

Addendum / Addenda

No./No

Project Description / Description de projet			
U66 Chiller Replacement.			
Solicitation No./N° de solicitation	Project No./N° de projet		W.O. No./N° d'ordre de travail
16-22146	5201		A1-006954-06-01
Departmental Representative / représentant ministériel			Date
Maurice Richard			February 27, 2017
Notice:		Nota:	
This addendum shall form part of the tender documents and all conditions shall apply and be read in conjunction with the original plans and specifications.		Cet addenda fait partie intégrale des dossiers d'appel; toutes les conditions énoncées doivent être lues et appliquées en conjonction avec les plans et les devis originaux.	

- 1 Penthouse abatement clarification: Abate all designated substances located in the penthouse and identified by DST consulting engineers in their Project-Specific Hazardous Materials Survey. In cases where insulation is removed, replace with new insulation of same thickness and thermal rating.
- 2 The roof opening detail shown on detail 1/A03 of drawing 5201-A03-ADD#1 is typical in nature and it is the responsibility of the general contractor to ensure that they make an opening suitably sized to allow the new equipment to be moved into the space, whether the equipment supplied is what was specified on the mechanical drawings or an acceptable alternate.
- **3** Ensure the opening of the roof is witnessed by the NRC Departmental Representative so any existing damage can be documented.
- 4 Refer to attached sketch of the stationary equipment in the control room. This is equipment is approximately 750mm deep and 2200mm high. Contractor must adequately protect this from damage during abatement and construction, to the satisfaction of the NRC Departmental Representative. Erect scaffolding above equipment to provide work platform for work to be done above this equipment. The cost of any repairs for damage caused by the general contractor or their sub-contractors will be billed back to the general contractor.
- **5** The interior of existing ductwork in the ceiling of the second floor is not considered contaminated and duct cleaning is not required, unless specifically noted in the project specific DSR.
- **6** Work restrictions:
- .1 Execute work with least possible interference or disturbance to normal use of premises. Make arrangements with NRC Departmental Representative to facilitate work as stated.





- .2 Any work to be performed by the general contractor and/or its sub-contractors generating excessive noise, odors and/or any kind of discomfort to building occupants shall be executed outside of the building's normal business hours, at the discretion of the NRC Departmental Representative. General contractor to bear all costs associated with this work. NRC will provide escort where deemed necessary.
- .3 Confirm in writing with NRC Departmental Representative scope and schedule of any work to be performed outside of normal business hours to meet this requirement.
- .4 If unsure, check with NRC Departmental Representative prior to performing any work that may cause a disturbance to building users.
- .5 The contractor will be held responsible to compensate NRC for any financial losses as a result of non-compliance with these conditions.
- 7 It is the general contractors responsibility to ensure all equipment supplied will fit through existing openings and into spaces required. General contractor is to carry all costs associated with modifying existing walls/doors etc. to move equipment into place.
- 8 In order to minimize disruption to the staff on the 2nd floor, work in the 2nd floor office areas is to be completed in 2 stages. Stage 1 is to be the east wing and lobby area and stage 2 is to be the west wing. Stage 2 cannot begin until stage 1 is complete and ready for staff to move in. Work within the 2nd floor office wings and lobby is not to begin until April 6, 2017.
- **9** Patch and repair as required around new thermostats. Paint entire wall where patching is done. 1 coat primer, 2 coast paint over patched areas, 1 coat paint over areas that did not require patching. Allow for 220 sq. m. of painting. Colour to match existing.
- **10** Tender questions:
- Q1 The spec contains section 07 30 00 Exterior Insulated Finish System. However, there does not appear to be any of this work shown on the drawings. Please clarify.
- A1 Remove section 07 30 00 Exterior Insulated finish system.
- Q2 Addendum 1, item 7, deletes 07 52 00 Mod Bituminous Membrane Roofing. However, there is no such section to delete. Please clarify. It appears section 06 08 99 Rough Carpentry for minor works, is in fact a roofing spec. Is this the one to be deleted?
- A2 Remove mistitled section 06 08 99 rough carpentry which appears to be a roofing specification. Specification section 07 52 00 issued with addendum #1 is to be used in it's place.
- 11 Add attached specification section 06 10 00 Rough Carpentry.
- **12** The following are acceptable alternates:
 - .1 VAV boxes
 - a. Basis of design: EH Price
 - b. acceptable equivalent: Krueger LMHS Low Profile
 - .2 Grilles and Diffusers
 - a. Basis of Design: EH Price SCD & 80
 - b. acceptable equivalent: Kruger 1450 (3 & 4 Cone) EGC6
 - .3 Humidifier
 - a. Basis of Design: DriSteem XTP-025
 - b. acceptable equivalent: Neptronic SK320





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- b. acceptable equivalent: Ventex 2215 & 2625
- .5 Fan
- a. Basis of design: Cook SQN-B
- b. acceptable equivalent: Penbarry SX
- .6 Air Handling Unit
 - a. Basis of design: Daikin CAH021GDAC
 - b. acceptable equivalent: Trane
- **13** Revise basis of design for Fan Coil Unit (FCU-1) to Daikin Model CAH010GDAC. The unit shall be capable to fit through a 37" inch wide door frame. Add acceptable equivalent: Trane.
- **14** Chemical feed clarification. The chemical feed requirements shall be as follows:
 - .1 Chemicals, chemical feed equipment, and test equipment to control corrosion in closed heat transfer circulating systems as specified below.
 - .2 Enameled steel or cast iron by-pass feeders sized as shown, 2060 kPa (300 psi) rated and complete with 20 mm (¾") diameter NPT pipe connection tappings, and a screw-on cast iron cap with "Buna N" "O" ring seal.
 - .3 By-pass filter and flow indicator assembly equal to a Shelco Inc. FOS78, 1725 kPa (250 psi) rated replaceable cartridge filter assembly with a stainless steel housing and 20 mm (¾") diameter piping connections, sized for approximately 5% of rated circulating pump flow and complete with a minimum of 6, 20 micron filter cartridges, and a sight flow indicator equal to an Anderson Midwest Model 350SS with 20 mm (¾") diameter piping connections.
 - .4 Piping tee mounting coupon holders, each complete with 25 mm (1") diameter NPT plugs with a minimum of one coupon for copper and one coupon for steel.
 - .5 Chromate free, nitrite/borate type corrosion inhibitor suitable for use with both ferrous and non-ferrous metals.
 - .6 Test kit for measuring inhibitor level.
- **15** On Detail 4 on drawing M14 all control devices shall be wired back to and controlled by the BAS.
- 16 Remove existing cooling tower louvres and add new cooling tower Louvres at cooling tower intake location (L3) and discharge location (L4). New Louvres dimensions shall match existing louvres and shall be approximately 1800mm x 2200mm. Contractor to confirm exact dimensions on-site. Finish to match existing.
- **17** Revise basis of design of cooling tower to Baltimore Aircoil model FXT-74-FM. The cooling shall have a side intake and exhaust as per the existing cooling tower configuration.









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Part 1 GENERAL

1.1 Source Quality Control

.1 Identify lumber and plywood by grade stamp of an agency certified by Canadian Lumber Standards Administration Board and in accordance with applicable CSA standards.

1.2 PRODUCTS

1.3 Lumber Material

- .1 Except as indicated or specified otherwise lumber shall be softwood, S4S, moisture content (MC) not greater than 19% at time of installation, in accordance with following standards:
- .2 CSA 0141-91.
- .3 NLGA Standard Grading Rules for Canadian Lumber.
- .4 Furring, blocking, nailing strips, grounds, rough bucks:
- .5 Use S2S or S4S material.
- .6 Board sizes: C or D species, utility grade.
- .7 Dimension sizes: C or D species, utility grade.
- .8 Plywood, exterior quality, GIS to CSA O121-M1978.

1.4 Fastenings & Hardware

- .1 In accordance with Part 9 of NBC 1977 as supplemented by following requirement except where specific type is indicated.
- .2 Nails, spikes and staples to NBC 9.23.3 except:
- .3 Use common spiral nails and spiral spikes except where indicated otherwise.
- .4 Use hot galvanized finish steel for exterior work, interior high humidity areas and for pressure treated lumber except where indicated otherwise.
- .5 Bolt, nut, washer, screw and pin type fasteners: with hot-dip galvanized finish to CSA G164-M92 for exterior work, interior high humidity areas and for pressure treated lumber.

- .6 Use surface fastenings of following types, except where specific type is indicated.
 - .1 To hollow masonry, plaster and panel surfaces use toggle bolt.
 - .2 To solid masonry and concrete use expansion shield with lag screw, jute fibre or lead plug with wood screw.
 - .3 To structural steel use bolts through drilled hole, or welded stud-bolts or power driven self-drilling screws.
 - .4 Submit alternate fasteners for Engineer's approval.

Part 2 EXECUTION

2.1 Furring & Blocking

- .1 Install furring and blocking as required to space-out and support surface applied materials or other work as indicated.
- .2 Align and plumb faces of furring and blocking to tolerance of 1:600.

2.2 Nailers

- .1 Install wood nailers as indicated.
- .2 Except where indicated otherwise use material at least 40 mm (1-1/2") thick secured with 10 mm (3/8") bolts located within 300 mm (1 ft.) from ends of members and uniformly spaced at 1200 mm (4 ft.) between.
- .3 Countersink bolts where necessary to provide clearance for other work.

END OF SECTION