REFERENCE NOTES

REMOVE EXISTING STEAM UNIT HEATER AND PNEUMATIC CONTROLS above ceiling to be intact.

EXISTING STEAM AND CONDENSATE PIPING ABOVE CEILING TO BE INTACT.

EXISTING STEAM UNIT HEATER AND PNEUMATIC CONTROLS SERVING CABINET UNIT TO BE REPLACE WITH NEW DDC CONTROLS. SEE DRAWING M101B.

EXISTING STEAM AND CONDENSATE PIPING ABOVE CEILING TO BE INTACT.

EXISTING STEAM UNIT HEATER AND PNEUMATIC CONTROLS SERVING CONVECTOR AND HALL TO BE REPLACE WITH NEW HOT WATER UNIT HEATER AND DDC CONTROLS. SEE DRAWING M101B.

EXISTING STEAM UNIT HEATER AND PNEUMATIC CONTROLS SERVING EXHAUST FAN TO BE REPLACE WITH NEW DDC CONTROLS. SEE DRAWING M101B.

EXISTING STEAM UNIT HEATER AND PNEUMATIC CONTROLS SERVING TOILET TO BE REPLACE WITH NEW DDC CONTROLS. SEE DRAWING M101B.

EXISTING STEAM UNIT HEATER AND PNEUMATIC CONTROLS SERVING CABINET UNIT TO BE REPLACE WITH NEW DDC CONTROLS. SEE DRAWING M101B.

EXISTING STEAM UNIT HEATER AND PNEUMATIC CONTROLS SERVING CONVECTOR AND HALL TO BE REPLACE WITH NEW HOT WATER UNIT HEATER AND DDC CONTROLS. SEE DRAWING M101B.

EXISTING STEAM UNIT HEATER AND PNEUMATIC CONTROLS SERVING EXHAUST FAN TO BE REPLACE WITH NEW DDC CONTROLS. SEE DRAWING M101B.

EXISTING STEAM UNIT HEATER AND PNEUMATIC CONTROLS SERVING CABINET UNIT TO BE REPLACE WITH NEW DDC CONTROLS. SEE DRAWING M101B.

EXISTING STEAM UNIT HEATER AND PNEUMATIC CONTROLS SERVING CONVECTOR AND HALL TO BE REPLACE WITH NEW HOT WATER UNIT HEATER AND DDC CONTROLS. SEE DRAWING M101B.

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EXISTING STEAM UNIT HEATER AND PNEUMATIC CONTROLS SERVING CONVECTOR AND HALL TO BE REPLACE WITH NEW HOT WATER UNIT HEATER AND DDC CONTROLS. SEE DRAWING M101B.

EXISTING STEAM UNIT HEATER AND PNEUMATIC CONTROLS SERVING EXHAUST FAN TO BE REPLACE WITH NEW DDC CONTROLS. SEE DRAWING M101B.

EXISTING STEAM UNIT HEATER AND PNEUMATIC CONTROLS SERVING CABINET UNIT TO BE REPLACE WITH NEW DDC CONTROLS. SEE DRAWING M101B.

EXISTING STEAM UNIT HEATER AND PNEUMATIC CONTROLS SERVING CONVECTOR AND HALL TO BE REPLACE WITH NEW HOT WATER UNIT HEATER AND DDC CONTROLS. SEE DRAWING M101B.
1. INSTALL NEW 12" DIA. POLYPROPYLENE BOILER FLUE PER MANUFACTURES INSTRUCTION AND EXTEND TO ROOF. (TYP-2 FLUES). SEE DETAIL 5/M602
2. INSTALL NEW 12" DIA. POLYPROPYLENE COMBUSTION AIR (C.A.) PIPE PER MANUFACTURERS INSTRUCTION AND EXTEND TO ROOF. (TYP-2 C.A. PIPES). SEE DETAIL 7/M602
3. SLOPE BOILER FLUE PIPING BACK TO CONDENSATE RESERVOIR AT BOILER. (TYP FOR EACH BOILER FLUE)
4. RUN BOILER FLUE AND C.A. PIPING HIGH CLOSE TO EXISTING ROOF STRUCTURE. COORDINATE LOCATION OF FLUE AND C.A. PIPING WITH NEW HYDRONIC PIPING, LIGHTING AND MECHANICAL TRADES.
5. EXISTING ROOF OPENINGS TO BE RE-USED FOR NEW FLUE AND C.A. PIPING. REMOVE EXISTING ROOF COVERING AND EXTEND NEW FLUE OR C.A. PIPING UP THROUGH OPENING. PROVIDE NEW GALVANIZED STEEL OR ALUMINUM COVERING SEALED WATERTIGHT OVER REMAINING OPENING.
6. EXISTING WATER HEATER FLUE TO REMAIN INTACT. NO WORK REQUIRED.
REFERENCE NOTES

- Piping to run high close to roof structure. Coordinate location of piping with existing mechanical, plumbing, lighting, and electrical trades. Make offsets in piping as needed to facilitate installation.

- Install new heating hot water coil in existing air handler serving auditorium area. Refurbish air handler as needed to accommodate new coil. Fabricate coil frame as needed for installation.

- Extend new CWS and CWR piping to existing chilled water coil at air handler serving auditorium area. Make all required connections for a complete cooling system.

- Make connection to existing CWS and CWR piping in this location. Verify that existing piping is clean and operational prior to connecting to new chilled water system. Notify owner of any discrepancies.

- Extend new HWS and HWR piping through existing wall. Core drill wall openings and extend piping to air handler.

- For continuation of piping see drawing M101D.

- Extend new CWS and CWR piping to existing chilled water coil at air handler serving art music area. Make all required connections for a complete cooling system.

- Provide 3-way coil control valves with bypass for each cooling coil and heating hot water coil connection. See detail 5/M603.
### Diagrams

**Installation Diagrams**

- Structural Diagram
- Functional Diagram
- Coordination Diagram

**Notes**

- Interferences with other installed equipment
- Boiler room functional is not to be scaled
- Mezzanine room approved smoke and fire devices, wraps and intumescent sealants
- Systems coordinates with existing site conditions
- Interference with existing construction

**Tables**

- Hot Water Unit Heater Schedule
- Cooling Coil Schedule
- Heating Coil Schedule
- Expansion Tank Schedule
- Pump Schedule

- Notes:
  - Horizontal
  - Ceiling/Wall
  - Elbow Down

**Equipment**

- AERCO Benchmark BMK-5000
- B&G E-1531 1.25AD

### Mechanical Equipment Schedule

- Фont size and typeface

**Mechanical Notes**

- The contractor shall coordinate with existing site conditions.
- Interferences with existing construction.
- All mechanical, electrical, and plumbing systems shall be recovered.
- The pump shall be mounted on a concrete base and furnished with a complete factory-operating and control sequence test.
- The unit is to be given a complete factory-operating and control sequence test.

**General**

- The contractor shall furnish a complete factory-operating and control sequence test.
- The unit is to be given a complete factory-operating and control sequence test.
- The unit is to be given a complete factory-operating and control sequence test.
**DIFFUSER SCHEDULE**

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<thead>
<tr>
<th>SYMBOL</th>
<th>TYPE</th>
<th>Make &amp; Model</th>
<th>Note</th>
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**RETURN GRILLE SCHEDULE**

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<th>Make &amp; Model</th>
<th>Note</th>
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**ROOFTOP UNIT SCHEDULE**

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**HEAT EXCHANGER SCHEDULE**

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**REQUIREMENTS INDICATED.**

1. PROVIDE 14 INCH HIGH FACTORY FABRICATED AND INSULATED ROOF CURB. VERIFY LOCATION OF ROOF CURB AND ROOF OPENINGS WITH ENGINEER PRIOR TO INSTALLING. ROOF OPENINGS FOR SUPPLY AND RETURN AIR DUCTWORK TO INSTALL NEW ROOF-TOP UNIT LEVEL AND PLUMB PER MANUFACTURERS INSTRUCTIONS. MAINTAIN MANUFACTURERS RECOMMENDED SERVICE AND OPERATIONAL CLEARANCES AROUND UNIT.

2. PROVIDE 4" HIGH CONCRETE PAD FOR MOUNTING ASME RATED. 150 PSIG DESIGN PRESSURE 230 DEG F MAX WORKING TEMPERATURE.

3. PROVIDE 3" FLANGED NOZZLE CONNECTIONS.

4. PROVIDE BRIGHT WHITE POWDER COAT FINISH.

5. PROVIDE 14 INCH HIGH FACTORY FABRICATED AND INSULATED ROOF CURB. VERIFY LOCATION OF ROOF CURB AND ROOF OPENINGS WITH ENGINEER PRIOR TO INSTALLING. ROOF OPENINGS FOR SUPPLY AND RETURN AIR DUCTWORK TO INSTALL NEW ROOF-TOP UNIT LEVEL AND PLUMB PER MANUFACTURERS INSTRUCTIONS. MAINTAIN MANUFACTURERS RECOMMENDED SERVICE AND OPERATIONAL CLEARANCES AROUND UNIT.

6. PROVIDE 4" HIGH CONCRETE PAD FOR MOUNTING ASME RATED. 150 PSIG DESIGN PRESSURE 230 DEG F MAX WORKING TEMPERATURE.

7. PROVIDE 3" FLANGED NOZZLE CONNECTIONS.

8. PROVIDE BRIGHT WHITE POWDER COAT FINISH.

9. PROVIDE BRIGHT WHITE POWDER COAT FINISH.
M601

MOUND FORT JUNIOR HIGH SCHOOL
HVAC REPLACEMENT PROJECT

PROPOSED CONSTRUCTION FOR OGDEN SCHOOL DISTRICT:

SHUT-OFF VALVE
SECONDARY
DIAMETER > 22"
DIMENSIONS:

NEOPRENE GASKET SEAL
DUCT DIAMETER + 4"
MINIMUM DUCT HEIGHT = BRANCH

TRAP - SAME
R = 1.5A

0 - 35°
2
0 ANGLE
NUMBER

3

45°
2
0 - 35°
NUMBER

3

20 - 60
4

72 - 90°
4

13 - 19
3

10 - 12 1/2
2

3

2

0 - 35°
NUMBER

3

10 - 12 1/2
2

3

2

0 - 35°
NUMBER

3

10 - 12 1/2
2

NOTE: MITERED ELBOW FITTING TO BE USED WHERE INDICATED ON CONTRACT DRAWINGS.

NOTE: IF THERE ARE TWO LATERAL TEES & LATERALS

NOTE: DUCT TAPS WILL NOT BE ALLOWED.

NOTE: MITERED ELBOW FITTING TO BE USED WHERE INDICATED ON CONTRACT DRAWINGS.

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NOTE: MITERED ELBOW FITTING TO BE USED WHERE INDICATED ON CONTRACT DRAWINGS.

NOTE: DUCT TAPS WILL NOT BE ALLOWED.
EXISTING BOILER TO BE REMOVED BY MECHANICAL CONTRACTOR. DISCONNECT POWER AND REMOVE ASSOCIATED CONDUIT AND WIRING BACK TO PANEL.

EXISTING AIR COMPRESSOR TO BE REMOVED BY MECHANICAL CONTRACTOR. DISCONNECT POWER AND REMOVE ASSOCIATED STARTER, CONDUIT AND WIRING BACK TO PANEL.

EXISTING AIR DRYER TO BE REMOVED BY MECHANICAL CONTRACTOR. DISCONNECT POWER.

EXISTING UNIT HEATER TO BE REPLACED BY MECHANICAL CONTRACTOR. DISCONNECT POWER AND SEE ELECTRICAL PLAN SHEET EE102 FOR NEW REQUIREMENTS.

EXISTING FAN MOTOR TO BE REPLACED BY MECHANICAL CONTRACTOR. DISCONNECT POWER AND SEE ELECTRICAL PLAN SHEET EE102 FOR NEW REQUIREMENTS.

EXISTING BOILER FEED PUMP TO BE REMOVED BY MECHANICAL CONTRACTOR. DISCONNECT POWER AND REMOVE ASSOCIATED STARTER, CONDUIT AND WIRING BACK TO PANEL.

EXISTING PNEUMATIC CONTROL PANEL TO BE REPLACED BY MECHANICAL CONTRACTOR. DISCONNECT POWER AND SEE ELECTRICAL PLAN SHEET EE102 FOR NEW REQUIREMENTS.

EXISTING RETURN FAN MOTOR TO BE REPLACED BY MECHANICAL CONTRACTOR. DISCONNECT POWER AND SEE ELECTRICAL PLAN SHEET EE103 FOR NEW REQUIREMENTS.

EXISTING FAN MOTOR TO BE REPLACED BY MECHANICAL CONTRACTOR. DISCONNECT POWER AND SEE ELECTRICAL PLAN SHEET EE103 FOR NEW REQUIREMENTS.

EXISTING PNEUMATIC CONTROL PANEL TO BE REPLACED BY MECHANICAL CONTRACTOR. DISCONNECT POWER AND SEE ELECTRICAL PLAN SHEET EE103 FOR NEW REQUIREMENTS.

EXISTING HEATING WATER PUMP TO BE REMOVED BY MECHANICAL CONTRACTOR. DISCONNECT POWER AND REMOVE ASSOCIATED STARTER, CONDUIT AND WIRING BACK TO PANEL.
NEW UNIT HEATER AT EXISTING LOCATION. RECONNECT EXISTING POWER.

NEW FAN MOTOR AT EXISTING LOCATION. RECONNECT EXISTING POWER.

NEW DDC ATC PANEL AT EXISTING CONTROL PANEL LOCATION. RECONNECT EXISTING POWER.

EXISTING ROCKY MOUNTAIN POWER TRANSFORMER.

EXISTING ROCKY MOUNTAIN METER FOR SCHOOL SERVICE.

NEW CT CABINET. SEE ONE-LINE DIAGRAM SHEET EX401 FOR ADDITIONAL REQUIREMENTS.

NEW METER BASE. SEE ONE-LINE DIAGRAM SHEET EX401 FOR ADDITIONAL REQUIREMENTS.

NEW FUSED DISCONNECT FOR SERVICE DISCONNECT. SEE ONE-LINE DIAGRAM SHEET EX401 FOR ADDITIONAL REQUIREMENTS.

PROVIDE (1) 4" CONDUIT FOR CONDUCTORS BY ROCKY MOUNTAIN POWER.

SERVICE TO CHILLER. SEE ONE-LINE DIAGRAM SHEET EX401 FOR ADDITIONAL REQUIREMENTS.
NEW FAN MOTOR AT EXISTING LOCATION. RECONNECT EXISTING POWER.

NEW RETURN FAN MOTOR AT EXISTING LOCATION. RECONNECT EXISTING POWER.

NEW ATC PANEL BY MECHANICAL CONTRACTOR. EXTEND EXISTING 120 VOLT CIRCUIT FROM EXISTING LOCATION TO NEW LOCATION.

NEW ATC PANEL BY MECHANICAL CONTRACTOR. RECONNECT EXISTING POWER.