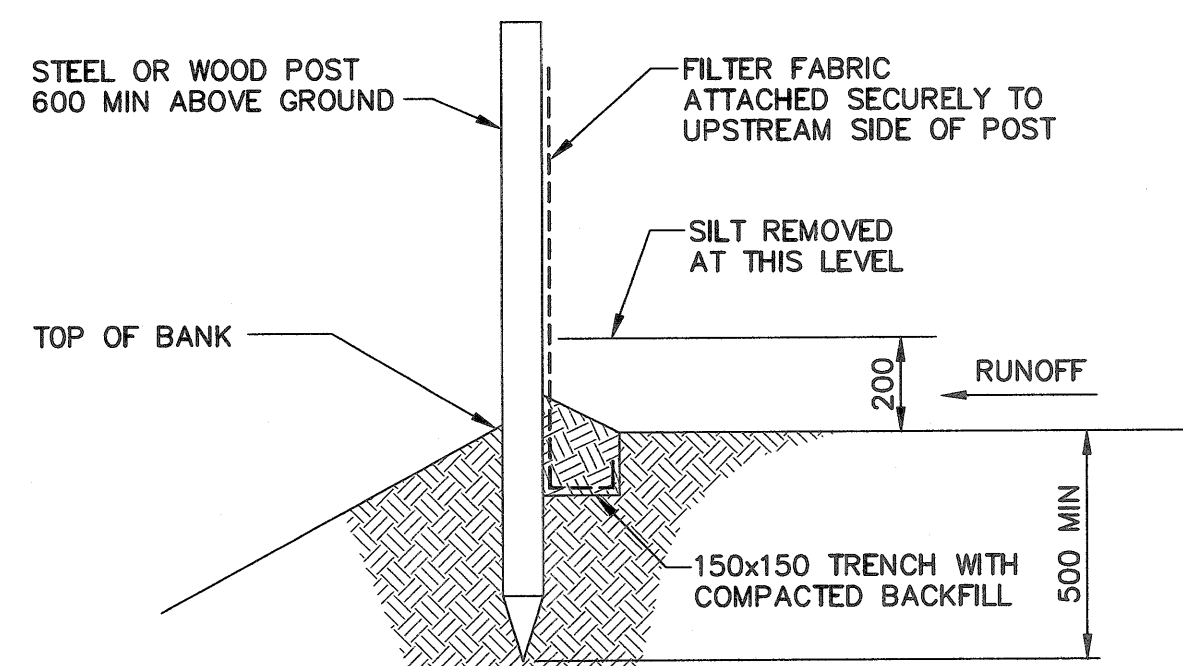
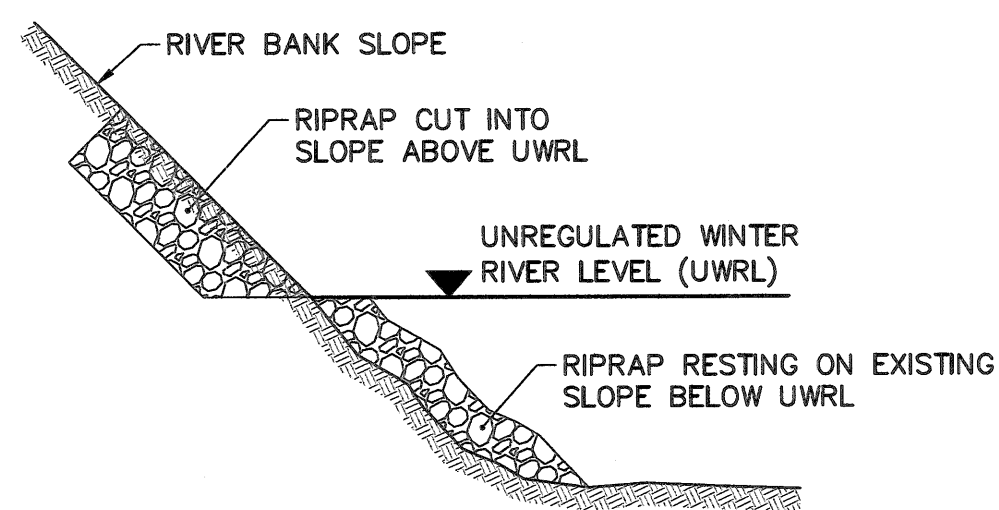


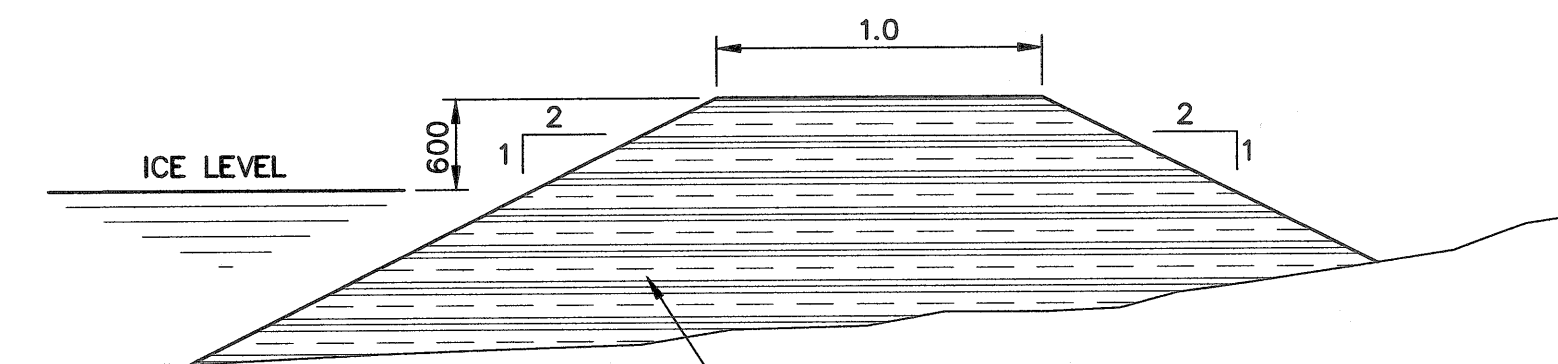
SILT FENCE
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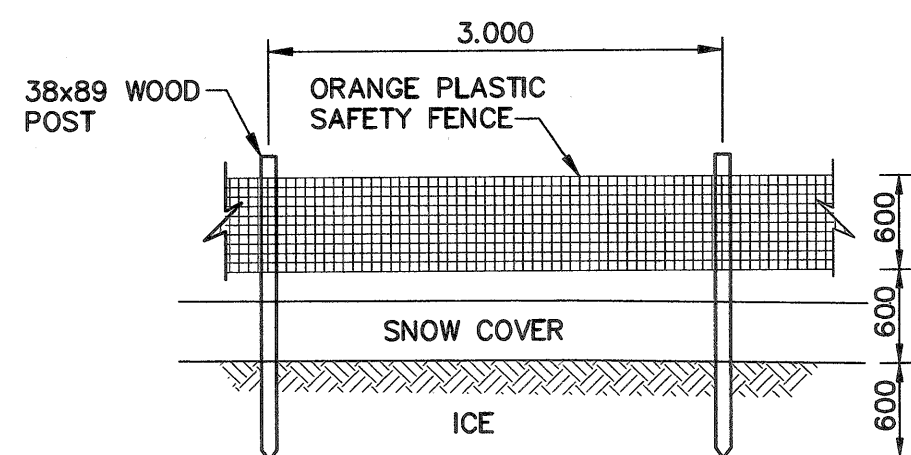
SECTION A - A
SCALE: N.T.S.



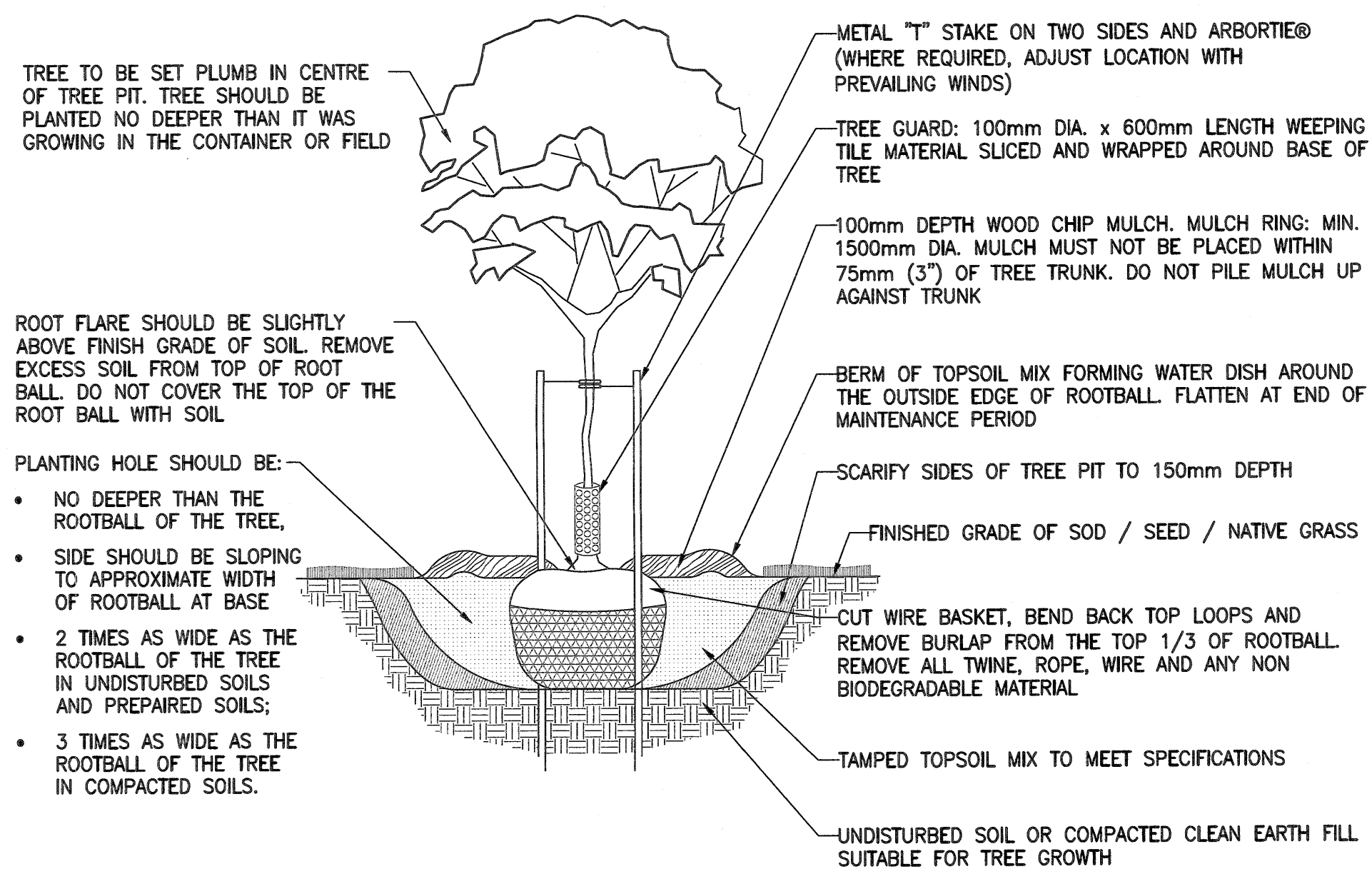
RIPRAP DETAIL
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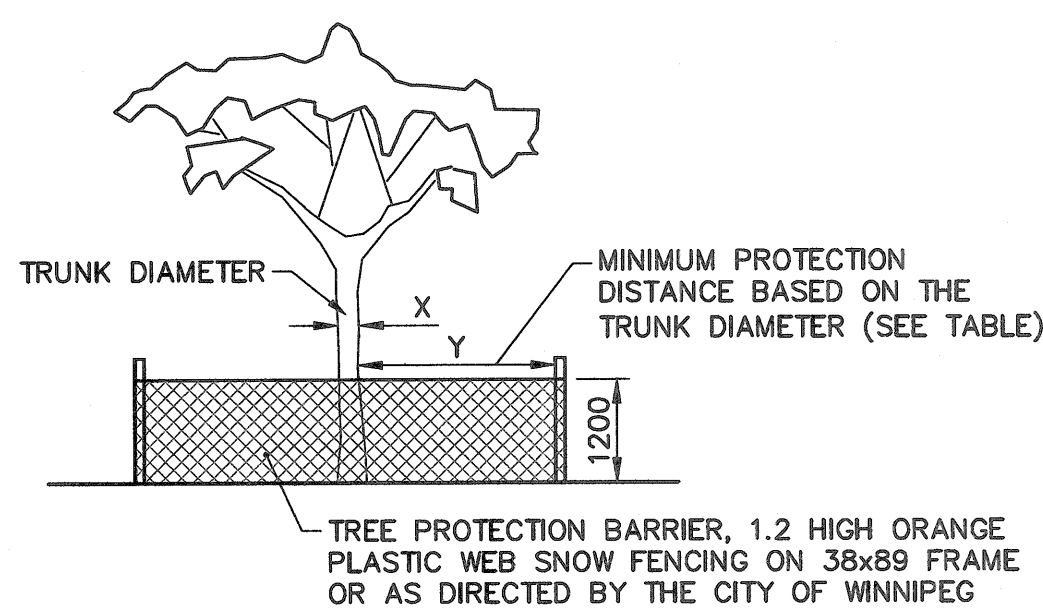
COFFERDAM DETAIL
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SAFETY FENCE DETAIL
SCALE: N.T.S.

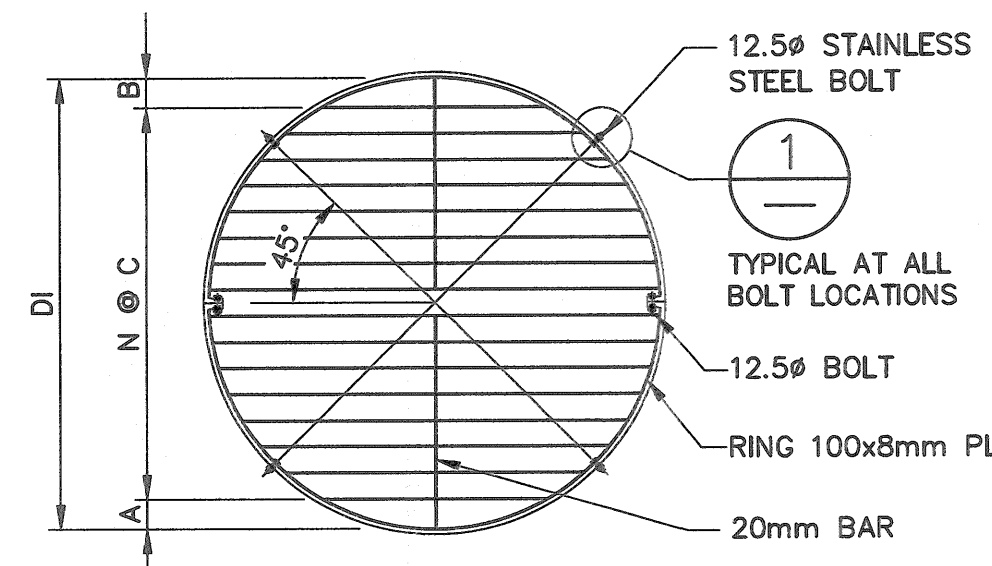


TYPICAL DECIDUOUS TREE PLANTING DETAIL
SCALE: N.T.S.

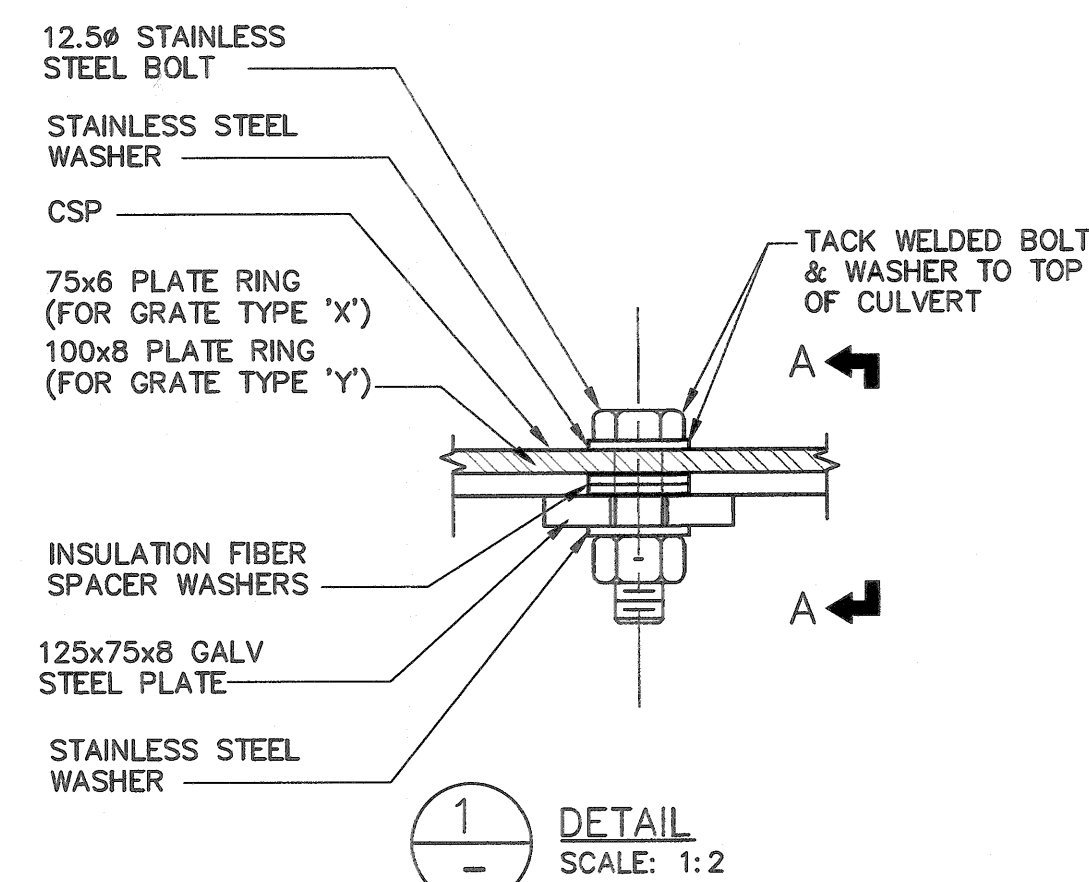


TREE PROTECTION ZONES	
X=TRUNK DIAMETER	Y=MINIMUM PROTECTION DISTANCE REQUIRED
< 100	2.0
110 - 400	2.4
410 - 500	3.0
510 - 600	3.8
610 - 700	4.2
710 - 800	4.8
810 - 900	5.4
910 - 1000	6.0

TREE PROTECTION DETAIL
SCALE: N.T.S.



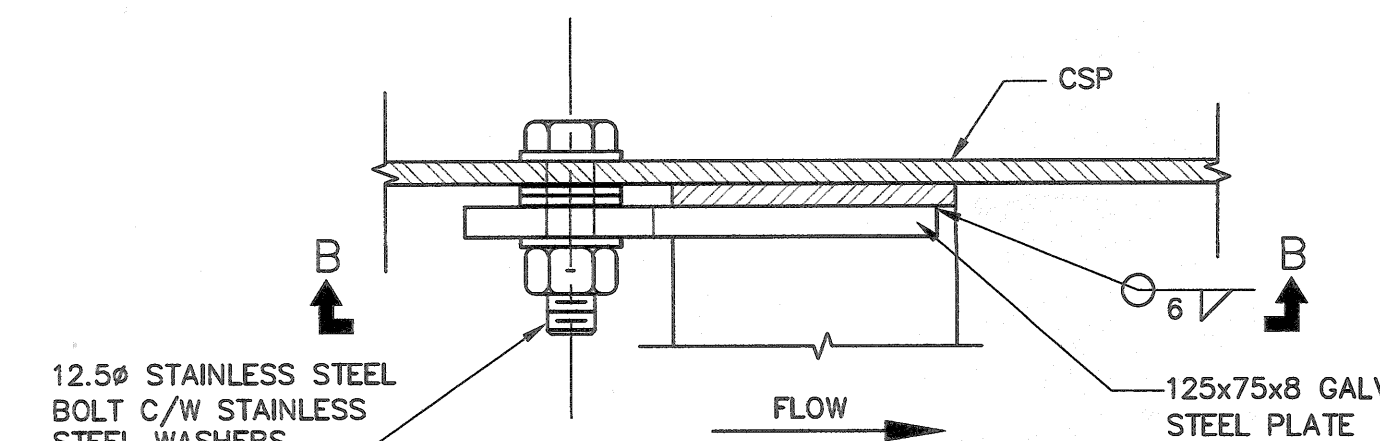
GRATING TYPE 'Y'
SCALE: N.T.S.



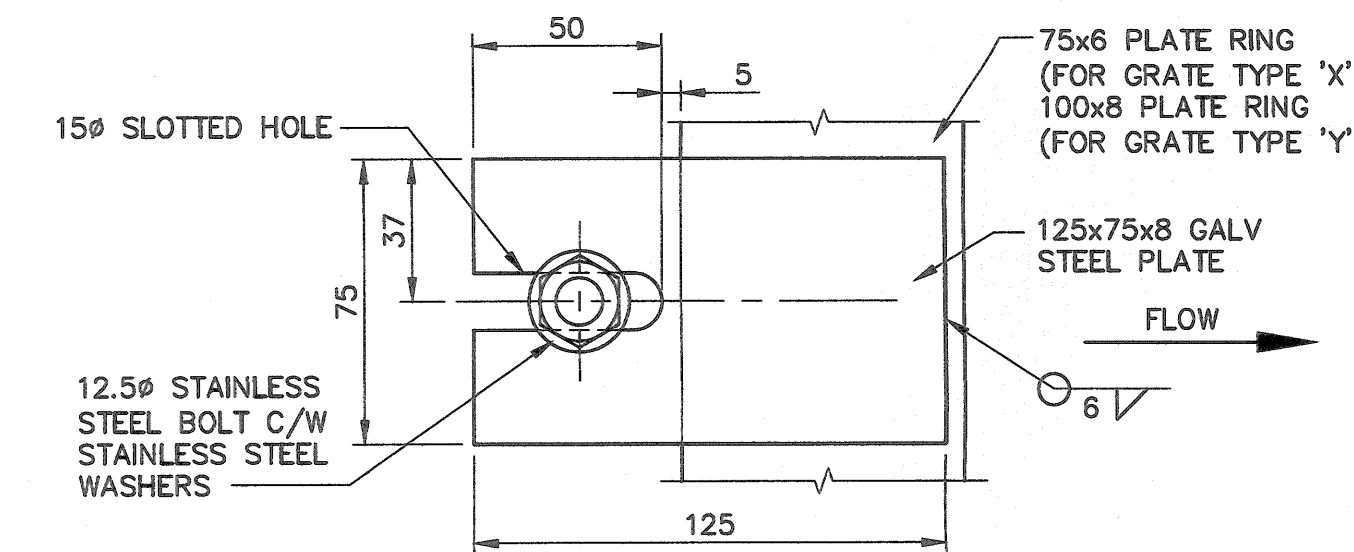
1
SCALE: 1:2

LOCATION	PIPE		END CONDITION	GRATING							
	DIAMETER D	MATERIAL		DIAMETER D1	TYPE	BAR DIA.	A	B	C	N	WEIGHT (lbs)
LODGE AVENUE (S-MA20003886)	1970	CMP	2	1955±	Y	25	155	150	150	11	260

- 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

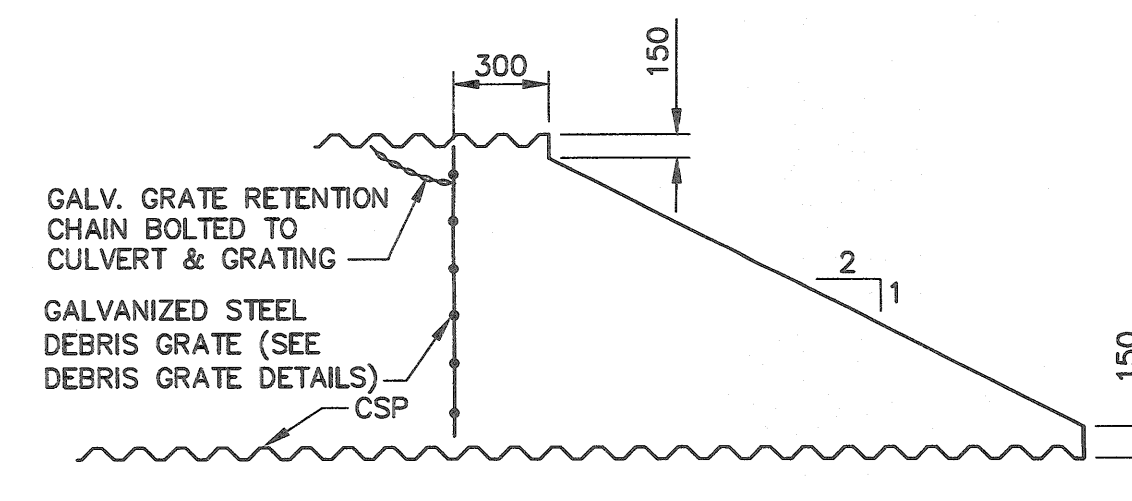


SECTION A-A
SCALE: 1:2



SECTION B-B
SCALE: 1:2

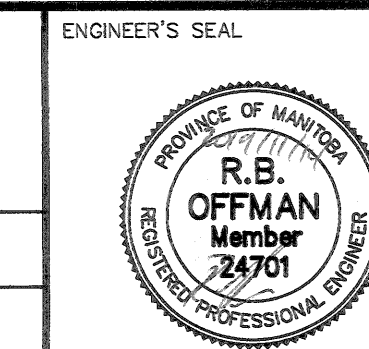
DEBRIS GRATE DETAILS
SCALE: N.T.S.



PIPE END CONDITION-2
SCALE: N.T.S.

FOR INDEX PAGE
SEE DWG LD-9566

ES ENGINEERS
GEOSCIENTISTS
MANITOBA
Certificate of Authorization
KGS Group
No. 245



THE CITY OF WINNIPEG
WATER AND WASTE DEPARTMENT
ENGINEERING DIVISION

2019 OUTFALL RENEWAL
REHABILITATION PROGRAM
MISCELLANEOUS DETAILS

SHEET 7 OF 7
CITY DRAWING NUMBER
LD-9569

LOCATION APPROVED UNDERGROUND STRUCTURES	B.M. ELEV.	DESIGNED BY	CHECKED BY
SUPV. U/G STRUCTURES COMMITTEE		NGV	RBO
DATE		DRAWN BY	APPROVED BY
		GEL	RBO
NOTE:		SCALE:	RELEASED FOR CONSTRUCTION
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.		HORIZONTAL AS NOTED	DATE
		VERTICAL NA	2019 11 14
		ISSUED FOR TENDER	DATE
		2019 11 15	2019 11 14
		NO.	REVISIONS

KGS GROUP	
DESIGNED BY	NGV
CHECKED BY	RBO
DRAWN BY	GEL
APPROVED BY	RBO
SCALE:	RELEASED FOR CONSTRUCTION
HORIZONTAL AS NOTED	DATE
VERTICAL NA	2019 11 14
ISSUED FOR TENDER	DATE
2019 11 15	2019 11 14
NO.	REVISIONS

ENGINEER'S SEAL
CONSULTANT DRAWING NUMBER
LD-9569

TENDER No.: 1173-2019

FILE PATH: P:\Projects\2019\19-0107-011\Draw\Win

METRIC
WHOLE NUMBERS INDICATE MILLIMETRES
DECIMALIZED NUMBERS INDICATE METRES