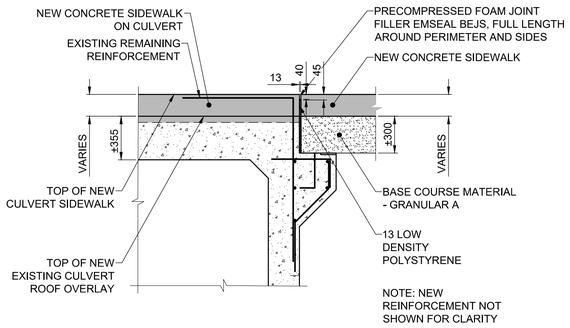
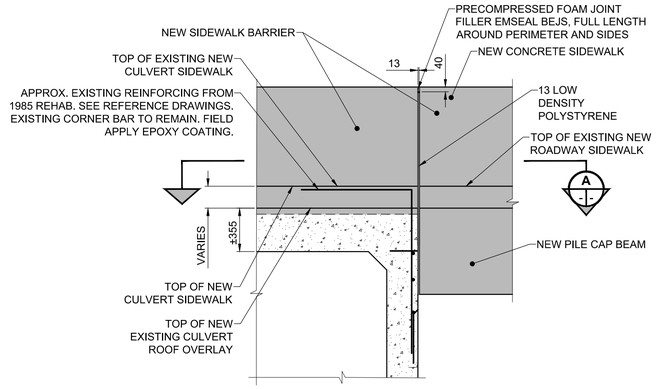
ISO A1 - 594mm x 841mm




## TYPICAL SECTION

H 10 13

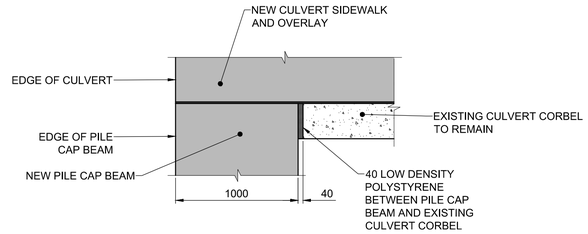
NEW SIDEWALK AT CULVERT CORBEL
SCALE: 1:25




## TYPICAL SECTION

J 10 13

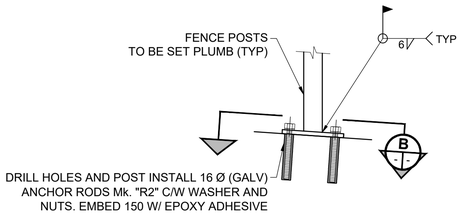
NEW SIDEWALK AND BARRIER AT CULVERT CORBEL
SCALE: 1:25




## TYPICAL SECTION

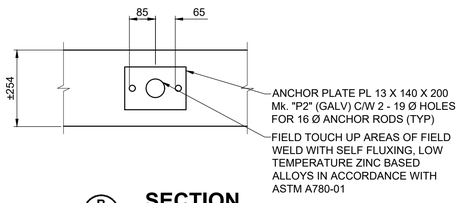
A

NEW PILE CAP BEAM AT CULVERT CORBEL
SCALE: 1:25




## FENCE DETAIL

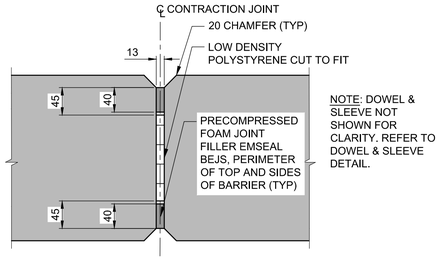
FENCE POST TO WINGWALL/WINGWALL CONNECTION
SCALE 1:10




## SECTION

B

SCALE: 1:10

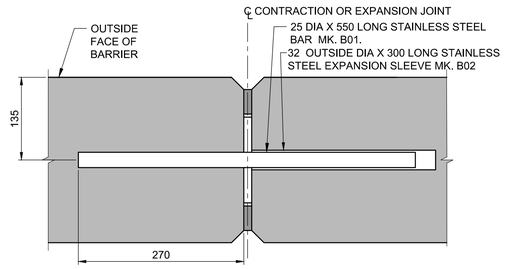



NOTE: DOWEL & SLEEVE NOT SHOWN FOR CLARITY. REFER TO DOWEL & SLEEVE DETAIL.

## TYPICAL DETAIL

1

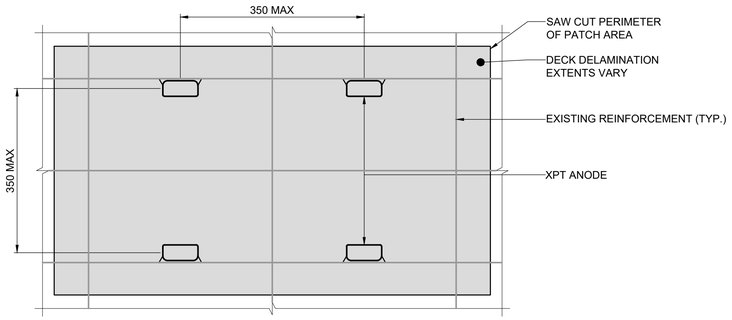
BARRIER EXPANSION JOINT
SCALE: 1:5




## TYPICAL DETAIL

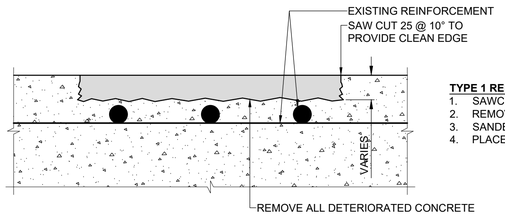
2

DOWEL & SLEEVE - BARRIER EXPANSION JOINT
SCALE: 1:5




## TYPICAL TYPE 1 & 2 CONCRETE REPAIR FOR CULVERT SLAB / WALL

PLAN
SCALE NTS

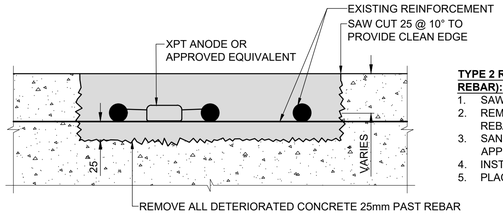



**TYPE 1 REPAIR PROCEDURE (NO EXPOSED REBAR):**

1. SAWCUT PERIPHERY OF REPAIR AREA TO 25 DEEP.
2. REMOVE ALL DETERIORATED CONCRETE.
3. SANDBLAST CONCRETE SURFACE.
4. PLACE NEW CONCRETE TO COMPLETE PATCH REPAIR.

## TYPICAL TYPE 1 CONCRETE REPAIR FOR CULVERT SLAB / WALL

ELEVATION
SCALE NTS




**TYPE 2 REPAIR PROCEDURE (DELAMINATION EXTENDS TO REBAR):**

1. SAWCUT PERIPHERY OF REPAIR AREA TO 25 DEEP.
2. REMOVE ALL DETERIORATED CONCRETE 25mm PAST REBAR.
3. SANDBLAST ALL EXPOSED REINFORCING STEEL AND FIELD APPLY EPOXY COATING TOUCH UPS WHERE REQUIRED.
4. INSTALL XPT ANODE.
5. PLACE NEW CONCRETE TO COMPLETE PATCH REPAIR.

## TYPICAL TYPE 2 CONCRETE REPAIR FOR CULVERT SLAB / WALL

ELEVATION
SCALE NTS

**NOTES:**

1. MEDIUM CRACKS TO BE ROUTED AND INJECTED WITH EPOXY.

ENGINEERS GEOSCIENTISTS MANITOBA
Certificate of Authorization
MORRISON HERSHFIELD
No. 1736

TENDER No. 971-2022

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 23-018 ELEV 235.300 m — S.E. Cor. Notre Dame Ave. & Sherwin Rd., Tblt. in W. Conc. foundation No. 2070 Notre Dame Ave., 0.8 m S. & 0.7 m below Conc. block of N.W. Cor. of bldg.

| No. | REVISIONS | YY/MM/DD | BY |
|---|---|---|---|
| 0 | ISSUED FOR TENDER | 22/12/16 | AGG |

MORRISON HERSHFIELD

| | | | |
|---|---|---|---|
| DESIGNED BY | AGG | CHECKED BY | TH |
| DRAWN BY | AH | APPROVED BY | BE |
| HOR SCALE / VERT SCALE | AS SHOWN | RELEASED FOR CONSTRUCTION BY: VAIBHAV BANTHIA, P.ENG. | |
| DATE | 22/03/14 | DATE | 22/12/16 |

PROFESSIONAL'S SEAL
PROVINCE OF MANITOBA — A.D.G. GILARSKI — Member — 32144 — 2022-12-16 — REGISTERED PROFESSIONAL ENGINEER

CONSULTANT FILE NAME
220042500-Rte 90-Details02.dwg

Winnipeg

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

## REHABILITATION OF ROUTE 90 CULVERT OVER OMAND'S CREEK

## CONCRETE DETAILS 2 OF 2

CITY DRAWING NUMBER: C315-21-13
SHEET 13 OF 27
DRAWING NUMBER: 13

X:\Proj\2022\220042500-CofW Rte 90 Culvert Over Omands Cre\09. CAD\07 Sheets\220042500-Rte 90-Details02.dwg Last Saved: 5/4/2022 9:13 AM by AHeppner Plotted: 12/15/2022 6:03 PM by Alex Heppner