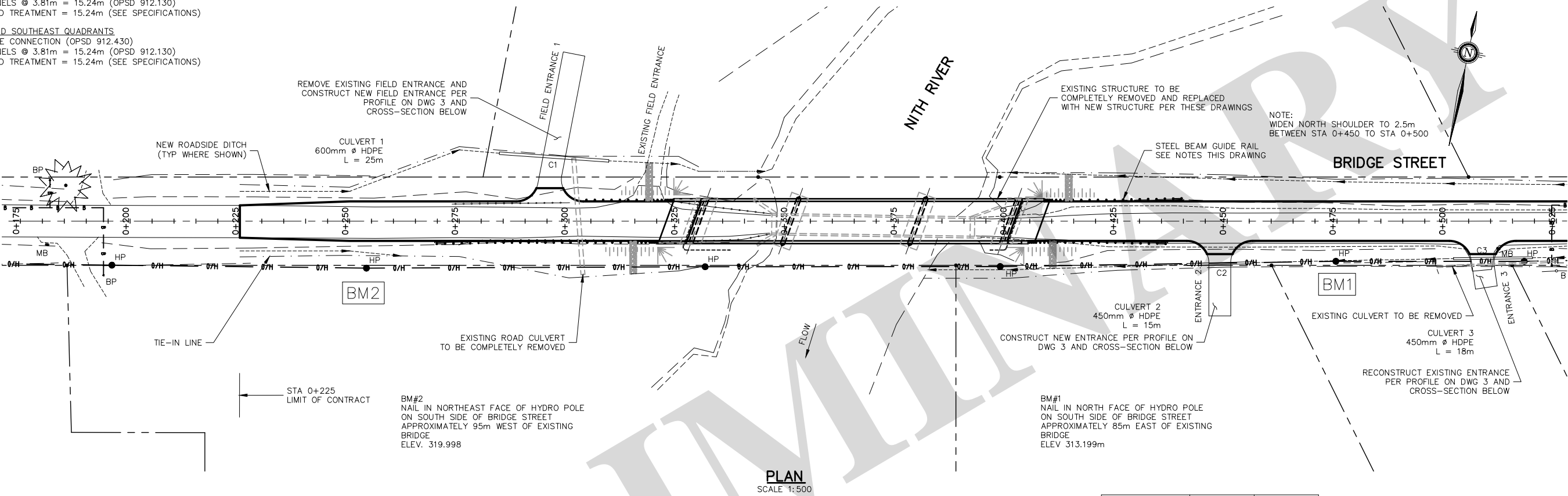
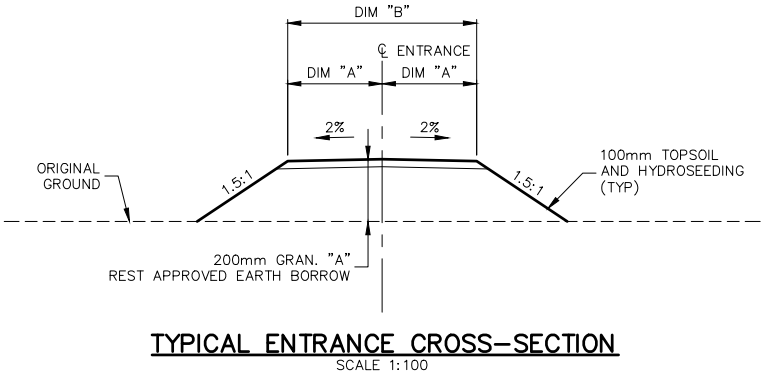
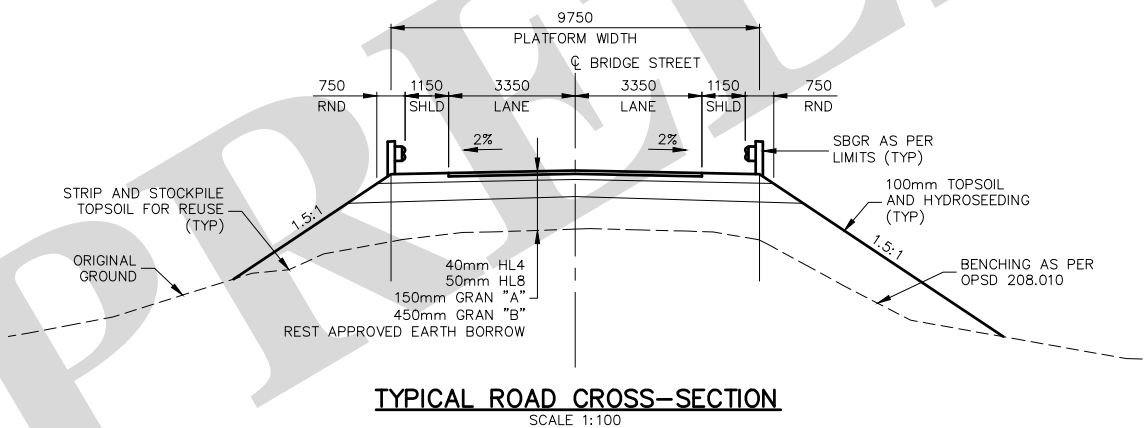


STEEL BEAM GUIDE RAIL WITH CHANNEL

- NORTHWEST QUADRANT
1 - STRUCTURE CONNECTION (OPSD 912.430)
9 - SBGR PANELS @ 3.81m = 34.29m (OPSD 912.130)
1 - LEAVING END TREATMENT = 3.81m (OPSD 912.235)
- NORTHEAST QUADRANT
1 - STRUCTURE CONNECTION (OPSD 912.430)
4 - SBGR PANELS @ 3.81m = 15.24m (OPSD 912.130)
1 - SBEAT END TREATMENT = 15.24m (SEE SPECIFICATIONS)
- SOUTHWEST AND SOUTHEAST QUADRANTS
1 - STRUCTURE CONNECTION (OPSD 912.430)
4 - SBGR PANELS @ 3.81m = 15.24m (OPSD 912.130)
1 - SBEAT END TREATMENT = 15.24m (SEE SPECIFICATIONS)



LOCATION	DIM "A"	DIM "B"
FIELD ENTRANCE 1	2.5m	5.0m
ENTRANCE 2	1.75m	3.5m
ENTRANCE 3	2.5m	5.0m
FIELD ENTRANCE 4	2.5m	5.0m

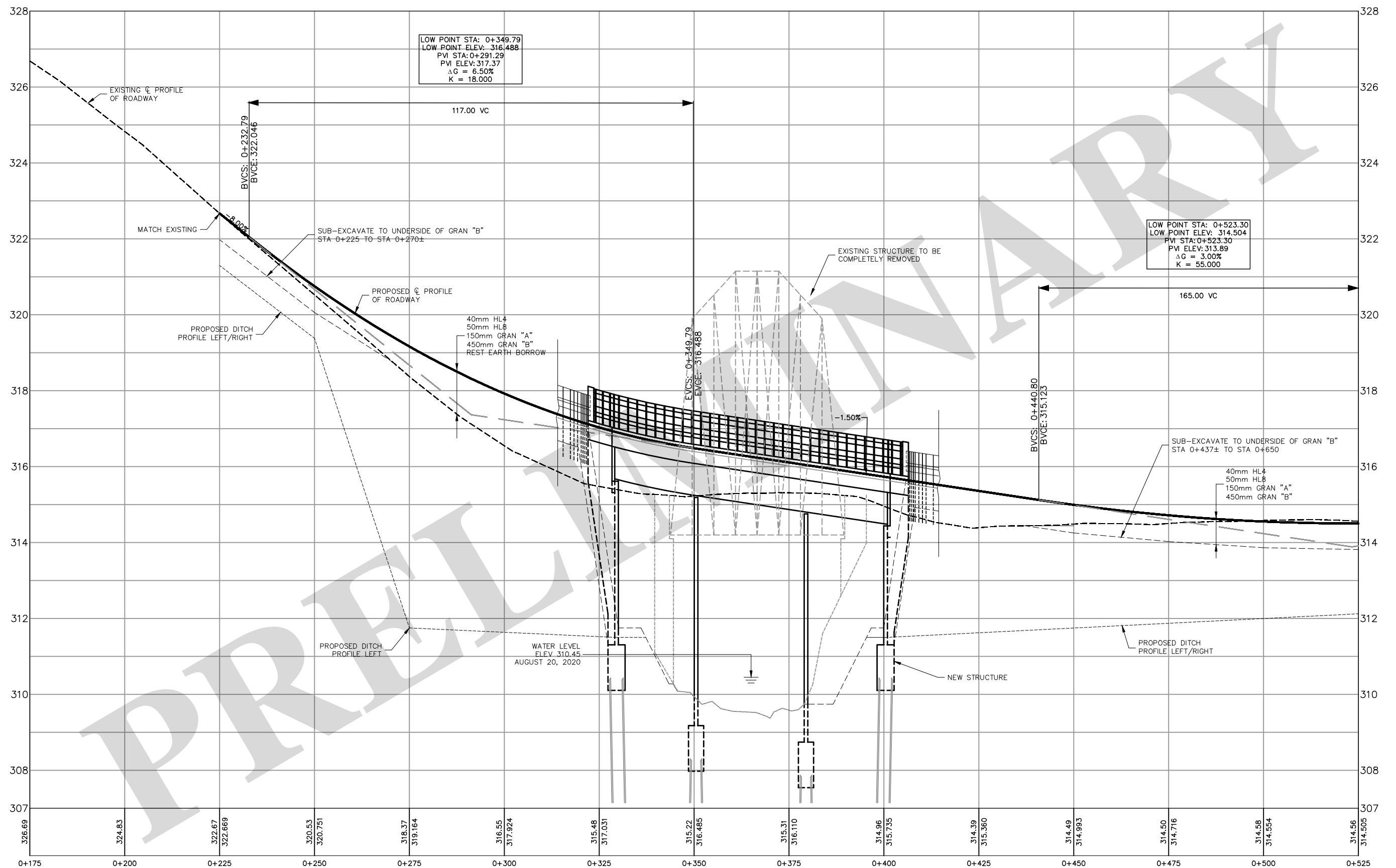


No.	REVISION	DATE	DESIGNED BY: A.G.
1.	ISSUED FOR PIC	OCT 1/21	CHECKED BY: P.M.
			DRAWN BY: J.A.
			CHECKED BY: A.G.
			FIELD BOOK:

SCALE
1:500
5.0m 0 10m (ON 24 x 36 PAPER)

BRIDGE 34/B-T9 REPLACEMENT
TOWNSHIP OF WILMOT
REGION OF WATERLOO
PLAN

	K. SMART ASSOCIATES LIMITED	JOB NUMBER 20-145
	CONSULTING ENGINEERS AND PLANNERS	DATE OCTOBER 2021
	KITCHENER	DRAWING NUMBER 1
	SUDBURY	



No.	REVISION	DATE	DESIGNED BY: A.G.
1.	ISSUED FOR PIC	OCT 1/21	CHECKED BY: P.M.
			DRAWN BY: J.A.
			CHECKED BY: A.G.
			FIELD BOOK:

SCALE

BRIDGE 34/B-T9 REPLACEMENT

TOWNSHIP OF WILMOT

REGION OF WATERLOO

PROFILE - STA 0+175 TO STA 0+525



K. SMART ASSOCIATES LIMITED
 CONSULTING ENGINEERS AND PLANNERS
 KITCHENER SUDBURY

JOB NUMBER

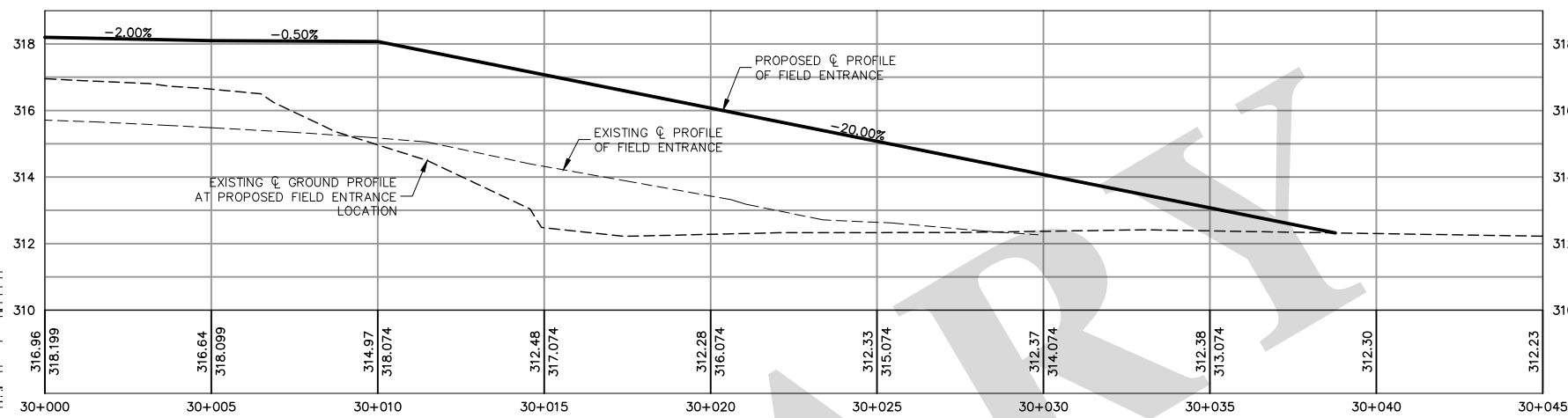
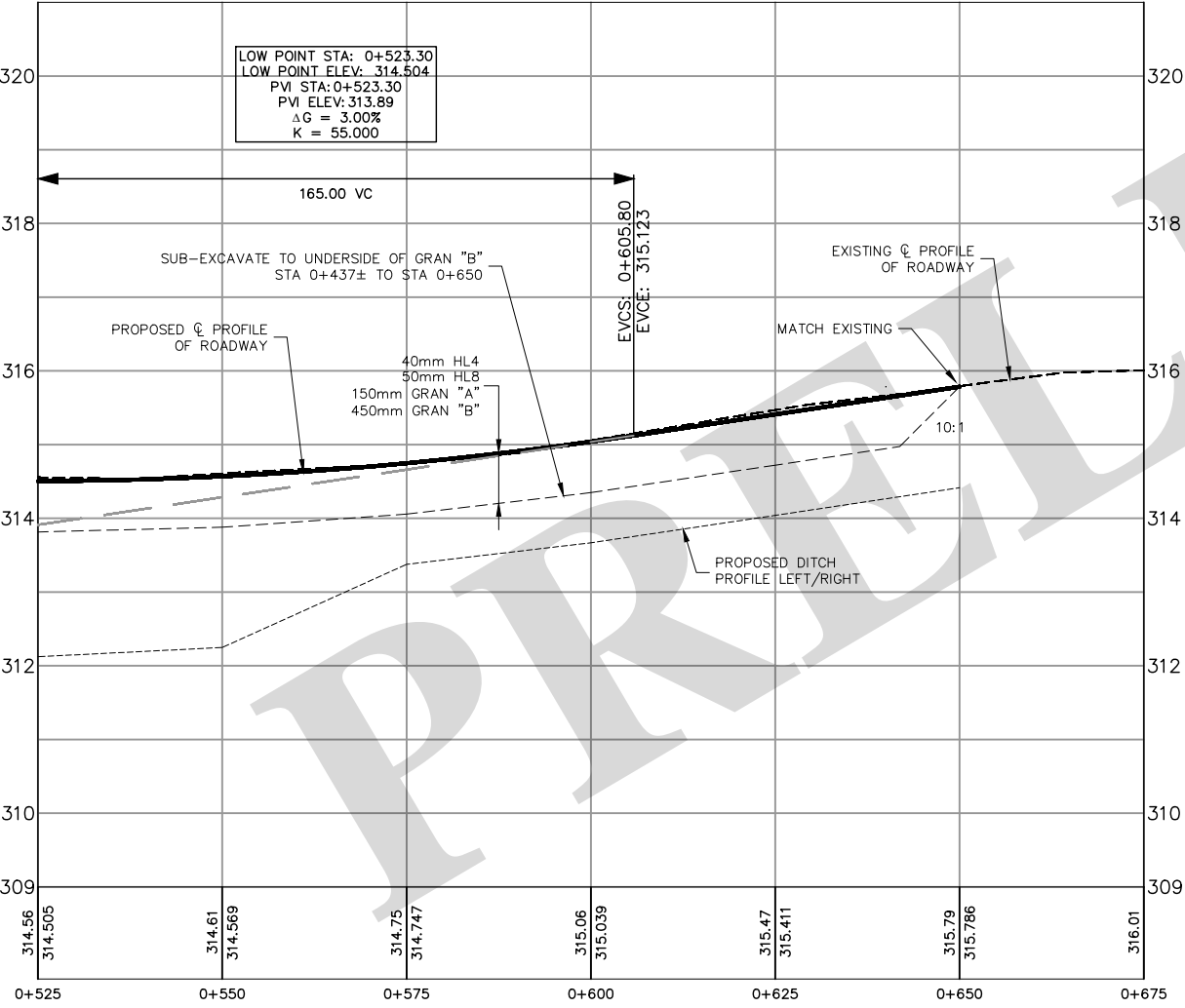
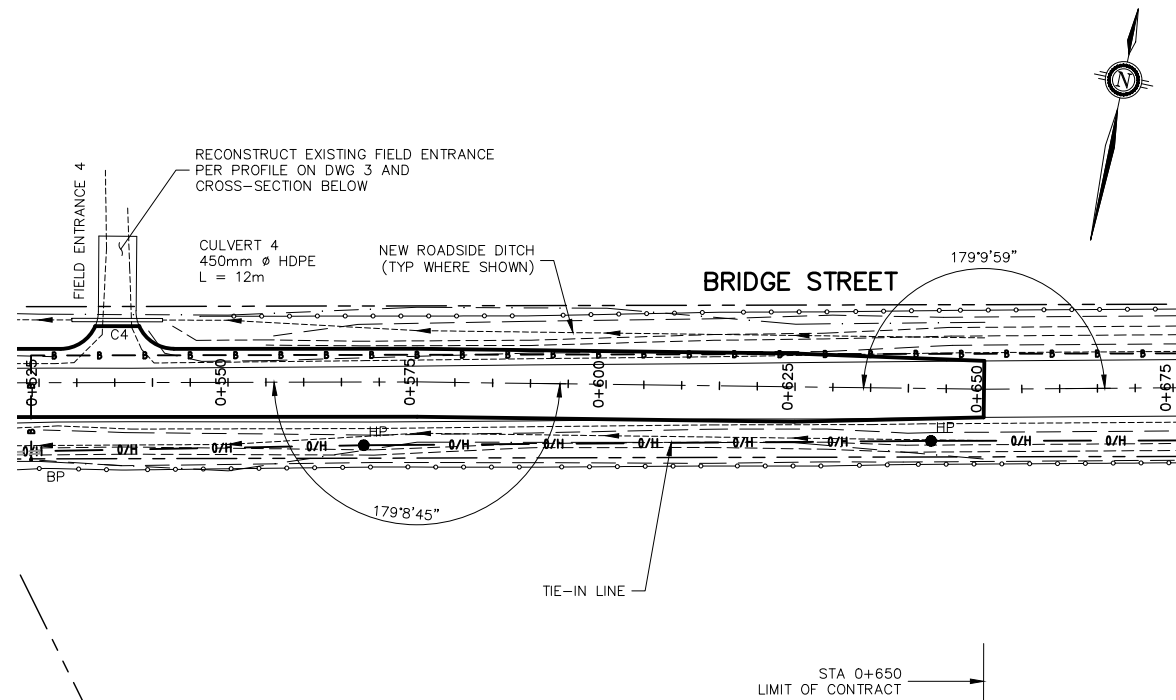
20-145

DATE

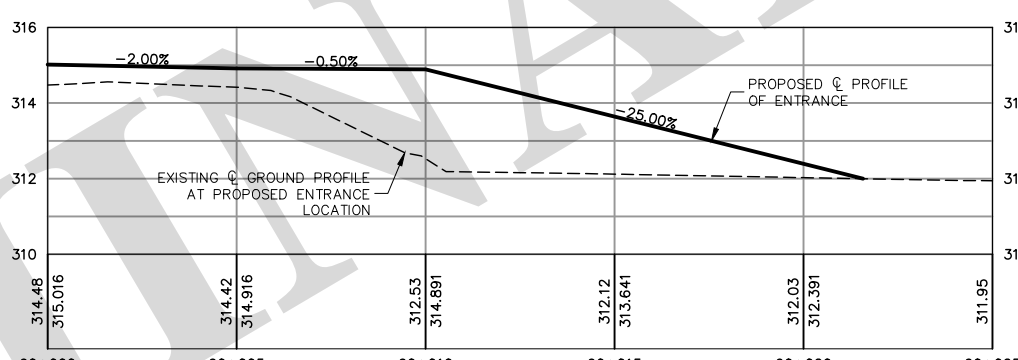
OCTOBER 2021

DRAWING NUMBER

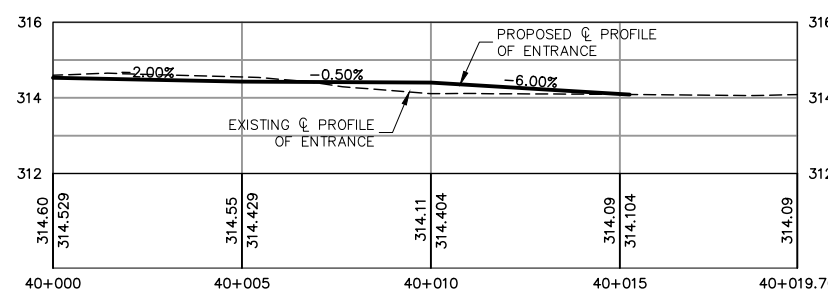
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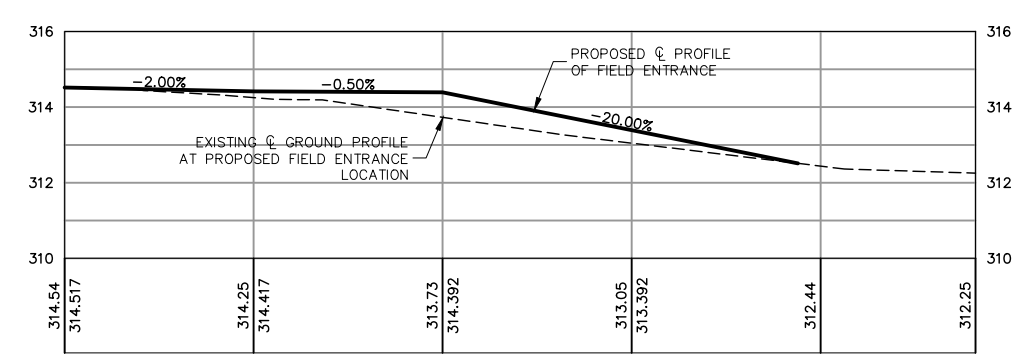
FIELD ENTRANCE 1 PROFILE
SCALE 1:100



ENTRANCE 2 PROFILE
SCALE 1:100



ENTRANCE 3 PROFILE
SCALE 1:100



FIELD ENTRANCE 4 PROFILE
SCALE 1:100

No.	REVISION	DATE	DESIGNED BY: A.G.	SCALE						JOB NUMBER
1.	ISSUED FOR PIC	OCT 1/21	CHECKED BY: P.M.							20-145
			DRAWN BY: J.A.							DATE
			CHECKED BY: A.G.							OCTOBER 2021
			FIELD BOOK:							DRAWING NUMBER
										3

BRIDGE 34/B-T9 REPLACEMENT

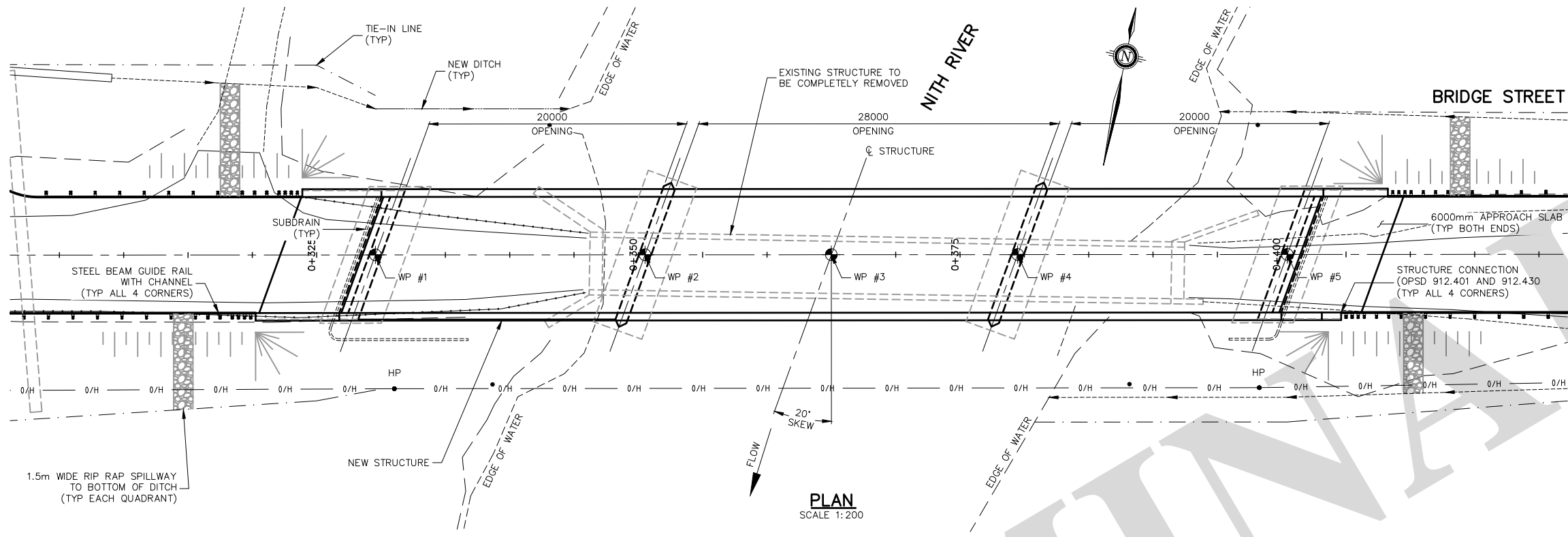
TOWNSHIP OF WILMOT

REGION OF WATERLOO

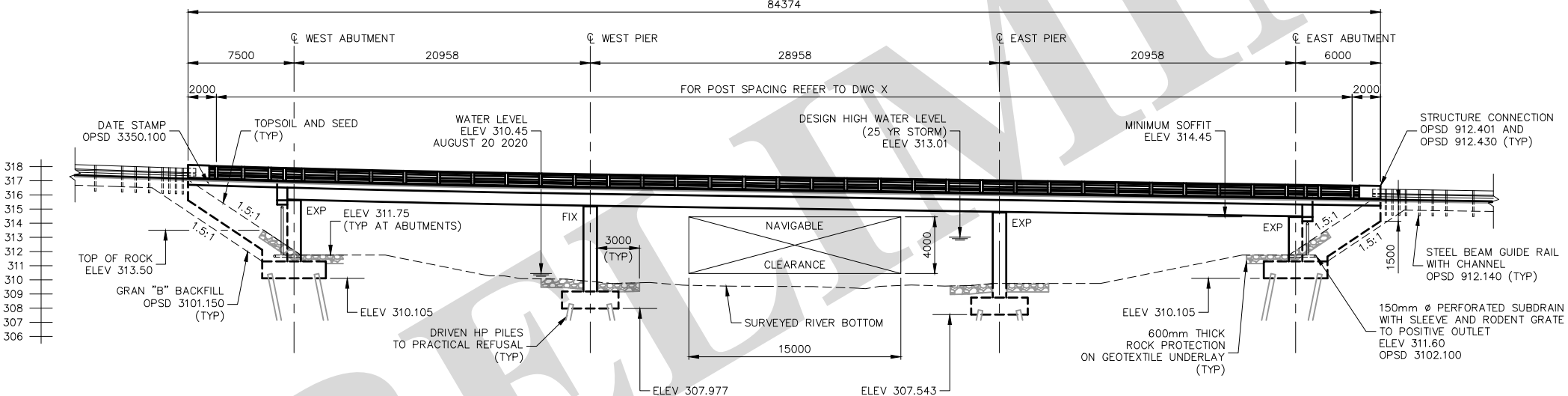
PLAN AND PROFILE - STA 0+525 TO STA 0+690



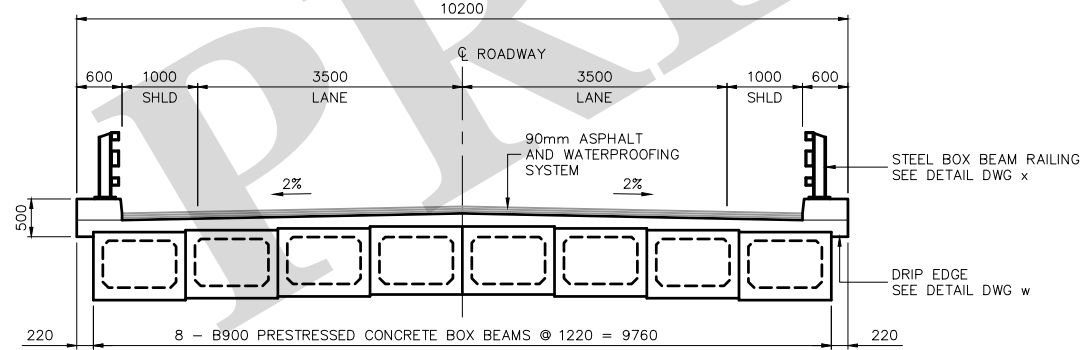
K. SMART ASSOCIATES LIMITED
CONSULTING ENGINEERS AND PLANNERS
KITCHENER SUDBURY



PLAN
SCALE 1:200



ELEVATION
SCALE 1:200



DECK CROSS SECTION
SCALE 1:50

	WP #1	WP #2	WP #3	WP #4	WP #5
STATION	0+329.563	0+350.521	0+365.000	0+379.479	0+400.437
ELEVATION	316.905	316.477	316.260	316.043	315.728

NOTE: WORKING POINT ELEVATIONS GIVEN TO TOP OF ASPHALT

GENERAL NOTES

- STRUCTURE DESIGNED FOR CL-625 (ONT) LOADING PLUS 90mm ASPHALT AND WATERPROOFING SYSTEM IN ACCORDANCE WITH THE CANADIAN HIGHWAY BRIDGE DESIGN CODE 2019.
- WORK ON THE STRUCTURE MUST NOT BE COMMENCED UNTIL MONUMENTS TO FIX CONTROL POINTS HAVE BEEN ERECTED AND CHECKED BY THE CONTRACT ADMINISTRATOR
- STRUCTURE TO BE BUILT IN ACCORDANCE WITH THE MOST CURRENT OPS SPECIFICATIONS AND DRAWINGS AS WELL AS THE CONTRACT ADMINISTRATORS SPECIFICATIONS.
- THE COMPLETE SOIL INVESTIGATION REPORT BY PETO MACCALLUM LTD. FORM PART OF THE CONTRACT DOCUMENTS. THE ENGINEER DOES NOT GUARANTEE THE ACCURACY OF THIS REPORT. THE CONTRACTOR SHALL REVIEW THE REPORT AND DETERMINE HIS OWN METHOD TO CONTROL GROUND WATER DURING THE CONSTRUCTION.
- THE CONTRACTOR SHALL CHECK AND VERIFY ALL DIMENSIONS ON THE JOB AND REPORT ANY DISCREPANCIES TO THE CONTRACT ADMINISTRATOR BEFORE PROCEEDING WITH THE WORK
- CLASS OF CONCRETE:
CAST-IN-PLACE CONCRETE 35 MPA C-1 MIX
PRESTRESSED CONCRETE REFER TO RELEVANT DRAWINGS
ALL CONCRETE SHALL INCLUDE AN APPROVED AIR ENTRAINING ADMIXTURE
- CLEAR COVER TO REINFORCING STEEL
FOOTINGS 100 ± 25mm
REMAINDER (UNLESS NOTED OTHERWISE) 70 ± 20mm
- REINFORCING STEEL SHALL BE GRADE 400. BARS MARKED WITH A POSTFIX "S" DENOTE STAINLESS STEEL BARS. UNLESS OTHERWISE SHOWN, TENSION LENGTH LAPS NOT INDICATED ON THE CONTRACT DRAWINGS SHALL BE CLASS "B". BAR HOOKS SHALL BE MINIMUM LENGTH AND STIRRUPS SHALL HAVE MINIMUM HOOKS, UNLESS INDICATED OTHERWISE.
- STAINLESS STEEL BARS SHALL BE TYPE 316 LN OR DUPLEX 2205 WITH A MINIMUM YIELD STRENGTH OF 500 MPA.
- MINIMUM LAP OF REINFORCING STEEL SHALL BE IN ACCORDANCE WITH THE CHBDC (2019)
- ALL CONCRETE SHALL BE PLACED IN THE DRY.
- NO CONCRETE SHALL BE PLACED BEFORE MATERIALS, FORMWORK AND REINFORCING STEEL HAVE BEEN CHECKED BY THE CONTRACT ADMINISTRATOR
- ALL EXPOSED EDGES TO BE CHAMFERED 19mm UNLESS OTHERWISE NOTED. ALL ACUTE ANGLES SHALL BE FILLETED AS NOTED.
- CONSTRUCTION JOINTS NOT SHOWN ON THE PLANS MUST BE APPROVED BY THE CONTRACT ADMINISTRATOR.
- BEARING SEATS SHALL BE FINISHED DEAD LEVEL TO THE SPECIFIED ELEVATIONS TO A TOLERANCE OF ±3mm.
- THE BRIDGE DECK SHALL BE FINISHED USING AN APPROVED FINISHING MACHINE IN ACCORDANCE WITH OPS.MUNI 904.
- ANY EXCAVATED OR IMPORTED MATERIAL SHALL BE STOCKPILED WELL AWAY FROM THE EDGE OF THE EXCAVATION AND AT APPROVED LOCATIONS.
- NO BACKFILL SHALL BE PLACED UNLESS APPROVED BEFOREHAND BY THE CONTRACT ADMINISTRATOR. NATIVE MATERIAL SHALL NOT BE REMOVED FROM THE CONSTRUCTION SITE WITHOUT WRITTEN APPROVAL FROM THE CONTRACT ADMINISTRATOR.
- ROCK PROTECTION SHALL BE 300mm NOMINAL SIZE WITH 50% LARGER THAN 300mm AND 50% SMALLER THAN 300mm. ROCK PROTECTION SHALL BE PLACED ON GEOTEXTILE UNDERLAY.

SUGGESTED SEQUENCE OF CONSTRUCTION

- YEAR 1
- DEMOLISH EXISTING BRIDGE
 - CONSTRUCT PIERS TO BEARING SEAT ELEVATIONS
 - CONSTRUCT ABUTMENTS AND WINGWALLS TO BEARING SEAT ELEVATIONS
 - PLACE BACKFILL AND ROCK PROTECTION AS REQUIRED
 - PLACE GIRDERS
- YEAR 2
- CONSTRUCT BRIDGE DECK AND WINGWALL TOPS
 - PLACE REMAINING BACKFILL
 - CONSTRUCT APPROACH SLABS, CURBS AND END POSTS
 - ERECT BRIDGE RAILING
 - COMPLETE ROAD RECONSTRUCTION INCLUDING GUIDE RAIL
 - WATERPROOF BRIDGE DECK AND PAVE ROADWAY APPROACHES
 - COMPLETE ANY REMAINING RESTORATION WORK

No.	REVISION	DATE	DESIGNED BY: A.G.	SCALE	BRIDGE 34/B-T9 REPLACEMENT TOWNSHIP OF WILMOT REGION OF WATERLOO GENERAL ARRANGEMENT	JOB NUMBER 20-145 DATE OCTOBER 2021 DRAWING NUMBER 4
1.	ISSUED FOR PIC	OCT 1/21	CHECKED BY: P.M.			
			DRAWN BY: J.A.			
			CHECKED BY: A.G.			
			FIELD BOOK:			

