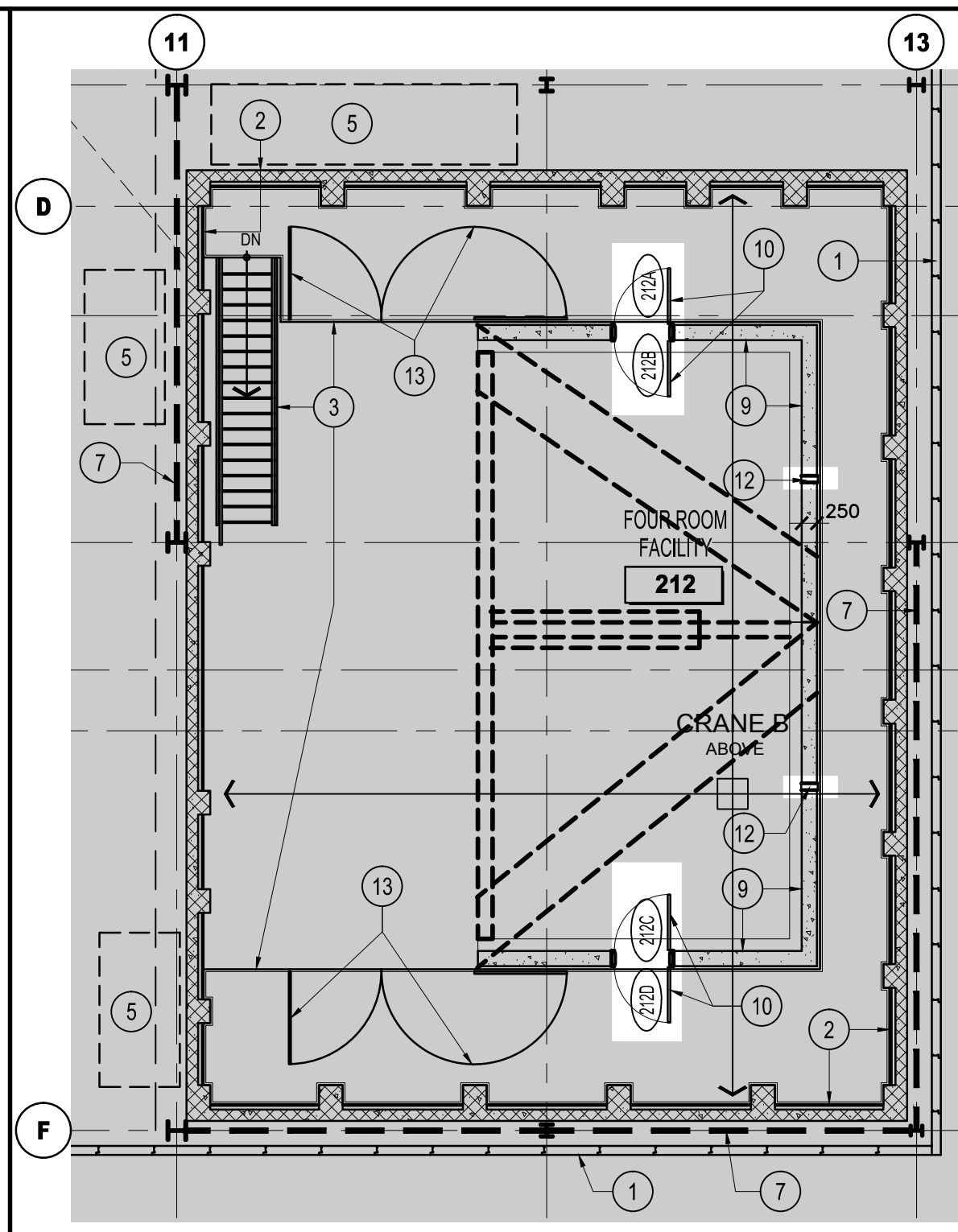
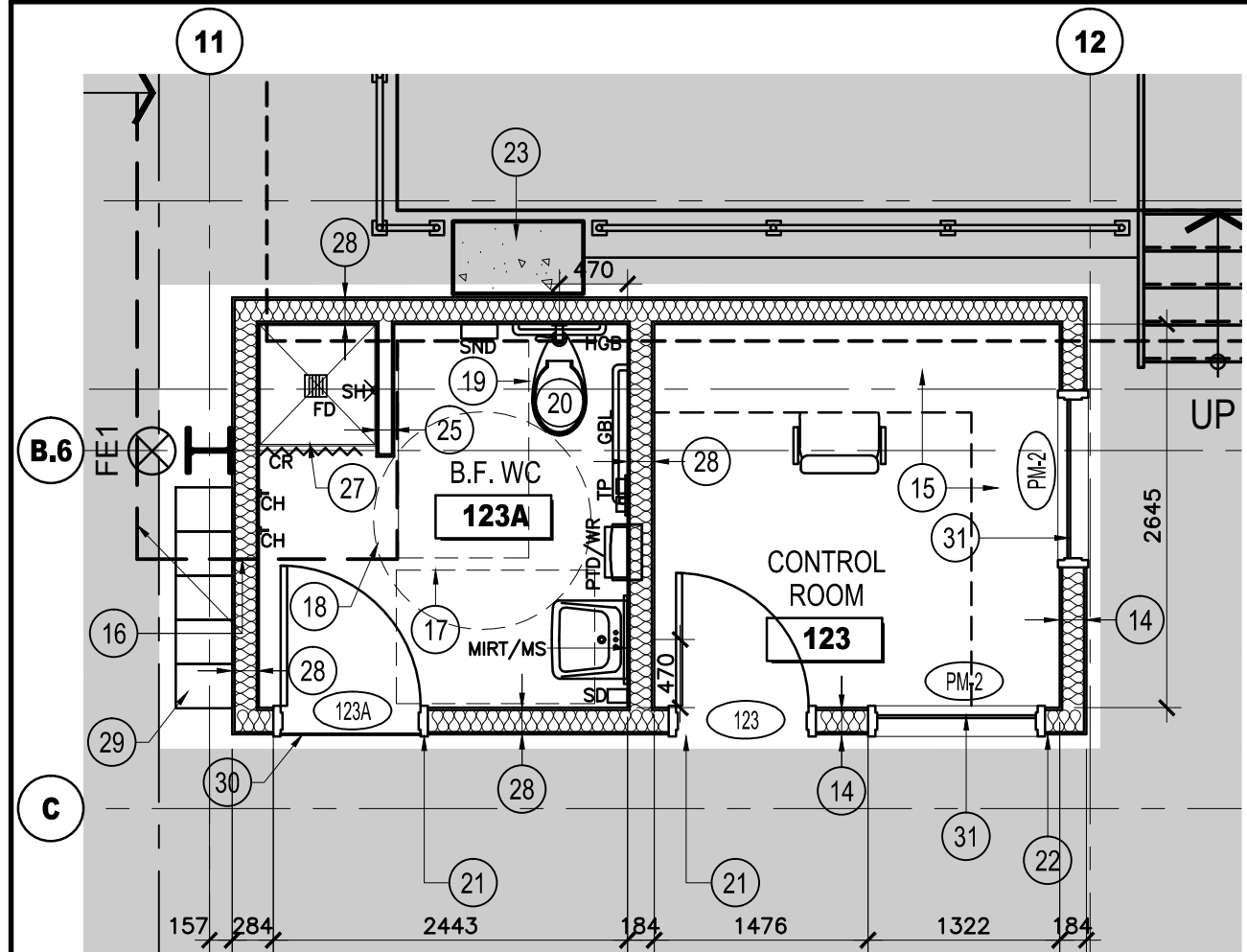


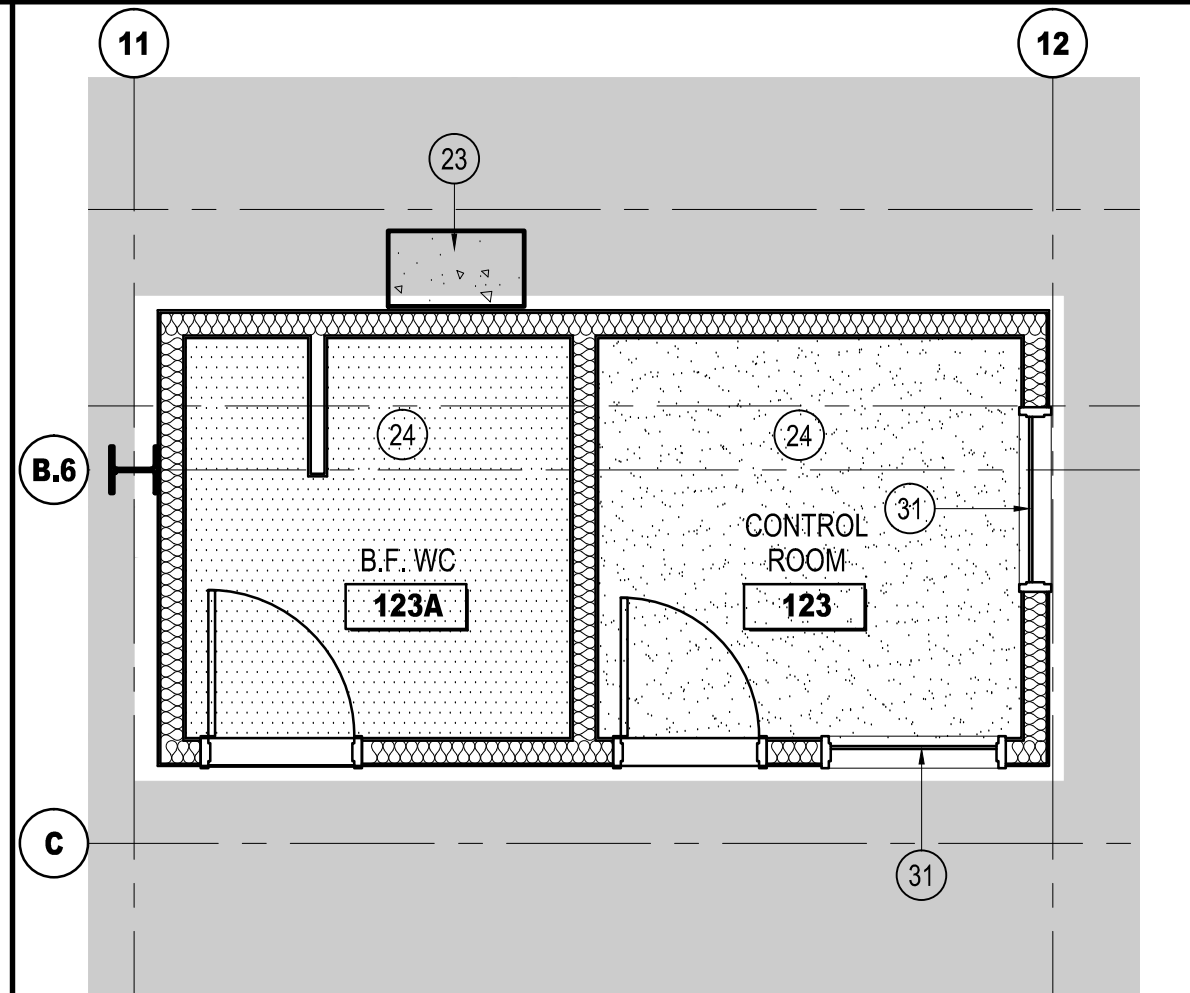
1 FOUR ROOM FACILITY GROUND FLOOR PLAN
ASK01 1:100



2 FOUR ROOM FACILITY SECOND FLOOR PLAN
ASK01 1:100



3 B.F. WC AND CONTROL ROOM PLAN
ASK01 1:100

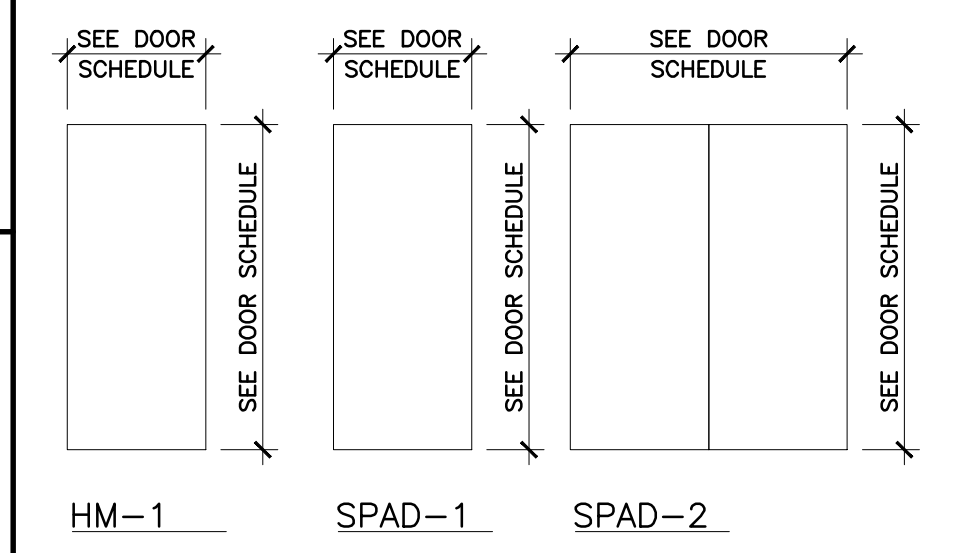


4 B.F. WC AND CONTROL ROOM CEILING PLAN
ASK01 1:100

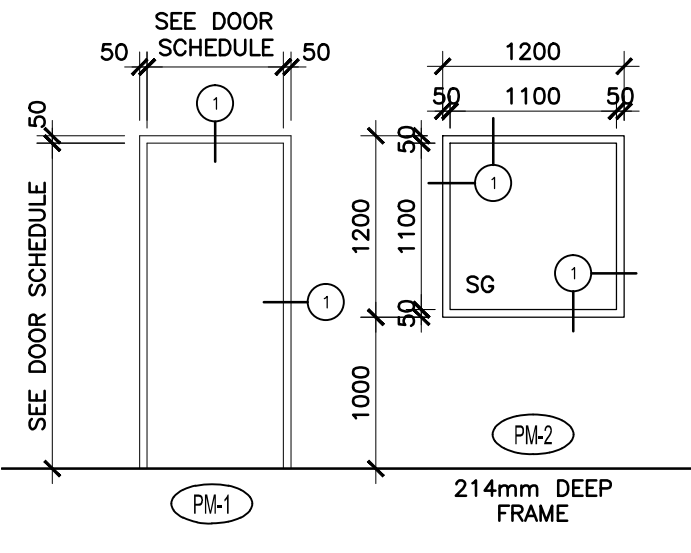
LOCATION	OPENING	FRAME MATERIAL	DOOR	U/L LABEL	REMARKS						
116	RM 122 RM 116	GB/M	GB/M	PM-1	265	HM-1	965	2150	45	C	SC, OS, KP, H, SL
117	RM 122 RM 117	GB/M	GB/M	PM-1	265	HM-1	965	2150	45	C	WST, KP, H, SL
118	RM 122 RM 118	GB/M	GB/M	PM-1	265	HM-1	965	2150	45	C	WST, KP, H, SL
123	RM 126 RM 123	GB	GB	PM-1	214	HM-2	965	2150	45	C	SC, OS, SS, KP, H, SL
123A	RM 126 RM 123A	GB	GB	PM-1	214	HM-2	965	2150	45	C	SC, OS, SS, KP, H, SL
124B	RM 124 RM 126	M	M	-	-	SPAD-1	1210 R.O.	2210 R.O.	-	-	H, KP, OS, PL, GN-4, GN-6
125A	RM 125 RM 124	C	C	-	-	SPAD-1	1210 R.O.	2210 R.O.	-	-	H, KP, OS, PL, GN-4, GN-6
125B	RM 124 RM 125	C	C	-	-	SPAD-1	1210 R.O.	2210 R.O.	-	-	H, KP, OS, PL, GN-4
125C	RM 124 RM 125	C	C	-	-	SPAD-1	1210 R.O.	2210 R.O.	-	-	H, KP, OS, PL, GN-4
125D	RM 125 RM 124	C	C	-	-	SPAD-1	1210 R.O.	2210 R.O.	-	-	H, KP, OS, PL, GN-4
212A	RM 124 RM 212	C	C	-	-	SPAD-1	1210 R.O.	2210 R.O.	-	-	H, KP, OS, PL, GN-4
212B	RM 124 RM 212	C	C	-	-	SPAD-1	1210 R.O.	2210 R.O.	-	-	H, KP, OS, PL, GN-4
212C	RM 124 RM 212	C	C	-	-	SPAD-1	1210 R.O.	2210 R.O.	-	-	H, KP, OS, PL, GN-4
212D	RM 124 RM 212	C	C	-	-	SPAD-1	1210 R.O.	2210 R.O.	-	-	H, KP, OS, PL, GN-4

DOOR SCHEDULE ABBREVIATIONS AND NOTES

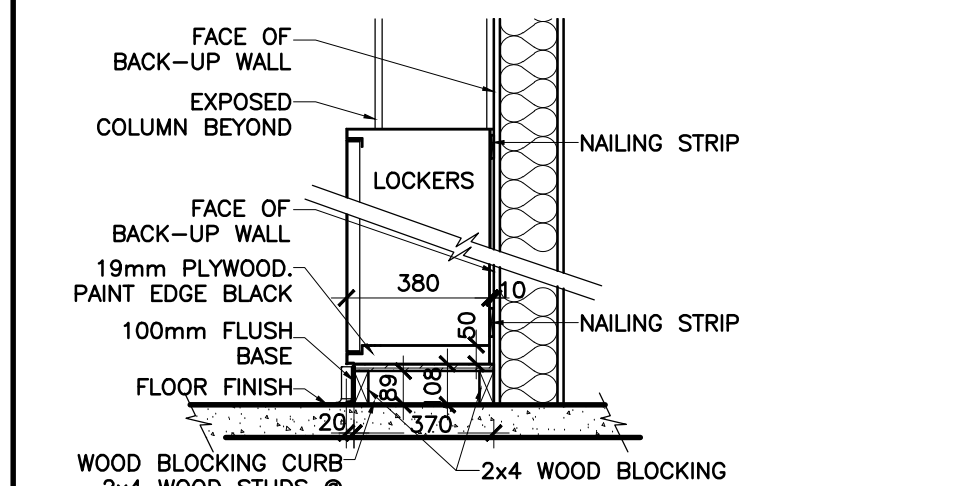
C	½ HR FIRE RATING	SL	STORE ROOM OR CLOSET LOCK	GND-4	ACOUSTIC STEEL DOOR AND FRAME ASSEMBLY, SEE SPECIFICATIONS. DOOR AND FRAME, PERIMETER ACOUSTIC SEALS, BOTTOM SEAL AND THRESHOLD SUPPLIED AND INSTALLED BY ACOUSTIC DOOR MANUFACTURER.
CN	CONCRETE	SPAD	SOUND PROOF ACOUSTIC DOOR STC	GND-6	ACOUSTIC STEEL DOOR INSTALLED IN SET OF TWO DOORS (BACK TO BACK) AND INSTALLED IN ONE ACOUSTIC DOOR FRAME. SPACE BETWEEN TWO DOORS IS LIMITED. COORDINATE LOCKSET SELECTION AND INSTALLATION WITH ACOUSTIC DOOR MANUFACTURER.
GB	DRYWALL (GYPSUM BOARD)	SS	SOUNDSTRIPPING		
H	HINGES, 3 PER DOOR	WST	WALL STOP		
HM	HOLLOW METAL DOOR				
KP	KICK PLATE	GND-2	ACOUSTIC STEEL DOOR AND FRAME ASSEMBLY, SEE SPECIFICATIONS. DOOR, FRAME AND ALL DOOR HARDWARE BY ACOUSTIC DOOR MANUFACTURER		
M	MASONRY				
OS	OVERHEAD STOP				
PL	PASSAGE OR CLOSET LATCH				
PM	PRESSED METAL FRAME				
SC	SELF-CLOSING DEVICE				
SG	6mm TEMPERED CLEAR SAFETY GLASS, REFER TO SPECIFICATIONS				



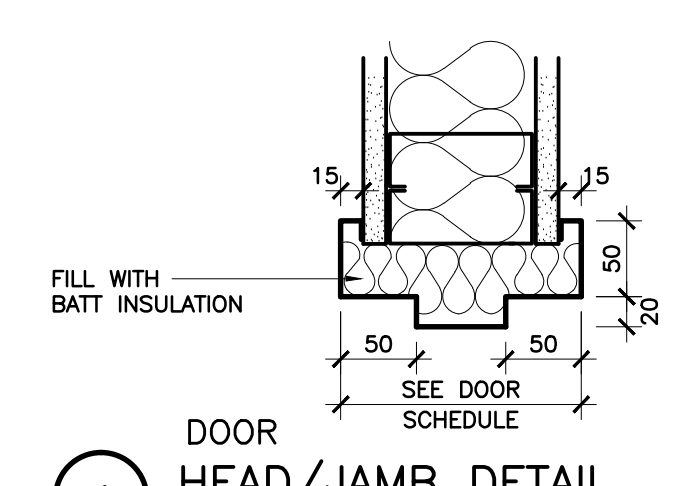
7 DOOR TYPES
ASK01 1:50



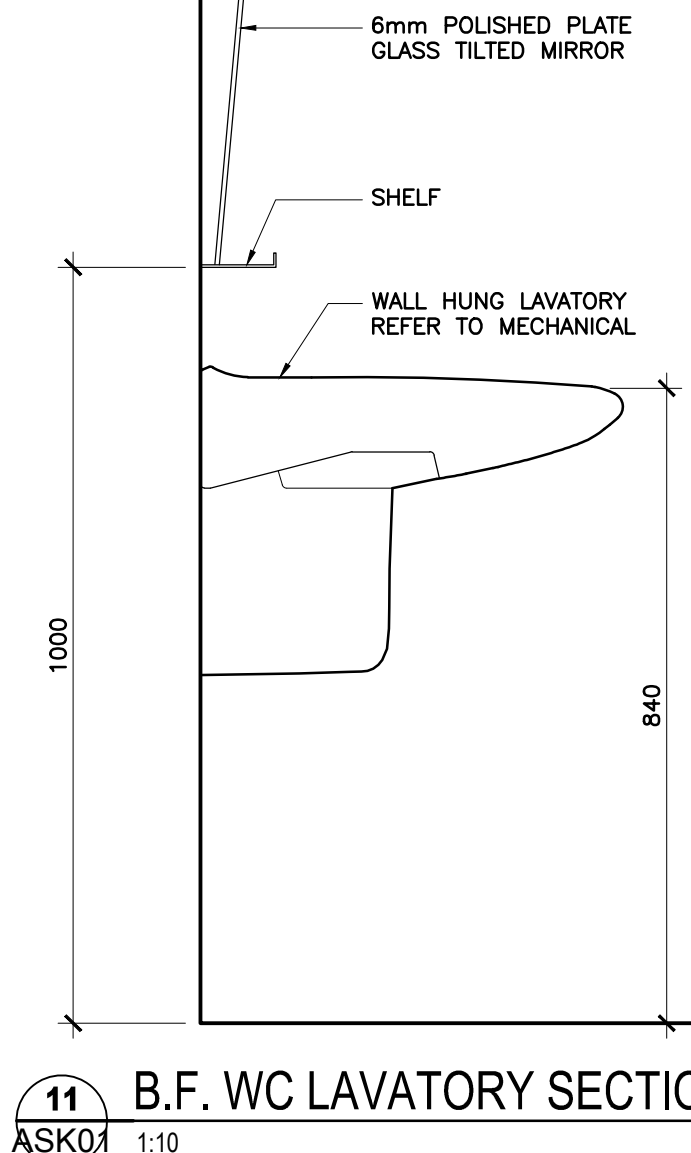
8 PRESSED METAL FRAMES
ASK01 1:50



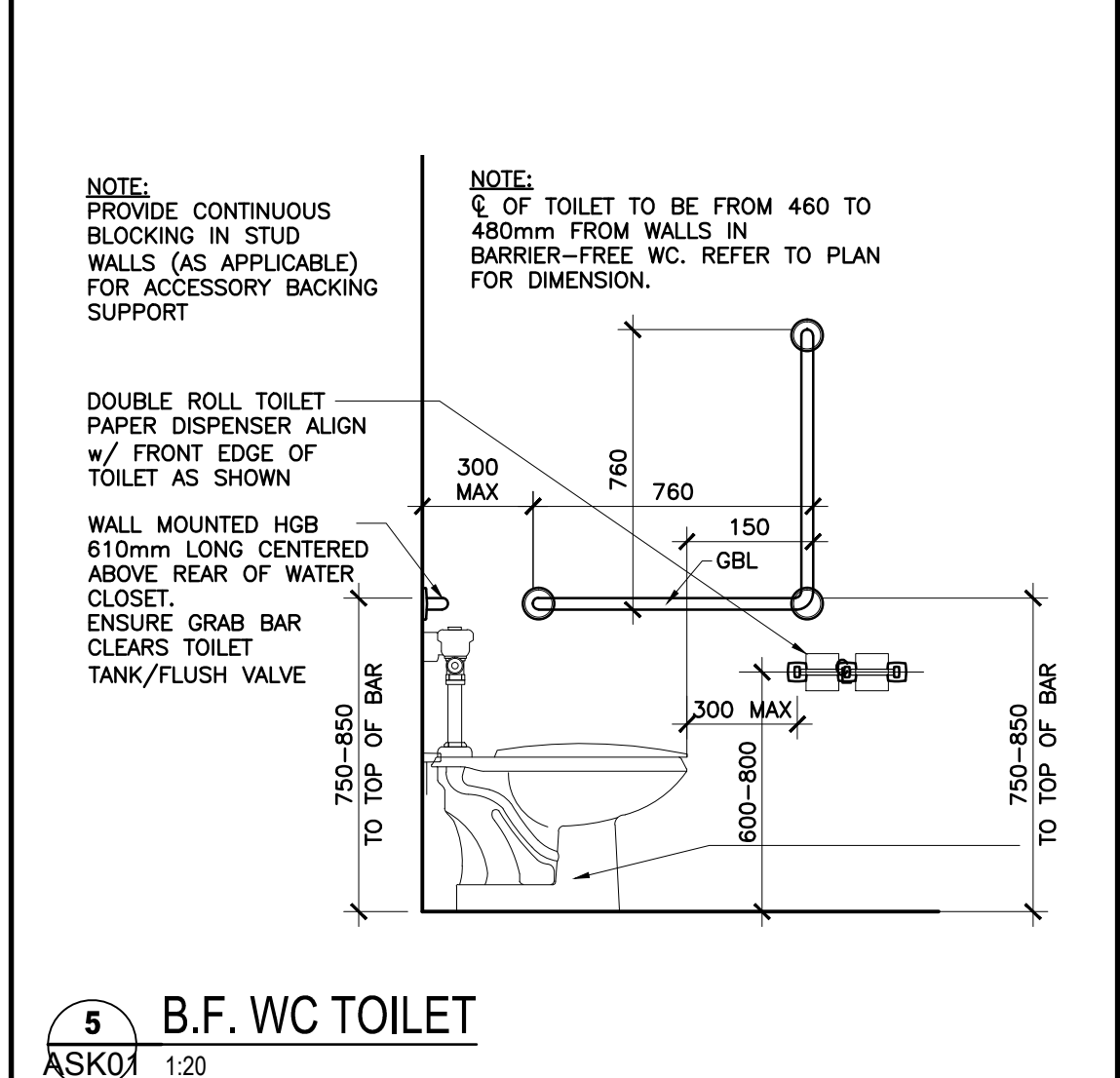
9 TYPICAL LOCKER SECTION
ASK01 1:20



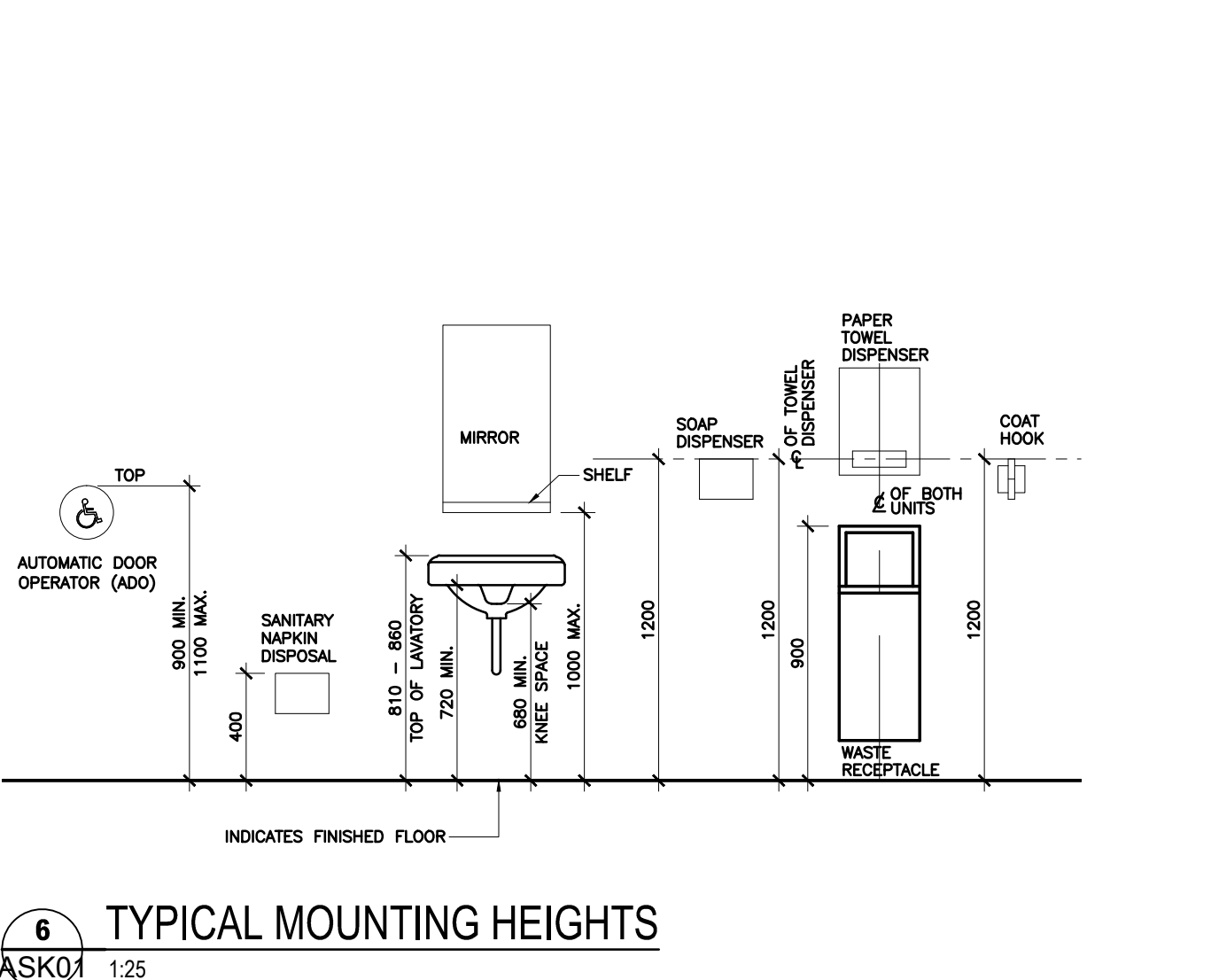
10 B.F. WC LAVATORY ELEVATION
ASK01 1:20



11 B.F. WC LAVATORY SECTION
ASK01 1:10



5 B.F. WC TOILET
ASK01 1:20



6 TYPICAL MOUNTING HEIGHTS
ASK01 1:25

DRAWINGS NOTES

- EXISTING INSULATED METAL WALL PANEL
- EXISTING 190 CONCRETE BLOCK AND CONCRETE BLOCK PIERS. FUTURE GYPSUM BOARD STUD WALL ASSEMBLY TO SPAN BETWEEN CONCRETE BLOCK PIERS.
- EXISTING METAL GRATE STAIR AND METAL GRATE PLATFORM
- FUTURE COMPUTER STATION BY NRC
- FUTURE MATERIAL STORAGE BY NRC
- EXISTING CONCRETE FLOOR SLAB CONTROL JOINT
- EXISTING STRUCTURAL BRACE FRAME
- FUTURE CONSTRUCTED TEST WALL BY NRC
- EXISTING CONCRETE WALL
- NEW DOOR, DOOR FRAME AND HARDWARE IN PHASE 3 SCOPE OF WORK
- EXISTING FLOOR DRAIN
- 100mm PVC PASS THROUGH CORED IN EXISTING CONCRETE WALL. ADHERE PIPE TO CONCRETE WITH NON-SHRINK GROUT. LOCATION TO BE COORDINATED WITH OWNER.
- EXISTING SWINGING GATE GUARDRAIL
- NEW WALL ASSEMBLY
16 ABUSE RESISTANT GYPSUM BOARD
152 STRUCTURAL STEEL STUD FRAMING @ 400 O.C. MAX.
FILL WITH SOUND ATTENUATION BATT
16 ABUSE RESISTANT GYPSUM BOARD
- FUTURE COMPUTER STATION BY NRC
- LINE OF EXISTING FOUNDATION WALL BELOW
- LAVATORY CLEAR AREA 920x1370mm
- 1500mm TURNING CIRCLE
- CLEAR TRANSFER SPACE 900x1500mm
- NEW TOILET WITH BACK SUPPORT
- NEW DOOR, DOOR FRAME AND HARDWARE IN PHASE 3 SCOPE OF WORK
- EXISTING PERIMETER CONTROL JOINT AROUND CONTROL ROOM 123 AND B.F. WC 123A
- FUTURE FLOOR FACILITY CONCRETE MOMENT FRAME
- UNDERSIDE OF NEW SUSPENDED GYPSUM BOARD CEILING TO TOP OF EXISTING CONCRETE FLOOR SLAB IS 2310mm
- NEW WALL ASSEMBLY
16 MOISTURE RESISTANT GYPSUM BOARD
92 STEEL STUD FRAMING @ 400 O.C. MAX.
16 MOISTURE RESISTANT GYPSUM BOARD
- NOT USED
- 32" X 32" X 76" FIBERGLASS SHOWER. REFER TO MANUFACTURER'S INSTRUCTIONS FOR ROUGH-IN DIMENSIONS
- NEW WALL ASSEMBLY
16 ABUSE RESISTANT GYPSUM BOARD
152 STRUCTURAL STEEL STUD FRAMING @ 400 O.C. MAX.
16 MOISTURE RESISTANT GYPSUM BOARD ON INTERIOR FACE OF WC
- NEW LOCKERS. REFER TO SECTION DETAIL.
- ALUMINUM TRANSITION TRIM
- NEW WINDOW AND WINDOW FRAME

ABBREVIATION NOTES FOR WASHROOM ACCESSORIES:

CH	- COAT HOOK
CR	- SHOWER CURTAIN AND CURTAIN ROD
FD	- FLOOR DRAIN; SEE MECHANICAL DRAWINGS
GBL	- GRAB BAR "L" SHAPE - 760x760mm
HGB	- HORIZONTAL GRAB BAR - 610mm
MIR	- MIRROR
MRT	- TILTED MIRROR
MS	- MIRROR SHELF
OPCI	- OWNER PROVIDED, CONTRACTOR INSTALLED
PTD	- PAPER TOWEL DISPENSER, OPCI
SD	- SOAP DISPENSER, OPCI
SH	- SHOWER HEAD FIXTURE
SND	- SANITARY NAPKIN DISPOSAL
TP	- TOILET PAPER DISPENSER, OPCI
WR	- SEMI-RECESSED WASTE RECEPTACLE

GENERAL NOTES

- SEAL ALL PENETRATIONS THROUGH EXTERIOR AND INTERIOR WALL ASSEMBLIES AND FLOOR ASSEMBLIES. REFER TO SPEC SECTION 07 92 00 JOINT SEALANTS.
- WALLS SHALL BE CONSTRUCTED OVER AND UNDER ALL OPENINGS FOR DOORS, WINDOWS, AND OPENINGS FOR MECHANICAL, ELECTRICAL AND STRUCTURAL ITEMS EQUAL TO THAT OF WALL CONSTRUCTION SHOWN ON EITHER SIDE OF OPENING.

LEGEND

[White Box]	PHASE 3 SCOPE OF WORK
[Grey Box]	NOT IN SCOPE OF WORK

NEW CEILING ASSEMBLY
2-16mm PLYWOOD, PAINT FINISH
203 STRUCTURAL STEEL STUD FRAMING @ 450 O.C. MAX.
FILL WITH SOUND ATTENUATION BATT
16 GYPSUM BOARD

NEW CEILING ASSEMBLY
2-16mm PLYWOOD, PAINT FINISH
203 STRUCTURAL STEEL STUD FRAMING @ 450 O.C. MAX.
FILL WITH SOUND ATTENUATION BATT
16 MOISTURE RESISTANT GYPSUM BOARD

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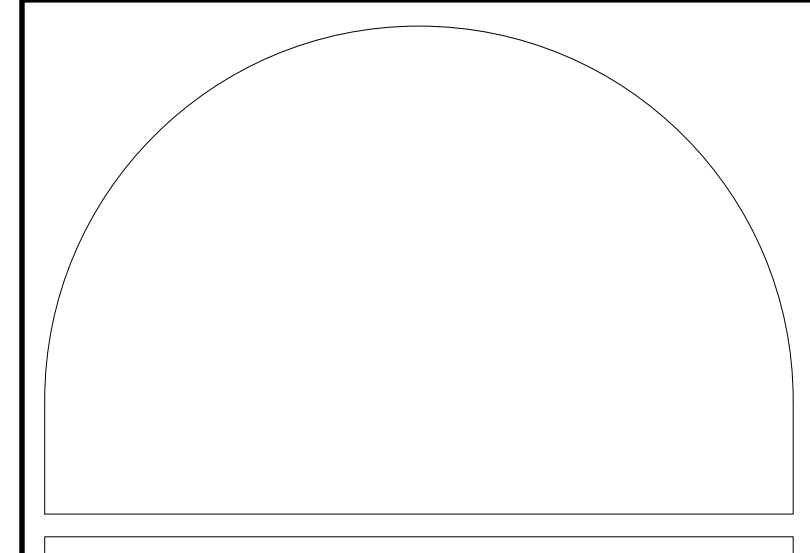
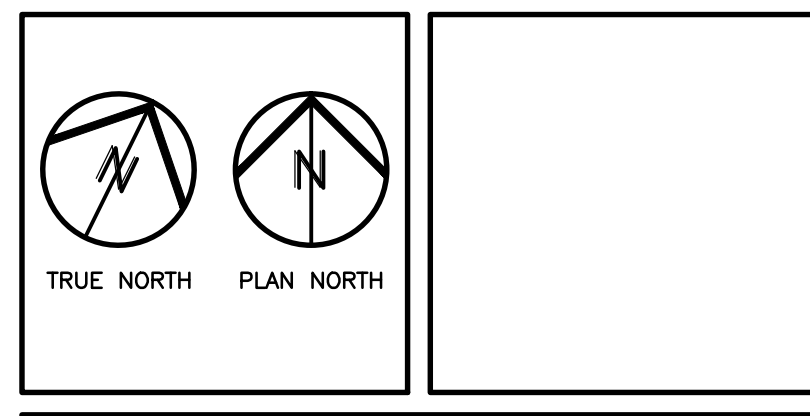
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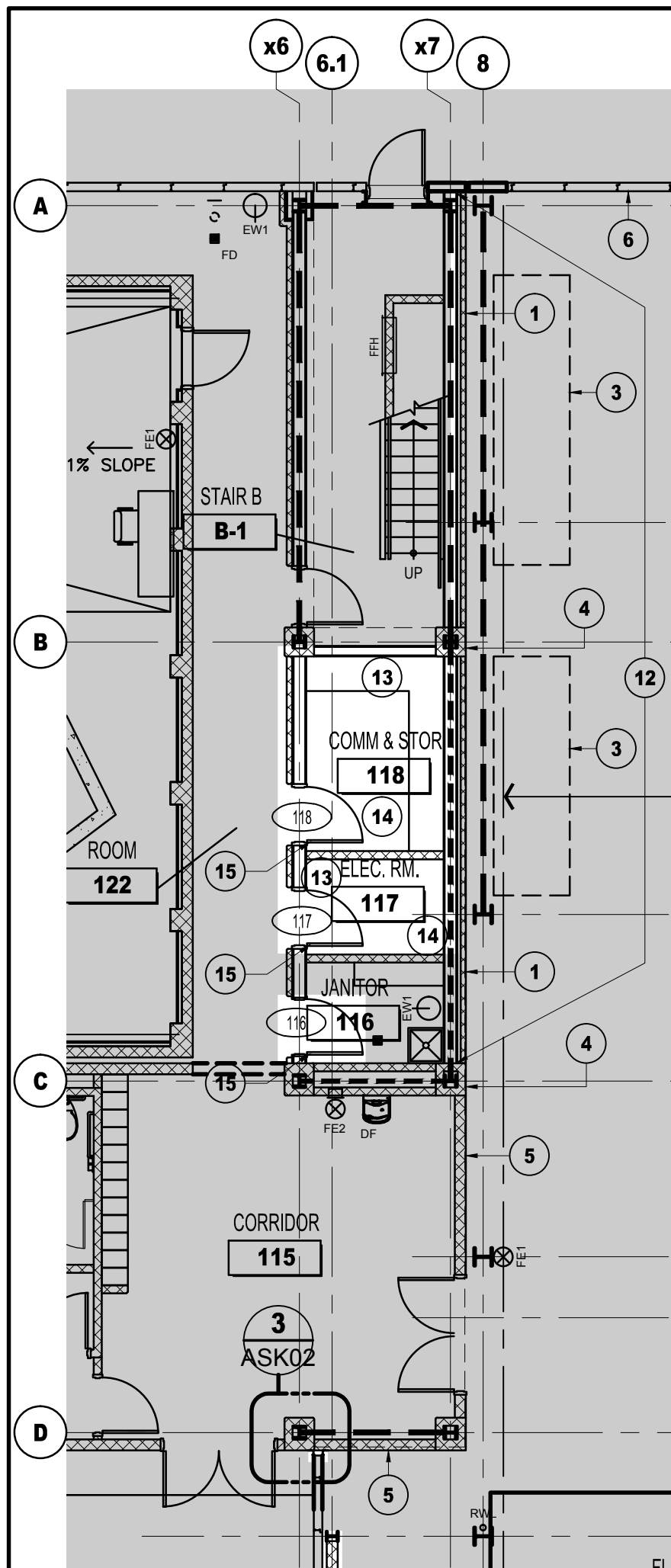
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PROJECT TITLE/TITRE DU PROJET
M-38 ACOUSTIC FACILITY
PHASE 3
MONTREAL ROAD CAMPUS

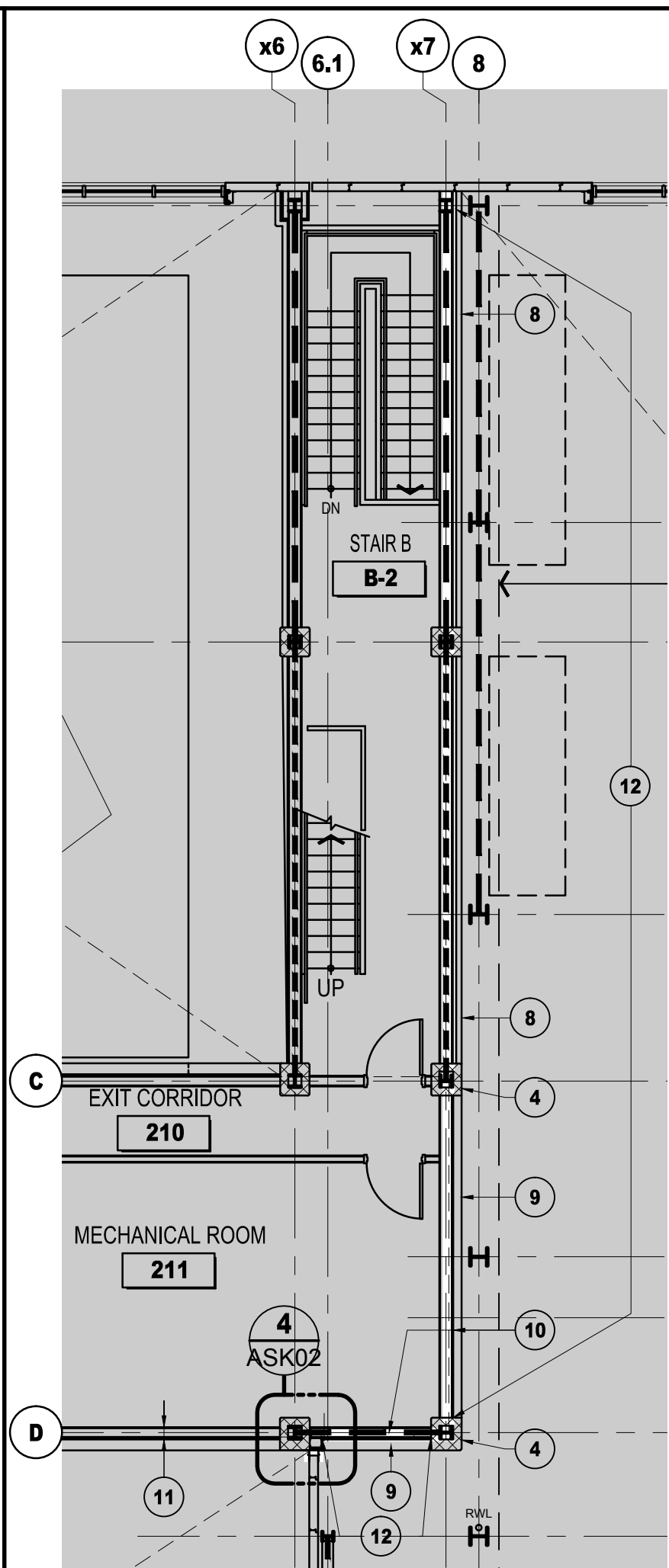
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PHASE 3 SCOPE OF WORK

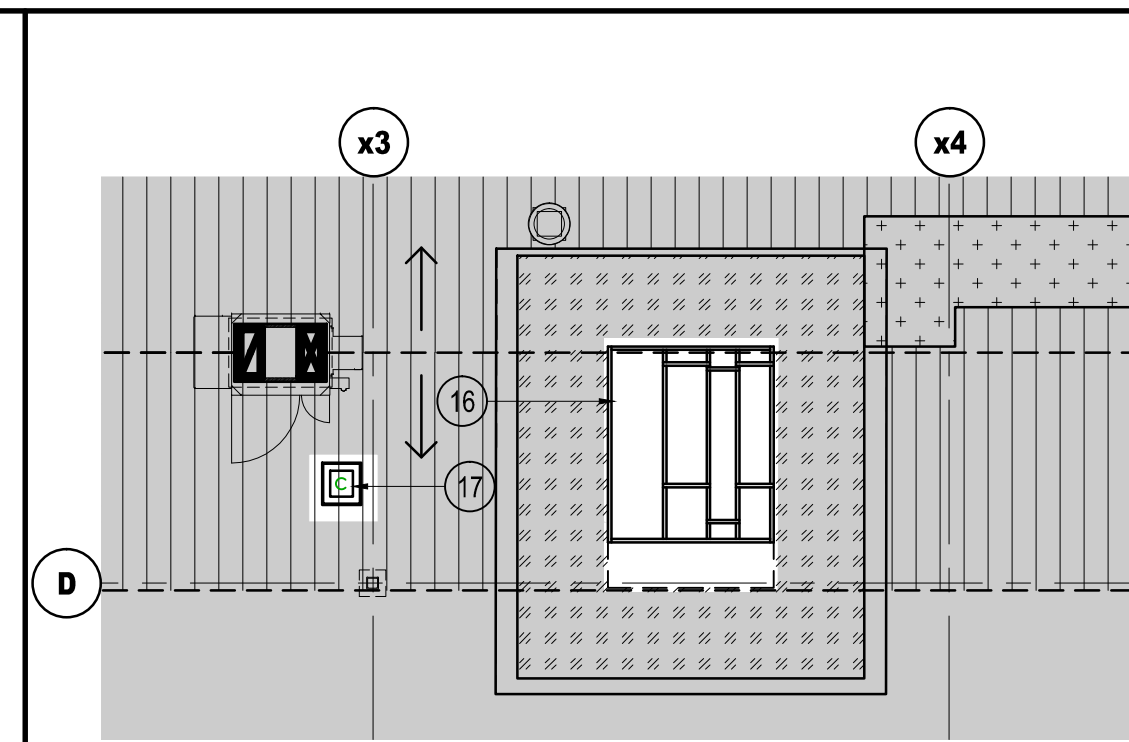
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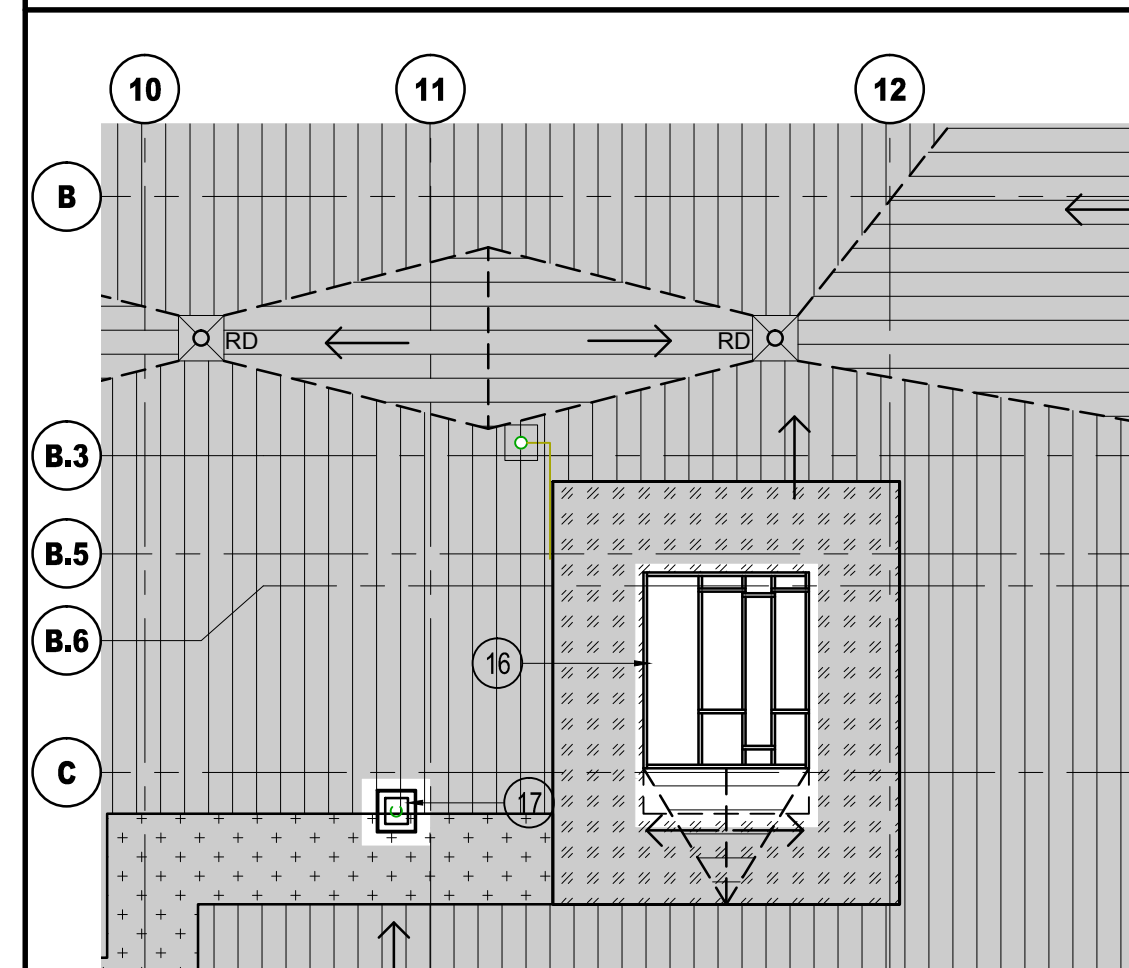
1 GROUND FLOOR GRIDLINE x7
ASK02 1:100



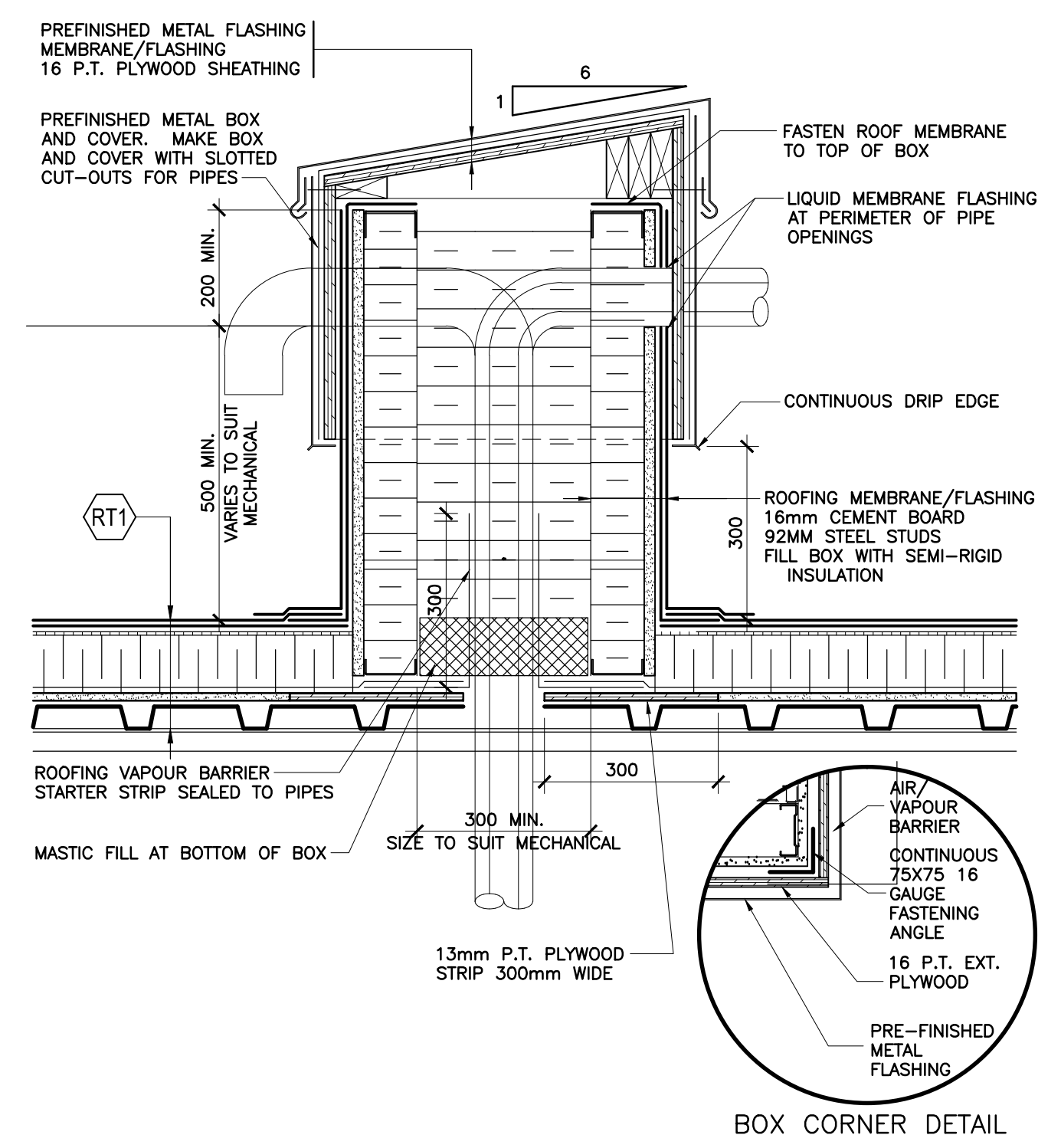
2 SECOND FLOOR GRIDLINE x7
ASK02 1:100



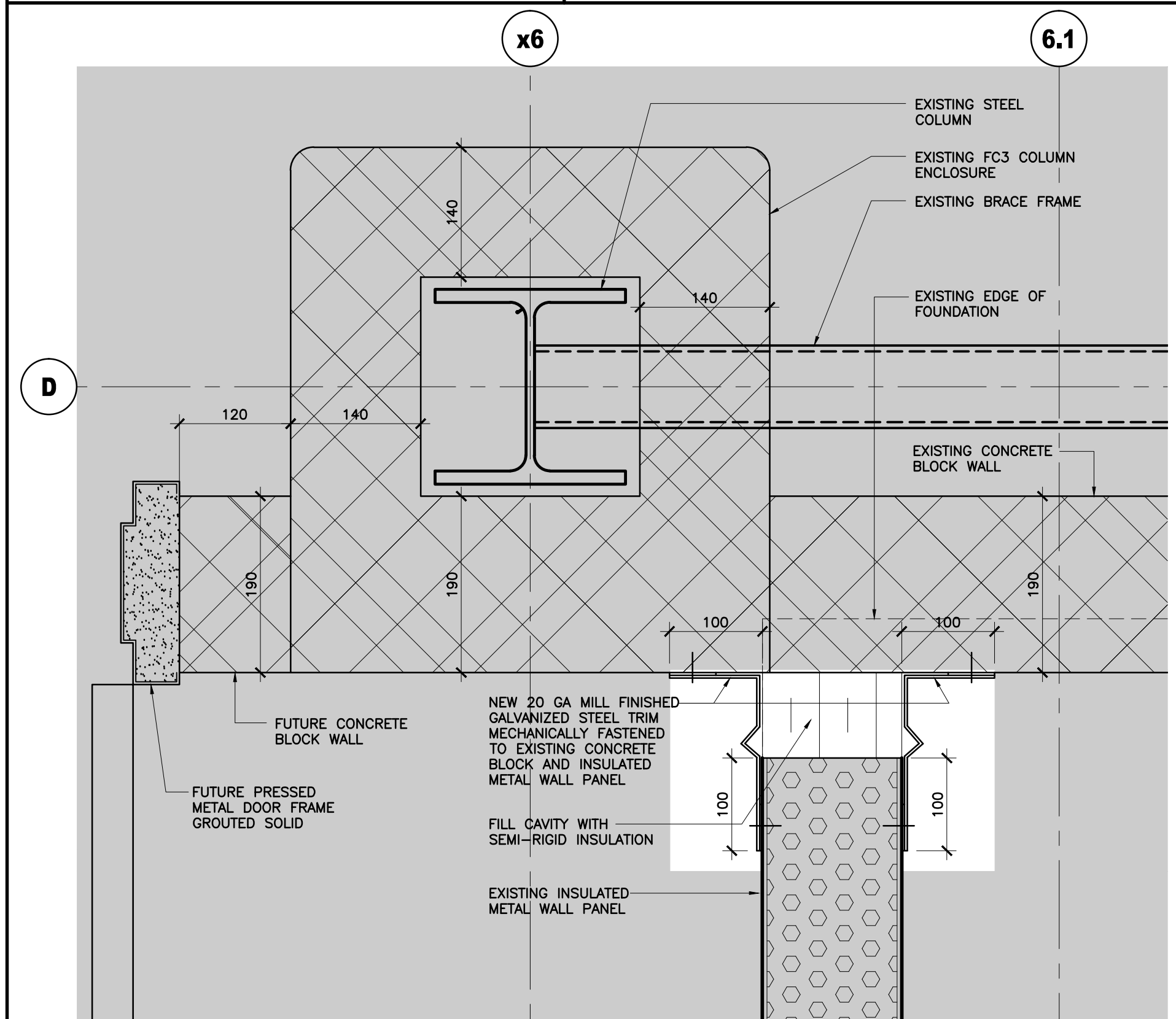
5 PARTIAL ROOF PLAN AT RTU
ASK02 1:100



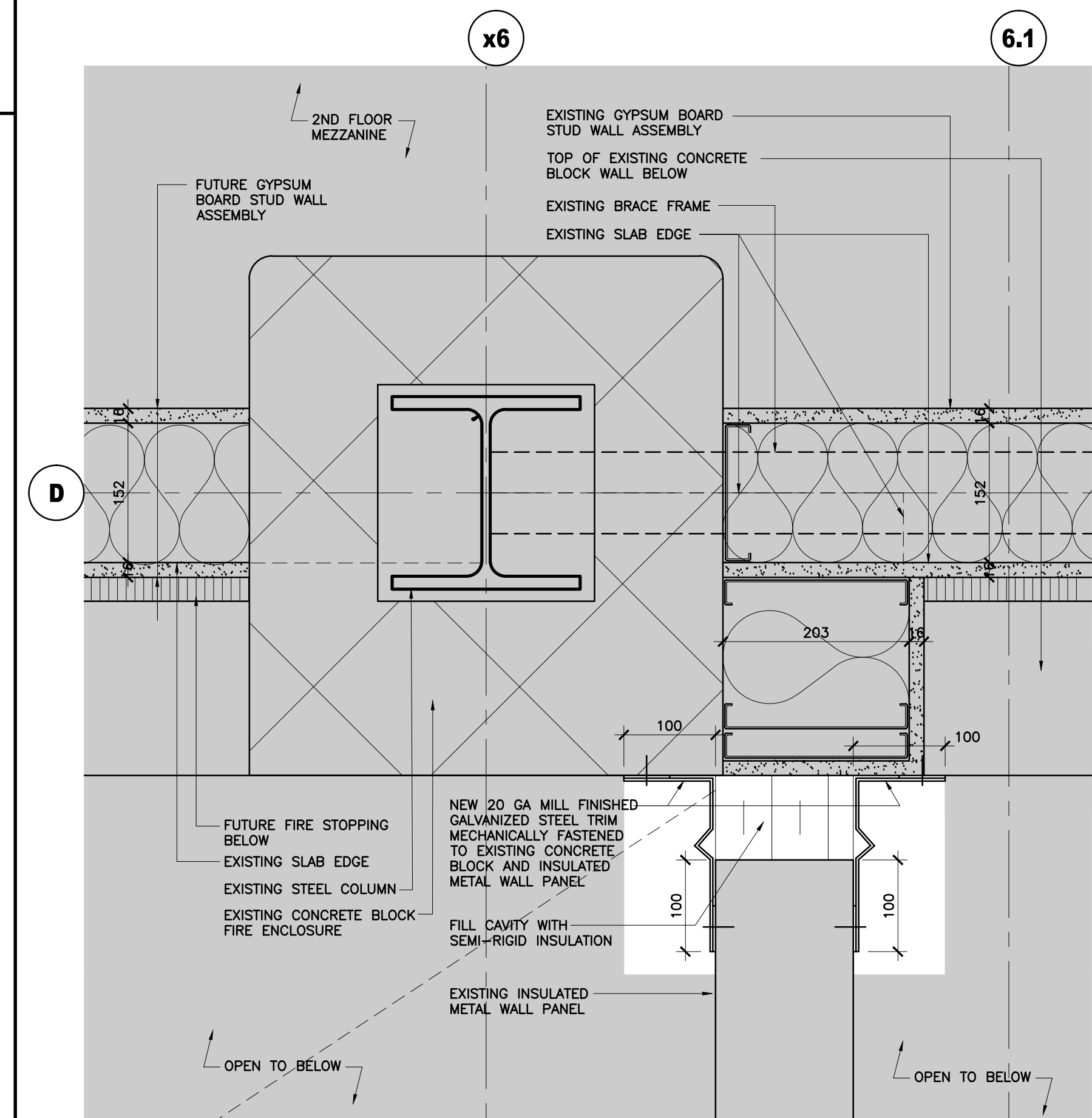
6 PARTIAL ROOF PLAN AT RTU
ASK02 1:100



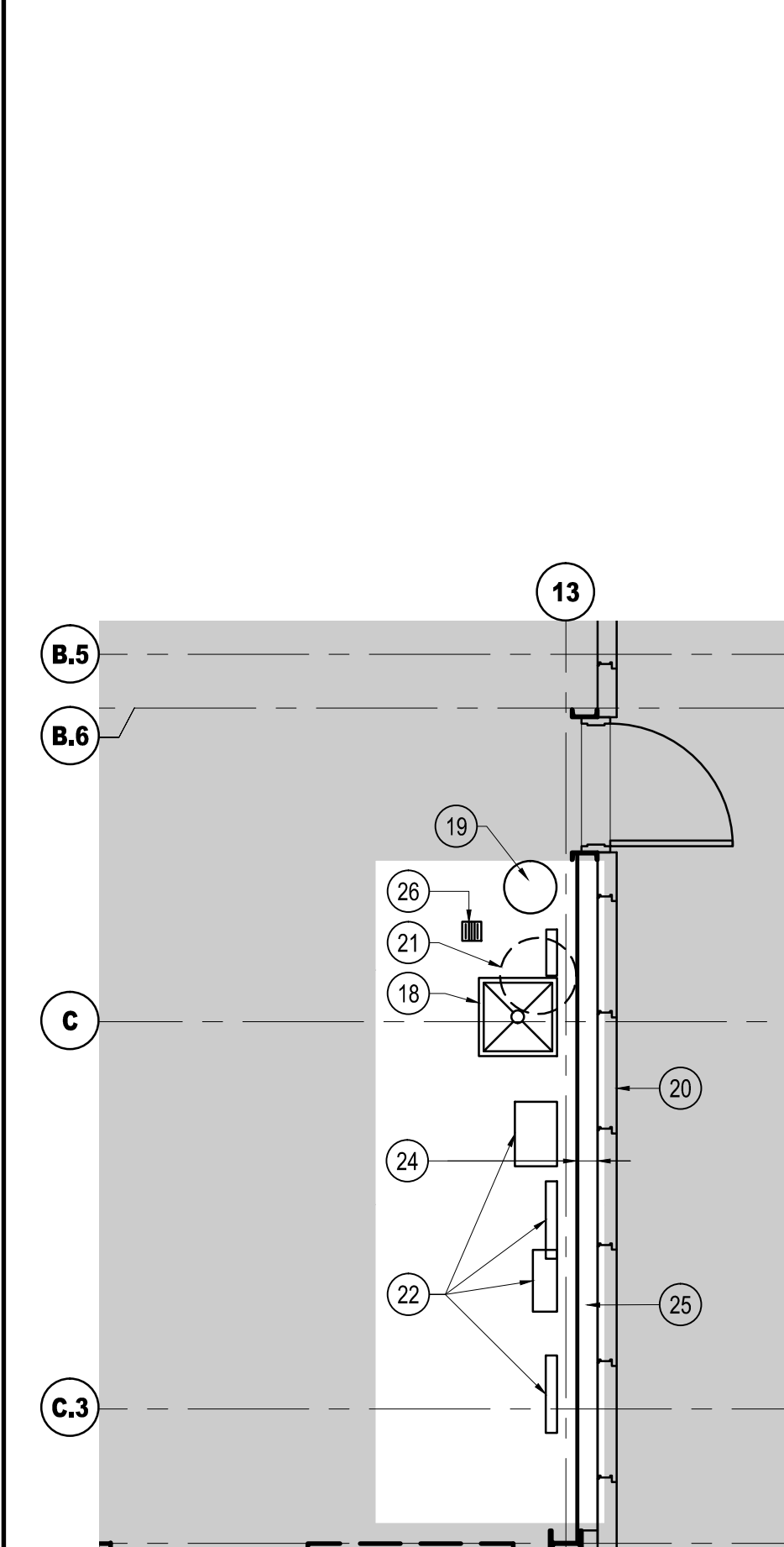
7 SECTION PIPE PENETRATION ENCLOSURE
ASK02 1:10



3 GROUND FLOOR PLAN DETAIL AT GRIDLINE D/x6
ASK02 1:5



4 SECOND FLOOR PLAN DETAIL AT GRIDLINE D/x6
ASK02 1:5



8 PARTIAL GROUND FLOOR PLAN
ASK02 1:50

- ### DRAWINGS NOTES
- FUTURE CONCRETE BLOCK VENEER ON THE EXISTING WALL ASSEMBLY
 - NOT USED
 - FUTURE MATERIAL STORAGE BY NRC
 - EXISTING CONCRETE BLOCK COLUMN ENCLOSURE
 - EXISTING CONCRETE BLOCK WALL
 - EXISTING INSULATED METAL WALL PANEL
 - NOT USED
 - TOP OF FUTURE CONCRETE BLOCK VENEER BELOW
 - EXISTING CONCRETE BLOCK WALL BELOW
 - EXISTING GYPSUM BOARD STUD WALL ASSEMBLY
 - FUTURE GYPSUM BOARD STUD WALL ASSEMBLY
 - MUD AND SAND GYPSUM WALL AS REQUIRED FOR NEW PAINT FINISH
 - PAINT WALL FINISH
 - SUPPLY AND INSTALL NEW 100mm RUBBER FLOOR BASE
 - NEW DOOR, DOOR FRAME AND HARDWARE IN PHASE 3 SCOPE OF WORK
 - ROOF TOP UNIT. REFER TO MECHANICAL
 - GAS PIPE PENETRATION ENCLOSURE. REFER TO SECTION, COORDINATE LOCATION OF ENCLOSURE WITH OWNER AND MECHANICAL.
 - NEW MOP SINK. REFER TO MECHANICAL
 - NEW HAND AND EYE WASH STATION. REFER TO MECHANICAL
 - EXISTING INSULATED METAL WALL PANEL
 - NEW HOT WATER TANK ABOVE. REFER TO MECHANICAL
 - MECHANICAL ITEMS. REFER TO MECHANICAL FOR INFORMATION
 - NOT USED
 - NEW WALL ASSEMBLY:
16 ABUSE RESISTANT GYPSUM BOARD
152 STRUCTURAL STEEL STUDS @ 400 O.C. MAX
HEIGHT OF WALL ASSEMBLY TO EXTEND VERTICALLY 4000mm TO HORIZONTAL HSS GIRT.
 - EXISTING 100x152x7.9 GALVANIZED STEEL ANGLE SECURED TO EXISTING SLAB AND EXISTING INSULATED METAL WALL PANEL.
 - EXISTING FLOOR DRAIN, REFER TO MECHANICAL.
-
- ### GENERAL NOTES
- SEAL ALL PENETRATIONS THROUGH EXTERIOR AND INTERIOR WALL ASSEMBLIES AND FLOOR ASSEMBLIES. REFER TO SPEC SECTION 07 92 00 JOINT SEALANTS.

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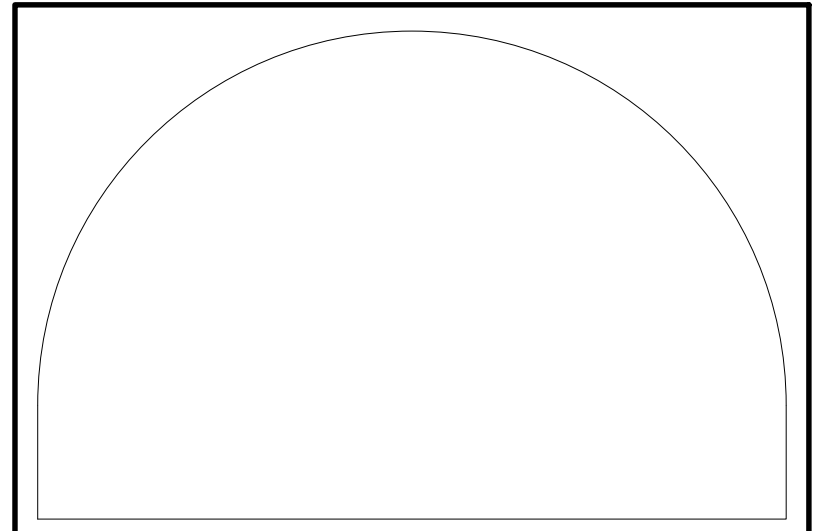
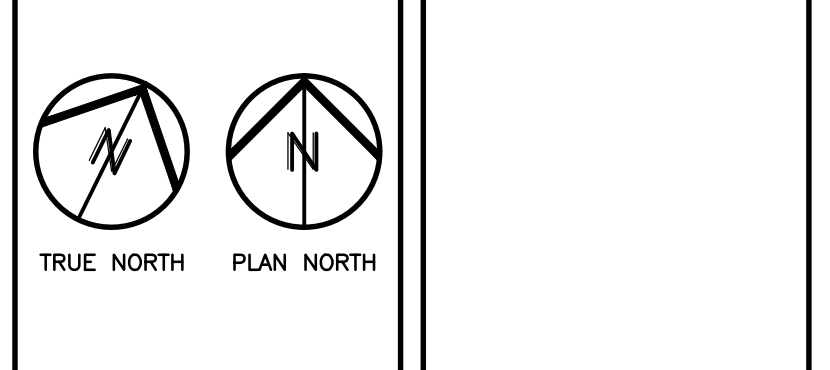
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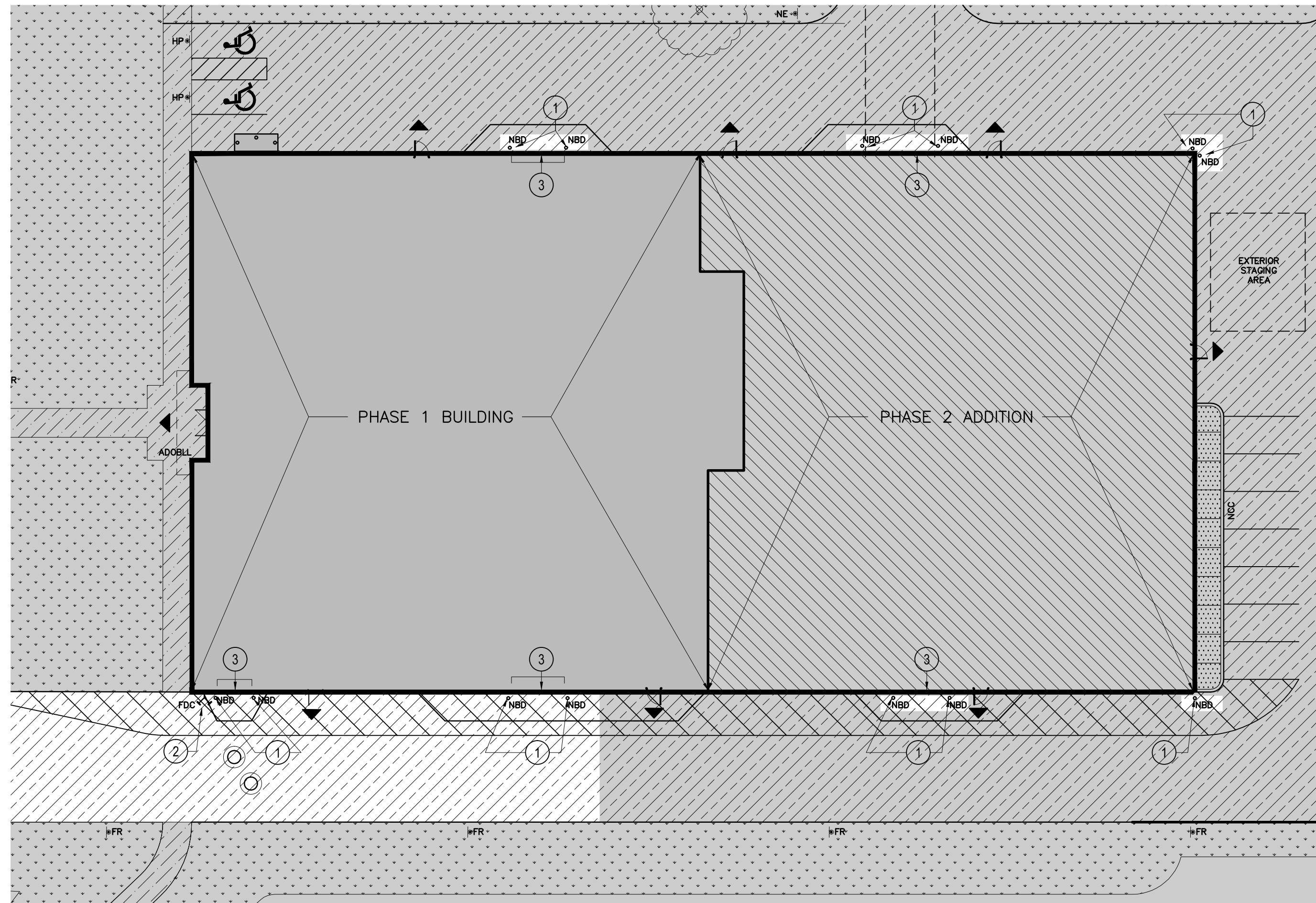
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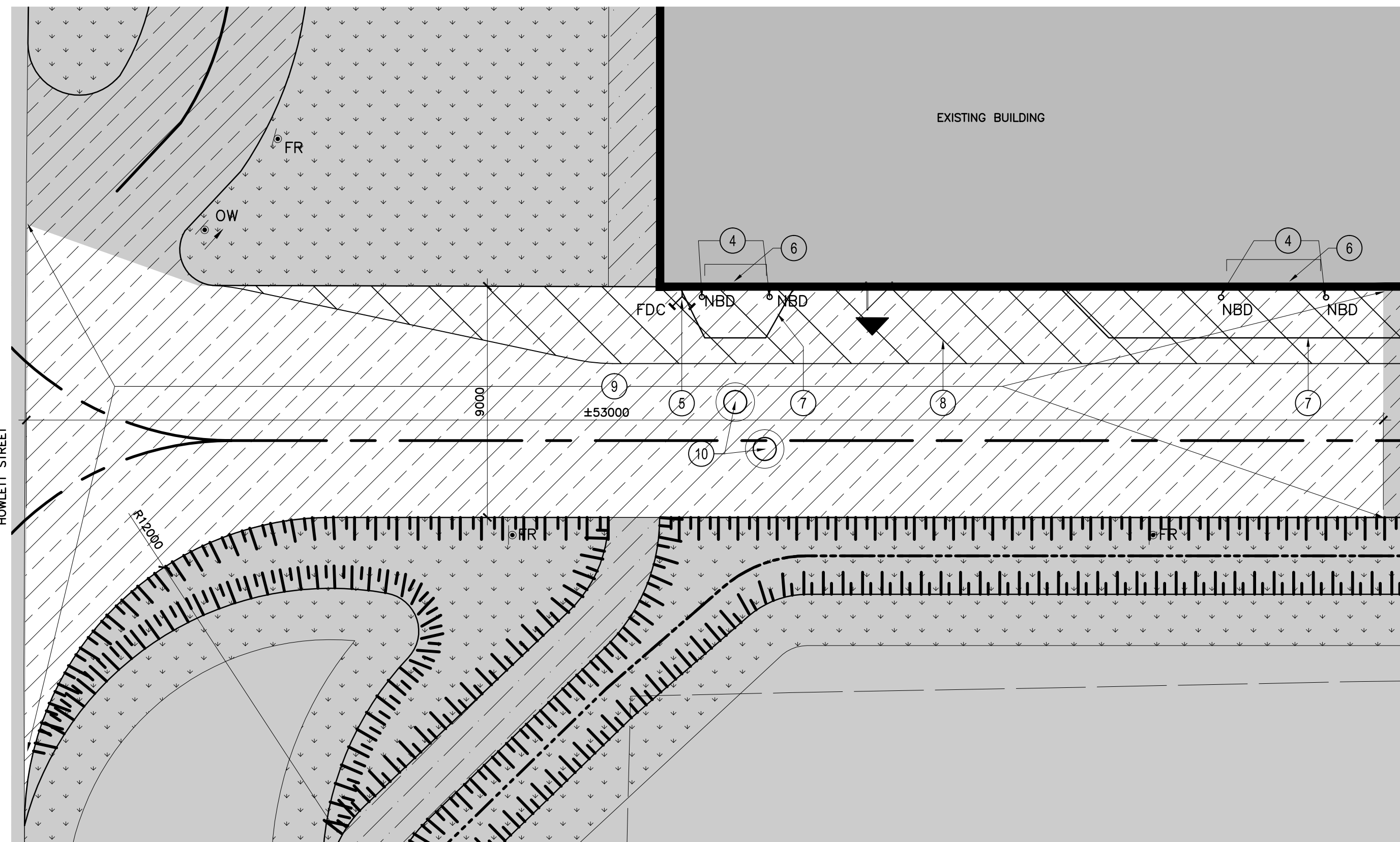
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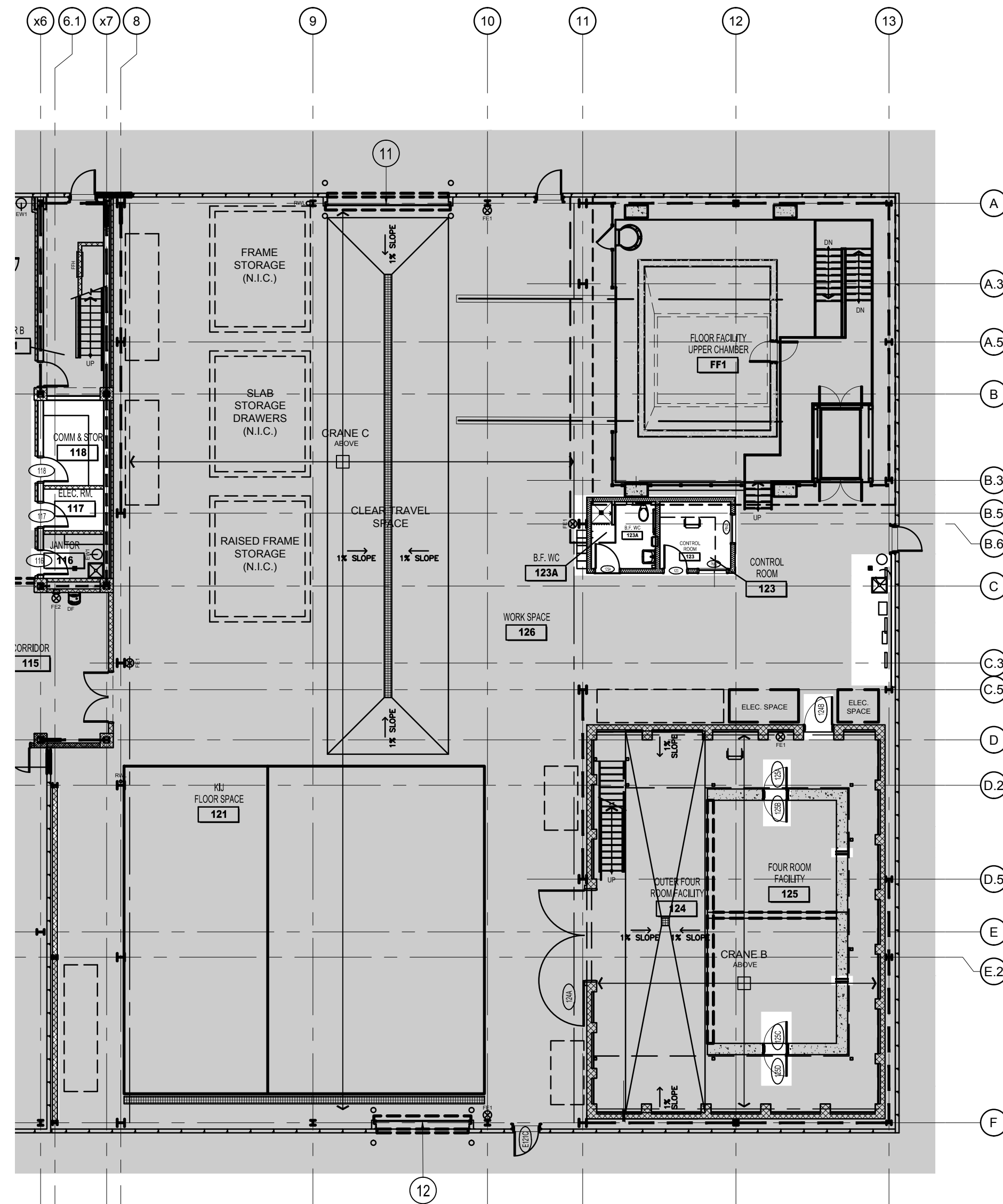
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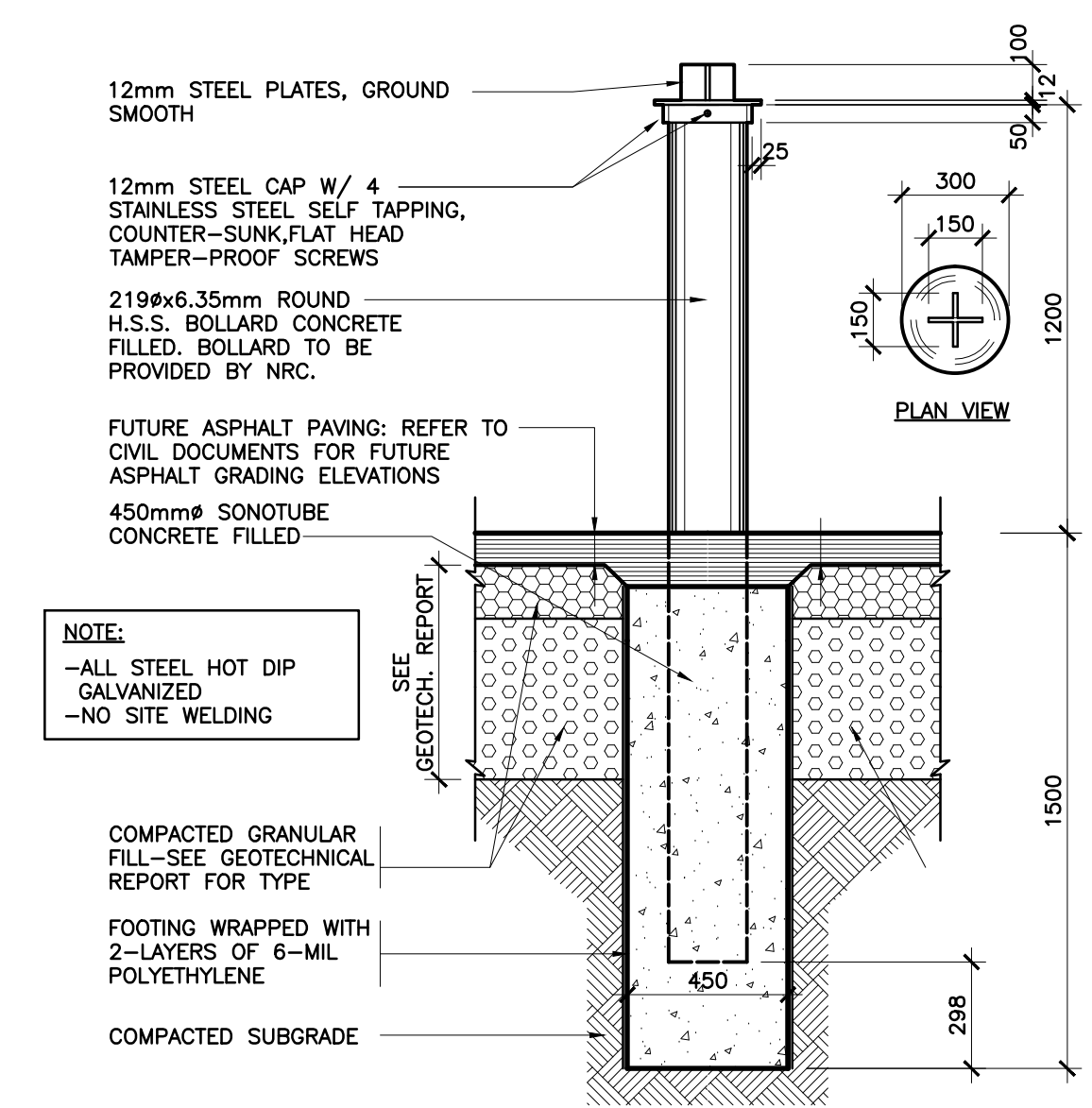
1 PARTIAL SITE PLAN - EXTERIOR METAL BOLLARDS
ASK03 1:100



2 PARTIAL SITE PLAN - NEW GRANULAR
ASK03 1:100



3 DOOR OPENER AT OVERHEAD DOORS
ASK03 1:160



4 NEW BOLLARD INSTALLATION
ASK03 1:20

DRAWINGS NOTES

- 1 INSTALL OWNER PROVIDED NEW STEEL BOLLARDS AT LOCATIONS INDICATED ON PLAN TO PROTECT OVERHEAD DOOR JAMBS.
- 2 EXISTING FIRE DEPARTMENT CONNECTION
- 3 EXISTING OVERHEAD DOOR
- 4 INSTALL OWNER PROVIDED NEW STEEL BOLLARDS AT LOCATIONS INDICATED ON ASK09 TO PROTECT OVERHEAD DOOR JAMBS.
- 5 EXISTING FIRE DEPARTMENT CONNECTION
- 6 EXISTING OVERHEAD DOOR
- 7 FUTURE RAISED ASPHALT SLOPE AT EXISTING OVERHEAD DOOR.
- 8 FUTURE PAINT MARKINGS
- 9 PROVIDE NEW GRANULAR B BROUGHT UP TO FINAL ASPHALT GRADING ELEVATION FROM HOWLETT STREET TO PAST THE EXISTING OVERHEAD DOOR AS SHOWN AND NOTED. REFER TO CIVIL DOCUMENTS FOR ADDITIONAL INFORMATION. REFER TO CIVIL DRAWING C1 DATED 2018-03-21 "REVISED GRADING" TO REFERENCE FINAL ASPHALT GRADING ELEVATIONS.
- 10 EXISTING MANHOLES TO BE ADJUSTED TO SUIT NEW GRADING. REFER TO CIVIL
- 11 EXISTING THERMISER MAX INSULATED OVERHEAD DOOR 4800 WIDE BY 4500 HIGH. PROVIDE AND INSTALL NEW DOOR OPERATOR. DOOR OPERATOR TO BE SIZED TO SUIT EXISTING OVERHEAD DOOR DIMENSIONS AS PER MANUFACTURER'S RECOMMENDATIONS. MANUFACTURER CONTACT INFORMATION: CORNELL: 24 ELMWOOD AVENUE, MOUNTAIN TOP, PA 18707 TELEPHONE: (800) 233-8366
- 12 EXISTING THERMISER MAX INSULATED OVERHEAD DOOR 3700 WIDE BY 3800 HIGH. PROVIDE AND INSTALL NEW DOOR OPERATOR. DOOR OPERATOR TO BE SIZED TO SUIT EXISTING OVERHEAD DOOR DIMENSIONS AS PER MANUFACTURER'S RECOMMENDATIONS. MANUFACTURER CONTACT INFORMATION: CORNELL: 24 ELMWOOD AVENUE, MOUNTAIN TOP, PA 18707 TELEPHONE: (800) 233-8366

- PHASE 3 SCOPE OF WORK
- NOT IN SCOPE OF WORK
- ▨ FUTURE TYPE 1 ASPHALT - HEAVY DUTY
- ▧ FUTURE TYPE 2 ASPHALT - LIGHT DUTY
- ▩ FUTURE CONCRETE WALK
- ⋯ FUTURE SOD AND TOPSOIL

GENERAL NOTES

1. SEAL ALL PENETRATIONS THROUGH EXTERIOR AND INTERIOR WALL ASSEMBLIES AND FLOOR ASSEMBLIES. REFER TO SPEC SECTION 07 92 00 JOINT SEALANTS.

ISSUE NO.	REV.	DATE	ISSUE
1	0	2018/12/12	ISSUED FOR TENDER

LES IDÉES, CONCEPTS, DISPOSITIONS ET PLANS MONTRÉS OU REPRÉSENTÉS PAR CE DESSIN APPARTIENNENT À EDWARD J. CUHACI AND ASSOCIATES ARCHITECTS INC. ET ONT ÉTÉ CRÉÉS, ET DÉVELOPPÉS POUR ÊTRE UTILISÉS DANS LE CADRE DU PRÉSENT PROJET. ILS NE DOIVENT PAS ÊTRE UTILISÉS À D'AUTRES FINS NI COMMUNIQUÉS À QUI QUE CE SOIT SANS LA PERMISSION ÉCRITE DE EDWARD J. CUHACI AND ASSOCIATES ARCHITECTS INC.

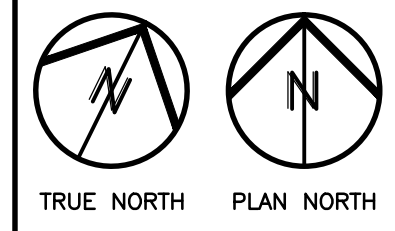
L'ARCHITECTE DÉCLINE TOUTE RESPONSABILITÉ DÉCOULANT DE PROBLÈMES FAISANT SUITE AU NON RESPECT DES PLANS ET DEVIS OU DE L'INTENTION DU CONCEPT QU'ILS TRANSMETTENT, OU DE TOUTS PROBLÈMES POUVANT RÉSULTER DU DÉFAUT DE TIERS D'OBTENIR OU DE SUIVRE LES INSTRUCTIONS DE L'ARCHITECTE RELATIVEMENT AUX ERREURS, OMISSIONS, INCOHÉRENCES, AMBIGUITÉS OU CONTRADICTIONS ALLÉGUÉES.

L'ENTREPRENEUR DOIT VÉRIFIER TOUTES LES DIMENSIONS SUR PLACE ET INFORMER L'ARCHITECTE DE TOUT ÉCART AVANT LE DÉBUT DES TRAVAUX. NE PAS MESURER LES DESSINS À L'ÉCHELLE.

ALL IDEAS, DESIGNS, ARRANGEMENTS, AND PLANS INDICATED OR REPRESENTED BY THIS DRAWING ARE OWNED BY AND THE PROPERTY OF EDWARD J. CUHACI AND ASSOCIATES INC. AND WERE CREATED, EVOLVED, AND DEVELOPED FOR USE ON AND IN CONNECTION WITH THE SPECIFIED PROJECT. NONE OF THE IDEAS, DESIGNS, ARRANGEMENTS OR PLANS SHALL BE USED BY OR DISCLOSED TO ANY PERSON, FIRM, OR CORPORATION FOR ANY PURPOSE WHATSOEVER WITHOUT THE WRITTEN PERMISSION OF EDWARD J. CUHACI AND ASSOCIATES INC.

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CONTRACTOR TO VERIFY ALL DIMENSIONS AND NOTIFY THE ARCHITECT OF ANY DISCREPANCIES BEFORE WORK COMMENCES. DO NOT SCALE DRAWINGS



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PROJECT TITLE/TITRE DU PROJET
M-38 ACOUSTIC FACILITY
PHASE 3
MONTREAL ROAD CAMPUS

NATIONAL RESEARCH COUNCIL CANADA
1200 MONTREAL ROAD
OTTAWA, ONTARIO

DRAWING TITLE/TITRE DU DESSIN
PHASE 3 SCOPE OF WORK

SCALE	AS SHOWN	PROJ. No.	ISSUE No.	REV. No.
ECHELLE	AS SHOWN	1735	1	0
DRAWN BY	TBL.S	DRAWING/DESSIN		
CHECKED BY	TB			
DATE	DECEMBER 2018	ACAD FILE/FICHER:	1735-M-38 PH3 Tender	

ASK03

BUILDING M-38 - ACOUSTIC FACILITY PHASE 3

NRC MONTREAL ROAD CAMPUS - MECHANICAL



GENERAL LEGEND	
SYMBOL	DESCRIPTION
---	NEW/RELOCATED PIPING/DUCTWORK/EQUIPMENT
---	NEW PIPING/DUCTWORK/EQUIPMENT BELOW SLAB
(E)	EXISTS EXISTING EQUIPMENT
(N)	EXISTS NEW EQUIPMENT

DRAWING LIST	
SYMBOL	DESCRIPTION
5310-M001	MECHANICAL LEGENDS AND SCHEDULES
5310-M201	MECHANICAL SECOND FLOOR PLUMBING - NEW WORK
5310-M202	MECHANICAL SECOND FLOOR PLUMBING - NEW WORK
5310-M301	MECHANICAL SECOND FLOOR UTILITIES - NEW WORK
5310-M302	MECHANICAL SECOND FLOOR UTILITIES - NEW WORK
5310-M401	MECHANICAL SECOND FLOOR HVAC - NEW WORK
5310-M402	MECHANICAL SECOND FLOOR HVAC - NEW WORK
5310-M403	MECHANICAL ROOF PLAN - NEW WORK

FIRE PROTECTION LEGEND	
SYMBOL	DESCRIPTION
FE	FIRE EXTINGUISHER C/W MOUNTING BRACKET
FE	RECESSED FIRE EXTINGUISHER
FE	SEMI-RECESSED FIRE EXTINGUISHER
O	SEMI-RECESSED SPRINKLER
S	UPRIGHT SPRINKLER
FDC	FIRE DEPARTMENT SIAMISE CONNECTION
S	SUPERVISED ISOLATION VALVES

CONTROLS LEGEND	
SYMBOL	DESCRIPTION
V	LOW VOLTAGE CONTROL WIRING
T	TEMPERATURE SENSOR
S	SPEED CONTROLLER
F	FAN CONTROLLER
T	FLOOR TEMPERATURE SENSOR

UTILITIES LEGEND	
SYMBOL	DESCRIPTION
HWS	HEATING WATER SUPPLY
HWR	HEATING WATER RETURN
NG	NATURAL GAS PIPING
P	PETES PLUG (TEMPERATURE AND PRESSURE MONITORING PORT)

PLUMBING LEGEND	
SYMBOL	DESCRIPTION
---	PIPING BELOW GRADE/SLAB
DCW	DOMESTIC COLD WATER PIPING
DHW	DOMESTIC HOT WATER PIPING
DHW-R	DOMESTIC HOT WATER RECIRCULATION PIPING
SAN	SANITARY PIPING
ST	STORM PIPING
V	VENT PIPING
COND	CONDENSATE DRAIN
FD1	FLOOR DRAIN (TYPE)
RD1	ROOF DRAIN (TYPE)
P	PIPING OFFSET
B	BRANCH PIPING DOWN
D	PIPING DOWN
L	PIPING UP
R	REDUCER
F	FLOW DIRECTION
B	PIPE BREAK
C	CAP
P-TRAP	RUNNING P-TRAP
P-TRAP	P-TRAP
D	DRAIN ASSEMBLY
CO	CLEAN OUT
WCO	WALL CLEAN OUT
FLOOR CLEAN OUT	FLOOR CLEAN OUT
ISOLATION VALVES	ISOLATION VALVES
PRV	PRESSURE REDUCING VALVE (PRV)
CBV	CIRCUIT BALANCING VALVE (CBV)
S	STRAINER
C	CHECK VALVE
F	FLEXIBLE CONNECTION
U	UNION
R	RELIEF VALVE
D	DRAIN VALVE C/W CAP & CHAIN
N-FREEZE	NON-FREEZE HOSE BIBB
P	PUMP (P)
CP	CONDENSATE PUMP (CP)
FM	FLOW METER (TYPE)
T	THERMOMETER
G	PRESSURE GAUGE
U	UTILITY METER

HVAC LEGEND	
SYMBOL	DESCRIPTION
R	RECTANGULAR DUCTWORK
R	ROUND DUCTWORK
R	ACOUSTICALLY LINED DUCTWORK (RETURN OR SUPPLY)
R	THERMALLY INSULATED DUCTWORK (RETURN OR SUPPLY). REFER TO SPECIFICATIONS FOR FULL SCOPE OF INSULATION REQUIREMENTS
R	ROUND DUCTWORK OFFSET
R	RECTANGULAR DUCTWORK OFFSET
R	DUCTWORK UP
R	DUCTWORK DOWN
R	RECTANGULAR TO ROUND TRANSITION
R	ECCENTRIC RECTANGULAR TO ROUND TRANSITION
R	ECCENTRIC TRANSITION
D	TAKE-OFF C/W BALANCING DAMPER
D	TAKE-OFF
S	SQUARE SUPPLY DIFFUSER (TYPE)
R	RETURN GRILLE (RG)
E	EXHAUST GRILLE (EG)
T	TRANSFER GRILLE (TG)
W	WALL GRILLE (TYPE)
L	LOUVER (L)
T	TRANSFER OPENING (TO)
L	ACOUSTICALLY LINED TRANSFER DUCT (TD)
F	FIRE DAMPER (FD)
B	BALANCING DAMPER (BD)
F	FLEXIBLE CONNECTION
T	TURNING VANES
A	ACCESS DOOR
M	MOTORIZED DAMPER
P	PENTHOUSE LOUVER (PL)
S	DIFFUSER TAG
S	DIFFUSER TYPE
S	AIRFLOW (L/S)
S	SIZE (mm)

PUMP SCHEDULE										
TAG	LOCATION	FUNCTION	TYPE	PUMP DATA			ELECTRICAL DATA		BASIS OF DESIGN	REMARKS
				DESIGN FLOW (L/s)	DESIGN HEAD (kPa)	RPM	MOTOR SIZE (HP)	V/PH/Hz		
38HWP01	WORK SPACE - [126]	DOMESTIC HOT WATER	WET ROTOR	0.87	33.45	1300	0.25	120/1/60	WLD STAR S 33RFC	SUPPLIED WITH BOILER.
38HWP02	WORK SPACE - [126]	BOILER CIRCULATION	WET ROTOR	1.59	39.42	3100	0.28	120/1/60	WLD TOP-S 1.25x25	SUPPLIED WITH BOILER.
38HWP03	WORK SPACE - [126]	RADIANT CIRCULATION	WET ROTOR	0.79	74.72	4800	0.29	208/1/60	WLD STRATOS 1.25x3-30	SUPPLIED WITH BOILER.

NOTES: 1. FOR DETAILS REFER TO SPECIFICATIONS.

GRILLE AND DIFFUSER SCHEDULE						
UNIT NO.	TYPE	MODULE (mm)	INLET (mm)	MOUNT	FINISH	REMARKS
SS1	DRUM LOUVER	AS INDICATED	AS INDICATED	DUCT	B12	EH PRICE H02 SPRINKLER FRAME AND VOLUME CONTROL DAMPER
EG1	EXHAUST AIR GRILLE	AS INDICATED	AS INDICATED	WALL/CEILING	B12	EH PRICE 6350 200x200 UNLESS OTHERWISE INDICATED
RS1	RETURN AIR GRILLE	AS INDICATED	AS INDICATED	WALL	B12	EH PRICE 630 FIXED LOUVER

NOTES: 1. FOR DETAILS REFER TO SPECIFICATIONS.

FAN SCHEDULE										
TAG	LOCATION	TYPE	FAN DIA. (mm)	AIR FLOW (L/s)	ESP (Pa)	FAN SPEED (RPM)	ELECTRICAL DATA		BASIS OF DESIGN	REMARKS
							MOTOR SIZE (HP)	V/PH/Hz		
38CAF02	AS INDICATED	PROPELLER	1584	2170	-	319	0.13	120/1/60	CANAM CP60HPMP	C/W REMOTE CONTROL UNIT/SPEED CONTROL CAPABLE OF OPERATING (3) FANS WITH (1) CONTROLLER.
38XAF01	B.F. WC - [123A]	INLINE EXHAUST	-	71	24.9	1300	0.02	120/1/60	GREENHECK CSP A-190	C/W DISCONNECT AND BACKDRAFT DAMPER.
38XAF02	ELEC. ROOM [117]	N-LINE	-	300	65	1191	0.5	120/1/60	GREENHECK SP A-710	C/W CEILING MOUNTED GRILLE, SPEED CONTROLLER, ON/OFF BY BAS. TEMPERATURE.

NOTES: 1. FOR DETAILS REFER TO SPECIFICATIONS.

FIXTURE CONNECTION SCHEDULE					
FIXTURE	DOMESTIC COLD WATER (mm)	DOMESTIC HOT WATER (mm)	SANITARY (mm)	COMMENTS	BASIS OF DESIGN (MAKE/MODEL)
LW1	13	13	40	L1: WHITE, BARRIER FREE WALL HUNG LAVATORY, ANTI-SOILD MIXING VALVE (605X100), FLOOR MOUNT WALL CARRIER, SHROUD/KNEE CONTACT GUARD, P-TRAP W/ CLEAN-OUT TRIM: 1.5GPM, HARDWIRED C/W BATTERY BACKUP KIT. 3 HOLE, 4" CENTERSET, BRASS CONSTRUCTION.	L1: AMERICAN STANDARD / O9S4 004EC + 0062.00DEC TRIM: AMERICAN STANDARD / SELECTRONIC 6055.202
SS1	13	13	50	SS1: HIGH DENSITY COMPOSITE WOP BASIN, 610x110x254mm, C/W BUMPER GUARD, REINFORCED HOSE, WOP HANGER, PVC DRAIN BODY, STAINLESS STEEL, DOME STRAINER WITH LOCKING NUT & STAINLESS STEEL WALL GUARDS. TRIM: FAUCET - WALL MOUNTED, TWO HANDLE, BRASS BODY, CERAMIC DISC CARTRIDGES, ROO SPRUIT, WALL BRACE, PAUL HOOK & HOSE THREAD WITH WACUM BREAKER.	SS1: ZURN / 21996-24 TRIM: FAUCET - 2843M-1XL
SH1	13	13	50	SH1: 4-Piece SHOWER WITH LOW THRESHOLD BASE, MASONRY SHOWER DOOR, BISCUIT FINISH. TRIM: BARRIER FREE HAND SHOWER WITH ADA GRAB BAR (810mm), CHROME PLATED FINISH, THERMOSTATIC MIXING VALVE, TEMPERATURE CONTROLLED WITH ADA COMPLIANT METAL LEVER HANDLE.	SH1: MAXX KDS 3232 / 145018-000-007 TRIM: DELTA T177H155-R10000-UNWS DRAWN TO SUIT SHOWER
WC1	13	-	75	BARRIER FREE, FLOOR MOUNTED, TANK TYPE, WHITE FINISH, ELONGATED BOWL HEAVY DUTY, OPEN FRONT, LESS COVER - CEN7000 500753C	AMERICAN STANDARD / 3483.001
EW2	20	20	32	EW2: HALO EYE/FACE WASH, STAINLESS STEEL BOWL AND SHOWERHEAD, HAND/FOOT OPERATED EYE WASH	EW2: BRADLEY S19 3145PR TEPID WATER: NAVIGATOR S19-2100 EPX25 EMERGENCY THERMOSTATIC MIXING VALVE, C/W CABINET

NOTES: 1. COORDINATE EXACT PIPING LOCATIONS ON SITE.
2. VENT TO MEET CBC REQUIREMENTS. VENTING THROUGH SLOPED ROOFS NOT PERMITTED.
3. ALL PIPING TO BE INSTALLED NEATLY AND COORDINATED WITH ALL OTHER TRADES.
4. MANUFACTURER NAME & MODEL NUMBERS REPRESENT ACCEPTABLE QUALITY STANDARD ONLY. ALTERNATIVE APPROVED BY ADDENDUM ONLY.
5. MINIMUM UNDERGROUND SANITARY PIPING SIZE TO BE 50R.
6. INSTALLATION OF SINK TO COMPLY WITH LATEST EDITION OF CSA B651 STANDARD FOR BARRIER-FREE ACCESS. INSULATE DOMESTIC HOT WATER AND DRAIN PIPING UNDER COUNTER. SEE ARCH. DWG FOR DETAILS. ACCEPTABLE MATERIAL: SKALLGUARD WHITE OR MINERAL FIBRE WITH WHITE PVC JACKET.

ROOF-TOP AIR HANDLING UNIT SCHEDULE																		
UNIT NO.	LOCATION	AREA SERVED	SUPPLY FAN DATA				DX COOLING COIL DATA				GAS HEATING SECTION			ELECTRICAL DATA		BASIS OF DESIGN	REMARKS	
			AIR FLOW (L/s)	EXTERNAL STATIC PRESSURE (Pa)	TOTAL STATIC PRESSURE (Pa)	HP	TOTAL CAPACITY (kW)	E.A.T. (DB/DB) (°C)	L.A.T. (DB/DB) (°C)	STAGES	INPUT (kW)	OUTPUT (kW)	TEMPERATURE RISE (°C)	STAGES	V/PH/Hz			MCA
38RTU01	ROOF	FUTURE OCCUPANT - [108]	2830	248.8	301.1	5	51.6	26.7/19.4	14.9/14.2	2	140.7	112.5	15.2	2	575/3/60	29	LENNOX - LGH180H4M	-NATURAL GAS, R410-A DX COOLING WITH REHEAT (55°F-65°F). 80% EFFICIENT, INSULATED COMPRESSOR SECTION, LOW NOISE CONDENSER FANS, MODULATING GAS HEAT, STANDALONE CONTROLS.
38RTU02	ROOF	WORK SPACE - [126]	2830	248.8	301.1	5	51.6	26.7/19.4	14.9/14.2	2	140.7	112.5	15.2	2	575/3/60	29	LENNOX - LGH180H4M	-NATURAL GAS, R410-A DX COOLING WITH REHEAT(55°F-65°F). 80% EFFICIENT, INSULATED COMPRESSOR SECTION, LOW NOISE CONDENSER FANS, MODULATING GAS HEAT, STANDALONE CONTROLS.

NOTES: 1. FOR DETAILS REFER TO SPECIFICATIONS.

BOILER SCHEDULE							
UNIT NO.	LOCATION	FLOW (L/s)	INPUT (kW)	OUTPUT (kW)	EFFICIENCY (%)	TYPE	REMARKS
38BLR01	WORK SPACE - [126]	1.2	46.7	43.1	95	GAS FIRED CONDENSING	120/1/60 IBC - SL16003

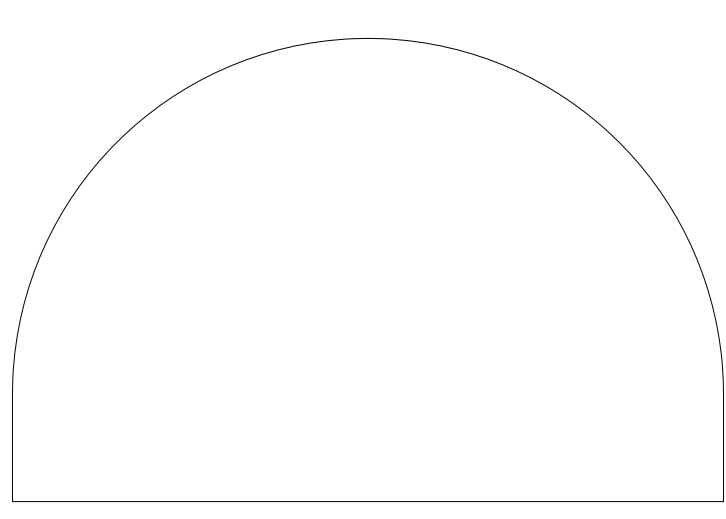
NOTES: 1. FOR DETAILS REFER TO SPECIFICATIONS.
2. TERMINATE WITH MANUFACTURERS SUPPLIED CONCENTRIC VENT KIT (HORIZONTAL).
3. MANUFACTURER TO SUPPLY CIRCULATION PUMPS, BOILER STAND, LOWLOSS HEADER, CONTROLS C/W CABINET INTEGRATION, AND NEUTRALIZATION KIT.

DOMESTIC HOT WATER STORAGE TANK/INDIRECT WATER HEATER					
UNIT NO.	LOCATION	TYPE	BOILER FLOW RATE (L/s)	STORAGE CAPACITY (L)	REMARKS
38HW01	WORK SPACE - [126]	INDIRECT WATER HEATER	0.88	113.6	IBC 30 C/W AJUSTAT, I + P VALVE, WALL MOUNT BRACKET

NOTES: 1. FOR DETAILS REFER TO SPECIFICATIONS.



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No.	Date	Revision
1	2018.12.05	ISSUED FOR TENDER

Date Printed: _____ Date Imprimé: _____
 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

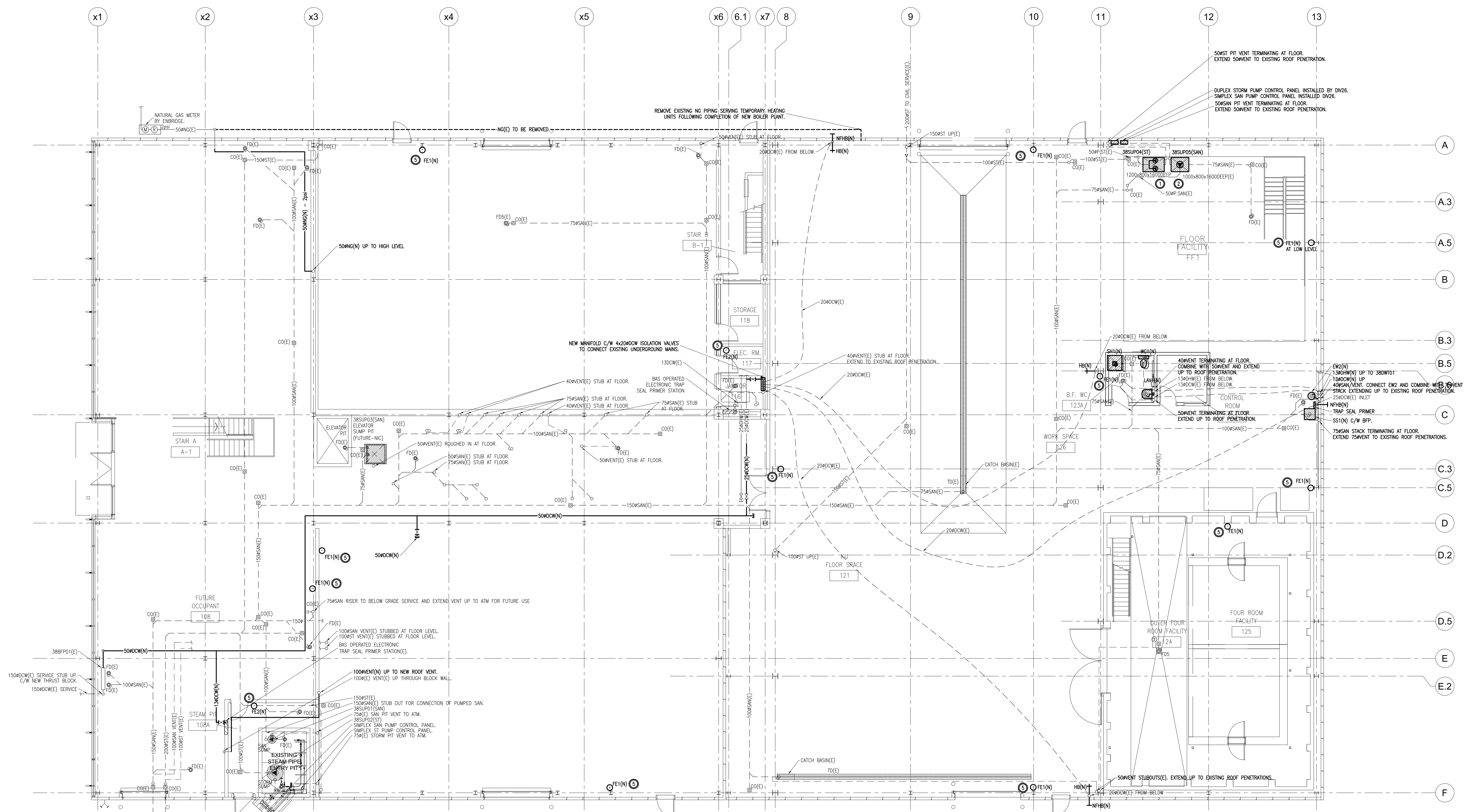
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C	C Drawing no. dessin no.	C

project: **BUILDING M-38 ADDITION - ACOUSTIC FACILITY** project

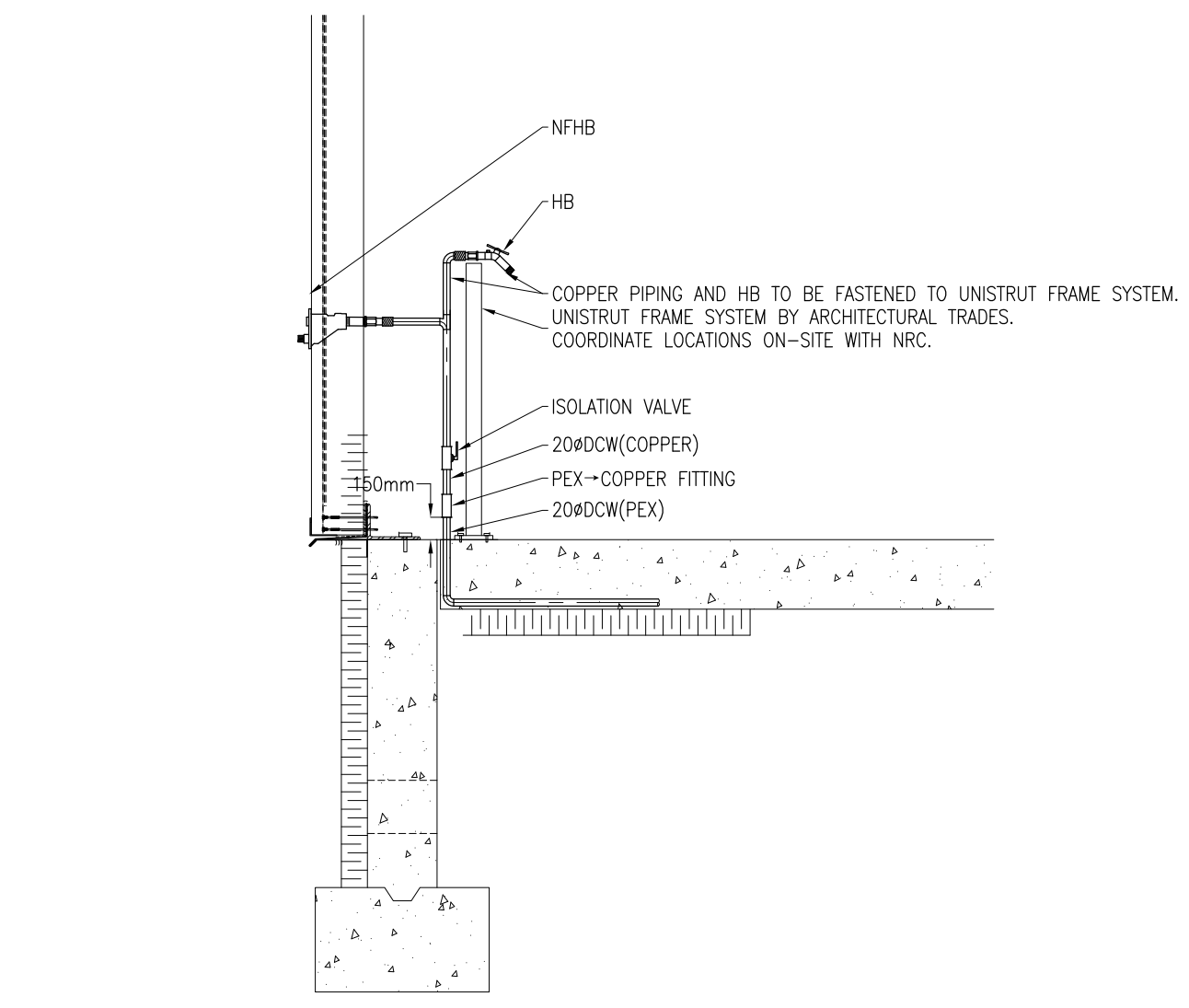
MONTREAL ROAD CAMPUS

drawing: **MECHANICAL DRAWING LIST, LEGENDS AND SCHEDULES** dessin

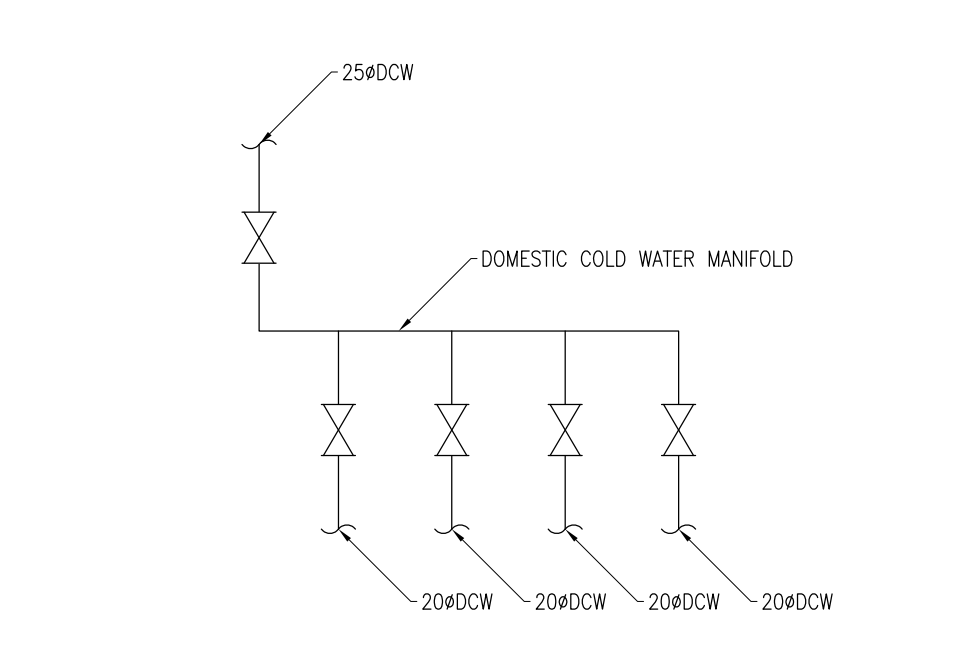
designed: RL	conçu: DECEMBER 2018	date	5310-M001
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checked: RL	vérifié: sheet 1 of 8	feuille	
approved: RL	approuvé: W.D.no.	D.T.no.	
dwg.no.: 5310-M001	dessin no.:		



GROUND FLOOR PLUMBING - NEW WORK
 1 M201 1:100



2 NON-FREEZE HOSE BIBB CONNECTION DETAIL
 M201 N.T.S.



3 DOMESTIC COLD WATER MANIFOLD
 M201 N.T.S.

DESCRIPTION OF WORK - NEW WORK

- 1 INSTALL NRC PROVIDED STORM WATER AND SANITARY SLUMP PUMP WITHIN EXISTING SLUMP PITS (38SU01 & 38SU02) C/W ASSOCIATED PIPING CONTROLS AND ACCESSORIES.
- 2 EXISTING SAN AND ST CONNECTIONS ARE ROUGHED INTO SIDEWALL OF SERVICE PIT FOR CONNECTION OF PUMPED CONNECTION. EXISTING PIT VENTS ARE ROUGHED IN ABOVE GRADE LEVEL. EXTEND VENTS FROM GRADE TO OUTSIDE THROUGH NEW PLUMBING VENT SYSTEM AS PER CODE.
- 3 ALL NG PIPING TO BE PAINTED WITH (2) COATS OF YELLOW TRIMLAC. ALL PIPING TO BE CLEARLY LABELED TO IDENTIFY NG PRESSURE (G. PSI).
- 4 PROVIDE NEW VENT PIPING AND EXTEND TO ROOF FROM EXISTING STUB OUTS.
- 5 GENERAL CONTRACTOR TO INSTALL NRC PROVIDED FE1(N) AND FE2(N) AS INDICATED.

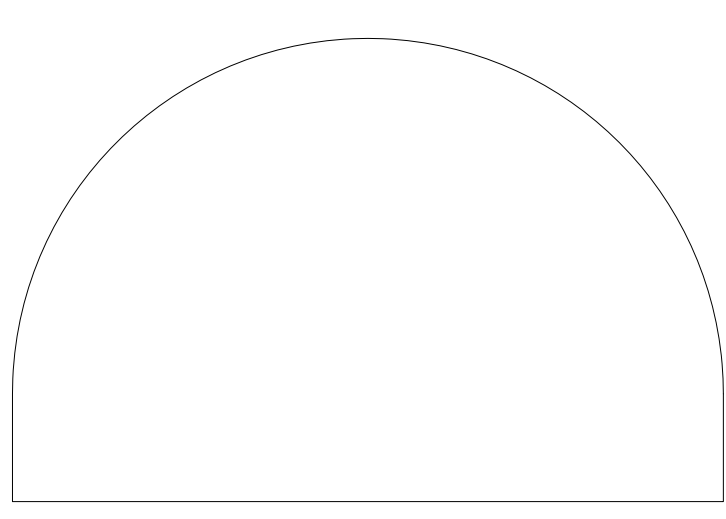
GENERAL NOTE:

1. IT IS EACH CONTRACTOR'S RESPONSIBILITY TO ENSURE ALL MATERIAL INSTALLED UNDER THEIR CONTRACT IS COORDINATED WITH ALL OTHER TRADES. THE DRAWINGS SHOW GENERAL SCOPE AND ROUTING OF ALL SYSTEMS. ALL INTERFERENCES BETWEEN PIPING, DUCTWORK, CONDUIT, STRUCTURE, CEILING, OVERHEAD CRANE, AND ALL OTHER BUILDING ELEMENTS MUST BE IDENTIFIED PRIOR TO COMMENCEMENT OF WORK. OTHERWISE, RELOCATING/ROUTING OF SYSTEMS SHALL BE PERFORMED BY CONTRACTOR TO SUIT FULLY COORDINATED INSTALLATION AT NO EXTRA COST.



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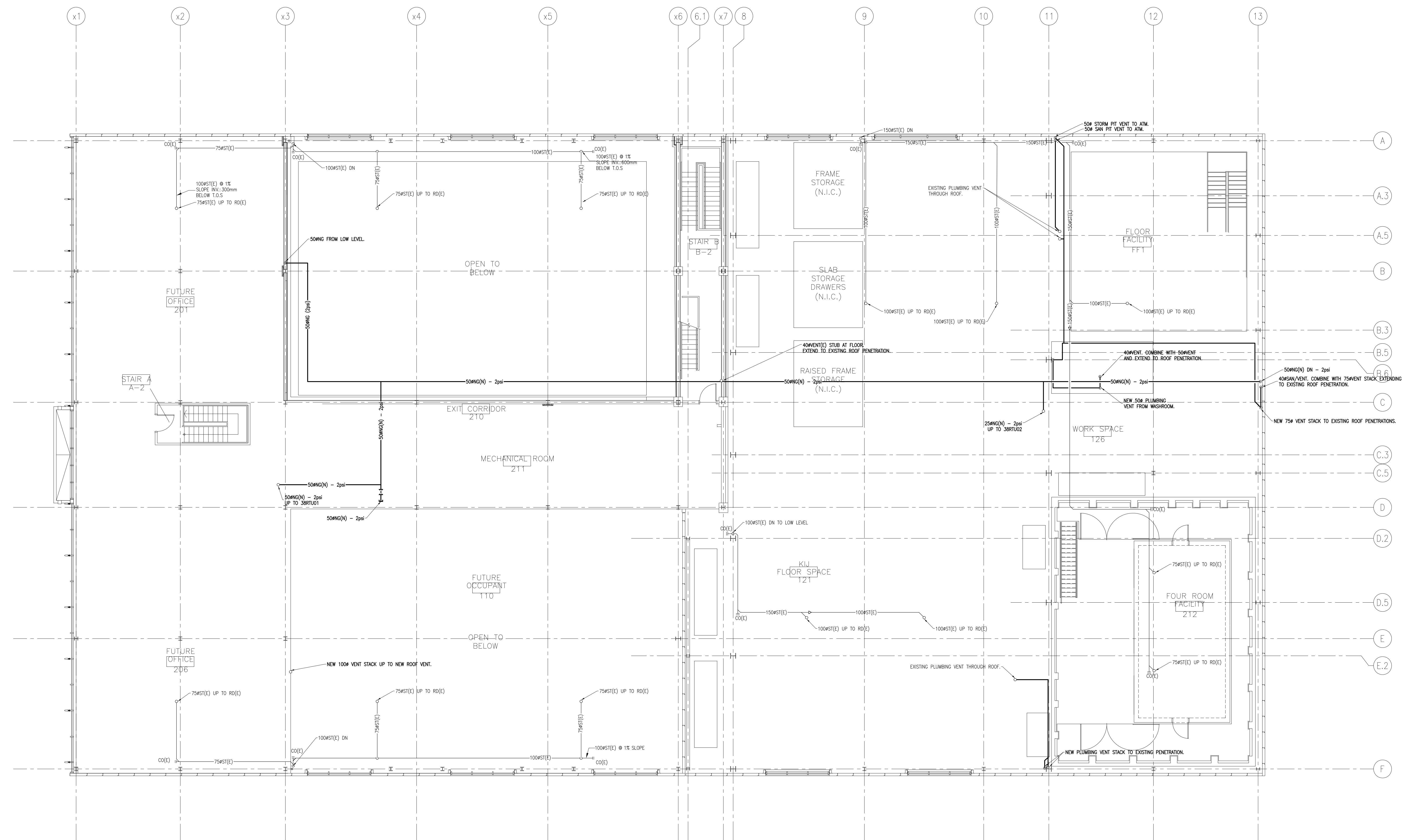
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C	C Drawing no. / dessin no.	C

PROJECT: **BUILDING M-38 ADDITION - ACOUSTIC FACILITY**

LOCATION: **MONTREAL ROAD CAMPUS**

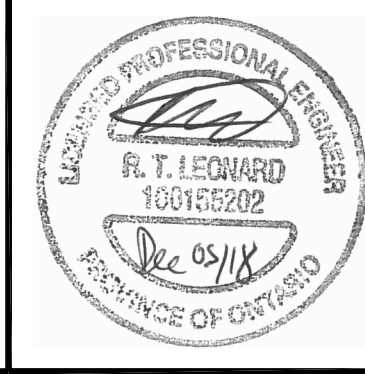
MECHANICAL
 GROUND FLOOR
 PLUMBING - NEW WORK

designed	conçu	DATE	DATE	5310-M201
drawn	dessiné	SCALE	ÉCHELLE	
checked	vérifié	SHEET	FEUILLE	
approved	approuvé	W.O. NO.	D.T. NO.	
dwg. no.	dessin no.			



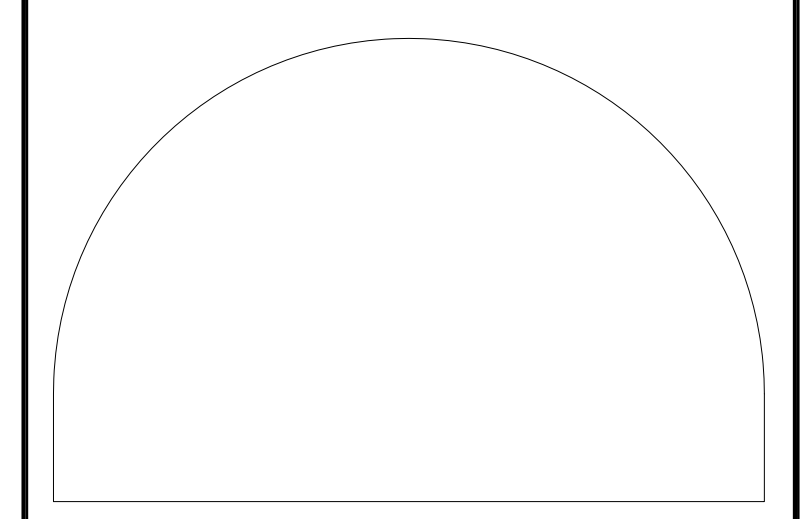
**SECOND FLOOR
 PLUMBING - NEW WORK**
 1 M202 1:100

GENERAL NOTE:
 1. PROPOSED LOCATIONS FOR NEW PLUMBING VENTS SHOWN FOR COORDINATION PURPOSES ONLY. CONTRACTOR RESPONSIBLE FOR FULL PLUMBING VENT DISTRIBUTION SYSTEM TO MEET OBC.
 2. IT IS EACH CONTRACTOR'S RESPONSIBILITY TO ENSURE ALL MATERIAL INSTALLED UNDER THEIR CONTRACT IS COORDINATED WITH ALL OTHER TRADES. THE DRAWINGS SHOW GENERAL SCOPE AND ROUTING OF ALL SYSTEMS. ALL INTERFERENCES BETWEEN PIPING, DUCTWORK, CONDUIT, STRUCTURE, CEILING, OVERHEAD CRANE, AND ALL OTHER BUILDING ELEMENTS MUST BE IDENTIFIED PRIOR TO COMMENCEMENT OF WORK. OTHERWISE, RELOCATING/ROUTING OF SYSTEMS SHALL BE PERFORMED BY CONTRACTOR TO SUIT FULLY COORDINATED INSTALLATION AT NO EXTRA COST.



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No.	Date	Revision
1	2018.12.05	ISSUED FOR TENDER

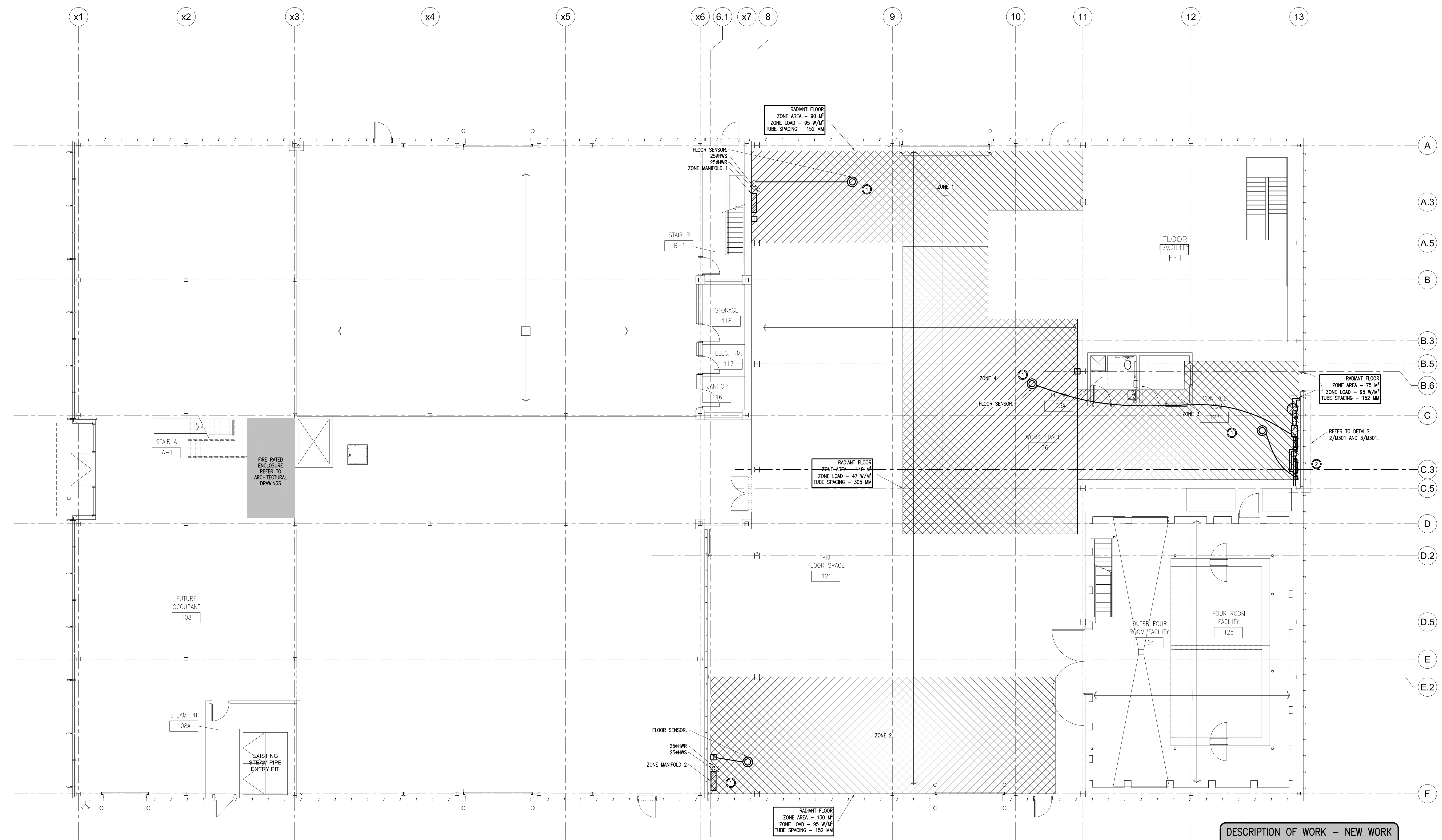
Date Printed: _____ Date Imprimée: _____
 a) Verify all dimensions and site conditions and be responsible for same.
 a) Vérifier toutes les dimensions et l'état des lieux et en assumer la responsabilité.

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

project: **BUILDING M-38 ADDITION - ACOUSTIC FACILITY**
 MONTREAL ROAD CAMPUS

drawing: **MECHANICAL SECOND FLOOR PLUMBING - NEW WORK**

designed	conçu	date	DATE	drawn	dessiné	scale	ÉCHELLE
FL		DECEMBER 2018		JG		AS NOTED	
checked	vérifié	sheet	feuille	approved	approuvé	W.O.no.	D.T.no.
FL		3 of/ de 8		FL			
dwg.no.	dessin no.						
5310-M202							



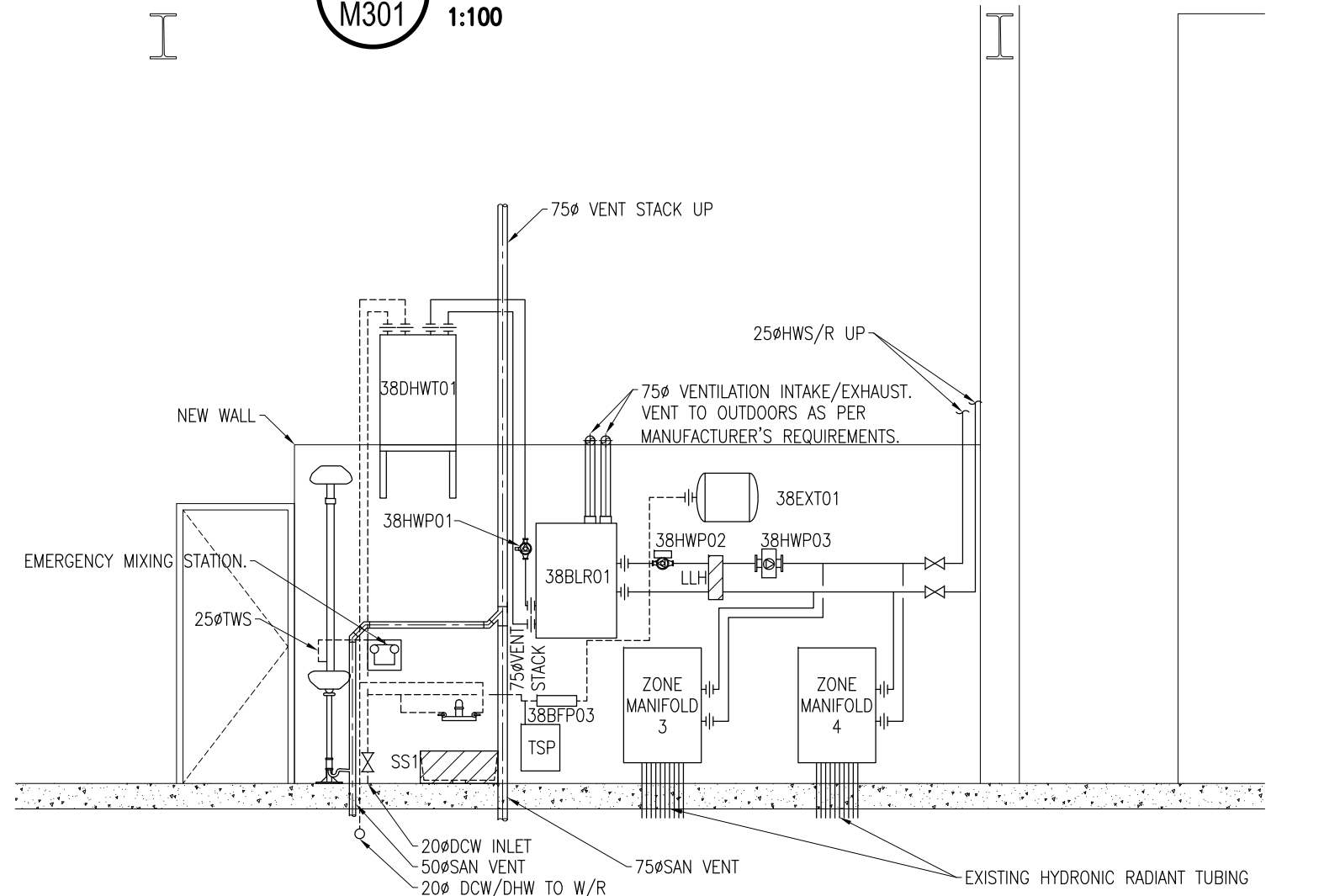
DESCRIPTION OF WORK - NEW WORK

- EXISTING RADIANT FLOOR ZONES C/W FLOOR TEMPERATURE SENSOR CONDUITS, PROVIDE NEW MANIFOLDS, CABINETS, ZONE CONTROL VALVES, SENSORS, SPACE TEMPERATURE SENSORS, WIRING AND ACCESSORIES AS INDICATED.
- REFER TO DETAIL 2/A/001, 3/A/001 AND 4/A/001 FOR NEW BOILER PLANT REQUIREMENTS. PROVIDE NEW EQUIPMENT, PIPING, CONTROLS AS INDICATED C/W ASSOCIATED ACCESSORIES.

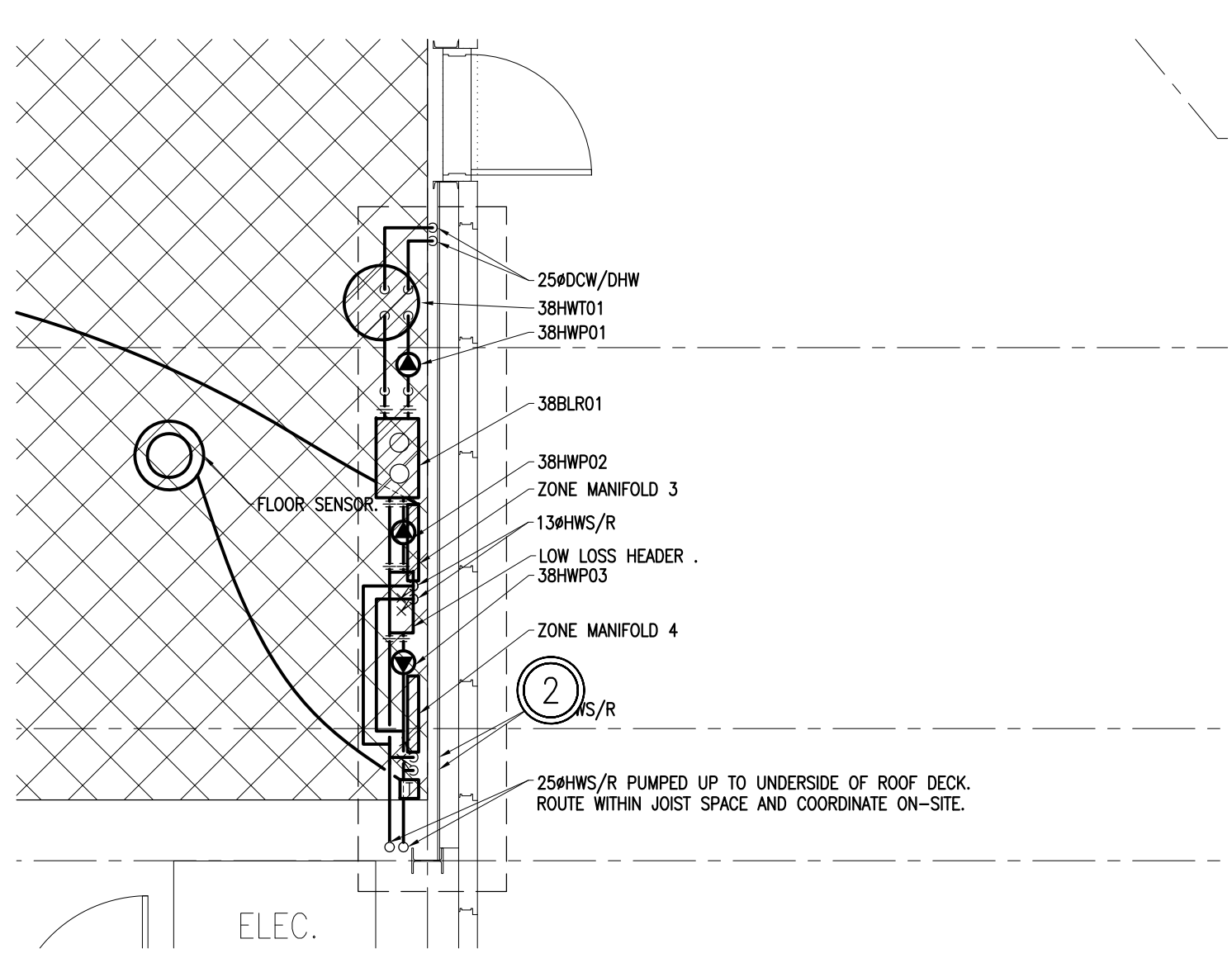
GENERAL NOTE:

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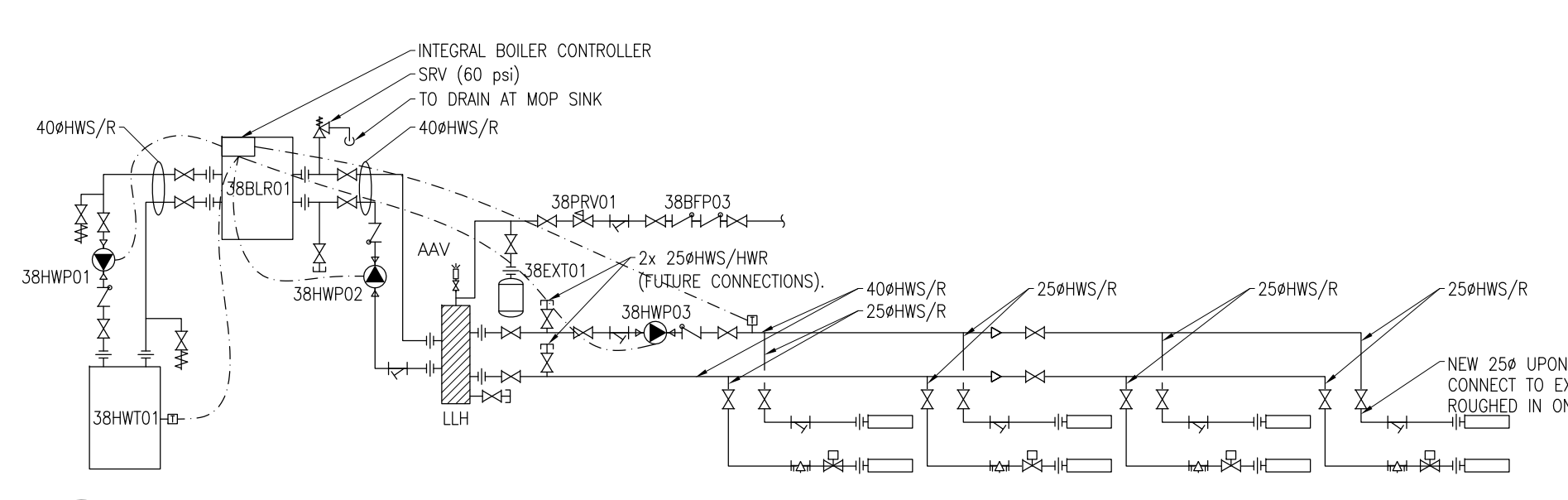
1 FIRST FLOOR UTILITIES - NEW WORK
 M301 1:100



2 BOILER PLANT AND HYDRONIC DISTRIBUTION - EAST ELEVATION
 M301 1:50



3 BOILER PLANT AND HYDRONIC DISTRIBUTION DETAIL
 M301 1:50

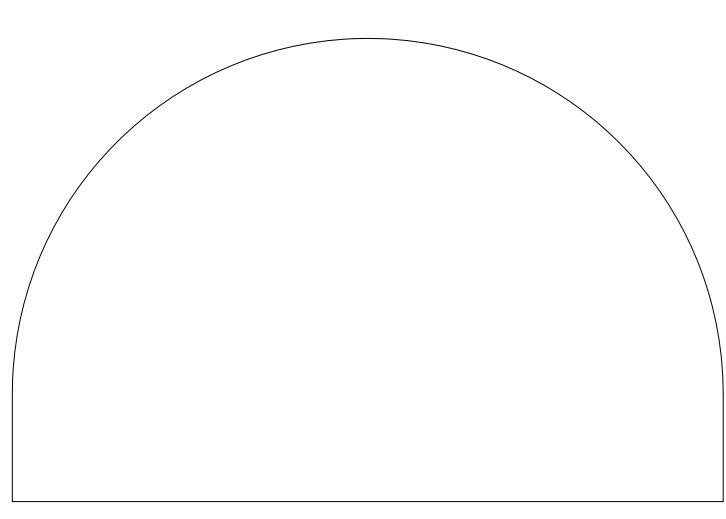


4 HYDRONIC HEATING SCHEMATIC
 M301 N.T.S.



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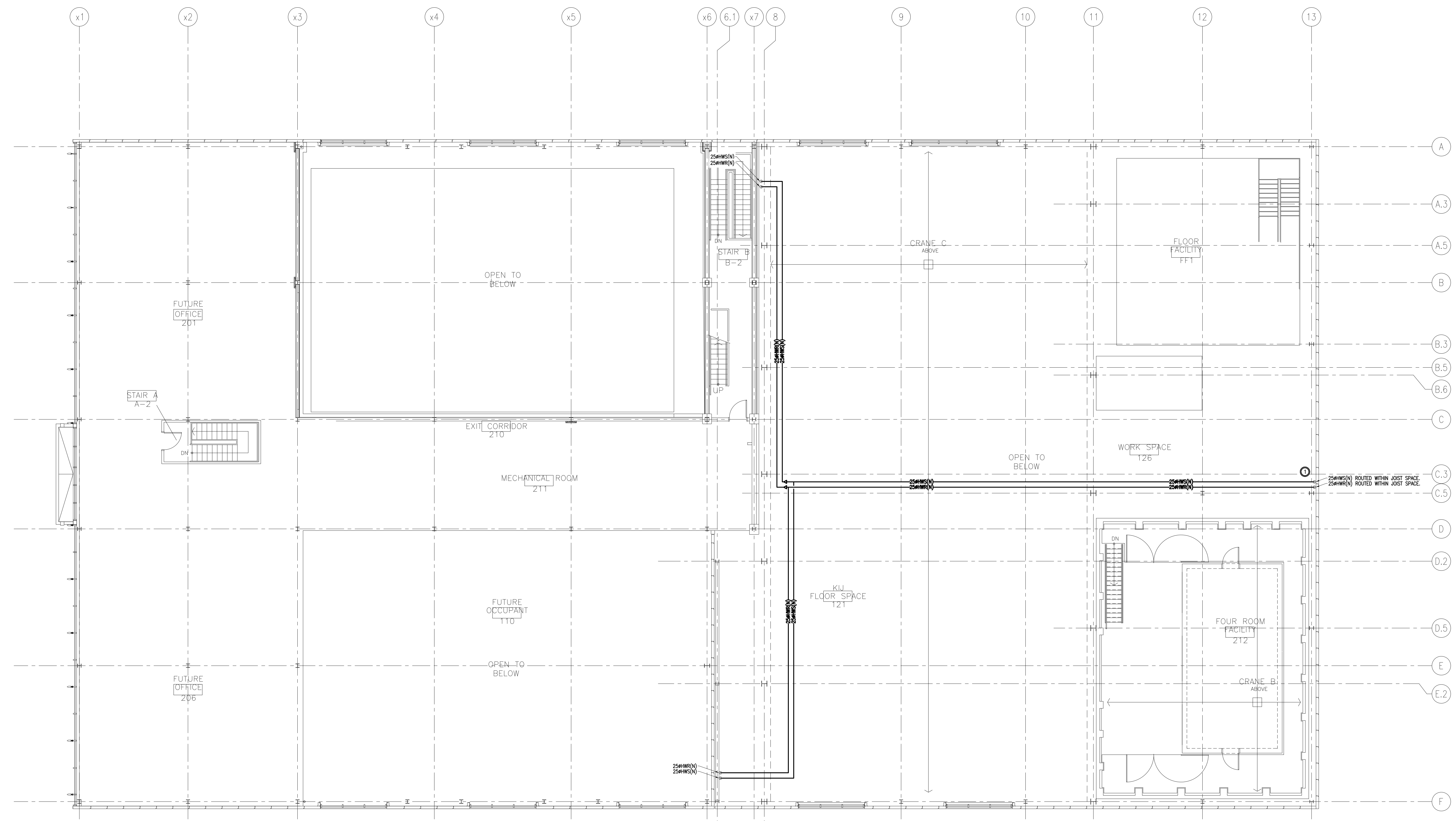
A	A Detail no. / No. du détail	A
B	B Location drawing no. / sur dessin no.	B
C	C Drawing no. / dessin no.	C

project: **BUILDING M-38 ADDITION - ACOUSTIC FACILITY**

MONTREAL ROAD CAMPUS

designed	conçu	date	DECEMBER 2018	scale	AS NOTED
drawn	dessiné	sheet	of/de	feuille	8
checked	vérifié	W.O.no.		D.T.no.	
approved	approuvé				
dwg.no.					

5310-M301



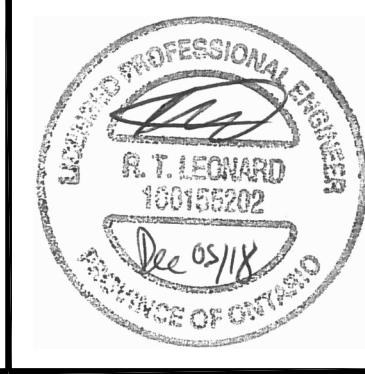
SECOND FLOOR UTILITIES - NEW WORK
 1 M302 1:100

DESCRIPTION OF WORK - NEW WORK

1	2018.12.05	ISSUED FOR TENDER
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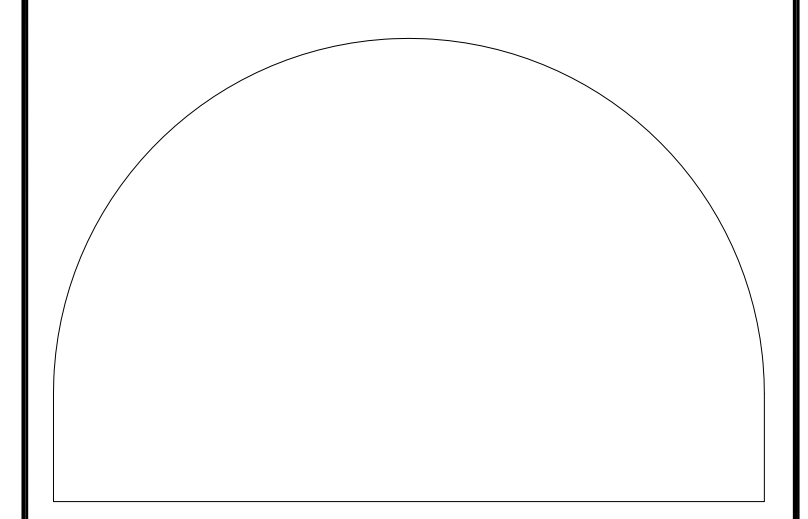
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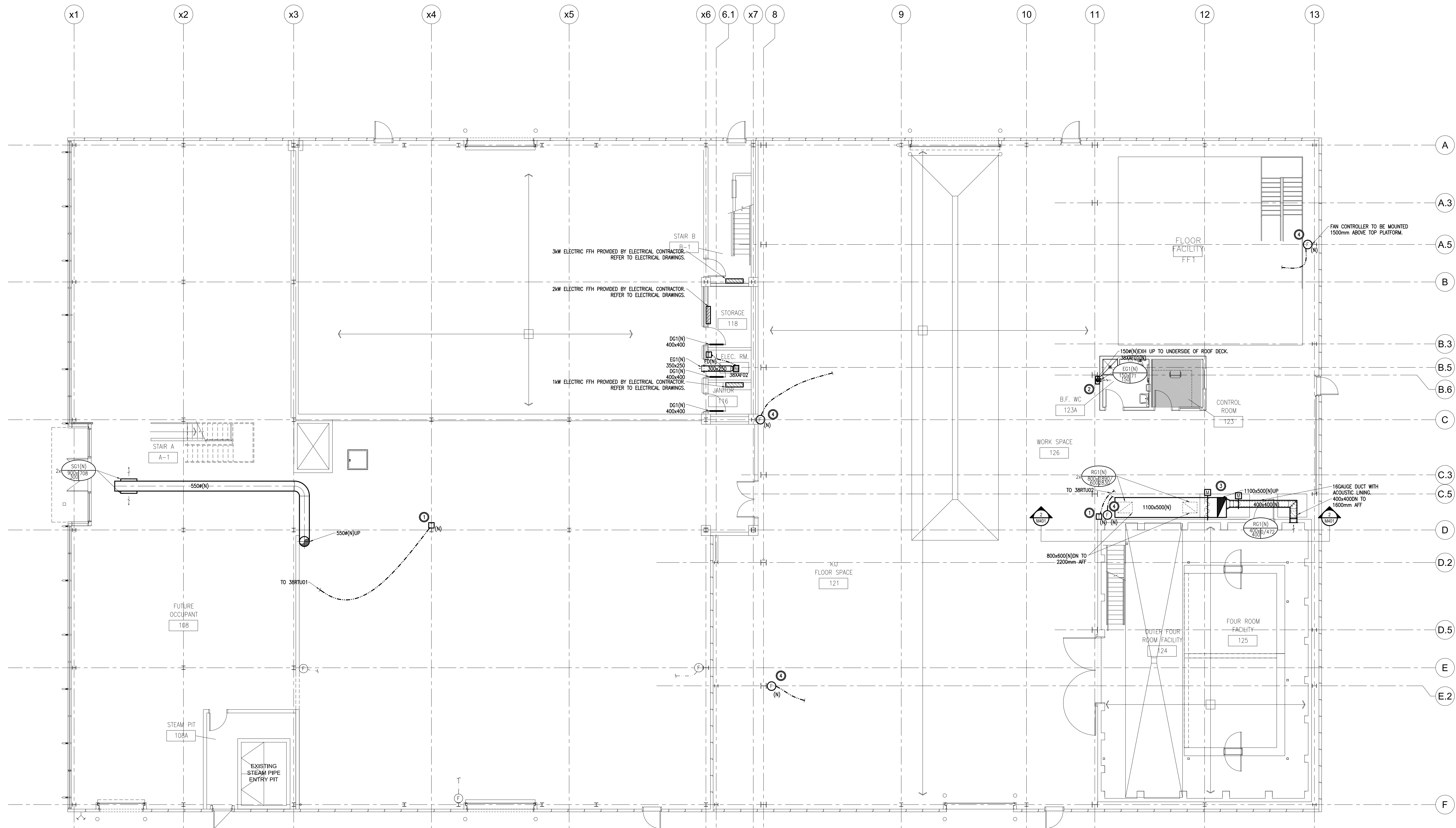
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B	B Location drawing no. / sur dessin no.	B
C	C Drawing no. / dessin no.	C

project: **BUILDING M-38 ADDITION - ACOUSTIC FACILITY** project

MONTREAL ROAD CAMPUS

drawing: **MECHANICAL SECOND FLOOR UTILITIES - NEW WORK** dessin

designed	conçu	date	DESIGNER	date	drawn	dessiné	scale	AS NOTED	échelle	checked	vérifié	sheet	5 of/ de 8	feuille	approved	approuvé	W.O.no.	D.T.no.	5310-M302
FL	JG	DECEMBER 2018	FL	AS NOTED	FL	FL				FL									



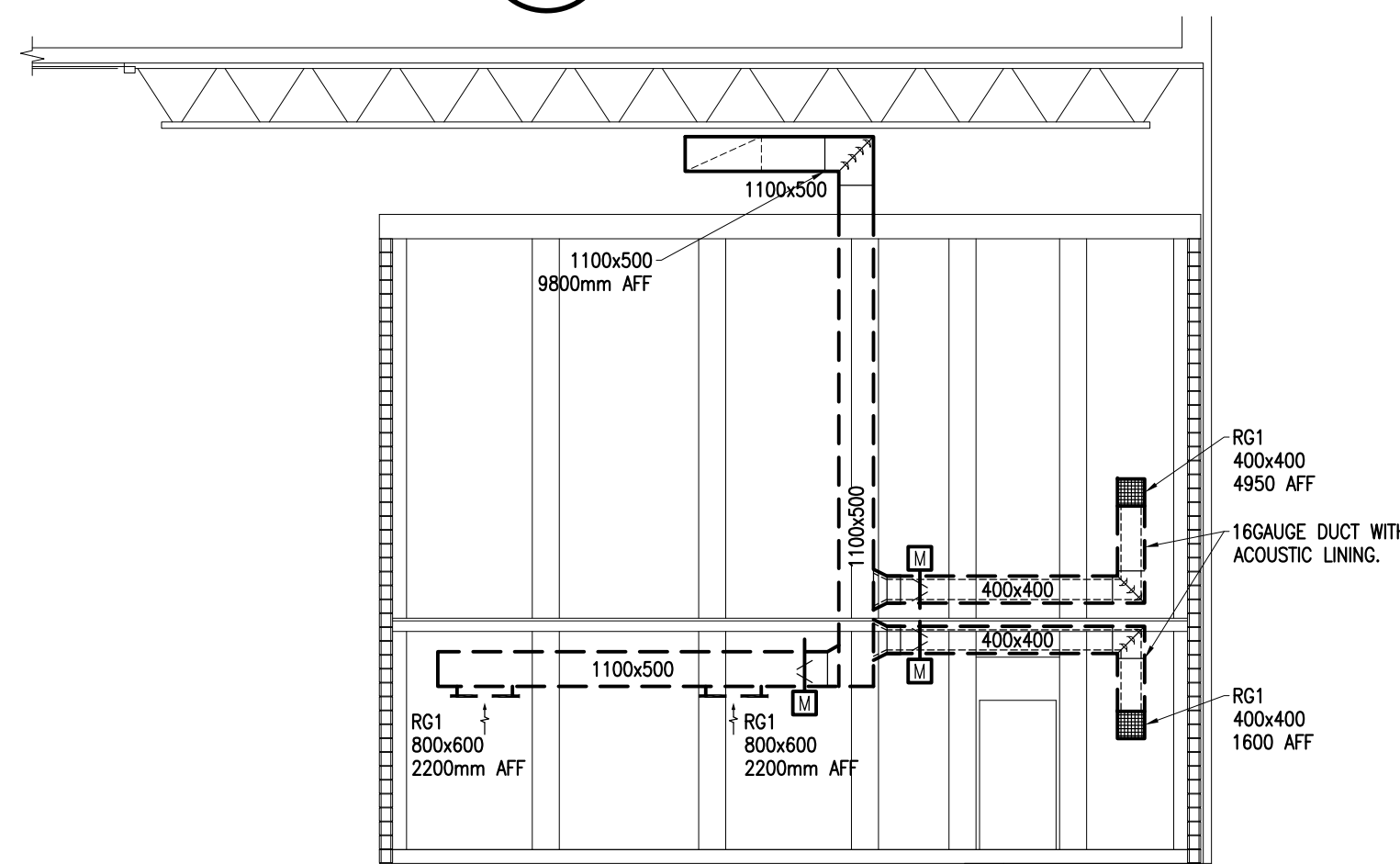
DESCRIPTION OF WORK - NEW WORK

1. PROVIDE STANDALONE SPACE TEMPERATURE/RTU CONTROLLERS AND WIRE BACK TO RTUS.
2. PROVIDE NEW WASHROOM EXHAUST FAN 38XAF01 TO BE CONTROLLED VIA SWITCH BY DW 26.
3. PROVIDE NEW DUCTWORK, GRILLES AND DIFFUSERS AS INDICATED. NEW MOTORIZED DAMPERS TO BE SUPPLIED, LESS ACTUATORS, TO BE MANUALLY SET AND CAPABLE OF ACCOMMODATING AN ACTUATOR IN FUTURE.
4. PROVIDE NEW FAN CONTROLLER TO CONTROL FANS AS INDICATED. PROVIDE NEW FANS AS INDICATED, WIRED BY DW 26.

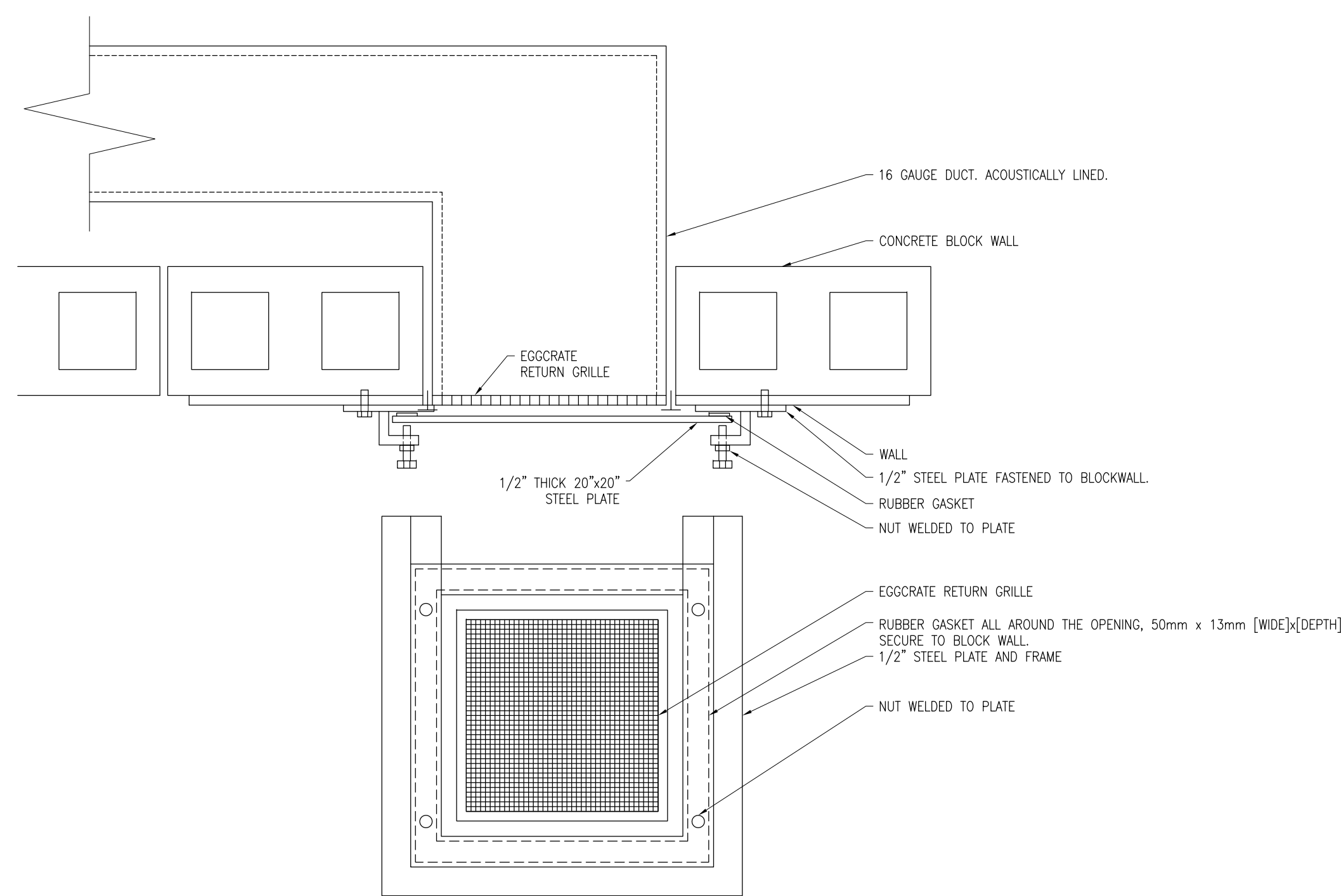
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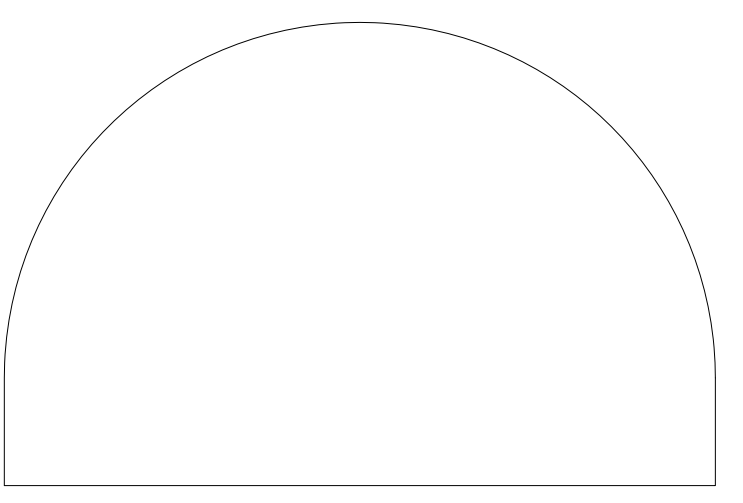
1
M401
GROUND FLOOR
HVAC - NEW WORK
1:100



2
M401
FOUR ROOM FACILITY
NORTH WALL ELEVATION
1:100



3
M401
FOUR ROOM FACILITY
ISOLATION DAMPER DETAIL
1:100



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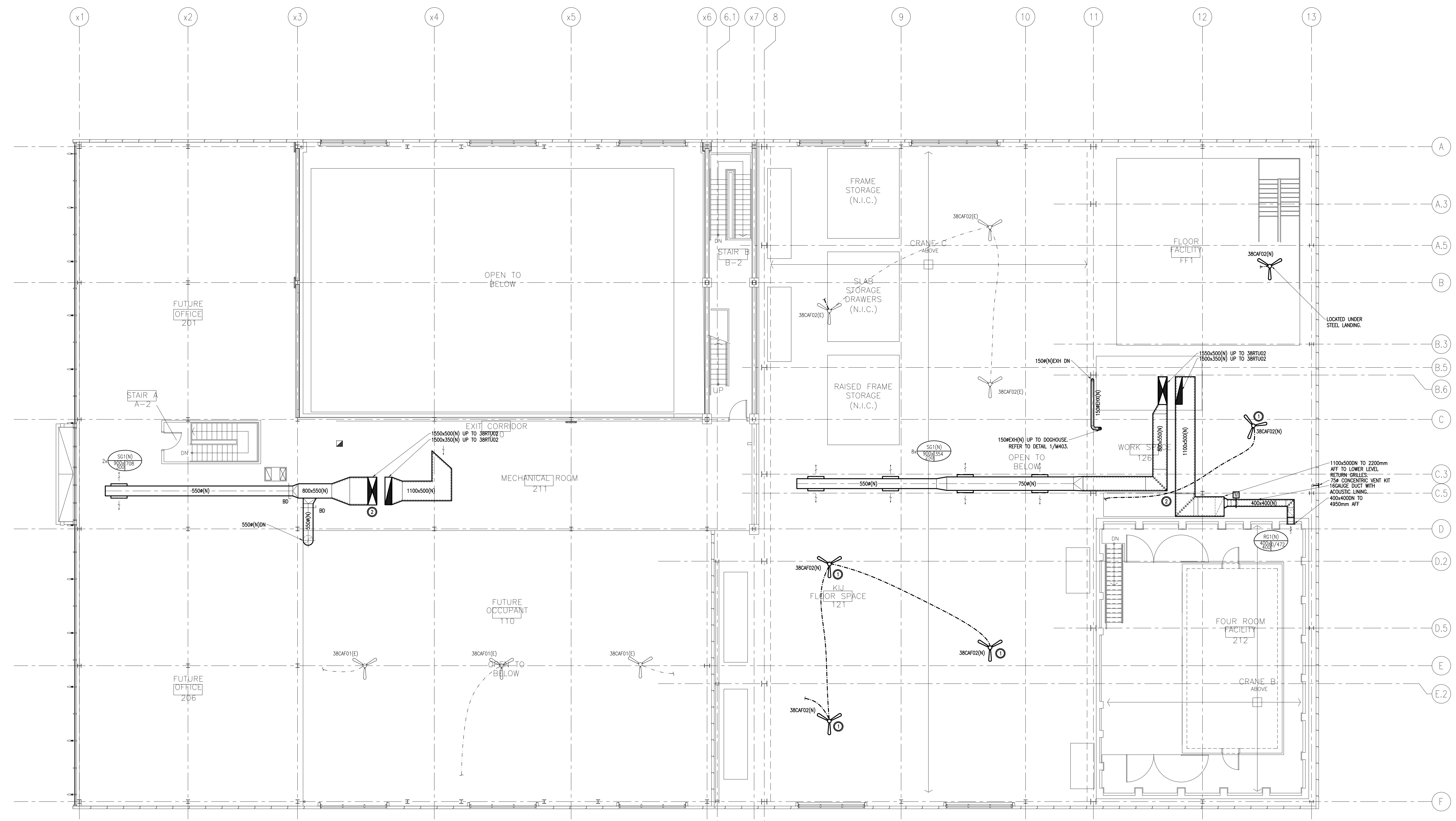
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B	B Location drawing no. sur dessin no.	B
C	C Drawing no. dessin no.	C

PROJECT: **BUILDING M-38 ADDITION - ACOUSTIC FACILITY**

MONTREAL ROAD CAMPUS

MECHANICAL
GROUND FLOOR
HVAC - NEW WORK

designed	conçu	date	DESIGNER	scale	échelle
drawn	dessiné	AS NOTED	sheet	feuille	6 of 8
checked	vérifié	6	sheet	feuille	8
approved	approuvé	W.O.no.	D.T.no.		
dwg.no.	dessin no.				



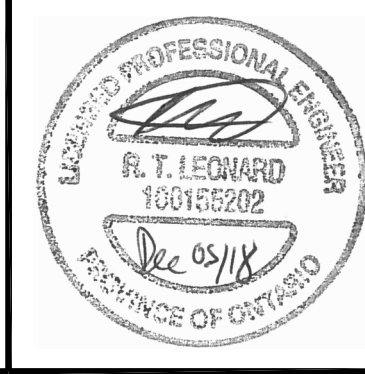
**SECOND FLOOR
 HVAC - NEW WORK**
 1 M402 1:100

DESCRIPTION OF WORK - NEW WORK

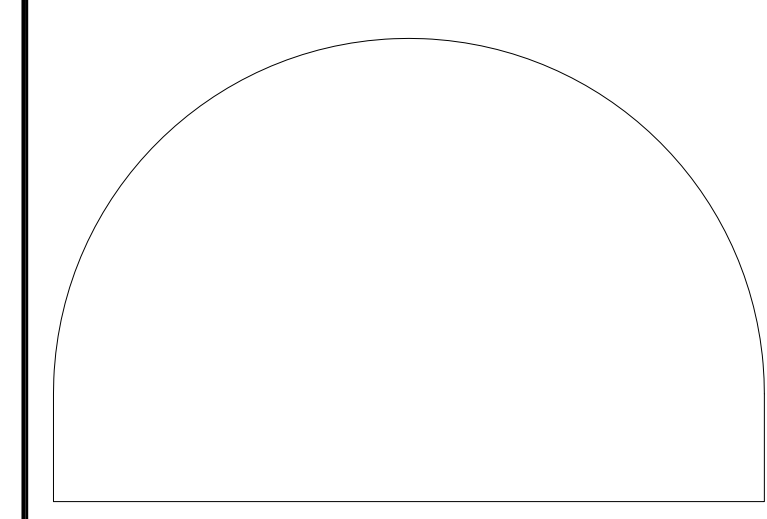
1	PROVIDE NEW FAN CONTROLLER TO CONTROL FANS AS INDICATED. PROVIDE NEW FANS AS INDICATED, WIRED BY DW 26.
2	PROVIDE NEW DUCTWORK, GRILLES AND DIFFUSERS AS INDICATED. NEW MOTORIZED DAMPERS TO BE SUPPLIED, LESS ACTUATORS, TO BE MANUALLY SET AND CAPABLE OF ACCOMMODATING AN ACTUATOR IN FUTURE.

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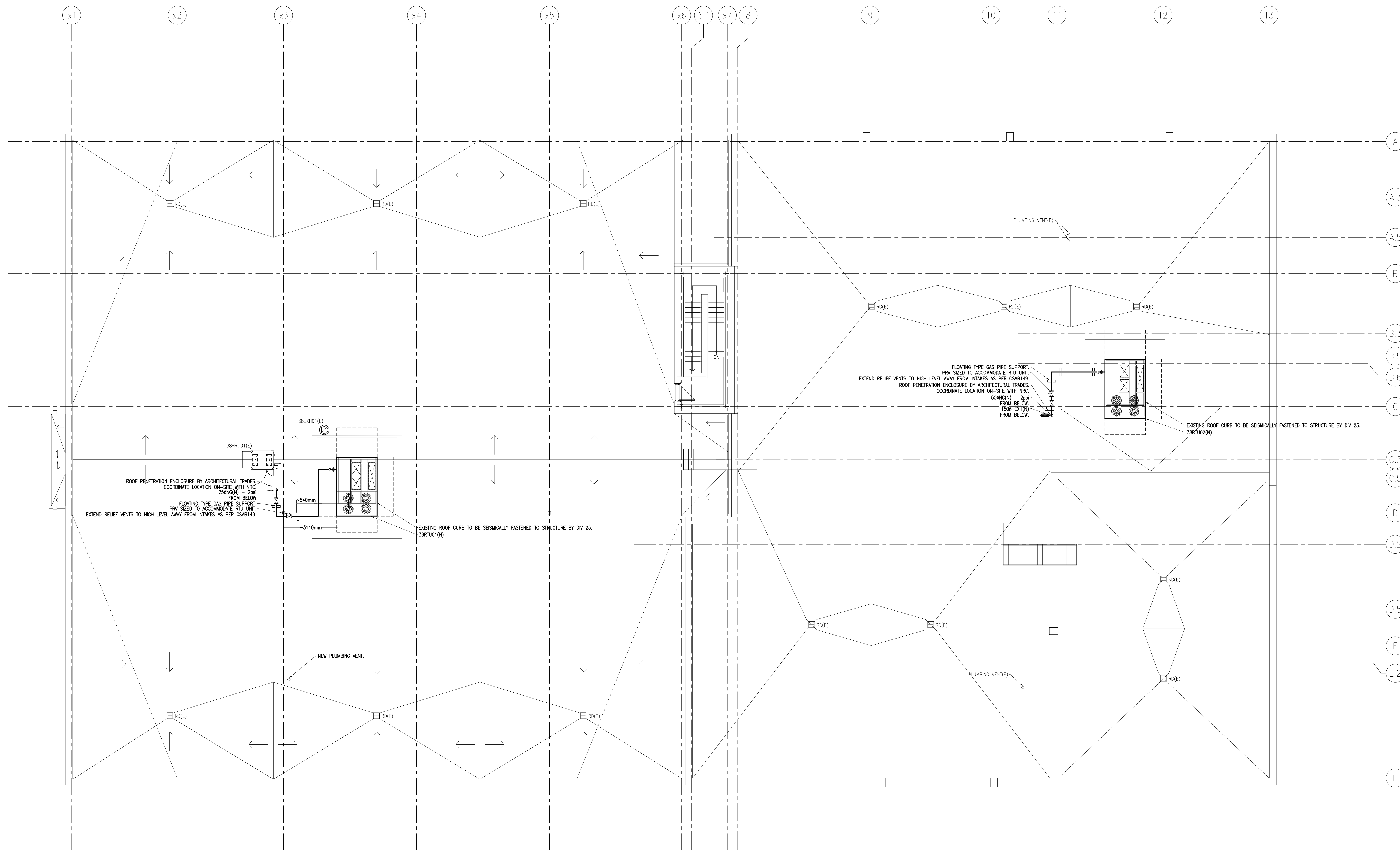
A	Detail no.	A
B	No. du détail	B
C	Location drawing no. sur dessin no.	C
	Drawing no. dessin no.	

project: **BUILDING M-38 ADDITION - ACOUSTIC FACILITY** project

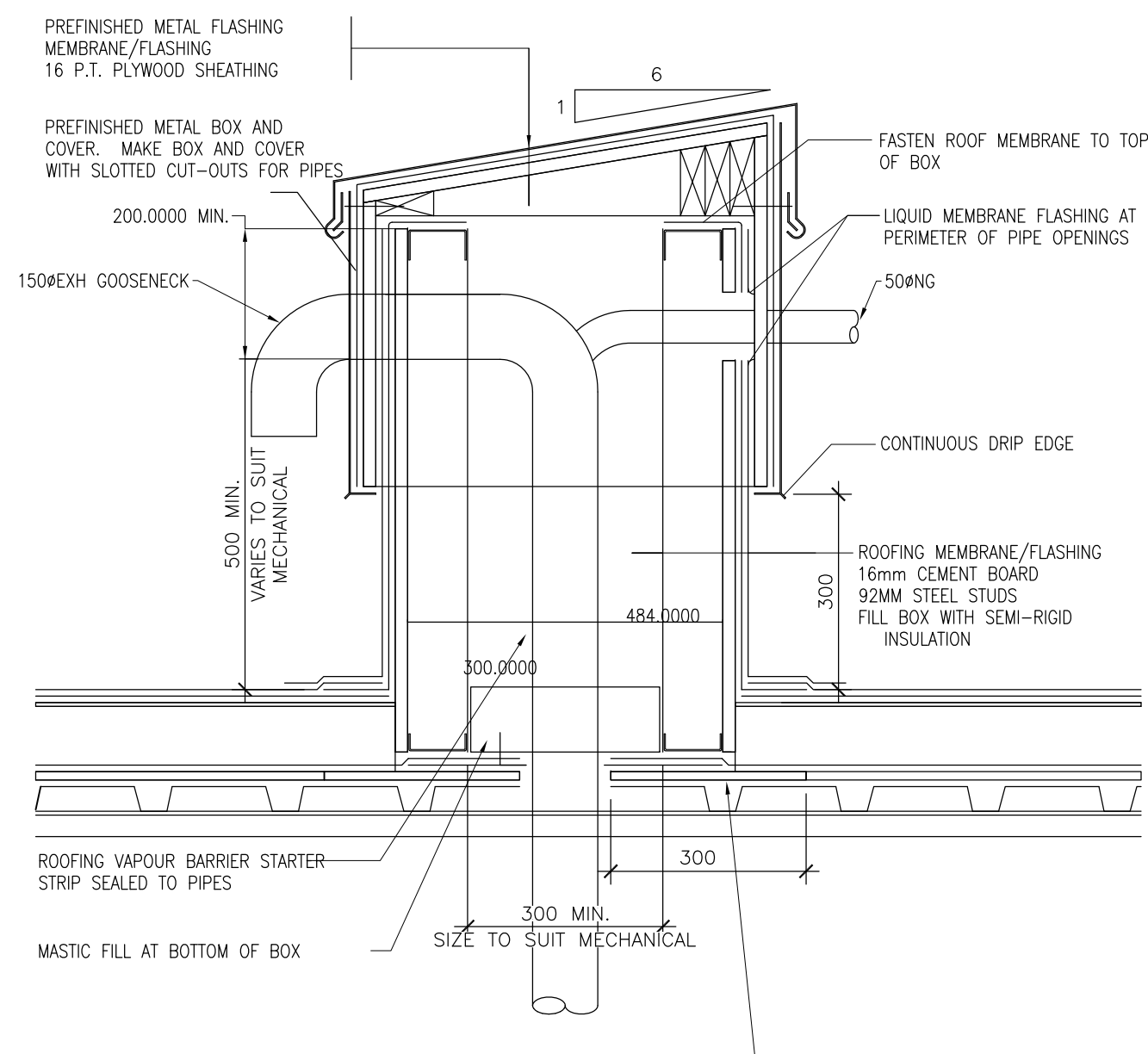
MONTREAL ROAD CAMPUS

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

designed	conçu	date	DESIGNED BY	date
FL		DECEMBER 2018		
drawn	dessiné	scale	SCALE	échelle
JG		AS NOTED		
checked	vérifié	sheet	7	of/de
FL		8		
approved	approuvé	W.O.no.		D.T.no.
FL				
dwg.no.	dessin no.			
5310-M402				



1
M403
ROOF PLAN
HVAC - NEW WORK
 1:100



2
M403
DOG HOUSE - ROOF PENETRATION DETAIL
 N.T.S.

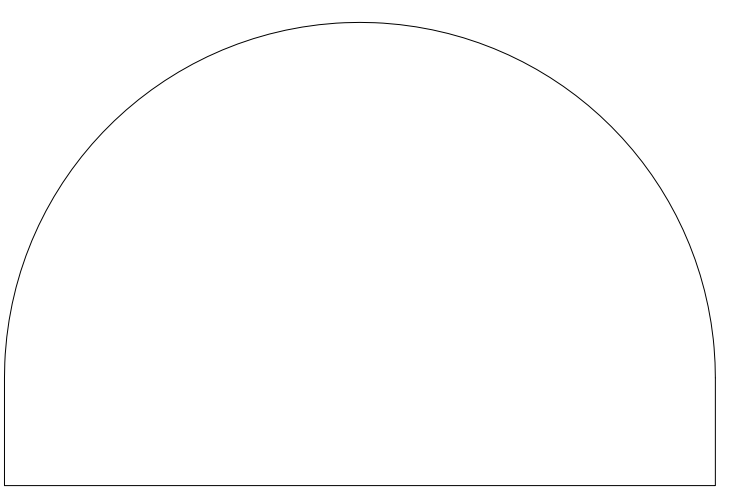
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C	C Drawing no. dessin no.	C

project: **BUILDING M-38 ADDITION - ACOUSTIC FACILITY** project

MONTREAL ROAD CAMPUS

drawing: **MECHANICAL** dessin
ROOF PLAN - NEW WORK

designed	conçu	date	date
FL		DECEMBER 2018	
drawn	dessiné	scale	échelle
JG		AS NOTED	
checked	vérifié	sheet	feuille
FL		8 of/ de 8	
approved	approuvé	W.O.no.	D.T.no.
FL			
dwg.no.	dessin no.		

5310-M403
 5310-M403



DRAWING NOTES:

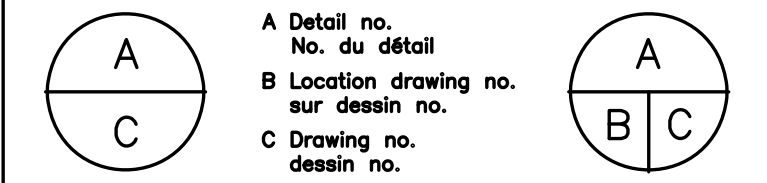
1. PROVIDE ELECTRICAL DEVICES AND MAKE ALL FINAL CONNECTIONS.

LEGEND	
SYMBOL	DESCRIPTION
[Symbol]	LUMINAIRE, TYPE AS SHOWN
[Symbol]	LUMINAIRE CONNECTED TO NON-SWITCHED EMERGENCY CIRCUIT
[Symbol]	LIGHTING CONTROL TOGGLE SWITCH
[Symbol]	MOTION CONTROL LIGHTING SWITCH
[Symbol]	MOTION CONTROL DIMMABLE LIGHTING SWITCH
[Symbol]	4-WAY LIGHTING CONTROL SWITCH
[Symbol]	LOW VOLTAGE LIGHTING CONTROL SWITCH
[Symbol]	MOTION SENSOR, WALL OR CEILING MOUNTED
[Symbol]	FIRE ALARM CONTROL PANEL
[Symbol]	FIRE ALARM ANNUNCIATION PANEL
[Symbol]	FIRE ALARM PULL STATION
[Symbol]	FIRE ALARM SMOKE DETECTOR
[Symbol]	FIRE ALARM SMOKE DETECTOR WITH ISOLATION BASE
[Symbol]	FIRE ALARM HORN/STROBE
[Symbol]	FIRE ALARM STROBE LIGHT
[Symbol]	FIRE ALARM ADDRESSABLE MODULE
[Symbol]	SUPERVISORY VALVE
[Symbol]	TAMPER SWITCH
[Symbol]	FLOW SWITCH
[Symbol]	END OF LINE REGISTER
[Symbol]	TRANSFORMER
[Symbol]	ELECTRICAL PANEL
[Symbol]	DISCONNECT SWITCH
[Symbol]	VARIABLE SPEED DRIVE
[Symbol]	MOTOR RATED MANUAL SWITCH WITH OVERLOAD
[Symbol]	120V, 15A DUPLEX RECEPTACLE
[Symbol]	120V, 20A GROUND FAULT INTERRUPTING RECEPTACLE
[Symbol]	120V, 15A DUPLEX RECEPTACLE ON DEDICATED CIRCUIT
[Symbol]	120V, 20A QUAD RECEPTACLE WITH SPLIT CIRCUIT
[Symbol]	DATA/VOICE OUTLET
[Symbol]	PULL BOX
[Symbol]	CONDUIT UP
[Symbol]	CONDUIT DOWN
[Symbol]	WEATHER PROOF
[Symbol]	ABOVE FINISHED FLOOR
[Symbol]	DARK SOLID LINE DENOTES NEW OR RELOCATED
[Symbol]	LIGHT SOLID LINE DENOTES EXISTING TO REMAIN
[Symbol]	DASH-DOTTED LINE DENOTES LIGHTING CONTROL ZONE

0	DEC/2018	ISSUED FOR TENDER	CYC
No.	Date	Revision	By/Par:

Date Printed: _____ Date Imprimée: _____

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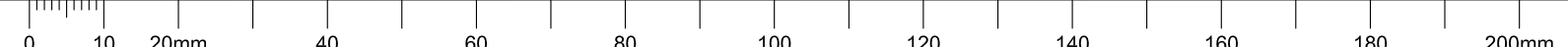
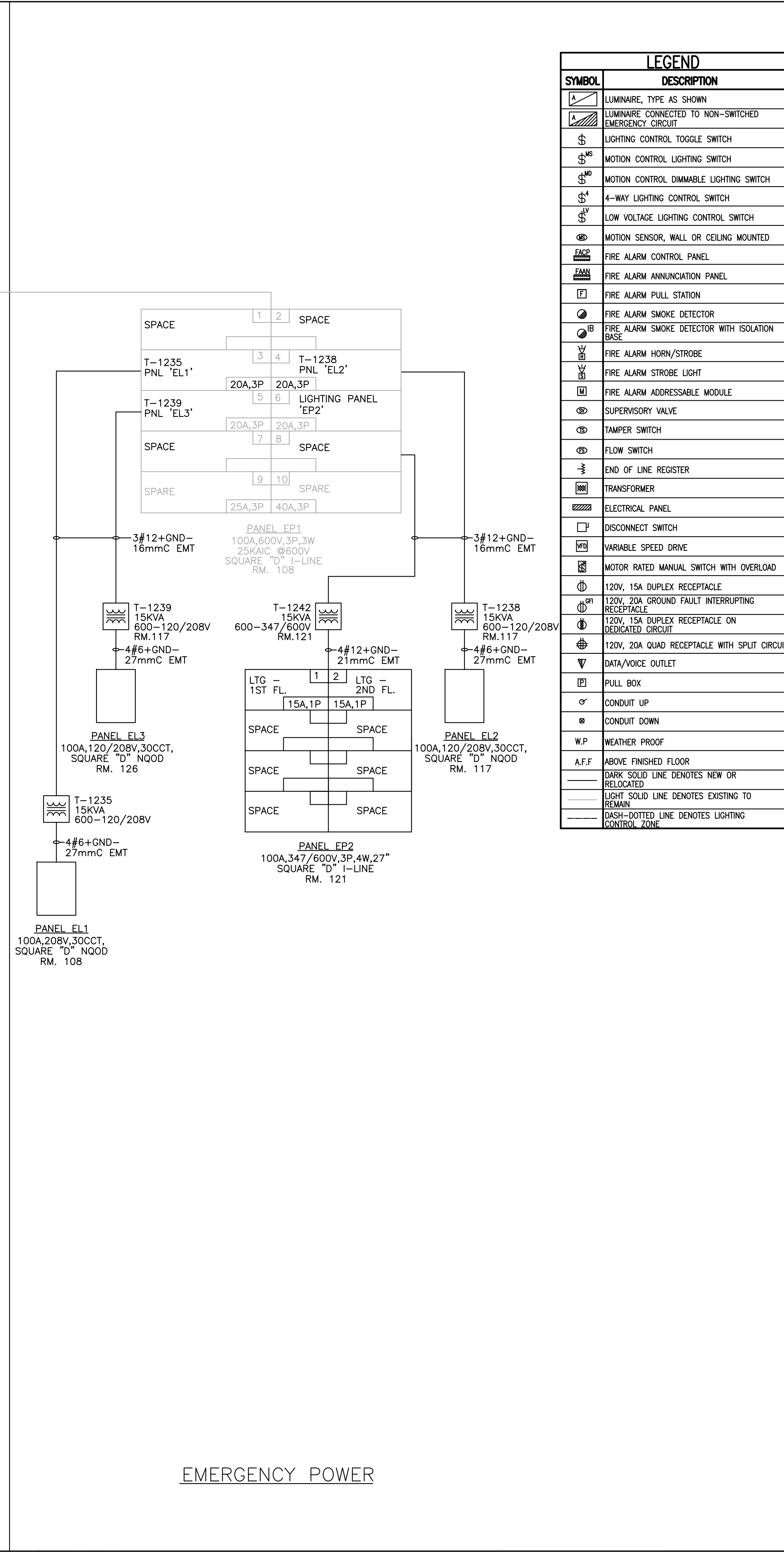
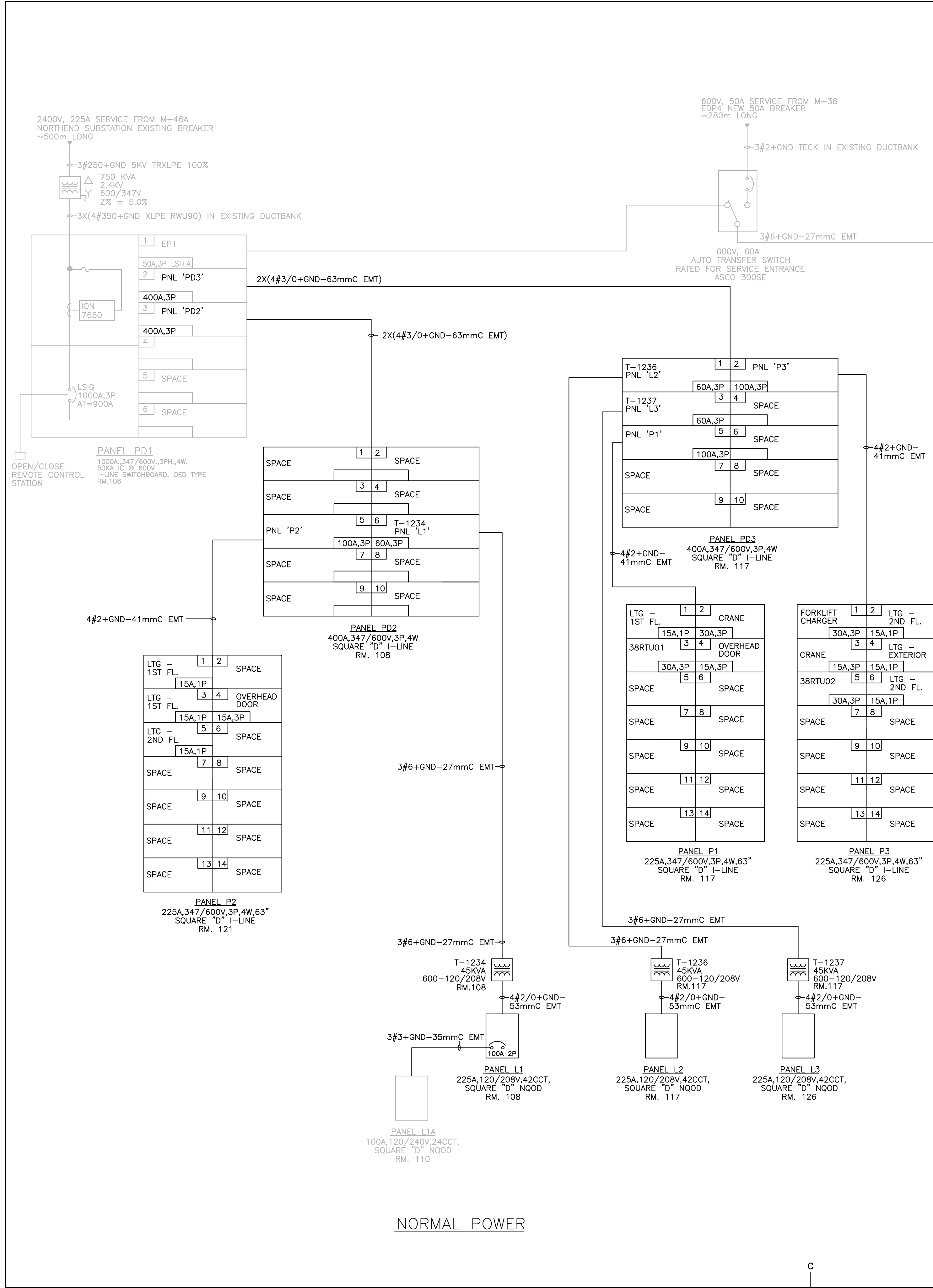


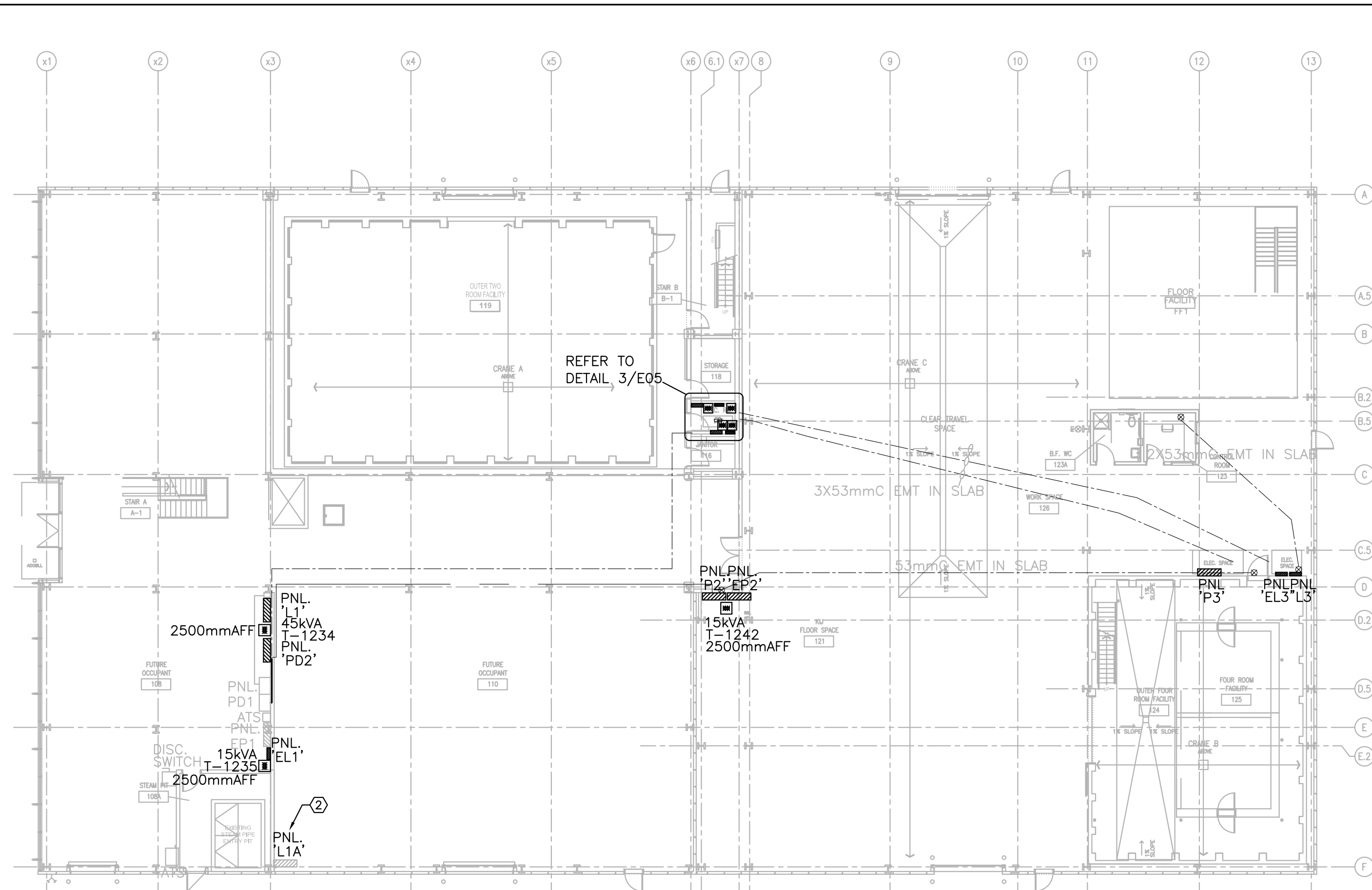
project
BUILDING M-38
ACOUSTICAL FACILITY
1200 MONTREAL ROAD CAMPUS
OTTAWA, ON

drawing
M-38 SINGLE LINE DIAGRAM

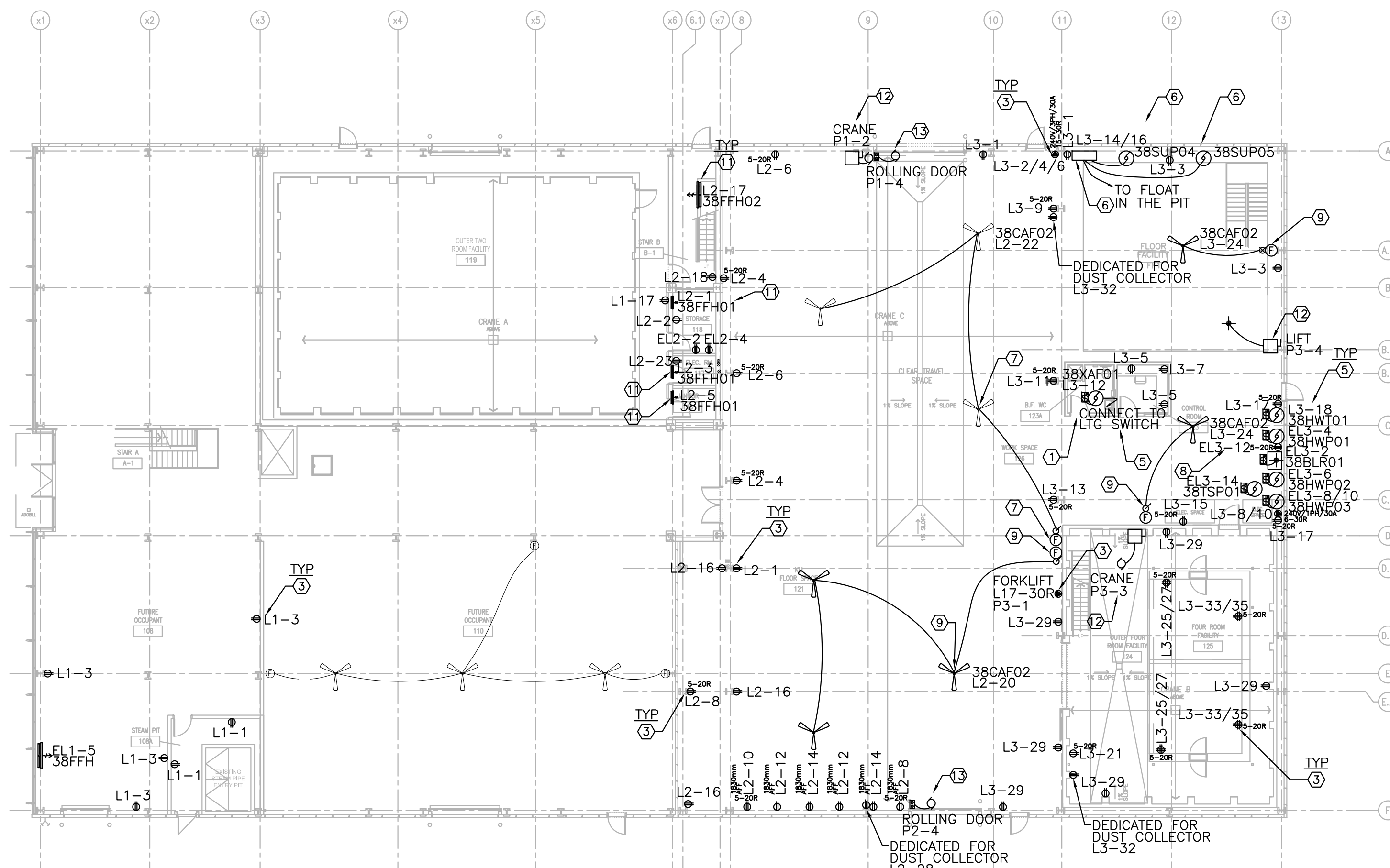
designed	CYC	conçu	date	DEC/2018	date
drawn	CYC/DF	dessiné	scale	AS NOTED	échelle
checked	KXL	vérifié	sheet	4	of/de
approved	BV	approuvé	W.O.no.		D.T.no.

dwg.no. **5310-E04** dessin no.

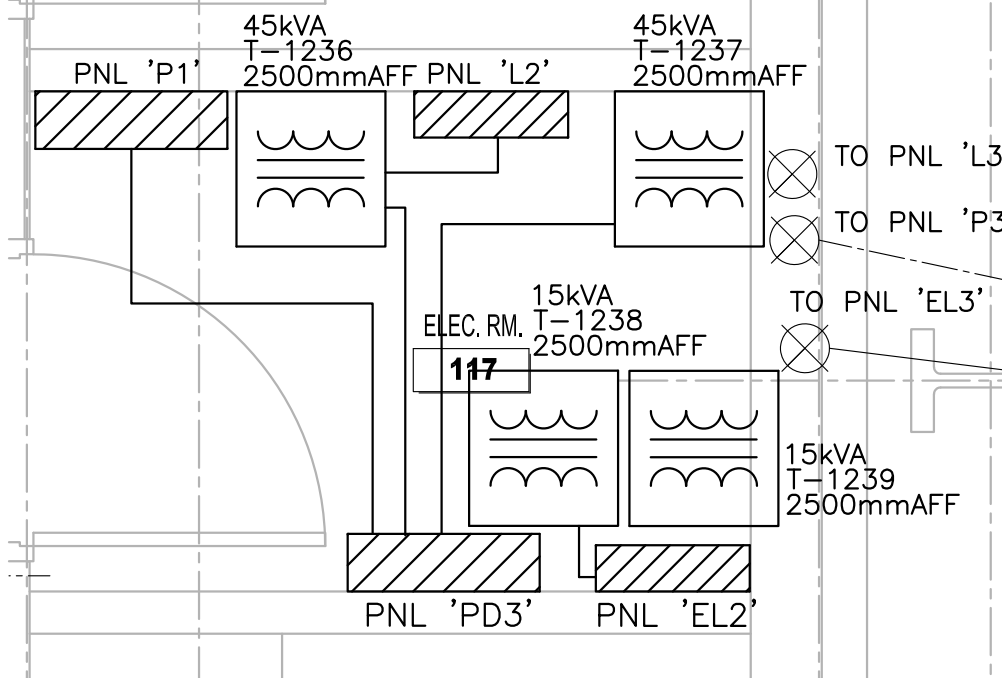




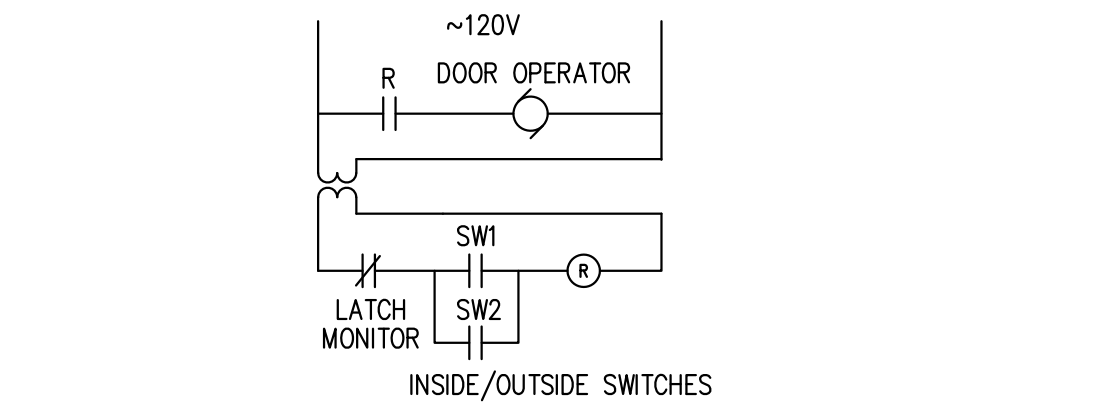
1 GROUND FLOOR - ELECTRICAL DISTRIBUTION
 SCALE: 1:200



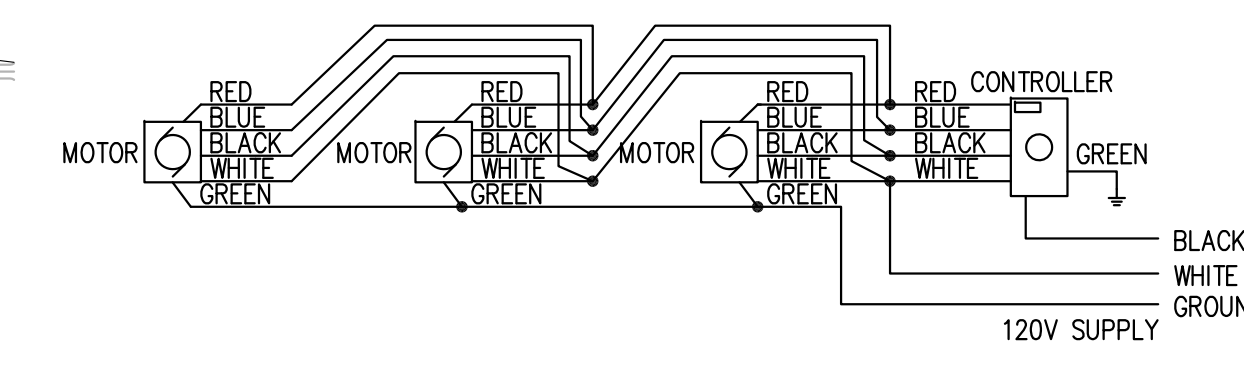
2 GROUND FLOOR - POWER
 SCALE: 1:200



3 ELECTRICAL ROOM 117
 SCALE: 1:25



4 DOOR OPERATOR DETAILS
 SCALE: N.T.S



5 PROP FAN CONTROL DIAGRAM
 SCALE: N.T.S

DRAWING NOTES:

- PROVIDE DEVICES FOR HANDICAPPED WASHROOM TO SUIT CODE REQUIREMENTS:
 - PROVIDE WALL MOUNTED SIGNALING DEVICE WITH LED FLASHING LIGHT AND BEEPING SOUND. MOUNT SIGNALING DEVICE ABOVE THE DOOR. STANDARD OF ACCEPTANCE: ALLEN-BRADLEY 85SW-C10Y4L4P1.
 - PROVIDE WALL RECESS MOUNTED PULL-CORD SWITCH C/W STAINLESS STEEL COVER PLATE AND CONNECT TO SIGNALING DEVICE. REFER TO ARCHITECTURAL DRAWING FOR EXACT LOCATION. STANDARD OF ACCEPTANCE: EDWARDS 6537.
 - PROVIDE MOTORIZED DOOR OPENER AND 36" COLUMN PUSH SWITCH AND MAKE ALL CONNECTIONS. REFER TO DETAIL #4 FOR ADDITIONAL INFORMATION. MOUNT COLUMN SWITCH @150mm AFF. RUN ALL WIRES INSIDE WALL SPACE. NO SURFACE WIRING OR CONDUIT IS ALLOWED. STANDARD OF ACCEPTANCE: HUNTER HA-8.
 - LATCH MONITOR TO BE SUPPLIED BY DOOR HARDWARE SUPPLIER. DIV.26 TO MAKE ALL FINAL CONNECTIONS. PROVIDE SIGN ABOVE PULL CORD WITH THE WORDING 'IN THE EVENT OF AN EMERGENCY, PULL THE CORD AND AUDIBLE AND VISUAL SIGNAL WILL ACTIVATE' AND 'EN CAS D'URGENCE, PASSER LE CORDON ET LE SIGNAL AUDIO ET VISUEL SERA ACTIVÉ'. SIGN TO BE BLACK LAMICOID WITH WHITE LETTERS. LETTERS TO BE AT LEAST 25mm HIGH WITH 5mm STROKE.
- PROVIDE NEW 100A, 2P BREAKER IN PANEL 'L1' AND RE-FEED EXISTING TEMPORARY PANEL FROM THIS NEW BREAKER. RENAME EXISTING PANEL TO 'L1A' AND CHANGE ALL LABELS ASSOCIATED WITH THIS PANEL.
- PROVIDE RECEPTACLE, TYPE AS SHOWN, AND CONNECT TO CIRCUIT AS INDICATED.
- PROVIDE ELECTRICAL EQUIPMENT AND MAKE ALL FINAL CONNECTIONS. REFER TO DRAWING E04 & E11 FOR ADDITIONAL INFORMATION. TRANSFORMER ARE ALL MOUNTED AT HIGH LEVEL. PROVIDE WALL BRACKET TO SUPPORT THE INSTALLATION. CONFIRM EXACT LOCATION ON SITE AND FOLLOW NRC DEPARTMENTAL REPRESENTATIVE'S INSTRUCTION.
- MECHANICAL EQUIPMENT TO BE SUPPLIED AND INSTALLED BY DIV.23. DIV.26 TO PROVIDE POWER AS INDICATED AND MAKE ALL FINAL CONNECTIONS. PROVIDE MOTOR RATED MANUAL SWITCH C/W PILOT LIGHT AND OVERLOAD PROTECTION AS LOCAL DISCONNECT MEANS. COORDINATE WORK WITH DIV.23. VERIFY ALL ELECTRICAL REQUIREMENT BEFORE MAKING ANY CONNECTION AND FOLLOW NRC DEPARTMENTAL REPRESENTATIVE'S INSTRUCTION. MANUAL SWITCH STANDARD OF ACCEPTANCE: SQUARE D 2510 TYPE F.
- PUMPS AND CONTROLLER ARE SUPPLIED AND INSTALLED BY DIV.23, INCLUDING RACEWAY BETWEEN PUMPS, FLOAT AND PUMP CONTROLLER. DIV.26 TO PROVIDE WIRES BETWEEN PUMP CONTROLLER AND PUMPS AND THE FLOAT AND MAKE ALL FINAL CONNECTIONS. CONFIRM EXACT LOCATION ON SITE AND FOLLOW NRC DEPARTMENTAL REPRESENTATIVE'S INSTRUCTION. REFER TO MANUFACTURER'S INSTRUCTION FOR ADDITIONAL INFORMATION.
- EXISTING FANS ARE INSTALLED ON SITE. DIV.26 TO REMOVE EXISTING TEMPORARY WIRING, RUN NEW WIRES AND MAKE ALL FINAL CONNECTIONS. REFER TO DETAIL E05#5 FOR DETAILS.
- PROVIDE 120V CIRCUIT FOR BOILER SYSTEM AND MAKE ALL FINAL CONNECTIONS. REFER TO 5310-M004 DETAIL #1 FOR ADDITIONAL INFORMATION. CONFIRM EXACT LOCATION ON SITE AND COORDINATE WORK WITH DIV.23.
- NEW PROP FAN ARE INSTALLED BY DIV.23. DIV.26 TO INSTALL CONTROLLER AT THE LOCATION AS INDICATED ON DRAWING. PROVIDE NEW WIRING AND CONDUITS AND MAKE ALL FINAL CONNECTIONS. NEW CONTROLLER TO CONTROL SINGLE OR THREE FANS AS SHOWN. REFER TO DETAIL E05#5 FOR WIRING DETAILS.
- N/A.
- PROVIDE 1.0KW, 120V SLIM PANEL CONVECTOR HEATER, C/W INTEGRATED THERMOSTAT, AND CONNECT TO CIRCUIT AS SHOWN. HEATER STANDARD OF ACCEPTANCE: DIMPLEX PLX1000.
- EXISTING CRANE AND MATERIAL LIFT TO REMAIN. DIV.26 TO PROVIDE POWER SUPPLY AND MAKE ALL FINAL CONNECTIONS. CONFIRM EXACT POWER REQUIREMENT BEFORE ORDERING BREAKER AND DISCONNECT SWITCH. COORDINATE WORK ON SITE.
- EXISTING OVERHEAD ROLLING DOOR C/W CONTROL STATION TO REMAIN. DIV.26 TO PROVIDE POWER SUPPLY AND MAKE ALL FINAL CONNECTIONS. CONFIRM EXACT POWER REQUIREMENT BEFORE ORDERING BREAKER. COORDINATE WORK ON SITE.

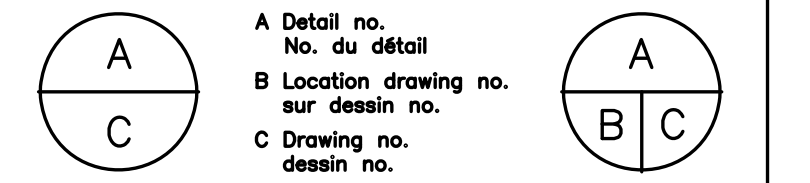
GENERAL NOTES:
 (APPLY TO ALL DRAWINGS)

- NO CONDUIT IS ALLOWED TO RUN THROUGH FLOOR FACILITY FF1.
- NO CONDUIT IS ALLOWED TO RUN ON INSIDE SURFACE OF FOUR ROOM SHOULD PENETRATE THE SPACE FROM THE BACK OF THE WALL. SEAL ALL OPENINGS UPON JOB COMPLETION WITH FIRE STOP.

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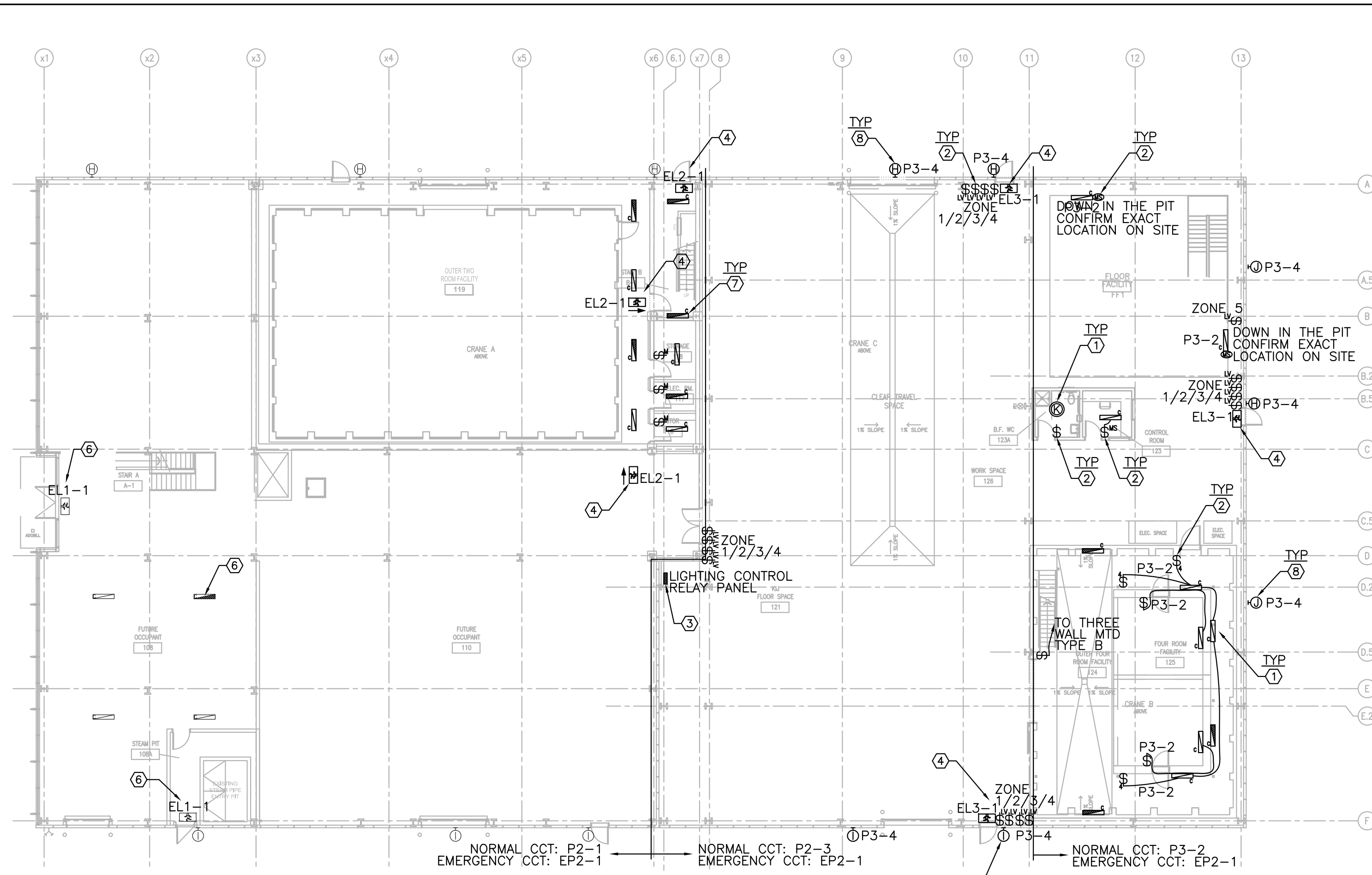


project **BUILDING M-38** project
ACOUSTICAL FACILITY
 1200 MONTREAL ROAD CAMPUS
 OTTAWA, ON

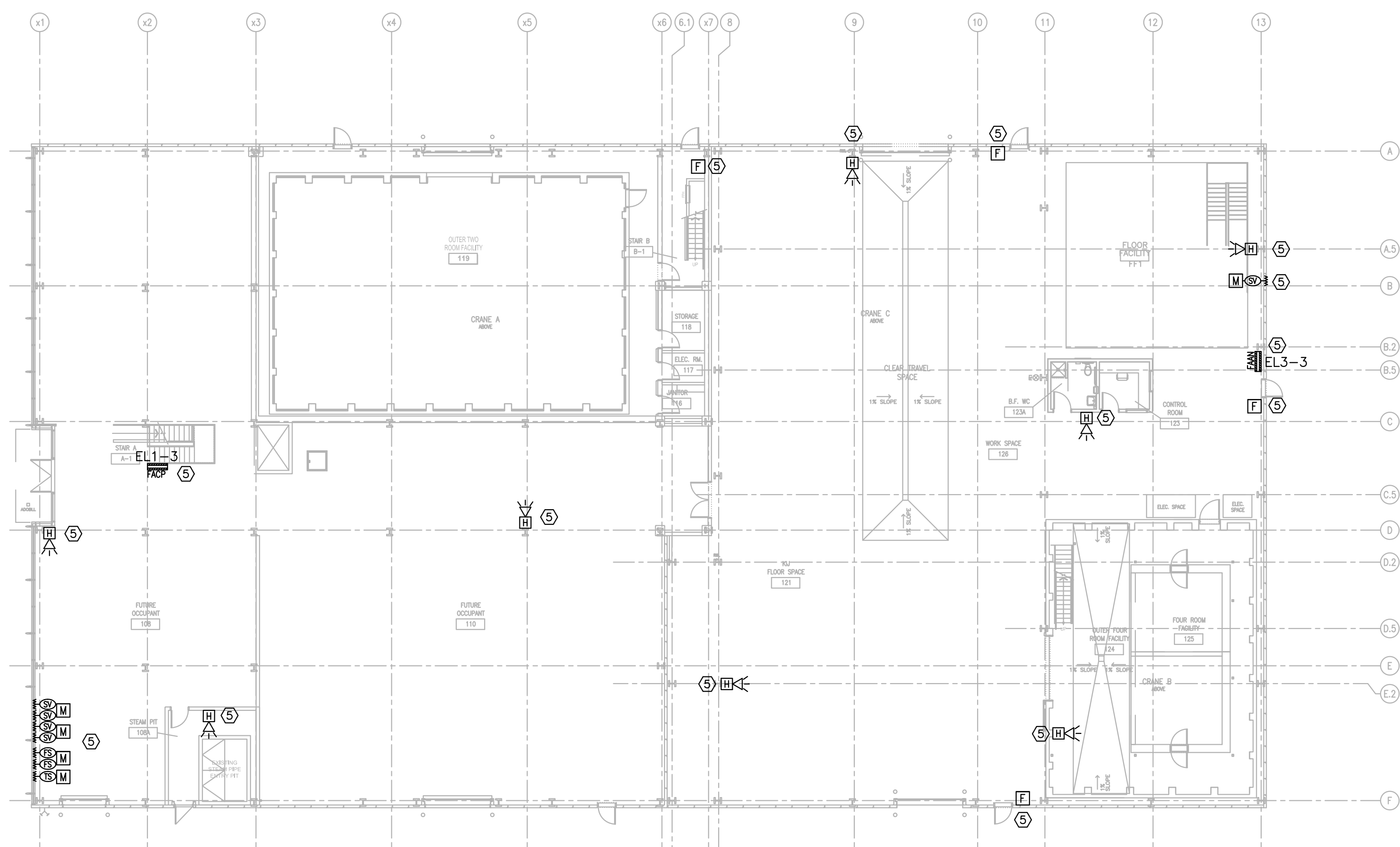
drawing **M-38 GROUND FLOOR DISTRIBUTION AND POWER** dessin

designed CYC/DF	conçu	date DEC/2018	date
drawn CYC/DF	dessiné	scale AS NOTED	échelle
checked KXL	vérifié	sheet 5	of/de 11
approved BV	approuvé	W.O.no.	D.T.no.

dwg.no. **5310-E05** dessin no.

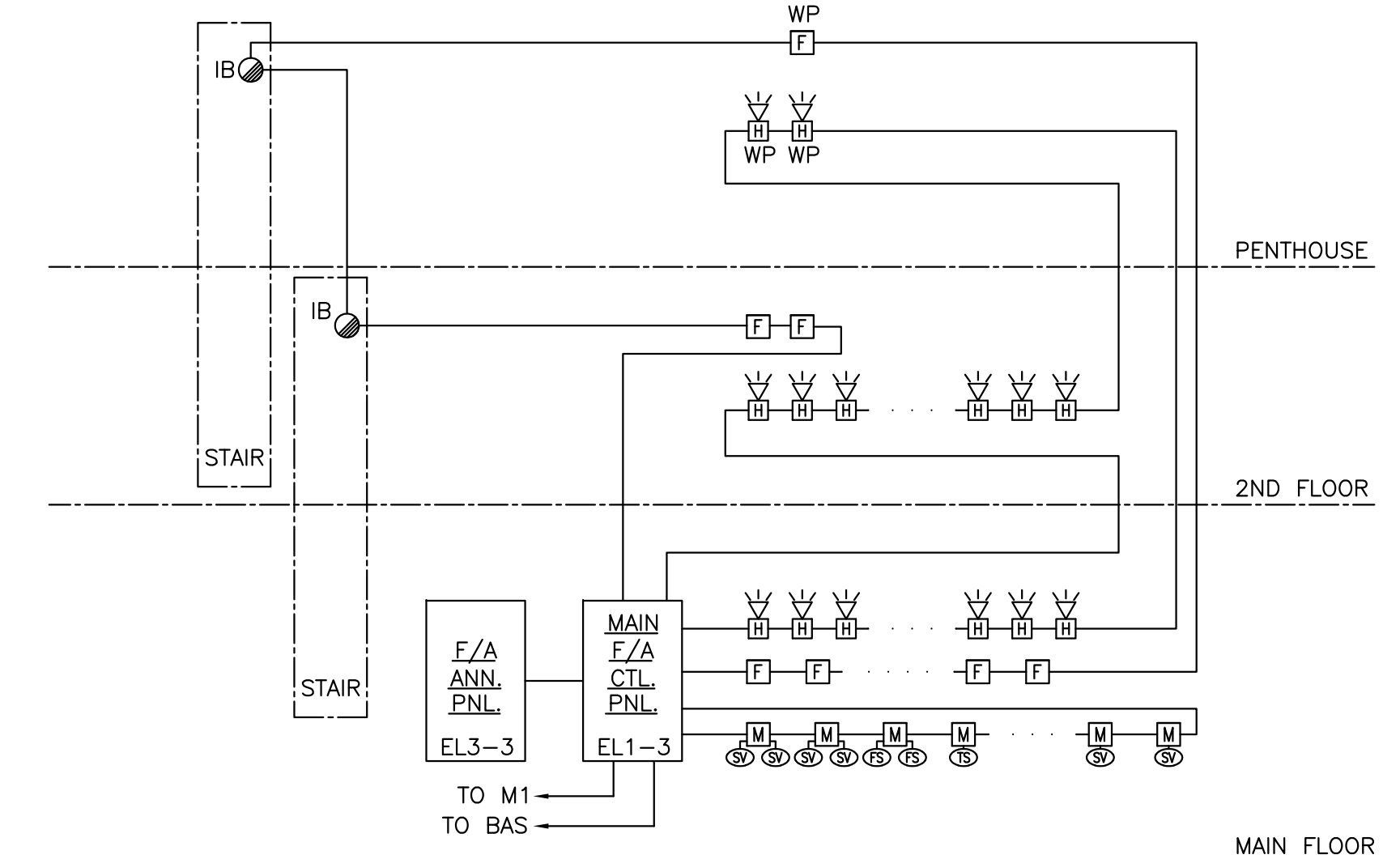


1 GROUND FLOOR - LIGHTING
 E06 SCALE: 1:200



2 GROUND FLOOR - FIRE ALARM & GAS MONITORING
 E06 SCALE: 1:200

- DRAWING NOTES:** (X)
- PROVIDE LUMINAIRES, TYPE AS SHOWN, AND CONNECT TO CIRCUITS AS INDICATED. REFER TO SPECIFICATION FOR MORE INFORMATION. COORDINATE WORK ON SITE WITH STRUCTURAL AND MECHANICAL INSTALLATION. FOLLOW INSTRUCTIONS FROM NRC DEPARTMENTAL REPRESENTATIVE.
 - PROVIDE LIGHTING CONTROL SWITCH, TYPE AS SHOWN AND CONNECT TO LUMINAIRES IN THE AREA.
 - INSTALL LOW VOLTAGE CONTROL PANEL AS PER DRAWING E09 AND MAKE ALL FINAL CONNECTIONS. CONTROL PANEL TO BE CONTROLLED BY BAS SYSTEM. DIV.26 TO RUN ALL THE WIRING BETWEEN RELAY PANEL TO 347V LIGHTING CIRCUITS AND LOW VOLTAGE SWITCHES. ALL THE LUMINAIRES WITHIN LOW VOLTAGE CONTROL ZONES WILL BE TURNED OFF BY BAS SYSTEM ON A PRESET SCHEDULE. LOW VOLTAGE SWITCH CAN OVERRIDE AND TURN THE LUMINAIRES BACK ON.
 - PROVIDE PICTOGRAM EXIT SIGN AND CONNECT TO EMERGENCY POWER CIRCUIT AS INDICATED. CONFIRM EXACT LOCATION AND DIRECTION ON SITE AND FOLLOW NRC DEPARTMENTAL REPRESENTATIVE'S INSTRUCTION.
 - PROVIDE ADDRESSABLE, CLASS A FIRE ALARM SYSTEM C/W CONTROL PANEL, ANNUNCIATION PANEL AND ALL DEVICES. CONFIRM EXACT QUANTITY AND LOCATION ON SITE. PROVIDE MODULE TO FIRE SUPPRESSION SYSTEM DEVICES AND CONNECT TO THE F/A SYSTEM. CONFIRM EXACT LOCATION AND QUANTITY WITH DIV.23 AND COORDINATE WORK ON SITE. PROVIDE PROGRAMING, VERIFICATION AND COMMISSIONING UPON JOB COMPLETION. UPDATE M-1 FIREWORKS AS PER SPEC.
 - EXISTING FIXTURE (CEILING LIGHT OR PICTOGRAM EXIT SIGN) TO REMAIN. DIV.26 TO RECONNECT FIXTURE TO EMERGENCY CIRCUIT AS SHOWN.
 - CONNECT LUMINAIRE TO EMERGENCY CIRCUIT AS INDICATED.
 - PROVIDE EXTERIOR LIGHTING. MOUNT LUMINAIRE BESIDE THE MAN DOOR AND ABOVE THE OVERHEAD ROLLING DOOR. CONFIRM EXACT LOCATION AND MOUNTING HEIGHT ON SITE.

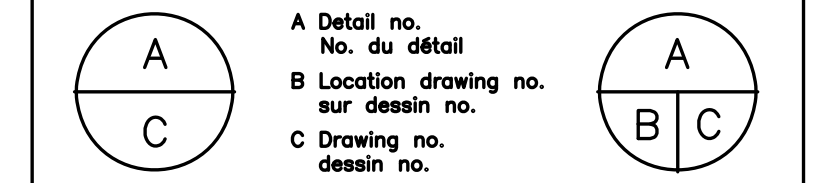


3 FIRE ALARM SYSTEM DIAGRAM
 E06 SCALE: N.T.S

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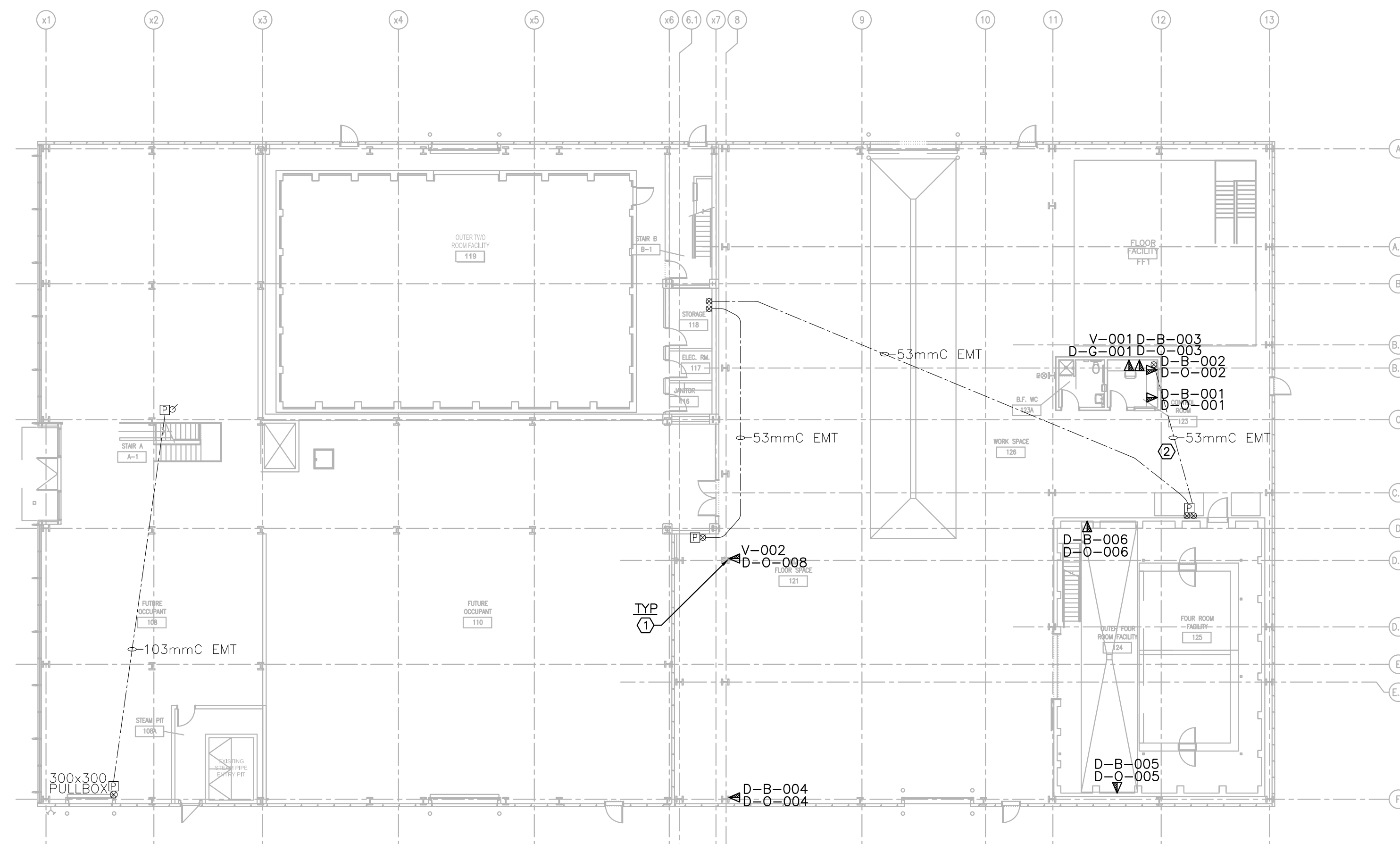


project **BUILDING M-38** projet
ACOUSTICAL FACILITY
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drawing **M-38 GROUND FLOOR LIGHTING AND FIRE ALARM** dessin

designed CYC/DF	conçu DF	date DEC/2018	date
drawn CYC/DF	dessiné DF	scale AS NOTED	échelle
checked KWL	vérifié KWL	sheet 6 of/de 11	feuille
approved BV	approuvé BV	W.O.no.	D.T.no.

dwg.no. **5310-E06** dessin no.



1 GROUND FLOOR - DATA/VOICE LAYOUT
 SCALE: 1:200

DRAWING NOTES: (X)

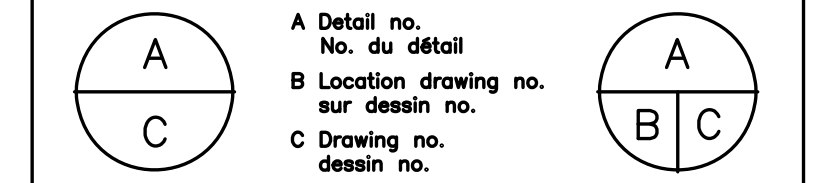
- PROVIDE COLORED EMT C/W DATA/VOICE CABLES AND REQUIRED BOXES TO THE NEAREST PULL BOX FOR DATA/VOICE OUTLETS. RUN BRANCH CONDUIT TO EACH LOCATION. 1-1/4" EMT FOR 13 CABLES AND BELOW, 1-1/2" EMT FOR 18 CABLES AND BELOW. RUN NEW 4-PAIR CAT6 DATA/VOICE CABLE FROM I.T. CLOSET TO EACH LOCATION, QUANTITY AS SHOWN. TERMINATE CABLES AT BOTH END WITH RJ45 JACKS AND MARK CABLE ON BOTH ENDS. PROVIDE NEW DATA/VOICE OUTLET PLATE AT EACH LOCATION C/W JACKS AS SHOWN. LEAVE OTHER END OF CABLE INSIDE I.T. CLOSET WITH 3 METER SLACK. TEST WIRE AND PROVIDE TESTING REPORT UPON JOB COMPLETION. LABEL EACH JACK AS PER NUMBER SHOWN ON THE DRAWING.
 V-VOICE
 D-DATA
 B-BLACK NETWORK
 O-ORANGE NETWORK
 G-GREEN NETWORK
- EXISTING PULL BOX AND ZONE CONDUIT FOR PULLING CABLES. CONFIRM EXACT LOCATION ON SITE. ADD EXTRA PULLING STRING IN THE CONDUIT FOR FUTURE USE.

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No.	Date	Revision	By: Par:

Date Printed: _____ Date imprimés: _____

- 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

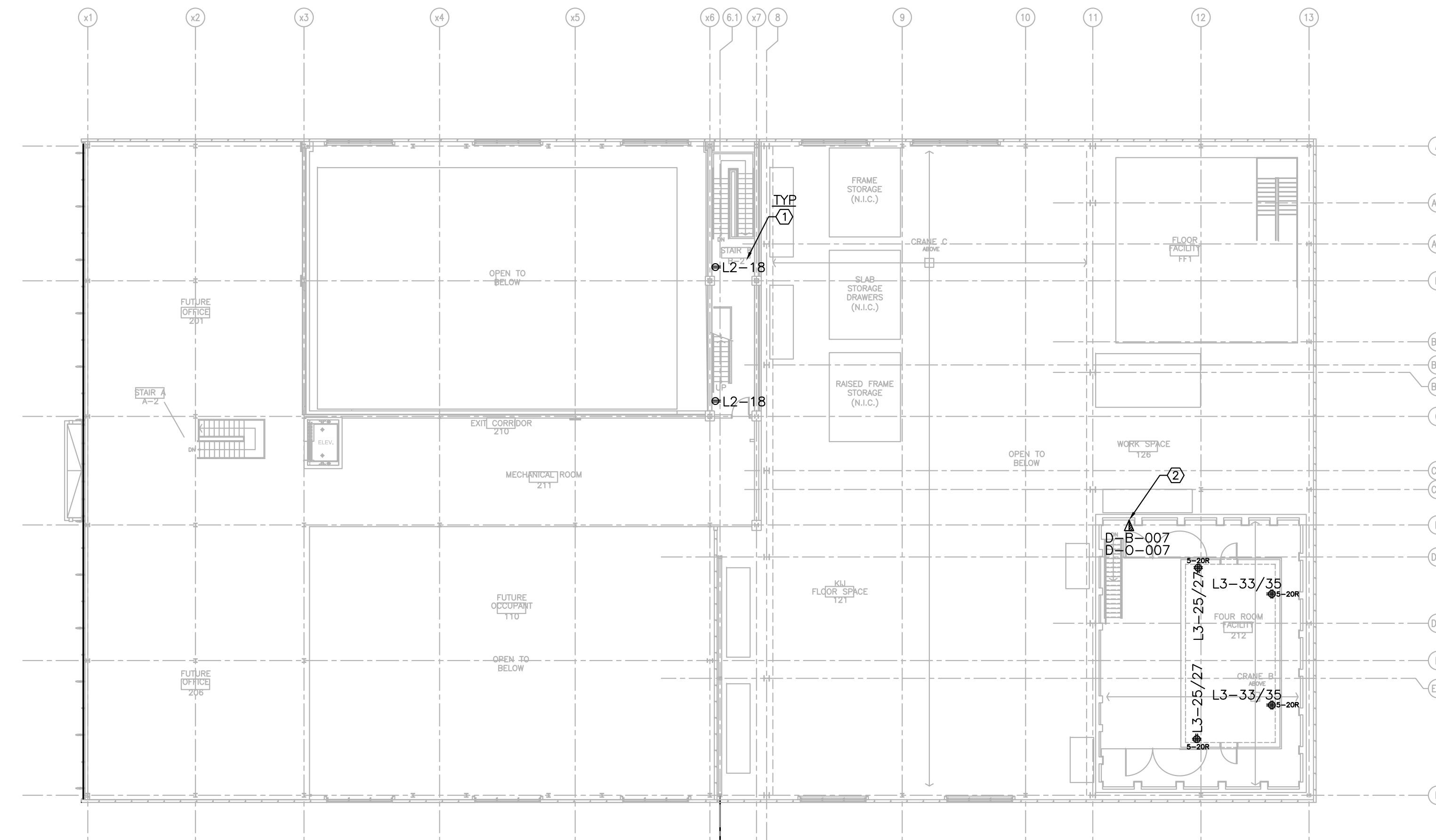


project **BUILDING M-38** project
ACOUSTICAL FACILITY
 1200 MONTREAL ROAD CAMPUS
 OTTAWA, ON

drawing **M-38 GROUND FLOOR COMMUNICATION** dessin
DETAILS

designed CYC/DF	conçu	date DEC/2018	date
drawn CYC/DF	dessiné	scale AS NOTED	échelle
checked KXL	vérifié	sheet 7 of/de 11	feuille
approved BV	approuvé	W.O.no.	D.T.no.

dwg.no. **5310-E07** dessin no.



DRAWING NOTES: (X)

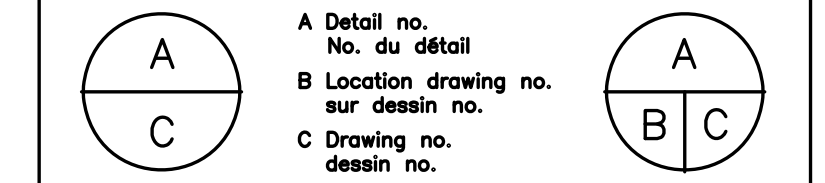
1. PROVIDE RECEPTACLE, TYPE AS SHOWN, AND CONNECT TO CIRCUIT AS INDICATED.
2. PROVIDE COLORED EMT C/W DATA/VOICE CABLES AND REQUIRED BOXES TO I.T. CLOSET FOR DATA/VOICE OUTLETS. FOLLOW SPECIFICATION AND TIA STANDARD FOR CONDUIT AND PULL BOX SIZE. 1-1/4" EMT FOR 13 CABLES AND BELOW, 1-1/2" EMT FOR 18 CABLES AND BELOW. RUN NEW 4-PAIR CAT6 DATA/VOICE CABLE FROM I.T. CLOSET TO EACH LOCATION, QUANTITY AS SHOWN. TERMINATE CABLES AT BOTH END WITH RJ45 JACKS AND MARK CABLE ON BOTH ENDS. PROVIDE NEW DATA/VOICE OUTLET PLATE AT EACH LOCATION C/W JACKS AS SHOWN. LEAVE OTHER END OF CABLE INSIDE I.T. CLOSET WITH 3 METER SLACK. TEST WIRE AND PROVIDE TESTING REPORT UPON JOB COMPLETION. LABEL EACH JACK AS PER NUMBER SHOWN ON THE DRAWING.
 V-VOICE
 D-DATA
 B-BLACK NETWORK
 O-ORANGE NETWORK
 G-GREEN NETWORK

1
E08 SECOND FLOOR - POWER AND COMMUNICATION
 SCALE: 1:200

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- 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

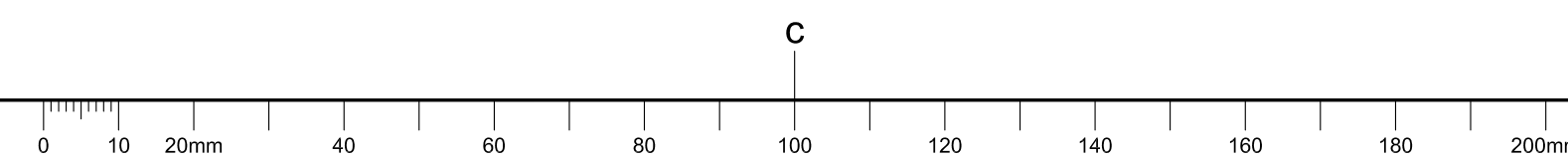


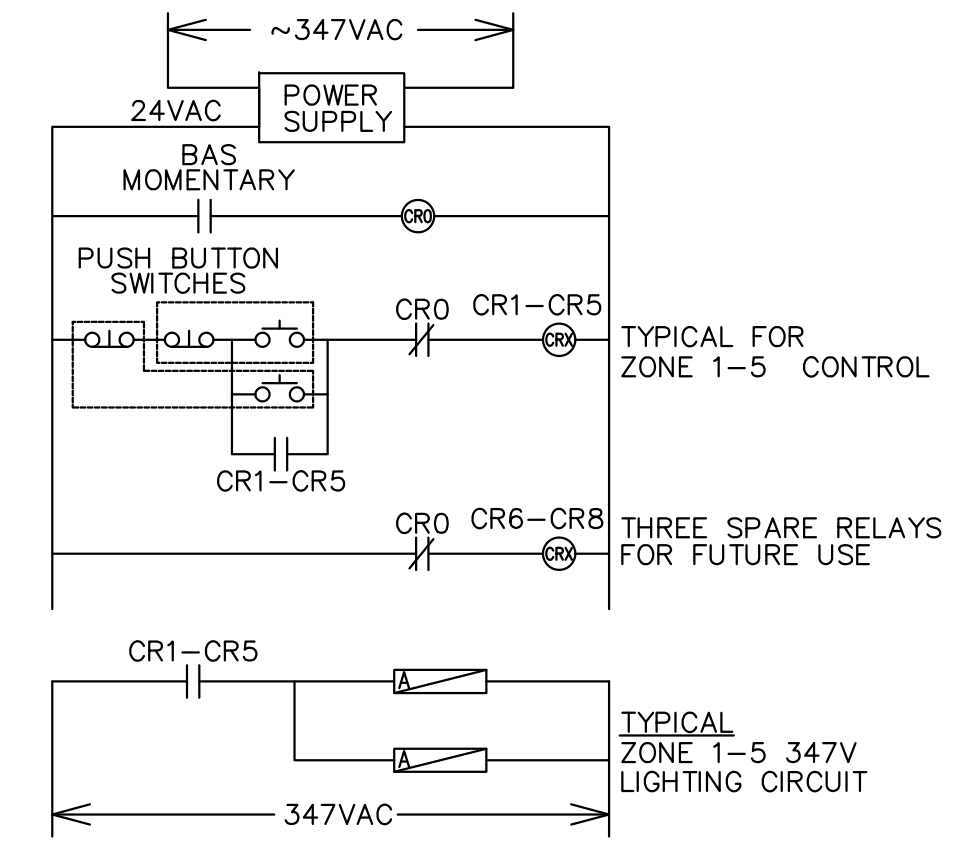
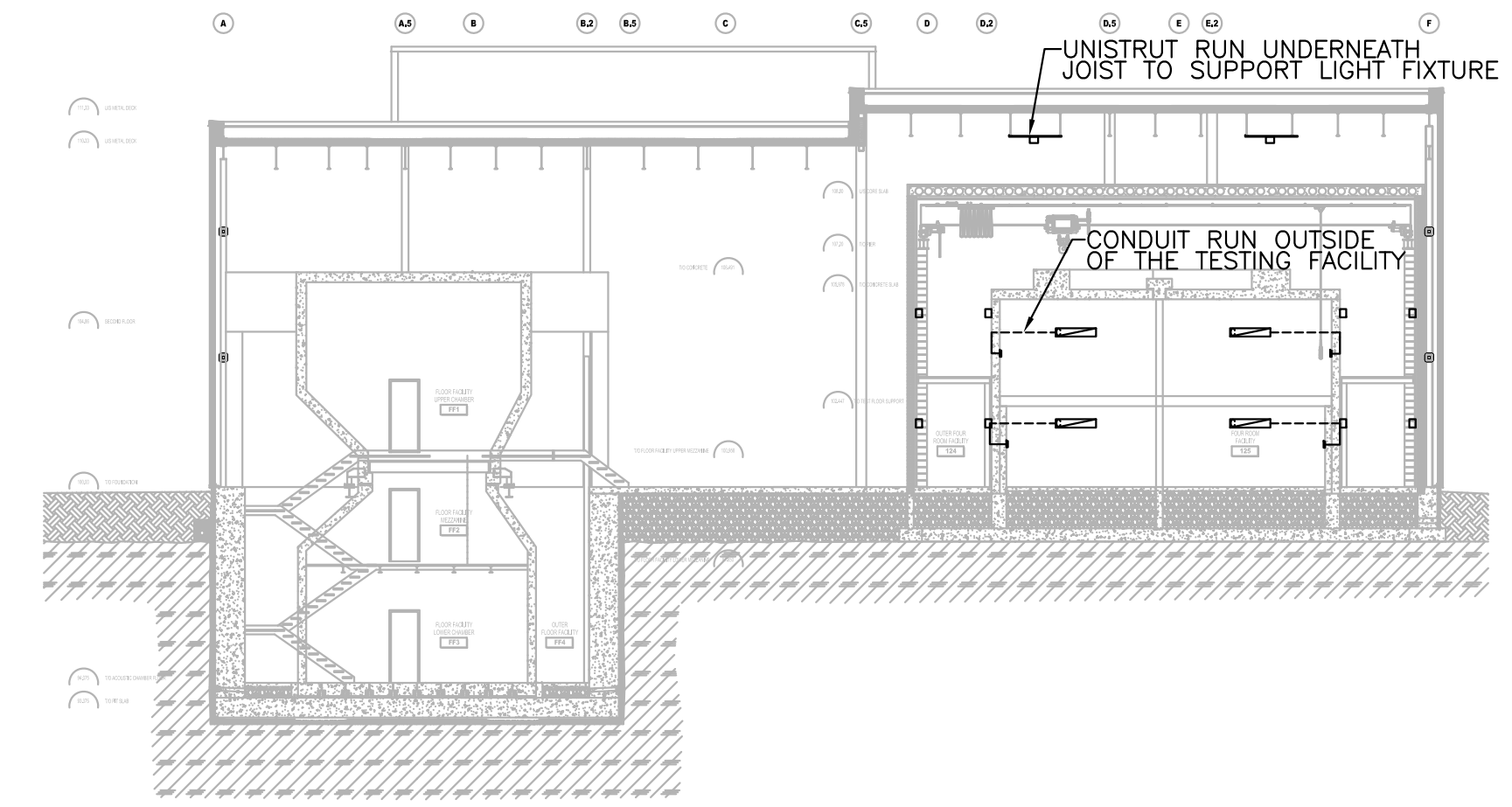
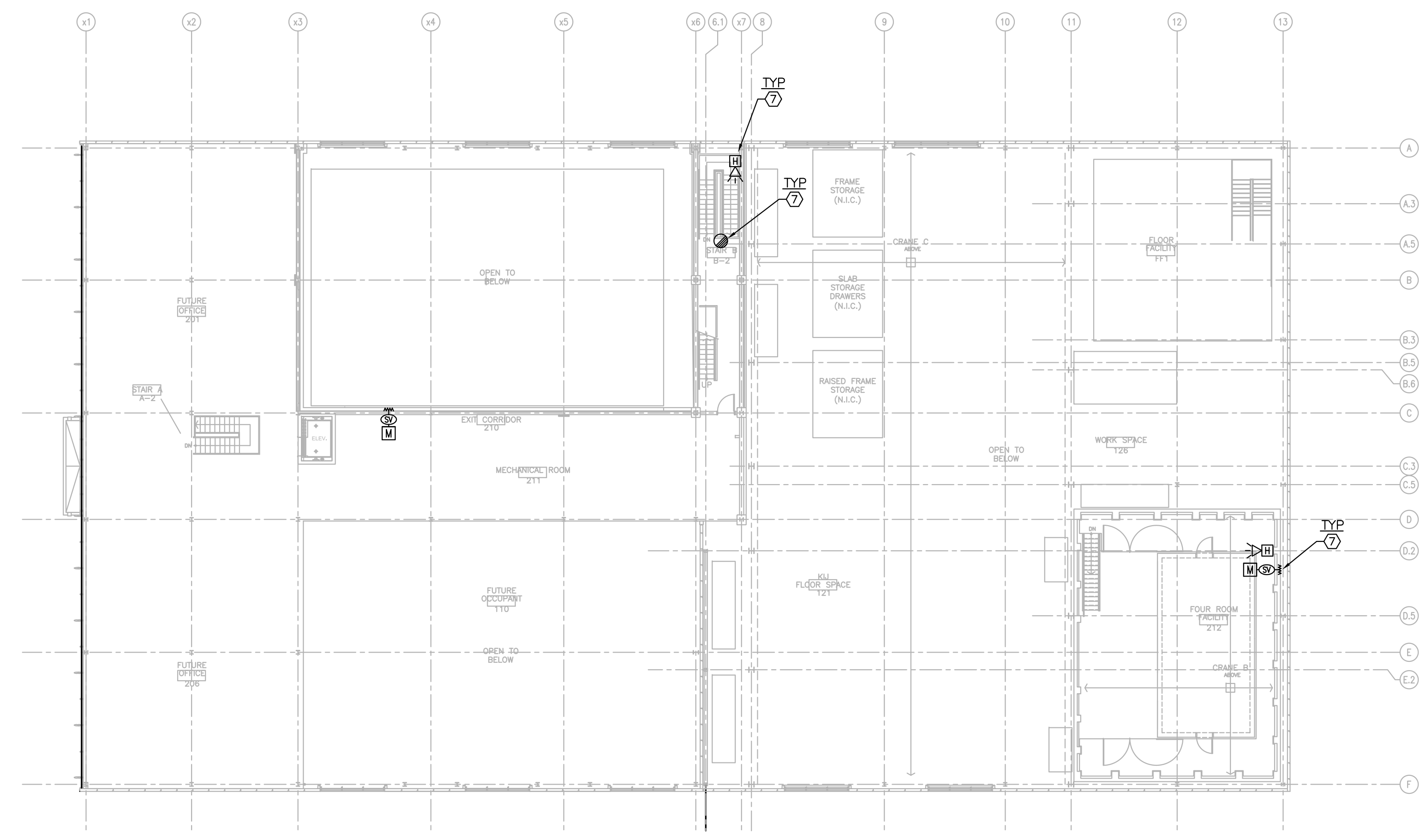
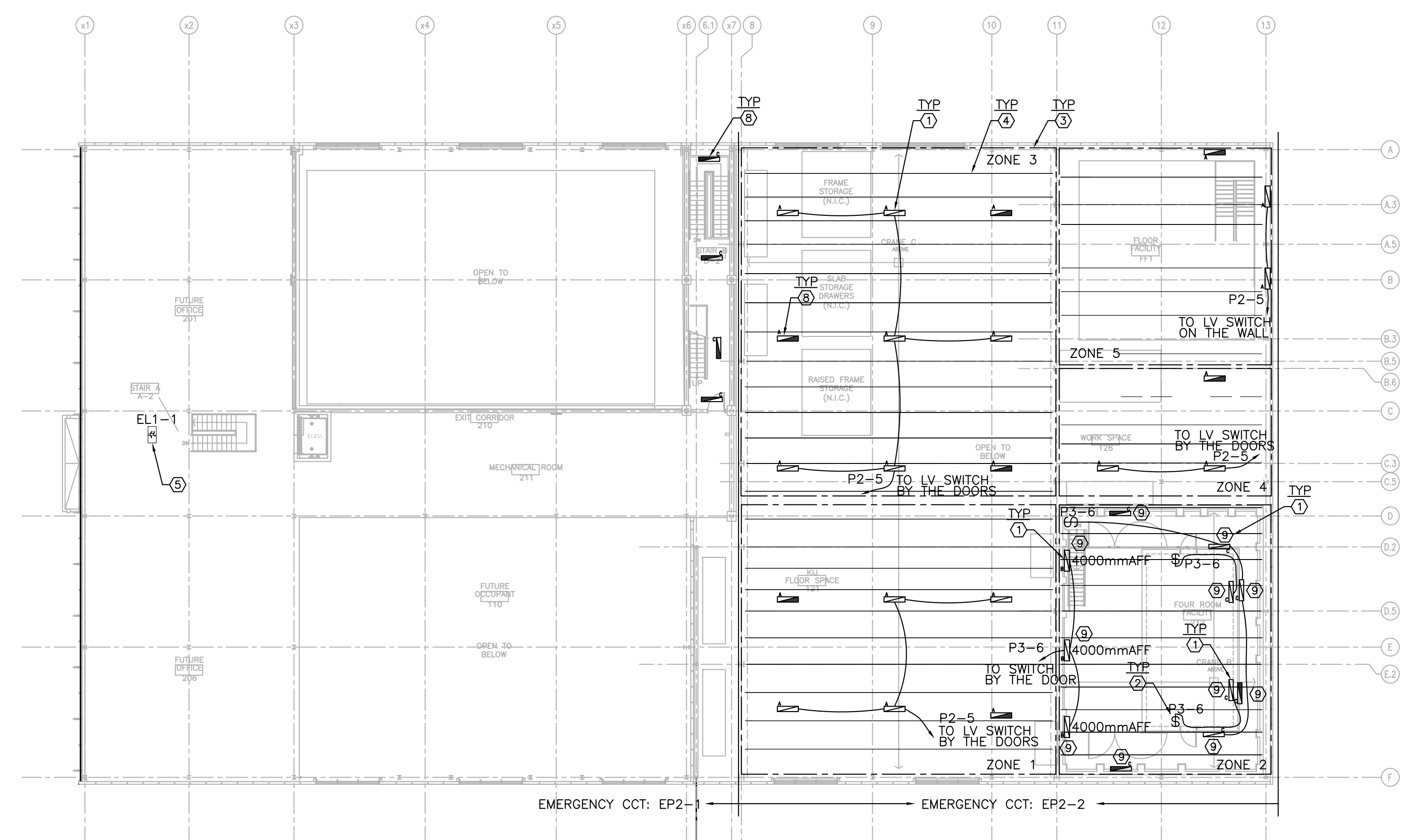
project: **BUILDING M-38**
ACOUSTICAL FACILITY
 1200 MONTREAL ROAD CAMPUS
 OTTAWA, ON

drawing: **M-38 SECOND FLOOR POWER AND COMMUNICATION**

designed	CYC/DF	conçu	date	DEC/2018	date
drawn	CYC/DF	dessiné	scale	AS NOTED	échelle
checked	KXL	vérifié	sheet	8 of/de 11	feuille
approved	BV	approuvé	W.O.no.		D.T.no.

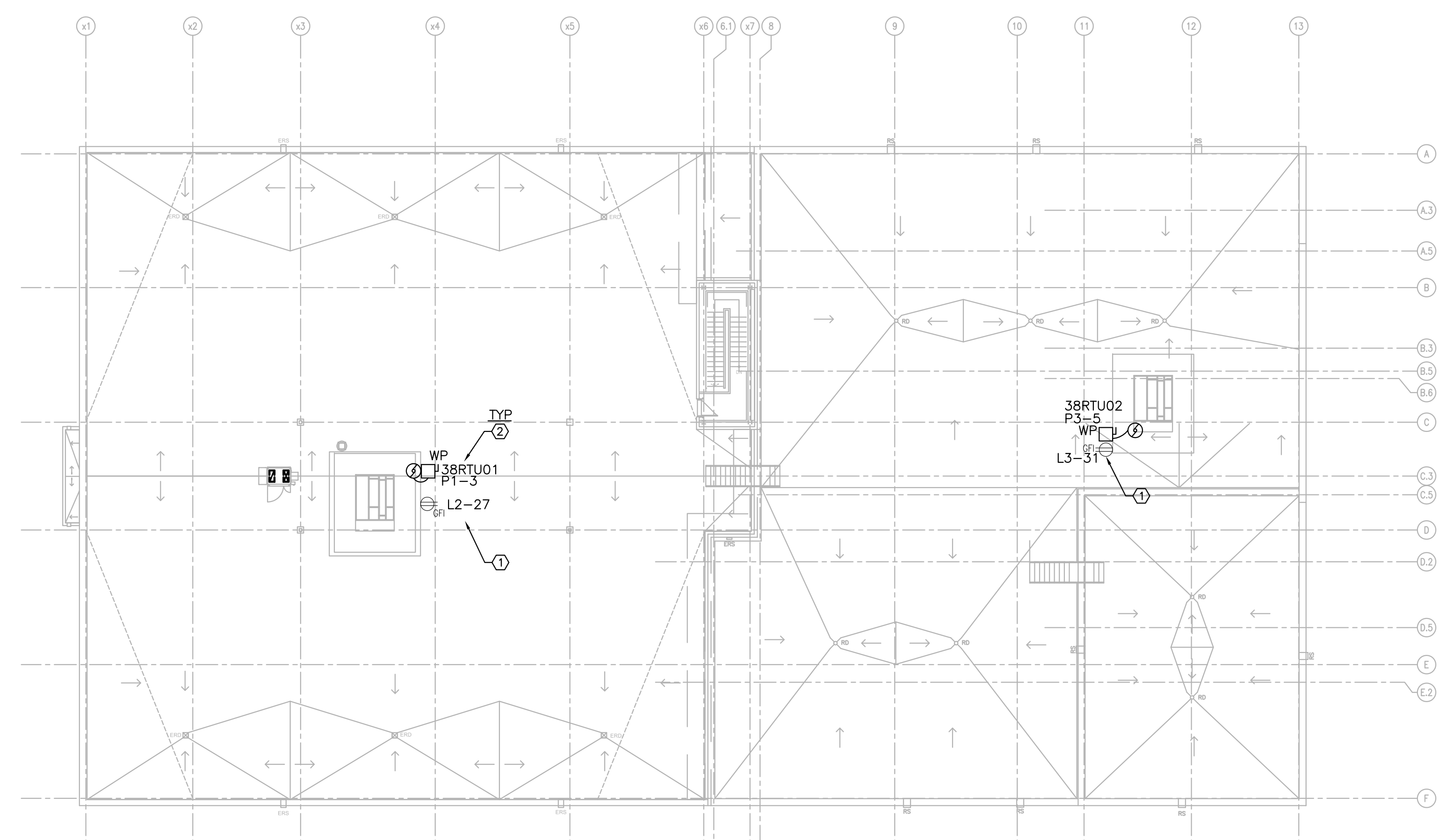
dwg.no. **5310-E08** dessin no.





- DRAWING NOTES:**
- PROVIDE LUMINAIRES, TYPE AS SHOWN, AND CONNECT TO CIRCUITS AS INDICATED. REFER TO SPECIFICATION FOR MORE DETAILS. COORDINATE WORK ON SITE WITH STRUCTURAL AND MECHANICAL INSTALLATION. FOLLOW INSTRUCTIONS FROM NRC DEPARTMENTAL REPRESENTATIVE.
 - PROVIDE LIGHTING CONTROL SWITCH, TYPE AS SHOWN AND CONNECT TO LUMINAIRES IN THE AREA.
 - LIGHTING CONTROL ZONE AS SHOWN. LIGHTING CONTROL ZONE IS FOR LOW VOLTAGE LIGHTING CONTROL ONLY. LIGHTING CONTROL LOW VOLTAGE OVERRIDE SWITCHES, RELAY BOX C/W POWER SUPPLY AND EIGHT (8) RELAYS TO BE SUPPLIED BY BAS SUPPLIER. DIV.26 TO INSTALL ALL COMPONENTS AND MAKE ALL FINAL CONNECTIONS. REFER TO DETAIL #4 FOR ADDITIONAL INFORMATION. COORDINATE WORK WITH BAS SUPPLIER (AINSWORTH). DIV.26 TO RUN ALL THE WIRING BETWEEN RELAY PANEL TO 347V LIGHTING CIRCUITS AND LOW VOLTAGE SWITCHES. ALL THE LUMINAIRES WITHIN LOW VOLTAGE CONTROL ZONES WILL BE TURNED OFF BY BAS SYSTEM ON A PRESET SCHEDULE. LOW VOLTAGE SWITCH CAN OVERRIDE AND TURN THE LUMINAIRES BACK ON FOR ANOTHER THIRTY (30) MINUTES. HIGH BAY LIGHTING CONTROL SWITCHES ARE LOCATED BESIDE EACH DOOR AS SHOWN ON DRAWING E06.
 - REFER TO STRUCTURAL DRAWINGS FOR EXACT LOCATION OF JOISTS. SUSPEND FIXTURE SO THAT BOTTOM OF FIXTURE IS FLUSH WITH BOTTOM OF OWSJ. COORDINATE WORK ON SITE TO AVOID CONFLICT.
 - EXISTING PICTOGRAM EXIT SIGN TO REMAIN. DIV.26 TO RECONNECT FIXTURE TO EMERGENCY CIRCUIT AS SHOWN.
 - N/A.
 - PROVIDE ADDRESSABLE, CLASS A FIRE ALARM SYSTEM C/W CONTROL PANEL, ANNUNCIATION PANEL AND ALL DEVICES. CONFIRM EXACT QUANTITY AND LOCATION ON SITE. PROVIDE MODULE TO FIRE SUPPRESSION SYSTEM DEVICES AND CONNECT TO THE F/A SYSTEM. CONFIRM EXACT LOCATION AND QUANTITY WITH DIV.23 AND COORDINATE WORK ON SITE. PROVIDE PROGRAMMING, VERIFICATION AND COMMISSIONING UPON JOB COMPLETION. UPDATE M-1 FIREWORKS AS PER SPEC.
 - CONNECT LUMINAIRE TO EMERGENCY CIRCUIT AS INDICATED.
 - THESE LIGHT FIXTURES ARE INSIDE THE 4 ROOM FACILITY OUTER CHAMBER. REFER TO DETAIL E09#3 FOR ADDITIONAL INFORMATION OF THE LIGHTING LAYOUT IN THE FOUR ROOM FACILITY AREA.

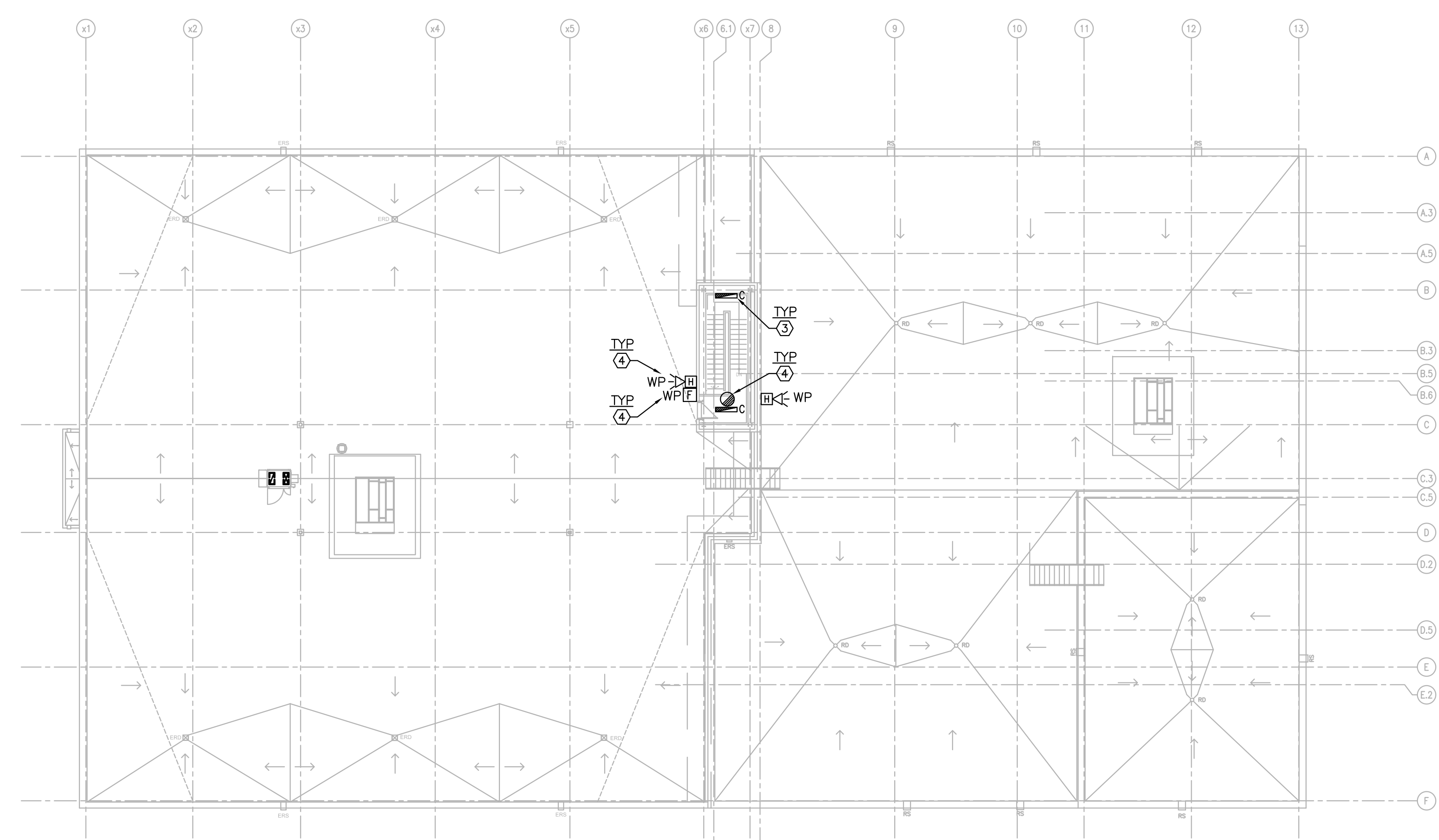
0	DEC/2018	ISSUED FOR TENDER	CYC
No.	Date	Revision	By: Par:
Date Printed		Date Imprimé	
o Verify all dimensions and site conditions and be responsible for same o Vérifier toutes les dimensions et l'état des lieux et en assumer la responsabilité			
A	A Detail no. No. du détail	A	
C	B Location drawing no. sur dessin no.	B	C
	C Drawing no. dessin no.		
project		project	
BUILDING M-38 ACOUSTICAL FACILITY 1200 MONTREAL ROAD CAMPUS OTTAWA, ON			
drawing		dessin	
M-38 SECOND FLOOR LIGHTING AND FIRE ALARM			
designed	CYC/DF	conçu	date
			DEC/2018
drawn	CYC/DF	dessiné	scale
			AS NOTED
checked	KXL	vérifié	sheet
			9 of/de 11
approved	BV	approuvé	W.O.no.
			D.T.no.
dwp.no.		dessin no.	
5310-E09			



DRAWING NOTES: ☒

1. ROOF TOP GFI RECEPTACLE COMES WITH THE UNIT. DIV.26 TO CONNECT RECEPTACLE TO CIRCUIT AS INDICATED AND MAKE ALL FINAL CONNECTIONS. CONFIRM EXACT LOCATION ON SITE.
2. MECHANICAL EQUIPMENT TO BE SUPPLIED AND INSTALLED BY DIV.23. DIV.26 TO PROVIDE WEATHER PROOF DISCONNECT SWITCH AND MAKE ALL FINAL CONNECTIONS. COORDINATE WORK WITH DIV.23. VERIFY ALL ELECTRICAL REQUIREMENT BEFORE MAKING ANY CONNECTION AND FOLLOW NRC DEPARTMENTAL REPRESENTATIVE'S INSTRUCTION.
3. PROVIDE LUMINAIRES, TYPE AS SHOWN, AND CONNECT TO CIRCUITS AS INDICATED. REFER TO SPECIFICATION FOR MORE DETAILS. COORDINATE WORK ON SITE WITH STRUCTURAL AND MECHANICAL INSTALLATION. FOLLOW INSTRUCTIONS FROM NRC DEPARTMENTAL REPRESENTATIVE.
4. PROVIDE FIRE ALARM DEVICES AND CONNECT TO BUILDING FIRE ALARM SYSTEM. CONFIRM EXACT QUANTITY AND LOCATION ON SITE.

1
E10 ROOF — ELECTRICAL SYSTEMS
 SCALE: 1:200

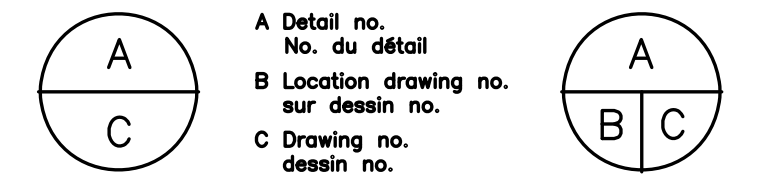


2
E10 ROOF — LIGHTING AND FIRE ALARM
 SCALE: 1:200

0	DEC/2018	ISSUED FOR TENDER	CYC
No.	Date	Revision	By: Par:

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project **BUILDING M-38** projet
ACOUSTICAL FACILITY
1200 MONTREAL ROAD CAMPUS
OTTAWA, ON

drawing **M-38 ROOF ELECTRICAL SYSTEMS** dessin

designed **CYC/DF** conçu date **DEC/2018** date

drawn **CYC/DF** dessiné scale **AS NOTED** échelle

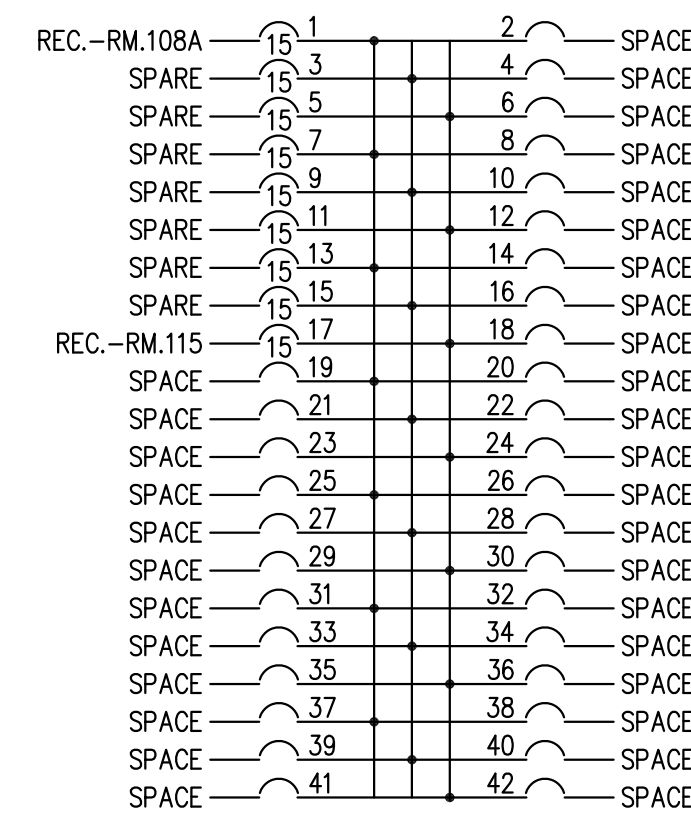
checked **KXL** vérifié sheet **10** of/de **11** feuille

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

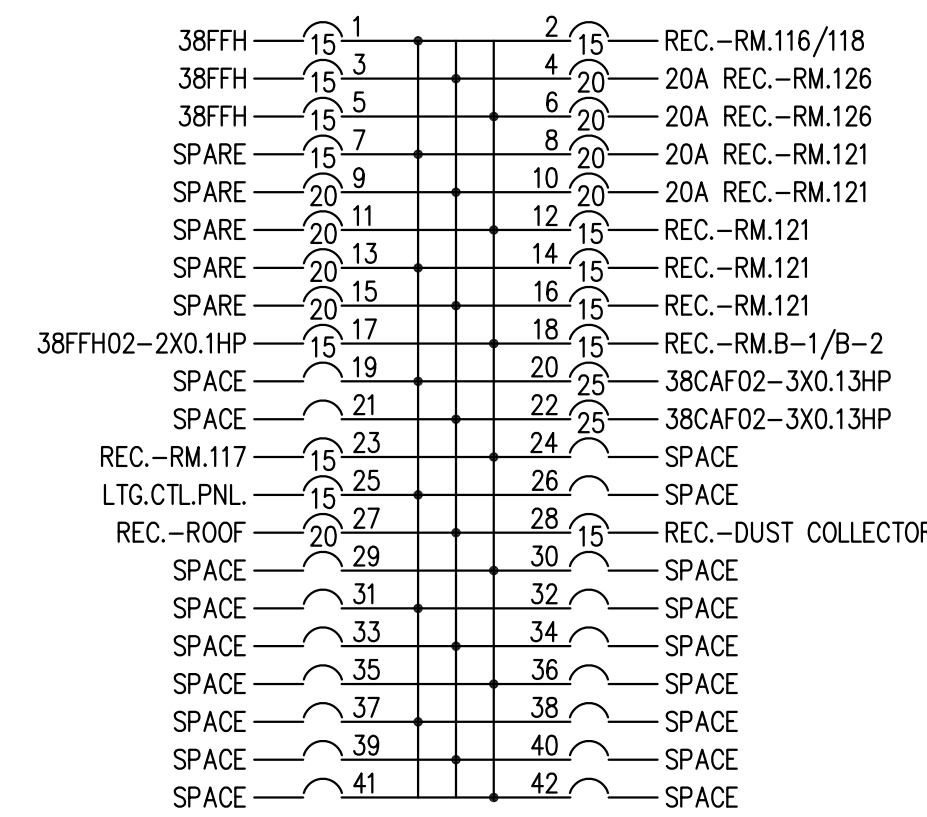
dwg.no. **5310-E10** dessin no. _____



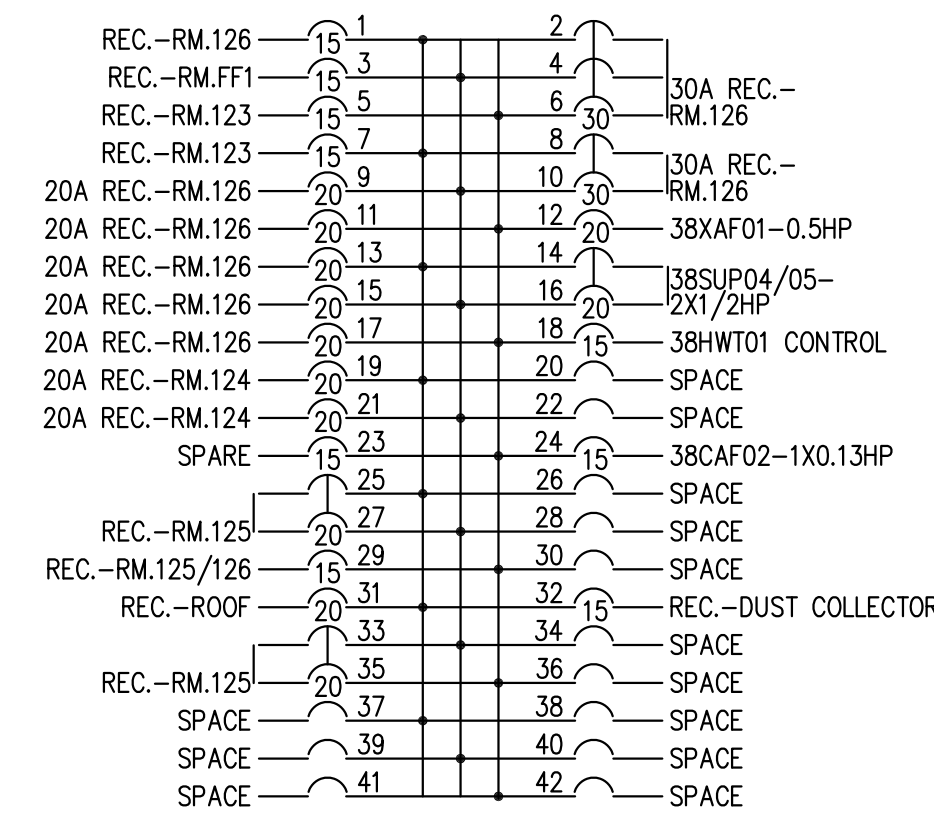
PANEL L1
 VOLTAGE 120/208V
 PHASE 3PH
 WIRE 4W
 RATING AMPS 225A
 LOCATION RM.108
 MODEL NO. SQUARE D
 NQOD
 FED FROM PNL 'PD2'



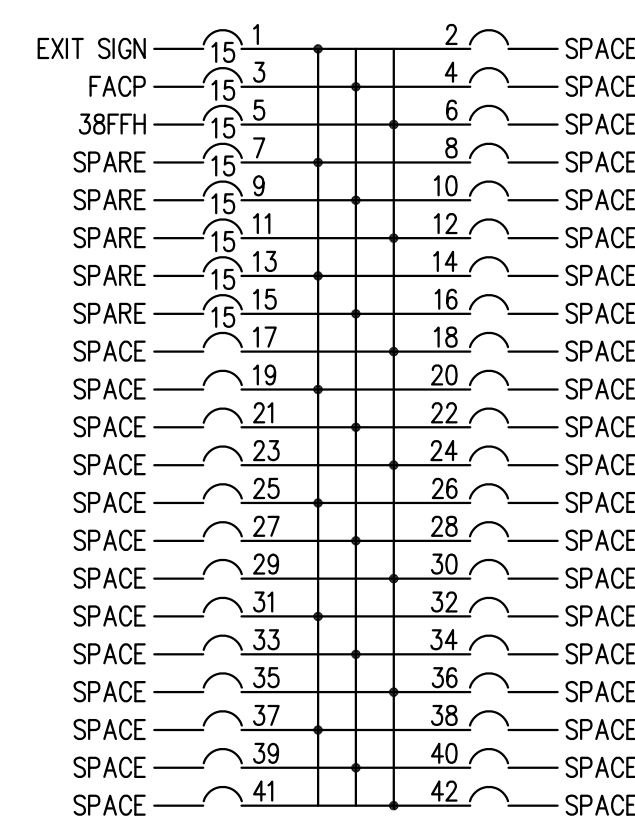
PANEL L2
 VOLTAGE 120/208V
 PHASE 3PH
 WIRE 4W
 RATING AMPS 225A
 LOCATION RM.117
 MODEL NO. SQUARE D
 NQOD
 FED FROM PNL 'PD3'



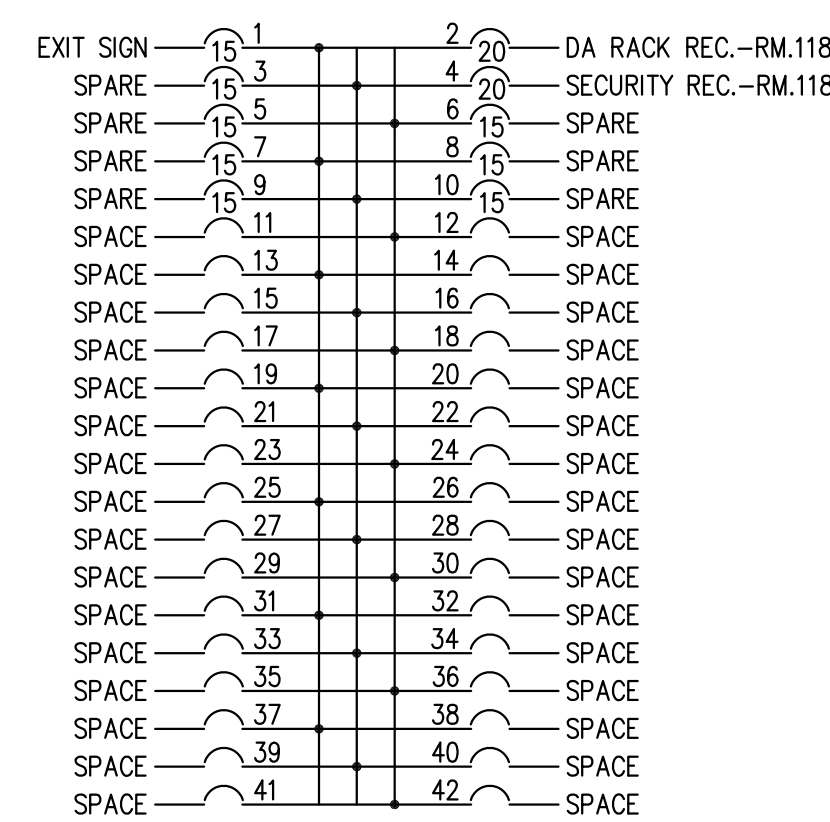
PANEL L3
 VOLTAGE 120/208V
 PHASE 3PH
 WIRE 4W
 RATING AMPS 225A
 LOCATION RM.126
 MODEL NO. SQUARE D
 NQOD
 FED FROM PNL 'PD3'



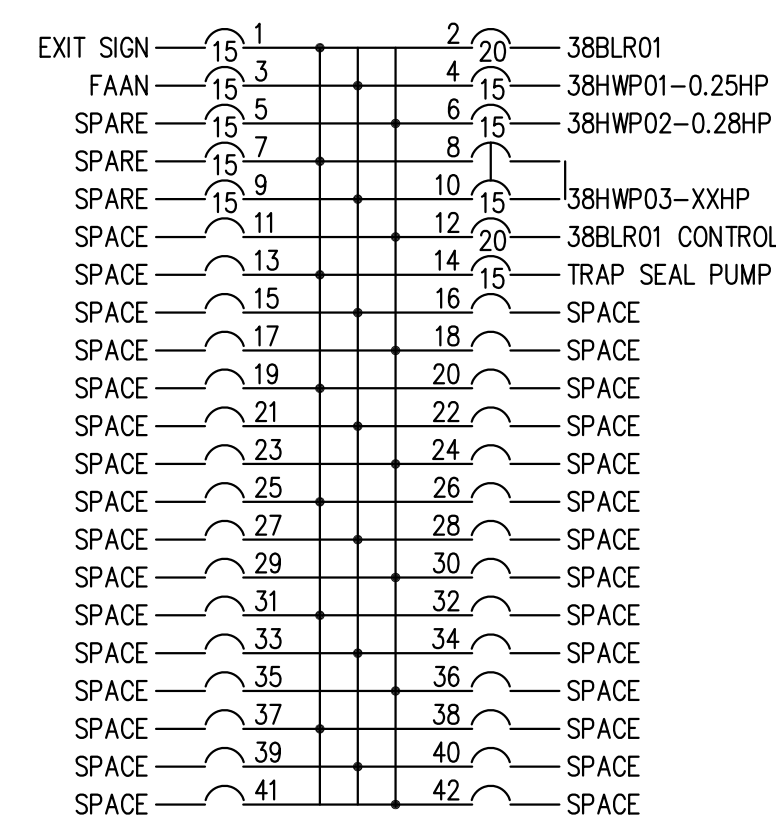
PANEL EL1
 VOLTAGE 120/208V
 PHASE 3PH
 WIRE 4W
 RATING AMPS 225A
 LOCATION RM.108
 MODEL NO. SQUARE D
 NQOD
 FED FROM PNL 'EP1'



PANEL EL2
 VOLTAGE 120/208V
 PHASE 3PH
 WIRE 4W
 RATING AMPS 225A
 LOCATION RM.117
 MODEL NO. SQUARE D
 NQOD
 FED FROM PNL 'EP1'



PANEL EL3
 VOLTAGE 120/208V
 PHASE 3PH
 WIRE 4W
 RATING AMPS 225A
 LOCATION RM.126
 MODEL NO. SQUARE D
 NQOD
 FED FROM PNL 'EP1'

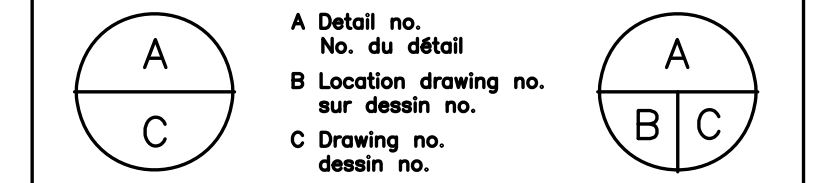


0	DEC/2018	ISSUED FOR TENDER	CYC
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project **BUILDING M-38** project
ACOUSTICAL FACILITY
 1200 MONTREAL ROAD CAMPUS
 OTTAWA, ON

drawing **M-38 PANEL SCHEDULES** dessin

designed	CYC	conçu	date	DEC/2018	date		
drawn	CYC/DF	dessiné	scale	AS NOTED	échelle		
checked	KXL	vérifié	sheet	11	of/de	11	feuille
approved	BV	approuvé	W.O.no.		D.T.no.		

dwg.no. **5310-E11** dessin no.