

25A RANGE RENOVATION

REGINA, SASKATCHEWAN



WALL SCHEDULE				
W1	EXT FIN	METAL CLADDING		
	INSUL	75 RIGID INSULATION		
		PRE-ENGINEERED HORIZONTAL Z-GIRTS @ 600 o.c.		
	BLOCK	AIR / VAPOUR BARRIER		
		250 CONCRETE BLOCK (CORE FILLED)		
	ULC F/R	NONE	STC	-
	NOTES	-		
W2	EXT FIN	BRICK VENEER (MATCH EXISTING COURSING)		
		AIR SPACE (MATCH EXISTING)		
	INSUL	75 RIGID INSULATION		
		AIR / VAPOUR BARRIER		
	BLOCK	250 CONCRETE BLOCK (CORE FILLED)		
	ULC F/R	NONE	STC	-
	NOTES	-		

PARTITION SCHEDULE					
P1	EXT FIN	0.85mm (22ga) PERFORATED METAL PANELS (TYPES 1, 2, 3, & 4)			
	STUDS	152 (18ga) STEEL STUDS @ 600 o.c.			
	ULC F/R	NONE		STC	-
		NOTES REFER TO DWG A4.2 FOR LOCATIONS OF PERFORATED PANEL TYPES			
		-			
P2	BLOCK	200 CONCRETE BLOCK			
	FILL	FILLED CORES			
		25ga Z-BARS HORIZONTAL @ 600 o.c.			
		38 MINERAL FIBRE BATT INSULATION			
		50 DUCT LINER INSULATION (MECH FASTENED)			
	ULC F/R	NONE	STC	-	
	NOTES	-			
P3	BLOCK	200 CONCRETE BLOCK			
	FILL	FILLED CORES			
	ULC F/R	NONE		STC	-
		NOTES			
		-			
P4	BLOCK	200 CONCRETE BLOCK			
	FILL	FILLED CORES			
		38x89 FIRE RETARDANT WOOD FURRING STRIPS @ 610 o.c.			
	PLY	19 FIRE RETARDANT PLYWOOD			
	EXT FIN	610x610x50 ACOUSTIC BALLISTIC RUBBER PANELS			
	ULC F/R	NONE	STC	-	
	NOTES	-			
P5	BLOCK	150 CONCRETE BLOCK			
	ULC F/R	NONE		STC	-
		NOTES			
		-			
		-			

ROOF SCHEDULE				
R1	EXT FIN	ROOF MEMBRANE		
		PROTECTION BOARD		
	INSUL	RSI 7.0 (R40) TAPERED POLYISO INSULATION		
		VAPOUR RETARDER		
		METAL DECK		
	ULC F/R	NONE	STC	-
	NOTES	-		
R2	EXT FIN	ROOF MEMBRANE		
		PROTECTION BOARD		
	INSUL	RSI 7.0 (R40) TAPERED POLYISO INSULATION		
		VAPOUR RETARDER		
		EXISTING METAL DECK		
	ULC F/R	NONE	STC	-
	NOTES	-		

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	S2 SECTIONS & DETAILS
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MECHANICAL	M1.1 MECHANICAL DEMOLITION: ROOF PLAN, MAIN FLOOR PLAN; EQUIPMENT SCHEDULE, LEGEND
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	E3.2 ELECTRICAL POWER & SYSTEMS MAIN FLOOR PLAN
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	E4.1 ELECTRICAL PANEL SCHEMATICS AND MOTOR SCHEDULE
	E5.1 ELECTRICAL SECTION DETAILS
	E5.2 ELECTRICAL DETAILS
	E5.3 ELECTRICAL DETAILS

GENERAL NOTES	
1.	REFER TO STRUCTURAL, MECHANICAL AND ELECTRICAL DRAWINGS FOR COMPLETE SCOPE OF WORK.
2.	CONTRACTOR TO CONFIRM ALL DIMENSIONS AND SITE CONDITIONS ON SITE PRIOR TO COMMENCEMENT OF WORK.
3.	ALL WORK PERFORMED OUTSIDE OF GENERAL SCOPE OF WORK AREA (i.e. ELECTRICAL FIRE ALARM COMPONENTS OR MECHANICAL SYSTEMS) SHOULD BE PERFORMED WITH THE LEAST AMOUNT OF DISTURBANCE TO SURROUNDING AREAS. PATCH, REPAIR AND REFINISH ALL AFFECTED SURROUNDING AREAS WHERE REQUIRED. PROVIDE FIRESTOPPING AS REQUIRED.
4.	PATCH, REPAIR AND REFINISH ALL FINISHES, TO MATCH EXISTING, WHERE AFFECTED BY REMOVALS OR NEW WORK (PARTITIONS, ELECTRICAL FIXTURES AND DEVICES, MECHANICAL FIXTURES, DUCTWORK, GRILLES, ETC.) ENSURE ALL FIRE SEPARATIONS ARE REINSTATED.
5.	OWNER WILL HAVE FIRST RIGHT OF REFUSAL FOR ALL ITEMS (GLAZING, HARDWARE, CASEWORK, ELECTRICAL FIXTURES, MECHANICAL FIXTURES, ETC) THAT ARE NOTED FOR REMOVAL OR DEMOLITION. REFUSED ITEMS ARE TO BE REMOVED AND DISPOSED. SALVAGED REMOVED ITEMS ARE TO BE DELIVERED TO STORAGE, ELSEWHERE ON PROJECT SITE, AS DIRECTED BY DEPARTMENTAL REPRESENTATIVE.
6.	INSTALL FIRESTOPPING MATERIALS AS REQUIRED AT ALL NEW PENETRATIONS THROUGH FIRE RATED ASSEMBLIES IN ACCORDANCE WITH SECTION 07 84 00 - FIRESTOPPING.
7.	ALL ABLAY HIGH SECURITY HARDWARE MUST BE SALVAGED AND TURNED OVER TO DEPARTMENTAL REPRESENTATIVE. PROVIDE SIGNED OFF TRANSMITTAL DOCUMENT.

ABBREVIATIONS			
A.F.F.	ABOVE FINISHED FLOOR	EQ.	EQUAL
ALUM.	ALUMINUM	GYP.BD.	GYPSON BOARD
BD.	BOARD	H.S.S.	HOLLOW STRUCTURAL STEEL
COL.	COLUMN	HORIZ.	HORIZONTAL
CONC.	CONCRETE	INSUL.	INSULATION
CORR.	CORRIDOR	MAX.	MAXIMUM
C/W	COMPLETE WITH	MECH.	MECHANICAL
DEMO.	DEMOLITION	MIN.	MINIMUM
DEPT.	DEPARTMENT	M.O.	MASONRY OPENING
D.F.	DRINKING FOUNTAIN	N.I.C.	NOT IN CONTRACT
DTL.	DETAIL	N.T.S.	NOT TO SCALE
ELEC.	ELECTRICAL	O.C.	ON CENTER
E.W.	EACH WAY	O.S.B.	ORIENTED STRAND BOARD
		PT	PAINT
		R.D.	ROOF DRAIN
		REV.	REVERSE
		R.F.	RESILIENT FLOORING
		S.A.P.	SOUND ABSORPTIVE PANEL
		SIM.	SIMILAR
		TB	TACKBOARD
		TYP.	TYPICAL
		VERT.	VERTICAL
		VEST.	VESTIBULE
		WASH.	WASHROOM
		WB	WHITE BOARD
		W.C.	WATER CLOSET

SYMBOL LEGEND		
	PROJECT NORTH	
	LOCATION REFERENCE	
	ELEVATION REFERENCE	
	ARCHITECTURAL REFERENCE	
	GRID REFERENCE	
	ROOM NUMBER	
	DOOR NUMBER	
	GLAZED SCREEN TYPE	
	WALL TYPES	
	PARTITION TYPES	
	INDICATES DETAIL NUMBER	
	DETAIL INDICATOR	
	INDICATES REFERENCE DRAWING NUMBER	
	INDICATES DETAIL NUMBER	
	DETAIL INDICATOR	
	INDICATES REFERENCE DRAWING NUMBER	
	INDICATES SECTION NUMBER	
	BUILDING SECTION INDICATOR	
	INDICATES REFERENCE DRAWING NUMBER	
	ELEVATION INDICATOR	
	INDICATES REFERENCE DRAWING NUMBER	

LEGEND			
	DOOR & FRAME TO BE REMOVED/RELOCATED		EXISTING DOOR & FRAME TO REMAIN
	RELOCATED DOOR & FRAME		NEW DOOR & FRAME
	PARTITION TO BE REMOVED		EXISTING PARTITION
	EXISTING CAST CONCRETE		NEW PARTITION
	EXISTING CONC BLOCK OR BRICK TO BE REMOVED		FIRE SEPARATION, NO RATING
	EXISTING CONC BLOCK OR BRICK		1 HR FIRE SEPARATION

DOOR TYPE SCHEDULE	
A	
B	

FRAME TYPE SCHEDULE	
1	
2	

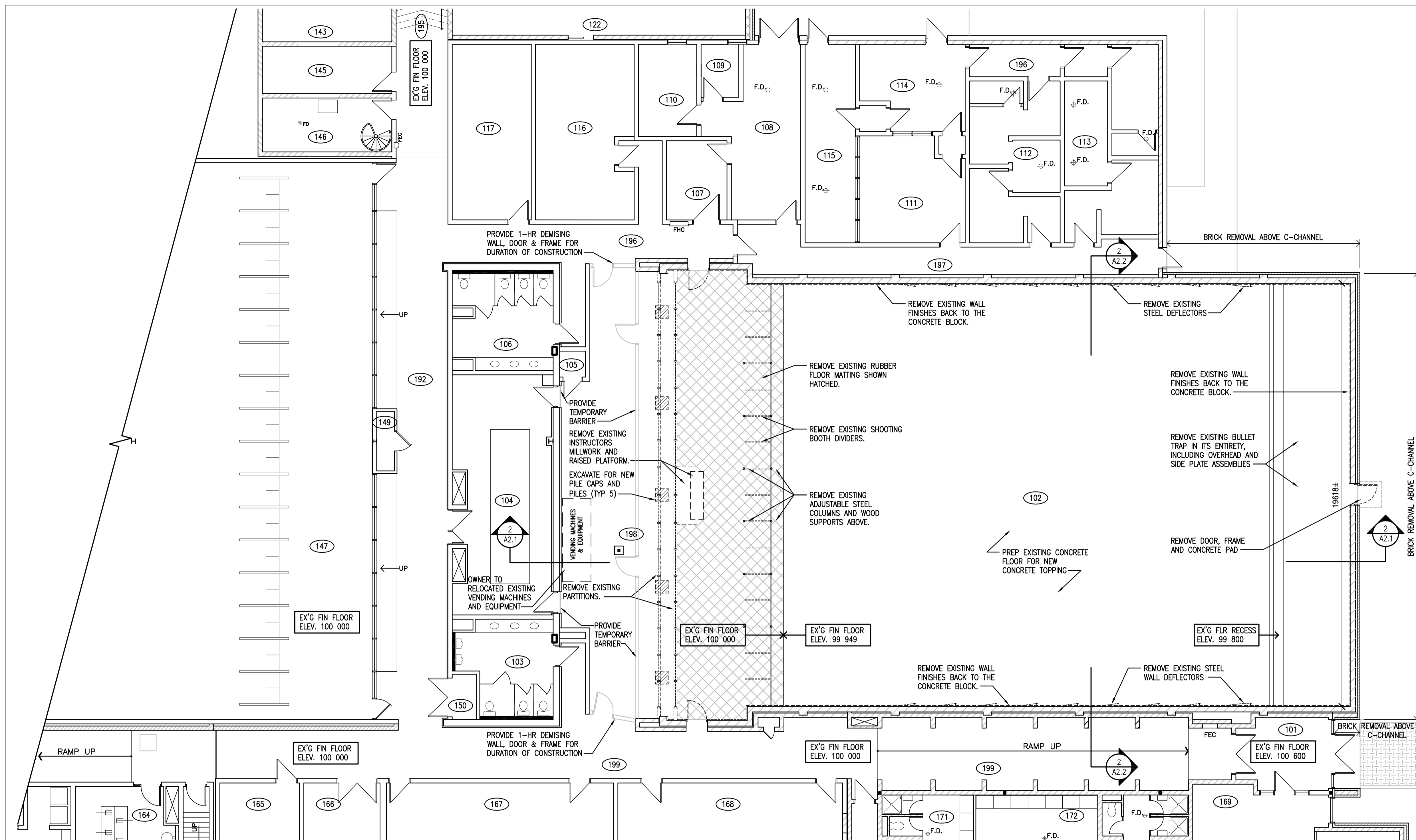
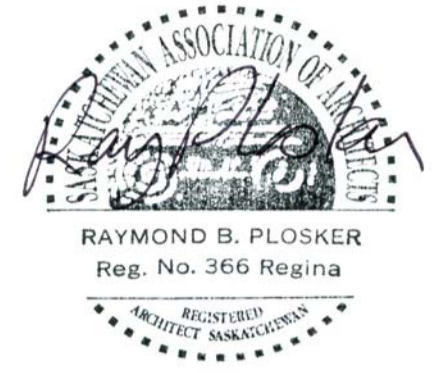
GLAZING TYPE SCHEDULE	
A	

NOTES:
REFER TO SCHEDULE FOR REQUIRED PARTITION THICKNESS
REFER TO SECTION 08 88 56 FOR UL752 PROTECTION RATINGS



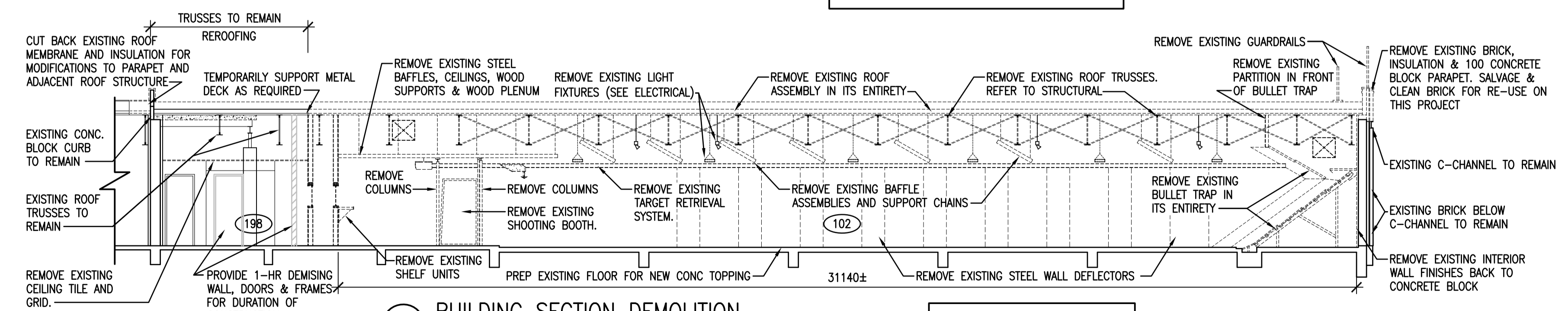
KEY PLAN
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Revision/Revision	Description/Description	Date/Date
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Project title/Titre du projet		
25A RANGE RENOVATION REGINA, SK		
Approved by/Approve par		
Designed by/Concep par		
Drawn by/Dessine par		
RCMP Project Manager/Administrateur de Projets GRC		
JD		
Client/client		
Drawing title/Titre du dessin		
GENERAL INFORMATION SCHEDULES		
Project No./No. du projet	Sheet/Feuille	Revision no./La Révision no.
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1 MAIN FLOOR DEMOLITION PLAN
 A2.1 1:100

NOTE: REFER TO STRUCTURAL, MECHANICAL, AND ELECTRICAL DRAWINGS FOR ADDITIONAL DEMOLITION REQUIREMENTS



2 BUILDING SECTION DEMOLITION
 A2.1 1:100

NOTE: PROVIDE WEATHERTIGHT ENCLOSURES FOR ALL ROOF OPENINGS AS PER SECTION 01 56 00.

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 REGINA, SK**

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RCMP Project Manager/Administrateur de Projets GRC

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**DEMOLITION PLAN
 BUILDING SECTION DEMOLITION**

Project No./No. du projet

27/2015

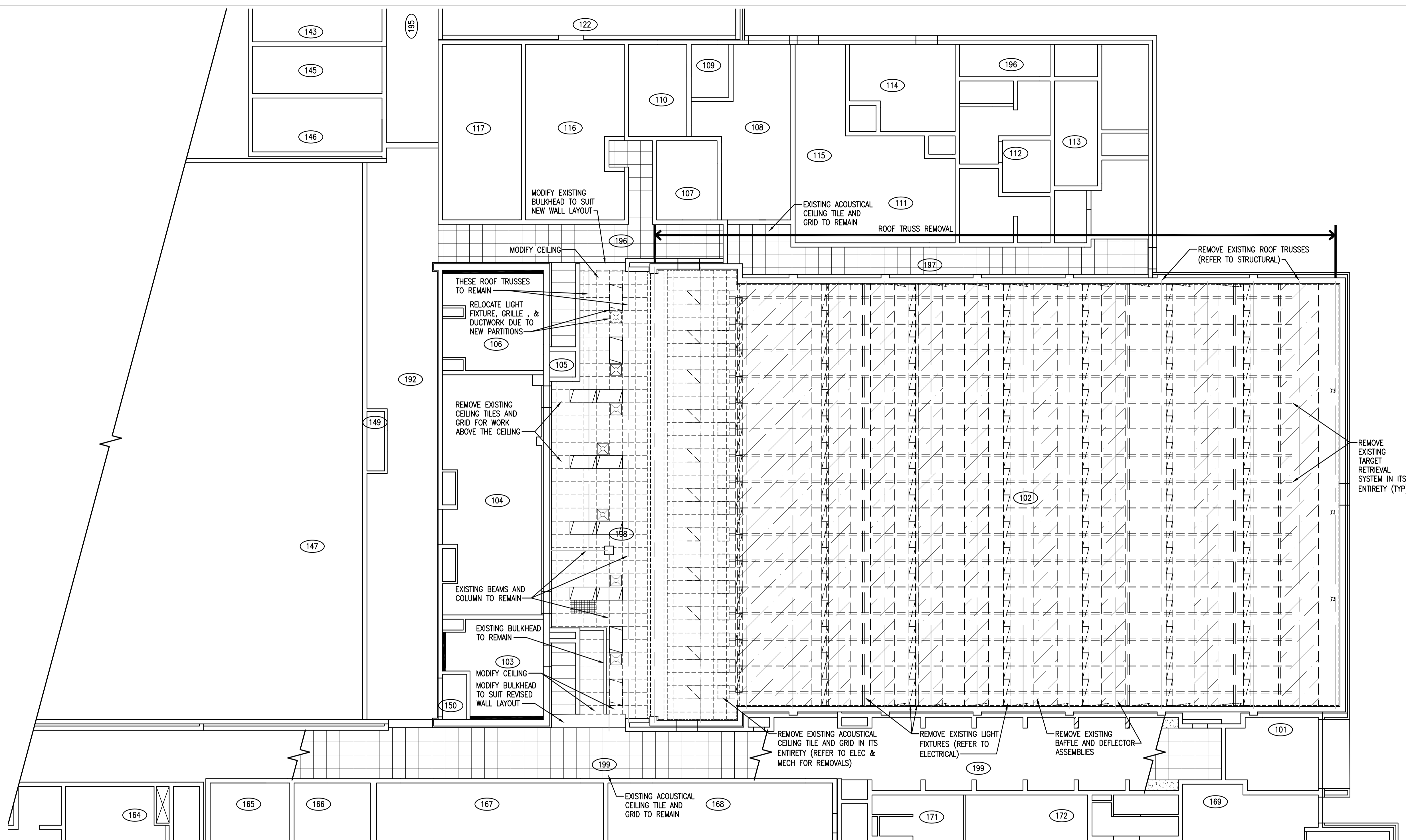
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REMOVE EXISTING TARGET RETRIEVAL SYSTEM IN ITS ENTIRETY (TYP)

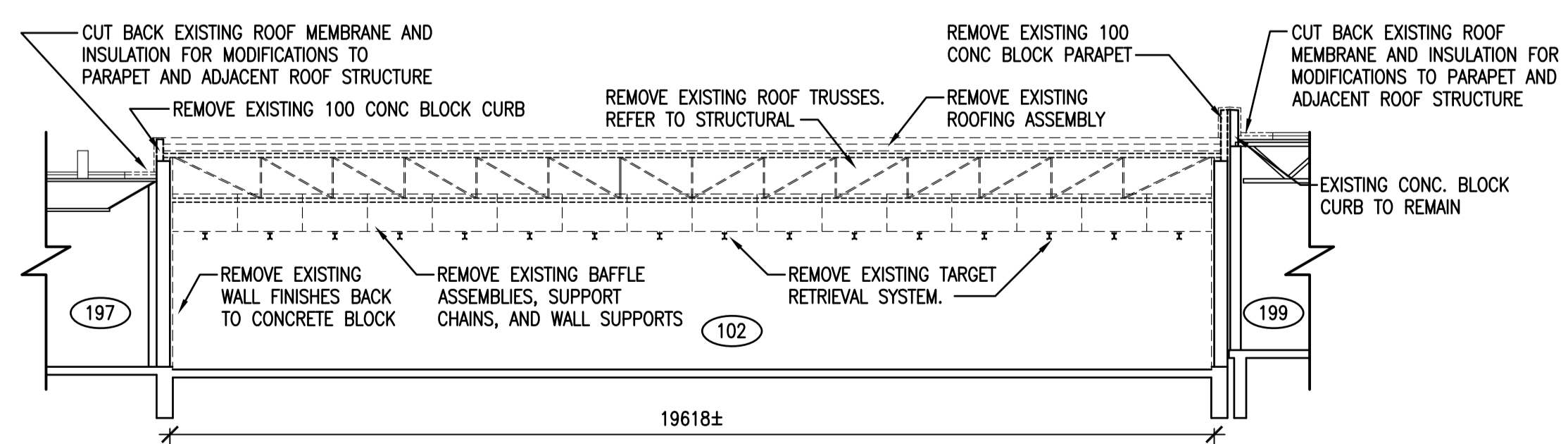
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1 REFLECTED CEILING DEMOLITION PLAN
 A2.2 1:100

NOTE:
 REFER TO STRUCTURAL, MECHANICAL, AND ELECTRICAL DRAWINGS FOR ADDITIONAL DEMOLITION REQUIREMENTS



2 BUILDING SECTION DEMOLITION
 A2.1 1:100

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**25A RANGE RENOVATION
 REGINA, SK**

Approved by/Approve par

Designed by/Concepé par
 RP

Drawn by/Dessiné par
 RHM / RP

RCMP Project Manager/Administrateur de Projets GRC
 JD

RCMP, Architectural and Engineering Resources Manager/
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**REFLECTED CEILING
 DEMOLITION PLAN
 BUILDING SECTION DEMOLITION**

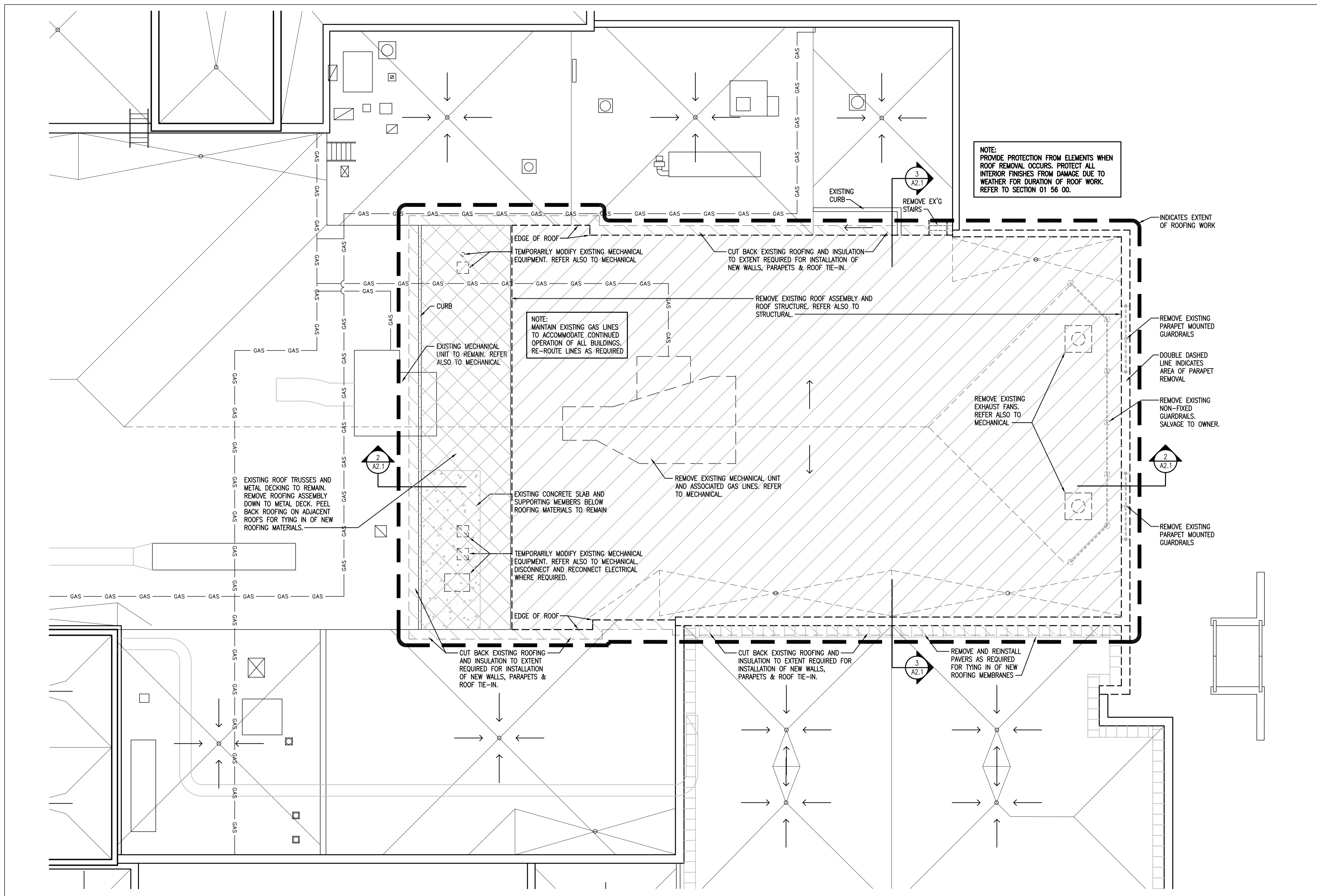
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A2.2

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NOTE:
 PROVIDE PROTECTION FROM ELEMENTS WHEN
 ROOF REMOVAL OCCURS. PROTECT ALL
 INTERIOR FINISHES FROM DAMAGE DUE TO
 WEATHER FOR DURATION OF ROOF WORK.
 REFER TO SECTION 01 56 00.



NOTE:
 MAINTAIN EXISTING GAS LINES
 TO ACCOMMODATE CONTINUED
 OPERATION OF ALL BUILDINGS.
 RE-ROUTE LINES AS REQUIRED

NOTE:
 TEMPORARILY MODIFY EXISTING MECHANICAL
 EQUIPMENT. REFER ALSO TO MECHANICAL
 DISCONNECT AND RECONNECT ELECTRICAL
 WHERE REQUIRED.

NOTE:
 ALL NATURAL GAS LINES SHOWN ARE BASED ON EXISTING
 RECORD DRAWINGS PROVIDED BY THE OWNER AND HAVE NOT
 BEEN SITE VERIFIED. LOCATE, VERIFY AND PROTECT ALL
 NATURAL GAS LINES PRIOR TO COMMENCEMENT OF WORK.

NOTE:
 REFER TO STRUCTURAL, MECHANICAL, AND ELECTRICAL
 DRAWINGS FOR ADDITIONAL DEMOLITION REQUIREMENTS

1 ROOF DEMOLITION PLAN
 A2.3 1:100
 NORTH

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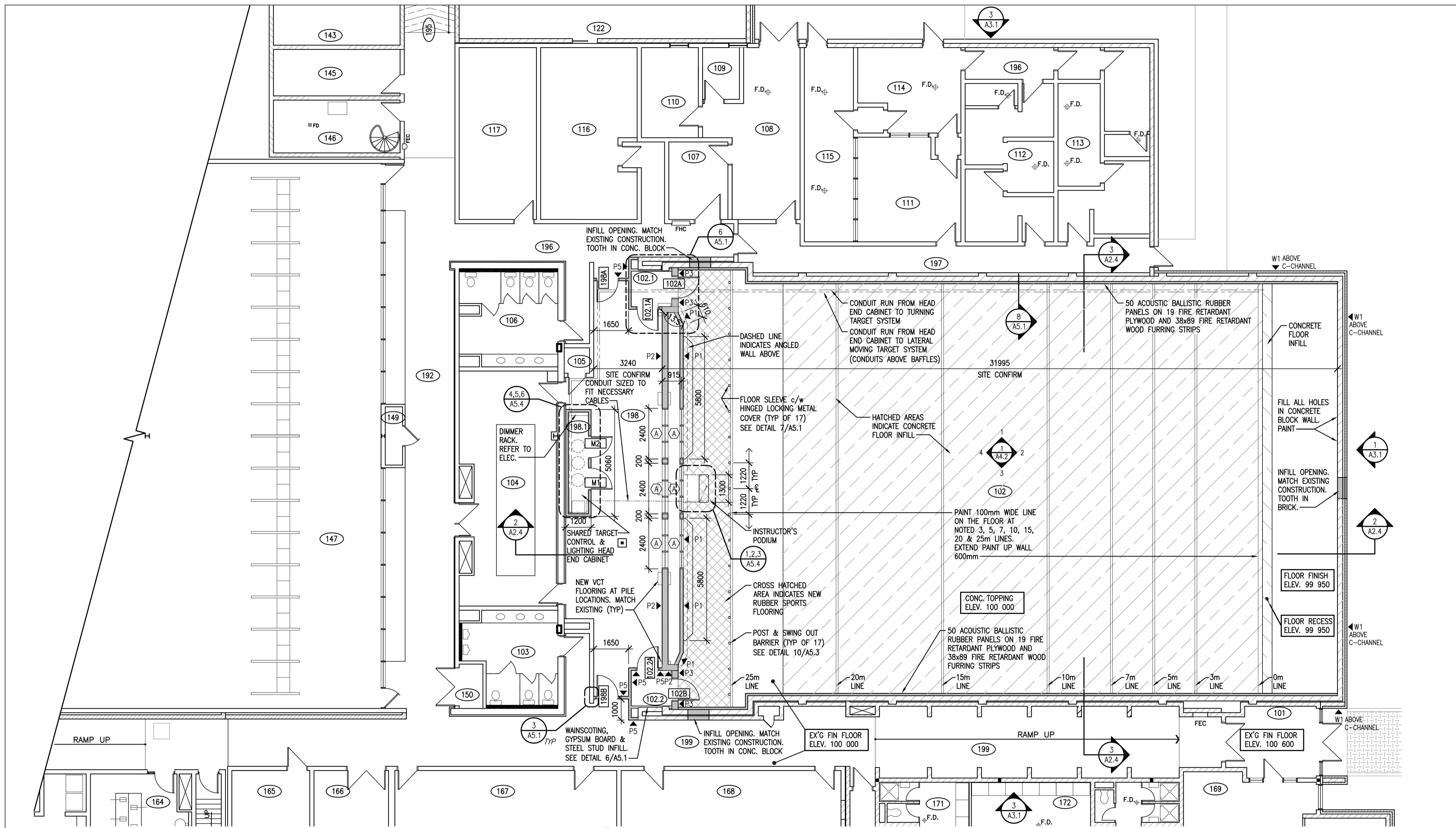
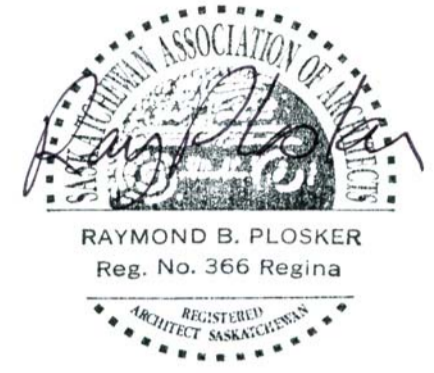
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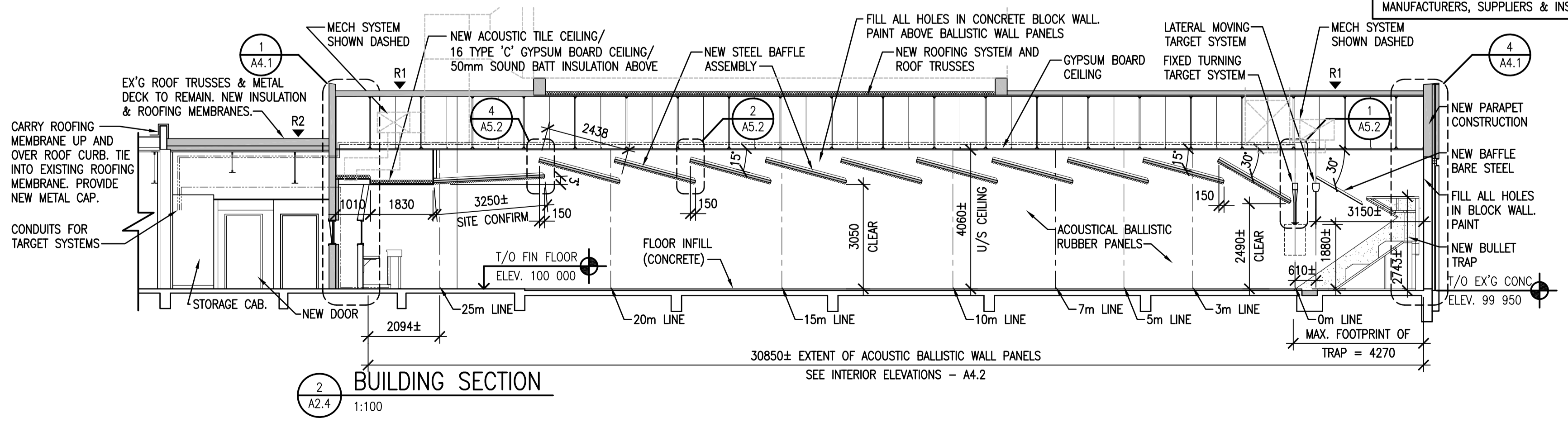
Drawing title/Titre du dessin
ROOF DEMOLITION PLAN

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REVISED FLOOR PLAN
 1:100
 NORTH

NOTE:
 FINAL CONFIGURATION OF BULLET TRAP,
 LATERAL MOVING TARGET SYSTEM, FIXED
 TURNING TARGET SYSTEM AND BAFFLE
 ASSEMBLY TO BE COORDINATED WITH ALL
 MANUFACTURERS, SUPPLIERS & INSTALLERS



BUILDING SECTION
 1:100

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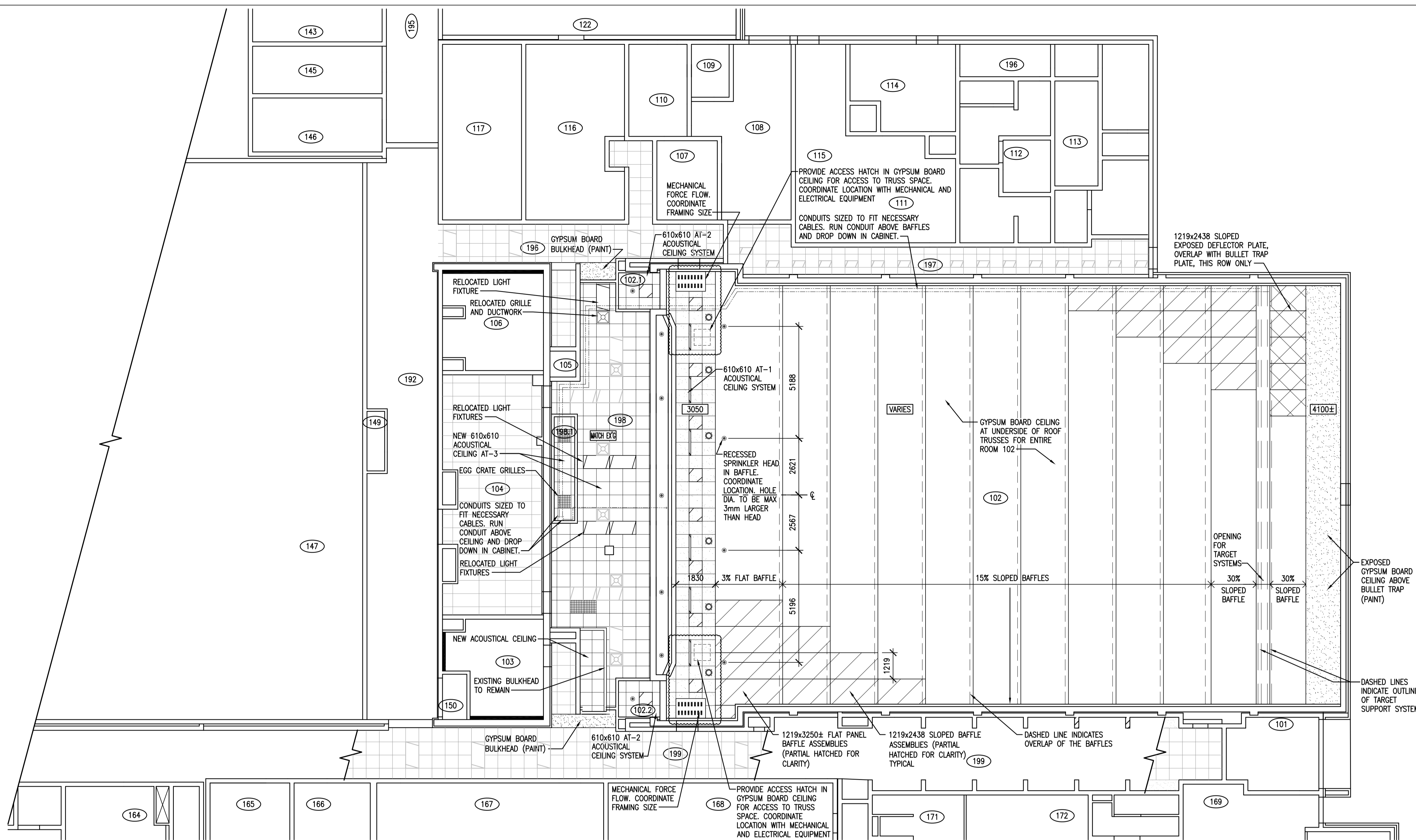
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**25A RANGE RENOVATION
 REGINA, SK**

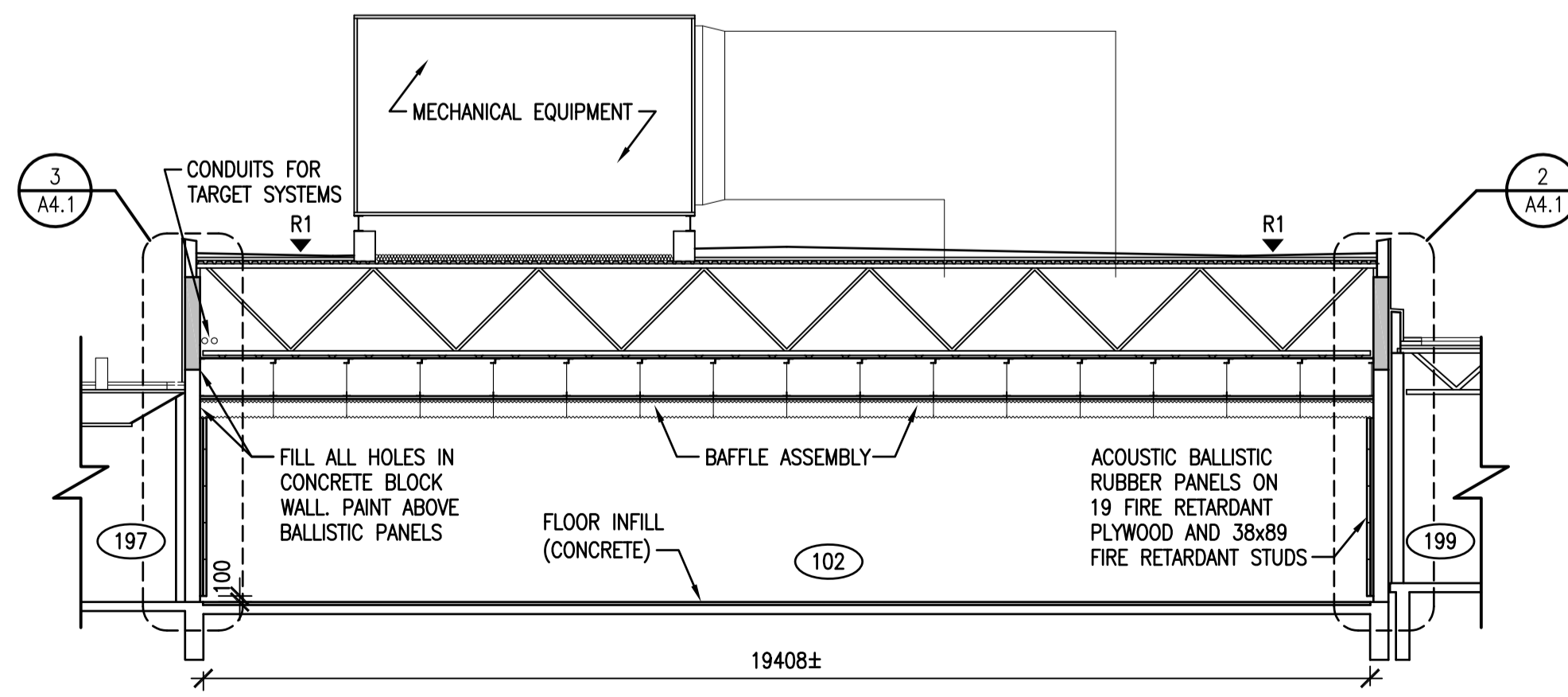
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**REVISED FLOOR PLAN
 BUILDING SECTION**

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1 REFLECTED CEILING PLAN
 A2.5 1:100



3 BUILDING SECTION
 A2.4 1:100

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 REGINA, SK**

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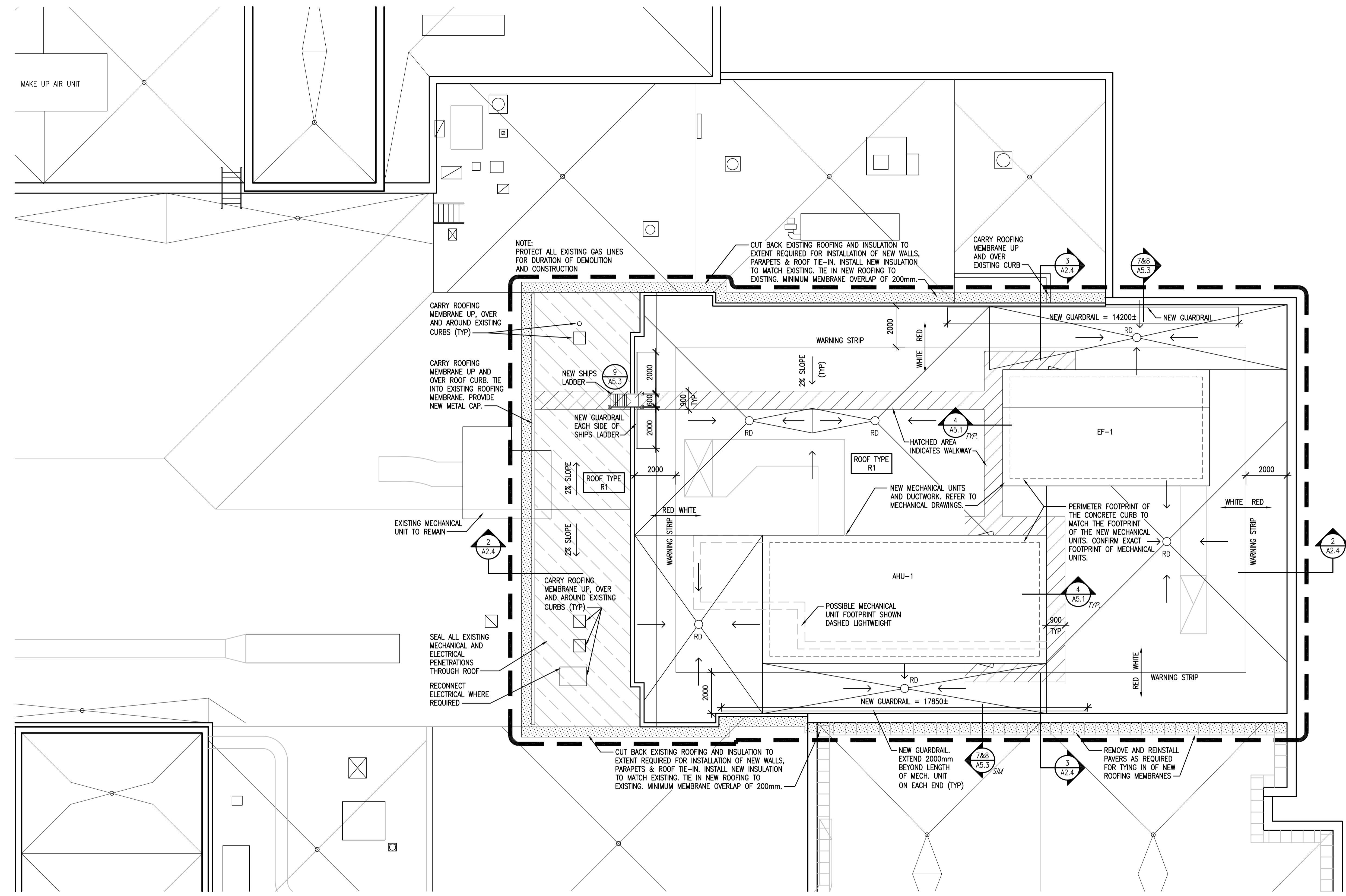
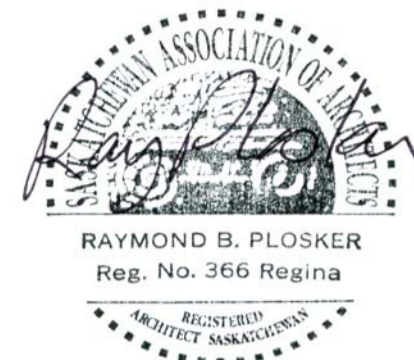
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**REVISED CEILING PLAN
 BUILDING SECTION**

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1 REVISED ROOF PLAN
 A2.6 1:100

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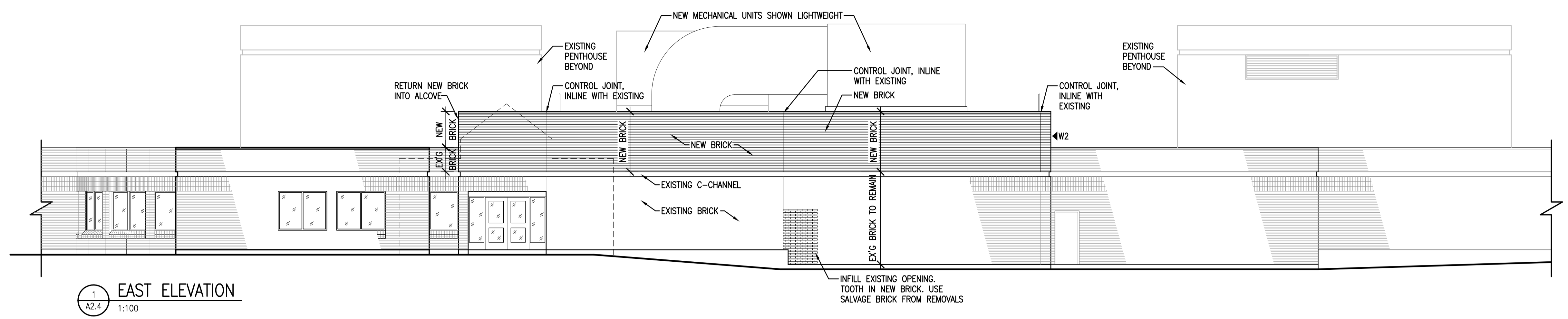
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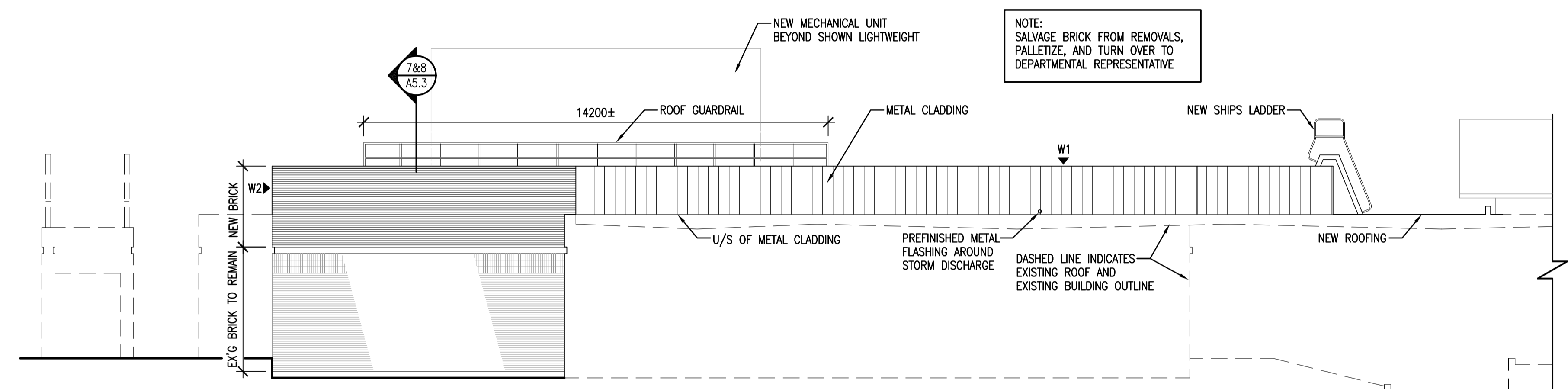
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REVISED ROOF PLAN

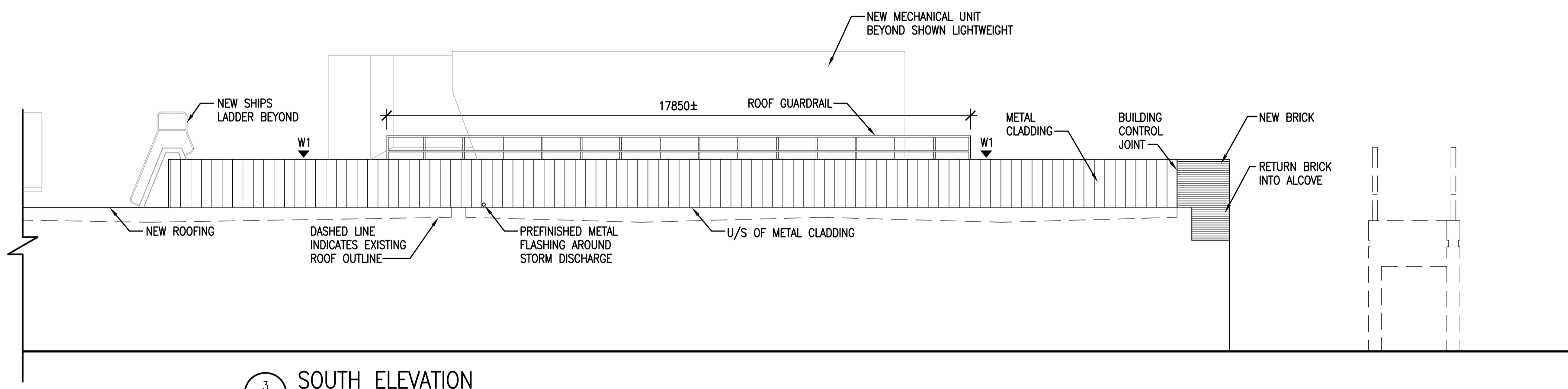
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1 EAST ELEVATION
 A2.4 1:100



2 NORTH ELEVATION
 A2.4 1:100



3 SOUTH ELEVATION
 A2.4 1:100

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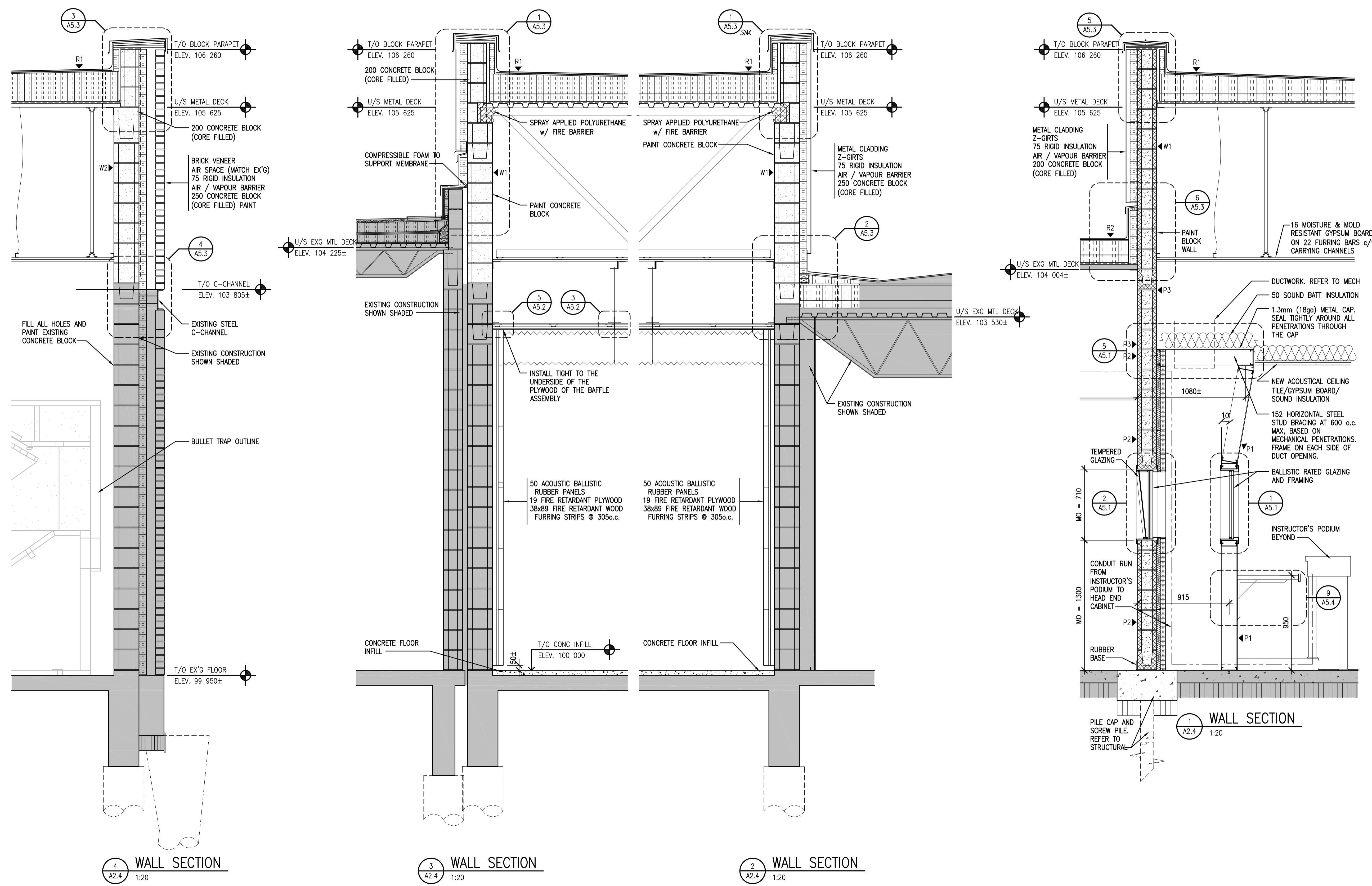
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EXTERIOR ELEVATIONS

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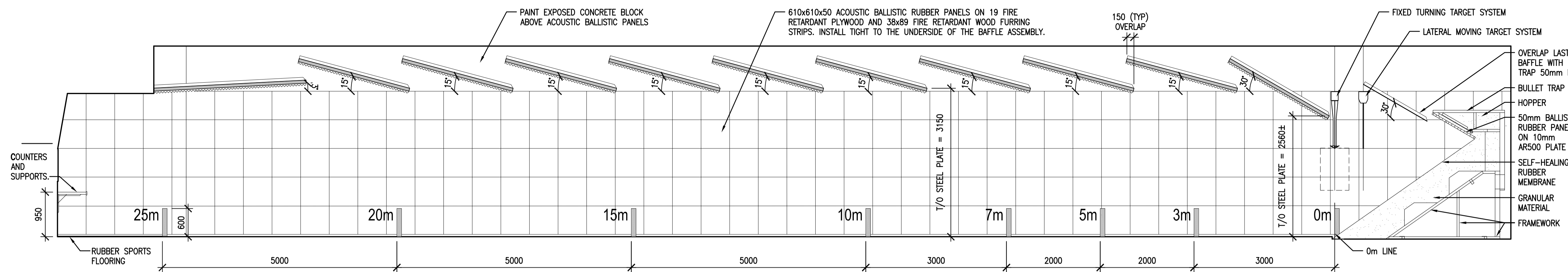
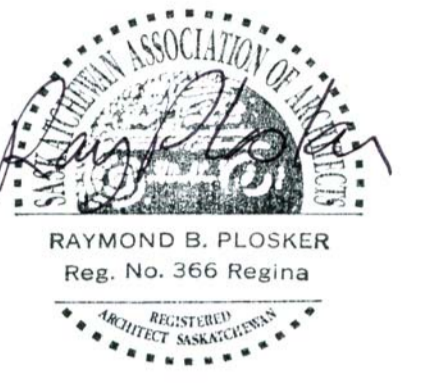
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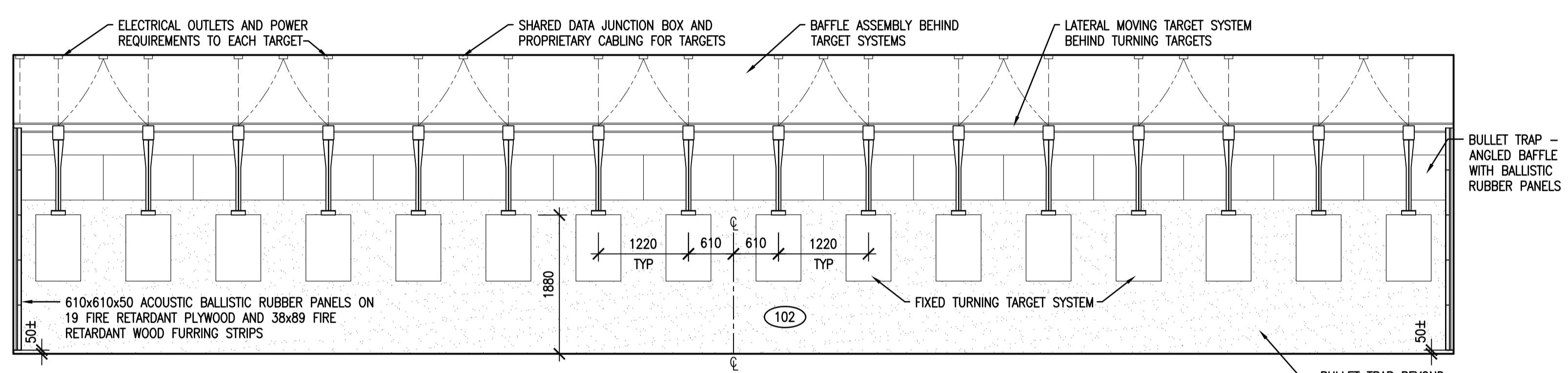
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WALL SECTIONS

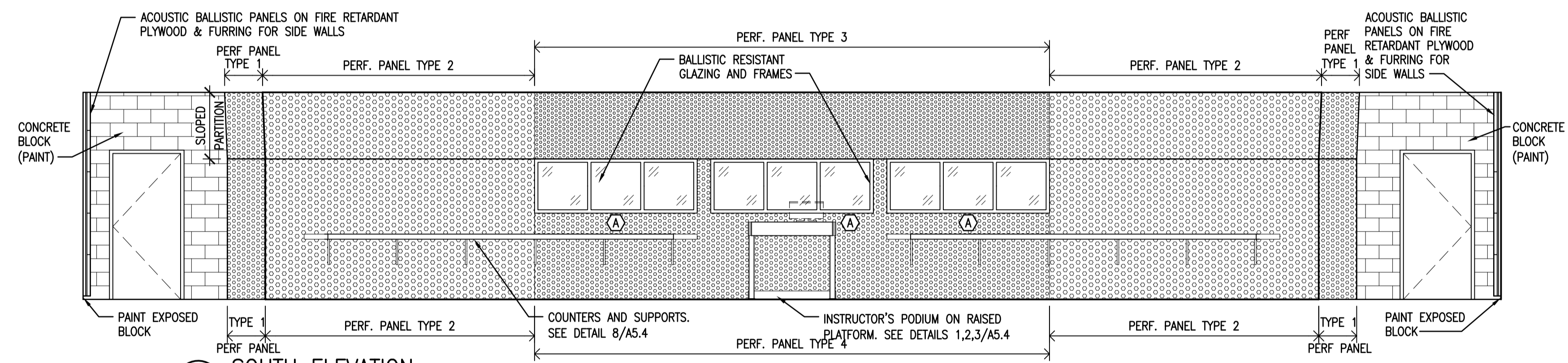
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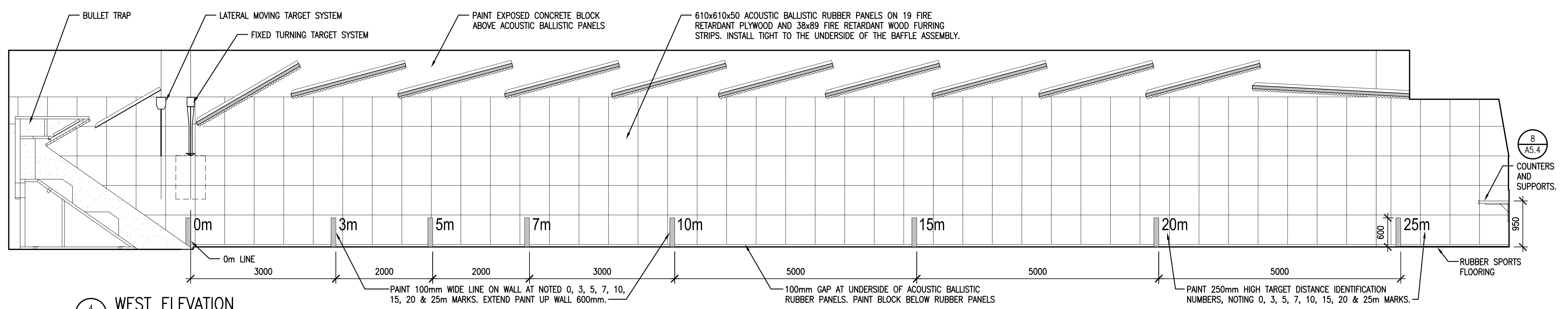
1 NORTH ELEVATION
 A2.4 1:50



2 EAST ELEVATION
 A2.4 1:50



3 SOUTH ELEVATION
 A2.4 1:50



4 WEST ELEVATION
 A2.4 1:50

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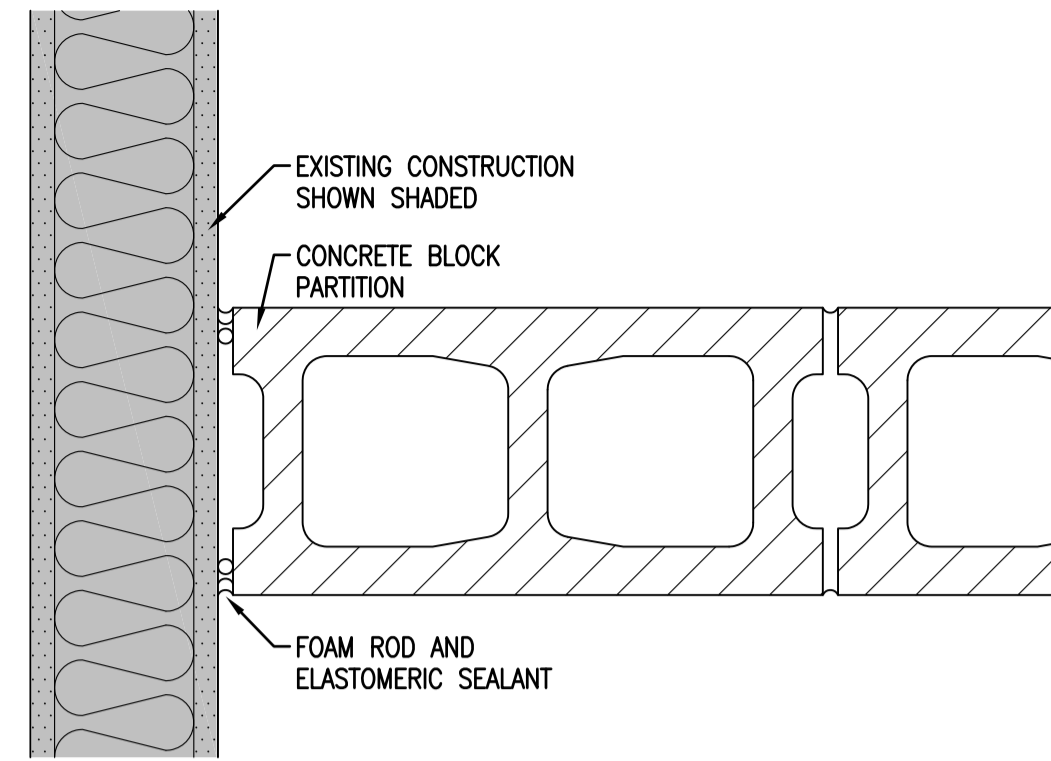
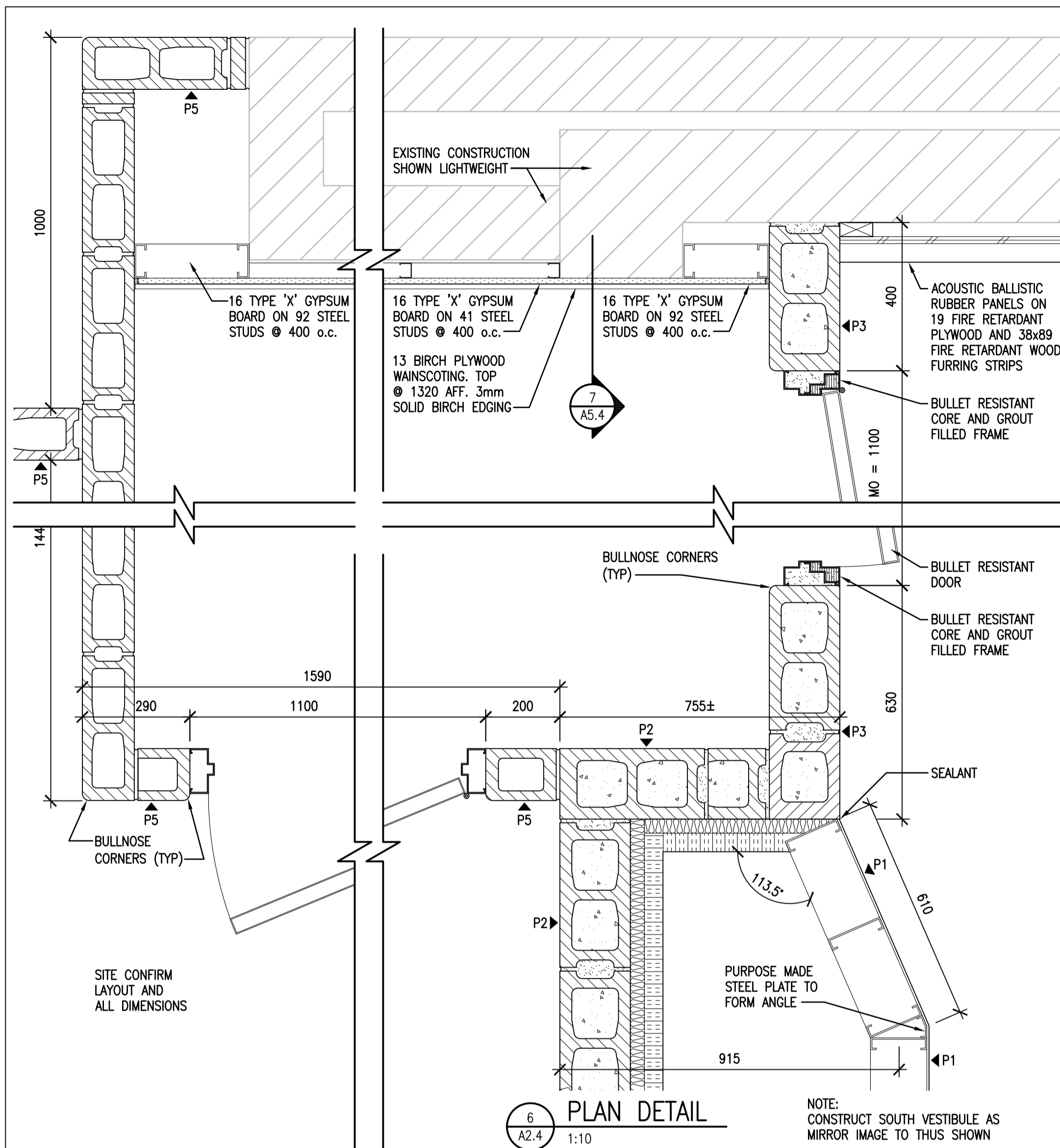
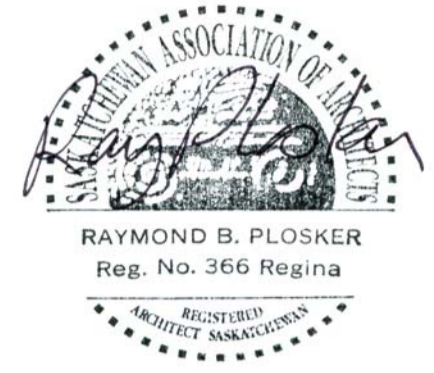
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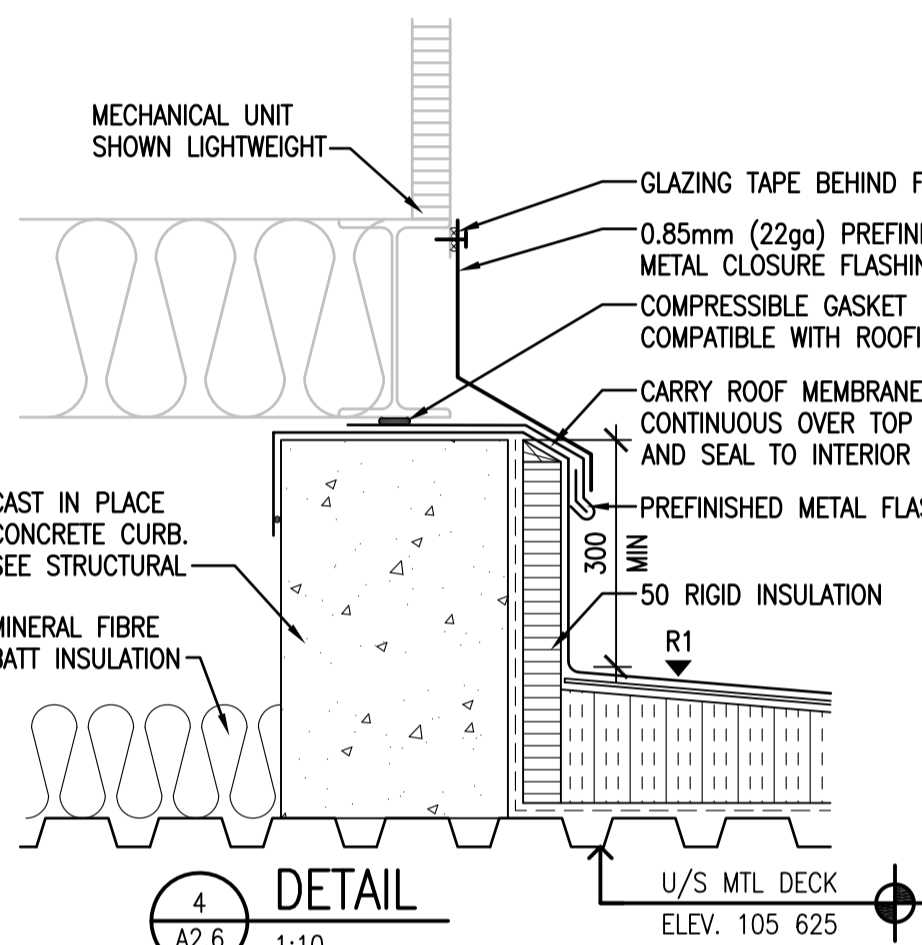
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Drawing title/Titre du dessin
INTERIOR ELEVATIONS

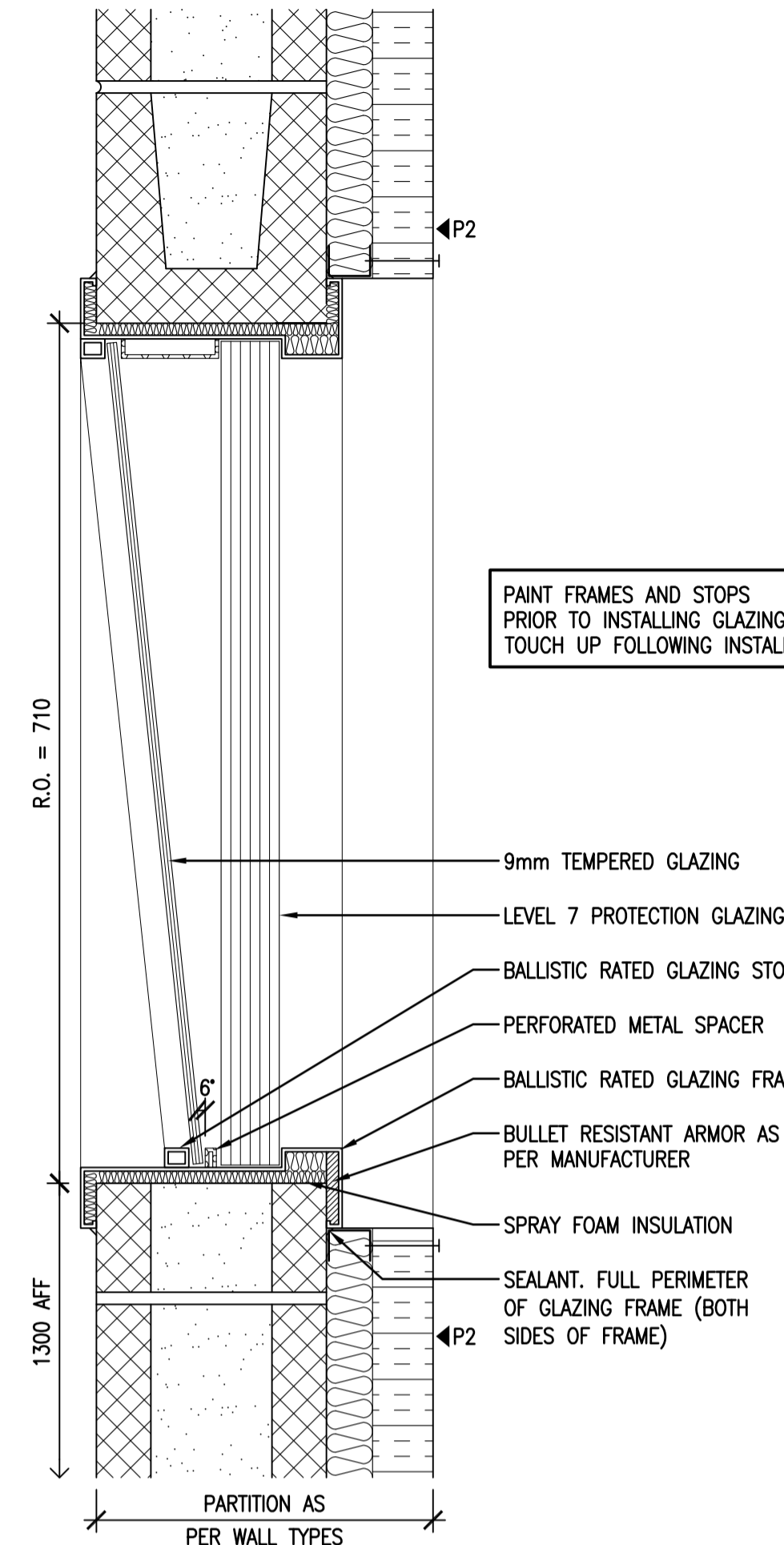
Project No./No. du projet 27/2015	Sheet/Feuille A4.2 OF 14	Revision no./ La Révision no. 0
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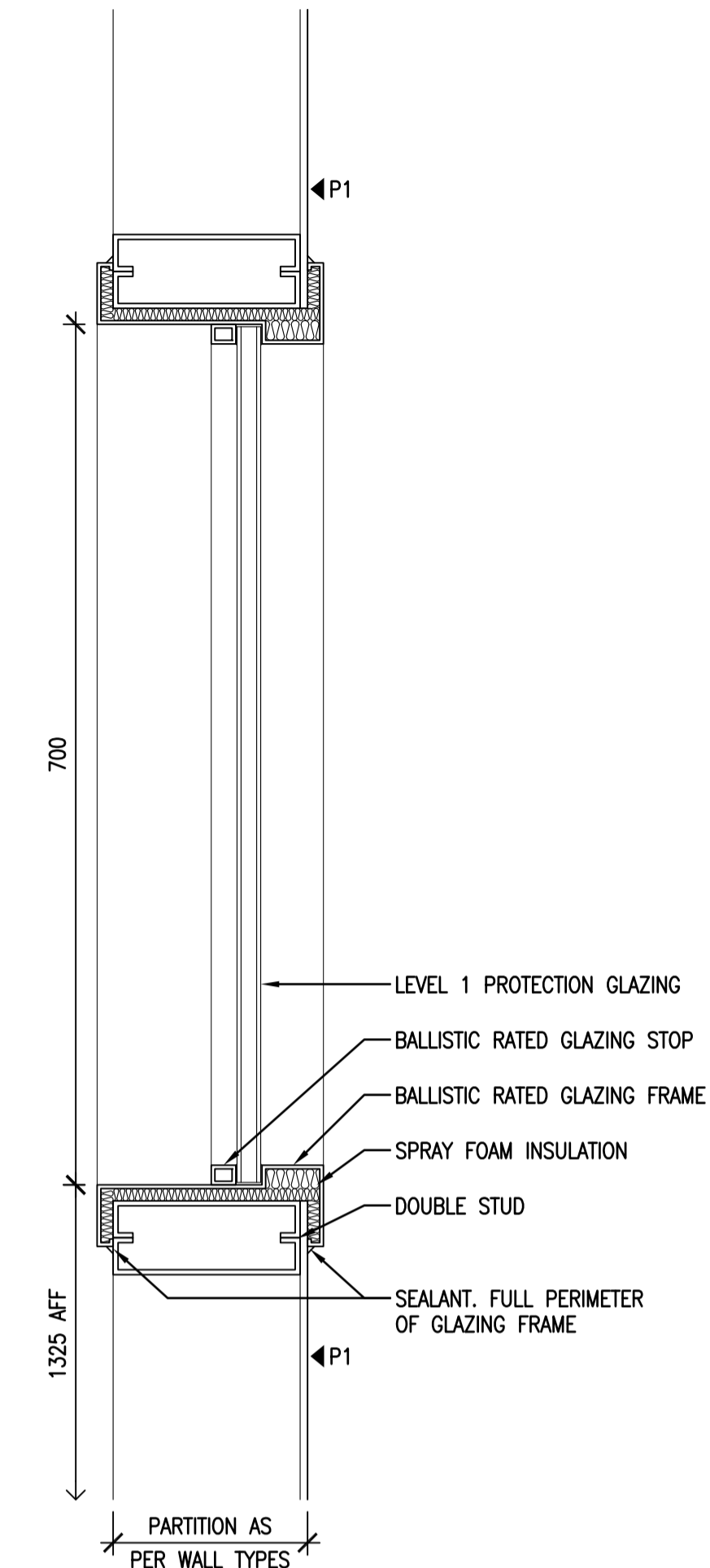
3 PLAN DETAIL
A2.4 1:5



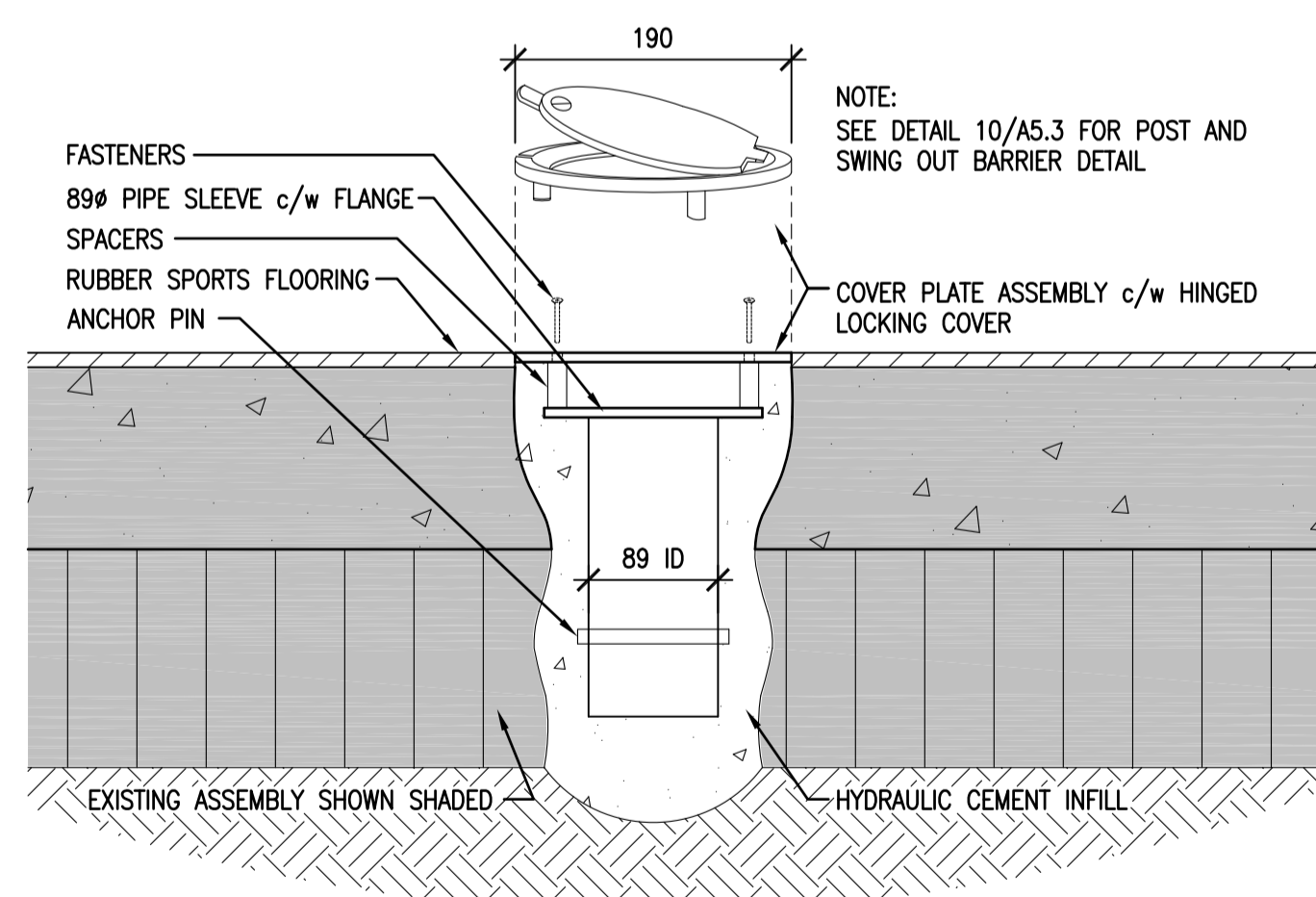
4 DETAIL
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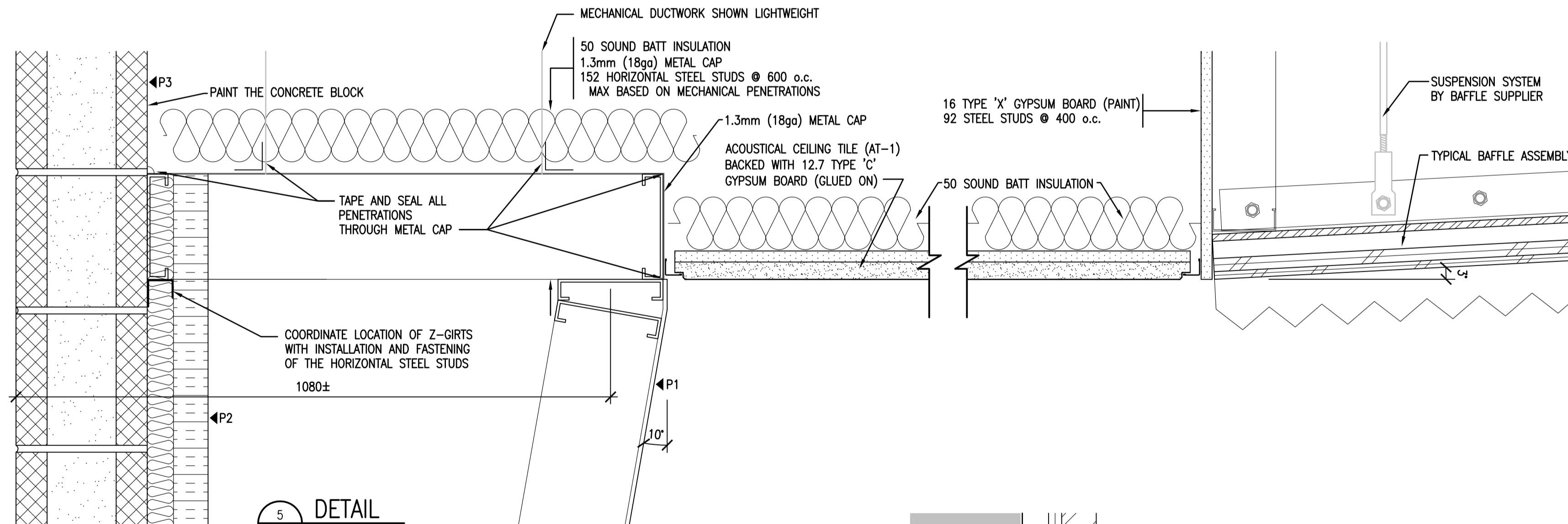
2 OBSERVATION WINDOW FRAME
A4.1 1:5



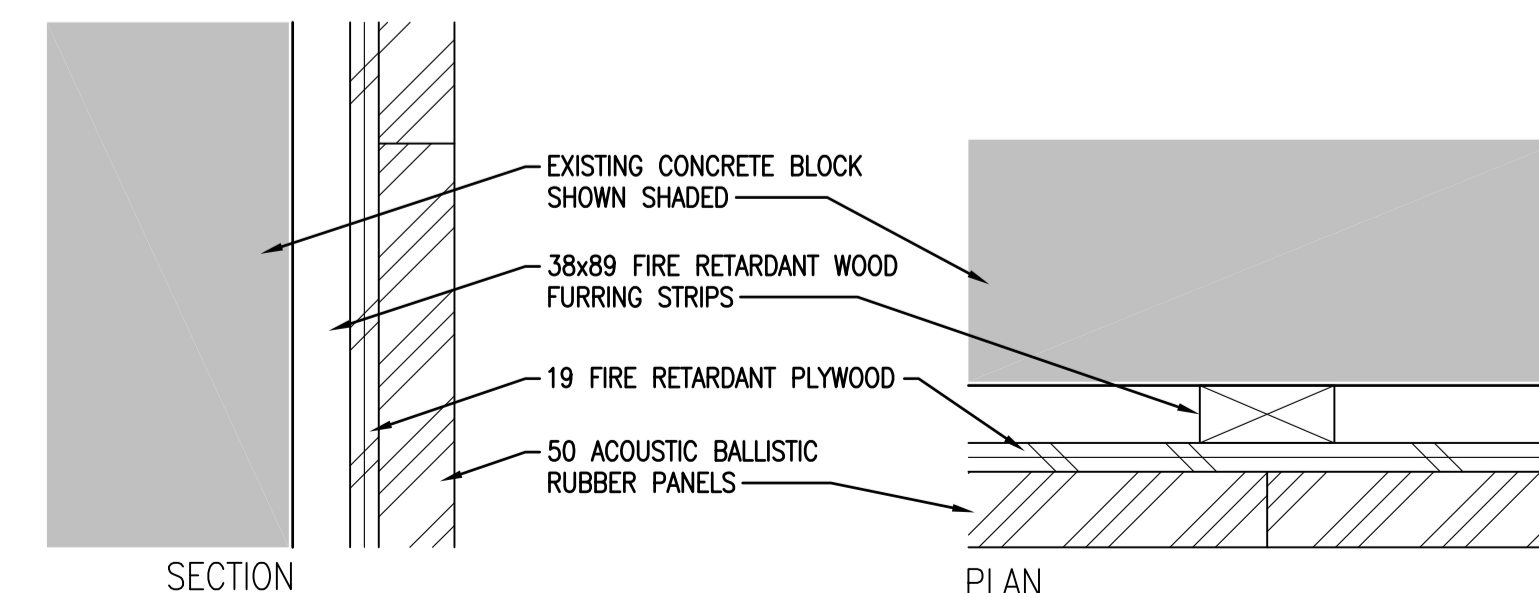
1 OBSERVATION WINDOW FRAME
A4.1 1:5



7 DETAIL
A2.4 1:5



5 DETAIL
A4.1 1:5



8 DETAIL
A2.4 1:5

DO NOT SCALE DRAWINGS

Revision/	Description/Description	Date/Date
0	ISSUED FOR TENDER	2016-07-21

Project title/Titre du projet

**25A RANGE RENOVATION
REGINA, SK**

Approved by/Approve par

Designed by/Concepé par
RP

Drawn by/Dessiné par
RHM / RP
RCMP Project Manager/Administrateur de Projets GRC
JD

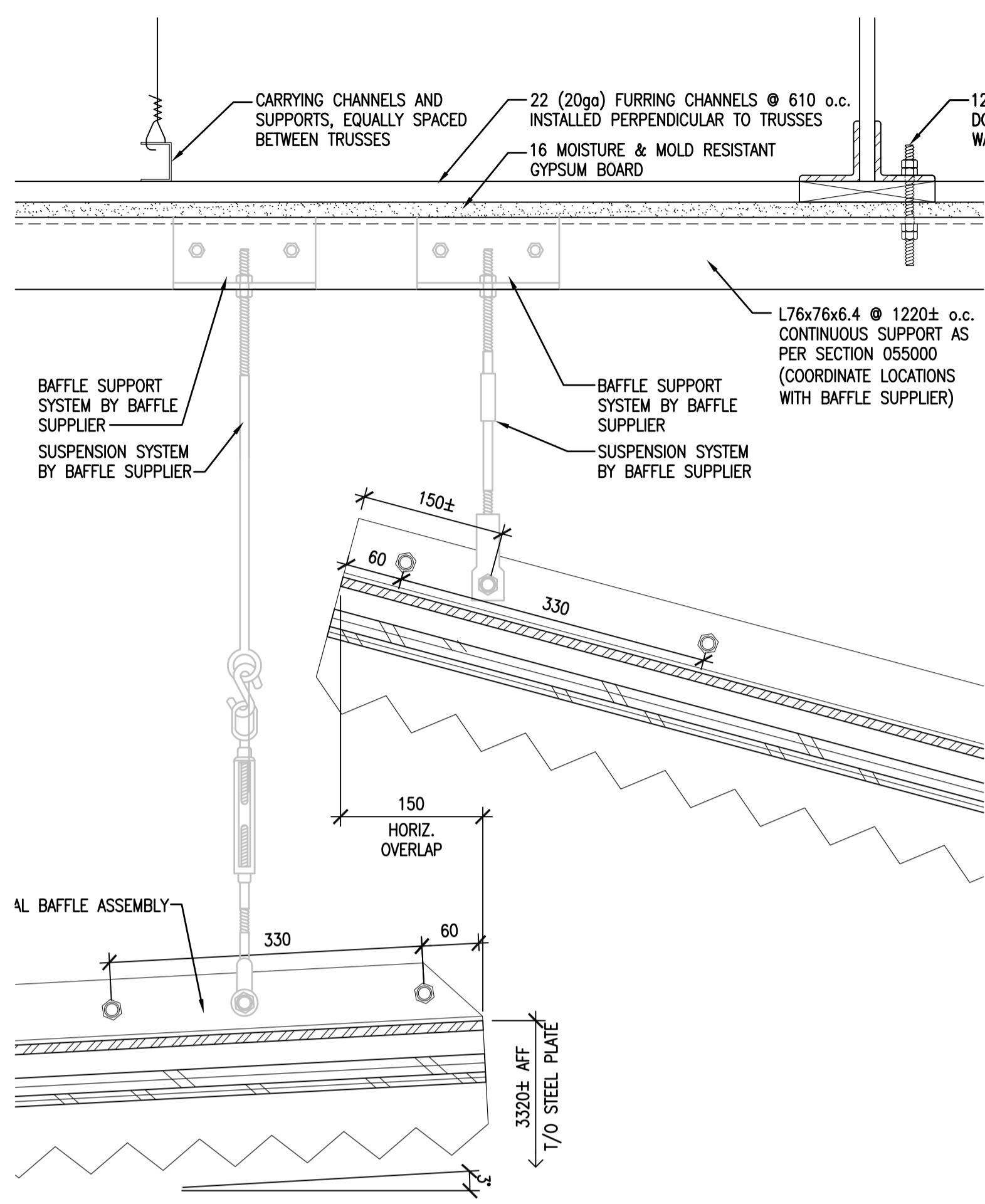
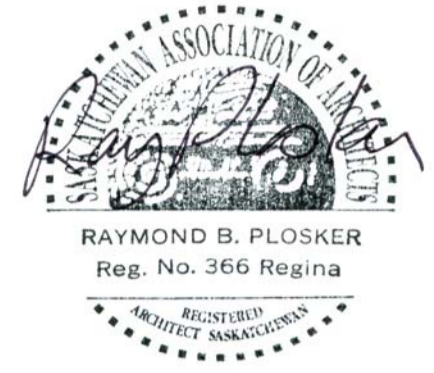
RCMP, Architectural and Engineering Resources Manager/
Ressources Architectural et de Directeur d'ingénierie, GRC

Client/client

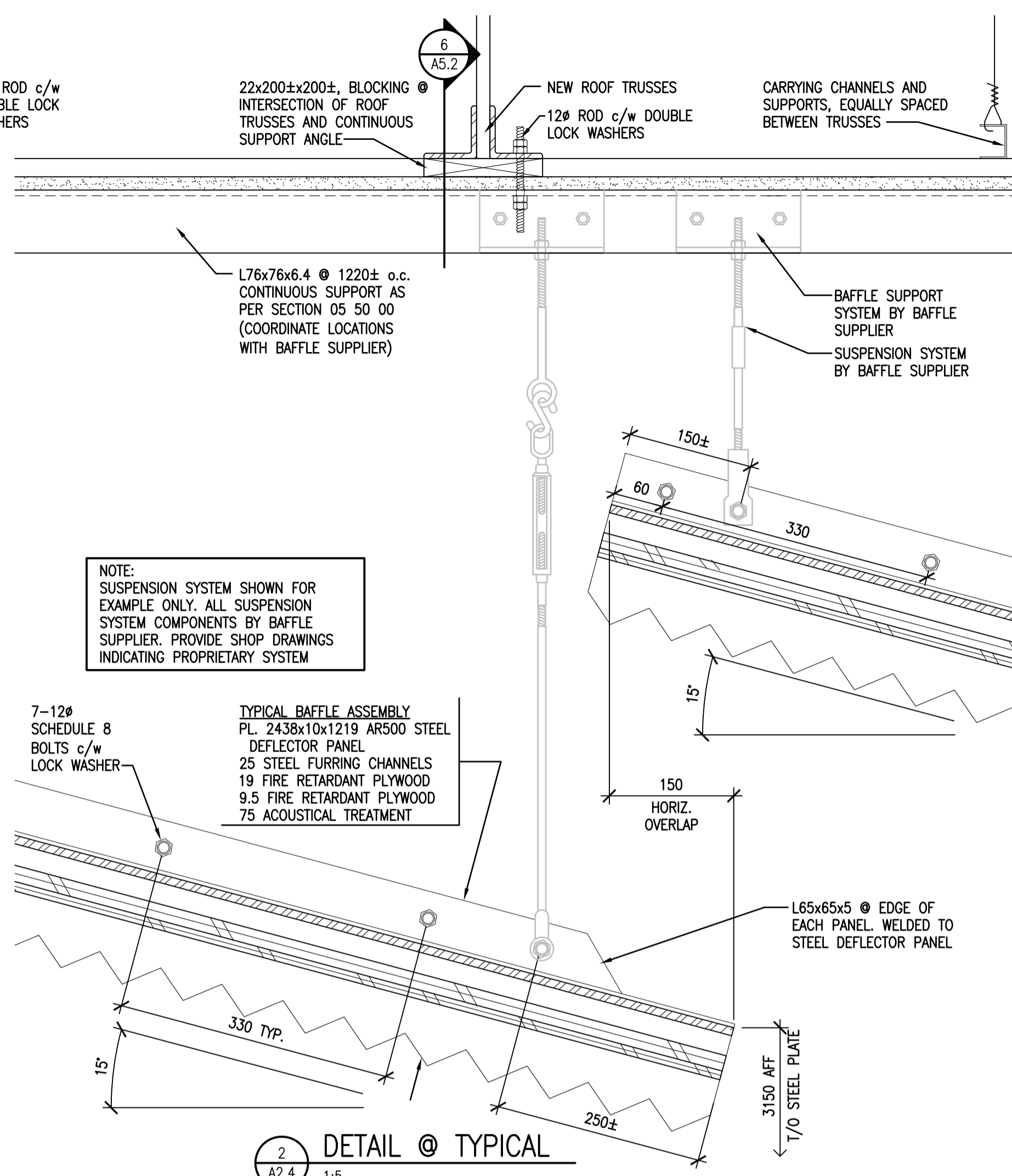
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DETAILS

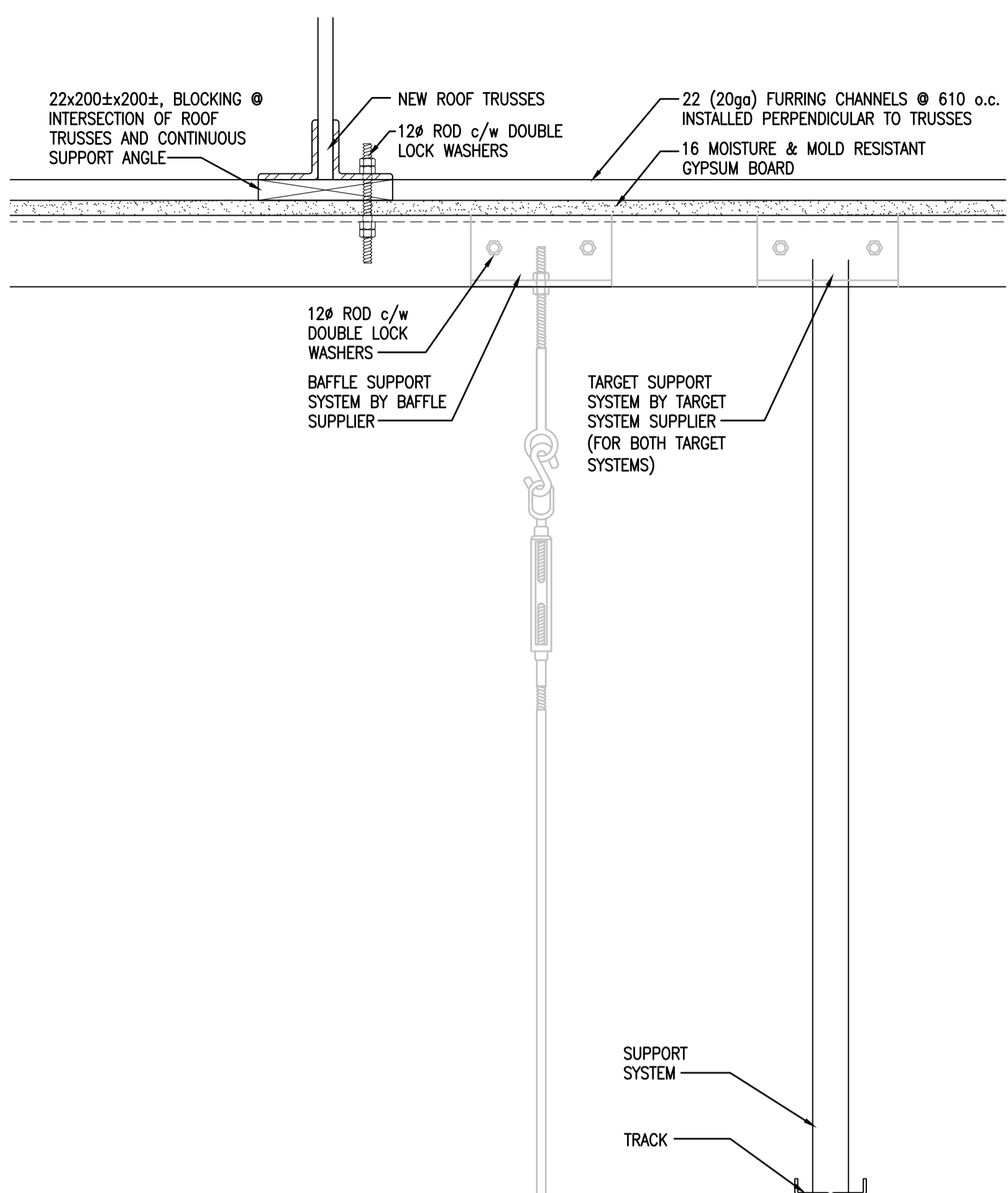
Project No./No. du projet	Sheet/Feuille	Revision no./ La Révision no.
27/2015	A5.1 OF 14	0



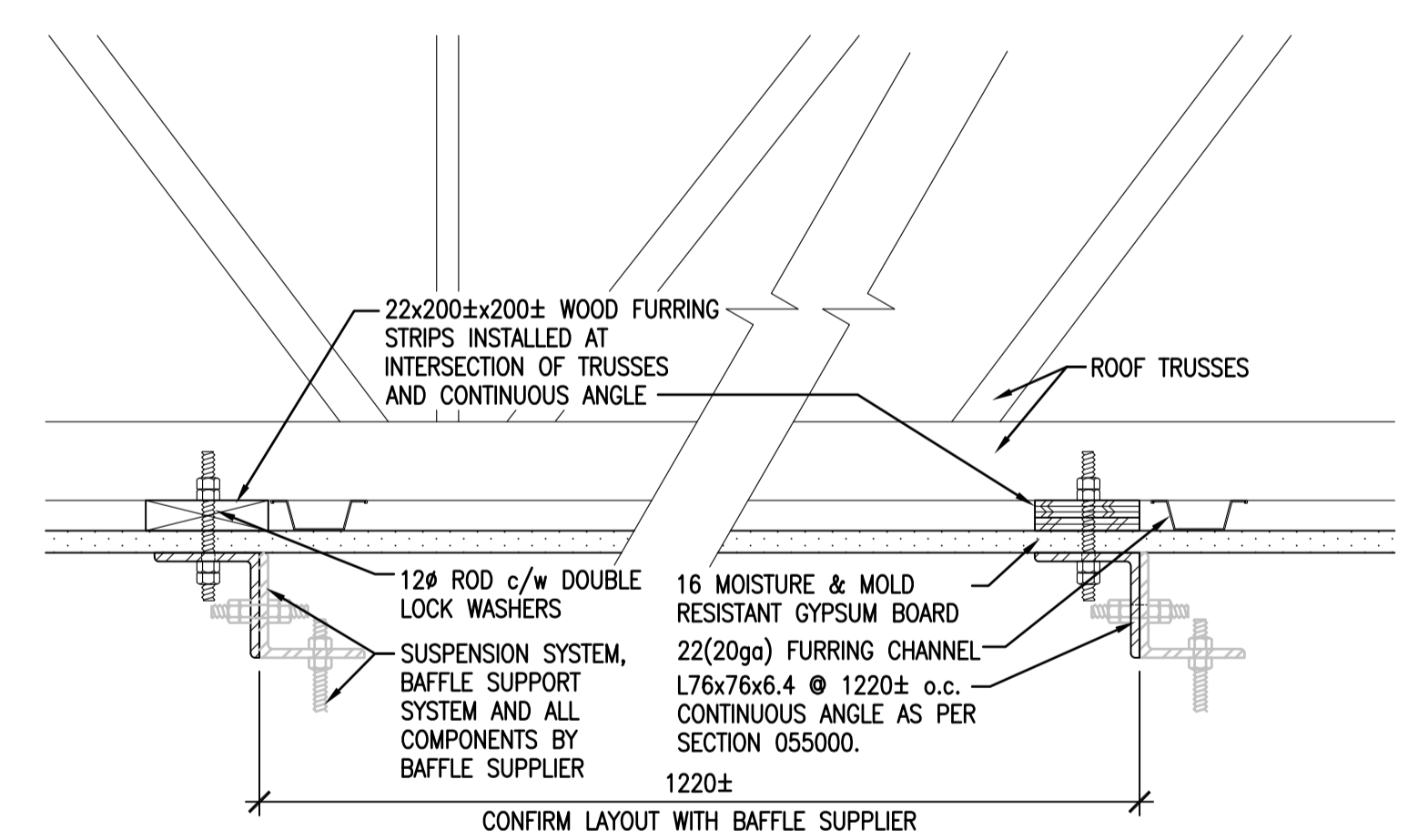
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A2.4
1:5
DETAIL @ SHOOTING LINE



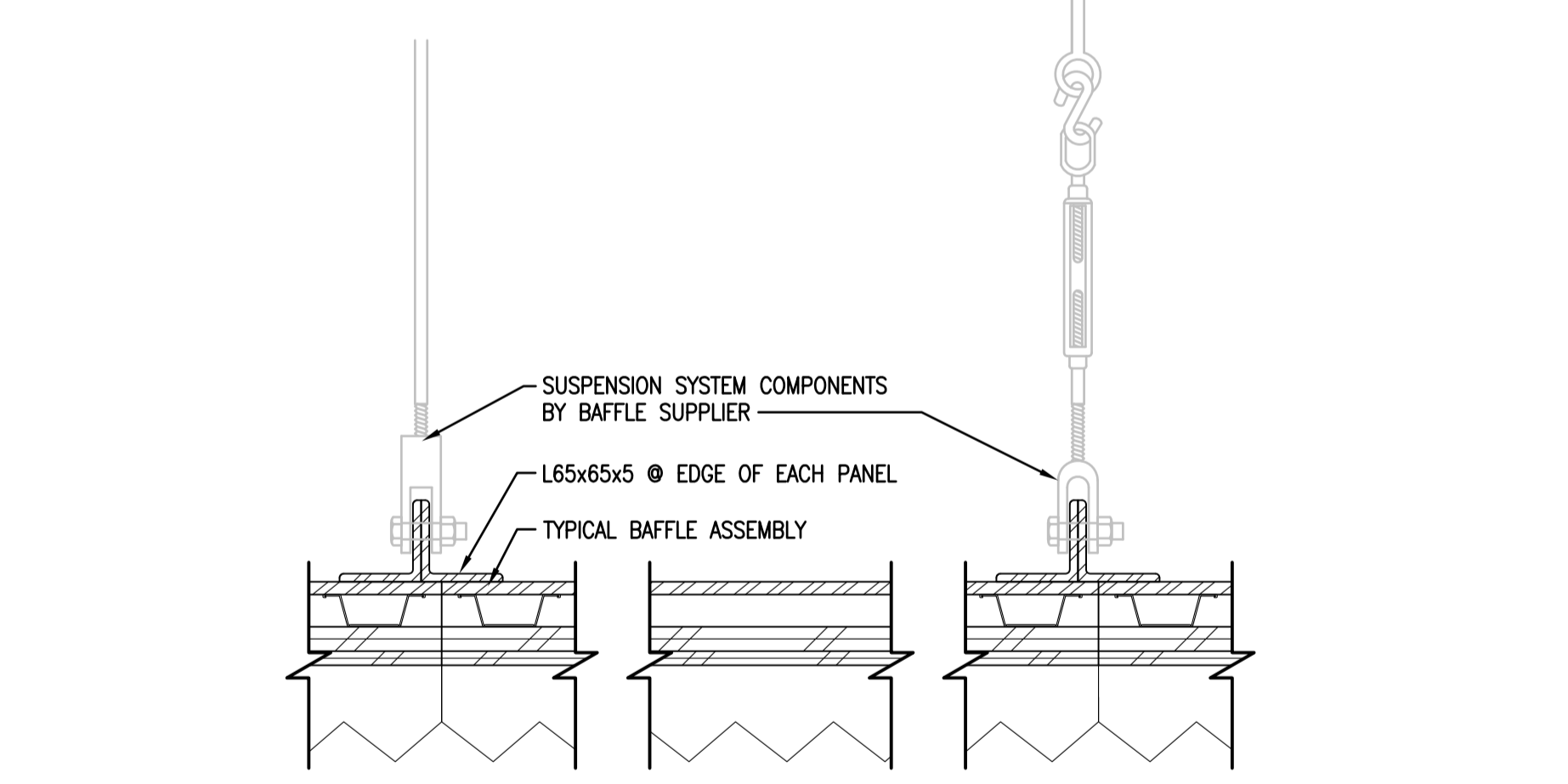
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1:5
DETAIL @ TYPICAL



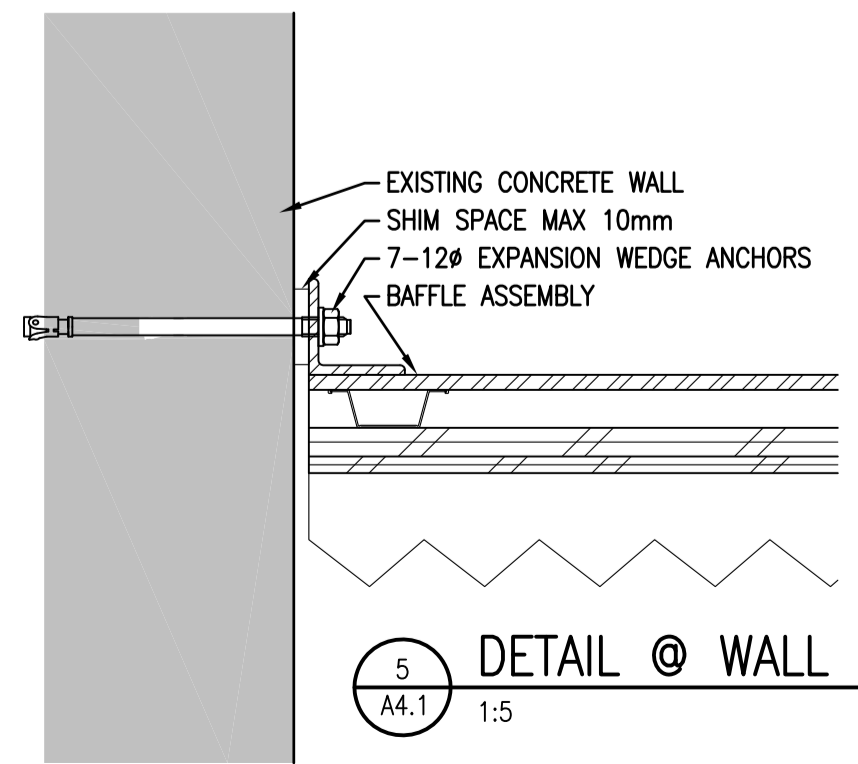
1
A2.4
1:5
DETAIL @ TARGETS



6
A5.2
1:5
DETAIL



3
A4.1
1:5
DETAIL @ ADJOINING PANELS



5
A4.1
1:5
DETAIL @ WALL

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Revision/Revision	Description/Description	Date/Date
0	ISSUED FOR TENDER	2016-07-21

Project title/Titre du projet

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REGINA, SK**

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RCMP Project Manager/Administrateur de Projets GRC
JD

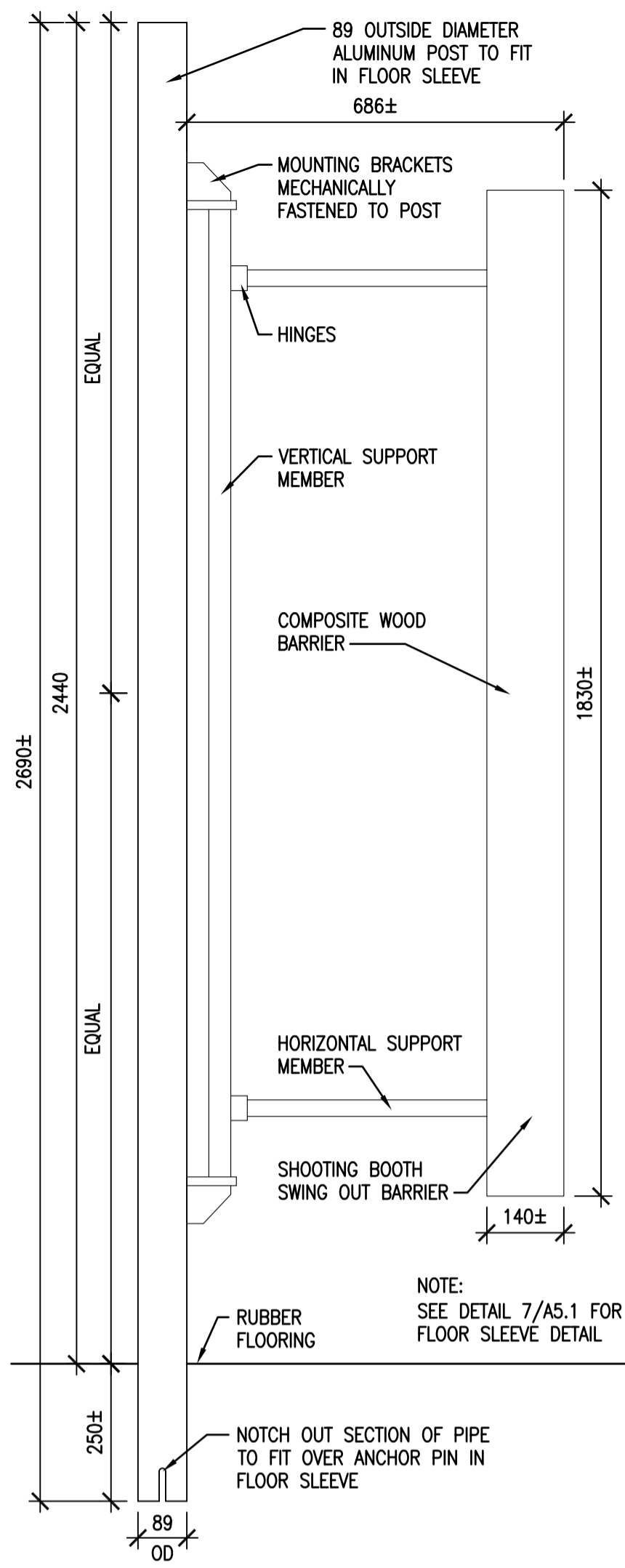
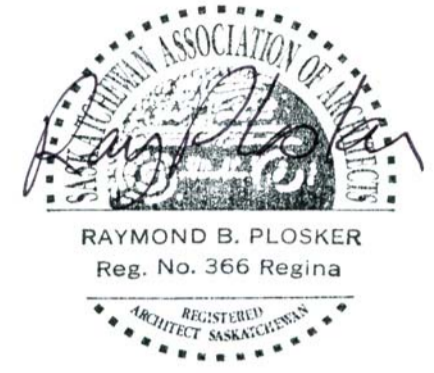
Client/client

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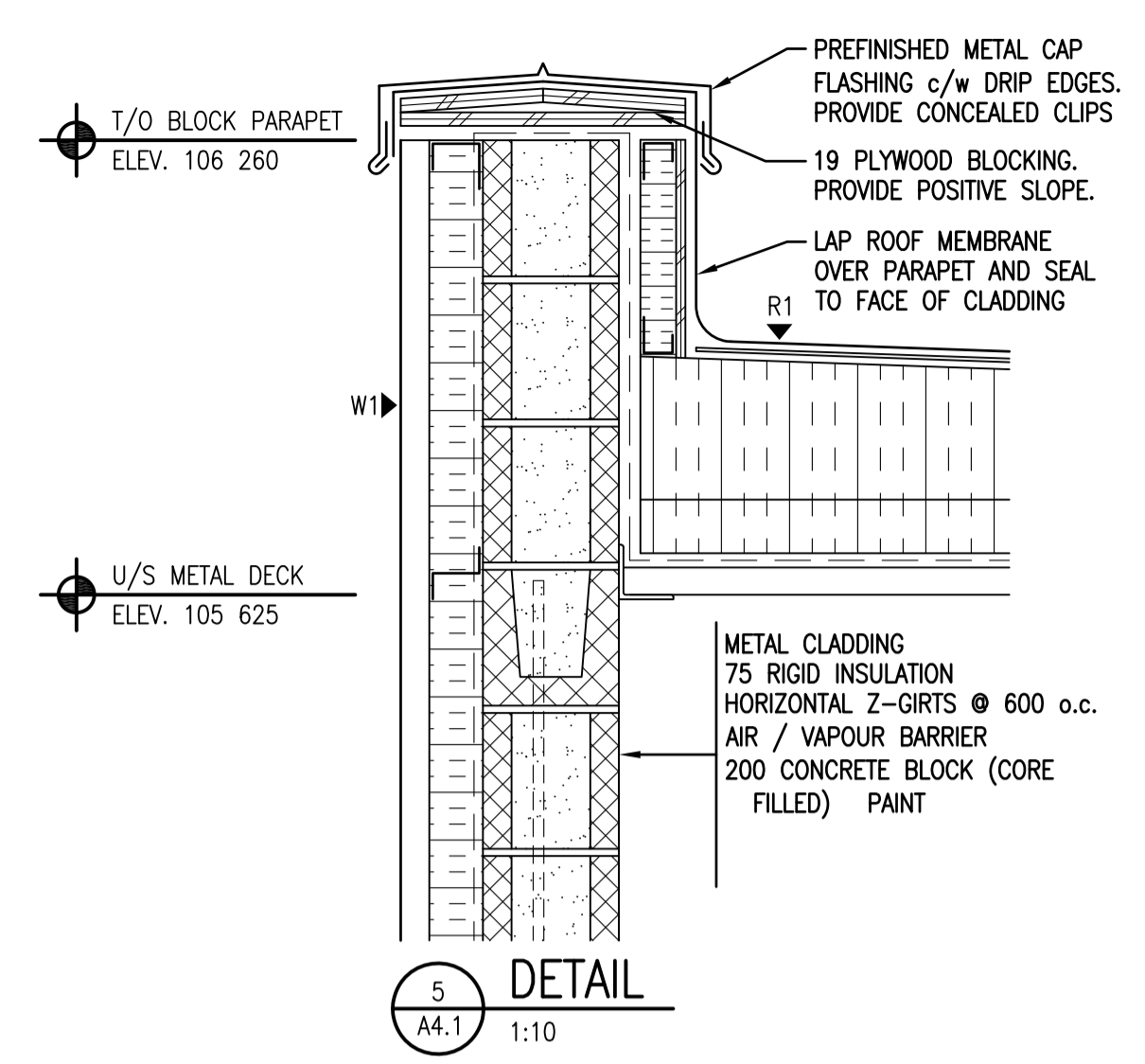
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Drawing title/Titre du dessin
DETAILS

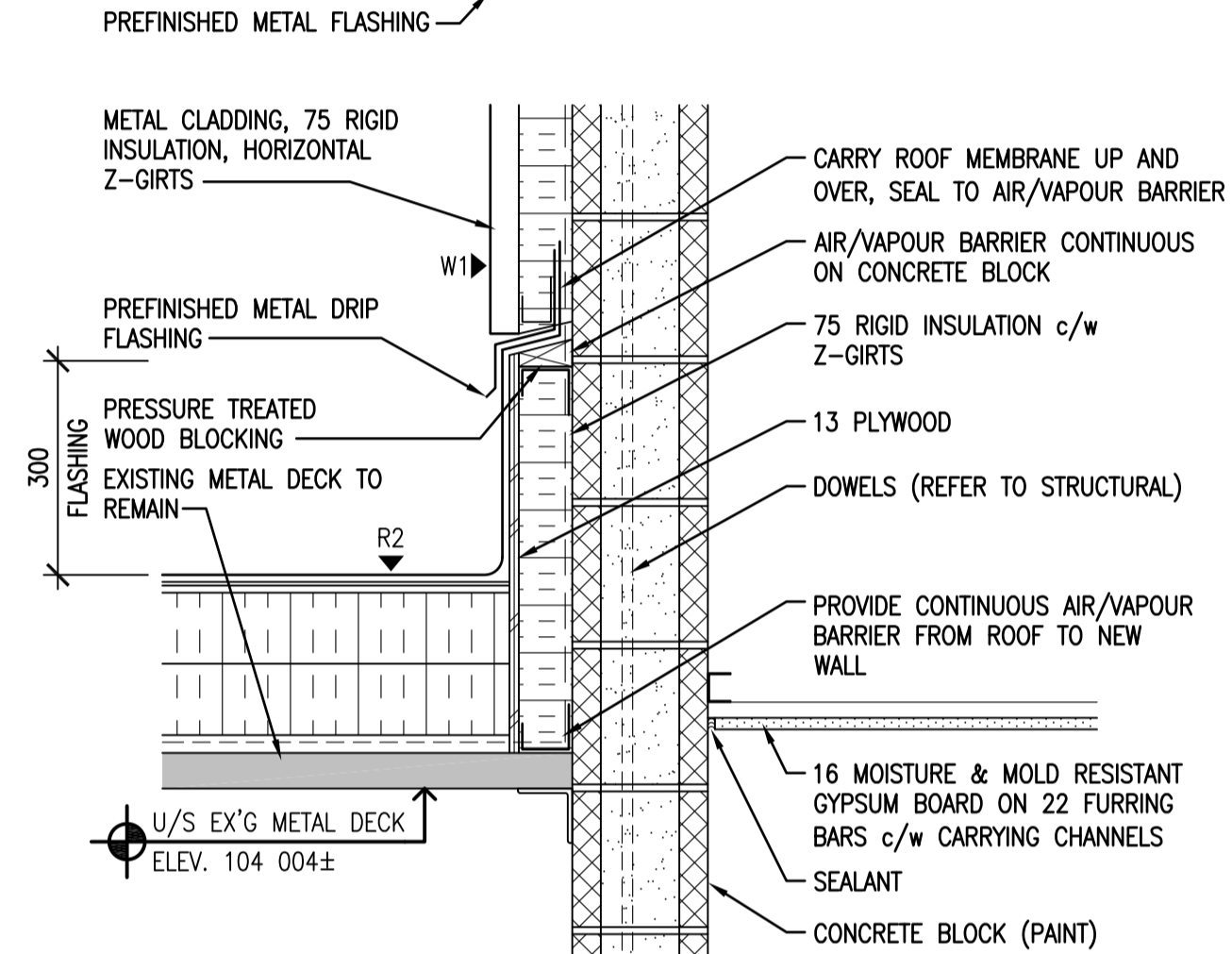
Project No./No. du projet	Sheet/Feuille	Revision no./ La Révision no.
27/2015	A5.2 OF 14	0



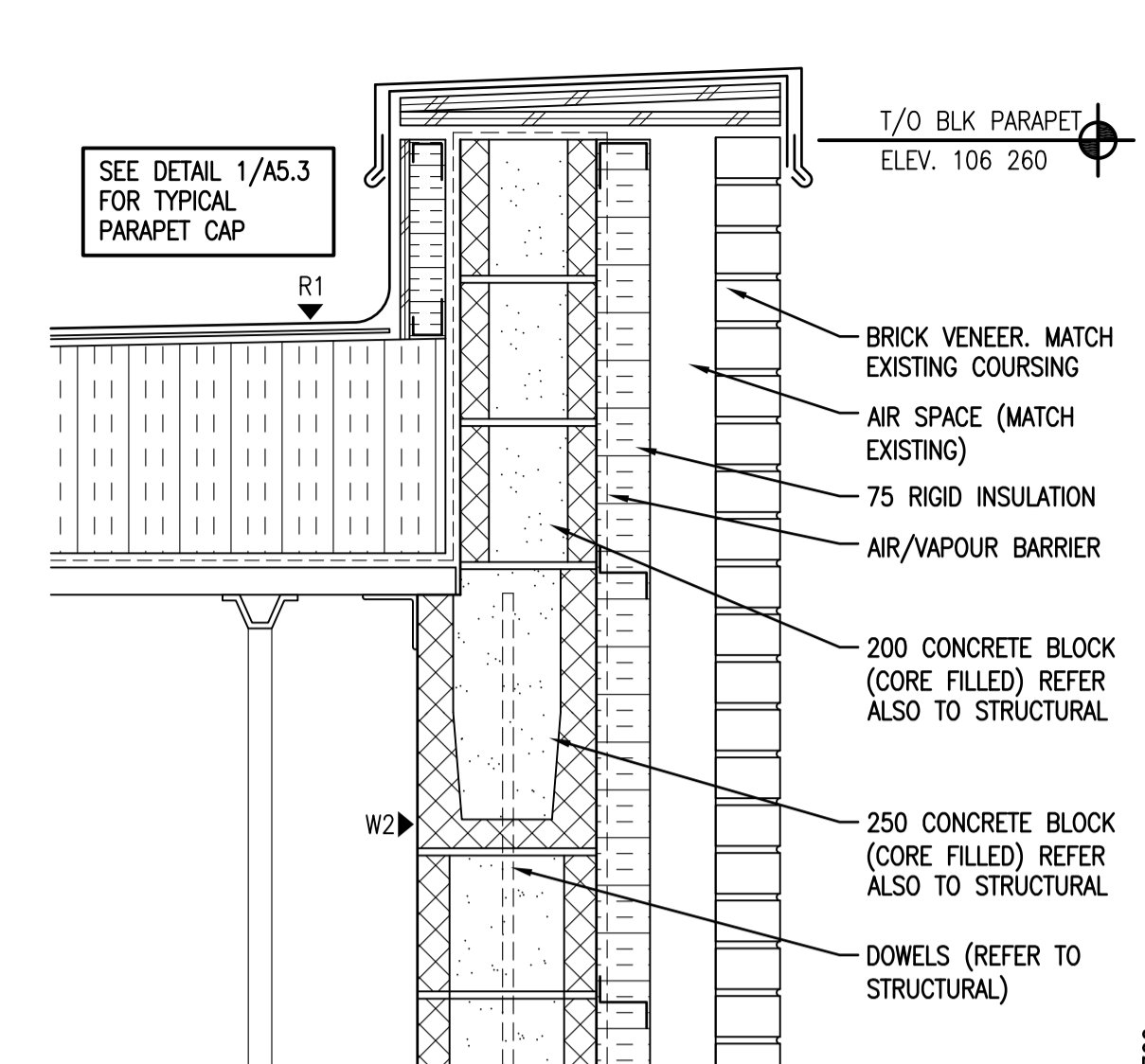
10 POST & SWING OUT BARRIER
 A2.4 1:10



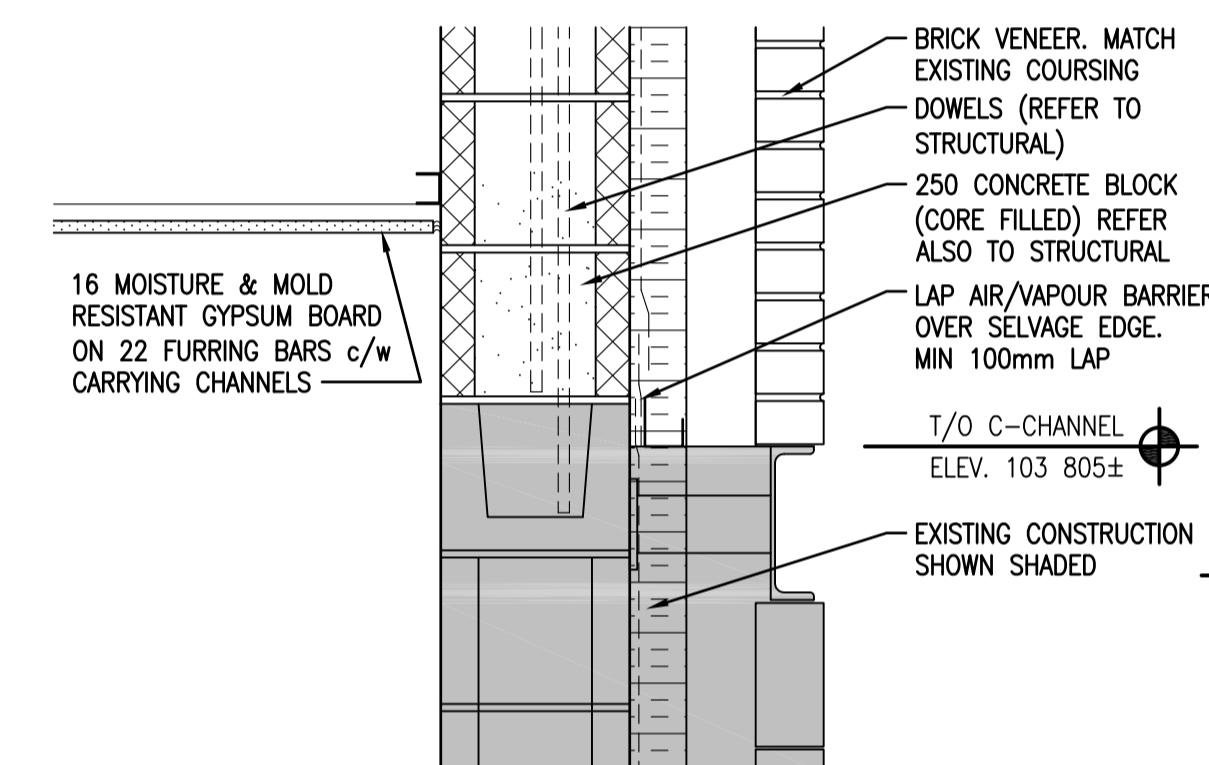
5 DETAIL
 A4.1 1:10



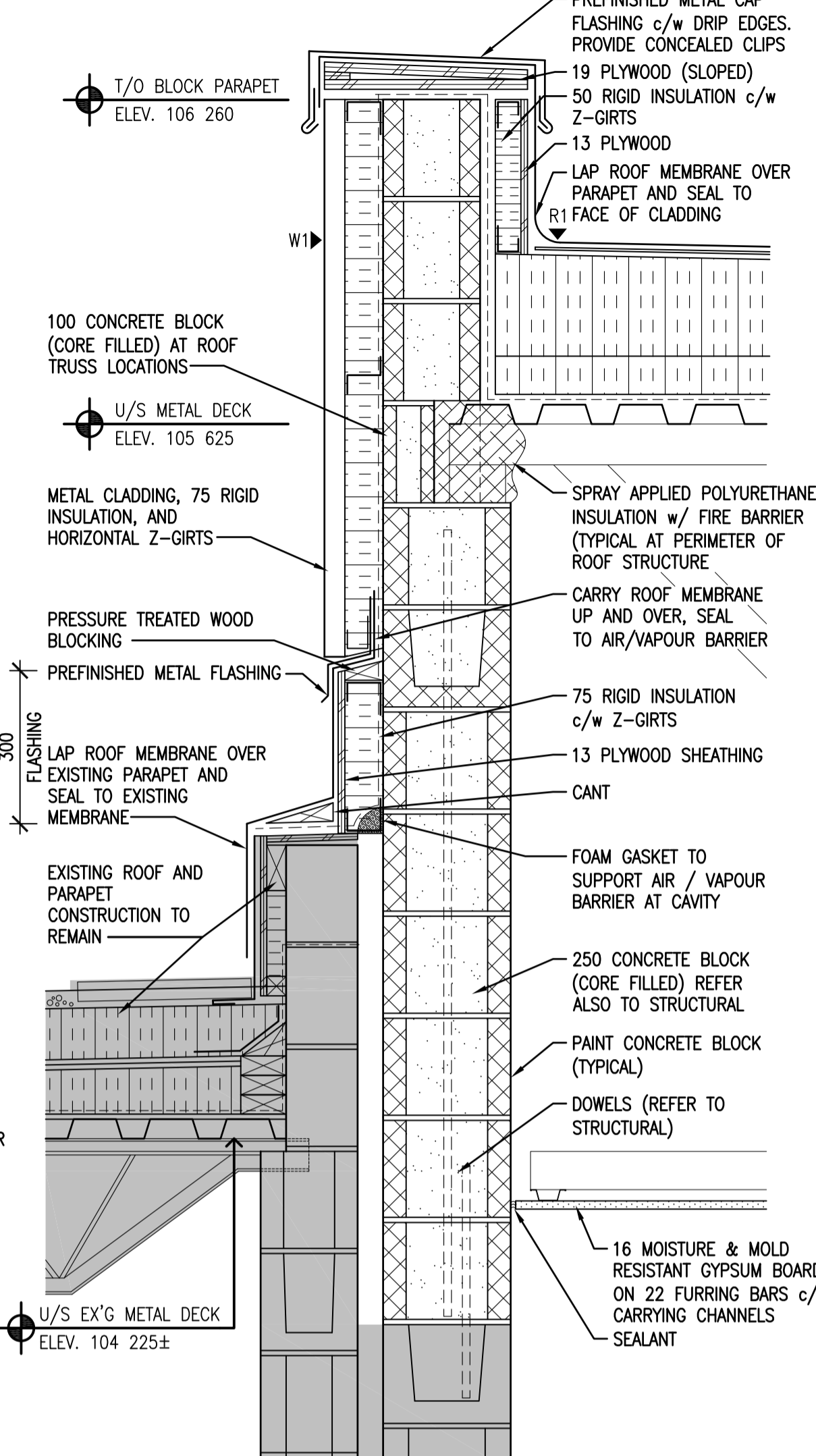
6 DETAIL
 A4.1 1:10



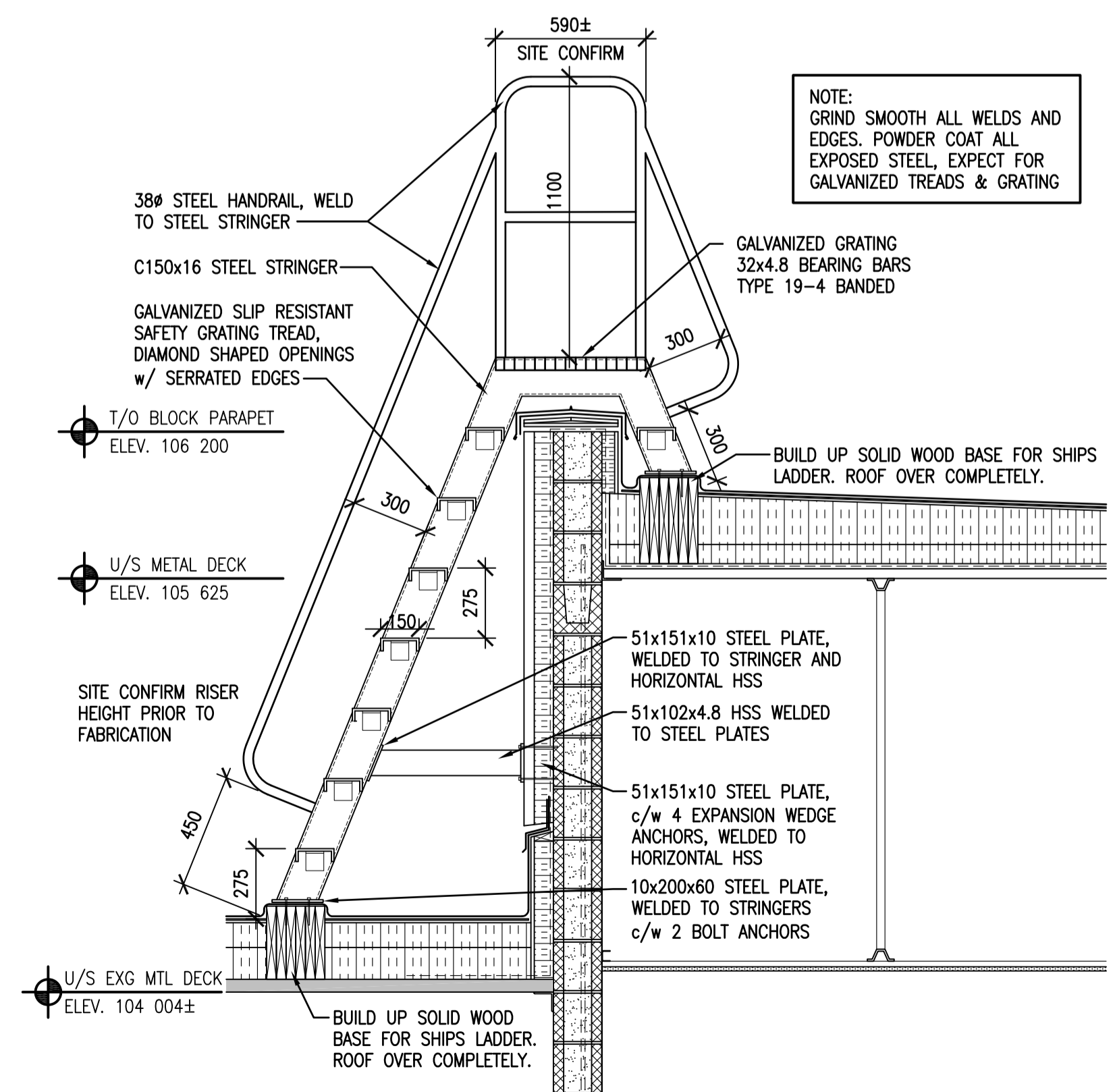
3 DETAIL
 A4.1 1:10



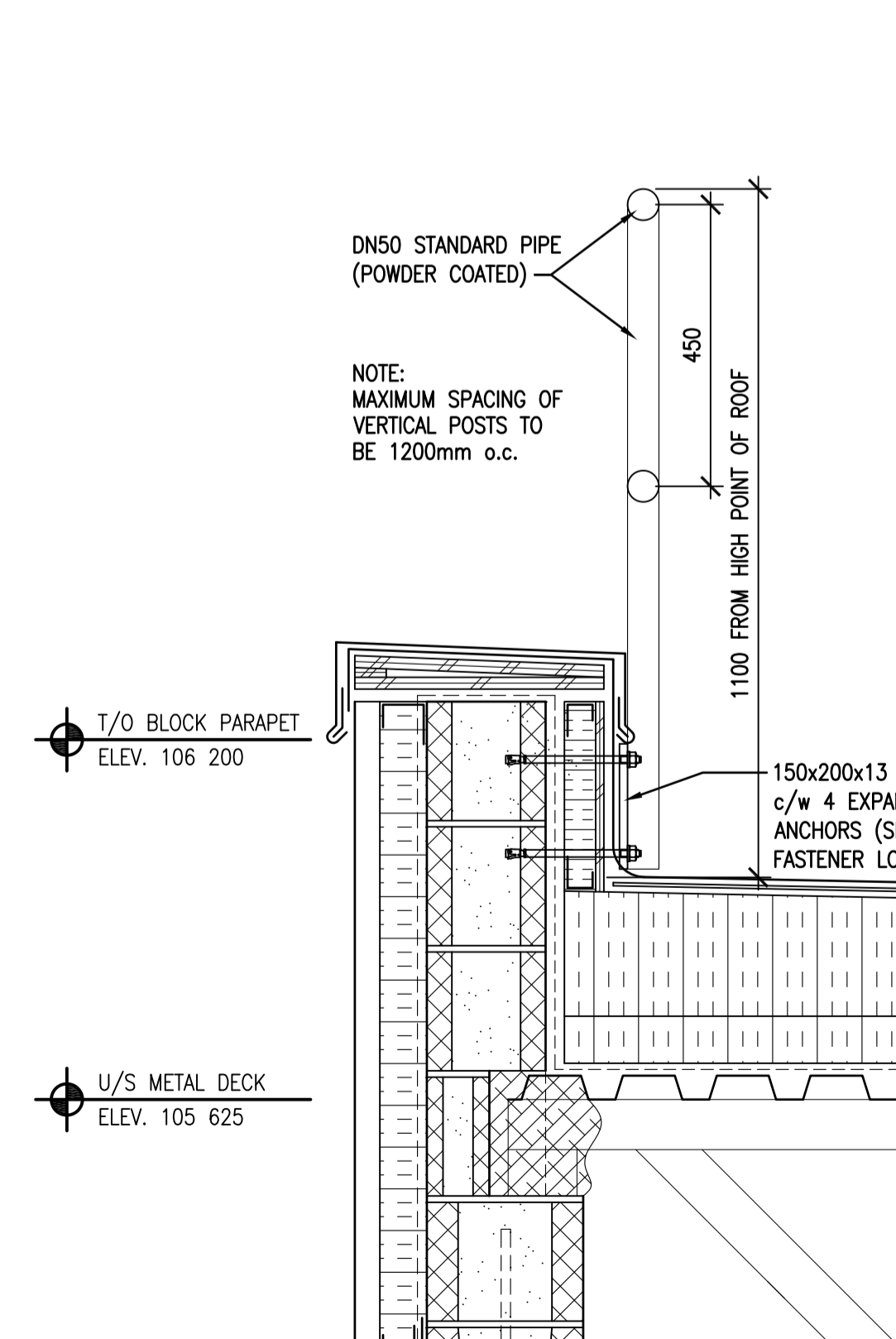
4 DETAIL
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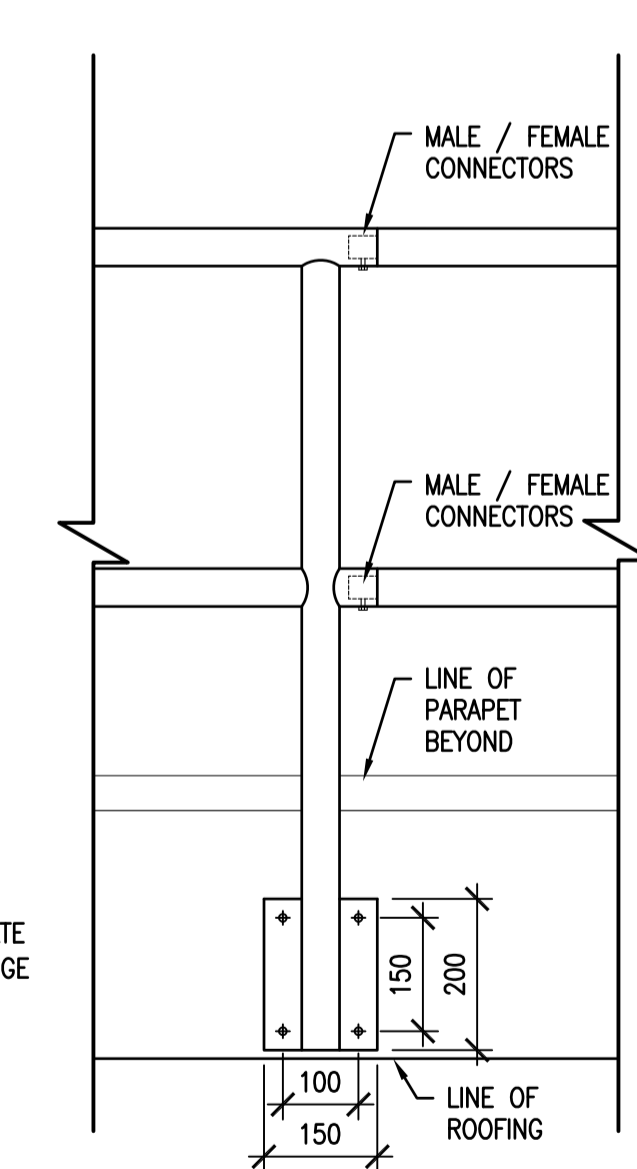
1 DETAIL
 A4.1 1:10



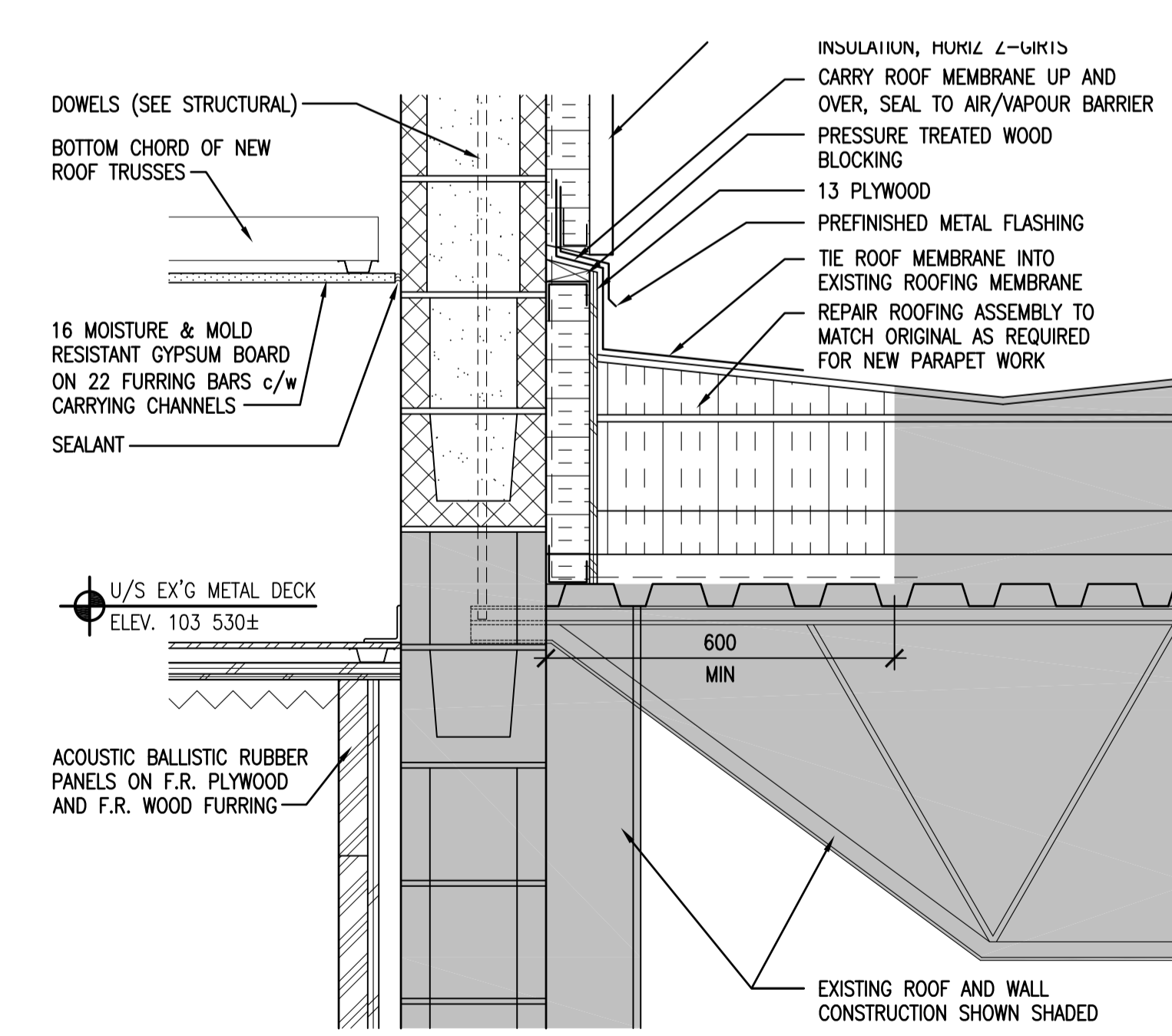
9 SHIPS LADDER
 A2.6 1:20



7 DETAIL
 A2.6 1:10



8 PARTIAL ELEVATION
 A2.6 1:10



2 DETAIL
 A4.1 1:10

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0	ISSUED FOR TENDER	2016-07-21

Project title/Titre du projet

**25A RANGE RENOVATION
 REGINA, SK**

Approved by/Approve par

Designed by/Concept par
 RP

Drawn by/Dessine par
 RHM / RP

RCMP Project Manager/Administrateur de Projets GRC
 JD

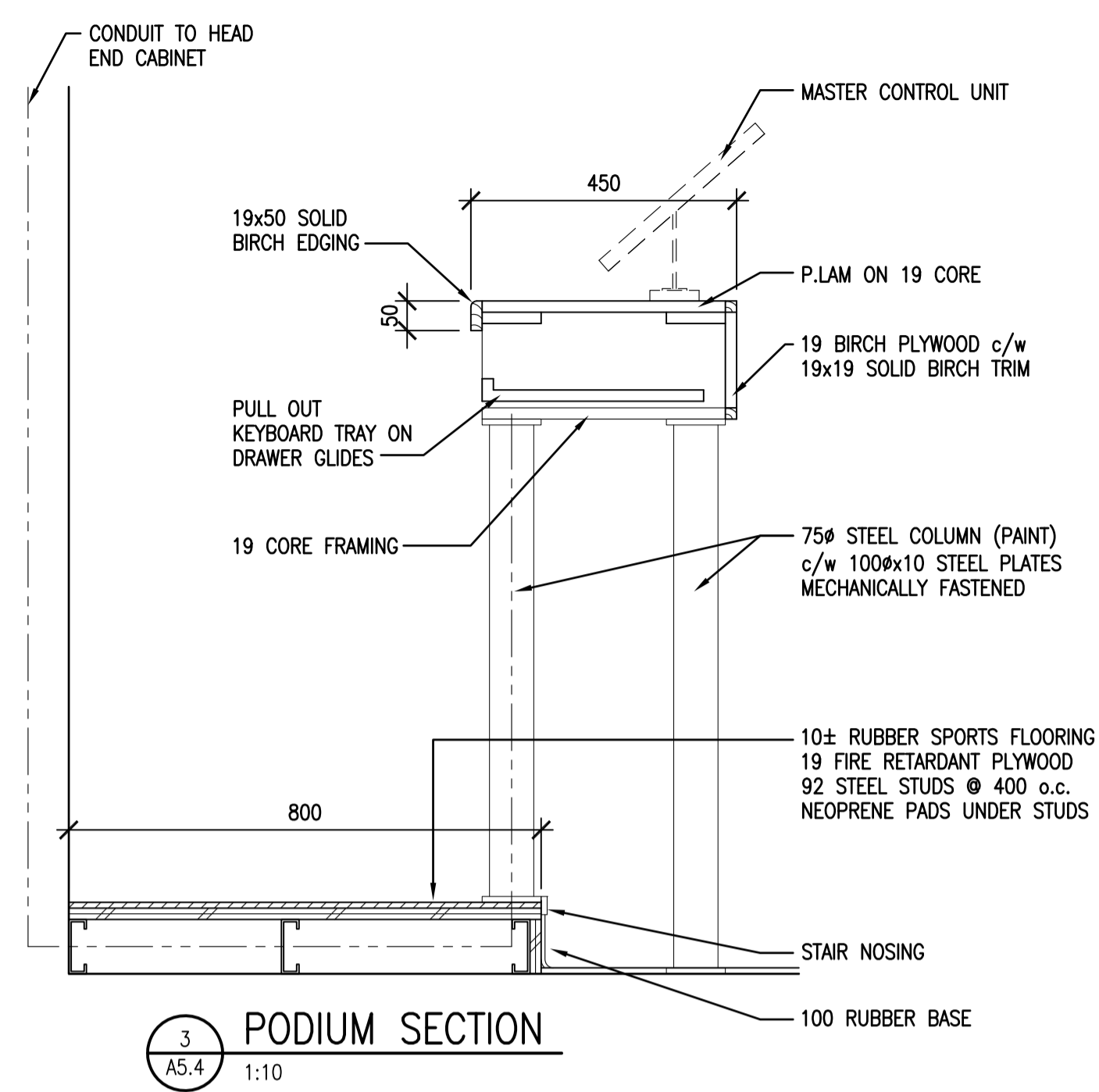
RCMP, Architectural and Engineering Resources Manager/
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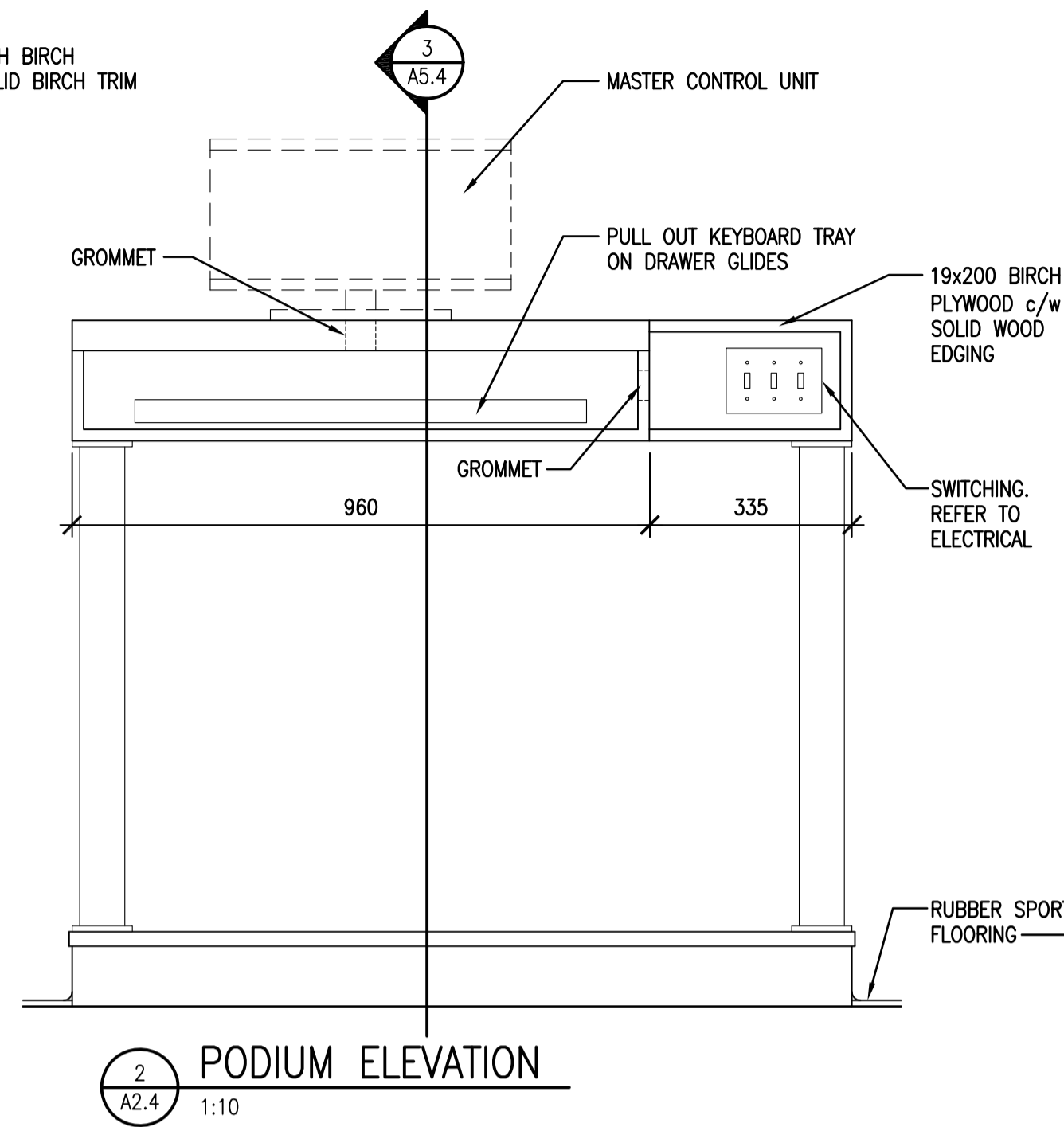
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Project No./No. du projet	Sheet/Feuille	Revision no./ La Révision no.
27/2015	A5.3 OF 14	0

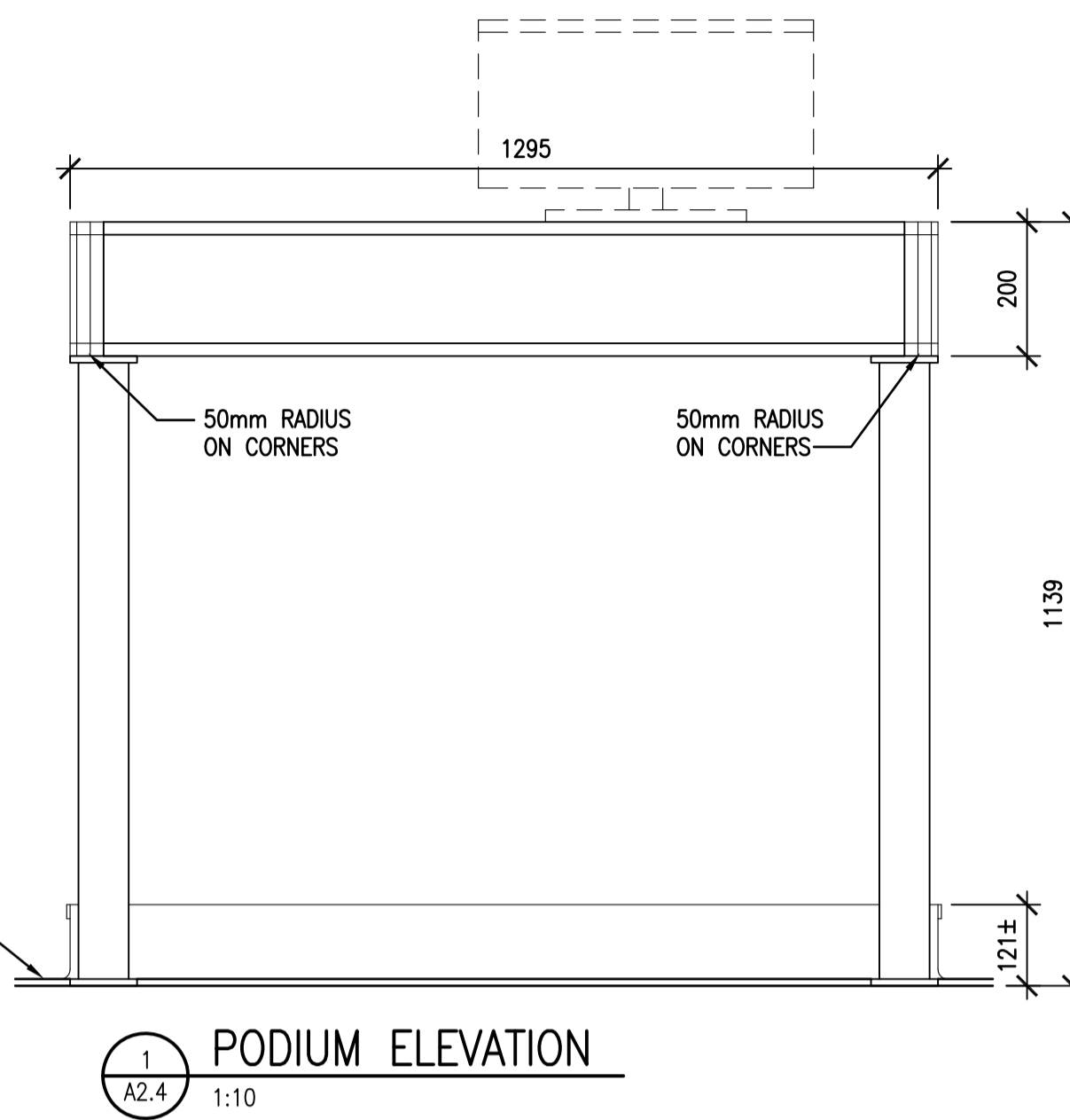


3 A5.4
 1:10
PODIUM SECTION

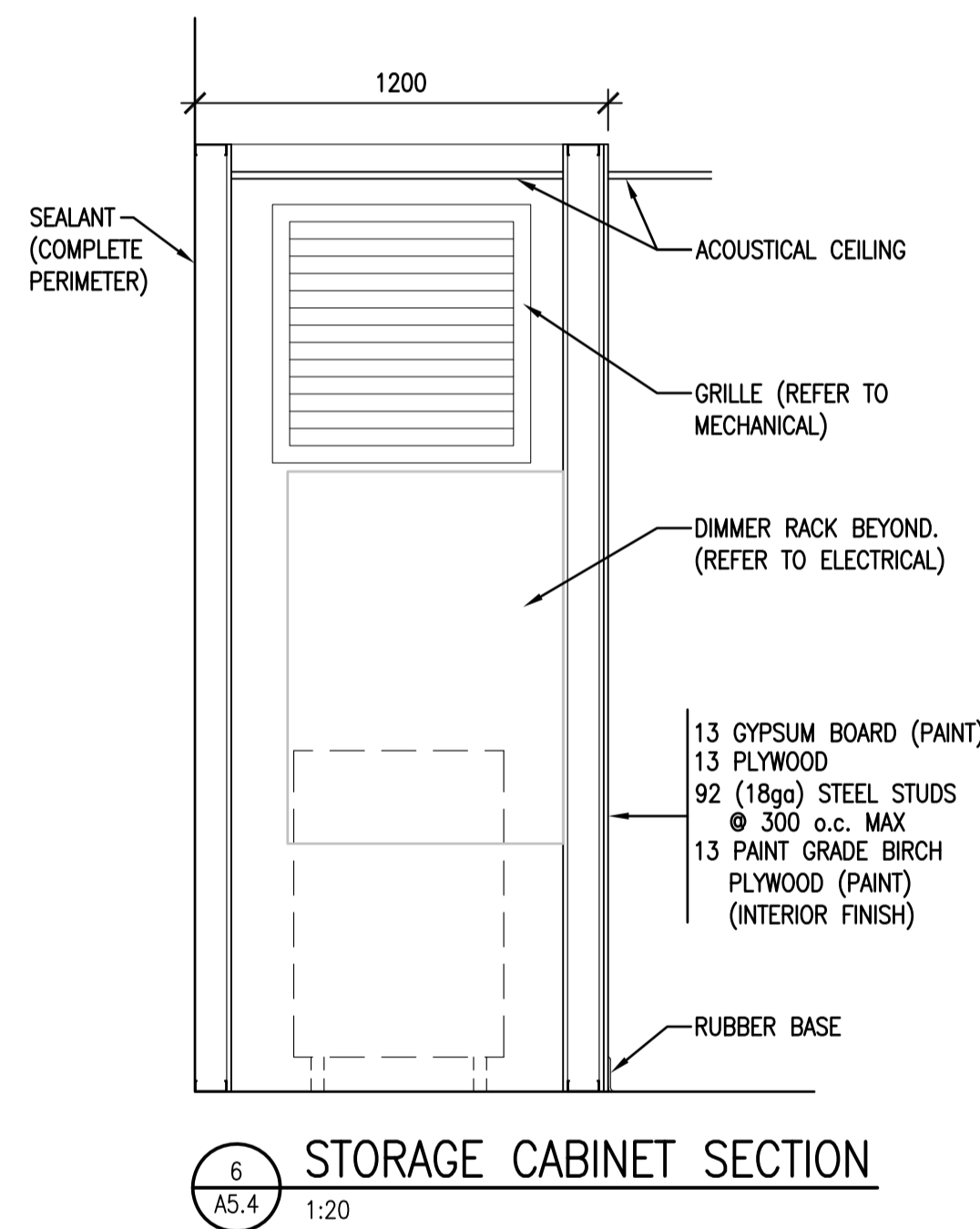
NOTE:
 STAIN AND VARNISH BIRCH PLYWOOD AND SOLID BIRCH TRIM



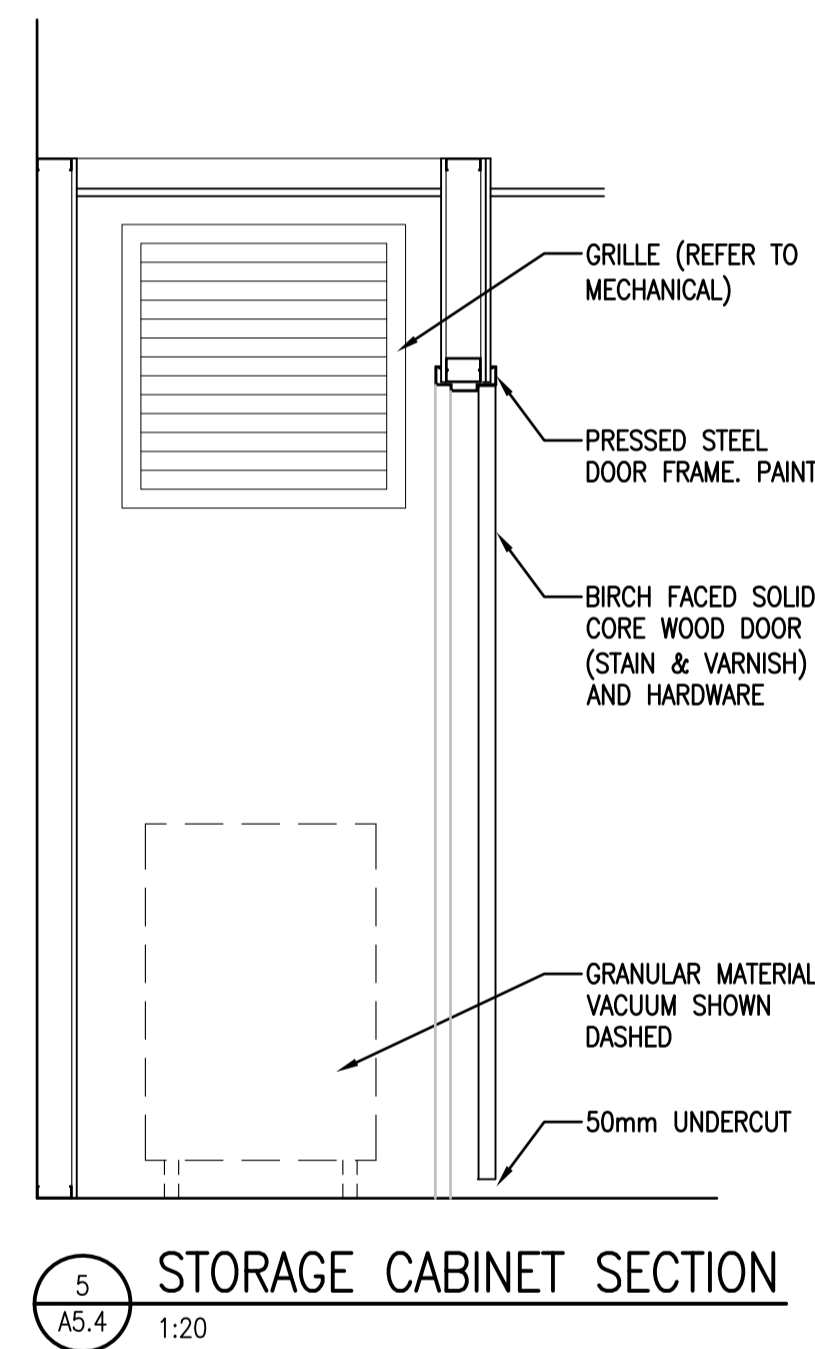
2 A2.4
 1:10
PODIUM ELEVATION



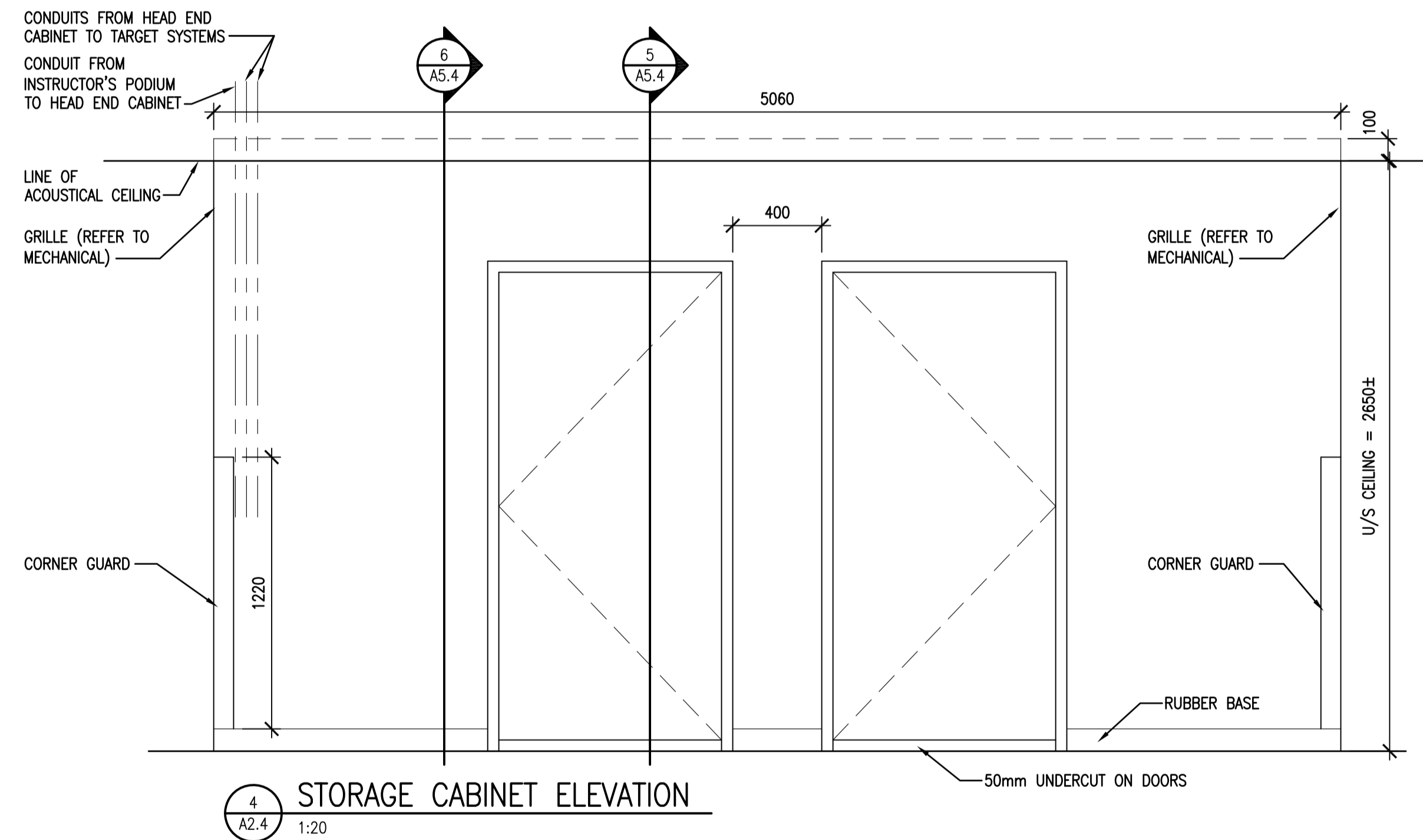
1 A2.4
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PODIUM ELEVATION



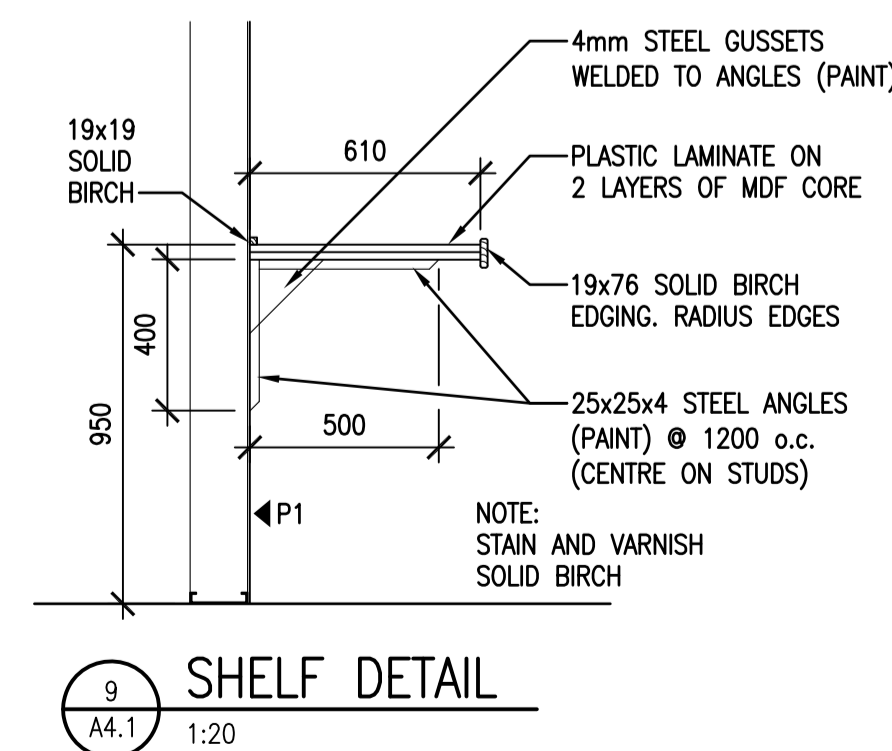
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STORAGE CABINET SECTION



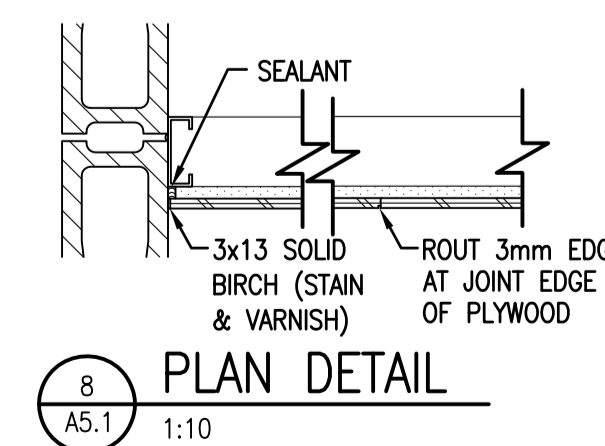
5 A5.4
 1:20
STORAGE CABINET SECTION



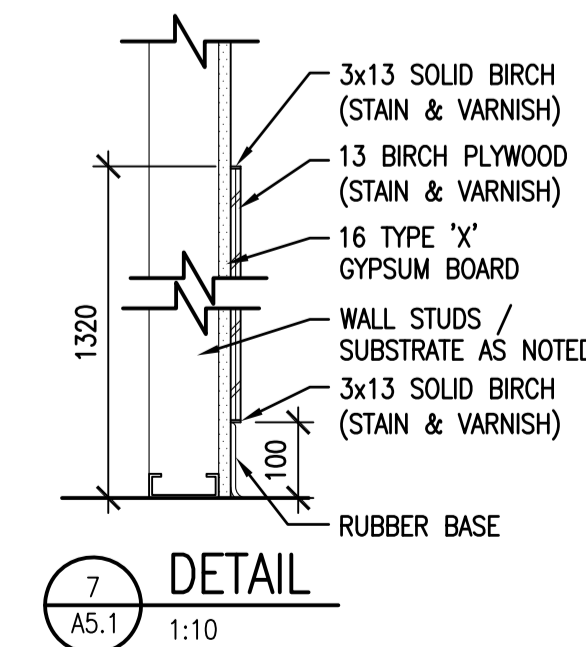
4 A2.4
 1:20
STORAGE CABINET ELEVATION



9 A4.1
 1:20
SHELF DETAIL



8 A5.1
 1:10
PLAN DETAIL



7 A5.1
 1:10
DETAIL

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Revision/Revision	Description/Description	Date/Date
0	ISSUED FOR TENDER	2016-07-21

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Project title/Titre du projet
25A RANGE RENOVATION REGINA, SK

Approved by/Approuve par
 Designed by/Concept par
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 RCMP Project Manager/Administrateur de Projets GRC
 Client/client
 Drawing title/Titre du dessin
MILLWORK

Project No./No. du projet 27/2015	Sheet/Feuille A5.4 OF 14	Revision no./La Révision no. 0
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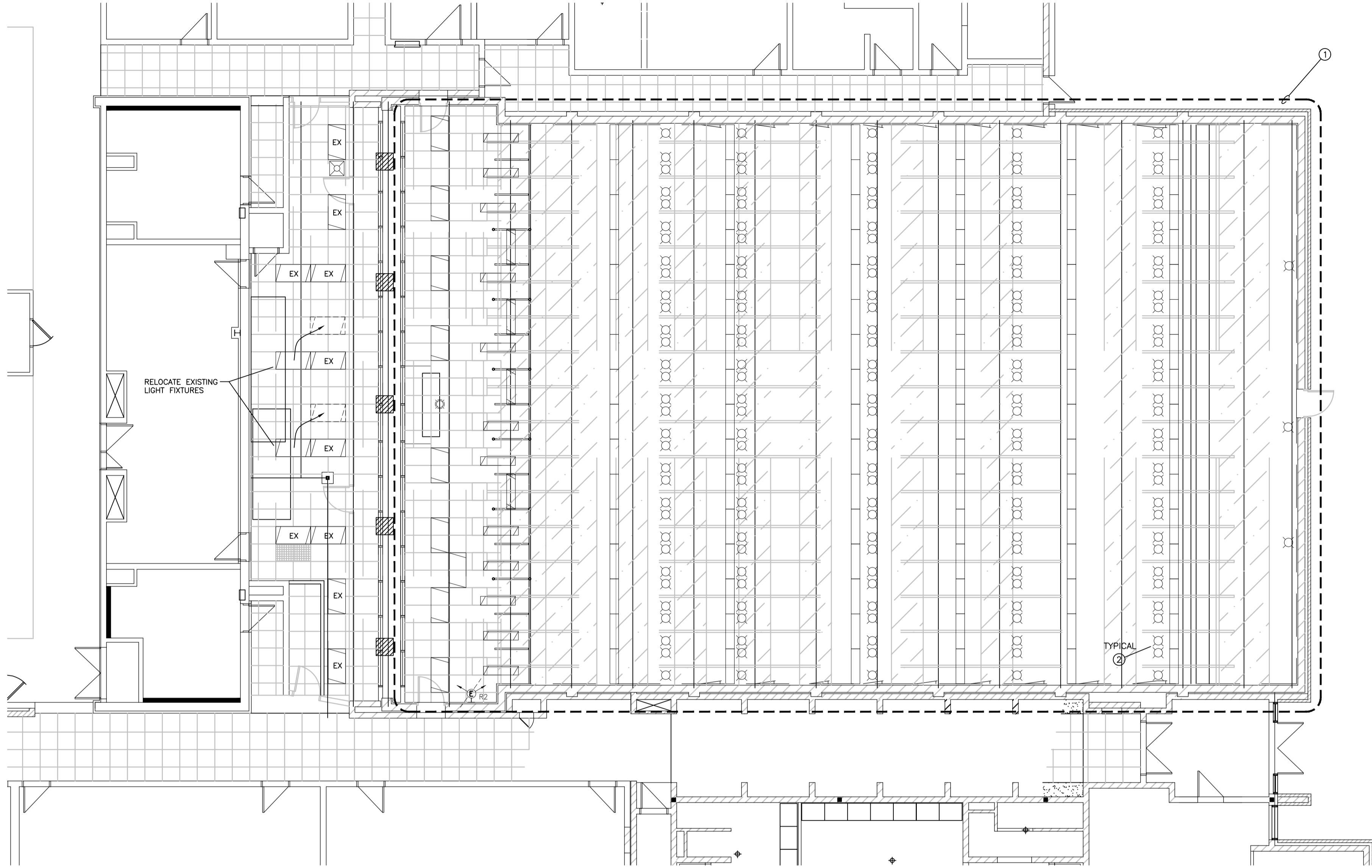


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 ELECTRICAL 9273

SYMBOL SCHEDULE:

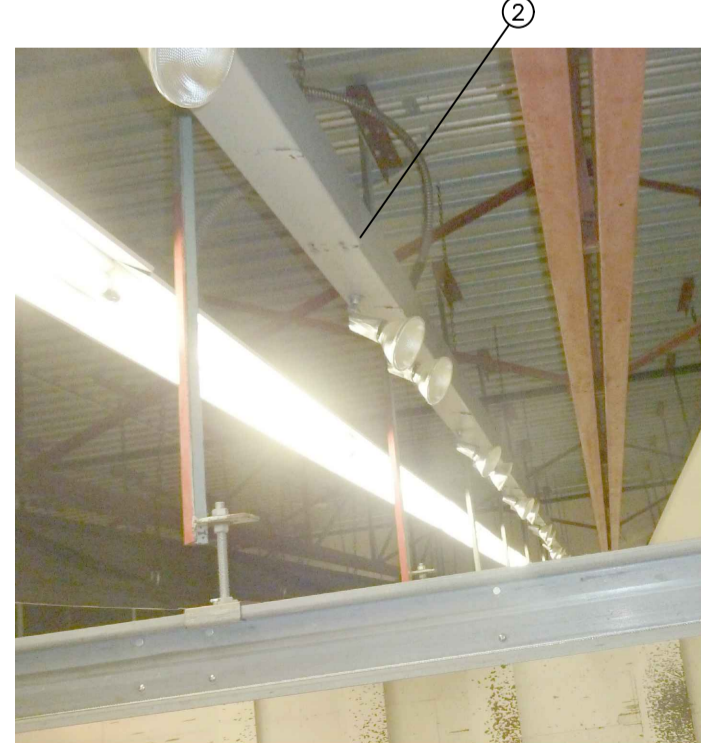
- LED FIXTURE, SURFACE MOUNTED OR SUSPENDED.
- LED FIXTURE, RECESSED.
- FIXTURE SHOWN SHADED DESIGNATES UNIT AS A NON-SWITCHED NIGHT LIGHT.
- LETTER SUFFIX ADJACENT TO FIXTURE DESIGNATES SWITCH CONTROL.
- RECESSED LED FIXTURE.
- WALL MOUNTED LED FIXTURE.
- WALL MOUNTED INFRARED FLOODLIGHT FOR USE WITH THE CCTV SYSTEM. REFER TO SPECIFICATIONS FOR FURTHER INFORMATION.
- WALL MOUNTED EMERGENCY OR COMBINATION EXIT/EMERGENCY LIGHT FIXTURE.
- WALL MOUNTED EXIT SIGN.
- S.P.S.T SWITCH MOUNTED UP 1200mm.
- LOW VOLTAGE DIMMER SWITCH CONNECTED TO THE LOW VOLTAGE LIGHTING CONTROL SYSTEM MOUNTED UP 1200mm.
- DUPLEX GROUNDED RECEPTACLE MOUNTED UP 450mm. "TL" DENOTES TWISTLOCK RECEPTACLE.
- DUPLEX GROUNDED RECEPTACLE, 20 AMP NEMA 5-20R T-SLOT MOUNTED UP 450mm OR AS NOTED.
- DUPLEX GROUND FAULT CURRENT INTERRUPTER RECEPTACLE MOUNTED 150mm ABOVE COUNTER OR AS NOTED.
- DUPLEX GFI RECEPTACLE C/W DIECAST ALUMINUM WEATHERPROOF RESISTANT DOUBLE LID COVER ADAPT FOR FLUSH OR FS BOX MOUNTING MOUNTED UP 900mm. PROVIDE "IN-USE" COVER.
- ELECTRICAL DISTRIBUTION PANEL, SURFACE/RECESSED.
- DISCONNECT SWITCH. SUFFIX "WP" INDICATES WEATHERPROOF.
- MOTOR CONNECTION. COORDINATE FINAL LOCATION ON SITE. REFER TO MOTOR CONTROL SCHEDULE - "STP" DESIGNATES MOTOR THERMAL SWITCH MOUNTED AT UNIT.
- JUNCTION BOX.
- BLANK OUTLET FOR MOUNTED UP 450mm. PROVIDE STAINLESS STEEL BLANK COVER.
- MOLDED CASE TYPE CIRCUIT BREAKER, 15 AMP UNLESS OTHERWISE NOTED.
- COMBINATION DATA/VOICE OUTLET WALL MOUNTED UP 450mm OR HEIGHT AS INDICATED BY SUFFIX. PROVIDE A 100mm SQUARE RECESSED JUNCTION BOX WITH A SINGLE GANG EXTENSION RING AND STAINLESS COVERPLATE AS REQUIRED. SUFFIX INDICATES QUANTITY OF TELEPHONE/DATA JACKS REQUIRED ON A COMMON FACEPLATE. EG: "1D/1V" INDICATES ONE DATA JACK, ONE VOICE JACK. IF DEVICE IS UNSUFFIXED PROVIDE (2) DATA DROPS AND (1) VOICE DROP.
- RECESSED RANGE SOUND ENHANCEMENT SPEAKER MOUNTED IN T-BAR CEILING. AZ:X DENOTES AUDIO ZONING. REFER TO SPECIFICATIONS FOR SPEAKER DETAILS.
- SURFACE MOUNTED RANGE SOUND ENHANCEMENT SPEAKER MOUNTED BETWEEN BAFFLES. AZ:X DENOTES AUDIO ZONING. REFER TO SPECIFICATIONS FOR SPEAKER DETAILS AND ELECTRICAL DETAIL DRAWINGS FOR FURTHER INFORMATION ON SPEAKER MOUNTING.
- AUDIO INPUT PANEL. REFER TO ELECTRICAL DETAIL DRAWINGS FOR FURTHER INFORMATION.
- FIRE ALARM SIGNAL DEVICE (HORN/STROBE) WALL MOUNTED UP 2290mm A.F.F. UNLESS NOTED AS "CLG".
- FIRE ALARM HEAT TYPE DETECTOR CEILING SURFACE MOUNTED. RATE OF RISE AND 135 DEGREES FIXED TEMPERATURE.
- CLOSED CIRCUIT TELEVISION POWER OVER ETHERNET CAMERA. REFER TO SPECIFICATIONS FOR DETAILS.
- ACCESS CONTROL DOOR. REFER TO ELECTRICAL DETAIL DRAWINGS FOR ROUGH-IN REQUIREMENTS.
- WHERE OUTLETS ARE SUFFIXED THEY SHALL BE MOUNTED AS FOLLOWS:
 SUFFIX "a" - MOUNT 150mm ABOVE COUNTER.
 SUFFIX "b" - MOUNT UP 900mm.
 SUFFIX "c" - MOUNT WITHIN ARCHITECTURAL MILLWORK
 SUFFIX "d" - MOUNT UP 1200mm.
 SUFFIX "f" - MOUNT UP 900mm FOR FRIDGE.
 SUFFIX "h" - MOUNT HORIZONTALLY BELOW MILLWORK COUNTER
 SUFFIX "m" - MOUNT WITHIN ARCHITECTURAL MILLWORK FOR MICROWAVE



1 ELECTRICAL LIGHTING DEMOLITION PLAN
 E1.1 1:100

DRAWING AND DETAIL NOTES:

- 1 DISCONNECT AND REMOVE ALL EXISTING LIGHT FIXTURES, LIGHT SWITCHES, EMERGENCY LIGHTING, AND LIGHTING CONTROL EQUIPMENT. REMOVE CONDUIT AND WIRING BACK TO SOURCE FOR ALL REMOVED DEVICES. NOT ALL DEVICES ARE SHOWN ON FLOORPLAN, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DEMOLITION OF DEVICES WITHIN THE CONSTRUCTION AREA.
- 2 ALL EXISTING INCANDESCENT TARGET LIGHTING WITHIN RENOVATED AREA IS PART OF AN EXISTING LIGHTING RAIL SYSTEM. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO REMOVE ALL COMPONENTS OF THIS LIGHTING RAIL.



2 EXISTING TARGET LIGHTING RAIL
 E1.1 N.T.S.

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**25A RANGE RENOVATION
 REGINA, SK**

Approved by/Approuve par

Designed by/Concept par
 BDK, SBK

Drawn by/Dessine par
 BDK

RCMP Project Manager/Administrateur de Projets GRC
 JD

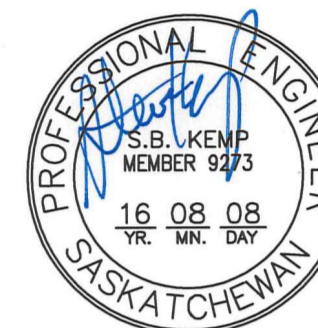
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**ELECTRICAL LIGHTING
 DEMOLITION PLAN**

Project No./No. du projet	Sheet/Fauille	Revision no./La Révision no.
27/2015	E1.1 OF -	0



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Project title/Titre du projet

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 REGINA, SK**

Approved by/Approve par

Designed by/Concept par
 BDK, SBK

Drawn by/Dessine par
 BDK

RCMP Project Manager/Administrateur de Projets GRC
 JD

RCMP, Architectural and Engineering Resources Manager/
 Ressources Architectural et de Directeur d'ingénierie, GRC

Client/client

Drawing title/Titre du dessin

**ELECTRICAL POWER & SYSTEMS
 DEMOLITION PLAN**

Project No./No. du projet

27/2015

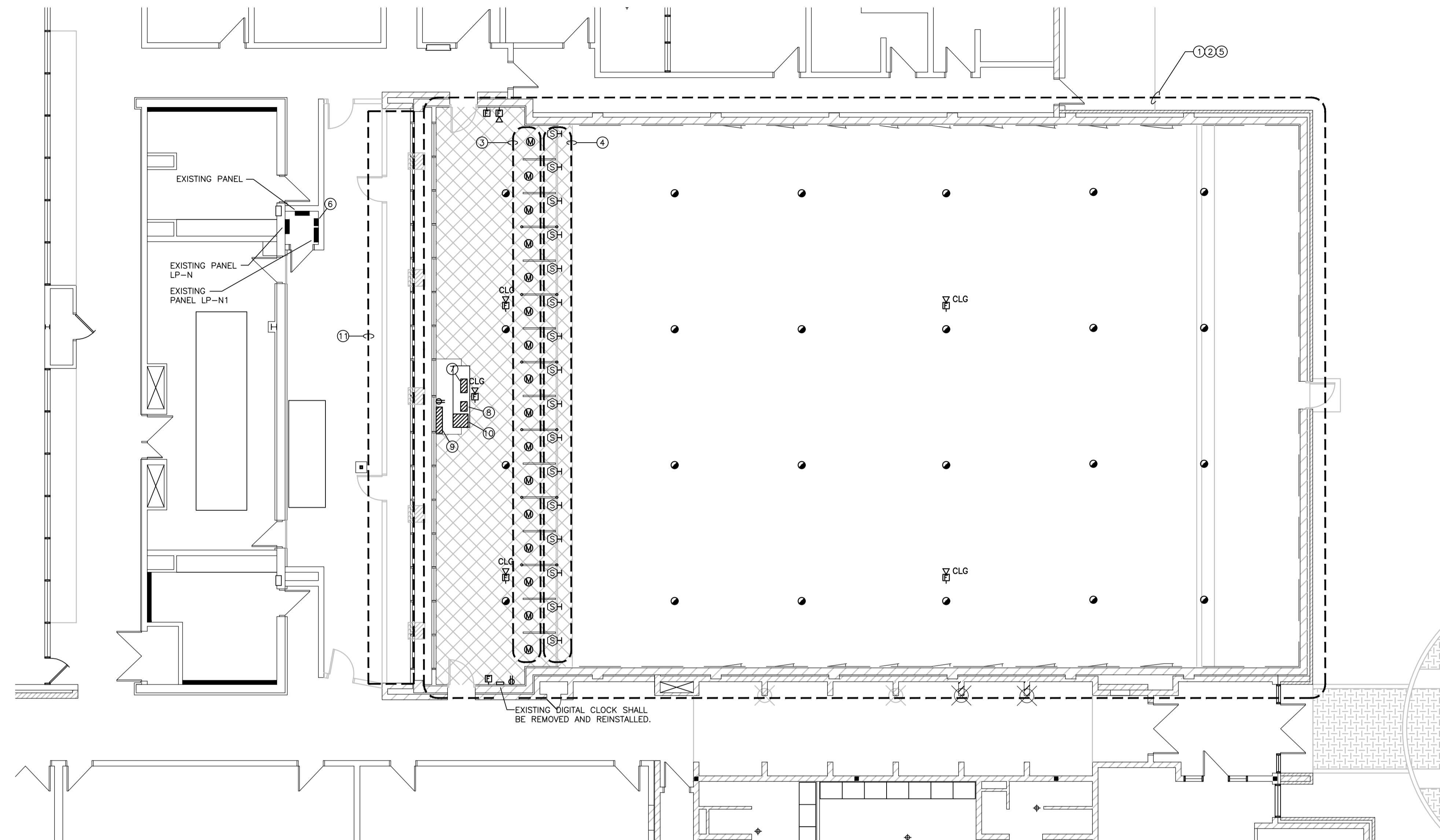
Sheet/Fauille

E1.2

Revision no./

La Révision no.

0



1 ELECTRICAL POWER DEMOLITION PLAN
 E1.2 1:100

DRAWING AND DETAIL NOTES:

- 1 DISCONNECT EXISTING FIRE ALARM HEAT DETECTORS AND REMOVE DEVICES TO ALLOW FOR NEW BAFFLE INSTALLATION. THESE DEVICES SHALL BE USED TO SUPPLEMENT HEAT DETECTOR COUNTS AS SHOWN IN NEW ELECTRICAL FLOORPLANS.
- 2 DISCONNECT AND REMOVE EXISTING FIRE ALARM PULL STATION AND HORN/STROBE DEVICES AND TURN DEVICES OVER TO OWNER. REMOVE CONDUIT/WIRING BACK TO FIRE ALARM PANEL.
- 3 EXISTING SHOOTING TARGET CARRIER MOTOR CONNECTIONS. TARGET CARRIERS SHALL BE REMOVED AS PER ARCHITECTURAL DRAWINGS. ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE DEMOLITION OF ALL POWER AND COMMUNICATIONS CONNECTIONS TO EACH TARGET CARRIER LOCATION.
- 4 EXISTING SPEAKERS MOUNTED ABOVE SHOOTING BOOTHS SHALL BE REMOVED AND TURNED OVER TO OWNER. REMOVE EXISTING CONDUIT AND SPEAKER WIRE BACK TO SOURCE.
- 5 ALL EXISTING DUPLEX RECEPTACLES, BACKBOXES, AND ASSOCIATED CONDUIT/WIRING SHALL BE REMOVED.
- 6 REMOVE EXISTING LIGHTING CONTACTOR PANEL LP-N1 AND TURN OVER TO OWNER. REMOVE FEEDER CONDUIT/CABLING FROM NEARBY PANEL.
- 7 EXISTING LIGHTING CONTROL PANEL SHALL BE REMOVED.
- 8 EXISTING MANCOM TARGET CARRIER TOUCHSCREEN SHALL BE REMOVED.
- 9 EXISTING MANCOM TARGET CARRIER SYSTEM PLC CABINET AND ASSOCIATED WIRING SHALL BE REMOVED.
- 10 EXISTING AUDIO EQUIPMENT SHELF SHALL BE REMOVED. EXISTING COMPONENTS SHALL BE RELOCATED AS PER NEW FLOORPLANS.
- 11 RELOCATE EXISTING ELECTRICAL INSTALLATION ABOVE T-BAR AFFECTED BY THIS RENOVATION. REFER TO DETAIL 2 IMAGE FOR AFFECTED CONDUIT/CABLING. ALL ELECTRICAL INSTALLATIONS WALL MOUNTED OR WITHIN 1000mm OF WALL WILL BE AFFECTED.



2 RANGE GALLERY ABOVE T-BAR IMAGE
 E1.2

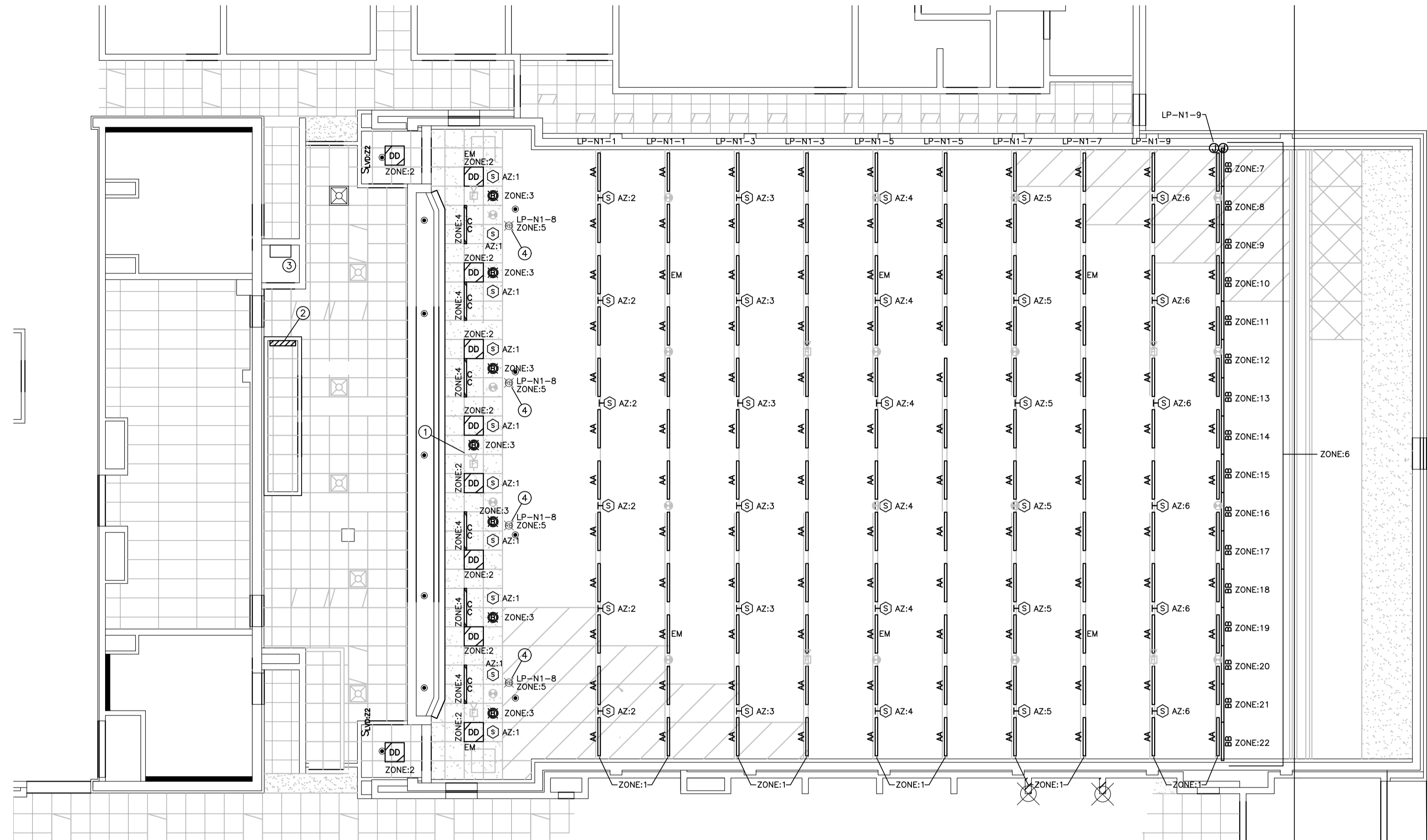


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DIGITAL LIGHTING CONTROL ZONING SUMMARY				
ZONE	FIXTURE	DESCRIPTION	DIMMING	CIRCUIT
1	AA	GENERAL AREA LIGHTING	Y	REFER TO DWG
2	DD	GENERAL AREA LIGHTING	Y	LP-N1-2
3	B	RED NIGHT SCENARIO RECESSED LIGHTING	Y	LP-N1-4
4	CC	RED NIGHT SCENARIO LINEAR LIGHTING	Y	LP-N1-4
5	RB	RED BLUE FLASHING LIGHTS ALL ON	N	LP-N1-8
6	BB	SHOOTING TARGETS LIGHTING OVERALL ZONE	Y	LP-N1-11
7 THRU 22	BB	SHOOTING TARGETS INDIVIDUAL LIGHT FIXTURES	Y	N/A



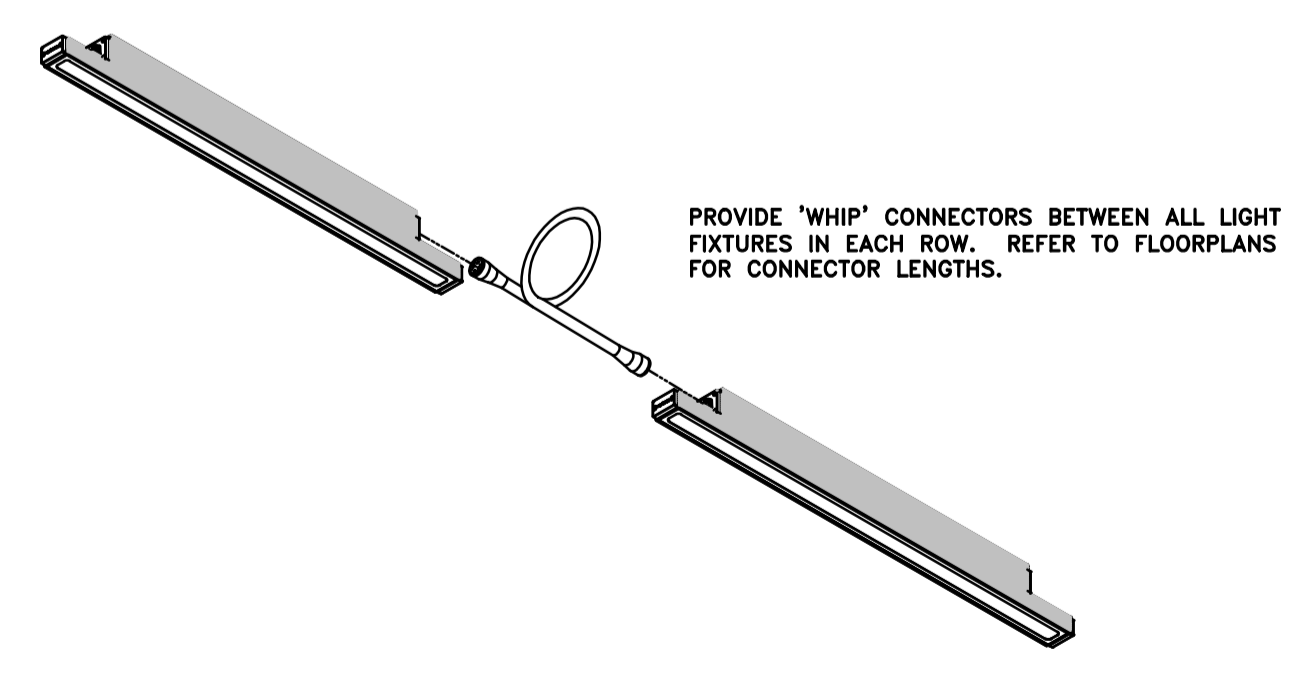
1 ELECTRICAL LIGHTING AND SPEAKER PLAN
 E2.1 1:100

DRAWING AND DETAIL NOTES:

- LOCATION OF NEW DESK MOUNT TARGET CARRIER TOUCHSCREEN PROVIDED BY ARCHITECTURAL. THIS TOUCHSCREEN SHALL CONTROL LOW VOLTAGE LIGHTING CONTROL SYSTEM.
- LOW VOLTAGE LIGHTING CONTROL HEAD-END PANEL/DIMMING PANEL LOCATION.
- PROVIDE NEW EMERGENCY LIGHTING INVERTER (EMPS) FOR EMERGENCY RANGE LIGHTING. INVERTER SHALL BE PROVIDED WITH FLOOR MOUNTS. UNIT SHALL BE LOCATED BELOW EXISTING ELECTRICAL PANEL. REFER TO LIGHTING SPECIFICATIONS FOR FURTHER INFORMATION.
- RED/BLUE FLASHING LIGHTS SHALL BE SURFACE MOUNTED TO UNDERSIDE OF BAFFLE PLYWOOD ON WEST EDGE OF BAFFLE. RED/BLUE LIGHTS SHALL BE SUPPLIED BY OWNER. INSTALLED BY CONTRACTOR. PROVIDE 12VDC POWER SUPPLY IN NEARBY T-BAR CEILING. CABLING SHALL BE AC90 FROM POWER SUPPLY TO FIXTURE.

GENERAL NOTES:

- CONTRACTOR SHALL PROVIDE TIE-IN BETWEEN LIGHTING CONTROL SYSTEM AND FIRE ALARM SYSTEM. UPON ACTIVATION OF THE FIRE ALARM, ALL TARGET LIGHT FIXTURES "BB" SHALL TURN OFF AND ALL LIGHT FIXTURES "AA" & "DD" SHALL ILLUMINATE AND THE ENTIRE LIGHTING CONTROL SYSTEM SHALL BE INCAPABLE OF BEING CHANGED. ONCE FIRE ALARM SIGNAL IS RESET, THE LIGHTING SYSTEM SHALL RESUME ITS PRIOR OPERATION AUTOMATICALLY WITHOUT FURTHER ACTION REQUIRED.
- PROVIDE DSP PROGRAMMING FOR PROGRESSIVE SPEAKER DELAYS FROM WEST TO EAST IN THE FIRING RANGE.



PROVIDE 'WHIP' CONNECTORS BETWEEN ALL LIGHT FIXTURES IN EACH ROW. REFER TO FLOORPLANS FOR CONNECTOR LENGTHS.

2 LIGHT FIXTURE CONNECTOR DETAIL
 E2.1 N.T.S.

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Revision/Revision	Description/Description	Date/Date
0	ISSUED FOR TENDER	2016-07-21

Client/client

Project title/Titre du projet
**25A RANGE RENOVATION
 REGINA, SK**

Approved by/Approve par
 BDK, SBK

Designed by/Concept par
 BDK

Drawn by/Dessine par
 BDK

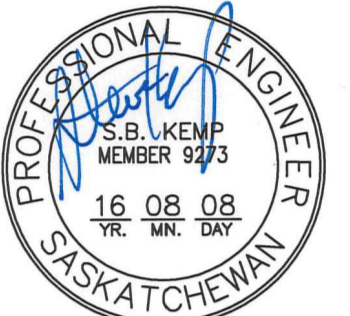
RCMP Project Manager/Administrateur de Projets GRC
 JD

RCMP, Architectural and Engineering Resources Manager/
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Client/client

Drawing title/Titre du dessin
ELECTRICAL LIGHTING PLAN

Project No./No. du projet	Sheet/Fauille	Revision no./La Révision no.
27/2015	E2.1 OF -	0



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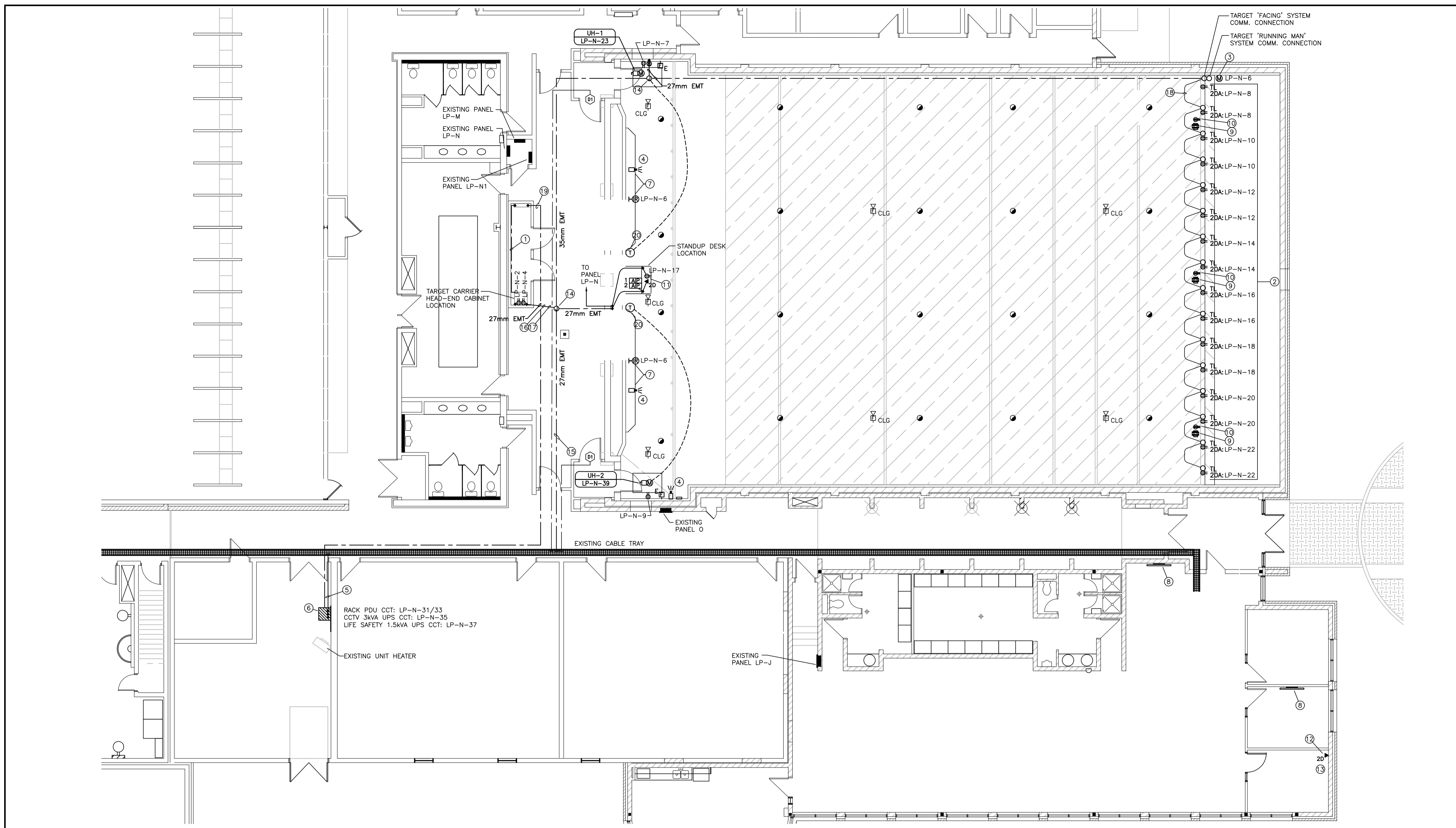
Drawing title/Titre du dessin

**ELECTRICAL POWER & SYSTEMS
 MAIN FLOORPLAN**

Project No./No. du projet
 27/2015

Sheet/Feuille
 E3.1

Revision no./
 La Révision no.
 0



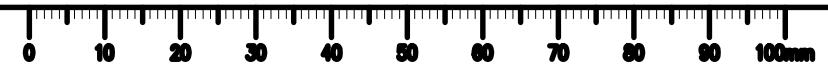
ELECTRICAL POWER & SYSTEMS PLAN
 1:100

DRAWING NOTES:

- PROVIDE 21mm EMT BETWEEN TARGET CARRIER HEAD-END AND LOW VOLTAGE LIGHTING CONTROL CABINET FOR INTERCONNECTION OF THESE SYSTEMS. CABLING SHALL BE AS PER MANUFACTURER'S REQUIREMENTS. REFER TO LOW VOLTAGE LIGHTING SPECIFICATIONS.
- TWISTLOCK RECEPTACLES MOUNTED TO UNDERSIDE OF DRYWALL CEILING FOR 'FACING' TARGET SYSTEM CONNECTIONS. REFER TO ELECTRICAL DETAIL DRAWINGS FOR FURTHER INFORMATION.
- PROVIDE 120V 15A CONNECTION TO 'RUNNING MAN' TARGET SYSTEM.
- PROVIDE 21mm EMT FROM CAMERA BACK TO EXISTING CABLE TRAY. PROVIDE DATA CABLE FOR CAMERA CONNECTION BACK TO CCTV HEAD-END LOCATION. EMT SHALL BE ROUTED FROM FIRING RANGE THROUGH VESTIBULES, THROUGH VIEWING GALLERY TO SOUTH HALLWAY WHERE EXISTING TRAY IS LOCATED.
- PROVIDE 3 x 53mm EMT CONDUITS FROM EXISTING TRAY TO WALL MOUNTED DATA RACK LOCATION FOR CONNECTIONS TO RACK IN THIS CONTRACT AND FUTURE.
- CCTV AND AUDIO RACK LOCATION. PROVIDE NEW WALL MOUNTED DATA RACK MOUNTED SUCH THAT THE TOP OF THE RACK IS 305mm BELOW THE EXISTING T-BAR CEILING. REFER TO ELECTRICAL DETAIL DRAWINGS FOR FURTHER INFORMATION.
- ALL WALL MOUNTED DEVICES SHALL BE MOUNTED ABOVE PERFORATED PORTION OF WALL, AT 2440mm A.F.F.
- LOCATION OF WALL MOUNTED CCTV MONITOR. REFER TO DETAIL DRAWINGS FOR POWER AND A/V REQUIREMENTS. CONTRACTOR SHALL PROVIDE MONITOR AND ADJUSTABLE WALL MOUNT. REFER TO SPECIFICATIONS FOR MONITOR DETAILS. UTILIZE EXISTING SPARE BREAKER IN PANEL LP-J ON CIRCUIT LP-J-17 FOR POWER REQUIREMENTS.
- CORD REEL FOR GRANULAR TRAP VACUUM PLUS. REFER TO ELECTRICAL DETAIL DRAWINGS FOR MOUNTING DETAILS. CORD REEL SHALL BE INDUSTRIAL QUALITY WITH STEEL CONSTRUCTION, MINIMUM 13.5m CORD LENGTH, SPRING RETRACTABLE, RATED FOR MINIMUM 300V. CORD SHALL BE 4 WIRE, AND TERMINATE TO A 50AMP TWIST LOCK, GROUNDING, 3ø, 4W, L15-30R RECEPTACLE. POWER FEED FOR CORD REEL BE TERMINATED TO AN L15-30P PLUG CONNECTED TO ADJACENT RECEPTACLE. ADJACENT RECEPTACLE SHALL BE MOUNTED ON THE SAME PIECE OF UNISTRUT AS CORD REEL. CORD REEL SHALL BE MANUFACTURED BY HUBBELL OR APPROVED EQUAL.
- PROVIDE L15-30R RECEPTACLE MOUNTED TO TOPSIDE OF BAFFLE BESIDE CORD REEL. REFER TO ELECTRICAL DETAIL DRAWINGS FOR MOUNTING INFORMATION.
- PROVIDE ONE DUPLEX RECEPTACLE AND ONE 2 PORT DATA OUTLET MOUNTED IN STANDUP DESK. AUDIO AND TARGET CARRIER CABLING SHALL BE RUN IN SHARED EMT. REFER TO ELECTRICAL DETAIL FOR MOUNTING INFORMATION.
- PROVIDE NEW 2 PORT DATA RECEPTACLE CONNECTED TO THE CCTV NETWORK. PROVIDE SURFACE WIREMOLD RACEWAY DOWN TO NEW SURFACE MOUNTED BOX. BOX SHALL BE MOUNTED 450mm ABOVE EXISTING RADIANT HEATER. PROVIDE PATCH CABLE TO NEW CCTV PC. WIREMOLD RACEWAY SHALL BE WHITE IN COLOUR, LEGRAND ECLIPSE PN05L SERIES.
- APPROXIMATE LOCATION OF CCTV PC AND DESK MOUNTED MONITOR. CONFIRM ON SITE LOCATION OF INSTRUCTOR'S DESK.
- PROVIDE 305x305x152mm PULL BOX FOR AUDIO/TARGET CARRIER COMMUNICATION CABLES.
- PROVIDE CONNECTIONS FROM RACK MOUNTED AUDIO EQUIPMENT TO AUDIO INPUT PANELS (AIP) LOCATED IN STANDUP DESK. REFER TO ELECTRICAL DETAIL DRAWINGS FOR FURTHER INFORMATION ON THESE CONNECTIONS.
- PROVIDE 2 x CAT5e ETHERNET CONNECTIONS FROM TARGET CARRIER HEAD-END TO STANDUP DESK DATA OUTLET FOR CONNECTION TO TARGET CARRIER TOUCHSCREEN. PROVIDE PATCH CABLE FROM DATA OUTLET IN DESK TO TOUCHSCREEN THROUGH GROMMET IN DESK.
- PROVIDE SERIAL CONNECTION FROM TARGET CARRIER HEAD-END TO FIRST 'FACING' TARGET COMMUNICATION CONNECTION. IN SAME CONDUIT, PROVIDE SERIAL CONNECTION FROM TARGET CARRIER HEAD-END TO 'RUNNING MAN' TARGET COMMUNICATION CONNECTION.
- PROVIDE SERIAL CONNECTION DAISY CHAINED BETWEEN ALL TARGETS #1 THRU #16. CABLES SHALL RUN ALONG UNDERSIDE OF DRYWALL CEILING BETWEEN TARGETS. THEN RUN DOWN TO TARGET COMMUNICATION CONNECTION POINT. PROVIDE J-HOOKS FOR SERIAL CABLE SUPPORT.
- PROVIDE 120V CONNECTION FROM RACK MOUNTED LIFE SAFETY UPS IN CCTV/AUDIO RACK TO LOW VOLTAGE LIGHTING CONTROL SYSTEM HEAD-END. CONNECTION SHALL BE (2) #10AWG RW90 + #10AWG INS. BOND IN 21mm EMT.
- LINE VOLTAGE THERMOSTATS SUPPLIED/INSTALLED BY MECHANICAL CONTRACTOR, WIRED BY ELECTRICAL CONTRACTOR.

GENERAL NOTES:

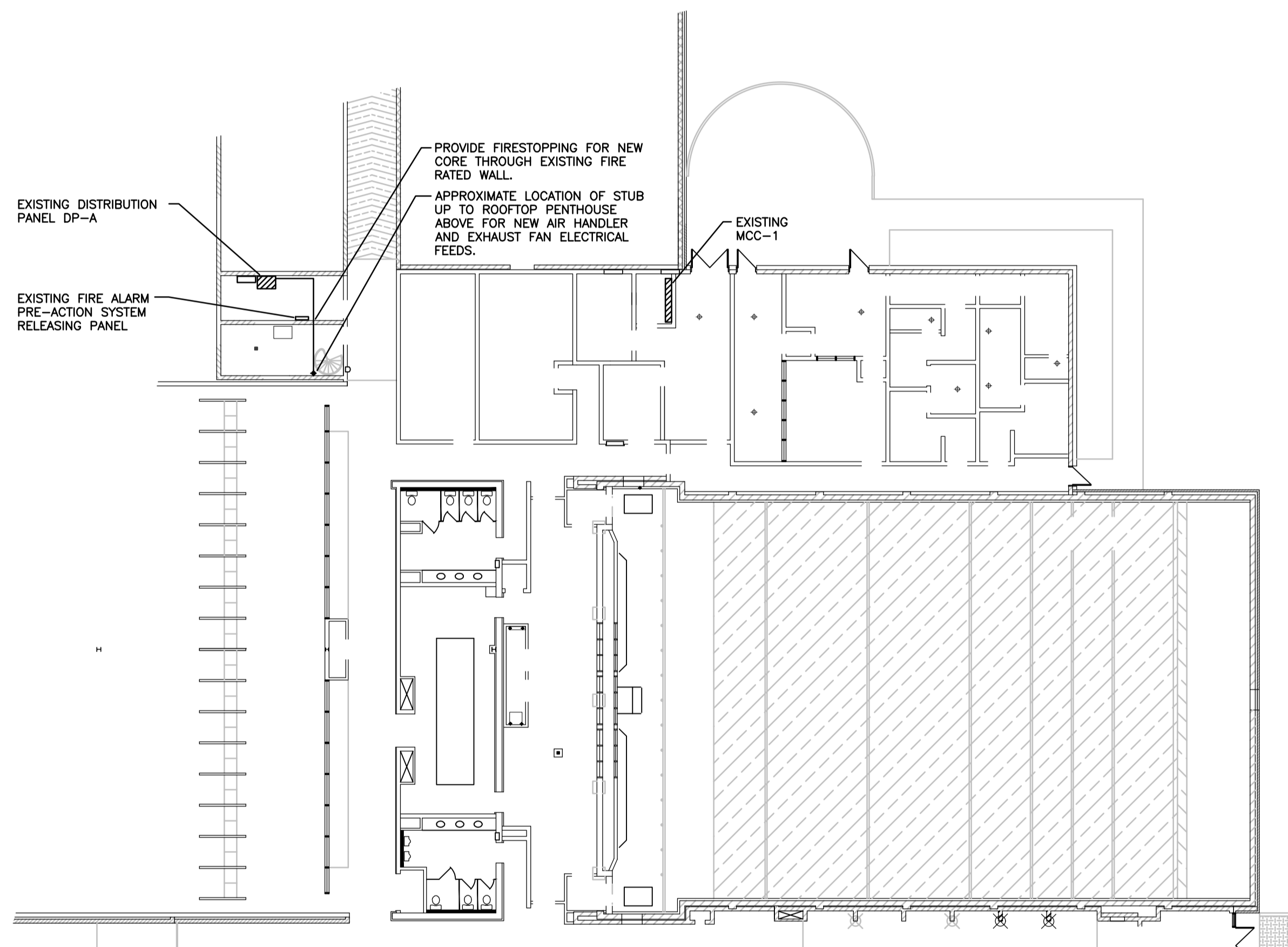
- FOR FURTHER INFORMATION ON HEAT DETECTOR MOUNTING LOCATIONS, REFER TO ELECTRICAL SECTIONS DRAWING.
- PROVIDE ALL NEW CONDUIT/WIRING FOR NEW/EXISTING DEVICES IN NEW LOCATIONS FROM FIRE ALARM RELEASING PANEL. ALL DEVICES SHALL BE VERIFIED AS OPERATIONAL BY THE MANUFACTURER'S REPRESENTATIVE AND A FINAL FIRE ALARM VERIFICATION REPORT PROVIDED TO THE CONSULTANT.
- TARGET CARRIER HEAD-END AND CABINET PROVIDED BY ARCHITECTURAL. ALL COMMUNICATION AND POWER CABLING REQUIRED FOR TARGET CARRIER SYSTEM SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR. CONFIRM WITH TARGET CARRIER SYSTEM ALL COMMUNICATION AND POWER CABLING REQUIREMENTS PRIOR TO INSTALLATION.
- ALL 'SERIAL CONNECTIONS' SHALL BE RS485 SERIAL CABLE, 4C #20AWG COMPLETE WITH OVERALL SHIELD, TERMINATED AT BOTH ENDS TO DB9 CONNECTORS. COORDINATE PINOUT WIRING WITH TARGET CARRIER MANUFACTURER PRIOR TO TERMINATING CABLES. ON RUNS OVER 3m, CABLE SHIELD SHALL BE GROUNDED AT END CONNECTED TO TARGET CARRIER HEAD-END ONLY.



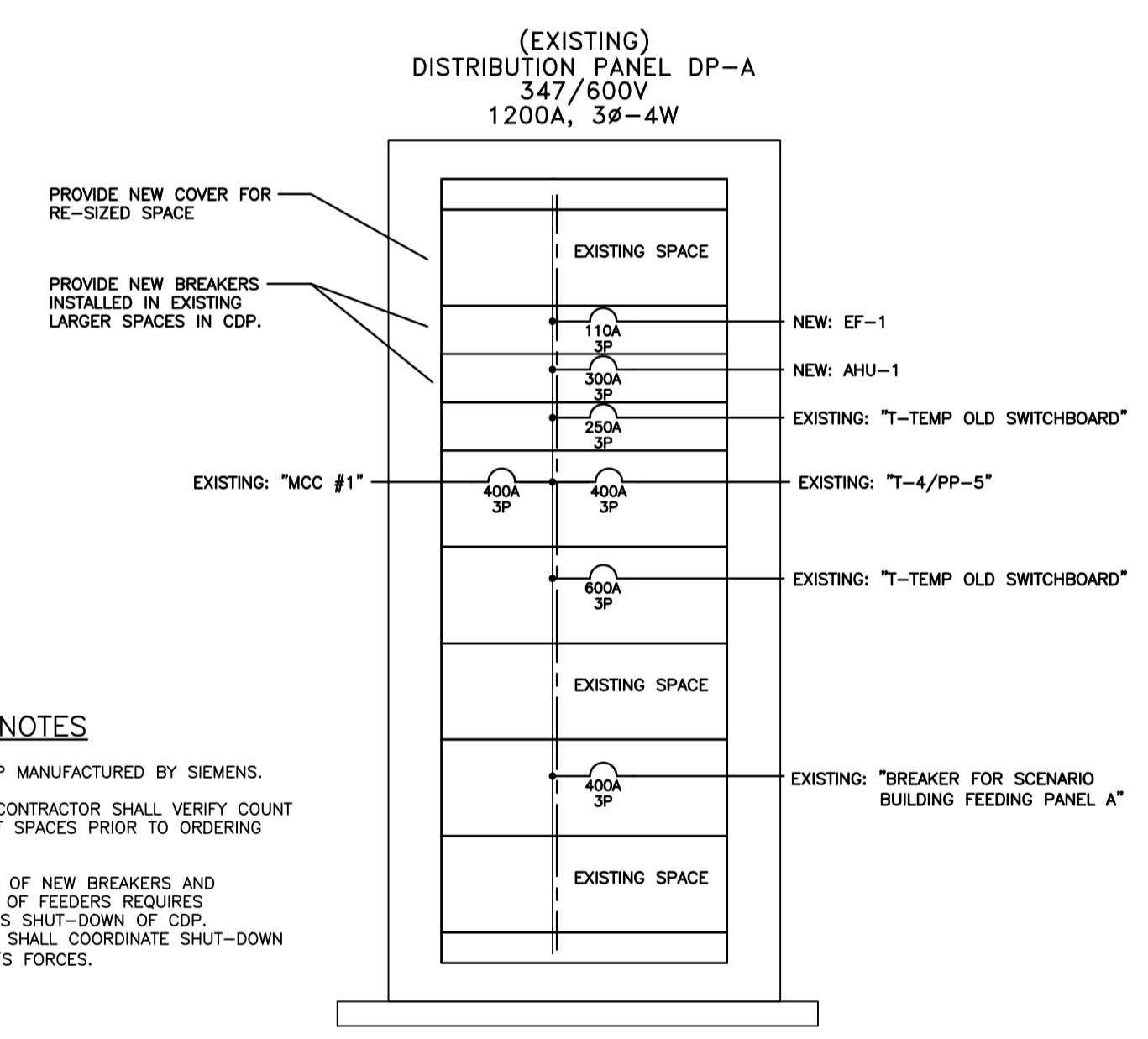


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1 ELECTRICAL POWER & SYSTEMS PLAN
 E3.2 1:200
 NORTH



DETAIL NOTES
 1. EXISTING CDP MANUFACTURED BY SIEMENS.
 2. ELECTRICAL CONTRACTOR SHALL VERIFY COUNT AND SIZE OF SPACES PRIOR TO ORDERING EQUIPMENT.
 3. INSTALLATION OF NEW BREAKERS AND TERMINATION OF FEEDERS REQUIRES AFTER-HOURS SHUT-DOWN OF CDP. CONTRACTOR SHALL COORDINATE SHUT-DOWN WITH OWNER'S FORCES.

2 DISTRIBUTION PANEL DP-A DETAIL
 E3.2 N.T.S.

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 REGINA, SK**

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Drawn by/Dessine par
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RCMP Project Manager/Administrateur de Projets GRC
 JD

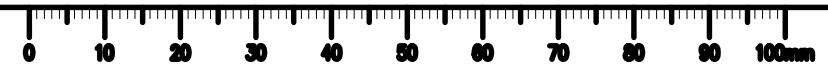
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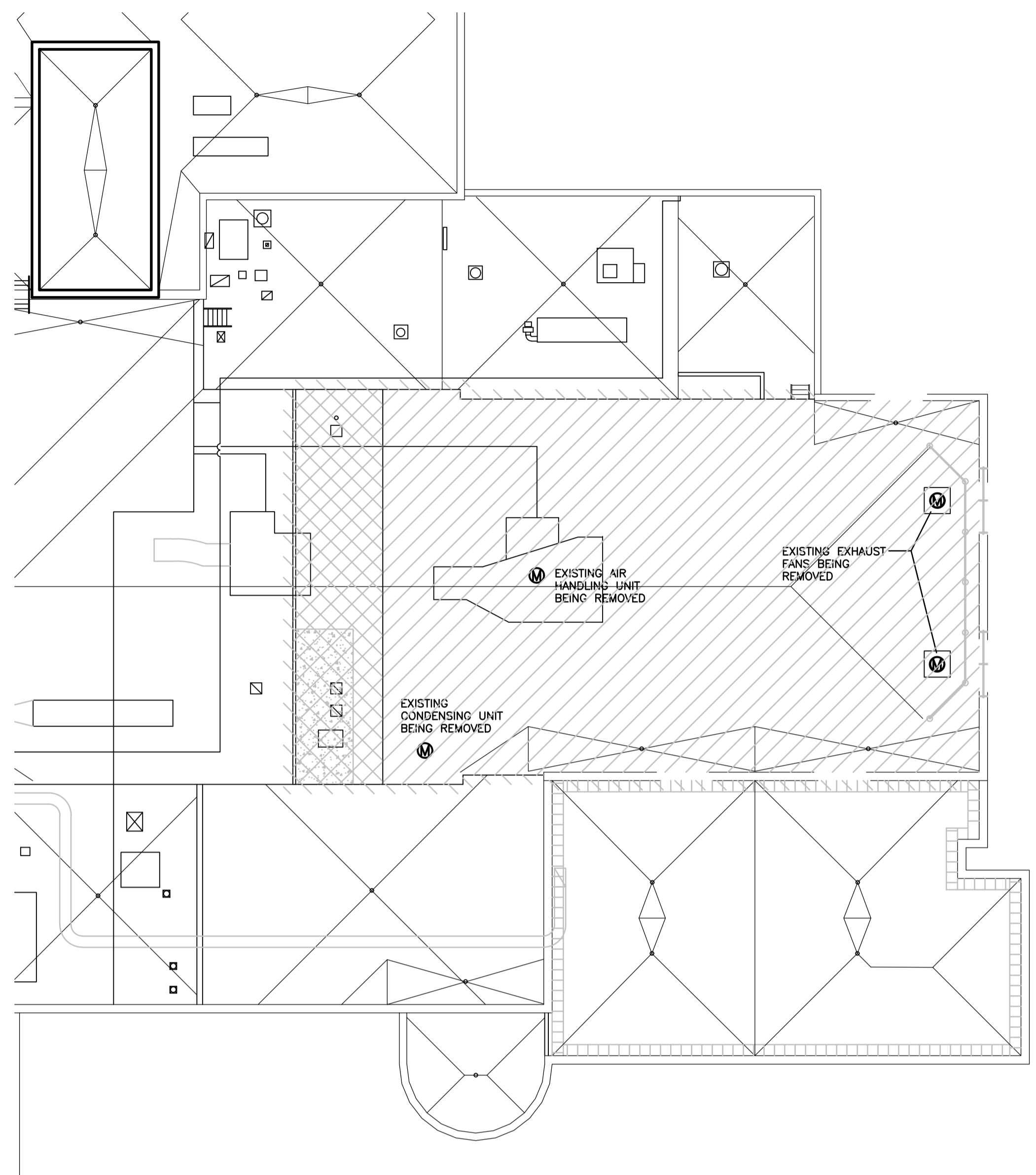
Client/client

Drawing title/Titre du dessin

**ELECTRICAL POWER & SYSTEMS
 MAIN FLOORPLAN**

Project No./No. du projet 27/2015	Sheet/Fauille E3.2 OF -	Revision no./ La Révision no. 0
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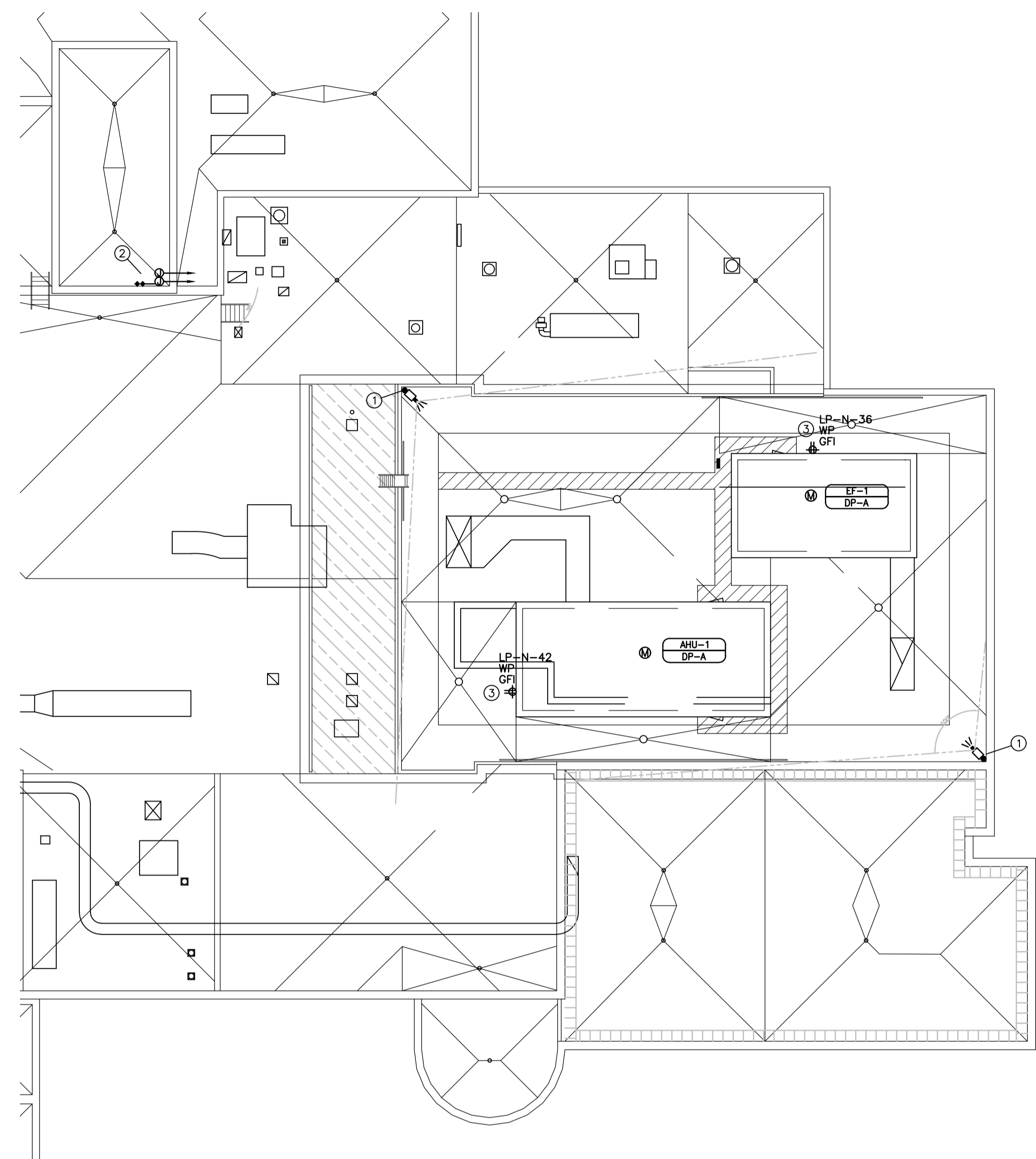




1
E3.3
1:200
ROOF ELECTRICAL DEMOLITION PLAN

DEMOLITION PLAN GENERAL NOTES:

- EXISTING MECHANICAL UNITS FED FROM MCC-1 SHOWN ON ELECTRICAL MAIN FLOORPLAN POWER PLAN. ANY EXISTING STARTERS FEEDING REMOVED UNITS SHALL BECOME SPARE. PROVIDE NEW 'SPARE' LAMECOID TO MATCH OTHERS IN LINEUP.



1
E3.3
1:200
ELECTRICAL POWER & SYSTEMS ROOF PLAN

NEW ROOF PLAN DRAWING NOTES:

- CCTV CAMERA SHALL BE MOUNTED TO POLE AT 2440mm ABOVE ROOF. POLE SHALL BE PROVIDED BY ARCHITECTURAL. REFER TO ARCHITECTURAL DRAWINGS FOR FURTHER INFORMATION. PROVIDE ALL REQUIRED MOUNTING HARDWARE FOR CAMERA TO MOUNT TO POLE.
- APPROXIMATE LOCATION OF ROOF TOP UNIT FEEDS STUB. TRANSITION FROM EMT TO RIGID PVC. PVC SHALL BE STRAPPED TO 100x100mm WOOD SLEEPERS EVERY 1500mm FOR CONDUIT SUPPORT.
- PROVIDE SURFACE MOUNTED SERVICE RECEPTACLE MOUNTED TO EXTERIOR OF MECHANICAL UNIT SERVICE CORRIDOR. COORDINATE FINAL LOCATION OF RECEPTACLE ON SITE.



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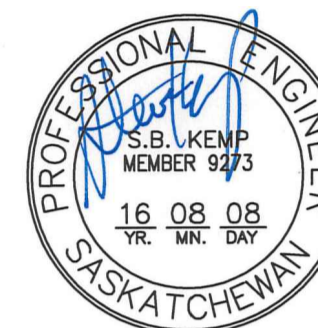
Client/client

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 REGINA, SK**

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 Drawn by/Dessine par
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 RCMP Project Manager/Administrateur de Projets GRC
 JD
 RCMP, Architectural and Engineering Resources Manager/
 Ressources Architectural et de Directeur d'ingénierie, GRC

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**ELECTRICAL POWER & SYSTEMS
 ROOF PLAN**

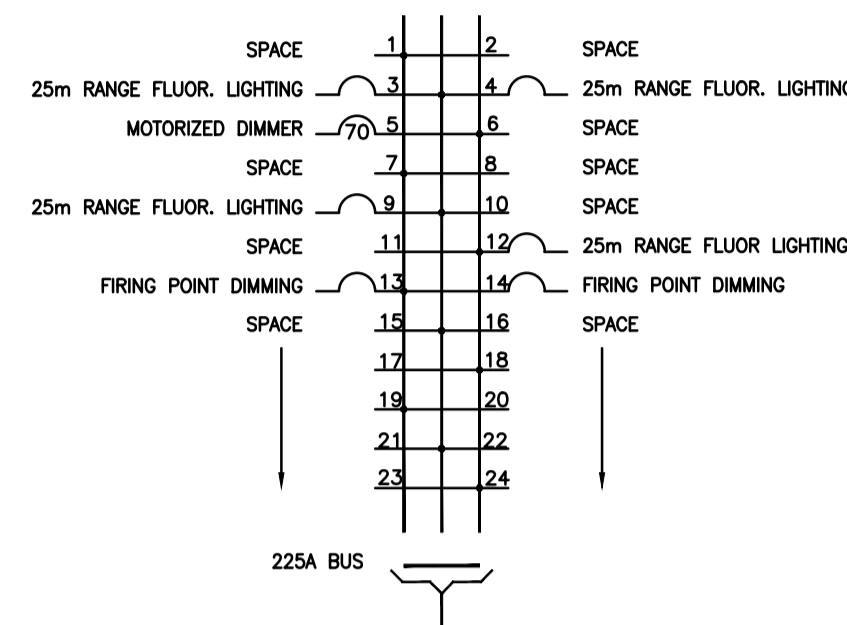
Project No./No. du projet 27/2015	Sheet/Fauille E3.3 OF -	Revision no./La Révision no. 0
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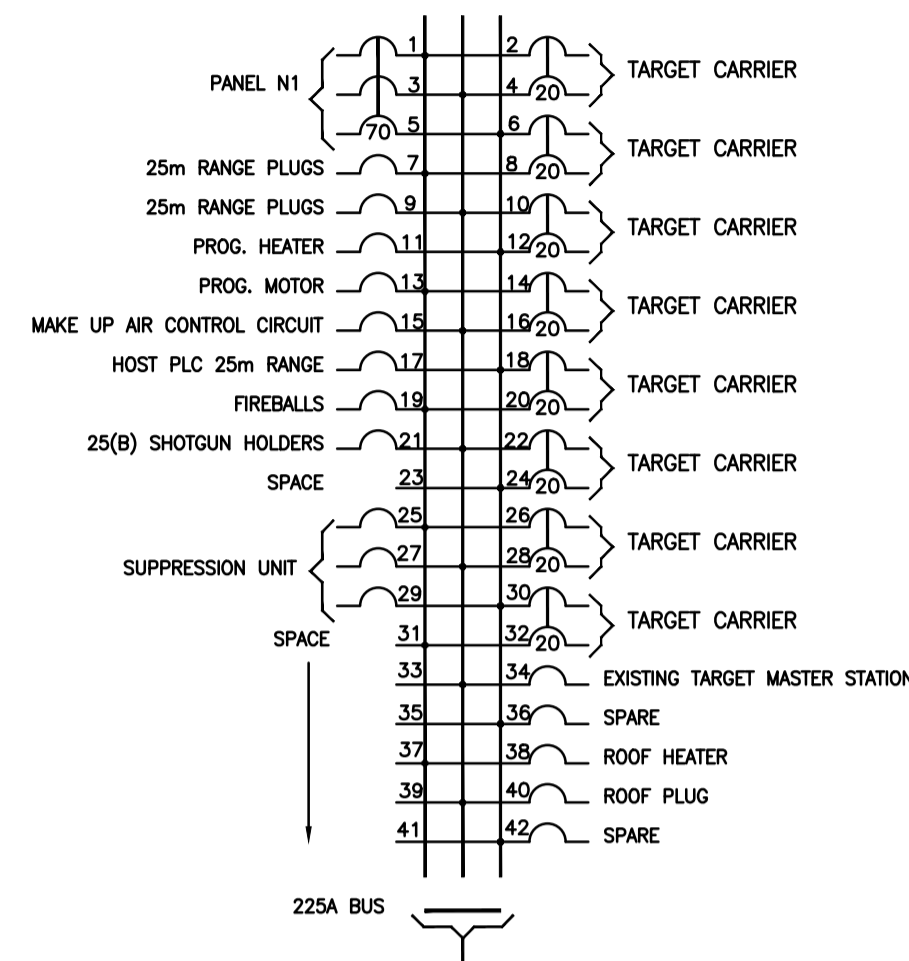
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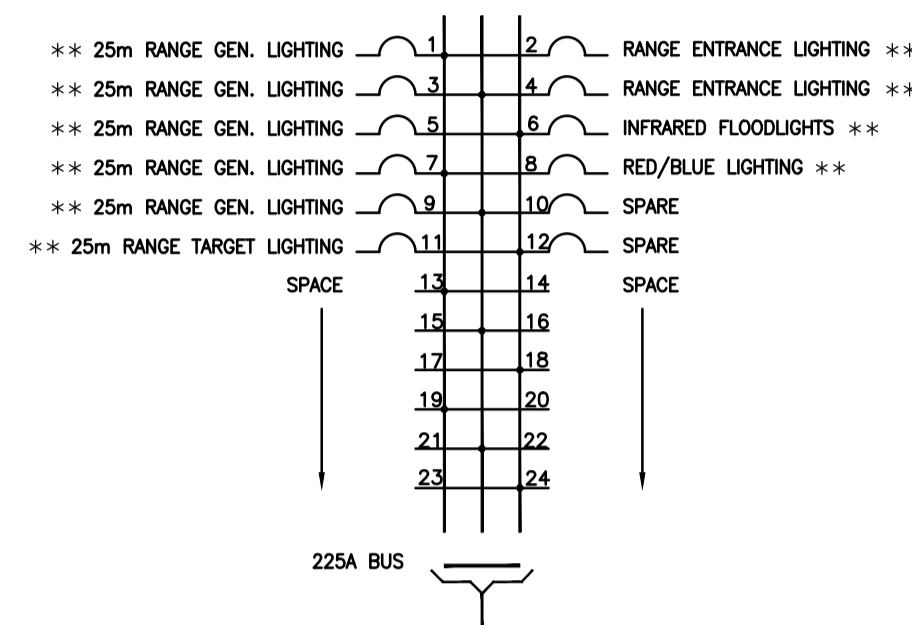
(ELECT 159)
 (EXISTING)
PANEL LP-N1
 (120/208 V.-3Ø-4W.)



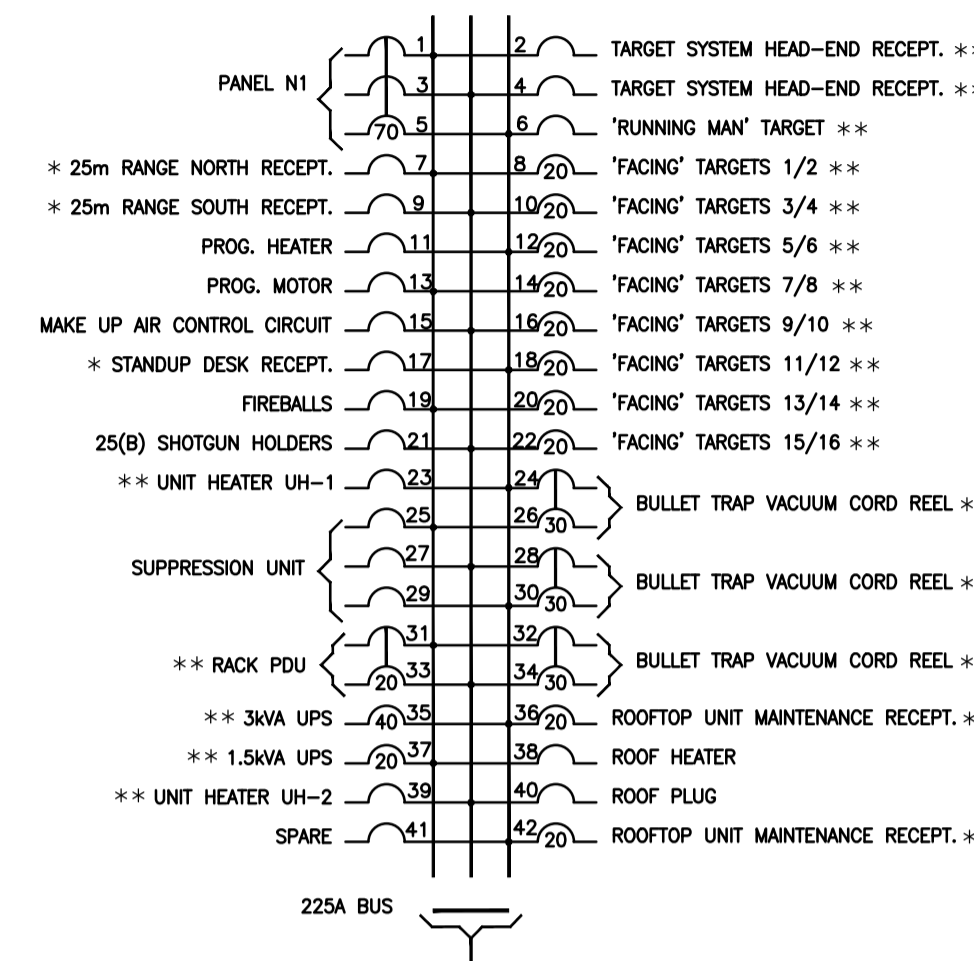
(ELECT 159)
 (EXISTING)
PANEL LP-N
 (120/208 V.-3Ø-4W.)



(ELECT 159)
 (EXISTING)
PANEL LP-N1
 (120/208 V.-3Ø-4W.)



(ELECT 159)
 (EXISTING)
PANEL LP-N
 (120/208 V.-3Ø-4W.)



DETAIL NOTES

- EXISTING PANELS MANUFACTURED BY SIEMENS.
- ELECTRICAL CONTRACTOR SHALL VERIFY COUNT AND SIZE OF SPACES PRIOR TO ORDERING EQUIPMENT.

1 EXISTING PANEL SCHEMATICS
 E4.1

2 REVISED PANEL SCHEMATICS
 E4.1

NOTE: THE EXISTING PANEL SCHEMATICS ARE SHOWN FOR REFERENCE ONLY. THE CIRCUIT NUMBERS AND DESCRIPTIONS DO NOT NECESSARILY REFLECT ACTUAL CIRCUITS. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY ALL EXISTING BRANCH CIRCUITRY MODIFIED IN THIS RENOVATION AND SHALL REUSE EXISTING BREAKERS MADE SPARE BY DEMOLITION TO ACHIEVE THE CIRCUITRY SHOWN ON THESE PLANS.

* INDICATES NEW BRANCH CIRCUITRY FED FROM AN EXISTING BREAKER.

** INDICATES NEW BRANCH CIRCUIT FED FROM A NEW BREAKER
 SUFFIX (E#) INDICATES REFERENCE CIRCUIT ONLY.

*** INDICATES EXISTING BRANCH CIRCUITRY FED FROM NEW BREAKERS

ALL PANEL DIRECTORIES AFFECTED BY THIS RENOVATION SHALL BE UPDATED TO SUIT NEW AND REVISED CIRCUITRY.

EQUIPMENT SCHEDULE														
ITEM	DESCRIPTION	MCA	HP	KW	VOLTAGE	Ø	FLA	STARTER	SIZE	LOCATION	FUSE	BREAKER	FEEDERS	NOTES
AH-1	AIR HANDLING UNIT				600V	3	257.1					300A-3P	4 350MCM RW90 + INS. #3AWG Cu. BOND IN 78mm EMT/RIGID PVC	
EF-1	EXHAUST FAN		75		600V	3						110-3P	3 #2AWG RW90 + INS. #6AWG Cu. BOND IN 35mm EMT/RIGID PVC	
UH-1, 2	UNIT HEATERS		1/4		120V	1						15-1P	2 #12AWG RW90 + INS. #12AWG Cu. BOND IN 21mm EMT	PROVIDE LINE VOLTAGE CONNECTION TO THERMOSTAT SHOWN ON POWER & SYSTEMS PLAN

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**ELECTRICAL PANEL SCHEMATICS
 AND MOTOR SCHEDULE**

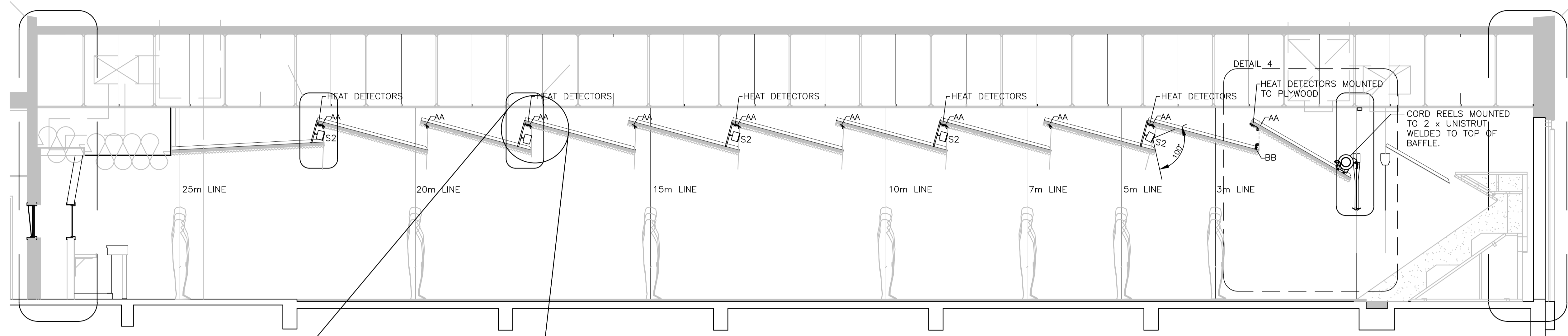
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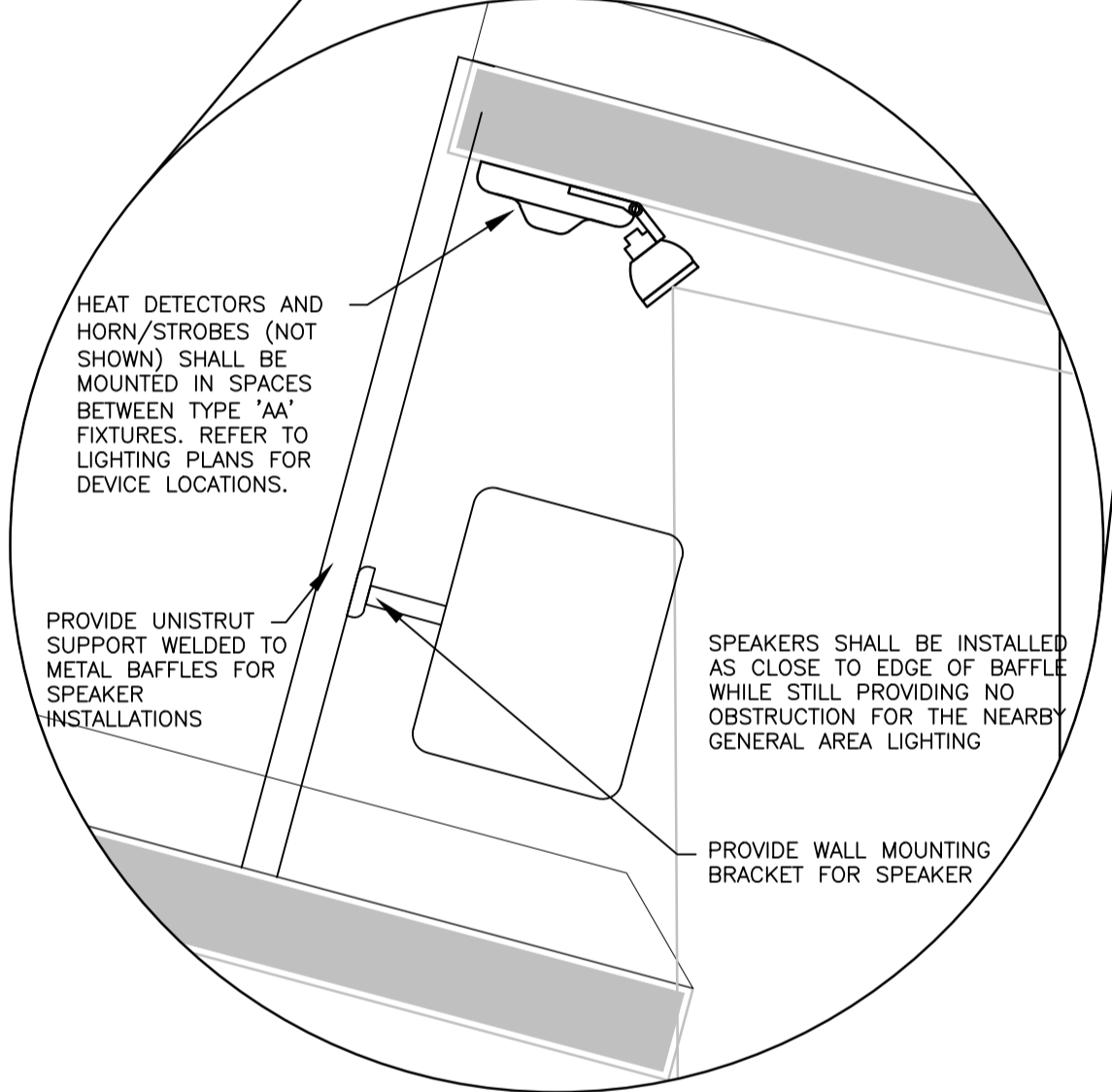


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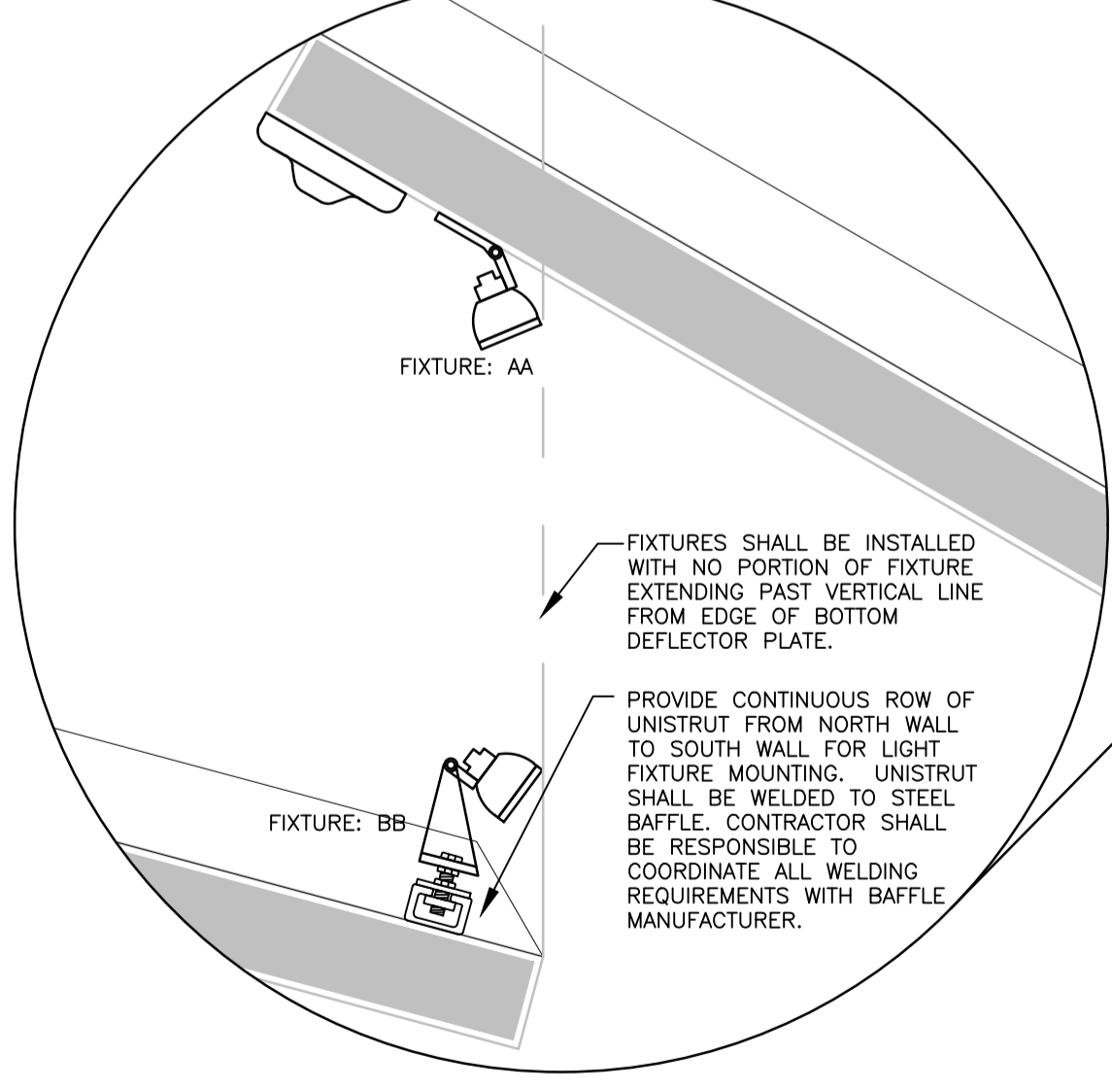
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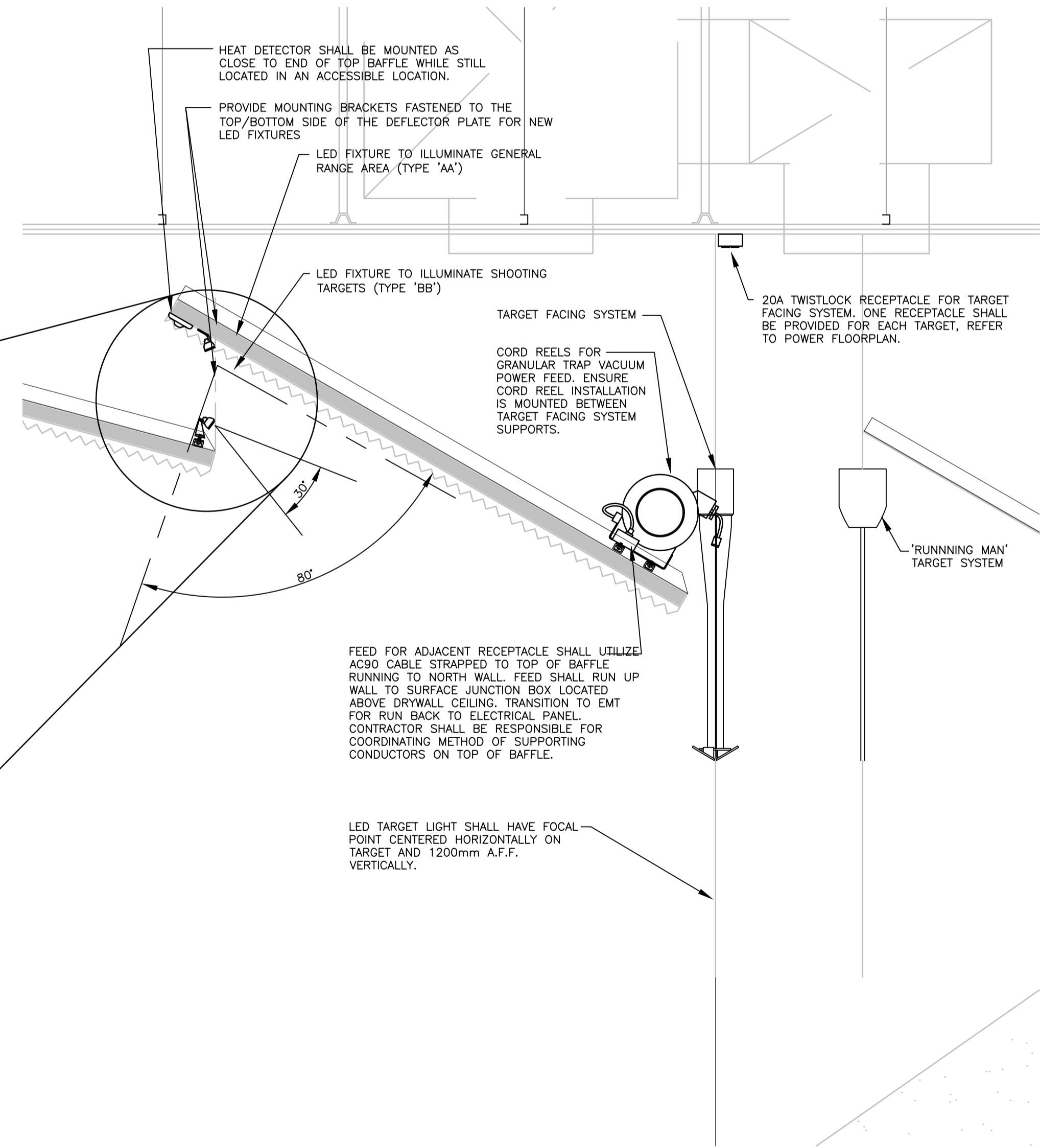
1 ELECTRICAL RANGE LIGHTING SECTION OVERVIEW
 E5.1 1:50



2 RANGE SPEAKER MOUNTING DETAIL
 E5.1 N.T.S.



3 RANGE FIXTURE MOUNTING DETAIL
 E5.1 N.T.S.



4 RANGE TARGET AREA DETAIL
 E5.1 N.T.S.

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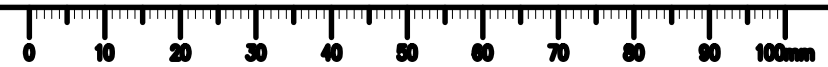
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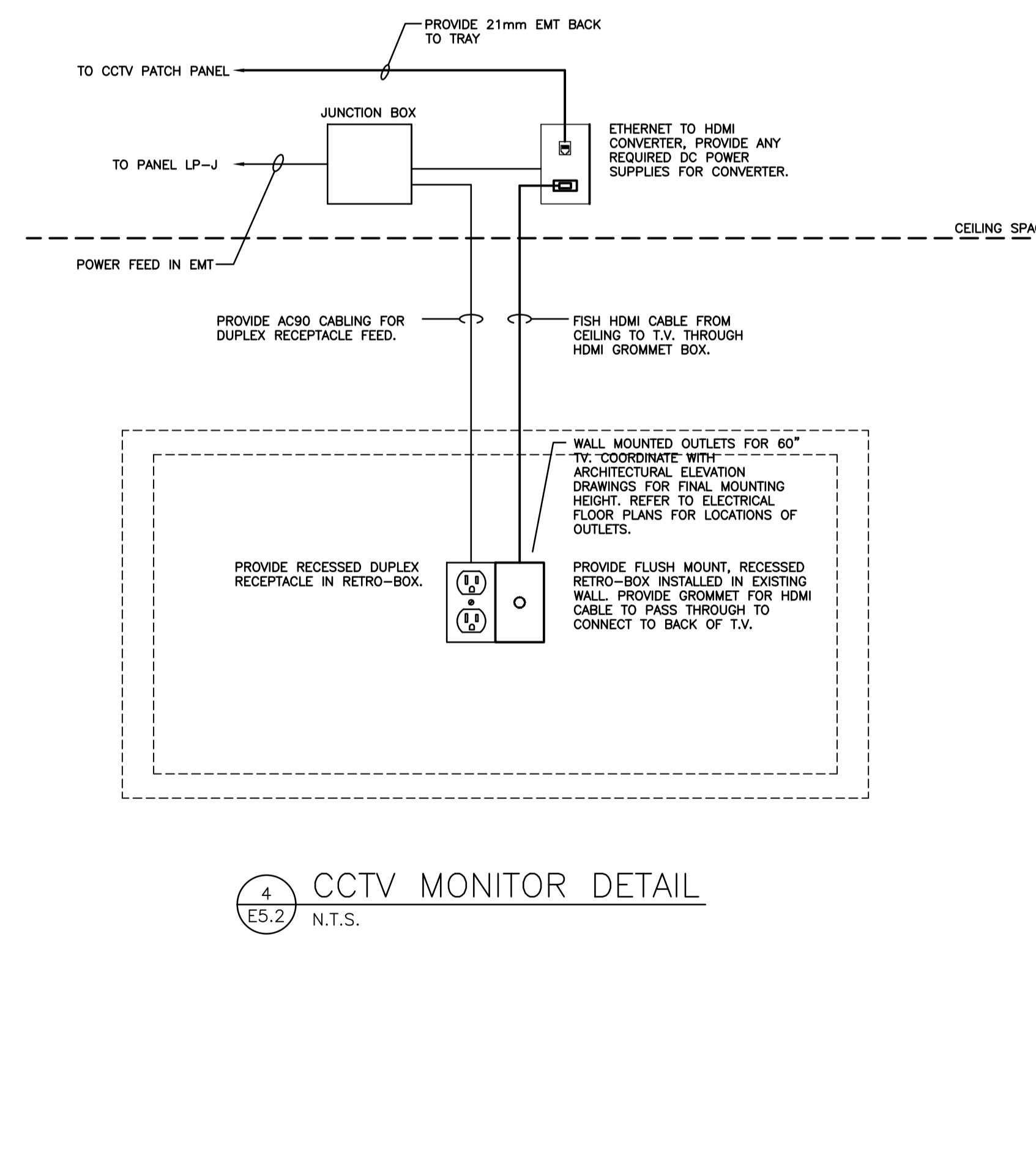
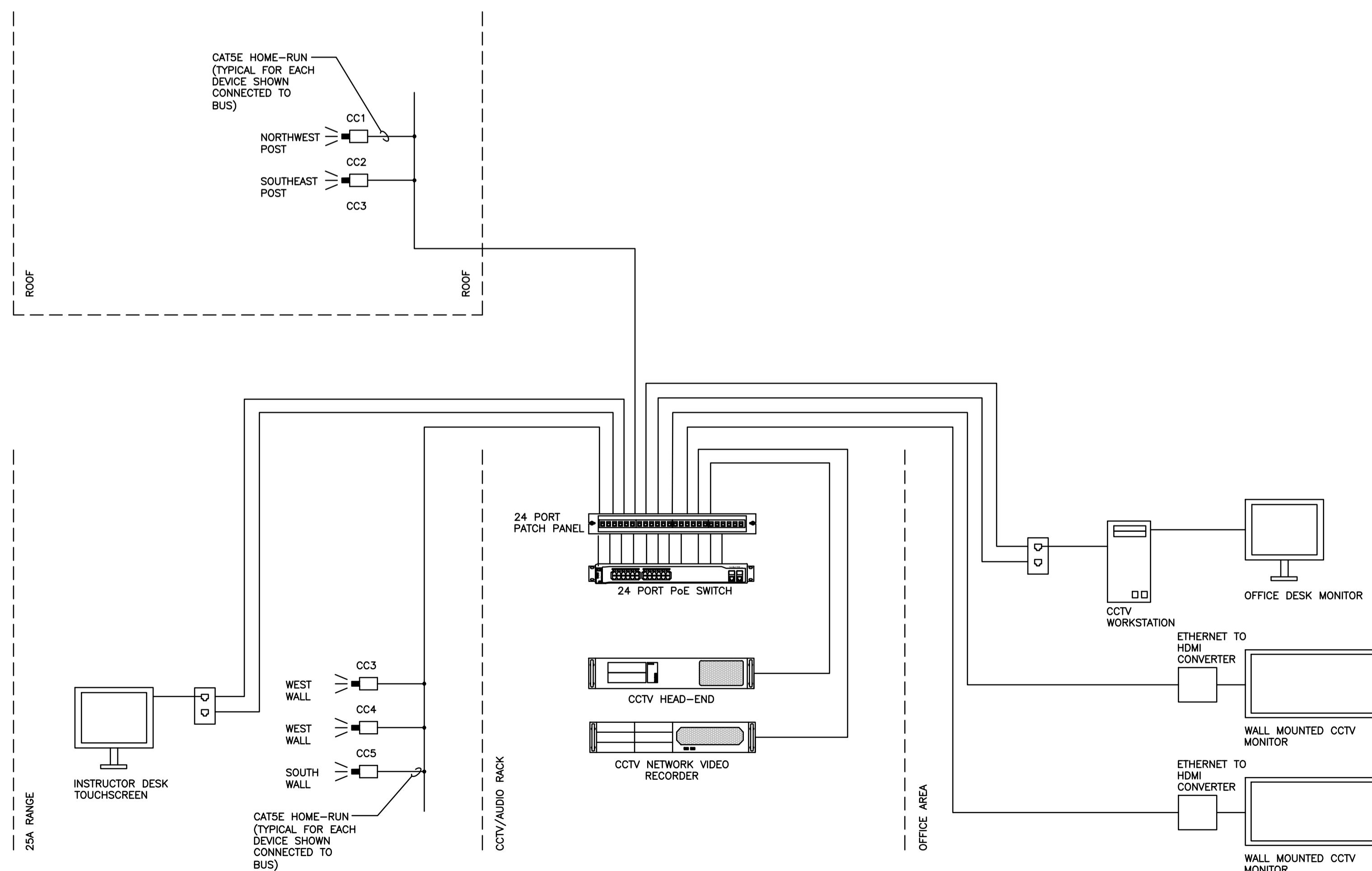
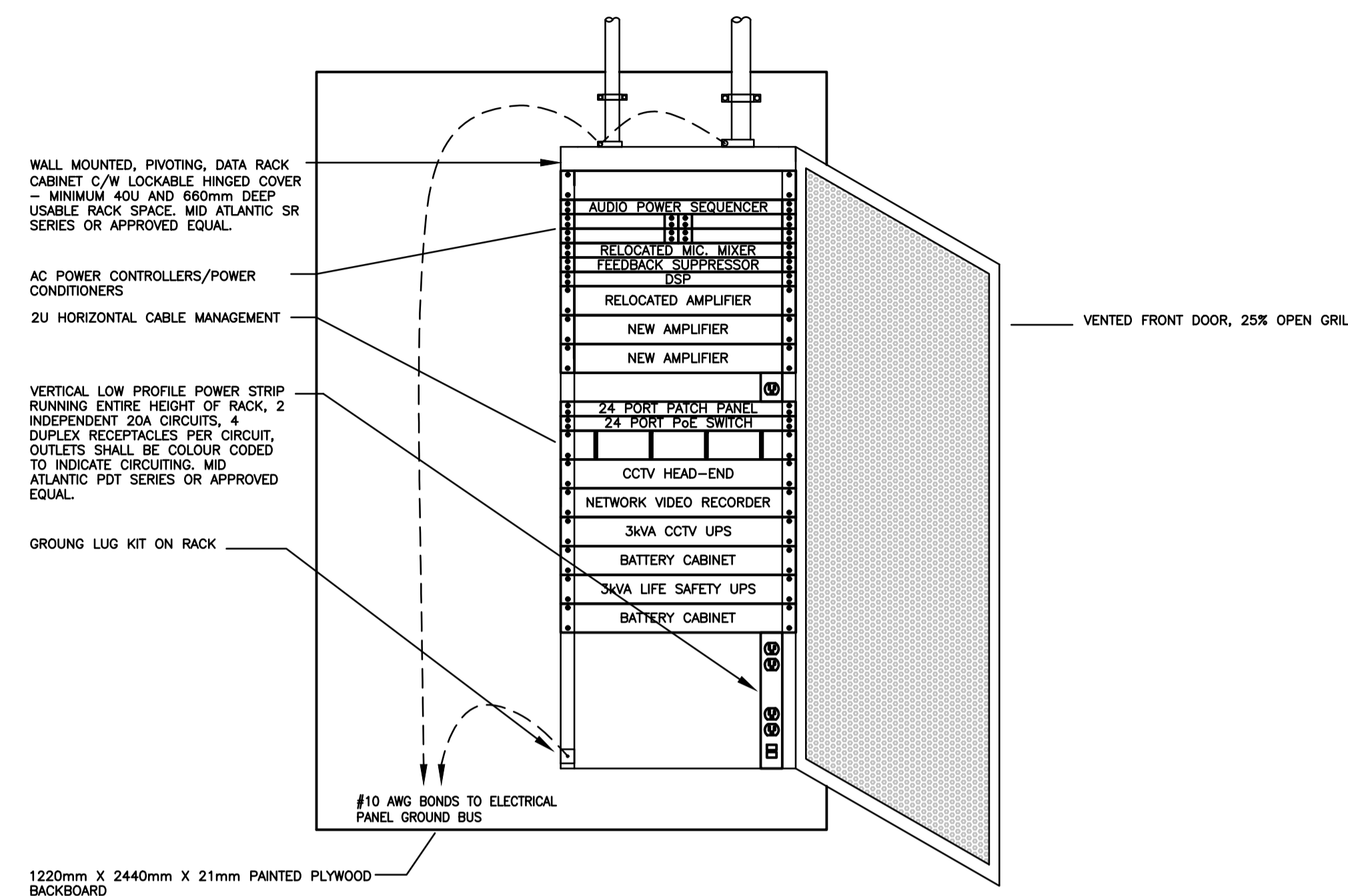
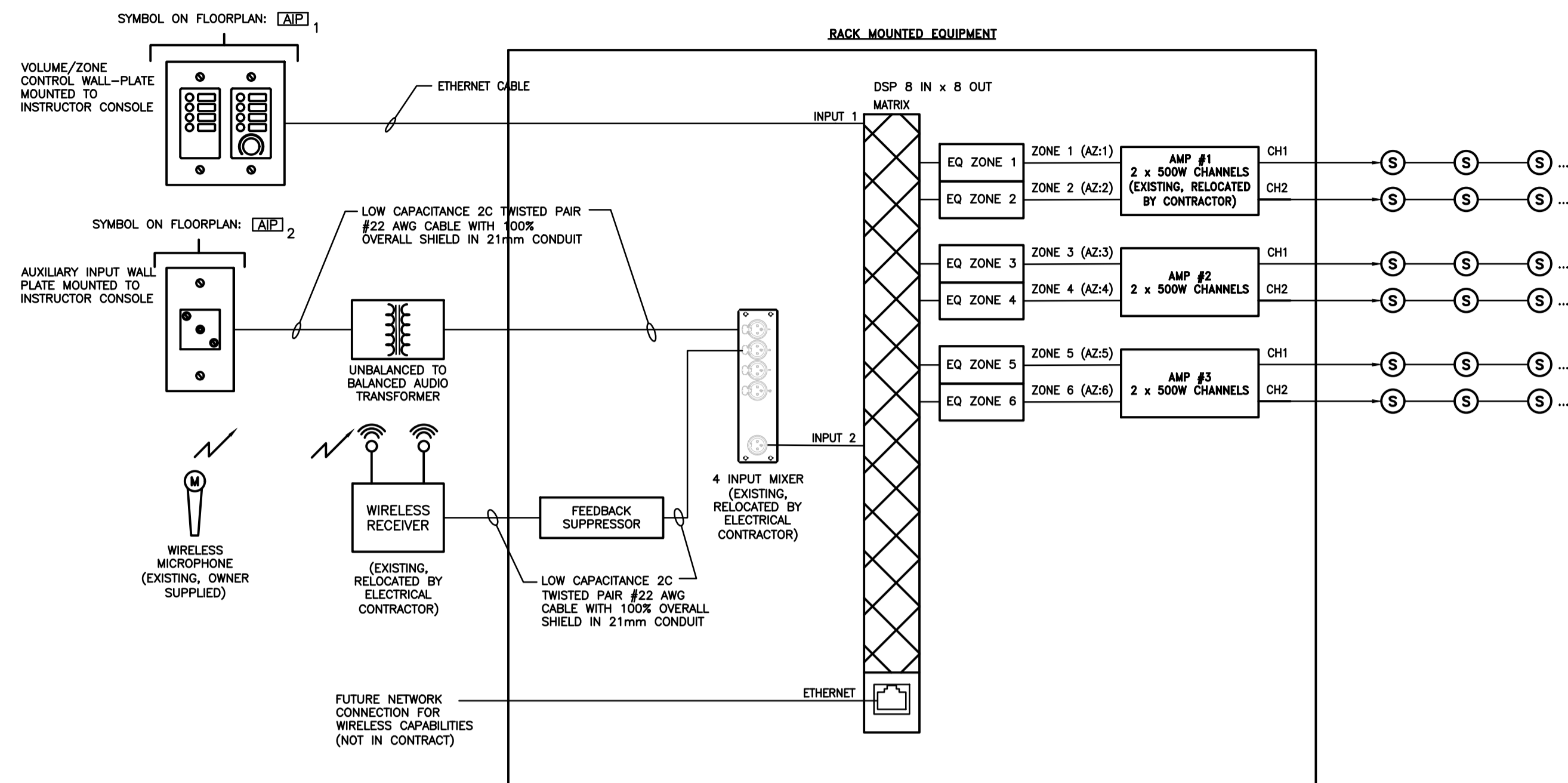
ELECTRICAL SECTION DETAILS

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ELECTRICAL DETAILS

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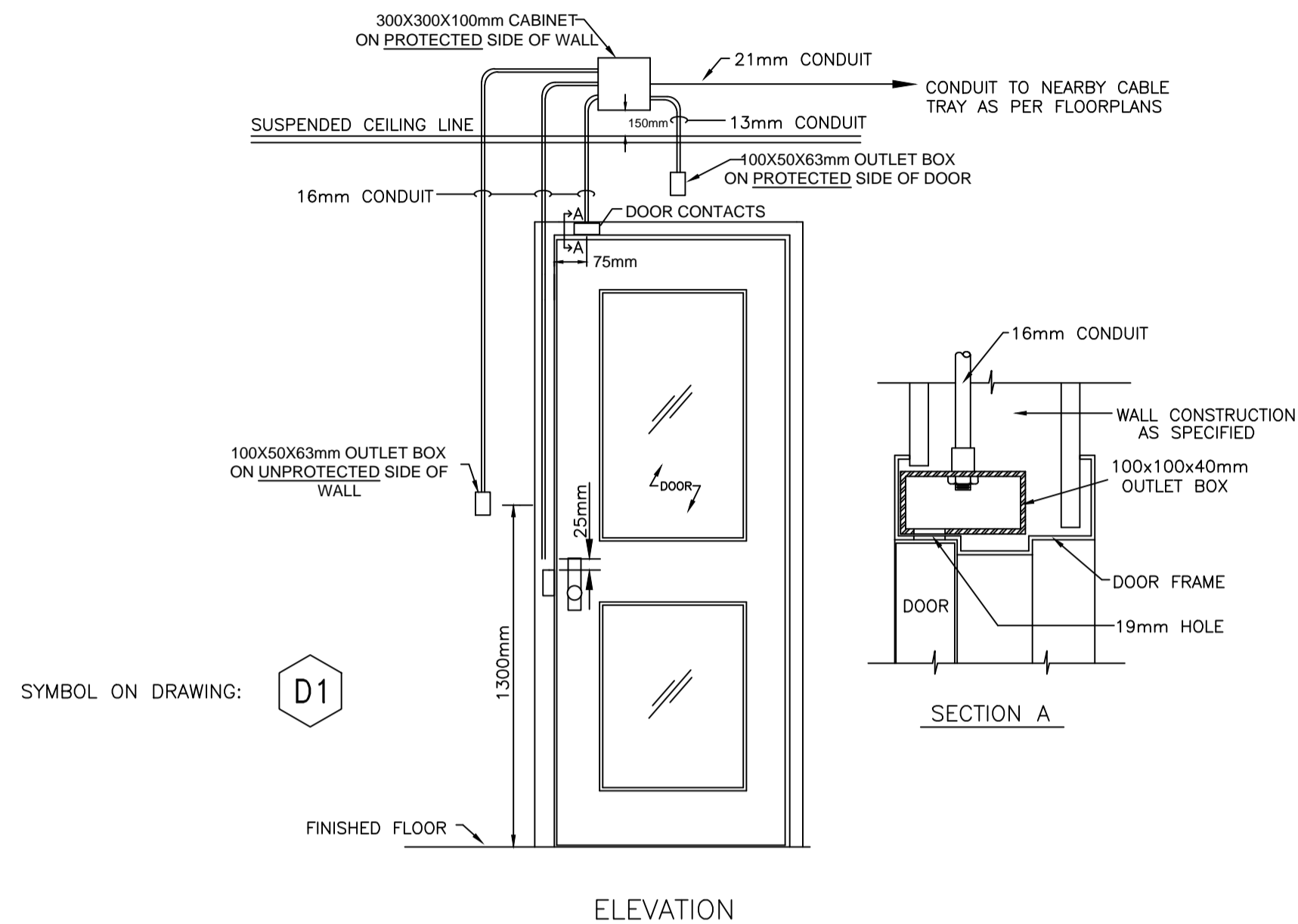
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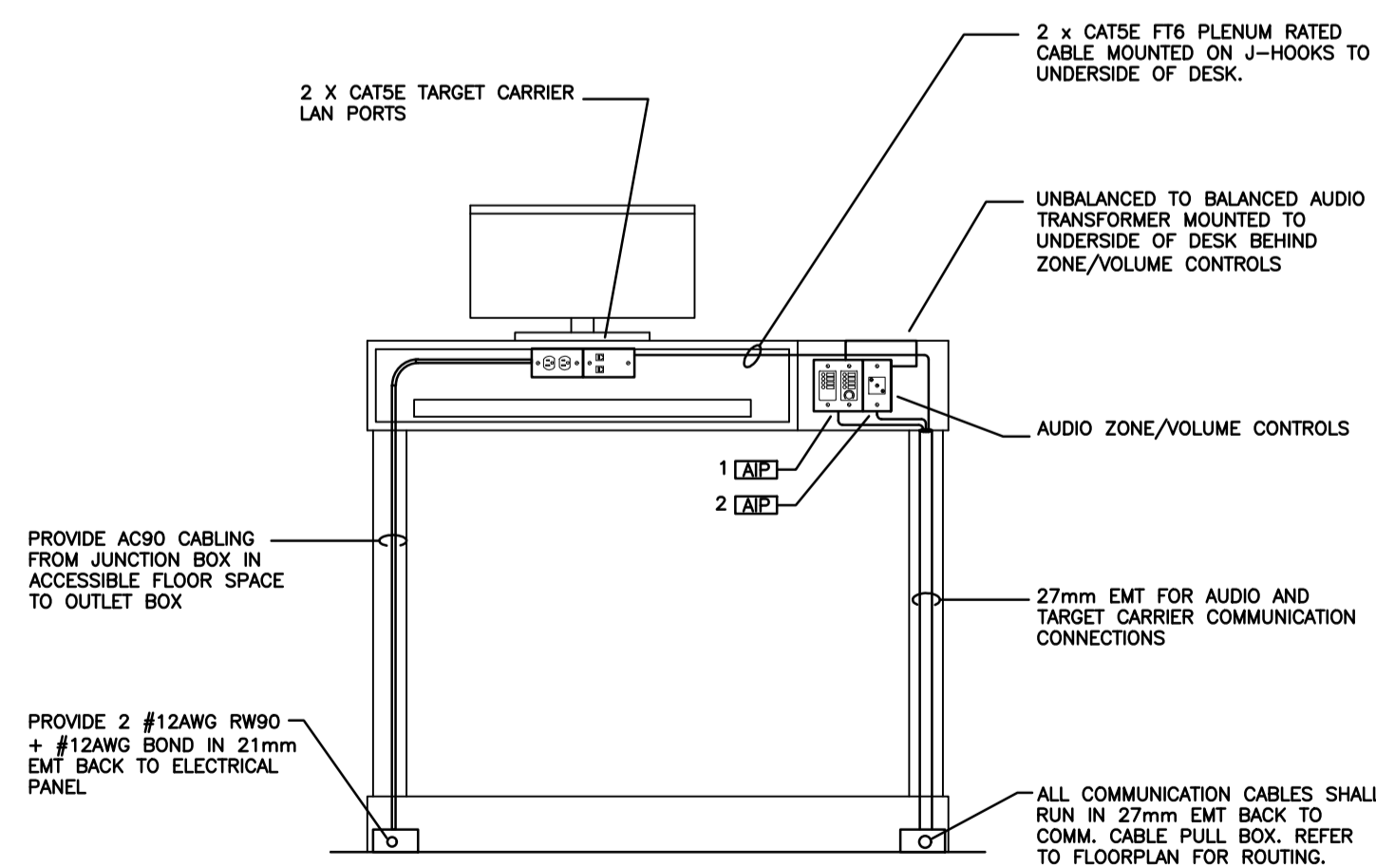
Detail Drawing
ACCESS CONTROL – ELEVATION OF SINGLE DOOR
WITH DOOR CONTACT, WALL MOUNTED READER
AND ELECTRIC STRIKE



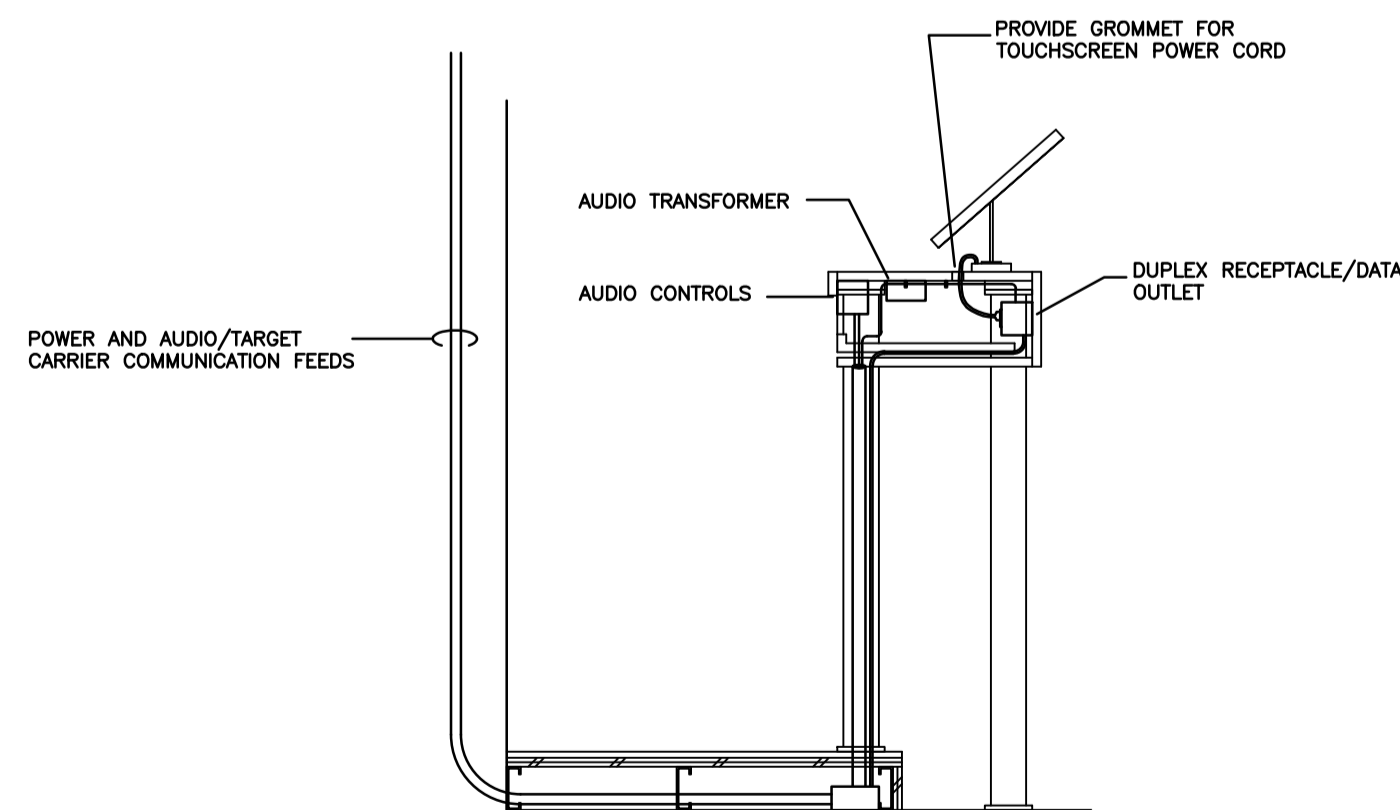
NOTES:

- CONDUIT CONNECTOR TO BE MOUNTED AND FASTENED TO OUTLET BOX BY DOOR FRAME FABRICATOR.
- OUTLET BOX TO BE SPOT WELDED IN PLACE BY DOOR FRAME FABRICATOR.
- DRILL A 19MM HOLE AT 75MM (CENTER POINT) FROM THE EDGE OF THE DOOR CASING TO ALLOW FOR DOOR SWITCH INSTALLATION AND ACCESS TO WIRING.

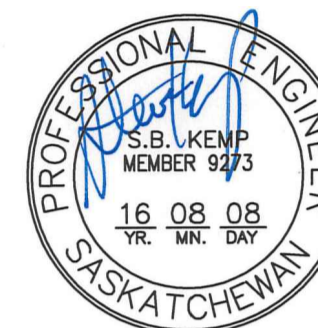
1 ACCESS CONTROL ROUGH-IN DETAIL
E5.3 N.T.S.



2 INSTRUCTOR'S DESK DETAIL – EAST ELEVATION
E5.3 N.T.S.



3 INSTRUCTOR'S DESK DETAIL – NORTH ELEVATION
E5.3 N.T.S.



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Client/client

Project title/Titre du projet

25A RANGE RENOVATION
REGINA, SK

Approved by/Approuve par

Designed by/Concept par
BDK, SBK

Drawn by/Dessine par
BDK

RCMP Project Manager/Administrateur de Projets GRC
JD

RCMP, Architectural and Engineering Resources Manager/
Ressources Architectural et de Directeur d'ingénierie, GRC

Client/client

Drawing title/Titre du dessin

ELECTRICAL DETAILS

Project No./No. du projet 27/2015	Sheet/Fauille E5.3 OF -	Revision no./ La Révision no. 0
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EQUIPMENT SCHEDULE

The design is based on the equipment listed here and noted in Equipment Schedule Tables and the specifications. Refer to Section 23 05 00 for responsibilities when utilizing alternate equipment than the basis of design.

AIR HANDLING UNIT AHU#1: Engineered Air Model FWE1057/DG650/MV/0 outdoor indirect fired make-up air unit, 20,401 l/s at 250 Pa ESP (43,250 cfm air volume at 1.0"ESP), 1225 Pa TSP (4.9"), 1904 kW gas input, 1524 kW output, 61.1 deg.C degree rise (6,500,000 BTU natural gas input, 5,200,000 BTU output, 110 deg.F rise), 365 kW (1,285,900 BTU) total cooling capacity, complete with outdoor inlet hood with hinged birdscreen. Inlet damper section with 2-position damper operator, summer and winter filter sections with 50 mm pleated filters in metal frames, magnetic filter gauges, glycol heat recovery coil as per following schedule, full service vestibule, 50 mm 3# insulation, 22 gauge solid internal liner, 14 gauge black iron checker plate floors complete with rust inhibitor coating, hinged access doors with leverlock handles, marine lights, two internally isolated air foil fans, 22.4 kW (30 HP) each, 575V/60/3 phase Super E Motor, titanium stainless steel drum and tube heat exchanger, 20:1 high turndown burner with independent control of gas and combustion air, minimum 80% efficiency with increasing efficiency as the burner turns down, blow through alternate tube circuited DX cooling coil with bypass section, R407C DX cooling with seven compressor circuits, air blender section to mix conditioned air with bypass air, CTRAC/GTRAC-2 electronic discharge air control with modulating room reset thermostat, remote panel with fan switch and light, heating and cooling status lights, clogged filter lights, auto bypass limit. Total full load Amps 257.1, Breaker size 300 amp. Unit to have separate power and control panel. Unit to be complete with single point power supply and to be complete with all transformers, relays and internal starters for various motors and power requirements (unit to be packaged and wired for low voltage controls and 120 V lighting). Unit to have packaged controls with bacNet interface to EMCS for monitoring only. Refer to sections 23 74 00 and 25 90 00.

Glycol Run Around Performance Data:

Coil Size: 2667mm x 3,658mm (105"x144"). Number Rows/FPI: 8R / 10. Airside Performance: 20,401 L/s (43,250 CFM), -40 Deg.C (-40 Deg.F) EAT, -25.5 Deg.C (-13.9 Deg.F) LAT, 137 Pa (0.55") air pressure drop. Waterside Performance: 20.2 L/s (320 GPM), 3.4 Deg.C (38.8 Deg.F) EAT, -1.1 Deg.C (30 Deg.F) LAT, 392 kW (1,221 MBH) energy transferred, 48.8 kPa (16.34") air pressure drop

EXHAUST FAN EF-1: Engineered Air Model LM50/C/MV/0 custom outdoor air handling unit. 21,800 l/s (46,216 cfm) air volume at 249 Pa (1") ESP, 1456 Pa (5.85") TSP, complete with return air plenum, prefilter section with 50 mm pleated filters, cartridge filter section with 300 mm 95% cartridge filters, magnetic filter gauges, 50 mm 3# insulation, 22 gauge solid internal liner, 14 gauge black iron check plate floors, complete with rust inhibitor coating, hinged access doors with leverlock handles, marine lights, glycol heat recovery coil section, access section, HEPA filter section with 99.99% filters, internally isolated air foil fan 55.9 kW (75 HP), 575V/60/3 phase, Super E Motor, discharge damper section with damper operator, vertical discharge exhaust air plenum, exhaust nozzle sized for 20.32 m/s (4,000 FPM). Factory wired with motor starters, remote panel with fan switch and light, clogged filter lights.

Glycol Run Around Performance Data:

Coil Size: 2667mm x 3,658mm (120"x144"). Number Rows/FPI: 8R / 10. Airside Performance: 21,800 L/s (46,216 CFM), 21.1 Deg.C (70 Deg.F) EAT, 7.5 Deg.C (45.55 Deg.F) LAT, 139 Pa (0.56") air pressure drop. Waterside Performance: 20.2 L/s (320 GPM), 3.4 Deg.C (38.8 Deg.F) LWT, -1.1 Deg.C (30 Deg.F) EWT, 392 kW (1,221 MBH) energy transferred, 46.6 kPa (15.6") water pressure drop

DIFFUSERS AND GRILLES:

F-1: E.H. Price, Model 80/TB/B12, eggcrate face return, t-bar lay-in or complete with plaster frame for gypsum ceiling, white powder coat finish. Unit to have integral balancing damper.

DUCT ROOF SUPPORTS: C-Port DSAW duct support c/w telescopic crossbeam and heavy duty angle supports. Base - 100% Recycled Rubber, UV Resistant. Strut - 14 gauge Galvanized Channel strut (13/16" high). Telescopic crossbeam - 12 gauge galvanized steel. Vari-angle Bracket - 1/4" hot-rolled, zinc-plated carbon steel. Rated for minimum 1,200 lbs. Warranty: 10 years.

PIPE ROOF SUPPORTS: C-Port C-series pipe support. Base: 100% recycled rubber, UV resistant. Strut: 14 gauge galvanized channel strut (13/16" high) supports. Rated for minimum 750 lbs. Warranty: 10 years.

EXPANSION TANK ET-1 (Reclaim System): Amtrol Model AX-80V, 44.7 gallon (168 litre) total volume, 22.6 gallon (85.5 litre) acceptance volume, 24" (610 mm) diameter x 29" (737 mm) high. Unit to be mounted on floor, provide stand if increased elevation is required. Installation to be complete with pressure relief valve, isolation valve and drain valve piped to glycol tank.

GLYCOL TANK AND PUMP (HEATING SYSTEM): Hydronic System SentryModel HSS-27 solution glycol feeder, completely preassembled and factory tested consisting of 27 litre (7 US gallon) polyethylene fluid container with cover, CSA labeled pressure pump with integral high pressure cut-out, integral check valve, cord and plug. CSA labeled low fluid cut-off with piggyback plug. Bronze and stainless steel automatic pressure reducing valve with integral check valve and visual pressure indication. Pre-charged pressure tank. Suction strainer, bronze and stainless bypass and fill ball valves, flexible connection hose, labeled valves. Wall mounting bracket to be included. Unit to be complete with HSS-alarm low fluid alarm complete with silencer button, horn, battery backup and dry contacts for interface to monitoring systems. Power: 120V/60/1 phase.

AIR SEPARATOR: Amtrol inline steel air purger Model 462. Unit shall be complete with baffle, vent tapping and drain tapping. Unit to be line size, complete with blow down connection and full port drain valve with hose bibb, cap and chain. Provide and install automatic air eliminator, high capacity float type, 150 PSI (10.5 BAR) and 250 Deg.F (121 Deg.C) rating with discharged piped to expansion tank.

TRIPLE DUTY VALVE: Are not permitted.

SIDE STREAM FILTERS: Filterite Model LM010 replaceable media side stream filter, complete with sight glass and one case of thirty 2 micron cartridges and one case of thirty 5 micron cartridges.

SYSTEM ANTIFREEZE: Supply and install 50% propylene glycol and 50% water solution. Glycol tank to be filled at substantial completion.

WALL HUNG FIRE EXTINGUISHER: 4.5 kg (10 lb) ABC dry chemical fire extinguisher c/w wall bracket.

PRESSURE RELIEF DAMPER: Greenheck Model HPR-120, heavy duty pressure relief damper with galvanized steel double flanged channel frame and galvanized steel single thickness blades. External heavy duty linkage with galvanized steel clevis arms and plated steel tie bars and pivot pins with nylon pivot bearings, ball bearings, blade counterbalance, and adjustable pressure setting weights are standard.

LINE VOLTAGE THERMOSTAT: Heavy duty heating line voltage thermostat to control cabinet unit heater and associated three way valve. Unit to be complete with locking cover and removable setpoint adjustment. Snap-acting switch makes on temperature fall for heating. Unit to mount directly onto standard outlet box. Mechanical to provide and mount thermostat, electrical to wire thermostat.

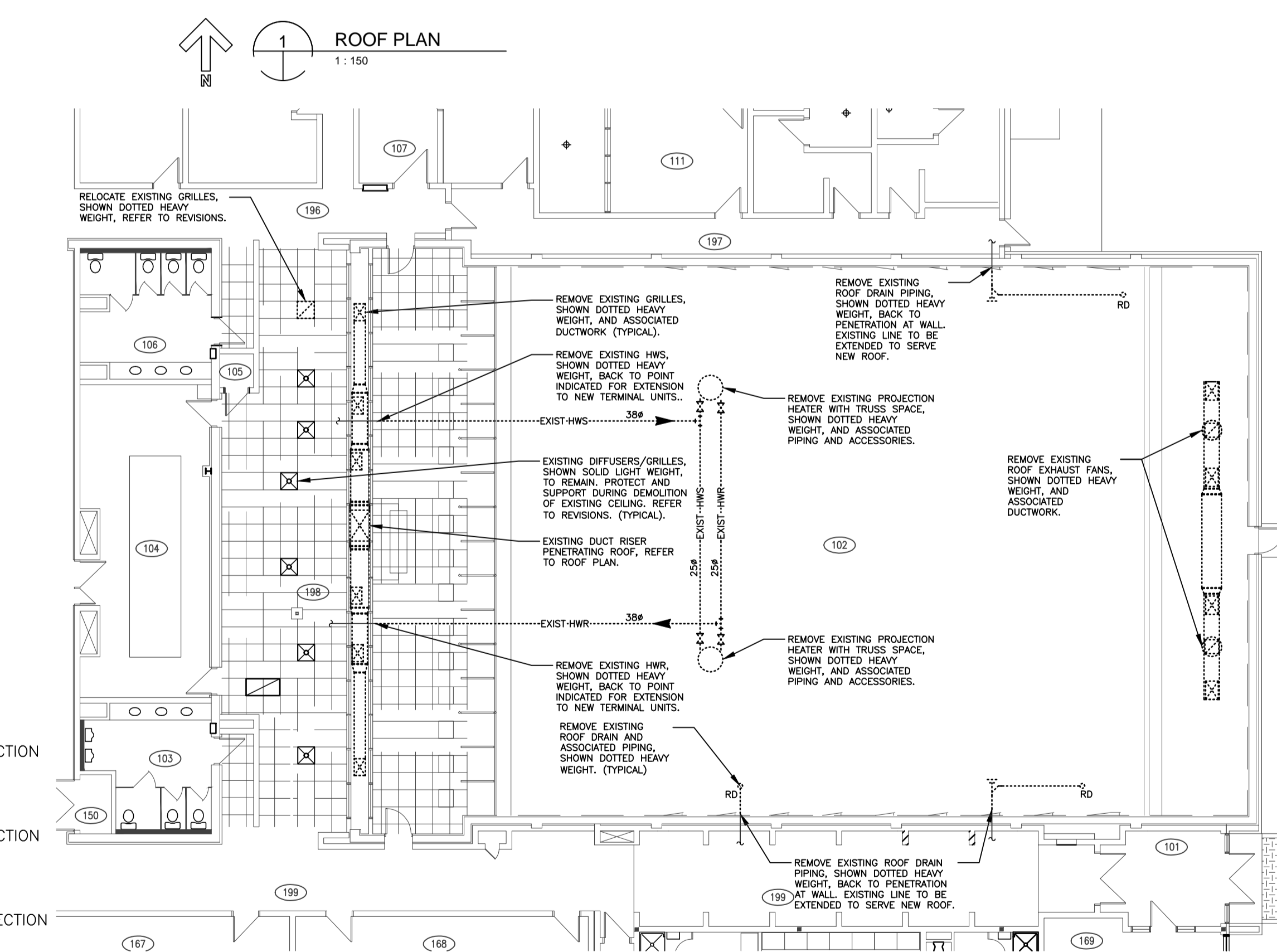
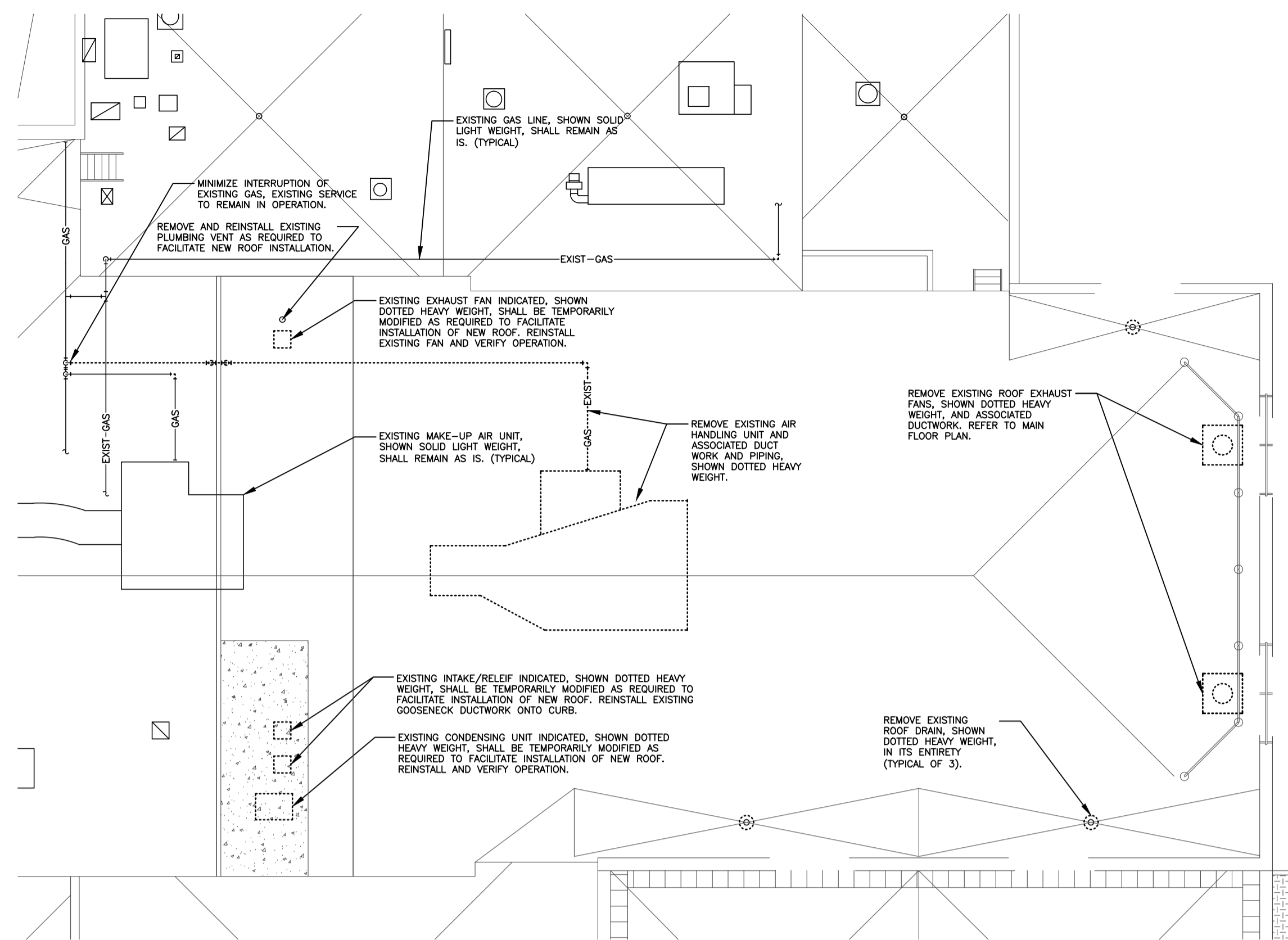
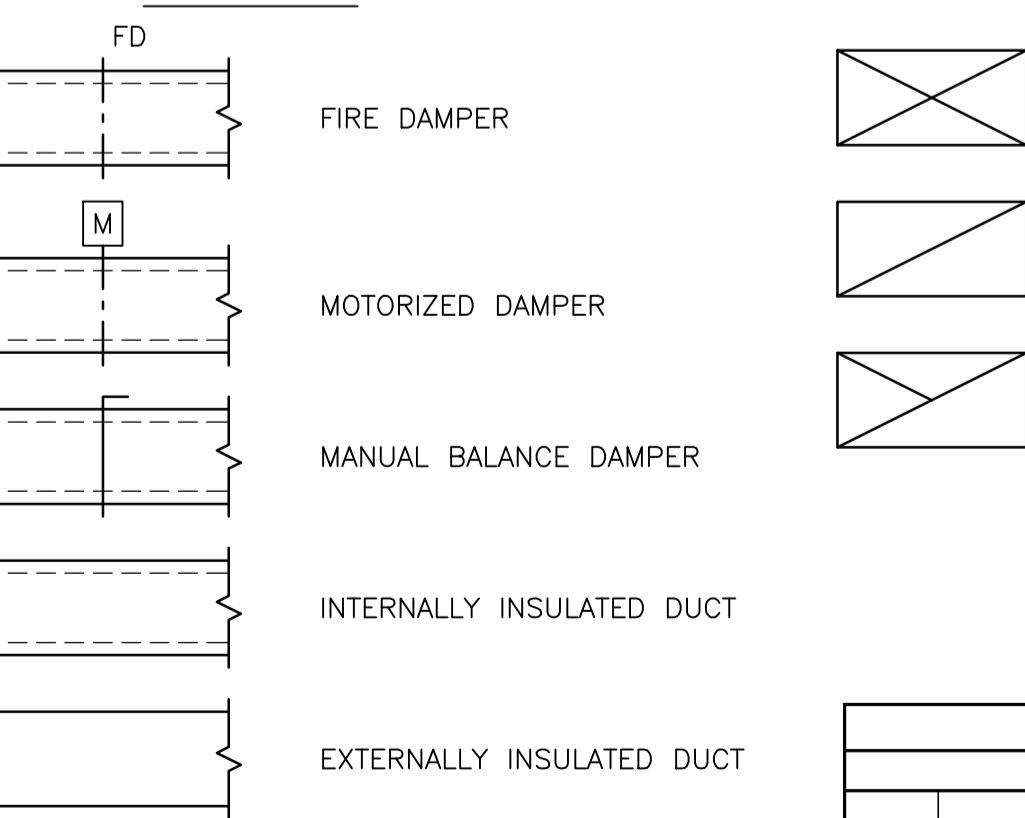
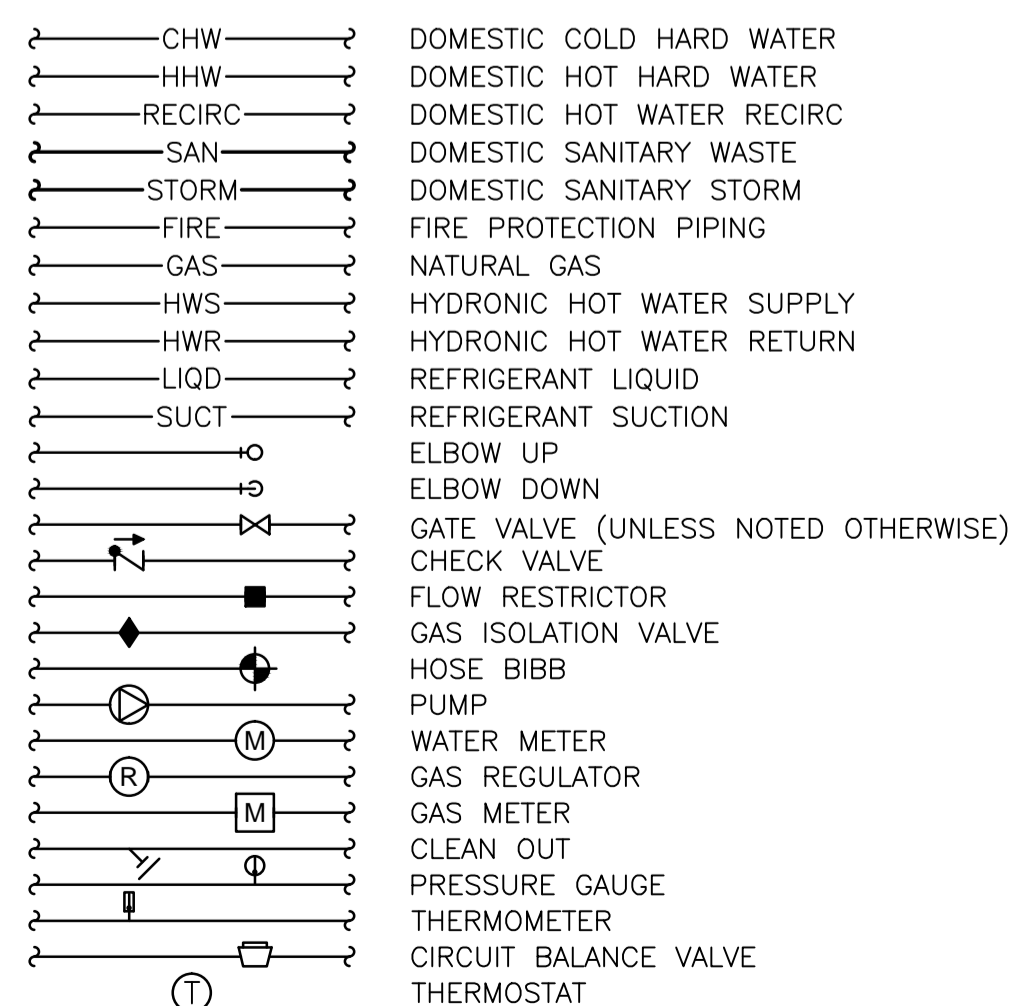
LINE VOLTAGE THREE-WAY VALVE: On-off line voltage three-way valve consisting of an actuator motor and valve assembly for controlling the flow of hot water. Valve shall fail open (flow through coil). Complete powerhead may be removed or replaced without breaking plumbing line connections or draining the system. Motor may be replaced without removing the valve body or draining the system. Mechanical to provide and mount valve, electrical to wire valve.

AIR BALANCE

- UPON COMPLETION OF WORK BALANCE EXHAUST AIR TO FLOW INDICATED AND SUPPLY AIR TO MAINTAIN FIELD DETERMINED DIFFERENTIAL NEGATIVE PRESSURE (INITIAL TARGET BASED ON FLOW INDICATED).

- SPECIFICATION VELOCITIES ACROSS RANGE IN ACCORDANCE WITH SPECIFICATIONS WHILE MAINTAINING TOTAL EXHAUST SYSTEM FLOW AND PRESSURE BALANCE.

LEGEND



Silencer Schedule																				
General Information							Airflow			Minimum Required Attenuation										
Tag	Location	Unit Served	Silencer Cross Section mm	Duct Connection mm	Silencer Type	Silencer Leg A mm	Silencer Leg B mm	Airflow L/S	Airflow (CFM)	Face Velocity m/s	Pressure Drop Pa	Octave Band in. w.c.								
												63	125	250	500	1k	2k	4k	8k	
SIL-1	Supply Air Duct	MUA-1	1300x2800	1300x2800	Elbow - Rect	3915	3895	18973	(40223)	5.1	51	0.20	20	37	47	49	55	45	36	30
SIL-2	Exhaust Air Duct	EF-1	1300x2800	1300x2800	Elbow - Rect	6752	2853	20401	(43250)	5.1	51	0.20	20	37	47	49	55	45	36	30

Pressure Drop listed includes system effect for duct arrangements indicated on drawings. Supplier to ensure Pressure Drop including system affect is not greater than number indicated.

SEPW Architecture Inc.
 100-3725 Pasqua Street, Regina, SK, S4S 0W8 ph: (306) 599-2255
 12101-3718 Kinross Place, Saskatoon, SK, S7P 0A6 ph: (306) 652-6457
 website: www.sepwa.ca



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25A RANGE RENOVATION REGINA, SK

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 Drawn by/Dessine par
 RCMP Project Manager/Administrateur de Projets GRC
 JD
 RCMP, Architectural and Engineering Resources Manager/
 Ressources Architectural et de Directeur d'ingénierie, GRC
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 Drawing Title/Titre du dessin
MECHANICAL DEMOLITION ROOF PLAN
MAIN FLOOR PLAN
EQUIPMENT SCHEDULES
LEGEND

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 REGINA, SK**

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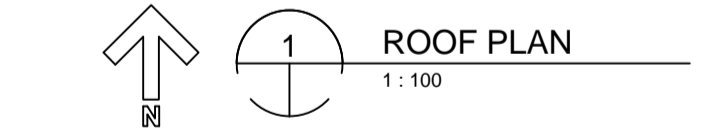
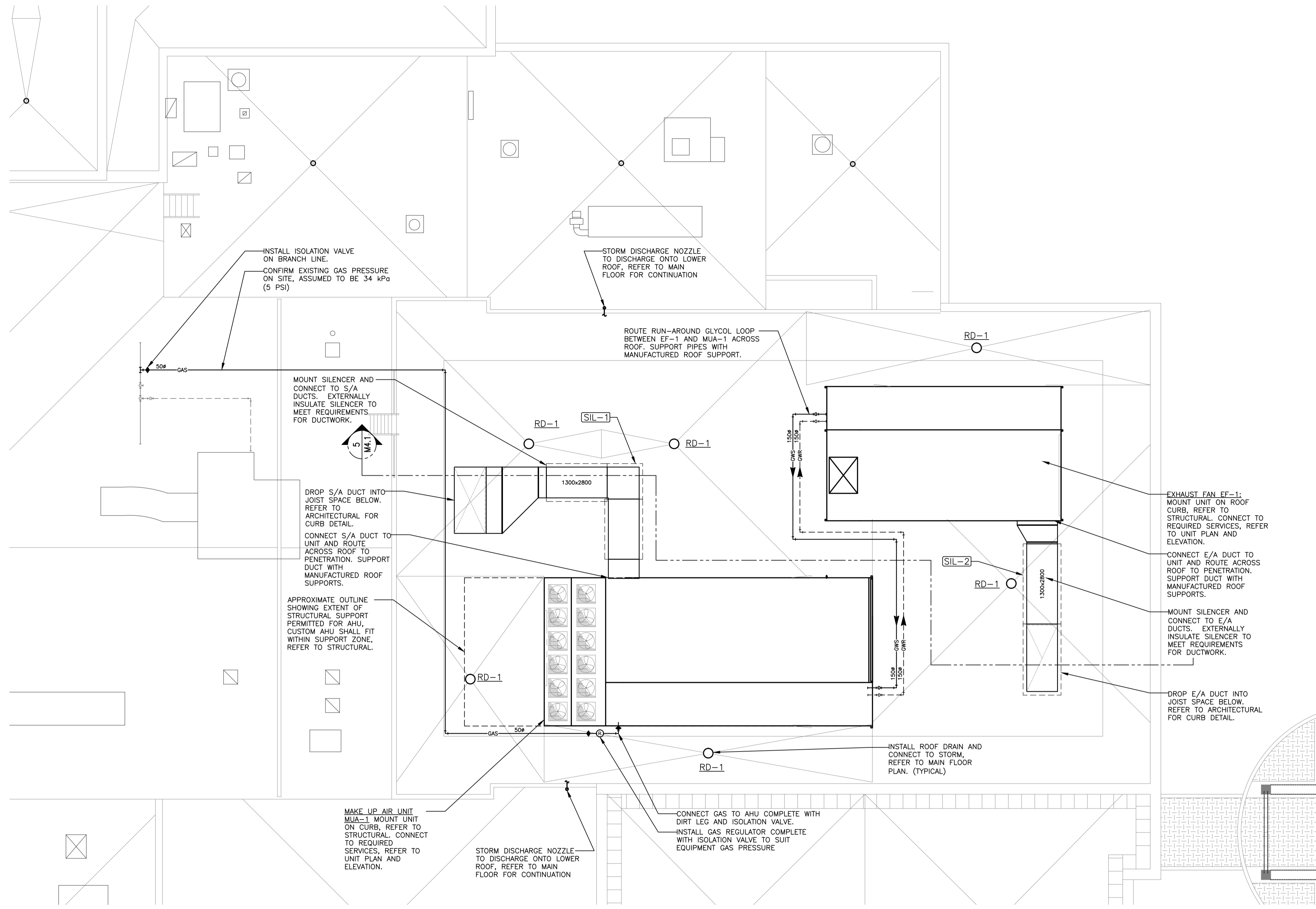
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MECHANICAL REVISIONS
ROOF PLAN.
ELEMENT SCHEDULES

Project No./No. du projet: 27/2015
 Sheet/Feuille: M2.1
 Revision no./La Révision no.: 0



VENTILATION GENERAL NOTES

- ALL DUCTWORK SHOWN DOUBLE LINE INSIDE PERIMETER OF DUCT IS TO BE COMPLETE WITH 25mm INTERNAL INSULATION. ALL OTHER DUCTWORK IS TO BE C/W EXTERNAL INSULATION. SIZES INCLUDE INTERNAL INSULATION WHERE APPLICABLE.
- EXTERIOR DUCTS (OUTSIDE BUILDING) WITH INTERNAL INSULATION MUST STILL MEET REQUIREMENTS OF SPECIFICATION AND WILL REQUIRE EXTERNAL INSULATION. INSULATION THICKNESS MAY BE REDUCED TO ACCOUNT FOR INTERNAL ACOUSTIC INSULATION.
- ALL FITTINGS ON INTERNALLY INSULATED DUCTWORK ARE TO BE C/W INTERNAL INSULATION. ALL OTHERS ARE TO BE EXTERNALLY INSULATED.
- ALL SUPPLY AIR AND EXHAUST AIR BRANCH DUCTS TO GRILLES AND DIFFUSERS ARE TO BE C/W BALANCE DAMPERS IN BRANCH DUCT NEAR MAIN, UNLESS BALANCE DAMPERS ARE PROVIDED IN GRILLE OR DIFFUSER.
- ALL EXHAUST FANS ARE TO BE SUSPENDED FROM STRUCTURE ON THREADED ROD C/W SPRING ISOLATORS.
- PROVIDE TURNING VANES IN ELBOWS
- PROVIDE ACCESS DOORS FOR ACCESS TO ALL MOTORIZED DAMPERS, FIRE DAMPERS, HUMIDIFIERS AND CONTROL DEVICES, AND TO FACILITATE DUCT CLEANING.
- COORDINATE ALL WORK WITH OTHER TRADES.
- RUN DUCTS AS HIGH AS POSSIBLE TO PROVIDE MAXIMUM CLEARANCE.

Hot Water Unit Heater Schedule

Cabinet Unit Heaters / Force Flows: Design based on Engineered Air hot water cabinet heater complete with speed control mounted inside cabinet, locking access door and filter. Suspend horizontal units from structure with spring isolation hangers. For flush mounted concealed units, adjust hangers to ensure face elevation matches ceiling unit is recessed in and provide vibration gasket on ceiling frame around perimeter of unit. Arrangement 24. Fully recessed into ceiling with flush face integral grilles. Servicing of unit to be from face, without accessing ceiling. Servicing for associated valves and pipe accessories may be through ceiling. Performance indicated in table is based on 100% water; unit shall be suitable for propylene glycol systems. Units controlled from a line voltage thermostat shall ensure circuit controls three way valve and fan. Thermostat and valve to be supplied and mounted by mechanical and wired by electrical.

Tag	Location	Arrangement (valve)	Model	Airflow		Capacity		EAT		EWT		LWT		Water Flow		Pressure Drop		Control	H.P.		V / Hz / P
				L/S	(CFM)	kW	(MBH)	Deg. C.	Deg. F.	Deg. C.	Deg. F.	Deg. C.	Deg. F.	L/S	(GPM)	kPa	ft. w.c.		kW	hp	
CUH-1	Room 102	24 (3-way)	CUH-11	613	(1300)	26.5	(90.5)	15.6	(60)	82.2	(180)	71.1	(160)	0.58	(9.15)	12.91	(4.32)	Line	0.19	(1/4)	120/60/1
CUH-2	Room 102	24 (3-way)	CUH-11	613	(1300)	26.5	(90.5)	15.6	(60)	82.2	(180)	71.1	(160)	0.58	(9.15)	12.91	(4.32)	Line	0.19	(1/4)	120/60/1

Line - Line Voltage Thermostat

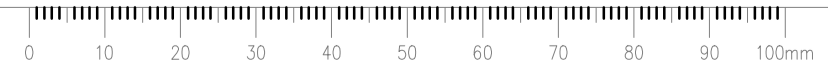
Pump Schedule

Design based on TACO centrifugal type with mechanical seals compatible with glycol. Cast iron construction for space heating. In-line pumps shall be supported from the floor with pipe stands or supported from structure with hangers. Frequency drives to be supplied and mounted by mechanical. Electrical to provide power wiring to VFD and from VFD to motor.

Tag	Service	Location	Type	Model	Size	RPM	Medium	Fluid Flow				Control	Motor		V / Hz / P
								Flow	S.P.	kPa	ft. w.c.		kW	hp	
P-1	Run-Around Coil Circulation Pump	AHU-1 Service Vestibule	Vertical Inline	KV2508	2.5 x 2.5 x 8	1750	50% PG	20.19	(320.0)	171.8	(57.5)	VFD - EMCS	7.46	(10)	575/60/3

Definitions
 PG - Propylene Glycol
 EG - Ethylene Glycol

Definitions
 VFD- Variable Frequency Drive
 CV- Constant Volume





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**25A RANGE RENOVATION
 REGINA, SK**

Approved by/Approuvé par

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Drawn by/Dessiné par

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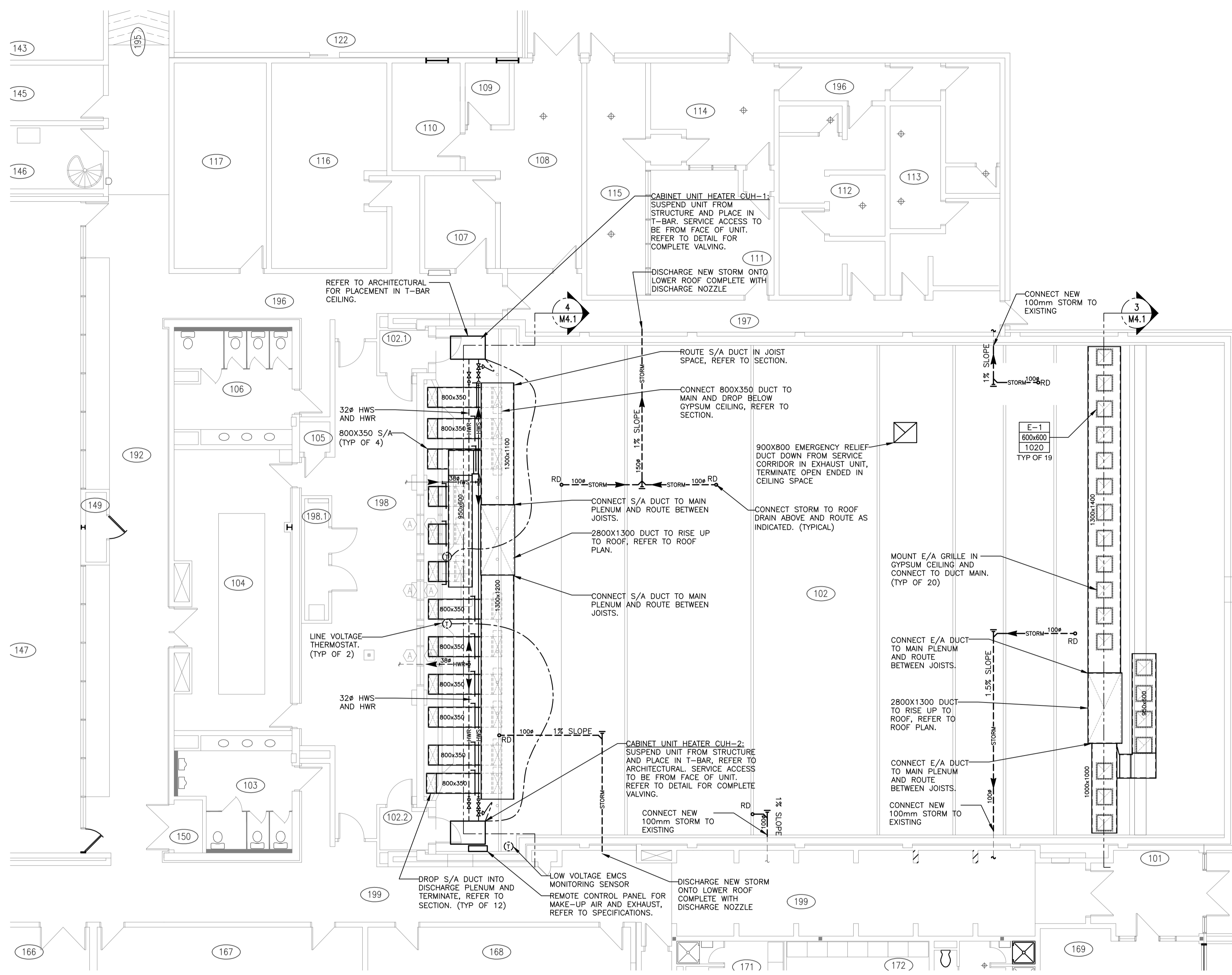
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**MECHANICAL REVISIONS
 MAIN FLOOR LAN**

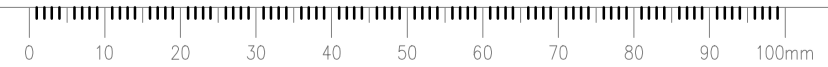
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 Sheet/Feuille: **M2.2**
 Revision no./La Révision no.: **0**



1 MAIN FLOOR PLAN
 1:100

VENTILATION GENERAL NOTES

- ALL DUCTWORK SHOWN DOUBLE LINE INSIDE PERIMETER OF DUCT IS TO BE COMPLETE WITH 25mm INTERNAL INSULATION. ALL OTHER DUCTWORK IS TO BE C/W EXTERNAL INSULATION. SIZES INCLUDE INTERNAL INSULATION WHERE APPLICABLE.
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- COORDINATE ALL WORK WITH OTHER TRADES.
- RUN DUCTS AS HIGH AS POSSIBLE TO PROVIDE MAXIMUM CLEARANCE.





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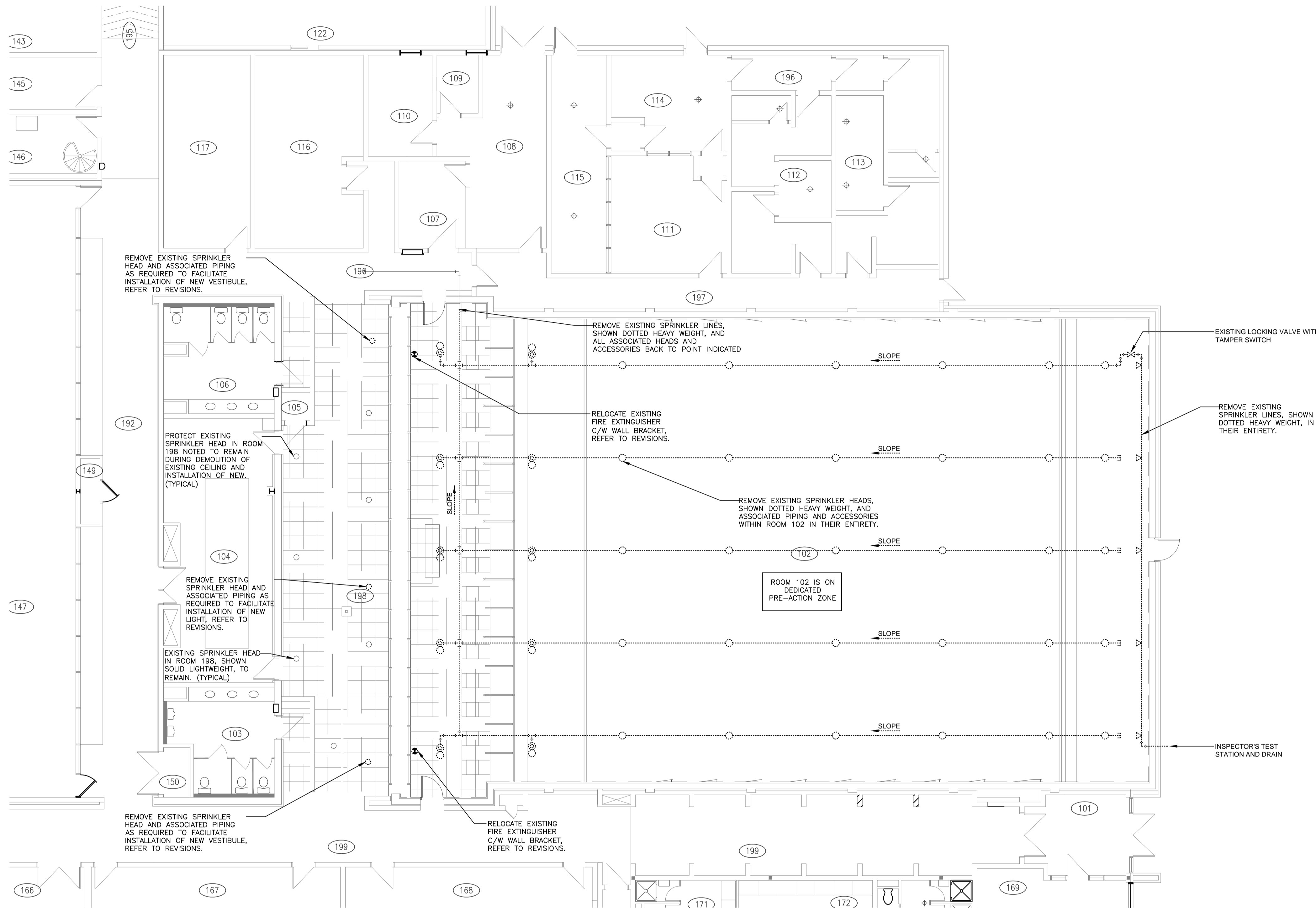
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**FIRE PROTECTION
 MAIN FLOOR PLAN DEMOLITION**

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27/2015

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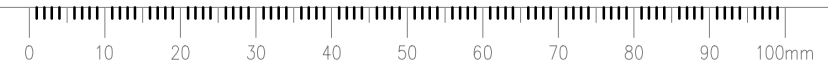
1 MAIN FLOOR PLAN
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LEGEND

- TYPE 'A' - CHROME SEMIRECESSED PENDANT
- ⊙ TYPE 'B' - CHROME SEMIRECESSED EXTENDED COVERAGE PENDANT
- ▷ TYPE 'C' - CHROME EXTENDED COVERAGE SIDEWALL
- TYPE 'D' - CONCEALED EXTENDED OR STANDARD COVERAGE PENDANT
- TYPE 'E' - UPRIGHT PENDANT
- SPRINKLER HEADS TO REMAIN SHOWN SOLID LIGHT WEIGHT
- ⊙ SPRINKLERS TO BE REMOVED/REPLACED SHOWN DOTTED HEAVY WEIGHT.

NOTES:

- CO-ORDINATE SPRINKLER LOCATIONS WITH LIGHTS, STRUCTURE, EXISTING PIPING, ELECTRICAL DISTRIBUTION, EQUIPMENT AND DEFLECTOR PANELS.
- SPRINKLERS SHALL BE BASED ON A LIGHT HAZARD OCCUPANCY.
- PROVIDE FIRE STOPPING AROUND ALL PIPING AT WALL PENETRATIONS.
- CONFIRM EXACT LOCATION OF DEFLECTOR PANELS ON SITE.
- COORDINATE LOCATION OF NEW SPRINKLER HEADS WITH OTHER TRADES AND EQUIPMENT..





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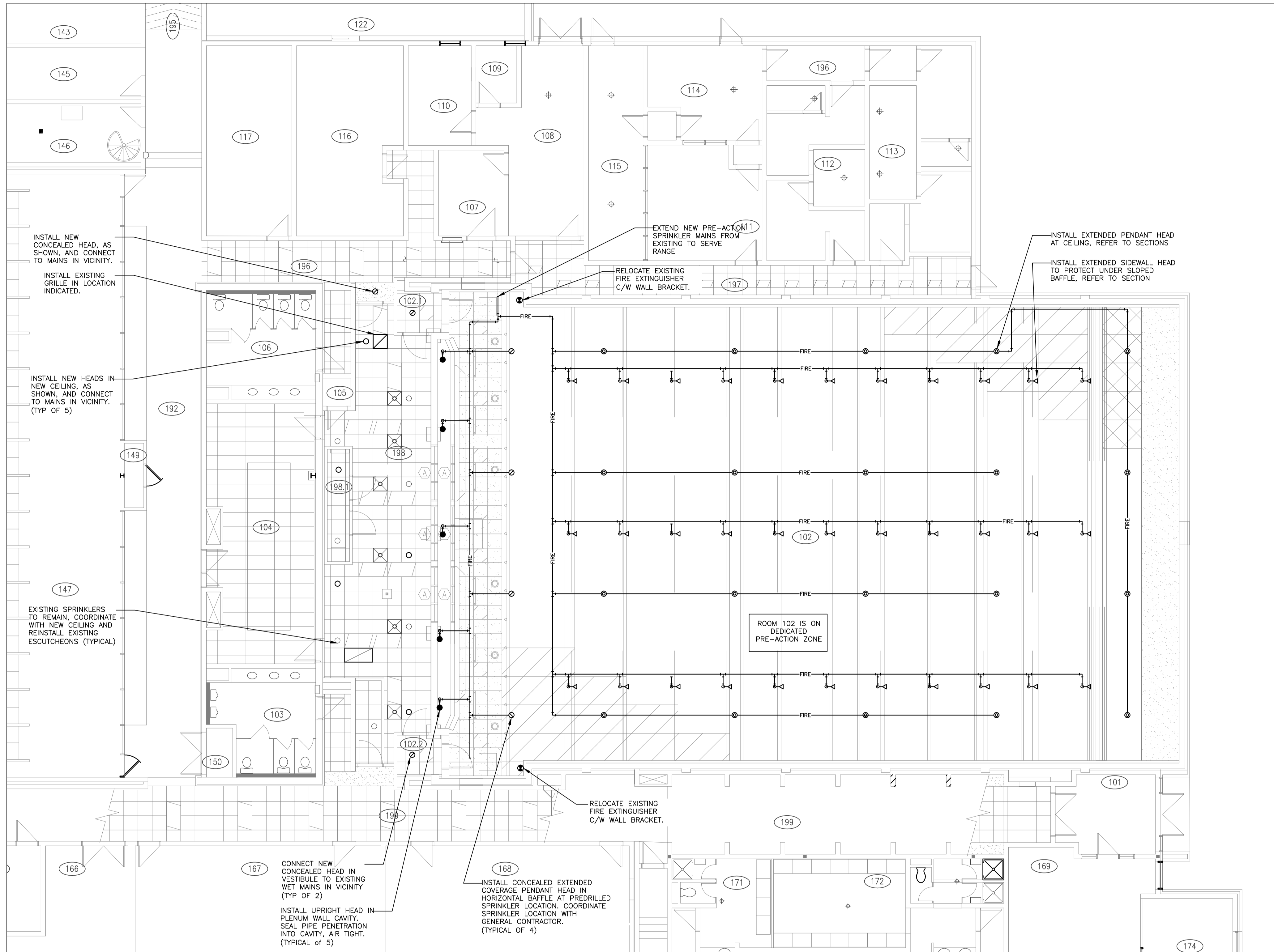
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**FIRE PROTECTION
 MAIN FLOOR PLAN REVISIONS**

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27/2015

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NOTES:

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2. SPRINKLERS SHALL BE BASED ON A LIGHT HAZARD OCCUPANCY.
3. PROVIDE FIRE STOPPING AROUND ALL PIPING AT WALL PENETRATIONS.
4. CONFIRM EXACT LOCATION OF DEFLECTOR PANELS ON SITE.
5. COORDINATE LOCATION OF NEW SPRINKLER HEADS WITH OTHER TRADES AND EQUIPMENT..

1 MAIN FLOOR PLAN
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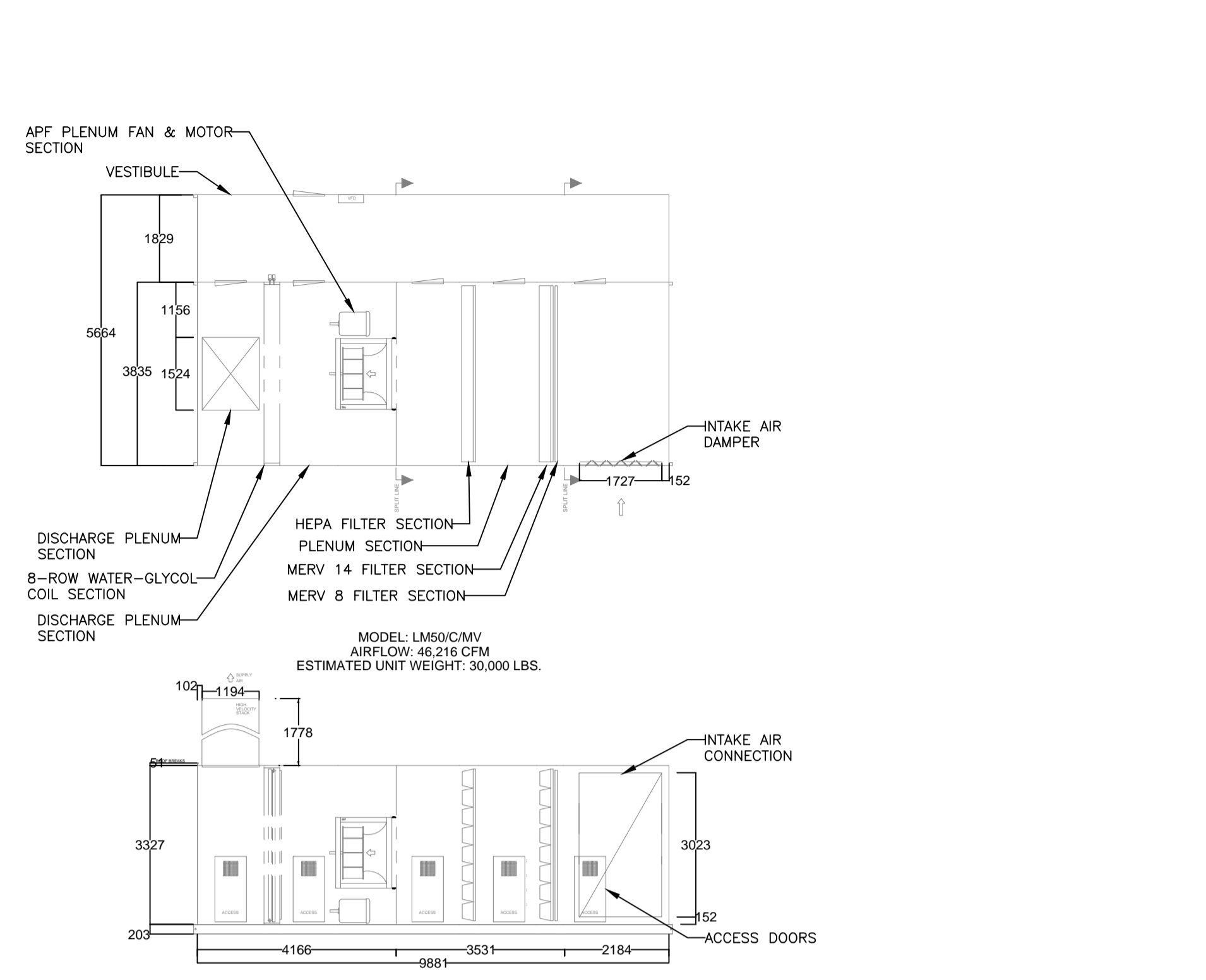
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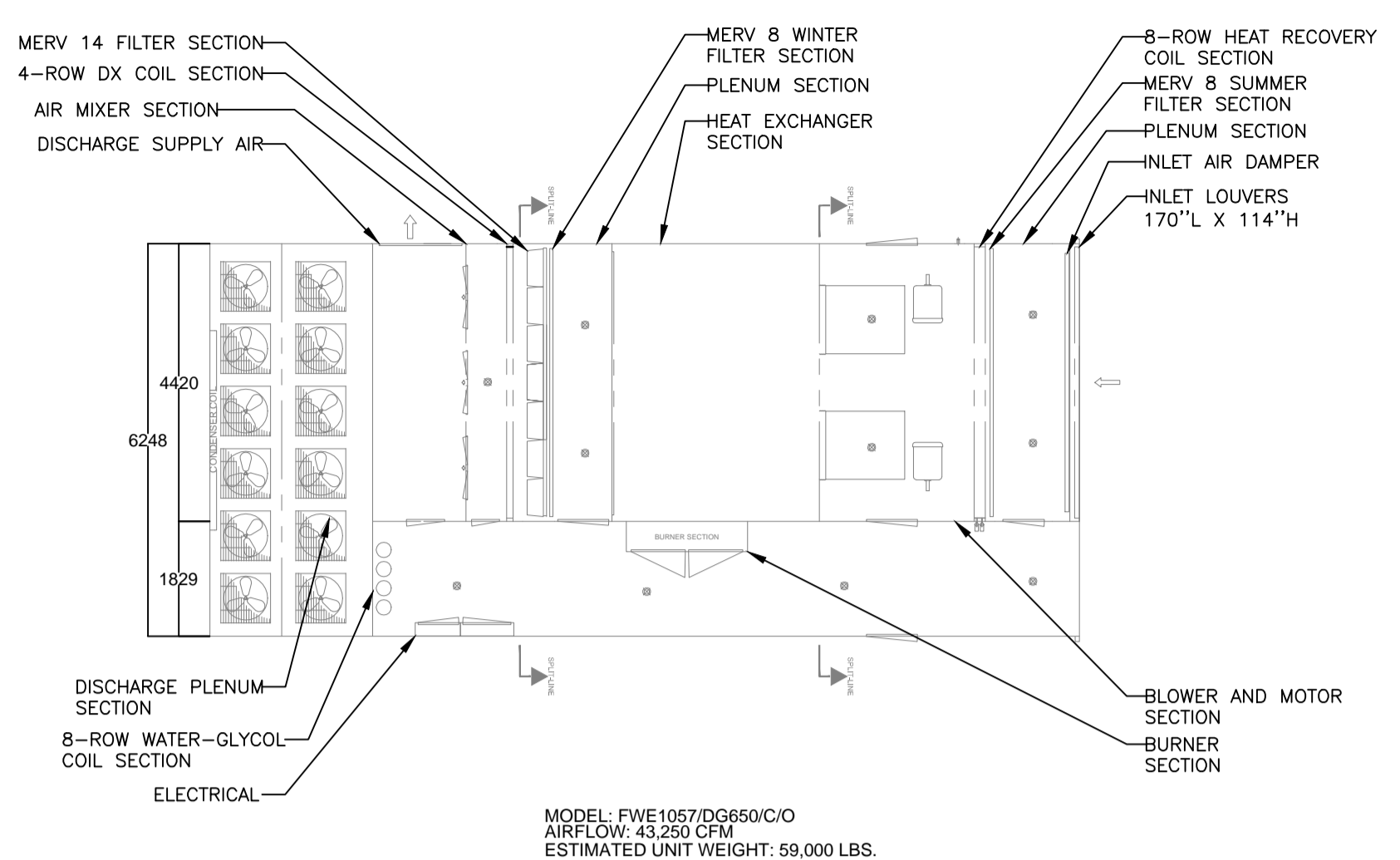
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**A PLANS AND SECTIONS
 MECHANICAL SECTIONS**

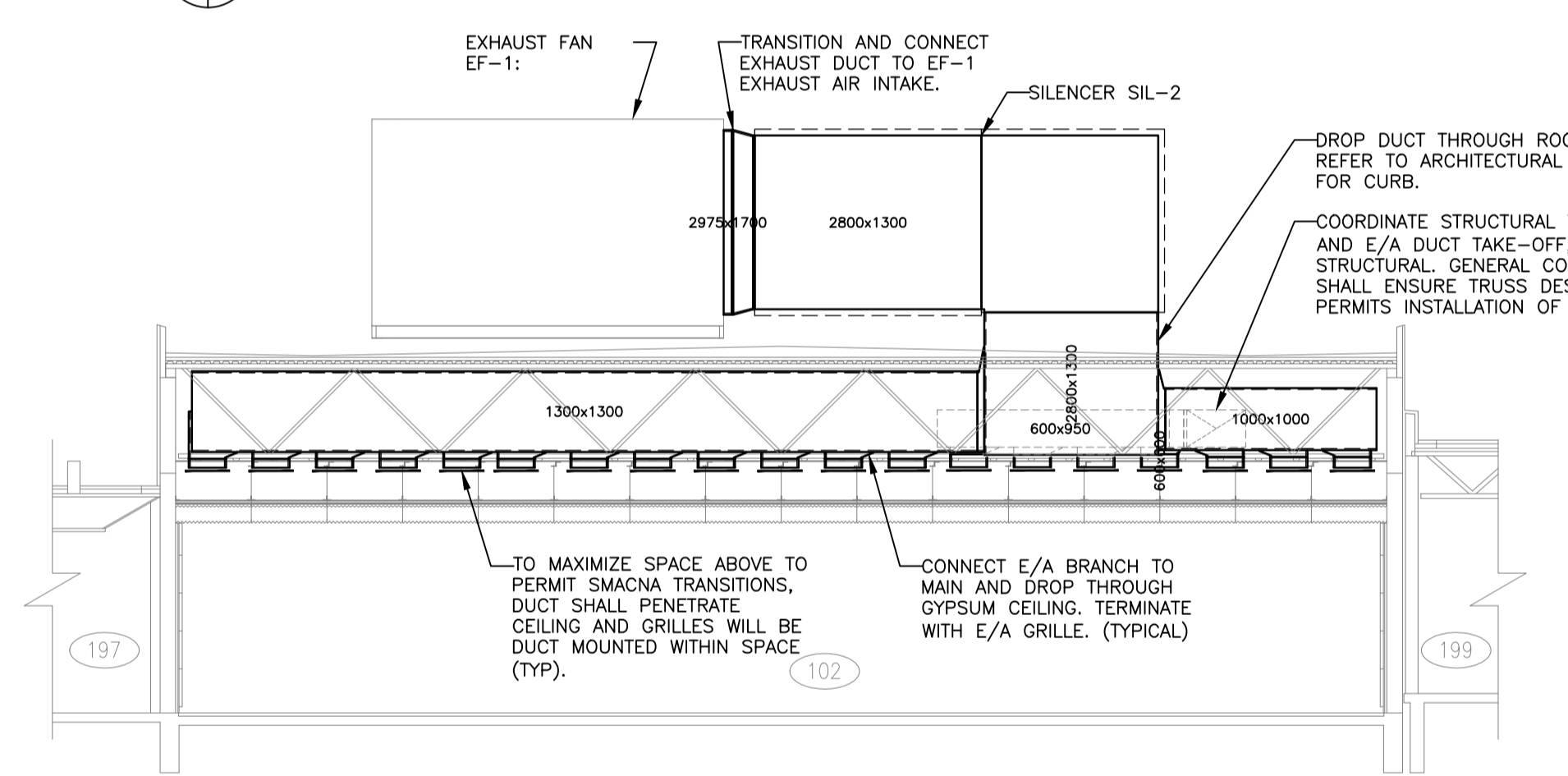
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 Sheet/Feuille: M1.1 OF -
 Revision no./La Révision no.: 0



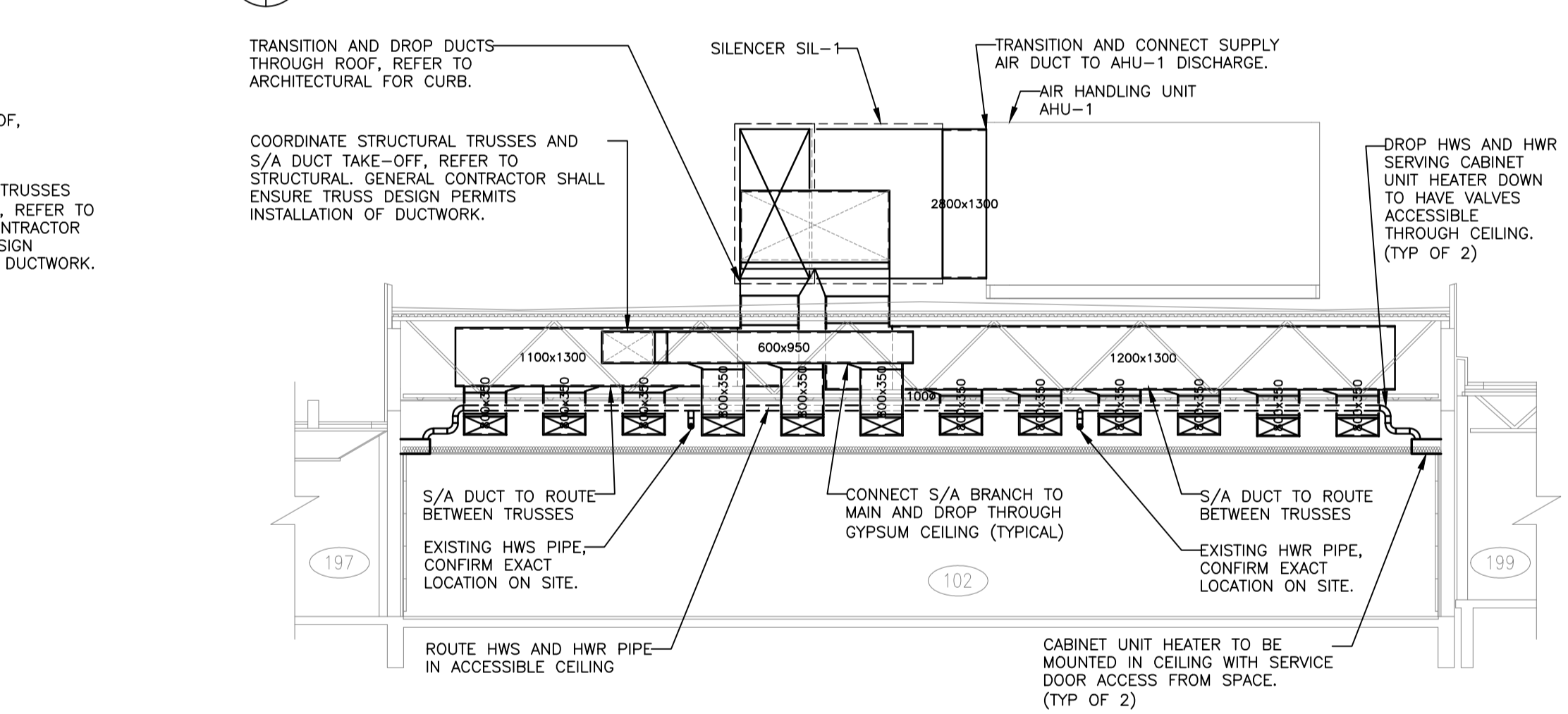
1 EXHAUST FAN EF-1
 1:100



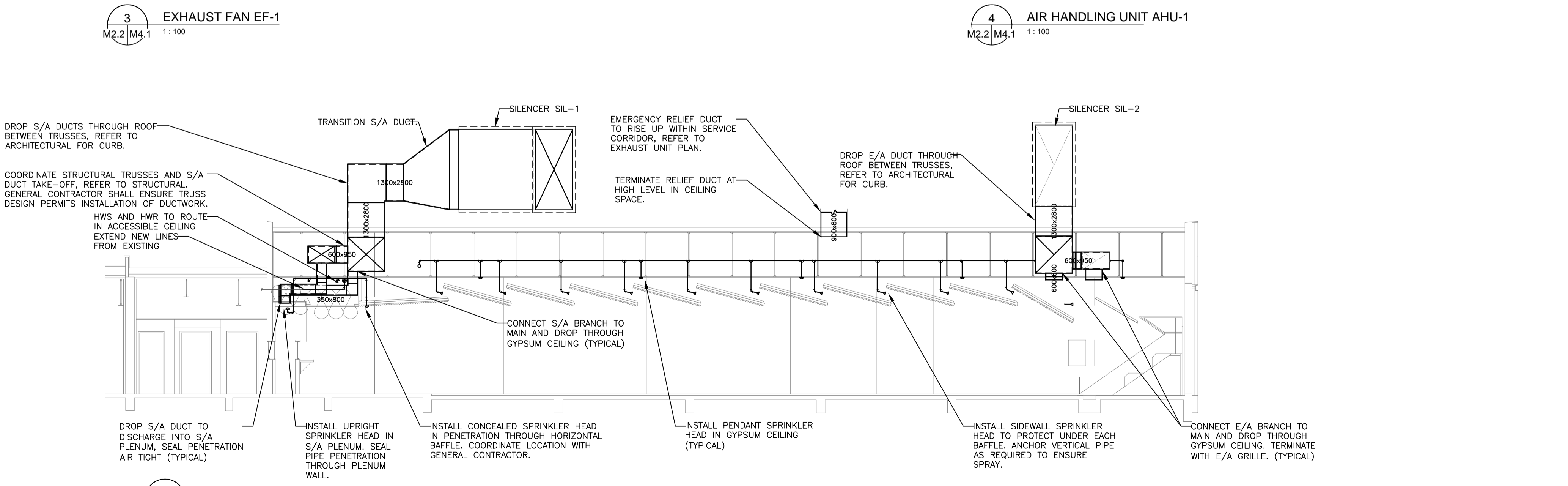
2 AIR HANDLING UNIT AHU-1
 1:100



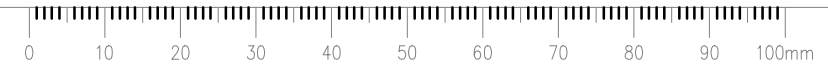
3 EXHAUST FAN EF-1
 M2.2/M4.1 1:100

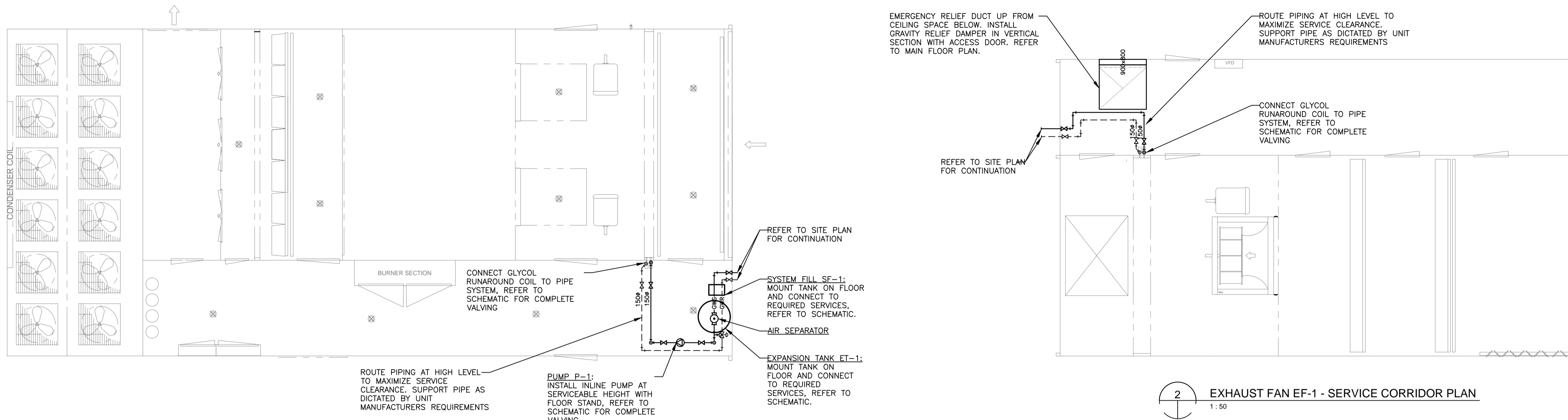


4 AIR HANDLING UNIT AHU-1
 M2.2/M4.1 1:100



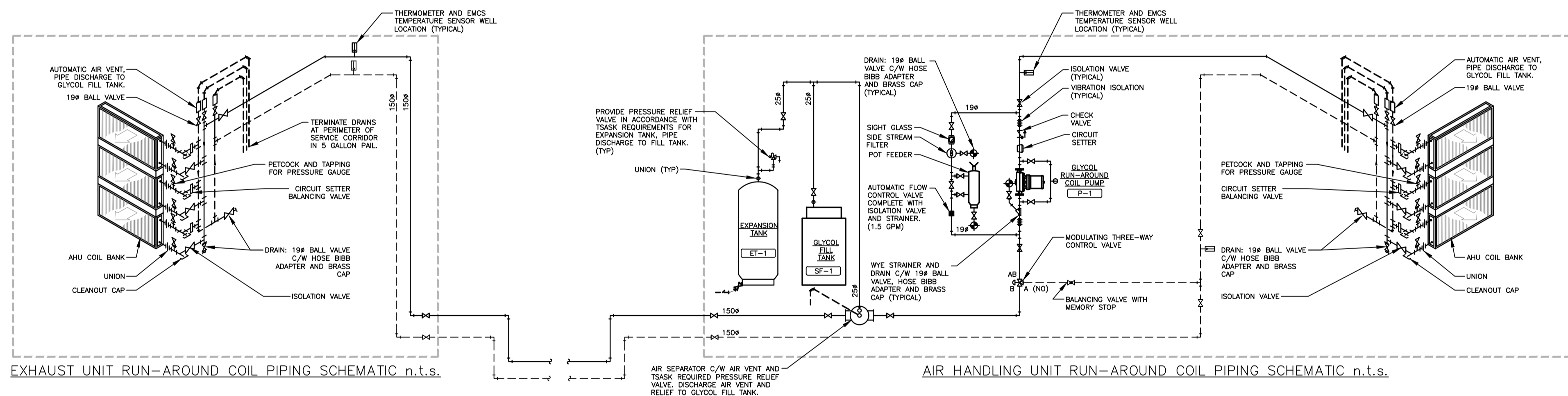
5 SECTION
 M2.2/M4.1 1:100



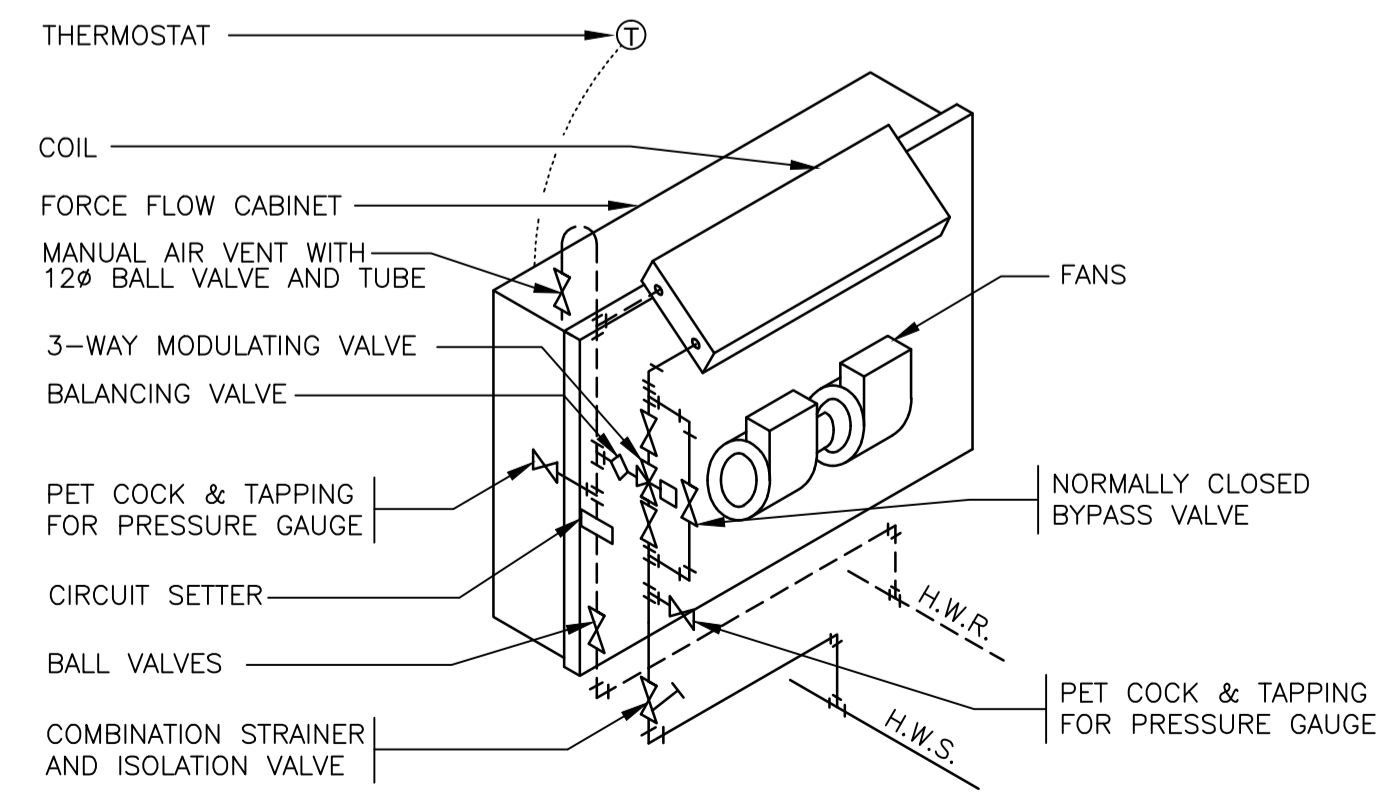


1 AIR HANDLING UNIT AHU-1 - SERVICE CORRIDOR PLAN
1:50

2 EXHAUST FAN EF-1 - SERVICE CORRIDOR PLAN
1:50



3 RUN-AROUND HEAT RECOVERY SCHEMATIC
N.T.S.



FORCE FLOW PIPING SCHEMATIC



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Revision/Revision Client/client	Description/Description	Date/Date
0	ISSUED FOR TENDER	2016-07-21

Project title/Titre du projet

**25A RANGE RENOVATION
REGINA, SK**

Approved by/Approuve par

Designed by/Concept par

Drawn by/Dessine par

RCMP Project Manager/Administrateur de Projets GRC
JD

RCMP, Architectural and Engineering Resources Manager/
Ressources Architectural et de Directeur d'ingénierie, GRC

Client/client

Drawing title/Titre du dessin

**SERVICE CORRIDOR PLANS
DETAILS AND SCHEMATICS**

Project No./No. du projet	Sheet/Feuille	Revision no./La Révision no.
27/2015	M 2 OF -	0



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25A RANGE RENOVATION REGINA, SK

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Designed by/Concept par DS

Drawn by/Dessine par CS

Project Manager/Administrateur de Projets JD

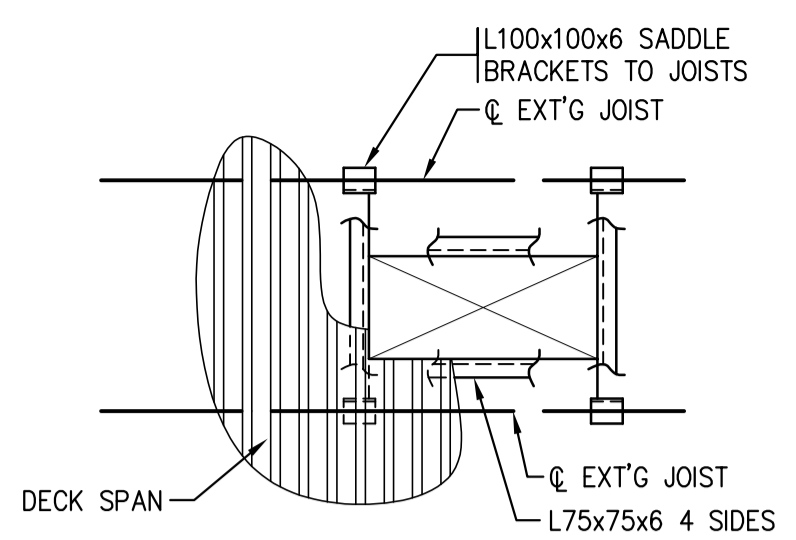
Architectural and Engineering Resources Manager/ Ressources Architectural et de Directeur d'ingénierie

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TYPICAL DETAILS

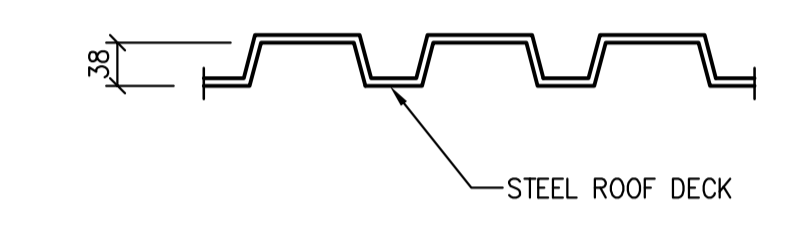
Project No./No. du projet	Sheet/Feuille	Revision no./La Révision no.
27/2015	S0 OF -	0



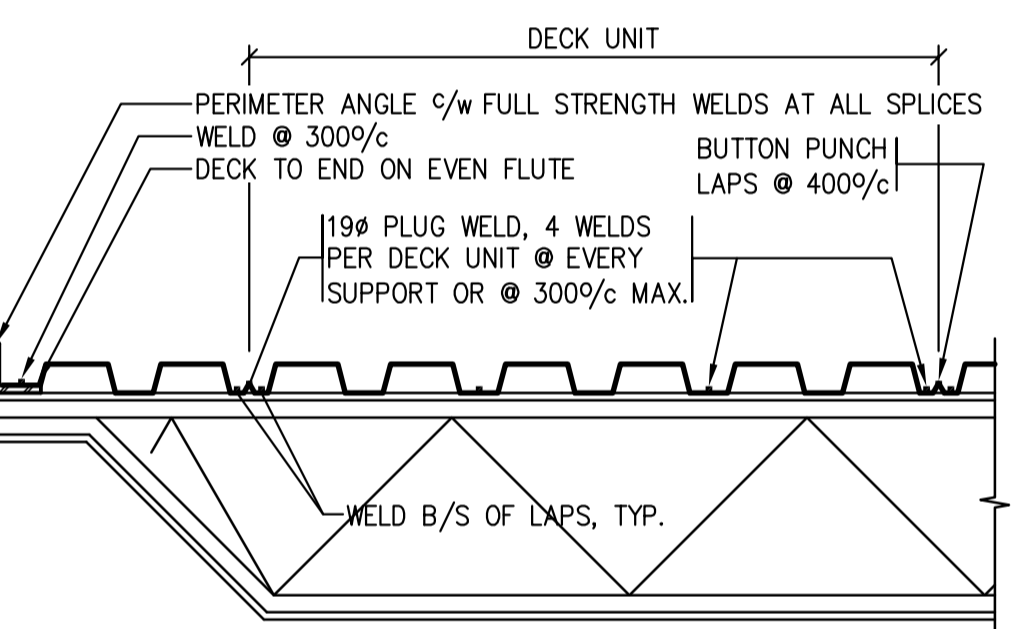
REFER TO MECHANICAL DRAWINGS FOR EXACT SIZE AND LOCATION OF NEW OPENINGS.
 1. OPENINGS LESS THAN 150 TO BE UNREINFORCED.
 2. OPENINGS 150 TO 450 TO BE REINFORCED AS PER SPEC.
 3. OPENINGS GREATER THAN 450 REINFORCE AS DETAILED.

A PLAN AT TYPICAL FRAMING AROUND NEW ROOF OPENINGS NTS

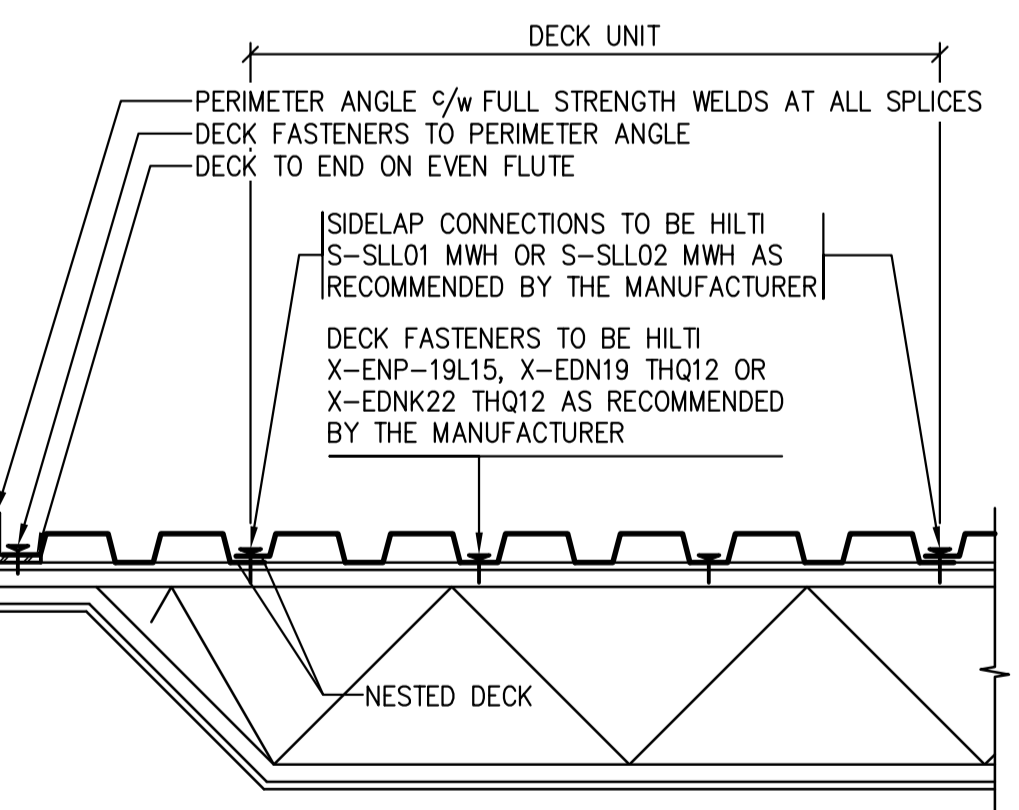
TYPICAL ROOF DECK
 U/S DECK ELEVATION AS DETAILED
 38mm x 0.76mm STEEL ROOF DECK
 ZF075 STANDARD (ZINC WIPE COAT GALVANIZED) U.N.O.
 1.214mm (18 Ga)(0.048")
 0.912mm (20 Ga)(0.036")
 0.76mm (22 Ga)(0.030")



B TYP. METAL DECK DETAIL NTS

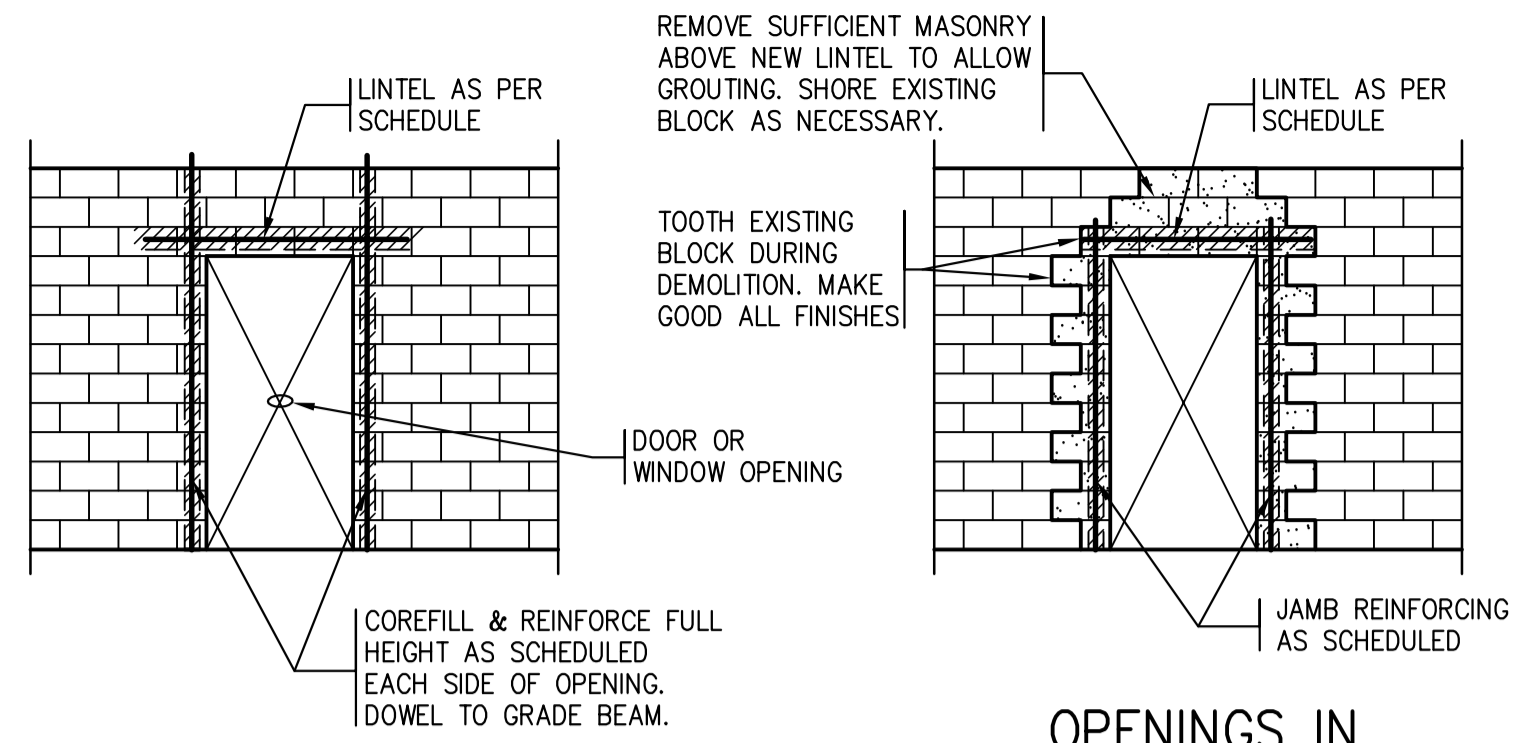


C WELDED ROOF DECK



D MECHANICAL FASTENED ROOF DECK

E TYP. METAL DECK FASTENER DETAIL NTS



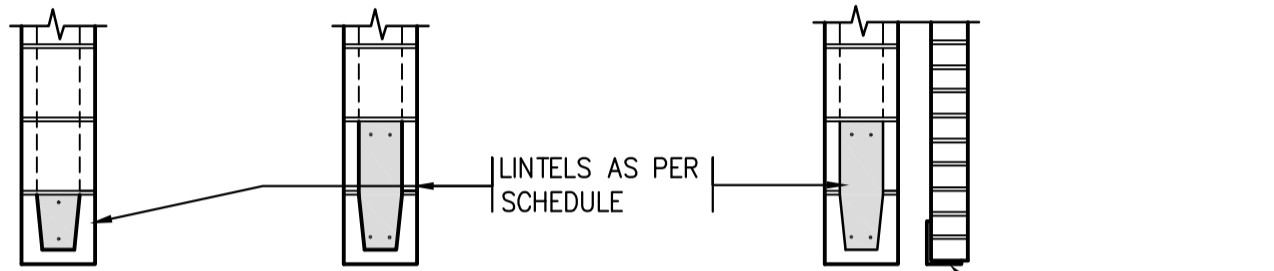
F OPENINGS IN NEW MASONRY

G OPENINGS IN EXISTING MASONRY

JAMB REINFORCING

OPENING WIDTH	JAMB REINFORCING
0 TO 1200	1-15M IN 1 CORE EACH SIDE
1201 TO 1800	1-20M IN 1 CORE EACH SIDE
1801 & GREATER	2-15M IN 2 CORES EACH SIDE

H TYPICAL REINFORCING AROUND ALL OPENINGS IN LOADBEARING CONCRETE BLOCK WALLS



LINTELS:

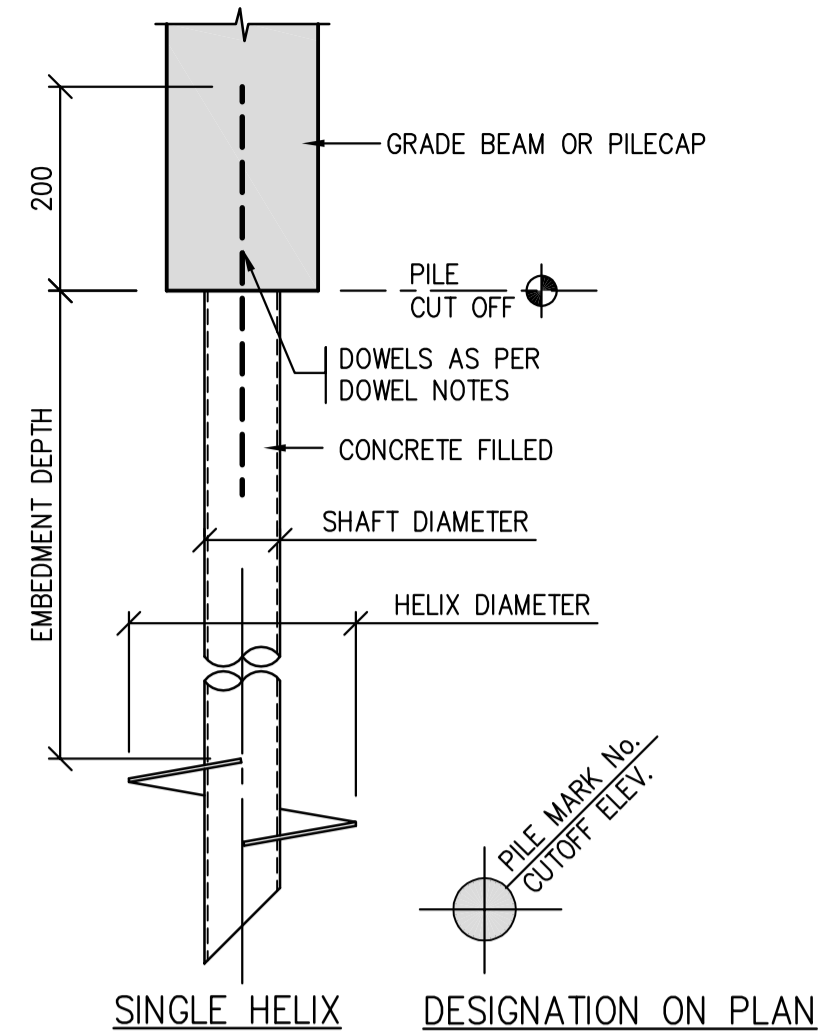
- TYPICAL LINTELS FOR OPENINGS UP TO 2400mm WIDE IN LOADBEARING WALLS AS SHOWN UNLESS DETAILED OTHERWISE. FOR LARGER OPENINGS SEE DETAILS.
- ALL LINTELS TO BEAR MIN. 200 EACH END.

OPENING WIDTH	100 MASONRY	150 CONC BLOCK	200 CONC BLOCK	250 CONC BLOCK
0 TO 1200	L100x90x10	200 HIGH c/w 1-20M BOT	200 HIGH c/w 2-20M BOT	200 HIGH c/w 2-20M BOT
1201 TO 2400	L125x90x10	400 HIGH c/w 1-20M TOP & BOT.	400 HIGH c/w 2-20M TOP & BOT.	400 HIGH c/w 2-20M TOP & BOT.

I TYPICAL LINTEL DETAILS FOR CONCRETE BLOCK & BRICK VENEER

NOTES:
 1. ALL EXTERIOR CONCRETE BLOCK WALLS TO BE REINFORCED WITH 1-15M c/w CORE FILLING AT 800 o.c. UNLESS NOTED OTHERWISE. EXTEND VERTICAL REINFORCING THRU BOND BEAMS. DOWEL TO FOUNDATION WITH 15Mx1200g DOWELS TO MATCH.
 2. STRUCTURAL DRAWINGS DETAIL EXTENT OF STRUCTURAL WALL REINFORCING ONLY. THESE REQUIREMENTS TO BE READ WITH AND CO-ORDINATED WITH ARCHITECTURAL DRAWINGS.
 3. REFER TO ARCHITECTURAL DRAWINGS FOR TYPES OF CONCRETE BLOCK AND EXTENT OF COREFILLING FOR SECURITY AND SOUND REQUIREMENTS.

J TYPICAL CONCRETE BLOCK WALL REINFORCING DETAILS



PILE DESIGN CRITERIA

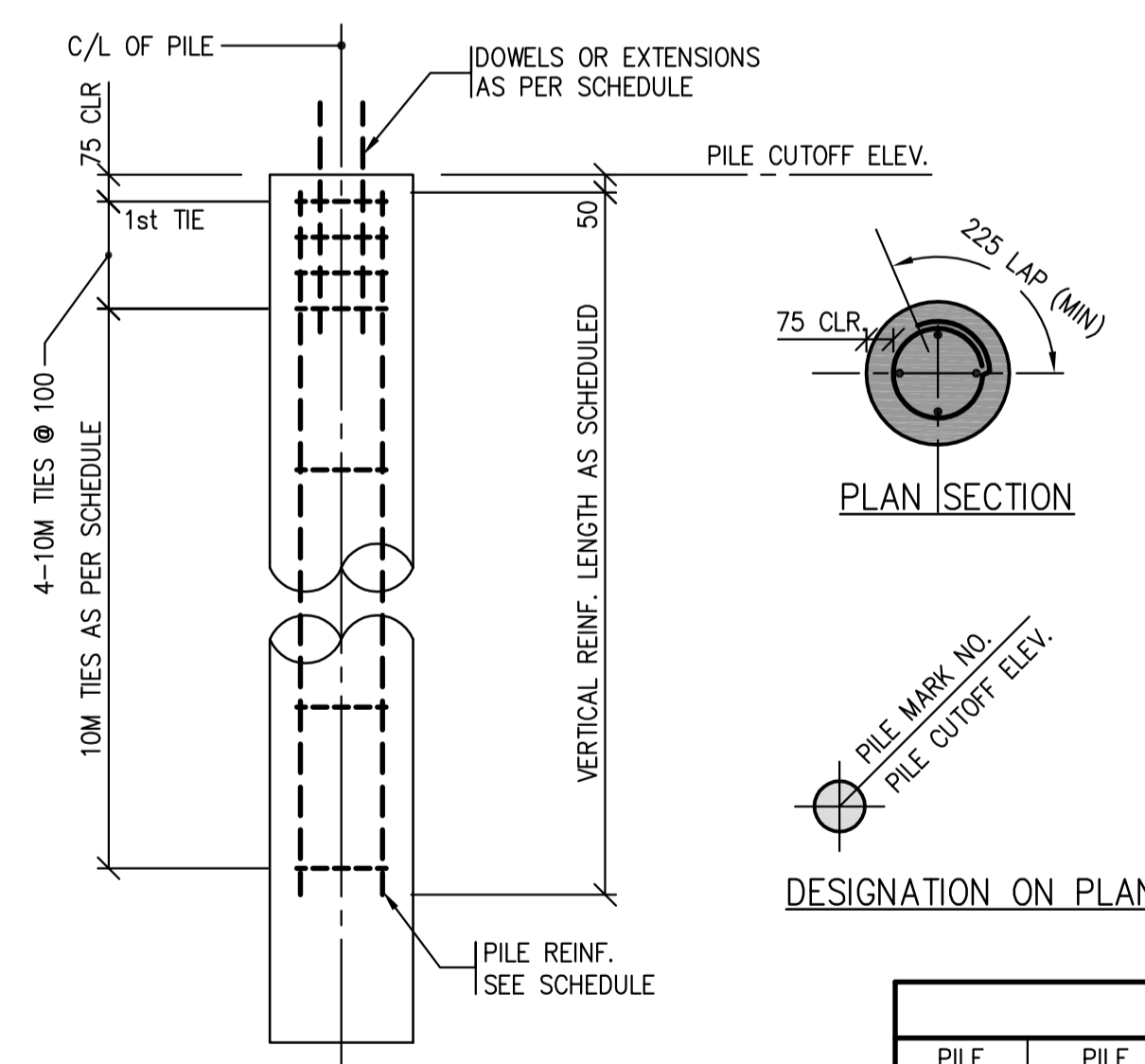
- PILE DESIGN CRITERIA ASSUMED.
- ALL STEEL PIPE HELIX SCREW PILES DESIGNED ON THE BASIS OF NET ALLOWABLE BEARING CONDITION.

SCREW PILE SCHEDULE

PILE MARK No.	PILE SHAFT DIA.	WALL THICKNESS	HELIX DIA. UPPER	HELIX DIA. LOWER	HELIX SPACING	EMBED. LENGTH	CAP.	DOWEL CODE	REMARKS
HP1	140mm	6.4mm	508mm	n/a	n/a	4572	65 kN	CODE A	

NOTES:
 1. ALL PILES TO BE CUT-OFF AT ELEVATION NOTED IN SCHEDULE.
 2. ALL PILES CENTERED UNDER GRADE BEAMS, PILE CAPS AND WALLS.
 3. PILE CONTRACTOR TO KEEP RECORD OF INSTALLATION TORQUE. TORQUE SHOULD BE MONITORED DURING THE ENTIRE INSTALLATION.
 4. ALL PILES TO BE FILLED WITH CONCRETE.
 DOWEL NOTES:
 A. 2-15Mx1100g DOWELS, EXTEND 750 ABOVE PILE CUTOFF ELEVATION BEND DOWN ON SITE

K TYPICAL STEEL PIPE HELIX SCREW PILE DETAIL NTS



PILE DESIGN CRITERIA (ASSUMED)

DEPTH BELOW GRADE (M)	SKIN FRICTION (KPa)
0 - 2M	NEGLECT
2M - 4.5M	24 KPa

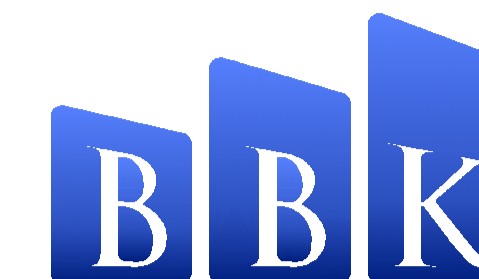
PILE REINFORCING SCHEDULE

PILE MARK No.	PILE SHAFT DIA.	PILE LENGTH	VERTICAL REINF.	HORIZONTAL TIES	PILE CUT-OFF	DOWEL CODE	REMARKS
HP1	400	4500	4-15Mx4000	NONE	ELEV	CODE A	-

NOTES:
 1. ALL PILES TO BE CUTOFF AT ELEVATION DENOTED ON SCHEDULE U.N.O. ON PLAN.
 2. REINFORCING LENGTHS DO NOT INCLUDE EXTENSIONS OR HOOKS.
 3. CONTINUOUS SPIRAL TIES ACCEPTABLE ALTERNATE TO HORIZONTAL TIES.
 4. HYDROVAC INSTALLATION IS ACCEPTABLE.

DOWEL NOTES:
 A. 2-20M x 1100 lg. EXTEND 750mm ABOVE PILE CUTOFF, BEND DOWN ON SITE.

L ALTERNATE - TYPICAL FRICTION PILE DETAIL NTS



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Client/client

Project title/Titre du projet

**25A RANGE RENOVATION
 REGINA, SK**

Approved by/Approve par

Designed by/Concept par
 DS

Drawn by/Dessine par
 CS

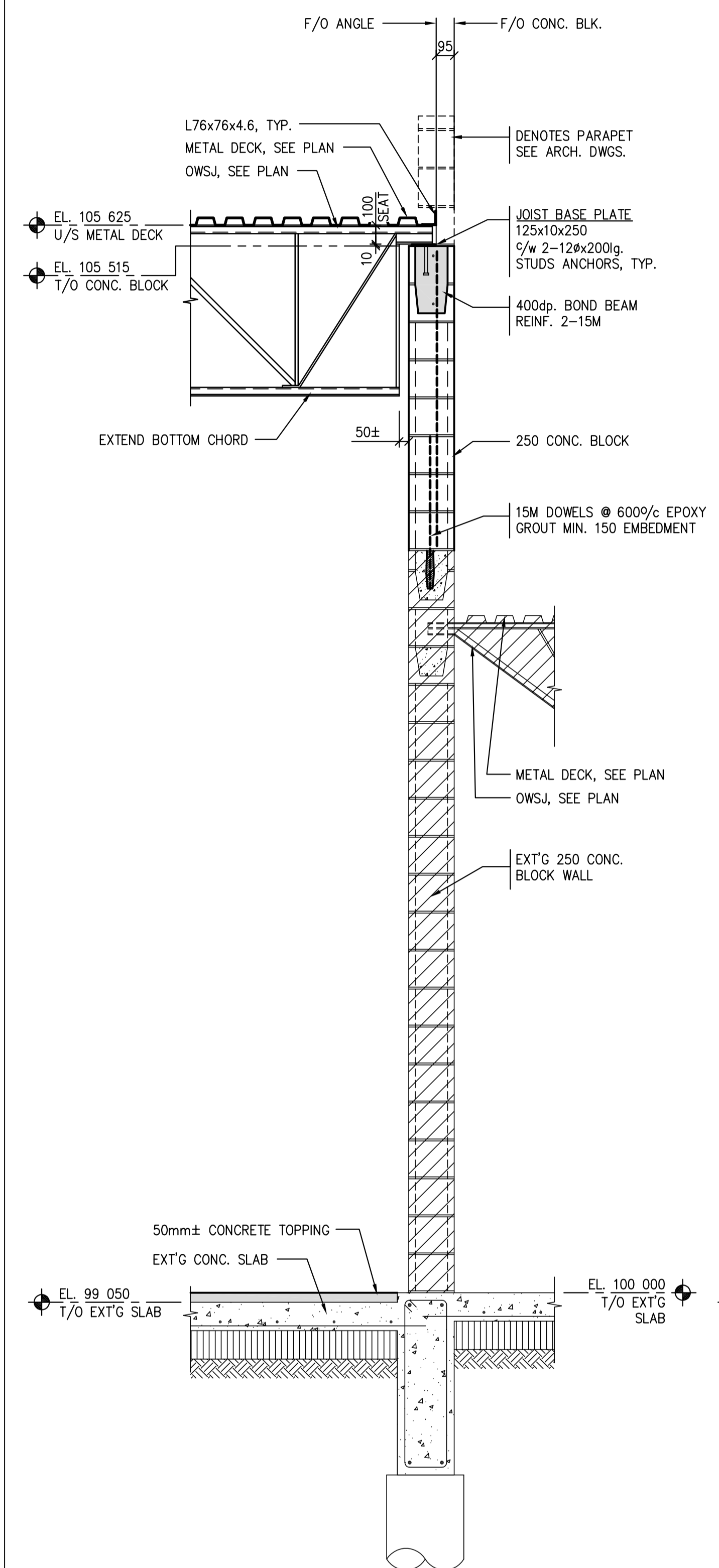
Project Manager/Administrateur de Projets
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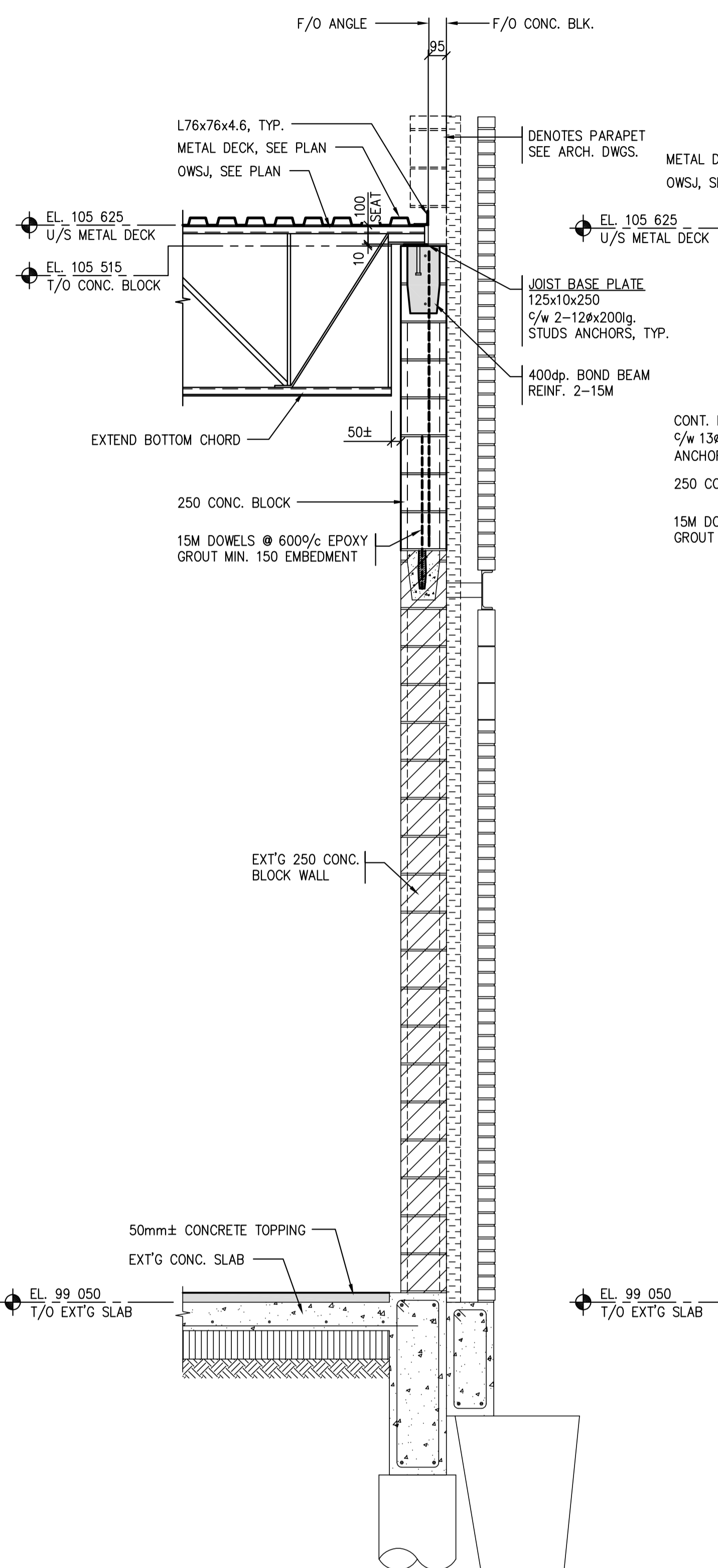
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Drawing title/Titre du dessin
SECTIONS & DETAILS

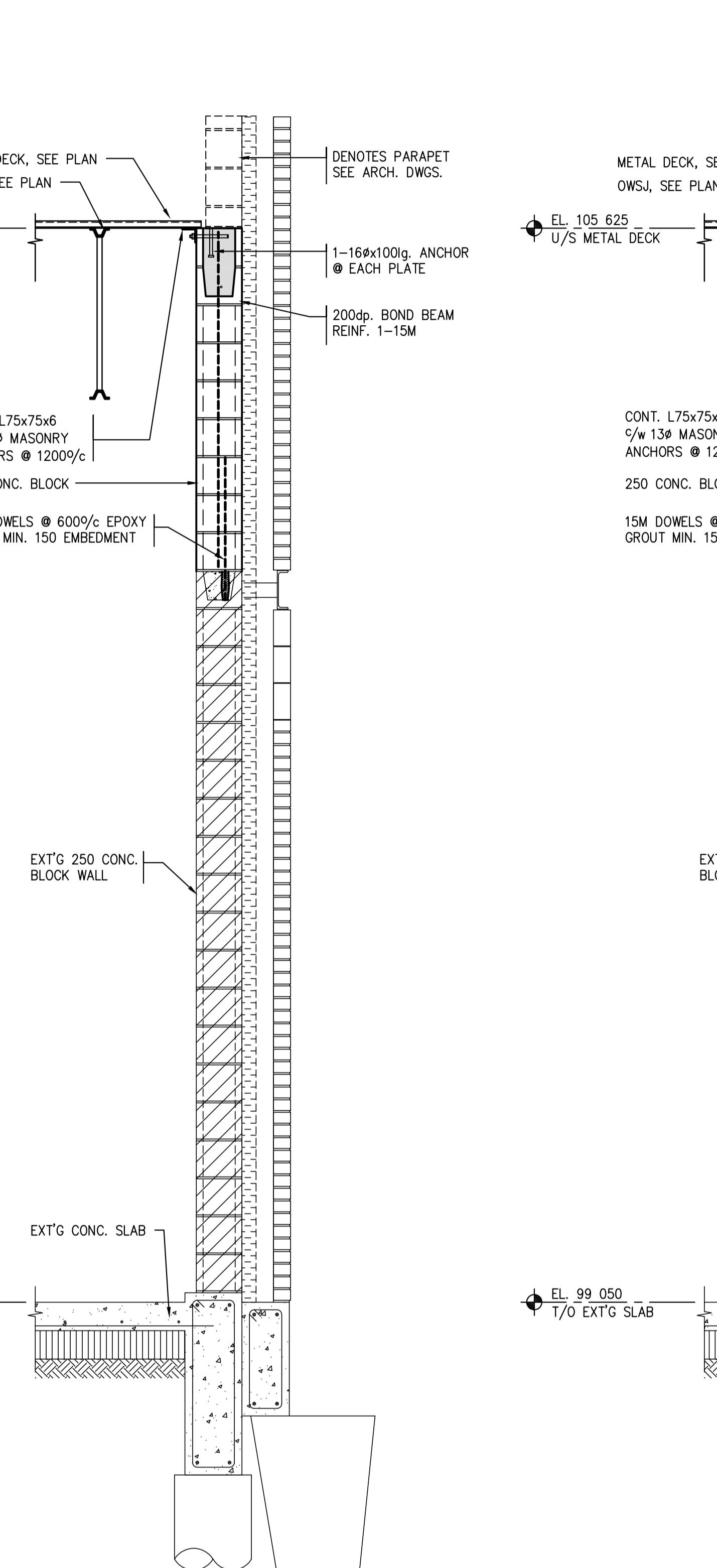
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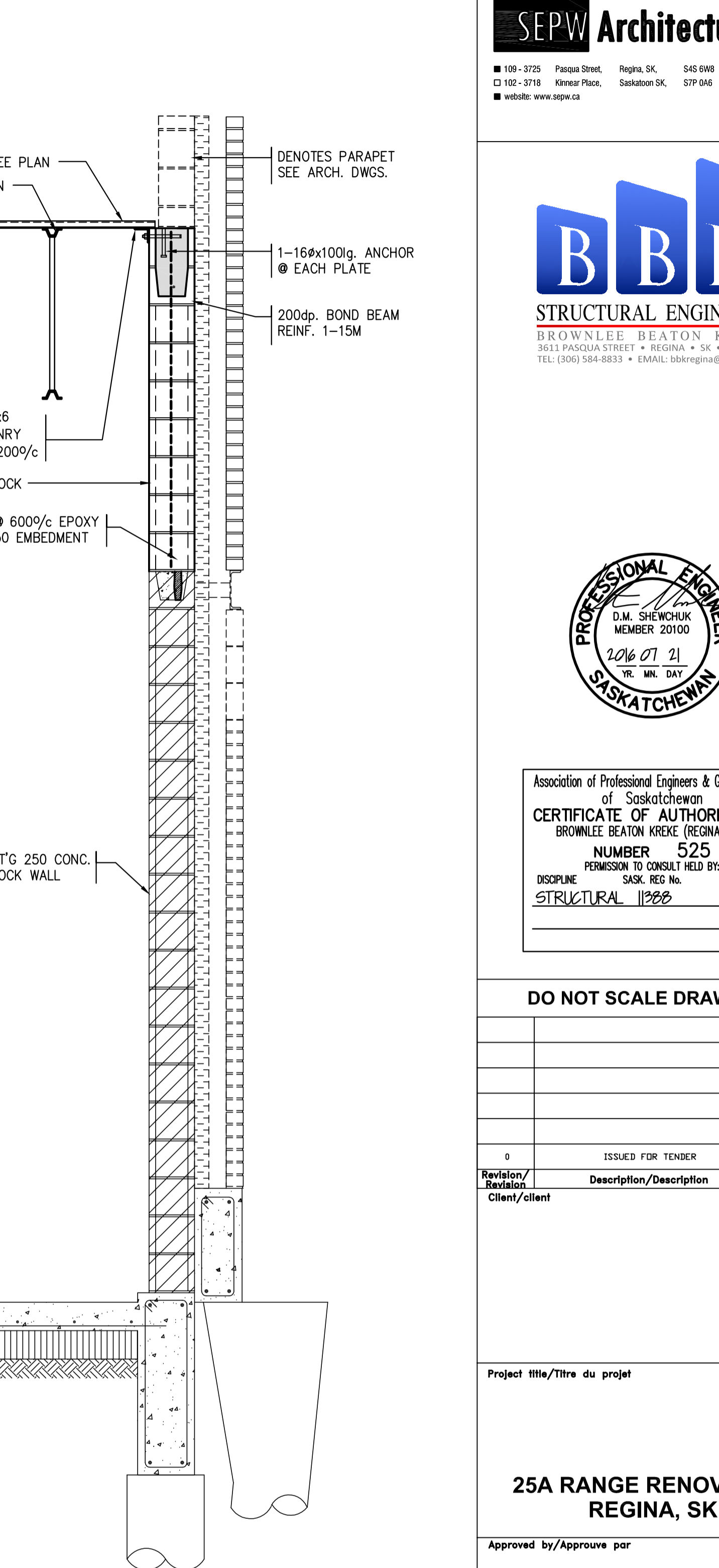
1 SECTION
 S1/S2 1:20



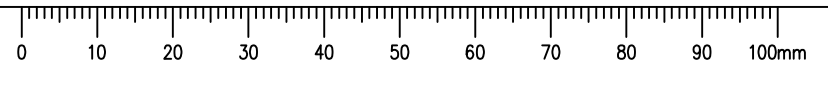
2 SECTION
 S1/S2 1:20



3 SECTION
 S1/S2 1:20



4 SECTION
 S1/S2 1:20





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Drawing title/Titre du dessin SECTIONS & DETAILS		
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