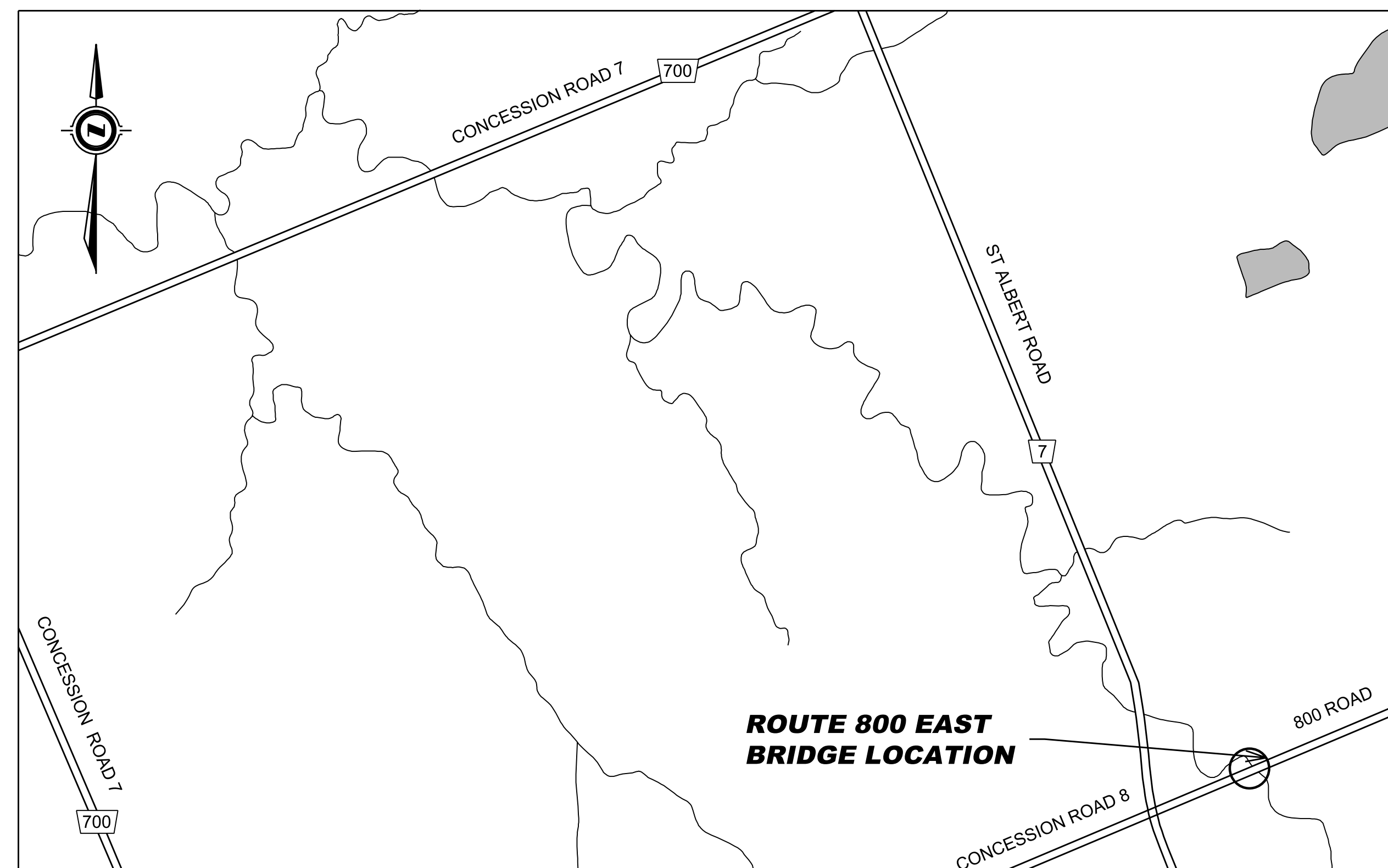


THE NATION MUNICIPALITY

MARC LEGAULT
DIRECTOR OF PUBLIC WORKS



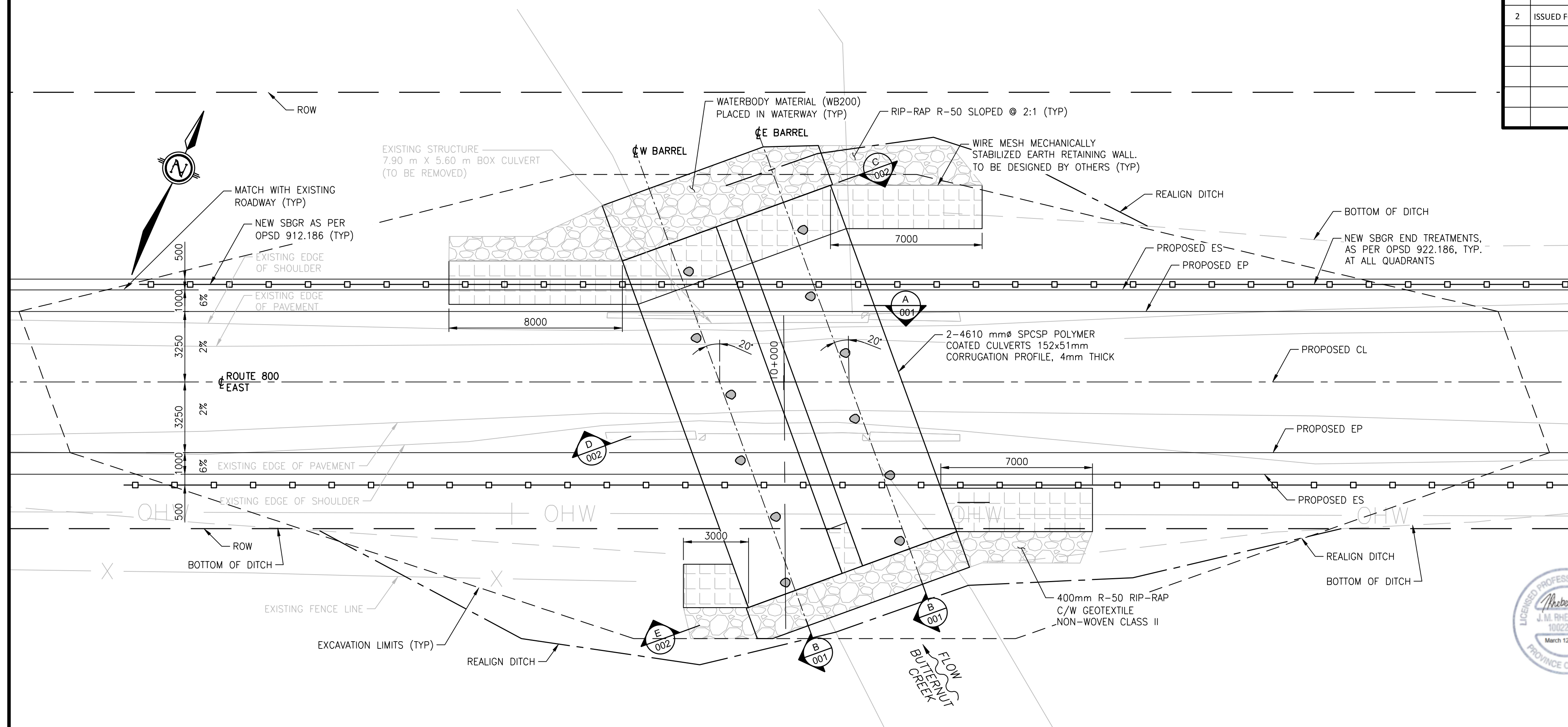
LISTING OF DRAWINGS:

- COVER SHEET
- 1. GENERAL ARRANGEMENT
- 2. GENERAL ARRANGEMENT
- 3. EROSION, SEDIMENT, AND TEMPORARY FLOW CONTROL
- 4. ROUTE 800 TEMPORARY ROAD RE-ALIGNMENT

ROUTE 800 EAST BUTTERNUT CREEK BRIDGE REPLACEMENT STRUCTURE NO. C001

ISSUED FOR REVIEW (100%)
MARCH 12, 2024

NO.	REVISION	BY	DATE	CLIENT	THE NATION MUNICIPALITY	DWG. NO.	001
1	ISSUED FOR DESIGN REVIEW	JR	15/12/23	PROJECT TITLE	ROUTE 800 EAST BUTTERNUT CREEK BRIDGE	SHEET	001 OF 004
2	ISSUED FOR DESIGN REVIEW (100%)	JR	12/03/24	DRAWING TITLE	GENERAL ARRANGEMENT	CONTRACT NO.	
				MP Proj No.		Des.	JR
				Dwn.	XZ	Chk.	GZ
				Date:	March 12, 2024	Chk.	JR
				Scale:	AS SHOWN		



PLAN
1:250

CONSTRUCTION NOTES:

- THIS DRAWING SHALL BE READ IN CONJUNCTION WITH ALL OTHER APPLICABLE CONTRACT DRAWINGS.
- ALL CONSTRUCTION PROCEDURES AND MATERIALS SHALL BE IN ACCORDANCE WITH CURRENT ONTARIO PROVINCIAL STANDARDS UNLESS AMENDED IN THE CONTRACT DOCUMENTS.

LIST OF ABBREVIATIONS

BH	DENOTES APPROXIMATE BOREHOLE
CL	CENTRELINE
EL	ELEVATION
EP	EDGE OF PAVEMENT
ES	EDGE OF SHOULDER
EX	EXISTING
PL	PROPERTY LINE
NTS	NOT TO SCALE
ROW	RIGHT OF WAY
SBGR	SINGLE BEAM GUIDE RAIL
TYP	TYPICAL
U/G	UNDERGROUND

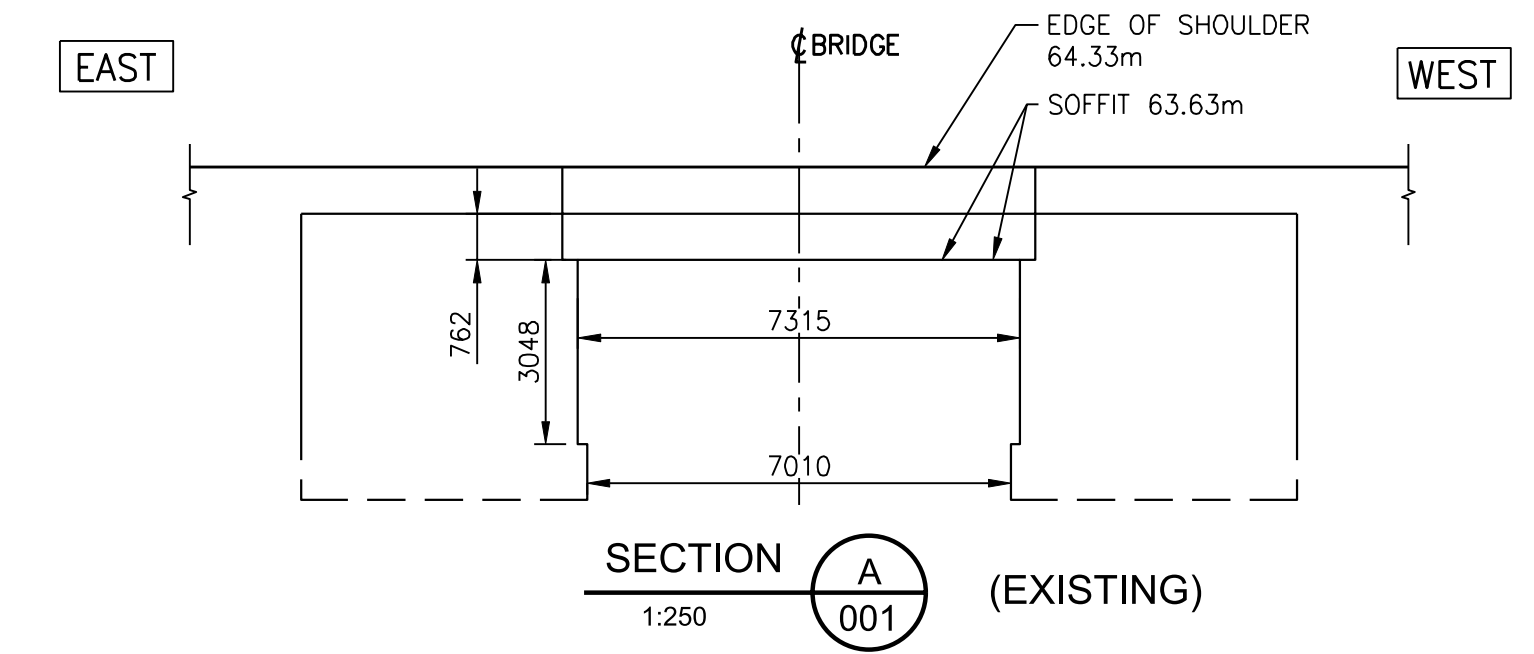
GENERAL NOTES:

- ALL DIMENSIONS ARE IN MILLIMETERS AND ELEVATIONS ARE IN METERS UNLESS OTHERWISE INDICATED.
- DESIGN LOAD - CHBDC CAN/CSA-S6-19
- DETAILS AND DIMENSIONS FOR THE EXISTING STRUCTURE SHOWN ON THIS DRAWING ARE BASED ON SITE SURVEY. THE CONTRACTORS SHALL VERIFY ALL DIMENSIONS, ELEVATIONS, AND ALL OTHER RELEVANT SITE CONDITIONS. ANY DISCREPANCIES SHALL BE REPORTED TO THE CONTRACT ADMINISTRATOR PRIOR TO COMMENCEMENT OF WORK.
- THE CONTRACTOR SHALL ENSURE THAT ALL REMOVED MATERIAL IS DISPOSED OF AT AN APPROVED SITE.
- NO IN-WATER WORK IS TO TAKE PLACE BETWEEN MARCH 15 TO JUNE 30.
- THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE LOCATION OF ANY UTILITIES WITHIN THE WORKING AREA BY CONSULTING WITH MUNICIPAL AUTHORITIES AND UTILITY COMPANIES PRIOR TO COMMENCEMENT OF WORK.
- ANY DAMAGE DURING CONSTRUCTION TO UTILITIES, ADJACENT PROPERTIES, STRUCTURES, AND THE EXISTING STRUCTURE, NOT DESIGNATED WITHIN CONTRACT LIMITS, SHALL BE REPAIRED BY THE CONTRACTOR TO THE SATISFACTION OF THE CONTRACT ADMINISTRATOR AT NO COST TO THE CITY OR UTILITY OWNERS.
- ALL AREAS AFFECTED BY CONSTRUCTION ACTIVITIES SHALL BE FULLY REINSTATED TO PRE-CONSTRUCTION OR BETTER CONDITIONS TO THE SATISFACTION OF THE CONTRACT ADMINISTRATOR.
- ALL BACKFILL TO BE COMPACTED TO 98% SPMD. BACKFILL SHALL BE PLACED SIMULTANEOUSLY ON BOTH SIDES OF THE CULVERT. AT NO TIME SHALL THE DIFFERENCE IN ELEVATION BETWEEN THE TWO FILLS EXCEED 200 mm. LAYERS OF GRANULAR BACKFILL SHALL NOT EXCEED 300 mm PRIOR TO COMPACTION.
- ALL BEDDING, SPRINGLINE, COVER AND EMBEDMENT MATERIALS TO BE COMPACTED TO 100% SPMD. LAYERS OF GRANULAR SHALL NOT EXCEED 200 mm PRIOR TO COMPACTION.
- CONCRETE POST FOUNDATION DETAIL 1/001 TO BE USED WHERE GUIDERAIL POSTS ARE OVER TOP OF STRUCTURE AND GRANULAR DEPTH IS LESS THAN 1.2 m.
- DESIGN OF PREFABRICATED STRUCTURE, CUT-OFF WALL AND WELDED WIRE MESH WINGWALL TO BE IN ACCORDANCE WITH CHBDC CAN/CSA-S6-19. SUPPLIER TO SUBMIT 3 SETS OF SHOP DRAWINGS STAMPED BY TWO PROFESSIONAL ENGINEERS OF ONTARIO TO CONTRACT ADMINISTRATOR FOR REVIEW PRIOR TO FABRICATION.
- EXISTING SIDE DITCHES SHALL BE LOCALLY ADJUSTED FOR PROPER DRAINAGE.

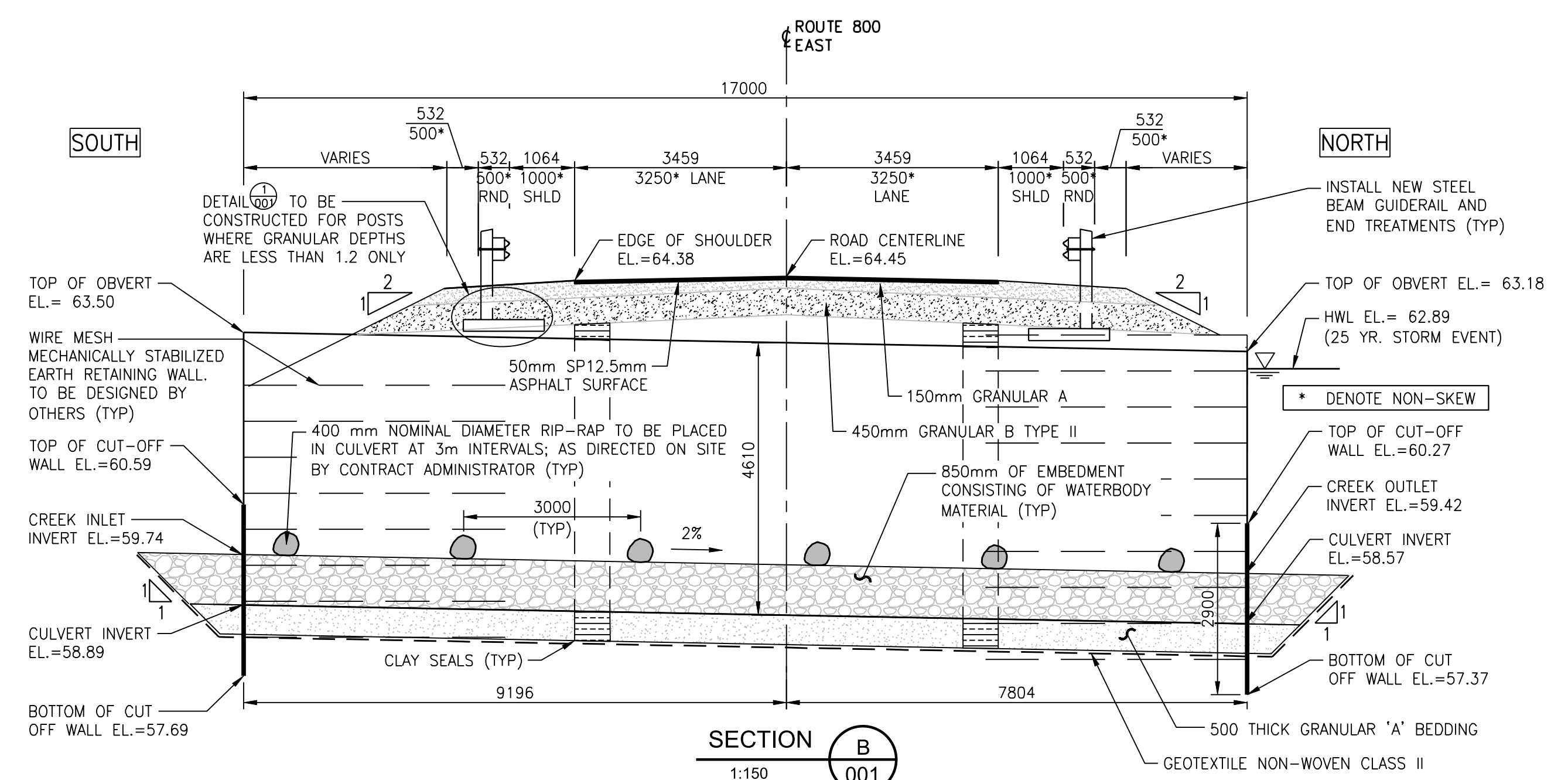


FOUNDATION NOTES

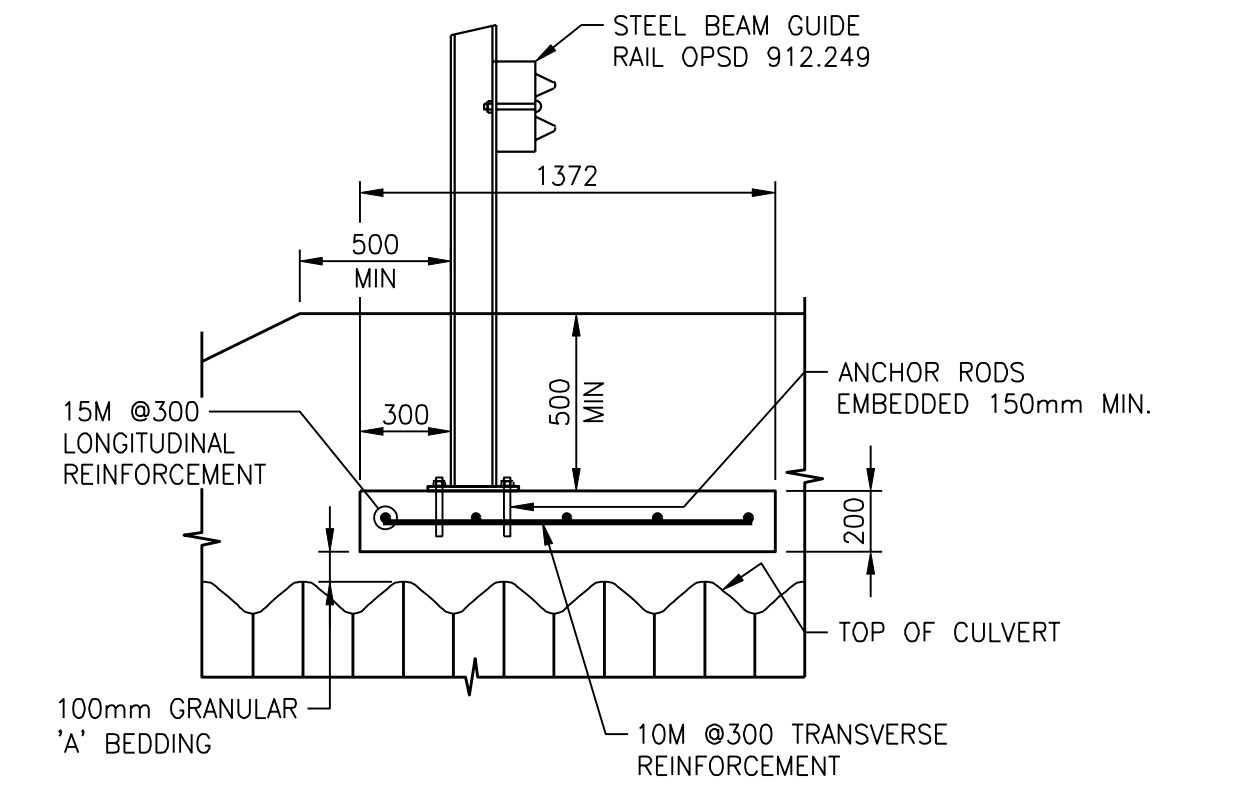
LOCATION	CONDITION	ULS (kPa)	SLS (kPa)	CONSOLIDATED SETTLEMENT (mm)
BENEATH CULVERTS	SUPPORTED ON 500mm GRANULAR 'A' PAD	117	78 (40mm SETTLEMENT)	35
BENEATH RETAINING WALLS	SUPPORTED ON 500mm GRANULAR 'A' PAD	206	137 (70mm SETTLEMENT)	35



SECTION A A
1:250 (EXISTING)



SECTION B B
1:150

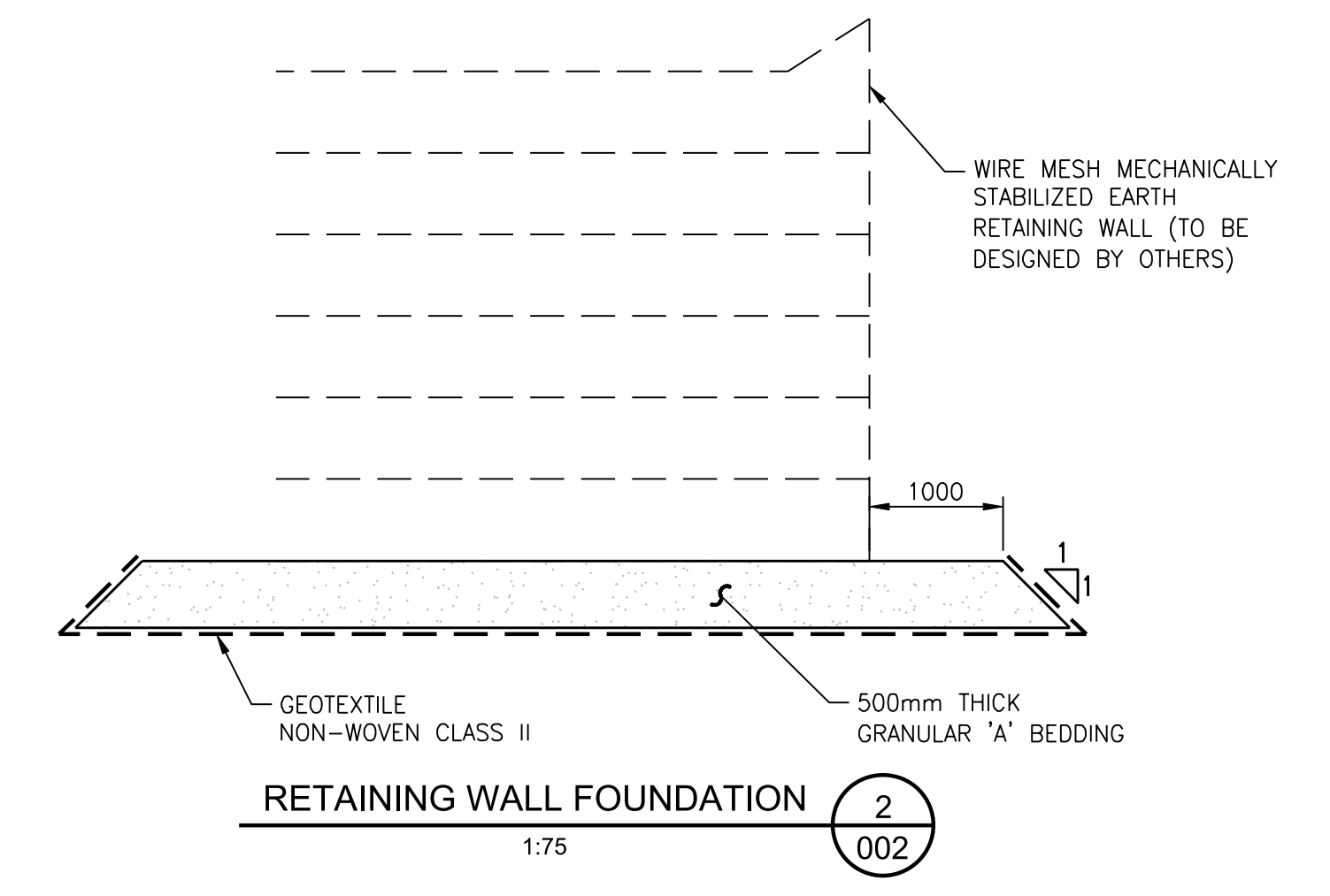
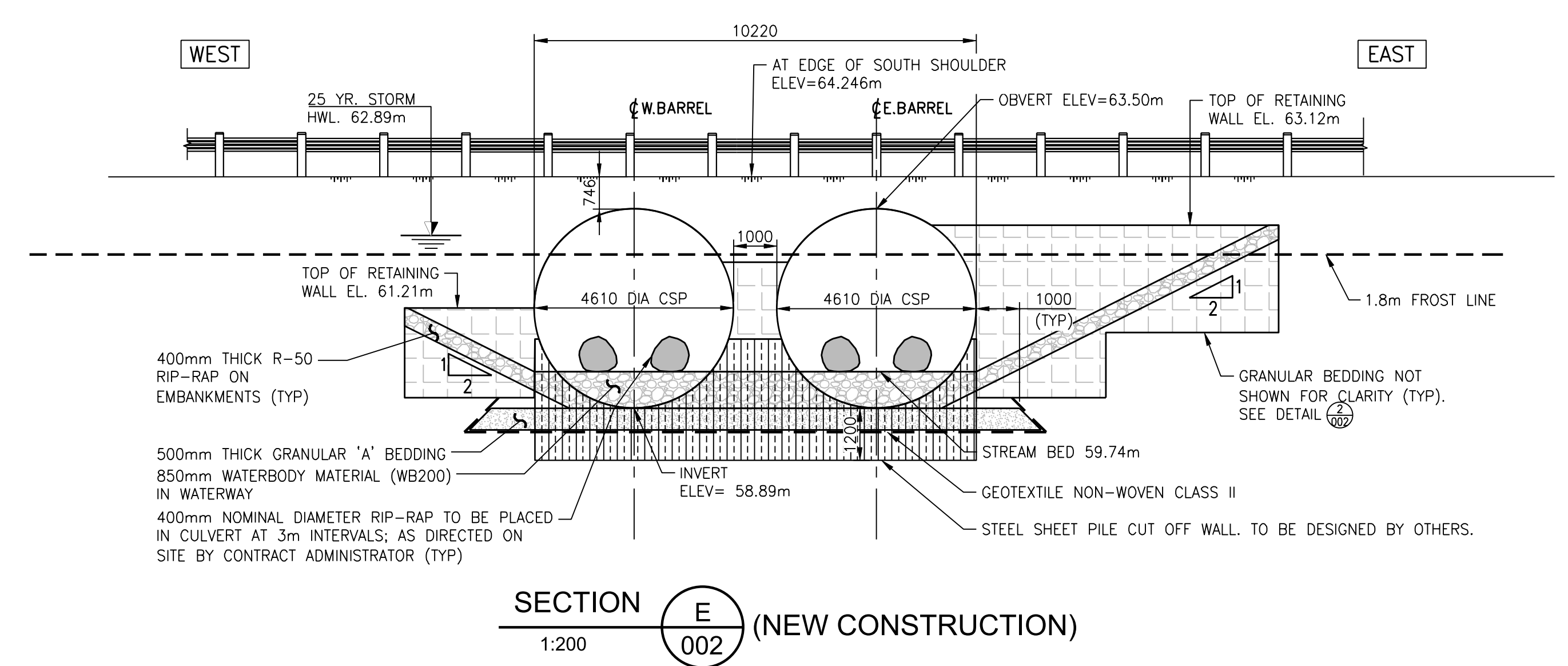
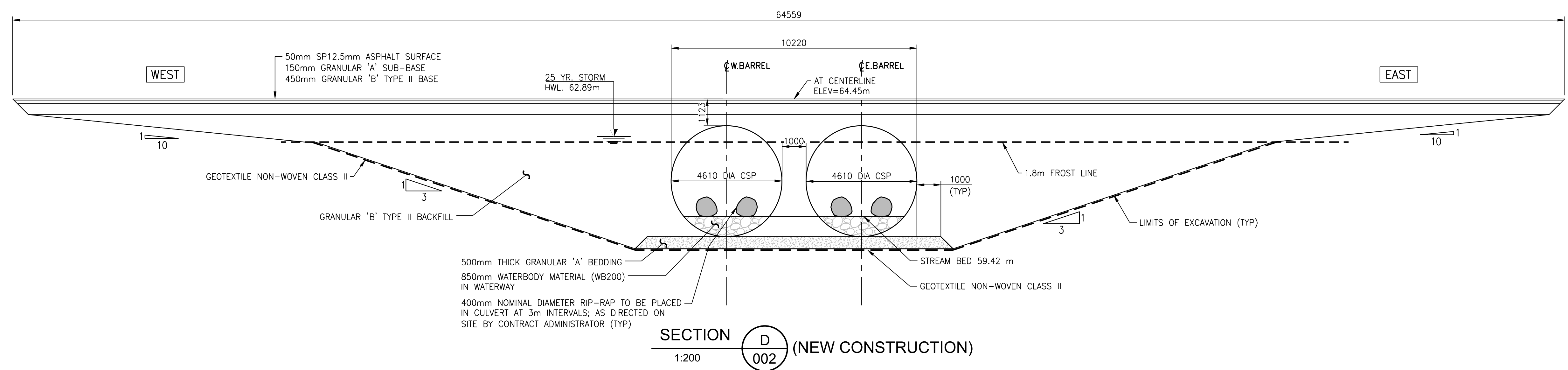
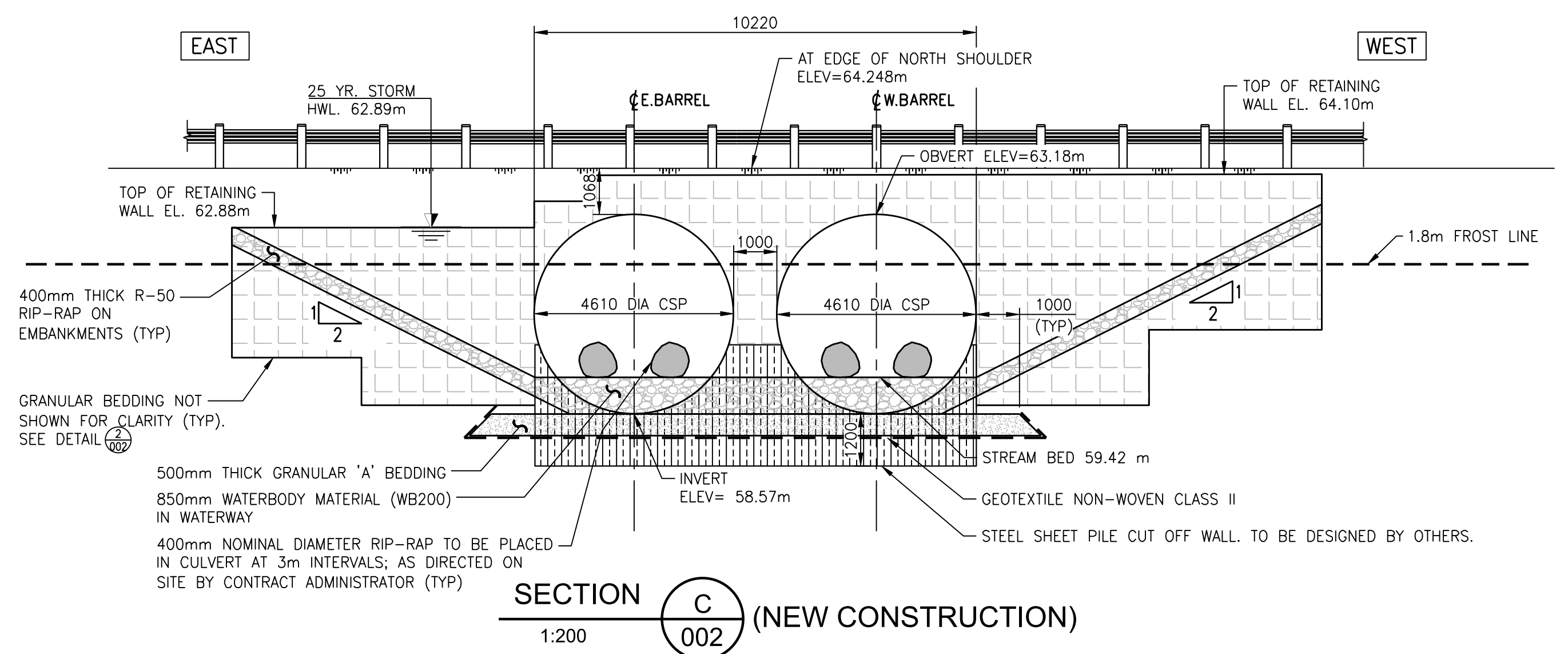


POST FOUNDATION 1 001
1:50

NOTE: NO PART OF THE GUIDERAIL SYSTEM SHALL BE CONNECTED TO THE STRUCTURE

NO.	REVISION	BY	DATE	CLIENT
1	ISSUED FOR DESIGN REVIEW	JR	15/12/23	THE NATION MUNICIPALITY
2	ISSUED FOR DESIGN REVIEW (100%)	JR	12/03/24	
				PROJECT TITLE
				ROUTE 800 EAST BUTTERNUT CREEK BRIDGE
				DRAWING TITLE
				GENERAL ARRANGEMENT

MP Proj No.		
Des.	JR	Chk. GZ
Dwn.	XZ	Chk. JR
Date:	March 12, 2024	
Scale:	AS SHOWN	



NO.	REVISION	BY	DATE	CLIENT	DWG. NO.
1	ISSUED FOR DESIGN REVIEW	JR	15/12/23	THE NATION MUNICIPALITY	003
2	ISSUED FOR DESIGN REVIEW (100%)	JR	12/03/24		SHEET 003 OF 004
				PROJECT TITLE	CONTRACT NO.
				ROUTE 800 EAST BUTTERNUT CREEK BRIDGE	
				DRAWING TITLE	
				EROSION, SEDIMENT CONTROL, AND DEWATERING PLAN	
				MP Proj No.	
				Des.	Chk.
				JR	GZ
				Dwn.	Chk.
				XZ	JR
				Date:	March 12, 2024
				Scale:	AS SHOWN

GENERAL NOTES:

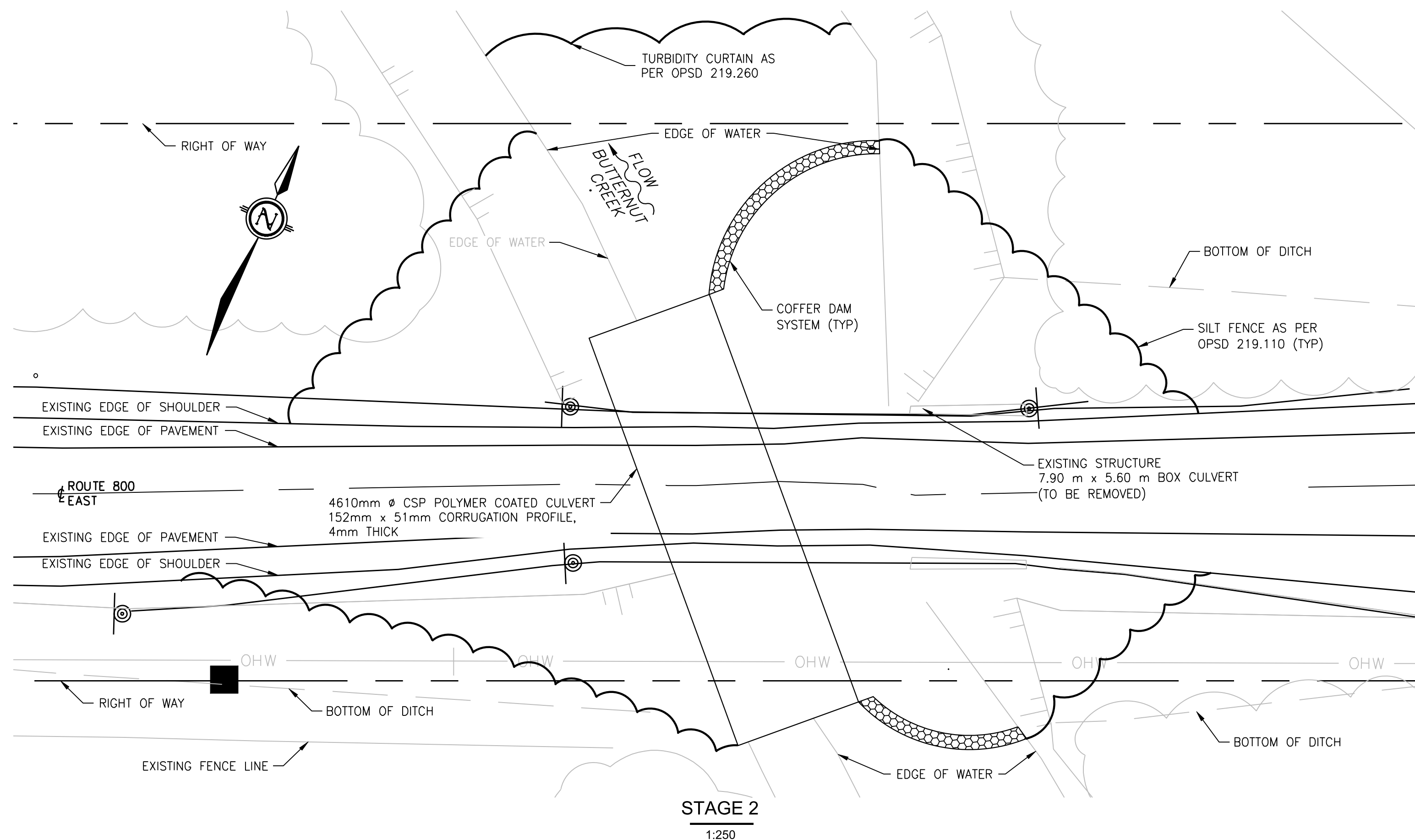
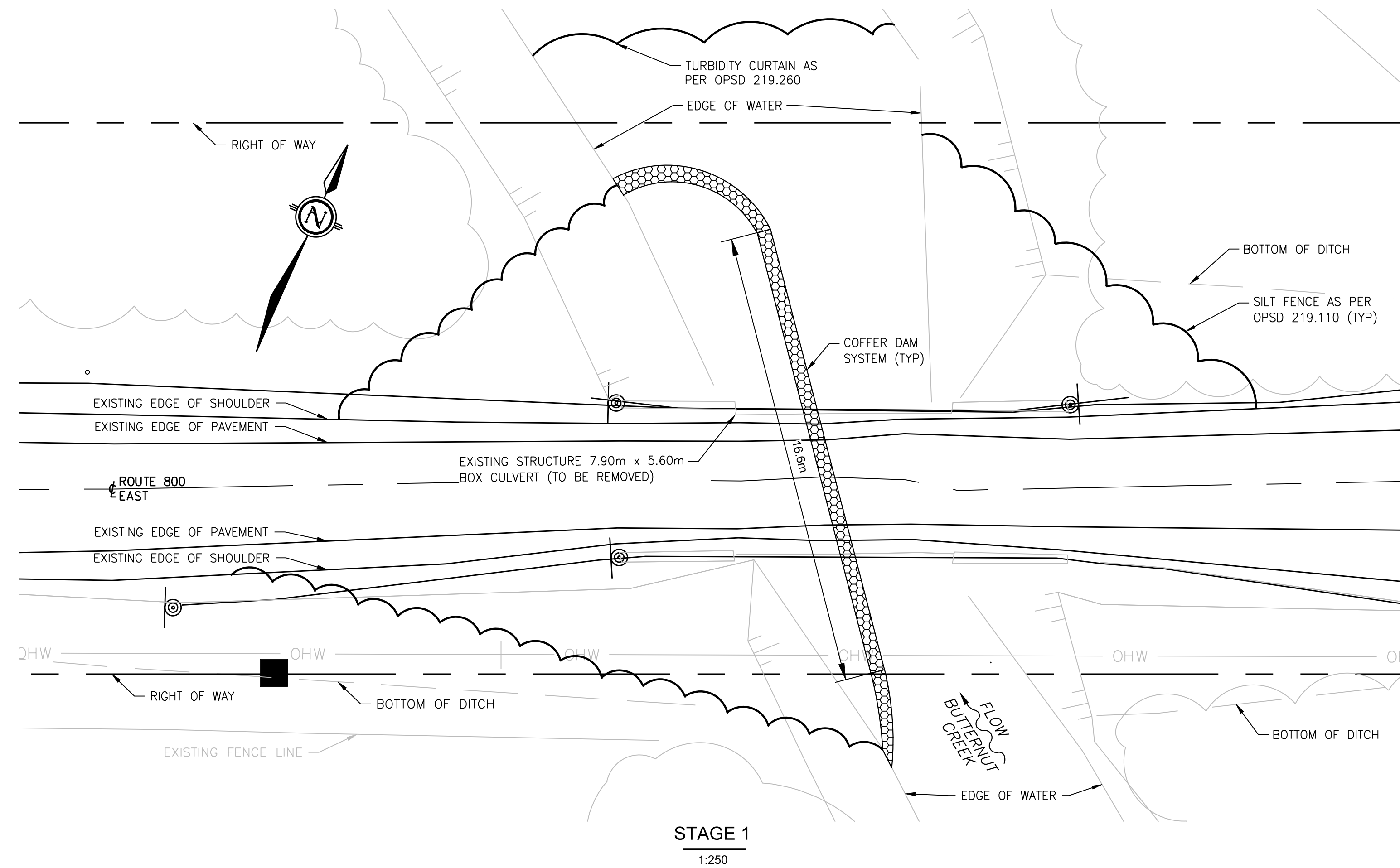
- THESE ARE SCHEMATICS ONLY. CONTRACTOR TO SUBMIT EROSION AND SEDIMENT CONTROL AND DEWATERING PLAN TO CONTRACT ADMINISTRATOR AND COUNTY FOR APPROVAL PRIOR TO CONSTRUCTION.
- SHOULD THE CONTRACTOR CHOOSE TO EMPLOY A DIFFERENT DEWATERING SCHEME, ALL APPROVALS AND PERMITS FROM THE APPROVING AGENCIES WILL BE THE CONTRACTOR'S RESPONSIBILITY, WHICH WILL INCLUDE STAMPED SHOP DRAWINGS FROM A PROFESSIONAL ENGINEER FOR DEWATERING, CONTINGENCY PLAN AND SEDIMENT AND EROSION AND CONTROL PLAN. IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO CO-ORDINATE AND APPLY FOR ANY EXTENSION(S) REQUIRED.
- THIS DESIGN IS BASED UPON THE 2 YEAR STORM. HIGH WATER LEVEL AT 2 YEAR STORM IS 62.40m.
- PUMPS SHALL NOT BE USED FOR TEMPORARY FLOW CONTROL. WATER FLOW SHALL BE BY GRAVITY ONLY.
- ALL WORK SHALL BE IN COMPLIANCE WITH OPSS 185, OPSS 517, OPSS 518., AND ANY OTHER APPLICABLE STANDARDS.
- A SEDIMENT CONTROL DEVICE WILL BE LEFT IN PLACE UNTIL THE GROUND IS STABILIZED.

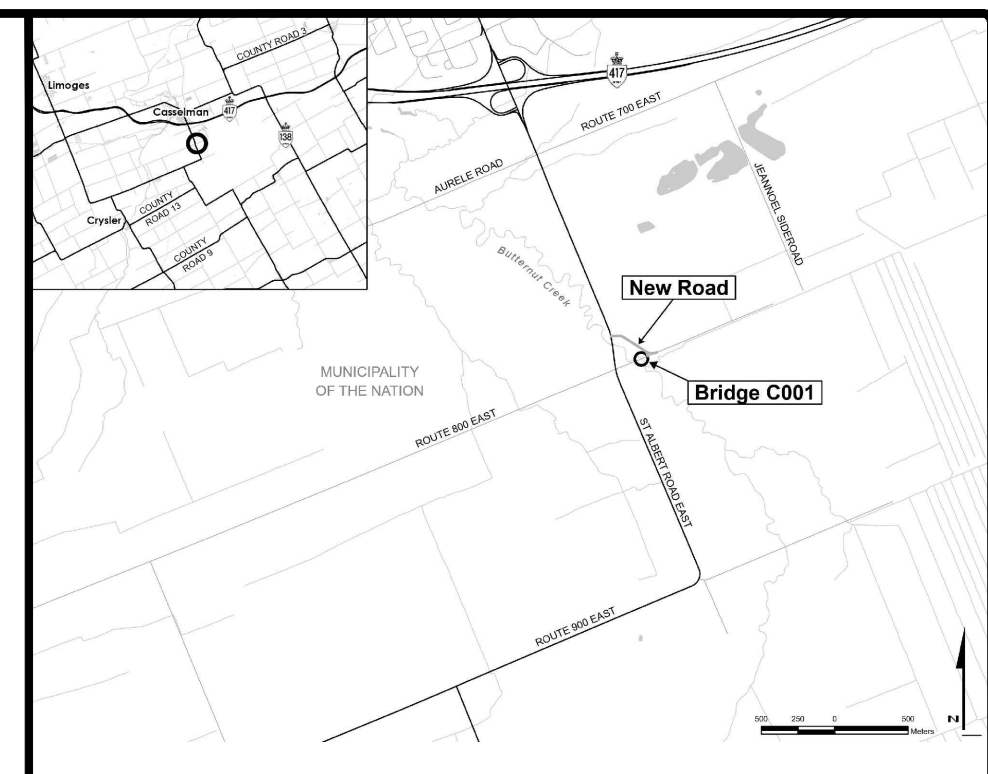
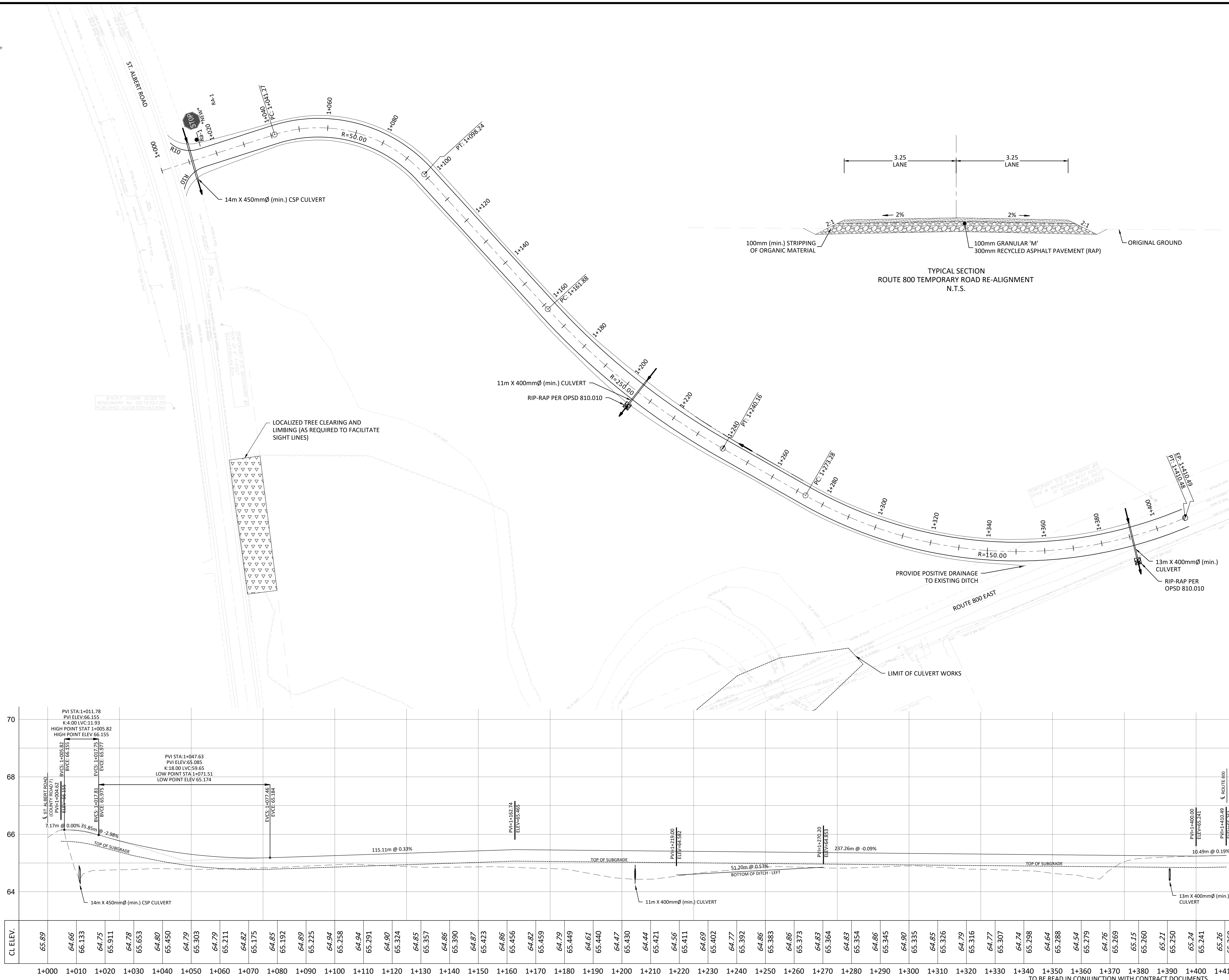
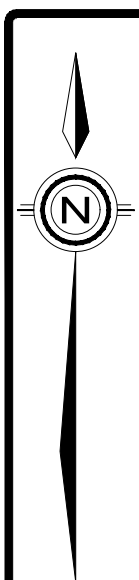
STAGE 1:

- GENERAL CONSTRUCTION SEQUENCING GUIDELINES:
 - INSTALL SILT CURTAINS UPSTREAM AND DOWNSTREAM OF WORK AREA TO FULL LIMITS OF STREAM BANKS.
 - INSTALL GEOTEXTILE DEWATERING PAD FOR PUMP-OUT OPERATIONS IN WORK AREA.
 - INSTALL COFFER DAMS (TYPE TO BE DETERMINED BY CONTRACTOR), AND TURBIDITY CURTAINS.
 - PROVIDE PUMPS TO MAINTAIN A DRY WORK AREA.
 - INSTALL DETOUR USING ADJACENT LOCAL ROADS AND THEN CLOSE ROAD.
 - DEMOLISH EXISTING STRUCTURE, ALLOWING USE OF DRY STREAMBED FOR CONSTRUCTION EQUIPMENT AND PERSONNEL.
 - EXCAVATE AND REMOVE EXISTING APPROACH FILL MATERIAL AS REQUIRED.
 - EXCAVATE FOR AND INSTALL 4.61m Ø POLYMER COATED STRUCTURAL PLATE CORRUGATED STEEL PIPE CULVERT, AND WIRE MESH MECHANICALLY STABILIZED EARTH RETAINING WALL.
 - PLACE AND COMPACT FILL MATERIAL.
 - TOPSOIL AND SEED SLOPES ON ALL DISTURBED AREAS.
 - PLACE GEOTEXTILE AND ROCK PROTECTION ON DISTURBED AREAS.

STAGE 2:

- GENERAL CONSTRUCTION SEQUENCING GUIDELINES:
 - INSTALL/MODIFY SILT CURTAINS UPSTREAM AND DOWNSTREAM OF WORK AREA TO FULL LIMITS OF STREAM BANKS.
 - INSTALL GEOTEXTILE DEWATERING PAD FOR PUMP-OUT OPERATIONS IN WORK AREA.
 - INSTALL COFFER DAMS (TYPE TO BE DETERMINED BY CONTRACTOR).
 - PROVIDE PUMPS TO MAINTAIN A DRY WORK AREA.
 - DEMOLISH REMAINING PART OF EXISTING STRUCTURE, ALLOWING USE OF DRY STREAMBED FOR CONSTRUCTION EQUIPMENT AND PERSONNEL.
 - EXCAVATE AND REMOVE EXISTING APPROACH FILL MATERIAL AS REQUIRED.
 - EXCAVATE FOR AND INSTALL 4.61 m Ø POLYMER COATED STRUCTURAL PLATE CORRUGATED STEEL PIPE CULVERT, AND WIRE MESH MECHANICALLY STABILIZED EARTH RETAINING WALL..
 - PLACE AND COMPACT FILL MATERIAL.
 - WIDEN ROAD, AND PLACE AND COMPACT GRANULARS ON ROADWAY.
 - CONSTRUCT CONCRETE FOUNDATIONS FOR GUIDERAIL OVER STRUCTURES.
 - INSTALL NEW STEEL BEAM GUIDERAIL.
 - TOPSOIL AND SEED SLOPES AND ALL DISTURBED AREAS.
 - PLACE GEOTEXTILE AND ROCK PROTECTION ON DISTURBED AREAS.
 - REMOVE COFFER DAMS AND TURBIDITY CURTAINS.
 - REMOVE UPSTREAM AND DOWNSTREAM SILT CURTAINS.
 - REMOVE DETOUR AND OPEN ROAD.
 - REMOVE EROSION CONTROL MEASURES.





No.	Revision/Issue	Date
2	ISSUED FOR DESIGN REVIEW (100%)	12/03/24
1	ISSUED FOR DESIGN REVIEW	15/12/23

Check and verify all dimensions before proceeding with the work. Do not scale drawings.

egis
 info.north-america@egis-group.com
 www.egis-group.com

115 Walgreen Road, RR 3
 Carp, ON K0A 1L0
 Tel: 613-836-2184 Fax: 613-836-3742

Stamp:

Client: **THE NATION MUNICIPALITY**

Project: **ROUTE 800 EAST BUTTERNUT CREEK BRIDGE**

Drawing Title: **ROUTE 800 TEMPORARY ROAD RE-ALIGNMENT**

Scale: H 1:600, V 1:60

Project Number: -

Drawn by: CG

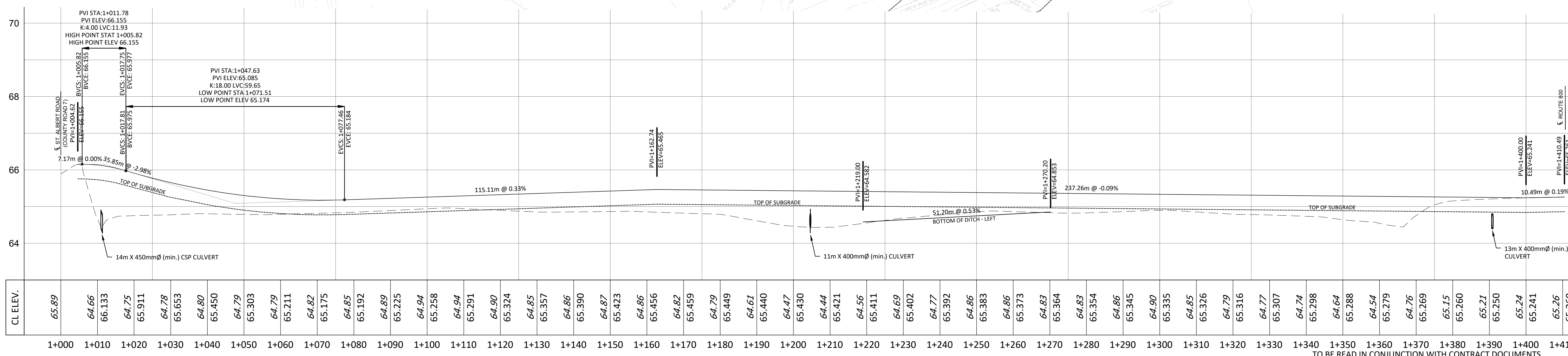
Checked By: AS

Designed By: AS & CG

Date: March 12, 2024

Drawing Number: -

SHEET 4 of 4



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