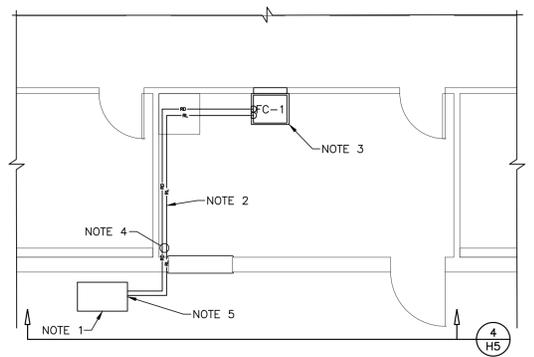


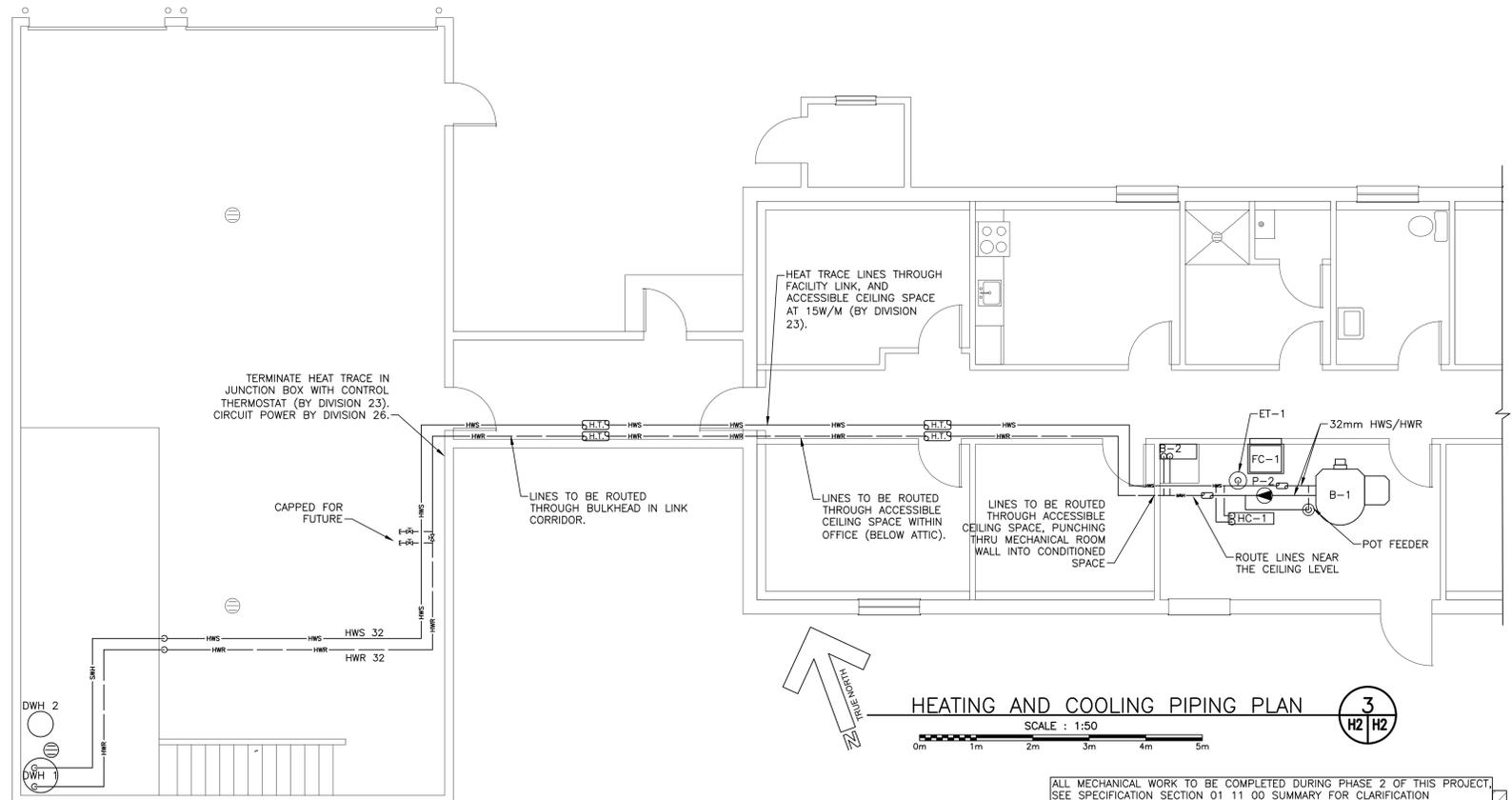
EQUIPMENT AND DUCTING LAYOUT
SCALE : 1:50

- DRAWING NOTES**
- INSTALL A SPLIT SYSTEM HEAT PUMP CENTRAL STATION FANCOIL UNIT WITHIN THE MECHANICAL ROOM AS SHOWN. PROVIDE A NEW RETURN GRILLE OPENING (600 X 500mm), WITHIN THE FURNACE ROOM WALL. RE-STUD AND REINFORCE WALL CAVITY AS NEEDED. PROVIDE REMEDIAL GWB, TAPE, JOINT COMPOUND AND TOUCH UP PAINT TO RESTORE FINISHES. SIZE PER COMMENTS.
 - INSTALL NEW PELLET BOILER, COMPLETE WITH VACUUM PELLETIZED TRANSFER DUCTING TO STORAGE SHED (SEE DWG A6 FOR SHED DETAILS), BREECHING, AND NEW CHIMNEY STACK. CONNECT TO ELECTRIC POWER (SEE DETAIL 2/E2 FOR ADDITIONAL DETAILS).
 - INSTALL NEW ERV IN THE LOCATION SHOWN, ROUTE BRANCH DUCTING TO THIS LOCATION.
 - INSTALL A TIMER CONTROLLER FOR NEW ERV, CONTROL TO START AT 6AM AND STOP AT 6PM.
 - INSTALL A MULTI-STAGE PROGRAMMABLE THERMOSTAT, WITH 2 STAGE HEATING CONTROL. SEE DETAIL 3/H4 FOR WIRING DETAIL.
 - CONFIGURE STAGE 1 HEATING CONTACTS TO START BOILER LOOP PUMP, FAN, AND HEATING DIVERTING VALVE.
 - CONFIGURE STAGE 2 HEATING CONTACTS TO START HEAT PUMP AND UNIT FAN.
 - CONFIGURE COOLING CONTACT TO START HEAT PUMP COOLING.
 - WIRE DEHUMIDIFICATION CONTROLS TO HEAT PUMP COOLING.
 - PULL WIRE FOR FUTURE HUMIDIFIER CAP & LABEL BEHIND THERMOSTAT. PULL TO MECHANICAL ROOM & LEAVE UNTERMINATED IN LABELED SURFACE MOUNTED BOX.
 - INSTALL A VACUUM TRANSFER CONNECTION AND MATERIAL FLAP IN THE STORAGE SHED, COMPATIBLE FOR USE WITH THE VACUUM TRANSFER SYSTEM ON THE BOILER.
 - INSTALL AN ADDITIONAL FLEXIBLE BLANKET INSULATION (WITH FOIL BACKING) ON ALL DUCTWORK WITHIN THE MECHANICAL ROOM, AND THE HATCHED DUCTWORK SHOWN ON THE PLAN.
 - INSTALL A HYDRONIC COIL WITHIN THE DISCHARGE DUCTWORK OF THE FANCOIL UNIT.
 - CONTRACTOR TO CONSTRUCT FILTER HOUSING TO ACCOMMODATE 600 X 500 X 25 MERV 8 CARTRIDGE FILTER. C/W REMOVAL HANDLE WITH EXTRACTION DIRECTION TO WEST SIDE OF UNIT, C/W 1/4 TURN LOCKING MECHANISM. LEAK TIGHTNESS TO SMACNA CLASS C-500ppa.
 - INSTALL LIVE BOTTOM AUGER IN PELLET STORAGE BUILDING. TERMINATE WIRING CONNECTIONS FOR AUGER DRIVE FROM BOILER TO MOTOR (WIRE PULLED BY DIVISION 26).



- DRAWING NOTE**
- INSTALL CONDENSING UNIT ON EXISTING HOUSEKEEPING PAD WITH METAL WEATHER ENCLOSURE.
 - ROUTE REFRIGERANT LINES AND CONTROL WIRING BETWEEN OUTDOOR CONDENSING UNIT AND INDOOR FANCOIL. REUSE EXISTING WALL PENETRATIONS IF POSSIBLE, AND RESEAL.
 - INSTALL FANCOIL UNIT WHERE SPECIFIED, MODIFY CASING PER MANUFACTURERS INSTRUCTIONS FOR SIDE RETURN CONNECTION, AND CONNECT TO WALL RETURN GRILLE AS INDICATED.
 - VACUUM REFRIGERANT LINES, TEST, AND TIGHTEN LEAKS AS LAID OUT WITHIN THE MANUFACTURERS INSTRUCTIONS, AND ADD SUPPLEMENTAL REFRIGERANT AS NEEDED.
 - THE CONTRACTOR SHALL FULLY COMPLY WITH THE SYSTEM INSTALLATION REQUIREMENTS OUTLINED IN THE 'DEPARTMENT OF FISHERIES AND OCEANS HALOCARBON MANAGEMENT PROCEDURE' FOUND IN APPENDIX A OF THE SPECIFICATION DOCUMENT. THE REQUIREMENTS ARE INCLUSIVE OF PROVIDING THE APPROPRIATE REGISTRATION INFORMATION, HALOCARBON INVENTORY, AND THE WORK MUST BE COMPLETED BY A LICENSED TRADESPERSON WHO HOLDS A REFRIGERATION CODE OF PRACTICE CERTIFICATE, AND HAS FORMALLY REVIEWED THE FEDERAL HALOCARBON REGULATION.

REPLACEMENT CONDENSING UNIT INSTALL
SCALE : 1:50



HEATING AND COOLING PIPING PLAN
SCALE : 1:50

ALL MECHANICAL WORK TO BE COMPLETED DURING PHASE 2 OF THIS PROJECT. SEE SPECIFICATION SECTION 01 11 00 SUMMARY FOR CLARIFICATION.

PROVINCE OF NEWFOUNDLAND AND LABRADOR.
PEGA PERMIT HOLDER
This Permit Allows
COLES ASSOCIATES LTD.
To practice Professional Engineering
in Newfoundland and Labrador.
Permit No. as issued by PEGA N.0503
which is valid for the year 2020



1	Issued for Tender	06/18/2020
revisions		date

project **DFO ST. LEWIS BUILDING UPGRADES** project

drawing **MECHANICAL HEATING, COOLING VENTILATION, AND PLUMBING PLANS** dessin

designed S.W.W., P.ENG	conçu
date JUNE, 2020	
drawn R.L.C., P.ENG	dessiné
date JUNE, 2020	
approved D.A.C., P.ENG	approuvé
date JUNE, 2020	
Tender	Soumission

PWOSC Project Manager Administrateur de projets TPSCC
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drawing no. **H2 OF 5** no. du dessin