

NOTES:

1. WORK PROCEDURE REQUIRED.
2. MAY REQUIRE WORKSAFE NOTICE OF PROJECT-NOP.
3. INSTALL 60mm BYPASS FROM PT."A" TO PT."B" AND 60mm BYPASS FROM PT."E" TO PT."F".
4. ABANDON 135.0 x 114 STL, 1971. CHARGE ALL ABANDONMENT COSTS TO #2800577045, SO#31292720. ABANDON 250.0 x 60 STL, 1972. CHARGE ALL ABANDONMENT COSTS TO #2800577046, SO#31292721. ABANDON 31.0 x 26 STL, 1978. CHARGE ALL ABANDONMENT COSTS TO #2800577053, SO#31292722.
5. INSTALL #6 BONDING CABLE INSIDE 42mm PIPE 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 DRAWING 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. USE TYPICAL HDD STANDARD DRAWING 22597-00-DW0.
10. VARIANCE FROM MINISTRY OF TRANSPORTATION AND INFRASTRUCTURE UTILITY POLICY MANUAL 2019 VERSION 1.0:
 - 10.1. SECTION 17.3.5 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 RAVINE 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.
 - 10.5. SECTION 17.5 PROTECTIVE MEASURES
THE PROPOSED CROSSING WILL BE DESIGNED TO WITHSTAND MAXIMUM HIGHWAY RATING LOADING WITH AN OVERWEIGHT PERMIT, AND ALL ACTIVITIES ON THE TRAVELLED SURFACE OF 232ND STREET. A THICKER WALL PIPE SHALL BE UTILIZED TO PROVIDE ADDITIONAL CONSERVATISM IN THE PIPE STRESS DESIGN, AND THE PIPE SHALL BE INSTALLED AT A DEPTH OF AT LEAST 2.0m BELOW THE TRAVELLED SURFACE AND DITCH BOTTOM.

NOT FOR CONSTRUCTION

| | | | |
|--|---|--|---|
| TO THE APPROVING OFFICE OF: | | AUTHORIZATION NUMBER OR SIGNATURE AND DATE: | |
| 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 |
| INSPECTIONS | | | |
| <input type="checkbox"/> RADIOGRAPHY (X-RAY) | <input type="checkbox"/> TRACER WIRE CONTINUITY | <input type="checkbox"/> MAG ANODE INSTALLED | <input type="checkbox"/> BORING TOOL USED |
| <input type="checkbox"/> DRESSER | <input type="checkbox"/> INSERT THRU OLD PIPE | <input type="checkbox"/> PROTECTION BOARD | <input type="checkbox"/> STUB MARKER BALL |
| CONSTRUCTION REPORT | | | |
| 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 _____ | |
| RECORD DRAWING REPORT | | | |
| <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 | |
| MEASUREMENTS ARE SHOWN IN METRES. NOMINAL PIPE DIAMETER IS SHOWN IN mm. | | 0 10 20 30 | |
| PROJECT LOCATION | | | |
| 232 St. and 70A Ave., LANGLEY | | | |

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

| LEGEND | |
|--------|----------------------------|
| | PROP. DP GAS MAIN |
| | EXIST. DP GAS MAIN |
| | PROP. IP GAS PIPELINE |
| | EXIST. IP GAS PIPELINE |
| | DP SERVICE HEADER |
| | DEAD GAS PIPING |
| | PROP. BONDING CABLE |
| | EXIST. BONDING CABLE |
| | MARKER BALL |
| | CAP |
| | PLUG |
| | REDUCER |
| | TRANSITION FITTING |
| | SHORT STOP FITTING (SSF) |
| | WILLIAMSON TEE |
| | P.C.T. |
| | BRANCH SADDLE |
| | NON-INSULATED DRESSER |
| | INSULATED DRESSER |
| | ELECTRO STOP |
| | ANCHORED INSULATED DRESSER |
| | MAINTAINED/ENCASED VALVE |
| | SURFACE ANODE |
| | DEEP ANODE |
| | TELEMETER |
| | PRE-DUCT SLEEVE |
| | 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.bctc.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.bctc.ca

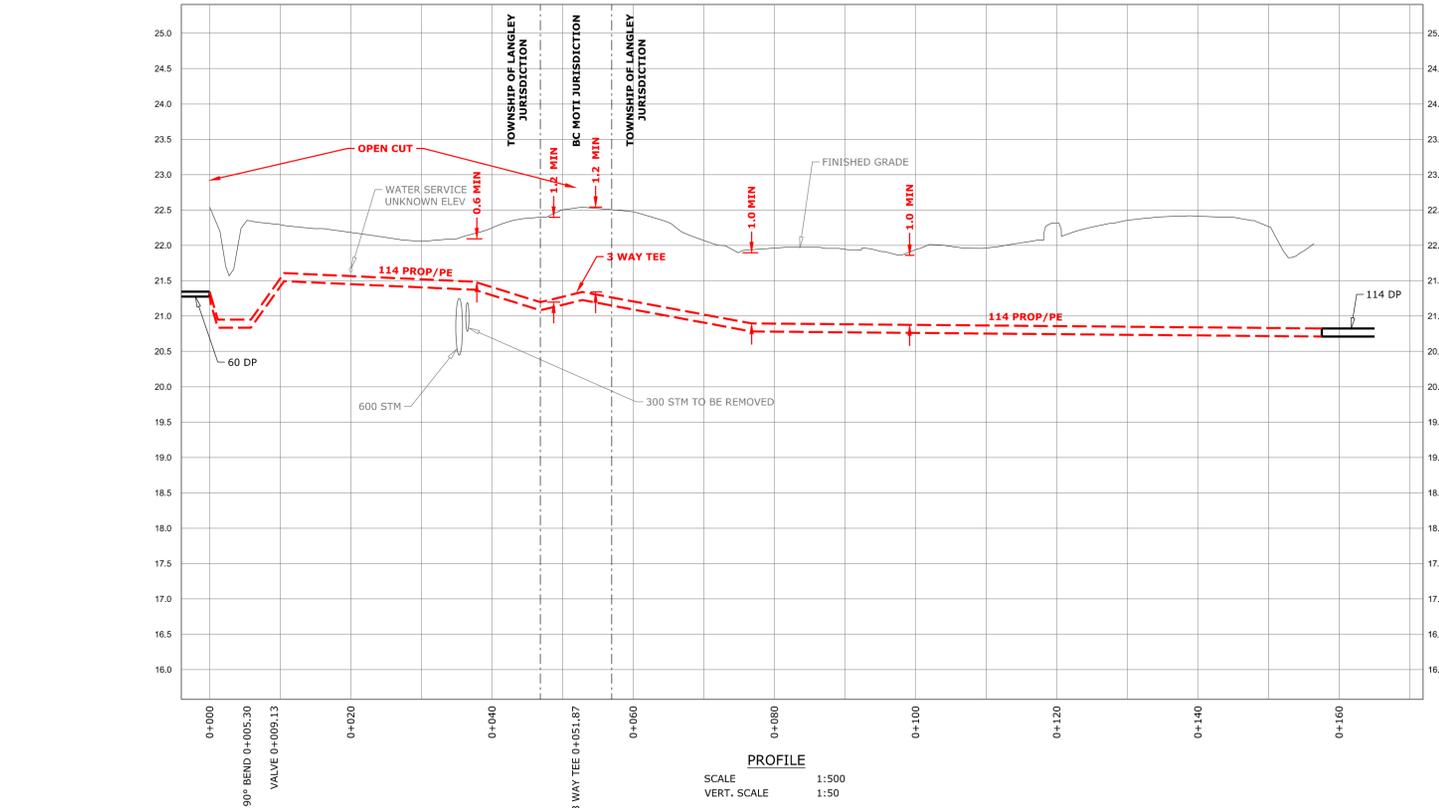
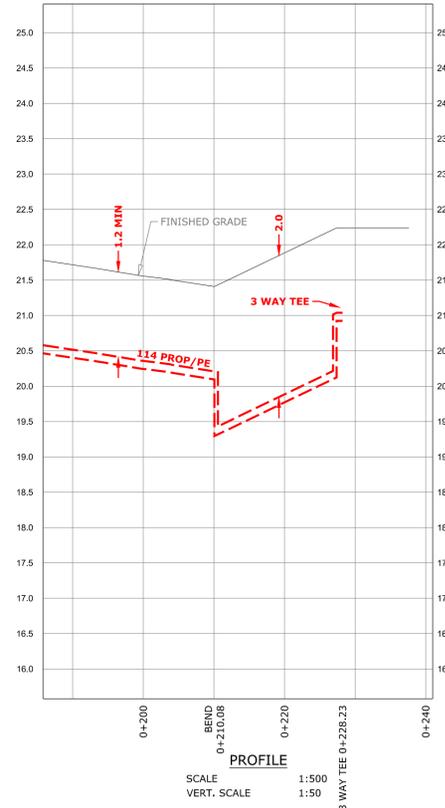
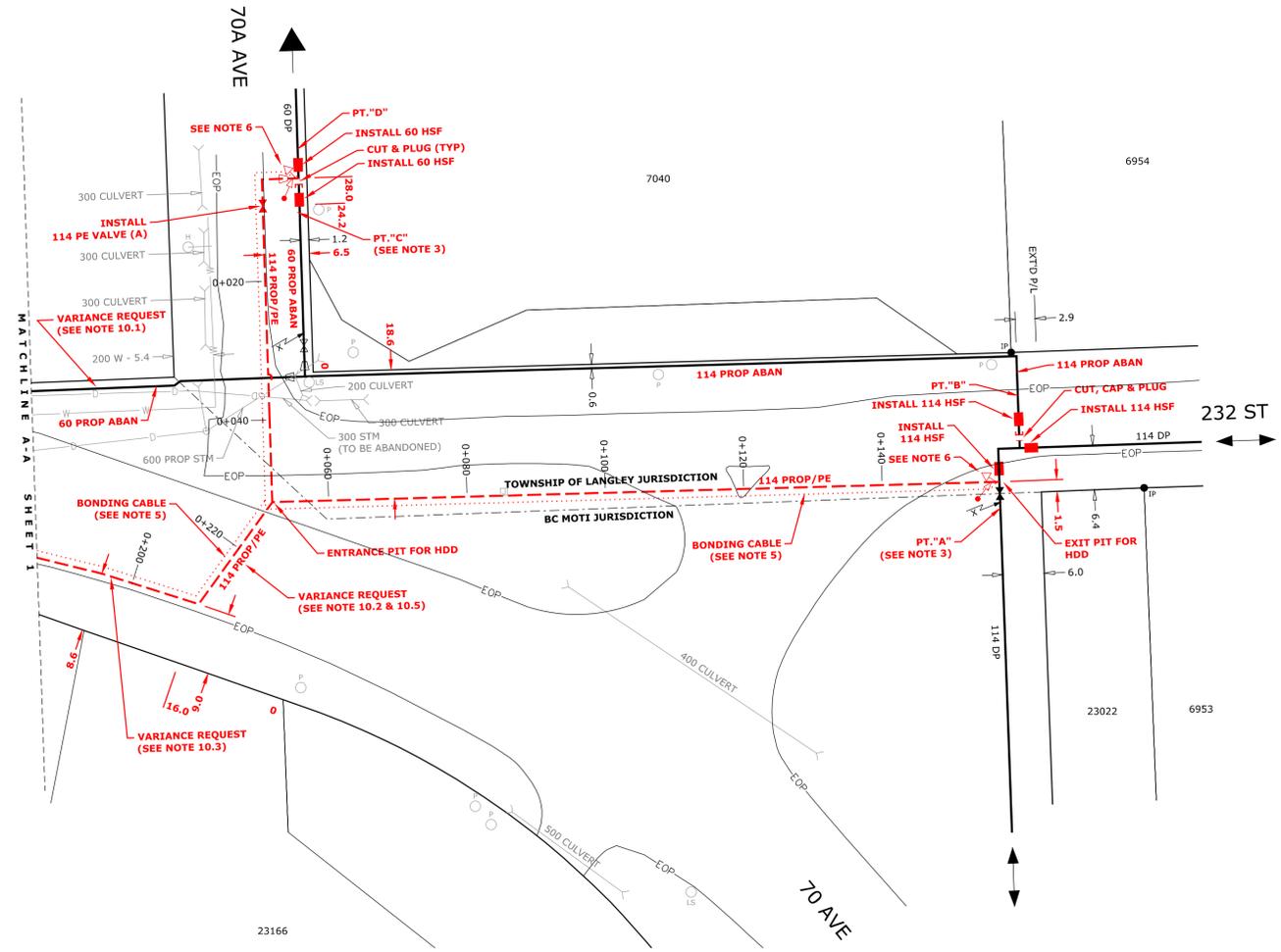
CALL AT LEAST TWO FULL WORKING DAYS BEFORE YOU PLAN TO DIG

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 | DATE | BY | CHKD | DESIGNED | DATE |
|-----|--------------|------------|----|------|----------------|------------|
| 1 | REV'D DESIGN | 2024/03/00 | JM | RU | Y. D'ANDREA | 2024/01/01 |
| 0 | | | JM | RU | S. KATALEVSKIY | 2024/01/01 |

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

| | | | |
|--|--------------------------------|--------|------|
| 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 |
| - - - | 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 STOPPLE FITTING (SFG) |
| ⊥ | NON-INSULATED DRESSER |
| ⊥ | NON-INSULATED ANCHORED DRESSER |
| ⊥ | STY. 39 & 90 INSULATED DRESSER |
| ⊥ | 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 |
| ⊥ | DEEP ANODE |
| ⊥ | TELEMETER |
| ⊥ | PRE-DUCT SLEEVE |
| ⊥ | PROTECTION BOARD |
| ★ | CUSTOMER STATION |
| ★ | REGULATOR |
| ★ | GATE STATION |
| ★ | FLOW CTRL. STATION |
| ★ | VALVE STATION |
| ★ | JP STATION |

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SEAL (IF REQUIRED)

DATE _____

NON FORTISBC GAS INFRASTRUCTURE ASSUMED ACCURACY LEVEL 4 CSA S250 +/-100mm

SCALE 1:500

MEASUREMENTS ARE SHOWN IN METRES. NOMINAL PIPE DIAMETER IS SHOWN IN mm.

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

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