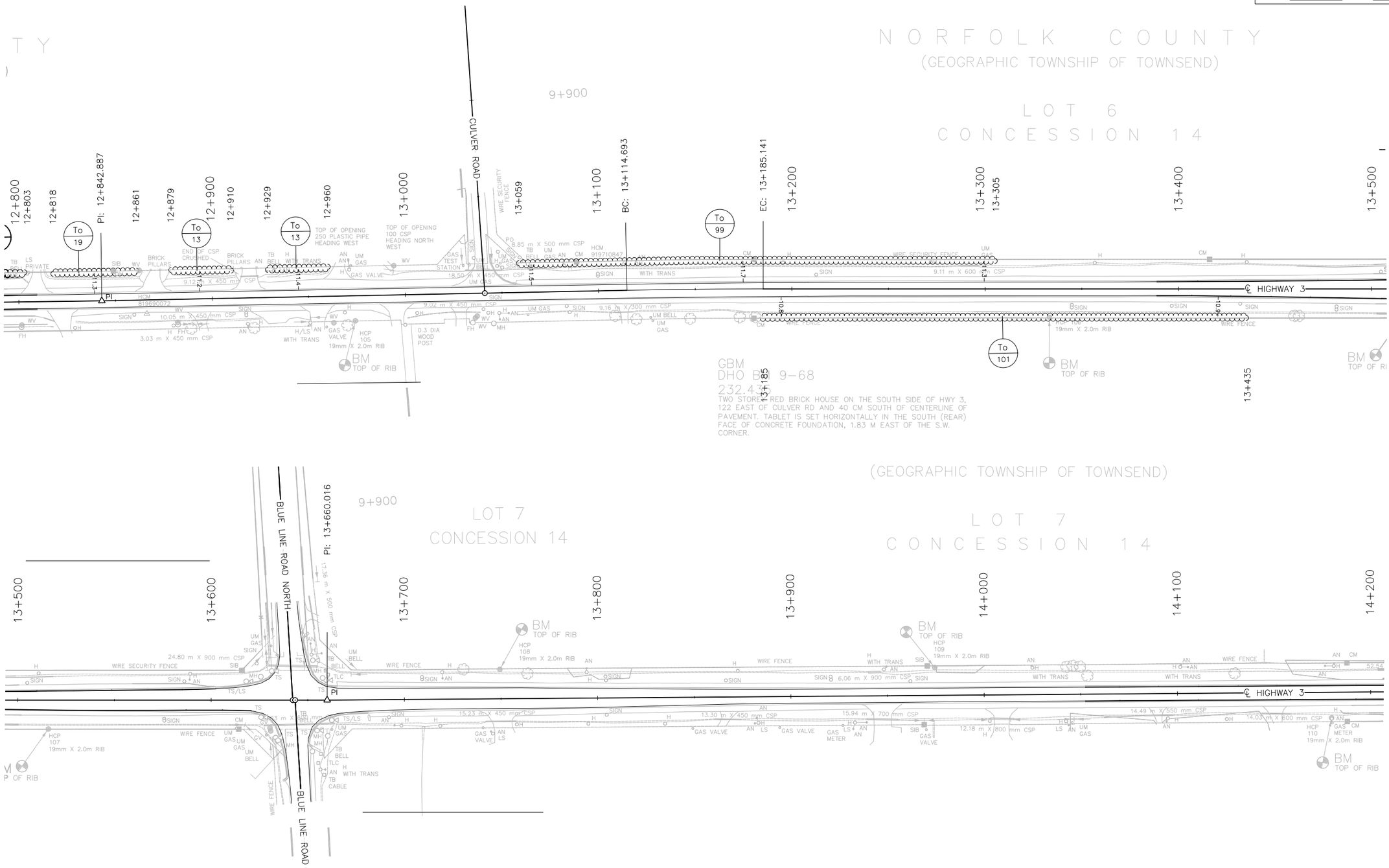
LANDSCAPE PLAN
STA 12+800 TO STA 13+500
STA 13+500 TO STA 14+200
Survey Revised

SHEET 74

MINISTRY OF TRANSPORTATION, ONTARIO PR-D-707 88-05

MODIFIED:

DRAWING NAME:
CREATED:



SCALE
10m 0 20m
Horizontal

METRIC

PLATE No

CONT 2018-3010

WP 3062-14-00

LANDSCAPE PLAN

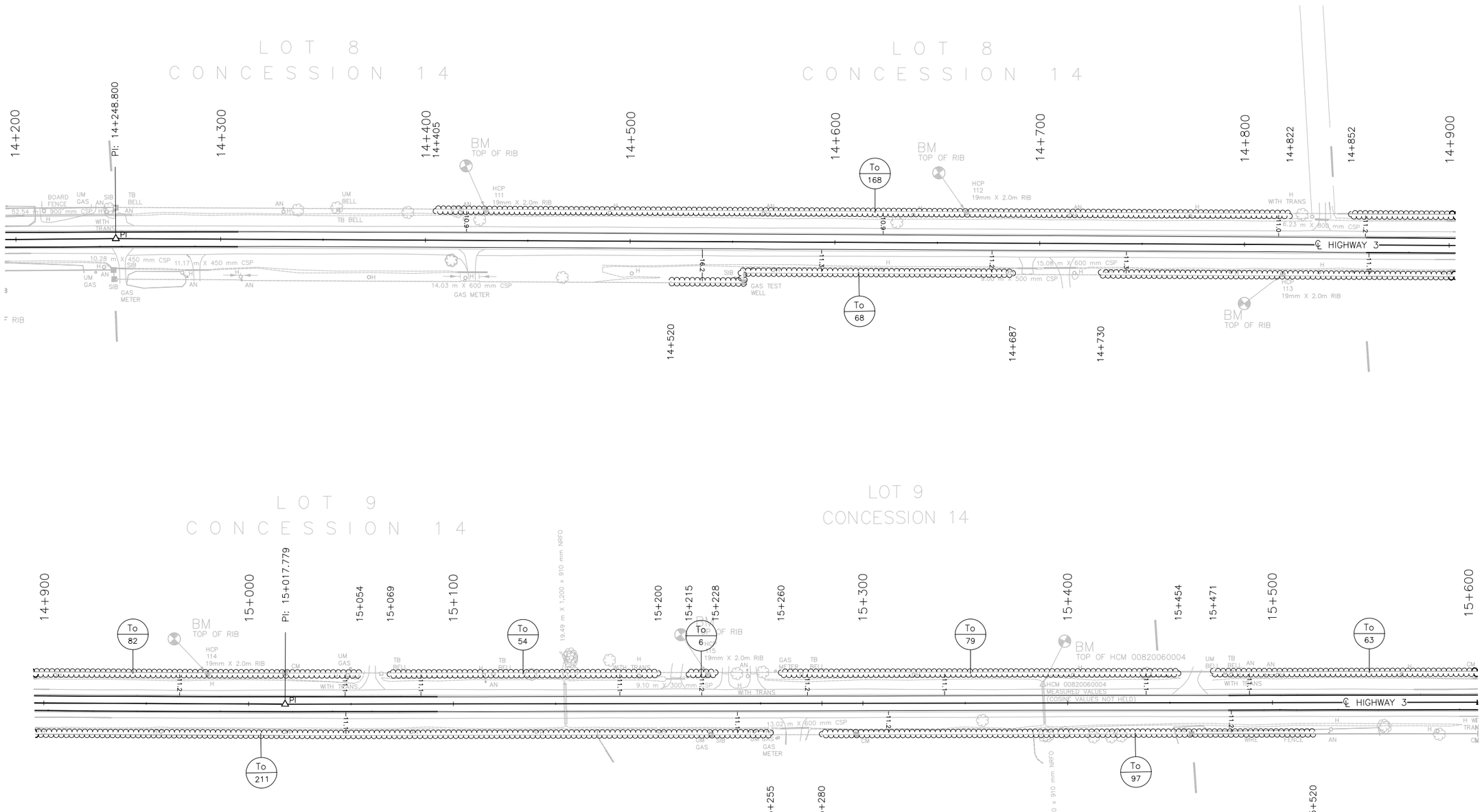
STA 14+200 TO STA 14+900

STA 14+900 TO STA 15+600

Survey Revised

SHEET 75

MINISTRY OF TRANSPORTATION, ONTARIO PR-D-707 88-05



SCALE

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Horizontal

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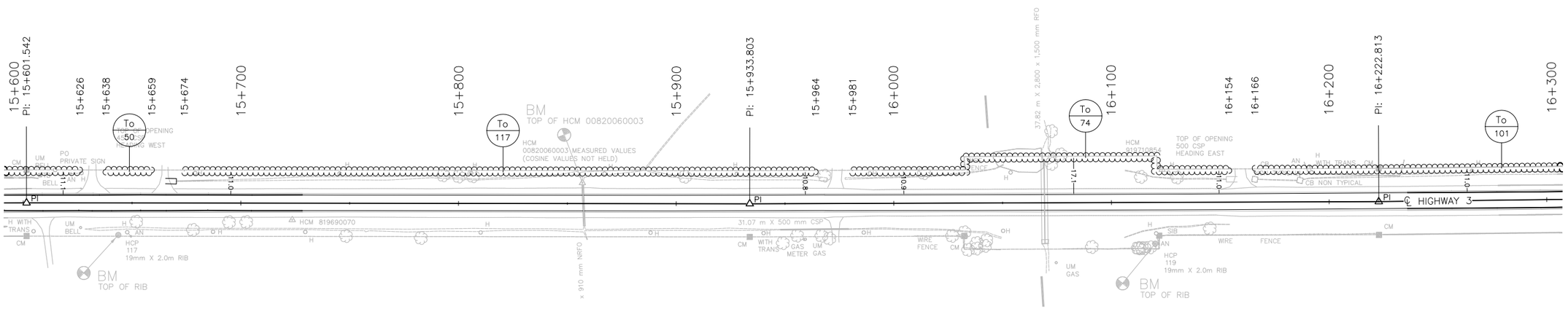
METRIC

PLATE No
CONT 2018-3010
WP 3062-14-00

LANDSCAPE PLAN
STA 15+600 TO STA 16+300
STA 16+300 TO STA 17+000
Survey Revised

SHEET 76

MINISTRY OF TRANSPORTATION, ONTARIO PR-D-707 88-05





SCALE
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Horizontal

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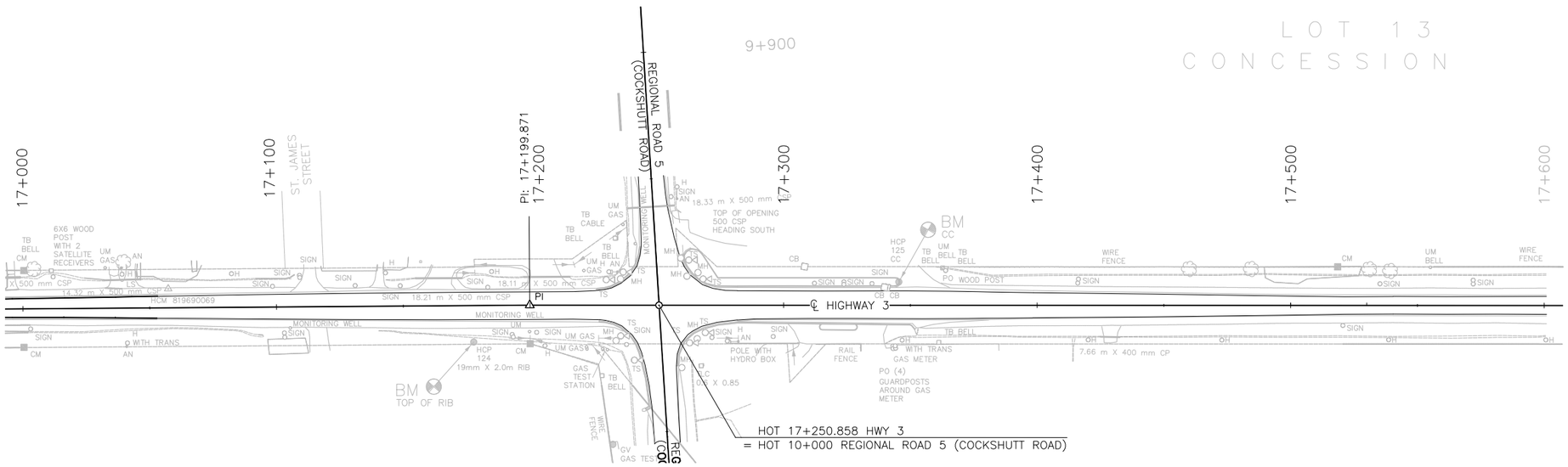
METRIC

PLATE No
CONT 2018–3010
WP 3062–14–00

LANDSCAPE PLAN
STA 17+000 TO STA 17+600
Survey _____ Revised _____

SHEET
77

MINISTRY OF TRANSPORTATION, ONTARIO PR-D-707 88-05



SCALE
10m 0 20m
Horizontal

MODIFIED:
DRAWING NAME:
CREATED:

METRIC

PLATE No
CONT 2017-3012
WP 3062-14-00

ELECTRICAL LAYOUT
HIGHWAY 3

SHEET
78

GENERAL NOTES

A. LOOPS SHALL BE INSTALLED IN BINDER COURSE AND CENTERED IN LANE.

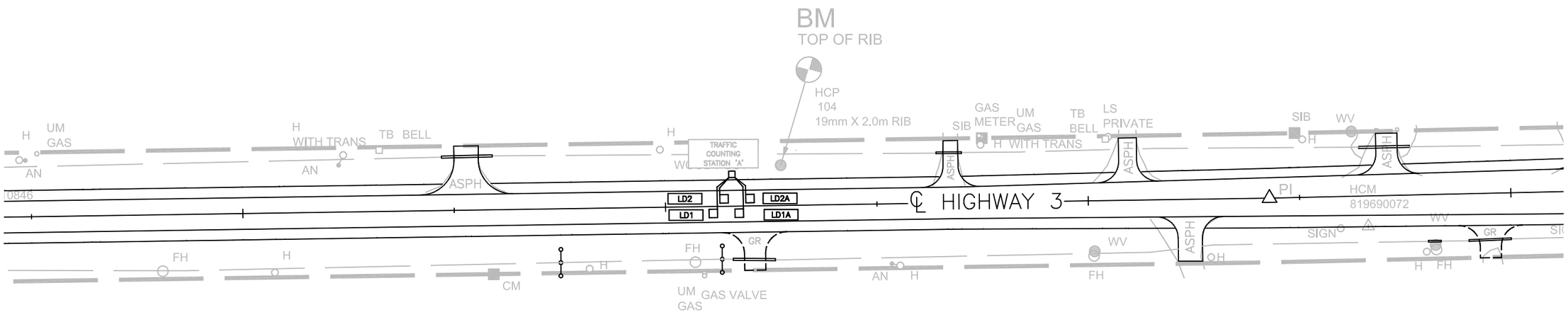
B. COUNTING STATION AND LOOPS SHALL BE INSTALLED AS PER MTOD 2901.021 AND MTOD 2901.521.

LOT 5
CONCESSION 14

12+600

12+700

12+800



LOT 5
CONCESSION 6

NORFOLK COUNTY

SCALES
5m 0 10m

MINISTRY OF TRANSPORTATION, ONTARIO PR-D-707 88-05

DRAWING LOCATION: N:\ENV\WP\Survey\2013\3062-14-00 Simcoe to Renton\Technical Data\Dwg\
DRAWING NAME: 3062-14-00_ELECTRICAL.dgn
LAYOUT NAME: 12+400 TO 13+100
USER NAME: Andrew Hoang
LAST MODIFIED: Feb 7, 2019 - 10:02
PLOTTED: Feb 7, 2019 11:14

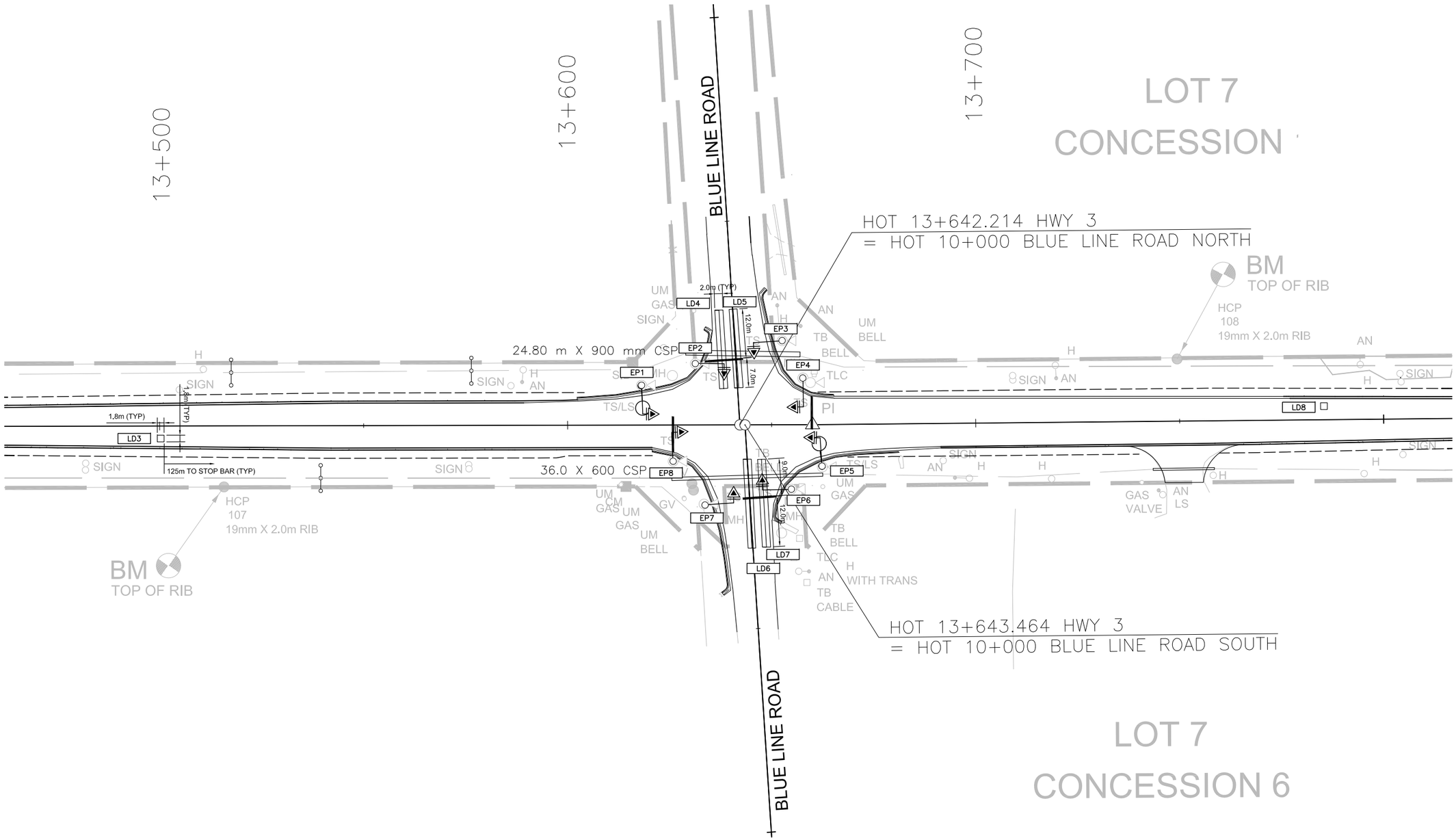
METRIC

PLATE No	
CONT	2017-3012
WP	3062-14-00
ELECTRICAL LAYOUT HIGHWAY 3 & BLUELINE ROAD	SHEET 79

GENERAL NOTES

A. LOOPS SHALL BE INSTALLED IN BINDER COURSE AND CENTERED IN LANE.

B. CONNECT LOOPS IN EXISTING HANDHOLE



MINISTRY OF TRANSPORTATION, ONTARIO PR-D-707 88-05
DRAWING LOCATION: W:\PD\WP'S\Hwy003\3062-14-00 Simcoe to Renton\Technical Data\Dwg\
DRAWING NAME: 201_Electrical Layout.dwg
LAYOUT NAME: 11x17 (1:500)
CREATED: Jan 3, 2014-07:41
LAST MODIFIED: Feb 7, 2019-10:02
PRINTED: Feb 7, 2019-11:15

METRIC

PLATE No
CONT 2017-3012
WP 3062-14-00

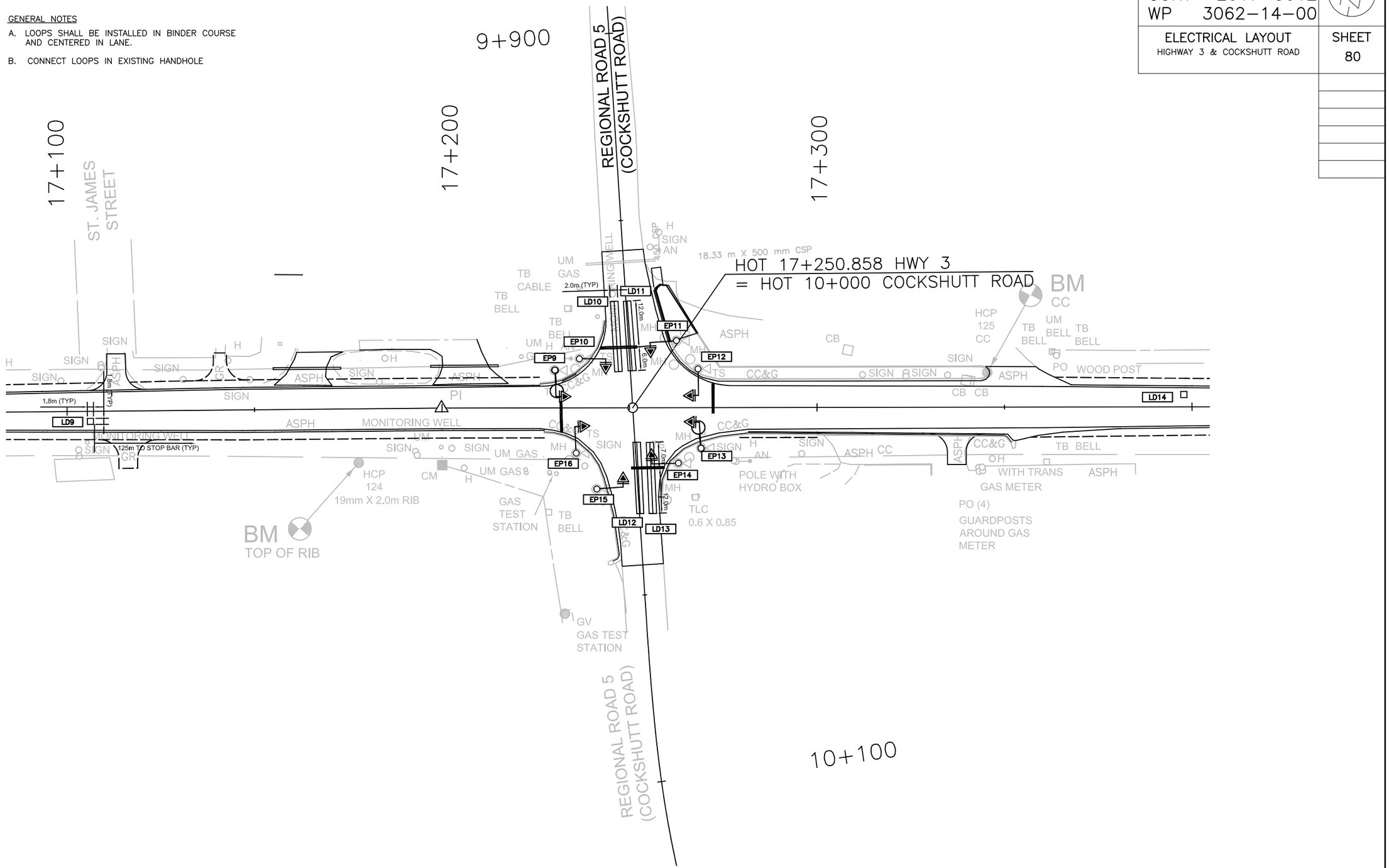
ELECTRICAL LAYOUT
HIGHWAY 3 & COCKSHUTT ROAD

SHEET
80

GENERAL NOTES

A. LOOPS SHALL BE INSTALLED IN BINDER COURSE AND CENTERED IN LANE.

B. CONNECT LOOPS IN EXISTING HANDHOLE



SCALES
5m 0 10m

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LAYOUT NAME - 17+200 TO 17+800
LAST MODIFIED - Feb 7, 2019 - 10:02
PRINTED - Feb 7, 2019 - 11:16

MINISTRY OF TRANSPORTATION, ONTARIO PR-D-707 88-05

METRIC

PLATE No	
CONT	2017-3012
WP	3062-14-00
ELECTRICAL REMOVAL HIGHWAY 3	SHEET 81

GENERAL NOTES

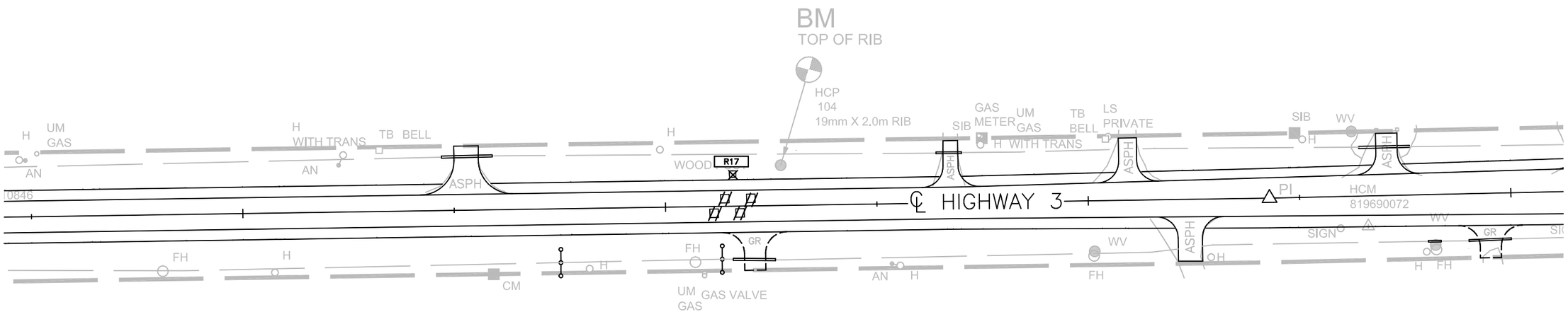
A. LOOPS SHALL BE BE DISCONNECTED IN HANDHOLE PRIOR TO MILLING.

LOT 5
CONCESSION 14

12+600

12+700

12+800



LOT 5
CONCESSION 6

NORFOLK COUNTY

SCALES
5m 0 10m

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LAST MODIFIED: Feb 7, 2019 - 10:02
PLOTTED: Feb 7, 2019 1:1:8

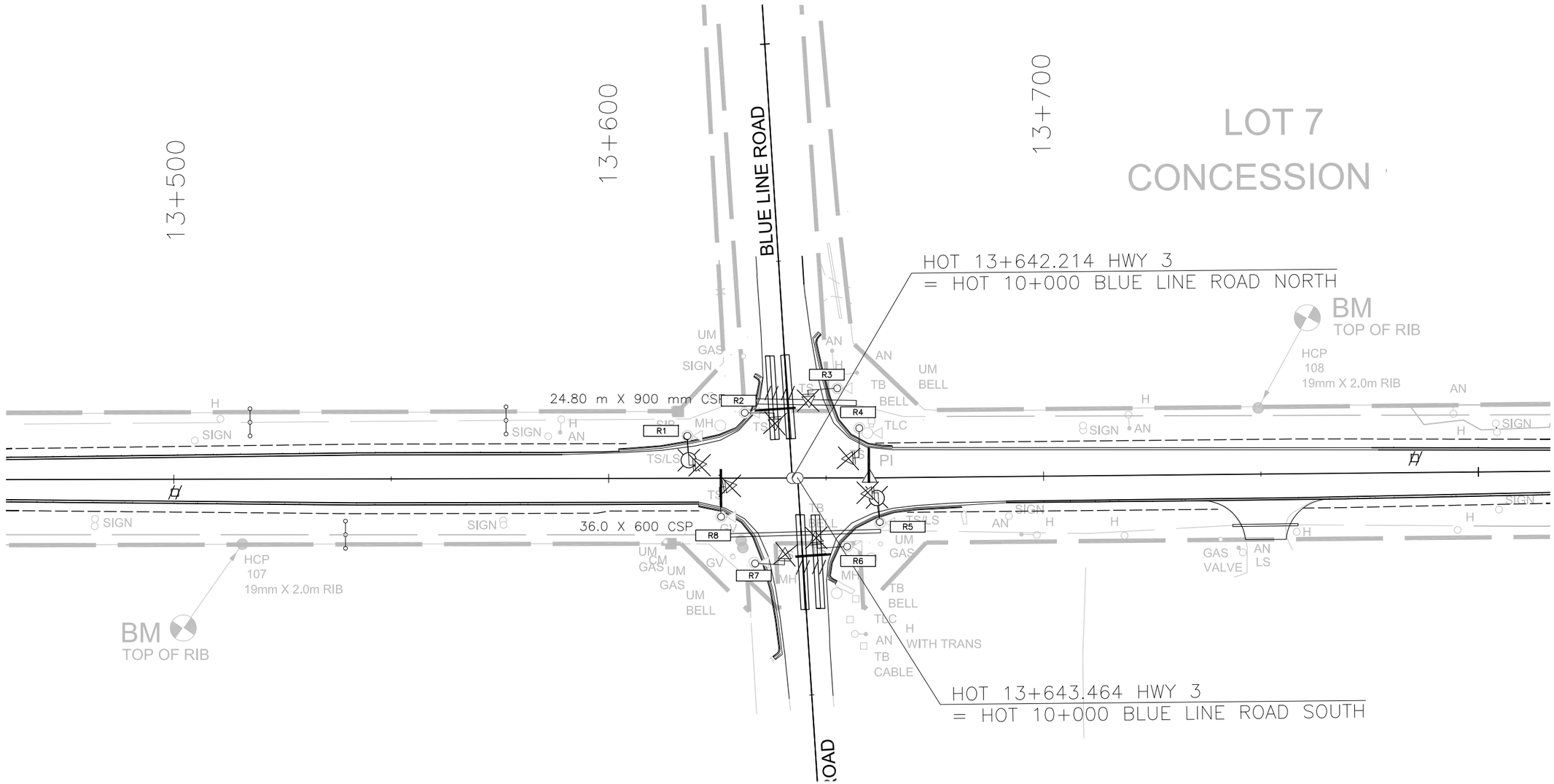
MINISTRY OF TRANSPORTATION, ONTARIO PR-D-707 88-05

METRIC

PLATE No	
CONT	2017-3012
WP	3062-14-00
ELECTRICAL REMOVAL HIGHWAY 3 & BLUELINE ROAD	SHEET 82

GENERAL NOTES

A. LOOPS SHALL BE BE DISCONNECTED IN HANDHOLE PRIOR TO MILLING.



SCALES

5m 0 10m

MINISTRY OF TRANSPORTATION, ONTARIO PR-D-707 88-05

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CREATED: Jan 3, 2014 - 07:41
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PRINTED: Feb 7, 2019 - 11:18

METRIC

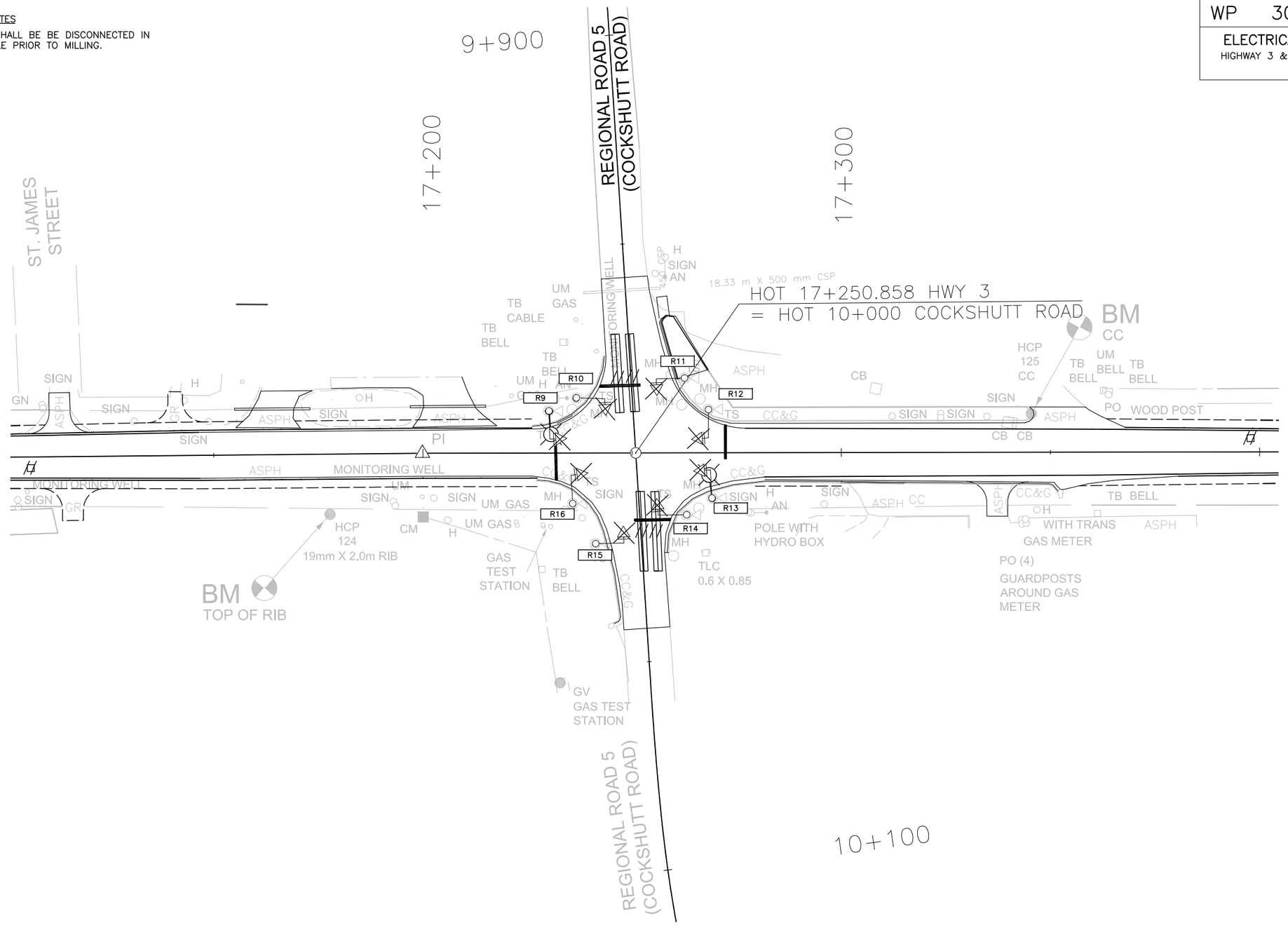
PLATE No
CONT 2017-3012
WP 3062-14-00

ELECTRICAL REMOVAL
HIGHWAY 3 & COCKSHUTT ROAD

SHEET
83

GENERAL NOTES

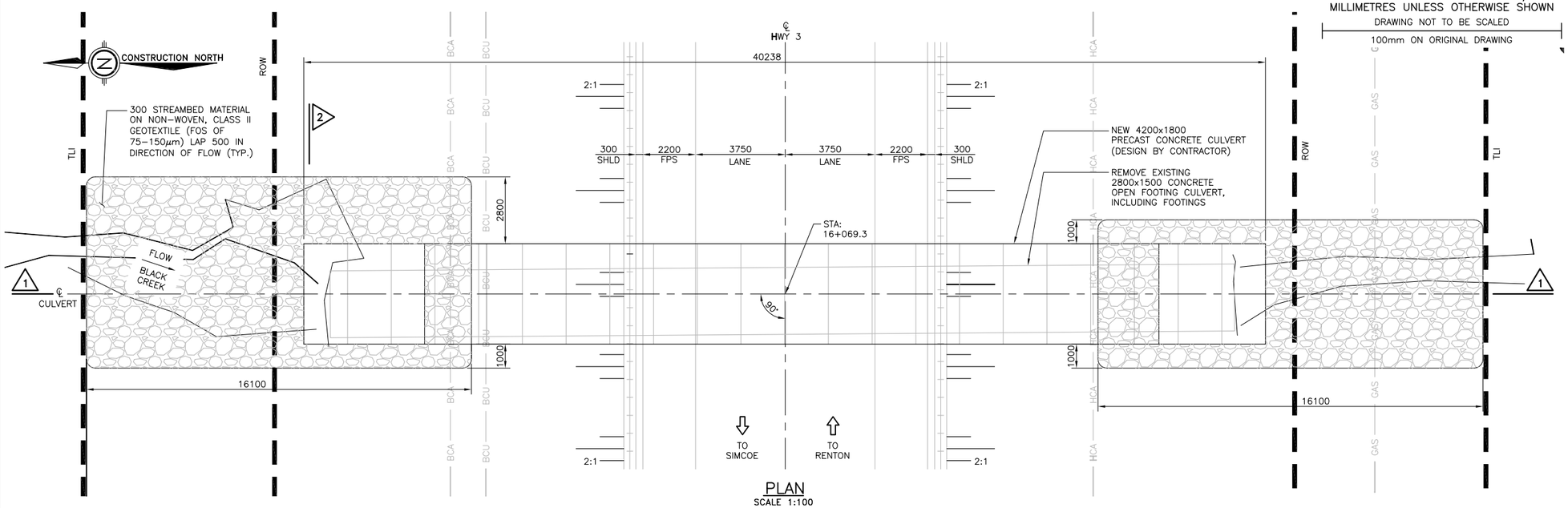
A. LOOPS SHALL BE BE DISCONNECTED IN HANDHOLE PRIOR TO MILLING.



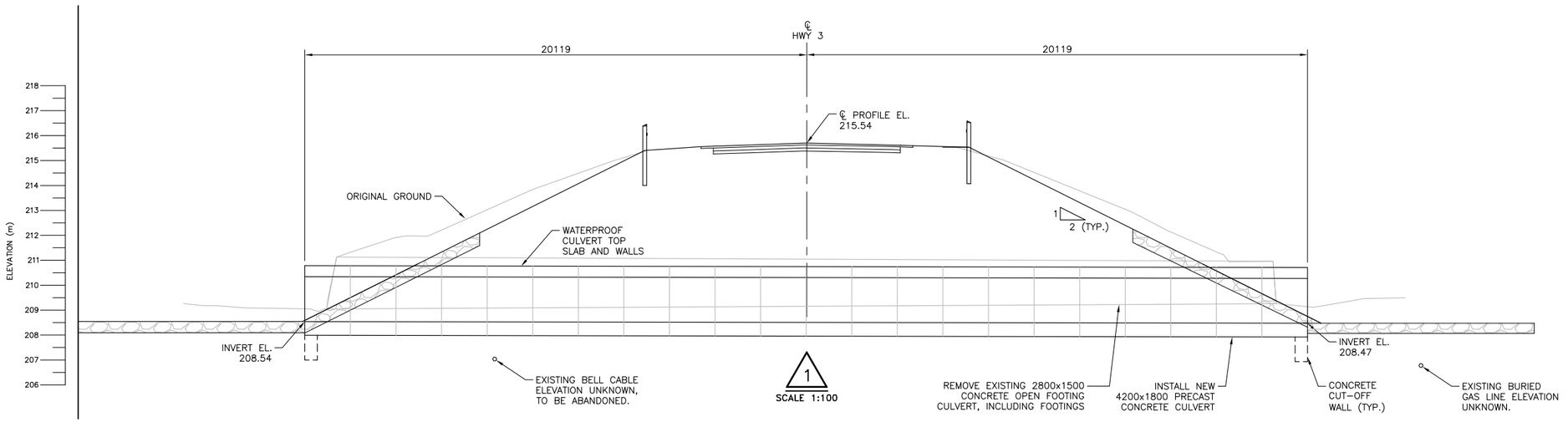
SCALES
5m 0 10m

MINISTRY OF TRANSPORTATION, ONTARIO PR-D-707 88-05

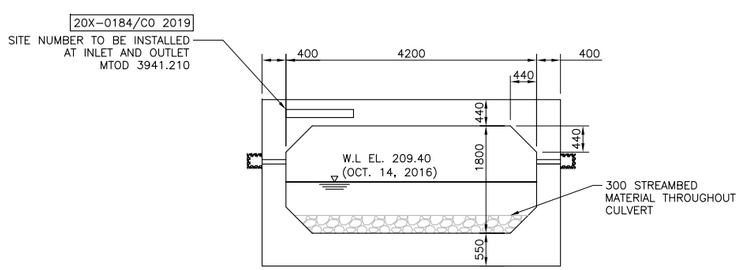
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DRAWING NAME: Plate 83.dgn
LAYOUT NAME: 17+200 TO 17+800 R
USER NAME: Jason.Hall
LAST MODIFIED: Feb 7, 2019-10:02
PRINTED: Feb 7, 2019-11:19



PLAN
SCALE 1:100



1
SCALE 1:100



2
SCALE 1:50

NOTE: GRADING NOT SHOWN FOR CLARITY

METRIC
DIMENSIONS ARE IN METRES AND/OR MILLIMETRES UNLESS OTHERWISE SHOWN

DRAWING NOT TO BE SCALED

100mm ON ORIGINAL DRAWING

CONT 2018-3010
WP 3062-14-00

BLACK CREEK
CULVERT REPLACEMENT
STATION 16+069
GENERAL ARRANGEMENT

SHEET 84

Ontario
Ministry of Transportation
West Region
Structural Section

GENERAL NOTES:

1. CLASS OF CONCRETE – 35MPa
   CLASS OF PRECAST CONCRETE – 35MPa
   CLASS OF MASS CONCRETE – 20MPa
2. CLEAR COVER TO REINFORCING STEEL:
   – CULVERT TOP SURFACE 50±10
   – CULVERT INSIDE WALLS 50±10
   – REMAINDER 45±10 UNLESS OTHERWISE NOTED
3. CULVERT DESIGN
   CULVERT DESIGN IS THE RESPONSIBILITY OF THE CONTRACTOR, AND SHALL BE IN ACCORDANCE WITH CHBDC 2014, LIVE LOAD SHALL BE CL-625-ONT. MINIMUM WALL/SLAB THICKNESS SHALL BE 300.
4. REINFORCING STEEL
   REINFORCING STEEL SHALL BE GRADE 400W UNLESS OTHERWISE SPECIFIED.

CONSTRUCTION NOTES:

1. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS OF THE PROPOSED WORK AND ALL DETAILS ON SITE AND REPORT ANY DISCREPANCIES TO THE CA BEFORE PROCEEDING WITH THE WORK.
2. THE LOCATION OF EXISTING UNDERGROUND UTILITIES IS APPROXIMATE. THE CONTRACTOR SHALL PROTECT THE UTILITIES FROM DAMAGE DURING WORK OPERATIONS.
3. DEBRIS FROM STRUCTURE REMOVALS SHALL BE PREVENTED FROM ENTERING THE WATERCOURSE.
4. THE CONTRACTOR SHALL ISOLATE THE WORK AREAS FROM THE WATERCOURSE FLOW FOR THE CULVERT REPLACEMENT. CULVERT TIMING RESTRICTIONS ARE OUTLINED ELSEWHERE IN THE CONTRACT.
5. THE CULVERT SHALL BE CONSTRUCTED IN THE DRY UNDER NO FLOW CONDITIONS, DURING SUITABLE WEATHER.
6. IN THE EVENT OF UNFORSEEN ADVERSE WEATHER, THE CONTRACTOR SHALL RESTORE ANY EXCAVATION WITHIN 3H:1V ZONE OF INFLUENCE OF ANY LIVE TRAFFIC LANES AND MAINTAIN FLOW THROUGH THE CONSTRUCTION ZONE.
7. THE CONTRACTOR WILL BE REQUIRED TO MONITOR WEATHER FORECASTS AND TIME THE WORK ACCORDINGLY.
8. ANY DAMAGE CAUSED DURING REMOVALS OR RECONSTRUCTION SHALL BE REPAIRED BY THE CONTRACTOR TO THE SATISFACTION OF THE CA, AT NO COST TO THE OWNER.
9. FACTUAL DESIGN SOIL BEARING CAPACITIES MUST BE VERIFIED BY THE CA ON SITE. GEOTECHNICAL REACTION AT SLS 150 kPa, FACTUAL GEOTECHNICAL RESISTANCE AT ULS 225 kPa
10. THE CONTRACTOR IS ALERTED THAT THE FOUNDING SOILS MAY BE SENSITIVE TO DISTURBANCE AND SOFTENING DUE TO ANY WATER SEEPAGE AND/OR PONDING. THE CONTRACTOR SHALL TAKE THE NECESSARY STEPS DURING EXCAVATION AND CONSTRUCTION TO ENSURE UNDISTURBED FOUNDING CONDITIONS.
11. BEDDING MATERIAL SHALL BE PLACED ON ALL EXPOSED FOUNDING MATERIAL WITHIN THE EXCAVATION ON A DAILY BASIS TO PREVENT DISTURBANCE.
12. FOR THE CONTRACTOR'S INFORMATION, THE APPROXIMATE FLOWS ARE AS FOLLOWS:
    2 YEAR FLOW = 5.92m3/s
    CORRESPONDING WATER SURFACE ELEVATION = 209.95m

SCOPE OF WORK:

1. INSTALL ENVIRONMENTAL PROTECTION SYSTEM FOR CONSTRUCTION.
2. INSTALL TEMPORARY FLOW PASSAGE SYSTEM, DIVERT FLOW TO THE PASSAGE AND DE-WATER THE WORK AREA.
3. EXCAVATE AND REMOVE EXISTING CULVERT.
4. BACKFILL VOIDS LEFT BY CULVERT FOOTINGS WITH GRANULAR 'A' UP TO WORKING SLAB ELEVATION.
5. INSTALL 100mm CONCRETE WORKING SLAB.
6. INSTALL PRECAST CULVERT AND PLACE STREAMBED MATERIAL UPSTREAM AND DOWNSTREAM AND THROUGHOUT CULVERT.
7. BACKFILL, PAVE AND REINSTATE GUIDERAIL.
8. STABILIZE EXPOSED SOIL ON FILL EMBANKMENT SLOPES AND THE CULVERT INLET AND OUTLET AS PER OPSS 804.
9. REINSTATE NATURAL STREAM FLOW AND REMOVE TEMPORARY FLOW PASSAGE.

LIST OF DRAWINGS

1. GENERAL ARRANGEMENT
2. CULVERT DETAILS

LICENSED PROFESSIONAL ENGINEER
J.B. TOTH
100160464
FEB 7,209
PROVINCE OF ONTARIO

LICENSED PROFESSIONAL ENGINEER
B. RICKER
100134904
Feb 7, 19
PROVINCE OF ONTARIO

REVISIONS	DATE	BY	DESCRIPTION

DESIGN	JT	CHK	BJR	CODE	CHBDC-14	LOAD	CL-625-ONT	DATE	NOV 2018
DRAWN	AB	CHK	CH	SITE	20X-0184/C0			DWG	1

FILE NAME: \\ntaplondsfs001\eng\Struc\Documents\20-Norfolk\20-184-C\Drawings\2018 Culvert Replacement\17.Structural Culverts - Block Creek GA 2.dwg
MODIFIED: 2019-1-22 11:02
MINISTRY OF TRANSPORTATION, ONTARIO ANSI-D 2016-11

MINISTRY OF TRANSPORTATION, ONTARIO ANSI-D 2016-11
FILE NAME: \\mtoplondsfs001\engStruc\Documents\20-Norfolk\20-184-C\Drawings\2018 Culvert Replacement\17.Structural Culverts - Black Creek Details.dwg
MODIFIED: 2019-1-22 11:02

METRIC

DIMENSIONS ARE IN METRES AND/OR MILLIMETRES UNLESS OTHERWISE SHOWN

DRAWING NOT TO BE SCALED

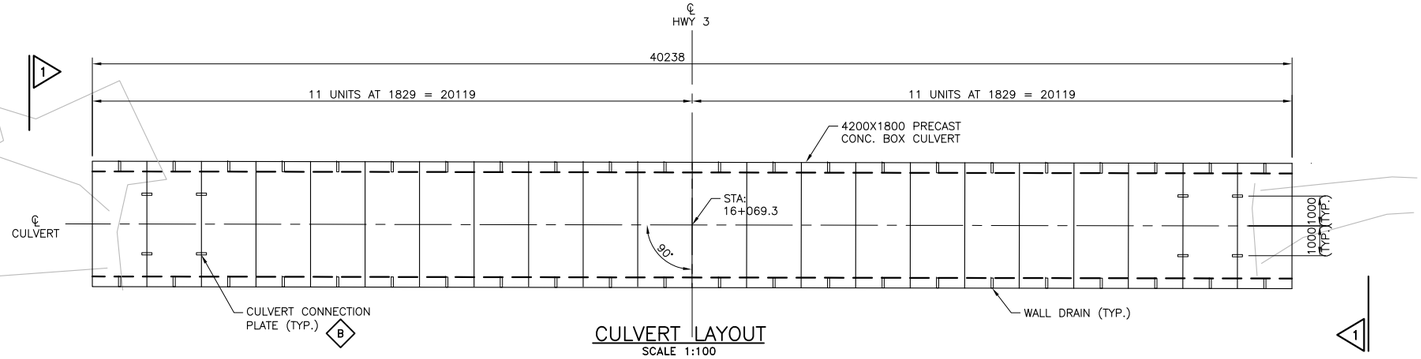
100mm ON ORIGINAL DRAWING

CONT 2018-3010
WP 3062-14-00

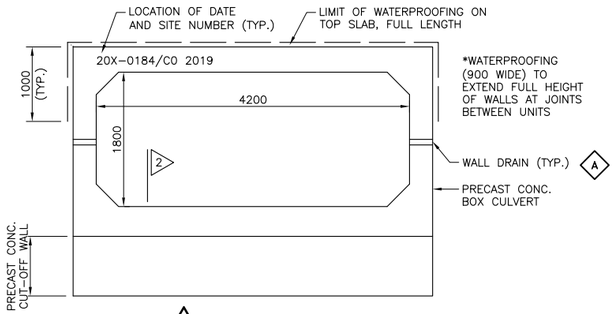
BLACK CREEK
CULVERT REPLACEMENT
STATION 16+069
CULVERT DETAILS

SHEET 85

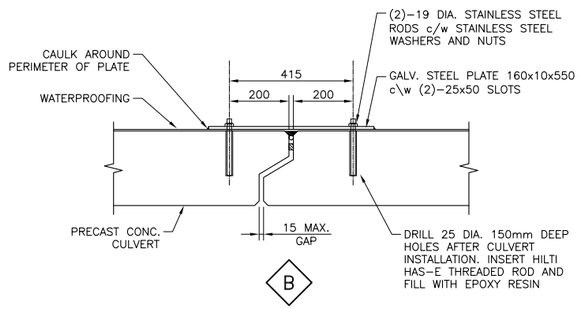
Ministry of Transportation
West Region
Structural Section



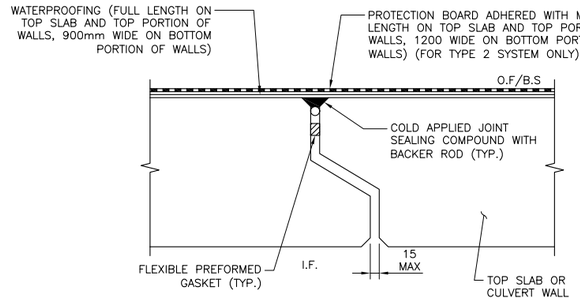
CULVERT LAYOUT
SCALE 1:100



1 ELEVATION
SCALE 1:40



CONNECTION PLATE DETAIL
1:10



JOINTS IN TOP SLAB OR WALLS
SCALE 1:5

GENERAL NOTES:

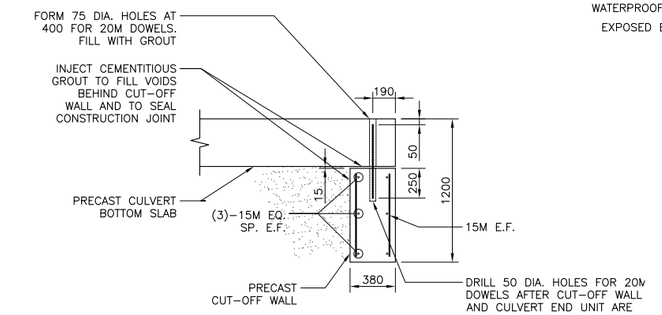
1. THE CONTRACT ADMINISTRATOR SHALL INSPECT THE FOUNDATION PRIOR TO PLACEMENT OF PRECAST UNITS.
2. GROUTING AT THE CUT-OFF WALLS SHALL NOT BE CARRIED OUT UNTIL AFTER COMPLETION OF BACKFILLING OPERATIONS.
3. GEOTEXTILE SHALL BE CLASS II, NON-WOVEN, FOS 75-150µm, AND FREE OF FOLDS TEARS AND WRINKLES.
4. GEOTEXTILE SHALL BE SECURED TO BOTH SIDES OF JOINT WITH SUITABLE ADHESIVE AS PER GEOTEXTILE MANUFACTURER'S RECOMMENDATIONS.
5. STEEL PLATE SHALL CONFORM TO CAN/CSA G40.21 GRADE 350W.
6. ALL CONCRETE SURFACES SHALL BE ABRASIVE BLAST-CLEANED PRIOR TO WATERPROOFING.
7. WATERPROOFING SHALL BE AS FOLLOWS:
   - EXPOSED CULVERT ENDS:
     TYPE 1 - POLYURETHANE RESIN WITH NON-SLIP FINISH
   - BURIED SECTIONS:
     TYPE 2 - SELF-ADHESIVE MEMBRANE WITH PROTECTION BOARD.

ADDITIONAL CONSTRUCTION NOTES:

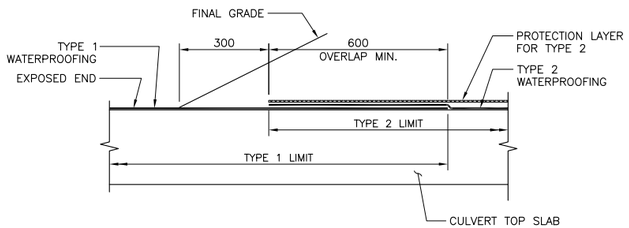
1. BACKFILL SHALL BE PLACED SIMULTANEOUSLY BEHIND BOTH SIDES OF THE CULVERT KEEPING THE HEIGHT OF THE BACKFILL APPROXIMATELY THE SAME. AT NO TIME SHALL THE DIFFERENCE IN ELEVATION BE GREATER THAN 300mm.
2. SUPPORTS FOR REINFORCING STEEL SHALL BE AS PER OPSD-3329.101 AND OPSD-3329.100 ON FORMED SURFACES. ON NON-FORMED SURFACES CONCRETE BLOCKS (MIN. 20MPa) SHALL BE USED.
3. PREFORMED GASKET, LOW MODULUS SILICONE SEALANT AND JOINT SEALING COMPOUND SHALL BE AS SPECIFIED IN THE CONCRACT DOCUMENTS.
4. BACKER ROD MATERIAL AND SIZE SHALL BE IN ACCORDANCE WITH SEALANT MANUFACTURER'S RECOMMENDATIONS. GEOTEXTILE SHALL BE FIXED TO BOTH SIDES OF JOINT USING SUITABLE ADHESIVE AS PER THE GEOTEXTILE MANUFACTURER'S RECOMMENDATIONS.
5. ALL COMPONENTS OF THE SYSTEM SELECTED SHALL BE COMPATIBLE WITH EACH OTHER AND INSTALLED AS PER THE MANUFACTURER'S INSTRUCTIONS.

LEGEND:

OF	OUTSIDE FACE OF CULVERT
IF	INSIDE FACE OF CULVERT
EF	EACH FACE OF CULVERT
BS	BACKFILL SIDE OF CULVERT
EQ. SP.	EQUALLY SPACED

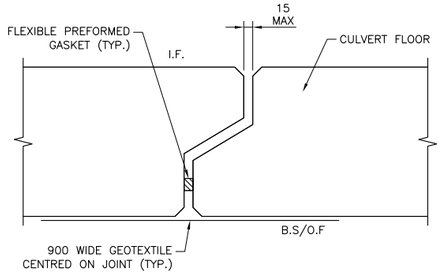


2 CUT-OFF WALL
SCALE 1:25

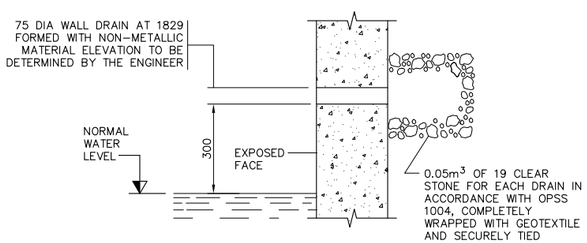


WATERPROOFING SPLICE DETAIL
SCALE 1:10

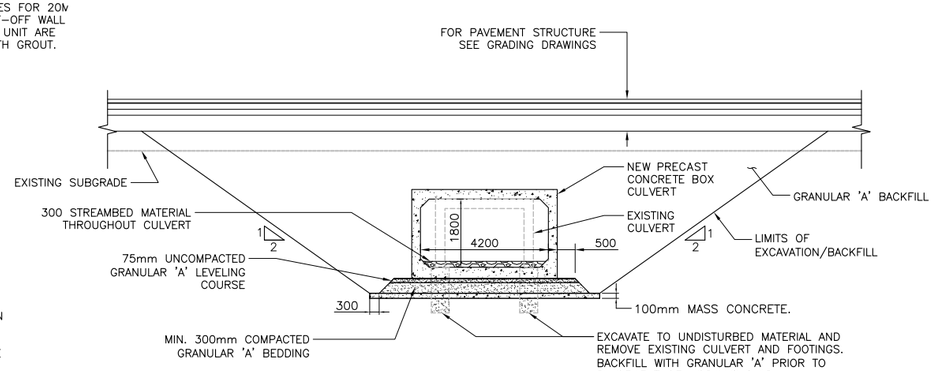
NOTE: ALL EXPOSED TYPE 1 WATERPROOFING SHALL BE EQUIPPED WITH AN ABRASION RESISTANT LAYER IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.



JOINTS IN FLOOR SLAB
SCALE 1:5



A WALL DRAIN DETAIL
SCALE 1:10



EXCAVATION AND BACKFILL
N.T.S.

LICENSED PROFESSIONAL ENGINEER J. B. TOTH 100160464 PROVINCE OF ONTARIO Feb 7, 19

LICENSED PROFESSIONAL ENGINEER B. RICKER 100134904 PROVINCE OF ONTARIO Feb 7, 19

REVISIONS	DATE	BY	DESCRIPTION

DESIGN	JT	CHK	BJR	CODE	CHBDC-14	LOAD	CL-625-ONT	DATE	NOV 2018
DRAWN	AB	CHK	CH	SITE	20X-0184/C0			DWG	2