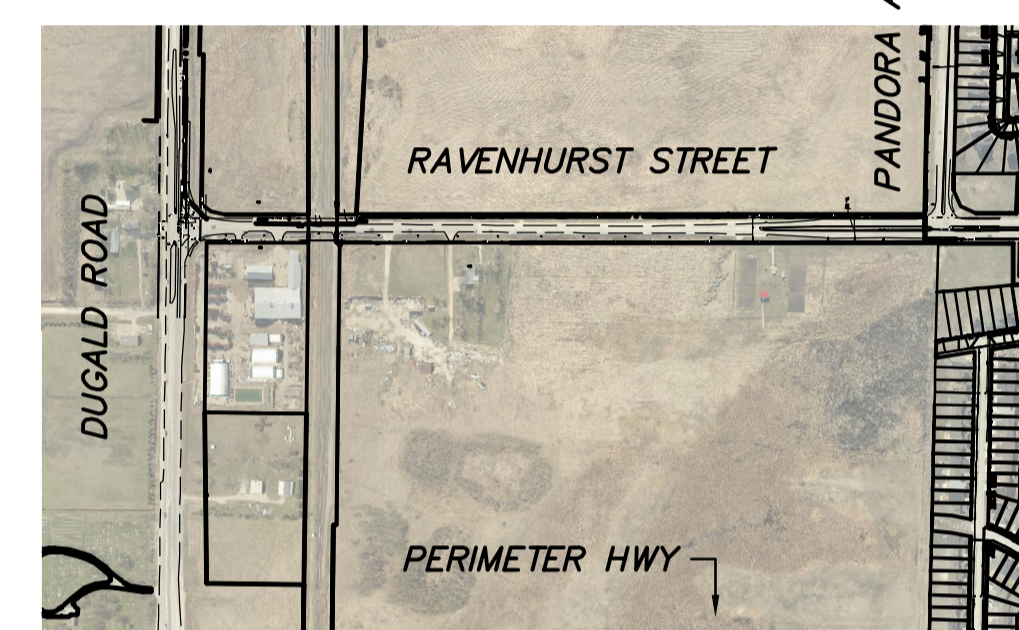
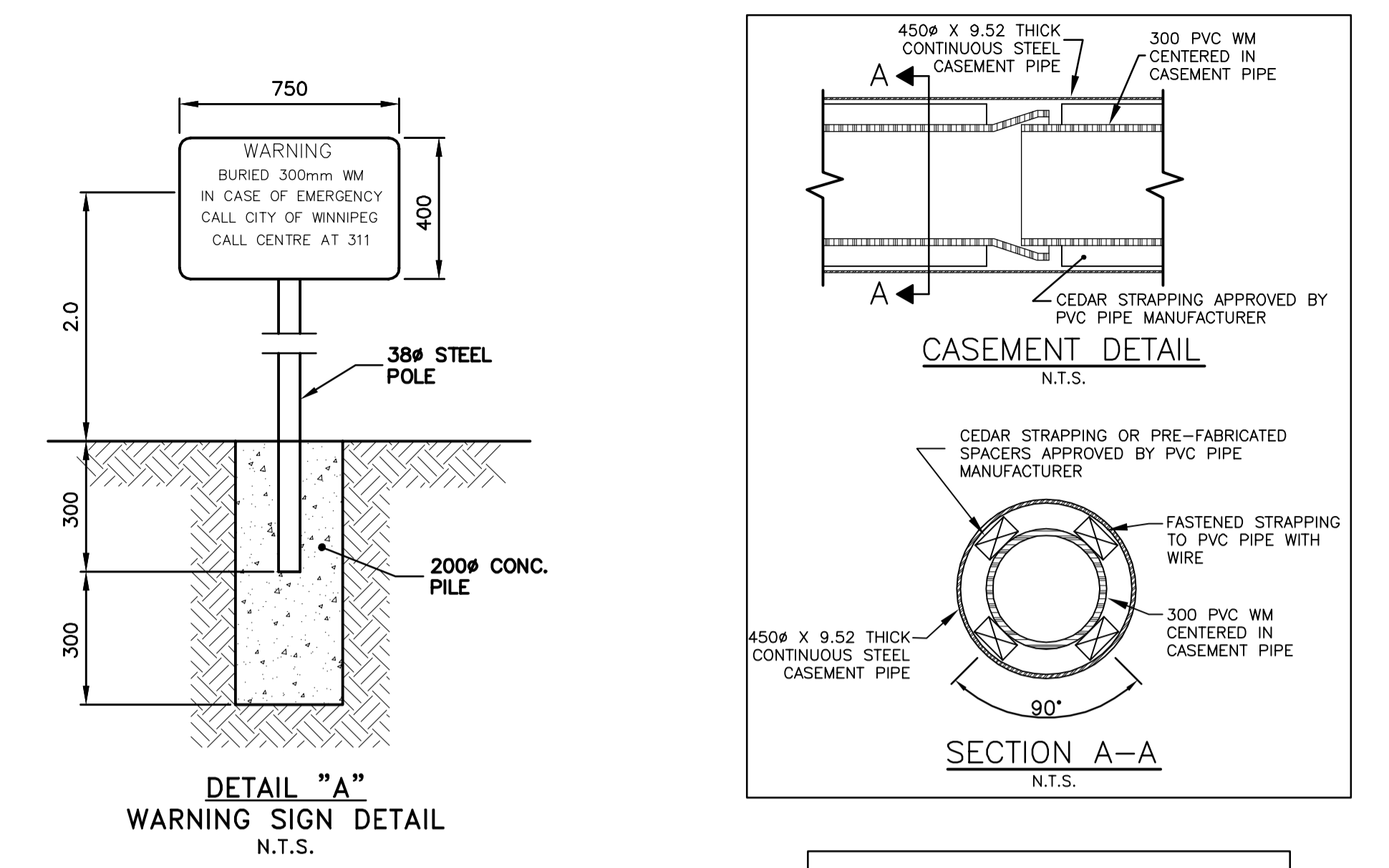
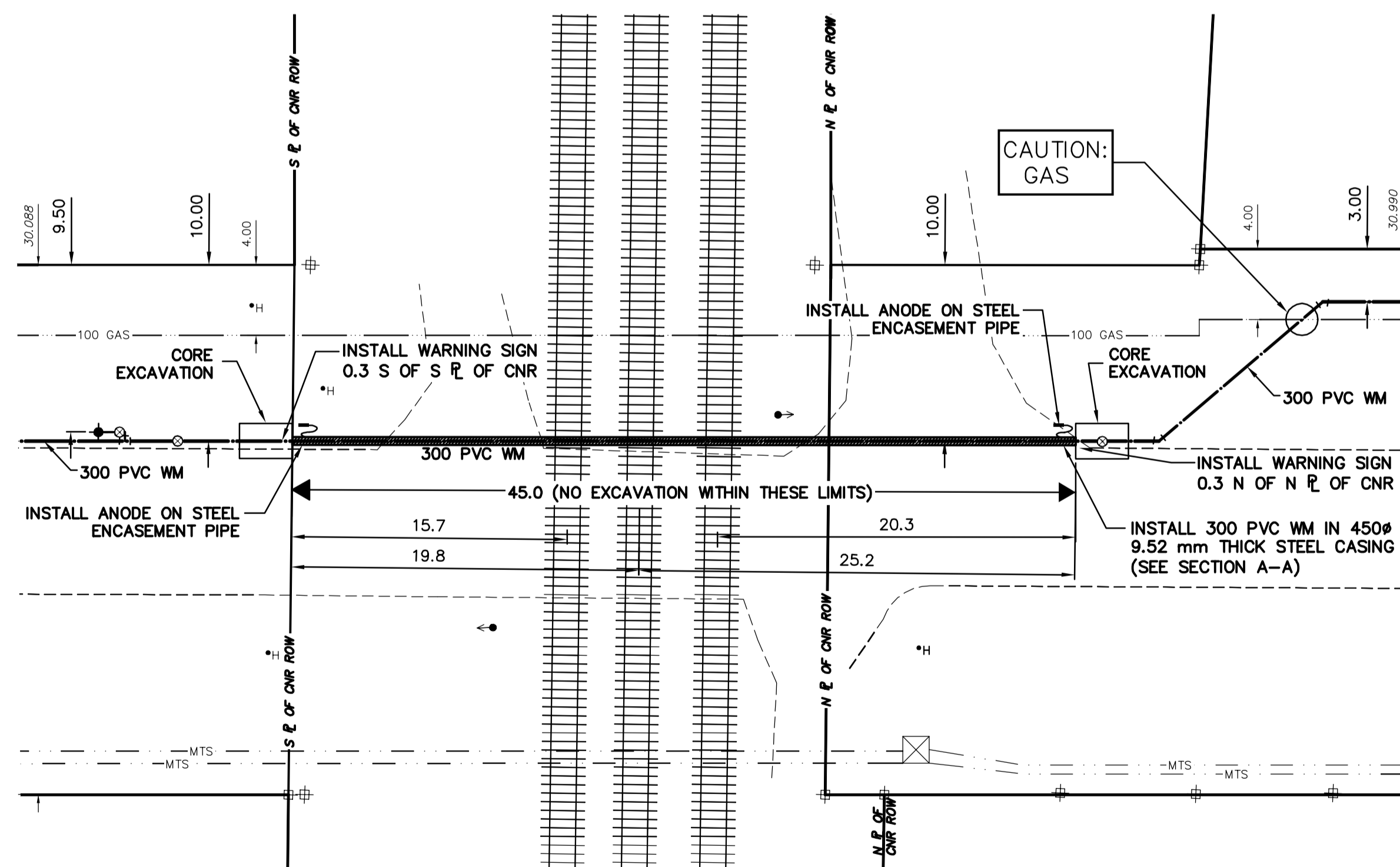


NOTE: CHAINAGES SHOWN ARE ALONG W. ℓ OF RAVENHURST ST

RAVENHURST STREET



KEY MAP

WATER CARRIER PIPE INFORMATION

DIAMETER - 300mm (335mm O.D.)
 MATERIAL - PVC
 WALL THICKNESS - 18.6 mm
 PIPE CLASS - AWWA C900 DR18
 SURGE PRESSURE - 300 PSI (2.0MPa)
 OPERATING PRESSURE - 60 PSI (0.4 MPa)
 TEST PRESSURE - 150 PSI (1.0 MPa)

INSTALLATION METHOD
 - PIPE ADVANCING WITH CORING
 - CORING HEAD TO BE MIN. 0.5m FROM CASING END, IN CASING

ENCASEMENT PIPE INFORMATION

DIAMETER - 450 mm (457mm O.D.)
 MATERIAL - STEEL - ASTM A53
 WALL THICKNESS - 9.52 mm MIN.
 YIELD STRENGTH - 241 MPa

CONSTRUCTION NOTES

- EXPOSE EXISTING WATERMAIN & CONFIRM INVERTS PRIOR TO CONSTRUCTION.
- LOCATION OF ALL SERVICES TO BE CONFIRMED IN THE FIELD.
- INSTALL WATERMAIN BY TRENCHLESS METHODS.
- TRENCHES AND EXCAVATIONS WITHIN 1 METRE OF A PAVED AREA INCLUDING SIDEWALKS SHALL BE CLASS 3 BACKFILL.
- ALL MATERIALS SHALL CONFORM TO THE CITY OF WINNIPEG STANDARD CONSTRUCTION SPECIFICATIONS.
- MINIMUM COVER TO TOP OF WATERMAIN SHALL BE 2.4 m.
- REPLACE ALL EXISTING LEAD SERVICES FROM PROPOSED WATERMAIN TO ℓ .
- NOTIFY ALL AFFECTED RESIDENTS AND BUSINESSES 24 HOURS IN ADVANCE OF ANY WATER SHUTDOWNS OR DISRUPTION OF SERVICE.

RAILWAY NOTES

- RAILWAY CROSSING WILL BE CONSTRUCTED, MAINTAINED AND OPERATED IN ACCORDANCE TO TRANSPORT CANADA E-10 (STANDARDS RESPECTING PIPELINE CROSSINGS UNDER RAILWAYS).
- EXCAVATIONS SHALL NOT BE CLOSER TO THE RAIL TRACKS THAN NOTED ON THE DRAWING. DISTANCES MEET CN GUIDELINES.
- NO RAILWAY CROSSING CONSTRUCTION SHALL BE PERMITTED UNTIL THE CONTRACTOR IS IN RECEIPT OF APPROVAL FROM CNR.

FOR INDEX SEE D-14184

NOTE: ALL VALVES INSTALLED CLOCKWISE TO CLOSE

METRIC
 WHOLE NUMBERS INDICATE MILLIMETRES
 DECIMALIZED NUMBERS INDICATE METRES

WARNING IF POWER EQUIPMENT OR EXPLOSIVES ARE TO BE USED FOR EXCAVATION ON THIS PROJECT THE CONTRACTOR MUST: 1) NOTIFY THE GAS COMPANY OF THE PROPOSED LOCATION OF EXCAVATION. 2) TAKE PRECAUTION TO AVOID DAMAGE TO GAS COMPANY INSTALLATIONS. 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.	B.M. ELEV. <table border="1"> <tr><td> </td></tr> <tr><td> </td></tr> <tr><td> </td></tr> <tr><td> </td></tr> <tr><td> </td></tr> <tr><td> </td></tr> <tr><td> </td></tr> <tr><td> </td></tr> <tr><td> </td></tr> <tr><td> </td></tr> <tr><td> </td></tr> </table>															
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	VERTICAL 1:50	DATE		2016 05 02													

ENGINEER'S SEAL
 ORIGINAL SIGNED BY S.R.J. COURNOYER 16/05/02
 CONSULTANT DRAWING NUMBER

THE CITY OF WINNIPEG
 WATER AND WASTE DEPARTMENT
 ENGINEERING DIVISION

2016 WATER MAIN RENEWALS CONTRACT
RAVENHURST STREET
 CN RAIL CROSSING

FILE PATH: R:\DRAWINGS\WATER\RENEWAL\2016 RENEWALS\Dugald\CNR\
 FILE NAME: dugald_RAIL-XING.dwg

CONTRACT NUMBER: 608-2016

DATE 2016 05 02

PLOT DATE: 2017 07 28

DESIGNED BY MJK
 CHECKED BY SC
 DRAWN BY RS
 APPROVED BY KZ
 RELEASED FOR CONSTRUCTION
 KAS ZUREK
 DATE 2016 05 02

SHEET 11 OF 11
 CITY DRAWING NUMBER
 D-14315