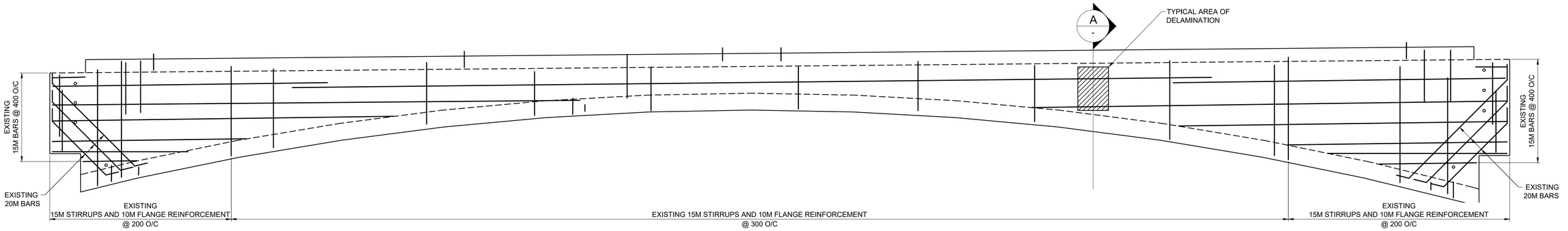
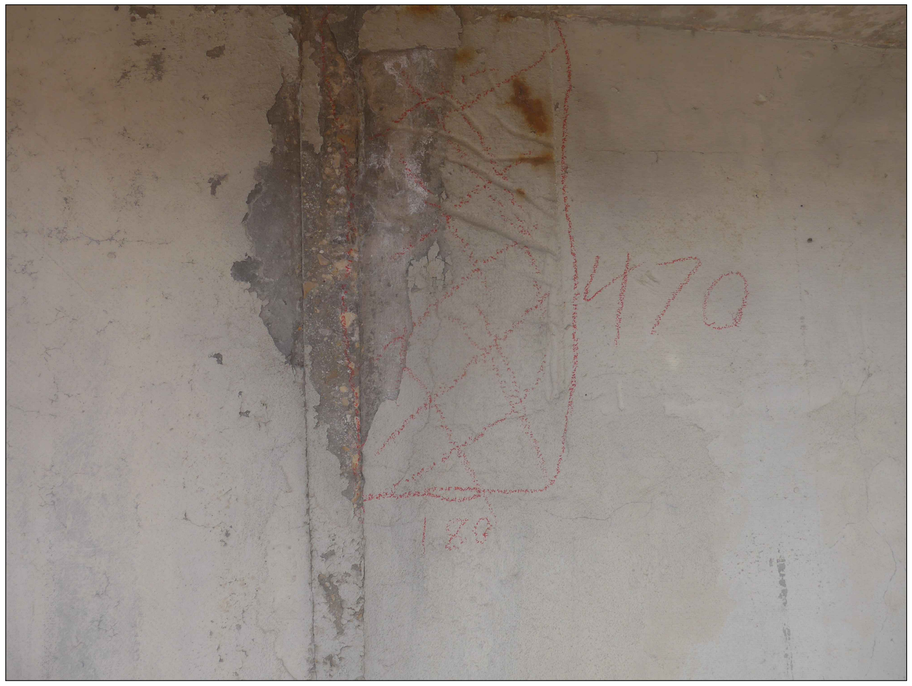
A1 SIZE 594mm x 841mm



NOTES:
1. PARTIAL REINFORCEMENT IS SHOWN FOR CLARITY.
2. DECK AND BARRIER NOT SHOWN FOR CLARITY.
3. PIER TRANSFER BEAM NOT SHOWN FOR CLARITY.

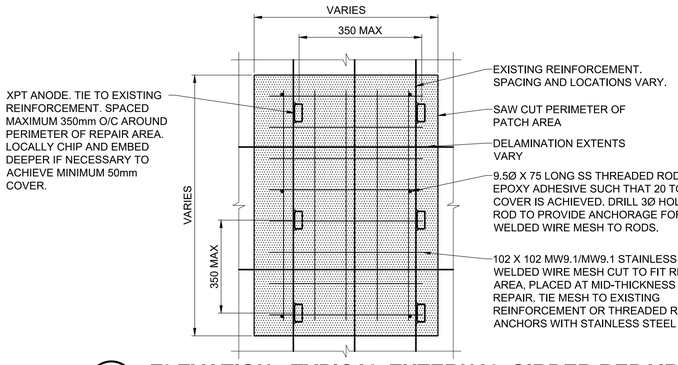
TYPICAL EXTERNAL GIRDER REINFORCING ELEVATION

SCALE: 1:40



TYPICAL DELAMINATION ON SOUTHBOUND BRIDGE SPANDREL WALL

LEGEND
- CONCRETE REMOVALS
- CONCRETE REPAIR

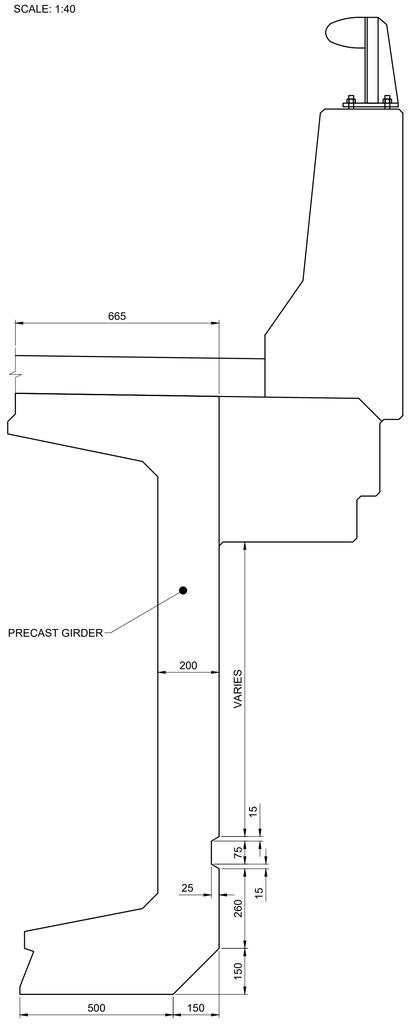


B - **ELEVATION - TYPICAL EXTERNAL GIRDER REPAIR**

SCALE: 1:10

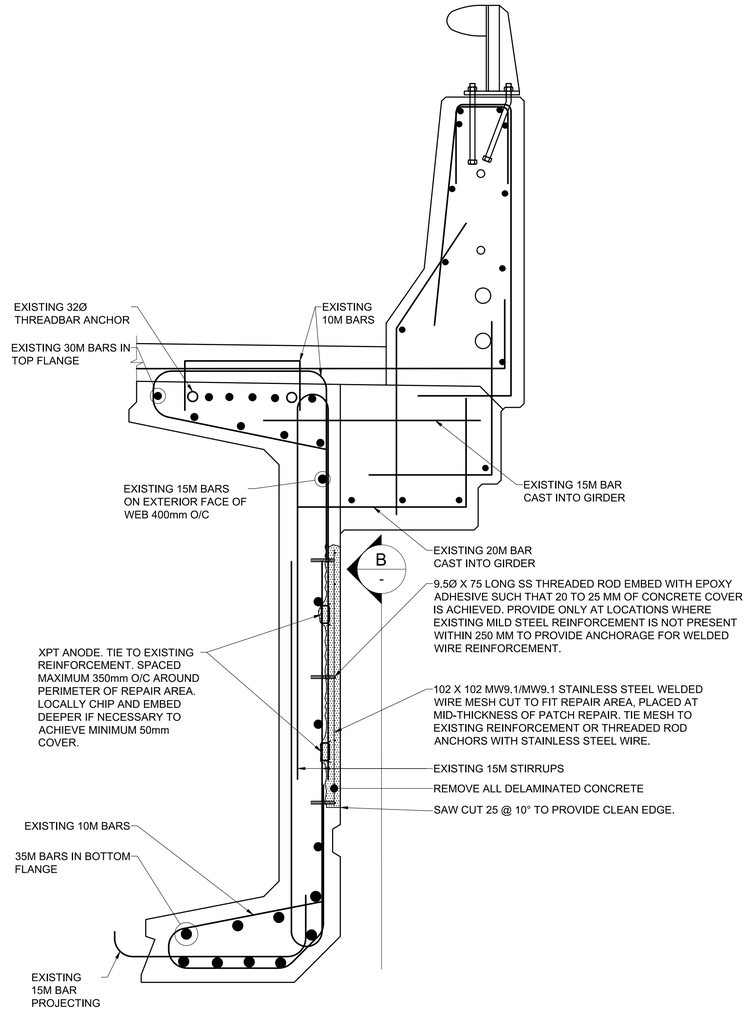
GENERAL NOTES:

1. SAW CUT PERIPHERY OF REPAIR AREA TO 25 DEEP AND REMOVE DELAMINATED CONCRETE.
2. DRILL HOLES AND INSTALL THREADED RODS.
3. SANDBLAST ALL EXPOSED REINFORCING STEEL.
4. TIE REINFORCING MESH TO THREADED RODS OR EXPOSED STEEL.
5. INSTALL XPT ANODES.
6. PLACE GROUT TO COMPLETE PATCH REPAIR.
7. ALL DEBRIS TO BE CONTAINED.
8. PIER TRANSFER BEAM REPAIRS SIMILAR.
9. APPLY SILANE SEALER TO PATCH REPAIRS, SURFACE GROUT REPAIRS, AND LOCATIONS OF LOW COVER.



A - **SECTION- TYPICAL EXTERNAL GIRDER SECTION**

SCALE: 1:10



A - **SECTION- TYPICAL EXTERNAL GIRDER REPAIR**

SCALE: 1:10

TENDER No. 685-2019

ENGINEERS GEOSCIENTISTS MANITOBA
Certificate of Authorization
MORRISON HERSHFIELD
No. 1736

METRIC
WHOLE NUMBERS INDICATE MILLIMETRES
DECIMALIZED NUMBERS INDICATE METRES

LOCATION APPROVED
UNDERGROUND STRUCTURES

SUPR. U/G STRUCTURES COMMITTEE _____ DATE _____

NOTE:
LOCATION OF UNDERGROUND STRUCTURES AS SHOWN ARE BASED ON THE BEST INFORMATION AVAILABLE BUT NO GUARANTEE IS GIVEN THAT ALL EXISTING UTILITIES ARE SHOWN OR THAT THE GIVEN LOCATIONS ARE EXACT. CONFIRMATION OF EXISTENCE AND EXACT LOCATION OF ALL SERVICES MUST BE OBTAINED FROM THE INDIVIDUAL UTILITIES BEFORE PROCEEDING WITH CONSTRUCTION.

BM
ELEV

No.	REVISIONS	YY/MM/DD	BY
0	ISSUED FOR TENDER	19/08/14	BE

MORRISON HERSHFIELD

DESIGNED BY	AGG	CHECKED BY	BAP
DRAWN BY	AH	APPROVED BY	BE
HOR SCALE	AS SHOWN	RELEASED FOR CONSTRUCTION	
VERT SCALE	AS SHOWN		
DATE		DATE	

PROFESSIONAL'S SEAL
PROVINCE OF MANITOBA
A.D.G. GILARSKI
ORIGINAL SIGNED 19/08/14
32144
REGISTERED PROFESSIONAL ENGINEER

CONSULTANT FILE NAME
180514900-MW-07.dwg

Winnipeg

THE CITY OF WINNIPEG
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

2019 BRIDGE MAINTENANCE NORWOOD AND MAIN STREET BRIDGES

NORWOOD BRIDGE SOUTHBOUND CONCRETE REPAIRS

CITY DRAWING NUMBER	B103-19-07
SHEET	07
OF	12
DRAWING No.	07
REV	0

P:\2018\180514900-Norwood Bridge\09. CAD\07. Sheets\180514900-MW-07.dwg Last Saved: 7/16/2019 1:47 PM by ahepprner Plotted: 8/13/2019 2:51 PM by Alex Hepprner PLOT: 8/13/2019 2:51:04 PM