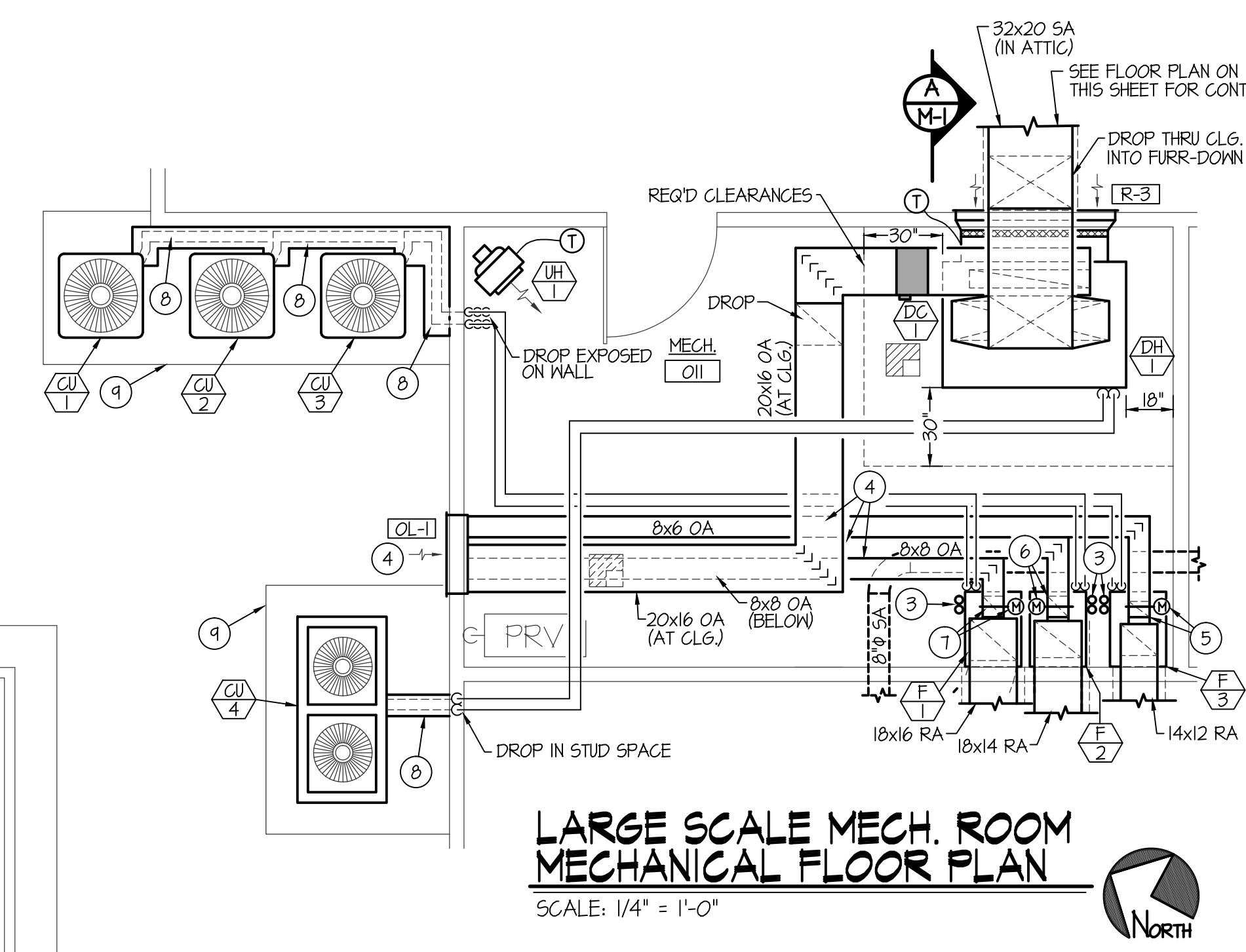


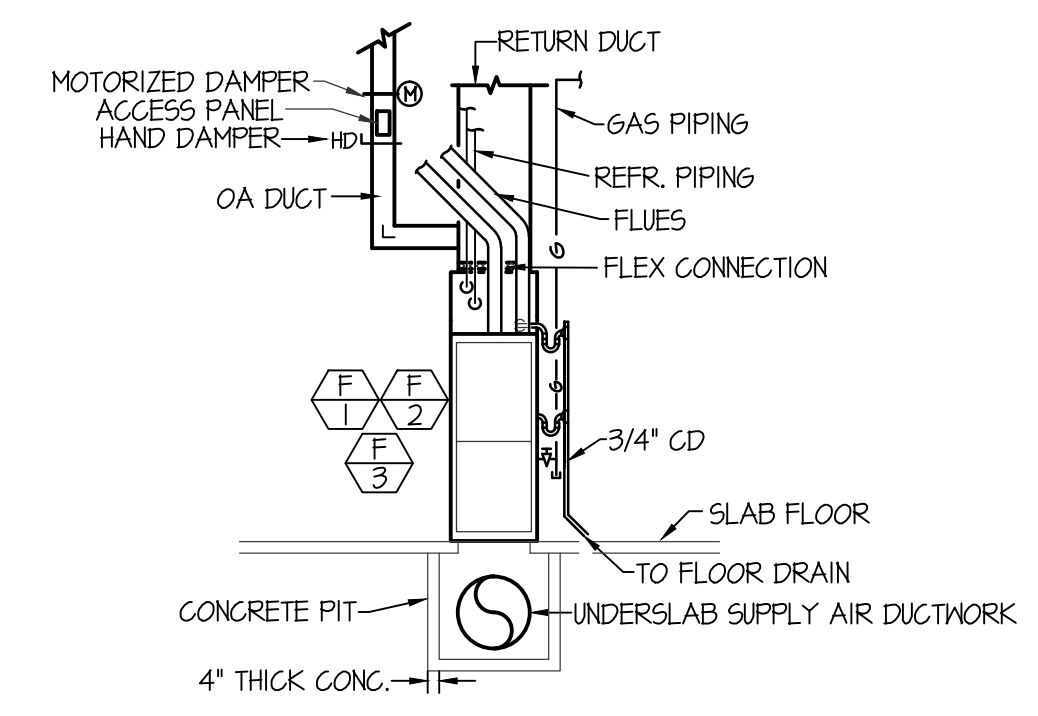
SPECIAL NOTE:
ALL SUPPLY AND RETURN AIR DUCTWORK, DIFFUSERS AND GRILLES SERVING DEHUMIDIFICATION AIR HANDLING UNIT LOCATED IN POOL AREA TO HAVE UN-LINED ALUMINUM DUCTWORK ONLY. NO STEEL DUCT OR ACOUSTICAL LINER ALLOWED.

NOTE:
SEE LARGE SCALE MECH. ROOM PLAN ON THIS SHEET FOR EQUIPMENT AND DUCTWORK LOCATED IN THIS AREA.

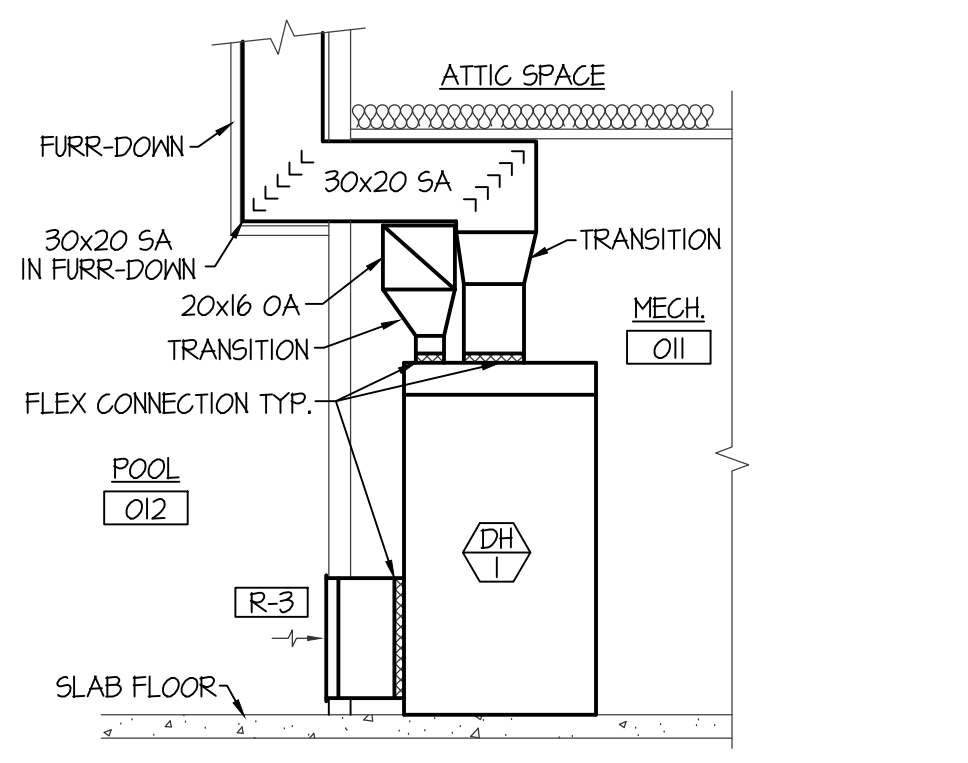
FLOOR PLAN - MECHANICAL
SCALE: 1/8" = 1'-0"



LARGE SCALE MECH. ROOM MECHANICAL FLOOR PLAN
SCALE: 1/4" = 1'-0"



TYPICAL DOWNFLOW FURNACE ELEVATION
NO SCALE



MECH. ROOM SECTION
SCALE: 1/4" = 1'-0"

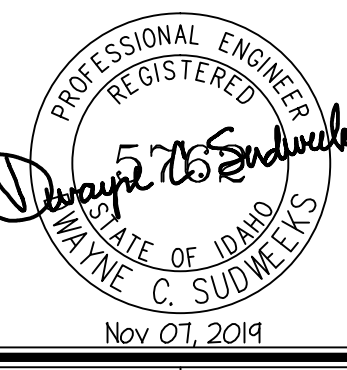
- PLAN NOTES:**
- INSTALL FIRE PLACE FLUE(S) THRU ROOF AS PER MANUFACTURER'S INSTRUCTIONS. SEAL ROOF PENETRATION WEATHERTIGHT.
 - ALL RETURN DUCTWORK LOCATED IN COLD ATTIC TO BE INSULATED WITH 1-1/2" THICK EXTERNAL DUCTWRAP.
 - RISE (2) 3" FURNACE FLUES UP THRU ROOF TO VERTICAL VENT TERMINATION. SEAL ROOF PENETRATION WEATHERTIGHT. SEE DETAIL ON SHEET M-2.
 - INSTALL LOUVER ON MECH. ROOM WALL AS HIGH AS POSSIBLE AND CONNECT (2) 8x8 OA 4 (1) 8x6 OA 1 (1) 18x14 OA DUCTS TO LOUVER. RUN DUCTS AS HIGH AS POSSIBLE AT CEILING OF MECH. ROOM.
 - DROP 8x6 OA DUCT DOWN FROM CEILING AND CONNECT TO RETURN AIR DUCT NEAR FURNACE. INSTALL MOTORIZED DAMPER, ACCESS PANEL AND HAND DAMPER IN VERTICAL PORTION OF 8x6 OA DUCT. BALANCE HAND DAMPER TO 100 CFM AND INTERLOCK MOTORIZED DAMPER WITH FURNACE OPERATION.
 - DROP 8x6 OA DUCT DOWN FROM CEILING AND CONNECT TO RETURN AIR DUCT NEAR FURNACE. INSTALL MOTORIZED DAMPER, ACCESS PANEL AND HAND DAMPER IN VERTICAL PORTION OF 8x6 OA DUCT. BALANCE HAND DAMPER TO 160 CFM AND INTERLOCK MOTORIZED DAMPER WITH FURNACE OPERATION.
 - DROP 8x6 OA DUCT DOWN FROM CEILING AND CONNECT TO RETURN AIR DUCT NEAR FURNACE. INSTALL MOTORIZED DAMPER, ACCESS PANEL AND HAND DAMPER IN VERTICAL PORTION OF 8x6 OA DUCT. BALANCE HAND DAMPER TO 200 CFM AND INTERLOCK MOTORIZED DAMPER WITH FURNACE OPERATION.
 - COVER EXPOSED REFRIGERANT PIPING WITH SHEET METAL COVER. SEE DETAIL ON SHEET M-2 FOR MATERIALS AND CONSTRUCTION.
 - INSTALL CONDENSING UNITS ON 4" THICK CONCRETE PAD (BY GENERAL CONTRACTOR). SEE ARCH. PLANS.
 - INSTALL BOILER FLUES THRU ROOF AS PER MANUFACTURER'S INSTRUCTIONS. SEAL ROOF PENETRATION WEATHERTIGHT. REFER TO POOL EQUIPMENT DWGS. FOR BOILER INFORMATION.
 - INSULATE ALL SUPPLY AIR DUCTWORK LOCATED IN COLD ATTIC WITH 1-1/2" THICK EXTERIOR DUCTWRAP.

MECHANICAL LEGEND	
SYMBOL	DESCRIPTION
Ⓣ	ELECTRONIC THERMOSTAT
Ⓢ	ELECTRONIC SENSOR
Ⓛ	EQUIPMENT SYMBOL
---	UNDERSLAB DUCTWORK
HD	HAND DAMPER
Ⓡ	ROUND BRANCH DUCT WITH HAND DAMPER
Ⓡ	RECTANGULAR SUPPLY AND RETURN AIR DUCT TAKE-OFF
Ⓡ	TURNING VANES
Ⓡ	DUCT TRANSITION
---	INSULATED FLEXIBLE DUCT
Ⓡ	SIDEMALL REGISTER SUPPLY OR RETURN AIR
Ⓡ	RETURN AIR OR EXHAUST GRILLE
Ⓡ	CEILING DIFFUSER
Ⓡ	CEILING MOUNTED EXHAUST FAN



Engineered Systems Associates
Mechanical Engineers
Dwayne Sudweeks
1355 East Center - Pocatello, Idaho 83201
Phone: (208) 233-0501 Fax: (208) 233-0529 email: esa@engsystems.com

SUMMERFIELD CLUBHOUSE
REXBURG, IDAHO
MECHANICAL FLOOR PLAN



DRWN. BY: SR
JOB NO: 18046
SHEET: M-1
OF: THREE
DGS
DATE: NOV. 2014