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Revision	Description	Date
Client		client

PUBLIC WORKS & GOVERNMENT SERVICES

100-167 LOMBARD AVENUE
WINNIPEG, MB R3B 0T6

**CORRECTIONAL SERVICE CANADA
STONY MOUNTAIN INSTITUTION
STONY MOUNTAIN, MB**

**UNIT 6
MECHANICAL UPGRADE**

Designed by	MAH	Conçu par
Drawn by	RTD	Dessiné par
Approved by	RLG	Approuvé par
Project Manager	TIM LODGE	Administrateur de Projets
Drawing Title		Titre du dessin

**UNIT 6
FLOOR PLAN - PARTIALS,
NEW FAN COIL & EXISTING WALL
MOUNTED FAN DETAILS**

Project no./No. du projet	Drawing no./No. du dessin	Revision no.
R.043722.003	M103	0
	OF 04	

- FAN COIL CONSTRUCTION NOTES**
- OPEN EXISTING STEEL SECURITY ENCLOSURE AT THE END OF THE RANGE HALLWAY.
 - DISCONNECT AND DRAIN THE SECTION OF RADIANT PANEL TUBING IN THE HALLWAY.
 - REMOVE AND DISPOSE OF STEEL SECURITY ENCLOSURE AND RADIANT PANEL TUBING.
 - MOUNT A NEW FAN COIL TO THE CONCRETE CEILING. SEE DETAILS 4 & 5.
 - CONNECT NEW FAN COIL TO MAIN HWS AND IHR DISTRIBUTION LOOPS w/ NEW 19mm PIPE AND SOLENOID VALVE ON SUPPLY LINE.
 - EACH NEW FAN COILS SHALL BE PROVIDED A 26W 24VDC POWER SUPPLY AND 0-10V CONTROL SIGNAL. SUPPLY AND RETURN WATER TEMPERATURES, SUPPLY AND RETURN AIR TEMPERATURES, AND FAN STATUS SHALL BE MONITORED BY THE DDC SYSTEM. DDC SYSTEM SHALL CONTROL SOLENOID VALVE. TWO NEW ENCLOSURES FOR DDC EQUIPMENT SHALL BE INSTALLED IN 2ND FLOOR HALLWAYS NEXT TO EXISTING DDC PANELS. SEE ELECTRICAL PLANS.
 - INSTALL SUPPLY AIR DUCT, NEW STEEL SECURITY ENCLOSURE PANELS, AND RETURN AND SUPPLY GRILLES. SEE DETAILS 4 & 5.
 - WALLS EXPOSED DUE TO REMOVAL OF EXISTING STEEL SECURITY ENCLOSURE TO BE PATCHED AND PAINTED. IF THE WALL CONDITION IS NOT SUITABLE FOR PATCHING AND PAINTING, THE EXISTING SECURITY ENCLOSURE IS TO BE REINSTALLED AROUND THE NEW ENCLOSURE TO PRE-CONSTRUCTION CONDITION.

PIPING NOTE

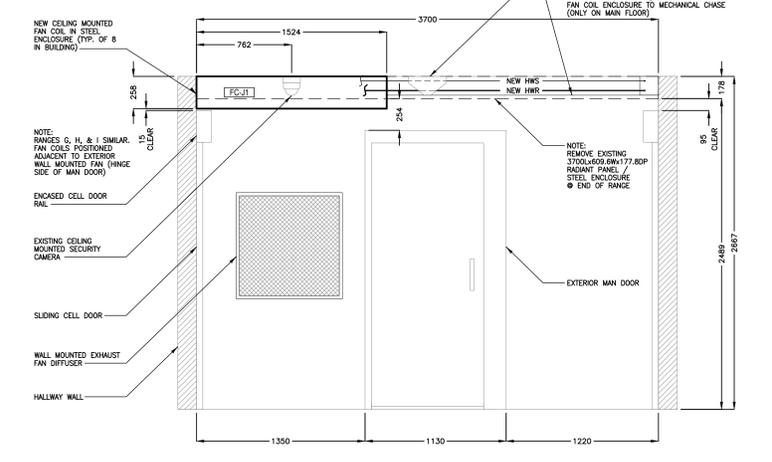
CONTRACTOR TO CONFIRM LOCATION OF EXISTING HWS/HWR PIPES. NEW HYDRONIC PIPING AND VALVES, POWER SUPPLY WIRING, AND DDC CONTROLS WIRING SHALL BE RUN WITHIN EXISTING & NEW MECHANICAL CHASES AND SECURITY ENCLOSURES AS SHOWN.

PIPING SCHEMATIC LEGEND

ITEM	SYMBOL	REMARKS
PIPE FITTING, END CAP		
PIPE FITTING, 90deg. ELBOW		
PIPE FITTING, 90deg. ELBOW - PIPE TURNING UP		
PIPE FITTING, 90deg. ELBOW - PIPE TURNING DOWN		
PIPE FITTING, TEE CONNECTION		
PIPE FITTING, TEE CONNECTION - LEG FROM BOTTOM OF PIPE		
FITTING - GATE/GLOBE VALVE		
EXISTING PIPE LINETYPE		
NEW PIPE LINETYPE		
FITTING - SOLENOID VALVE		

EQUIPMENT LEGEND

FAN COIL TAG		
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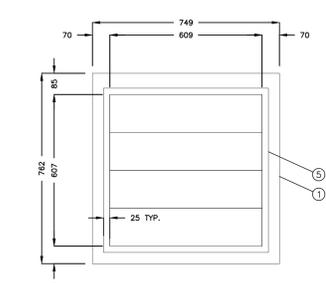
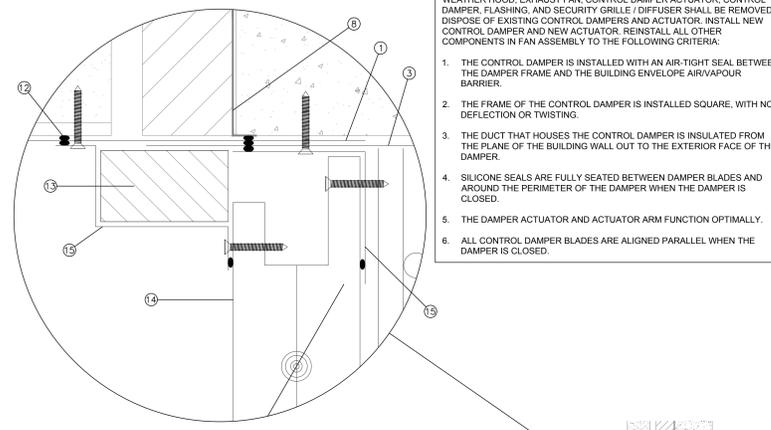


**UNIT 6 - RANGE J1 (MAIN FLOOR)
INTERIOR HALLWAY ELEVATION**
1:20 SHEET REF. M103

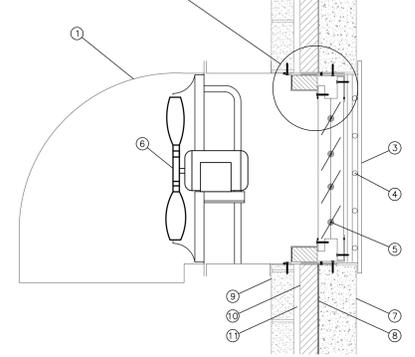
WALL MOUNTED FAN SECTION LEGEND

1	EXISTING METAL ENCLOSURE
2	EXISTING FLASHING
3	DIFFUSER
4	SECURITY GRILLE
5	EXISTING CONTROL DAMPER
6	FAN MOTOR & BLADES
7	CONCRETE WALL
8	EXISTING AIR / VAPOUR BARRIER
9	BRICK VENEER
10	INSULATION
11	AIR GAP
12	ACOUSTIC CAULK
13	57x102 RIGID INSULATION (INSTALL AROUND PERIMETER OF FACE OF DAMPER)
14	NEW CONTROL DAMPER AND NEW ACTUATOR
15	NEW FLASHING

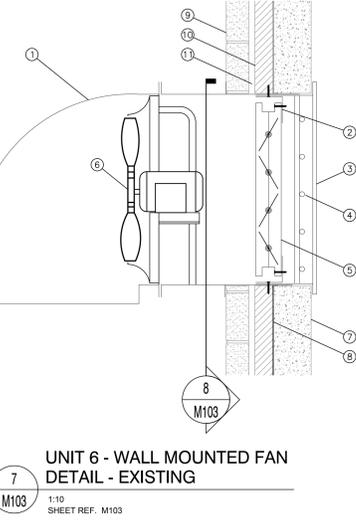
- WALL MOUNTED FAN CONSTRUCTION NOTES (TYP.)**
- WEATHER HOOD, EXHAUST FAN, CONTROL DAMPER ACTUATOR, CONTROL DAMPER, FLASHING, AND SECURITY GRILLE / DIFFUSER SHALL BE REMOVED. DISPOSE OF EXISTING CONTROL DAMPERS AND ACTUATOR. INSTALL NEW CONTROL DAMPER AND NEW ACTUATOR. REINSTALL ALL OTHER COMPONENTS IN FAN ASSEMBLY TO THE FOLLOWING CRITERIA:
- THE CONTROL DAMPER IS INSTALLED WITH AN AIR-TIGHT SEAL BETWEEN THE DAMPER FRAME AND THE BUILDING ENVELOPE AIR/VAPOUR BARRIER.
 - THE FRAME OF THE CONTROL DAMPER IS INSTALLED SQUARE, WITH NO DEFLECTION OR TWISTING.
 - THE DUCT THAT HOUSES THE CONTROL DAMPER IS INSULATED FROM THE PLANE OF THE BUILDING WALL OUT TO THE EXTERIOR FACE OF THE DAMPER.
 - SILICONE SEALS ARE FULLY SEATED BETWEEN DAMPER BLADES AND AROUND THE PERIMETER OF THE DAMPER WHEN THE DAMPER IS CLOSED.
 - THE DAMPER ACTUATOR AND ACTUATOR ARM FUNCTION OPTIMALLY.
 - ALL CONTROL DAMPER BLADES ARE ALIGNED PARALLEL WHEN THE DAMPER IS CLOSED.



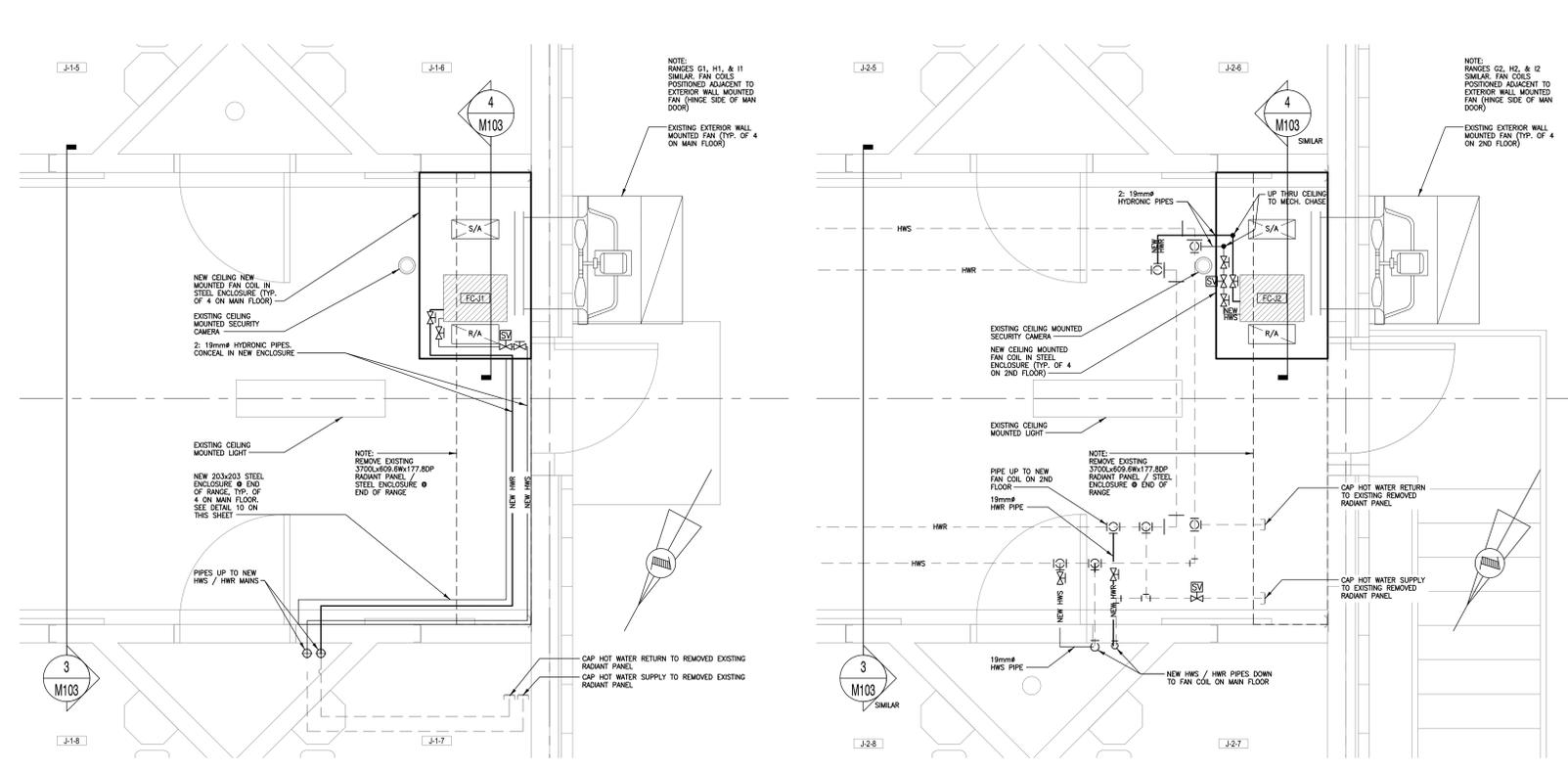
**UNIT 6 - WALL MOUNTED FAN
SECTION - EXISTING**
1:10 SHEET REF. M103



**UNIT 6 - WALL MOUNTED FAN
DETAIL - UPGRADE**
1:10 SHEET REF. M103

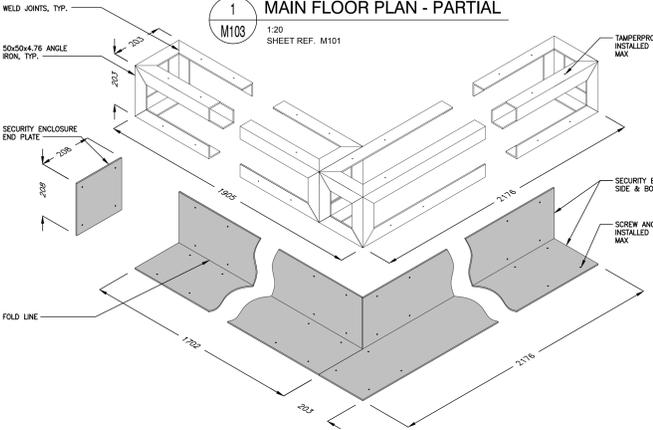


**UNIT 6 - WALL MOUNTED FAN
DETAIL - EXISTING**
1:10 SHEET REF. M103

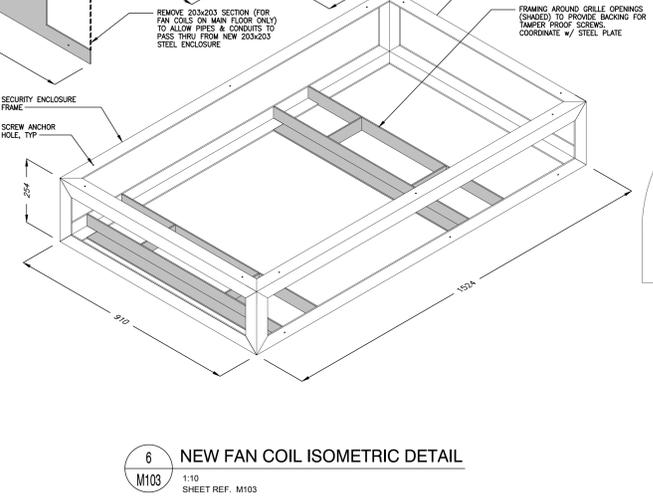
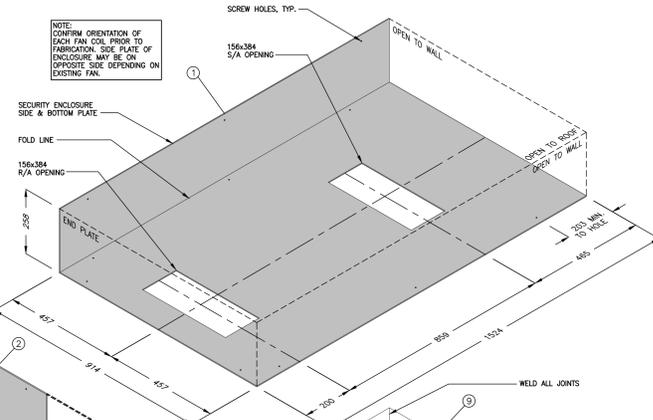


**UNIT 6 - RANGE J1
MAIN FLOOR PLAN - PARTIAL**
1:20 SHEET REF. M101

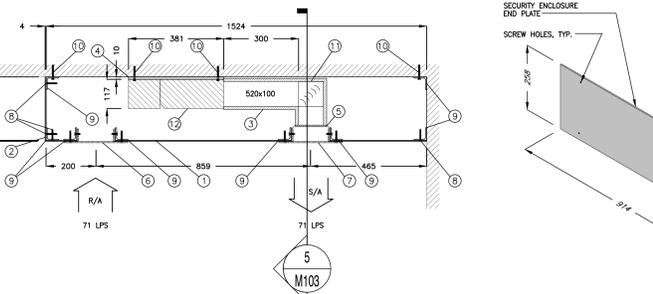
**UNIT 6 - RANGE J2
2ND FLOOR PLAN - PARTIAL**
1:20 SHEET REF. M102



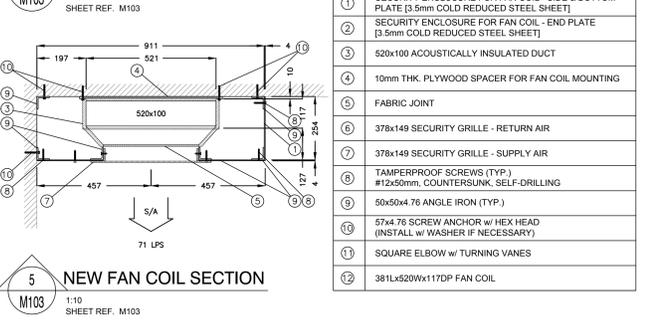
NEW ENCLOSURE ISOMETRIC DETAIL
1:10 SHEET REF. M103



NEW FAN COIL ISOMETRIC DETAIL
1:10 SHEET REF. M103



NEW FAN COIL SECTION
1:10 SHEET REF. M103



NEW FAN COIL SECTION
1:10 SHEET REF. M103

FAN COIL SECTION LEGEND

1	SECURITY ENCLOSURE FOR FAN COIL - SIDE & BOTTOM PLATE [3.5mm COLD REDUCED STEEL SHEET]
2	SECURITY ENCLOSURE FOR FAN COIL - END PLATE [3.5mm COLD REDUCED STEEL SHEET]
3	520x100 ACOUSTICALLY INSULATED DUCT
4	10mm THK. PLYWOOD SPACER FOR FAN COIL MOUNTING
5	FABRIC JOINT
6	378x149 SECURITY GRILLE - RETURN AIR
7	378x149 SECURITY GRILLE - SUPPLY AIR
8	TAMPERPROOF SCREWS (TYP.) #12x50mm, COUNTERSUNK, SELF-DRILLING
9	50x50x4.76 ANGLE IRON (TYP.)
10	57x4.76 SCREW ANCHOR w/ HEX HEAD (INSTALL w/ WASHER IF NECESSARY)
11	SQUARE ELBOW w/ TURNING VANES
12	381Lx520Wx117DP FAN COIL