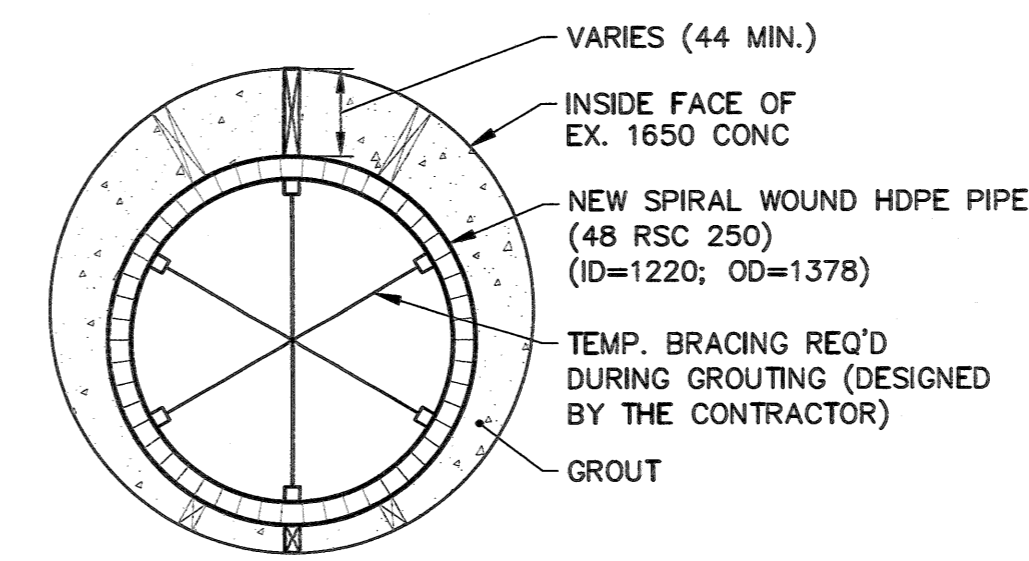
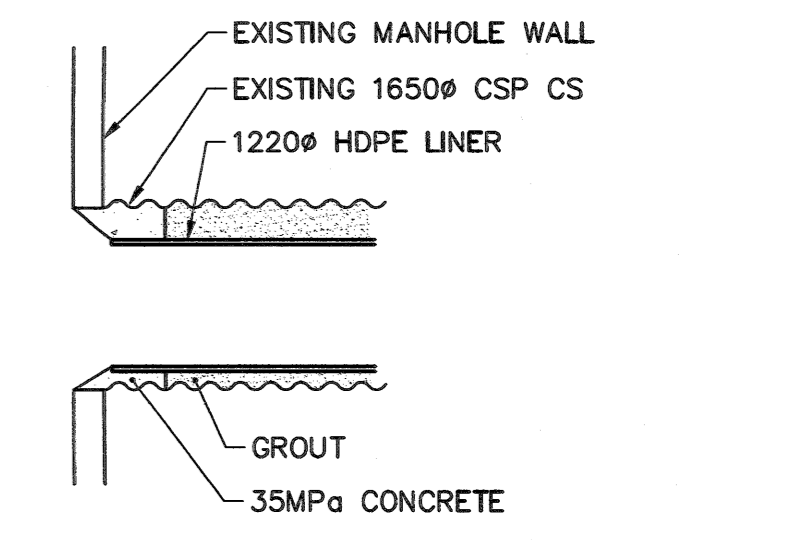


NOTE: CHAINAGES SHOWN ARE ALONG ϕ OF 1650 CONC LDS

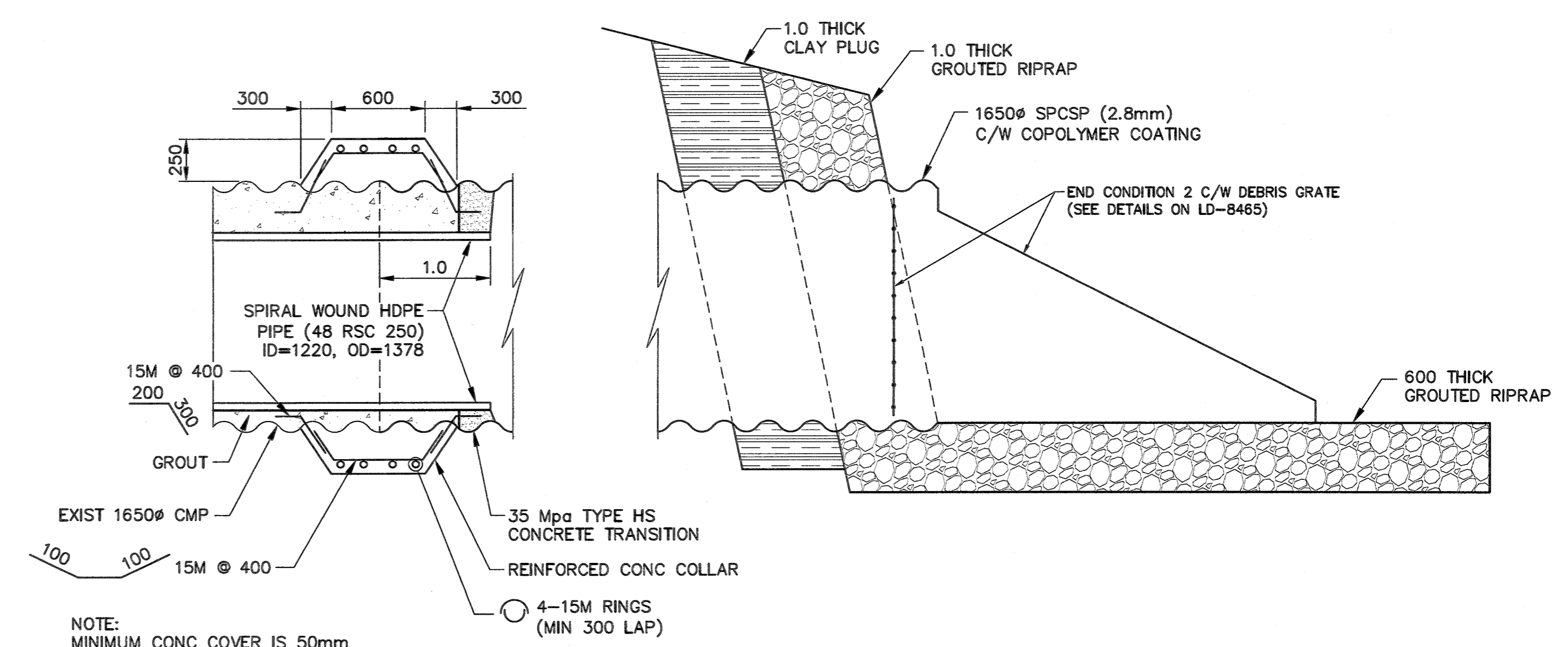


NOTE: INSTALLATION OF SPIRAL WOUND HDPE REQUIRES SPACERS AND OR WEIGHTS TO ENSURE LINER REMAINS IN DESIGNED POSITION (SPACERS DESIGNED BY THE CONTRACTOR)

PIPE LINER DETAIL
SCALE: N.T.S.



PIPE TO MANHOLE CONNECTION DETAIL
SCALE: N.T.S.



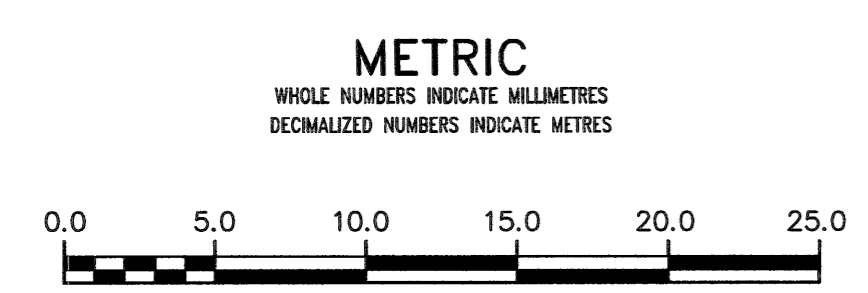
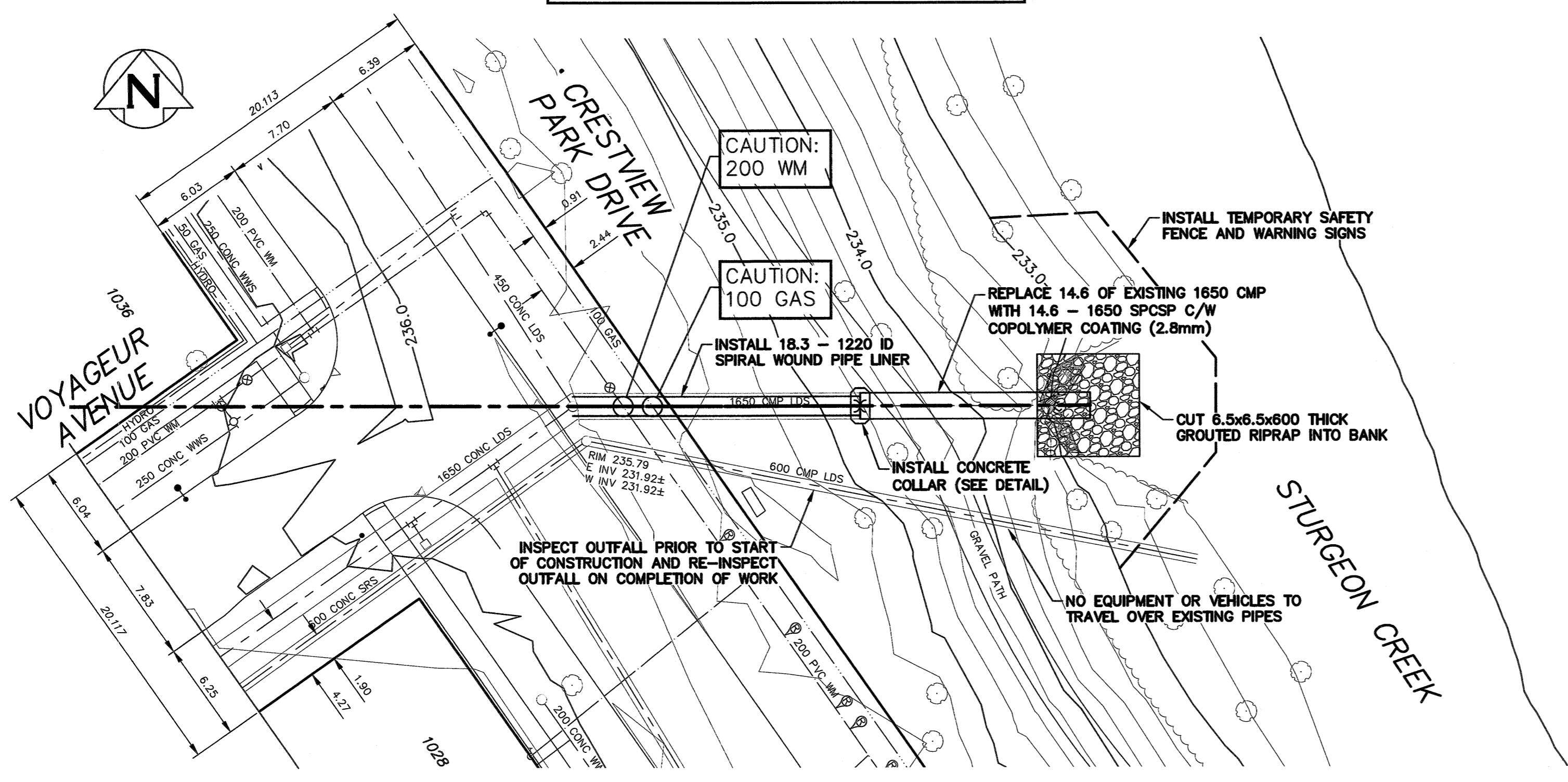
NOTE: MINIMUM CONC COVER IS 50mm

CONCRETE COLLAR AND END SECTION DETAIL
SCALE: N.T.S.

NOTES:

- CONSTRUCT CLAY COFFER DAM AT CREEK AS REQUIRED. SEE DWG LD-8465.
- ALL EXCAVATED MATERIAL WITHIN 107.0 OF THE REGULATED SUMMER RIVER LEVEL (RSRL) MUST BE REMOVED FROM SITE (NO STOCK PILING).
- CLEAN EXISTING OUTFALL PIPE OF SEDIMENT.
- CONTRACTOR TO PROVIDE PROPER WARNING SIGNS ALONG ROAD CONCERNING WORK SITE.
- CONTRACTOR TO RESTORE ROADS, PATHWAYS AND LANDSCAPING FEATURES TO PRE-CONSTRUCTION CONDITION.
- WINTER WATER MAIN BREAKS MAY RESULT IN OVER TOPPING WEIR AND ENTIRE OUTFALL.

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



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.

NO.	ISSUED FOR CONSTRUCTION	DATE	BY
0	ISSUED FOR CONSTRUCTION	2017 12 05	RBO
	REVISIONS	DATE	BY

DESIGNED BY	NGV	CHECKED BY	RBO
DRAWN BY	GEL	APPROVED BY	RBO
SCALE:		RELEASED FOR CONSTRUCTION	
HORIZONTAL	1:250		
VERTICAL	1:50		
DATE	2017 12 04	DATE	Dec 4/17

APEGM
Certificate of Authorization
KGS Group
No. 245

ENGINEER'S SEAL
R.B. OFFMAN
Member
24701
CONSULTANT DRAWING NUMBER
17-0107-020_LD-8456

THE CITY OF WINNIPEG
WATER AND WASTE DEPARTMENT
ENGINEERING DIVISION
2018 OUTFALL RENEWAL
REHABILITATION PROGRAM
VOYAGEUR AVENUE OUTFALL (ST-21)
PLAN AND PROFILE
S-MA20002394

SHEET 3 OF 14
CITY DRAWING NUMBER
LD-8456