

Developer: MACKENZIE COUNTY	REVISIONS		
Consultant: BEAIRSTO & ASSOCIATES ENGINEERING LTD.	# COMMENTS	DATE	
Consultant. BEAIRSTO & ASSOCIATES ENGINEERING LTD.	1 ISSUED FOR REVIEW - 30% DESIGN	Dec. 17, 2021	
Underground:	2 ISSUED FOR REVIEW - 60% DESIGN	Jan. 13, 2022	
Road Works:	3 ISSUED FOR REVIEW - 90% DESIGN	Mar. 25, 2022	
Start Date:	4 ISSUED FOR TENDER	April 14, 2022	
Completion Date:	5 6		
No. of Lots: N/A No. of Drawings: 12			

BASE FILE NUMBER: 21GEME6061



LIST OF DRAWINGS

CO-01	COVER SHEET
G-01	LIST OF DRAWINGS, NOTES, LEGEND, AND
	ABBREVIATIONS

OVERALL CONSTRUCTION PLANS

LE-01	LEGAL OVERALL
TR-01	TRANSPORTATION OVERALL
OU-01	OVERALL UTILITIES
LG-01	LOT GRADING
DI-01	DISINFECTION AND TESTING

PLAN AND PROFILES

PP-01	N-S ROAD
PP-02	W-E ROAD

TYPICAL SECTIONS AND DETAILS

XS-01	TYPICAL SECTIONS - N-S ROAD
XS-02	TYPICAL SECTIONS - W-E ROAD
DT-01	TYPICAL DETAILS

ABBREVIATIONS

AB ACP ACP APPROX APPROXIMATE AQ AUATERA AT AUEERTA TRANSPORTATION AVEBC BC BCBEGINNING OF CURVE BUVD BOULEVARD BOULEVARD BOULEVARD BOULEVARD BOULEVARD BOULEVARD BOULEVARD BOULEVARD BOULEVARD BOULEVARD BOULEVARD BOULEVARD BOULEVARD BOULEVARD BOULEVARD CIP CAST IRON PIPE CL CONC CONCRETE CSP CORRUGATED STEEL PIPE CV COMPLETE WITHDESC DESCRIPTION DIA DIAMETER DIPDESCRIPTION DUCTILE IRON PIPEE E E CAST COMPLETE WITHDESC DESCRIPTION DIAMETER DIPDESCRIPTION DUCTILE IRON PIPEF EC EC ED ED COP END OF CURVE EL ELEVATION DIAMETER DID DUCTILE IRON PIPEF MC COM COMPLANT F%CFIRE HYDRANT FRAME AND COVERGBC GC GRANULAR BASE COURSEHYD HYD HYDRANTID INV INVERTMAX MANNON MONOLITHICNO NONON MONOLITHICN NOT TO SCALE NUMBEROD OUTSIDE DIAMETERPC PC POINT OF CURVATURE PROPOSEDPC POINT OF CURVATURE PROPOSEDPT POINT OF VERTICAL INTERSECTIONR RADUS SANITARY SHT STAR STORM ST		
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MANHOLE / CATCHBASIN	• •	00
HYDRANT	+	\$
MAIN WATER VALVE	€	8
AIR RELEASE VALVE	⊗ ^{AR}	8 ^{AR}
SERVICE WATER VALVE	*	₩
BLOW-OFF VALVE	6	ď
/IDEO INSPECTION RISER/CLEANOUT	● ^{CO}	0 ^{c0}
SERVICE RISER		SR 0.40m
NSULATED PIPE/SERVICE		
SERVICE INVERT		672.67
STREET LIGHT		<u>ب</u> بر
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POWER PEDESTAL		\bigtriangleup
POWER TRANSFORMER		
POWER POLE	- • -	
STREET SIGN	+	+
IREE		Ö
BOREHOLE	•Вн	
SIDEWALK RAMP	вн #	4///
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SIDEWALK RAMP TYPE		(A1)

## DRAWING LINETYPE & SYMBOLS

# MATERIALS KEY PROPOSED EXISTING LANDSCAPE AREA CONCRETE GRAVEL BRICK

ASPHALT

**GENERAL NOTES** 

2. DRAWINGS ARE NOT TO BE SCALED FOR DETAILED MEASUREMENTS. DISCREPANCIES OR OMISSIONS TO THE DESIGNER IMMEDIATELY. IMPROVEMENT STANDARDS (2021) UNLESS OTHERWISE NOTED. PRIOR TO CONSTRUCTION.

SANITARY AND WATER

3. ALL HYDRANT LEADS ARE 150mm PVC DR18 UNLESS OTHERWISE NOTED.

INSPECTED PRIOR TO CONSTRUCTION, AND AS PART OF THE CCC INSPECTION.

INSPECTED AT FAC.

APPROVED BY ENGINEER.

9. ALL CURB STOPS TO BE 0.30m OUTSIDE PROPERTY LINE. ALL SANITARY SERVICES TO HAVE CLEANOUTS.

COMPLETED. ELEVATIONS WITH THE ENGINEER BEFORE INSTALLATION.

CONSTRUCTION FOR BOUNDARY VALVE OPERATION REQUIREMENTS.

MUNICIPAL IMPROVEMENTS STANDARDS, SECTION D.14.3 ii.

IMPROVEMENTS STANDARDS, SECTION D.11.1.

### SHALLOW UTILITY NOTES

BOUNDARY INCLUDE:

CLOSELY WITH THE SHALLOW UTILITY COMPANIES THROUGHOUT THE PROJECT.

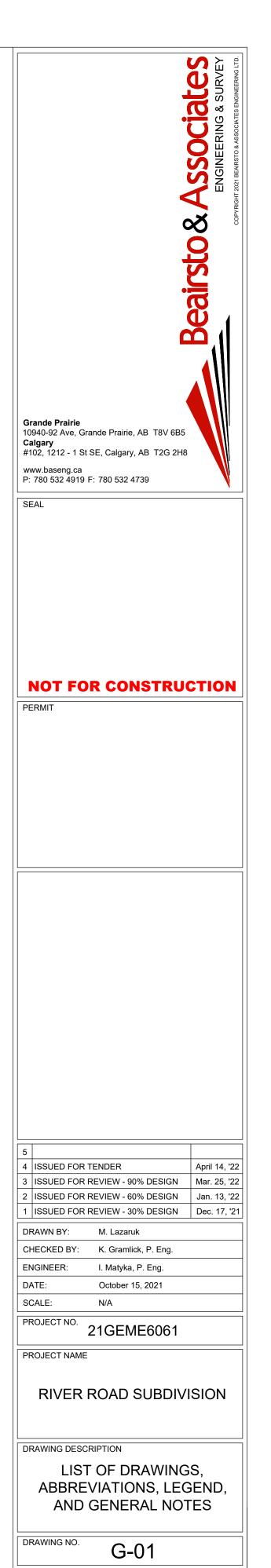
- 1. ONLY "ISSUED FOR CONSTRUCTION" DRAWINGS ONCE SIGNED AND SEALED CAN BE USED FOR CONSTRUCTION.
- 3. VERIFY ALL DIMENSIONS, DATUMS, AND LEVELS PRIOR TO COMMENCEMENT OF WORK. REPORT ANY
- 4. INFORMATION ON THIS DRAWING WHICH PERTAINS TO EXISTING STRUCTURES MAY BE INCOMPLETE OR IN ERROR. THE CONTRACTOR SHALL VERIFY ALL SUCH INFORMATION PRIOR TO THE START OF CONSTRUCTION. 5. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE MACKENZIE COUNTY GENERAL MUNICIPAL
- 6. THE CONTRACTOR SHALL HAVE ALL ABOVE GROUND AND UNDERGROUND UTILITIES AND PIPELINES LOCATED

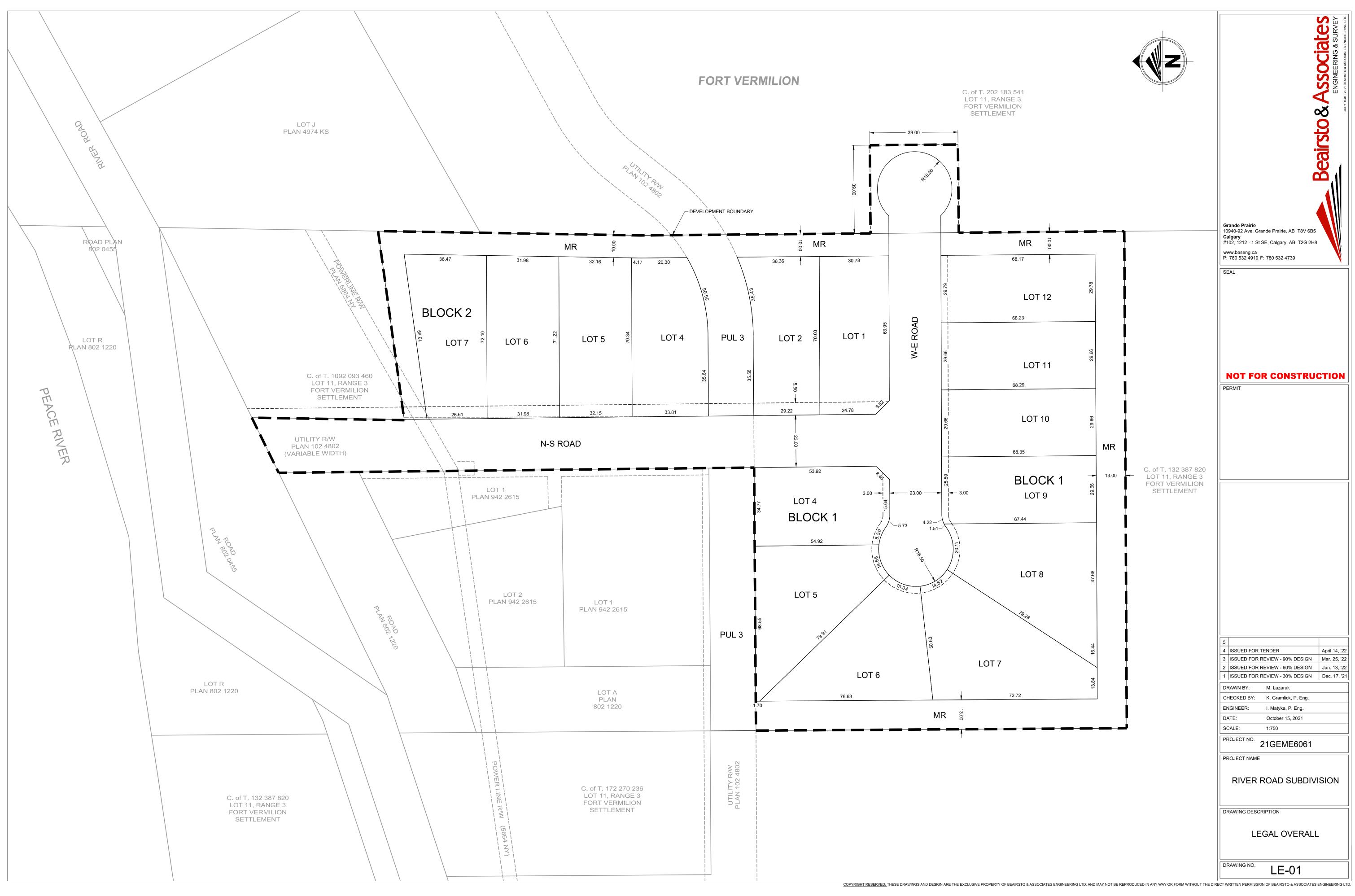
- 1. ALL SANITARY SEWER MAINS ARE 200mm PVC SDR35 UNLESS OTHERWISE NOTED.
- 2. ALL WATER MAINS ARE 200mm PVC DR18 UNLESS OTHERWISE NOTED.
- 4. ALL RESIDENTIAL SERVICES ARE TO BE 100mm PVC SDR28 SANITARY SERVICE WITH 25mm COPPER WATER SERVICE IN COMMON TRENCH EXTENDED 1.85m BEYOND PROPERTY OR EASEMENT.
- 5. ALL EXISTING MACKENZIE COUNTY INFRASTRUCTURE LOCATED WITHIN THE PHASE BOUNDARY TO BE
- 6. ALL EXISTING MACKENZIE COUNTY INFRASTRUCTURE REQUIRING ADJUSTMENT TO NEW GRADES TO BE COMPLETED AS PER MACKENZIE COUNTY GENERAL MUNICIPSAL IMPROVEMENTS STANDARDS AND WILL ALSO BE
- 7. BACKFILL IS TO BE COMPACTED NATIVE 100% SPD ON CLASS B SAND BEDDING UNLESS OTHERWISE NOTED. IF WATER TABLE ENCOUNTERED, USED WASHED ROCK AS OPPOSED TO SAND. GRADATION OF WASHED ROCK TO BE
- 8. ALL INSULATED SANITARY SEWER TO BE PRE-INSULATED URECON OR EQUIVALENT.
- 10. BLOW-OFF VALVES AT TIE-IN LOCATIONS TO BE PERMANENT FIXURES ONCE SUCCESSFULL TESTING
- 11. VALVE, HYDRANT AND MANHOLE RIM ELEVATIONS ARE DESIGN ELEVATIONS, THE CONTRACTOR IS TO CONFIRM
- 12. REFER TO THE TABLE ON OU-01 FOR MANHOLE BARREL SIZES AND FRAME AND COVER TYPES.
- 13. ALL WORK TO BE COMPLETED TO MACKENZIE COUNTY GENERAL MUNICIPAL IMPROVEMENT STANDARDS. CONSTRUCTION DETAILS AND REQUIREMENTS TO BE FOLLOWED AS PER MANUAL.
- 14. THE CONTRACTOR SHALL CONTACT THE MUNICIPALITY AT LEAST 48 HOURS PRIOR TO BEGINNING WATER MAIN
- 15. WATER USAGE DURING CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE MACKENZIE COUNTY GENERAL
- 16. CATHODIC PROTECTION MUST BE PROVIDED AS OUTLINED IN THE MACKENZIE COUNTY GENERAL MUNICIPAL
- 17. EXISTING WATER BOUNDRY VALVES TO BE OPERATED BY MACKENZIE COUNTY WATERWORKS PERSONNEL ONLY. CONTRACTOR MUST CONTACT THE COUNTRY AT LEAST 48HRS TO OPERATE VALVES.

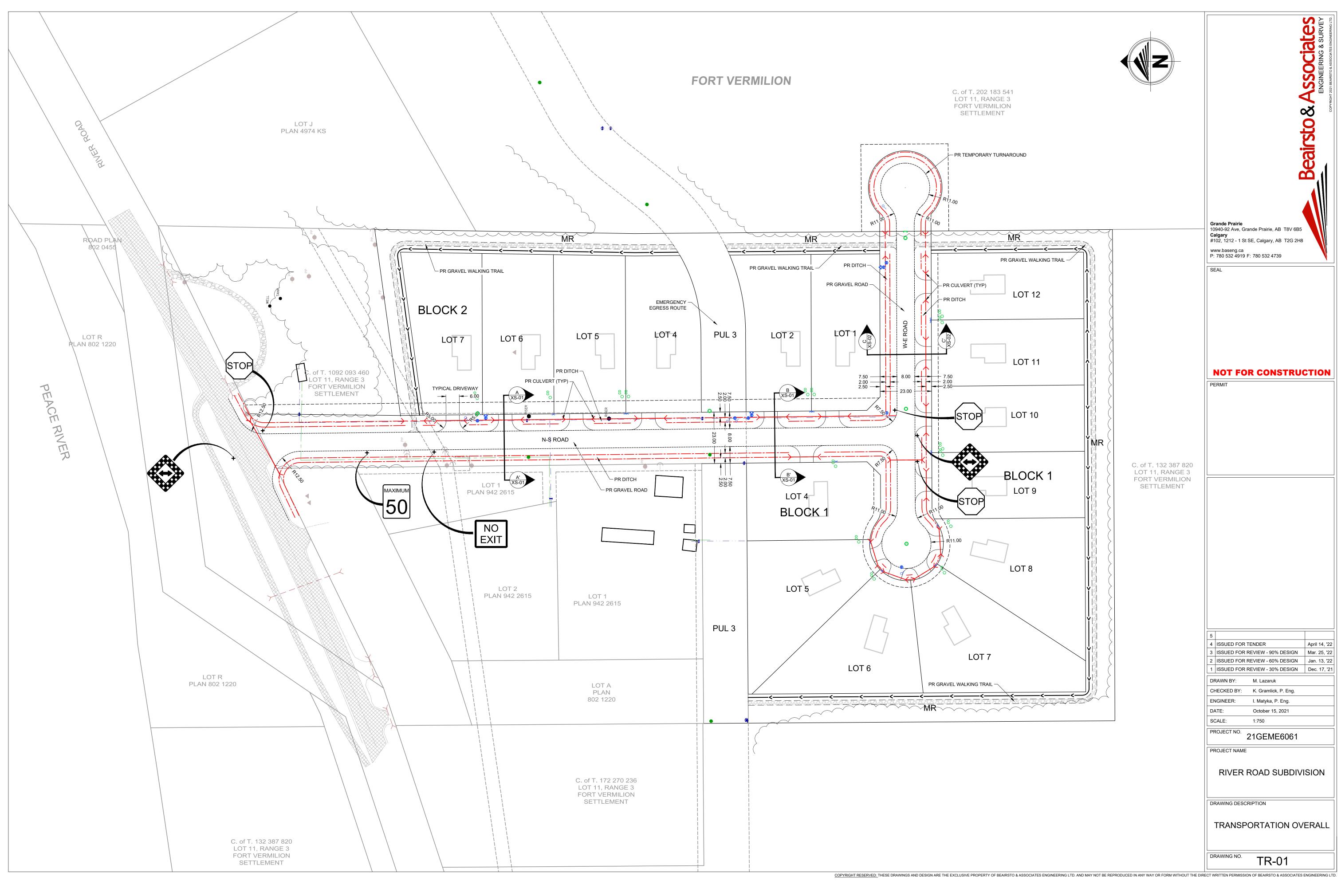
- 1. THE KNOWN COMPANIES, OWNERS AND OPERATORS WITH UTILITIES IN OR NEAR THE CONSTRUCTION
- NORTHERN GAS LIGHTS COOP (JACK ECCLES) 1-780-928-3881 (24 HR. EMERGENCY 1-800-511-3447)
- ATCO ELECTRIC (NEMA OSHI) 1-780-296-3245 (24 HR. EMERGENCY 1-800-668-5506)

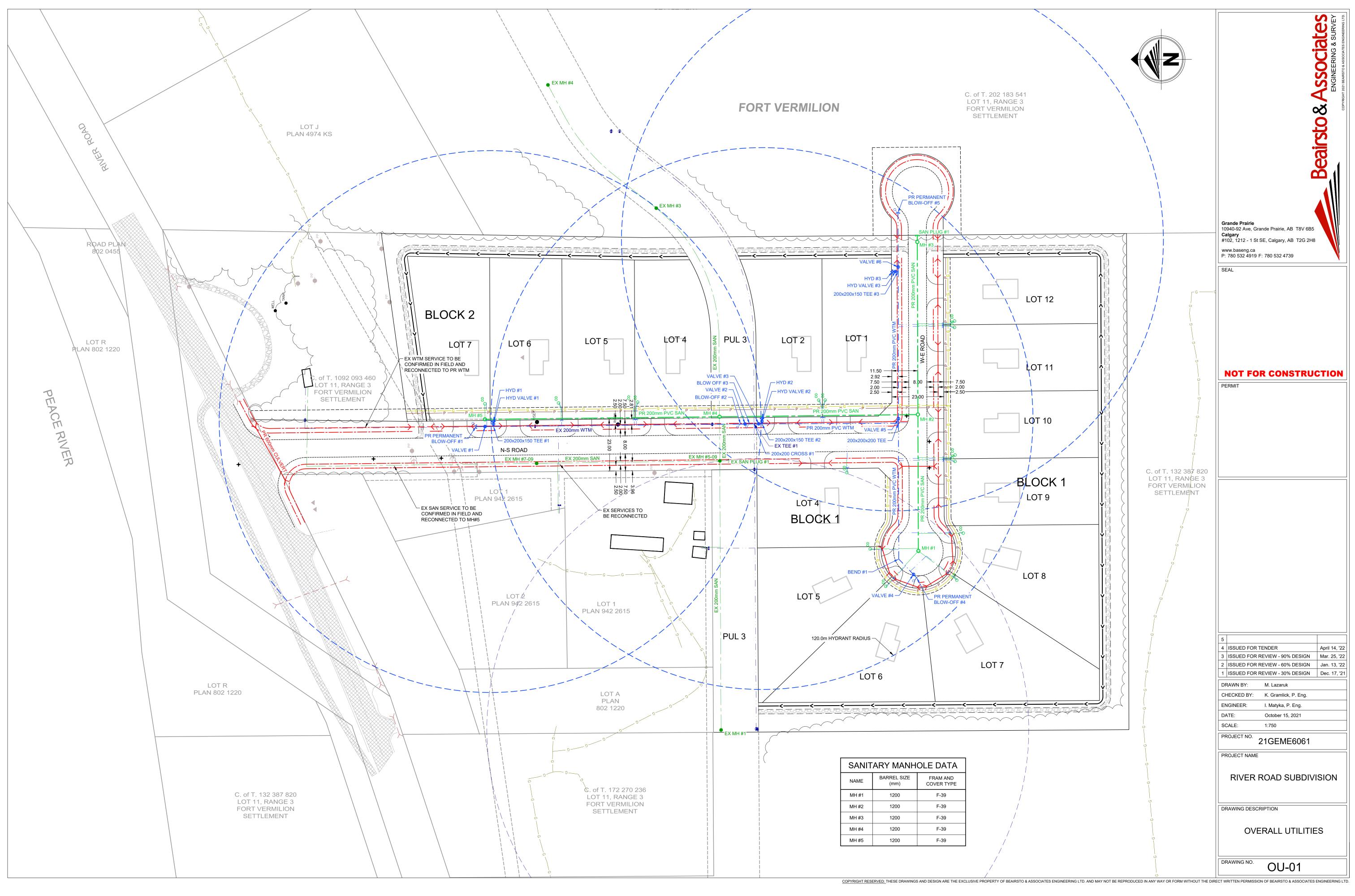
### TELUS (CLARKE PREFONTAINE) 1-403-384-1445

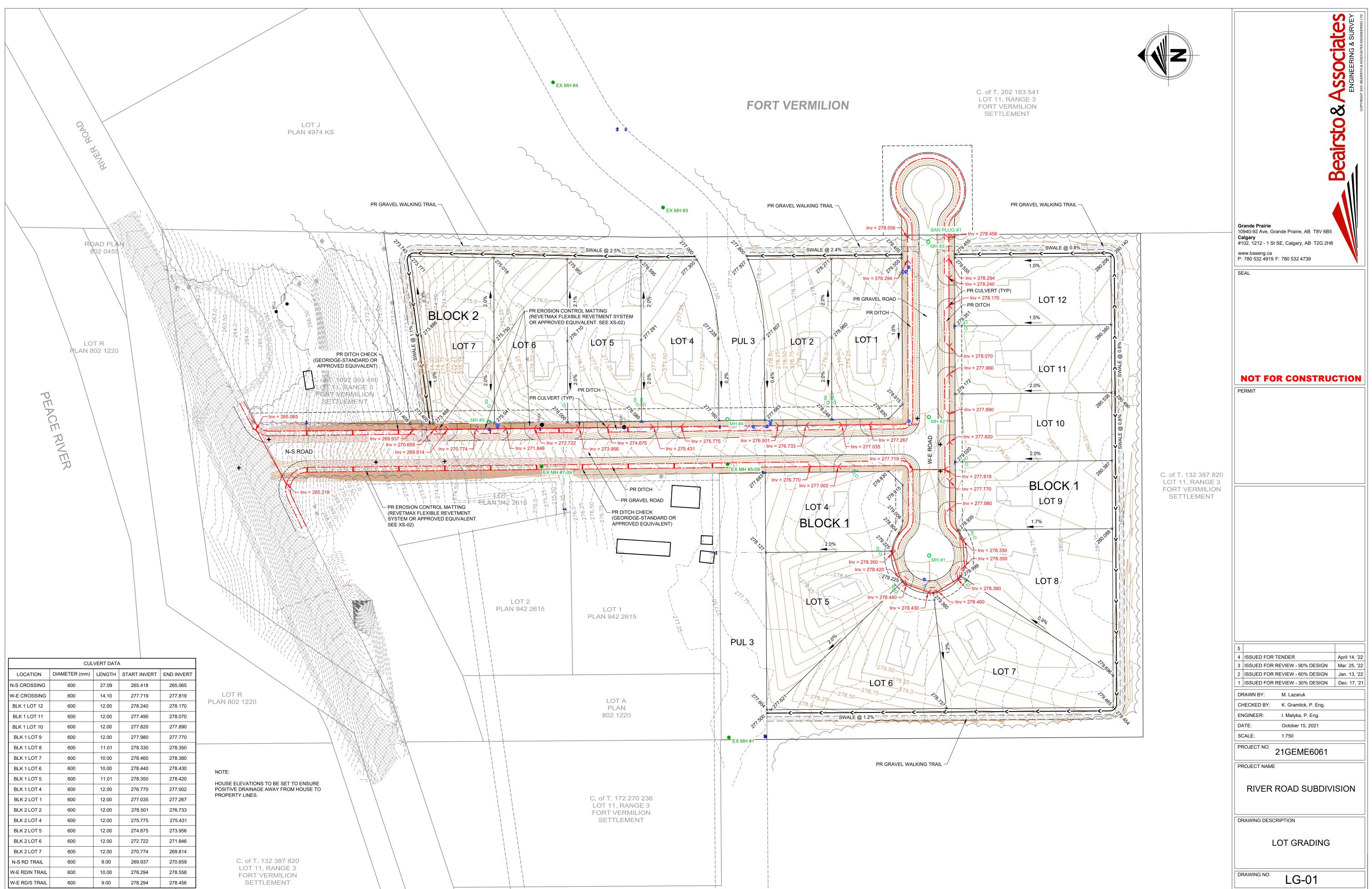
- 2. ADJUSTMENT OF UTILITIES MAY OCCUR CONCURRENTLY WITH THE PROPOSED CONSTRUCTION. DEPENDANT ON THE MAGNITUDE AND DEGREE OF ADJUSTMENTS REQUIRED. THE WORK MAY NOT BE COMPLETED UNTIL THE LATER STAGES OF CONSTRUCTION OPERATIONS. IN THAT EVENT, THE CONTRACTOR SHALL BE REQUIRED TO ARRANGE THEIR OPERATION CLEAR OF THOSE UTILITIES UNTIL THE ADJUSTMENTS ARE COMPLETE.
- 3. THE CONTRACTOR SHALL ENSURE THAT ALL SHALLOW UTILITIES ARE PROTECTED AND/OR RESTORED AS PER THE DIRECTION OF THE SHALLOW UTILITY COMPANIES. AS SUCH, THE CONTRACTOR IS REQUIRED TO WORK



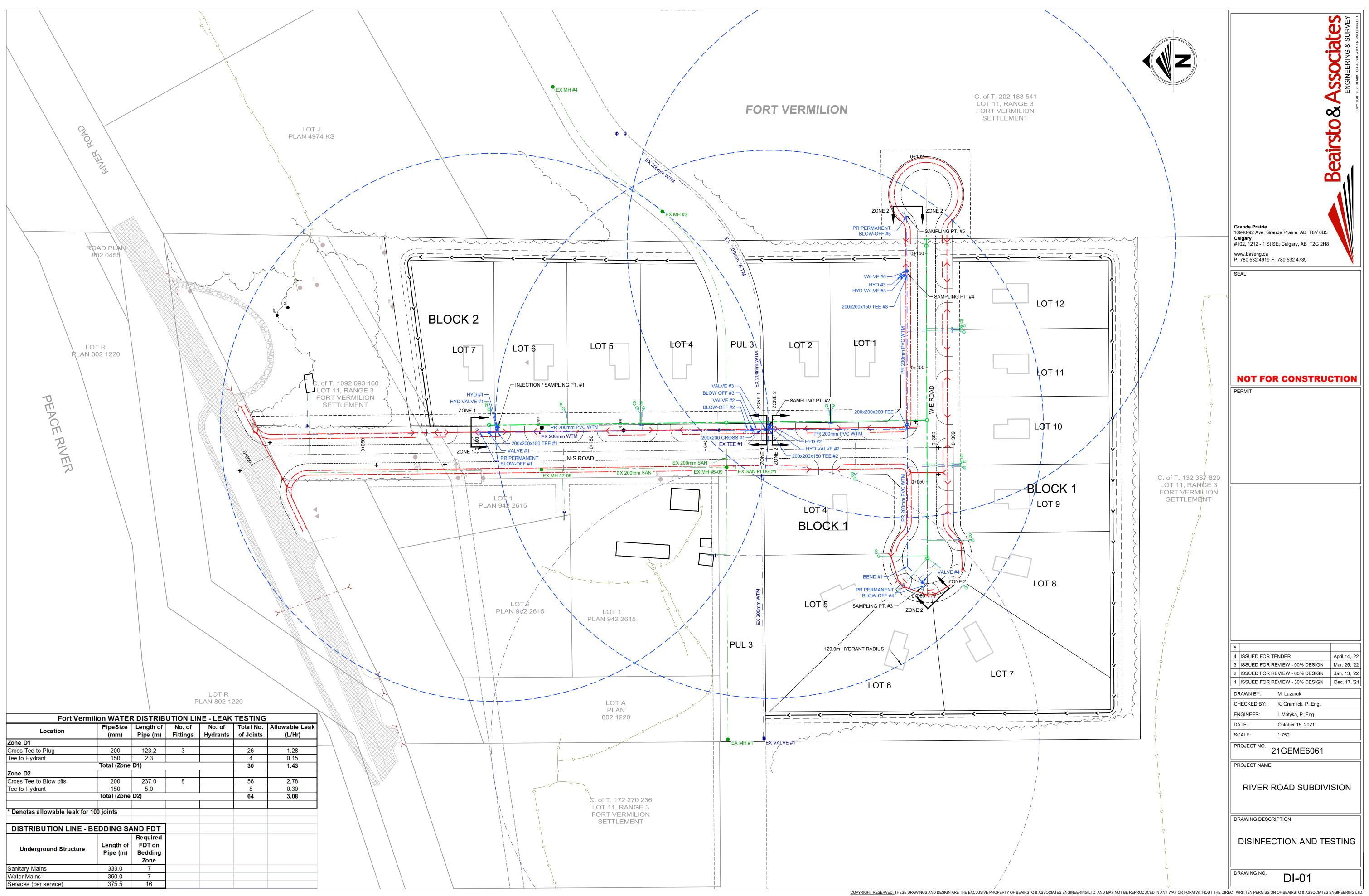




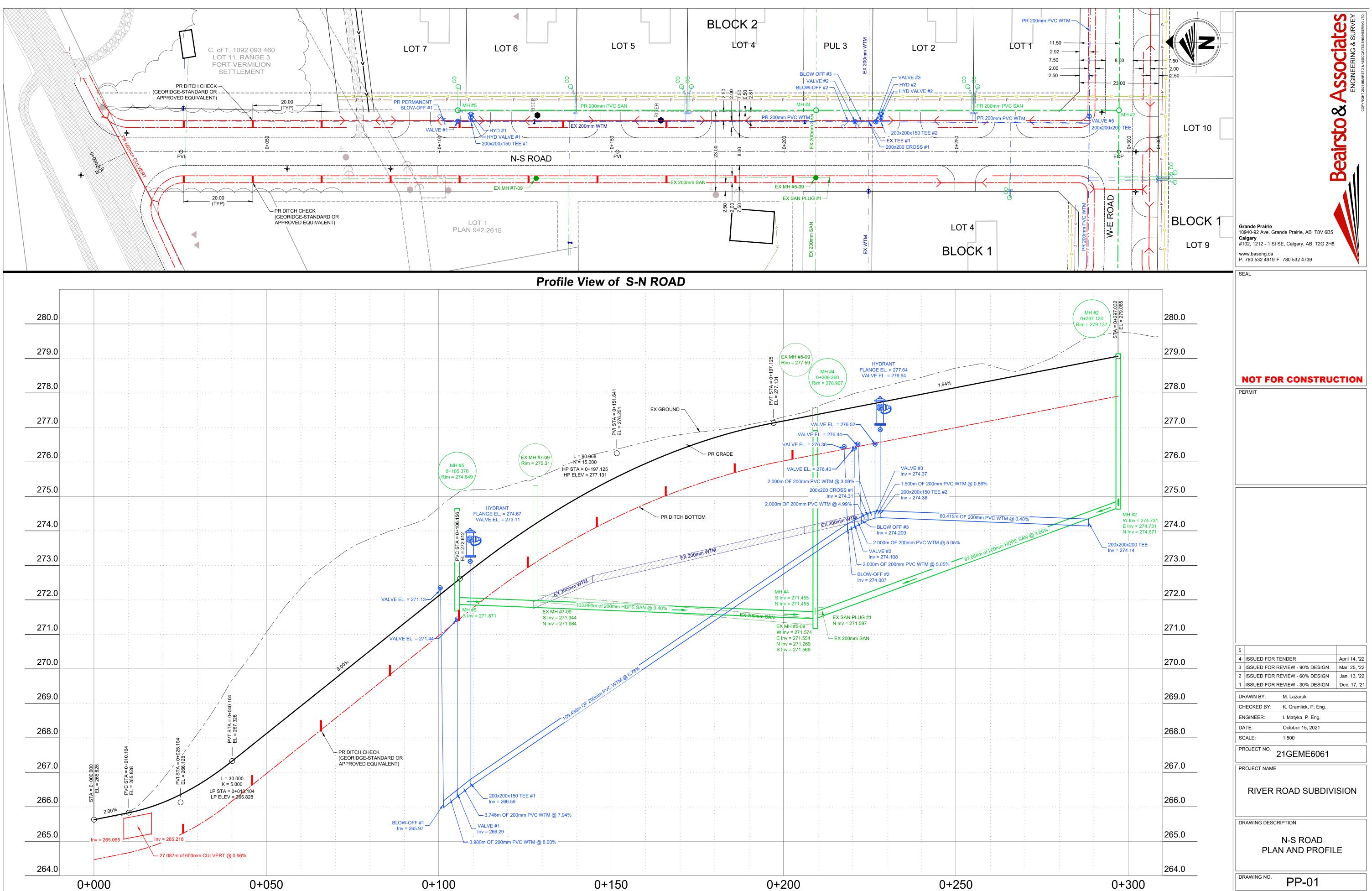


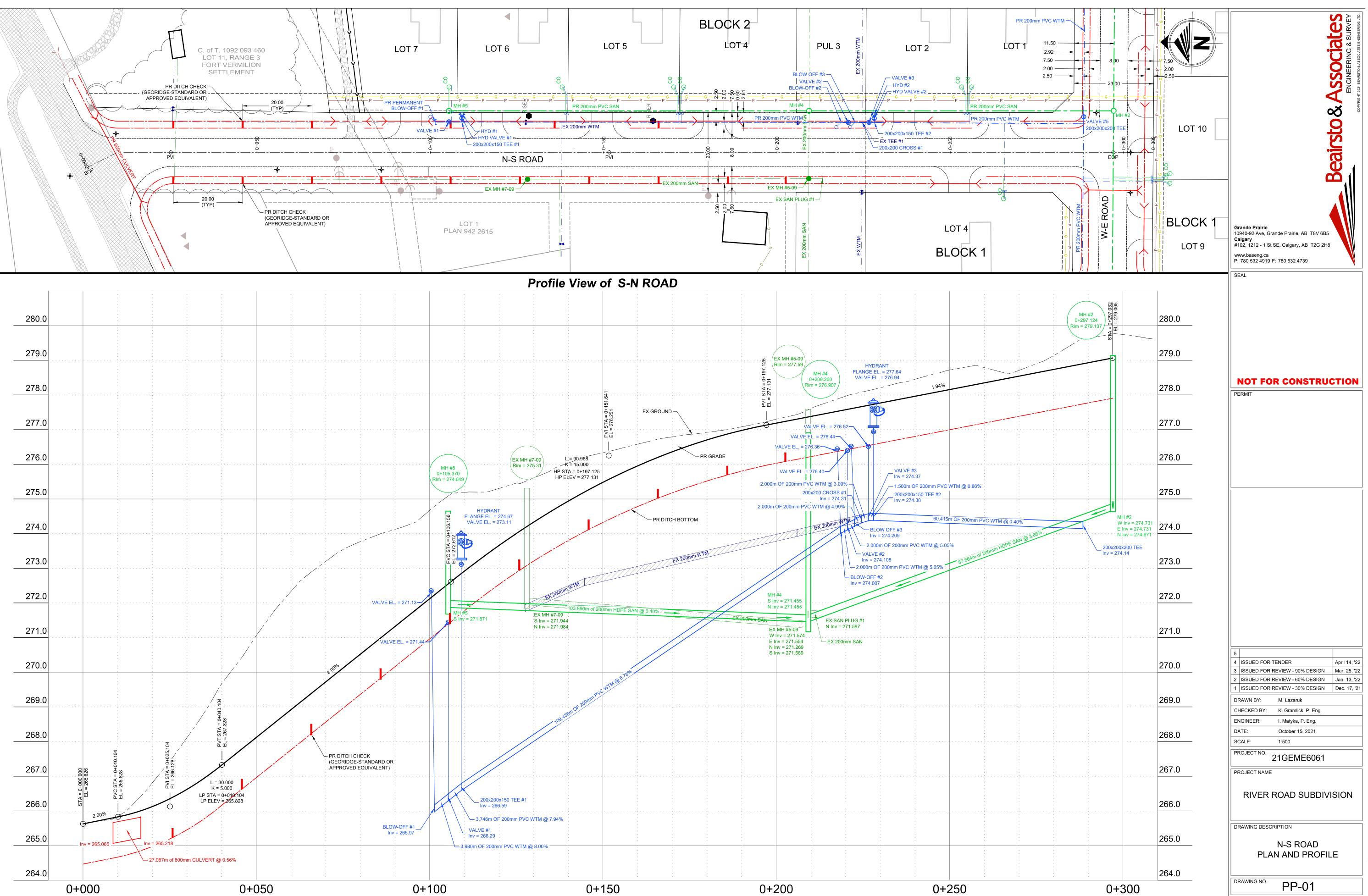


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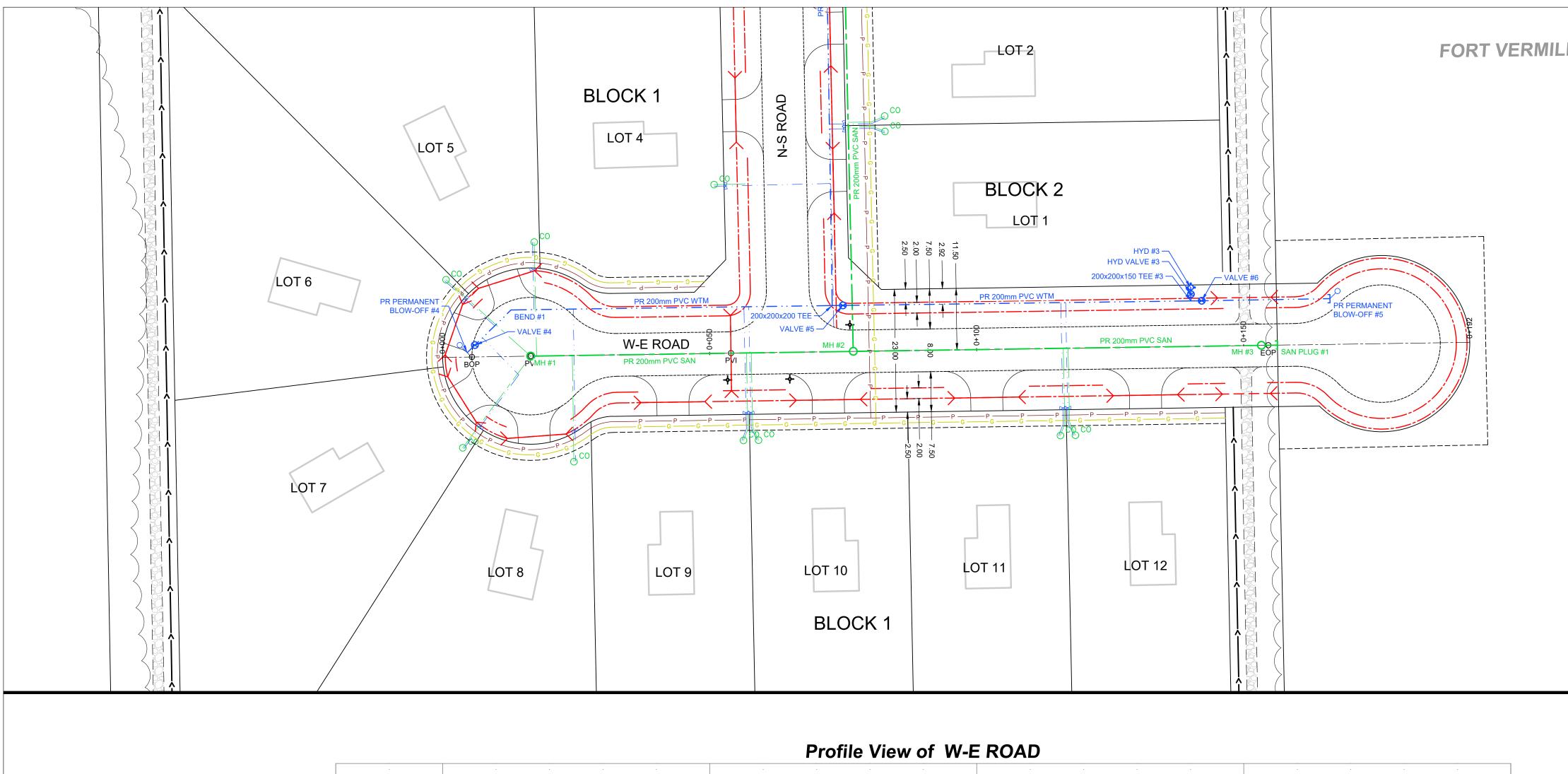


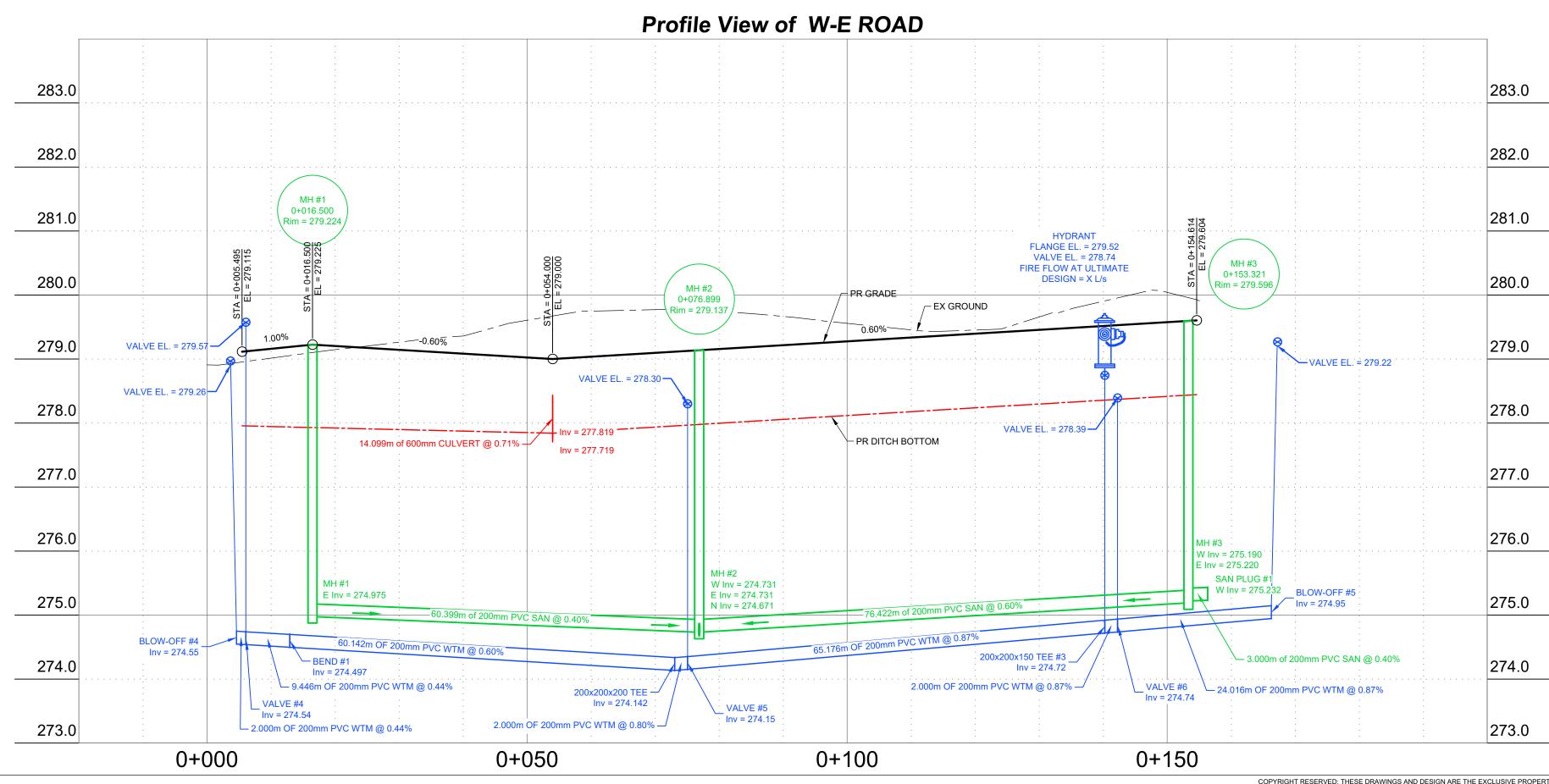
				30	1.45
Zone D2					
Cross Tee to Blow offs	200	237.0	8	56	2.78
Tee to Hydrant	150	5.0		8	0.30
	Total (Zone	D2)		64	3.08
* Denotes allowable leak for 1	00 joints				
<b>DISTRIBUTION LINE - B</b>	EDDING SA	ND FDT			
		Required			
Underground Structure	Length of	FDT on			
enderground enderdre	Pipe (m)	Bedding			
		Zone			
Sanitary Mains	333.0	7			
Water Mains	360.0	7			
Services (per service)	375.5	16			





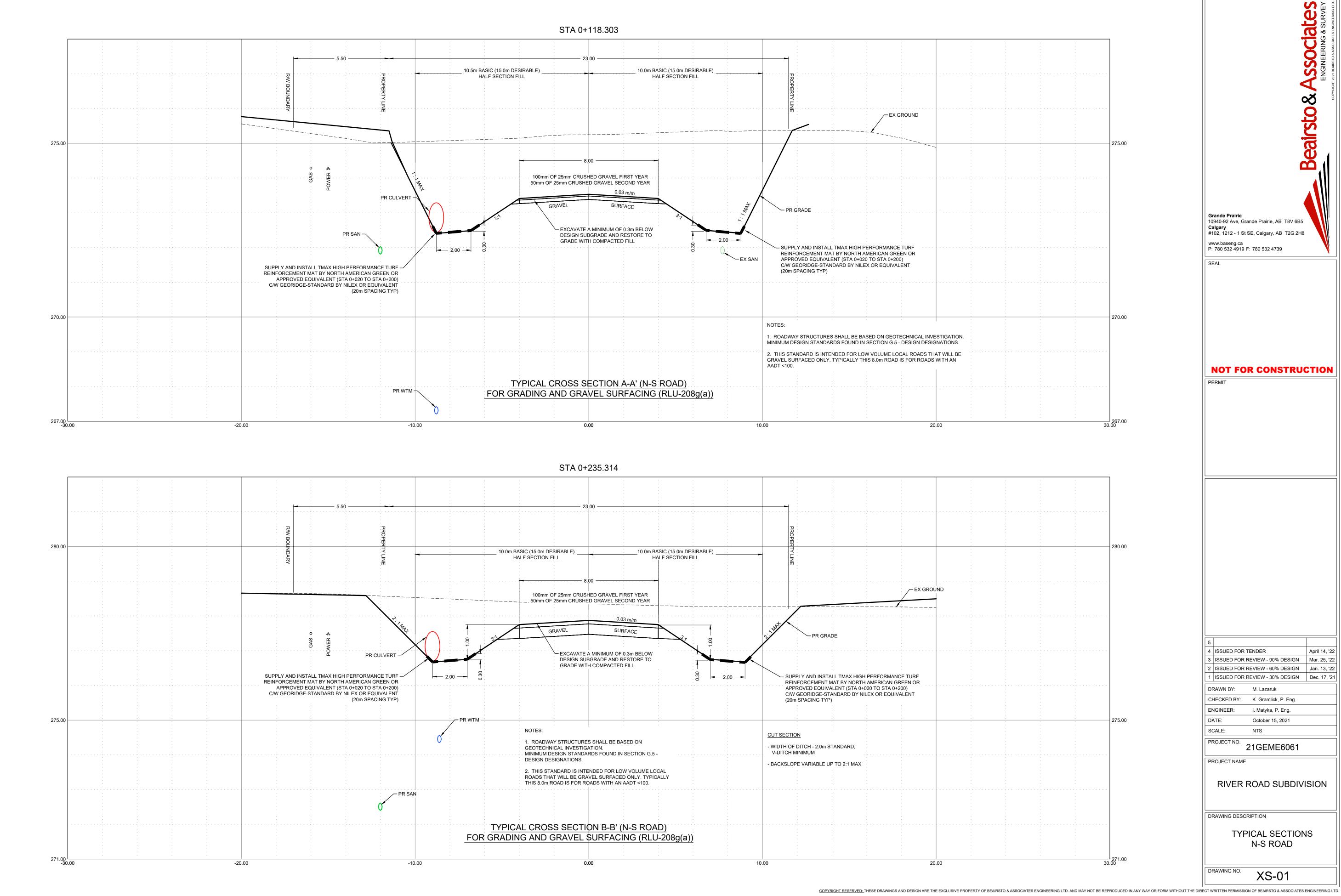
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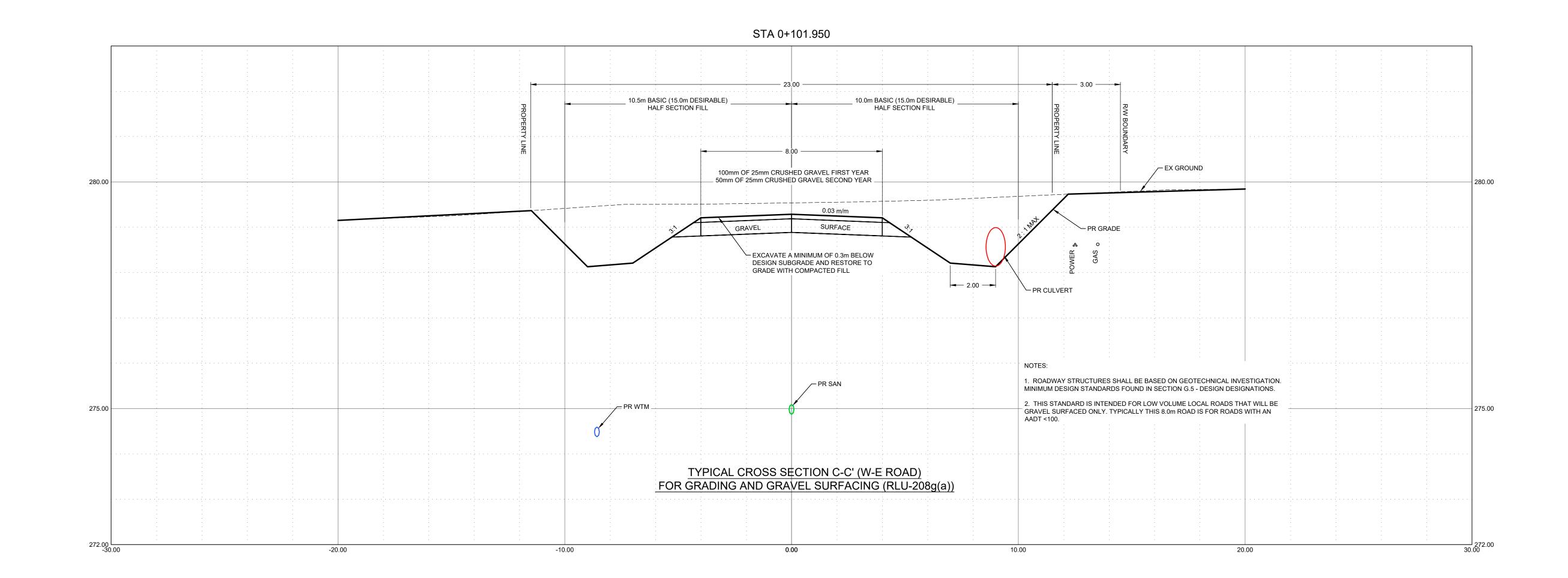




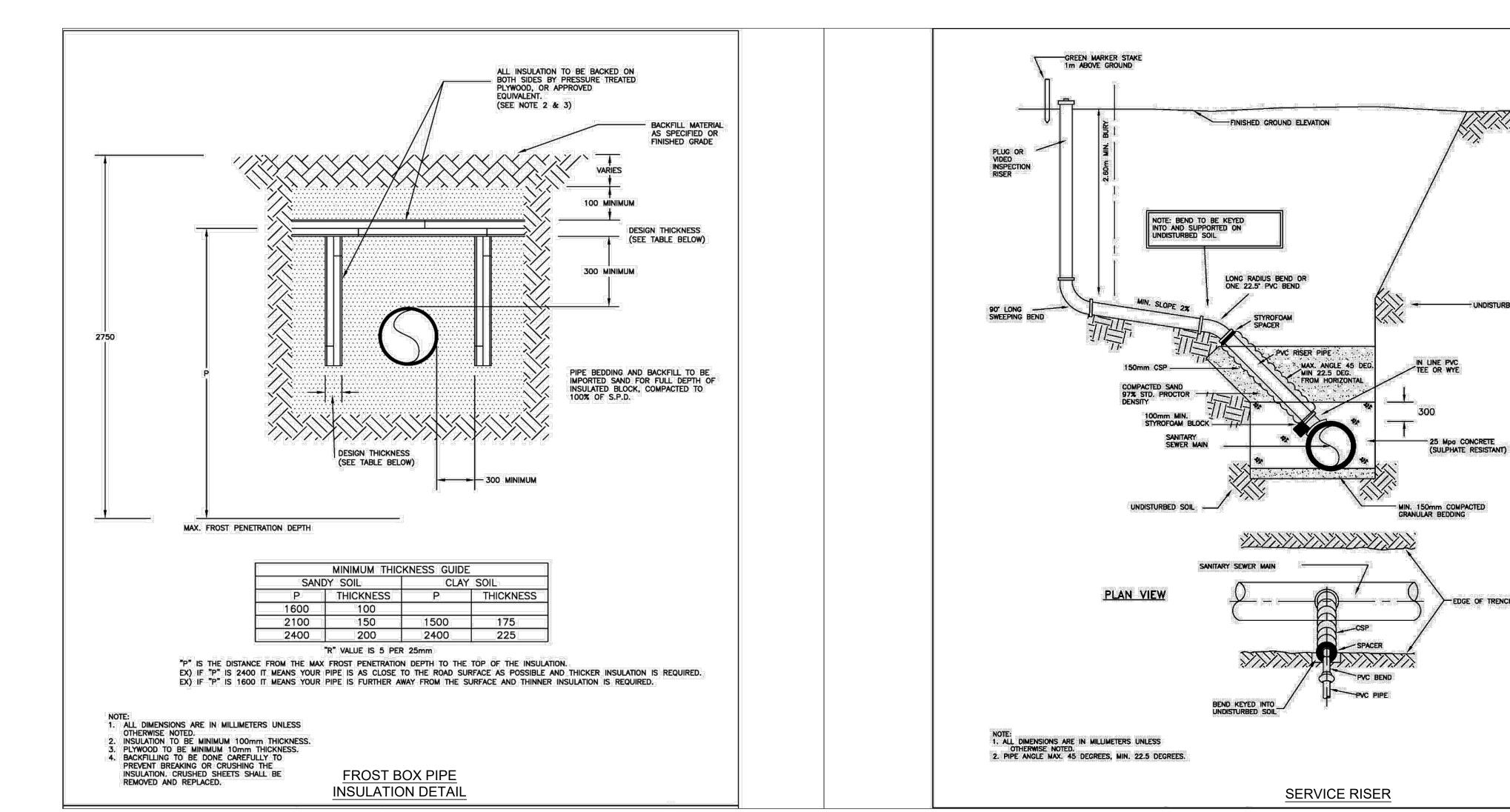
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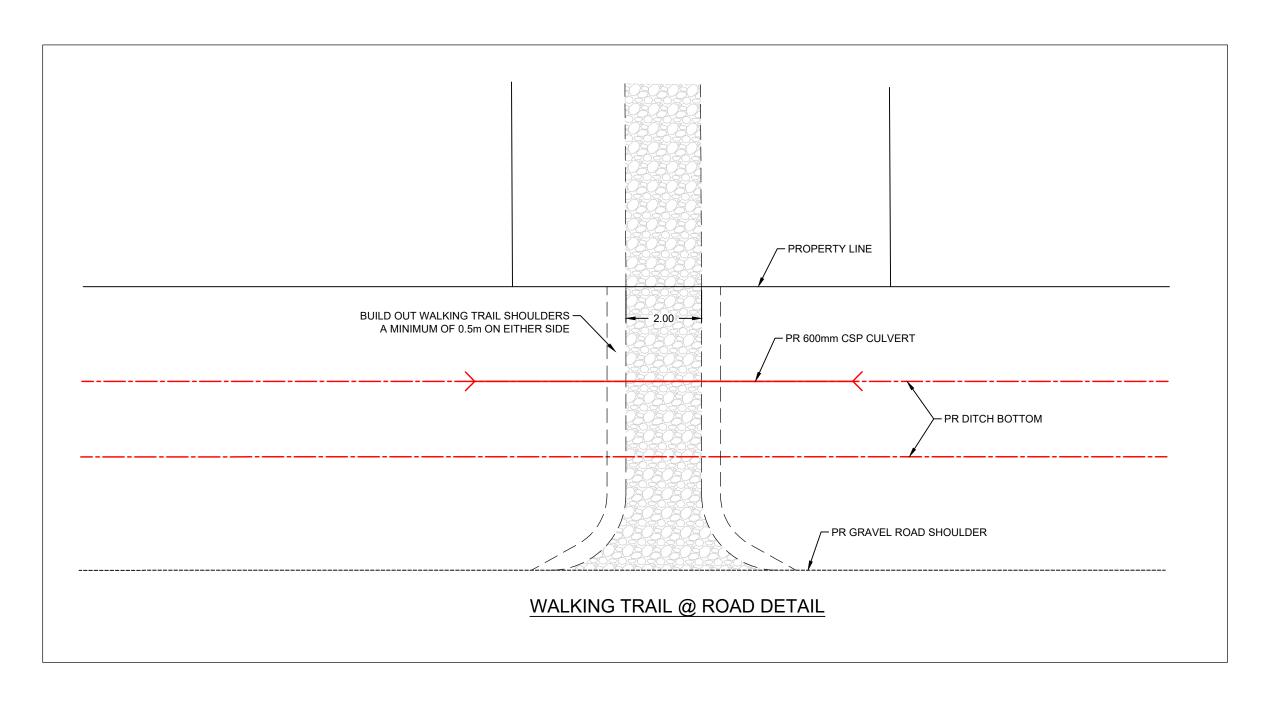
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	RIVER ROAD SUBDIVISION
	LOT 11, RANGE 3 FORT VERMILION





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