

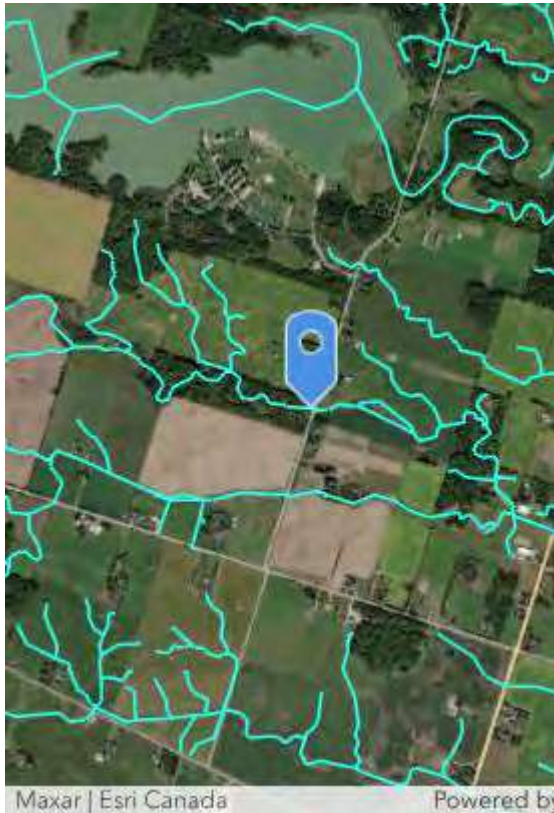
APPENDIX A – Structure Inventory Sheets

CROSSING DATA SHEET

Watershed and Location Information	Structure Configuration and Dimensions		Current Flow Information
Date (mm/dd/yyyy): 10/20/2025	Structure Type: Ditch/Culvert	Shape: Rectangular	Flow Present (Y/N): Y
Field Crew: MA, AMM	Number of Cells: 1	Open Footing (Yes/No): N	Approx. Depth of Water (mm): 550
ABL ID: ABL_0	Material (Concrete/Steel): Concrete		Upstream Erosion (Y/N): Y
Creek Name: Upper Welland River Tributaries	Height (m) x Width (m) or Diameter (m): 1.8 x 4.5		Downstream Erosion (Y/N): Y
Road Type: Arterial	Length (m): 12.2		Structure Conditions and Additional Comments:
Municipality: Binbrook	U/S Invert Elev. (m): 190.24	U/S Obvert Elev. (m): 192.12	
Location (Road Name/Intersection): Harrison Road	D/S Invert Elev. (m): 190.12	D/S Obvert Elev. (m): 191.79	
UTM Coordinates (LON, LAT): (106822.92215694906 , 4782347.725349098)	Inlet Type (Projecting/Mitered/Headwall): Projecting		
	Depth of Siltation (mm): 200		
Survey Vertical Datum: CGVD2013			

Location and Site Photographs

Site Location:



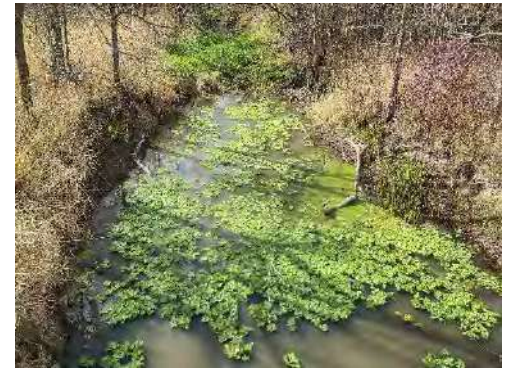
Upstream Face



Upstream Channel



Downstream Face



Downstream Channel

CROSSING DATA SHEET			
Watershed and Location Information	Structure Configuration and Dimensions		Current Flow Information
Date (mm/dd/yyyy): 10/08/2025	Structure Type: Ditch/Culvert	Shape: Rectangular	Flow Present (Y/N): Y
Field Crew: MA, AMM	Number of Cells: 1	Open Footing (Yes/No): Y	Approx. Depth of Water (mm): 500
ABL ID: ABL_1	Material (Concrete/Steel): Concrete		Upstream Erosion (Y/N): N
Creek Name: Upper Welland River Tributaries	Height (m) x Width (m) or Diameter (m): 1.72 x 3.5		Downstream Erosion (Y/N): Y
Road Type: Arterial	Length (m): 12.5		Structure Conditions and Additional Comments:
Municipality: Caistor Centre	U/S Invert Elev. (m): 184.75	U/S Obvert Elev. (m): 186.49	
Location (Road Name/Intersection): Concession 3 Road	D/S Invert Elev. (m): 184.47	D/S Obvert Elev. (m): 186.40	
UTM Coordinates (LON, LAT): (120744.87996979948 , 4777857.350068392)	Inlet Type (Projecting/Mitered/Headwall): Projecting		
	Depth of Siltation (mm): 5		
Survey Vertical Datum: CGVD2013			
Location and Site Photographs			
Site Location:  Maxar Esri Canada Powered by	 Upstream Face	 Upstream Channel	
	 Downstream Face	 Downstream Channel	

CROSSING DATA SHEET

Watershed and Location Information	Structure Configuration and Dimensions		Current Flow Information
Date (mm/dd/yyyy): 10/08/2025	Structure Type: Ditch/Culvert	Shape: Rectangular	Flow Present (Y/N): Y
Field Crew: MA, AMM	Number of Cells: 1	Open Footing (Yes/No): Y	Approx. Depth of Water (mm): 700
ABL ID: ABL_2	Material (Concrete/Steel): Concrete		Upstream Erosion (Y/N): N
Creek Name: Upper Welland River Tributaries	Height (m) x Width (m) or Diameter (m): 2.12 x 4.2		Downstream Erosion (Y/N): N
Road Type: Arterial	Length (m): 16.4		Structure Conditions and Additional Comments: Potential turtle habitat. (Turtle spotted at upstream face).
Municipality: Warner	U/S Invert Elev. (m): 178.65	U/S Obvert Elev. (m): 180.77	
Location (Road Name/Intersection): Concession 2 Road	D/S Invert Elev. (m): 178.55	D/S Obvert Elev. (m): 180.95	
UTM Coordinates (LON, LAT): (120721.35571774864 , 4776298.46843286)	Inlet Type (Projecting/Mitered/Headwall): Projecting		
	Depth of Siltation (mm): 20		
Survey Vertical Datum: CGVD2013			

Location and Site Photographs

Site Location:



Upstream Face



Upstream Channel



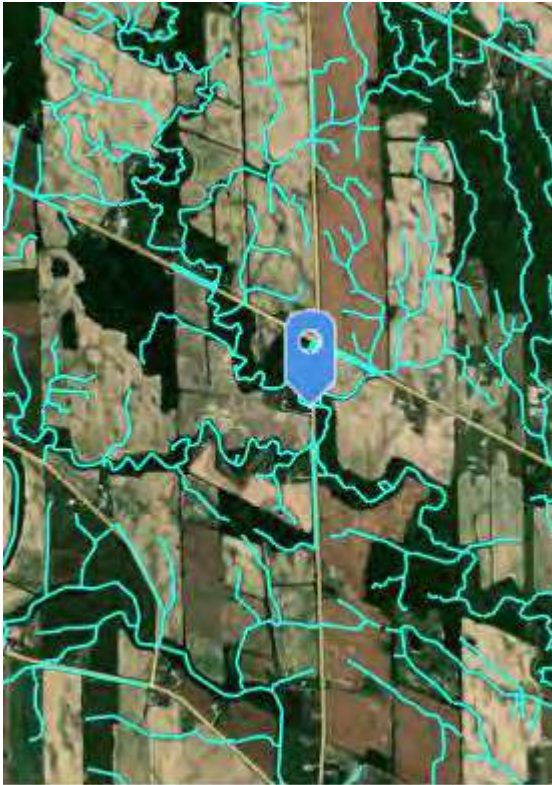
Downstream Face



Downstream Channel

CROSSING DATA SHEET

Watershed and Location Information	Structure Configuration and Dimensions		Current Flow Information
Date (mm/dd/yyyy): 10/08/2025	Structure Type: Ditch/Culvert	Shape: Rectangular	Flow Present (Y/N): Y
Field Crew: MA, AMM	Number of Cells: 1	Open Footing (Yes/No): Y	Approx. Depth of Water (mm): 800
ABL ID: ABL_3	Material (Concrete/Steel): Concrete		Upstream Erosion (Y/N): N
Creek Name: Upper Welland River Tributaries	Height (m) x Width (m) or Diameter (m): 1.69 x 4.2		Downstream Erosion (Y/N): N
Road Type: Arterial	Length (m): 17.3		Structure Conditions and Additional Comments: upstream side 1m depth downstream side 0.5m high siltation
Municipality: Warner	U/S Invert Elev. (m): 176.92	U/S Obvert Elev. (m): 178.61	
Location (Road Name/Intersection): Caistor Centre Road	D/S Invert Elev. (m): 176.53	D/S Obvert Elev. (m): 178.55	
UTM Coordinates (LON, LAT): (121067.55137715739 , 4775790.90766859)	Inlet Type (Projecting/Mitered/Headwall): Projecting		
	Depth of Siltation (mm): 20		
Survey Vertical Datum: CGVD2013			

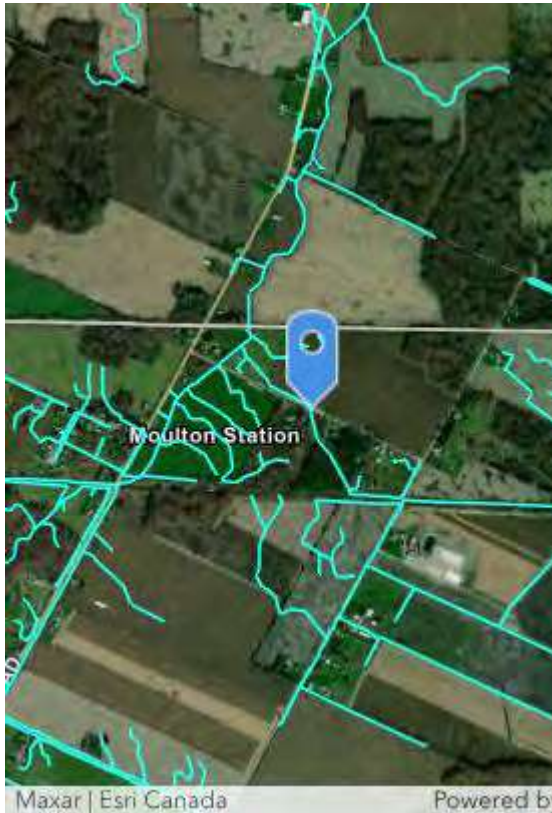
Location and Site Photographs			
Site Location:  Maxar Esri Canada Powered by	 Upstream Face	 Upstream Channel	
	 Downstream Face	 Downstream Channel	

CROSSING DATA SHEET

Watershed and Location Information	Structure Configuration and Dimensions		Current Flow Information
Date (mm/dd/yyyy): 10/01/2025	Structure Type: Ditch/Culvert	Shape: Circular	Flow Present (Y/N): N
Field Crew: CM, MSR	Number of Cells: 1	Open Footing (Yes/No): N	Approx. Depth of Water (mm): 200
ABL ID: ABL_4	Material (Concrete/Steel): Steel		Upstream Erosion (Y/N): Y
Creek Name: Upper Welland River Tributaries	Diameter (m): 1.75		Downstream Erosion (Y/N): N
Road Type: Local	Length (m): 26		Structure Conditions and Additional Comments:
Municipality: Moulton Station	U/S Invert Elev. (m): 174.723	U/S Obvert Elev. (m): 176.254	
Location (Road Name/Intersection): Calvert Road	D/S Invert Elev. (m): 174.706	D/S Obvert Elev. (m): 176.288	
UTM Coordinates (LON, LAT): (130320.88567330211 , 4766752.430482042)	Inlet Type (Projecting/Mitered/Headwall): Projecting		
	Depth of Siltation (mm): 75		
Survey Vertical Datum: CGVD2013			

Location and Site Photographs

Site Location:



Upstream Face



Upstream Channel



Downstream Face



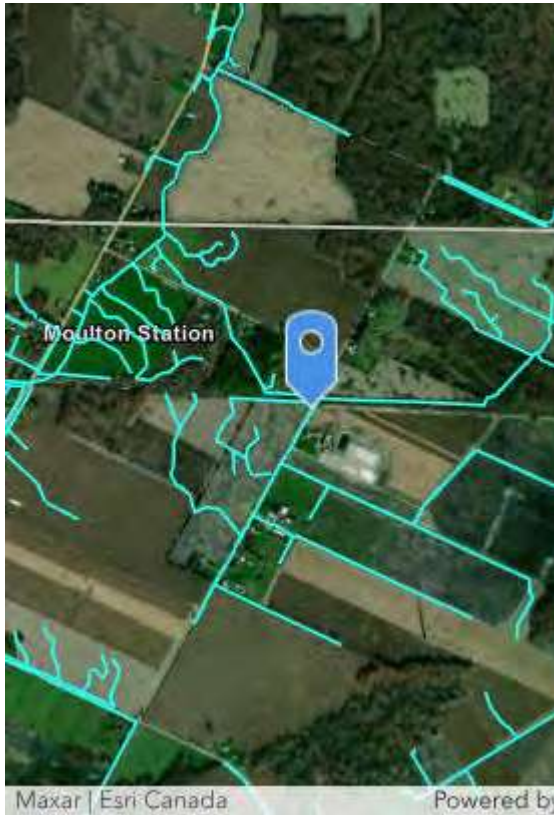
Downstream Channel

CROSSING DATA SHEET

Watershed and Location Information	Structure Configuration and Dimensions		Current Flow Information
Date (mm/dd/yyyy): 10/01/2025	Structure Type: Ditch/Culvert	Shape: Circular	Flow Present (Y/N): N
Field Crew: CM, MSR	Number of Cells: 1	Open Footing (Yes/No): N	Approx. Depth of Water (mm): 200
ABL ID: ABL_5	Material (Concrete/Steel): Steel		Upstream Erosion (Y/N): N
Creek Name: Upper Welland River Tributaries	Height (m) x Width (m) or Diameter (m): x 1.8		Downstream Erosion (Y/N): Y
Road Type: Arterial	Length (m): 55		Structure Conditions and Additional Comments: Culvert locate incorrect, leads to agricuorrual drain cb (drop structure)
Municipality: Moulton Station	U/S Invert Elev. (m): 174.745	U/S Obvert Elev. (m): 176.478	
Location (Road Name/Intersection): Gore A Road	D/S Invert Elev. (m): 174.992	D/S Obvert Elev. (m): 176.437	
UTM Coordinates (LON, LAT): (130639.44960407668 , 4766329.76371367)	Inlet Type (Projecting/Mitered/Headwall): Projecting		
	Depth of Siltation (mm): 100		
Survey Vertical Datum: CGVD2013			

Location and Site Photographs

Site Location:



Upstream Face



Upstream Channel



Downstream Face



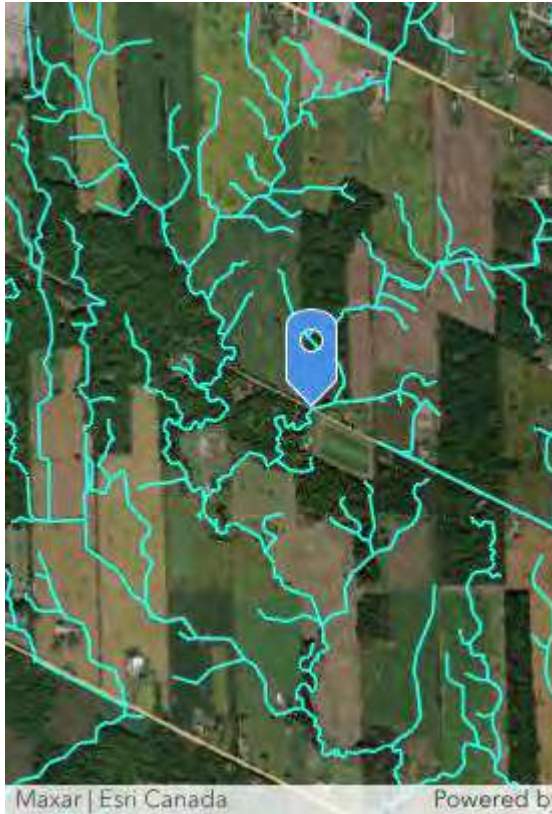
Downstream Channel

CROSSING DATA SHEET

Watershed and Location Information	Structure Configuration and Dimensions		Current Flow Information
Date (mm/dd/yyyy): 10/09/2025	Structure Type: Ditch/Culvert	Shape: Arch	Flow Present (Y/N): Y
Field Crew: ET, GS	Number of Cells: 1	Open Footing (Yes/No): N	Approx. Depth of Water (mm): 300
ABL ID: ABL_6	Material (Concrete/Steel): Steel		Upstream Erosion (Y/N): N
Creek Name: Upper Welland River Tributaries	Height (m) x Width (m) or Diameter (m): 1.3 x 1.6		Downstream Erosion (Y/N): N
Road Type: Arterial	Length (m): 10.6		Structure Conditions and Additional Comments:
Municipality: Abingdon	U/S Invert Elev. (m): 191.12	U/S Obvert Elev. (m): 192.43	
Location (Road Name/Intersection): Concession Road 3	D/S Invert Elev. (m): 191.12	D/S Obvert Elev. (m): 192.40	
UTM Coordinates (LON, LAT): (117497.92785261554 , 4779747.036150957)	Inlet Type (Projecting/Mitered/Headwall): Projecting		
	Depth of Siltation (mm): 50		
Survey Vertical Datum: CGVD2013			

Location and Site Photographs

Site Location:



Upstream Face



Upstream Channel



Downstream Face



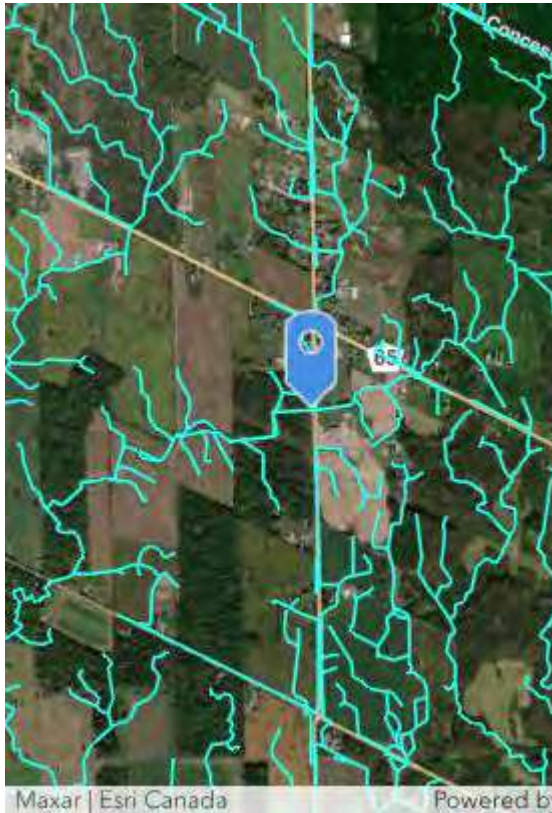
Downstream Channel

CROSSING DATA SHEET

Watershed and Location Information	Structure Configuration and Dimensions		Current Flow Information
Date (mm/dd/yyyy): 10/09/2025	Structure Type: Ditch/Culvert	Shape: Rectangular	Flow Present (Y/N): N
Field Crew: ET, GS	Number of Cells: 1	Open Footing (Yes/No): Y	Approx. Depth of Water (mm): 700
ABL ID: ABL_7	Material (Concrete/Steel): Concrete		Upstream Erosion (Y/N): N
Creek Name: Upper Welland River Tributaries	Height (m) x Width (m) or Diameter (m): 0.99 x 2.8		Downstream Erosion (Y/N): N
Road Type: Arterial	Length (m): 12.1		Structure Conditions and Additional Comments:
Municipality: Abingdon	U/S Invert Elev. (m): 196.01	U/S Obvert Elev. (m): 197.00	
Location (Road Name/Intersection): Abingdon Road	D/S Invert Elev. (m): 195.95	D/S Obvert Elev. (m): 196.96	
UTM Coordinates (LON, LAT): (118572.34624294215 , 4780366.583446418)	Inlet Type (Projecting/Mitered/Headwall): Projecting		
	Depth of Siltation (mm): 500		
Survey Vertical Datum: CGVD2013			

Location and Site Photographs

Site Location:



Upstream Face



Upstream Channel



Downstream Face



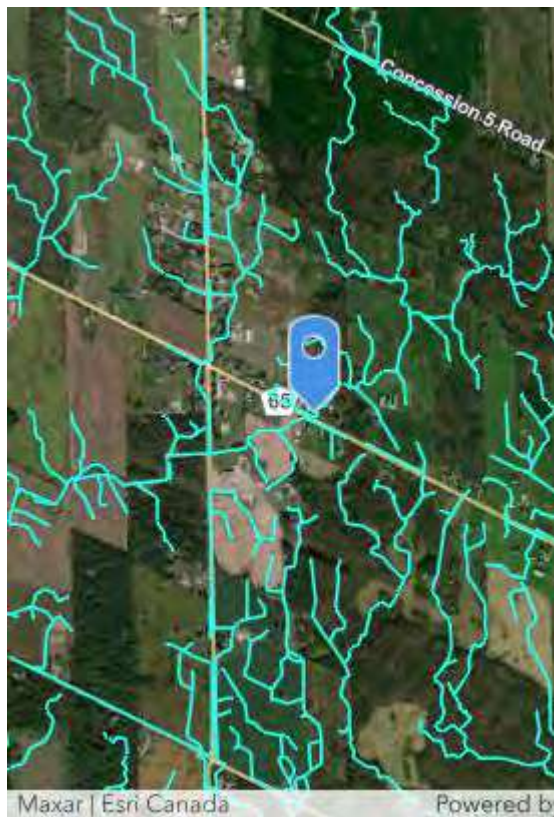
Downstream Channel

CROSSING DATA SHEET

Watershed and Location Information	Structure Configuration and Dimensions		Current Flow Information
Date (mm/dd/yyyy): 10/09/2025	Structure Type: Road Bridge	Shape: Rectangular	Flow Present (Y/N): N
Field Crew: ET, GS	Number of Cells: 1	Open Footing (Yes/No): Y	Approx. Depth of Water (mm): 300
ABL ID: ABL_8	Material (Concrete/Steel): Concrete		Upstream Erosion (Y/N): Y
Creek Name: Upper Welland River Tributaries	Height (m) x Width (m) or Diameter (m): 0.83 x 1.5		Downstream Erosion (Y/N): Y
Road Type: Arterial	Length (m): 17.1		Structure Conditions and Additional Comments:
Municipality: Abingdon	U/S Invert Elev. (m): 197.42	U/S Obvert Elev. (m): 198.25	
Location (Road Name/Intersection): Bismark Road	D/S Invert Elev. (m): 197.24	D/S Obvert Elev. (m): 198.25	
UTM Coordinates (LON, LAT): (119009.06164144987 , 4780498.325109516)	Inlet Type (Projecting/Mitered/Headwall): Headwall		
	Depth of Siltation (mm): 50		
Survey Vertical Datum: CGVD2013			

Location and Site Photographs

Site Location:



Upstream Face



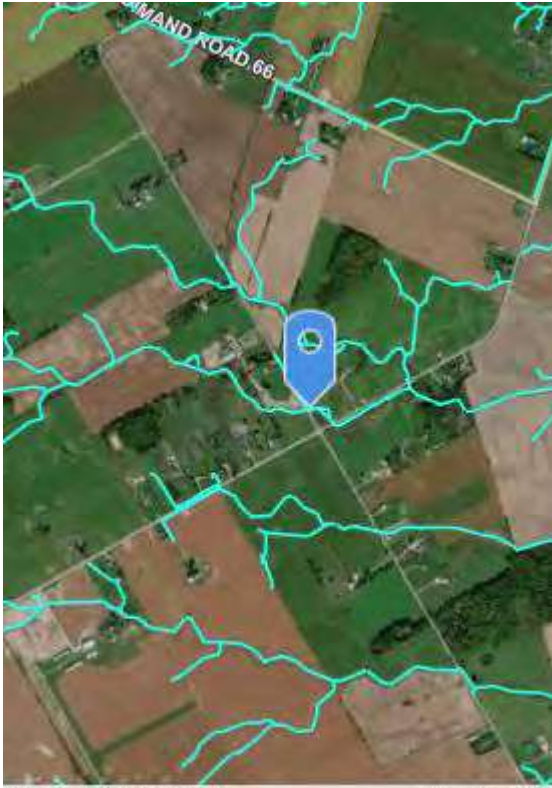
Upstream Channel



Downstream Face



Downstream Channel

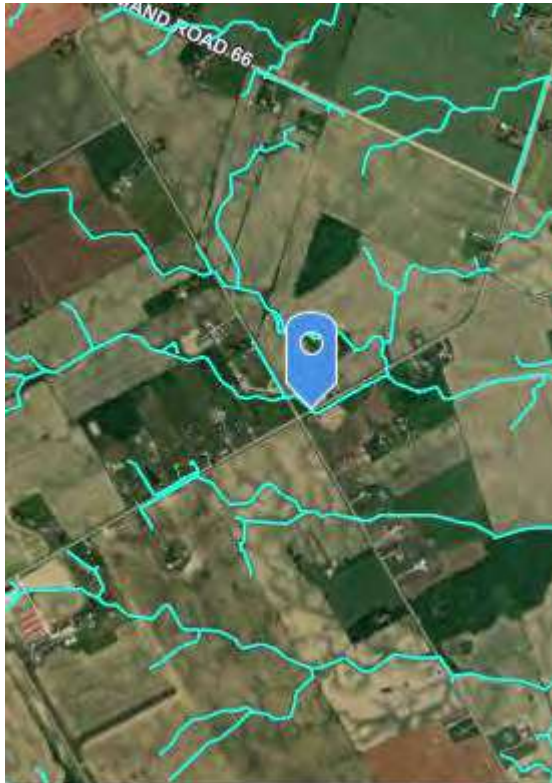
CROSSING DATA SHEET			
Watershed and Location Information	Structure Configuration and Dimensions		Current Flow Information
Date (mm/dd/yyyy): 10/20/2025	Structure Type: Ditch/Culvert	Shape: Circular	Flow Present (Y/N): N
Field Crew: MA, AMM	Number of Cells: 2	Open Footing (Yes/No): N	Approx. Depth of Water (mm): 20
ABL ID: ABL_9	Material (Concrete/Steel): Steel		Upstream Erosion (Y/N): N
Creek Name: Upper Welland River Tributaries	Diameter (m): 0.9		Downstream Erosion (Y/N): N
Road Type: Local	Length (m): 16		Structure Conditions and Additional Comments:
Municipality: Blackheath	U/S Invert Elev. (m): 196.461	U/S Obvert Elev. (m): 197.33	
Location (Road Name/Intersection): Moores Road	D/S Invert Elev. (m): 197.9	D/S Obvert Elev. (m): 198.671	
UTM Coordinates (LON, LAT): (105558.60865211714 , 4777775.389795742)	Inlet Type (Projecting/Mitered/Headwall): Projecting		
	Depth of Siltation (mm): 0		
Survey Vertical Datum: CGVD2013			
Location and Site Photographs			
Site Location: 			
			

CROSSING DATA SHEET

Watershed and Location Information	Structure Configuration and Dimensions		Current Flow Information
Date (mm/dd/yyyy): 05/15/2026	Structure Type: Culvert	Shape: Circular	Flow Present (Y/N): Y
Field Crew: CM, OC	Number of Cells: 1	Open Footing (Yes/No): N	Approx. Depth of Water (mm): 100
ABL ID: ABL_10	Material (Concrete/Steel): Steel		Upstream Erosion (Y/N): N
Creek Name: Upper Welland River Tributaries	Diameter (m): 1.05		Downstream Erosion (Y/N): N
Road Type: Arterial	Length (m): 15		Structure Conditions and Additional Comments:
Municipality: Blackheath	U/S Invert Elev. (m): 196.99	U/S Obvert Elev. (m): 198.06	
Location (Road Name/Intersection): Stoney Creek Road	D/S Invert Elev. (m): 196.92	D/S Obvert Elev. (m): 197.95	
UTM Coordinates (LON, LAT): (105649.29077858449 , 4777717.038436546)	Inlet Type (Projecting/Mitered/Headwall):		
	Depth of Siltation (mm): 20		
Survey Vertical Datum: CGVD2013			

Location and Site Photographs

Site Location:



Upstream Face



Upstream Channel



Downstream Face



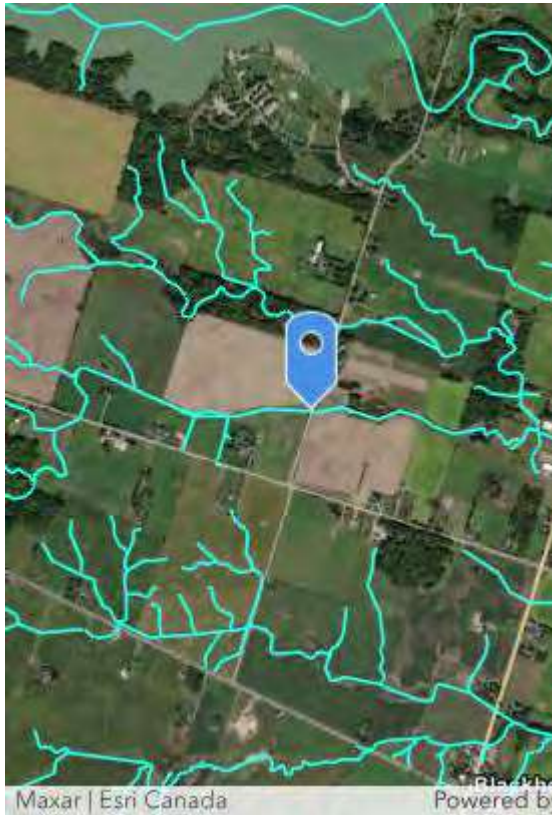
Downstream Channel

CROSSING DATA SHEET

Watershed and Location Information	Structure Configuration and Dimensions		Current Flow Information
Date (mm/dd/yyyy): 10/20/2025	Structure Type: Ditch/Culvert	Shape: Rectangular	Flow Present (Y/N): N
Field Crew: MA, AMM	Number of Cells: 1	Open Footing (Yes/No): N	Approx. Depth of Water (mm): 10
ABL ID: ABL_11	Material (Concrete/Steel): Concrete		Upstream Erosion (Y/N): N
Creek Name: Upper Welland River Tributaries	Height (m) x Width (m) or Diameter (m): 0.94 x 3.6		Downstream Erosion (Y/N): N
Road Type: Arterial	Length (m): 11.5		Structure Conditions and Additional Comments:
Municipality: Tyneside	U/S Invert Elev. (m): 192.62	U/S Obvert Elev. (m): 193.56	
Location (Road Name/Intersection): Harrison Road	D/S Invert Elev. (m): 192.52	D/S Obvert Elev. (m): 193.59	
UTM Coordinates (LON, LAT): (106705.02177006222 , 4782022.257905387)	Inlet Type (Projecting/Mitered/Headwall): Projecting		
	Depth of Siltation (mm): 0		
Survey Vertical Datum: CGVD2013			

Location and Site Photographs

Site Location:



Upstream Face



Upstream Channel



Downstream Face



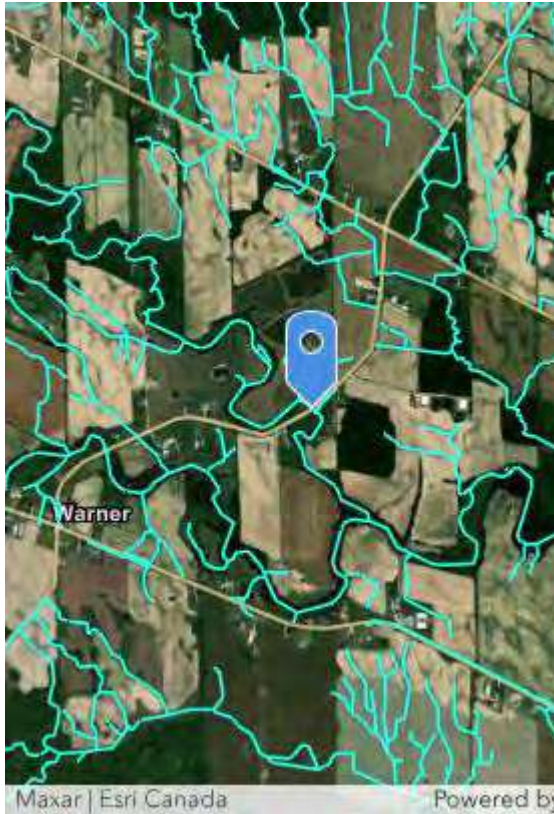
Downstream Channel

CROSSING DATA SHEET

Watershed and Location Information	Structure Configuration and Dimensions		Current Flow Information
Date (mm/dd/yyyy): 10/06/2025	Structure Type: Road Bridge	Shape: Arch	Flow Present (Y/N): N
Field Crew: ET, GS	Number of Cells: 1	Open Footing (Yes/No): Y	Approx. Depth of Water (mm): 600
ABL ID: ABL_12	Material (Concrete/Steel): Concrete		Upstream Erosion (Y/N): N
Creek Name: Upper Welland River Tributaries	Height (m) x Width (m) or Diameter (m): 3.82 x 13.8		Downstream Erosion (Y/N): N
Road Type: Arterial	Length (m): 12.5		Structure Conditions and Additional Comments:
Municipality: West Lincoln	U/S Invert Elev. (m): 174.35	U/S Obvert Elev. (m): 178.17	
Location (Road Name/Intersection): Smithville Road	D/S Invert Elev. (m): 174.27	D/S Obvert Elev. (m): 178.06	
UTM Coordinates (LON, LAT): (122566.35601904558 , 4774285.375822233)	Inlet Type (Projecting/Mitered/Headwall): Headwall		
	Depth of Siltation (mm): 250		
Survey Vertical Datum: CGVD2013			

Location and Site Photographs

Site Location:



Upstream Face



Upstream Channel



Downstream Face



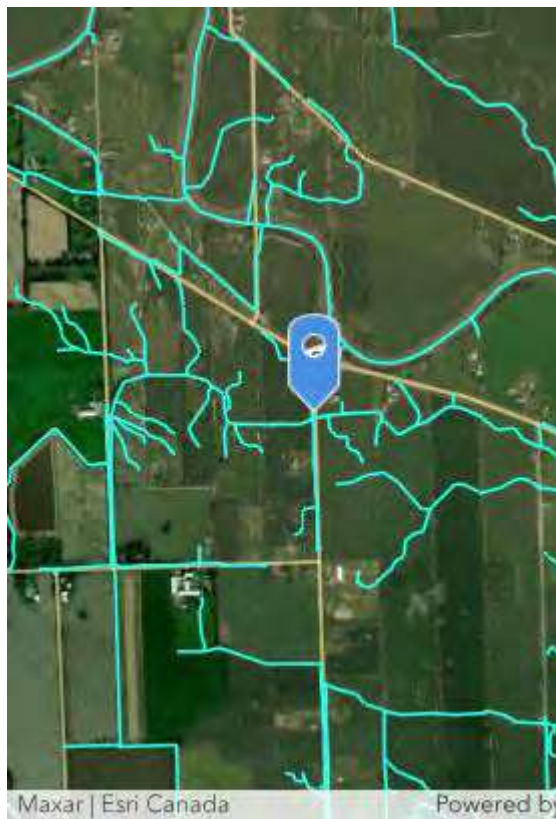
Downstream Channel

CROSSING DATA SHEET

Watershed and Location Information	Structure Configuration and Dimensions		Current Flow Information
Date (mm/dd/yyyy): 09/29/2025	Structure Type: Ditch/Culvert	Shape: Rectangular	Flow Present (Y/N): N
Field Crew: MA, AMM	Number of Cells: 1	Open Footing (Yes/No): Y	Approx. Depth of Water (mm): 150
ABL ID: ABL_13	Material (Concrete/Steel): Concrete		Upstream Erosion (Y/N): N
Creek Name: Upper Welland River Tributaries	Height (m) x Width (m): 2.61 x 4.2		Downstream Erosion (Y/N): N
Road Type: Local	Length (m): 19.5		Structure Conditions and Additional Comments:
Municipality: Becketts Bridge	U/S Invert Elev. (m): 171.39	U/S Obvert Elev. (m): 174.00	
Location (Road Name/Intersection): Traver Road	D/S Invert Elev. (m): 171.07	D/S Obvert Elev. (m): 173.96	
UTM Coordinates (LON, LAT): (140556.9346440857 , 4768723.108947593)	Inlet Type (Projecting/Mitered/Headwall): Projecting		
	Depth of Siltation (mm): 10		
Survey Vertical Datum: CGVD2013			

Location and Site Photographs

Site Location:



Upstream Face



Upstream Channel



Downstream Face



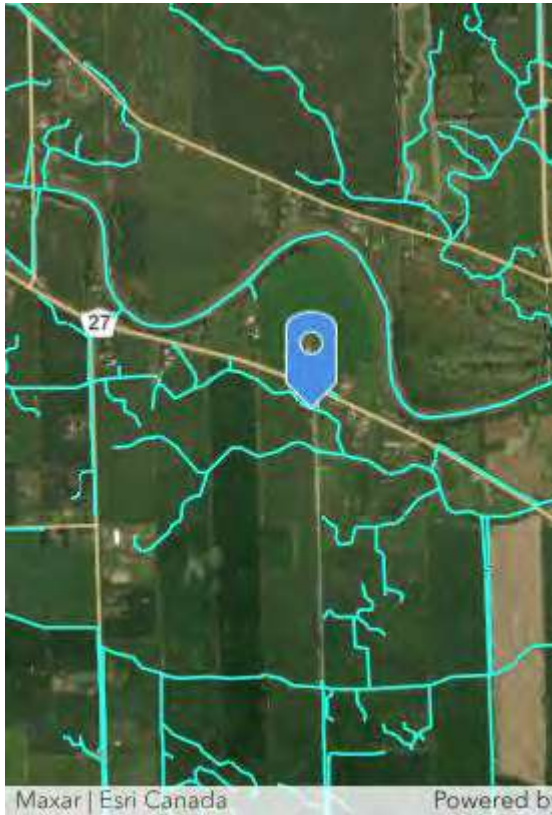
Downstream Channel

CROSSING DATA SHEET

Watershed and Location Information	Structure Configuration and Dimensions		Current Flow Information
Date (mm/dd/yyyy): 09/29/2025	Structure Type: Ditch/Culvert	Shape: Circular	Flow Present (Y/N): Y
Field Crew: MA, AMM	Number of Cells: 1	Open Footing (Yes/No): N	Approx. Depth of Water (mm): 150
ABL ID: ABL_14	Material (Concrete/Steel): Steel		Upstream Erosion (Y/N): N
Creek Name: Upper Welland River Tributaries	Diameter (m): 3.51		Downstream Erosion (Y/N): N
Road Type: Local	Length (m): 20		Structure Conditions and Additional Comments:
Municipality: Marshville	U/S Invert Elev. (m): 170.47	U/S Obvert Elev. (m): 173.98	
Location (Road Name/Intersection): Elsie Road	D/S Invert Elev. (m): 170.35	D/S Obvert Elev. (m): 174.04	
UTM Coordinates (LON, LAT): (141428.28101707547 , 4768548.61549533)	Inlet Type (Projecting/Mitered/Headwall): Projecting		
	Depth of Siltation (mm): 0		
Survey Vertical Datum: CGVD2013			

Location and Site Photographs

Site Location:



Upstream Face



Upstream Channel



Downstream Face



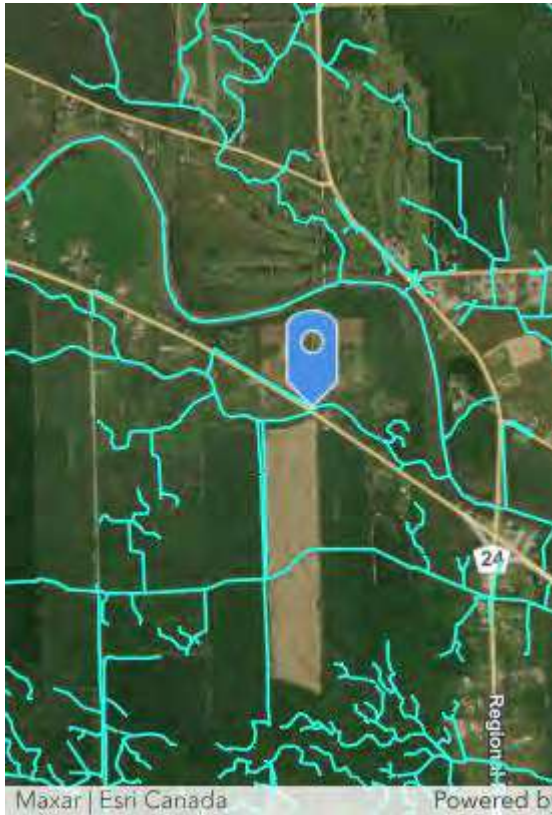
Downstream Channel

CROSSING DATA SHEET

Watershed and Location Information	Structure Configuration and Dimensions		Current Flow Information
Date (mm/dd/yyyy): 09/29/2025	Structure Type: Road Bridge	Shape: Rectangular	Flow Present (Y/N): Y
Field Crew: MA, AMM	Number of Cells: 1	Open Footing (Yes/No): Y	Approx. Depth of Water (mm): 480
ABL ID: ABL_15	Material (Concrete/Steel): Concrete		Upstream Erosion (Y/N): N
Creek Name: Upper Welland River Tributaries	Height (m) x Width (m) or Diameter (m): 2.72 x 4.4		Downstream Erosion (Y/N): N
Road Type: Highway	Length (m): 15.05		Structure Conditions and Additional Comments:
Municipality: Wellandport	U/S Invert Elev. (m): 170.29	U/S Obvert Elev. (m): 173.01	
Location (Road Name/Intersection): Regional Road 27	D/S Invert Elev. (m): 170.28	D/S Obvert Elev. (m): 173.49	
UTM Coordinates (LON, LAT): (142300.50619694247 , 4768121.821525626)	Inlet Type (Projecting/Mitered/Headwall): Projecting		
	Depth of Siltation (mm): 10		
Survey Vertical Datum: CGVD2013			

Location and Site Photographs

Site Location:



Upstream Face



Upstream Channel



Downstream Face



Downstream Channel

CROSSING DATA SHEET

Watershed and Location Information	Structure Configuration and Dimensions		Current Flow Information
Date (mm/dd/yyyy): 09/30/2025	Structure Type: Ditch/Culvert	Shape: Arch	Flow Present (Y/N): N
Field Crew: ET, GS	Number of Cells: 1	Open Footing (Yes/No): N	Approx. Depth of Water (mm): 250
ABL ID: ABL_16	Material (Concrete/Steel): Steel		Upstream Erosion (Y/N): N
Creek Name: Upper Welland River Tributaries	Height (m) x Width (m): 2 x 2.3		Downstream Erosion (Y/N): Y
Road Type: Local	Length (m): 13		Structure Conditions and Additional Comments: Erosion within the culvert, particularly on the DS end
Municipality: Wainfleet	U/S Invert Elev. (m): 174.35	U/S Obvert Elev. (m): 176.20	
Location (Road Name/Intersection): Gracey Road	D/S Invert Elev. (m): 174.19	D/S Obvert Elev. (m): 176.01	
UTM Coordinates (LON, LAT): (136431.01639872097 , 4769488.817447636)	Inlet Type (Projecting/Mitered/Headwall): Projecting		
	Depth of Siltation (mm): 15		
Survey Vertical Datum: CGVD2013			

Location and Site Photographs

Site Location:



Upstream Face



Upstream Channel



Downstream Face



Downstream Channel

CROSSING DATA SHEET

Watershed and Location Information	Structure Configuration and Dimensions		Current Flow Information
Date (mm/dd/yyyy): 09/30/2025	Structure Type: Ditch/Culvert	Shape: Arch	Flow Present (Y/N): N
Field Crew: ET, GS	Number of Cells: 1	Open Footing (Yes/No): N	Approx. Depth of Water (mm): 20
ABL ID: ABL_17	Material (Concrete/Steel): Steel		Upstream Erosion (Y/N): N
Creek Name: Upper Welland River Tributaries	Height (m) x Width (m): 2 x 3		Downstream Erosion (Y/N): N
Road Type: Local	Length (m): 12.2		Structure Conditions and Additional Comments:
Municipality: Wainfleet	U/S Invert Elev. (m): 173.74	U/S Obvert Elev. (m): 175.75	
Location (Road Name/Intersection): Henderson Road	D/S Invert Elev. (m): 173.68	D/S Obvert Elev. (m): 175.86	
UTM Coordinates (LON, LAT): (137254.42177749577 , 4769148.82138807)	Inlet Type (Projecting/Mitered/Headwall): Projecting		
	Depth of Siltation (mm): 100		
Survey Vertical Datum: CGVD2013			

Location and Site Photographs

Site Location:



Upstream Face



Upstream Channel



Downstream Face



Downstream Channel

CROSSING DATA SHEET

Watershed and Location Information	Structure Configuration and Dimensions		Current Flow Information
Date (mm/dd/yyyy): 09/30/2025	Structure Type: Ditch/Culvert	Shape: Arch	Flow Present (Y/N): N
Field Crew: ET, GS	Number of Cells: 1	Open Footing (Yes/No): N	Approx. Depth of Water (mm): 200
ABL ID: ABL_18	Material (Concrete/Steel): Steel		Upstream Erosion (Y/N): N
Creek Name: Upper Welland River Tributaries	Height (m) x Width (m): 2.5 x 3.4		Downstream Erosion (Y/N): N
Road Type: Local	Length (m): 13.6		Structure Conditions and Additional Comments:
Municipality: Wainfleet	U/S Invert Elev. (m): 172.92	U/S Obvert Elev. (m): 175.41	
Location (Road Name/Intersection): Robertson Road	D/S Invert Elev. (m): 172.72	D/S Obvert Elev. (m): 175.24	
UTM Coordinates (LON, LAT): (138096.45345421473 , 4768853.144479573)	Inlet Type (Projecting/Mitered/Headwall): Projecting		
	Depth of Siltation (mm): 150		
Survey Vertical Datum: CGVD2013			

Location and Site Photographs

Site Location:



Upstream Face



Upstream Channel



Downstream Face



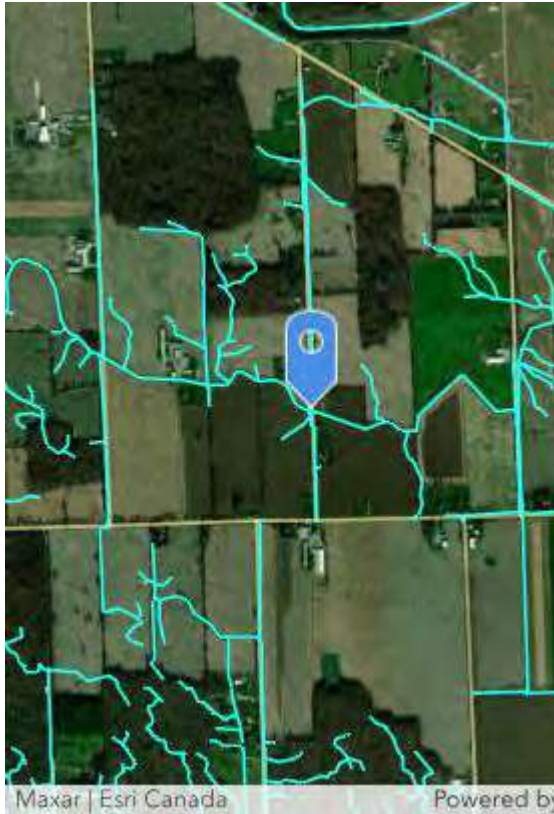
Downstream Channel

CROSSING DATA SHEET

Watershed and Location Information	Structure Configuration and Dimensions		Current Flow Information
Date (mm/dd/yyyy): 09/29/2025	Structure Type: Ditch/Culvert	Shape: Arch	Flow Present (Y/N): N
Field Crew: MA, AMM	Number of Cells: 1	Open Footing (Yes/No): N	Approx. Depth of Water (mm): 100
ABL ID: ABL_19	Material (Concrete/Steel): Steel		Upstream Erosion (Y/N): N
Creek Name: Upper Welland River Tributaries	Height (m) x Width (m): 2.2 x 3.66		Downstream Erosion (Y/N): N
Road Type: Local	Length (m): 15.5		Structure Conditions and Additional Comments:
Municipality: Wellandport	U/S Invert Elev. (m): 172.55	U/S Obvert Elev. (m): 174.92	
Location (Road Name/Intersection): Kilts Road	D/S Invert Elev. (m): 172.48	D/S Obvert Elev. (m): 174.80	
UTM Coordinates (LON, LAT): (138919.29995807534 , 4768617.181882786)	Inlet Type (Projecting/Mitered/Headwall): Projecting		
	Depth of Siltation (mm): 10		
Survey Vertical Datum: CGVD2013			

Location and Site Photographs

Site Location:



Upstream Face



Upstream Channel



Downstream Face



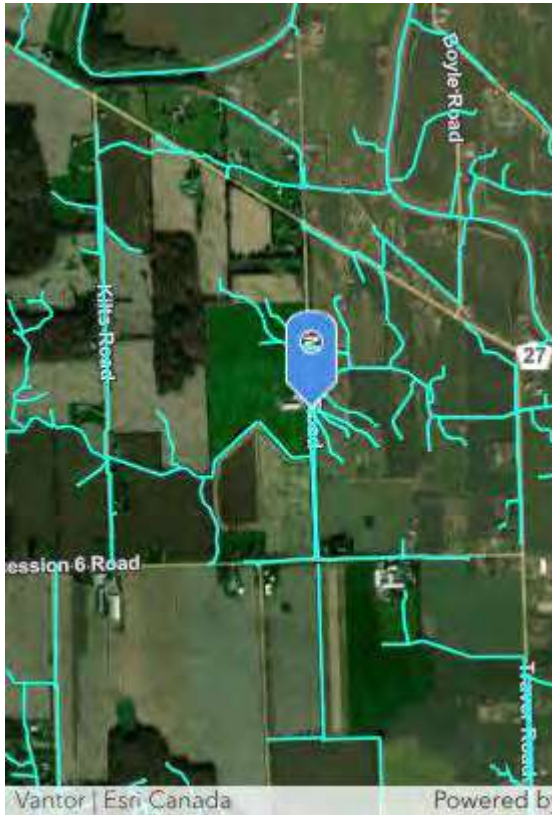
Downstream Channel

CROSSING DATA SHEET

Watershed and Location Information	Structure Configuration and Dimensions		Current Flow Information
Date (mm/dd/yyyy): 11/19/2025	Structure Type: Ditch/Culvert	Shape: Circular	Flow Present (Y/N): Y
Field Crew: MA, MFS	Number of Cells: 2	Open Footing (Yes/No): N	Approx. Depth of Water (mm): 100
ABL ID: ABL_20	Material (Concrete/Steel): Steel		Upstream Erosion (Y/N): Y
Creek Name: Upper Welland River Tributaries	Diameter (m): 2.46		Downstream Erosion (Y/N): Y
Road Type: Local	Length (m): 28.3		Structure Conditions and Additional Comments:
Municipality: Wainfleet	U/S Invert Elev. (m): 171.67	U/S Obvert Elev. (m): 174.13	
Location (Road Name/Intersection): Metler Road	D/S Invert Elev. (m): 171.60	D/S Obvert Elev. (m): 174.00	
UTM Coordinates (LON, LAT): (139740.18035489152 , 4768753.680955734)	Inlet Type (Projecting/Mitered/Headwall): Projecting		
	Depth of Siltation (mm): 80		
Survey Vertical Datum: CGVD2013			

Location and Site Photographs

Site Location:



Upstream Face



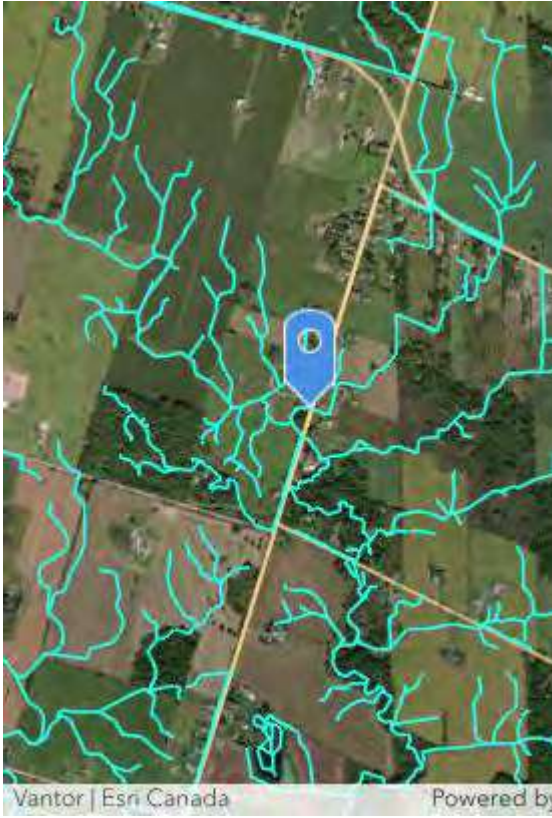
Upstream Channel



Downstream Face



Downstream Channel

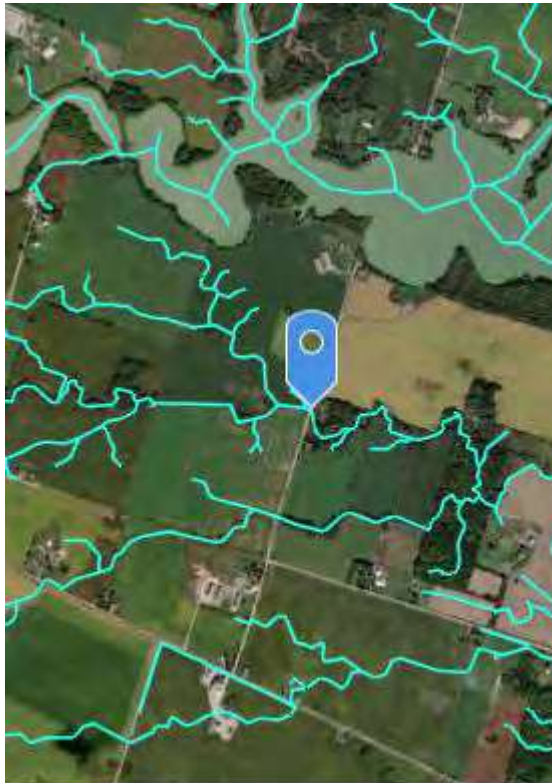
CROSSING DATA SHEET			
Watershed and Location Information	Structure Configuration and Dimensions		Current Flow Information
Date (mm/dd/yyyy): 10/27/2025	Structure Type: Ditch/Culvert	Shape: Rectangular	Flow Present (Y/N): N
Field Crew: MA, OC	Number of Cells: 1	Open Footing (Yes/No): N	Approx. Depth of Water (mm): 300
ABL ID: ABL_21	Material (Concrete/Steel): Concrete		Upstream Erosion (Y/N): N
Creek Name: Upper Welland River Tributaries	Height (m) x Width (m) or Diameter (m): 0.85 x 2.5		Downstream Erosion (Y/N): N
Road Type: Local	Length (m): 10.5		Structure Conditions and Additional Comments: Fence at upstream end. Only took 1 cross-section
Municipality: Caistorville	U/S Invert Elev. (m): 194.50	U/S Obvert Elev. (m): 195.35	
Location (Road Name/Intersection): Westbrook Road	D/S Invert Elev. (m): 194.40	D/S Obvert Elev. (m): 195.37	
UTM Coordinates (LON, LAT): (114497.30610368098 , 4782023.709888906)	Inlet Type (Projecting/Mitered/Headwall): Projecting		
	Depth of Siltation (mm): 150		
Survey Vertical Datum: CGVD2013			
Location and Site Photographs			
Site Location: 	 Upstream Face	 Upstream Channel	
	 Downstream Face	 Downstream Channel	

CROSSING DATA SHEET

Watershed and Location Information	Structure Configuration and Dimensions		Current Flow Information
Date (mm/dd/yyyy): 10/21/2025	Structure Type: Ditch/Culvert	Shape: Rectangular	Flow Present (Y/N): N
Field Crew: MA, AMM	Number of Cells: 1	Open Footing (Yes/No): Y	Approx. Depth of Water (mm): 20
ABL ID: ABL_22	Material (Concrete/Steel): Concrete		Upstream Erosion (Y/N): N
Creek Name: Upper Welland River Tributaries	Height (m) x Width (m) or Diameter (m): 0.99 x 3.5		Downstream Erosion (Y/N): N
Road Type: Local	Length (m): 11.5		Structure Conditions and Additional Comments:
Municipality: Tyneside	U/S Invert Elev. (m): 195.73	U/S Obvert Elev. (m): 196.72	
Location (Road Name/Intersection): Trinity Church Road	D/S Invert Elev. (m): 195.73	D/S Obvert Elev. (m): 196.67	
UTM Coordinates (LON, LAT): (104657.91376152885 , 4783136.412634722)	Inlet Type (Projecting/Mitered/Headwall): Projecting		
	Depth of Siltation (mm): 10		
Survey Vertical Datum: CGVD2013			

Location and Site Photographs

Site Location:



Upstream Face



Upstream Channel



Downstream Face



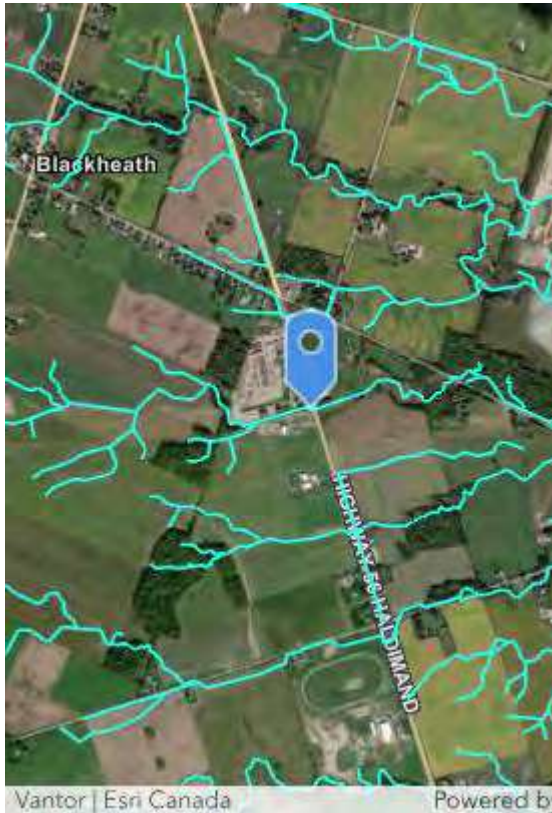
Downstream Channel

CROSSING DATA SHEET

Watershed and Location Information	Structure Configuration and Dimensions		Current Flow Information
Date (mm/dd/yyyy): 10/28/2025	Structure Type: Ditch/Culvert	Shape: Rectangular	Flow Present (Y/N): N
Field Crew: MA, ET	Number of Cells: 1	Open Footing (Yes/No): N	Approx. Depth of Water (mm): 850
ABL ID: ABL_23	Material (Concrete/Steel): Concrete		Upstream Erosion (Y/N): N
Creek Name: Upper Welland River Tributaries	Height (m) x Width (m): 1.46 x 2.4		Downstream Erosion (Y/N): N
Road Type: Highway	Length (m): 24		Structure Conditions and Additional Comments:
Municipality: Blackheath	U/S Invert Elev. (m): 188.13	U/S Obvert Elev. (m): 189.59	
Location (Road Name/Intersection): Regional Road 56	D/S Invert Elev. (m): 187.91	D/S Obvert Elev. (m): 189.60	
UTM Coordinates (LON, LAT): (108298.8951478037 , 4779467.48187661)	Inlet Type (Projecting/Mitered/Headwall): Projecting		
	Depth of Siltation (mm): 250		
Survey Vertical Datum: CGVD2013			

Location and Site Photographs

Site Location:



Upstream Face



Upstream Channel



Downstream Face



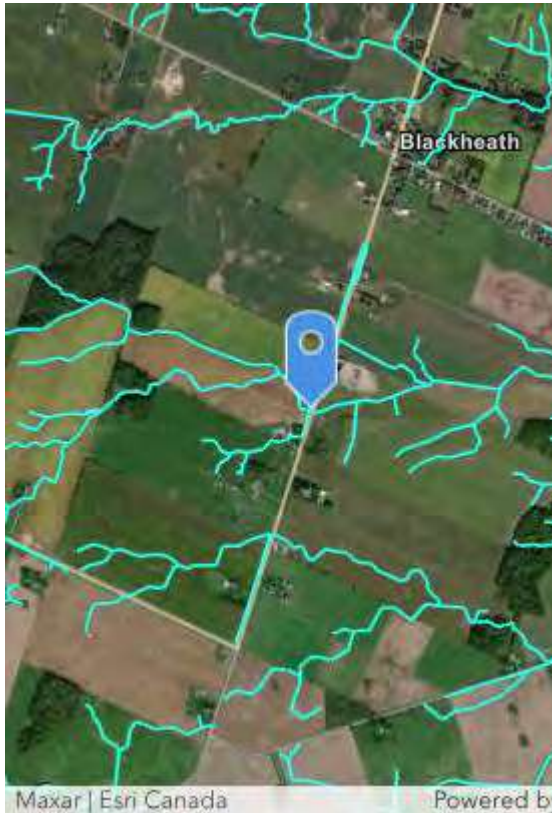
Downstream Channel

CROSSING DATA SHEET

Watershed and Location Information	Structure Configuration and Dimensions		Current Flow Information
Date (mm/dd/yyyy): 10/20/2025	Structure Type: Ditch/Culvert	Shape: Rectangular	Flow Present (Y/N): N
Field Crew: MA, AMM	Number of Cells: 1	Open Footing (Yes/No): N	Approx. Depth of Water (mm): 30
ABL ID: ABL_24	Material (Concrete/Steel): Concrete		Upstream Erosion (Y/N): N
Creek Name: Upper Welland River Tributaries	Height (m) x Width (m) or Diameter (m): 1.4 x 4.6		Downstream Erosion (Y/N): N
Road Type: Arterial	Length (m): 19.5		Structure Conditions and Additional Comments:
Municipality: Blackheath	U/S Invert Elev. (m): 193.038	U/S Obvert Elev. (m): 194.483	
Location (Road Name/Intersection): Stoney Creek Road	D/S Invert Elev. (m): 193.219	D/S Obvert Elev. (m): 194.571	
UTM Coordinates (LON, LAT): (106851.7528609226 , 4779461.341755427)	Inlet Type (Projecting/Mitered/Headwall): Projecting		
	Depth of Siltation (mm): 10		
Survey Vertical Datum: CGVD2013			

Location and Site Photographs

Site Location:



Upstream Face



Upstream Channel



Downstream Face



Downstream Channel

CROSSING DATA SHEET

Watershed and Location Information	Structure Configuration and Dimensions		Current Flow Information
Date (mm/dd/yyyy): 10/28/2025	Structure Type: Ditch/Culvert	Shape: Arch	Flow Present (Y/N): Y
Field Crew: MA, ET	Number of Cells: 1	Open Footing (Yes/No): N	Approx. Depth of Water (mm): 400
ABL ID: ABL_25	Material (Concrete/Steel): Steel		Upstream Erosion (Y/N): N
Creek Name: Upper Welland River Tributaries	Height (m) x Width (m): 2 x 3.5		Downstream Erosion (Y/N): N
Road Type: Local	Length (m): 50		Structure Conditions and Additional Comments:
Municipality: Blackheath	U/S Invert Elev. (m): 186.17	U/S Obvert Elev. (m): 188.17	
Location (Road Name/Intersection): Haldibrook Road	D/S Invert Elev. (m): 185.24	D/S Obvert Elev. (m): 187.12	
UTM Coordinates (LON, LAT): (108872.40523117792 , 4779549.021110453)	Inlet Type (Projecting/Mitered/Headwall): Projecting		
	Depth of Siltation (mm): 50		
Survey Vertical Datum: CGVD2013			

Location and Site Photographs

Site Location:



Upstream Face



Upstream Channel



Downstream Face



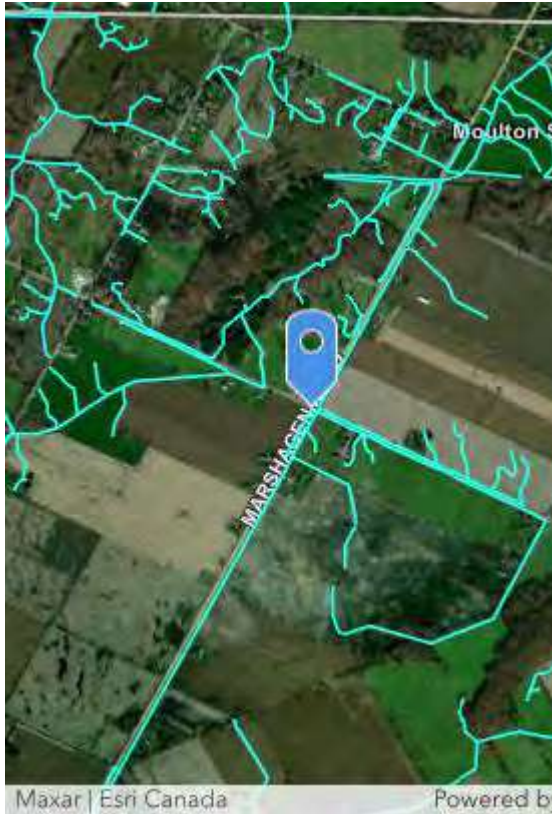
Downstream Channel

CROSSING DATA SHEET

Watershed and Location Information	Structure Configuration and Dimensions		Current Flow Information
Date (mm/dd/yyyy): 09/30/2025	Structure Type: Road Bridge	Shape: Rectangular	Flow Present (Y/N): N
Field Crew: ET, GS	Number of Cells: 1	Open Footing (Yes/No): Y	Approx. Depth of Water (mm): 10
ABL ID: ABL_26	Material (Concrete/Steel): Concrete, Steel		Upstream Erosion (Y/N): N
Creek Name: Upper Welland River Tributaries	Height (m) x Width (m) or Diameter (m): 2.27 x 2.1		Downstream Erosion (Y/N): N
Road Type: Arterial	Length (m): 16.6		Structure Conditions and Additional Comments: Upstream is rectangular concrete, changes to circular culvert midway through.
Municipality: Mount Carmel	U/S Invert Elev. (m): 174.99	U/S Obvert Elev. (m): 177.26	
Location (Road Name/Intersection): Marshagen Road	D/S Invert Elev. (m): 174.71	D/S Obvert Elev. (m): 176.36	
UTM Coordinates (LON, LAT): (128969.84894192981 , 4765621.9220725205)	Inlet Type (Projecting/Mitered/Headwall): Headwall		
	Depth of Siltation (mm): 100		
Survey Vertical Datum: CGVD2013			

Location and Site Photographs

Site Location:



Upstream Face



Upstream Channel



Downstream Face



Downstream Channel

CROSSING DATA SHEET

Watershed and Location Information	Structure Configuration and Dimensions		Current Flow Information
Date (mm/dd/yyyy): 09/30/2025	Structure Type: Ditch/Culvert	Shape: Circular	Flow Present (Y/N): N
Field Crew: ET, GS	Number of Cells: 1	Open Footing (Yes/No): N	Approx. Depth of Water (mm): 10
ABL ID: ABL_27	Material (Concrete/Steel): Steel		Upstream Erosion (Y/N): N
Creek Name: Upper Welland River Tributaries	Height (m) x Width (m) or Diameter (m): 1.84 x 1.6		Downstream Erosion (Y/N): N
Road Type: Arterial	Length (m): 19.4		Structure Conditions and Additional Comments:
Municipality: Mount Carmel	U/S Invert Elev. (m): 175.47	U/S Obvert Elev. (m): 177.31	
Location (Road Name/Intersection): Hines Road	D/S Invert Elev. (m): 175.42	D/S Obvert Elev. (m): 177.23	
UTM Coordinates (LON, LAT): (127788.14605095488 , 4765624.515914246)	Inlet Type (Projecting/Mitered/Headwall): Projecting		
	Depth of Siltation (mm): 10		
Survey Vertical Datum: CGVD2013			

Location and Site Photographs

Site Location:



Upstream Face



Upstream Channel



Downstream Face



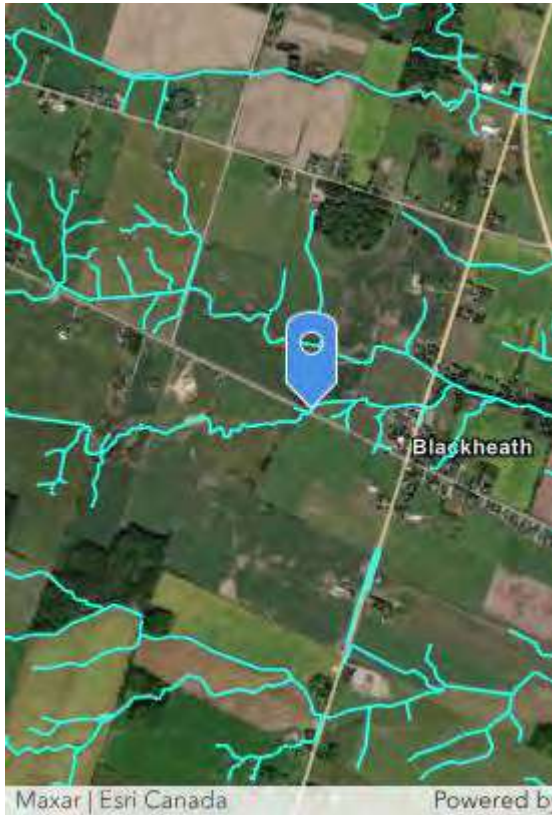
Downstream Channel

CROSSING DATA SHEET

Watershed and Location Information	Structure Configuration and Dimensions		Current Flow Information
Date (mm/dd/yyyy): 10/20/2025	Structure Type: Ditch/Culvert	Shape: Arch	Flow Present (Y/N): Y
Field Crew: MA, AMM	Number of Cells: 1	Open Footing (Yes/No): N	Approx. Depth of Water (mm): 500
ABL ID: ABL_28	Material (Concrete/Steel): Steel		Upstream Erosion (Y/N): N
Creek Name: Upper Welland River Tributaries	Height (m) x Width (m): 1.8 x 2.7		Downstream Erosion (Y/N): N
Road Type: Local	Length (m): 18		Structure Conditions and Additional Comments:
Municipality: Blackheath	U/S Invert Elev. (m): 189.95	U/S Obvert Elev. (m): 191.27	
Location (Road Name/Intersection): Haldibrook Road	D/S Invert Elev. (m): 189.88	D/S Obvert Elev. (m): 191.60	
UTM Coordinates (LON, LAT): (106871.76343445427 , 4780671.300444361)	Inlet Type (Projecting/Mitered/Headwall): Projecting		
	Depth of Siltation (mm): 400		
Survey Vertical Datum: CGVD2013			

Location and Site Photographs

Site Location:



Upstream Face



Upstream Channel



Downstream Face



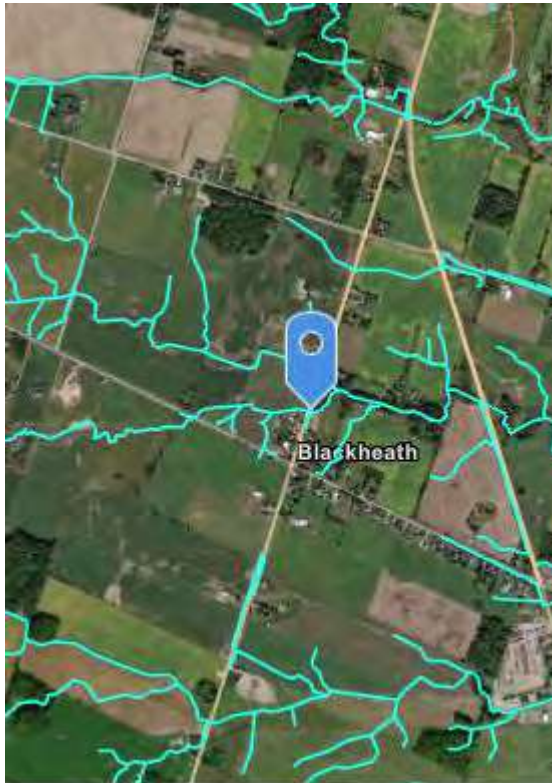
Downstream Channel

CROSSING DATA SHEET

Watershed and Location Information	Structure Configuration and Dimensions		Current Flow Information
Date (mm/dd/yyyy): 10/27/2025	Structure Type: Ditch/Culvert	Shape: Rectangular	Flow Present (Y/N): Y
Field Crew: MA, OC	Number of Cells: 1	Open Footing (Yes/No): Y	Approx. Depth of Water (mm): 550
ABL ID: ABL_29	Material (Concrete/Steel): Concrete		Upstream Erosion (Y/N): N
Creek Name: Upper Welland River Tributaries	Height (m) x Width (m) or Diameter (m): 1.62 x 4.8		Downstream Erosion (Y/N): N
Road Type: Arterial	Length (m): 15		Structure Conditions and Additional Comments:
Municipality: Blackheath	U/S Invert Elev. (m): 188.82	U/S Obvert Elev. (m): 190.44	
Location (Road Name/Intersection): Blackheath Road	D/S Invert Elev. (m): 188.66	D/S Obvert Elev. (m): 190.46	
UTM Coordinates (LON, LAT): (107327.90424938774 , 4780665.941353644)	Inlet Type (Projecting/Mitered/Headwall): Projecting		
	Depth of Siltation (mm): 150		
Survey Vertical Datum: CGVD2013			

Location and Site Photographs

Site Location:



Upstream Face



Upstream Channel



Downstream Face



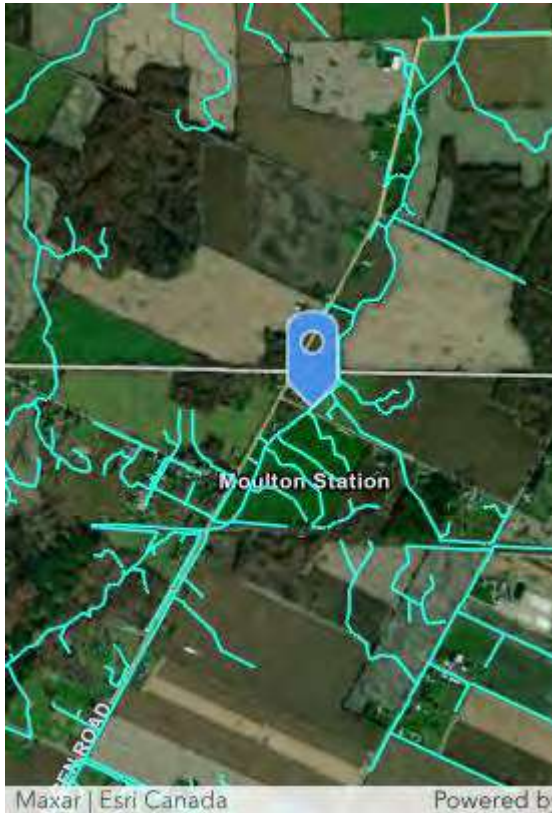
Downstream Channel

CROSSING DATA SHEET

Watershed and Location Information	Structure Configuration and Dimensions		Current Flow Information
Date (mm/dd/yyyy): 10/01/2025	Structure Type: Ditch/Culvert	Shape: Circular	Flow Present (Y/N): N
Field Crew: CM, MSR	Number of Cells: 1	Open Footing (Yes/No): N	Approx. Depth of Water (mm): 150
ABL ID: ABL_30	Material (Concrete/Steel): Steel		Upstream Erosion (Y/N): Y
Creek Name: Upper Welland River Tributaries	Height (m) x Width (m) or Diameter (m): 1.55 x 2.4		Downstream Erosion (Y/N): Y
Road Type: Arterial	Length (m): 16.5		Structure Conditions and Additional Comments:
Municipality: Moulton Station	U/S Invert Elev. (m): 173.92	U/S Obvert Elev. (m): 175.47	
Location (Road Name/Intersection): Calvert Road	D/S Invert Elev. (m): 173.85	D/S Obvert Elev. (m): 175.60	
UTM Coordinates (LON, LAT): (129972.92024981999 , 4766953.385943261)	Inlet Type (Projecting/Mitered/Headwall): Headwall		
	Depth of Siltation (mm): 200		
Survey Vertical Datum: CGVD2013			

Location and Site Photographs

Site Location:



Upstream Face



Upstream Channel



Downstream Face



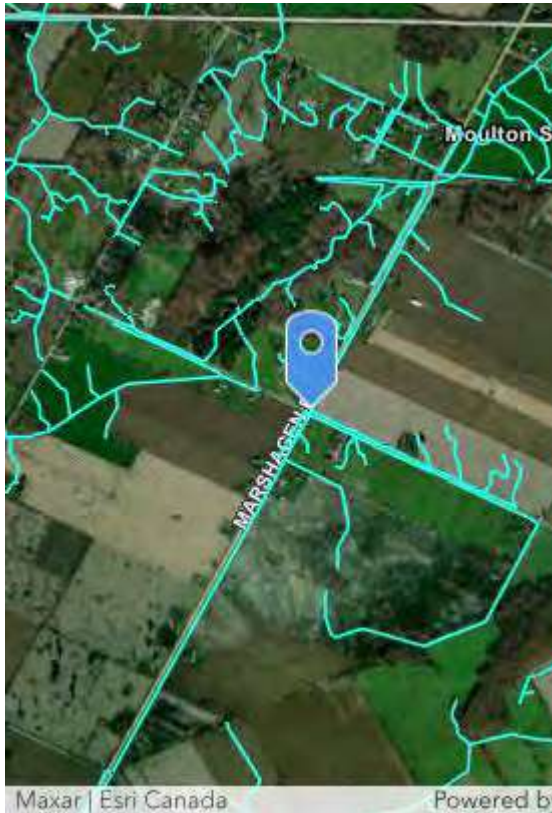
Downstream Channel

CROSSING DATA SHEET

Watershed and Location Information	Structure Configuration and Dimensions		Current Flow Information
Date (mm/dd/yyyy): 09/30/2025	Structure Type: Ditch/Culvert	Shape: Circular	Flow Present (Y/N): N
Field Crew: ET, GS	Number of Cells: 1	Open Footing (Yes/No): Y	Approx. Depth of Water (mm): 300
ABL ID: ABL_31	Material (Concrete/Steel): Steel		Upstream Erosion (Y/N): N
Creek Name: Upper Welland River Tributaries	Height (m) x Width (m) or Diameter (m): 2.27 x 2		Downstream Erosion (Y/N): N
Road Type: Arterial	Length (m): 14.4		Structure Conditions and Additional Comments:
Municipality: Moulton Station	U/S Invert Elev. (m): 174.99	U/S Obvert Elev. (m): 177.26	
Location (Road Name/Intersection): Hutchinson Road	D/S Invert Elev. (m): 174.78	D/S Obvert Elev. (m): 176.36	
UTM Coordinates (LON, LAT): (128999.52518591075 , 4765626.9946036525)	Inlet Type (Projecting/Mitered/Headwall): Projecting		
	Depth of Siltation (mm): 500		
Survey Vertical Datum: CGVD2013			

Location and Site Photographs

Site Location:



Upstream Face



Upstream Channel



Downstream Face



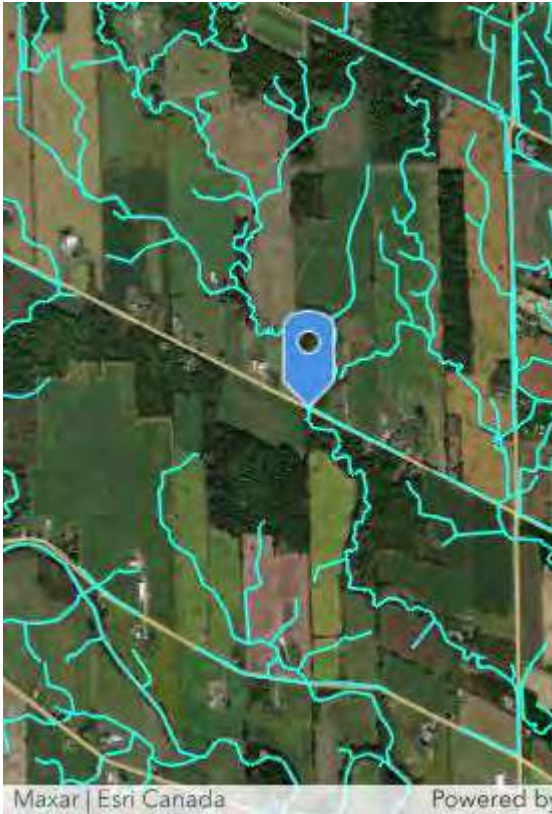
Downstream Channel

CROSSING DATA SHEET

CROSSING DATA SHEET			
Watershed and Location Information	Structure Configuration and Dimensions		Current Flow Information
Date (mm/dd/yyyy): 10/10/2025	Structure Type: Road Bridge	Shape: Rectangular	Flow Present (Y/N): N
Field Crew: CM, MSR	Number of Cells: 1	Open Footing (Yes/No): N	Approx. Depth of Water (mm): 1.4
ABL ID: ABL_32	Material (Concrete/Steel): Concrete		Upstream Erosion (Y/N): Y
Creek Name: Upper Welland River Tributaries	Height (m) x Width (m) or Diameter (m): 1.76 x 6		Downstream Erosion (Y/N): Y
Road Type: Highway	Length (m): 11.3		Structure Conditions and Additional Comments: Too deep for cross section
Municipality: Caistorville	U/S Invert Elev. (m): 184.45	U/S Obvert Elev. (m): 186.21	
Location (Road Name/Intersection): Concession Road 2	D/S Invert Elev. (m): 184.26	D/S Obvert Elev. (m): 186.23	
UTM Coordinates (LON, LAT): (117658.83237934974 , 4778066.444302887)	Inlet Type (Projecting/Mitered/Headwall): Headwall		
	Depth of Siltation (mm): 100		
Survey Vertical Datum: CGVD2013			

Location and Site Photographs

Site Location:



Upstream Face



Upstream Channel



Downstream Face



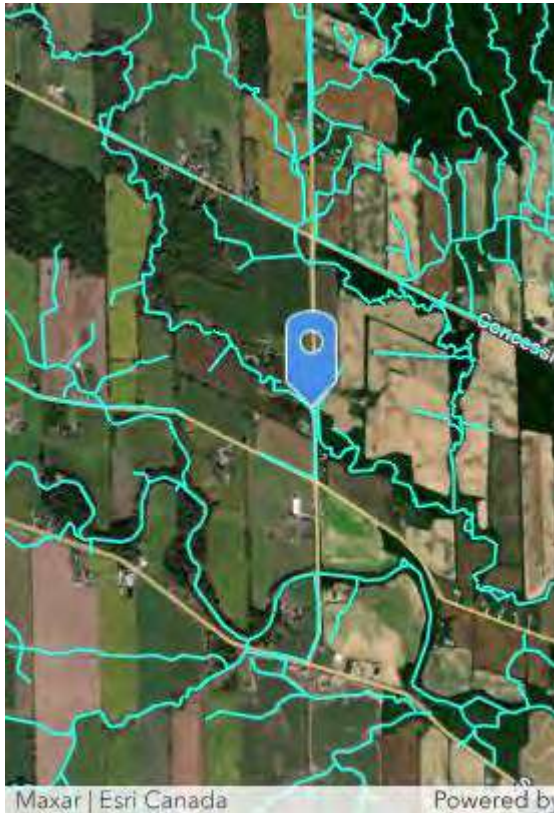
Downstream Channel

CROSSING DATA SHEET

Watershed and Location Information	Structure Configuration and Dimensions		Current Flow Information
Date (mm/dd/yyyy): 10/09/2025	Structure Type: Ditch/Culvert	Shape: Rectangular	Flow Present (Y/N): Y
Field Crew: ET, GS	Number of Cells: 1	Open Footing (Yes/No): N	Approx. Depth of Water (mm): 10,000
ABL ID: ABL_33	Material (Concrete/Steel): Concrete		Upstream Erosion (Y/N): N
Creek Name: Upper Welland River Tributaries	Height (m) x Width (m) or Diameter (m): 1.58 x 5.5		Downstream Erosion (Y/N): N
Road Type: Arterial	Length (m): 12.1		Structure Conditions and Additional Comments:
Municipality: Caistorville	U/S Invert Elev. (m): 181.80	U/S Obvert Elev. (m): 183.38	
Location (Road Name/Intersection): Abingdon Road	D/S Invert Elev. (m): 181.55	D/S Obvert Elev. (m): 183.36	
UTM Coordinates (LON, LAT): (118413.59051109414 , 4776923.35236341)	Inlet Type (Projecting/Mitered/Headwall): Projecting		
	Depth of Siltation (mm): 50		
Survey Vertical Datum: CGVD2013			

Location and Site Photographs

Site Location:



Upstream Face



Upstream Channel



Downstream Face



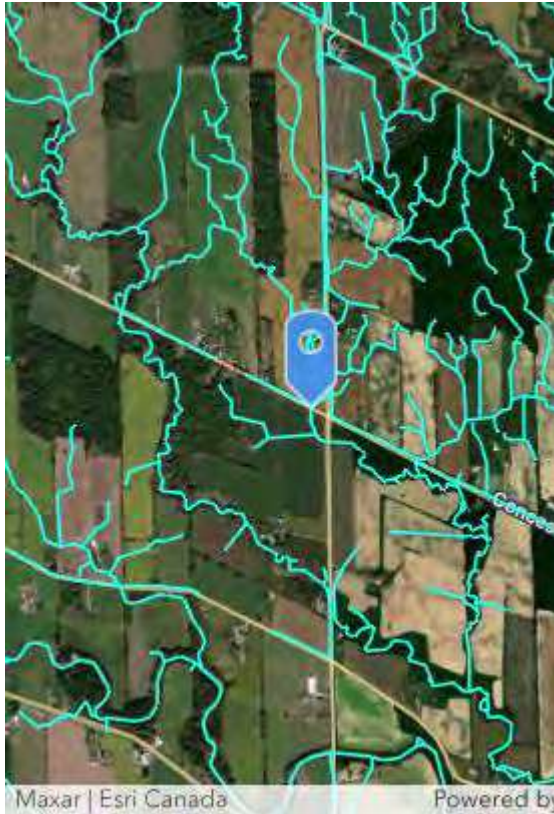
Downstream Channel

CROSSING DATA SHEET

Watershed and Location Information	Structure Configuration and Dimensions		Current Flow Information
Date (mm/dd/yyyy): 10/09/2025	Structure Type: Ditch/Culvert	Shape: Rectangular	Flow Present (Y/N): N
Field Crew: ET, GS	Number of Cells: 1	Open Footing (Yes/No): Y	Approx. Depth of Water (mm): 50
ABL ID: ABL_34	Material (Concrete/Steel): Concrete		Upstream Erosion (Y/N): N
Creek Name: Upper Welland River Tributaries	Height (m) x Width (m) or Diameter (m): 1.2 x 2.3		Downstream Erosion (Y/N): N
Road Type: Local	Length (m): 12.3		Structure Conditions and Additional Comments:
Municipality: Caistorville	U/S Invert Elev. (m): 186.16	U/S Obvert Elev. (m): 187.36	
Location (Road Name/Intersection): Concesssion Road 2	D/S Invert Elev. (m): 186.01	D/S Obvert Elev. (m): 187.35	
UTM Coordinates (LON, LAT): (118391.92259415775 , 4777640.18729422)	Inlet Type (Projecting/Mitered/Headwall): Projecting		
	Depth of Siltation (mm): 200		
Survey Vertical Datum: CGVD2013			

Location and Site Photographs

Site Location:



Upstream Face



Upstream Channel



Downstream Face



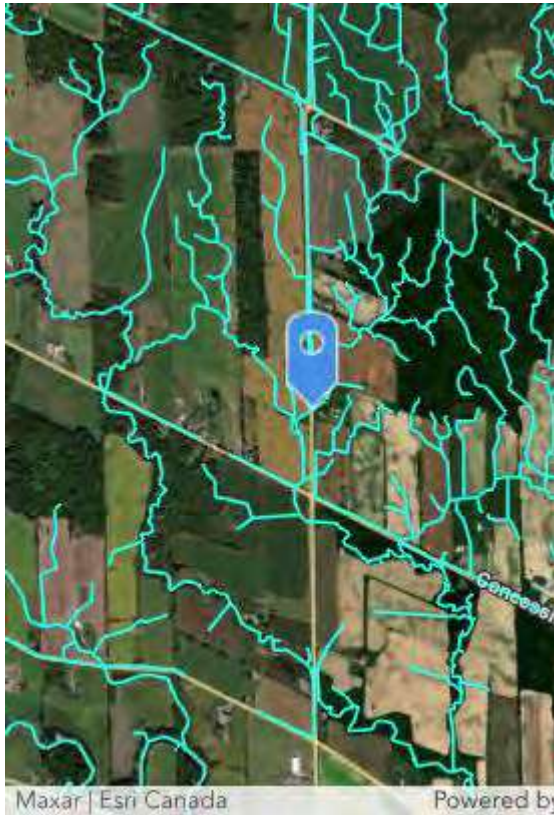
Downstream Channel

CROSSING DATA SHEET

Watershed and Location Information	Structure Configuration and Dimensions		Current Flow Information
Date (mm/dd/yyyy): 10/09/2025	Structure Type: Ditch/Culvert	Shape: Arch	Flow Present (Y/N): N
Field Crew: ET, GS	Number of Cells: 1	Open Footing (Yes/No): N	Approx. Depth of Water (mm): 100
ABL ID: ABL_35	Material (Concrete/Steel): Steel		Upstream Erosion (Y/N): N
Creek Name: Upper Welland River Tributaries	Height (m) x Width (m): 1 x 1.5		Downstream Erosion (Y/N): N
Road Type: Arterial	Length (m): 12.2		Structure Conditions and Additional Comments:
Municipality: Castor	U/S Invert Elev. (m): 187.12	U/S Obvert Elev. (m): 188.12	
Location (Road Name/Intersection): Abingdon Road	D/S Invert Elev. (m): 187.07	D/S Obvert Elev. (m): 188.11	
UTM Coordinates (LON, LAT): (118473.77640293789 , 4777949.525574866)	Inlet Type (Projecting/Mitered/Headwall): Projecting		
	Depth of Siltation (mm): 50		
Survey Vertical Datum: CGVD2013			

Location and Site Photographs

Site Location:



Upstream Face



Upstream Channel



Downstream Face



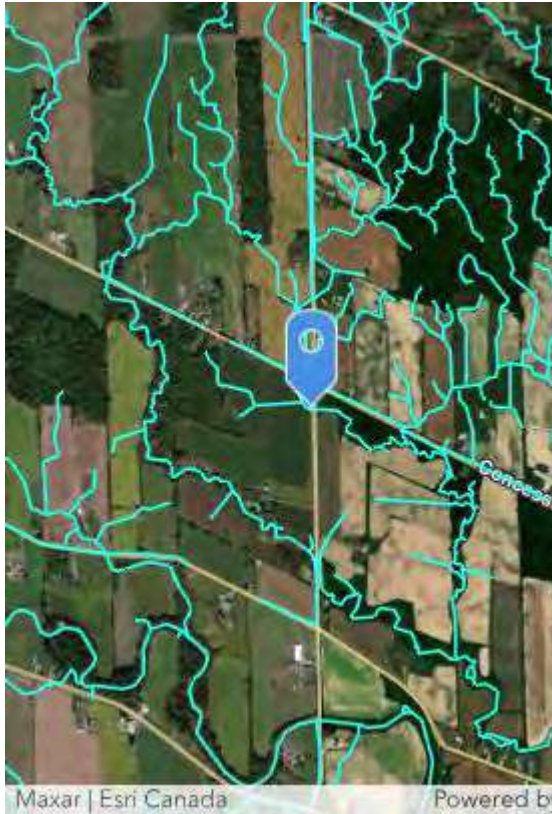
Downstream Channel

CROSSING DATA SHEET

Watershed and Location Information	Structure Configuration and Dimensions		Current Flow Information
Date (mm/dd/yyyy): 10/09/2025	Structure Type: Ditch/Culvert	Shape: Rectangular	Flow Present (Y/N): N
Field Crew: ET, GS	Number of Cells: 1	Open Footing (Yes/No): Y	Approx. Depth of Water (mm): 200
ABL ID: ABL_36	Material (Concrete/Steel): Concrete		Upstream Erosion (Y/N): Y
Creek Name: Upper Welland River Tributaries	Height (m) x Width (m) or Diameter (m): 1 x 2.4		Downstream Erosion (Y/N): Y
Road Type: Arterial	Length (m): 10.7		Structure Conditions and Additional Comments: US and DS structures severely eroded with rebar sticking out
Municipality: Caistorville	U/S Invert Elev. (m): 185.85	U/S Obvert Elev. (m): 186.85	
Location (Road Name/Intersection): Abingdon Road	D/S Invert Elev. (m): 185.66	D/S Obvert Elev. (m): 186.78	
UTM Coordinates (LON, LAT): (118439.3912071361 , 4777509.193717083)	Inlet Type (Projecting/Mitered/Headwall): Projecting		
	Depth of Siltation (mm): 50		
Survey Vertical Datum: CGVD2013			

Location and Site Photographs

Site Location:



Upstream Face



Upstream Channel



Downstream Face



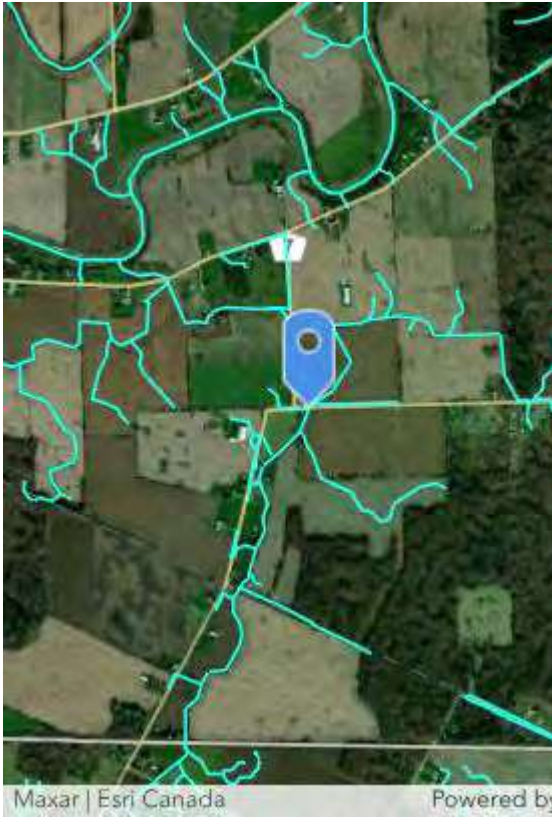
Downstream Channel

CROSSING DATA SHEET

CROSSING DATA SHEET			
Watershed and Location Information	Structure Configuration and Dimensions		Current Flow Information
Date (mm/dd/yyyy): 10/01/2025	Structure Type: Ditch/Culvert	Shape: Rectangular	Flow Present (Y/N): N
Field Crew: CM, MSR	Number of Cells: 1	Open Footing (Yes/No): Y	Approx. Depth of Water (mm): 5
ABL ID: ABL_37	Material (Concrete/Steel): Concrete		Upstream Erosion (Y/N): Y
Creek Name: Upper Welland River Tributaries	Height (m) x Width (m) or Diameter (m): 2.21 x 4.8		Downstream Erosion (Y/N): Y
Road Type: Highway	Length (m): 22		Structure Conditions and Additional Comments:
Municipality: Moulton Station	U/S Invert Elev. (m): 172.34	U/S Obvert Elev. (m): 174.55	
Location (Road Name/Intersection): Concession 6 Road	D/S Invert Elev. (m): 172.25	D/S Obvert Elev. (m): 174.49	
UTM Coordinates (LON, LAT): (130653.83155451808 , 4768393.262956123)	Inlet Type (Projecting/Mitered/Headwall): Projecting		
	Depth of Siltation (mm): 20		
Survey Vertical Datum: CGVD2013			

Location and Site Photographs

Site Location:



Upstream Face



Upstream Channel



Downstream Face



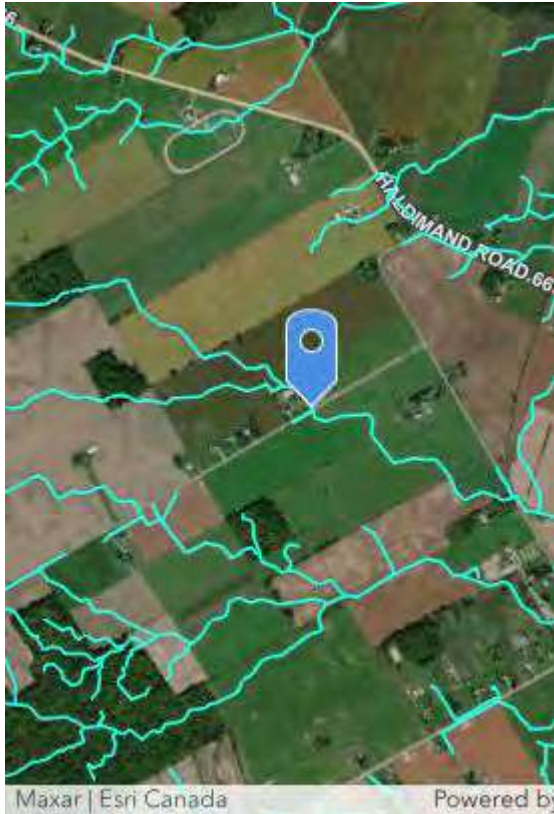
Downstream Channel

CROSSING DATA SHEET

Watershed and Location Information	Structure Configuration and Dimensions		Current Flow Information
Date (mm/dd/yyyy): 10/10/2025	Structure Type: Road Bridge	Shape: Arch	Flow Present (Y/N): N
Field Crew: CM, MSR	Number of Cells: 1	Open Footing (Yes/No): N	Approx. Depth of Water (mm): 0
ABL ID: ABL_38	Material (Concrete/Steel): Steel		Upstream Erosion (Y/N): N
Creek Name: Upper Welland River Tributaries	Height (m) x Width (m): 1.2 x 1.52		Downstream Erosion (Y/N): N
Road Type: Arterial	Length (m): 12		Structure Conditions and Additional Comments: Fence on downstream side preventing cross section Property owner commented on how much the ditch overflows and floods their property
Municipality: Blackheath	U/S Invert Elev. (m): 200.18	U/S Obvert Elev. (m): 201.56	
Location (Road Name/Intersection): Young Road	D/S Invert Elev. (m): 200.17	D/S Obvert Elev. (m): 201.43	
UTM Coordinates (LON, LAT): (104505.14990408032 , 4778679.590155943)	Inlet Type (Projecting/Mitered/Headwall): Projecting		
	Depth of Siltation (mm): 0		
Survey Vertical Datum: CGVD2013			

Location and Site Photographs

Site Location:



Upstream Face



Upstream Channel



Downstream Face



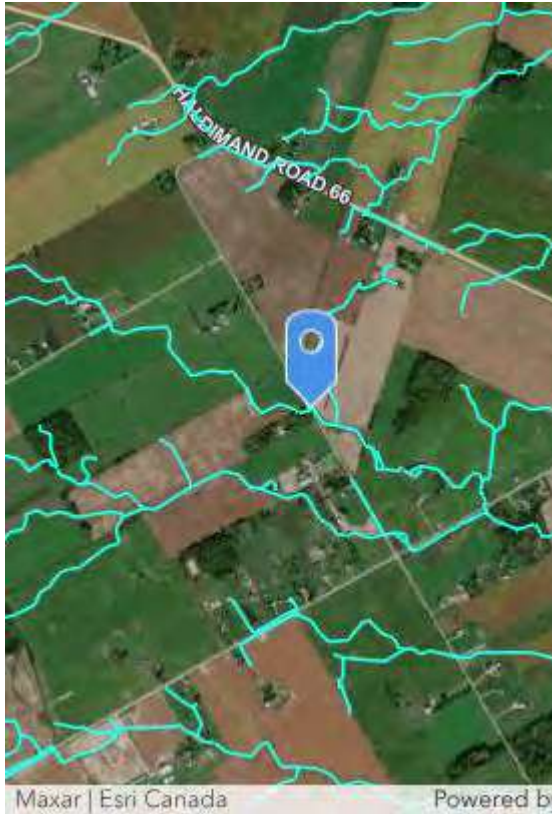
Downstream Channel

CROSSING DATA SHEET

Watershed and Location Information	Structure Configuration and Dimensions		Current Flow Information
Date (mm/dd/yyyy): 10/20/2025	Structure Type: Ditch/Culvert	Shape: Rectangular	Flow Present (Y/N): N
Field Crew: MA, AMM	Number of Cells: 1	Open Footing (Yes/No): Y	Approx. Depth of Water (mm): 20
ABL ID: ABL_39	Material (Concrete/Steel): Concrete		Upstream Erosion (Y/N): N
Creek Name: Upper Welland River Tributaries	Height (m) x Width (m): 0.81 x 3.6		Downstream Erosion (Y/N): N
Road Type: Local	Length (m): 9.5		Structure Conditions and Additional Comments:
Municipality: Blackheath	U/S Invert Elev. (m): 198.17	U/S Obvert Elev. (m): 198.98	
Location (Road Name/Intersection): Moores Road	D/S Invert Elev. (m): 198.00	D/S Obvert Elev. (m): 198.96	
UTM Coordinates (LON, LAT): (105289.50309784303 , 4778286.938745334)	Inlet Type (Projecting/Mitered/Headwall): Projecting		
	Depth of Siltation (mm): 0		
Survey Vertical Datum: CGVD2013			

Location and Site Photographs

Site Location:



Upstream Face



Upstream Channel



Downstream Face



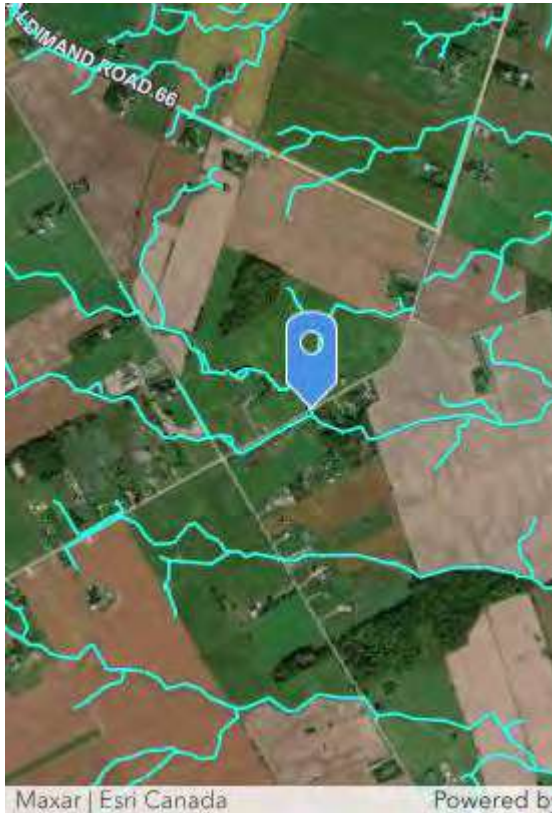
Downstream Channel

CROSSING DATA SHEET

Watershed and Location Information	Structure Configuration and Dimensions		Current Flow Information
Date (mm/dd/yyyy): 10/20/2025	Structure Type: Road Bridge	Shape: Rectangular	Flow Present (Y/N): N
Field Crew: MA, AMM	Number of Cells: 1	Open Footing (Yes/No): Y	Approx. Depth of Water (mm): 200
ABL ID: ABL_40	Material (Concrete/Steel): Concrete		Upstream Erosion (Y/N): N
Creek Name: Upper Welland River Tributaries	Height (m) x Width (m) or Diameter (m): 1.21 x 3.2		Downstream Erosion (Y/N): N
Road Type: Arterial	Length (m): 12.5		Structure Conditions and Additional Comments:
Municipality: Blackheath	U/S Invert Elev. (m): 196.21	U/S Obvert Elev. (m): 197.42	
Location (Road Name/Intersection): Stoney Creek Road	D/S Invert Elev. (m): 196.18	D/S Obvert Elev. (m): 197.35	
UTM Coordinates (LON, LAT): (105958.23600384826 , 4777857.814078075)	Inlet Type (Projecting/Mitered/Headwall): Wingwall		
	Depth of Siltation (mm): 20		
Survey Vertical Datum: CGVD2013			

Location and Site Photographs

Site Location:



Upstream Face



Upstream Channel



Downstream Face



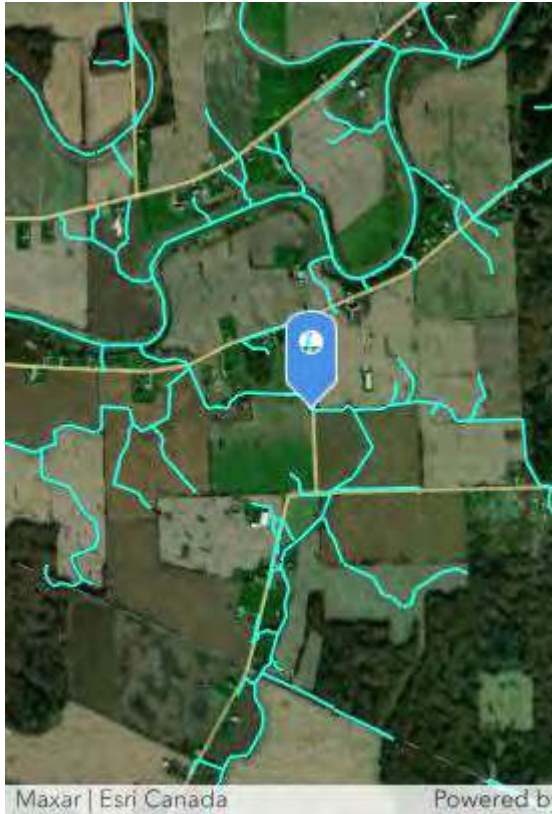
Downstream Channel

CROSSING DATA SHEET

Watershed and Location Information	Structure Configuration and Dimensions		Current Flow Information
Date (mm/dd/yyyy): 10/10/2025	Structure Type: Road Bridge	Shape: Arch	Flow Present (Y/N): Y
Field Crew: CM, MSR	Number of Cells: 2	Open Footing (Yes/No): N	Approx. Depth of Water (mm): 300
ABL ID: ABL_41	Material (Concrete/Steel): Steel		Upstream Erosion (Y/N): Y
Creek Name: Upper Welland River Tributaries	Height (m) x Width (m): 2.3 x 3.4		Downstream Erosion (Y/N): N
Road Type: Arterial	Length (m): 19		Structure Conditions and Additional Comments:
Municipality: Port Davidson	U/S Invert Elev. (m): 171.49, 171.50	U/S Obvert Elev. (m): 173.64, 173.77	
Location (Road Name/Intersection): Marshagan Road	D/S Invert Elev. (m): 171.44, 171.36	D/S Obvert Elev. (m): 173.69, 173.67	
UTM Coordinates (LON, LAT): (130593.9062243409 , 4768735.131431362)	Inlet Type (Projecting/Mitered/Headwall): Projecting		
	Depth of Siltation (mm): 25		
Survey Vertical Datum: CGVD2013			

Location and Site Photographs

Site Location:



Upstream Face



Upstream Channel



Downstream Face



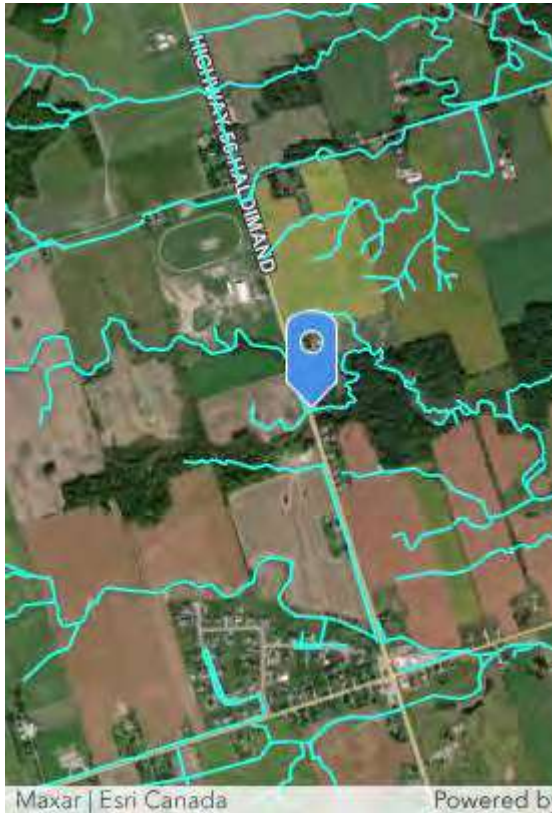
Downstream Channel

CROSSING DATA SHEET

Watershed and Location Information	Structure Configuration and Dimensions		Current Flow Information
Date (mm/dd/yyyy): 10/17/2025	Structure Type: Road Bridge	Shape: Rectangular	Flow Present (Y/N): N
Field Crew: MSR, EM	Number of Cells: 1	Open Footing (Yes/No): Y	Approx. Depth of Water (mm): 150
ABL ID: ABL_42	Material (Concrete/Steel): Concrete		Upstream Erosion (Y/N): Y
Creek Name: Upper Welland River Tributaries	Height (m) x Width (m) or Diameter (m): 1.29 x 4		Downstream Erosion (Y/N): Y
Road Type: Highway	Length (m): 22.5		Structure Conditions and Additional Comments:
Municipality: Empire Corners	U/S Invert Elev. (m): 190.17	U/S Obvert Elev. (m): 191.46	
Location (Road Name/Intersection): Haldimand Highway	D/S Invert Elev. (m): 189.85	D/S Obvert Elev. (m): 191.51	
UTM Coordinates (LON, LAT): (108768.45691723528 , 4777693.506778903)	Inlet Type (Projecting/Mitered/Headwall): Headwall		
	Depth of Siltation (mm): 100		
Survey Vertical Datum: CGVD2013			

Location and Site Photographs

Site Location:



Upstream Face



Upstream Channel



Downstream Face



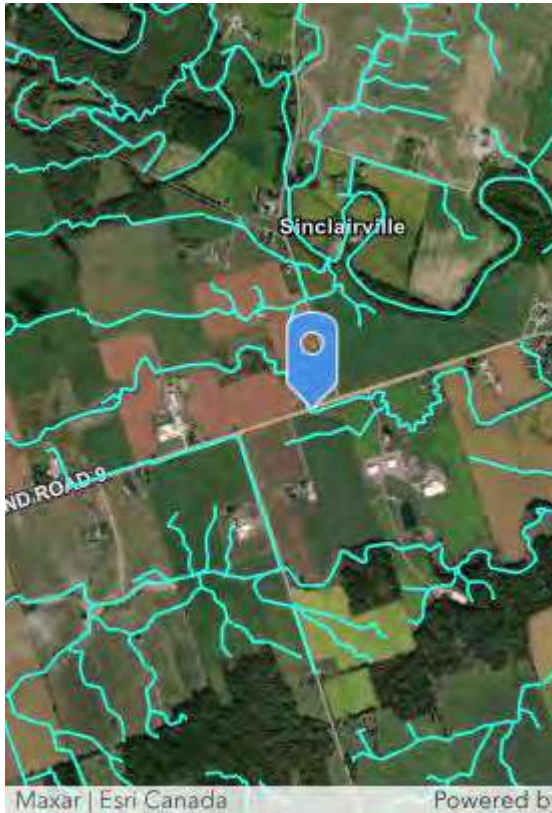
Downstream Channel

CROSSING DATA SHEET

Watershed and Location Information	Structure Configuration and Dimensions		Current Flow Information
Date (mm/dd/yyyy): 10/16/2025	Structure Type: Ditch/Culvert	Shape: Rectangular	Flow Present (Y/N): N
Field Crew: MA, AMM	Number of Cells: 1	Open Footing (Yes/No): N	Approx. Depth of Water (mm): 100
ABL ID: ABL_43	Material (Concrete/Steel): Concrete		Upstream Erosion (Y/N): N
Creek Name: Upper Welland River Tributaries	Height (m) x Width (m): 1.92 x 4.175		Downstream Erosion (Y/N): N
Road Type: Arterial	Length (m): 16		Structure Conditions and Additional Comments:
Municipality: Sinclairville	U/S Invert Elev. (m): 183.61	U/S Obvert Elev. (m): 185.53	
Location (Road Name/Intersection): Haldimand Road 9	D/S Invert Elev. (m): 183.64	D/S Obvert Elev. (m): 185.52	
UTM Coordinates (LON, LAT): (111712.79141594749 , 4777326.737417732)	Inlet Type (Projecting/Mitered/Headwall): Projecting		
	Depth of Siltation (mm): 10		
Survey Vertical Datum: CGVD2013			

Location and Site Photographs

Site Location:



Upstream Face



Upstream Channel



Downstream Face



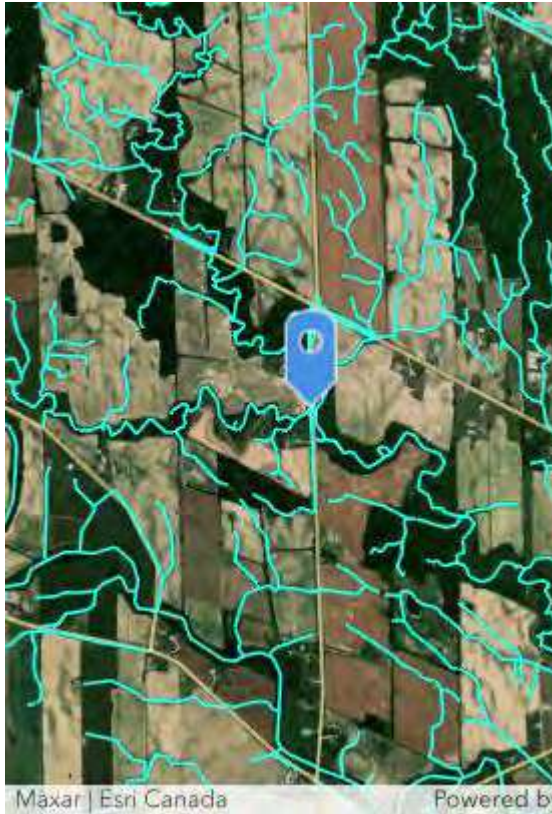
Downstream Channel

CROSSING DATA SHEET

Watershed and Location Information	Structure Configuration and Dimensions		Current Flow Information
Date (mm/dd/yyyy): 10/08/2025	Structure Type: Road Bridge	Shape: Rectangular	Flow Present (Y/N): Y
Field Crew: MA, AMM	Number of Cells: 1	Open Footing (Yes/No): Y	Approx. Depth of Water (mm): 1,000
ABL ID: ABL_44	Material (Concrete/Steel): Concrete		Upstream Erosion (Y/N): N
Creek Name: Upper Welland River Tributaries	Height (m) x Width (m): 2.06 x 4.6		Downstream Erosion (Y/N): N
Road Type: Arterial	Length (m): 11		Structure Conditions and Additional Comments: water depth greater than one (1) metre
Municipality: Caistor Centre	U/S Invert Elev. (m): 176.83	U/S Obvert Elev. (m): 178.89	
Location (Road Name/Intersection): Caistor Centre Road	D/S Invert Elev. (m): 176.63	D/S Obvert Elev. (m): 178.87	
UTM Coordinates (LON, LAT): (121072.76036756136 , 4775651.283531606)	Inlet Type (Projecting/Mitered/Headwall): Projecting		
	Depth of Siltation (mm): 20		
Survey Vertical Datum: CGVD2013			

Location and Site Photographs

Site Location:



Upstream Face



Upstream Channel



Downstream Face



Downstream Channel

CROSSING DATA SHEET

Watershed and Location Information	Structure Configuration and Dimensions		Current Flow Information
Date (mm/dd/yyyy): 10/14/2025	Structure Type: Ditch/Culvert	Shape: Rectangular	Flow Present (Y/N): Y
Field Crew: GS, AMM	Number of Cells: 1	Open Footing (Yes/No): Y	Approx. Depth of Water (mm): 10
ABL ID: ABL_45	Material (Concrete/Steel): Concrete		Upstream Erosion (Y/N): N
Creek Name: Upper Welland River Tributaries	Height (m) x Width (m): 1.81 x 6.2		Downstream Erosion (Y/N): N
Road Type: Arterial	Length (m): 13.2		Structure Conditions and Additional Comments:
Municipality: Caistorville	U/S Invert Elev. (m): 184.96	U/S Obvert Elev. (m): 186.77	
Location (Road Name/Intersection): Concession Road 2	D/S Invert Elev. (m): 184.23	D/S Obvert Elev. (m): 186.74	
UTM Coordinates (LON, LAT): (115634.94993455743 , 4779248.866162978)	Inlet Type (Projecting/Mitered/Headwall): Projecting		
	Depth of Siltation (mm): 5		
Survey Vertical Datum: CGVD2013			

Location and Site Photographs

Site Location:



Upstream Face



Upstream Channel



Downstream Face



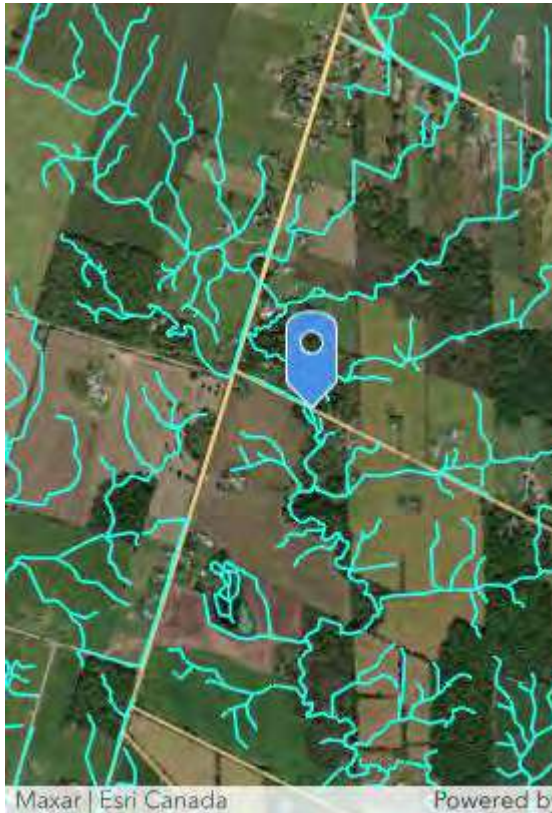
Downstream Channel

CROSSING DATA SHEET

Watershed and Location Information	Structure Configuration and Dimensions		Current Flow Information
Date (mm/dd/yyyy): 10/15/2025	Structure Type: Road Bridge	Shape: Rectangular	Flow Present (Y/N): N
Field Crew: MSR, EM	Number of Cells: 1	Open Footing (Yes/No): Y	Approx. Depth of Water (mm): 200
ABL ID: ABL_46	Material (Concrete/Steel): Concrete		Upstream Erosion (Y/N): Y
Creek Name: Upper Welland River Tributaries	Height (m) x Width (m) or Diameter (m): 2.29 x 3		Downstream Erosion (Y/N): Y
Road Type: Arterial	Length (m): 12		Structure Conditions and Additional Comments:
Municipality: Abingdon	U/S Invert Elev. (m): 190.97	U/S Obvert Elev. (m): 193.26	
Location (Road Name/Intersection): Concession Road 3	D/S Invert Elev. (m): 190.95	D/S Obvert Elev. (m): 193.27	
UTM Coordinates (LON, LAT): (114639.6142668213 , 4781398.977823908)	Inlet Type (Projecting/Mitered/Headwall): Headwall		
	Depth of Siltation (mm): 100		
Survey Vertical Datum: CGVD2013			

Location and Site Photographs

Site Location:



Upstream Face



Upstream Channel



Downstream Face



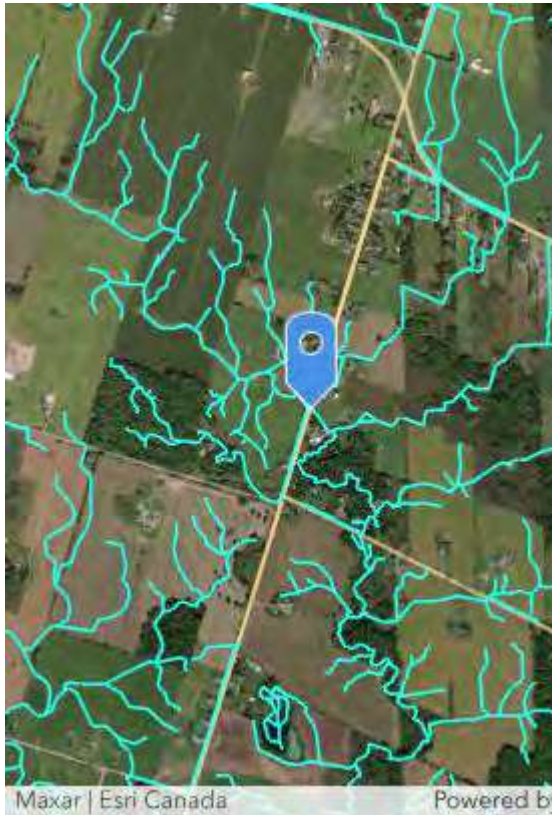
Downstream Channel

CROSSING DATA SHEET

Watershed and Location Information	Structure Configuration and Dimensions		Current Flow Information
Date (mm/dd/yyyy): 10/14/2025	Structure Type: Ditch/Culvert	Shape: Rectangular	Flow Present (Y/N): Y
Field Crew: GS, AMM	Number of Cells: 1	Open Footing (Yes/No): Y	Approx. Depth of Water (mm): 50
ABL ID: ABL_47	Material (Concrete/Steel): Concrete		Upstream Erosion (Y/N): Y
Creek Name: Upper Welland River Tributaries	Height (m) x Width (m) or Diameter (m): 1.60 x 3.4		Downstream Erosion (Y/N): N
Road Type: Arterial	Length (m): 12.6		Structure Conditions and Additional Comments:
Municipality: Abingdon	U/S Invert Elev. (m): 193.18	U/S Obvert Elev. (m): 194.78	
Location (Road Name/Intersection): Westbrook Road	D/S Invert Elev. (m): 192.94	D/S Obvert Elev. (m): 194.77	
UTM Coordinates (LON, LAT): (114473.2882285068 , 4781907.153842375)	Inlet Type (Projecting/Mitered/Headwall): Projecting		
	Depth of Siltation (mm): 10		
Survey Vertical Datum: CGVD2013			

Location and Site Photographs

Site Location:



Upstream Face



Upstream Channel



Downstream Face



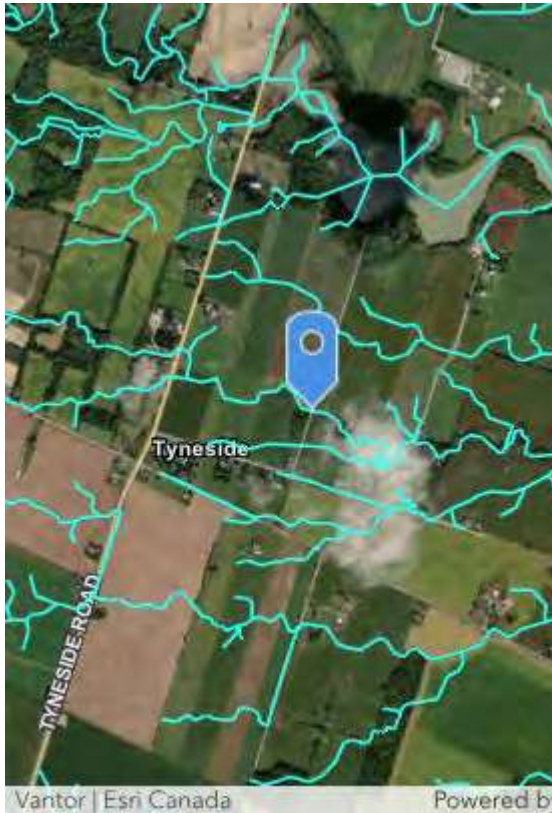
Downstream Channel

CROSSING DATA SHEET

Watershed and Location Information	Structure Configuration and Dimensions		Current Flow Information
Date (mm/dd/yyyy): 10/23/2025	Structure Type: Ditch/Culvert	Shape: Circular	Flow Present (Y/N): N
Field Crew: MSR, ET	Number of Cells: 1	Open Footing (Yes/No): N	Approx. Depth of Water (mm): 50
ABL ID: ABL_48	Material (Concrete/Steel): Steel		Upstream Erosion (Y/N): Y
Creek Name: Upper Welland River Tributaries	Height (m) x Width (m) or Diameter (m): 0.4 x 0.4		Downstream Erosion (Y/N): N
Road Type: Private Road	Length (m): 9		Structure Conditions and Additional Comments:
Municipality: Tyneside	U/S Invert Elev. (m): 201.825	U/S Obvert Elev. (m): 202.285	
Location (Road Name/Intersection): Private	D/S Invert Elev. (m): 200.479	D/S Obvert Elev. (m): 201.033	
UTM Coordinates (LON, LAT): (102900.1724377601 , 4783435.46859362)	Inlet Type (Projecting/Mitered/Headwall): Projecting		
	Depth of Siltation (mm): 25		
Survey Vertical Datum: CGVD2013			

Location and Site Photographs

Site Location:



Upstream Face



Upstream Channel



Downstream Face



Downstream Channel

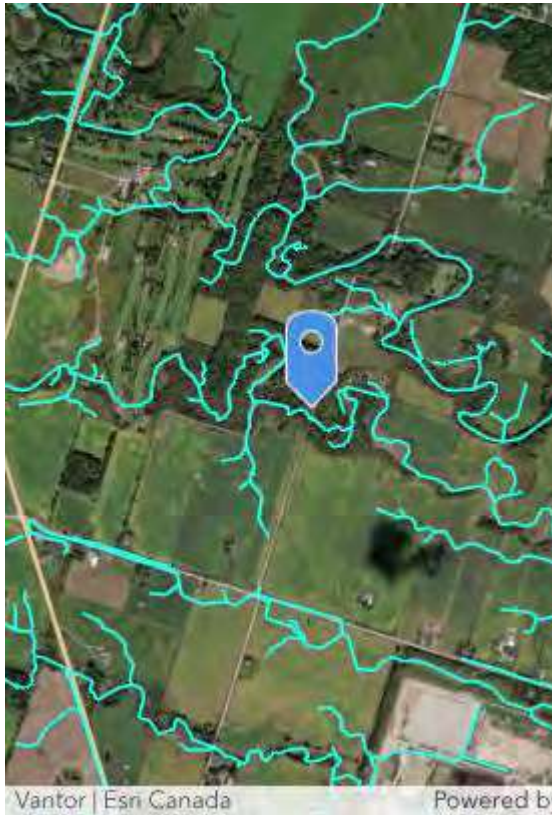
CROSSING DATA SHEET			
Watershed and Location Information	Structure Configuration and Dimensions		Current Flow Information
Date (mm/dd/yyyy): 10/23/2025	Structure Type: Ditch/Culvert	Shape: Rectangular	Flow Present (Y/N): N
Field Crew: MSR, ET	Number of Cells: 1	Open Footing (Yes/No): Y	Approx. Depth of Water (mm): 0
ABL ID: ABL_49	Material (Concrete/Steel): Concrete		Upstream Erosion (Y/N): N
Creek Name: Upper Welland River Tributaries	Height (m) x Width (m) or Diameter (m): 1.07 x 2		Downstream Erosion (Y/N): N
Road Type: Private Road	Length (m): 5		Structure Conditions and Additional Comments:
Municipality: Tyneside	U/S Invert Elev. (m): 199.94	U/S Obvert Elev. (m): 201.01	
Location (Road Name/Intersection): Private	D/S Invert Elev. (m): 199.84	D/S Obvert Elev. (m): 200.98	
UTM Coordinates (LON, LAT): (103304.71782231587 , 4783281.031970181)	Inlet Type (Projecting/Mitered/Headwall): Headwall		
	Depth of Siltation (mm): 50		
Survey Vertical Datum: CGVD2013			
Location and Site Photographs			
Site Location: 	 Upstream Face	 Upstream Channel	
	 Downstream Face	 Downstream Channel	

CROSSING DATA SHEET

Watershed and Location Information	Structure Configuration and Dimensions		Current Flow Information
Date (mm/dd/yyyy): 10/27/2025	Structure Type: Ditch/Culvert	Shape: Circular	Flow Present (Y/N): N
Field Crew: MA, OC	Number of Cells: 1	Open Footing (Yes/No): N	Approx. Depth of Water (mm): 200
ABL ID: ABL_50.1	Material (Concrete/Steel): Concrete		Upstream Erosion (Y/N): Y
Creek Name: Upper Welland River Tributaries	Diameter (m): 0.75		Downstream Erosion (Y/N): Y
Road Type: Local	Length (m): 11		Structure Conditions and Additional Comments: Structure located near ABL_50. Structure eroded.
Municipality: Blackheath	U/S Invert Elev. (m): 187.20	U/S Obvert Elev. (m): 188.14	
Location (Road Name/Intersection): Trimble Road	D/S Invert Elev. (m): 187.17	D/S Obvert Elev. (m): 188.04	
UTM Coordinates (LON, LAT): (109030.37979114457 , 4781626.687670993)	Inlet Type (Projecting/Mitered/Headwall): Projecting		
	Depth of Siltation (mm): 10		
Survey Vertical Datum: CGVD2013			

Location and Site Photographs

Site Location:



Upstream Face



Upstream Channel



Downstream Face



Downstream Channel

CROSSING DATA SHEET

Watershed and Location Information	Structure Configuration and Dimensions		Current Flow Information
Date (mm/dd/yyyy): 10/27/2025	Structure Type: Ditch/Culvert	Shape: Circular	Flow Present (Y/N): N
Field Crew: MA, OC	Number of Cells: 1	Open Footing (Yes/No): N	Approx. Depth of Water (mm): 600
ABL ID: ABL_50	Material (Concrete/Steel): Steel		Upstream Erosion (Y/N): Y
Creek Name: Upper Welland River Tributaries	Diameter (m): 0.57		Downstream Erosion (Y/N): Y
Road Type: Local	Length (m): 6		Structure Conditions and Additional Comments: Road and Culvert structure fully eroded. Channel flows over culvert
Municipality: Blackheath	U/S Invert Elev. (m): 186.86	U/S Obvert Elev. (m): 187.43	
Location (Road Name/Intersection): Trimble Road	D/S Invert Elev. (m): 186.82	D/S Obvert Elev. (m): 187.35	
UTM Coordinates (LON, LAT): (109039.74640599516 , 4781617.91113357)	Inlet Type (Projecting/Mitered/Headwall): Projecting		
	Depth of Siltation (mm): 150		
Survey Vertical Datum: CGVD2013			

Location and Site Photographs

Site Location:



Upstream Face



Upstream Channel



Downstream Face



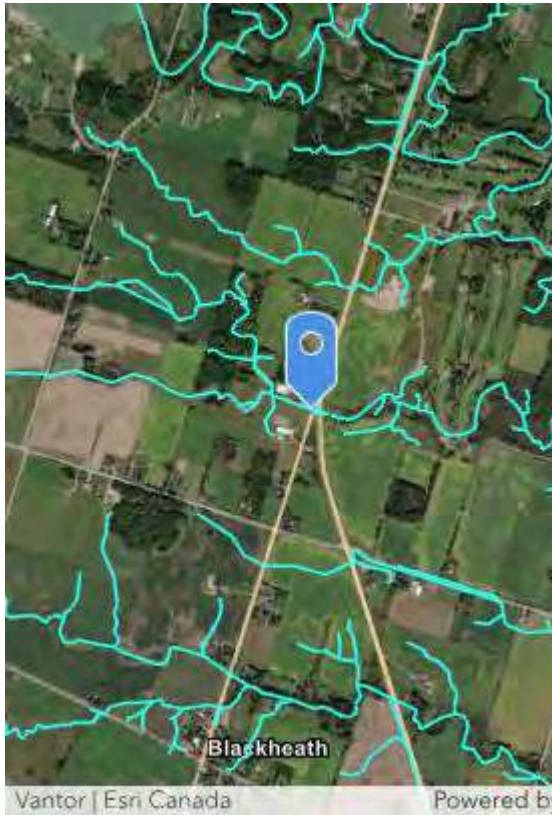
Downstream Channel

CROSSING DATA SHEET

Watershed and Location Information	Structure Configuration and Dimensions		Current Flow Information
Date (mm/dd/yyyy): 10/27/2025	Structure Type: Road Bridge	Shape: Rectangular	Flow Present (Y/N): Y
Field Crew: MA, OC	Number of Cells: 1	Open Footing (Yes/No): Y	Approx. Depth of Water (mm): 550
ABL ID: ABL_51.1	Material (Concrete/Steel): Concrete		Upstream Erosion (Y/N): N
Creek Name: Upper Welland River Tributaries	Height (m) x Width (m): 1 x 6		Downstream Erosion (Y/N): N
Road Type: Private	Length (m): 14		Structure Conditions and Additional Comments: Debris Jam on upstream end.
Municipality: Blackheath	U/S Invert Elev. (m): 188.73	U/S Obvert Elev. (m): 190.04	
Location (Road Name/Intersection): Highway 56	D/S Invert Elev. (m): 188.66	D/S Obvert Elev. (m): 189.97	
UTM Coordinates (LON, LAT): (107751.70109075308 , 4781815.5026573725)	Inlet Type (Projecting/Mitered/Headwall): Headwall		
	Depth of Siltation (mm): 100		
Survey Vertical Datum: CGVD2013			

Location and Site Photographs

Site Location:



Upstream Face



Upstream Channel



Downstream Face



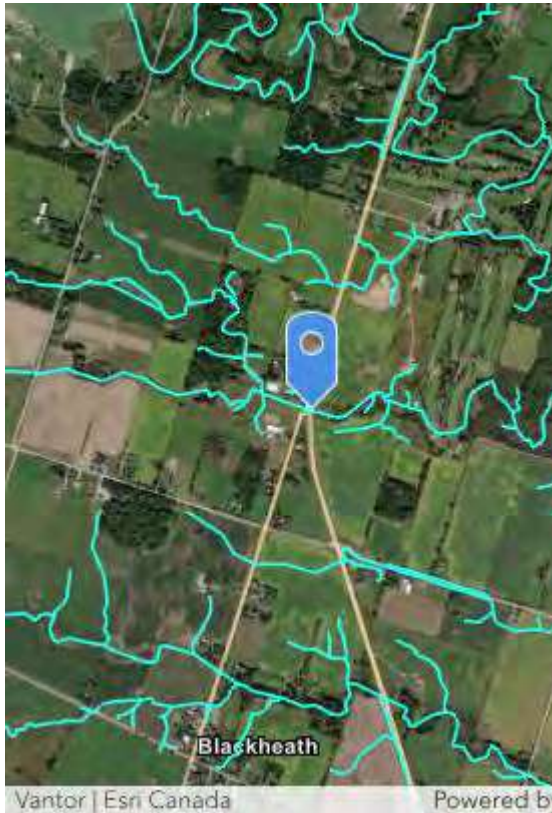
Downstream Channel

CROSSING DATA SHEET

Watershed and Location Information	Structure Configuration and Dimensions		Current Flow Information
Date (mm/dd/yyyy): 10/27/2025	Structure Type: Ditch/Culvert	Shape: Rectangular	Flow Present (Y/N): Y
Field Crew: MA, OC	Number of Cells: 1	Open Footing (Yes/No): Y	Approx. Depth of Water (mm): 850
ABL ID: ABL_51	Material (Concrete/Steel): Concrete		Upstream Erosion (Y/N): N
Creek Name: Upper Welland River Tributaries	Height (m) x Width (m) or Diameter (m): 3.25 x 3		Downstream Erosion (Y/N): N
Road Type: Highway	Length (m): 24.5		Structure Conditions and Additional Comments:
Municipality: Blackheath	U/S Invert Elev. (m): 188.746	U/S Obvert Elev. (m): 191.363	
Location (Road Name/Intersection): Highway 56	D/S Invert Elev. (m): 188.337	D/S Obvert Elev. (m): 191.586	
UTM Coordinates (LON, LAT): (107790.8213550864 , 4781805.849926033)	Inlet Type (Projecting/Mitered/Headwall): Projecting		
	Depth of Siltation (mm): 250		
Survey Vertical Datum: CGVD2013			

Location and Site Photographs

Site Location:



Upstream Face



Upstream Channel



Downstream Face



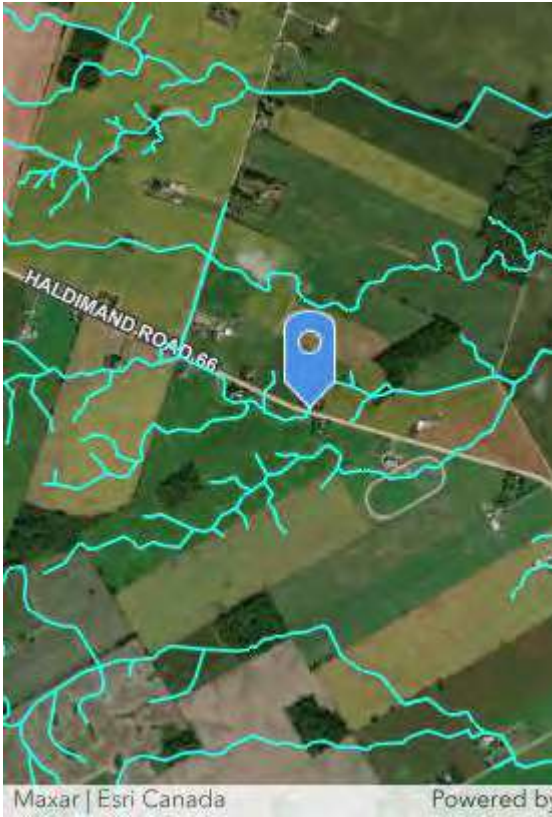
Downstream Channel

CROSSING DATA SHEET

Watershed and Location Information	Structure Configuration and Dimensions		Current Flow Information
Date (mm/dd/yyyy): 10/10/2025	Structure Type: Road Bridge	Shape: Rectangular	Flow Present (Y/N): N
Field Crew: CM, MSR	Number of Cells: 1	Open Footing (Yes/No): N	Approx. Depth of Water (mm): 0
ABL ID: ABL_52	Material (Concrete/Steel): Concrete		Upstream Erosion (Y/N): Y
Creek Name: Upper Welland River Tributaries	Height (m) x Width (m) or Diameter (m): 1.41 x 1.6		Downstream Erosion (Y/N): Y
Road Type: Arterial	Length (m): 25		Structure Conditions and Additional Comments: Flip photos
Municipality: Blackheath	U/S Invert Elev. (m): 200.92	U/S Obvert Elev. (m): 202.33	
Location (Road Name/Intersection): Halimand Road 66	D/S Invert Elev. (m): 200.80	D/S Obvert Elev. (m): 202.21	
UTM Coordinates (LON, LAT): (103779.13392367924 , 4780095.528739987)	Inlet Type (Projecting/Mitered/Headwall): Projecting		
	Depth of Siltation (mm): 100		
Survey Vertical Datum: CGVD2013			

Location and Site Photographs

Site Location:



Upstream Face



Upstream Channel



Downstream Face



Downstream Channel

CROSSING DATA SHEET

Watershed and Location Information	Structure Configuration and Dimensions		Current Flow Information
Date (mm/dd/yyyy): 10/02/2025	Structure Type: Ditch/Culvert	Shape: Arch	Flow Present (Y/N): Y
Field Crew: CM, MSR	Number of Cells: 1	Open Footing (Yes/No): N	Approx. Depth of Water (mm): 250
ABL ID: ABL_53	Material (Concrete/Steel): Steel		Upstream Erosion (Y/N): N
Creek Name: Upper Welland River Tributaries	Height (m) x Width (m) or Diameter (m): 1.13 x 2.7		Downstream Erosion (Y/N): N
Road Type: Arterial	Length (m): 18		Structure Conditions and Additional Comments:
Municipality: Attercliffe	U/S Invert Elev. (m): 177.55	U/S Obvert Elev. (m): 178.68	
Location (Road Name/Intersection): Church Road	D/S Invert Elev. (m): 177.37	D/S Obvert Elev. (m): 178.63	
UTM Coordinates (LON, LAT): (123662.57223761722 , 4772195.0959349945)	Inlet Type (Projecting/Mitered/Headwall): Projecting		
	Depth of Siltation (mm): 0		
Survey Vertical Datum: CGVD2013			

Location and Site Photographs

Site Location:



Upstream Face



Upstream Channel



Downstream Face



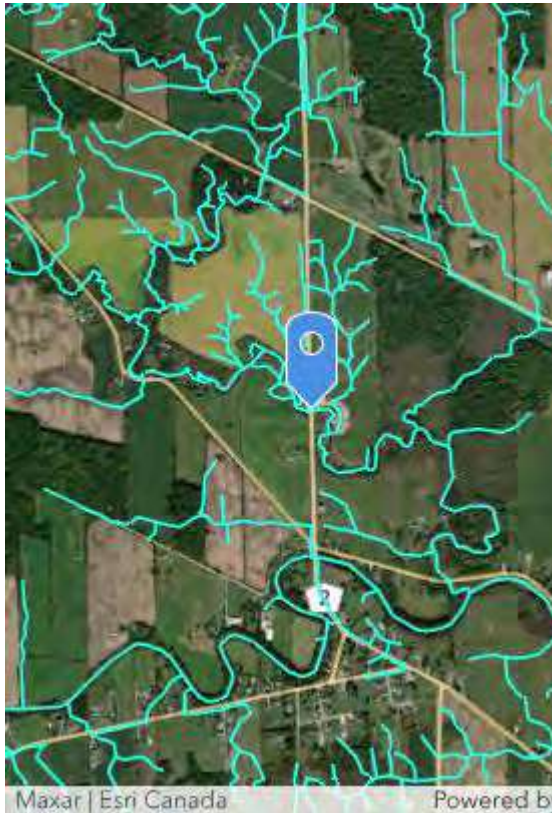
Downstream Channel

CROSSING DATA SHEET

Watershed and Location Information	Structure Configuration and Dimensions		Current Flow Information
Date (mm/dd/yyyy): 10/14/2025	Structure Type: Road Bridge	Shape: Rectangular	Flow Present (Y/N): Y
Field Crew: GS, AMM	Number of Cells: 1	Open Footing (Yes/No): N	Approx. Depth of Water (mm): 50
ABL ID: ABL_54	Material (Concrete/Steel): Concrete		Upstream Erosion (Y/N): N
Creek Name: Upper Welland River Tributaries	Height (m) x Width (m) or Diameter (m): 2.70 x 9.03		Downstream Erosion (Y/N): N
Road Type: Arterial	Length (m): 10.5		Structure Conditions and Additional Comments:
Municipality: Caistorville	U/S Invert Elev. (m): 181.61	U/S Obvert Elev. (m): 184.31	
Location (Road Name/Intersection): Caistorville Road	D/S Invert Elev. (m): 180.70	D/S Obvert Elev. (m): 184.76	
UTM Coordinates (LON, LAT): (115767.94185304205 , 4778306.582394586)	Inlet Type (Projecting/Mitered/Headwall): Headwall		
	Depth of Siltation (mm): 500		
Survey Vertical Datum: CGVD2013			

Location and Site Photographs

Site Location:



Upstream Face



Upstream Channel



Downstream Face



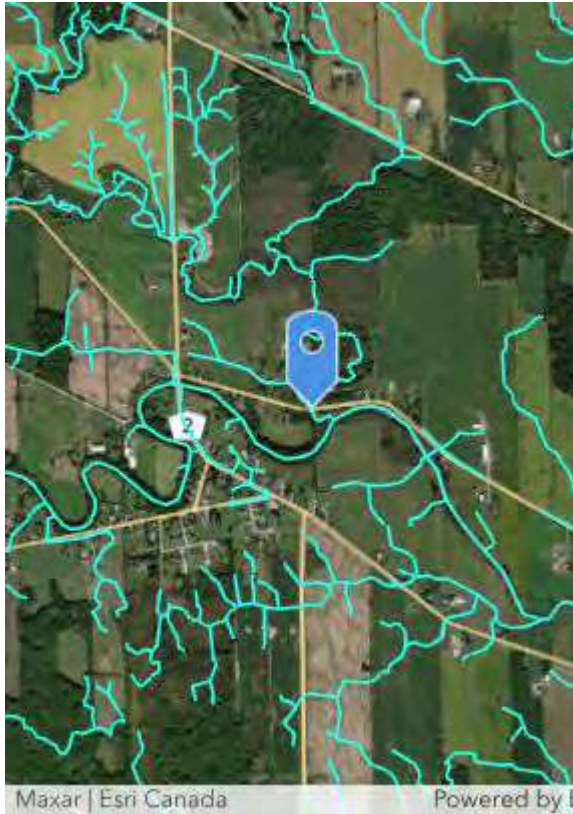
Downstream Channel

CROSSING DATA SHEET

Watershed and Location Information	Structure Configuration and Dimensions		Current Flow Information
Date (mm/dd/yyyy): 10/14/2025	Structure Type: Road Bridge	Shape: Rectangular	Flow Present (Y/N):
Field Crew: GS, AMM	Number of Cells: 1	Open Footing (Yes/No): Y	Approx. Depth of Water (mm): 300
ABL ID: ABL_55	Material (Concrete/Steel): Concrete		Upstream Erosion (Y/N): N
Creek Name: Upper Welland River Tributaries	Height (m) x Width (m): 3.09 x 9.183		Downstream Erosion (Y/N): N
Road Type: Arterial	Length (m): 9.7		Structure Conditions and Additional Comments:
Municipality: Caistorville	U/S Invert Elev. (m): 178.52	U/S Obvert Elev. (m): 181.61	
Location (Road Name/Intersection): North Chippawa Road	D/S Invert Elev. (m): 177.71	D/S Obvert Elev. (m): 181.76	
UTM Coordinates (LON, LAT): (116273.23108612973 , 4777598.387290245)	Inlet Type (Projecting/Mitered/Headwall): Headwall		
	Depth of Siltation (mm): 15		
Survey Vertical Datum: CGVD2013			

Location and Site Photographs

Site Location:



Upstream Face



Upstream Channel



Downstream Face



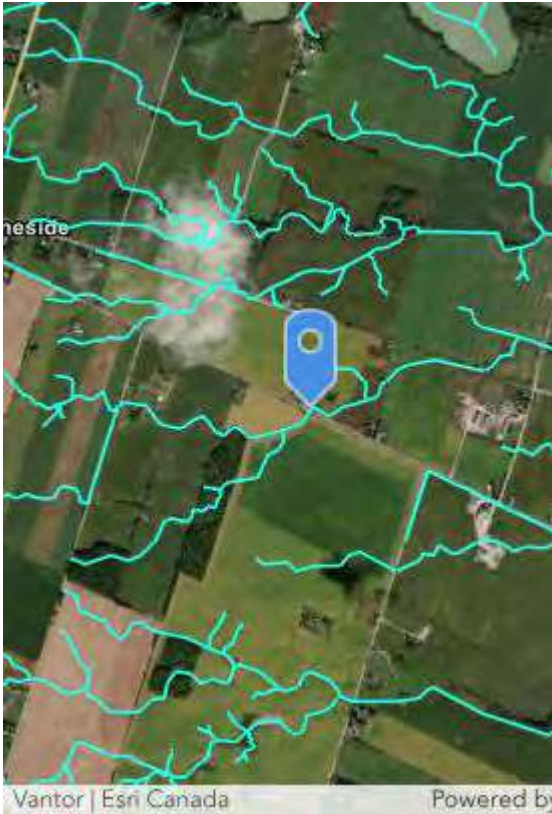
Downstream Channel

CROSSING DATA SHEET

CROSSING DATA SHEET			
Watershed and Location Information	Structure Configuration and Dimensions		Current Flow Information
Date (mm/dd/yyyy): 10/21/2025	Structure Type: Ditch/Culvert	Shape: Arch	Flow Present (Y/N): Y
Field Crew: MA, AMM	Number of Cells: 1	Open Footing (Yes/No): Y	Approx. Depth of Water (mm): 50
ABL ID: ABL_56	Material (Concrete/Steel): Steel		Upstream Erosion (Y/N): N
Creek Name: Upper Welland River Tributaries	Height (m) x Width (m): 1.79 x 2.7		Downstream Erosion (Y/N): N
Road Type: Local	Length (m): 12.5		Structure Conditions and Additional Comments:
Municipality: Tyneside	U/S Invert Elev. (m): 199.36	U/S Obvert Elev. (m): 201.15	
Location (Road Name/Intersection): Haldibrook Road	D/S Invert Elev. (m): 196.58	D/S Obvert Elev. (m): 198.38	
UTM Coordinates (LON, LAT): (103553.6161161869 , 4782523.233054638)	Inlet Type (Projecting/Mitered/Headwall): Projecting		
	Depth of Siltation (mm): 0		
Survey Vertical Datum: CGVD2013			

Location and Site Photographs

Site Location:



Upstream Face



Upstream Channel



Downstream Face



Downstream Channel

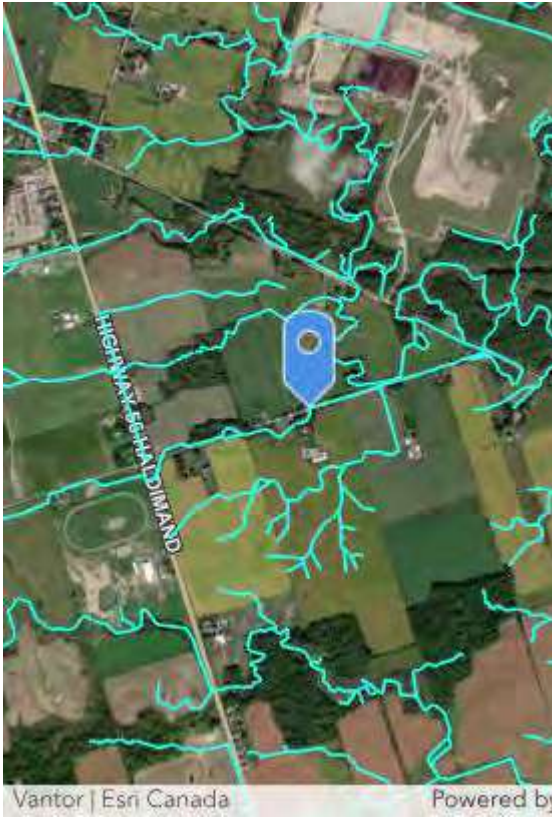
CROSSING DATA SHEET			
Watershed and Location Information	Structure Configuration and Dimensions		Current Flow Information
Date (mm/dd/yyyy): 10/23/2025	Structure Type: Road Bridge	Shape: Rectangular	Flow Present (Y/N): Y
Field Crew: MSR, ET	Number of Cells:	Open Footing (Yes/No): Y	Approx. Depth of Water (mm): 200
ABL ID: ABL_57	Material (Concrete/Steel): Concrete		Upstream Erosion (Y/N): Y
Creek Name: Upper Welland River Tributaries	Height (m) x Width (m) or Diameter (m): 1.35 x 2.3		Downstream Erosion (Y/N): Y
Road Type: Local	Length (m): N/A		Structure Conditions and Additional Comments: Survey incomplete. Unable to survey DS face and cross-sections due to fence preventing access.
Municipality: Tyneside	U/S Invert Elev. (m): 196.31	U/S Obvert Elev. (m): 197.66	
Location (Road Name/Intersection): Trinity Church Road	D/S Invert Elev. (m): N/A	D/S Obvert Elev. (m): N/A	
UTM Coordinates (LON, LAT): (104492.99537857593 , 4782725.505113855)	Inlet Type (Projecting/Mitered/Headwall):		
	Depth of Siltation (mm): 50		
Survey Vertical Datum: CGVD2013			
Location and Site Photographs			
Site Location:  Vantor Esri Canada Powered by	 Upstream Face	 Upstream Channel	
	Downstream Face	 Downstream Channel	

CROSSING DATA SHEET

Watershed and Location Information	Structure Configuration and Dimensions		Current Flow Information
Date (mm/dd/yyyy): 10/22/2025	Structure Type: Ditch/Culvert, Road	Shape: Circular	Flow Present (Y/N): N
Field Crew: MSR, ET	Number of Cells: 2	Open Footing (Yes/No): N	Approx. Depth of Water (mm): 50
ABL ID: ABL_58 E	Material (Concrete/Steel): Steel		Upstream Erosion (Y/N): Y
Creek Name: Upper Welland River Tributaries	Diameter (m): 1.2		Downstream Erosion (Y/N): N
Road Type: Local	Length (m): 10		Structure Conditions and Additional Comments: Downstream channel second cross-section too vegetated
Municipality: Blackheath	U/S Invert (m): 186.686, 186.70	U/S Obvert (m): 187.942, 187.922	
Location (Road Name/Intersection): 4th Concession	D/S Invert (m): 186.410, 186.438	D/S Obvert (m): 187.757, 187.792	
UTM Coordinates (LON, LAT): (109198.4390601205 , 4778782.940725754)	Inlet Type (Projecting/Mitered/Headwall): Projecting		
	Depth of Siltation (mm): 50		
Survey Vertical Datum: CGVD2013			

Location and Site Photographs

Site Location:



Upstream Face



Upstream Channel



Downstream Face



Downstream Channel

CROSSING DATA SHEET

Watershed and Location Information	Structure Configuration and Dimensions		Current Flow Information
Date (mm/dd/yyyy): 10/17/2025	Structure Type: Road Bridge,	Shape: Circular	Flow Present (Y/N): N
Field Crew: MSR, EM	Number of Cells: 2	Open Footing (Yes/No): N	Approx. Depth of Water (mm): 0
ABL ID: ABL_58 W	Material (Concrete/Steel): Steel		Upstream Erosion (Y/N): N
Creek Name: Upper Welland River Tributaries	Diameter (m): 1.2		Downstream Erosion (Y/N): N
Road Type: Local	Length (m): 15.5		Structure Conditions and Additional Comments:
Municipality: Blackheath	U/S Invert (m): 193.665, 193.801	U/S Obvert (m): 194.773, 194.807	
Location (Road Name/Intersection): 4th Concession	D/S Invert (m): 193.683, 193.451	D/S Obvert (m): 194.926, 194.673	
UTM Coordinates (LON, LAT): (108600.55793797306 , 4778622.266498087)	Inlet Type (Projecting/Mitered/Headwall): Projecting		
	Depth of Siltation (mm): 0		
Survey Vertical Datum: CGVD2013			

Location and Site Photographs

Site Location:



Upstream Face



Upstream Channel



Downstream Face



Downstream Channel

CROSSING DATA SHEET

CROSSING DATA SHEET			
Watershed and Location Information	Structure Configuration and Dimensions		Current Flow Information
Date (mm/dd/yyyy): 10/17/2025	Structure Type: Road Bridge,	Shape: Circular	Flow Present (Y/N): N
Field Crew: MSR, EM	Number of Cells: 2	Open Footing (Yes/No): N	Approx. Depth of Water (mm): 0
ABL ID: ABL_58	Material (Concrete/Steel): Steel		Upstream Erosion (Y/N): N
Creek Name: Upper Welland River Tributaries	Diameter (m): 1.2		Downstream Erosion (Y/N): N
Road Type: Local	Length (m): 15.5		Structure Conditions and Additional Comments:
Municipality: Blackheath	U/S Invert Elev. (m): 189.75, 189.75	U/S Obvert Elev. (m): 190.90, 190.84	
Location (Road Name/Intersection): 4th Concession	D/S Invert Elev. (m): 189.07, 189.88	D/S Obvert Elev. (m): 190.53, 190.81	
UTM Coordinates (LON, LAT): (108600.55793797306 , 4778622.266498087)	Inlet Type (Projecting/Mitered/Headwall): Projecting		
	Depth of Siltation (mm): 0		
Survey Vertical Datum: CGVD2013			

Location and Site Photographs

Site Location:



Upstream Face



Upstream Channel



Downstream Face



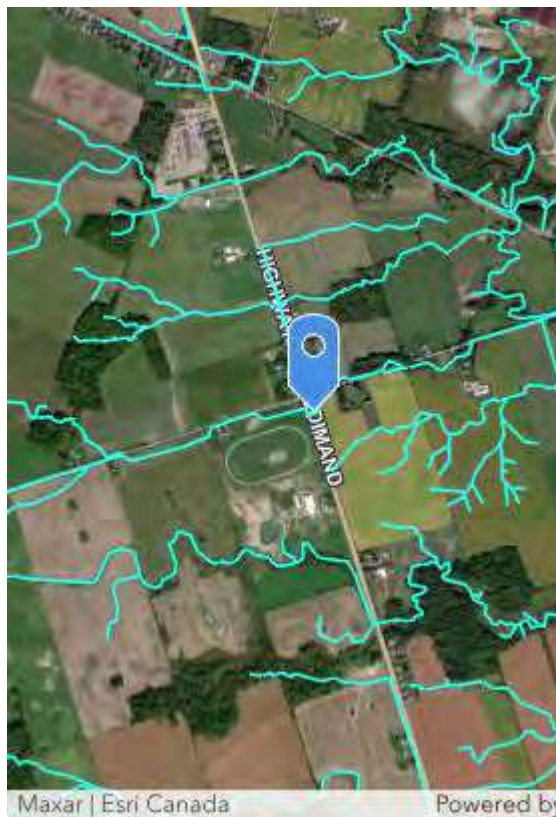
Downstream Channel

CROSSING DATA SHEET

Watershed and Location Information	Structure Configuration and Dimensions		Current Flow Information
Date (mm/dd/yyyy): 10/17/2025	Structure Type: Road Bridge,	Shape: Rectangular	Flow Present (Y/N): N
Field Crew: MSR, EM	Number of Cells: 1	Open Footing (Yes/No): Y	Approx. Depth of Water (mm): 0
ABL ID: ABL_59	Material (Concrete/Steel): Concrete		Upstream Erosion (Y/N): Y
Creek Name: Upper Welland River Tributaries	Height (m) x Width (m) or Diameter (m): 1.12 x 2.3		Downstream Erosion (Y/N): Y
Road Type: Highway	Length (m): 22		Structure Conditions and Additional Comments:
Municipality: Sinclairville	U/S Invert Elev. (m): 192.68	U/S Obvert Elev. (m): 193.80	
Location (Road Name/Intersection): Halimand Highway	D/S Invert Elev. (m): 192.20	D/S Obvert Elev. (m): 193.83	
UTM Coordinates (LON, LAT): (108557.30080763937 , 4778535.436524434)	Inlet Type (Projecting/Mitered/Headwall): Headwall		
	Depth of Siltation (mm): 0		
Survey Vertical Datum: CGVD2013			

Location and Site Photographs

Site Location:



Upstream Face



Upstream Channel



Downstream Face



Downstream Channel

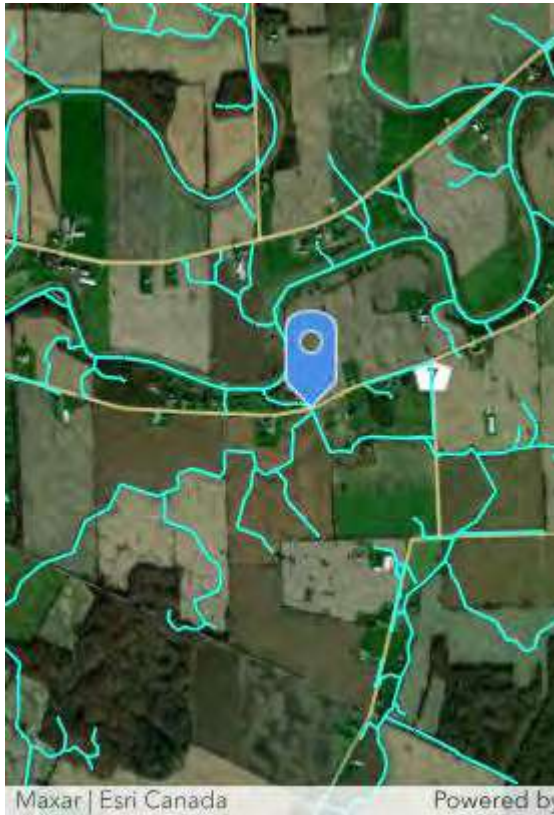
CROSSING DATA SHEET			
Watershed and Location Information	Structure Configuration and Dimensions		Current Flow Information
Date (mm/dd/yyyy): 10/15/2025	Structure Type: Road Bridge	Shape: Rectangular	Flow Present (Y/N): N
Field Crew: MSR, EM	Number of Cells: 1	Open Footing (Yes/No): N	Approx. Depth of Water (mm): 0
ABL ID: ABL_60	Material (Concrete/Steel): Concrete		Upstream Erosion (Y/N): N
Creek Name: Upper Welland River Tributaries	Height (m) x Width (m) or Diameter (m): 1.18 x 3.2		Downstream Erosion (Y/N): N
Road Type: Arterial	Length (m): 12		Structure Conditions and Additional Comments:
Municipality: Woodburn	U/S Invert Elev. (m): 195.52	U/S Obvert Elev. (m): 196.70	
Location (Road Name/Intersection): Woodburn Road	D/S Invert Elev. (m): 195.43	D/S Obvert Elev. (m): 196.69	
UTM Coordinates (LON, LAT): (111837.21517031587 , 4781968.426815629)	Inlet Type (Projecting/Mitered/Headwall): Headwall		
	Depth of Siltation (mm): 0		
Survey Vertical Datum: CGVD2013			
Location and Site Photographs			
Site Location:  Maxar Esri Canada Powered by	 Upstream Face	 Upstream Channel	
	 Downstream Face	 Downstream Channel	

CROSSING DATA SHEET

Watershed and Location Information	Structure Configuration and Dimensions		Current Flow Information
Date (mm/dd/yyyy): 10/10/2025	Structure Type: Road Bridge	Shape: Rectangular	Flow Present (Y/N): Y
Field Crew: CM, MSR	Number of Cells: 1	Open Footing (Yes/No): Y	Approx. Depth of Water (mm): 500
ABL ID: ABL_61	Material (Concrete/Steel): Concrete		Upstream Erosion (Y/N): N
Creek Name: Upper Welland River Tributaries	Height (m) x Width (m) or Diameter (m): 3.24 x 4.3		Downstream Erosion (Y/N): Y
Road Type: Arterial	Length (m): 9		Structure Conditions and Additional Comments:
Municipality: Port Davidson	U/S Invert Elev. (m): 170.04	U/S Obvert Elev. (m): 173.28	
Location (Road Name/Intersection): Regional Road 45	D/S Invert Elev. (m): 170.02	D/S Obvert Elev. (m): 173.22	
UTM Coordinates (LON, LAT): (130114.04196638701 , 4768931.473784145)	Inlet Type (Projecting/Mitered/Headwall): Wingwall		
	Depth of Siltation (mm): 350		
Survey Vertical Datum: CGVD2013			

Location and Site Photographs

Site Location:



Upstream Face



Upstream Channel



Downstream Face



Downstream Channel

CROSSING DATA SHEET

Watershed and Location Information	Structure Configuration and Dimensions		Current Flow Information
Date (mm/dd/yyyy): 10/10/2025	Structure Type: Road Bridge	Shape: Circular	Flow Present (Y/N): N
Field Crew: CM, MSR	Number of Cells: 1	Open Footing (Yes/No): N	Approx. Depth of Water (mm): 0
ABL ID: ABL_62	Material (Concrete/Steel): Steel		Upstream Erosion (Y/N): N
Creek Name: Upper Welland River Tributaries	Diameter (m): 0.99		Downstream Erosion (Y/N): N
Road Type: Local	Length (m): 14		Structure Conditions and Additional Comments:
Municipality: Tyneside	U/S Invert Elev. (m): 203.23	U/S Obvert Elev. (m): 204.22	
Location (Road Name/Intersection): Abbey Road	D/S Invert Elev. (m): 203.22	D/S Obvert Elev. (m): 204.21	
UTM Coordinates (LON, LAT): (102247.40394205553 , 4781134.193842436)	Inlet Type (Projecting/Mitered/Headwall): Projecting		
	Depth of Siltation (mm): 0		
Survey Vertical Datum: CGVD2013			

Location and Site Photographs

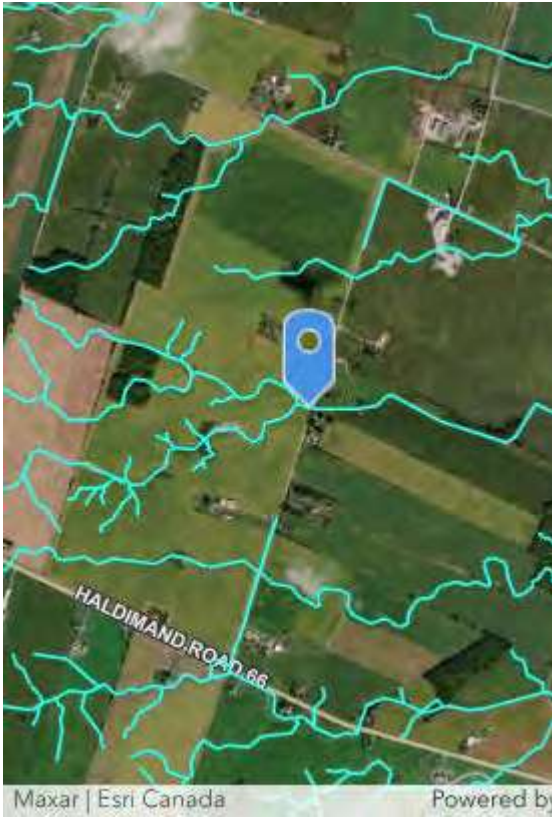
Site Location:  Maxar Esri Canada Powered by	 Upstream Face		 Upstream Channel
	 Downstream Face		 Downstream Channel

CROSSING DATA SHEET

CROSSING DATA SHEET			
Watershed and Location Information	Structure Configuration and Dimensions		Current Flow Information
Date (mm/dd/yyyy): 10/10/2025	Structure Type: Road Bridge	Shape: Arch	Flow Present (Y/N): N
Field Crew: CM, MSR	Number of Cells: 2	Open Footing (Yes/No): N	Approx. Depth of Water (mm): 0
ABL ID: ABL_63	Material (Concrete/Steel): Steel		Upstream Erosion (Y/N): N
Creek Name: Upper Welland River Tributaries	Height (m) x Width (m) or Diameter (m): 0.8 x 1.5		Downstream Erosion (Y/N): N
Road Type: Arterial	Length (m): 15		Structure Conditions and Additional Comments:
Municipality: Tyneside	U/S Invert Elev. (m): 199.01	U/S Obvert Elev. (m): 200.231	
Location (Road Name/Intersection): Stoneman Road	D/S Invert Elev. (m): 198.21	D/S Obvert Elev. (m): 199.315	
UTM Coordinates (LON, LAT): (103652.98811676691 , 4781357.170550701)	Inlet Type (Projecting/Mitered/Headwall): Projecting		
	Depth of Siltation (mm): 50		
Survey Vertical Datum: CGVD2013			

Location and Site Photographs

Site Location:



Upstream Face



Upstream Channel



Downstream Face



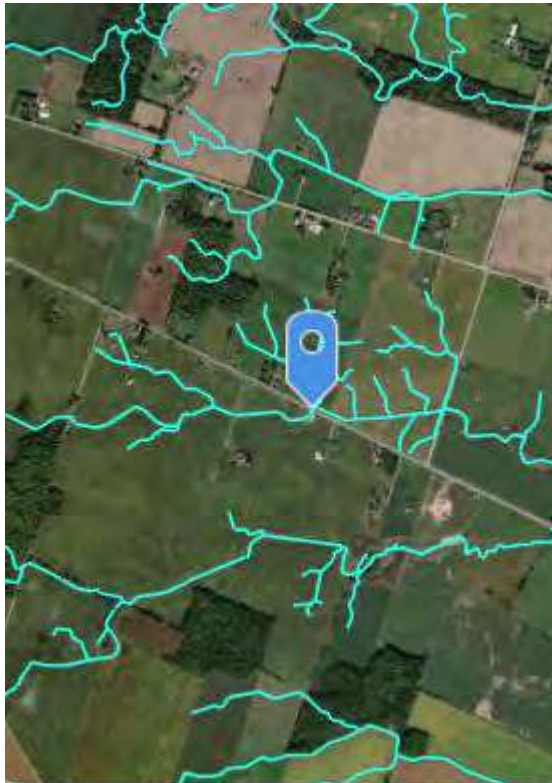
Downstream Channel

CROSSING DATA SHEET

Watershed and Location Information	Structure Configuration and Dimensions		Current Flow Information
Date (mm/dd/yyyy): 10/27/2025	Structure Type: Ditch/Culvert	Shape: Rectangular	Flow Present (Y/N): N
Field Crew: MA, OC	Number of Cells: 1	Open Footing (Yes/No): Y	Approx. Depth of Water (mm): 0
ABL ID: ABL_64	Material (Concrete/Steel): Concrete		Upstream Erosion (Y/N): N
Creek Name: Upper Welland River Tributaries	Height (m) x Width (m) or Diameter (m): 1.53 x 2.8		Downstream Erosion (Y/N): N
Road Type: Local	Length (m): 14.5		Structure Conditions and Additional Comments:
Municipality: Tyneside	U/S Invert Elev. (m): 192.57	U/S Obvert Elev. (m): 194.10	
Location (Road Name/Intersection): Haldibrook Rd	D/S Invert Elev. (m): 192.51	D/S Obvert Elev. (m): 194.11	
UTM Coordinates (LON, LAT): (105883.42872764712 , 4781207.036957104)	Inlet Type (Projecting/Mitered/Headwall): Projecting		
	Depth of Siltation (mm): 0		
Survey Vertical Datum: CGVD2013			

Location and Site Photographs

Site Location:



Upstream Face



Upstream Channel



Downstream Face



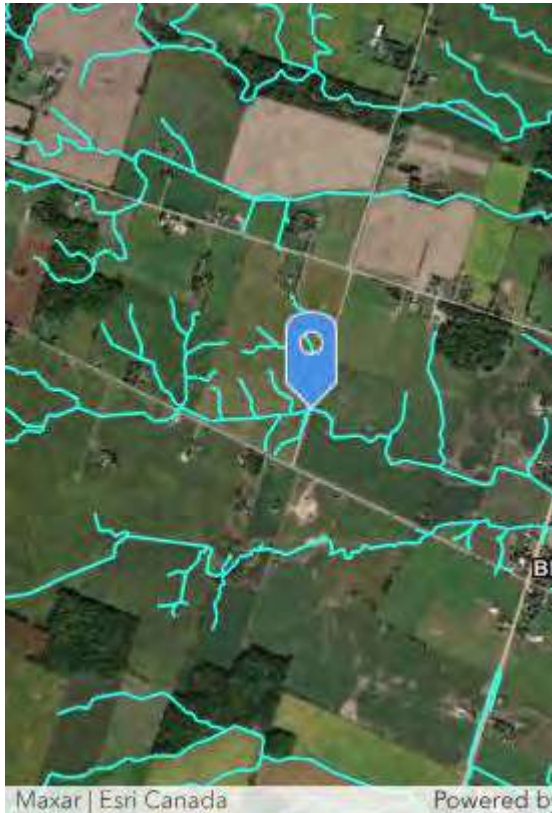
Downstream Channel

CROSSING DATA SHEET

Watershed and Location Information	Structure Configuration and Dimensions		Current Flow Information
Date (mm/dd/yyyy): 10/20/2025	Structure Type: Ditch/Culvert	Shape: Rectangular	Flow Present (Y/N): N
Field Crew: MA, AMM	Number of Cells: 1	Open Footing (Yes/No): N	Approx. Depth of Water (mm): 10
ABL ID: ABL_65	Material (Concrete/Steel): Concrete		Upstream Erosion (Y/N): Y
Creek Name: Upper Welland River Tributaries	Height (m) x Width (m): 1.07 x 3.5		Downstream Erosion (Y/N): N
Road Type: Local	Length (m): 15.5		Structure Conditions and Additional Comments: Structure appears to have been dredged recently.
Municipality: Blackheath	U/S Invert Elev. (m): 191.58	U/S Obvert Elev. (m): 192.65	
Location (Road Name/Intersection): Harrison Road	D/S Invert Elev. (m): 191.26	D/S Obvert Elev. (m): 192.61	
UTM Coordinates (LON, LAT): (106418.35888453986 , 4781179.272909159)	Inlet Type (Projecting/Mitered/Headwall): Projecting		
	Depth of Siltation (mm): 0		
Survey Vertical Datum: CGVD2013			

Location and Site Photographs

Site Location:



Upstream Face



Upstream Channel



Downstream Face



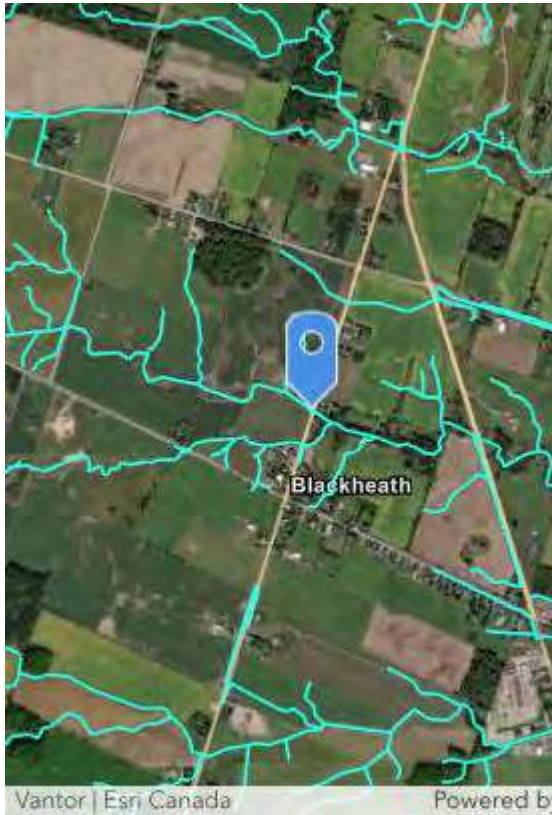
Downstream Channel

CROSSING DATA SHEET

Watershed and Location Information	Structure Configuration and Dimensions		Current Flow Information
Date (mm/dd/yyyy): 10/23/2025	Structure Type: Road Bridge	Shape: Rectangular	Flow Present (Y/N): Y
Field Crew: MSR, ET	Number of Cells: 1	Open Footing (Yes/No): Y	Approx. Depth of Water (mm): 100
ABL ID: ABL_66	Material (Concrete/Steel): Concrete		Upstream Erosion (Y/N): Y
Creek Name: Upper Welland River Tributaries	Height (m) x Width (m) or Diameter (m): 1.80 x 4		Downstream Erosion (Y/N): Y
Road Type: Arterial	Length (m): 15		Structure Conditions and Additional Comments:
Municipality: Blackheath	U/S Invert Elev. (m): 188.88	U/S Obvert Elev. (m): 190.68	
Location (Road Name/Intersection): Blackheath Road	D/S Invert Elev. (m): 188.85	D/S Obvert Elev. (m): 190.21	
UTM Coordinates (LON, LAT): (107360.70106463571 , 4780794.945088588)	Inlet Type (Projecting/Mitered/Headwall): Headwall		
	Depth of Siltation (mm): 50		
Survey Vertical Datum: CGVD2013			

Location and Site Photographs

Site Location:



Upstream Face



Upstream Channel



Downstream Face



Downstream Channel

CROSSING DATA SHEET

Watershed and Location Information	Structure Configuration and Dimensions		Current Flow Information
Date (mm/dd/yyyy): 10/22/2025	Structure Type: Road Bridge,	Shape: Circular	Flow Present (Y/N): Y
Field Crew: MSR, ET	Number of Cells: 2	Open Footing (Yes/No): N	Approx. Depth of Water (mm): 1,500
ABL ID: ABL_67	Material (Concrete/Steel): Steel		Upstream Erosion (Y/N): Y
Creek Name: Upper Welland River Tributaries	Diameter (m): 2.08		Downstream Erosion (Y/N): Y
Road Type: Arterial	Length (m): 18.5		Structure Conditions and Additional Comments: Downstream cross section blocked by barb wire
Municipality: Blackheath	U/S Invert Elev. (m): 184.16	U/S Obvert Elev. (m): 186.24	
Location (Road Name/Intersection): Haldibrook Road	D/S Invert Elev. (m): 184.08	D/S Obvert Elev. (m): 186.04	
UTM Coordinates (LON, LAT): (109421.59014413215 , 4779244.849377494)	Inlet Type (Projecting/Mitered/Headwall): Projecting		
	Depth of Siltation (mm): 100		
Survey Vertical Datum: CGVD2013			

Location and Site Photographs

Site Location:



Upstream Face



Upstream Channel



Downstream Face



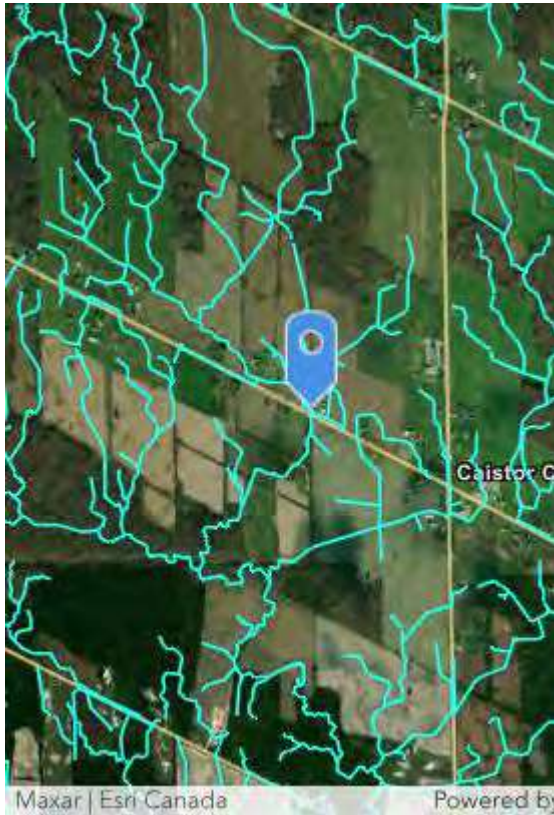
Downstream Channel

CROSSING DATA SHEET

Watershed and Location Information	Structure Configuration and Dimensions		Current Flow Information
Date (mm/dd/yyyy): 10/08/2025	Structure Type: Ditch/Culvert	Shape: Rectangular	Flow Present (Y/N): Y
Field Crew: MA, AMM	Number of Cells: 1	Open Footing (Yes/No): Y	Approx. Depth of Water (mm): 600
ABL ID: ABL_68	Material (Concrete/Steel): Concrete		Upstream Erosion (Y/N): N
Creek Name: Upper Welland River Tributaries	Height (m) x Width (m): 1.01 x 2.3		Downstream Erosion (Y/N): Y
Road Type: Arterial	Length (m): 26		Structure Conditions and Additional Comments: Field maps shows three (3) structures but when on site, only one culvert present
Municipality: Caistor Centre	U/S Invert Elev. (m): 192.81	U/S Obvert Elev. (m): 193.82	
Location (Road Name/Intersection): Silver Street	D/S Invert Elev. (m): 192.57	D/S Obvert Elev. (m): 193.80	
UTM Coordinates (LON, LAT): (120717.18963177316 , 4779493.020473245)	Inlet Type (Projecting/Mitered/Headwall): Projecting		
	Depth of Siltation (mm): 20		
Survey Vertical Datum: CGVD2013			

Location and Site Photographs

Site Location:



Upstream Face



Upstream Channel



Downstream Face



Downstream Channel

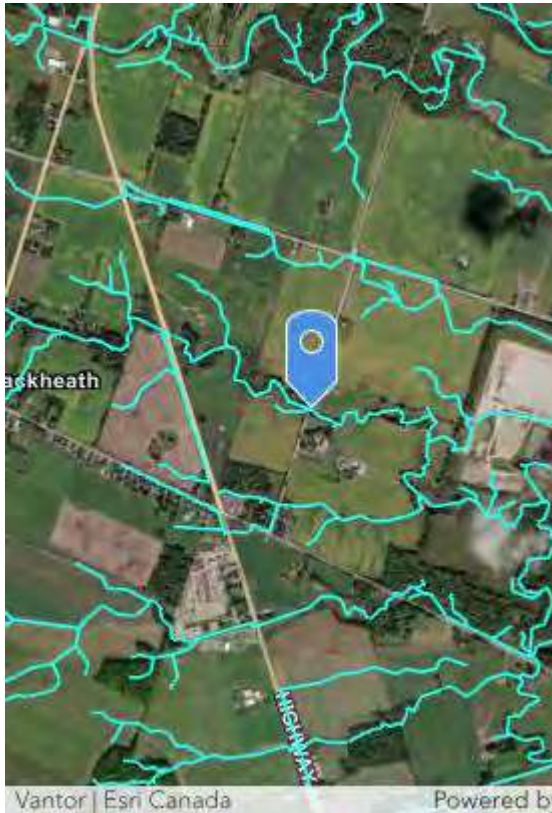
CROSSING DATA SHEET			
Watershed and Location Information	Structure Configuration and Dimensions		Current Flow Information
Date (mm/dd/yyyy): 10/15/2025	Structure Type: Road Bridge	Shape: Rectangular	Flow Present (Y/N): N
Field Crew: MSR, EM	Number of Cells: 1	Open Footing (Yes/No): N	Approx. Depth of Water (mm): 0
ABL ID: ABL_69	Material (Concrete/Steel): Concrete		Upstream Erosion (Y/N): Y
Creek Name: Upper Welland River Tributaries	Height (m) x Width (m) or Diameter (m): 0.63 x 1		Downstream Erosion (Y/N): Y
Road Type: Arterial	Length (m): 9.5		Structure Conditions and Additional Comments:
Municipality: Woodburn	U/S Invert Elev. (m): 198.04	U/S Obvert Elev. (m): 198.67	
Location (Road Name/Intersection): Kirk Road	D/S Invert Elev. (m): 198.01	D/S Obvert Elev. (m): 198.75	
UTM Coordinates (LON, LAT): (112434.45872512052 , 4782226.902949346)	Inlet Type (Projecting/Mitered/Headwall): Headwall		
	Depth of Siltation (mm): 10		
Survey Vertical Datum: CGVD2013			
Location and Site Photographs			
Site Location: 			
			
	Upstream Face		Upstream Channel
	Downstream Face		Downstream Channel

CROSSING DATA SHEET

Watershed and Location Information	Structure Configuration and Dimensions		Current Flow Information
Date (mm/dd/yyyy): 10/28/2025	Structure Type: Ditch/Culvert	Shape: Rectangular	Flow Present (Y/N): Y
Field Crew: MA, ET	Number of Cells: 1	Open Footing (Yes/No): Y	Approx. Depth of Water (mm): 550
ABL ID: ABL_70	Material (Concrete/Steel): Concrete		Upstream Erosion (Y/N): N
Creek Name: Upper Welland River Tributaries	Height (m) x Width (m): 2.58 x 6		Downstream Erosion (Y/N): N
Road Type: Local	Length (m): 16		Structure Conditions and Additional Comments:
Municipality: Blackheath	U/S Invert Elev. (m): 186.11	U/S Obvert Elev. (m): 188.69	
Location (Road Name/Intersection): Trimble Road	D/S Invert Elev. (m): 185.47	D/S Obvert Elev. (m): 188.62	
UTM Coordinates (LON, LAT): (108574.84623622976 , 4780310.066143024)	Inlet Type (Projecting/Mitered/Headwall): Projecting		
	Depth of Siltation (mm): 400		
Survey Vertical Datum: CGVD2013			

Location and Site Photographs

Site Location:



Upstream Face



Upstream Channel



Downstream Face



Downstream Channel

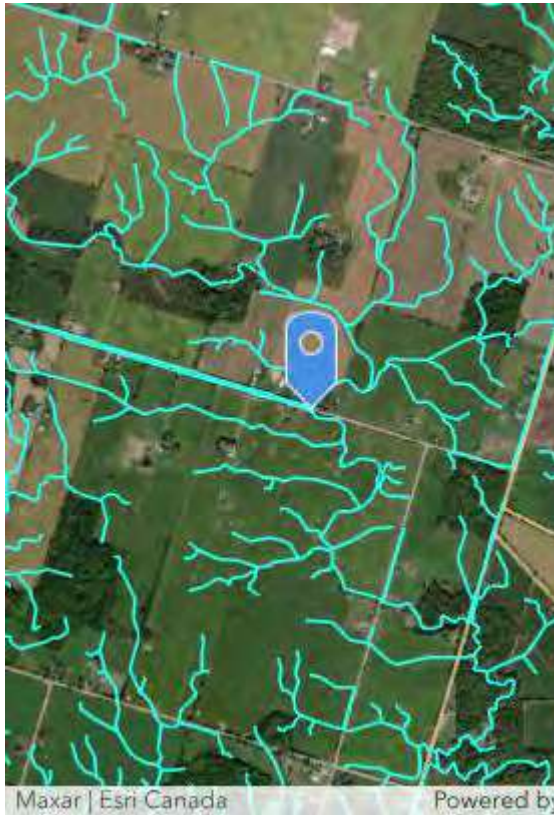
CROSSING DATA SHEET			
Watershed and Location Information	Structure Configuration and Dimensions		Current Flow Information
Date (mm/dd/yyyy): 10/08/2025	Structure Type: N/A	Shape: N/A	Flow Present (Y/N): N/A
Field Crew: MA, AMM	Number of Cells: N/A	Open Footing (Yes/No): N/A	Approx. Depth of Water (mm): N/A
ABL ID: ABL_71	Material (Concrete/Steel): N/A		Upstream Erosion (Y/N): N/A
Creek Name: Upper Welland River Tributaries	Diameter (m): N/A		Downstream Erosion (Y/N): N/A
Road Type: Local	Length (m): N/A		Structure Conditions and Additional Comments: Structure not present
Municipality: Caistor Centre	U/S Invert Elev. (m): N/A	U/S Obvert Elev. (m): N/A	
Location (Road Name/Intersection): Concession Road 3	D/S Invert Elev. (m): N/A	D/S Obvert Elev. (m): N/A	
UTM Coordinates (LON, LAT): (120582.62964352441 , 4777958.095476383)	Inlet Type (Projecting/Mitered/Headwall): N/A		
	Depth of Siltation (mm): N/A		
Survey Vertical Datum: CGVD2013			
Location and Site Photographs			
Site Location: 	Upstream Face		
	Downstream Face		

CROSSING DATA SHEET

Watershed and Location Information	Structure Configuration and Dimensions		Current Flow Information
Date (mm/dd/yyyy): 10/16/2025	Structure Type: Ditch/Culvert	Shape: Rectangular	Flow Present (Y/N): Y
Field Crew: MA, AMM	Number of Cells: 1	Open Footing (Yes/No): N	Approx. Depth of Water (mm): 10
ABL ID: ABL_72	Material (Concrete/Steel): Concrete		Upstream Erosion (Y/N): N
Creek Name: Upper Welland River Tributaries	Height (m) x Width (m): 1.44 x 4.2		Downstream Erosion (Y/N): N
Road Type: Local	Length (m): 14.5		Structure Conditions and Additional Comments:
Municipality: Caistorville	U/S Invert Elev. (m): 189.56	U/S Obvert Elev. (m): 191.00	
Location (Road Name/Intersection): Bell Road	D/S Invert Elev. (m): 189.48	D/S Obvert Elev. (m): 190.98	
UTM Coordinates (LON, LAT): (113121.29143892456 , 4780697.586863068)	Inlet Type (Projecting/Mitered/Headwall): Projecting		
	Depth of Siltation (mm): 0		
Survey Vertical Datum: CGVD2013			

Location and Site Photographs

Site Location:



Upstream Face



Upstream Channel



Downstream Face



Downstream Channel

CROSSING DATA SHEET			
Watershed and Location Information	Structure Configuration and Dimensions		Current Flow Information
Date (mm/dd/yyyy): 10/16/2025	Structure Type: Ditch/Culvert	Shape: Rectangular	Flow Present (Y/N): N
Field Crew: MA, AMM	Number of Cells: 1	Open Footing (Yes/No): N	Approx. Depth of Water (mm): 10
ABL ID: ABL_73	Material (Concrete/Steel): Concrete		Upstream Erosion (Y/N): N
Creek Name: Upper Welland River Tributaries	Height (m) x Width (m): 1.56 x 7.4		Downstream Erosion (Y/N): N
Road Type: Local	Length (m): 18.5		Structure Conditions and Additional Comments:
Municipality: Caistorville	U/S Invert Elev. (m): 188.11	U/S Obvert Elev. (m): 189.67	
Location (Road Name/Intersection): Berry Road	D/S Invert Elev. (m): 188.07	D/S Obvert Elev. (m): 189.61	
UTM Coordinates (LON, LAT): (113352.82006929355 , 4779940.792834839)	Inlet Type (Projecting/Mitered/Headwall): Projecting		
	Depth of Siltation (mm): 100		
Survey Vertical Datum: CGVD2013			
Location and Site Photographs			
Site Location:  Maxar Esri Canada Powered by			
			

CROSSING DATA SHEET

Watershed and Location Information	Structure Configuration and Dimensions		Current Flow Information
Date (mm/dd/yyyy): 10/16/2025	Structure Type: Ditch/Culvert	Shape: Rectangular	Flow Present (Y/N): N
Field Crew: MA, AMM	Number of Cells: 1	Open Footing (Yes/No): N	Approx. Depth of Water (mm): 50
ABL ID: ABL_74	Material (Concrete/Steel): Concrete		Upstream Erosion (Y/N): N
Creek Name: Upper Welland River Tributaries	Height (m) x Width (m): 1.12 x 6.1		Downstream Erosion (Y/N): N
Road Type: Local	Length (m): 15.5		Structure Conditions and Additional Comments:
Municipality: Caistorville	U/S Invert Elev. (m): 187.09	U/S Obvert Elev. (m): 188.21	
Location (Road Name/Intersection): Westbrook Road	D/S Invert Elev. (m): 187.07	D/S Obvert Elev. (m): 188.74	
UTM Coordinates (LON, LAT): (113687.37084586843 , 4779824.8215575535)	Inlet Type (Projecting/Mitered/Headwall): Projecting		
	Depth of Siltation (mm): 10		
Survey Vertical Datum: CGVD2013			

Location and Site Photographs

Site Location:



Upstream Face



Upstream Channel



Downstream Face



Downstream Channel

CROSSING DATA SHEET

Watershed and Location Information	Structure Configuration and Dimensions		Current Flow Information
Date (mm/dd/yyyy): 10/16/2025	Structure Type: Ditch/Culvert	Shape: Rectangular	Flow Present (Y/N): Y
Field Crew: MA, AMM	Number of Cells: 1	Open Footing (Yes/No): Y	Approx. Depth of Water (mm): 800
ABL ID: ABL_75	Material (Concrete/Steel): Concrete		Upstream Erosion (Y/N): Y
Creek Name: Upper Welland River Tributaries	Height (m) x Width (m) or Diameter (m): 2.19 x 3.5		Downstream Erosion (Y/N): N
Road Type: Arterial	Length (m): 11		Structure Conditions and Additional Comments: unsafe depth of siltation, unable to complete cross section streambed shots. heavy vegetation on US
Municipality: Caistorville	U/S Invert Elev. (m): 182.76	U/S Obvert Elev. (m): 184.95	
Location (Road Name/Intersection): Green Road	D/S Invert Elev. (m): 182.54	D/S Obvert Elev. (m): 185.04	
UTM Coordinates (LON, LAT): (114879.91962225427 , 4778856.035016792)	Inlet Type (Projecting/Mitered/Headwall): Projecting		
	Depth of Siltation (mm): 500		
Survey Vertical Datum: CGVD2013			

Location and Site Photographs

Site Location:



Upstream Face



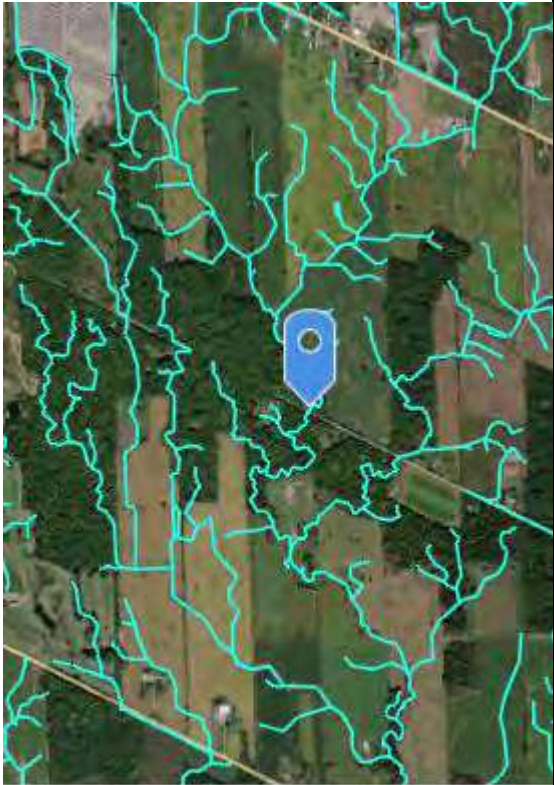
Upstream Channel



Downstream Face



Downstream Channel

CROSSING DATA SHEET			
Watershed and Location Information	Structure Configuration and Dimensions		Current Flow Information
Date (mm/dd/yyyy): 10/09/2025	Structure Type: Road Bridge	Shape: Rectangular	Flow Present (Y/N): N
Field Crew: ET, GS	Number of Cells: 1	Open Footing (Yes/No): Y	Approx. Depth of Water (mm): 300
ABL ID: ABL_76	Material (Concrete/Steel): Concrete, Steel		Upstream Erosion (Y/N): N
Creek Name: Upper Welland River Tributaries	Height (m) x Width (m) or Diameter (m): 1.98 x 3.3		Downstream Erosion (Y/N): Y
Road Type: Arterial	Length (m): 7.3		Structure Conditions and Additional Comments:
Municipality: Caistorville	U/S Invert Elev. (m): 190.68	U/S Obvert Elev. (m): 192.66	
Location (Road Name/Intersection): Concession Road 3	D/S Invert Elev. (m): 190.66	D/S Obvert Elev. (m): 192.56	
UTM Coordinates (LON, LAT): (117157.00941933645 , 4779956.257579094)	Inlet Type (Projecting/Mitered/Headwall): Headwall		
	Depth of Siltation (mm): 50		
Survey Vertical Datum: CGVD2013			
Location and Site Photographs			
Site Location:  Maxar Esri Canada Powered by	 Upstream Face	 Upstream Channel	
	 Downstream Face	 Downstream Channel	

CROSSING DATA SHEET

Watershed and Location Information	Structure Configuration and Dimensions		Current Flow Information
Date (mm/dd/yyyy): 10/16/2025	Structure Type: Ditch/Culvert	Shape: Rectangular	Flow Present (Y/N): Y
Field Crew: MA, AMM	Number of Cells: 1	Open Footing (Yes/No): Y	Approx. Depth of Water (mm): 700
ABL ID: ABL_77	Material (Concrete/Steel): Concrete		Upstream Erosion (Y/N): N
Creek Name: Upper Welland River Tributaries	Height (m) x Width (m) or Diameter (m): 2.47 x 3.5		Downstream Erosion (Y/N): N
Road Type: Arterial	Length (m): 14		Structure Conditions and Additional Comments: heavy vegetation on US LS, deep siltation , unable to complete second cross section
Municipality: Sinclairville	U/S Invert Elev. (m): 179.55	U/S Obvert Elev. (m): 182.02	
Location (Road Name/Intersection): York Street	D/S Invert Elev. (m): 179.52	D/S Obvert Elev. (m): 182.03	
UTM Coordinates (LON, LAT): (113736.35248050292 , 4777115.466959415)	Inlet Type (Projecting/Mitered/Headwall): Headwall		
	Depth of Siltation (mm): 100		
Survey Vertical Datum: CGVD2013			

Location and Site Photographs

Site Location:



Upstream Face



Upstream Channel



Downstream Face



Downstream Channel

CROSSING DATA SHEET

Watershed and Location Information	Structure Configuration and Dimensions		Current Flow Information
Date (mm/dd/yyyy): 10/16/2025	Structure Type: Ditch/Culvert	Shape: Rectangular	Flow Present (Y/N): Y
Field Crew: MA, AMM	Number of Cells: 1	Open Footing (Yes/No): Y	Approx. Depth of Water (mm): 50
ABL ID: ABL_78	Material (Concrete/Steel): Concrete		Upstream Erosion (Y/N): Y
Creek Name: Upper Welland River Tributaries	Height (m) x Width (m) or Diameter (m): 1.92 x 3.8		Downstream Erosion (Y/N): N
Road Type: Local	Length (m): 11.5		Structure Conditions and Additional Comments:
Municipality: Sinclairville	U/S Invert Elev. (m): 183.42	U/S Obvert Elev. (m): 185.34	
Location (Road Name/Intersection): Turnbull Road	D/S Invert Elev. (m): 182.16	D/S Obvert Elev. (m): 185.24	
UTM Coordinates (LON, LAT): (111581.81238521548 , 4776617.102518531)	Inlet Type (Projecting/Mitered/Headwall): Projecting		
	Depth of Siltation (mm): 200		
Survey Vertical Datum: CGVD2013			

Location and Site Photographs

Site Location:



Upstream Face



Upstream Channel



Downstream Face



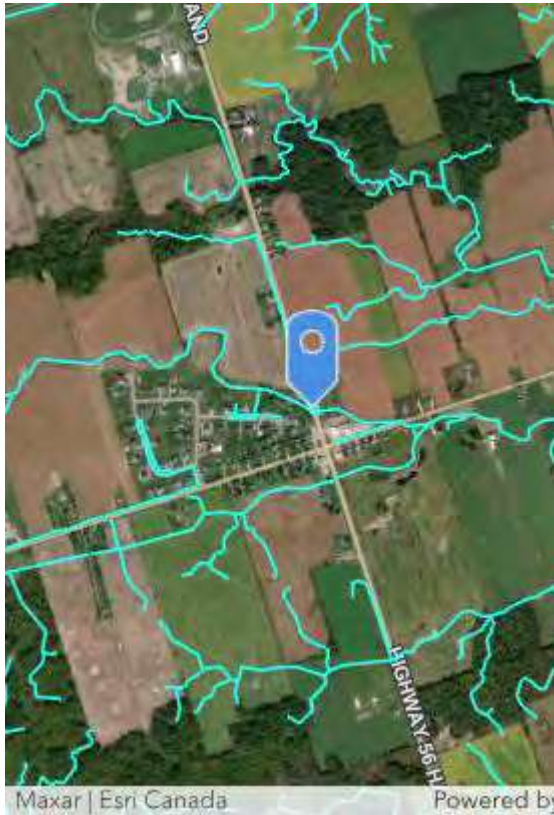
Downstream Channel

CROSSING DATA SHEET

Watershed and Location Information	Structure Configuration and Dimensions		Current Flow Information
Date (mm/dd/yyyy): 10/17/2025	Structure Type: Road Bridge	Shape: Rectangular	Flow Present (Y/N): N
Field Crew: MSR, EM	Number of Cells: 1	Open Footing (Yes/No): Y	Approx. Depth of Water (mm): 200
ABL ID: ABL_79	Material (Concrete/Steel): Concrete		Upstream Erosion (Y/N): Y
Creek Name: Upper Welland River Tributaries	Height (m) x Width (m) or Diameter (m): 2.07 x 2.5		Downstream Erosion (Y/N): Y
Road Type: Highway	Length (m): 26		Structure Conditions and Additional Comments: Headwall concrete deteriorating
Municipality: Empire Corners	U/S Invert Elev. (m): 188.18	U/S Obvert Elev. (m): 190.25	
Location (Road Name/Intersection): Halimand Highway	D/S Invert Elev. (m): 188.11	D/S Obvert Elev. (m): 190.33	
UTM Coordinates (LON, LAT): (108980.02815145254 , 4776772.20291775)	Inlet Type (Projecting/Mitered/Headwall): Projecting		
	Depth of Siltation (mm): 200		
Survey Vertical Datum: CGVD2013			

Location and Site Photographs

Site Location:



Upstream Face



Upstream Channel



Downstream Face



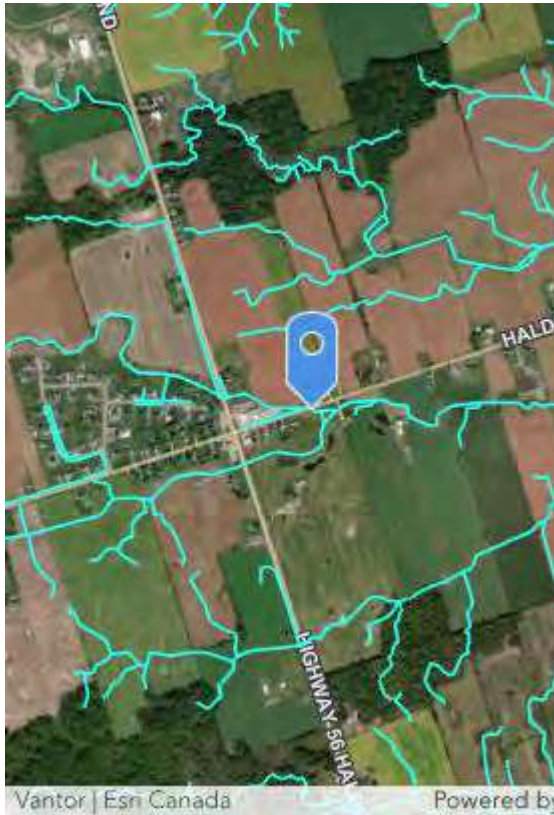
Downstream Channel

CROSSING DATA SHEET

CROSSING DATA SHEET			
Watershed and Location Information	Structure Configuration and Dimensions		Current Flow Information
Date (mm/dd/yyyy): 10/15/2025	Structure Type: Road Bridge	Shape: Rectangular	Flow Present (Y/N): N
Field Crew: MSR, EM	Number of Cells: 1	Open Footing (Yes/No): N	Approx. Depth of Water (mm): 100
ABL ID: ABL_80	Material (Concrete/Steel): Concrete		Upstream Erosion (Y/N): N
Creek Name: Upper Welland River Tributaries	Height (m) x Width (m) or Diameter (m): 0.78 x 4		Downstream Erosion (Y/N): N
Road Type: Arterial	Length (m): 31		Structure Conditions and Additional Comments:
Municipality: Empire Corners	U/S Invert Elev. (m): 187.51	U/S Obvert Elev. (m): 188.29	
Location (Road Name/Intersection): Haldimand Road 9	D/S Invert Elev. (m): 187.51	D/S Obvert Elev. (m): 188.41	
UTM Coordinates (LON, LAT): (109341.02997522731 , 4776693.804565533)	Inlet Type (Projecting/Mitered/Headwall): Projecting		
	Depth of Siltation (mm): 50		
Survey Vertical Datum: CGVD2013			

Location and Site Photographs

Site Location:



Upstream Face



Upstream Channel



Downstream Face



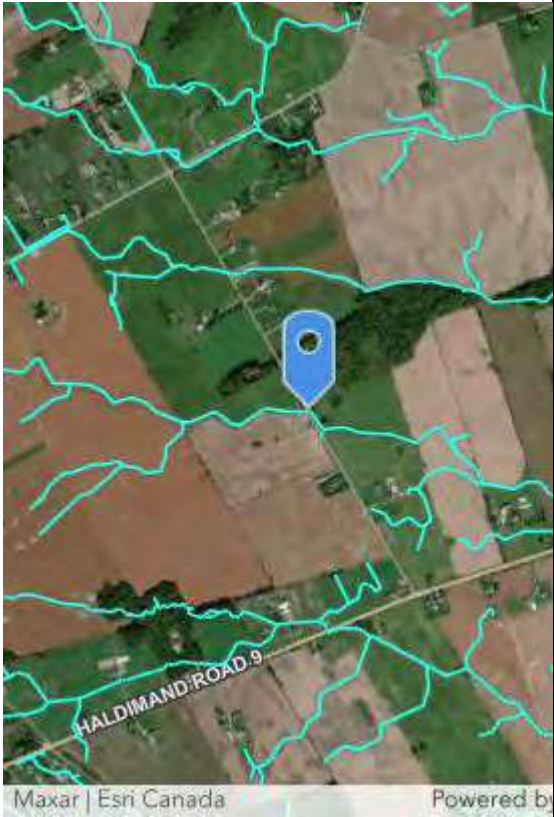
Downstream Channel

CROSSING DATA SHEET

Watershed and Location Information	Structure Configuration and Dimensions		Current Flow Information
Date (mm/dd/yyyy): 10/15/2025	Structure Type: Road Bridge	Shape: Rectangular	Flow Present (Y/N): N
Field Crew: MSR, EM	Number of Cells: 1	Open Footing (Yes/No): N	Approx. Depth of Water (mm): 300
ABL ID: ABL_81	Material (Concrete/Steel): Concrete		Upstream Erosion (Y/N): Y
Creek Name: Upper Welland River Tributaries	Height (m) x Width (m) or Diameter (m): 1.09 x 1.7		Downstream Erosion (Y/N): Y
Road Type: Arterial	Length (m): 9.2		Structure Conditions and Additional Comments:
Municipality: Seneca	U/S Invert Elev. (m): 194.68	U/S Obvert Elev. (m): 195.77	
Location (Road Name/Intersection): Moores Road	D/S Invert Elev. (m): 194.64	D/S Obvert Elev. (m): 195.79	
UTM Coordinates (LON, LAT): (106098.97326326091 , 4776717.464712347)	Inlet Type (Projecting/Mitered/Headwall): Headwall		
	Depth of Siltation (mm): 100		
Survey Vertical Datum: CGVD2013			

Location and Site Photographs

Site Location:



Upstream Face



Upstream Channel



Downstream Face



Downstream Channel

CROSSING DATA SHEET

Watershed and Location Information	Structure Configuration and Dimensions		Current Flow Information
Date (mm/dd/yyyy): 10/15/2025	Structure Type: Road Bridge	Shape: Rectangular	Flow Present (Y/N): N
Field Crew: MSR, EM	Number of Cells: 1	Open Footing (Yes/No): N	Approx. Depth of Water (mm): 100
ABL ID: ABL_82	Material (Concrete/Steel): Concrete		Upstream Erosion (Y/N): Y
Creek Name: Upper Welland River Tributaries	Height (m) x Width (m) or Diameter (m): 1.11 x 2		Downstream Erosion (Y/N): Y
Road Type: Arterial	Length (m): 19		Structure Conditions and Additional Comments:
Municipality: Seneca	U/S Invert Elev. (m): 191.16	U/S Obvert Elev. (m): 192.27	
Location (Road Name/Intersection): Halidmand Road 9	D/S Invert Elev. (m): 191.07	D/S Obvert Elev. (m): 192.27	
UTM Coordinates (LON, LAT): (107384.1279394888 , 4776205.941702742)	Inlet Type (Projecting/Mitered/Headwall): Projecting		
	Depth of Siltation (mm): 100		
Survey Vertical Datum: CGVD2013			

Location and Site Photographs

Site Location:



Upstream Face



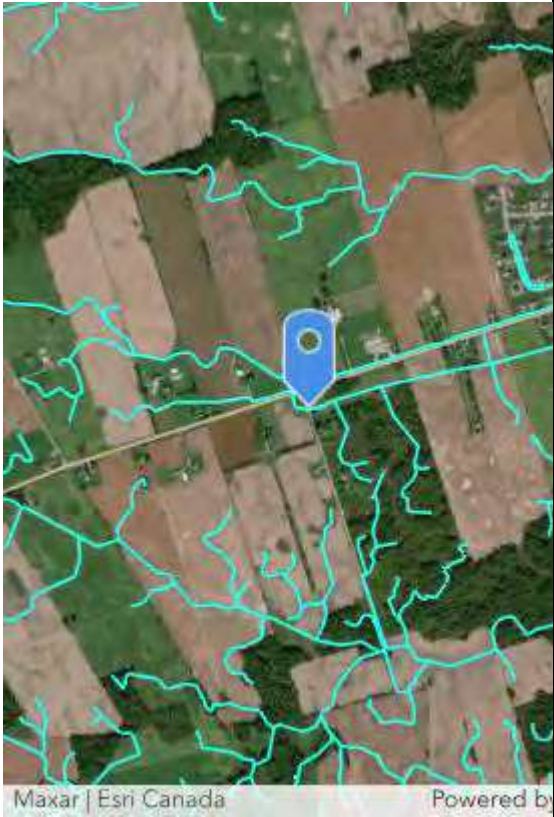
Upstream Channel



Downstream Face



Downstream Channel

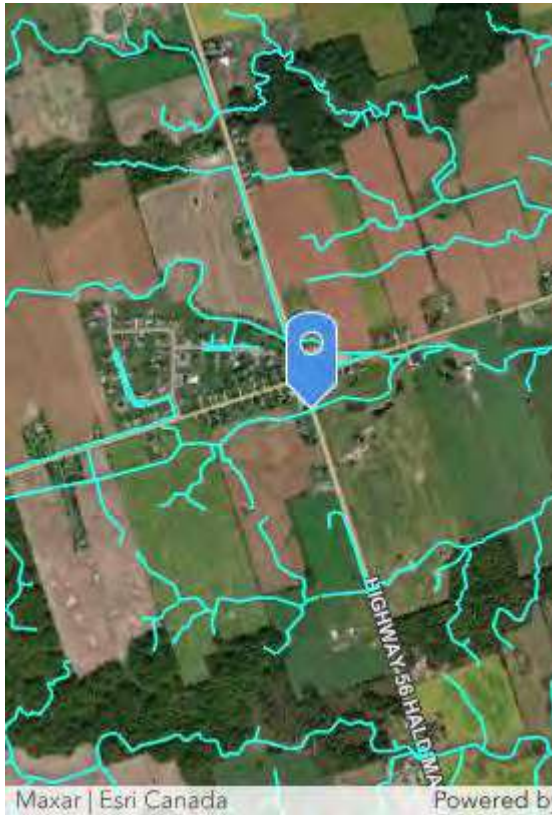
CROSSING DATA SHEET			
Watershed and Location Information	Structure Configuration and Dimensions		Current Flow Information
Date (mm/dd/yyyy): 10/15/2025	Structure Type: Road Bridge	Shape: Rectangular	Flow Present (Y/N): N
Field Crew: MSR, EM	Number of Cells: 1	Open Footing (Yes/No): N	Approx. Depth of Water (mm): 350
ABL ID: ABL_83	Material (Concrete/Steel): Concrete		Upstream Erosion (Y/N): Y
Creek Name: Upper Welland River Tributaries	Height (m) x Width (m) or Diameter (m): 1.23 x 1.9		Downstream Erosion (Y/N): Y
Road Type: Arterial	Length (m): 5.2		Structure Conditions and Additional Comments: Headwall eroding
Municipality: Seneca	U/S Invert Elev. (m): 190.64	U/S Obvert Elev. (m): 191.87	
Location (Road Name/Intersection): Singer Road	D/S Invert Elev. (m): 190.38	D/S Obvert Elev. (m): 191.92	
UTM Coordinates (LON, LAT): (107452.9712167792 , 4776126.893062081)	Inlet Type (Projecting/Mitered/Headwall): Headwall		
	Depth of Siltation (mm): 150		
Survey Vertical Datum: CGVD2013			
Location and Site Photographs			
Site Location: 	 Upstream Face	 Upstream Channel	
	 Downstream Face	 Downstream Channel	

CROSSING DATA SHEET

Watershed and Location Information	Structure Configuration and Dimensions		Current Flow Information
Date (mm/dd/yyyy): 10/15/2025	Structure Type: Road Bridge	Shape: Rectangular	Flow Present (Y/N): N
Field Crew: MSR, EM	Number of Cells: 1	Open Footing (Yes/No): N	Approx. Depth of Water (mm): 200
ABL ID: ABL_84	Material (Concrete/Steel): Concrete		Upstream Erosion (Y/N): Y
Creek Name: Upper Welland River Tributaries	Height (m) x Width (m) or Diameter (m): 1.48 x 3		Downstream Erosion (Y/N): Y
Road Type: Highway	Length (m): 22.8		Structure Conditions and Additional Comments:
Municipality: Empire Corners	U/S Invert Elev. (m): 187.71	U/S Obvert Elev. (m): 189.19	
Location (Road Name/Intersection): Haldimand Highway	D/S Invert Elev. (m): 187.16	D/S Obvert Elev. (m): 189.24	
UTM Coordinates (LON, LAT): (109057.04857069842 , 4776493.096560371)	Inlet Type (Projecting/Mitered/Headwall): Projecting		
	Depth of Siltation (mm): 100		
Survey Vertical Datum: CGVD2013			

Location and Site Photographs

Site Location:



Upstream Face



Upstream Channel



Downstream Face



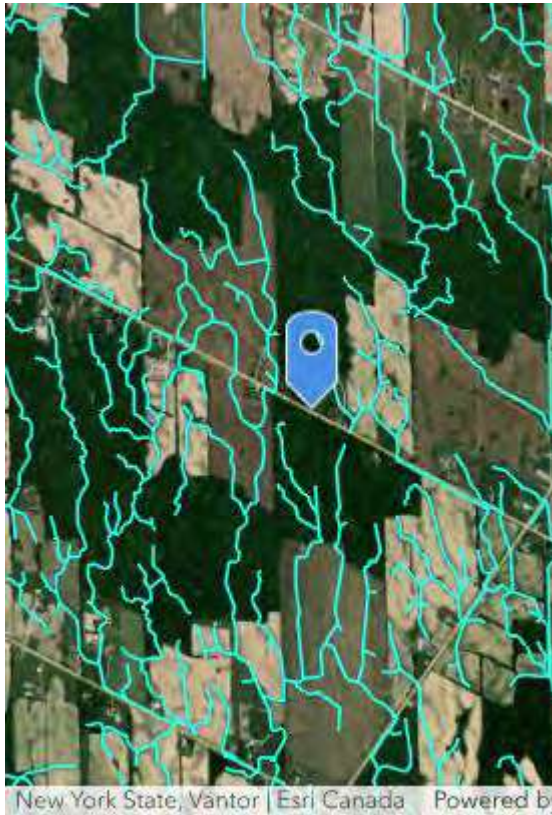
Downstream Channel

CROSSING DATA SHEET

Watershed and Location Information	Structure Configuration and Dimensions		Current Flow Information
Date (mm/dd/yyyy): 05/15/2026	Structure Type: Ditch/Culvert, Road	Shape: Circular	Flow Present (Y/N): Y
Field Crew: CM, OC	Number of Cells: 1	Open Footing (Yes/No): N	Approx. Depth of Water (mm): 250
ABL ID: ABL_85	Material (Concrete/Steel): HDPE		Upstream Erosion (Y/N): N
Creek Name: Upper Welland River Tributaries	Diameter (m): 0.45		Downstream Erosion (Y/N): N
Road Type: Arterial	Length (m): 12		Structure Conditions and Additional Comments:
Municipality: Caistor Centre	U/S Invert Elev. (m): 187.71	U/S Obvert Elev. (m): 188.17	
Location (Road Name/Intersection): Concession Road 3	D/S Invert Elev. (m): 187.66	D/S Obvert Elev. (m): 188.10	
UTM Coordinates (LON, LAT): (122887.65761990804 , 4776585.8253731355)	Inlet Type (Projecting/Mitered/Headwall): Projecting		
	Depth of Siltation (mm): 150		
Survey Vertical Datum: CGVD2013			

Location and Site Photographs

Site Location:



Upstream Face



Upstream Channel



Downstream Face



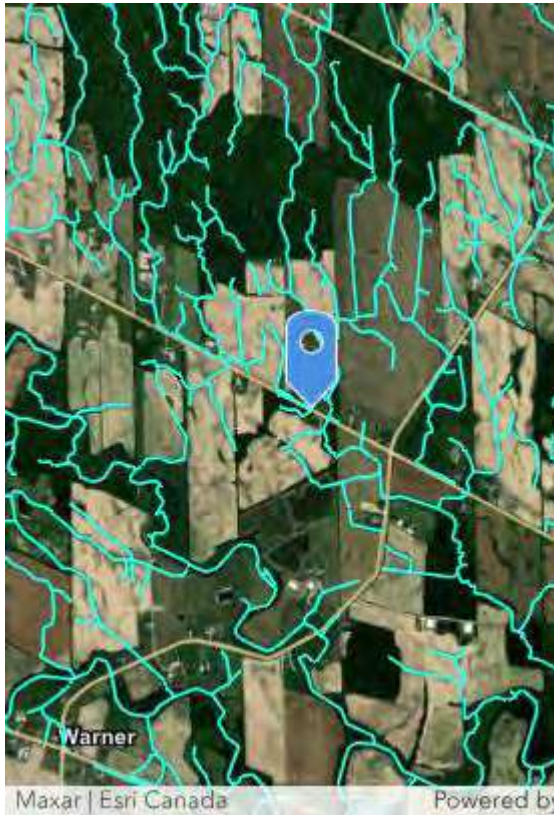
Downstream Channel

CROSSING DATA SHEET

Watershed and Location Information	Structure Configuration and Dimensions		Current Flow Information
Date (mm/dd/yyyy): 10/06/2025	Structure Type: Ditch/Culvert	Shape: Rectangular	Flow Present (Y/N): N
Field Crew: ET, GS	Number of Cells: 1	Open Footing (Yes/No): Y	Approx. Depth of Water (mm): 0
ABL ID: ABL_86	Material (Concrete/Steel): Concrete		Upstream Erosion (Y/N): N
Creek Name: Upper Welland River Tributaries	Height (m) x Width (m): 2 x 1		Downstream Erosion (Y/N): N
Road Type: Arterial	Length (m): 7.7		Structure Conditions and Additional Comments: Mislabelled in SHP file as a duplicate of ABL_86, ABL_86 is actually downstream, adjacent to Additional_3
Municipality: Warner	U/S Invert Elev. (m): 181.53	U/S Obvert Elev. (m): 182.68	
Location (Road Name/Intersection): Concession Road 2	D/S Invert Elev. (m): 181.42	D/S Obvert Elev. (m): 182.66	
UTM Coordinates (LON, LAT): (122594.09167117043 , 4775166.750567568)	Inlet Type (Projecting/Mitered/Headwall): Headwall		
	Depth of Siltation (mm): 0		
Survey Vertical Datum: CGVD2013			

Location and Site Photographs

Site Location:



Upstream Face



Upstream Channel



Downstream Face



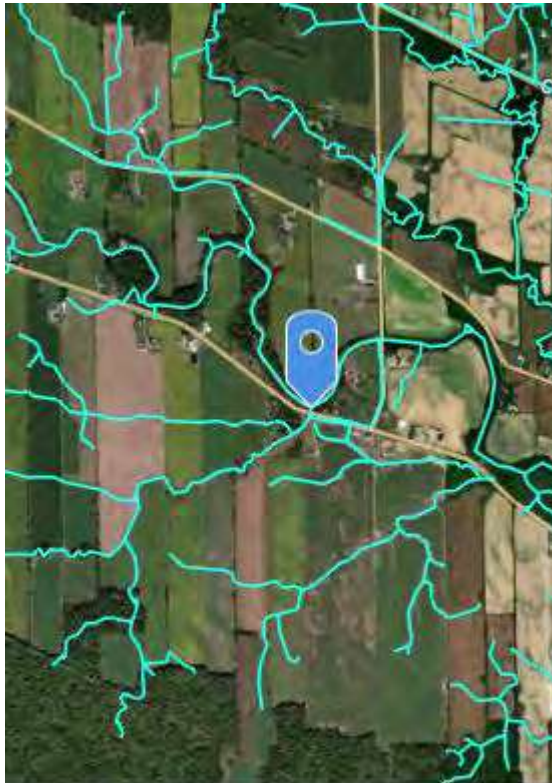
Downstream Channel

CROSSING DATA SHEET

Watershed and Location Information	Structure Configuration and Dimensions		Current Flow Information
Date (mm/dd/yyyy): 10/09/2025	Structure Type: Ditch/Culvert	Shape: Rectangular	Flow Present (Y/N): Y
Field Crew: ET, GS	Number of Cells: 1	Open Footing (Yes/No): N	Approx. Depth of Water (mm): 600
ABL ID: ABL_87	Material (Concrete/Steel): Concrete		Upstream Erosion (Y/N): N
Creek Name: Upper Welland River Tributaries	Height (m) x Width (m) or Diameter (m): 0.41 x 2.4		Downstream Erosion (Y/N): Y
Road Type: Arterial	Length (m): 22		Structure Conditions and Additional Comments: Failing gabion baskets downstream, scour pool filled with large stones, beaver dam downstream
Municipality: Caistorville	U/S Invert Elev. (m): 180.73	U/S Obvert Elev. (m): 181.14	
Location (Road Name/Intersection): South Chippawa	D/S Invert Elev. (m): 179.81	D/S Obvert Elev. (m): 181.57	
UTM Coordinates (LON, LAT): (118108.674947633 , 4776011.131442219)	Inlet Type (Projecting/Mitered/Headwall): Projecting		
	Depth of Siltation (mm): 0		
Survey Vertical Datum: CGVD2013			

Location and Site Photographs

Site Location:



Upstream Face



Upstream Channel



Downstream Face



Downstream Channel

CROSSING DATA SHEET

Watershed and Location Information	Structure Configuration and Dimensions		Current Flow Information
Date (mm/dd/yyyy): 10/02/2025	Structure Type: Ditch/Culvert	Shape: Circular	Flow Present (Y/N): N
Field Crew: CM, MSR	Number of Cells: 2	Open Footing (Yes/No): N	Approx. Depth of Water (mm): 5
ABL ID: ABL_88	Material (Concrete/Steel): Steel		Upstream Erosion (Y/N): N
Creek Name: Upper Welland River Tributaries	Height (m) x Width (m) or Diameter (m): x 1.6		Downstream Erosion (Y/N): N
Road Type: Arterial	Length (m): 12		Structure Conditions and Additional Comments:
Municipality: Winslow	U/S Invert Elev. (m): 184.089	U/S Obvert Elev. (m): 185.126	
Location (Road Name/Intersection): Concession Road 3	D/S Invert Elev. (m): 184.78	D/S Obvert Elev. (m): 185.08	
UTM Coordinates (LON, LAT): (123878.73962405045 , 4775980.939937973)	Inlet Type (Projecting/Mitered/Headwall): Projecting		
	Depth of Siltation (mm): 20		
Survey Vertical Datum: CGVD2013			

Location and Site Photographs

Site Location:



Upstream Face



Upstream Channel



Downstream Face



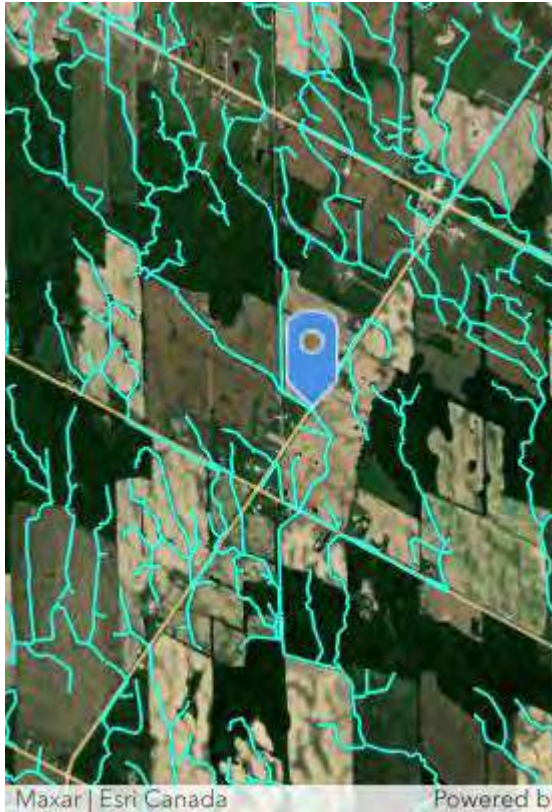
Downstream Channel

CROSSING DATA SHEET

Watershed and Location Information	Structure Configuration and Dimensions		Current Flow Information
Date (mm/dd/yyyy): 10/06/2025	Structure Type: Ditch/Culvert	Shape: Rectangular	Flow Present (Y/N): N
Field Crew: ET, GS	Number of Cells: 1	Open Footing (Yes/No): Y	Approx. Depth of Water (mm): 300
ABL ID: ABL_89	Material (Concrete/Steel): Concrete		Upstream Erosion (Y/N): Y
Creek Name: Upper Welland River Tributaries	Height (m) x Width (m) or Diameter (m): 1.32 x 1.8		Downstream Erosion (Y/N): Y
Road Type: Arterial	Length (m): 12.3		Structure Conditions and Additional Comments: Bank erosion US and DS and erosion within structure
Municipality: Winslow	U/S Invert Elev. (m): 184.86	U/S Obvert Elev. (m): 186.18	
Location (Road Name/Intersection): Smithville Road	D/S Invert Elev. (m): 184.63	D/S Obvert Elev. (m): 186.18	
UTM Coordinates (LON, LAT): (123948.03669553826 , 4776381.1149428245)	Inlet Type (Projecting/Mitered/Headwall): Headwall		
	Depth of Siltation (mm): 200		
Survey Vertical Datum: CGVD2013			

Location and Site Photographs

Site Location:



Upstream Face



Upstream Channel



Downstream Face



Downstream Channel

CROSSING DATA SHEET

Watershed and Location Information	Structure Configuration and Dimensions		Current Flow Information
Date (mm/dd/yyyy): 10/02/2025	Structure Type: Road Bridge	Shape: Rectangular	Flow Present (Y/N): Y
Field Crew: CM, MSR	Number of Cells: 1	Open Footing (Yes/No): N	Approx. Depth of Water (mm): 250
ABL ID: ABL_90	Material (Concrete/Steel): Concrete		Upstream Erosion (Y/N): Y
Creek Name: Upper Welland River Tributaries	Height (m) x Width (m) or Diameter (m): x 3.2		Downstream Erosion (Y/N): N
Road Type: Arterial	Length (m): 34		Structure Conditions and Additional Comments:
Municipality: Winslow	U/S Invert Elev. (m): 172.699	U/S Obvert Elev. (m): 174.854	
Location (Road Name/Intersection): Concession Road 2	D/S Invert Elev. (m): 172.398	D/S Obvert Elev. (m): 174.546	
UTM Coordinates (LON, LAT): (124614.88800821942 , 4773975.390449614)	Inlet Type (Projecting/Mitered/Headwall): Wingwall		
	Depth of Siltation (mm): 150		
Survey Vertical Datum: CGVD2013			

Location and Site Photographs

Site Location:



Upstream Face



Upstream Channel



Downstream Face



Downstream Channel

CROSSING DATA SHEET

Watershed and Location Information	Structure Configuration and Dimensions		Current Flow Information
Date (mm/dd/yyyy): 10/06/2025	Structure Type: Ditch/Culvert	Shape: Rectangular	Flow Present (Y/N): N
Field Crew: ET, GS	Number of Cells: 1	Open Footing (Yes/No): Y	Approx. Depth of Water (mm): 300
ABL ID: ABL_91	Material (Concrete/Steel): Concrete		Upstream Erosion (Y/N): N
Creek Name: Upper Welland River Tributaries	Height (m) x Width (m) or Diameter (m): 1.39 x 2		Downstream Erosion (Y/N): N
Road Type: Arterial	Length (m): 19		Structure Conditions and Additional Comments:
Municipality: Warner	U/S Invert Elev. (m): 175.83	U/S Obvert Elev. (m): 177.22	
Location (Road Name/Intersection): South Chippawa	D/S Invert Elev. (m): 175.46	D/S Obvert Elev. (m): 177.29	
UTM Coordinates (LON, LAT): (121266.14942886395 , 4773977.354257474)	Inlet Type (Projecting/Mitered/Headwall): Headwall		
	Depth of Siltation (mm): 50		
Survey Vertical Datum: CGVD2013			

Location and Site Photographs

Site Location:



Upstream Face



Upstream Channel



Downstream Face



Downstream Channel

CROSSING DATA SHEET

Watershed and Location Information	Structure Configuration and Dimensions		Current Flow Information
Date (mm/dd/yyyy): 10/06/2025	Structure Type: Ditch/Culvert	Shape: Circular	Flow Present (Y/N): N
Field Crew: ET, GS	Number of Cells: 1	Open Footing (Yes/No): N	Approx. Depth of Water (mm): 0
ABL ID: ABL_92	Material (Concrete/Steel): Steel		Upstream Erosion (Y/N): N
Creek Name: Upper Welland River Tributaries	Height (m) x Width (m) or Diameter (m): 1.3 x 1.7		Downstream Erosion (Y/N): N
Road Type: Arterial	Length (m): 15.2		Structure Conditions and Additional Comments:
Municipality: Warner	U/S Invert Elev. (m): 180.8	U/S Obvert Elev. (m): 182.1	
Location (Road Name/Intersection): Concession Road 2	D/S Invert Elev. (m): 180.8	D/S Obvert Elev. (m): 182.1	
UTM Coordinates (LON, LAT): (122656.05604406557 , 4775122.671822103)	Inlet Type (Projecting/Mitered/Headwall): Projecting		
	Depth of Siltation (mm): 0		
Survey Vertical Datum: CGVD2013			

Location and Site Photographs

Site Location:



Upstream Face



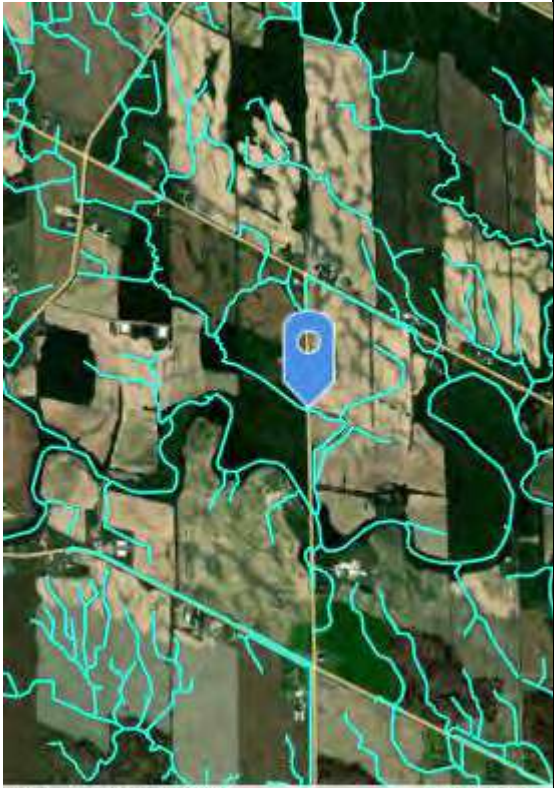
Upstream Channel



Downstream Face



Downstream Channel

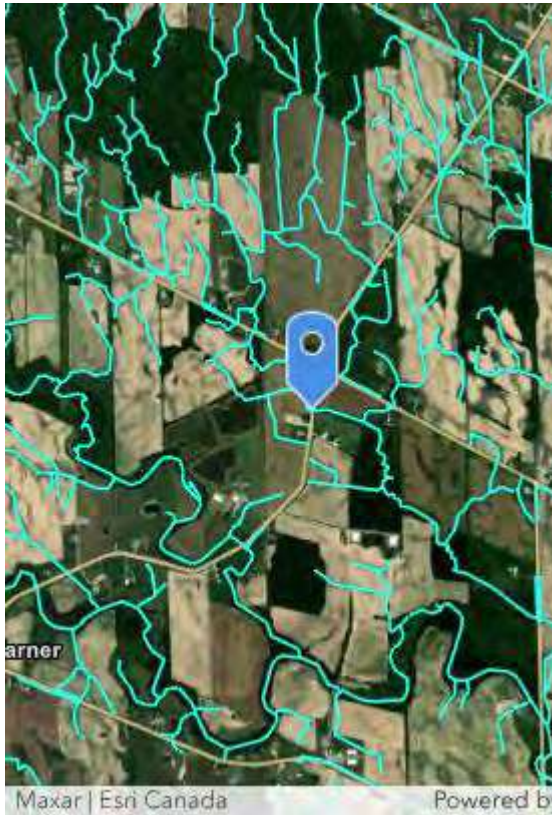
CROSSING DATA SHEET			
Watershed and Location Information	Structure Configuration and Dimensions		Current Flow Information
Date (mm/dd/yyyy): 10/02/2025	Structure Type: Ditch/Culvert	Shape: Rectangular	Flow Present (Y/N): N
Field Crew: CM, MSR	Number of Cells: 1	Open Footing (Yes/No): Y	Approx. Depth of Water (mm): 0
ABL ID: ABL_93	Material (Concrete/Steel): Concrete		Upstream Erosion (Y/N): N
Creek Name: Upper Welland River Tributaries	Height (m) x Width (m) or Diameter (m): 1.74 x 2.5		Downstream Erosion (Y/N): N
Road Type: Arterial	Length (m): 18		Structure Conditions and Additional Comments:
Municipality: Warner	U/S Invert Elev. (m): 174.10	U/S Obvert Elev. (m): 175.84	
Location (Road Name/Intersection): Church Road	D/S Invert Elev. (m): 174.06	D/S Obvert Elev. (m): 175.82	
UTM Coordinates (LON, LAT): (123734.31175380334 , 4773933.315893804)	Inlet Type (Projecting/Mitered/Headwall): Projecting		
	Depth of Siltation (mm): 0		
Survey Vertical Datum: CGVD2013			
Location and Site Photographs			
Site Location:  Maxar Esri Canada Powered by	 Upstream Face	 Upstream Channel	
	 Downstream Face	 Downstream Channel	

CROSSING DATA SHEET

Watershed and Location Information	Structure Configuration and Dimensions		Current Flow Information
Date (mm/dd/yyyy): 10/06/2025	Structure Type: Ditch/Culvert	Shape: Rectangular	Flow Present (Y/N): N
Field Crew: ET, GS	Number of Cells: 1	Open Footing (Yes/No): Y	Approx. Depth of Water (mm): 0
ABL ID: ABL_94	Material (Concrete/Steel): Concrete		Upstream Erosion (Y/N): N
Creek Name: Upper Welland River Tributaries	Height (m) x Width (m) or Diameter (m): 1.58 x 3		Downstream Erosion (Y/N): N
Road Type: Arterial	Length (m): 12		Structure Conditions and Additional Comments:
Municipality: Warner	U/S Invert Elev. (m): 178.57	U/S Obvert Elev. (m): 180.15	
Location (Road Name/Intersection): Smithville Road	D/S Invert Elev. (m): 178.47	D/S Obvert Elev. (m): 180.10	
UTM Coordinates (LON, LAT): (122872.06042504101 , 4774806.159757743)	Inlet Type (Projecting/Mitered/Headwall): Headwall		
	Depth of Siltation (mm): 50		
Survey Vertical Datum: CGVD2013			

Location and Site Photographs

Site Location:



Upstream Face



Upstream Channel



Downstream Face



Downstream Channel