



593-2024B ADDENDUM 12

CONSTRUCTION OF NORTH GARAGE REPLACEMENT

URGENT

**PLEASE FORWARD THIS DOCUMENT TO
WHOEVER IS IN POSSESSION OF THE
BID/PROPOSAL**

ISSUED: May 21, 2025
BY: Arthur Anderson, C.E.T., CCCA
TELEPHONE NO. 204 801-7579

**THIS ADDENDUM SHALL BE INCORPORATED
INTO THE BID/PROPOSAL AND SHALL FORM
A PART OF THE CONTRACT DOCUMENTS**

Template Version: Add 2024-02-01

Please note the following and attached changes, corrections, additions, deletions, information and/or instructions in connection with the Bid/Proposal, and be governed accordingly. Failure to acknowledge receipt of this Addendum in Paragraph 10 of Form A: Bid/Proposal may render your Bid/Proposal non-responsive.

FORM B: PRICES

Replace: 593-2024B Form B: Prices with 593-2024B Addendum 12 - Form B: Prices. The following is a summary of changes incorporated in the replacement Bid/Proposal Submission:

Form B(R3): Minor revisions to Items E.8 i), ii), iii), iv), v), G.3, G.5, G.11. Item H Allowances added.

Page numbering on some forms may be changed as a result.

PART B – BIDDING PROCEDURES

Add: B4.7 Notwithstanding B4.2, all enquires shall be submitted to the Contract Administrator by May 26, 2025.

PART D – SUPPLEMENTAL CONDITIONS

Replace D24 to read:

D24. SUPPLY CHAIN DISRUPTION SCHEDULE DELAYS

- D24.1 The City acknowledges that the schedule for **the Scope of Work described in D3.1(f) of this Contract will, and all other Work may**, be impacted by Supply Chain Disruption. Commencement and progress of all Work shall be performed by the Contractor with due consideration to the delivery requirements and schedule identified in the Contract, in close consultation with the Contract Administrator.
- D24.2 If the Contractor is delayed in the performance of the Work by reason of Supply Chain Disruption, the Work schedule **shall** be adjusted by a period of time equal to the time lost due to such delay, and costs related to such delay will be determined as identified herein.
- D24.3 A minimum of seven (7) Calendar Days prior to the commencement of Work, the Contractor shall declare whether a Supply Chain Disruption, **other than with respect to the Scope of Work described in D3.1(f)**, will affect the start date. The Contractor shall provide sufficient evidence that the delay is directly related to a Supply Chain Disruption, including but not limited to evidence related to availability ordering of Material or Goods, production and/or manufacturing schedules or availability of staff as appropriate. **The Contractor**

shall keep the Contract Administrator fully updated with respect to the Supply Chain Disruptions for the Work described in D3.1(f).

- D24.4 For any other delay related to Supply Chain Disruption and identified after Work has commenced, the Contractor shall within seven (7) Calendar Days of becoming aware of the anticipated delay declare the additional delay and shall provide sufficient evidence as indicated in D24.3. Failure to provide this notice will result in no additional time delays being considered by the City.
- D24.5 The Work schedule, including the durations identified in **D21** to D23 where applicable, will be adjusted to reflect delays **(a) attributable to delivery of the items in D3.1(f), or (b), for all other Work**, accepted by the Contract Administrator. No additional payment will be made for adjustment of schedules except where seasonal work, not previously identified in the Contract, is carried over to the following construction season.
- D24.6 Where Work not previously identified is being carried over solely as a result of delays related to Supply Chain Disruption, as confirmed by the Contract Administrator, the cost of temporary works to maintain the Work in a safe manner until Work recommences, will be considered by the Contract Administrator. Where the Work is carried over only partially due to Supply Chain Disruption, a partial consideration of the cost of temporary works will be considered by the Contract Administrator.
- D24.7 Any time or cost implications as a result of Supply Chain Disruption and in accordance with the above, as confirmed by the Contract Administrator, shall be **evaluated in good faith by the Contract Administrator** in accordance with C7.

DRAWINGS

Electrical

The following Electrical drawings are to be replaced and are included in PDF file 593-2024B_Addendum_12_Drawing_Electrical-R5:

Replace: 593-2024B_Addendum_11_Drawing_G-0002-R4 with 593-2024B_Addendum_12_Drawing_G-0002_IFC-R5

593-2024B_Addendum_9_Drawing_E-0003-R3 with 593-2024B_Addendum_12_Drawing_E-0003_IFC-R4

593-2024B_Addendum_7_Drawing_E-0051-R2 with 593-2024B_Addendum_12_Drawing_E-0051_IFC-R3

593-2024B_Addendum_7_Drawing_E-0107-R2 with 593-2024B_Addendum_12_Drawing_E-0107_IFC-R3

593-2024B_Addendum_9_Drawing_E-2102-R3 with 593-2024B_Addendum_12_Drawing_E-2102_IFC-R4

593-2024B_Addendum_9_Drawing_E-2103-R3 with 593-2024B_Addendum_12_Drawing_E-2103_IFC-R4

593-2024B_Addendum_9_Drawing_E-2104-R3 with 593-2024B_Addendum_12_Drawing_E-2104_IFC-R4

593-2024B_Addendum_9_Drawing_E-2105-R2 with 593-2024B_Addendum_12_Drawing_E-2105_IFC-R3

593-2024B_Addendum_7_Drawing_E-2109-R2 with 593-2024B_Addendum_12_Drawing_E-2109_IFC-R3

593-2024B_Addendum_9_Drawing_E-2110-R3 with 593-2024B_Addendum_12_Drawing_E-2110_IFC-R4

593-2024B_Addendum_7_Drawing_E-2111-R2 with 593-2024B_Addendum_12_Drawing_E-2111_IFC-R3

593-2024B_Addendum_9_Drawing_E-2302-R3 with 593-2024B_Addendum_12_Drawing_E-2302_IFC-R4

593-2024B_Addendum_9_Drawing_E-2500-R3 with 593-2024B_Addendum_12_Drawing_E-2500_IFC-R4

593-2024B_Addendum_9_Drawing_E-8005-R3 with 593-2024B_Addendum_12_Drawing_E-8005_IFC-R4
593-2024B_Addendum_11_Drawing_E-8009-R4 with 593-2024B_Addendum_12_Drawing_E-8009_IFC-R5
593-2024B_Addendum_9_Drawing_E-8011-R3 with 593-2024B_Addendum_12_Drawing_E-8011_IFC-R4
593-2024B_Addendum_7_Drawing_E-8013-R2 with 593-2024B_Addendum_12_Drawing_E-8013_IFC-R3
593-2024B_Addendum_9_Drawing_E-9002-R3 with 593-2024B_Addendum_12_Drawing_E-9002_IFC-R4

Delete: 593-2024B_Drawing_E-4100_IFC-R1

NMS SPECIFICATIONS

Add: 593-2024B_Addendum_12_NMS_01_21_00-Allowances.

Section 02 61 00.01 Soil Remediation

- Revise: 3.1.2.2 to read: Contractor to collect required water samples for laboratory analysis and obtain necessary approvals from the City of Winnipeg for sanitary or storm discharges. If the groundwater is not approved for discharge under a Temporary Discharge Permit, it could be accepted as hauled wastewater at a City disposal facility. **Select dewatering costs will be covered by cash allowance as described in Section 01 21 00 Allowances.**
- Revise: 3.1.2.3 to read: Treat **or discharge** groundwater, storm water and precipitation which contains contaminants in excess of acceptable wastewater disposal guidelines. See 1.2 References of this Section.

Section 03 20 00 Concrete Reinforcing

- Revise: 3.4.2 to read: Inspection and testing of reinforcing and reinforcing materials carried out by testing laboratory retained by the contractor for review to CSA A23.1/A23.2.
- Delete: 1. 2.2.1 through to 1.2.2.4.
- Delete: 1.4.2.2.
- Delete: 2.1.7 in its entirety.
- Delete: 3.1 in its entirety.

Section 03 30 00 Cast-In-Place Concrete

- Replace: 1.7.1 to read: Mock-Ups: Construction mock-ups in accordance with Section 01 40 00 – Quality Assurance **and Section 03 35 00 – Concrete Finishing.**
- Delete: 1.7.1.1 through to 1.7.1.5
- Revise: 2.3.1 to read: Portland Cement: GU, **GUL** and MS.
- Revise: 3.5.2 to read: Inspection and testing of concrete and concrete materials carried out by testing laboratory retained by the Contractor in accordance with CSA A23.1/CSA A23.2.

Section 03 35 00 Concrete Finishing

Revise: 1.7.1 in its entirety to read: Mock-Up "A": Mock-Up: Construct mock-ups in accordance with Section 01 40 00 – Quality Assurance:

- .1 Minimum sizes: 25 m².
- .2 Finish: Steel power trowelled, no hardener, no floor slope intended.
- .3 Location: As directed by Contract Administrator.
- .4 Contract Administrator accepted mock-up shall not remain as part of the Work and will be demolished.
- .5 Areas of review: Floor flatness, floor levelness and finish appearance without grinding or polishing for any remediation, in order to achieve the specified Floor Flatness and Floor Levelness requirements. Contractor's Third-Party Floor Flatness and Floor Levels testing results will be reviewed by the Contract Administrator.
- .6 Intentionally damage part of exposed face texture in the presence of the Contract Administrator for approximately 600mm x 600mm within a corner of the above noted mock-up area. This specific 600mmx600mm area will only be used to demonstrate proposed methods and materials to be used for repairs to match adjacent undamaged surfaces excluding floor flatness and floor levelness.

Add: 1.7.2: Mock-Up "B" (various): Construct mock-ups in accordance with Section 01 40 00 – Quality Assurance. Construct mock-ups in an area (locations vary) that will receive applied floor finishes, and will be covered when those materials are installed and as follows:

- .1 Minimum size: 10 m² per individual floor finish (only one project occurrence per floor finish type).
- .2 Evaluation: Contract Administrator will evaluate finish, Floor Flatness, Floor Levelness (FL excluded for sloped floors) and may request changes or variation to materials in order to achieve the specified requirements and visual appearance (visual appearance as determined by the Contract Administrator).
- .3 Acceptable mock-ups will remain as part of the Work.
- .4 Area of review: Contract Administrator will evaluate finish and review the Contractor established Third-Party Floor Flatness and Floor Levels results.
- .5 Contract Administrator accepted mock-up will form the standards for the remaining concrete work for the floor finish reviewed and will form a part of the total Work.

Section 04 22 00 Concrete Masonry Units

Revise: 3.15.2.1 to read: The ~~Contractor~~ ~~City~~ will ~~engage~~ **retain** qualified independent testing agency to inspect and test engineered masonry work and prepare reports.

Section 05 21 00 Steel Joist and Joist Girder Framing

Revise: 3.3.1 to read: Inspection and testing of materials and work carried out by testing laboratory **retained** by the **Contractor**.

Section 05 31 00 Steel Decking

Add: 2.2.1.1 Acceptable products: Canam P-3615, Agway RD36, or approved equal.

Add: 2.2.2.1 Acceptable products: Canam P3615 Composite, Agway CD36, or approved equal.

Section 07 13 52 Bituminous Sheet Membrane Waterproofing

Revise: 1.1.1 to read: This Section includes supply and installation of a self-adhering modified bitumen waterproofing for foundation walls, complete with primer, drainage board, and protection course required for a complete system installation, **including but not limited to the following locations:**

.1 Exterior side of frame hoist pits

.2 Exterior side of repair bay pits

Add: Section 07 16 16 Crystalline Waterproofing

Section 07 46 19 Sheet Metal Cladding

Revise: 2.2.1.2 to read: Cladding MC2: Horizontal pattern, colour White White. **AD275** by Vicwest

Add: 2.2.1.4 Cladding MC1: Vertical pattern, colour Cambridge White. Agway HF-12F

Add: 2.2.1.5 Cladding MC2: Horizontal pattern, colour White White. Agway HF-11NF

Add: 2.2.1.6 Cladding MC3: Horizontal pattern, colour White White. Agway HF-8NF

Section 08 33 53 High Speed Rapid Rolling Doors

Delete: 2.1.2.2

Section 08 36 16 Sectional Overhead Doors

Add: 2.1.2.5 Garaga G-5000

Add: 2.1.2.6 Clopay Commercial Model 520, 522 for O/H doors non insulated.

Add: 2.1.2.7 Richards-Wilcox commercial grade door, non-insulated version of model T-175.

Revise: 2.6.1 to read: Of suitable motor, designed by door manufacturer to operate doors of dimensions shown. Electrical motor and related components shall be supplied to suit voltage and other electrical characteristics of electrical system in building. ~~4/2 H.P.~~ **1 H.P.**, 208 volt, 3 phase, 60 Hz, complete with:

.1 Motor instantly reversible.

.2 Reversing, heavy duty, industrial type contactors with mechanical interlock.

.3 Solenoid operated brake.

.4 Quick release door arm.

- .5 Pneumatic safety edge on bottom of door to reverse instantly on meeting an obstruction in downward travel.
- .6 Take up reel for pneumatic safety edge.

Section 08 71 00 Door Hardware

Revise: Section 593-2024B_Addendum_12_NMS_08_71_00_Door_Hardware_Schedule-R2.pdf

Section 09 67 25 Epoxy Flooring

Add: 2.2.1.1.4 Primer SN, Maprfloor I 302SL, Maplefloor EP 20 by Mapei

Section 09 67 29 Epoxy Flooring (Trowel)

Add: 2.2.2.2.4 Primer SN, Mapefloor EP19, Maprfloor I 302SL, Maplefloor EP 20 by Mapei

Section 09 96 56 Epoxy Wall Coatings

Add: 2.2.2.1.1.4 Primer SN, Mapefloor I 302SL by Mapei

Section 10 91 13 Miscellaneous Specialties

Add: 2.5.3 Quantity: Three (3) required.

Section 11 11 00 Vehicle Service Equipment

Revise: 2.2.3.4 to read: Wetted parts: TPE, PTFE or Hytrel.

Section 22 13 16 Drainage, Waste and Vent Piping.

Add: 2.2.11 Provide proprietary geotech style fabric sock over subsoil drain pipe.

Revise: 3.2.1.7 to read: Radon pipe and fittings must be tested as a system by IPEX Inc. Mixing of pipe, fittings or joining methods from different manufacturers is not allowed as they have different joint systems and adhesives. Radon pipe and fittings must NOT be used for any applications other than soil gas venting. ~~For subsoil drainage piping,~~

- ~~.1 Tubing shall be bedded in gravel or crushed stone however, selected soil backfill material may also be used with satisfactory results. The top and sides of the drain pipe or tile shall be covered with not less than 150mm of crushed stone or other coarse clean granular material. When selected soil bedding material from the trench excavation is used, choose small loose particles of soil that will flow around the tubing and minimize soil settling. Avoid large rocks that may damage the tubing or large clods of soil that cause voids and subsequent excessive settling.~~
- ~~.2 For areas where tubing is exposed to vehicular traffic, there should be a minimum of 30cm (12") of cover over the tubing if gravel bedding material is used~~

~~and 61cm (24") of cover if selected soil bedding material is used. Typical recommended gravel materials are pea gravel, granular A stone or pit run course sand and gravel mixes.~~

~~.3 — Achieve a continuous downhill fall, or grade, over the entire length of the drain line. A fall of 5cm (2") per 30m (100') of length is generally considered adequate.~~

~~.4 — Backfill~~

Add: 3.2.1.8: For subsoil drainage and radon piping:

- .1 Tubing shall be bedded in sand, gravel or crushed stone. The top and sides of the drain pipe or tile shall be covered with not less than 150mm of crushed stone or other coarse clean granular material. When selected soil bedding material from the trench excavation is used, choose small loose particles of soil that will flow around the tubing and minimize soil settling. Avoid large rocks that may damage the tubing or large clods of soil that cause voids and subsequent excessive settling.
- .2 For areas where tubing is exposed to vehicular traffic, there should be a minimum of 30cm (12") of cover over the tubing if gravel bedding material is used and 61cm (24") of cover if selected soil bedding material is used. Typical recommended gravel materials are pea gravel, granular A stone or pit run course sand and gravel mixes.
- .3 Achieve a continuous downhill fall, or grade, over the entire length of the drain line, as indicated on drawings.

Section 32 31 12 Automatic Barrier Fence Gate

Revise: 2.1.1 to read: The vehicle gate specified product is based on Model BLG77L or BLG77M by Automatic Systems America Inc. **Other approved manufacturers and products include:**

.1 Autogate VPG2490 (with heater)

Other manufacturers and products with similar function, profile, type, and performance may submit for Contract Administrator to review for acceptance.

Revise: 2.1.2 to read: The turnstile specified product is based on model TRS370 paired with ADA gate by Automatic Systems America Inc, or approved equivalent. **Other approved manufacturers and products include:**

.1 Alvarado MST-6X with MSGX ADA Pedestrian Gate (with heater(s))

Section 32 93 53 – Planting of Trees, Shrubs and Ground Cover

Revise: 2.12.1 to read: **Natural wood chip** ~~Shredded pine bark~~ mulch derived from pine, shredded, free from twigs, leaves, branches, noxious weed seed and foreign material harmful to plant growth and other extraneous material. Mulch with artificial dyes will be rejected.

Section 33 71 16 – Electrical Pole Lines and Hardware

Revise: 2.1.3.2 to read: Wood species: Western Red Cedar, **Douglas Fir, Western Larch, Northern White Cedar.**

Add: 2.9 HV CONNECTORS

- .1 Terminal pad shall be bolted aluminum alloy with NEMA pad. The 2-hole or 4-hole NEMA pad shall be provided according to the hole patterns on the high voltage equipment.
- .2 Use a bi-metallic plate between the terminal pad and the equipment pad for dissimilar metals to prevent galvanic reaction, if applicable.
- .3 Deadend connector shall be high strength aluminum clamp suitable for ACSR conductor with pulling eye, hot-stick lifting eye and U-bolts clamp.
- .4 Deadend tap connector shall be aluminum compression type suitable for ACSR conductor.

- Add: 3.3.8.5 Wire brush bare aluminum pad and conductor to remove any oxidation. Apply an oxide inhibitor such as Penetrox™ compound before termination.
- Add: 3.3.8.6 The terminal pad connection hardware must include a pair of flat washers and Belleville washers to provide the required clamping force.
- Add: 3.3.8.7 All the bolted connections shall be tightened according to the manufacturer's recommended torque value.

QUESTIONS AND ANSWERS

Q1: Section(s): Architecture Drawings and Mech - Fire and Plumbing Drawings; Specifications / Plan Reference: Architecture Drawing page 21; All Plumbing Drawings: Question: It seems there's a discrepancy between the grid lines between the Architecture Drawings and the Plumbing Drawings. The overall distances are still the same, but some of the intervals are quite off.

Architecture column is what is on the drawings. Plumbing column is what I have gotten.

	<u>Architecture</u>	<u>Plumbing</u>
Grid Lines K-L	8590mm	4900mm
Grid Lines P-P.1	765mm	4300mm
Grid Lines P.1-Q	7685mm	3700mm
Grid Lines Q-Q.1	1648mm	5500mm
Grid Lines Q.1-R	6967mm	3400mm
Grid Lines R-R.1	2367mm	6100mm

A1: Reference Drawings in Addendum 9.

Q2: Section(s): 593-2024B_Addendum_3_Drawing_Mech_HVAC_IFC-R1; Specifications / Plan Reference: Equipment: Question: There's various equipment that doesn't correspond from the line drawings to the schematic drawings. Such as:

- a) 00-M-104 – in AHU-01 there a UH-01 inside. But referring to the schematic 50-M-621, the UH-01 is not shown with AHU-01.
- b) 20-M-103 – Along line C it shows two UH-01 on both sides of CUH-03. On drawing 20-M-101 along line C between intersecting lines 13 and 15 it shows three UH-01. Which does not correspond with the schematic drawing 50-M-621.
- c) Drawing 20-M-101 I see that FCU-07 has been relocated. Which is not clearly indicated on drawing 20-M-103. Was not adjusted on the schematic, questioning the appropriate sizing of mains in regard to relocation.
- d) Drawing 20-M-103 along line M. It shows two CUH-03's one off the perimeter main and 1 off the branches that cross the building, as well as six CUH-01's. referencing the schematic 50-M-621 it shows two CUH-03's coming off the perimeter main and just four CUH-01's still. When referencing the HVAC drawing 20-M-101 along line M it looks like there could be seven CUH-01's and three CUH-03's.

Raising the question of what are the correct number of units?

Is the sizing for piping mains correct?

- A2: a) Correct AHU-01 corridor contains UH-01. Schematic 50-M-621 will be updated accordingly, reference Addendum 11.
- b) Annotation and schematic were updated as referenced in Addendum 11.
- c) Annotation and schematic were updated as referenced in Addendum 11.
- d) Annotation and schematic were updated as referenced in Addendum 11.
- e) Annotation and schematic were updated as referenced in Addendum 11.

Q3: Section(s): 23 11 23, Specifications / Plan Reference: Natural gas: Question: Who will be covering the cost for Hydro? Contractor or the Client.

A3: The City will be responsible for the cost of the connection from the Manitoba Hydro main gas line to the meter location.

Q4: Pallet racking & tire storage racking

A) Looks like for your 4-Tier Pallet rack storage you have identified the following beam levels ground, 63", 126" & 180". If your top beam level is 180" why are there two frames listed 1 @ 272" for aisle frames and 1 @ 222" for mid frames? The specification states clear room between beams to be at least 64" which the above levels do not allow sufficient space. I was thinking that the levels would be ground, 74", 148" & 222". With these elevations it would make sense for the mid frames to be 222" where the top beam level would be then taller on the end of aisle frames which is somewhat common.

Sheet 00-A-912 shows a rendering of the pallet racking which doesn't give dimensions but shows the top beam at the very top of the frame. See below:

B) What I was asking about were rooms 30-111 & 30-110 where the tire racking is planned to go. Is there an elevation for those available? The levels sound like they would work @ ground, then 63", 126" (all 3 tire rack levels) & 192" top level ("for rims or other related devices"). The frames would need to be 192" or bigger if my elevation is correct.

A4: Reference Addendum 9.

Q5: We do not have the size of all sprinkler main lines provided on F-101. Please provide the sizes.

A5: Reference the Notes on Drawing 00-M-002. Design of the entire Fire Sprinkler system shall be by the licensed fire protection Engineer retained by the Contractor (Contractor's Engineer). Sprinkler pipe sizes, including sizes of main lines will only be available after the Contractor's design has been completed and approved.

Q6: Please advise if all joists will receive epoxy paint as shown on note 3.5.7.1 from Section 09 90 00. Or epoxy paint required only for Bypass Lanes and Bus Wash Lanes areas as shown on Room finish schedule from A-601 and standard primer for the rest. Please also specify if sealed welds are required for joists receiving epoxy.

A6: All joist in the bypass lane and bus wash lanes, Repair Bay 06 (and adjacent areas) will be hot dipped galvanized, no epoxy paint required, no requirement for sealed welds. Reference Addendum 7.

Q7: 08 11 13 has several references to Acoustic doors (eg. 2.1.4) but there is no cross reference to acoustics on the door schedules – i.e. there are no doors indicated as Acoustic so are any required, and if so, which openings?

A7: There are no acoustic doors in this project.

Q8: Please advise which credits under LEED BD+C V4 and V4.1 you require freestanding furniture to contribute to.

A8: The project is not pursuing any credit in which freestanding furniture can contribute to.

Q9: I do not see a spec for the Rolling Security Grille 40-104a.

A9: No Rolling Grille is required. Rolling Grille is replaced with Side Folding Grille, in accordance with Section 08 35 16 – Side Folding Grilles as referenced in Addendum 7.

Q10: There appears to be a typo for the size of the MTFR from Martins Industries. It is supposed to be 93 ½"x40"x55 ½", according to their website (I am assuming the size is a typo). I am also unsure how many folding racks are expected (78, or 104)?

A10: The dimensions of the Martin MTFR-HD are 2375 long x 1219 deep x 1429 open height.

A total of 15 folding tire racks are to be provided. They will be in 5 groups of 3 high, as represented on drawing 30-A-101, in the Tire Storage/Shipping & Receiving / High Voltage Battery Storage, Room 30-110.

Q11: Section 01 40 00 Quality Requirements - 1.4.1.4 Cost of Services will be paid by the City & 1.4.1.5 Cost of Services will be paid out of cash allowance. Please confirm the total amount and expected breakdown of the Cash Allowance to be included by the Contractor for Testing and Inspection as noted in specification 01 40 00 and revise the tender form. Specifically, please confirm that all 3rd Party Inspections and Testing, other than Contract Compliance Testing (Mill Tests, Mix Designs, and Building Systems Performance, Adjustments and Balancing Reports) are to be paid by the Testing and Inspection Cash Allowance, including but not limited to:

1. 04 22 00 Concrete Masonry Units inspections
2. 05 12 23 Structural Steel for Buildings inspections and testing
3. 05 21 00 Steel Joist and Joist Girder Framing inspections
4. 05 31 Steel Decking inspections
5. 07 21 00 R1 Thermal Insulation
6. 07 52 16 R1 SBS Mod Bit Roofing inspections
7. Building envelope?

A11: Cash allowance for these items has been deleted through past Addenda. Also, reference Addendum 12 for further data.

Q12: Drawing 10-A-201 detail 1 and 2 shows the building logo sign for the transit garage. Please provide a specification for the scope of work. Please confirm if interior signage (way finder signs, room signs) are required for this project and provide specs.

A12: Reference Section 10 14 00 - Signage in Addendum 7.

Q13: Please confirm where 07 14 13 Hot Applied Rubberized Waterproofing is to be utilized within the project.

A13: Section 07 14 13 Hot Applied Rubberised Waterproofing was deleted in Addendum 7.

Q14: Please confirm if Dampproofing or Self-Adhered Mod Bit Waterproofing is to be applied to the grade beams. B1 as shown on 00-1-001 states Dampproofing, on Beam details for example 2,6 and 10 on OO-A-520 state Self-Adhered Mod Bit Waterproofing. Provide what materials are to be used.

A14: Reference Section 07 13 52 Bituminous Sheet Waterproofing (Self-Adhered Mod Bit Waterproofing) in Addendum #7.

Q15: Door Hardware

- a) Page 2 of Section 08 71 00 - Door Hardware states that the Hardware supplier will provide "Preparation of the hardware schedule issued for tender" We are tendering please provide the hardware schedule.
- b) Page 17 of 08 71 00 - Door Hardware states "Refer to attached Hardware Schedule prepared by Hardware Consultant (To be provided at later date) Please provide it is required to be able to bid the hardware for the project.

A15: Reference Addendum 7 for Door Hardware Schedule. Also reference Addendum 12 for some modifications to the Door Hardware Schedule.

Q16: Spec Section 11 11 29 Transit Washing Systems:

- a) Where specifically should the removable tire guides be located? This is not shown in the drawings and would require a door access.
- b) Can you provide more details on the chassis wash location? The drawings show it in the first of three bays. Please clarify what tasks are performed in the first two bays if the third is designated for washing. We assume cleaning and fueling, but our concern is whether the city intends to spray the buses before entering the building. Our standard approach, which also meets specifications, is to place the chassis wash within the wash rack (wash bay).
- c) Can the first bay handle water, or are there drainage concerns?
- d) Do they require a freshwater or reclaim system for the chassis wash?
- e) Do all electrical panels in the wash bay and equipment room need to be NEMA 4X-rated, or only those exposed to wash bay elements?
- f) What are the water quality standards for this project and the City of Winnipeg? If available, can you provide a copy?
- g) The drawings indicate blowers at the exit, but the specifications do not mention them. Can you confirm whether the City requires or wants blowers?

A16: a) The removable tire guide section will be required for the south guide rail in the south Bypass Lane (10-125) Undercarriage wash system, to provide access into the double doors going into Mechanical Room 02 SV (10-123). Removable section to provide at least 2.4m clear opening.

- b) There will not be any advance washing in the first two spots of the Service Lanes (10-130), where fueling, DEF, and windshield washer fluid or water (summer) will be replenished, and interior cleaning will be performed.

Chassis wash systems are required as follows:

Two chassis only wash systems, will be located in each of the two south Bypass Lanes (10-125) west of Grid Line 7, approximately as shown by cross trench drain and notes on Industrial Drawing 10-D-101.

Two chassis wash systems included as part of the combined chassis/external wash systems in the Bus Wash Lanes (10-126) will be located approximately 1/3 of the way through the wash system, approximately east of Grid Line 7, as indicated by cross trench drain and notes on Industrial Drawing 10-D-101.

- c) As per response to question b) above, there is no washing in the first bus spots of the Service Lanes (10-130).
- d) The chassis wash systems require freshwater makeup and a water recycling system.
- e) All electrical and control panels in the Wash Bay (10-126) are required to be NEMA 4x. All electrical and control panels in the Bus Wash Equipment Room (10-124) are required to be NEMA 4 at a minimum.
- f) The make-up fresh water supplied into the system is from building potable water and is anticipated to be of the same quality as the water in the City of Winnipeg potable water distribution system. Please refer to the City of Winnipeg website, including the potable water quality test results: <https://legacy.winnipeg.ca/waterandwaste/water/testResults/Winnipeg.stm>
- g) Blowers are required to blow wash/rinse water off of the bus surfaces prior to the exit of both external wash systems located in the Wash Bay (10-126).

Q17: Cash Allowances, there are no cash allowances listed. Yet there is reference to Quality Control - Testing (01 40 00, 1.4;5) to be paid out of a cash allowance. Please provide list of Cash Allowances to be carried in Tender.

A17: Reference various Addenda for the deletion of specific Allowances "cash allowances". Also, reference Section 01 21 00 – Allowances in Addendum 12.

Q18: Attached is our steel door mfg. LEED document. Will this meet the required specification for this tender?

A18: The document is acceptable but must be accompanied by the material cost provided by the contractor and the LEED Materials coversheet.

Q19: I would like to confirm the stormceptor sizing. The tender shows 2x EF6 however my supplier is wondering if it should be 2xEF8 sizing instead.

A19: Reference Addendum 3.

Q20: Please provide more details for Alternate 1. Is this to delete all paving including the access road to the parking lot?

A20: Alternate Price No. 1 involves deletion of the asphalt pavement in the staff parking lot only. Asphalt paving on the access road is to be maintained to end of radius where the access road ties into the staff parking lot. The 100mm Heavy Duty and 75 mm Light Duty Asphalt Type 1A in the staff parking lot is to be replaced with additional Granular A Base Course material. Reference Addendum 7.

Q21: Div 28 CCTV and access control specs appear to not be included in the project specs.

A21: Reference Addendum 5.

Q22: Can you confirm if a specification will be forthcoming for the above tender for the following systems:

- 1) Access Control
- 2) CCVE System
- 3) Intrusion System
- 4) Paging System

A22: Reference Section 01 21 00 - Allowances in Addendum 12 security and public announcement.

Q23: Are you able to confirm the technical requirements and locations of the Emergency Lighting Inverters.

A23: See Section 26 33 33 Inverter Rectifier and Charger for emergency lighting inverter technical requirements. Locations of emergency lighting inverter are shown on Drawing E-0501 and E-2201. Reference Addendum 3.

Q24: Please confirm if Painting of sprinkler pipe is required?

A24: Reference Section 21 13 13 - Wet-Pipe Sprinkler Systems clause 3.12 for painting requirements. Also reference Section 20 05 00 - General Mechanical Requirements and to Architectural Division for painting requirements.

Q25: Confirm who is responsible for the following and if they are included in Form B Price Sheet to ensure there are no scope gaps or doubling up:

- 1) Build substation yard pad
- 2) Concrete foundation pad for substation high voltage transformer
- 3) Excavation in substation for high voltage cable trench
- 4) Excavation in substation for grounding
- 5) Supply and placement of the insulating gravel for the substation yard
- 6) Supply and installation of the geotextile oil containment for the substation high voltage transformer
- 7) Provide the spec for the oil containment required

A25: 1) The Contractor is responsible as referenced in General Conditions for Construction C6. The Contract Administrator will not define subcontractor trade definitions of work.
2) The Contractor is responsible as referenced in General Conditions for Construction C6. The Contract Administrator will not define subcontractor trade definitions of work.

- 3) The Contractor is responsible as referenced in General Conditions for Construction C6. The Contract Administrator will not define subcontractor trade definitions of work.
- 4) The Contractor is responsible as referenced in General Conditions for Construction C6. The Contract Administrator will not define subcontractor trade definitions of work.
- 5) The Contractor is responsible as referenced in General Conditions for Construction C6. The Contract Administrator will not define subcontractor trade definitions of work.
- 6) The Contractor is responsible as referenced in General Conditions for Construction C6. The Contract Administrator will not define subcontractor trade definitions of work.
- 7) Specification 26 12 14 - Transformer Secondary Containment Systems as referenced in Addendum 3.

Q26: Please confirm who's responsibility is for the oil containment pad. Please also clarify its design. Suggested that civil undertakes this. Also, please confirm its location on the bid form.

A26: The Contractor is responsible as referenced in General Conditions for Construction C6. The Contract Administrator will not define subcontractor trade definitions of work. Intent is to prevent any leaking transformer oil from seeping into the ground water. Reference Form B, G Building for the specific Division and applicable Section.

Q27: We require some clarification on the below questions that we found while going through the spec. Panels 6DP-01, 6DP-04, 6DP-06, 6DP-07, 6DP-09 show 85kA is that high interrupting rating required. For example 6DP-01 requires 84 spaces, with Air Circuit breakers we can only fit 4 feeder breakers in a single panel, we will end up with quite a bit of empty sections, additionally, Air circuit breakers can not go down below 200A.

A27: Reference Section 26 05 70 – Electrical Work Analysis and Testing, clause 3.2 for short circuit rating requirements. The number of circuits for panelboard 6DP-01 has been revised as referenced in Addendum 7. Refer to specification Section 26 23 00 - Low Voltage Switchboards, clause 2.2.11.1 and 2.2.11.2 as referenced in Addendum 9, circuit breaker type to be moulded case, bolt-on circuit breakers or insulated case circuit breakers.

Q28: Also I have noticed on Section 26 20 00 1.4 Series Rated Combination

.1 states Series Rated Combination of over-current protective devices are not permitted, and

.2 Comply with local governing electrical code rule with regards to series rated combinations of over-current protective devices and ensure that equipment in which lower rated devices are installed are marked with a series combination interrupting rating at least equal to available fault current.

Which of the above is correct and should be implemented!

A28: Section 26 20 00 Electrical Service and Distribution, clause 1.4.1 is correct, specification has been revised as referenced in Addendum #7.

Q29: Spec 26 13 18 – 2.8 12.47KV switchgear spare parts – Please confirm if all spare parts are provided with owners pre-purchased package.

A29: Spare parts are stated in accordance with Section 26 13 18 - 12.47 KV Switchgear, clause 2.8 as reference in Addendum 7.

Q30: Spec 26 13 18 – 3.4 - Please confirm if owner supplied 12.47KV switchgear includes training for City of Winnipeg staff.

A30: Contractor to coordinate training for City of Winnipeg staff as per specification Section 26 13 18 - 12.47 KV Switchgear, clause 3.4 as referenced in Addendum 7.

Q31: Panels 6DP-01, 6DP-04, 6DP-06, 6DP-07, 6DP-09 show 85kA is that high interrupting rating required. For example 6DP-01 requires 84 spaces, with Air Circuit breakers we can only fit 4 feeder breakers in a single panel, we will end up with quite a bit of empty sections, additionally, Air circuit breakers can not go down below 200A.

A31: Reference Section 26 05 70 – Electrical Work Analysis and Testing, clause 3.2 for short circuit rating requirements. The number of circuits for panelboard 6DP-01 has been revised as referenced in Addendum 7. Refer to specification Section 26 23 00 - Low Voltage Switchboards, clause 2.2.11.1 and 2.2.11.2 as referenced in Addendum 9, circuit breaker type to be moulded case, bolt-on circuit breakers or insulated case circuit breakers.

Q32: E0003

- a) Can you confirm note 5 requirement for emt "threaded connection"
- b) Please confirm if conduits by the overhead doors are "exposed to weather". if so, please clarify how far that zone is for the epoxy coated conduit
- c) Note 11 - can you clarify if this is div 26 scope? div 26 is assuming that it will be part of the concrete/flooring scope to provide.
- d) Note 4 - no shared neutrals - please confirm this requirement. for the size of this building, that is allot of extra copper for branch circuits, as these will be upsized for voltage drop already.

A32: a) Yes, reference Addendum 7 Drawing E-0003 General Note 5.

b) Refer to Section 26 05 00 - Basic Electrical Materials and Methods clause 3.3.2.4 as referenced in Addendum 7 for areas that require epoxy coated conduits.

c) Refer to Section 26 05 00 - Basic Electrical Materials and Methods clause 3.15. Equipment bases and supports are Division 26 scope.

d) Yes, note 4 is correct.

Q33: Sheet E-003, Note 14 states all Electrical Rooms are to have Epoxy floors. Not all electrical rooms on Finish Schedules are listed with Epoxy Flooring i.e. Sheet 20-4-413. Please confirm all electrical rooms are to have Epoxy Floors.

A33: Reference Addendum 7 Drawings.

Q34: Please Provide more details for Alternate 4. Does this include both Chain Link and Ornamental Site Fencing? Does this include Automatic Barrier Fence Gates?

A34: Reference Section 01 23 00 01 Alternatives in Addendum 7 for this data.

Q35: I am looking to apply for equals for the mechanical equipment on this project. I have reviewed all the documentation available on the WCA site, however it looks like the Division 23 specifications are not included. Would it be possible for you to provide this?

We submitted our request for equals some time ago through a local contractor. In that request we also included an RFI. I just wanted to follow up with you to see if there were any issues with that request, or if we can be of any assistance in its review. We have seen several addendums come out but have not seen this addressed.

In our RFE, we included SolutionAir as an equal to Tempeff. I wanted to note that AECOM has used this product locally for the City of Winnipeg in the past. There has been a unit running at the Winnipeg Transit terminal on Osbourne for several years.

A35: Reference Addendum 3, Addendum 6, and Addendum 7.

Q36: We require some clarification on the below questions that we found while going through the spec.

- 1) Panels 6DP-01, 6DP-04, 6DP-06, 6DP-07, 6DP-09 show 85kA is that high interrupting rating required.

For example 6DP-01 requires 84 spaces, with Air Circuit breakers we can only fit 4 feeder breakers in a single panel, we will end up with quite a bit of empty sections, additionally, Air circuit breakers can not go down below 200A.

2) Section 26 05 70 3.5 asks for Ground Potential Rise Study, is that required.

A36: Reference Section 26 05 70 – Electrical Work Analysis and Testing clause 3.2 for short circuit rating requirements. The number of circuits for panelboard 6DP-01 has been revised as referenced in Addendum 7. Refer to Section 26 23 00 Low Voltage Switchboards clause 2.2.11.1 and 2.2.11.2 as per Addendum 9, circuit breaker type to be moulded case, bolt-on circuit breakers or insulated case circuit breaker. Yes GPR study is required and to meet requirements in accordance with Section 26 05 70 - Electrical Work Analysis and Testing clause 3.5.

Q37: Please provide a detail showing the requirements for the house keeping pads for electrical equipment to be installed on.

A37: Refer to Detail 17 on drawing 00-S-001 for housekeeping pad details. Housekeeping pad requirements are outlined in Section 26 05 00 - Basic Electrical Materials and Methods clause 3.15.

Q38: In regards to the civil scope for the substation. Is the material to be carried in the pricing lines called out for the other civil scopes?

A38: The design of the Substation pad is as follows:

150 mm INSULATING STONE

450 mm GRANULAR A SUB BASE (MAX SIZE 100mm)

NON-WOVEN GEOTEXTILE FABRIC c/w CLASS A GEOGRID

All these materials are listed as separate line items in Form B.

Q39: Additionally, can you please confirm the required capacities for the baseboard heaters below? The schedule calls for performance at an average water temperature (AWT) of 107.5 F with 50% P.G. but the capacities listed are that of 120 F AWT on Runtal's published data.

A39: Revised capacities were updated in Addendum 7.

Q40: The VAV Box schedule calls for tags VAV-40 and VAV-41 to be Price Industries model SDEQ – This model has an integrated and factory tested silencer. Several other manufacturers are listed as equal in the specifications, however no other manufacturer can offer this product. The listed "equal" manufacturers can offer an attenuator only, at a reduced cost. Will the reviewing engineer be requiring VAV-40 and VAV-41 to have the integrated silencer, or will an attenuator be permitted.

A40: All technical solutions will be acceptable as long as they are designed for the intended application, which in this case is exhaust of humid air. Thus, the selected equipment shall meet not only the acoustical requirements but also humid air, corrosion resistance and mold resistance.

Q41: Please confirm that specification Sections 23 72 00 part 2.3, 2.4, 2.5, 2.6, 2.7, 2.8, 2.9, 2.10, 2.11, 2.13, 2.15, 2.16, 2.17 and 2.18 Do Not apply to the Tempeff basis of design Heat Recovery Units. In our interpretation Section 2.12 and 2.19 apply to the Heat Recovery Units and represent the Tempeff standard of construction. However, the sections noted above contradict section 2.12 and 2.19.

A41: Refer to Section 23 72 00 Hydronic Air Handling Units: All air handling units and heat recovery units are under clauses 2.2 to 2.18. For additional information, detail and requirements refer to:

1. Mechanical schedule DWGs,
2. Equipment enlarged view of AHU/ HRU DWGs
3. Division 25 and control schematics
4. 2.19 depicts ERV requirements
5. Reference Addendum 7

Q42: We have been asked to quote the Silencers on the above tender and will have to go for equals. But before we can do this we have come across a small discrepancy we would need clarified in order to submit correctly. Would you be able to clarify the following:

Vibro Acoustic models CD & RD are dissipative models which are not film lined. There is one CFL model which is a film lined model number. However the notes indicate film lining on all units. Film lined silencers will have less performance than dissipative ones.

A42: The discrepancy was addressed in Addendum 7 Drawings.

Q43: What kind of pricing validity is expected for this tender? Most of our steel suppliers are only guaranteeing their pricing for anywhere from 10 days to 6 weeks.

A43: Please reference Form A-Bid Proposal, Clause 11.

Q44: Re: Tender B10.1.1 Notwithstanding C12.2.3(c), prices on Form B: Prices shall not include the Manitoba Retail Sales Tax (MRST, also known as PST), which shall be extra where applicable. Please confirm that PST is to be excluded from the unit prices and contract value.

A44: Reference Addendum 5.

Q45: Section 01 40 00 Quality Requirements - 1.1.2

Travel Expenses: Where it is necessary for the Contract Administrator and the City to visit places away from the Place of the Work in order to supervise, inspect or witness testing activities of items of the Work, for compliance with the Contract Documents, the Contractor shall pay the travelling, lodging and food expenses of Contract Administrator and the City. Please clarify what costs the contractor shall pay for travelling, lodging and food expenses of Contract Administrator and the City?

A45: This clause was deleted as referenced in Addendum 3.

Q46: Cash Allowances: RE - Section 01 40 00 Quality Requirements - 1.4.5 - Cost of services will be paid out of cash allowance. Pay testing agency charges authorized by the Contract Administrator from the cash allowance included for these services. Are there any cash allowances costs we are to include in the tender? If yes, what are the costs?

A46: Reference various Addenda for the deletion of specific Allowances "cash allowances". Also, reference Section 01 21 00 – Allowances in Addendum 12.

Q47: Section 01 56 00 Temporary Barriers Enclosures - 3.1.1 - Erect structurally adequate, protective, covered walkway for passage of individuals along adjacent public streets. Please identify locations we require covered walkway?

A47: This clause was deleted as referenced in Addendum 3.

Q48: Would it be possible to receive unlocked architectural drawings for the Winnipeg North Garage Replacement project so we can add mark-ups for estimation purposes?

A48: PDF Drawings are not "locked". The image of the Architect of Record seal or Engineer of Record seal remains as issued via Addendum.

Q49: There are references to the hardware schedule. Will this be issued?

A49: Reference Addendum 7 and Addendum 12.

Q50: I noticed that there is a spec section (Prefabricated Steel Building – 13 34 00) for the Winnipeg North Garage Replacement project that shows IMPs. It states the building is to be 4000mm x 4000mm x 2700mm with a "location as indicated in Contract Drawings". However, I do not see this building on the architectural or structural drawings. Could you please confirm whether there is supposed to be this prefabricated steel building, or whether this spec section could be deleted?

A50: As a minimum, reference Addendum #3, Drawing 00-AS101, northeast corner of site, building described as "Diesel Pump House".

Q51: Completion of a pre-construction test pit program to determine fill quality and disposal requirements, who is responsible for arranging and paying for this? What is the ETA for this scope of work, since it might impact our schedule.

A51: Reference Section 02 61 00.01 Soil Remediation and Addendum 3. The Contract Administrator will be conducting the test pit program. Test pit program costs will be paid by the City through a separate contract with the Contract Administrator. It is anticipated that the test pit program can be started within two weeks of notice to proceed from the City and will require approximately two weeks of field work to complete. A draft report will be available for City review within approximately four weeks of the completion of the field work.

Q52: Section 01 23 00 01 Alternatives:

Alternate Price No. 1 - Provide additional information to the extent of asphalt paving to be deleted.

Alternate Price No. 4 - Provide details, types and locations of site fencing to be deleted.

Alternate Price No.5 - Provide details and location, including scope of work for reducing the Bus Storage Compartment 03 by half.

Alternate Price No.6 - Provide details and location, including scope of work for reducing the full Bus Storage Compartment 03.

A52: Reference Section 01 23 00 01 Alternatives in Addendum 7.

Q53: Construction Joint Detail in Slab 9-00-S-001 - Detail has a note, "Provide 150 PVC waterstop where indicated on plans", Currently the plans do not indicate a requirement of waterstop, if it is not indicated do we require waterstop for the control joints?

A53: In general, PVC waterstop in construction joints of the main floor slabs is not required. At underground pits and similar underground concrete box structures where waterstop is indicated between wall and slab, PVC waterstop should be provided in the construction joint of the slab, if the pit slab is to be poured with a construction joint.

Q54: Please confirm that the intent of the Liquidated Damages provision of the Prime Contract is that any Liquidated Damages charged will be the City of Winnipeg's sole right to financial renumeration in the event of project delays.

A54: Correct.

Q55: Many of the test hole logs reported auger refusal in poorly graded sand. The resulting pile lengths varies across the footprint of the building from possible 10m to 12m when the MFE = 235.300m is factored in. However, there are several test holes that were drilled beyond "auger refusal".

TH24-01:

Auger Refusal = -10.67m

Mudstone = -14.50m

Dolomite = -17.20m

End of Test Hole = -19.8m +/-

TH24-03:

Auger Refusal = -11.43m

Mudstone = -12.30m

Dolomite = -17.50m

End of Test Hole = -20m +/-

TH24-09:

Auger Refusal = -10.82m

Mudstone = -17.00m

End of Test Hole = -20.10m +/-

TH24-12:
Auger Refusal = -12.19m
Mudstone = -17.00m
Dolomite = -20.9m
End of Test Hole = -25.8m +/-

As you can see, the deep test holes may mean longer pile lengths beyond auger refusal. This is a big precast pile (600 +) project and getting the wrong precast pile length is risky. Are you able to specify a precast pile length for fair tendering purposes?

Dolomite elevation = -17.0m will likely guarantee a refused pile.

Mudstone elevation varies from -12.30m to -17.00m so again 17m long precast piles may be the length to use.

In addition, maybe specify that a test pile program is required for pile length confirmation prior to start of the project. Ask for a 17m long precast pile bids with add/deduct unit prices. This will minimize any risk for both piling subcontractor and owner in getting the pile length wrong.

A55: Pile lengths are highly variable, depending on practical pile refusal. Therefore, it is not explicitly indicated on the Drawings or Specifications. We understand that contractor is looking for an "average" pile length. According to the geotechnical report, pile refusal can be assumed to be approximately at auger refusal depth (223~226m ASL). Refer to Civil and Structural drawings for the finished floor elevations and top of pile elevations. It is the Contractor's responsibility to review the Geotechnical Report, consider the variation of soil depth, and perform necessary calculations to estimate the varying pile lengths.

Q56: Drawing 00-P-109 Ground Floor Plan – Sub Soil Drainage Drawing and Drawing 00-P-610 - Confirm if subsoil drainage pump station is to be cast in place concrete. If cast in place concrete, provide structural details complete with reinforcing. Provide location where this is to be priced in Form B: Prices.

A56: Reference Addendum 7. Form B location is G.3, Division 03-Concrete.

Q57: I have gone thru the originally issued specifications and addendums 1-5 but can not find the specification for the heat recovery units shown on drawings 50-M-602 and 50-M-603. Please see RFI 1 questions below:

1. Please issue specification for the heat recovery units shown on sheet 50-M-602, 50-M-603.

We have located the HRU specification in Section 23 72 00 and it's incorrect. We have attached the correct general unit specifications for your use.

A57: Refer to Section 23 72 00 - Hydronic Air Handling Units: All air handling units and heat recovery units are under clauses 2.2 to 2.18. Those clauses depict the general performance intent and the some means and methods to achieve them. Since each manufacturer (refer to acceptable manufacturer list) has its own means and methods, the solution provided shall meet or exceed the performance intent.

For additional information, detail and requirements refer to:

1. Mechanical schedule Drawings,
2. Equipment enlarged view of AHU/ HRU Drawings
3. Division 25 and control schematics.

Approved manufacturers are listed in Section 23 72 00 - Hydronic Air Handling Units and through various Addenda.

Q58: Please provide the oil volume so that we can accurately provide quotes for both the transformer filling (commissioning) and esterweb secondary oil containment system. Section 26 12 13, Section 26 12 24.

A58: The oil volume is identified on Drawing E-9002, Note 6 in Addendum 7 and is based on initial information from the transformer vendor.

Q59: As noted in section B3.4, please see our attached contract/supplementary condition blackline mark-ups for further review and discussion. Please note that we are open to discussing in more detail to ensure satisfactory outcomes for both parties.

A59: Please reference Addendum 8.

Q60: I have been reviewing the requirements as outlined in Addendum 5, specifically:

Section 28 23 00 1.2.2 Contractor must maintain Unified Elite Status with Video Surveillance Manufacturer
Section 28 13 00 1.2.3 the system programmer shall be a Genetec Certified partner with the following level of qualification: Unified Elite Reseller

Our company maintains a Genetec Certification however, not Unified Elite. There are currently no Genetec Certified Unified Elite Resellers in Manitoba. We have deployed a number of Genetec systems province wide for Video Surveillance as well as for Access Control. to our understanding, the main differentiator between our certifications and Unified Elite are largely based upon the dollar volume of business though Genetec on an annual basis.

We are seeking clarification on whether this is an absolute or, if given that there are no Genetec Unified Elite Reseller in the Province of Manitoba, the Genetec certification that we maintain will be allowed for this project. We would be pleased to provide you with our main Genetec contacts of this will provide you with any assistance.

A60: A Physical Security Systems and Public Address (PA) Allowance has been allocated to the project to implement this area of work. Details on the allowance are provided in Section 01 21 00 - Allowances in this Addendum 12.

Q61: Please confirm type of Fire hose cabinets are required in the locations shown. Unclear the types required FHC-01, FHC-02 & FHC-03.

A61: Refer to DWG 00-P-502 and Section 21 12 00 Fire Suppression Standpipes for details.

Q62: Section(s): 11 11 29; 11 81 33, Specifications / Plan Reference: How can sub-contractors be expected to quote on the installation of equipment and materials in these sections without adequate drawings and information regarding location of equipment and piping that aren't shown.

A62: Section 11 11 29 – Transit Bus Washing Equipment: The automatic bus washing systems' in-floor and below floor piping is indicated on the industrial and plumbing drawings. The above ground piping installation requirements will vary according to the vendor's final layouts, and this information should be obtained from the scheduled system vendor, or approved equivalent(s).

Q63: Section(s): 23, Specifications / Plan Reference: 23 21 13 Hydronic Piping 3.2.4: It suggests having a means of flanges/unions for pipe removal every 15' for pipes over 30' of total length. Given that most of the main runs would qualify, it makes more sense to change this to every 20'/21' (full length of pipe). It would save money on labour and material.

A63: Suggestion will be taken into consideration; however all parties (City included) review and acceptance is required. At present time no spec modifications will occur.

Q64: I would like to request clarification regarding the galvanizing requirements for the North Garage Replacement project.

- a) Section 05 12 23 2.2 .8 (page 4) in the project specifications calls for galvanized structural steel in the Vehicle Wash Areas, Under-Vehicle Cleaning Areas & Vehicle Repair Wet Bay Area.
- b) Structural drawings only indicate galvanized steel in the wash bays (gridlines 4 – 9 & A – E)
- c) Based on the specs, I wonder if galvanized steel is required in parts of the Maintenance Garage (West of gridline 3.1)

Can you please confirm.

A64: In the maintenance garage, hot dip galvanized steel is required only in the repair bay 06 (grid lines F.7 to F.8, from E.6 to 3.1, inclusive).

Q65: Subsoil Drainage Pump Station - Drawing O-P-610 shows the 3 chamber pit for the subsoil drainage pump station, please provide structural detail (including reinforcement, access hatch, ladder, required angular bar for the opening).

A65: Please see Drawing 00-S-555 in Addendum #7.

Q66: 66kV Transformer - For the installation of the 66kV transformer, please confirm the following:

- o Cross weight of station transformer.
- o Are oil radiators tanks being shipped loose or installed.
- o Oil capacity with and without radiators
- o Approximate value of the station transformer and 69KV pole mounted switch and fuses to assume ownership of equipment.

A66: The approximate total weight of the transformer is 32,252kg including the oil. There is no information provided by Vendor if the radiator tanks is being shipped loose. The approximate total oil capacity is 10,500L (with radiator). The supply of the HV transformer, 66kV disconnect and fuses will be by the Contractor and requirement will be included in the main construction tender as referenced in Addendum 9.

Q67: Integral Main Breaker - Please confirm if Series Rating to the integral main breaker allowed? Or do we price everything as fully rated?

A67: Series rating is not permitted in accordance with Section 26 20 00 - Electrical Service and Distribution clause 1.4.1 in Addendum 7.

Q68: Can you confirm that seismic restraints per spec 20 05 50 are required for mechanical even though Manitoba does not require seismic restraints?

A68: In accordance with Section 20 05 50 – General Mechanical Requirements, Mechanical, Process and Industrial equipment installation shall meet the building code requirements. Refer to NBC 2020 and to, but not limited to, clause 4.1.8.18 for further requirements. Section 20 05 50 – Seismic Restraint Systems clause 1.5 depicts the calculations and the submittal requirements.

Q69: I have a few inquiries about the surface works for Tender 593-2024B and am hoping to receive some clarifications:

- a) Items A.19i and A.19ii are asking for Superpave Mixes, as this is a parking lot, is this correct? Or should these be the Marshall Mixes?
- b) As there are two types of Superpave mixes being called out, what are the corresponding lift thickness?
- c) Item A.19iii for the pathway is asking for a Superpave Mix, shouldn't this be a Marshall Mix?
- d) The cross sections on Drawings C-014 and C-015 are showing Type 1A asphalt and Form B is calling for SP1 and SP2, which mixes are correct, and what are the corresponding lift thickness?
- e) Item D.10 – Temporary Surface Restoration

- o The spec reference CW 3650 is a reference to Installation of Aluminum Balanced Barrier, there is method of measurement or basis of payment referring to "Street Pavement" restorations
- o Please clarify how the Contractor shall determine area of pavement restorations for with a unit of measure that is linear.

f) Alternate Price 1

- o Alternate Price No. 1.1 Base Bid Price – Are there take offs specific to this area? (Excavation, Geo, Geogrid, Sub-base, Base, Asphalt?)
- o Alternate Price No. 1.2 Alternation Price – Are there reference quantities of the asphalt to delete and the gravel to add?

-Does the curb and gutter remain and the gravel is brought up to the gutter grade?

-Does the LDS have to be removed in this alternate as it would result in gravel spilling into a catchbasin?

Please advise if an addendum is forth coming for the above.

- A69: a) For items A.19i, A.19ii and A.19iii, Addendum 9 replaces asphalt Type SP1 and Type SP2 with Type 1A in Form B.
- b) Asphalt pavement thickness is shown on Drawings 0-C-014 and 0-C-015. Minimum lift thickness shall be as per City of Winnipeg Construction Specifications.
- c) For items A.19i, A.19ii and A.19iii, Addendum 9 replaces asphalt Type SP1 and Type SP2 with Type 1A in Form B.
- d) The Type 1A asphalt shown on Drawings 0-C-014 and 0-C-015 is correct. For items A.19i, A.19ii and A.19iii, Addendum 9 replaces asphalt Type SP1 and Type SP2 with Type 1A on Form B. Asphalt pavement thickness is shown on Drawings 0-C-014 and 0-C-015. Minimum lift thickness shall be as per City of Winnipeg Construction Specifications.
- e) Clause E.10.2 states that temporary surface restorations (if necessary) are at the Contractor's cost with no separate payment. As a result, Form B item D10 will be deleted as part of Addendum 9. Clause E.10.2 states that temporary surface restorations (if necessary) are at the Contractor's cost with no separate payment. As a result, Form B item D10 will be deleted as part of Addendum 9.
- f) No separate quantities for the staff parking area included in Alternate Price No. 1 will be provided. Yes the curb and gutter is to be installed and additional Granular A Base Course material placed to bring the gravel parking lot grade to the gutter elevations. All LDS including catchbasins are to be installed under Alternate Price No. 1.

Q70: Please see below list from schneider and advise if acceptable. Is Series Rating to the integral main breaker allowed? Or do we quote everything as fully rated.

A70: Series rating is not permitted in accordance with Section 26 20 00 Electrical Service and Distribution clause 1.4.1 in Addendum 7.

Q71: Missing schedule: quoted with 84 circuits and 50% filled with 15A/1P breakers in the absence of schedule. PP-MG-04 (E-1005)

A71: PP-MG-04 has been removed in Addendum 9.

Q72: Main breaker rating do no match between schedule and SLD:

- a) PP-SG-03 (quoted 150A main breaker)
- b) PP-SG-06 (quoted 150A main breaker)
- c) PP-SG-07 (quoted 150A main breaker)
- d) PP-SG-08 (quoted 150A main breaker)
- e) PP-SG-10 (quoted 100A main breaker)
- f) EP-MG-01 (quoted 150A main breaker)
- g) DP-SG-01 (quoted 200A main breaker)

- A72: a) Main Breaker rating on panel schedule has been revised in Addendum 7.
- b) Main Breaker rating on panel schedule has been revised in Addendum 7.
- c) Main Breaker rating on panel schedule has been revised in Addendum 7.
- d) Main Breaker rating on panel schedule has been revised in Addendum 7.
- e) Main Breaker rating on panel schedule has been revised in Addendum 7. To be 150A main breaker.
- f) Main Breaker rating on panel schedule has been revised in Addendum 7.
- g) Main Breaker rating matches panel schedule and single line diagram. 200A main breaker is correct.

Q73: CCT count do not match between schedule and SLD:

- a) LP-SG-01 (quoted 84CCT)
- b) LP-SG-02 (quoted 84CCT)

- c) LP-OE-01 (quoted 84CCT)
- d) EP-SG-01 (quoted 84CCT)
- e) LP-SG-03 (quoted 54CCT only)

- A73:
- a) CCT numbers have been revised on single line diagram and panel schedule in Addendum 7.
 - b) CCT numbers have been revised on single line diagram and panel schedule in Addendum 7.
 - c) CCT numbers have been revised on single line diagram and panel schedule in Addendum 7.
 - d) CCT numbers have been revised on single line diagram and panel schedule in Addendum 7.
 - e) CCT numbers have been revised on single line diagram and panel schedule in Addendum 7.

Q74: DPs and Panels were quoted with reduce # of CCT to maintain a single tub panel.

- a) DP-MG-05 (54 CCT only)
- b) DP-MG-04 (66 CCT only)
- c) DP-MG-03 (66 CCT only)
- d) DP-MG-02 (66 CCT only)
- e) 6DP-05 (60 CCT only)
- f) 6DP-07 (57 CCT only)

- A74:
- a) CCT numbers have been revised on single line diagram and panel schedule in Addendum 7.
 - b) CCT numbers have been revised on single line diagram and panel schedule in Addendum 7.
Double tub panelboard may be required to accommodate number of circuits.
 - c) CCT numbers have been revised on single line diagram and panel schedule in Addendum 7.
 - d) CCT numbers have been revised on single line diagram and panel schedule in Addendum 7.
 - e) CCT numbers have been revised on single line diagram and panel schedule in Addendum 7.
 - f) CCT numbers have been revised on single line diagram and panel schedule in Addendum 7.

Q75: We have concerns regarding the bid validity period of 90 days. Due to the uncertainty of how the tariffs will affect our overall economy we have concerns regarding the value of the Canadian dollar vs. the U.S. dollar. Because of this we have no certainty as to the prices we will be paying for structural steel and OWSJ. Most of the material required for this project will be coming from the U.S. which is subject to the 25% tariff on steel imported from the U.S. as well as the potential increases due to the reduced value of the Canadian dollar. We are taking a big risk to hold pricing for even 30 days never mind 90. To put this into perspective, one of the joist suppliers has a bid validity of only 15 days that we are hoping to get them to revise to 30 days. Therefore, we respectfully ask that the bid validity be modified to 30 days.

A75: Reference Addendum 8.

Q76: Section 1.3 – Workstation System and Furniture Schedule Specifications

1. WS-2: The specification mentions fabric-wrapped panels but also refers to a “1-inch laminate floor screen, back connection.” Could you please confirm whether all panels should be fabric, laminate, or a combination of both?
2. WS-2: The floor plan image for this workstation appears blurry in the tender package. Could you provide a clearer version to better understand the notes?
3. CH-5: The design standard notes the product as “bar stool”, but the notes mention counter height. Can you please confirm if you require bar or counter height?
4. PM-1: This product is not labelled on the drawings, so we are unable to verify total quantity. Please confirm the quantity required.
5. WS-1: Is a 24” x 48” height-adjustable desk optional or mandatory for this desk configuration?

A76: Reference Addendum 7:

1. WS-2 panels are a Combination of both, bottom laminate finish (from floor to desk height) and upper portion fabric for sound.
2. WS-02 is the cluster of 2 workstation, and WS-02A is the single workstation in the room DISPATCH WORKSTATIONS - 40-104.

3. CH-5 to be bar height to match the Bar height island countertop. Counter height stool only, for kitchen island.
4. PM-1: 1 unit for each workstation in the room TRAINING ROOM CONFERENCE ROOM 40-103.

Q77: I have submitted a request for information through PCL regarding the hardware schedule and group assignments for Section 08 71 00. It is our understanding that this information is to be provided in an upcoming addendum, can you let us know when this information will be available? Without this information we are unable to proceed any further in our process. I would like to ask that an extension of at least two weeks be considered past the release date of the necessary information.

A77: Reference Addendum 7 for the Door Hardware Schedule, Section 08 71 00. Also reference Addendum 12 for modifications to the Door Hardware Schedule.

Q78: 50-M-601 Forced Air Curtain Schedule - On the air curtain schedule there is a tag: FAC-02. We are unable to locate this tag on the drawings. Please advise where tag: FAC-02 is located on the drawings.

A78: Correct, although FAC-02 is depicted on the schedule, currently is not depicted on the layout, is reserved. The final length of the air curtains and side baffles will be based on the actual submitted and approved overhead doors.

Q79: 50-M-603 HVAC Fans Schedule - Fan Tags EF-02 & EF-04 are specified with an ECM motor to be 575v/3 ph. ECM motors are not available with 575v/3 ph. Please clarify.

A79: Reference mechanical schedules, EF-02, 04 are VFD driven (not ECM).

Q80: Vehicle Chargers - Reference to drawing E-1001 General Notes 2 indicates that the electrical vehicle charging cabinets will be by others while Drawing E-003 General Notes not clearly defined who is supplying them. Electrical trade has reached out to ABB and they mentioned that the chargers are purchased between the ABB and the City. Please confirm if who is supplying the EV chargers and if the supply will be excluded on this contract.

A80: Drawing E-1001 keynote 2 was revised in Addendum 9. EV chargers to be included in this contract as per contract drawings and specification Section 11 11 36.10 Electric Vehicle Chargers.

Q81: Seismic restraint systems: 20 05 50 and 26 05 48 are for the Seismic Restraint systems. Please clarify if these need to be included in the price since our jurisdiction is not subject to seismic movement.

A81: In accordance with Section 20 05 50 – General Mechanical Requirements, Mechanical, Process and Industrial equipment installation shall meet the building code requirements. Refer to NBC 2020 and to, but not limited to, clause 4.1.8.18 for further requirements. Specification 20 05 50 – Seismic Restraint Systems clause 1.5 depicts the calculations and the submittal requirements. In accordance with Section 26 05 48 – Vibration Isolation and Seismic Restraints clause 2.2 electrical equipment installation to meet local governing authority having jurisdiction and code seismic requirements.

Q82: Please make the following adjustment to specification Section 23 72 00 Hydronic Air Handler specification

- 1) Page 3 para 2.1.3.4 – do not need unit to be supplied in sections to fit thru doors – units will be craned to roof.
- 2) Page 4 para 2.2.7.7 – BACnet – not a Haakon option – should be by controls. BACnet is an option for HRUs - TempEff option and we will include.
- 3) Page 5 para 2.3 – Unit construction – Haakon standard spec – 2" wall w/ 3lb density insulation, thermal break construction
- 4) Page 6 para .2.2 – seismic roof curb noted. Manitoba is in a low seismic hazard area – according to Geological Survey of Canada. Please confirm
- 5) Page 8 para .8 – seismic restraint type isolators – please confirm

- 6) Page 8 para .1 Coils – Haakon to supply and install coils. Coils include: 304 stainless racks, 5/8" 0.020 tube, red brass MPT connections, 304 stainless casing for cooling coils
- 7) Page 11 para 2.8.4.4 – Notes humidifier to be single point power with AHU however panel schedule drawing E-8008 indicates separate power supply to humidifier. Please confirm
- 8) Page 15 para 2.15 / 2.16, page 16 para .2, .4 – controls components / control panel – control components / control panel should be supplied and installed by controls contractor in the field – not including controller / panel for heat recovery wheel. This is how we have done previous Haakon units in Winnipeg. Controls can request factory installed conduits from point A to point B within the air handler to run control wiring but all components mounted in the field
- 9) Page 23 para 3.1.9 – Field leak test – is very expensive. On projects where leak testing is needed best approach is to have a factory certified leak test (Engineer can ask to be present if needed). Haakon will provide certified documentation. Field leak test is by contractor / air balancer
- 10) Page 24 para .8 – coils to be supplied and installed by Haakon
- 11) Page 24 para .9 – paint by Haakon

A82: Specifications will not be modified. Specification 23 72 00 Hydronic Air Handling Units: All air handling units and heat recovery units are under clauses 2.2 to 2.18. Those clauses depict the general performance intent and some means and methods to achieve them. Since each manufacturer (refer to acceptable manufacturer list) has its own means and methods, the solution provided shall meet or exceed the performance intent. No adjustments will be made to specification, at this time.

Q83: Item 1.2.3 of Section 28 13 00 specifies that the Genetec Certified Partner have the qualification level of Unified Elite Reseller. This level of qualification is not held by any Genetec Certified Partners in Manitoba. The Elite reseller level is attained based on a sales figure of the product. This is only held by a few companies outside of Manitoba. We are kindly requesting that the qualification level be changed to Genetec Certified Partner with Genetec Synergis for Access Control and Omnicast for the Video Surveillance.

A83: A lumpsum cash allowance will be allocated to the Contractor to implement Sections 28 05 00, 28 08 00, 28 13 00, 28 16 00, 28 23 00, 28 47 00. Details on the allowance are included within this Addendum 12.

Q84: Section 28 13 00, 1.1.2.3:

The System programmer shall be a Genetec Certified partner with the following level of qualification: Unified Elite Reseller

I have confirmed with Genetec and there are no Unified Elite Resellers in Manitoba currently.

Can you confirm if the above could be re-stated as Certified Channel Partner.

Programmer qualifications could be stated as: SC-ETC-001 Security Center Enterprise Training

This is advanced technical certification; this gives the holder an in depth of overview of both video and access control. The holder will be able to design large systems and understand and configure Security Center expansion options.

SC-OTC-002

Security Center Omnicast Level 2

This certification is an advanced configuration and troubleshooting course. This will equip the participant with a deeper understanding of Security Cener's video architecture with an emphasis on troubleshooting, thereby increasing autonomy and decreasing reliance on Genetec support.

Typically, the programmer does not hold the Unified Elite Reseller status, but the company they are employed under may.

Typical Certifications for projects of this magnitude would involve a programmer within a company with the above qualifications.

A84: A Physical Security Systems and Public Address (PA) Allowance has been allocated to the project to implement this area of work. Details on the allowance are provided in Section 01 21 00 - Allowances in this Addendum 12.

- Q85:
- 1) Panelboard LP-SG-03 is shown on E-6110 gridline U.1 & 8. Panelboard is also shown located at E-0502/detail 1. Please confirm location.
 - 2) Drawing TY-720 - fiber to dispatch workstation room. Please confirm where the 2 fibers are to be terminated in the dispatch room and are we supplying racks or equipment for the terminations.
 - 3) TY-500, 501, 502, 503 - Drawings show shielded cat 6A panels. However specs call for non-shielded cat 6A. Please confirm the shielding requirements for the panels and/or cables
 - 4) TY-700 - Please confirm if the cabling is to be cat6A or cat 6?
 - 5) TY-100 - OCBA 1-4 - please confirm enclosure type, size, and mounting detail.
 - 6) With the primary and secondary midspan fiber for the perimeter security cameras, is it permissible to complete the midspan splice in an open bottom pull pit and bring the 4 strands into the fiber enclosure above ground?

- A85:
- 1) Correct location of LP-SG-03 is in electrical room on Drawing E-0502.
 - 2) No Security fibre connections are required to the dispatch room. Drawing TY-720 was modified in Addendum 9.
 - 3) Shielded CAT6A cabling/patch panels required for outdoor devices. This was updated in Addendum 9 for clarification in cable schedules and Section 27 10 05 – Structured Cabling for Communications.
 - 4) All cabling to be CAT6A, as referenced in Addendum 9.
 - 5) Refer to sheet TY504 for OCAB enclosure reference. Keep in mind that the enclosures and their contents are a part of the Security allowance under 01 21 00 – Allowances as referenced in Addendum 12.
 - 6) If the midspan enclosure/4 strand fibre are rated for underground/duct usage, and the handhole has sufficient space to secure the midspan enclosure and provide proper fibre slack with ease of access for maintenance purposes, we do not have a problem with the proposal.

- Q86:
- 1) DWG E-0051 and TY100 - please confirm mounting details and if power is required for the switched for the cameras in the parking lot.
 - 2) TY-601 references details on TY-701. these details do not exist
 - 3) E-7101 - note 3 - please confirm that the contractor is responsible for heat mapping. If so, and it is determined that more WIFI points are required or relocated, would this be at an extra cost?
 - 4) Types LJ5 and LJ6 are listed on the luminaire schedule as 208V. They've specified Albeo's ABC highbay series. It's available in multi-volt 120-277v, but also 277, 347, and 480v. Can you please have them confirm the voltage? As discussed on the phone multi-volt may cause a problem with city inspectors and 208v drivers are special order.

- A86:
- 1) Mounting details are included in drawing E-0108 for electric charging stations, receptacles for block heaters, mini power distribution centers and lighting poles. Electrical providing conduits for data cables for cameras in parking lot. Cameras in parking lot are powered by security cabinet. Parking lot cameras to be powered via CAT6A PoE from the DIN Rail switches inside security

cabinets. AC power required for each cabinet to power the switches via DIN rail AC-DC PSU. CCTV Mounting details provided in drawing TY601. Cabinet details provided in TY501.

- 2) Should read FOR DETAIL SEE #4 / TY601. This was updated in Addendum 9.
- 3) Correct. At this time, Contractor is response for heat mapping and if it is determined additional wireless access points are required, associated extra cost will be expected. Slight relocations are to be expected and should be accounted for.
- 4) 208V voltage is required for these lighting fixtures.

Q87: Piles Caps "PC1 and PC3" shown on sheet 00-S-520 and Pile Caps "PC1 and PC3" on Sheet 00-S-550 Schedules are different sizes, which sheet is correct.

A87: Please follow dimensions shown on Drawing 00-S-520. This clarification will be included in an upcoming Addendum.

Q88: Requesting an extension if possible?

A218: Reference Addendum 11 for updated Submission Date.

Q89: In speaking with our Toronto office that worked with AECOM on the design, they indicated than an addendum is going to be issued for the North Garage Project that will revise some chiller manufactures and other mechanical items. Is this Addendum in process and will it be an extension be added when issued?

A89: No changes to Mechanical systems, no new addenda with "new" chillers. The "equal requests" are posted in the various addenda.

Q90: Section 02 61 00 Soil Remediation: Addendum 3 removed the original testing frequency criteria for testing of the contaminated soils. The remediation scope of work is on the critical path for this project. Not knowing the testing frequency and the turnover time for the test results, the Contractor would assume unreasonable risk for meeting the schedule requirements including the Liquidated Damages costs. Confirmation of the frequency of tests and the turnover timelines are kindly requested to be confirmed by the City.

A90: Frequency and turnover time information has been added to 02 61 00.01 Soil Remediation 1.10.1 in Addendum 9. Addendum 9 supersedes Addendum 3 in relation to clause 1.10.1.

Q91: Electrical:

- a) No details for the bus lifts provided within the electrical scope besides the power feeds. Please confirm if there are any additional wiring/conduit underground or in-slab required.
- b) E-0050, E-0108 Security and power conduits for the cameras - Please confirm if HDPE is acceptable installed via directional bore
- c) E-0106 - is an emergency stop/shutdown button required at the building entrances for the EV charging units?
- d) E-1003 – 6DP-04 shows a air compressor tire fill feeder but the panel schedule does not. Please clarify.
- e) Would you please confirm the delivery to site date for the Owner supplied HV electrical equipment?

A91: a) Electrical to provide power feeds to bus lifts. Additional conduit requirements are shown on drawing 30-D101/ detail #2 and detail #3. Confirm installation requirements with lift supplier.

- b) Security and power conduits for the cameras to be as per Drawing E-0102 detail 4 to 6.
- c) Emergency stop/shutdown button required at each dispenser location.
- d) Drawing E-1003 was revised. Reference Addendum 7.
- e) HV electrical equipment to be supplied by Contractor in accordance with Addendum 9.

Q92: Bollards:

On Structural Drwg. 00-S-004, it provides a standard detail for Bollards noting that the diameter is to be 200mm dia., 6mm thickness with a length of 2325mm. However, on all the plan view dwgs. 10-A-401, 10-A-402, 10-A-201, 20-A-201, 30-A-201 & 40-A-201 it notes that all bollards are to be 150mm dia, 6mm thickness. Please advise which is the correct size to allow for?

On drawing 00-A-907, it shows a 3-D view of a double bollard post with a horizontal cross pipe tie. Do we include for these and what is the diameter sizing? Also, where do these actually apply as plan view drawings do not detail or shown these.

A92: Please follow the structural detail. These are indicated as "BGR" (Bollard Guard Rail). A structural detail will be added accordingly in the next addendum.

Q93: Fire Suppression Drawings

- a) Sprinkler Zone and coverage Areas. Can they be maxed out to the NFPA maximum coverage areas? Perhaps a couple wet zones can be extended/reduced. Cost savings would be associated, and would still meet NFPA standards. Can we do this?
- b) Pipe routing on F-101. Can there be cost effective measures applied with adjustment to the indicated pipe routes?
- c) Is there an opportunity for a remote header instead of all zones in Fire pump Room? I do see you have a tail end Pre-action, perhaps similar ideas can be applied, in mech room for example.
- d) STP U/G - indicated in repair bay. Is that underground? What pipe is required here, and is that to be welded? Or can this be above, and come down a column?
- e) What area is wet zone 11?
- f) Can elec rooms at south areas by parts storage, share one pre-action valve and have their independent sectional valve?
- g) Purpose for the 4 flow switches at grid L. Dry system activation would in fact activate all 4 flow switches, so trying to understand the purpose to see any possible alternate methods. None would be required per NFPA.
- h) The offset at grid line G. please explain.
- i) Fire Pump Schedule – Indicates AC Fire pump (Xylem), I would think that an alternate such as Peerless would be acceptable?

A93: a) No changes will be made.

- b) The routing as indicated schematically on the drawings. Yes, provided the routing does not compromise pipe protection and integrity.
- c) No, this was considered but the Fire Department access and other requirements precluded that option.
- d) This pipe is shown underground to ensure protection of pipe from damage. Pipe is to be as per specification.
- e) Zone 11 is the long electrical room (corridor) at mezzanine level. This has now been clarified on the revised drawings. Reference Addendum 9.
- f) No, the two spaces have different hazard requirements. However, this proposal may be considered in future, if alarming and similar aspects are found satisfactory.

- g) The flow switches provide notification at the emergency panel response regarding location of the fire. At the emergency panel regarding location of the fire. No, all four switches would not activate if there is a fire in one compartment.
- h) These are pipe expansion loops, shown at this location, where there is building expansion joint.
- i) Alternative manufacturer of pump to be 'Equal and Approved' through Addenda in accordance with B7 Substitutes.

Q94: Due to the requirement of NEMA4 X (Panel Schedule) and LSIG breaker (NOTE 1 Drawing E-1002), I-LINE panel offer can only be supplied on TYPE 2 Surface with Hinged Door. LSIG requires a gutter for the neutrals and gutters will only be supplied on TYPE 2 enclosure. Affected Panels: DP-MG-05, DP-SG-01, DP-MG-03 and DP-SG-02.

- a) Main Breaker SLD do not match schedule, example PP-SG-12, SLD says 150A, but schedule says 100A.
- b) E-1003 are the inverted Panels INV-MG-01 and INV-SG-01 part of Schneider scope?
- c) Panels PP-MG-04 (E-1005) and EP-SG-01 (E-1005) are quoted with 84 circuits and 50% filled with 15A/1P breakers in the absence of schedule.

A94: RFI question is not clear. Panel Schedule enclosure rating to be met as NEMA 4. Main breaker trip unit to be LSIG type in lieu of LSI in accordance with general note 1 Drawing E-1002.

- a) In Addendum 7, Main breaker SLD matches panel schedule including PP-SG-12.
- b) Inverter Panels are built-in panel inverters.
- c) PP-MG-04 has been removed in Addendum 9. EP-SG-01 is shown on panel schedule Drawing E-8012.

Q95: Section 25 50 00, Item 1.10 QUALITY ASSURANCE, is asking to the bid price to include 85 person days (85 x 8 = 680 hours) of technician labour time additional to the project. Can you confirm that these extra 680 hours will be required to be included in the bid price?

A95: Contractor shall refer to Specification 23 72 0 0 Hydronic Air Handling Units clause 2.16 in regard to the BAS scope of work and factory-trained service personnel. Also refer to Section 25 00 00 – Building Automation System (BAS) clause 1.10. 13.6 "Credit to the City, all unused service person-days specified above, at the manufacturer's published field service rate." if such hours will not be used.

Q96: 26 05 28 Drawing E4100 makes reference to detail drawing E4101-1, E4102-1, E4107-2, E4500-1, & E4300-1. Addendum #3 Drawing Electrical IFC-R1 does not have these detail drawings. Please provide.

A96: Electrical Drawing E-4100 to be removed in Addendum 12. Refer to overall grounding layout on drawing E-4000.

Q97: E-1003 – 6DP-04 shows an air compressor tire fill feeder but the panel schedule does not. Please clarify.

A97: E-1003 Drawing has been revised in Addendum 7.

Q98: 26 05 00 3.1.5 PDF page 1065 - Please specify if including any underground conduit runs below the slabs, and confirm these conduits are run per Section 26 05 00. Do these need to be concrete encased?

A98: Conduits shown on electrical drawings E-6000 series are surface mounted conduits but only show the main feeder conduits and not including branch conduits. For conduits underground below slab refer to requirements in Section 26 05 00 – Basic Electrical Materials and Methods clause 3.1.5.

Q99: Spec. 26 23 00

- a) 1.01.2.1 refers to close coupling of the power transformer. In looking at drawing E-1000 there is cable bus between the transformer and the SWBD-61. Is this correct or is it close coupled?
- b) 1.01.3 refers to a coordination study. Will a coordination study be part of this bid?

- c) 2.01.3.1 refers to this board having the capability to lower the incident energy level to less than 8 cal/cm² at 18". Please note Eaton does not know what is required until an Arc Flash Study is done. Will an Arc Flash Study be part of this tender? I can quote this SWBD-61 c/w Eaton's EAFR arc-flash detection relay and loop sensors; however I will not know if this will reduce the energy level to less than 8 cal/cm² until the arc flash study is done at which case I may have to provide an adder to reduce the energy level further. <https://www.eaton.com/us/en-us/skuPage.BU-EAFR-110F.html>
- d) I see reference in this specification to draw-out power circuit breakers. I do not see any breakers on drawing E-1000 shown as draw-out. Would the customer like the main and branch breakers to all be draw-out?
- e) 2.01.13.5 & 15.3 makes reference to proper selective coordination. Please note once a selective coordination study is done, the results of this study advise us which breakers and trip units are required to be used in order to achieve selective coordination - <https://www.eaton.com/ca/en-gb/support/business-resources/consultants-engineers/consultant---engineer-resources-for-medium-voltage-power---eaton/selective-coordination.html>. Until this study is complete, we do not know which breakers and trip units are required.
- f) 14.4 states that the PM8000 digital meter is required unless otherwise noted on each air circuit power breaker. On drawing E-1000 I only see the one digital customer meter required and it is located after the main breaker. Does this line-up require the one PM8000 digital meter or does it require one on each feeder breaker as well?

- A99:
- a) Refer to Section 26 23 00 Low Voltage Switchboards in Addendum 9. There is cable bus between transformer and SWBD-61.
 - b) Yes. Refer to Section 26 23 00 Low Voltage Switchboards in Addendum 9.
 - c) Arc Flash study required. Refer to Section 26 23 00 Low Voltage Switchboards in Addendum 9.
 - d) Main breaker to be draw-out type. Refer to Section 26 23 00 Low Voltage Switchboards in Addendum 9.
 - e) Selective Coordination to be done. Refer to Section 26 23 00 Low Voltage Switchboards in Addendum 9.
 - f) Refer to Section 26 23 00 Low Voltage Switchboards in Addendum 9. One PM8000 digital meter is required.

Q100: Spec. 26 23 002.02.11.4 – requests the main breaker to be 100% rated. I do not see this on drawing E-100. Would the customer like this breaker to be 100% rated Moulded Case Circuit Breaker?

A100: Refer to Section 26 23 00 Low Voltage Switchboards clause 2.1.13.7 in Addendum 9 for 100% rated. Circuit breaker type to be as per clause 2.1.13.1 or 2.1.13.2.

Q101: I see that tender No. 593-2024B has been released, which includes the LV distributions. In spec 26 20 00 on page 7 of 13, section 3.6, there are provisions for the building automation system. These requirements weren't listed in the long lead-time tender, however they will affect the distribution breakers provided in that tender. Could you please advise how you would like the pricing for these provisions to be handled? Would you be the contact for the LV tender as well? I'd like to go for equal on the EV chargers but would like to discuss this first. Please let me know.

A101: Refer to Addendum 9. Long lead equipment to be included in main construction tender.

Q102: Addendum #3 Electrical Drawing E-4100 - 4 location on drawing reference details on pages E-4101, E-4102, E-4107. These pages are not included in the drawing package.

A102: Electrical Drawing E-4100 to be removed in Addendum 12. Refer to overall grounding layout on drawing E-4000.

Q103: Missing Light Fixtures - Please provide details for new light fixtures that are not shown on lighting schedule. LJ8 & LT1.

A103: Refer to drawing number E-3600 Addendum 3 – Issued for Construction drawings. These lighting fixture details were included.

Q104: HV - Ground Potential Rise Study – 26.05.70-3.5 - Confirm requirement for GPR study to be provided by EC. Typically a GPR study is performed by the engineer as the results of the study may have electrical design implication IE; additional ground rods, longer ground rods, may also introduce bldg ground loop around perimeter etc.

A104: Ground Study to be performed by others, refer to Drawing E-9300 General Note 6.

Q105: HV - LIQUID FILLED, HV PAD-MOUNT TRANSFORMER- 26.12.13-3.2.11 - Please confirm that the oil processing is only required if the manufactures instruction indicate to do so. And if this will be a requirement for the EC.

A105: Transformer will be prefilled with oil upon delivery.

Q106: HV - EMI Testing – 26.05.70-3.96 - Please confirm requirement for EMI Testing. We assume that any remedial work that may be required a PCN would be issued.

A106: EMI testing requirements as outlined in Addendum 7 Section 26 05 70 Electrical Work Analysis and Testing clause 3.9. For general scope of work refer to clause 2.1 includes repairs and adjustments.

Q107: HV - REQUIRED GROUNDING DESIGN – E-9050 - Provide grounding design for 15KV switchgear, 15kv transformers etc.

A107: Refer to drawing E-4000. See note 7) on drawing E-9050 as referenced in Addendum 7.

Q108: CDP Panels - 6DP-01, 6DP-04, 6DP-06, 6DP-07, 6DP-09 show 85kA - Please confirm that interrupting rating required. 6DP-01 requires 84 spaces, with Air Circuit breakers we can only fit 4 feeder breakers in a single panel, we will end up with quite a bit of empty sections, additionally, Air circuit breakers can not go down below 200A. Please advise.

A108: Refer to Section 26 05 70 – Electrical Work Analysis and Testing clause 3.2 for short circuit rating requirements. The number of circuits for panelboard 6DP-01 has been revised for Addendum 7. Reference Section 26 23 00 – Low Voltage Switchboards clause 2.2.11.1 and 2.2.11.2 in accordance with Addendum 9, circuit breaker type to be moulded case, bolt-on circuit breakers or insulated case circuit breaker.

Q109: Lighting Inverter. - Do the batteries in the inverter need to be lithium-ION batteries? Or will standard sealed type batteries be acceptable? Is unit supplied by an emergency lighting manufacture or by another supplier? No details specified.

A109: Refer to specification Section 26 33 33 Inverter Rectifier and Charger for lighting inverter requirements.

Q110: Wanted to submit an RFI in regards to Addendum 7 for clarification,

1) What is the specified waterproofing material at the following locations

- o Drawing 00-S-552 for locations of exterior side waterproofing to frame hoist pits (6)
- o Drawing 00-S-553 for locations of interior side waterproofing to water recycling pits (2)
- o Drawing 00-S-554 for locations of interior side waterproofing to vehicle wash bay pits (2)

2) Not currently shown, is there waterproofing needed on either side of below grade walls for the Subsoil Drainage Pump Station on drawing 00-S-555?

3) Where is the Subsoil Drainage Pump Station located in reference to main building? Can there be GLs added?

A110: 1) For those locations listed:

- .1 Exterior side of frame hoist pits, refer to specification Section 07 13 52 Bituminous Sheet Waterproofing;
- .2 Interior side of water recycling pits and vehicle wash bay pits, refer to the specification Section 07 16 16 Crystalline Waterproofing being added in this Addendum 12.

- 2) The Subsoil Drainage Pump Station shall receive Crystalline Waterproofing on the inner side of the walls.
- 3) Refer to Addendum 7 for general location.

Q111: Regarding the Husky 1050 models it seems TPE or Hyrel has been specified for construction material of the wetted parts, but stainless-steel seats.

In going with the SST seats, the most compatible option for your application for balls would be PTFE as it is an available option and more compatible with the fluids you are pumping than Hyrel is.

Please advise if this change is acceptable or if you have designed this around a specific pump and have the part number, we can directly quote the design standard.

A111: PTFE is acceptable as referenced in Section 11 11 00 – Vehicle Service Equipment on Addendum 12.

Q112: For the Fireball pumps you have selected, did you design around specific pumps? Each model for these comes with a variety of options, if you had a correlating part number to the design framework that would be extremely helpful.

A112: No specific part number has been identified within the model series. The Fireball pumps are to be supplied to suit the application, the type of mounting, and the requirements identified in the specifications and shown on the plan and schematic drawings.

Q113: Finally, for the sump pumps, is the schedule labeled “Subsoil Drainage Pumps” the one correlating to Section 22 13 29 ‘Sump Pumps and Pits’? Do you happen to know what pump this was designed around?

A113: Grundfos

Q114: The Shop Paint section of the spec does not say to what standard to use to apply primer. What is the Standard for applying primer to structural steel?

A114: Please refer to Specification Section 05 12 23, sentence 1.2.3.2 for applicable standard for primer on structural steel.

Q115: Regarding suspended equipment above the overhead doors, please provide the expected loading on the steel stud wall framing at the location shown above the structural girts where there are suspended and out-rigged equipment/motors. Please also confirm where the Overhead Door assembly is attached. It would appear from these drawings above to be attached to the steel stud wall framing and not the horizontal structural girt.

A115: The door assembly and motors are to be supported by the steel stud wall framing. Stud wall framing is supported by the structural girt. Support framing of the air curtain is to be mounted on the metal stud wall or on building column. Loads and details of the door assembly, motors or the air curtain support are to be provided by the door manufacturer or air curtain supplier.

Q116: Regarding the overhead doors - vertical framing on either side of the door: Will the frame of the Overhead Doors be designed to transfer the wind load into the structure? Or will the steel studs each side of the opening be relied on to transfer those wind loads? Some of these openings are very large (7.25m in some cases) and using steel studs as vertical framing at these openings may not be the most practical option - a vertical wind girt/post may be a more appropriate framing member at these conditions. Please see the below snippets from the drawings:

A116: Wind load on the doors is to be supported by steel stud framing on each side of the opening, as shown on the architectural detail. Please note the configuration of the steel stud framing shown on the architectural details are illustrative only.

Q117: The latest prices (Addendum 3) form has topsoil at 150mm thick for 54400m². All seed areas add to 50975 m² the sod area is 7405 m² total of 58080m². The topsoil E1 doesn't cover all sod and seed areas nor does it cover seed only, so why the discrepancies?

A117: The seed and sod areas were revised in Addendum 9. Total seed area is 50,560m², sod area within Section E is 7,595m². Topsoil in E1 has two depths, spread throughout the site to provide depth for tree root growth. Sheet 00-L-105 in Addendum 9 demonstrates limits of topsoil depths.

Q118: E3 supply and install sod. NMS 32 92 23. The specifications do not mention topsoil, will topsoil be included in the 150mm thick topsoil of E1 i) or does it need to be allowed for under E3?

A118: Topsoil is included in NMS 32 91 19 - Topsoil Placement and Grading. Topsoil under sod will vary. Refer to sheet 00-L-105 in Addendum 9.

Q119: E7 calls for 75mm thick mulch for 170 m³. if this mulch is covering the 800mm topsoil areas (5813 m²) 170m³ doesn't allow for enough mulch at 75mm thick. The mulch in the spec is from southern Ontario. There must be a local option to use instead?

A119: Mulch does not extend to the limits of the 800mm thick topsoil. Mulch is within planting beds as shown on the Drawings and per tree not in the planting beds.

Q120: Possibly local wood chip mulch available at any landscape supply.

A120: Reference Addendum 9. Reference to a specific supplier has been removed from the specification. Local supplier for mulch is preferred.

Q121: Under Part 1 on site roadworks item A.7 grading of blvds for 57600 m², is this covering the final grading of seed and sod areas?

A121: Boulevard grading is outside the scope for what is in Section E.

Q122: Lastly the prices form has several items (mostly plants in bold print, these cells do not auto fill dollar totals when a unit price is filled in.

A122: This has been adjusted in Form B in Addendum 12.

Q123: Drawing E-1000 - Fire Pump ATS/Controller to be fed from SWBD-61 and 500kW Generator 2 Sets Of 4#500 + #3 GRND in 103mm conduit and required to be 2HR Fire Rated Feeders (Note 1). However, on Drawings E-6103, E-6105, E-6107, E-6108 conduits shown as 2x 63mm Conduit with no indication of 2hr rating. Please clarify feeder type.

A123: Feeder type to be 2hr rated feeders as per single line diagram. Conduit sizes have been revised in Addendum 9 on Drawings E-6103, E-6105, E-6107, E-6108, E-6110 and E-6301.

Q124: Drawing E-1002 - Duplicate Panel EP-SG-01 (COMM ROOM SV) Shown as fed from Panel EP-MG-01(ELEC RM SP) Approx 700' Distance Drawing E-1005 shows Panel EP-SG-01 as being fed from UPS Located On Lvl 2 Elec RM SG. Approx 450' Distance. Please clarify.

A124: EP-SG-01 in Comm Room (SV) is fed from 40kW UPS in Electrical Room 01 (SG). Refer to latest single line diagram drawing E-1002 in Addendum 7.

Q125: The specification 01 81 19 – LEED Indoor Air Quality Requirements – Clause 3.4.1.1 reads: “Frequently cleaning interior surfaces to minimize dust and dirt accumulation by...”. The term frequently is open for different interpretations. Would the City please confirm what their expectation is in terms of frequency of the cleaning? Daily, weekly, monthly, etc.?

A125: Reference LEED v4 Reference Guide and the Sheet Metal and Air Conditioning National Contractors Association (SMACNA) IAQ Guidelines for Occupied Buildings under Construction for Housekeeping as 1 of the 5 guidelines to meet the Construction Indoor Air Quality Management Plan credit: "Maintain good job site housekeeping on a daily basis."

Q126: Specification Section 01 35 43 Environmental Procedures – Clause 1.5.1.1 reads "The Site shall be cleared of natural vegetation and grubbed prior to construction outside of the breeding bird season for Winnipeg (April 30 – August 18) to prevent birds from ...". Considering the breeding season defined and the approximate contract award date for this RFP, the Contractor would not be able to start construction any time before August 18, which would put the construction schedule on risk. Would the City of Winnipeg consider completing the clearing scope of work by other means prior to the contract award and in advance of the breeding season?

A126: A separate tender was published prior to this one to clear and maintain the site prior to nesting season. As such, all nesting areas have been removed and should not be a concern for this contract.

Q127: RE: Mulch

b) E7 supply and place 75mm thick mulch NMS 32 93 53. The spec states shredded pine bark mulch by Gro-Bark, This company is in Thorold ON 2200 km away. Can we use local wood chip mulch instead?

A127: Reference Addendum 9. Reference to a specific supplier has been removed from the specification. Local supplier for mulch is preferred.

Q128: RE: Sod

a) There is a discrepancy on soil quantity, E1 i) has 54,400M2 of soil at 150mm thick, that quantity does not add to the seed area and the sod area nor does it add up to only the seed area. Please confirm if bid item E.3 is supply and install sod only, the spec doesn't reference soil. Please confirm if the soil needed for sod areas covered elsewhere or does it need to be included in the sodding item E3?

A128: E.3 is sod quantity only; no topsoil is to be included under item E.3. Topsoil for the site (except for Item B.31) is covered under item E.1.

Q129: Bid Form Part 3 - C - C.2i) Bollard (Outside the face of the perimeter building concrete grade beam)

Please confirm if the quantity of 250 bollards includes for all interior and exterior bollards and not only outside the face of the perimeter building concrete grade beam. When we quantify the total bollards for both interior and exterior our quantity is 260?

A129: Exterior bollards: Total 247 (8 surface mounted, 44 removable, 195 conc footing tube). Interior Bollards: Total 130 conc footing tube.

Q130: Re - Mechanical and Electrical Concrete Pads and Curbs Interior and Exterior of Building

Provide locations and sizes of all concrete pads and curbs required underside of all equipment as the current drawings are not clear on locations and sizes.

A130: Civil drawings 0-C-009/0-C-010 refer to Mechanical and Structural plans for exterior equipment slab details. Please refer to mechanical specification Section 20 05 00 Art. 3.11 which specifies size and other requirements for equipment bases and supports. Locations as per equipment layout on mechanical drawings.

Q131: Maintenance Garage - Room Finish Schedule Sheet 30-A-601

60' - Repair Bays 01 to 06 reads to provide waterproofing to all surfaces of pits - please clarify the type of waterproofing to be applied and provide specifications.

A131: The repair bays pits shall receive waterproofing membrane on the outer side of the hoist pit walls.

Q132: Structural Foundation Sections

Sections 8. 32 and 34 - indicates 300 mm Approach Slab and reads to refer to Civil Drawings. Please indicate on the civil drawings where the approach slabs and exterior concrete pavement meet per Section 32.

On the Civil drawings 00-C-009 and 00-C-0010, I do not see a designation between Approach slabs and exterior concrete pavement. Please clarify

A132: The Addendum 9 Civil Drawings show where the approach slabs meet the exterior concrete. The approach slab widths are shown on 00-C-011 and 00-C-012.

Q133: E-9001 and E-9002 Substation Gravel Pad: Please indicate where the gravel pad is to be priced in Form B Prices.

A133: The design of the Substation pad is as follows:

150 mm Insulating Stone

450 mm Granular Sub Base (max size 100mm)

Non Woven Geotextile Fabric c/w Class A Geogrid

All these materials are listed as separate line items in Form B (the Insulating gravel was added in Addendum 3).

Q134: D3. Scope of Work - D3.1 (f) - "Off-loading and installation Tender 1045-2024 Supply and Delivery of Long Lead Electrical Equipment for Winnipeg's North Garage Replacement Project." Please provide delivery dates to site for the items listed (i) to (vii).

A134: Refer to Addendum 9 for the incorporation of the electrical equipment. Delivery times will need to be based on the Contractor's schedule for the 593-2024B Work.

Q135: RE - Regarding Curtains at Service and Bus Wash Lanes

Drawing 10-A-602 Service Lanes - Door Schedule: reads "SPD-1 Provide Splash Reduction Curtains (See Process Drawings)"

Provide specifications for Splash Reduction Curtains.

Drawing 10-D-101 Ground Floor Plan - Service Lane-Compressed Air and Cleaning System Layout ---- Note 16 & 17 refer to Splash Reduction Strip Curtains.

Note 17 mentions Splash Reduction Strips while Spec Section 11 11 29.13 says Transparent Wash Bay Curtains in the same location on the Architectural location, which is solid 20mil Clear Vinyl, confirm which is correct?

- A135: 1. Reference Section 11 11 29.13 Wash Bay Curtains for general information. However, Notes 16 and 17 on the Process Drawing 10-D-101 override the specification regarding material and thickness.
2. The correct curtains for the ends of the wash bays referenced in Notes 16 and 17 are clear strip curtains of 3mm thickness. The cutout in the shape of the bus is still required but the intent is that strip curtains will more readily adapt to the outline, and to any unforeseen items that may occasionally protrude beyond the normal bus outline.

Q136: RE - Weeping Tile on Architectural Exterior Foundation Details

Provide location, specifications and size of weeping tile exterior of the exterior grade beams.

Provide specifications for granular material required for weeping tile.

A136: Reference Mechanical Plumbing Drawings 00-P-109 and Section 22 13 16 Drainage, Waste and Vent Piping modifications as referenced in Addendum 12.

- Q137: Sheet 00- A-001 Floor types -F1 shows 300 mm however Structural drawings show 250 thick slab, please clarify.
- A137: Follow 250 thick slab shown on structural drawings. Floor type F1 on sheet 00-A-001 reads: "250mm OR 300mm CONCRETE FLOOR SLAB".
- Q138: Section 07 95 13 Expansion Joint Assemblies
- a) Provide locations of Fire rated floor to floor joint systems (EJ-F1).
- A138: Construction joint between gridlines "12.1" and "12.2", and between gridlines "L" and "M", at the service level.
- Q139: 1915 x 2400 & 1915 x 4000 Frost slabs - Located on Architectural Drawings
- a) Provide details and sections including reinforcing for frost slabs on structural drawings.
- A139: Frost slabs located on all doors leading to the granular pavement yard, and landscaped locations, and doors leading to the concrete pavement driveway are covered by the structural details.
- Q140: 150 mm high raised concrete walkways - Located on Architectural Drawings
- a) Provide details and sections including reinforcing for 150 mm raised concrete walkways on structural drawings.
- A140: These raised walkways are indicated on structural plans as concrete curb on slab. Refer to structural Drawing 00-S-151 or 00-S-152, for instance. Refer to detail 8 on 00-S-001 for section details of the concrete curb.
- Q141: Drawing E-0102 Electrical Details 2
- a) Pull Box Details 1 and 2 - Provided locations and quantities, and how are the pull boxes to be constructed with precast concrete or cast in place concrete?
- b) Exterior Pad Mounted Transformer detail 7 - are they to be constructed as precast concrete or cast in place concrete, what is the size of the transformer pad(s).
- c) Manhole - are they to be constructed as precast concrete or cast in place concrete? If precast can the size vary to meet suppliers available sizes?
- A141: a) E-0102 details 1 and 2 refer to inground handholes and pull boxes. Handholes/pullboxes can be precast or cast in place in accordance with Section 26 05 31 Electrical Concrete Products clause 2.3.1. Approximate quantities and locations are shown on electrical site plan drawings E-0050, E-0051 and E-0052. Reference general notes 4 on Drawing E-0050 for additional requirements on handhole quantities and locations.
- b) Transformer pad for building transformer TX-61 and Charger Transformer TX-41 to be in accordance with Section 26 05 31 Electrical Concrete Products clause 2.2.1.1 and be precast concrete. Size of transformer pad in accordance with Section 26 05 31 - Electrical Concrete Products clause 2.2.1.2.
- c) Manholes can be precast or cast in place in accordance with Section 26 05 31 - Electrical Concrete Products clause 2.4.3.
- Q142: Drawing E-1003-Compressor (Tire Fill) Shown as fed from 6DP-04. However also shown on E-2302 and Panel Schedule DP-MG-04 Drawing E-8006 as fed from Panel DP-MG-04. Please clarify.
- A142: Air Compressor (Tire Fill) fed from Panel DP-MG-04 as per Drawing E-2302 and Panel Schedule Drawing E-8006. Feeder from 6DP-04 was removed as referenced in Addendum 7.
- Q143: Lighting Schedule Discrepancies - Type LL2 & LL3 – Length noted on schedule do not match drawings. Please clarify length.

A143: Provide continuous lengths as per Drawings; reference Addendum 9.

Q144: Electrical vehicle / bus charging system/units - Please confirm that all EVC, DCB and DCP units and all corresponding interconnecting cable is supplied and installed by others.

A144: All EV Charging units are to be supplied and installed by Contractor. Refer to general note 21 on Drawing E-0003, key note 2 on Drawing E-1001 and Section 11 11 36.10 - Electric Vehicle Chargers for more information.

Q145: Please Clarify the Following Discrepancies

- 1) Drawing E-1005- SL 6DP-08 Shown To feed 40kW UPS. 40kW UPS is not shown on CDP 6DP-08 Schedule on Drawing E-8003
- 2) Drawing E-1003 -SL 6DP-03 Shows Transformers TX-SG-01 And TX-SG-17 Shown fed from 60A Breakers. CDP Schedule on Drawing E-8003 shows 20A Breakers.
- 3) Drawing E-1003-SL 6DP-03 Shows Panel DP-SG-01 Fed from 200A Breaker. CDP Schedule on Drawing E-8003 shows 20A Breaker.
- 4) Drawing E-1003-SL 6DP-04 Shows Transformer TX-OE-02 Fed from 40A Breaker. CDP Schedule on Drawing E-8001 Shows Fed From 90A Breaker.
- 5) Drawing E-1002-SL 6DP-01 Shows Transformer TX-MG-01 Fed From 90A Breaker. CDP Schedule on Drawing E-8000 Shows Fed From 20A Breaker.
- 6) Drawing E-1002-SL 6DP-01 Shows 40kW UPS Fed From 50A Breaker. CDP Schedule on Drawing E-8000 Shows Fed From 125A Breaker.
- 7) Drawing E-1002-SL 6DP-01 Shows Panel DP-MG-05 As Fed From 300A Breaker. CDP Schedule on Drawing E-8000 Shows Fed From 125A Breaker
- 8) Drawing E-1002 -SL 6DP-02 Shows AHU-1 Fed From 70A Breaker. CDP Schedule On Drawing E-8003 Shows Fed From 175A Breaker.
- 9) Drawing E-1002- SL 6DP-02 Shows Transformers TX-SG-04, TX-SG-05, TX-SG-06, TX-SG-08, TX-SG-10 Fed From 60A Breakers. CDP Schedule On Drawing E-8003 Shows Fed From 20A Breakers.
- 10) Many panel schedules have duplicate equipment. Example UH-04.

- A145:
- 1) Panel Schedule for 6DP-08 on Drawing E-8003 has been revised to include circuit for 40kW UPS in Addendum 7.
 - 2) Panel Schedule on Drawing E-8003 has been revised to include 60A breakers for TX-SG-01 and TX-SG-17 in Addendum 7.
 - 3) Panel Schedule on Drawing E-8003 has been revised to show 200A breaker for DP-SG-01 in Addendum 7.
 - 4) Panel Schedule on Drawing E-8001 has been revised to include 40A breaker for TX-OE-02 in Addendum 7.
 - 5) Panel Schedule on Drawing E-8000 has been revised to include 90A breaker for TX-MG-01 in Addendum 7.
 - 6) Panel Schedule for 6DP-01 on Drawing E-8000 has been revised to include 50A breaker from 40kW UPS in Addendum 7.
 - 7) Panel Schedule for 6DP-01 on Drawing E-8000 has been revised to include 300A breaker for DP-MG-05 in Addendum 7.

- 8) Panel Schedule for 6DP-02 on Drawing E-8003 has been revised to 70A breaker for AHU-1 in Addendum 7.
- 9) Panel Schedule for 6DP-02 on Drawing E-8003 has been revised to include 60A breaker for TX-SG-04, TX-SG-05, TX-SG-06, TX-SG-08, TX-SG-10 in Addendum 7.
- 10) Mechanical equipment tags have been updated in Addendum 7 to remove duplicate equipment tags.

Q146: Voltage drop for lighting in the warehouse is very significant. Please confirm it been accounted for on conduit layout drawings.

A146: Lighting conduits are not shown on conduit layout Drawings. 208V lighting fixtures have been used in warehouse to reduce voltage drop. Reference general note 25 on Drawing E-0003 for more information.

Q147: Built-in Inverter Panel. Please provide information / specifications. Please confirm if a standalone inverter and independent lighting panel is acceptable.

A147: Refer to specification Section 26 33 33 - Inverter Rectifier and Charger for built-in inverter panel. Standalone inverter and independent lighting panel may be acceptable if requirements outlined in Drawings and Specifications are met and space requirements in electrical room can accommodate standalone inverter and independent lighting panel.

Q148: HV - INSTALLATION OF PAD MOUNTED TRANSFORMERS – 26.12.00-3.1 – Listed in specs not shown on drawings. Please confirm requirement for oil containment and design.

A148: Refer to specification Section 26 12 14 - Transformer Secondary Containment Systems for oil containment and design.

Q149: Refer to specification Section 26 12 14 - Transformer Secondary Containment Systems for oil containment and design.

A149: Industrial CO detection is provided by Mechanical. However, in order to meet Manitoba Building Code clause 6.9.3.2, CO detectors must form part of the fire alarm system, so they are included in Fire Alarm Drawings.

Q150: EMT testing Section 26.05.70-3.9 - Please confirm if this is required for this project. Specs make mention of patient care areas which are not relevant.

A150: EMI testing requirements as outlined in Section 26 05 70 - Electrical Work Analysis and Testing Clause 3.9. Clause 3.9.4.1 was revised in Addendum 7 to not include reference to patient care areas.

Q151: Could you confirm that Section 25 95 00 (R1) "SEQUENCE OF OPERATION", needs to adhere to the ASHRAE G36 guidelines, as noted in Section 25 08 00 "COMMISSIONING OF INTEGRATED AUTOMATION", as per attached screen shot.

I'm asking because Section 25 95 00 has no mention of G36, and because implementation of G36 has a substantial cost impact.

A151: Commissioning is performed by a third-party, therefore commissioning requirements are to be followed.

Q152: Note 6 on drawing E9002 Addendum #7 Transformer oil secondary containment system (See Section 16 12 14). Please provide this section. We have seen oil containment cost in the range of \$ 500k-1m. Oil containment is not a code requirement in Manitoba.

A152: Reference to Section 26 12 14 - Transformer Secondary Containment Systems in Addendum 3.

Preference is to keep the secondary containment, as per IEEE 980 (Guide for Containment and Control of Oil Spills in Substations) which requires either a spill plan or a secondary containment system, and the preliminary estimated costs were projected much lower than the RFI estimated range.

Note, FR3 will produce an oil sheen when released, Canadian Environmental Protection Act (CEPA) of 1999 requires elimination of releases of substantial that are persistent, bio-accumulative, toxic and primary the result of human activities. Elimination is the reduction of releases to the environment of a substance to a level below which its release cannot be accurately measured.

Q153: Addendum 7 references Sketches SK-5A, SK-5B, SK-6A, & SK-6B. Can you please send these?

There are a few joist and deck questions that I received from our suppliers. I would appreciate you addressing these:

1. Please confirm that no crank joists are required between grids 3.2-4.

A153: Refer to Addendum 9, specification 593-2024B_Addendum_9_NMS_01_23_00_01-Alternatives-R2. PDF, pages 8-15 for the sketches. Please reference Architectural Drawings 10-A-420 and 20-A-420 for the underside deck elevations in this area. Joist shapes / cranks are to match underside of deck elevation.

Q154: Please specify if special deflection is required for joists at the expansion joint. If yes please provide the value.

A154: Joists on each side of an expansion joint shall be of compatible shape and member size, so that they would deflect the same under live (snow) loads.

Q155: Due to end moment connection values provided on S-420 for joists girders, a knife plate connection may be required. Please confirm that knife plate connection will be acceptable

A155: Type and detail of the connection at building columns are to be coordinated with the structural steel Subcontractor. Reference Detail 7/00-S-003 for an indicative joist girder connection. The joist girder designer and structural steel connection designer may select to use an alternative connection (including but not limited to knife connection). Alternative connections are generally acceptable, as long as such connection meets the loading requirements of the joist girder and facilitates structural steel fabrication and erection.

Q156: Uplift values provided on S-010 are based on a tributary area of 5.0 m². Joist element area is over 5.0 m², please approve that uplift values provided in schedule are ok to be used for joists design.

A156: If the joist tributary area is larger than 5.0m², using the values provided in the schedule should be slightly conservative and is therefore acceptable.

Q157: Please approve that all suspended mechanical/electrical items are included in point load specified on note 22 from S-251

A157: Please note the concentrated live load specified on note 22/00-S-251 is in addition to the uniform 0.8 kPa MECH. ALLOWANCE.

Q158: Please confirm if storm pipes loads are already included in dead load (storm pipes shown on P-105)

A158: The weights of the storm pipes have been included.

Q159: Please confirm that no AESS requirements apply to steel joists/girders. If yes please specify the areas where is required.

A159: AESS is not required, use Section 05 05 18 Shop Applied Coatings for Structural Steel specification requirement when coating is required to be used. Section 05 05 18 Shop Applied Coatings for Structural Steel is included in Addendum #9.

Q160: On roof anchor detail from S-002 are specified two types of roof anchors, end anchor and intermediate anchor. Please specified which anchors are end anchors and which are intermediate anchor.

A160: The roof anchors are generally arranged in lines. The first and last anchor along every straight line of roof anchors are the "end anchors"; the remainder are "intermediate anchors".

Q161: If two or more roof anchors are on the same joist, please confirm that only one act in a time and not all of them will act simultaneously.

A161: Where more than one roof anchors are supported by one joist, only loads from one roof anchor need to be considered at any given time. Whichever roof anchor produces the most critical effect shall be used for the joist design.

Q162: We do not have the size of all sprinkler main lines provided on F-101. Please provide the sizes.

A162: Please refer to the notes on Drawing 00-M-002. Design of the entire Fire Sprinkler system shall be by the licensed fire protection Professional Engineer retained by the Contractor (Contractor's Engineer). Sprinkler pipe sizes, including sizes of main lines will only be available after the Contractor's design has been completed and approved.

Q163: a) Please advise if all joists will receive epoxy paint as shown on note 3.5.7.1 from Section 099000.
b) Or epoxy paint required only for Bypass Lanes and Bus Wash Lanes areas as shown on Room finish schedule from A-601 and standard primer for the rest
c) Please also specify if sealed welds are required for joists receiving epoxy

A163: All joist in the Bypass Lane and Bus Wash lanes, Repair Bay 06 (and adjacent areas) will be galvanized. No epoxy paint required. No requirement for sealed welds.

Q164: Please confirm that pre-painted deck is not required. If yes please specify the areas.

A164: If the deck is required to have fireproofing, then no paint or primer is required to pre-apply. Other steel members requiring pre-paint, refer to Section 05 05 18 Shop Applied Coatings for Structural Steel referenced in Addendum 9.

Q165: Looking through the door hardware schedule issued in addendum 7, the following doors and their associated frames are listed as Aluminum, however the latest door schedule for the Office issued in the Addendum 3 IFC R2 set list has these doors s to be Hollow Metal and frames to be Painted Pressed Steel frames:

Door 40-103 – HW Set 37

Door 40-108 – HW Set 40

Door 40-109 – HW Set 40

Door 40-110 – HW Set 40

Door 40-111 – HW Set 40

Door 40-128A – HW Set 48 – hardware schedule also lists as sliding – floor plan shows as swinging

Door 40-128B – HW Set 48 – hardware schedule also lists as sliding – floor plan shows as swinging

Can you please confirm whether these doors and frames are HM/PS or Aluminum? (see email for snippets from the addendums for ease of review).

A165: As shown in the revised Addendum 7 Drawings those doors are Hollow Metal on Painted Press Steel frames. Reference revised Door Hardware Schedule in Addendum 12.

Q166: Further question for clarification regarding the specification Section 32 31 13 for fencing.

In spec Section 32 31 13 the document calls for galvanized steel framework (posts and top rail) with vinyl coated black mesh. The mesh

a) Written mesh specification in 32 31 13 section 2.2.2 is No. 9 gauge fabric, PVC coated, galvanized steel. This will drive a core wire of 11 gauge which is a typical residential grade product. We would recommend a 9 gauge galvanized steel finished wire without PVC coating
b) Written mesh spec calls for twisted top and bottom selvage, L-502 drawings call for barbed (twisted) top and knuckled bottom selvage. We recommend barbed top and knuckled bottom as shown on drawings

- c) Written post spec section 2.2.3 calls for 2.875" OD posts, L-502 drawings call for 88.9mm OD terminal/corner posts. We recommend 88.9mm dia. For this application.
- d) Written spec section 2.2.9 calls for 11 gauge galvanized steel ties. Typical tie wire gauge is same as mesh, therefore, we would recommend 9 gauge tie wires. Typical tie wires are aluminum with galvanized steel being an upgraded spec typically found in correctional applications. We recommend aluminum 9 gauge ties so long as privacy inserts will not be added to the fence system. Drawing L-502 calls for tie wires to be spaced at 500mm and 400mm on top rails and lineposts respectively whereas written spec section 3.1.8 calls for them to be spaced at 24" and 12" respectively. We recommend 500mm and 400mm spacing. Language in written spec is typical for aluminum tie installation (as opposed to steel noted elsewhere)
- e) Written spec section 2.4 FINISHES notes galvanizing and PVC coating. Actual required chain link fence system is unclear. Please confirm.
- f) Drawings L-502 details 4 and 5, call for post spacing as 2.4m O.C. typical with a maximum spacing of 3.0m. Written spec Section 32 31 13 3.1.2 notes line post spacing at 10' O.C. maximum. Please clarify whether posts are to be at 8' or 10' O.C. as this will make a significant difference in cost. Our recommendation, so long as privacy inserts will not be added, is 10' spacing. Otherwise, 8' spacing if wind load on the fence assembly will be increased with privacy inserts now or sometime in the future.

A166: a) Wire is 9 gauge. PVC coating is additional.

b) Barbed top, knuckled bottom is requested. Specification will be updated.

c) 88.9mm dia. end post is requested. Specification will be updated.

d) Privacy inserts are not intended. 9 gauge ties are acceptable; specification will be updated. Spacing for tie wires will be revised to 500mm and 400mm.

e) PVC coated finish is expected.

f) 10'-0" O.C. spacing is acceptable.

Q167: I failed to mention that on L-502 detail 8 is labeled "security gate pedestal and bollards" but the image is a copy of the Omega Secur fence in detail 7. There should be a different image. Please advise.

A167: Detail 8 was removed in Addendum 3. Addendum 9 added Detail 8 and 9 to sheet 00-L-502.

Q168: Provide details and specifications for Bollard Guardrails (BGR) 10-A-402

A168: Refer to Addendum 9, drawing 00-S-003.

Q169: Sheet 10-A-101 Grid lines 20 & G shows a section of EW1 Exterior Wall, Sheet 10-A-401 shows this same section as EW4, which is correct.

A169: EW1 wall type extends for 3m beyond gridline "20" to comply with code for firewalls design, and transition to wall type EW4, as shown in the Drawing 10-A-401.

Q170: Sheet 30-A-401 Wall tag EW5 along gridline 7.1 and between grid lines W and W.1, appears that it should be EW1 when referring to sheet 30-A-403.

A170: Correct, the wall type should read "EW1" in the portion between gridlines "W" and "W.1".

Q171: Please confirm the Type of Fire extinguisher are required in each locations shown. Unclear the types required FE-1, FE-2.

A171: Reference Drawing 00-M-001 and Section 21 13 13 - Wet-Pipe Sprinkler Systems for details.

Q172: Section 11 81 33 - High Pressure Washing Equipment

a) What voltage is required for the two cold water washers?

b) Do the cold water units require auto start stop?

A172: a) The 2 pressure washers for the Interior Cleaning require 575/3/60hz power.

b) Auto start stop is required.

Please refer also to equipment schedules on the Drawings.

Q173: Please specify if rolling jacks are required for the service bays and specification details.

A173: Rolling jacks are not included as part of the 593-2024B tender.

Q174: Please provide the location of the Vertical Lift Module (Carousel) on drawings and the quantity.

A174: One Vertical Lift Module that must replace the need of platform decking in the PARTS STORAGE & FM STORES - GF. Also refer to sketch file "593-2024B_Addendum_12_Sketch Q_174-R0.pdf"

Q175: Please provide more detail, location(s) on drawings and quantity for Section 10 56 29 21.6 fixed position loose tire and wheel rack for working area.

A175: This item has been deleted from the Work for the 593-2024B Tender.

Q176: Spec Section 03 20 00 - Concrete Reinforcing mentions Galvanizing, please confirm if all Reinforcing Steel needs to be Galvanized.

A176: Galvanized reinforcing steel is not required the Work. Reference deletion items in Section 03 20 00 – Concrete Reinforcing as referenced in Addendum 12.

Q177: Section 07 52 16 R1, subsection 1.13, item 2.5 specifies "Submit daily inspection report..." and item 3 specifies "Inspection of all roofing to be provided by the appointed inspection agency." Is the intent of the foregoing to require independent third-party inspections and reports for every day that work of this section is being installed? If not, please confirm the schedule and/or frequency required for third-party independent inspections.

In the original roof specification it noted that the City would hire the roofing inspection agency, however the addendum 5 roof specification just says hire inspection agency.

Can you confirm that we are not required to include for this. It would make more sense for the city to hire an 3rd party independent inspection agency.

Original roof specification:

Addendum 5 roof specification:

A177: Reference Section 01 40 00 - QUALITY REQUIREMENTS - 1.4 QUALITY CONTROL – TESTING, 1.4.1.

Q178: For the interior paint finishes the package calls for Aura paints/ colours, however in the specifications it calls for Sherwin Williams. The reason for the question is Aura is not just a colour it is the product itself, they are kind of married to each other in the sense that the colour pallet is specific to the product. Aura is a very high end residential coating, and is not recommended for commercial settings as it is extremely difficult to work with for touch ups. We can replicate the colours (within 99.5% and come very close) however we do not recommend using this product in this particular type of building. Also although Aura paints are L4 acceptable, they are not registered with Leed and do not have a registration number, therefore they will not meet the sustainability requirements of an L4 project. Please advise and confirm if the "Aura" reference was only meant for the colour pallet or is this the products they actually want. Also for ceilings that are generally flat, this product only comes in an Ulti matte (which is not a true flat and is not recommended for ceilings as it will have too much sheen in it)

A178: The reference of "Aura" was meant for the colour palette.

Q179: Addendum 7 spec Section 10 91 13 - Miscellaneous Specialties lists Mobile Work Platforms and Stair For Bus Roof Access. On Sheet 00-A-805 - Interior Signage Plan there appears to be 3 items (Repair Bays 1-3) that could be these platforms but are not labeled on shown on any other plan. Please provide locations.

A179: They are mobile units to be located anywhere in the Repair Bay areas. Three (3) units required in accordance with Addendum 12 Section 10 91 13 – Miscellaneous Specialties.

Q180: Form B has Unit Rates for Excavation and Disposal of Hydrocarbon, Contaminated, Clean Suitable and Unsuitable Soil for Earth and Base Works for On-Site Roadways. What Unit Rates will be used for these Earth and Base Works within the Building Footprint.

A180: The excavation quantities listed in Form B Part A include excavation under the building footprint to a depth of 1.05 m below the finished floor elevation.

Form B Part A does not include excavation quantities for pile caps, grade beams, drainage pipes under the building or other excavations for building services. These are to be bid as part of the lump sum for G.19.

Form B Part A does not include quantities for granular backfill under the building footprint. These are to be bid as part of the Lump Sum for G.19.

Q181: Groundwater, please provide Unit Price on Form B for the Disposal of Contaminated Groundwater. It is impossible for contractor to quantify the amount of Contaminated Groundwater that might accumulate.

A181: Reference Section 01 21 00 – Allowances in Addendum 12.

Q182: No RFI and Answer log has been shared with the contractors. When will this log be released to the contractors?

A182: Answers to RFIs are provided through addenda under the Questions & Answers section.

Q183: Due to the RFP timelines push out from what was specified at RFQ stage, we don't think that it would be of any parties benefit for the Contractors to allow for the cost of penalties for the replacement of key individuals, especially in a competitive tender. Please confirm if the penalties are no longer applicable due to the extended timelines.

A183: Request for Qualification, RFQ No. 593-2024A, B26 Substitutions remains without change.

Q184: Metal Deck Paint

As per painting Specs 3.5.7.2 Metal Deck requires SSPC SP1 and paint. Reference to room Finish Schedules 10-A-601, 20-A-601, 30-A-601 Ceiling - "Exposed" was noted "Finish - N/A". Please confirm that those "exposed areas" (which we assumed are metal deck) does not require painting.

A184: Confirmed.

Q185: Section 03 30 00 Cast in Place Concrete - 1.7 Quality Assurance

In reference to Section 03 35 00 Concrete Finishing and clause 3.4 in this Section, how many mock-ups are required?

Per Section 03 35 00 - 3.5 there are various finishes shown in the Concrete Finishing Schedule, which finishes do you require mock-ups for?

Confirm, do all the concrete mock-ups have to be demolished as 03 30 00-1.7.1.4, reads, "Acceptable mock-ups may not remain as part of the work"?

A185: Reference to revised clause(s) for Sections 03 30 00 - Cast-In-Place Concrete and Section 03 35 00 - Concrete Finishing in Addendum 12.

Q186: For the dual IPLC receptacle pedestals, please confirm the reasoning to have 2x 27mm conduits to each. I would recommend a 3 wire in a single 21mm conduit to each.

A186: The conduits for dual IPLC receptacle pedestals to be revised to single 27mm conduit as referenced in this Addendum 12.

Q187: Sheets 00-C-010 and 00-C-11 all section details are mislabeled.

A187: Section labels were corrected in Addendum 9 Civil Drawings.

Q188: Provide Spec for Building Column Protectors (BCP).

A188: The column protectors are added to the Specification Section 05 50 00 Metal Fabrications, clause 3.3.16 and was issued in Addendum 11.

Q189: Please confirm folding tire racks model MTFR specified with dimensions 93.5" x 40" x 56.25" and quantity. Manufacturer lists model MTFR with dimensions 93.5" x 40" x 55.5" and model MTFR-HD with dimensions 93.5" x 48" x 56.25".

A189: The dimensions of the Martin MTFR-HD are 2375 long x 1219 deep x 1429 open height.

A total of 15 folding tire racks are to be provided. They will be in 5 groups of 3 high, as represented on drawing 30-A-101, in the Tire Storage/Shipping & Receiving / High Voltage Battery Storage, Room 30-110.

Q190: In reference to Addendum #7; Page 6; Alternate Price Scope .3.1f – Can you please advise the Drawing number where these doors are shown.

A190: Section 01 23 00 01 - Alternatives, Alternate Price No.6 and Architectural Drawings as these doors would be relocated in accordance with 1.2.6.3.1.f.

Q191: Also, the added Interior window SCN3 – is this aluminum?

A191: It is to be hollow metal.

Q192: We would like to know the document SK-5A, SK-5B, Sk-6A and Sk-6B as mentioned in Add. 7 Alternate Price 5 & 6 as per snapshot below.

A192: Reference Addendum 9, Section 01 23 00 01 - Alternatives.

Q193: Could you please confirm which type of AVB Membrane is to be used behind exterior wall cladding? The wall type requests "permeable" the spec indicates impermeable with Blueskin SA.

A193: This issue was addressed in the Answer 44 in Addendum 9.

Q194: Can you please advise if an electrical mechanical schedule will be provided for this tender? There are many equipment connections with no details and non typical abbreviations. Examples: ACU, ASHP, DBP, EQ-EF-EE. Also no information on interlocking with fire alarm or other systems.

A194: Refer to Mechanical and Industrial Drawings for more details on abbreviations and equipment type. These abbreviations are based on Mechanical and Industrial equipment tags. Fire alarm interlocking are shown on Fire Alarm Drawings and Specifications.

Q195: Please clarify the painting system required for structural steel and OWSJ. Are we supposed to follow Section 05 05 18 Shop Applied Coating for Structural Steel issued in Add. #9 or follow Section 09 90 00 Item 3.5.7.1.1? Also, please refer to previous email requesting the coating be revised to standard cleaning and priming to CISC/CPMA 1-73a as noted.

A195: Finish is not to be field applied; quality control becomes more difficult to achieve. Steel must be protected during shipping to avoid damages; per specifications damages to finishes are to be repaired. Reference the related specifications for detailed information.

Q196: Reference Addenda 7-Page 19 ADD 1.17- Please advise the relevance and what inspections are required to the curtainwall system. Also advise what third party independent inspection agencies do this type of inspections. There is not enough information relevant to our scope to provide a cost for this in our tender.

A196: Curtain wall construction inspections are typically handled by third-party inspection agencies and building envelope consultants, who ensure the system meets building codes, performance standards,

and design specifications. These inspections often include air and water infiltration tests to verify the installed materials' performance.

Q197: How long will it take to provide approvals/ responses for shop drawings? Will the city expedite shop drawings on major electrical equipment due to the nature of them being custom built items to avoid delays?

A197: In accordance with Section 01 33 00 - Submittal Procedures clause 1.2.3 allow fourteen (14) days for review of each submission.

Q198: a.1.03.4 requests shop drawings to be signed and sealed by a professional Engineer – Please note manufacturer designs have all been tested and approved to meet CSA standards. Individual shop drawings are not signed and sealed by a professional engineer. Equipment is provided based upon a specification and drawing provided by a consultant. Is the City asking the contractor to hire a Engineer to sign and seal shop drawings that the consultant is to approve?

A198: Contractor to follow Specification submittal requirements. Some specification sections including Section 26 13 18 - 12.47kV Switchgear requires vendor to seal shop drawing with a Professional Engineer stamp (Contractor's Engineer) in accordance with clause 1.4.4.

Q199: Please provide the questions and answers for tender 1045-2024 for the equipment that was added in Addendum 9.

A199: Changes to the equipment that were part of the 1045-2024 tender have been incorporated into the tender documents for 593-2024B as part of Addendum 9.

Q200: We are looking at the waterproofing scope of work for this project. Aside from the perimeter grade beam, it appears that there is waterproofing required at the following locations...

Drawing 00-S-552 and 00-S-156 for locations of waterproofing to frame hoist pits (4 each)
Drawing 00-S-553 and 00-S-553 for locations of waterproofing to water recycling pits (2 each)
Drawing 00-S-554 and 00-S-553 for locations of waterproofing to vehicle wash bay pits (2 each)
Possibly waterproofing to the Subsoil Drainage Pump Station on drawing 00-S-555 yet to be confirmed.

Is there a specification for the waterproofing to be used in these locations? I would assume a cementitious /crystalline waterproofing is intended, but there doesn't appear to be a spec for that.

A200: Reference Section 07 16 16 - Crystalline Waterproofing in this Addendum 12.

Q201: Can you please provide a mechanical louver spec and schedule for the louvers shown on the Mechanical HVAC drawings? All we could find was a louver spec in the architectural spec for the architectural louvers.

A201: Louvers are part of the building envelope and are part of Architectural Specifications Division Section 08 90 00 - Fixed Metal Louvres. Location and quantities are listed in the Mechanical Drawings.

Q202: Spec. 26 23 00 R1, 1.2.2.1 refers to close coupling of the power transformer. I did not see a new one-line showing SWBD-61 close coupled to a transformer. Is this distribution to be close coupled with TX-61?

A202: Reference Section 26 23 00 Low Voltage Switchboards in Addendum 9. There is cable bus between transformer and SWBD-61.

Q203: Spec. 26 23 00 R1, 2.1.3 refers to this board having the capability to lower the incident energy level to less than 8 cal/cm² at 18". Please note Eaton does not know what is required until an Arc Flash Study is done. I can quote this SWBD-61 c/w Eaton's EAFR arc-flash detection relay and loop sensors; however I will not know if this will reduce the energy level to less than 8 cal/cm² until the arc flash study is done at which case I may have to provide an adder to reduce the energy level further. Would you like me to set up a meeting for us to discuss this? <https://www.eaton.com/us/en-us/skuPage.BU-EAFR-110F.html>

A203: Arc Flash study is required. Reference Section 26 23 00 Low Voltage Switchboards in Addendum 9 and Section 26 05 70 - Electrical Work Analysis and Testing clause 3.8.

- Q204: Spec. 26 23 00 R1, 2.1.14.4 states unless otherwise noted, each air circuit power breaker is to be provided with PM8000 meter unit. As a new drawing has not been issued, please confirm which breakers require this PM8000 meter. Is it just the main or do all feeder breaker (Qty 18) need this meter as well?
- A204: Refer to Section 26 23 00 - Low Voltage Switchboards in Addendum 9. One PM8000 digital meter is required for main breaker.
- Q205: Spec. 26 23 00 R1, 2.1.15.4 makes reference to proper selective coordination. Please note once a selective coordination study is done, the results of this study advise us which breakers and trip units are required to be used in order to achieve selective coordination - <https://www.eaton.com/ca/en-gb/support/business-resources/consultants-engineers/consultant---engineer-resources-for-medium-voltage-power---eaton/selective-coordination.html>. Until this study is complete, we do not know which breakers and trip units are required. Would you like me to set up a meeting to discuss if true selective coordination is required for this project?
- A205: Selective Coordination to be done. Reference Section 26 23 00 Low Voltage Switchboards in Addendum 9 and Section 26 05 70 - Electrical Work Analysis and Testing clause 3.2.
- Q206: Spec. 26 23 00 R1, 2.1.16 refers to switch and fuse distribution section. Can you please confirm which distribution is fusible?
- A206: Switch and Fuse distribution section for switchboards is not required in accordance with the Single Line Diagram Drawings.
- Q207: Spec. 26 23 00 R1, 2.2.2 refers to insulated case breakers. Is the customer looking for air circuit breakers for the mains in SWBD-14, 6DP-02, 6DP-03, 6DP-04, 6DP-06, 6DP-07, 6DP-08 & 6DP-09?
- A207: In accordance with Section 26 23 00 - Low Voltage Switchboards as reference in Addendum 9 clause 2.2.11.1 and clause 2.2.11.2, main breakers to be moulded case circuit breaker or insulated case.
- Q208: Section 26 20 00 1.4 Series Rated Combination, .1 states Series Rated Combination of over-current protective devices are not permitted.
- A208: Section 26 20 00 – Electrical Service and Distribution clause 1.4.1 is correct, specification was modified as referenced in Addendum 7.
- Q209: Section 26 20 00 1.4 Series Rated Combination, .2 Comply with local governing electrical code rule with regards to series rated combinations of over-current protective devices and ensure that equipment in which lower rated devices are installed are marked with a series combination interrupting rating at least equal to available fault current. Please confirm if series ratings is acceptable.
- A209: Section 26 20 00 – Electrical Service and Distribution clause 1.4.1 is correct, specification was modified as referenced in Addendum 7.
- Q210: Which one of the following will supersede in case of any discrepancy Panel Schedule, SLD or Spec. as we sound out discrepancy in breaker Amperages and counts between SLD and Panel schedule also enclosure type between drawings and panels schedule comparing to the spec.
- A210: Electrical contractor to follow Panel Schedules, Single Line Diagrams and Electrical Specifications for breaker amperages, quantities, and enclosure type requirements. Addendum 7 Electrical Drawings have revised breaker amperages and quantities and have addressed questions related to Panel Schedules and Single Line Diagram(s).
- Q211: Drawings - I do not see a revised ground floor plan – maintenance garage – electrical room 01 (SP) elevation #3 to see the dimensions for SWBD-61. Will one be coming? A distribution layout of line-up SWBD-61 would be helpful as it would show where metering would be required, if there is a switch and fuse distribution section, etc.
- A211: Elevation for SWBD-61 is shown on Drawing E-0501 Detail #4. Metering requirements for SWBD-61 are included in Single Line Diagram Drawing E-1000 Single Line Diagram 1 and Section 26 23 00 - Low Voltage Switchboards clause 2.1.14. Switch and Fuse distribution section is not required for SWBD-61.

- Q212: Drawing E-0003 - Note 13 states "All Digital Metering Shall be integrated with BAS Systems¹³. All Digital metering shall measure per phase VOLTS, AMPS, KW, KVA KVAR, PF, HZ, KW DEMAND, AND PEAK. All meters shall be capable of storing data for minimum 3 years. Digital Metering provider to supply and install subscription free software to monitor and operate digital meters remotely. All new panel boards, switchboards, RPs, PPs and DPs shown on single line diagram, plans and panel schedules require digital metering." Does this apply to ALL switchboards and panel boards? SLD and Panel schedules are not showing.
- A212: Digital metering are not required for all switchboards and panelboards. Digital metering is shown on Single Line Diagram Drawings. General note is revised in Addendum 12 Drawings.
- Q213: Drawing E-1001 - Keynote 2 shows Electrical Vehicle Charing Cabinets by others. Do the Cabinets (EVC-01 to EVC-06) (DCB-01A to DCB-06D) require any chargers in them? If so, are there any specs.
- A213: Drawing E-1001 key note 2 was revised in Addendum 9. The EV bus chargers are to be supplied and installed by the Contractor in accordance with Electrical Drawings and Section 11 11 36.10 – Electric Vehicle Chargers.
- Q214: Please confirm if Seismic hangers are required to be installed for fire protection?
- A214: In accordance with Section 20 05 50 – General Mechanical Requirements, Mechanical, Process and Industrial equipment installation shall meet the building code requirements. Refer to NBC 2020 and to, but not limited to, clause 4.1.8.18 for further requirements. Section 20 05 50 – Seismic Restraint Systems clause 1.5 depicts the calculations and the submittal requirements.
- Q215: The below RFI is what I was referring to in our phone call where the grid lines have to be revised for Alternate Price #6 to only grids 4 – 23 and R-T. I assume this will be revised in the next addendum so they trades have a clear understanding of the Alternate prices.
- I have to revise RFI #2 below, Alternate Price No.6 should read as revised per below in green: Gridlines 4 – 23 and R-T only, there should be no reference in any descriptions to U.1 for Alternative No.6.
2. RE - Addendum 9 Section 01 23 00 01 Alternatives R2 - 1.2.6 Alternate Price No.6
- All references to gridline "U.1" should be revised to "T" as Alternate Price No.5 has already delated scope between "U.1" to "T".
- Per Addendum 1 Part B - Bidding Procedures, "...deducting items (s) 1 to 6, progressively in the order listed, until a Total Bid Price within the budgetary provision is achieved."
- Therefore Alternate Price No. 6 should only include scope of work between gridlines 4 - 23 and R – T only.
- A215: The Alternative Price No.5 and No.6 must be provided, each one, from the original design, the Issued For Construction Drawings and subsequent Addenda revisions. Therefore, Alternative Price No.5 and No.6 don't share any interchangeable element, to be added or deleted, being each one part of a standalone design revision.
- Q216: As the tender documents now include the supply and installation of the Long Lead Electrical equipment, we have reviewed the anticipated timing of the equipment delivery and it appears as the delivery of some equipment will be beyond the original Substantial Completion date of September 1/27. As these delays are outside of our control given the recent inclusion within this tender, we would request revision of the Substantial Completion date to March 31, 2028 with any liquidated damages being applicable from this date forward. Subsequent extension of the Total Completion date would be required as well. Alternatively, should the substantial completion date not be revised, we will need to include Liquidated Damages costs within our pricing accordingly which ultimately will raise the total project cost.
- A216: Please see revisions to D24 above which should address Proponent concerns with respect to impact of long lead time delivery items on Substantial and Total Performance dates.
- Q217: RE: Addendum 11 – Q87 Addendum 9 – Part D Supplemental Conditions D3.1(F) Supply and Delivery of Long Lead Electrical Equipment.

Answer to the question is: Refer to D24 Supply Chain Disruptions.

Per your response to the above, please confirm that major electrical long lead time items will be considered a supply chain disruption.

In reference to D24.2, please revise “schedule may be adjusted” to “schedule shall be adjusted”.

A217: Please see revisions to D24 above which should address Proponent concerns with respect to impact of long lead time delivery items.