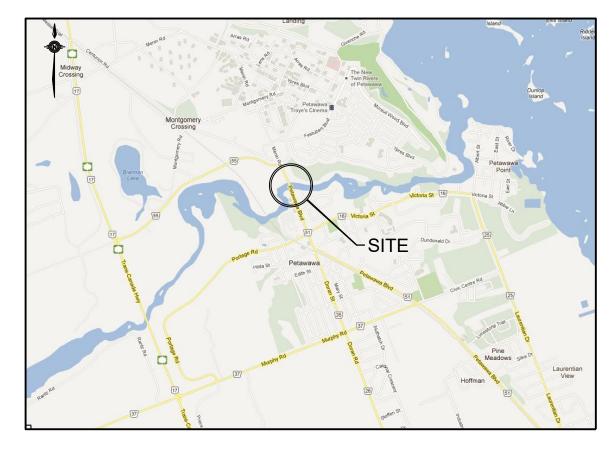
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LEE PERKINS, MBA, C.E.T. DIRECTOR OF PUBLIC WORKS AND ENGINEERING



R-05

R-06

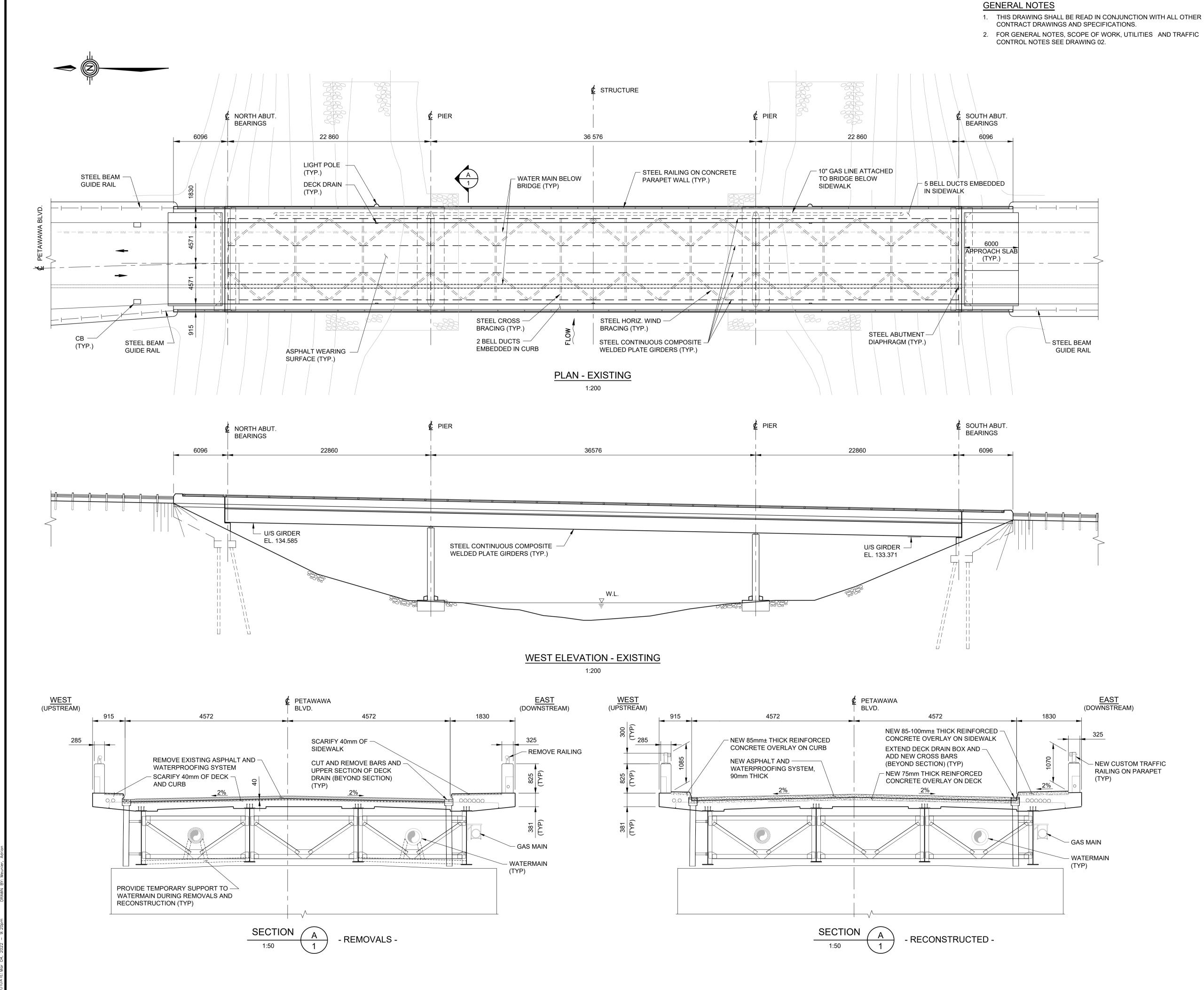
REHABILITATION OF B-203 (PETAWAWA RIVER BRIDGE)

COUNTY ROAD 51 (PETAWAWA BOULEVARD) TOWN OF PETAWAWA

CONTRACT No. PWC 2021-56

LIST OF DRAWING

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ABUTMENT RECONSTRUCTION
ABUTMENT RECONSTRUCTION - DETAILS
ABUTMENT REINFORCING
ABUTMENT SHEAR KEY
DECK REMOVALS
DECK REMOVALS - DETAILS
DECK RECONSTRUCTION
DECK RECONSTRUCTION DETAILS
DECK REINFORCING
APPROACH SLAB RECONSTRUCTION
STRIP SEAL EXPANSION JOINT TYPE C DETAILS
STRIP SEAL EXPANSION JOINT ASSEMBLY FOR
PARAPET WALL TRAFFIC RAILING
DETAILS - CONCRETE REPAIRS
STRUCTRAL STEEL REPAIRS COATING AND
BEARING REFURBISHMENT DETAIL
CONTROL JOINT AND ASPHALT JOINT DETAILS
WATERMAIN SUPPORT DETAILS
DECK DRAIN
ROADWAY CONSTRUCTION STAGE 1
ROADWAY CONSTRUCTION STAGE 2
ROADWAY CONSTRUCTION - REMOVALS
ROADWAY CONSTRUCTION - NEW
ROADWAY CONSTRUCTION PAVEMENT MARKING







000-2011 WA (ONTARIO) CANADA K2B 8K2 TELEPHONE: 613-829-2800 FAX: 613-829-8299 WWW.WSP.COM

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PP	PROGRESS PRINT		04/03/22	AEM
2	ISSUED FOR 90% RE	EVIEW	26/02/22	ZFW
01	ISSUED FOR REVIEW	V	21/01/22	Z.F.W.
#	REVISIONS		DATE	NAME

THE CORPORATION OF THE COUNTY OF RENFREW DEPARTMENT OF PUBLIC WORKS AND ENGINEERING 9 INTERNATIONAL DRIVE PEMBROKE ONTARIO K8A 6W5 613-732-4353



PROJECT:

PETAWAWA RIVER BRIDGE (B203) REHABILITATION PWC 2021-56

DRAWING:

GENERAL ARRANGEMENT

DESIGN BY:	DRAWN BY:
Z.F.W.	A.E.M.
CHECKED BY:	APPROVED BY:
DATE DRAWN :	PROJECT # :
FEB 2022	211-13633-00
SCALE:	DRAWING # :
HOR. AS SHOWN	01
VERT. AS SHOWN	UT
DATE PRINTED :	FILE # :
March 4, 2022	PWC-2021-56
	OF

- 1. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH ALL OTHER CONTRACT DRAWINGS AND SPECIFICATIONS.
- 2. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND ELEVATIONS PRIOR TO COMMENCEMENT OF ANY WORK. ANY DISCREPANCIES SHALL BE PROMPTLY REPORTED TO THE CONTRACT ADMINISTRATOR.
- 3. CLASS OF CONCRETE: 35 MPa, UNLESS NOTED OTHERWISE
- 4. CLEAR COVER TO REINFORCING STEEL: 70 ± 20mm, UNLESS NOTED OTHERWISE
- 5. REINFORCING STEEL SHALL BE GRADE 400 W. THE PREFIX 'G' DENOTES GALVANIZED REINFORCING, THE PREFIX 'S' DENOTES STAINLESS STEEL REINFORCING. WHERE GALVANIZED REINFORCING STEEL IS SPECIFIED, IT CAN BE REPLACED WITH STAINLESS STEEL.
- 6. NO BLACK REINFORCING STEEL OR BLACK WELDED WIRE FABRIC ARE PERMITTED ON THIS CONTRACT, UNLESS NOTED IN STANDARD OR OPSD DRAWING
- 7. ALL HOOKS FOR REINFORCING STEEL SHALL BE STANDARD HOOKS IN ACCORDANCE WITH RSIC, LATEST EDITION, UNLESS NOTED OTHERWISE.
- 8. ALL SPLICES SHALL BE CLASS 'B' TENSION LAP SPLICES IN ACCORDANCE WITH RSIC, LATEST EDITION, UNLESS NOTED OTHERWISE.
- 9. ALL WELDING SHALL CONFORM TO CSA STANDARD W59.
- 10. GALVANIZING SHALL BE IN ACCORDANCE WITH CSA STANDARD G-164.
- 11. BOLTS SHALL BE ASTM-A325 HIGH STRENGTH BOLTS. UNLESS NOTED OTHERWISE.
- 12. ALL CONSTRUCTION PROCEDURES AND MATERIALS SHALL BE IN ACCORDANCE WITH ONTARIO PROVINCIAL STANDARDS. ALL MATERIALS SUPPLIED SHALL BE FROM MTO DESIGNATED SOURCES, WHERE APPLICABLE.
- 13. ALL DIMENSIONS ARE IN MILLIMETERS.
- 14. DO NOT SCALE DRAWINGS.
- 15. DESIGN LOADS CHBDC, NO LOAD POSTING REQUIRED
- 16. THE 'SCOPE OF WORK', AS PROVIDED ON THIS DRAWING, IS FOR GENERAL INFORMATION ONLY AND SHALL NOT BE CONSTRUED AS EXHAUSTIVE.
- 17. COUNTY MAY SPEED POST THE ROAD FOR CONSTRUCTION. CONTRATOR TO ASSUME THAT ADVISORY SPEED LIMITS OF 30KM/H THROUGH THE CONSTRUCTION ZONE WILL BE REQUIRED.
- 18. IMPLEMENT EROSION AND SEDIMENT CONTROL MEASURES AS PER LEGISLATIVE REQUIREMENTS AND SPECIFIC MEASURES REQUESTED BY MNRF
- 19. IMPLEMENT ADDITIONAL MITIGATION MEASURES, CONTROL AND MONITORING PLAN FOR ENDANGERED AND SPECIES AT RISKS AS PER APPLICABLE LEGISLATION AND SEPARATE MNRF REQUIREMENTS. MAINTAIN THE MEASUREMENT THAT COUNTY INSTALLED PRIOR TO WORK IF APPLICABLE.
- 20. MAINTAIN DRAINAGE ON THE STRUCTURE AT ALL TIMES DURING CONSTRUCTION AND PREVENT RUN OFF WITH SEDIMENT REACHING WATERWAY, ASSURE THAT ANY SEDIMENTS AND PARTICLES ARE EXTRACTED FROM RUN OFF BEFORE IT IS ALLOWED TO BE DISCHARGED INTO THE WATERWAY.
- 21. ALL ELEVATIONS SHOWN ON DRAWINGS ARE FROM ORIGINAL 1972 DRAWINGS AND ARE RELATED TO EACH OTHER, BUT ARE NOT GEODETIC.
- 22. TELECOMMUNICATION CABLES ARE PRESENT IN THE DUCTS IN EAST SIDEWALK AND WEST CURB. SEE SEPARATE UTILITY NOTES.
- 23. HYDRO HIGH VOLTAGE CABLES ARE PRESENT IN WEST SIDEWALK. SEE SEPARATE UTILITY NOTES.
- 24. THE WORK ON WATERMAIN SHALL BE COORDINATED WITH UTILITY DEPARTMENT OF THE TOWN OF PETAWAWA THE TOWN IS THE OWNER AND OPERATOR OF THE WATERMAIN.
- 25. PEDESTRIAN TRAFFIC SHALL BE MAINTAINED AT ALL TIMES
- 26. THE WORK WILL REQUIRE A PROTECTION SYSTEM THAT WILL NEED TO BE INSTALLED IN PRE-STAGE AND BE SUITABLE FOR BOTH STAGES OF WORK.
- 27. CONTRACTOR SHALL REVIEW ORIGINAL CONTRACT DRAWINGS AND 2012 REHABILITATION DRAWINGS FRO PURPOSE OF PLANNING THE METHODOLOGY.
- 28. WATERMAIN ANCHORS INSTALLED IN 2012 WILL INTERFERE WITH SCARIFICATION AND SCARIFICATION BY HAD WILL BE REQUIRED. REFER TO 2012 CONTRACT DRAWINGS.

CONSTRUCTION NOTES

(A1 841mm x 594mm)

- 1. THE WOODEN POLES, TEMPORARY TRAFFIC SIGNALS AND INFRASTRUCTURE WILL BE INSTALLED BY OTHERS PRIOR TO WORK BY CONTRACTOR AND ENERGIZE AND PUT IN SERVICE IMMEDIATELY PRIOR TO STAGING IMPLEMENTATION AND TEMPORARY CONCRETE BARRIERS INSTALLATION.
- 2. THE TEMPORARY TRAFFIC SIGNALS, INFRASTRUCTURE AND WOODEN POLES WILL BE REMOVED BY OTHERS WHEN NO LONGER REQUIRED.
- 3. THE SCOPE OF WORK IS NOT NECESSARILY IN ORDER OF OPERATIONS. 4. THE ROADWAY PROTECTION AT THE APPROACHES WILL REMAIN AND LEFT IN PLACE.
- 5. SCARIFICATION OF SIDEWALK AND SAFETY CURB WILL NEED TO BE CARRIED OUT BY BELL APPROVED CONTRACTOR AS THE WORK WILL BE OVER UTILITIES EMBEDDED IN CONCRETE THAT WILL NEED TO BE MAINTAINED IN SERVICE.
- 6. THE INSTALLATION OF GUARDRAIL POSTS ON APPROACHES WILL REQUIRE USE OF HYDROVAC TO ELIMINATE POSSIBILITY OF DAMAGE TO UTILITIES.
- 7. THE TWO WATERMAINS UNDER THE BRIDGE SHALL BE PROTECTED AT ALL TIMES AND REMAIN IN SERVICE. SUPPORT STRUCTURES ARE REQUIRED UNDER THE BRIDGE PRIOR TO WORK ON THE ASPHALT.
- 8. THE GAS INSTALLATION UNDER THE WEST SIDE OVERHANG TO BE PROTECTED AT ALL TIMES.
- 9. THE TWO WATERMAINS BURIED IN FILL UNDER THE APPROACH SLABS TO BE PROTECTED AT ALL TIMES AND FULLY SUPPORTED IN FILL
- 10. THE BELL DUCTS UNDER EAST SIDEWALK ON APPROACHES ARE IN CONCRETE ENCASED DUCT BANK THAT WILL NEED TO BE SUPPORTED. 11. ALL UTILITIES SHALL BE LOCATED AND IDENTIFIED ON SITE.
- 12. IT IS IMPERATIVE THAT THE TOP OF ASPHALT MATCHES PERFECTLY THE TOP OF CONCRETE ALONG EXPANSION JOINTS.

SCOPE OF WORK:

- A. INSTALL EROSIONS AND SEDIMENT CONT B. INSTALL TEMPORARY TRAFFIC SIGNALS O APPROACH (BY OTHERS)
- C. INSTALL ROADWAY PROTECTION SYSTEM UTILIZING SEPARATE TRAFFIC CONTROLS OF SECTION OF APPROACH SLAB.
- D. INSTALL VEHICULAR TRAFFIC AND PEDES INCLUDING CONSTRUCTION SIGNAGE. PEI SIDEWALK
- E. INSTALL TEMPORARY CONCRETE JERSEY FOR STAGE 1
- F. ADJUST PAVEMENT MARKINGS AND INST
- G. ENERGIZE TEMPORARY TRAFFIC SIGNALS
- H. REMOVE GUIDERAILS ON WEST SIDE
- I. INSTALL THE SUPPORT FOR WATERMAINS
- J. REMOVE ASPHALT AND WATERPROOFING
- K. SCARIFY THE DECK FOR STAGE 1
- L. CARRY OUT PARTIAL DEPTH REMOVALS A DECK FOR STAGE 1
- M. REMOVE THE EXPANSION JOINTS FOR STA
- N. REMOVE THE APPROACH SLABS FOR STA
- O. REMOVE THE BALLAST WALLS FOR STAGE
- P. SCARIFY THE SAFETY CURB FOR STAGE
- Q. CARRY OUT PARTIAL AND FULL DEPTH DE
- R. REBUILT THE BASINS OF EXISTING DRAINS AT SOUTH EXPANSION JOINT.
- S. CONSTRUCT NEW BALLAST WALLS FOR S
- T. INSTALL ASPHALT DRAINS.
- U. OVERLAY THE DECK AND SAFETY CURB F V. REMOVE EXISTING RAILING ON WEST PARA
- CUSTOM TRAFFIC RAILING. W. INSTALL NEW EXPANSION JOINTS FOR STA
- X. INSTALL NEW APPROACH SLABS IN STAGE AT THE NORTH END
- Y. ADJUST CATCH BASINS (ONE AT EACH AP Z. REMOVE AND REPLACE THE CURB AND GU
- AA. WATERPROOF AND PAVE FOR STAGE 1 (B REQUIRED ASPHALT RAMPING TO EXISTIN EXPANSION JOINTS
- AB. INSTALL TEMPORARY CONCRETE BARRIE SIDE TO SEPARATE NEW TEMPORARY SID END TREATMENTS.
- AC. PLACE GRANULAR AND TEMPORARY ASPH SAFETY CURB TO CONSTRUCT NEW SIDEV
- AD. INSTALL PEDESTRIAN FACILITIES/PAVED ROAD, NORTH AND SOUTH OF THE BRIDG
- AE. ADJUST PAVEMENT MARKINGS FOR STAG
- AF. RELOCATE THE TEMPORARY CONCRETE AG. ADJUST TRAFFIC CONTROL SIGNAGE AND FOR STAGE 2
- AH. SWITCH TRAFFIC CONTROLS TO STAGE 2
- AI. REMOVE GUARDRAILS ON EAST SIDE
- AJ. REMOVE ASPHALT AND WATERPROOFING
- AK. SCARIFY THE DECK FOR STAGE 2
- AL. CARRY OUT PARTIAL DEPTH REMOVALS A DECK FOR STAGE 2
- AM. REMOVE THE EXPANSION JOINTS FOR STA
- AN. REMOVE THE APPROACH SLABS FOR STAC
- AO. INSTALL TEMPORARY SUPPORT FOR THE SIDEWALK (BOTH APPROACHES)
- AP. REMOVE THE BALLAST WALLS FOR STAGE
- AQ. SCARIFY THE EAST SIDEWALK FOR STAGE
- AR. CARRY OUT PARTIAL AND FULL DEPTH DE
- AS. REBUILT THE BASINS OF EXISTING DRAINS AT SOUTH EXPANSION JOINT.
- AT. CONSTRUCT NEW BALLAST WALLS FOR ST
- AU. INSTALL ASPHALT DRAINS.
- AV. OVERLAY THE DECK AND SIDEWALK FOR AW. REMOVE EXISTING RAILING ON EAST PARA CUSTOM TRAFFIC RAILING.
- AX. INSTALL NEW EXPANSION JOINTS FOR STA AY. INSTALL NEW APPROACH SLABS IN STAGE
- NORTH END AZ. ADJUST CATCH BASINS ON APPROACHES
- BA. REMOVE AND REPLACE THE CURB AND GU 2
- BB. CARRY OUT REPAIRS TO CONCRETE IN AI BC. WATERPROOF AND PAVE FOR STAGE 2 (B REQUIRED ASPHALT RAMPING TO EXISTIN
- EXPANSION JOINTS. **BD. REMOVE TEMPORARY CONCRETE BARRIE**
- BE. TURN OFF TRAFFIC SIGNALS (BY OTHERS)
- BF. INSTALL TEMPORARY PAVEMENT MARKIN
- BG. REINSTATE THE ORIGINAL TRAFFIC
- BH. INSTALL GUARDRAILS AND END TREATMENTS
- BI. MILL APPROACHES FOR BLENDING OF NEW PAVEMENT AND INSTALL TOP COURSE ASPHALT ON DECK, APPROACH SLABS AND APPROACHES AS ONE CONTINUOUS OPERATION.
- **BJ. INSTALL FINAL PAVEMENT MARKINGS**

STEELWORK AND BEARINGS.

- BK. GROOVE AND SEAL JOINTS IN ASPHALT AT THE END OF APPROACH SLABS
- BL. INSTALL THE SEALS IN EXPANSION JOINTS
- BM. INSTALL PENETRATING CONCRETE SEALER ON PARAPET WALLS, SIDEWALK, SAFETY CURB AND EXPOSED CONCRETE SURFACES OF EXPANSION JOINTS
- BN. REMOVE TRAFFIC SIGNALS AND WOODEN POLES (BY OTHERS)

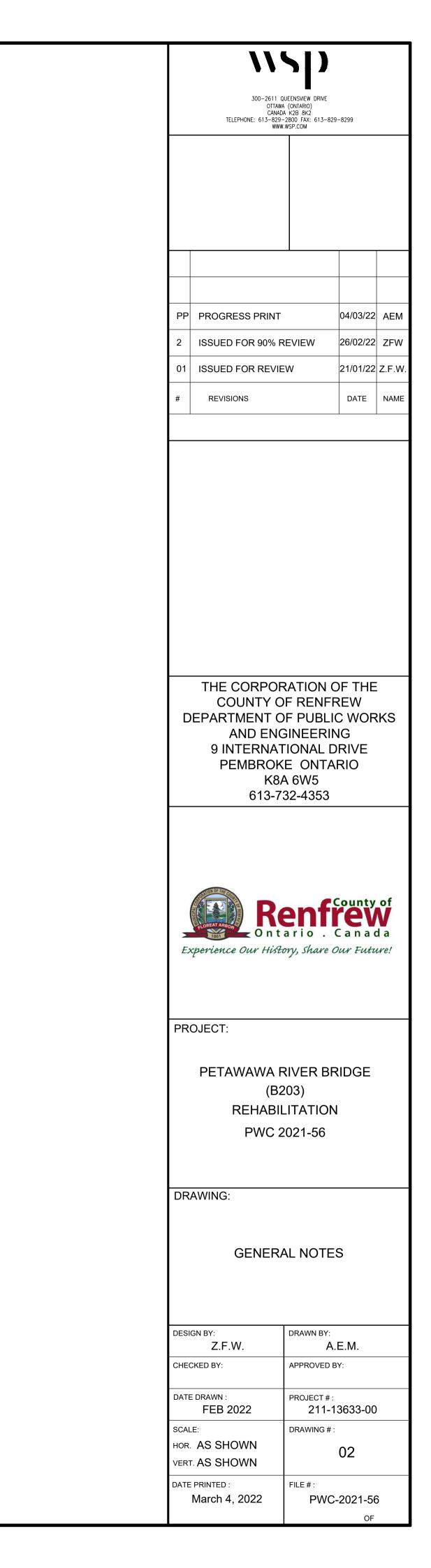
BQ. CONSTRUCT SHEAR BLOCKS ON ABUTMENTS.

BR. REINFORCE DAMAGED GIRDER FLANGE.

	<u>GENERAL C</u>	ABLE UTILITY NOTES	LIST OF A	BBREVIATIONS
NTROL SYSTEM S ON WOODEN POLES ON EACH	SIDEWALK. CONTRACT	IUNICATION CABLES ARE PRESENT IN THE DUCTS IN EAST THESE UTILITIES WILL REMAIN OPERATIONAL AT ALL TIMES. OR SHALL DEVELOP A PROCEDURE TO CARRY OUT THE WORK	ABUT. BRGS. BOT	ABUTMENT BEARINGS BOTTOM
EMS AT EACH END OF THE BRIDGE LS (FLAGGING). INCLUDING REMOVAL	2. CONTRACT	DAMAGE TO UTILITY DUCTS AND UTILITIES. TOR SHALL BE RESPONSIBLE FOR ALL DAMAGE, REPAIRS AND ANY COSTS ASSOCIATED WITH DAMAGE TO THE UTILITIES.	BLL BUL C/C	BOTTOM LOWER L BOTTOM UPPER LI CENTER TO CENTI
ESTRIAN TRAFFIC CONTROL SIGNAGE PEDESTRIANS TO UTILIZE EAST SIDE	3. THE DUCT WALLS ARE	AND POWER SUPPLY CABLE ARE PRESENT IN EAST PARAPET E TO REMAIN IN SERVICE AND BE OPERATIONAL AT ALL TIMES. ANY RY SHUT DOWN OF POWER SUPPLY TO THE STREET LIGHT TO BE	C.J. DIA. DWG.	CONSTRUCTION JO DIAMETER DRAWING
EY BARRIERS AND END TREATMENTS		TED WITH THE TOWN OF PETAWAWA. ET LIGHTS ON THE BRIDGE AND APPROACHES TO REMAIN IN	EBL E.E. E.F.	EASTBOUND LANE EACH END
STALL STOP BARS LS (BY OTHERS)		T ALL TIMES.	E.J. EL. EQ. SPCD	EACH FACE EXPANSION JOINT ELEVATION EQUALLY SPACED
NS UNDER THE BRIDGE	<u>GENERAL V</u>	VATERMAIN UTILITY NOTES	E.S. EXP	EACH SIDE EXPANSION BEAR
NG FOR STAGE 1 S AND FULL DEPTH REMOVALS IN THE	SHUTTING THE WATEI	RMAIN IS OWNED BY TOWN OF PETAWAWA AND WORK OF DOWN THE NEARBY VALVES, COMMISSIONING AND PUTTING RMAIN BACK IN SERVICE SHALL BE CO-ORDINATED WITH THE PETAWAWA.	FIX F.F. I.F. LG	FIXED BEARINGS FAR FACE INSIDE FACE LONG
STAGE 1	2. THE WATE	RMAIN UNDER THE BRIDGE SHALL BE SHORED/PROPPED FROM INDERNEATH THE DECK BEFORE REMOVALS OF ASPHALT FROM	EQ. MIN. MID. N.F.	MAXIMUM MINIMUM MIDDLE NEAR FACE
GE 1 E 1	3. ADDITIONA WARRANTE	L HANGERS FOR THE WATERMAIN SHALL BE INSTALLED WHERE ED BY CONDITION OF CONCRETE IN THE DECK AND AS DIRECTED NTRACT ADMINISTRATOR. THIS WILL BE DECIDED AFTER	N.T.S. O.F. PL	NOT TO SCALE OUTSIDE FACE PLATE
DECK REPAIRS FOR STAGE 1 INS AND INSTALL 1 MORE DECK DRAIN	COMMENC	EMENT OF CONCRETE REMOVALS IN THE DECK. AND ANCHORS FOR THE ADDITIONAL HANGERS WILL BE	TLL TUL	TOP LOWER LEVEL
STAGE 1 AND BACKFILL	INSTALLED	PRIOR TO INSTALLATION OF CONCRETE OVERLAY.	T/P T/ TYP	TOP OF PAVEMEN TOP OF TYPICAL
B FOR STAGE 1	6. ANY WATE	ING WATERMAIN WILL NEED TO REMAIN IN SERVICE. RMAIN WORKS ON APPROACHES NEED TO BE COORDINATED K OF APPROACH SLAB REMOVALS AND RECONSTRUCTION TO	U.N. WBL W.P.	WATER LEVEL WESTBOUND LANE WORKING POINT
ARAPET WALL AND REPLACE WITH		CESS. AL CONDITION AND DESIGN OF THE 1972 WATERMAIN IN THE		
STAGE 1 GE 1 INCLUDING NEW ASPHALT DRAINS		IES IS UNKNOWN AS NO DESIGN DRAWINGS ARE AVAILABLE.		
APPROACH). GUTTER ON APPROACHES FOR STAGE		ONTROL NOTES ONTROL AS PER ONTARIO TRAFFIC MANUAL BOOK 7 .		
(BINDER COURSE ONLY) INCLUDING TING ON APPROACHES AND AT	TEMPORAF	WORK AREA AND WORKERS FROM TRAFFIC WITH USE OF RY CONCRETE BARRIERS AND APPROVED END TREATMENTS. ET LIGHTS ON THE BRIDGE AND APPROACHES TO REMAIN IN		
IERS ALONG SAFETY CURB ON WEST SIDEWALK FOR USE IN STAGE 2, C/W		T ALL TIMES.		
SPHALT FILL BETWEEN THE TCB AND DEWALK OVER THE BRIDGE FOR STAGE	APPLICABL OPSD 911.160	E STANDARD DRAWINGS GUIDE RAIL SYSTEM, CONCRETE BARRIER TYPE M		
D PATHWAY ALONG WEST SIDE OF DGE	OPSD 911.161	CONNECTION INSTALLATION - TEMPORARY 1 GUIDE RAIL SYSTEM, CONCRETE BARRIER TYPE M CONNECTION INSTALLATION - TEMPORARY 2		
AGE 2 E BARRIERS FOR STAGING (STAGE 2)	OPSD 911.162	GUIDE RAIL SYSTEM, CONCRETE BARRIER, TYPE M CONNECTION, INSTALLATION, TEMPORARY		
ND PEDESTRIAN TRAFFIC CONTROL	OPSD 911.164	RESTRAINED SYSTEM PINNED TO ASPHALT PAVEMENT GUIDE RAIL SYSTEM, CONCRETE BARRIER, TYPE M CONNECTION, INSTALLATION, TEMPORARY RESTRAINT		
		SYSTEM STRAPPED TO CONCRETE WITH ASPHALT SURFACE		
NG FOR STAGE 2 S AND FULL DEPTH REMOVALS IN THE	OPSD 911.168	GUIDE RAIL SYSTEM, CONCRETE BARRIER, TYPE M CONNECTION, INSTALLATION, TEMPORARY RESTRAINT SYSTEM BOLTED THROUGH CONCRETE WITH ASPHALT		
STAGE 2	OPSD 911.171	SURFACE GUIDE RAIL SYSTEM, CONCRETE BARRIER, TYPE M		
TAGE 2	0.020.000	CONNECTION, INSTALLATION, TEMPORARY RESTRAINT SYSTEM TRANSITION TO STRAPPED TCB		
IE UTILITY BANK UNDER EAST GE 2	OPSD 911.172	GUIDE RAIL SYSTEM, CONCRETE BARRIER, TYPE M CONNECTION, INSTALLATION, TEMPORARY RESTRAINT SYSTEM TRANSITION TO BOLTED TCB		
GE 2	OPSD 911.174	GUIDE RAIL SYSTEM, CONCRETE BARRIER, TYPE M		
DECK REPAIRS FOR STAGE 2 INS AND INSTALL 1 MORE DECK DRAIN	OPSD 911.236	CONNECTION, COMPONENT, THRIE BEAM TRANSITION GUIDE RAIL SYSTEM, TEMPORARY CONCRETE BARRIER AND ENERGY ATTENUATOR, TEMPORARY REDUCED		
STAGE 2 AND BACKFILL		EXPOSURE, ANCHORED BARRIER, INSTALLATION, TEMPORARY		
R STAGE 2 ARAPET WALL AND REPLACE WITH	OPSD 923.001	ENERGY ATTENUATOR, CRASH CUSHION, NARROW SYSTEMS, COMPONENT, REINFORCED CONCRETE PAD		
STAGE 2	OPSD 923.002	ENERGY ATTENUATOR, CRASH CUSHION, COMPONENT, ANCHOR ASSEMBLY		
GE 2 INCLUDING ASPHALT DRAINS AT	OPSD 923.196	ENERGY ATTENUATOR, CRASH CUSHION, QUADGUARD M10 SYSTEM, INSTALLATION, TEMPORARY, UNIDIRECTIONAL		
ES (ONE ON EACH APPROACH) GUTTER ON APPROACHES FOR STAGE	OPSD 984.203	ENERGY ATTENUATOR, CRASH CUSHION, DELINEATION, INSTALLATION, TEMPORARY		
ABUTMENTS	OPSD 3101.150	WALLS ABUTMENT, BACKFILL MINIMUM GRANULAR REQUIREMENT		
(BINDER COURSE ONLY) INCLUDING TING ON APPROACHES AND AT	OPSD 3340.150			
RIERS	OPSD 3370.100	DECK WATERPROOFING HOT APPLIED ASPHALT MEMBRANE WITH PROTECTION BOARD DETAILS		
RS)	OPSD 3370.101	MEMBRANE AT ACTIVE CRACKS GREATER THAN 2MM		
INGS	OPSD 3950.100	WIDE AND CONSTRUCTION JOINTS JOINTS CONCRETE EXPANSION AND CONSTRUCTION		
MENTS		ON STRUCTURE		

BO. REMOVE WATERMAIN SUPPORT SYSTEMS FROM UNDER THE DECK

BP. INSTALL ENVIRONMENTAL PROTECTION SYSTEM AND ABRASIVE BLAST CLEAN END OF STEEL GIRDERS AND STEEL STRUCTURE AND BEARINGS. COAT THE



EQUALLY SPACED EXPANSION BEARINGS

BOTTOM LOWER LEVEL

BOTTOM UPPER LEVEL

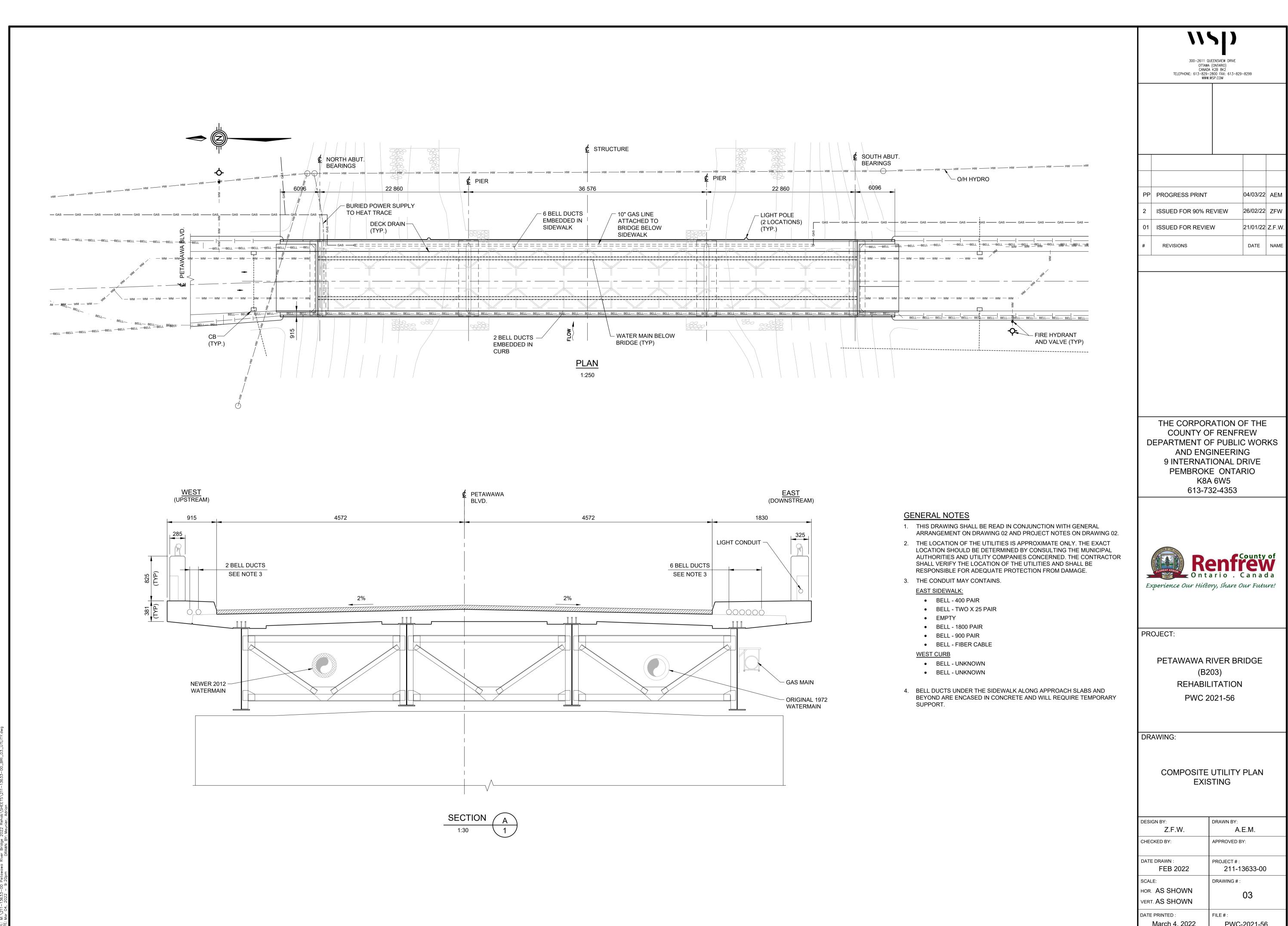
CONSTRUCTION JOINT

CENTER TO CENTER

FIXED BEARINGS

TOP LOWER LEVEL TOP UPPER LEVEL TOP OF PAVEMENT

WESTBOUND LANE WORKING POINT



March 4, 2022 PWC-2021-56 OF

TRAFFIC CONTROL

PRE-STAGE:

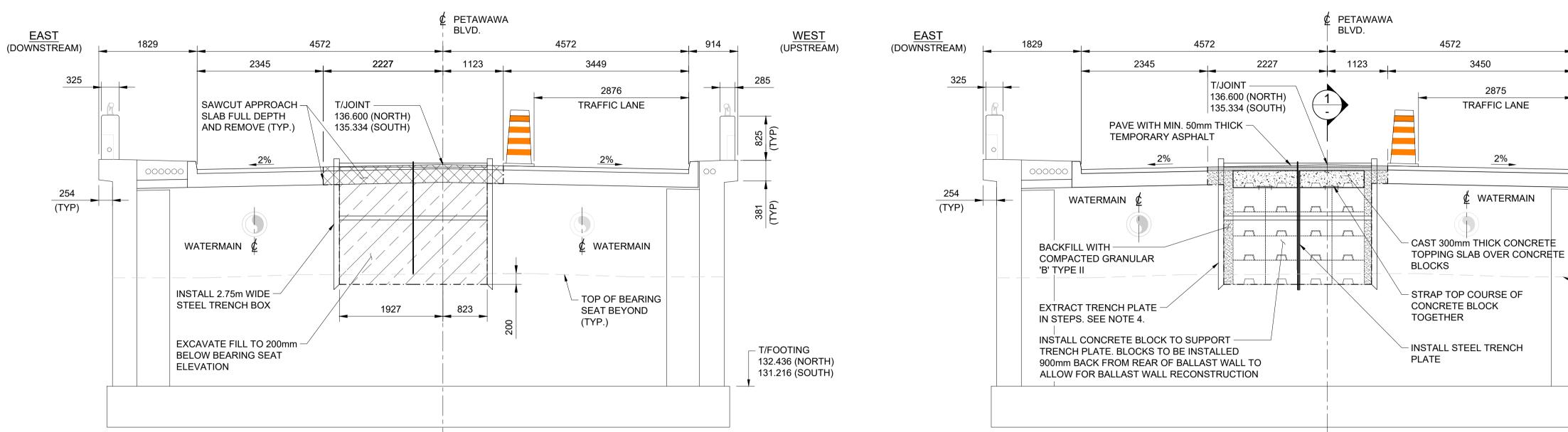
- PRE-STAGE WORK TO INSTALL CONCRETE BLOCK AND STEEL PLATE ROADWAY PROTECTION SHALL BE INSTALLED UNDER SINGLE LANE CLOSURE WITH TRAFFIC CONTROL PERSONNEL AND RESTRICTED VEHICLE WIDTH AND TRUCK DETOUR ROUTE IN PLACE.
- SAW CUTTING OF ASPHALT AND CONCRETE DECK (25mm DEEP) ALONG STAGING JOINT TO BE DONE UNDER SINGLE LANE CLOSURE WITH TRAFFIC CONTROL PERSONNEL.

STAGE 1:

- SOUTH BOND LANE TO BE CLOSED WITH LONG DURATION SINGLE LANE CLOSURE WITH ALTERNATIVE TRAFFIC FLOW UNDER TEMPORARY TRAFFIC SIGNALS IN NORTH BOUND LANE.
- PEDESTRIAN TO USE EAST SIDE WALK.

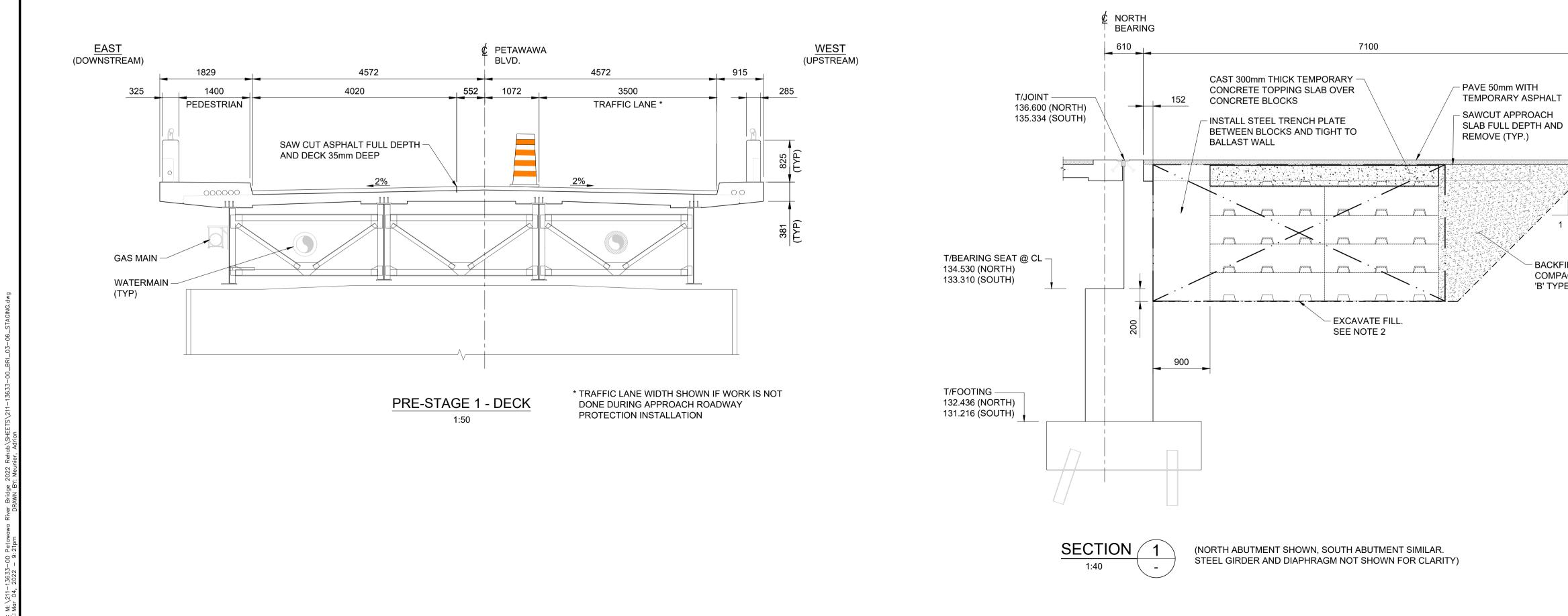
STAGE 2:

- NORTH BOUND LANE TO BE CLOSED WITH LONG DURATION SINGLE LANE CLOSURE WITH ALTERNATIVE TRAFFIC FLOW UNDER TEMPORARY TRAFFIC SIGNALS IN SOUTH BOUND LANE.
- PEDESTRIAN TO USE WEST CURB WITH TEMPORARY WIDENING AND TEMPORARY ASPHALT SIDEWALK AND MARKING ON APPROACH TO BRIDGE FROM NORTH AND SOUTH INTERSECTIONS.
- EAST SIDE WALK TO BE CLOSED WITH APPROPRIATE DETOUR SIGNAGE AT INTERSECTIONS TO THE NORTH AND SOUTH.



PRE-STAGE 1 - NORTH ABUTMENT REAR FACE - REMOVALS

1:50 (NORTH ABUTMENT SHOWN, SOUTH ABUTMENT SIMILAR)



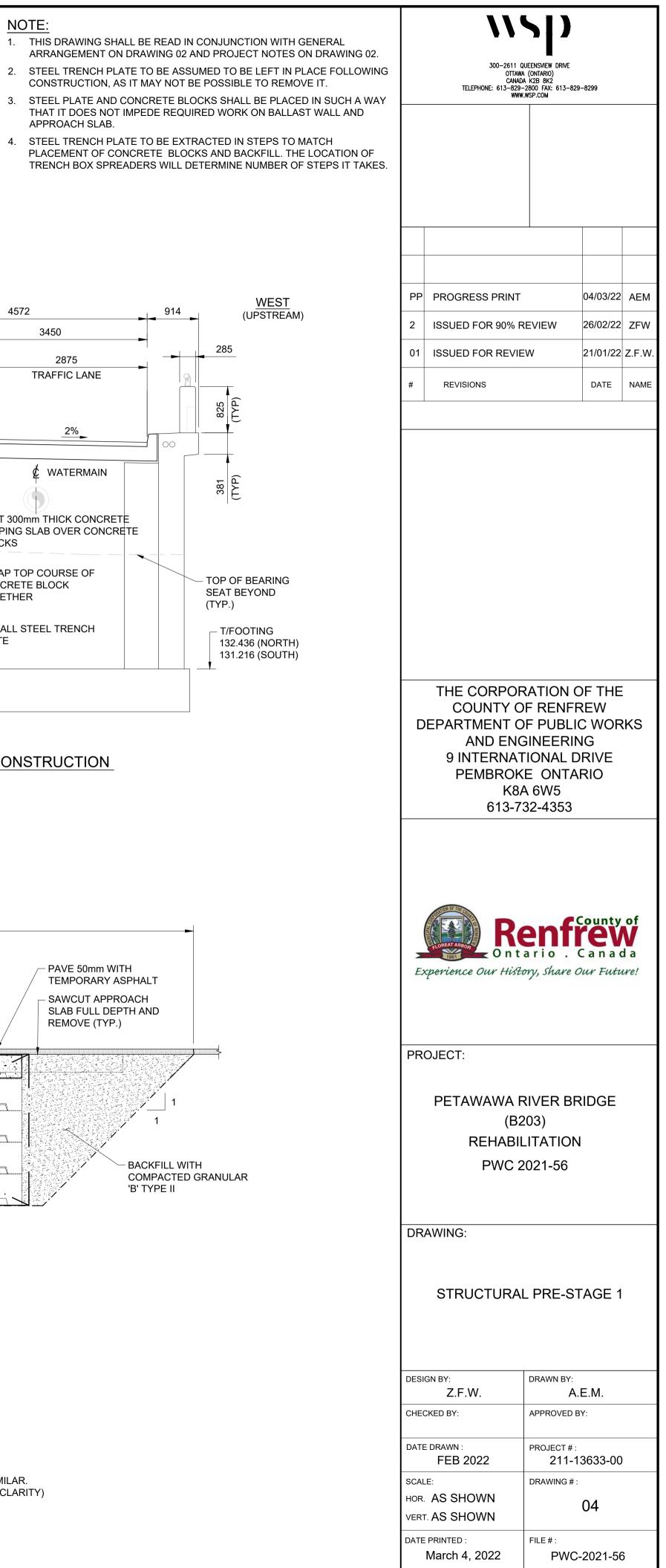
(A1 841mm x 594mm)



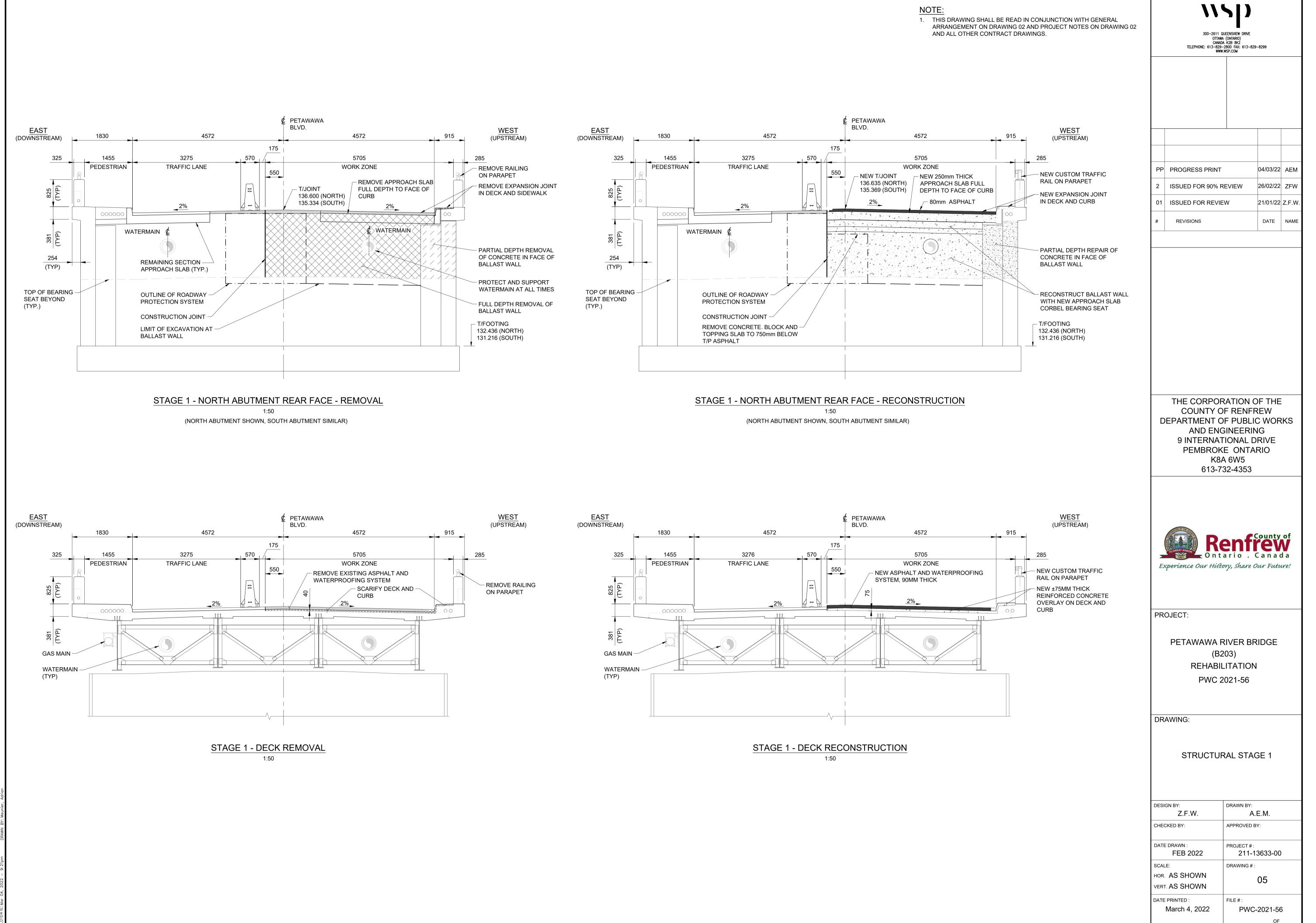
- APPROACH SLAB.

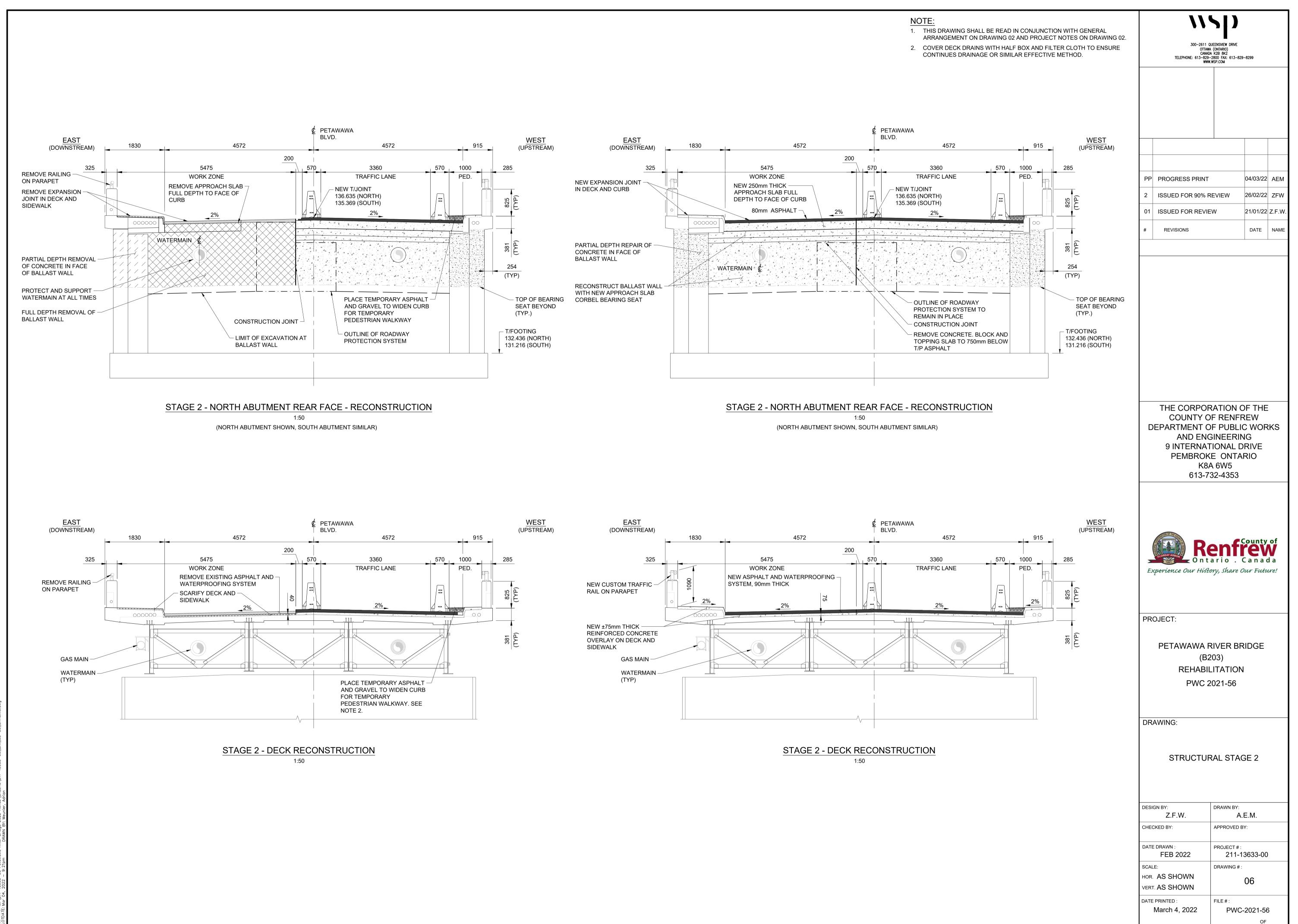
PRE-STAGE 1 - NORTH ABUTMENT REAR FACE - RECONSTRUCTION 1:50

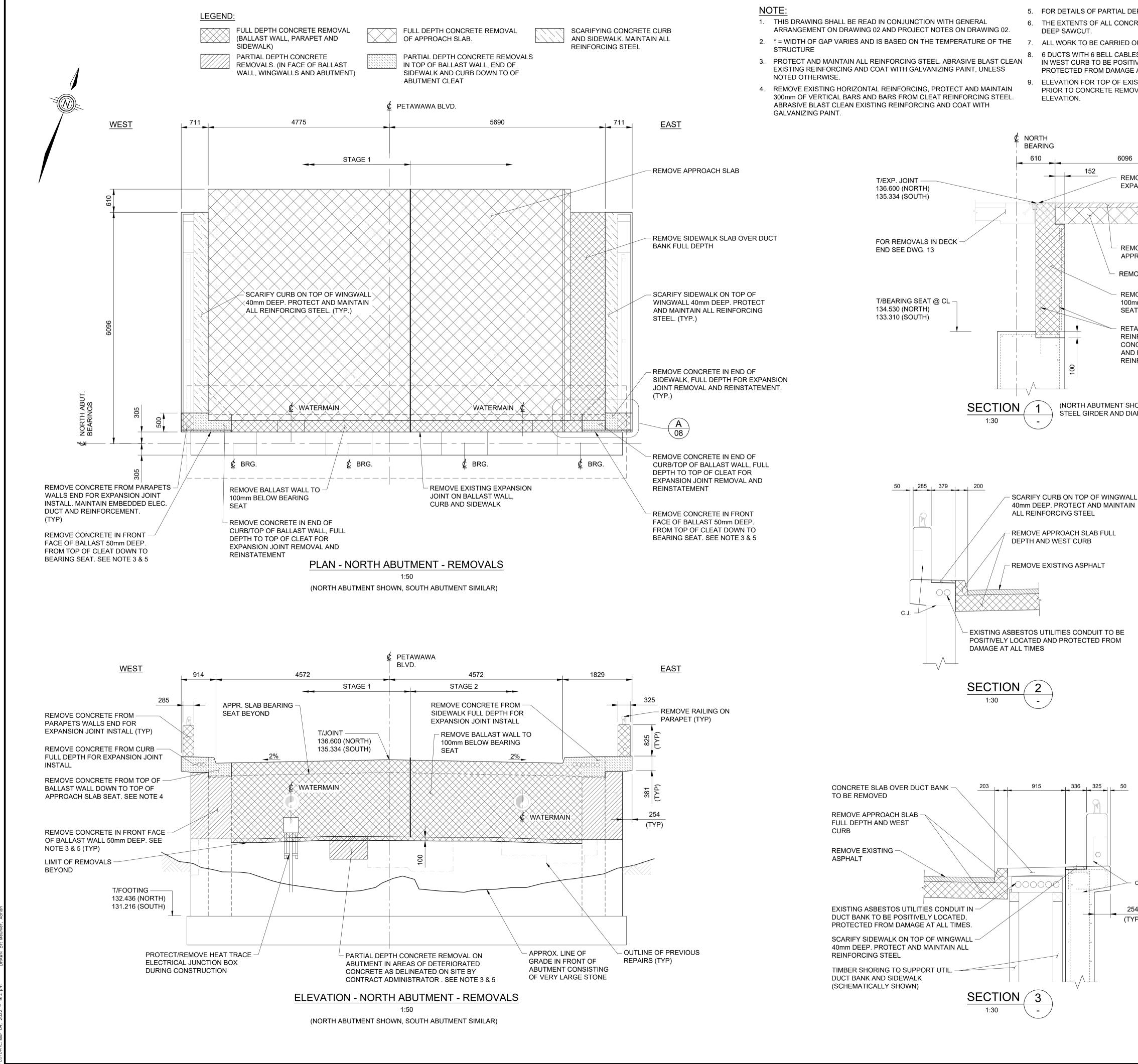
(NORTH ABUTMENT SHOWN, SOUTH ABUTMENT SIMILAR)



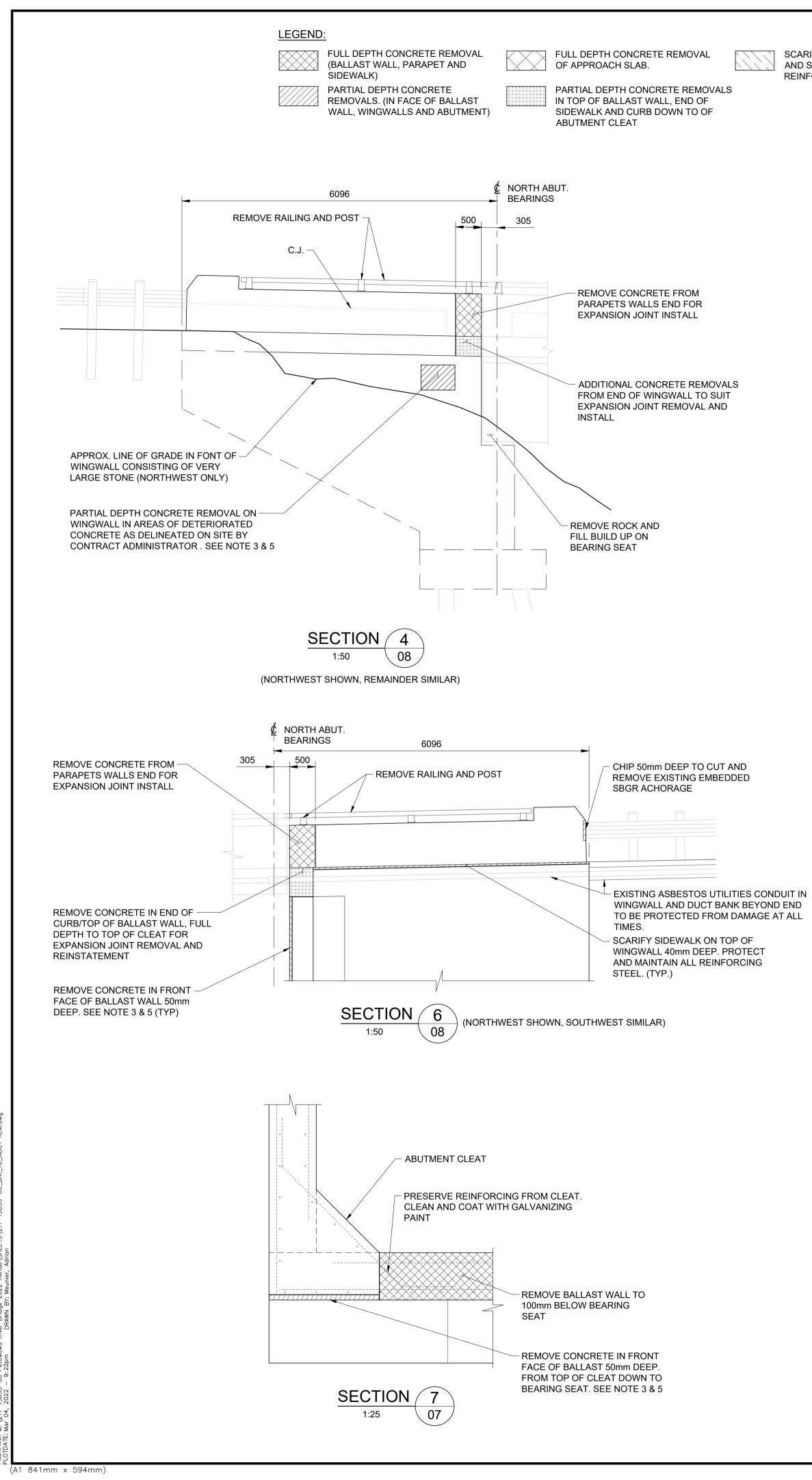
OF







EPTH REMOVAL SEE DWG. 22. RETE REMOVALS TO BE DELINEATED WITH 25mm OUT IN STAGES. ES IN EAST SIDEWALK AND 2 DUCTS WITH 3 BELL VELY LOCATED, TREATED AS LIVE AND AT ALL TIMES.	300–2611 QUEENSVIEW DRIVE OTTAWA (ONTARIO) CANADA K2B 8K2 TELEPHONE: 613–829–2800 FAX: 613–829–8299 WWW.WSP.COM				
STING SIDEWALK/CURB SHALL BE RECORDED VALS TO CALCULATE TOP OF OVERLAY					
OVE EXISTING ANSION JOINT					
	PP			04/03/22	
OVE ASPHALT ON ROACH	2 #	ISSUED FOR 90% F		26/02/22 DATE	ZFW
OVE APPROACH SLAB					
OVE BALLAST WALL TO nm BELOW BEARING T					
AIN EXISTING VERTICAL IFORCING BARS 600mm ABOVE CRETE REMOVALS LIMITS. CUT REMOVE ALL OTHER IFORCING UNLESS NOTED					
OWN, SOUTH ABUTMENT SIMILAR. APHRAGM NOT SHOWN FOR CLARITY)					
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	DR	AWING:			
C.J.		ABUTMEN	Γ REMOV	/ALS	
4 P)					
,		GN BY: Z.F.W.		E.M.	
		E DRAWN : FEB 2022	APPROVED E PROJECT # : 211-1		
		LE: AS SHOWN T. AS SHOWN	DRAWING # :	07	
		PRINTED : March 4, 2022	FILE # : PWC	-2021-56 OF)



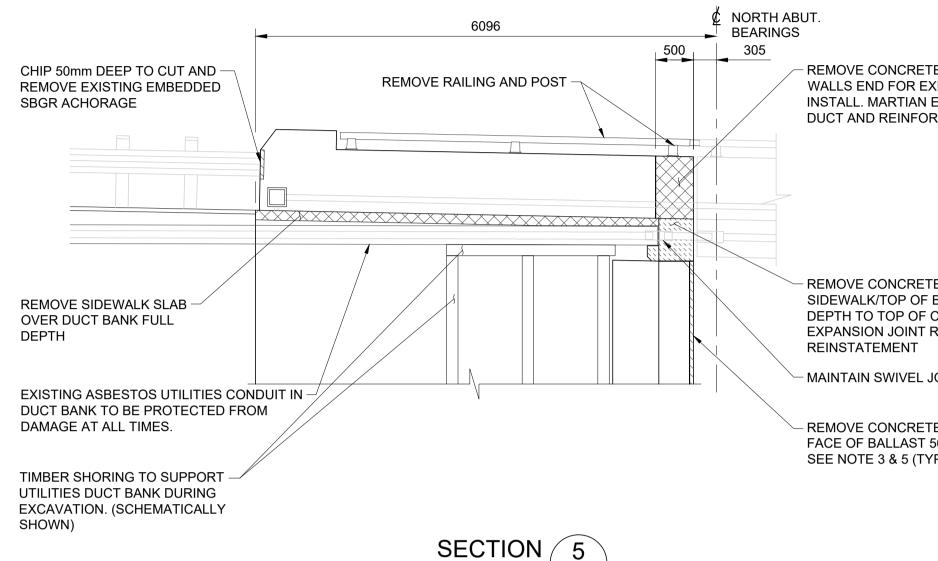
NOTE:

SCARIFYING CONCRETE CURB

AND SIDEWALK. MAINTAIN ALL

REINFORCING STEEL

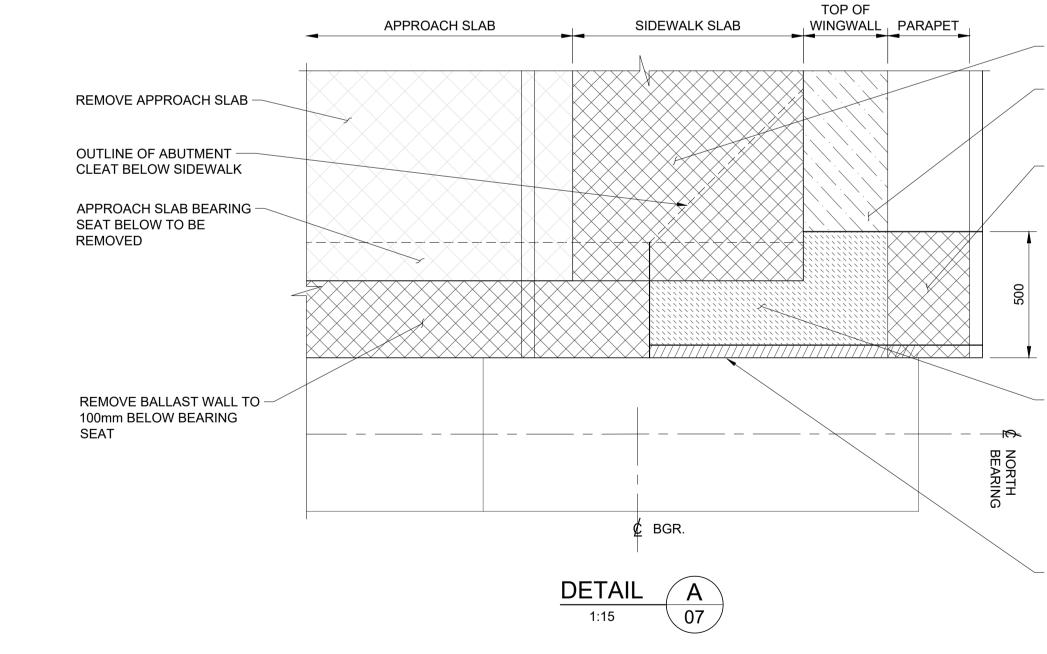
- 1. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH GENERAL ARRANGEMENT ON DRAWING 02 AND PROJECT NOTES ON DRAWING 02.
- 2. * = WIDTH OF GAP VARIES AND IS BASED ON THE TEMPERATURE OF THE STRUCTURE
- 3. PROTECT AND MAINTAIN ALL REINFORCING STEEL. ABRASIVE BLAST CLEAN EXISTING REINFORCING AND COAT WITH GALVANIZING PAINT, UNLESS NOTED OTHERWISE.
- 4. REMOVE EXISTING HORIZONTAL REINFORCING, PROTECT AND MAINTAIN 300mm OF VERTICAL BARS AND BARS FROM CLEAT REINFORCING STEEL. ABRASIVE BLAST CLEAN EXISTING REINFORCING AND COAT WITH GALVANIZING PAINT.
- 5. FOR DETAILS OF PARTIAL DE 6. THE EXTENTS OF ALL CONC
- DEEP SAWCUT. 7. ALL WORK TO BE CARRIED (
- 8. 6 DUCTS WITH 6 BELL CABLE IN WEST CURB TO BE POSIT PROTECTED FROM DAMAGE
- 9. ELEVATION FOR TOP OF EXIS PRIOR TO CONCRETE REMO ELEVATION.
- 10. FOLLOWING PARAPET RAILIN



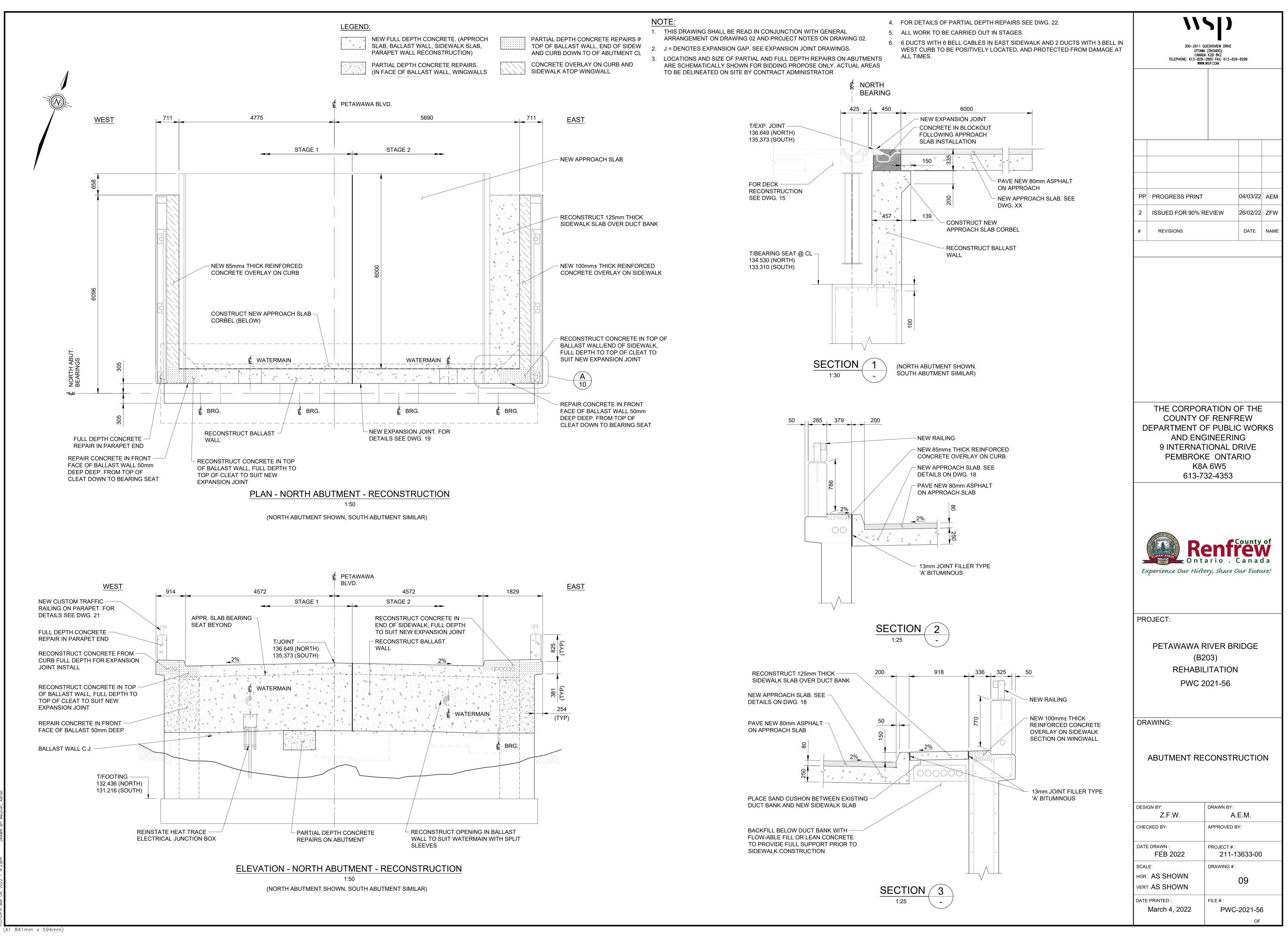
(NORTHEAST SHOWN, SOUTHEAST SIMILAR)

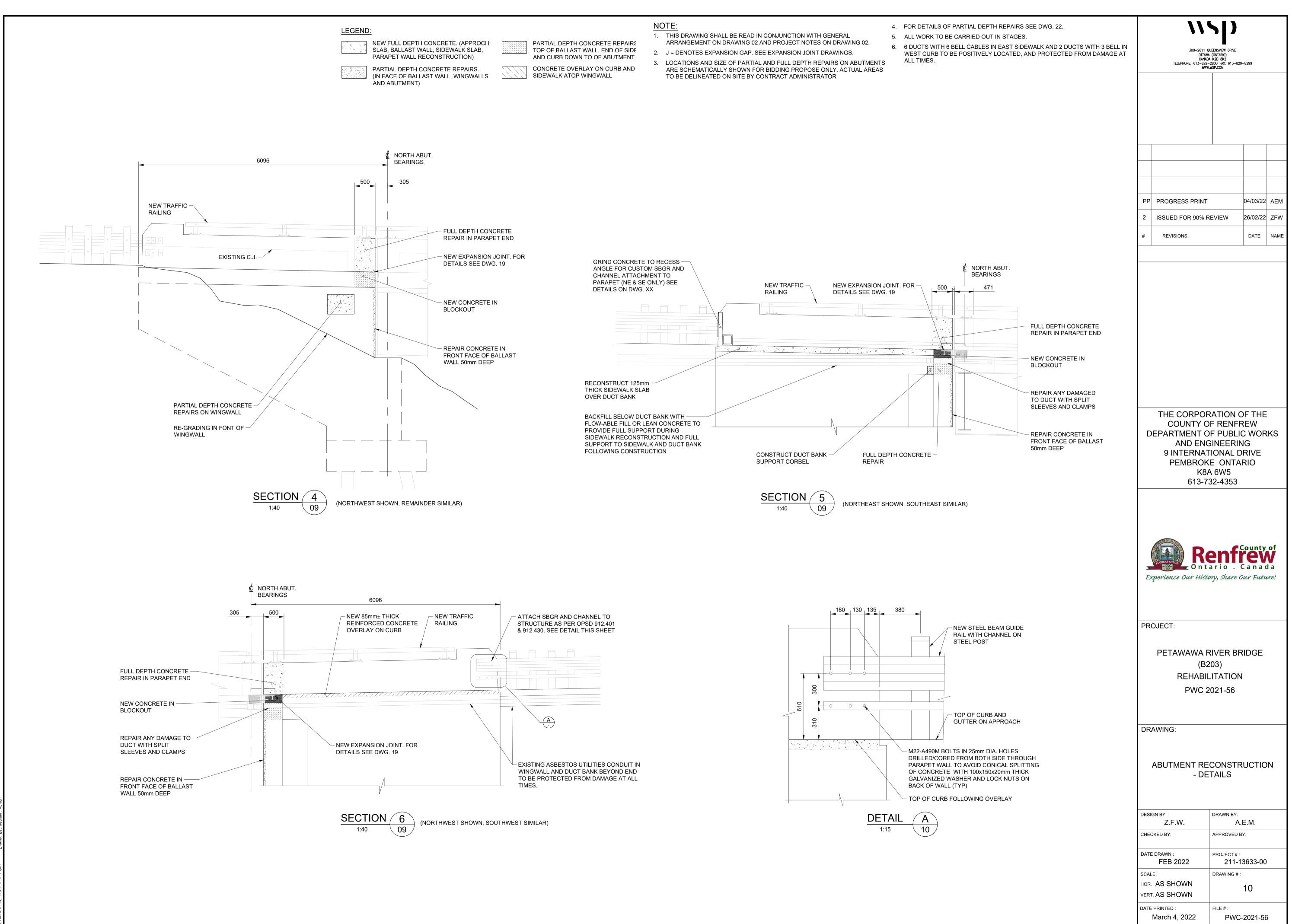
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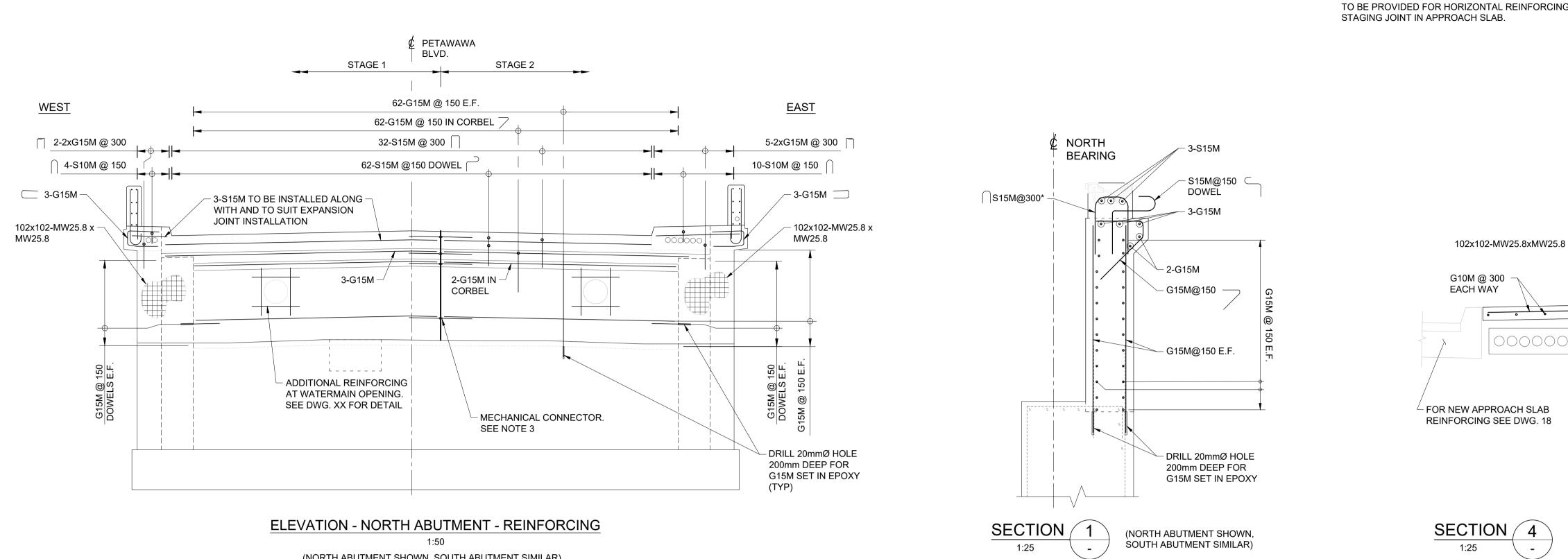
DEPTH REMOVAL SEE DWG. 22. CRETE REMOVALS TO BE DELINEATED WITH 25mm	ЕРФ	XY G	GROUT.	5)		
OUT IN STAGES. .ES IN EAST SIDEWALK AND 2 DUCTS WITH 3 BELL			OTTAWA CANAD/ TELEPHONE: 613-829-		-8299	
TIVELY LOCATED, TREATED AS LIVE AND E AT ALL TIMES. (ISTING SIDEWALK/CURB SHALL BE RECORDED	-			WSP.COM		
OVALS TO CALCULATE TOP OF OVERLAY						
ING REMOVAL, FILLING ANCHOR HOLES WITH						
		PP	PROGRESS PRINT		04/03/22	AEM
TE FROM PARAPETS EXPANSION JOINT I EMBEDDED ELEC.	-	2	ISSUED FOR 90% R	EVIEW	26/02/22	
DRCEMENT.		#	REVISIONS		DATE	NAME
TE IN END OF BALLAST WALL, FULL CLEAT FOR REMOVAL AND						
JOINT						
TE IN FRONT 50mm DEEP. YP)						
			THE CORPOR			
		D	COUNTY O EPARTMENT O AND ENG		C WOR	KS
			9 INTERNAT PEMBROK	IONAL D	RIVE	
				4 6W5 32-4353		
- REMOVE SIDEWALK SLAB OVER DUCT BANK FULL DEPTH - SCARIFY SIDEWALK ON TOP OF						
WINGWALL 40mm DEEP. PROTECT AND MAINTAIN ALL REINFORCING STEEL		(COREAT ARBOR	enfi	ev	of
- REMOVE CONCRETE FROM PARAPETS WALLS END FOR EXPANSION JOINT INSTALL. MAINTAIN EMBEDDED ELEC.) Ex	cperience Our Histo	ario . (ory, share C		
DUCT AND REINFORCEMENT						
	-	PR	OJECT:			
			PETAWAWA F	RIVER BR	RIDGE	
- REMOVE CONCRETE IN END OF SIDEWALK/TOP OF BALLAST WALL,			(B2 REHABIL	203) LITATION	l	
PARTIAL DEPTH TO TOP OF CLEAT FOR EXPANSION JOINT REMOVAL AND REINSTATEMENT			PWC 2	021-56		
	-	DR	AWING:			
- REMOVE CONCRETE IN FRONT FACE OF BALLAST 50mm DEEP.		DIV				
FROM TOP OF CLEAT DOWN TO BEARING SEAT		A	BUTMENT REM	IOVALS -	DETA	LS
		DESI	GN BY: Z.F.W.	DRAWN BY: A.	E.M.	
	-	CHEC	CKED BY:	APPROVED B		
			EDRAWN : FEB 2022		3633-00	
			AS SHOWN	DRAWING # :	08	
		DATE	PRINTED :	FILE # :	2024 52	
			March 4, 2022	PWC-	-2021-56 OF)



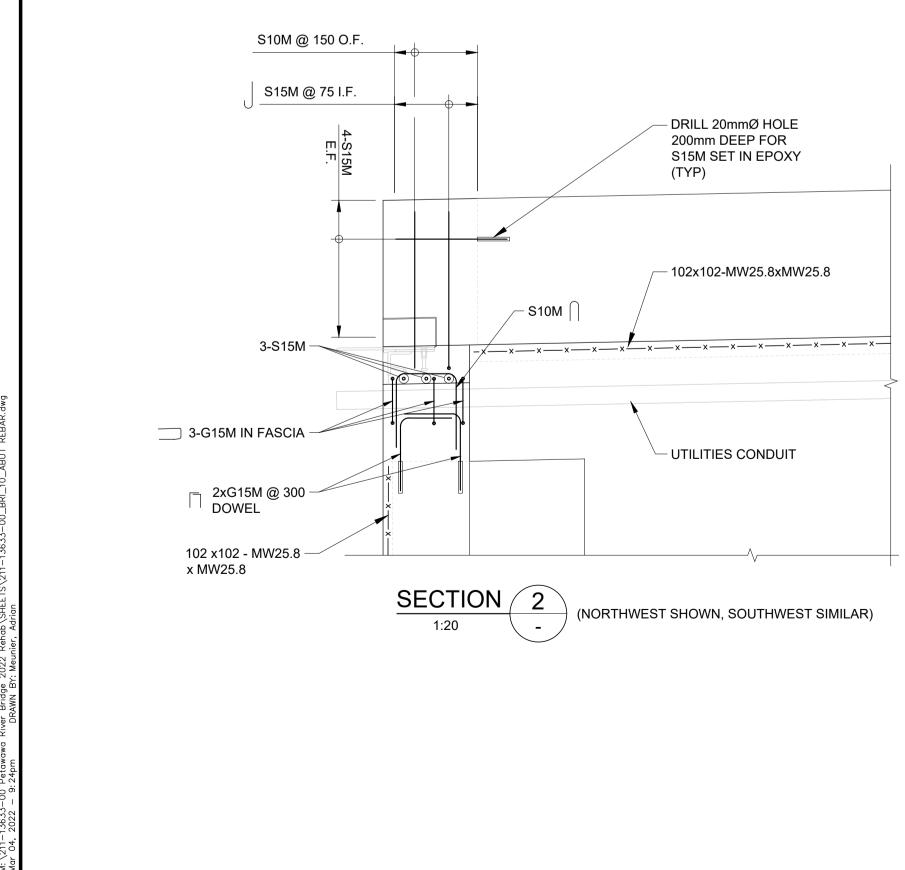


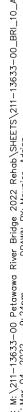


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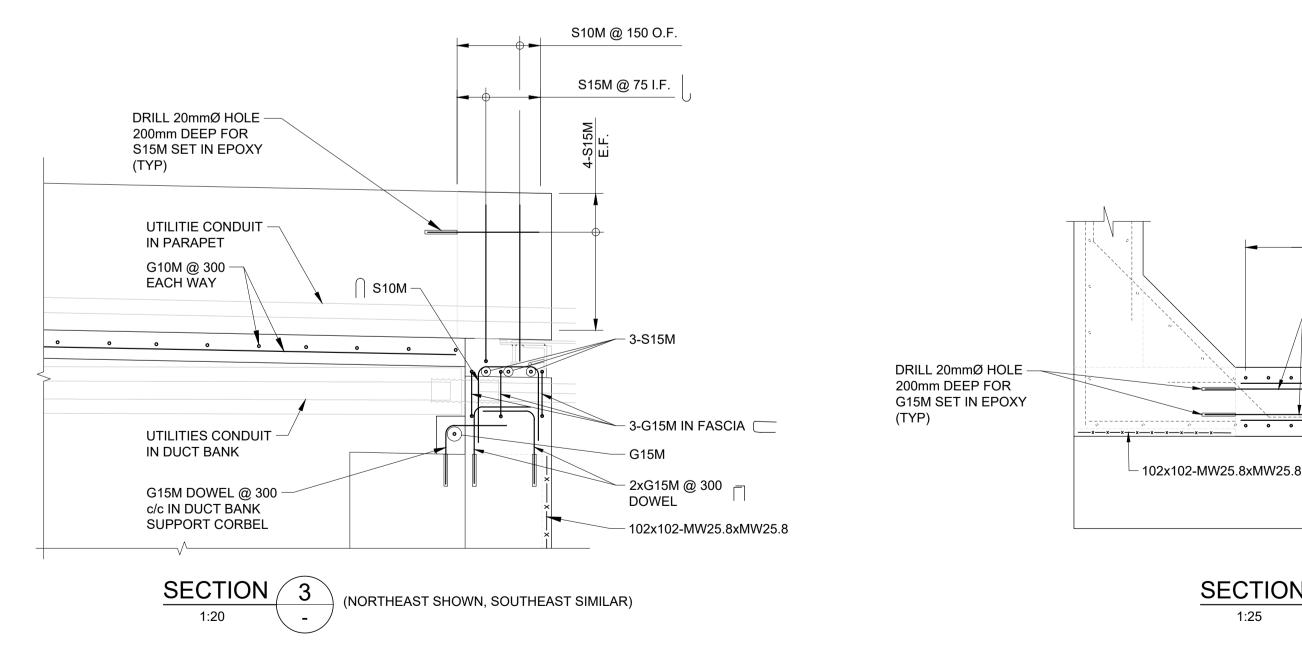
(NORTH ABUTMENT SHOWN, SOUTH ABUTMENT SIMILAR)

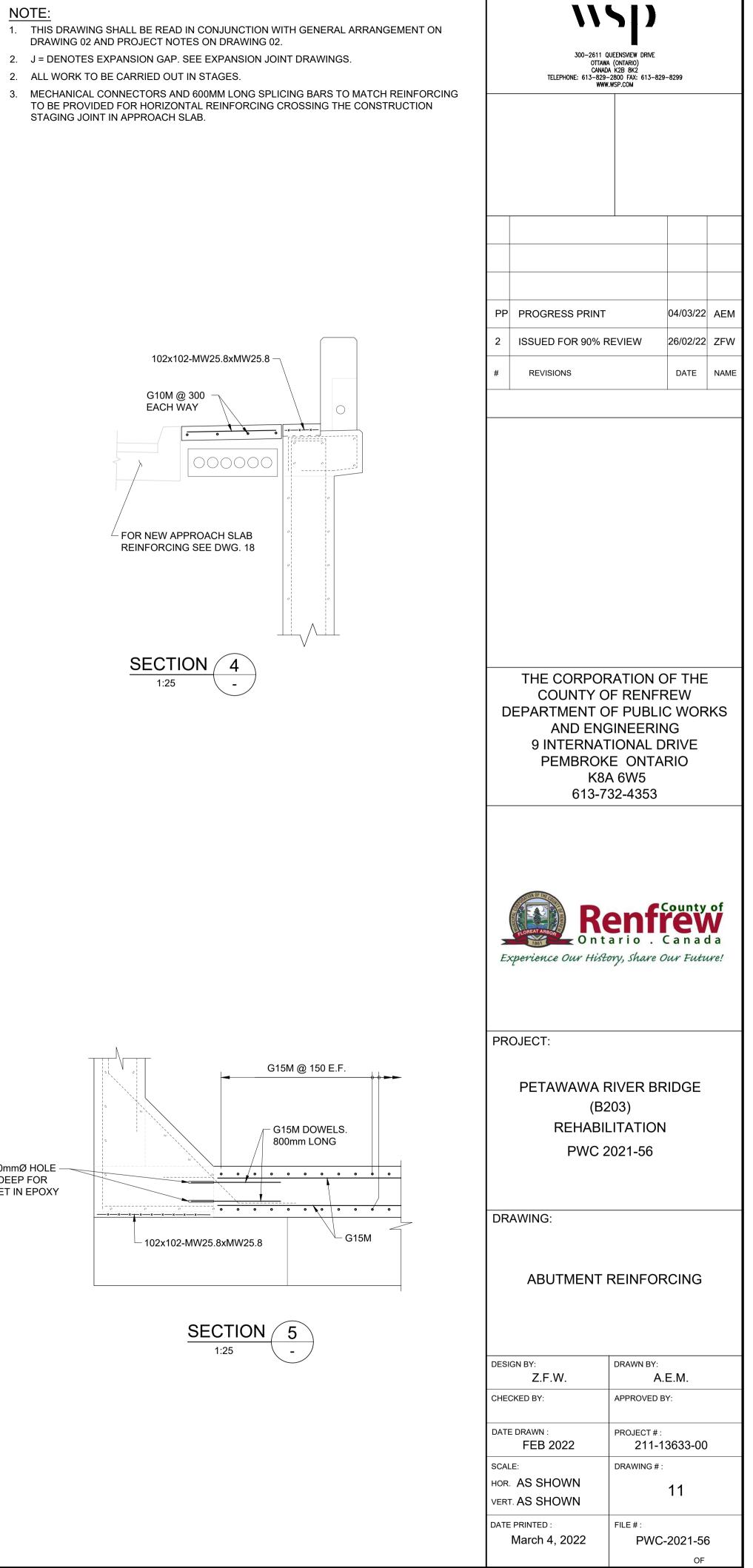


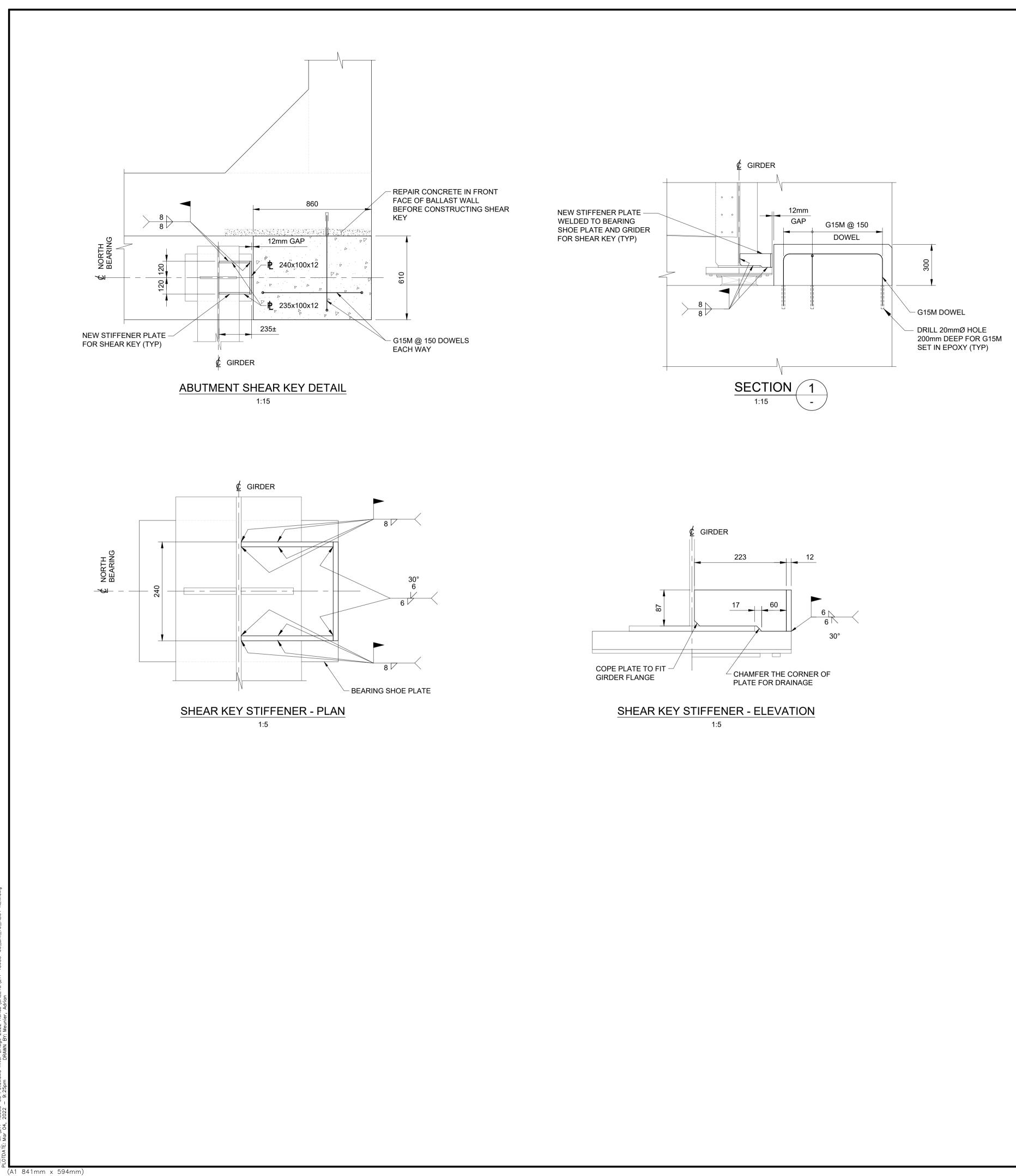


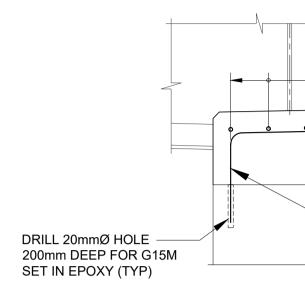
NOTE:

- DRAWING 02 AND PROJECT NOTES ON DRAWING 02.
- 2. J = DENOTES EXPANSION GAP. SEE EXPANSION JOINT DRAWINGS.
- 2. ALL WORK TO BE CARRIED OUT IN STAGES.

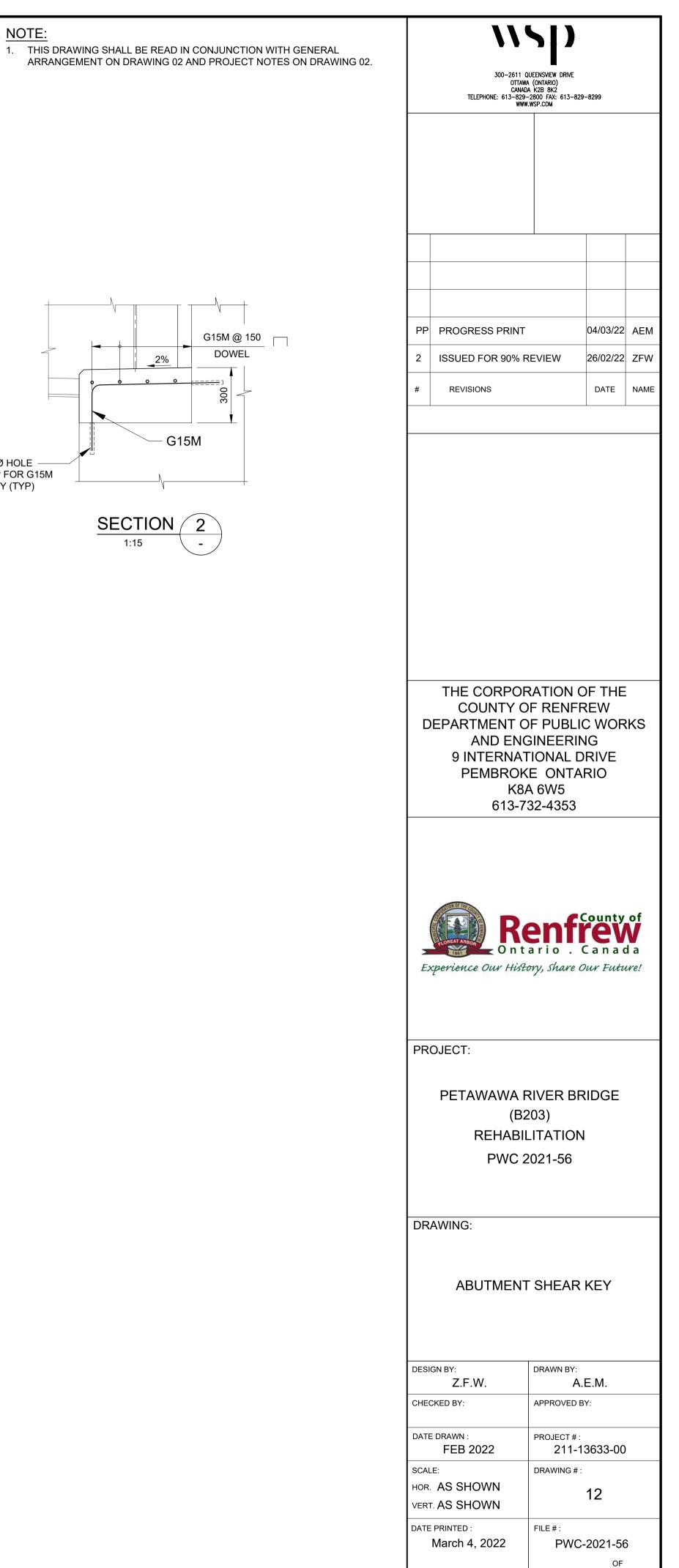


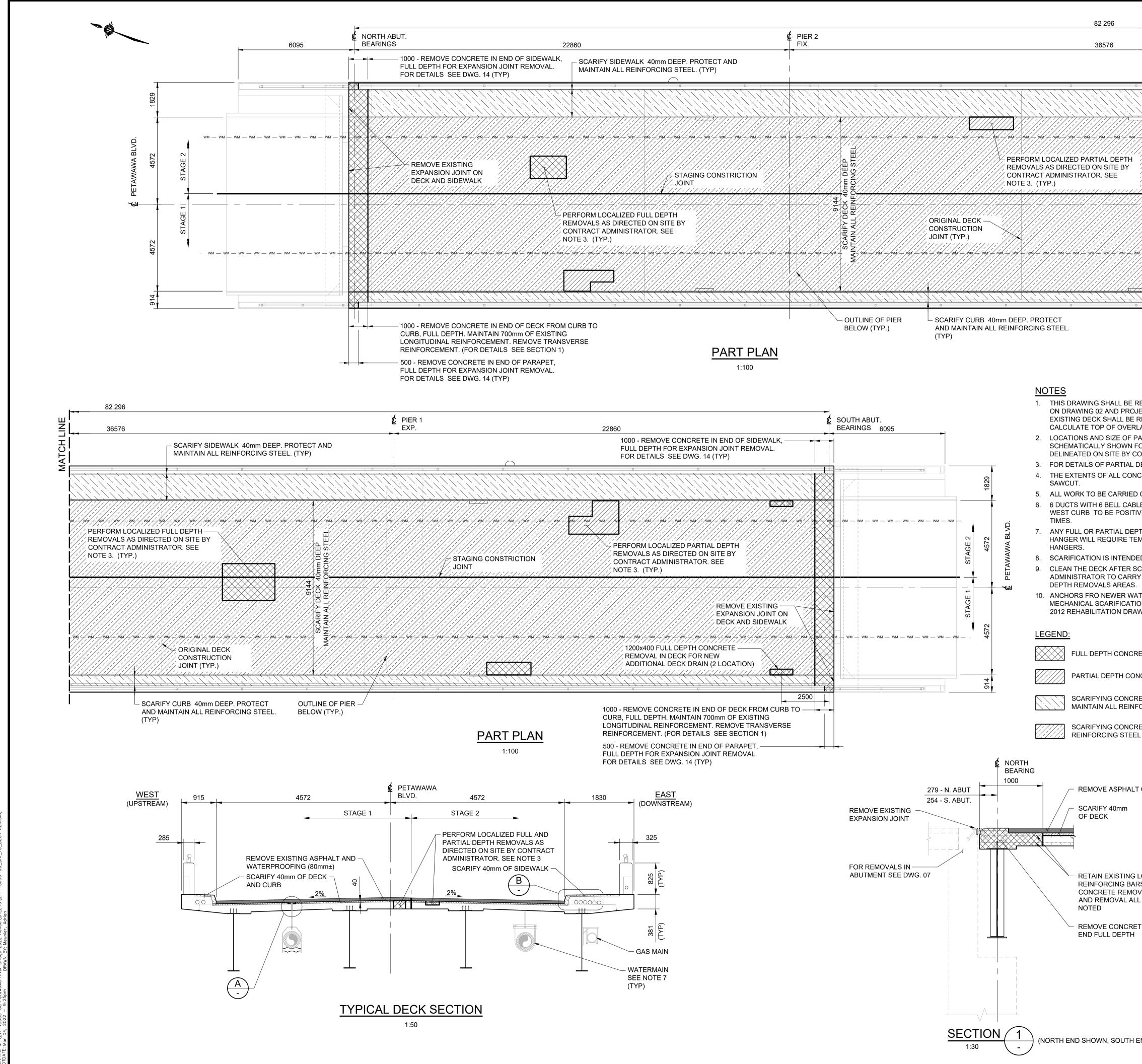




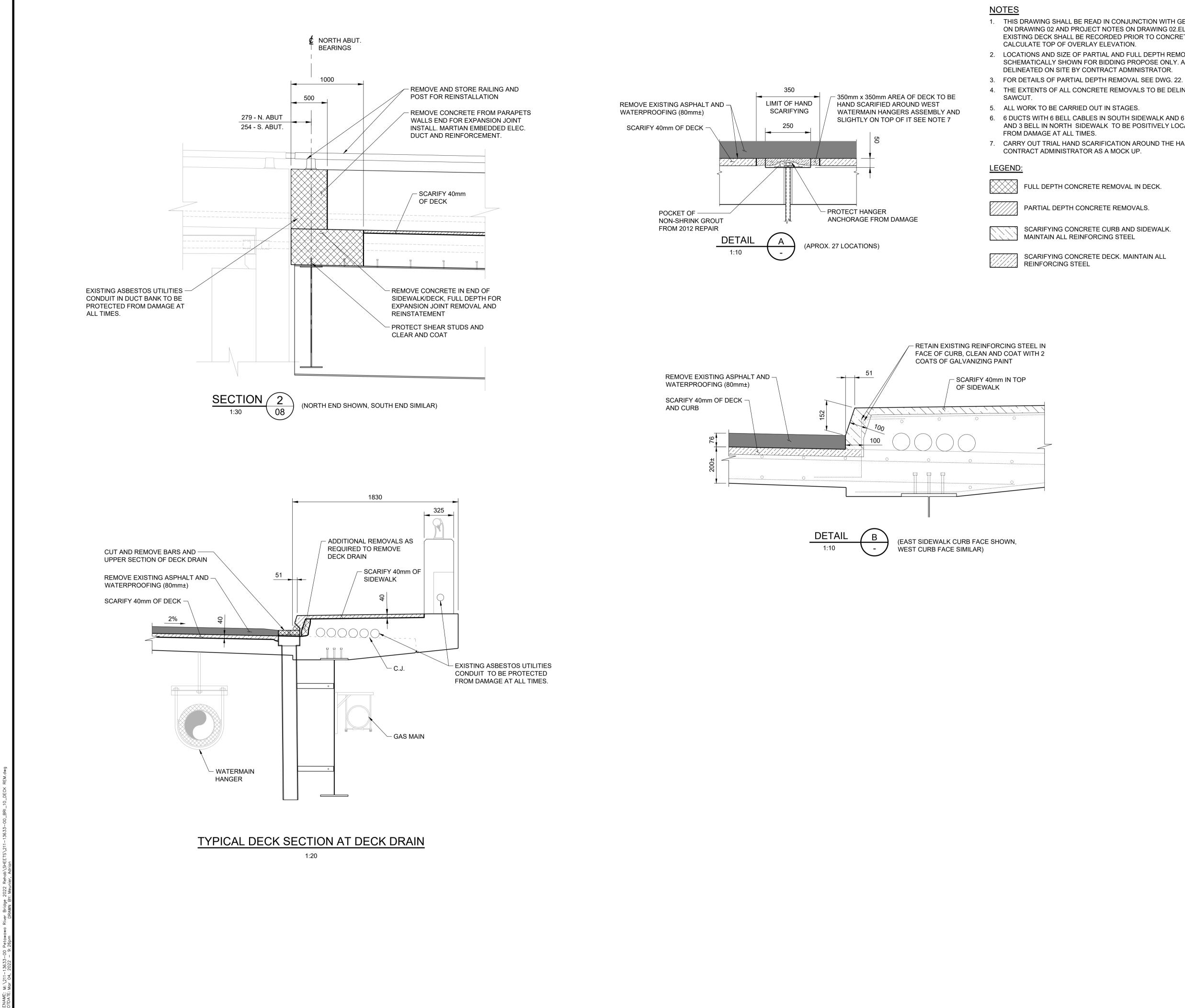








	300-2611 QUEENSVIEW DRIVE OTTAWA (ONTARIO) CANADA K2B 8K2 TELEPHONE: 613-829-2800 FAX: 613-829-8299 WWW.WSP.COM					
MATCH						
	PP	PROGRESS PRINT		04/03/22	AEM	
	2	ISSUED FOR 90% F	REVIEW	26/02/22	ZFW	
	#	REVISIONS		DATE	NAME	
EAD IN CONJUNCTION WITH GENERAL ARRANGEMENT ECT NOTES ON DRAWING 02.ELEVATION FOR TOP OF RECORDED PRIOR TO CONCRETE REMOVALS TO AY ELEVATION. ARTIAL AND FULL DEPTH REMOVALS ON DECK ARE OR BIDDING PROPOSE ONLY. ACTUAL AREAS TO BE ONTRACT ADMINISTRATOR.						
DEPTH REMOVAL SEE DWG. 22. CRETE REMOVALS TO BE DELINEATED WITH 25mm DEEP		THE CORPOR COUNTY C				
OUT IN STAGES. ES IN EAST SIDEWALK AND 2 DUCTS WITH 2 BELL IN VELY LOCATED, AND PROTECTED FROM DAMAGE AT ALL	D	EPARTMENT C AND ENC 9 INTERNAT	GINEERIN TIONAL D	IG RIVE	KS	
TH CONCRETE REMOVALS WITHIN 1m OF A WATERMAIN MPORARY SUPPORTS TO GIRDERS BELOW AFFECTED			E ONTA A 6W5 32-4353	RIO		
ED TO EXTEND TO THE TIP OF REINFORCING STEEL. CARIFICATION AND REQUEST SOUNDING BY CONTRACT Y OUT A CHAIN DRAG, MARK UP PARTIAL AND FULL		013-7	32-4333			
TERMAIN INSTALLED IN 2012 WILL INTERFERE WITH ON. HAND SCARIFICATION WILL BE REQUIRED. REFER TO WINGS	l	RCREAT ARBOS	enfi	eunty	of	
ETE REMOVAL IN DECK.	> E>	cperience Our Hist	ario . (ory, share C			
NCRETE REMOVALS.						
ETE CURB AND SIDEWALK. ORCING STEEL	PR	OJECT:				
ETE DECK. MAINTAIN ALL L		PETAWAWA F		RIDGE		
ON DECK		REHABI	203) _ITATION 2021-56			
	DR	AWING:				
LONGITUDINAL RS 600mm FROM VALS LIMITS. CUT L OTHERS UNLESS		DECK R	EMOVAL	S		
TE IN DECK	DESI	GN BY:	DRAWN BY:			
	CHE	Z.F.W.	A. APPROVED B	E.M. Y:		
	DATE	E DRAWN : FEB 2022	PROJECT # : 211-1	3633-00		
		E: AS SHOWN AS SHOWN	DRAWING # :	13		
END SIMILAR)		PRINTED : March 4, 2022	FILE # : PWC-	-2021-56 OF	;	



1. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH GENERAL ARRANGEMENT ON DRAWING 02 AND PROJECT NOTES ON DRAWING 02. ELEVATION FOR TOP OF EXISTING DECK SHALL BE RECORDED PRIOR TO CONCRETE REMOVALS TO

2. LOCATIONS AND SIZE OF PARTIAL AND FULL DEPTH REMOVALS ON DECK ARE SCHEMATICALLY SHOWN FOR BIDDING PROPOSE ONLY. ACTUAL AREAS TO BE

4. THE EXTENTS OF ALL CONCRETE REMOVALS TO BE DELINEATED WITH 25mm DEEP

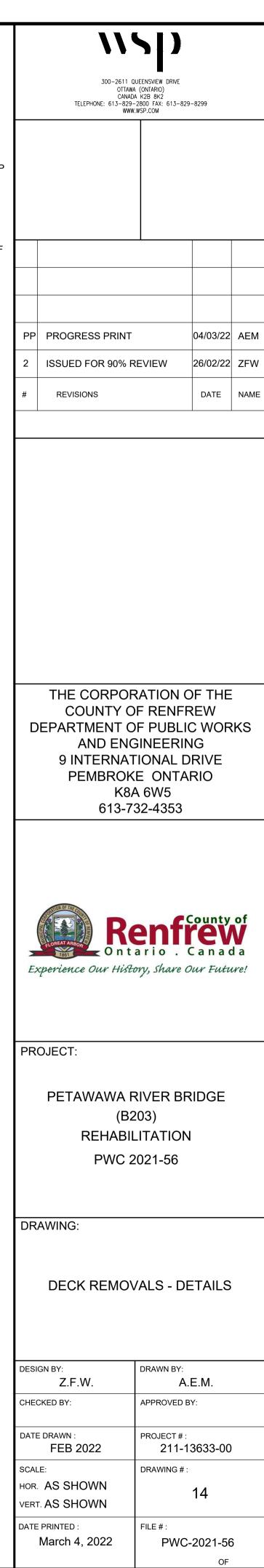
6. 6 DUCTS WITH 6 BELL CABLES IN SOUTH SIDEWALK AND 6 DUCTS WITH 3 HYDRO AND 3 BELL IN NORTH SIDEWALK TO BE POSITIVELY LOCATED, AND PROTECTED

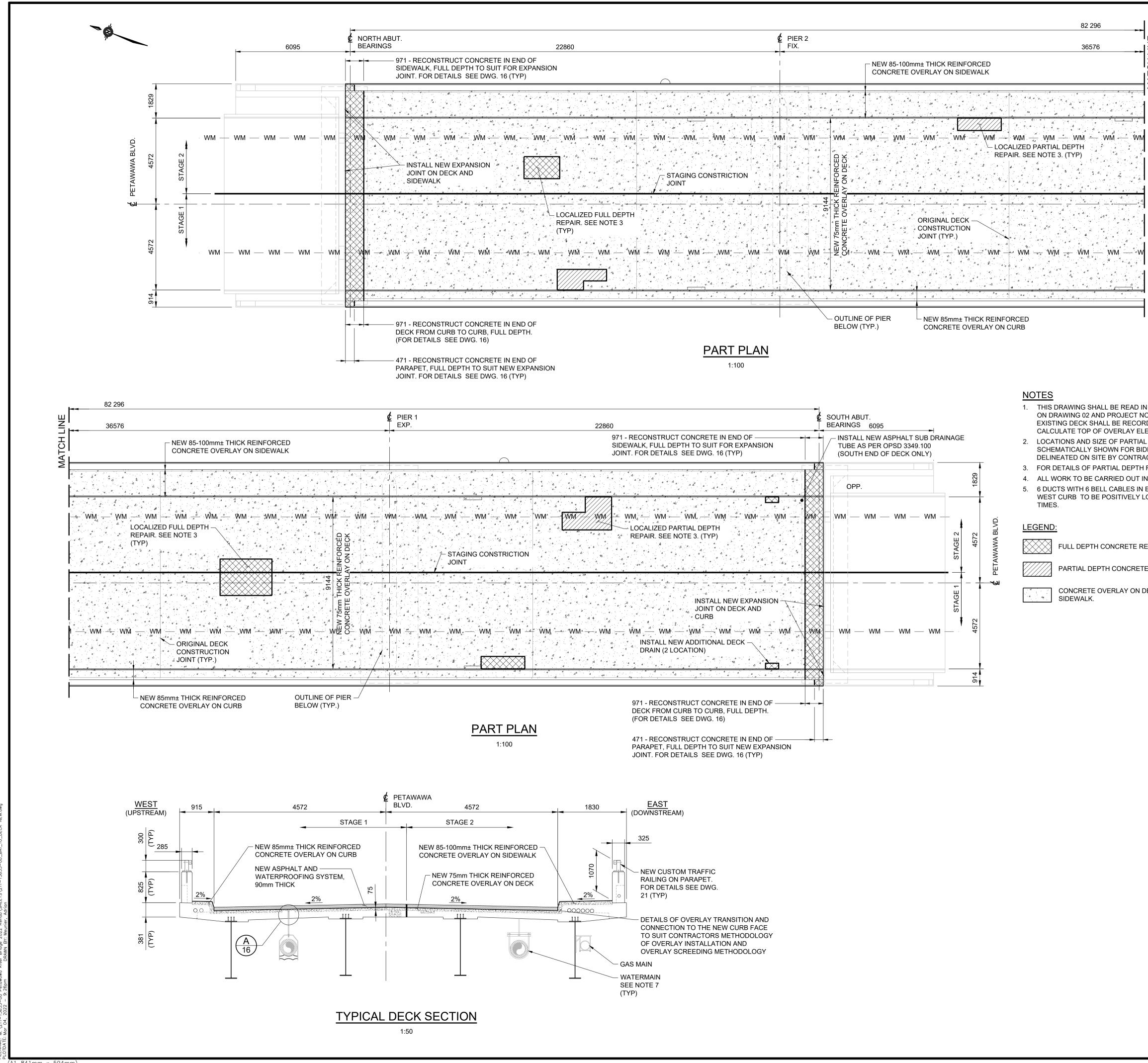
7. CARRY OUT TRIAL HAND SCARIFICATION AROUND THE HANGERS IN PRESENCE OF

FULL DEPTH CONCRETE REMOVAL IN DECK.

SCARIFYING CONCRETE CURB AND SIDEWALK.

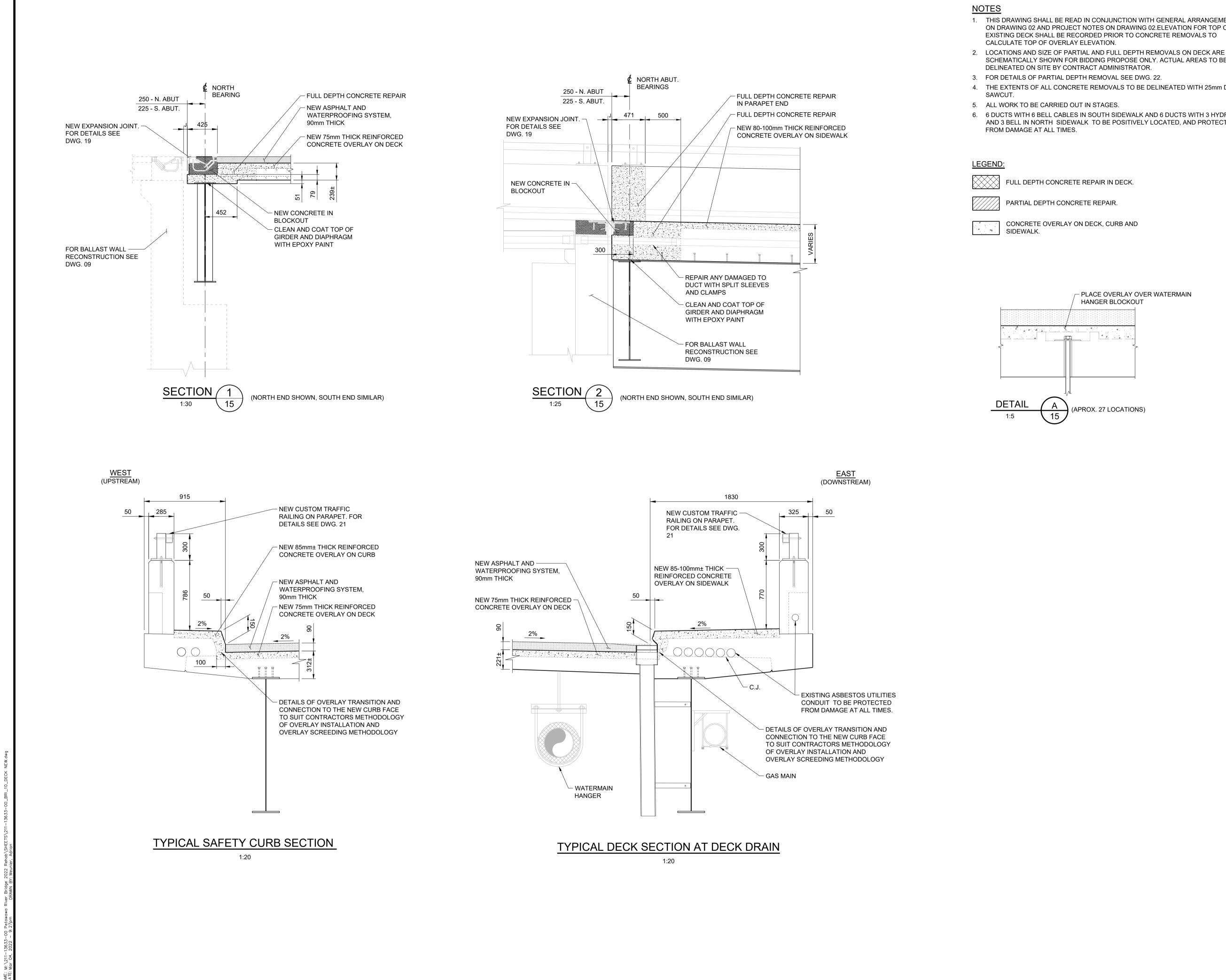
SCARIFYING CONCRETE DECK. MAINTAIN ALL





		11	5))		
U Z I		OTTAW	QUEENSVIEW DRIVE A (ONTARIO) A K2B 8K2		
MATCH LINE		TELEPHONE: 613-829	-2800 FAX: 613-829 WWSP.COM	-8299	
M M					
				0.4/00/00	
	2 PP	PROGRESS PRINT		04/03/22	AEM ZFW
	#	REVISIONS		DATE	NAME
CONJUNCTION WITH GENERAL ARRANGEMENT					
OTES ON DRAWING 02.ELEVATION FOR TOP OF DED PRIOR TO CONCRETE REMOVALS TO EVATION.					
AND FULL DEPTH REPAIRS ON DECK ARE DDING PROPOSE ONLY. ACTUAL AREAS TO BE					
CT ADMINISTRATOR. REPAIRS SEE DWG. 22. N STAGES.		THE CORPOR COUNTY C			
EAST SIDEWALK AND 2 DUCTS WITH 2 BELL IN OCATED, AND PROTECTED FROM DAMAGE AT ALL	D	EPARTMENT C AND ENC			KS
		9 INTERNAT PEMBROK			
			A 6W5 32-4353		
EPAIR IN DECK.					
ECK, CURB AND		IN DE THE FORM			
		LOREAT ABBOR	enfi	ev	of
	> E>	xperience Our Hist	ario. 0	Lanad	aa
	PR	OJECT:			
		PETAWAWA F	RIVER BR	RIDGE	
		-	203) LITATION		
		PWC 2	2021-56		
	DR	AWING:			
		DECK RECC	NSTRUC	TION	
	DESI	GN BY:	DRAWN BY:		
		Z.F.W.		E.M.	
		E DRAWN :	PROJECT # :		
		FEB 2022	211-1	3633-00	
		AS SHOWN	DRAWING # :	15	
		R. AS SHOWN	FILE # :		
		March 4, 2022		-2021-56	5

OF



1. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH GENERAL ARRANGEMENT ON DRAWING 02 AND PROJECT NOTES ON DRAWING 02. ELEVATION FOR TOP OF EXISTING DECK SHALL BE RECORDED PRIOR TO CONCRETE REMOVALS TO

SCHEMATICALLY SHOWN FOR BIDDING PROPOSE ONLY. ACTUAL AREAS TO BE

4. THE EXTENTS OF ALL CONCRETE REMOVALS TO BE DELINEATED WITH 25mm DEEP

6. 6 DUCTS WITH 6 BELL CABLES IN SOUTH SIDEWALK AND 6 DUCTS WITH 3 HYDRO AND 3 BELL IN NORTH SIDEWALK TO BE POSITIVELY LOCATED, AND PROTECTED

PLACE OVERLAY OVER WATERMAIN HANGER BLOCKOUT

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		 						<	>

(APROX. 27 LOCATIONS)

	300–2611 QUEENSVIEW DRIVE OTTAWA (ONTARIO)							
	CANADA K2B 8K2 TELEPHONE: 613-829-2800 FAX: 613-829 WWW.WSP.COM	-8299						
PP	PROGRESS PRINT	04/03/22	AEM					
2	ISSUED FOR 90% REVIEW	26/02/22	ZFW					
#	REVISIONS	DATE	NAME					

THE CORPORATION OF THE COUNTY OF RENFREW DEPARTMENT OF PUBLIC WORKS AND ENGINEERING 9 INTERNATIONAL DRIVE PEMBROKE ONTARIO K8A 6W5 613-732-4353



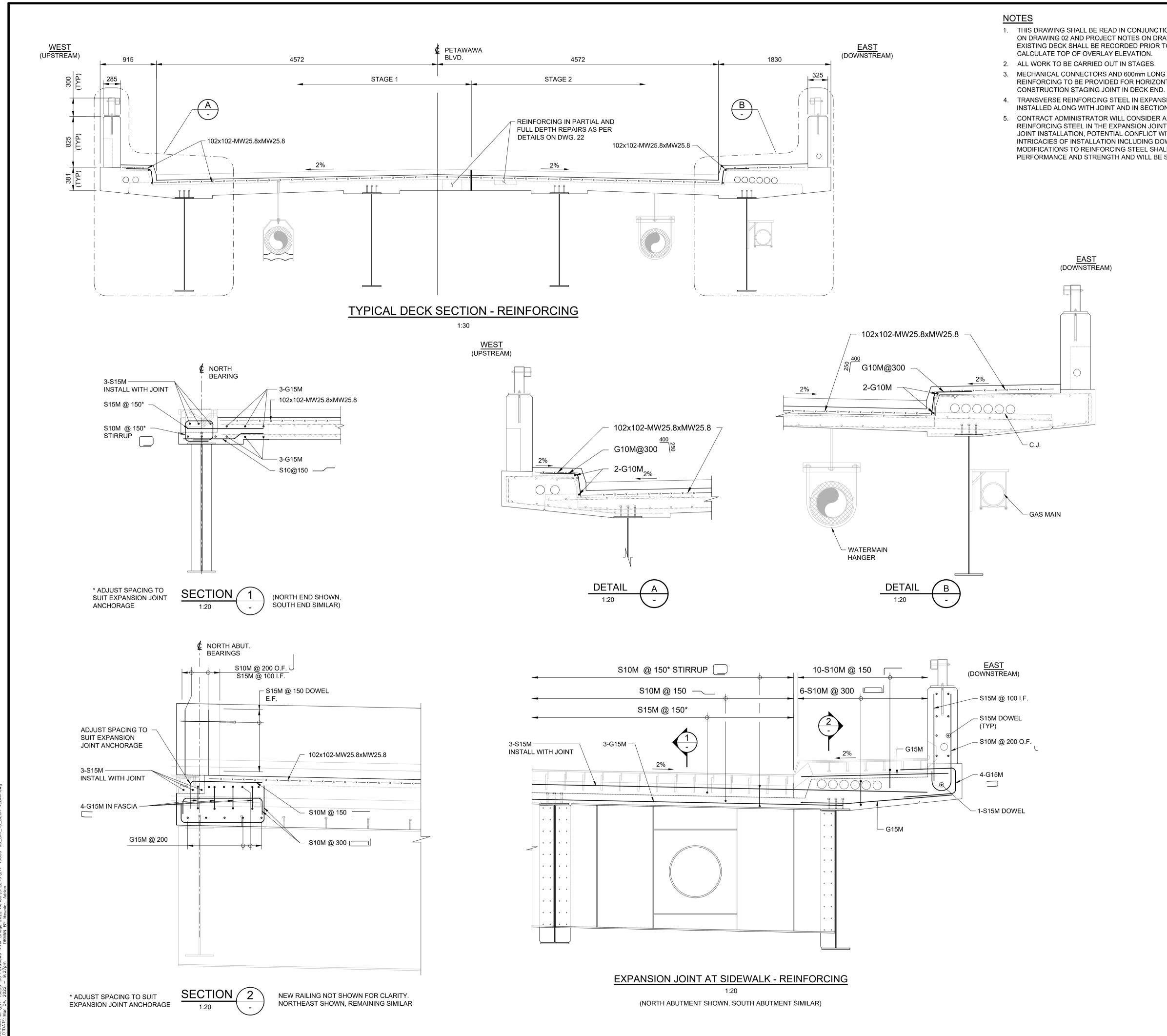
PROJECT:

PETAWAWA RIVER BRIDGE (B203) REHABILITATION PWC 2021-56

DRAWING:

DECK RECONSTRUCTION DETAILS

DESIGN BY:	DRAWN BY:
Z.F.W.	A.E.M.
CHECKED BY:	APPROVED BY:
DATE DRAWN : FEB 2022	PROJECT # : 211-13633-00
	211-13633-00
SCALE:	DRAWING # :
HOR. AS SHOWN	16
VERT. AS SHOWN	10
DATE PRINTED :	FILE # :
March 4, 2022	PWC-2021-56
	OF



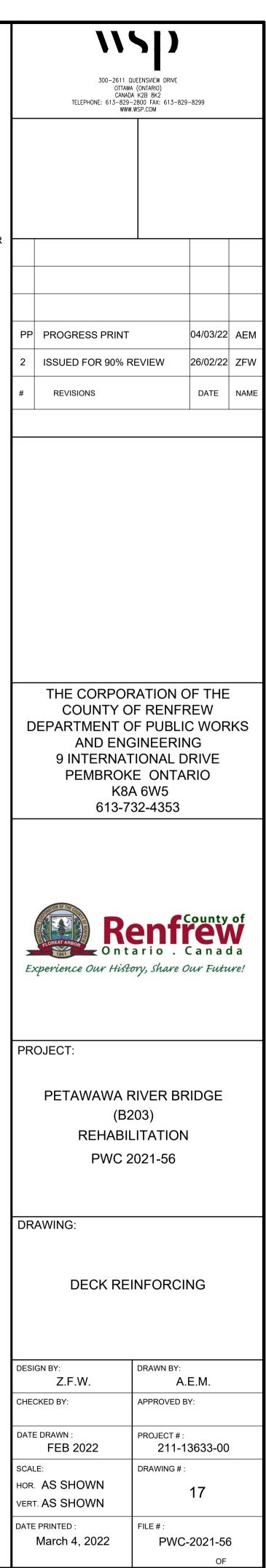
⁽A1 841mm x 594mm)

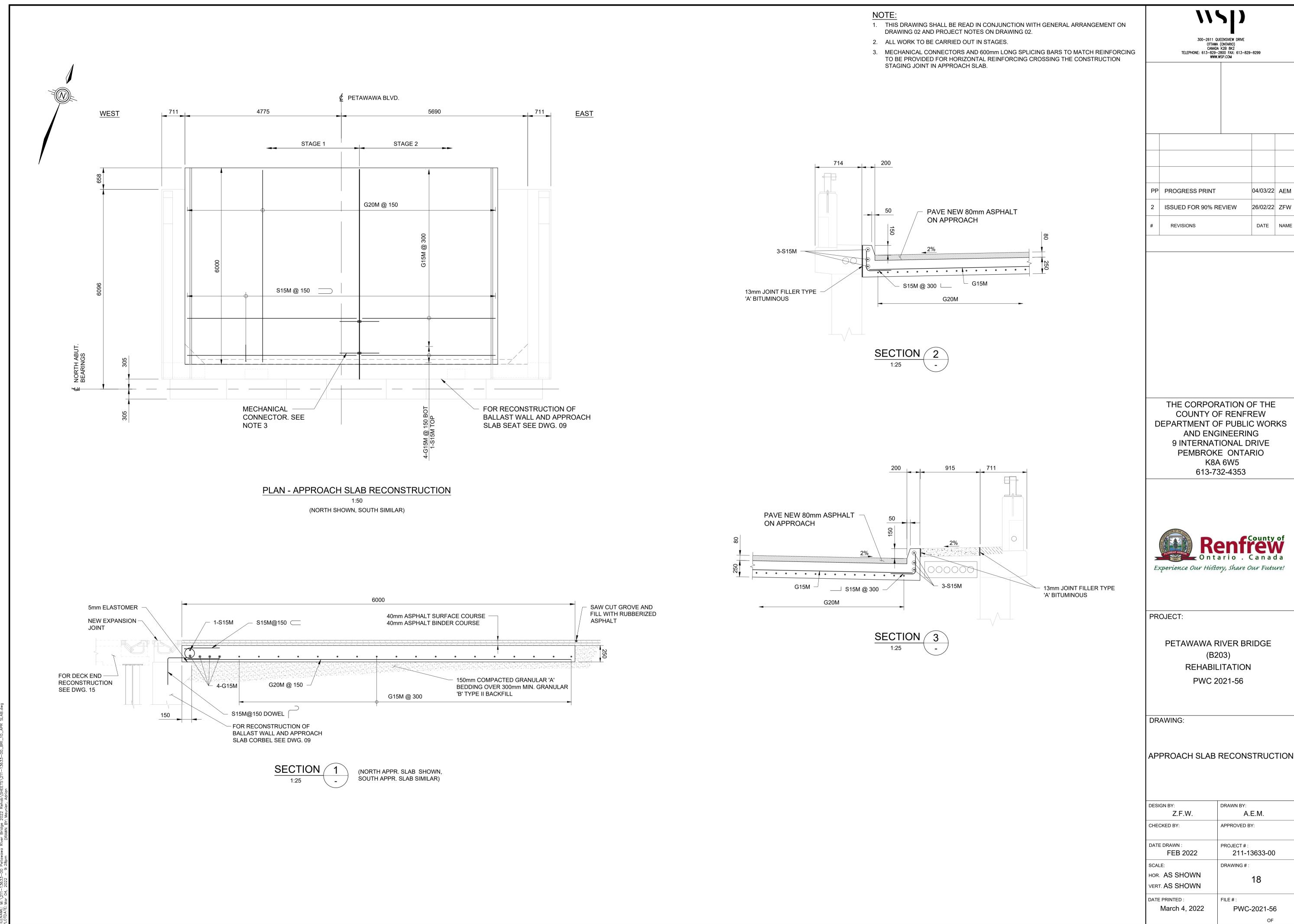
1. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH GENERAL ARRANGEMENT ON DRAWING 02 AND PROJECT NOTES ON DRAWING 02. ELEVATION FOR TOP OF EXISTING DECK SHALL BE RECORDED PRIOR TO CONCRETE REMOVALS TO

3. MECHANICAL CONNECTORS AND 600mm LONG SPLICING BARS TO MATCH REINFORCING TO BE PROVIDED FOR HORIZONTAL REINFORCING CROSSING THE

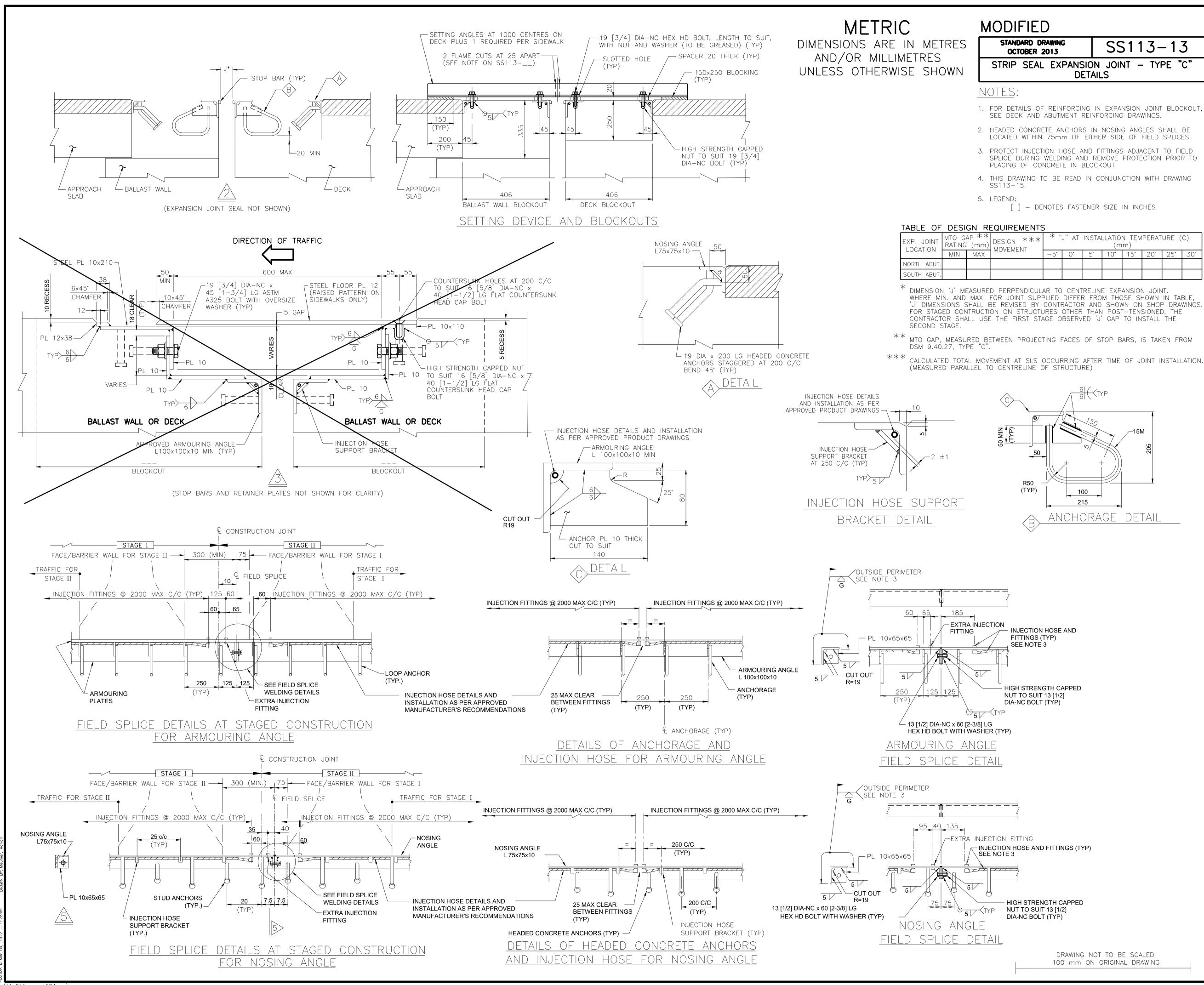
4. TRANSVERSE REINFORCING STEEL IN EXPANSION JOINT BLOCK OUT TO BE INSTALLED ALONG WITH JOINT AND IN SECTIONS TO SUIT JOINT INSTALLATION.

5. CONTRACT ADMINISTRATOR WILL CONSIDER ALTERNATIVE ARRANGEMENT OF REINFORCING STEEL IN THE EXPANSION JOINT ASSEMBLIES TO SUIT EXPANSION JOINT INSTALLATION, POTENTIAL CONFLICT WITH ANCHORAGE ASSEMBLIES AND INTRICACIES OF INSTALLATION INCLUDING DOWELING TO NEW CONCRETE. ANY MODIFICATIONS TO REINFORCING STEEL SHALL PROVIDE EQUIVALENT OR BETTER PERFORMANCE AND STRENGTH AND WILL BE SUBJECT TO APPROVAL





⁽A1 841mm x 594mm)



D		
DRAWING 2013	SS113-13	
L EXPANSIC	ON JOINT – TYPE "C" AILS	\vdash
	IN EXPANSION JOINT BLOCKOUT, NFORCING DRAWINGS.	

\sim				
* "J" AT INSTALLATION TEMPERATURE (C) (mm)				
30°				
-				

PP PROGRESS PRINT 04/03/22 AEM 26/02/22 ZFW **ISSUED FOR 90% REVIEW** REVISIONS DATE NAME

****\\

300-2611 QUEENSVIEW DRIVE

OTTAWA (ONTARIO) CANADA K2B 8K2

TELEPHONE: 613-829-2800 FAX: 613-829-8299

WWW.WSP.COM

THE CORPORATION OF THE COUNTY OF RENFREW DEPARTMENT OF PUBLIC WORKS AND ENGINEERING **9 INTERNATIONAL DRIVE** PEMBROKE ONTARIO K8A 6W5 613-732-4353



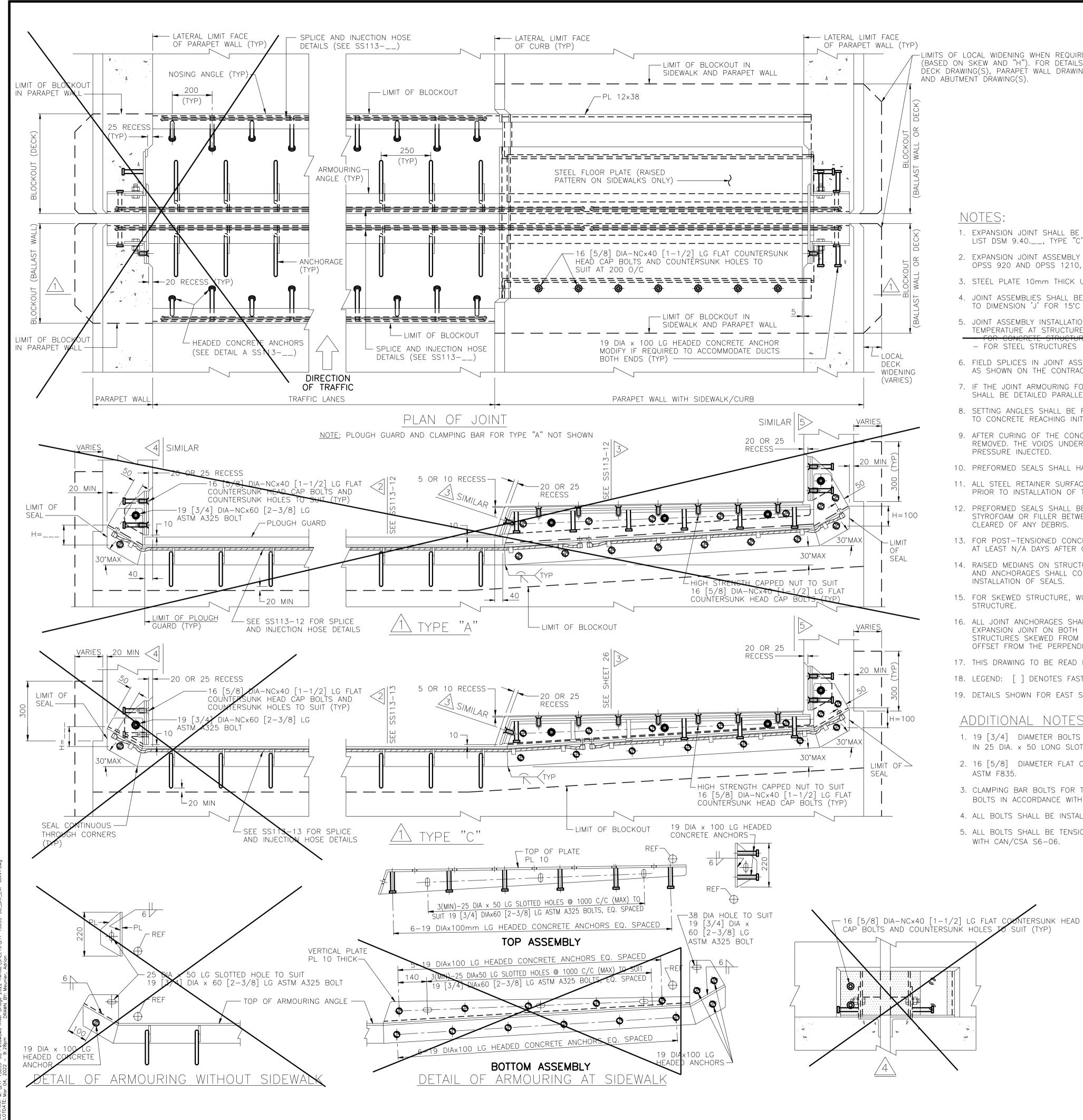
PROJECT:

PETAWAWA RIVER BRIDGE (B203) REHABILITATION PWC 2021-56

DRAWING:

STRIP SEAL EXPANSION JOINT **TYPE C DETAILS**

DESIGN BY:	DRAWN BY:
Z.F.W.	A.E.M.
CHECKED BY:	APPROVED BY:
DATE DRAWN :	PROJECT # :
FEB 2022	211-13633-00
SCALE:	DRAWING # :
HOR. AS SHOWN	19
VERT. AS SHOWN	19
DATE PRINTED :	FILE # :
March 4, 2022	PWC-2021-56
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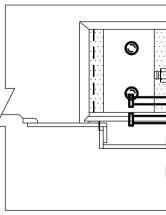
MODIFIED -LIMITS OF LOCAL WIDENING WHEN REQUIRED (BASED ON SKEW AND "H"). FOR DETAILS, SEE DECK DRAWING(S), PARAPET WALL DRAWING(S) STANDARD D AUGUST 2 STRIP SEA DIME А UNL 1. EXPANSION JOINT SHALL BE IN ACCORDANCE WITH THE D LIST DSM 9.40.__, TYPE "C". DETAILS SHOWN FOR OTHEI 2. EXPANSION JOINT ASSEMBLY CONSTRUCTION AND MATERIA OPSS 920 AND OPSS 1210, AND AS SPECIFIED IN THE 3. STEEL PLATE 10mm THICK UNLESS OTHERWISE NOTED. 4. JOINT ASSEMBLIES SHALL BE COMPLETELY SHOP ASSEMBL

- TO DIMENSION 'J' FOR 15°C AND ADJUSTED IN THE FIELD 5. JOINT ASSEMBLY INSTALLATION TEMPERATURE SHALL BE T TEMPERATURE AT STRUCTURE PRIOR TO JOINT INSTALLATION
- FOR STEEL STRUCTURES 24 HOURS 6. FIELD SPLICES IN JOINT ASSEMBLY ARE ONLY PERMITTED
- AS SHOWN ON THE CONTRACT DRAWINGS.
- 7. IF THE JOINT ARMOURING FOR A SKEWED STRUCTURE IS SHALL BE DETAILED PARALLEL TO THE CENTRELINE OF TH
- 8. SETTING ANGLES SHALL BE FLAME CUT ACCORDING TO OF TO CONCRETE REACHING INITIAL SET.
- 9. AFTER CURING OF THE CONCRETE HAS BEEN COMPLETED. REMOVED. THE VOIDS UNDER THE ARMOURING ANGLE AND PRESSURE INJECTED.
- 10. PREFORMED SEALS SHALL HAVE MINIMUM THICKNESS OF
- 11. ALL STEEL RETAINER SURFACES COMING IN CONTACT WITH PRIOR TO INSTALLATION OF THE SEAL.
- 12. PREFORMED SEALS SHALL BE INSTALLED AFTER JOINT ASS STYROFOAM OR FILLER BETWEEN DECK AND BALLAST WALL CLEARED OF ANY DEBRIS.
- 13. FOR POST-TENSIONED CONCRETE BRIDGES, JOINT ASSEME AT LEAST N/A DAYS AFTER COMPLETION OF POST-TENSIC
- 14. RAISED MEDIANS ON STRUCTURES SHALL BE PROVIDED W AND ANCHORAGES SHALL CONFORM TO SIDEWALK DETAILS INSTALLATION OF SEALS.
- 15. FOR SKEWED STRUCTURE, WORKING DRAWINGS SHALL BE STRUCTURE.
- 16. ALL JOINT ANCHORAGES SHALL BE DETAILED ON WORKING EXPANSION JOINT ON BOTH THE DECK SIDE AND THE ABI STRUCTURES SKEWED FROM OVER 15° AND UP TO 45° S OFFSET FROM THE PERPENDICULAR TO THE EXPANSION J
- 17. THIS DRAWING TO BE READ IN CONJUNCTION WITH DRAWIN
- 18. LEGEND: [] DENOTES FASTENER SIZE IN INCHES.
- 19. DETAILS SHOWN FOR EAST SIDEWALK APPLY TO WEST SAF

ADDITIONAL NOTES FOR BOLTS:

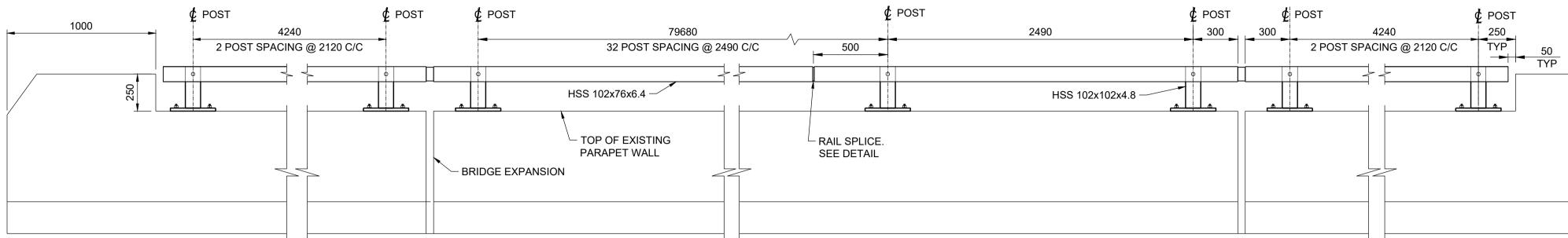
- 1. 19 [3/4] DIAMETER BOLTS SHALL BE IN ACCORDANCE IN 25 DIA. x 50 LONG SLOTTED HOLES SHALL BE INSTAL
- 2. 16 [5/8] DIAMETER FLAT COUNTERSUNK HEAD CAP BOL ASTM F835.
- 3. CLAMPING BAR BOLTS FOR TYPE 'A' JOINTS SHALL BE 19 BOLTS IN ACCORDANCE WITH ASTM A325. CLAMPING BAR
- 4. ALL BOLTS SHALL BE INSTALLED USING MOLY50 LUBRICAN
- 5. ALL BOLTS SHALL BE TENSIONED USING THE TURN-OF-N WITH CAN/CSA S6-06.

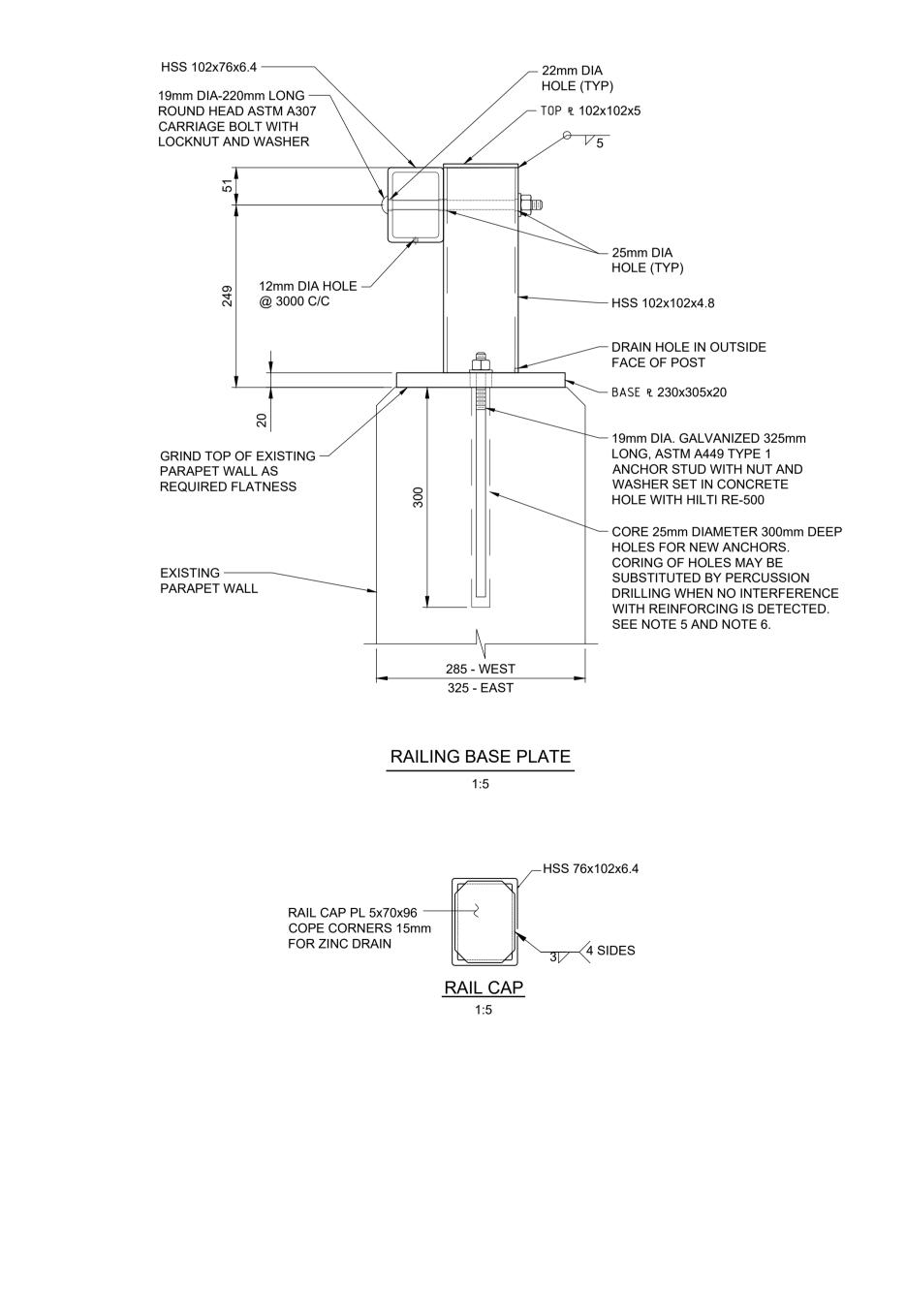
SUIT (TYP)



DRAWING 100 mm (

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D	300–2611 QUEENSVIEW DRIVE OTTAWA (ONTARIO) CANADA K2B 8K2 TELEPHONE: 613–829–2800 FAX: 613–829–8299 WWW.WSP.COM		
SS113-15			
AL EXPANSION JOINT ASSEMBLY FOR PARAPET WALLS			
METRIC ENSIONS ARE IN METRES ND/OR MILLIMETRES ESS OTHERWISE SHOWN			
DESIGNATED SOURCES FOR MATERIALS ER TYPES ARE NOT APPLICABLE. AL SHALL BE ACCORDING TO CONTRACT DOCUMENTS.	PPPROGRESS PRINT04/03/22AEM2ISSUED FOR 90% REVIEW26/02/22ZFW#REVISIONSDATENAME		
BLED (EXCEPT FOR SEALS) AND PRESET D TO SUIT INSTALLATION TEMPERATURE. TAKEN AS MEAN SHADE AIR TON AS FOLLOWS:			
D AT STAGED CONSTRUCTION, AND/OR			
S SPLICED AT A CROWN, THE SPLICE THE TRAFFIC LANE. DPSS 920, BUT IN NO CASE PRIOR			
D, THE SETTING DEVICES MAY BE ID NOSING ANGLE SHALL THEN BE			
5mm OR AS PER DSM. TH PREFORMED SEAL SHALL BE CLEANED	THE CORPORATION OF THE		
SSEMBLY HAS BEEN CAST IN PLACE, L REMOVED, AND EXPANSION GAP	COUNTY OF RENFREW DEPARTMENT OF PUBLIC WORKS AND ENGINEERING 9 INTERNATIONAL DRIVE PEMBROKE ONTARIO K8A 6W5 613-732-4353		
ABLY SHALL NOT BE INSTALLED UNTIL IONING OPERATIONS. WITH SLIDING PLATES. PLATE THICKNESS .S, AND SHALL ACCOMMODATE			
E DETAILED TO SUIT GEOMETRY OF			
IG DRAWINGS PERPENDICULAR TO THE BUTMENT SIDE EXCEPT AS FOLLOWS. SHALL HAVE ANCHORAGES DETAILED 30° JOINT ON THE DECK SIDE. /ING SS113-12 OR SS113-13. AFETY CURB.	Renfress Ontario . Canada Experience Our History, Share Our Future!		
WITH WITH ASTM A325. ALL BOLTS USED ALLED WITH OVERSIZE WASHERS. OLTS SHALL BE IN ACCORDANCE WITH 19 [3/4] DIAMETER HEX HEAD R BOLTS SHALL BE TENSIONED TO 125kN. ANT.	PROJECT: PETAWAWA RIVER BRIDGE (B203) REHABILITATION PWC 2021-56		
	DRAWING:		
	STRIP SEAL EXPANSION JOINT ASSEMBLY FOR PARAPET WALL		
	DESIGN BY: Z.F.W. DRAWN BY: A.E.M.		
$\overline{5}$	CHECKED BY: APPROVED BY: DATE DRAWN : PROJECT # :		
	DATE DRAWN : PROJECT # : FEB 2022 211-13633-00 SCALE: DRAWING # :		
ON ORIGINAL DRAWING	HOR. AS SHOWN 20 VERT. AS SHOWN 20 DATE PRINTED : FILE #: March 4, 2022 PWC-2021-56		
	March 4, 2022 PWC-2021-56 OF		



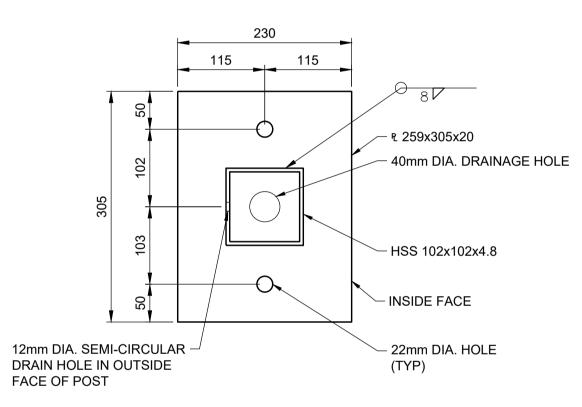


ME: M:/211-13633-00 Petawawa River Bridge 2022 Rehab/SHEETS/211-13633-00_BRI_60 TRAFFIC RAI 31F: Mrr 04 2022 - 0: 28cm DPANN DY: Marrison Advison

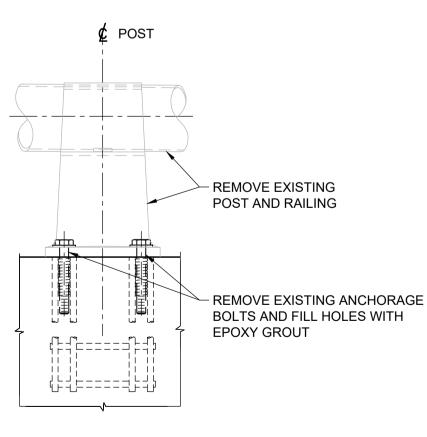
(A1 841mm x 594mm)

RAILING LAYOUT

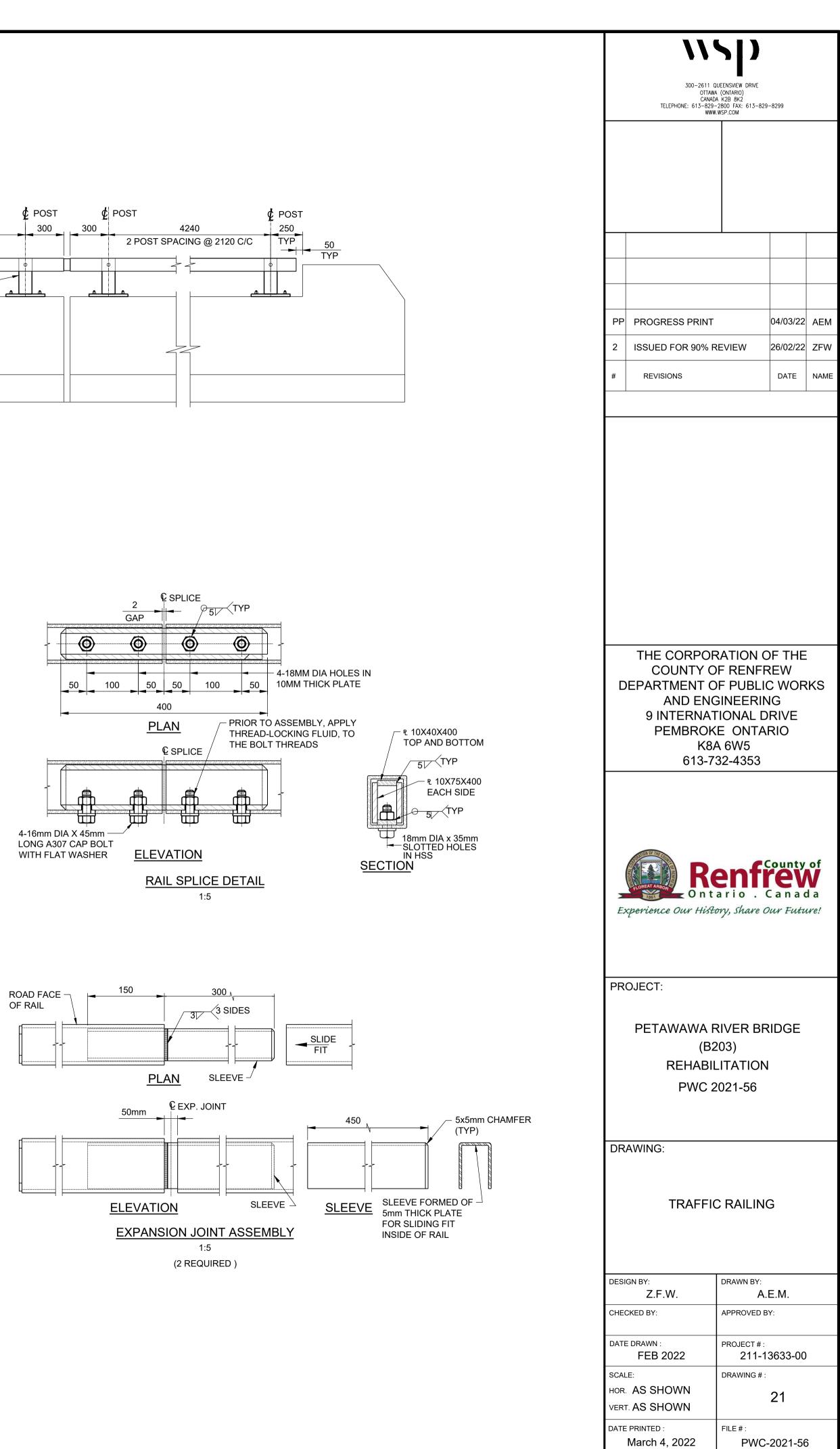
1:20



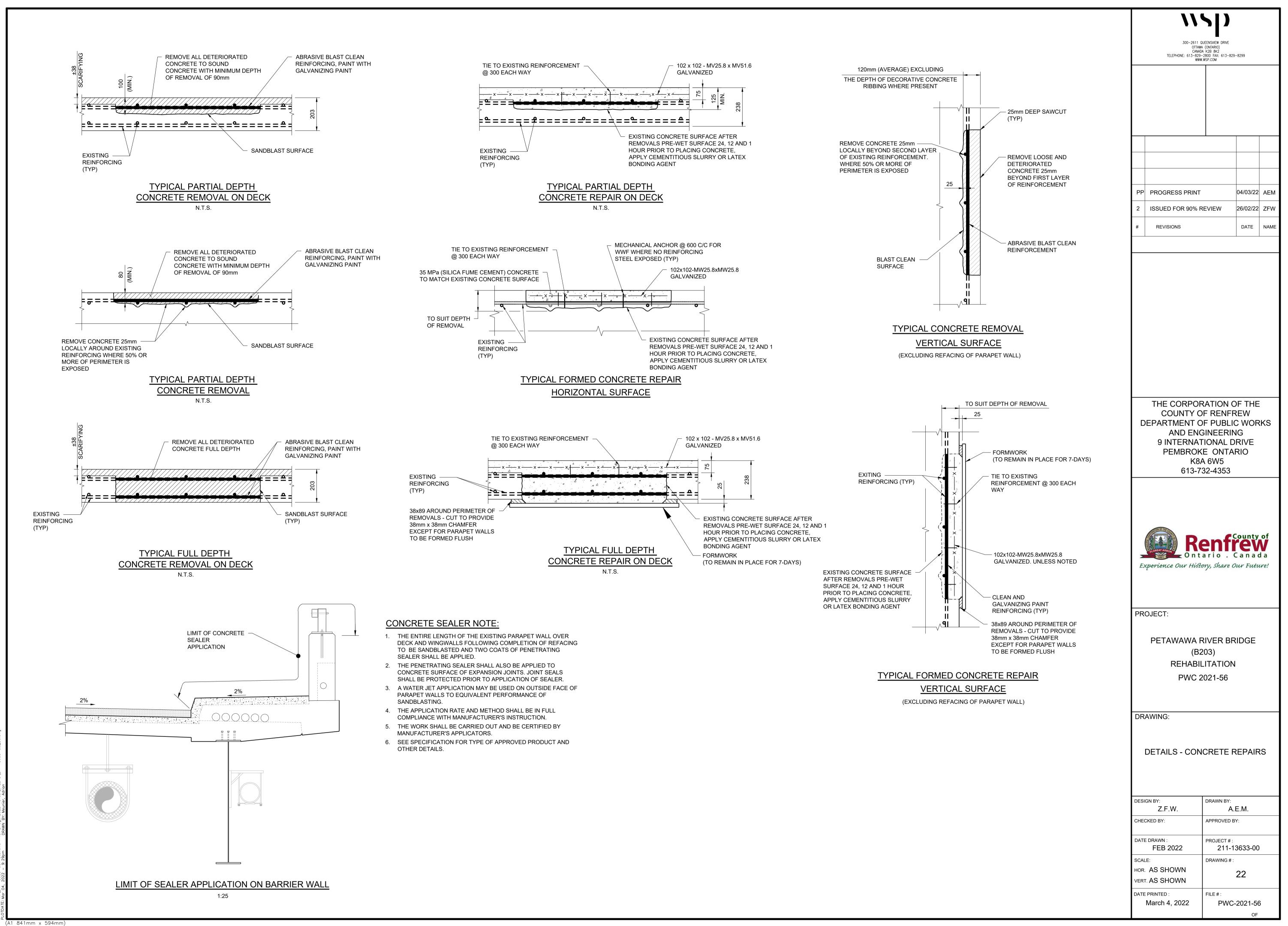


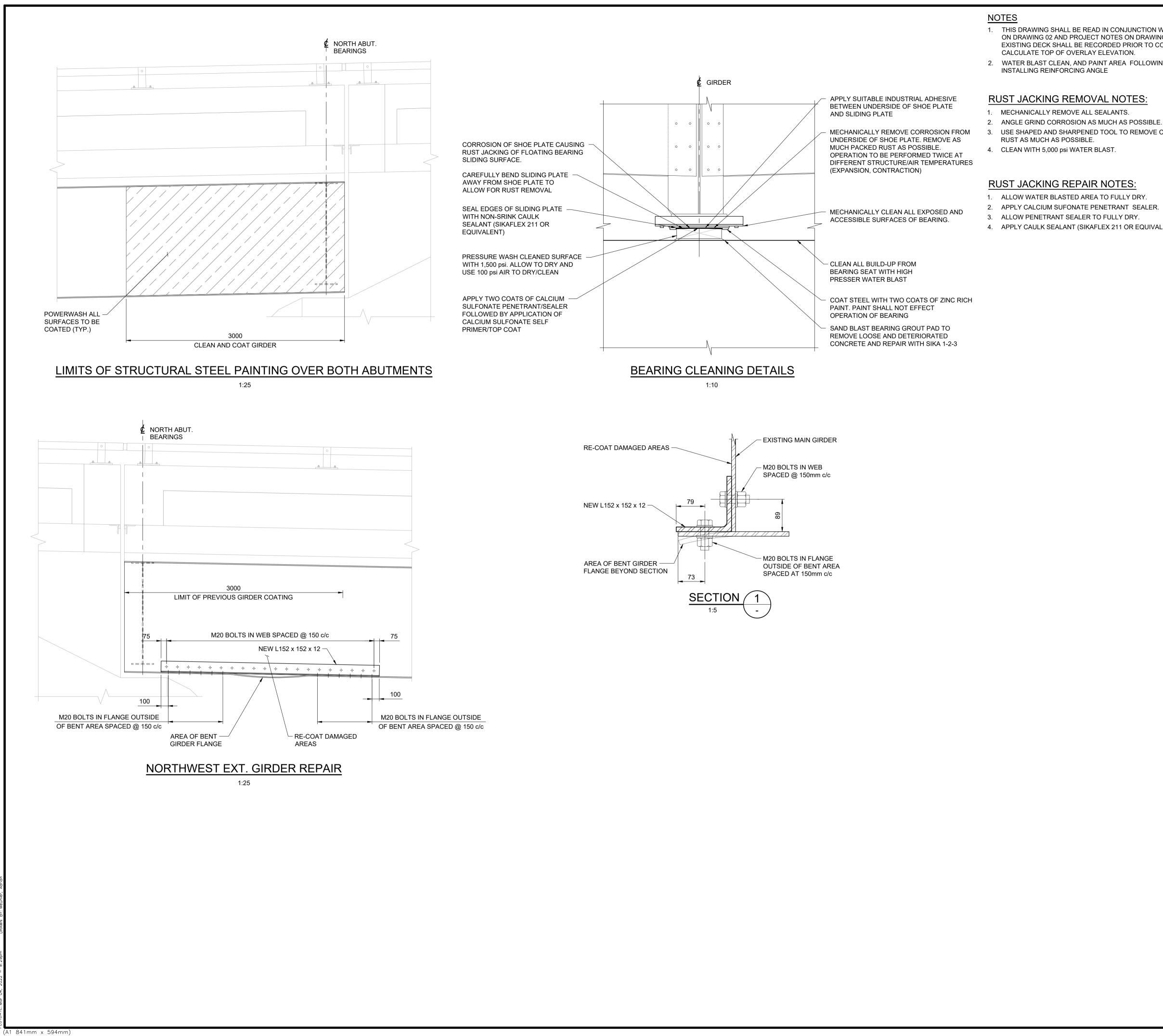






OF



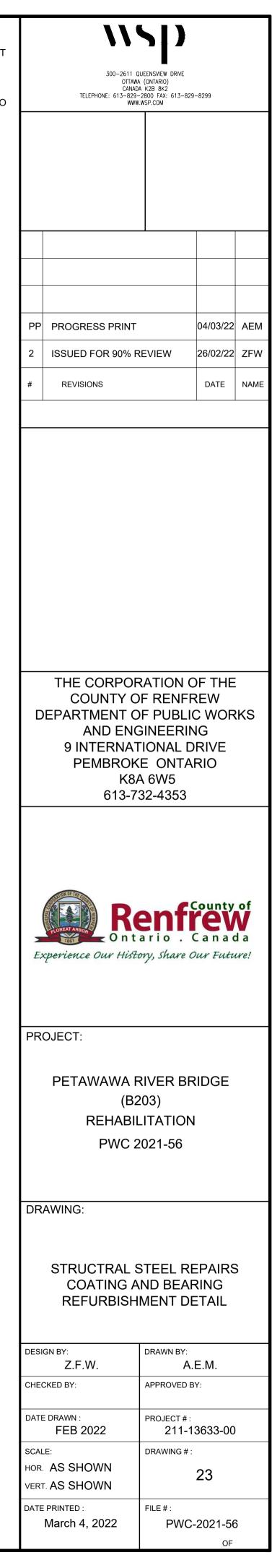


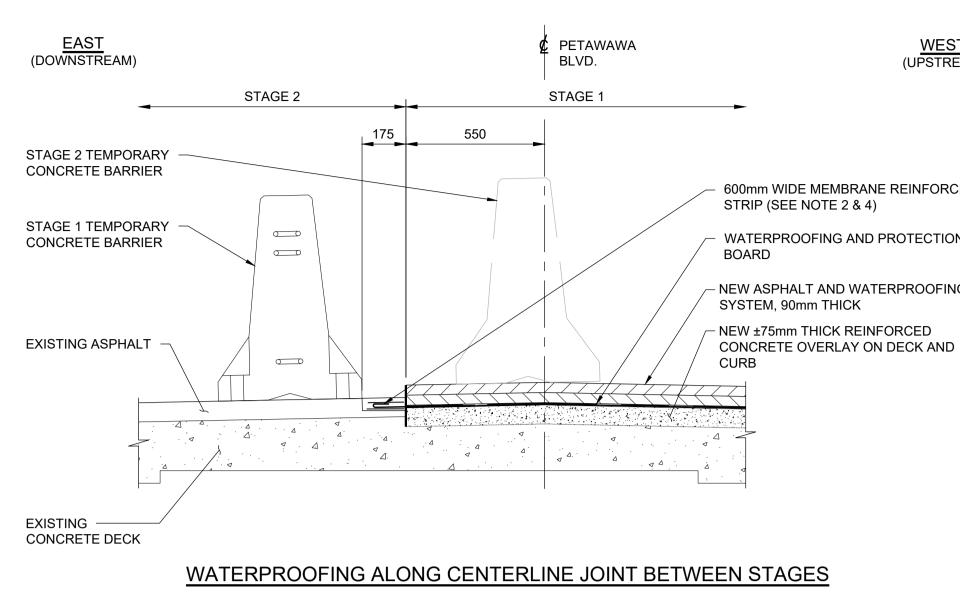
THIS DRAWING SHALL BE READ IN CONJUNCTION WITH GENERAL ARRANGEMENT ON DRAWING 02 AND PROJECT NOTES ON DRAWING 02.ELEVATION FOR TOP OF EXISTING DECK SHALL BE RECORDED PRIOR TO CONCRETE REMOVALS TO

2. WATER BLAST CLEAN, AND PAINT AREA FOLLOWING DRILLING HOLES, PRIOR TO

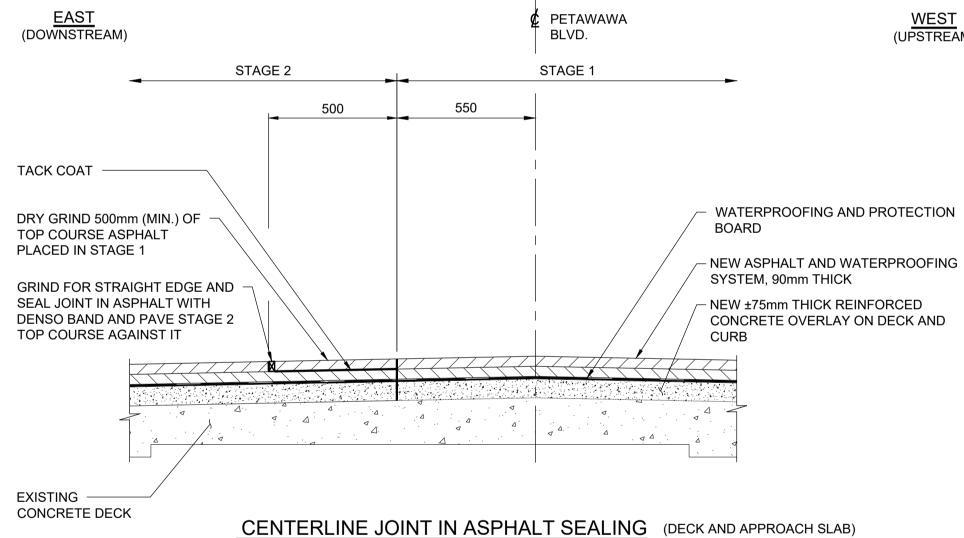
3. USE SHAPED AND SHARPENED TOOL TO REMOVE CORROSION AND PACKED

4. APPLY CAULK SEALANT (SIKAFLEX 211 OR EQUIVALENT)





1:15



1:15



(A1 841mm x 594mm)

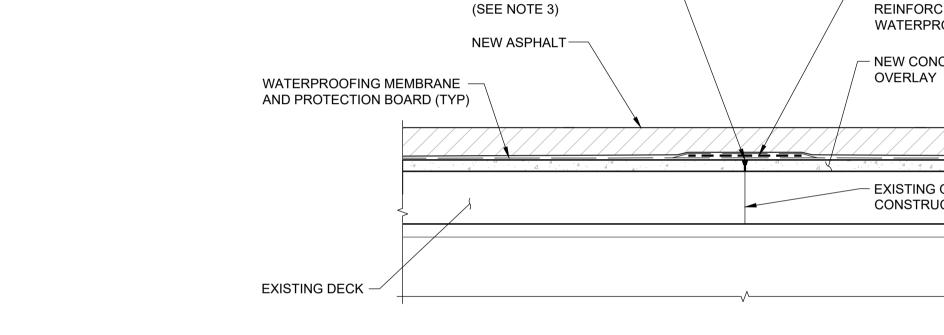
WEST (UPSTREAM)

- 600mm WIDE MEMBRANE REINFORCING
- WATERPROOFING AND PROTECTION
- NEW ASPHALT AND WATERPROOFING

NOTES

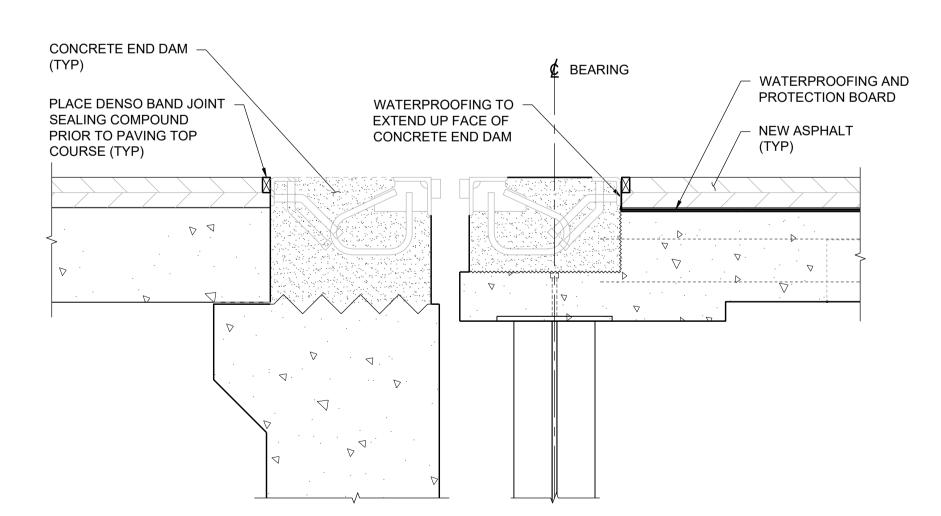
- 1. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH GENERAL ARRANGEMENT ON DRAWING 02 AND PROJECT NOTES ON DRAWING 02. ELEVATION
- 2. 600mm WIDE SOLID RUBBER BUTYL MEMBRANE REINFORCING STRIP EMBEDDED 400mm IN STAGE 1, SANDWICH BETWEEN WATERPROOFING AND
- PROTECTION BOARD BELOW BINDER COURSE.
- 3. CONTROL JOINT IN OVERLAY:
 - STAGE 1: SAW CUT 25mm DEEP CONTROL JOINT ACROSS FULL WIDTH OF OVERLAY DIRECTLY ABOVE EXISTING ORIGINAL DECK CONSTRUCTION JOINT, 24 HOURS AFTER PLACEMENT OF OVERLAY. STAGE 2: RE-SAW CUT CONTROL JOINT, CLEAN AND SEAL WITH POLYURETHANE AT LEAST 14 DAYS AFTER CASTING OF OVERLAY PRIOR TO
- WATERPROOFING. 4. THE INSTALLATION OF THE MEMBRANE REINFORCEMENT IN WATERPROOFING SHALL BE SUCH IT THAT IT WILL ALLOW EFFECTIVENESS AND BE
- COMPATIBLE WITH STAGE 2 OF WORK PROVIDING A CONTINUOUS SEAMLESS JOINT IN THE WATERPROOFING. THE INSTALLATION IS TO BE AS FOLLOWS: • THE ASPHALT AND WATERPROOFING ON STAGE 2 DECK IS TO BE REMOVED COMPLETELY TO CLEAN CONCRETE SURFACE FOR THE
 - WATERPROOFING AND MEMBRANE REINFORCEMENT OVERLAP. • THE OVERLAY IS INSTALLED AND THE TOP OF OVERLAY WILL BE 35mm NOMINALLY HIGHER THAN ADJOINING DECK IN STAGE 2.
 - PRIOR TO WATERPROOFING THE SECTION OF EXPOSED DECK IN STAGE 2 ADJOINING TO THE OVERLAID DECK IN STAGE 1 WILL BE COVERED • WITH SAND TO PROVIDE A LEVEL MATCHING SURFACE WITH THE TOP OF THE OVERLAY.
 - 200mm WIDE CONTINUOUS STRIP OF ¼ INCH PLYWOOD WILL BE PLACED ON SAND AND COVERED WITH THIN LAYER OF POWDERED TALC (DRUGSTORE GRADE).
 - 600mm WIDE PREMOLDED SOLID RUBBER MEMBRANE REINFORCEMENT (COMMONLY CALLED BUTYL) WILL BE UTILIZED AS MEMBRANE • REINFORCEMENT
 - THE MEMBRANE REINFORCEMENT WILL BE PLACED 400mm ON STAGE 1 AND 200mm ON STAGE 2 OVER "TALCED" OVER PLYWOOD. THE 400mm SECTION ON STAGE 1 WILL BE FULLY EMBEDDED IN HOT RUBBER WATERPROOFING UNDER AND OVER AND COVERED WITH PROTECTION BOARDS.
 - THE LOOSE 200mm WIDE SECTION OF MEMBRANE REINFORCEMENT IN STAGE 2 WILL BE AGAIN COVERED BY "TALC" AND COVERED BY ANOTHER 200mm WIDE 1/4 INCH THICK PLYWOOD.
 - THE MEMBRANE REINFORCEMENT IN STAGE 2 TO BE MAINTAINED AS LONG AS POSSIBLE IN THE INSTALLATION TO MINIMIZE TIME OF FLIP AND EXPOSURE AS THIS WILL DAMAGE AND POTENTIALLY DEFORM THE MEMBRANE REINFORCEMENT.
 - IMMEDIATELY PRIOR TO WATERPROOFING IN STAGE 2, THE TOP PLYWOOD WILL BE REMOVED, THE MEMBRANE REINFORCEMENT EXPOSED AND WEIGHTED DOWN ON SIDE.
 - THE DECK UNDER THE MEMBRANE REINFORCEMENT SHALL BE CLEANED AND MEMBRANE REINFORCEMENT EMBEDDED IN HOT RUBBERIZED WATERPROOFING IN STAGE 2 UNDER AND OVER AND COVERED WITH PROTECTION BOARD.

CONTROL JOINT IN OVERLAY -



CONTROL JOINT & WATERPROOFING AT CONSTRUCTION JOINT ACROSS DECK

N.T.S. (4 LOCATIONS)



WATERPROOFING AT EXPANSION JOINT 1:10

CONCRETE OVERLAY ON DECK AND

WEST (UPSTREAM)

FOR TOP OF EXISTING DECK SHALL BE RECORDED PRIOR TO CONCRETE REMOVALS TO CALCULATE TOP OF OVERLAY ELEVATION.

- 300mm WIDE SOLID RUBBER BUTYL MEMBRANE REINFORCING STRIP, SANDWICHED BETWEEN WATERPROOFING AND PROTECTION BOARD.

- NEW CONCRETE DECK

- EXISTING ORIGINAL CONSTRUCTION JOINT

300–2611 QUEENSVIEW DRIVE OTTAWA (ONTARIO) CANADA K2B 8K2 TELEPHONE: 613–829–8299 WWW.WSP.COM			
PP	PROGRESS PRINT	04/03/22	AEM
2	ISSUED FOR 90% REVIEW	26/02/22	ZFW
#	REVISIONS	DATE	NAME
THE CORPORATION OF THE COUNTY OF RENFREW DEPARTMENT OF PUBLIC WORKS AND ENGINEERING 9 INTERNATIONAL DRIVE PEMBROKE ONTARIO K8A 6W5 613-732-4353			
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PETAWAWA RIVER BRIDGE (B203) REHABILITATION PWC 2021-56

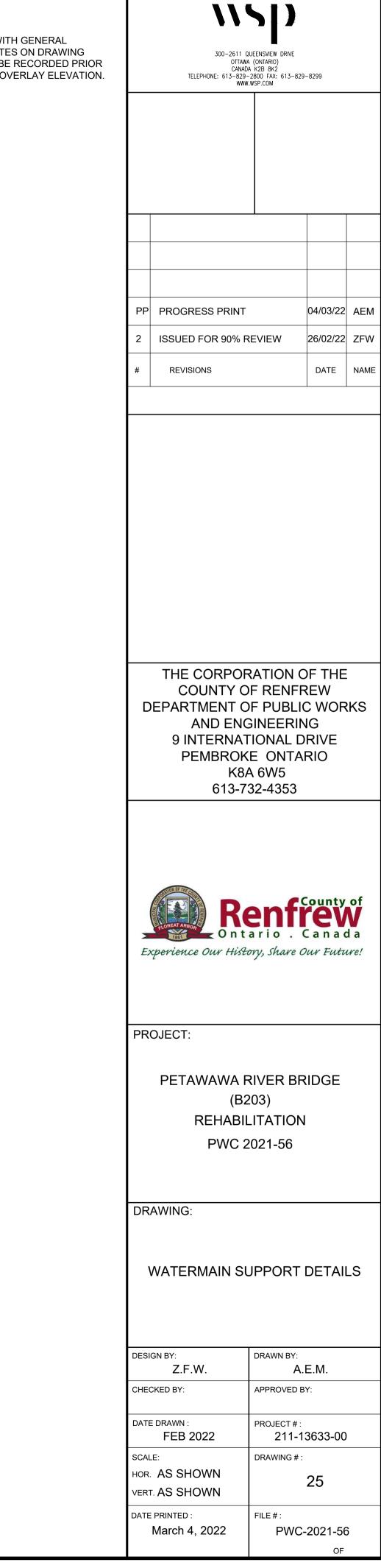
DRAWING:

CONTROL JOINT AND ASPHALT JOINT DETAILS

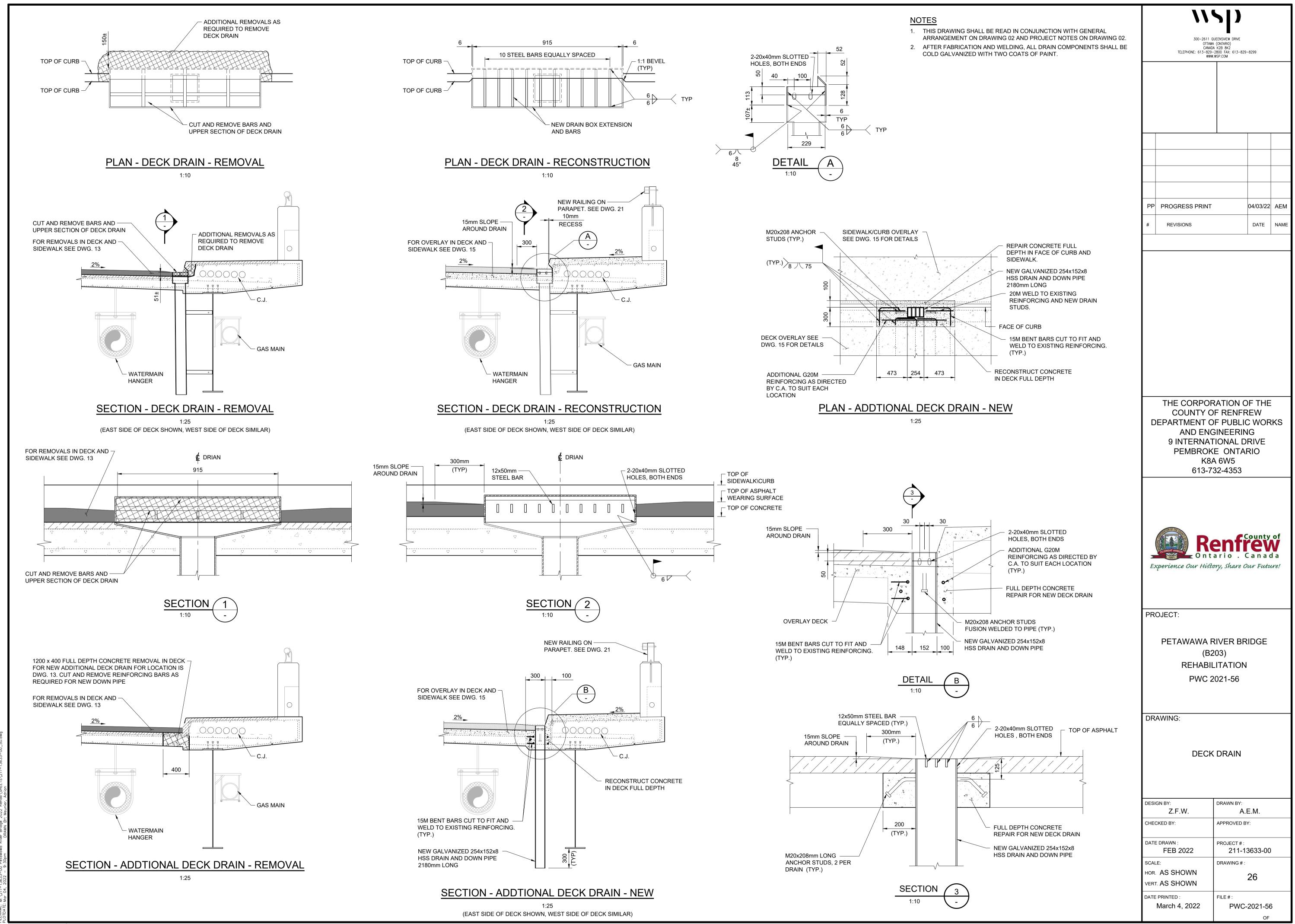
DESIGN BY:	DRAWN BY:
Z.F.W.	A.E.M.
CHECKED BY:	APPROVED BY:
DATE DRAWN :	PROJECT # :
FEB 2022	211-13633-00
SCALE:	DRAWING # :
HOR. AS SHOWN	24
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DATE PRINTED :	FILE # :
March 4, 2022	PWC-2021-56
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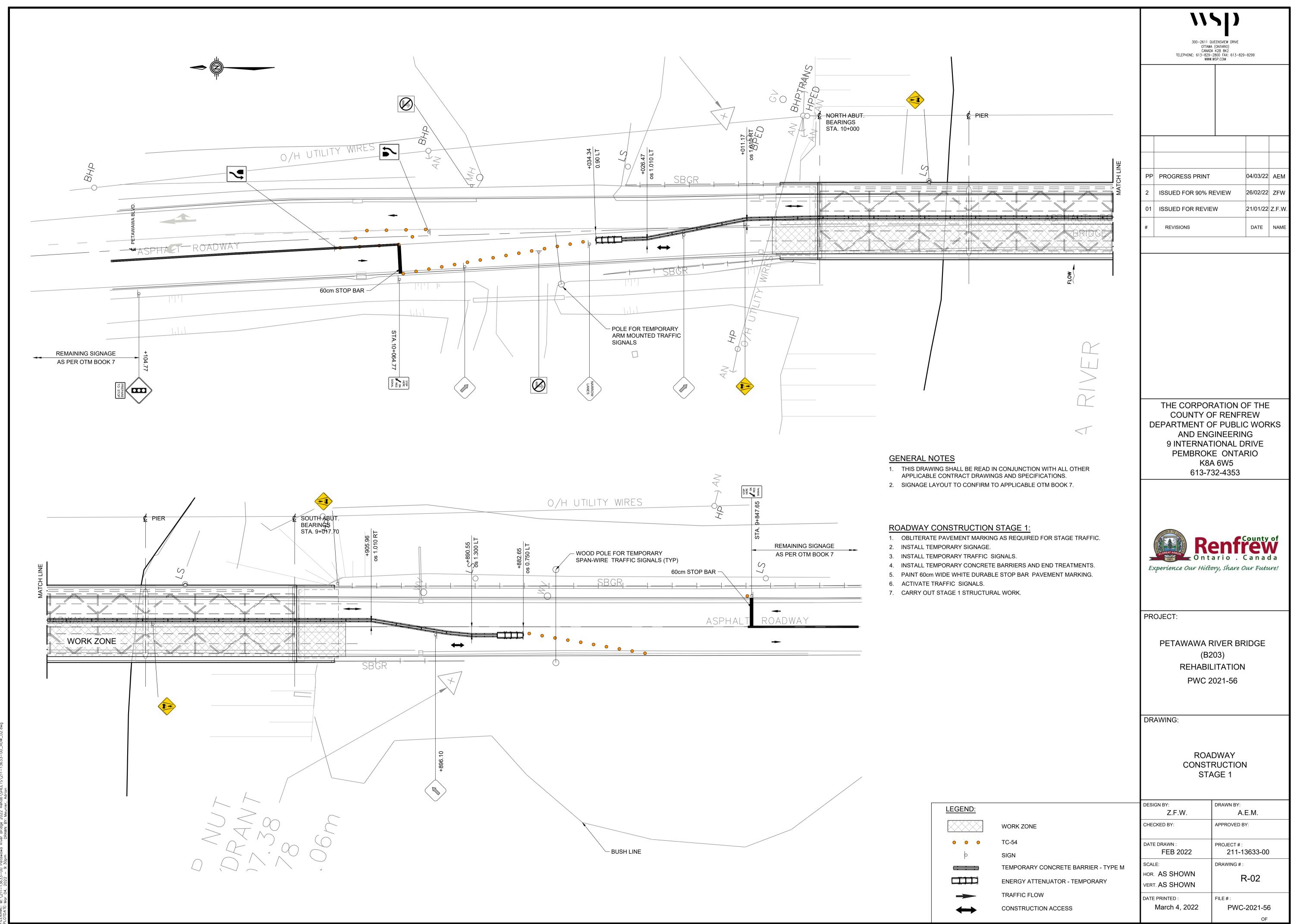
<u>NOTES</u>

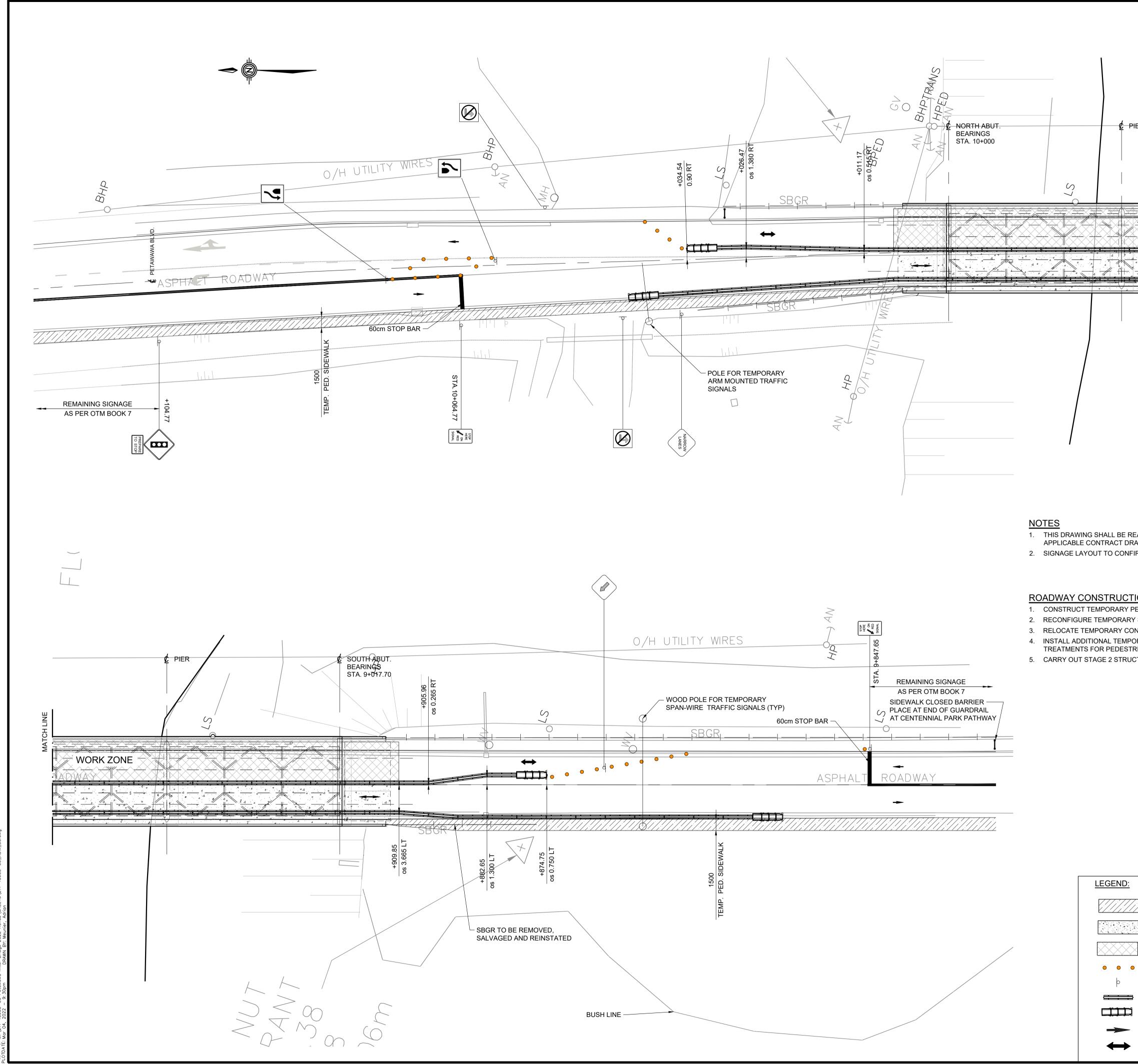
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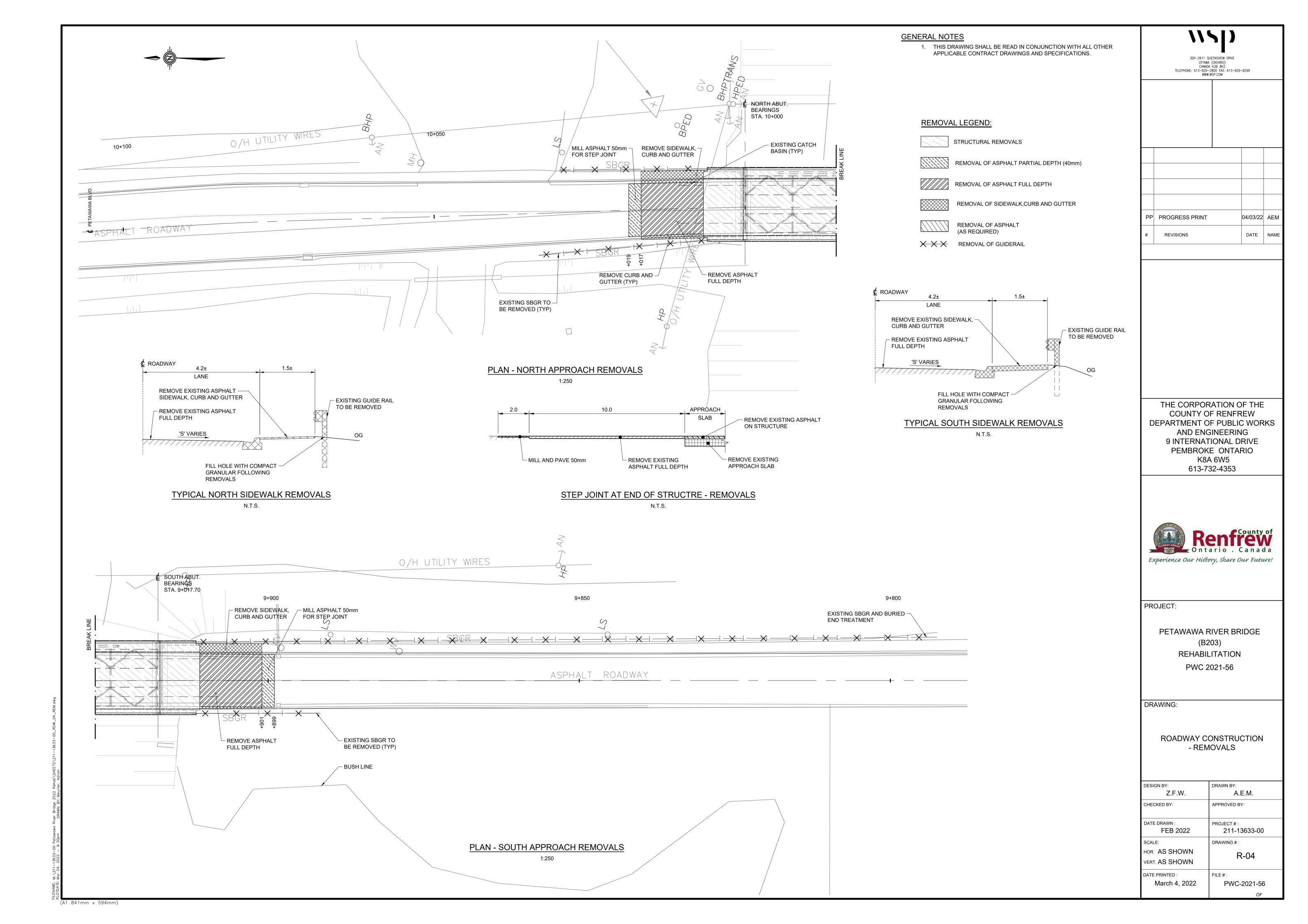
ARRANGEMENT ON DRAWING 02 AND PROJECT NOTES ON DRAWING 02. ELEVATION FOR TOP OF EXISTING DECK SHALL BE RECORDED PRIOR TO CONCRETE REMOVALS TO CALCULATE TOP OF OVERLAY ELEVATION.

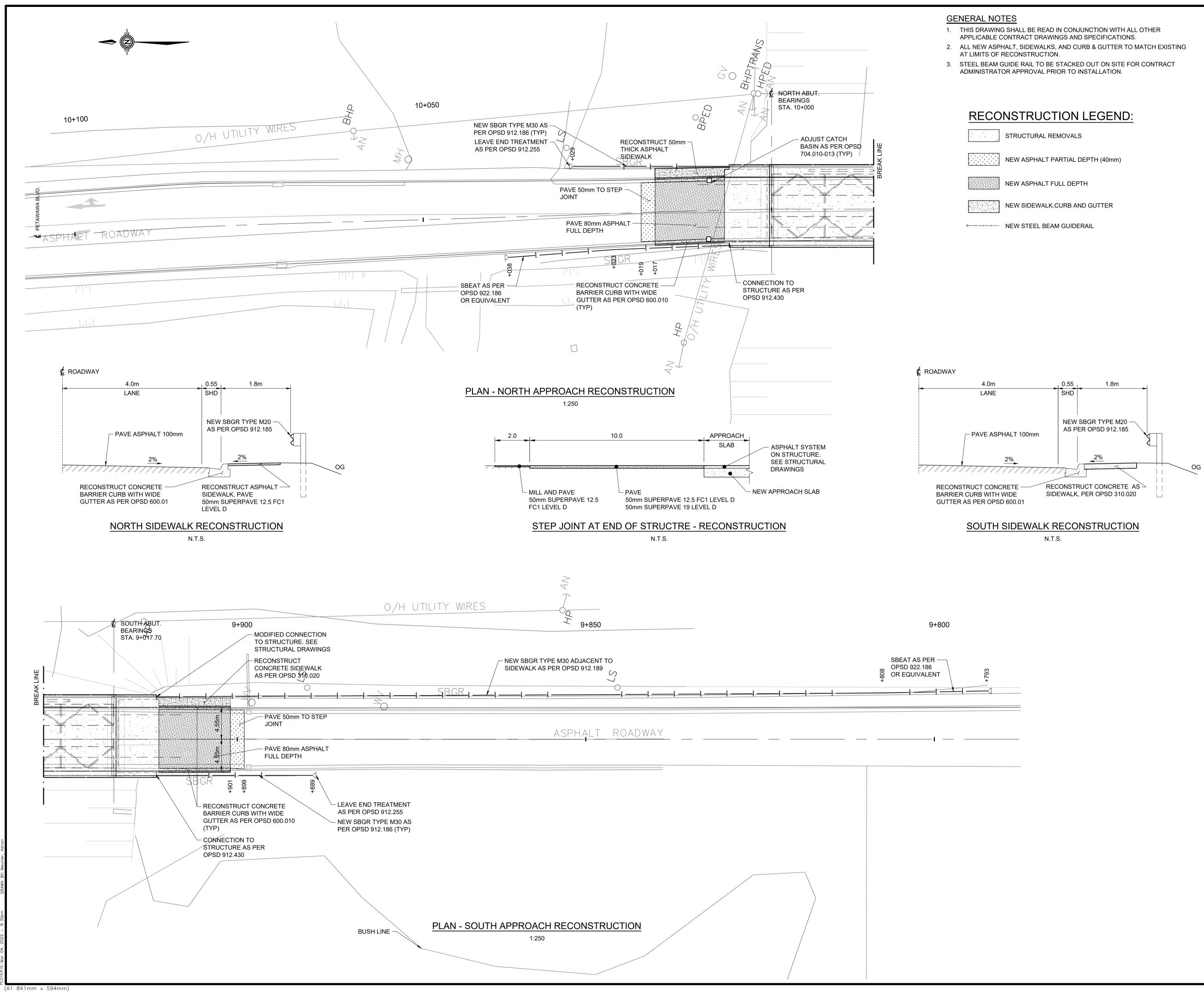


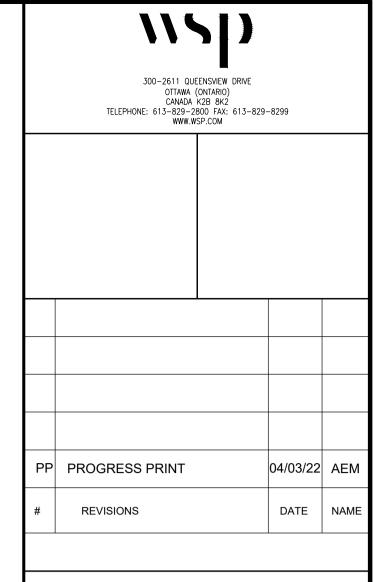


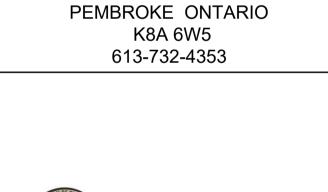


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		REHABI		J	
		PWC 2	2021-56		
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PAVING FOR TEMPORARY PEDESTRIAN WALKWAY		517	AGE 2		
COMPLETED CONSTRUCTION	DESI	GN BY:	DRAWN BY:		
7	CHE	Z.F.W.	A.	.E.M.	
WORK ZONE					
SIGN	DATE	E DRAWN : FEB 2022	PROJECT # : 211-1	3633-00	
TEMPORARY CONCRETE BARRIER - TYPE M	SCAL		DRAWING # :		
ENERGY ATTENUATOR - TEMPORARY		AS SHOWN AS SHOWN	F	R-03	
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THE CORPORATION OF THE

COUNTY OF RENFREW

DEPARTMENT OF PUBLIC WORKS

AND ENGINEERING

9 INTERNATIONAL DRIVE



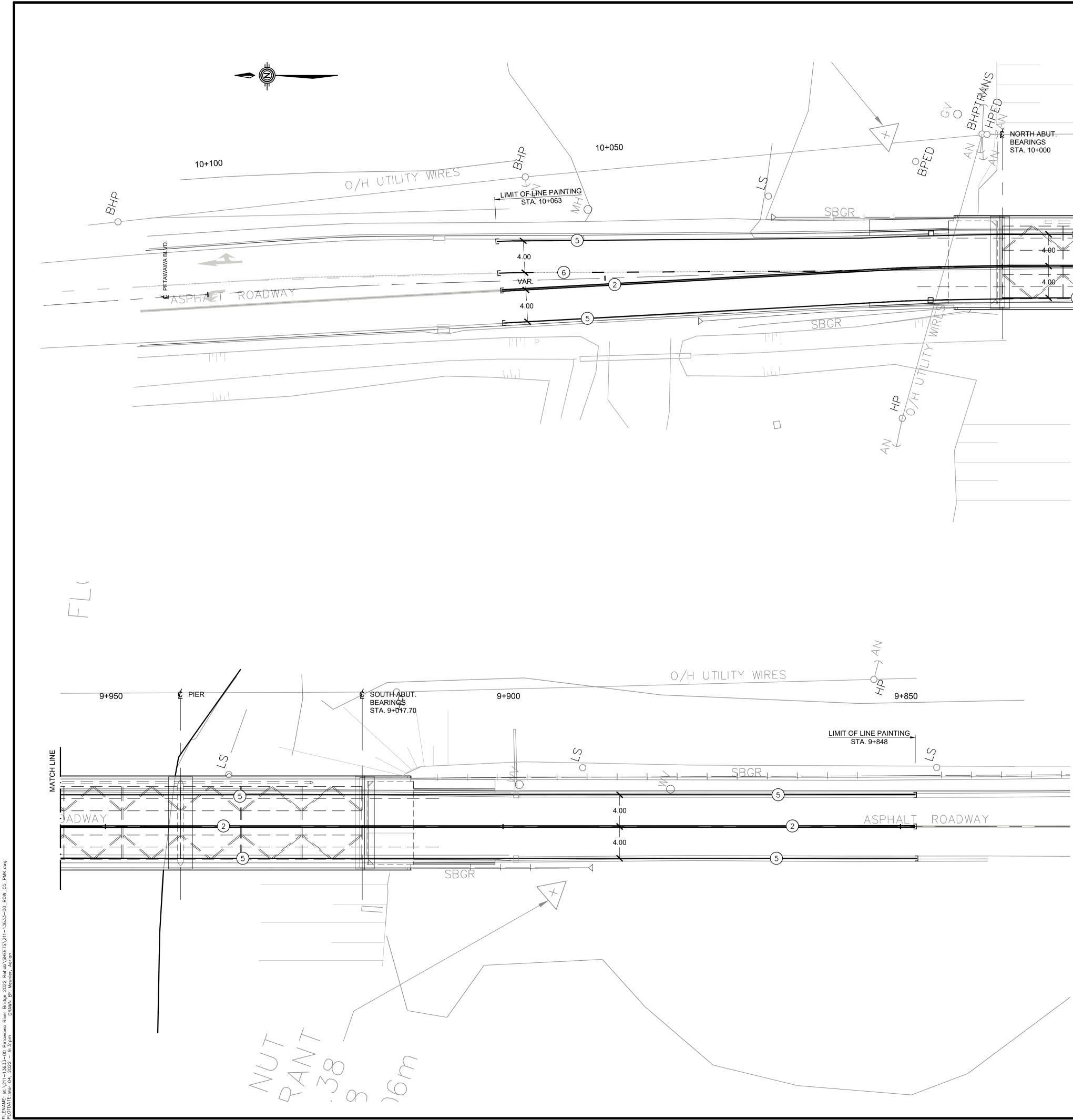
PROJECT:

PETAWAWA RIVER BRIDGE (B203) REHABILITATION PWC 2021-56

DRAWING:

ROADWAY CONSTRUCTION - NEW

DESIGN BY:	DRAWN BY:
Z.F.W.	A.E.M.
CHECKED BY:	APPROVED BY:
DATE DRAWN : FEB 2022	PROJECT # : 211-13633-00
SCALE:	DRAWING # :
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March 4, 2022	PWC-2021-56
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GENERAL NOTES 1. THIS DRAWING SHALL BE RE APPLICABLE CONTRACT DRA

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D IN CONJUNCTION WITH ALL OTHER VINGS AND SPECIFICATIONS. 300-2611 QUEENSVIEW DRIVE OTTAWA (ONTARIO) CANADA K2B 8K2 TELEPHONE: 613-829-2800 FAX: 613-829-8299 WWW.WSP.COM	
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A NIA A	THE CORPORATION OF THE COUNTY OF RENFREW DEPARTMENT OF PUBLIC WORKS AND ENGINEERING 9 INTERNATIONAL DRIVE PEMBROKE ONTARIO K8A 6W5 613-732-4353
LEGEND 1. SOLID YELLOW, 10cm 2. SOLID DOUBLE YELLOW, 10cm	PROJECT: PETAWAWA RIVER BRIDGE (B203) REHABILITATION
 3. 363 BROKEN YELLOW, 10cm 4. SOLID YELLOW, 20cm 5. SOLID WHITE, 10cm 6. 333 BROKEN WHITE, 10cm 7. 363 BROKEN WHITE, 10cm 8. 393 BROKEN WHITE, 10cm 9. SOLID WHITE, 20cm 	PWC 2021-56 DRAWING: ROADWAY CONSTRUCTION PAVEMENT MARKING
10. 111 BROKEN WHITE, 20cm11. 333 BROKEN WHITE, 20cm123.3.3 BROKEN WHITE, 20cm123.3.3 BROKEN WHITE, 30cm15. SOLID WHITE, 60cm20. SYMBOLS21. SOLID GREEN] [LIMITS OF MARKINGSNOTES:1. 333, 363 DENOTES PAVEMENT	DESIGN BY:DRAWN BY:Z.F.W.A.E.M.CHECKED BY:APPROVED BY:DATE DRAWN :PROJECT # :FEB 2022211-13633-00SCALE:DRAWING # :HOR. AS SHOWNPR 06
 333, 363 DENOTES PAVEMENT MARKING SPACING (i.e. 3m LINE, 3m GAP, 3m LINE). ① DENOTES PAVEMENT MARKING 	HOR. AS SHOWNR-06VERT. AS SHOWNFILE #:DATE PRINTED:FILE #:March 4, 2022PWC-2021-56OF