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British Columbia
V6Z 0B9
Bid Fax: (604) 775-9381

SOLICITATION AMENDMENT
MODIFICATION DE L'INVITATION

The referenced document is hereby revised; unless otherwise indicated, all other terms and conditions of the Solicitation remain the same.

Ce document est par la présente révisé; sauf indication contraire, les modalités de l'invitation demeurent les mêmes.

Comments - Commentaires

Vendor/Firm Name and Address
Raison sociale et adresse du fournisseur/de l'entrepreneur

Issuing Office - Bureau de distribution
Public Works and Government Services Canada - Pacific Region
800 Burrard Street, Room 219
800, rue Burrard, pièce 219
Vancouver
British C
V6Z 0B9

Title - Sujet South Substation Switchgear Replace	
Solicitation No. - N° de l'invitation EZ108-162126/A	**Amendment No. - N° modif.** 005
Client Reference No. - N° de référence du client	**Date** 2016-03-14
GETS Reference No. - N° de référence de SEAG PW-$PWY-026-7753	
File No. - N° de dossier PWY-5-38400 (026)	**CCC No./N° CCC - FMS No./N° VME**
Solicitation Closes - L'invitation prend fin **at - à 02:00 PM** **on - le 2016-03-29**	**Time Zone** **Fuseau horaire** Pacific Daylight Saving Time PDT
F.O.B. - F.A.B. **Plant-Usine:** ☐ **Destination:** ☑ **Other-Autre:** ☐	
Address Enquiries to: - Adresser toutes questions à: Liu (PWY), Patty	**Buyer Id - Id de l'acheteur** pwy026
Telephone No. - N° de téléphone (604) 775-6227 ( )	**FAX No. - N° de FAX** (604) 775-6633
Destination - of Goods, Services, and Construction: **Destination - des biens, services et construction:** PWGSC - Esquimalt Graving Dock - Victoria, BC	

Instructions: See Herein

Instructions: Voir aux présentes

Delivery Required - Livraison exigée	**Delivery Offered - Livraison proposée**

Vendor/Firm Name and Address
Raison sociale et adresse du fournisseur/de l'entrepreneur

Telephone No. - N° de téléphone
Facsimile No. - N° de télécopieur

Name and title of person authorized to sign on behalf of Vendor/Firm (type or print)
Nom et titre de la personne autorisée à signer au nom du fournisseur/ de l'entrepreneur (taper ou écrire en caractères d'imprimerie)

Signature **Date**

Canada

Solicitation No. - N° de l'invitation	Amd. No. - N° de la modif.	Buyer ID - Id de l'acheteur
EZ108-162126/A	005	pwy026
Client Ref. No. - N° de réf. du client	File No. - N° du dossier	CCC No./N° CCC - FMS No./N° VME
	PWY-5-38400	

AMENDMENT 005

Amendment 005 has been raised to incorporate Addendum No. 2.

All other terms and conditions remain unchanged.

The following changes/clarifications in the tender documents are effective immediately. This addendum will form part of the contract documents.

Special Instructions to Bidders

1.0 SPECIFICATIONS

1. Refer to Specification Section 07 16 16, Crystalline Waterproofing, 1.1 Section Included.

Delete:

.1 Furnishing of all labor, materials, services and equipment necessary for the supply and installation of crystalline waterproofing additive to concrete structures of the new concrete driveway and supporting structure at the south side of the new southside substation. The crystalline waterproofing material shall be added to concrete during the mixing cycle, and shall be used in below-grade walls and slabs.

Add:

.1 Furnishing of all labor, materials, services and equipment necessary for the supply and installation of crystalline waterproofing additive to all below grade concrete structures and the new concrete driveway and supporting of the new substation. The crystalline waterproofing material shall be added to concrete during the mixing cycle, and shall be used in below-grade walls and slabs.

2. Refer to Specification Section 07 18 16, Traffic Deck Waterproof Membrane, 2.1.2 Materials.

Change:

Area	Primer	Membrane	Intermediate Coat	Topcoat	Total Thickness *
Room Areas	4-6	25	0	20	45

To:

Area	Primer	Membrane	Intermediate Coat	Topcoat	Total Thickness *
Concrete Driveway	4-6	25	0	20	45

3. Refer to Specification Section 07 95 20, Below Grade Expansion Joint, 2.1 General.
Delete:

.6 Sealant System is to be installed slightly recessed from the surface such that when the field-applied injection band of silicone is installed between the substrates and the foam-and-silicone-bellows, the system will be essentially flush with the substrate surface.

Add:

.6 Sealant System is to be installed slightly recessed from the surface such that when the field-applied injection band of silicone is installed between the substrates and the foam-and-silicone-bellows, the system will be essentially flush with the substrate surface. The system will be subjected to hydrostatic pressure from ground water and sea water.

4. Refer to Specification Section 08 50 00, Windows, 1.3 Action and Informational Submittals.
Delete:

.5 Performance Requirement

.1 Air Infiltration: The test specimen shall be tested in accordance with ASTM E 283 Standard Test Method for Determining the Rate of Air Leakage Through Exterior Windows, Curtain Walls, and Doors Under Specified Pressure Differences Across the Specimen. Air infiltration rate shall not exceed 0.06 cfm/ft^2 (0.3 l/s m^2) at a static air pressure differential of 6.24 psf (300Pa).

.2 Water Resistance (static): The test specimen shall be tested in accordance with ASTM E 331 Standard Test Method for Water Penetration of Exterior Windows, Skylights, Doors, and Curtain Walls by Uniform Static Air Pressure Difference. There shall be no leakage at a static air pressure differential of 12 psf (575 Pa) as defined in AAMA 501.

.3 Uniform Load: ASTM E 330 Standard Test Method for Water Penetration of Exterior Windows, Skylights, Doors, and Curtain Walls by Uniform Static Air Pressure Difference. Requirements for this should be confirmed with the glazing systems structural engineer.

5. Refer to Specification Section 08 50 00, Windows, 2.1 Materials.
Add:

.7 Overall U-value including glass and frame to be 2.0 W/m2K maximum.

2.0 QUESTIONS

1. Drawing 5110 shows a CAT6 going from the access controller cabinet to "new Ethernet switch in comm room". Who supplies the supplies the switch? What are the specs for this switch?
Response: Refer to Electrical Tender Addendum No. 2

2. Drawing 5110 shows a 21mm conduit from the access controller cabinet "for repeater power". What is repeater power?
Response: Refer to Electrical Tender Addendum No. 2

3. The Div 28 Spec does not call for a Lenel Intelligent System controller (ISC). A LNL-3300 ISC is required for the Electrified locks on this building to communicate to the rest of the Lenel Access control system over the network.
Response: Refer to Electrical Tender Addendum No. 2

4. Drawing 5010 please confirm if the 600A breaker shown at the top of the single line is intended to be a main breaker in 25/12 SSSR or a stand alone breaker (located where).
Response: Refer to Electrical Tender Addendum No. 2

5. Access riser shown 5110 differs from indicated devices at doors on 5109. Please confirm which rough in should be allowed.
Response: Refer to Electrical Tender Addendum No. 2

6. EUH 5 appears on 3/5109 but does not appear on the Mechanical equipment schedule. Please confirm it requires 3 phase 600V power as per the other heaters.
Response: Refer to Electrical Tender Addendum No. 2

7. Please confirm the interlock for BBH 1 is to connect to IAC-1.
Response: Refer to Electrical Tender Addendum No. 2

8. Reference drawings 5105 & 5109 it is difficult to tell if there is size variations in the tray widths. Please confirm if all tray is 36” wide or if the tray colours correlate to differing dimensions.
Response: Refer to Electrical Tender Addendum No. 2

9. Variable Frequency Drives are identified in the EMCS specification. Please confirm electrical is to provide the VFD for MUA 1 as pre equipment schedule on 5111.
Response: Refer to Electrical Tender Addendum No. 2

10. Transfer switch cable sizing (2x 350 Notes 4&5 on 5114) differ from single line 5011 (2x 4c 250). Please confirm which is correct.
Response: Refer to Electrical Tender Addendum No. 2

11. Please confirm MV feeders run overhead are to be in GRC conduit.
Response: Refer to Electrical Tender Addendum No. 2

12. Please confirm any run time fuel consumed during the deployment of the temporary generator (5114 Keynote 1) will be supplied or compensated by PWGSC.
Response: Refer to Electrical Tender Addendum No. 2

13. Please confirm if PWGSC will provide storage for the fuel removed from the permanent generator (5114 Keynote 1).
Response: Refer to Electrical Tender Addendum No. 2

14. Trailing crane feeds are indicated as #1 AWG on 5010 and #2 on 5101. Please confirm sizing.
Response: Refer to Electrical Tender Addendum No. 2

15. Note 2 -5102 indicates a 102mm conduit. The same conduit appears Note 7 on detail 2/5104 as a 129mm. Please confirm the correct size.
Response: Refer to Electrical Tender Addendum No. 2

16. Re 5401 please confirm only one air terminal mounted is required? The lightning protection suppliers have indicated this installation should have multiple air terminals mounted to the parapet to meet CSA code.
Response: Refer to Electrical Tender Addendum No. 2

17. The Communication and Fire alarm cables listed in the schedule 5106 & 5107 do not correspond to the block diagram (5905) cable requirements for the Sock Service kiosks. Please confirm the correct cable requirements are 25P 24AWG Outside Plant and 4c 16 FAS.
Response: Refer to Electrical Tender Addendum No. 2

18. Tug wharf is shown on 5905 requiring cabling but I am unable to find a site plan that locates the wharf. Please provide a plan showing the routing that can be scaled.
Response: Refer to Electrical Tender Addendum No. 2

19. The switch symbols on 5109 indicate dual switches but no switching designations are indicated on the fixtures. Please confirm if dual switching is desired.
Response: Refer to Electrical Tender Addendum No. 2

20. Please confirm if Quantity 1 or 7 sleeves are required per Note 1 – 5109.
Response: Refer to Electrical Tender Addendum No. 2

21. Please confirm Note 52 drawing 5115 should indicate 129 mm conduit.
Response: Refer to Electrical Tender Addendum No. 2

22. The existing Harmonic Filter (5130 keynote 17) will be out of service for a period of time while the specified retrofit work is completed. Please confirm no temporary services are required while the unit is out of the system.
Response: Refer to Electrical Tender Addendum No. 2

23. Please issue panel schedules showing existing loads for the existing SSS panels.
Response: Refer to Electrical Tender Addendum No. 2

24. Note 27 & 28 drawing 5130 refer to the service to the Barker building. I can find no reference to the services on Single line nor drawings 5100, 5106 -5108. Please confirm the service sizes.
Response: Refer to Electrical Tender Addendum No. 2

25. We cannot find a cross reference for the cables referenced in 5/5413 or 1 & 2/5414. Please confirm these cables are not in scope.
Response: Refer to Electrical Tender Addendum No. 2

26. Please confirm duct details 5418 should be STB (new) and STC (existing) per 5100.
Response: Refer to Electrical Tender Addendum No. 2

27. Communications and Fire alarm cable requirements in the 5418 matrix do not appear to be co-ordinated to the final requirements shown 5100. Please confirm.
Response: Refer to Electrical Tender Addendum No. 2

28. Please confirm what site plan 5415 co-ordinates to. We are unable to find any cross reference to this detail.
Response: Refer to Electrical Tender Addendum No. 2

29. Will the Electrical Contractor also be required to carry a separate commissioning agent? The reason I ask is that all the commissioning agents are taken up either by PWGSC or the General Contractor.
Response: Refer to Section 01 91 31 3.10 (yes, the contractor carries the ECA). The electrical bid should carry the electrical Cx. The GC will only carry overall CX as required for general trades and coordination as required.

30. The Floor elevations indicated in section A / 5607 are not correct. The Main Floor elevation is 3.675 geodetic (design elevation 0.000) as indicated on Architectural drawing 5702. The Service Pit floor elevation is .925 geodetic (design elevation -2.750)
Response: Refer to Mechanical Addendum #2

31. Please review the design of the Storm drainage system indicated on drawing 5805, particularly the need for the Subsoil Drain Lift Sump to be installed inside the Basement / Service Pit Floor. The Section through the Subsoil Drain Lift Sump, indicated on drawing 5806, requires the sump invert to be 2.725m below finish floor elevation. This significantly impacts the raft slab depression shown in section 1 / 5603 of the Structural drawings, which in turn impacts the overall dimensions of the raft slab. As it stands right now, Structural drawing 5603 does not correctly represent the impact of this Lift Sump. A quick calculation of the additional concrete volume due to this Lift Sump is in the order of 200 cm, plus the additional reinforcing steel.
Response: Refer to Mechanical Addendum #2

REFER TO:
Mechanical Addendum No. M2 dated 2016-03-09 (1 page).

Electrical Tender Addendum No. 2 dated 2016-03-11 (5 pages).

Civil Addendum No. 2 dated 2016-03-09 (1 page).

End of Addendum #2

PWGSC EGD SOUTH SUBSTATION
SWITCHGEAR REPLACEMENT (SSSR)
MECHANICAL ADDENDUM NO. M2

FILE: 1530.00
March 9, 2016

To: Chernoff Thompson Architects
Attention: TONY YIP, P. Eng.

By E-mail

- ☐ Design Meeting Minutes
- ☐ Design Correspondence
- ☒ Addenda
- ☐ Approvals
- ☐ Shop Drawings
- ☐ Change Notices
- ☐ Change Orders
- ☐ Change Directives
- ☐ Supplemental Instructions
- ☐ Construction Meeting Minutes
- ☐ Construction Correspondence
- ☐ Progress Claims
- ☐ Construction Review Reports
- ☐ Temporary

From: Raul Valderama, AScT

Total no. of pages: 1

THIS ADDENDUM FORMS PART OF THE CONTRACT DOCUMENTS AND IS TO BE READ, INTERPRETED AND COORDINATED WITH ALL OTHER PARTS. INCLUDE COST OF ALL WORK CONTAINED HEREIN IN THE CONTRACT PRICE. THE FOLLOWING REVISIONS SUPERSEDE INFORMATION CONTAINED IN THE ORIGINAL DRAWINGS AND SPECIFICATIONS ISSUED OF THE ABOVE NAMED PROJECT TO THE EXTENT REFERENCED AND BECOME PART THEREOF. PLEASE ACKNOWLEDGE RECEIPT OF THIS ADDENDUM ON THE FORM OF TENDER.

Please issue an Addendum with the following wording:

1. REFER TO MECHANICAL DRAWINGS 5803, 5805 AND 5806:

1. Main Floor finish elevation changed to 3.675 and Basement Floor finish elevation changed to 0.925 matching the Architectural drawings.
2. Sanitary Drain and Sewer piping, Subsoil Drain piping and Lift Sump Pumps piping inverts are lifted 0.038 metres higher matching the Architectural floor elevations.
3. The bottom elevation of the Subsoil Drain Lift Sump is changed to -1.775 metres.

End of Mechanical Addendum #2

JM BEAN & CO. LTD

Consulting Mechanical Engineers
6468 Main Street, Vancouver, British Columbia V5W 2V4
Phone 604-736-6724 Facsimile 604-736-6726

THE FOLLOWING ADDENDUM SUPERSEDES INFORMATION CONTAINED IN DRAWINGS AND SPECIFICATIONS ISSUED FOR THE PROJECT TO THE EXTENT REFERENCED. THIS ADDENDUM FORMS PART OF THE TENDER DOCUMENTS AND IS SUBJECT TO ALL OF THE CONDITIONS SET OUT IN THE CONTRACT CONDITIONS.

This electrical addendum contains three (3) pages, plus 1 page(s) of Panel Schedules, one (1) page Drawing 5100 for a total of 5 pages.

Part 1 Specification Changes

.1 No changes this addendum

Part 2 Drawing Changes/Clarification requests, requests in BOLD, response in *Italics*

.1 Please confirm Note 52 drawing 5115 should indicate 129 mm conduit.

.1 Drawing 5115 Note 52 to read "1x129mm RIGID STEEL CONDUIT FOR 120/208V CIRCUIT."

.2 The existing Harmonic Filter (5130 keynote 17) will be out of service for a period of time while the specified retrofit work is completed. Please confirm no temporary services are required while the unit is out of the system.

.1 Existing Harmonic Filter (5130 keynote 17). No temporary harmonic filter is required while existing device is refurbished.

.3 Please issue panel schedules showing existing loads for the existing SSS panels.

.1 Panel schedules are attached to this addendum.

.4 Note 27 & 28 drawing 5130 refer to the service to the Barker building. I can find no reference to the services on Single line nor drawings 5100, 5106 -5108. Please confirm the service sizes.

.1 Drawing 5130 Note 27 and Note 28 - Delete reference to Barker Building replace with "Building B-1".

.5 We cannot find a cross reference for the cables referenced in 5/5413 or 1 & 2/5414. Please confirm these cables are not in scope.

.1 B-1, Sump#1 & #2 and Lift Station #11 teck cables are in scope, and appear on section SSSR/5416 to be installed from new SSSR to existing loads. See Note 1 and Note 2 for reference to cable sizes for insulator holders for future loads.

.6 Please confirm duct details 5418 should be STB (new) and STC (existing) per 5100.

.1 STC indicates approximate layout of existing conduit duct bank. STB indicated new duct bank to be installed.

.7 Communications and Fire alarm cable requirements in the 5418 matrix do not appear to be co-ordinated to the final requirements shown 5100. Please confirm.

.1 Section STC indicates all services running in existing duct bank, Notes on sheet 5100 are missing 50pr#22 tel and 12pr#22, 1 fibre fire alarm circuits. Drawing 5100 – Add 2x50mm to conduit and conductor counts "50pr#22 tel and 12pr#22, 1 fibre fire alarm circuits".

.8 Please confirm what site plan 5415 co-ordinates to. We are unable to find any cross reference to this detail.

.1 Section SS on 5415 is a cut section showing the existing duct bank between manholes 140HV, 141 LV, 142C and 143HC, 144LC and 145C.

.9 Drawing 5010 please confirm if the 600A breaker shown at the top of the single line is intended to be a main breaker in 25/12 SSSR or a standalone breaker (located where).

.1 Main breaker for 25/12SSSR should be inside switchboard boundary line, this is the breaker shown in cell #7 on sheet 5112, no stand alone breaker is needed.

.10 Access riser shown 5110 differs from indicated devices at doors on 5109. Please confirm which rough in should be allowed.

.1 Security system layout to illustrative. Refer to building floor plans for exact quantities of equipment required for rough in and installation.

.11 EUH 5 appears on 3/5109 but does not appear on the Mechanical equipment schedule. Please confirm it requires 3 phase 600V power as per the other heaters.

.1 EUH-5 has been removed. No connection required.

.12 Please confirm the interlock for BBH 1 is to connect to IAC-1.

.1 Baseboard heater to be interlocked with Air conditioner in server room to prevent simultaneous operation.

.13 Reference drawings 5105 & 5109 it is difficult to tell if there is size variations in the tray widths. Please confirm if all tray is 36" wide or if the tray colours correlate to differing dimensions.

.1 Colours indicate voltages for each tray.

Red - Comms

Green - 120/208V

Magenta - 480V

Blue - 600V

Tray lengths are between 750 and 900mm wide. Widths shown on 5105 and 5106

.14 Transfer switch cable sizing (2x 350 Notes 4&5 on 5114) differ from single line 5011 (2x 4c 250). Please confirm which is correct.

.1 Generator cables should be 250kCM not 350kCM.
Drawing 5114 - Delete 2x 4c350kCM. Add 2x 4c 250kCM. Size equipment lugs to size shown on Single line.

.15 Please confirm MV feeders run overhead are to be in GRC conduit.

.1 25/12.5kV and 2.4kV feeders are to be installed in galvanized rigid steel conduit for all non underground conduit runs.

.16 Please confirm any run time fuel consumed during the deployment of the temporary generator (5114 Keynote 1) will be supplied or compensated by PWGSC.

.1 Fuel for temporary generator to be covered by PWGSC by change order based on quantity consumed, supplied by contractor.

.17 Please confirm if PWGSC will provide storage for the fuel removed from the permanent generator (5114 Keynote 1).

.1 Existing generator fuel storage by contractor, cost to be covered by change order based on amount in tank.

.18 Trailing crane feeds are indicated as #1 AWG on 5010 and #2 on 5101. Please confirm sizing.

.1 Crane trailing cable is #2 conductor.

.19 **Note 2 -5102 indicates a 102mm conduit. The same conduit appears Note 7 on detail 2/5104 as a 129mm. Please confirm the correct size.**

.1 Drawing 5102. Note 2. 2.4kV conduit from High Voltage wire way to cable pit to be 1x129mm Galvanized Rigid Steel.

.20 **The Communication and Fire alarm cables listed in the schedule 5106 & 5107 do not correspond to the block diagram (5905) cable requirements for the Sock Service kiosks. Please confirm the correct cable requirements are 25P 24AWG Outside Plant and 4c 16 FAS.**

.1 Use values given on sheet 5905 for take offs.

.21 **Tug wharf is shown on 5905 requiring cabling but I am unable to find a site plan that locates the wharf. Please provide a plan showing the routing that can be scaled.**

.1 See attached revised sheet 5100 Showing tug wharf location.

.22 **The switch symbols on 5109 indicate dual switches but no switching designations are indicated on the fixtures. Please confirm if dual switching is desired.**

.1 Double pole light switches should be single pole. Each floor to be one lighting zone.

.23 **Please confirm if Quantity 1 or 7 sleeves are required per Note 1 – 5109.**

.1 Price for 7 floor penetrations and sleeves.

.24 **Drawing 5110 shows a CAT6 going from the access controller cabinet to "new Ethernet switch in comm room". Who supplies the supplies the switch? What are the specs for this switch?**

.1 Should indicate cat5E, to connect to 48 port network switch located in SSSR data rack #1. Drawing 5110 Delete CAT6. Add CAT5E.

.25 **Drawing 5110 shows a 21mm conduit from the access controller cabinet "for repeater power". What is repeater power?**

.1 This is not required.

.26 **The Div 28 Spec does not call for a Lenel Intelligent System controller (ISC). A LNL-3300 ISC is required for the Electrified locks on this building to communicate to the rest of the Lenel Access control system over the network.**

.1 We cannot specify sole source components in contractor documents, equipment is to be selected based on site conditions to allow connection to existing system.

.27 **Variable Frequency Drives are identified in the EMCS specification. Please confirm electrical is to provide the VFD for MUA 1 as pre equipment schedule on 5111.**

.1 No VFD is required, unit comes with integrated speed controller.

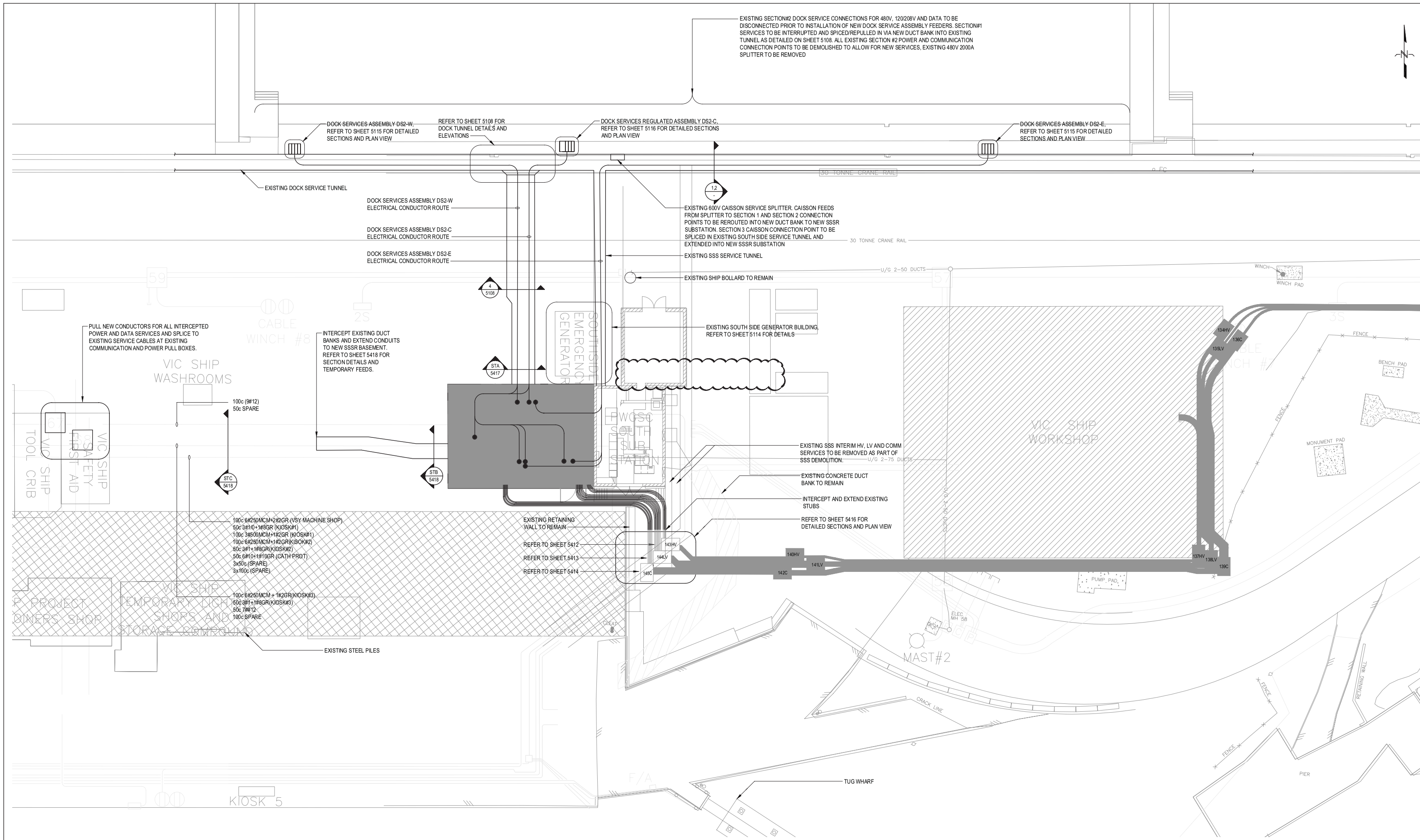
.28 **Will the Electrical Contractor also be required to carry a separate commissioning agent?**

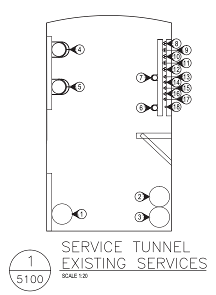
.1 Refer to Section 01 91 31 3.10 (yes, the contractor carries the ECA). The electrical bid should carry the electrical Cx. The GC will only carry overall CX as required for general trades and coordination as required.

.29 **5401 please confirm only one air terminal mounted is required? The lightning protection suppliers have indicated this installation should have multiple air terminals mounted to the parapet to meet CSA code.**

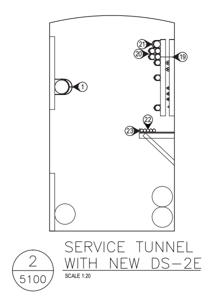
.1 Provide air terminal located at each of the cornets of the new building (3 additional air terminals, and all associated grounding and bonding requirements).

END OF ELECTRICAL TENDER ADDENDUM NO. 02


EXISTING SECTION#2 DOCK SERVICE CONNECTIONS FOR 480V, 120/208V AND DATA TO BE DISCONNECTED PRIOR TO INSTALLATION OF NEW DOCK SERVICE ASSEMBLY FEEDERS. SECTION#1 SERVICES TO BE INTERRUPTED AND SPICED/REPULLED IN VIA NEW DUCT BANK INTO EXISTING TUNNEL AS DETAILED ON SHEET 5108. ALL EXISTING SECTION #2 POWER AND COMMUNICATION CONNECTION POINTS TO BE DEMOLISHED TO ALLOW FOR NEW SERVICES, EXISTING 480V 2000A SPLITTER TO BE REMOVED
DOCK SERVICES ASSEMBLY DS2-W, REFER TO SHEET 5115 FOR DETAILED SECTIONS AND PLAN VIEW
REFER TO SHEET 5108 FOR DOCK TUNNEL DETAILS AND ELEVATIONS
DOCK SERVICES REGULATED ASSEMBLY DS2-C, REFER TO SHEET 5116 FOR DETAILED SECTIONS AND PLAN VIEW
DOCK SERVICES ASSEMBLY DS2-E, REFER TO SHEET 5115 FOR DETAILED SECTIONS AND PLAN VIEW
30 TONNE CRANE RAIL
EXISTING DOCK SERVICE TUNNEL
DOCK SERVICES ASSEMBLY DS2-W ELECTRICAL CONDUCTOR ROUTE
DOCK SERVICES ASSEMBLY DS2-C ELECTRICAL CONDUCTOR ROUTE
DOCK SERVICES ASSEMBLY DS2-E ELECTRICAL CONDUCTOR ROUTE
EXISTING 600V CAISSON SERVICE SPLITTER. CAISSON FEEDS FROM SPLITTER TO SECTION 1 AND SECTION 2 CONNECTION POINTS TO BE REROUTED INTO NEW DUCT BANK TO NEW SSSR SUBSTATION. SECTION 3 CAISSON CONNECTION POINT TO BE SPLICED IN EXISTING SOUTH SIDE SERVICE TUNNEL AND EXTENDED INTO NEW SSSR SUBSTATION
EXISTING SSS SERVICE TUNNEL
EXISTING SHIP BOLLARD TO REMAIN
U/G 2-50 DUCTS
PULL NEW CONDUCTORS FOR ALL INTERCEPTED POWER AND DATA SERVICES AND SPLICE TO EXISTING SERVICE CABLES AT EXISTING COMMUNICATION AND POWER PULL BOXES.
INTERCEPT EXISTING DUCT BANKS AND EXTEND CONDUITS TO NEW SSSR BASEMENT. REFER TO SHEET 5418 FOR SECTION DETAILS AND TEMPORARY FEEDS.
EXISTING SOUTH SIDE GENERATOR BUILDING, REFER TO SHEET 5114 FOR DETAILS
SOUTHSIDE EMERGENCY GENERATOR
VIC SHIP WASHROOMS
VIC SHIP SAFETY FIRST AID
VIC SHIP TOOL CRIB
CABLE WINCH #8
PWGSC SOUTH SUB STATION
VIC SHIP WORKSHOP
EXISTING SSS INTERIM HV, LV AND COMM SERVICES TO BE REMOVED AS PART OF SSS DEMOLITION
EXISTING CONCRETE DUCT BANK TO REMAIN
INTERCEPT AND EXTEND EXISTING STUBS
REFER TO SHEET 5416 FOR DETAILED SECTIONS AND PLAN VIEW
EXISTING RETAINING WALL TO REMAIN
REFER TO SHEET 5412
REFER TO SHEET 5413
REFER TO SHEET 5414
100c (9#12)
50c SPARE
100c 6#250MCM+2#2GR (VSY MACHINE SHOP)
50c 3#1/0+1#8GR (KIOSK#1)
100c 3#500MCM+1#2GR (KIOSK#1)
100c 6#250MCM+1#2GR (KIOSK#2)
50c 3#1+1#8GR (KIOSK#2)
50c 6#10+1#10GR (CATH PROT)
3x50c (SPARE)
3x100c (SPARE)
100c 6#250MCM + 1#2GR (KIOSK#3)
50c 3#1+1#8GR (KIOSK#3)
50c 7#12
100c SPARE
TEMPORARY LIGHT SHOPS AND STORAGE CONTAINERS
EXISTING STEEL PILES
WINCH PAD
BENCH PAD
MONUMENT PAD
PUMP PAD
FENCE
MAST#2
CRANE LINE
KIOSK 5
TUG WHARF
PIER



1 / 5100 SERVICE TUNNEL EXISTING SERVICES
SCALE 1:20



2 / 5100 SERVICE TUNNEL WITH NEW DS-2E
SCALE 1:20

KEY NOTES:

1. EXISTING COMPRESSOR AIR LINE TO REMAIN.
2. EXISTING POTABLE WATER LINE TO REMAIN
3. EXISTING SERVER LINE TO REMAIN.
4. EXISTING 12.5kV SSS TECK FEEDER TO BE DISMOUNTED AND REROUTED FOR TEMPORARY SSS REEFED. TO BE REMOVED FROM TUNNELS AND DISPOSED OF AS PART OF SSS DEMOLITION.
5. 2.4SS2 TECK 5KV TO 30T CRANE TO BE REPLACED WITH NEW FROM 2,4SSSR SWITCHBOARD
6. 3c#2/0 TECK 1000V 6SB2 CAISSON POWER TO SECTION #3 TO BE REPLACED WITH NEW CABLE FROM EXISTING SPLICE BOX
7. EXISTING TECK CABLE TO REMAIN.
8. 3c#25OMCM MI CABLE (3x1c#250kCM TECK SPLICE) 4SS2-10 500A 480V #2 CENTER TO BE DEMOLISHED AND REMOVED FROM TUNNEL
9. 3c#25OMCM MI CABLE (3x1c#250kCM TECK SPLICE) 4SS2-9 500A 480V #2 SOUTHEAST TO BE DEMOLISHED AND REMOVED FROM TUNNEL
10. 3c#25OMCM MI CABLE (3x1c#250kCM TECK SPLICE) 4SS2-14 500A 480V #2 SOUTHWEST TO BE DEMOLISHED AND REMOVED FROM TUNNEL
11. 3c#25OMCM MI (3x1c#250kCM TECK SPLICE) CABLE 4SS2-13 500A 480V #3 CENTER
12. 3c#25OMCM MI (3x1c#250kCM TECK SPLICE) CABLE 4SS2-12 500A 480V #3 SOUTHEAST
13. 3c#3 MI (3c#1 TECK SPLICE) CABLE 2SS2-5 125A 120/208V #2 SOUTH CENTER TO BE DEMOLISHED AND REMOVED FROM TUNNEL
14. 3c#3 MI (3c#1 TECK SPLICE) CABLE 2SS2-4 125A 120/208V #2 SOUTHEAST TO BE DEMOLISHED AND REMOVED FROM TUNNEL
15. 3c#3 MI (3c#1 TECK SPLICE) CABLE 2SS2-9 125A 120/208V #3 SOUTHWEST
16. 3c#1 MI (3c#2/0 TECK SPLICE) CABLE 2SS2-8 125A 120/208V #3 CENTER
17. 3c#1/0 MI (3c#3/0 TECK SPLICE) CABLE 2SS2-7 125A 120/208V #3 SOUTHEAST
18. 3c#10 (3c#6 TECK SPLICE) MI CABLE 25K 32, 34 ROPE LIGHT AND SOUTHEAST DOCK STAIRS
19. NEW DS2-E 480V, 400A SERVICE 3x3c#3/0 TECK CABLES MOUNTED TO EXISTING SERVICE TUNNEL WALLS. RUN CONDUIT FROM NEW 4SSSR-2 SWITCHBOARD TO NEW DS2-E DOCK SERVICE ASSEMBLY IN EXISTING SERVICE TUNNELS.
20. NEW DS2-E 600V, 400A SERVICE 2x3c#4/0 TECK CABLES MOUNTED TO EXISTING SERVICE TUNNEL WALLS. RUN CONDUIT FROM NEW 4SSSR-2 SWITCHBOARD TO NEW DS2-E DOCK SERVICE ASSEMBLY IN EXISTING SERVICE TUNNELS.
21. NEW DS2-E 120/208, 200A SERVICE 4c#350kCM TECK CABLES MOUNTED TO EXISTING SERVICE TUNNEL WALLS. RUN CONDUIT FROM NEW 4SSSR-2 SWITCHBOARD TO NEW DS2-E DOCK SERVICE ASSEMBLY IN EXISTING SERVICE TUNNELS.
22. NEW DS2-E TELECOM SERVICES:

TEL	-12PR#22
DATA	-4xCAT5e
FIBRE	-FUTURE (PROVIDE SPACE)
F/A	-2x2c#12
EMERGENCY	-2X2C#12

23. NEW 300mm CABLE TRAY MOUNTED TO EXISTING STEEL BRACKETS

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REAL PROPERTY SERVICES
Pacific Region
SERVICES IMMOBILIERS
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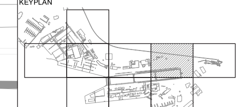
KEYPLAN



Revision/Revision	Description/Description	Date/Date
5	ISSUED FOR TENDER	15/01/28
4	ISSUED FOR 99% DESIGN REVIEW	16/01/06
3	ISSUED FOR 66% DESIGN REVIEW	15/11/25
2	ISSUED FOR 33% DESIGN REVIEW	15/10/28
1	ISSUED FOR DESIGN DEVELOPMENT	15/09/11
0		

Client/client

ESQUIMALT GRAVING DOCK

825 ADMIRALS ROAD
VICTORIA, BC, V9A 2P1

Project title/Titre du projet
825 ADMIRALS ROAD VICTORIA BC
ESQUIMALT GRAVING DOCK
ELECTRICAL SAFETY UPGRADE

SOUTH SUBSTATION SWITCHGEAR REPLACEMENT (SSSR)

Consultant Signature Box Only

Designed by/Concept par
I. BARNES

Drawn by/Dessine par
J. BIELING / S. SEYMOUR

PWGSC Project Manager/Administrateur de Projets TPSGC
Jamie LeBlanc

PWGSC, Regional Manager, Architectural and Engineering Services/ Gestionnaire régionale, Services d'architectural et de génie, TPSGC
Preetipal Paul

Drawing title/Titre du dessin
SSSR ELECTRICAL SITE PLAN

Project No./No. du projet	Sheet/Feuille	Revision no./La Révision no.
R.062548.2	5100	5

Scale bars: 0 400 800 1200 1600mm 1:20; 0 2 4 6 8m 1:100

Plot Date: March 11, 2016 1:39 PM Plotted by: Jacob Bieling
File Name: H:\PROJECTS\2015\1-15-168\DWGS\5100 SSR SITE.DWG

PWGSC – B1 – 1000X707

PANELBOARD SCHEDULE – PANEL '2T'

System: 120/208V, 3ø, 4W
Location: South Compressor Room
Bus Size: 225A
Total Load (watts):

Description	LOAD A	LOAD B	LOAD C	Bkr	P	Cir	Cir	Bkr	P	LOAD A	LOAD B	LOAD C	Description
Spare				15	1	1	2	15	1				Spare
Spare				15	1	3	4	15	1				Split Wall Plugs
Spare				15	1	5	6	15	2				Split Wall Plugs
Spare				15	1	7	8						
Split Receptacle West Side				15	2	9	10	15	2				Split Wall Plugs Outside
Chip Wagon						11	12						
Space						13	14	15	1				Spare
Space						15	16	15	1				Spare
Washroom				60	2	17	18	15	1				Spare
						19	20						
Pop Machine Receptacle				15	1	21	22	30	3				Transformer Cooling Fan
30A Receptacle West Side				30	1	23	24						
TRFR Heating/Lighting Panel				20	1	25	26						
Spare				15	1	27	28	20	3				Exhaust Fan F1, 2K2 watts
Emergencu Lights				15	1	29	30						

TO COME BY PWGSC:
BUTLER BUILDING:
PANELS '4B', '4C', '2U', '2V', '2VA'

STANDBY SYSTEMS PANELS

PANELBOARD SCHEDULE – STANDBY PANEL '4SA'

System: 480V, 3ø
Location: Southside Substation
Bus Size: 225A
Main Breaker: 150A
Total Load (watts):

Description	LOAD A	LOAD B	LOAD C	Bkr	P	Cir	Cir	Bkr	P	LOAD A	LOAD B	LOAD C	Description
						1	2						
Sewage Pump				100	3	3	4						
						5	6						
						7	8						
						9	10						
						11	12						
						13	14						
						15	16						
						17	18						

PANELBOARD SCHEDULE – STANDBY PANEL '2SK'

System: 120/208V, 3ø, 4W
Location: Southside Substation
Bus Size: 100A
Main Breaker: 100A
Total Load (watts):

Description	LOAD A	LOAD B	LOAD C	Bkr	P	Cir	Cir	Bkr	P	LOAD A	LOAD B	LOAD C	Description
LIGHTING SUBSTATION				15	1	1	2	15	1				RECEPTACLES
LIGHTING SUBSTATION				15	1	3	4	15	1				EXTERIOR RECEPTACLES
DATA CABINET				15	1	5	6	15	1				EXTERIOR LIGHTING
FA CONTROL PANEL				15	1	7	8	15	1				TUNNEL LTG CCT. D
VENTILATION FAN				30	2	9	10	15	1				TUNNEL LTG CCT. C
						11	12	15	1				TUNNEL LTG CCT. B
EMERG. LIGHTING				15	1	13	14	15	1				TUNNEL LTG CCT. A
DATA CABINET				15	1	15	16	15	1				TUG WHARF FLOOD LIGHTS
CABLE WINCH + BLU EM ALARM LT				15	1	17	18	30	2				TUG WHARF 2
ROPE LOCKER				15	2	19	20						
						21	22	30	2				TUG WHARF 1
TUG WHARF RECEPT.				20	1	23	24						
LIGHTING				15	1	25	26						SUB–PANEL '2SL'
EMERG. ALARM				15	1	27	28	50	3				(In South Generator Building)
SPARE				15	1	29	30						
SPARE				15	1	31	32	30	2				S.E. STAIRWELL DRYDOCK
RECEPT. – UPS				30	2	33	34						(RECEPT. – UPS)
SW STAIRWELL DRYDOCK						35	36	15	1				JETTY MOUNT H3 CIRCUIT
UNIT SUB. LIGHTS				15	1	37	38						SPACE
SOUTH TUNNEL PUMP RECEPTACLE				15	1	39	40						SPACE
F.A. LOCATOR LIGHTS – DOCKSIDE				15	1	41	42						SPACE
SPACE						43	44						SPACE
SPACE						45	46						SPACE
SPACE						47	48						SPACE
SPACE						49	50						SPACE
SPACE						51	52						SPACE
SPACE						53	54						SPACE
SPACE						55	56						SPACE
SPACE						57	58						SPACE
SPACE						59	60						SPACE

PANELBOARD SCHEDULE – STANDBY PANEL '2SL'

System: 120/208V, 3ø, 4W
Location: South Generator Building
Bus Size: 100A
Total Load (watts):

Description	LOAD A	LOAD B	LOAD C	Bkr	P	Cir	Cir	Bkr	P	LOAD A	LOAD B	LOAD C	Description
LIGHTING				15	1	1	2	15	1				BLOCK HEATER
EMERG. LIGHTING				15	1	3	4	15	1				DAMPER CONTROLS
RECEPTACLES				15	1	5	6						
RECEPTACLES				15	1	7	8	15	3				SPACE HEATER
BATTERY CHARGER				15	1	9	10						
FUEL PANEL				15	1	11	12	15	1				SPARE

PANELBOARD SCHEDULE – STANDBY PANEL '2SM'

System: 120/208V, 3ø, 4W
Location: Machine Shop
Bus Size: 100 A
Total Load (watts):

Description	LOAD A	LOAD B	LOAD C	Bkr	P	Cir	Cir	Bkr	P	LOAD A	LOAD B	LOAD C	Description
RECEPTACLE (Below Panel)				15	1	1	2						PANEL 2SN
FIRE ALARM BOOSTER PNL.				15	1	3	4	50	3				(FIRST AID BLDG)
FA LOCATOR LIGHTS				15	1	5	6						
BLDG. 33 FA BOOSTER PNL				15	1	7	8	15	1				SPARE
(1)				15	1	9	10	15	1				SPARE
(1)				15	1	11	12	15	1				SPARE
(1)				15	1	13	14						
(1)				15	1	15	16						
						17	18						
						19	20						
						21	22						
						23	24						

Public Works and Government Services Canada
Travaux publics et Services Gouvernementaux Canada

Pacific Region

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TEMPORARY NOTES:
(1) FIELD CONFIRM

revisions		date
–	BY RFA: APPROVED ISSUE	15 AUG 2005

A detail no. / no. du detail
B location drawing no. / sur dessin no.
C drawing no. / dessin no.

project / projet
ESQUIMALT GRAVING DOCK
ESQUIMALT, B.C.

ELECTRICAL MASTER DRAWING

drawing / dessin
SOUTH SIDE SUBSTATION PANEL SCHEDULES

designed / concu: M. K. ÇANÇAR
date: OCTOBER 2004
drawn / dessine: M. EVANS / S. LEE
date: OCTOBER 2004
approved / approuve:
date:
tender / Soummission
PWGSC Project Manager / Administrateur de projets TPSGC
project no. / no. du projet: –
drawing no. / no. du dessin: EMD E15 REV.–

WESTBROOK Consulting Ltd.

A D D E N D U M N O . 2

DATE: Mar 9, 2016
PROJECT No. 2951.05
PROJECT NAME: **EGD - SSSR**

Civil Addendum

1. This Addendum shall be read in conjunction with and considered as an integral part of the Contract Documents; revisions supercede the information contained in the original drawings, specifications or previously issued Addendum.
2. Tender Price submitted shall include all items of this Addendum.
3. No consideration will be allowed for any extras due to any bidder not being familiar with the contents of this Addendum.

1. Document Revisions:

1.1. Replace Section 33 65 73 with the attached Section 33 65 73

1.1.1. The replacement is due to the insertion a new item “1.1 Related Sections” which requires the remaining items be renumbered.