Coquitlam

Addendum No. 3

City of Coquitlam
Tender 87422
Foster Pump Station Upgrades

(Consists of 8 Pages)

Issue Date: May 23, 2023

Tenderers shall note the following changes:

REVISIONS:

1. **The Tenderers shall note the following amendments to the AGREEMENT, Schedule 2 (LIST OF DRAWINGS):**

REMOVE:

TITLE	SHEET NO.	REVISION NO.	DATE
COVER SHEET & KEY PLAN	-	-	-
MECHANICAL – HVAC DETAILS	M121	0	05 APR 2023

REPLACE WITH:

TITLE	SHEET NO.	REVISION NO.	DATE
COVER SHEET & KEY PLAN	-	-	-
MECHANICAL – HVAC DETAILS	M121	1	12-May 2023

2. **REFER to: Appendix E – Supplementary Specifications (Project)**

Section 26 29 23 11 – Variable Frequency Drive

Add to Clause 2.1.1.11

- ABB
- Schneider
- Mitsubishi
- Eaton

Any proposed VFD alternates will need to be provided with detailed shop drawings for review by the Engineer showing how the functionality shown in the Contract Documents will be maintained with the alternate products being proposed (such as I/O configuration and parameter settings to achieve the required controls, analog speed setpoint and feedback signals, hand mode selection, and hand speed controls).

Section 26 28 16.02 – Molded Case Circuit Breakers

Add to Clause 2.0.1

Schneider would be considered as an equivalent standard of acceptance to Eaton.

Section 26 32 13 – Diesel Generating Set Supply

Add Clause 1.11 Sound Level

While running at rated load, the sound pressure level measured at 7m outside the enclusoure in a free field condition shall be 75 dBA or less. Provide an independent test report of sound pressure level of assembled unit onsite verifying unit performance.

Section 26 54 00 – Heaters and Ventilation

Add Clause 2.4.6

Two programmable thermostats are required. One for pump room at entry door (to control the fans / heaters in this room) and one for the electrical room mounted inside new double doors to control new AC/heat pump unit.

3. ADD: Appendix F – BC Hydro Design Drawing

Add BC Hydro Drawing No. 413-U07-03791 dated: 2023-01-20

CONTRACTOR QUESTIONS and CLARIFICATIONS

Q1) From reading the specs, our understanding is that an equivalent to the specified Eaton DG-1 drives and MCC would be accepted, as they are stated as a "Standard of Acceptance". Would a quotation with a Schneider Model 6 MCC and Altivar 630 drives be accepted?

A1) Schneider Altivar630 VFDs would be considered an equivalent standard of acceptance.

Schneider is generally considered an equivalent standard to Eaton across their common product lines, whether that be for Breakers, Switches, MCCs, or VFDs.

Other approved VFD alternatives are:

(1) ABB
(2) Schneider
(3) Mitisubishi
(4) Eaton

Any proposed VFD alternates will need to be provided with detailed shop drawings for review by the Engineer showing how the functionality shown in the Contract Documents will be maintained with the alternate products being proposed (such as I/O configuration and parameter settings to achieve the required controls, analog speed setpoint and feedback signals, hand mode selection, and hand speed controls).

Q2) For the generator, what is the required sound level (decibels) for the unit?

A2) While running at rated load, the sound pressure level measured at 7m outside the enclusoure in a free field condition shall be 75 dBA or less. Provide an independent test report of sound pressure level of assembled unit onsite verifying unit performance."

Q3) Appendix C - Updated Arborist Report, Add 1-11, Section 3.0: "Nineteen trees are proposed for removal to accommodate the proposed plan." On the drawing C101 we see only 5 trees shown as to be removed. Please confirm the number of trees to be removed.

A3) The arborist report includes groups of trees and unsurveyed trees which may not be shown on the civil drawings. The arborist report takes precedent for tree removals.

Q4) Please confirm if these pumps have to be NSF 61 certified, or what level of compliance is required given that the application is for potable water.

Can City please clarify is this time and material project or Lump Sum price project?

A4) Yes, NSF61 certification required.

Q5) The project requires to remove the existing Peerless pumps and install the new one in the existing cans. We need the dimensions of the existing can to verify if the new pumps will work following the HI guidelines.

A5) See ASB 7 (record drawings provided as part of Appendix B of tender set)

Q6) Please provide details on the BC Hydro Scope of supply/overall design for all the work from the street pole, u/g conduit ducting, cables and new pad mounted transformer. This would have been provided by BC Hydro Express connect. What portion of that will be provided by BC Hydro?

A6) BC Hydro will provide the new pad mounted transformer and the conductors between the pole and the transformer, and the transformer and the service kiosk. The Contractor is responsible for supplying and installing all other works including but not limited to pole pilaster, u/g conduit ducting, trenching, concrete, etc.

Q7) Drawing E350 shows outside lighting, provide design criteria for these fixtures.

A7) Exterior fixture listed in lighting specification 26 50 00

Q8) Any heat detectors inside the pumphouse to be added? Drawings don't show any but listed in the spec only for the generator building.

A8) Two programmable thermostats are required. One for pump room at entry door (to control the fans / heaters in this room) and one for the control room mounted inside new double doors to control new AC/heat pump unit.

Q9) The HMI-200 to be installed on the PLC panel or out in the field (dwg E340,E240). Dwg E230 shows on in the PLC panel door. Please clarify.

A9) 2 HMI's are required, one is to be installed on the Control Panel door (HMI-100), the second (HMI-200) is to be installed in the pump room NE corner with a NEMA12 rated cabinet and associated DIN Rail and terminal blocks to facilitate power connections.

Q10) Specific make and model for Motion Detectors?

A10) Use motion detectors compatible with the proposed security panel manufacturer model listed in the specifications.

Q11) Is an AC unit stand required for snow protection?

A11) Detail E on drawing M121 is revised to include a fabricated heat pump unit stand and revised concrete pad thickness.

Q12) What is the exsiting pump station crane lifting height?

A12) The existing pump station crane can be used by the Contractor. The maximum lift height is approximately 3.85 m from the top of grating elevation.

Q13) Section 43 21 13**,** 2.8.2 and 2.83 – standard construction for vertical turbine pumps is to use 416 SS shafting rather than coating the steel at the bearing points, or using sleeves?

A13) Use of a 416 SS line shaft as an alternate is acceptable.

Q14) As existing genset to be removed, demo, please confirm the weight of it.

A14) Refer to ASB 29 for available generator details.

Q15) Drawing C101, S105, M100, M107 - Existing 600 dia discharge main to be demo and re-routed.... We understand that we are going to use existing opening for new 600mm pipe installation as per M107. Please confirm that this opening is big enough for the pipe and link seal installation. There are not any notes on the drawings for extra coring to 'make opening bigger' to accommodate new pipe installation.

A15) It is expected that additional coring will be required for the new pipe installation.

Q16) Confirm requirement to re-coat all existing piping to AWWA C210. Do existing valves, couplings, and fasteners need to be removed for coating, or can remaining pipe work be coated as an assembly? If removal is required, should the Contractor allow for all new gaskets and fasteners?

A16) Coat existing piping in-place as an assembly, no removal required.

Q17) Reference drawing C111, "Existing underground electrical lines to be temporarily relocated during the construction". Please provide details for UG utilities relocation and restoration, including trench depth, duct bank details, temporary and permanent locations etc.

A17) Temporary relocation not required. Substation to be removed prior to lock block wall construction as per C111.

Q18) Drawing E110 shows power feeder from PS to 120V panel for PTZ1 & 2. This is not accounted for on the panel schedule.

A18) Panel schedule drawing to be updated in the Issued for Construction drawing package. Contractor to install power feeder cables as stated on drawing E110. Allow for additional breakers in the panel.

Q19) Drawing E110 shows section C duct bank with raceways containing feeders C016, P013, C017, C040 & P003. These raceways would account for 3 x 3", 3 x 1 ¼" & 3 x 2" conduits as well as a direct buried Teck cable feeder for P013. Please revise Section C duct bank to account for all required raceways in this section.

A19) Duct bank profile to be updated in the Issued for Construction drawing package.

Q20) Please confirm if feeder P013 noted as Teck cable on E243, is to be installed in Rigid PVC from the generator enclosure to pump station.?

A20) Feeder P013 to be installed in RPVC.

Q21) Please confirm that CJB-400 shown on E340 is to be labelled as CJB-100. Refer to E242 C42.

A21) CJB-100 is an acceptable label to replace the reference shown on sheet E340. To be updated in Issued for Construction drawings.

Q22) Drawing E231 shows SV-301D & SV-301C with incorrect labels. Please confirm they are to be both labelled CF-C069.

A22) Correct, both should reference raceway CF-C069.

Q23) Please confirm future VFD440 feeder is to be excluded from this tender price.

A23) Feeder up to and including the VFD breaker shall be provided as part of the MCC. Equipment downstream of the VFD440 breaker is not required as part of this work.

Q24) Honeywell T775 is a base model spec. There are many different options for this control panel, please provide a detailed part number or the options that are required in this control cabinet.

A24) Please provide a model that fits the functionality shown in drawing E611 complete with NEMA 12 rated cabinet, and operator switches for the pump room. The generator enclosure may also use a T775 thermostat for control of its equipment.

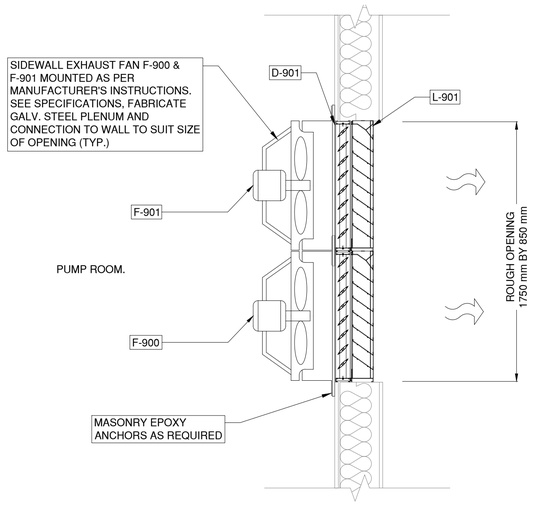
End of Addendum No. 3

Tenderers shall take into account the content of this Addendum in the preparation and submission of the Tender which will form part of the contract and should be acknowledged on the Tender form where indicated.

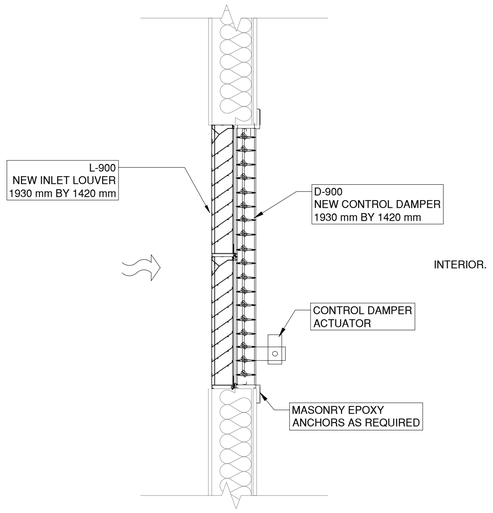
Upon submitting a Tender, Tenderers will be deemed to have received all addenda and considered the information for inclusion in the Tender submitted.

Issued by:

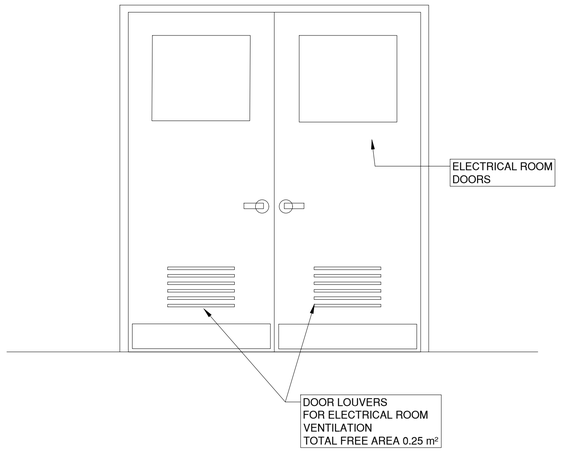
M. Pain
Purchasing Manager
Email: bid@coquitlam.ca



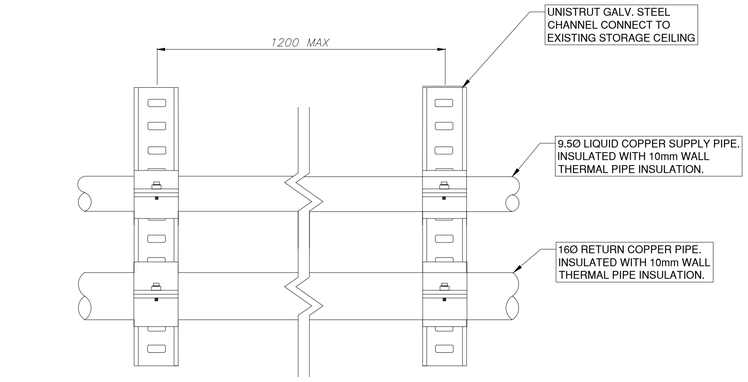
A M-120 EXHAUST FAN, BACKDRAFT DAMPER AND LOUVER DETAIL



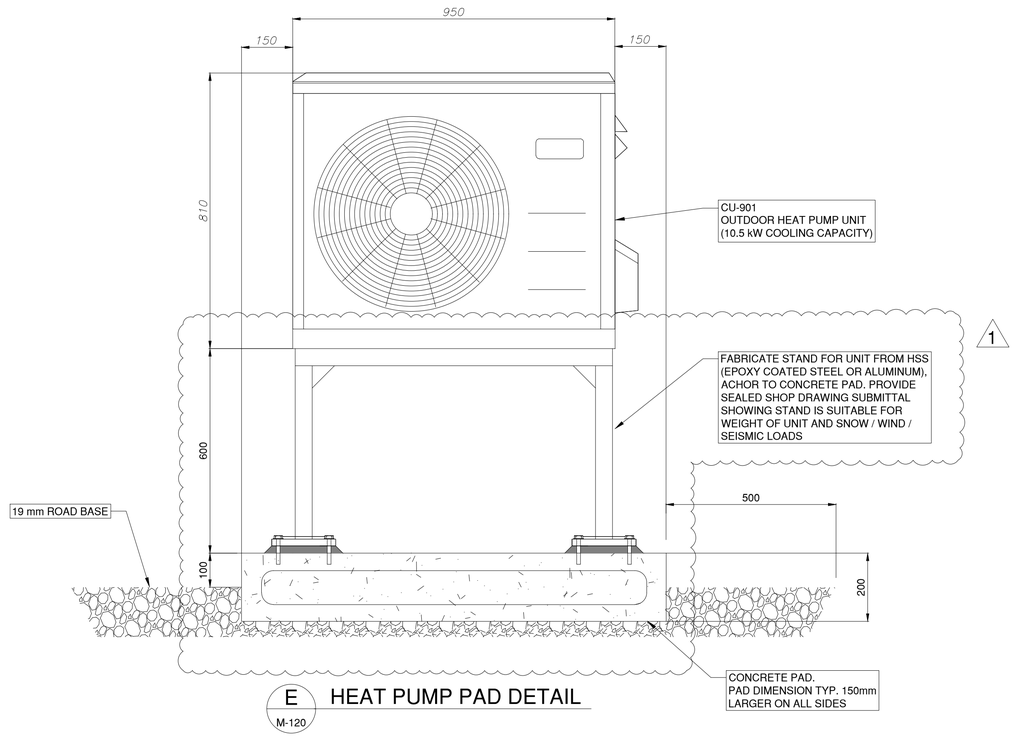
B M-120 INLET DAMPER AND LOUVER DETAIL



C M-120 DOOR LOUVER DETAIL



D M-120 CONDENSER HEATPUMP CONNECTION DETAIL



E M-120 HEAT PUMP PAD DETAIL

Benchmark:

Note:
Contractor to contact Telus, BC Hydro, FortisBC and BC one call prior to construction to confirm locations of utilities and appurtenances requiring adjustment.

WATER STREET ENGINEERING

No.	Date	By	Revisions
1	12-MAY-2023	KL	ADDED HEAT PUMP STAND
0	05-APR-2023	KL	ISSUED FOR TENDER

Coquitlam
Engineering & Public Works
3000 Guildford Way, Coquitlam, B.C. V3B 7N2

PERMIT TO PRACTICE
Signature:
Date:
PERMIT NUMBER: 1000830
The Association of Professional Engineers and Geoscientists of British Columbia

Seal:

Design by NW	Date 2022-06-23	Scale 1:250
Drawn by KL	Date 2022-06-23	Sheet of
Checked by NW	Date 2023-04-05	Eng. Project No. 87422
Approved by NW	Date 2023-04-05	

Project: CITY OF COQUITLAM
FOSTER PUMP STATION UPGRADES

Description: MECHANICAL
HVAC DETAILS

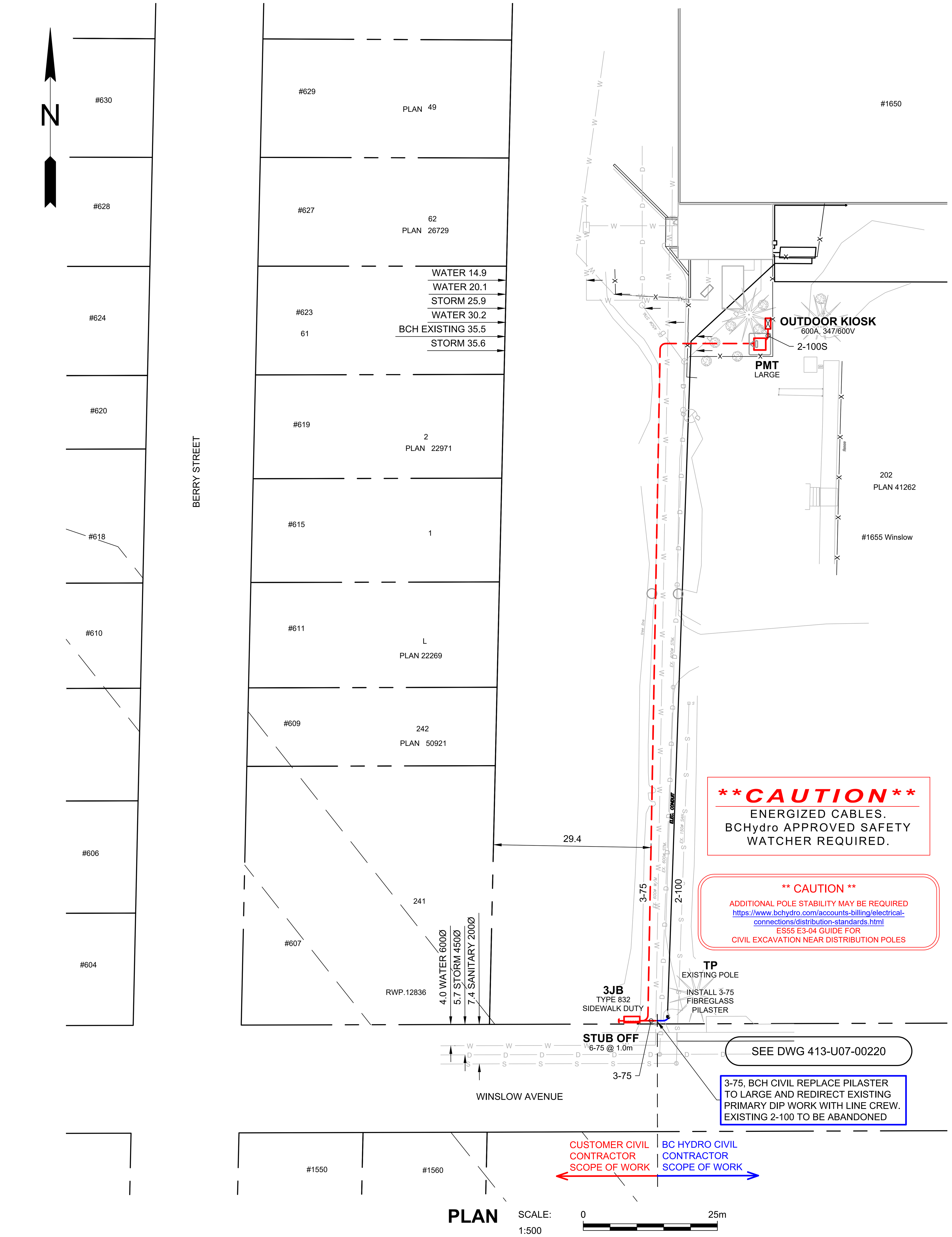
File: M-120_&_M-121_HVAC Overview Plan & HVAC Details

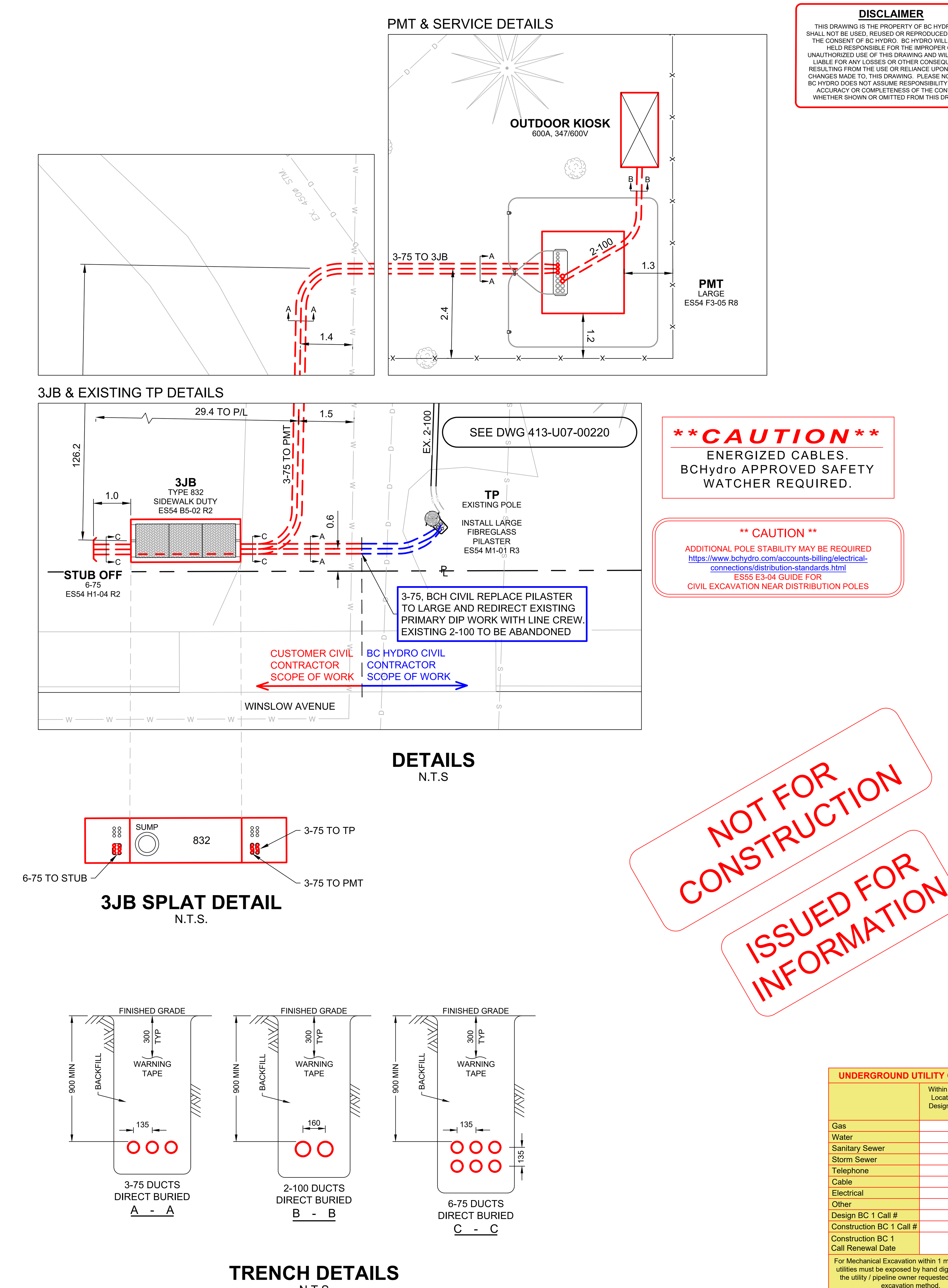
M121

Plot Date: May 12, 2023

Appendix F -

BC Hydro Design Drawing





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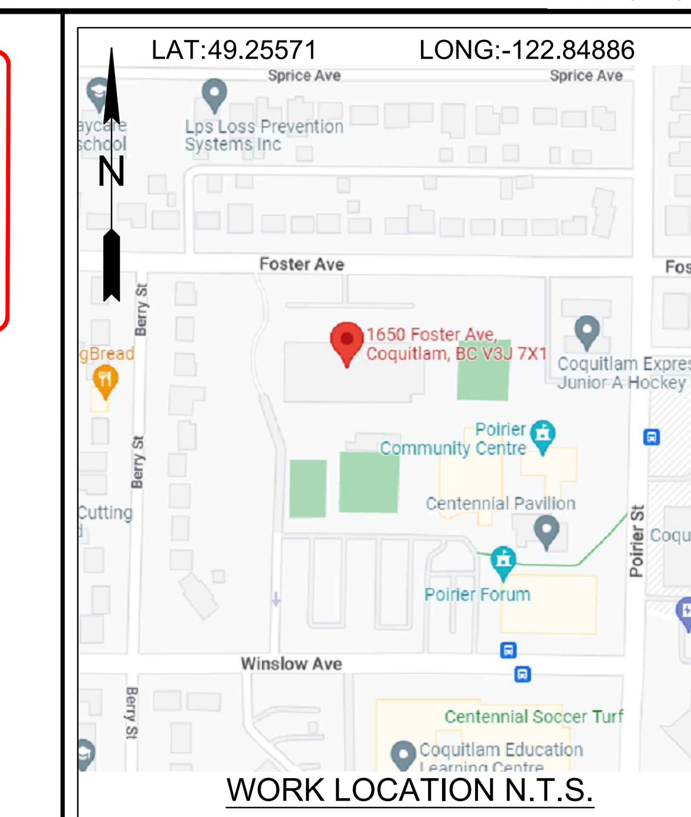

BC ONE CALL

CALL BEFORE YOU DIG
1-800-474-6886

CALL AT LEAST 3 FULL WORKING DAYS BEFORE YOU PLAN TO DIG

CIVIL SPEC. 1323 NOTES:

1. BC HYDRO UNDERGROUND CIVIL INSPECTOR MUST BE NOTIFIED 48 HOURS PRIOR TO CONSTRUCTION.
2. ALL WORK TO BE PERFORMED IN ACCORDANCE WITH CLASS OF WORK SPECIFICATION 1323 AND BC HYDRO UNDERGROUND DISTRIBUTION ENGINEERING STANDARDS SERIES ES53 AND ES54.
3. ANY CHANGES NEED TO HAVE PRIOR APPROVAL OF BC HYDRO CIVIL INSPECTOR.
4. UNLESS OTHERWISE NOTED ON TRENCH DETAILS OR REQUIRED PER ES 54 H0-02.02, ALL CONDUIT INSTALLATION FOR BC HYDRO ON PUBLIC OR PRIVATE PROPERTY SHOULD HAVE MIN. 0.9m COVER AND ANY FACTORY BEND MUST HAVE A MIN. RADIUS OF 0.9m.
5. ALL UTILITIES (EXCEPT TELUS) MUST MAINTAIN A 0.9m HORIZONTAL AND 0.3m VERTICAL SEPARATION FROM BC HYDRO DUCT UNLESS DIRECTED OTHERWISE BY BC HYDRO CIVIL INSPECTOR.
6. OTHER UTILITIES SHOWN ON THE CIVIL DRAWING ARE FOR REFERENCE ONLY. PROVE LOCATION OF ALL UTILITIES IN THE WORK AREA BEFORE CONSTRUCTION. FOR CURRENT INFORMATION CONTACT BC ONE CALL.
7. ALL OFFSETS INDICATE CENTERLINE OF BC HYDRO PLANT.
8. METRES EXPRESSED IN DECIMALS, MILLIMETRES IN WHOLE NUMBERS.
9. TRANSFORMER MUST BE A MIN. OF 1.5m BEHIND NON-MOUNTABLE CURB OR PROTECTED. FINAL NUMBER AND LOCATION OF PROTECTION POSTS TO BE DETERMINED IN THE FIELD BY BC HYDRO CIVIL INSPECTOR.
10. FOR TRANSFORMER PAD COUNTERPOISE CLEARANCES TO OTHER UTILITIES AND UNDERGROUND CONDUCTIVE SURFACES, SEE ES54.
11. MIN. OFFSET FOR BC HYDRO DUCTS, IN JOINT TRENCH, FROM PROPERTY LINE IS 1.2m, UNLESS OTHERWISE NOTED.
12. STUB SERVICE DUCT 1.0m FROM PROPERTY CORNER AND 1.0m INTO THE LOT UNLESS OTHERWISE NOTED.
13. IT IS THE RESPONSIBILITY OF THE RESOURCE THAT IS PERFORMING THE INSTALLATION OF THE PROPOSED CIVIL WORKS TO PROVIDE BC HYDRO WITH A RECORD DRAWING(S) OF THE CONSTRUCTION. THE RECORD DRAWING(S) MUST BE RECEIVED AND ACCEPTED BEFORE ELECTRICAL WORK WILL COMMENCE.

CUSTOM NOTES HERE IF REQUIRED

UNDERGROUND UTILITY CHECKS	Within 1m of Plant Location (as per Design BC 1 Call) Y/N
Gas	
Water	
Sanitary Sewer	
Storm Sewer	
Telephone	
Cable	
Electrical	
Other	
Design BC 1 Call #	
Construction BC 1 Call #	
Construction BC 1 Call Renewal Date	

For Mechanical Excavation within 1 metre of plant, utilities must be exposed by hand digging, unless the utility / pipeline owner requested a different excavation method.

Design BC 1 Call Ticket number valid for planning purposes only. Ticket refresh by a Construction BC 1 Call must be completed.

CIVIL PLAN LEGEND:

BC HYDRO RESPONSIBILITY		CUSTOMER RESPONSIBILITY
	NEW DUCT	
	EXISTING DUCT	
	FIELD COMPLETED DUCT	
	SERVICE BOX	
	TERMINAL POLE	
	LOW PROFILE TRANSFORMER (LPT-PYRAMID PAD)	
	LOW PROFILE TRANSFORMER (LPT)	
	PAD MOUNT TRANSFORMER (PMT)	
	3Ø & 1Ø JUNCTION & PULL BOXES (332, 632, 832 & 1232)	
	PRECAST MANHOLE	
	VISTA SWITCH SUBMERSIBLE (VSWB)	
	VISTA SWITCH ABOVE GROUND (VSWA)	

REFER TO ES53 AND ES54 UNDERGROUND STANDARDS

NO	DRAWING NUMBER	DRAWING TITLE
1	413-U07-00220	UNDERGROUND DUCT AND STRUCTURES

REFERENCE DRAWINGS

NO	REMARKS
0	DESIGN: 0004395876 - NEW DRAWING

REVISIONS

DESIGN NUMBER	0004395876	DSGN	K.ISRAELYAN
WORK ORDER NUMBER		INDEP CHK	
CSA S250 ACCURACY NAD 83 - 10UTM		DFTG	L.TAN (AUS)
		DFTG CHK	C.SANBUENAVENTURA (AUS)
BASE ACCURACY LEVEL: 4 +/- 1000 mm		INSP	
		REV	
ASB ACCURACY LEVEL: 4 +/- 1000 mm		ACPT	

BC Hydro

LMN - COQUITLAM - MAPLE RIDGE
COQUITLAM DISTRICT OFFICE
UNDERGROUND DUCT AND STRUCTURES FOR
FOSTER PUMP STATION - 600A 347/600B
1650 FOSTER AVENUE, COQUITLAM
SHEET 1 OF 1

DATE	DIST	DRAWING NUMBER	REPORT NUMBER	FIG NO	SIZE	REV
2023JAN20		413-U07-03791			D	0

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Drawing Unit = Metric (0)
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1/20/2023 9:23 AM