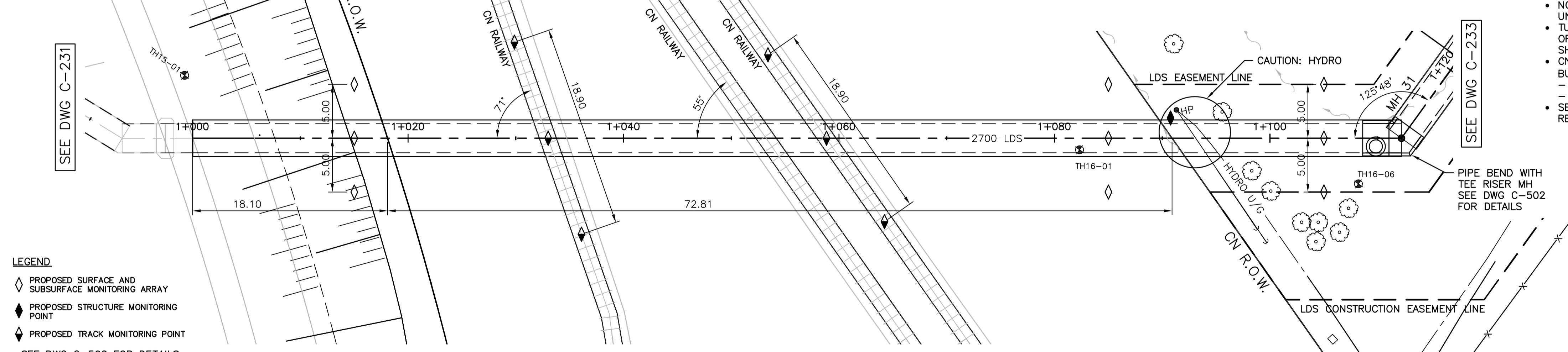


LOCATION PLAN
NTS

CROSSING PROFILE
HORZ. 1:250 VERT. 1:50

FUTURE STORMWATER RETENTION BASIN AND SPCSP (BY OTHERS)



DETAIL PLAN
1:250

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

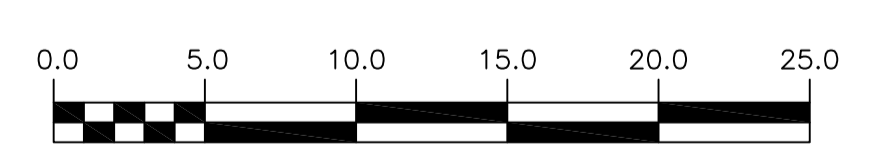
PROPERTY LIMITS DELINEATION
DELINEATION OF PROPERTY LIMITS AS SHOWN ON THIS DWG DOES NOT REPRESENT A "LEGAL SURVEY". CH2M HILL MAKES NO REPRESENTATION OR WARRANTY AS TO THE ACCURACY OF PROPERTY LIMITS DELINEATED ON THIS DRAWING, NOR ON THE DIMENSIONAL ACCURACY OF DRAWING FEATURES RELATIVE TO THOSE PROPERTY LIMITS.

- NOTES:**
- WARNING MARKERS REQUIRED AT EACH SIDE OF CN RIGHT-OF-WAY.
 - INSTALLATION AND MAINTENANCE TO BE IN ACCORDANCE WITH TC E-10
 - SMALL RISK OF VERY LOW SURCHARGE PRESSURES DURING HIGH FLOW EVENTS.
 - NO EXCAVATION WITHIN CN RIGHT-OF-WAY UNLESS DIRECTED BY CONTRACT ADMINISTRATOR.
 - TUNNELING SHOULD EXTEND THE FULL LENGTH OF CN RIGHT-OF-WAY WITH NO INTERMEDIATE SHAFTS PERMITTED.
 - CN REQUIREMENT FOR MINIMUM DEPTH OF BURIAL (MEASURED TO TOP OF PIPE)
 - BELOW TRACK = 1.68m
 - BELOW CN R.O.W. = 0.9m
 - SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

STORMWATER PIPE SPECIFICATIONS

I.D (NOMINAL) - 2743 mm
WALL THICKNESS - 273 mm
MATERIAL - REINFORCED CONCRETE
GRADE - C76-CLV
INSTALLATION METHOD - TRENCHLESS METHOD
MAX. PRES. - ATMOSPHERIC

LEGEND
 ◊ PROPOSED SURFACE AND SUBSURFACE MONITORING ARRAY
 ◆ PROPOSED STRUCTURE MONITORING POINT
 ◆ PROPOSED TRACK MONITORING POINT
 SEE DWG C-502 FOR DETAILS



EXISTING	LEGEND-PLAN	PROPOSED	EXISTING	LEGEND-PLAN	PROPOSED	EXISTING	LEGEND-PROFILE	PROPOSED
150 WM	WATER MAIN	150 WM	HYDRO	HYDRANT, VALVE	150 WM	WATER MAIN	150 WM	WATER MAIN
300 LDS	LAND DRAINAGE SEWER	300 LDS	M.T.S.	CONCRETE ASPHALT	300 LDS	LAND DRAINAGE SEWER	300 LDS	LAND DRAINAGE SEWER
250 WWS	WASTE WATER SEWER	250 WWS	SIDEWALK	PLANNING	250 WWS	WASTE WATER SEWER	250 WWS	WASTE WATER SEWER
○	MANHOLE	●	PROPERTY LINE	SURVEY BAR	○	NORTH/WEST GUTTER	○	SOUTH/EAST GUTTER
□	CATCH BASIN	■	GAS	CURB STOP	□	TEE	□	TEE
▽	CURB INLET	▽	EXISTING	EXISTING	▽	EXISTING	▽	EXISTING
∩	BEND	∩	PROPOSED	PROPOSED	∩	PROPOSED	∩	PROPOSED
∩	REDUCER	∩	PROPOSED	PROPOSED	∩	PROPOSED	∩	PROPOSED

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
D	ISSUED FOR RFQ 908-2016	11/2016	JBC
C	ISSUED FOR 95% REVIEW	09/2016	JBC
B	ISSUED FOR REVIEW	08/2016	JBC
A	ISSUED FOR REVIEW	05/2016	JBC

KGS GROUP CONSULTING ENGINEERS

DESIGNED BY: SDG
 CHECKED BY: MD
 DRAWN BY: JBC
 APPROVED BY:
 HOR. SCALE: 1:250
 VERTICAL: 1:50
 RELEASED FOR CONSTRUCTION:
 DATE:

ENGINEER'S SEAL
 PRELIMINARY
 NOT FOR CONSTRUCTION

THE CITY OF WINNIPEG WATER AND WASTE DEPARTMENT

PROJECT TITLE: COCKBURN AND CALROSSIE COMBINED SEWER RELIEF WORKS - CONTRACT 4
 CN CROSSING FROM STA 1+000 TO MH 31

SHEET OF 6 OF 12
 COMPUTER FILE NAME: C-232.dwg
 CITY DRAWING NUMBER: LD-7892

CONSULTANT DRAWING NO. C-232

CANADIAN NATIONAL RAILWAYS	
MILEAGE	2.91
SUBDIVISION	RIVERS