

NATIONAL RESEARCH COUNCIL CANADA MONTREAL ROAD CAMPUS

BUILDING M-19, STORES AMALGAMATION PROJECT

DRAWING LIST

ARCHITECTURAL COVER SHEET

PART SECOND FLOOR, RCP PLANS AND DETAILS
 ELEVATIONS ROOM 318
 PART SECOND FLOOR FINISHES PLAN

DRAWING No.

5463-A00
 5463-A01
 5463-A02
 5463-A03

STRUCTURAL

STRUCTURAL FLOOR PLAN, ELEVATIONS AND SECTIONS

5463-S01

MECHANICAL

LEGEND AND FIRE PROTECTION - DEMOLITION AND NEW WORK

5463-M01

HVAC - NEW WORK

5463-M02

UTILITIES - NEW WORK, MISCELLANEOUS EQUIPMENT SCHEDULES

5463-M03

HVAC - DEMOLITION AND NEW WORK

5463-M04

ELECTRICAL

NEW - LIGHTING, POWER & COMMUNICATION, COMMUNICATION ZONE CONDUIT

5463-E01

LEGEND	
APPLICABLE TO ALL ARCHITECTURAL DRAWINGS	
	DRAWING NOTE
	ELEVATION REFERENCE
	DETAIL NUMBER
	SECTION DETAIL REFERENCE
	DRAWING NUMBER
	DETAIL REFERENCE
	DOOR TAG
	WALL TYPE
	ELEVATION HEIGHT
	EXISTING WALL TO REMAIN
	EXISTING WALL TO BE REMOVED
	NEW WALL

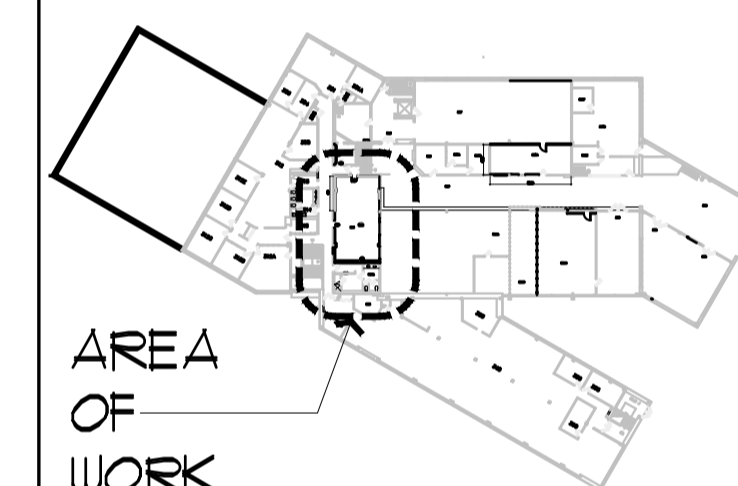
PROJECT NORTH



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.
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KEY PLAN



AREA OF WORK

No.	Date	Revision	By:
1	16-11-2017	ISSUED FOR TENDER	SWH

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

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

MONTREAL ROAD CAMPUS
 drawing COVER SHEET dessin

designed SWH conçu date OCT 2017 date

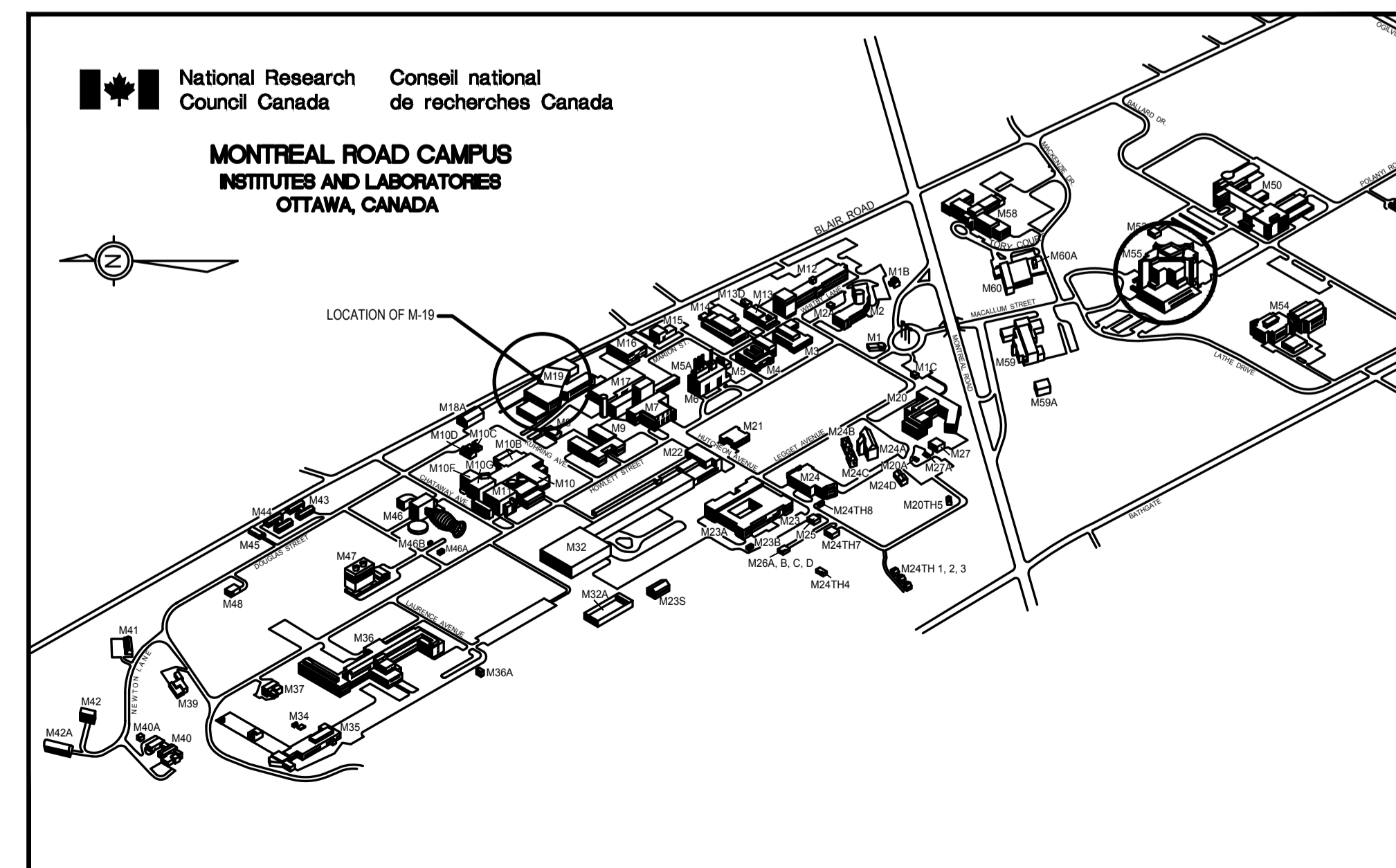
drawn SWH dessiné scale AS NOTED échelle

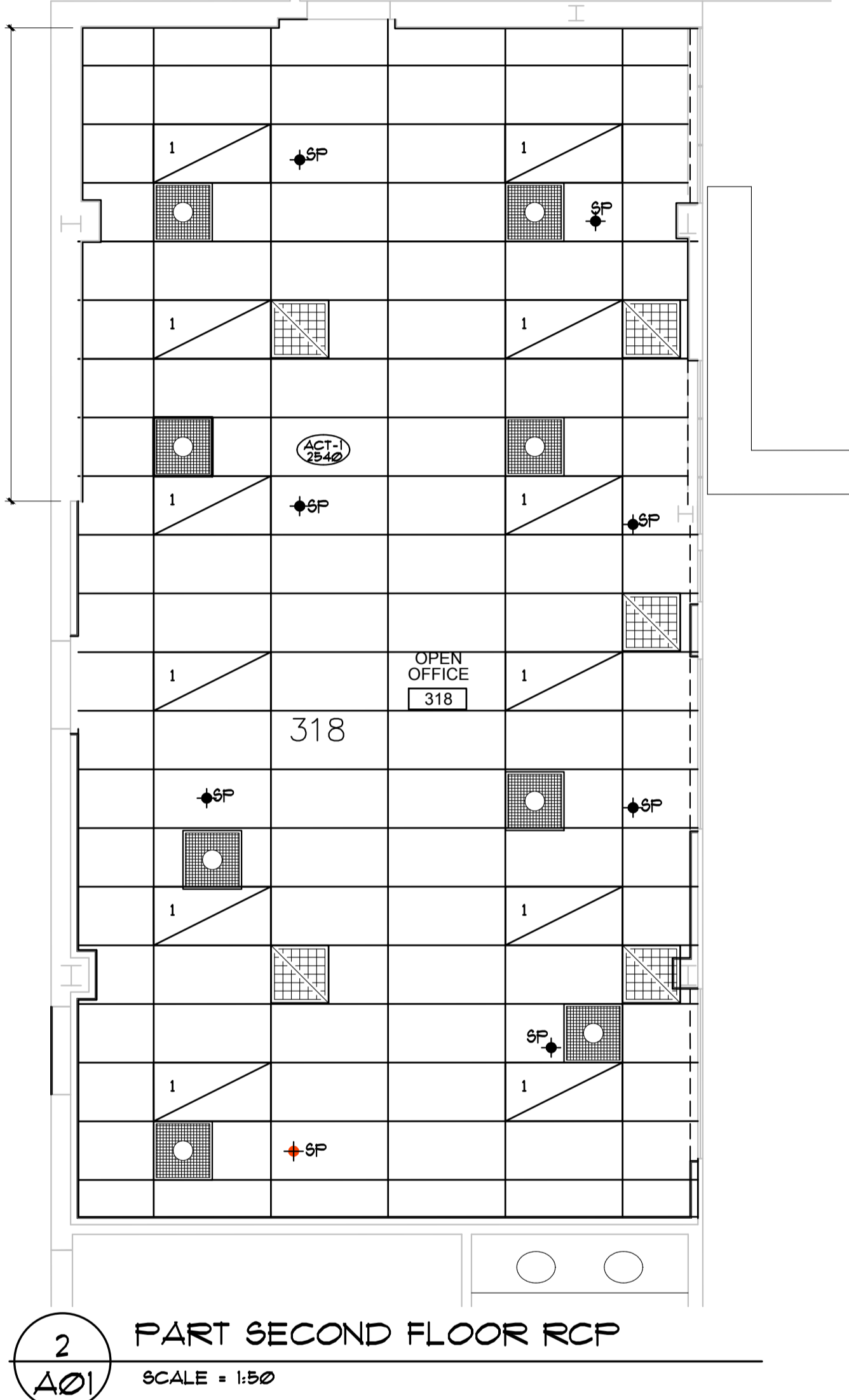
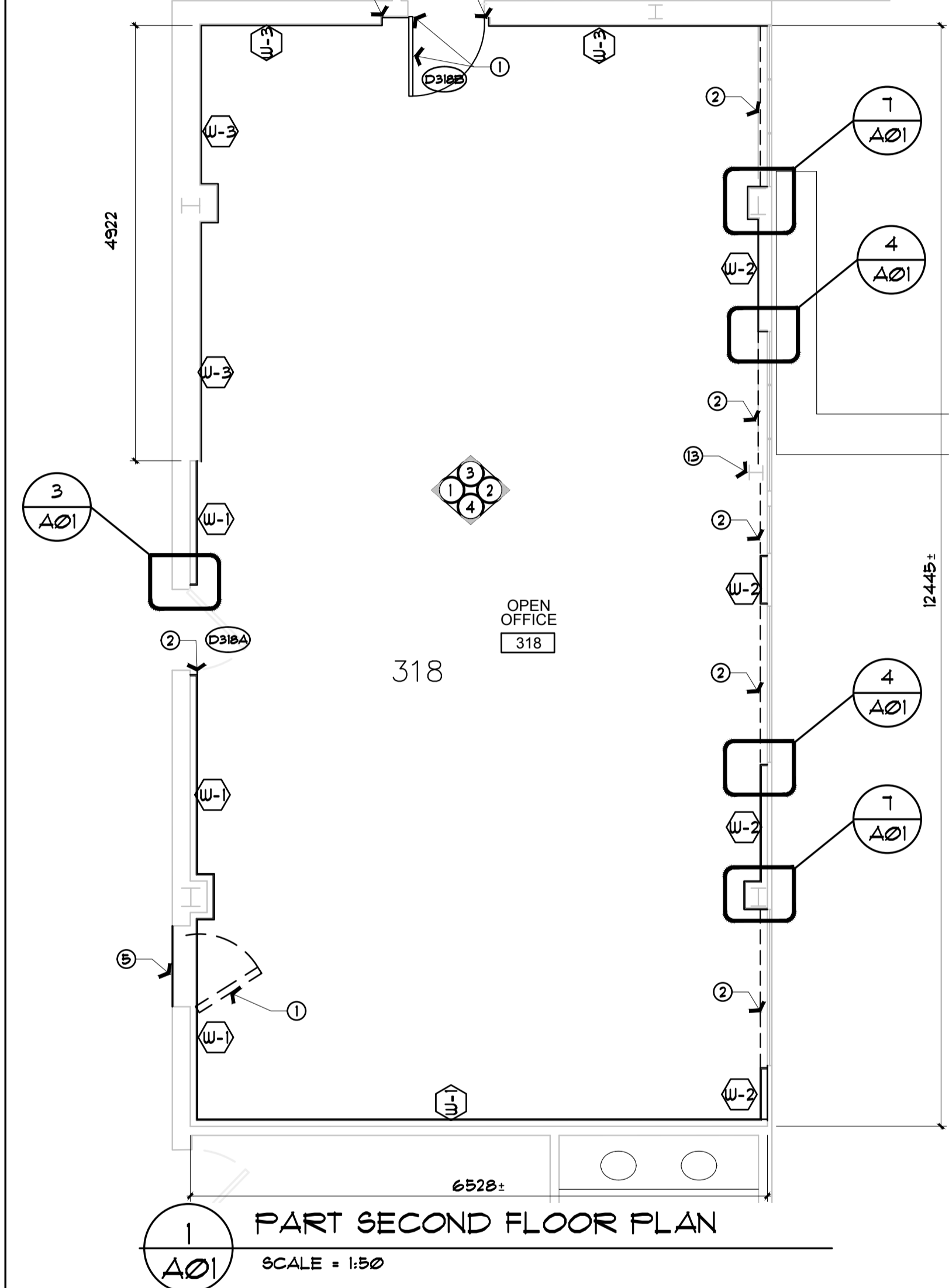
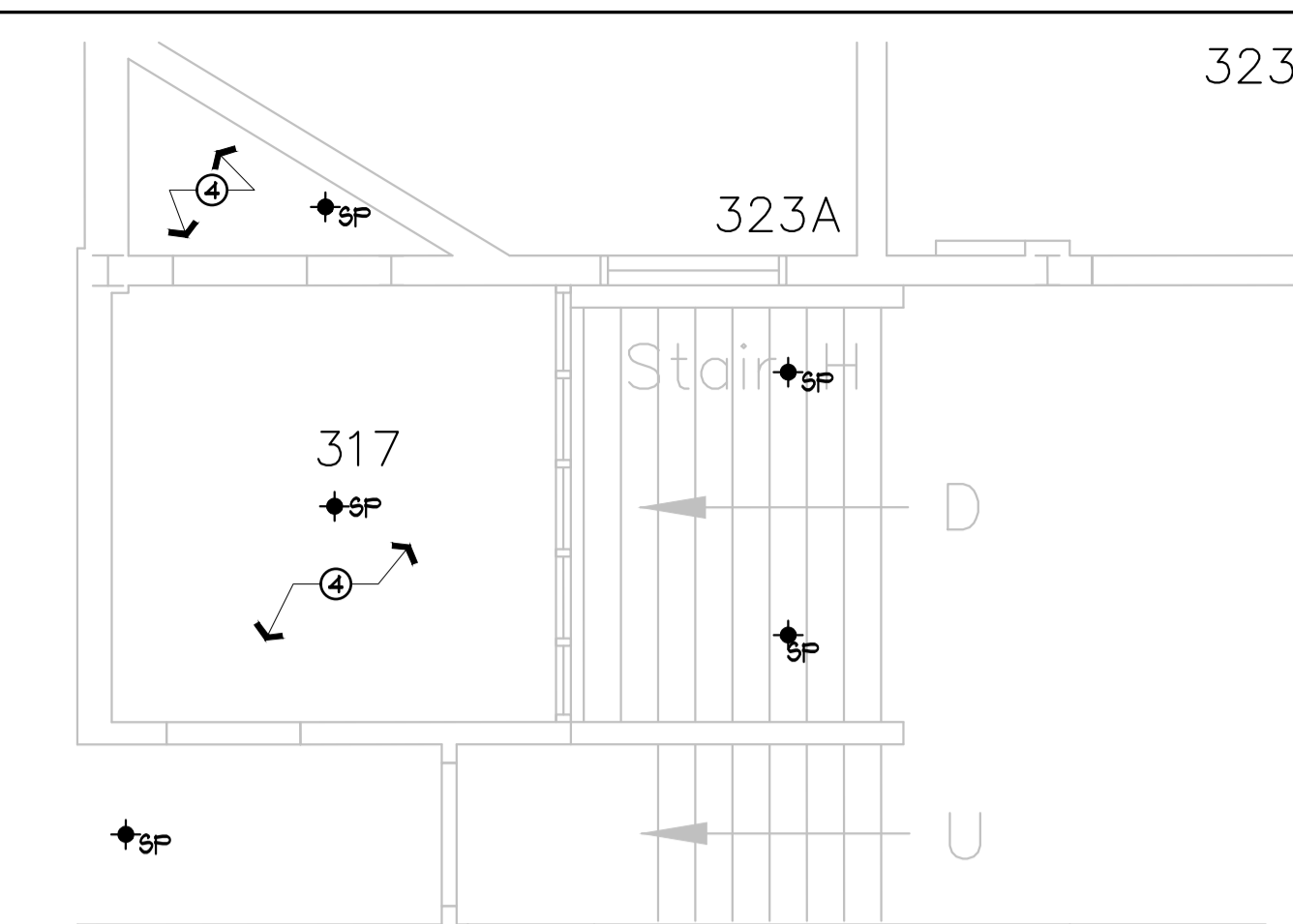
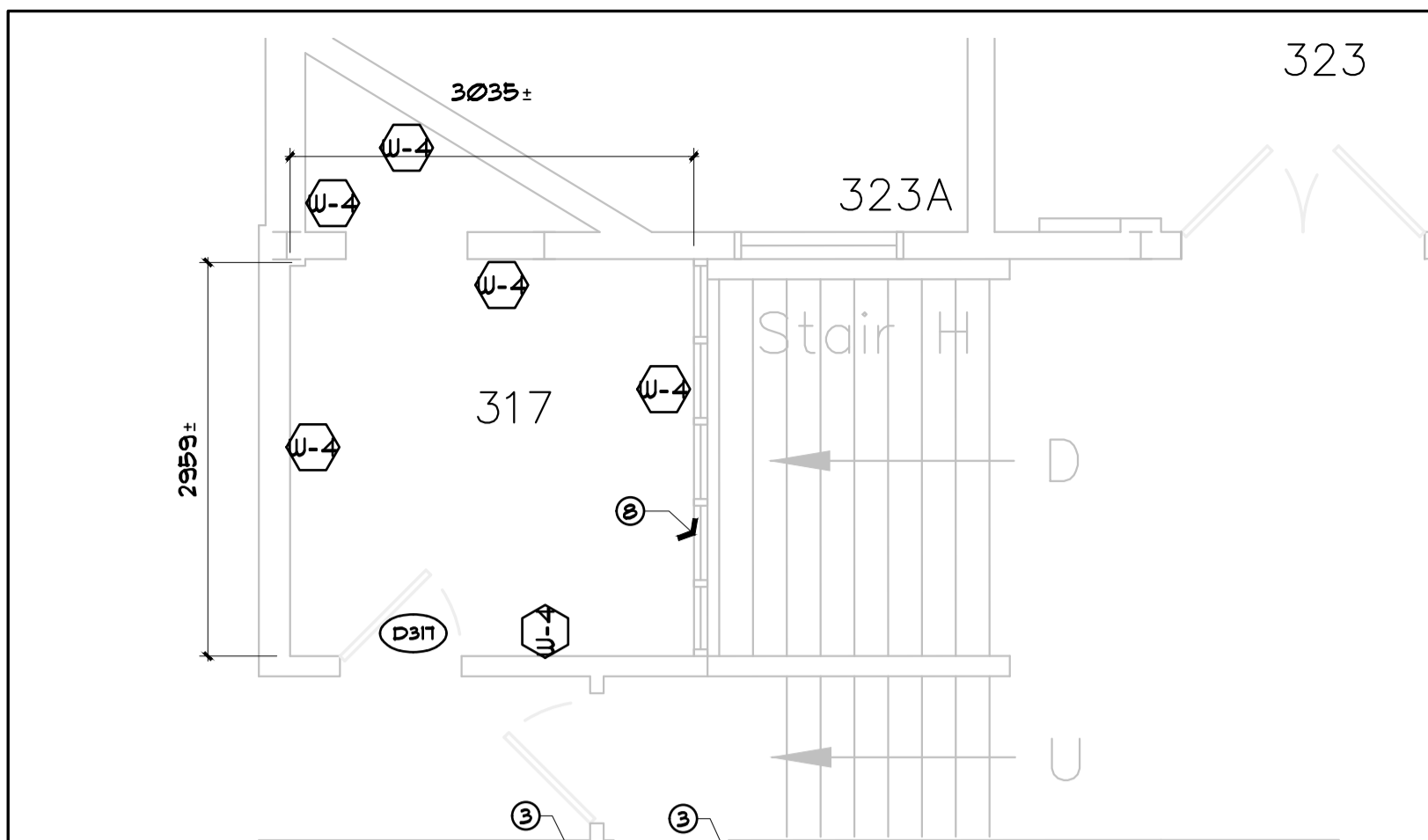
checked JCW vérifié sheet 1 of/de 4 feuille

approved D. Labelle approuvé W.O.no. D.T.no.

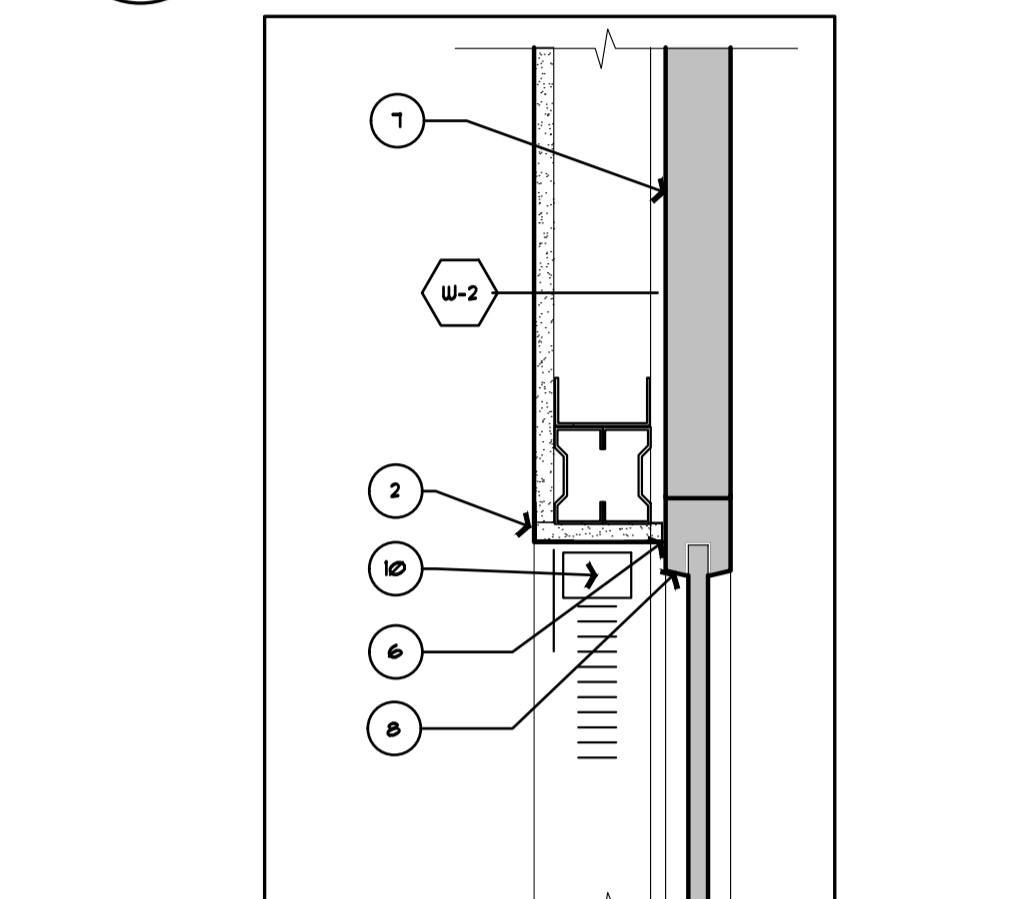
dwg.no. 5463-A00 dessin no.

ABBREVIATIONS		PARTITION WALLS: NEW CONSTRUCTION	
AWB	ALUMINUM WALL BASE	O.C.	ON CENTER
ACP	ACOUSTIC CEILING PANEL	FS	PRESSED STEEL
AF	ABOVE FINISHED FLOOR	PT	PAINT
CONC	CONCRETE	PCT	PAINTED CONCRETE TOPPING
CFT	CARPET	REV	REVERSE
CMU	CONCRETE MASONRY UNIT	RUB	RESILIENT WALL BASE
C/W	COMPLETE WITH	SIM	SIMILAR
DMNT	DEMOUNTABLE	SP	SPRINKLER HEAD
DWG	DRAWING	U/S	UNDERSIDE
(E)	EXISTING	TYP	TYPICAL
FFL	FINISHED FLOOR LEVEL		
GB	GYPSUM BOARD		
HM	HOLLOW METAL		
NTS	NOT TO SCALE		
	NEW INTERIOR PARTITION		NEW WALL FINISH
	-13mm GYPSUM BOARD, TO 150mm ABOVE ACT, PAINT FINISH. -64mm, 20ga METAL STUDS AT 400mm O.C., EXTEND TO 150mm ABOVE ACT. -EXISTING PLASTER AND TERRA COTTA TILE WALL. NOTES: 1) GYPSUM BOARD TO EXTEND A 150mm ABOVE ACT. 2) C/W METAL CHANNEL STIFFENERS.		-13mm GYPSUM BOARD, PAINT FINISH -32mm 20ga METAL STUDS AT 400mm O.C., EXTEND TO U/S OF STEEL STRUCTURE -FILL VOIDS WITH ROXUL, SAFE AND SOUND -EXISTING ACM TRANSITE WALL PANEL NOTES: 1) DO NOT EFFECT TRANSITE WALL PANELS, (ACM) 2) WHERE REQUIRED SECURE NEW METAL STUDS TO EXISTING 50mm METAL WALL PANEL FRAME. 3) GYPSUM BOARD TO 150mm ABOVE ACT. 4) C/W METAL CHANNEL STIFFENERS.
	-EXISTING Gypsum board to 150mm above act, paint finish -EXISTING METAL STUDS ADD STUDS OR MODIFY AS REQUIRED. -EXTEND TO 150mm ABOVE ACT.		EXISTING GB OR PLASTER WALL -REMOVE ALL SCREWS, WALL PLUGS, ETC AND PATCH WALLS. -PREP WALL FOR 1 COAT PRIMER AND TWO COAT PAINT FINISH.

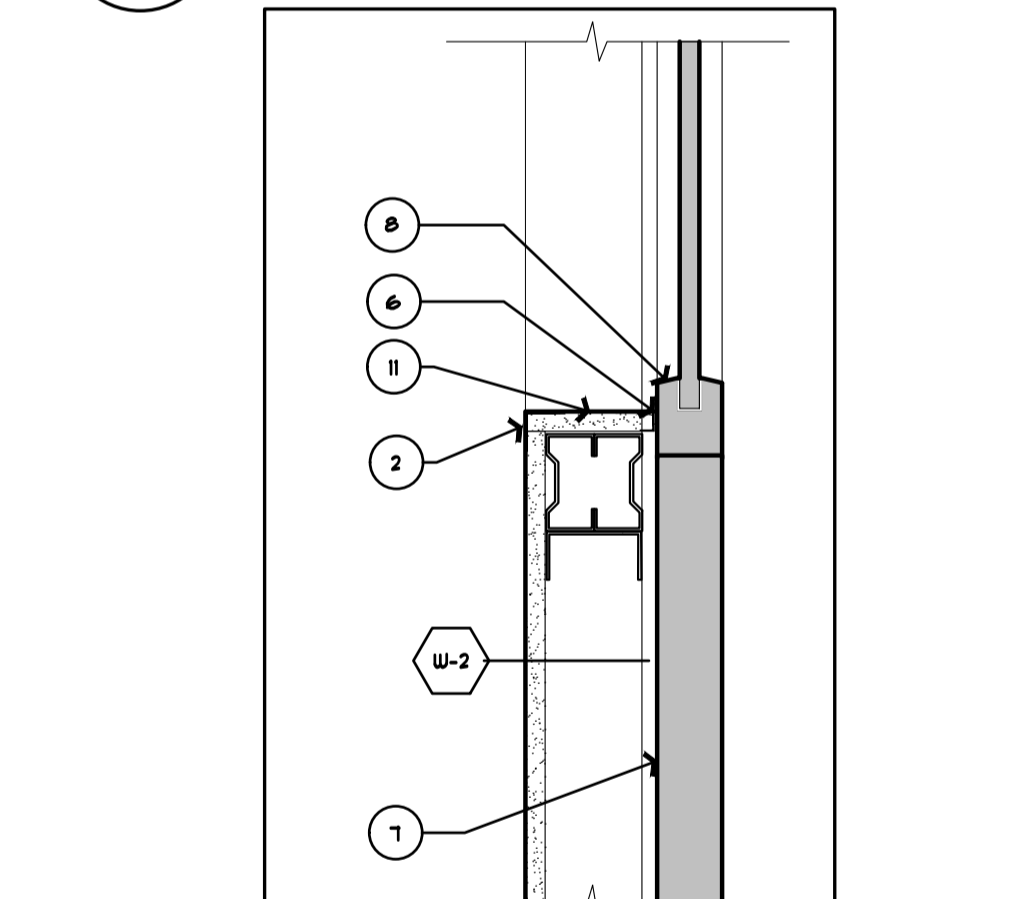




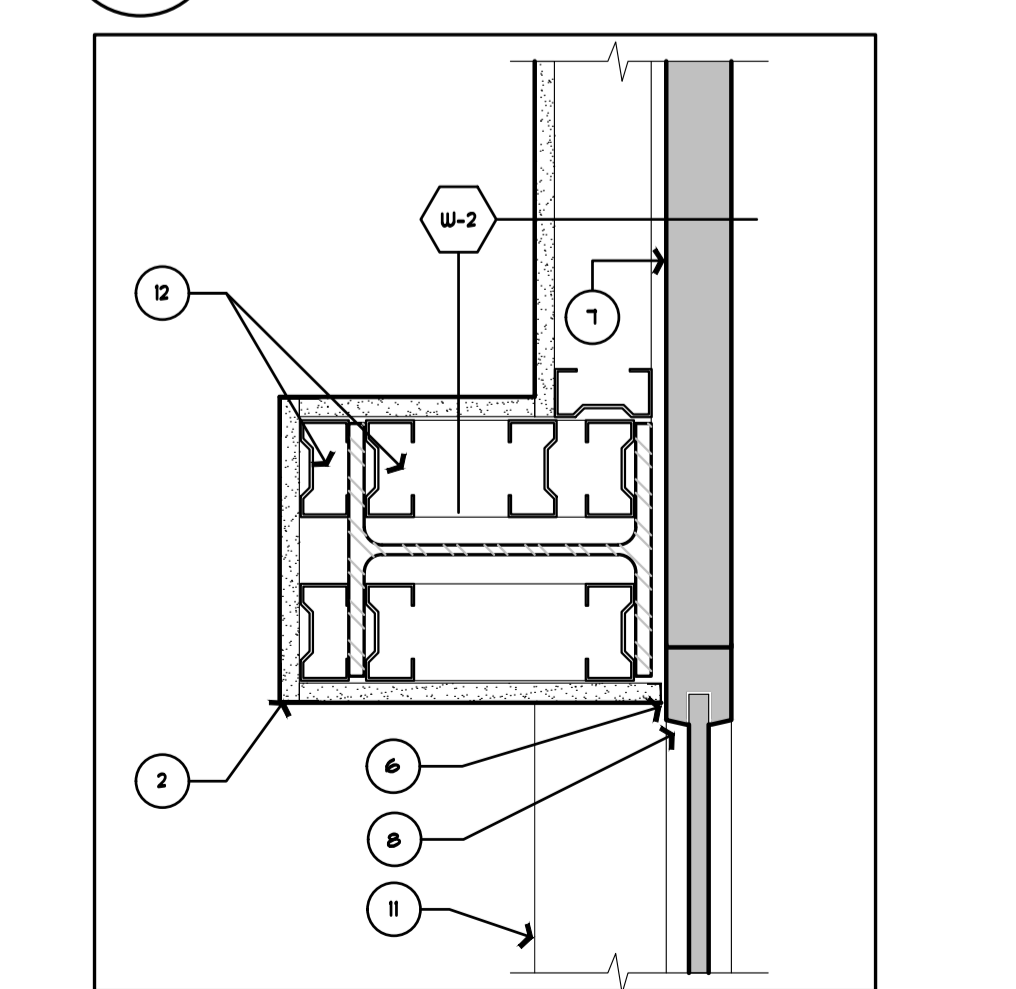
4 TYP. WINDOW JAMB DETAIL
SCALE = 1:5



5 TYP. WINDOW HEAD DETAIL
SCALE = 1:5



6 TYP. WINDOW SILL DETAIL
SCALE = 1:5



7 WINDOW JAMB AT COLUMN 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.

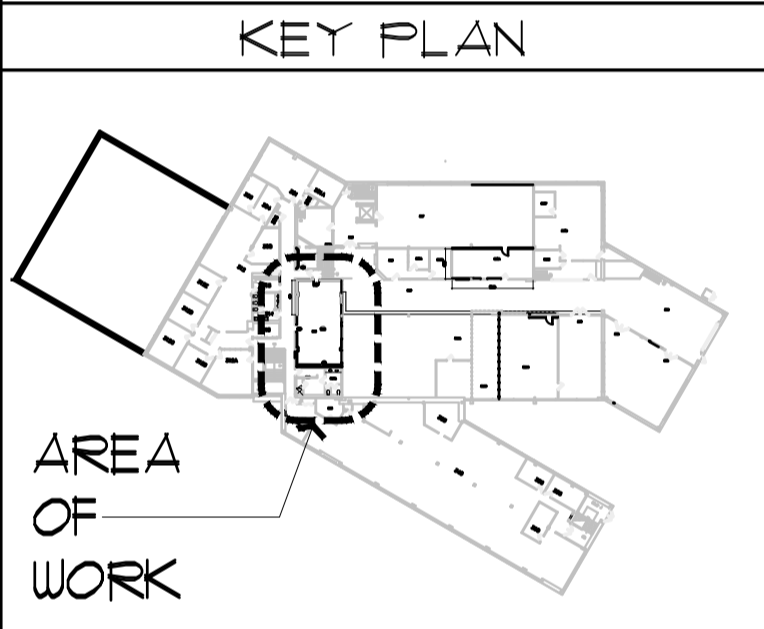
	NEW 610X1220 LIGHT FIXTURE, REFER TO ELECTRICAL.
	SPRINKLER HEAD, REFER TO MECHANICAL.
	NEW 610' x 610' SUPPLY AIR DIFFUSER, REFER TO MECHANICAL.
	NEW 610' x 610' RETURN AIR GRILLE, REFER TO MECHANICAL.

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

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Date Printed: DD MM YYYY Date imprimée: DD MM YYYY

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

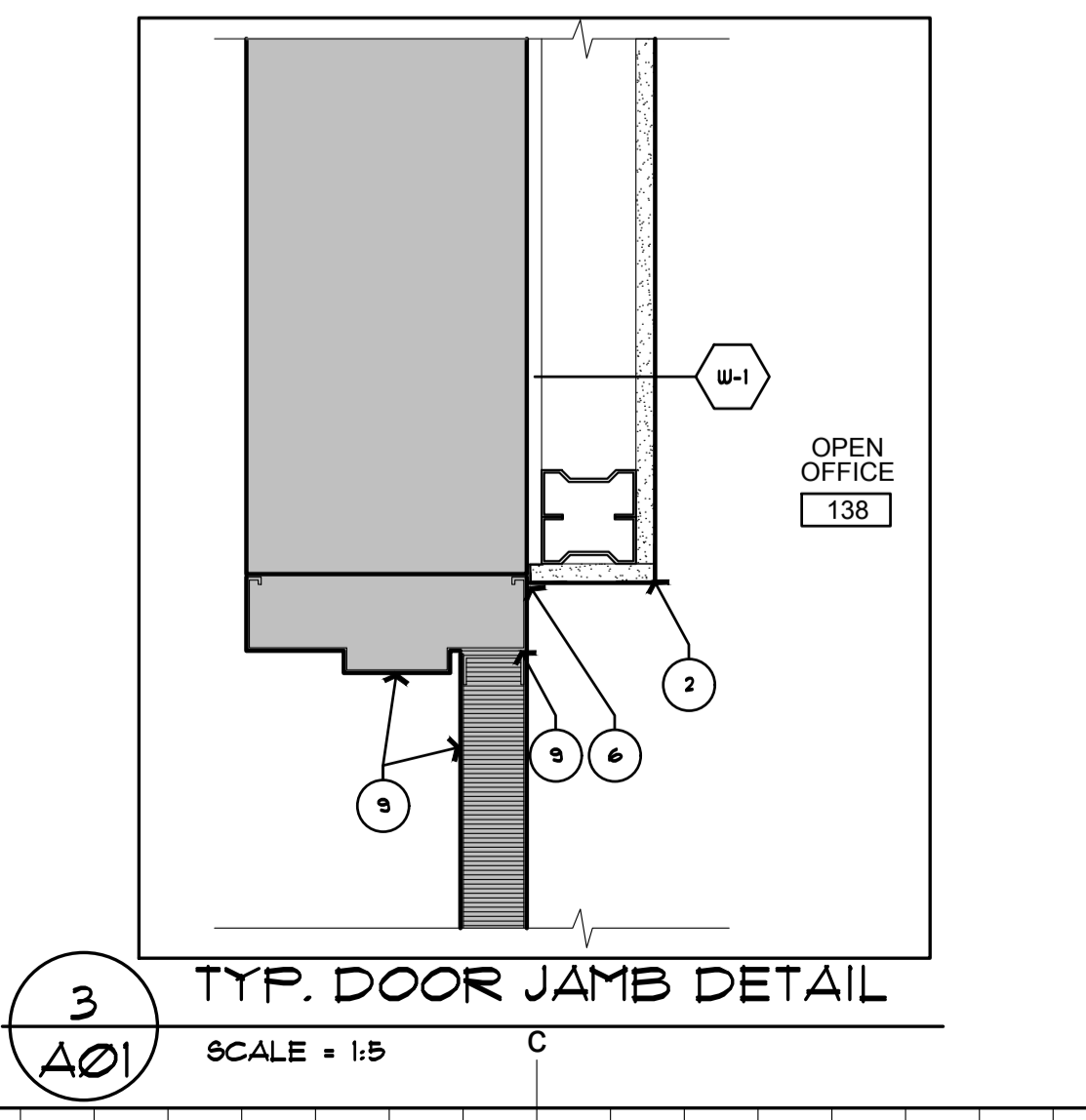
project: NRC M-19, STORES AMALGAMATION PROJECT PHASE 2

MONTREAL ROAD CAMPUS

drawing: PART SECOND FLOOR, RCP PLANS AND DETAILS

designed	conçu	date	date
SWH		NOV. 2017	
drawn	dessiné	scale	échelle
SWH		AS NOTED	
checked	vérifié	sheet	feuille
JCW		2 of/de 4	
approved	approuvé	W.O.no.	D.T.no.
D. LABELLE			
dwg.no.		dessin no.	
5463-A01			

- ### 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

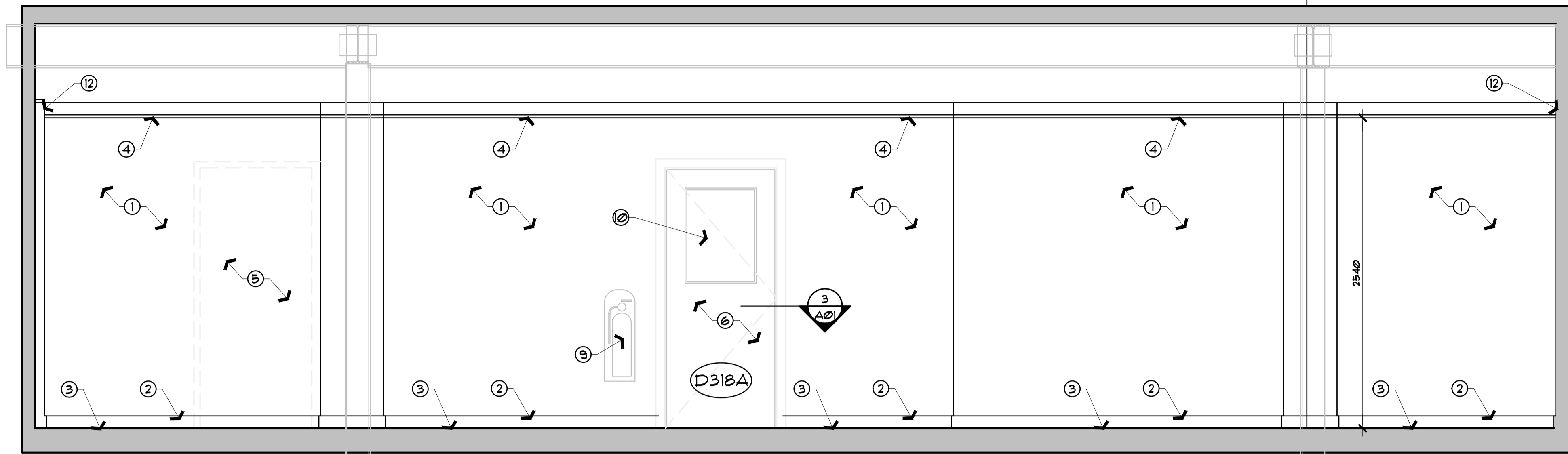
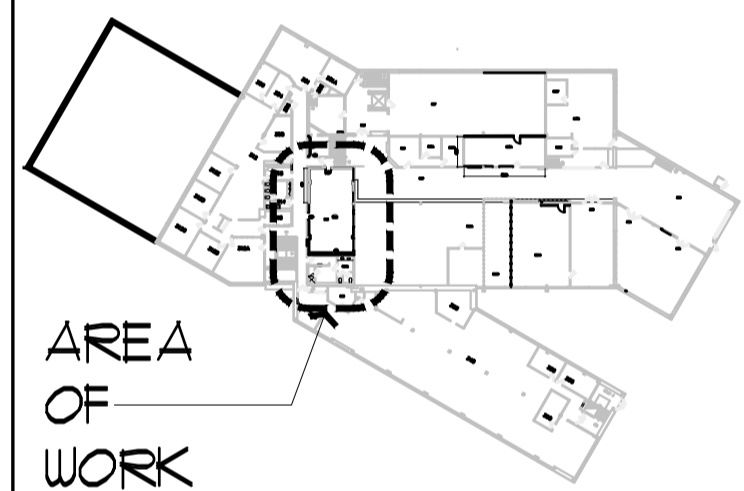
CONSTRUCTION NOTES
SHEET A02 ONLY

1. GYPSUM BOARD - PAINT.
2. RESILIENT WALL BASE.
3. CARPET TILE FLOOR FINISH, REFER TO SHEET A03.
4. ACOUSTIC CEILING PANELS AND SUSPENSION SYSTEM.
5. EXISTING METAL DOOR BEHIND, REMOVE FRAME TO REMAIN. OPENING TO BE COVERED OVER WITH WALL TYPE W-1.
6. a. CLEAN AND DEGREASE EXISTING WOOD DOOR, PREP FOR PRIME AND TWO COAT PAINT FINISH.
b. CLEAN AND DEGREASE EXISTING METAL DOOR FRAME PREP FOR PRIME AND TWO COAT PAINT FINISH.
7. CLEAN AND DEGREASE EXISTING WINDOW AND METAL WINDOW FRAME. CLEAN AND DEGREASE EXISTING METAL WINDOW FRAME PREP FOR PRIME AND TWO COAT PAINT FINISH.
8. NOT USED
9. REMOVE FIRE EXTINGUISHER AND WALL MOUNT BRACKET, HAND OVER TO DEPARTMENTAL REPRESENTATIVE. CONTRACTOR TO REINSTALL WHEN PROJECT IS COMPLETE.
10. GRAPHIC WINDOW FILM, REFER TO SPECIFICATION.
11. INSTALL 25mm WHITE, ALUMINUM ROOM DARKENING MINI-BLINDS C/W VALANCE.
12. EXTEND NEW OR EXISTING PERIMETER WALL 150mm ABOVE NEW SUSPENDED CEILING.
13. EXISTING STRUCTURAL COLUMN, CLEAN/DEGREASE, PREP FOR ONE COAT PRIMER AND TWO COAT PAINT FINISH. COLOUR TO MATCH WALL, PI.

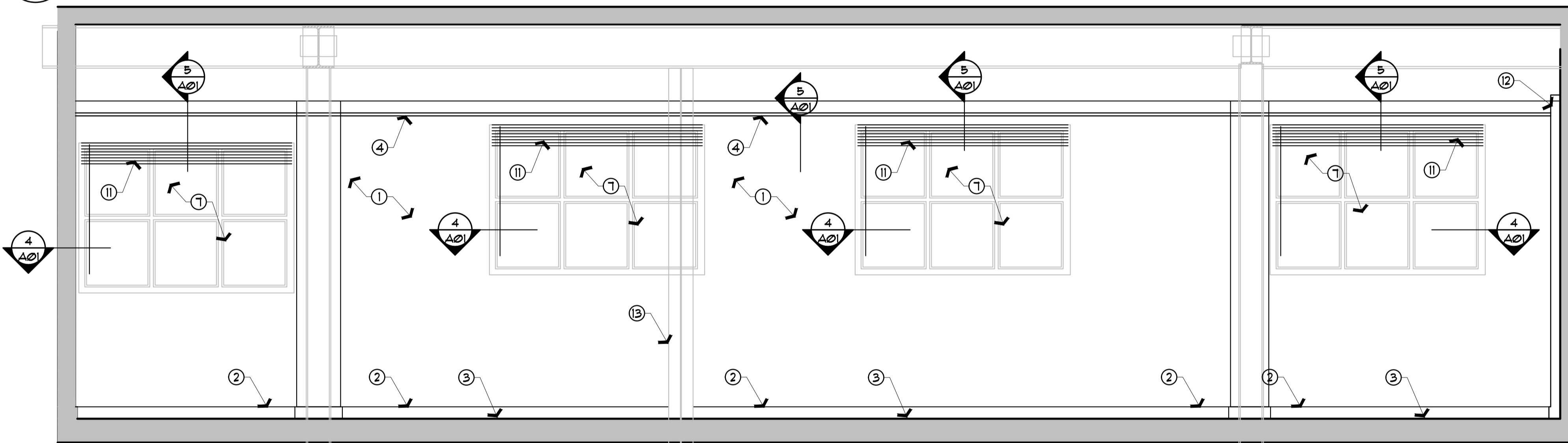
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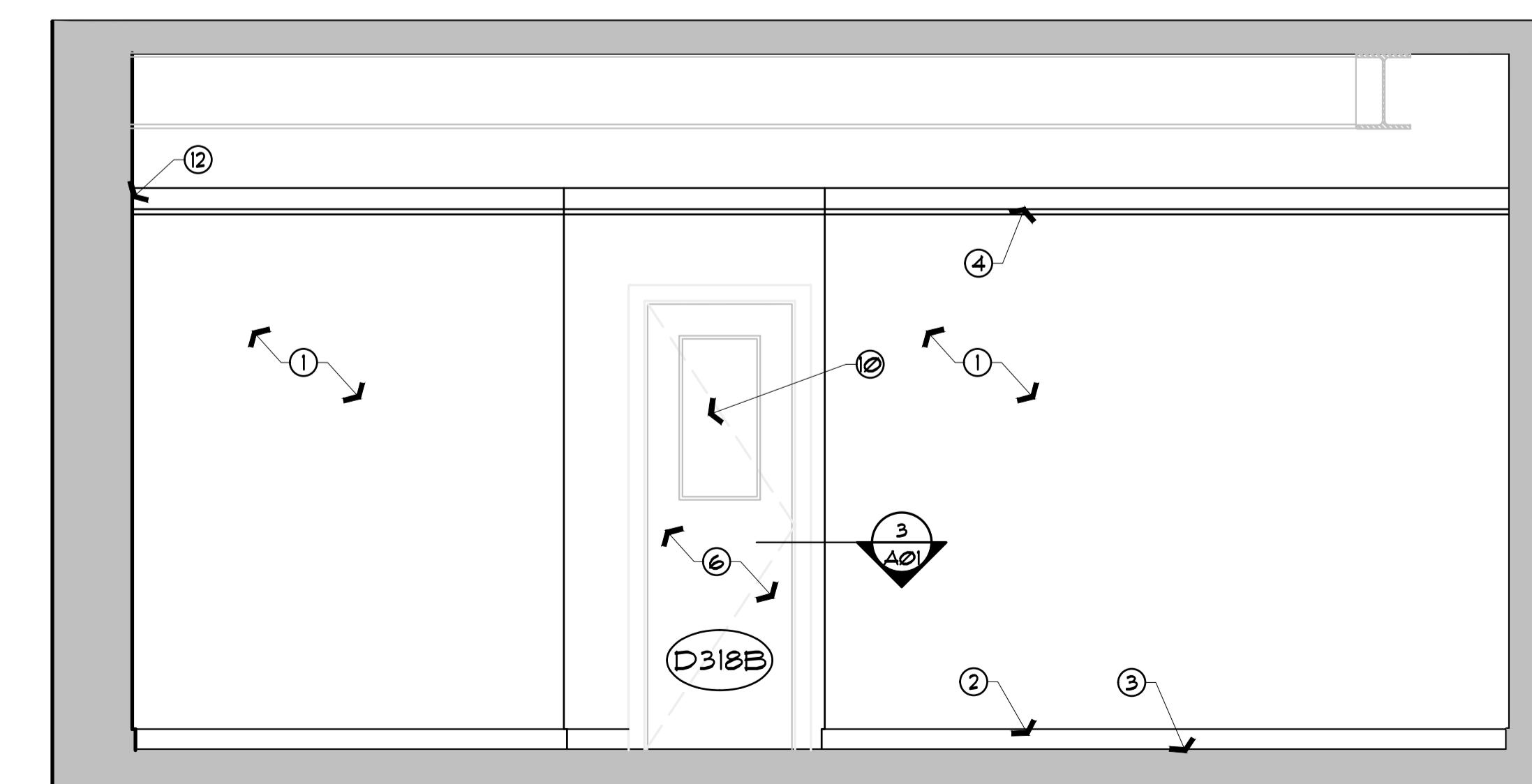
KEY PLAN



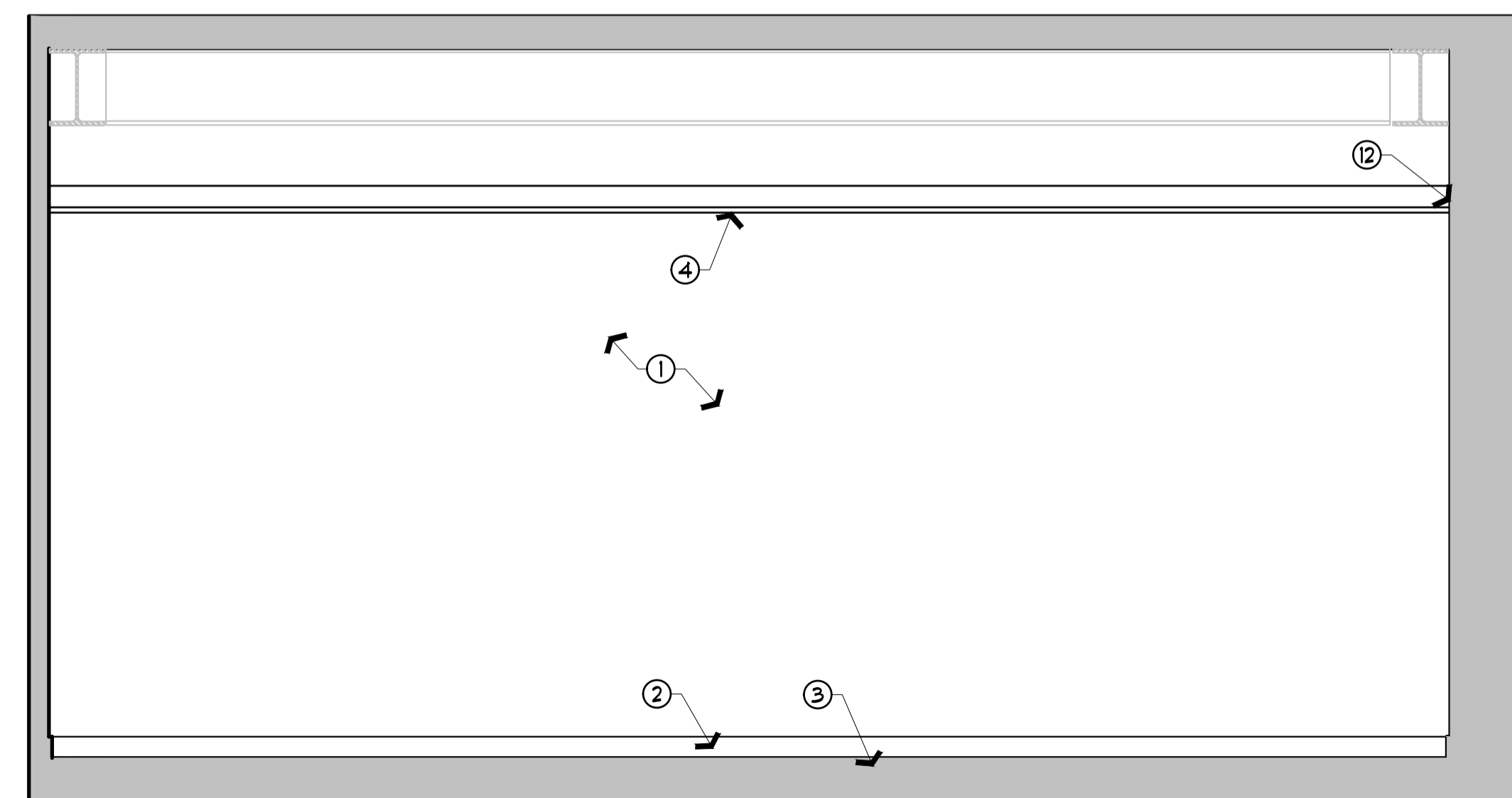
1
ELEVATION - ROOM 318
SCALE = 1:25



2
ELEVATION - ROOM 318
SCALE = 1:25



3
ELEVATION - ROOM 318
SCALE = 1:25

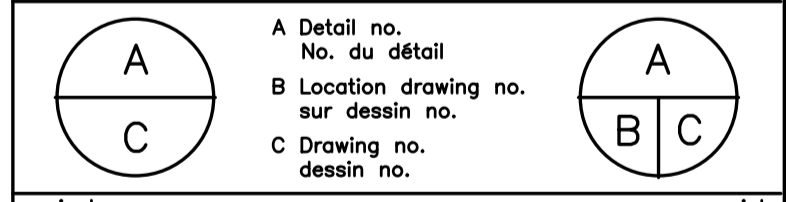


4
ELEVATION - ROOM 318
SCALE = 1:25

No.	Date	Revision	By:
1	16-11-2011	ISSUED FOR TENDER	SWH

Date Printed DD MM YYYY Date imprimée

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

MONTREAL ROAD CAMPUS

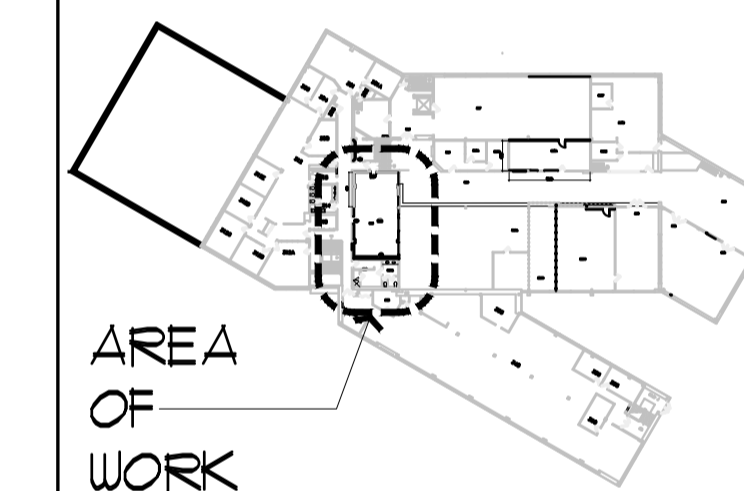
drawing: **ELEVATIONS ROOM 318**

designed	conçu	date	date
SWH		NOV. 2017	
drawn	dessiné	scale	échelle
SWH		AS NOTED	
checked	vérifié	sheet	feuille
JCW		3 of/de 4	
approved	approuvé	W.O.no.	D.T.no.
D. LABELLE			
dwg.no.	dessin no.		
5463-A02			

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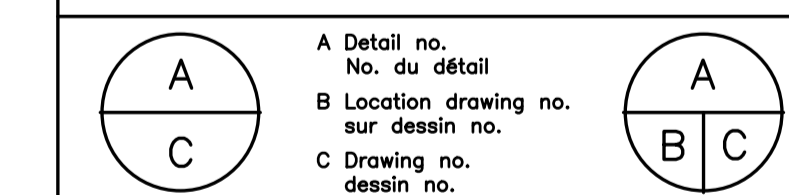
KEY PLAN



No.	Date	Revision	By:
1	16-11-2017	ISSUED FOR TENDER	SWH

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

MONTREAL ROAD CAMPUS
 drawing / dessin
PART SECOND FLOOR FINISHES PLAN AND SCHEDULES

designed / conçu date / date
 SWH / SWH NOV. 2017

drawn / dessiné scale / échelle
 SWH / SWH AS NOTED

checked / vérifié sheet / feuille
 JCW / JCW 4 of/de 4

approved / approuvé W.O.no. / D.T.no.
 D. LABELLE

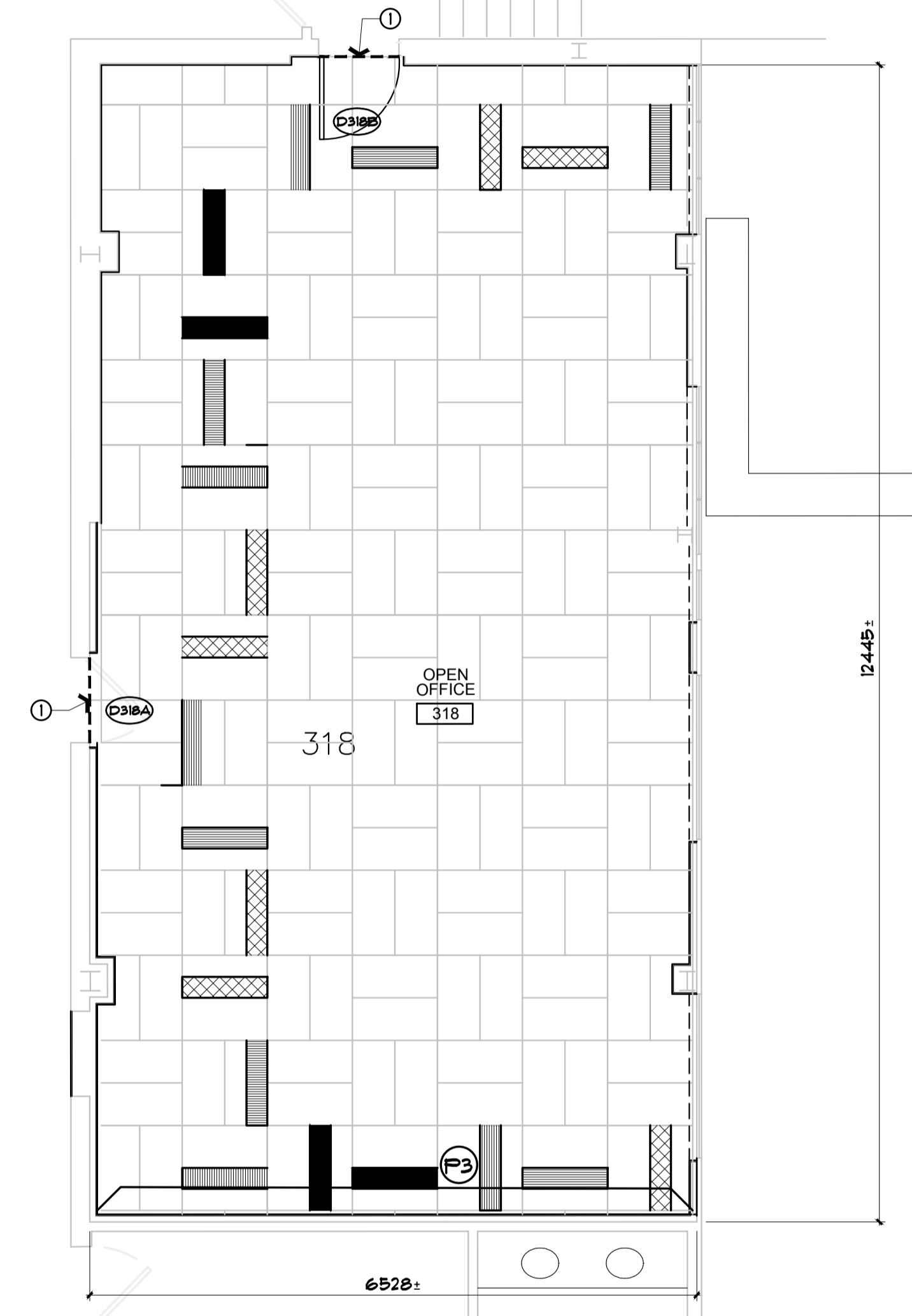
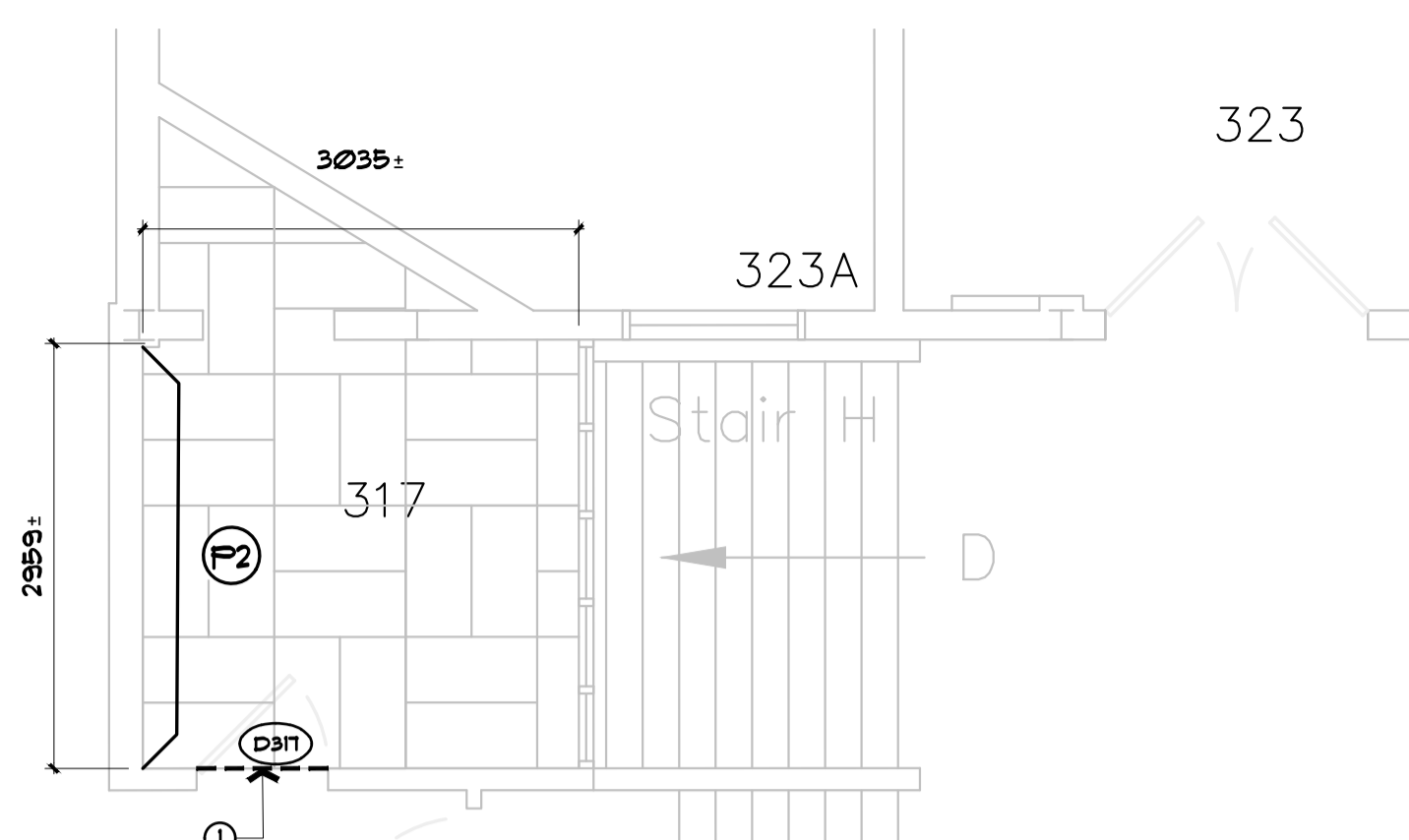
dwg.no. / dessin no.
5463-A03

ROOM No.	ROOM NAME	FLOOR		BASE		NORTH WALL		SOUTH WALL		EAST WALL		WEST WALL		CEILING		NOTES
		MAT.	FIN.	MAT.	FIN.	MAT.	FIN.	MAT.	FIN.	MAT.	FIN.	MAT.	FIN.	MAT.	FIN.	
317	OFFICE AND CLOSET	-	CPT	RUB	RUB	GB	PT	GB	PT	GB	PT	GB	PT	GB	PT	
318	OPEN OFFICE	-	CPT	RUB	RUB	GB	PT	GB	PT	GB	PT	GB	PT	-	ACP	

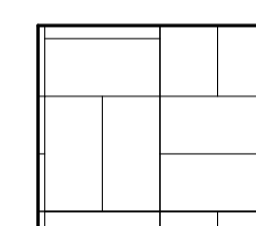
2 ROOM FINISH SCHEDULE

DOOR NO.	DOOR						GLAZ'G		FRAME		NOTES
	WIDTH	HEIGHT	THICKL	MAT.	FIN.	COLOUR	MAT.	MAT.	FIN.	COLOUR	
D317	EX	EX	EX	WOOD	PAINT	PI	EX	F3	PAINT	F3	
D318A	EX	EX	EX	WOOD	PAINT	PI	EX	F3	PAINT	F4	GRAPHIC WINDOW FILM
D318B	EX	EX	EX	WOOD	PAINT	PI	EX	F3	PAINT	F3	GRAPHIC WINDOW FILM

3 DOOR SCHEDULE



CARPET TILE:



CPT MAIN COLOUR:
 IGNITE TILE, COLOUR, OXIDIZE 48531, SIZE 18" x 36"
 AS MANUFACTURED BY SHAW CONTRACT GROUP.

ACCENT COLOURS, SIZE 9" x 36": COLOUR FORM,
 AS MANUFACTURED BY SHAW CONTRACT GROUP.

- CPT-1 GLOWING 01211 (YELLOW)
- CPT-2 PURPLE 01991 (PURPLE)
- CPT-3 HYPER GREEN 01326 (GREEN)
- CPT-4 HYPER BLUE 01436 (BLUE)

WALL BASE:

RUB RESILIENT WALL BASE:
 J SIMILAR TO JOHNSONITE, TRADITIONAL WALL BASE.
 J COLOUR: 48 GREY.

PAINT:

- IN ROOM 317 AND 318, ALL WALLS TO BE PAINTED P1 UNLESS OTHERWISE NOTED.
- IN ROOMS 317 AND 318, EXISTING METAL WINDOWS TO BE PAINTED F2, UNLESS OTHERWISE NOTED.
- ALL GYPSUM BOARD CEILING / BULKHEADS TO BE PAINTED CEILING WHITE.

1. PAINT COLOURS:

P1	SHERWIN WILLIAMS	ELDER WHITE	SW 1014
P2	SHERWIN WILLIAMS	GAUNTLET GREY	SW 1019
P3	SHERWIN WILLIAMS	DYNAMIC BLUE	SW 6958
P4	SHERWIN WILLIAMS	OVERT GREEN	SW 6718
P5	SHERWIN WILLIAMS	BEE	SW 6683
P6	SHERWIN WILLIAMS	VERVE VIOLET	SW 6975

1 PART SECOND FLOOR FINISHES PLAN
 SCALE = 1:50

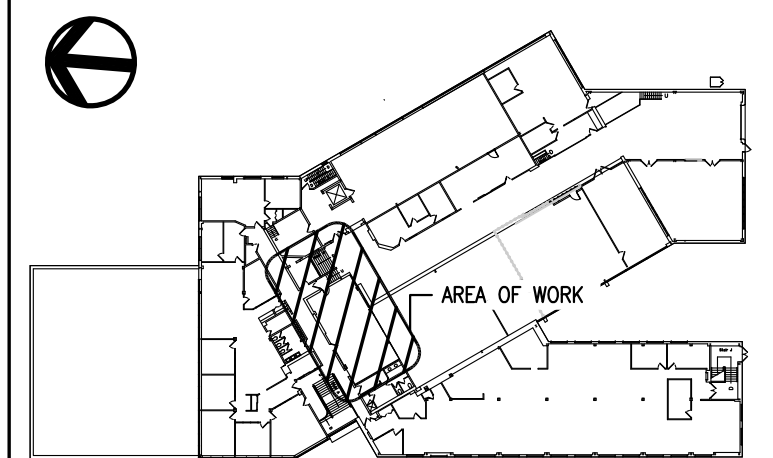
CONSTRUCTION NOTES
 SHEET A03 ONLY

- INSTALL METAL TRANSITION STRIP.

GENERAL NOTES

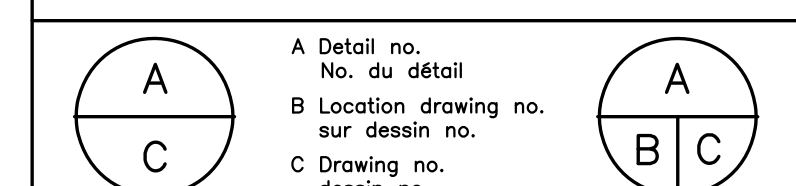
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0	16 11 2017	ISSUED FOR TENDER	ALS
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Date Printed 16 11 2017		Date imprimée	

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project
NRC M-19, STORES AMALGAMATION PROJECT
 PHASE 2

MONTREAL ROAD CAMPUS

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

designed **ALS** conçu **ALS** date **NOV 2017** date

drawn **ALS** dessiné **ALS** scale **AS SHOWN** échelle

checked **JWG** vérifié **JWG** sheet **1** of/de **3** feuille

approved **BV** approuvé **BV** W.O.no. D.T.no.

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

DEMOLITION NOTES:

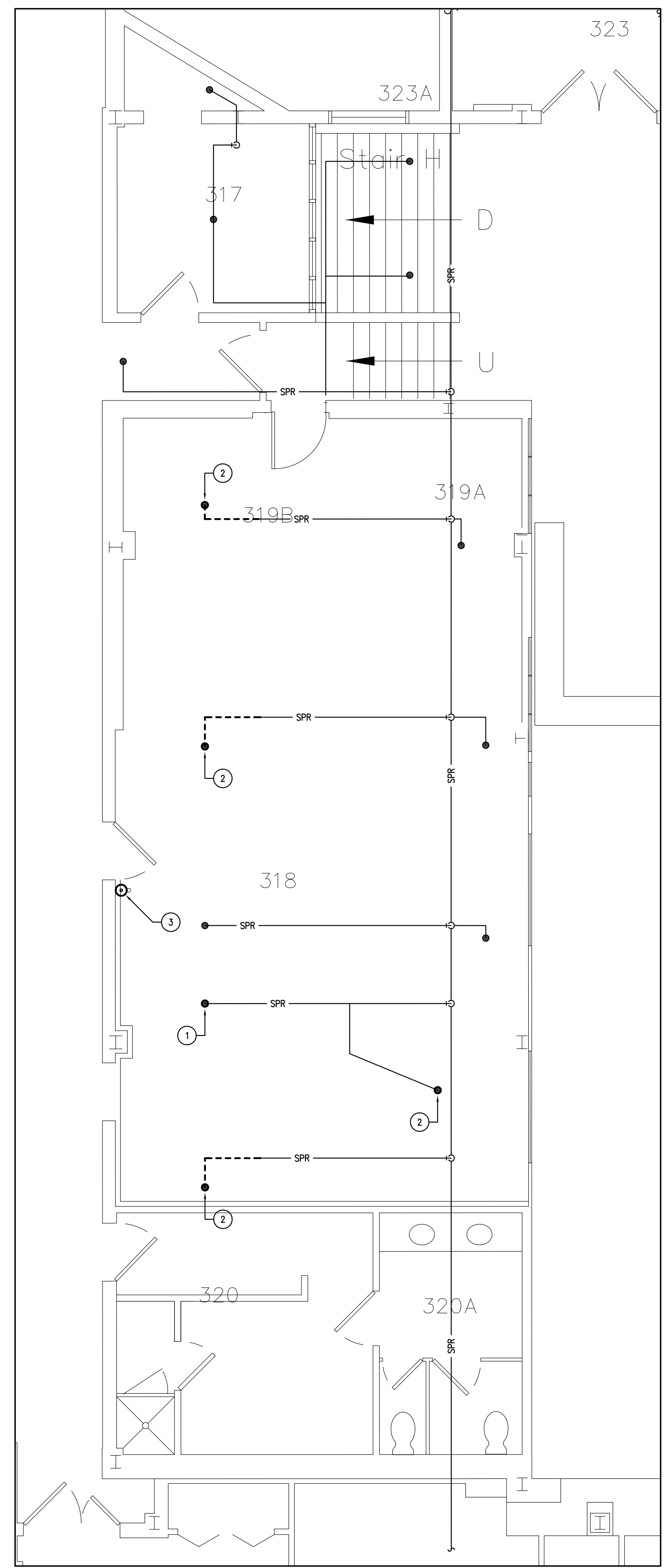
- EXISTING PENDANT TYPE SPRINKLER HEAD TO BE REMOVED AND SPRINKLER PIPING BRANCH CONNECTION CAPPED.
- EXISTING PENDANT TYPE SPRINKLER HEAD TO BE RELOCATED. CUT BACK EXISTING SPRINKLER PIPING AS NECESSARY TO ACCOMMODATE RELOCATION.
- REMOVE EXISTING FIRE EXTINGUISHER AND HANDOVER TO NRC DEPARTMENTAL FOR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

NEW WORK NOTES:

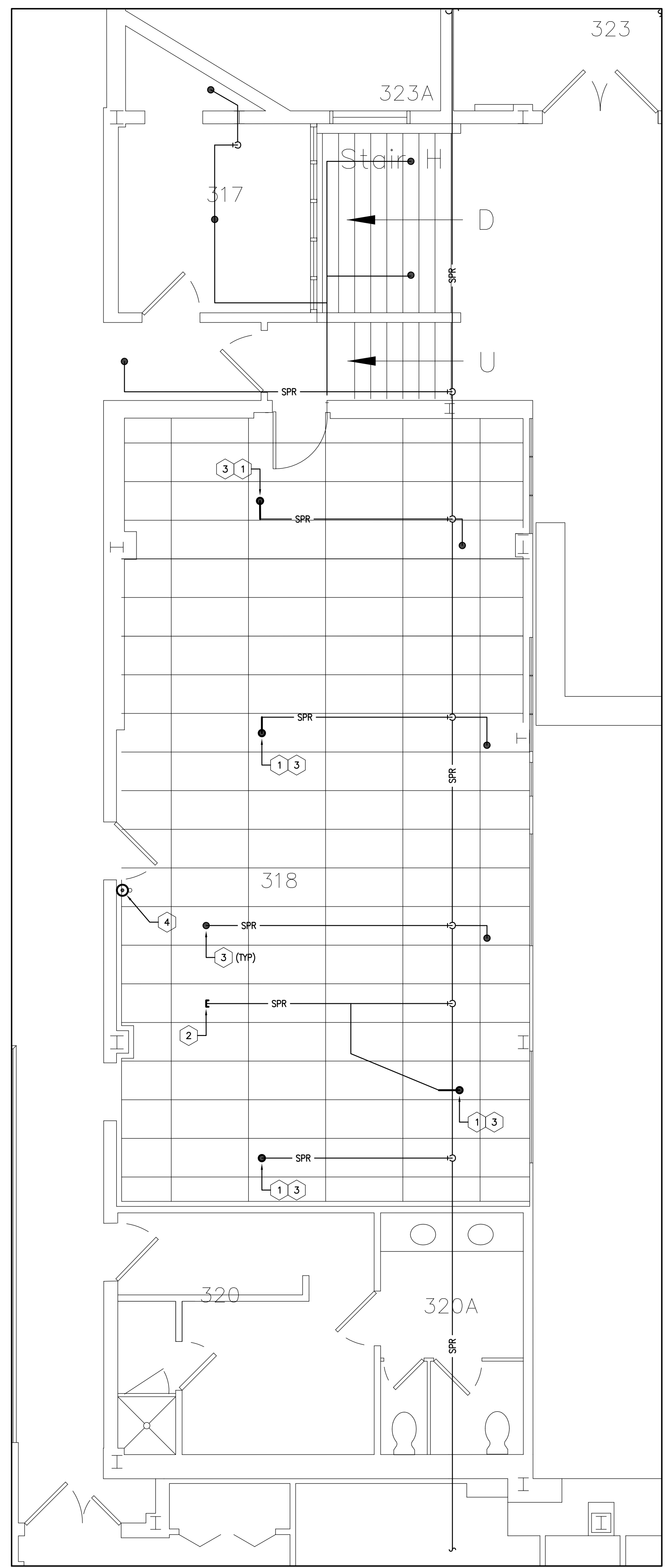
- EXTEND EXISTING SPRINKLER PIPING TO SERVE RELOCATED PENDANT TYPE SPRINKLER HEAD LOCATION.
- CAP SPRINKLER PIPING IN LOCATION OF REMOVED SPRINKLER HEAD.
- PROVIDE NEW SPRINKLER ESCUTCHEON PLATE FOR ALL SPRINKLER HEADS. (TYPICAL OF 8)
- REINSTALL EXISTING FIRE EXTINGUISHER.

MECHANICAL DRAWING SYMBOLS LEGEND

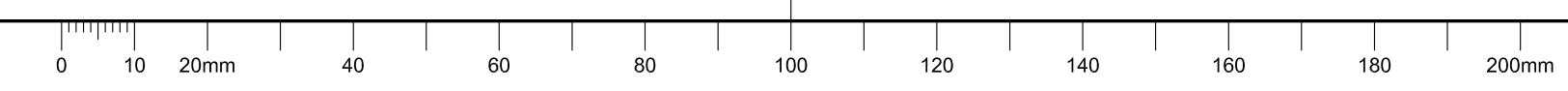
	TYPICAL EXISTING
	TYPICAL NEW
	TYPICAL DEMOLITION / REMOVALS
	SPRINKLER PIPING
	FIRE PROTECTION WATER (STANDPIPE SYSTEM)
	CHILLED WATER RETURN
	CHILLED WATER SUPPLY
	SANITARY VENT PIPING
	SANITARY PIPING
	STORM PIPING
	LOW PRESSURE STEAM
	LOW PRESSURE CONDENSATE
	REFRIGERANT LIQUID
	REFRIGERANT GAS
	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 (IN PLAN)
	VALVE (VERTICAL ORIENTATION)
	CONTROL VALVE (IN 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
 M01 SCALE = 1:50



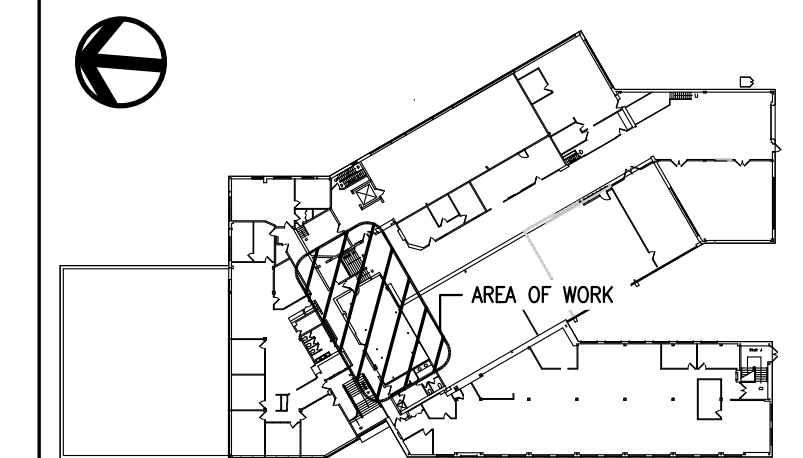
2 PARTIAL 3RD FLOOR FIRE PROTECTION - NEW WORK
 M01 SCALE = 1:50



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.

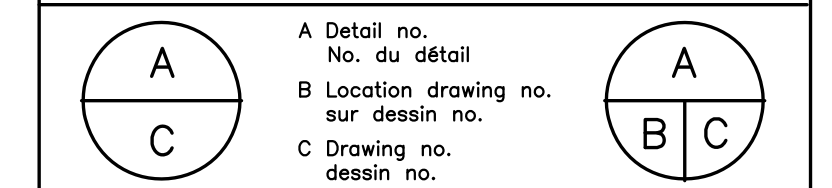
KEY PLAN



No.	Date	Revision	By:	Par:
0	16 11 2017	ISSUED FOR TENDER	ALS	

Date Printed 16 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** projet

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.

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

GENERAL CONTROLS NOTES:

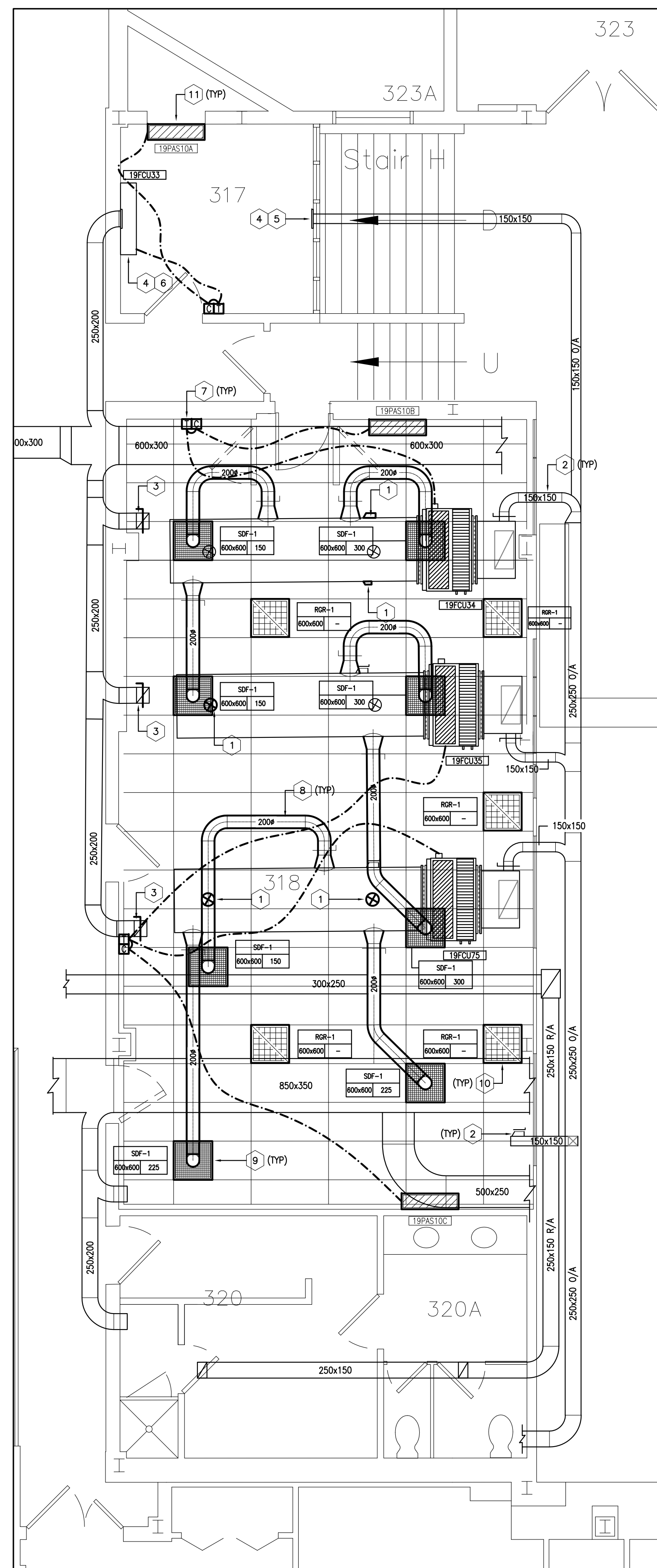
- AINSWORTH CANADA SHALL BE SUBCONTRACTED FOR ALL HVAC CONTROLS WORK ON THIS PROJECT.
 CONTACT: AARON DOBSON
 100-2935 CONROY ROAD
 OTTAWA, ON K1G 6C6
 T: 613.247.7936
 C: 613.203.1951
 E: AARON.DOBSON@AINSWORTH.COM
- EXISTING CONTROL GRAPHICS TO BE UPDATED TO INCORPORATE ALL NEW POINTS AS PER NRC STANDARD.
- 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:

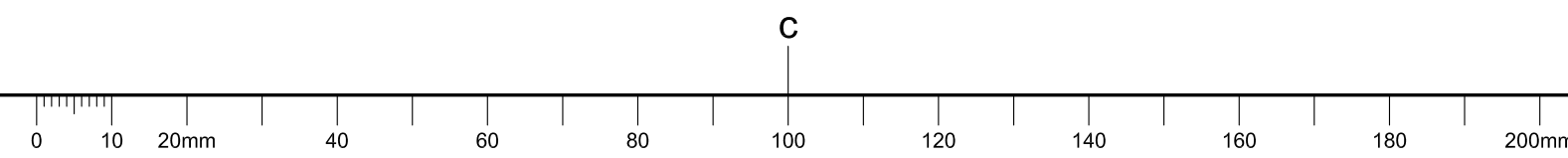
- ROOM 317**
 SUMMER OPERATION:
 WHEN ROOM FAN COIL UNIT 19FCU33 CHILLED WATER CONTROL VALVE IS OPEN 100% AND ROOM SPACE TEMPERATURE RISES ABOVE SETPOINT (ADJUSTABLE) AIR CONDITIONER 19PAS10A SHALL BE ENABLED AND COMMANDED TO START.
- WINTER OPERATION:
 WHEN ROOM FAN COIL UNIT 19FCU33 CHILLED WATER CONTROL 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 AND OUTDOOR AIR DUCT CONNECTIONS AT MAIN BRANCH DUCT. (TYPICAL OF 6)
- 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.



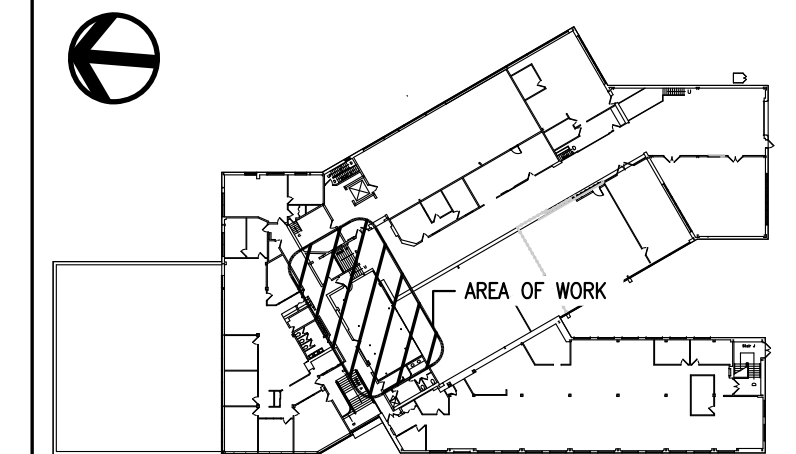
1 PARTIAL 3RD FLOOR HVAC - NEW WORK
 MO2 SCALE = 1:50



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.

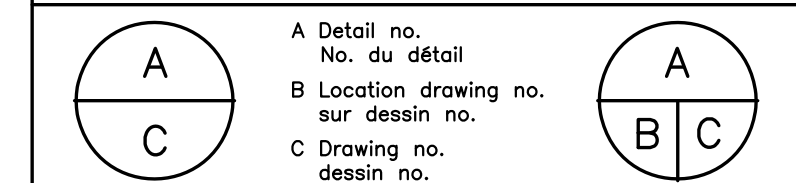
KEY PLAN



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0	16 11 2017	ISSUED FOR TENDER	ALS

Date Printed 16 11 2017 Date imprimée

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- Vérifier toutes les dimensions et l'état des lieux et en assumer la responsabilité

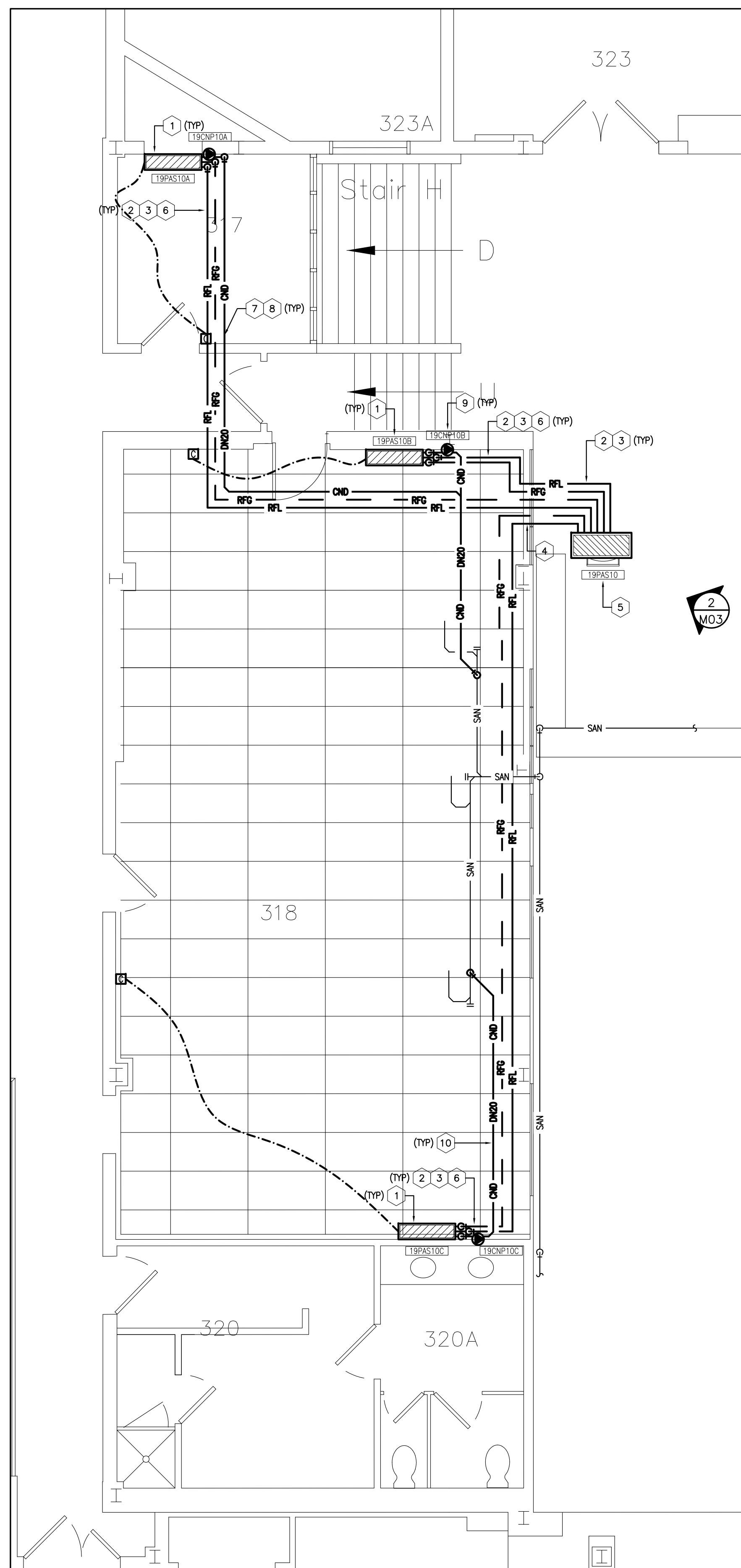


project
NRC M-19, STORES AMALGAMATION PROJECT
 PHASE 2

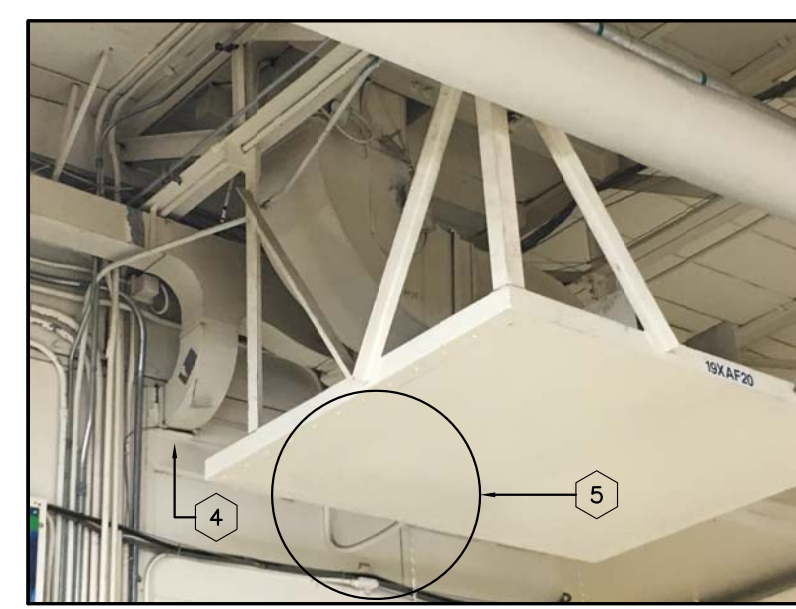
drawing
MONTREAL ROAD CAMPUS
MECHANICAL: UTILITIES - NEW WORK
MISCELLANEOUS EQUIPMENT SCHEDULES

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 329A 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 RECTORSSEAL SLIMDUCT C/W ALL REQUIRE FITTINGS AND ACCESSORIES TO CONCEAL ALL EXPOSED REFRIGERANT PIPING AND CONDENSATE VISIBLE WITHIN ROOMS 317 AND 318. COLOUR OF RECTORSSEAL 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	
	LOCATION	MODEL	COOLING CAPACITY (BTUh)	POWER	RATED AMPS	REFRIGERANT		
19PAS10A	RM 317	LMN07BHYT	7,000	208/1/60	0.2A	R410A	REFER TO NOTES 1, 2, 3 & 4	
19PAS10B	RM 318	LSN120HSV	12,000	208/1/60	0.2A	R410A		
19PAS10C	RM 318	LSN120HSV	12,000	208/1/60	0.2A	R410A		
19PAS10	CONDENSER							REFER TO NOTES 1, 2, 3 & 4
	LOCATION	MODEL	OPERATING RANGE (oF)	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 (ARTIRON).
- 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:

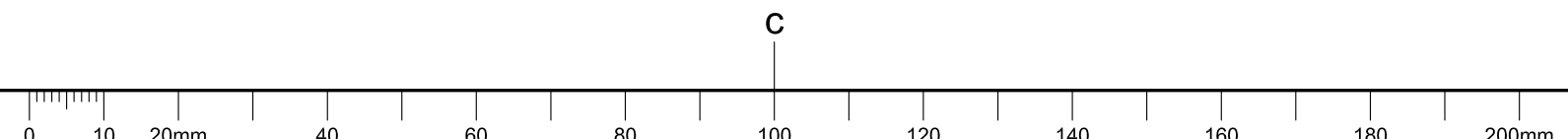
- DIFFUSERS, RETURN AND EXHAUST GRILLES SHALL BE OF SINGLE MANUFACTURER.
- DIFFUSERS, RETURN AND EXHAUST GRILLES SELECTION MODELS BASED ON E.H. PRICE.
- ALL DIFFUSERS SHALL BE EQUIPPED WITH VOLUME CONTROL DAMPERS AND EXTENDED NECKS FOR EASY CONNECTION TO FLEXIBLE DUCTWORK.
- INSTALLATION SHALL BE IN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

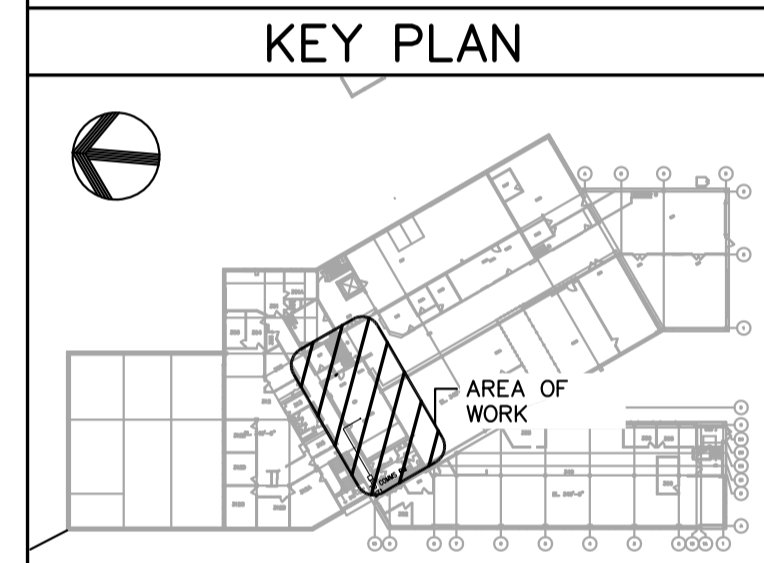
PANEL L-10

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	MACHINE SHOP LTGS
TEST PANEL 110V	13	14	FLOOR PLUGS - MACHINE SHOP
SPARE	15	16	CEILING FAN
COFFEE MACHINE	17	18	BENCH PLUGS - ELECT SHOP
A/C FAN COIL RM 206A	19	20	RECEPTACLE RM 206
UNKNOWN	21	22	RECS 2 ROWS OF BENCHES
UNKNOWN	23	24	COMPRESSOR
COMPRESSOR	25	26	UNKNOWN
REF. TEST PANEL	27	28	PLUGS RM 318
RM 318 REC	29	30	UNKNOWN
RM 318 REC	31	32	UNKNOWN
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

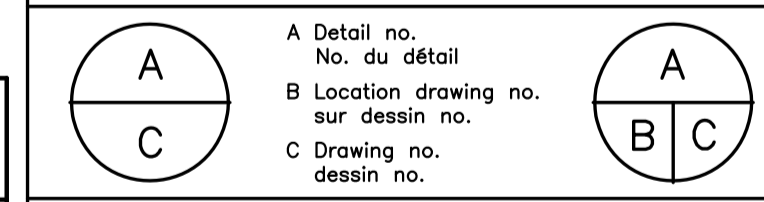
4 NEW PANEL L10 SCHEDULE
N.T.S.



No.	Date	Revision	By: Par.
0	15 11 2017	ISSUED FOR TENDER	FG

Date Printed DD MM YYYY Date imprimée

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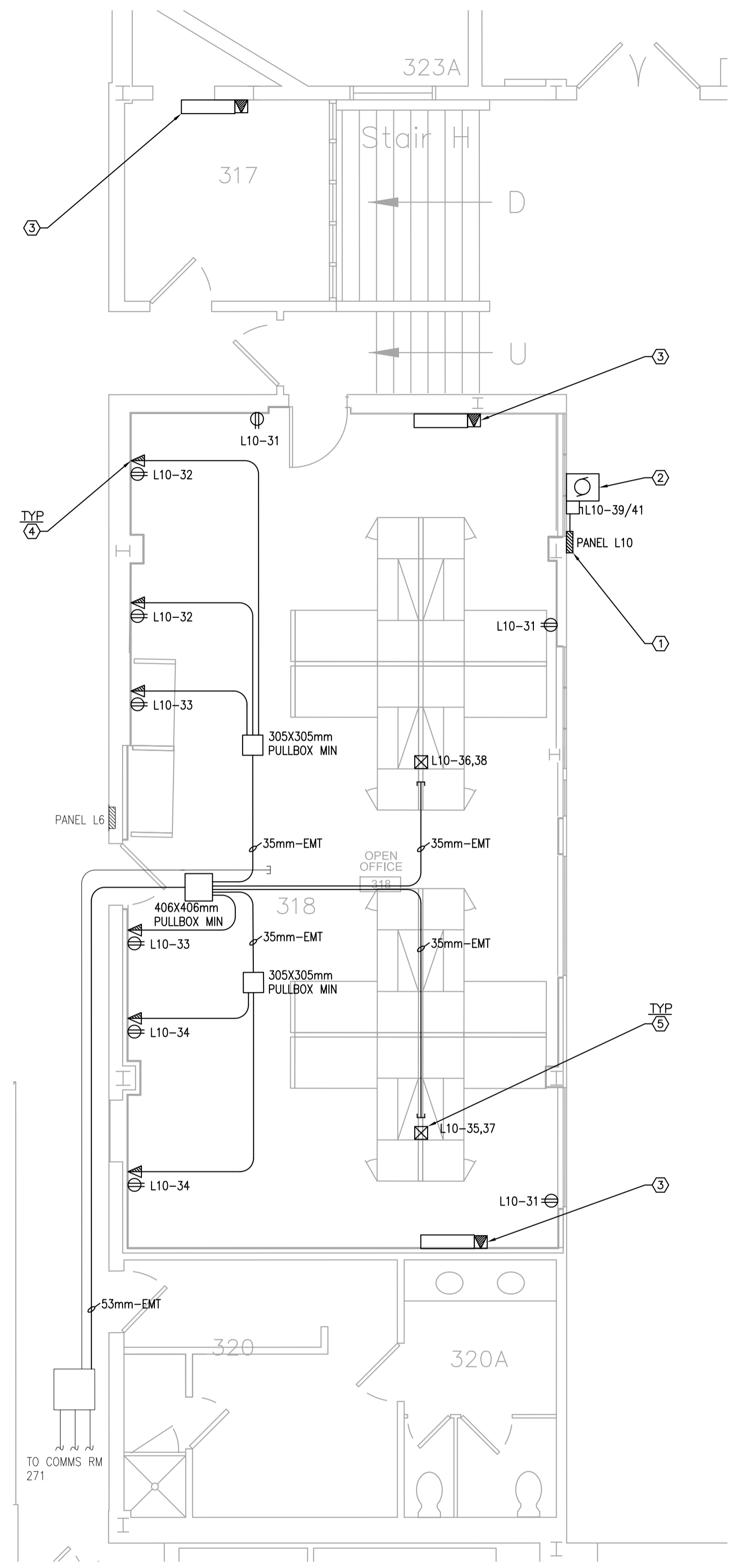


project NRC M-19, STORES AMALGAMATION PROJECT PHASE 2

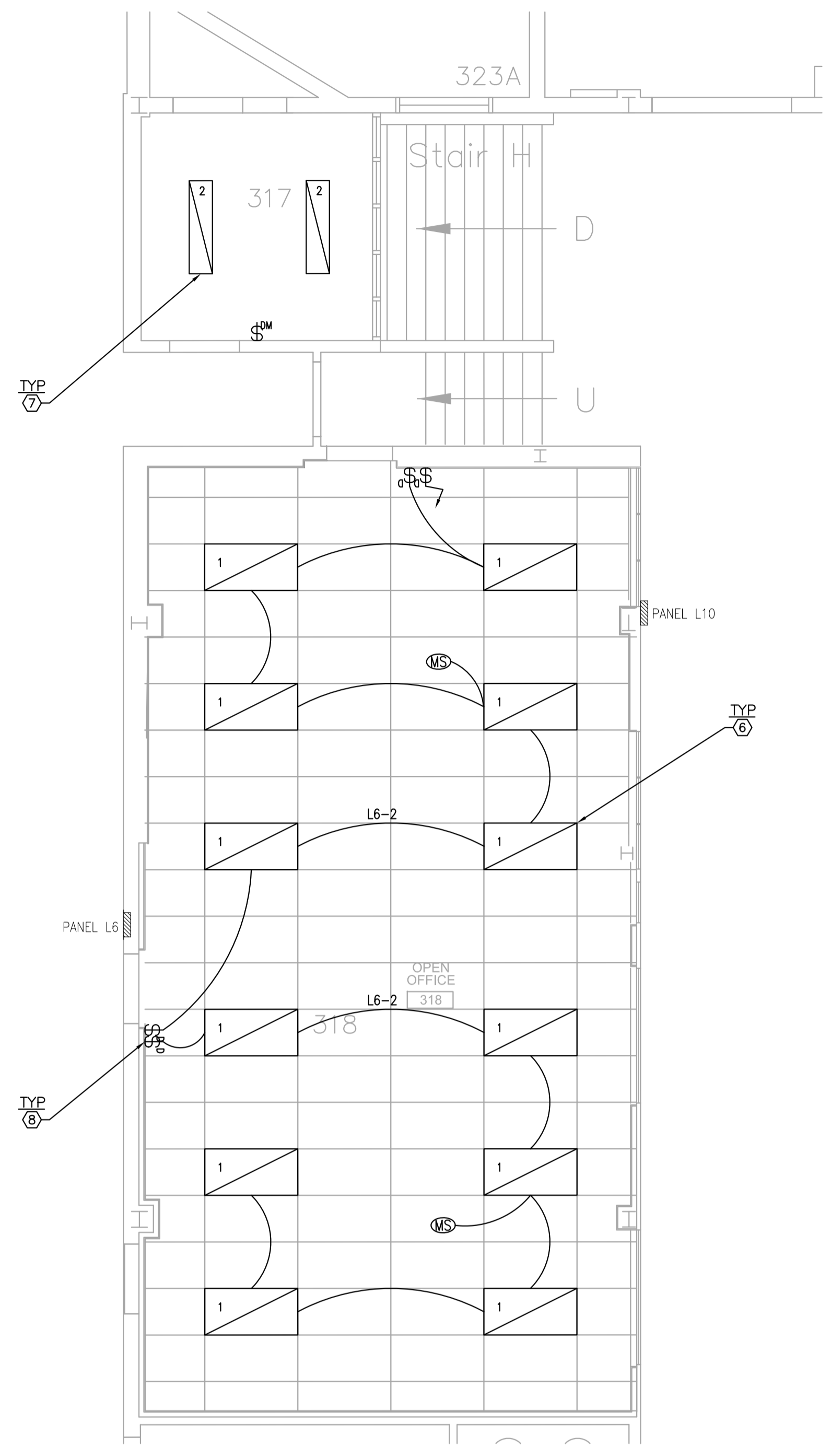
drawing MONTREAL ROAD CAMPUS

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

dwg.no.	5463-E01	dessin no.
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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 NQOD 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 DIMMABLE 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 DIMMER WALL LIGHT SWITCHES AND CEILING MOUNTED OCCUPANCY SENSORS. REFER TO SPECIFICATIONS FOR DETAILS.

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 2EVG43L840-4-D-UNV-DIM OR EQUAL APPROVED	C/W 0-10 DIMMING
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 0-10 DIMMING

