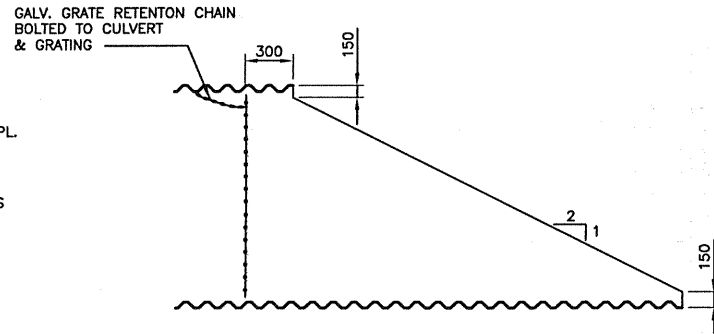
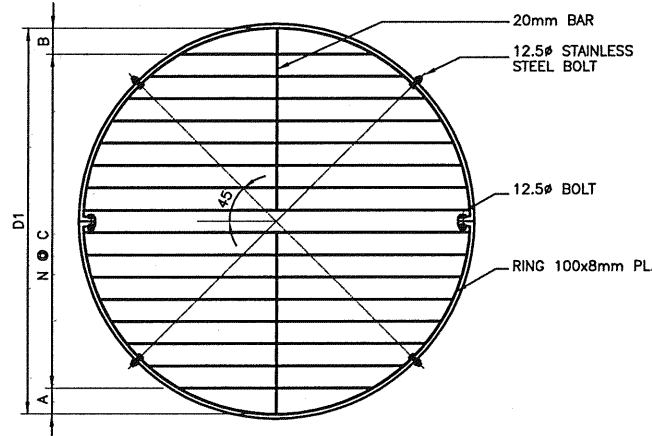


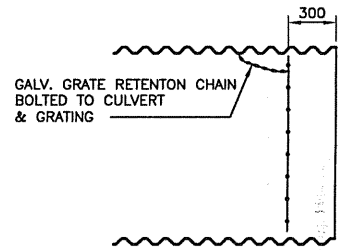
GRATING TYPE 'X'
SCALE: N.T.S.



END CONDITION '1'
SCALE: N.T.S.



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

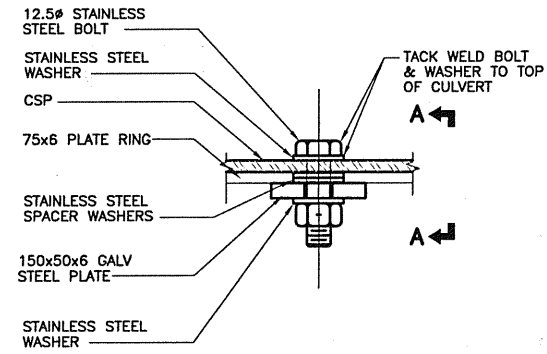


END CONDITION '2'
SCALE: N.T.S.

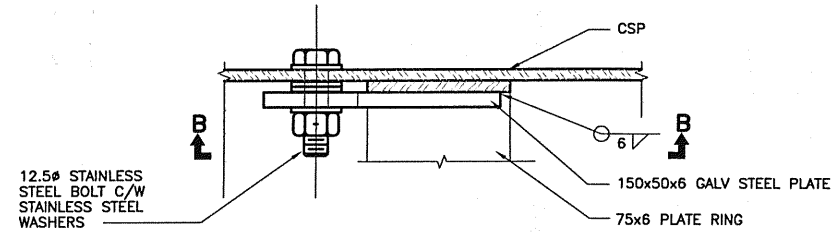
LOCATION	PIPE		END CONDITION	GRATING								WEIGHT (lbs)
	DIAMETER D	MATERIAL		DIAMETER D1	TYPE	BAR DIA.	A	B	C	N		
EASTWOOD DR (RR-108)	600	CSP	1	588±	X	20	150	138	150	2	22	

- 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

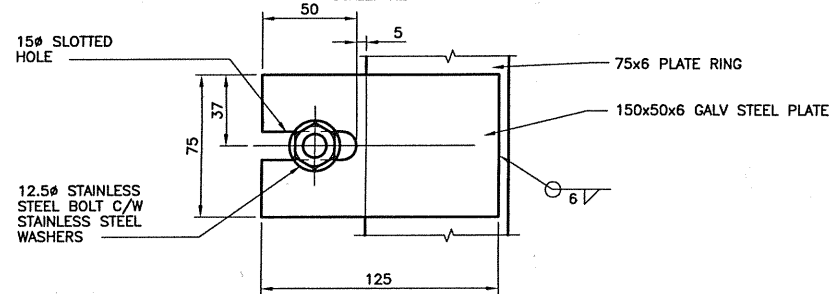
STANDARD GRATING AND END CONDITION DETAILS



1 DETAIL
SCALE: 1:2



SECTION A-A
SCALE: 1:2



SECTION B-B
SCALE: 1:2

2005\05-0107-11\MAIN\DWGS\OUTFALL-WORKING-DWGS\BID-2-DETAILS-PL01.DWG

METRIC
WHOLE NUMBERS INDICATE MILLIMETRES
DECIMALIZED NUMBERS INDICATE METRES



LOCATION APPROVED UNDERGROUND STRUCTURES

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.

NO.	REVISIONS	DATE	BY
1	REISSUED FOR TENDER	02/02/06	RJH
0	ISSUED FOR TENDER	23/01/06	RJH
A	ISSUED FOR REVIEW	18/01/06	RJH

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
VERTICAL:
RELEASED FOR CONSTRUCTION:
DATE: 12/09/05

ENGINEER'S SEAL



CONSULTANT DRAWING NO. 05-107-11_05

THE CITY OF WINNIPEG
WATER & WASTE DEPARTMENT

EASTWOOD OUTFALL
DEBRIS GRATE DETAILS

SHEET OF 05 06
CAD FILE DRAWING NUMBER 05-0107-11
CITY DRAWING NUMBER LD-3271