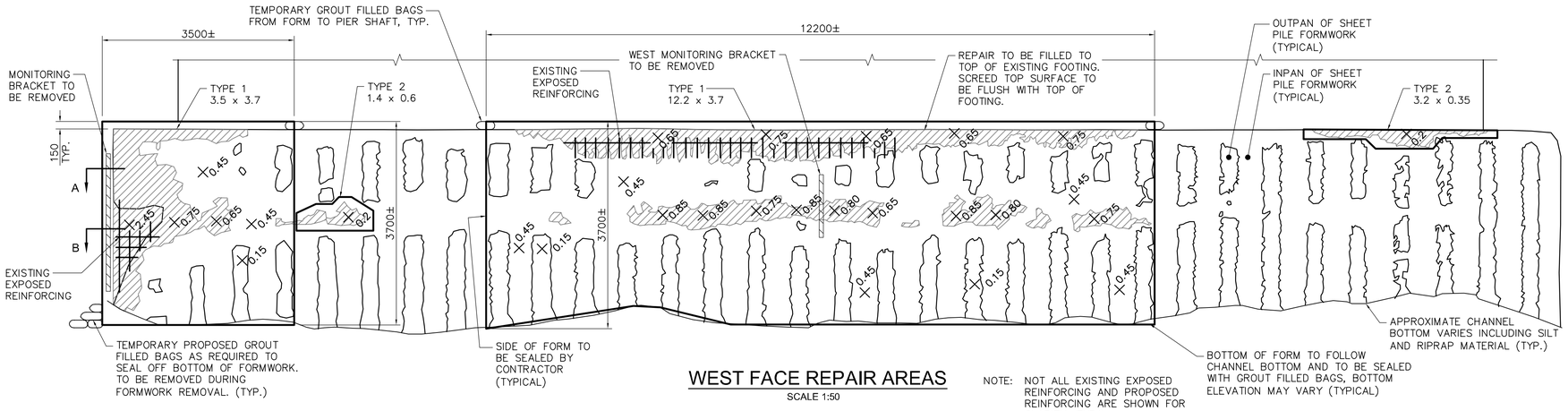
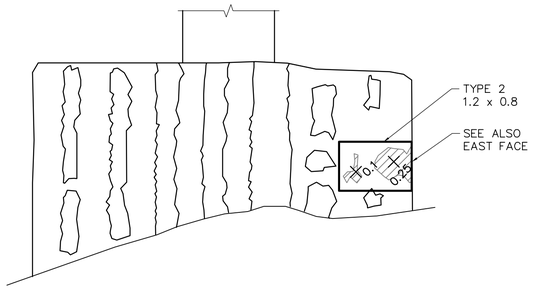


WEST FACE REPAIR AREAS

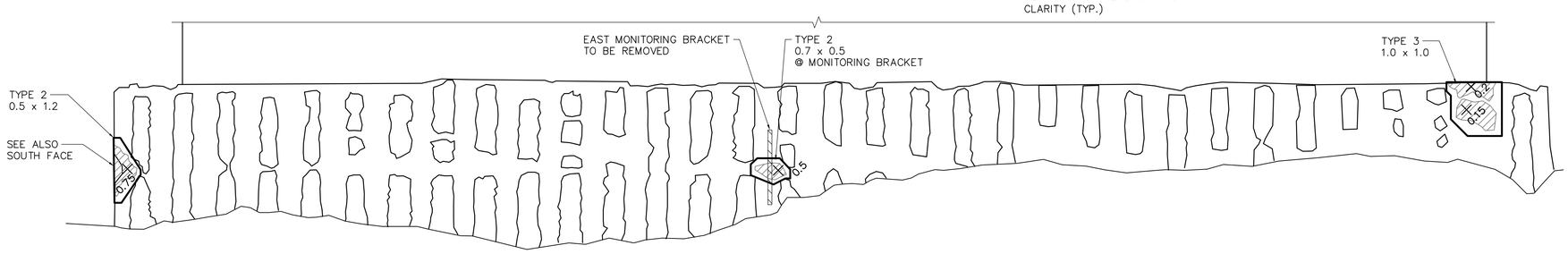
SCALE 1:50

NOTE: NOT ALL EXISTING EXPOSED REINFORCING AND PROPOSED REINFORCING ARE SHOWN FOR CLARITY (TYP.)



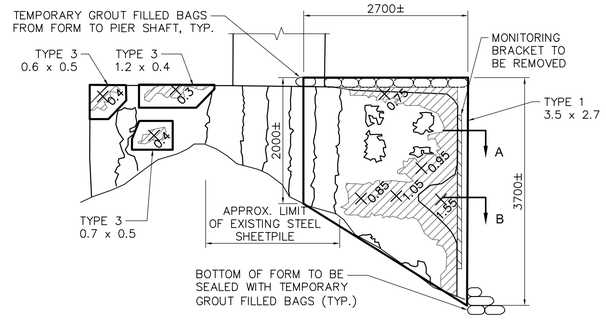
SOUTH FACE REPAIR AREAS

SCALE 1:50



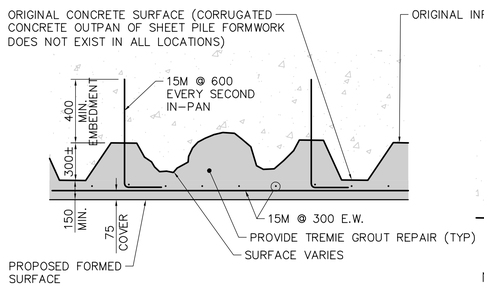
EAST FACE REPAIR AREAS

SCALE 1:50



NORTH FACE REPAIR AREAS

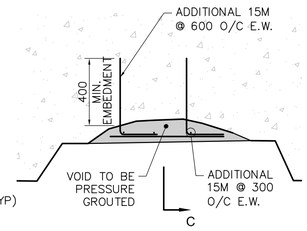
SCALE 1:50



TYPE 1 REPAIRS

FULL HEIGHT WITH FORMS OFFSET FROM FLUTES

SCALE 1:25

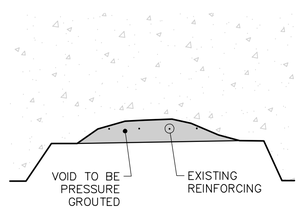


NOTE: NO EXPOSED REINFORCING

TYPE 2 REPAIRS

LOCAL REPAIR WITH NEW REINFORCING

SCALE 1:25

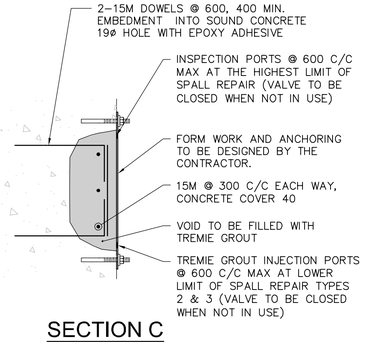


NOTE: REPAIR AREA ASSUMED TO HAVE EXISTING REINFORCING EXPOSED

TYPE 3 REPAIRS

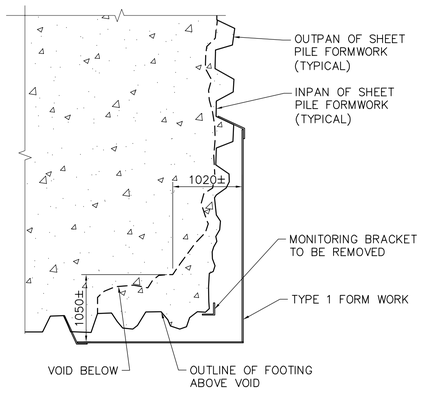
LOCAL REPAIR WITH EXISTING REINFORCING

SCALE 1:25



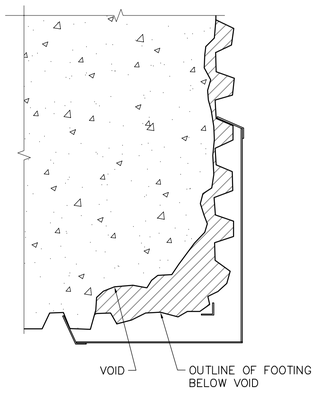
SECTION C

SCALE 1:20



SECTION A

SCALE 1:50



SECTION B

SCALE 1:50

GENERAL NOTES:

1. CHANNEL BOTTOM AND SIZE/LOCATION OF DEFECTS MAY VARY FROM ORIGINAL INSPECTION IN 2016. REPORT ANY DISCREPANCIES TO THE CONTRACT ADMINISTRATOR IMMEDIATELY.
2. ALL REPAIR AREAS TO BE PRESSURE WASHED TO REMOVE LOOSE MATERIAL, DIRT, DEBRIS AND SURFACE LAITANCE.
3. FORMWORK TO BE DESIGNED BY CONTRACTOR AND REMOVED FOLLOWING CONSTRUCTION. ALL FORMWORK DIMENSIONS ARE APPROXIMATE TO OUTER LIMITS OF FORMS.
4. ORIGINAL STEEL SHEET PILE FORM WORK HAS BEEN REMOVED IN MOST LOCATIONS UNLESS NOTED OTHERWISE.
5. VIDEO INSPECTION AFTER PRESSURE WASHING (10% OF REPAIR AREA) AND AFTER FORMWORK REMOVAL (25% OF REPAIR AREA) IS REQUIRED WITH CLEAR WATER BOX (300 W x 150 H x 300 DP) AS DIRECTED BY CONTRACT ADMINISTRATOR.
6. REFER TO SPECIFICATIONS FOR ENVIRONMENTAL REQUIREMENTS.

REPAIR PROCEDURES:

1. ALL EXISTING CONCRETE SURFACES TO BE REPAIRED WITH GROUT MATERIAL TO BE PROPERLY CLEANED. CLEAN SURFACES OF ALL MARINE GROWTH, SEDIMENT, DEBRIS AND DETERIORATED CONCRETE JUST PRIOR TO STARTING CONCRETE PLACEMENT WITH WATER JETS.
2. WATER JETS TO HAVE A PRESSURE OF 25000 PSI TO REMOVE MARINE GROWTH, SEDIMENT, DEBRIS AND DETERIORATED CONCRETE.
3. IF FORM IS NOT PLACED WITHIN 72 HOURS OF CLEANING, CONTRACTOR TO CLEAN SURFACE OF SEDIMENT AND SILT WITH A WATER JET OF 5000 PSI PRIOR TO FORMING.
4. FILL VOID BEHIND FORM WITH NON-SHRINK PRESSURE INJECTED EUCO TREMIE GROUT OR APPROVED EQUAL.
5. ALL MATERIAL SHALL BE MIXED IN ACCORDANCE WITH THE MANUFACTURER INSTRUCTIONS.
6. IF REPAIR DEPTH EXCEEDS 75mm EXTEND EUCO TREMIE GROUT WITH UP TO 20lb (9.1 kg) OF 3/8" (9.5mm) PEA GRAVEL PER 50 lb (22.7 kg) BAG.
7. FORMS FOR TYPE 1 REPAIRS TO BE EXTENDED MIN 150mm ABOVE TOP OF FOOTING. BOTTOM AND SIDES OF FORMS TO BE SEALED TO CONCRETE AND CHANNEL BOTTOM.
8. FORMS FOR TYPE 2 & 3 REPAIRS TO BE EXTENDED MINIMUM 100mm BEYOND VOID (TYPICAL) AND SEALED ON ALL FACES TO EXISTING CONCRETE INCLUDING TOP SURFACE. SOME CONCRETE REMOVALS MAY BE REQUIRED. NOTIFY THE CONTRACT ADMINISTRATOR IMMEDIATELY IF EXPOSED REINFORCING IS FOUND IN TYPE 2 REPAIRS AND/OR NO EXPOSED REINFORCING IS FOUND IN TYPE 3 REPAIRS.
9. ALL EDGES OF FORMS TO BE SEALED EXCEPT TOP OF TYPE 1 REPAIR.

LEGEND

= DETERIORATION (VOID BEYOND ORIGINAL INPAN SURFACE)

= REPAIR AREA FORM

$X_{0.5}$ = APPROXIMATE DEPTH (m) TO FORM

ENGINEERS GEOSCIENTISTS MANITOBA
Certificate of Authorization
AECOM Canada Ltd.
No. 4671 Date: June 6, 2019

METRIC
WHOLE NUMBERS INDICATE MILLIMETRES
DECIMALIZED NUMBERS INDICATE METRES

NO.	REVISIONS	DATE	BY
0	ISSUED FOR TENDER	19/06/06	EBL

B.M. ELEV.

AECOM

DESIGNED BY	FT	CHECKED BY	FT
DRAWN BY	KM	APPROVED BY	EBL
HOR. SCALE: VERTICAL:	AS NOTED	RELEASED FOR CONSTRUCTION BY:	
DATE	2019-04-02	DATE	

ENGINEER'S SEAL
PROVINCE OF MANITOBA
E. B. LOEWEN
Member 8325
June 6, 2019
REGISTERED PROFESSIONAL ENGINEER

CONSULTANT DRAWING NO.
60480699_B216_S-2

Winnipeg
THE CITY OF WINNIPEG
PUBLIC WORKS DEPARTMENT
TRANSPORTATION ENGINEERING DIVISION

KILDONAN SETTLERS BRIDGE
PIER SU4
UNDERWATER CONCRETE REPAIRS

CITY DRAWING NUMBER B216-19-03

SHEET 3 OF 3

CONCRETE REPAIR DETAILS

REV-0

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