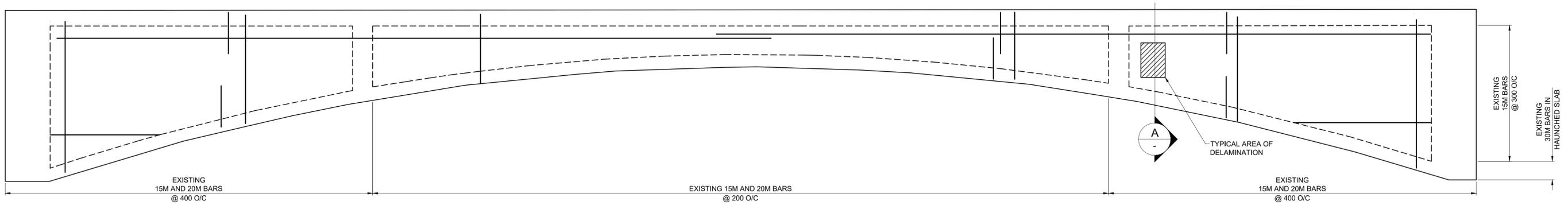


A1 SIZE 594mm x 841mm  
 PLOT: 8/13/2019 2:50:44 PM  
 P:2018180514900-Norwood Bridge.dwg CAD07: Sheets180514900-MW-06.dwg Last Saved: 7/29/2019 2:22 PM by ahppner Plotted: 8/13/2019 2:50:44 PM by alex.heppner



- NOTES:**
- PARTIAL REINFORCEMENT IS SHOWN FOR CLARITY.
  - DECK AND BARRIER NOT SHOWN FOR CLARITY.

**TYPICAL EXTERNAL SPANDREL WALL REINFORCING ELEVATION**  
 SCALE: 1:50

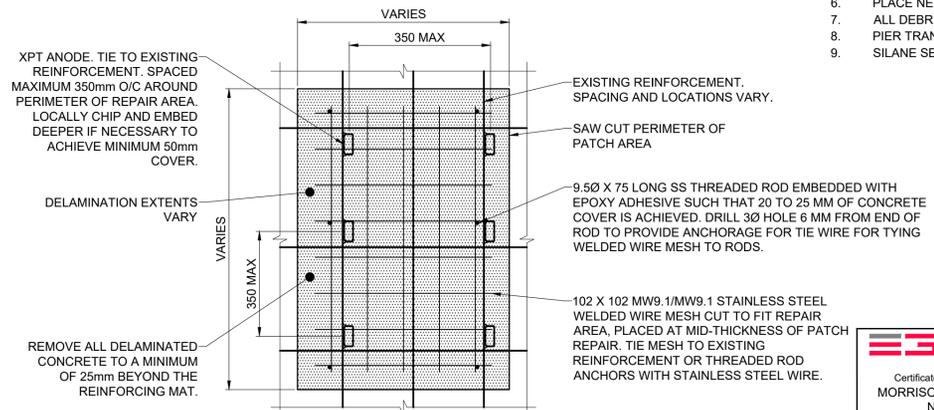


TYPICAL DELAMINATION ON NORTHBOUND BRIDGE SPANDREL WALL

- GENERAL NOTES:**
- SAW CUT PERIPHERY OF REPAIR AREA TO 25 DEEP AND REMOVE DELAMINATED CONCRETE MINIMUM 25 PAST EXISTING REINFORCEMENT.
  - DRILL HOLES AND INSTALL THREADED RODS.
  - SANDBLAST ALL EXPOSED REINFORCING STEEL.
  - TIE REINFORCING MESH TO THREADED RODS OR EXPOSED STEEL.
  - INSTALL XPT ANODES.
  - PLACE NEW GROUT TO COMPLETE PATCH REPAIR.
  - ALL DEBRIS TO BE CONTAINED.
  - PIER TRANSFER BEAM REPAIRS SIMILAR.
  - SILANE SEALER TO BE APPLIED TO PATCH REPAIRS.

**LEGEND**

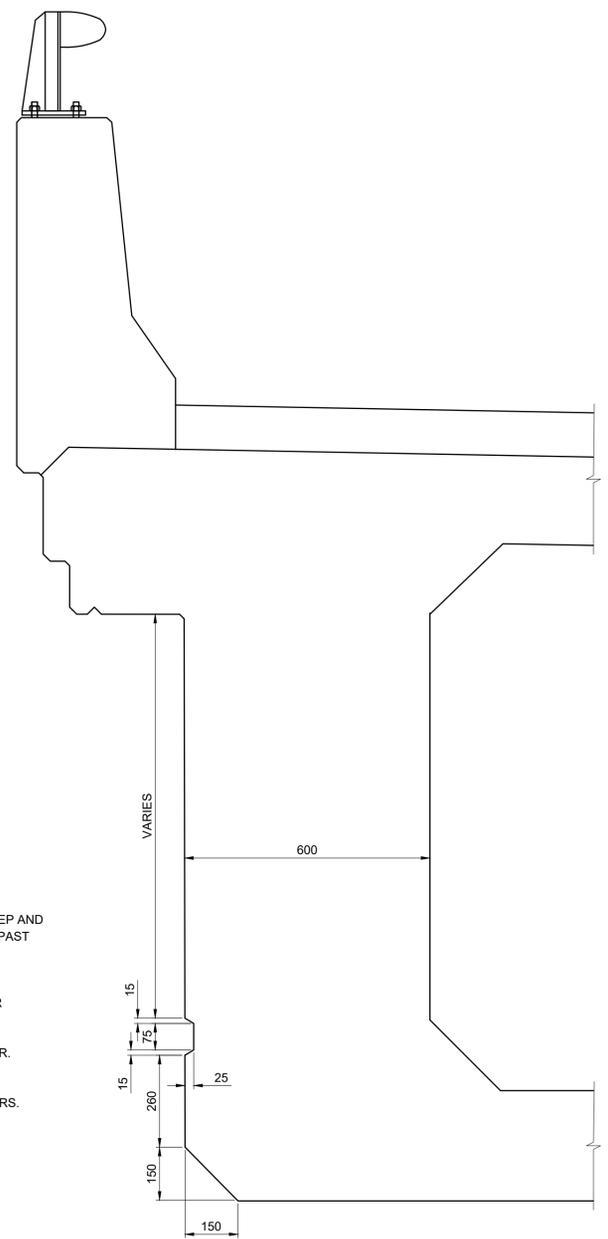
- CONCRETE REMOVALS
- CONCRETE REPAIR



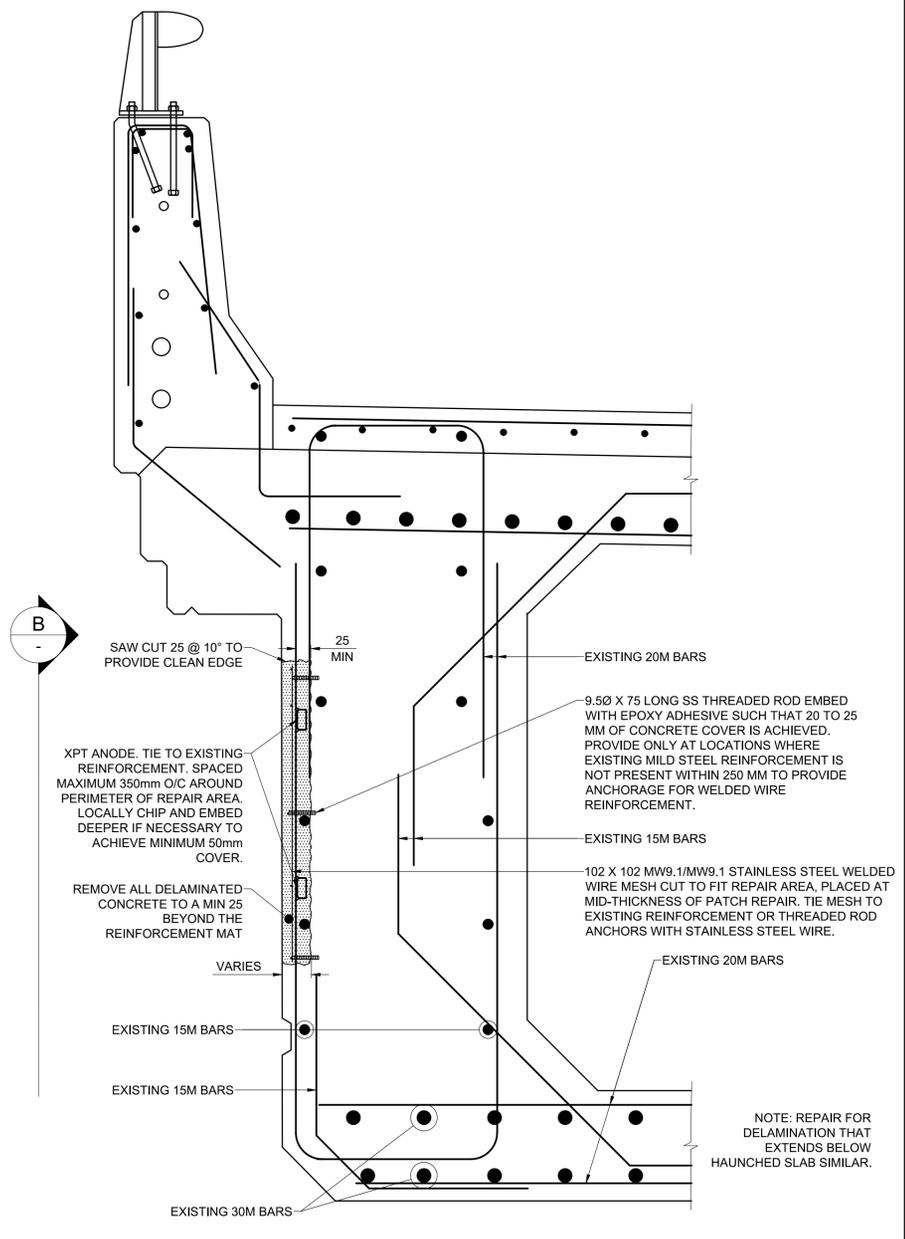
**ELEVATION- TYPICAL EXTERNAL WALL REPAIR**  
 SCALE: 1:10

**ENGINEERS & GEOSCIENTISTS**  
 IN MANITOBA  
 Certificate of Authorization  
**MORRISON HERSHFIELD**  
 No. 1736

**METRIC**  
 WHOLE NUMBERS INDICATE MILLIMETRES  
 DECIMALIZED NUMBERS INDICATE METRES



**SECTION- TYPICAL EXTERNAL WALL SECTION**  
 SCALE: 1:10



**SECTION- TYPICAL EXTERNAL WALL REPAIR**  
 SCALE: 1:10

**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.	

ISSUED FOR TENDER	19/08/14	BE
No. REVISIONS	YYMMDD	BY DATE

**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		

PROFESSIONAL'S SEAL  
 PROVINCE OF MANITOBA  
**A.D.G. GILARSKI**  
 ORIGINAL SIGNED 19/08/14 32144  
 REGISTERED PROFESSIONAL ENGINEER  
 CONSULTANT FILE NAME  
 180514900-MW-06.dwg

**THE CITY OF WINNIPEG PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION**

**2019 BRIDGE MAINTENANCE NORWOOD AND MAIN STREET BRIDGES**

NORWOOD BRIDGE NORTHBOUND CONCRETE REPAIRS

CITY DRAWING NUMBER	B103-19-06
SHEET	06 OF 12
DRAWING No.	06
REV	0

TENDER No. 685-2019