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**RETOURNER LES SOUMISSIONS À:**

Bid Receiving - PWGSC / Réception des soumissions -  
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11 Laurier St./11 rue Laurier  
Place du Portage, Phase III  
Core 0B2 / Noyau 0B2  
Gatineau, Québec K1A 0S5

**SOLICITATION AMENDMENT  
MODIFICATION DE L'INVITATION**

The referenced document is hereby revised; unless otherwise indicated, all other terms and conditions of the Solicitation remain the same.

Ce document est par la présente révisé; sauf indication contraire, les modalités de l'invitation demeurent les mêmes.

<b>Title - Sujet</b> LTDLC Garage Rehabilitation		
<b>Solicitation No. - N° de l'invitation</b> EH901-181236/A		<b>Amendment No. - N° modif.</b> 007
<b>Client Reference No. - N° de référence du client</b> 20181236		<b>Date</b> 2017-12-14
<b>GETS Reference No. - N° de référence de SEAG</b> PW-\$\$FG-356-73597		
<b>File No. - N° de dossier</b> fg356.EH901-181236	<b>CCC No./N° CCC - FMS No./N° VME</b>	
<b>Solicitation Closes - L'invitation prend fin</b> <b>at - à 02:00 PM</b> <b>on - le 2017-12-19</b>		<b>Time Zone</b> Fuseau horaire Eastern Standard Time EST
<b>F.O.B. - F.A.B.</b>		
Plant-Usine: <input type="checkbox"/> Destination: <input checked="" type="checkbox"/> Other-Autre: <input type="checkbox"/>		
<b>Address Enquiries to: - Adresser toutes questions à:</b> Steele, Harold		<b>Buyer Id - Id de l'acheteur</b> fg356
<b>Telephone No. - N° de téléphone</b> (873) 469-3596 ( )		<b>FAX No. - N° de FAX</b> (819) 956-8335
<b>Destination - of Goods, Services, and Construction:</b> <b>Destination - des biens, services et construction:</b>		

**Comments - Commentaires**

\*\*\* This document contains a security requirement

\*\*\*

\*\*\* Ce document contient une condition de sécurité

\*\*\*

**Vendor/Firm Name and Address**

Raison sociale et adresse du  
fournisseur/de l'entrepreneur

**Instructions: See Herein**

**Instructions: Voir aux présentes**

<b>Delivery Required - Livraison exigée</b>	<b>Delivery Offered - Livraison proposée</b>
<b>Vendor/Firm Name and Address</b> Raison sociale et adresse du fournisseur/de l'entrepreneur	
<b>Telephone No. - N° de téléphone</b> <b>Faximile No. - N° de télécopieur</b>	
<b>Name and title of person authorized to sign on behalf of Vendor/Firm (type or print)</b> Nom et titre de la personne autorisée à signer au nom du fournisseur/ de l'entrepreneur (taper ou écrire en caractères d'imprimerie)	
<b>Signature</b>	<b>Date</b>

Solicitation No. - N° de l'invitation EH901-181236/A	Amd. No. - N° de la modif. 007	Buyer ID - Id de l'acheteur FG 356
Client Ref. No. - N° de réf. du client	File No. - N° du dossier	CCC No./N° CCC - FMS No./N° VME R.061511.318

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**Amendment 007 is issued for the following reasons:**

- To issue the following Addendum 005, included herein.

**ALL OTHER TERMS AND CONDITIONS REMAIN UNCHANGED**

## **ADDENDUM N°: 05**

**PWGSC Project: R.061511.318**

**The following changes in the bid documents are effective immediately. This addendum will form part of the contract documents.**

### **DRAWINGS**

#### **1 MECHANICAL**

- .1 M-441 – Mechanical Ventilation Schedules – New Layout | Revision 1 | December 13, 2017 | Re-issued with addendum.
  - .1 Fan schedule is modified and new schedule is added

#### **2 ELECTRICAL**

- .1 E-001 – Legend | Revision 1 | December 12, 2017| Re-issued with addendum.
  - .1 Modified DEM item to indicate "Combined Magnetic Starter".
- .2 E-002 – Single Line Diagram | Revision 1 | December 12, 2017| Re-issued with addendum
  - .1 Modify transformer T-01-1 identification, which powers HOT-01-2, renamed T-01-2.
- .3 E-200 – Services – Level A (North) – New Layout | Revision 1 | December 12, 2017| Re-issued with addendum.
  - .1 Added reference to the location of the main electrical, shown on E-241.
- .4 E-231 – Services – Level D (South) – New Layout | Revision 1 | December 12, 2017| Re-issued with addendum.
  - .1 Added identifications 4 and 5.

#### **3 STRUCTURAL**

- 1. Drawing S300 – DETAILS
  - .1 Clarification for Details 1/S300 to 7/S300; as noted on Drawing S300, the amount of new galvanized rebars to be included is 5,000kg.

### **SPECIFICATIONS**

#### **1 ARCHITECTURAL**

- .1 Section 09 00 00 – ROOM FINISH SCHEDULE
  - .1 Replace the ROOM FINISH SCHEDULE issued with the Addendum #4 by the attached revised copy dated December 13 2017. Rooms 1P00, 1P01, 1P41B, 2P01, 2P13, 2P14, 3P01, 3P12, 4P01, 4P11 were added along with other minor revisions.
  - .2 Rooms where the ceiling is noted “EX” under the FINISH column; ceiling are not be painted.

## **ADDENDUM N°: 05**

### **PWGSC Project: R.061511.318**

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## **2 MECHANICAL**

### **.1 Section 23 34 00 – HVAC Fans**

- .1 Delete and replace article 2.3 entirely.**

#### **2.3 FAN ARRAY SYSTEM**

##### **.1 General:**

- .1 Multiple, direct driven, plenum fans constructed per AMCA requirements. All fans shall be selected to deliver the specified airflow quantity at the specified operating Total Static Pressure. Arrangement shall be as indicated.**
- .2 Each fan/motor shall include an 11 gauge, A60 Galvanized steel intake wall, 14 gauge spun steel inlet funnel, and an 11 gauge G90 Galvanized steel motor support plate and structure.**
- .3 The fan intake wall, inlet funnel, and motor support structure shall be coated with an air dried industrial grade alkyd enamel for superior corrosion resistance.**
- .4 Each fan/motor shall be dynamically balanced to meet or exceed AMCA standard 204-96 to meet or exceed an equivalent Grade G55.**
- .5 The fan array unit shall be completely factory-wired, requiring only field wiring of main power wiring to the line side of the main power disconnect switch. The automatic system optimization controller and main electrical panels shall be provided by the unit manufacturer.**
- .6 Each fan/motor assembly shall be removable through a 750 mm wide, free area, access door.**

##### **.2 Motors**

- .1 Motors shall be standard pedestal mounted type, T-frame.**
- .2 Motors shall be premium efficiency, IEEE inverter duty rated with appropriate winding insulation to meet NEMA MG 31, part 1, requirements.**
- .3 Each fan motor shall be wired to an individual VFD. *Each VFD shall be mounted on the fan motor.***

## **ADDENDUM N°: 05**

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### **.3 Accessories**

- .1 All fans in the multiple fan arrays shall be provided with a back flow prevention means that produces no static pressure drop and/or system effect when that fan is enabled. Back draft damper pressure drops that are rated for pressure drop and performance in straight runs of ductwork per AMCA standards will not be accepted as indicating performance for back flow prevention in the multiple fan arrays unless the dampers are installed in accordance with the mounting arrangement under which the dampers are rated by AMCA for pressure loss at a given flow. Manufacturers proposing such dampers shall provide factory witnessed testing of the dampers in the proposed mounting arrangement including the fan(s) being isolated to validate the submitted pressure drops as well as the submitted fan BHP and the submitted air handling unit sound power levels. Any increase in fan system power requirements or sound power levels that exceed those as specified will be corrected at no additional cost to the owner.
  
- .1 Back-draft damper shall be made of heavy duty 6063T5 extruded aluminum frame, .125" wall thickness. Frame shall have galvanized steel braces on all corners. Blades shall be minimum 1.8 mm wall thickness 6063T5 extruded aluminum. Bearings shall be corrosion resistant long life synthetic. Linkage shall be 12 mm tie bar with stainless steel pivot pins.

### **.4 Control**

- .1 Each fan array unit shall contain one or more electrical control panels consisting of a surface mounted NEMA rated, ULC/CSA listed enclosure for the application that shall include all fan motor disconnects and overload protection, one for each fan motor in the multiple fan array, or alternate means for providing motor disconnecting capability along with overload protection as well as a single point electrical connection for the power wiring for the multiple fan array.
  
- .2 Means for monitoring and controlling individual fan and motor status for each of the multiple fans and motors in the array shall be provided. There shall be a controller provided as an integral part of the fan system electrical panel that automatically reconfigures the number of active fans in the multiple fan array to achieve substantially peak operating efficiency for the fan array at any fan system operating point.

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- .3 System optimization shall be achieved by enabling and automatically disabling fans, in the active array while the controller varies the enabled fan operating speeds and number of enabled fans to achieve substantially peak efficiency at the concurrent system flow and pressure demands of the system.
- .4 Each fan and motor assembly shall be provided with individual fan speed control to operate at the required speed as dictated by the ***fan array controller*** communicating with all fan/motor assemblies in the array via an internal communication network.

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- .5 The fan array controller shall also be provided with an interface that is compatible with the building automation system (BACnet BTL certified) and which shall allow remote monitoring and/or control of the multiple fan array being interfaced with. The multiple fan array control panel(s) shall be provided with means to indicate fan and motor status, operating mode, system flow rate and fan total static pressure, as well as connected and required HP at the current system flow and pressure conditions. Status shall be displayed at the unit control panel and at the building automation system.
- .6 ***All wiring (controls, communication, power) between individual fans and the fan array controller shall be the responsibility of the manufacturer. The fan array controller shall be mounted on a wall in the fan's room.***
- .7 Redundancy in the variable frequency drives shall be included, along with all necessary controls and devices to assure that in a fault condition for any drive, whether internal or external to the drive, the fan array shall handle ***92.5% of the full flow and corresponding pressure*** at the required fan operating speed at the time of the fault with no interruption in flow to the system affected. The system shall be provided with internal ground fault protection such that a ground fault in any of the motor circuits does not cause a system shutdown.
- .8 Each fan array controller shall be provided with a fire alarm contact that will start/stop the system at a specified air flow for smoke management on a command from the fire alarm panel.
- .9 Supply air system controllers shall be provided with a fire alarm contact that will stop the system on a command from the fire alarm panel when smoke is detected.

**ADDENDUM N°: 05**

**PWGSC Project: R.061511.318**

**The following changes in the bid documents are effective immediately. This addendum will form part of the contract documents.**

.2 Section 25 05 01 – EMCS: General Requirements

.1 Delete and replace paragraph 1.3.1 entirely.

.1 Hire the services of Johnson Controls or its authorized representative to complete the work of all EMCS sections.

***Johnson Controls' representative is:***

***Mohammad Habbal***

***[Mohammad.habbal@jci.com](mailto:Mohammad.habbal@jci.com)***

***(613) 282-9594***

**3 ELECTRICAL**

.3 Section 26 05 34 – Conduits, Conduit Fastenings and Conduit Fittings

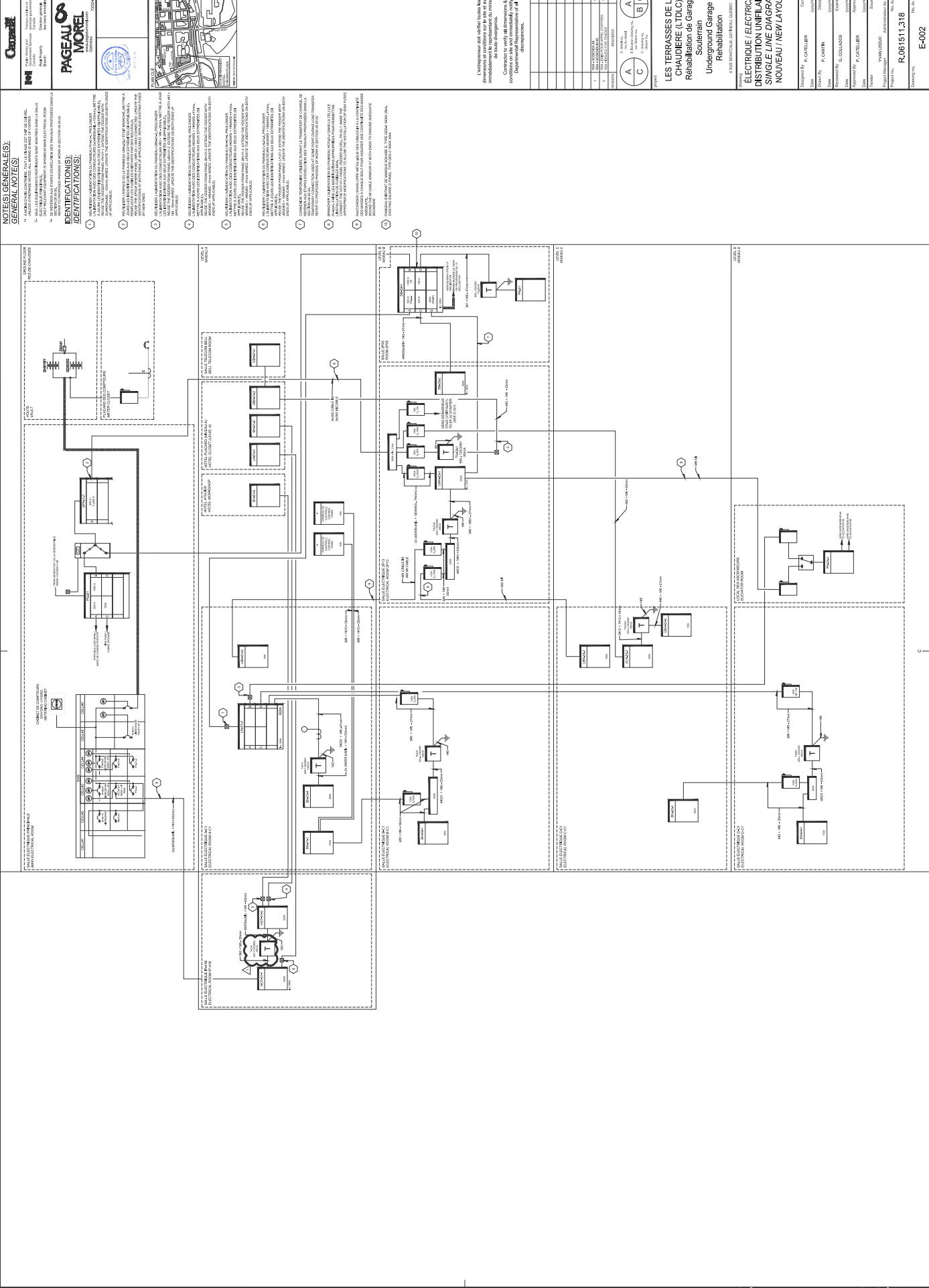
.1 Delete article 2.2.3 entirely.

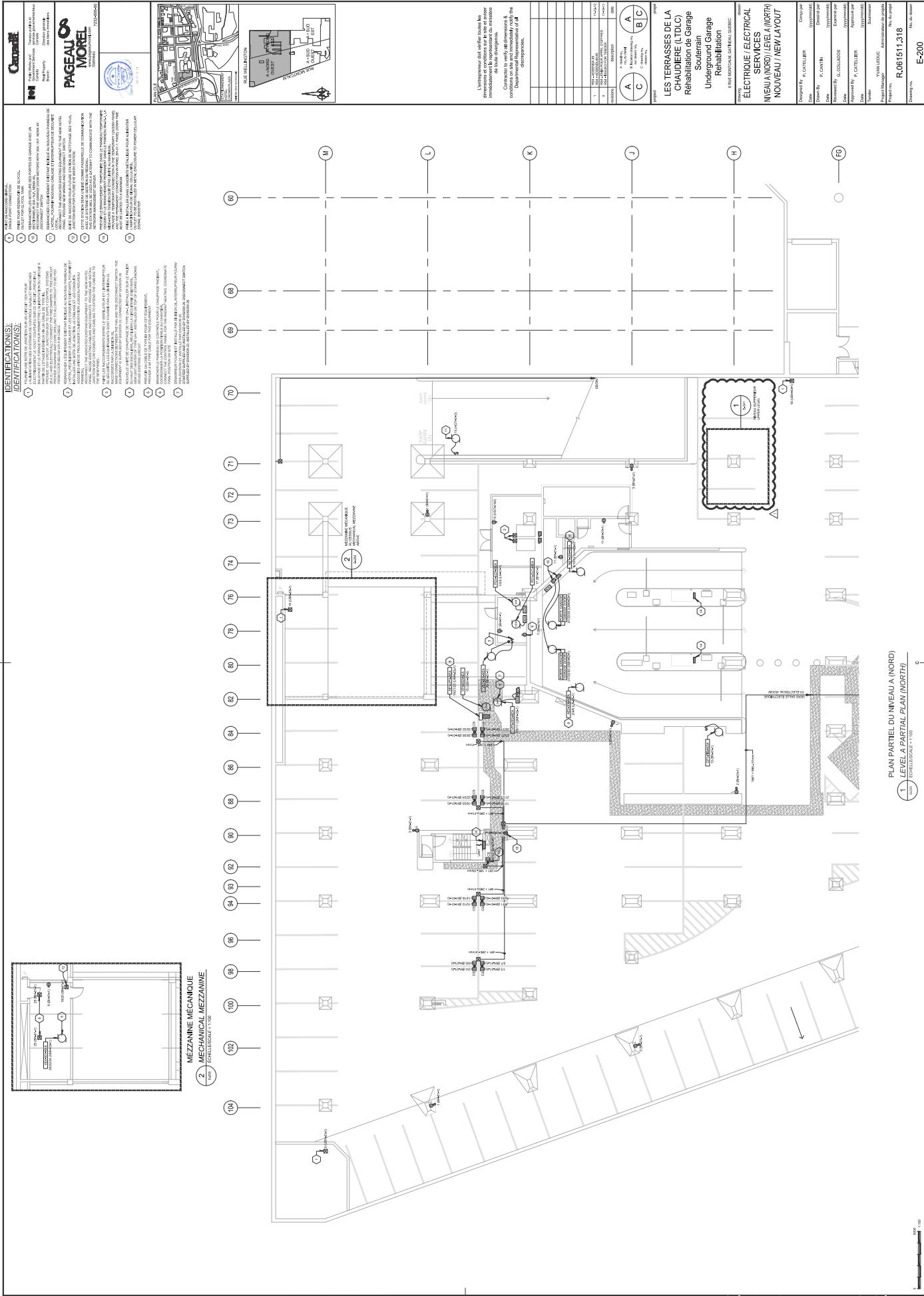
.2 Delete article 3.2.5 entirely.

**END OF ADDENDUM**











0116-Room Finish Schedule										
ORIGINAL ROOM #	ON SITE ROOM #	ORIGINAL ROOM NAME	ON SITE ROOM NAME (DOOR LABEL)	FLOOR		BASE		WALLS		CEILING
				FLOOR MAT'L	FINISH	BASE MAT'L	HEIGHT	MAT'L	FINISH	
1P00		BICYCLE PARKING		EX/CONC	F			EX CONC/ EX CONC BLK	P1	EX/CONC P1 EX
1P01		PARKING LEVEL A		EX/CONC	F			EX CONC/ EX CONC BLK	P1	EX/CONC P1 EX
1P02		STAIR C		EX/CONC	F1	R	100	EX/CONC BLK	P1	EX/CONC P1 EX
1P03		STAIR B VESTIBULE	HOTEL	EX/CONC	F1	R	100	EX/CONC BLK	P1	EX/CONC P1 EX
1P03		STAIR B		EX/CONC	F1	R	100	EX/CONC	P1	EX/CONC P1 EX
1P05		EX ELEVATOR MACHINE ROOM								INTERIOR OF ROOM IS NOT PART OF REHABILITATION WORK
1P30		ELEV LOBBY		EX/CONC	CPT	R	100	EX/B & GWB	EX/B & P1 GWB	P1 3400
1P37	P/1B	STAIR A VESTIBULE		EX/CONC	F1	R	100	EX/CONC BLK	P1	EX/CONC P1 EX
1P37	P/1B	STAIR A		EX/CONC	F1	R	100	EX/CONC BLK & CONC EX	P1	EX/CONC P1 EX
1P38	A/C2	VENTILATION ROOM		EX/CONC	F1			EX/CONC BLK	EX	Provide new floor membrane. Concrete/concrete block walls and ceiling to remain as is.
1P41	A/C1	ELECTRICAL		EX/CONC	F1			EX/CONC BLK	EX	Provide new floor membrane. Concrete walls and ceiling to remain as is.
1P41B		ELECTRICAL		EX/CONC	F1			EX/NEW CONC BLK	P1	EX/CONC P1 EX
1P43		TRANSFORMER ROOM	ELECTRICAL	EX/CONC	F1			EX CONC/ EX CONC BLK / EX GWB	P1	EX/CONC P1 EX
1P43B		STORAGE		EX/CONC	F1			EX CONC/ EX CONC BLK / EX GWB	P1	Patch and make good existing GWB walls prior to new paint finish.
1P44		TRANSFORMER ROOM		EX/CONC	F1			EX CONC/ CONC BLK	P1	EX/CONC P1 EX
1P45	A/C6	TRANSFORMER ROOM		EX/CONC	F1			EX CONC/ CONC BLK	EX	Provide new floor membrane. Concrete walls and ceiling to remain as is.
1P46		CONTROL ROOM	INDIGO ROOMS	-	-			-	-	- NOT PART OF REHABILITATION WORK

**ROOM SCHEDULE**

MECH MEZZ	MECH FAN ROOM	EX/CONC	EX	EX/CONC/ CONC BLK	EX	EX/CONC	EX	EX	No new finishes required in this area.
2P00	LOCK-UP AREA	EX/CONC	F1	EX CONC/ EX CHAIN LINK FENCE	P4	EX/CONC	P1	EX	Chain link fence to remain as is. Existing concrete wall to receive new P4 finish as indicated on finish plans.
2P01	PARKING LEVEL B	EX/CONC	F	EX CONC/ EX CONC BLK	P1	EX/CONC	P1	EX	
2P03	STAIR C VESTIBULE	EX/CONC	F1	R	100	EX/CONC BLK	P1	EX/CONC	P1
2P03	STAIR C	EX/CONC	F1	R	100	EX/CONC	P1	EX/CONC	P1
2P04	STAIR B VESTIBULE	EX/CONC	F1	R	100	EX/CONC BLK	P1	EX/CONC	P1
2P04	STAIR B	EX/CONC	F1	R	100	EX/CONC	P1	EX/CONC	P1
2P05	B/C1	STORAGE	EX/CONC	F1		EX CONC / EX CONC BLK	P1	EX/CONC	P1
2P05a	ELECTRICAL	EX/CONC	F1			EX CONC BLK	P1	EX/CONC	P1
2P06	STAIR A VESTIBULE	EX/CONC	F1	R	100	EX/CONC BLK	P1	EX/CONC	P1
2P06	STAIR A	EX/CONC	F1	R	100	EX/CONC	P1	EX/CONC	P1
2P07	ELEV LOBBY	EX/CONC	CPT	R	100	EX/B & GWB	EX/B & P1	GWB	P1
2P10	B/C1	ELECTRICAL	EX/CONC	F1		EX/CONC BLK	P1	EX/CONC	P1
2P11	AIR EQUIP	EX/CONC	EX			EX/CONC BLK	EX	EX/CONC	EX
2P13	ELECTRICAL	EX/CONC	EX			EX/CONC BLK	EX	EX/CONC	EX
2P14	CAMERA	EX/CONC	F1			EX/NEW CONC BLK	P1	EX/CONC	P1
3P01	PARKING LEVEL C	EX/CONC	F			EX CONC/ EX CONC BLK	P1	EX/CONC	P1
3P02	MECHANICAL	FAN ROOM	EX/CONC	F1		EX/CONC	P1	EX/CONC	P1
3P03	STAIR C VESTIBULE	EX/CONC	F1			EX/CONC BLK	P1	EX/CONC	P1
3P03	STAIR C	EX/CONC	F1	R	100	EX/CONC	P1	EX/CONC	P1
3P04	STAIR B VESTIBULE	EX/CONC	F1	R	100	EX/CONC BLK	P1	EX/CONC	P1

**ROOM SCHEDULE**

3P04		STAIR B		EX/CONC	F1	R	100	EX/CONC	P1	EX/CONC	P1	EX
3P05	CC2	STORAGE		EX/CONC	F1			EX/CONC/ CONC BLK	P1	EX/CONC	P1	EX
3P06		STAIR A VESTIBULE		EX/CONC	F1	R	100	EX/CONC BLK	P1	EX/CONC	P1	EX
3P06		STAIR A		EX/CONC	F1	R	100	EX/CONC	P1	EX/CONC	P1	EX
3P07		ELEV LOBBY		EX/CONC	CPT	R	100	EX/B & G/WB EX/B & P1	G/WB	P1	2300	
3P09	CC3	VENTILATION ROOM		EX/CONC	F1			EX/CONC	EX	EX/CONC	EX	EX
3P10	CC1	ELECTRICAL		EX/CONC	F1			EX/CONC BLK	EX	EX/CONC	EX	EX
2P11		AIR EQUIP.		EX/CONC	EX			EX/CONC/ CONC BLK	EX	EX/CONC	EX	EX
3P12		ELECTRICAL		EX/CONC	EX			EX/CONC/ CONC BLK	EX	EX/CONC	EX	EX
4P01		PARKING LEVEL D		EX/CONC	F			EX CONC/EX CONC BLK	P1	EX/CONC	P1	EX
4P02	D/C2	STORAGE		EX/CONC	F5			EX/CONC BLK	P1	EX/CONC	P1	EX
4P03		STAIR C VESTIBULE		EX/CONC	F1	R	100	EX/CONC BLK	P1	EX/CONC	P1	EX
4P03		STAIR C		EX/CONC	F1	R	100	EX/CONC	P1	EX/CONC	P1	EX
4P04		STAIR B VESTIBULE		EX/CONC	F1	R	100	EX/CONC BLK	P1	EX/CONC	P1	EX
4P04		STAIR B		EX/CONC	F1	R	100	EX/CONC	P1	EX/CONC	P1	EX
4P06		ELEV LOBBY		EX/CONC	CPT	R	100	EX/B & G/WB EX/B & P1	G/WB	P1	2300	
4P07		STAIR A VESTIBULE		EX/CONC	F1	R	100	EX/CONC BLK	P1	EX/CONC	P1	EX
4P07		STAIR A		EX/CONC	F1	R	100	EX/CONC	P1	EX/CONC	P1	EX
4P08		ELEV MACHINE ROOM		EX/CONC				EX/CONC		EX/CONC		No new finishes required in this area.
4P09		STORAGE		EX/CONC	F5			EX/CONC BLK	P1	EX/CONC	P1	EX
4P10	D/C1	ELECTRICAL		EX/CONC	F1			EX/CONC BLK	EX	EX/CONC	EX	EX
4P11		VENTILATION ROOM		EX/CONC	EX			EX/CONC/ CONC BLK	EX	EX/CONC	EX	EX

**GENERAL NOTES:**

1. All finishes affected by the work of this contract to be repaired to blend with adjacent existing.
2. All apparent electrical and mechanical equipment within the scope of the project are to be painted.
3. All finishes that are damaged/affected during demolition are to be repaired or replaced as per existing.

**LEGEND:**

CONC BLK	Concrete Block
CONC	Concrete
CPT	Carpet Tile
GWB	Gypsum Board
P	Paint
B	Brick
ACT	Acoustic Ceiling Tile
EX	Existing
F	Floor coating
R	Rubber Base