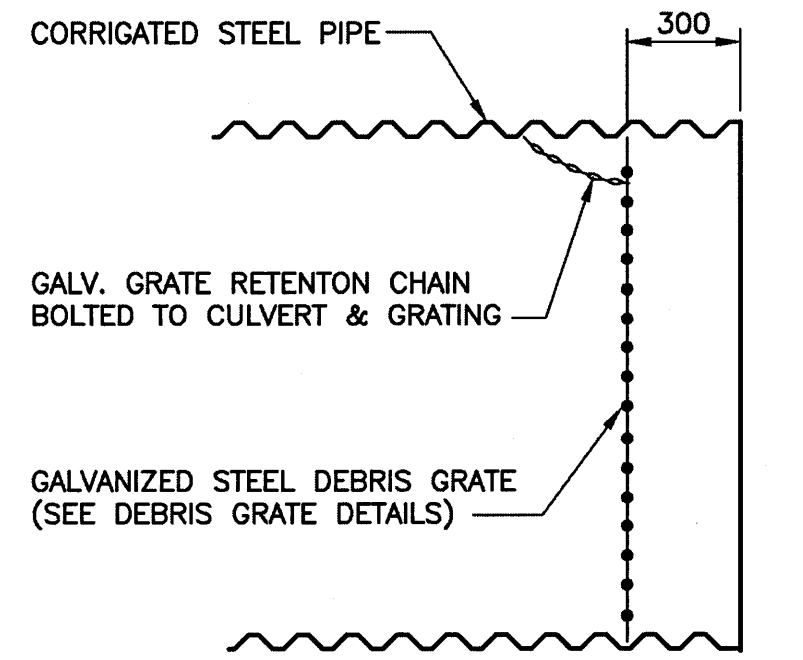


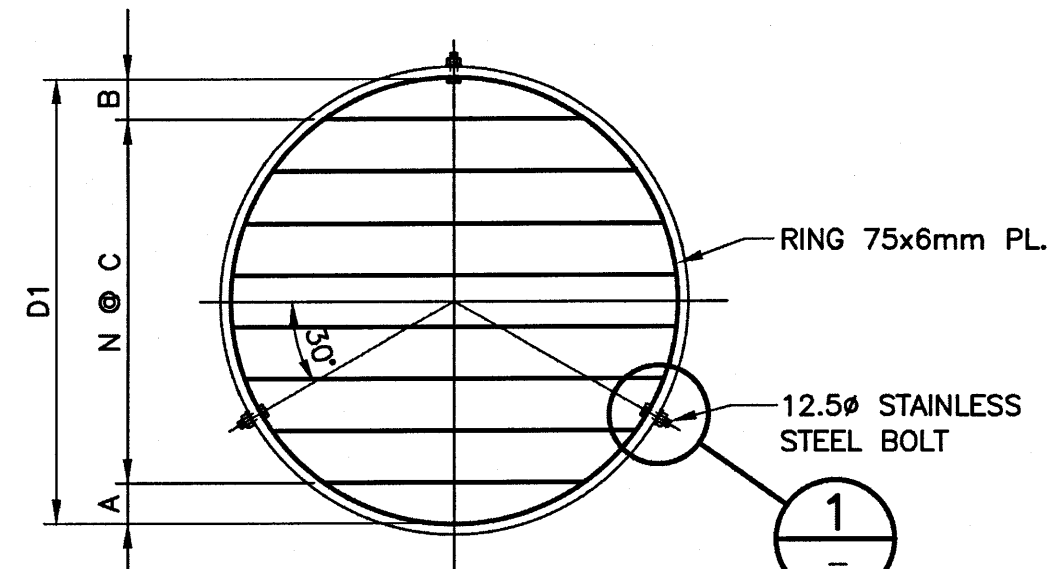
COFFER DAM DETAILS

SCALE: NTS



PIPE END CONDITION-1

SCALE: NTS

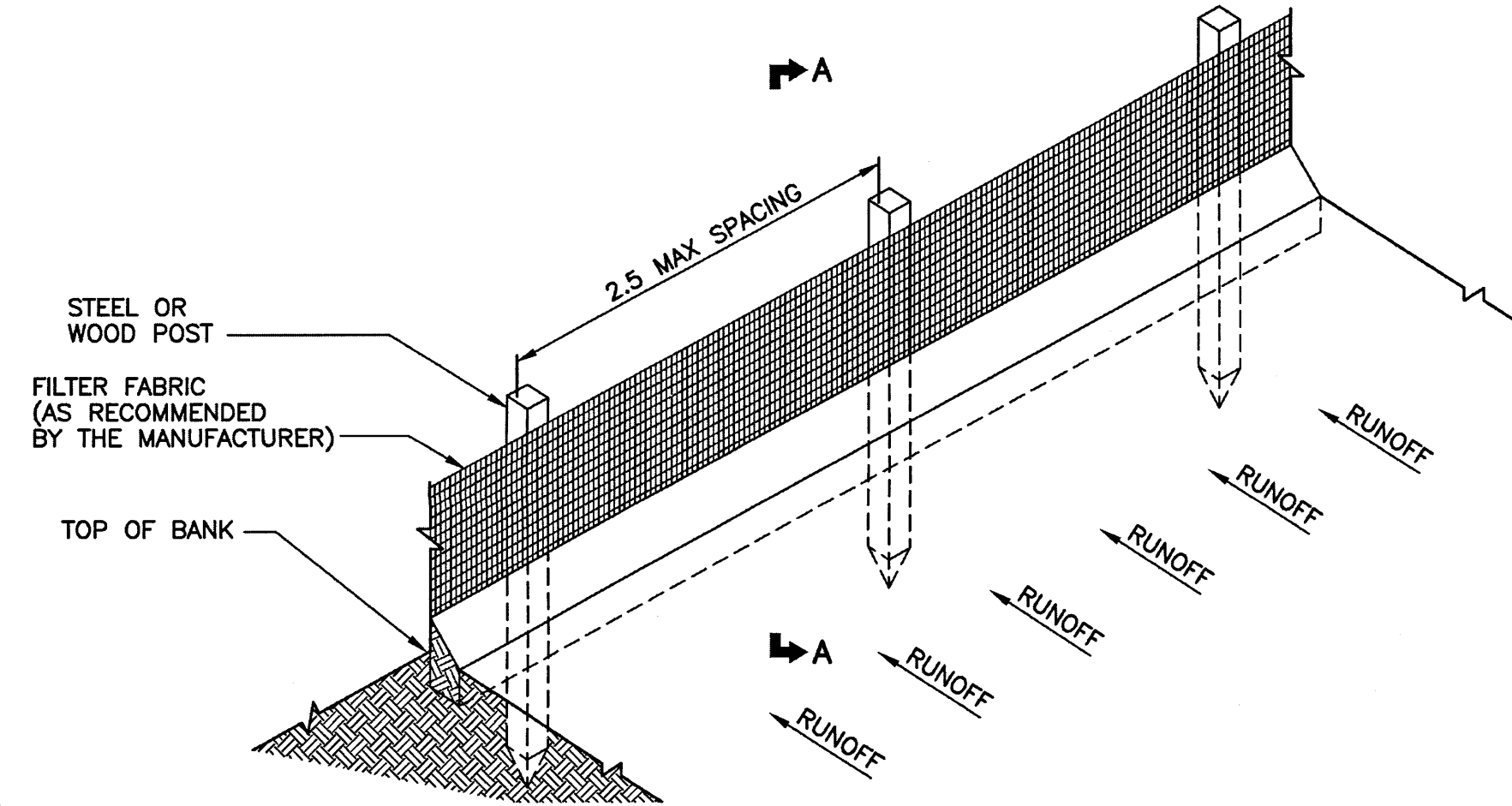


GRATING TYPE 'X'

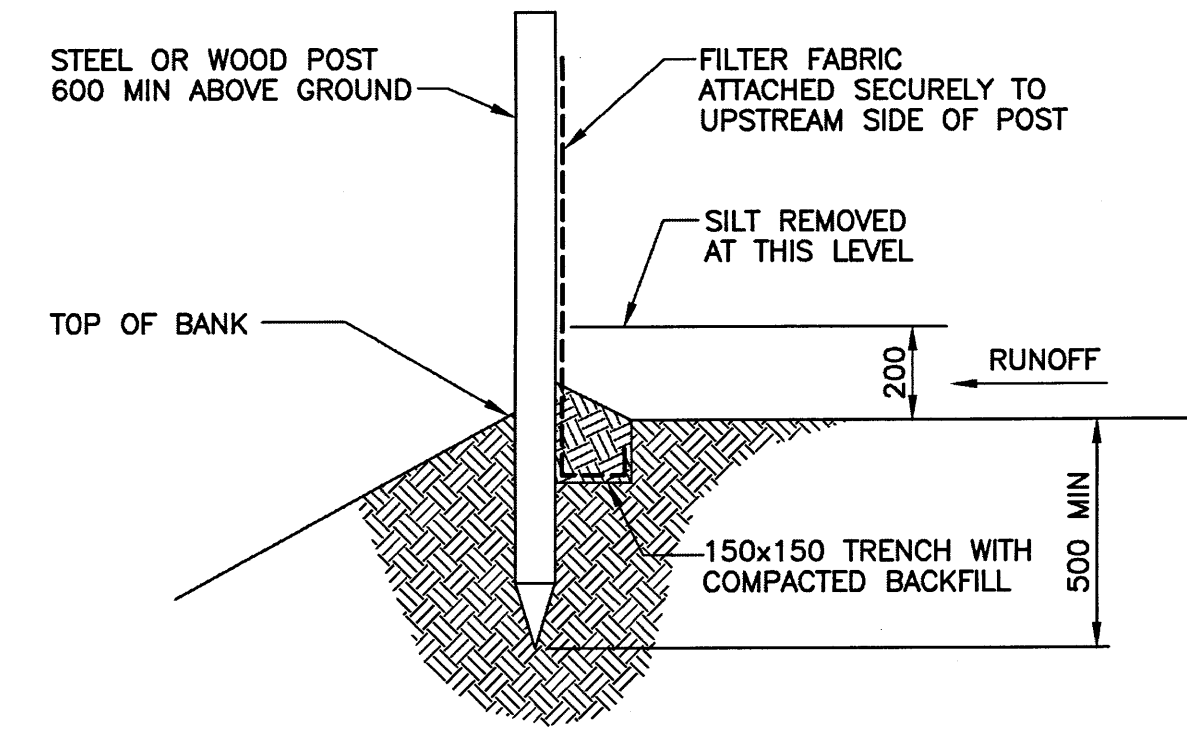
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LOCATION	PIPE		END CONDITION	GRATING							
	DIAMETER D	MATERIAL		DIAMETER D1	TYPE	BAR DIA.	A	B	C	N	WEIGHT (lbs)
BISHOP GRANDIN BLVD (RR-21)	900	CSP	1	885±	X	20	150	75	165	4	42

- 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



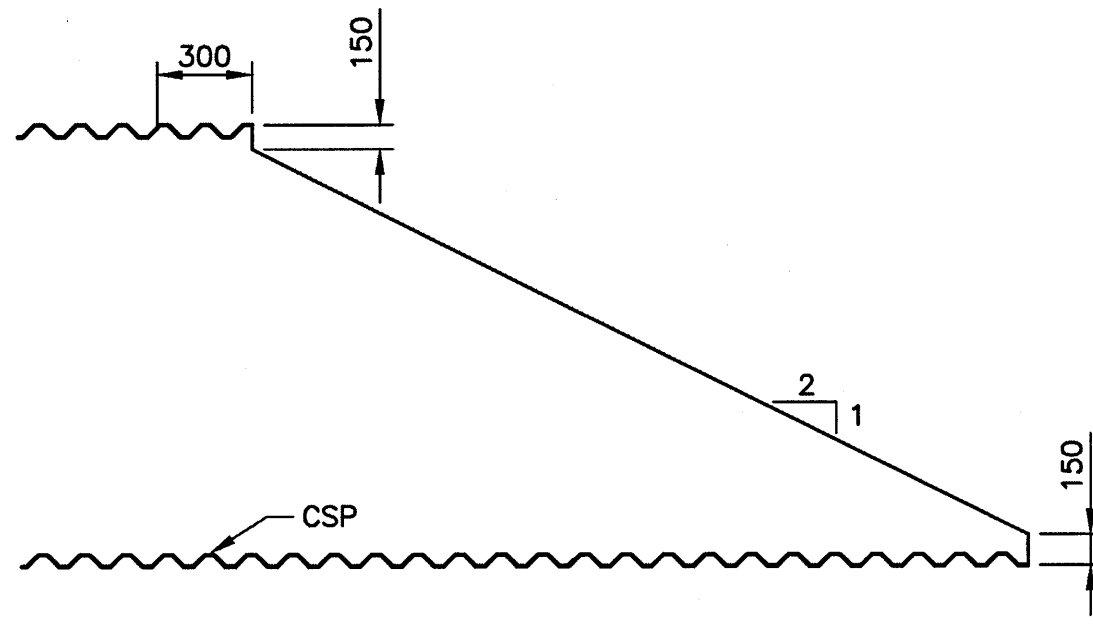
ISOMETRIC DETAIL



SECTION A-A

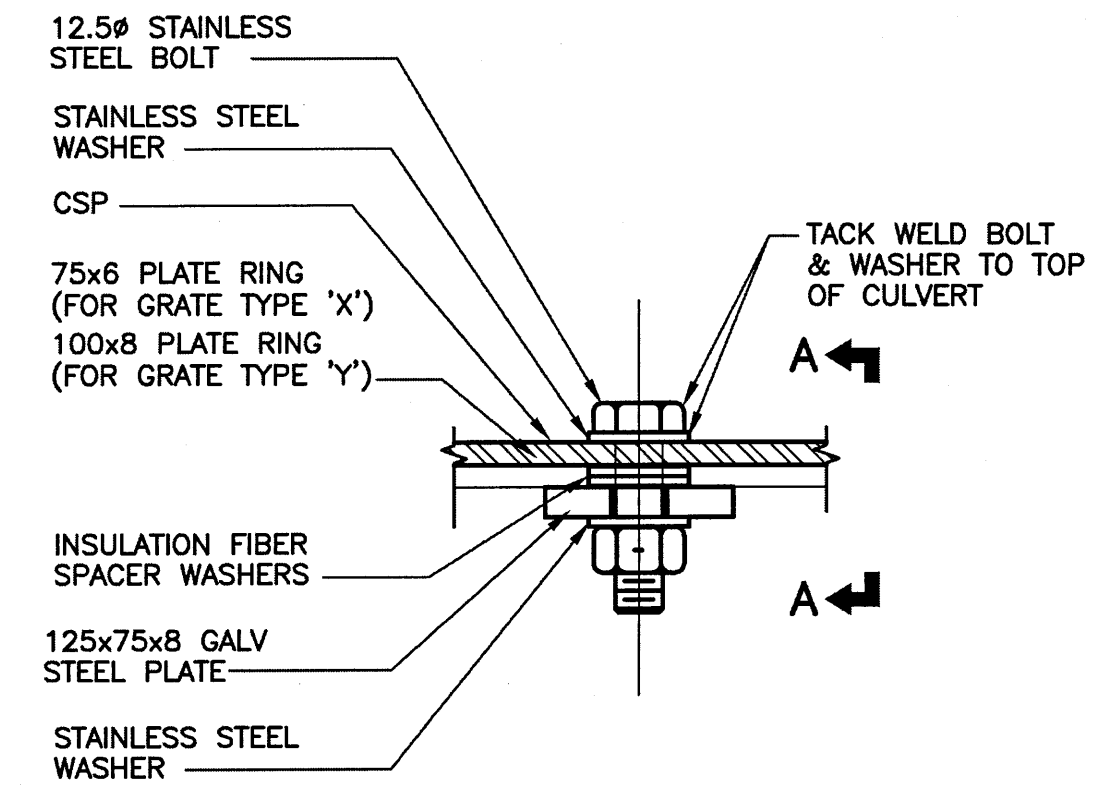
SILT FENCE DETAILS

SCALE: NTS



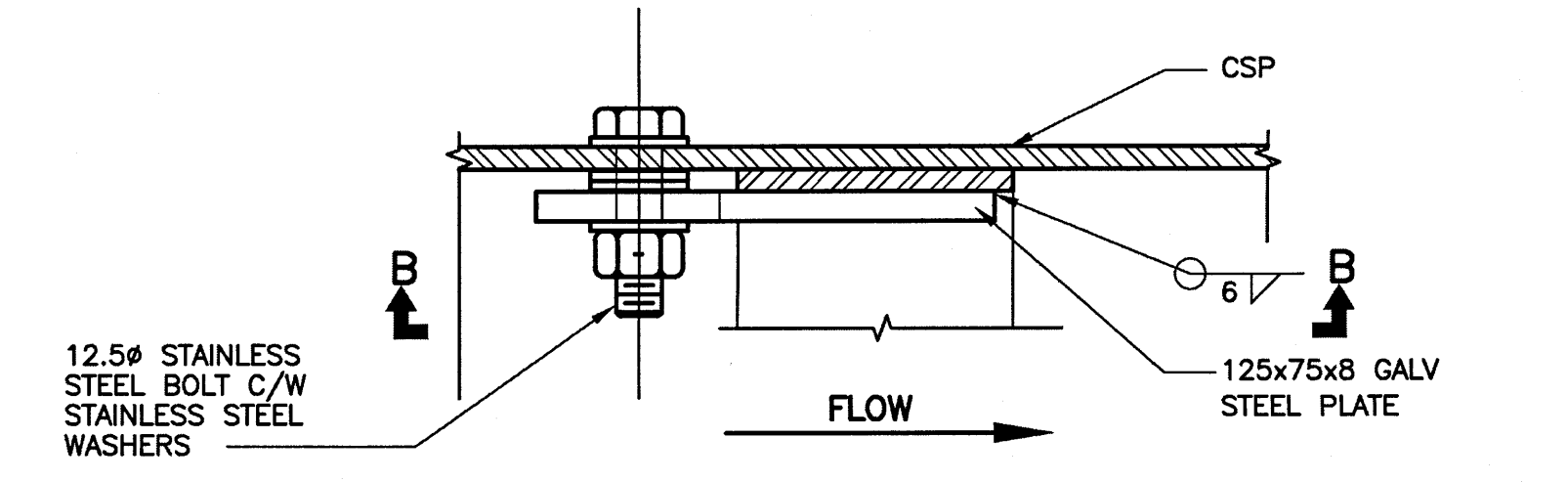
PIPE END CONDITION-2

SCALE: NTS



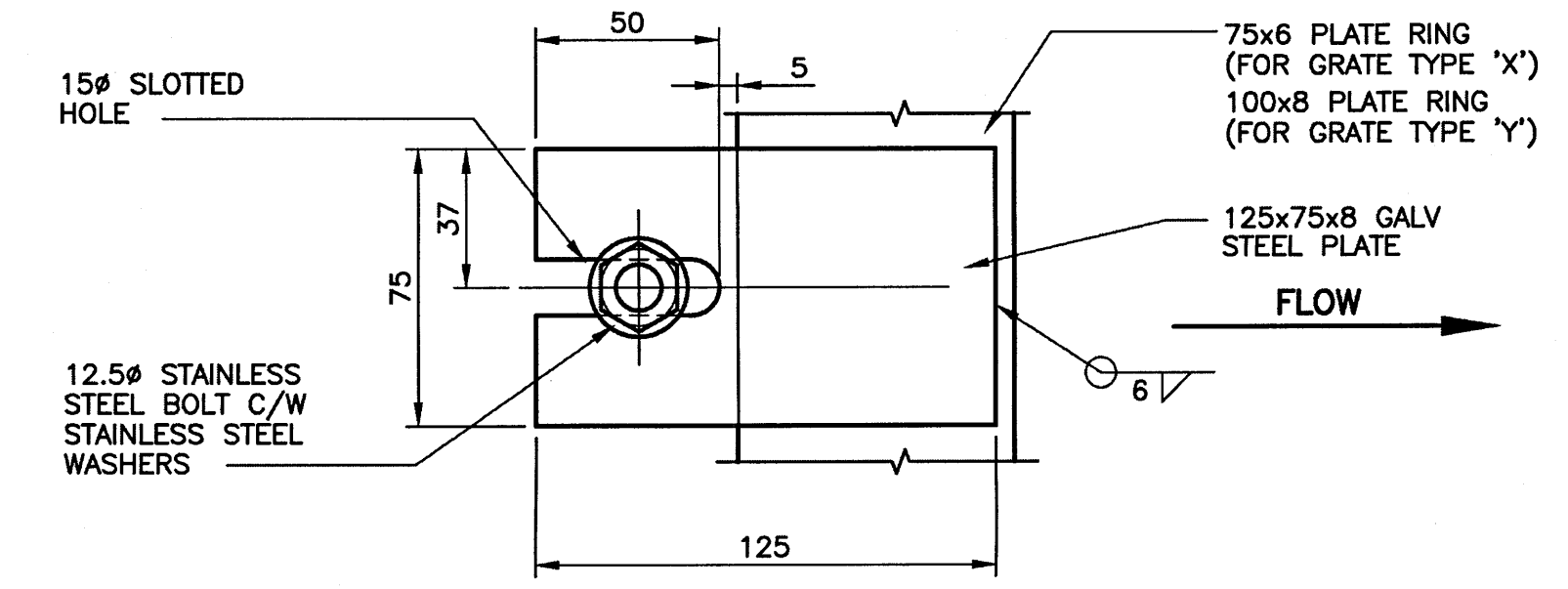
DETAIL

SCALE: 1:2



SECTION A-A

SCALE: 1:2

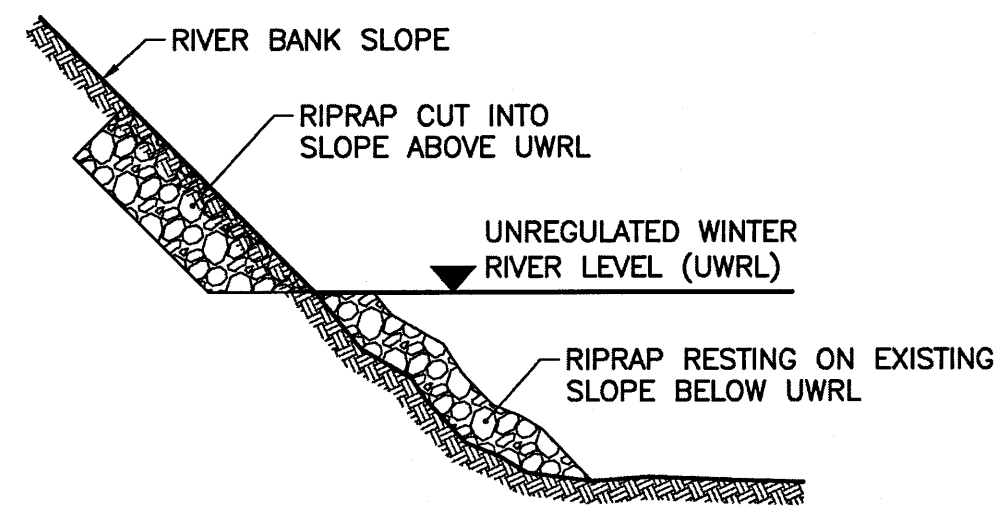


SECTION B-B

SCALE: 1:2

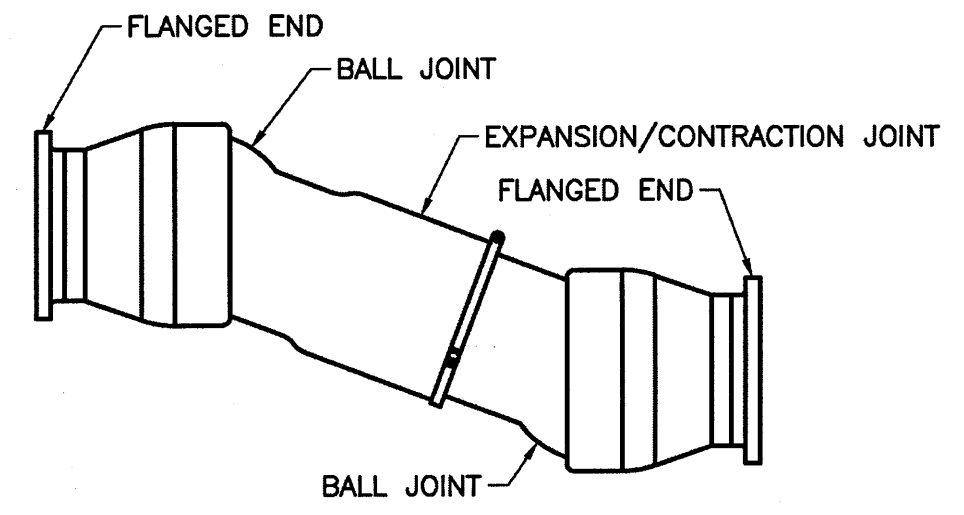
DEBRIS GRATE DETAILS

SCALE: NTS



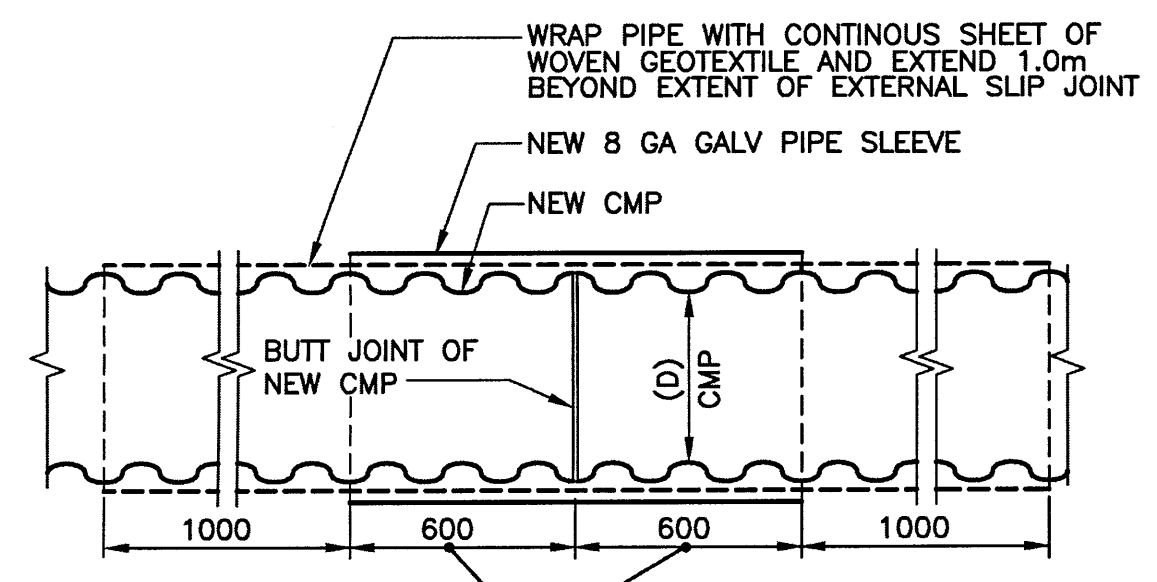
RIPRAP DETAIL

SCALE: NTS



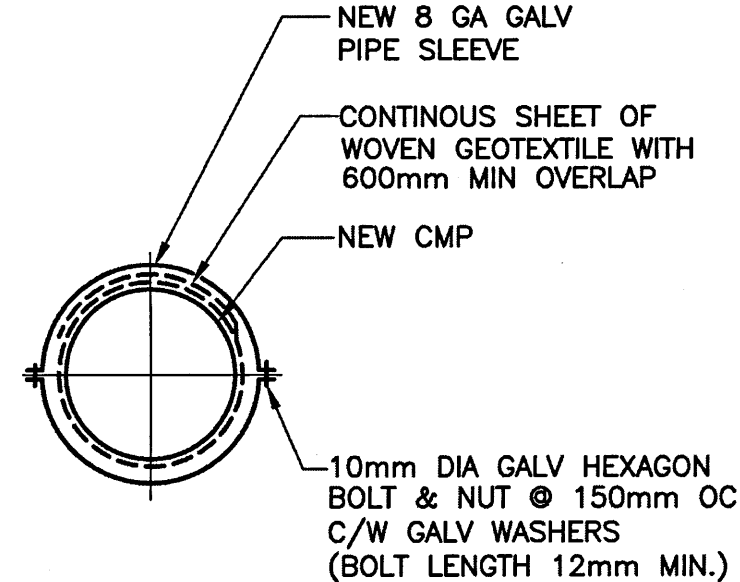
FLEXIBLE EXPANSION JOINT DETAIL

SCALE: NTS



EXTERNAL SLIP JOINT DETAIL

SCALE: NTS



10mm DIA GALV HEXAGON BOLT & NUT @ 150mm OC C/W GALV WASHERS (BOLT LENGTH 12mm MIN.)



METRIC
 WHOLE NUMBERS INDICATE MILLIMETRES
 DECIMALIZED NUMBERS INDICATE METRES

LOCATION APPROVED UNDERGROUND STRUCTURES		B.M. KGS_BASE ELEV=249.213 NAD83 CSRS CGVD28
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 CONSTRUCTION	03/11/16	
NO. REVISIONS	DATE	BY

KGS GROUP CONSULTING ENGINEERS	
DESIGNED BY: JB	CHECKED BY: RSO
DRAWN BY: DMW	APPROVED BY:
HOR. SCALE: 1:250	RELEASED FOR CONSTRUCTION:
VERTICAL: 1:50	DATE: 29/09/16

ENGINEER'S SEAL

 CONSULTANT DRAWING NO. 16-0107-021_C08

THE CITY OF WINNIPEG WATER & WASTE DEPARTMENT

2017 OUTFALL RENEWAL/REHABILITATION PROGRAM
 MISCELLANEOUS DETAILS

SHEET 08 OF 08
 CAD FILE DRAWING NUMBER 16-0107-021_CALL
 CITY DRAWING NUMBER LD-7993

File Name: U:\FMS\16-0107-021\16-0107-021_CALL.dwg - Tab: C08 Plotted By: dweber 16/11/03 [Thu 3:41pm]
 A1/PLOT SCALE=1