

**TOWN OF BLIND RIVER
REQUEST FOR TENDER
NEW BLIND RIVER WATER TREATMENT PLANT INTAKE AND LOW LIFT PUMPING STATION
CONTRACT NO. PS-2026-01**

**ADDENDUM #9
March 13th, 2026**

This addendum shall form part of the Contract Documents. The Addendum issued shall be indicated in FT.05 ADDENDA of the FORM OF TENDER.

ADDITIONS & DELETIONS TO THE TENDER

Please note the following changes to Section 3. TENDERING INFORMATION of the tender:

- 1.1 ADD: TI.66 TAXES AND DUTIES, below
 TI.66 TAXES AND DUTIES
1. The Contract Price shall include all taxes, tariffs, and customs duties in effect as of February 28, 2026, except for Value Added Taxes payable by the Owner to the Contractor as stipulated in the Agreement.
 2. Any increase or decrease in costs to the Contractor due to changes in such included taxes, tariffs, and duties after February 28, 2026, shall increase or decrease the Contract Price accordingly.
 3. The Contractor shall provide a detailed breakdown of additional taxes, tariffs, and duties in a form satisfactory to the Owner. Profit and overhead shall not be included in the increase or decrease in costs incurred by the Contractor due to changes in the aforementioned taxes, tariffs, and duties.
 4. Where an exemption or recovery of government sales taxes, tariffs, customs duties or excise taxes is applicable to the Contract, the parties agree to cooperate with each other to obtain such exemptions. Refunds that are properly due to the Owner and have been recovered by the Contractor shall be promptly refunded to the Owner. In addition, any reduction or elimination of taxes, tariffs, or customs duties that take effect after February 28, 2026 resulting in savings to the Contractor shall be due to the Owner in the form of a credit to the Contract Price.

Please note the following changes to Section 4. FORM OF TENDER of the tender:

- 2.1 DELETE: FT.11 – Schedule of Tender Prices, Provisional Table, Items No. 1,2, 3, 4, 5, 11, and 12

- 2.2 ADD: FT.11 – Schedule of Tender Prices, MISCELLANEOUS ALLOWANCE TABLE, Item No. 6, below

Item No.	Specification Number	Description	Unit of Measure	Estimated Quantity	Unit Price	Total
6	N/A	Installation of Buoys	Lump Sum	1	\$20,000	\$20,000

- 2.3 ADD: FT.10 – Detailed Contract Price Breakdown, DIVISION 8 - DOORS AND WINDOWS, Section 08310, below

Section	Title	Total
08310	Access Hatches	

- 2.4 ADD: FT.10 – Detailed Contract Price Breakdown, DIVISION 2 - SITEWORKS, Section 02850, below

Section	Title	Total
02850	Navigation	

- 2.5 ADD: FT.10 – Detailed Contract Price Breakdown, DIVISION 2 - SITEWORKS, Section 02480, below

Section	Title	Total
02480	Marine Works	

Please note the following changes to Section 9. SPECIFICATIONS of the tender:

- 3.1 DELETE: Division 1 – General Requirements, Section 01750 – Disinfection of Water Structures, Clause 1.2.2, and
 REPLACE WITH: Division 1 – General Requirements, Section 01750 – Disinfection of Water Structures, Clause 1.2.2, below:
- 1.2.2 Acceptable Specialist Sub-contractors include:
1. Corix Group of Companies
 2. Jackson-Tkach Inc.
 3. Canadian Pipeline Cleaning Inc.
 4. Tarpon
 5. Industrial Waterblast
 6. Engineer approved equal.
- 3.2 DELETE: Division 16 – Electrical, Section 16231 - Diesel Electric Generating Set, Clause 1.2.1.3, and
 REPLACE WITH: Division 16 – Electrical, Section 16231 - Diesel Electric Generating Set, Clause 1.2.1.3, below:
- 1.2.1.3 Load Bank test breaker complete with shunt trip coil
- 3.3 DELETE: Division 16 – Electrical, Section 16231 - Diesel Electric Generating Set, Clause 1.2.1.4

- 3.4 DELETE: Division 16 – Electrical, Section 16231 - Diesel Electric Generating Set, Clause 1.2.14.14, and
REPLACE WITH: Division 16 – Electrical, Section 16231 - Diesel Electric Generating Set, Clause 1.2.14.14, below:
- 1.2.14.14 Provide shunt trip connection between the ats and the generator load bank breaker such that the load bank breaker is tripped when the ats senses loss of normal power and switches to emergency power. Provide additional control cable between the ats and the generator load bank breaker as required."
- 3.5 ADD: Division 2 – Siteworks, Section 02850 – Navigation, as attached.
- 3.6 ADD: Division 9 – Finishes, Section 09910 – Painting, Clause 2.4.3, below:
- 2.4.3 Submerged Structural Carbon Steel and Metal Fabrications:
1. Polyamine Epoxy system
 2. Prepare by sandblasting with non-metallic media to create a complete and uniform angular profile with a minimum depth of profile of 2.5 mils, as per manufacturers printed instructions (SSPC-SP10/NACE 2). Grind all welds and cut plates to a minimum 7mm radius as per NACE SP0178.
 3. First coat; Aromatic Polyurethane, Zinc-Rich Primer, Tnemec Series 90G-1K97, 2.5 to 3.5 mils dry film thickness. Brush coat all welds and edges.
 4. Second Coat: Polyamidoamine Epoxy, Tnemec Series N69F, 6-8mil dry film thickness
 5. Third Coat; Modified Polyamide Epoxy, Tnemec Series 142, 8-12mil dry film thickness
 6. Coating recoat and over coat times as per manufacturers printed instructions.
 7. Coatings supplied by Tnemec, or approved equivalent.
 8. Coating applied in a controlled shop environment.
- 3.7 ADD: Division 9 – Finishes, Section 09910 – Painting, Clause 3.8.2.6.6, below:
- 3.8.2.6.6 Submerged Structural Carbon Steel and Metal Fabrications. Near white Metal Blast Cleaning SSPC_SP10/NACE 2.
- 3.8 ADD: Division 9 – Finishes, Section 09910 – Painting, Clause 3.8.5, below:
- 3.8.5 Submerged Structural Carbon Steel and Metal Fabrications. Sharp metal corners and edges are to be ground to a minimum of 7 mm radius in accordance with NACE SP0178. All welds are to be prepared by grinding in accordance with NACE SP0178 Designation C to remove all weld splatter and create a smooth profile.
- 3.9 ADD: Division 9 – Finishes, Section 09910 – Painting, Clause 3.12.5.3, below:
- 3.12.5.3 Submerged Structural Carbon Steel and Metal Fabrications to be assessed for final dry film thickness and a Holiday test. All discontinuities and areas of reduced dry film thickness are to be repaired to provide a Holiday free coating.

- 3.10 ADD: Division 2 – Siteworks, Section 02480 – Marine Works, as attached.
- 3.11 DELETE Division 11 – Equipment, Section 11101 – Piping Valves and Fittings, Clause 2.10.2,
and REPLACE WITH Division 11 – Equipment, Section 11101 – Piping Valves and Fittings, Clause 2.10.2, below:

2.10.2 Process piping schedule is provided in the following table:

Service	Nominal Sizes	Exposure	Pipe Material	Operating Pressure (kPa)	Working Temp (°C)	Test Pressure (kPa)	PVC Insulation
LLPS Process Piping	100 150 250 300	Exposed	304L SS	500	0 - 25	750	No Insulation
Raw Watermain	300	Buried	PVC	500	0 – 25	750	No Insulation
Sampling Line	25	Exposed / Buried	DR11 HDPE	200	0 - 25	300	No Insulation
Compressed Air Line	75	Exposed / Buried	DR11 HDPE	1,250	0 - 25	1,875	No Insulation

Note: For pressure test, H = Hydraulic test; P = pneumatic Test

- 3.12 DELETE Division 11 – Equipment, Section 11101 – Piping Valves and Fittings, Clause 2.6.1,
and REPLACE WITH Division 11 – Equipment, Section 11101 – Piping Valves and Fittings, Clause 2.6.1, below:
- 2.6.1 Instrumentation connections
- 3.13 DELETE: Division 15 – Mechanical, Section 15184 - Refrigerant Piping, Clause 2.1.1, and REPLACE WITH: Division 15 – Mechanical, Section 15184 - Refrigerant Piping, Clause 2.1.1, below:
- 2.1.1 Type "L" hard drawn seamless copper tubing (ACR) to ASTM B280, factory cleaned in accordance with ASTM B280 and ANSI B9.1-1971, pressurised or pre-purged with nitrogen and supplied with capped ends, and complete with factory washed and capped wrought copper soldering fittings, and solder joints made with high melting point silver brazing alloy conforming to AWS Classification BCuP-5.
- 3.14 DELETE: Division 15 – Mechanical, Section 15413 - Drainage, Waste, and Vent Piping, Clause 2.1, and REPLACE WITH: Division 15 – Mechanical, Section 15413 - Drainage, Waste, and Vent Piping, Clause 2.1, below:
- 2.1 Pipe and Pipe Fittings
- 2.1.1 Sanitary Drainage
- .1 Unburied Sections except Condensate Drains and Buried Sections

PSM Poly (Vinyl Chloride) (PVC) gravity sewer pipe to CAN/CSA B181.2-M90, CAN/CSA B182.1, CAN/CSA B192.2-M87 and ASTM D30340-85b with DR of 35 maximum. Include rubber ring gaskets. Solvent cement to ASTM D2564-84.

2.1.2 Vent:

- .1 Buried and Unburied Sections:
PVC-DWV pipe and fittings certified to CAN/CSA-B-181.2-M90, PVC primer and PVC solvent cement to ASTM D2564-84, DR of 35 maximum.

2.1.3 Condensate Drains

- .1 Condensate Drain Lines: 3/4" (20 mm) and 1" (25 mm) type M copper, 1-1/4" (32 mm) and larger annealed copper tubing, type DWV, to ASTM B306-86, soldered, with wrought copper or copper alloy drainage fittings to ANSI B16.29-1980 or cast brass drainage fittings to B158.1-1976.

- 3.15 DELETE Division 11 – Equipment, Section 11280 – Fabricated SS Sluice Gate, Clause 2.2.2, and
REPLACE WITH: Division 11 – Equipment, Section 11280 – Fabricated SS Sluice Gate, Clause 2.2.2, below:

2.2.2 Sluice gate, actuator, and appurtenances shall be designed as following

Gate Size	500x500 mm
Stem Configuration	Non-Rising
Operating Elevation (m) – Applies to Sluice Gates SG0111 and SG0121	179.950 m
Operating Elevation (m) – Applies to all sluice gates other than SG0111 and SG0121	180.100 m
Gate Bottom Elevation (m)	173.83 m
Seating Head (m)	7 m
Unseating Head (m)	7 m
Actuator Type	Manual Operator with Handwheel

- 3.16 DELETE: Division 16 – Electrical, Section 16231 - Diesel Electric Generating Set, Clause 1.2.1.3, and
REPLACE WITH: Division 16 – Electrical, Section 16231 - Diesel Electric Generating Set, Clause 1.2.1.3, below:

1.2.1.3 Load Bank test breaker complete with shunt trip coil

- 3.17 DELETE: Division 16 – Electrical, Section 16231 - Diesel Electric Generating Set, Clause 1.2.1.4

- 3.18 DELETE: Division 16 – Electrical, Section 16231 - Diesel Electric Generating Set, Clause 1.2.14.14, and
REPLACE WITH: Division 16 – Electrical, Section 16231 - Diesel Electric Generating Set, Clause 1.2.14.14, below:
1.2.14.14 Provide shunt trip connection between the ats and the generator load bank breaker such that the load bank breaker is tripped when the ats senses loss of normal power and switches to emergency power. Provide additional control cable between the ats and the generator load bank breaker as required.
- 3.19 DELETE: Division 16 – Electrical, Section 16231 - Diesel Electric Generating Set, Clause 2.2.1.1, and
REPLACE WITH: Division 16 – Electrical, Section 16231 - Diesel Electric Generating Set, Clause 2.2.1.1, below:
2.2.1.1 Generator set minimum Standby Rating 175 kW, 218.8 kVA.
- 3.20 DELETE: Division 4 – Masonry, Section 04211 - Brick Unit Masonry, Clause 2.1.1.1.4, and
REPLACE WITH: Division 4 – Masonry, Section 04211 - Brick Unit Masonry, Clause 2.1.1.1.4, below:
2.1.1.1.4 To be determined from standard colour range.
- 3.21 DELETE: Division 11 – Equipment, Section 11422 – Raw Water Sample Pump, Clause 1.1.1, and
REPLACE WITH: Division 11 – Equipment, Section 11422 – Raw Water Sample Pump, Clause 1.1.1, below:
1.1.1 The Contractor shall supply materials, equipment and labour to furnish, install and test the pump system complete with the pump, motor, piping, valves and accessories, as indicated on the contract drawings and following the instructions specified by the manufacturer. The pumping system includes one (1) jet pump (sample pump) as indicated on the contract drawings and additional an identical shelf spare sample pump.
- 3.22 CHANGE: Division 11 – Equipment, Section 11101-S1 – Valve Schedule, Item 1 (AR0111) size, from 150 to 50
- 3.23 CHANGE: Division 11 – Equipment, Section 11101-S1 – Valve Schedule, Item 2 (AR0121) size, from 150 to 50

Please note the following changes to Section 10.1. PLANS of the tender:

- 4.1 ADD: Drawing S038 – Structural Details, as attached
- 4.2 ADD: Drawing S040 – Structural Details, as attached
- 4.3 DELETE: Drawing E-601 – Single Line Diagram, and
REPLACE WITH: Drawing E-601, as attached
- 4.4 DELETE: Drawing E-102B – Fiber Optic Cable Installation Site Plan, and
REPLACE WITH: Drawing E-102B – Fiber Optic Cable Installation Site Plan, as attached
- 4.5 DELETE: Label “PTFE” on Drawing D-022 (changed to PVC per Addendum 8, Change 2.4),
and
REPLACE WITH: “HDPE”
- 4.6 DELETE: Note 8, Drawing P-101, and
REPLACE WITH: Note 8, Drawing P-101, below:
 8. WITH THE EXCEPTION OF CONDENSATE DRAINAGE, DRAINAGE PIPING INSIDE THE BUILDING TO BE SCHEDULE 40 PVC DWV IN ACCORDANCE WITH CSA B181.2.
- 4.7 DELETE: Drawing E-503 – Electrical Details - Sheet 1, and
REPLACE WITH: Drawing E-503 – Electrical Details - Sheet 1, as attached
- 4.8 DELETE: Drawing S-102 – Structural Plans - 02, a label which reads “200 TANK PAD, SEE DET 4/S104”, and
REPLACE WITH: Label reading “200 TANK PAD, SEE DET 9/S701”.
- 4.9 DELETE: Drawing S-102 – Structural Plans - 02, Note 2, and
REPLACE WITH: Drawing S-102 – Structural Plans - 02, Note 2, below:
 2. ROOF FRAMING FOR REPRESENTATION ONLY, REFER TO ARCH DWGS. FOR ROOF OVERHANG DIMENSIONS, REFER TO 5/A501.
- 4.10 DELETE: Drawing E-102A – Proposed Electrical Site Plan, and
REPLACE WITH: Drawing E-102A – Proposed Electrical Site Plan, as attached
- 4.11 DELETE: Drawing E-108B – Electrical Cable Tray & Conduit Layout, and
REPLACE WITH: Drawing E-108B – Electrical Cable Tray & Conduit Layout, as attached

QUESTIONS & ANSWERS

Q1: Reference Provisional Table of Form of Tender item 11 and 12. Please provide additional clarity on the scope to be assumed for these items. Item 11 references three different mixes (35Mpa); base slab concrete is very different than suspended slab concrete vs toppings. Item 12 clarity between mud slabs, fill concrete and benching would be helpful.

A1: Provisional items 11 and 12 have been removed. Refer to Change 2.1.

Q2: Lintels. Reference drawing S-702, detail 7, shows structural framing that spans openings between 2500 to 4600mm. Please provide lintel details for openings that span less than 2500mm.

A2: Contractor shall use S-702, detail 7 for openings from 2,030 to 4,600 mm. For spans less than 2,100 mm, contractor shall use grouted block lintel and galvanized steel lintel as shown on details S038 and S040 attached as part of this addendum (refer to Changes 4.1 and 4.2)

Q3: Lintels. Reference drawing S-704, Detail 7 shows a steel lintel at the foot of the stud gable wall, without sizing or the extent required. Please provide details if required.

A3: Detail 7 on drawing S-704 is a typical detail to show the gable end wall studs supported on blocks. The opening shown is a typical opening for any applicable location. See lintel schedule on S-001 for details on the lintel.

Q4: Specification 01750 states the acceptable disinfection specialists. None of these companies are in operation anymore or performing disinfection work. Please provide alternative acceptable specialists to disinfect.

A4: Tarpon and Industrial Waterblast have been added as acceptable disinfection specialists. Refer to Change 3.1. The selected bidder may propose an alternative disinfection specialist following acceptance of their bid. For further information Bidders shall refer to Specification Section 01200 – Alternatives.

Q5: Reference Section 16231, Clauses 2.6 & 2.7 – Specs ask for duplex lube oil and fuel filters. Please confirm that simplex filters will be acceptable as duplex filters are not available from the factory for this size range of generators.

A5: No ruling on proposed alternate equipment as acceptable will be made prior to acceptance of a Bidder Submission. For further information Bidders shall refer to Specification Section 01200 – Alternatives.

Q6: Reference Section 16231, Clause 2.8.7.4.2 – Specs ask for silencer to be constructed from stainless steel. This is not an available option. Standard Cat factory silencer is carbon steel and has 5yr warranty. Please confirm this is acceptable.

A6: No ruling on proposed alternate equipment as acceptable will be made prior to acceptance of a Bidder Submission. For further information Bidders shall refer to Specification Section 01200 – Alternatives.

Q7: Reference Section 16231, 2.14.14, and Single Line Diagram – This point refers to a Kirk key setup and also the SLD refers to a kirk key setup for mechanical interlock for both generator mounted breakers. Normally, The sequence of operation will make the output breaker to the main distribution panel normally closed and the shunt trip on the load bank breaker to trip the load bank breaker in case of power outage. Kirk keys will not allow this operation. If kirk keys

are placed, it will require manual change over of breaker position during generator load testing which takes time. Instead of kirk keys we suggest implementing a shunt trip on the load bank breaker that is triggered by generator start signal from the ATS to trip the load bank breaker in the event the building loses power during generator load bank testing. Please confirm this is acceptable.

A7: Contractor shall include a shunt trip to the load bank breaker, interlocked with the ATS. Refer to Changes 3.2, 3.3, 3.4, and 4.3.

Q8: Please provide the specification and installation procedure for buoys as per the drawing S-050.

A8: A provisional allowance has been provided for the installation of buoys. Refer to Change 2.2. Details regarding the number and type of buoys required will be determined following discussion with DFO. Buoys are to be independently moored and shall not be attached to the protection structure. Refer to Section 02850 (added as per Change 3.5) for navigation related requirements.

Q9: Please provide the specification for the Ballast blocks as per the drawing S-050.

A9: The ballast blocks are to be constructed of structural concrete mix 1 as described in Specification Section 03300.

Q10: Intake Protection Structure – Please provide specifications for coating of intake structure.

A10: See Specification Section 09910 Painting, updated as per this addendum (refer to Changes 3.6, 3.7, 3.8, and 3.9).

Q11: Intake Protection Structure – Is a geotextile membrane to be placed to the underside of the protection structure. If so, please provide specifications.

A11: No geotextile membrane is required

Q12: Intake Protection Structure – Side casting, will cast-a-side method be acceptable?

A12: Yes, cast-a-side method will be acceptable provided the materials are not mounded and do not impact the intake operation or marine protection areas.

Q13: Carrier line, please confirm this line is to be installed via horizontal directional drilling, If so, the DR may have be increased form DR32.5 to DR17 or DR11. Please confirm.

A13: Per Addendum 8, installation method shall be Conventional Open Trenching.

Q14: Intake Screen Assembly, Chemical Line – Please provide details for this line from carrier pipe to intake structure. Is there a diffuser required? If so, please provide information on the layout / location of the diffuser.

A14: Chemical line is to be connected to a PVC diffuser, installed with a stainless steel bracket at intake screen. Refer to Section 02480, Clause 3.4 for details (added as per Change 3.10).

Q15: Raw Water Sampling Line – Please provide details on the layout from the carrier line to the location and attachment point.

A15: Raw water sampling line shall be connected to intake screen assembly through a manufacturer installed port. Refer to response to Question 28.

Q16: Raw Water Sampling Line – If it is to be located outside the intake screen, is there an independent intake SS screen required.

- A16: Sampling line to be located inside intake assembly, behind intake screen. An independent intake screen is not required.
- Q17: Intake Navigation Buoys – Please provide information for the navigation buoys, i.e. number of buoys required, colour, size, location(s) and if marine solar lights (amber) are required. Please confirm if independent anchors are required for each buoy or if pad eyes can be installed on the protection structure for mooring points**
- A17: A provisional allowance has been provided for the installation of buoys. Refer to Change 2.2. Details regarding the number and type of buoys required will be determined following discussion with DFO. Buoys are to be independently moored and shall not be attached to the protection structure. Refer to Section 02850 (added as per Change 3.5) for navigation related requirements.
- Q18: Intake Line & Carrier Line. It appears the off-shore end of lines will have very minimal coverage, horizontal directional drilling installation may result with some length of exposed pipe. Please confirm if ballast blocks will be required for exposed HDPE pipe(s). Please confirm if Concrete Cable Mats will be required for securing HDPE pipe(s) with shallow overburden coverage? If so, what is the minimum coverage is required to counteract the buoyancy of the HDPE pipe?**
- A18: Per Addendum 8, installation method shall be Conventional Open Trenching.
- Q19: E001 notes 12,17,&19 all make reference to the electrical contractor having to submit to ESA for plan review prior to submitting electrical shop drawings. In general, ESA plan review should be completed prior to tender. ESA plan reviews can take up to 6 months to be completed. That being said we cannot submit for final ESA plan review until we have approved shop drawings for any and all equipment being fed from the MCC which usually takes weeks to complete. Please confirm the engineering firm will complete these pre-tender scopes to avoid delays and future RFI's during the construction phase.**
- A19: Refer to Section 16010, which includes ESA plan review.
- Q20: Spec section 16010 1.9.1 states that the engineer shall obtain ESA plan review prior to starting the project. The electrical contractor shall conform to the ESA plan review at no additional cost. As we do not know what they are submitting, we cannot be held responsible for additional costs if all required studies come back with a failed result. Kindly confirm if this item could be considered a cash allowance to cover any erroneous costs**
- A20: Refer to Section 16010, which includes ESA plan review.
- Q21: We must submit a coordination and arc flash study prior to shop drawing submission. We will need to be sure the design associated with this project by the electrical engineer has taken into consideration and the equipment being specified will be suitable based on their internal calculations. Again, a cash allowance for this item should be considered to avoid potential added costs**
- A21: Refer to Section 16015. All protection coordination, short circuit analysis, and arc flash analysis shall be included as part of Section 16015. No cash allowance shall be provided.
- Q22: Spec notes that we need to collect the "Utility Fault Contribution Data, and Design Short CCT Levels, and Fault Contribution Data for Utility Feet ccts" this should be done by the design team prior to tender, or include a cash allowance**

- A22: All data collection and utility coordination shall be the responsibility of the contractor as specified in Section 16015. Bidders shall include all associated costs in their bid submission. No cash allowance shall be provided.
- Q23: 16015 1.8.2 states the electrical contractor are liable for any and all changes that may occur as a result of an (at this point seems to be) an incomplete ESA plan review. We will not accept this item, nor should we be held accountable for data sets outside of our control or available data. The design team should have all the required information prior to sending the design out for tender. If not, a cash allowance should be included for all required engineering to suit the project intent.**
- A23: Refer to Section 16010, which includes ESA plan review.
- Q24: Please provide the detailed specification for WP Material 50 mm compressible material along perimeter wall.**
- A24: 50 mm compressible material between bedrock and cast-in-place concrete structure will be 2 x 25 mm thick CEREMAR flexible foam expansion joint by W.R.Meadows.
- Q25: As per Drawing S102, the drain hatches are indicated as thermally insulated. Could you please confirm and provide clarification?**
- A25: Thermal insulation shall be provided on outdoor hatches only. The outdoor hatches should have minimal of R-20 insulation installed under the hatches. R-20 insulation material and thickness to be determined by manufacturer.
- Q26: Drawing E-102B specifies 12-strand OM3 multimode fiber, while drawing I-603 indicates 12-strand single mode fiber trunk cable. Please confirm which fiber type is required for the WTP to LLP connection.**
- A26: Fiber type for interconnection between the Water Treatment Plant and the new Low Lift Pumping Station shall be a 12-strand OS2 singlemode fiber trunk cable suitable for aerial installation as specified in Section 13590, Clause 2.2. Refer to Change 4.4 for updated drawing E-102B.
- Q27: Please clarify types and sizes of pipes for the Compressed Air, Raw Sampling, sodium hypochlorite and carrier pipe that are required to accompany the 400mm intake pipe to the intake screen.**
- A27: Refer to updated piping schedule (Change 3.11) for compressed air and sampling line details. Refer to Section 02480, Clause 3.4 (added as per Change 3.10) for hypochlorite line details (also refer to Change 4.5). Carrier pipe is to be 125mm DR32.5 HDPE.
- Q28: Drawing D101 shows the Compressed air pipe leaving the top left of the building, near column line 1. Are there any details of the trench, burial depth, bedding requirements etc. for this pipe to get to the intake screen? Similar question for the sodium hypochlorite and the raw water sampling line which don't even show leaving the building. Would it be possible for these pipes to be routed inside the building and exit the building at one location, perhaps adjacent the 400mm Raw intake?**
- A28: The carrier pipe shall be installed within the same trench as the intake pipe.

The carrier pipe shall connect to the LLPS at the southeast wall, underground, between the chemical room and raw water intake well.

The compressed air line and sampling line shall be routed to this point along the southwest and southeast walls, passing over top of the chemical room. The hypochlorite line shall be routed to this point through the northeast wall of the chemical room. Each of these lines shall be connected to the intake structure via manufacturer installed ports.

A schematic highlighting the carrier line interior, carrier line path, and connections for sampling line, hypochlorite line, and compressed air line at the LLPS and intake to be provided in a subsequent addendum.

Q29: Can the 100mm carrier pipe sit on the lakebed bottom or would also have to be installed by HDD?

A29: Per Addendum 8, installation method shall be Conventional Open Trenching.

Q30: Drawing D-501 shows a short 90 degree section of 75mm Air Backwash piping at the screen. It seems to connect the screen to the intake pipe. Please clarify.

A30: The air backwash piping will connect to the carrier pipe. Drawing D-501 shall be corrected, and a schematic highlighting the carrier line interior, carrier line path, and connections for sampling line, hypochlorite line, and compressed air line at the LLPS and intake shall be provided in a subsequent addendum

Q31: As per specification section 11101-2.10.2 Piping Schedule, Sampling Line is to be HDPE, however specification section 11101-2.6 Stainless Steel Tubing identifies Sample Lines as Stainless Steel Tube. Please clarify and provide an HDPE specification as needed.

A31: Sampling line is to be DR11 HDPE. Refer to Changes 3.11 and 3.12.

Q32: As per specification section 11540 Chemical Piping is to be PVC, however drawing D-022 indicates the chemical line to be PTFE, please clarify and provide specifications as needed.

A32: Refer to response to Question 27.

Q33: Please provide cross-sectional detail for Raw Water Intake line indicating all interior pipes and appurtenances required.

A33: Refer to response to Question 28.

Q34: Specification Section 15184 Refrigerant Piping calls for ASTM B88 Copper Tubing, however Section 15770 Room Air Conditioning Units identifies the Refrigerant Piping as ASTM B280 Copper Tubing. Please clarify.

A34: ASTM B280 copper pipe shall be used for refrigerant piping. Refer to Change 3.13.

Q35: Please confirm that Plumbing General Note #8 on Drawing P-101 does not apply to the Condensate drainage lines and these as per specifications shown in section 15413.

A35: Confirmed.

Q36: Please clarify pipe specifications to be used for Sanitary drainage as specification section 15413-2.1.1 calls for copper at 2" and less (Unburied & Buried) and Cast Iron (Unburied & Buried) or DR35 PVC (Buried) at 3" and larger. While Drawing P-101 Plumbing General Note #8 states drainage pipe inside the building is to be Schedule 40 PVC DWV.

- A36: Drawing P-101 General Note #8 shall be followed for the building Drainage and vent system pipe material except for condensate drainage piping. Refer to Changes 3.14 and 4.6.
- Q37: Specification Section 15413-2.1.2 Vent, indicates that the unburied pipe is to be Cast Iron and as per Drawing P-101 vent pipe is shown to run through the chemical room. Please clarify whether Drawing P-101 General Note #8, regarding drainage piping inside the building to be schedule 40 PVC DWV, applies to the vent pipe shown.**
- A37: Refer to response for Question 36
- Q38: In response to your answer to my question, Q3 – Addendum 8, please see the attached. I have circled the note I’m referring to. What is the specification of the paint to be used?**
- A38: See updated specification Section 09910 – Painting (refer to Changes 3.6, 3.7, 3.8, and 3.9).
- Q39: One of our suppliers has the following inquiry, “During the review of specification section 11210 we noted the total dynamic head specified in the table in section 2.1.1 of 35m is not the same as the duty point referred to in the system curve noted in section 2.1.14 of 24.3m TDH. (39.35l/s does equal 3,400 m3/day) Please confirm the TDH to design the pump for LLP1 & LLP2.”**
- A39: Contractor shall assume TDH of 35m for the purposes of pump pricing.
- Q40: Please confirm whether the Hydro One coordination costs are the same as those listed in the Miscellaneous Allowance table under “Allowance for Utilities Coordination.”**
- A40: Yes, the allowance includes Hydro One coordination.
- Q41: Please confirm whether the excess soil/native material can be used as backfill along the sides of the LLPS, as indicated in Drawing Section S304.**
- A41: For the purpose of pricing, the contractor shall assume no.
- Q42: The platform level mentioned in the new schedule is not matching with the plans, Plan D-302 shows operating elevation 179.950 meter for Gate SG0121. Please confirm which elevations are the correct ones?**
- A42: Elevations shall be as per the drawings. Refer to Change 3.15.
- Q43: Plan D-102 shows 8 qty. Gates but the schedule doesn’t mention any quantity, please confirm the correct qty of gates.**
- A43: Per drawing D-102, there shall be 8 sluice gates.
- Q44: There appears to be a discrepancy in the required TDH. The system curve shows 39.35 L/s at 24.3 m, whereas item 2.1.1 shows 39.35 L/s at 35 m. Could you clarify which value we should follow?**
- A44: Contractor shall assume TDH of 35m for the purposes of pump pricing.
- Q45: Section 11210, clause 2.11. Could you confirm whether the Enclosed line shaft requirement is mandatory?**
- A45: Pumps shall be as specified.
- Q46: Could you confirm the height of the step shown on drawing D-302?**
- A46: Refer to drawing S-302 for floor heights

- Q47: Writing to submit a request for equals on the HVAC portion on project Blind River WTP & LLPS.**
A47: No ruling on proposed alternate equipment as acceptable will be made prior to acceptance of a Bidder Submission. For further information Bidders shall refer to Specification Section 01200 – Alternatives.
- Q48: Please clarify why builder's risk insurance is not mentioned in the contract.**
A48: Refer to TI.34 for insurance requirements.
- Q49: Section 16231, 1.5.1. Confirming this generator is not being used for a life safety CSA C282 application? If it is not, are intake louvers/dampers still required? As the main purpose of these louvers is to keep the enclosure heat in to maintain it at 10°C per CSA C282. If it is not needed, a simple mesh/bird screen will be installed on the intake.**
A49: No, the generator is not for a life safety or CSA 282 Application. Internal Intake and Exhaust dampers are required in accordance with Section 16231 Clauses 2.26.10.3 and 2.26.11.5
- Q50: E-601, Note 3 – Please advise if a kirk-key system is required. A practical design feature is to have the main breaker closed and shunt tripping the load bank breaker in case of a power failure during load bank testing. This way the generator is ready to provide power to the building within a short period of time vs having to deal with a kirk-key system to restore power to the building.**
A50: Contractor shall include a shunt trip to the load bank breaker, interlocked with the ATS. Refer to Changes 3.16, 3.17, 3.18, and 4.3.
- Q51: Addendum #8, Q5 – This response does not fully answer the question being asked, as an alternate is not being proposed. We just need to confirm what kW size generator is required due to multiple kW ratings throughout the specs and drawings. Prime rating is not required on water station applications that are for emergency standby only. Drawing E-503, Note 1 states the generator is based on a 135kW prime rated unit, Section 16231 (2.2.1.1) asks for a 150kW standby rated generator, but the SLD asks for 150kW prime rated generator. Is a 175kW standby/160kW prime rating or a 150kW Standby/135kW prime rating generator required?**
A51: A 175 kW standby / 150 kW prime rated generator is required. Refer to Changes 3.19 and 4.7.
- Q52: Section 16231, Clause 2.2.1.10 – A generator this small will not produce a 35kA fault current. Please confirm the breaker's kA rating is to match the generator's fault current output per the generator manufacturer's engineering design and does not need to be 35kA. A 35kA rating will result in an oversized/overpriced breaker and may not be able to be accommodated in the breaker box to meet CSA/ULC clearance guidelines.**
A52: The generator breaker kA rating shall be confirmed based on the calculated short-circuit current as part of the electrical study. Refer to the Single Line Diagram for MCC bus rating.
- Q53: Section 16231, Clauses 2.4.7 & 3.44.1.3 – Please confirm vibration testing measurements are not required to be taken during factory tests per these sections. All vibration measurements are done during engineering stages to ensure they meet design and operational requirements.**
A53: Vibration displacement testing is required as part of the factory test in accordance with Section 16231, Clause 3.4.4.1.13

Q54: Section 16231, Clause 2.26.4.5 & 2.26.13.3 – Please confirm if a fire alarm rough-ins are required or if this was left in the specification by mistake. The fire alarm items listed here seem a bit excessive for a factory skin-tight enclosure that no one can walk inside.

A54: Contractor shall follow requirements in specifications Section 16231.

Q55: Section 16301 - 2.8 spec'd Eaton, TTI, please confirm ASCO is approved as equivalent?

A55: No ruling on proposed alternate equipment as acceptable will be made prior to acceptance of a Bidder Submission. For further information Bidders shall refer to Specification Section 01200 – Alternatives.

Q56: All competing drives are listed in the specification 16224 except for Schneider Electric's. Can the ATV630 be considered for approval?

A56: No ruling on proposed alternate equipment as acceptable will be made prior to acceptance of a Bidder Submission. For further information Bidders shall refer to Specification Section 01200 – Alternatives.

Q57: The specification calls for MTE AHF, which requires one AHF per VFD and does not align with the elevation layout. Accusine, on the other hand, is an external MCC solution shared across all VFDs, allowing it to match the e-room layout. As such, the specification and elevation currently do not align. Please advise which option is preferred so we can proceed accordingly.

A57: No ruling on proposed alternate equipment as acceptable will be made prior to acceptance of a Bidder Submission. For further information Bidders shall refer to Specification Section 01200 – Alternatives.

Q58: Reference drawing E-104, please clarify if the aluminum colour accent bands are required.

A58: Aluminum colour accent bands are optional but are recommended for enhanced visibility.

Q59: Reference drawing E-104, please provide rebar details for the lightpole base.

A59: The lightpole base is a prefabricated product by ArtFORMS®. Refer to the attached manufacturer detail in Appendix A for the Kellamy 610R base.

Q60: Reference drawing S-704 detail 2 and 3, are there any pipe encasements required?

A60: Pipe Encasement has been specified on Section D on drawing S-304.

Q61: Brick. Please advise the Type, size, texture of brick to be used on the project. Also please advise if the colour is from the standard colour range or custom. Please advise

A61: Refer to Section 04211 Brick Unit Masonry section 2.1.1.1 for the type, size, and texture of brick. The colour shall be selected from the standard colour range (per Change 3.20).

Q62: Environmental Activity and Sector Registry (EASR). Please confirm that the owner will include the EASR Registration.

A62: Refer to Section 02410 of the specifications.

Q63: Intake Crib Steel Structure. Reference drawing S-050, note 8 outlines "all members to be painted" Can you provide the paint details for the underwater steel structure? Would hot dip galvanizing be accepted as an alternative

A63: Refer to updated Section 09910 for painting requirements.

Q64: As per Addenda, the Chlorine pipe and Compressed Air pipe located within the Carrier pipe were specified with rigid pipe materials (Schedule 80 PVC & Stainless Steel). As such raised concerns are as follows:

These materials are not something that would be pulled through close to 400m of carrier pipe and would typically be of IPS HDPE, please provide a DR# & diameter should this material be IPS HDPE.

Assuming average rigid pipe length of 20', multiple couplings would be needed. This would carry potential leaks with no means to test during install, additionally the weight of the stainless-steel pipe over that length is of concern as well, please clarify pipe & testing requirements regarding this pipe.

A64: Refer to response to Question 27.

Q65: As per pipe supplier concerns:

Please confirm that the 400mm Raw Water Intake line is ID or OD.

HDPE Carrier line is an uncommon sizing, making large quantities of pipe and fittings procurement difficult. Upsizing to 6" OD DR17 will be significantly easier to procure. It is recommended that the Compressed Air Line be of HDPE, as Stainless Steel is a rigid material.

Please confirm that Advanced PE or HDPE pipe can be used for Sodium Hypochlorite lines.

A65: It is acceptable (but not required) to upsize the carrier line as suggested. Refer to response to Question 27 for updated pipe materials.

Q66: Please clarify, does the Sodium Hypochlorite line need a diffuser as is mentioned in Section 5. Sodium Hypochlorite Feed System of the Process Control Narrative? If so, please provide details.

A66: Chemical line is to be connected to a PVC diffuser. Refer to Section 02480, Clause 3.4 (added as per Change 3.10) for details (also refer to Change 4.5).

Q67: Please confirm that the Air Burst line & Raw Water Sampling line can be installed internal to the 400mm Raw Water Intake Line.

A67: No.

Q68: Please confirm whether a specific Microsoft Project software version is required for submission of the CPM schedule, or whether any current version capable of producing a native *.mpp* file is acceptable.

A68: Any version capable of producing an .mpp file is acceptable.

Q69: Please confirm whether major equipment procurement activities (e.g., generator, MCCs, VFDs, transformers) may exceed the stated per-activity cost-loading threshold when shown as individual procurement activities.

A69: Refer to Specification Section 01320.

Q70: Please confirm whether man-hour loading is required for subcontracted activities or only for work self-performed by the Contractor.

A70: Refer to Specification Section 01320.

- Q71: Please confirm the required level of detail for procurement activities, including whether submittals, review, fabrication, and delivery are to be shown as separate activities.**
A71: Refer to Specification Section 01320, Clause 2.1.2.
- Q72: Please confirm whether the in-water work window (July 16 to August 31, 2026) is to be treated as a hard calendar constraint within the CPM schedule.**
A72: Yes.
- Q73: Please confirm the required frequency of CPM schedule updates during construction and whether updated *.mpp* files are required with each submission.**
A73: Project schedule updates are required bi-weekly with an updated .mpp file.
- Q74: Please confirm whether weather allowances are to be explicitly shown as activities or assumed within activity durations, and whether schedule float is considered project float or Contractor float.**
A74: Refer to Specification Section 01320.
- Q75: Please confirm whether interim milestones (e.g., completion of in-water works, building weather-tight, mechanical completion) are required in addition to Substantial Performance and Final Completion.**
A75: Refer to Specification Section 01320.
- Q76: Please confirm that Engineer review of the CPM schedule constitutes acceptance of logic and sequencing only and does not relieve the Contractor of responsibility for meeting Contract completion dates.**
A76: Confirmed.
- Q77: Please confirm whether a baseline CPM schedule will be formally accepted following contract award and used for progress measurement.**
A77: Confirmed.
- Q78: Please confirm permitted working hours, weekend work allowances, and any restrictions related to work near residential or municipal infrastructure.**
A78: Refer to Contract Documents.
- Q79: Please confirm whether temporary power, water, and communications will be provided by the Owner or are to be supplied by the Contractor.**
A79: Refer to Specification Section 01510 Temporary Utilities.
- Q80: Please confirm any additional environmental monitoring, reporting, or permitting requirements beyond those explicitly stated, particularly for work adjacent to Lake Huron.**
A80: Refer to Contract Documents.
- Q81: Please confirm whether formal inspection or testing hold points are required prior to proceeding with subsequent work stages.**
A81: Refer to Specification Section 01120.

Q82: Please confirm the extent of dewatering required during excavation and foundation works and whether continuous dewatering is included in the Contract.

A82: Refer to Specification Section 02140 Dewatering and Appendix 104 Hydrogeological Investigation.

Q83: Please confirm how differing site conditions will be addressed should conditions vary from those described in the geotechnical information.

A83: Refer to Contract Documents.

Q84: Please confirm any restrictions on concrete pour sizes, sequencing, or cold joints for water-retaining structures.

A84: Refer to specification Section 03100.

Q85: Please clarify curing duration and protection requirements for concrete placed during cooler or shoulder season conditions.

A85: Refer to specification Section 03300.

Q86: Please confirm fabrication tolerances for structural steel and embedded items and whether shop trial fitting is required.

A86: Refer to specification Section 05500.

Q87: Please confirm corrosion protection systems required for steel components exposed to moist or submerged environments.

A87: Refer to notes on Drawing S-103.

Q88: Please confirm whether the building envelope is required to meet specific air leakage or thermal performance criteria and associated testing requirements.

A88: The building is designed to meet the requirements of the OBC. Refer to Contract Documents for details.

Q89: Please confirm finish systems required for high-humidity or chemically exposed spaces, including durability expectations.

A89: Refer to room finish schedule on drawing A-106 and respective specification sections in Division 9.

Q90: Please confirm the extent and timing of tie-ins to existing systems and allowable outage durations.

A90: Refer to contract documents.

Q91: Please confirm whether HVAC commissioning is to be performed by the Contractor or by a third-party commissioning agent.

A91: Refer to specification Section 15044.

Q92: Please confirm required duration and load conditions for standby generator testing and whether fuel for testing is included.

A92: Refer to specification Section 16231.

- Q93: Please confirm whether extended lead times for major electrical equipment may be considered for schedule relief when procurement is initiated promptly.**
A93: Refer to contract documents.
- Q94: Please confirm responsibility for coordination of ESA inspections, including re-inspection costs.**
A94: Refer to specification Section 16010.
- Q95: Please confirm responsibility for coordination between mechanical, electrical, and instrumentation vendors.**
A95: Refer to contract documents.
- Q96: Please confirm whether SCADA programming, integration, and final acceptance testing are included in the Contract scope.**
A96: Refer to Specification Section 13100 Control & Instrumentation. Contractor shall provide ICP-0001 with shell program for panel FAT testing and final SCADA programming and integration of ICP-0001 by the Engineer.
- Q97: Please confirm whether engineered lift plans are required for intake structures, major mechanical equipment, or generator installation.**
A97: No.
- Q98: On Drawing S102, a note references '200 Tank Pad, See Det 4/S104'. However, drawing S104 does not exist. Please provide details for the Tank Pad.**
A98: Per Change 4.8, refer to detail 9 on Drawing S-701 for tank pad detail.
- Q99: For Concrete Benching minimum compressive strength is given as 20MPa in Materials note #2 on S-001. However, specs section 03300 2.2.5 states that 35 MPa should be used. Please clarify.**
A99: Contractor shall use mix number 3 as detailed in specification Section 03300
- Q100: Reference to the Lean Concrete Fill indicated on Drawing S-101 (Foundation Slab Plan), the specifications list one mix design for 'fill concrete' and a separate mix for 'mass concrete'. Please confirm which of these specified mixes is intended to be used for the Lean Concrete Fill.**
A100: Contractor shall use concrete mix number 6 as lean concrete, as detailed in specification Section 03300. There is no requirement for mass concrete for this project.
- Q101: The specs state that rock removal may be paid out of the provisional items. Which items would cover rock removal? Items 1,2 and 3 say "excavation in all kinds of material" are these meant to include the cost of rock removal if directed?**
A101: Provisional items 1, 2, and 3 have been removed. Refer to Change 2.1. Updated removals quantities for bidding are being prepared and will be provided via separate addendum.
- Q102: Please confirm whether the concrete blocks used for the crib structure are required to include rebar.**
A102: Refer to specification Section 02480 (added per Change 3.10).
- Q103: Please confirm the required compressive strength for the concrete blocks used in the crib structure.**

A103: Regular structural concrete strength.

Q104: For the crib support structure shown on S-050, please provide the approved manufacturer and specifications for the metal components.

A104: Refer to specification Section 05120.

Q105: For the crib support structure shown on S-050, please provide the approved manufacturer and specifications for the precast concrete blocks.

A105: Refer to specification Section 03300.

Q106: Drawing S-102 Note 2 refers to Detail 3/A131. However, A131 does not exist. Please clarify.

A106: Per Change 4.9, refer to detail 5 on drawing A-501.

Q107: Drawing P-101 - Confirm SAN lines including vents in new LLPS are to be PVC DWV.

A107: Drainage and vent piping inside the building except condensate drainage piping shall be schedule 40 PVC DWV in accordance with CSA B181.2.

Q108: What is the routing for the 75mm compressed air line from the compressor to the 125mm Carrier pipe?

A108: Refer to response to Question 28.

Q109: What is the routing for the 25mm Sodium Hypochlorite line from dosing pumps to the 125mm Carrier pipe?

A109: Refer to response to Question 28.

Q110: What is the routing for the 25mm Sampling Pump line from pump to the 125mm Carrier pipe?

A110: Refer to response to Question 28.

Q111: No specification seems to have been provided for the required Raw Water Sampling Pumps. Please provide specification.

A111: Refer to specification Section 11422 and Change 3.21.

Q112: Drawing D-102 - Does the 400mm HDPE Intake continue into the new LLPS or does it change to a different pipe material through the foundation?

A112: Intake pipe material does not change at building foundation.

Q113: Drawing D-102 - Where does the 300mm pump discharge piping change to PVC DR18 piping? Are couplings required at this pipe material change?

A113: 300 mm raw water piping changes from 304L SS to PVC at the coupling shown at the northwest edge of the building per drawing D-102.

Q114: Addendum 5 Q/A #3 noted to refer to the valve schedule for the air release valve sizes. The Valve schedule states the ARV's to be 150mm. Drawing D-302 shows the ARV's piped off the 150mm pump discharge line of which its line is much smaller. Confirm contractors are to carry 150mm air release valves and 150mm isolating ball valves.

A114: Air release valves to be 50 mm. Refer to Changes 3.22 and 3.23.

Q115: Drawing D-501 - Does the HDPE piping have to have the flanged connections as shown, or can they be fused? A flanged connection for the Intake screen will be provided if required.

A115: Connections shall be as shown in drawing D-501.

Q116: Addendum #8 clarified that the Sodium Hypochlorite line as shown on Drawing D-022 was to be PVC. Please confirm that it is to be PVC SCH80.

A116: Refer to response to Question 27.

Q117: What DR rating are contractors to carry for the 25mm HDPE Sampling Pump piping?

A117: Refer to response to Question 27.

Q118: Since the Intake piping has been switched from directional drilling to open trench, there is a concern that the 75mm stainless steel compressed air piping will not allow for a typical barge type installation. The intake will require to be fabricated and drag and dropped into position by the barge and the rigidity of the stainless steel piping may prevent this from being performed safely and without damage to any of the pipes within and including the carrier pipe.

A118: Refer to response to Question 27.

Q119: Provisional Items 3, 4 and 5 Include shoring in the unit rate which is measured as a volume when shoring cannot be measured this way. Shoring is not a volume and it cannot relate to a generic volume. Two quantities of the same volume of excavation can have different quantities of shoring. Please provide a separate provisional unit rate for shoring.

A119: Provisional Items 3, 4, and 5 have been removed. Refer to Change 2.1.

Q120: Provisional Items 3, 4 and 5 Include dewatering in the unit rate which is measured as a volume when dewatering cannot be measured this way. Dewatering is related to the duration of the excavation and flow rates and water levels. Two quantities of the same volume of excavation can have different amounts of dewatering. Please provide a separate method to handle dewatering.

A120: Provisional Items 3, 4, and 5 have been removed. Refer to Change 2.1.

Q121: Are there any union requirements or restrictions applicable to this project?

A121: No.

Q122: Is builder's risk insurance required for this project?

A122: Refer to TI.34 for insurance requirements.

Q123: Will the connection of hydro and gas be covered by the cash allowance?

A123: See miscellaneous table for utility coordination.

Q124: E102A- conduit run C3B states to install new pull box 2. Drawings shows PB3 from PB2 to MH4 but MH4 isn't located nor is there a detail or sizing requirements for MH4. Please confirm

A124: Manhole MH-4 is not required. A pull box located at the exterior wall of the new pumping station is acceptable. Refer to Change 4.10.

Q125: E601 note 3 states to use RWU for the main feeder than transition to a jbox on the wall and run into cable tray, per detail 1 on E103. Please provide clarification on the transition methods

required, as RWU is not an acceptable cable to be installed in tray. Suggest installing main feeder conduits underground into base of MCC and eliminating the transition

A125: Provide four (4) 1C-3/0 RWU90 conductors installed in a dedicated 103 mmC surface-mounted PVC conduit routed to the MCC Service Entrance Section (Refer to Change 4.11).

Q126: Please note sections 16222, 16223 and 16224 will integral to the MCC package. Suppliers/manufacturers will not separate these costs as they are a complete assembly. There may be more itemized pricing at the time of closing that we cannot separate but these are the current line items

A126: Sections 16223 and 16224 may be listed as included in Section 16225 for a lump sum MCC cost. If Section 16222 AC Motor starters are part of the MCC they may be included in Section 16225 for a lump sum MCC.

Q127: The controls package spec requires us to perform the SCADA testing. This is typically completed by the township after turnover is complete. We will not be able to secure a controls package if this is indeed our responsibility. This falls in the same vein of our previous RFI/concern with site plan evaluation. These 2 items are not the construction teams responsibility and should be omitted from our scope.

A127: Refer to Specification Section 13100. Contractor shall be responsible for leading and assisting with commissioning and testing. Programming and Integration of ICP-0001 shall be completed by the Engineer.

Q128: Good morning, could we get the following added to the contact?

In the case where tariffs (imposed by the US, Canadian and/or other countries) are imposed and have direct and verifiable impacts on materials necessary for this project, the Owner will provide appropriate monetary compensation to the Contractor. The Contractor would be required to provide documentation to support any request for compensation (letters from suppliers, proof of material costs at the time of bidding, revised quotes for material costs at the time of supply, etc.).

A128: Refer to Change 1.1.

End of Addendum 9

Encls.

Sec0248 Marine Work (7 pages)

Sec0285 Navigation (2 pages)

E-102A (1 page)

E-102B (1 page)

E-108B (1 page)

E-503 (1 page)

E-601 (1 page)

S-038 (1 page)

S-040 (1 page)

Appendix A Kellamy 610R Base (1 page)

1 GENERAL

1.1 Scope and Intent of Temporary Works

- 1.1.1 This specification covers the requirements for construction of the in-water portion of a new raw water intake pipeline and intake structure.
- 1.1.2 The overall objective of the temporary work is to provide a controlled / effective working environment for new construction, within the setting of a large waterbody environment.

1.2 Work Included

- 1.2.1 Engineering design, construction and removal of temporary systems as well as planning of the work, sequencing and construction staging.
- 1.2.2 Construction of protective works including intake supports, rock protection and shoreline restoration.
- 1.2.3 Temporary warning signage.
- 1.2.4 Refer to all available drawings and specifications.

1.3 Related Sections

- 1.3.1 Section 02137 – Bracing and Shoring
- 1.3.2 Section 02140 – Dewatering
- 1.3.3 Section 02150 – Turbidity Curtain
- 1.3.4 Section 02315 – Excavation, Trenching & Backfilling
- 1.3.5 Section 02511 – Watermains
- 1.3.6 Section 11340 – Intake Screen And Air Backwash System
- 1.3.7 Section 11530 – Chemical Metering And Storage Systems

1.4 References

- 1.4.1 American Society for Testing and Materials International (ASTM)
 - .1 ASTM A6/A6M-14, Standard Specification for General Requirements for Rolled Structural Steel Bars, Plates, Shapes, and Sheet Piling.
 - .2 ASTM A 325M-13, Standard Specification for Structural Bolts, Steel, Heat Treated, 120/105 ksi Minimum Tensile Strength.
 - .3 ASTM A572/A572M-13, Standard Specification for High-Strength Low-Alloy Columbium-Vanadium Structural Steel

- .4 ASTM A1011/A1011M-14, Standard Specification for Steel, Sheet and Strip, Hot-Rolled, Carbon, Structural, High-Strength Low-Alloy and High-Strength Low-Alloy with Improved Formability, and Ultra-High Strength.

1.4.2 Canadian Standards Association

- .1 S16.1 Limit States Design for Steel Structures
- .2 G40.20/G40.21-13, General Requirements for Rolled or Welded Structural Quality Steel/Structural Quality Steel.
- .3 W47.1-09 Certification of Companies for Fusion Welding of Steel Structures.
- .4 W59-M1991(R2008)], Welded Steel Construction (Metal Arc Welding)

1.4.3 Ontario Provincial Standard and Specifications (OPSS)

- .1 OPSS 805 Construction Specification for Temporary Erosion and Sediment Control Measures
- .2 OPSS 1004 Material Specification for Aggregates, Miscellaneous

1.4.4 Regulations for Construction Projects, Ontario Regulation 213/91, made under the Occupational Health and Safety Act, Revised Statutes of Ontario, 1990, Chapter O.1.

1.5 **Design – General**

1.5.1 The General Contractor shall provide all control and verification of the work in fulfilling the requirements of this specification. The Contractor shall be on site full time and provide full review of the subcontractor's activities, maintaining conformance with the Contract Documents.

1.5.2 All submissions prepared by subcontractors shall be reviewed by the General Contractor prior to submission. Any field dimensions / verification should be addressed prior to submissions.

1.5.3 Prepare and submit engineering / working drawings for all temporary works, stamped and sealed by a Professional Engineer licensed in the Province of Ontario.

1.5.4 The specific details and arrangement of temporary works are left to the discretion of the Contractor.

1.5.5 Design of Pipe Ballast

- .1 Contractor to provide the design for concrete ballast weights for the HDPE intake pipeline to provide negative buoyancy to sink the pipeline and to maintain its position on the lake bottom.

1.5.6 Concrete ballast weights for HDPE intake pipe shall be spaced at a maximum of 3.0 m, assuming 20% air in the pipe.

1.6 **Measurement and Payment**

1.6.1 Work outlined in this section is included in the lump sum tender price.

2 PRODUCTS

2.1 Concrete Ballasts

2.1.1 Ballast weights shall meet the following requirements:

- .1 All concrete ballast blocks must be suitably reinforced with steel reinforcing rods to prevent cracking of the blocks as they are being fastened on the pipe. Minimum 60 mm cover on rebar.
- .2 The bore diameter of the block should be larger than the outside diameter of the pipe to allow for the insertion of a 3.2 mm thick protective neoprene pad between the pipe and the concrete. The pipe should therefore not be used as a form during the manufacture of the concrete ballasts without some allowance for this increase in diameter.
- .3 Allow a gap of at least 50 mm between mating surfaces of the concrete and the pipe to allow compression of the neoprene gasket and prevent pinching of the pipe when tightening the bolts.
- .4 The concrete ballasts may be fastened to the pipe with galvanized threaded bolts to provide a means of post-tightening the blocks a minimum of 24 hours after the initial installation of the ballasts.
- .5 A round ballast weight design shall not be used, as the submerged line is subject to currents and wave action. A ballast design consisting of a heavier lower block than the top block will provide a more stable configuration.
- .6 Provide lifting lugs for each collar section.

2.1.2 Concrete ballast design including reinforcing to be in accordance with pipe suppliers' recommendation and to the satisfaction of the Engineer. Submit shop drawings to the Engineer for review and approval.

2.1.3 An HDPE Flex restraint block shall be fused to the pipe at every alternate concrete ballast collar in order to maintain the position of each collar during deep water installation of the fused pipe.

2.1.4 Concrete ballasts to be installed at spacing indicated at all locations where intake pipe to be installed in the wet (under water) regardless of if section is in-shore.

2.2 Marker Buoy

2.2.1 Install marker buoy in vicinity of intake screens according to requirements of Navigation Canada.

2.2.2 Size, shape, colour and markings of buoy to be in accordance with all applicable regulations including Canadian Aids to Navigation Systems.

2.2.3 Buoy to be anchored to concrete weight independent of the intake and screens with stainless steel cable or chain.

2.2.4 Contractor responsible for providing appropriate weight and anchoring system.

2.2.5 Concrete weight/support to be constructed using minimum 30 MPa concrete in accordance with CAN/CSA-A23.1/A23.2-00 – Concrete Materials and Methods of Concrete Construction/Methods of Test for Concrete.

2.3 Clay Seal

2.3.1 Clay seal material for trench plugs in accordance with OPSS 1205.

2.3.2 Suitability of trench plug source material to be approved by the Engineer.

2.4 Steel Sheet piling and Components

2.4.1 Steel sheet piles: to CAN/CSA-G40.21, grade 350W (or equivalent ASTM) and the following.

.1 Hot-rolled, continuous interlocking Z sections, 350 mm deep or greater

.2 Minimum effective section modulus of 1,800 cm³ per linear meter of sheet

2.4.2 Structural steel for rolled sections including walers and waler splices: to CAN/CSA- G40.21, Grade 350W.

2.4.3 Structural steel for plates and miscellaneous steel: to CAN/CSA-G40.21, Grade 300W

2.4.4 Nuts and bolts: hexagon nuts, bolts, and washers: to ASTM A325M.

2.4.5 Welding materials: to CSA W47.1 and CSA W59.

2.4.6 Corners: standard or custom corner pieces to suit the arrangement.

2.4.7 Sheet piling shoes: straight bar, cast steel or other.

2.5 Miscellaneous Aggregates

2.5.1 Rock Protection: 10% to 90% Gradation - well graded between 125 mm to 300 mm diameter, according to Table 8 of OPSS 1004. The upper 300 mm finish rock shall have rounded edges suitable for aquatic life.

2.5.2 Clear stone: 19 mm diameter, Type II according to OPSS 1004

2.6 Equipment

2.6.1 Large excavators may be utilized with a reach suitable for the scale of the site.

2.6.2 Vibratory hammers may be utilized for driving the sheet. Impact hammer shall be utilized when vibratory hammer is unable to drive sheet piling to required depth.

2.6.3 Pipes, wells, deep wells, well-points, pumps, electrical generators and other equipment as required to dewater in accordance with the requirements of this section.

2.6.4 Barges, as required.

3 EXECUTION

3.1 General

- 3.1.1 Install clear, bright, large, reflective warning signage on the banks of Lake Huron, upstream and downstream of the construction at a distance of 100 m. Remove signage following completion of the intake.

3.2 Dredging, Excavating, Trenching and Backfilling

- 3.2.1 Complete all excavating, trenching and backfilling in accordance with Section 02315.
- 3.2.2 Submit detailed pipe installation procedures, as recommended by the pipe manufacturer to the Engineer for review, with pipe shop drawings.
- 3.2.3 Trench alignment and depth require Engineer's approval prior to pipe installation.
- 3.2.4 Restoration works to be completed in the spring.

3.3 Pipe Jointing

- 3.3.1 Jointing of high-density polyethylene pipe shall be completed in accordance with the manufacturer's instructions.
- 3.3.2 Jointing shall be completed using the thermal butt-fusion process, or by using electro-fusion couplings.

3.4 Zebra Mussel Control System

- 3.4.1 Provide one (1) 20 mm diameter coiled Polyethylene chlorine feed line for zebra mussel control from the on-shore pumping station to the intake screen and make connections as shown on the Contract Drawings.
- 3.4.2 Provide an additional 5.0 m of coiled PE feed line over and above the length of the intake pipe.
- 3.4.3 Contractor to coordinate chlorine line supply to ensure suitable sealed transition from inside of intake at Pumping Station. Chlorine lines to be rated for minimum 860 kPa (125 psi) and suitable for use with 12% sodium hypochlorite.
- 3.4.4 Install PVC chlorine diffusers complete with stainless steel brackets at the intake screens as per the Contract Drawings.

3.5 Pipe Installation

- 3.5.1 Provide a bulkhead on both ends of the pipeline to prevent water from entering the pipe. Bulkhead to consist of a flange assembly and a blind flange.
- 3.5.2 Join and install pipe in accordance with specifications and manufacturer's instructions.
- 3.5.3 Float the pipe in position using temporary anchors as required or use such other construction methods as appropriate and as approved by the Engineer.
- 3.5.4 Make preparations for and sink the floating pipeline by filling it with water at a controlled rate as recommended by the manufacturer. Arrange and pay for the technical

representative of the pipe manufacturer to be present at the site during the sinking operation. Provide additional temporary buoyancy during the sinking operation if required.

3.5.5 Carry out appropriate corrective action if an air pocket or “hump” develops in the pipeline during the sinking operation.

3.5.6 Unless otherwise shown on the drawings or directed by the Engineer, the concrete weights installed on the intake pipe shall be founded on firm subgrade. The intake pipe shall be bedded and surrounded with 19 mm crushed stone as shown on the Drawings. After backfilling with clear stone to 300 mm above pipe native material shall be placed in the trench to the height shown on the drawings.

3.6 Trench Plugs

3.6.1 Install clay or bentonite trench plug(s) on the HDPE intake pipe to as shown on the drawings to prevent trench erosion caused by wave action and to allow in-shore excavations in the dry.

3.6.2 Trench plug to be a minimum 600 mm thick and to extend into undisturbed soil on the sides and bottom of the trench and shall extend a minimum of 300mm above high lake level.

3.7 Quality Assurance

3.7.1 The Contractor shall provide continuous underwater video camera recording of all on-going dive operations by CCTV for the inspector to monitor operations from shore.

3.7.2 A complete underwater camera inspection shall be performed on the entire length of the installed intake pipe and screens and a DVD and report shall be submitted to the Engineer for review. Prior to proceeding with backfilling.

3.7.3 A complete underwater camera inspection shall be performed on the entire length of the installed intake pipe and screens and a DVD and report shall be submitted to the Engineer for review, after backfilling and prior to Substantial Completion.

3.7.4 Additional video evidence will be required to confirm rectification of any deficiencies identified.

3.8 Close out submittals

3.8.1 Provide “As-Built” Survey of the installed pipeline. The “As Built Survey shall include, at a minimum:

- .1 Location and elevation of the intake screens.
- .2 Top of the installed intake pipeline at a maximum 20 m spacing.
- .3 Location of the end of the abandoned intake.

3.8.2 The tolerances for the “As Built” survey shall be:

- .1 ± 50 mm horizontally
- .2 ± 10 mm vertically.

END OF SECTION

1 GENERAL

1.1 Description

- 1.1.1 This section specifies requirements for in-water construction work in Lake Huron at the project site.
- 1.1.2 Comply with Division 1 – General Requirements
- 1.1.3 Comply with all requirements specified by Transport Canada

1.2 Non-Interference with Navigation

- 1.2.1 It is a prime consideration that none of the work carried out as part of this contract shall in any way interfere with, delay, or interrupt navigation.
- 1.2.2 Be advised that the project site may be subject to navigational traffic.
- 1.2.3 Contractor shall prevent any material and equipment from his operations from encroaching on navigation activities in the lake other than which is actually required for work in the lake, for accessing the project site, and for transporting material and floating equipment to and from the site.
- 1.2.4 In all matters connected with arranging and carrying out the work, the Contractor shall be governed by all established regulations relating to the safety of navigation.
- 1.2.5 Contractor shall keep the Canadian Coast Guard informed of construction operations prior to their undertaking in order that necessary Notices to Shipping and Notices to Mariners can be issued.
- 1.2.6 The Owner will not be responsible for any injury to the Contractor's personnel or for any damage to the Contractor's plant, equipment and material caused by or as a result of navigation in the lake.
- 1.2.7 Make no claim for delays or downtime resulting from navigation and vessel traffic. The Owner and Engineer will not be responsible for any loss of time, equipment, material and any other cost related to interference with navigation and vessel traffic.

1.3 Communication Systems

- 1.3.1 The Contractor shall ensure that all units of floating plant being used are equipped with VHF radio equipment.
- 1.3.2 The equipment shall be capable of maintaining constant contact on Radio Channels 12 or 16 with other vessels transiting the project site during offshore dredging and construction operations.
- 1.3.3 The Contractor shall ensure that all floating equipment requiring radio communication be equipped with VHF marine radios fitted with Channels 12 or 16, and when carrying out offshore work in the lake, the Contractor shall maintain at all times a listening watch on these channels.
- 1.3.4 For communications with the Contractor's own floating equipment and personnel at the site, the Contractor shall use the Contractor's own frequency.

1.3.5 Radio procedures as given in the Department of Communications Regulations, shall be followed at all times when radios are being operated.

1.3.6 Contractor shall conform to all procedures of the Department of Communications Regulations.

1.4 Additional Navigation Aids

1.4.1 Contractor shall supply, install and maintain any additional navigational aids and marker buoys required to mark the limits of the work.

1.4.2 If a permanent buoy is relocated, placed or changed in any way from its advertised condition, or when the work performed could restrain, interfere with or modify the navigation, including pleasure crafts', the Contractor shall obtain prior authorization from the Canadian Coast Guard and Transport Canada.

1.4.3 Contractor shall mark all floating equipment with lights to warn boaters of its presence in the lake, in accordance with the Collision Regulations with Canadian Modifications, 1983.

1.5 Existing Navigation Aids

1.5.1 The Contractor shall not modify or relocate any existing navigational aids at any time.

1.6 Public Notification

1.6.1 Notices shall be posted at all marinas and public boat launching areas within 1km of the project site warning of construction activities being carried out at the site.

2 PRODUCTS

2.1 All navigational aids supplied and installed by the Contractor shall meet the requirements of:

2.1.1 Canadian Coast Guard

2.1.2 Transport Canada

2.1.3 Canada's Private Buoy Regulations

2.1.4 Canada Shipping Act

2.1.5 Vessel Operation Restriction Regulations

2.1.6 Canadian Navigable Waters Act

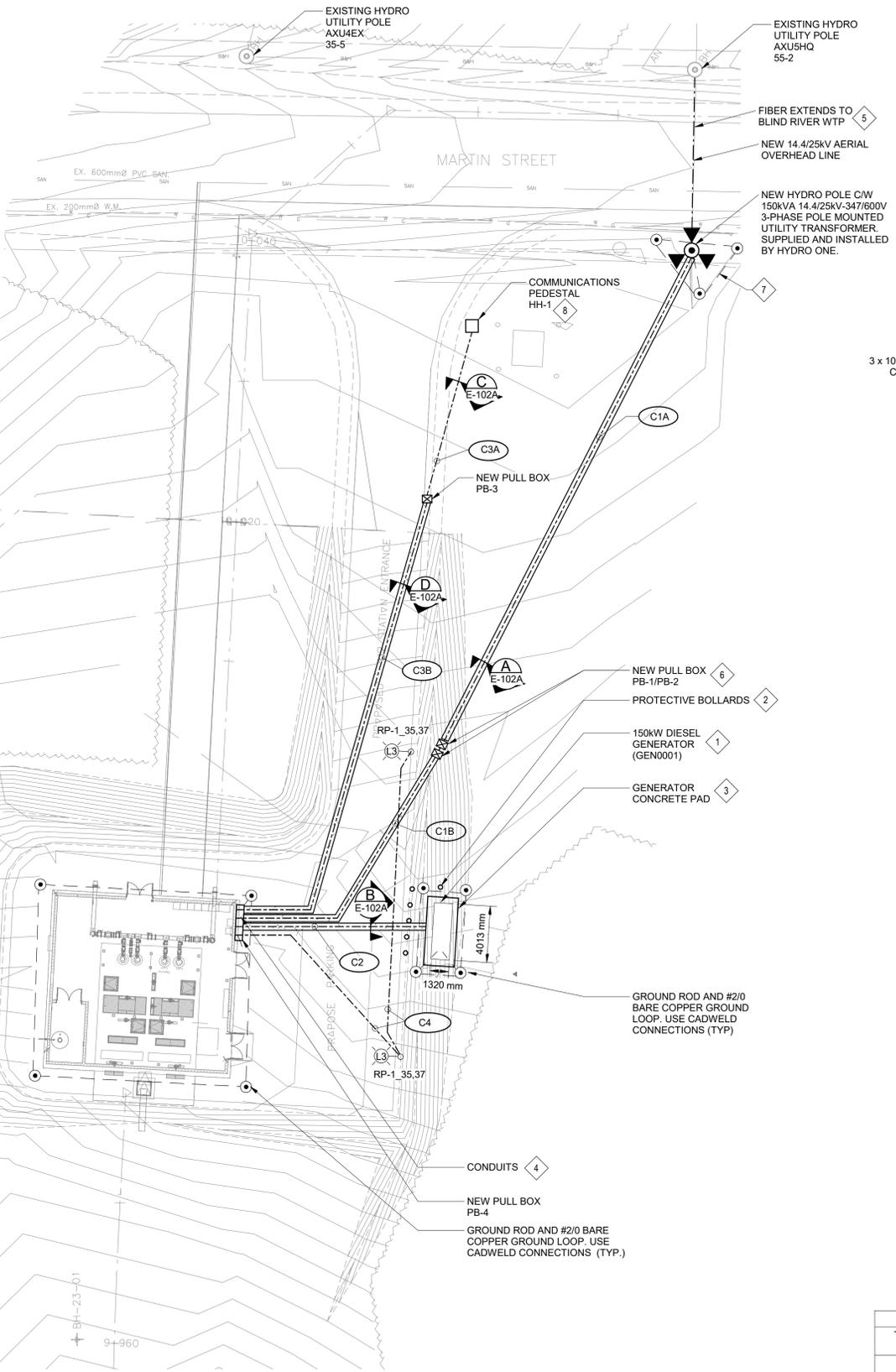
3 EXECUTION

Not Applicable

END OF SECTION

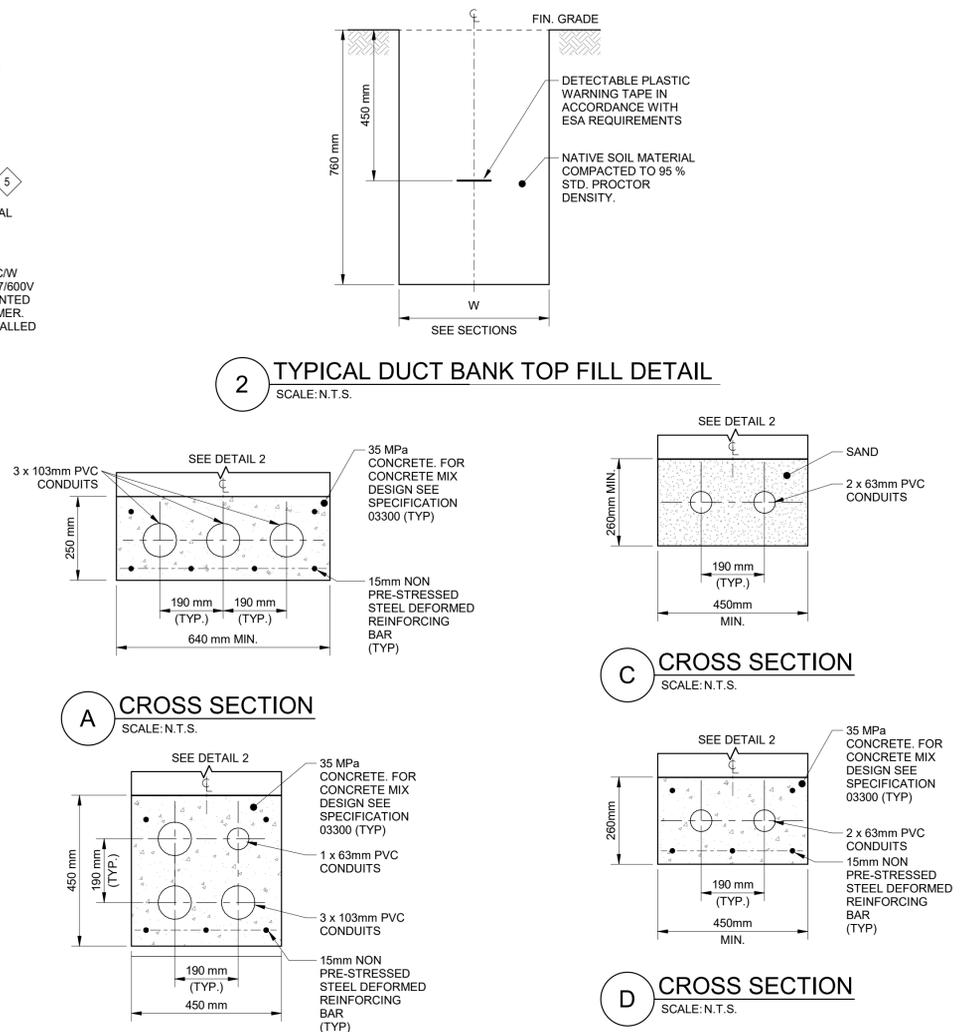
NOTES:

- 1 PROVIDE A NEW 150kW OUTDOOR GENERATOR IN SKIN TYPE SOUND ATTENUATED ENCLOSURE. PROVIDE GENERATOR FOUNDATION PER STRUCTURAL DRAWINGS. COORDINATE FOUNDATION DIMENSIONS AND CONDUIT UPTURN POSITIONS WITH APPROVED GENERATOR SHOP DRAWINGS. REFER TO DETAIL 1/E-503.
- 2 INSTALL BOLLARDS WHERE VEHICULAR TRAFFIC MAY BE A HAZARD SO AS NOT TO OBSTRUCT OPERATION OF GENERATOR ENCLOSURE DOORS OR COMPONENTS. MINIMUM 1 AWAY FROM THE GENERATOR PAD. COORDINATE BOLLARDS LOCATION ON SITE, SPACING BETWEEN THE BOLLARDS SHALL NOT EXCEED 1340mm. BOND BOLLARDS TO GENERATOR GROUNDING SYSTEM WITH #4 AWG COPPER WIRE. REFER TO STRUCTURAL DETAIL 4 ON DRAWING S-705 FOR BOLLARD DETAIL.
- 3 REFER TO STRUCTURAL DETAIL FOR GENERATOR CONCRETE PAD.
- 4 CONDUITS TO RISE ON WALL SURFACE AND ENTER BUILDING AT HIGH LEVEL. REFER TO DETAIL 1 ON DRAWING E-103.
- 5 INSTALL FIBER COMMUNICATION CABLE IN THE SAME DUCTBANK WITH 600V POWER. FIBER CABLE SHALL RISE TO THE NEW HYDRO POLE AND BE INSTALLED ON EXISTING HYDRO POLES ALL THE WAY TO EXISTING BLIND RIVER WTP. REFER TO SITE PLAN DRAWING E-102B FOR CONTINUATION.
- 6 PROVIDE SEPARATE PULLBOXES FOR POWER AND FOR COMMUNICATIONS
- 7 PROVIDE A GROUNDING SYSTEM AT NEW HYDRO POLE. REFER TO DETAIL 4/E-502.
- 8 PROPOSED LOCATION OF THE TELEPHONE PEDESTAL IS PROVIDED FOR GENERAL INFORMATION ONLY. CONTRACTOR SHALL COORDINATE WITH THE LOCAL TELEPHONE PROVIDER TO CONFIRM THE EXACT LOCATION AND DEMARCATION POINT PRIOR TO TRENCHING AND INSTALLING THE DUCT BANK. ANY RELOCATIONS REQUIRED BY THE TELEPHONE PROVIDER SHALL BE PERFORMED AT NO ADDITIONAL COST.



1 ELECTRICAL SITE PLAN
SCALE: 1 : 200

2 TYPICAL DUCT BANK TOP FILL DETAIL
SCALE: N.T.S.



UNDERGROUND DUCT SCHEDULE:

TAG	DESCRIPTION	ORIGIN	DESTINATION	SECTION	COMMENTS
C1A	1 x 103mm (600V POWER) 1 x 103mm (SPARE) 1 x 103mm (COMMUNICATIONS/FIBER)	NEW MARTIN ST HYDRO ONE 150kVA UTILITY POLE-MOUNTED TRANSFORMER	NEW PULL BOX (PB-1)	A	CONCRETE ENCASED
C1B	1 x 103mm (600V POWER) 1 x 103mm (SPARE) 1 x 103mm (COMMUNICATIONS/FIBER)	NEW PULL BOX (PB-1)	NEW BUILDING	A	CONCRETE ENCASED
C2	1 x 103mm (600V POWER) 1 x 103mm (208/120V SHORE POWER & CONTROLS) 1 x 103mm (SPARE) 1 x 63mm (SPARE)	NEW GENERATOR GEN0001 ON CONCRETE PAD	NEW BUILDING	B	CONCRETE ENCASED
C3A	1 x 63mm (PHONE) 1 x 63mm (SPARE)	COMMUNICATIONS PEDESTAL (HH-1)	NEW PULL BOX (PB-2)	C	DIRECT BURIED
C3B	1 x 63mm (PHONE) 1 x 63mm (SPARE)	NEW PULL BOX (PB-2)	NEW PULL BOX (PB-4)	D	CONCRETE ENCASED
C4	1 x 41mm 2 X 1/C #10 TECK90 (LIGHTING)	NEW BUILDING	LIGHTING POLE		DIRECT BURIED

SITE LIGHTING FIXTURE SCHEDULE

TYPE	DESCRIPTION	MODEL	SOURCE TYPE	MOUNTING HEIGHT	DRIVER VOLTAGE	WATTAGE	NOMINAL LUMENS	CRI	FINISH	COLOUR TEMPERATURE
L3	POLE MOUNT LED AREA LIGHT (SINGLE)	LITHONIA LIGHTING RSX3-LED-P3-30K-R4-MVOLT-SPA EGS-DBLXD	LED	7.5m POLE MOUNT	208V	266W	32593	80	BLACK	3000K
POLE	NOVA POLE 4" STRAIGHT SQUARE STEEL	NSS42MD LENGTH: 24FT. SINGLE HEAD POWDER COATED BLACK								



ENGINEER'S SEAL:

DATE	REV.	REVISION	BY	APPD
MAR 2026	2	ISSUED FOR ADDENDUM No. 9	MG	DC
FEB 2026	1	ISSUED FOR ADDENDUM No. 6	MG	DC
JAN 2026	0	ISSUED FOR TENDER	MG	DC



PROJECT TITLE:
BLIND RIVER INTAKE AND LLPS

DRAWING TITLE:
PROPOSED ELECTRICAL SITE PLAN

RW	DT	DC	MG
DRAWN	DESIGNED	CHECKED	APPROVED
1:200		MAR 2026	
SCALE		DATE	
T001592B	2	E-102A	
PROJECT NO.	REVISION	DRAWING	

NOTES:

- 1 THE FIBER CABLE SHALL ORIGINATE FROM THE NEW PUMPING STATION AND APPROACH THE POLE IN U/G DUCTBANK. REFER TO SITE PLAN E-102A FOR CONTINUATION. REFER TO NETWORK ARCHITECTURE DRAWING 1-605 FOR ADDITIONAL INFORMATION.
- 2 12 STRANDS AERIAL FIBER, LOOSE TUBE SINGLEMODE, OS2 OUTDOOR CABLE WITH MESSENGER WIRE. THE CABLE SHALL BE MOUNTED ON EXISTING HYDRO POLES. THE WORK SHALL BE PERFORMED BY A HYDRO ONE APPROVED CONTRACTOR AS PROVIDED. COORDINATE WORK WITH HYDRO ONE. REFER TO THE FOLLOWING FOR A LIST OF HYDRO ONE APPROVED CONTRACTORS:

Contractor Name	Contact Information
Black & McDonald Limited	Chuck Mosman cmosman@blackandmcdonald.com 416-803-1528
Iconic Power Systems Ltd.	Barb Page bpage@iconicpowersystems.com 493-463-1727
K-Line Maintenance & Construction Ltd.	Brandon Wetzel bwetzel@k-line.ca & opportunitiesteam@k-line.ca 416-272-2949
Valard Construction LP	Keith Jones kjones@valard.com 604-557-3653
Aecon/Alnoworth JV	Melissa DeSilva mde@estimates@aecon.com 416-779-0633
Forbes Bros Ltd (NININ Forbes JV)	Jerry Sampson jsampson@forbesbrosltd.ca 517-336-3166
Infinity-Corcoran JV (Powerte/Infinity Equipment Rentals)	Dan Courville dan.courville@gmail.com 819-360-4588

- 3 PROVIDE A NEW MAST C/W WEATHER CUP AND A WALL PENETRATION TO ENTER FIBER CABLE INTO THE BUILDING. COORDINATE WITH THE OWNER FOR EXACT ENTRY POSITION.

KEY PLAN



ENGINEER'S SEAL:

DATE	REV.	REVISION	BY	APP'D
MAR 2026	1	ISSUED FOR ADDENDUM No. 9	MG	DC
JAN 2026	0	ISSUED FOR TENDER	MG	DC

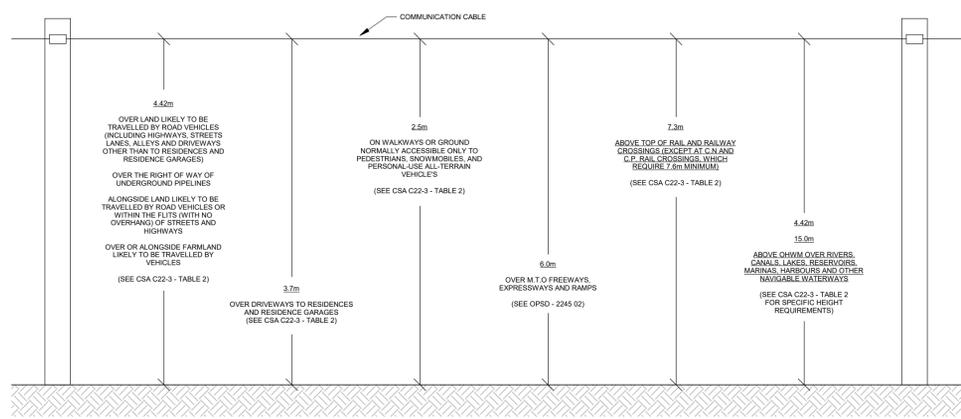
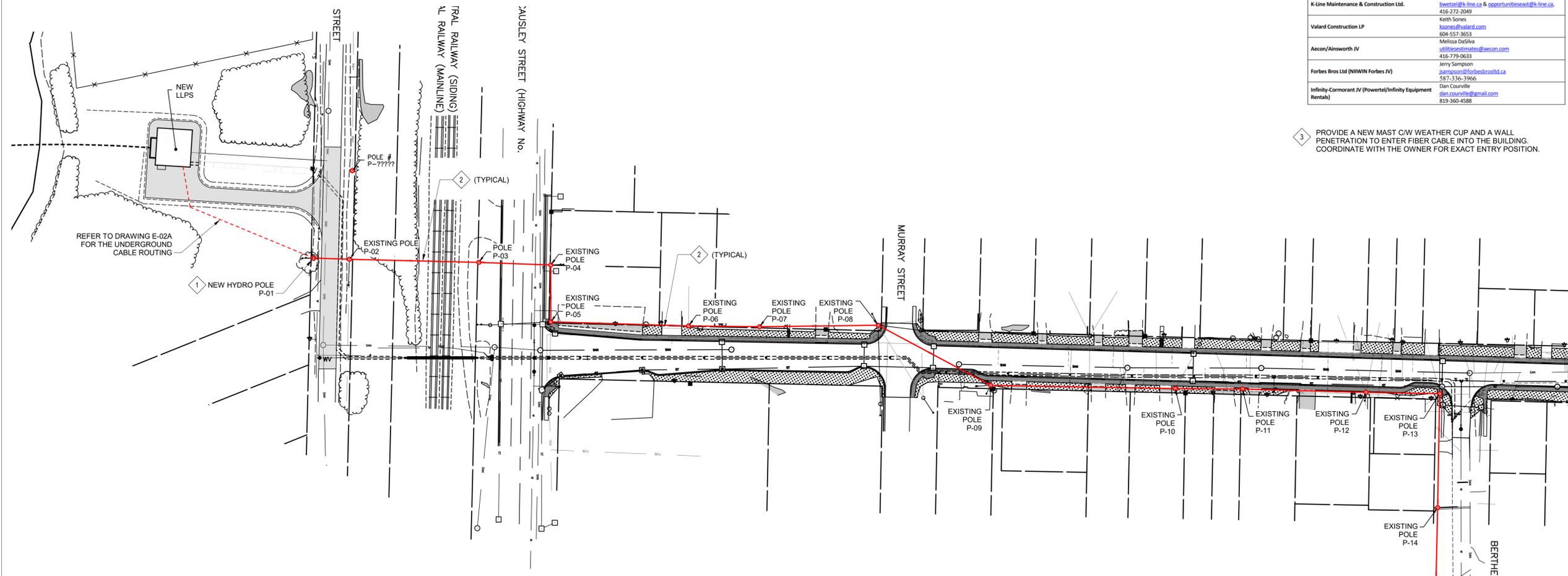


BLIND RIVER INTAKE AND LLPS

DRAWING TITLE:

FIBER OPTIC CABLE INSTALLATION SITE PLAN

RW	DT	DC	MG
DRAWN	DESIGNED	CHECKED	APPROVED
1:200		MAR 2026	
SCALE		DATE	
T001592B	1	E-102B	
PROJECT NO.	REVISION	DRAWING	



NOTE: CLEARANCE NOTED ASSUME MAXIMUM LOADING CONDITIONS AT MID SPAN.

2 CABLE HEIGHT REQUIREMENTS
SCALE: N.T.S.

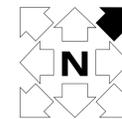
1 FIBRE OPTICS SITE PLAN
SCALE: 1 : 750

NOTES:

1. PROVIDE ALL NECESSARY FITTINGS FOR ADEQUATE CABLE SUPPORT AND BENDING RADIUS PRIOR TO INSTALL OF CABLES. SUPPORTS SHALL BE NON-COMBUSTIBLE TYPE.
2. ALLOW FOR A MINIMUM OF 300MM VERTICAL CLEARANCE ABOVE THE TRAY FOR FUTURE ACCESSIBILITY. REDUCED CLEARANCES SHALL BE PERMITTED IN AREAS WHERE CABLE TRAY IS TRANSITIONING THROUGH A CHASE OR UNDER A SHORT LENGTH OBSTRUCTION. OBTAIN APPROVAL FROM THE ENGINEER FOR SEGMENTS REQUIRING REDUCED CLEARANCE PRIOR TO INSTALL.
3. THE CABLE TRAY INSTALLATION SHALL COMPLY WITH ADDITIONAL REQUIREMENTS OUTLINED IN THE LATEST EDITION OF THE OESC AND RECOMMENDED MANUFACTURER INSTALLATION GUIDELINES.
4. MAINTAIN A MINIMUM OF 300MM CLEARANCE BETWEEN TOP OF CABLE TRAY AND UNDERSIDE OF CEILING AND/OR OTHER CABLE TRAY.
5. PROPOSED CONDUIT AND CABLE TRAY ROUTES ARE SHOWN FOR ILLUSTRATION PURPOSES AND PRICING. ELECTRICAL CONTRACTOR IS TO COORDINATE WITH ALL TRADES AND TO FINALIZE A PROPOSED ROUTING IN A SHOP DRAWING FOR A FINAL REVIEW WITH THE ENGINEER. CABLE TRAY OR CONDUIT LAYOUT ALTERNATES MAY BE PROPOSED FOR FINAL APPROVAL PROVIDED THAT THERE IS NO ADDITIONAL COSTS TO THE OWNER.
6. CONDUITS ARE TO DROP DOWN FROM THE CEILING FOR INSTRUMENTS AND EQUIPMENT NOT SHOWN ON THE FLOOR SLAB. EXACT CONDUITS AND ROUTING ARE NOT SHOWN ON THE DRAWINGS. CONTRACTOR IS TO PROVIDE PROPOSED CEILING ROUTING TO THE ENGINEER FOR REVIEW PRIOR TO INSTALLATION. CONTRACTOR IS TO AVOID CONDUIT ROUTING THAT WILL OBSTRUCT LIGHTING COVERAGE.
7. ELECTRICAL CONTRACTOR TO PROVIDE CABLES AND CONDUIT FROM OUTDOOR (CONDENSER) UNIT TO INDOOR (AC) UNIT AS REQUIRED.
8. CABLE TRAY SIZES ARE SUGGESTED SIZES. CONTRACTOR SHALL ADJUST AS REQUIRED TO SUIT APPLICATION.
9. CONTRACTOR IS TO RELOCATE CEILING MOUNTED LIGHTING FIXTURES THAT ARE OBSTRUCTED BY THE CABLE TRAYS. ROUTE CABLE TRAYS AS NEEDED BELOW PIPING AND/OR ANY OBSTRUCTION. TRANSITION TO TOP OF CEILING WHEN THE OBSTRUCTION IS CLEAR.
10. CONTRACTOR TO PROVIDE A CABLE TRAY ROUTE PLAN PRIOR TO DRILLING/CORING THROUGH WALLS, STAIRS, OR FLOOR.
11. EXAMINE THE PROPOSED ROUTING TO CONFIRM INSTALLATION REQUIREMENTS, INCLUDING PENETRATIONS, SUPPORTS, AND CLEARANCES TO EXISTING SERVICES AND EQUIPMENT TO FACILITATE THE NEW CABLE TRAY APPLICATIONS.
12. PROVIDE A ROUTING PLAN FOR THE NEW CABLE TRAY FOR REVIEW PRIOR TO INSTALLATION.
13. UTILIZE CABLE TRAY FITTINGS AND REDUCERS AS REQUIRED FOR PENETRATIONS AND TO AVOID OBSTRUCTIONS.
14. CONTRACTOR TO ENSURE CABLE TRAY IS ROUTED TO AVOID INSTALLING CABLE TRAY BENEATH LIQUID PIPES WHERE POSSIBLE AND TO ENSURE COMPLIANCE WITH OESC.
15. SURFACE MOUNTED WIRE AND CONDUIT SHALL ONLY BE ACCEPTABLE FOR LIGHTING AND RECEPTACLE CIRCUITS FROM ELECTRICAL PANEL RP-1.
16. RECEPTACLE AND LIGHTING WIRING INSIDE OF THE CHEMICAL ROOM SHALL BE INSTALLED IN CORROSION RESISTANCE NEMA 4X SURFACE MOUNTED CONDUIT. ALL OTHER WIRING INSIDE OF THE CHEMICAL ROOM SHALL BE SURFACE MOUNTED TECK CABLE. CABLE TRAY IS NOT ACCEPTABLE.
17. FOR CONTROLS CABLE TRAYS, CONTRACTOR SHALL PROVIDE A METAL BARRIER WHICH SEPARATES ANALOG CONTROLS WIRING FROM DIGITAL CONTROLS AND 120VAC POWER WIRING.

DRAWING NOTE:

- 1 PROVIDE 1" SURFACE MOUNTED CONDUIT FOR AC INDOOR/OUTDOOR UNIT CONTROLS WIRING.



KEY PLAN



ENGINEER'S SEAL:

DATE	REV.	REVISION	BY	APPD
MAR 2026	1	ISSUED FOR ADDENDUM No. 9	MG	DC
JAN 2026	0	ISSUED FOR TENDER	MG	DC

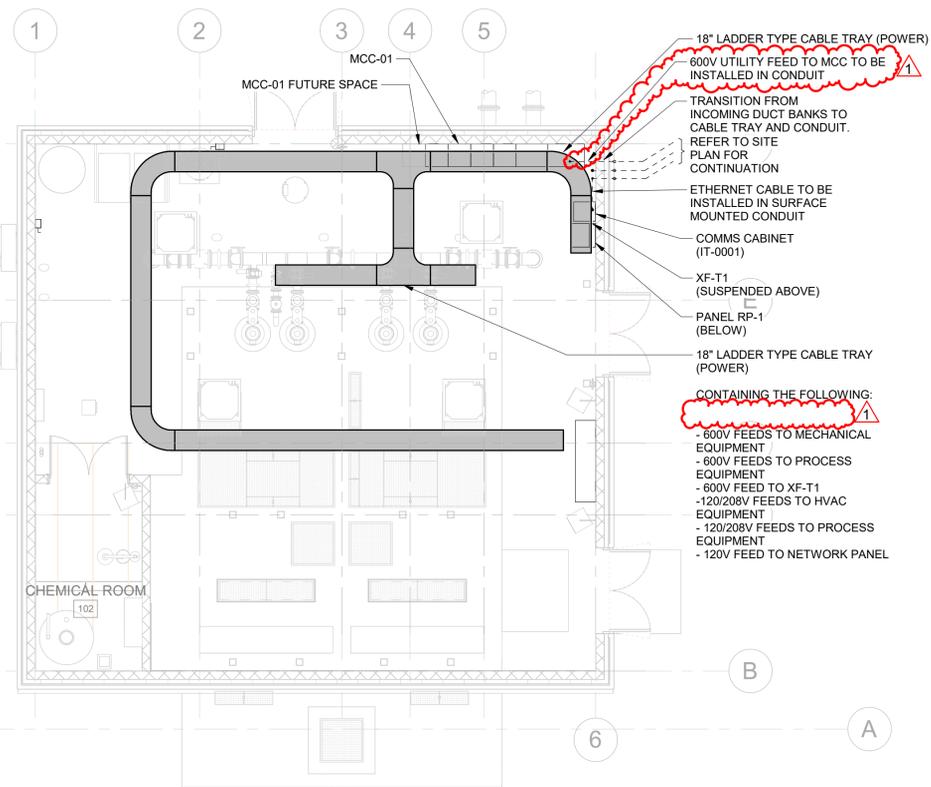
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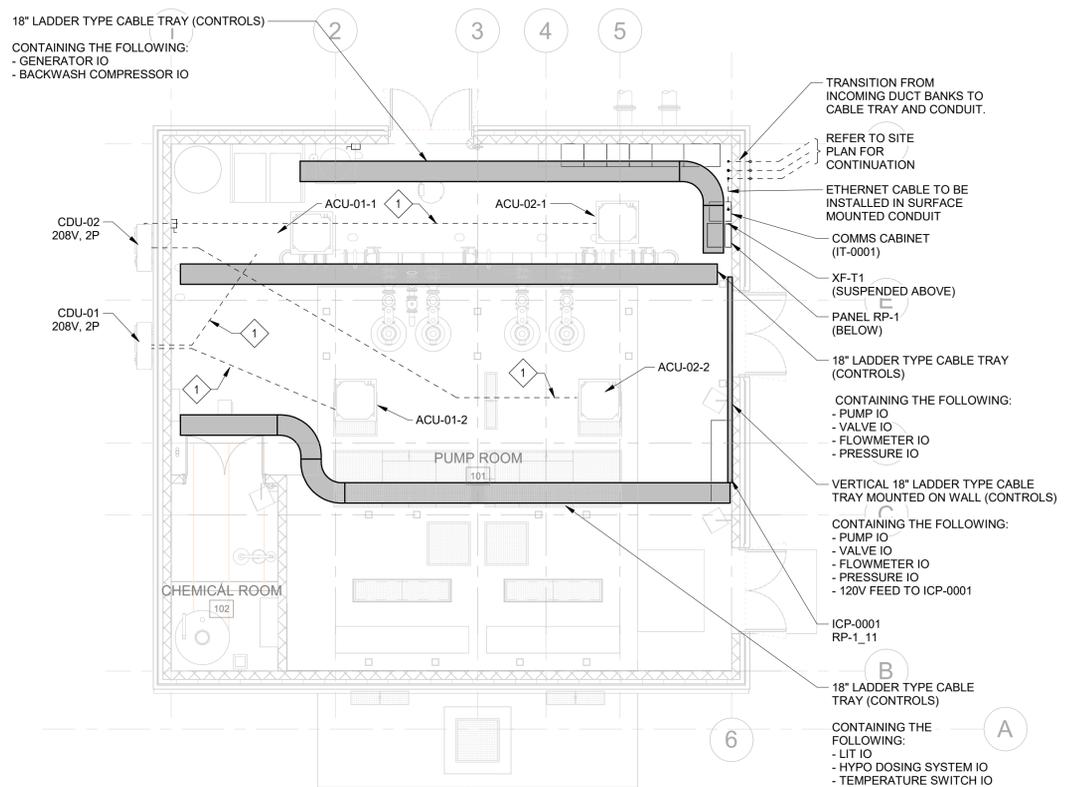
PROJECT TITLE:
BLIND RIVER INTAKE AND LLPS

DRAWING TITLE:
ELECTRICAL CABLE TRAY & CONDUIT LAYOUT

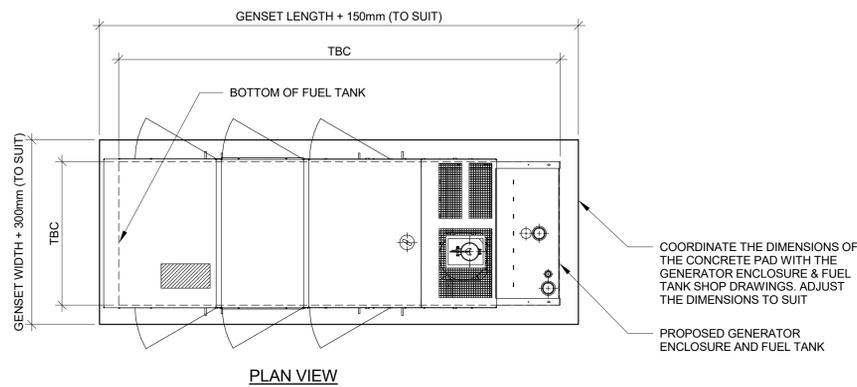
RW	DT	DC	MG
DRAWN	DESIGNED	CHECKED	APPROVED
1 : 75		MAR 2026	
SCALE		DATE	
T001592B	1	E-108B	
PROJECT NO.	REVISION	DRAWING	



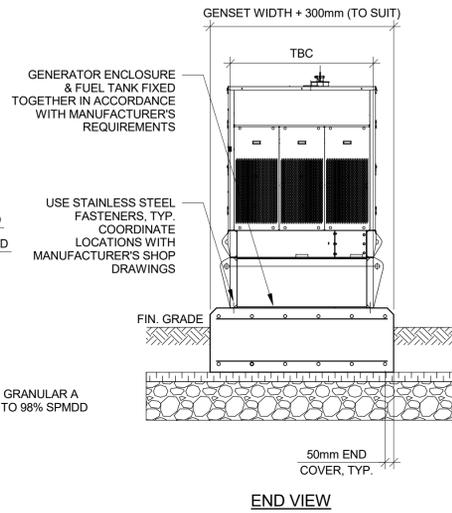
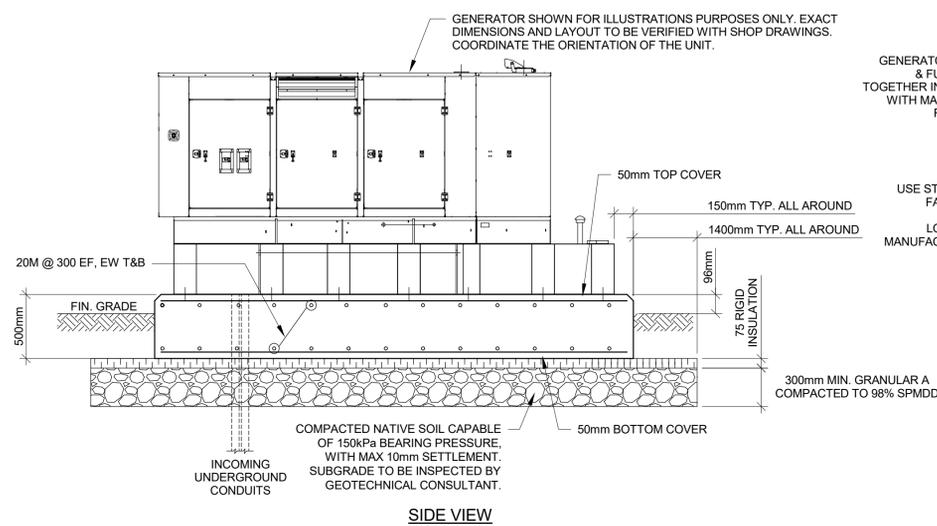
1 GROUND FLOOR POWER CABLE TRAY / CONDUIT
SCALE: 1 : 75



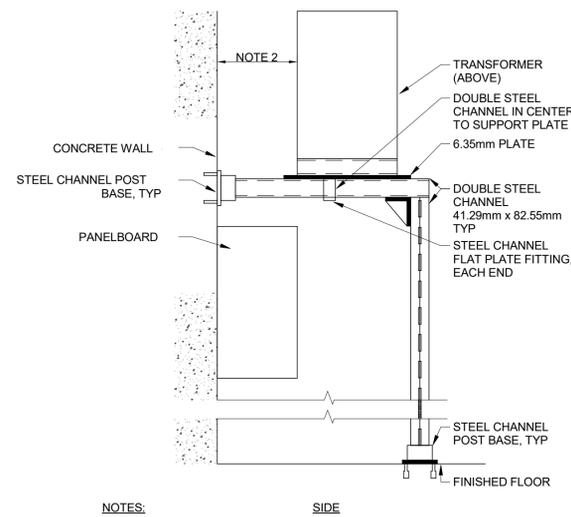
2 GROUND FLOOR CONTROLS CABLE TRAY / CONDUIT
SCALE: 1 : 75



- NOTES:**
1. THE PAD MOUNTED, SOUND ATTENUATED DIESEL GENERATOR DIMENSIONS AND CONFIGURATION IS BASED ON A MTU 150 KW PRIME RATED GENERATOR WITH AN INTEGRAL 24-HOUR SUB-BASED FUEL TANK. THE CONTRACTOR IS REQUIRED TO COORDINATE THE LENGTH AND WIDTH OF THE GENERATOR CONCRETE PAD WITH THE SHOP DRAWING DIMENSIONS OF THE SPECIFIC PRODUCT SUPPLIED. ENSURE 150 MM OF EXPOSED CONCRETE PAD AROUND THE PERIMETER OF THE GENERATOR.
 2. ROUGH IN ALL POWER AND CONTROL CONDUITS TO SUIT THE DIESEL GENERATOR PRIOR TO INSTALLATION OF THE CONCRETE PAD. COORDINATE ENTRY OF CONDUITS AND LOCATION IN CONCRETE SLAB WITH GENERATOR SHOP DRAWINGS TO SUIT POWER AND CONTROLS CONDUCTOR TERMINATIONS.
 3. COORDINATE CONSTRUCTION OF CONCRETE PAD, INCLUDING REINFORCING BARS, WITH LOCATIONS AND ENTRY POINTS OF ELECTRICAL CONDUITS.
 4. PROVIDE ALL CONDUIT ENTRY TO GENERATOR THROUGH CONCRETE PAD.
 5. APPROXIMATE DIMENSIONS OF 150 KW GENERATOR IN A SOUND ATTENUATED ENCLOSURE ON UL LISTED FUEL TANK BASE ARE: L=4008 MM, W=1318 MM, H=1925 MM. FOR EXACT DIMENSIONS REFER TO APPROVED GENERATOR SHOP DRAWINGS.

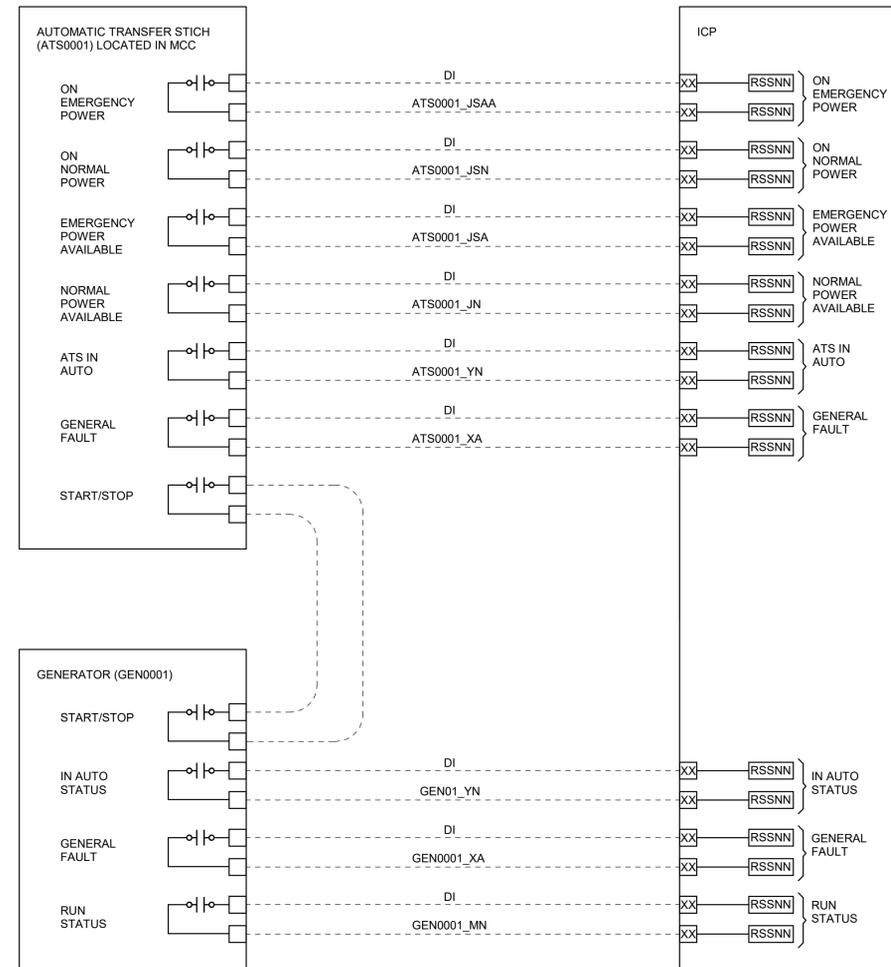


1 GENSET DETAILS
SCALE: N.T.S.



- NOTES:**
1. PROVIDE MINIMUM 1000mm WIDE AND 1980mm HIGH WORKING SPACE IN FRONT OF PANELBOARD.
 2. SPACE PROVIDED BEHIND THE TRANSFORMER SHALL BE GREATER THAN THE DEPTH OF THE PANELBOARD.

3 TYPICAL TRANSFORMER MOUNTING
SCALE: N.T.S.



2 GENERATOR/ATS CONTROLLER DETAIL
SCALE: N.T.S.



ENGINEER'S SEAL:

DATE	REV.	REVISION	BY	APP'D
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FEB 2026	1	ISSUED FOR ADDENDUM No. 6	MG	DC
JAN 2026	0	ISSUED FOR TENDER	MG	DC

CLIENT:



CONSULTANT:



CONSULTANT:



PROJECT TITLE:

BLIND RIVER INTAKE AND LLPS

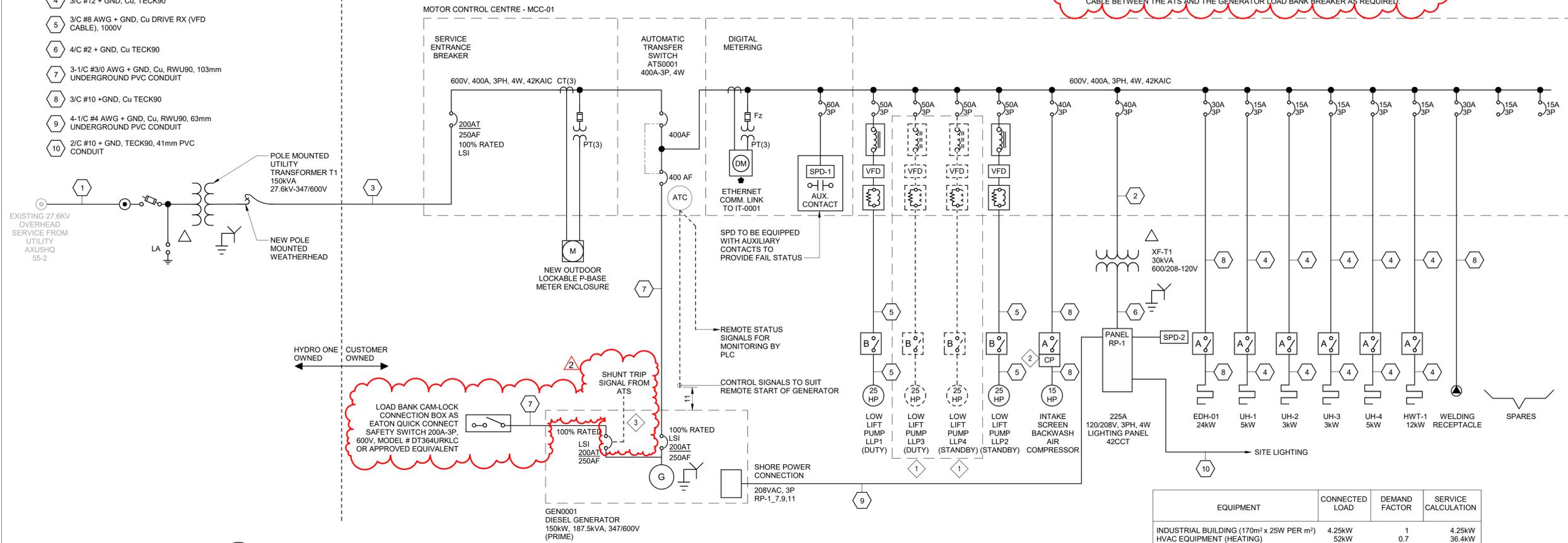
DRAWING TITLE:

ELECTRICAL DETAILS - SHEET 1

RW	DT	DC	MG
DRAWN	DESIGNED	CHECKED	APPROVED
N.T.S.		MAR 2026	
SCALE		DATE	
T001592B	2	E-503	
PROJECT NO.	REVISION	DRAWING	

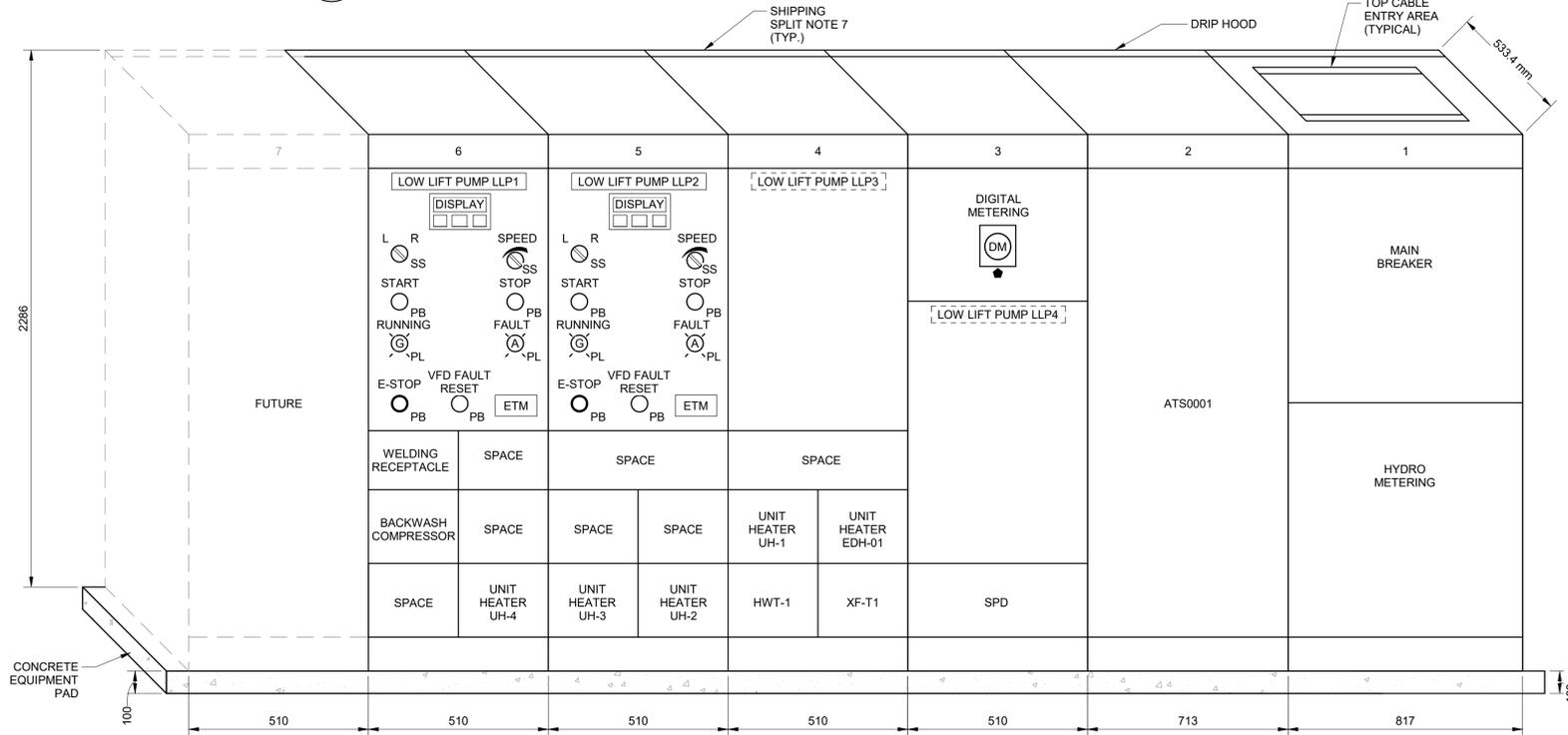
CABLE AND CONDUIT SCHEDULE:

- 1 OVERHEAD UTILITY 14.4/25KV PRIMARY CABLE BY HYDRO ONE
- 2 3/C #8 + GND, Cu TECK90
- 3 4-1/C #3/0 AWG + GND, Cu, RWU90, 103mm UNDERGROUND PVC CONDUIT
- 4 3/C #12 + GND, Cu, TECK90
- 5 3/C #8 AWG + GND, Cu DRIVE RX (VFD CABLE), 1000V
- 6 4/C #2 + GND, Cu TECK90
- 7 3-1/C #3/0 AWG + GND, Cu, RWU90, 103mm UNDERGROUND PVC CONDUIT
- 8 3/C #10 + GND, Cu TECK90
- 9 4-1/C #4 AWG + GND, Cu, RWU90, 63mm UNDERGROUND PVC CONDUIT
- 10 2/C #10 + GND, TECK90, 41mm PVC CONDUIT



- NOTES:**
- 1 PUMPS LLP3 AND LLP4 ARE INTENDED FOR FUTURE INSTALLATION AND ARE NOT TO BE INCLUDED IN THE BASE CONTRACT. NEW VFD STARTER, REACTOR AND DV/DT FILTER INCLUDING ALL CONTROL WIRING SHALL NOT BE PROVIDED AS PART OF THE CONTRACT.
 - 2 THE CONTROL PANEL IS TO BE SUPPLIED BY COMPRESSOR VENDOR AND WIRED BY DIV 16.
 - 3 PROVIDE SHUNT TRIP CONNECTION BETWEEN THE ATS AND THE GENERATOR LOAD BANK BREAKER SUCH THAT THE LOAD BANK BREAKER IS TRIPPED WHEN THE ATS SENSES LOSS OF NORMAL POWER AND SWITCHES TO EMERGENCY POWER. PROVIDE ADDITIONAL CONTROL CABLE BETWEEN THE ATS AND THE GENERATOR LOAD BANK BREAKER AS REQUIRED.

1 SINGLE LINE DIAGRAM
SCALE: N.T.S.



2 MCC-01 ELEVATION
SCALE: N.T.S.

EQUIPMENT	CONNECTED LOAD	DEMAND FACTOR	SERVICE CALCULATION
INDUSTRIAL BUILDING (170m ² x 25W PER m ²)	4.25kW	1	4.25kW
HVAC EQUIPMENT (HEATING)	52kW	0.7	36.4kW
SITE LIGHTING	1kW	1	1kW
PUMPS (4 x 25HP)	95.2kW	0.5	47.6kW
COMPRESSOR (1 X 15HP)	15kW	1	15kW
TOTAL AT COMPLETION			104.25kW

AMPS = $\frac{104.25 \times 1000}{600V \times 1.73 \times 0.95} = 105.7 \text{ AMP}$ THEREFORE, A 200A SERVICE IS SUFFICIENT

HYDRO ONE (SCOPE OF WORK)	CONTRACTOR (SCOPE OF WORK) ALL WORK IS TO BE COORDINATED WITH HYDRO ONE PRIOR TO ANY INSTALLATION
PROVIDE NEW HYDRO POLE WITH POLE 150kVA 3-PH POLE-MOUNT TRANSFORMER. HYDRO ONE TO SUPPLY AND INSTALL TRANSFORMER. THE NEW HYDRO POLE WILL BE DESIGNATED AS THE DEMARCATON POINT.	COORDINATE WITH HYDRO ONE AND SUPPLY AND INSTALL NEW 600V UNDERGROUND DUCT BANK, MAN HOLES AND PULL BOXES FROM THE NEW HYDRO POLE TO THE BUILDING UTILITIES POINT-OF-ENTRY (MCC SERVICE ENTRANCE BREAKER). CONTRACTOR TO KEEP SUFFICIENT LOOPED CABLING AT THE POLE FOR HYDRO ONE TO INSTALL VIA THE RISER AND WEATHERHEAD ON THE POLE. COORDINATE INSTALLATION FOR ALL UNDERGROUND DUCT BANKS WITH OTHER DISCIPLINES AND UTILITIES TO AVOID INTERFERENCE FINAL. ADJUST FINAL LOCATIONS AS NECESSARY.
SUPPLY NEW 24" (H) x 16" (W) x 12" (D) NEMA 4X LOCKABLE P-BASE METER ENCLOSURE. SUPPLY AND INSTALL INSTRUMENT TRANSFORMERS IN THE MCC UTILITY METERING SECTION. WIRE INSTRUMENT TRANSFORMER TO EXTERIOR P-BASE METER ENCLOSURE.	COORDINATE WITH HYDRO ONE AND INSTALL A NEW 24" (H) x 16" (W) x 12" (D) NEMA 4X LOCKABLE P-BASE METER ENCLOSURE ON THE EXTERIOR OF THE BUILDING. CONTRACTOR TO PROVIDE AND INSTALL A 1 1/4" CONDUIT C/W PULL STRING FROM THE P-BASE METER ENCLOSURE TO THE MCC UTILITY METER SECTION. ONCE INSTALL IS COMPLETE, HAND OVER KEYS FOR THE P-BASE METER ENCLOSURE TO HYDRO ONE.
CONNECT THE PRIMARY CABLING TO THE NEW POLE-MOUNTED TRANSFORMER.	COORDINATE WITH HYDRO ONE TO MAKE THE NECESSARY SERVICE CONNECTION FROM SECONDARY SIDE OF THE NEW UTILITY TRANSFORMER.

- NOTES:**
- NEW MCC DIMENSION IS BASED ON AN EATON PRODUCT. CONTRACTOR SHALL ENSURE THAT PRODUCTS FROM OTHER VENDORS FALL WITHIN THE DIMENSIONAL CONSTRAINTS SHOWN ON THIS DRAWING.
 - MINIMUM CONDUCTOR SIZE FOR ALL LOW VOLTAGE (120VAC, 1-PHASE) CIRCUITS SHALL BE #12AWG. CONTRACTOR SHALL SIZE WIRES/CONDUITS FOR ALL LOW VOLTAGE EQUIPMENT FED FROM DISTRIBUTION PANELS BASED ON MINIMUM ACCEPTABLE SIZES AND MANUFACTURERS REQUIREMENTS.
 - CONDUIT ROUTES FOR ALL LOW VOLTAGE (120VAC, 1-PHASE) FEEDERS SHALL BE DETERMINED ON SITE BY THE CONTRACTOR.
 - PROVIDE LOCAL DISCONNECT SWITCHES FOR ALL MOTORS LOADS.
 - PROVIDE LAMACOIDS FOR EACH BUCKET.
 - PROVIDE CONCRETE PAD DIMENSION FOR THE MCC. REFER TO DIVISION 3 FOR CONCRETE PAD DETAILS.
 - PROVIDE SHIPPING SPLITS FOR EACH MCC SECTION.



ENGINEER'S SEAL:

DATE	REV.	REVISION	BY	APPD
MAR 2026	2	ISSUED FOR ADDENDUM No. 9	MG	DC
FEB 2026	1	ISSUED FOR ADDENDUM No. 6	MG	DC
JAN 2026	0	ISSUED FOR TENDER	MG	DC

CLIENT:



PROJECT TITLE:
BLIND RIVER INTAKE AND LLPS

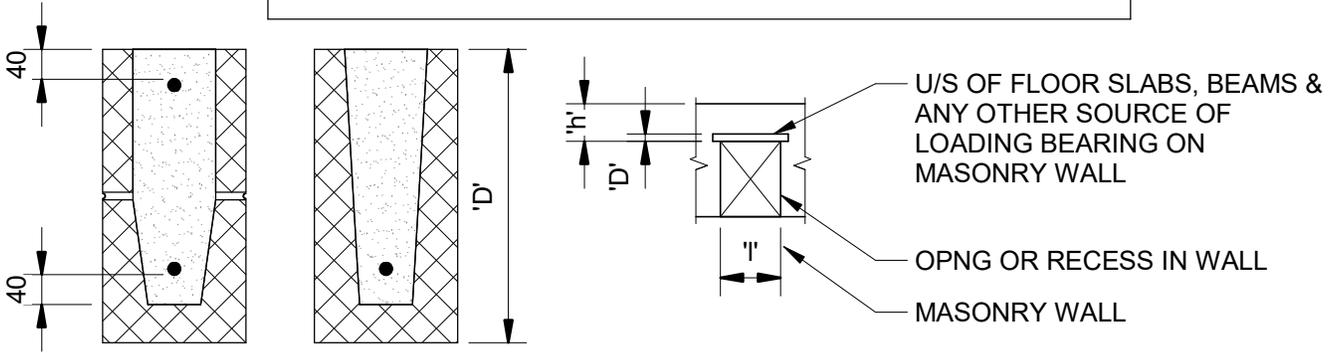
DRAWING TITLE:
SINGLE LINE DIAGRAM

RW	DT	DC	MG
DRAWN	DESIGNED	CHECKED	APPROVED
N.T.S.		MAR 2026	
SCALE		DATE	
T001592B	2	E-601	
PROJECT NO.	REVISION	DRAWING	

PATH: Autocad Docs\C12 Blind River LLPS - T001592B\1592-E Blind River Electr

BLOCK LINTEL SCHEDULE				
WALL THK	UP TO 1200 mm		1200 mm TO 2030 mm	
	REINF	D	REINF	D
140 mm	1 -10M T&B	390 mm	1 -10M T&B	390 mm
190 mm	1 -10M T&B	390 mm	1 -10M T&B	390 mm
240 mm	1 -10M T&B	390 mm	2 -10M T&B	390 mm

1. MIN BEARING FOR BLOCK LINTEL SHALL BE 200 UNO.
 2. FILL VOIDS OR LINTEL BLOCKS W/ 20 MPa CONC. MORTAR IS NOT ACCEPTABLE.
 3. WHEN 'h' IS SMALLER THAN 'l', ABOVE LINTEL SCHEDULE DOES NOT APPLY. REFER TO PLAN OR THE STEEL LINTEL SCHEDULE.



		STRUCTURAL DETAILS	S038
DATE: 2022.06.22		SCHEDULE	
DESIGNER: ERIC ESTRELLA	ENGINEER/ ARCHITECT: REBECCA PRINGLEMEIR	DRAWING No: Sched - Lintel - Block	Metric

STEEL LINTEL SCHEDULE				
CLEAR SPAN	UP TO 1200 mm	1200 mm TO 1800 mm	1800 mm TO 2100 mm	ARRANGEMENT
90 WALL	L89x89x7.9	L127x89x7.9	L152x89x7.9	
140 WALL	2 - L64x64x7.9	2 - L89x64x7.9	W200x27 + PL 6	
190 WALL	2 - L89x89x7.9	2 - L127x89x7.9	2L - 152x89x7.9	
240 WALL	2 - L102x102x7.9	2 - L152x102x7.9	2L - 152x102x7.9	
290 WALL	2 - L89x89x7.9	3 - L127x89x7.9	3L - 152x89x7.9	
UP TO 3200	W200x27 + PL 6 THK IN CENTER OF WALL			SEE DETAIL
<ol style="list-style-type: none"> 1. PAIR OF LINTEL ANGLES TO BE STITCH WELDED (T&B) @ 600 mm C/C 2. MIN BEARING FOR STEEL ANGLES SHALL BE 150 mm, UNO 3. FOR LINTELS ABUTTING STEEL COLS, CONC WALLS OR OTHER COLS PROVIDE L89x89x9.5 FASTENED TO ABUTMENT. 4. ALL ANGLES SHALL BE LLV, UNO. 5. ALL LOOSE ANGLES SHALL BE HOT DIPPED GALVANIZED, UNO. 				

LINTEL STEEL SCHEDULE

SCALE: 1 : 10



STRUCTURAL DETAILS

S040

DATE:

2022.06.23

SCHEDULE

DESIGNER:

ERIC ESTRELLA

ENGINEER/ ARCHITECT:

REBECCA PRINGLEMEIR

DRAWING No:

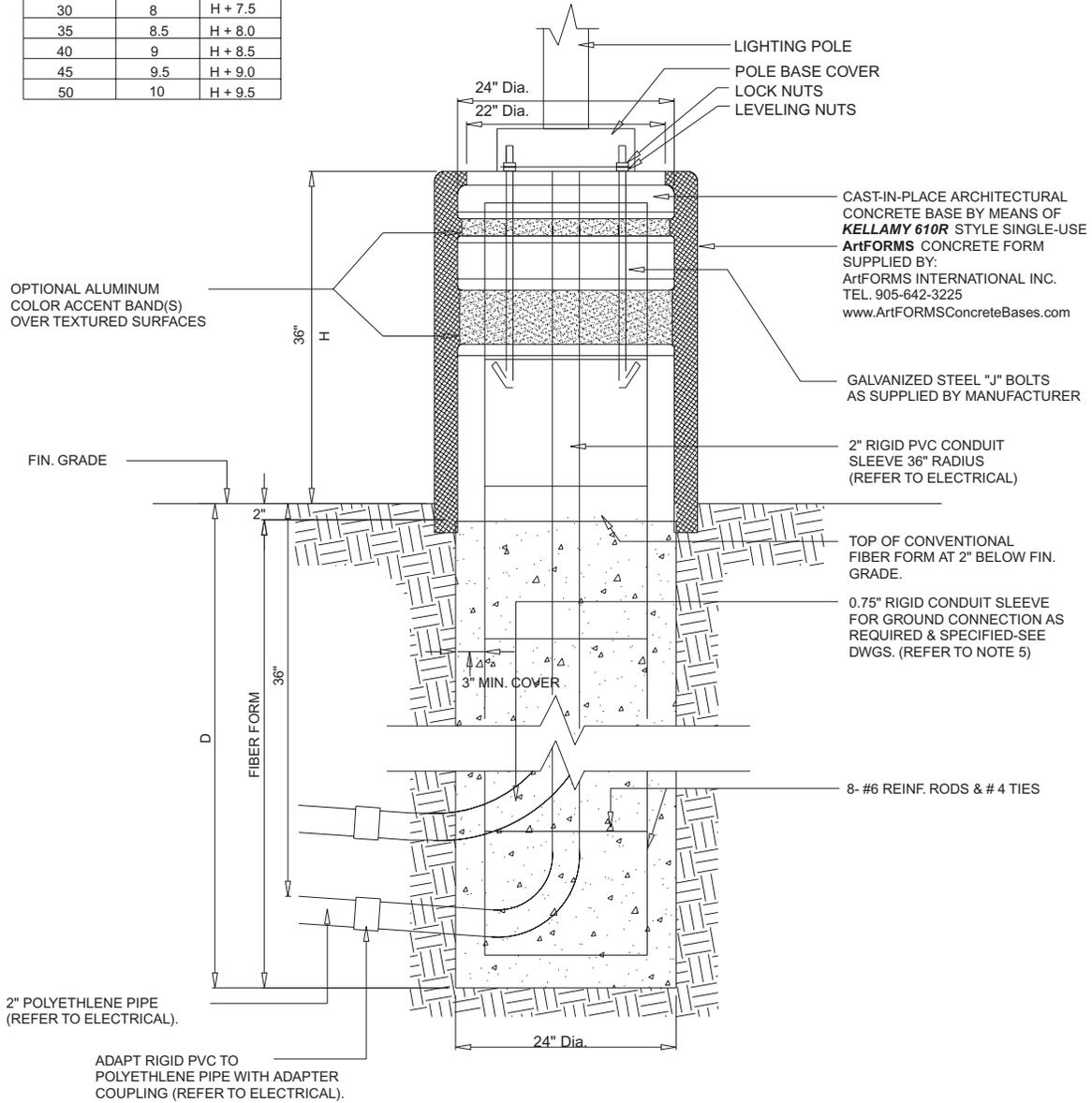
Sched - Lintel - Steel

Metric

POLE LENGTH (ft.)	BASE BURIAL DEPTH D (ft.)	REINF. ROD LENGTH (ft.)
10	5	H + 4.5
19	7	H + 6.5
23	7	H + 6.5
25	7	H + 6.5
29	8	H + 7.5
30	8	H + 7.5
35	8.5	H + 8.0
40	9	H + 8.5
45	9.5	H + 9.0
50	10	H + 9.5

- NOTES:
1. ALL DIMENSIONS ARE IN NOMINAL FEET OR INCHES
 2. TOP OF FOUNDATION SHALL BE TROWELLED SMOOTH & LEVEL.
 3. CLASS OF CONCRETE SHALL BE 3000 P.S.I. CONCRETE SHALL BE VIBRATED.
 4. MINIMUM OF TWO SLEEVES REQUIRED FOR EACH CONC. FOUNDATION UNLESS OTHERWISE SHOWN.

5. PROVIDE A 0.75" DIA. 10' STEEL COPPER COATED GROUND ROD ADJACENT TO POLES AS SPECIFIED ON PLAN AND CONNECT TO METAL POLE WITH BARE COPPER CONDUCTOR.
6. CONTRACTOR TO VERIFY OPENING SIZE IN POLE BASE PLATE PRIOR TO SETTING CONDUIT SLEEVES.
7. SUBJECT TO SOIL CONDITIONS, REFER TO SOIL REPORT.
8. FORM RELEASE AGENT HAS BEEN FACTORY-APPLIED TO INSIDE SURFACE OF "ArtFORM".



ArtFORMS®
KELLAMY 610R

NOTE:
Where applicable, this detail drawing should be modified to meet local requirements.

DRAWING TITLE
LIGHTING POLE, FLAGPOLE, SIGN AND COLUMN BASE

DATE	JOB NO.	SCALE	DWG. NO.
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