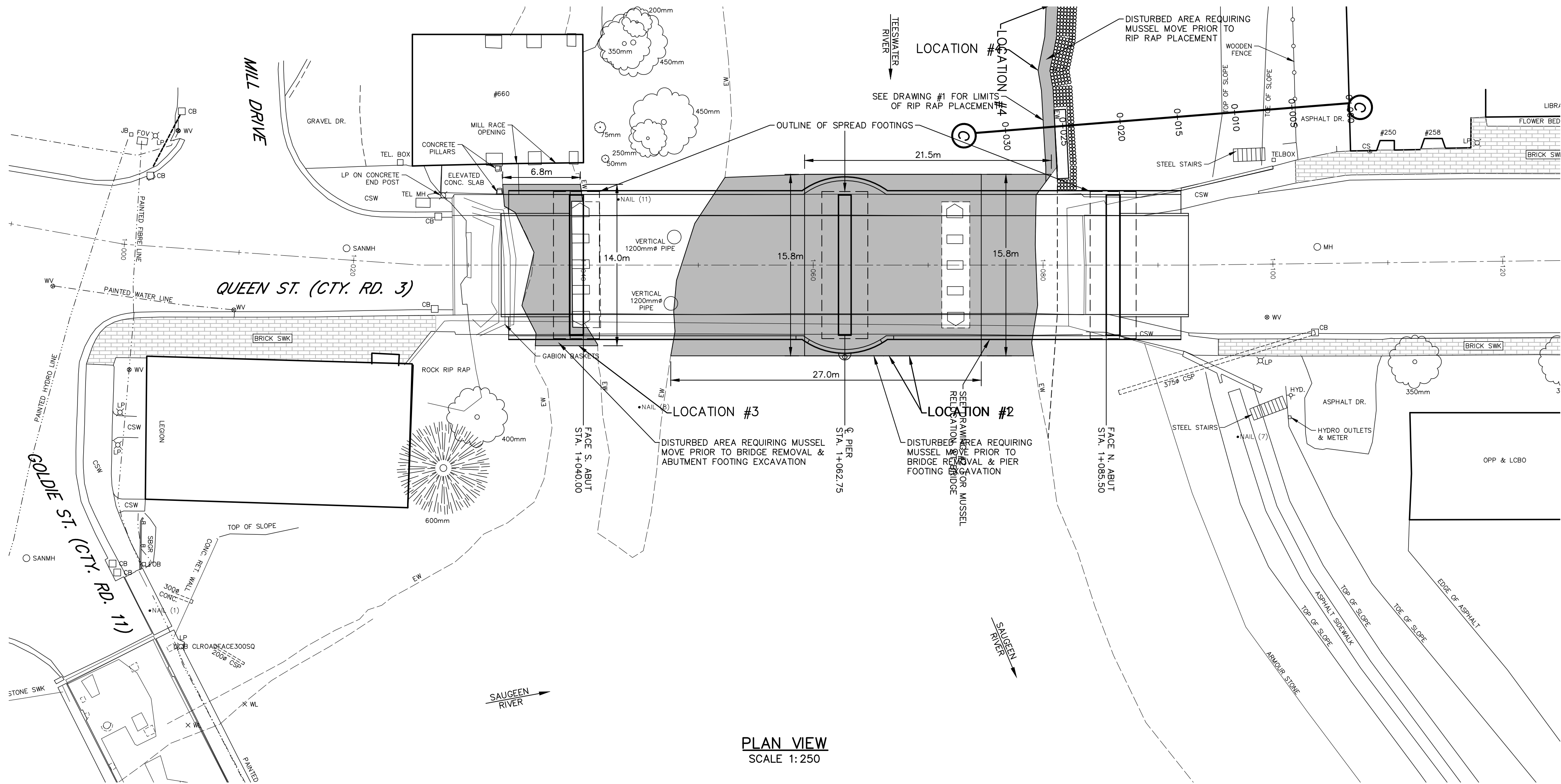


APPENDIX H

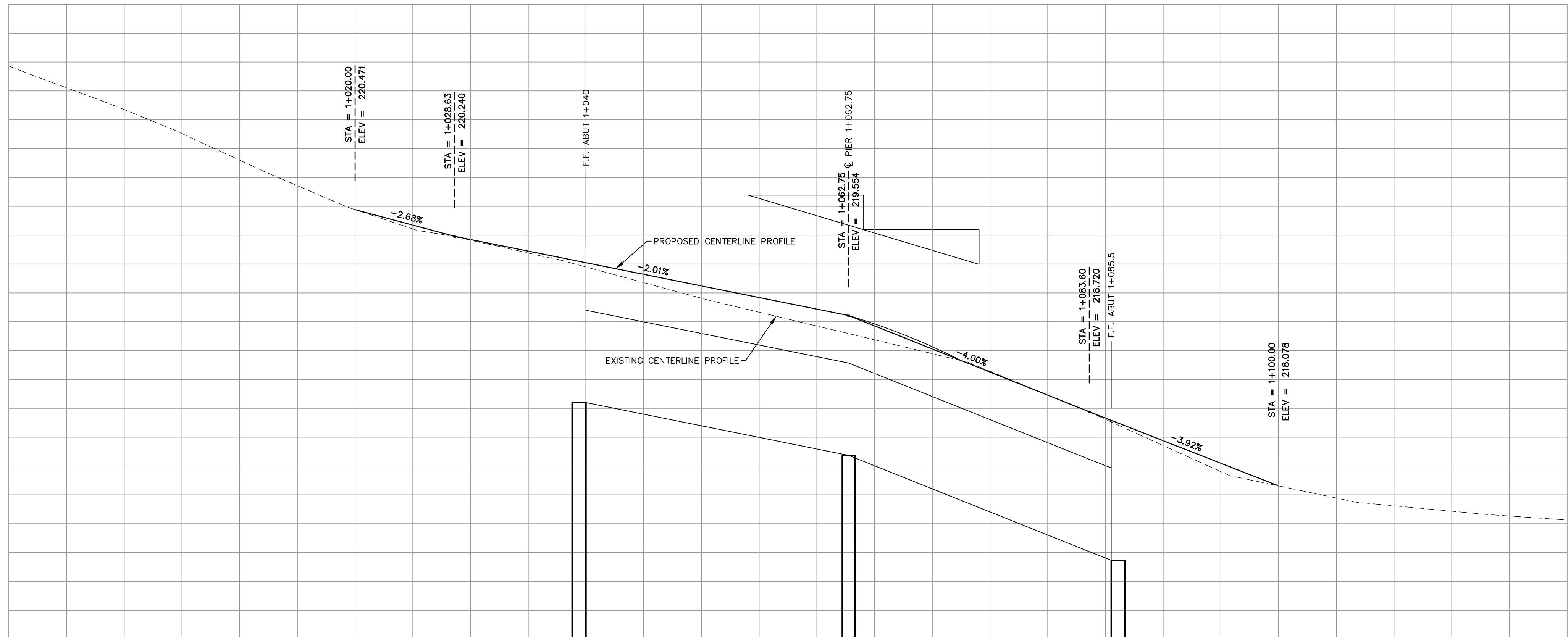
DRAWINGS OF PREFERRED ALTERNATIVE



PLAN VIEW
SCALE 1:250

ELEVATION

222.0
221.5
221.0
220.5
220.0
219.5
219.0
218.5
218.0
217.5
217.0



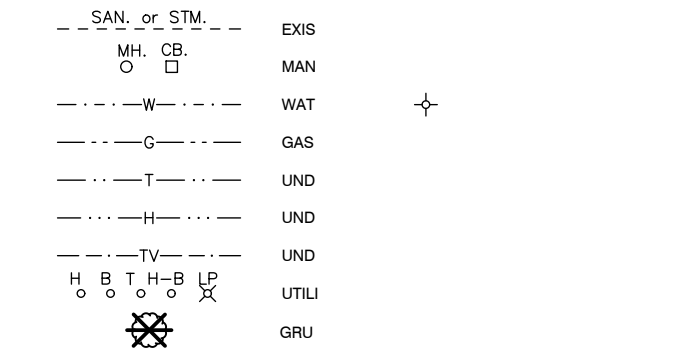
FINISHED
ASPHALT
GRADE

EXISTING
GRADE

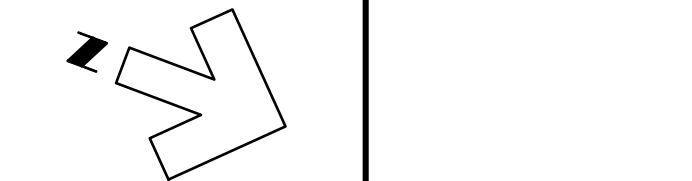
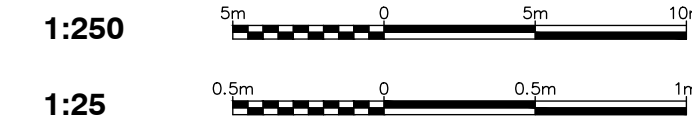
STATION

221.716	221.527	221.339	221.130	220.900	220.679	220.471	220.304	220.207	220.095	219.975	219.839	219.704	219.583	219.463	219.343	219.223	219.071	218.865	218.654	218.427	218.201	218.078	217.973	217.905	217.858	217.817	217.781
0+990		1+000		1+010		1+020		1+030		1+040		1+050		1+060		1+070		1+080		1+090		1+100		1+110		1+120	

- WATERSHED AREA **340 km²**
- DESIGN FLOOD FREQUENCY **50 YEARS**
- SPECIAL FEATURES AT SITE (DAMS, ICE, SCOUR, DRIFT, SLIDING BANKS, ETC.)
DAM WEST OF THE BRIDGE, TEESWATER RIVER
AND THE SAUGEEN RIVER CONVERGE
- (A) EXISTING STRUCTURES AT SITE, UPSTREAM AND DOWNSTREAM (GIVE LOCATION, TOTAL SPAN, HEIGHT ABOVE NORMAL HIGH WATER, NET AREA FOR FLOW AT N.H.L., ESTIMATED AGE)
AT SITE: **37.60m CLEAR SPAN, STEEL THROUGH TRUSS BRIDGE, 1910±**
UPSTREAM: **MORRIS-TURNBERRY STR. BR2 2-17.2m SPAN RIGID FRAME BRIDGE DAM DIRECTLY UPSTREAM OF BRIDGE**
DOWNSTREAM: **HURON COUNTY STR. 4-32.9 3 (15.3m-18.4m-15.3m) SPAN RIGID FRAME BRIDGE**
(B) REASON FOR CHANGE IN HEIGHT OR SPAN OF PROPOSED STRUCTURE FROM THAT OF EXISTING STRUCTURE
- INCREASED SPAN TO ALIGN STRUCTURE WITH CHANNEL
INFORMATION ON EXTREME FLOODING AT SITE OBTAINED FROM HEC 2 MODELLING AND REFLECTS HIGHEST WATER ELEVATION TO BE **ABOUT ELEV. 314.71m (100 YR. W.L.)** AND LOWEST WATER ELEVATION TO BE **ABOUT ELEV. 312.18m**
IS IT LIKELY THAT STREAM BED WILL BE LOWERED **NO**
IS STRUCTURE ON A MUNICIPAL DRAIN **NO**
DESIGN LOADING **CSA-S8-19 PLUS 90 MM. ASPHALT.**
(A) NAVIGATION CLEARANCES REQUIRED, IF ANY **N/A**
(B) RAILWAY CLEARANCES REQUIRED, IF ANY **N/A**
(C) REQUIREMENTS OF OTHER AGENCIES **SAUGEEN VALLEY CONSERVATION AUTHORITY, D.F.O.**
(D) IS A TEMPORARY DETOUR REQUIRED, **NO**
WHO WILL BUILD IT, **N/A**
WHO WILL MAINTAIN IT, **N/A**
FINAL SUBMISSION
10. HAS APPROVAL BEEN OBTAINED FROM FEDERAL MINISTRY OF TRANSPORT (N.W.P.) ACT **N/A** CANADIAN TRANSPORT COMMISSION **N/A** RAILWAY COMPANIES **N/A**
11. APPROX. VOLUME OF CONCRETE **xx** CU. M.
WEIGHT OF REINFORCEMENT **xx (excl. GFRP)** Tonne
WEIGHT OF STRUCTURAL STEEL **-** Tonne
LENGTH OF PRESTRESSED BEAMS **xx** LIN. M.
LENGTH OF PIPE CULVERT **-** LIN. M.



NOTES:
1. See drawing #3 for additional notes.



The locations of existing u approximate way only and by the owner or its represe the exact location of all exi and agrees to be fully resp be occasioned by the contr preserve any and all under

BENCHMARK
B.M. Elev. 221.107
Nail & flag in North face of HP, East of Goldie St. bridge on the South side of the road
Northing: 4905973.431
Easting: 0478329.827

Design By: M.A.B. Checked By: A.I.R.

PRELIMINARY

No.	DATE	REVISION
1.	July 19, 2021	Issue for County Review

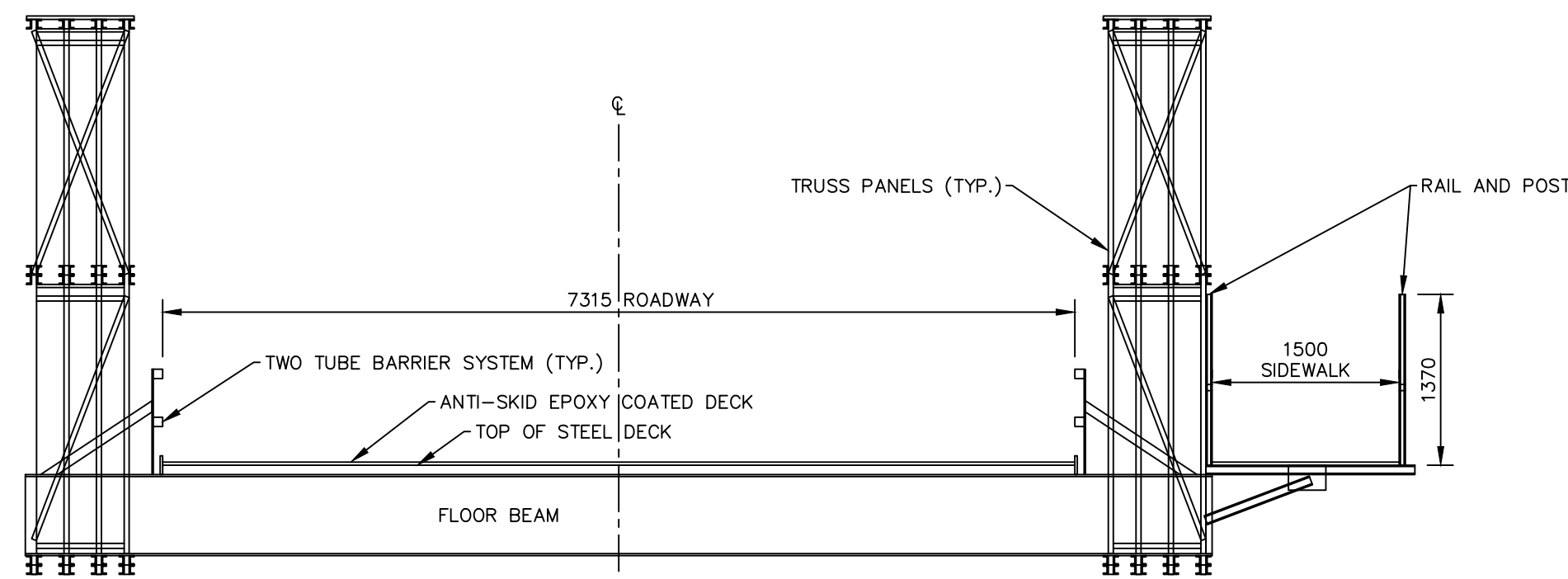


Goderich Mount Forest Sarnia

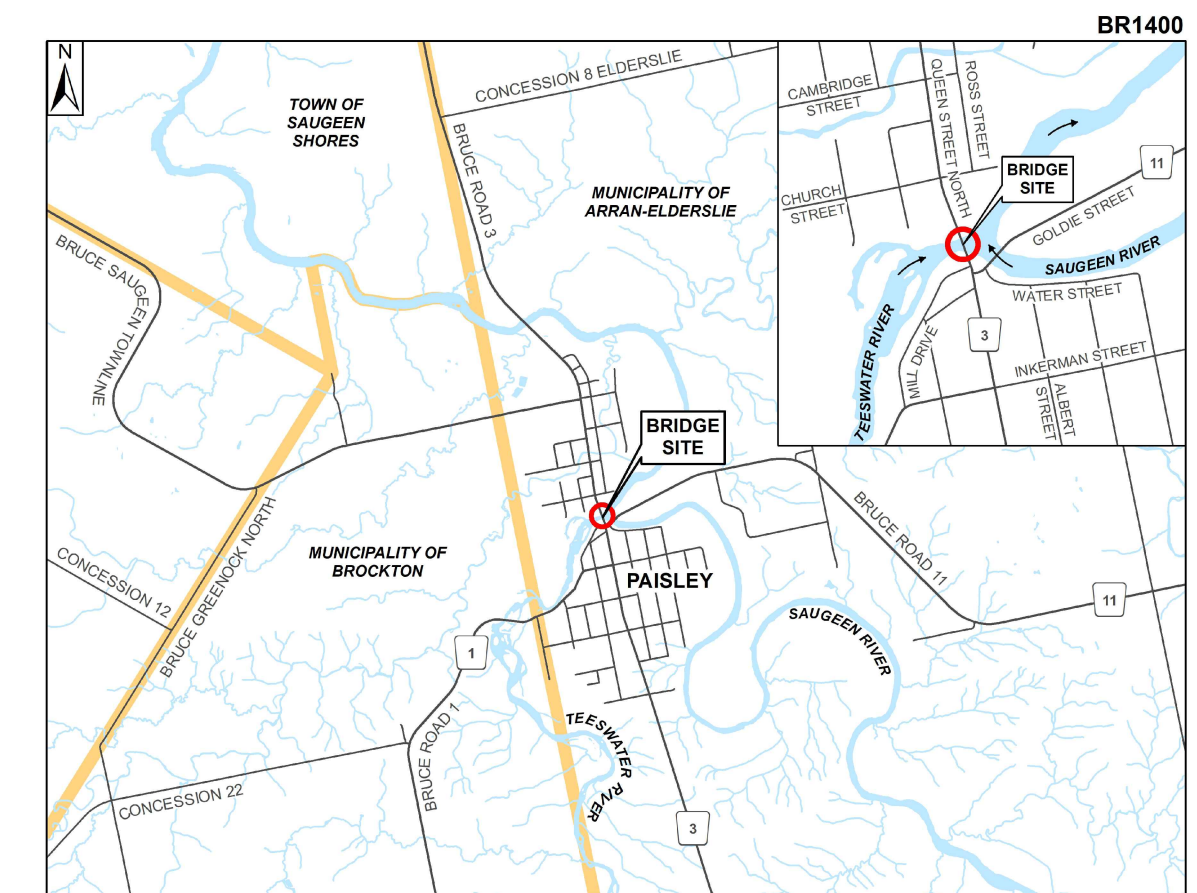


County of Bruce
Teeswater River Bridge
Plan and Profile from Sta. 0+990 to 1+125

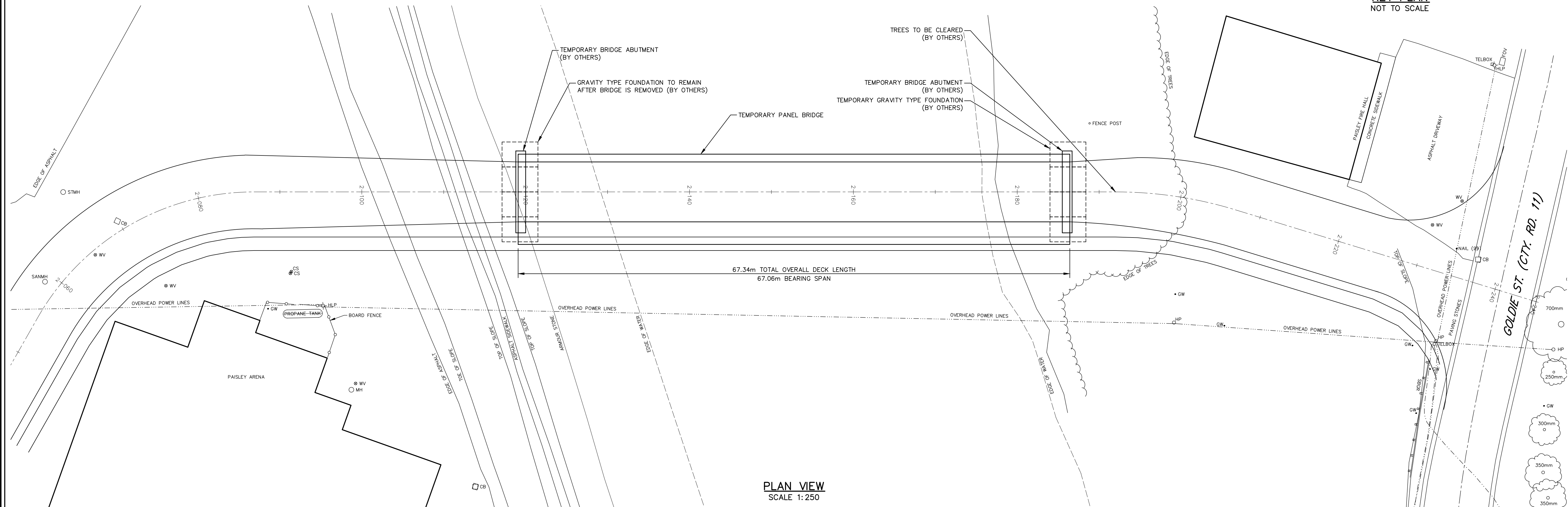
Structure No. 0333300
Project No. BR1400
Scale (24x36)
Horizontal : 1:250
Vertical : 1:25
Drawing No. 1 of



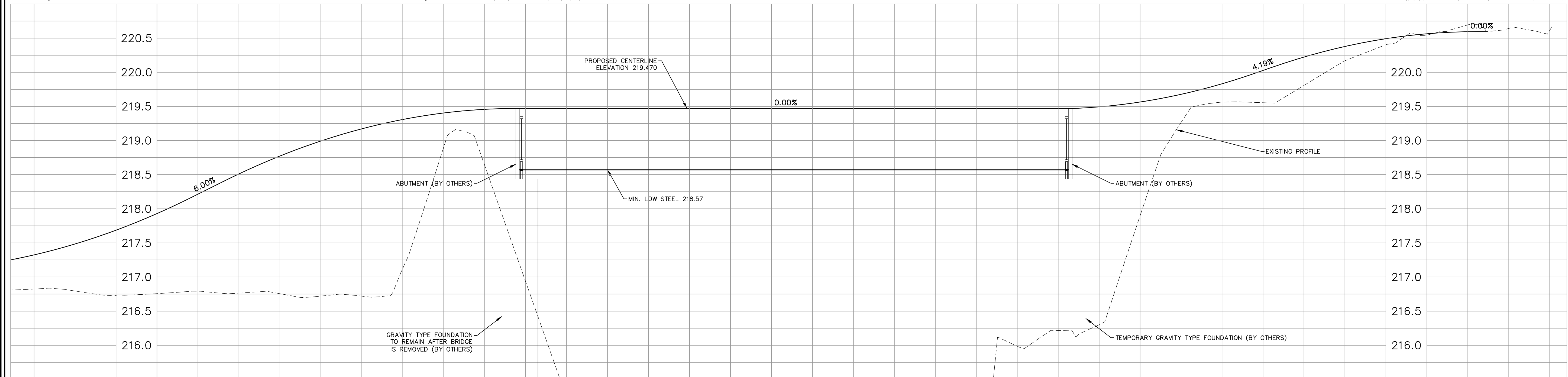
PROPOSED BRIDGE CROSS SECTION
SCALE 1:50



KEY PLAN
NOT TO SCALE



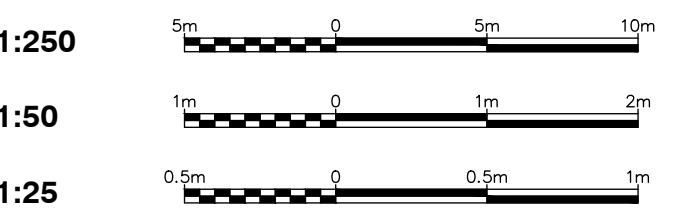
PLAN VIEW
SCALE 1:250



ELEVATION VIEW
SCALE 1:250 HORIZ.
1:25 VERT.

NOTES:

1.



Design By: M.A.B. Checked By: R.J.M.

PRELIMINARY

No.	DATE	REVISION
1.	July 19, 2021	Issue for County Review

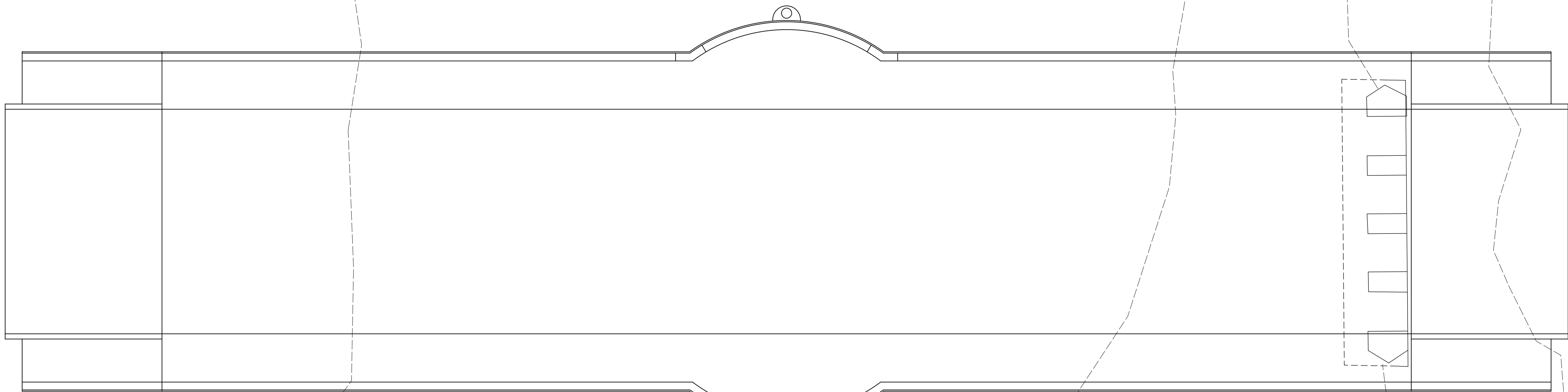


Goderich Mount Forest Sarnia

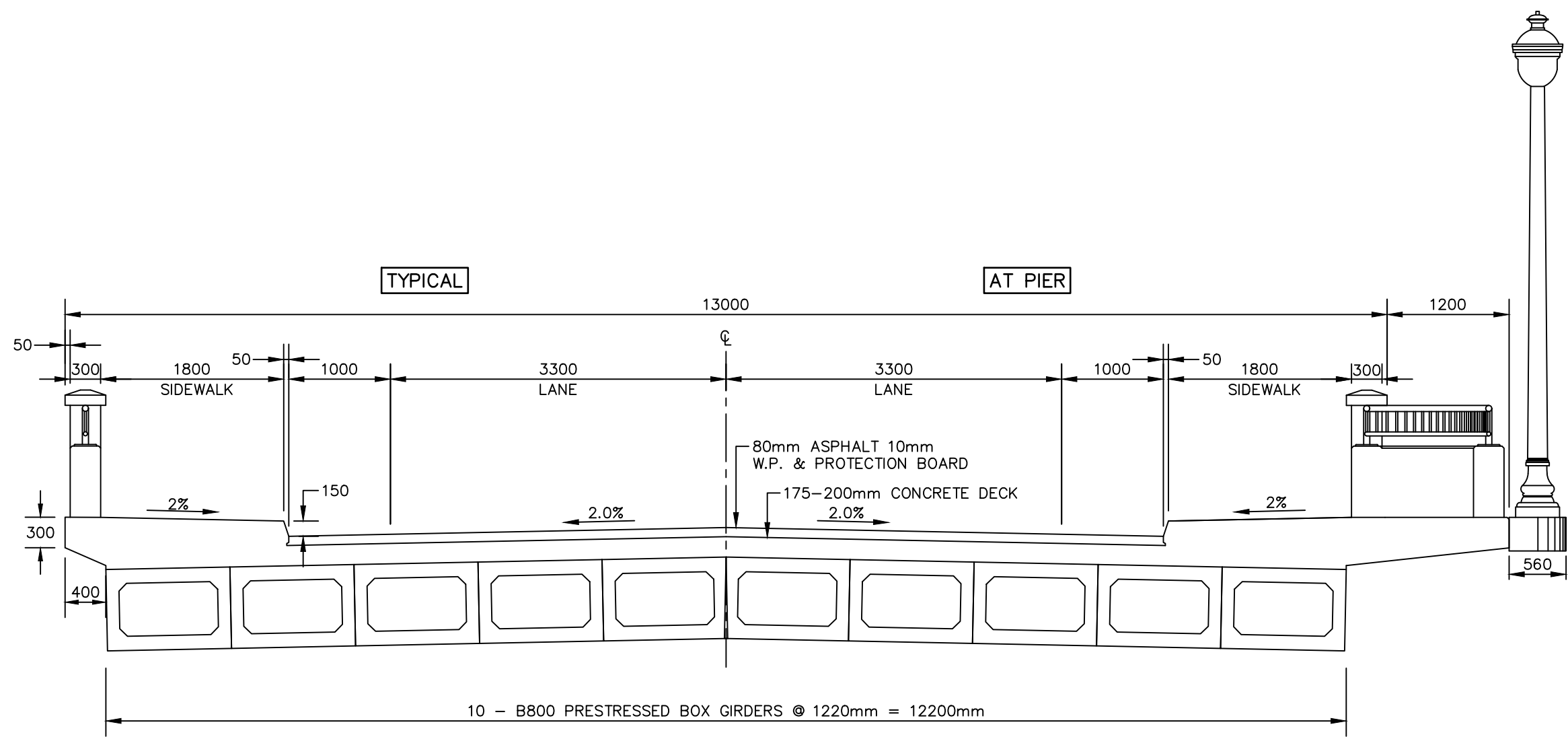


**County of
Bruce**
**Paisley Temporary Bridge
over Teeswater River**
Plan, Elevation & Section Views

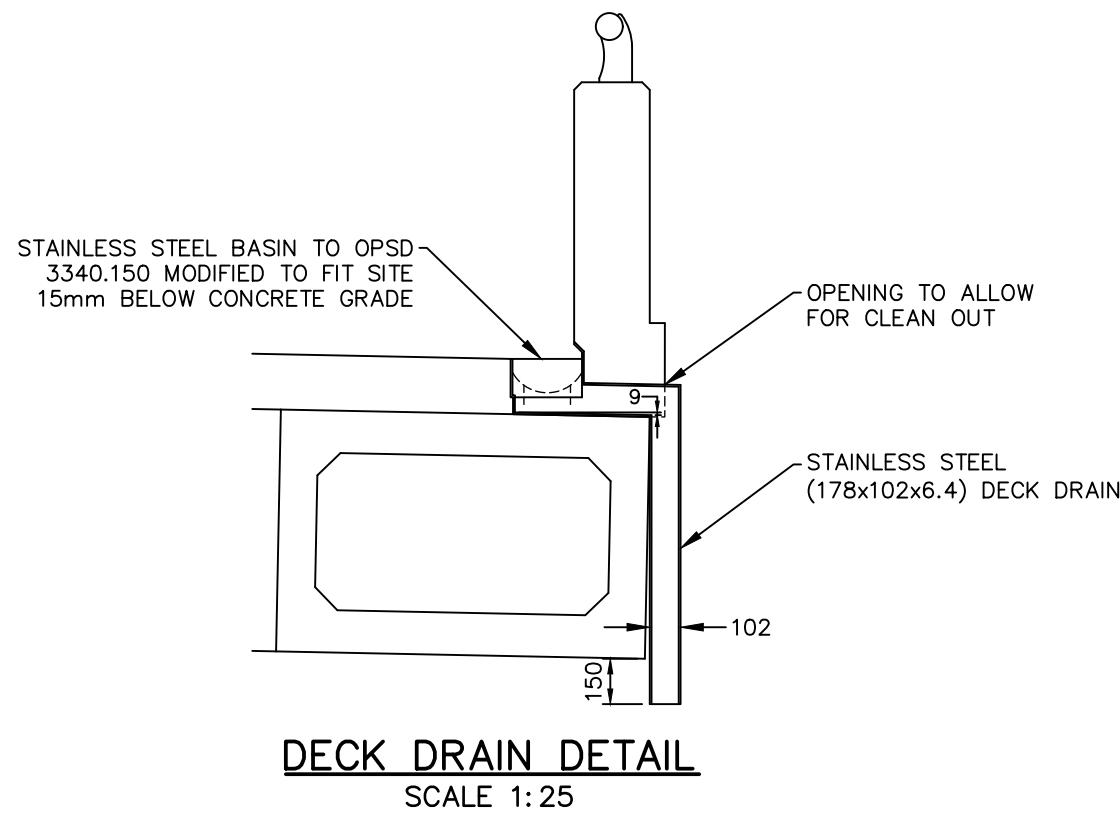
Structure No. 0333300	Project No. BR1400
Scale (24x36) As Shown	Drawing No. 1 of 1



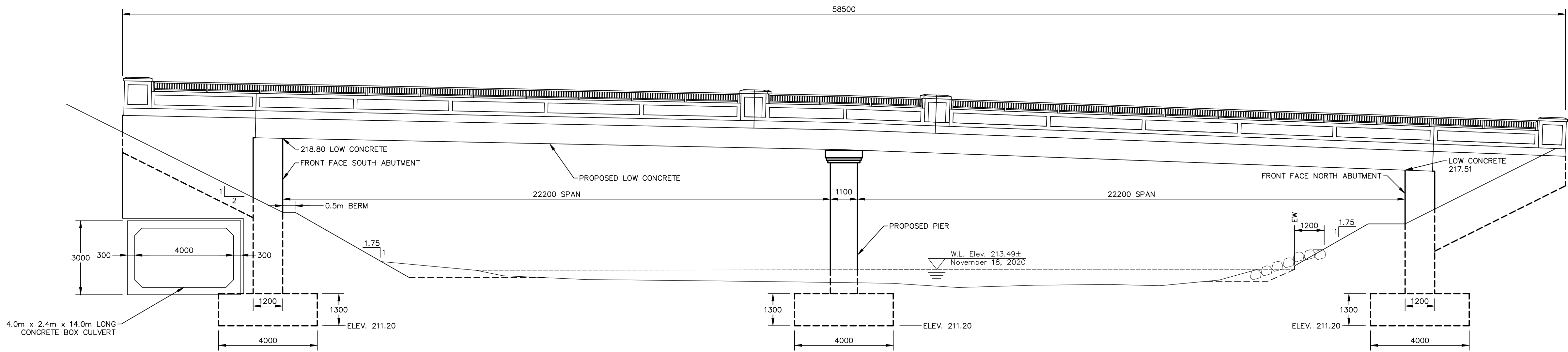
PLAN VIEW
SCALE 1:100



TYPICAL DECK SECTION
SCALE 1:50



DECK DRAIN DETAIL
SCALE 1:25



PROPOSED ELEVATION VIEW
SCALE 1:100

- NOTES:**
- Structure to be built in accordance with the latest revision of the Ontario Provincial Standard Specifications, Division 9: Structures.
 - Minimum compressive strength of concrete at 28 days:
Beams: 50MPa
Remainder: 35MPa (CSA C-1)
Mixes to be O.P.S.S. minimum cement content.
Approval of the Engineer is required for all mix designs and admixtures.
 - Reinforcing:**
Barriers: GFRP Grade GIII (60GPa)
Elsewhere: Steel, Grade 400
 - Clear Cover to Reinforcing Steel:**
Bottom of pile caps: 100mm ± 25mm
Top of deck: 70mm ± 20mm
Bottom of deck: 50mm ± 10mm
Elsewhere: 70mm ± 20mm unless otherwise noted
 - Bars marked with suffix "c" – Epoxy Coated.
 - Lap Splice Lengths:**
Grade 400:
Un-Coated
15M–520
20M–690
25M–1070
Coated
15M–620
20M–820
25M–1290
GFRP: As Per Manufacturer's Specifications
 - Abutment concrete above the bearings concrete shall be cast at the same time as the deck.
 - No abutment backfill shall be placed until the deck concrete has reached 26 MPa. Backfill shall be placed simultaneously behind both abutments so that the difference in backfill height does not exceed 0.5m.
 - Unless noted otherwise, all concrete corners to be chamfered 25mm.
 - No concrete shall be ordered to the site without the approval of the Contract Administrator.
 - Materials to be as identified on M.T.O. Designated Sources for Materials List.
 - Design to CAN/CSA-S6-19 including allowance for 90mm asphalt.
 - Environmental protection measures specified by the Department of Fisheries and Oceans and the Conservation Authority shall be followed.
 - These notes apply to all drawings.

1:50 1m 0 1m 2m

Design By: M.A.B. Checked By: A.I.R.

PRELIMINARY

No.	DATE	REVISION
1.	July 19, 2021	Issue for County Review

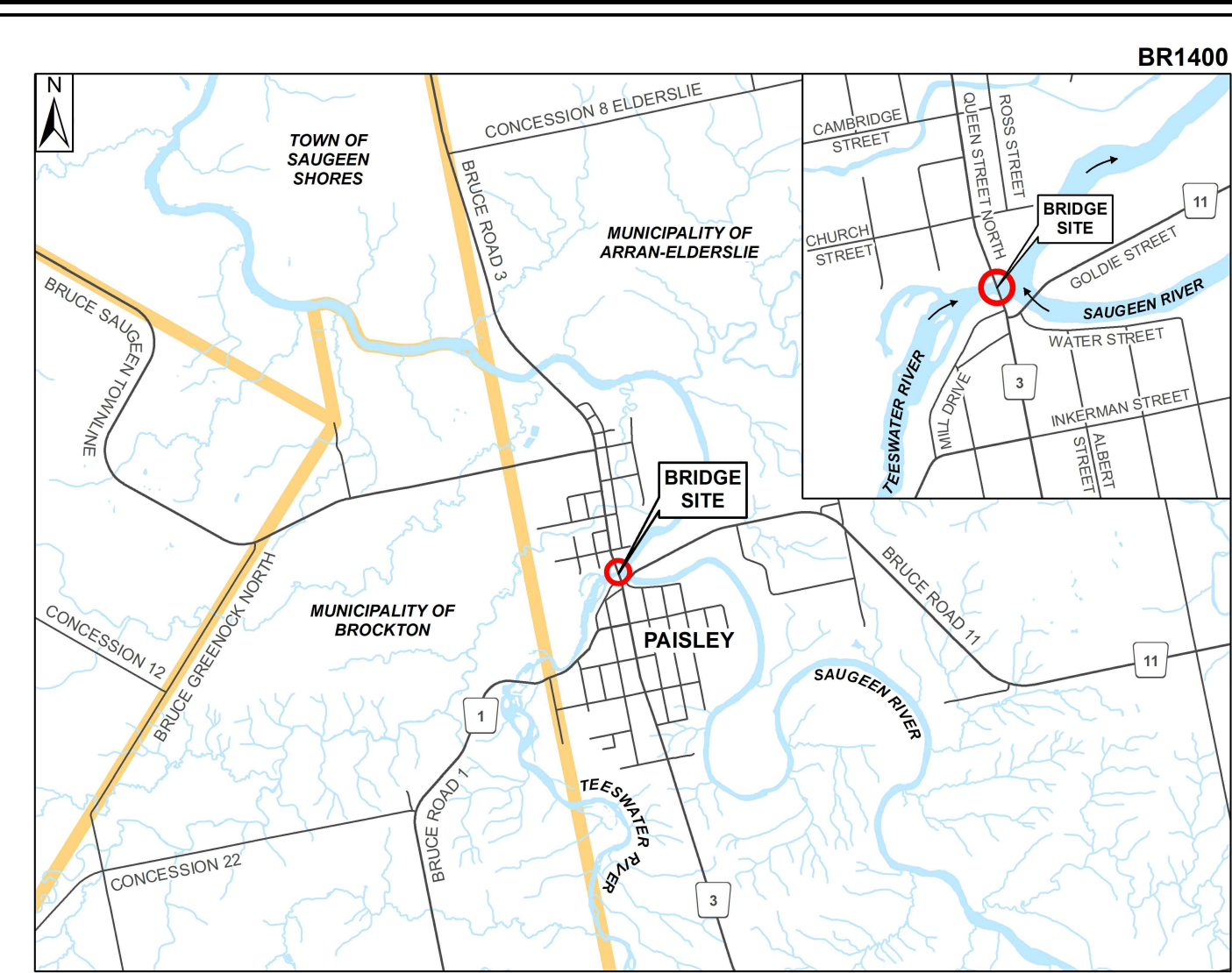
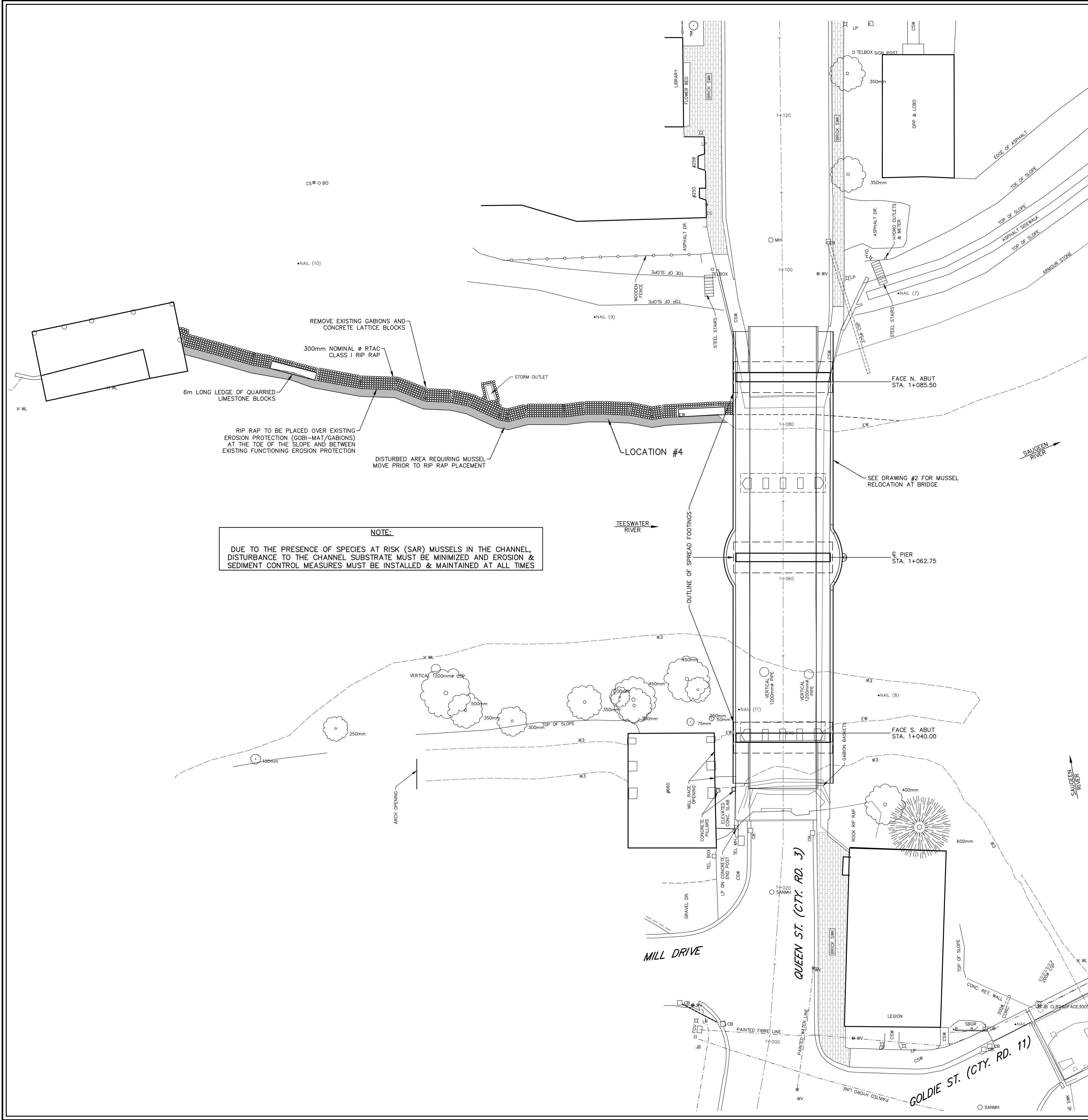


Goderich Mount Forest Sarnia



County of Bruce
Teeswater River Bridge
General Arrangement
Details & Sections

Structure No. 0333300	Project No. BR1400
Scale (24x36) As Shown	Drawing No. 2 of



KEY PLAN
NOT TO SCALE

LEGEND

- SAN. or STM. EXISTING SEWERS, SANITARY or STORM
- MANHOLE and CATCHBASIN
- WATERMAIN
- GASMAIN
- UNDERGROUND TELEPHONE
- UNDERGROUND HYDRO
- UNDERGROUND T.V. CABLE
- UTILITY POLES

MUSSEL REMOVAL AREA

Location	Area (m ²)
#1 - North Side Entry	292.0
#2 - South Side Entry	376.0
#3 - Mill Race	63.0
#4 - Along Riverbank	71.0
North Side Total (#1+#3+#4)	426.0
South Side Total (#2+#3+#4)	510.0

1:250

BENCHMARK INFORMATION

B.M. Elev. 221.107
 Nail & flag in North face of HP, East of Goldie St.
 bridge on the South side of the road
 Northing: 4905973.431
 Easting: 0478329.827

Design By: M.A.B. Checked By: K.V.

PRELIMINARY

No.	DATE	REVISION
1.	July 9, 2021	Issued for Review by D.F.O.
2.	July 19, 2021	Issue for County Review

Goderich	Mount Forest	Sarnia
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County of Bruce

Teeswater River Bridge

Plan View

Structure No. 0333300	Project No. BR1400
Scale (24x36) 1:250	Drawing No. 1 of 2