



ADDENDUM NO. 5

INVITATION TO TENDER No.: FIN2024-009T

TITLE: General Contractors for the New Construction of the Barrie Fire and Emergency Service Station 6

ADDENDUM ISSUE DATE: Monday, April 8, 2024

CLOSING DATE & TIME: Thursday, April 11, 2024 2:00 PM

This addendum is issued to modify the previously issued bid document and/or given for information/clarification purposes and is hereby made a part of the bid documents. Per the bid document, the respondent shall acknowledge receipt of any and all addenda.

Attachments:

- Addendum ME-3
- Architectural Addendum 4

Modifications

Modification 1:

Modifications have been made to Attachment A – Drawings and Attachment B – Specifications of ITT Document FIN2024-009T. Please refer to Addendum ME-3 and Architectural Addendum 4 attached to this addendum for the modifications.

Modification 2:

The Submission Deadline has been extended to Thursday, April 11, 2024.

Questions & Answers

Question 1:

The document mentions a gen set has been purchased already, please elaborate if that includes the ATS, commissioning, etc.

Answer 1:

Yes, the generator set has been purchased by the City. Refer to Specification Section 26 32 13 - Diesel Generators 1.1 B and 26 36 23 - Automatic Transfer

Switches 1.1 in Attachment B - Specifications for a summary of the scope required of the procured equipment by the successful bidder. The Generator and ATS including all indicated components in those two clauses have been purchased by the City.

The successful bidder shall perform the scope identified for the contractor, general contractor, or electrical contractor in the specifications. The scope items identified for the manufacturer or general manufacturer shall be preformed by others.

Question 2:

There are drawings for the Public Address System, but no specs. Can you please provide details?

Answer 2:

The public address system shall be performed by others. The scope of work for this portion of the project is limited to the rough-in indicated in the electrical drawing package Sheets E1.0 to E10.0 in Attachment A – Drawings and Division 26, Division 27, and Division 28 in Attachment B – Specifications to the ITT document.

Question 3:

Is Comms doing the cabling for this or is it by others? If so, is it Cat 6 as well?

Answer 3:

Cabling shall be completed by a communications subcontractor retained by the Contractor. All cabling is to follow the specifications identified in Attachment A – Drawings, Attachment B – Specifications, and Attachment D – General City of Barrie Cabling Specification.

Question 4:

For Section 09 65 00 Athletic Flooring, we request approval the use of Regupol AktivPro Tiles as an acceptable alternative.

Answer 4:

Regupol AktivPro Tiles is an acceptable alternative.

Question 5:

Spec 07 42 41 indicates Aluminum panels by Longboard. We request the use of Bellara cladding as an acceptable product for the aluminum panels and soffit systems.

Answer 5:

Bellara cladding is an acceptable alternative.

Question 6:

For the structured cabling, Attachment B Specifications call for Panduit or equivalent for all components. However, Attachment D - General City of Barrie Fire Hall Specification require Commscope Systimax. Please advise which is acceptable. Are either accepted?

Answer 6:

Both Panduit and Commscope Systimax are acceptable manufacturers.

Question 7:

Is Notifier the only acceptable F/A system to be installed? Some Fire Alarm sub-contractors are not authorized Notifier installers but have worked for the City of Barrie.

Answer 7:

No, Notifier is not the only acceptable F/A system to be installed. The City will accept other equivalent Fire Alarm systems meeting the requirements of the specifications.

Question 8:

Notes 22 and 23 in the general notes on page E1.0 state that each device (data/telephone and PA) shall have a ¾" conduit from such device to the backboard. Is this necessary? This would eliminate the need for any cable tray. Minimum 1" Conduit for data is also stated in the specs. Please advise.

Answer 8:

Yes, this is correct. In rooms with ACT or drywall ceiling the contractor is to run conduit from the devices to the ceiling space and then run through the cable tray to the backboard. Rooms with no ceiling will require the contractor to run the conduit from the devices to the backboard. The City requires a minimum 1" conduit for data as specified.

Question 9:

Drawing E9.0 references Detail #4 on E7.0. Should that be detail #7?

Answer 9:

Detail #4 on E7.0 is for security components. Detail #7 on E7.0 is for Barrier-free door operators.

Question 10:

Landscape Details on L2 are smudged, would it be possible to provide a clearer version?

Answer 10:

Please ensure you are viewing a properly downloaded version of the drawings. The details referenced take some time to load on a PDF viewer but are clear. For ease of reference, the original documents found on the City of Barrie [website \(https://www.barrie.ca/planning-building-infrastructure/infrastructure-standards\)](https://www.barrie.ca/planning-building-infrastructure/infrastructure-standards) Infrastructure Standards have been included here for reference.

Question 11:

Our Landscaping Subcontractor has asked for the following - Drawing L1 scale, the scale says 1:200 but when you measure against the scale at the top of the drawings it is not correct.

Answer 11:

The scale 1:200 is correct. This drawing is to scale and has been verified.

Question 12:

Can you inform us what pages contain locations for Roller Shades (RS)? We don't see them shown on the floor plans or in the General Notes, and specifications state "where indicated on drawings".

Answer 12:

All windows except those in the Apparatus Bays are to receive window covering, refer to drawing A303 of Architectural Addendum 4 included as part of this Addendum 5.

Question 13:

Could you provide acuity (Brand) approved on controls?

Answer 13:

Yes, Acuity Brands is acceptable for lighting controls.

Question 14:

Please clarify the following queries:

1. As per room Finish schedule Univ. Wrm 003 has CT-5 on the south wall, Wrms 011, 013, 015,017 & 019 have all sides wall tiles. But in drawing A601 Interior Elevations, there is no wall tiles as per elevations. Please provide the washroom wall tile layout showing tiles CT-5 and CT-3.
2. As per Finish schedule Wrms 011, 013, 015,017 & 019 have Tile ceiling CT-3 on shower areas, but drawing A701 Reflected Ceiling Plan Addendum 2, shows GWB-1 (gypsum Wall Board) for shower areas ceiling. Please confirm

3. As per room Finish schedule Laundry room 021 has CT-7 back splash tile on West wall. But drawing A601 Interior Elevations, there is no wall tiles as per elevation 11/A601. Please provide the tile layout.

Answer 14:

1. Walls are to be tiled in line with the Colour And Material Schedule included in Architectural Addendum 3, Amendment 3 included in the Attachment B – Specifications to the ITT. Finalized Tile layouts are to be confirmed at shop drawing stage to coordinate grout lines with fixtures and equipment.

2. Shower areas are to receive tile finish as identified in the finish schedule. Refer to Architectural Addendum 4, Amendment 1, included as part of this Addendum 5.

3. Walls are to be tiled in line with the finish schedule. Finalized Tile layouts are to be confirmed at shop drawing stage to coordinate grout lines with fixtures and equipment.

Question 15:

The spec says 'Ready Rack lockers or approved equivalent'. Barrie has used GearGrid on their last 2 renovations. Is this an approved alternate?

Answer 15:

Yes, GearGrid is an acceptable alternative.

Question 16:

We haven't been able to find specifications provided for the 10kVA UPS System as shown on the SLD. Are you able to clarify the specs?

Answer 16:

This information was provided in the Mechanical Electrical Addendum ME-2 attached to Addendum 4.

Question 17:

Are there any union requirements?

Answer 17:

No, there are no union requirements.

Question 18:

Re: Rolling Overhead Door

1) There is a rolling overhead door shown at Refuse/Recycling Enclosure which is part of Provisional items. This door is different than what is specified for the main building (Sectional Overhead – 08 36 15). Can you please provide a specification ?

Answer 18:

Refer to specification 08 33 00 in Architectural Addendum 4 attached to this addendum.

Question 19:

Re: Washroom Accessories

- 1) Please revise the washroom accessory specification for Grab Bars to meet the drawing requirements. Grab Bar 3 is shown on drawing as a swing up and also as a L shaped in Univ Shower (1000x762) and also GB-1 and GB-2 are reversed (GB-1 is 610 and GB-2 is L 762)
- 2) Please provide specification for the swing up Grab Bars, they are shown as 1 with TPH and 1 without.

Answer 19:

Refer to Architectural Addendum 4, Amendment 3, attached to this Addendum 5 for revised grab bar numbering and swing up grab bars.

Question 20:

Re: Window Coverings

- 1) Please confirm if all windows are to receive window coverings.

Answer 20:

Yes, all windows except those in the Apparatus Bays are to receive window covering, refer to Architectural Addendum 4 attached to this addendum.

Question 21:

Has a Connection Impact Assessment (CIA) been completed with InnPower?

Answer 21:

A CIA has not been completed to date. InnPower has been involved in coordinating service to the property.

Question 22:

Specified module is no longer commercially available, is the attached JA module (550W) an acceptable substitute?

Answer 22:

Solar Photovoltaic Systems from manufacturers that meet all requirements of the specification will be acceptable.

Question 23:

Fronius' recommended over current protection for these inverters is 60A, not 50A as shown on the panel schedule. Please advise if breaker/feeder sizing should be increased?

Answer 23:

Please refer to the Mechanical Electrical Addendum ME-3 attached to this addendum for these details.

Question 24:

Is Supervisory Control and Data Acquisition (SCADA) required for the PV system?

Answer 24:

No, SCADA is not required for the PV system.

Question 25:

Are there any requirements for an exterior utility disconnect for the PV system?

Answer 25:

Yes, exterior utility disconnect is to be provided as required by ESA. Disconnects are shown on the single-line diagram on Sheet E6.1-A-3 of Addendum ME-3 attached to this addendum.

Question 26:

Is rodent protection required for the PV system or shall we assume for an ESA deviation?

Answer 26:

Yes, rodent protection is required and should not be assumed as an ESA deviation.

Question 27:

What structural capacity has been allocated for the PV system?

Answer 27:

The roof structures have been designed to accommodate the PV System design.

Question 28:

Cannot find specifications provided for the 10kVA UPS System as shown on the SLD, please provide.

Answer 28:

Please refer to answer 16 above. This information was provided in Mechanical Electrical Addendum ME-2 attached to Addendum 4.

Question 29:

Is this to be a standalone access control system, or integrated into an existing larger system? If access control needs to be integrated into existing system, which access control system is required?

Answer 29:

Refer to the response to question 3 in Addendum 4. The security system is to be connected to the City of Barrie network.

Question 30:

What level of access control licensing is required?

Answer 30:

Intermediate level licensing is required.

Question 31:

Do any access card readers also require keypads? If so, please indicate which doors on drawings.

Answer 31:

No. Keypads are not required.

Question 32:

What card format is required for the 100 access cards requested as per access control spec?

Answer 32:

Access cards are to be in card format, as identified in 2.6.4 of Section 28 13 00, of Attachment B – Specifications to the ITT.

Question 33:

Is the new camera system standalone, or integrated into existing system? If integrated into existing, which make, and model of VMS is required?

Answer 33:

The camera system is not required. The camera system scope was removed in Addendum ME-2 attached to Addendum 4.

Question 34:

What is the retention time required for the camera VMS, with frame rates and resolution settings?

Answer 34:

The camera system is not required. The camera system scope was removed in Addendum ME-2 attached to Addendum 4.

Question 35:

There are no intrusion devices on the drawings, except for 1 keypad and horn. Is there an intrusion system required? If so, please indicate devices on drawings such as Keypads, Motion Sensors and Glass Breaks.

Answer 35:

The camera system is not required. The camera system scope was removed in Addendum ME-2 attached to Addendum 4.

Question 36:

What is the thickness of the alum and acrylic for the Barrie Logo and the material used? 1/4 inch alum is required for the lettering, but is not mentioned for the logo.

Answer 36:

A minimum of 1/8" thick aluminium is required for the logo crest. Refer to the revised detail issued as part of Architectural Addendum 4 attached to this addendum.

Question 37:

Please clarify the following:

- Specify the exact material for the Crow's Nest walls. it seems as an aluminum composite panels on the elevations, however, as per sections and plans it is 38mm thick aluminum panels. Please clarify.
Note: 38mm thick is not for aluminum composite panels, (51mm), nor for longboard, (12mm).

Answer 37:

These walls for the Crow's Nest are ACP panels as indicated. The thickness of the panel will vary dependent on the carried ACP product. Please refer to the wall type legend on drawing A001 and details on A406 included in line 1.8 of Amendment 1 in Architectural Addendum 4 attached to this Addendum.

Question 38:

Please clarify the exact height for the ACP fascia, it is mentioned as 65cm on elevations, however, it is 80 cm on all details.

Answer 38:

The ACP fascia is to be 800mm. Please refer to the details on A404 and A405 included in Architectural Addendum 4 attached to this Addendum.

Question 39:

Would you be able to provide any electrical specs for the exits and the remotes?

Answer 39:

This question is unclear and appears to be incomplete.

Question 40:

We haven't been able to find specifications for the 10kVA UPS System, as shown on the SLD. Can you please provide?

Answer 40:

Please refer to Answer 16 in this addendum. This information was provided in Mechanical Electrical Addendum ME-2 attached to Addendum 4.

Question 41:

On drawing A205, detail 7/a205 shows schluter dilex trim at the bottom of the shower bases, but the finish schedule calls for a ceramic cove tile. Please clarify.

Answer 41:

This was addressed in Addendum 4. Please refer to Answer 11 and the Architectural Addendum 3 in that addendum.

Question 42:

What number is the BF washroom?

Answer 42:

The Universal Washroom is Room 003.

Question 43:

Drawing E3.1 shows the PV Solar Array interfering with the snow fence(s) and roof drain. Please confirm that the area for the array is North of the roof snow fence(s) and mounted so as to avoid shading from the snow fence onto the PV Solar Array.

Answer 43:

Final coordination of the snow fence and PV Solar Array are to take place at the shop drawing stage to coordinate with the procured products.

Question 44:

Drawing E3.1 Note 1 indicates GC is responsible for coordination with LDC and owner is to cover those costs. Should coordination result in additional equipment/provisions to satisfy LDC, scope change will be issued and costs covered by owner?

Answer 44:

Yes, this is correct.

Question 45:

Drawing E6.1 shows both 535Wp and 365Wp solar panels. Please confirm that target installation is 164kWp using panels available from suppliers at time of installation (Likely Q1-Q2 2025).

Answer 45:

PV Panel Selection shall be closed to 535WP and 365Wp as shown on the electrical drawings in Attachment A – Drawings.

Question 46:

Drawing E5.1 shows embedded PV generation feeding into a 600A splitter. Please confirm rating of splitter to accept PV Solar.

Answer 46:

Yes, the rating of the splitter is to be 600 Amps as indicated.

Question 47:

With regards to the Solar Photovoltaic System 26 31 00 1.02.2 Acceptable Manufacturers, we request the approval of Longi, Trina, JASolar, Jinko as acceptable alternatives for the PV Panels and CSI, Solis, Sungrow, SMA as alternatives for the inverters.

Answer 47:

Yes, Solar Photovoltaic Systems from these manufacturers will be accepted if the systems meet all requirements of the specification identified in the ITT, its attachments, and addenda.

Question 48:

Drawing SS-1 mentions a backflow preventer is required at the connection of the 50mm PEX Watermain to city service at the property line. However, Std W504 (shown in drawing # ND-2) doesn't show a backflow device. And the Std W533 (in ND-2) shows a backflow device which is presumably for the meter room (inside the building). Can you please advise if a backflow preventer is still required at the property line? If so, it should be inside a chamber. And please advise which standard to follow.

Answer 48:

The backflow, bypass and metering are to be provided in the mechanical room as per W533 and the mechanical drawings in Attachment A – Drawings. Please follow W504 for the service connection at the property line.

Question 49:

Is there a specified BAS contactor? We can't find it anywhere in the drawings or specs, but it seems like the engineer has been working with a specific company to design this. Can we get some clarification on controls?

Answer 49:

Acceptable BAS contractors are mentioned on specification 25 30 00, page 2, Paragraph 2: Acceptable BMS Subcontractors in Attachment B – Specifications.

Question 50:

For Access control System, are we to connect to existing City of Barrie Infrastructure/Server?

Answer 50:

Please refer to Addendum 4, Answer 3.

Question 51:

Who are Electric Strikes supplied by?

Answer 51:

Refer to Addendum 4, Answer 4.

Question 52:

Is there a Hardware Schedule and/or is the Hardware Schedule open Spec?

Answer 52:

The Door Hardware schedule shall be provided to the Contractor. Door Hardware is by Cash Allowance.

Question 53:

Is the access control system Kantech? Can you please provide Make/Model of PA System? Or is it open Spec?

Answer 53:

Please refer to responses to answers 2 and 3 in Addendum 4. Please refer to Answer 2 of this addendum regarding the PA System.

Question 54:

We've noticed discrepancies in the control sequences of operations relative to the points list. Some examples are shown below.

We also haven't seen any lists of acceptable manufacturers for this control scope.

- 1) Please clarify which equipment will come with OEM BacNet interfaces.
- 2) Points are listed on the points list which are not outlined in the sequences of operations.
- 3) The points list states submetering for many devices. Are these to be independently metered or are they to be metered from one common feed?
- 4) In the points list, outdoor air monitoring is specified for the VRF system. How will this be achieved?
- 5) Hydronic heating valves are 2 position in the sequence of operations but noted to be 0-10vdc in the points list.

There are many more discrepancies in the Addendum ME-1.

Answer 54:

Acceptable BAS contractors are mentioned in the ITT, Attachment B – Specification Section 25 30 00, page 2, paragraph 2: Acceptable BMS Subcontractors.

1. All Specified equipment shall come with BacNet interfaces.
2. All equipment operations that need to be described are given in the sequence of operations. If there is any specific question about any point listed, please submit a question through the Bidding System using the “Submit a Question” link associated with this bid opportunity.
3. These are included in the scope to be independently metered as identified in section 25 30 00 and section 25 90 00 in Attachment B – Specifications.
4. Included in the scope. Provide an airflow metering station, in the outdoor air intake duct, wired to BAS as identified in section 25 30 00 and section 25 90 00 in Attachment B – Specifications.
5. All heating valves are modulating type. See the notes in the remarks column.

Question 55:

As per addendum 4 drawing E9.0 -A-1, there is an outlet for security arm/disarm key pad and an outlet for security siren/alarm horn in the captain's room. However, there is no Intrusion system going in at this location. Please elaborate on the use and purpose of those devices

Answer 55:

These devices are to be deleted. Please refer to line 2 of Addendum ME-3 included attached to this Addendum.

Question 56:

The single line diagram shows the temporary generator and the permanent generator cables t-taping off each other. How is this connection intended to happen?

Answer 56:

The regular generator and the temporary generator are shown with 600 Amp disconnects. If the regular generator fails, then it will be isolated by the disconnect switch manually.

The temporary generator will be brought to the Fire Station and will be connected through the tap box and the disconnect associated with the temporary generator will be turned on.

Question 57:

We would like to request approval for Bellara cladding by Vicwest for the Aluminum Panels and Soffit Systems indicated in specification 07 42 41: Aluminum Panels and Soffit Systems.

Spec 07 42 41:

2.1.1 indicates Aluminum panels by Longboard and we would like to propose our Bellara Cladding profile.

Longboard is manufactured from Aluminum and Bellara is manufactured from both 26ga and 24 ga. Prefinished Steel.

Bellara is now available in 3-different coverages 90mm, 135mm and 200mm The Bellara profile can be used vertically, horizontally or for Soffit applications.

1.3.6: indicates system to allow for removal of individual panels but these types of products are not removable.

2.2.3: indicates Powder Coat finish.

Bellara uses prefinished steel coil and offers a 40 paint integrity warranty.

There 17 stocked colours including 11-Woodgrain finishes. Each woodgrain has multiple variations to the grain pattern for a very natural appearance.

Link to Website: <https://www.vicwest.com/ca/en/products/all-vicwest-product/hidden-fastener-wall-cladding/bellara/>

Answer 57:

Please see Answer 5 above as a part of this addendum. Bellara cladding by Vicwest for the Aluminum Panels and Soffit Systems indicated in specification 07 42 41: Aluminum Panels and Soffit Systems is an approved alternatives.