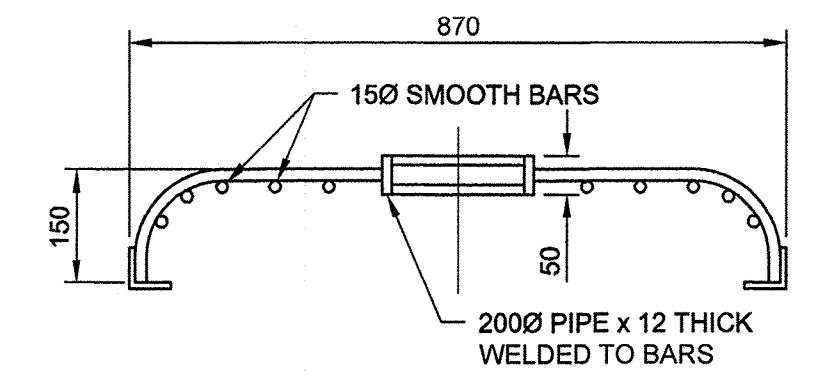
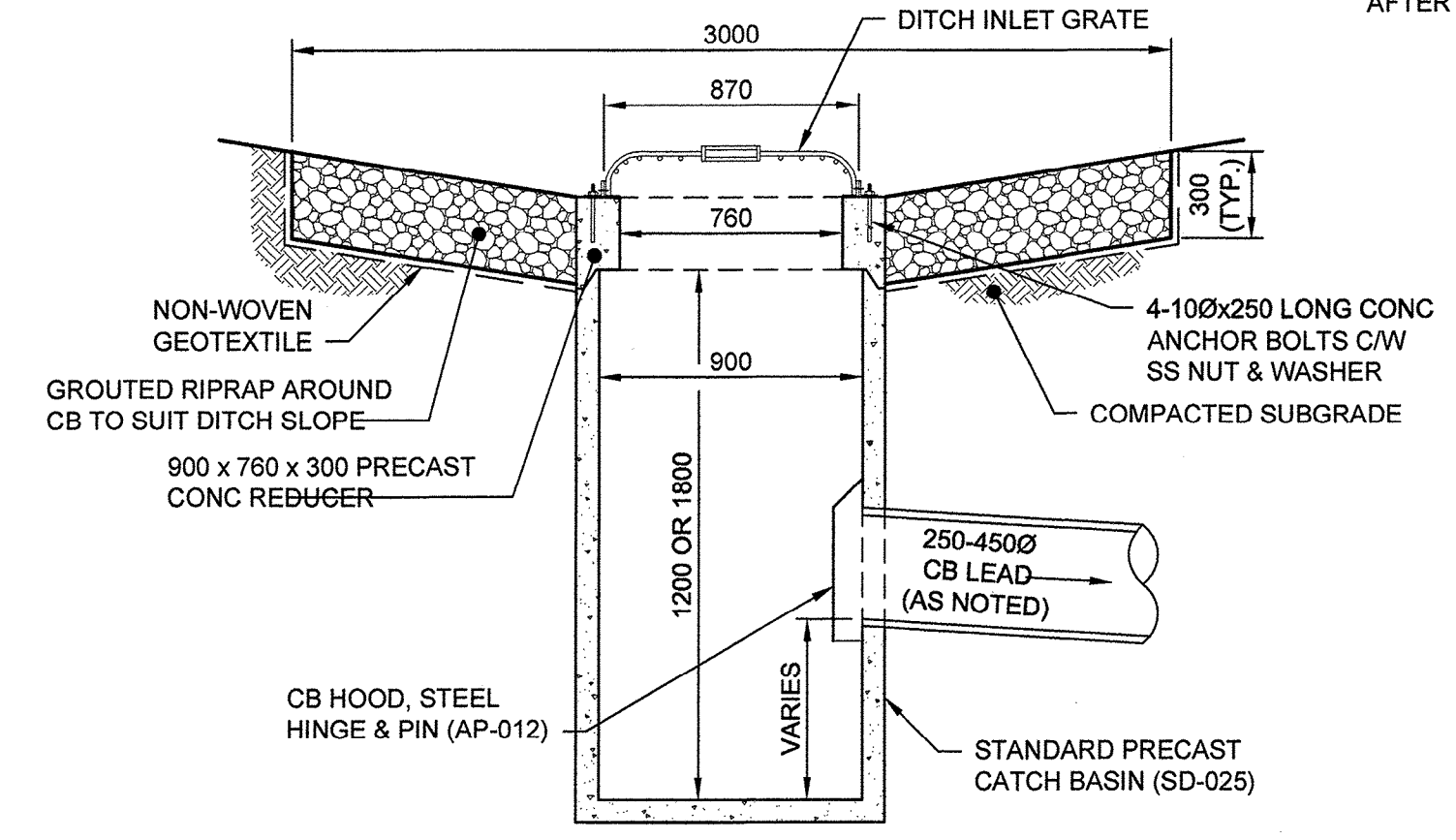


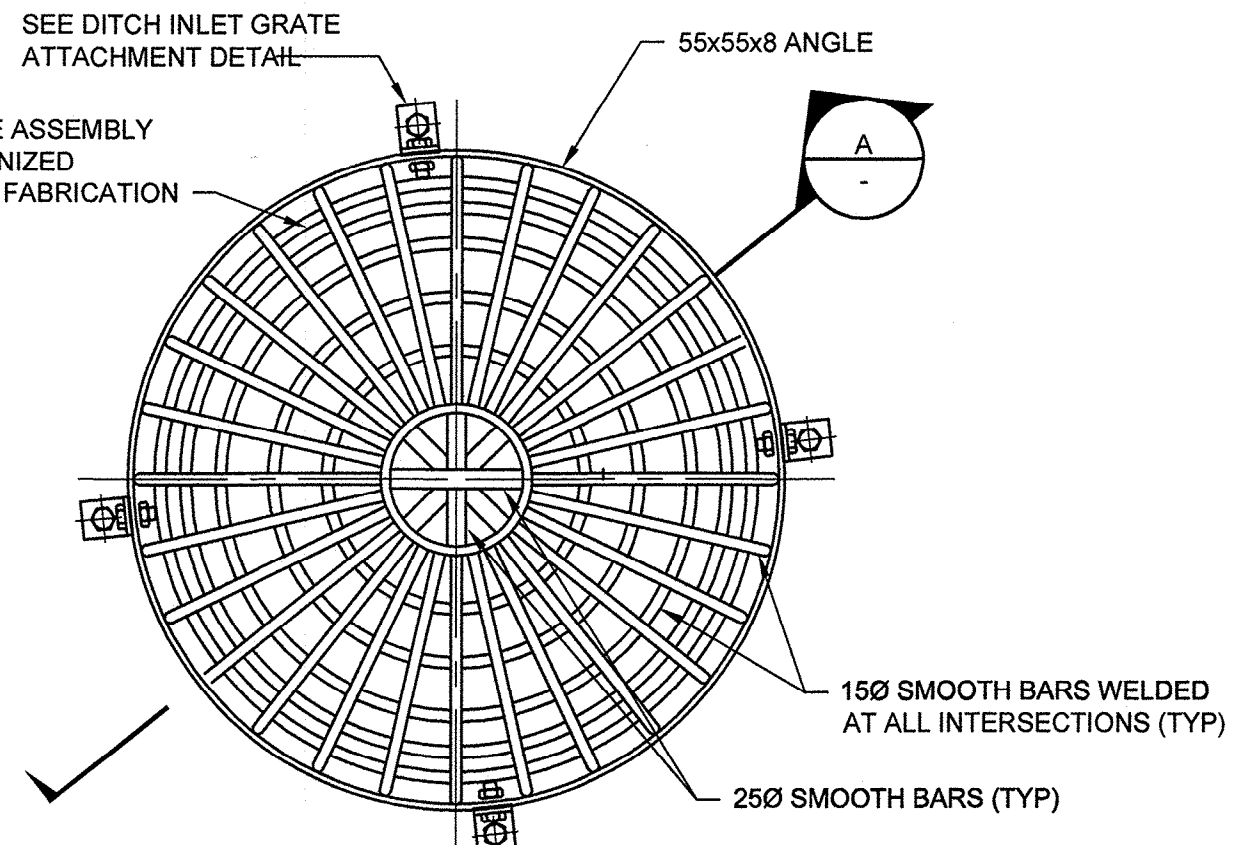
GRATE ATTACHMENT
Scale 1:2.5
0 62.5 125 mm



A SECTION
Scale 1:10
0 250 500 mm

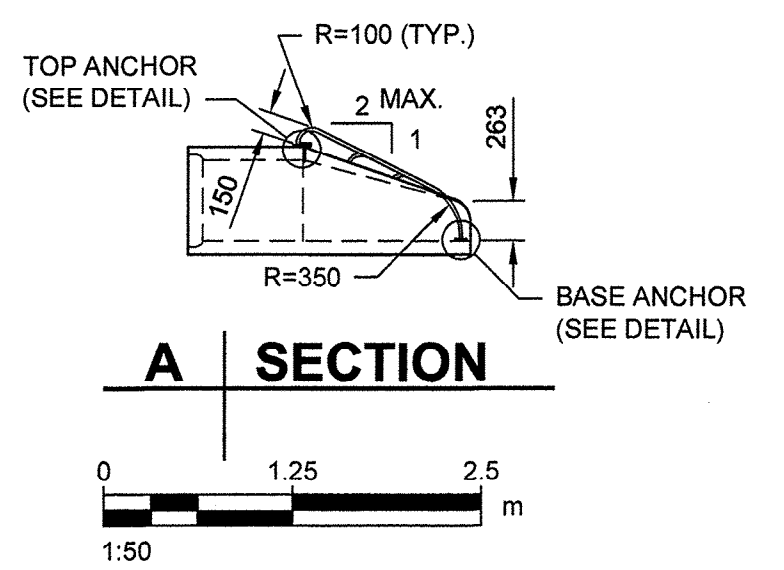


CATCHBASIN
Scale 1:25
0 62.5 1250 mm

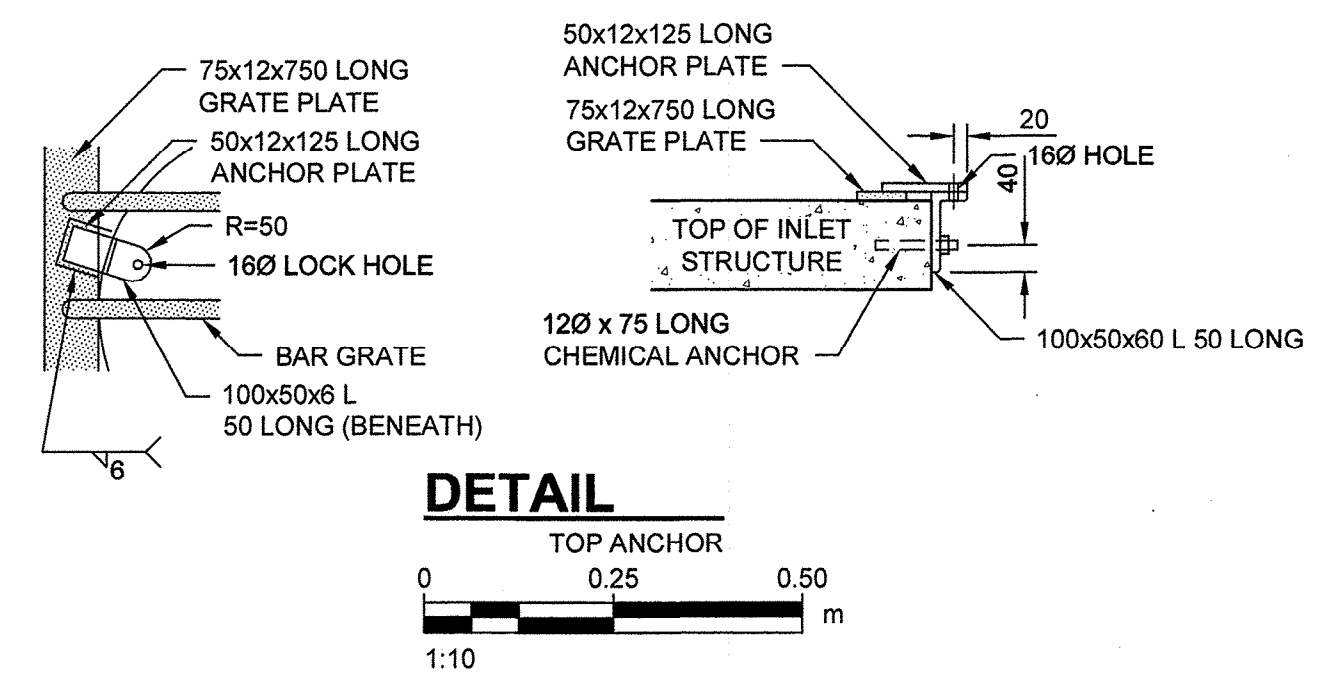


GRATE
Scale 1:10
0 250 500 mm

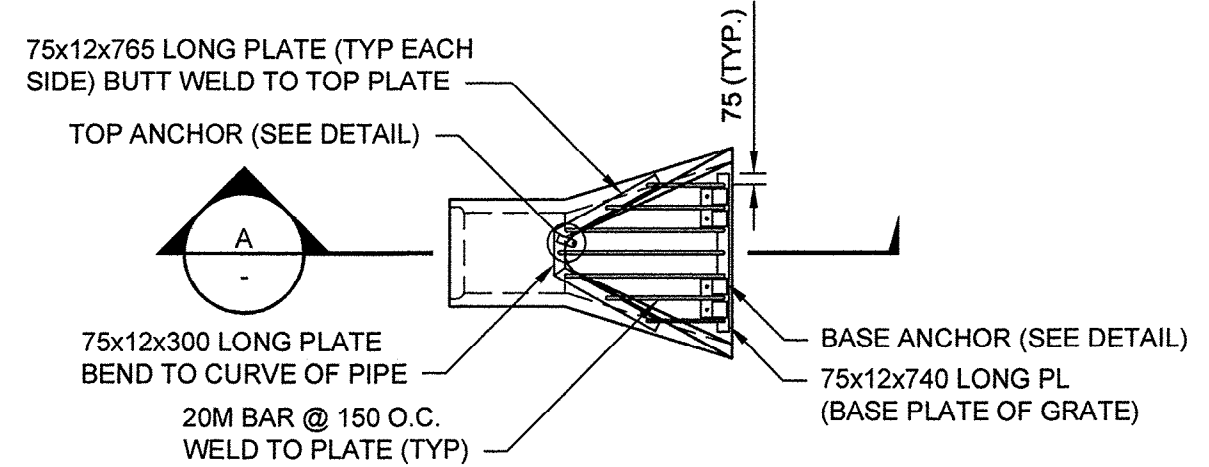
BEEHIVE DITCH INLET
P-3346-1106



A SECTION
Scale 1:50
0 1.25 2.5 m

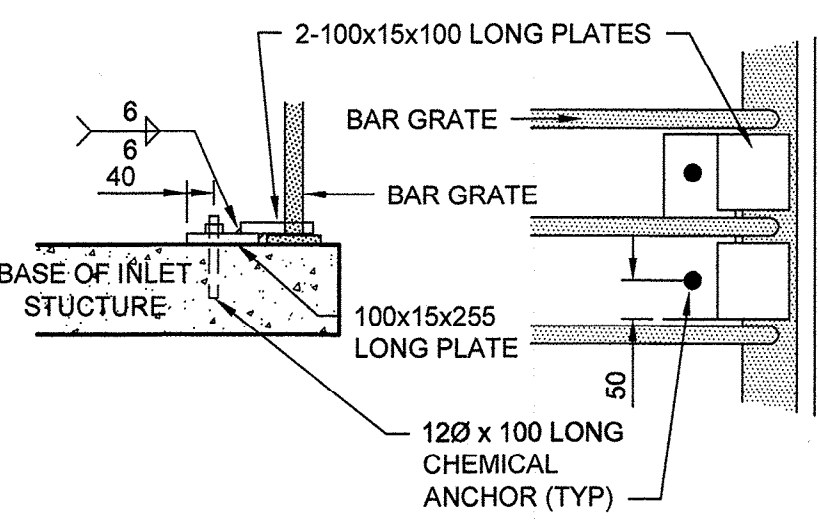


DETAIL
Scale 1:10
0 0.25 0.50 m

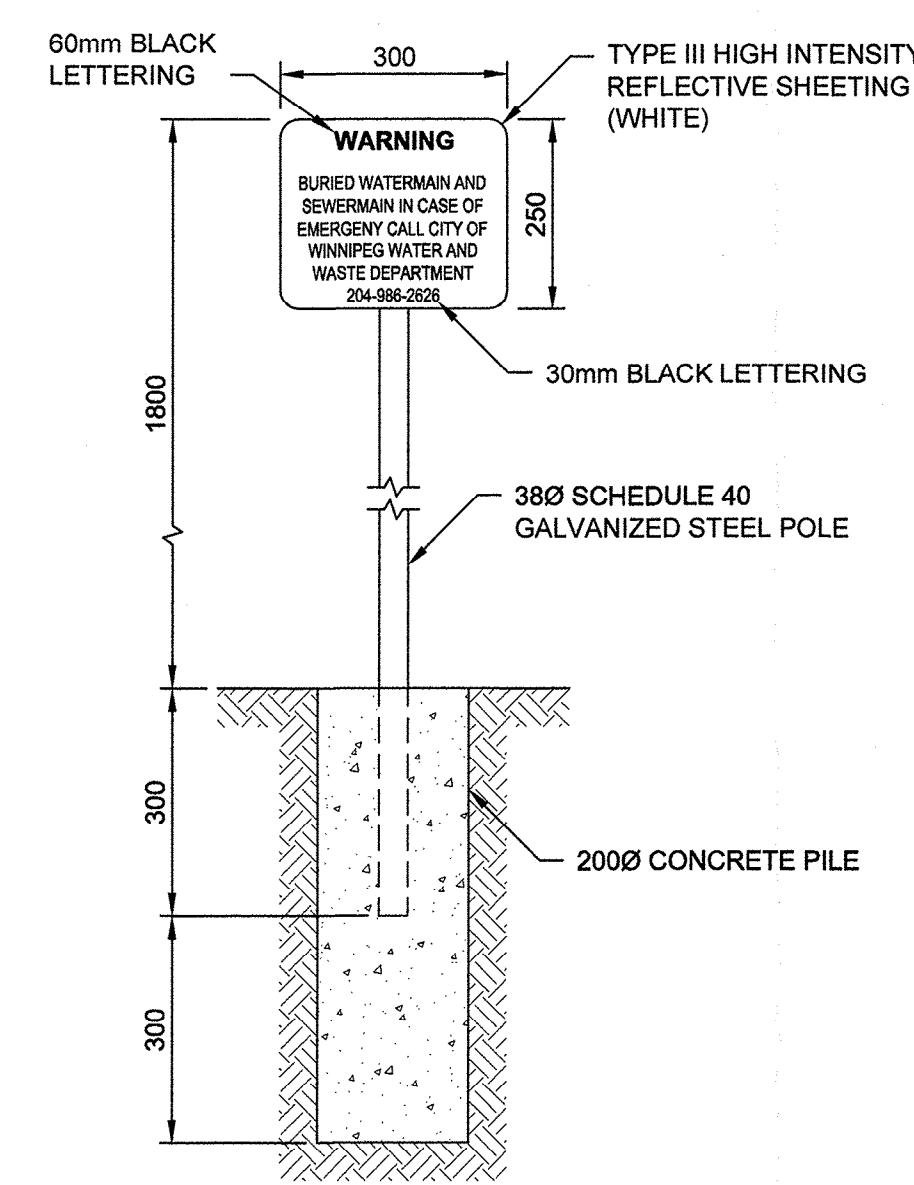


DETAIL
Scale 1:50
0 1.25 2.5 m

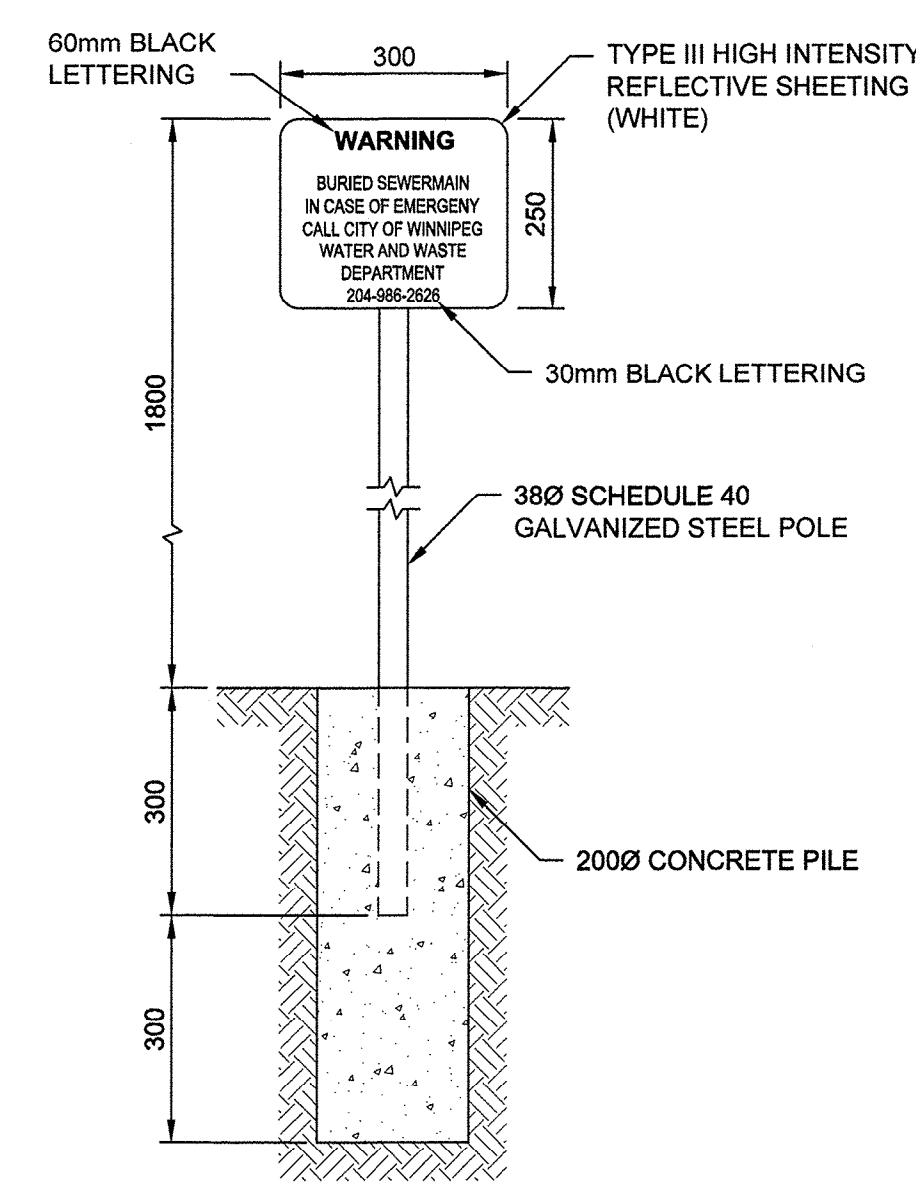
FLARED END SECTION SAFETY GRATE
P-3346-1104



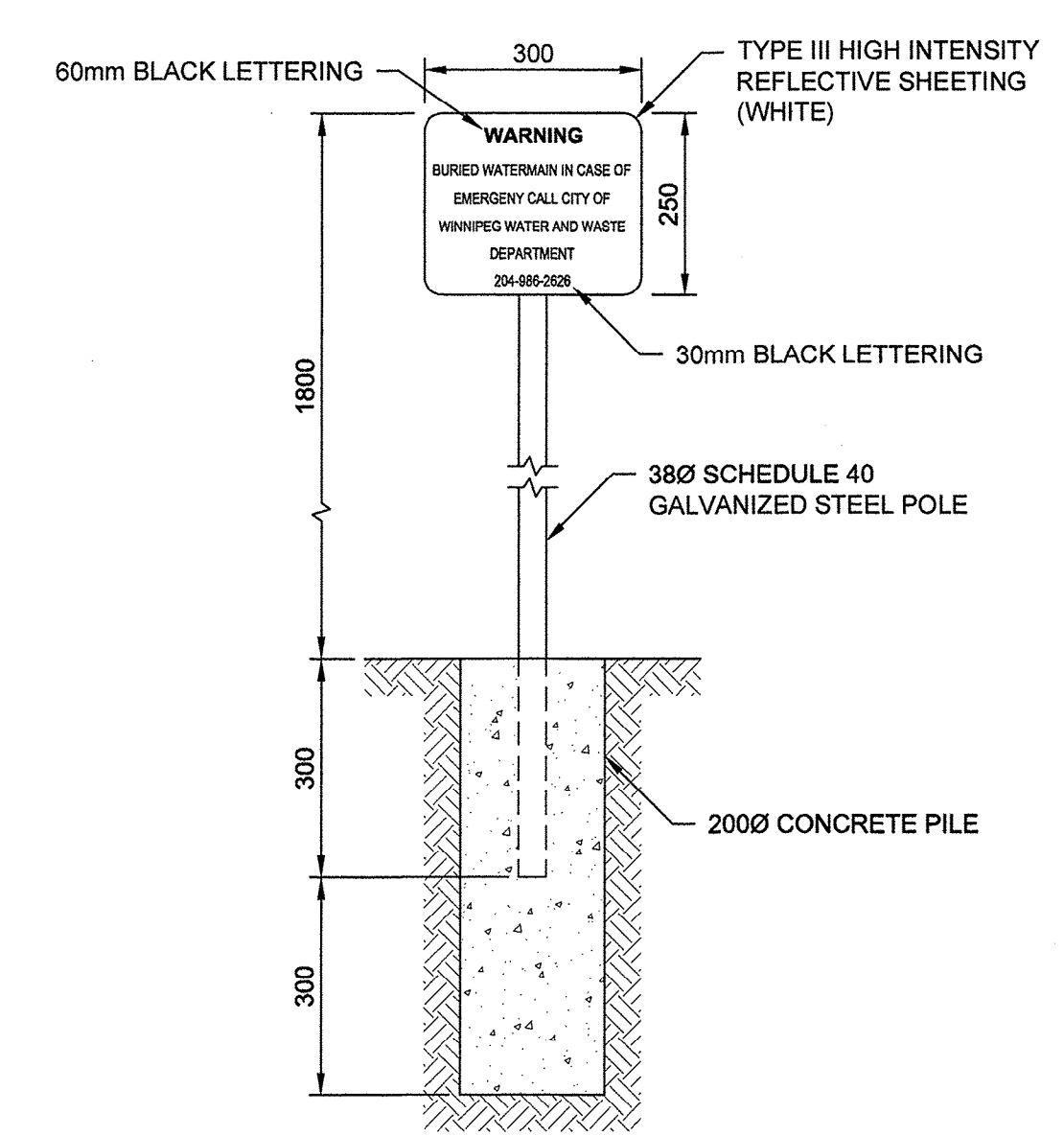
DETAIL
Scale 1:10
0 0.25 0.50 m



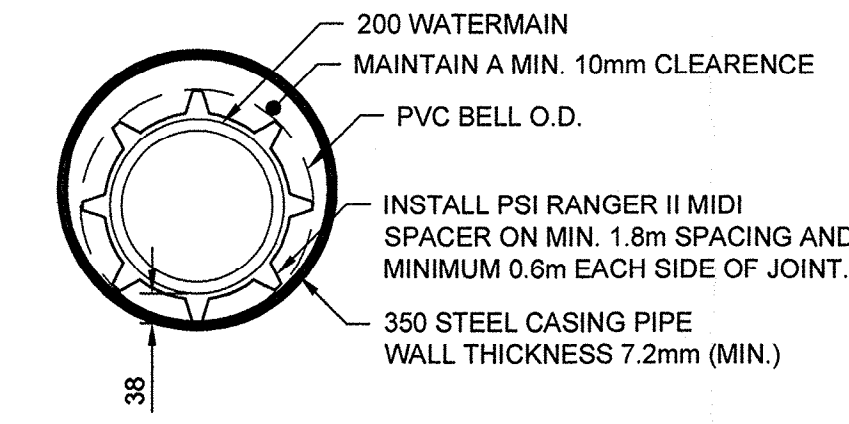
1 DETAIL
P-3346-1104
Scale 1:10
0 250 500 mm



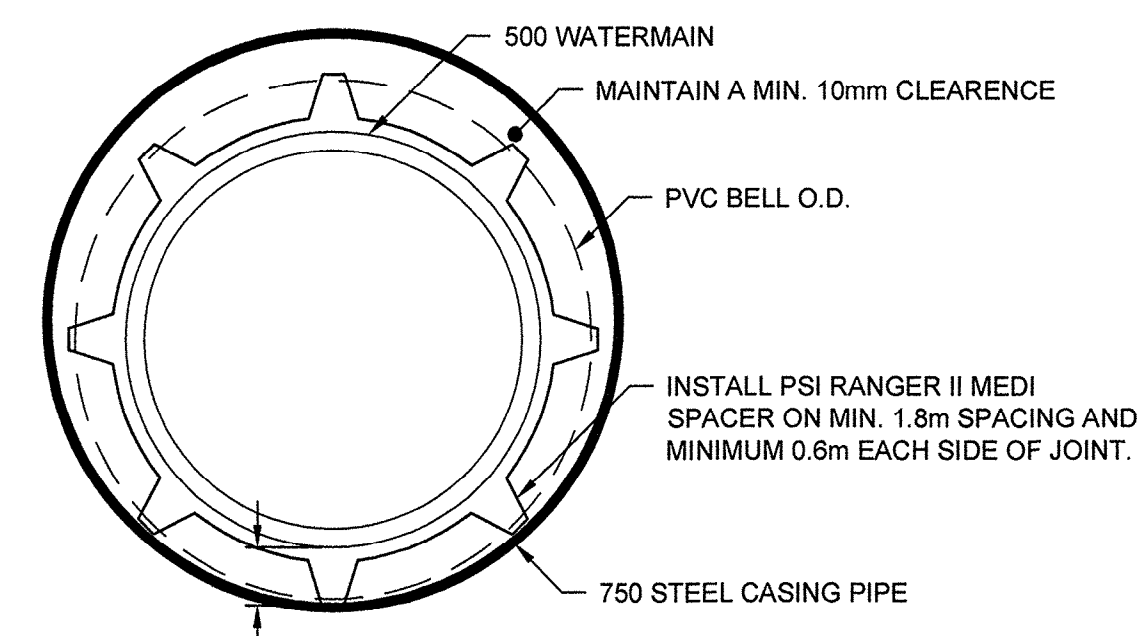
2 DETAIL
P-3346-1106
Scale 1:10
0 250 500 mm



3 DETAIL
P-3346-1108
Scale 1:10
0 250 500 mm



A SECTION
P-3346-1104
Scale 1:10



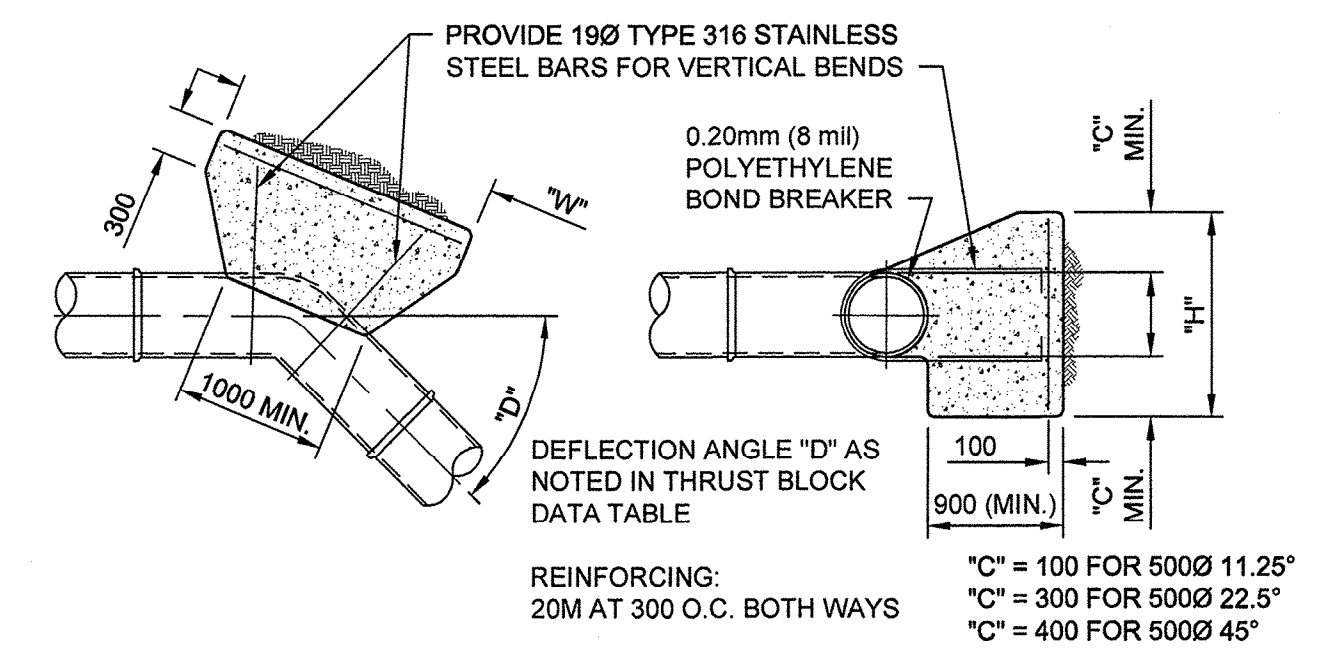
B SECTION
P-3346-1108
Scale 1:10

THRUST BLOCK DATA TABLE

SIZE	BEARING AREA A (m ²)	H (m)	W (m)	DEFLECTION ANGLE D
500	0.7	0.7	1.0	11.25°
500	1.32	1.1	1.2	22.5°
500	2.7	1.5	1.8	45°

DESIGN CRITERIA

	PRESSURE	SOIL BEARING
PRESSURE TEST	1035 KPa	58 KPa
LONG TERM	700 KPa	48 KPa



PLAN SECTION
4 DETAIL
P-3346-1108, P-3346-1109
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.

NO.	REVISIONS	DATE	BY
0	ISSUED FOR TENDER	13/05/14	ADL

AECOM
WHOLE NUMBERS INDICATE MILLIMETRES
DECIMALIZED NUMBERS INDICATE METRES

DESIGNED BY	JAT	CHECKED BY	[Signature]
DRAWN BY	ADL	APPROVED BY	[Signature]
HOR. SCALE	AS NOTED	RELEASED FOR CONSTRUCTION	
VERT. SCALE	N/A	DATE	

AECOM
Certificate of Authorization
AECOM Canada Ltd.
No. 4671 Date: May 14, 2013

PROFESSIONAL'S SEAL
PROVINCE OF MANITOBA
D.M.R.
ENNS
Member
31777
May 14, 2013
REGISTERED PROFESSIONAL ENGINEER
CONSULTANT DRAWING NO.
60273041-SHT-01-CON1-C-4001

THE CITY OF WINNIPEG PUBLIC WORKS DEPARTMENT

PLESSIS ROAD TWINNING AND GRADE SEPARATION AT CN REDDIT SUBDIVISION CONTRACT 1 UTILITY DETAILS

CITY DRAWING NUMBER P-3346-1110
SHEET 26 OF 27
CONSULTANT DWG No. REV
C-4001 0

BID OPPORTUNITY NO. 342-2013