

Addendum Addenda

No./No
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Project Description / Description de projet M50 Epitaxy Lab- HVAC Replacement and New Exhaust System/M50 Laboratoire Épitaxie amélioration		
Project No./No de projet 5746	Departmental Representative / représentant ministériel Allan Smith	Date 8-Apr-2021
Solicitation No./N° de sollicitation 20-58135		
Notice: 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.		
Nota: 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.		

Item No	Description
1	See attached job showing attendance sheets
2	<p>Question: What is the parapet height at the location of the ladder lead on platforms? If the platform comes with guardrails, then would you still be needing the others guardrails noted?</p> <p>Response: Parapet height at the extremities where the existing ladders come up is approx. 10"-12" high. The extra guardrail at the extensions of platform (near grid 'N') on the east side access were added since the actual step on the roof, is right at the junction of the secondary curb/parapet. This is to secure and provide safety at this tripping hazard. We just match the detail on the west side. The extra guards on the sides, is to ensure Safety overlaps.</p>
3	<p>Question: Must the system be painted yellow, even if our product is either aluminum of galvanised?</p> <p>Response: Safety factory painted yellow is to be maintained.</p>
4	All exhaust duct work being demolished to be treated and disposed of as hazardous material.
5	All lab equipment to be wrapped with 6mm poly and protected by a scaffold system or equivalent approved by department representative.
6	Pick up and transport NRC supplied equipment from storage on Montreal Rd campus to project site. Handle products on site, including uncrating and storage. Protect products from damage, and from exposure to elements. Assemble, install, connect, adjust, and finish products. Provide installation inspections and commissioning.

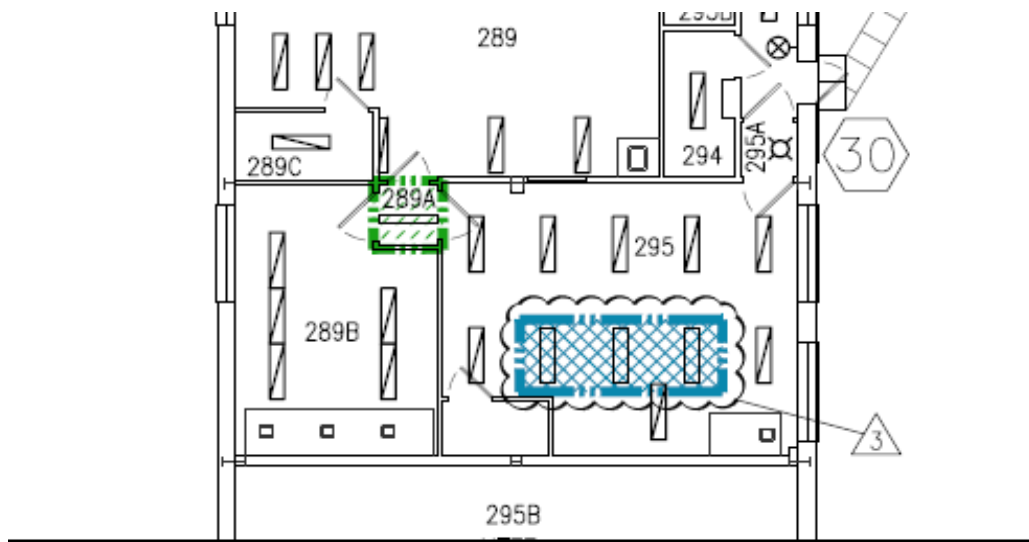
- 7 Proposed alternate: PennBarry SX-B fan; the smallest belt driven fan found in the catalogue is size 100, this fan can't make a low flow of 100cfm at 2.5"wg. The pressure booster 60SQNB fan from Cook is able to make a flow as low as 55cfm at 3in.wg. We can't confirm the PennBarry fan performance at this condition. **Not Accepted.**
- 8 Stainless Steel ductwork welding, where applicable, must be high quality welding. Contractor to provide welder certification prior to fabrication. Departmental representative reserve the right to reject unacceptable welds for quality and appearance request an X-ray verification at the expense of the contractor.
- 9 Proposed alternate: (Vented/Alumavent 3100 Airfoil 6" Blade). The TAMCO damper, model 1500 is an ultra-low leakage damper with silicone seal as standard. It comes with a round to rectangular 304SS transition as standard option from the manufacturer. It has a higher blades pressure limitation. We can't confirm the Alumavent damper as ultra low leakage. **Not Accepted.**
- 10 Drawing M01:
Note 1: Add the following: Contractor is required/responsible to Pick up Rooftop Unit and accessories as required from Building M45 and transport these to M50.

Note 6: Add the following: Refer to Drawing M03 for clearer Detail.
Note 12: Add the following: Design Engineer to be present during Air Balance Survey.
Note 14: Add the following: Door to be removed from Lab Area (295/295A) to allow Contractor to install the Door Grille.
General Mechanical Note: Add the following: Clean ALL Grilles/Diffusers that are to be Re-used or are presently connected onto either of the New Rooftop Units or Exhaust System.
- 11 Drawing M02:
Add the following: Duct connected onto the Bypass Damper is to be cut on 45 degree Angle and be complete with Bird Screen over the inlet.
NRC supplied Fans approximate weight is 1800lbs each.
<http://events.tcf.com/products/centrifugal-fans/baf-sw---airfoil-centrifugal-fan-swsi>
.
NRC supplied Daikin RTU approximate weight is approximately 1409lbs.
<https://www.daikinapplied.com/products/rooftop-systems/rebel>
Under General Note #1: Add the following: Design Engineer to be present during Air Balancing of all Systems and verification of Safety Procedure of the Damper in Lab 295.
- 12 Drawing M03:

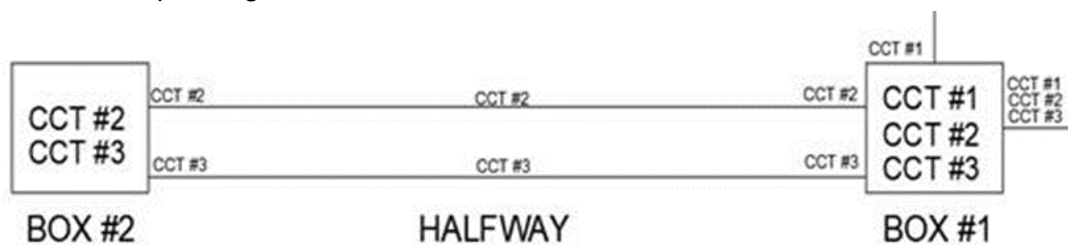
Note 8: Add the following: Nitrogen piping should be installed by Authorized MED GAS Contractor.

Note 9: Delete the note and replace with the following: KF Stainless Steel piping and KF clamps will be provided by NRC and installed by the contractor (piping are cut and welded and ready for installation). Contractor is responsible for the adequate piping supports.

- 13 Drawing M04:
Add the following: Provide Diagonal Unistrut on each set of Vertical Duct supports in addition of the Angle Brackets. Note that this is not a replacement of the Seismic design requirement by a professional Engineer.
- 14 BAS control work addition:
Add the following: Ainsworth to move from Webclient M50PCS04 process cooling system for room 295 to EcoStruxure. Add control work to include the existing second pump in addition to pump 50PDP01. Rename the 2 existing pumps as required. Modify the graphic to include both pumps. After verification of the proper operation of both pumps, modify the sequence of operation to alternate the operation of the pumps on a weekly basis. Contractor to ensure that the existing controller that is shared with the Crius labs operation is not affected during the disconnect of M50PCS04 from the system.
- 15 E01/1, Panel P5, the existing 70A breaker and feeder to 50PAC08 remains as is. Remove wires to heating coil(HTR01) of 50PAC08. E01/2, Provide additional wires, splices and connections from existing feeder to new unit where required.
- 16 Panel P5 is located in room 092 at basement, second floor below panel EL11 at 289.
- 17 Re-ballast and re-lamp existing (3) fluorescent lights to LED in room 295, ballasts(1 per fixture) and lamps(2 per fixture) are supplied by NRC.



- 18 Provide conduit/cable identification:
- Identify all electrical circuits in every junction box and pull box on the box cover with 9mm letter size P-touch label. Identify all electrical circuits on each conduit end where conduit penetrates a wall ,enclosure ,junction box or pull box , and halfway of each conduit run between walls ,enclosures ,junction boxes or pull boxes with 3mm letter size P-touch label..
 - Identify electrical circuit on each cable 250MCM or larger with lamacoid nameplate, or cable 4/0 or smaller with P-touch label, on every splitter, every 30m of each cable run and cable end where cable penetrates a wall, enclosure, junction box or pull box.
 - Sample diagram shown as below:



- 19 Question: Are you able to provide the model and kA rating of the existing panel boards? (P5, EL11, EL11A, L56, L57)
- Response: P5, SQ D I-LINE, 14KA, 600V
- EL11, EL11A,L56,L57: SQ D NQOD, 10KA, 208V

Mandatory Site Visit Attendance / Visite de chantier obligatoire

Project Description / Description de projet		Closing Date / Date de fermeture	
M50 Eptaxy Lab- HVAC Replacement and New Exhaust System/M50 Laboratoire Épitaxie amélioration du system de ventilation et d'évacuation		April 15, 2021 2:00 PM	
Solicitation No./N° de sollicitation	20-58135	Project No./No de projet	5746
Departmental Representative / représentant		Alternate / Substituts	Question
Allan Smith MARK O'Connor		April 5, 2021	April 5, 2021
Signature		1st Showing / 1er visite	2nd Showing / 2ieme visite
		March 22, 2021	March 23, 2021
		9:30 AM	9:30 AM

COMPANY/ENTREPRENEUR	NAME/NOM	SIGNATURE	PHONE/TELEPHONE	EMAIL/COURRIEL
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