

SHARBOT LAKE BRIDGE BEARING REPLACEMENTS



STRUCTURAL DRAWING LIST

DWG NO.	DESCRIPTION
S-1	GENERAL NOTES, PLAN VIEW, SECTIONS, & ELEVATION
S-2	DETAILS



NOTES:

- ALL WORK SHALL BE IN ACCORDANCE WITH RELEVANT CODES AND GUIDELINES INCLUDING THE ONTARIO BUILDING CODE.
- ALL DRAWINGS AND ADDENDA ARE TO BE READ AS, AND IN CONJUNCTION WITH THE SPECIFICATIONS.
- ALL EQUIPMENT SHALL BE INSTALLED AS SPECIFIED OR APPROVED EQUIVALENT.
- CONTRACTOR MUST CHECK AND VERIFY ALL DIMENSIONS BEFORE PROCEEDING WITH WORK AND BE RESPONSIBLE FOR SAME.
- CONTRACTOR MUST REPORT ANY DISCREPANCIES TO ENGINEER FOR RESOLUTION BEFORE COMMENCING THE WORK.
- ANY CHANGES MUST BE APPROVED BY THE ENGINEER.

- A A DETAIL NO.
B B DRAWING NO. - WHERE DETAILED

REVISION	DESCRIPTION	DD.MM.YYYY
6	-	-
5	-	-
4	-	-
3	-	-
2	ISSUED FOR TENDER	29.10.2024
1	ISSUED FOR CLIENT REVIEW	15.10.2024

NORTH

STAMP

PROJECT
BEARING REPLACEMENT
ROAD 38, SHARBOT
LAKE BRIDGE
ONTARIO

FRONTENAC COUNTY, ONTARIO

DRAWING TITLE
GENERAL NOTES, PLAN
VIEW, SECTIONS, &
ELEVATION

DESIGNED BY
G. TORO SUAREZ

DRAWN BY
M. ROWSELL

REVIEWED BY
G. TORO SUAREZ

APPROVED BY
J. MAITLAND

PROJECT DATE
JULY 2024 (DD/MM/YYYY)

PROJECT #
2453415

DRAWING SCALE
AS SHOWN

DRAWING #
S-1

GENERAL NOTES:

- DESIGN CODE: CANADIAN HIGHWAY BRIDGE DESIGN CODE CAN/CSA-S6-14

DEMOLITION/REMOVAL WORK:

- COMPLETE WORK AS DETAILED ON THE DRAWINGS AND AS DIRECTED BY THE CONTRACT ADMINISTRATOR.
- WORK SHALL BE CONTAINED SO NO DEBRIS ENTERS WATERCOURSE.
- ALL DEBRIS IS TO BE DISPOSED BY THE CONTRACTOR OFF SITE.

REHABILITATION NOTES:

- THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS AND REPORT ANY DISCREPANCIES TO THE ENGINEER PRIOR TO PROCEEDING WITH THE REPAIR WORK.
- ANY DAMAGE DURING CONSTRUCTION TO THE EXISTING STRUCTURE/PAVEMENT NOT DESIGNATED FOR REPAIR, UTILITIES AND ADJACENT PROPERTIES SHALL BE REPAIRED BY THE CONTRACTOR TO THE SATISFACTION OF THE CONTRACT ADMINISTRATOR AT NO COST TO THE OWNER.
- THE CONTRACTOR IS FULLY RESPONSIBLE FOR THE PROTECTION OF ALL UTILITIES, SERVICES, ROADWAYS, ETC. DURING CONSTRUCTION.

- THE CONTRACTOR SHALL DESIGN NECESSARY CONTAINMENT MEASURES TO COLLECT FALLING CONCRETE AND CONSTRUCTION DEBRIS AND ENSURE THAT NO DEBRIS OR MATERIAL RESULTING FROM THE REMOVAL WORK FALL INTO THE CREEK.

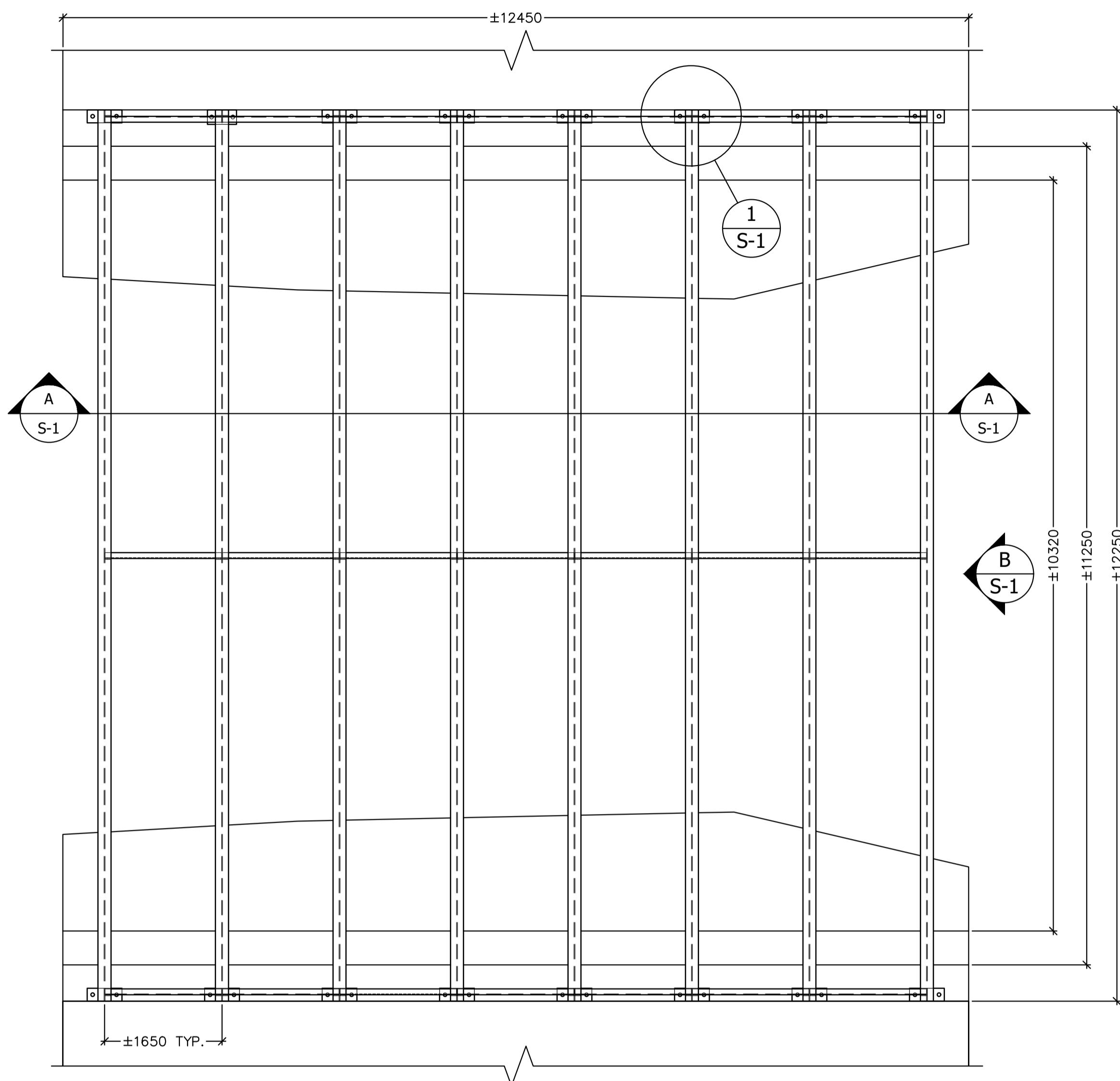
- ALL AREAS AFFECTED BY THE CONSTRUCTION ACTIVITIES SHALL BE FULLY REINSTATED TO THE PRE-CONSTRUCTION OR BETTER CONDITIONS TO THE SATISFACTION OF THE CONTRACT ADMINISTRATOR INCLUDING THE REINSTATEMENT OF ALL VEGETATION, SLOPE PROTECTION, PATHWAYS, FENCES, AREAS USED FOR SITE ACCESS/STORAGE/STAGING.

- JACKING REQUIRED. SEE JACKING NOTES BELOW

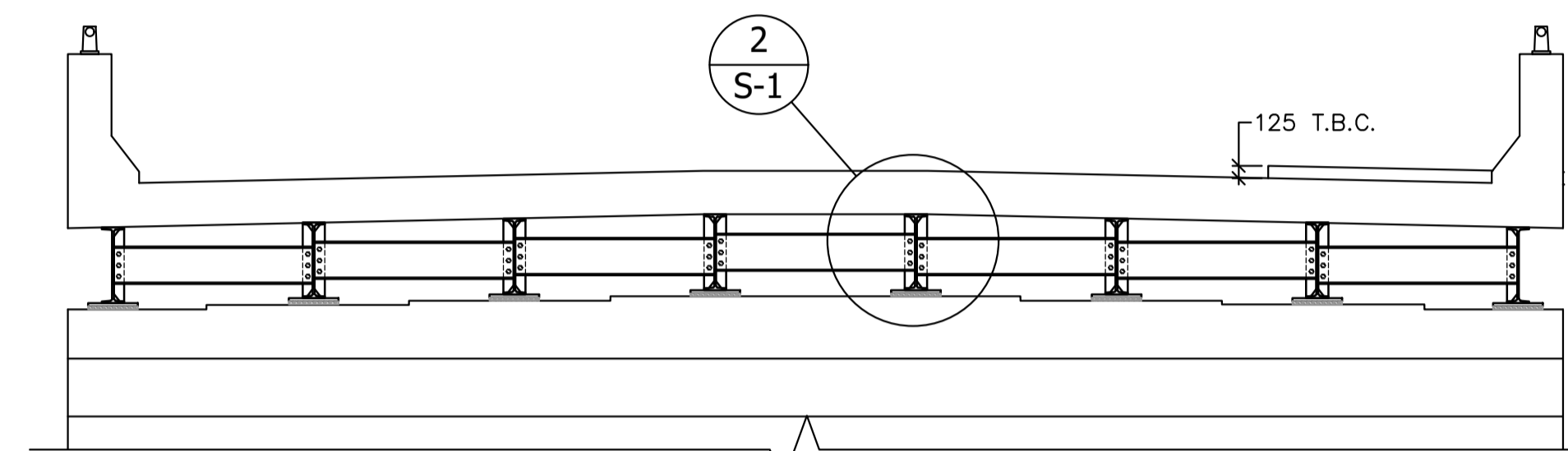
- REFER TO OPSS. MUNI 930 NOVEMBER 2014 FOR CONCRETE PATCHING AT SOFFIT AND OPSS. MUNI 932 NOVEMBER 2020 FOR CRACKS REPAIR IN CONCRETE.

JACKING NOTES

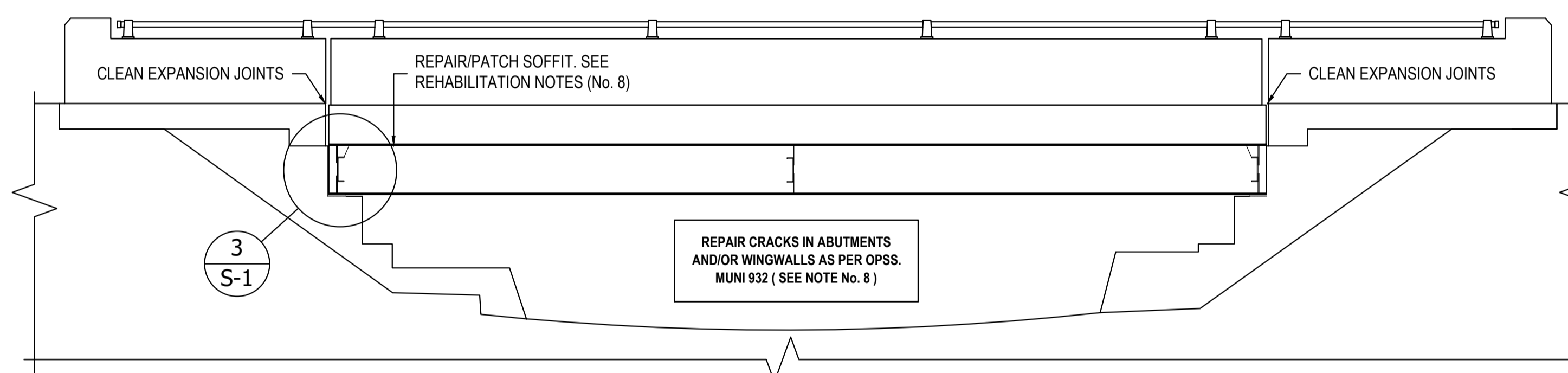
FOR JACKING OF BRIDGE SUPERSTRUCTURE, CONTRACTOR TO FOLLOW OPSS PROV 921 NOVEMBER 2020. CONTRACTOR TO PROVIDE TEMPORARY SUPPORT AND/OR SHORING AS REQUIRED, BEFORE COMMENCING ANY DEMOLITION OR REMOVAL.



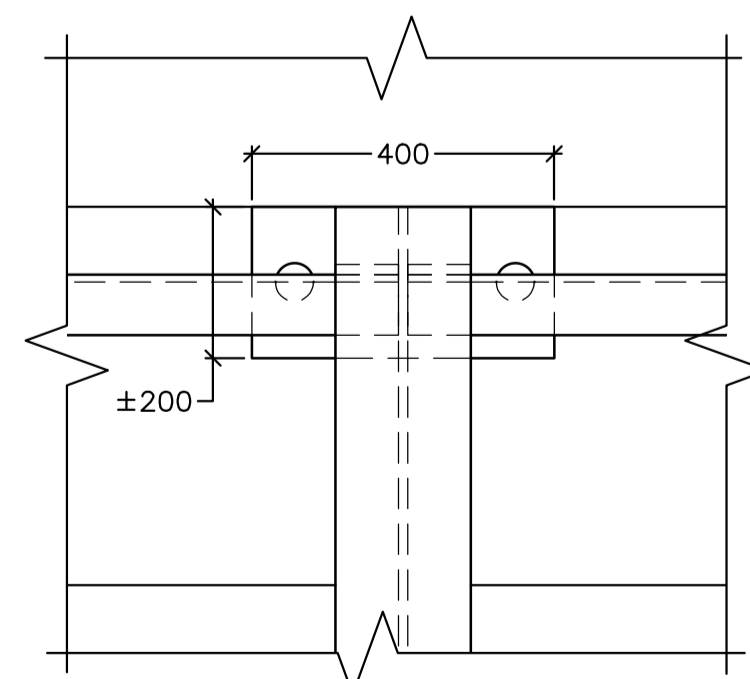
DECK PLAN VIEW
SCALE: 1:50



SECTION NORTH - A-A
SCALE: NTS

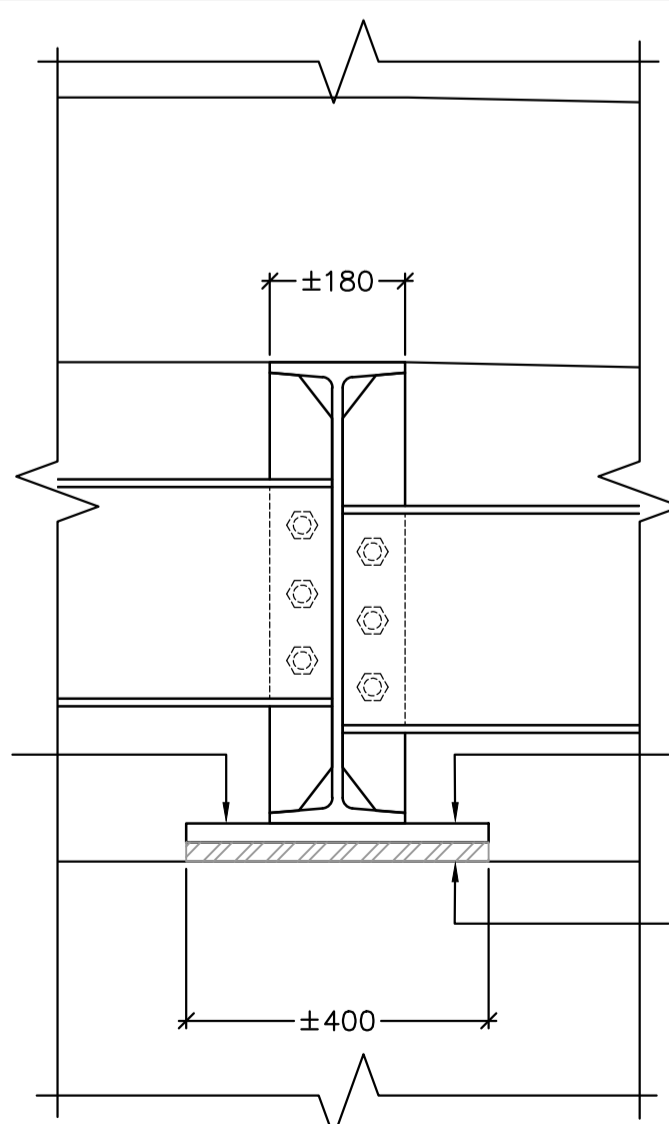


ELEVATION WEST - B
SCALE: NTS



DETAIL 1
SCALE: NTS

CLEAN /GRIND & APPLY COATED PAINT (AS PER MTO DSM # 9.20.70) TO SHOE PLATES.

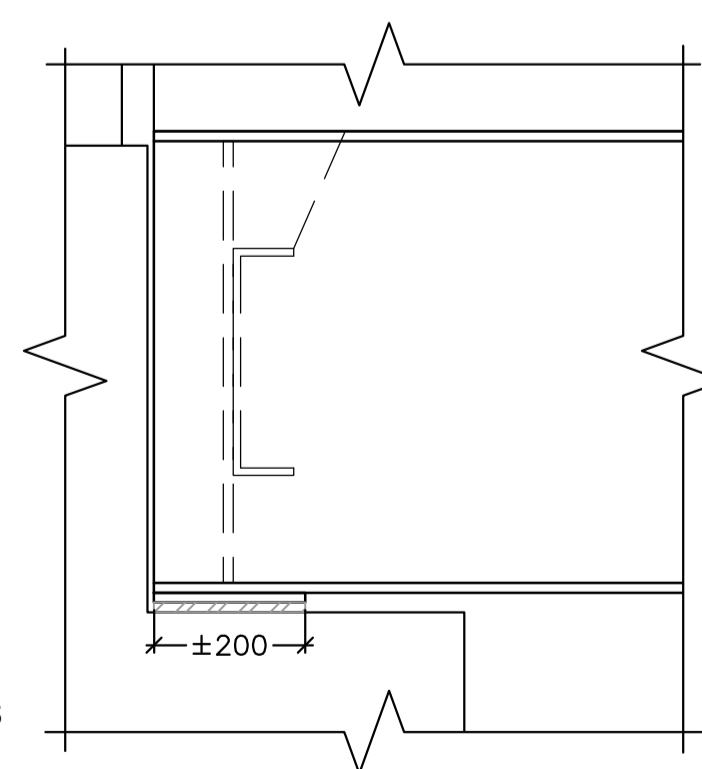


DETAIL 2
SCALE: NTS

SHOE PLATE = 400x200. TO BE VERIFIED

BEARING PADS 400x200x15. GOODCO Z-TECH ELASTOMERIC BEARINGS SERIES E-55 HARDNESS OR APPROVED EQUIVALENT.

NOTE:
BEARING PADS DIMENSIONS SHALL NOT BE LARGER THAN SHOE PLATES.



DETAIL 3
SCALE: NTS

BEARING DESIGN DATA

	NORTH ABUTMENT		SOUTH ABUTMENT	
	SLS	ULS	SLS	ULS
PERMANENT LOAD (KN)	123	148	123	148
TOTAL LOAD (KN)	311	468	311	468
TRANSLATION (MM)	3		3	
ROTATION (DEGREES)	0.08		0.08	
SIZE (MM)	400X200X15		400x200x15	
QUANTITY REQUIRED (INC. 1 FOR TESTING)	8		8	

ABUTMENTS: GOODCO Z-TECH ELASTOMERIC BEARINGS SERIES E-55 HARDNESS OR APPROVED EQUIVALENT.

NOTES:

- WHERE THE BOND BETWEEN CONCRETE AND REINFORCING STEEL IS BROKEN, OR WHERE MORE THAN HALF OF THE PERIMETER OF THE BAR IS EXPOSED, THE CONCRETE SURROUNDING THE BARS SHALL BE REMOVED LOCALLY TO A DEPTH OF 25mm BELOW THE BAR.

- BONDING AGENTS USED TO BE PER CONTRACT DOCUMENTS OR APPROVED EQUIVALENT.

PROCEDURE NOTES:

- REMOVE DETERIORATED CONCRETE AS DIRECTED BY C.A.
- ABRASIVE BLAST CLEAN CONCRETE AND REINFORCING STEEL.
- PATCH CONCRETE AS DIRECTED BY C.A.

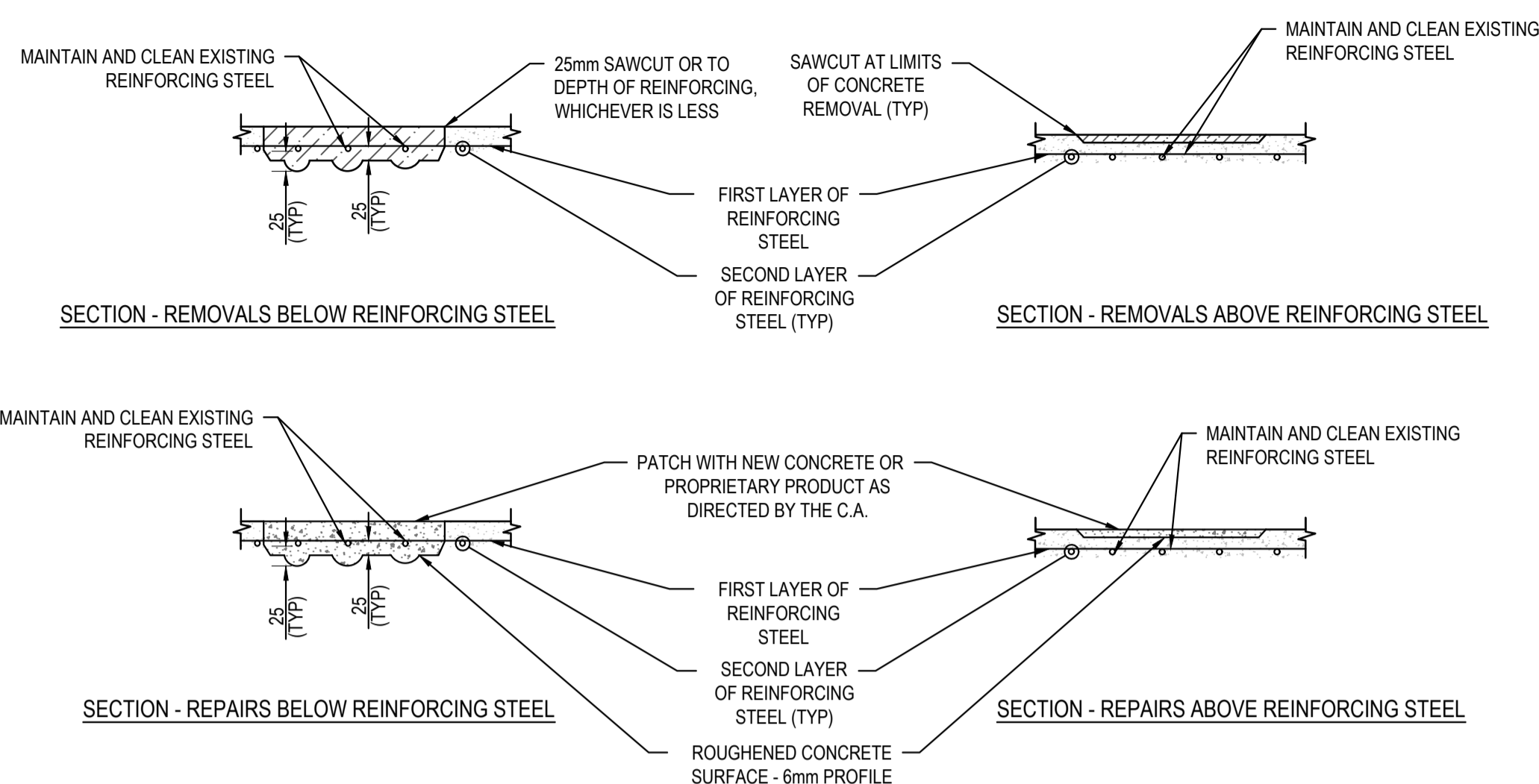
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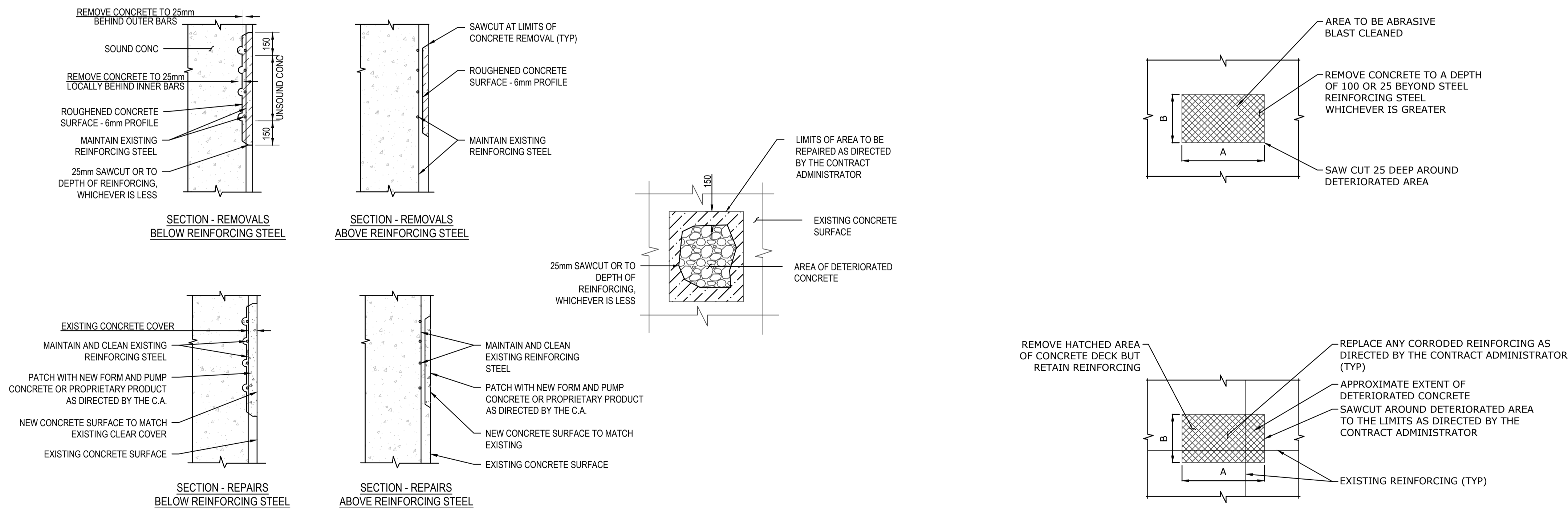
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GRAPHIC LEGEND - STRUCTURAL

- REMOVALS - FULL DEPTH (MAINTAIN EXIST. REBAR AS INDICATED)
- REMOVALS - PARTIAL DEPTH (MAINTAIN EXIST. REBAR AS INDICATED)
- CONCRETE - EXISTING (SECTION VIEW)
- CONCRETE - EXISTING REMOVAL
- CONCRETE - NEW (SECTION VIEW)



01
S-2
TYPICAL CONCRETE PATCHING
DETAIL FOR 'TYPE A' REMOVALS
N.T.S.



02
S-2
TYPICAL CONCRETE PATCHING
DETAIL FOR 'TYPE B' AND 'TYPE C' REMOVALS
N.T.S.

03
S-2
ABUTMENT SHOWING AREA OF PARTIAL
DEPTH REMOVAL - TYPE 'C' REMOVAL
N.T.S.

NOTE: DIMENSIONS A AND B TO BE DELINEATED IN THE FIELD BY THE CONTRACT ADMINISTRATOR

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