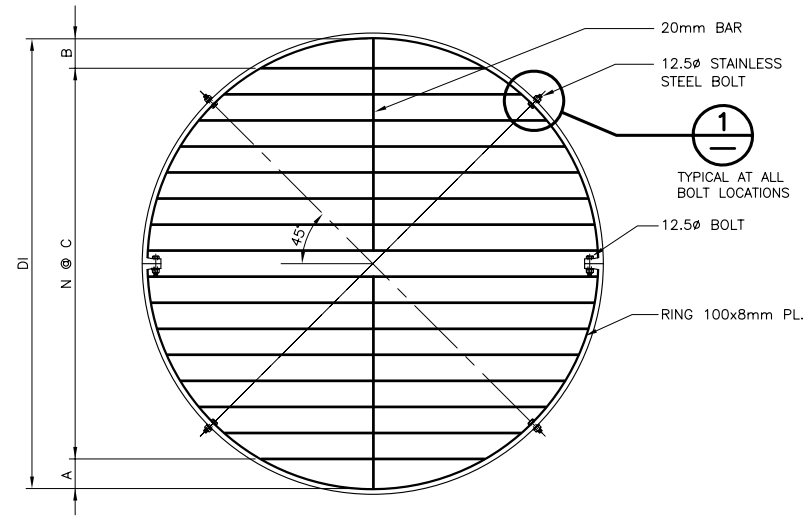
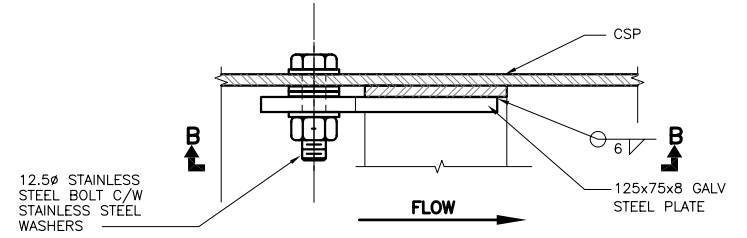
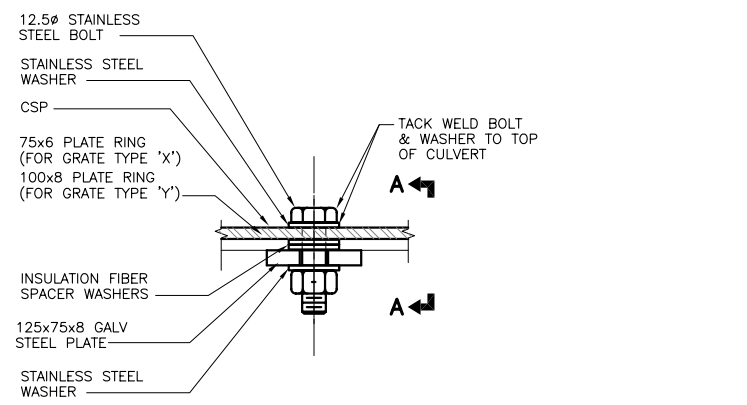


STANDARD PIPE END DETAILS



GRATING TYPE 'Y'
SCALE: N.T.S.



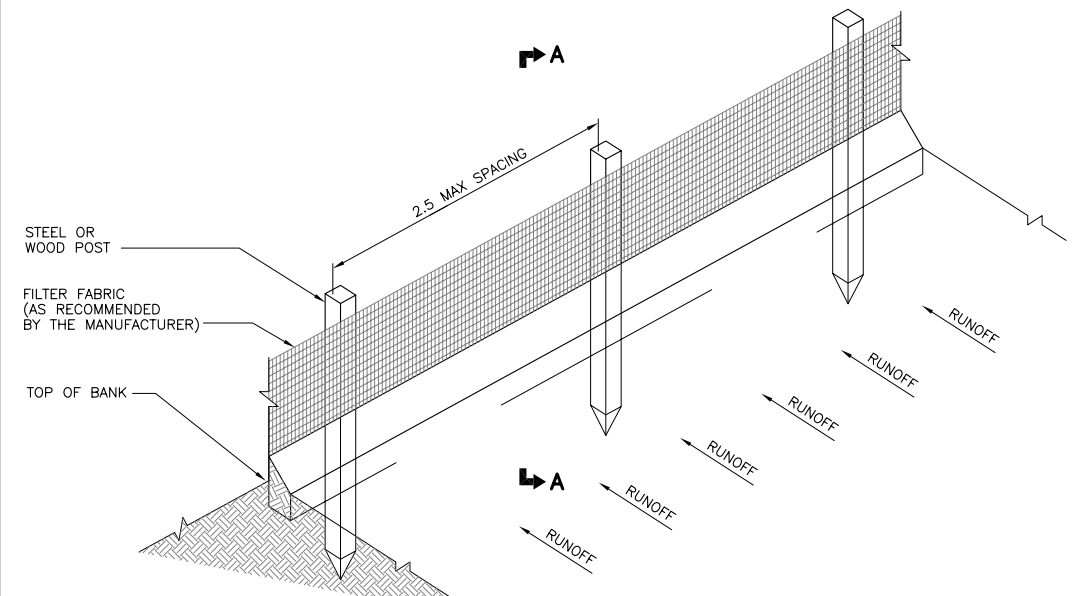
SECTION A-A
SCALE: 1:2

SECTION B-B
SCALE: 1:2

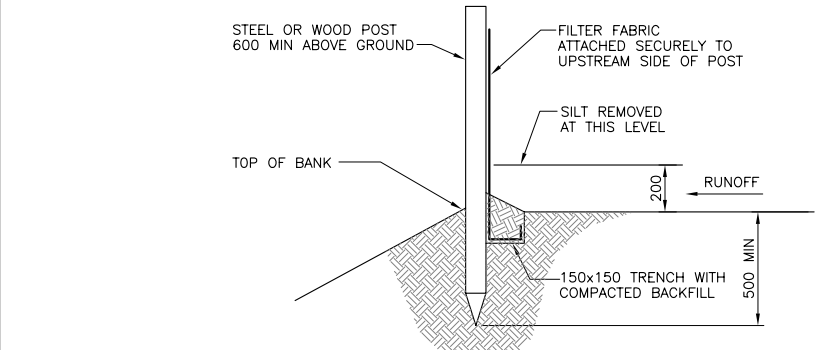
LOCATION	PIPE		END CONDITION	GRATING							WEIGHT (lbs)
	DIAMETER D	MATERIAL		DIAMETER D1	TYPE	BAR DIA.	A	B	C	N	
RUE LA VERENDRYE (RR-59)	1200	CSP	1	1185±	Y	20	145	150	130	7	72

NOTE:
 1. ALL PLATES AND BARS ARE CSA G40.21-300W.
 2. ALL COMPONENTS ARE GALVANIZED.
 3. ALL BOLTS TO BE TYPE 316 STAINLESS STEEL CONFORMING TO ASTM A320 GRADE B8M

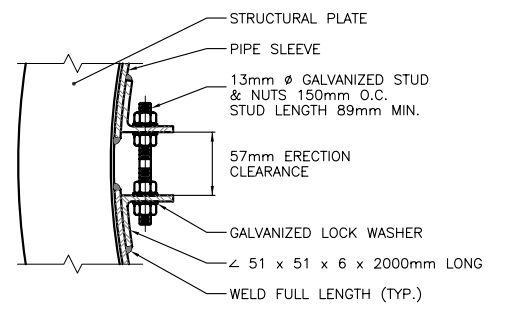
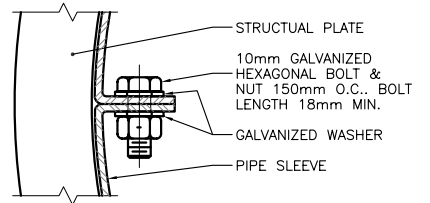
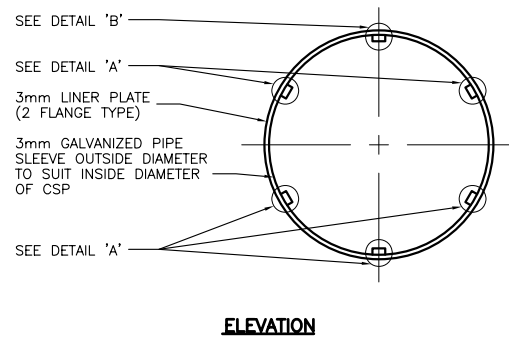
STANDARD DEBRIS GRATE DETAILS



ISOMETRIC DETAIL
SCALE: N.T.S.



SECTION A-A
SCALE: 1:2
SILT FENCE DETAILS



INTERNAL SLIP JOINT DETAILS
SCALE: N.T.S.

LOCATION APPROVED UNDERGROUND STRUCTURES		B.M. ELEV.			
SUPV. 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.					
0	ISSUED FOR TENDER	14/12/07	RJH		
	NO. REVISIONS	DATE	BY	DATE	09/08/07

KGS GROUP CONSULTING ENGINEERS & PROJECT MANAGERS
 WINNIPEG (204) 896-1209
 THUNDER BAY (807) 345-2233

DESIGNED BY: RJH
 CHECKED BY: RJH
 DRAWN BY: DW
 APPROVED BY:
 HOR. SCALE: AS NOTED
 RELEASED FOR CONSTRUCTION:
 DATE: 09/08/07

ENGINEER'S SEAL
 ORIGINAL SIGNED BY R.J. HOUSTON
 14 DEC 07
 CONSULTANT DRAWING NO. 07-0107-25 02

THE CITY OF WINNIPEG
 WATER & WASTE DEPARTMENT

2007 OUTFALL REPAIRS

MISCELLANEOUS DETAILS

SHEET 02 OF 05
 CAD FILE DRAWING NUMBER DETAILS-PLOT
 CITY DRAWING NUMBER LD-3939

APGM
 Certificate of Authorization
 KGS Group
 No. 245 Date:

FILE NO. P:\PROJECTS\2007\07-0107-25\MUN\DWGS\DETAILS-PLOT.DWG
 PLOT. 1:1 A1