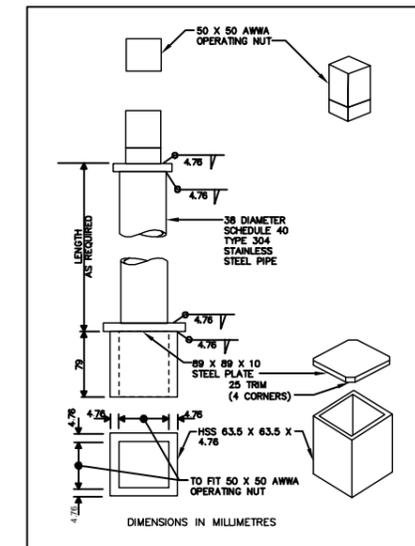


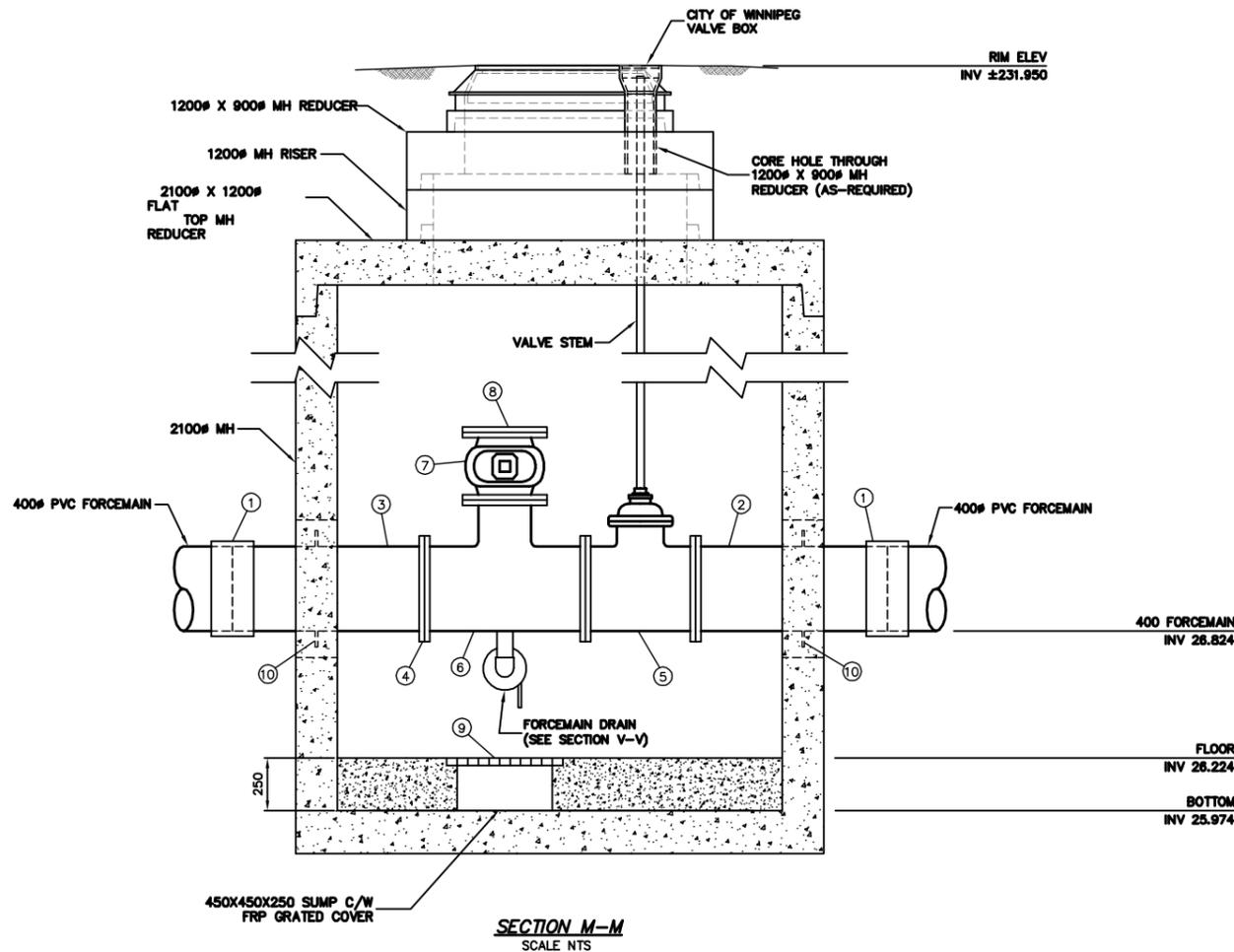
DETAIL "A"
PLAN VIEW AT ELEV 228.100
 SCALE NTS

MATERIALS LIST (FOR DETAIL "A" AND SECTION M-M)

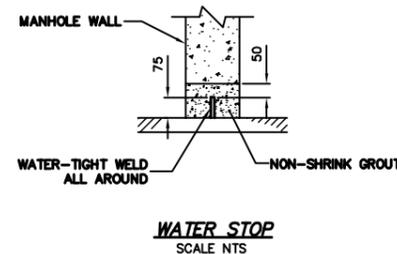
ITEM	DESCRIPTION	ENDS	LENGTH	QUANTITY	NOTES
①	400# PIPE COUPLING	-	-	2	CITY OF WINNIPEG APPROVED "WIDE RANGE COUPLING"
②	400# PIPE	FL X PE	911±	1	
③	400# PIPE	PE X PE	911±	1	
④	400# ADAPTER FLANGE	-	-	1	"UNI-FLANGE" OR APPROVED EQUAL REMOVABLE FLANGE
⑤	400# ROTATING DISK VALVE	FL X FL	521	1	AMERICAN R/D
⑥	400#X400#X200# TEE	FL X FL X FL	762	1	
⑦	200# GATE VALVE	FL X FL	292	1	
⑧	200# BLIND FLANGE	-	-	1	
⑨	FRP SUMP COVER	-	-	1	
⑩	WATERSTOP	-	12 X 75	2	



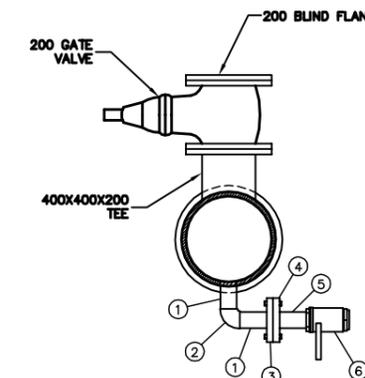
VALVE STEM EXTENSION DETAIL
 SCALE NTS



SECTION M-M
 SCALE NTS



WATER STOP
 SCALE NTS



SECTION V-V
FORCEMAIN DRAIN
 SCALE NTS

MATERIALS LIST (FOR SECTION V-V)

ITEM	DESCRIPTION	LENGTH	QUANTITY
①	75# SCHEDULE 80 STEEL NIPPLE (THREADED)	125	2
②	75# SCHEDULE 80 STEEL 90° ELBOW (THREADED)	-	1
③	75# STEEL FLANGE CL 125 (THREADED) C/W ISOLATION KIT	-	1
④	75# CAST BRONZE OR BRASS FLANGE	-	1
⑤	75# CAST BRONZE OR BRASS NIPPLE	125	1
⑥	75# CAST BRONZE BALL VALVE	-	1

WARNING

IF POWER EQUIPMENT OR EXPLOSIVES ARE TO BE USED FOR EXCAVATION ON THIS PROJECT THE CONTRACTOR MUST:

- NOTIFY THE GAS COMPANY OF THE PROPOSED LOCATION OF EXCAVATION.
- TAKE PRECAUTION TO AVOID DAMAGE TO GAS COMPANY INSTALLATIONS.

METRIC
 WHOLE NUMBERS INDICATE MILLIMETRES
 DECIMALIZED NUMBERS INDICATE METRES

SEE PROVINCIAL REGULATION 210/72 FOR DETAILS

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

DESIGNED BY	DB	CHECKED BY	KZ/SC
DRAWN BY	CJH	APPROVED BY	KZ
SCALE:	HORIZONTAL AS SHOWN	RELEASED FOR CONSTRUCTION	
DATE	2013 02 05	DATE	
PLOT DATE:	2013 02 05		

ENGINEER'S SEAL
ORIGINAL SIGNED
K.R. ZUREK
13/02/05

THE CITY OF WINNIPEG
 WATER AND WASTE DEPARTMENT
 ENGINEERING DIVISION

2013 RIVERWOOD FORCEMAIN REPLACEMENT AND WILLOW PUMPING STATION UPGRADES
PROPOSED BY-PASS MANHOLE SECTIONS AND DETAILS

SHEET 7 OF 8
 CITY DRAWING NUMBER
10497

CONTRACT NUMBER: 17
 FILE PATH: R:\DRAWINGS\SEWER\2011_RENEWALS\Riverwood Forcemain\
 FILE NAME: 10497.dwg