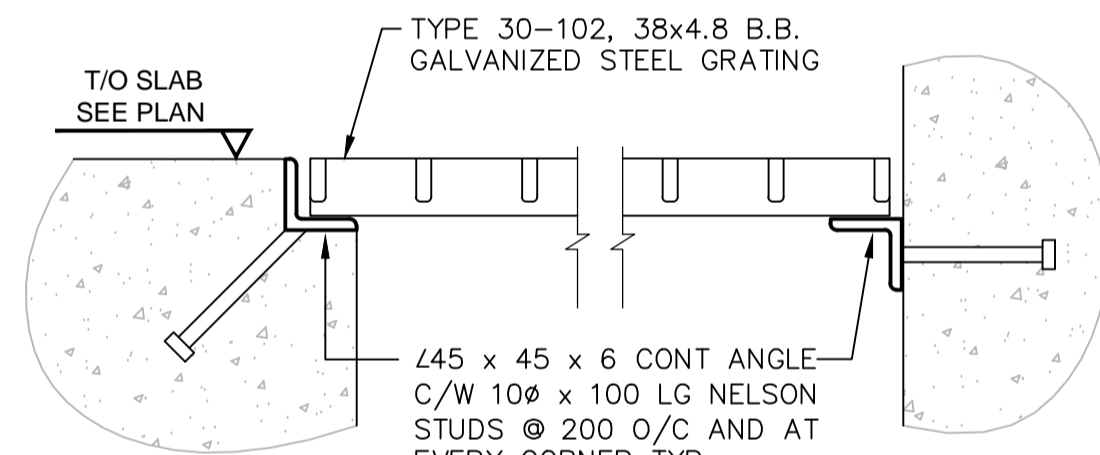
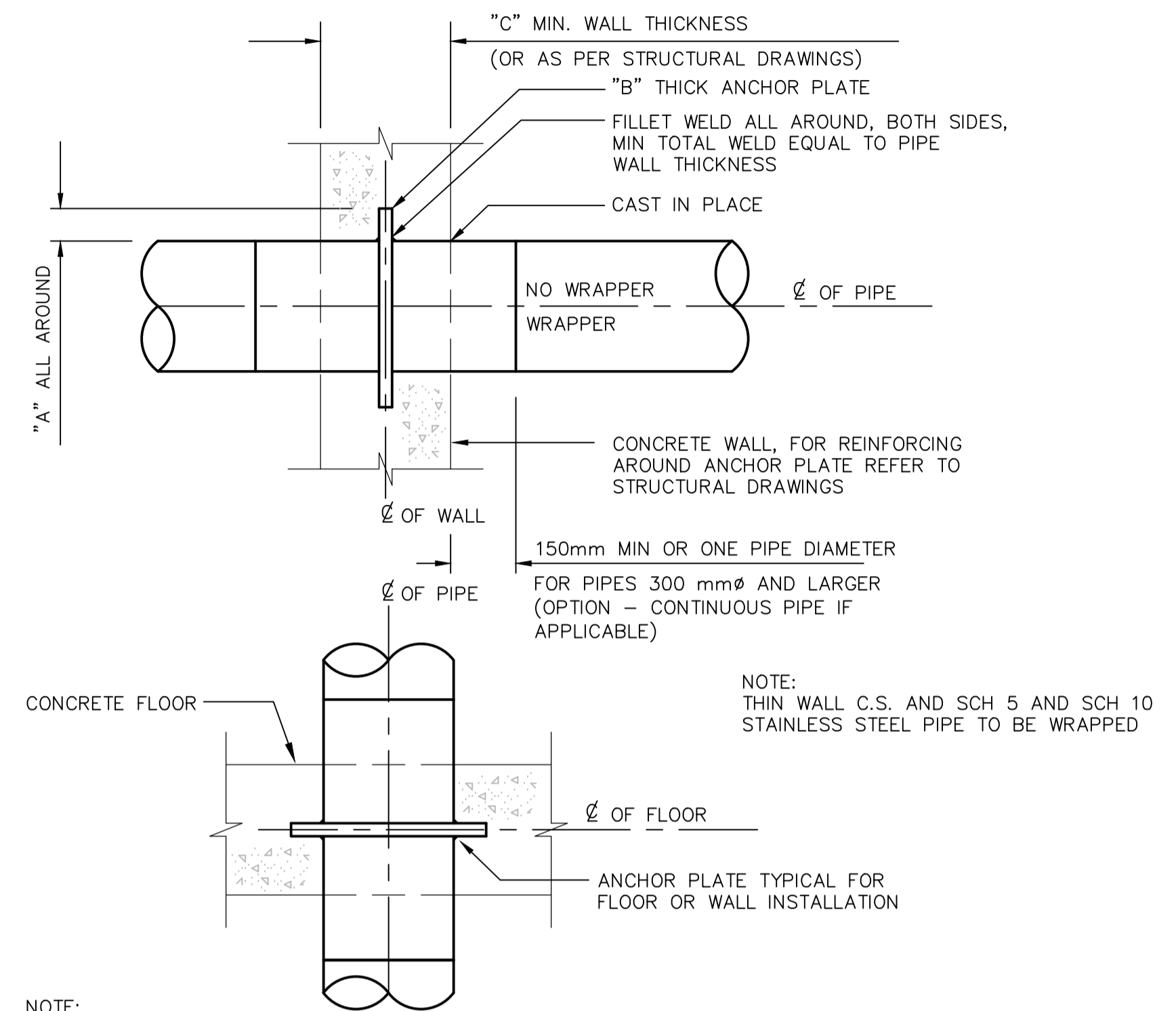


1 DETAIL 1:20
STEEL LADDER



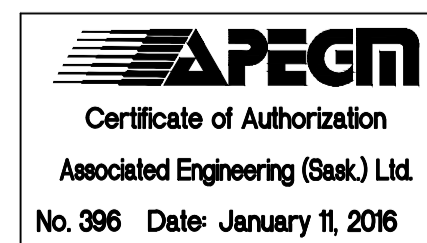
2 DETAIL N.T.S.
STEEL GRATING



NOTE: ANCHOR RING CHART INFORMATION BASED AWWA M-11 FIGURE 13-19 AND TABLE 13-3 BEARING LOADS FOR ANCHOR RINGS IN CONCRETE IS BASED ON MAXIMUM PIPE PRESSURE 1724 kPa (250 PSI)

PIPE SIZE	50 TO 200	250 & 300	350 & 450	500 & 600	750 & 900	1050 & LARGER
A	25	40	50	76	102	CUSTOM DESIGN FOR EACH APPLICATION
B	10	10	13	15	22	
C	200	300	350	400	AS PER DESIGN	
PERMISSIBLE LOAD ON RING	414 kg	904 kg	1425 kg	3200 kg	7214 kg	

3 DETAIL N.T.S.
UTILIZING NEW STRUCTURAL WALL/FLOOR PIPE ANCHOR (CAST IN PLACE)



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.

B.M. ELEV.

CONSTRUCTION COMPLETION DATE: YYYY MM DD

NO.	ISSUED FOR CLIENT REVIEW	DATE	BY
A	ISSUED FOR CLIENT REVIEW	15-JUL-08	MJ

Associated Engineering

DESIGNED BY: KD CHECKED BY: []

DRAWN BY: LP APPROVED BY: J.L.

SCALE: HORIZONTAL AS SHOWN VERTICAL AS SHOWN

DATE: 2016 01 11

ENGINEER'S SEAL

PROVINCE OF MANITOBA REGISTERED PROFESSIONAL ENGINEER

J.S. BETKE MEMBER 22412

CONSULTANT DRAWING NUMBER: 20134376

THE CITY OF WINNIPEG
WATER AND WASTE DEPARTMENT
ENGINEERING DIVISION

NORTH KILDONAN FEEDERMAIN VALVE CHAMBERS AND CONNECTIONS

VALVE CHAMBER DETAILS

SHEET 8 OF 9
CITY DRAWING NUMBER: D-14040