

**NOTES:**

1. WORK PROCEDURE REQUIRED.
2. MAY REQUIRE WORKSAFE NOTICE OF PROJECT-NOP.
3. INSTALL 60mm BYPASS FROM PT."A" TO PT."B" AND 42mm BYPASS FROM PT."E" TO PT."F".
4. ABANDON 135.0 x 114 STL, 1971. CHARGE ALL ABANDONMENT COSTS TO NOT.#2800577045, SO#31297270. ABANDON 250.0 x 60 STL, 1972. CHARGE ALL ABANDONMENT COSTS TO NOT.#2800577046, SO#31297271. ABANDON 31.0 x 26 STL, 1978. CHARGE ALL ABANDONMENT COSTS TO NOT.#2800577053, SO#31297272.
5. INSTALL #6 BONDING CABLE INSIDE 42mm PVC CONDUIT AS PER DRAWING GA-6582. CONTACT CORROSION CONTROL TECHNICIAN RYAN SMITH AT 778-874-5198 PRIOR TO BONDING CABLE INSTALLATION.
6. INSTALL TRACER WIRE TEST POINT AS PER DOCUMENT 1155.
7. THE STANDARD DEPTH OF COVER FOR GAS MAIN IN TRAVELLED PORTION OF HIGHWAY RIGHT OF WAY IS 1.2m.
8. THE STANDARD DEPTH OF COVER FOR GAS MAIN IN ROAD ALLOWANCE IS MINIMUM 0.6m.
9. INSTALL 114mm (4") PE MAIN IN 219mm (8") STEEL CASING FOR ROAD CROSSING.
10. VARIANCE FROM MINISTRY OF TRANSPORTATION AND INFRASTRUCTURE UTILITY POLICY MANUAL 2019 VERSION 1.0:
  - 10.1. SECTION 17.3.6 PIPELINE ABANDONMENT  
FORTISBC WILL BE ABANDONING EXISTING GAS MAINS IN PLACE, AND CAPPING THE ENDS (WHICH IS STANDARD AND COMPLIANT WITH 2662.23). REMOVAL IN THIS CASE PRESENTS ADDITIONAL RISK (A LARGE SECTION OF THE EXISTING MAIN IS ADJACENT TO A DEEP RAINE WITH A WATERCOURSE, WHICH PRESENTS ACCESS ISSUES AND SAFETY/ENVIRONMENTAL CONCERNS), AS WELL AS COST TO BRING IN A CONTRACTOR TO REMOVE PIPE. FORTISBC ALSO RECOGNIZES THAT WHEN 232ND STREET IS WIDENED, AND ANY VEGETATION REMOVAL/PROPOSED UTILITY INSTALLATION TAKES PLACE, MOTI'S CONTRACTOR WILL LIKELY NEED TO REMOVE ANY OLD ABANDONED PIPE THAT IS IN CONFLICT, AND IT WOULD BE MOST EFFICIENT TO DO SO AT THIS STAGE (AND THEREFORE EASIER TO REMOVE WITH NO CONCRETE FILL INSIDE THE PIPE).
  - 10.2. SECTION 17.4.1 CROSSINGS  
ASSUMING THAT WE WILL COMPLY WITH THIS CLAUSE, AND OUR CROSSINGS WILL BE AT AN ANGLE OF 70 DEGREES OR GREATER CROSSING 232ND STREET.
  - 10.3. SECTION 17.4.2 OFFSETS  
NOT MEETING STANDARD DUE TO MULTIPLE UTILITY INTERFERENCES, VEGETATION, DITCHES, AND STEEP EMBANKMENTS. BASED ON THE EXISTING SPACE, THERE IS NO WAY TO WORK AROUND THIS REQUIREMENT.
  - 10.4. SECTION 17.4.3 DEPTH OF COVER  
NOT MEETING STANDARD DUE TO CONFLICTS WITH EXISTING AND PROPOSED UTILITIES. THE ALTERNATIVES IN SOME CASES INVOLVE INSTALLING PIPE OVER 2.5m DEEP, WHICH INTRODUCES LARGE TRENCHES/EXCAVATIONS, WHICH MAY PRESENT SAFETY RISKS AND INTERFERENCE WITH THE EXISTING 232ND STREET. CONCRETE SLABS/PADDING ARE SUGGESTED TO ADD MECHANICAL PROTECTION.

DRAFT ONLY  
NOT FOR CONSTRUCTION  
2024/02/21

<b>TO THE APPROVING OFFICE OF:</b>		<b>AUTHORIZATION NUMBER OR SIGNATURE AND DATE:</b>	
TOWNSHIP OF LANGLEY MINISTRY OF TRANSPORTATION & INFRASTRUCTURE			
PLATE MAP: 92G.018.021.4, 92G.018.031.2			
TIE IN METHOD		DEPTH OF MAIN (m)	
TAP SIZE (mm)		PRESSURE (kPag)	
PRESSURE TEST		DURATION	
<input type="checkbox"/> AIR	<input type="checkbox"/> NITROGEN	<input type="checkbox"/> HYDROSTATIC	<input type="checkbox"/> SOAP TEST
<b>INSPECTIONS</b>			
<input type="checkbox"/> RADIOGRAPHY (X-RAY)	<input type="checkbox"/> NDI OF WELDS	<input type="checkbox"/> DRESSER	<input type="checkbox"/> INSERT THRU OLD PIPE
<input type="checkbox"/> TRACER WIRE CONTINUITY	<input type="checkbox"/> MAG ANODE INSTALLED	<input type="checkbox"/> BORING TOOL USED	<input type="checkbox"/> PROTECTION BOARD
<input type="checkbox"/> STUB MARKER BALL	<input type="checkbox"/> OTHER		
<b>CONSTRUCTION REPORT</b>			
I HEREBY CERTIFY THAT THE PIPING WAS INSTALLED IN ACCORDANCE WITH THIS DRAWING (UNLESS OTHERWISE MARKED IN RED PEN) AND IN ACCORDANCE WITH CURRENT STANDARD PRACTICES AND WAS TESTED OF _____ kPag FOR _____ HOURS AND THAT NO LEAKAGE WAS DETECTED.			
DATE _____	FOREMAN _____	AREA MANAGER _____	
<b>RECORD DRAWING REPORT</b>			
<input type="checkbox"/> REFER TO RECORD DRAWING NOTE AND SEAL, OR			
DATE _____	APPROVER'S SIGNATURE _____	APPROVER'S NAME _____ (PLEASE PRINT)	
NON FORTISBC GAS INFRASTRUCTURE ASSUMED ACCURACY LEVEL 4 CSA S250 +/-100mm		SCALE 1:500 0 10 20 30 MEASUREMENTS ARE SHOWN IN METRES. NOMINAL PIPE DIAMETER IS SHOWN IN mm.	

VALVE LIST							
VALVE	NOMINAL SIZE	TYPE (PLUG, BALL, ETC.)	DEPTH (PIPE CL)	MANUFACTURER	FIGURE NUMBER	NO. OF TURNS TO OPERATE	VALVE NUMBER
(A)	114						96643

LEGEND	
--- PROP. DP GAS MAIN	● WILLIAMSON TEE
--- EXIST. DP GAS MAIN	● HALF SADDLE FITTING (HSF)
--- PROP. IP GAS PIPELINE	□ FULL SADDLE FITTING (FSF)
--- EXIST. TP GAS PIPELINE	□ ANCHORED DRESSER
--- DP SERVICE HEADER	--- STY. 39 & 90 INSULATED DRESSER
--- DEAD GAS PIPING	--- ELECTRO STOP
--- PROP. BONDING CABLE	--- ANCHORED INSULATED DRESSER
--- EXIST. BONDING CABLE	--- MAINTAINED WELD END VALVE
● MARKER BALL	● WILLIAMSON TEE
○ CAP	○ REDUCER
○ TRANSITION FITTING	○ TEST POINT
○ P.C.T.	○ BRANCH SADDLE
○ MAINTAINED/ SERVICE VALVE	○ RECTIFIER
○ MAINTAINED BALL VALVE	○ SURFACE ANODE
○ MAINTAINED SERVICE VALVE	○ DEEP ANODE
○ MAINTAINED INSULATED VALVE	○ PRE DUCT SLEEVE
○ MAINTAINED WELD END VALVE	○ PROTECTION BOARD
★ CUSTOMER STATION	★ REGULATOR STATION
★ GATE STATION	★ FLOW CTRL. STATION
★ VALVE STATION	★ IP STATION

FORTISBC DOES NOT WARRANT OR GUARANTEE, NOR ACCEPT ANY RESPONSIBILITY FOR THE LOCATION, ACCURACY OR COMPLETENESS OF THE DESIGNED INFORMATION SUPPLIED BY OTHERS CONTAINED IN THESE DRAWINGS, BUT DOES CERTIFY THAT THE DESIGNED INFORMATION, IF ACCURATE AND COMPLETE, PROVIDES A DESIGNED SYSTEM WHICH SUBSTANTIALLY COMPLIES IN ALL MATERIAL RESPECTS WITH THE CURRENT FORTISBC SPECIFICATIONS INTENT ON THE DATE OF ISSUE. PERSONS UTILIZING THE DRAWING AGREE AND ACCEPT THAT THEIR USE OF ANY INFORMATION CONTAINED THEREIN IS ENTIRELY AT THEIR OWN RISK. FORTISBC WILL NOT ACCEPT RESPONSIBILITY FOR ERROR OR OMISSIONS. YOU ARE REQUIRED TO CALL BC ONE CALL AT 1-800-474-6886 OR VISIT THEIR WEB PAGE www.bc1call.ca TO CREATE A NEW TICKET PRIOR TO COMMENCING ANY WORK.

**BC 1 CALL**  
CALL BEFORE YOU DIG  
1-800-474-6886 OR BY CELLULAR \*6886  
VANCOUVER AREA 257-1940  
www.bc1call.ca

**CALL AT LEAST TWO FULL WORKING DAYS BEFORE YOU PLAN TO DIG**

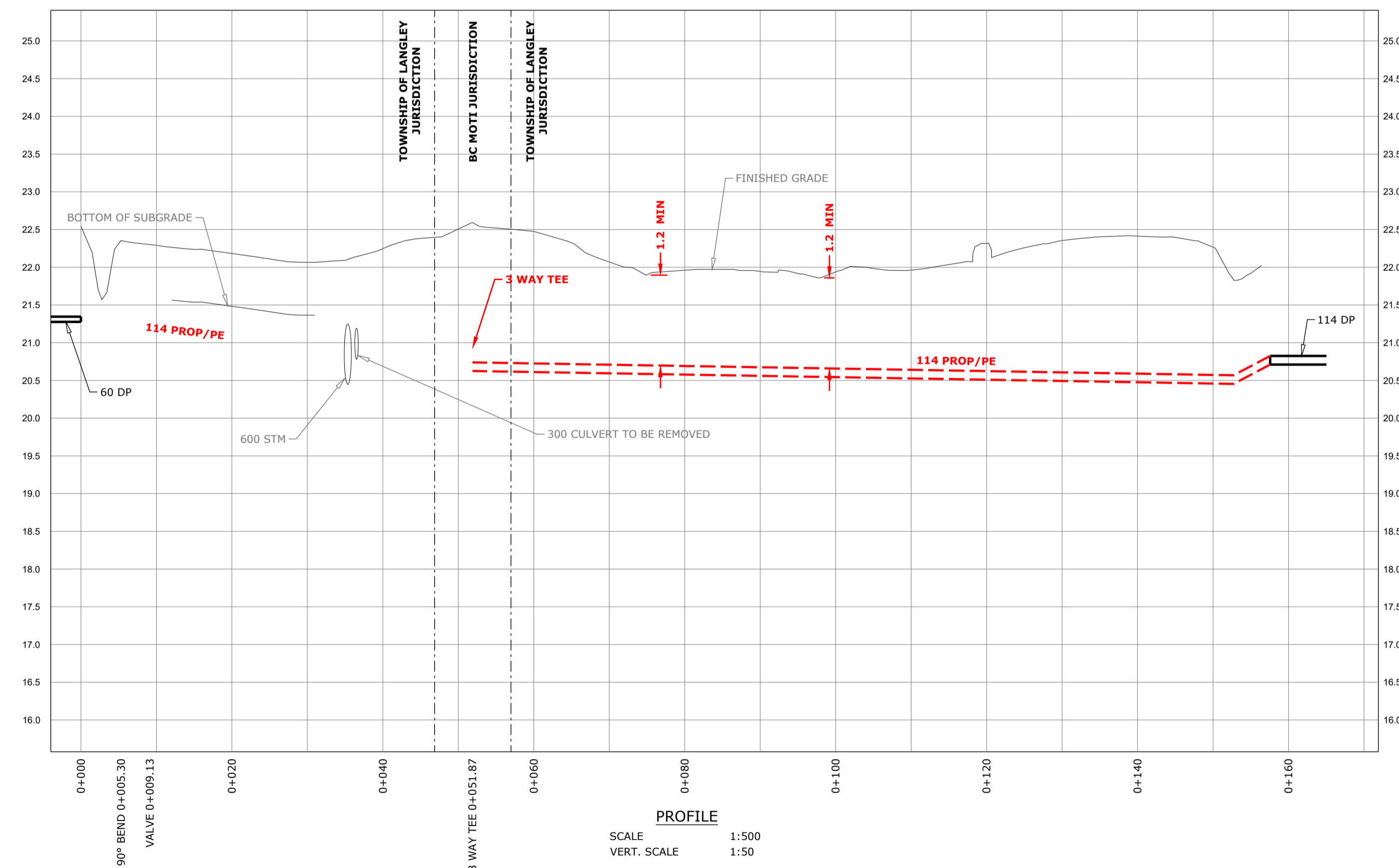
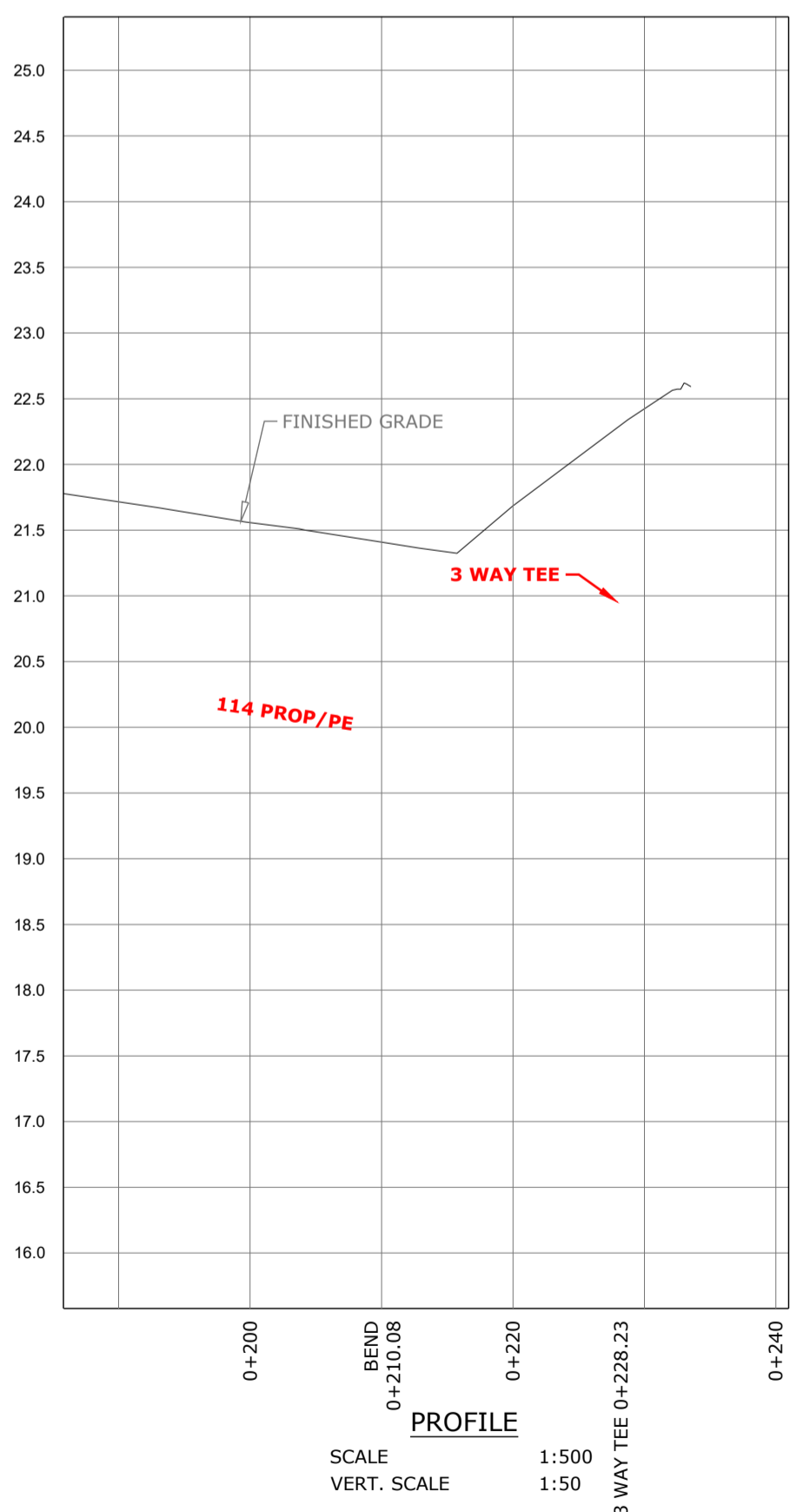
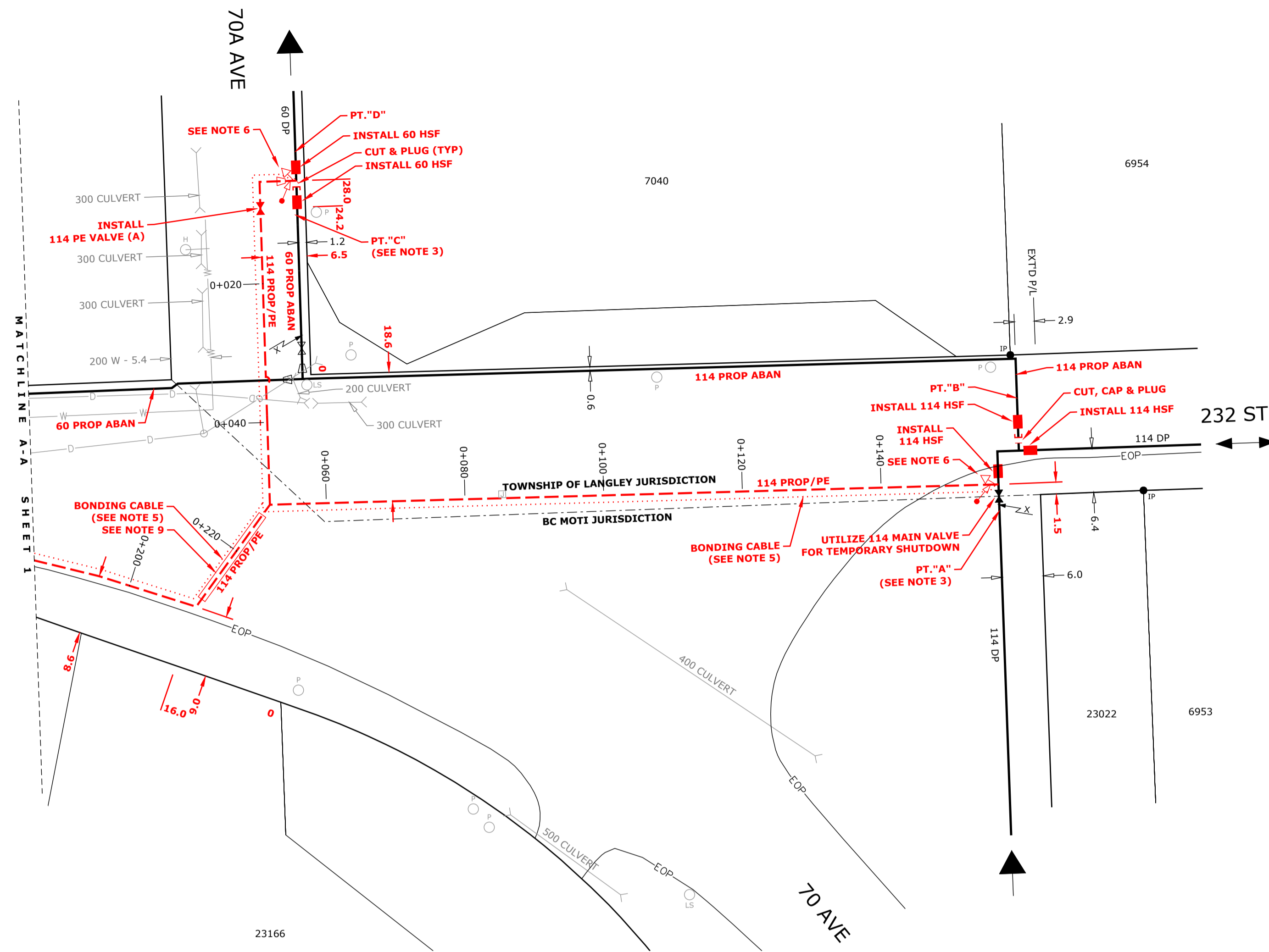
**OTHER UTILITIES AND INFRASTRUCTURE NOT OWNED BY FORTISBC ARE SHOWN FOR REFERENCE ONLY. CONTACT BC 1 CALL PRIOR TO CONSTRUCTION. PROVE LOCATIONS OF ALL UTILITIES PRIOR TO CONSTRUCTION.**

REV	DESCRIPTION	DRAWN	CHKD	DESIGNER	DATE
1	REV'D DESIGN	JM	RU	Y. D'ANDREA	2024/02/02
0		JM	RU	S. KATALEVSKIY	2024/01/01

ASSET TYPE	DESIGN CONTACT PH #	CONSTRUCTION SO #	DESIGN SJ #	ECONOMIC TEST #	PARENT SHO #
<input checked="" type="checkbox"/> DP MAIN <input type="checkbox"/> SERVICE HEADER <input type="checkbox"/> VERTICAL SUBDIVISION <input type="checkbox"/> IP GAS PIPELINE	604-690-3875	31143458			

**DISTRIBUTION PIPING DESIGN**  
16705 Fraser Highway | Surrey, BC V4N 0E8 | 1-888-224-2710

SIZE	DRAWING / SAP / PROJECT NUMBER	SH.	REV.
A1	2800500397	1 OF 2	1



LEGEND	
—	PROP. DP GAS MAIN
—	EXIST. DP GAS MAIN
---	PROP. IP GAS PIPELINE
---	EXIST. IP GAS PIPELINE
---	EXIST. TP GAS PIPELINE
---	DP SERVICE HEADER
---	DEAD GAS PIPING
---	PROP. BONDING CABLE
---	EXIST. BONDING CABLE
●	MARKER BALL
⌈	CAP
⌋	PLUG
⌋	REDUCER
⌋	TRANSITION FITTING
⌋	TEST POINT
⌋	P.C.T.
⌋	BRANCH SADDLE
⌋	WILLIAMSON TEE
⌋	HALF SADDLE FITTING (HSF)
⌋	FULL SADDLE FITTING (FSF)
⌋	WILLIAMSON SHORT STOP FITTING (SSF)
⌋	WILLIAMSON STORPLE FITTING (SFG)
⌋	NON-INSULATED DRESSER
⌋	NON-INSULATED ANCHORED DRESSER
⌋	STY. 39 & 90
⌋	ELECTRO STOP
⌋	ANCHORED INSULATED DRESSER
⌋	MAINTAINED/ SERVICE VALVE
⌋	ENCASED VALVE
⌋	MAINTAINED BALL VALVE
⌋	INSULATED SERVICE VALVE
⌋	MAINTAINED INSULATED VALVE
⌋	MAINTAINED WELD END VALVE
⌋	RECTIFIER
⌋	MAGNESIUM ANODE
⌋	SURFACE ANODE
⌋	TELEMETER
⌋	PRE-DUCT SLEEVE
⌋	PROTECTION BOARD
★	CUSTOMER REGULATOR STATION
★	REGULATOR STATION
★	GATE STATION
★	FLOW CTRL. STATION
★	VALVE STATION
★	JP STATION

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SEAL	
(IF REQUIRED)	DATE _____

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SCALE 1:500  
MEASUREMENTS ARE SHOWN IN METRES. NOMINAL PIPE DIAMETER IS SHOWN IN mm.

PROJECT LOCATION  
**232 St. and 70A Ave., LANGLEY**

**DISTRIBUTION PIPING DESIGN**  
16705 Fraser Highway | Surrey, BC V4N 0E8 | 1-888-224-2710



SIZE	DRAWING / SAP / PROJECT NUMBER	SH.	REV.
A1	2800500397	2 OF 2	1