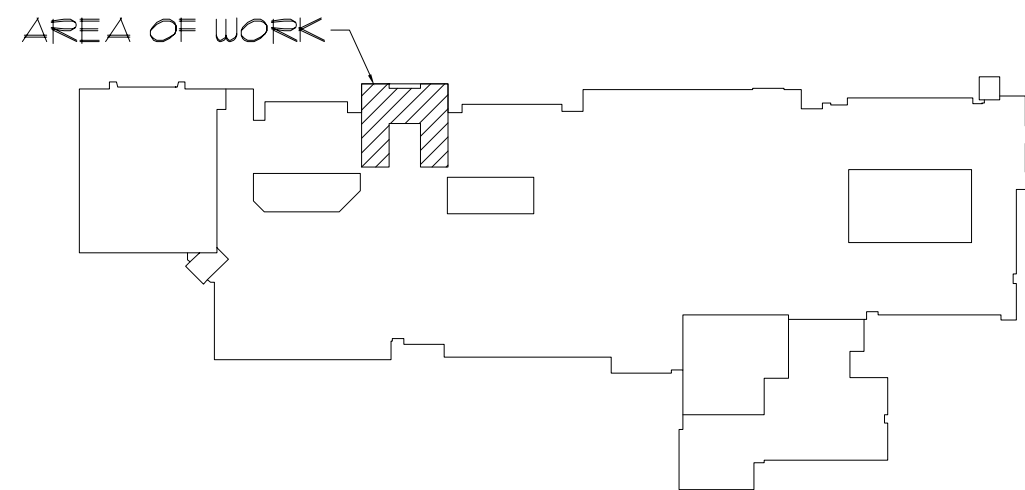
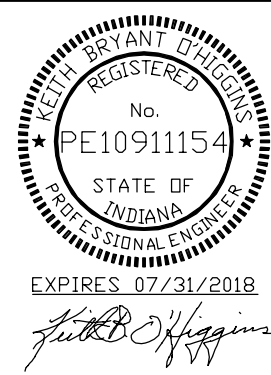


1 PARTIAL SECOND FLOOR PLAN - MECHANICAL  
1/8" = 1'-0"



KEY PLAN  
NOT TO SCALE



M1.20

## MECHANICAL (HVAC) NEW WORK NOTES

### I. DRAWINGS

- 1 PROVIDE NEW THERMOSTAT/SENSOR CUT/PATCH WALL. SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION. PROVIDE KEYED GUARD IN UNSUPERVISED AREAS.
- 2 PROVIDE NEW CUSTOM PAINTED FINNED TUBE RADIATION COVER. COVER TO MATCH EXISTING. FIELD VERIFY COVER SIZE, TYPE, LENGTH, ETC. COLOR SELECTED BY ARCHITECT/OWNER.
- 3 MODIFY EXISTING FINNED TUBE RADIATION PIPING/FINS TO ACCOMMODATE NEW WALL(S).
- 4 MODIFY EXISTING FINNED TUBE RADIATION PIPING/FINS TO ACCOMMODATE NEW WALL(S) AND CONDENSATE DRAIN.
- 5 EXISTING FINNED TUBE RADIATION.
- 6 EXISTING HOT WATER SUPPLY/RETURN PIPING.
- 7 NEW HOT WATER SUPPLY/RETURN PIPING. PROVIDE NEW CONNECTION TO EXISTING PIPING. FIELD VERIFY PIPE SIZE.
- 8 EXISTING HOT WATER CONTROL VALVE(S). SEE SEQUENCE OF OPERATION.
- 9 PROVIDE NEW INLINE PUMP. PUMP TO BE SAME SIZE (GPM/HEAD) FIELD VERIFY. SEE DETAILS AND SPECIFICATIONS FOR PIPING REQUIREMENTS. SEE SEQUENCE OF OPERATION.
- 10 CAP AND RE-INSULATE EXISTING HOT WATER SUPPLY/RETURN MAINS AT LOCATION OF REMOVED PIPING.
- 11 INSULATE EXISTING PIPING AFTER REMOVAL OF EXISTING FIN TUBE COVER AND FIN BEHIND NEW LIFT.
- 12 PROVIDE NEW SUPPLY/RETURN/EXHAUST AIR GRILLE/REGISTER. BALANCE TO CFM SHOWN ON DRAWINGS. GRILLE/REGISTER TO BE SAME TYPE/STYLE/SIZE. FIELD VERIFY.
- 13 EXISTING EXHAUST GRILLE.
- 14 EXISTING EXHAUST DUCTWORK.
- 15 REMOVE/RELOCATE/REROUTE EXHAUST DUCTWORK AS REQUIRED TO INSTALL NEW FAN COILS. FIELD VERIFY DUCTWORK SIZE AND ROUTING.
- 16 EXISTING HOT WATER SUSPENDED UNIT HEATER.
- 17 REWORK EXISTING OUTDOOR AIR DUCTWORK. EXTEND TO OUTDOOR AIR DUCTWORK (INLET SIZE) TO OUTDOOR AIR VRF UNIT. PROVIDE MOTORIZED OUTDOOR AIR DAMPER. INSULATED NEW AND EXISTING DUCTWORK PER THE SPECIFICATIONS. SEE SEQUENCE OF OPERATION FOR ADDITIONAL REQUIREMENTS.
- 18 PROVIDE INSULATED 1-1/2" CONDENSATE PIPE DROP IN WALL. ROUTE PIPE TO BUILDING EXTERIOR WITH 45 DEG. ELBOW.
- 19 CAP EXISTING CHILLED WATER SUPPLY/RETURN BELOW FLOOR.
- 20 EXISTING SUPPLY/RETURN AIR DUCTWORK.
- 21 PROVIDE NEW CONNECTION TO EXISTING DUCTWORK. FIELD VERIFY SIZE/LOCATION.
- 22 PROVIDE 1" INSULATED CONDENSATE PIPE FROM VRF UNIT. RISE CONDENSATE AS HIGH AS POSSIBLE AND RUN PIPING IN JOIST SPACE/WEB. PROVIDE INSULATED REF. PIPING TO/FROM VRF UNIT AND BRANCH CONTROL BOX AND/OR CONDENSING UNIT. PROVIDE ISOLATION VALVES AT EACH UNIT. SIZE PIPING PER MANUFACTURERS RECOMMENDATIONS. SEE DETAILS AND SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS. FIELD VERIFY PIPE ROUTING. HANG UNITS FROM EXISTING STRUCTURE PER MANUFACTURERS RECOMMENDATIONS.
- 23 PROVIDE FULL SIZE OPEN END DUCT WITH BIRD SCREEN PM EXISTING RETURN DUCTWORK. FIELD VERIFY SIZE/LOCATION.
- 24 PROVIDE FULL SIZE OPEN END DUCT WITH BIRD SCREEN ON VRF UNIT INLET. FIELD VERIFY SIZE.
- 25 CUT/PATCH EXISTING WALL TO INSTALL ELECTRIC WALL HEATER.
- 26 REFRIGERANT PIPING TO/FROM ABOVE/BELOW. ROUTE PIPING THROUGH EXISTING ABANDONED FLOOR DUCTWORK OPENINGS. OFFSET PIPING AS REQUIRED. SEAL PIPING AT EXISTING FLOOR. FIELD VERIFY ROUTING.
- 27 REFRIGERANT PIPING TO/FROM ABOVE/BELOW. CORE THROUGH EXISTING FLOOR. SEAL PIPING AT EXISTING FLOOR. FIELD VERIFY ROUTING.
- 28 SUPPLY AIR DUCTWORK FROM ABOVE. ROUTE DUCTWORK THROUGH EXISTING ABANDONED FLOOR DUCTWORK OPENINGS. OFFSET DUCTWORK AS REQUIRED. SEAL DUCTWORK AT EXISTING FLOOR. FIELD VERIFY ROUTING.
- 29 SUPPLY AIR DUCTWORK FROM ABOVE. CORE THROUGH EXISTING FLOOR. SEAL DUCTWORK AT EXISTING FLOOR. FIELD VERIFY ROUTING.
- 30 INSULATED REF. PIPING TO/FROM VRF UNITS NO. 9, 10, 11 AND 12 AND BRANCH CONTROL BOX NO. 1. SIZE PIPING PER MANUFACTURERS RECOMMENDATIONS. SEE DETAILS AND SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS. FIELD VERIFY PIPE ROUTING.
- 31 INSULATED REF. PIPING TO/FROM VRF UNITS NO. 1, 2, 3, 4, 5, 6, 7, 8, 24 AND 25 AND BRANCH CONTROL BOX NO. 4. SIZE PIPING PER MANUFACTURERS RECOMMENDATIONS. SEE DETAILS AND SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS. FIELD VERIFY PIPE ROUTING.
- 32 INSULATED REF. PIPING TO/FROM VRF UNITS NO. 20, 21, 22 AND 23 AND BRANCH CONTROL BOX NO. 2. SIZE PIPING PER MANUFACTURERS RECOMMENDATIONS. SEE DETAILS AND SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS. FIELD VERIFY PIPE ROUTING.
- 33 INSULATED REF. PIPING TO/FROM VRF UNITS NO. 13, 14, 15, 16, 17, 18 AND 19 AND BRANCH CONTROL BOX NO. 3. SIZE PIPING PER MANUFACTURERS RECOMMENDATIONS. SEE DETAILS AND SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS. FIELD VERIFY PIPE ROUTING.
- 34 INSULATED REF. PIPING TO/FROM BRANCH CONTROL BOXES AND CONDENSING UNIT(S). SIZE PIPING PER MANUFACTURERS RECOMMENDATIONS. PROVIDE ALUMINUM JACKET AND COATING ON EXTERIOR PIPING. PROVIDE ROOF PIPE SUPPORTS MAX. 3'-0" O.C. SEAL WALL PIPE PENETRATIONS AIR/WATER TIGHT. SEE DETAILS AND SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS. FIELD VERIFY ROUTING.
- 35 MOUNT CONDENSING UNIT ON 18" HIGH PLATFORM CURB WITH STAND AND ISOLATORS PER MANUFACTURERS RECOMMENDATIONS. SEE DETAILS.
- 36 PROVIDE FULL SIZE DRAIN WITH TRAP FROM CONDENSING UNIT TO NEAREST ROOF DRAIN. FIELD VERIFY ROUTING.
- 37 EXTEND INSULATED DRAIN PIPE FULL SIZE TO NEAREST FLOOR DRAIN. DROP PIPE ON WALL AND EXTEND TO FLOOR DRAIN. SECURE PIPE TO WALL/FLOOR.
- 38 ROUTE INSULATED REF. PIPING TO/FROM VRF-24 AND BS-4 IN NEW CUSTOM PAINTED PIPE ENCLOSURE AT FLOOR. RISE/DROP REFRIGERANT PIPING IN CORNER OF EACH MECHANICAL ROOM. SIZE PIPING PER MANUFACTURERS RECOMMENDATIONS. FIELD VERIFY ROUTING.

DUNELAND SCHOOL CORPORATION  
2018 MAIN OFFICE RENOVATIONS AT:  
CHESTERTON MIDDLE SCHOOL (CMS)  
651 W. MORGAN AVENUE, CHESTERTON, INDIANA 46304

PROJECT NUMBER: 139-003  
PROJECT MANAGER: MGA  
DRAWN BY: OAS

ISSUED FOR BID: 03/28/2018  
PARTIAL SECOND FLOOR PLAN -  
MECHANICAL