

RFP# 4251 - Addendum #4 Curtain Wall Addition – Herring Cove Junior High

To: All Bidders

Date: August 28, 2024

From: Nancy Rideout, Purchasing Manager

Office: (902) 464-2000 ext. 2222

Email: nrideout@hrce.ca

The bid documents shall be amended, and new drawings and clauses added, and shall become part of the contract documents as follows:

Question

Please provide specification for the new baseboard radiator to be installed.

<u>Answer</u>

The required specifications and drawings are enclosed.

Additional Questions

Additional questions and responses are further enclosed.

All bidders are reminded to review the entirety of each addendum prior to finalizing their bid submissions.

Questi	ion
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We'd like to request an extension to Thursday, Sept 5. We are trying to find subtrades that can complete this work after hours and weekends. Where this RFP is closing just before the long weekend it seems a lot of subtrades are on vacation.

The HRCE agrees to extend the closing date for this RFP to Sept 5.

No further extensions will be permitted.

The RFI period is now closed.

New RFP Close Date: Thurs - Sept 5, 2024

Closing Time: 2pm ATL

End of Addendum #4 - RFP 4251

	PLEASE SIGN BELOW AND RETURN WITH BID DOCUMENTS:							
 Signature	· · · · · · · · · · · · · · · · · · ·	Company Name						

Herring Cove Junior High
Curtain Wall
Herring Cove, NS

Addendum #4

Page 1 of 3 August 27, 2024

Addendum No. 4 Issued: August 27, 2024

The Bid Documents shall be amended and new clauses and drawings added or deleted will become part of the Contract Document as follows:

- .1 Add attached drawings,
 - .1 M-001: Mechanical Specifications
 - .2 MH101: Floor Plan Heating
 - .3 MH501: Schedules and Details Heating
 - .4 E-101: Floor Plans Electrical
- .2 Question: While our proposed schedule is not yet finalized, initial discussions with subcontractors indicate the lead time on the curtain wall system could be up to or more than 10 weeks. Considering shop drawing submittal and review periods, this may cause the Ready-For-Takeover date of December 31st, 2024 to be unachievable. Please clarify whether the client is willing to extend the ready-for-takeover date.
 - .1 Response: HRCE will entertain an extension if required. Submit your bid with your actual schedule but include the reasoning for the extension (i.e. lead times)
- .3 Question: Please clarify the scoring for Section IV. If we don't believe the schedule is achievable, but have submitted an RFI indicating as such, will we automatically be deducted 3 points?
 - .1 Response: The reason for an extended schedule will be taken into account in your evaluation scoring.
- .4 Question: Structural Plans indicate "C1" as an HSS 6x4x0.250, while detail 2//S-1 shows an HSS 6x4x0.375. Please clarify which detail is correct.
 - .1 Response: HSS 6x4x0.375 is the correct size
- .5 Question: Specifications are listed for Mod-bit roofing, but drawings do not show a tie-in to the existing roofing. Please confirm that detail 3/A109 is the extent of the roofing requirement for this project.
 - .1 Response: Delete reference to mod bit roofing. No tie in required.
- Question: A note on A102 indicates to 'infill opening with P2 Temporary Hoarding Wall Assembly until curtain wall construction'. Please confirm that this is the hoarding required, or an alternative hoarding method (i.e. tarps) would be acceptable.
 - .1 Response: No, P2 walls will be required.

- .7 Question: Please confirm whether the demolition of the temporary hoarding walls (P1, P2) will be included in the scope of work, or if this is by others.
 - .1 Response: Yes, demolition to be included in scope.
- .8 Question: Notes #4 on A103-A105 indicates to "replace" concrete floor where removed to install columns. Please clarify whether existing flooring is to be salvaged, or finished with new flooring and if the latter, please provide flooring type.
 - .1 Response: Flooring to be made good with new VCT, colour to match as close as possible to existing.
- .9 Question: Please confirm that if a school is currently under HRCE control, but HRCE was not the initial client, whether or not it would be considered an 'HRCE Project'.
 - .1 Response: HRCE is the owner, operator and client. This is an HRCE project.
- .10 Question: Site Plan indicates that hoarding should extend a minimum of 15' from face of building please provide comment on whether the hoarded area can be extended out onto the parking lot in both east and south directions to accommodate equipment.
 - .1 Response: Hoarding can be extended to sidewalk but no further as bus lane is located along driveway.
- Ouestion: The RFP indicates if the proponent fails to include relevant HRCE projects, this will negatively impact their technical score. The scoring for project experience (total of 15 points) includes for budget, quality, and time management of project for each of the listed three projects. How many points for each of these projects would be deducted for non-HRCE projects?
 - .1 Response: This clause to ensure that a contractor includes relevant HRCE projects regardless of a positive or negative outcome. If the contractor has no history with HRCE there is no deduction. The contractor must share three external references that meet the remaining criteria.
- .12 Question: Please confirm that contractors will not be permitted any access to existing power sources withing Herring Cove Junior High.
 - .1 Response: The contractor is fully responsible for temporary power, including any related costs. The contractor can connect to existing power, following the constraints outlined in Section 2.1
- Question: As per drawing A102, temporary hoarding is required in the infill opening with the P2 hoarding wall assembly until the curtain wall construction is complete. Could you please confirm if this hoarding is required only on the upper level? Additionally, can you confirm whether the provision of this hoarding is within our scope? Please advise.
 - .1 Response: Hoarding required on main and upper levels. Yes, hoarding in and behind window opening are within scope.

Herring Cove Junior High
Curtain Wall Addendum #4 Page 3 of 3
Herring Cove, NS August 27, 2024

Attachments:

- M-001: Mechanical Specifications

- MH101: Floor Plan Heating

- MH501: Schedules and Details Heating

- E-101: Floor Plans Electrical

END ADDENDUM #4

1 GENERAL

1.1 REFERENCE STANDARDS

- THE MOST STRINGENT REQUIREMENTS OF LOCAL MUNICIPAL BY-LAWS, PROVINCIAL CODES AND FOLLOWING CODES AND STANDARDS SHALL BE FOLLOWED.
- IN NO INSTANCE SHALL THE STANDARD ESTABLISHED BY THE CONTRACT DOCUMENTS BE REDUCED BY THE APPLICATION OF ANY OTHER CODES.
- NATIONAL PLUMBING CODE OF CANADA.
- CSA C22.1, CANADIAN ELECTRICAL CODE, PART 1 SAFETY STANDARD FOR ELECTRICAL INSTALLATIONS 1.2 DEFINITIONS
 - "EXPOSED" WILL MEAN "NOT CONCEALED" AS DEFINED HEREIN "HYDRONIC" INCLUDES HOT WATER HEATING SUPPLY AND RETURN PIPING.
- 1.3 EXAMINE THE SITE CONDITIONS: EACH CONTRACTOR SHALL VISIT AND EXAMINE THE SITE AND THE LOCAL CONDITIONS AFFECTING THIS WORK, NO ALLOWANCE WILL BE MADE LATER FOR ANY EXPENSES OCCURRED THROUGH FAILURE TO MAKE THESE EXAMINATIONS.

"CONCEALED" - MECHANICAL SERVICES AND EQUIPMENT IN HUNG CEILING SPACES AND NON-ACCESSIBLE CHASES AND FURRED SPACES.

- 1.4 USE PERMANENT HEATING AND/OR VENTILATING SYSTEMS FOR SUPPLYING TEMPORARY HEAT OR VENTILATION IS NOT PERMITTED.
- 1.5 PROTECT EQUIPMENT AND SYSTEMS OPENINGS FROM DIRT, DUST, AND OTHER FOREIGN MATERIALS WITH MATERIALS APPROPRIATE TO SYSTEM.
- 1.6 NO FANS TO BE STARTED UNTIL PROJECT HAS BEEN CLEANED TO THE SATISFACTION OF THE CONSULTANT.

- .1 STANDARD OF ACCEPTANCE AND/OR ACCEPTABLE MATERIAL: MEANS THAT ITEM NAMED AND SPECIFIED BY MANUFACTURER AND/OR CATALOGUE NUMBER FORMS PART OF SPECIFICATION AND SETS STANDARD REGARDING PERFORMANCE, QUALITY OF MATERIAL AND WORKMANSHIP AND WHEN USED IN CONJUNCTION WITH A REFERENCED STANDARD. SHALL BE DEEMED TO SUPPLEMENT THE STANDARD.
- ACCEPTABLE MANUFACTURER: MEANS THAT ITEM MANUFACTURED BY NAMED AND SPECIFIED MANUFACTURER, MEETING THE SPECIFICATION AND REFERENCED
- STANDARD REGARDING PERFORMANCE, QUALITY OF MATERIAL AND WORKMANSHIP SHALL BE DEEMED ACCEPTABLE. SHOULD THE CONTRACTOR DESIRE TO SUBSTITUTE A ANOTHER MANUFACTURER/ MATERIAL FOR ONE OR MORE SPECIFIED, THE CONTRACTOR SHALL APPLY IN WRITING FOR SUCH PERMISSION AT LEAST FIVE (5) CALENDAR DAYS BEFORE CLOSING DATE OF MECHANICAL TRADE TENDERS. THE CONTRACTOR SHALL ALSO PROVIDE TECHNICAL DATA AND/OR SAMPLES FOR THE CONSULTANTS CONSIDERATION.
- 1.8 FOR THE PURPOSE OF UNIFORMITY SIMILAR MATERIALS SHALL BE BY ONE MANUFACTURER.
- 1.9 ALL LABOR AND MATERIALS SHALL BE GUARANTEED FOR A PERIOD OF ONE YEAR AFTER THE DATE OF ACCEPTED SUBSTANTIAL COMPLETION OF THE CONTRACT.
- 1.10 THIS CONTRACTOR SHALL GIVE ALL NOTICES AND OBTAIN ALL PERMITS AND PAY ALL FEES IN ORDER THAT THE WORK HEREIN MAY BE CARRIED OUT WITHOUT DELAY

ALL ELECTRICAL EQUIPMENT AND DEVICES TO BE CSA CERTIFIED AND MANUFACTURED TO STANDARD QUOTED. WHERE FIELD MODIFICATIONS ARE MADE TO CERTIFIED ELECTRICAL EQUIPMENT, ARRANGE AND PAY FOR FIELD CERTIFICATION BY CSA.

- LINE VOLTAGE CONTROL WIRING: WIRING SHALL BE INSTALLED BY AN ELECTRICIAN. ELECTRICAL WIRING PERMITS: SUBMIT TO ELECTRICAL INSPECTION DEPARTMENT AND SUPPLY AUTHORITY NECESSARY NUMBER OF CONTROL DRAWINGS AND CONTROL SPECIFICATIONS FOR EXAMINATION AND APPROVAL PRIOR TO COMMENCEMENT OF WORK PAY ASSOCIATED FEES. FURNISH CERTIFICATES OF ACCEPTANCE FROM INSPECTION DEPARTMENT AND AUTHORITIES HAVING
- .2 LOW VOLTAGE CONTROL WIRING: WIRING SHALL BE INSTALLED BY A CERTIFIED COMMUNICATIONS CABLING SPECIALISTS. COMMUNICATIONS WIRING PERMITS: SUBMIT TO ELECTRICAL INSPECTION DEPARTMENT AND SUPPLY AUTHORITY NECESSARY NUMBER OF CONTROL DRAWINGS AND CONTROL SPECIFICATIONS FOR EXAMINATION AND APPROVAL PRIOR TO COMMENCEMENT OF WORK. PAY ASSOCIATED FEES. FURNISH CERTIFICATES OF ACCEPTANCE FROM INSPECTION DEPARTMENT AND AUTHORITIES HAVING JURISDICTION ON COMPLETION OF WORK.
- 1.13 CUTTING, PATCHING, AND WATERPROOFING NECESSARY FOR THE PROPER INSTALLATION OF THIS WORK, SHALL BE PROVIDED BY THE GENERAL CONTRACTOR. THIS CONTRACTOR IS RESPONSIBLE FOR PROVIDING THE NECESSARY INFORMATION TO THE GENERAL CONTRACTOR IN A TIMELY FASHION.
- 1.14 THIS CONTRACTOR SHALL PRESERVE ALL OPERATION AND MAINTENANCE INSTRUCTIONS AND MARKED-UP "RECORD" PRINTS AND TURN OVER TO THE OWNER AT JOB
- 1.15 SCOPE OF WORK INCLUDES BUT IS NOT LIMITED TO THE SUPPLY AND INSTALLATION OF, HEATING, SYSTEMS, AS SHOWN ON THE DRAWINGS AND HEREIN DESCRIBED.
- EQUIPMENT SUPPORTS NOT SUPPLIED BY EQUIPMENT MANUFACTURER: FABRICATE FROM STRUCTURAL GRADE STEEL.

- APPLY AT LEAST ONE COAT OF PRIMER PAINT TO FERROUS SUPPORTS, PIPE HANGERS AND SITE FABRICATED WORK. PRIMER TO BE THE MASTER PAINTERS INSTITUTE MPI #23 WITH VOC <351 GRAINS/L
- 1.18 PIPE PENETRATION THROUGH WALLS AND FLOOR
- SLEEVE ALL HYDRONIC PIPES PENETRATION THROUGH MASONRY WALLS. DO NOT GROUT OR BOND HYDRONIC PIPES SOLID TO WALLS OR FLOORS.
- MAINTAIN A MINIMUM UNIFORM 1/4" (6 MM) CLEARANCE ALL AROUND OR AS REQUIRED FOR SMOKE SEAL, ACOUSTIC SEAL AND/OR FIRE STOPPING. COORDINATE WITH OTHER TRADES.
- FIRESTOP ALL PIPE PENETRATION THROUGH FIRE RATED WALLS AND FIRE RATED FLOOR
- SMOKE SEAL AND/OR ACOUSTIC SEAL ALL PIPES ON THROUGH NON RATED WALLS AND FLOOR WHERE WALLS EXTEND FROM FLOOR TO FLOOR OR FLOOR TO ROOF DECK.
- BOTH SIDES OF WALL.
- ENSURE NO CONTACT BETWEEN COPPER TUBE / PIPE AND FERROUS SLEEVE OR CONCRETE.

1.19 PIPE SLEEVES

- FOR FLOORS INTO ROOMS, PROVIDE 16 GAUGE GALVANIZED SLEEVES WITH RETAINING TABS, TERMINATING FLUSH WITH FLOOR. ENSURE NO CONTACT BETWEEN COPPER TUBE OR PIPE AND FERROUS SLEEVE.

1.20 FIRESTOPPING

- FIRESTOPPING MATERIAL AND INSTALLATION WITHIN ANNULAR SPACE BETWEEN PIPES, DUCTS, INSULATION AND ADJACENT FIRE SEPARATION INSULATED PIPES AND DUCTS: ENSURE INTEGRITY OF INSULATION AND VAPOR BARRIER AT FIRE SEPARATION.
 - FIRE STOP BOTH SIDES OF WALL

1.21 ESCUTCHEONS .1 ON PIPES PASSING THROUGH WALLS, PARTITIONS, FLOORS AND CEILINGS IN FINISHED AREAS.

1.22 ACCESS DOORS

- SUPPLY ACCESS DOORS TO CONCEALED MECHANICAL EQUIPMENT FOR OPERATING, INSPECTING, ADJUSTING AND SERVICING.
- MINIMUM 12" X 12" FOR HAND ENTRY DOOR FLUSH WITH FRAME.
- 1.23 DIELECTRIC COUPLINGS: WHERE PIPES OF DISSIMILAR METALS ARE JOINTED.
- 1.24 SHOP DRAWINGS: PROVIDE 6 COPIES TO THE CONSULTANT.
- 1.25 START-UP REPORT, REPORTS TO SHOW MODEL NUMBER, SERIAL NUMBER, VOLTAGE AND RATED AMPERES.
- 1.26 OPERATING AND MAINTENANCE MANUAL: PROVIDE 3 COPIES CUSTOM DESIGNED AND CONTAIN MATERIAL PERTINENT TO THIS PROJECT ONLY AND TO PROVIDE FULL. INCLUDE A COPY OF FINAL SHOP DRAWING.
- 1.27 DEMONSTRATION AND OPERATING AND MAINTENANCE INSTRUCTIONS: SUPPLY TOOLS, EQUIPMENT AND PERSONNEL TO DEMONSTRATE AND INSTRUCT OPERATING AND MAINTENANCE PERSONNEL IN OPERATING, CONTROLLING, ADJUSTING, TROUBLE-SHOOTING AND SERVICING OF ALL SYSTEMS AND EQUIPMENT DURING REGULAR WORK HOURS, PRIOR TO ACCEPTANCE.
- 2 PRODUCTS
- 2.1 PIPE AND DUCT HANGERS
- MIDDLE ATTACHMENT (ROD) CADMIUM PLATED STEEL THREADED ROD. ADJUSTABLE CLEVIS HANGER: TO MSS-SP69, TYPE 1, ULC LISTED.
- LONG ADJUSTABLE CLEVIS HANGER: TO MSS-SP69, TYPE 1 ULC LISTED.
- COPPER PLATED OR EPOXY COATED ADJUSTABLE CLEVIS HANGER:
- 2.2 PIPING IDENTIFICATION: IDENTIFY MEDIUM BY LETTERED LEGEND, CLASSIFICATION BY PRIMARY AND SECONDARY COLORS, DIRECTION OF FLOW BY ARROWS.

- 2.3 CEILING COLOR DISCS: AT VALVES, ELECTRICAL COMPONENTS LOCATED ABOVE T-BAR CEILING OR ACCESS DOORS, PROVIDE SELF ADHERING COLOR DISC AS NEAR AS
- 2.4 P-2 FORMED MINERAL FIBER WITH VAPOUR BARRIER TO 454°C PIPE INSULATION
 - COMPONENTS OF INSULATION SYSTEM TO HAVE MAXIMUM FLAME SPREAD RATING OF 25 AND MAXIMUM SMOKE DEVELOPED RATING OF 50 IN ACCORDANCE WITH
 - APPLICATION FOR PIPING, VALVES AND FITTINGS ON: HYDRONIC PIPING EXCEPT INFLOOR HEATING SYSTEM AND WHERE INDICATED. THICKNESS: 1/2" ON NPS 1/2 PIPE. 1" ON NPS 3/4 AND OVER.
- 2.5 BALL VALVES QUARTER-TURN: 600 PSI W.O.G., BRONZE, LARGE PORT, SOLDERED OR SCREWED.

- NPS 1-1/4 AND UNDER: MIN. 125 PSI, BRONZE BODY RENEWABLE COMPOSITION DISC, SCREWED STRAIGHT OR ANGLE BONNET, THREADED/SOLDER UNION TAIL PIECE.
 - ON SUPPLY PIPING, WHEEL HANDLE. ON RETURN PIPING, MEMORY BALANCING VALVE WITH FLOW MEASURING VENTURI.

2.7 DRAIN VALVES

- LOCATE AT LOW POINTS OF MAINS, BRANCHES AND RISERS.
- AT DOMESTIC WATER BRANCH ISOLATION VALVES, PROVIDE DRAIN UNLESS BRANCH CAN BE DRAINED THROUGH A FIXTURE. AT HYDRONIC BRANCH ISOLATION VALVES, PROVIDE DRAIN UNLESS BRANCH CAN BE DRAINED THROUGH A HYDRONIC UNIT
- BALL VALVE WITH HOSE END MALE THREAD AND CAP WITH CHAIN, MINIMUM NPS 1/2 UNLESS OTHERWISE SPECIFIED.
- 2.8 GAUGE COCKS: NPS 1/4 SCREWED BALL VALVES QUARTER-TURN: 250 PSI W.O.G., BRONZE, LARGE PORT, SOLDERED OR SCREWED.

2.9 HYDRONIC PIPE, FITTINGS, COUPLINGS AND JOINTS

- COPPER TUBE: TYPE L HARD DRAWN TO ASTM B88M.
- SCHEDULE 40 STEEL PIPE TO ASTM A-53 GRADE B.
- ROLL GROOVED COUPLINGS AND FITTINGS. WHERE ROLLED GROOVED COUPLINGS AND FITTINGS ARE USED, THEY SHALL BE OF THE SAME MANUFACTURER.
- ACCEPTABLE MANUFACTURERS: VICTAULIC CO. OF CANADA AND GRINNELL GRUVLOK

2.10 STANDARD CONTINUOUS WALL CONVECTORS

- FINISH CABINET WITH FACTORY APPLIED BAKED PRIMER COAT. HEATING ELEMENTS: SEAMLESS COPPER TUBING, MECHANICALLY EXPANDED INTO FLANGED COLLARS OF EVENLY SPACED ALUMINUM FINS, 4" X 4" NOMINAL, SUITABLE FOR SWEAT FITTINGS. ELEMENT HANGERS: BALL BEARINGS OR TEFLON CRADLE TYPE PROVIDING UNRESTRICTED LONGITUDINAL MOVEMENT ON ENCLOSURE BRACKETS, SPACE BRACKETS 36" CENTERS MAXIMUM AND WITHIN 12" OF JOINT.
- 16 GA. THICK STEEL COMPLETE WITH DIE FORMED END CAPS HAVING NO KNOCK-OUTS, WITH INSIDE CORNERS, OUTSIDE CORNERS, AS INDICATED. SLIP JOINT CONSTRUCTION
- WHERE WALL TO WALL, PROVIDE WALL TO WALL ENCLOSURE WITH WALL TRIM. TRIM THE WALL TRIM PIECE TO MATCH THE CONTOUR OF THE WALL AND TRIM EDGE OF THE WALL TRIM SO THAT THE WALL TRIM DOESN'T COVER ANY OF THE RADIATION GRILLE.
- STANDARD OF ACCEPTANCE: ENGINEERED AIR AS PER SCHEDULE ON DRAWINGS. .5 ACCEPTABLE MANUFACTURERS: ROSEMEX, TRANE OR SIGMA CORPORATION

3 EXECUTION

- .1 IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTION.
- 3.2 PROTECTION OF OPENINGS: PROTECT EQUIPMENT AND SYSTEMS OPENINGS FROM DIRT, DUST, AND OTHER FOREIGN MATERIALS WITH MATERIALS APPROPRIATE TO SYSTEM.

- GIVE 24 H WRITTEN NOTICE OF DATE FOR TESTS.
- INSULATE OR CONCEAL WORK ONLY AFTER TESTING AND APPROVAL BY CONSULTANT.
- CONDUCT TESTS IN PRESENCE OF CONSULTANT OR REPRESENTATIVE AUTHORIZED BY THE CONSULTANT. BEAR COSTS INCLUDING RETESTING AND MAKING GOOD.
- HYDRAULICALLY TEST HYDRONIC PIPING SYSTEMS AT 1 1/2 TIMES SYSTEM OPERATING PRESSURE OR MINIMUM 125 PSIG, WHICHEVER IS GREATER.
- PRIOR TO TESTS, ISOLATE ALL EQUIPMENT OR OTHER PARTS WHICH ARE NOT DESIGNED TO WITHSTAND TEST PRESSURES OF TEST MEDIUM.
- 3.4 PIPE HANGER SPACING: SPACING AND MIDDLE ATTACHMENT (ROD) DIAMETER AS SPECIFIED IN:
- PLUMBING PIPING: TO NATIONAL PLUMBING CODE OF CANADA.
- SPRINKLER PIPING: TO NFPA 13. PROPANE PIPING: TO CAN/CGA B149.2.
- WITHIN 12" OF EACH HORIZONTAL ELBOW.
- RISERS AT EACH FLOOR.
- 3.5 HYDRONIC PIPE ATTACHMENT APPLICATION UNINSULATED STEEL PIPE: ADJUSTABLE CLEVIS HANGER.
 - INSULATED STEEL PIPE: LONG ADJUSTABLE CLEVIS HANGER.
 - COPPER PIPE: COPPER PLATED OR EPOXY COATED ADJUSTABLE CLEVIS HANGER. PROVIDE DOUBLE NUTS AT MIDDLE ATTACHMENT (ROD) TOP AND BOTTOM.
- 3.6 LOCATION OF PIPING IDENTIFICATION: ON LONG STRAIGHT RUNS IN OPEN AREAS, SO THAT AT LEAST ONE IS CLEARLY VISIBLE FROM ANY ONE VIEWPOINT IN OPERATING AREAS OR WALKING ISLES AND NOT AT MORE THAN 50' INTERVALS. ADJACENT TO ALL CHANGES IN DIRECTION. AT LEAST ONCE IN EACH SMALL ROOM THROUGH WHICH

3.7 HYDRONIC INSTALLATION

- SLOPE PIPING IN DIRECTION OF FLOW WHEREVER POSSIBLE. SLOPE FOR POSITIVE DRAINAGE AND VENTING WHERE PIPE SIZES DIFFER FROM CONNECTION SIZES OF EQUIPMENT, INSTALL REDUCING FITTINGS CLOSE TO THE EQUIPMENT. REDUCING BUSHINGS ARE NOT
- ACCEPTABLE. PROVIDE CLEARANCE FOR INSTALLATION OF INSULATION AND ACCESS FOR MAINTENANCE OF EQUIPMENT, VALVES AND FITTINGS. INSTALL PIPING, UNIONS AND FLANGES SO THAT ANY FIXED PIPING DOES NOT INTERFERE WITH REMOVAL OF COILS, TUBES OR TUBE BUNDLES.
- SADDLE TYPE BRANCH FITTINGS MAY BE USED ON MAINS IF BRANCH LINE IS HALF SIZE OR SMALLER THAN MAIN. HOLE SAW OR DRILL AND REAM MAIN TO
- MAINTAIN FULL INSIDE DIAMETER OF BRANCH LINE PRIOR TO WELDING SADDLE OR INSTALLING MECHANICAL T. FORCED WATER SUPPLY AND RETURN PIPING TO BE TAKEN OFF MAIN AT 45° ANGLE VERTICALLY FROM EACH MAIN OR BRANCH. ALL RUNOUTS MADE FROM MAIN
- USING FOUR JOINT SWING CONNECTIONS TO PERMIT EXPANSION AND AVOID STRAIN ON EQUIPMENT.

- WIRING INSTALLATION: RUN IN CONDUIT WHERE INACCESSIBLE AREAS, AREAS OF HEAT ABOVE 80° C, MECHANICAL ROOM, ROOMS WHERE SUBJECT TO DAMAGE AND IN ROOMS WITHOUT SUSPENDED CEILINGS, USE FT4 RATED CABLE: WHERE CODE PERMITS AND IN LOCATION NOT REQUIRING CONDUIT.
- CONTROL CIRCUIT WIRING 50 VOLTS AND LESS: THE INSTALLATION OF "SURFACE" WIRING ON WALLS OR IN OPEN (NON-ENCLOSED) TYPE CEILINGS SHALL ALWAYS BE IN EMT TYPE CONDUIT COMPLETE WITH ASSOCIATED "STEEL" TYPE CONNECTORS AND COUPLINGS. UNLESS SPECIFICALLY INDICATED OTHERWISE, LIQUID TIGHT METAL TYPE CONDUIT C/W MATCHING LIQUID TIGHT TYPE CONNECTORS ARE TO BE USED FOR "FINAL" CONNECTION BETWEEN END OF EMT CONDUIT AND APPLICABLE CONTROL DEVICE, EMT TYPE CONDUIT "WALL-STUB" COMPLETE WITH FLUSH INSTALLED DEVICE BOX SHALL BE LOCATED IN ALL CONCRETE. CONCRETE BLOCK OR AS INDICATED IN ALL OTHER PARTITIONS "OTHER THAN" THOSE TYPES CONSTRUCTED SOLELY OF DRY-WALL AND METAL TYPE STUDS, EMT CONNECTORS COMPLETE WITH NYLON INSULATED THROAT OR THREADED TYPE BUSHING SHALL BE INSTALLED ON END OF EMT STUB WHERE IT PROTRUDES THROUGH WALL "ABOVE," AND WITHIN FINISH ACCESSIBLE TYPE CEILINGS. ALL EMT CONDUIT STUBS ARE TO BE "BONDED" TO GROUND AS REQUIRED BY CANADIAN
- ELECTRICAL CODE AND SECTION 16133. ALL CONTROL WIRING SHALL BE SUPPORTED INDEPENDENTLY AND NOT SECURED TO DUCTWORK, PIPING OR ELECTRICAL CONDUITS EXCEPT AT DROPS TO DUCT OR PIPE MOUNTED SENSORS OR ACTUATORS. SUPPORT WIRING EVERY 3' 0". SECURELY ANCHOR TO STRUCTURE OR EQUIPMENT.
- INSTALL WIRING IN MECHANICAL, ELECTRICAL OR SERVICE ROOMS EXPOSED, CONCEAL ALL OTHER WIRING.
- 3.9 TESTING, ADJUSTING AND BALANCING (TAB) OF MECHANICAL SYSTEMS
- ENGAGE THE SERVICES OF AN INDEPENDENT TAB AGENCY. TAB MEANS TO TEST, ADJUST AND BALANCE TO PERFORM IN ACCORDANCE WITH REQUIREMENTS OF CONTRACT DOCUMENTS AND TO DO ALL OTHER WORK AS
- SPECIFIED IN THIS SECTION TEST TO VERIFY PROPER AND SAFE OPERATION, DETERMINE ACTUAL POINT OF PERFORMANCE, EVALUATE QUALITATIVE AND QUANTITATIVE PERFORMANCE OF
- EQUIPMENT, SYSTEMS AND CONTROLS AT DESIGN, AVERAGE AND LOW LOADS USING ACTUAL OR SIMULATED LOADS ADJUST AND REGULATE EQUIPMENT AND SYSTEMS SO AS TO MEET SPECIFIED PERFORMANCE REQUIREMENTS AND TO ACHIEVE SPECIFIED INTERACTION WITH ALL OTHER RELATED SYSTEMS UNDER ALL NORMAL AND EMERGENCY LOADS AND OPERATING CONDITIONS.
- BALANCE SYSTEMS AND EQUIPMENT TO REGULATE FLOW RATES TO MATCH LOAD REQUIREMENTS OVER FULL OPERATING RANGES. START TAB ONLY WHEN BUILDING IS ESSENTIALLY COMPLETED. APPLICATION TOLERANCES: HVAC SYSTEMS: PLUS 10%, MINUS 5%. HYDRONIC SYSTEMS: PLUS OR MINUS 10%.
- DEFINITIONS: FOR PURPOSES OF THIS SECTION, TO INCLUDE LOW PRESSURE HOT WATER HEATING.
- STANDARD: TAB TO BE TO MOST STRINGENT OF TAB STANDARDS OF AABC NEBB, SMACNA AND ASHRAE TAB REPORT: FORMAT TO BE IN ACCORDANCE WITH REFERENCE STANDARD AND TO INCLUDE SYSTEM SCHEMATICS.
- SUBMIT 3 COPIES OF TAB REPORT TO CONSULTANT FOR VERIFICATION AND APPROVAL, IN D RING BINDERS, COMPLETE WITH INDEX TABS. PERMANENTLY MARK ALL SETTINGS TO ALLOW RESTORATION AT ANY TIME DURING LIFE OF FACILITY. MARKINGS NOT TO BE ERADICATED OR COVERED IN ANY
- ACCEPTABLE TAB AGENCIES: ATLANTIC INDOOR AIR QUALITY AUDIT CO., BARRINGTON AIR BALANCE SERVICE, GRIFFIN AIR BALANCE, SCOTIA AIR BALANCE LIMITED AND SYSTEM BALANCE LIMITED

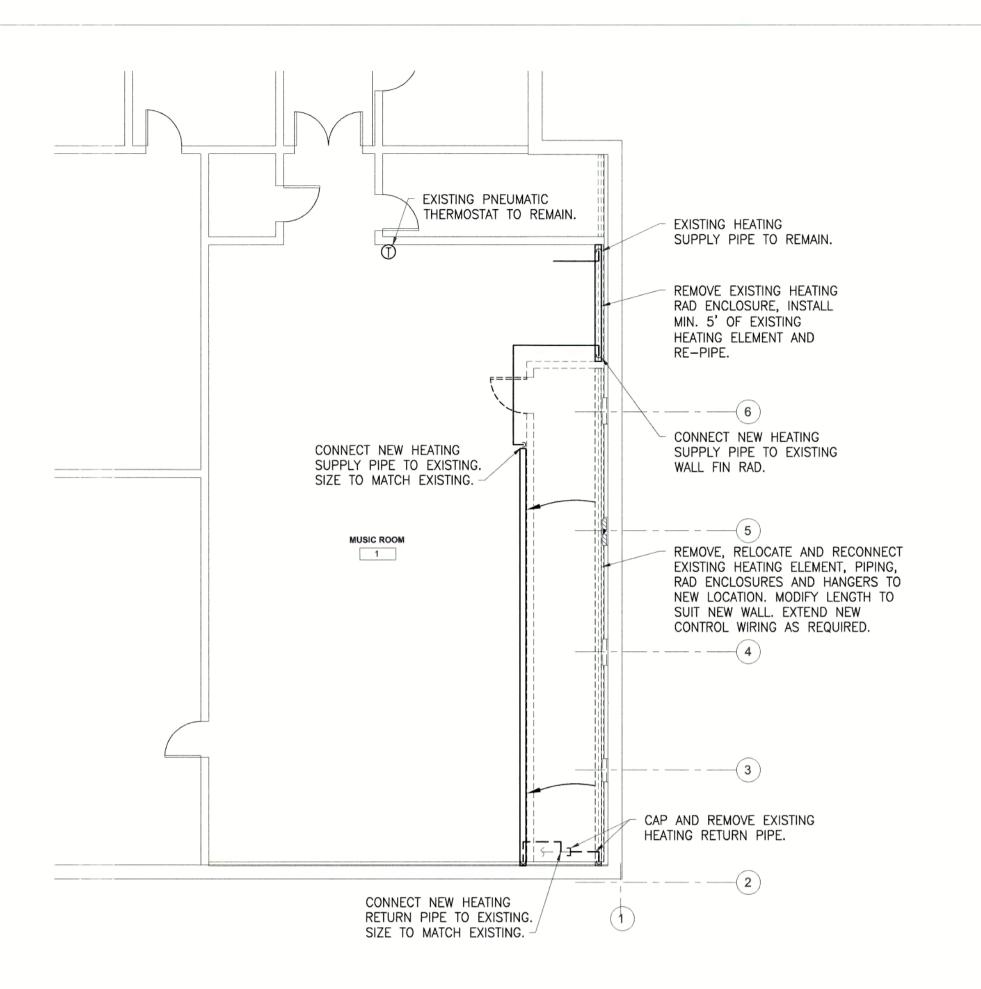


ISSUED FOR TENDER 24.08.27 No. Date Description

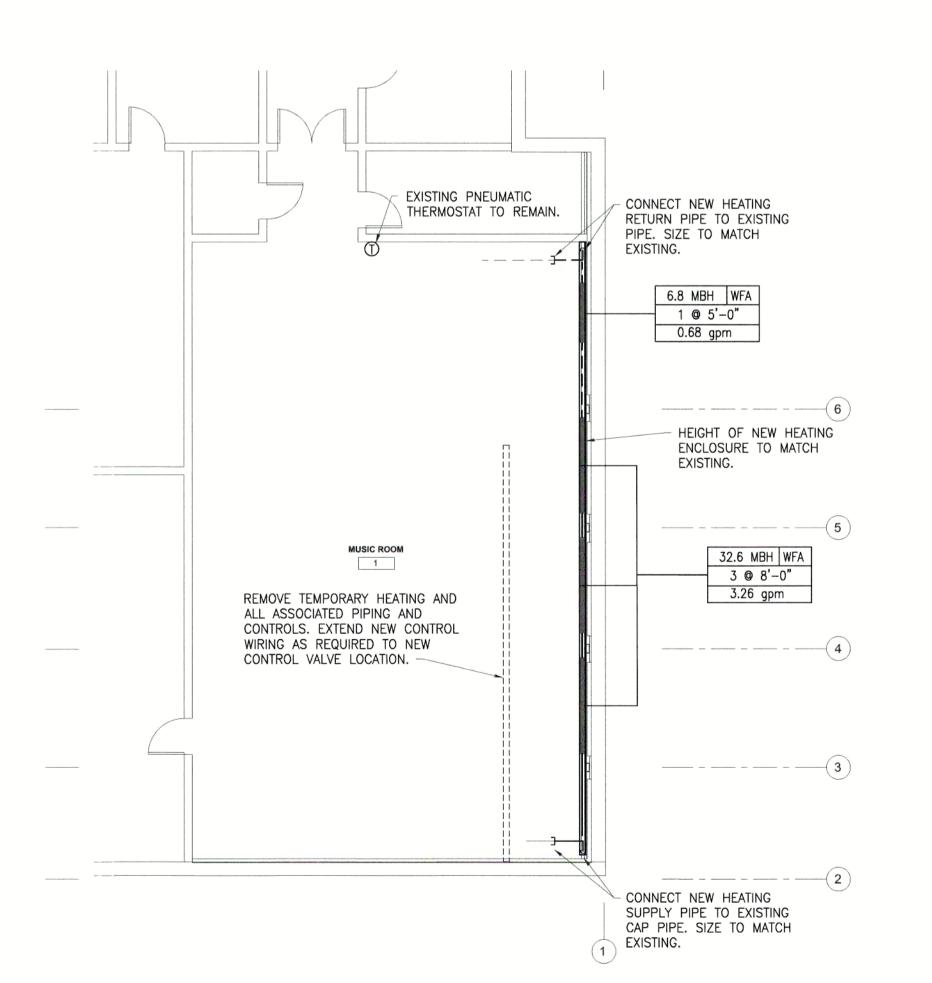


HERRING COVE HERRING COVE. NS

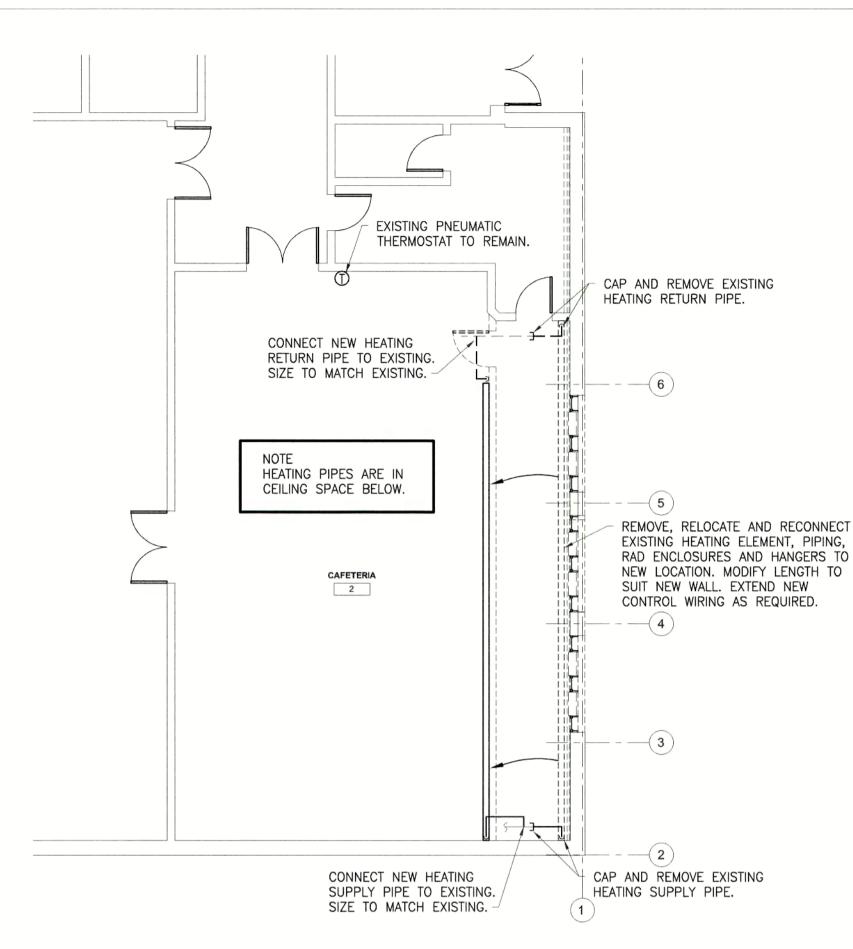
Project Number	
Date	2024.0
Drawn By	STAFF
Checked By	STAFF





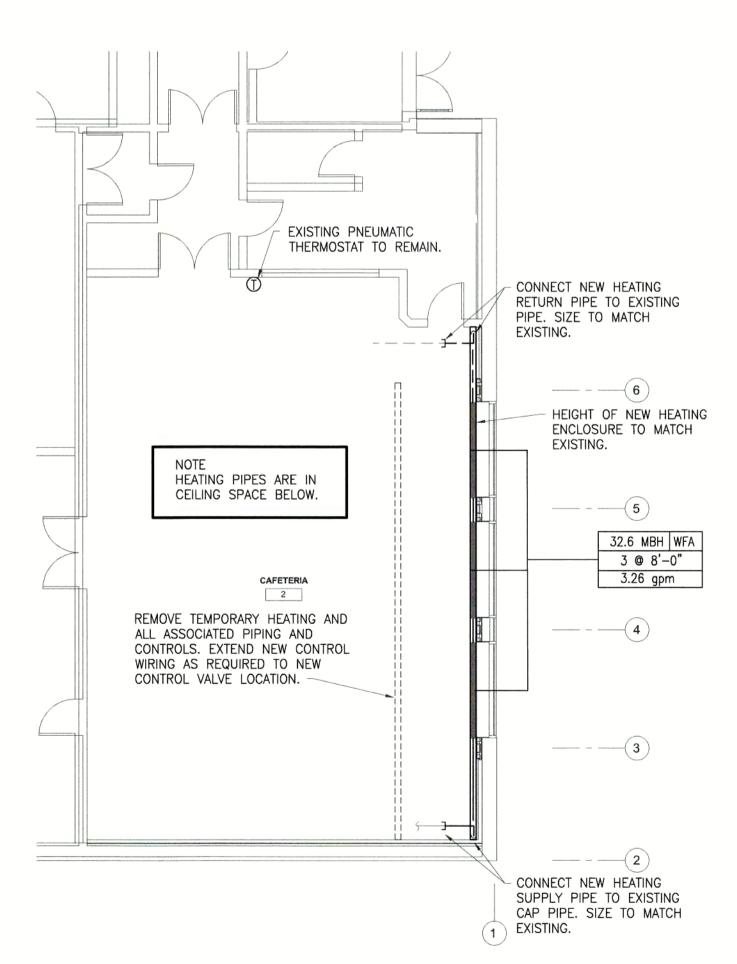






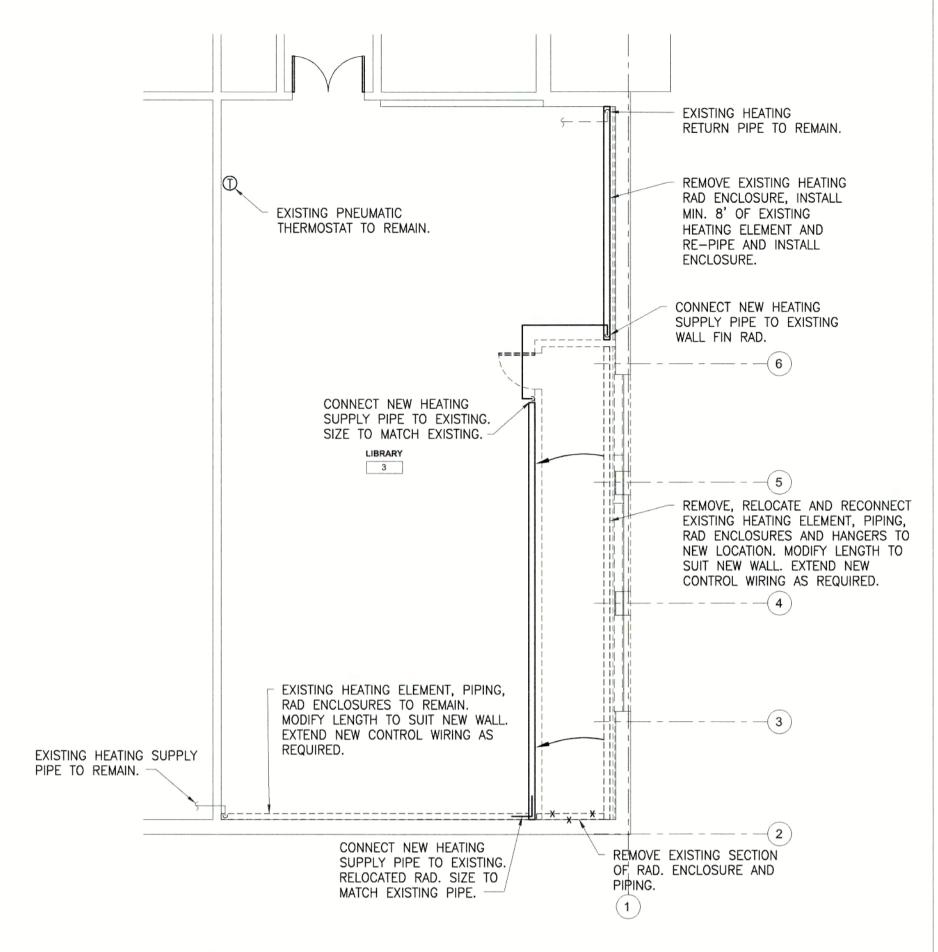
MAIN FLOOR PLAN-HEATING DEMOLITION

SCALE 1/8"=1'-0"



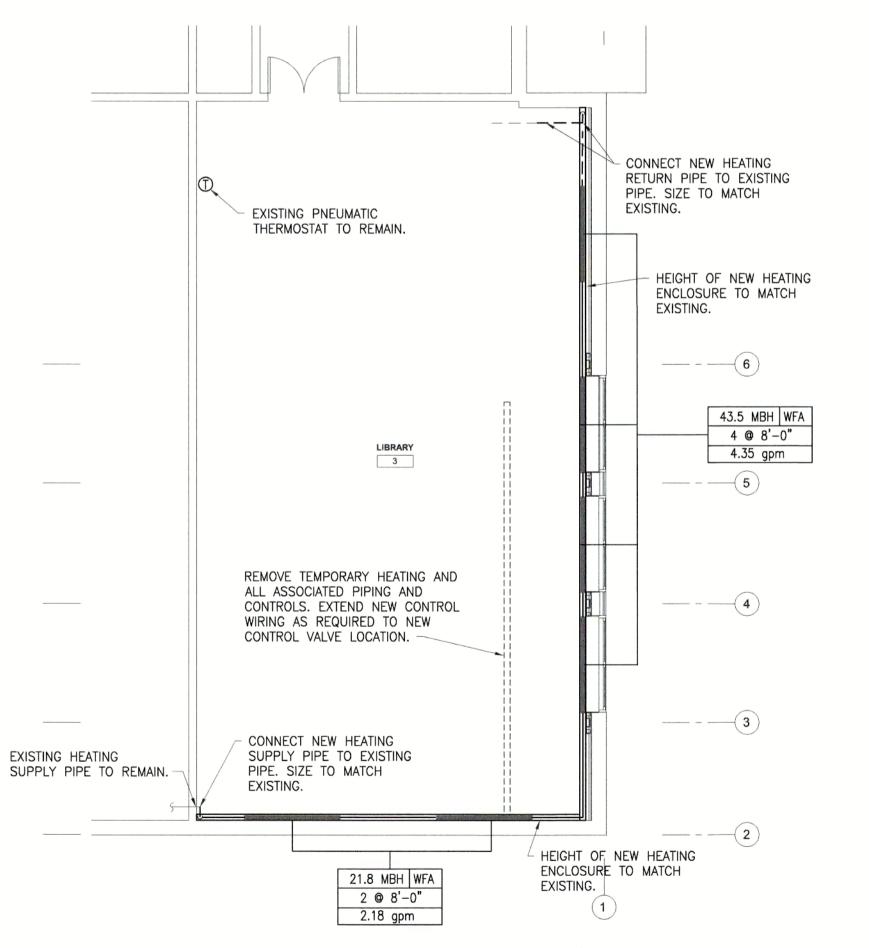
MAIN FLOOR PLAN-HEATING

SCALE 1/8"=1'-0"



UPPER LEVEL FLOOR PLAN-HEATING DEMOLITION

SCALE 1/8"=1'-0"

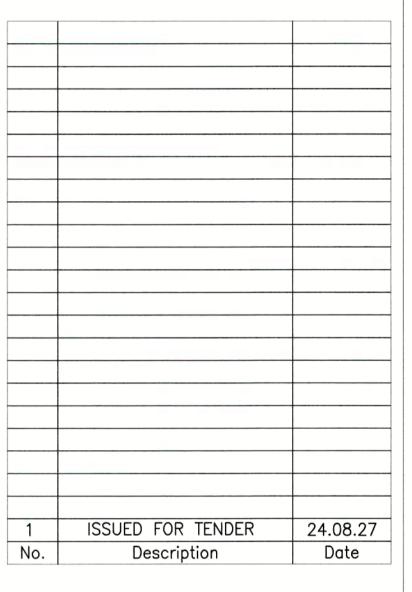






DUMAC ENERGY LTD.

CONSULTING ENGINEERS
752 BEDFORD HIGHWAY
HALIFAX, N.S.





HERRING COVE CURTAIN WALL HERRING COVE, NS

> FLOOR PLAN HEATING

Project Number

Date 2024.08.27

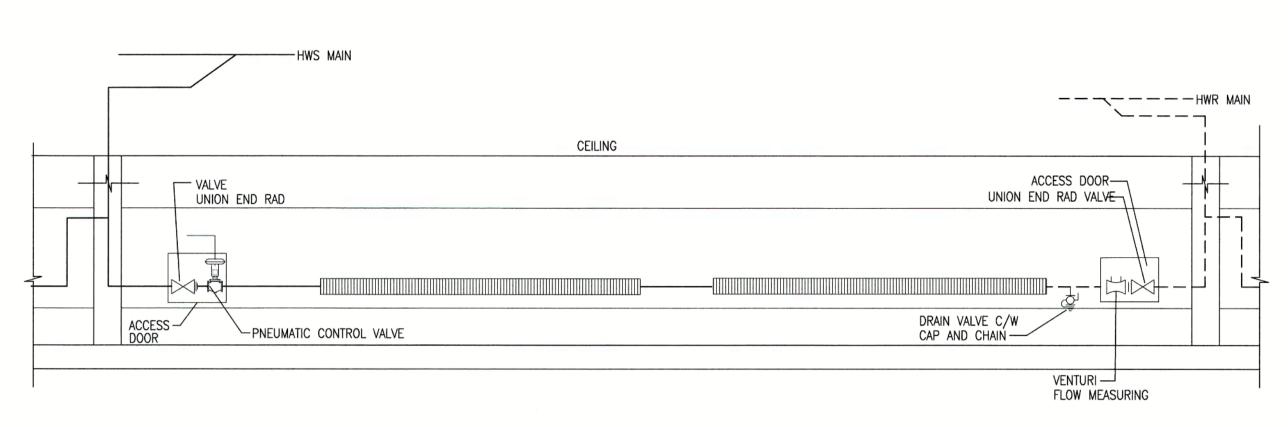
Drawn By STAFF

Checked By STAFF

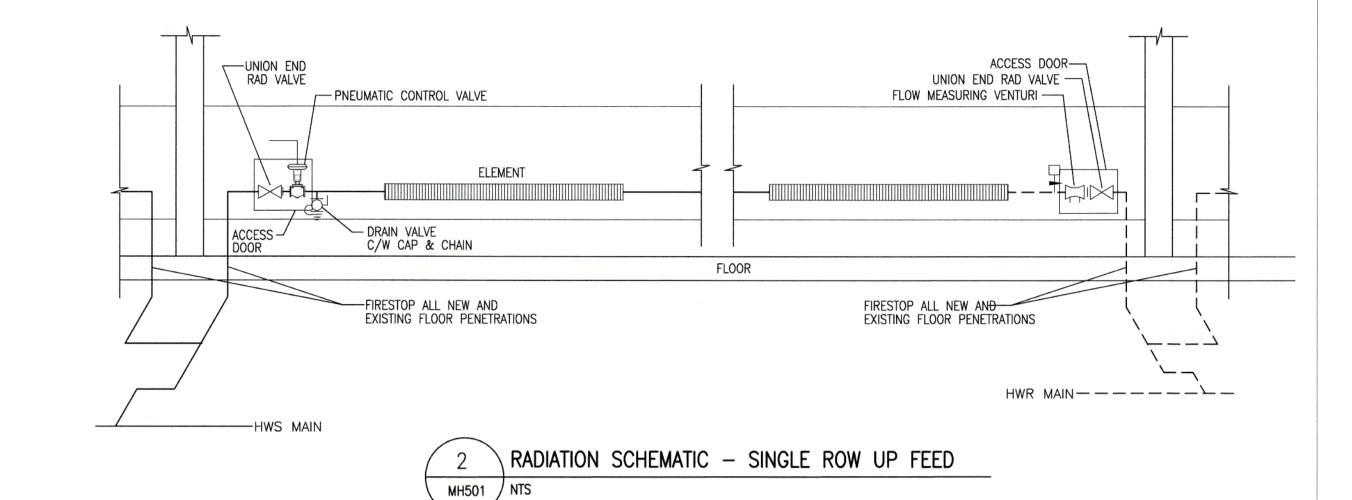
MH101

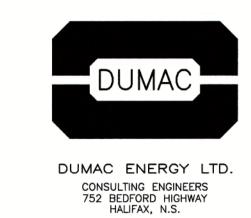
Scale

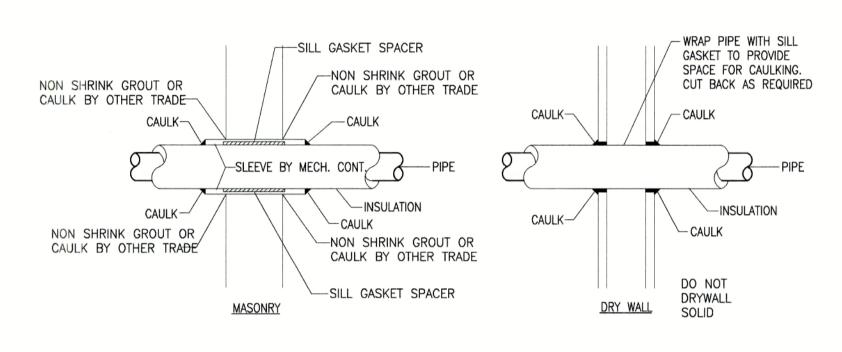
AS NOTED











MECHANICAL LEGEND

EXISTING HOT WATER HEATING SUPPLY PIPE

EX-HWR — EXISTING HOT WATER HEATING RETURN PIPE

HOT WATER HEATING SUPPLY PIPE

HOT WATER HEATING RETURN PIPE

T EXISTING PNEUMATIC THERMOSTAT TO REMAIN

11.6 MBH WFA

2 © 5'-6"

NEW BASEBOARD HEATING CAPACITY

1.16 gpm



HEATI	HEATING SCHEDULE														
STANDARD OF ACCEPTANCE				CAPACITY	FLOWRATE	EAT	EWT AWT	AWT	T LWT			MOTOR			
SYMBOL	MANUFACTURER	MODEL	ARRANGEMENT	ELEMENT	BTU/HR	GPM	• F	*F	*F	•F	I AIREI OW I		HP	VOLTS	ACCESSORIES &/OR REMARKS
WFA	ENG A	WF-1A	3/4"x4"x4"	CU/AL	1360/FT	-	70	180	170	160					1-ROW OF ELEMENTS, SEE FLOOR PLAN FOR ENCLOSURE HEIGHTS.

1	ISSUED FOR TENDER	24.08.27
No.	Description	Date



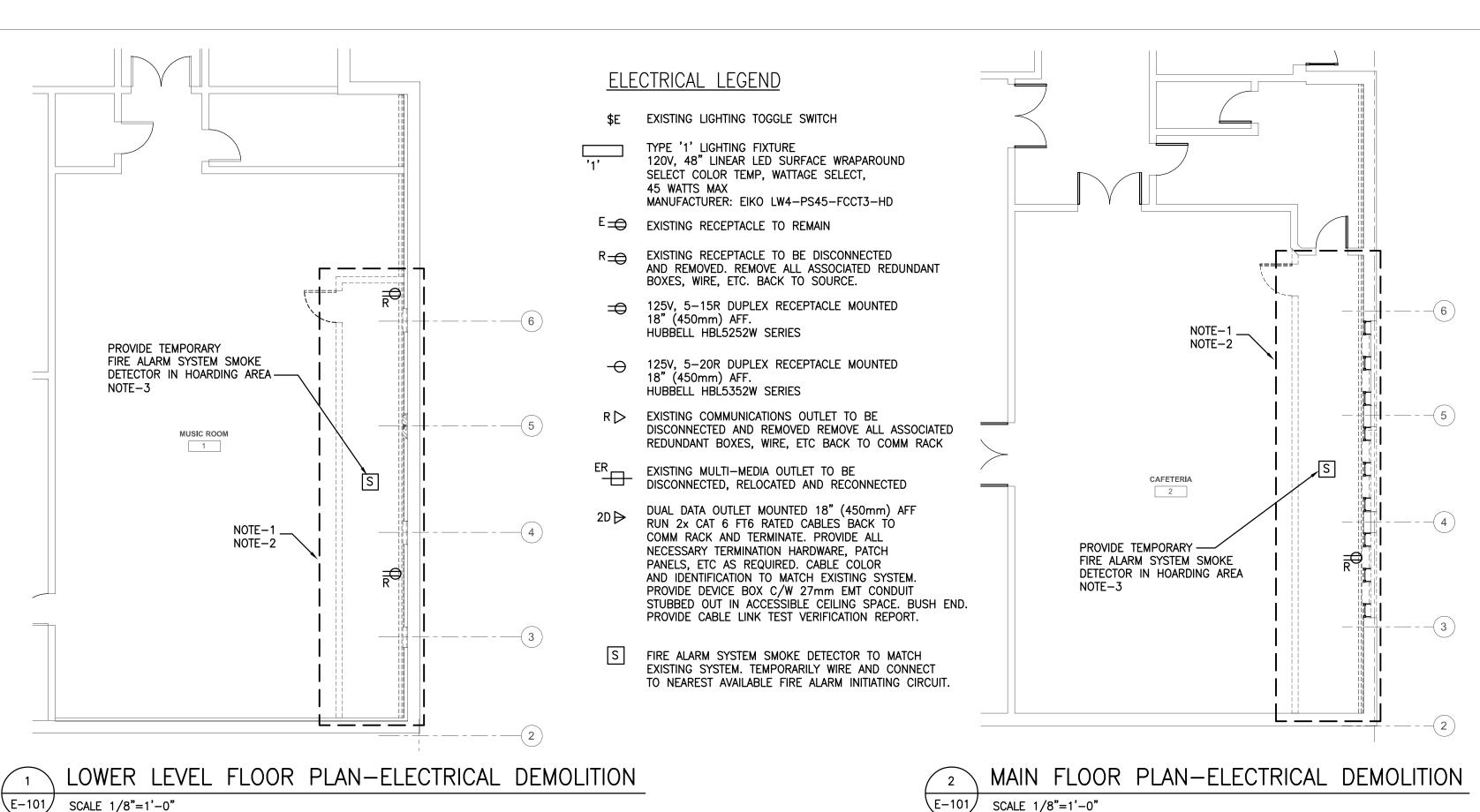
HERRING COVE CURTAIN WALL HERRING COVE, NS

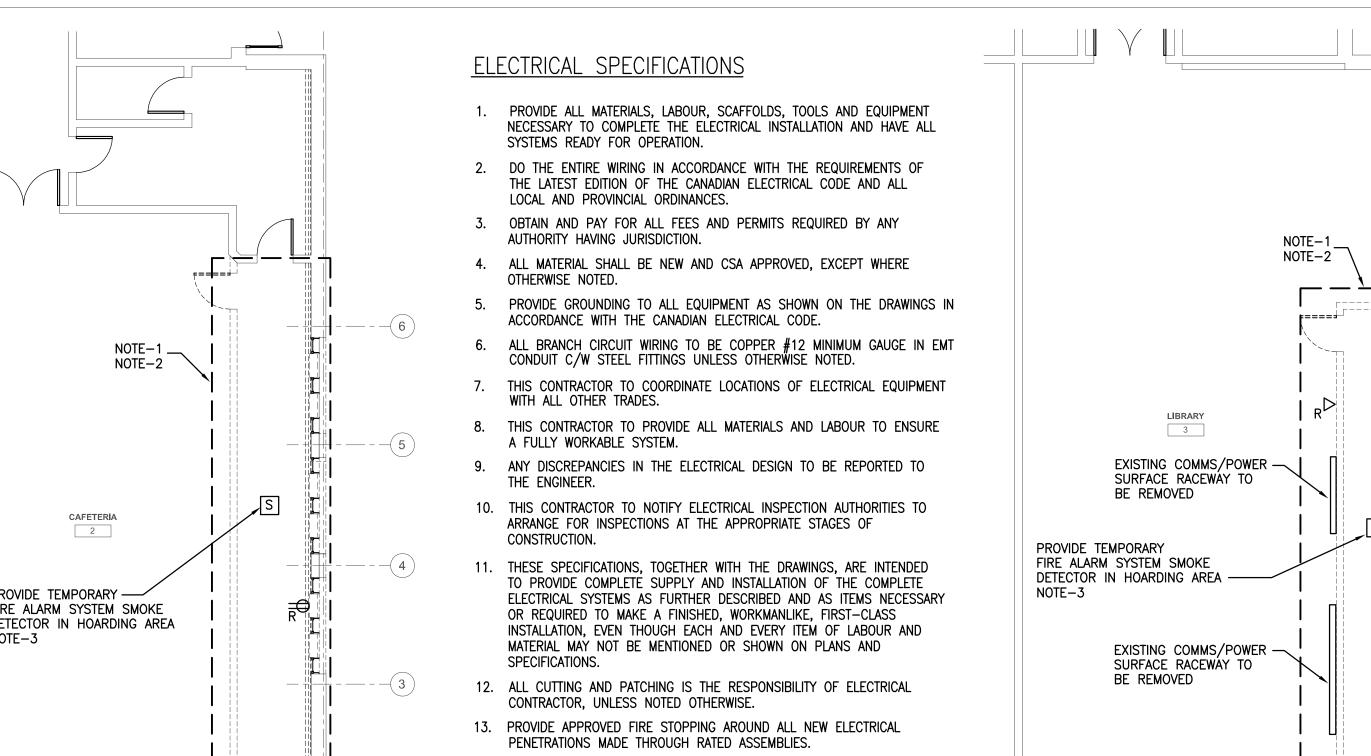
SCHEDULES AND DETAILS HEATING

2024.08.2
STAFF
STAFF

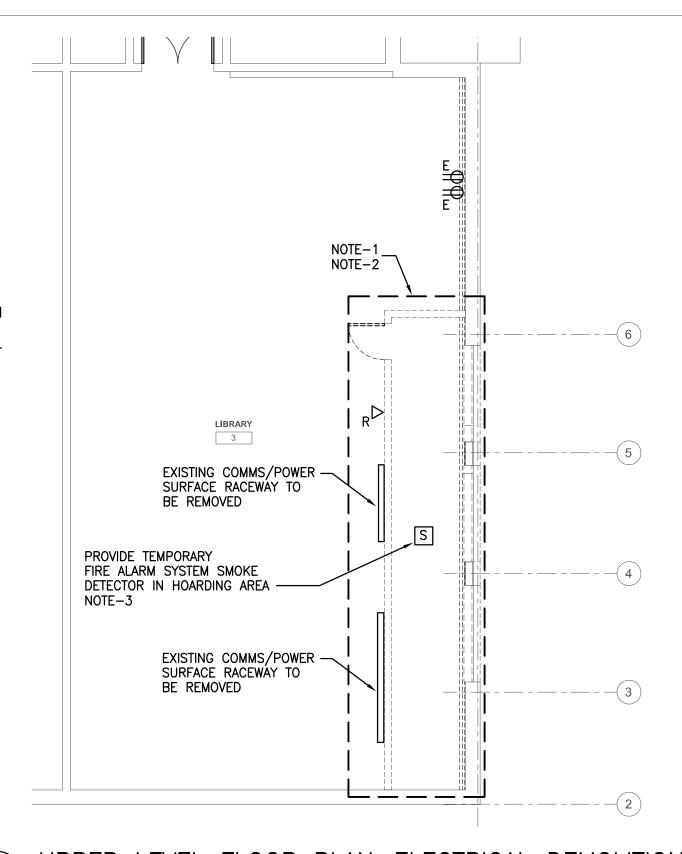
MH501

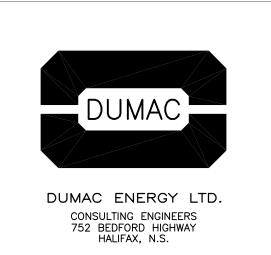
AS NOTED



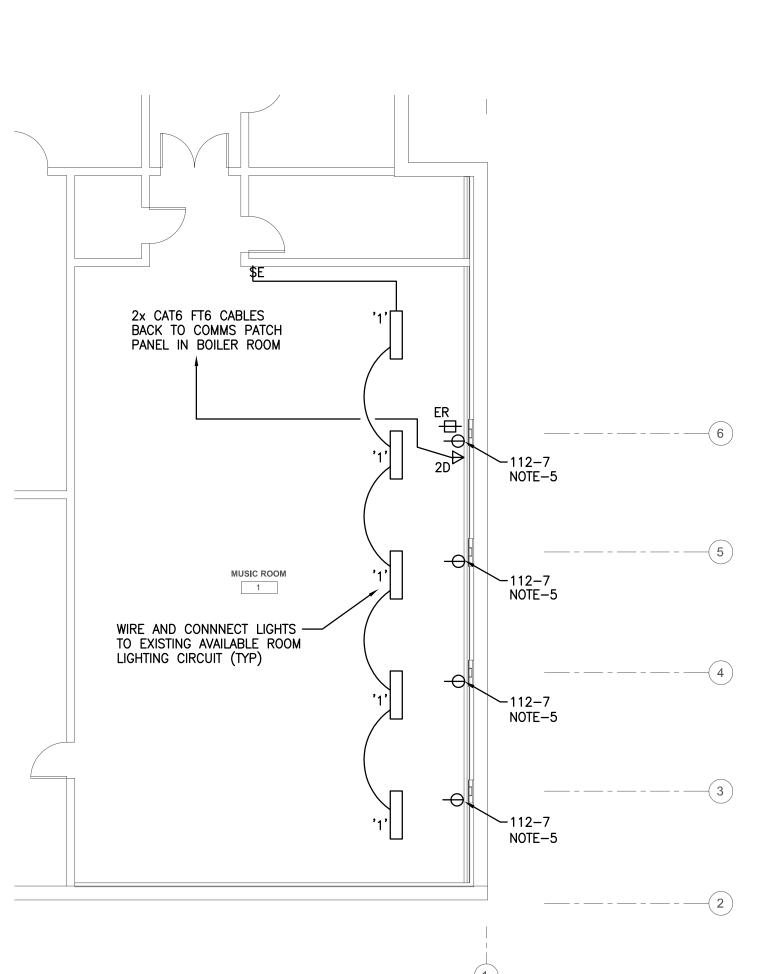


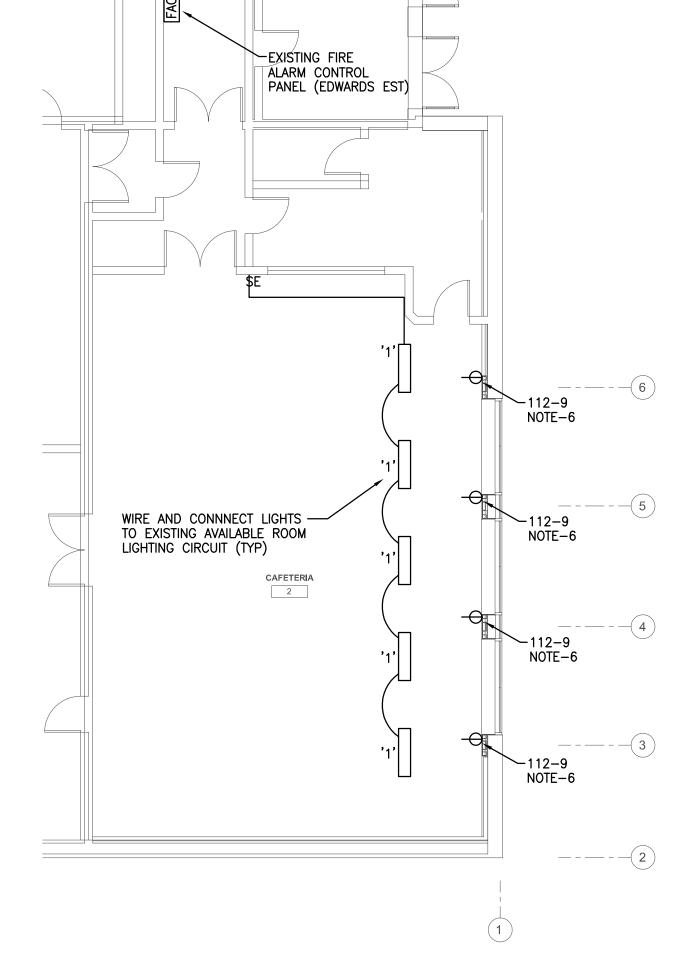
14. PROVIDE LAMICOID IDENTIFICATION FOR ALL DEVICES.

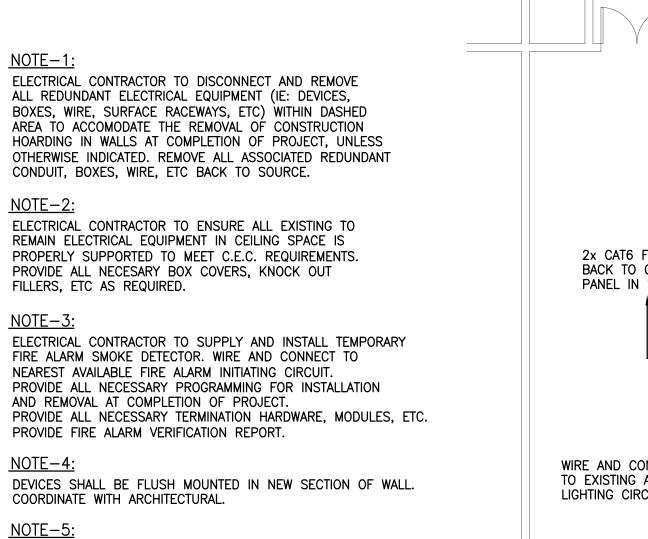


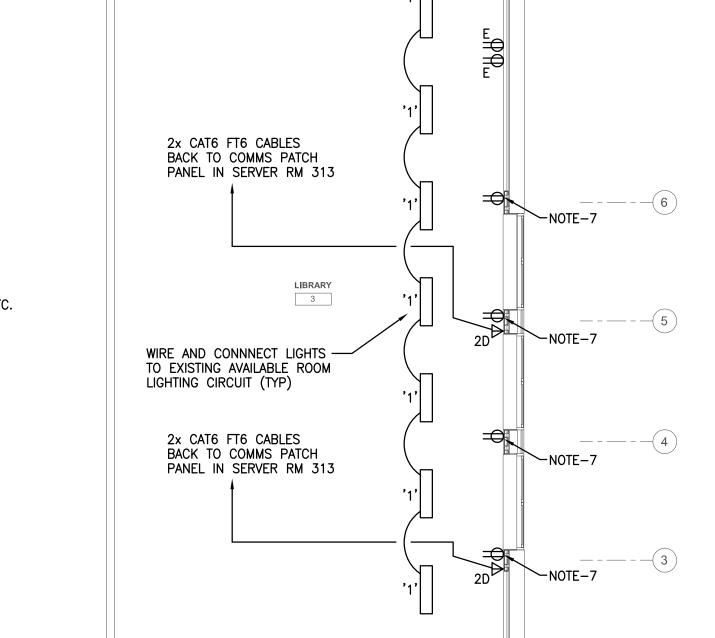


UPPER LEVEL FLOOR PLAN-ELECTRICAL DEMOLITION SCALE 1/8"=1'-0"











ISSUED FOR TENDER

Description

)irsle Pettipos

N.B. PETTIPAS

No.

24.08.27

Date

FLOOR PLANS ELECTRICAL

Project Nu	umber		
Date			2024.08.27
Drawn By			STAFF
Checked E	Зу		STAFF
		4 0 4	

E-101 Scale AS NOTED

MAIN FLOOR PLAN-ELECTRICAL

IN SERVER RM 313. PROVIDE SUITABLE NUMBER OF NEW MINI-BREAKERS TO ACCOMODATE THE INSTALLATION OF NEW CIRCUIT. VERIFY EXISTING EQUIPMENT ON SITE PRIOR TO CLOSE OF TENDER.

WIRE AND CONNECT RECEPTACLE TO NEW 15AMP, 1 POLE BREAKER IN EXISTING WESTINHOUSE LOADCENTRE, LOCATED

WIRE AND CONNECT RECEPTACLE TO NEW 20AMP, 1 POLE

WIRE AND CONNECT RECEPTACLE TO NEW 20AMP, 1 POLE BREAKER IN EXISTING EATON PANEL "112", CIRCUIT #9

LOCATED IN BOILER ROOM. BREAKER TYPE TO MATCH EXISTING.

LOCATED IN BOILER ROOM. BREAKER TYPE TO MATCH EXISTING.

BREAKER IN EXISTING EATON PANEL "112", CIRCUIT #7

UPDATE PANEL DIRECTORY.

UPDATE PANEL DIRECTORY.

E-101/ SCALE 1/8"=1'-0"

LOWER LEVEL FLOOR PLAN-ELECTRICAL \E-101丿 SCALE 1/8"=1'-0"

UPPER LEVEL FLOOR PLAN-ELECTRICAL E-101 SCALE 1/8"=1'-0"