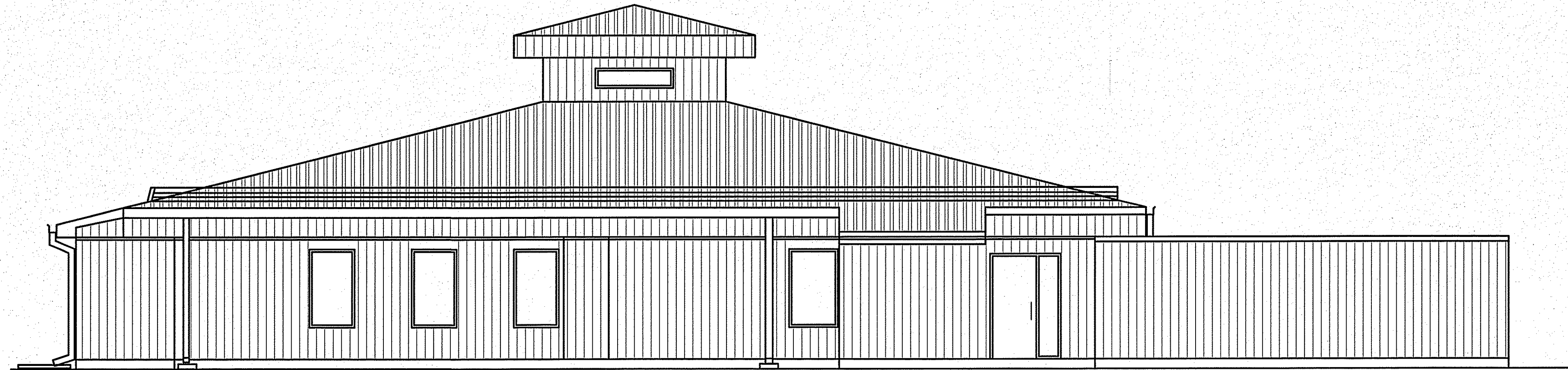


INTERIOR AND EXTERIOR RENOVATIONS WABOWDEN MANITOBA



DRAWING LIST

ARCHITECTURAL

- A0.0 TITLE PAGE
- A0.1 TRAILER RENOVATION DRAWING
- A1.0 MAIN FLOOR
- A1.1 ROOF PLAN
- A1.2 ELEVATIONS
- A2.0 MAIN FLOOR PLAN
- A2.1 ROOF PLAN
- A3.0 ELEVATIONS
- A4.0 DETAILS
- A4.1 DETAILS
- A6.0 REFLECTED CEILING

MECHANICAL

- M2.0 MAIN FLOOR - HVAC
- M2.1 HVAC DETAILS
- M2.2 MECHANICAL SPECIFICATION

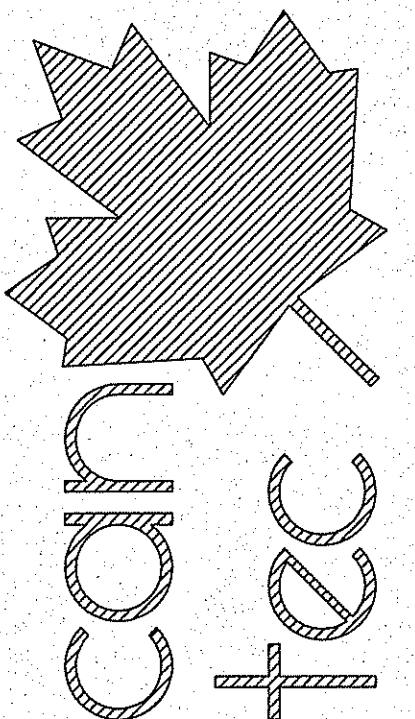
ELECTRICAL

- E-1 MAIN FLOOR LIGHTING PLAN

ABBREVIATION LIST

ACOUSTIC	ACST	DRYWALL	DW	LAVATORY	LAV	ROOM	RM
ADHESIVE	ADH	EACH	EA	LAY-IN ACOUSTIC TILE	LAT	ROUGH OPENING	RO
ADJUSTABLE	ADJ	EACH WAY	EW	LEFT HAND	LH	RUBBER	RB
AGGREGATE	AGGR	EAST	E	LEFT HAND REVERSE	LHR	RVT	RESILIENT SHEET FLOORING
AIR VAPOUR BARRIER	AVB	ELECTRICAL	ELEC	LENGTH	LG	SCHEDULE	SCHED
ALTERNATE	ALT	ELEVATION	EL	LIGHT	LT	SCREW	SCR
ALUMINUM	ALUM	ELEVATOR	ELEV	LOUVRE	LVR	SECTION	SECT
APARTMENT	APT	EPOXY	EP	MANUFACTURE	MFG	SELF ADHESIVE	SA
APPROXIMATE	APPROX	EQUAL	EQ	MARK	MK	SHEATHING	SHTG
ARCHITECTURE	ARCH	EQUALLY SPACED	EQ SP	MASONRY OPENING	MO	SHEET	SHT
BEAM	BM	EQUIPMENT	EQUIP	MATERIAL	MAT	SHEET VINYL	SV
BENCH MARK	BM	EXISTING	EXIST	MECHANICAL	MECH	SIMILAR	SIM
BETWEEN	BTWN	EXPANSION	EXP	MINIMUM	MIN	SOLID CORE	SC
BLOCK	BLK	EXTERIOR	EXT	MISCELLANEOUS	MISC	SOUTH	S
BOARD	BD	EXTRUDE	EXTR	NEAR FACE	NF	SPECIFICATION	SPEC
BOTH SIDES	BS	FACE TO FACE	F/F	NEAR SIDE	NS	SPRUCE	SPR
BOTH WAYS	BW	FAR SIDE	FS	NORTH	N	SPRUCE, PINE OR FIR	SP/PF
BOTTOM	BOT	FIBREBOARD	FBRBD	NOT APPLICABLE	N/A	STAIN	ST
BUILDING	BLDG	FINISH	FIN	NOT IN CONTRACT	NIC	STAINLESS STEEL	SS
CARPET	CPT	FLOOR	FL	NOT TO SCALE	NTS	STANDARD	STD
CAST IRON	CI	FLOOR DRAIN	FD	NUMBER	NO	STEEL	STL
CEILING	CLG	FLOORING	FLG	ON CENTRE	O/C	STRUCTURAL	STRUCT
CEMENT BOARD	CBD	FLUORESCENT	FLR	OUT TO OUT	O/O	SQUARE FEET	SF
CENTRE	CTR	FOOTING	FTG	OUTSIDE DIAMETER	OD	TEMPORARY	TEMP
CENTRE TO CENTRE	C/C	FOUNDATION	FDN	OUTSIDE FACE	OF	THROUGH	THRU
CERAMIC TILE	CT	FULL SIZE	FS	OVERHEAD	OH	TO MATCH EXISTING	TME
CIRCLE	CIRC	GALVANIZED	GALV	PAINT	PT	TONGUE AND GROOVE	T&G
CLEAR	CLR	GALVANIZED IRON	GI	PAINTED	PTD	TOP AND BOTTOM	T&B
COLUMN	COL	GAUGE	GA	PARTITION	PTN	TOP OF	T/O
COMPLETE WITH	C/W	GLASS	GL	PLYWOOD	PLYWD	TYPICAL	TYP
CONCRETE	CONC	HARDWARE	HDW	PRECAST	PC	UNDER SIDE	US
CONCRETE BLOCK	CBLK	HEIGHT	HGT	PRECAST CONCRETE	PC CONC	UNDERCUT	UCUT
CONSTRUCTION	CONST	HEXAGON	HEX	PREFABRICATION	PREFAB	URINAL	UR
CONTINUOUS	CONT	HOLLOW CORE	HC	PREFINISHED	PREFIN	VAPOUR BARRIER	VB
CONTROL JOINT	CJ	HOLLOW METAL	HM	PRESSED STEEL	PS	VERTICAL	VERT
COUNTERSINK	CSK	HORIZONTAL	HORIZ	QUANTITY	QTY	VINYL ASBESTOS TILE	VAT
COVERED SHEET VINYL	CSV	INCLUSIVE	INCL	QUARRY TILE	QT	VINYL COVE BASE	VCB
DETAIL	DTL	INSIDE DIAMETER	ID	RADIUS	R	VINYL TILE	VT
DEMOLISH	DEMO	INSIDE FACE	IF	RAINWATER LEADER	RWL	VINYL WALL COVERING	VWC
DIAGONAL	DIAG	INSULATE	INSUL	REFERENCE	REF	WATER CLOSET	WC
DIAMETER	DIA	INTERIOR	INT	REINFORCE	REINF	WEATHERSTRIPPING	WS
DIMENSION	DIM	JOINT	JT	RESILIENT	RESIL	WEIGHT	WT
DOOR	DR	JOIST	JST	REVERSE	RVS	WITH	W/
DOUBLE	DBL	KNOCK DOWN	KD	REVISION	REV	WITHOUT	W/O
DOWN	DN	LAMINATE	LAM	RIGHT HAND	RH	WOOD	WD
DRAWING	DWG	LATEX EPOXY	LEP	RIGHT HAND REVERSE	RHR	WROUGHT IRON	WI

THIS DRAWING MUST NOT BE SCALED.
THE GENERAL CONTRACTOR SHALL VERIFY ALL DIMENSIONS, DATINGS AND LEVELS PRIOR TO COMMENCEMENT OF WORK AND IS HELD RESPONSIBLE FOR REPORTING ANY DISCREPANCY OR OMISSION TO CANTEC SERVICES LTD. IMMEDIATELY.
THIS DRAWING IS THE EXCLUSIVE PROPERTY OF CANTEC SERVICES LTD. AND CAN BE REPRODUCED ONLY WITH THE PERMISSION OF CANTEC SERVICES LTD. IN WHICH CASE THE REPRODUCTION MUST BEAR THEIR NAME AS THE ENGINEERING DRAFTING FIRM.



ENGINEERING AND DRAFTING
184 MAIN STREET, WINNIPEG, MANITOBA
TEL: (204) 943-7222 Fax: (204) 943-8277
http://www.cantecservices.com

REVISED FOR TRAILER CONSTRUCTION
DATE: (Y/M/D) 13/10/24
REVISED BY: RS
REASON: AS NOTED

SEALED BY:

PROJECT TITLE
INTERIOR AND EXTERIOR RENOVATIONS

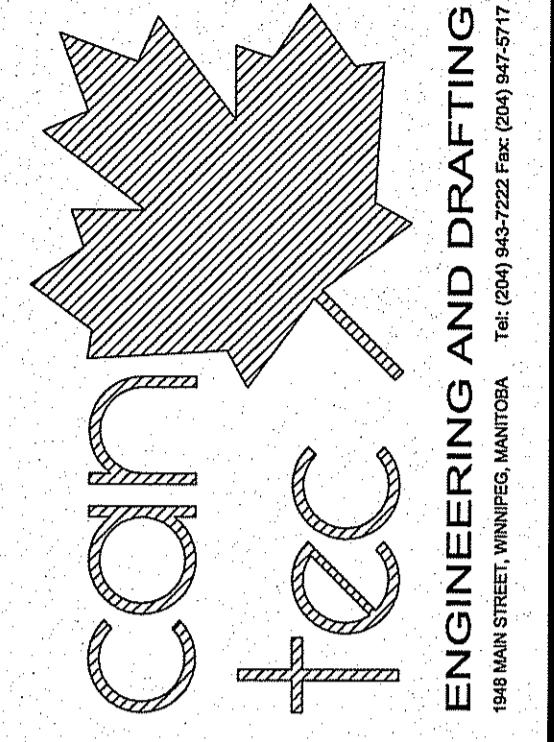
SHEET TITLE
TITLE PAGE

DATE (Y/M/D) 13/10/24
SCALE AS NOTED

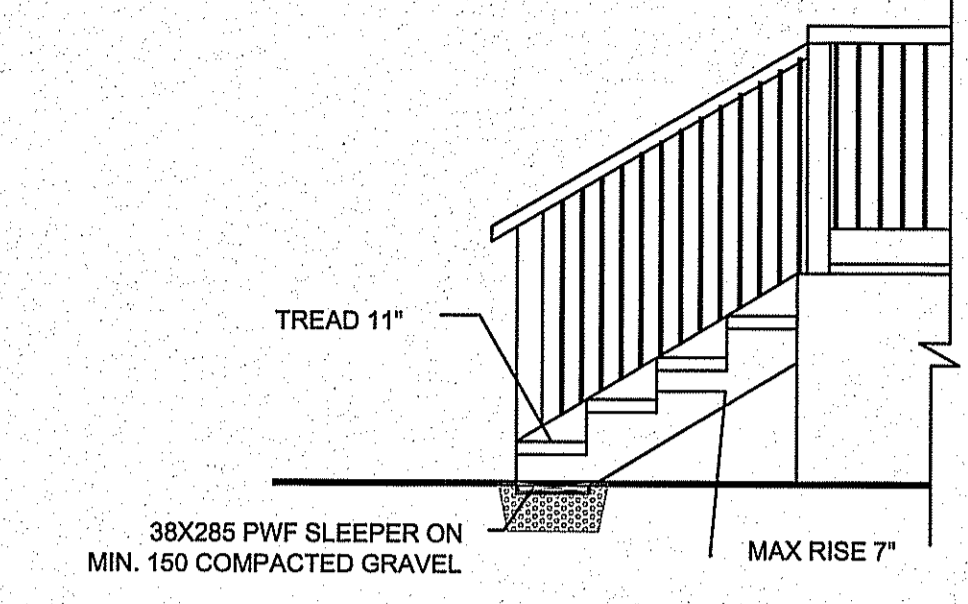
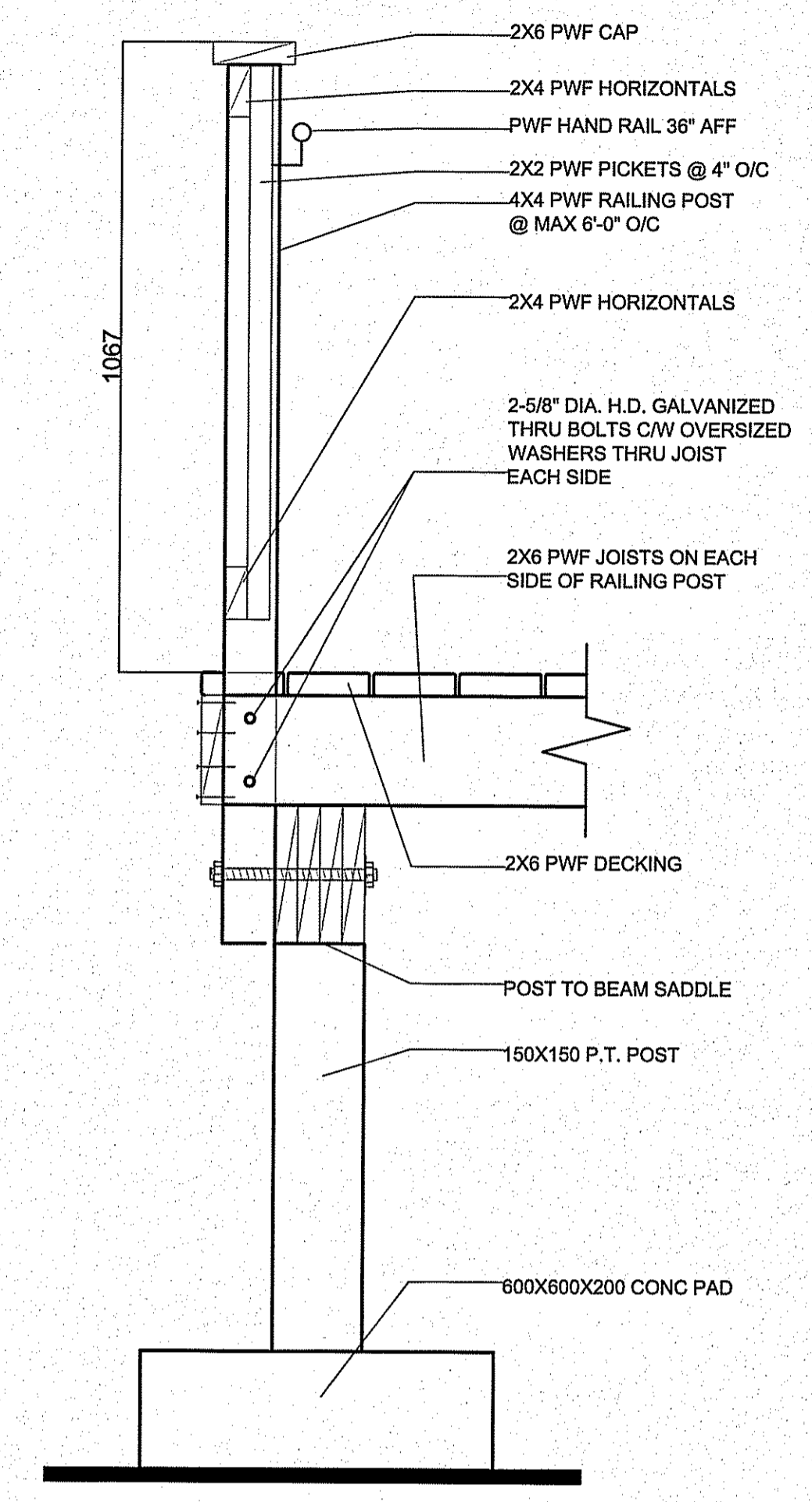
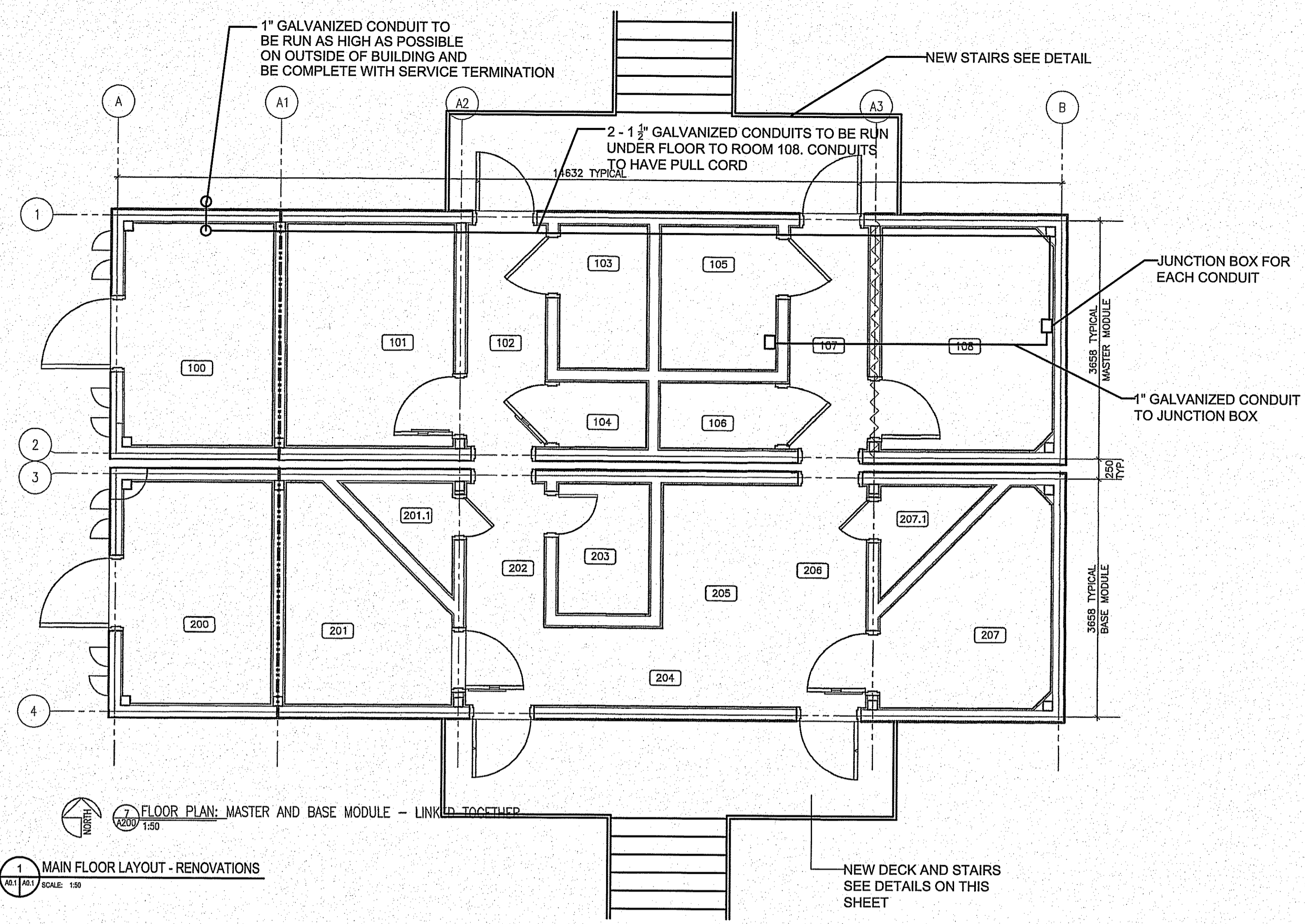
DRAWN BY RS
CHECKED BY AK

CONSTRUCTION
A0.0
REVISION #: 01
JOB NO. 13-033-01-30

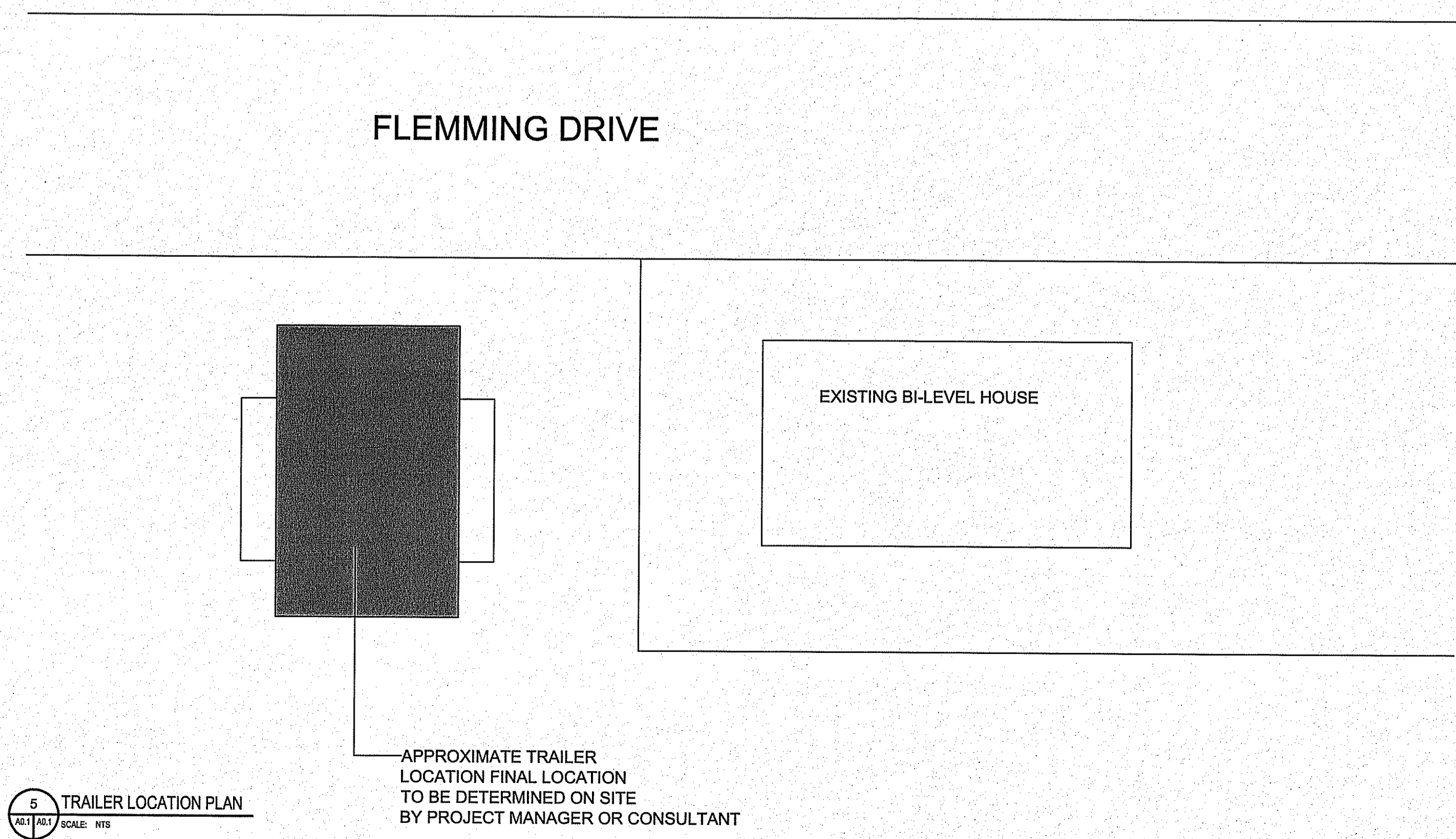
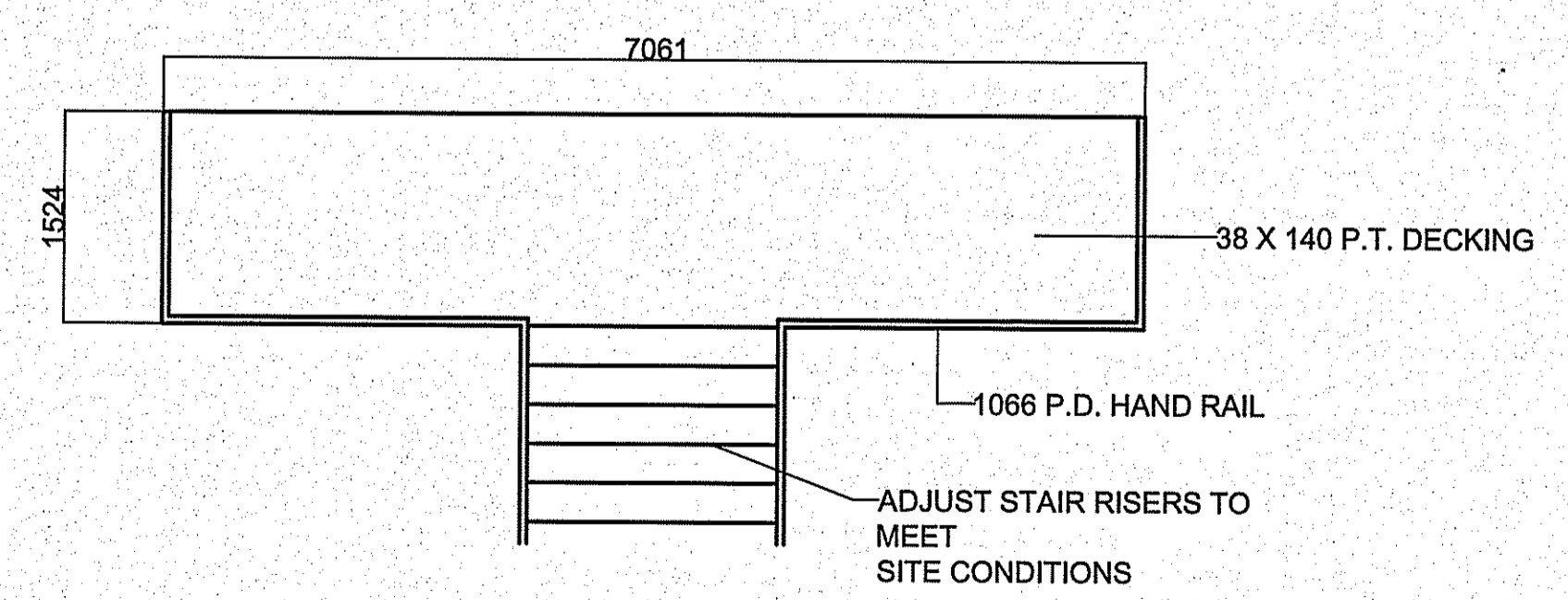
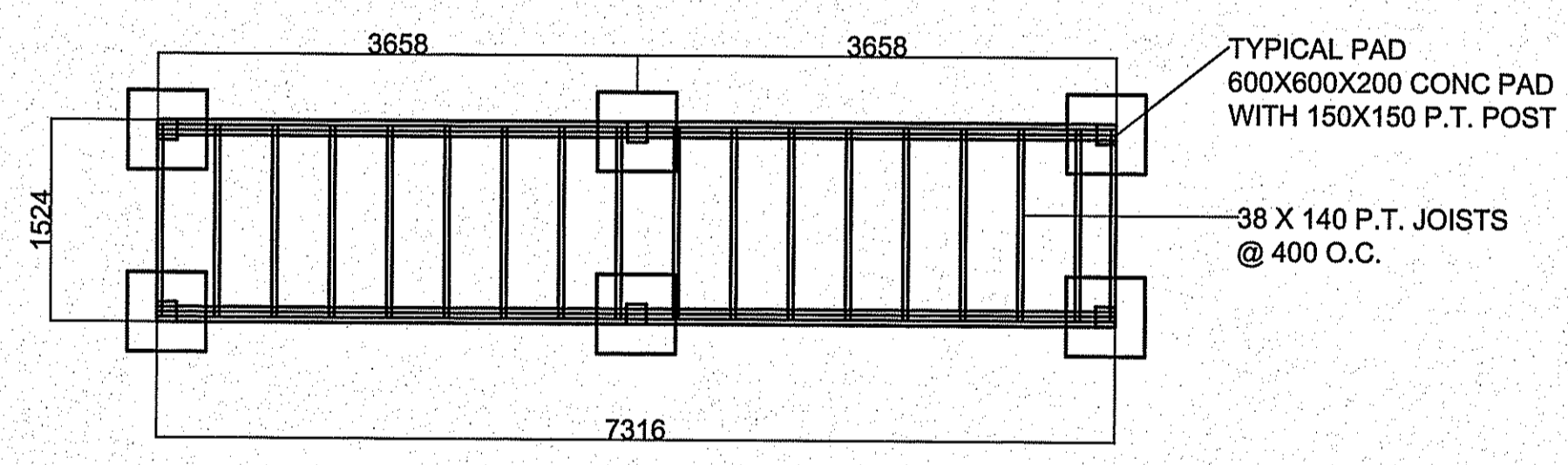
THIS DRAWING MUST NOT BE SCALED.
 THE GENERAL CONTRACTOR SHALL VERIFY ALL DIMENSIONS, DATUMS AND LEVELS PRIOR TO COMMENCEMENT OF WORK AND SHALL BE RESPONSIBLE FOR REPORTING ANY DISCREPANCY OR OMISSION TO CAN-TEC SERVICES LTD. IMMEDIATELY.
 THIS DRAWING IS THE EXCLUSIVE PROPERTY OF CAN-TEC SERVICES LTD. AND CAN BE REPRODUCED ONLY WITH THE PERMISSION OF CAN-TEC SERVICES LTD. IN WHICH CASE THE REPRODUCTION MUST BEAR THEIR NAME AS THE ENGINEERING DRAFTING FIRM.
<http://www.can-tec.com>



ENGINEERING AND DRAFTING
 1918 MAIN STREET, WABOWDEN, MANITOBA
 The (204) 843-7222 Fax: (204) 847-2717
 01 REV.# ISSUED FOR CONSTRUCTION/REVISION DATE (YY/MM/DD) REV. BY
 14/02/14 2.5
 01 REV.#



- GENERAL NOTES:
- CONTRACTOR TO CONTACT AND COORDINATE UTILITY, POWER, GAS AND PHONE LOCATIONS WITH TOWN/UTILITY / COMPANY FOR DISCONNECTION AND RECONNECTION AS REQUIRED
 - CONTRACTOR TO COMMISSION ALL SYSTEMS INCLUDING FIRE ALARM, H.V.A.C. STARTUP REQUIREMENTS AND FILL OF WATER STORAGE TANKS.
 - CONTRACTOR TO SUPPLY SHOP DRAWINGS FOR WOOD LANDINGS AND STAIRS AND CO-ORDINATE WITH RCMP
 - CONTRACTOR TO INSTALL ALL INTERCONNECTIONS BETWEEN THE TRAILERS. INSTALL ALL ROOF VENTS, GASKETS, FLASHING, PLUMBING FIXTURES WHICH WERE DISASSEMBLED IN THE MANUFACTURER SHOP BEFORE DEPLOYMENT. ALL CONNECTIONS AND INSTALLATION ARE TO BE MAKE AS PER TRAILERS MANUFACTURER RECOMMENDATIONS.



PROJECT TITLE
INTERIOR AND EXTERIOR RENOVATIONS

SHEET TITLE
TRAILER RENOVATION PLAN

DATE (YY/MM/DD)
 13 10 24

SCALE
 AS NOTED

LOCATION
 WABOWDEN, MANITOBA

DRAWN BY
 RS

CHECKED BY
 AK

CONSTRUCTION

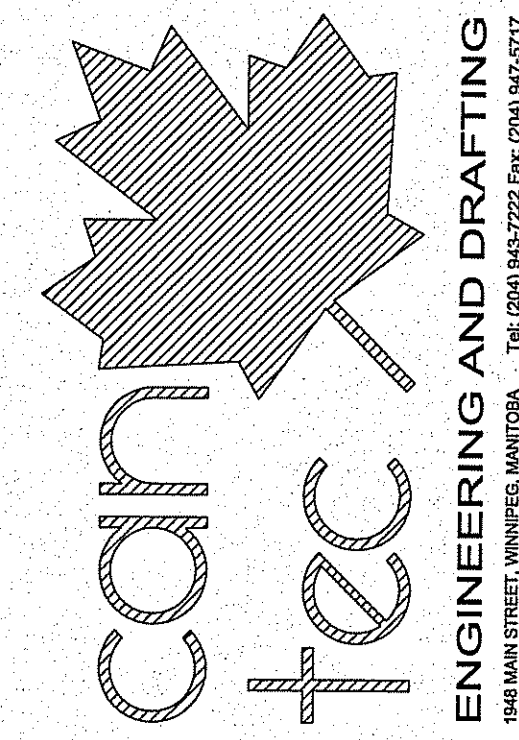
A0.1

REVISION # 01

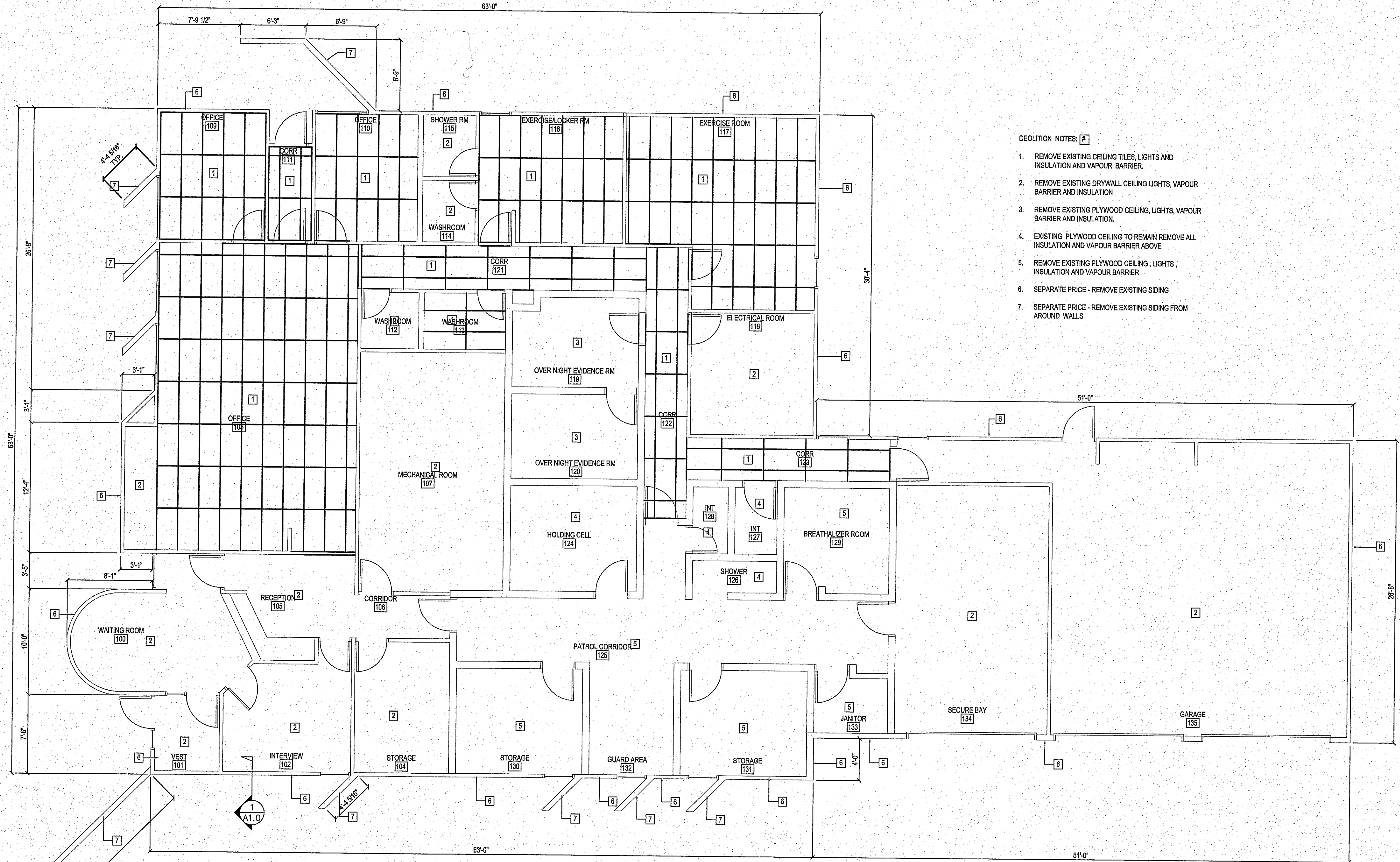
JOB NO.
 13-033-01-30

METRIC DRAWING

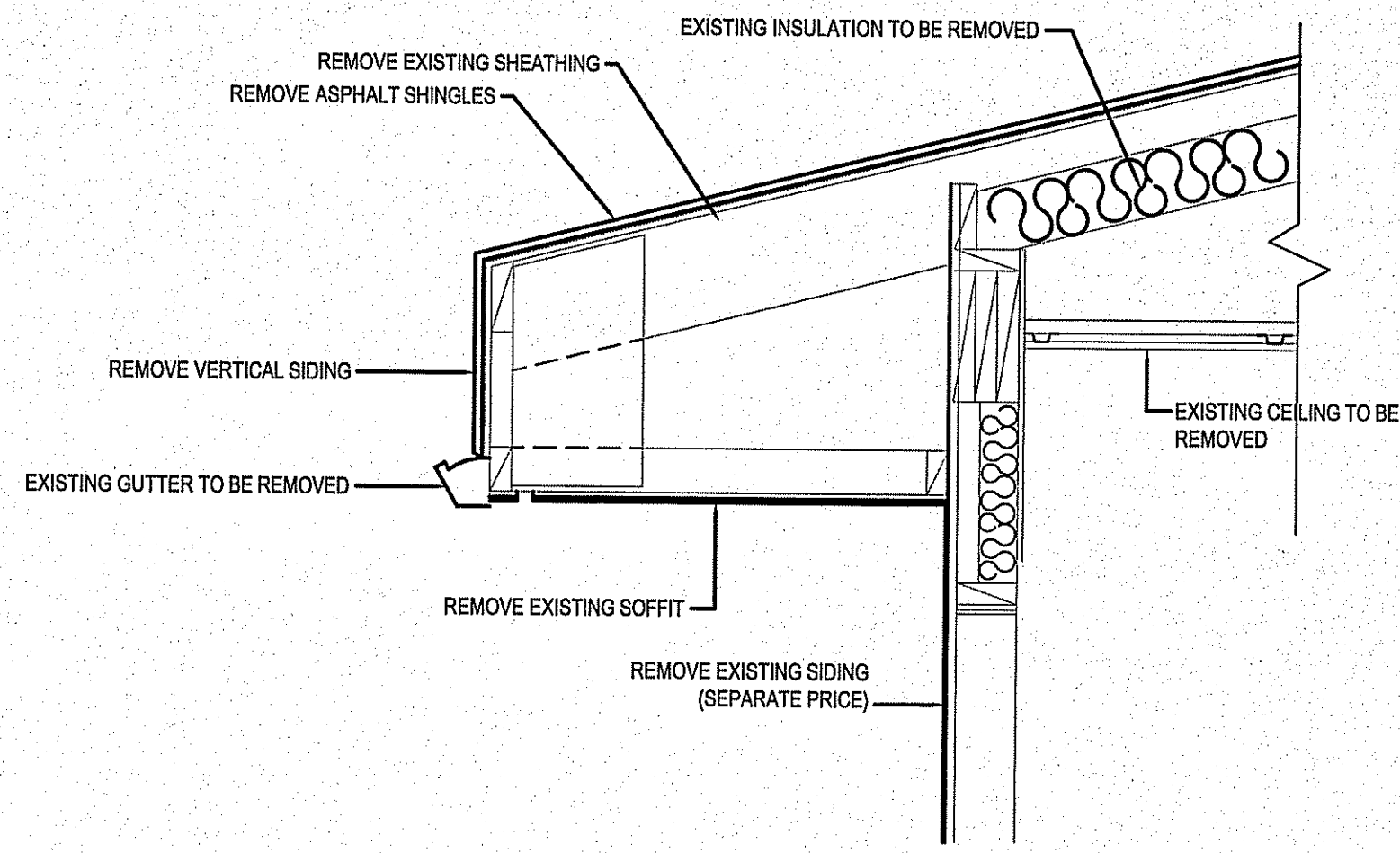
THIS DRAWING MUST NOT BE SCALED.
 THE GENERAL CONTRACTOR SHALL VERIFY ALL DIMENSIONS, DATUMS AND LEVELS PRIOR TO COMMENCEMENT OF WORK AND IS HELD RESPONSIBLE FOR REPORTING ANY DISCREPANCY OR OMISSION TO CANTEC SERVICES LTD. IMMEDIATELY.
 THIS DRAWING IS THE EXCLUSIVE PROPERTY OF CANTEC SERVICES LTD. AND CAN BE REPRODUCED ONLY WITH THE PERMISSION OF CANTEC SERVICES LTD. IN WHICH CASE THE REPRODUCTION MUST BEAR THEIR NAME AS THE ENGINEERING/DRAFTING FIRM.



ENGINEERING AND DRAFTING
 184 MAIN STREET, WINNIPEG, MANITOBA
 TEL: (204) 845-7252 FAX: (204) 941-9177
 WWW.CANTECSERVICES.COM



- DEMOLITION NOTES: [#]
1. REMOVE EXISTING CEILING TILES, LIGHTS AND INSULATION AND VAPOUR BARRIER.
 2. REMOVE EXISTING DRYWALL CEILING LIGHTS, VAPOUR BARRIER AND INSULATION
 3. REMOVE EXISTING PLYWOOD CEILING, LIGHTS, VAPOUR BARRIER AND INSULATION.
 4. EXISTING PLYWOOD CEILING TO REMAIN REMOVE ALL INSULATION AND VAPOUR BARRIER ABOVE
 5. REMOVE EXISTING PLYWOOD CEILING, LIGHTS, INSULATION AND VAPOUR BARRIER
 6. SEPARATE PRICE - REMOVE EXISTING SIDING
 7. SEPARATE PRICE - REMOVE EXISTING SIDING FROM AROUND WALLS

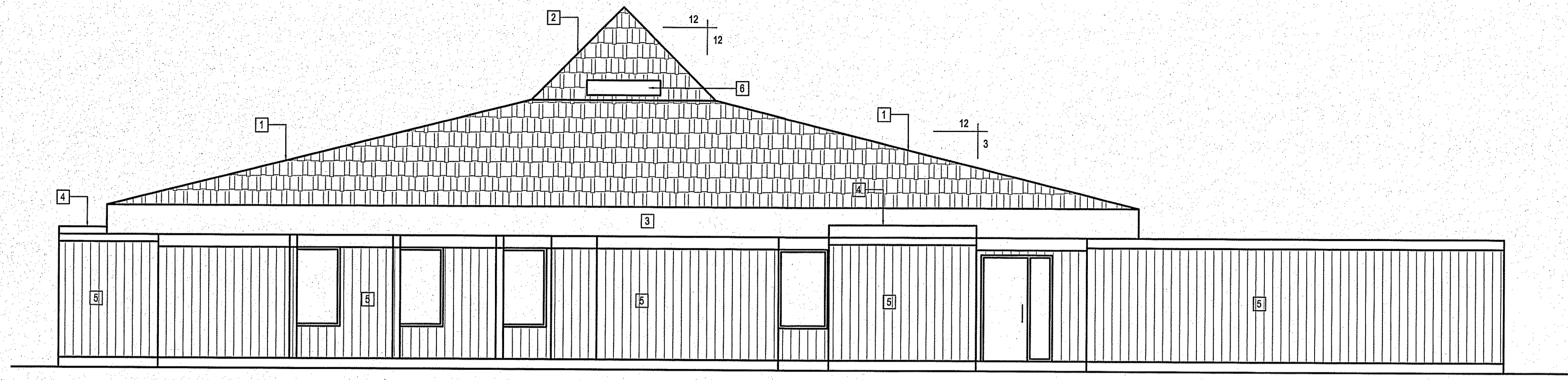


2 EXISTING WALL SECTION DETAIL
 SCALE: 1/4" = 1'-0"

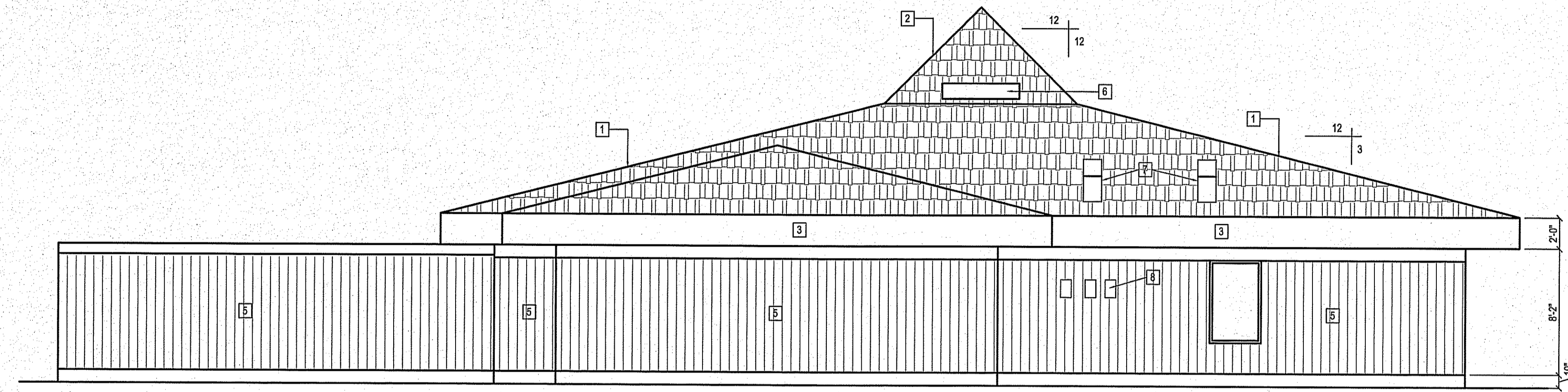
1 FLOOR PLAN - DEMOLITION
 SCALE: 1/4" = 1'-0"

PROJECT TITLE: INTERIOR AND EXTERIOR RENOVATIONS
 SHEET TITLE: MAIN FLOOR PLAN - DEMOLITION
 DATE: 13/10/24
 SCALE: AS NOTED
 LOCATION: WABOWDEN, MANITOBA
 DRAWN BY: RS
 CHECKED BY: AK

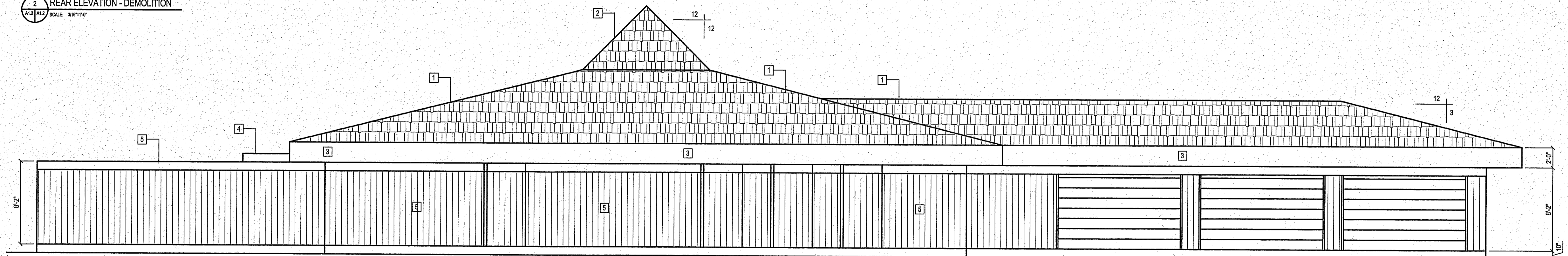
CONSTRUCTION
A1.0
 REVISION #: 01
 JOB NO.: 13-033-01-30



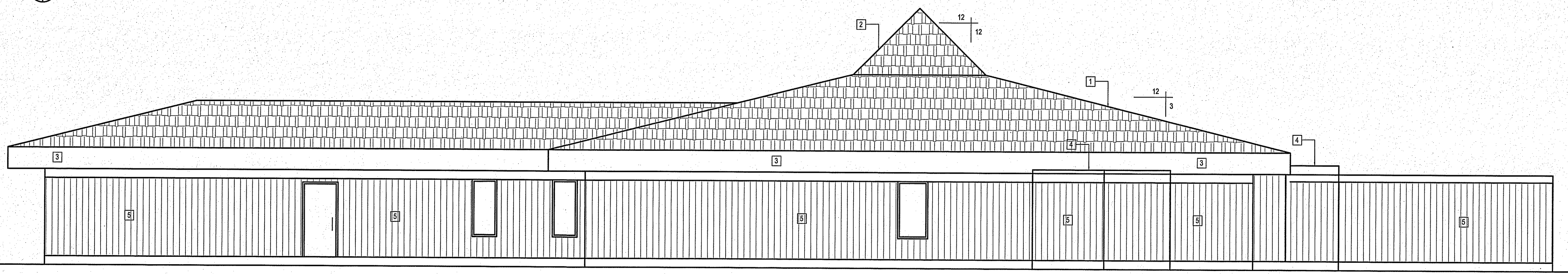
1 FRONT ELEVATION - DEMOLITION
 A1.2 | A1.2 SCALE: 3/16"=1'-0"



2 REAR ELEVATION - DEMOLITION
 A1.2 | A1.2 SCALE: 3/16"=1'-0"



3 RIGHT ELEVATION - DEMOLITION
 A1.2 | A1.2 SCALE: 3/16"=1'-0"

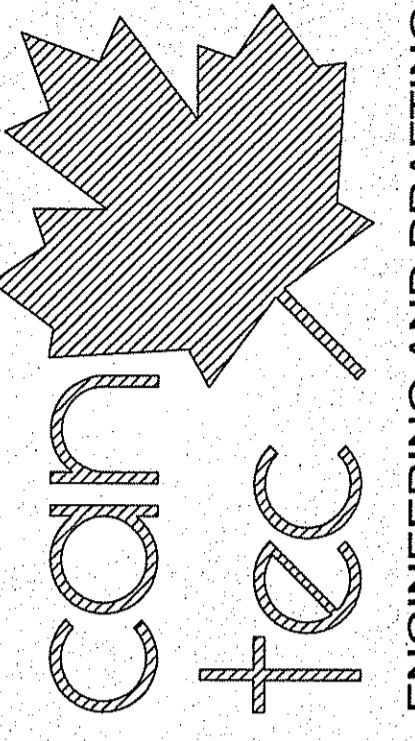


4 LEFT ELEVATION - DEMOLITION
 A1.2 | A1.2 SCALE: 3/16"=1'-0"

DRAWING NOTES:

1. REMOVE EXISTING ROOF SHINGLES
2. REMOVE EXISTING 12 / 12 ROOF AT TOP OF BUILDING, INCLUDING ALL ROOF STRUCTURES
3. REMOVE ALL EXISTING SOFIT, FASCIA, GUTTERS AND DOWN SPOUTS
4. REMOVE EXISTING FLAT ROOF AND ALL INSULATION, INSPECT ALL ROOF STRUCTURES AND REMOVE ALL ROTTED MATERIALS.
5. SEPARATE PRICE: REMOVE ALL EXISTING SIDING
6. EXISTING MECHANICAL DUCT TO REMAIN AND BE EXTENDED
7. EXISTING EXHAUST GOOSE NECK TO REMAIN
8. EXISTING DISCONNECTS FOR AIR CONDITIONING SYSTEM, TO BE MOVED AND RE-INSTALLED WITH EXISTING SIDING - PRICE SEPARATELY.

THIS DRAWING MUST NOT BE SCALED
 THE GENERAL CONTRACTOR SHALL VERIFY ALL DIMENSIONS, DATUMS AND LEVELS PRIOR TO COMMENCEMENT OF WORK AND IS HELD RESPONSIBLE FOR REPORTING ANY DISCREPANCY OR OMISSION TO CAN-TEC SERVICES LTD. IMMEDIATELY.
 THIS DRAWING IS THE EXCLUSIVE PROPERTY OF CAN-TEC SERVICES LTD. AND CAN BE REPRODUCED ONLY WITH THE PERMISSION OF CAN-TEC SERVICES LTD. IN WHICH CASE THE REPRODUCTION MUST BEAR THEIR NAME AS THE ENGINEERING FIRM.
<http://www.can-tec.com>



ENGINEERING AND DRAFTING
 198 MAIN STREET, WINNIPEG, MANITOBA
 TEL: (204) 945-7222 FAX: (204) 941-5717

SEALED BY:

PROJECT TITLE
INTERIOR AND EXTERIOR RENOVATIONS

SHEET TITLE
ELEVATION PLAN - DEMOLITION

DATE (YY/M/YY)
 13 10 24

SCALE
 AS NOTED

DRAWN BY
 RS

CHECKED BY
 AK

CONSTRUCTION

A1.2

REVISION #: 01

JOB NO.
 13-033-01-30

LOCATION
 DETACHMENT WABOWDEN, MANITOBA

ISSUED FOR TENDER/CONSTRUCTION
 14.07.14
 REVISION

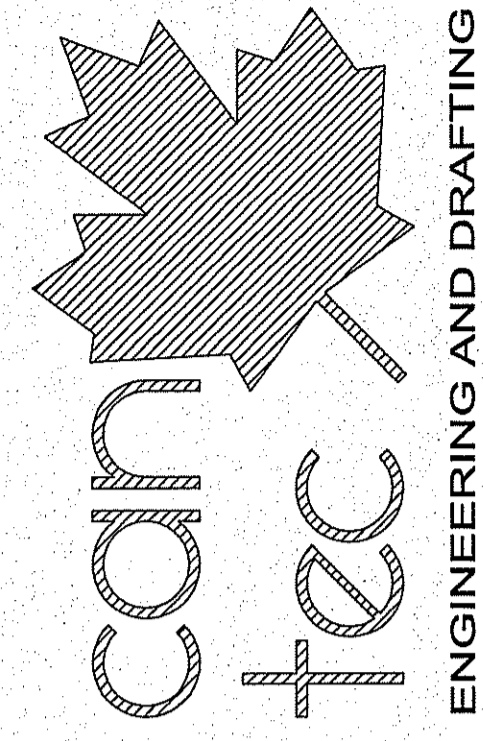
REV. #

RS

REV. BY

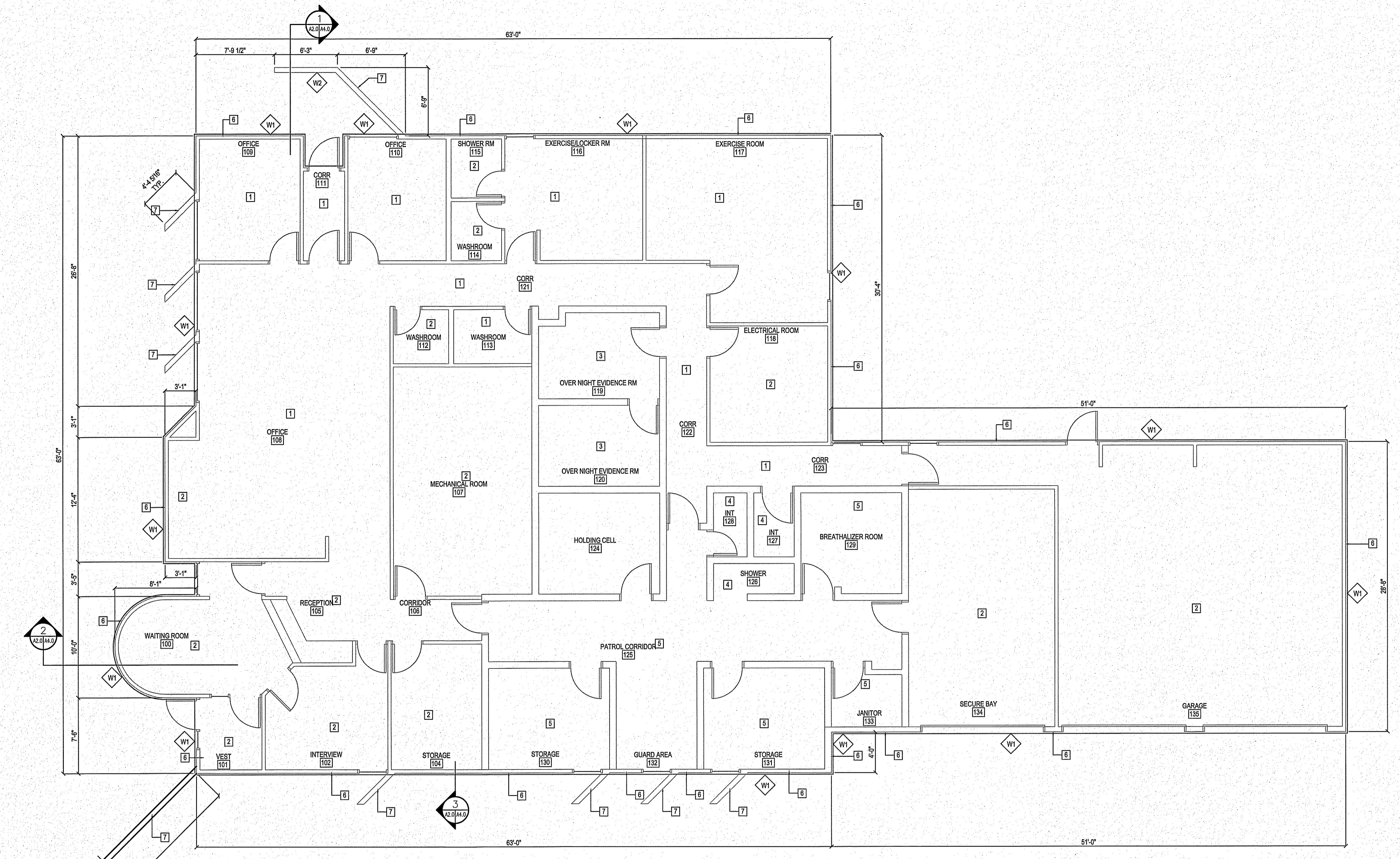
http://www.can-tec.com

THIS DRAWING MUST NOT BE SCALED.
 THE GENERAL CONTRACTOR SHALL VERIFY ALL DIMENSIONS, DATUMS AND LEVELS PRIOR TO COMMENCEMENT OF WORK AND IS HELD RESPONSIBLE FOR REPORTING ANY DISCREPANCY OR OMISSION TO CAN-TEC SERVICES LTD. IMMEDIATELY.
 THIS DRAWING IS THE EXCLUSIVE PROPERTY OF CAN-TEC SERVICES LTD. AND CAN BE REPRODUCED ONLY WITH THE PERMISSION OF CAN-TEC SERVICES LTD. IN WHICH CASE THE REPRODUCTION MUST BEAR THEIR NAME AS THE ENGINEERING/DRAFTING FIRM.
<http://www.can-tesec.com>



184 MAIN STREET, WINNIPEG, MANITOBA The (204) 843-7225 Fax: (204) 847-5177
 REV. # REVISION DATE (Y/M/D) ISSUED FOR CONSTRUCTION ORDER
 01 14/02/14

SEALED BY:



1 FLOOR PLAN
 A13/A10 SCALE: 3/16"=1'-0"

DRAWING NOTES: [F]

- INSTALL NEW T-BAR CEILING AND LIGHTS
- INSTALL NEW DRYWALL CEILING
- INSTALL NEW G1S PLYWOOD CEILING AND LIGHTS
- EXISTING PLYWOOD CEILING TO REMAIN
- INSTALL NEW PLYWOOD CEILING AND LIGHTS
- INSTALL NEW RIGID INSULATION AND VERTICAL STEEL SIDING - SEPARATE PRICE
- IF NEW SIDING IS NOT INSTALLED UNDER SEPARATE PRICE THEN SIDE SCREENS ARE TO REMAIN.
- INSTALL NEW STEEL SIDING AROUND WIND BREAK - SEPARATE PRICE
- EXTEND ROOF OVER THIS SECTION SEE DETAIL 1 SHEET A4.0
- INSTALL NEW ROOF OVER FRONT FOYER SEE DETAIL 2 SHEET A4.0

GENERAL NOTES:

- AFTER CEILING VAPOR BARRIER AND ROOF SHEATHING IS REMOVED ALL REMAINING MATERIALS ARE TO HAVE THE MOLD REMOVED.
- ONCE ALL OF THE MOLD IS REMOVED THE UNDERSIDE OF THE ROOF IS TO BE SPRAY PAINTED WITH MOLD RESISTANT PAINT.
- ALL ROOF COMPONENTS TO BE CHECKED FOR WATER DAMAGE AND INFORMATION TO BE BROUGHT FORWARD TO CONSULTANT.
- FLOORING AND WALLS TO BE PROTECTED DURING CONSTRUCTION ANY DAMAGE FROM THE DEMOLITION IS TO BE REPAIRED BY CONTRACTORS AT HIS EXPENSE.
- IN-FILL ALL SUPPLY DUCT HOLES IN FLOOR WITH CONCRETE AND ADD NEW SECTION OF FLOORING TO COVER APPROXIMATELY 32 LOCATIONS
- RE-PAINT ENTIRE DETACHMENT. COLORS TO BE CHOSEN BY CONSULTANT

WALL SCHEDULE [E]

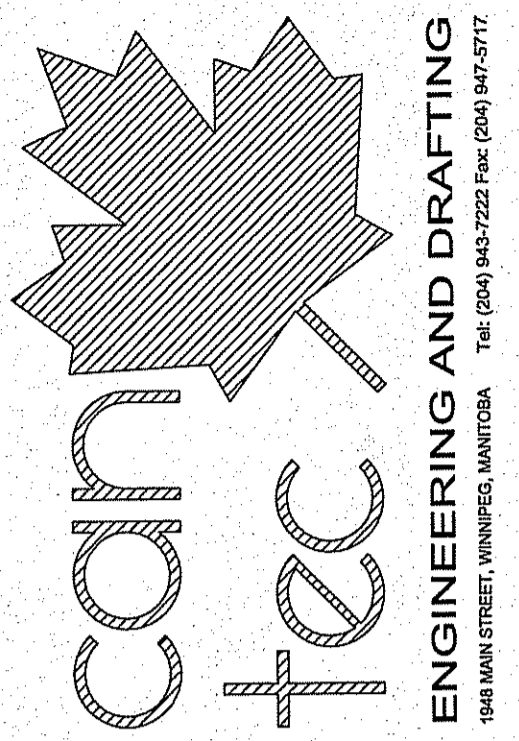
W1 EXISTING DRYWALL
 EXISTING VAPOUR BARRIER
 EXISTING STUDS
 EXISTING INSULATION
 EXISTING SHEATHING
 NEW 2" RIGID INSULATION TYPE 4
 NEW THERMALLY BROKEN Z-GIRTS @ 24" O.C.
 NEW AIR BARRIER
 NEW PF STEEL SIDING

W2 NEW PF STEEL SIDING
 NEW AIR BARRIER
 EXISTING SHEATHING
 EXISTING STUDS AND SUBSTRUCTURE
 NEW AIR BARRIER
 NEW PF STEEL SIDING

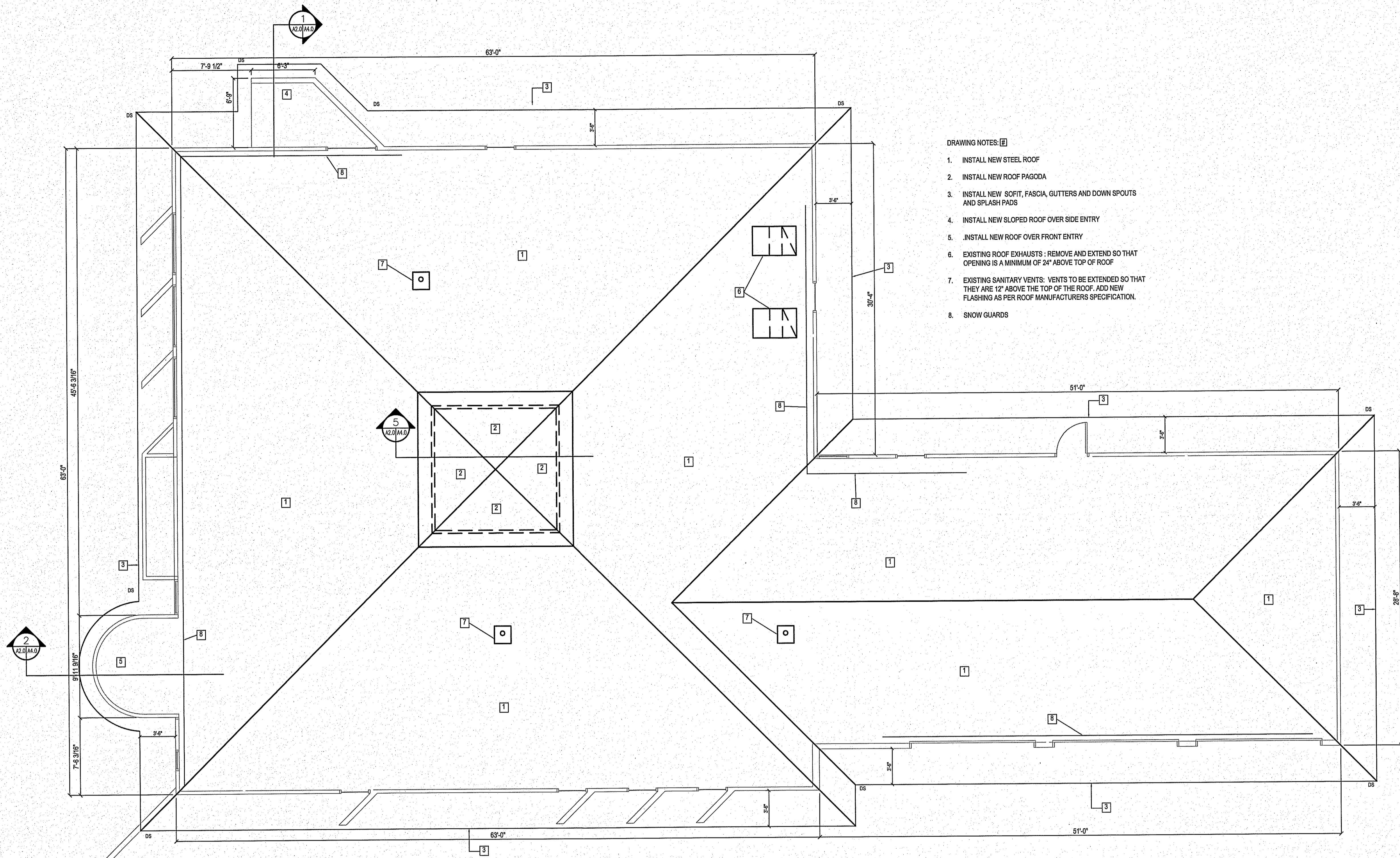
PROJECT TITLE: INTERIOR AND EXTERIOR RENOVATIONS
 SHEET TITLE: MAIN FLOOR PLAN
 DRAWN BY: RS
 CHECKED BY: AK
 DATE (Y/M/D): 13/10/24
 SCALE: AS NOTED
 LOCATION: DETACHMENT WABOWDEN, MANTOBA

CONSTRUCTION
A2.0
 REVISION #: 01
 JOB NO. 13-033-01-30

THIS DRAWING MUST NOT BE SCALED.
 THE GENERAL CONTRACTOR SHALL VERIFY ALL DIMENSIONS, DATUM AND LEVELS PRIOR TO COMMENCEMENT OF WORK AND IS HELD RESPONSIBLE FOR REPORTING ANY DISCREPANCY OR OMISSION TO CAN-TEC SERVICES LTD. IMMEDIATELY.
 THIS DRAWING IS THE EXCLUSIVE PROPERTY OF CAN-TEC SERVICES LTD. AND CAN BE REPRODUCED ONLY WITH THE PERMISSION OF CAN-TEC SERVICES LTD. IN WHICH CASE THE REPRODUCTION MUST BEAR THEIR NAME AS THE ENGINEERING DRAFTING FIRM.



1100 WWW.CAN-TEC-SERVICES.COM
 104 MAIN STREET, WINNIPEG, MANITOBA
 (204) 943-7222 FAX (204) 943-5777
 11/21/14
 01
 ISSUED FOR CONSTRUCTION/DRAWER
 REV. # REVISION DATE (Y/M/D) REV. BY



- DRAWING NOTES: [A]
1. INSTALL NEW STEEL ROOF
 2. INSTALL NEW ROOF PAGODA
 3. INSTALL NEW SOFT, FASCIA, GUTTERS AND DOWN SPOUTS AND SPLASH PADS
 4. INSTALL NEW SLOPED ROOF OVER SIDE ENTRY
 5. INSTALL NEW ROOF OVER FRONT ENTRY
 6. EXISTING ROOF EXHAUSTS: REMOVE AND EXTEND SO THAT OPENING IS A MINIMUM OF 24" ABOVE TOP OF ROOF
 7. EXISTING SANITARY VENTS: VENTS TO BE EXTENDED SO THAT THEY ARE 12" ABOVE THE TOP OF THE ROOF. ADD NEW FLASHING AS PER ROOF MANUFACTURERS SPECIFICATION.
 8. SNOW GUARDS

1 ROOF PLAN
 1/21/14 SCALE: 3/16"=1'-0"

PROJECT TITLE
INTERIOR AND EXTERIOR RENOVATIONS

SHEET TITLE
ROOF PLAN

DATE (Y/M/D) 13 10 24
 SCALE AS NOTED
 LOCATION DETACHMENT WABOWDEN, MANITOBA

DRAWN BY RS
 CHECKED BY AK

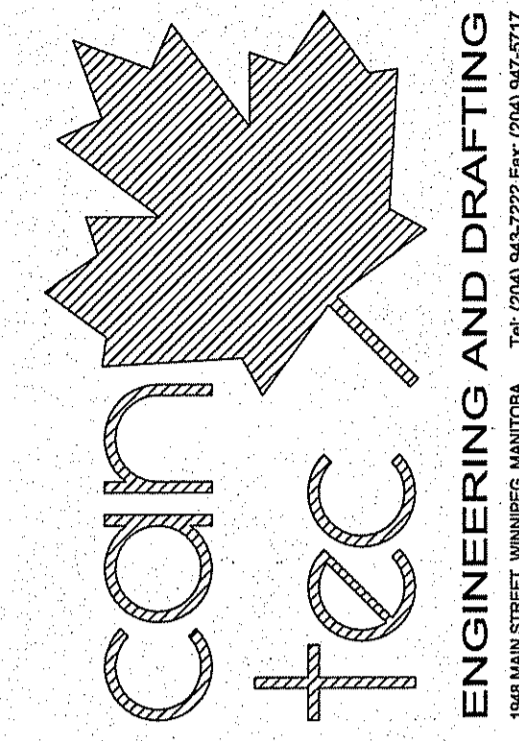
CONSTRUCTION

A2.1

REVISION #: 01

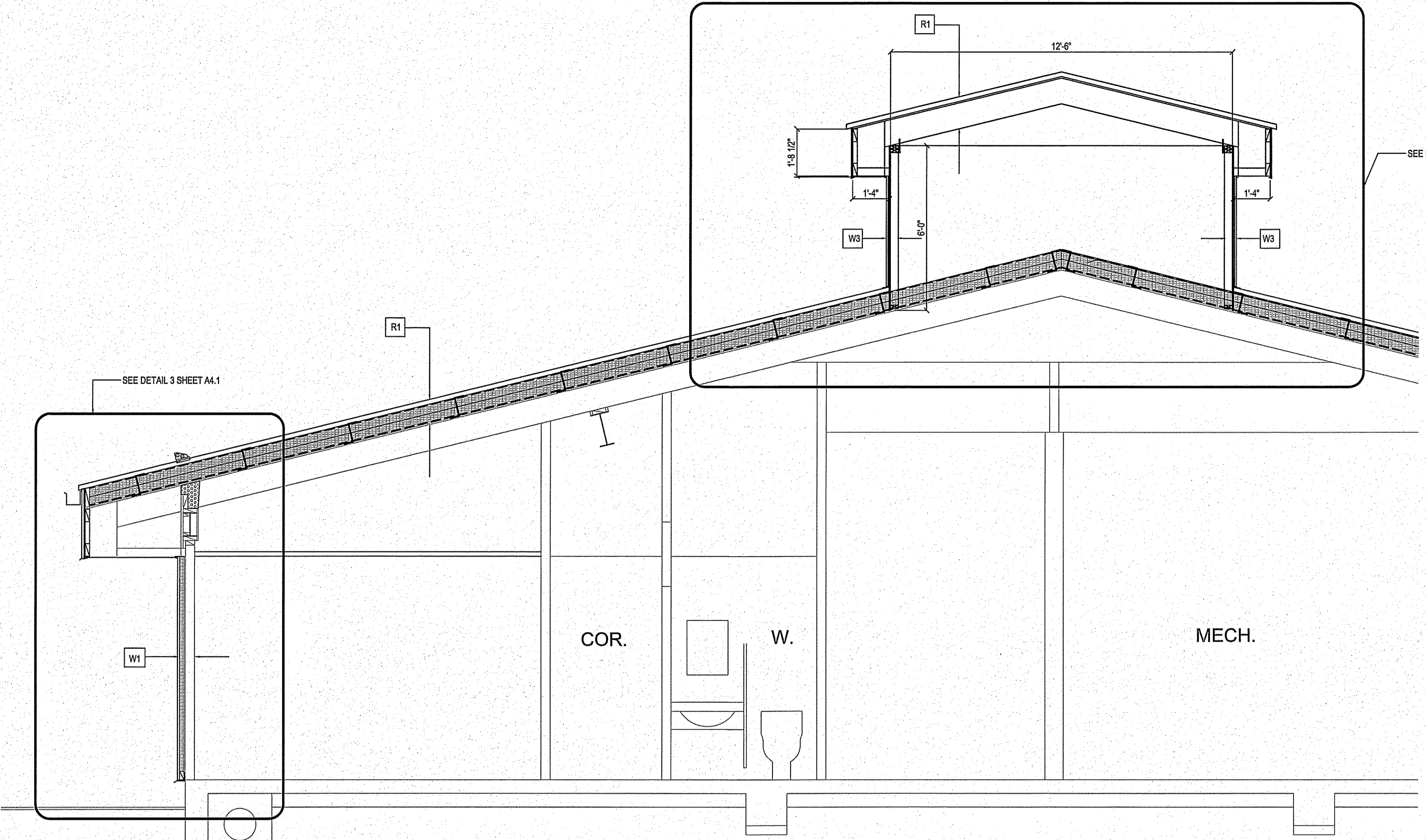
JOB NO. 13-033-01-30

THIS DRAWING MUST NOT BE SCALED.
 THE GENERAL CONTRACTOR SHALL VERIFY ALL DIMENSIONS, DATUMS AND LEVELS PRIOR TO COMMENCEMENT OF WORK AND IS SOLELY RESPONSIBLE FOR REPORTING ANY DISCREPANCY OR OMISSION TO CAN-TEC SERVICES LTD. IMMEDIATELY.
 THIS DRAWING IS THE EXCLUSIVE PROPERTY OF CAN-TEC SERVICES LTD. AND CAN BE REPRODUCED ONLY WITH THE PERMISSION OF CAN-TEC SERVICES LTD. IN WHICH CASE THE REPRODUCTION MUST BEAR THEIR NAME AS THE ENGINEERING/DRAFTING FIRM.

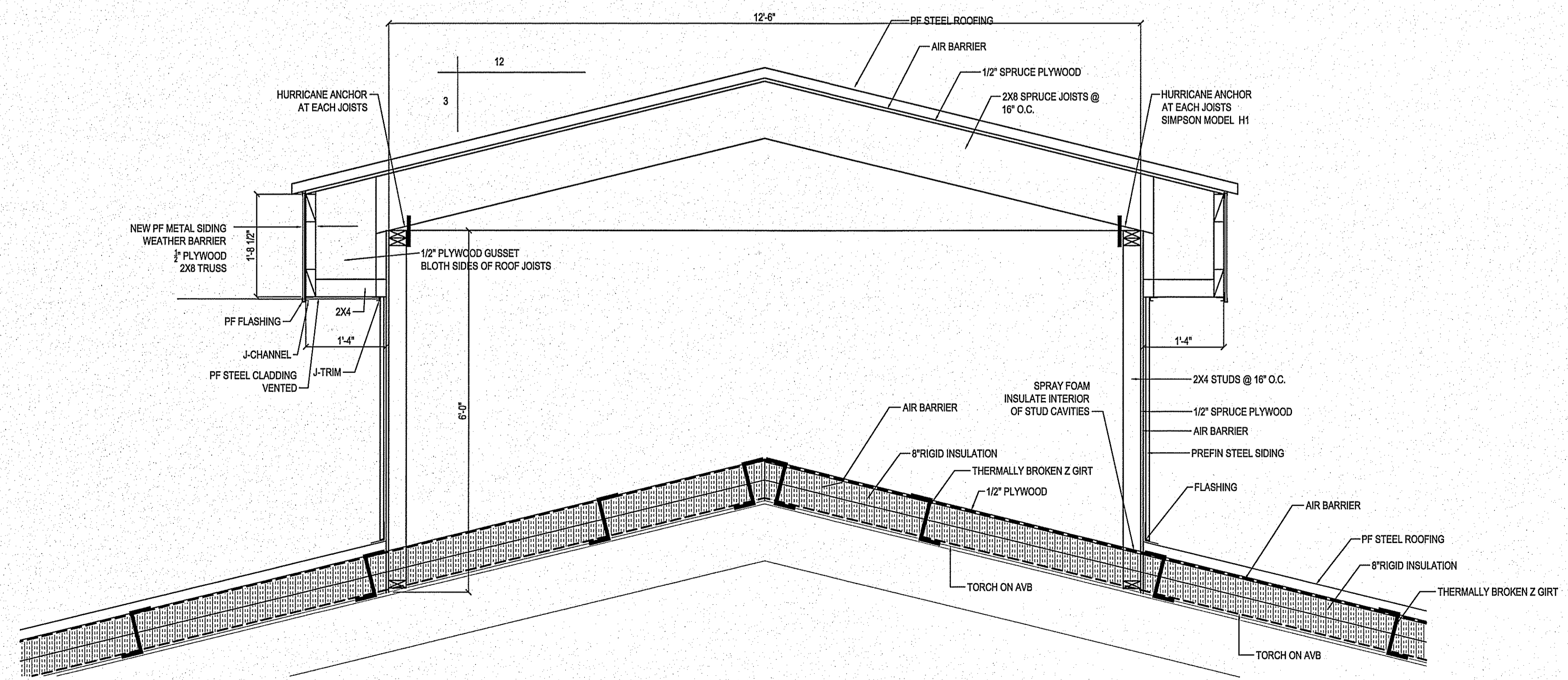


1888 MAIN STREET, WINNIPEG, MANITOBA
 TEL: (204) 944-7722 FAX: (204) 941-2571
 WWW.CAN-TEC-SERVICES.COM

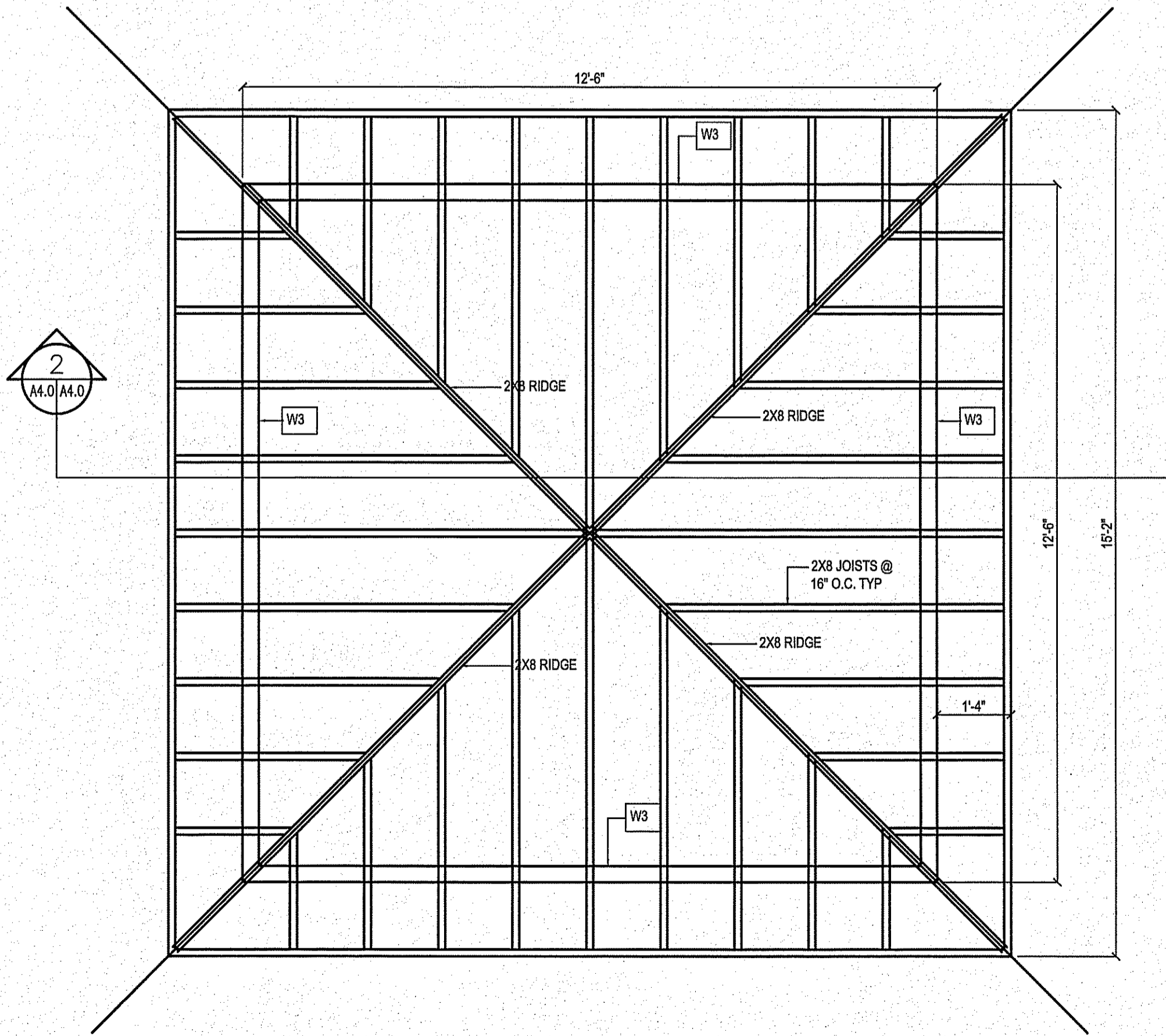
SCHEDULE [F]	
R1	PF STEEL ROOFING AIR BARRIER 1/2" SPRUCE PLYWOOD CW/H CLIPS 2X8 SPRUCE JOISTS @ 16" O.C.
R2	PF STEEL ROOFING AIR BARRIER THERMALLY BROKEN Z GIRTS @ 24" O.C. TORCH ON AIR VAPOR BARRIER 1/2" SPRUCE PLYWOOD CW/H CLIPS EXISTING ROOF JOISTS
W3	PF STEEL SIDING AIR BARRIER 1/2" SPRUCE PLYWOOD 2X4 NO.2 SPRUCE STUDS @ 16" O.C.



1 SECTION
 A4.0/A4.1 SCALE: 3/8"=1'-0"



2 COUPOLA DETAIL
 A4.2/A4.3 SCALE: 3/8"=1'-0"



3 COUPOLA ROOF JOIST LAYOUT
 A4.4/A4.5 SCALE: 1/2"=1'-0"

PROJECT TITLE
INTERIOR AND EXTERIOR RENOVATIONS

SHEET TITLE
SECTIONS

DATE (Y/M/D) 13 10 24
 SCALE AS NOTED
 LOCATION WABOWDEN, MANITOBA
 DRAWN BY RS
 CHECKED BY AK

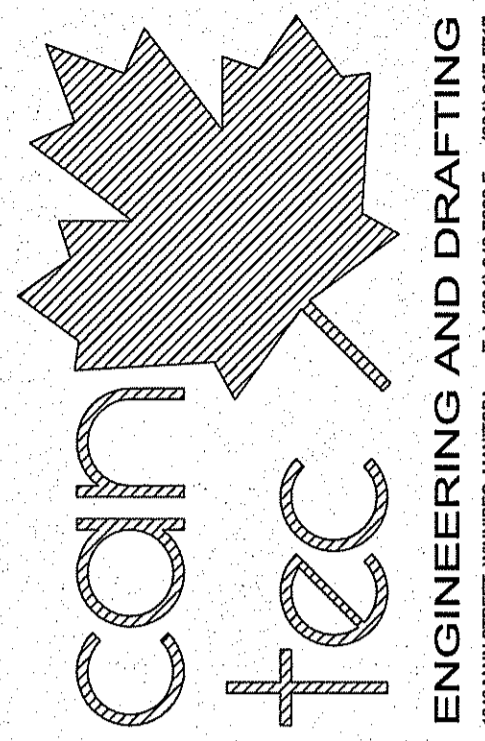
CONSTRUCTION

A4.0

REVISION #: 01

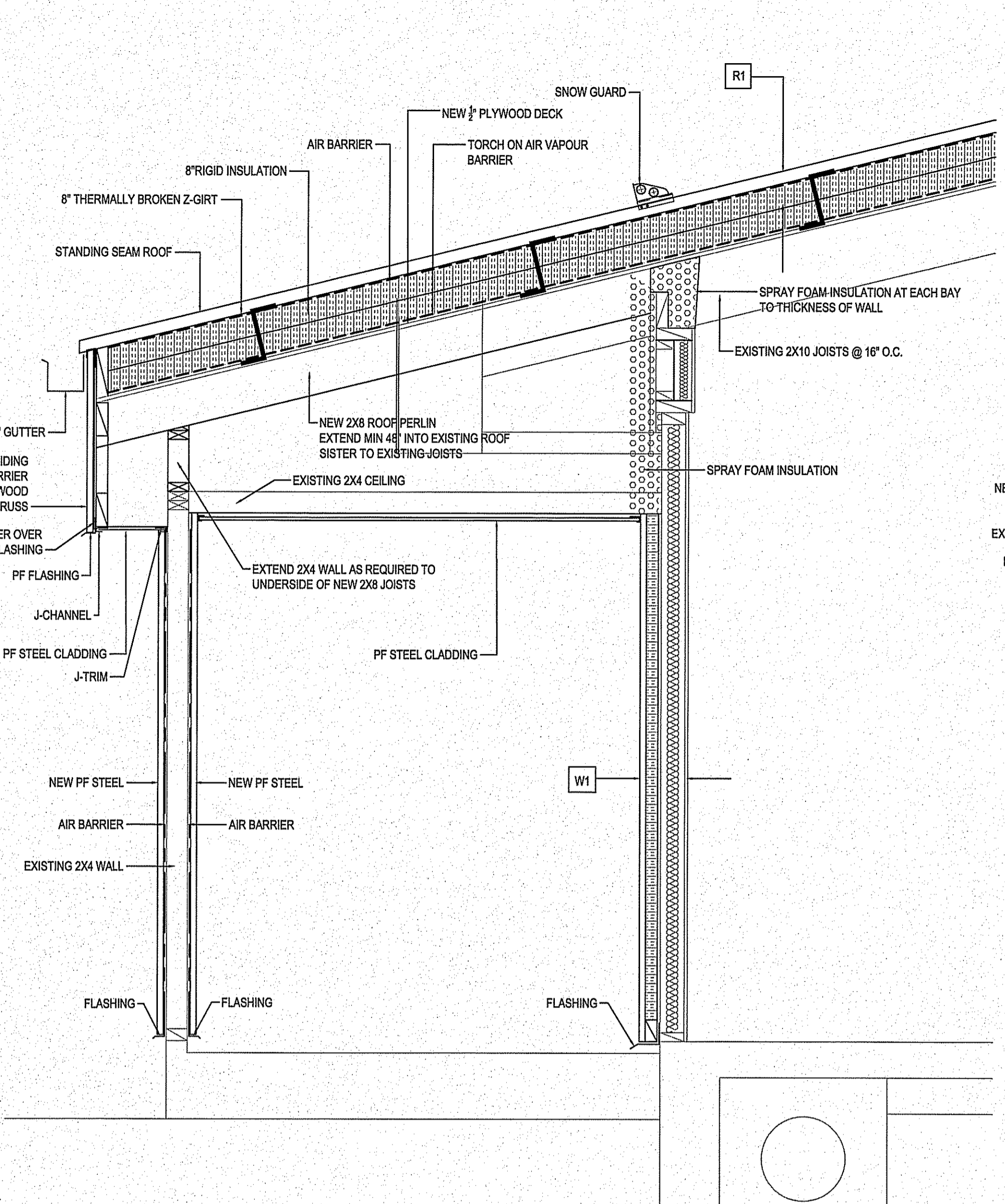
JOB NO. 13-033-01-30

THIS DRAWING MUST NOT BE SCALED.
 THE GENERAL CONTRACTOR SHALL VERIFY ALL DIMENSIONS, DATUMS AND LEVELS PRIOR TO COMMENCEMENT OF WORK AND IS HELD RESPONSIBLE FOR REPORTING ANY DISCREPANCY OR OMISSION TO CAN-TEC SERVICES LTD. IMMEDIATELY.
 THIS DRAWING IS THE EXCLUSIVE PROPERTY OF CAN-TEC SERVICES LTD. AND CAN BE REPRODUCED ONLY WITH THE PERMISSION OF CAN-TEC SERVICES LTD. IN WHICH CASE THE REPRODUCTION MUST BEAR THEIR NAME AS THE ENGINEERING DRAFTING FIRM.

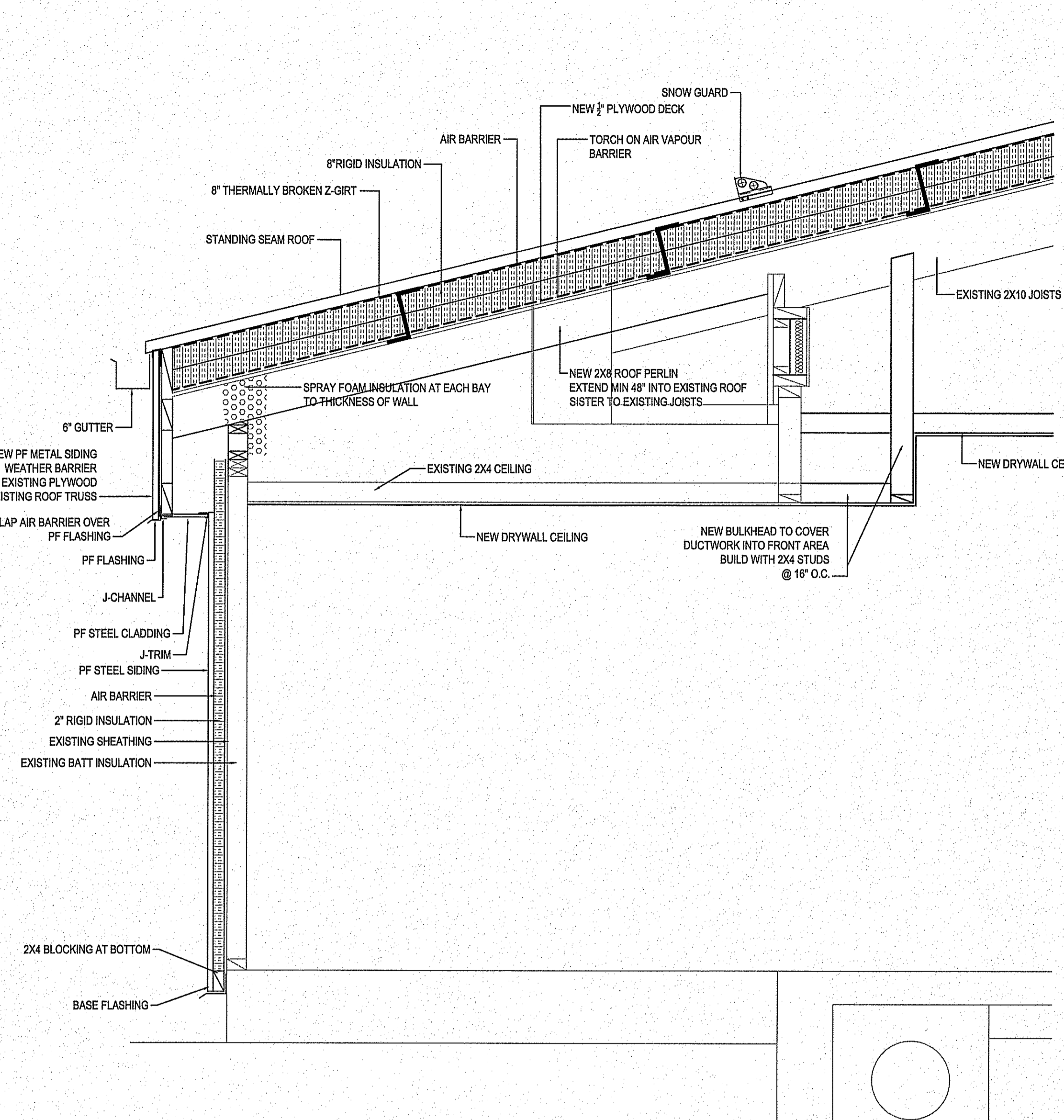


ENGINEERING AND DRAFTING
 1445 MAIN STREET, WINNIPEG, MANITOBA
 TEL: (204) 943-2222 FAX: (204) 949-2977
 01 REVISION
 14.05.14
 DATE (Y/M/D)
 RS
 DRAWN BY
 REVISION
 01
 ISSUED FOR TENDER/CONSTRUCTION

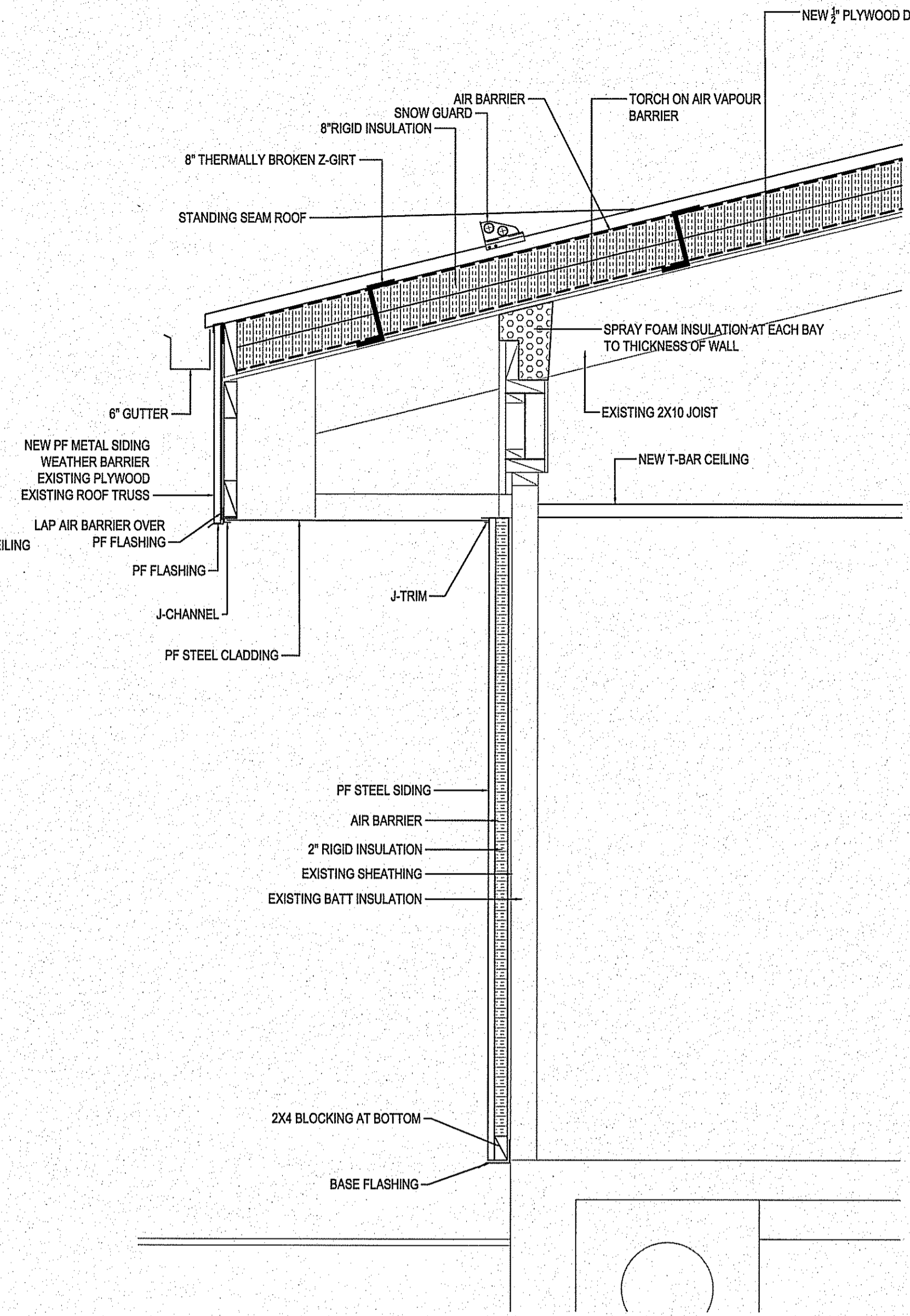
SEALED BY:



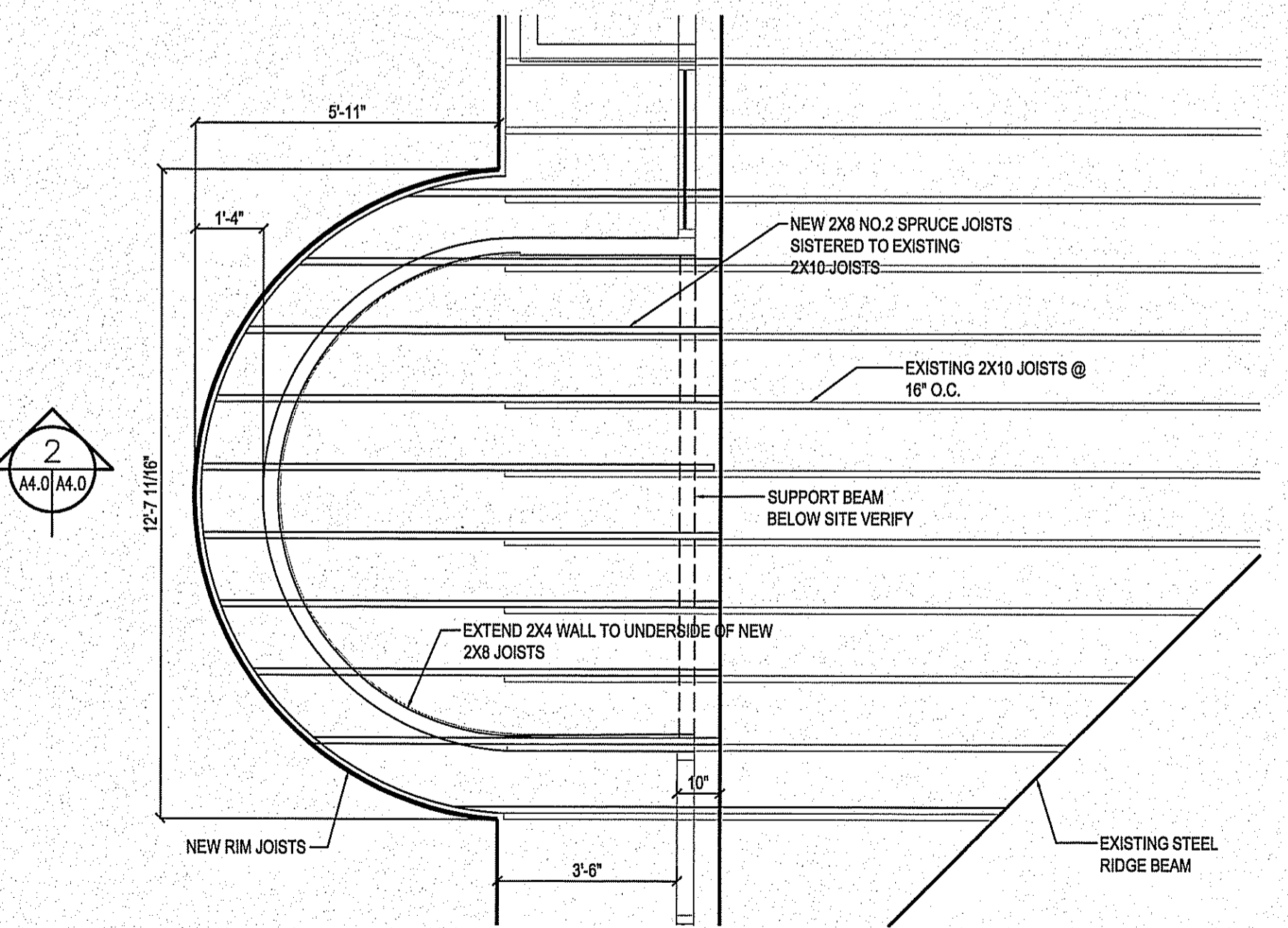
1 REAR ROOF DETAIL
 A30 (A4.1) SCALE: 3/8"=1'-0"



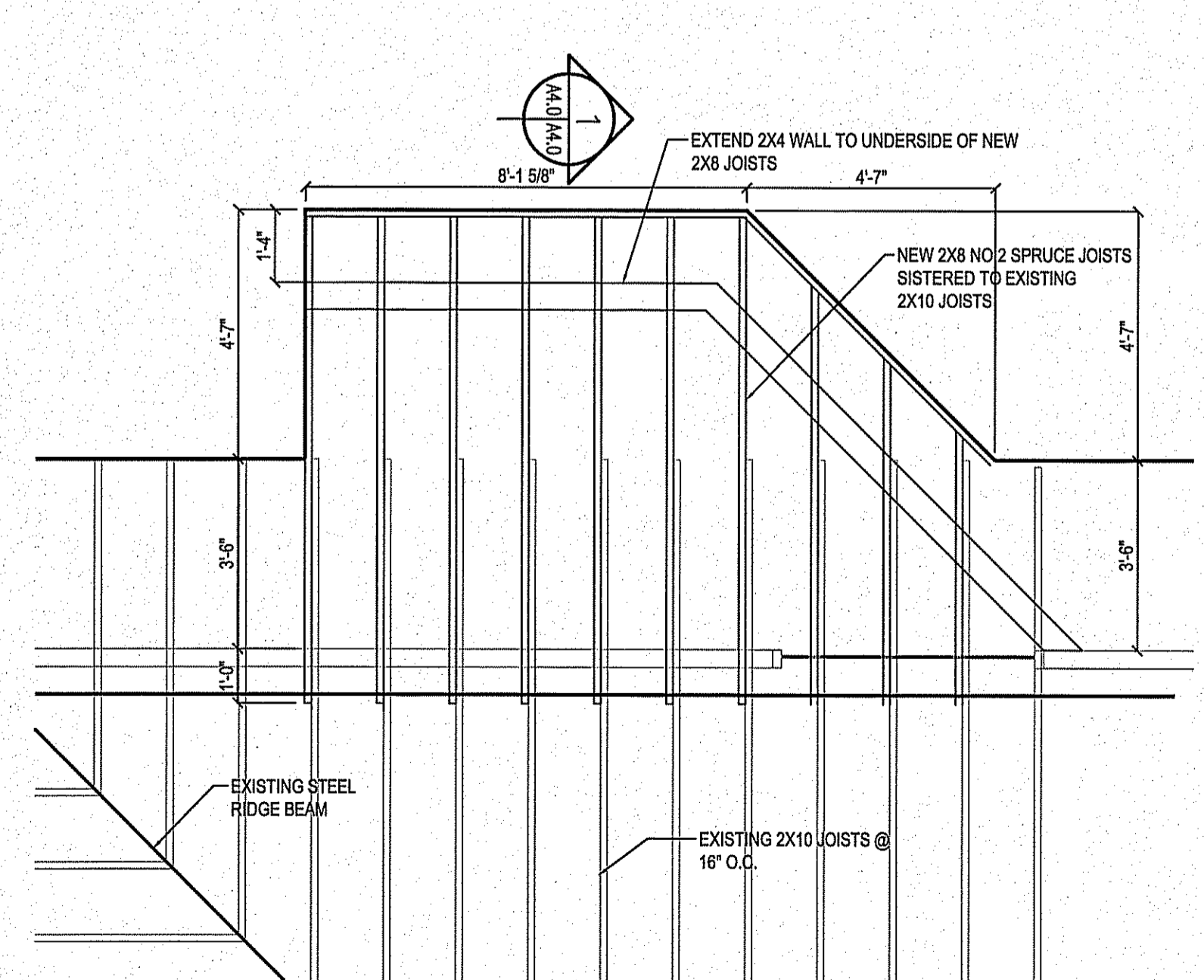
2 CURVED ROOF EXTENSION DETAIL
 A30 (A4.1) SCALE: 3/8"=1'-0"



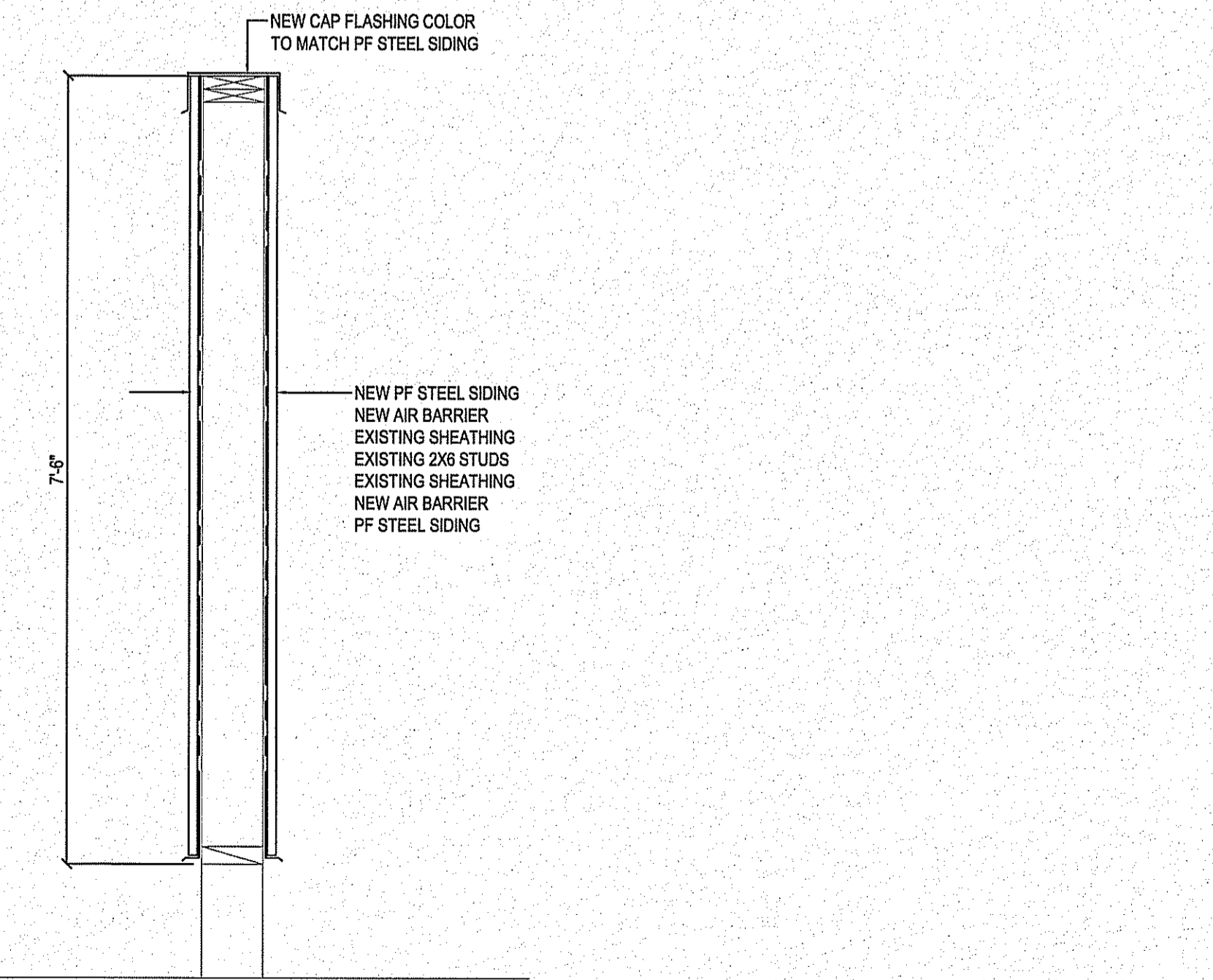
3 WALL SECTION 1
 A30 (A4.1) SCALE: 1/2"=1'-0"



4 JOIST PLAN - FRONT RECEPTION
 A30 (A4.1) SCALE: 3/8"=1'-0"



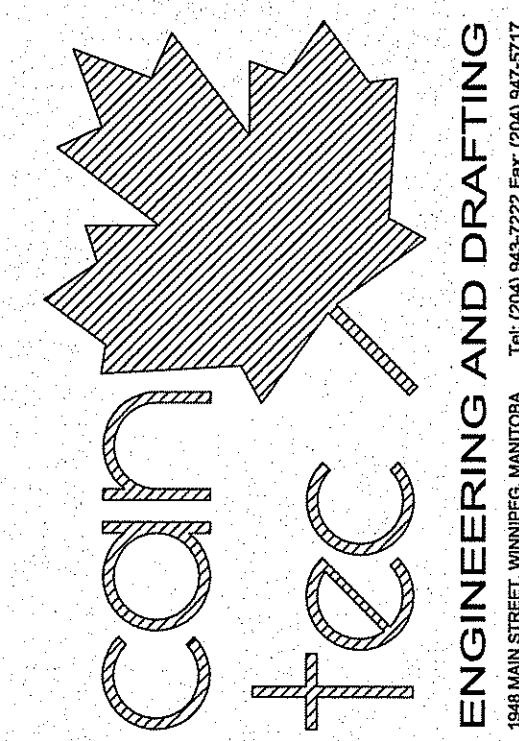
5 JOIST PLAN - REAR ENTRY
 A30 (A4.1) SCALE: 3/8"=1'-0"



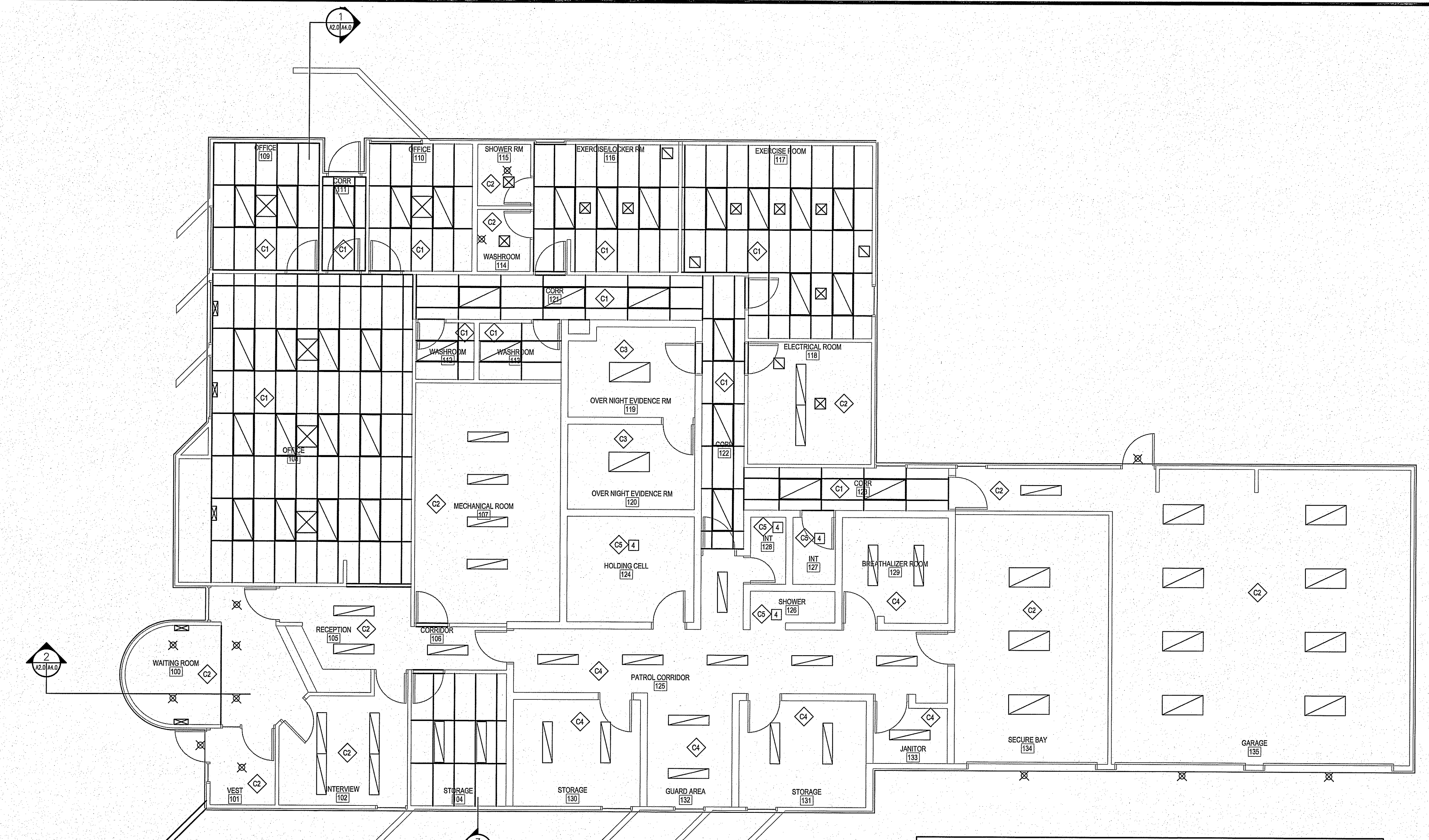
6 WING WALL - DETAIL
 A30 (A4.1) SCALE: 3/8"=1'-0"

PROJECT TITLE: INTERIOR AND EXTERIOR RENOVATIONS
 SHEET TITLE: DETAILS
 DATE (Y/M/D): 13-10-24
 SCALE: AS NOTED
 LOCATION: WABOWDEN, MANITOBA
 CHECKED BY: AK
 DRAWN BY: RS
 CONSTRUCTION
A4.1
 REVISION #: 01
 JOB NO. 13-033-01-30

THIS DRAWING MUST NOT BE SCALED.
 THE GENERAL CONTRACTOR SHALL VERIFY ALL DIMENSIONS, DATUMS AND LEVELS PRIOR TO COMMENCEMENT OF WORK AND IS HELD RESPONSIBLE FOR REPORTING ANY DISCREPANCY OR OMISSION TO CAN-TEC SERVICES LTD. IMMEDIATELY.
 THIS DRAWING IS THE EXCLUSIVE PROPERTY OF CAN-TEC SERVICES LTD. AND CAN BE REPRODUCED ONLY WITH THE PERMISSION OF CAN-TEC SERVICES LTD. IN WHICH CASE THE REPRODUCER MUST BEAR THEIR NAME AS THE ENGINEERING DRAFTING FIRM.
<http://www.can-tec.ca>



PROJECT: 13-033-01-30
 DATE: 13-10-24
 DRAWN BY: RS
 CHECKED BY: AK
 LOCATION: DETACHMENT WABOWDEN, MANTOBA



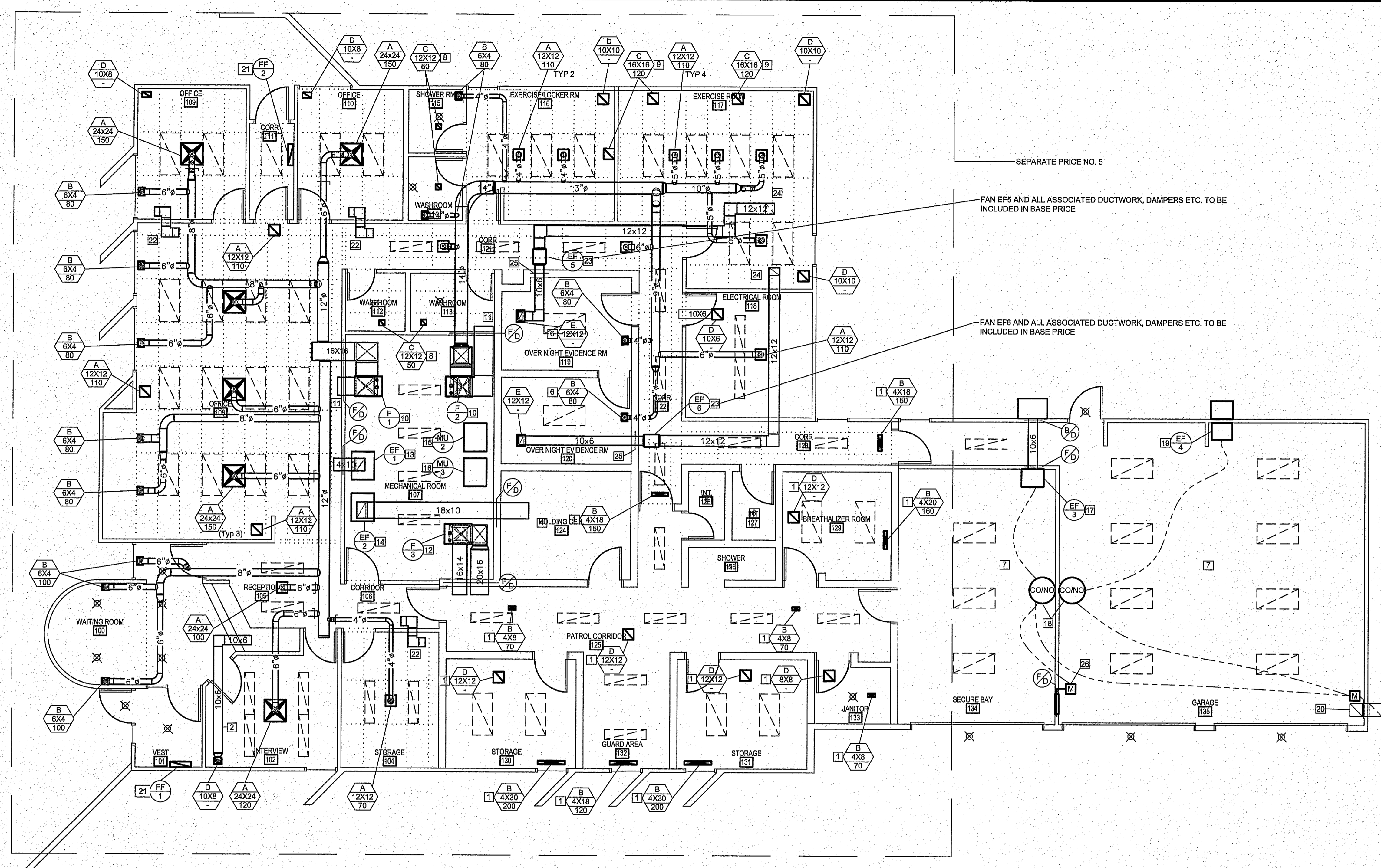
DRAWING NOTES: [2]	
1.	INSTALL NEW T-BAR CEILING
2.	NEW - DRYWALL CEILING
3.	NEW - PLYWOOD CEILING
4.	EXISTING LIGHTING AND CEILING TO REMAIN

CEILING SCHEDULE [2]	
C1	NEW T-BAR CEILING
C2	NEW DRYWALL CEILING 1-LAYER 5/8" FIRE GUARD DRYWALL
C3	NEW PLYWOOD CEILING 1 LAYER 3/4" PLYWOOD SCREWED TO JOISTS 1 LAYER 3/4" PLYWOOD G1S SCREWED TO JOISTS RUN LAYER PERPENDICULAR TO FIRST LAYER
C4	NEW PLYWOOD CEILING 1 LAYER 3/4" PLYWOOD G1S SCREWED TO JOISTS. CEILING TO BE FINISHED WITH EPOXY PAINT AND NO PICK CAULK
C5	EXISTING CEILING TO REMAIN

1 FLOOR PLAN - REFLECTED CEILING PLAN
 AS NOTED SCALE: 3/8"=1'-0"

PROJECT TITLE: INTERIOR AND EXTERIOR RENOVATIONS
 MAIN FLOOR REFLECTED CEILING PLAN
 DATE: 13-10-24
 SCALE: AS NOTED
 LOCATION: DETACHMENT WABOWDEN, MANTOBA

CONSTRUCTION
A6.0
 REVISION #: 01
 JOB NO. 13-033-01-30



HEATING AND COOLING LEGEND	
⊖	THERMOSTAT
⊙	ROOM SENSOR
⊖/⊙	EQUIPMENT TAG (SEE SCHEDULE)

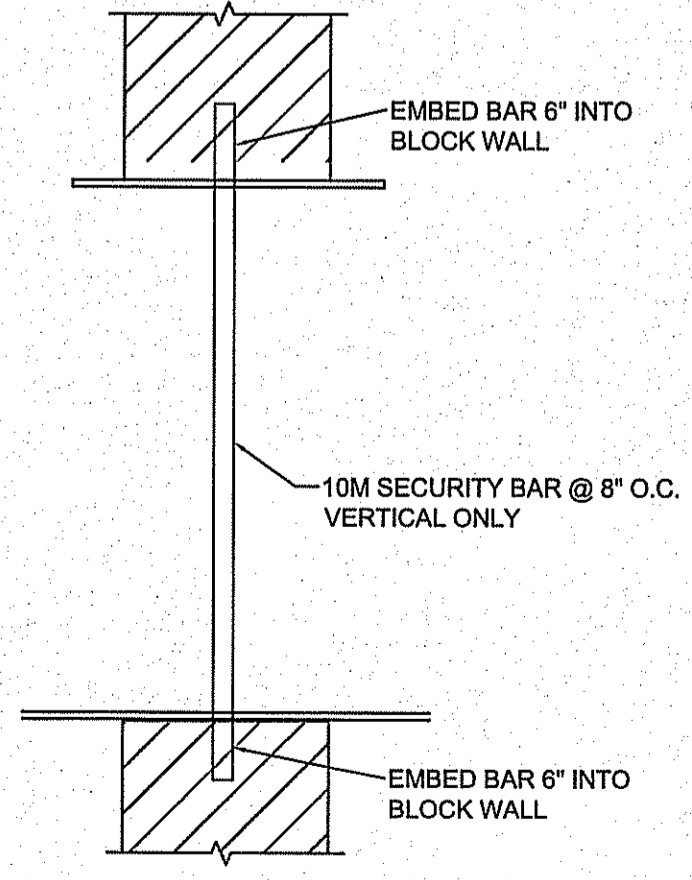
VENTILATION LEGEND	
—	ACCESS DOOR
⊕	TRANSFER SLEEVE
⊕	VOLUME BALANCING DAMPER
⊕	FIRE DAMPER
⊕	FIRE FLAP
⊕	BACKDRAFT DAMPER
⊕	DIFFUSER AND GRILLE TAG (SEE SCHEDULE)

- DRAWING NOTES: #
- ATTACH NEW GRILL TO EXISTING DUCTWORK LOCATED IN CEILING SPACE
 - ACOUSTICALLY LINE
 - NO CHANGES TO DUCTWORK AND DIFFUSERS IN CELL AREA
 - NO CHANGES TO DUCTWORK OR DIFFUSERS IN PRISONER SHOWER ROOM
 - NO CHANGES TO DUCTWORK OR DIFFUSERS IN PRISONER INTERVIEW ROOM
 - RETURN AIR DUCT TO BE MOUNTED ON 1/2" X 2" STEEL PLATE. STEEL PLATE TO HAVE 3/8" EXPANDED STEEL MESH WELDED TO IT.
 - EXISTING UNIT HEATERS TO BE REMOVED AND RE-INSTALLED ONCE NEW CEILING HAS BEEN INSTALLED.
 - CONNECT TO EXISTING EXHAUST DUCTWORK WITH 8" DIA DUCT. ADJUST EXISTING DUCTWORK TO SUIT. INCLUDE BALANCING DAMPER WITH EACH EXHAUST DIFFUSER
 - CONNECT TO EXISTING EXHAUST DUCTWORK WITH 8" DIA DUCT. ADJUST EXISTING DUCTWORK TO SUIT. INCLUDE BALANCING DAMPER WITH EACH EXHAUST DIFFUSER
 - REMOVE AND RE-INSTALL EXISTING HEATING COIL FOR HEATING UNIT SEE DETAIL NO. 1 THIS SHEET. COVER EXISTING HOLE IN FLOOR WITH 3/8" STEEL PLATE COMPLETE WITH HINGES AND D-RING TO OPEN EPOXY PAINTED.
 - EXISTING RETURN AIR DUCT TO REMAIN ADD FIRE DAMPER IN WALL
 - EXISTING CELL FURNACE TO REMAIN WITH NO CHANGES ALL SUPPLY AND RETURN DUCTS RUN ABOVE SLAB. ADD FIRE DAMPERS TO BE ADDED
 - EXISTING EXHAUST FAN EF-1 TO REMAIN. ADD NEW FIRE DAMPER AT DUCT 14"x10"
 - EXISTING EXHAUST FAN EF-2 TO REMAIN. ADD NEW FIRE DAMPER AT DUCT 18"x10"
 - EXISTING MUA-2 TO REMAIN. ADD FIRE DAMPER AT CEILING DUCT 14"x10"
 - EXISTING MUA-3 TO REMAIN. ADD FIRE DAMPER AT CEILING DUCT 20"x10"
 - NEW EXHAUST FAN EF-3 CONNECTED TO NEW CO/NO SENSOR. EXHAUST FAN TO BE MOUNTED AS HIGH AS POSSIBLE ON WALL. DUCT TO BE INSULATED WITH 2" FOIL FACE INSULATION AND BE COMPLETE WITH WEATHER HOOD AND BACK DRAFT DAMPER. SEE TYPICAL DETAIL 2
 - NEW CO/NO SENSOR
 - NEW EXHAUST FAN EF-4 CONNECTED TO NEW CO/NO SENSOR. SEE TYPICAL DETAIL 2
 - NEW FRESH AIR INTAKE 24"x24" SEE DETAIL 1
 - NEW FORCE FLOW HEATER 3 KW
 - TRANSFER DUCTS TO BE LINED WITH 1" ACOUSTIC INSULATION
 - NEW EXHAUST FANS TO BE HUNG FROM CEILING ADJUST LOCATION AS NECESSARY
 - CONNECT TO EXISTING EXHAUST DUCTWORK TO ROOF TOP GOOSENECK
 - INSTALL NEW STEEL BARS IN WALL OF EXISTING DETACHMENT SEE DETAIL
 - TRANSFER DAMPER 20"x20" C/W FIRE DAMPER

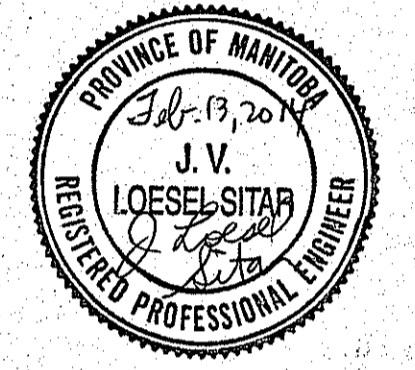
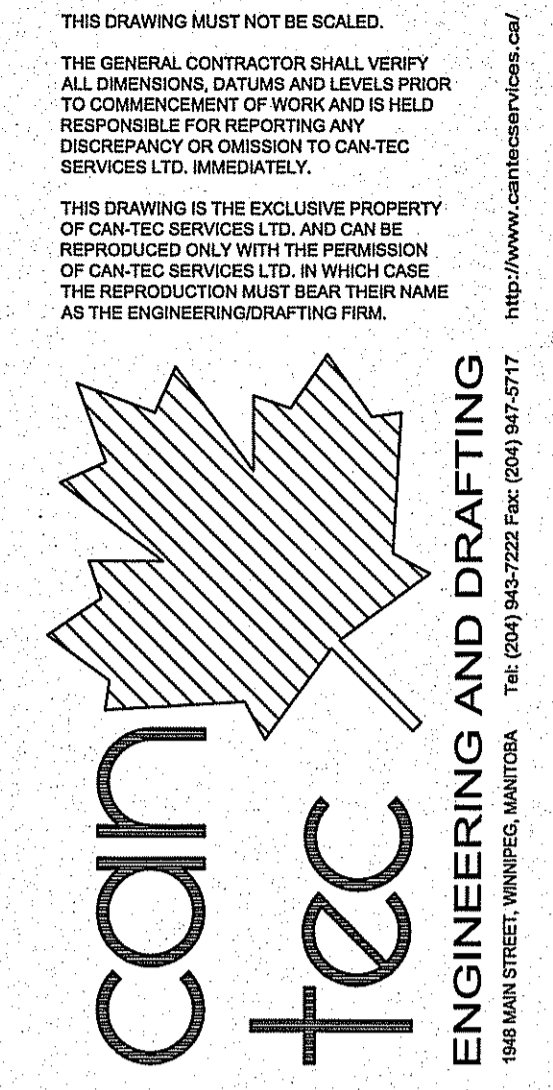
1 MAIN FLOOR - HVAC PLAN
SCALE: 3/16"=1'-0"

- GENERAL NOTES:
- ALL EXISTING FLOOR DIFFUSERS TO BE FILLED IN AND SEALED
 - MECHANICAL CONTRACTOR TO SCHEDULE SITE VISIT TO INSPECT EXISTING SYSTEM AND CONFIRM ALL SIZES. INFORM ENGINEER OF ANY DISCREPANCIES PRIOR TO START OF MECHANICAL FOR REVIEW AND RE-DESIGN.

GRILLE/DIFFUSER SCHEDULE			
SYMBOL	MANUFACTURER	MODEL	REMARKS
A	EH PRICE	SQUARE CONE DIFFUSERS SCA/3/3/C/B-12	ADJUST DIFFUSER FRAME TO SUIT CEILING TYPE
B	EH PRICE	LOUVERED SUPPLY S20D/F/L/A/B/12	ADJUST DIFFUSER FRAME TO SUIT CEILING TYPE
C	EH PRICE	PERFORATED RETURN DIFFUSERS PDDR/1/B/12	ADJUST DIFFUSER FRAME TO SUIT CEILING TYPE
D	EH PRICE	EGG GRATE RETURN 80/F/L/A/B/12	ADJUST DIFFUSER FRAME TO SUIT CEILING TYPE
E	VITRUCOM	SCO SECURITY GRILL SURFACE MOUNT	



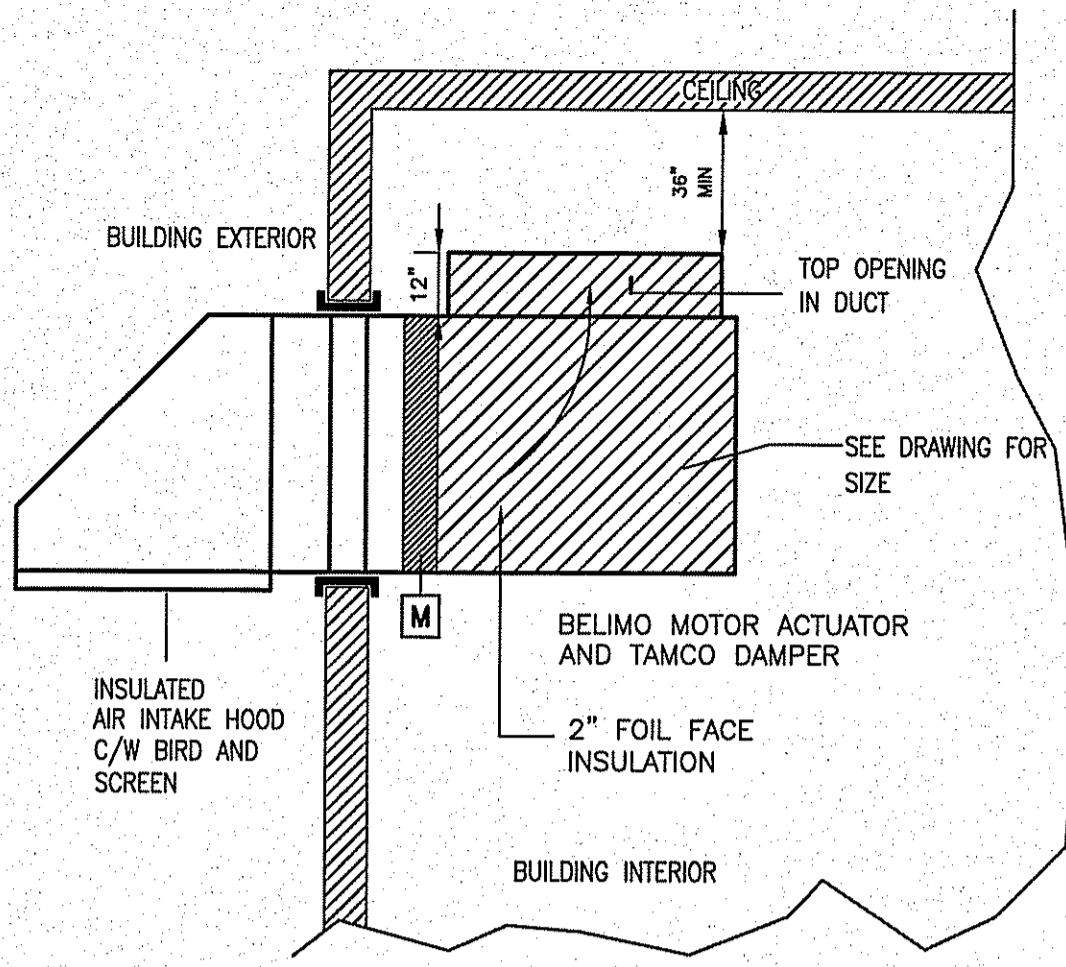
2 SECURITY DUCT DETAIL
SCALE: 1/8"=1'-0"



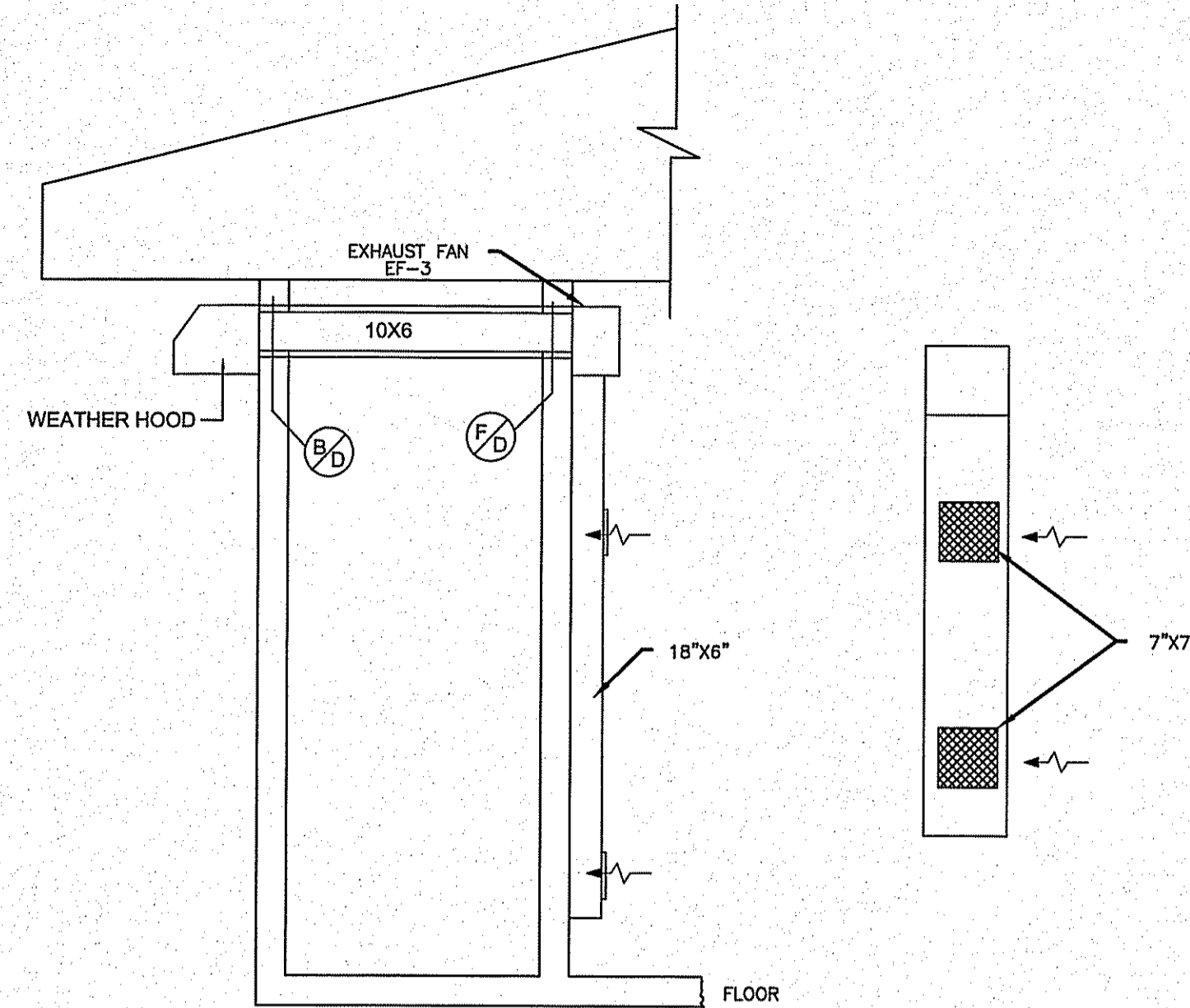
SEALED BY:
APCA
 Certificate of Authorization
 Can-Tec Services Ltd.
 No. 4189 Date: Feb 13, 2014

PROJECT TITLE
INTERIOR AND EXTERIOR RENOVATIONS
 SHEET TITLE
MAIN FLOOR PLAN MECHANICAL
 DATE
 13 11 04
 SCALE
 AS NOTED
 CHECKED BY
 JLS
 DRAWN BY
 RS
 LOCATION
 WABOWDEN, MANITOBA

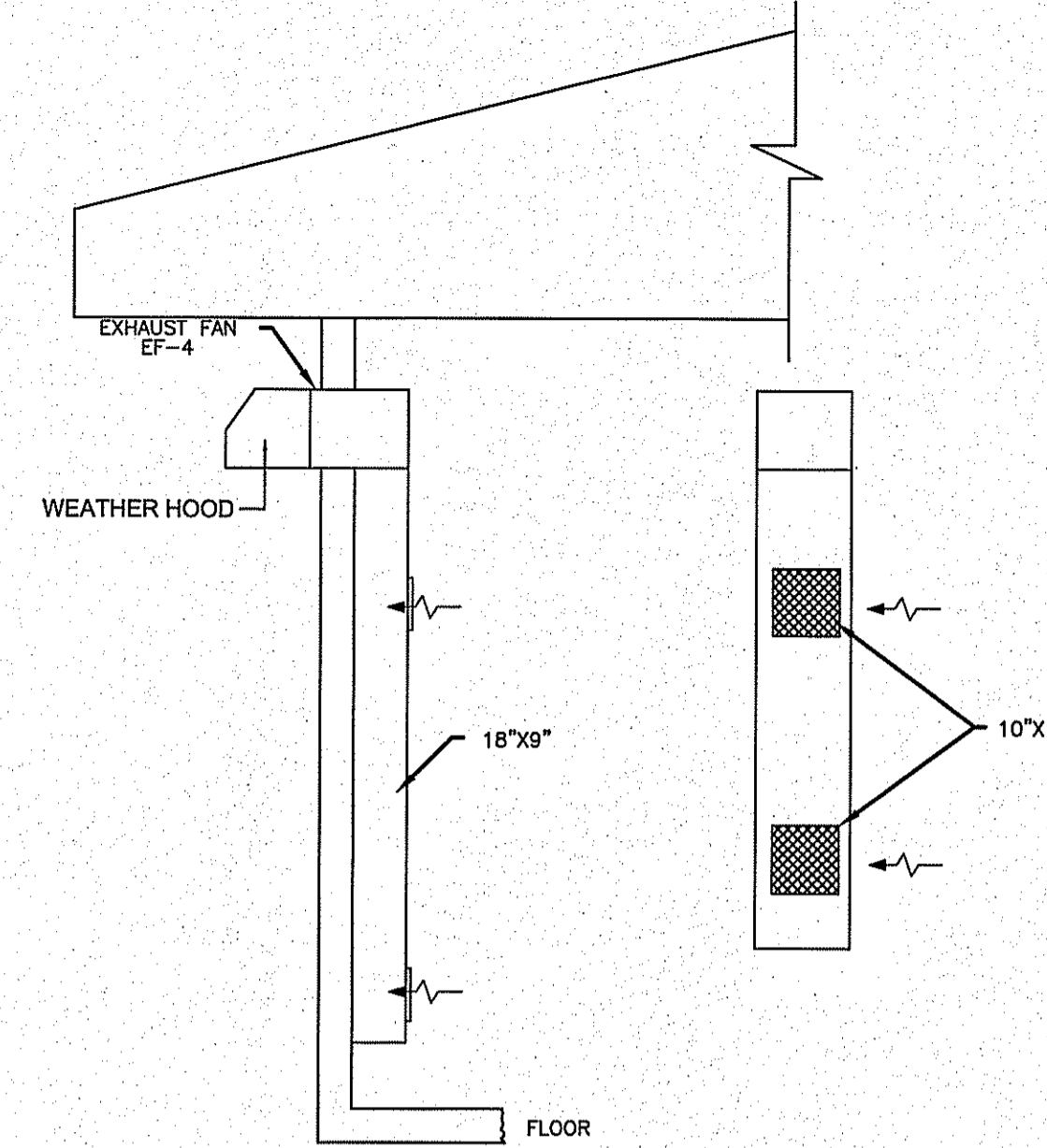
CONSTRUCTION
M2.0
 REVISION # 01
 JOB NO.
13-033-01-30



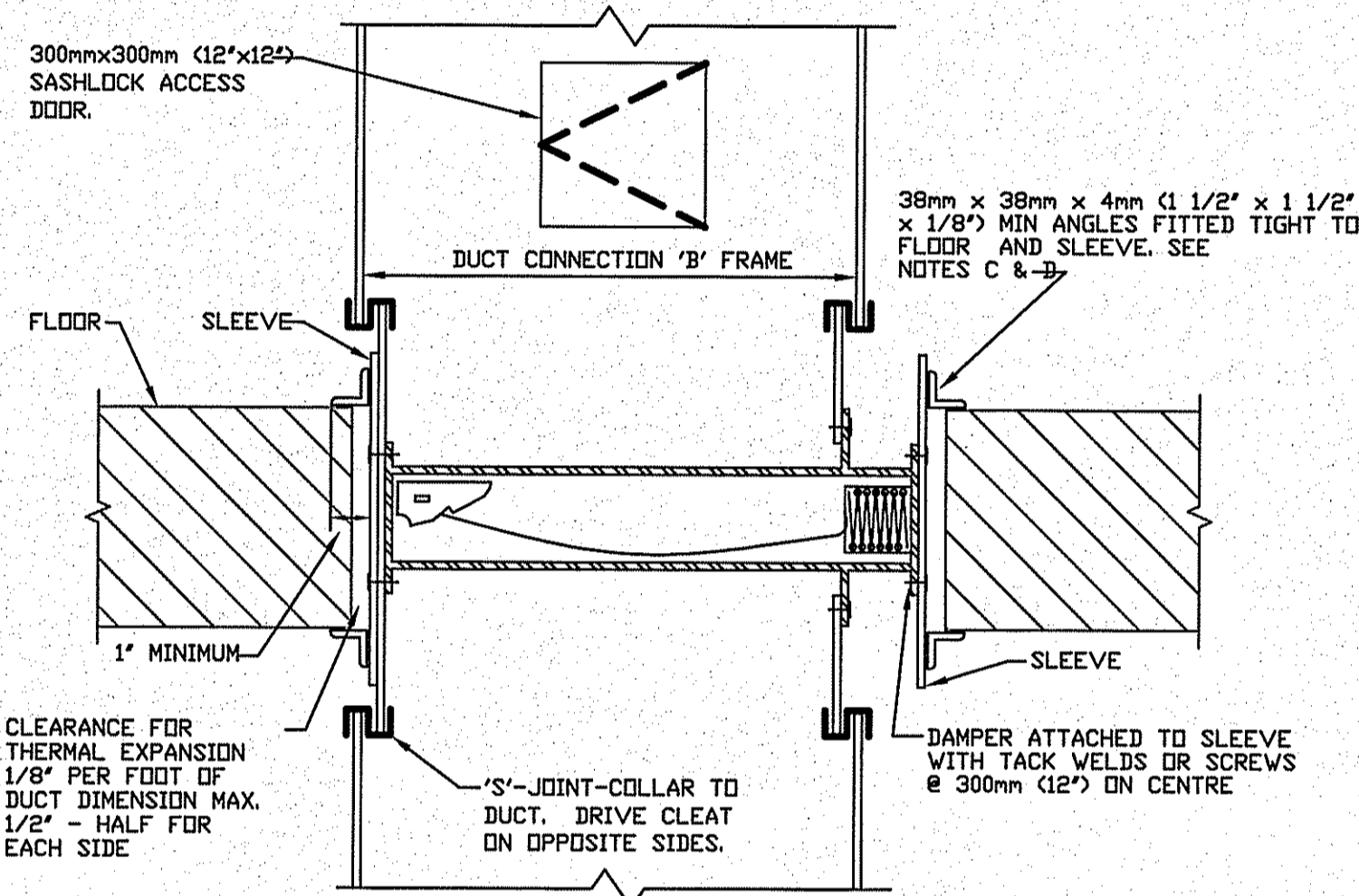
1 OUTSIDE AIR INTAKE
M2.0/M2.1 SCALE: NTS



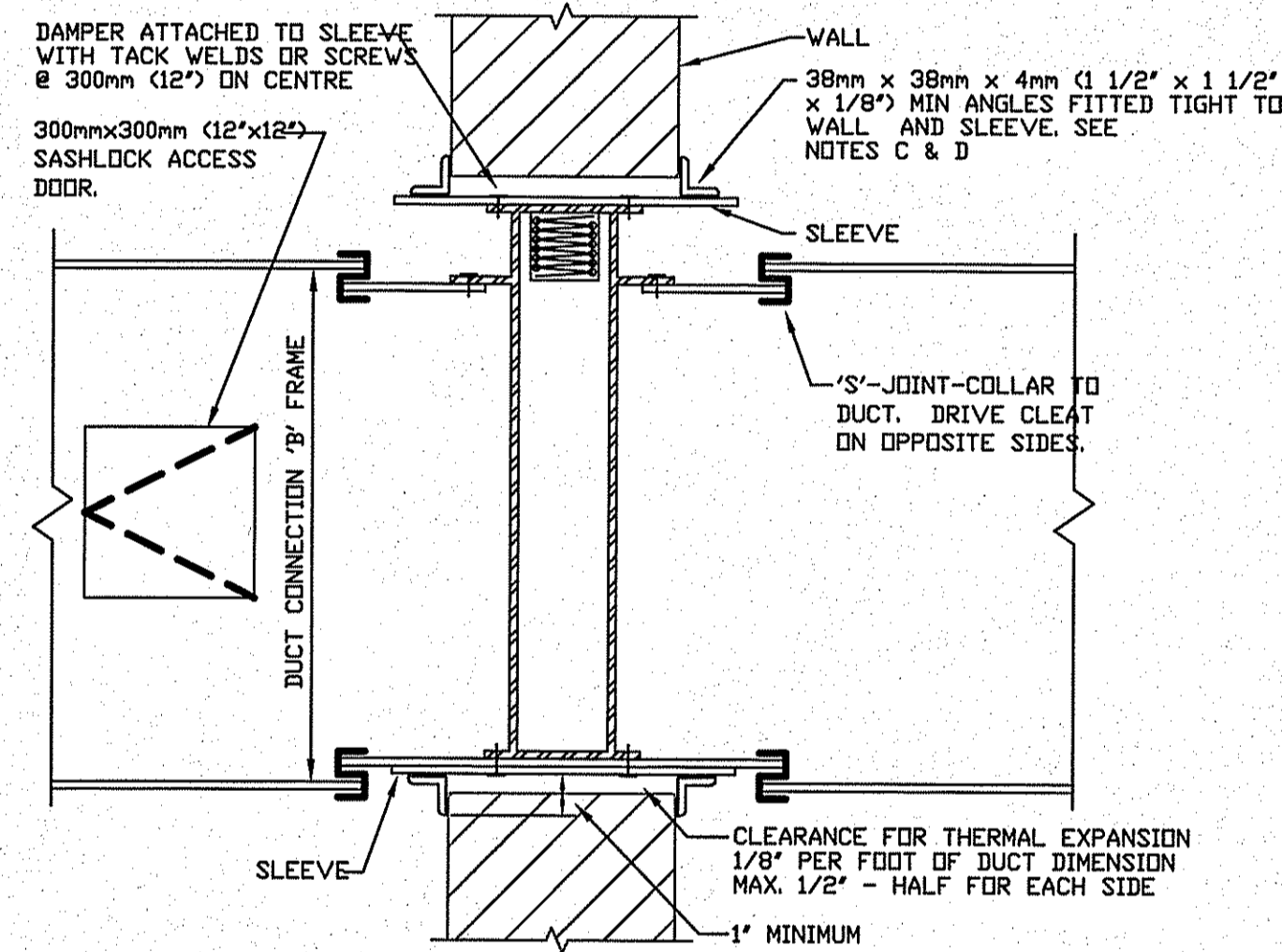
2 EXHAUST FAN EF-3 DETAIL
M2.0/M2.1 SCALE: NTS



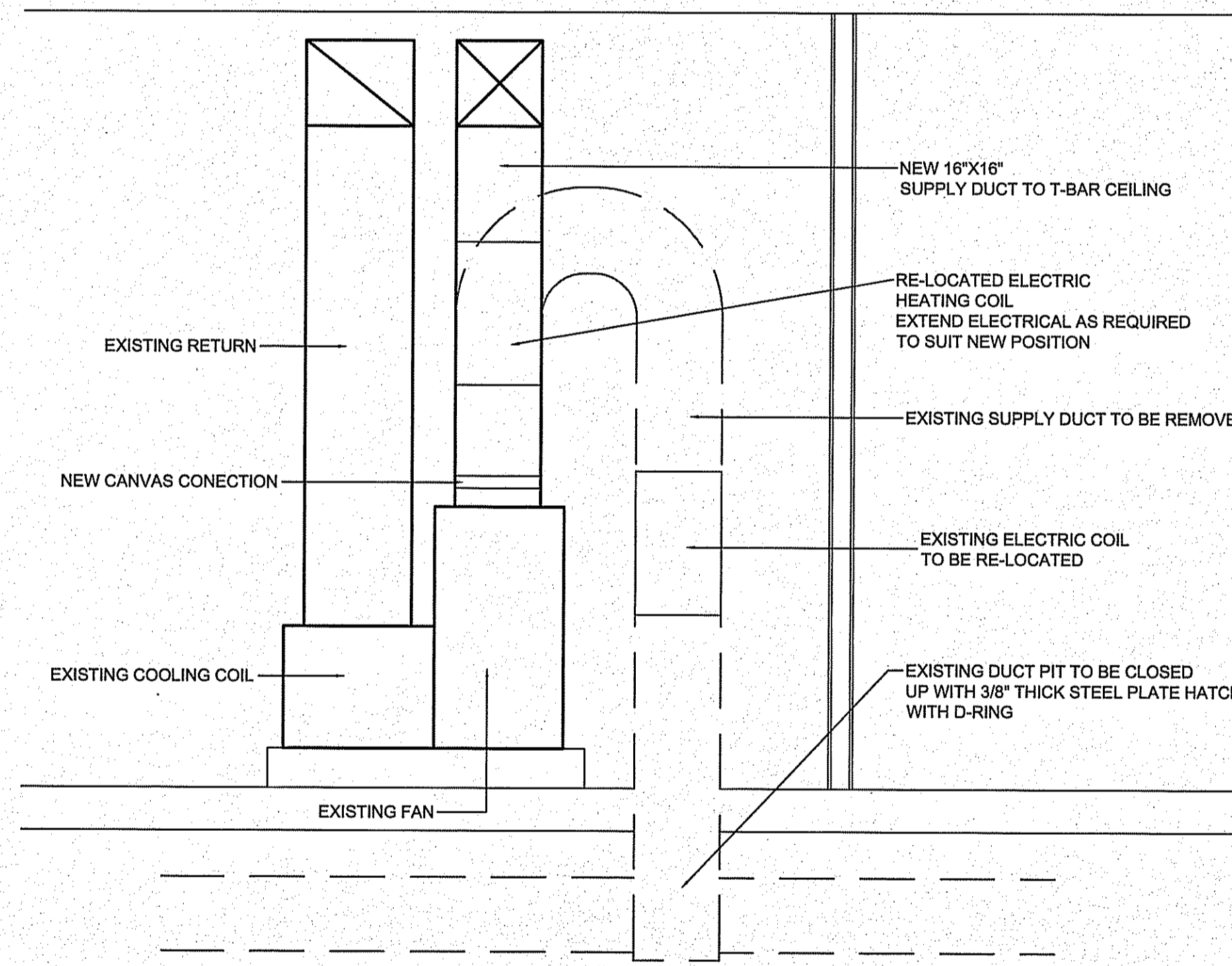
3 EXHAUST FAN EF-4 DETAIL
M2.0/M2.1 SCALE: NTS



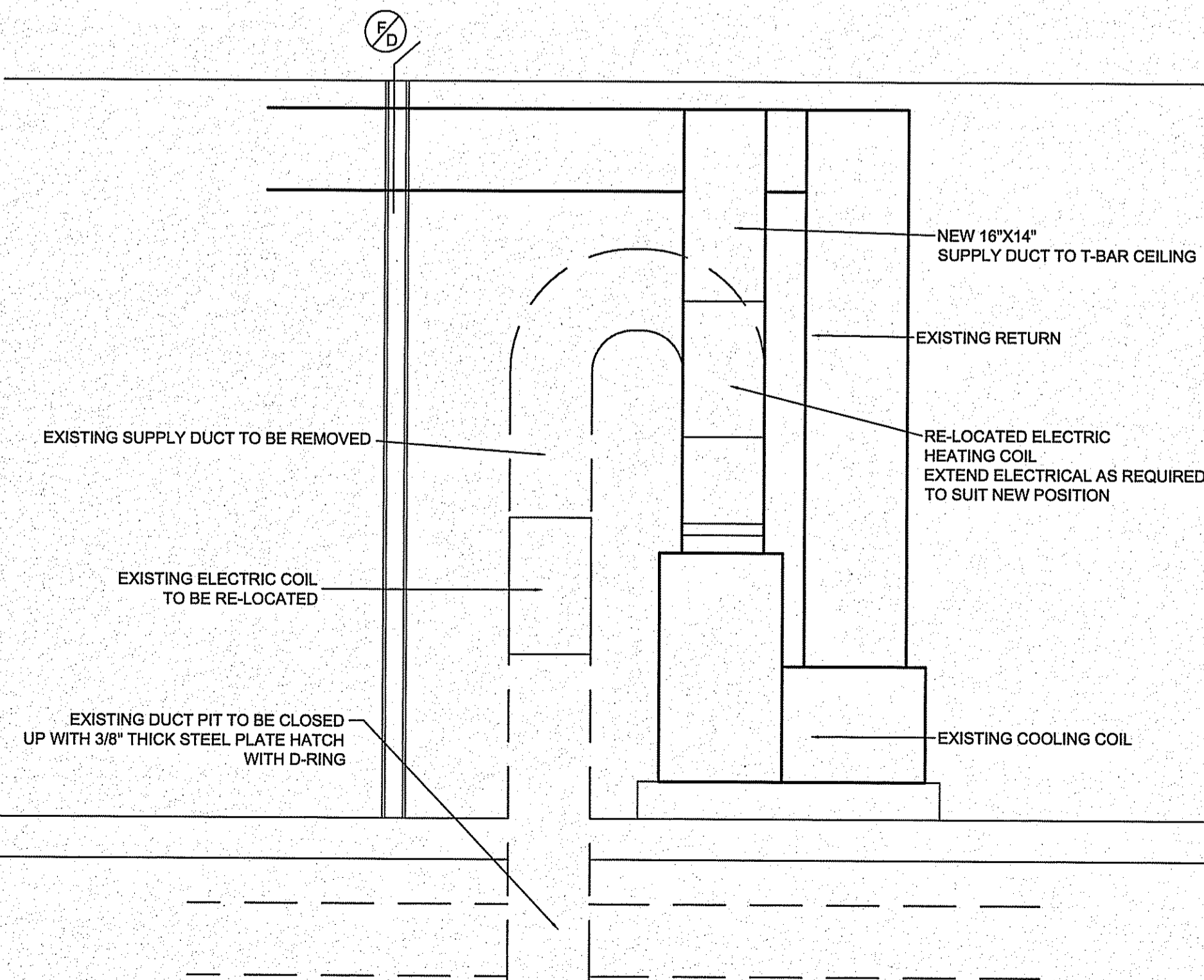
4 TYPICAL VERTICAL FIRE DAMPER DETAIL
M2.0/M2.1 SCALE: NTS



5 TYPICAL HORIZONTAL FIRE DAMPER DETAIL
M2.0/M2.1 SCALE: NTS

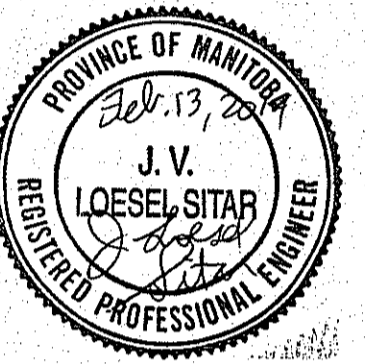


6 FURNACE DETAIL F-1
M2.0/M2.1 SCALE: NTS



6 FURNACE DETAIL F-2
M2.0/M2.1 SCALE: NTS

THIS DRAWING MUST NOT BE SCALED.
THE GENERAL CONTRACTOR SHALL VERIFY ALL DIMENSIONS, DATUMS AND LEVELS PRIOR TO COMMENCEMENT OF WORK AND IS HELD RESPONSIBLE FOR REPORTING ANY DISCREPANCY OR OMISSION TO CAN-TEC SERVICES LTD. IMMEDIATELY.
THIS DRAWING IS THE EXCLUSIVE PROPERTY OF CAN-TEC SERVICES LTD. AND CAN BE REPRODUCED ONLY WITH THE PERMISSION OF CAN-TEC SERVICES LTD. IN WHICH CASE THE REPRODUCTION MUST BEAR THEIR NAME AS THE ENGINEERING/DRAFTING FIRM.



SEALED BY:
MAPEGM
Certificate of Authorization
Can-Tec Services Ltd.
No. 4189 Date: Feb. 13, 2014

PROJECT TITLE
INTERIOR AND EXTERIOR RENOVATIONS

SHEET TITLE
MECHANICAL DETAILS

DATE
13 11 04

LOCATION
WABOWDEN, MANITOBA

CHECKED BY
JLS

DRAWN BY
RS

SCALE
AS NOTED

CONSTRUCTION

M2.1

REVISION #: 01

JOB NO.
13-033-01-30

MECHANICAL GENERAL SPECIFICATION

- MECHANICAL CONTRACTOR SHALL EMPLOY ONLY CERTIFIED JOURNEYMEN NORMALLY ENGAGED IN THE SHEET METAL AND STEAM FITTINGS TRADES TO THE SATISFACTION OF THE AUTHORITY HAVING JURISDICTION AND/OR OWNER OR HIS REPRESENTATIVE.
- PROVIDE A WRITTEN ONE YEAR WARRANTY ON ALL WORK DONE UNDER THIS CONTRACT FROM DATE OF ACCEPTANCE.
- THE MANITOBA BUILDING/PLUMBING CODE 2010 SHALL GOVERN THIS PROJECT MECHANICALLY.
- ALL CHANGES AND ALTERATIONS REQUIRED BY THE AUTHORIZED INSPECTOR OF THE AUTHORITIES HAVING JURISDICTION SHALL BE CARRIED OUT WITHOUT CHARGE OR EXPENSES TO THE OWNER.
- EACH CONTRACTOR SHALL COORDINATE THE WORK WITH OTHER CONTRACTORS IN ORDER TO AVOID CONFLICTS.
- CONTRACTOR SHALL VERIFY EXACT LOCATIONS, SIZES, INVERTS, ETC PRIOR TO TENDER CLOSE AND COMMENCEMENT OF WORK.
- COORDINATE THE EXACT LOCATION OF THE GRILLES AND DIFFUSERS ON SITE WITH THE ELECTRICAL CONTRACTOR, GENERAL CONTRACTOR, ARCHITECTURAL REFLECTED CEILING PLAN, LIGHTING LAYOUT, ETC. TO ENSURE THAT THERE ARE NO CONFLICTS DURING INSTALLATION.
- AT THE COMPLETION OF THE INSTALLATION, PROVIDE TWO MARKED UP COPIES OF THE TENDER DRAWINGS FOR RECORD PURPOSES.
- ALL PIPING, DUCTWORK, AND EQUIPMENT SHALL BE SECURELY SUPPORTED FROM THE BUILDING STRUCTURE TO ACCEPTABLE BUILDING DESIGN STANDARDS. PERFORATED STRAP HANGERS WILL NOT BE PERMITTED. ALL PIPE HANGERS SHALL BE OVERSIZED WITH BOTTOM SADDLE WHERE EXTERIOR PIPE INSULATION IS USED.
- PERMANENT SYSTEMS AND/OR EQUIPMENT SHALL NOT BE USED DURING THE CONSTRUCTION PERIOD WITHOUT WRITTEN PERMISSION FROM THE OWNER.
- PROVIDE INSTRUCTIONS TO OWNER ON ALL SYSTEMS AND ASSOCIATED EQUIPMENT.
- TESTING OF ALL SAFETY DEVICES SHALL BE CARRIED OUT BY THE MECHANICAL CONTRACTOR AND WITNESSED BY THE OWNER'S REPRESENTATIVE, SIGNED OFF AND FORWARDED TO THE O/M MANUAL.
- MEET SAFETY REQUIREMENTS OF PROVINCIAL DEPARTMENT OF LABOUR AND LOCAL AUTHORITIES HAVING JURISDICTION.
- A WRITTEN GUARANTEE COVERING ALL MATERIALS AND WORKMANSHIP FOR ONE (1) YEAR FROM DATE OF FINAL ACCEPTANCE OF THE ENTIRE CONTRACT, SHALL BE SUPPLIED BY THE CONTRACTOR. THIS GUARANTEE WILL NOT CANCEL LONGER WARRANTIES.
- UPON COMPLETION OF THE WORK, THE ENTIRE JOB SITE SHALL BE CLEARED UP AND LEFT IN GOOD OPERATING CONDITION. THOROUGHLY CLEAN PIPING, DUCTWORK, AND EQUIPMENT OF DIRT, CUTTINGS AND OTHER FOREIGN SUBSTANCES.
- ALL CUTTING AND PATCHING AND RELATED CONSTRUCTION WORK ARE TO BE PERFORMED BY THE GENERAL CONTRACTOR UPON INSTRUCTION FROM THE MECHANICAL CONTRACTOR.
- ALL GALVANIZED DUCTWORK IS TO BE MANUFACTURED IN ACCORDANCE WITH CURRENT S.M.A.C.N.A. SPECIFICATIONS. ALL DUCTWORK IS TO BE SEALED WITH HIGH VELOCITY BRUSHED ON DUCT SEALANT.
- PERMITS: CONTRACTOR IS RESPONSIBLE FOR GIVING ALL NECESSARY NOTICES, OBTAINING ALL NECESSARY PERMITS AND PAYING ALL APPLICABLE FEES.
- ASSUME FULL RESPONSIBILITY FOR LAYING OUT ALL WORK AND ENSURE THAT NO DAMAGE IS CAUSED TO THE OWNERS EQUIPMENT AND PREMISES. PROTECT AND MAINTAIN ALL WORK UNTIL WORK HAS BEEN COMPLETED AND ACCEPTED BY THE OWNER AND ENGINEER.
- ALL WIRING AND THE SUPPLY AND INSTALLATION OF STARTERS AND/OR DISCONNECT SWITCHES FOR EQUIPMENT SHALL BE BY THE ELECTRICAL CONTRACTOR (DIV 16)
- SUPPLY AND INSTALL ULC FIRE DAMPERS/FIRE STOPS AT ALL FIRE RATED PENETRATIONS.
- ACCESS DOORS REQUIRED TO GAIN ACCESS TO BALANCING DAMPERS AT FIRE-RATED CEILING - SUPPLIED AND INSTALLED BY GENERAL CONTRACTOR.
- BALANCING - CONTRACTOR WILL ENGAGE AN INDEPENDENT AIR BALANCING AGENCY.
 - SYSTEM TO BE ADJUSTED TO DATA PROVIDED.
 - BALANCING CONTRACTOR TO CONFIRM OPERATION OF COMPLETE MECHANICAL SYSTEM.
 - PROVIDE REPORT TO ENGINEER. (4 COPIES)

INSPECTION AND TESTING

- THE WORK SHALL BE AT ALL TIMES AVAILABLE FOR INSPECTION BY AN OWNER REPRESENTATIVE. ALL WORK SHALL BE IN ACCORDANCE WITH AND SHALL BE INSPECTED TO MEET THE REQUIREMENTS OF THIS SPECIFICATION.
- ALL START-UP AND TESTING SHALL BE PERFORMED IN THE PRESENCE OF THE OWNER. NOTICE OF DATE WHEN TESTS SHALL BE PERFORMED MUST BE RECEIVED BY OWNER
- WORK SHALL NOT BE INSULATED OR CONCEALED PRIOR TO BEING TESTED AND APPROVED.
- OPERATE SYSTEM FOR A SUFFICIENT PERIOD OF TIME TO ENSURE COMPLETE ACCEPTANCE; DEFECTS SHALL BE REMEDIATED AT CONTRACTOR'S EXPENSE.
- AIR BALANCING SHALL BE PERFORMED BY AN INDEPENDENT CERTIFIED AIR BALANCING CONTRACTOR AND THE BALANCING REPORT SUBMITTED TO THE ENGINEER. COST FOR THIS WORK IS TO BE CARRIED BY THE MECHANICAL CONTRACTOR.

INSULATION:

- PROVIDE 1/2"(12mm) THICK, FOIL-FACED RIGID PRE-FORMED FIBREGLASS EXTERNAL THERMAL PIPE INSULATION ON ALL NEW NATURAL GAS PIPING FOR 10'(3000mm) ON THE WARM SIDE OF A PENETRATION THROUGH A WALL OR CEILING/ROOF TO A COLD SPACE.
- PROVIDE 2"(50mm) THICK, FOIL-FACED RIGID (FIBREGLASS OR FIBREBOARD) OR FLEXIBLE FIBREGLASS EXTERNAL THERMAL INSULATION ON ALL NEW EXHAUST OR RELIEF DUCTWORK FOR 10'-0"(3.0M) ON THE WARM SIDE OF A PENETRATION THROUGH A WALL/FLOOR/CEILING/ROOF TO A COLD SPACE, WHERE A BACKDRAFT DAMPER IS PROVIDED AT THE PENETRATION TO THE COLD SPACE WHERE THE BACKDRAFT DAMPER IS PROVIDED IN THE DUCTWORK, INSULATION SHALL EXTEND FROM THE PENETRATION TO 10'-0"(3.0M) UPSTREAM OF THE BACK DRAFT DAMPER.
- PROVIDE 1"(25mm) THICK, FOIL-FACED EXTERNAL THERMAL INSULATION ON ALL NEW SUPPLY AIR DUCT MAINS, EXCLUDING INDIVIDUAL RUN-OUTS TO DIFFUSERS. INSULATION SHALL BE FLEXIBLE FIBREGLASS, OR RIGID FIBREBOARD.
- PROVIDE 2"(50mm) THICK, FOIL-FACED RIGID FIBREGLASS OR FIBREBOARD EXTERNAL THERMAL INSULATION ON ALL NEW OUTSIDE AIR INTAKE, MIXED AIR AND COMBUSTION AIR DUCTWORK, ROUND COMBUSTION AIR DUCTWORK MAY BE FLEXIBLE FIBREGLASS.
- PROVIDE 3"(75mm) THICK, FOIL-FACED RIGID FIBREGLASS OR FIBREBOARD EXTERNAL THERMAL INSULATION ON ALL NEW DUCTWORK LOCATED OUTDOORS. PROVIDE WEATHERPROOFING EQUAL TO:
 - PROVIDE DIMPLE FINISH .016 ALUMINUM JACKET OR GALVANIZED SHEET.
- PROVIDE 1"(25mm) THICK, BLACK CELLULAR FOAM RUBBER INSULATION ON ALL REFRIGERATION PIPING, INSTALL USING PLASTIC WIRE TIES.
- ALL JOINTS AND ELBOWS SHALL BE COMPLETELY INSULATED EXCEPT JOINTS AND ELBOWS MAY BE LEFT UNCOVERED ON HOT PIPING IN CONCEALED SPACES.
- ALL VALVES AND UNIONS SHALL BE COMPLETELY INSULATED, EXCEPT VALVES AND UNIONS MAY BE LEFT UNCOVERED ON HOT PIPING IN CONCEALED SPACES.
- SEAMS OF FOIL-FACED THERMAL INSULATION SHALL BE SEALED WITH ALUMINUM DUCT TAPE.
- COVER BUTT JOINTS WITH A STRIP OF THE SAME MATERIAL AS THE JACKET.
- FLEXIBLE INSULATION SHALL BE INSTALLED IN A MANNER THAT DOES NOT REDUCE ITS THICKNESS.

DUCTWORK

- ALL DUCT DIMENSIONS DENOTE INTERNAL "FREE" AREA OF THE DUCT.
- SHEET METAL DUCTWORK, HANGERS, FITTINGS, AND COMPONENTS SHALL BE CONSTRUCTED AND INSTALLED IN ACCORDANCE WITH "SMACNA" HVAC DUCT CONSTRUCTION STANDARDS LATEST EDITION AND "ASHRAE"

EQUIPMENT GUIDE.

- ALL DUCTWORK SHALL BE INSTALLED ACCORDING TO SMACNA STATIC PRESSURE CLASS + 500 PA STANDARDS.
- ALL 90 DEGREE SQUARE TURN ELBOWS (WHICH HAVE NO CHANGE IN DIMENSIONS THROUGH TURN) SHALL HAVE DOUBLE THICKNESS TURNING VANES.
- ROUND DUCT ELBOWS SHALL HAVE A RADIUS DIMENSION 1.5 TIMES THE WIDTH OF THE DUCT (IN THE PLANE OF THE TURN) TO THE CENTERLINE OF THE DUCT.
- ALL EXHAUST AIR DUCTWORK SHALL BE INSULATED WITH 2" THICK FOIL FACED FIBERGLASS DUCT INSULATION FROM THE EXTERIOR WALL OR ROOF SURFACE TO A DISTANCE OF 6'-0" (MIN.) INTO THE BUILDING SPACE, EXCEPT AS INDICATED.
- MECHANICAL CONTRACTOR SHALL INSTALL 4" (MIN.) FLEXIBLE CONNECTORS ON INLET AND DISCHARGE DUCTWORK OF EQUIPMENT.
- ALL SUPPLY AIR DUCTWORK SHALL BE INTERIOR INSULATED WITH 1" ACOUSTIC INSULATION FOR THE FIRST 10' FROM THE FAN DISCHARGE, UNLESS INDICATED OTHERWISE. PROVIDE INTERIOR ACOUSTIC INSULATION FOR RETURN AIR DUCT FROM RETURN AIR GRILLE TO MIXING BOX.
- PROVIDE BALANCING DAMPERS AS SHOWN AND AS REQUIRED TO ALLOW PROPER BALANCING OF THE SYSTEM. BALANCING DAMPERS SHALL BE PROVIDED FOR EACH SUPPLY AIR OUTLET AND RETURN/EXHAUST AIR INLET DAMPERS MOUNTED AT GRILLES SHALL BE MULTI-BLADE TYPE. BUTTERFLY DAMPERS IN DUCTWORK SHALL BE CONSTRUCTED OF SHEET METAL TWO GAUGES HEAVIER THAN THE DUCTWORK. DUCT DAMPERS SHALL HAVE LOCKING QUADRANTS AND POSITION INDICATORS.
- JOINT SEALS SEAL JOINTS BETWEEN DUCTS, FITTINGS, ETC., WITH DURO-DYNE S-2 DUCT SEALER AND DURO-DYNE FIBERGLASS DUCT TAPE. APPLY IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
- FITTINGS MANUFACTURED BY UNITED, 90 DEGREE ELBOWS TO BE 5 PIECE MITRED, 8" DIA. OR LESS, 90 DEGREE ELBOWS CAN BE 1 PIECE MOLDED TYPE. USE CONICAL CONNECTIONS THROUGHOUT INSTALLATION.
- FIRE DAMPERS ULC LISTED BLADE POCKETS OUT OF AIR STREAM, "FIRE BARRIER" OR EQUAL. CEILING FIRE DAMPERS SHALL BE "CONTROLLED AIR" MODEL CFSR-1 c/w CK2000 THERMAL BLANKET, ULC LISTED.
- ACCESS DOORS PROVIDE ACCESS DOORS AS REQUIRED TO ACCESS AND MAINTAIN ALL VENTILATION EQUIPMENT, INCLUDING COILS, MOTORIZED DAMPERS, AND FIRE DAMPERS.
- PIPING REFRIGERANT PIPING TO BE INSULATED WITH 1/4" FLEXIBLE PIPE INSULATION AND WEATHER COATING WHERE REQUIRED.
- ALL PENETRATIONS IN FIRE RATED SURFACES ARE TO BE SEALED WITH ELECTROVERT CLK CAULKING MATERIAL OR APPROVED EQUAL.
- SUPPLY 4 SPARE FUSES AND LAMPS FOR ALL CONTROL PANELS.
- SUPPLY LAMACOID NAME TAGS FOR ALL AIR HANDLING EQUIPMENT, THERMOSTATS, MOTORIZED DAMPERS AND PUMPS.
- SUBMIT FOR ENGINEERS APPROVAL 4 COPIES OF SHOP DRAWINGS OF ALL EQUIPMENT.
- SUPPLY O&M MANUALS FOR EQUIPMENT SUPPLIED AND INSTALLED.
- COMPLETE TRAINING TO BE SUPPLIED ON ALL THE EQUIPMENT SUPPLIED AND INSTALLED.

EQUIPMENT

EXHAUST FAN, EF-5.6 (OVERNIGHT EXHIBIT ROOMS)

GREENHECK CSP-B150, 100 CFM @ 0.5" SP. IN-LINE CABINET EXHAUST FAN, 150 W. 120V/60HZ/1 PHASE. C/W GRAVITY DAMPER. SOLID STATE SPEED CONTROL.

EXHAUST FAN, EF-3 (SECURE BAY)

GREENHECK BSG-90-4, 300 CFM @ 0.2" SP. BELT DRIVE CENTRIFUGAL EXHAUST FAN, SIDE DISCHARGE. 1/4 HP. 115V/60HZ/1 PHASE. C/W GRAVITY DAMPER WD-330-PB-12x12.

EXHAUST FAN, EF-4 (GARAGE)

GREENHECK BSG-100-4, 675 CFM @ 0.2" SP. BELT DRIVE CENTRIFUGAL EXHAUST FAN, SIDE DISCHARGE. 1/4 HP. 115V/60HZ/1 PHASE. C/W GRAVITY DAMPER WD-330-PB-14x14.

INTAKE CONTROL DAMPER, D-1 (GARAGE)

TAMCO SERIES 9000 BF THERMALLY INSULATED DAMPER, 24"x24". FLANGED TO DUCT STYLE, COMPLETE WITH SHORT WALL HOUSING AND GALVANIZED 45° WEATHERHOOD WITH BIRDSCREEN.

DAMPER ACTUATOR, BELIMO NFBUP/NFXUP ACTUATOR, SIZED TO MATCH DAMPER, WITH AUXILIARY SWITCH FOR FAN START-UP.

INTAKE CONTROL DAMPER, D-2 (SECURE BAY)

TAMCO SERIES 9000 BF THERMALLY INSULATED DAMPER, 20"x20". FLANGED TO DUCT STYLE, COMPLETE WITH SHORT WALL HOUSING AND GALVANIZED 45° WEATHERHOOD WITH BIRDSCREEN.

DAMPER ACTUATOR, BELIMO NFBUP/NFXUP ACTUATOR, SIZED TO MATCH DAMPER, WITH AUXILIARY SWITCH FOR FAN START-UP.

CO AND NO2 SENSORS

HONEYWELL E3POINT DUAL GAS MONITOR FOR NO2 AND CO. EACH DETECTION CIRCUIT SHALL INCLUDE:

- INDEPENDENTLY ADJUSTABLE LOW AND HIGH ALARM LEVELS
- SPDT RELAYS (HIGH, LOW), C/W PROGRAMMABLE TIME DELAY CIRCUITRY
- PROGRAMMABLE SPAN ADJUSTMENT.
- AUDIBLE ALARM (ON/OFF PROGRAMMABLE)

INSTALLED AT 60" ABOVE FINISHED FLOOR. REMOTE SENSOR TO BE NO2, INSTALLED 1-3' FROM CEILING, AS PER MANUFACTURER'S INSTRUCTIONS.

UPON SENSING OF 25 PPM OF CARBON MONOXIDE. INTERNAL SPDT RELAY SHALL ACTIVATE INTAKE DAMPER CONTROL. UPON SENSING OF 75 PPM OF CARBON MONOXIDE CORRESPONDING ALARM LEVEL INDICATING LIGHT SHALL ENERGIZE AND INTERNAL SPDT RELAY SHALL ACTIVATE. INTERNAL SONALERT SHALL SOUND WHERE SPECIFIED.

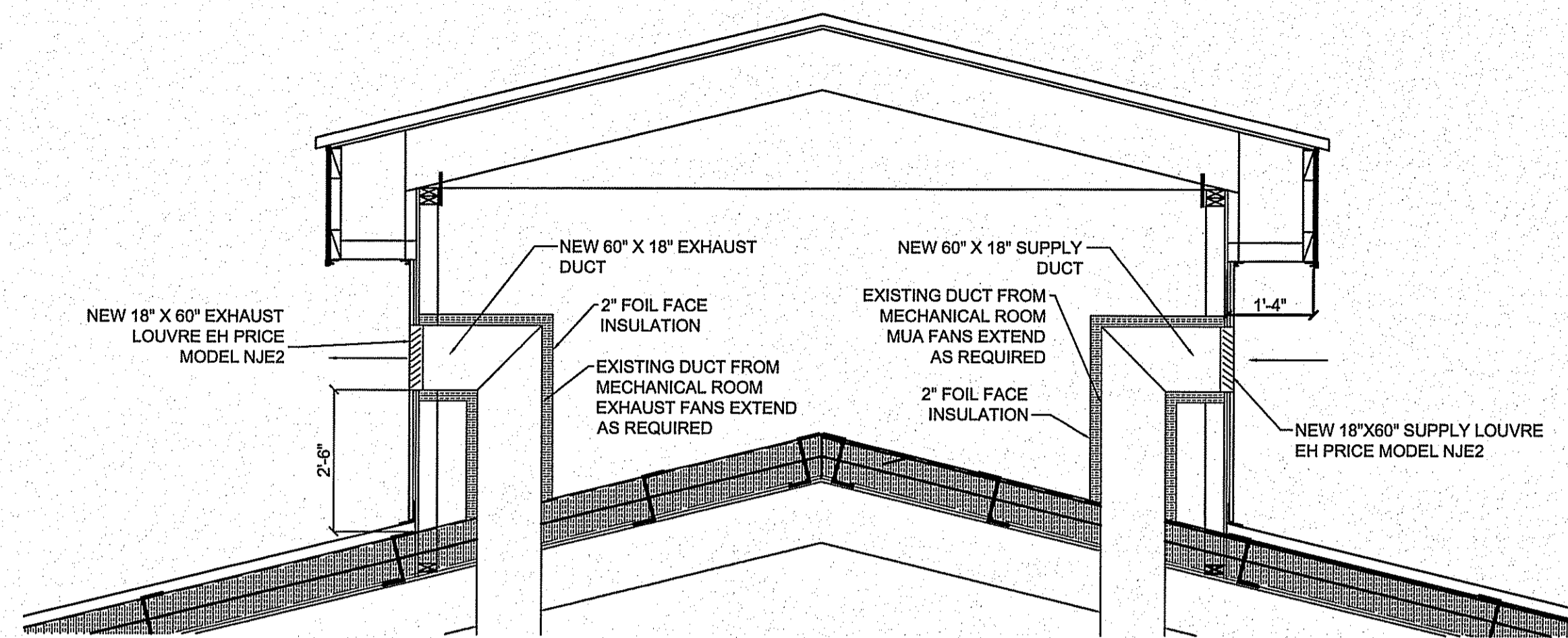
UPON SENSING OF 1 PPM OF NITROGEN DIOXIDE INTERNAL SPDT RELAY SHALL ACTIVATE INTAKE DAMPER CONTROL. UPON SENSING OF 3 PPM OF NITROGEN DIOXIDE CORRESPONDING ALARM LEVEL INDICATING LIGHT SHALL ENERGIZE AND INTERNAL SPDT RELAY SHALL ACTIVATE. INTERNAL SONALERT SHALL SOUND WHERE SPECIFIED.

CARBON MONOXIDE (CO) AND NITROGEN DIOXIDE (NO2) SENSORS SHALL BE LONG LIFE ELECTROCHEMICAL TYPE WITH 2-3 YEAR MINIMUM LIFE EXPECTANCY. RANGE OF CO SENSOR 0-250PPM, NO2 SENSOR SHALL BE 0-10PPM. SIGNAL OUTPUT TO CONTROL SYSTEM OF 4-20MA, LINEAR, OR RS 485 DIGITAL.

EXHAUST FAN CONTROLS - SEQUENCE OF OPERATIONS

EF-5 AND 6 OPERATE CONTINUOUSLY.

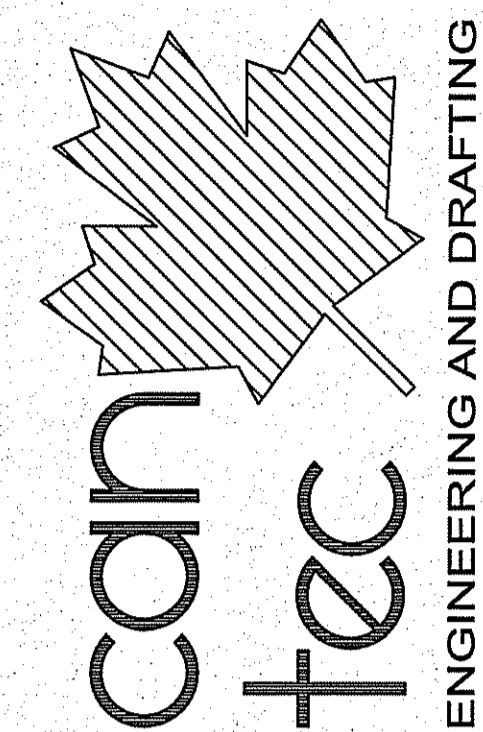
EF-3 AND EF-4 OPERATE INTERMITTENTLY. THE EXHAUST FANS AND INTAKE DAMPER ARE CONTROLLED THROUGH THE CO/NO2 TRANSMITTER/SENSORS. WHEN EITHER CO OR NO2 LOW ALARM LIMITS ARE REACHED, THE SENSOR RELAY WILL IMMEDIATELY SEND A SIGNAL TO THE INTAKE DAMPER TO OPEN. WHEN THE DAMPER IS FULLY OPEN, THE END SWITCH WILL SEND A SIGNAL TO START THE EXHAUST FAN IN THE SAME ROOM AS THE ALARMED SENSOR. THE FAN SHALL RUN UNTIL THE SIGNAL DROPS BELOW THE LOW ALARM LIMIT, AND THEN FOR ANOTHER 10 MIN.



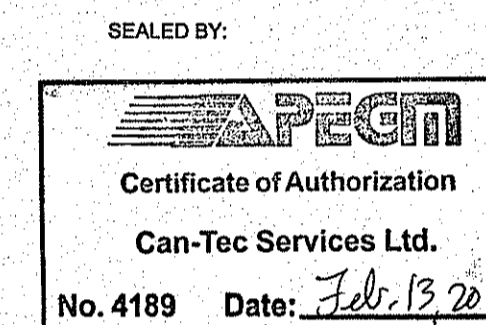
1 COUPOULA MECHANICAL DETAIL

SCALE: 3/16"=1'-0"

THIS DRAWING MUST NOT BE SCALED.
THE GENERAL CONTRACTOR SHALL VERIFY ALL DIMENSIONS, DATUMS AND LEVELS PRIOR TO COMMENCEMENT OF WORK AND IS HELD RESPONSIBLE FOR REPORTING ANY DISCREPANCY OR OMISSION TO CAN-TEC SERVICES LTD. IMMEDIATELY.
THIS DRAWING IS THE EXCLUSIVE PROPERTY OF CAN-TEC SERVICES LTD. AND CAN BE REPRODUCED ONLY WITH THE PERMISSION OF CAN-TEC SERVICES LTD. IN WHICH CASE THE REPRODUCTION MUST BEAR THEIR NAME AS THE ENGINEERING/DRAFTING FIRM.



ENGINEERING AND DRAFTING
101 MAIN STREET, WABOWDEN, MANITOBA, CAN. (204) 843-7222 Fax: (204) 843-0771



PROJECT TITLE: INTERIOR AND EXTERIOR RENOVATIONS
 SHEET TITLE: MECHANICAL DETAILS
 DATE: 13 11 04
 SCALE: AS NOTED
 DRAWN BY: RS
 CHECKED BY: JLS
 LOCATION: WABOWDEN, MANITOBA

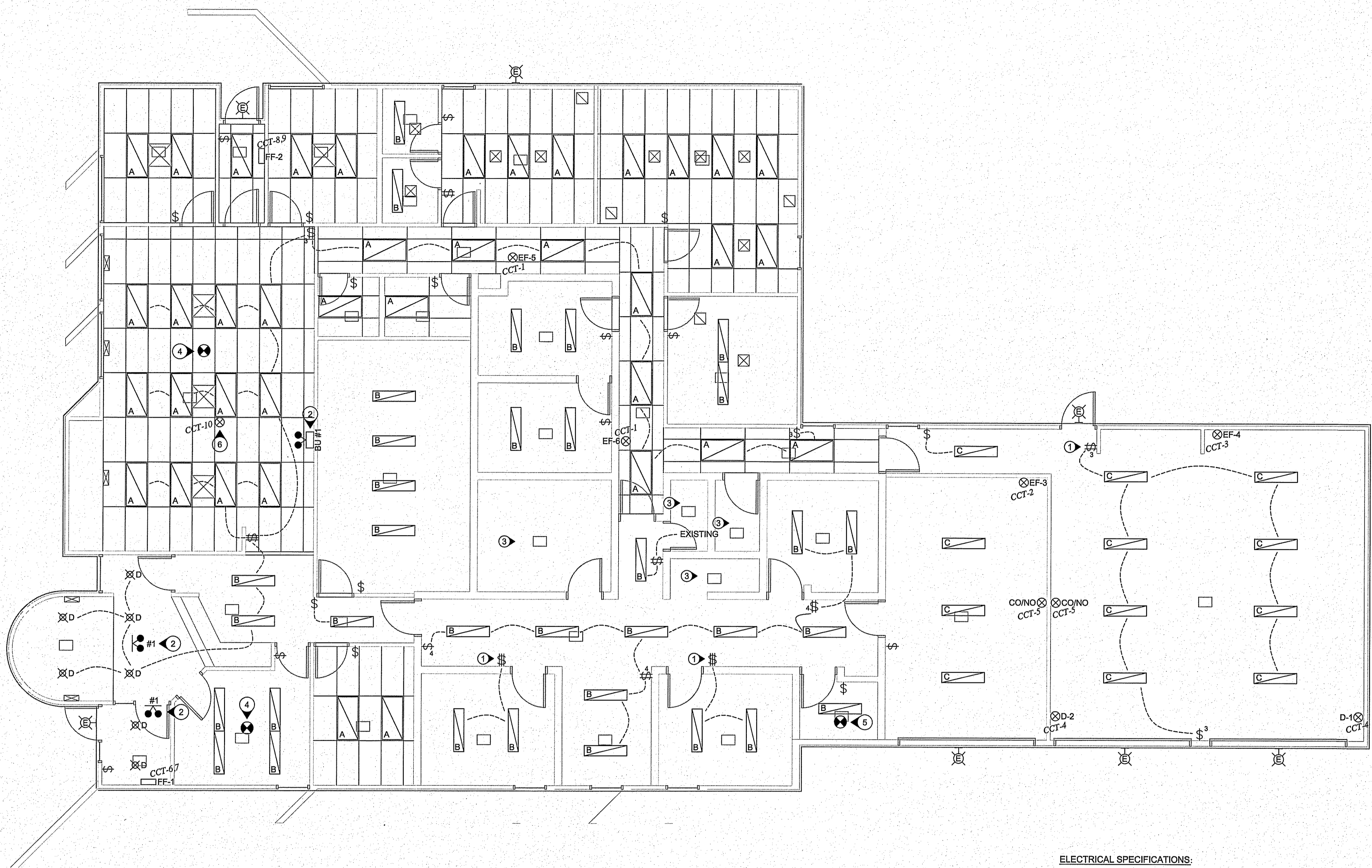
CONSTRUCTION
M2.2
REVISION #: 01
JOB NO. 13-033-01-30

THIS DRAWING MUST NOT BE SCALED.
 THE GENERAL CONTRACTOR SHALL VERIFY ALL DIMENSIONS, DATUMS AND LEVELS PRIOR TO COMMENCEMENT OF WORK AND IS HELD RESPONSIBLE FOR REPORTING ANY DISCREPANCY OR OMISSION TO JOREY ELECTRIC LTD. IMMEDIATELY.
 THIS DRAWING IS THE EXCLUSIVE PROPERTY OF JOREY ELECTRIC LTD. AND CAN BE REPRODUCED ONLY WITH THE PERMISSION OF JOREY ELECTRIC LTD. IN WHICH CASE THE REPRODUCTION MUST BEAR THEIR NAME AS THE ENGINEERING/DRAFTING FIRM.

Jorey Electric Ltd.
 Engineering Consultants
 Telephone: (204) 255-4843
 6-1375 Wilson Road E.
 Winnipeg, Manitoba
 Facsimile: (204) 255-7679
 E-mail: info@joreyelectric.com

- DRAWING NOTES:**
- ONLY ONE SWITCH IS NECESSARY AT THIS LOCATION. REMOVE UNUSED SWITCH(ES) AND PROVIDE BLANK INSERT.
 - CONNECT EMERGENCY LIGHTING SUCH THAT IT WILL AUTOMATICALLY ACTUATE UPON FAILURE OF THE POWER SUPPLY TO THE NORMAL LIGHTING IN THE AREA COVERED BY THE EMERGENCY LIGHTING. PROVIDE A VOLTAGE SENSING RELAY IF REQUIRED.
 - EXISTING CEILING AND LIGHTING TO REMAIN IN THESE ROOMS.
 - ADD NEW SMOKE DETECTOR TO MATCH EXISTING
 - REPLACE EXISTING HEAT DETECTOR WITH SMOKE DETECTOR
 - SUPPLY AND INSTALL POWER POLE AT THIS LOCATION

- GENERAL NOTES:**
- REMOVE ALL EXISTING LIGHTING UNLESS OTHERWISE NOTED. REUSE EXISTING WIRING WHERE POSSIBLE.
 - EXISTING LIGHT SWITCHES ARE TO REMAIN AND ARE TO BE REUSED UNLESS OTHERWISE NOTED.
 - ALL EXTERIOR LIGHTS ARE TO BE CONTROLLED BY EXISTING PHOTOCELL.
 - ALL EXISTING DEVICES IN CEILING SUCH AS FIRE ALARM DEVICES, SECURITY SYSTEM DEVICES AND SPEAKERS ARE TO BE REUSED. PROTECT DURING CONSTRUCTION. REMOVE AND RECONNECT WHERE NECESSARY.
 - PROVIDE VERIFICATION OF FIRE ALARM UPON COMPLETION



LIGHTING SCHEDULE

TYPE	DESCRIPTION	LAMPS
A	COOPER LIGHTING 2GC-232A-UNV-EB81-RIF1 RECESS MOUNTED	2 32W T8 4100K
B	COOPER LIGHTING MC-232A-UNV-EB81-RIF1 CEILING MOUNTED	2 32W T8 4100K
C	COOPER LIGHTING VRV12-232-DR-UNV-EB81-RIF1 CEILING MOUNTED	2 32W T8 4100K
D	GO7HAM EVC-3514-6AR-MVOLT CEILING MOUNTED	25W LED
E	RC LIGHTING WPLED13-RCL WALL MOUNTED AT 102" ABOVE GRADE	13W LED

EMERGENCY LIGHTING SCHEDULE

TYPE	DESCRIPTION
BU #1	LUMACELL BATTERY UNIT RG12S-36-2-LD7
☉	LUMACELL REMOTE HEADS MQM-2-LD7

SYMBOL SCHEDULE

\$	SINGLE GANG SWITCH
*3	*3 DENOTES 3-WAY
*4	*4 DENOTES 3-WAY
⌘	TWO GANG SWITCH
⌘	THREE GANG SWITCH
☉	FIRE ALARM SMOKE DETECTOR
⊗	ELECTRICAL CONNECTION

1 ELECTRICAL PLAN
 E-1 SCALE 3/16"=1'-0"

EQUIPMENT SCHEDULE

NUMBER	DESCRIPTION	KWH/PA	VOLTS/PH	BREAKER	CONDUCTOR	LOCATION
EF-3,4	EXHAUST FANS	0.25HP	120V/1PH	15A/1P	2 #12 RW90	OVERNIGHT EXHIBIT ROOMS
EF-5,6	EXHAUST FANS	150W	120V/1PH	15A/1P	2 #12 RW90	SECURE BAY & GARAGE
D-1,2	MOTORIZED FIRE DAMPERS	FRACTIONAL	120V/1PH	15A/1P	2 #12 RW90	GARAGE
CO/NO	GAS DETECTORS	FRACTIONAL	120V/1PH	15A/1P	2 #12 RW90	SECURE BAY & GARAGE

NOTES:
 MATCH BREAKER AND WIRE SIZES TO ACTUAL NAMEPLATE RATINGS OF EQUIPMENT
 PROVIDE LOCAL DISCONNECTS TO CODE"

HEATING SCHEDULE

TYPE	DESCRIPTION	KW	VOLTS/PH	BREAKER	CONDUCTOR
FF-1,2	OUTLETT FORCE FLOW HEATER OACU2008 CW BUILT IN STAT	2kW	208V/1PH	15A/2P	2 #12 RW90

CIRCUIT SCHEDULE

CCT #	DESCRIPTION	BREAKER SIZE	WIRE SIZE
1	EF-5,6	15A	#12
2	EF-3	15A	#12
3	EF-4	15A	#12
4	DAMPERS	15A	#12
5	GAS DETECTOR	15A	#12
6		15A	#12
7	FF-1	15A	#12
8		15A	#12
9	FF-2	15A	#12
10	POWER POLE	15A	#12

NOTE: CONNECT ABOVE NEW CIRCUITS TO NEAREST PANEL WITH SPACE AVAILABLE. NEW LIGHTS ARE TO BE CONNECTED TO EXISTING LIGHTING CIRCUITS

- ELECTRICAL SPECIFICATIONS:**
- GENERAL**
 SUPPLY ALL LABOUR, EQUIPMENT & MATERIALS NECESSARY AND REASONABLY IMPLIED FOR THE COMPLETE INSTALLATION OF THE ELECTRICAL WORK AS SHOWN ON THE PLANS AND/OR SPECIFIED.
 - CODES, PERMITS, AND FEES**
 ELECTRICAL INSTALLATION SHALL BE IN ACCORDANCE WITH THE CURRENT EDITION OF THE CANADIAN ELECTRICAL CODE, PROVINCIAL, MUNICIPAL, AND OTHER CODES, RULES AND REGULATIONS. OBTAIN AND PAY FOR ALL PERMITS AND LICENSES REQUIRED TO EXECUTE THE WORK.
 - MATERIALS**
 ALL MATERIALS SUPPLIED SHALL BE NEW (OR AS NOTED) AND OF THE QUALITY INDICATED IN THE SPECIFICATIONS AND SHALL CONFORM TO THE STANDARDS OF THE C.S.A. IN THE EVENT THAT A MATERIAL SPECIFIED DOES NOT BEAR C.S.A. OR EQUIVALENT APPROVAL, THE CONTRACTOR IS TO OBTAIN THE APPROVAL OF THE LOCAL INSPECTION AUTHORITY AND MAKE ANY MODIFICATIONS REQUIRED AT NO ADDITIONAL EXPENSE TO THE OWNER.
 - DEVICES AND WIRING**
 RECEPTACLES MARKED "20A" ARE TO BE CSA CONFIGURATION 5-20R UNLESS OTHERWISE NOTED. PROVIDE TAMPER RESISTANT RECEPTACLES WHERE REQUIRED BY CODE. PROVIDE ALL WIRING AND TERMINATIONS FOR TELEPHONE, DATA AND TV OUTLETS UNLESS OTHERWISE NOTED.
 - SUBSTITUTIONS**
 EQUIPMENT AND MATERIAL SHALL BE INSTALLED AS SPECIFIED. REQUESTS FOR EQUAL STATUS SHALL BE SUBMITTED TO THE ENGINEER 7 DAYS PRIOR TO CLOSE OF TENDER.
 - EQUIPMENT LOCATIONS**
 SWITCHES SHALL BE MOUNTED 47" OR 1200mm ABOVE FINISHED FLOOR UNLESS OTHERWISE NOTED ON THE DRAWINGS. RECEPTACLES SHALL BE MOUNTED 12" OR 305mm ABOVE FINISHED FLOOR OR 6" OR 150mm ABOVE COUNTERTOPS UNLESS OTHERWISE NOTED ON THE DRAWINGS. RECEPTACLES ON EITHER SIDE OF A PARTITION SHALL BE STAGGERED. DO NOT MOUNT BACK TO BACK.
 - VERIFICATION**
 THE ELECTRICAL CONTRACTOR SHALL CAREFULLY EXAMINE ALL DRAWINGS AND SPECIFICATIONS RELATING TO THE WORK TO BE CERTAIN THAT THE WORK UNDER THIS CONTRACT CAN BE SATISFACTORILY CARRIED OUT. PRIOR TO THE SUBMISSION OF TENDER, THE CONTRACTOR SHALL REPORT AT ONCE TO THE ENGINEER, ANY DEFECT, DISCREPANCY, OMISSION, OR INTERFERENCE AFFECTING THE WORK OF THIS SECTION OR THE GUARANTEE OF THE SAME.
 - WARRANTY**
 THE ELECTRICAL CONTRACTOR SHALL WARRANTY THE SATISFACTORY OPERATION OF ALL WORK AND MATERIALS INCLUDED AND INSTALLED UNDER THIS SECTION OF THE SPECIFICATION FOR A PERIOD OF ONE YEAR AFTER THE FINAL ACCEPTANCE OF THE COMPLETE BUILDING.
 - AS-BUILT DRAWINGS**
 SUBMIT ONE SET OF CORRECTED 'AS-BUILT' DRAWINGS OR CORRECTED DRAWINGS IN DWG FORMAT TO THE OWNER. CONFIRM REQUIREMENTS PRIOR TO COMPLETION.
 - CERTIFICATE OF APPROVAL**
 UPON COMPLETION AND BEFORE FINAL PAYMENT IS MADE, PRESENT TO THE ENGINEER A CERTIFICATE OF APPROVAL FOR ALL ELECTRICAL WORK FROM THE INSPECTION DEPARTMENT HAVING JURISDICTION.

SEALED BY:

Certificate of Authorization
 Jorey Electric Ltd.
 No. 4600 Date: 13 Feb 2014

PROJECT TITLE: **INTERIOR & EXTERIOR RENOVATIONS**
 SHEET TITLE: **ELECTRICAL PLAN**
 DATE (BY REVISION): 13 FEB 2014
 SCALE: AS NOTED
 LOCATION: WABOWDEN FIRST NATION, MANITOBA
 DRAWN BY: JJD
 CHECKED BY: JJD

E-1
 REVISION #: 0
 JOB NO. 13-029