

September 06, 2024

Addendum No. 2

Bid Call No. T2024-220

Construction of Fire Station 215

Closing Date: September 17, 2024 @ 2:00pm

The additions, deletions, revisions and/or clarifications as hereinafter specified shall form an integral part of the bid document and shall be read in conjunction with the requirements set forth in the bid request document.

1: (a) For the Mandatory Requirements SP2.3 Project Experience requirement 2, replace “Each project must be completed in the last five (5) years” with “Each project must be completed in the last eight (8) years.”

(b) For the Mandatory Requirements SP2.3 Project Experience requirement 5, replace “One of the three projects must be a public administration building or emergency facility (Police, Paramedic or Fire Station)” with “ One of the three projects must be a public administration building or emergency facility”

2: MODIFICATIONS

Revision No. 1

The following Appendices have been added:

ADD 02 – Architectural

ADD 02 – Electrical

ADD 02 – Mechanical

ADD 02 – Structural

32 33 00 - Site Furnishings

3: QUESTION AND ANSWERS (Unanswered Questions from Addendum 01)

Question 13:

The BAS points list in Section 25 06 00 refers to BACnet integration of unit heaters, but the unit heater specification (23 82 39.19) does not show that BACnet communications is coming with the unit heaters. Please clarify.

Answer 13:

Required. Refer to added note on the mechanical schedule M-901 issued as part of this addendum.

Question 14:

Is BAS control or monitoring of the following equipment required? If so, please provide a sequence of operation and points list:

- Energy Recovery Ventilators, ERV-1, 2, 3
- Desiccant Dehumidifier, DD-1
- Domestic Hot Water Pump, P-1
- Domestic Hot water Heater, DHWT-1

Answer 14:

**Refer to Mechanical Addendum 2 attached herein and updated Section 25 06 00
- Integrated automation points schedule**

Question 15:

The BAS points list in Section 25 06 00 lists control points for In-Floor Heating but there isn't any in-floor heating or boilers shown on the drawings. Please clarify.

Answer 15:

There will be no in-floor radiant heating in the project.

Question 16:

The BAS points list in Section 25 06 00 lists control points for four circulator fans in the Apparatus Bay, but the drawings only show one fan. Please clarify.

Answer 16:

Only one is required for the Apparatus Bay. Section 25 06 00 - Integrated automation points schedule will be updated.

Question 22:

Appendix A1, Page 1876 of the specifications has security equipment design standard and equipment specifications. Electrical drawings do not show any security scope of work, please clarify if security should be carried in the base bid by the general contractor.

Answer 22:

Carry as part of the base bid. Refer to drawing E-401 for security scope of work, security cameras, card readers, electric strikes, etc.

Question 23:

If security needs to be designed based on the design standards provided, the given tender period might not be enough to design a security system for this project. Please consider allocation of cash allowance for this item.

Answer 23:

Refer to drawings and review the security scope of work; security cameras and access controls drawing E-401.

Question 25:

Civil drawing C2.1 has a note by the garbage enclosure that states (Garbage enclosure foundation and retaining wall to be structurally integrated), please provide structural sections and details.

Answer 25:

Refer to issued Structural Addendum #2 for garbage enclosure details.

Question 26:

Drawing A02.07 Section 1 garbage enclosure gate detail states to refer to structural drawing for garbage enclosure footing, structural drawings do not provide any detail for garbage enclosure footing, please provide details.

Answer 26:

Refer to issued Structural Addendum #2 for garbage enclosure details.

Question 27:

Please clarify if the foundation wall and the wall above grade of garbage enclosure should be reinforced with rebar?

Answer 27:

Refer to issued Structural Addendum #2 for garbage enclosure details.

Question 44:

Please confirm below for electrical subcontractor

- Please confirm the primary duct bank details.
- Please confirm the size and number of conduits in the communication duct bank.
- Please confirm the meaning of fire alarm symbols in the dormitory area (above the beds).
- Electrical drawings show a cable tray on drawing E-401. E-803, detail 6 shows information for J-hooks. If we have a cable tray, are J-hooks required as well? If so, please confirm where they are required.
- Please confirm the type of receptacles in the south of corridor 108.
- Please confirm the PV scope.
 - o Are there any preferred PV contractors?
 - o In the electrical specs it asks for the PV contractor to design, supply, install, etc. PV contractors are not going to be able to put a design together in such short amount of time. Please provide a design or have the PV system covered as a cash allowance item.
- Please confirm who supplies the mobile charger (E-808).

Answer 44:

- Refer to detail 4 in Sheet E-104 for primary ductbank details.
- Refer to detail 2 in Sheet E-103 for size and number of conduits in communication duct bank
- Residential smoke alarm, 120V, Complete with strobe. For areas as indicated on plans by "CO", provide integral carbon monoxide detection. Symbol will be added to legend sheet.
- Yes the j-hooks are required to branch off the cable tray.
- Receptacles in the south of corridor 108 are 120V u-ground Quad receptacles mounted above counter top or as instructed on site. Symbol will be added to the legend sheet.
- PV system shall be designed to roughly 30kW DC on the apparatus bay.
- Mobile Charger is owner supplied.

Question 45:

Please confirm the primary duct bank details

Answer 45:

Refer to Answer 44.

Question 46:

Please confirm the size and number of conduits in the communication duct bank.

Answer 46:

Refer to Answer 44.

Question 47:

Please confirm the meaning of fire alarm symbols in the dormitory area (above the beds).

Answer 47:

Refer to Answer 44.

Question 48:

Electrical drawings show a cable tray on drawing E-401. E-803, detail 6 shows information for J-hooks. If we have a cable tray, are J-hooks required as well? If so, please confirm where they are required.

Answer 48:

Refer to Answer 44.

Question 49:

Please confirm the type of receptacles in the south of corridor 108.

Answer 49:

Refer to Answer 44.

Question 50:

Please confirm the PV scope.

o Are there any preferred PV contractors?

o In the electrical specs it asks for the PV contractor to design, supply, install, etc. PV contractors are not going to be able to put a design together in such short amount of time. Please provide a design or have the PV system covered as a cash allowance item.

Answer 50:

Refer to Answer 44.

Question 51:

Please confirm who supplies the mobile charger (E-808).

Answer 51:

Refer to Answer 44.

Question 55:

Please see below dropbox and provide clarification on symbol listed.

<https://www.dropbox.com/scl/fo/svibq6bd60rxhu0anjvcu/AMZBoZPCJdWaPjOoEITDdGY?rlkey=iyaulgtexaqa7qtmrup191ja&dl=0>

Answer 55:

Refer to Answer 44.

Question 56:

On Drawing E-202 there are two cord reels for EV Fire Truck Power. It is stated as 100A fed from RP-M2 circuits 2,4,6 and 76,78,80. However, on the panel schedule it indicates 20A.

Answer 56:

The EV Coord Reels are feed from DP-DA as shown in the single line diagram. RP-M2 is meant for mechanical equipment. We will revise the drawings.

Question 57:

Section 27 05 28.63 of the spec indicates that the security vendor is under a cash allowance, but the allowance section does not mention this. Please confirm whether the security is included under the cash allowance or not?

Answer 57:

Security vendor is not cash allowance. Security scope of work shall be carried under the base contract.

Question 58:

- Please confirm the specs for 100A ceiling receptacle and 100A cord reel as well.
- Please confirm the feeding information of the exit signs. There is no circuit information for them in the drawing.
- Please confirm the location of the DP-PV panel.
- Please confirm the location of fire truck EV charging disconnect switch feeds from DP-DA.

Answer 58:

- **Standard 100A, 3P+PE. Refer to manufacturer's literature. The charger plugs into a 480VAC, 3Phase, 100A circuit via a 480VAC, 4 pin (no neutral) receptacle that corresponds to the 480 VAC 4 pin plug that comes with the charger. Photo below is receptacle and the AC plug on the charger. The receptacle should be available from an electrical equipment distributor. Brand will be either Leviton or Hubbell.**



- **Exit Signs** - Provide a dedicated 120V 15A,1P circuit from panel RP-L. Drawings will be revised to show the circuit number in panel schedule RP-L.
- **DP-PV Panel** is located on roof. Noted in Single Line Diagram. Shown in drawing E-302 as “inverter combiner panel”.
- **EV Truck Charging disconnect** is located on the Wall mounted on engine bay north wall. Location is revised in the drawings.

Question 59:

Please confirm the specs for 100A ceiling receptacle and 100A cord reel as well.

Answer 59:

Refer to answer 58.

Question 60:

Please confirm the feeding information of the exit signs. There is no circuit information for them in the drawing.

Answer 60:

Refer to answer 58.

Question 61:

Please confirm the location of the DP-PV panel.

Answer 61:

Refer to answer 58.

Question 62:

Please confirm the location of fire truck EV charging disconnect switch feeds from DP-DA.

Answer 62:

Refer to answer 58.

Question 63:

Section 27 05 28.63 of the spec indicates that the security vendor is under a cash allowance, but the allowance section does not mention this. Please confirm whether the security is included under the cash allowance or not?

Answer 63:

Security is base scope of work and not cash allowance.

Question 74:

RFI for BAS/Controls Section:

1- Specification section 25 06 00 - INTEGRATED AUTOMATION POINTS
SCHEDULE LIST

Some equipment and counts don't match the mechanical drawings. Please confirm the following equipment are associated with the actual project:

- a) In-floor Heating including Boiler and radiant floor heating.
- b) Unit heater UH-9
- c) Fan Coil Units (VRF) FC-9, FC-10, FC-11 & FC-12
- d) Please confirm the total counts of exhaust fans that should be on the BAS system.

2- Section 23 81 29 VRF System, it mentions that the units come with their own controllers and thermostats and VRF system should be integrated to the BAS system via the BACnet interface. However, Section 25 06 00 points list mentions some hardwired points for VRF units. Please confirm the VRF system shall come with their own controls including thermostats and integrated into the BAS system only.

3- Specifications Section 23 82 39.19, Unit heaters. It mentions that unit heaters come with integral thermostats. However, Section 25 06 00 points list mentions that unit heaters shall have full control by BAS contractor. Please confirm if the unit heaters are standalone (not connected to the BAS system) or part of the BAS system.

4- The following systems are not shown on the controls schematics in the mechanical drawings. Please confirm if they are part of the BAS scope, if so, please provide controls schematics for them.

- a. Fan Coil (FC-1 to FC-8) and Condensing Units (CU-1, CU-2) (VRF)

- b. Fan Coil (SAC-1, SAC-2) and Condenser Units (SCU-1, CU-2) (Split Unit)
 - c. Energy Recovery Ventilator (ERV-1 to ERV-3)
 - d. Unit Heaters (UH-1 to UH-8)
 - e. Exhaust Fans (EF-2, EF-3, EF-4 & EF-6)
 - f. Domestic Hot Water Tank System (DHWT-1 and P-1)
 - g. DESICCANT Humidifier (DD-1)
- 5- Mechanical drawings M-901 mentions Engine Exhaust System (FEE-1&FEE-2). They are not shown on the floor plans. Please clarify.

Answer 74:

- 1A - There is no in-floor radiant heating in the project.**
- 1B - There is no UH-9.**
- 1C - There is no FC-9, FC-10, FC-11 & FC-12 .**
- 1D - All exhaust fans shall be on the BAS system**
- 2 - Correct, the VRF system comes with its own thermostat and requires integration to BAS system. BAS must have the ability to override.**
- 3 - Correct, the Unit Heaters comes with its own thermostat and requires integration to BAS system. BAS must have the ability to override.**
- 4a - Refer to Mechanical Addendum 2.**
- 4b - Refer to Mechanical Addendum 2.**
- 4c - Refer to Mechanical Addendum 2.**
- 4d - Refer to Mechanical Addendum 2**
- 4e - Refer to Mechanical Addendum 2**
- 4f - Refer to Mechanical Addendum 2**
- 4g - Refer to Mechanical Addendum 2**
- 5 - Refer to Tended Addendum 2 with added tagging for FEE-1 & FEE-2 for guardrail system on the apparatus bay on the Mechanical dwg M-301**

Question 75:

Regarding the generator, please confirm the required size. Drawing E-002 asks for 500kw. The SLD asks for 500kva (400kw). The specs ask for 350kw.

Answer 75:

500kW. Specification document will be revised.

Question 78:

- 1- Please confirm Split System Air Conditioners Units come with BACnet Card, and if hardwired points (DO command, DI status, and AI space temperature) are required by the BAS supplier.
- 2- Please confirm if the hardwired points (DO command, DI status, and AI space temperature) for VRF units are NOT required by the BAS supplier.
- 3- Please confirm if the hardwired points (AI speed feedback and AI space temperature) for destratification fans are required by the BAS supplier.
- 4- Please confirm clarify the sensor SO2 / CO2.

Answer 78:

- 1. Split system air conditioning unit will have bacnet card and will be connected to BAS. Refer Section 25 06 00 - Integrated automation points schedule**
- 2. Refer updated Section 25 06 00 - Integrated automation points schedule**
- 3. Refer updated Section 25 06 00 - Integrated automation points schedule**
- 4. Refer to Mechanical Addendum 2**

Question 80:

- 1) Are we to strip the entire hardscape and building envelope of all topsoil and fill down to native?
- 2) Are there liquidated damages on this project?
- 3) Cash allowance item 1.1.22.12 refers to supply and installation of clock. Is this for the clock on the hose tower?
- 4) There appears to be a roof anchor of the roof of the hose tower. Is this in contract? If so please provide specifications.
- 5) A00.03 – Assemblies – Foundation Walls indicate perimeter insulation to sandwich foundation walls. A05.05 shows insulation cast into the foundation wall as well. Please clarify.
- 6) What is the finish required for the P-TA-1, P-RCA-1 and P-RCA-2 pavement types?

- 7) In regards to A02.05 detail 7- Is the broom finish portion to be raised, if so by how much?
- 8) Please clearly indicate which signage is cash allowance and which is base bid.
- 9) Is road crossing for hydro duct to be carried under base bid?
- 10) the ceiling finish legend appears to be complete, please advise.
- 11) What is the ceiling finish in corridor?
- 12) 32 33 00 is included in table of contents but missing from specification, please advise.

Answer 80:

1. Yes, only within the site extents. No work is permitted in the TRCA regulated land.
2. Refer to response in Addendum 01.
3. Refer to response in Addendum 01.
4. Refer to response in Addendum 01.
5. Refer to response in Addendum 01.
6. Refer to response in Addendum 01.
7. Refer to response in Addendum 01.
8. Refer to response in Addendum 01.
9. Refer to response in Addendum 01.
10. Drawing A03.10 Level 01 - Reflected Ceiling Plan Legend And Details has been updated
11. Underside of metal deck shall be painted PNT-3 including all exposed steel and any conduits on the metal deck. Columns at high clear story window shall be painted PNT-3. Suspended Wood Slat ceiling shall be installed in corridor. Refer to Level 01 - Reflected Ceiling Plan for notation WPC-1
12. Specification section 32 33 00 has been included as part of this addendum 2.

Question 86:

Can you please provide wall assembly for ACP-1?

Answer 86:

ACP-1 assembly description on drawing A00.03 Construction Assembly Matrix - Exterior Envelope is provided. Backup assembly references are on the floor plans as ACP-1 is applied in various locations. Bidders are to review all drawings to understand all ACP-1 locations.

Question 87: The City of Brampton has a prequalified bidders list for building automation projects (BAS) that is limited to:

ESC Automation

Johnson Controls

Siemens

Answer 87:

Delete list of BAS manufacturers from Specification section 25 05 02 and replace with the list of City of Brampton pre-qualified vendors as noted below:

- 1. Johnson's Controls Canada LP**
- 2. ESC Automation Inc.**
- 3. Siemens Canada Ltd**

All other terms & conditions remain unchanged.

If you have any questions, please do not hesitate to contact the undersigned.

Bidders are required to acknowledge all Addenda.

naveed

Naveed Ahmed Butt

Senior Buyer

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