

Addendum/Addenda

No./N° 2

Project Description / Description de projet M19 Stores Amalgamatim Phase 1		
Solicitation No./ N° de sollicitation 17-22098	Project No./N° de projet 5463	W.O. No./N° d'ordre de travail A1-009909/99
Departmental Representative / Représentant Ministériel Janik Leroux	Date November 29, 2017	
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 d'offres; toutes les conditions énoncées doivent être lues et appliquées en conjonction avec les plans et les devis originaux.

GENERAL

1. Job Showing sign in sheet is attached.
2. Questions from bidders:
 - a. Do you have specs for the new 25mm window blinds and valance?
Answer: Refer to Addendum #2
 - b. On drawing 5463-A01 construction note 1 is shown at door 318B which states "Remove existing door, frame to remain". On drawing 5463-A03 in the Door Schedule 3/A04 it indicates door 318B as existing to be painted and to receive graphic window film. Please advise if door is to be removed as per note 1 or to remain as noted in door schedule.
Answer: notes and arrows have been revised on drawing 5463-A01, refer to Addendum #2

ARCHITECTURAL

1. Drawings:

Reference drawing 5463-A01

 - a. Replace original tender drawing with attached Addendum #2 drawing 5463-A01.
 - i. Changes from tender issue have been clouded.
2. Specifications:
 - a. Add attached Section 12 21 12 – Horizontal Louver Blinds



MECHANICAL

1. Drawings:

Reference drawings 5463-M01, 5463-M02 and 5463-M03

- a. Replace original tender drawings with attached Addendum #2 drawings:
 - i. 5463-M01,
 - ii. 5463-M02
 - iii. 5463-M03

ELECTRICAL

1. Drawings:

Reference Drawing 5463-E01

- a. Replace original tender drawing with attached Addendum #2 drawing 5463-E01.
 - i. Changes from tender issue have been clouded.

2. Specifications:

Reference section 26 27 26 Wiring Devices

Replace Items 2.1.1 (LED Dimming Switches) and 2.1.2 (LED Occupancy Sensor (Ceiling Mounted)) with the following:

1. LED Switches:

- .1 Wireless connection to occupancy sensor.
- .2 Push button type, colour white unless otherwise noted.
- .3 Multi-location switching.
- .4 Standard of acceptance:
 - .1 Lutron Maestro: MRF2-6ANS-WH & MA-AS-WH companion switch or equal approved by NRC Departmental Representative.

2. Occupancy Sensor (Ceiling Mounted):

- .1 360 deg. Ceiling mounted occupancy/vacancy wireless sensor.
- .2 Auto-on/auto-off or manual on /auto-off.
- .3 Compatible with wireless switch.
- .4 Set to manual on / auto-off
- .5 Standard of acceptance:
 - .1 Lutron LRF2-OCR2B-P-WH or equivalent approved by NRC Departmental Representative.

END OF ADDENDUM

ISSUED NOVEMBER 29, 2017

Mandatory Site Visit Attendance / Visite de chantier obligatoire

Project Description / Description de projet		M-19 Stores Almagamation Phase 1		Closing Date		December 19, 2017		Closing time		2:00 PM			
Solicitation No./N° de sollicitation		17-22098		Project No./No de projet		1st Showing		November 22, 2017		Showing Time		9:00 AM	
Departmental Representative / représentant		Janik Leroux		Signature		Alternate/Questions deadline		December 5, 2017		Addendum Deadline		December 12/ 12:00	
						2nd Showing		November 24, 2017					

COMPANY/COMPAGNIE	NAME/NOM	SIGNATURE	PHONE/TELEPHONE	FAX/TELECOPIEUR	EMAIL/COURRIEL
Ranger-Desryns CONST.	CHRIS JENNINGS		413-297-9258		CHRIS@RANGERDESRYNS.COM
F. Pottier CONST.	YVES POTTIER		613-790-5435		Bids @ tpottier.ca
JUNE CONSTRUCTION	MARIE BEAUCHE		615-721-1145		JUNE@JUNE.CON
JP General Construction	Carole Lapierre		613-349-1311		Carole@JPGeneralConst.ca
			Nov 24 / 17		
Down Developments	ANDY LIBBOS		613-282-1285		ESTIMATE@DOWNDEV.COM
M3 FORD CONST.	MARC SEZEMIK		613-742-8338		MARC@M3FORD.COM
LCC	Mylene Grenier		819-598-3264		Mylene@LCCPARADISE.COM
BUTICON	WILE AMY/HT		613-383-0505		AMY@HT@BUTICON.COM
ARCO	DEAN SKIDNICK		613-229-5864		dean.skidnick@arcs.com
DMA	MARCEZ GOLEY		819-772-4422		RECEPTION@DMACONSTRUCTION.COM
Premium Construction	Sohbi Kalsi		613-301-6005		Premium.Construction@Rogers.com
Amor Construction	MIKE PETERS		613-217-0049		mike.peters@amorc.ca
FIRECON CONST.	BRAD DOROSZKIEWICZ		613-445-2944		ESTIMATE@FIRECON.CA
ARCO	ANDRÉ-ALEXANDRE HONEY		819-244-1697		m.bclair@ARCO.CA
ARCO	CHRIS A. CHAT		613-558-3517		Chris@honeyconstruction.ca
ARCO	MIKE SHIRLING		613-805-4599		MIKE.SHIRLING@DNI-IND.COM
ARCO	MEDIA SHABAN		613-265-6632		S.C. CANADA @ YAHOO.CA

General Contractors & Ass. Inc. National Research Council Canada Conseil national de recherches Canada

613-809-0813

Canada

smesurier@raymondgenesal.ca

Part 1 General

1.1 RELATED SECTIONS

- .1 Section 09 11 10 - Metal Stud System.

1.2 REFERENCES

- .1 American Society for Testing and Materials (ASTM)
- .2 Environmental Choice Program (ECP)
 - .1 ECP-66-[94], Office Furniture.

1.3 SHOP DRAWINGS

- .1 Submit shop drawings in accordance with Section 01 10 00 – General Conditions
- .2 Indicate dimensions in relation to window jambs, operator details, head and sill anchorage details, hardware and accessories details.

1.4 SAMPLES

- .1 Submit samples in accordance with Section 01 10 00 – General Conditions.
- .2 Submit one representative working sample of each type horizontal louvre.
- .3 Submit duplicate samples of manufacturer's standard colours for selection by Departmental Representative
- .4 After approval samples will be returned for incorporation into the Work.Products

1.5 MATERIALS AND FABRICATION

- .1 Slats: 25 mm wide, 0.15mm thick, with rounded corners and rough edges removed.
 - .1 Aluminum alloy, corrosion resistant spring-tempered.
 - .2 Colour: white
- .2 Ladders: braided polyester yarn designed for full tilting action while retaining the same level and position of each slat. Ladders spaced not more than 150 mm from end of slats and 550 mm o.c.
- .3 Headrails: one piece steel channel with rolled edges, formed to provide sufficient strength to support blind without sagging, twisting or distorting. Metal minimum 0.50 mm thick.
- .4 Bottom rails: lock seam tubular steel section. 0.36 mm thick.
- .5 Bottom rail end caps: soft moulded plastic fitted snugly over ends of rails. Colour to match slats.
- .6 Tiltrods: solid steel.
- .7 Tassels: soft moulded plastic. Colour to match slats.

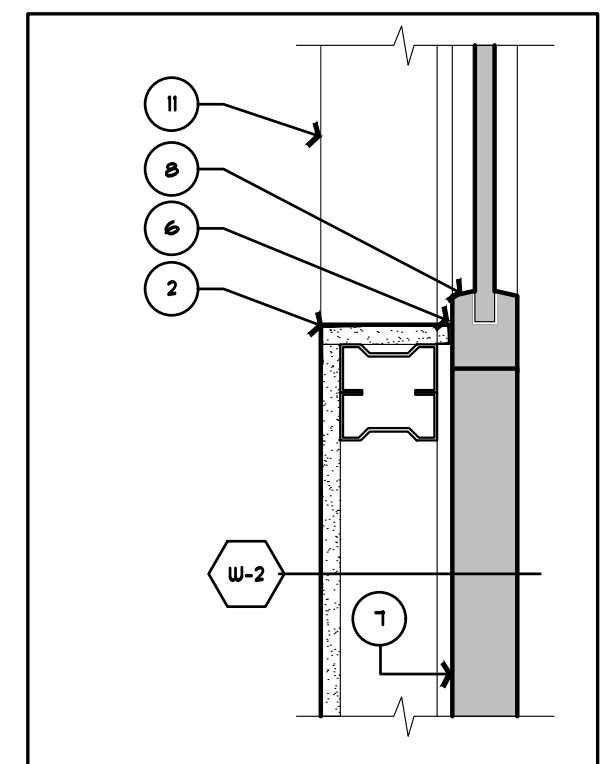
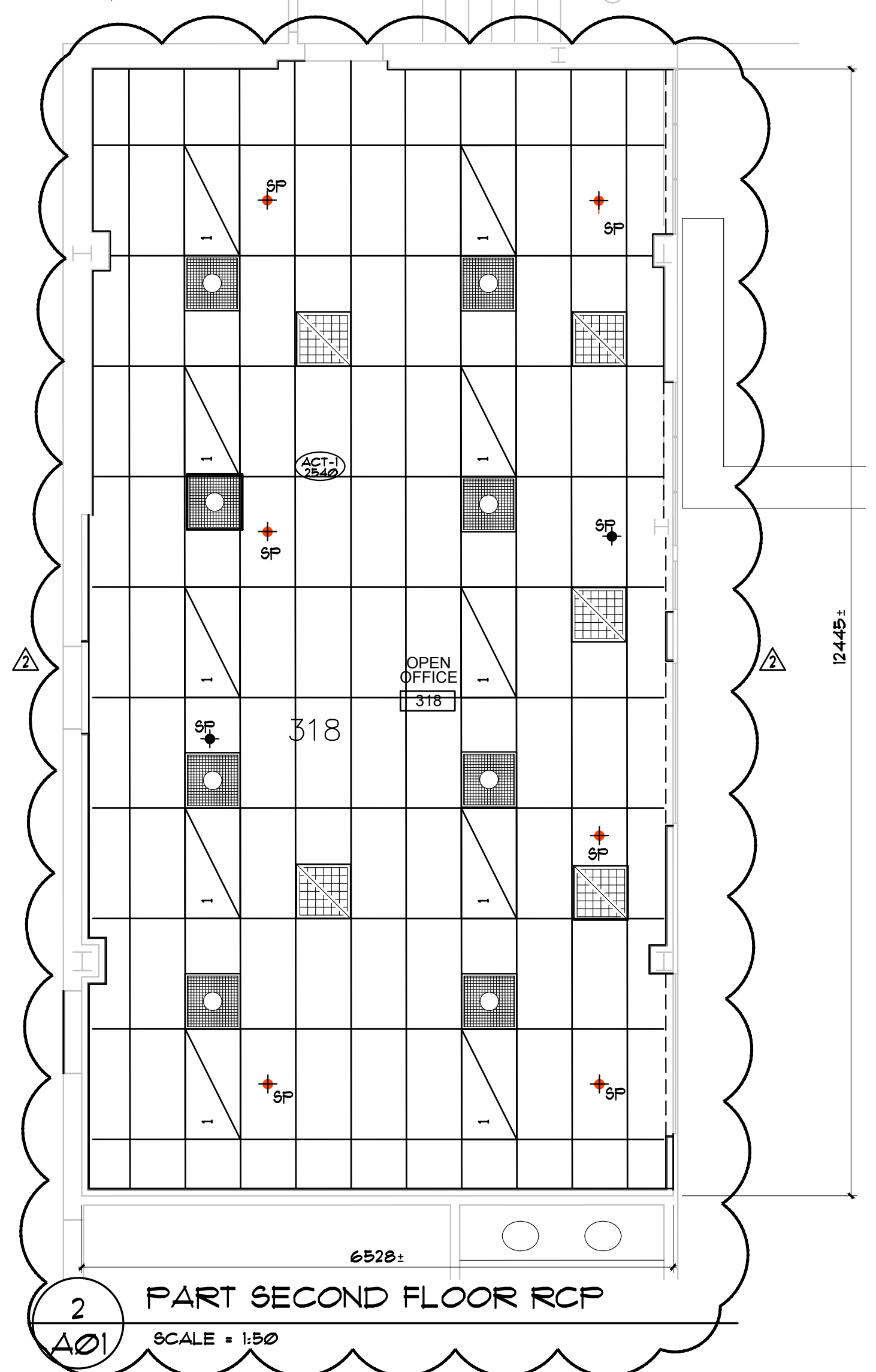
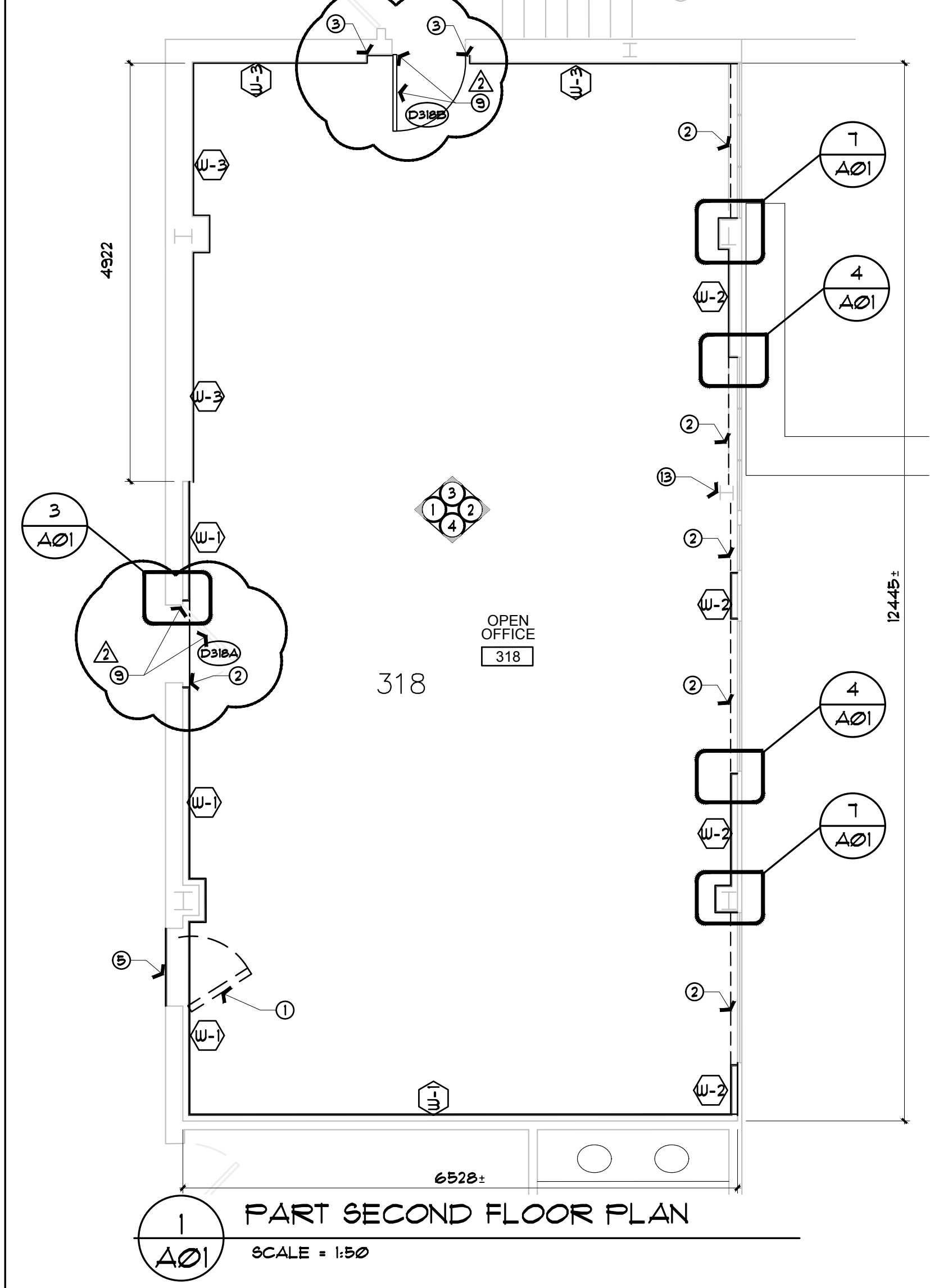
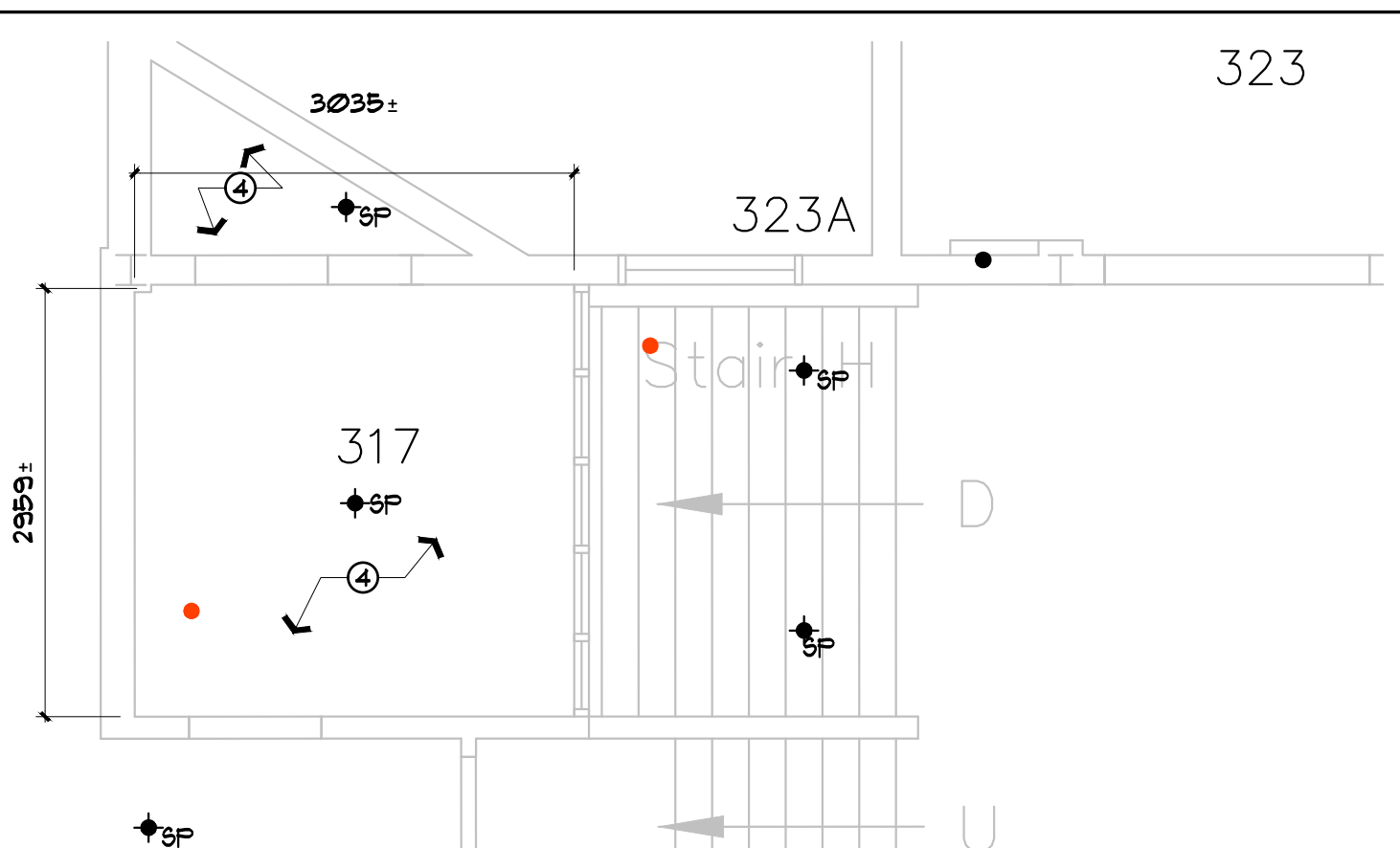
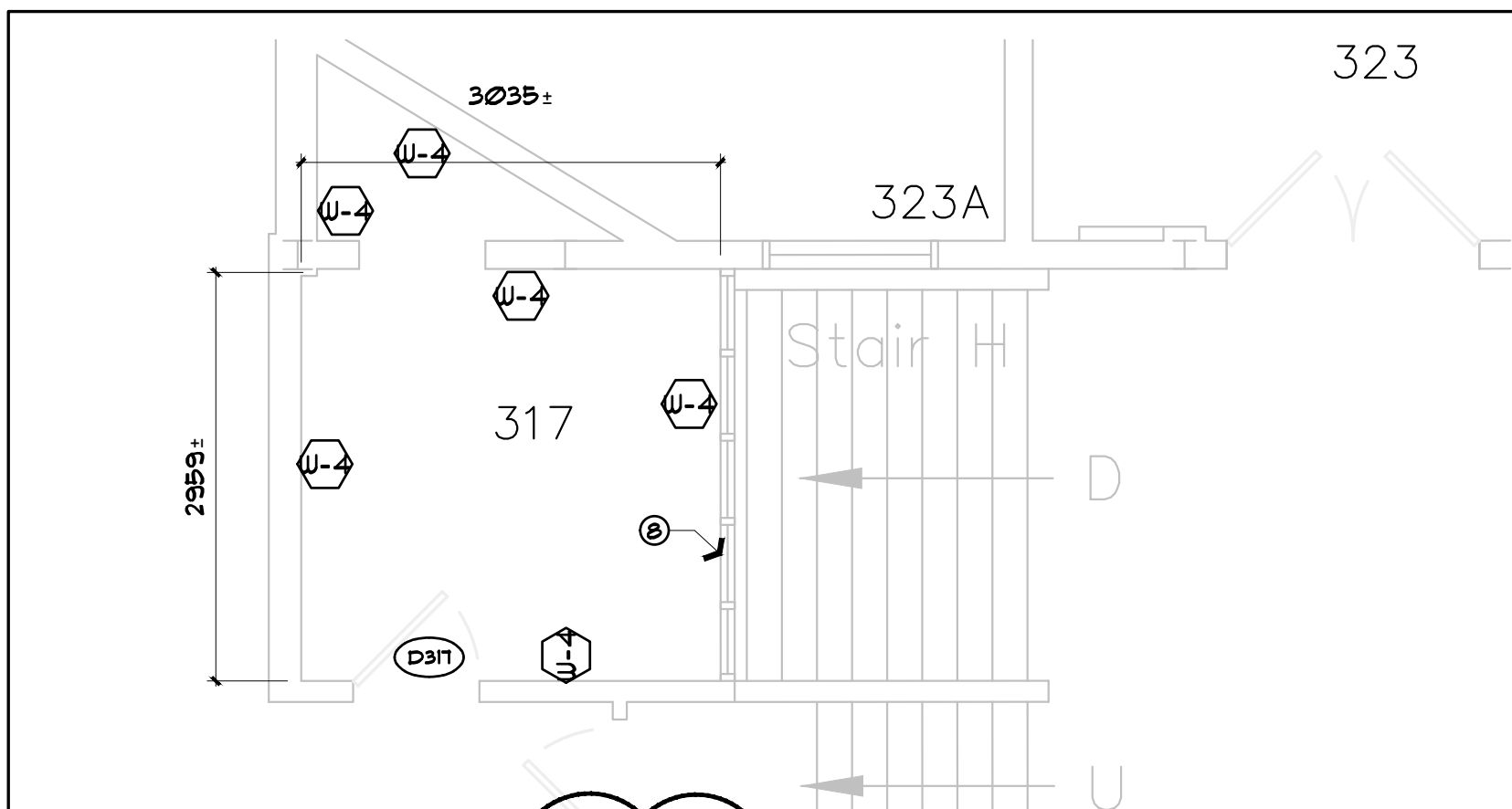
- .8 Pulleys: designed to permit ease of operation with minimum wear to cord.
- .9 Valance: same material colour and finish as slats.
- .10 Tilters: fully enclosed and lubricated, with positively locked to drum to prevent slippage and ensure accurate timing. Use anti-friction materials for worm and gear.
- .11 Cordlocks: designed to provide smooth operation with feature to prevent accidental dropping of blinds.
- .12 Ladder cap: designed to provide sufficient retention when snapped onto bottom rail to hold ladders in proper position.
- .13 Installation brackets: end and centre type complete with safety locking caps to secure headrail and valance.
- .14 Lift cords: 1.98 mm diameter, minimum tensile strength 689 kPa., complete with tassels.
- .15 Tilter controls: transparent wand, minimum 8 mm diameter.

Part 2 Execution

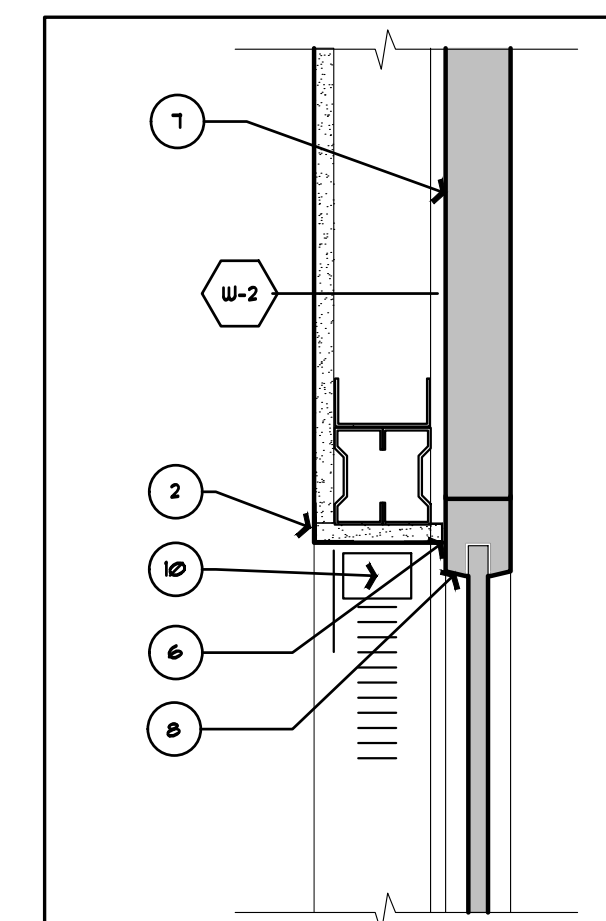
2.1 INSTALLATION

- .1 Include centre brackets where necessary to prevent deflection of headrail.
- .2 Adjust to provide for operation without binding.
- .3 Use non corrosive metal fasteners for installation, concealed in final assembly.

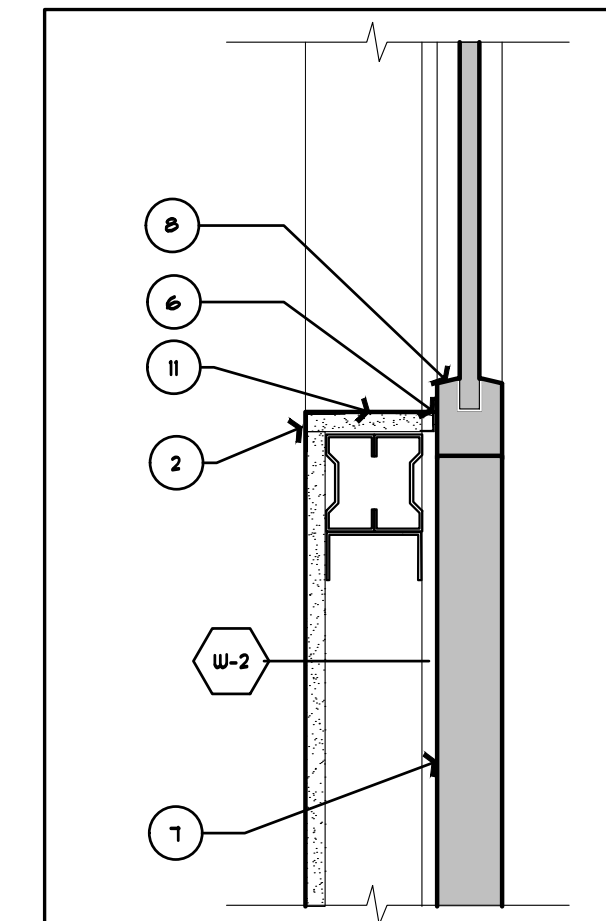
END OF SECTION



4 TYP. WINDOW JAMB DETAIL
SCALE = 1:5



5 TYP. WINDOW HEAD DETAIL
SCALE = 1:5



6 TYP. WINDOW SILL DETAIL
SCALE = 1:5

CEILING LEGEND

	A. NEW ACOUSTIC CEILING PANEL, 610mm x 1220mm x 19mm, COLOUR WHITE. REFER TO SPECIFICATION.
	B. SUSPENSION SYSTEMS REFER TO SPECIFICATION, WHITE. CEILING HEIGHT: TO MATCH EXISTING.

NOTE: INCLUDE ALL TEES, TRIM, TILES AND HANGARS FOR A COMPLETE INSTALLATION.

*****NOTE:*****

- EXISTING ROOF DECK IS AN ACM PRECAST CEMENT DECK.
- DO NOT MECHANICALLY FASTEN TO OR CUT INTO DECK.
- SUPPORTS MUST BE FROM EXISTING STRUCTURAL STEEL OR EXISTING SUSPENDED CEILING WIRE.

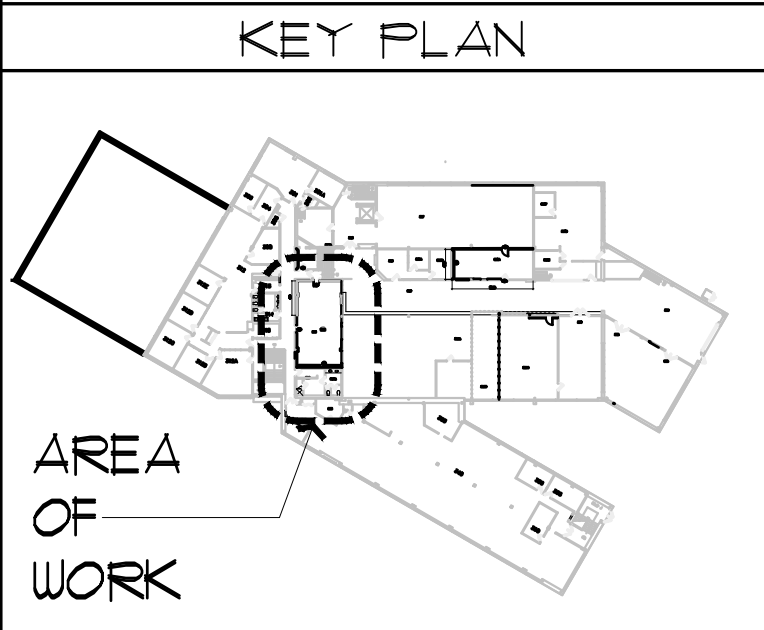
	NEW 610X1220 LIGHT FIXTURE, REFER TO ELECTRICAL.
	SPRINKLER HEAD, REFER TO MECHANICAL.
	NEW 610' x 610' SUPPLY AIR DIFFUSER, REFER TO MECHANICAL.
	NEW 610' x 610' RETURN AIR GRILLE, REFER TO MECHANICAL.

National Research Council Canada
Administrative Services and Property Management Branch

Conseil national de recherches Canada
Division des services administratifs et gestion de l'immobilier

NRC-CNRC

- ### GENERAL NOTES
- CONTRACTORS TO CHECK AND VERIFY ALL DIMENSIONS ON SITE PRIOR TO DEMOLITION OR CONSTRUCTION AND REPORT ANY ERRORS OR OMISSIONS TO DEPARTMENTAL REPRESENTATIVE.
 - CONTRACTORS MUST VISIT THE SITE & FULLY FAMILIARIZE THEMSELVES WITH THE SCOPE OF THE WORK.
 - PREVENT THE SPREAD OF DUST & DEBRIS BEYOND THE WORK AREA AND CLEAN ALL SURFACES AT COMPLETION.
 - MAKE GOOD ALL SURFACES AFFECTED BY THIS WORK.
 - COORDINATE ALL SHUTDOWNS WITH THE DEPARTMENTAL REPRESENTATIVE.
 - PROVIDE ALL LABOUR AND MATERIAL REQUIRED TO FORM A COMPLETE, FUNCTIONAL SYSTEM AS DESCRIBED ON DRAWINGS.



No.	Date	Revision	By:	For:
2	21-11-2017	ISSUED FOR ADDENDUM #2	SWH	
1	16-11-2017	ISSUED FOR TENDER	SWH	

Date Printed DD MM YYYY Date imprimée

o Verify all dimensions and site conditions and be responsible for same
o Vérifier toutes les dimensions et l'état des lieux et en assumer la responsabilité

A Detail no. No. du détail		A	
B Location drawing no. sur dessin no.		B C	
C Drawing no. dessin no.		C	

project NRC M-19, STORES AMALGAMATION PROJECT PHASE 2. projet

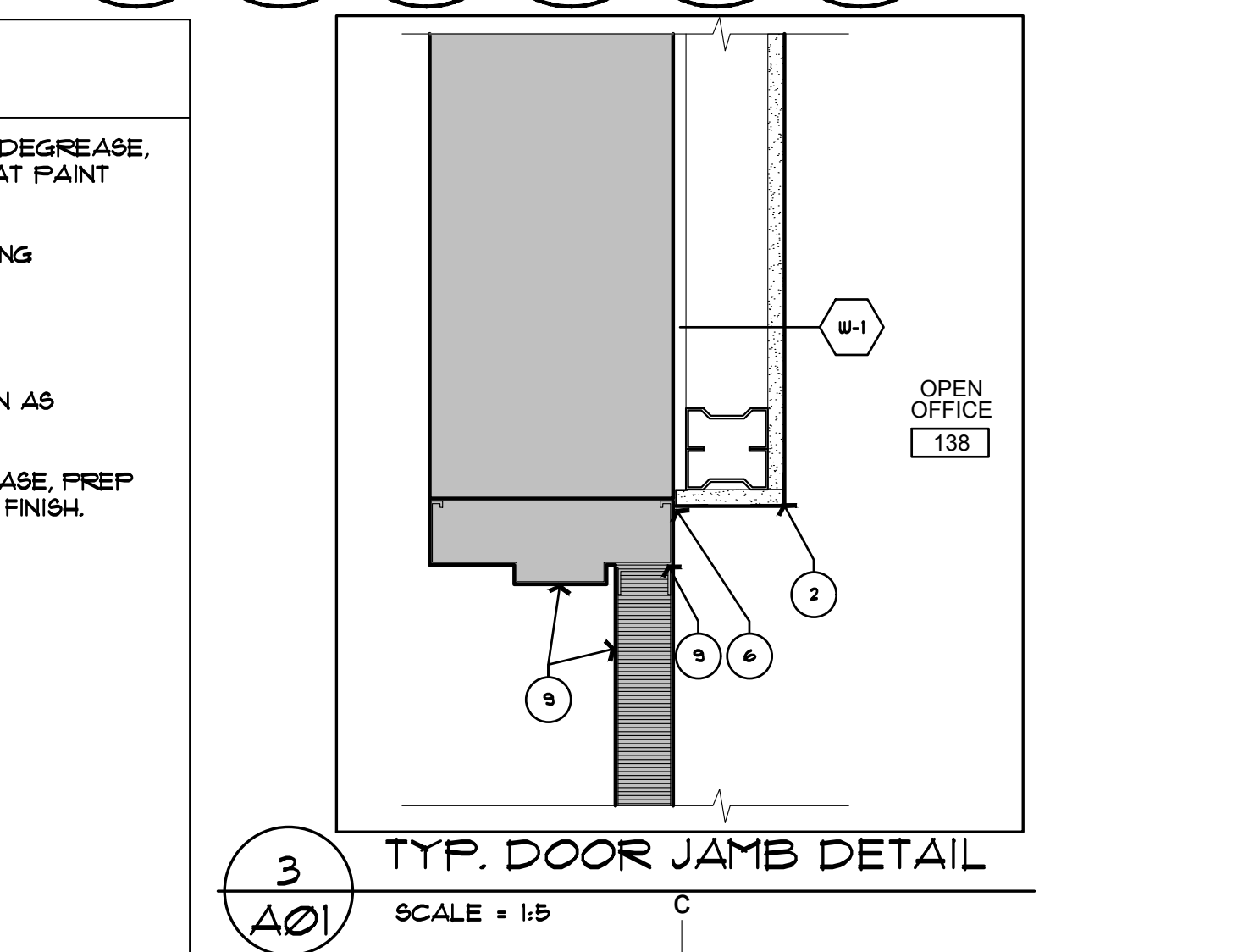
MONTREAL ROAD CAMPUS

drawing PART SECOND FLOOR, RCP PLANS AND DETAILS dessin

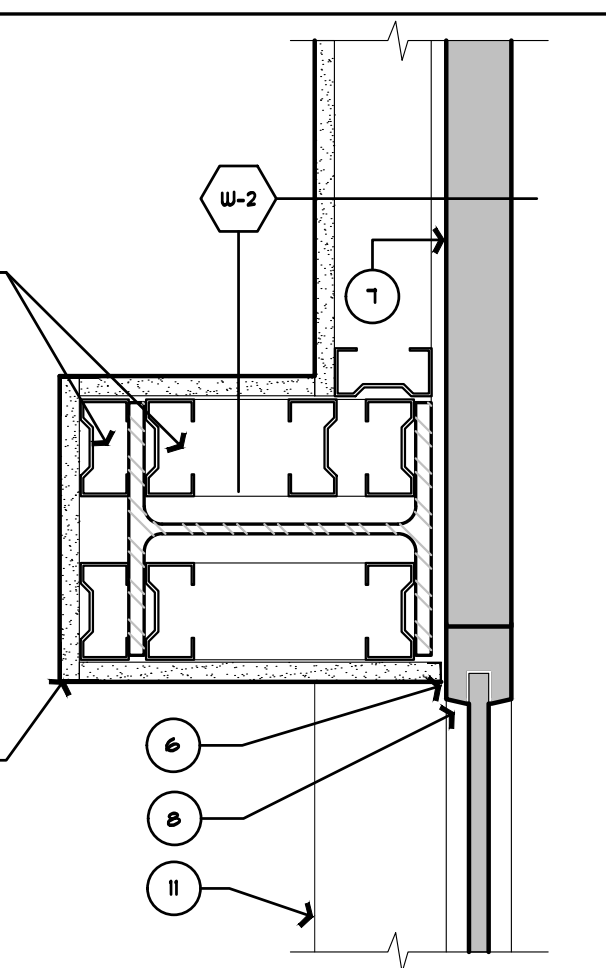
designed SWH	conçu	date NOV. 2017	date
drawn SWH	dessiné	scale AS NOTED	échelle
checked JCW	vérifié	sheet 2 of/de 4	feuille
approved D. LABELLE	approuvé	W.O.no.	D.T.no.

dwg.no. 5463-A01 dessin no.

- ### CONSTRUCTION NOTES
- SHEET A01 ONLY
- REMOVE EXISTING DOOR, FRAME TO REMAIN.
 - FRAME OUT AROUND EXISTING WINDOW AND DOOR FRAMES, GYPSUM BOARD RETURN CAJ J-MOULD AND METAL CORNER BEADS. PAINTABLE SEALANT BETWEEN EXISTING WINDOW FRAME AND J-MOULD.
 - TERMINATE WALL TYPE 2 AGAINST EXISTING PLASTER WALL. PROVIDE CONTINUOUS SEALANT.
 - ALL GYPSUM BOARD CEILINGS / BULKHEADS TO BE PAINTED CEILING WHITE.
 - FILL IN DOOR OPENING:
 - 13mm GYPSUM BOARD, PAINT FINISH.
 - CAJ J-MOULDs AROUND PERIMETER OF DOOR JAMBS AND FLOOR, 6mm REVEAL.
 - FILL REVEAL WITH SEALANT, COLOUR TO MATCH ADJACENT WALL COLOUR.
 - METAL STUDS TO SUIT/FILL VOID WITH ROXUL SAFE AND SOUND.
 - PAINTABLE SEALANT.
 - EXISTING TRANSITE WALL PANELS (ACM) DO NOT MODIFY.
 - EXISTING STEEL WINDOW FRAME, CLEAN/DEGREASE, PREP FOR 1 COAT PRIMER AND TWO COAT PAINT FINISH.
 - EXISTING DOOR AND DOOR FRAME, CLEAN/DEGREASE, PREP FOR 1 COAT PRIMER AND TWO COAT PAINT FINISH.
 - INSTALL 25mm WHITE, ALUMINUM ROOM DARKENING MINI-BLINDS CAJ VALANCE.
 - GYPSUM BOARD SILL.
 - FRAME AROUND EXISTING STRUCTURAL COLUMN AS REQUIRED.
 - EXISTING STRUCTURAL COLUMN, CLEAN/DEGREASE, PREP FOR ONE COAT PRIMER AND TWO COAT PAINT FINISH. COLOUR TO MATCH WALL, PI.



3 TYP. DOOR JAMB DETAIL
SCALE = 1:5

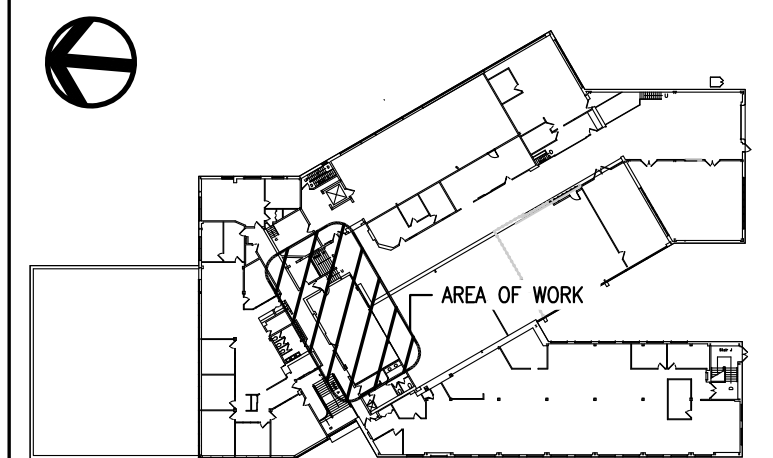


7 WINDOW JAMB AT COLUMN DETAIL
SCALE = 1:5

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- PROVIDE ALL LABOUR AND MATERIAL REQUIRED TO FORM A COMPLETE, FUNCTIONAL SYSTEM AS DESCRIBED ON DRAWINGS.
- DO NOT SCALE DRAWINGS.
- EXISTING ROOF DECK IS AN ACM CEMENT DECK. DO NOT MECHANICALLY FASTEN TO OR CUT INTO DECK. SUPPORTS MUST BE FROM EXISTING STRUCTURAL MEMBERS.

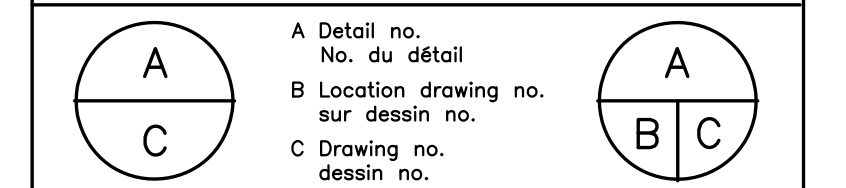
KEY PLAN



No.	Date	Revision	By:	Par:
1	27 11 2017	ISSUED FOR ADDENDUM#2	ALS	
0	16 11 2017	ISSUED FOR TENDER	ALS	

Date Printed 27 11 2017 Date imprimée

- Verify all dimensions and site conditions and be responsible for same
- Vérifier toutes les dimensions et l'état des lieux et en assumer la responsabilité



project
NRC M-19, STORES AMALGAMATION PROJECT
 PHASE 2

MONTREAL ROAD CAMPUS

drawing
MECHANICAL: LEGEND AND FIRE PROTECTION - DEMOLITION AND NEW WORK

designed	conçu	date	date
			NOV 2017
drawn	dessiné	scale	échelle
ALS		AS SHOWN	
checked	vérifié	sheet	feuille
JWG		1 of/de 3	
approved	approuvé	W.O.no.	D.T.no.
BV			

dwg.no. **5463-M01** dessin no.

DEMOLITION NOTES:

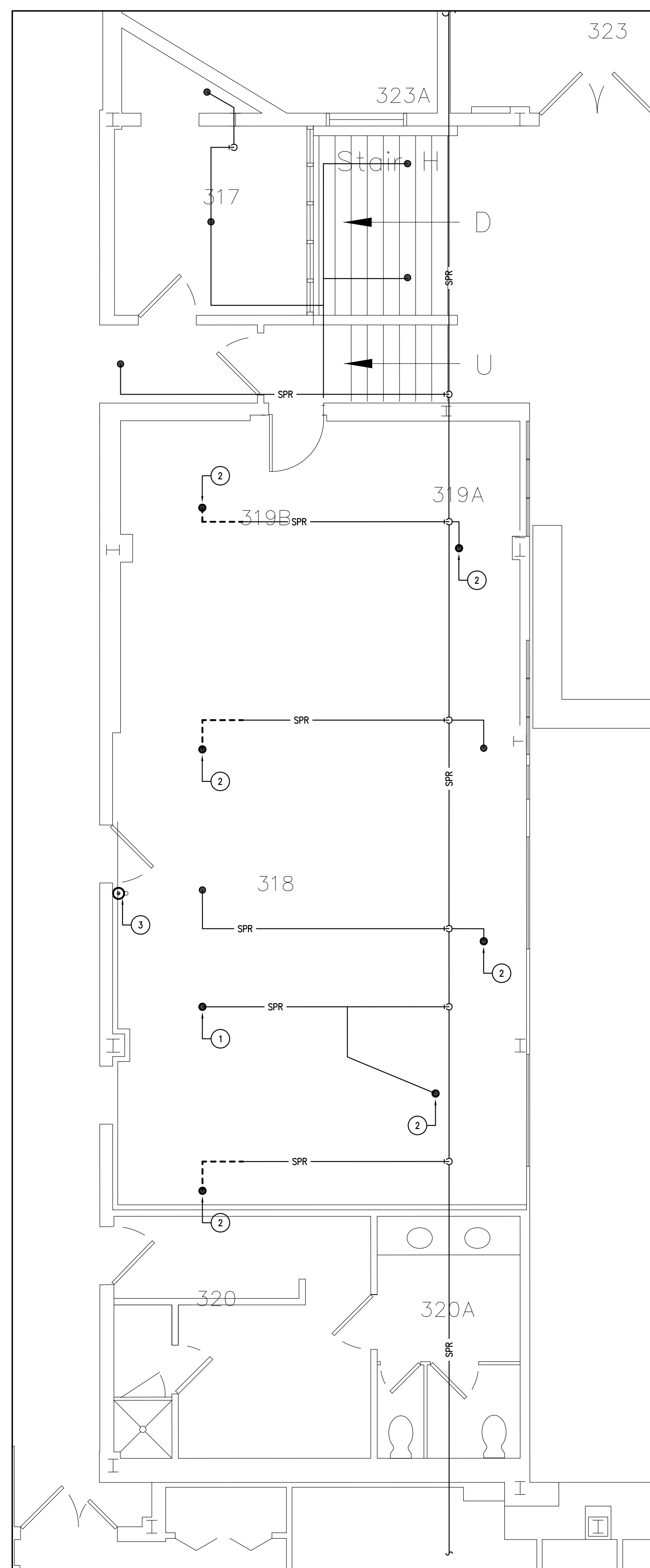
- EXISTING PENDANT TYPE SPRINKLER HEAD TO BE REMOVED AND SPRINKLER PIPING BRANCH CONNECTION CAPPED.
- EXISTING PENDANT TYPE SPRINKLER HEAD TO BE RELOCATED. CUT BACK EXISTING SPRINKLER PIPING AS NECESSARY TO ACCOMMODATE RELOCATION.
- REMOVE EXISTING FIRE EXTINGUISHER AND HANDOVER TO NRC DEPARTMENTAL FOR SAFE KEEPING AND FUTURE REINSTALLATION.

NEW WORK NOTES:

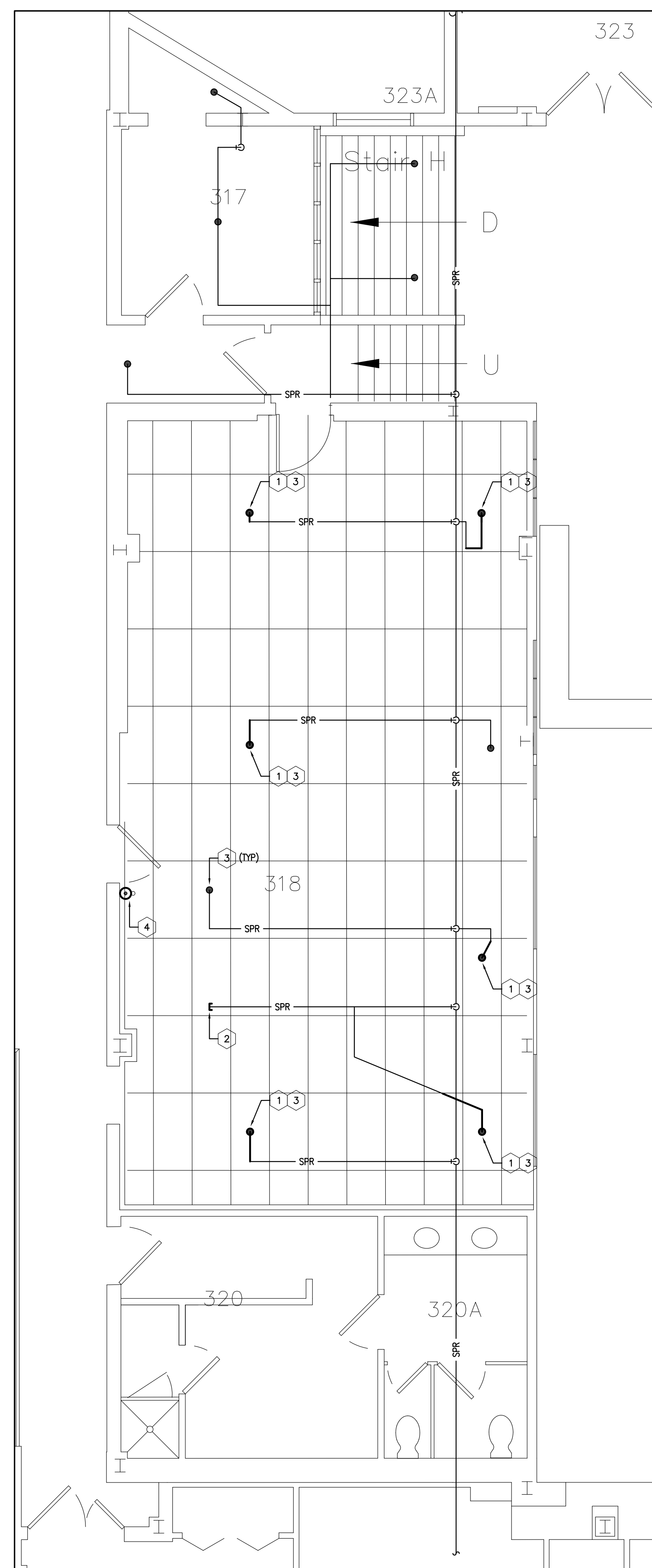
- EXTEND EXISTING SPRINKLER PIPING TO SERVE RELOCATED PENDANT TYPE SPRINKLER HEAD LOCATION.
- CAP SPRINKLER PIPING IN LOCATION OF REMOVED SPRINKLER HEAD.
- PROVIDE NEW SPRINKLER ESCUTCHEON PLATE FOR ALL SPRINKLER HEADS. (TYPICAL OF 8)
- REINSTALL EXISTING FIRE EXTINGUISHER.

MECHANICAL DRAWING SYMBOLS LEGEND

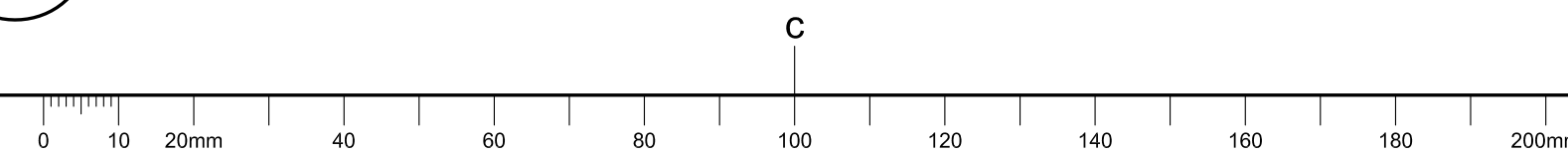
	TYPICAL EXISTING
	TYPICAL NEW
	TYPICAL DEMOLITION / REMOVALS
	SPRINKLER PIPING
	FIRE PROTECTION WATER (STANDPIPE SYSTEM)
	CHILLED WATER RETURN
	CHILLED WATER SUPPLY
	SANITARY VENT PIPING
	SANITARY PIPING
	STORM PIPING
	LOW PRESSURE STEAM
	LOW PRESSURE CONDENSATE
	REFRIGERANT LIQUID
	REFRIGERANT GAS
	CONDENSATE
	COMPRESSED AIR
	DOMESTIC COLD WATER
	CAP
	PIPE DN / INTO PAGE
	PIPE UP / OUT OF PAGE
	PIPE CONTINUATION
	CLEAN OUT
	PIPE RISER
	FLOOR DRAIN
	VALVE (N PLAN)
	VALVE (VERTICAL ORIENTATION)
	CONTROL VALVE (N PLAN)
	PUMP
	SPRINKLER HEAD
	FIRE EXTINGUISHER
	DUCT
	ROUND DUCT
	EXHAUST AIR
	OUTDOOR AIR
	SUPPLY AIR
	RETURN AIR
	SUPPLY DIFFUSER
	CAPPED SUPPLY DIFFUSER CONNECTION
	RETURN / EXHAUST GRILLE
	SIDEWALL GRILLE
	BALANCING DAMPER
	MOTORIZED DAMPER
	GRILLE / DIFFUSER TYPE C/W AIR FLOW (CFM)
	A/C EVAPORATOR
	A/C CONDENSER
	FAN COIL UNIT
	UNIT HEATER
	CEILING FAN
	EQUIPMENT IDENTIFICATION TAG
	TEMPERATURE CONTROLLER
	A/C UNIT CONTROLLER
	PNEUMATIC TEMPERATURE CONTROLLER
	FAN CONTROLLER
	CONTROL SIGNAL



1 PARTIAL 3RD FLOOR FIRE PROTECTION - DEMOLITION
 MO1 SCALE = 1:50



2 PARTIAL 3RD FLOOR FIRE PROTECTION - NEW WORK
 MO1 SCALE = 1:50

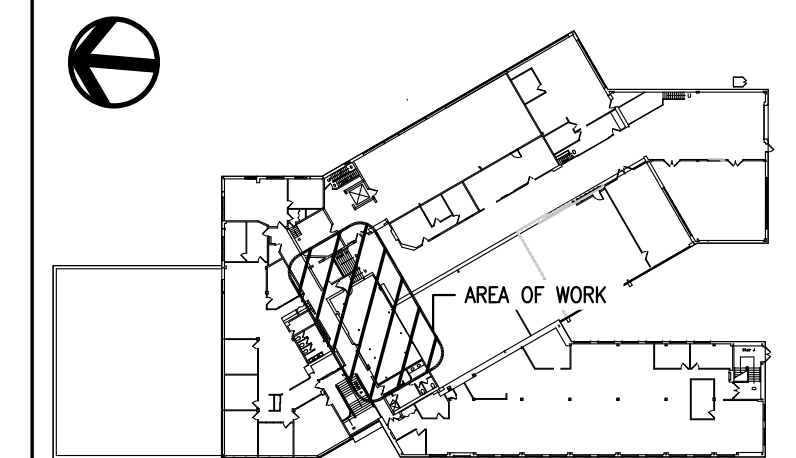




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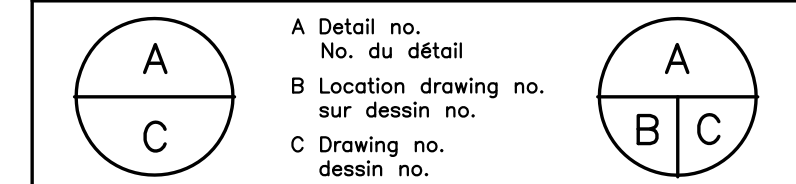
KEY PLAN



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1	27 11 2017	ISSUED FOR ADDENDUM#2	ALS	
0	16 11 2017	ISSUED FOR TENDER	ALS	

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- Verify all dimensions and site conditions and be responsible for same
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project
NRC M-19, STORES AMALGAMATION PROJECT
 PHASE 2

MONTREAL ROAD CAMPUS

drawing **MECHANICAL: HVAC - NEW WORK** dessin

designed	conçu	date	NOV 2017	date
drawn	dessiné	scale	AS SHOWN	échelle
checked	vérifié	sheet	2 of/de 3	feuille
approved	approuvé	W.O.no.		D.T.no.
	BV			

dwg.no. **5463-M02** dessin no.

GENERAL CONTROLS NOTES:

- AINSWORTH CANADA SHALL BE SUBCONTRACTED FOR ALL HVAC CONTROLS WORK ON THIS PROJECT.
 CONTACT: AARON DOBSON
 100-2935 CONROY ROAD
 OTTAWA, ON K1G 6C6
 T: 613.247.7936
 C: 613.203.1951
 E: AARON.DOBSON@AINSWORTH.COM
- EXISTING CONTROL GRAPHICS TO BE UPDATED TO INCORPORATE ALL NEW POINTS AS PER NRC STANDARD.
- MODIFICATION OF THE EXISTING M-19 CONTROLLER, AT A MINIMUM SHALL INCLUDE:
 - 19PAS10A ENABLE
 - 19PAS10A SETPOINT
 - 19PAS10A STATUS/FAULT
 - 19PAS10B ENABLE
 - 19PAS10B SETPOINT
 - 19PAS10B STATUS/FAULT
 - 19PAS10C ENABLE
 - 19PAS10C SETPOINT
 - 19PAS10C STATUS/FAULT
- EXISTING M-19 CONTROLLER TO HAVE POINTS LIST UPDATED UPON PROJECT COMPLETION.
- CONTROL WIRING / CONDUITS TO BE APPROPRIATELY TAGGED WITH POINT NAMES AS PER NRC STANDARD.
- AINSWORTH SHALL PROVIDE ELECTRONIC AS-BUILTS FOR STORAGE ON THE ASPM DDC SERVER AND PROVIDE REQUIRED DOCUMENTATION TO GENERAL CONTRACTOR FOR INCLUSION IN MAINTENANCE MANUALS.

GENERAL SEQUENCE OF OPERATION:

ROOM 317
 SUMMER OPERATION:
 WHEN ROOM FAN COIL UNIT 19FCU33 CHILLED WATER CONTROL VALVE IS OPEN 100% AND ROOM SPACE TEMPERATURE RISES ABOVE SETPOINT (ADJUSTABLE) AIR CONDITIONER 19PAS10A SHALL BE ENABLED AND COMMANDED TO START.

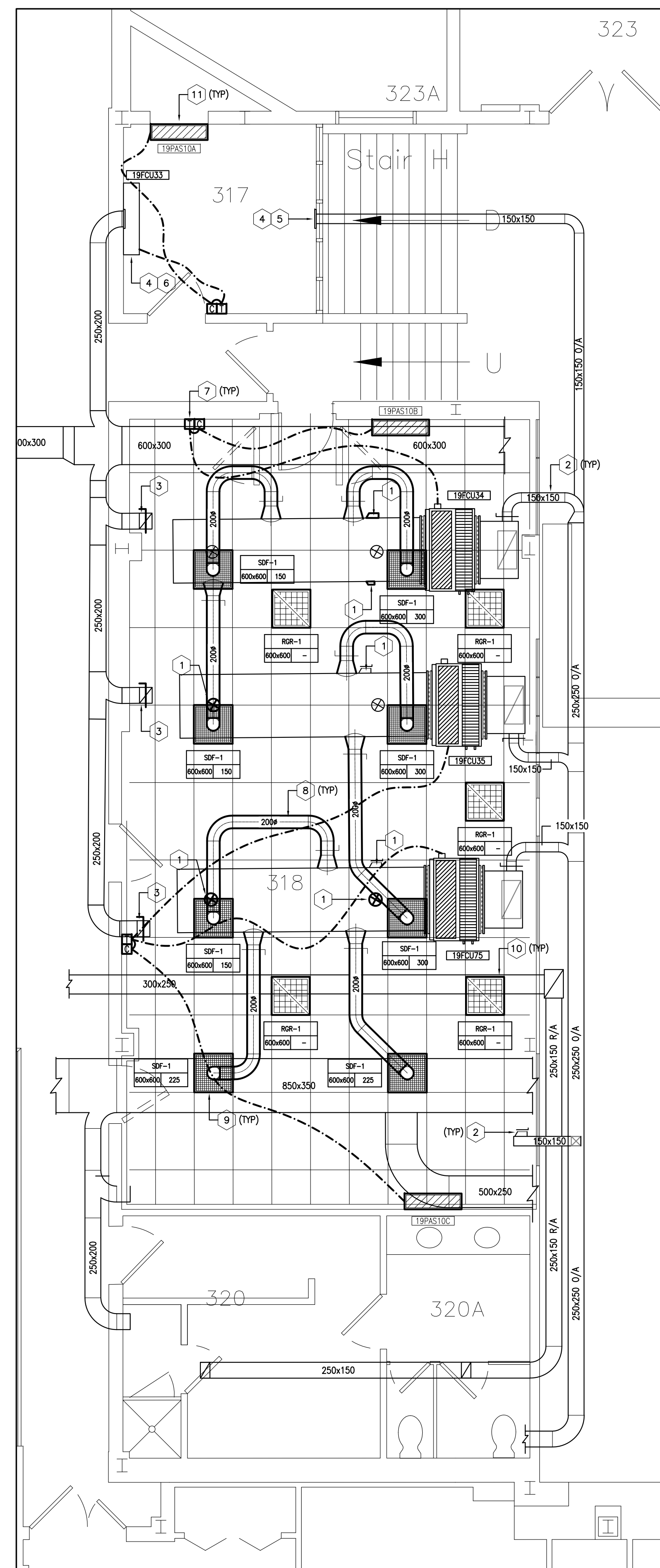
WINTER OPERATION:
 WHEN ROOM FAN COIL UNIT 19FCU33 CHILLED WATER CONTROL VALVE IS OPEN 100% AND ROOM SPACE TEMPERATURE RISES ABOVE SETPOINT (ADJUSTABLE) AIR CONDITIONER 19PAS10A SHALL BE ENABLED AND COMMANDED TO START.

ROOM 318
 SUMMER OPERATION:
 WHEN ROOM FAN COIL UNITS 19FCU34, 19FCU35 & 19FCU75 CHILLED WATER CONTROL VALVES ARE OPEN 100% AND ROOM SPACE TEMPERATURE RISES ABOVE SETPOINT (ADJUSTABLE) AIR CONDITIONERS 19PAS10B & 19PAS10C SHALL BE ENABLED AND COMMANDED TO START.

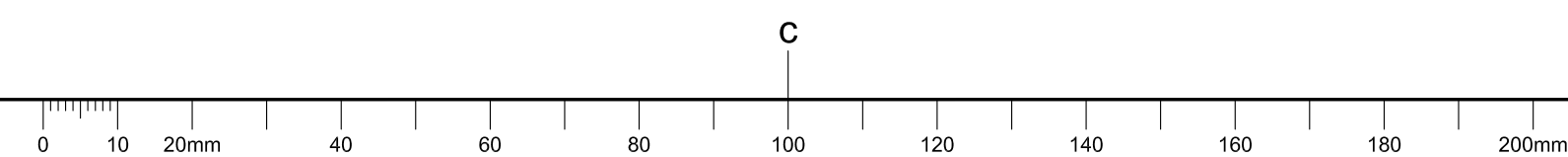
WINTER OPERATION:
 WHEN ROOM FAN COIL UNITS 19FCU34, 19FCU35 & 19FCU36 CHILLED WATER CONTROL VALVES ARE OPEN 100% AND ROOM SPACE TEMPERATURE RISES ABOVE SETPOINT (ADJUSTABLE) AIR CONDITIONERS 19PAS10B & 19PAS10C SHALL BE ENABLED AND COMMANDED TO START.

NEW WORK NOTES:

- CAP ABANDONED SUPPLY AIR DUCT CONNECTIONS AT MAIN BRANCH DUCT. (TYPICAL OF 7)
- BALANCE OUTDOOR AIR CONNECTIONS TO RM 318 TO 80 CFM IN ACCORDANCE WITH SPECIFICATIONS. (TYPICAL OF 4)
- PROVIDE NEW BALANCING DAMPERS AND BALANCE EXHAUST AIR CONNECTIONS TO RM 318 TO 106 CFM IN ACCORDANCE WITH SPECIFICATIONS. (TYPICAL OF 3)
- CLEAN EXISTING SUPPLY AND RETURN GRILLES SERVING RM 317 AND REINSTALL.
- BALANCE OUTDOOR AIR CONNECTION TO RM 317 TO 50 CFM IN ACCORDANCE WITH REQUIREMENTS OUTLINED IN SPECIFICATIONS.
- BALANCE EXHAUST AIR CONNECTION TO RM 317 TO 50 CFM IN ACCORDANCE WITH REQUIREMENTS OUTLINED IN SPECIFICATIONS.
- PROVIDE NEW ROOM TEMPERATURE CONTROLLERS C/W DISPLAY AND EXTEND CONTROL WIRING TO SERVICE EXISTING FAN COILS AND NEW DUCTLESS SPLIT VARIABLE REFRIGERANT FLOW AIR CONDITIONING SYSTEM UNITS AS INDICATED. PROVIDE ALL NECESSARY CONTROL/COMMUNICATION WIRING IN EMT CONDUIT. (TYPICAL OF 3)
- PROVIDE NEW RIGID AND INSULATED FLEXIBLE SUPPLY DUCTWORK C/W NEW ROUND BRANCH DUCT CONNECTION AND BALANCING DAMPER FROM MAIN DUCT BRANCH TO SERVE NEW SUPPLY DIFFUSER. INSULATE ALL RIGID DUCTWORK IN ACCORDANCE TO SPECIFICATIONS. (TYPICAL)
- PROVIDE NEW SUPPLY DIFFUSER IN ACCORDANCE WITH SPECIFICATIONS AND EQUIPMENT SCHEDULES. BALANCE AIR FLOW TO VALUE INDICATED IN ACCORDANCE WITH REQUIREMENTS OUTLINED IN SPECIFICATIONS. (TYPICAL)
- PROVIDE NEW RETURN GRILLES IN ACCORDANCE WITH SPECIFICATIONS AND EQUIPMENT SCHEDULES. (TYPICAL)
- PROVIDE NEW DUCTLESS SPLIT VARIABLE REFRIGERANT FLOW AIR CONDITIONING SYSTEM COMPONENTS 19PAS10, 19PAS10A, 19PAS10B & 19PAS10C C/W ASSOCIATED MOUNTING BRACKETS, REFRIGERANT PIPING, CONTROLLER, CONTROL WIRING AND BAS INTERFACE IN ACCORDANCE WITH SPECIFICATIONS AND EQUIPMENT SCHEDULES. PROVIDE 12mm (1/2") PLYWOOD ON WALL BEHIND EVAPORATOR MOUNTING BRACKET TO SECURE EVAPORATORS (19PAS10A, 19PAS10B & 19PAS10C). PAINT EVAPORATOR MOUNTING PLYWOOD TO MATCH ADJACENT WALL COLOUR. REFER TO DRAWING 5463-M03 FOR CONDENSER (19PAS10) LOCATION AND PROPOSED PIPING ROUTING. FINAL INSTALLATION LOCATIONS SHALL BE COORDINATED ON SITE WITH NRC DEPARTMENTAL REPRESENTATIVE. INSTALL EQUIPMENT, PIPING AND ACCESSORIES IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.



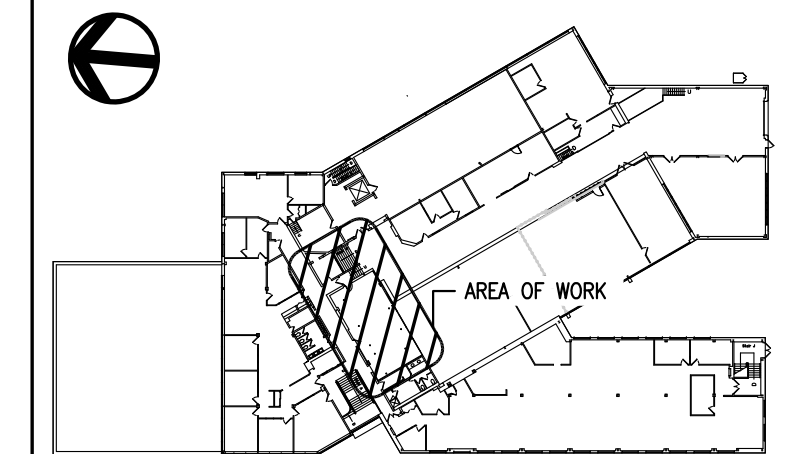
1 PARTIAL 3RD FLOOR HVAC - NEW WORK
 MO2 SCALE = 1:50



GENERAL NOTES

- CONTRACTORS TO CHECK AND VERIFY ALL DIMENSIONS ON SITE PRIOR TO DEMOLITION OR CONSTRUCTION AND REPORT ANY ERRORS OR OMISSIONS TO DEPARTMENTAL REPRESENTATIVE.
- CONTRACTORS MUST VISIT THE SITE & FULLY FAMILIARIZE THEMSELVES WITH THE SCOPE OF THE WORK.
- PREVENT THE SPREAD OF DUST & DEBRIS BEYOND THE WORK AREA AND CLEAN ALL SURFACES AT COMPLETION.
- MAKE GOOD ALL SURFACES AFFECTED BY THIS WORK.
- COORDINATE ALL SHUTDOWNS WITH THE DEPARTMENTAL REPRESENTATIVE.
- PROVIDE ALL LABOUR AND MATERIAL REQUIRED TO FORM A COMPLETE, FUNCTIONAL SYSTEM AS DESCRIBED ON DRAWINGS.
- DO NOT SCALE DRAWINGS.
- EXISTING ROOF DECK IS AN ACM CEMENT DECK. DO NOT MECHANICALLY FASTEN TO OR CUT INTO DECK. SUPPORTS MUST BE FROM EXISTING STRUCTURAL MEMBERS.

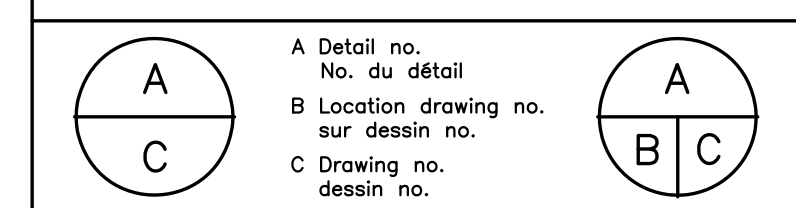
KEY PLAN



No.	Date	Revision	By:	Par:
1	27 11 2017	ISSUED FOR ADDENDUM#2	ALS	
0	16 11 2017	ISSUED FOR TENDER	ALS	

Date Printed 27 11 2017 Date imprimée

- Verify all dimensions and site conditions and be responsible for same
- Vérifier toutes les dimensions et l'état des lieux et en assumer la responsabilité

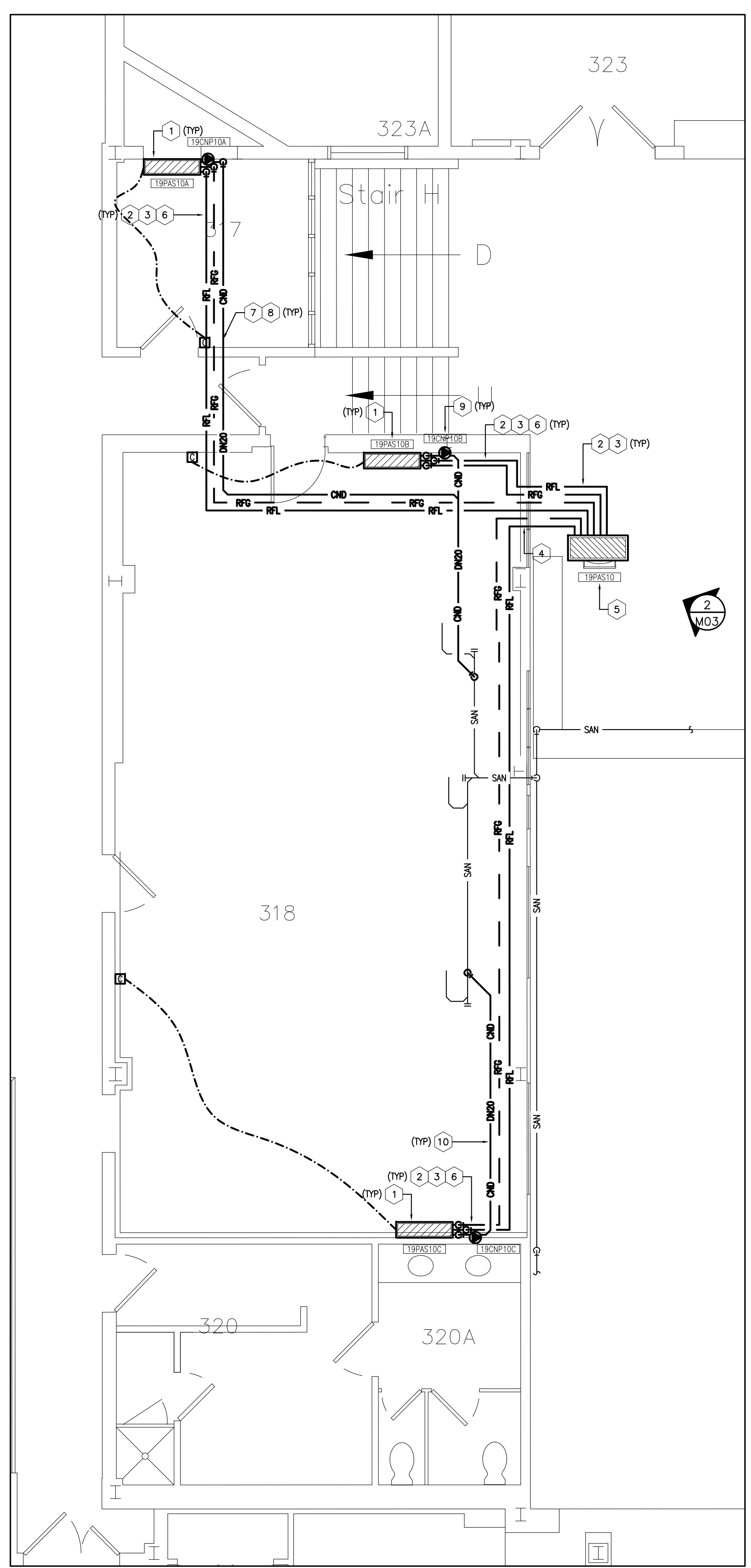


project
NRC M-19, STORES AMALGAMATION PROJECT
 PHASE 2

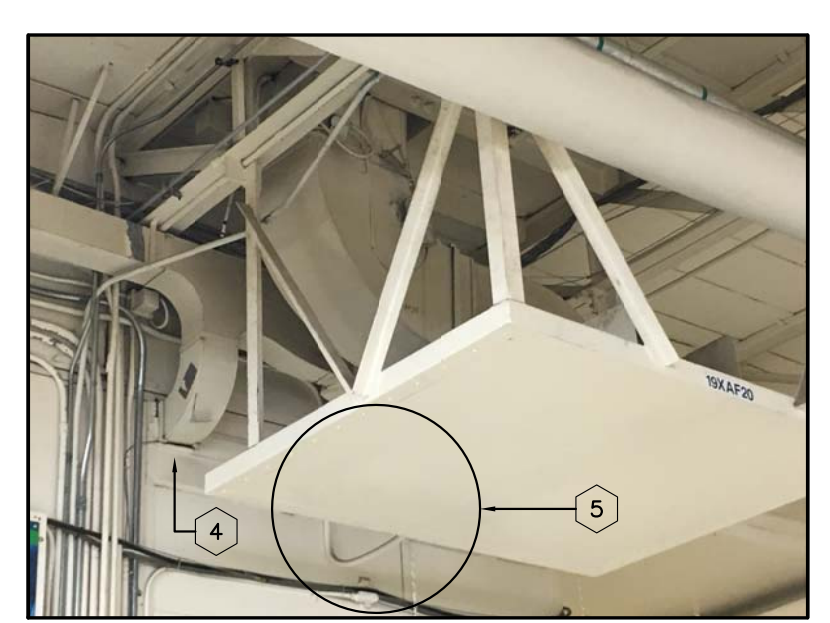
MONTREAL ROAD CAMPUS
 drawing
MECHANICAL: UTILITIES - NEW WORK
MISCELLANEOUS EQUIPMENT SCHEDULES
 dessin

designed	conçu	date	date
		NOV 2017	
drawn	dessiné	scale	échelle
ALS		AS SHOWN	
checked	vérifié	sheet	feuille
JWG		3	of/de 3
approved	approuvé	W.O.no.	D.T.no.
BV			

dwg.no. **5463-M03** dessin no.



1 PARTIAL 3RD FLOOR
 MO3 SCALE = 1:50



2 PHOTO#1
 MO3 SCALE = NTS

NEW WORK NOTES:

- PROVIDE NEW DUCTLESS SPLIT VARIABLE REFRIGERANT FLOW EVAPORATORS 19PAS10A, 19PAS10B & 19PAS10C C/W ASSOCIATED MOUNTING BRACKETS, REFRIGERANT PIPING, CONTROLLER, CONTROL WIRING AND BAS INTERFACE IN ACCORDANCE WITH SPECIFICATIONS AND EQUIPMENT SCHEDULES. PROVIDE 12mm (1/2") PLYWOOD ON WALL BEHIND EVAPORATOR MOUNTING BRACKETS TO SECURE EVAPORATORS. PAINT EVAPORATOR MOUNTING PLYWOOD TO MATCH ADJACENT WALL COLOUR. FINAL INSTALLATION LOCATIONS AND PROPOSED PIPE ROUTING SHALL BE COORDINATED ON SITE WITH NRC DEPARTMENTAL REPRESENTATIVE. INSTALL EQUIPMENT, PIPING AND ACCESSORIES IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
- PROVIDE REFRIGERANT PIPING IN ACCORDANCE WITH SPECIFICATIONS AND MANUFACTURER'S INSTRUCTIONS.
- INSULATE REFRIGERANT PIPING IN ACCORDANCE WITH SPECIFICATIONS.
- ROUTE REFRIGERANT PIPING BETWEEN ROOM 318 AND ROOM 323A THROUGH EXISTING SHEET METAL PANEL. SEAL PENETRATIONS WITH FIREPROOF CAULKING. REFER TO PHOTO#1 ON DRAWING 5463-M03 FOR REFERENCE.
- PROVIDE AND MOUNT VARIABLE REFRIGERANT FLOW SYSTEM CONDENSER 19PAS10 USING WALL MOUNTING BRACKETS SECURED TO NEW SERVICE PLATFORM SUPPORT BRACING IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. REFER TO STRUCTURAL DRAWING FOR NEW SERVICE PLATFORM SUPPORT BRACING DETAILS. COORDINATE FINAL POSITION OF CONDENSER ON SITE WITH NRC DEPARTMENTAL REPRESENTATIVE. REFER TO PHOTO#1 ON DRAWING 5463-M03 FOR REFERENCE.
- PROVIDE RECTORSEAL SLIMDUCT C/W ALL REQUIRE FITTINGS AND ACCESSORIES TO CONCEAL ALL EXPOSED REFRIGERANT PIPING AND CONDENSATE VISIBLE WITHIN ROOMS 317 AND 318. COLOUR OF RECTORSEAL SLIMDUCT TO MATCH PENETRATIONS WITH FIREPROOFING CAULKING. (TYPICAL)
- CORE DRILL FLOOR AND WALL PENETRATIONS REQUIRED FOR PASSAGE OF REFRIGERANT PIPING AND CONDENSATE. COORDINATE WITH ARCHITECTURAL AND NRC DEPARTMENTAL REPRESENTATIVE FOR EXACT LOCATION ON SITE. SEAL PENETRATIONS WITH FIREPROOFING CAULKING. (TYPICAL)
- PROVIDE CONDENSATE CONNECTION FROM NEW DUCTLESS SPLIT EVAPORATOR 19PAS10A C/W AUTOMATIC CONDENSATE PUMP SYSTEM 19CNP10A. CONDENSATE SHALL BE ROUTED ACROSS CEILING OF ROOM 317 ADJACENT REFRIGERANT PIPING THROUGH CORRIDOR CEILING PLENUM AND ROOM 318 CEILING PLENUM AND CONNECT WITH EXISTING SANITARY DRAIN IN CEILING PLENUM OF ROOM 318. AUTOMATIC CONDENSATE PUMP SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS WITH RESERVOIR LOCATED IN EVAPORATOR CASE AND PUMP-CONTROLLER ON WALL OF ROOM 317. INSULATE CONDENSATE IN ACCORDANCE WITH SPECIFICATIONS.
- PROVIDE CONDENSATE CONNECTION FROM NEW DUCTLESS SPLIT EVAPORATOR 19PAS10B C/W AUTOMATIC CONDENSATE PUMP SYSTEM 19CNP10B. CONDENSATE SHALL BE ROUTED THROUGH CEILING PLENUM OF ROOM 318 AND CONNECT WITH EXISTING SANITARY DRAIN IN CEILING PLENUM. AUTOMATIC CONDENSATE PUMP SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS WITH RESERVOIR LOCATED IN EVAPORATOR CASE AND PUMP-CONTROLLER IN CEILING PLENUM. INSULATE CONDENSATE IN ACCORDANCE WITH SPECIFICATIONS.
- PROVIDE CONDENSATE CONNECTION FROM NEW DUCTLESS SPLIT EVAPORATOR 19PAS10C C/W AUTOMATIC CONDENSATE PUMP SYSTEM 19CNP10C. CONDENSATE SHALL BE ROUTED THROUGH CEILING PLENUM OF ROOM 318 AND CONNECT WITH EXISTING SANITARY DRAIN IN CEILING PLENUM. AUTOMATIC CONDENSATE PUMP SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS WITH RESERVOIR LOCATED IN EVAPORATOR CASE AND PUMP-CONTROLLER IN CEILING PLENUM. INSULATE CONDENSATE IN ACCORDANCE WITH SPECIFICATIONS.

VARIABLE REFRIGERANT FLOW DUCTLESS SPLIT AIR CONDITIONING SYSTEM SCHEDULE								
ID TAG	EVAPORATOR						REMARKS	
19PAS10A	LOCATION	MODEL	COOLING CAPACITY (BTUh)	POWER	RATED AMPS	REFRIGERANT	REFER TO NOTES 1, 2, 3 & 4	
	RM 317	LMN07BHT	7,000	208/1/60	0.2A	R410A		
19PAS10B	LOCATION	MODEL	COOLING CAPACITY (BTUh)	POWER	RATED AMPS	REFRIGERANT		
	RM 318	LSN120HSV	12,000	208/1/60	0.2A	R410A		
19PAS10C	LOCATION	MODEL	COOLING CAPACITY (BTUh)	POWER	RATED AMPS	REFRIGERANT		
	RM 318	LSN120HSV	12,000	208/1/60	0.2A	R410A		
19PAS10	CONDENSER							REFER TO NOTES 1, 2, 3 & 4
	LOCATION	MODEL	OPERATING RANGE (°F)	POWER	MOP	MCA		
SERVICE PLATFORM ROOM 329A	LMU30CHV	-40 TO 118 DB	208/1/60	25A	16.6A			

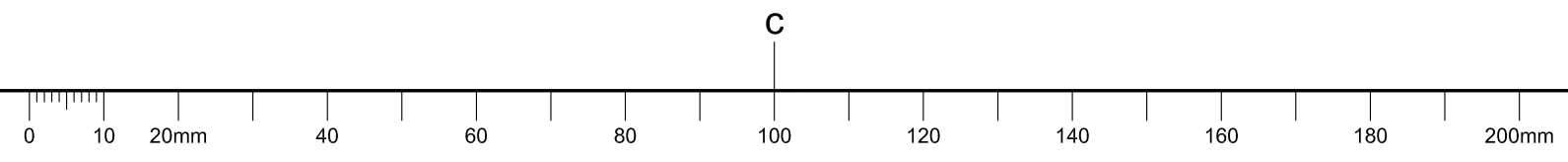
- NOTES:
- VARIABLE REFRIGERANT FLOW SYSTEM COMPONENTS SHALL BE OF SINGLE MANUFACTURER.
 - VARIABLE REFRIGERANT FLOW SYSTEM COMPONENT MODELS BASED ON LG.
 - VARIABLE REFRIGERANT FLOW SYSTEM SHALL BE EQUIPPED WITH DRY CONTACT BAS INTERFACE MODULE. ENABLE, STATUS AND SETPOINT FROM THE AIR CONDITIONING UNIT CONTROLLER SHALL BE INTERFACED WITH THE BAS BY CONTROL'S CONTRACTOR (ARTTRON).
 - INSTALLATION SHALL BE IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.

GRILLES & DIFFUSERS SCHEDULE						
ID TAG	TYPE	MANUFACTURER	SIZE (mm x mm)	THROAT SIZE (mm)	MODEL	REMARKS
SDF-1	SUPPLY DIFFUSER	E.H. PRICE	600x600	200ø	200/600x600/APDMC-BN/3/B12	REFER TO NOTES 1, 2 & 3
RGR-1	RETURN GRILLE	E.H. PRICE	600x600	-	550x550/600x300/APDDR/3/B12	REFER TO NOTES 1 & 2

- NOTES:
- DIFFUSERS, RETURN AND EXHAUST GRILLES SHALL BE OF SINGLE MANUFACTURER.
 - DIFFUSERS, RETURN AND EXHAUST GRILLES SELECTION MODELS BASED ON E.H. PRICE.
 - ALL DIFFUSERS SHALL BE EQUIPPED WITH VOLUME CONTROL DAMPERS AND EXTENDED NECKS FOR EASY CONNECTION TO FLEXIBLE DUCTWORK.
 - INSTALLATION SHALL BE IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.

CONDENSATE PUMP SCHEDULE							
ID TAG	LOCATION	MANUFACTURER	TYPE	MODEL	FLOW	POWER	REMARKS
19CNP10A	CEILING SPACE RM 318	LITTLE GIANT	CENTRIFUGAL	EC-1 SERIES	1.2 GPH @ 20FT	115/1/60	REFER TO NOTES 1 & 2
19CNP10B	CEILING SPACE RM 318	LITTLE GIANT	CENTRIFUGAL	EC-1 SERIES	1.2 GPH @ 20FT	115/1/60	REFER TO NOTES 1 & 2
19CNP10C	WALL RM 317	LITTLE GIANT	CENTRIFUGAL	EC-1 SERIES	1.2 GPH @ 20FT	115/1/60	REFER TO NOTES 1 & 2

- NOTES:
- CONDENSATE PUMP BASED ON LITTLE GIANT MODEL: EC-1 SERIES C/W RESERVOIR. REFER TO SPECIFICATIONS FOR ADDITIONAL DETAILS.
 - INSTALLATION SHALL BE IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.



GENERAL NOTES

- READ THIS DRAWING IN CONJUNCTION WITH SPECIFICATIONS, ARCHITECTURAL AND MECHANICAL DRAWINGS.
- CONTRACTORS TO CHECK AND VERIFY ALL DIMENSIONS ON SITE PRIOR TO DEMOLITION OR CONSTRUCTION AND REPORT ANY ERRORS OR OMISSIONS TO NRC DEPARTMENTAL REPRESENTATIVE.
- CONTRACTORS MUST VISIT THE SITE & FULLY FAMILIARIZE THEMSELVES WITH THE SCOPE OF THE WORK.
- PREVENT THE SPREAD OF DUST & DEBRIS BEYOND THE WORK AREA AND CLEAN ALL SURFACES AT COMPLETION.
- MAKE GOOD ALL SURFACES AFFECTED BY THIS WORK.
- FILL ALL HOLES, PATCH & PAINT ALL SURFACES IN CONTRACT AREA. PAINT ALL SURFACE CONDUITS. COLOR SCHEME TO MATCH EXISTING.
- COORDINATE WORK WITH OTHER DIVISIONS FOR INSTALLATION AND TO AVOID INTERFERENCE.
- COORDINATE ALL SHUTDOWNS WITH THE NRC DEPARTMENTAL REPRESENTATIVE.
- REMOVE MEANS REMOVE AND DISPOSE OF OFF SITE UNLESS OTHERWISE NOTED.
- REMOVE REDUNDANT CONDUIT AND WIRING BACK TO SOURCE UNLESS OTHERWISE NOTED, AND MAKE SAFE.
- PROVIDE LABELS TO NEW DEVICES TO INDICATE POWER SOURCE. UPDATE PANEL SCHEDULES AFTER JOB COMPLETION AND PROVIDE NEW TYPED SCHEDULES.
- ALL INTERIOR WIRING SHALL BE #12 AWG CONDUCTOR MINIMUM. TYPE R90 XLPE CROSS-LINK POLYETHYLENE STRANDED FOR SIZE NO.8 AND LARGER. TYPE T90 STRANDED FOR SIZE NO.10 AND SMALLER. ALL NEW RACEWAYS SHALL BE THIN WALL ELECTRICAL METALLIC TUBING (EMT) 1/2" MINIMUM UNLESS OTHERWISE INDICATED. CONDUITS TO BE COMPLETE WITH INSULATED TYPE CONNECTORS AND BUSHING.
- SURFACE CONDUIT TO RUN PARALLEL OR PERPENDICULAR TO BUILDING LINES. ALL CONDUITS AND JUNCTION BOXES TO BE ANCHORED TO THE BUILDING STRUCTURE.
- ALL RACEWAYS SHALL BE CONCEALED IN FINISHED AREAS.
- THE WORD "PROVIDE" MEANS SUPPLY, INSTALL, CONNECT AND TEST.
- MOTOR STARTERS:
 - P.A. MANUAL MOTOR STARTERS C/W ONE OVERLOAD PER PHASE. PILOT LIGHT, QUICK MAKE, QUICK BREAK TOGGLE SWITCH. LOCKING TABS IN "ON" OR "OFF" POSITION. CSA CERTIFIED AS A DISCONNECTING MEANS. SHALL COMPLY WITH ESA BULLETIN REQUIREMENTS.



3 EXISTING PANEL L10
N.T.S.

PANEL L-10

VOLTAGE 120/240V
 PHASE 1Ø
 WIRE 3
 RATING AMPS 225
 LOCATION RM 329
 MODEL NO. SQUARE D

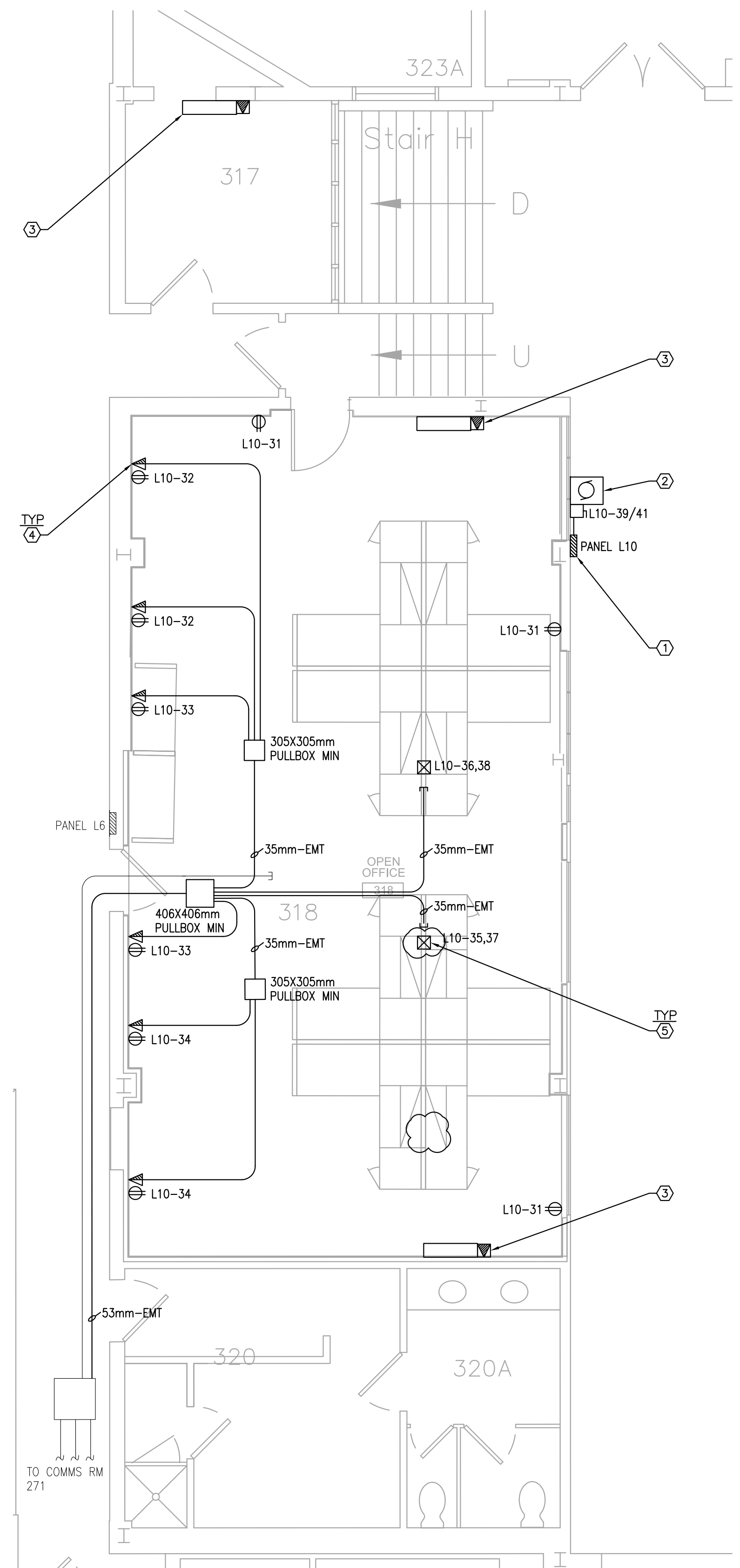
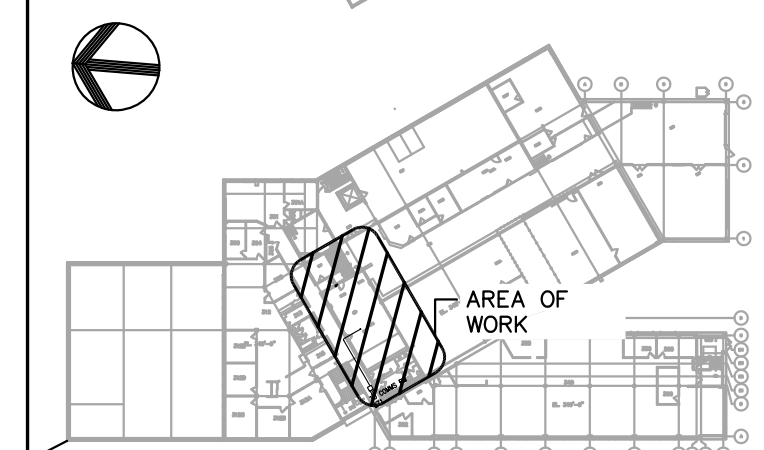
FED FROM LD2-3

UNIT HEATER	1	2	2 UNIT HEATERS CENTRE COLUMN
WORKSHOP LTGS	3	4	WORKSHOP LTGS
WORKSHOP LTGS	5	6	MACHINE SHOP LTGS
MACHINE SHOP LTGS	7	8	MACHINE SHOP LTGS
MACHINE SHOP LTGS	9	10	MACHINE SHOP LTGS
MACHINE SHOP LTGS	11	12	FLOOR PLUGS - MACHINE SHOP
TEST PANEL 110V	13	14	CEILING FAN
SPARE	15	16	BENCH PLUGS - ELECT SHOP
COFFEE MACHINE	17	18	RECEPTACLE RM 206
A/C FAN COIL RM 206A	19	20	RECS 2 ROWS OF BENCHES
UNKNOWN	21	22	COMPRESSOR
UNKNOWN	23	24	UNKNOWN
COMPRESSOR	25	26	PLUGS RM 318
UNKNOWN	27	28	UNKNOWN
REF. TEST PANEL	29	30	UNKNOWN
RM 318 REC	31	32	RM 318 REC
RM 318 REC	33	34	RM 318 REC
RM 318 REC	35	36	RM 318 REC
RM 318 REC	37	38	RM 318 REC
A/C UNIT RM 329	39	40	SPARE
	41	42	SPARE

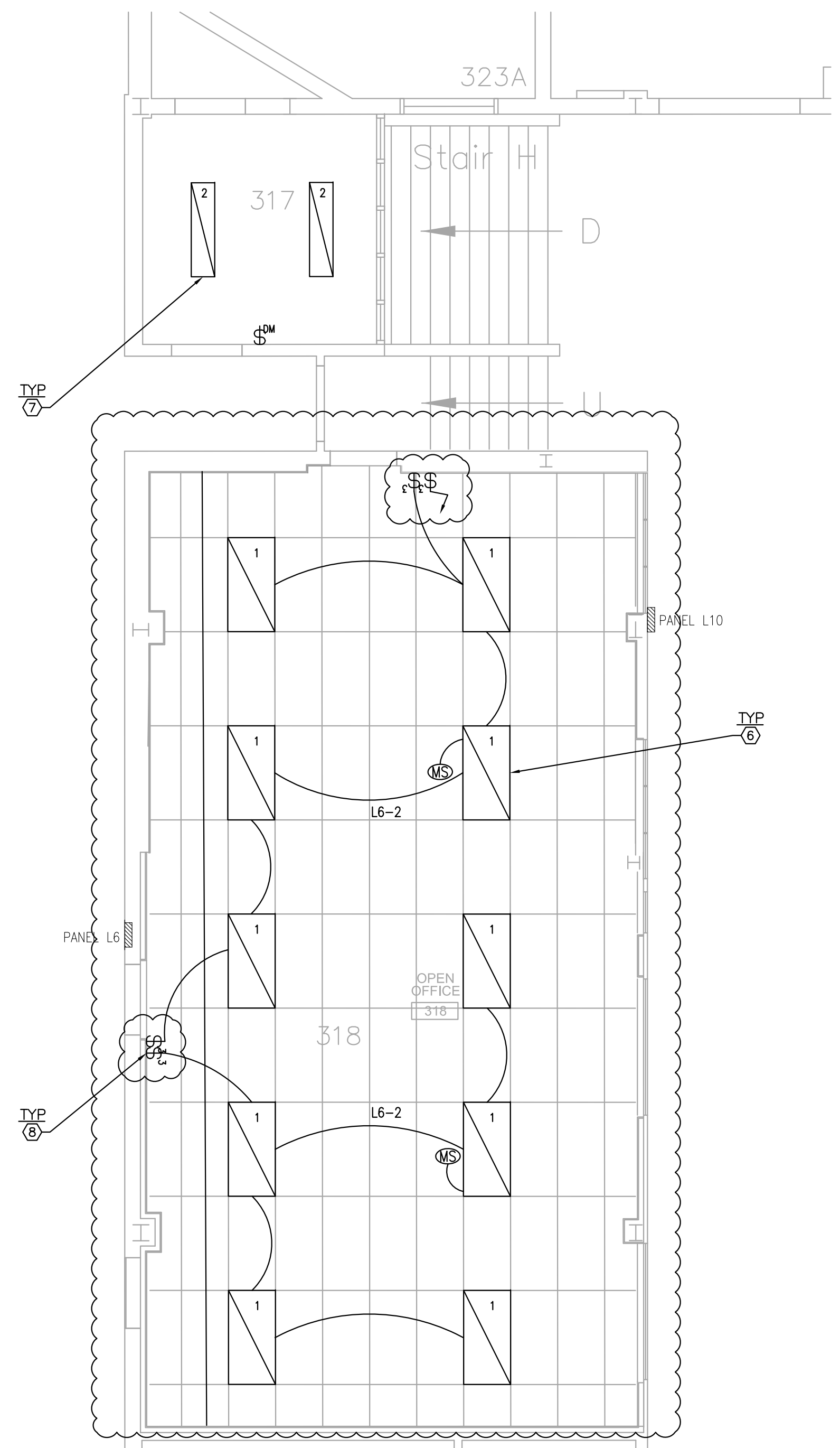
Δ EXISTING LOAD ON NEW BREAKER

4 NEW PANEL L10 SCHEDULE
N.T.S.

KEY PLAN



1 POWER AND SYSTEMS - NEW WORK
SCALE = 1:50



2 LIGHTING - NEW WORK
SCALE = 1:50

DRAWING NOTES

- REPLACE EXISTING PANEL WITH NEW 120/240V, 1PH, 3W, 225A, 42CCT, COPPER-BUS, 14" WIDE NQDD SQUARE D PANEL, C/W ALL BREAKERS AS SHOWN. RECONNECT EXISTING CIRCUITS BACK TO NEW PANEL. MODIFY CONDUITS AND WIRING AS REQUIRED. CONFIRM EXISTING CCTS SHOWN ON 4/E01, TRACE UNKNOWN CIRCUITS AND UPDATE LABEL ON FIELD DEVICES. EXISTING PANEL IS CUTLER HAMMER 120/240V, 1-PHASE, 30 CCTS, TUB SIZE: APPROX 33"H X 14"W X 4"D.
- NEW 240V, 25A, 1-PHASE AC UNIT BY MECHANICAL CONTRACTOR. PROVIDE HEAVY DUTY SAFETY SWITCH (SQUARE D RCD5326 OR EQUAL APPROVED) AND CONNECTION TO PANEL L10 AND TO INDOOR UNIT. PROVIDE NEW 25A 2-POLE BREAKER WITHIN PANEL L10 AND MAKE CONNECTION USING 2#12+GND-21mm EMT. COORDINATE WORK ON SITE WITH MECHANICAL CONTRACTOR.
- TYPICAL: NEW INDOOR EVAPORATOR WITHIN ROOM (TYPICAL OF THREE) BY MECHANICAL CONTRACTOR. PROVIDE NEW 3-POLE MANUAL SWITCH, SQUARE D CLASS 2510 KG2B OR EQUAL APPROVED IN CEILING SPACE AND PROVIDE 3-WIRE #14 AWG-16mm EMT CONNECTION TO CONDENSING UNIT AS PER MANUFACTURER'S INSTRUCTIONS. PROVIDE LABEL ON UNIT: "SERVICE SWITCH IN CEILING". ELECTRICAL WIRING TO FOLLOW SAME ROUTING AS MECHANICAL PIPING. COORDINATE WORK ON SITE WITH MECHANICAL CONTRACTOR.
- TYPICAL: PROVIDE DATA/COMMUNICATION ROUGH-IN. RUN 27mmC EMT CONDUIT FROM OUTLET TO ABOVE PULLBOX.
- TYPICAL: TWO CHANNEL, ALUMINUM FURNITURE POLE TO BE SUPPLIED WITH FURNITURE. DIV.26 TO SUPPLY EACH POLE WITH POWER CIRCUITS AS SHOWN. PROVIDE JUNCTION BOX IN CEILING SPACE WITH 120V CIRCUITS AS INDICATED TO SUPPLY POWER TO EACH POLE.
- TYPICAL: PROVIDE NEW LIGHT FIXTURE (AND CONNECT TO NEW CONTROLS. REFER TO LUMINAIRE SCHEDULE FOR DETAILS.
- TYPICAL: PROVIDE NEW SURFACE MOUNTED DIMMABLE LIGHT FIXTURE AND CONNECT TO NEW CONTROLS AND LOCAL LIGHTING CIRCUIT FOR THIS ROOM. REFER TO LUMINAIRE SCHEDULE FOR DETAILS.
- TYPICAL: PROVIDE NEW 3-WAY LIGHTING CONTROL WALL LIGHT SWITCHES AND CEILING MOUNTED OCCUPANCY SENSORS. REFER TO SPECIFICATIONS FOR DETAILS.

LUMINAIRE SCHEDULE

TYPE	LUMINAIRE TYPE	LAMP TYPE	LAMP WATT	LAMP VOLTAGE	LUMEN OUTPUT	COLOR TEMPERATURE	CRI	MODEL NUMBER	NOTE
1	2'x4' RECESSED	LED	40	120	4300	4000K	80	PHILIPS CFI ZEVG38L840-4-D-UNV-DIM OR EQUAL APPROVED	
2	1'x4' SURFACE	LED	36	120	3500	4000K	80	PINNACLE LTG AD14A-840HO-S-U-OL1-1-W-QS OR EQUAL APPROVED	C/W 0-10V DIMMING

LEGEND

SYMBOL	DESCRIPTION
[Symbol]	2'x4' LUMINAIRE, TYPE AS SHOWN
[Symbol]	1'x4' LUMINAIRE, TYPE AS SHOWN
[Symbol]	LIGHTING CONTROL OCCUPANCY/VANOCANCY SWITCH
[Symbol]	LIGHTING CONTROL SWITCH 3-WAY REFER TO SPECIFICATIONS
[Symbol]	LIGHTING CONTROL DIMMABLE MOTION SWITCH
[Symbol]	ELECTRICAL PANEL - RECESSED
[Symbol]	ELECTRICAL PANEL - SURFACE
[Symbol]	MOTOR
[Symbol]	MANUAL SWITCH
[Symbol]	120V, 15A DUPLEX RECEPTACLE
[Symbol]	ROUGH-IN FOR DATA/VOICE OUTLET REFER TO SPECIFICATIONS
[Symbol]	FURNITURE POLE C/W POWER CIRCUITS AS SHOWN
[Symbol]	DARK SOLID LINE DENOTES NEW OR RELOCATED
[Symbol]	LIGHT SOLID LINE DENOTES EXISTING TO REMAIN
[Symbol]	DASHED LINE DENOTES DEMOLITION WORK

1	22 11 2017	ADDENDUM #2	FG
0	15 11 2017	ISSUED FOR TENDER	FG
No.	Date	Revision	By: / Par:

Date Printed DD MM YYYY / Date imprimée

- Verify all dimensions and site conditions and be responsible for same
- Vérifier toutes les dimensions et l'état des lieux et en assumer la responsabilité

A	A Detail no. / No. du détail
B	B Location drawing no. / sur dessin no.
C	C Drawing no. / dessin no.

project / projet
NRC M-19, STORES AMALGAMATION PROJECT PHASE 2
 MONTREAL ROAD CAMPUS

drawing / dessin
ELECTRICAL: POWER, SYSTEMS AND LIGHTING NEW WORK

designed / conçu	FG	date	NOV. 2017
drawn / dessiné	FG	scale	AS NOTED
checked / vérifié	CYC	sheet / de	E1
approved / approuvé	BV	W.O.no.	D.T.no.

dwg.no. / dessin no.
5463-E01