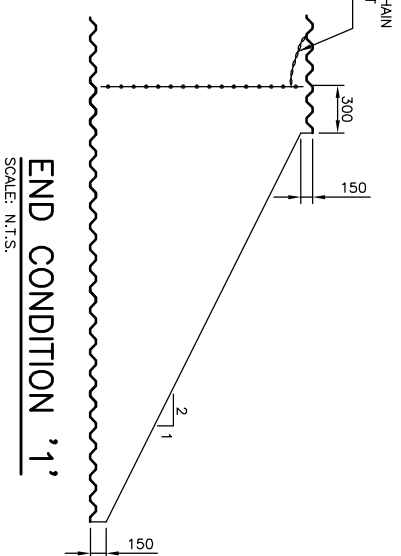
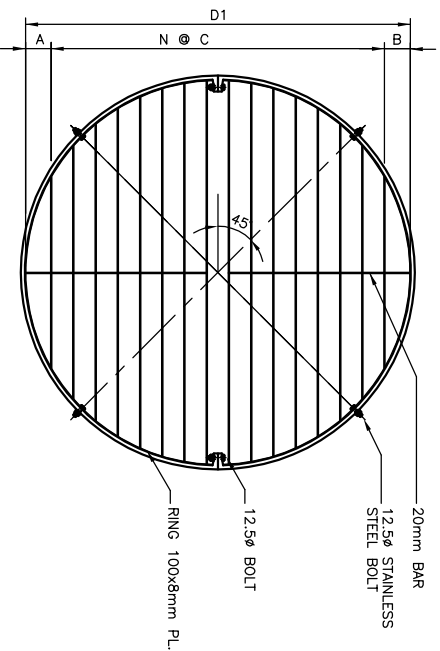


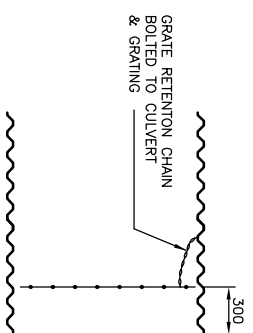
GRATING TYPE 'X'
SCALE: N.T.S.



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



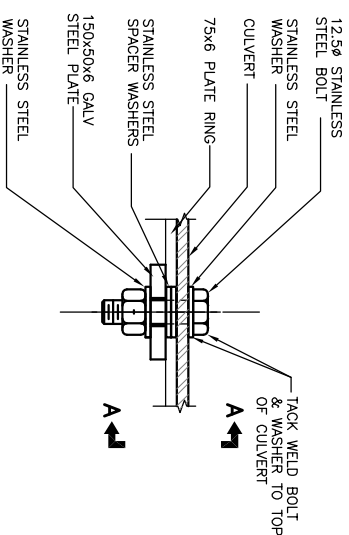
GRATING TYPE 'Y'
SCALE: N.T.S.



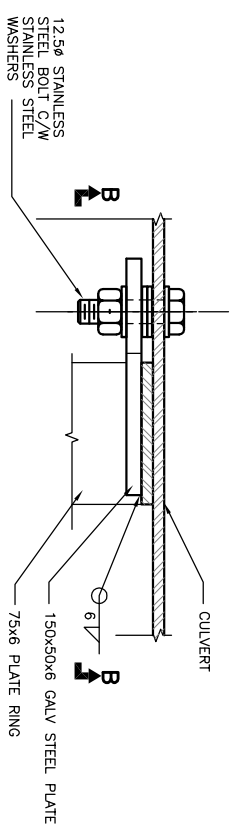
END CONDITION '2'
SCALE: N.T.S.

OUTFALL DEBRIS GRATING									
PIPE DIAMETER D	END CONDITION	DIAMETER D1	TYPE	BAR DIA.	A	B	C	N	WEIGHT (lbs)
1050	CSP	2	X	20	150	225	165	4	60
1220	CSP	2	X	20	150	150	130	7	72

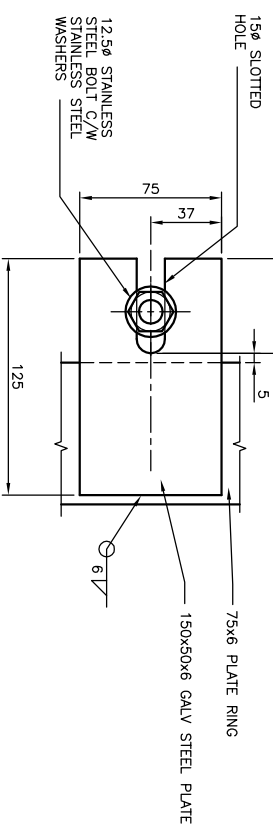
NOTE:
ALL PLATES AND BARS ARE CSA G40.21-300W.
ALL COMPONENTS ARE GALVANIZED.



DETAIL
SCALE: 1:2



SECTION A-A
SCALE: 1:2



SECTION B-B
SCALE: 1:2

LOCATION APPROVED
UNDERGROUND STRUCTURES COMMITTEE

DATE: _____

NOTE:
LOCATION OF UNDERGROUND STRUCTURES AS SHOWN ON THIS DRAWING IS APPROVED FOR CONSTRUCTION. THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL SERVICES MUST BE BEFORE PROCEEDING WITH CONSTRUCTION.

NO.	REVISIONS	DATE	BY	DATE
0	ISSUED FOR TENDER	06/01/04		
A	ISSUED FOR REVIEW	22/12/03		

KGS GROUP CONSULTING ENGINEERS & PROJECT MANAGERS
WINNIPEG (204) 896-1299
THUNDER BAY (807) 343-2233

DESIGNED BY: D.G.G.
DRAWN BY: D.W. V.A.M.
HOR. SCALE: AS NOTED
VERTICAL: _____

CHECKED BY: R.J.H.
APPROVED BY: _____
RELEASED FOR CONSTRUCTION: _____

ENGINEER'S SEAL
D.G. GRAY
REGISTERED PROFESSIONAL ENGINEER
22380

CONSULTANT DRAWING NO. **03-107-05_06**

THE CITY OF WINNIPEG
WATER & WASTE DEPARTMENT

OUTFALL REPAIRS
DEBRIS GRATE DETAILS
PROPOSED UPGRADING DETAILS

SHEET **06** OF **07**
OLD FILE DRAWING NUMBER **03-107-05-DETAILS_LW0**
CITY DRAWING NUMBER **LD-2988**

WARNING
EQUIPMENT OR EXPLOSIVES ARE TO BE USED WITH CAUTION ON THIS PROJECT THE CONTRACTOR SHALL NOTIFY THE GAS COMPANY OF THE PROPOSED LOCATION OF EXPANSION, INSTALLATION AND REMOVAL OF INSTALLATIONS. SEE PROVINCIAL REGULATION 210/72 FOR DETAILS.

METRIC
WHOLE NUMBERS INDICATE MILLIMETRES
DECIMALIZED NUMBERS INDICATE METRES

APENM
Certificate of Authorization
KGS Group
No. 245 Expiry: April 30, 2004