



Public Works and  
Government Services  
Canada

Travaux publics et  
Services gouvernementaux  
Canada

REAL PROPERTY SERVICES  
Western Region  
SERVICES IMMOBILIERS  
Région de l'ouest

SUITE 483  
RENOVATION & FIT UP

INTERIOR ALTERATIONS  
1091 PORTAGE AVENUE

WINNIPEG, MANITOBA  
R.076524.002

DATE: June 11, 2018  
ISSUED FOR CONSTRUCTION



Public Works and  
Government Services  
Canada

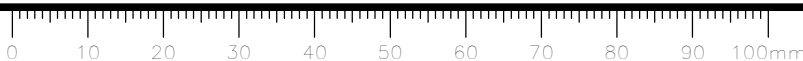
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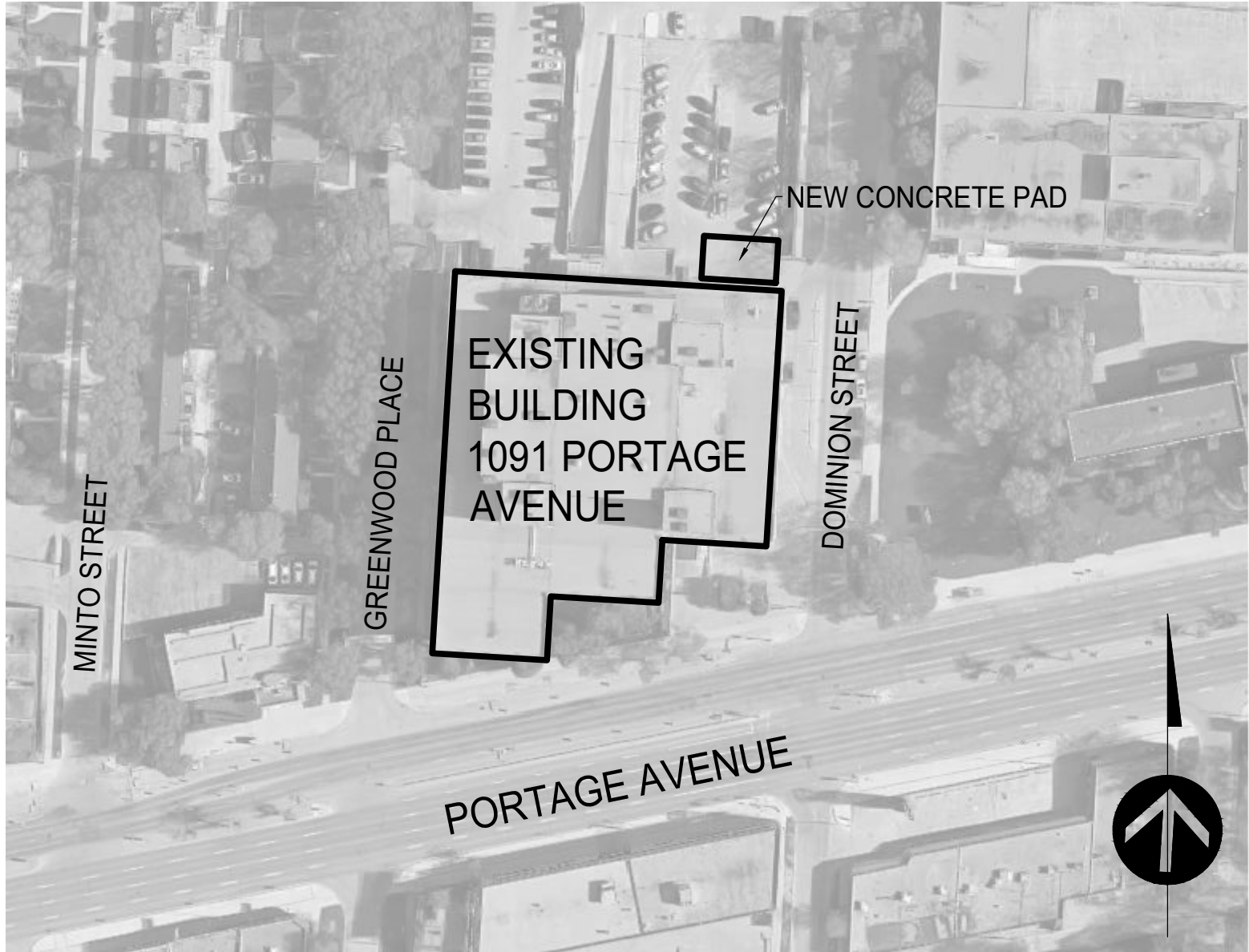
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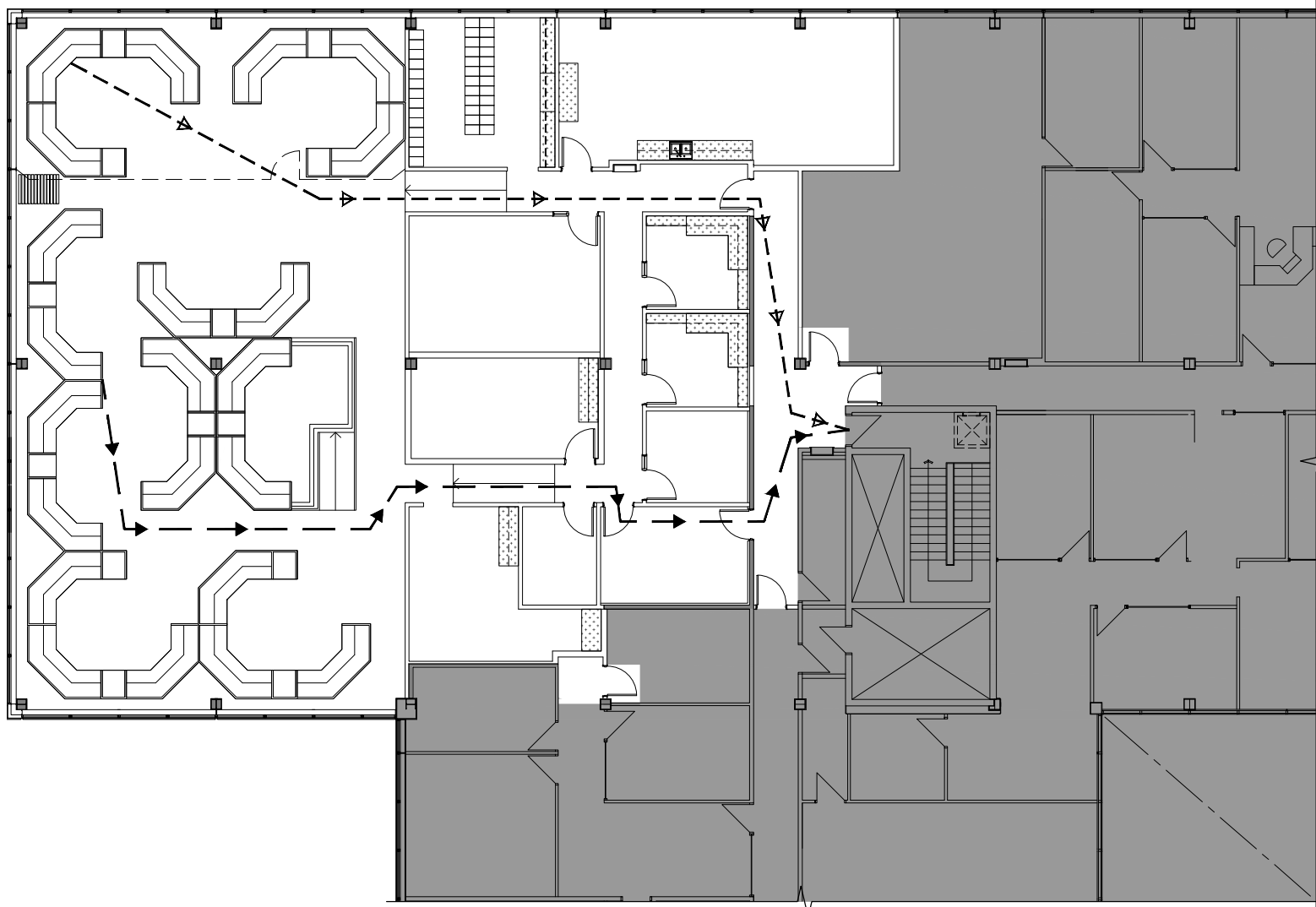
3	Issued for Construction	2018 06 11
2	99% Construction Documents Submission	2018 04 05
1	50% Construction Documents Submission	2018 01 25
0	Design Development Submission	2017 08 30
Revision	Description	Date
Client		
PSPC/SPAC		
SUITE 100-167 LOMBARD AVENUE WINNIPEG, MANITOBA		
Project title		
INTERIOR ALTERATIONS 1091 PORTAGE AVENUE WINNIPEG, MANITOBA  SUITE 483 RENOVATION & FIT UP		
Designed by		
TS		
Drawn by		
HA		
Approved by		
MG		
PWGSC Project Manager		
MARK ARROJADO		
Drawing title		
Cover		
Project no.	Drawing no.	Revision no.
R.076524.002	A0	3







1 SITE PLAN  
A1 NTS



2 FOURTH FLOOR EGRESS PLAN  
A1 NTS

## LIST OF DRAWINGS

A0 - COVER

### ARCHITECTURAL

- A1 - SITE PLAN, CONSULTANTS, EGRESS PLAN, LIST OF DRAWINGS, NATIONAL BUILDING CODE MATRIX
- A2 - FOURTH FLOOR AND BASEMENT DEMOLITION FLOOR PLANS
- A3 - FOURTH FLOOR AND BASEMENT DEMOLITION REFLECTED CEILING PLANS
- A4 - FOURTH FLOOR AND BASEMENT NEW CONSTRUCTION FLOOR PLANS, DOOR AND FRAME ELEVATIONS, DISPATCH CONSOLE REQs
- A4.1 - FOURTH FLOOR AND BASEMENT NEW CONSTRUCTION FINISHES FLOOR PLANS
- A4.2 - SITE PLAN AND PARKING LOT LAYOUT
- A5 - FOURTH FLOOR NEW CONSTRUCTION REFLECTED CEILING PLAN, ACOUSTIC BAFFLE / PANEL DETAILS, CEILING SECTIONS
- A6 - RAISED ACCESS FLOOR DETAILS, NEW COLUMN ENCLOSURE DETAILS, DOOR AND FRAME DETAILS
- A7 - INTERIOR ELEVATIONS AND TYPICAL MOUNTING HEIGHTS
- A8 - MILLWORK SECTIONS

### INTERIOR DESIGN

- ID1 - FOURTH FLOOR FURNITURE PLAN (FURNITURE NOT IN CONTRACT, FOR REFERENCE ONLY)

### STRUCTURAL

- S1.1 - GENERATOR SLAB PLAN SECTIONS AND NOTES

### MECHANICAL

- M1 - MECHANICAL SITE PLAN, ROOM B13 MECHANICAL PLAN NOTES, SYMBOL SCHEDULE AND DRAWING LIST
- M2 - SPRINKLER SYSTEM EXISTING / DEMOLITION PLAN
- M3 - HVAC AND PIPING EXISTING / DEMOLITION LAYOUT
- M4 - ROOM B13, THIRD FLOOR AND FOURTH FLOOR NEW PLUMBING PLANS
- M5 - FOURTH FLOOR NEW SPRINKLER SYSTEM PLAN
- M6 - NEW HVAC LAYOUT
- M7 - NEW HVAC PIPING LAYOUT
- M8 - NEW HVAC ROOF PLAN
- M9 - MECHANICAL SCHEDULES

## CONSULTANTS

### ARCHITECTURAL

#### REPUBLIC ARCHITECTURE INC.

385 ST. MARY AVENUE  
WINNIPEG, MANITOBA R3C 0N1

### STRUCTURAL

#### CROSIER KILGOUR & PARTNERS LTD.

300-275 CARLTON STREET  
WINNIPEG, MANITOBA R3C 5R6

### MECHANICAL, ELECTRICAL & COMMUNICATIONS

#### HDK CONSULTING INC.

2633 PORTAGE AVENUE  
WINNIPEG, MANITOBA R3J 0P7

## NATIONAL BUILDING CODE MATRIX / MANITOBA BUILDING CODE 2011

MANITOBA BUILDING CODE 2011										REFERENCE
ITEM	DESCRIPTION									
1	<b>PROJECT INFORMATION</b> NAME OF PROJECT: Suite 483 Renovation & Fit-Up LOCATION: 1091 Portage Avenue, Winnipeg, MB R3G 0S6 LEGAL DESCRIPTION: Roll #: 13096026700									1.3.3 / 1.4.1
2	<b>PROJECT DESCRIPTION</b> NEW ADDITION ALTERATION CHANGE OF USE									
3	<b>MAJOR OCCUPANCIES</b> D F2 B1 - - - - - 17,357.1m2 2185.7m2 169.5m2 MULTIPLE MAJOR OCCUPANCIES FIRE SEPARATION REQUIRED (HRS): D F2 D B1 - - - - - 0 2 - - - - -									3.1.2.1 / 3.2.2.6 / A-3.1.2.1
4	<b>BUILDING AREA</b> EXISTING (M2): 4,021.00 NEW (M2): 0.00 TOTAL (M2): 4,021.00 FIREWALL: REQUIRED NOT REQUIRED RATING AND GRID LOCATION: n/a									1.4.1 / 3.1.10
5	<b>GROSS FLOOR AREA</b> EXISTING (M2): 20,961.00 NEW (M2): 0.00 TOTAL (M2): 20,961.00									1.4.1
6	<b>NUMBER OF STOREYS</b> ABOVE GRADE: 4 BELOW GRADE: 2									1.4.1 / 3.2.1.1
7	<b>NUMBER OF STREETS</b> FACING: 1 STREET 2 STREETS 3 STREETS FIREFIGHTER ACCESS									3.2.2.10 / 3.2.5
8	<b>BUILDING CLASSIFICATION</b> 3.2.2.56 DESCRIPTION: GROUP D, ANY HEIGHT, ANY AREA, SPRINKLERED SPRINKLER SYSTEM: REQUIRED NOT REQUIRED EXISTING TO REMAIN PERMITTED CONSTRUCTION: COMBUSTIBLE NON-COMBUSTIBLE REQUIRED FIRE RESISTANCE RATINGS (HRS): ROOF: 0 FLOOR: 1 MEZZANINE: 1									3.2.2.20-88
9	<b>STANDPIPE SYSTEM</b> REQUIRED NOT REQUIRED EXISTING TO REMAIN									3.2.5.8
10	<b>EXIT SIGNAGE</b> REQUIRED NOT REQUIRED EXISTING TO REMAIN									3.4.5
11	<b>FIRE ALARM SYSTEM</b> REQUIRED NOT REQUIRED EXISTING TO REMAIN									3.2.4
12	<b>VERTICAL TRANSPORTATION</b> ELEVATOR SHAFT FIRE SEPARATION (HRS): 2 MACHINE ROOM FIRE SEPARATION (HRS): 2 ELEVATOR SIZE (mm): 2010x610									3.5.3.1 / 3.5.3.3 / 3.5.4.1
13	<b>FIRESTOPS IN CONCEALED SPACES</b> CRAWL SPACE COMPARTMENT AREA (M2): n/a MAX. DIMENSION (M): ATTIC SPACE COMPARTMENT AREA (M2): n/a MAX. DIMENSION (M):									3.1.11.5 / 3.1.11.6
15	<b>INTERCONNECTED FLOOR SPACE</b> MEZZANINE(S) AREA (M2): n/a OPEN MEZZANINE (MAX 40%): NO ENCLOSED MEZZANINE (MAX 10%): NO INTERCONNECTED FLOOR SPACE: NO									3.2.1.1 / 3.2.8.2 - 3.2.8.9
16	<b>EXIT DIMENSIONS</b> CORRIDORS MAX TRAVEL DISTANCE (M): 45 CORRIDOR CLEAR WIDTH (mm): 1100 MAX DEAD END CORRIDOR LENGTH (M): 6 MEZZANINE DISTANCE TO EGRESS (M): DISTANCE TO T.O. STAIR IF > 1 EGRESS (M): STAIRS STAIR CLEAR WIDTH (mm): 1100 LANDING CLEAR WIDTH (mm): 1100 LANDING TO LANDING MAX. RISE (M): 3.7 DOORS DOOR CLEAR WIDTH (mm): 800 B1: 2.4m									3.4.2.2 / 3.4.2.5 / 3.4.3.2
17	<b>EXIT CAPACITY</b> FLOOR NUMBER OF DOORS DOOR WIDTH (mm) WIDTH PER PERSON (mm) CAPACITY OF DOORS NUMBER OF STAIRS TREAD WIDTH (mm) WIDTH PER PERSON (mm) CAPACITY OF STAIRS EXIT CAPACITY BASEMENT 3 914 6.1 449 3 1100 8 412 412 4 4 914 6.1 599 4 1100 8 550 550 ADEQUATE EXIT CAPACITY YES EXIT CAPACITY DISTRIBUTED AS REQUIRED YES									3.4.3.2
18	<b>OTHER EXIT CONSIDERATIONS:</b> <b>OCCUPANT LOAD</b> BASED ON: M2 / PERSON DESIGN OF BUILDING FLOOR OCCUPANCY TYPE OCCUPANCY LOAD NUMBER OF PERSONS BASEMENT D + F2 1312.6 M2 / (9.3 M2 PER PERSON), 2252.2 M2 / (28 M2 PER PERSON) 141 + 80 4 D 2635.9 M2 / (9.3 M2 PER PERSON) TOTAL: 283 504									3.1.17
19	<b>SAFETY IN FLOOR AREAS</b> SUITES: NO FIRE SEPARATION REQUIRED (HRS): PUBLIC CORRIDORS: NO FIRE SEPARATION REQUIRED (HRS): SUITE/ROOM PERMITTED TO BE SERVED BY SINGLE MEANS OF EGRESS: OCCUPANCY (GROUP) MAX. AREA (M2) MAX. DISTANCE (M) D 300 25									3.3.1 / 3.3.2.6 / 3.4.2.4
20	<b>ADDITIONAL REQUIREMENTS FOR SPECIFIC ROOMS</b> ROOM DESCRIPTION F.R.R. REQUIRED (HRS) JANITOR ROOMS 1 MECHANICAL ROOMS 1 ELECTRICAL ROOMS 1 STORAGE ROOMS 1 OTHER: Detention Block 1 OTHER: Parking/Repair Garage 2									3.3.1.21 - 3.3.6.9
22	<b>BARRIER FREE DESIGN</b> BARRIER FREE ENTRANCES PROVIDED: (ALL PEDESTRIAN ENTRANCES REQUIRED) POWER ASSIST DOOR OPERATORS PROVIDED: YES ELEVATOR REQUIRED/PROVIDED: YES LEVELS REQUIRING BARRIER FREE ACCESS: ALL BARRIER FREE LIFT PROVIDED: NO EXCEPTIONS TO BARRIER FREE ACCESS: N/A									3.8

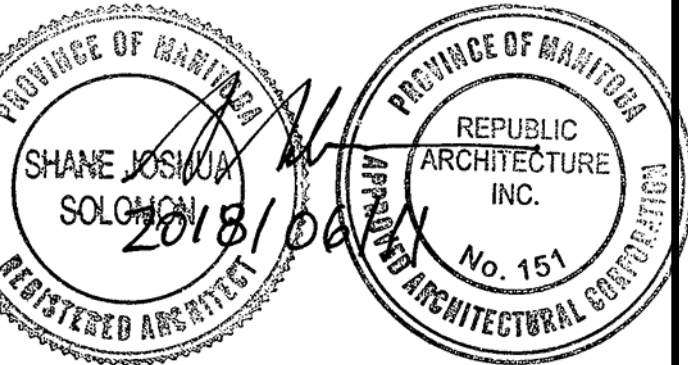
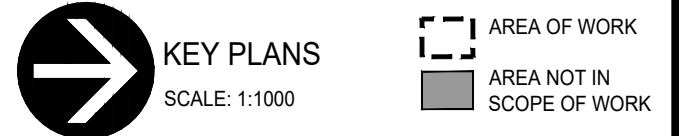
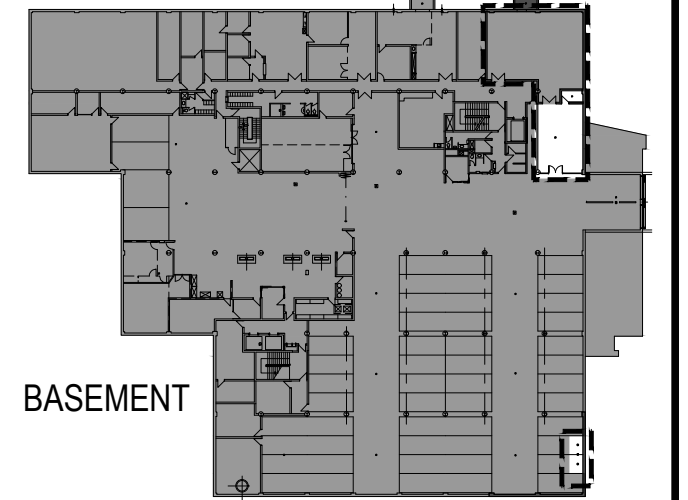
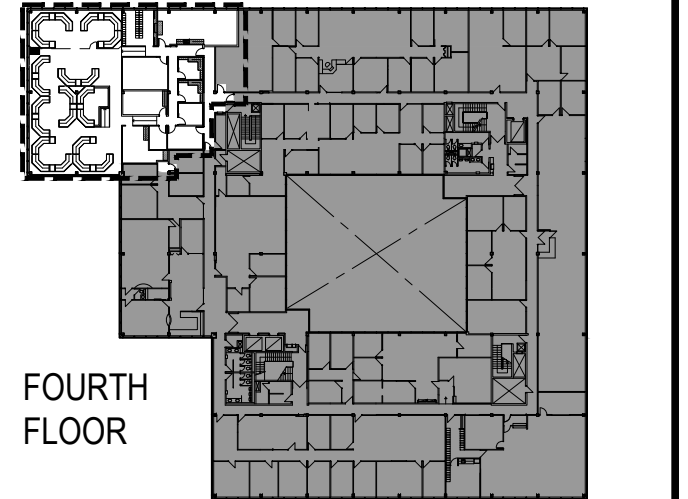
M10 - MECHANICAL DETAILS AND SCHEDULES

### ELECTRICAL

- E1 - SITE PLAN, GENERATOR LAYOUT AND SYMBOL SCHEDULE
- E2 - ELECTRICAL DETAILS
- E3 - BASEMENT AND FOURTH FLOOR ELECTRICAL DEMOLITION PLANS
- E4 - PARTIAL BASEMENT NEW ELECTRICAL PLANS
- E5 - FOURTH FLOOR LIGHTING PLAN
- E6 - FOURTH FLOOR POWER PLAN, PARTIAL THIRD FLOOR, PARTIAL ELECTRICAL ROOF PLAN AND 483 LARGE SCALE PLAN
- E6 - FOURTH FLOOR POWER PLAN AND ROOM 483 LARGE SCALE PLAN
- E7 - FOURTH FLOOR LIFE SAFETY SYSTEMS PLAN
- E8 - ELECTRICAL DETAILS
- E9 - PARTIAL SINGLE LINE DISTRIBUTION DIAGRAM
- E10 - FIRE ALARM RISER DIAGRAM
- E11 - MECHANICAL EQUIPMENT SCHEDULE
- E12 - ELECTRICAL SCHEDULES
- E13 - LIGHTING CONTROL SCHEDULE AND SCHEMATIC
- E14 - UPS POWER PANELBOARD SCHEDULES 1
- E15 - UPS POWER PANELBOARD SCHEDULES 2
- E16 - ESSENTIAL POWER PANELBOARD SCHEDULES 3

### COMMUNICATIONS AND SECURITY

- T1 - FOURTH FLOOR COMMS AND SECURITY EXISTING / DEMOLITION LAYOUT
- T2 - FOURTH FLOOR BACKBONE PLAN
- T3 - NEW TELECOMMUNICATIONS LAYOUT AND DETAILS
- T4 - NEW ACCESS CONTROL / INTRUSION LAYOUT AND DETAILS
- T5 - NEW SOUND MASKING PLAN, RACK ELEVATION AND SOUND MASKING SINGLE LINE DIAGRAM AND DETAILS
- T6 - PATCH PANEL SCHEDULE



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PSPC/SPAC

SUITE 100-167 LOMBARD AVENUE  
WINNIPEG, MANITOBA

Project title  
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1091 PORTAGE AVENUE  
WINNIPEG, MANITOBA

SUITE 483  
RENOVATION & FIT UP

Designed by  
TS

Drawn by  
HA

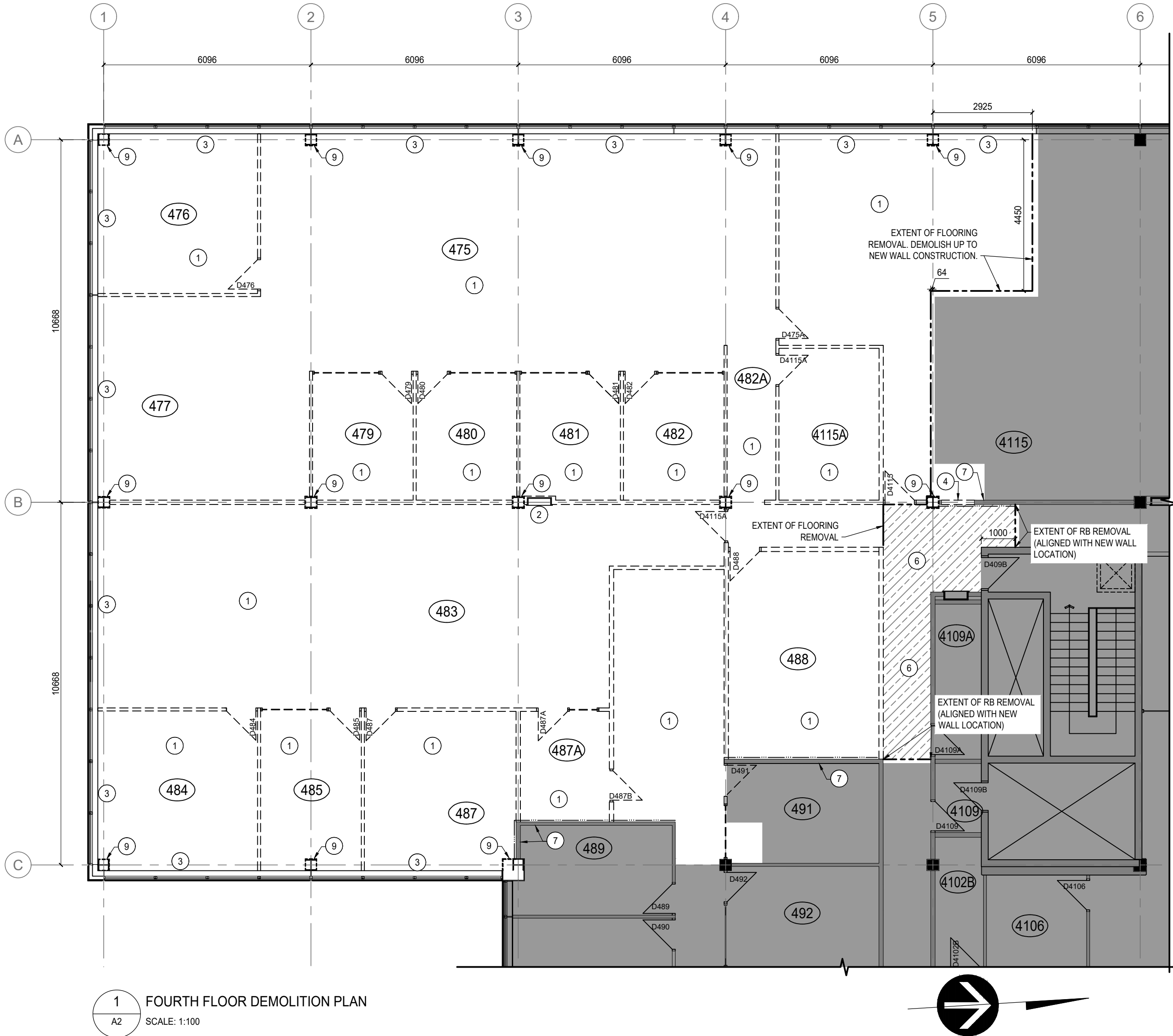
Approved by  
MG

PWSSC Project Manager  
MARK ARROJADO

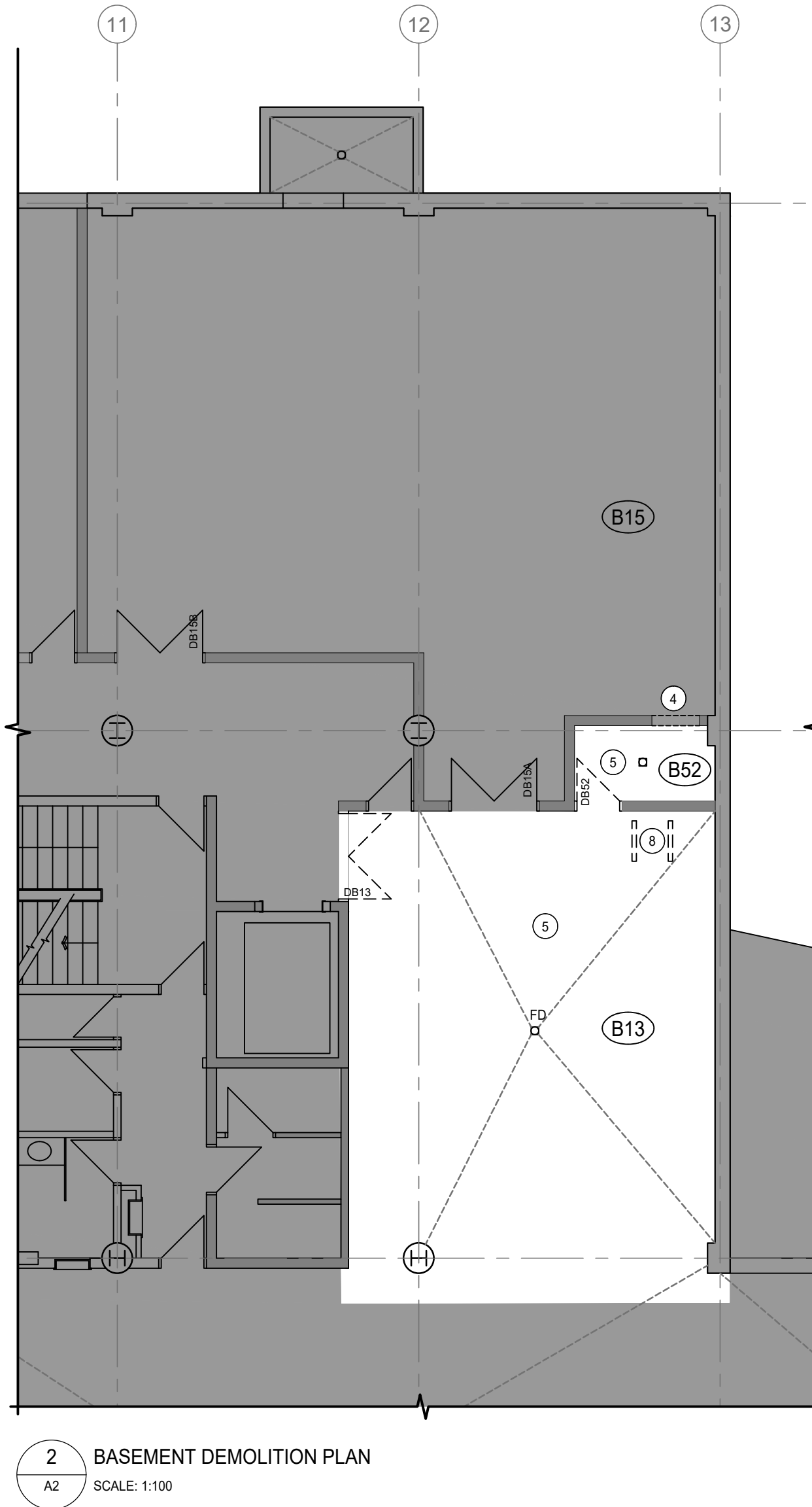
Drawing title

SITE PLAN, CONSULTANTS,  
EGRESS PLAN, LIST OF DRAWINGS  
NATIONAL BUILDING CODE MATRIX





1 FOURTH FLOOR DEMOLITION PLAN  
A2 SCALE: 1:100



2 BASEMENT DEMOLITION PLAN  
A2 SCALE: 1:100

#### DEMOLITION KEY NOTES:

- 1 REMOVE EXISTING FLOORING AND BASE THROUGHOUT AREA OF RENOVATION.
- 2 REMOVE EXISTING FIRE HOSE CABINET (FHC) AND SALVAGE ALL COMPONENTS FOR REUSE. NEW LOCATION AS INDICATED IN NEW CONSTRUCTION PLAN.
- 3 REMOVE EXISTING INTERIOR WINDOW TREATMENTS AND TURN OVER TO PSPC REPRESENTATIVE FOR FIRST RIGHT OF REFUSAL.
- 4 REMOVE PORTION OF EXISTING WALL TO ACCOMMODATE NEW DOOR.
- 5 EXISTING CONCRETE BASEMENT FLOOR TO REMAIN. ANY DAMAGE TO THE FLOOR DURING DEMOLITION OR CONSTRUCTION TO BE PATCHED, REPAIRED AND MADE GOOD TO THE SATISFACTION OF THE PSPC REPRESENTATIVE.
- 6 EXISTING CARPET TILE TO REMAIN IN EXISTING CORRIDOR. PROTECT FOR DURATION OF CONSTRUCTION. REMOVE EXISTING BASE IN CORRIDOR TO EXTENT SHOWN.
- 7 GWB TO REMAIN ON SIDE OF WALL INDICATED BY ARROW, IF CONTRACTOR DEEMS SALVAGEABLE AND CAN PATCH AND REPAIR TO MEET NEW CONSTRUCTION WALL TYPE. IF NOT SALVAGEABLE, PROVIDE NEW. REFER TO MODIFIED WALL CONSTRUCTION TYPES ON SHEET A4.
- 8 REMOVE CURBS FROM UNDER EXISTING CONDENSING UNIT TO BE RELOCATED. PATCH AND REPAIR ANY DAMAGE THAT OCCURS DURING THE REMOVAL OF THE CONDENSING UNIT INCLUDING CURBS AND WALL MOUNTED MECH / ELEC.
- 9 REMOVE EXISTING GYPSUM AND INSULATION FROM ALL SIDES OF EXISTING COLUMNS WITHIN AREA OF WORK ON FOURTH FLOOR.

#### GENERAL NOTES:

1. INFORMATION CONCERNING EXISTING CONSTRUCTION WAS TAKEN FROM ORIGINAL DRAWINGS AND IS ASSUMED CORRECT.
2. THE CONTRACTOR IS RESPONSIBLE FOR THE VERIFICATION OF SITE MEASUREMENTS AND QUANTITIES OF MATERIALS REQUIRED.
3. PERFORM WORK IN STRICT ACCORDANCE WITH THE NATIONAL BUILDING CODE OF CANADA, AND ANY OTHER CODE OF APPLICATION OR ANY AUTHORITY HAVING JURISDICTION.
4. DRAWINGS MUST NOT BE SCALED.
5. WHERE NEW WORK CONNECTS WITH EXISTING AND WHERE EXISTING WORK IS ALTERED, PATCH, REPAIR AND MAKE GOOD TO MATCH EXISTING. CONTACT DEPARTMENTAL REPRESENTATIVE FOR CLARIFICATION AS REQUIRED.
6. ALL FINISHES AND MATERIALS TO REMAIN ARE TO BE PROTECTED IN THEIR EXISTING CONDITION EXCEPT AS NOTED. ANY FINISHES DAMAGED IN THE COURSE OF CONSTRUCTION ARE TO BE PATCHED, REPAIRED AND MADE GOOD.
7. IN CASE OF DOUBT, CONFLICT OR DISCREPANCIES ON THE DRAWINGS, SPECIFICATIONS, MATERIALS OR METHOD OF CONSTRUCTION, CONTACT DEPARTMENTAL REPRESENTATIVE FOR CLARIFICATION IN WRITING BEFORE PROCEEDING WITH WORK.
8. DIMENSIONS TO FACE OF FINISHED GWB UNLESS OTHERWISE INDICATED.
9. SITE CONFIRM EXACT QUANTITIES OF ITEMS TO BE DEMOLISHED PRIOR TO TENDER CLOSE.
10. TURN OVER EXISTING ITEMS ON WALLS TO BE DEMOLISHED TO DEPARTMENTAL REPRESENTATIVE FOR FIRST RIGHT OF REFUSAL.
11. ALL CONSTRUCTION MATERIAL, RECYCLING & WASTE TO BE TAKEN OFF SITE BY CONTRACTOR.

#### ABBREVIATIONS:

ACT	Acoustic Ceiling Tile	FHC	Fire Hose Cabinet	PT	Paint
ADO	Automatic Door Opener	FR	Fridge	QTY	Quantity
AFF	Above Finished Floor	FRR	Fire Resistance Rating	RB	Rubber Base
AWP	Acoustic Wall Panels	GB	Gypsum Board	RCP	Reflected Ceiling Plan
BFL	Baffle	GWB	Gypsum Wall Board	REQS	Requirements
B/W	Between	HPL	High Pressure Laminate	RTF	Resilient Tile Floor
CPT	Carpet Tile	HR	Hour	RM	Room
CG	Corner Guard	MAX	Maximum	STC	Sound Transmission Class
CLG	Ceiling	MECH	Mechanical	TB	Tack Board
DE	Dry Erase Board	MIN	Minimum	TBD	To Be Determined
DW	Dishwasher	MW	Microwave	TS	Transition Strip
ELEC	Electrical	NBC	National Building Code	TV	Television
EQ	Equal	NC	Not in Contract	TYP	Typical
EX	Existing	NTS	Not to Scale	UIS	Underside
EXP	Exposed	O/C	On Centre	WI	With
FD	Floor Drain	PLY	Plywood	WWC	Writeable Wall Covering

#### LEGEND:

	AREA NOT IN SCOPE OF WORK
	EXISTING WALL CONSTRUCTION TO REMAIN
	EXISTING WALL CONSTRUCTION TO BE REMOVED
	EXISTING SIDELITE ASSEMBLY TO BE REMOVED
	THIS SIDE OF GWB TO REMAIN ON EXISTING WALL TO BE MODIFIED
	EXISTING DOOR AND FRAME TO REMAIN
	EXISTING DOOR TO BE REMOVED. FRAME TO BE REMOVED UNLESS OTHERWISE INDICATED. NOTE: TURN OVER REMOVED BASEMENT DOORS TO PSPC REPRESENTATIVE FOR FIRST RIGHT OF REFUSAL.
	EXISTING GRIDLINE
	EXISTING ROOM NUMBER
	AREA OF EXISTING CARPET TO REMAIN (REFER TO KEYNOTE 6)



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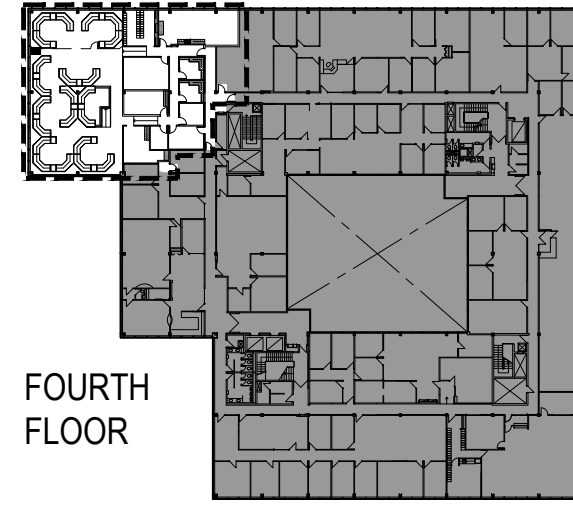


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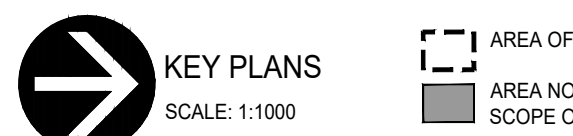
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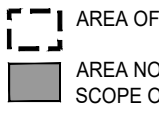
FOURTH FLOOR

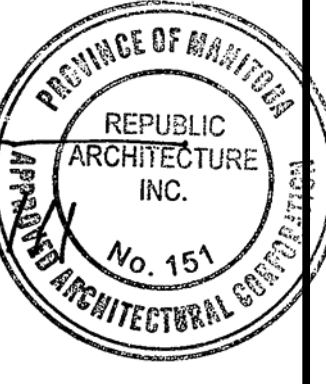
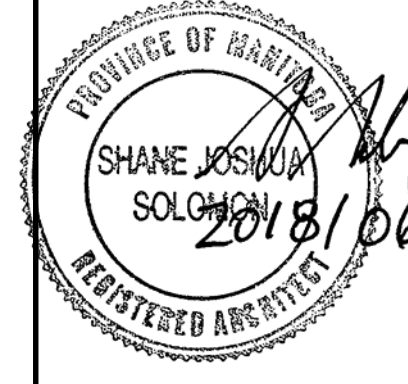


BASEMENT



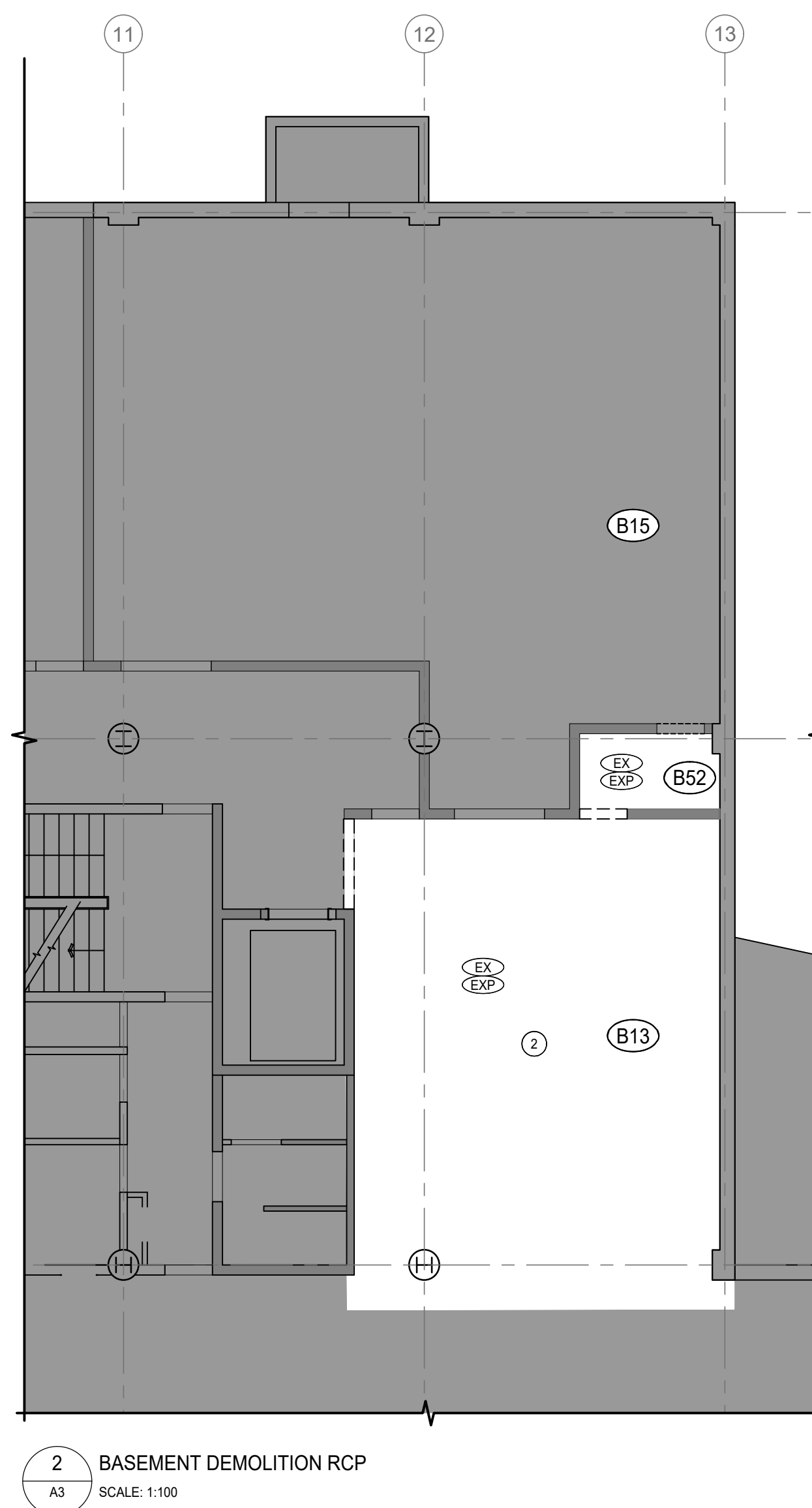
KEY PLANS  
SCALE: 1:1000

 AREA OF WORK  
AREA NOT IN SCOPE OF WORK



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PWGSC Project Manager MARK ARROJADO		
Drawing title		
FOURTH FLOOR AND BASEMENT DEMOLITION FLOOR PLANS		
Project no. R.076524.002	Drawing no. A2	Revision no. 3
OF 9		





ACT	Automatic Ceiling Tie	FHC	Fire Hose Cabinet	PT	Panty
ADO	Automatic Door Opener	FR	Frige	QTY	Quantity
AFB	Above Finished Floor	FR	Fire Resistance Rating	RB	Room Base
AWP	Airflow Wall Panels	GYP	Gypsum Board	RCQ	Reflected Ceiling Plan
BFL	Baffle	GWB	Gypsum Wall Board	REQS	Requirements
B/W	Between	HPL	High Pressure Laminate	RTF	Resilient Tile Floor
CPT	Carpet Tile	HR	Hour	RHM	Room
CG	Corner Guard	MAX	Maximum	STC	Sound Transmission Class
CLG	Ceiling	MECH	Mechanical	TB	Tack Board
DE	Dry Erase Board	MIN	Minimum	TBD	To Be Determined
DW	Dishwasher	MW	Microwave	TS	Transition Strip
ELEC	Electrical	NBC	National Building Code	TV	Television
EQ	Equal	NIC	Not in Contract	UPS	Typical
EX	Existing	NLS	Not to Scale	U/S	Underside
EXP	Exposed	O/C	On Centre	W/U	Within
FD	Fire Door Drain	PLY	Plywood	WWC	Wettable Wall Covering

Ceiling Tile	FHC	Fire Hose Cabinet	PT	Paint
Automatic Door Opener	FHD	Frige	QTY	Quantity
Finished Floor	FRR	Fire Resistance Rating	RCP	Rubber Base
Wall Panels	GB	Gypsum Board	REF	Reflected Ceiling
	GWG	Gypsum Wall Board	REQS	Requirements
	HPL	High Pressure Laminate	RTF	Resilient Tile Floor
Guard	HR	Hour	Room	Room
En	MAX	Maximum	STC	Sound Transmission Class
	MECH	Mechanical	TB	Tack Board
Base Board	MIN	Minimum	TBD	To Be Determined
Call	MW	Microwave	TS	Transition Strip
Wall	NBC	National Building Code	TV	Television
	NIC	Not in Contract	TYP	Typical
	NLT	Not to Scale	UIS	Underside
Bed	OIC	On Centre	WI	Wire
Drain	PYS	Plywood	WWC	Wearable Wall Covering

EXISTING LIGHT FIXTURE TO BE REMOVED

EXISTING ACOUSTIC CEILING TILE AND GRID TO BE REMOVED

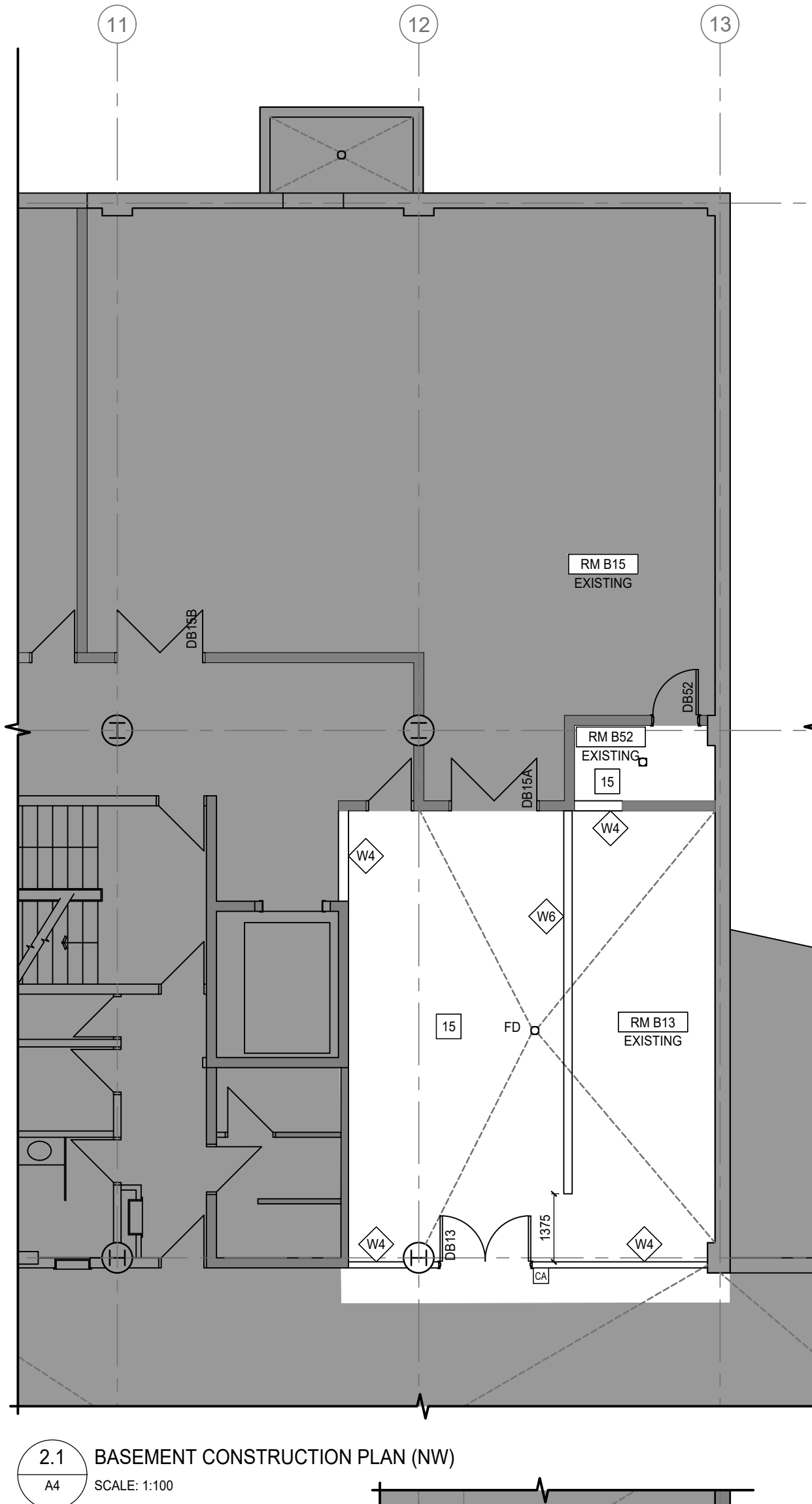
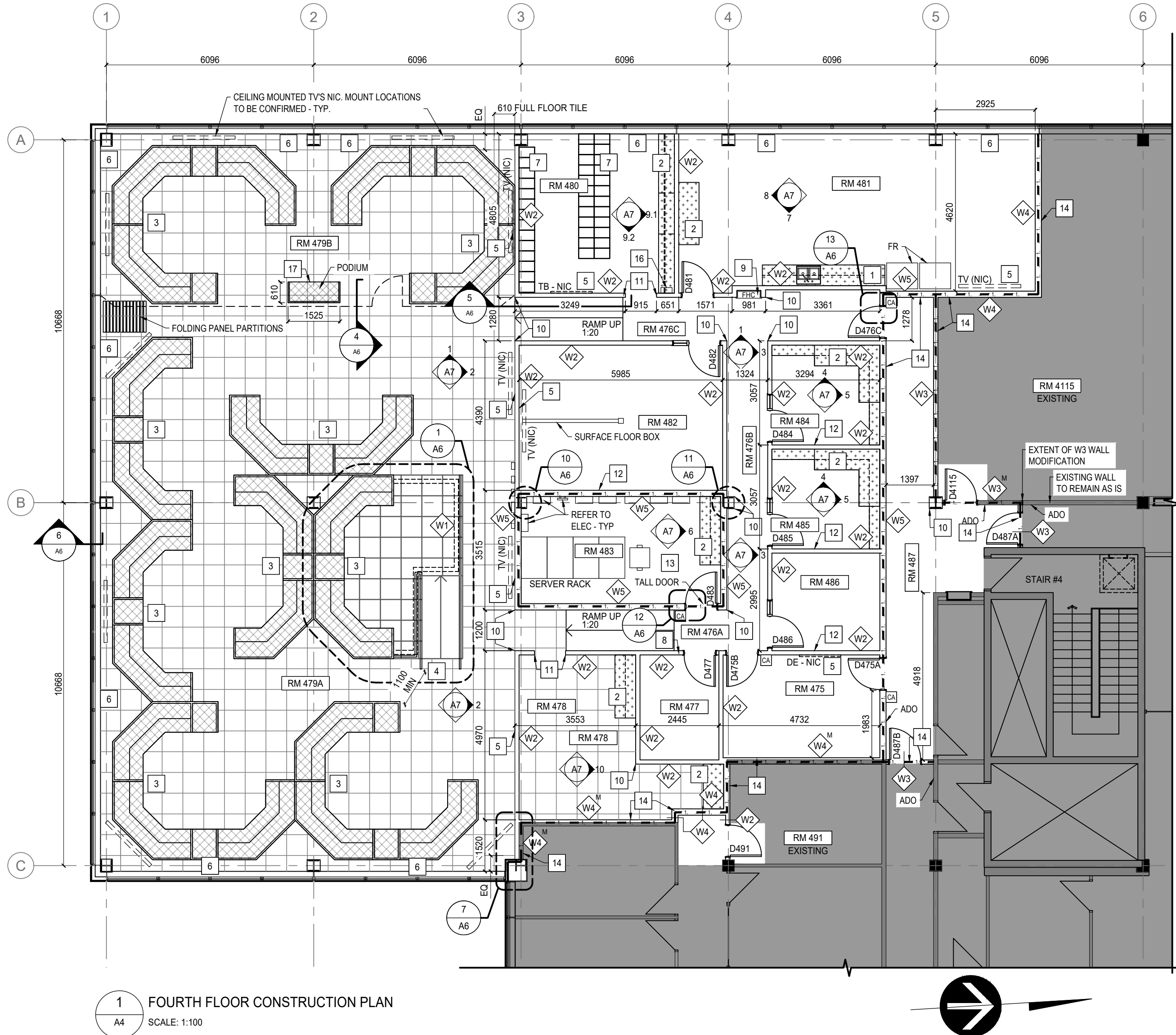
NOTE: LAYER OF GB EXISTS ABOVE ACT AT +/- 350mm AFF.  
PORTION OF GB TO BE REMOVED AND PORTION TO BE  
REPAIRED AS PER 3/A3.

EXISTING ROOM NUMBER

EXISTING CEILING HEIGHT, A.F.F.

EXISTING CEILING FINISH





#### NEW CONSTRUCTION KEY NOTES:

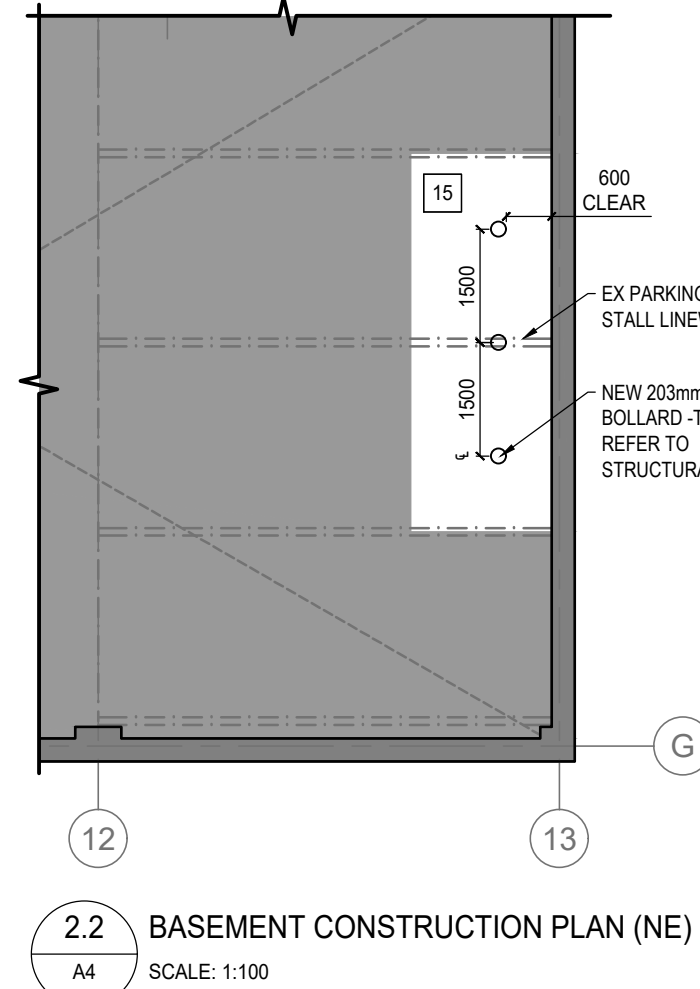
- SUPPLY AND INSTALL NEW KITCHEN MILLWORK INCLUDING NEW FAUCET AND SINK.
- SUPPLY AND INSTALL NEW MILLWORK AS INDICATED IN ELEVATIONS.
- SUPPLY AND INSTALL NEW DISPATCH CONSOLES IN AREA OF RAISED ACCESS FLOOR ROOMS 479A/479B.
- RAMP HAND RAIL TO EXTEND 305mm PAST EDGE OF RAMP AS PER NBC. CRITICAL DIMENSION OF 1100mm TO BE MAINTAINED BETWEEN HANDRAIL AND ADJACENT DISPATCH CONSOLE.
- SUPPLY AND INSTALL PLYWOOD BLOCKING IN WALL FOR WALL MOUNTED ITEMS IN CONTRACT. FUTURE N.I.C. EQUIPMENT AND FURNITURE COMPONENTS. INSTALL CONTINUOUS BLOCKING AS DETAILED IN TYPICAL MOUNTING HEIGHT ELEVATION 11A7.
- SUPPLY AND INSTALL NEW DUAL SHADE ROLLER BLINDS AND NEW WINDOW SILL AROUND BUILDING PERIMETER WITHIN AREA OF RENOVATION. REFER TO DETAIL 6/A6. PROVIDE BLOCKING IN CEILING FOR BLIND MOTORS.
- SUPPLY AND INSTALL NEW STACKED HALF HEIGHT LOCKERS W/ SLOPED TOP.
- WALL MOUNTED "IN USE" SIGN TO BE INSTALLED OUTSIDE OF DOOR.
- RELOCATED FIRE HOSE CABINET (FHC). FRAME NEW WALL TO ACCOMMODATE EXISTING UNIT.
- SUPPLY AND INSTALL NEW CORNER GUARDS FROM TOP OF BASE TO 1200 mm AFF.
- SUPPLY AND INSTALL NEW END CAPS FROM TOP OF BASE TO 1200 mm AFF.
- SUPPLY AND INSTALL WRITE ABLE WALL COVERING IN ROOMS 482, 484, 485 AND 486. COVERING TO BE INSTALLED ON FULL EXTENT OF WALL, FROM TOP OF BASE TO UNDERSIDE OF FINISHED CEILING AND FULL LENGTH OF INDICATED WALL.
- SUPPLY AND INSTALL 19mm PLYWOOD GOOD ONE SIDE ON TOP OF GYPSUM. INSTALL ON ALL WALLS IN ROOM 483 FROM 150mm A.F.F. TO FULL HEIGHT OF WALL. RUN FULL WIDTH OF WALL. PAINT 6 SIDES OF PLYWOOD WITH WHITE INTUMESCENT PAINT.
- NEW 1 HR F.R.R. WALL TO BE CONSTRUCTED AND FINISHED TO GB (BOTH SIDES OF WALL) PRIOR TO INTERIOR FIT UP OF SUITE.
- EXISTING EXPOSED CONCRETE FLOOR IN BASEMENT TO REMAIN. PATCH AND REPAIR AREAS DAMAGED DURING COURSE OF CONSTRUCTION.
- SUPPLY AND INSTALL SURFACE MOUNTED FIREARM LOCKER. PROVIDE CONTINUOUS WALL BLOCKING.
- PODIUM DIMENSIONS TO BE: 1525mm LENGTH X 600mm DEEP X 900 mm HIGH (INCLUDING LOCKABLE CASTORS) WITH A 100mm HIGH TRIM (IN ADDITION TO THE 900 mm HEIGHT). PODIUM TO ENCLOSE AN EQUIPMENT RACK WITH TWO DOORS, ADJUSTABLE SHELF AND BE VENTED TO THE SIDE OF THE CABINET.

#### NEW CONSTRUCTION GENERAL NOTES:

- PROVIDE NEW FLOORING (CARPET TILE AND RESILIENT TILE) AND BASE THROUGHOUT AREA OF RENOVATION. REFER TO ROOM FINISH PLAN A4.1.
- PROVIDE BLOCKING IN WALLS AND CEILING AS REQUIRED FOR ALL WALL MOUNTED MILLWORK, LOCKERS, FURNITURE AND EQUIPMENT (TVS, TACK BOARDS, DRY ERASE BOARDS, ETC.) AND CEILING MOUNTED ITEMS. REFER TO ELEVATIONS SHEET A7 FOR EXTENT OF BLOCKING WITHIN WALL REQUIRED.
- CENTER RAISED ACCESS FLOOR TILES IN SOUTH - EAST DIRECTION BETWEEN GRIDLINES A AND C. START FULL TILE ALONG WALL AT GRIDLINE 3 IN NORTH - SOUTH DIRECTION AND RUN SOUTH.
- LOCATION OF WALL TYPE W1 UNDER RAISED ACCESS FLOOR DEPENDENT ON CONSOLE DIMENSIONS. CONSOLE SHOP DRAWINGS TO BE SUBMITTED PRIOR TO NEW WALL FRAMING.
- PROVIDE NEW COLUMN ENCLOSURES AT ALL EXISTING STEEL COLUMNS WITHIN AREA OF WORK. NEW ENCLOSURES TO MEET REQUIRED FIRE AND STC RATINGS. REFER TO DETAILS ON A6.
- IN REFERENCE TO INSTALLATION OF METAL SECURITY MESH, "ATTACK SIDE" AND "SECURE ROOM SIDE" IS DEFINED BY THE RCMP PHYSICAL SECURITY GUIDE G13-01. "ATTACK SIDE" IS THE SIDE OF THE DOOR OR WALL THAT IS EXPOSED TO THE ADVERSARY."
- AS PER NBC 2015, TO ACHIEVE FIRE 1 HR FIRE RESISTANCE RATING IN WALL TYPES AND COLUMN ENCLOSURES, ENSURE MINERAL WOOL IS PRODUCED FROM ROCK OR SLAG WITH A MASS OF AT LEAST 2.8kg/m<sup>2</sup> (FOR 89mm STUD THICKNESS) AND COMPLETELY FILL THE WALL CAVITY.
- ALL NEW AND EXISTING PENETRATIONS IN RATED ASSEMBLIES TO BE INFILLED AS PER REQUIRED WALL TYPE AND FIRESTOPPED. THIS ALSO APPLIES TO ALL WALL PENETRATIONS ABOVE FINISHED CEILING.

#### NEW WALL TYPES:

- W1** NEW 0 HR SMOKE SEPARATION PARTIAL HEIGHT INTERIOR WALL - TOP OF CONCRETE FLOOR TO UIS SECOND LEVEL ACCESS FLOOR
- 16 mm GYPSUM BOARD
  - 92mm STEEL STUDS @ 600 O/C
  - FILL CAVITY WITH MINERAL WOOL INSULATION
  - 16mm GYPSUM BOARD
- NOTE:**
- FIRE STOP TOP OF WALL WHERE IT MEETS THE ACCESS FLOOR AND AT THE FLOOR SLAB. REFER TO DETAIL 3/A6.
- W2** NEW INTERIOR WALL - TOP OF CONCRETE FLOOR TO UIS STRUCTURE NBC S4a - STC 48
- 16 mm GYPSUM BOARD - PAINTED
  - 92mm STEEL STUDS @ 600 O/C
  - FILL CAVITY WITH MINERAL WOOL INSULATION
  - 16mm GYPSUM BOARD - PAINTED
- W3** NEW 1 HR F.R.R. INTERIOR WALL - TOP OF CONCRETE FLOOR TO UIS STRUCTURE. NBC S5b - STC 52
- 16 mm (TWO LAYERS) GYPSUM BOARD - PAINTED
  - 92mm STEEL STUDS @ 400 O/C
  - FILL CAVITY WITH MINERAL WOOL INSULATION
  - 16mm GYPSUM BOARD - PAINTED
- W4** MODIFIED EXISTING 1 HR F.R.R. INTERIOR WALL - TOP OF CONCRETE FLOOR TO UIS STRUCTURE. NBC S5b - STC 52
- MODIFY EXISTING WALL AS REQUIRED TO MEET CONSTRUCTION AND REQUIREMENTS OF WALL TYPE 3.
  - EXISTING WALL TO REMAIN INCLUDES 92mm STEEL STUD AND 16mm GYPSUM BOARD ONE SIDE. ALL OTHER COMPONENTS OF WALL CONSTRUCTION TO BE NEW. CONFIRM EXISTING WALL CONSTRUCTION ON SITE AND ENSURE THE EXISTING TO REMAIN WILL MEET WALL TYPE 3 CONSTRUCTION AND REQUIREMENTS. IF EXISTING CAN NOT MEET NEW WALL REQUIREMENTS, PROVIDE NEW.
  - INFILL ANY WALL PENETRATIONS IN GWB.
- W5** NEW 1 HR F.R.R. / SECURE INTERIOR SUITE DEMISING WALL - TOP OF CONCRETE FLOOR TO UIS STRUCTURE NBC S7a - STC 51
- 16 mm TYPE X GYPSUM BOARD - PAINTED
  - 152 mm STEEL STUDS @ 300 O/C. STUDS TO BE HEAVIER GAUGE TO MEET RCMP SECURITY REQUIREMENTS
  - 16 mm TYPE X GYPSUM BOARD - PAINTED
- W6** NEW BASEMENT WALL PARTITION
- PLYWOOD GOOD ONE SIDE, PAINTED 6 SIDES WITH WHITE INTUMESCENT PAINT.
  - PLYWOOD GOOD ONE SIDE, PAINTED 6 SIDES WITH WHITE INTUMESCENT PAINT.
- NOTES:**
- PLYWOOD TO BE INSTALLED FROM CONCRETE FLOOR TO +/- 2100mm A.F.F. (BOTH SIDES)
  - EVERY OTHER STEEL STUD TO BE INSTALLED TO +/- 2100 A.F.F. TO PROVIDE CLEARANCE ABOVE WALL FOR MECH AND ELEC.



#### GENERAL NOTES:

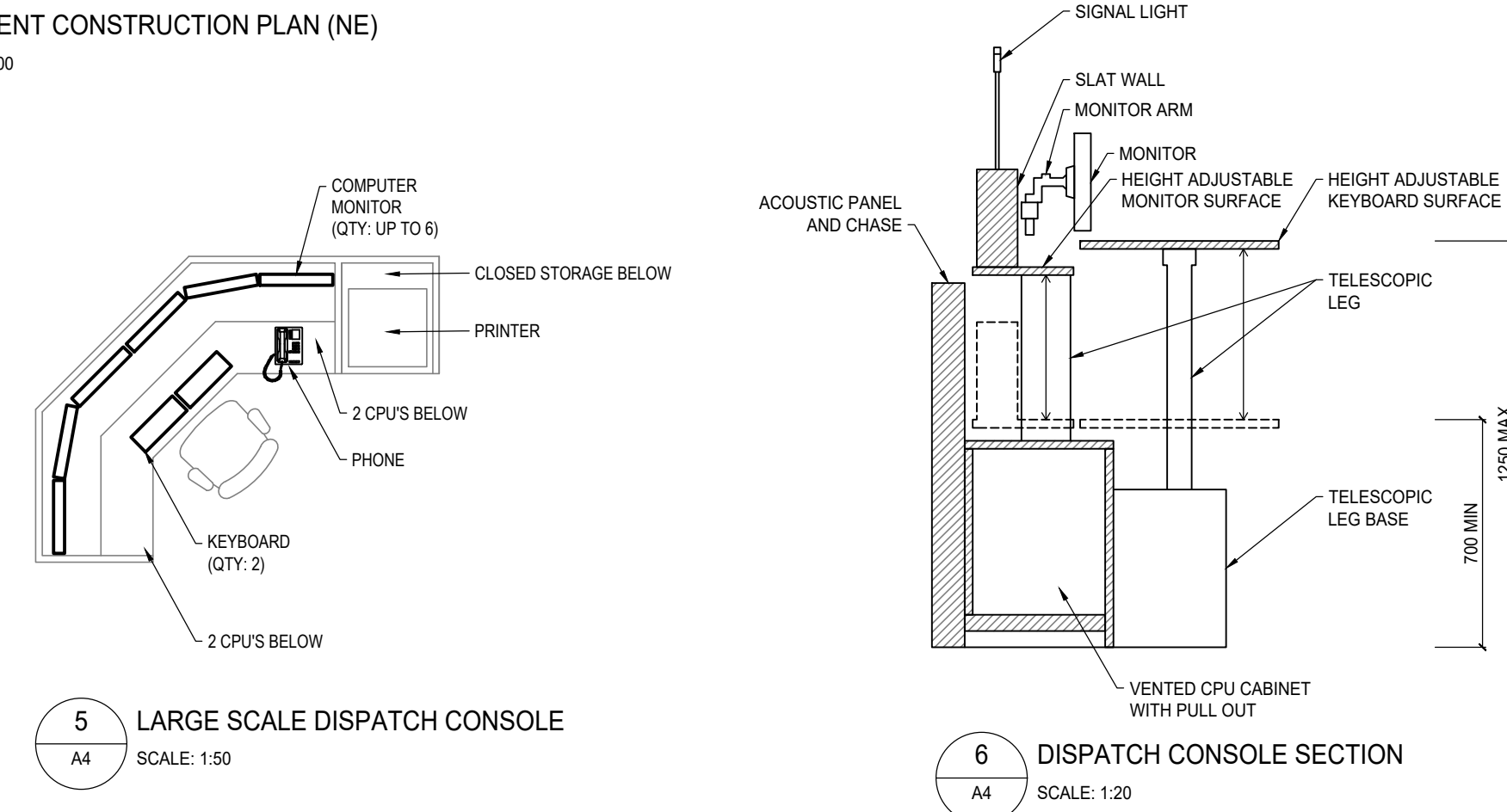
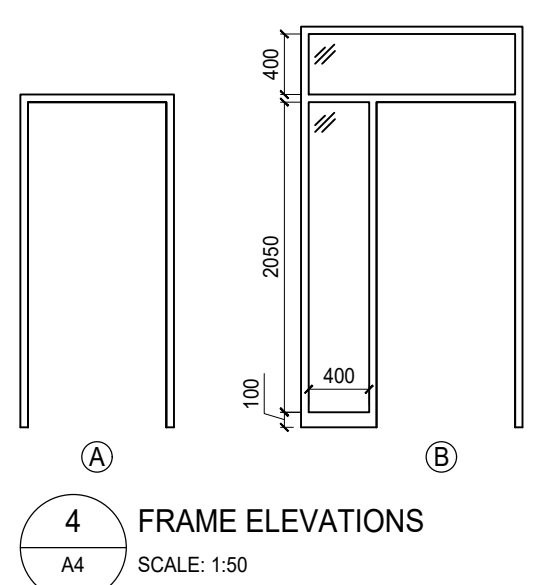
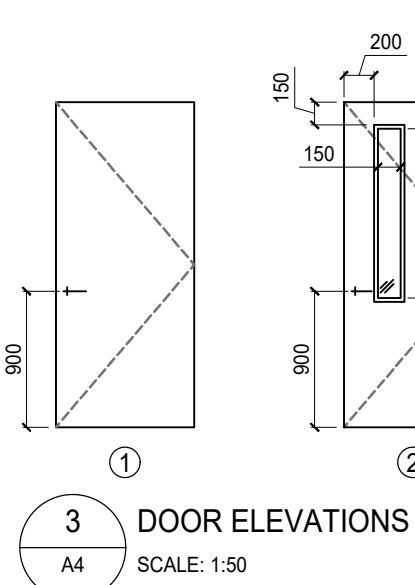
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- IN CASE OF DOUBT, CONFLICT OR DISCREPANCIES ON THE DRAWINGS, SPECIFICATIONS, MATERIALS OR METHOD OF CONSTRUCTION, CONTACT DEPARTMENTAL REPRESENTATIVE FOR CLARIFICATION IN WRITING BEFORE PROCEEDING WITH WORK.
- DIMENSIONS TO FACE OF FINISHED GWB UNLESS OTHERWISE INDICATED.
- SITE CONFIRM EXACT QUANTITIES OF ITEMS TO BE DEMOLISHED PRIOR TO TENDER CLOSE.
- TURN OVER EXISTING ITEMS ON WALLS TO BE DEMOLISHED TO DEPARTMENTAL REPRESENTATIVE FOR FIRST RIGHT OF REFUSAL.
- ALL CONSTRUCTION MATERIAL, RECYCLING & WASTE TO BE TAKEN OFF SITE BY CONTRACTOR.

#### ABBREVIATIONS:

ACT	Acoustic Ceiling Tile	FHC	Fire Hose Cabinet	PT	Paint
ADO	Automatic Door Opener	FR	Fridge	QTY	Quantity
AFF	Above Finished Floor	FRR	Fire Resistance Rating	RB	Rubber Base
AWP	Acoustic Wall Panels	GB	Gypsum Board	RCP	Reflected Ceiling Plan
BFL	Baffle	GWB	Gypsum Wall Board	REQS	Requirements
B/W	Between	HPL	High Pressure Laminate	RTF	Resilient Tile Floor
CPT	Carpet Tile	HR	Hour	RM	Room
CG	Corner Guard	MAX	Maximum	STC	Sound Transmission Class
CLG	Ceiling	MECH	Mechanical	TB	Tack Board
DE	Dry Erase Board	MIN	Minimum	TBD	To Be Determined
DW	Dishwasher	MW	Microwave	TS	Transition Strip
ELEC	Electrical	NBC	National Building Code	TV	Television
EQ	Equal	NIC	Not in Contract	TYP	Typical
EX	Existing	NTS	Not to Scale	UIS	Underside
EXP	Exposed	O/C	On Centre	W/	With
FD	Floor Drain	PLY	Plywood	WWC	Writeable Wall Covering

#### LEGEND:

- AREA NOT IN SCOPE OF WORK
- EXISTING WALL CONSTRUCTION TO REMAIN
- NEW WALL CONSTRUCTION
- EXISTING DOOR AND FRAME TO REMAIN
- NEW DOOR / DOOR WITH SIDELIGHT TO BE INSTALLED.
- EXISTING GRIDLINE
- NEW MILLWORK
- DISPATCH CONSOLES
- RAISED 610mm X 610mm ACCESS FLOOR
- INTERIOR ELEVATION MARKER
- SECTION MARKER  
A - DETAIL NUMBER  
B - SHEET DETAIL IS LOCATED ON
- NEW AND EXISTING 1 HR FRR SEPARATION
- NEW WALL TYPE
- EXISTING WALL TO BE MODIFIED
- WALL MOUNTED CARD ACCESS
- ROOM NUMBER



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**FOURTH FLOOR**  
**BASEMENT**

**KEY PLANS**  
SCALE: 1:1000

Revision	Description	Date
3	Issued for Construction	2018 06 11
2	99% Construction Documents Submission	2018 04 05
1	50% Construction Documents Submission	2018 01 25
0	Design Development Submission	2017 08 30

Client  
**PSPC/SPAC**  
**SUITE 100-167 LOMBARD AVENUE WINNIPEG, MANITOBA**

Project title  
**INTERIOR ALTERATIONS 1091 PORTAGE AVENUE WINNIPEG, MANITOBA**  
**SUITE 483 RENOVATION & FIT UP**

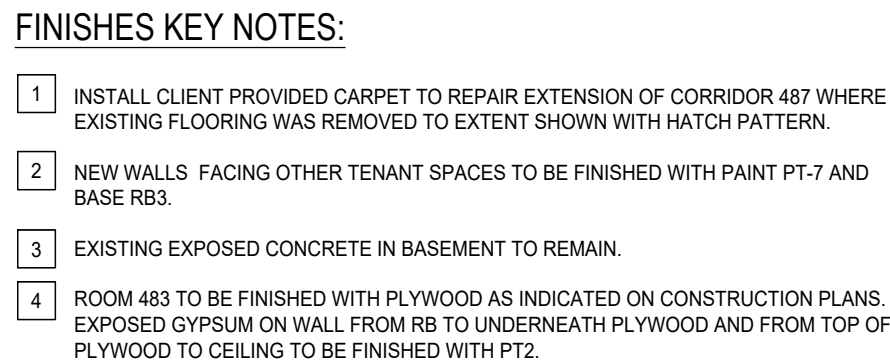
Designed by  
**TS**  
Drawn by  
**HA**  
Approved by  
**MG**  
PWSC Project Manager  
**MARK ARROJADO**

Drawing title  
**FOURTH FLOOR AND BASEMENT NEW CONSTRUCTION FLOOR PLANS, DOOR AND FRAME ELEVATIONS, DISPATCH CONSOLE REQs**

Project no.	Drawing no.	Revision no.
<b>R.076524.002</b>	<b>A4</b>	<b>3</b>

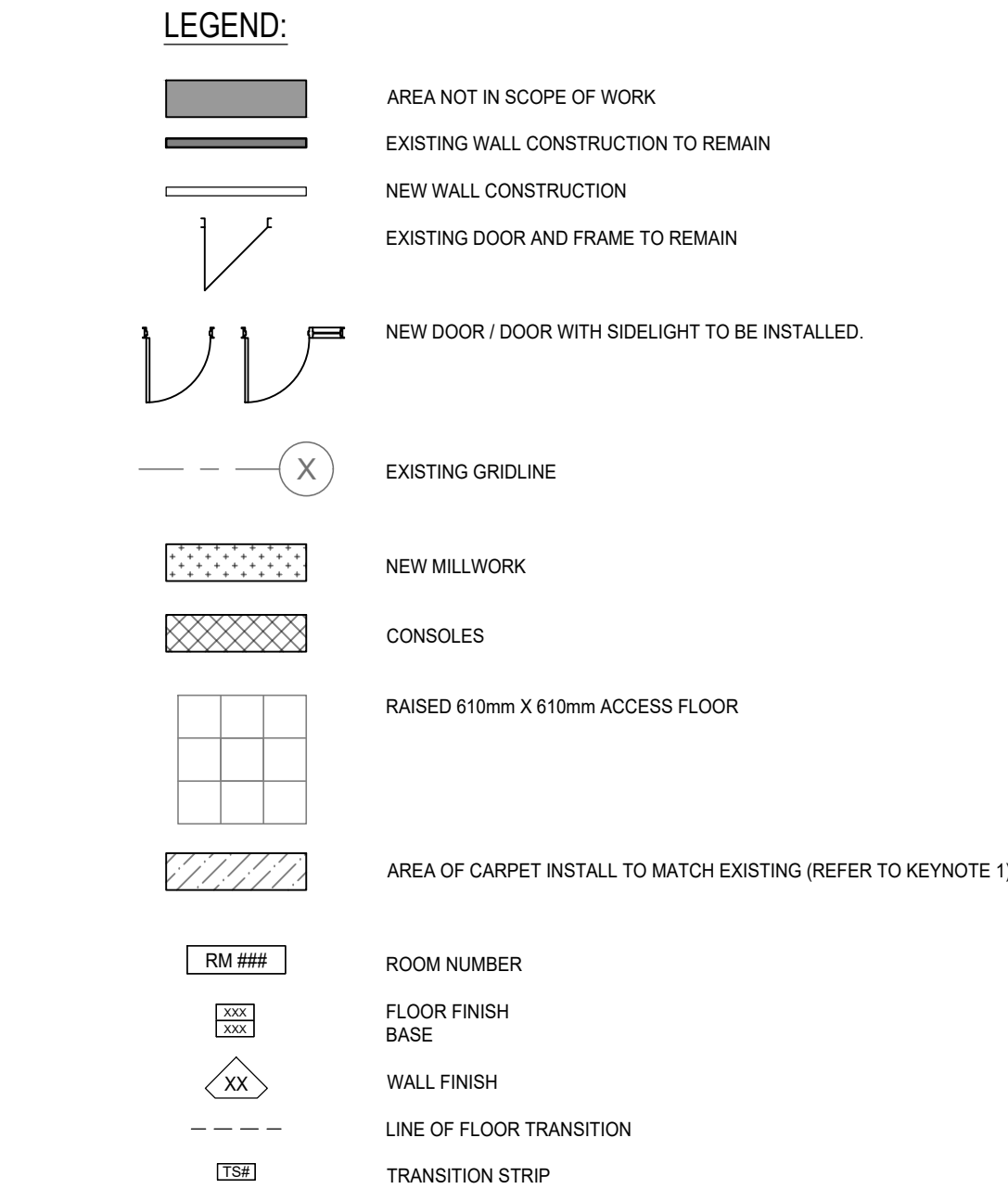
OF 9





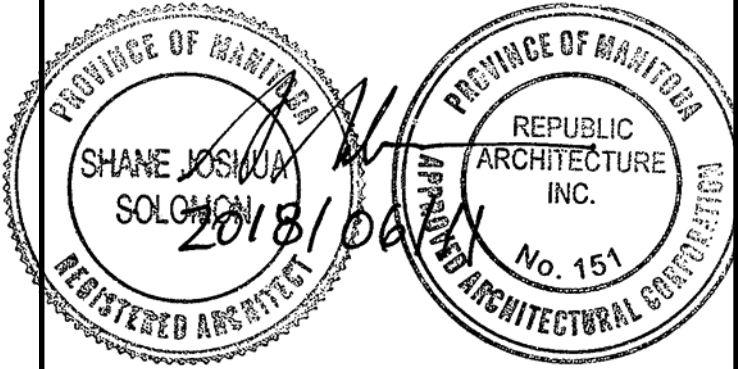
1. WHERE NEW AND EXISTING CARPET MEET, TRANSITION TO BE CENTERED IN DOOR OPENING. ENSURE SEAMS ARE SEALED.
2. GYPSUM CEILING THROUGHOUT AREA OF WORK TO BE PT-1.

PLY WWC PLYWOOD TO BE FINISHED WITH INTUMESCENT PAINT ALL 6 SIDES  
WRITEABLE WALL COVERING. REFER TO KEYNOTE 12 ON SHEET A4 FOR  
INSTALLATION INSTRUCTIONS.



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AF	After Finish	FRF	Fire Resistance Rating	R	Rubber Base
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BW	Board	HPL	High Pressure Laminate	RTF	Resident Tie Floor
CJ	Corner Jate	HR	Hour	RM	Room
CG	Corner Guard	MAX	Maximum	STC	Sound Transmission Class
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EQ	Equal	NIC	Not in Contract	TYP	Typical
EV	Exhausting	NS	Not to Scale	UNS	Underside
EXP	Exposed	OC	On Centre	W/	With
FD	Floor Drain	Ply	Plywood	WWC	Wearable Wall Covering



1	Issued for Construction	2018 06 11
0	99% Construction Documents Submission	2018 04 05
Revision	Description	Date

Client	
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PSPC/SPAC

**SUITE 100-167 LOMBARD AVENUE  
WINNIPEG, MANITOBA**

Project title
---------------

**INTERIOR ALTERATIONS  
1091 PORTAGE AVENUE  
WINNIPEG, MANITOBA**

**SUITE 483**  
**RENOVATION & FIT UP**

Designed by	
TS	

Drawn by  
HA

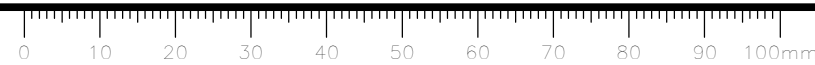
Approved by  
MG

PWGSC Project Manager  
**MARK ARROJADO**

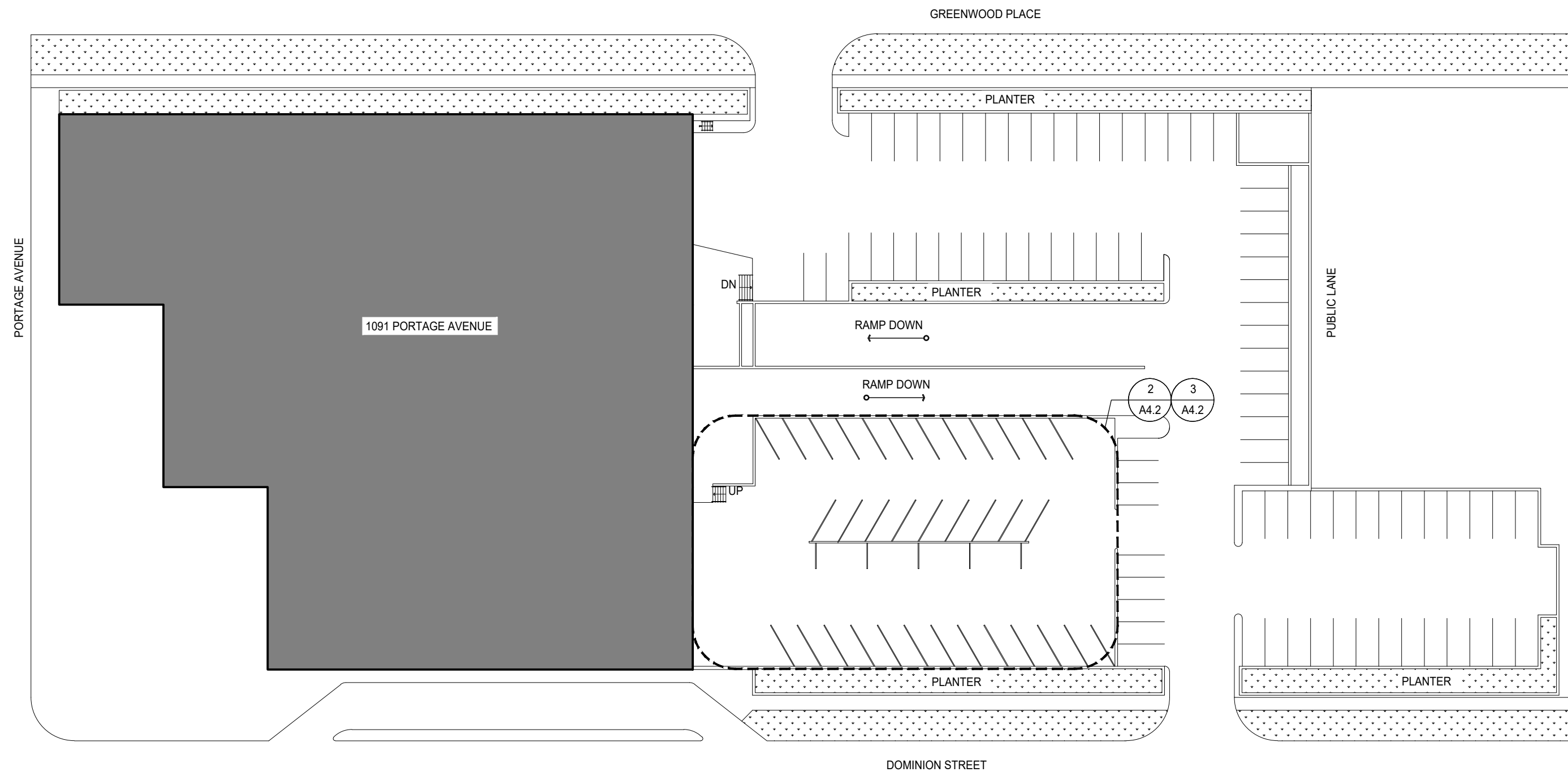
Drawing title

**FOURTH FLOOR AND BASEMENT  
NEW CONSTRUCTION FINISHES  
FLOOR PLANS**

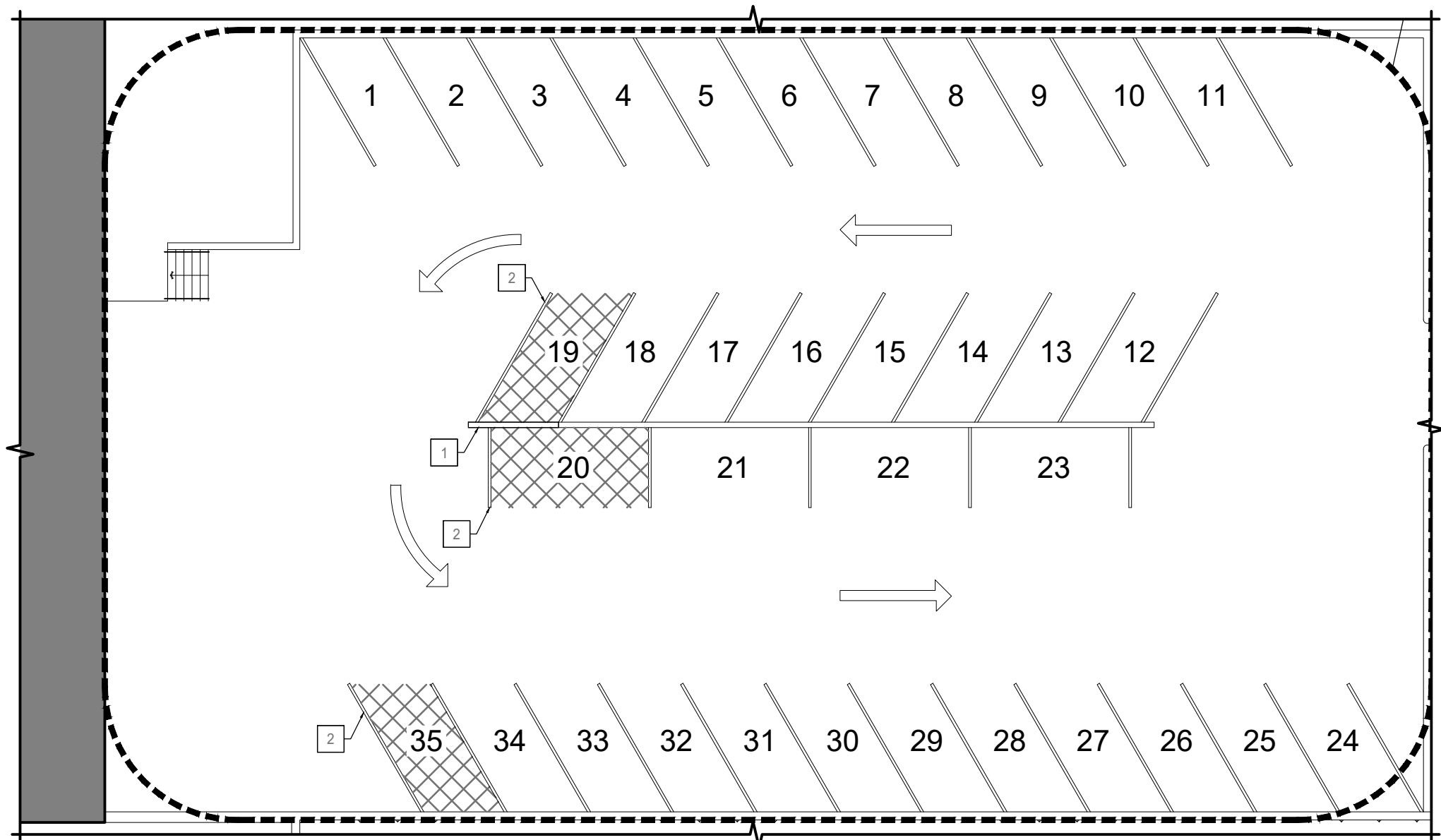
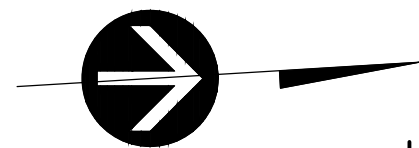
Project no.	Drawing no.	Revision no.
<b>R.076524.002</b>	<b>A4.1</b>	<b>1</b>



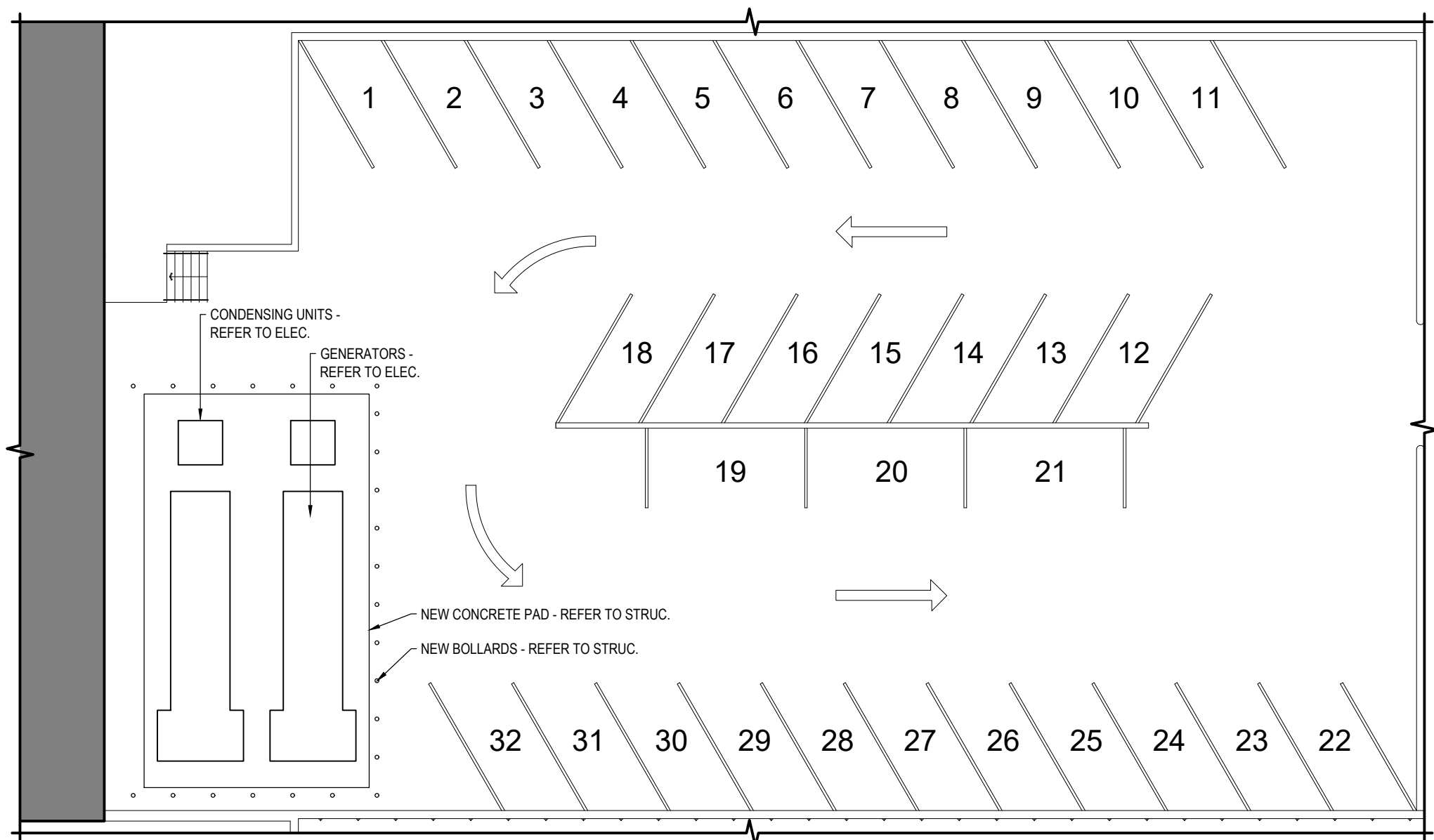




1 SITE PLAN  
A4.2 1:500



2 ENLARGED AREA OF WORK - EXISTING PARKING STALL LAYOUT  
A4.2 1:200



3 ENLARGED AREA OF WORK - NEW PARKING STALL LAYOUT  
A4.2 1:200

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EXP	Exposed	O/C	On Centre	WI	With
FD	Floor Drain	PLY	Plywood	WWC	Writeable Wall Covering

#### LEGEND:

- EXISTING BUILDING
- EXISTING PARKING STALLS TO BE REMOVED TO CREATE LANEWAY
- ONE WAY DIRECTION FOR VEHICULAR TRAFFIC

#### SITE / PARKING LOT KEY NOTES:

1. REMOVE PORTION OF PARKING FENCE AND CURB BETWEEN EXISTING PARKING STALLS 19 AND 20.
2. REMOVE PAINT / LINEWORK FROM EXISTING PARKING STALLS TO BE REMOVED.

#### SITE / PARKING LOT GENERAL NOTES:

1. STALLS ARE NUMBERED FOR CLARIFICATION ONLY AND DO NOT REFLECT THE PARKING STALL NUMBER SEQUENCE THAT MAY BE PRESENT ON SITE.

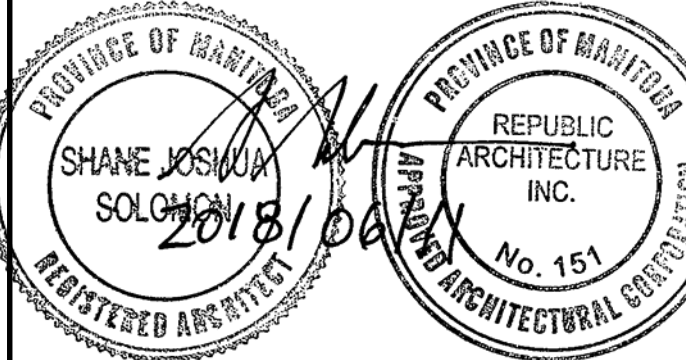
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Revision	Description	Date
0	Issued for Construction	2018 06 11

Client  
**PSPC/SPAC**

SUITE 100-167 LOMBARD AVENUE  
WINNIPEG, MANITOBA

Project title  
**INTERIOR ALTERATIONS  
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SUITE 483  
RENOVATION & FIT UP**

Designed by  
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**MARK ARROJADO**

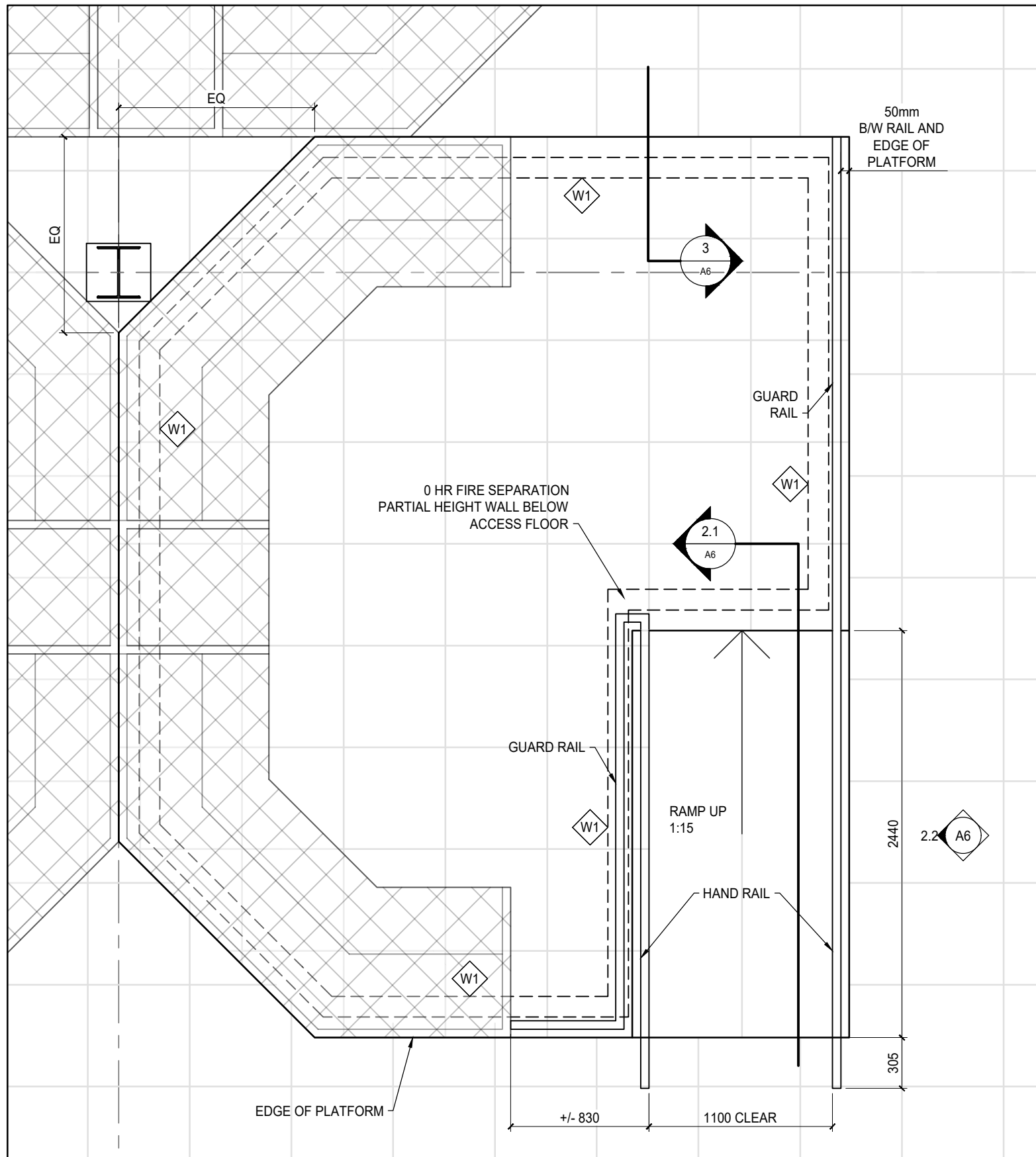
Drawing title  
**SITE PLAN AND  
PARKING LOT LAYOUT**

Project no.	Drawing no.	Revision no.
<b>R.076524.002</b>	<b>A4.2</b> OF 9	<b>0</b>

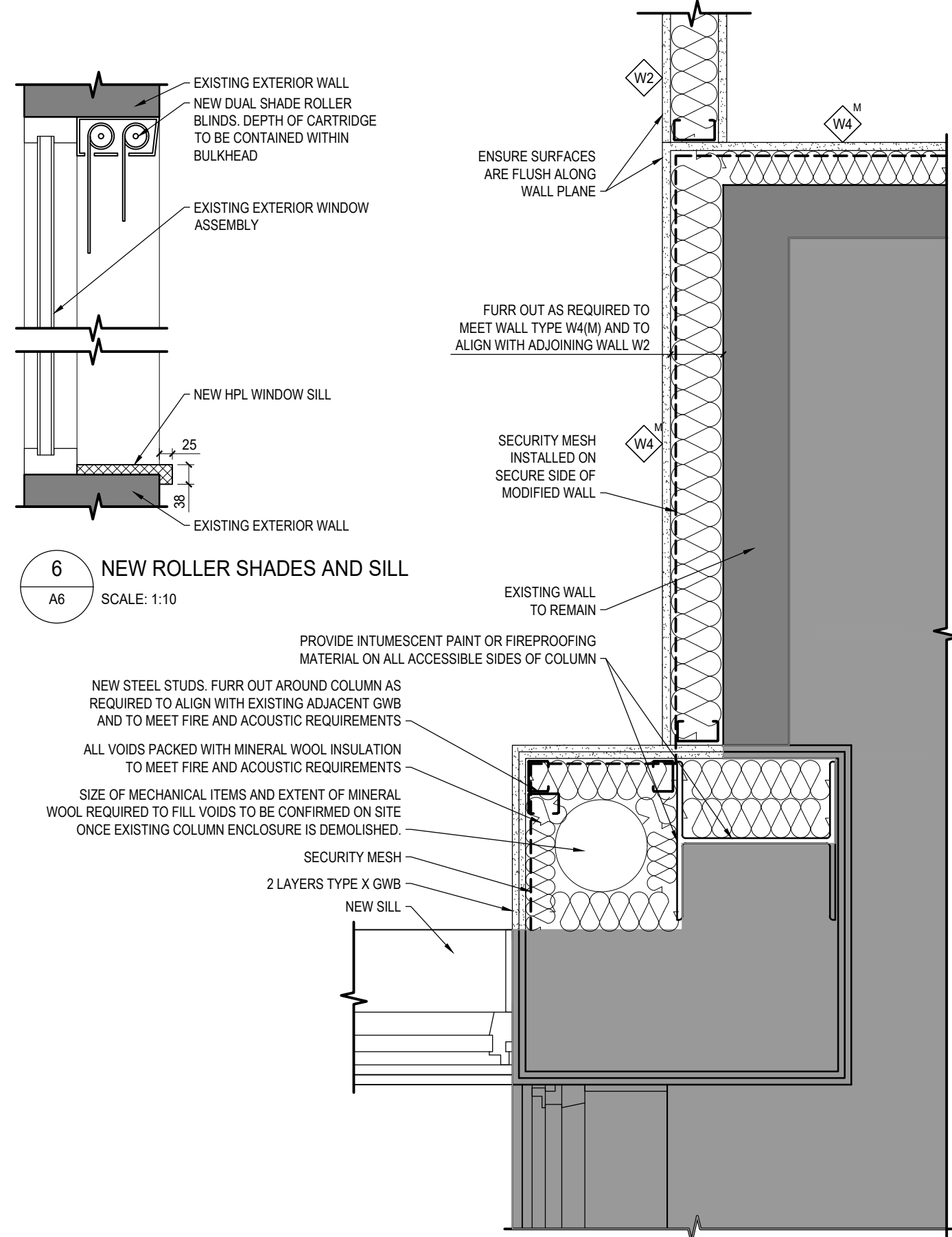






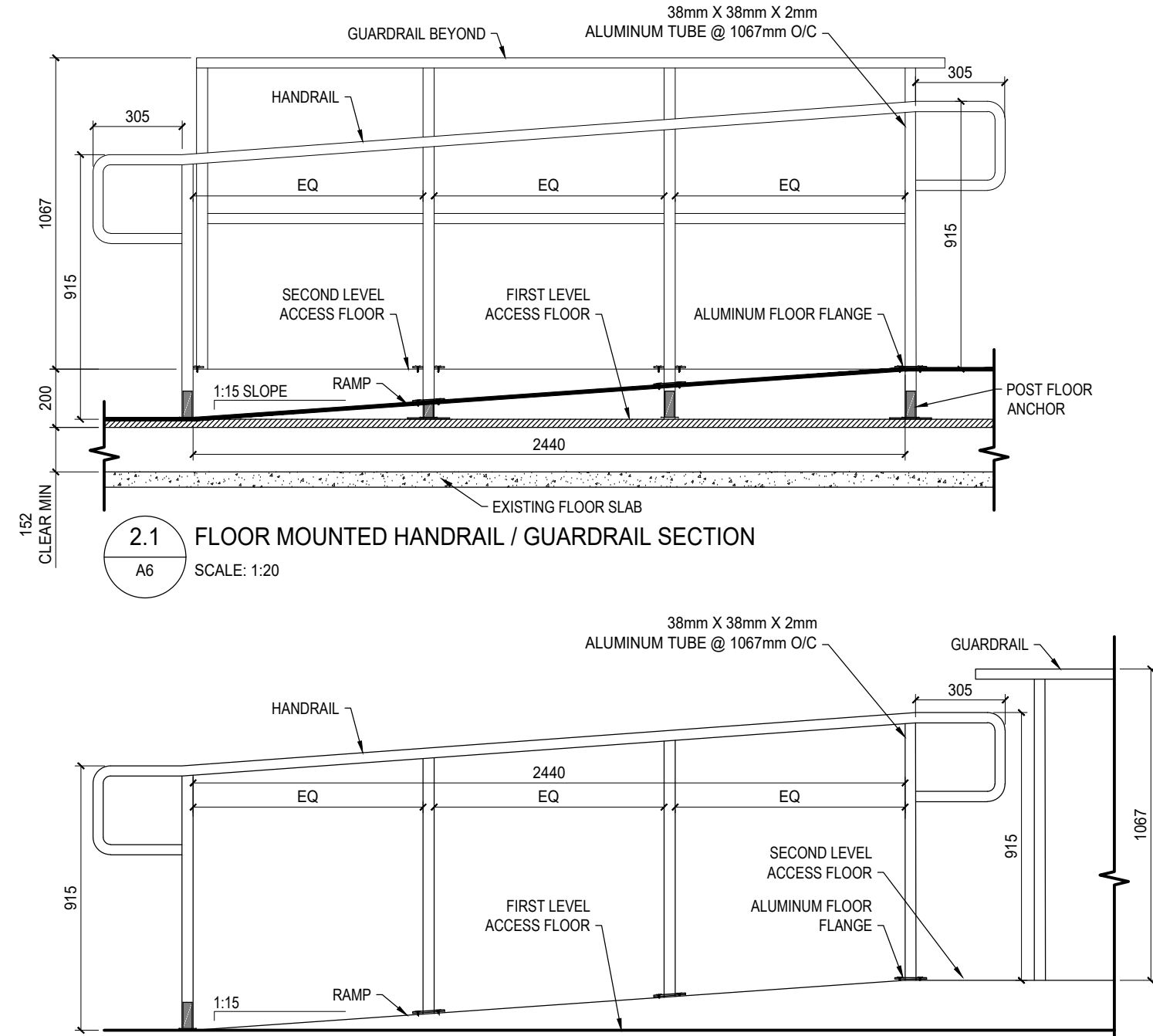


1 ENLARGED PLAN DETAIL - RAISED ACCESS FLOOR  
SCALE: 1:30  
NOTE: LOCATION OF WALL TYPE W1 UNDER RAISED ACCESS FLOOR DEPENDENT ON DISPATCH CONSOLE DIMENSIONS. DISPATCH CONSOLE SHOP DRAWINGS TO BE SUBMITTED PRIOR TO NEW WALL FRAMING.



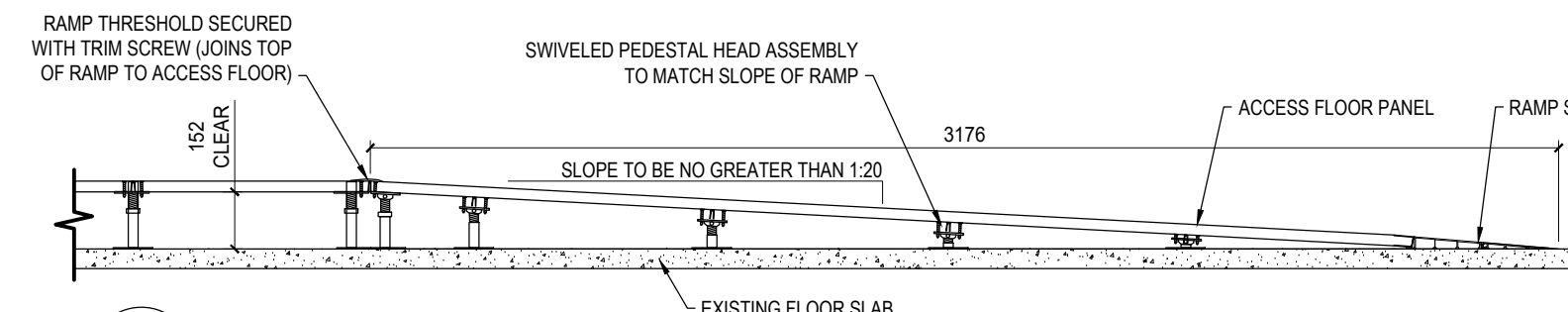
6 NEW ROLLER SHADES AND SILL  
SCALE: 1:10

7 NEW 1 HR F.R.R. / STC RATING AROUND EXISTING COLUMN AND NEW WALL TYPES  
SCALE: 1:10  
NEW COLUMN ENCLOSURE AROUND MECHANICAL CHASE TO MEET REQUIREMENTS:  
- 1 HOUR F.R.R.  
- STC 45  
- SECURE WALL

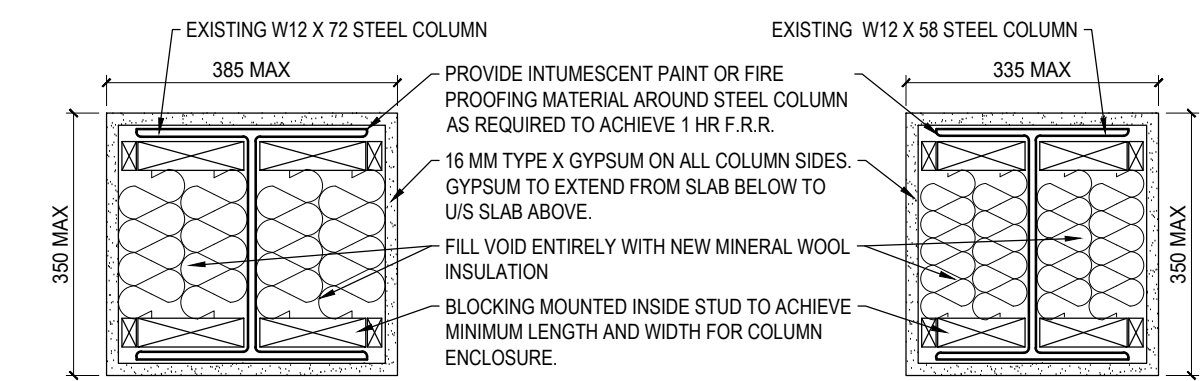


2.1 FLOOR MOUNTED HANDRAIL / GUARDRAIL SECTION  
SCALE: 1:20

2.2 RAMP HANDRAIL AND GUARD RAIL ELEVATION  
SCALE: 1:20



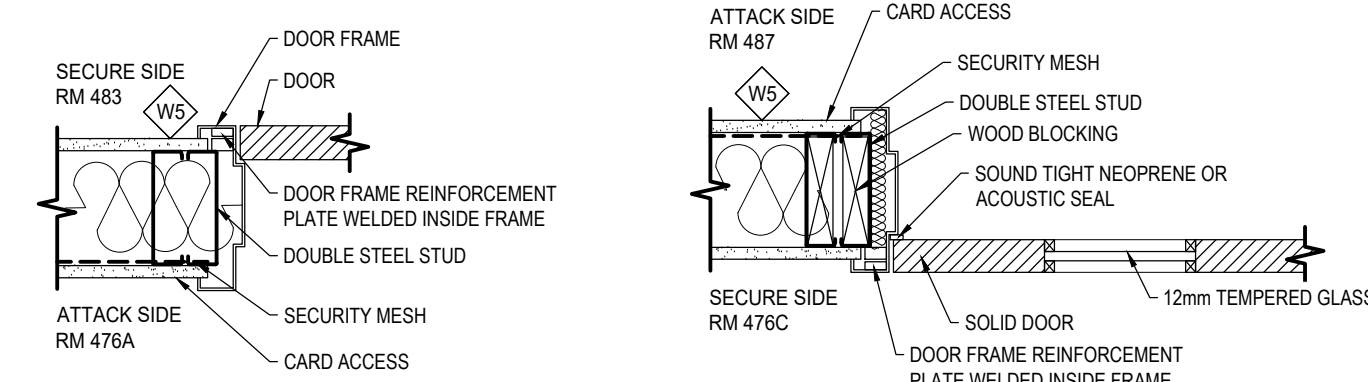
5 RAMP ASSEMBLY DETAIL  
SCALE: 1:20



8 NEW 1 HR F.R.R. RATING AROUND EXISTING EXTERIOR COLUMN - TYP  
SCALE: 1:10  
NOTE: TYPICAL DETAIL FOR W12 X 72 COLUMNS AROUND EXTERIOR WALL PERIMETER AND COLUMN AT GRIDLINE G/B.

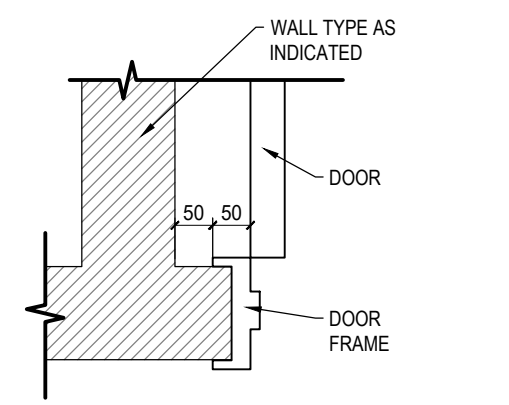
9 NEW 1 HR F.R.R. RATING AROUND EXISTING INTERIOR COLUMN - TYP  
SCALE: 1:10

TYPICAL 1 HR F.R.R. COLUMN ENCLOSURE NOTES:  
- ALL COLUMNS WITHIN SCOPE OF WORK TO ACHIEVE A 1 HOUR F.R.R.  
- PROVIDE INTUMESCENT PAINT OR FIREPROOFING MATERIAL AS REQUIRED TO ACHIEVE RATING WITH MINIMUM COLUMN ENCLOSURE DEPTH.  
- SECURE GYPSUM AROUND STEEL STUD USING BLOCKING INSIDE WEB TO ENSURE MINIMUM LENGTH AND WIDTH DIMENSION IS MET.  
- IN THE EVENT THAT A PRODUCT INCREASES THE COLUMN WIDTH AND DEPTH OVER MINIMUM DIMENSIONS PROVIDED, SUBMIT PROPOSAL TO DEPARTMENTAL REPRESENTATIVE FOR APPROVAL PRIOR TO COMMENCING WITH WORK.



12 FRAME REINFORCEMENT AT DOOR  
SCALE: 1:10

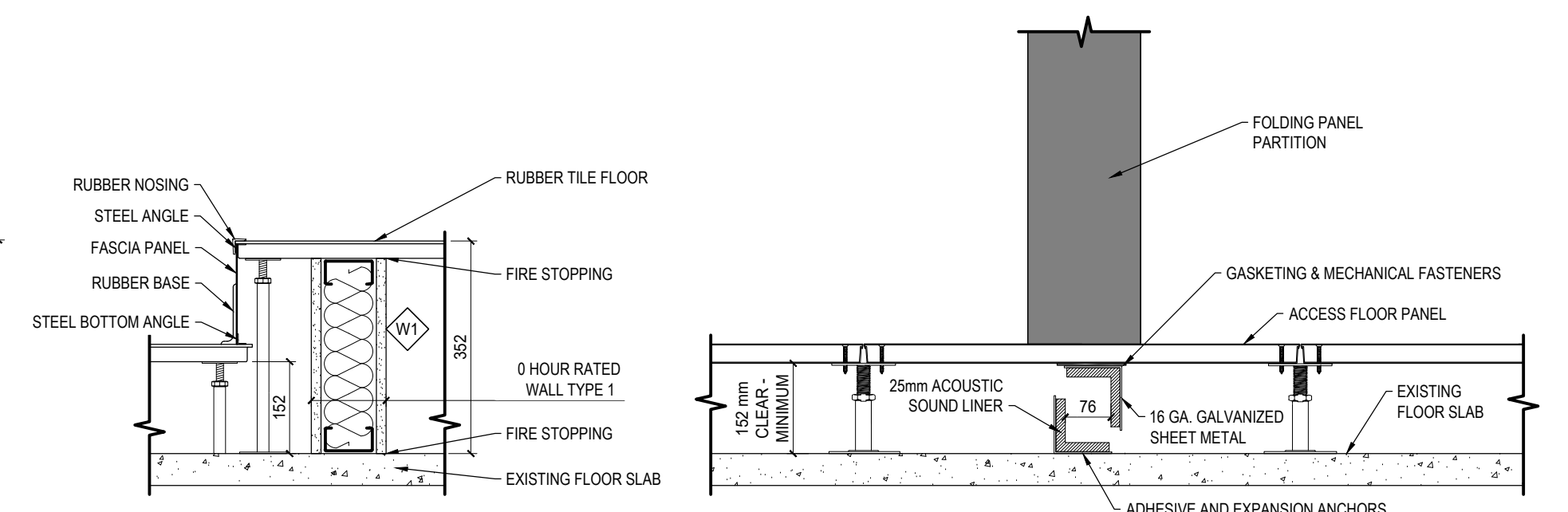
13 DOOR WITH GLAZING IN SECURE WALL  
SCALE: 1:10



14 TYPICAL DOOR OFFSET FROM WALL (HINGE SIDE)  
SCALE: 1:10

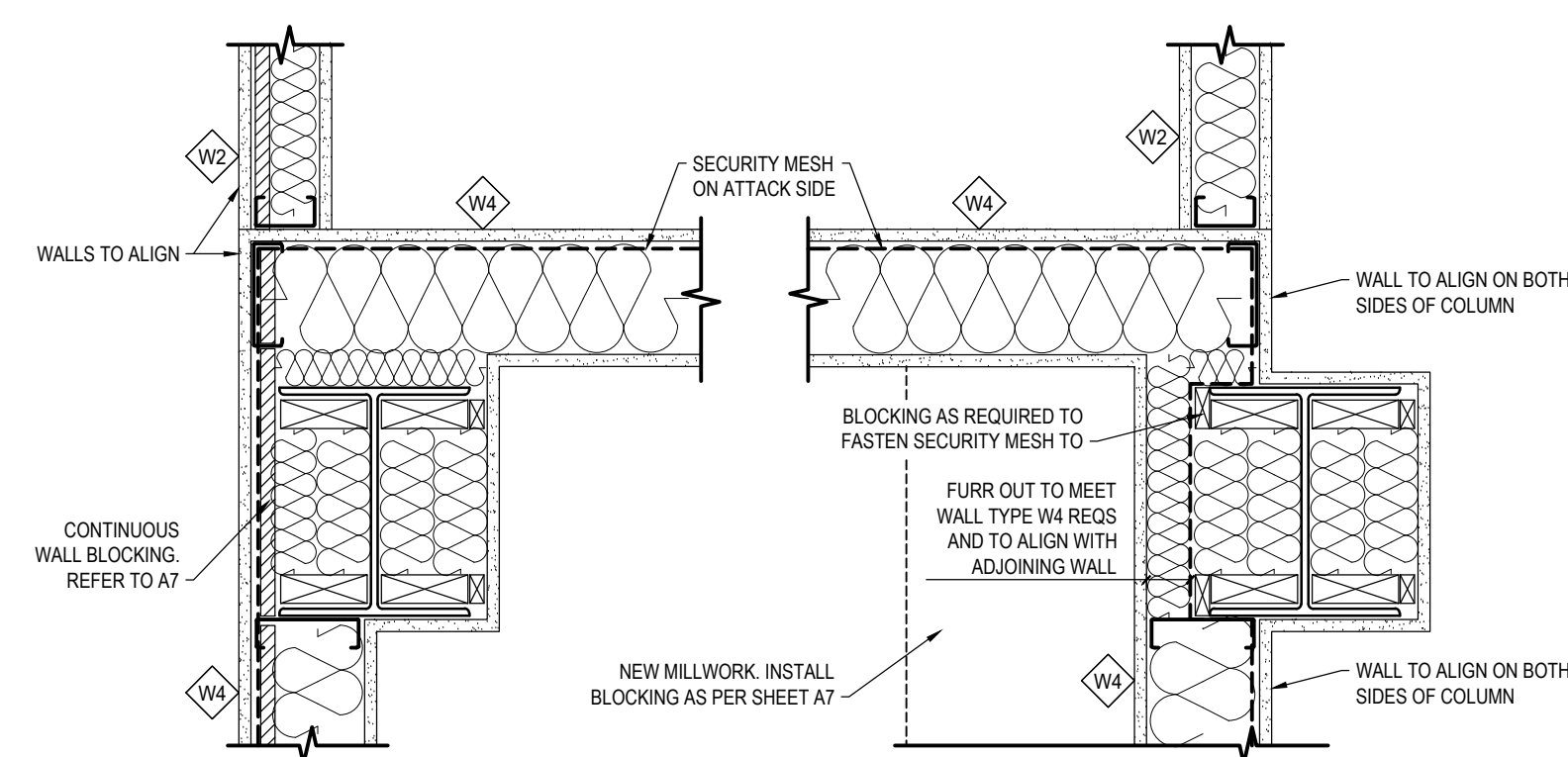
GENERAL NOTES:  
1. INFORMATION CONCERNING EXISTING CONSTRUCTION WAS TAKEN FROM ORIGINAL DRAWINGS AND IS ASSUMED CORRECT.  
2. THE CONTRACTOR IS RESPONSIBLE FOR THE VERIFICATION OF SITE MEASUREMENTS AND QUANTITIES OF MATERIALS REQUIRED.  
3. PERFORM WORK IN STRICT ACCORDANCE WITH THE NATIONAL BUILDING CODE OF CANADA, AND ANY OTHER CODE OF APPLICATION OR ANY AUTHORITY HAVING JURISDICTION.  
4. DRAWINGS MUST NOT BE SCALED.  
5. WHERE NEW WORK CONNECTS WITH EXISTING AND WHERE EXISTING WORK IS ALTERED, PATCH, REPAIR AND MAKE GOOD TO MATCH EXISTING. CONTACT DEPARTMENTAL REPRESENTATIVE FOR CLARIFICATION AS REQUIRED.  
6. ALL FINISHES AND MATERIALS TO REMAIN ARE TO BE PROTECTED IN THEIR EXISTING CONDITION EXCEPT AS NOTED. ANY FINISHES DAMAGED IN THE COURSE OF CONSTRUCTION ARE TO BE PATCHED, REPAIRED AND MADE GOOD.  
7. IN CASE OF DOUBT, CONFLICT OR DISCREPANCIES ON THE DRAWINGS, SPECIFICATIONS, MATERIALS OR METHOD OF CONSTRUCTION, CONTACT DEPARTMENTAL REPRESENTATIVE FOR CLARIFICATION IN WRITING BEFORE PROCEEDING WITH WORK.  
8. DIMENSIONS TO FACE OF FINISHED GWB UNLESS OTHERWISE INDICATED.  
9. SITE CONFIRM EXACT QUANTITIES OF ITEMS TO BE DEMOLISHED PRIOR TO TENDER CLOSE.  
10. TURN OVER EXISTING ITEMS ON WALLS TO BE DEMOLISHED TO DEPARTMENTAL REPRESENTATIVE FOR FIRST RIGHT OF REFUSAL.  
11. ALL CONSTRUCTION MATERIAL, RECYCLING & WASTE TO BE TAKEN OFF SITE BY CONTRACTOR.

ABBREVIATIONS:  
ACT Acoustic Ceiling Tile  
ADO Automatic Door Opener  
AFF Above Finished Floor  
AWP Acoustic Wall Panels  
BFL Baffle  
BW Between  
CPT Carpet Tile  
CG Corner Guard  
CLG Ceiling  
DE Dry Erase Board  
DW Dishwasher  
ELEC Electrical  
EQ Equal  
EX Existing  
EXP Exposed  
FD Floor Drain  
FHC Fire Hose Cabinet  
FR Fridge  
FRR Fire Resistance Rating  
GB Gypsum Board  
GWB Gypsum Wall Board  
HPL High Pressure Laminate  
HR Hour  
MAX Maximum  
MECH Mechanical  
MIN Minimum  
MW Microwave  
NBC National Building Code  
NIC Not in Contract  
NTS Not to Scale  
O/C On Centre  
PLY Plywood  
PT Paint  
QTY Quantity  
QB Rubber Base  
RCP Reflected Ceiling Plan  
REQS Requirements  
RTF Resilient Tile Floor  
RM Room  
STC Sound Transmission Class  
TB Tack Board  
TBD To Be Determined  
TS Transition Strip  
TV Television  
TYP Typical  
UIS Underside  
WI With  
WWC Writeable Wall Covering



3 ACCESS FLOOR STEP DETAIL  
SCALE: 1:10  
NOTE: REFER TO SHEET A4 FOR WALL TYPES.

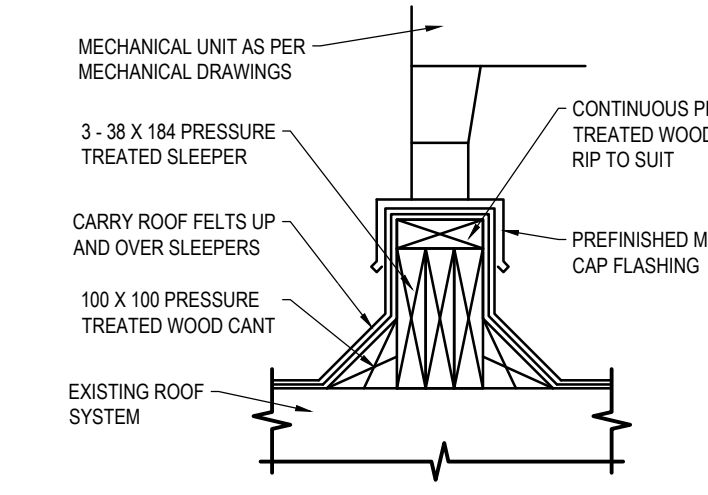
4 INSULATED FLOOR SPACE  
SCALE: 1:10



10 NEW 1 HR F.R.R. RATING COLUMN ENCLOSURE AND SECURITY MESH  
SCALE: 1:10

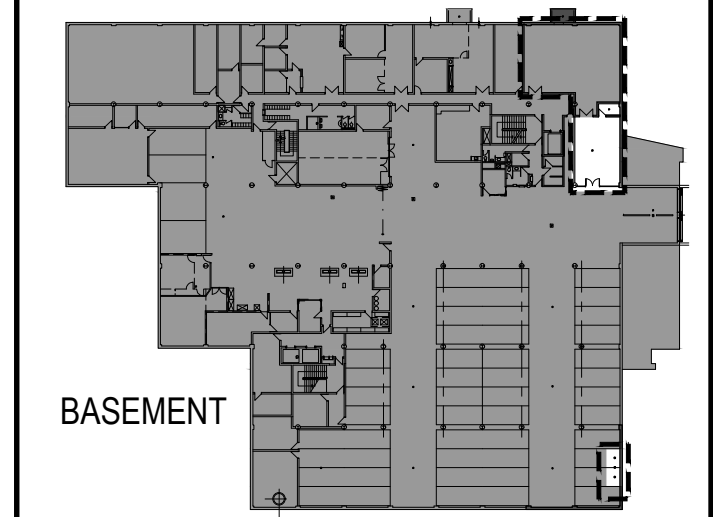
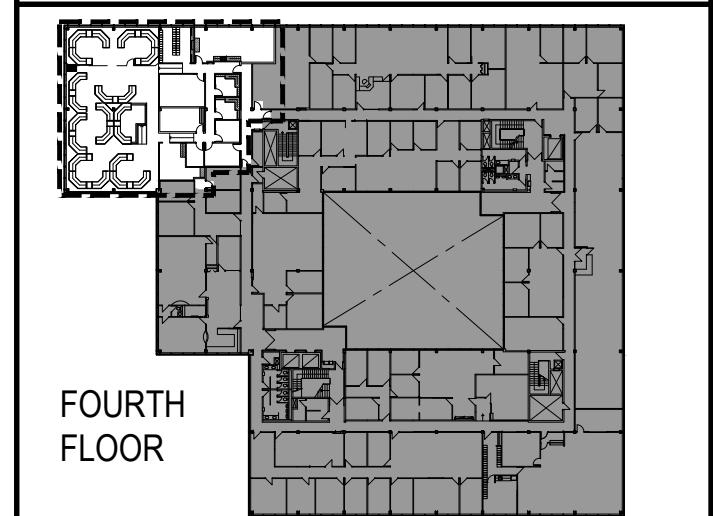
11 NEW 1 HR F.R.R. RATING COLUMN ENCLOSURE AND SECURITY MESH  
SCALE: 1:10

NOTES:  
- BLOCKING AND INSULATION REQUIREMENTS AS PER DETAIL 9/A6.  
- TYPICAL INTERIOR COLUMN MODIFIED ON ONE SIDE AS ABOVE.  
- WHERE COLUMN MUST BE FURRED OUT TO ALIGN WITH NEW WALL.  
- REFER TO SPECIFICATIONS FOR SECURITY MESH REQUIREMENTS.

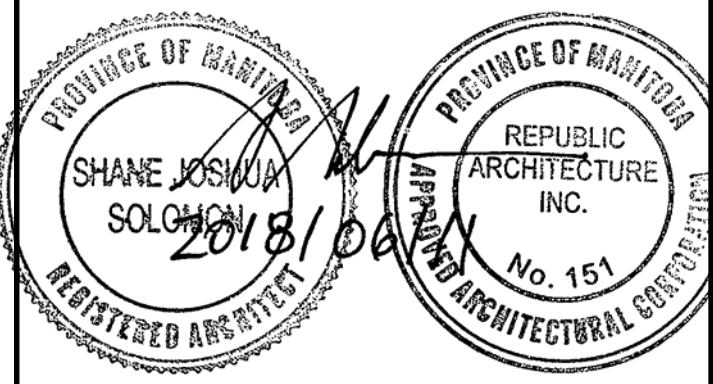


15 ROOF CURB DETAIL  
SCALE: 1:10  
NOTES: VAPOR RETARDER CONTINUOUS BELOW SLEEPER.

Public Works and Government Services Canada  
Travaux publics et Services gouvernementaux Canada  
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KEY PLANS  
SCALE: 1:1000  
AREA OF WORK  
AREA NOT IN SCOPE OF WORK



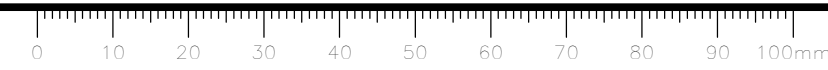
Revision	Description	Date
3	Issued for Construction	2018 06 11
2	99% Construction Documents Submission	2018 04 05
1	50% Construction Documents Submission	2018 01 25
0	Design Development Submission	2017 08 30

Client  
**PSPC/SPAC**  
SUITE 100-167 LOMBARD AVENUE  
WINNIPEG, MANITOBA  
Project title  
**INTERIOR ALTERATIONS  
1091 PORTAGE AVENUE  
WINNIPEG, MANITOBA  
SUITE 483  
RENOVATION & FIT UP**

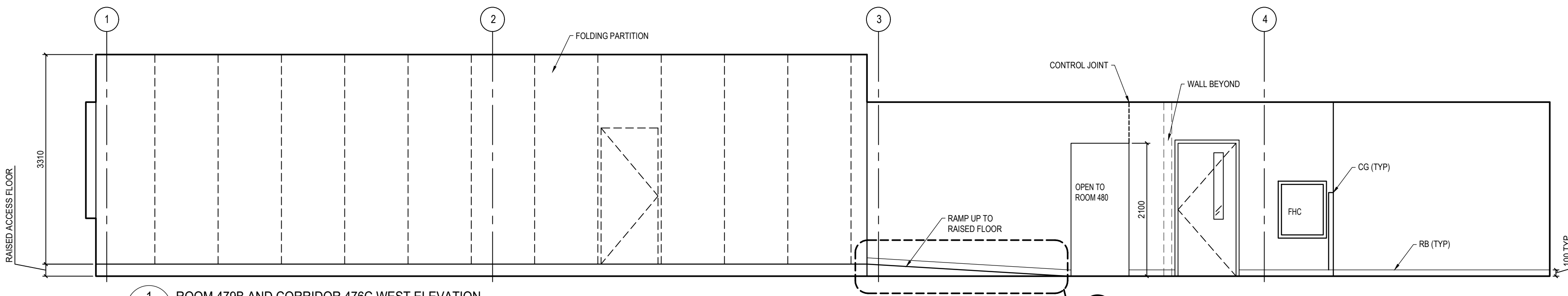
Designed by  
**TS**  
Drawn by  
**HA**  
Approved by  
**MG**  
PWGSC Project Manager  
**MARK ARROJADO**

Drawing title  
**RAISED ACCESS FLOOR DETAILS,  
NEW COLUMN ENCLOSURE DETAILS,  
DOOR AND FRAME DETAILS**

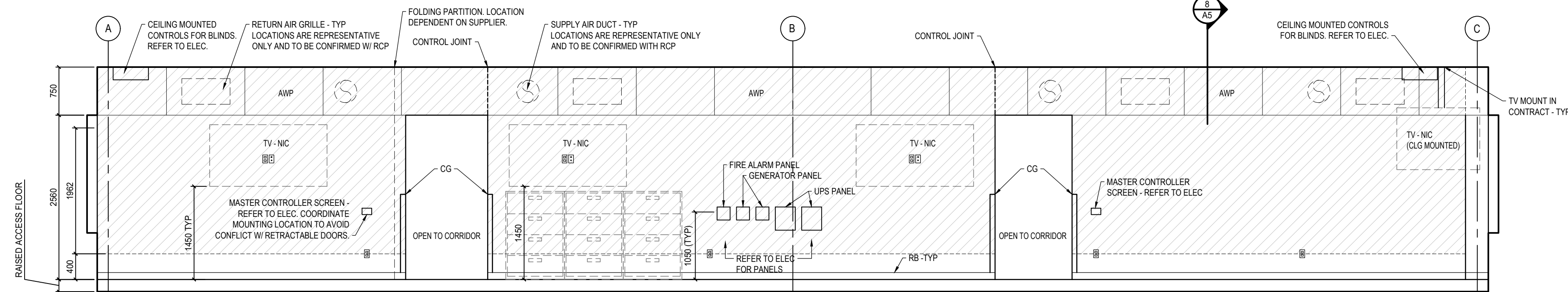
Project no.	Drawing no.	Revision no.
<b>R.076524.002</b>	<b>A6</b> OF 9	<b>3</b>





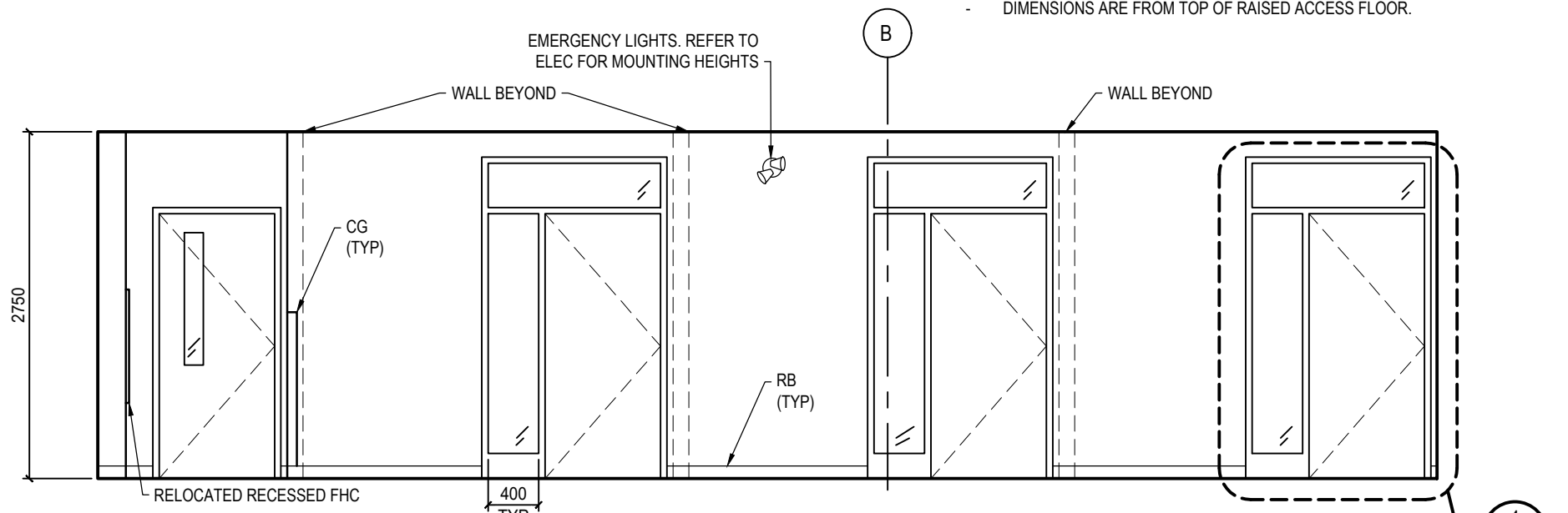


1 ROOM 479B AND CORRIDOR 476C WEST ELEVATION  
A7 SCALE: 1:50

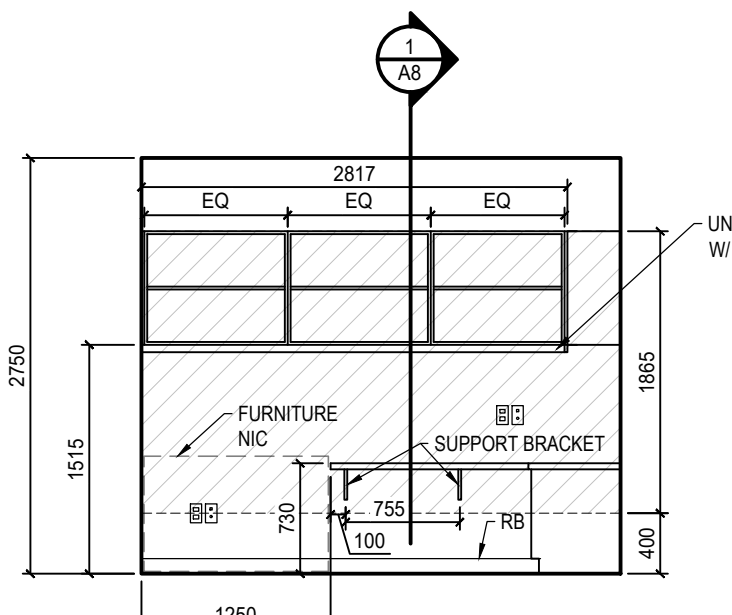


2 ROOM 479 A/B NORTH ELEVATION  
A7 SCALE: 1:50

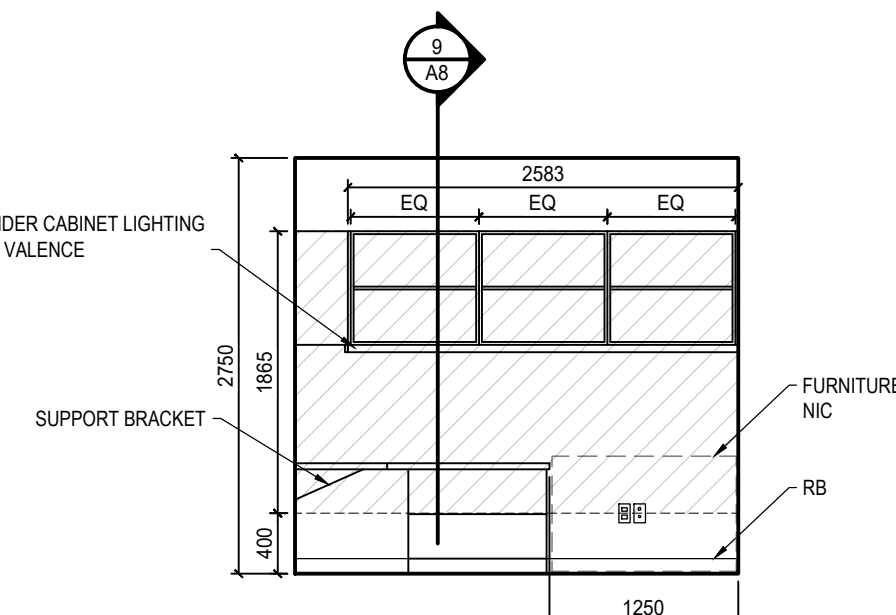
- NOTES:
- EXTENT OF BLOCKING ALONG NORTH WALL IN ROOM 479A AND 479B TO BE INSTALLED TO UNDERSIDE OF FINISHED CEILING AS INDICATED FOR INSTALLATION OF WALL MOUNTED ACOUSTIC BAFFLES.
  - INSTALL CONTROL JOINTS AS INDICATED. NOTIFY DEPARTMENTAL REPRESENTATIVE PRIOR TO MAKING ANY MODIFICATIONS.
  - COORDINATE ALL CEILING MOUNTED ITEMS BETWEEN TRADES AND NOTIFY DEPARTMENTAL REPRESENTATIVE OF ANY DISCREPANCIES IN WRITING PRIOR TO PROCEEDING WITH WORK.
  - DIMENSIONS ARE FROM TOP OF RAISED ACCESS FLOOR.



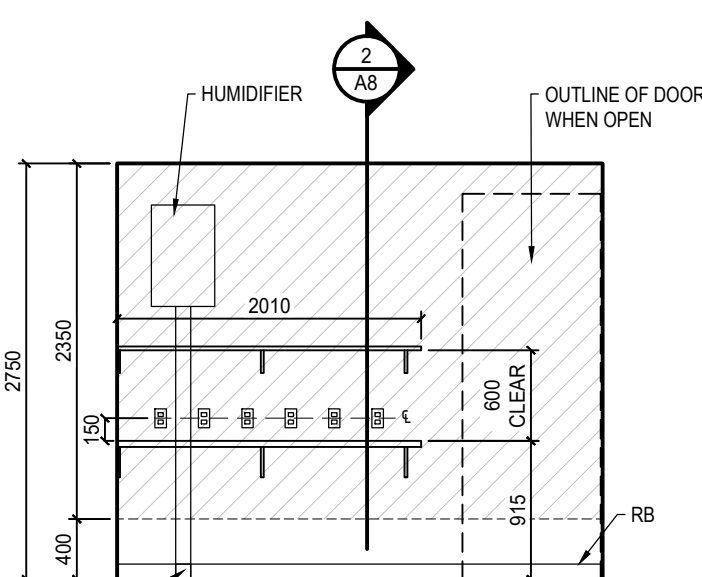
3 CORRIDOR 476B NORTH ELEVATION  
A7 SCALE: 1:50



4 OFFICE 484 / 485 WEST ELEVATION  
A7 SCALE: 1:50

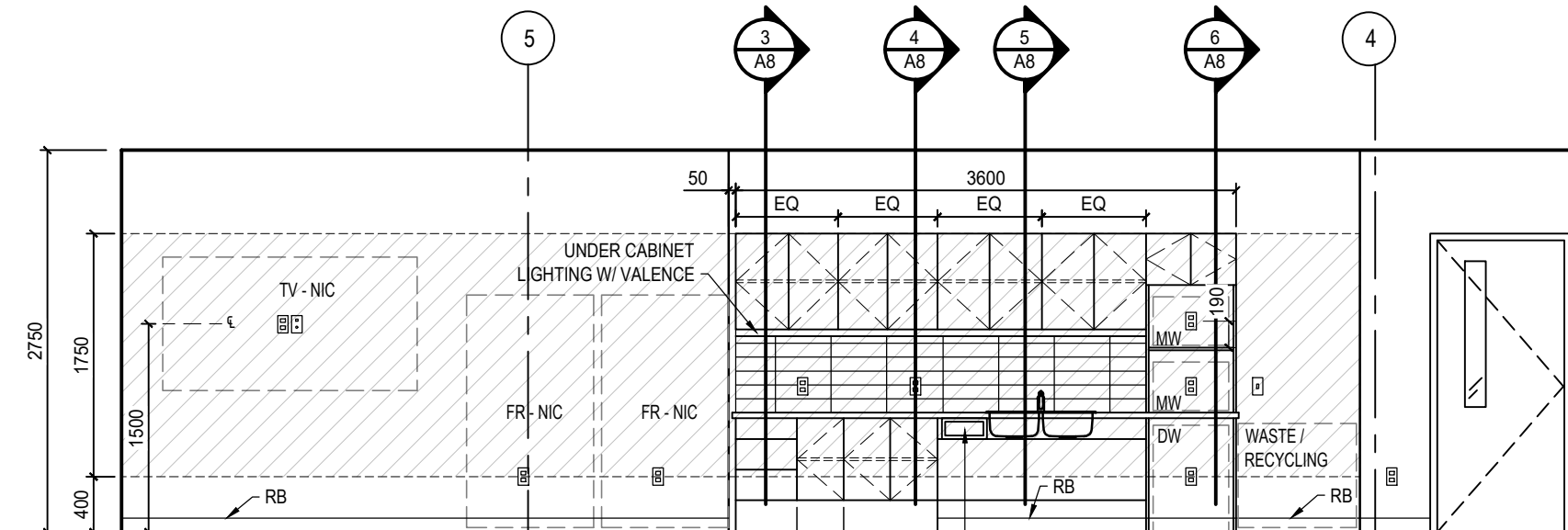


5 OFFICE 484 / 485 NORTH ELEVATION  
A7 SCALE: 1:50

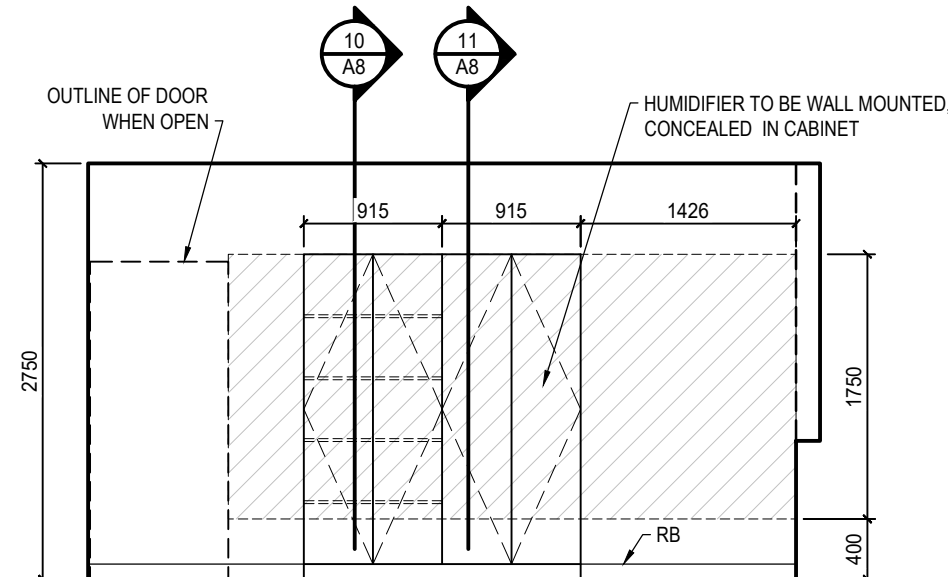


6 ROOM 483 NORTH ELEVATION  
A7 SCALE: 1:50

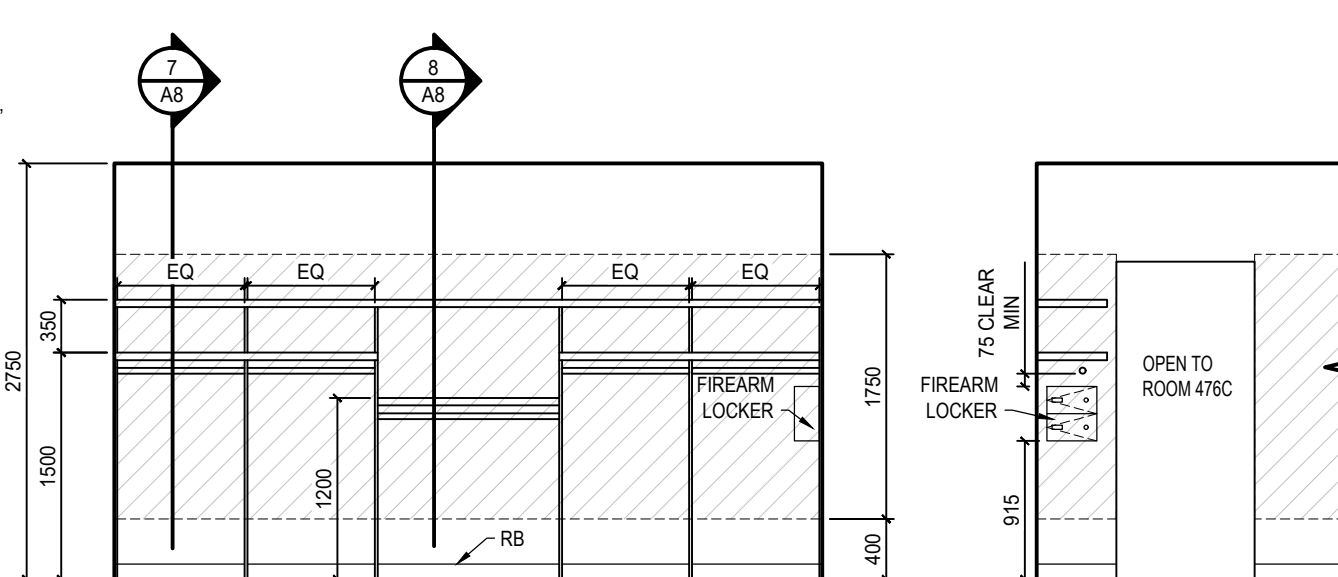
NOTE:  
CONTINUOUS BLOCKING REQUIRED TO UNDERSIDE OF CEILING ON NORTH ELEVATION FOR HUMIDIFIER.



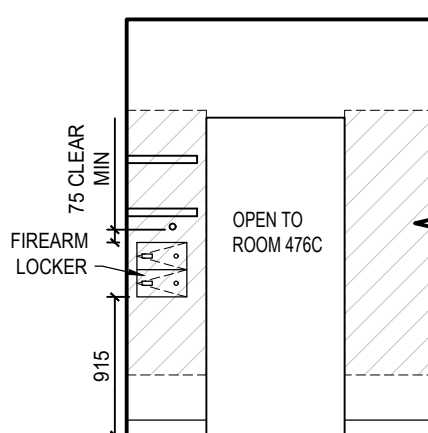
7 ROOM 481 EAST ELEVATION  
A7 SCALE: 1:50



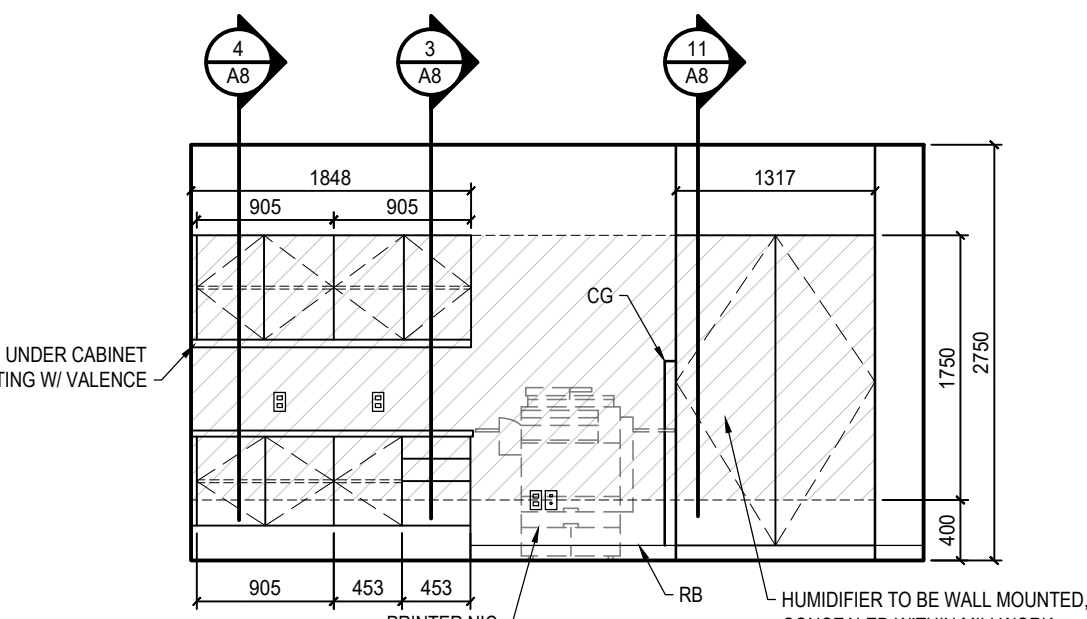
8 ROOM 481 SOUTH ELEVATION  
A7 SCALE: 1:50



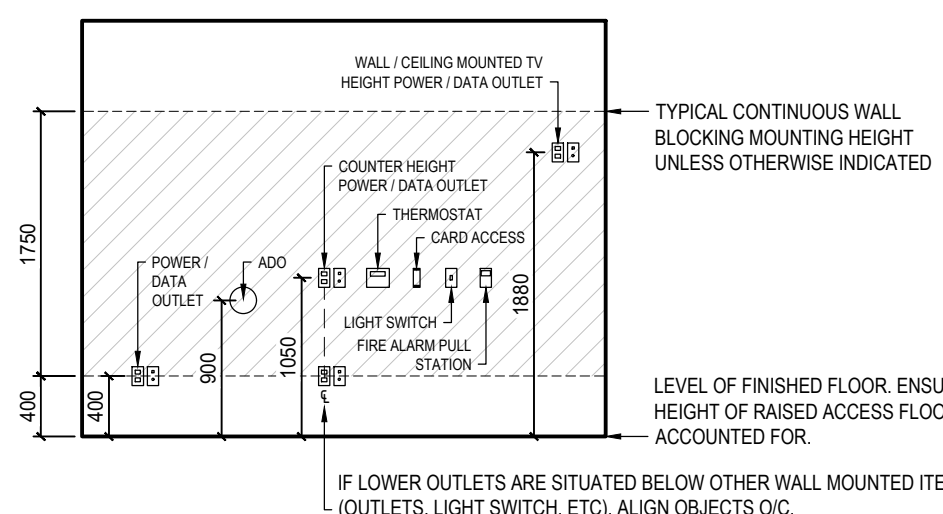
9.1 ROOM 480 NORTH ELEVATION  
A7 SCALE: 1:50



9.2 ROOM 480 EAST ELEVATION  
A7 SCALE: 1:50



10 ROOM 478 NORTH ELEVATION  
A7 SCALE: 1:50



11 TYPICAL MOUNTING AND CONTINUOUS BLOCKING HEIGHTS  
A7 SCALE: 1:50

#### TYPICAL MOUNTING AND BLOCKING GENERAL NOTES:

- MOUNTING HEIGHTS ARE TYPICAL UNLESS OTHERWISE NOTED OR DIMENSIONED.
- MOUNTING HEIGHTS ARE FROM TOP OF FINISHED FLOOR TO CENTERLINE OF OBJECT.
- CONTINUOUS BLOCKING RUNS ENTIRE LENGTH OF WALL INDICATED.
- MOUNTING AND BLOCKING LOCATIONS TO BE COORDINATED BETWEEN TRADES. NOTIFY THE DEPARTMENTAL REPRESENTATIVE OF ANY DISCREPANCIES IN WRITING PRIOR TO COMMENCEMENT OF WORK.
- PROVIDE BLOCKING IN CEILING FOR ALL CEILING MOUNTED ITEMS INCLUDING TV MOUNTS, MOTORIZED BLIND CONTROLS AND MECHANICAL AND ELECTRICAL ITEMS AS REQUIRED.
- LIGHT SWITCHES TO BE MOUNTED 100mm FROM OUTSIDE EDGE OF ADJACENT DOOR OR SIDELITE FRAME TO CENTRELINE OF SWITCH.

#### GENERAL NOTES:

- INFORMATION CONCERNING EXISTING CONSTRUCTION WAS TAKEN FROM ORIGINAL DRAWINGS AND IS ASSUMED CORRECT.
- THE CONTRACTOR IS RESPONSIBLE FOR THE VERIFICATION OF SITE MEASUREMENTS AND QUANTITIES OF MATERIALS REQUIRED.
- PERFORM WORK IN STRICT ACCORDANCE WITH THE NATIONAL BUILDING CODE OF CANADA AND ANY OTHER CODE OF APPLICATION OR ANY AUTHORITY HAVING JURISDICTION.
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- ALL CONSTRUCTION MATERIAL, RECYCLING & WASTE TO BE TAKEN OFF SITE BY CONTRACTOR.

#### ABBREVIATIONS:

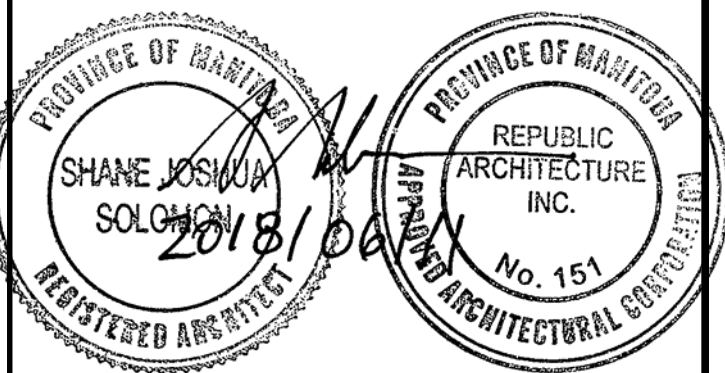
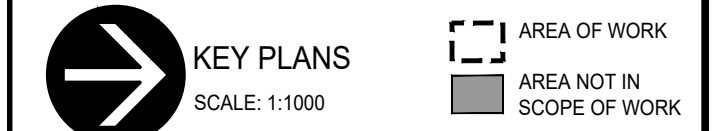
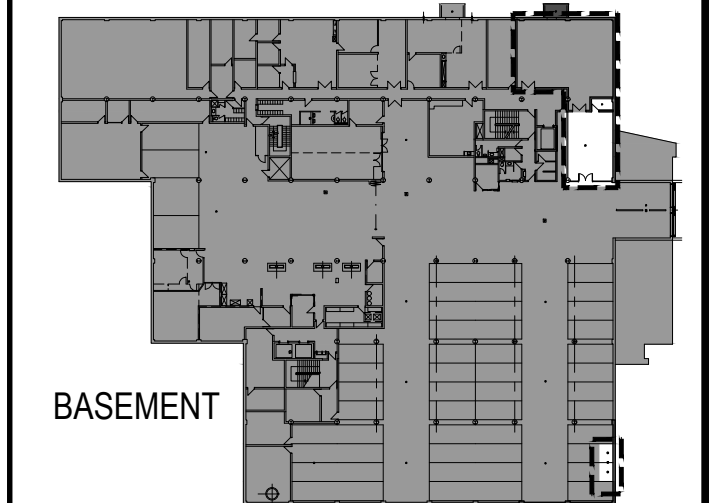
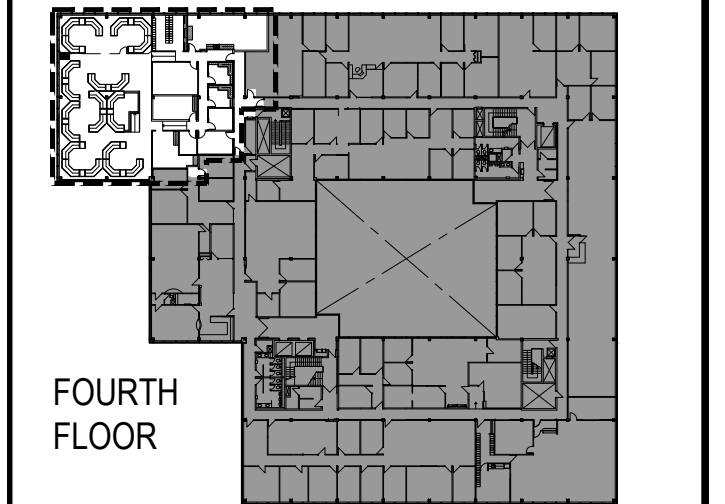
ACT	Acoustic Ceiling Tile	FHC	Fire Hose Cabinet	PT	Paint
ADO	Automatic Door Opener	FR	Fridge	QTY	Quantity
AFF	Above Finished Floor	FRR	Fire Resistance Rating	RB	Rubber Base
AWP	Acoustic Wall Panels	GB	Gypsum Board	RCP	Reflected Ceiling Plan
BFL	Baffle	GWB	Gypsum Wall Board	REQS	Requirements
B/W	Between	HPL	High Pressure Laminate	RTF	Resilient Tile Floor
CPT	Carpet Tile	HR	Hour	RM	Room
CG	Corner Guard	MAX	Maximum	STC	Sound Transmission Class
CLG	Ceiling	MECH	Mechanical	TB	Tack Board
DE	Dry Erase Board	MIN	Minimum	TBD	To Be Determined
DW	Dishwasher	MW	Microwave	TS	Transition Strip
ELEC	Electrical	NBC	National Building Code	TV	Television
EQ	Equal	NIC	Not in Contract	TYP	Typical
EX	Existing	NTS	Not to Scale	U/S	Underside
EXP	Exposed	O/C	On Centre	W/	With
FD	Floor Drain	PLY	Plywood	WWC	Writeable Wall Covering

#### PLAN LEGEND

EXTENT OF WALL BLOCKING

#### MILLWORK AND ELEVATIONS GENERAL NOTES:

- HPL ON ALL EXPOSED MILLWORK SURFACES.
- MOUNTING HEIGHTS OF TVs TO BE CONFIRMED WITH DEPARTMENTAL REPRESENTATIVE PRIOR TO INSTALLATION.



Revision	Description	Date
3	Issued for Construction	2018 06 11
2	99% Construction Documents Submission	2018 04 05
1	50% Construction Documents Submission	2018 01 25
0	Design Development Submission	2017 08 30

Client

PSPC/SPAC

SUITE 100-167 LOMBARD AVENUE  
WINNIPEG, MANITOBA

Project title

INTERIOR ALTERATIONS  
1091 PORTAGE AVENUE  
WINNIPEG, MANITOBA

SUITE 483  
RENOVATION & FIT UP

Designed by

TS

Drawn by

HA

Approved by

MG

PWGCSC Project Manager

MARK ARROJADO

Drawing title

INTERIOR ELEVATIONS AND  
TYPICAL MOUNTING HEIGHTS

Project no.

R.076524.002

Drawing no.

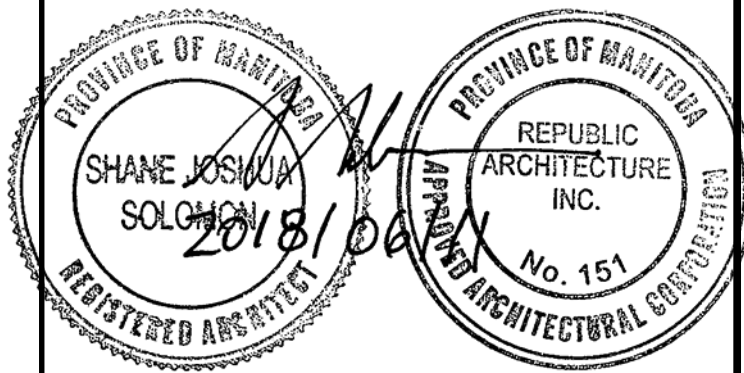
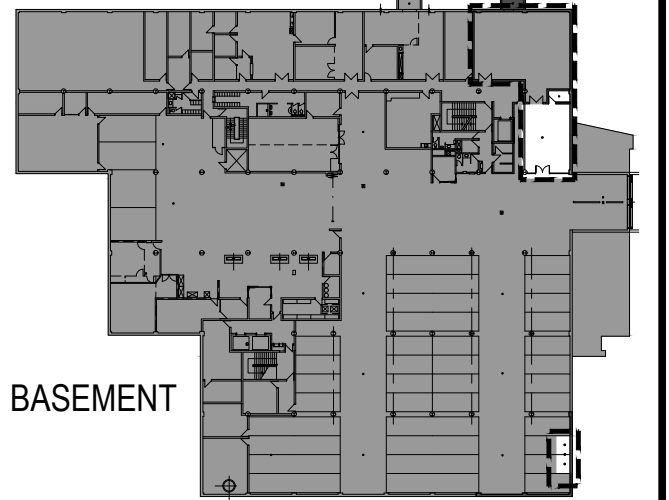
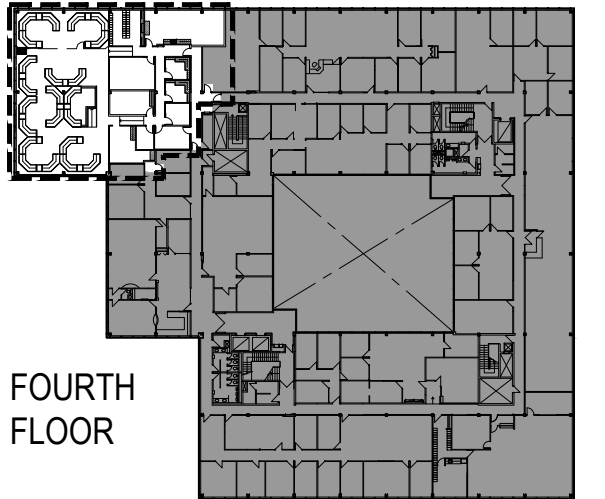
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OF 9

Revision no.

3





Revision	Description	Date
2	Issued for Construction	2018 06 11
1	99% Construction Documents Submission	2018 04 05
0	50% Construction Documents Submission	2018 01 25

Client

PSPC/SPAC

SUITE 100-167 LOMBARD AVENUE  
WINNIPEG, MANITOBA

Project title  
INTERIOR ALTERATIONS  
1091 PORTAGE AVENUE  
WINNIPEG, MANITOBA  
SUITE 483  
RENOVATION & FIT UP

Designed by  
TS

Drawn by  
HA

Approved by  
MG

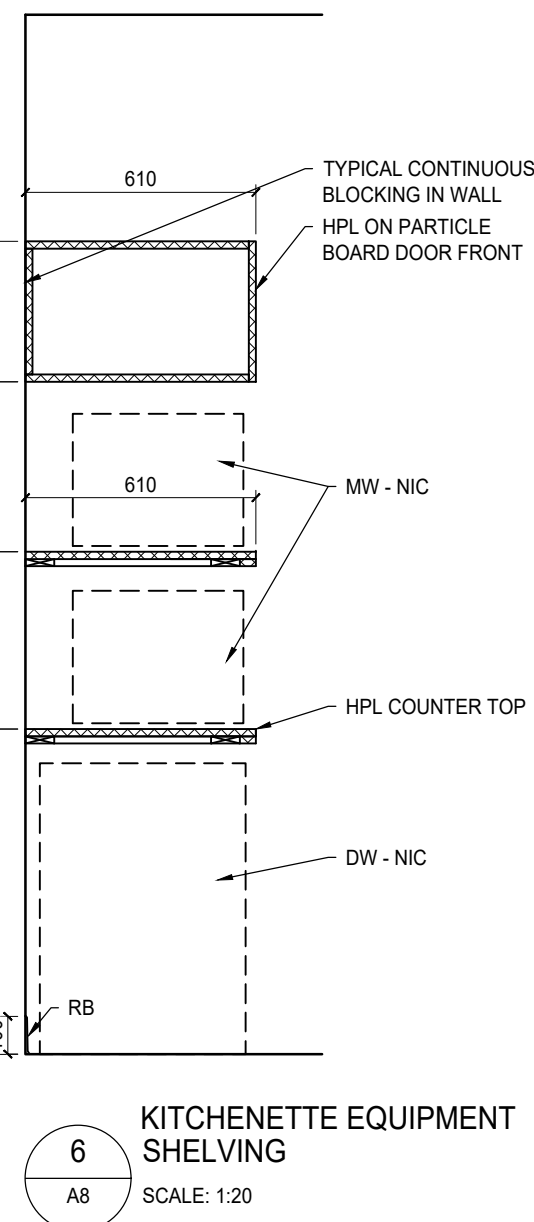
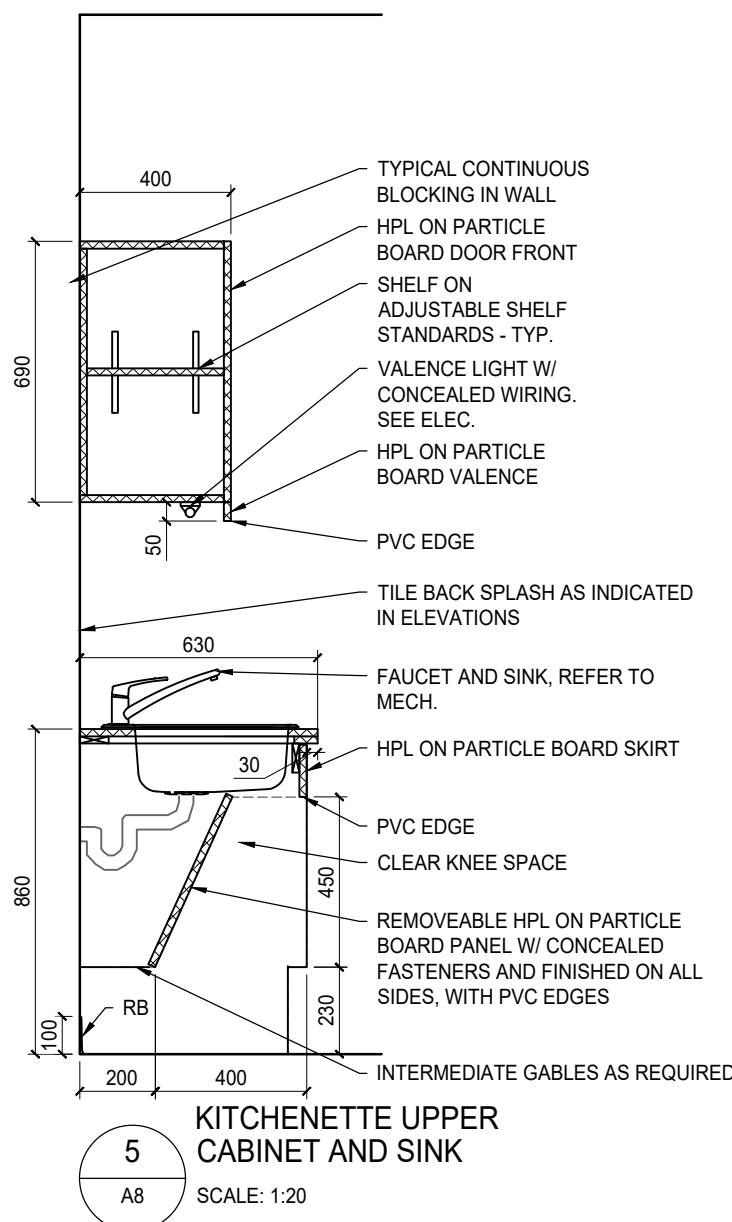
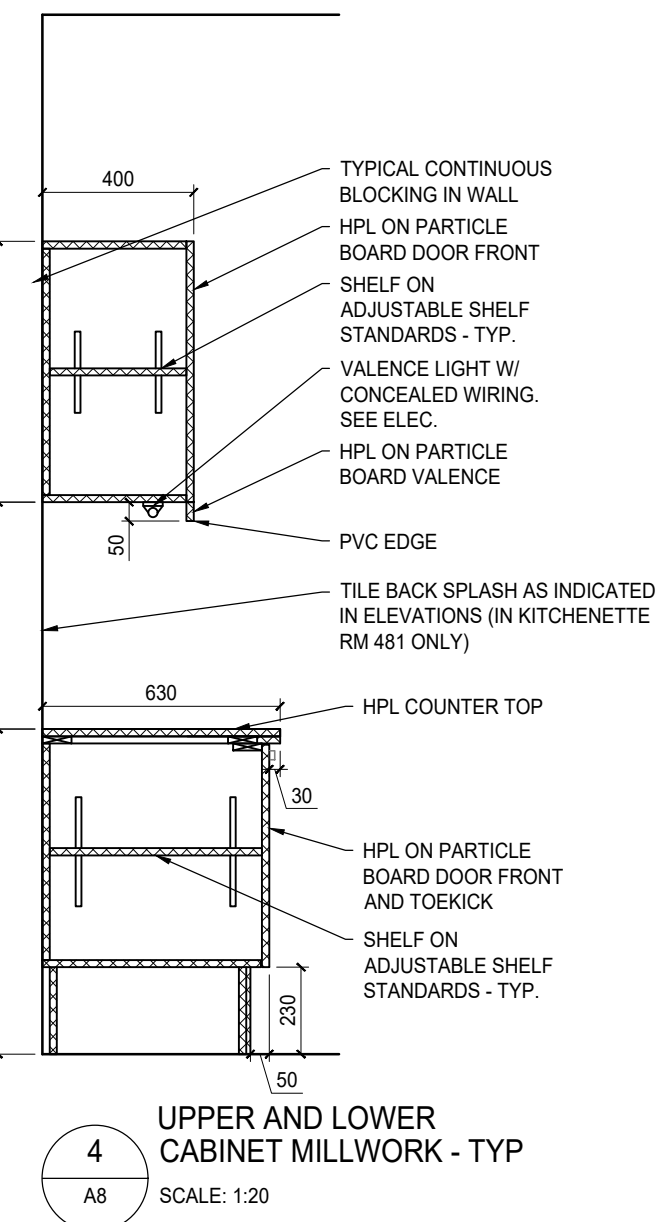
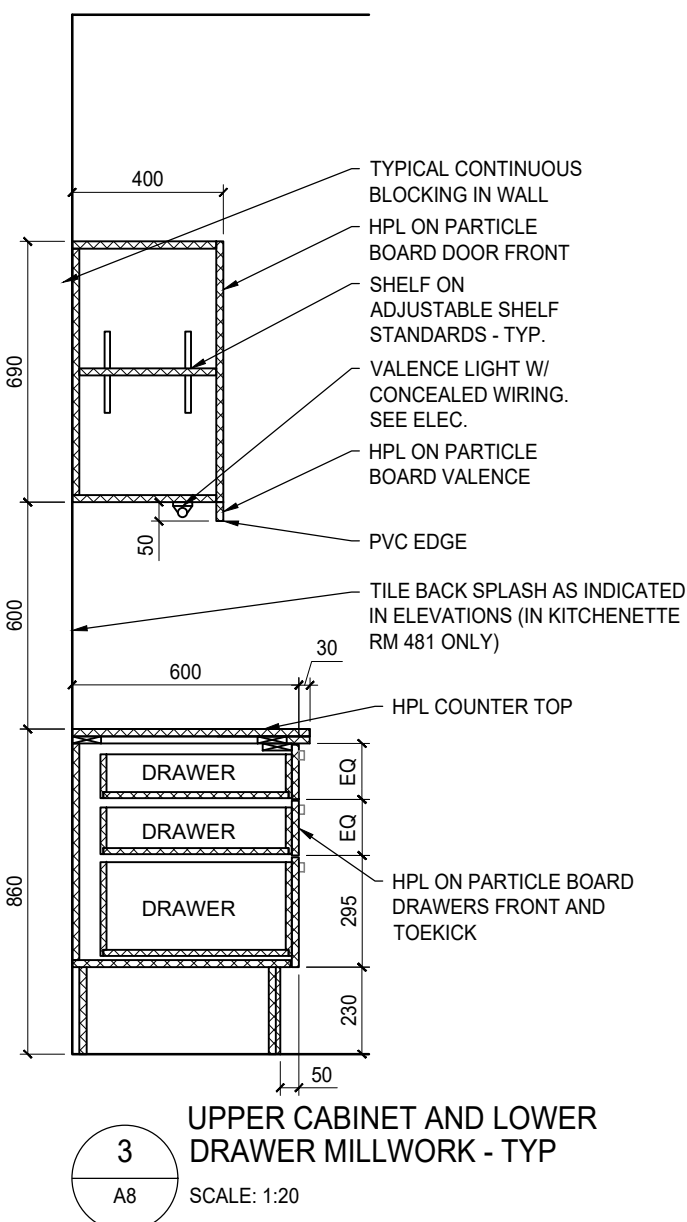
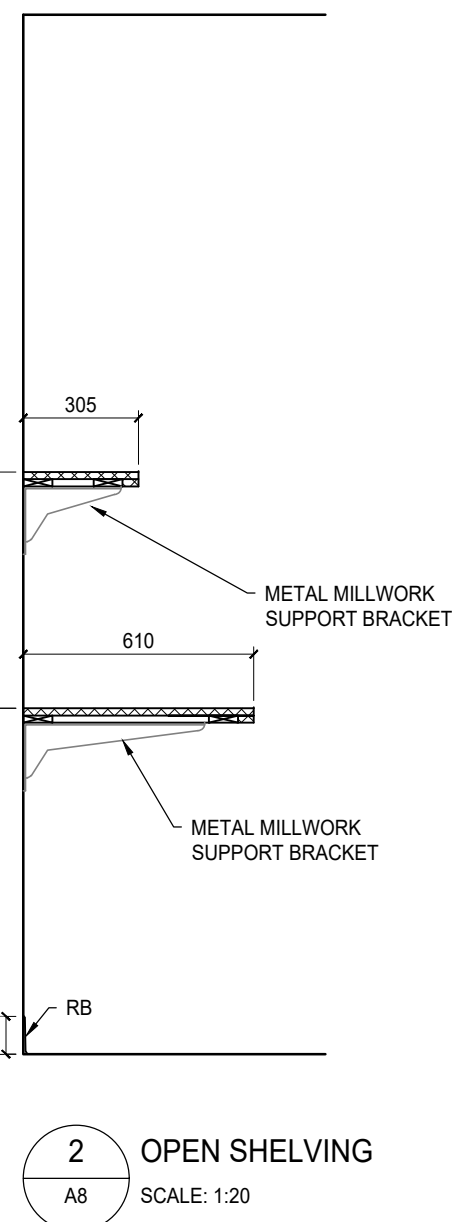
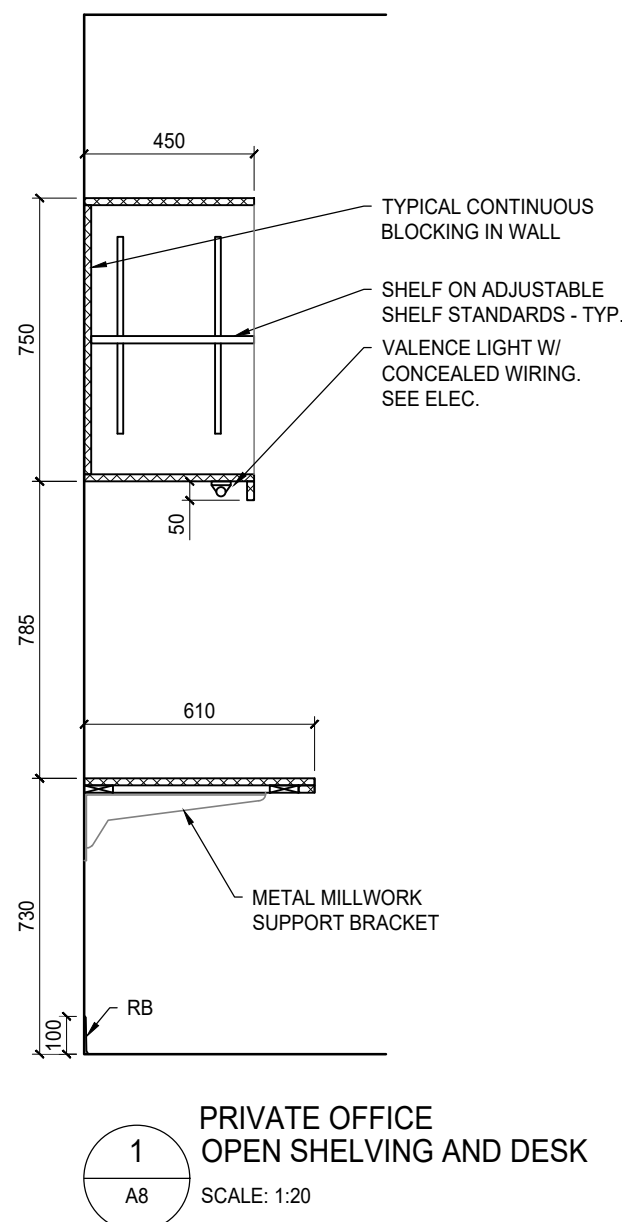
PWGSC Project Manager  
MARK ARROJADO

Drawing title  
MILLWORK SECTIONS

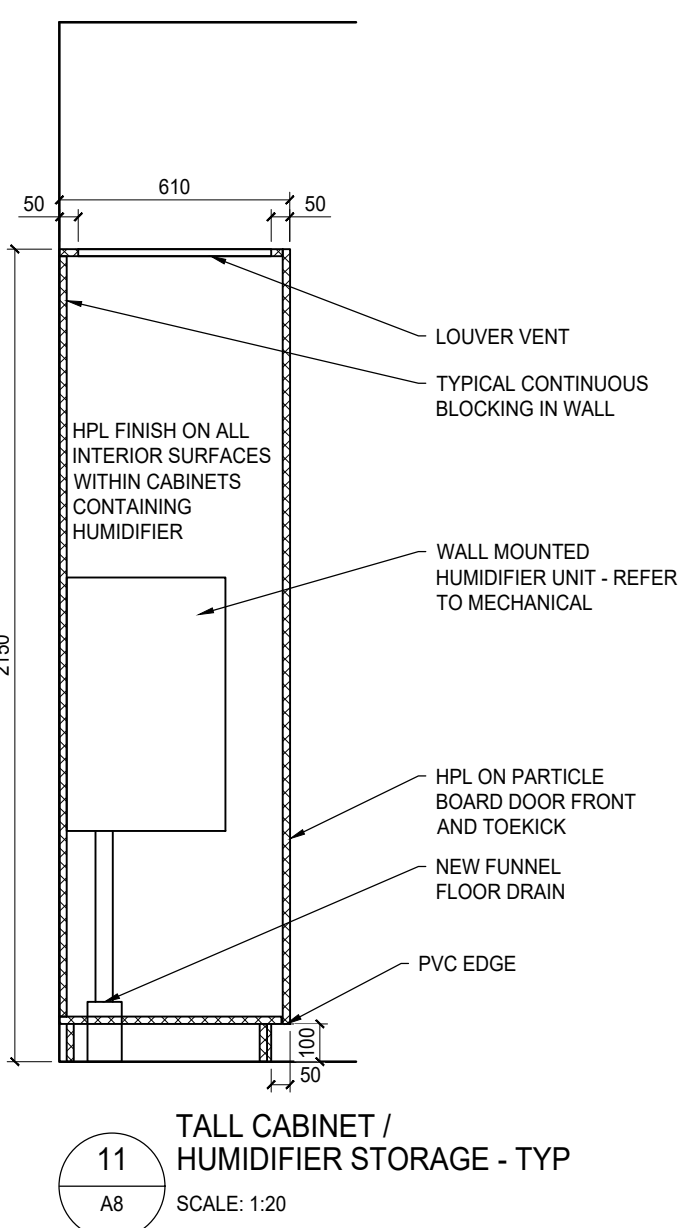
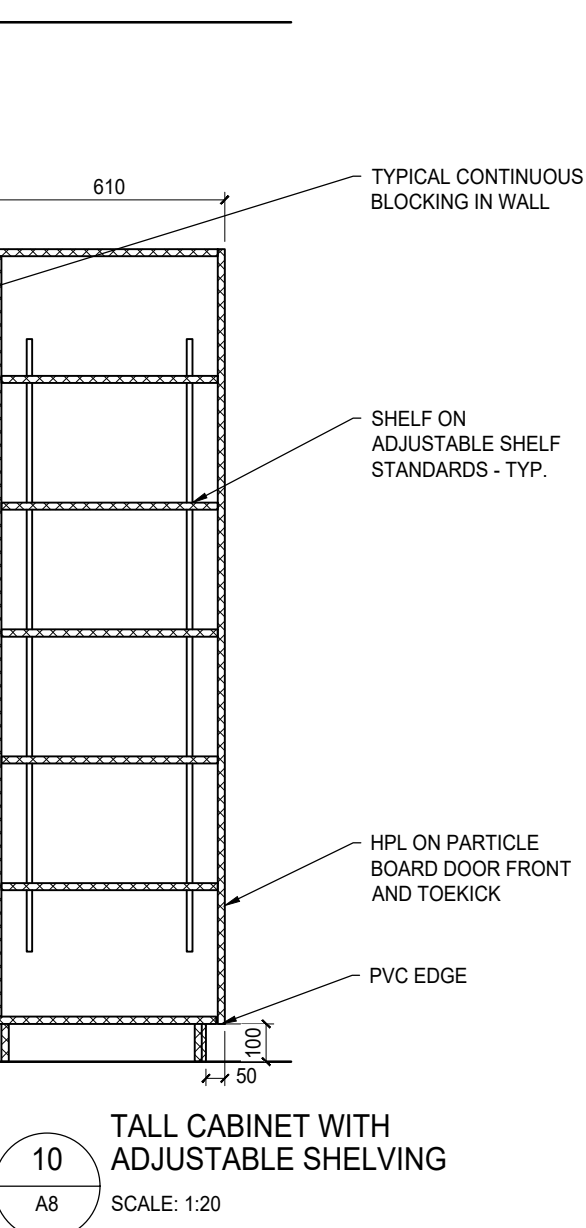
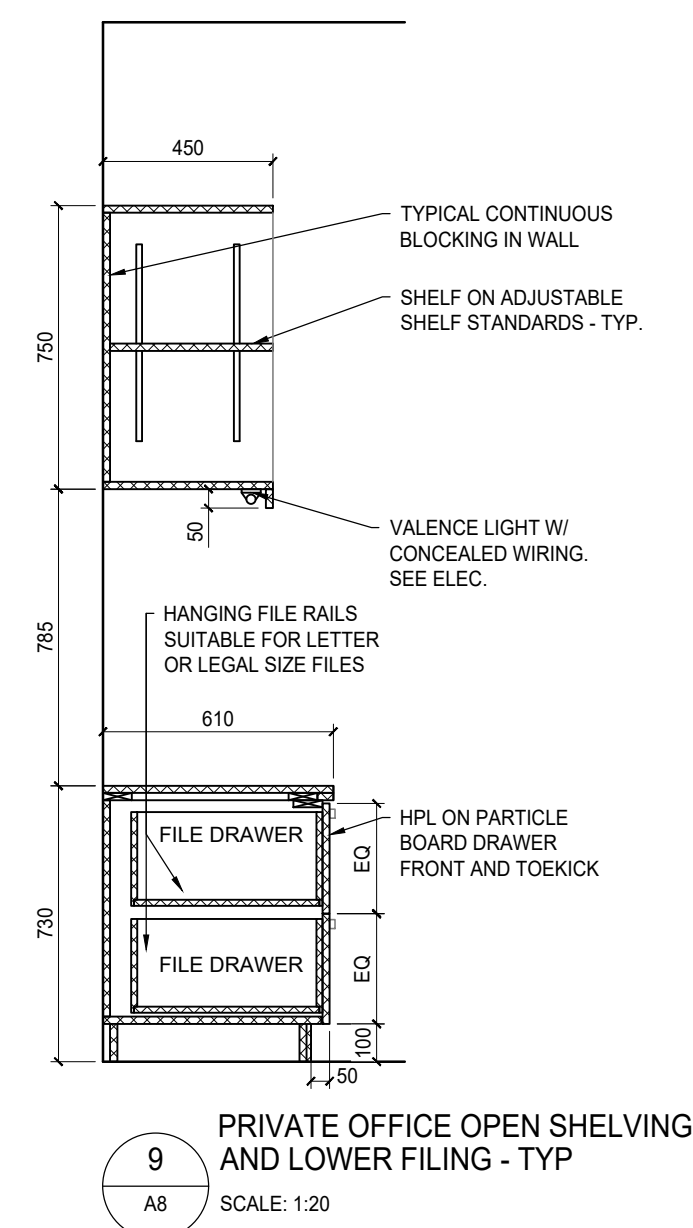
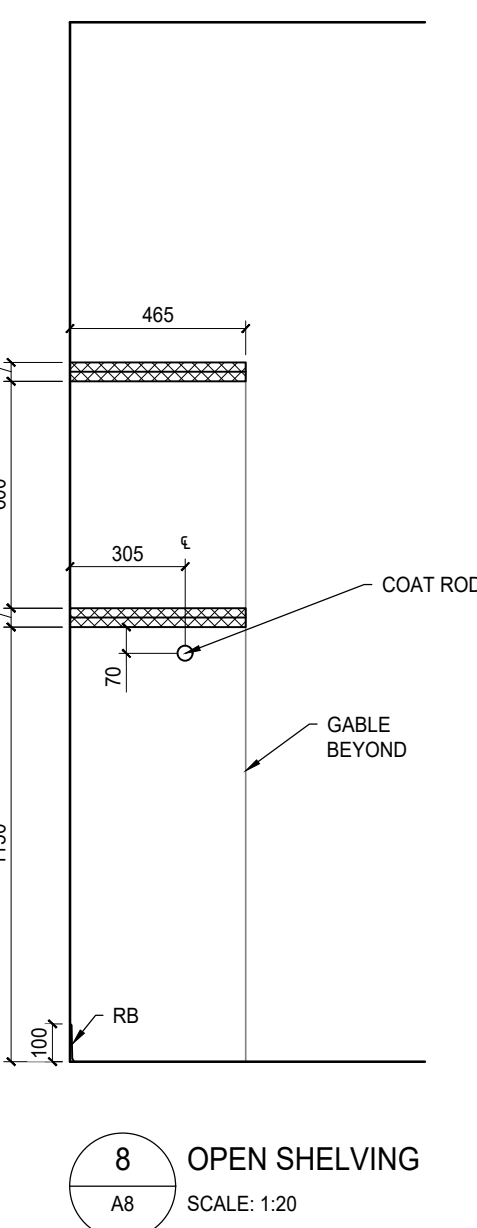
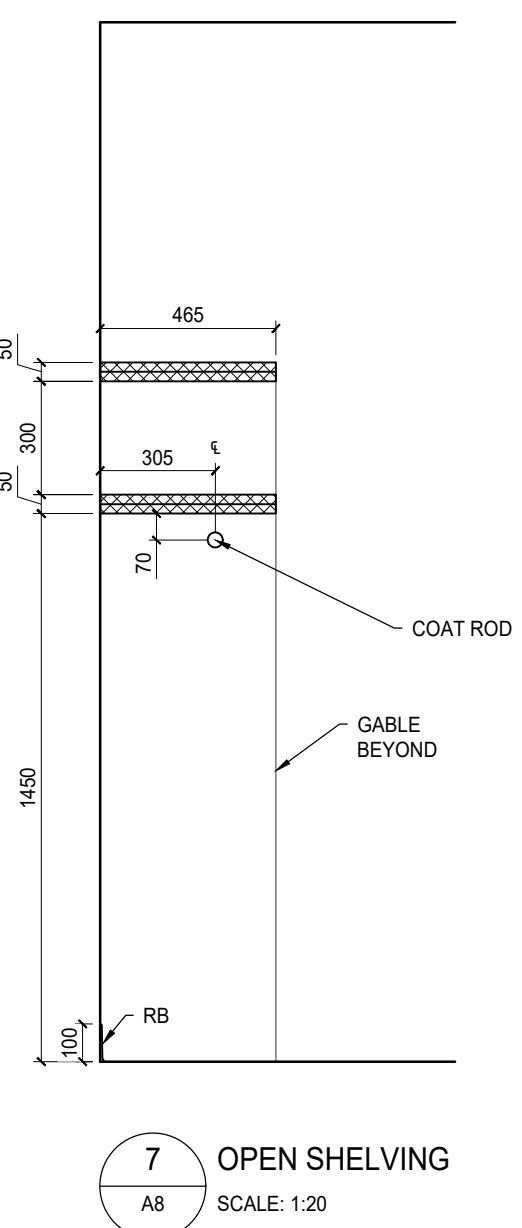
Project no.  
R.076524.002

Drawing no.  
A8

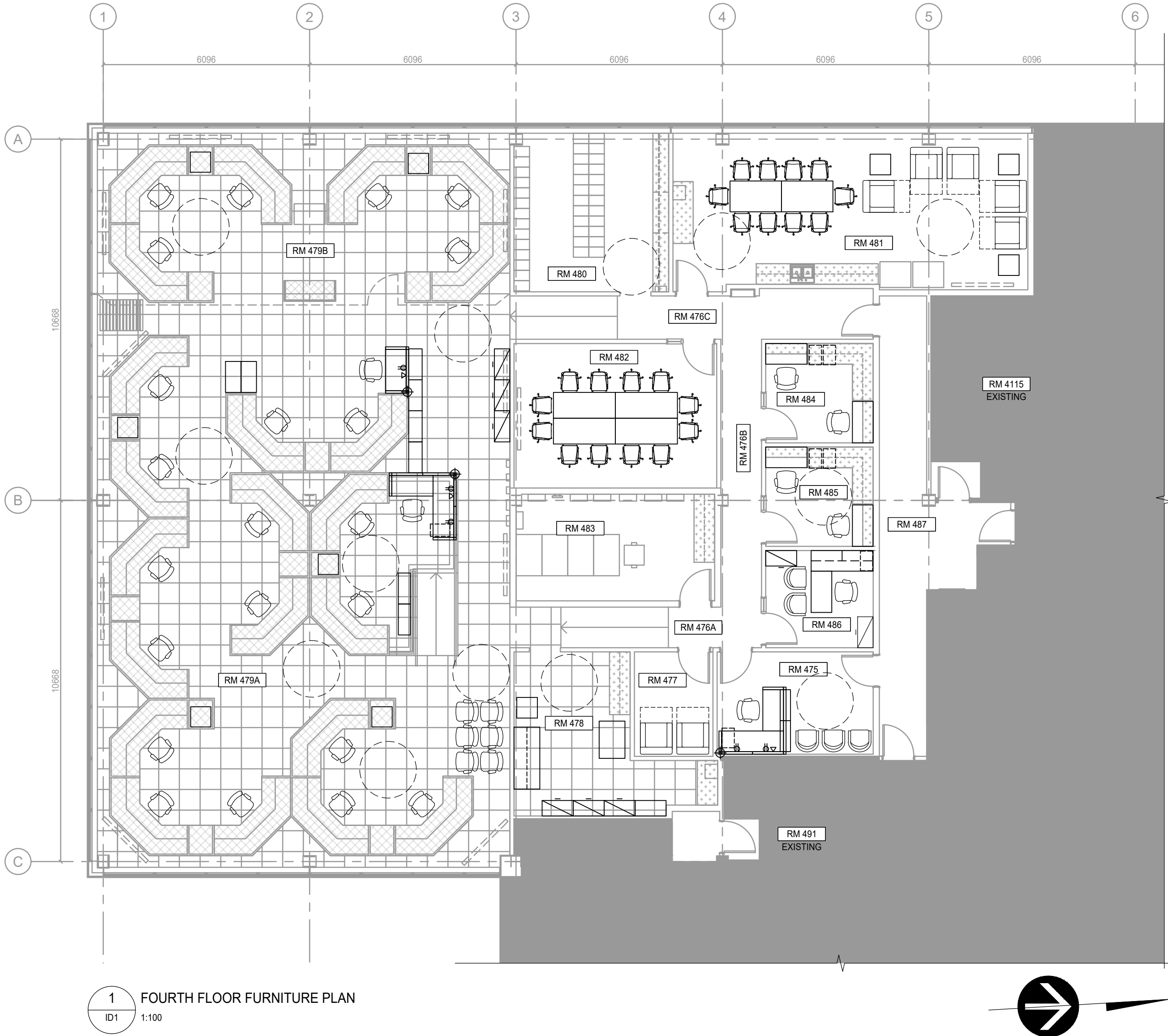
Revision no.  
2



- NOTES:
- COORDINATE DIMENSIONS WITH MECHANICAL TO CONCEAL MECH EQUIPMENT AND PIPING. MAINTAIN KNEE CLEARANCE AS PER NBC
  - CAULK FOR WATER TIGHT SEAL AT WALL FINISH AT ALL WALLS THAT ABUT MILLWORK







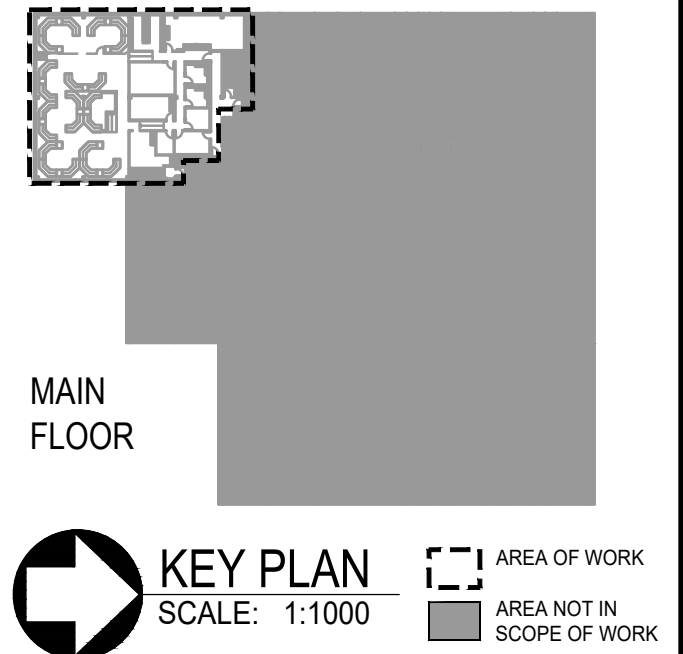
1 FOURTH FLOOR FURNITURE PLAN  
ID1 1:100

#### FURNITURE GENERAL NOTES:

1. THERE IS NO FURNITURE SCOPE IN BASEMENT.
2. MILLWORK, CONSOLES AND LOCKERS ARE IN GC CONTRACT.

#### PLAN LEGEND

- NEW MILLWORK (IN CONTRACT) - REFER TO CONSTRUCTION PLAN
- NEW CONSOLES (IN CONTRACT) - REFER TO CONSTRUCTION PLAN
- OFFICE CHAIRS - NIC
- RECLINING CHAIR - NIC
- PRINTER - NIC
- WHEELCHAIR TURNING RADIUS 1675mm Ø
- BASE FEED LOCATION
- POWER OUTLET
- DATA OUTLET



MAIN FLOOR

KEY PLAN  
SCALE: 1:1000  
AREA OF WORK  
AREA NOT IN SCOPE OF WORK

Revision	Description	Date
3	Issued for Construction	2018 06 11
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1	50% Construction Documents Submission	2018 01 25
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Client
PSPC/SPAC
SUITE 100-167 LOMBARD AVENUE WINNIPEG, MANITOBA
Project title
INTERIOR ALTERATIONS 1091 PORTAGE AVENUE WINNIPEG, MANITOBA SUITE 483 RENOVATION & FIT UP

Designed by TS
Drawn by HA
Approved by MG
PWGSC Project Manager MARK ARROJADO

Drawing title
FOURTH FLOOR FURNITURE PLAN (FURNITURE NOT IN CONTRACT, FOR REFERENCE ONLY)

Project no. R.076524.002	Drawing no. ID1 OF 1	Revision no. 3
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# GENERAL NOTES

- STRUCTURAL DESIGN BASED ON THE NATIONAL MANITOBA BUILDING CODE 2011 EDITION.
  - IMPORTANCE CATEGORY: NORMAL
  - WIND LOAD: Q50 = 0.45 KPA
  - GROUND SNOW LOAD: SS = 1.9 KPA
  - ASSOCIATED RAIN LOAD: SR = 0.2 KPA
- SEISMIC SITE CLASSIFICATION: NOT APPLICABLE
- DO NOT SCALE DRAWINGS
- DO NOT BACKFILL UNTIL GROUND FLOOR SLABS HAVE BEEN POURED AND CURED.
- ALL DIMENSIONS ARE TO BE VERIFIED WITH THE ARCHITECTURAL DRAWINGS AND EXISTING SITE CONDITIONS PRIOR TO CONSTRUCTION.
- THESE STRUCTURAL DRAWINGS SHOW THE COMPLETED STRUCTURE AND DO NOT INDICATE ALL COMPONENTS NECESSARY FOR SAFETY DURING CONSTRUCTION. THE GENERAL CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR SAFETY ON AND AROUND THE JOBSITE DURING CONSTRUCTION.

## FOUNDATIONS

- A COPY OF THE GEOTECHNICAL REPORT COMMISSIONED BY THE OWNER IS AVAILABLE FOR REVIEW AT THE OFFICES OF THE ARCHITECT CONSULTANT.
- NOTWITHSTANDING THE INFORMATION PROVIDED IN THE GEOTECHNICAL REPORT THE FOUNDATION AND GENERAL CONTRACTORS SHALL SATISFY THEMSELVES AS TO THE PREVAILING CONDITIONS AT THE SITE AS NO EXTRAS SHALL BE GRANTED SHOULD CONDITIONS DIFFER FROM THOSE INDICATED.
- ALL FRICTION PILES ARE DESIGNED BASED ON THE FOLLOWING:
  - SLS SKIN FRICTION OF 14.4 KPA
  - ULS SKIN FRICTION OF 22.9 KPA
  - EFFECTIVE LENGTH OF FRICTION PILES IS TOTAL LENGTH AS SHOWN ON PLAN MINUS 3000 MM.
  - FRICTION PILE REINFORCING TO BE 6000 MM LONG UNLESS NOTED IN PLANS; 10M RINGS AT 1200 MM ON-CENTRE AND 3-10M RINGS AT 150 ON-CENTRE AT TOP. WET-SET DOWELS INTO TOP OF PILE AND EXTEND INTO BEAMS AS PER PLAN. PILE REINFORCING TO BE 5-10M FOR 400 DIAMETER PILES.
- PROVIDE 10 MIL POLYETHYLENE WRAPPED SONOTUBE PLASTIC TUBE, GREASED COMPLETELY ON INSIDE FOR TOP 1800 MM 6'-0" OF PILES INDICATED ON PLAN.

## CAST-IN-PLACE CONCRETE

### 1 CONCRETE

- ALL CONCRETE IS TO BE MANUFACTURED AND INSTALLED IN ACCORDANCE WITH THE LATEST EDITION OF CSA-A23.1-14 "CONCRETE MATERIALS AND METHODS OF CONCRETE CONSTRUCTION" AND CSA-A23.2-14 "METHOD OF TEST FOR CONCRETE".
- PROVIDE CERTIFICATION THAT MIX PROPORTIONS SELECTED WILL PRODUCE CONCRETE OF QUALITY, YIELD AND STRENGTH AS SPECIFIED IN CONCRETE MIXES, AND WILL COMPLY WITH CSA-A23.1. CERTIFICATION LETTER TO BE SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE PROVINCE OF MANITOBA.
- PROVIDE CERTIFICATION THAT PLANT, EQUIPMENT, AND MATERIALS TO BE USED IN CONCRETE COMPLY WITH REQUIREMENTS OF CSA-A23.1. CERTIFICATION LETTER TO BE SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE PROVINCE OF MANITOBA.
- CONCRETE PROPERTIES SHALL BE AS FOLLOWS UNLESS NOTED OTHERWISE ON THE DRAWINGS.

PILES:

35 MPA MIN. AT 56 DAYS  
CLASS OF EXPOSURE: S-1  
ENTRAINED AIR/CATEGORY: 2 (4% TO 7%)  
CEMENT TYPE: HS  
AGGREGATE MAX. 20 MM  
CURING TYPE: TYPE 2 - ADDITIONAL  
SLUMP: MIN. 120 MM

GRADE BEAMS:

30MPA MIN. AT 28 DAYS  
CLASS OF EXPOSURE: F-1  
ENTRAINED AIR/CATEGORY: 1 (5% TO 8%)  
AGGREGATE MAX. 20 MM  
CURING TYPE: TYPE 2 - ADDITIONAL

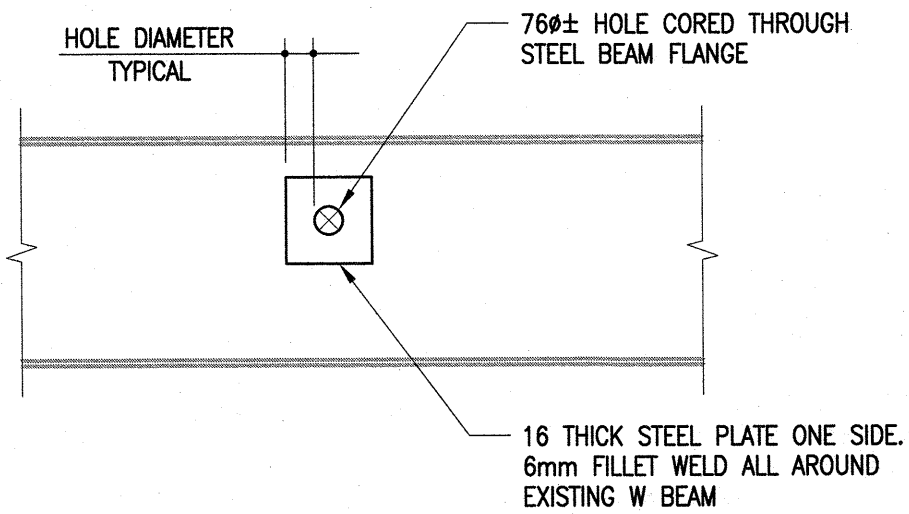
EXTERIOR STRUCTURAL SLABS:

30 MPA MIN. AT 28 DAYS  
CLASS OF EXPOSURE: F-1  
ENTRAINED AIR/CATEGORY: 1 (5% TO 8%)  
AGGREGATE MAX. 20 MM  
CURING TYPE: TYPE 2 - ADDITIONAL

UNLESS INDICATED OTHERWISE THE GENERAL CONTRACTOR SHALL SPECIFY CONCRETE SLUMP APPROPRIATE WITH PLACEMENT METHODS AND SITE CONDITIONS. THE GENERAL CONTRACTOR SPECIFIED SLUMP MUST BE SHOWN ON THE CERTIFICATION LETTER AND CONCRETE DELIVERY TICKET.

- UNLESS NOTED OTHERWISE CONCRETE CURING TO CONFORM TO THE LATEST EDITION OF CSA-A23.1-14 AS FOLLOWS:
  - TYPE 1 - BASIC: 3 DAYS  $\geq 10^{\circ}\text{C}$  AND FOR A TIME NECESSARY TO ATTAIN 40% OF THE SPECIFIED STRENGTH.
  - TYPE 2 - ADDITIONAL: 7 DAYS  $\geq 10^{\circ}\text{C}$  AND FOR A TIME NECESSARY TO ATTAIN 70% OF THE SPECIFIED STRENGTH.
  - TYPE 3 - EXTENDED: 7 DAYS WET CURING  $\geq 10^{\circ}\text{C}$ .

- AIR ENTRAINING ADMIXTURES SHALL CONFORM TO THE REQUIREMENTS OF ASTM C260/C260M-10A "STANDARD SPECIFICATION FOR AIR ENTRAINING ADMIXTURES FOR CONCRETE". SUPERPLASTICIZING ADMIXTURES SHALL CONFORM TO ASTM C494/C494M "STANDARD SPECIFICATION FOR CHEMICAL ADMIXTURES FOR CONCRETE" OR ASTM C1017/C1017M "STANDARD SPECIFICATION FOR CHEMICAL ADMIXTURES FOR USE IN PRODUCING FLOWING CONCRETE" WHEN FLOWING CONCRETE IS APPLICABLE. AIR ENTRAINING ADMIXTURES TO HAVE A DURABILITY FACTOR GREATER THAN 75, WHEN TESTED TO ASTM STANDARDS C666/C666M PROCEDURE A. SPACING FACTOR FOR ANY AIR ENTRAINING ADMIXTURE MUST BE 0.17MM OR LESS WHEN TESTED IN ACCORDANCE WITH ASTM C457 "STANDARD TEST METHOD FOR MICROSCOPICAL DETERMINATION OF PARAMETERS OF THE AIR-VOID SYSTEM IN HARDENED CONCRETE".



## STEEL BEAM PLUMBING PENETRATION DETAIL

A  
S1.1 S1.1  
1 : 20

- REFER TO MECHANICAL FOR EXACT LOCATION, 4TH FLOOR FRAMING, GRID LINE B, NEAR GRID LINE S

## REINFORCING STEEL

- ALL REINFORCING STEEL TO BE CSA-G30.18M-09 GRADE 400R DEFORMED BARS EXCEPT COLUMN TIES AND BEAM STIRRUPS WHICH SHALL BE GRADE 400W STEEL. ALL REINFORCING IS TO BE DETAILED IN ACCORDANCE WITH THE LATEST EDITION OF THE REINFORCING STEEL INSTITUTE OF CANADA - MANUAL OF STANDARD PRACTICE, EXCEPT OTHERWISE NOTED.
- WELDED STEEL WIRE MESH SHALL BE TO ASTM A185/A185M-07, 400 MPA YIELD, FLAT SHEETS ONLY.
- REINFORCING STEEL COVER IS TO CONFORM TO CAN/CSA A23.3-14 "DESIGN OF CONCRETE STRUCTURES FOR BUILDINGS" AND AS FOLLOWS:

EXTERIOR STRUCTURAL SLABS:  
EXPOSURE CLASS: F-1 40 MM TOP 40 MM BOTTOM

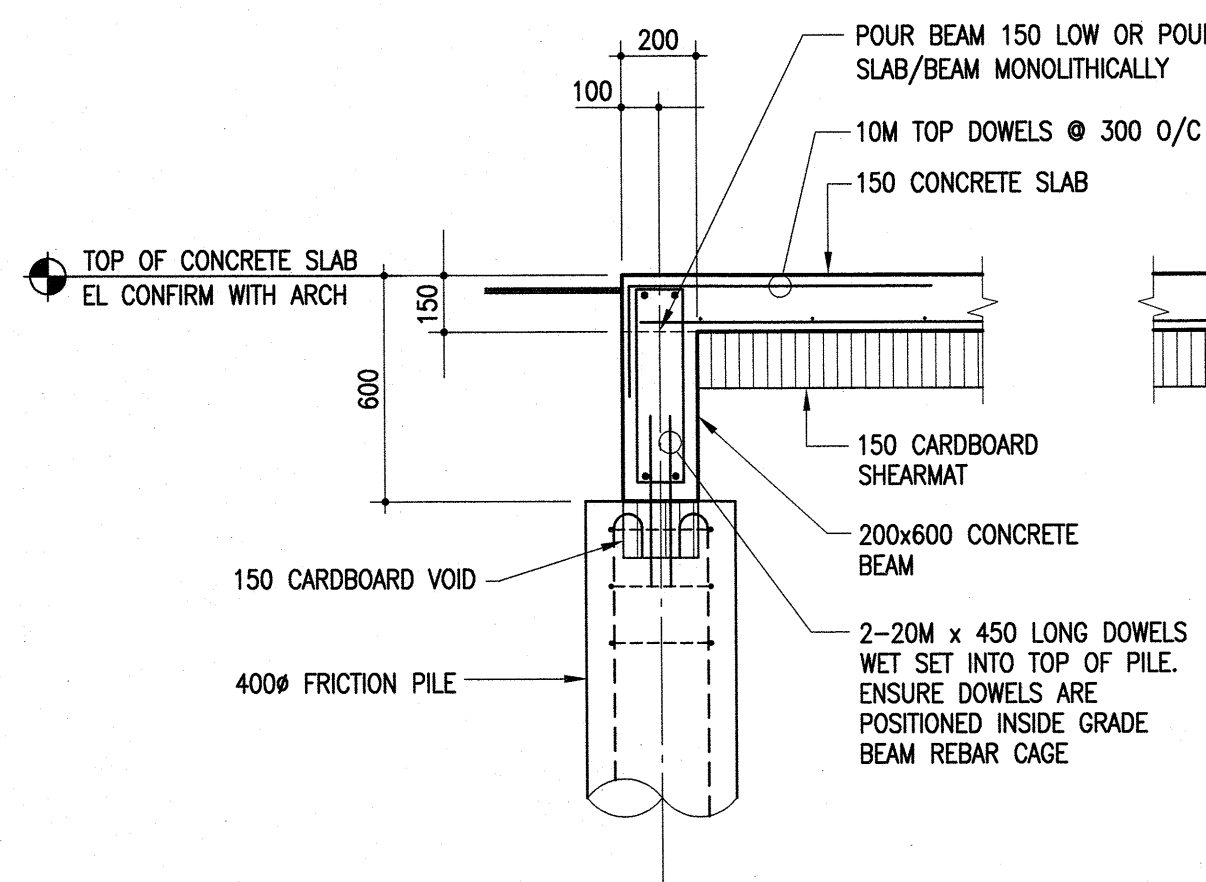
GRADE BEAMS:  
EXPOSURE CLASS: F-1 50 MM BOTTOM TO TIES 40MM SIDES AND TOP TO TIES.

PILES:  
EXPOSURE CLASS: S-1 75 MM TO TIES.

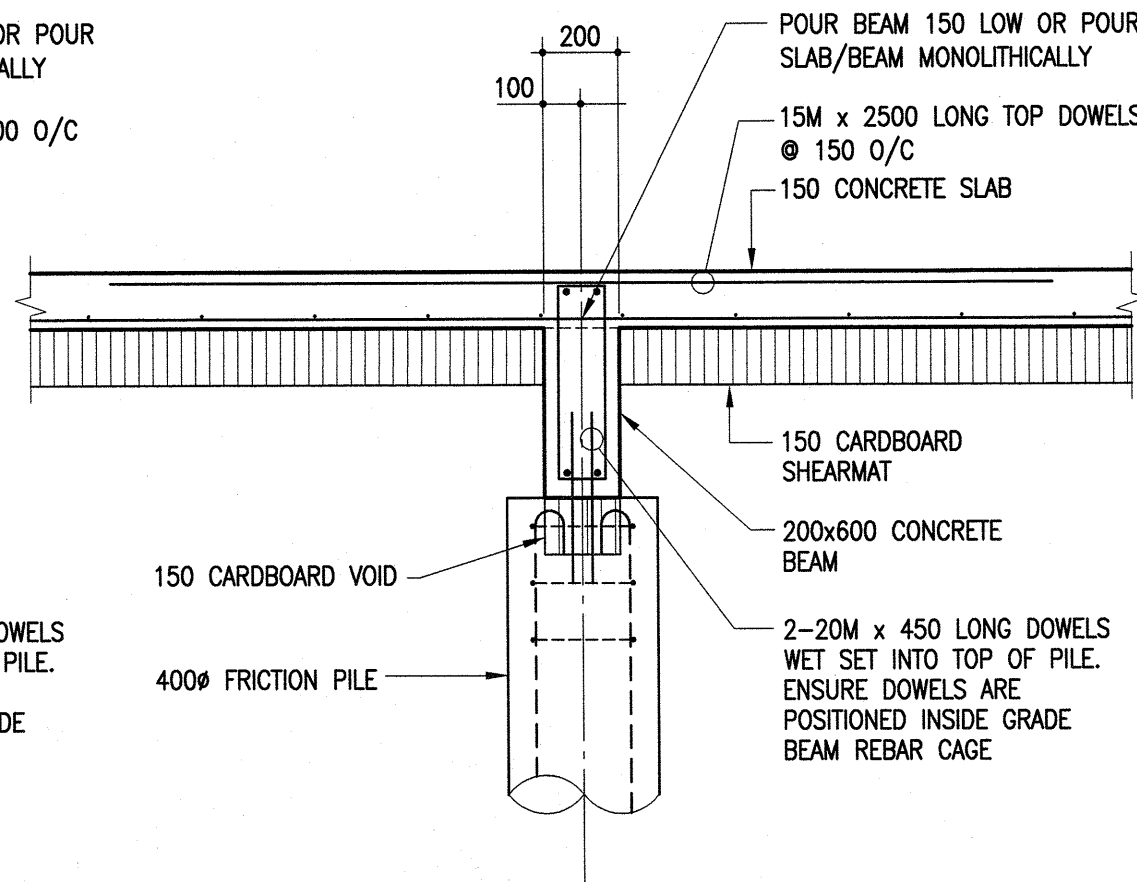
- IN GRADE BEAMS, BEND ALL TOP AND INTERMEDIATE HORIZONTAL STEEL 600 MM AROUND CORNERS, OR USE EXTRA L BARS 1200 MM LONG. ALL OPENINGS IN GRADE BEAMS TO HAVE 2-15M EACH SIDE AND 2-25M OVER, EXCEPT AS NOTED.
- TOP STEEL IN BEAMS TO BE LAPPED AT CENTRE SPAN, BOTTOM STEEL TO BE BUTTED AT SUPPORT.
- ALL REINFORCING TO BE HELD IN PLACE, AND TIED BY THE USE OF PROPER ACCESSORIES, SUCH AS HI-CHAIRS, SPACERS, ETC. TO BE SUPPLIED BY THE REINFORCING STEEL FABRICATOR. HI-CHAIRS TO HAVE 4 LEGS AND TO BE STAPLED OR NAILED TO THE FORMWORK.
- ALL OPENINGS IN CAST-IN-PLACE CONCRETE FLATWORK TO BE TRIMMED WITH 2-15M ALL AROUND ON BOTH FACES, EXCEPT AS NOTED.
- FOR ALL STRUCTURAL SLABS A MINIMUM OF 50% OF THE BOTTOM STEEL SHALL BE CONTINUED A MINIMUM DISTANCE OF 150 MM INTO ALL SUPPORTING WALLS AND BEAMS. IF KEYS ARE USED AT JOINTS BETWEEN SLABS AND WALLS OR BEAMS, BOTTOM DOWELS EQUAL TO BOTTOM REINFORCEMENT OR 10M AT 300 MM O/C SHALL BE PROVIDED WHICHEVER IS GREATER.
- ALL MISCELLANEOUS CONCRETE PADS AND CURBS ARE TO BE REINFORCED WITH A MINIMUM OF 10M AT 400 MM 16 IN. O/C EACH WAY, UNLESS NOTED.
- WHEN CONCRETE BEAMS ARE CAST INTO A WALL CHASE, DOWELS SIZE AND NUMBER SAME AS BEAM REINFORCING ARE TO BE PROVIDED FROM WALL, UNLESS OTHERWISE SHOWN ON PLAN.
- PROVIDE MINIMUM 2-10M BOTTOM INTEGRITY BARS THROUGHOUT STRUCTURES IN ACCORDANCE WITH CSA A23.3-14, CLAUSE 13.10.6.

## FORMWORK

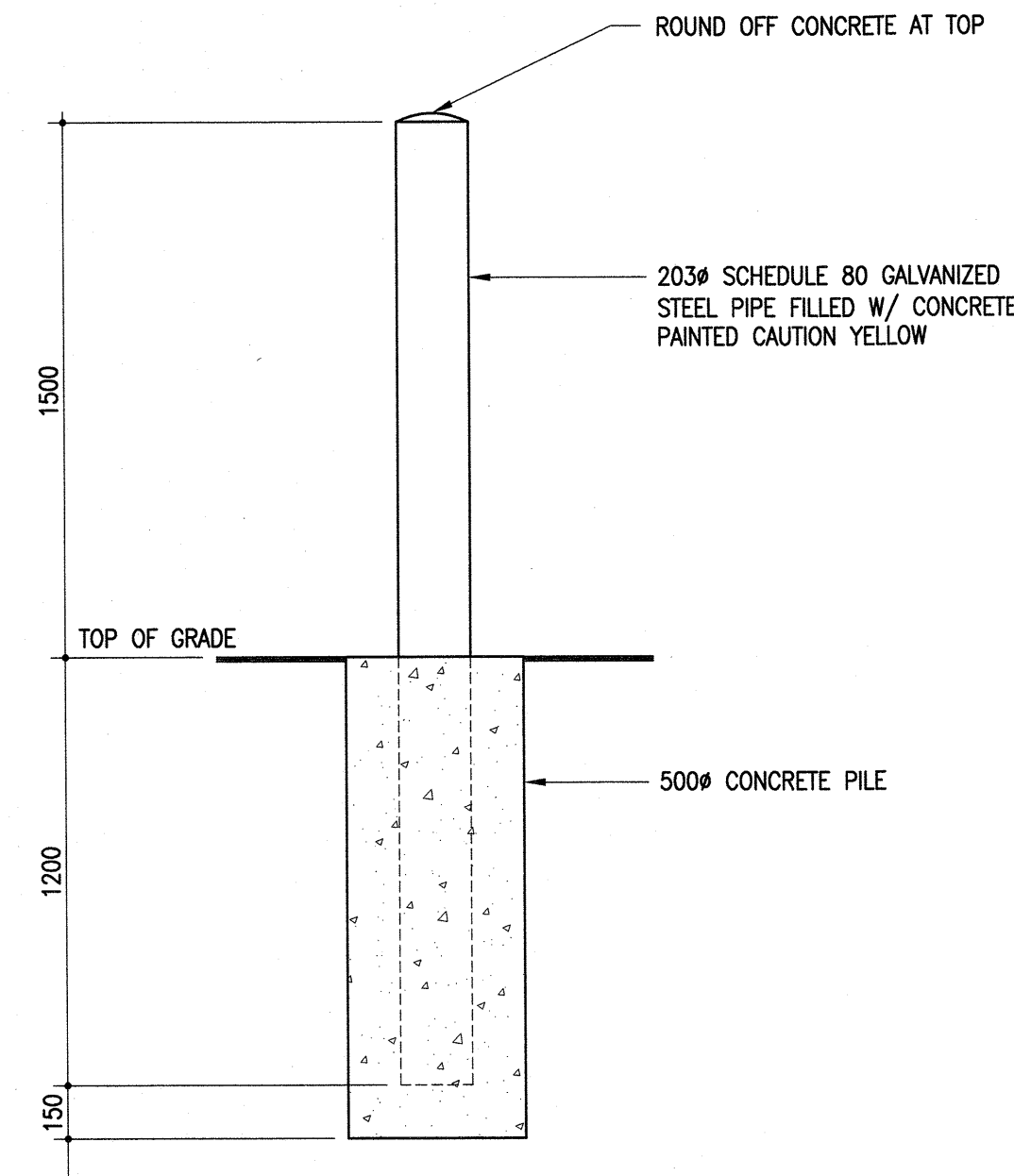
- SHEARMAT OR APPROVED CARDBOARD VOIDFORM WITH A MIN. DEPTH OF 150 MM SHALL BE USED AS THE BOTTOM FORM FOR STRUCTURAL SLABS AT GRADE, GRADE BEAMS, AND WALLS IN CONTACT WITH SOIL. SELECT AND INSTALL IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
- ACCESSORIES SUCH AS HI-CHAIRS, SPACERS, ETC. SHALL BE SUPPORTED BY PADS OF PLYWOOD OR TEMPERED HARDBOARD TO PREVENT PUNCTURING THE VOIDFORM.
- UNLESS NOTED OTHERWISE PROVIDE SLIP JOINT ALL PAVING OR CONCRETE SLABS ON GRADE AGAINST STRUCTURAL MEMBERS WITH 12 MM 1/2 IN. ASPHALT IMPREGNATED FIBREBOARD.
- ALL CONSTRUCTION JOINT KEYS ARE TO BE A MINIMUM OF 40 MM DEEP.
- ALL STRUCTURAL SLABS FRAMING INTO BASEMENT WALLS ARE TO HAVE A MINIMUM KEY OF 40 MM.
- ALL CONCRETE BEAMS FRAMING INTO CONCRETE WALLS ARE TO BE SUPPORTED BY A CHASE OF MINIMUM 100 MM DEPTH AND THE HEIGHT AND WIDTH OF THE BEAM.
- PLACE 10 MIL POLYETHYLENE UNDER ALL SLABS ON FILL AND OVER TOP OF VOIDFORM.
- PROVIDE 150 MM WIDE, RIBBED, PVC WATERSTOPS IN ALL HORIZONTAL AND VERTICAL CONSTRUCTION JOINTS IN ALL EXTERIOR WALLS BELOW GRADE AND PIT WALLS.



1  
S1.1 S1.1  
1 : 20

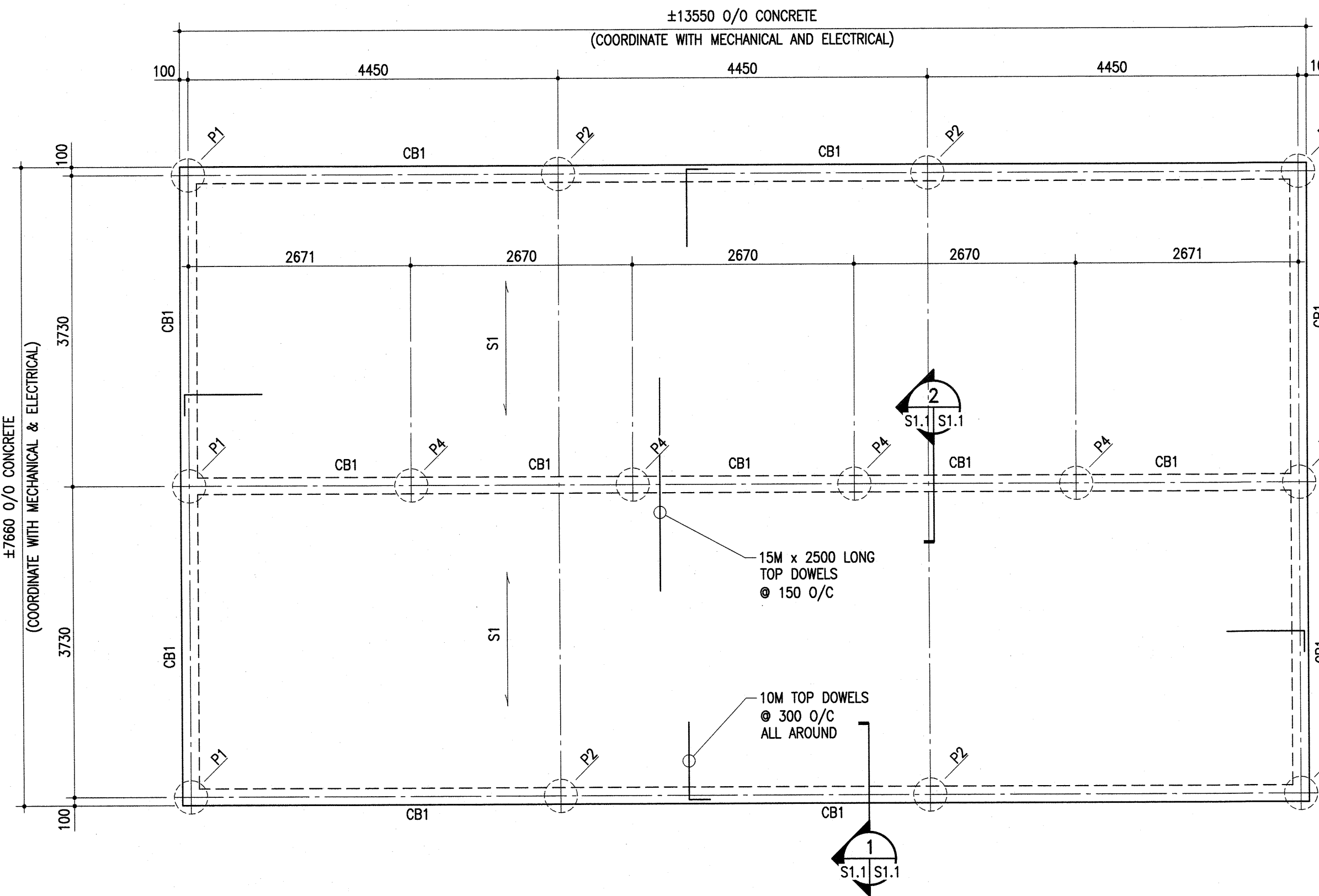


2  
S1.1 S1.1  
1 : 20



3  
S1.1 S1.1  
1 : 20

- SEE ELECTRICAL DRAWINGS FOR LOCATIONS



## GENERATOR SLAB FRAMING PLAN

1 : 50

- SUPERIMPOSED DEAD LOAD (GENERATORS, ENCLOSURES, FUEL TANKS) = 7.9 kPa
- DEAD LOAD (150 CONC SLAB) = 3.6 kPa

## PILE SCHEDULE:

- P1: 400# x 7500 LONG CAST-IN-PLACE FRICTION PILE
- P2: 400# x 9000 LONG CAST-IN-PLACE FRICTION PILE
- P3: 400# x 8000 LONG CAST-IN-PLACE FRICTION PILE
- P4: 400# x 10000 LONG CAST-IN-PLACE FRICTION PILE

- SEE GENERAL NOTES FOR PILE REINFORCING

## BEAM SCHEDULE:

- CB1: 200x600 CONCRETE BEAM  
ON 150 CARDBOARD SHEARMAT  
R/W 2-20M CONTINUOUS TOP & BOTTOM  
10M STIRRUPS @ 300 O/C

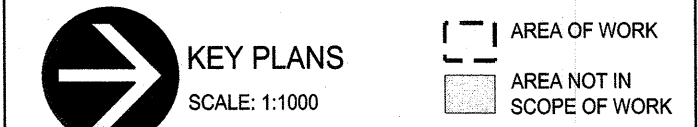
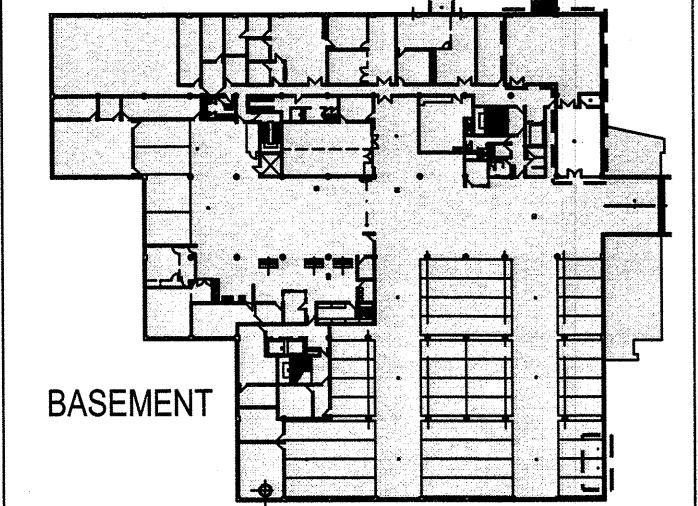
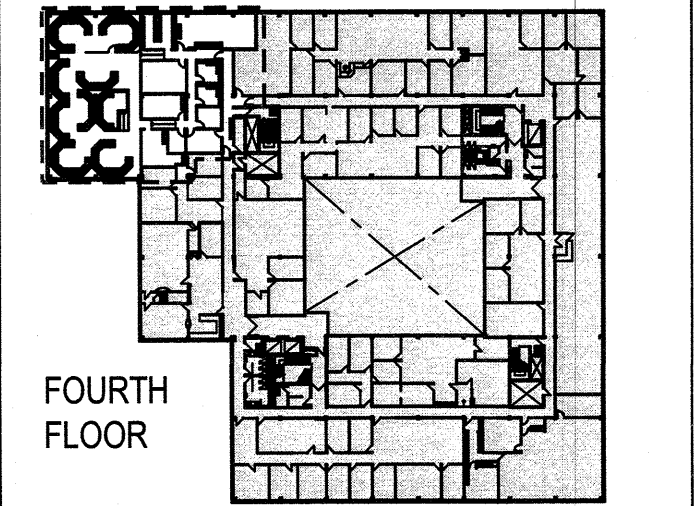
## SLAB SCHEDULE:

- S1: 150 CONCRETE SLAB  
ON 150 CARDBOARD VOIDFORM  
R/W 15M @ 150 O/C BLL  
10M @ 300 O/C BUL (TEMP STEEL)

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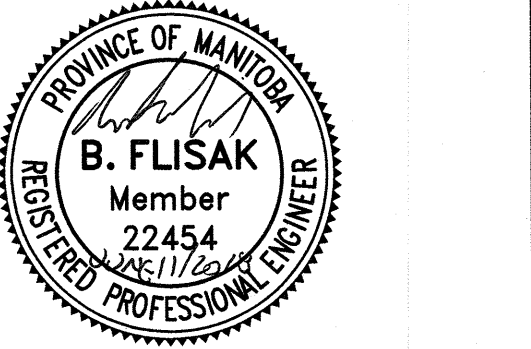
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Crosier Kilgour & Partners Ltd.  
CONSULTING STRUCTURAL ENGINEERS



5		
4		
3		
2	Issued for Construction	2018 06 11
1	99% Construction Documents Submission	2018 04 05
0	50% Construction Documents Submission	2018 01 25
Revision	Description	Date

Client

PSPC/SPAC

SUITE 100-167 LOMBARD AVENUE  
WINNIPEG, MANITOBA

Project title  
INTERIOR ALTERATIONS  
1091 PORTAGE AVENUE  
WINNIPEG, MANITOBA

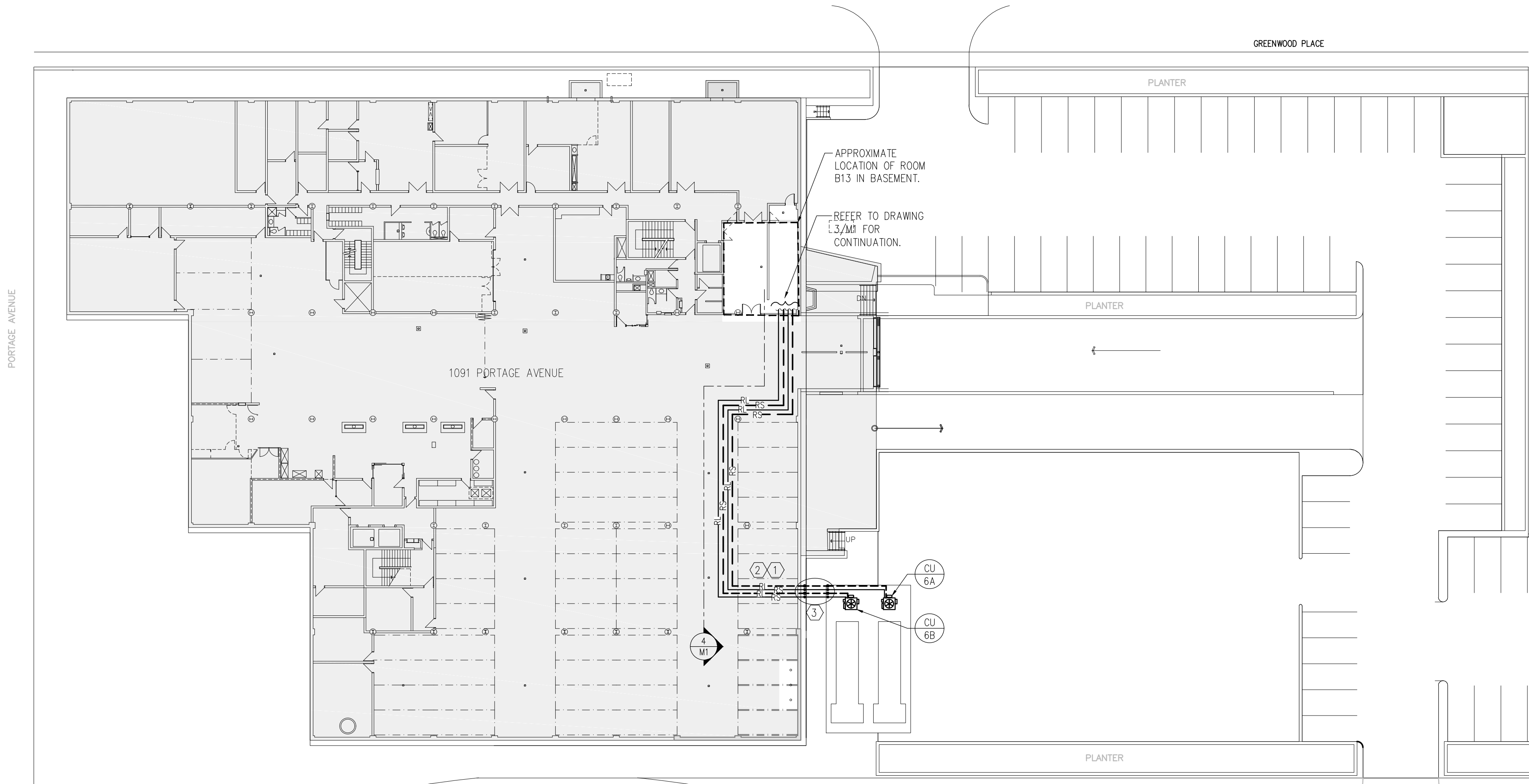
SUITE 483  
RENOVATION & FIT UP

Designed by  
AJG  
Drawn by  
JLP  
Approved by  
--  
PWGSC Project Manager  
MARK ARROJADO  
Drawing title  
GENERATOR SLAB PLAN  
SECTIONS AND NOTES

Project no.	Drawing no.	Revision no.
R.076524.002	S1.1	2

OF 1





1 MECHANICAL SITE PLAN  
M1 1:300

GENERAL NOTES:

- DO NOT SCALE THIS DRAWING. CONTRACTOR SHALL VERIFY ALL DIMENSIONS PRIOR TO INSTALLATION AND REPORT ANY DISCREPANCY TO THE CONSULTANT.
- THE DRAWING ONLY SHOWS A GENERAL SCHEMATIC OF NEW SYSTEMS. ROUTING OF DUCTWORK AND UNITS LOCATIONS SHALL SUIT SITE CONDITIONS AND MAY HAVE TO BE CHANGED TO AVOID CONFLICTS WITH STRUCTURE, DUCTS AND PIPES. WHEN CONFLICT CANNOT BE AVOIDED, THE DUCTWORK SHALL BE MODIFIED AS REQUIRED.
- CONTRACTOR SHALL INCLUDE FOR AND PROVIDE ALL COORDINATION BETWEEN TRADES AND CONSULTANT ON AND OFF SITE AS REQUIRED FOR INSTALLATION OF MECHANICAL AND ELECTRICAL SYSTEMS, WHERE MINOR REROUTING OF DUCTWORK OR SERVICES IS REQUIRED DUE TO ONSITE CONDITIONS, IT SHALL BE PERFORMED AT NO ADDITIONAL COST.
- CONFORM TO SPECIFICATIONS AND MANUFACTURER GUIDES FOR MATERIALS AND UNITS' INSTALLATION DETAILS.
- INSTALL ALL MECHANICAL CONTROLS AT ACCESSIBLE HEIGHT, 1050mm (42") UNLESS OTHERWISE DIRECTED BY THE ARCHITECT. PROVIDE LOCKING CLEAR COVER IN PUBLIC AREAS.
- WORK IN OTHER TENANT AREAS TO BE DONE OUTSIDE OF BUSINESS HOURS. SUPERVISION BY RCMP APPROVED COMMISSIONAIRE REQUIRED.

# DRAWING 1/M1 KEYNOTES:

- MECHANICAL CONTRACTOR TO ALLOW FOR X-RAY SCANNING BEFORE DRILLING BASEMENT WALL. PENETRATIONS SHOULD AVOID CONFLICT WITH STRUCTURAL COMPONENTS.
- AT BUILDING FOUNDATION SCAN CONCRETE WALL TO LOCATE ALL EXISTING REINFORCING STEEL. LOCATE NEW OPENINGS BETWEEN REINFORCING. DO NOT CUT OR DAMAGE ANY EXISTING REINFORCING.
- REFRIGERANT PIPING TO RISE UP AND CROSS WALKWAY AT APPROXIMATELY 2100mm HIGH LEVEL AND DROP DOWN TO GRADE TO SERVICE CU-6A AND 6B. PROVIDE EXTRUDED CHANNEL LADDER SUPPORT UP AND OVER WALKWAY AND BACK DOWN.

SYMBOL SCHEDULE:

CO II	CLEAN-OUT
U	TRAP (SANITARY)
E	PIPE CAP
~	PIPE BREAK
---	DOMESTIC COLD WATER (DCW)
---	DOMESTIC HOT WATER (DHW)
---V---	PLUMBING VENT
-SAN-	SANITARY
---RL---	REFRIGERANT LIQUID
---RS---	REFRIGERANT SUCTION
---HWR---	HEATING WATER RETURN
---HWS---	HEATING WATER SUPPLY
F	FIRE DAMPER
SB	SECURITY BAR
~	AIRFLOW
T	THERMOSTAT
SD	SUPPLY AIR DIFFUSER
□	RETURN AIR GRILLE
⊗	EXHAUST FAN GRILLE
E	EXISTING SPRINKLER HEAD
D	SPRINKLER HEAD TO BE DEMOLISHED
R	NEW PENDENT/RECESSED PENDENT TYPE SPRINKLER HEAD
O	RELOCATED NEW SPRINKLER HEAD
D	EXISTING UPRIGHT TYPE SPRINKLER HEAD TO REMAIN
D	EXISTING UPRIGHT TYPE SPRINKLER HEAD TO BE DEMOLISHED

DRAWING LIST:

- M1 MECHANICAL SITE PLAN, ROOM B13 MECHANICAL PLANS, NOTES, SYMBOL SCHEDULE AND DRAWING LIST
- M2 SPRINKLER SYSTEM EXISTING/DEMOLITION PLAN
- M3 HVAC AND PIPING EXISTING/DEMOLITION PLAN
- M4 ROOM B13, THIRD AND FOURTH FLOOR PLUMBING PLAN
- M5 FOURTH FLOOR NEW SPRINKLER PLAN
- M6 FOURTH FLOOR NEW HVAC PLAN
- M7 FOURTH FLOOR NEW PIPING PLAN
- M8 NEW HVAC ROOF PLAN
- M9 MECHANICAL SCHEDULES
- M10 MECHANICAL DETAILS

# DRAWING 3/M1 KEYNOTES:

- NEW LOCATION OF EXISTING CONDENSING UNIT.
- NEW LOCATION OF EXISTING THERMOSTAT.
- REFER TO DRAWING 1/M1 FOR CONTINUATION.
- RELOCATED PUMP AND FILTER SYSTEM.
- NEW COMPUTER ROOM AIR CONDITIONERS AC-6A AND AC-6B. REFER TO 1/M1 FOR CONDENSING UNIT LOCATIONS.

3 ROOM B13 NEW MECHANICAL PLAN  
M1 1:100

# DRAWING 2/M1 KEYNOTES:

- EXISTING CONDENSING UNIT TO BE RELOCATED. EXTEND ALL SERVICES AS REQUIRED.
- EXISTING UNIT HEATER TO BE DEMOLISHED. CAP HYDRONIC BRANCH LINES AT MAIN.
- EXISTING EXHAUST DUCT TO REMAIN.
- EXISTING THERMOSTAT TO BE RELOCATED. EXTEND PNEUMATIC CONTROL TUBING AS REQUIRED.
- EXISTING PUMP AND FILTER TO BE RELOCATED. REVISE PIPING AS REQUIRED, PATCH INSULATION.
- EXISTING SUPPLY DUCT TO REMAIN.

2 ROOM B13 EXISTING MECHANICAL PLAN  
M1 1:100

4 REFRIGERATION LINE ELEVATION  
M1 1:100

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KEY PLAN

SCALE: 1:1000

Certificate of Authorization

HDK Consulting Incorporated

No. 5539 Date: 04/30/2019

5		
4		
3	For Construction	2018-06-11
2	99% Construction Documents Submission	2018-04-05
1	50% Construction Documents Submission	2018-01-25
0	Design Development Submission	2017-08-30
Revision	Description	Date

Client

PSPC/SPAC

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SUITE 483  
RENOVATION & FIT UP

Designed by  
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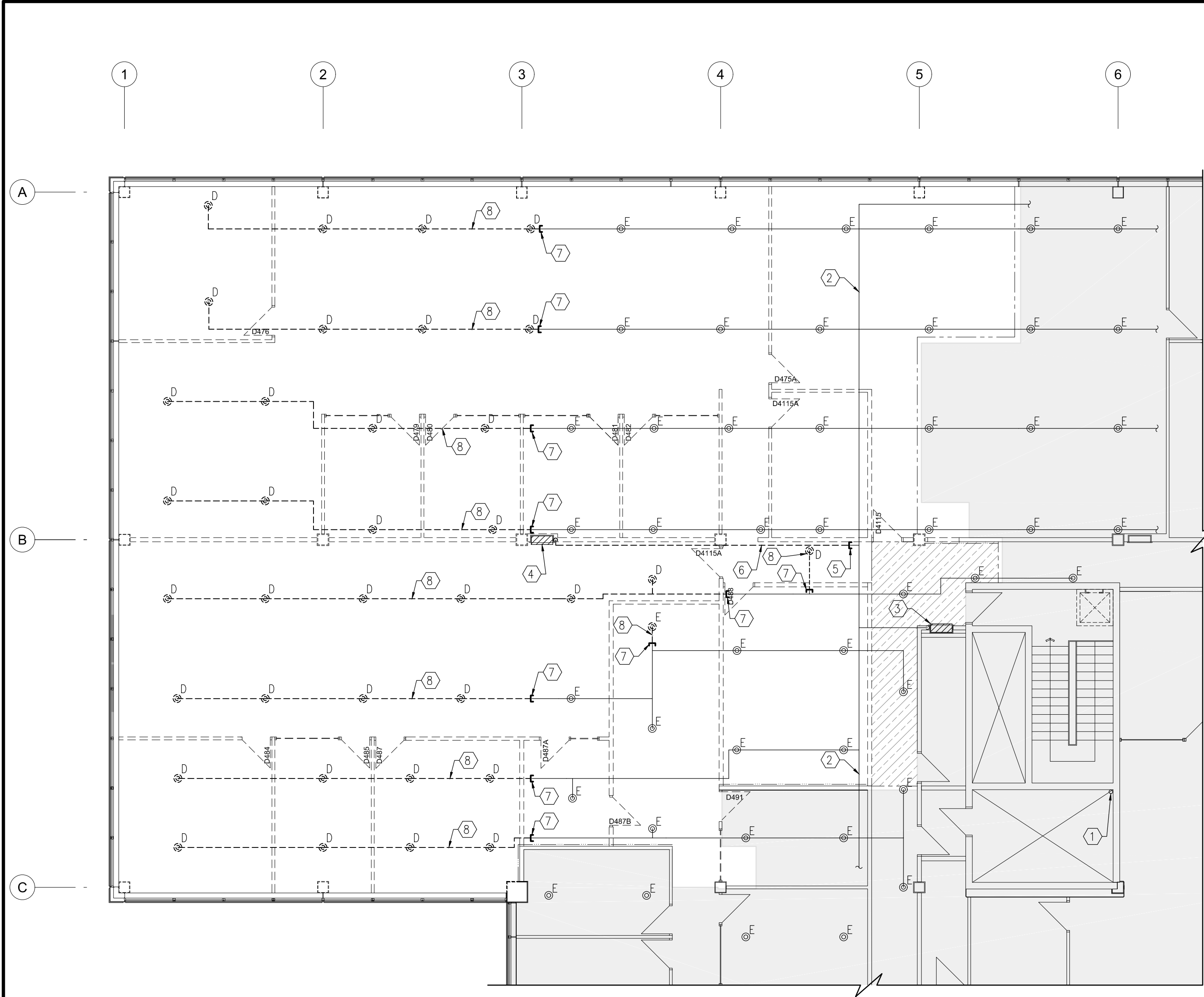
PWSSC Project Manager  
MARK ARROJADO

Drawing title

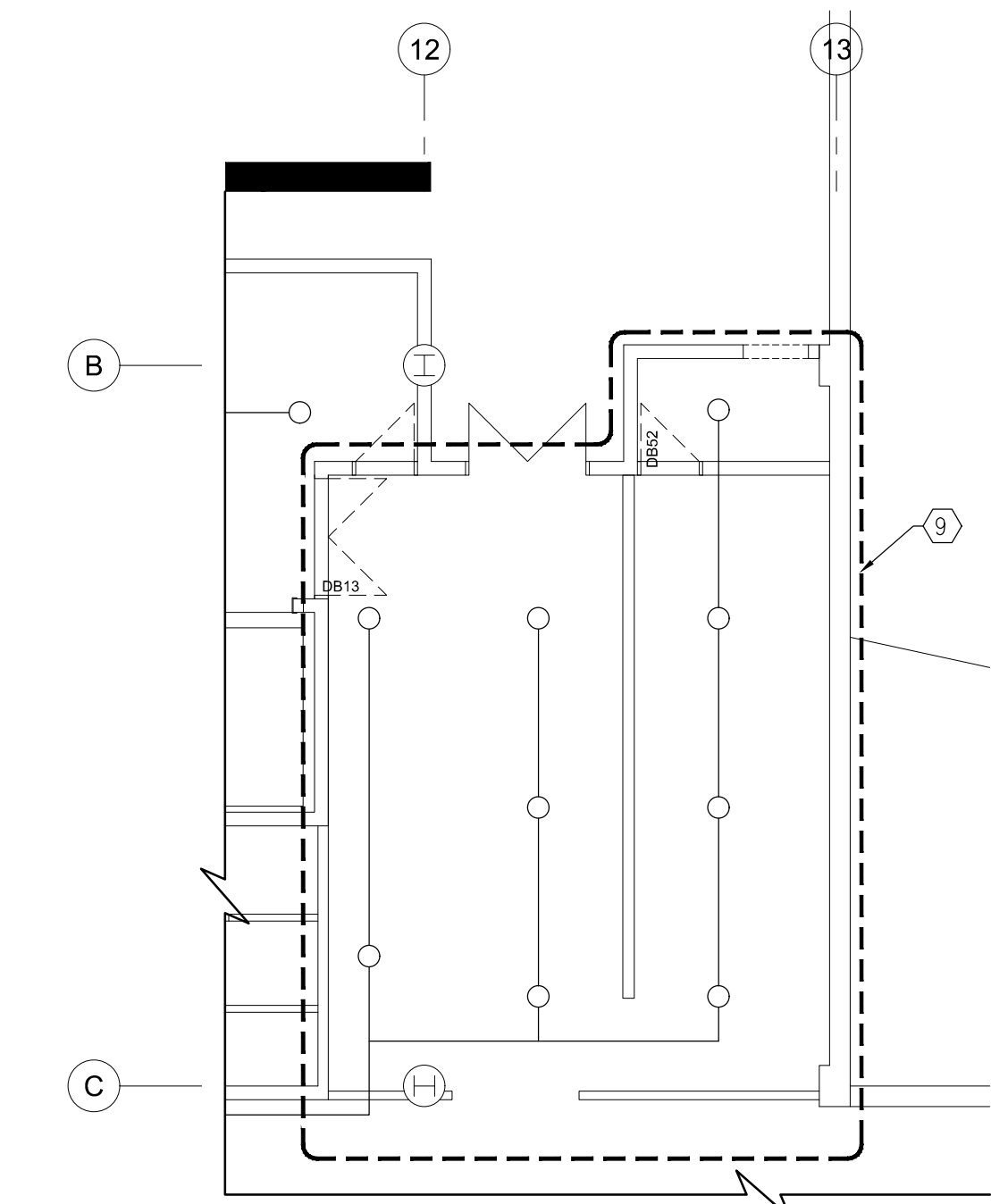
MECHANICAL SITE PLAN,  
ROOM B13 MECHANICAL PLAN  
NOTES, SYMBOL SCHEDULE  
AND DRAWING LIST

Project no.	Drawing no.	Revision no.
R.076524.002	M1	3
	OF 10	





1 FOURTH FLR SPRINKLER SYSTEM EXISTING/DEMOLITON PLAN  
M2 1:100




2 BASEMENT SPRINKLER SYSTEM EXISTING/DEMOLITON LAYOUT  
M2 1:100

GENERAL NOTES:


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- THE DRAWING ONLY SHOWS A GENERAL SCHEMATIC OF NEW SYSTEMS. ROUTING OF DUCTWORK AND UNITS LOCATIONS SHALL SUIT SITE CONDITIONS AND MAY HAVE TO BE CHANGED TO AVOID CONFLICTS WITH STRUCTURE, DUCTS AND PIPES. WHEN CONFLICT CANNOT BE AVOIDED, THE DUCTWORK SHALL BE MODIFIED AS REQUIRED.
- CONTRACTOR SHALL INCLUDE FOR AND PROVIDE ALL COORDINATION BETWEEN TRADES AND CONSULTANT ON AND OFF SITE AS REQUIRED FOR INSTALLATION OF MECHANICAL AND ELECTRICAL SYSTEMS. WHERE MINOR REROUTING OF DUCTWORK OR SERVICES IS REQUIRED DUE TO ONSITE CONDITIONS, IT SHALL BE PERFORMED AT NO ADDITIONAL COST.
- CONTRACTOR SHALL CONFIRM EXACT LOCATION OF EXISTING SPRINKLER HEADS, PIPING AND ASSOCIATED APPURTENANCES PRIOR TO PERFORM NEW WORK.
- INSTALL ALL MECHANICAL CONTROLS AT ACCESSIBLE HEIGHT, 1050mm (42") UNLESS OTHERWISE DIRECTED BY THE ARCHITECT. PROVIDE LOCKING CLEAR COVER IN PUBLIC AREAS.
- WORK IN OTHER TENANT AREAS TO BE DONE OUTSIDE OF BUSINESS HOURS. SUPERVISION BY RCMP APPROVED COMMISSIONAIRE REQUIRED.

DRAWING KEYNOTES:

- EXISTING 75mm $\varnothing$  SPRINKLER RISER.
- EXISTING SPRINKLER MAIN IN CEILING SPACE TO REMAIN.
- EXISTING FIRE HOSE CABINET TO REMAIN.
- EXISTING FIRE HOSE CABINET AND ASSOCIATED APPURTENANCES TO BE RELOCATED. REFER TO NEW SPRINKLER SYSTEM LAYOUT FOR NEW LOCATION AND PIPE ROUTING.
- CAP-OFF EXISTING STANDPIPE SUPPLY TO EXISTING FIRE HOSE CABINET APPROXIMATELY THIS LOCATION IN CEILING SPACE AND REMOVE PIPE AS INDICATED.
- EXISTING STANDPIPE TO BE REMOVED.
- CAP-OFF EXISTING SPRINKLER PIPE THIS LOCATION AND REMOVED REMAINDER AS SHOWN INCLUDING SPRINKLER HEADS.
- EXISTING SPRINKLER PIPE TO BE REMOVED.
- EXISTING SPRINKLER HEADS IN THIS AREA TO REMAIN. COORDINATE AND MODIFY LOCATION OF EXISTING SPRINKLER HEADS ON SITE AS REQUIRED TO SUIT NEW ELECTRICAL ROOM.



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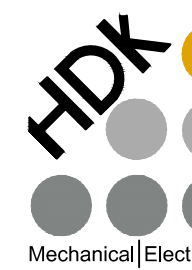


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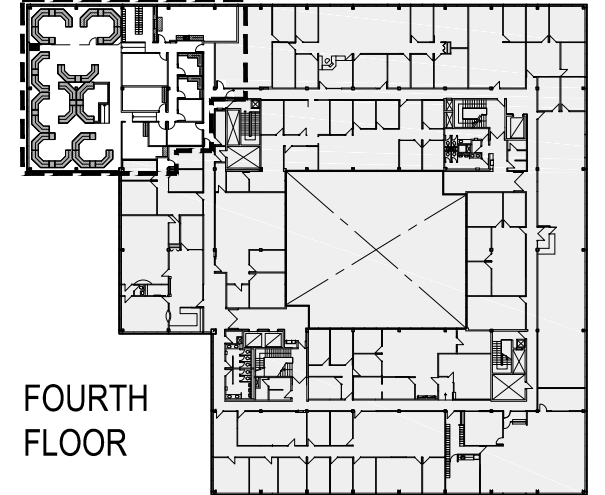
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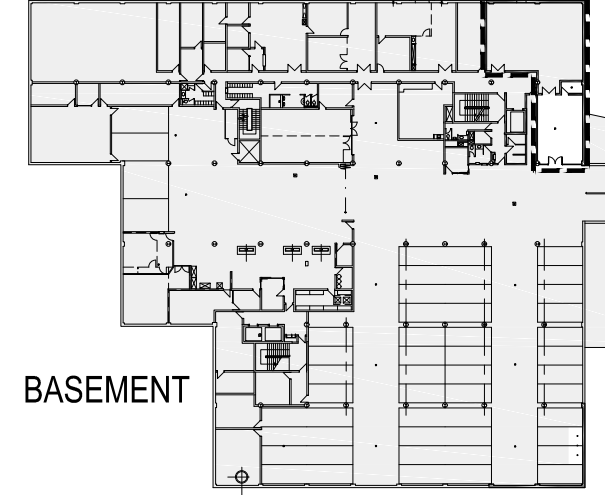
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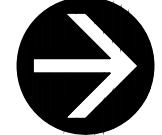
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FOURTH FLOOR



BASEMENT



KEY PLANS  
SCALE: 1:1000

5		
4		
3	For Construction	2018-06-11
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1	50% Construction Documents Submission	2018-01-25
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Revision	Description	Date

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SUITE 483  
RENOVATION & FIT UP

Designed by  
RR

Drawn by  
RR/IS


Approved by  
DH

PWSSC Project Manager  
MARK ARROJADO


Drawing title

SPRINKLER SYSTEM  
EXISTING/DEMOLITION PLAN

Project no.	Drawing no.	Revision no.
R.076524.002	M2	3
	OF 10	



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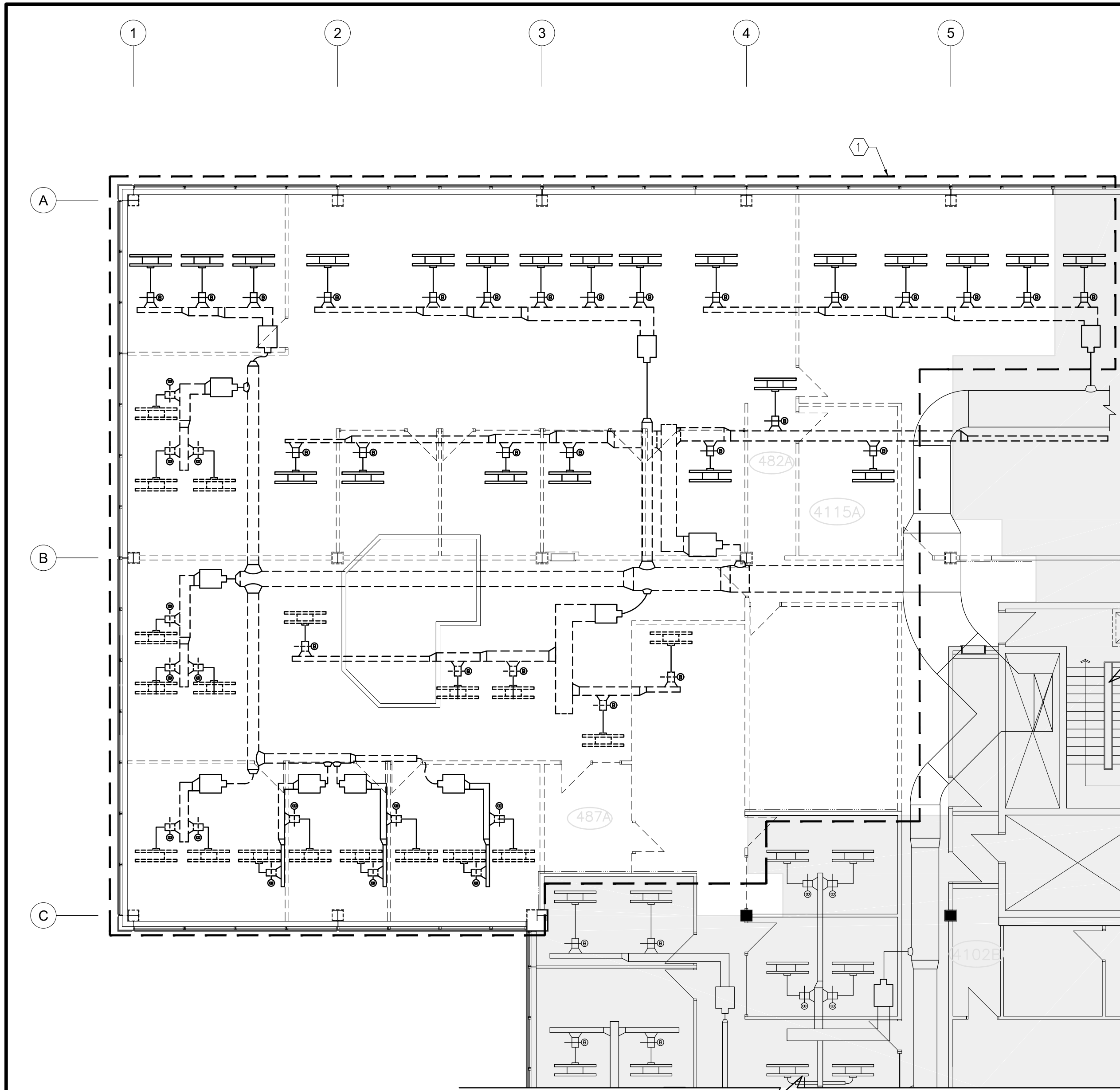


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No. 5539 Date: 04/30/2019

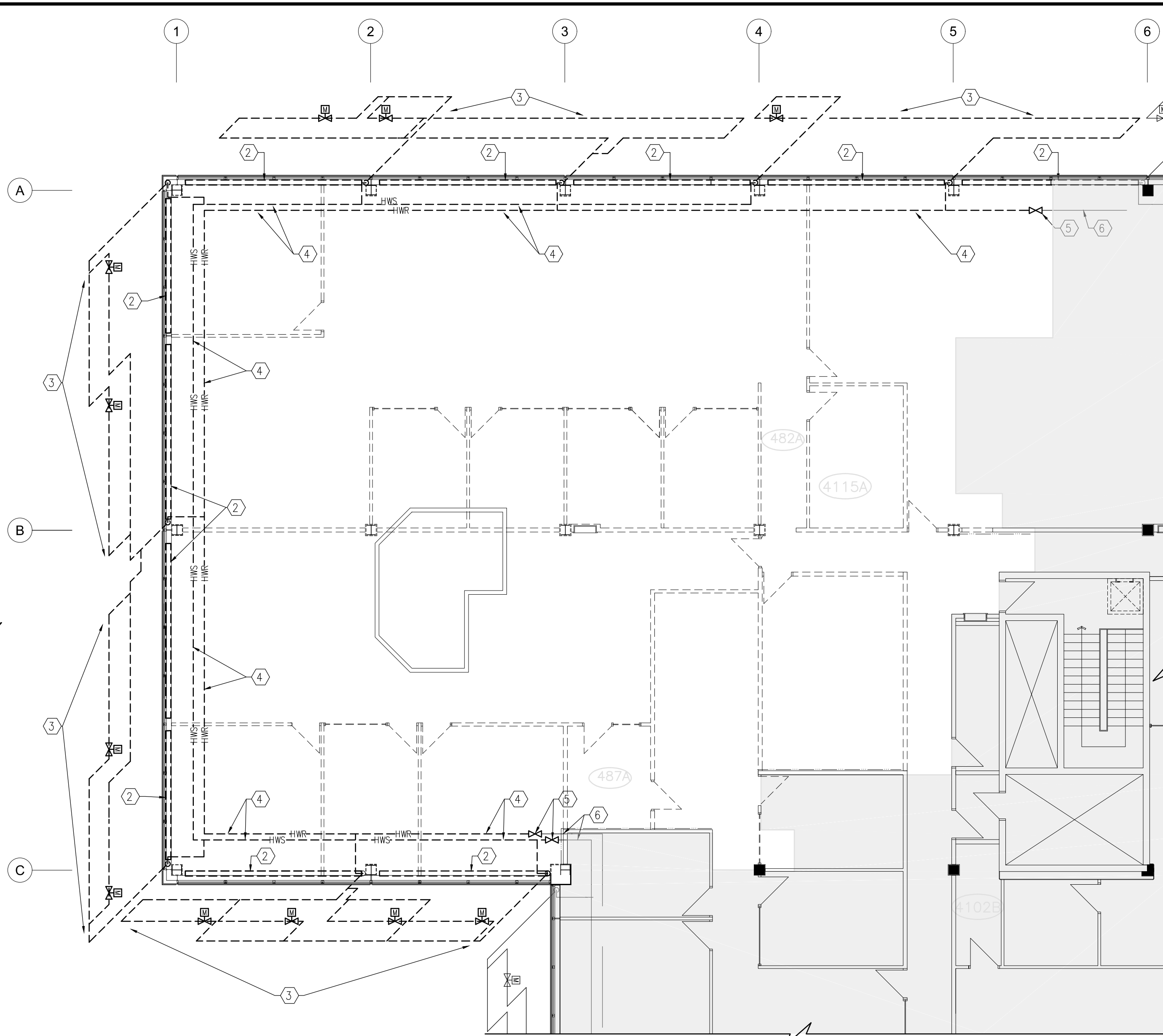
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1 FOURTH FLOOR EXISTING/DEMOLITON HVAC PLAN  
M3 1:100



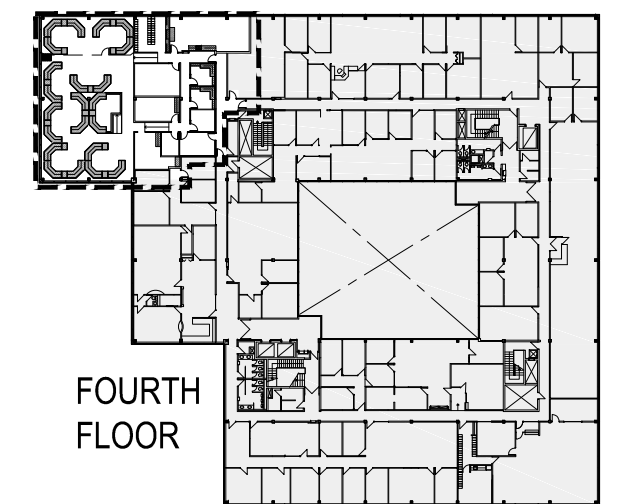
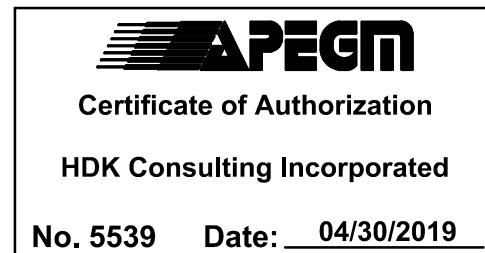
2 FOURTH FLOOR EXISTING/DEMOLITON PIPING PLAN  
M3 1:100

# DRAWING KEYNOTES:

- DEMOLISH ALL EXISTING SUPPLY AIR DUCTWORK IN AREA OF RENOVATION BACK TO THIS LOCATION, RETAIN ALL VAV BOXES, CONTROLLERS AND THERMOSTATS AND RETURN TO OWNER. REMOVE ASSOCIATED SERVICES NO LONGER IN USE BACK TO SOURCE INCLUDING PNEUMATIC TUBING.
- DEMOLISH ALL PERIMETER RADIATION, CAP SUPPLY PIPING WITH NEW ISOLATION VALVE FOR RECONNECTION TO NEW PERIMETER HEATING SYSTEM.
- DEMOLISH HWS/HWR BRANCHES SERVING WALL FIN RADIATION BACK TO CEILING SPACE AND MAIN LINE.
- DEMOLISH ALL HYDRONIC SUPPLY AND RETURN MAINS IN AREA OF RENOVATION.
- PROVIDE ISOLATION VALVES ON HWS/HWR LINES AT THESE LOCATIONS AND PREPARE FOR INSTALLATION OF NEW HYDRONIC PIPING IN AREA OF RENOVATION.
- EXISTING PIPING ON THIS SIDE OF NEW ISOLATION VALVE TO REMAIN.

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- CONFORM TO SPECIFICATIONS AND MANUFACTURER GUIDES FOR MATERIALS AND UNITS' INSTALLATION DETAILS.
- INSTALL ALL MECHANICAL CONTROLS AT ACCESSIBLE HEIGHT, 1050mm (42") UNLESS OTHERWISE DIRECTED BY THE ARCHITECT. PROVIDE LOCKING CLEAR COVER IN PUBLIC AREAS.
- WORK IN OTHER TENANT AREAS TO BE DONE OUTSIDE OF BUSINESS HOURS. SUPERVISION BY RCMP APPROVED COMMISSIONAIRE REQUIRED.



KEY PLAN  
SCALE: 1:1000

Revision	Description	Date
5		
4		
3	For Construction	2018-06-11
2	99% Construction Documents Submission	2018-04-05
1	50% Construction Documents Submission	2018-01-25
0	Design Development Submission	2017-08-30

Client

PSPC/SPAC

SUITE 100-167 LOMBARD AVENUE  
WINNIPEG, MANITOBA

Project title

INTERIOR ALTERATIONS  
1091 PORTAGE AVENUE  
WINNIPEG, MANITOBA

SUITE 483  
RENOVATION & FIT UP

Designed by

DH

Drawn by

IS

Approved by

DH

PWSSC Project Manager

MARK ARROJADO

Drawing title

HVAC AND PIPING  
EXISTING/DEMOLITON PLAN

Project no.

R.076524.002

Drawing no.

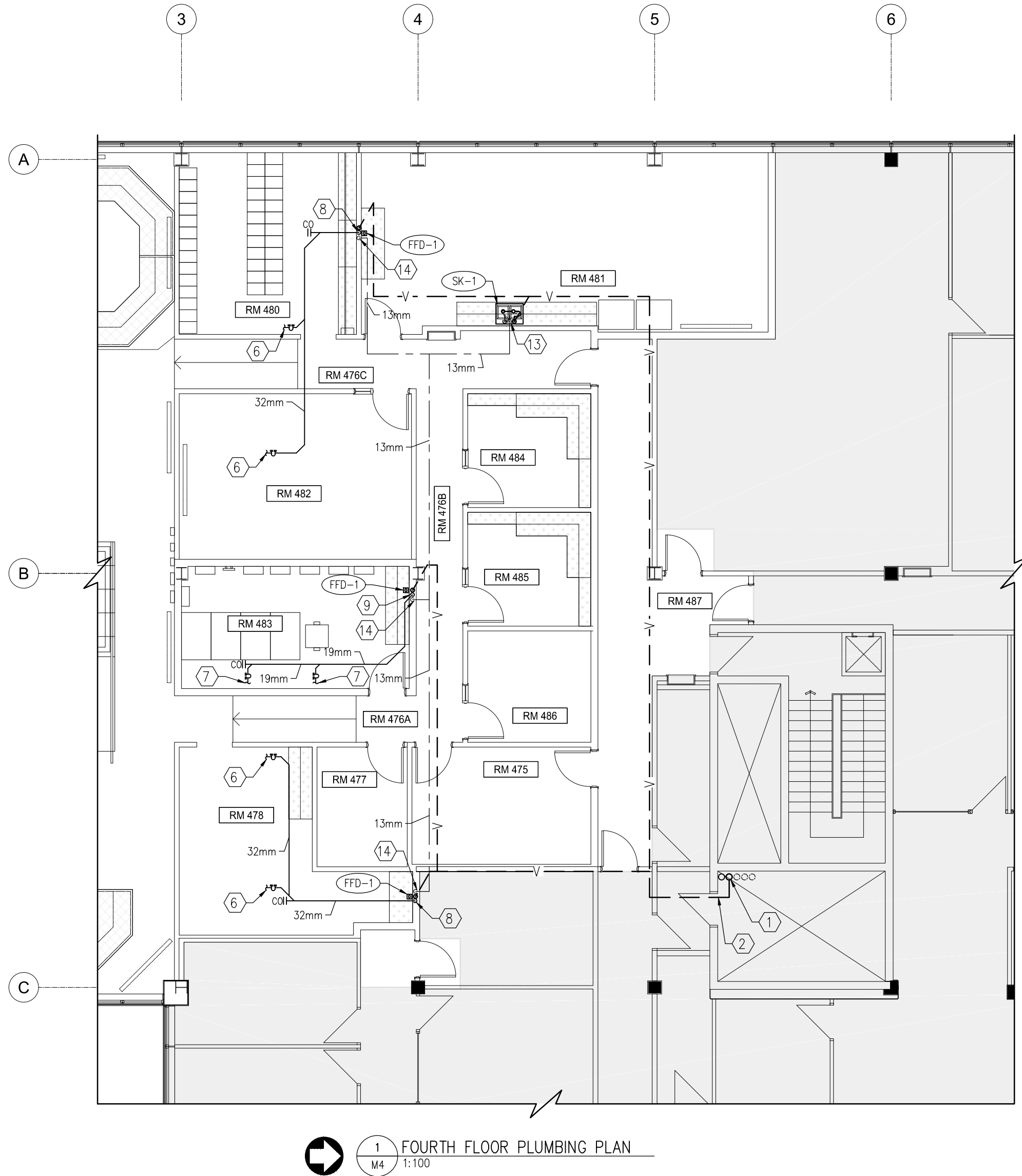
M3

Revision no.

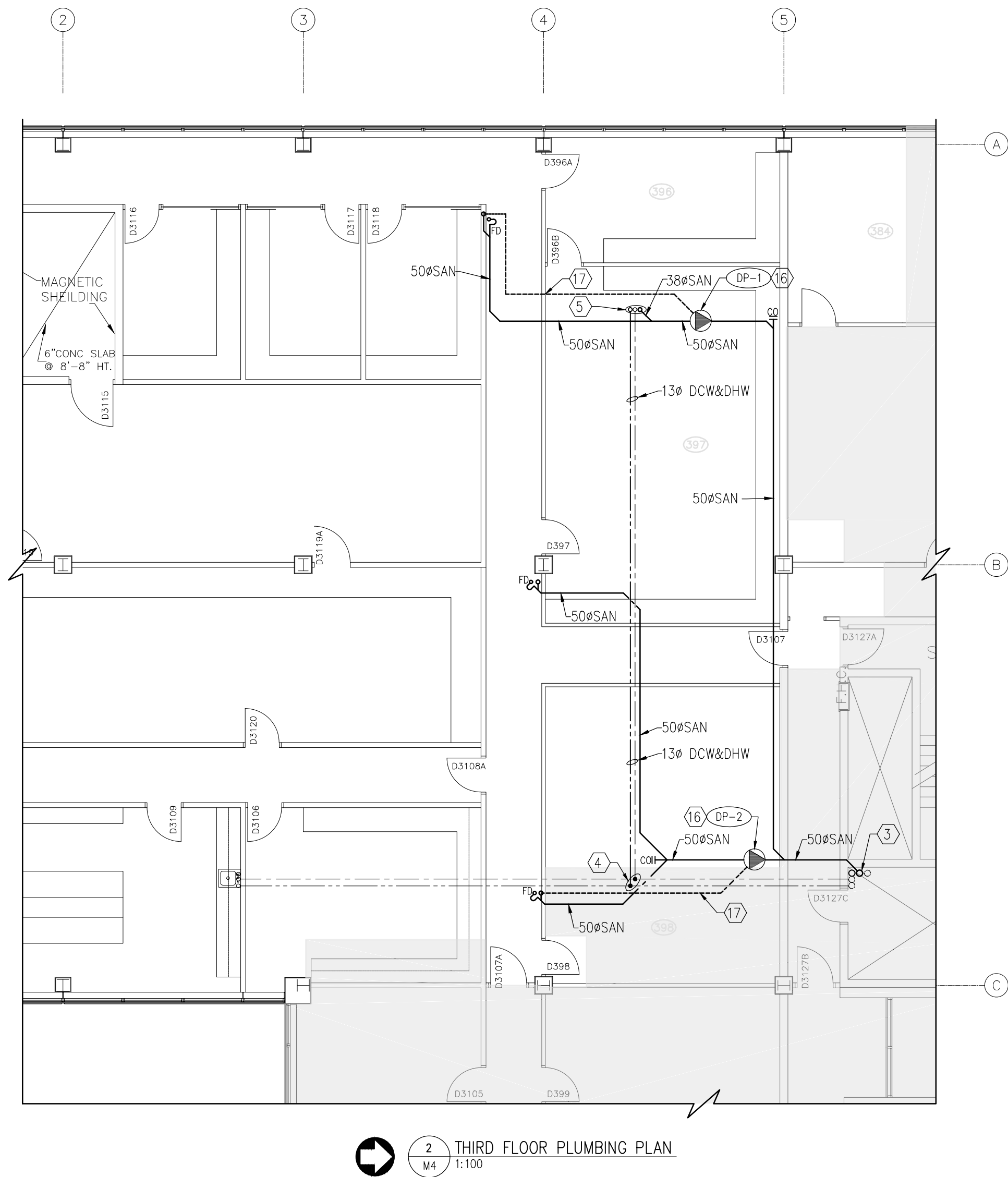
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OF 10

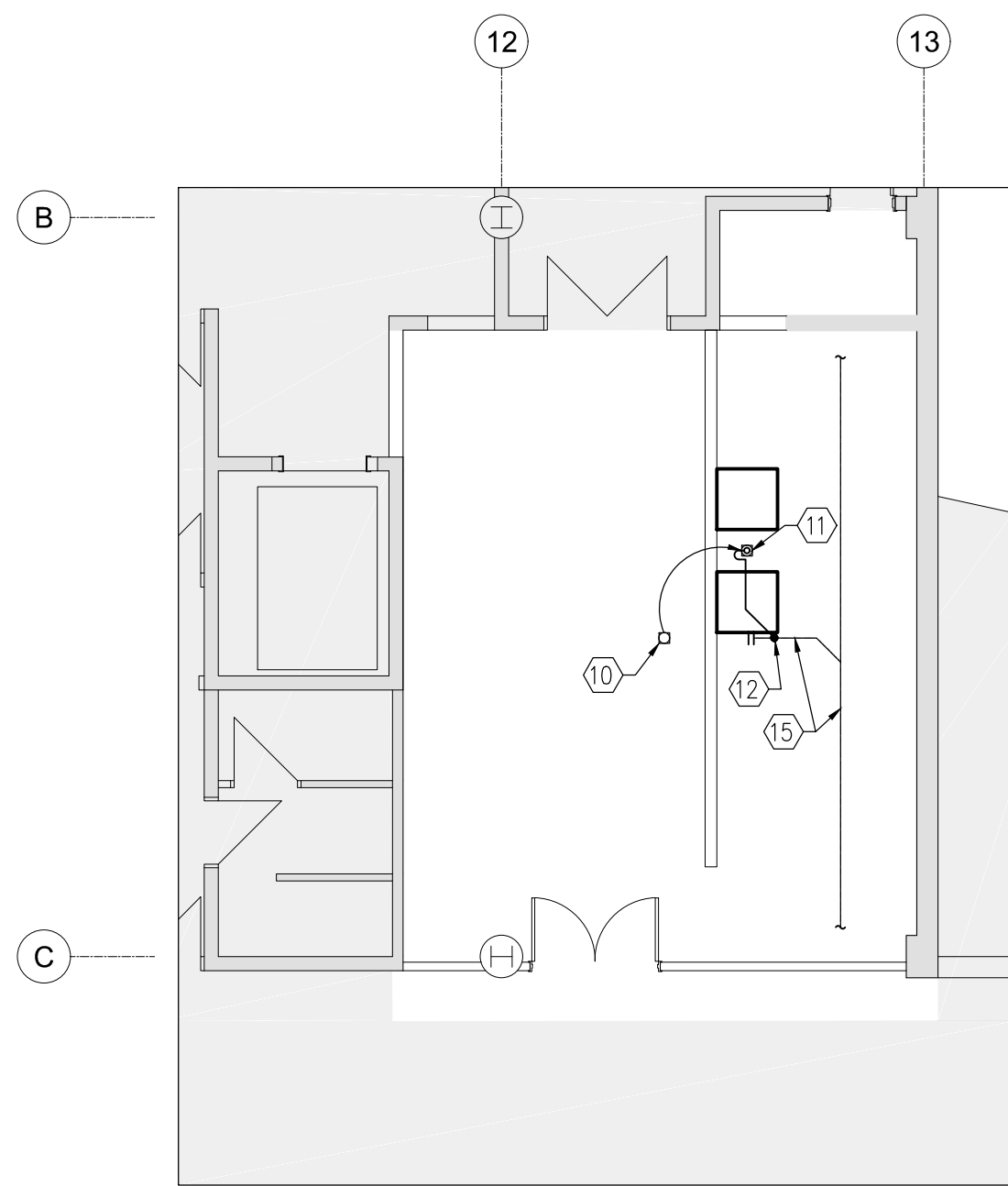




1  
M4  
1:100  
FOURTH FLOOR PLUMBING PLAN



2  
M4  
1:100  
THIRD FLOOR PLUMBING PLAN



3  
M4  
1:100  
ROOM B13 NEW PLUMBING PLAN

GENERAL NOTES:

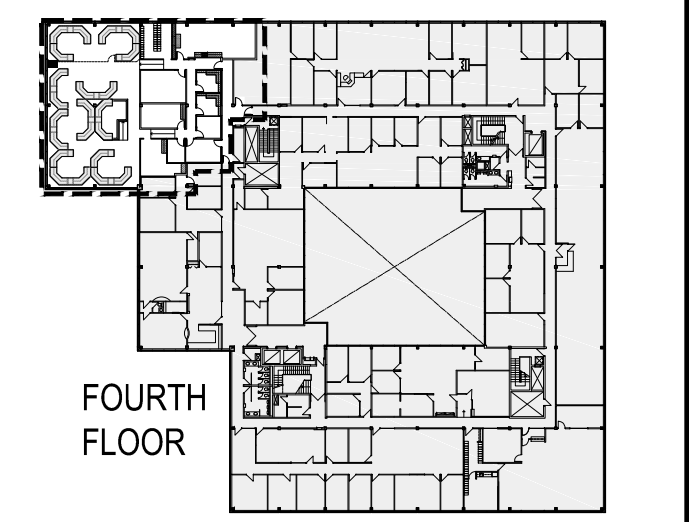
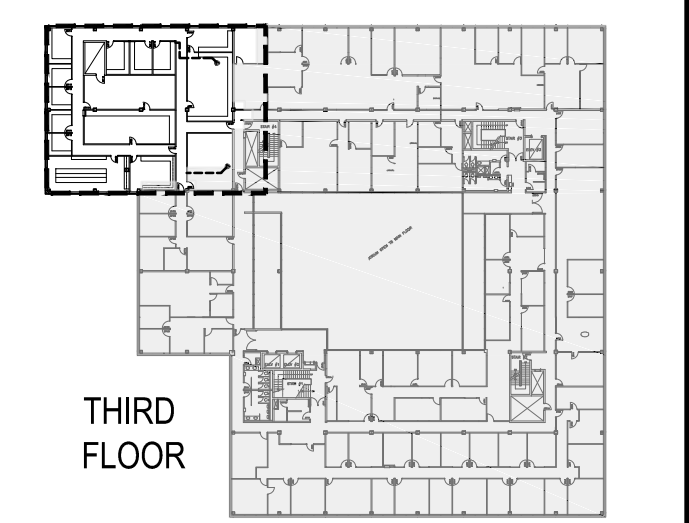
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- WORK IN OTHER TENANT AREAS TO BE DONE OUTSIDE OF BUSINESS HOURS. SUPERVISION BY RCMP APPROVED COMMISSIONAIRE REQUIRED.
- INTUMESCENT FIRE STOP SHALL BE PROVIDED TO DWV PLASTIC PIPING WHERE IT PENETRATES A FIRE SEPARATIONS.

DRAWING KEYNOTES:

- EXISTING 100mm $\varnothing$  SOIL STACK, 100mm $\varnothing$  RWL, 75mm $\varnothing$  VENT STACK, 53mm $\varnothing$  DCW AND 13mm $\varnothing$  DHW.
- TIE-IN NEW 38mm $\varnothing$  VENT TO EXISTING 75mm $\varnothing$  VENT STACK THIS LOCATION. CONFIRM EXACT LOCATION AND COORDINATE PIPE ROUTING ON SITE.
- TIE-IN NEW 75mm $\varnothing$  SANITARY TO EXISTING 100mm $\varnothing$  SANITARY STACK THIS LOCATION. CONFIRM EXACT LOCATION AND COORDINATE PIPE ROUTING ON SITE.
- CONNECT NEW 13mm $\varnothing$  AND 13mm $\varnothing$  DHW TO EXISTING DOMESTIC WATER SERVICES THIS LOCATION RESPECTIVELY. CONFIRM EXACT LOCATION AND COORDINATE PIPE ROUTING ON SITE.
- NEW 38mm $\varnothing$  SAN, 13mm $\varnothing$  DCW AND 13mm $\varnothing$  DHW FROM KITCHENETTE SINK ABOVE.
- NEW 32mm $\varnothing$  CONDENSATE DRAIN FROM FAN COIL UNIT IN CEILING SLAB C/W TRAP.
- NEW 19mm $\varnothing$  CONDENSATE DRAIN FROM WALL MOUNT AC UNIT C/W TRAP.
- PIPE 32mm $\varnothing$  CONDENSATE DRAIN THROUGH WALL AND TERMINATE INDIRECTLY TO FUNNEL FLOOR DRAIN.
- PIPE 19mm $\varnothing$  CONDENSATE DRAIN THROUGH WALL AND TERMINATE INDIRECTLY TO FUNNEL FLOOR DRAIN.
- EXISTING FLOOR DRAIN TO BE RELOCATED. CAP-OFF EXISTING DRAIN PIPE AND PREPARE FOR RECONNECTION.
- NEW LOCATION OF EXISTING FLOOR DRAIN.
- TIE-IN NEW DRAIN TO SIZE OF EXISTING AND CONNECT TO EXISTING DRAIN PIPE THIS LOCATION. CONTRACTOR TO CONFIRM EXACT LOCATION ON SITE AND COORDINATE PIPE ROUTING ON SITE.
- PIPE 13mm $\varnothing$  DCW C/W DOUBLE CHECK BACKFLOW PREVENTER INSTALLED UNDER-COUNTER AND PIPE TO HUMIDIFIERS.
- 13mm $\varnothing$  DCW PIPE DOWN THROUGH WALL AND CONNECT TO HUMIDIFIER.
- EXISTING BELOW SLAB 100mm $\varnothing$  SANITARY DRAIN. CONTRACTOR TO CONFIRM EXACT LOCATION.
- DRAIN PUMP IN CEILING SPACE TO BE SUSPENDED FROM STRUCTURE. COORDINATE INSTALLATION OF SUPPORT ON SITE. WIRING BY ELECTRICAL DIVISION.
- DRAIN PUMP VENT TIE-IN INTO FUNNEL FLOOR DRAIN VENT IN CEILING SPACE.

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KEY PLANS  
SCALE: 1:1000

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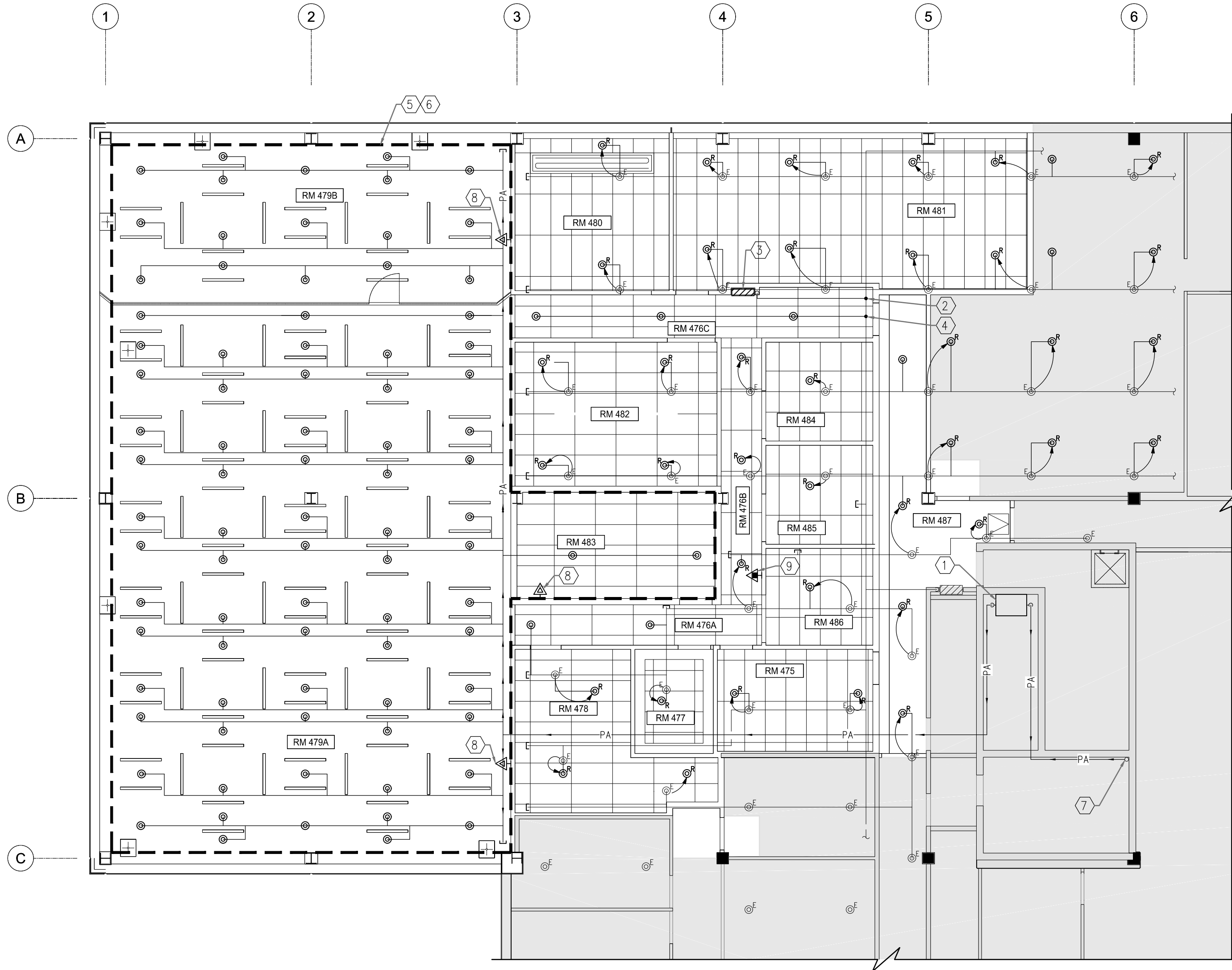
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PSPC/SPAC  
SUITE 100-167 LOMBARD AVENUE  
WINNIPEG, MANITOBA  
Project title  
INTERIOR ALTERATIONS  
1091 PORTAGE AVENUE  
WINNIPEG, MANITOBA  
SUITE 483  
RENOVATION & FIT UP

Designed by RR	Drawn by IS	Approved by DH	PWSSC Project Manager MARK ARROJADO	Drawing title ROOM B13, THIRD FLOOR AND FOURTH FLOOR NEW PLUMBING PLANS
Project no. R.076524.002	Drawing no. M4 OF 10	Revision no. 3		



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**1**  
M5  
FOURTH FLOOR NEW SPRINKLER SYSTEM PLAN  
1:100

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- INSTALL ALL MECHANICAL CONTROLS AT ACCESSIBLE HEIGHT, 1050mm (42") UNLESS OTHERWISE DIRECTED BY THE ARCHITECT. PROVIDE LOCKING CLEAR COVER IN PUBLIC AREAS.
- WORK IN OTHER TENANT AREAS TO BE DONE OUTSIDE OF BUSINESS HOURS. SUPERVISION BY RCMP APPROVED COMMISSIONAIRE REQUIRED.
- CONTRACTOR TO CONFIRM FINAL LOCATION OF SPRINKLER HEADS IN RELATION TO THE CEILING AND COORDINATE LAYOUT WITH ARCHITECT. PROVIDE ADDITIONAL SPRINKLER HEADS AS REQUIRED TO SUIT SPRINKLER COVERAGE AND RENOVATION.
- INTUMESCENT FIRE STOP SHALL BE PROVIDED TO DWV PLASTIC PIPING WHERE IT PENETRATES A FIRE SEPARATIONS.

**# DRAWING KEYNOTES:**

- PROVIDE NEW SELF-CONTAINED DOUBLE INTERLOCK PRE-ACTION VALVE C/W TRIM AND COMPRESSOR TO SERVE RM479A, RM479B AND RM483 PRE-ACTION SPRINKLER SYSTEM ZONE. ELECTRICAL DIVISION TO PROVIDE WIRING FOR CONTROL VALVE TAMPER SWITCH, ALARM PRESSURE SWITCH AND AIR SUPERVISORY SWITCH.
- TIE-IN NEW 65mmØ STANDPIPE FROM EXISTING SPRINKLER MAIN THIS LOCATION TO SUPPLY NEW LOCATION OF FIRE HOSE CABINET. CONFIRM EXACT LOCATION AND COORDINATE PIPE ROUTING ON SITE.
- NEW LOCATION OF FIRE HOSE CABINET.
- TIE-IN NEW SPRINKLER LINE TO EXISTING SPRINKLER MAIN THIS LOCATION TO SERVE NEW SPRINKLER HEADS. CONFIRM EXACT LOCATION AND COORDINATE PIPE ROUTING ON SITE.
- CLEARANCE OF ALL SPRINKLER HEADS IN RM479A & RM479B SHALL BE INSTALLED NOT MORE THAN 550mm (22") BELOW THE UNDERSIDE OF THE CEILING/SLAB FROM THE SPRINKLER HEAD DEFLECTOR.
- OUTLINE OF PRE-ACTION SPRINKLER SYSTEM ZONE.
- CONNECT NEW PRE-ACTION SPRINKLER MAIN EXISTING STANDPIPE RISER THIS LOCATION. COORDINATE NEW AND EXISTING PIPE ROUTING TO SUIT NEW CONNECTION.
- PROVIDE 9.5 lb (4.3 kg) FE-36 CLEAN AGENT FIRE EXTINGUISHER. COORDINATE MOUNTING TYPE WITH ARCHITECTURAL.
- PROVIDE 10 lb (4.5 kg) ABC TYPE DRY CHEMICAL FIRE EXTINGUISHER. COORDINATE MOUNTING TYPE WITH ARCHITECTURAL.

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FOURTH FLOOR

KEY PLAN

SCALE: 1:1000

5		
4		
3	For Construction	2018-06-11
2	99% Construction Documents Submission	2018-04-05
1	50% Construction Documents Submission	2018-01-25
0	Design Development Submission	2017-08-30
Revision	Description	Date

Client

**PSPC/SPAC**

SUITE 100-167 LOMBARD AVENUE  
WINNIPEG, MANITOBA

Project title

**INTERIOR ALTERATIONS  
1091 PORTAGE AVENUE  
WINNIPEG, MANITOBA**

**SUITE 483  
RENOVATION & FIT UP**

Designed by  
**RR**

Drawn by  
**RR/JS**

Approved by  
**DH**

PWSSC Project Manager  
**MARK ARROJADO**

Drawing title

**FOURTH FLOOR  
NEW SPRINKLER SYSTEM PLAN**

Project no.	Drawing no.	Revision no.
<b>R.076524.002</b>	<b>M5</b>	<b>3</b>
	OF 10	

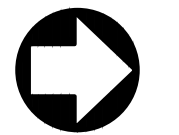
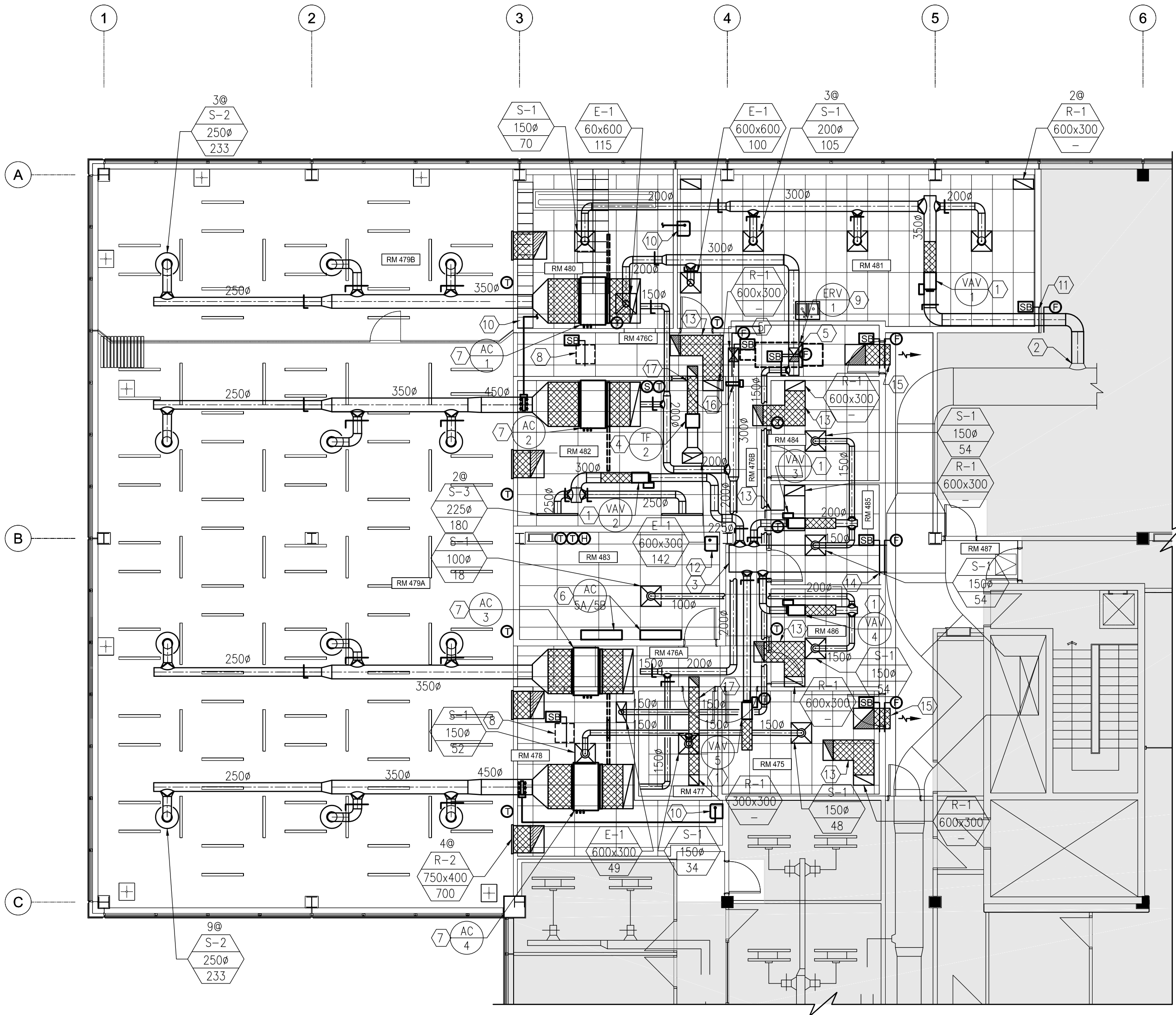


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No. 5539 Date: 04/30/2019





1 FOURTH FLOOR NEW HVAC LAYOUT  
M6 1:100

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  - WORK IN OTHER TENANT AREAS TO BE DONE OUTSIDE OF BUSINESS HOURS. SUPERVISION BY RCMP APPROVED COMMISSIONAIRE REQUIRED.
- DRAWING KEYNOTES:**
- PROVIDE NEW VAV BOX. PROVIDE NEW CONTROLLER, ACTUATOR, AND THERMOSTAT FOR CONTROL OF VAV AND ZONE PERIMETER HEATING.
  - MODIFY EXISTING DUCTWORK AND PROVIDE NEW DUCTWORK AND DIFFUSERS AS SHOWN TO SUPPLY AIR TO KITCHENETTE AND LOCKER AREA. PROVIDE FIRE DAMPER AND SECURE BARS IN PENETRATION THROUGH DEMISING WALL.
  - EXTEND EXISTING SUPPLY MAIN INTO AREA OF RENOVATION AS SHOW, SAME SIZE AS EXISTING.
  - PROVIDE TRANSFER FAN, TF-1, WITH SPEED CONTROLLER IN ACCORDANCE WITH WORKPLACE 2.0
  - ERV INTAKE AND EXHAUST THROUGH ROOF WITH SECURITY BARS.
  - 3-TON WALL MOUNTED AC UNITS FOR SERVER ROOM WITH YEAR ROUND COOLING.
  - NEW 3.5-TON DUCTED FAN COIL. PROVIDE ELECTRODE HUMIDIFIER, ONE UNIT FOR AC-1 AND FOR AC-4. ESTIMATED SIZE TO BE 5 LB/HR, PER UNIT. ALL FAN COILS TO RUN CONTINUOUSLY.
  - ROOF CURB ENTRY THROUGH ROOF FOR REFRIGERANT LINES, CONTROLS AND POWER TO CONDENSING UNITS ON ROOF ABOVE WITH SECURITY BARS.
  - OUTLINE OF NEW 264 L/S (560 CFM) ROOF MOUNTED ERV UNIT ABOVE. DUCT INTAKE AND DISCHARGE THROUGH ROOF. DUCT SUPPLY AIR TO EACH FAN COIL AND DUCT EXHAUST TO LOCKER, KITCHEN AND SHARED EQUIPMENT AREA. PROVIDE PRE AND POST HEATERS AS PER SCHEDULES.
  - NEW 5 LB/HR HUMIDIFIER, WALL MOUNTED WITHIN ARCHITECTURAL MILLWORK.
  - PROVIDE SECURITY BARS IN DUCTWORK CROSSING SECURE WALLS, TYPICAL FOR ALL.
  - SERVER ROOM HUMIDIFIER, H-3 WITH BLOWER PACK AND ROOM HUMIDISTAT.
  - PROVIDE 600X200 RATED CROSS TALK SILENCER TO MEET STC REQUIREMENTS OF ROOM. SILENCER TO TURN HORIZONTALLY AND ALSO UP VERTICALLY TO MINIMIZE DIMENSIONS. REFER TO ARCHITECTURAL PLANS FOR RATING REQUIREMENT.
  - INSTALL NEW FIRE DAMPER AND SECURITY BAR IN EXISTING SUPPLY AIR DUCT.
  - NEW 600X300 RATED ACOUSTIC AIR TRANSFER BACK TO MAIN CORRIDOR. PROVIDE FIRE DAMPER AND SECURITY BAR.
  - NEW 7KW ERV POST HEATER.
  - PROVIDE 150X150 RATED CROSS TALK SILENCER TO MEET STC REQUIREMENTS OF ROOM. SILENCER TO TURN HORIZONTALLY AND ALSO UP VERTICALLY TO MINIMIZE DIMENSIONS. REFER TO ARCHITECTURAL PLANS FOR RATING REQUIREMENT.



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**FOURTH FLOOR**

**KEY PLAN**  
SCALE: 1:1000

5		
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3	For Construction	2018-06-08
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Revision	Description	Date

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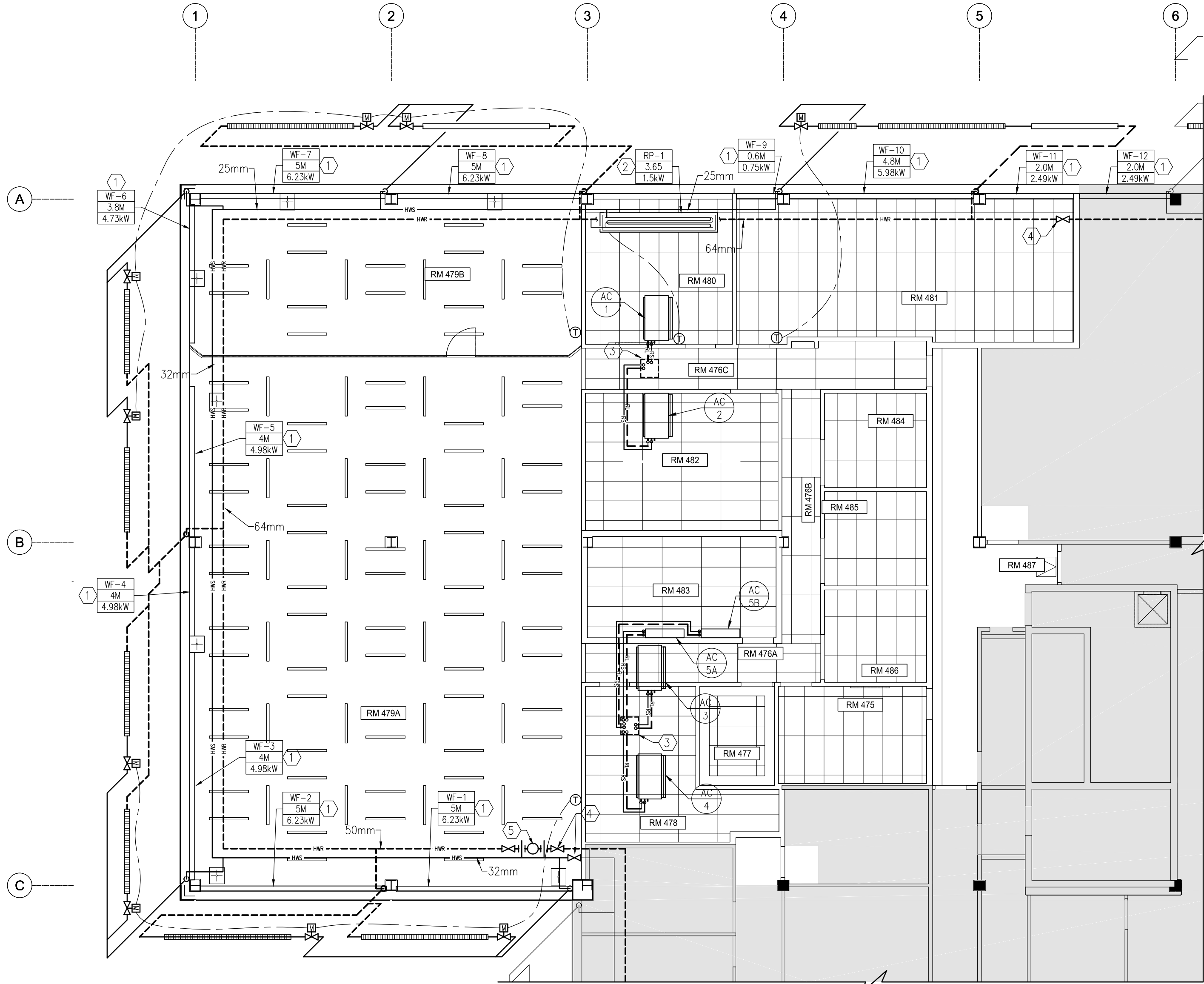
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**INTERIOR ALTERATIONS  
1091 PORTAGE AVENUE  
WINNIPEG, MANITOBA**

**SUITE 483  
RENOVATION & FIT UP**

Designed by DH		
Drawn by DH/IS		
Approved by DH		
PWGSC Project Manager MARK ARROJADO		
Drawing title  NEW HVAC LAYOUT		
Project no.  R.076524.002	Drawing no.  M6  OF 10	Revision no.  3





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- # DRAWING KEYNOTES:**
- PROVIDE NEW PERIMETER RADIATION INCLUDE NEW FINNED ELEMENTS, COVERS, ISOLATION/BALANCING VALVES AND CONTROL VALVES. REFER TO WALL FIN DETAIL.
  - PROVIDE NEW RADIANT PANEL INCLUDE ISOLATION/BALANCING VALVES AND CONTROL VALVES. PROVIDE 25 MM FOIL FACED BATT INSULATION ABOVE RADIANT PANEL. REFER TO RADIANT PANEL DETAIL.
  - REFRIGERANT LINES FROM AC UNITS, UP THROUGH ROOF TO CONDENSING UNITS.
  - NEW ISOLATION VALVES FOR SPACE
  - NEW AIR AND DIRT SEPARATOR WITH ISOLATION VALVES AND UNIONS ON EITHER SIDE.

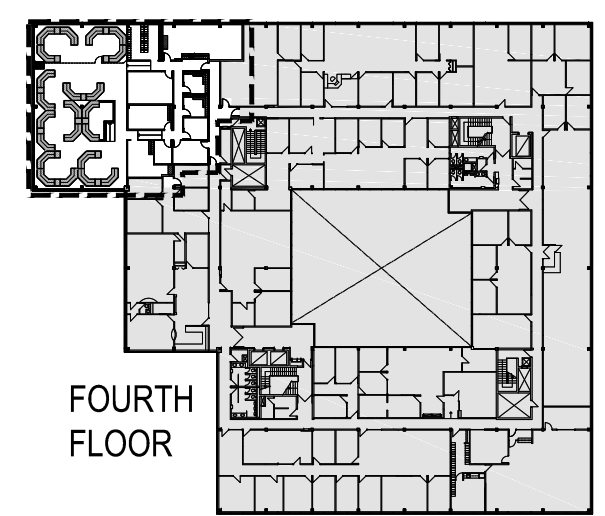
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Designed by  
DH

Drawn by  
IS

Approved by  
DH

PWSSC Project Manager  
MARK ARROJADO

Drawing title

NEW HVAC PIPING LAYOUT

Project no.  
R.076524.002

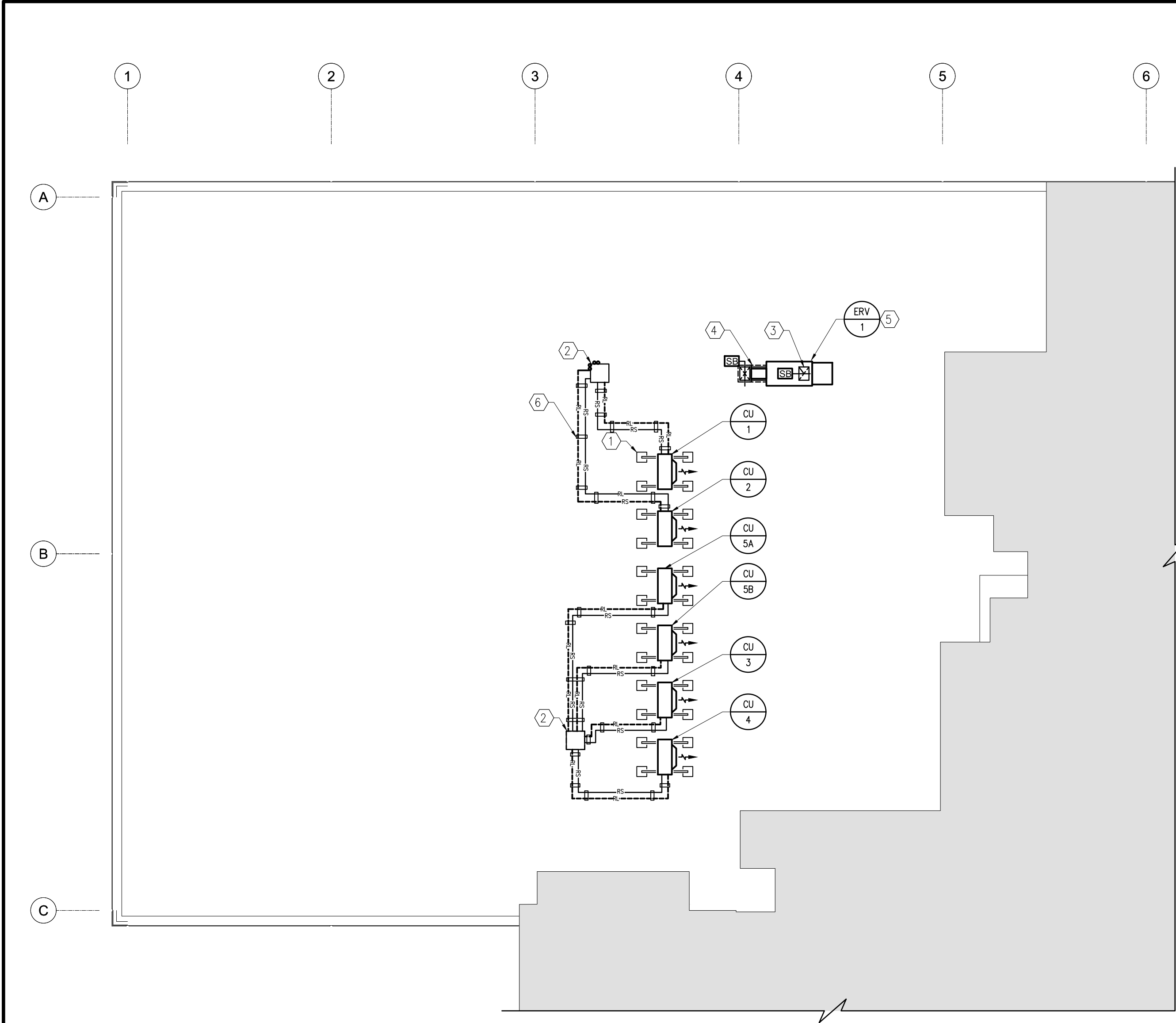
Drawing no.  
M7  
OF 10

Revision no.  
3



Certificate of Authorization  
HDK Consulting Incorporated  
No. 5539 Date: 04/30/2019





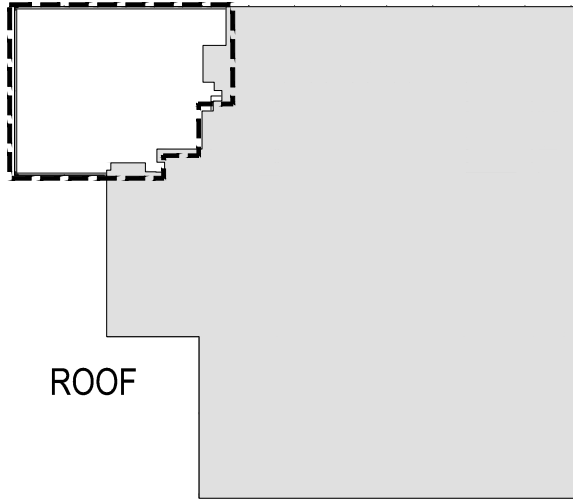
➡ 1 NEW HVAC ROOF PLAN  
M8 / 1:100

GENERAL NOTES:

- DO NOT SCALE THIS DRAWING, CONTRACTOR SHALL VERIFY ALL DIMENSIONS PRIOR TO INSTALLATION AND REPORT ANY DISCREPANCY TO THE CONSULTANT.
- THE DRAWING ONLY SHOWS A GENERAL SCHEMATIC OF NEW SYSTEMS. ROUTING OF DUCTWORK AND UNITS LOCATIONS SHALL SUIT SITE CONDITIONS AND MAY HAVE TO BE CHANGED TO AVOID CONFLICTS WITH STRUCTURE, DUCTS AND PIPES. WHEN CONFLICT CANNOT BE AVOIDED, THE DUCTWORK SHALL BE MODIFIED AS REQUIRED.
- CONTRACTOR SHALL INCLUDE FOR AND PROVIDE ALL COORDINATION BETWEEN TRADES AND CONSULTANT ON AND OFF SITE AS REQUIRED FOR INSTALLATION OF MECHANICAL AND ELECTRICAL SYSTEMS, WHERE MINOR REROUTING OF DUCTWORK OR SERVICES IS REQUIRED DUE TO ONSITE CONDITIONS, IT SHALL BE PERFORMED AT NO ADDITIONAL COST.
- CONFORM TO SPECIFICATIONS AND MANUFACTURER GUIDES FOR MATERIALS AND UNITS' INSTALLATION DETAILS.
- INSTALL ALL MECHANICAL CONTROLS AT ACCESSIBLE HEIGHT, 1050mm (42") UNLESS OTHERWISE DIRECTED BY THE ARCHITECT. PROVIDE LOCKING CLEAR COVER IN PUBLIC AREAS.
- WORK IN OTHER TENANT AREAS TO BE DONE OUTSIDE OF BUSINESS HOURS. SUPERVISION BY RCMP APPROVED COMMISSIONAIRE REQUIRED.

➡ DRAWING KEYNOTES:

- NEW CONDENSING UNITS ON RAISED STAND, TYPICAL OF 6. BY MECHANICAL CONTRACTOR.
- NEW ROOF CURB ENTRY FOR REFRIGERANT, POWER AND CONTROLS, TYPICAL OF 3.
- ERV-1 EXHAUST DUCT DOWN THROUGH ROOF. GOOSENECK
- ERV-1 SUPPLY DUCT DOWN THROUGH ROOF. INSULATE AND PROVIDE WEATHER PROOF JACKET FOR EXPOSED DUCTWORK.
- NEW ROOF TOP ERV-1.
- MANUFACTURED PIPING SUPPORT SYSTEM, NON-PENETRATING MADE FROM RECYCLED RUBBER WITH INTEGRAL EXTRUDED CHANNEL, TYPICAL.



KEY PLAN

SCALE: 1:1000

5		
4		
3	For Construction	2018-06-11
2	99% Construction Documents Submission	2018-04-05
1	50% Construction Documents Submission	2018-01-25
0	Design Development Submission	2017-08-30
Revision	Description	Date

Client

PSPC/SPAC

SUITE 100-167 LOMBARD AVENUE  
WINNIPEG, MANITOBA

Project title

INTERIOR ALTERATIONS  
1091 PORTAGE AVENUE  
WINNIPEG, MANITOBA

SUITE 483  
RENOVATION & FIT UP

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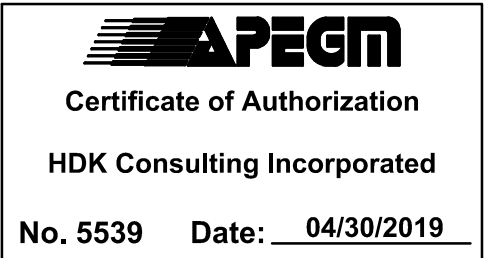
Drawing no.

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3





PLUMBING FIXTURE SCHEDULE		
Label	Fixture	Specification
SK-1	Double Compartment Sink	FRANKE COMMERCIAL LBD4408P-1 DOUBLE BOWL COUNTERTOP MOUNT SINK, 478mm (18-13/16") x 794mm (31-1/4") x 200mm (8") DEEP, COUNTER MOUNTED, WITH FAUCET LEDGE, MOUNTING KIT PROVIDED, FULLY UNDERCOATED TO REDUCE CONDENSATION AND RESONANCE, FACTORY APPLIED RIM SEAL. KOHLER SIMPLICE K-596 PULL-DOWN SINK FAUCET GOOSNECK SPOUT, DECK MOUNTED, CHROME PLATED SOLID CAST BRASS LEAD-FREE BODY, SINGLE LEVER, CERAMIC DISC VALVE CARTRIDGES, WITH PRESSURE COMPENSATING 5.7 LPM (1.5GPM) AERATOR OUTLET. OPEN GRID DRAIN, CHROME PLATED CAST BRASS ONE PIECE TOP, 17 GA. (1.5mm) TUBULAR 32mm (1-1/4") TAILPIECE, FAUCET SUPPLIES, CHROME PLATED POLISHED BRASS, HEAVY DUTY ANGLE STOPS, 10mm (3/8") I.P.S. INLET x 76mm (3") LONG RIGID HORIZONTAL NIPPLES, V.P. LOOSE KEYS, ESCUTCHEONS AND FLEXIBLE COPPER RISER. P-TRAP, HEAVY CAST BRASS ADJUSTABLE BODY, WITH SLIP NUT, 32mm (1-1/4") SIZE, SHALLOW WALL FLANGE AND SEAMLESS TUBULAR WALL BEND. KOHLER, ELKAY AND KINDRED.
DP-1 & DP-2	Drain Pump	LIBERTY 405/A COMMERCIAL DRAIN PUMP, PRE-ASSEMBLE SYSTEM, FULLY AUTOMATIC OPERATION, CORROSION RESISTANT POLYOLEFIN BASIN WITH INTEGRAL MOLDED RUBBER GASKET, STANDARD ALARM C/W FACTORY MOUNTED ALARM FLOAT, HANDLE HOT WATER AND GREASE BUILD-UP. DISCHARGE FLOW RATE OF 20GPM (76LPM) AT 20' (60 kPa). MAXIMUM TEMPERATURE OF 180°F (82°C). ACCEPTABLE MANUFACTURERS ARE LITTLE GIANT AND GRUNDFOS.
FFD-1	FUNNEL FLOOR DRAIN	ZURN ZN-211-BE FUNNEL FLOOR DRAIN DURA-COATED CAST IRON BODY WITH 51mm BOTTOM OUTLET, ADJUSTABLE POLISHED NICKEL BRONZE ROUND STRAINER WITH SECURES OPEN THROAT OVAL FUNNEL. ACCEPTABLE MANUFACTURERS ARE WADE, J.R.SMITH AND MIFAB.

DIFFUSER AND GRILLE SCHEDULE (Based on E. H. PRICE)

TAG	MODEL	FINISH	REMARKS
S-1	24x24" SPD SQUARE PLAQUE DIFFUSER	WHITE	REFER TO DRAWING FOR NECK SIZES
S-2	RPD SQUARE PLAQUE DIFFUSER	PRIMER	REFER TO DRAWING FOR NECK SIZES
S-3	SDS/SDBI LINEAR DIFFUSER WITH INSULATED PLENUM, 1.5" SLOT WIDTH AND 4 SLOTS	WHITE	
R-1	80 SERIES RETURN GRILLE	WHITE	REFER TO DRAWING FOR FACE SIZE
R-2	510 LOUVRER RETURN GRILLE	WHITE	REFER TO DRAWING FOR FACE SIZE
NOTES: 1. SELECT BORDER AND MOUNTING STYLE TO SUIT SURFACE BEING INSTALLED ON. ACCEPTABLE MANUFACTURERS: EH PRICE, NAILOR, TITUS			

ELECTRIC STEAM HUMIDIFIER SCHEDULE

TAG	SERVES	HUMIDIFIER DATA			NOTES
		MAXIMUM Kw	STEAM OUTPUT (kg/h)	(lb./h)	
H-1	RM 479A	1.9	2.3	5	1, 2, 3, 5, 6
H-2	RM 479B	1.9	2.3	5	1, 2, 3, 5, 6
H-3	RM 483	1.9	2.3	5	4, 5
NOTES:  1. PROVIDE SHORT ABSORPTION MANIFOLD, ONE AC-1 AND ONE IN AC-3 2. PROVIDE MODULATING CONTROLS WITH HIGH LIMIT SENSOR, AIR FLOW PROVING SWITCH, ONE PER FANCOIL 3. PROVIDE RETURN AIR DUCT RELATIVE HUMIDITY SENSOR. 4. PROVIDE BLOWER PACK AND ROOM HUMIDISTAT 5. PROVIDE 5 MICRO METER FILTER ON WATER INLET AND SHUT OFF VALVE ON BOTH SIDES OF FILTER FOR ISOLATION. 6. SIZE ALL LINES AS PER MANUFACTURERS INSTRUCTIONS. PROVIDE 25 MM INSULATION ON STEAM SUPPLY LINE.					

VAV TERMINAL UNIT SCHEDULE

TAG	AREA SERVED	UNIT SIZE	AIRFLOW RATE				ATTENUJATOR		S.P.D.	
			MAXIMUM	MINIMUM	LENGTH		AT MAX. A.F.R.			
			(L/s)	(CFM)	(L/s)	(CFM)	(mm)	(in.)	(Pa)	(in.WC)
VAV-1	RM 481, RM 480	10	385	816	96	204	914	36	25	0.10
VAV-2	RM 482	9	360	763	90	191	914	36	25	0.10
VAV-3	RM 484, RM 485	5	108	229	27	57	914	36	25	0.10
VAV-4	RM 486	4	72	153	18	38	914	36	25	0.10
VAV-5	RM 475, RM 477, RM 478	5	118	250	30	63	914	36	25	0.10
NOTES: Acceptable Manufacturers: EH Price, Nailor, Titus										

DIRECT EXPANSION FAN COIL SCHEDULE

TAG	MANUFACTURER	MODEL (INDOOR/OUTDOOR)	FAN PERFORMANCE							
			AIR FLOW RATE		E.S.P.		MOTOR		NOMINAL COOLING	
			(L/s)	(CFM)	(Pa)	(in.WC)	(W)	(HP)	(kW)	(MBH)
AC-1 / CU-1	MITSUBISHI	PEAD-A42AA7 / PUY-A42NKA7	700	1483	0	0.25	74	FRAC	12.3	42.0
AC-2 / CU-2	MITSUBISHI	PEAD-A42AA7 / PUY-A42NKA7	700	1483	0	0.25	74	FRAC	12.3	42.0
AC-3 / CU-3	MITSUBISHI	PEAD-A42AA7 / PUY-A42NKA7	700	1483	0	0.25	74	FRAC	12.3	42.0
AC-4 / CU-4	MITSUBISHI	PEAD-A42AA7 / PUY-A42NKA7	700	1483	0	0.25	74	FRAC	12.3	42.0
AC-5A / CU-5A	MITSUBISHI	PKA-A36KA4 / PUY-A36NHA4	434	920	-	-	50	FRAC	10.5	36.0
AC-5B / CU-5B	MITSUBISHI	PKA-A36KA4 / PUY-A36NHA4	434	920	-	-	50	FRAC	10.5	36.0
AC-6A / CU-6A	LIEBERT	PX023 / MCM040	1,699	3,600	-	-	-	-	22.9	78.0
AC-6B / CU-6B	LIEBERT	PX023 / MCM040	1,699	3,600	-	-	-	-	22.9	78.0
NOTES: 1. PROVIDE YEAR ROUND COOLING CAPABILITY (-40 C) 2. SUPPORT OUTDOOR UNIT AND ALL PIPING AND SERVICES ON RECYCLED RUBBER C-BLOCK ROOF SUPPORTS WITH EXTRUDED CHANNEL SUPPORT. 3. PROVIDE REFRIGERANT PIPING, SIZED AS PER MANUFACTURERS RECOMMENDATION WITH INSULATION AND JACKET. 4. PROVIDE CONDENSATE PUMP AND PIPE DISCHARGE TO NEAREST DRAIN. 5. PROVIDE MANUFACTURERS CENTRAL CONTROLLER WITH BACNET INTERFACE. INTEGRATE WITH BUILDING AUTOMATION SYSTEM AND UPDATE ALL GRAPHICS ON OPERATORS WORK STATION. 6. AC-6A/B: UPFLOW WITH FRONT RETURN, TWO STAGE 12 kW ELECTRIC REHEAT, ECM PLUG FANS, DIGITAL SCROLL COMPRESSORS, DUAL FLOAT CONDENSATE PUMPS.  ACCEPTABLE MANUFACTURERS (AC-1 THROUGH 5): MITSUBISHI, DAIKIN, LG ACCEPTABLE MANUFACTURERS (AC-6): LIEBERT, APC										

WALLFIN CONVECTOR SCHEDULE (Based on Rosemex)

TAG	MANUFACTURER	MODEL	TUBE		ELEMENT		ROWS	LENGTH		ENCLOSURE		WATER SIDE				HEATING OUTPUT		
			MATERIAL	DIAMETER (mm) (in.)	MATERIAL TYPE	FINS PER		(m)	(ft)	HEIGHT (mm) (in.)	ENT. TEMP. ( C ) ( F )	LVG. TEMP. ( C ) ( F )	FLOW RATE (GPM)	(kW/m)	(BTU/H-ft)	(kW)		
						(m)											(ft)	
WF-1	Rosemex	RVT	COPPER	19 0.75	ALUMINUM	171 52	1	5.0	16.4	610 24	82.2 180.0	71.1 160.0	2.1	1.25	1295	6.23		
WF-2	Rosemex	RVT	COPPER	19 0.75	ALUMINUM	171 52	1	5.0	16.4	610 24	82.2 180.0	71.1 160.0	2.1	1.25	1295	6.23		
WF-3	Rosemex	RVT	COPPER	19 0.75	ALUMINUM	171 52	1	4.0	13.1	610 24	82.2 180.0	71.1 160.0	1.7	1.25	1295	4.98		
WF-4	Rosemex	RVT	COPPER	19 0.75	ALUMINUM	171 52	1	4.0	13.1	610 24	82.2 180.0	71.1 160.0	1.7	1.25	1295	4.98		
WF-5	Rosemex	RVT	COPPER	19 0.75	ALUMINUM	171 52	1	4.0	13.1	610 24	82.2 180.0	71.1 160.0	1.7	1.25	1295	4.98		
WF-6	Rosemex	RVT	COPPER	19 0.75	ALUMINUM	171 52	1	3.8	12.5	610 24	82.2 180.0	71.1 160.0	1.6	1.25	1295	4.73		
WF-7	Rosemex	RVT	COPPER	19 0.75	ALUMINUM	171 52	1	5.0	16.4	610 24	82.2 180.0	71.1 160.0	2.1	1.25	1295	6.23		
WF-8	Rosemex	RVT	COPPER	19 0.75	ALUMINUM	171 52	1	5.0	16.4	610 24	82.2 180.0	71.1 160.0	2.1	1.25	1295	6.23		
WF-9	Rosemex	RVT	COPPER	19 0.75	ALUMINUM	171 52	1	0.6	2.0	610 24	82.2 180.0	71.1 160.0	0.3	1.25	1295	0.75		
WF-10	Rosemex	RVT	COPPER	19 0.75	ALUMINUM	171 52	1	4.8	15.7	610 24	82.2 180.0	71.1 160.0	2.0	1.25	1295	5.98		
WF-11	Rosemex	RVT	COPPER	19 0.75	ALUMINUM	171 52	1	2.0	6.6	610 24	82.2 180.0	71.1 160.0	0.8	1.25	1295	2.49		
WF-12	Rosemex	RVT	COPPER	19 0.75	ALUMINUM	171 52	1	2.0	6.6	610 24	82.2 180.0	71.1 160.0	0.8	1.25	1295	2.49		
NOTES:																		
1. HEATING OUTPUT BASED ON WATER AT 0.9 m/s (3.0 FPS) VELOCITY AND 18 C (65 F) ENTERING AIR TEMPERATURE.																		
2. PROVIDE 25 mm (1") HWS AND HWR PIPING TO EACH HEATER																		
3. BASED ON 100% WATER, 4"X4" ELEMENT																		
4. PROVIDE "WALL TO WALL" ENCLOSURE OF LENGTHS AS SHOWN ON DRAWINGS AND IN ARCHITECTURAL DETAILS. SITE VERIFY ALL DIMENSIONS																		
5. PROVIDE ACCESS DOORS, END COVERS, AND JOINERS AS REQUIRED FOR A FINISHED LOOK.																		
6. PROVIDE MANUFACTURERS SUPPORT SYSTEM AND COORDINATE WITH WALL FRAMING AND STRUTURE.																		
ACCEPTABLE MANUFACTURERS: ROSEMEX, SIGMA, ENGINEERED AIR, TRANE																		

FAN SCHEDULE

TAG	MANUFACTURER	TYPE	MODEL	RPM	AIR FLOW RATE		E.S.P.		MOTOR		SONES	ACCESSORIES
					(L/s)	(CFM)	(Pa)	(in.WC)	(W)	(HP)		
TF-1	GREENHECK	I	CSP-A290	1,050	142	300	25	0.10	98	FRAC	1.2	SC, SH, DS
FAN TYPES:  C CENTRIFUGAL TA TUBE AXIAL  R ROOF W WALL  I IN-LINE MF MIXED FLOW  CE CEILING EXHAUST P PROPELLER  CU CENTRIFUGAL UP BLAST CF CEILING FAN												
ABBREVIATIONS:  BG BELT GUARD AS ADJUSTABLE SHEAVES SC SOLID STATE SPEED CONTROL IG INLET GRILLE BD BACKDRAFT DAMPER F FILTER E EPOXY COATING IH INLET HOOD  MT MANUAL RESET TIMER NSW NON-SPARKING WHEEL SH SPRING HANGERS VP VIBRATION PADS SM SPRING MOUNT WC WALL CAP DS DISCONNECT SWITCH MDW MOTION DETECTOR, WALL MTD.  SD SCROLL DRAIN FC FACTORY CURB BS BIRDSCREEN MC MOUNTING COLLAR WH WEATHERPROOF HOUSING RC ROOF CAP AD ACCESS DOOR GN GOOSENECK												
NOTES: Acceptable Manufacturers: Greenheck, Loren Cook, Twin Cities.												

RADIANT CEILING PANEL SCHEDULE (BASED ON AIRTEX)

ROOM	TAG	MODEL	PANEL WIDTH (FT)	AVG. FLUID TEMP. (F)	TEMP. DIFF. (dT) (F)	OUTPUT		TOTAL LENGTH (FT)	TOTAL WATER FLOW (GPM)	FLOW PER TUBE (GPM)	WPD ft. WC	TUBE per panel width	Passes	TUBE DIA. (mm)
						Btu/hrft	MBH							
480	RP-1	HEF-2	2	175	10	420	5.1	12.0	1.01	1.01	0.6	4	4	13
ACCEPTABLE MANUFACTURERS: AIRTEX, TWA, SIGMA														

ENERGY/HEAT RECOVERY VENTILATORS (Based on Greenheck)

TAG		ERV-1	
SERVICE		Call Centre	
MODEL		ECV-10-VG	
SUPPLY FAN			
AIR FLOW RATE (L/s / CFM)	264		560
E.S.P. (Pa / in.WC)	62		0.25
MOTOR SIZE (kW / HP)	0.37		1/2
RETURN FAN			
AIR FLOW RATE (L/s / CFM)	264		560
E.S.P. (Pa / in.WC)	62		0.25
MOTOR SIZE (kW / HP)	0.37		1/2
HEAT EXCHANGER (WINTER)			
SENSIBLE EFFECTIVENESS (%)		67.0	
LATENT EFFECTIVENESS (%)		50.0	
FILTERS SECTION			
FILTER DEPTH / TYPE		25 mm	
AVERAGE EFFICIENCY		MERV 13 SUPPLY MERV 8 EXHAUST	
PHYSICAL DATA			
WEIGHT (kg / lbs)	59		130
LENGTH (m / in.)	1.02		40.00
WIDTH (m / in.)	1.27		50.00
HEIGHT (m / in.)	0.40		15.75
ELECTRICAL DATA			
INPUT WATTS		650	
VOLTAGE/PHASE		120/1	
NOTES:			
1. PROVIDE 7.5 KW POST HEATER TO MAINTAIN SUPPLY AIR TEMPERATURE AT 70 F WHEN SYSTEMS ARE IN HEATING. IF SYSTEMS ARE IN COOLING, MAINTAIN SUPPLY AIR TEMPERATURES AT 55 F.			
2. PROVIDE 8.2kW PRE HEATER FOR FROST CONTROL.			
3. FREE COOLING, RUN ERV IN BYPASS MODE.			
3. IF SYSTEMS ARE IN COOLING AND OUTSIDE AIR TEMPERATURES ARE SUITABLE FOR FREE COOLING, RUN ERV IN BYPASS MODE.			
4. INCLUDE WEATHER HOODS, LOW LEAKAGE OUTDOOR AND EXHAUST AIR DAMPERS, SPEED CONTROLLER FOR BALANCING.			
5. UNIT SHALL HAVE VARIABLE SPEED EC MOTORS			
6. PROVIDE ROOF 16" FACTORY ROOF CURB.			
ACCEPTABLE MANUFACTURERS: NU-AIR, VENMAR, GREENHECK			

REAL PROPERTY SERVICES  
Western Region  
SERVICES IMMOBILIERS  
Région de l'ouest

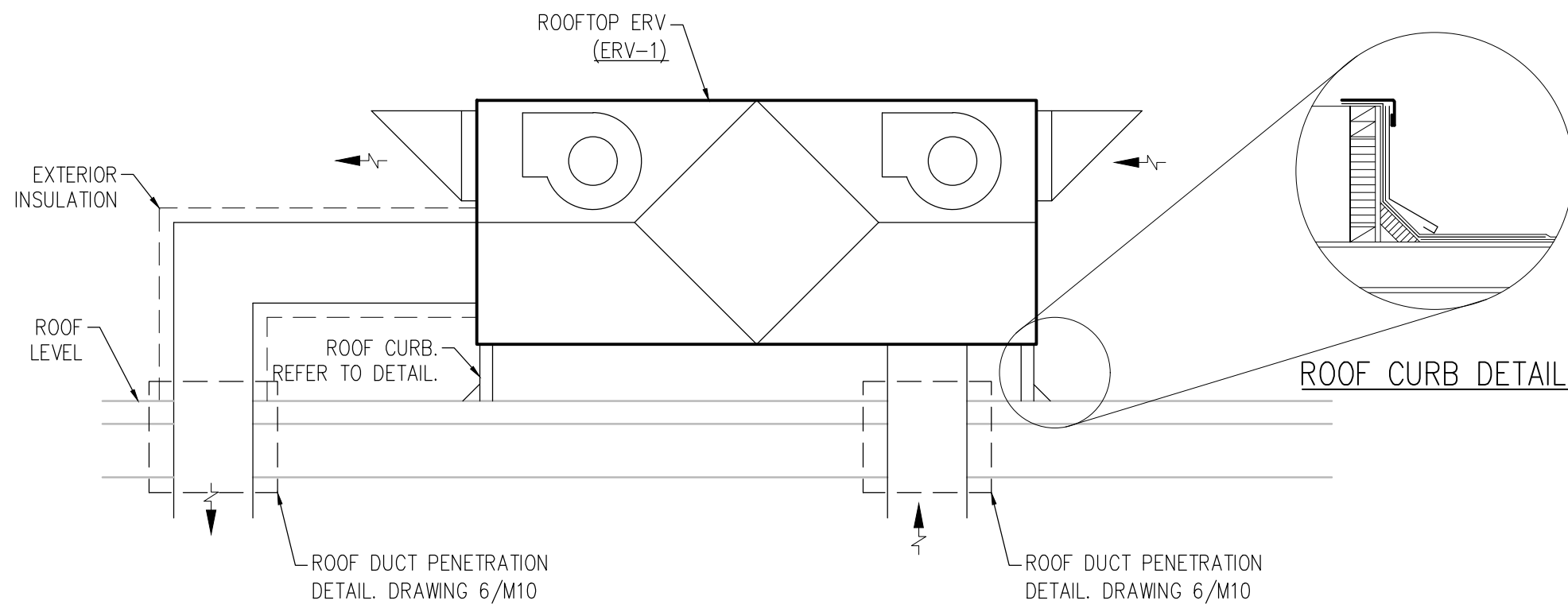
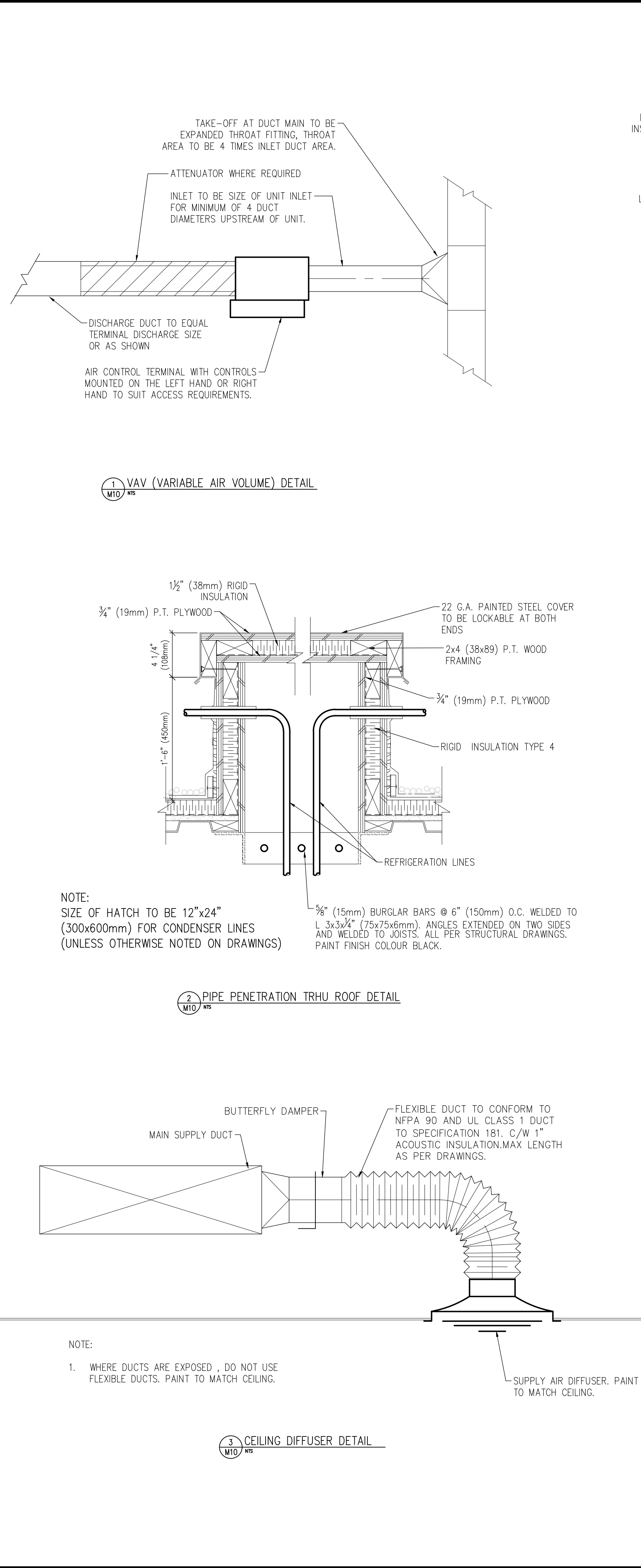
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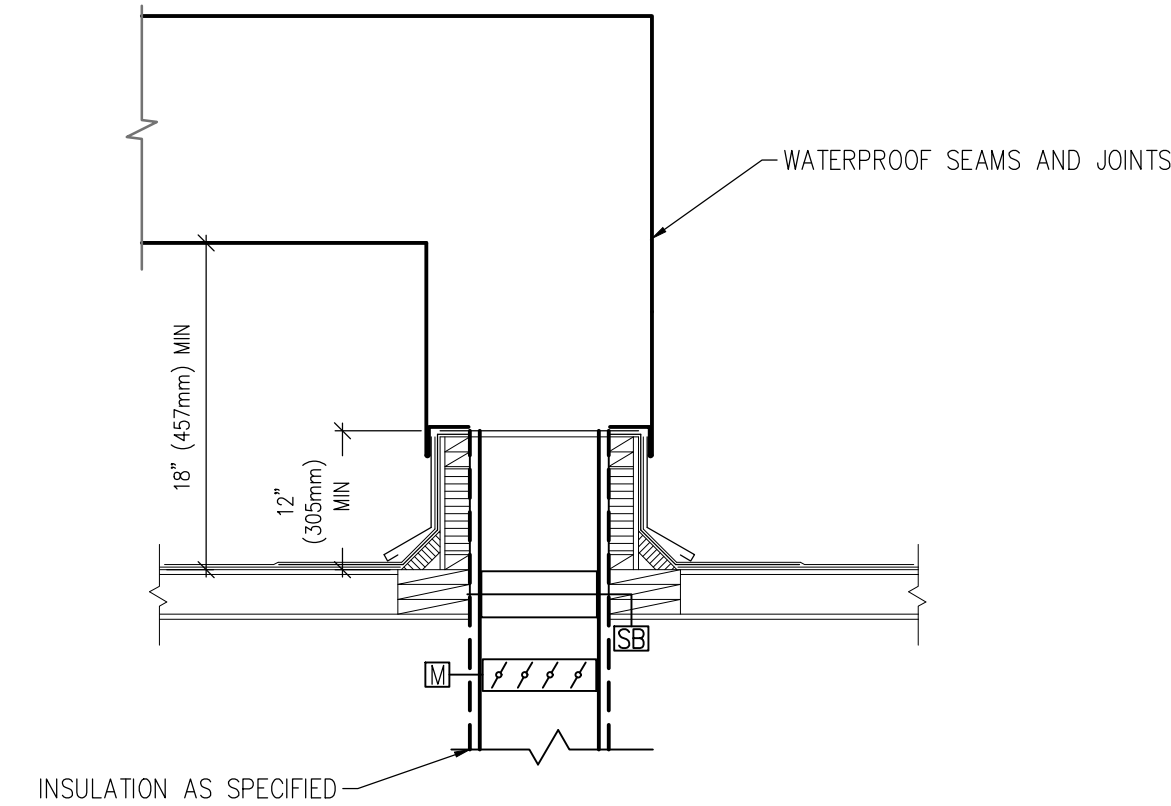
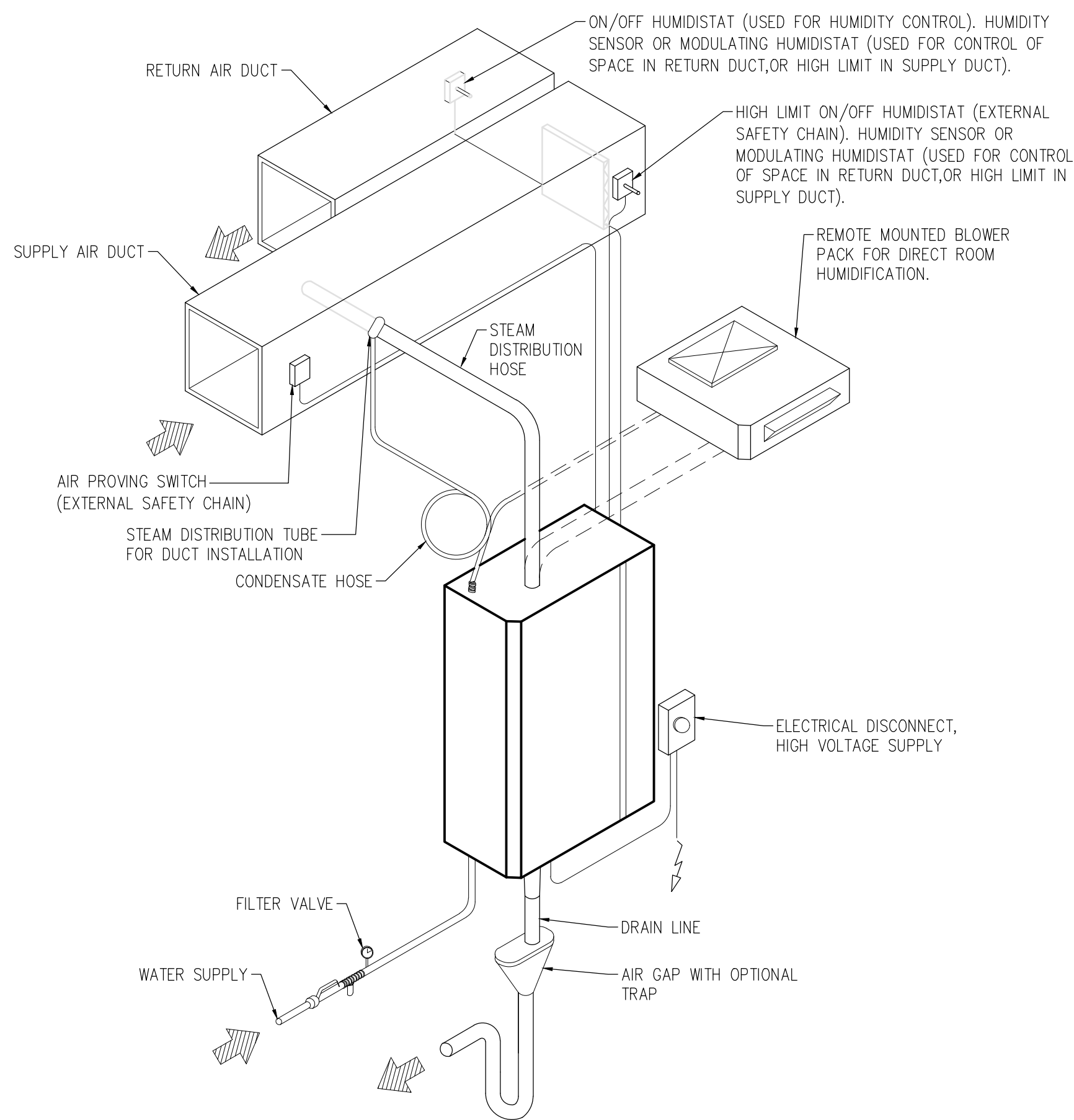
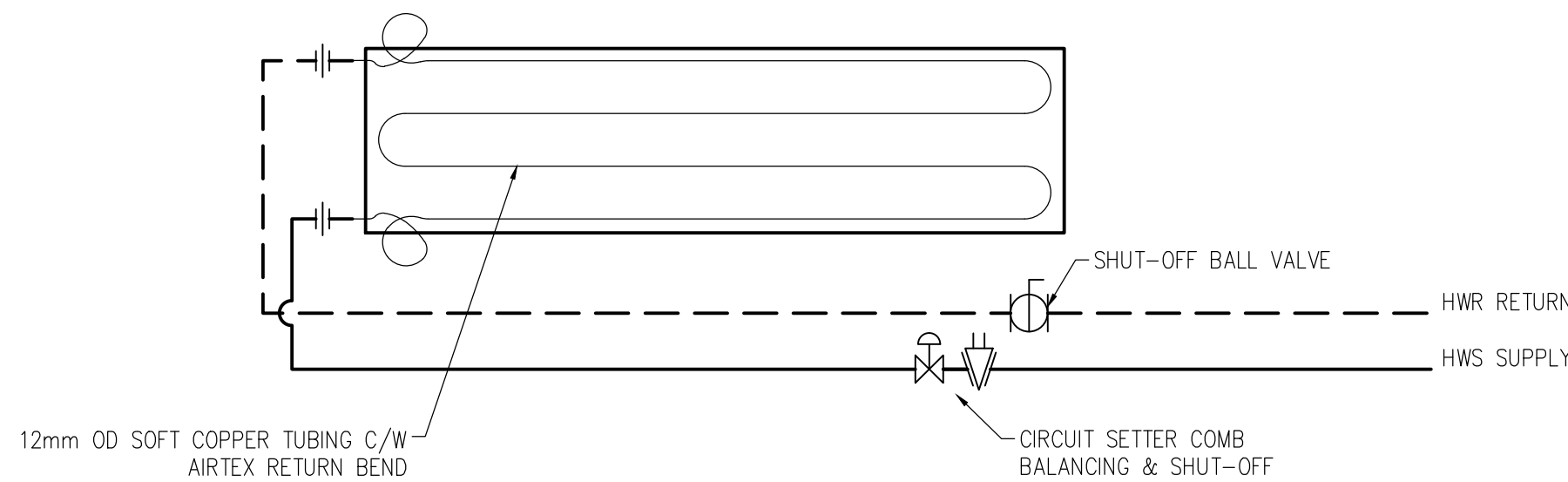


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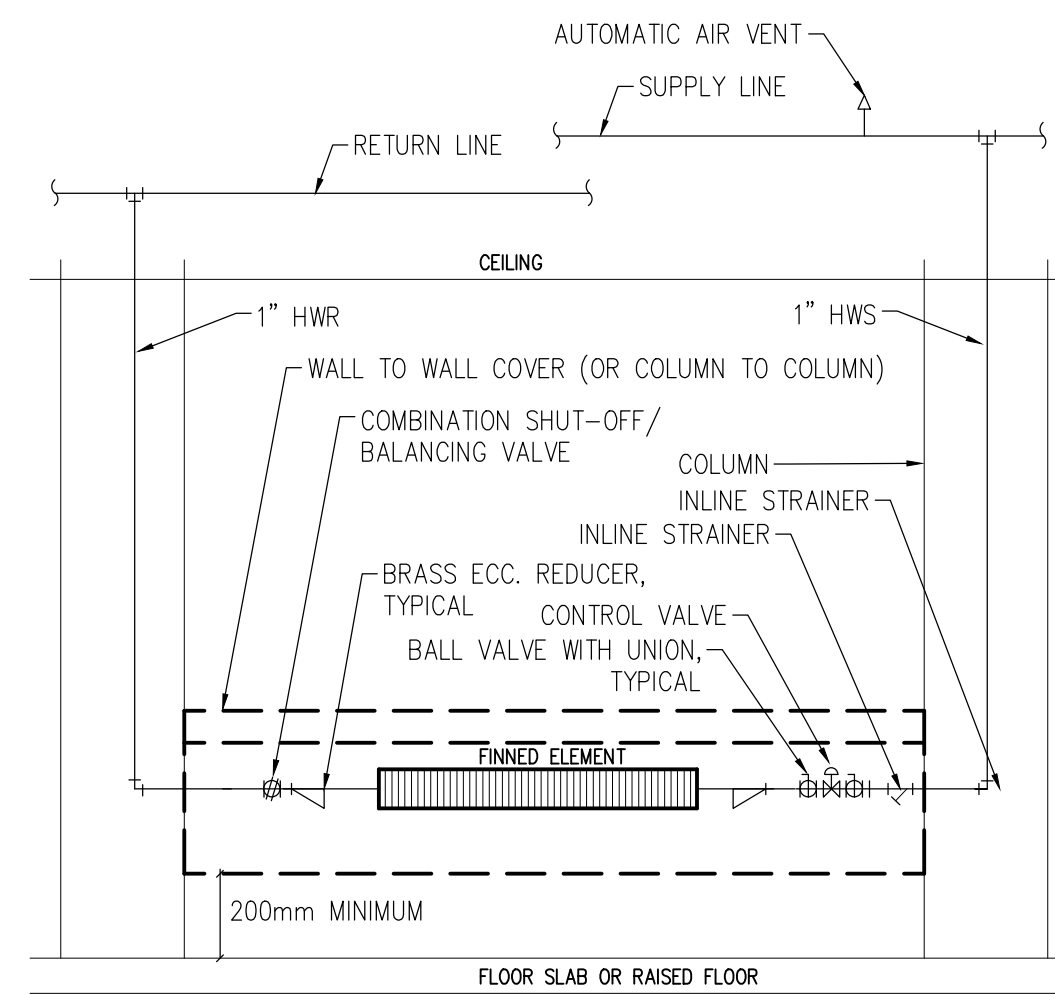




4 ROOF MOUNTED ERV DETAIL

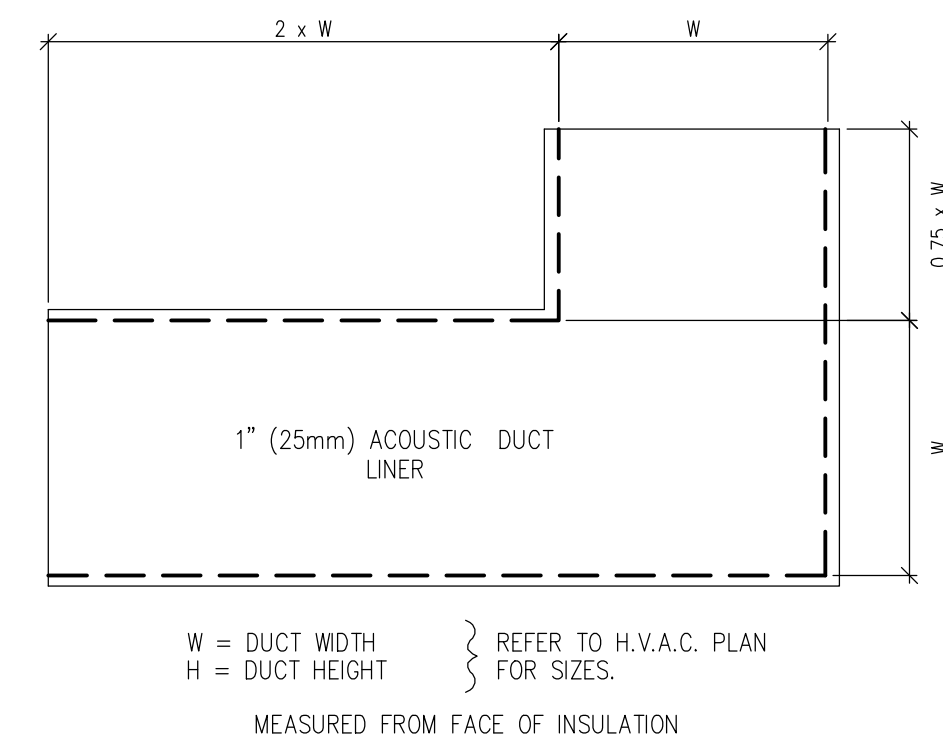


NOTE:  
ALSO REFER TO ARCHITECTURAL CURB DETAIL.

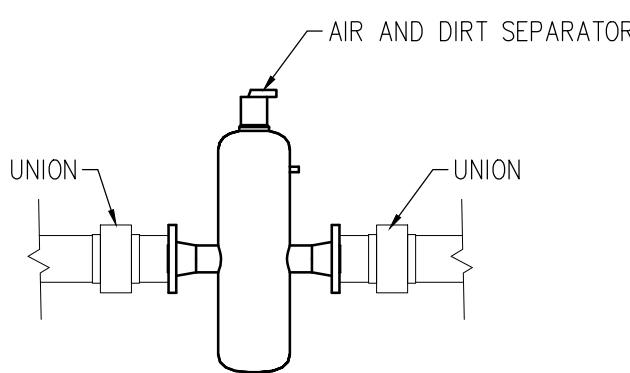


NOTES:

1. ALL MATERIALS BETWEEN COUPLINGS TO BE BRASS OR COPPER.
2. ALL VALVES TO BE MOUNTED INSIDE RADIATION COVER OR IN CEILING SPACE.



9 TRANSFER AIR DUCT DETAIL



5		
4		
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MECHANICAL DETAILS  
AND SCHEDULES

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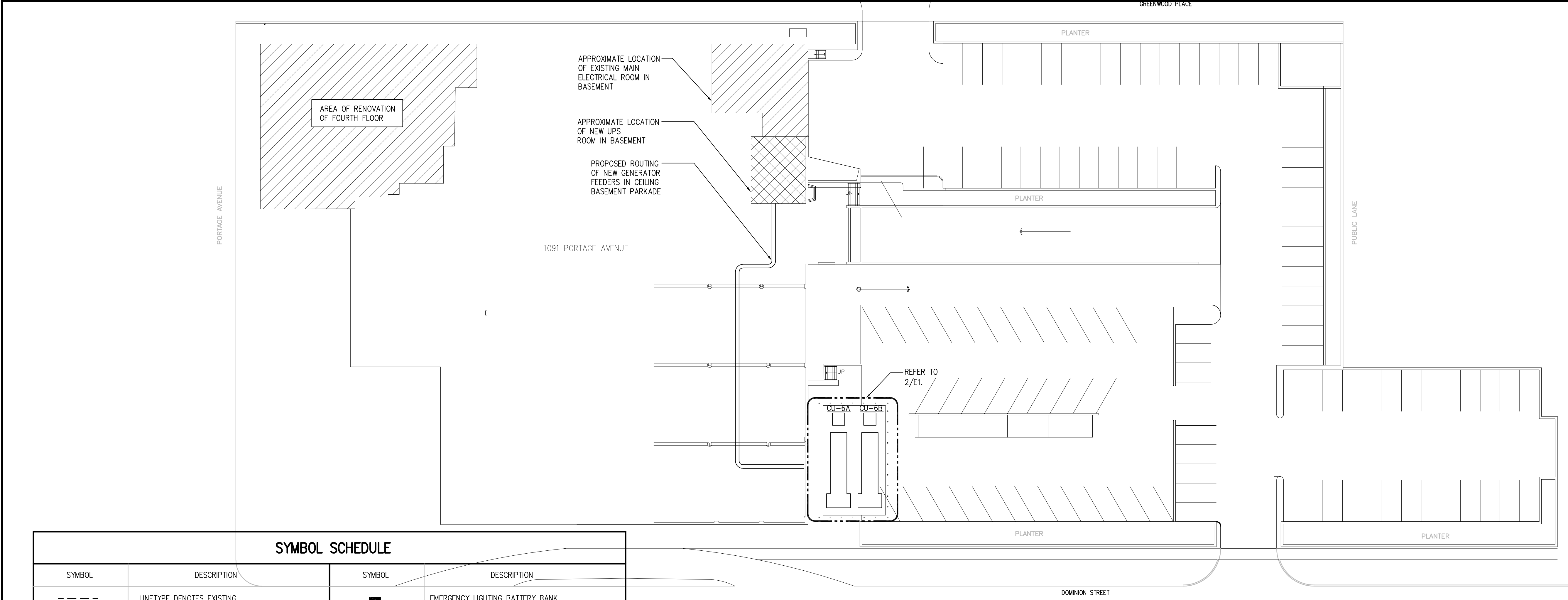
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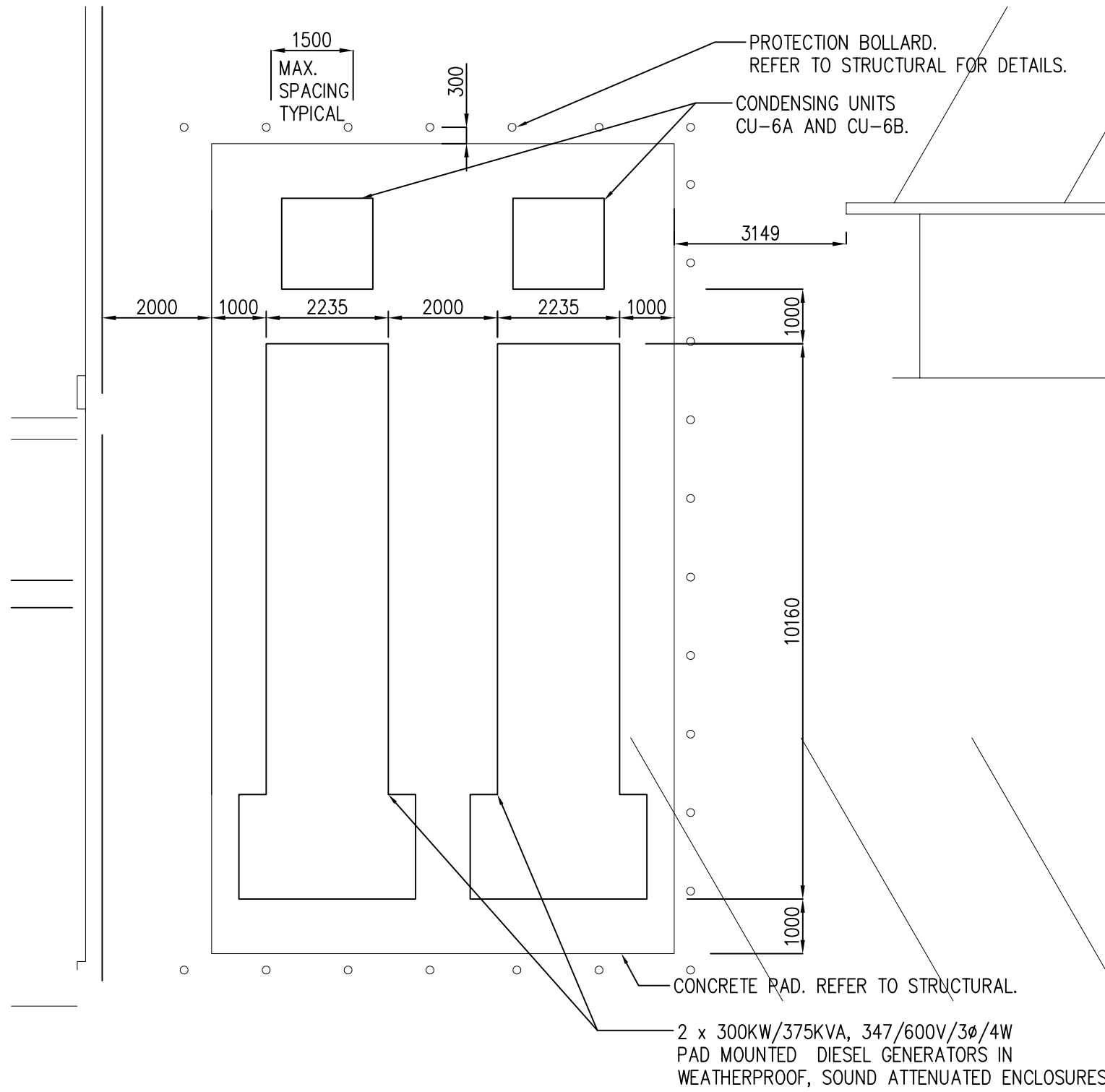




SYMBOL SCHEDULE			
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
---	LINETYPE DENOTES EXISTING		
D	DENOTES EXISTING TO BE DEMOLISHED		EMERGENCY LIGHTING BATTERY BANK
E	DENOTES EXISTING TO REMAIN		EMERGENCY LIGHTING BATTERY BANK C/W DUAL REMOTE HEADS
ER	DENOTES EXISTING TO BE RELOCATED	EL-1	EMERGENCY LIGHTING DUAL REMOTE HEADS EL-1 DENOTES TYPE
R	DENOTES EXISTING RELOCATED	C EL-2	EMERGENCY LIGHTING DUAL REMOTE HEADS CEILING MOUNTED, EL-2 DENOTES TYPE
X/XX A	STRIP LIGHT X/XX - DENOTES PANEL/CIRCUIT NUMBER A - DENOTES LUMINAIRE TYPE	LR	CEILING MOUNT OCCUPANCY SENSOR LR-DENOTES LONG RANGE
X/XX A	SUSPENDED DIRECT/INDIRECT LUMINAIRE X/XX - DENOTES PANEL/CIRCUIT NUMBER A - DENOTES LUMINAIRE TYPE		MOTOR CONNECTION C/W DISCONNECT
X/XX A	SURFACE MOUNT LUMINAIRE X/XX - DENOTES PANEL/CIRCUIT NUMBER A - DENOTES LUMINAIRE TYPE		MECHANICAL EQUIPMENT CONNECTION C/W DISCONNECT
X/XX A	RECESSED MOUNT LUMINAIRE X/XX - DENOTES PANEL/CIRCUIT NUMBER A - DENOTES LUMINAIRE TYPE		PANELBOARD
X/XX A	SURFACE MOUNT LUMINAIRE X/XX - DENOTES PANEL/CIRCUIT NUMBER A - DENOTES LUMINAIRE TYPE	F	FIRE ALARM MANUAL PULL STATION
X/XX A	SURFACE MOUNT LUMINAIRE X/XX - DENOTES PANEL/CIRCUIT NUMBER A - DENOTES LUMINAIRE TYPE	S	FIRE ALARM STROBE
X/XX A	SURFACE MOUNT LUMINAIRE X/XX - DENOTES PANEL/CIRCUIT NUMBER A - DENOTES LUMINAIRE TYPE	S #	FIRE ALARM STROBE # DENOTES CANDELA VALUE
\$	ONE GANG SWITCH - LOW VOLTAGE	S	FIRE ALARM SMOKE DETECTOR
\$	TWO GANG SWITCH - LOW VOLTAGE	S UF	FIRE ALARM SMOKE DETECTOR UF DENOTES UNDER FLOOR
\$ OC	OC-COMBINATION WALL SWITCH/OCCUPANCY SENSOR 3-DENOTES THREE WAY SWITCH	H	FIRE ALARM HEAT DETECTOR
\$ 3	3 WAY SWITCH	H S C	FIRE ALARM HORN/STROBE CEILING MOUNTED
MP	PUSH BUTTON MP DENOTES MOTORIZED PARTITION	EXIT	EXIT SIGNAGE
⓪	WALLBOX DIMMER	EXIT	PICTOGRAM EGRESS SIGNAGE
⓪	DUPLEX RECEPTACLE	EXIT	DOUBLE FACE DIRECTIONAL EGRESS SIGNAGE
⓪ TV	DUPLEX RECEPTACLE FOR TV	A	SPRINKLER AIR PRESSURE SWITCH
⓪ TV	CEILING MOUNTED RECEPTACLE FOR TV	F	SPRINKLER FLOW SWITCH
⓪	QUAD RECEPTACLE	T	SPRINKLER TAMPER SWITCH
⓪	QUAD RECEPTACLE MOUNTED ABOVE COUNTER HEIGHT		FIRE ALARM BELL
⓪	DUPLEX RECEPTACLE MOUNTED ABOVE COUNTER HEIGHT	MS	JUNCTION BOX F - DENOTES FURNITURE MS - DENOTES MOTORIZED SHADE MD - DENOTES MOTORIZED DAMPER ACP- DENOTES AUTOMATIC DOOR OPERATOR MP - DENOTES MOTORIZED PARTITION POWER SUPPLY
⓪	GROUND FAULT TYPE RECEPTACLE MOUNTED ABOVE COUNTER HEIGHT	J #	RAISED FLOOR FURNITURE FEED THRU #-DENOTES ASSOCIATED ZONE DISTRIBUTION BOX
⓪	SPECIAL RECEPTACLE		CONDUIT DOWN
⓪	SPLIT FED RECEPTACLE		CONDUIT UP
⓪ WP	DUPLEX GROUND FAULT TYPE RECEPTACLE WP-DENOTES WEATHERPROOF	A.F.F	ABOVE FINISHED FLOOR
⓪	THERMOSTAT	ZDB-#	UNDERFLOOR ZONE DISTRIBUTION BOX MINIMUM DIMENSIONS TO BE 200x200x100mm(WxLxD)

- DRAWING LISTS:
- E1 - SITE PLAN, GENERATOR LAYOUT AND SYMBOL SCHEDULE
  - E2 - ELECTRICAL DETAILS
  - E3 - BASEMENT AND FOURTH FLOOR ELECTRICAL DEMOLITION PLANS
  - E4 - PARTIAL BASEMENT NEW ELECTRICAL PLANS
  - E5 - FOURTH FLOOR LIGHTING PLAN
  - E6 - FOURTH FLOOR POWER PLAN, PARTIAL ELECTRICAL ROOF PLAN AND 483 LARGE SCALE PLAN
  - E7 - FOURTH FLOOR LIFE SAFETY SYSTEMS PLAN
  - E8 - ELECTRICAL DETAILS
  - E9 - NEW PARTIAL SINGLE LINE DISTRIBUTION DIAGRAM
  - E10 - FIRE ALARM RISER DIAGRAM
  - E11 - MECHANICAL EQUIPMENT SCHEDULE
  - E12 - ELECTRICAL SCHEDULES
  - E13 - LIGHTING CONTROL SCHEDULE AND SCHEMATIC
  - E14 - UPS POWER PANELBOARD SCHEDULES-1
  - E15 - UPS POWER PANELBOARD SCHEDULES-2
  - E16 - UPS POWER PANELBOARD SCHEDULES-3

ESTIMATED LOAD CALCULATION		
UPS POWER LOAD:	TOTAL CONNECTED:	DEMANDED:
LIGHTING:	4.833KW	4.833KW
MECHANICAL:	0 KW	0 KW
COMMUNICATIONS	96.3 KW	54.89KW
MISC. POWER	34.1 KW	20.46KW
TOTAL	135.23KW	80.183KW
ESSENTIAL POWER LOAD:	DEMANDED:	
LIGHTING:	0 KW	0 KW
MECHANICAL	90.32KW	65.03KW
ELECTRIC HEAT	43.19KW	38.79KW
MISC. POWER	10.0 KW	6.0 KW
UPS LOAD	135.23KW	80.183KW
ESTIMATED CURRENT LOAD	278.74KW	190KW
ADDITIONAL 25% SPARE CAPACITY	69.69KW	47.5KW
TOTAL ESTIMATED LOAD	348.43KW	237.5KW
RECOMMENDED GENERATOR SIZE	300 KW, 347/600V/3ø/4W	



NOTE:  
1. PAD DIMENSIONS ARE BASED ON "CATERPILLAR" GENSET. CONFIRM EXACT PAD SIZE WITH SELECTED GENERATOR MANUFACTURER PRIOR TO START OF PILING.

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Revision	Description	Date

Client  
**PSPC/SPAC**

Project title  
**SUITE 100-167 LOMBARD AVENUE  
WINNIPEG, MANITOBA**  
**SUITE 483  
RENOVATION & FIT UP**

Designed by  
**PL**

Drawn by  
**RD**

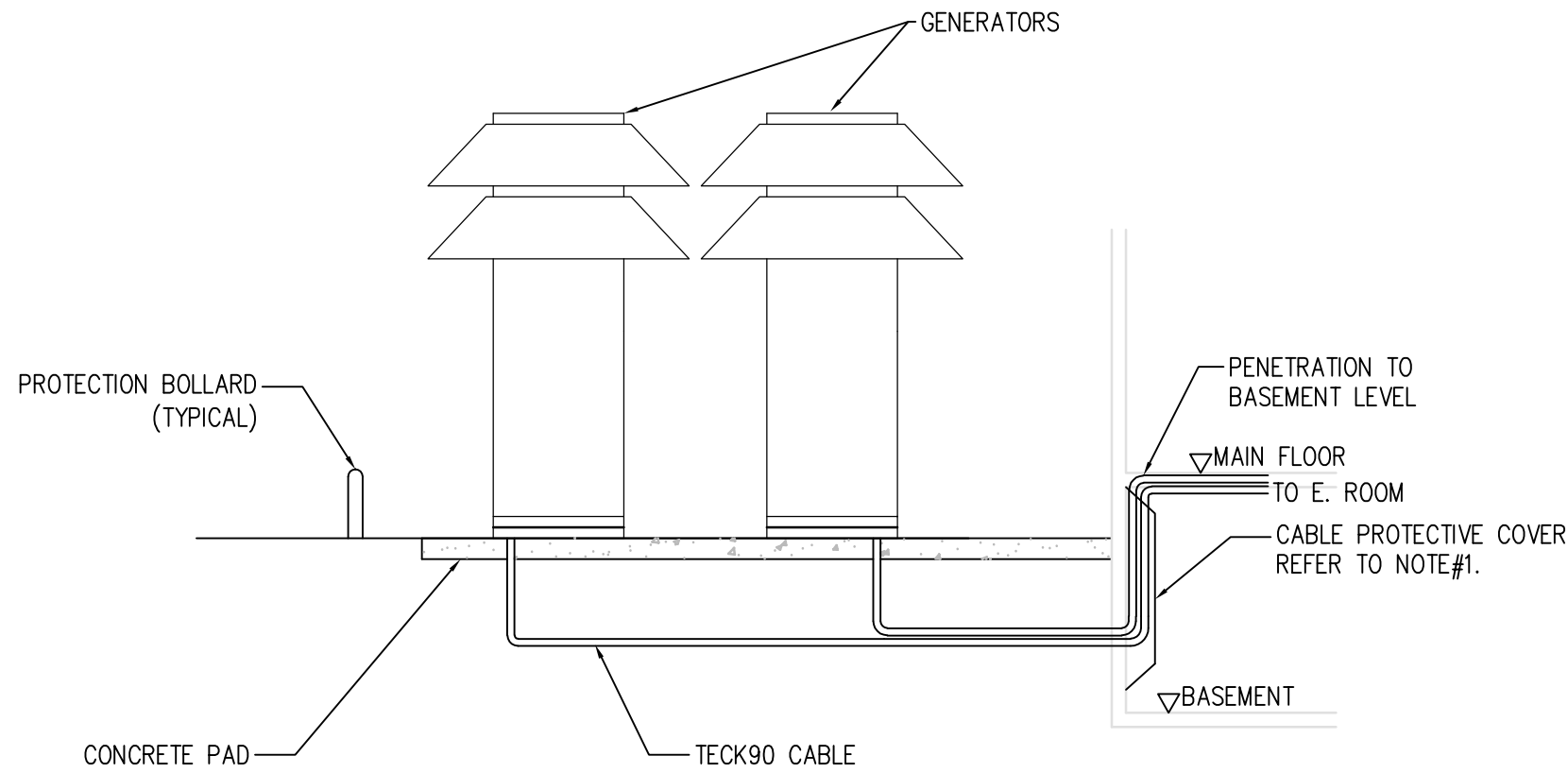
Approved by  
**HCC**

PWSSC Project Manager  
**MARK ARROJADO**

Drawing title  
**SITE PLAN, GENERATOR LAYOUT AND  
SYMBOL SCHEDULE**

Project no. <b>R.076524.002</b>	Drawing no. <b>E1</b> OF 16	Revision no. <b>3</b>
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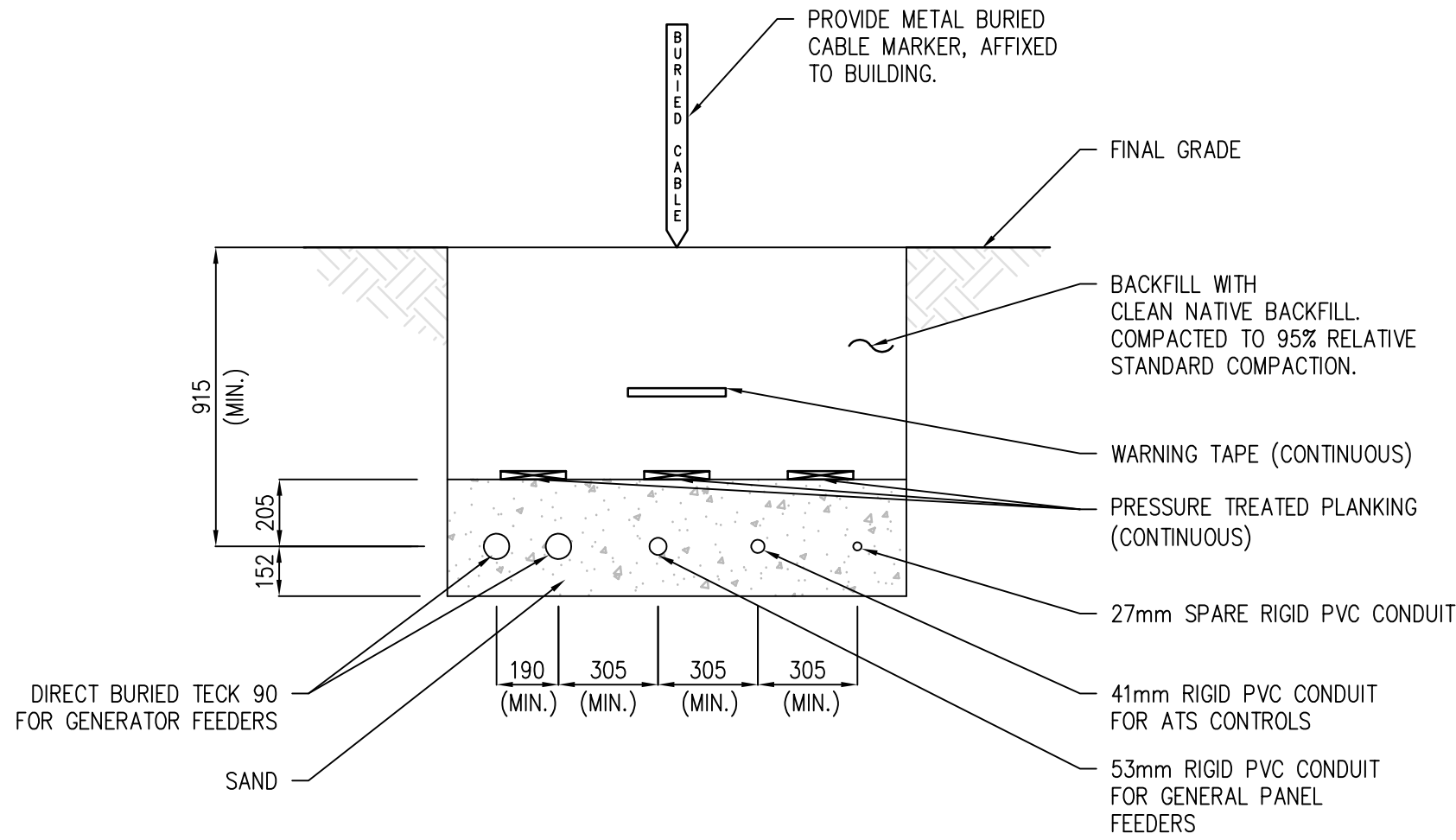




1  
E2  
1:100  
GENERATOR PAD MOUNT ELEVATION

NOTE:

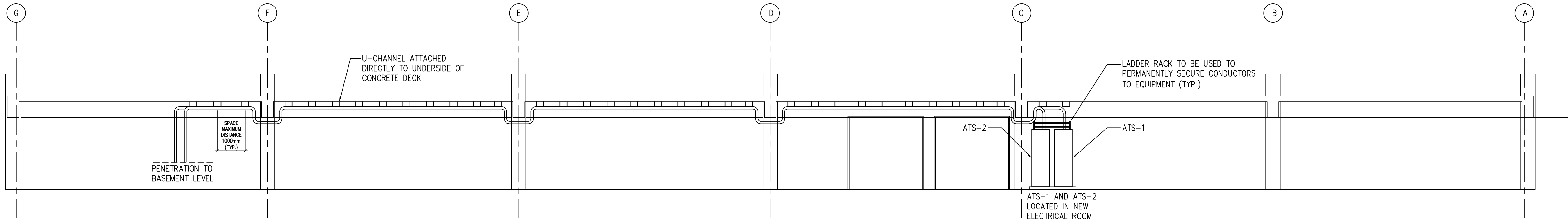
1. PROVIDE CABLE PROTECTIVE COVER OVER GENERATOR FEEDERS, ATS CONTROL CABLES AND GENERATOR PANEL FEEDERS. COVER TO BE FABRICATED FROM 14 GAUGE STAINLESS STEEL SHEET METAL AND COVER CABLES FROM WALL PENETRATIONS TO CEILING BEAM POCKET. PROVIDE VERTICAL DIVIDERS WITHIN COVER FROM 14 GAUGE STAINLESS STEEL. SEAL ALL WALL AND PLATE PENETRATIONS WITH CSA APPROVED SEALANT.
2. ELECTRICAL CONTRACTOR TO ALLOW FOR X-RAY SCANNING BEFORE DRILLING BASEMENT WALL, FLOORING AND/OR CEILING. PENETRATIONS SHOULD AVOID CONFLICT WITH STRUCTURAL COMPONENTS.
3. AT BUILDING FOUNDATION SCAN CONCRETE WALL TO LOCATE ALL EXISTING REINFORCING STEEL. LOCATE NEW OPENINGS BETWEEN REINFORCING. DO NOT CUT OR DAMAGE ANY EXISTING STRUCTURAL REINFORCING.



2  
E2  
NTS  
GENERATOR SERVICE TRENCH DETAIL

NOTES:

1. DETAIL IS FOR ONE GENERATOR. DUPLICATE ALL WORK FOR SECOND GENERATOR.



3  
E2  
1:100  
GENERATOR FEEDER ELEVATION



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HCC

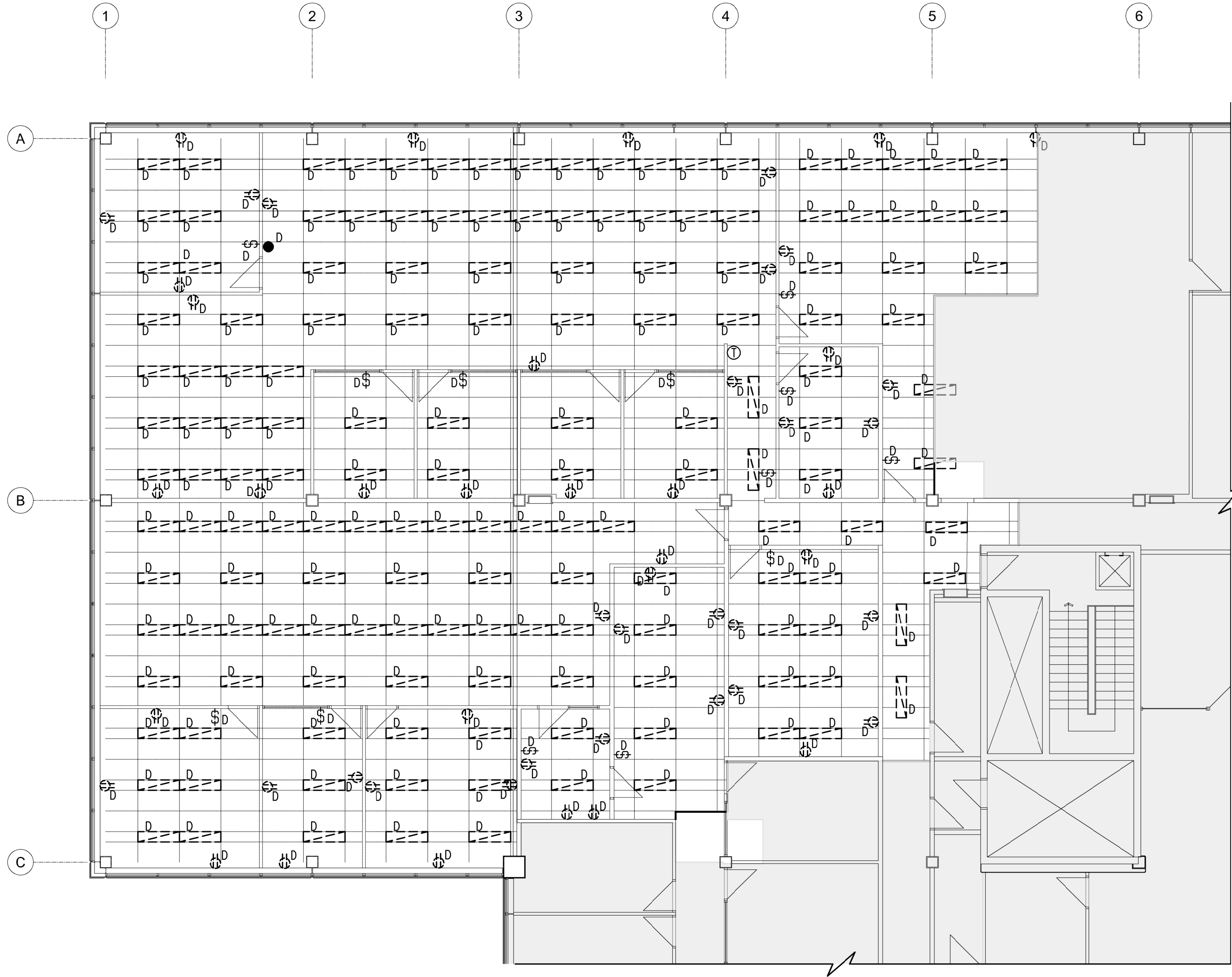
PWSSC Project Manager  
MARK ARROJADO

Drawing title

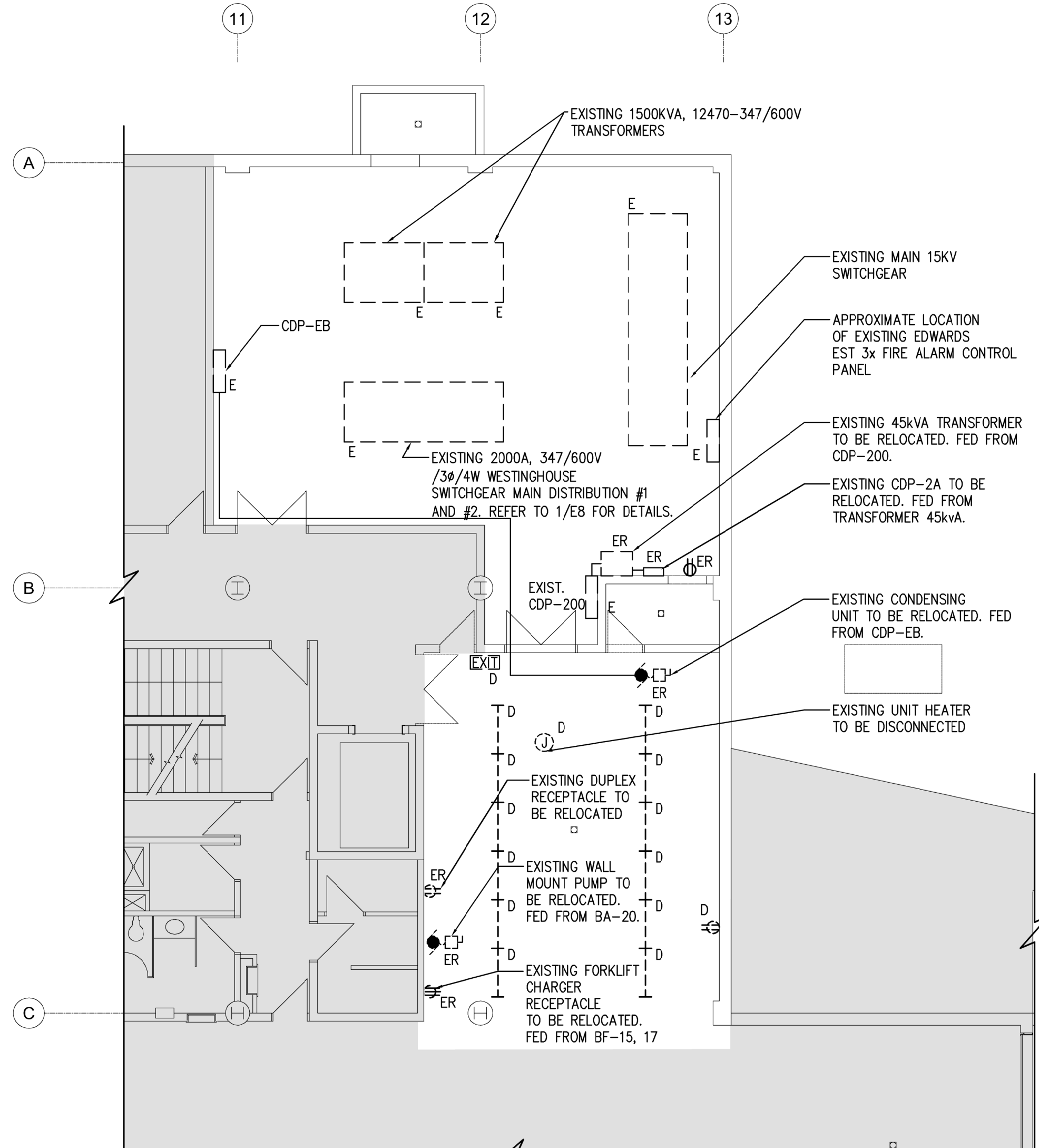
ELECTRICAL DETAILS

Project no.	Drawing no.	Revision no.
R.076524.002	E2	1





1 FOURTH FLOOR ELECTRICAL DEMOLITION PLAN  
E3 1:100



2 BASEMENT EXISTING/DEMOLITION ELECTRICAL PLAN  
E3 1:100

### GENERAL NOTES:

1. MAINTAIN THE INTEGRITY OF ALL EXISTING SYSTEMS REQUIRED TO REMAIN OPERATIONAL. IDENTIFY ALL CIRCUIT BREAKERS, WIRING, JUNCTION BOXES AND DEVICES PRIOR TO PROCEEDING WITH WORK. CONTACT DEPARTMENTAL REPRESENTATIVE IF UNSURE BEFORE SHUTDOWNS, DEMOLITION, OR RELOCATION OF ANY DEVICES.
2. ALL ITEMS SHOWN DASHED WITH AN 'E' ARE EXISTING AND ARE TO REMAIN. ITEMS SHOWN DASHED WITH A 'D' ARE TO BE DISCONNECTED AND DEMOLISHED/REMOVED AND TRANSPORTED TO DESIGNATED SITE TO BE CONFIRMED BY DEPARTMENTAL REPRESENTATIVE. INCLUDE ALL COSTS IN BASE BID. REMOVE AND HAVE ALL ASSOCIATED WIRE AND CONDUIT REMOVED BACK TO PANEL SOURCE.
3. EXTEND, RE-ROUTE, RE-WIRE AND RE-CONNECT ALL CIRCUITS ON EXISTING DEVICES BEING RELOCATED.
4. WIRE AND CONDUIT SERVING DEVICES REQUIRED TO REMAIN IN USE SHALL BE RE-ROUTED AND DIVERTED AS REQUIRED TO MAINTAIN OPERATION. EXTEND, RE-ROUTE, RE-WIRE AND RE-CONNECT AS REQUIRED. CONFIRM EXISTING ON SITE.
5. NOT ALL EXISTING DEVICES AND ELECTRICAL EQUIPMENT ARE BEING SHOWN ON ELECTRICAL DRAWINGS. REMOVE AND RE-INSTALL ALL EXISTING AND NECESSARY ELECTRICAL DEVICES SHOWN OR NOT LOCATED ON INDICATED WALLS OR PORTIONS OF THE BUILDING BEING DEMOLISHED OR MODIFIED. MAINTAIN INTEGRITY OF ALL EXISTING ELECTRICAL SYSTEMS IN AREAS NOT INCLUDED IN THIS PROJECT AND IN PARTS OF THE BUILDING THAT ARE NOT SUBJECTED TO ANY DEMOLITION WORK.
6. REPORT ANY DISCREPANCIES BETWEEN CONTRACT DOCUMENTS AND SITE OBSERVATION TO DEPARTMENTAL REPRESENTATIVE.

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BASEMENT

FOURTH FLOOR

KEY PLANS  
SCALE: 1:1000

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PSPC/SPAC

SUITE 100-167 LOMBARD AVENUE  
WINNIPEG, MANITOBA

Project title

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1091 PORTAGE AVENUE  
WINNIPEG, MANITOBA  
SUITE 483  
RENOVATION & FIT UP

Designed by  
PL

Drawn by  
RD

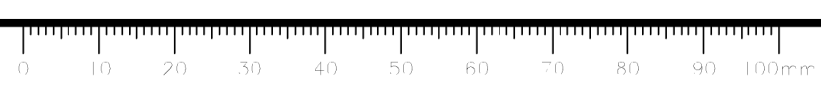
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PWSSC Project Manager  
MARK ARROJADO

Drawing title

BASEMENT AND FOURTH FLOOR  
ELECTRICAL DEMOLITION PLANS

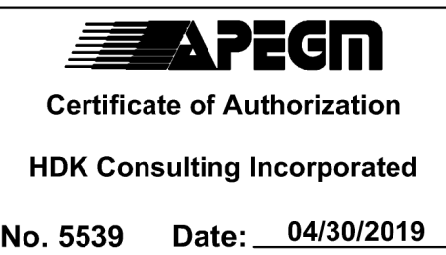
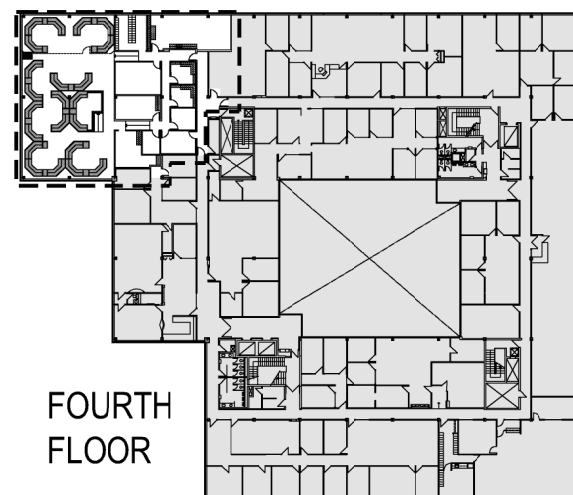
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**INTERIOR ALTERATIONS  
1091 PORTAGE AVENUE  
WINNIPEG, MANITOBA**

## SUITE 483 RENOVATION & FIT UP

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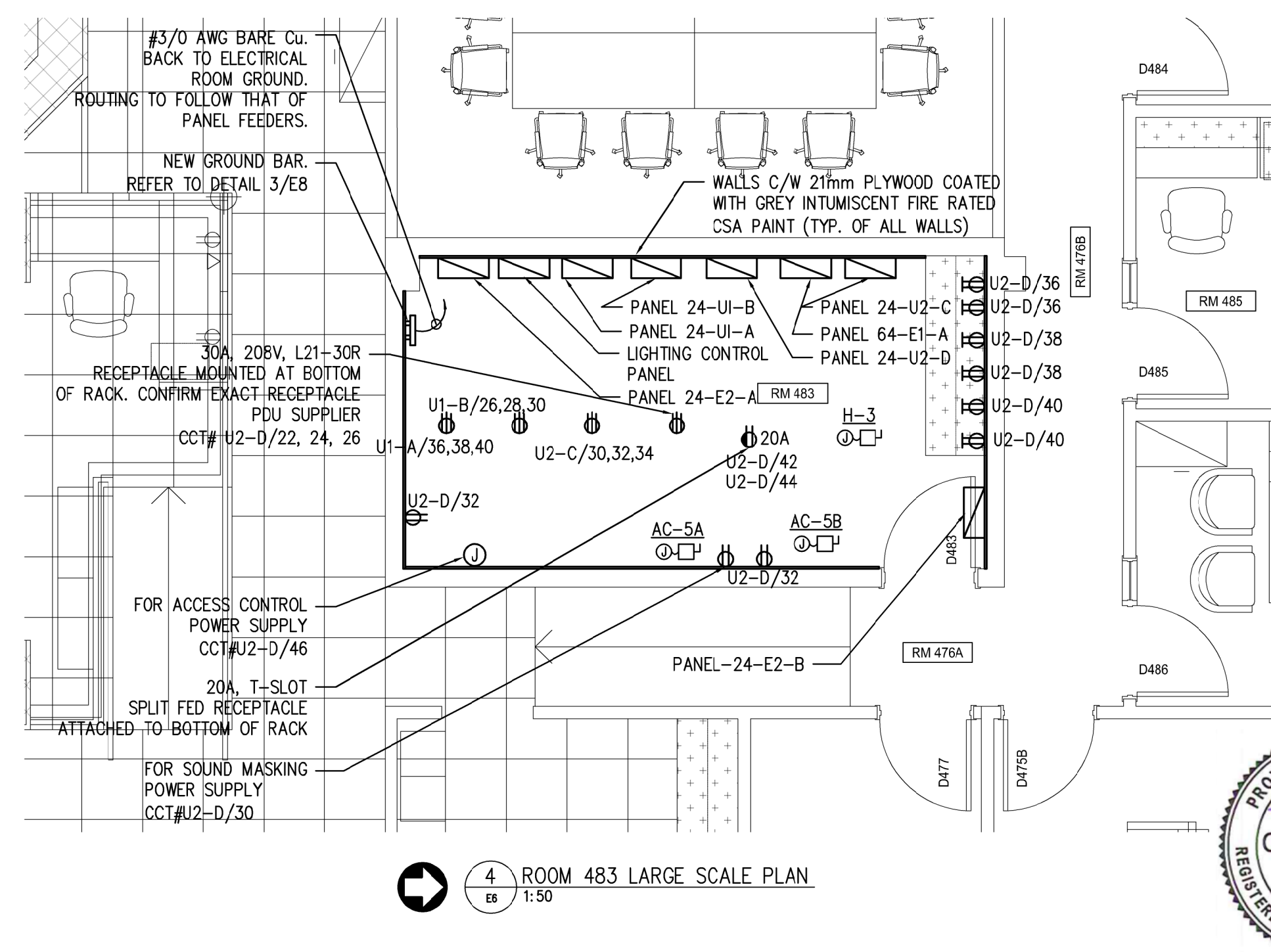
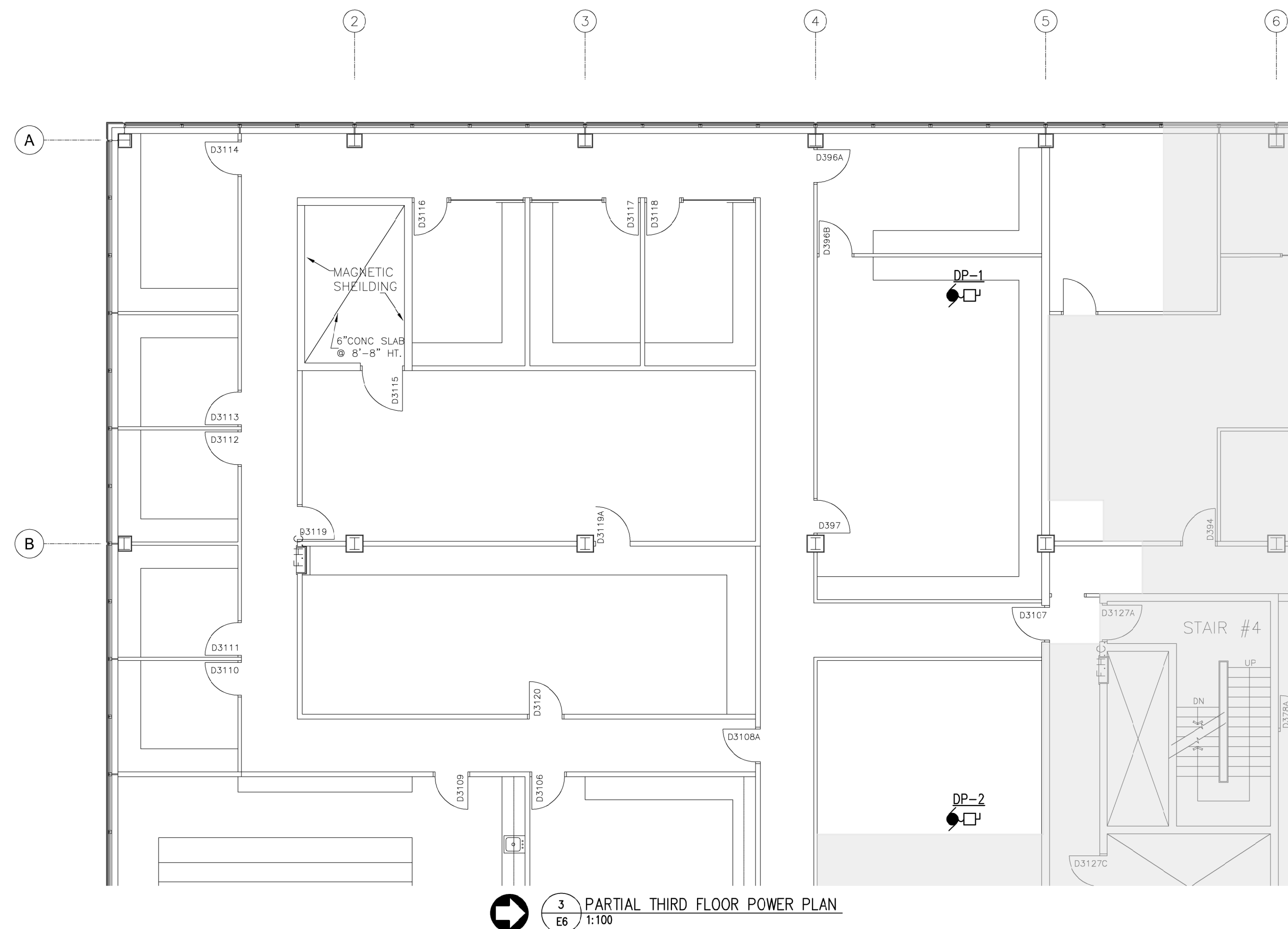
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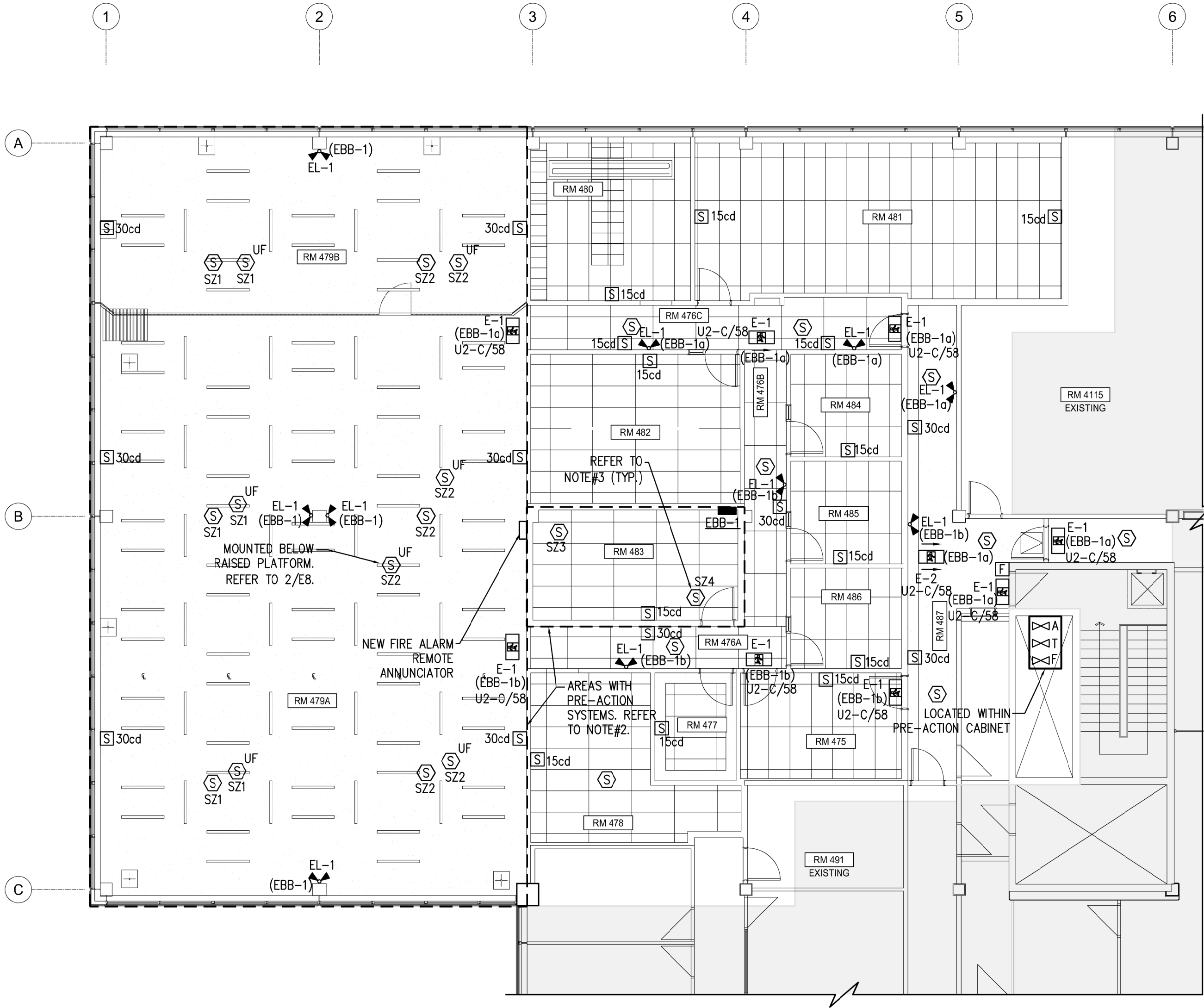
### FOURTH FLOOR LIGHTING PLAN

Project no.  <b>R.076524.002</b>	Drawing no.  <b>E5</b>  <b>OF 16</b>	Revision no.  <b>3</b>
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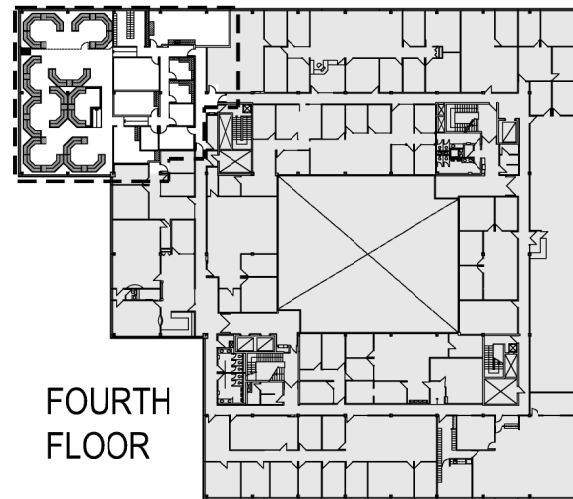


1  
E7  
1:100

FOURTH FLOOR LIFE SAFETY SYTEMS PLAN

NOTE:

- NUMBER BESIDE THE STROBE SYMBOL INDICATES CANDELA VALUE.
- SMOKE DETECTORS IN PRE-ACTION SYSTEMS AREAS TO BE INTERCONNECTED TO SPRINKLER DOUBLE INTERLOCK PRE-ACTION SYSTEMS.
- APPROXIMATE LOCATION OF SMOKE DETECTORS ON ROOM 483 TO BE COORDINATED WITH CABLE TRAY INSTALLATION TO AVOID CONFLICT. (LOCATE ONE SMOKE DETECTOR ON EACH SIDE OF CABLE TRAY).
- CROSS ZONE DETECTION FOR PRE-ACTION SYSTEM AREAS:  
SZ1 - SOFTWARE ZONE 1  
SZ2 - SOFTWARE ZONE 2  
SZ3 - SOFTWARE ZONE 3  
SZ4 - SOFTWARE ZONE 4



FOURTH  
FLOOR



KEY PLAN  
SCALE: 1:1000



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FOURTH FLOOR LIFE SAFETY  
SYSTEMS PLAN

Project no.

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Drawing no.

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Revision no.

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ELECTRICAL DETAILS

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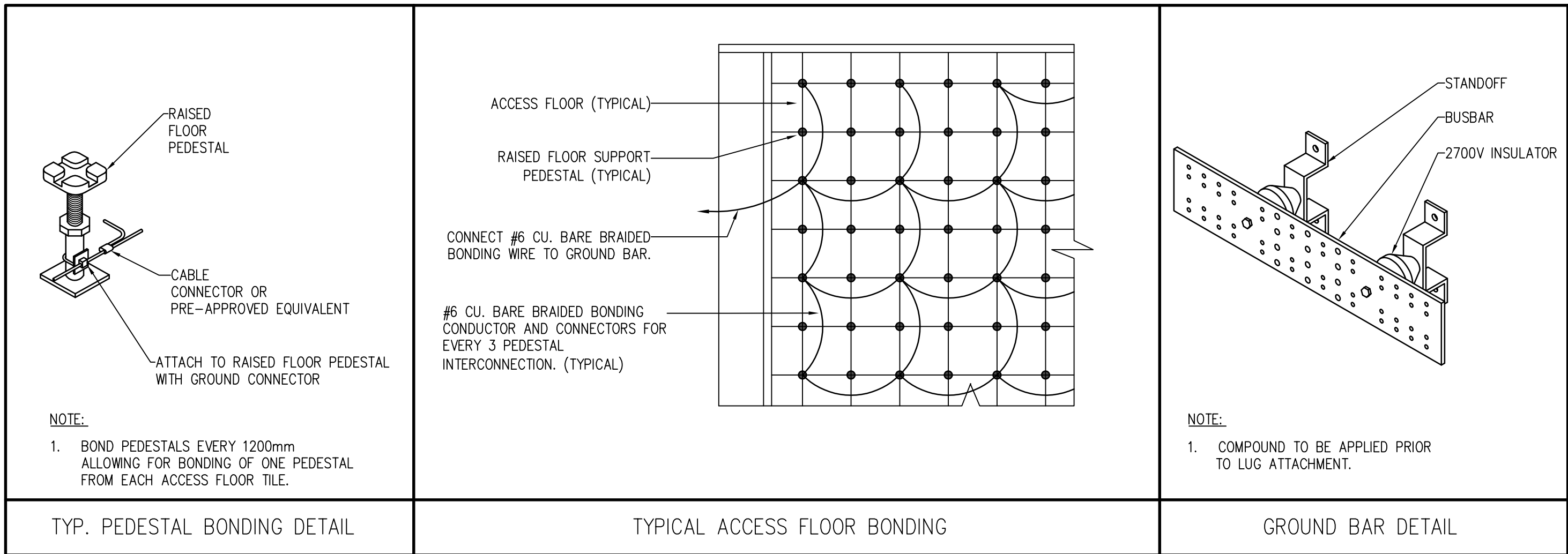
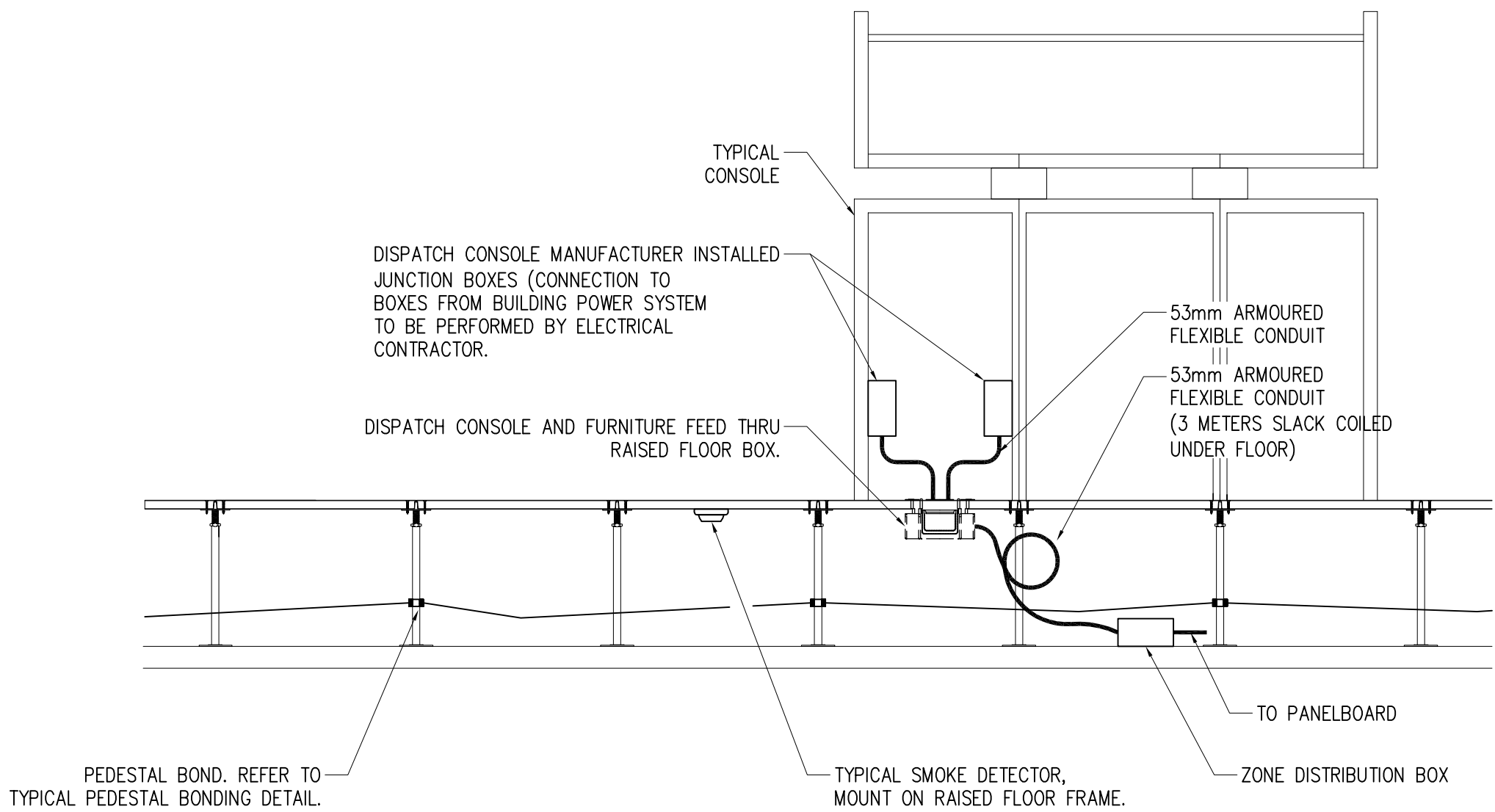
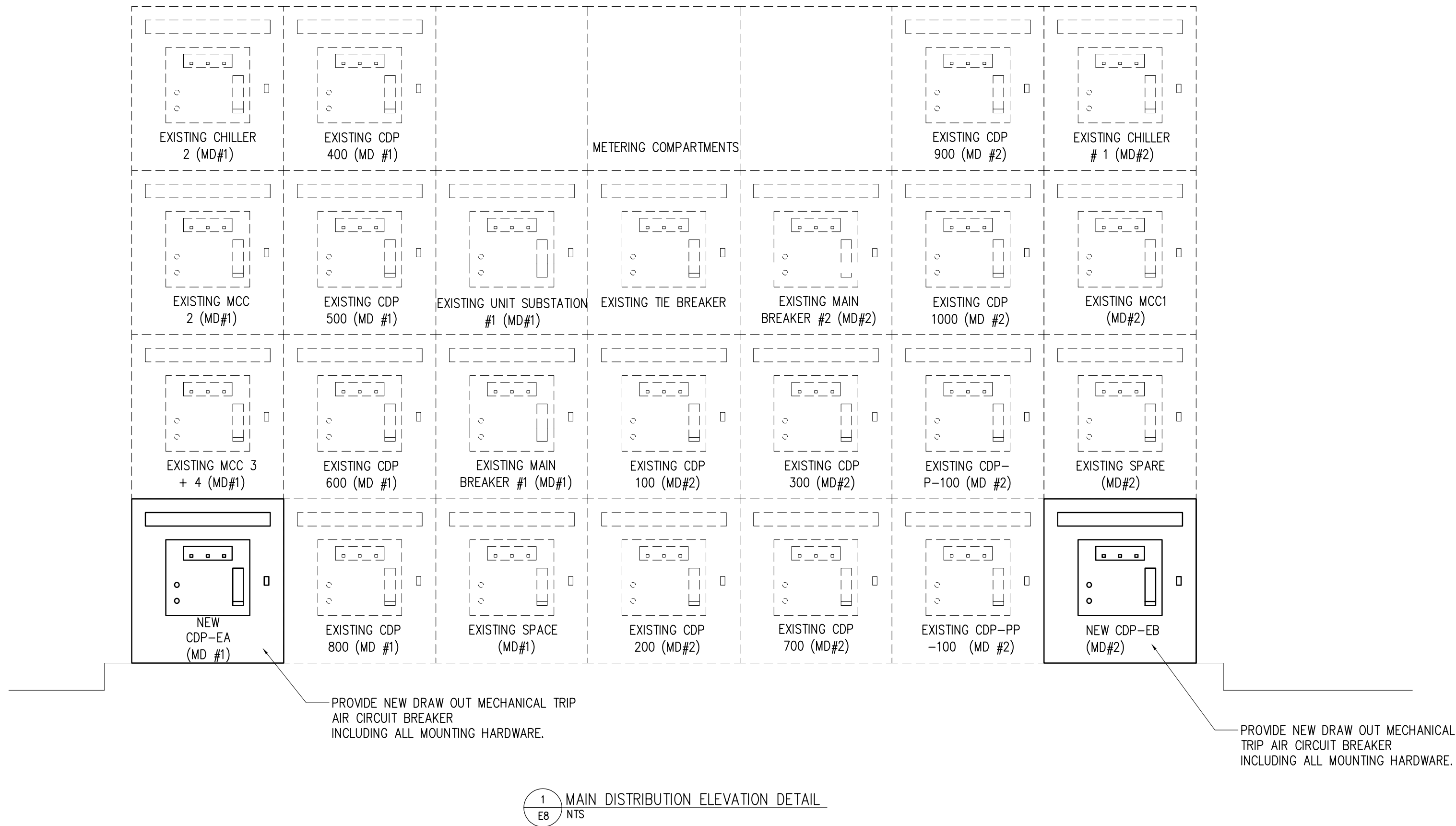
Drawing no.

E8

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Revision no.

2





130mm  
(MIN.)

UNDERGROUND CONDUCTORS

YEAR INSTALLED \_\_\_\_\_

DIAGRAM \_\_\_\_\_ DETAIL \_\_\_\_\_ TABLE \_\_\_\_\_

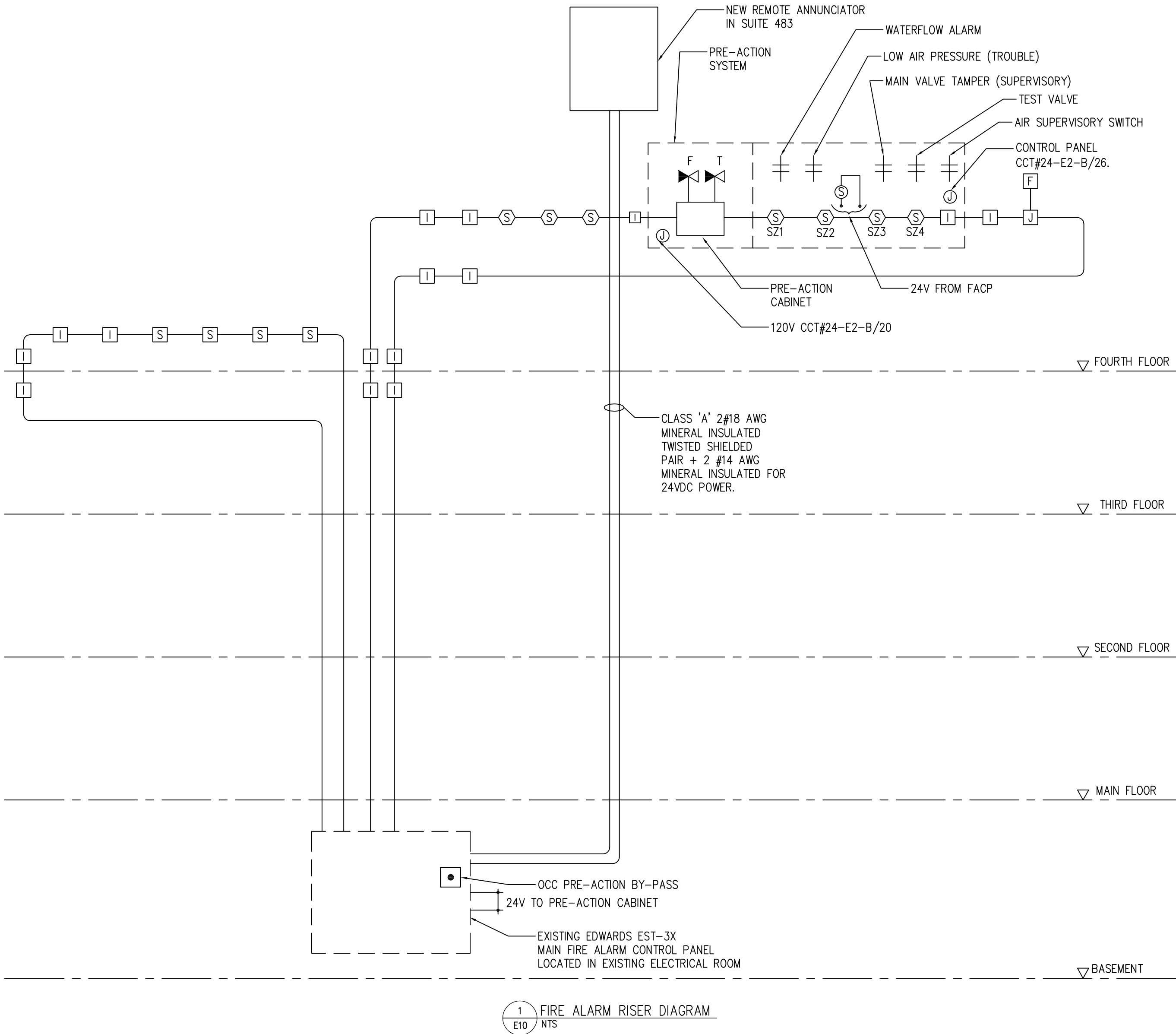
SIZE/TYPE OF CONDUCTOR \_\_\_\_\_

AMPACITY \_\_\_\_\_ MAX. OVERCURRENT \_\_\_\_\_

75 mm  
(MIN.)







GENERAL NOTES:

- SUPPLY, INSTALL, WIRE, CONNECT AND GROUND IN EMT ALL REQUIRED COMPONENTS OF THE MODIFIED EXISTING TWO STAGE, NON-CODED, ADDRESSABLE FIRE ALARM SYSTEM. ALL NEW COMPONENTS OF THE SYSTEM TO BE CSA APPROVED, ULC LISTED AND INSTALLED IN ACCORDANCE WITH CAN/ULC-S524-14 AND MANUFACTURERS REQUIREMENTS.
- ELECTRICAL CONTRACTOR TO PROVIDE ALL HARDWARE, SOFTWARE AND PROGRAMMING MODIFICATIONS TO THE EXISTING FIRE ALARM CONTROL PANEL (FACP) AND LOOPS TO COVER ALL AREAS AS INDICATED IN SCHEMATIC.
- ALL WIRING LOOPS FOR NOTIFICATION DEVICES TO BE WIRED IN A CLASS 'A' CONFIGURATION (RETURN LOOP CIRCUIT) AND ALL WIRING FOR SIGNALING DEVICES TO BE WIRED IN A CLASS 'A' CONFIGURATION. PROVIDE SEPARATE CONDUIT SYSTEM FOR EACH LOOP.
- ALL FIRE ALARM WIRING TO BE FAS 105 AND RUN IN MINIMUM 21mm RED EMT.
- ELECTRICAL CONTRACTOR TO PROVIDE FAULT ISOLATION MODULES WHEN ENTERING AND LEAVING EACH FIRE RATED ZONE PER NATIONAL BUILDING CODE. THIS DIAGRAM IS FOR SCHEMATIC PURPOSES ONLY. REFER TO FLOOR PLANS FOR EXACT NUMBER AND LOCATION OF DEVICES. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ADDITIONAL MODULES AS REQUIRED WHETHER SHOWN OR NOT IN ORDER TO ACCOMMODATE THE ACTUAL NUMBER OF DEVICES AND ROUTING OF WIRING. EACH ISOLATION MODULE TO BE CLEARLY LABELED WITH A RIVETED LAMACOID AND READILY ACCESSIBLE FOR INSPECTION. ISOLATION MODULES ARE NOT TO BE INSTALLED ABOVE SUSPENDED CEILING. AS BUILT DRAWINGS TO REFLECT THE LOCATION OF EACH ISOLATION MODULE.
- THE OPERATION OF ANY MANUAL 2-STAGE (PRE-SIGNAL) PULL STATION OR DETECTION TYPE DEVICE TO TRIP THE FIRE ALARM CONTROL PANEL CAUSING IT TO GO INTO 1ST STAGE OR ALERT MODE WITHOUT CAUSING EVACUATION. IN THIS MODE ALL THE SIGNALLING DEVICES SHOULD SOUND AT A SLOW PULSING RATE. IF AFTER INVESTIGATION BY QUALIFIED PERSONNEL IT IS DETERMINED THAT FIRE EMERGENCY EXISTS, THE PULL STATION SHOULD BE SET FOR 2ND STAGE TO INITIATE EVACUATION. ALL FIRE ALARM SIGNALING DEVICES TO SOUND CONTINUOUSLY UNTIL THE SYSTEM IS MANUALLY RESET AT THE CONTROL PANEL.
- ELECTRICAL CONTRACTOR TO INCLUDE ALL COSTS ASSOCIATED WITH SETTING-UP, TESTING AND THE VERIFICATION OF THE FIRE ALARM SYSTEM. THE MANUFACTURER WITH THE ASSISTANCE OF THE ELECTRICAL CONTRACTOR AND THE DEPARTMENTAL REPRESENTATIVE TO PERFORM A COMPLETE FIRE ALARM VERIFICATION AFTER THE INSTALLATION HAS BEEN COMPLETED. A CERTIFICATE OF VERIFICATION AND A COMPLETE REPORT SHALL BE SENT TO THE DEPARTMENTAL REPRESENTATIVE FOR REVIEW. THE ENTIRE FIRE ALARM SYSTEM AND INSTALLATION SHALL CARRY A ONE (1) YEAR WARRANTY FROM THE DATE OF SUBSTANTIAL COMPLETION.
- THE ENTIRE INSTALLATION TO BE TO THE FULL SATISFACTION OF THE DEPARTMENTAL REPRESENTATIVE.
- PROVIDE ALL REQUIRED TROUBLE INDICATION FOR TAMPERS, LOW PRESSURE SWITCHES, FLOW PRESSURE SWITCHES AND AIR SUPERVISORY SWITCHES.
- ELECTRICAL CONTRACTOR TO CONFIRM AND COORDINATE WITH SPRINKLER CONTRACTOR ALL POWER REQUIREMENTS FOR CONTROL PANELS, SOLENOIDS, PRESSURE SWITCHES, ETC. PROVIDE ALL REQUIRED WIRING BETWEEN PRE-ACTION SOLENOID VALVE AND FIRE ALARM PANEL FOR PROPER FIRE ALARM ACTIVATION.
- PROVIDE ALL WIRING, HARDWARE AND SOFTWARE FOR THE FOLLOWING SYSTEMS:
  - FAN CONTROLS/VENTILATION
  - MOTORIZED DAMPERS
  - GENERATOR
  - PRE-ACTION DOUBLE INTERLOCK SYSTEM
- ALL FIRE ALARM DEVICES IN BASEMENT TO BE C/W WIRE GUARD, DUAL ACTION AND MOISTURE PROOF (M).
- CONFIRM CONNECTIONS REQUIREMENTS TO EXISTING FIRE ALARM NETWORK AND COMMUNICATIONS SYSTEM ON SITE. NEW PANEL AND ANNUNCIATOR TO BE COMPATIBLE WITH EXISTING SYSTEM.
- CONFIRM CONNECTION TYPE (CONTACT CLOSURE RATINGS, SOLENOID VOLTAGE) WITH SPRINKLER CONTROL PANEL.
- ELECTRICAL CONTRACTOR TO ENSURE MANUFACTURER PROVIDES COMPLETE WIRING DETAILS AND NECESSARY DRAWINGS FOR COMPLETE INSTALLATION.
- DIVISION 28 SHALL PROVIDE TROUBLE INDICATION FOR:
  - TAMPERS
  - SPRINKLER LOW PRESSURE SWITCH (OR EXCESS PRESSURE)
  - PRE-ACTION LOW PRESSURE
  - PRE-ACTION HIGH PRESSURE
- ALL SPRINKLER SUPERVISED ZONES SHALL BE CONNECTED TO A "LATCHING" TYPE SUPERVISED CIRCUIT IN FIRE ALARM CONTROL PANEL.
- REFER TO MECHANICAL DRAWINGS FOR ALL FLOW AND TAMPERS SWITCHES. EXCAT LOCATIONS AND COUNT PRIOR TO INSTALLATION OF WIRING.
- ALL DOOR "HOLD OPEN" DEVICES SHALL BE INTERLOCKED WITH FIRE ALARM SYSTEM TO RELEASE UPON "FIRST STAGE" ALERT SIGNAL.
- INTERLOCK SMOKE DAMPERS TO CLOSE UPON FIRST STAGE ALERT SIGNAL.

SYMBOL SCHEDULE	
SYMBOL	DESCRIPTION
	SMOKE DETECTOR
	MANUAL PULL STATION
	ISOLATION MODULE
	SPRINKLER SUPERVISORY SWITCH T - TAMPER F - PRESSURE
	STROBE
	JUNCTION BOX
	CONTACT

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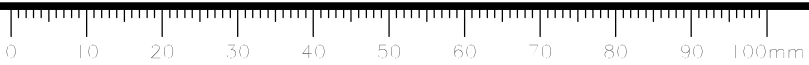
PWGS&C Project Manager

MARK ARROJADO

Drawing title

FIRE ALARM RISER DIAGRAM


Project no.	Drawing no.	Revision no.
R.076524.002	E10 OF 16	3







MECHANICAL EQUIPMENT SCHEDULE															
EQUIPMENT			ELECTRICAL CHARACTERISTICS			PACKAGED UNIT	CONTROLS				CIRCUITRY INFORMATION				NOTES
ITEM	DESCRIPTION	LOCATION	HP/kW	AMPS	VOLTS/ø		TYPE	SUPPLIED BY	INSTALLED BY	WIRED BY	PANEL-CCT #	O.C.P.	WIRE	CONDUIT	
CONDENSING UNITS ROOF															
CU-1	CONDENSING UNIT	ROOF	—	26MCA	208V/1ø	X		MECH	MECH	MECH	24-E2-B/1, 3	40A-2P	2#8 AWG RW90 Cu. +GRD	27mm	
CU-2	CONDENSING UNIT	ROOF	—	26MCA	208V/1ø	X		MECH	MECH	MECH	24-E2-B/5, 7	40A-2P	2#8 AWG RW90 Cu. +GRD	27mm	
CU-3	CONDENSING UNIT	ROOF	—	26MCA	208V/1ø	X		MECH	MECH	MECH	24-E2-B/9, 11	40A-2P	2#8 AWG RW90 Cu. +GRD	27mm	
CU-4	CONDENSING UNIT	ROOF	—	26MCA	208V/1ø	X		MECH	MECH	MECH	24-E2-B/13, 15	40A-2P	2#8 AWG RW90 Cu. +GRD	27mm	
CU-5A	CONDENSING UNIT	ROOF	—	25MCA	208V/1ø	X		MECH	MECH	MECH	24-E2-B/2, 4	40A-2P	2#8 AWG RW90 Cu. +GRD	27mm	
CU-5B	CONDENSING UNIT	ROOF	—	25MCA	208V/1ø	X		MECH	MECH	MECH	24-E2-B/6, 8	40A-2P	2#8 AWG RW90 Cu. +GRD	27mm	
CU-6A	CONDENSING UNIT	OUTDOOR UNIT	—	1.2FLA	600V/3ø	X		MECH	MECH	MECH	SD-6B-E1-A	15A-3P	3#12 AWG RW90 Cu. +GRD	21mm	REFER TO NOTE#5.
CU-6B	CONDENSING UNIT	OUTDOOR UNIT	—	1.2FLA	600V/3ø	X		MECH	MECH	MECH	SD-6B-E2-B	15A-3P	3#12 AWG RW90 Cu. +GRD	21mm	REFER TO NOTE#5.
ENERGY RECOVERY VENTILATOR															
ERV-1	ENERGY RECOVERY VENTILATOR	ROOM 476B	0.65KW	5.4A	120V/1ø	X		MECH	MECH	MECH	24-E2-B/17	15A-1P	2#12 AWG RW90 Cu. +GRD	21mm	
ELECTRIC HEATING COILS															
PHC-1	PRE-HEAT COIL	ROOM 476B	8.2KW	7.9A	600V/3ø	X		MECH	MECH	MECH	64-E1-A/1, 3, 5	15A-3P	3#12 AWG RW90 Cu. +GRD	21mm	
RHC-1	POST-HEAT COIL	ROOM 476C	7.5KW	7.2A	600V/3ø	X		MECH	MECH	MECH	64-E1-A/2, 4, 6	15A-3P	3#12 AWG RW90 Cu. +GRD	21mm	
AIR CONDITIONING EVAPORATOR															
AC-1	AIR CONDITIONING EVAPORATOR	ROOM 480	—	3.5 MCA	208V/1ø	X		MECH	MECH	MECH	24-E2-B/19, 21	15A-2P	2#12 AWG RW90 Cu. +GRD	21mm	
AC-2	AIR CONDITIONING EVAPORATOR	ROOM 482	—	3.5 MCA	208V/1ø	X		MECH	MECH	MECH	24-E2-B/23, 25	15A-2P	2#12 AWG RW90 Cu. +GRD	21mm	
AC-3	AIR CONDITIONING EVAPORATOR	ROOM 476A	—	3.5 MCA	208V/1ø	X		MECH	MECH	MECH	24-E2-B/27, 29	15A-2P	2#12 AWG RW90 Cu. +GRD	21mm	
AC-4	AIR CONDITIONING EVAPORATOR	ROOM 478	—	3.5 MCA	208V/1ø	X		MECH	MECH	MECH	24-E2-B/31, 33	15A-2P	2#12 AWG RW90 Cu. +GRD	21mm	
AC-5A	AIR CONDITIONING EVAPORATOR	ROOM 483	—	1.0 MCA	208V/3ø	X		MECH	MECH	MECH	24-E2-B/35, 37	15A-2P	2#12 AWG RW90 Cu. +GRD	21mm	
AC-5B	AIR CONDITIONING EVAPORATOR	ROOM 483	—	1.0 MCA	208V/3ø	X		MECH	MECH	MECH	24-E2-B/39, 41	15A-2P	2#12 AWG RW90 Cu. +GRD	21mm	
AC-6A	AIR CONDITIONING EVAPORATOR	NEW UPS ROOM	—	26.2 FLA	600V/3ø	X		MECH	MECH	MECH	SD-6B-E1-A	35A-3P	3#8 AWG RW90 Cu. +GRD	27mm	
AC-6B	AIR CONDITIONING EVAPORATOR	NEW UPS ROOM	—	26.2 FLA	600V/3ø	X		MECH	MECH	MECH	SD-6B-E2-B	35A-3P	3#8 AWG RW90 Cu. +GRD	27mm	
FANS															
TF-1	TRANSFER FAN	ROOM 482	FRAC	—	120V/1ø		VSC	MECH.	MECH.	ELEC	24-E2-B/10	15A-1P	2#12 AWG RW90 Cu. +GRD	21mm	
VARIABLE AIR VOLUME UNITS															
VAV-1	VARIABLE AIR VOLUME UNIT	ROOM 481	FRAC	—	120V/1ø	X		MECH	MECH	MECH	24-E2-B/12	15A-1P	2#12 AWG RW90 Cu. +GRD	21mm	PROVIDE POWER TO LOW VOLTAGE TRANSFORMER (SUPPLIED BY MECH.)
VAV-2	VARIABLE AIR VOLUME UNIT	ROOM 482	FRAC	—	120V/1ø	X		MECH	MECH	MECH	24-E2-B/12	15A-1P	2#12 AWG RW90 Cu. +GRD	21mm	
VAV-3	VARIABLE AIR VOLUME UNIT	ROOM 485	FRAC	—	120V/1ø	X		MECH	MECH	MECH	24-E2-B/12	15A-1P	2#12 AWG RW90 Cu. +GRD	21mm	
VAV-4	VARIABLE AIR VOLUME UNIT	ROOM 486	FRAC	—	120V/1ø	X		MECH	MECH	MECH	24-E2-B/12	15A-1P	2#12 AWG RW90 Cu. +GRD	21mm	
VAV-5	VARIABLE AIR VOLUME UNIT	ROOM 475	FRAC	—	120V/1ø	X		MECH	MECH	MECH	24-E2-B/12	15A-1P	2#12 AWG RW90 Cu. +GRD	21mm	
HUMIDIFIERS															
H-1	HUMIDIFIER	ROOM 480	1.9KW	15.8A	120V/1ø		H'STAT.	MECH.	MECH.	ELEC.	24-E2-B/14	15A-1P	2#12 AWG RW90 Cu. +GRD	21mm	PRE-ACTION SMOKE DETECTORS
H-2	HUMIDIFIER	ROOM 478	1.9KW	15.8A	120V/1ø		H'STAT.	MECH.	MECH.	ELEC.	24-E2-B/16	15A-1P	2#12 AWG RW90 Cu. +GRD	21mm	
H-3	HUMIDIFIER	ROOM 483	1.9KW	15.8A	120V/1ø		H'STAT.	MECH.	MECH.	ELEC.	24-E2-B/18	15A-1P	2#12 AWG RW90 Cu. +GRD	21mm	
MISCELLANEOUS															
PAC-1	PRE-ACTION CABINET	MECH. SHAFT	—	9.9A	208V/1ø	X	P A C K A G E D				24-E2-B/20	20A-1P	2#12 AWG RW90 Cu. +GRD	21mm	
DRAIN PUMPS															
DP-1	DRAIN PUMP	THIRD FLOOR CEILING SPACE	1/2HP	3.5FLA	208V/1ø	X	FLOAT	MECH.	MECH.	MECH.	24-E2-A/26, 28	15A-2P	2#12 AWG RW90 Cu. +GRD	21mm	PROVIDE POWER WIRING AND DISCONNECT SWITCH
DP-2	DRAIN PUMP	THIRD FLOOR CEILING SPACE	1/2HP	3.5FLA	208V/1ø	X	FLOAT	MECH.	MECH.	MECH.	24-E2-A/30, 32	15A-2P	2#12 AWG RW90 Cu. +GRD	21mm	
NOTES: 1. DIVISION 26 TO CONFIRM FINAL LOCATION OF ALL EQUIPMENT WITH MECHANICAL DRAWINGS PRIOR TO ROUGHING IN OF CONDUIT. CONFIRM FINAL EQUIPMENT RATINGS WITH MECHANICAL PRIOR TO ROUGHING-IN OF CONDUIT, WIRING AND CIRCUIT BREAKERS. SIZE OVERLOADS ACCORDINGLY. CONFIRM FINAL RATINGS WITH EQUIPMENT NAMEPLATES. INFORM ENGINEER OF ANY DISCREPANCIES AND OR DEVIATIONS PRIOR TO ROUGHING IN OF EQUIPMENT. 2. ALL CONTROL WIRING TO BE BY DIVISION 23 UNLESS OTHERWISE NOTED. REFER TO MECHANICAL DRAWINGS AND SPECIFICATIONS. ALL CONDUIT REQUIRED FOR CONTROLS TO BE SUPPLIED AND INSTALLED BY DIVISION 23 TO TO DIVISION 26 STANDARDS. 3. ALL STARTERS TO BE SUPPLIED, INSTALLED AND WIRED BY DIVISION 26 UNLESS OTHERWISE INDICATED. 4. PROVIDE DISCONNECTS FOR ALL EQUIPMENT AS REQUIRED. 5. FINAL EQUIPMENT DESIGNATIONS ARE TO BE CONFIRMED WITH BGIS PRIOR TO COMPLETING LABELS, LAMACOIDS, PANEL DIRECTORIES AND RECORD DRAWINGS.															
LEGEND: STARTERS MAG = MAGNETIC STARTER VFD = VARIABLE FREQUENCY DRIVE MAN = MANUAL STARTER TOG = MOTOR RATED TOGGLE SWITCH CON = CONTRACTOR  FIRE ALARM SHUTDOWN FIRE ALARM SHUTDOWN C/W HOA AT FIRE ALARM PANEL DUCT DETECTOR AND SHUTDOWN ON SEPARATE ZONE.															
CONTROLS T'STAT = THERMOSTAT H'STAT = HUMIDISTAT EMCS = ENERGY MANAGEMENT CONTROL SYSTEM TC = TIME CLOCK MT = MANUAL TIMER MS = MANUAL SWITCH VSC = VARIABLE SPEED CONTROL APS = AIR PROVIDING SWITCH COD = CARBON MONOXIDE DETECTOR FA = FIRE ALARM INTERLOCK AUTO = INTEGRAL AUTO SWITCH ACTIVATION FLOAT = FLOAT SWITCH															



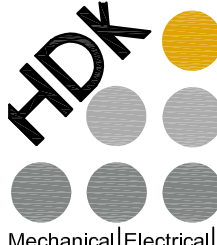
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No. 5539    Date:    04/30/2019

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4		
3	For Construction	2018-06-11
2	99% Construction Documents Submission	2018-04-05
1	50% Construction Documents Submission	2018-01-25
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Revision	Description	Date

Client

PSPC/SPAC

SUITE 100-167 LOMBARD AVENUE  
WINNIPEG, MANITOBA

Project title

INTERIOR ALTERATIONS  
1091 PORTAGE AVENUE  
WINNIPEG, MANITOBA  
SUITE 483  
RENOVATION & FIT UP

Designed by  
PL

Drawn by  
RD

Approved by  
HCC

PWGSC Project Manager  
MARK ARROJADO

Drawing title

MECHANICAL EQUIPMENT SCHEDULE

Project no.	Drawing no.	Revision no.
R.076524.002	E11 OF 16	3



EMERGENCY LIGHTING SCHEDULE			
TYPE	MANUFACTURER	CATALOGUE NUMBER	LAMPS
EL-1	LUMACELL	DR2-130-WH-MR16-LD9	TWO (2) 5W, 12V MR 16 LED
	EMERGILITE	EF150-D-LIC	
	READYLITE	RL150-D-LD9	
EL-2	LUMACELL	LHPR-2-L10W	TWO (2) 10W, 24V LED
	EMERGILITE	EHPR-2-L10W	
	READYLITE	RHPR-2-L10W	

REMOTE EMERGENCY HEAD WIRE SIZE CHART		
WATTAGE	DISTANCE (METERS)	WIRE SIZE (FOR 5%)
18	34	12
	58	10
	91	8
	144	6
	231	4
25	26	12
	41	10
	65	8
	103	6
	164	4
35	19	12
	29	10
	46	8
	74	6
	118	4
50	12	12
	20	10
	32	8
	51	6
	83	4
NOTES: 1. THE FOLLOWING CHART SHOWS THE MAXIMUM DISTANCE AND WIRE SIZE FOR A LOAD TO PRODUCE 5% TOTAL VOLTAGE DROP. 2. ADJUST FOR THE DIFFERENCES IN: .1 EMERGENCY LIGHTING VOLTAGE .2 VARIATION IN LOAD .3 DISTANCE 3. BASED ON LUMACELL "WIRE SIZE GUIDE" FOR A 12 VOLT SYSTEM.		

LUMINAIRE SCHEDULE							
TYPE	MANUFACTURER	CATALOGUE NUMBER	LAMPS	WATTS	LUMINAIRE STYLE	VOLTAGE	COMMENTS
A	AXIS LIGHTING	WALED-24-5000-80-35-VL-W-120-DP-1-TB9	LED 3500K 80 CRI	44W	RECESSED TROFFER (LAY-IN)	120V	
	LITHONIA	2ALL4-48L-EZ1-LP835		40W			
	PHILIPS	2ST-G-50L-835-4-DS-UNV-DIM		40W			
B3	AXIS LIGHTING	ZELED-SL65/35-750-80-35-MSO-12-W-UNV -MD-1-CT9(36)	LED 3500K 80 CRI	92.4W	SUSPENDED DIRECT/INDIRECT	120V	
	FLUXWERX	PF1-B-F-B-35-W-12-G-E1-M-03		87W			
	FOCAL POINT	FOSS-FL80-750LF-35K-1C-UNV-DII-HS-CLV48-WH-12'		78W			
C	AXIS LIGHTING	BBLED2-SL-1000-320-80-35-50-4-W-120-DALI-2-CA36	LED 3500K 90 CRI	40W	SUSPENDED DIRECT/INDIRECT	120V	
	PEERLESS	SQM4-LLP-4FT.-MSL4-80CRI-35K-1900LMF-400LMF-DARK-DALI-120-DET-F2-24A-CO32-CSA					
	FOCAL LIGHT	FSM4BS-FLFL-375DN-1000UP-35K-2C-120-D11-C48-WH-4'					
E-1	LUMACELL	LAE-1-TA-ACD	LED	2.5W	EGRESS SIGN (SINGLE SIDED)	6-24VDC 120-347VAC	
	EMERGI-LITE	EAE-1-TA-U		2.5W			
	READY-LITE	RAE-1-TA-DC		2.5W			
E-2	LUMACELL	LAE-2-TA-ACD	LED	2.5W	EGRESS SIGN (DOUBLE SIDED)	6-24VDC 120-347VAC	
	EMERGI-LITE	EAE-2-TA-U		2.5W			
	READY-LITE	RAE-1-TA-DC		2.5W			
E-3	LUMACELL	LN-1-W-U	LED	2.5W	EGRESS SIGN		
	EMERGI-LITE	EN-1-W-U		2.5W			
	READY-LITE	RN-1-W-U		2.5W			
F	EATON'S PORTFOLIO	LD4B-10-D5LT-EU4B-1020-80-35-4LB-M-1-L1	LED 3500K 80 CRI	11W	RECESSED DOWNLIGHT	120V	
	GOTHAM	EVO-35/10-4AR-MD-LSS-120-DALI		12.8W			
	LITHOUER	C4-R-N-C4L-10-8-35-M-DALI-U-C4-R-DL-CL-P		11W			
G	AXIS LIGHTING	BRLED-750-80-35-FL-S44-W-120-O(DALI)-1-DS	LED 3500K 80 CRI	7.5W/ft.	RECESSED LINEAR (MUD OVER FLANGE)	120V	CONFIRM EXACT LENGTH UPON ORDERING.
	FOCAL POINT	FSM2L-FL-625LF-35K-1C-UNV-D11-XF1-WH-44FT		8.25W/ft.			
	A LIGHT	ACL5-44FT-LH-35-U-HE-G-W-D3(DALI)		9.7W/ft.			
H	GREEN IMAGE TECH	GS-50-BID-24VDC-WW-100W(DIMMABLE) C/W GIT-P3-07 PROFILE	LED	100W	DIMMABLE VALENCE TAPE LIGHT	120V	TO BE C/W ALL REQUIRED MOUNTING HARDWARE, DRIVERS, POWER SUPPLIES ETC.
	ACCLAIM LIGHTING	FLEX 31-3 C/W M100L24DC + FLX444 + FLX113					
	LUMICREST	LMFS-5M24-3000K C/W ALUMINUM CORNER MOUNT CHANNEL C/W PWM DIMMER					
J	EATON'S	4SNLED-LD5-49SL-LN-UNV-L835-CD-1-U	LED 3500K	38.7W	SUSPENDED STRIP	120V	
	LITHONIA	2LID-L48-5MR-5000LM-FST-120V-35-80CRI-WH		41W			
	PHILIPS	FSS-4-SSL-835-120-DIM		45W			
K1	AXIS LIGHTING	CCH-SL-900-80-35-SL6-W-120-O(DALI)-1-C	LED 3500K	63.6W	COVE LIGHT	120V	CONFIRM EXACT LENGTH UPON ORDERING. LUMINAIRES TO BE MOUNTED TO ELIMINATE DARK CORNERS.
	LUMENWERX	ALC-APO-LED-80-950-35-6FT-120-DA-1-COVH-W		45W			
	FOCAL POINT	FCOLT-HF-1000LF-35K-1C-UNV-D11-CV-NF-6		61.5W			
K2	AXIS LIGHTING	CCH-SL-900-80-35-SL9-W-120-O(DALI)-1-C	LED 3500K	95.4W	COVE LIGHT	120V	CONFIRM EXACT LENGTH UPON ORDERING. LUMINAIRES TO BE MOUNTED TO ELIMINATE DARK CORNERS.
	LUMENWERX	ALC-APO-LED-80-950-35-9FT-120-DA-1-COVH-W		67.5W			
	FOCAL POINT	FCOLT-HF-1000LF-35K-1C-UNV-D11-CV-NF-9		92.25W			

EMERGENCY LIGHTING BATTERY BANK SCHEDULE						
TYPE	MANUFACTURER	CATALOGUE NUMBER	WATTAGE	CIRCUIT NUMBER	LOCATION	LAMPS
EBB-1	LUMACELL	RG24S-2-DR130-LD9-ATN-V-A C/W VSR-3Z-1-1-A-PB-PL	200W	24-U2-C/60	ROOM 483	TWO(2) 5W-12V MR16 LED
	EMERGILITE	24ESL-UN-A-V-/2-EF150-U C/W 2CB-3Z-1-A-PB-PL				
	READYLITE	LDX24-ADN-2-RL150-LD9-A-V C/W V120-ZCP-3Z-1-PB-PL				
EBB-2	LUMACELL	LHP-24150-2-L10-ATN	150W	2B-U1-C/1	NEW UPS ROOM	TWO(2) 10W-24V LED
	EMERGILITE	EHP-24150-2-L10-UN				
	READYLITE	RHP-24150-2-L10-ADN				
NOTES: 1. ALL WIRING TO BE IN EMT CONDUIT 21mm C/W MINIMUM #12 AWG Cu WIRING. CONFIRM WIRE SIZES WITH DISTANCES PER MANUFACTURER'S RECOMMENDATIONS. 2. ADJUST LIGHTING HEADS TO PROPERLY ILLUMINATE EGRESS ROUTE. 3. EMERGENCY LIGHTING INSTALLATION TO CONFORM TO OEC 46-304.						



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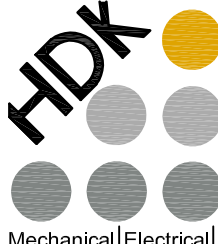
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Certificate of Authorization

HDK Consulting Incorporated

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4		
3	For Construction	2018-06-11
2	99% Construction Documents Submission	2018-04-05
1	50% Construction Documents Submission	2018-01-25
0	Design Development Submission	2017-08-30
Revision	Description	Date

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WINNIPEG, MANITOBA

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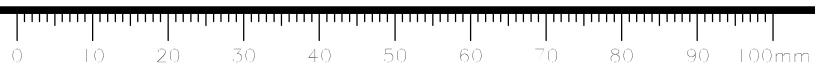
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PWSSC Project Manager  
MARK ARROJADO

Drawing title

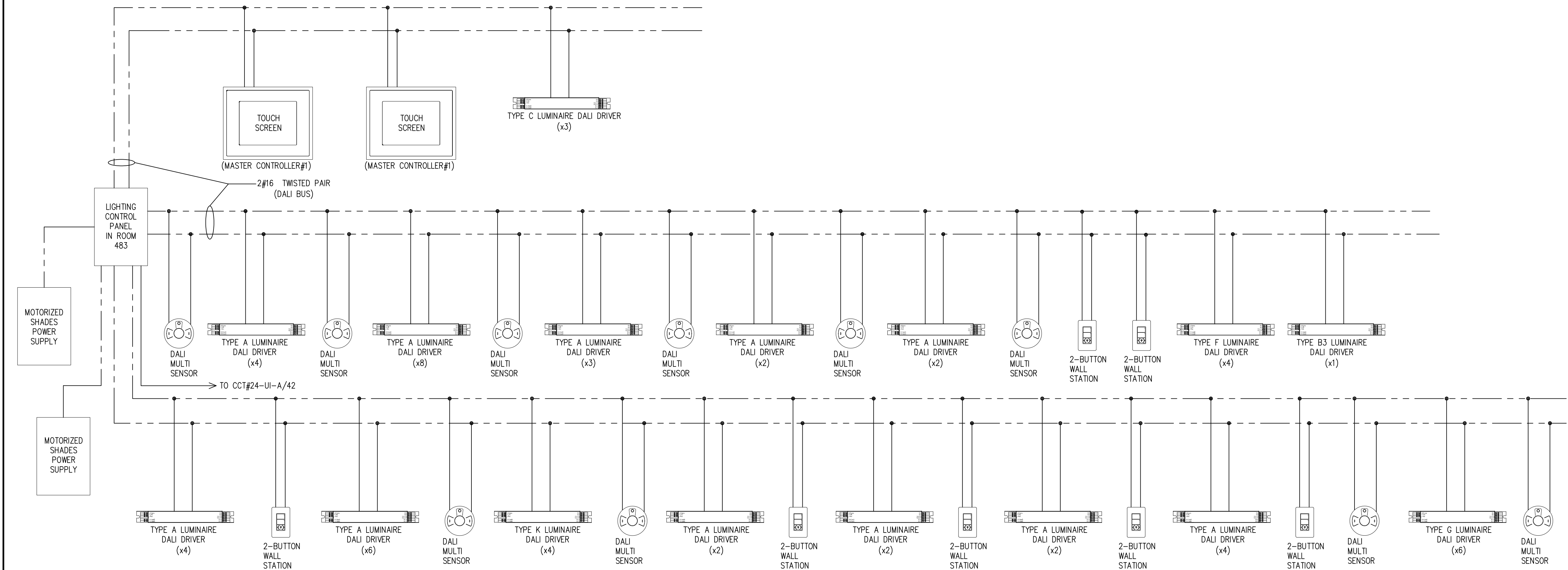
ELECTRICAL SCHEDULES

Project no.	Drawing no.	Revision no.
R.076524.002	E12 OF 16	3





LIGHTING CONTROL SCHEMATIC



EQUIPMENT DESCRIPTION

LIGHTING CONTROL PANEL: USED FOR THE CONTROL AND OPERATION OF ALL LIGHTING DEVICES USING DIGITAL ADDRESSABLE LIGHTING INTERFACE (DALI) AND LOW VOLTAGE ANALOG SYSTEMS. IT HOUSES THE LOCAL CONTROLLER, LIGHTING MANAGEMENT SOFTWARE AND VARIOUS TYPES OF LIGHTING INTERFACE MODULES.

DALI DRIVER LED DRIVER C/W INTEGRAL DALI COMMUNICATION INTERFACE. DRIVER TO BE ADDRESSABLE.

MULTI SENSOR COMBINES DAYLIGHT SENSING, OCCUPANCY DETECTION AND TEMPERATURE MEASUREMENT INTO A SINGLE DEVICE.

WALL STATIONS PROVIDE ON/OFF DIMMING OF ANY DALI ZONE OR GROUP OF LUMINAIRES FROM A SINGLE SPECIFICATION GRADE DEVICE. CONNECTS DIRECTLY TO THE DALI BUS.

TOUCH SCREEN 145mm TOUCH SCREEN WITH INTUITIVE VISUAL INTERFACE AND ETHERNET CONNECTIVITY. (MASTER CONTROLLER)

SYSTEM DESCRIPTION

1. SYSTEM TO BE SCALABLE, MODULAR AND DESIGNED TO CONSOLIDATE MULTIPLE FACILITIES INTO A SINGLE POINT OF CONTROL.
2. SYSTEM TO INCLUDE TIME BASED, SENSOR BASED AND MANUAL INPUT BASED CONTROL FOR EACH INDIVIDUAL ZONE.
3. EACH DEVICE TO BE ADDRESSABLE FOR EASE OF MAINTENANCE.
4. UPON LOSS OF CONNECTION TO THE NETWORK, EACH ZONE TO OPERATE INDIVIDUALLY.
5. ALL WIRING TO BE RUN IN CONDUIT MINIMUM 21mm.

BASIS OF DESIGN:

EATON'S FIFTH LIGHT SCHEMATIC IS FOR GRAPHICAL REPRESENTATION ONLY. REFER TO LIGHTING CONTROL SCHEDULES AND PLANS FOR EXACT QUANTITIES AND LOCATIONS. CONFIRM FINAL REQUIREMENTS OF SYSTEM WITH MANUFACTURER.

LIGHTING CONTROL SCHEDULE

RELAY	ROOM NAME AND NUMBER	LUMINAIRE		OCCUPANCY SENSOR CEILING			LOCAL WALL CONTROL			DALIBUS NUMBER	CCT NUMBER	ZONE OPERATION	MASTER CONTROL
		TYPE	QTY.	PIR	DUAL TECH	LONG RANGE	ON/OFF	OS	DIM				
4TH FLOOR													
L01	RM 475	A	4	X						3	24-U1-A/3	①	
L02	RM 476A	A	2	X		X				2	24-U1-A/4	②	
L03	RM 476B	A	2	X		X				2	24-U1-A/4	②	
L04	RM 476C	A	3	X		X				2	24-U1-A/4	②	
L05	RM 477	G	—				X		X	3	24-U1-A/3	③	
L06	RM 478	A	6	X						3	24-U1-A/3	①	
L07	RM 479A-LCZ-3	C	4							1	24-U2-C/1	⑦	X
L08	RM 479A-LCZ-4	C	3							1	24-U1-A/1	⑦	X
L09	RM 479A-LCZ-5	C	5							1	24-U1-A/1	⑦	X
L10	RM 479A-LCZ-6	C	3							1	24-U2-C/1	⑦	X
L11	RM 479A-LCZ-7	C	4							1	24-U2-C/1	⑦	X
L12	RM 479A-LCZ-8	C	3							1	24-U1-A/1	⑦	X
L13	RM 479A-LCZ-9	C	5							1	24-U1-A/1	⑦	X
L14	RM 479A-LCZ-10	C	3							1	24-U2-C/1	⑦	X
L15	RM 479A-LCZ-1	C	5							1	24-U1-A/1	⑦	X
L16	RM 479A-LCZ-2	C	3							1	24-U2-C/1	⑦	X
L17	RM 480	A	4		X		X			2	24-U1-A/2	①	
L18	RM 481	A	8	X			X			2	24-U1-A/2	①	
L19	RM 482	B3	1	X			X		X	2	24-U1-A/2	④	
		F	4				X		X	2	24-U1-A/2	④	
L20	RM 483	A	4				X			3	24-U1-A/2	⑤	
L21	RM 484	A	2				X	X		3	24-U1-A/3	⑥	
L22	RM 485	A	2				X	X		3	24-U1-A/3	⑥	
L23	RM 486	A	2				X	X		3	24-U1-A/3	⑥	
L24	RM 487	G	—	X		X				3	24-U1-A/4	①	

ZONE OPERATION:

- ① ON/OFF VIA CEILING MOUNT OCCUPANCY SENSOR.
- ② OPERATION VIA CEILING MOUNT OCCUPANCY SENSOR
  - NO OCCUPANCY - LIGHTING TO DIM TO 50%
  - OCCUPANCY - LIGHTING TO BE FULL ON
- ③ ON/OFF/DIMMING VIA WALL BOX DIMMER
- ④ ON/OFF/DIMMING VIA WALL BOX DIMMER WITH "OFF" OVERRIDE VIA CEILING MOUNT OCCUPANCY SENSOR.
- ⑤ ON/OFF VIA WALL SWITCH
- ⑥ ON/OFF VIA COMBINATION WALL MOUNT SWITCH/OCCUPANCY SENSOR (VACANCY)
- ⑦ DIRECT AND INDIRECT PORTIONS OF LUMINAIRES TO BE DIMMED INDEPENDENTLY VIA MASTER CONTROL STATIONS.

NOTES:

1. CONFIRM ALL ZONE OPERATION WITH DEPARTMENTAL REPRESENTATIVE PRIOR TO COMMISSIONING OF SYSTEM.

5		
4		
3	For Construction	2018-06-11
2	99% Construction Document Submission	2018-04-05
1	50% Construction Documents Submission	2018-01-25
0	Design Development Submission	2017-08-30
Revision	Description	Date

Client

PSPC/SPAC

SUITE 100-167 LOMBARD AVENUE  
WINNIPEG, MANITOBA

Project title

INTERIOR ALTERATIONS  
1091 PORTAGE AVENUE  
WINNIPEG, MANITOBA

SUITE 483  
RENOVATION & FIT UP

Designed by

PL

Drawn by

RD

Approved by

HCC

PWGSC Project Manager

MARK ARROJADO

Drawing title

LIGHTING CONTROL  
SCHEDULE AND SCHEMATIC

Project no.

R.076524.002

Drawing no.

E13

OF 16

Revision no.


3



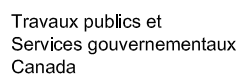
PANELBOARD "24-U1-A"											
ITEM	WIRE	LOAD (kW)	OCP	C	C	ITEM	WIRE	LOAD (kW)	OCP		
LIGHTING RM 479A + RM 79B	#12	0.84	15A	1	2	LIGHTING RM 480, 481, 482, 483	#12	0.817	15A		
LIGHTING RM 480, 481, 482, 483	#12	0.896	15A	3	4	LIGHTING RM 476, 487	#12	0.80	15A		
				5	6						
DISPATCH CONSOLE #1 (C#1)	#12	0.62	20A	7	8	DISPATCH CONSOLE #14 (C#14)	#12	0.62	20A		
DISPATCH CONSOLE #1 (C#1)	#12	0.62	20A	9	10	DISPATCH CONSOLE #14 (C#14)	#12	0.62	20A		
DISPATCH CONSOLE #1 (C#1)	#12	0.62	20A	11	12	DISPATCH CONSOLE #14 (C#14)	#12	0.62	20A		
DISPATCH CONSOLE #1 (C#1)	#12	0.62	20A	13	14	DISPATCH CONSOLE #14 (C#14)	#12	0.62	20A		
DISPATCH CONSOLE #1 (C#1)	#12	0.62	20A	15	16	DISPATCH CONSOLE #14 (C#14)	#12	0.62	20A		
DISPATCH CONSOLE #2 (C#2)	#12	0.62	20A	17	18	DISPATCH CONSOLE #15 (C#15)	#12	0.62	20A		
DISPATCH CONSOLE #2 (C#2)	#12	0.62	20A	19	20	DISPATCH CONSOLE #15 (C#15)	#12	0.62	20A		
DISPATCH CONSOLE #2 (C#2)	#12	0.62	20A	21	22	DISPATCH CONSOLE #15 (C#15)	#12	0.62	20A		
DISPATCH CONSOLE #2 (C#2)	#12	0.62	20A	23	24	DISPATCH CONSOLE #15 (C#15)	#12	0.62	20A		
DISPATCH CONSOLE #2 (C#2)	#12	0.62	20A	25	26	DISPATCH CONSOLE #15 (C#15)	#12	0.62	20A		
DISPATCH CONSOLE #3 (C#3)	#12	0.62	20A	27	28	TV 479B (x2)	#12	1.00	15A		
DISPATCH CONSOLE #3 (C#3)	#12	0.62	20A	29	30	TV 479A (x1)	#12	0.50	15A		
DISPATCH CONSOLE #3 (C#3)	#12	0.62	20A	31	32	FLOOR BOX 479B (x1)	#12	1.00	15A		
DISPATCH CONSOLE #3 (C#3)	#12	0.62	20A	33	34	TEACHING PODIUM	#12	1.00	15A		
DISPATCH CONSOLE #3 (C#3)	#12	0.62	20A	35	36	RACK MOUNT RECEPTACLE	#10	1.33	30A, 3P		
DISPATCH CONSOLE #12 (C#12)	#12	0.62	20A	37	38		#10	1.33			
DISPATCH CONSOLE #12 (C#12)	#12	0.62	20A	39	40		#10	1.33			
DISPATCH CONSOLE #12 (C#12)	#12	0.62	20A	41	42	LIGHTING CONTROL PANEL					15A
DISPATCH CONSOLE #12 (C#12)	#12	0.62	20A	43	44	SPARE					15A
DISPATCH CONSOLE #12 (C#12)	#12	0.62	20A	45	46	SPARE					15A
DISPATCH CONSOLE #13 (C#13)	#12	0.62	20A	47	48	SPARE					15A
DISPATCH CONSOLE #13 (C#13)	#12	0.62	20A	49	50	SPARE					15A
DISPATCH CONSOLE #13 (C#13)	#12	0.62	20A	51	52	SPARE					15A
DISPATCH CONSOLE #13 (C#13)	#12	0.62	20A	53	54	SPARE					15A
DISPATCH CONSOLE #13 (C#13)	#12	0.62	20A	55	56	SPARE					15A
SPACE				57	58	SPACE					
SPACE				59	60	SPACE					
RESERVED FOR SURGE PROTECTION DEVICE				61	62	RESERVED FOR SURGE PROTECTION DEVICE					
				63	64						
				65	66						
				67	68						
				69	70						
				71	72						
NOTES:						MOUNTING: SURFACE RATING: 225A,120/208V/3ø/4W					
LOAD TYPES		TOTAL CONNECTED LOAD			DEMAND %			DEMAND LOAD			
LIGHTING		3.353KW			1.00			3.353KW			
COMMUNICATIONS		24.1KW			0.57			13.737KW			
ELECTRIC HEAT		—			—			—			
MECHANICAL		—			—			—			
MISCELLANEOUS		2.0KW			0.60			1.4KW			
TOTAL LOAD								18.49KW			

PANELBOARD "24-U1-B"											
ITEM	WIRE	LOAD (kW)	OCP	C	C	ITEM	WIRE	LOAD (kW)	OCP		
DISPATCH CONSOLE #7 (C#7)	#12	0.62	20A	1	2	TV479B	#12	0.50	15A		
DISPATCH CONSOLE #7 (C#7)	#12	0.62	20A	3	4	TV479B	#12	0.50	15A		
DISPATCH CONSOLE #7 (C#7)	#12	0.62	20A	5	6	FLOOR BOX 479A	#12	1.00	15A		
DISPATCH CONSOLE #7 (C#7)	#12	0.62	20A	7	8	FLOOR BOX 479A	#12	1.00	15A		
DISPATCH CONSOLE #7 (C#7)	#12	0.62	20A	9	10	ROOM 484 WORKSTATION	#12	1.00	15A		
DISPATCH CONSOLE #8 (C#8)	#12	0.62	20A	11	12	ROOM 484, 485 WORKSTATIONS	#12	1.00	15A		
DISPATCH CONSOLE #8 (C#8)	#12	0.62	20A	13	14	ROOM 485 WORKSTATIONS	#12	1.00	15A		
DISPATCH CONSOLE #8 (C#8)	#12	0.62	20A	15	16	ROOM 484, 485 REC'S (x2)	#12	0.40	15A		
DISPATCH CONSOLE #8 (C#8)	#12	0.62	20A	17	18	ROOM 486 WORKSTATION	#12	0.50	15A		
DISPATCH CONSOLE #8 (C#8)	#12	0.62	20A	19	20	ROOM 486 REC'S (x2)	#12	0.40	15A		
DISPATCH CONSOLE #9 (C#9)	#12	0.62	20A	21	22	ROOM 475 WORKSTATION	#12	0.50	15A		
DISPATCH CONSOLE #9 (C#9)	#12	0.62	20A	23	24	ROOM 475, 487 REC'S (x4)	#12	0.80	15A		
DISPATCH CONSOLE #9 (C#9)	#12	0.62	20A	25	26	RACK MOUNT RECEPTACLE	#10	1.33	30A, 3P		
DISPATCH CONSOLE #9 (C#9)	#12	0.62	20A	27	28		#10	1.33			
DISPATCH CONSOLE #9 (C#9)	#12	0.62	20A	29	30		#10	1.33			
DISPATCH CONSOLE #19 (C#19)	#12	0.62	20A	31	32	MOTORIZED SHADES	#12	1.00	20A		
DISPATCH CONSOLE #19 (C#19)	#12	0.62	20A	33	34	MOTORIZED SHADES	#12	1.00	20A		
DISPATCH CONSOLE #19 (C#19)	#12	0.62	20A	35	36	SPARE					15A
DISPATCH CONSOLE #19 (C#19)	#12	0.62	20A	37	38	SPARE					15A
DISPATCH CONSOLE #19 (C#19)	#12	0.62	20A	39	40	SPARE					15A
DISPATCH CONSOLE #20 (C#20)	#12	0.62	20A	41	42	SPARE					15A
DISPATCH CONSOLE #20 (C#20)	#12	0.62	20A	43	44	SPARE					15A
DISPATCH CONSOLE #20 (C#20)	#12	0.62	20A	45	46	SPARE					15A
DISPATCH CONSOLE #20 (C#20)	#12	0.62	20A	47	48	SPARE					15A
DISPATCH CONSOLE #20 (C#20)	#12	0.62	20A	49	50	SPARE					15A
DISPATCH CONSOLE #21 (C#21)	#12	0.62	20A	51	52	SPACE					
DISPATCH CONSOLE #21 (C#21)	#12	0.62	20A	53	54	SPACE					
DISPATCH CONSOLE #21 (C#21)	#12	0.62	20A	55	56	SPACE					
DISPATCH CONSOLE #21 (C#21)	#12	0.62	20A	57	58	SPACE					
DISPATCH CONSOLE #21 (C#21)	#12	0.62	20A	59	60	SPACE					
RESERVED FOR SURGE PROTECTION DEVICE				61	62	RESERVED FOR SURGE PROTECTION DEVICE					
				63	64						
				65	66						
				67	68						
				69	70						
				71	72						
NOTES:						MOUNTING: SURFACE RATING: 225A,120/208V/3ø/4W					
LOAD TYPES		TOTAL CONNECTED LOAD			DEMAND %			DEMAND LOAD			
LIGHTING		-			-			-			
COMMUNICATIONS		23.6KW			0.57			13.45KW			
ELECTRIC HEAT		-			-			-			
MECHANICAL		-			-			-			
MISCELLANEOUS		9.6KW			0.60			5.76KW			
TOTAL LOAD								19.21KW			

PANELBOARD "2B-U1-C"											
ITEM	LOAD (kW)	OCP	C	C	ITEM	LOAD (kW)	OCP				
LIGHTING	0.40	15A	1	2	REC'S (x4)	0.80	15A				
SPARE		15A	3	4	SPACE						
SPARE		15A	5	6	SPACE						
SPARE		15A	7	8	SPACE						
SPARE		15A	9	10	SPACE						
SPARE		15A	11	12	SPACE						
SPARE		15A	13	14	SPACE						
SPACE			15	16	SPACE						
SPACE			17	18	SPACE						
SPACE			19	20	SPACE						
SPACE			21	22	SPACE						
SPACE			23	24	SPACE						
NOTES:						MOUNTING: SURFACE RATING: 60A,120/208V/3ø/4W					
LOAD TYPES		TOTAL CONNECTED LOAD			DEMAND %		DEMAND LOAD				
LIGHTING		0.4KW			1.00		0.4KW				
COMMUNICATIONS		-			-		-				
ELECTRIC HEAT		-			-		-				
MECHANICAL		-			-		-				
MISCELLANEOUS		0.8KW			0.60		0.48KW				
TOTAL LOAD							0.88KW				



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No. 5539    Date: 04/30/2019

5		
4		
3		
2	For Construction	2016-06-11
1	99% Construction Documents Submission	2016-04-05
0	50% Construction Documents Submission	2016-01-25
Revision	Description	Date</



PANELBOARD "24-U2-C"												
ITEM	WIRE	LOAD (kW)	OCF	C	C	ITEM	WIRE	LOAD (kW)	OCF			
LIGHTING RM 479A + RM 479B	#12	0.68	15A	1	2	DISPATCH CONSOLE #18 (C#18)	#12	0.62	20A			
				3	4	DISPATCH CONSOLE #18 (C#18)	#12	0.62	20A			
				5	6	DISPATCH CONSOLE #18 (C#18)	#12	0.62	20A			
DISPATCH CONSOLE #4 (C#4)	#12	0.62	20A	7	8	DISPATCH CONSOLE #18 (C#18)	#12	0.62	20A			
DISPATCH CONSOLE #4 (C#4)	#12	0.62	20A	9	10	DISPATCH CONSOLE #18 (C#18)	#12	0.62	20A			
DISPATCH CONSOLE #4 (C#4)	#12	0.62	20A	11	12	TV 479B (x2)	#12	1.00	15A			
DISPATCH CONSOLE #4 (C#4)	#12	0.62	20A	13	14	TV 479A	#12	0.50	15A			
DISPATCH CONSOLE #4 (C#4)	#12	0.62	20A	15	16	FLOORBOX 479B	#12	1.00	15A			
DISPATCH CONSOLE #5 (C#5)	#12	0.62	20A	17	18	FLOORBOX 479B	#12	1.00	15A			
DISPATCH CONSOLE #5 (C#5)	#12	0.62	20A	19	20	RM 476A, 476B REC'S (x2)	#12	0.40	15A			
DISPATCH CONSOLE #5 (C#5)	#12	0.62	20A	21	22	RM 477 REC'S (x2)	#12	0.40	15A			
DISPATCH CONSOLE #5 (C#5)	#12	0.62	20A	23	24	RM 478 PRINTER	#12	1.20	15A			
DISPATCH CONSOLE #5 (C#5)	#12	0.62	20A	25	26	RM 478 REC'S (x3)	#12	0.60	15A			
DISPATCH CONSOLE #6 (C#6)	#12	0.62	20A	27	28	RM 478 COUNTER REC'S (x2)	#12	0.40	15A			
DISPATCH CONSOLE #6 (C#6)	#12	0.62	20A	29	30	RACK MOUNT RECEPTACLE	#10	1.33	30A, 3P			
DISPATCH CONSOLE #6 (C#6)	#12	0.62	20A	31	32		#10	1.33				
DISPATCH CONSOLE #6 (C#6)	#12	0.62	20A	33	34		#10	1.33				
DISPATCH CONSOLE #6 (C#6)	#12	0.62	20A	35	36	SPARE			15A			
DISPATCH CONSOLE #16 (C#16)	#12	0.62	20A	37	38	SPARE			15A			
DISPATCH CONSOLE #16 (C#16)	#12	0.62	20A	39	40	SPARE			15A			
DISPATCH CONSOLE #16 (C#16)	#12	0.62	20A	41	42	SPARE			15A			
DISPATCH CONSOLE #16 (C#16)	#12	0.62	20A	43	44	SPARE			15A			
DISPATCH CONSOLE #16 (C#16)	#12	0.62	20A	45	46	SPARE			15A			
DISPATCH CONSOLE #17 (C#17)	#12	0.62	20A	47	48	SPARE			15A			
DISPATCH CONSOLE #17 (C#17)	#12	0.62	20A	49	50	SPARE			15A			
DISPATCH CONSOLE #17 (C#17)	#12	0.62	20A	51	52	SPACE						
DISPATCH CONSOLE #17 (C#17)	#12	0.62	20A	53	54	SPACE						
DISPATCH CONSOLE #17 (C#17)	#12	0.62	20A	55	56	SPACE						
SPACE				57	58	EXIT SIGNS	#12	0.20	15A			
SPACE				59	60	EBB-1	#12	0.20	15A			
RESERVED FOR SURGE PROTECTION DEVICE				61	62	RESERVED FOR SURGE PROTECTION DEVICE						
				63	64							
				65	66							
				67	68							
				69	70							
				71	72							
NOTES: PROVIDE CIRCUIT BREAKER LOCKING DEVICE FOR CCT#58 AND 60.							MOUNTING: SURFACE RATING: 225A,120/208V/3ø/4W					
LOAD TYPES		TOTAL CONNECTED LOAD			DEMAND %			DEMAND LOAD				
LIGHTING		1.08KW			1.00			1.08KW				
COMMUNICATIONS		24.1KW			0.57			13.737KW				
ELECTRIC HEAT		-			-			-				
MECHANICAL		-			-			-				
MISCELLANEOUS		5.0KW			0.60			3.0KW				
TOTAL LOAD								17.817KW				

PANELBOARD "24-U2-D"												
ITEM	WIRE	LOAD (kW)	OCF	C	C	ITEM	WIRE	LOAD (kW)	OCF			
DISPATCH CONSOLE #10 (C#10)	#12	0.62	20A	1	2	ROOM 476C, 480, 481 REC'S (x5)	#12	1.00	15A			
DISPATCH CONSOLE #10 (C#10)	#12	0.62	20A	3	4	MICROWAVE	#12	1.20	15A			
DISPATCH CONSOLE #10 (C#10)	#12	0.62	20A	5	6	MICROWAVE	#12	1.20	15A			
DISPATCH CONSOLE #10 (C#10)	#12	0.62	20A	7	8	FRIDGE	#12	1.00	15A			
DISPATCH CONSOLE #10 (C#10)	#12	0.62	20A	9	10	FRIDGE	#12	1.00	15A			
DISPATCH CONSOLE #11 (C#11)	#12	0.62	20A	11	12	COUNTER REC'S (x2)	#12	1.20	15A			
DISPATCH CONSOLE #11 (C#11)	#12	0.62	20A	13	14	COUNTER REC'S (x1)	#12	0.60	15A			
DISPATCH CONSOLE #11 (C#11)	#12	0.62	20A	15	16	ROOM 482 FLOORBOX/TV	#12	1.00	15A			
DISPATCH CONSOLE #11 (C#11)	#12	0.62	20A	17	18	ROOM 482 REC'S (x2)	#12	0.40	15A			
DISPATCH CONSOLE #11 (C#11)	#12	0.62	20A	19	20	ROOM 481 TV	#12	0.50	15A			
DISPATCH CONSOLE #22 (C#22)	#12	0.62	20A	21	22	RACK MOUNT RECEPTACLE	#10	1.33	30A, 3P			
DISPATCH CONSOLE #22 (C#22)	#12	0.62	20A	23	24		#10	1.33				
DISPATCH CONSOLE #22 (C#22)	#12	0.62	20A	25	26	#10	1.33					
DISPATCH CONSOLE #22 (C#22)	#12	0.62	20A	27	28	DOOR OPERATOR (x2)	#12	1.00	15A			
DISPATCH CONSOLE #22 (C#22)	#12	0.62	20A	29	30	SOUND MASKING	#12	1.00	15A			
DISPATCH CONSOLE #23 (C#23)	#12	0.62	20A	31	32	ROOM 483 REC'S (x3)	#12	0.60	15A			
DISPATCH CONSOLE #23 (C#23)	#12	0.62	20A	33	34	ROOM 483 REC'S (x2)	#12	1.00	15A			
DISPATCH CONSOLE #23 (C#23)	#12	0.62	20A	35	36	ROOM 483 REC'S (x2)	#12	1.00	15A			
DISPATCH CONSOLE #23 (C#23)	#12	0.62	20A	37	38	ROOM 483 REC'S (x2)	#12	1.00	15A			
DISPATCH CONSOLE #23 (C#23)	#12	0.62	20A	39	40	DISHWASHER	#12	1.20	15A			
DISPATCH CONSOLE #24 (C#24)	#12	0.62	20A	41	42	RACK MOUNT RECEPTACLE	#12	1.00	15A			
DISPATCH CONSOLE #24 (C#24)	#12	0.62	20A	43	44	RACK MOUNT RECEPTACLE	#12	1.00	15A			
DISPATCH CONSOLE #24 (C#24)	#12	0.62	20A	45	46	ACCESS CONTROL POWER SUPPLY	#12	1.00	15A			
DISPATCH CONSOLE #24 (C#24)	#12	0.62	20A	47	48	SPARE			15A			
DISPATCH CONSOLE #24 (C#24)	#12	0.62	20A	49	50	SPARE			15A			
TV 479A	#12	0.50	15A	51	52	SPARE			15A			
TV 479A	#12	0.50	15A	53	54	SPARE			15A			
FLOORBOX	#12	1.00	15A	55	56	SPARE			15A			
ROOM 479 REC'S (x4)	#12	0.80	15A	57	58	SPARE			15A			
SPACE				59	60	SPARE			15A			
				61	62	RESERVED FOR SURGE PROTECTION DEVICE						
				63	64							
				65	66							
				67	68							
				69	70							
				71	72							
NOTES:							MOUNTING: SURFACE RATING: 225A,120/208V/3ø/4W					
LOAD TYPES		TOTAL CONNECTED LOAD				DEMAND %		DEMAND LOAD				
LIGHTING		-				-		-				
COMMUNICATIONS		24.5KW				0.57		13.97KW				
ELECTRIC HEAT		-				-		-				
MECHANICAL		-				-		-				
MISCELLANEOUS		16.7KW				0.60		10.02KW				
TOTAL LOAD								23.99KW				



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REAL PROPERTY SERVICES

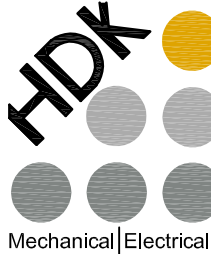
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Certificate of Authorization

HDK Consulting Incorporated

No. 5539    Date: 04/30/2019

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Revision	Description	Date

Client

PSPC/SPAC

SUITE 100-167 LOMBARD AVENUE  
WINNIPEG, MANITOBA

Project title

INTERIOR ALTERATIONS  
1091 PORTAGE AVENUE  
WINNIPEG, MANITOBA

SUITE 483  
RENOVATION & FIT UP

Designed by  
PL

Drawn by  
RD

Approved by  
HCC

PWSCC Project Manager  
MARK ARROJADO

Drawing title

UPS POWER  
PANELBOARD SCHEDULES - 2

Project no.	Drawing no.	Revision no.
R.076524.002	E15	3
OF 16		

PWGSC - A1 - 8412594

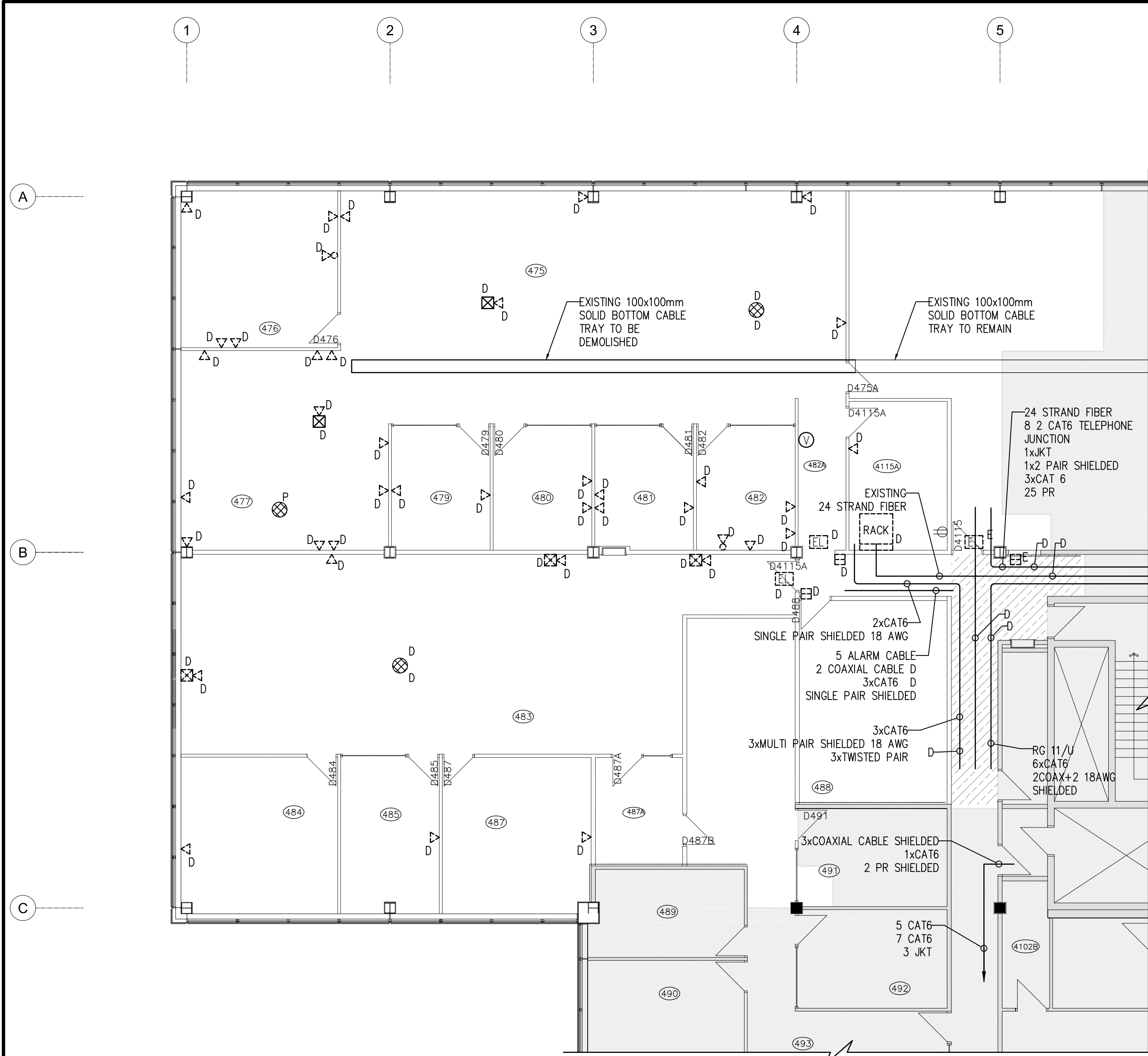


PANELBOARD "24-E2-A"													
ITEM	WIRE	LOAD (kW)	OCB	C	C	ITEM	WIRE	LOAD (kW)	OCB				
DISPATCH CONSOLE #1 (C#1) HEAT	#12	1.15	20A	1	2	DISPATCH CONSOLE #2 (C#2) HEAT	#12	1.15	20A				
DISPATCH CONSOLE #3 (C#3) HEAT	#12	1.15	20A	3	4	DISPATCH CONSOLE #4 (C#4) HEAT	#12	1.15	20A				
DISPATCH CONSOLE #5 (C#5) HEAT	#12	1.15	20A	5	6	DISPATCH CONSOLE #6 (C#6) HEAT	#12	1.15	20A				
DISPATCH CONSOLE #7 (C#7) HEAT	#12	1.15	20A	7	8	DISPATCH CONSOLE #8 (C#8) HEAT	#12	1.15	20A				
DISPATCH CONSOLE #9 (C#9) HEAT	#12	1.15	20A	9	10	DISPATCH CONSOLE #10 (C#10) HEAT	#12	1.15	20A				
DISPATCH CONSOLE #11 (C#11) HEAT	#12	1.15	20A	11	12	DISPATCH CONSOLE #12 (C#12) HEAT	#12	1.15	20A				
DISPATCH CONSOLE #13 (C#13) HEAT	#12	1.15	20A	13	14	DISPATCH CONSOLE #14 (C#14) HEAT	#12	1.15	20A				
DISPATCH CONSOLE #15 (C#15) HEAT	#12	1.15	20A	15	16	DISPATCH CONSOLE #16 (C#16) HEAT	#12	1.15	20A				
DISPATCH CONSOLE #17 (C#17) HEAT	#12	1.15	20A	17	18	DISPATCH CONSOLE #18 (C#18) HEAT	#12	1.15	20A				
DISPATCH CONSOLE #19 (C#19) HEAT	#12	1.15	20A	19	20	DISPATCH CONSOLE #20 (C#20) HEAT	#12	1.15	20A				
DISPATCH CONSOLE #21 (C#21) HEAT	#12	1.15	20A	21	22	DISPATCH CONSOLE #22 (C#22) HEAT	#12	1.15	20A				
DISPATCH CONSOLE #23 (C#23) HEAT	#12	1.15	20A	23	24	DISPATCH CONSOLE #24 (C#23) HEAT	#12	1.15	20A				
				25	26	DP-1	#12	0.364	15A, 2P				
				27	28		#12	0.364					
				29	30	DP-2	#12	0.364		15A, 2P			
				31	32		#12	0.364					
				33	34								
				35	36								
				37	38								
				39	40								
				41	42								
NOTES:						MOUNTING: SURFACE RATING: 400A,120/208V/3ø/4W							
LOAD TYPES		TOTAL CONNECTED LOAD			DEMAND %			DEMAND LOAD					
LIGHTING		-			-			-					
COMMUNICATIONS		-			-			-					
ELECTRIC HEAT		27.6KW			(x-10KW)0.75 + 10KW			23.2KW					
MECHANICAL		-			-			-					
MISCELLANEOUS		-			-			-					
TOTAL LOAD								23.2KW					

PANELBOARD "24-E2-B"											
ITEM	WIRE	LOAD (kW)	OCB	C	C	ITEM	WIRE	LOAD (kW)	OCB		
CU-1	#8	2.70	40A, 2P	1	2	CU-5A	#8	2.70	40A, 2P		
	#8	2.70		3	4		#8	2.70			
CU-2	#8	2.70	40A, 2P	5	6	CU-5B	#8	2.70	40A, 2P		
	#8	2.70		7	8		#8	2.70			
CU-3	#8	2.70	40A, 2P	9	10	TF-1	#12	0.20	15A		
	#8	2.70		11	12	VAV'S	#12	0.50	15A		
CU-4	#8	2.70	40A, 2P	13	14	H-1	#12	1.90	15A		
	#8	2.70		15	16	H-2	#12	1.90	15A		
ERV-1	#12	0.65	15A	17	18	H-3	#12	1.90	15A		
	#12	0.364	15A, 2P	19	20	PAC-1	#12	1.20	20A		
AC-1	#12	0.364		21	22	MOTORIZED DAMPER	#12	1.20	15A		
	AC-2	#12	0.364	15A, 2P	23	24	ROOF MOUNTED RECEPTACLE	#12	1.20	20A	
#12		0.364	25		26	PAC CONTROL PANEL	#12	1.00	15A		
AC-3	#12	0.364	15A, 2P	27	28						
	#12	0.364		29	30						
AC-4	#12	0.364	15A, 2P	31	32						
	#12	0.364		33	34						
AC-5A	#12	0.1	15A, 2P	35	36						
	#12	0.1		37	38						
AC-5B	#12	0.1	15A, 2P	39	40						
	#12	0.1		41	42						
NOTES:						MOUNTING: SURFACE RATING: 400A,120/208V/3ø/4W					
LOAD TYPES		TOTAL CONNECTED LOAD			DEMAND %			DEMAND LOAD			
LIGHTING		-			-			-			
COMMUNICATIONS		-			-			-			
ELECTRIC HEAT		-			-			-			
MECHANICAL		46.362			0.72			33.38KW			
MISCELLANEOUS		-			-			-			
TOTAL LOAD								33.38KW			

PANELBOARD "64-E1-A"											
ITEM	WIRE	LOAD (kW)	OCB	C	C	ITEM	WIRE	LOAD (kW)	OCB		
PHC-1	#12	2.73	15A, 3P	1	2	RHC-1	#12	2.50	15A, 3P		
	#12	2.73		3	4		#12	2.50			
	#12	2.73		5	6		#12	2.50			
SPARE			15A	7	8	SPACE					
SPARE			15A	9	10	SPACE					
SPARE			15A	11	12	SPACE					
SPARE			15A	13	14	SPACE					
SPARE			15A	15	16	SPACE					
SPARE			15A	17	18	SPACE					
SPARE			15A	19	20	SPACE					
SPARE			15A	21	22	SPACE					
SPACE				23	24	SPACE					
SPACE				25	26	SPACE					
SPACE				27	28	SPACE					
SPACE				29	30	SPACE					
SPACE				31	32	SPACE					
SPACE				33	34	SPACE					
SPACE				35	36						
SPACE				37	38						
SPACE				39	40						
SPACE				41	42						
NOTES:							MOUNTING: SURFACE RATING: 125A, 347/600V/3ø/4W				
LOAD TYPES		TOTAL CONNECTED LOAD				DEMAND %		DEMAND LOAD			
LIGHTING		-				-		-			
COMMUNICATIONS		-				-		-			
ELECTRIC HEAT		15.59KW				1.00		15.59KW			
MECHANICAL		-				-		-			
MISCELLANEOUS		-				-		-			
TOTAL LOAD								15.59KW			





1 FOURTH FLOOR COMMS AND SECURITY EXISTING/DEMOLITON LAYOUT  
1:100

DRAWING LIST:

- T1 FOURTH FLOOR COMMS AND SECURITY EXISTING/DEMOLITION LAYOUT  
T2 FOURTH FLOOR BACKBONE PLAN  
T3 NEW TELECOMMUNICATIONS LAYOUT AND DETAILS  
T4 NEW ACCESS CONTROL/INTRUSION LAYOUT AND DETAILS  
T5 NEW SOUND MASKING PLAN, RACK ELEVATION, SOUND MASKING SINGLE LINE DIAGRAM AND DETAILS  
T6 PATCH PANEL SCHEDULE

DEMOLITION NOTES:

- ALL DEVICES DENOTED BY "D" TO BE DEMOLISHED. ALL CABLES TO BE REMOVED BACK TO SOURCE. ALL ASSOCIATED CONDUITS TO BE REMOVED. NOT ALL DEVICES ARE SHOWN.
- EXISTING 12RU EQUIPMENT RACK TO BE REMOVED AND HAND-OVER TO DEPARTMENTAL REPRESENTATIVE AND OBTAIN RECEIPT.
- EXISTING CABLE TRAY TO BE REMOVED AS INDICATED AND HAND-OVER TO DEPARTMENTAL REPRESENTATIVE, OBTAIN RECEIPT.
- RECONNECT LOOP FOR DEMOLISHED P.A. SPEAKERS AND ALLOW FOR 75M OF CABLE AND 21mm CONDUIT.

SYMBOL SCHEDULE:

SYMBOL	DESCRIPTION
---	LINE TYPE DENOTES EXISTING DEVICE
D	DENOTES EXISTING DEVICE TO BE DEMOLISHED
ER	DENOTES EXISTING DEVICE TO BE RELOCATED
E	DENOTES EXISTING TO REMAIN
R	DENOTES RELOCATED EXISTING DEVICE
	VOICE/DATA OUTLET CEILING MOUNTED
	VOICE/DATA OUTLET
	DATA OUTLET
	DOOR CONTACT
	ELECTRIFIED MORTISE LOCK
	ACCESS CONTROL CARD READER
	VOICE/DATA FLOOR BOX
	REQUEST TO EXIT MOTION
	STUB CONDUIT
	CONDUIT UP
	CONDUIT DOWN
	SOUND MASKING PAGING SPEAKER P.A. SPEAKER
	1 DENOTES PENDANT MOUNTED 2 DENOTES FLUSH MOUNTED ON CEILING
	TV OUTLET
	INTERCOM STATION D-DENOTES DOOR STATION M-DENOTES MASTER STATION
	MICROPHONE INPUT JACK
	BASKET STYLE CABLE TRAY (UNDERFLOOR)
	BASKET STYLE CABLE TRAY (OVERHEAD)
	MOTION SENSOR
	SECURITY KEY PAD
	AUDIO VIDEO OUTLET (HDMI)
	FLOOR BOX
	SPEAKER CONTROLLER PULL BOX 300x300x100mm C/W HINGED COVER AND KEYLOCK. COLOUR TO MATCH CEILING PAINT.
	60" MONITOR OWNER SUPPLIED. CONTRACTOR TO INSTALL C/W CAT 6 PATCH CABLE AND MOUNTING.
	P - DENOTES PENDANT MOUNT TO BE PROVIDED BY CONTRACTOR. W - DENOTES WALL MOUNT TO BE PROVIDED BY CONTRACTOR.
	COMMUNICATION PORT (SERIAL AND IR) AND HDMI Rx DENOTES RECEIVER Tx DENOTES TRANSMITTER
PULL BOX SIZES	
	100mm x 100mm x 65mm
	200mm x 200mm x 75mm
	100mm x 100mm x 65mm OCTAGONAL BOX
	300mm x 300mm x 100mm

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FOURTH  
FLOOR

KEY PLAN  
NTS

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HDK Consulting Incorporated  
No. 5539 Date: 04/30/2019

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PSPC/SPAC

SUITE 100-167 LOMBARD AVENUE  
WINNIPEG, MANITOBA

Project title

INTERIOR ALTERATIONS  
1091 PORTAGE AVENUE  
WINNIPEG, MANITOBA  
SUITE 483  
RENOVATION & FIT UP

Designed by  
JS

Drawn by  
RD

Approved by  
KO

PWSSC Project Manager  
MARK ARROJADO

Drawing title

FOURTH FLOOR COMMS AND SECURITY  
EXISTING/DEMOLITON LAYOUT

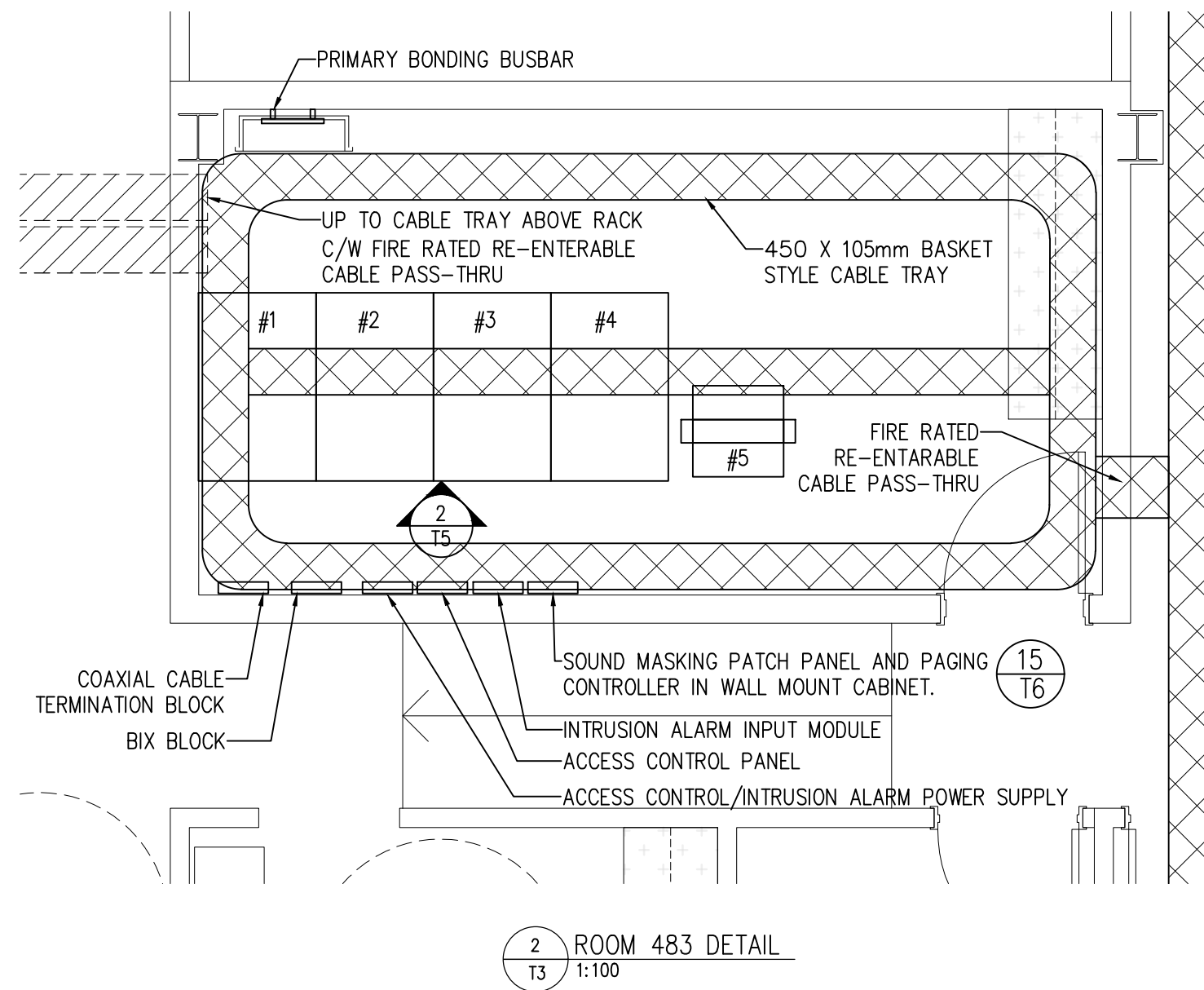
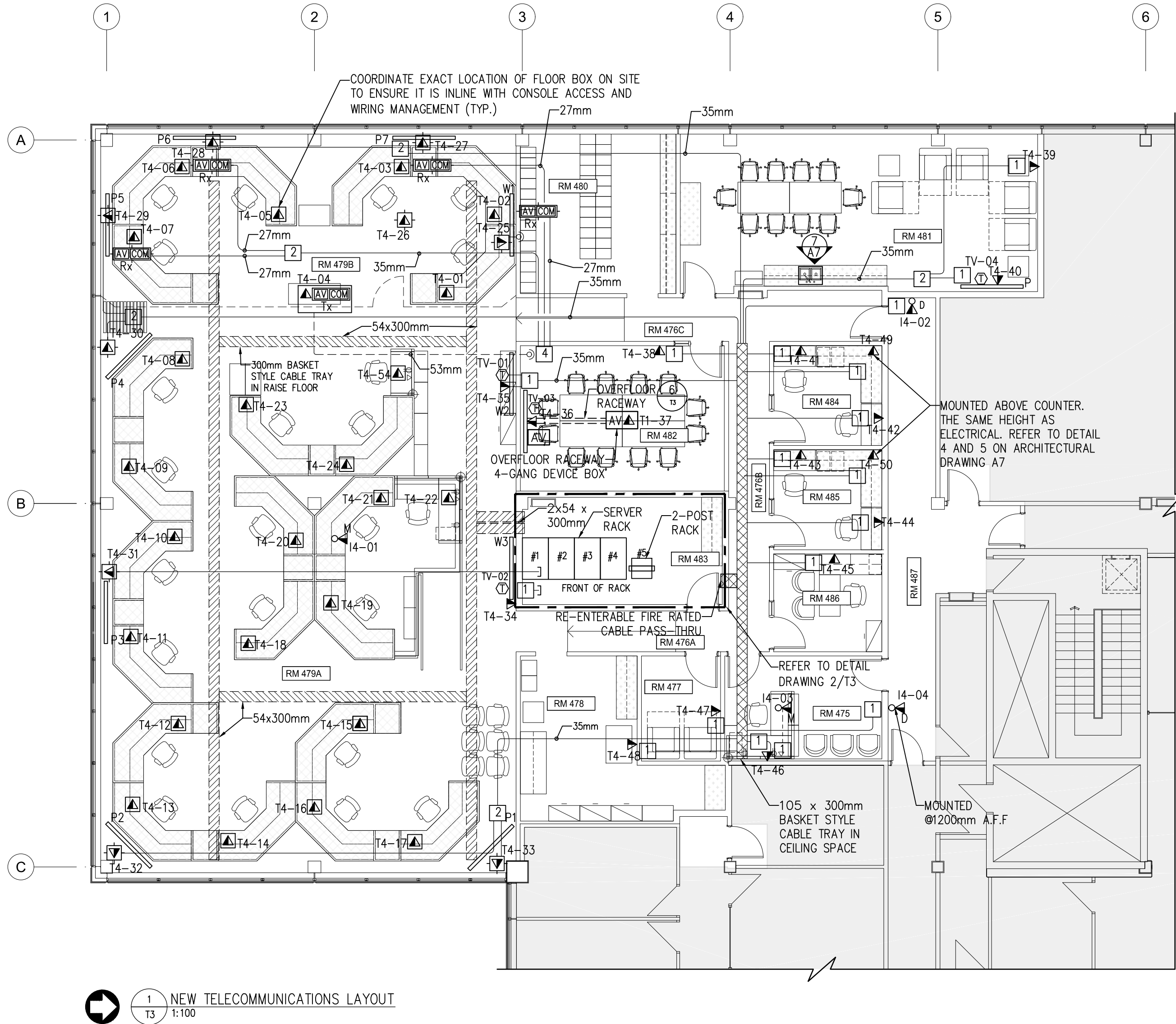
Project no.	Drawing no.	Revision no.
R.076524.002	T1 OF 6	3





Project no.  <b>R.076524.002</b>	Drawing no.  <b>T2</b>  OF 6	Revision no.  <b>3</b>
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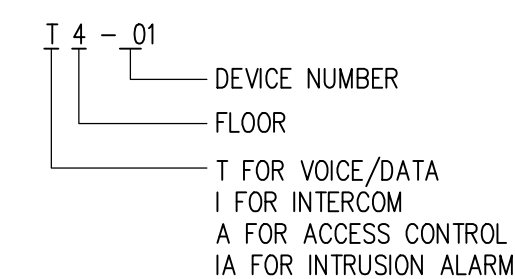




## GENERAL NOTES:

- ALL VOICE/DATA AND ACCESS CONTROL CONDUITS TO BE 27mm EMT MINIMUM UNLESS OTHERWISE NOTED.
- ALL INTRUSION ALARM AND SOUND MASKING CONDUITS TO BE 21mm EMT MINIMUM UNLESS OTHERWISE NOTED.
- ALL PENETRATIONS THROUGH FIRE RATED FLOOR AND WALL SHALL BE FIRE SEALED.
- FINAL LOCATION OF FLOOR BOX TO BE COORDINATED WITH THE FINAL LAYOUT OF FURNITURE.
- FOR MOUNTING HEIGHT OF MONITOR, CARD READER V/D OUTLETS REFER TO ARCHITECTURAL DRAWING A7 INTERIOR ELEVATIONS AND TYPICAL MOUNTING HEIGHTS.
- ELECTRICAL CONTRACTOR TO INSTALL OWNER SUPPLIED 60" MONITOR. CONTRACTOR TO PROVIDE CEILING AND WALL MOUNTING SUPPORT AS INDICATED IN SPECIFICATION.
- CONDUIT AND CABLE TRAY LAYOUT SHOWN ON THE DRAWING DOES NOT DEPICT POSSIBLE OBSTRUCTION OR ACTUAL SITE CONDITION. CONTRACTOR TO INSTALL CONDUIT AND CABLE TRAY BASED ON ACTUAL SITE CONDITION. THE CABLE TRAY AND CONDUIT WERE SIZED BASED ON THE EQUIPMENT AND DEVICES KNOWN AT THE TIME OF DESIGN.

## DEVICE DESIGNATION



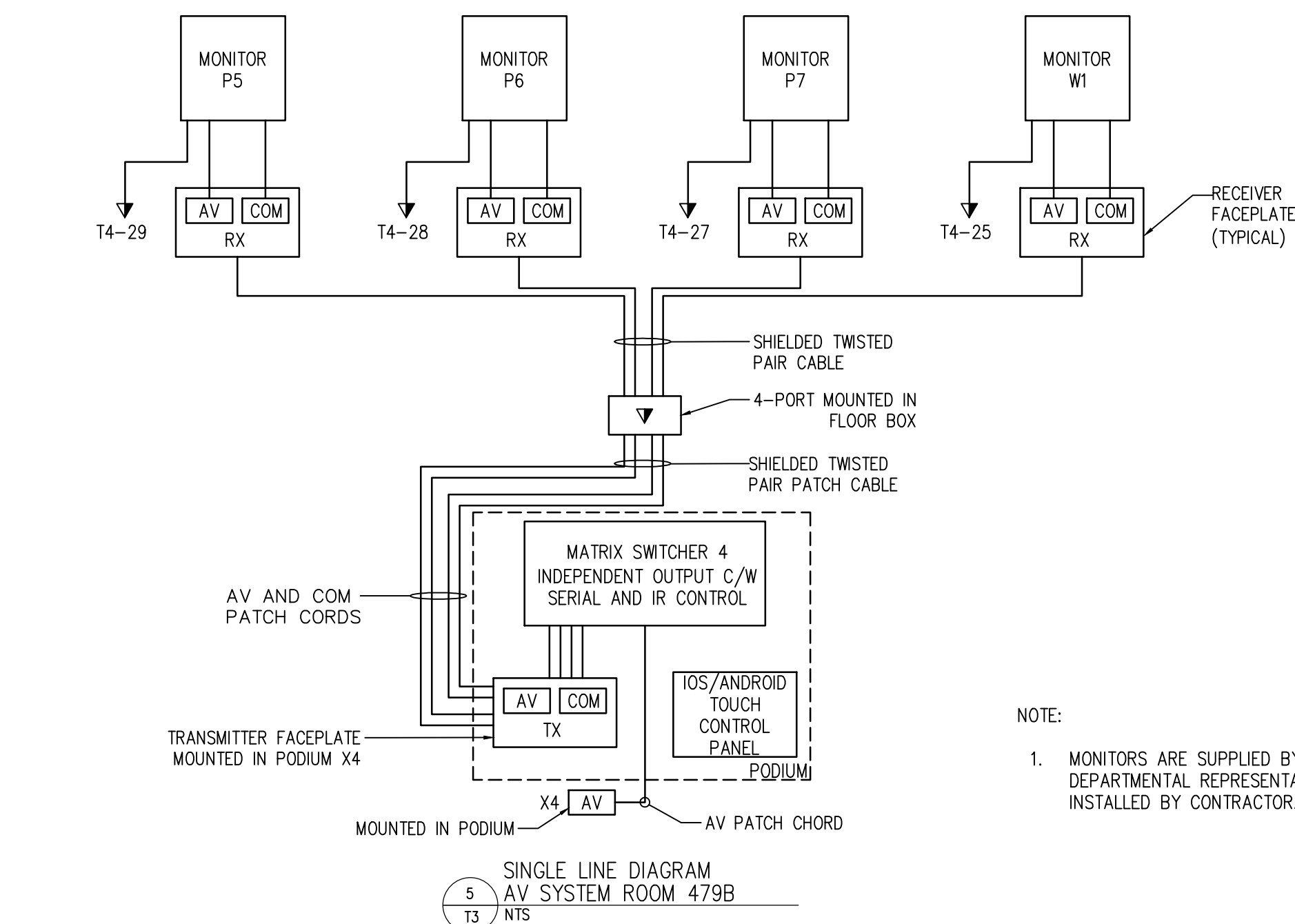
## CABLE TYPES:

- CATEGORY 6 CABLE
- CATEGORY 6 PATCH CABLE
- 2 PAIR 18AWG STRANDED

## TERMS:

SIP - SYSTEM INITIATION PROTOCOL

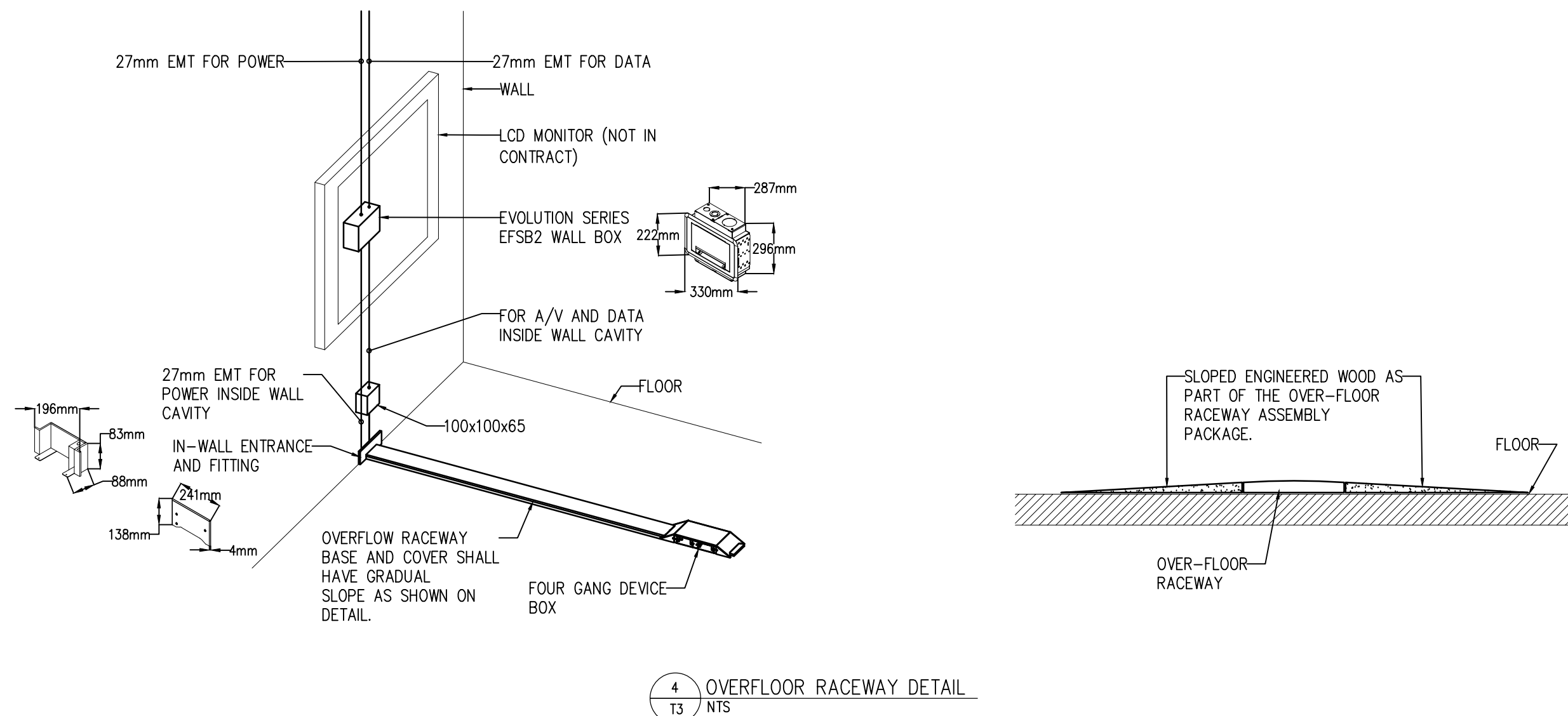
## 3 INTERCOM SYSTEM RISER DIAGRAM NTS



## NOTE:

- MONITORS ARE SUPPLIED BY DEPARTMENTAL REPRESENTATIVE AND INSTALLED BY CONTRACTOR.

## 4 OVERFLOOR RACEWAY DETAIL NTS



## NOTE:

- FOR MEETING ROOM 482 PROVIDE 1 HDMI OUTLET BEHIND THE MONITOR AND ON THE FLOOR MOUNTED BOX COMPLETE WITH HDMI CABLE.

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FOURTH FLOOR

KEY PLAN NTS

PROVINCE OF MANITOBA

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CEA CANAS

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22882

REGISTERED COMMUNICATIONS DISTRIBUTION DESIGNER

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Expires 03-31-2019

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HDK Consulting Incorporated

No. 5539 Date: 04/30/2019

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Project title	<div> <div>INTERIOR ALTERATIONS 1091 PORTAGE AVENUE WINNIPEG, MANITOBA</div> <div>SUITE 483 RENOVATION &amp; FIT UP</div> </div>		
Designed by	KO		
Drawn by	IS		
Approved by	KO		
PWSSC Project Manager	MARK ARROJADO		
Drawing title	NEW TELECOMMUNICATIONS LAYOUT AND DETAILS		
Project no.	R.076524.002	Drawing no.	
	T3	Revision no.	
	OF 6	3	











100PRS CAT 3 BACKBONE					
RM 483 BIX BLOCK "AA"					
RISER	DESIGNATOR LABEL	NOTES	RISER	DESIGNATOR LABEL	NOTES
FR BIX XXX-AA-01	483-BIX-AA-01		FR BIX XXX-AA-51	483-BIX-AA-51	
FR BIX XXX-AA-02	483-BIX-AA-02		FR BIX XXX-AA-52	483-BIX-AA-52	
FR BIX XXX-AA-03	483-BIX-AA-03		FR BIX XXX-AA-53	483-BIX-AA-53	
FR BIX XXX-AA-04	483-BIX-AA-04		FR BIX XXX-AA-54	483-BIX-AA-54	
FR BIX XXX-AA-05	483-BIX-AA-05		FR BIX XXX-AA-55	483-BIX-AA-55	
FR BIX XXX-AA-06	483-BIX-AA-06		FR BIX XXX-AA-56	483-BIX-AA-56	
FR BIX XXX-AA-07	483-BIX-AA-07		FR BIX XXX-AA-57	483-BIX-AA-57	
FR BIX XXX-AA-08	483-BIX-AA-08		FR BIX XXX-AA-58	483-BIX-AA-58	
FR BIX XXX-AA-09	483-BIX-AA-09		FR BIX XXX-AA-59	483-BIX-AA-59	
FR BIX XXX-AA-10	483-BIX-AA-10		FR BIX XXX-AA-60	483-BIX-AA-60	
FR BIX XXX-AA-11	483-BIX-AA-11		FR BIX XXX-AA-61	483-BIX-AA-61	
FR BIX XXX-AA-12	483-BIX-AA-12		FR BIX XXX-AA-62	483-BIX-AA-62	
FR BIX XXX-AA-13	483-BIX-AA-13		FR BIX XXX-AA-63	483-BIX-AA-63	
FR BIX XXX-AA-14	483-BIX-AA-14		FR BIX XXX-AA-64	483-BIX-AA-64	
FR BIX XXX-AA-15	483-BIX-AA-15		FR BIX XXX-AA-65	483-BIX-AA-65	
FR BIX XXX-AA-16	483-BIX-AA-16		FR BIX XXX-AA-66	483-BIX-AA-66	
FR BIX XXX-AA-17	483-BIX-AA-17		FR BIX XXX-AA-67	483-BIX-AA-67	
FR BIX XXX-AA-18	483-BIX-AA-18		FR BIX XXX-AA-68	483-BIX-AA-68	
FR BIX XXX-AA-19	483-BIX-AA-19		FR BIX XXX-AA-69	483-BIX-AA-69	
FR BIX XXX-AA-20	483-BIX-AA-20		FR BIX XXX-AA-70	483-BIX-AA-70	
FR BIX XXX-AA-21	483-BIX-AA-21		FR BIX XXX-AA-71	483-BIX-AA-71	
FR BIX XXX-AA-22	483-BIX-AA-22		FR BIX XXX-AA-72	483-BIX-AA-72	
FR BIX XXX-AA-23	483-BIX-AA-23		FR BIX XXX-AA-73	483-BIX-AA-73	
FR BIX XXX-AA-24	483-BIX-AA-24		FR BIX XXX-AA-74	483-BIX-AA-74	
FR BIX XXX-AA-25	483-BIX-AA-25		FR BIX XXX-AA-75	483-BIX-AA-75	
FR BIX XXX-AA-26	483-BIX-AA-26		FR BIX XXX-AA-76	483-BIX-AA-76	
FR BIX XXX-AA-27	483-BIX-AA-27		FR BIX XXX-AA-77	483-BIX-AA-77	
FR BIX XXX-AA-28	483-BIX-AA-28		FR BIX XXX-AA-78	483-BIX-AA-78	
FR BIX XXX-AA-29	483-BIX-AA-29		FR BIX XXX-AA-79	483-BIX-AA-79	
FR BIX XXX-AA-30	483-BIX-AA-30		FR BIX XXX-AA-80	483-BIX-AA-80	
FR BIX XXX-AA-31	483-BIX-AA-31		FR BIX XXX-AA-81	483-BIX-AA-81	
FR BIX XXX-AA-32	483-BIX-AA-32		FR BIX XXX-AA-82	483-BIX-AA-82	
FR BIX XXX-AA-33	483-BIX-AA-33		FR BIX XXX-AA-83	483-BIX-AA-83	
FR BIX XXX-AA-34	483-BIX-AA-34		FR BIX XXX-AA-84	483-BIX-AA-84	
FR BIX XXX-AA-35	483-BIX-AA-35		FR BIX XXX-AA-85	483-BIX-AA-85	
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FR BIX XXX-AA-37	483-BIX-AA-37		FR BIX XXX-AA-87	483-BIX-AA-87	
FR BIX XXX-AA-38	483-BIX-AA-38		FR BIX XXX-AA-88	483-BIX-AA-88	
FR BIX XXX-AA-39	483-BIX-AA-39		FR BIX XXX-AA-89	483-BIX-AA-89	
FR BIX XXX-AA-40	483-BIX-AA-40		FR BIX XXX-AA-90	483-BIX-AA-90	
FR BIX XXX-AA-41	483-BIX-AA-41		FR BIX XXX-AA-91	483-BIX-AA-91	
FR BIX XXX-AA-42	483-BIX-AA-42		FR BIX XXX-AA-92	483-BIX-AA-92	
FR BIX XXX-AA-43	483-BIX-AA-43		FR BIX XXX-AA-93	483-BIX-AA-93	
FR BIX XXX-AA-44	483-BIX-AA-44		FR BIX XXX-AA-94	483-BIX-AA-94	
FR BIX XXX-AA-45	483-BIX-AA-45		FR BIX XXX-AA-95	483-BIX-AA-95	
FR BIX XXX-AA-46	483-BIX-AA-46		FR BIX XXX-AA-96	483-BIX-AA-96	
FR BIX XXX-AA-47	483-BIX-AA-47		FR BIX XXX-AA-97	483-BIX-AA-97	
FR BIX XXX-AA-48	483-BIX-AA-48		FR BIX XXX-AA-98	483-BIX-AA-98	
FR BIX XXX-AA-49	483-BIX-AA-49		FR BIX XXX-AA-99	483-BIX-AA-99	
FR BIX XXX-AA-50	483-BIX-AA-50		FR BIX XXX-AA-100	483-BIX-AA-100	

1 ROOM 483 BIX BLOCK "AA"  
16 NTS

100PRS CAT 3 BACKBONE					
RM 483 BIX BLOCK "BB"					
RISER	DESIGNATOR LABEL	NOTES	RISER	DESIGNATOR LABEL	NOTES
FR BIX 483-AA-01	483-SC-01		FR BIX 483-AA-51	483-SC-51	
FR BIX 483-AA-02	483-SC-02		FR BIX 483-AA-52	483-SC-52	
FR BIX 483-AA-03	483-SC-03		FR BIX 483-AA-53	483-SC-53	
FR BIX 483-AA-04	483-SC-04		FR BIX 483-AA-54	483-SC-54	
FR BIX 483-AA-05	483-SC-05		FR BIX 483-AA-55	483-SC-55	
FR BIX 483-AA-06	483-SC-06		FR BIX 483-AA-56	483-SC-56	
FR BIX 483-AA-07	483-SC-07		FR BIX 483-AA-57	483-SC-57	
FR BIX 483-AA-08	483-SC-08		FR BIX 483-AA-58	483-SC-58	
FR BIX 483-AA-09	483-SC-09		FR BIX 483-AA-59	483-SC-59	
FR BIX 483-AA-10	483-SC-10		FR BIX 483-AA-60	483-SC-60	
FR BIX 483-AA-11	483-SC-11		FR BIX 483-AA-61	483-SC-61	
FR BIX 483-AA-12	483-SC-12		FR BIX 483-AA-62	483-SC-62	
FR BIX 483-AA-13	483-SC-13		FR BIX 483-AA-63	483-SC-63	
FR BIX 483-AA-14	483-SC-14		FR BIX 483-AA-64	483-SC-64	
FR BIX 483-AA-15	483-SC-15		FR BIX 483-AA-65	483-SC-65	
FR BIX 483-AA-16	483-SC-16		FR BIX 483-AA-66	483-SC-66	
FR BIX 483-AA-17	483-SC-17		FR BIX 483-AA-67	483-SC-67	
FR BIX 483-AA-18	483-SC-18		FR BIX 483-AA-68	483-SC-68	
FR BIX 483-AA-19	483-SC-19		FR BIX 483-AA-69	483-SC-69	
FR BIX 483-AA-20	483-SC-20		FR BIX 483-AA-70	483-SC-70	
FR BIX 483-AA-21	483-SC-21		FR BIX 483-AA-71	483-SC-71	
FR BIX 483-AA-22	483-SC-22		FR BIX 483-AA-72	483-SC-72	
FR BIX 483-AA-23	483-SC-23		FR BIX 483-AA-73	483-SC-73	
FR BIX 483-AA-24	483-SC-24		FR BIX 483-AA-74	483-SC-74	
FR BIX 483-AA-25	483-SC-25		FR BIX 483-AA-75	483-SC-75	
FR BIX 483-AA-26	483-SC-26		FR BIX 483-AA-76	483-SC-76	
FR BIX 483-AA-27	483-SC-27		FR BIX 483-AA-77	483-SC-77	
FR BIX 483-AA-28	483-SC-28		FR BIX 483-AA-78	483-SC-78	
FR BIX 483-AA-29	483-SC-29		FR BIX 483-AA-79	483-SC-79	
FR BIX 483-AA-30	483-SC-30		FR BIX 483-AA-80	483-SC-80	
FR BIX 483-AA-31	483-SC-31		FR BIX 483-AA-81	483-SC-81	
FR BIX 483-AA-32	483-SC-32		FR BIX 483-AA-82	483-SC-82	
FR BIX 483-AA-33	483-SC-33		FR BIX 483-AA-83	483-SC-83	
FR BIX 483-AA-34	483-SC-34		FR BIX 483-AA-84	483-SC-84	
FR BIX 483-AA-35	483-SC-35		FR BIX 483-AA-85	483-SC-85	
FR BIX 483-AA-36	483-SC-36		FR BIX 483-AA-86	483-SC-86	
FR BIX 483-AA-37	483-SC-37		FR BIX 483-AA-87	483-SC-87	
FR BIX 483-AA-38	483-SC-38		FR BIX 483-AA-88	483-SC-88	
FR BIX 483-AA-39	483-SC-39		FR BIX 483-AA-89	483-SC-89	
FR BIX 483-AA-40	483-SC-40		FR BIX 483-AA-90	483-SC-90	
FR BIX 483-AA-41	483-SC-41		FR BIX 483-AA-91	483-SC-91	
FR BIX 483-AA-42	483-SC-42		FR BIX 483-AA-92	483-SC-92	
FR BIX 483-AA-43	483-SC-43		FR BIX 483-AA-93	483-SC-93	
FR BIX 483-AA-44	483-SC-44		FR BIX 483-AA-94	483-SC-94	
FR BIX 483-AA-45	483-SC-45		FR BIX 483-AA-95	483-SC-95	
FR BIX 483-AA-46	483-SC-46		FR BIX 483-AA-96	483-SC-96	
FR BIX 483-AA-47	483-SC-47		FR BIX 483-AA-97	483-SC-97	
FR BIX 483-AA-48	483-SC-48		FR BIX 483-AA-98	483-SC-98	
FR BIX 483-AA-49	483-SC-49		FR BIX 483-AA-99	483-SC-99	
FR BIX 483-AA-50	483-SC-50		FR BIX 483-AA-100	483-SC-100	

2 ROOM 483 BIX BLOCK "BB"  
16 NTS

48 PORT (96 STRAND) FIBER OPTIC PATCH PANEL, FRONT DUPLEX LC JACKS				50/125micron MULTI MODE OM3 FIBER OPTIC CABLE NOTE: 2 FIBER PER PORT USING DUPLEX LC JACK			
RM 483 RACK #5 PATCH PANEL "A"							
PORT	RISER	DESIGNATOR LABEL	NOTES	PORT	RISER	DESIGNATOR LABEL	NOTES
1	LAN RM	483-SA-01	24 STRAND 50/125 MICRON OM3 FIBER OPTIC CABLE	25	EMS RM	483-SA-25	24 STRAND 50/125 MICRON OM3 FIBER OPTIC CABLE
2	LAN RM	483-SA-02		26	EMS RM	483-SA-26	
3	LAN RM	483-SA-03		27	EMS RM	483-SA-27	
4	LAN RM	483-SA-04		28	EMS RM	483-SA-28	
5	LAN RM	483-SA-05		29	EMS RM	483-SA-29	
6	LAN RM	483-SA-06		30	EMS RM	483-SA-30	
7	LAN RM	483-SA-07		31	EMS RM	483-SA-31	
8	LAN RM	483-SA-08		32	EMS RM	483-SA-32	
9	LAN RM	483-SA-09		33	EMS RM	483-SA-33	
10	LAN RM	483-SA-10		34	EMS RM	483-SA-34	
11	LAN RM	483-SA-11		35	EMS RM	483-SA-35	
12	LAN RM	483-SA-12		36	EMS RM	483-SA-36	
13	LAN RM	483-SA-13		37	EMS RM	483-SA-37	
14	LAN RM	483-SA-14		38	EMS RM	483-SA-38	
15	LAN RM	483-SA-15		39	EMS RM	483-SA-39	
16	LAN RM	483-SA-16		40	EMS RM	483-SA-40	
17	LAN RM	483-SA-17		41	EMS RM	483-SA-41	
18	LAN RM	483-SA-18		42	EMS RM	483-SA-42	
19	LAN RM	483-SA-19		43	EMS RM	483-SA-43	
20	LAN RM	483-SA-20		44	EMS RM	483-SA-44	
21	LAN RM	483-SA-21		45	EMS RM	483-SA-45	
22	LAN RM	483-SA-22		46	EMS RM	483-SA-46	
23	LAN RM	483-SA-23		47	EMS RM	483-SA-47	
24	LAN RM	483-SA-24		48	EMS RM	483-SA-48	

3 ROOM 483 RACK #5 PATCH PANEL "A"  
16 NTS

48 PORT (96 STRAND) FIBER OPTIC PATCH PANEL, FRONT DUPLEX LC JACKS				RM 483 RACK #5 PATCH PANEL "B"				9/125micron OS2 SINGLE MODE FIBER OPTIC CABLE NOTE: 2 FIBER PER PORT USING DUPLEX LC JACK			
PORT	RISER	DESIGNATOR LABEL	NOTES	PORT	RISER	DESIGNATOR LABEL	NOTES				
1	LAN RM	483-SB-01	24 STRAND 9/125 MICRON OS2 SINGLE MODE FIBER OPTIC CABLE	25	EMS RM	483-SB-25	24 STRAND 9/125 MICRON OS2 SINGLE MODE FIBER OPTIC CABLE				
2	LAN RM	483-SB-02		26	EMS RM	483-SB-26					
3	LAN RM	483-SB-03		27	EMS RM	483-SB-27					
4	LAN RM	483-SB-04		28	EMS RM	483-SB-28					
5	LAN RM	483-SB-05		29	EMS RM	483-SB-29					
6	LAN RM	483-SB-06		30	EMS RM	483-SB-30					
7	LAN RM	483-SB-07		31	EMS RM	483-SB-31					
8	LAN RM	483-SB-08		32	EMS RM	483-SB-32					
9	LAN RM	483-SB-09		33	EMS RM	483-SB-33					
10	LAN RM	483-SB-10		34	EMS RM	483-SB-34					
11	LAN RM	483-SB-11		35	EMS RM	483-SB-35					
12	LAN RM	483-SB-12		36	EMS RM	483-SB-36					
13		483-SB-13		37		483-SB-37					
14		483-SB-14		38		483-SB-38					
15		483-SB-15		39		483-SB-39					
16		483-SB-16		40		483-SB-40					
17		483-SB-17		41		483-SB-41					
18		483-SB-18		42		483-SB-42					
19		483-SB-19		43		483-SB-43					
20		483-SB-20		44		483-SB-44					
21		483-SB-21		45		483-SB-45					
22		483-SB-22		46		483-SB-46					
23		483-SB-23		47		483-SB-47					
24		483-SB-24		48		483-SB-48					

4 ROOM 483 RACK #5 PATCH PANEL "B"  
16 NTS

CATEGORY 6 KEYSTONE PATCH PANEL				ROOM 483 RACK #5 PATCH PANEL "E"			
PORT	DRAWING DESIGNATOR	DESIGNATOR LABEL	NOTES	PORT	DRAWING DESIGNATOR	DESIGNATOR LABEL	NOTES
1	T4-01	483-SE-01		25	T4-03	483-SE-25	
2	T4-01	483-SE-02		26	T4-03	483-SE-26	
3	T4-01	483-SE-03		27	T4-03	483-SE-27	
4	T4-01	483-SE-04		28	T4-03	483-SE-28	
5	T4-01	483-SE-05		29	T4-03	483-SE-29	
6	T4-01	483-SE-06		30	T4-03	483-SE-30	
7	T4-01	483-SE-07		31	T4-03	483-SE-31	
8	T4-01	483-SE-08		32	T4-03	483-SE-32	
9	T4-01	483-SE-09		33	T4-03	483-SE-33	
10	T4-01	483-SE-10		34	T4-03	483-SE-34	
11	T4-01	483-SE-11		35	T4-03	483-SE-35	
12	T4-01	483-SE-12		36	T4-03	483-SE-36	
13	T4-02	483-SE-13		37	T4-04	483-SE-37	
14	T4-02	483-SE-14		38	T4-04	483-SE-38	
15	T4-02	483-SE-15		39	T4-04	483-SE-39	
16	T4-02	483-SE-16		40	T4-04	483-SE-40	
17	T4-02	483-SE-17		41	T4-04	483-SE-41	
18	T4-02	483-SE-18		42	T4-04	483-SE-42	
19	T4-02	483-SE-19		43	T4-04	483-SE-43	
20	T4-02	483-SE-20		44	T4-04	483-SE-44	
21	T4-02	483-SE-21		45	T4-04	483-SE-45	
22	T4-02	483-SE-22		46	T4-04	483-SE-46	
23	T4-02	483-SE-23		47	T4-04	483-SE-47	
24	T4-02	483-SE-24		48	T4-04	483-SE-48	