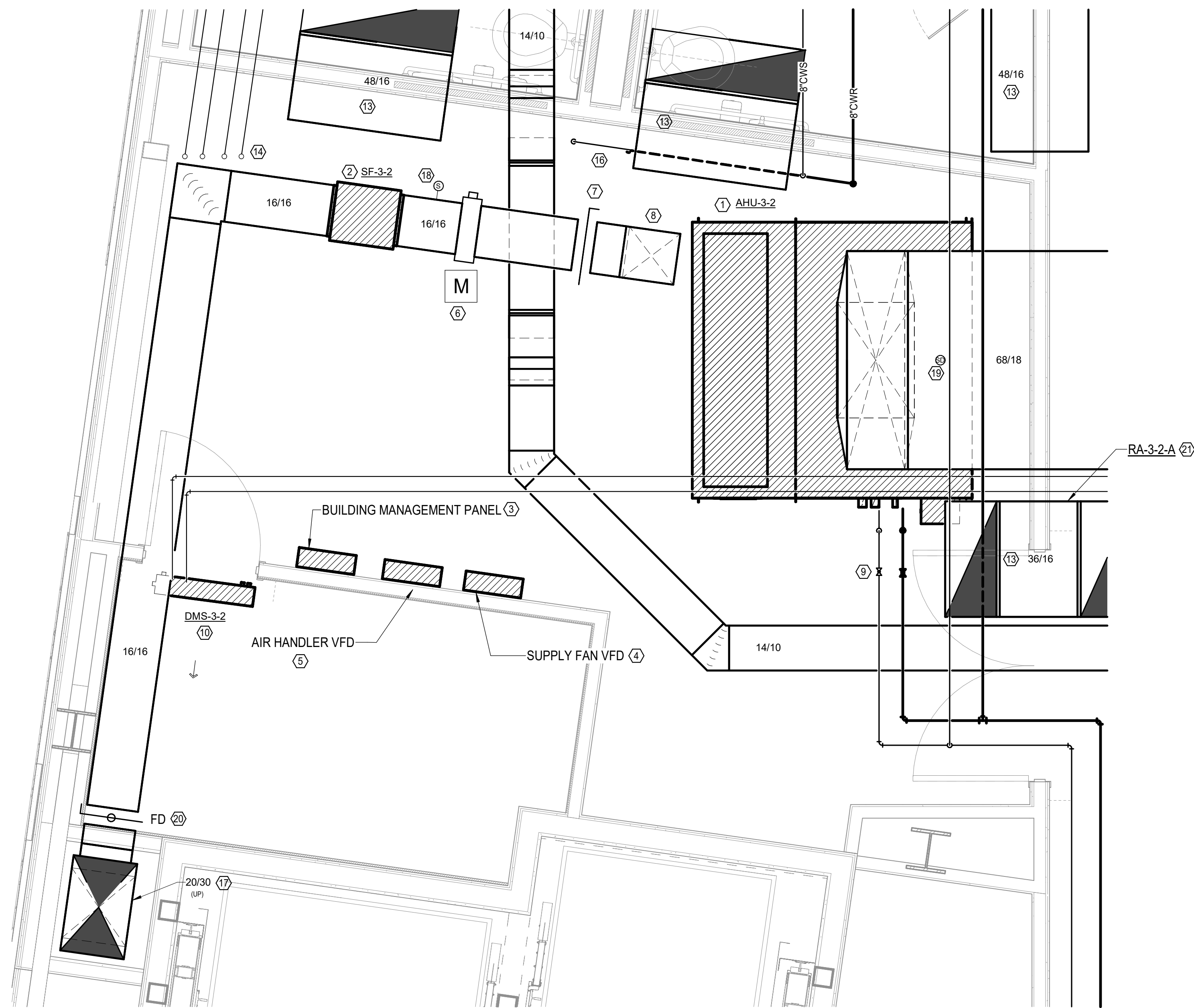


1 ENLARGED MECHANICAL PLAN - MECHANICAL ROOM 303
Scale: 1/2" = 1'-0"



2 ENLARGED MECHANICAL PLAN - MECHANICAL ROOM 313
Scale: 1/2" = 1'-0"

MECHANICAL KEYED NOTES

- 1 PROVIDE AND INSTALL NEW AIR HANDLER. TRANSITION CHILLED PIPING AS REQUIRED FOR CONNECTIONS TO AIR HANDLER (VALVE INSTALLED HIGH NEAR MAIN PIPING TAP). COORDINATE EXACT REQUIREMENT FOR DUCT CONNECTION TO NEW UNIT. ROUTE UNITS FULL SIZED INSULATED CONDENSATE LINE TO FLOOR DRAIN. PROVIDE WATER LEVEL SENSOR IN DRAIN PAN TO SHUT OFF UNIT IF PRIMARY DRAIN FAILS. MAINTAIN MANUFACTURER'S RECOMMENDED CLEARANCE AROUND UNIT. PROVIDE AND INSTALL CARBON DIOXIDE SENSOR IN THE RETURN OF THE UNIT. INTERLOCK WITH UNITS ASSOCIATED MOTORIZED DAMPER. PROVIDE AND INSTALL NEW DUCT STATIC PRESSURE SENSOR IN MAIN SUPPLY DUCT APPROXIMATELY 34 DOWN THE MAIN RUN (UNLESS SHOWN OTHERWISE). COORDINATE EXACT FINAL LOCATION WITH CONTROLS CONTRACTOR. REFER TO SCHEDULE AND DETAILS FOR MORE INFORMATION.
- 2 PROVIDE AND INSTALL NEW SUPPLY AIR FAN FOR OUTSIDE AIR. FAN TO BE INTERLOCKED WITH ASSOCIATED PRESSURE SENSOR. FAN SHALL BE CONTROLLED BY VFD TO MAINTAIN MINIMUM SETPOINT FOR BUILDING PRESSURIZATION. REFER TO SCHEDULE AND DETAILS FOR MORE INFORMATION.
- 3 PROVIDE AND INSTALL BUILDING MANAGEMENT SYSTEM PANEL (BMS) IN MECHANICAL ROOM. COORDINATE EXACT MOUNTING LOCATION TO MAINTAIN PROPER CLEARANCES RECOMMENDED BY MANUFACTURER.
- 4 PROVIDE AND INSTALL SUPPLY FAN VARIABLE FREQUENCY DRIVE (VFD) IN MECHANICAL ROOM. COORDINATE EXACT MOUNTING LOCATION TO MAINTAIN PROPER CLEARANCES RECOMMENDED BY MANUFACTURER. VFD SHALL MODULATE BASED UPON DUCT-MOUNTED, ADJUSTABLE PRESSURE SENSOR.
- 5 PROVIDE AND INSTALL AIR HANDLER VARIABLE FREQUENCY DRIVE (VFD) IN MECHANICAL ROOM. COORDINATE EXACT MOUNTING LOCATION TO MAINTAIN PROPER CLEARANCES RECOMMENDED BY MANUFACTURER.
- 6 PROVIDE AND INSTALL NEW MOTORIZED DAMPER. DAMPER TO BE INTERLOCKED WITH ASSOCIATED MECHANICAL EQUIPMENT OPERATION. DAMPER TO BE CLOSED WHEN UNIT IS "OFF". FIELD VERIFY EXACT LOCATION.
- 7 PROVIDE AND INSTALL NEW MANUAL BALANCING DAMPER IN DUCTWORK. FIELD VERIFY EXACT LOCATION.
- 8 ROUTE OUTSIDE AIR DUCT DOWN TO IMMEDIATE VICINITY OF RETURN AIR INTAKE. DUCT TO TERMINATE APPROXIMATELY 3' ABOVE FINISH FLOOR.
- 9 PROVIDE AND INSTALL NEW CHILLED WATER ISOLATION VALVES LOCATED HIGH IN SPACE TO FACILITATE UNIT REPLACEMENT SERVICE.
- 10 NEW INDOOR WALL MOUNTED EVAPORATOR UNIT. COORDINATE FINAL LOCATION IN THE FIELD. REFER TO MECHANICAL HYDRONIC/REFRIGERANT PIPING PLANS FOR PIPE ROUTING. MAINTAIN MAINTENANCE ACCESS CLEARANCES FOR UNIT. ROUTE UNITS FULL SIZED CONDENSATE DRAIN LINE TO NEW INSULATED HUB DRAIN, HOP SINK, MECHANICAL ROOM FLOOR DRAIN OR OTHER CODE APPROVED LOCATION. PROVIDE WITH INTEGRAL CONDENSATE PUMP. PROVIDE WITH FACTORY PROGRAMMABLE THERMOSTAT.
- 11 ROUTE NEW CHILLED/HOT WATER DOWN TO FLOOR BELOW. REFER TO MECHANICAL HYDRONIC PLANS FOR CONTINUATION.
- 12 PROVIDE AND INSTALL NEW COMBINATION FIRE/SMOKE DAMPER AS SHOWN. PROVIDE NEW DUCT SEALING AND FIRE CAULK/SEAL AROUND NEW DUCT. REFER TO DETAIL. FIELD VERIFY ALL SIZES. ALL FIRE DAMPERS INSTALLED IN NEW DUCTS TO MATCH NEW DUCTWORK SIZES.
- 13 NEW TRANSFER AIR DUCT ACROSS WALL TO DECK. MINIMUM SIZE OF 24" BY 12" UNLESS OTHERWISE INDICATED ON PLAN. REFER TO DETAILS.
- 14 REFRIGERANT PIPING DOWN FROM FLOOR ABOVE. ROUTE PIPING HIGH AND TIGHT TO STRUCTURE. FIELD VERIFY EXACT FINAL ROUTING.
- 15 NEW WALL MOUNTED ALUMINUM LOUVER SIMILAR TO GREENHECK MODEL ESD-635DE OR APPROVED EQUAL TO BE INSTALLED AND USED FOR OUTSIDE AIR. PAINT TO MATCH EXTERIOR WALL COLOR OR OTHER COLOR AS REQUIRED BY THE ARCHITECT. PROVIDE AND TRANSITION NEW CONNECTION TO NEW OUTSIDE AIR SUPPLY FAN AS SHOWN. PROVIDE BIRDSCREEN AT LOUVER. PROVIDE PLENUM DUCTWORK BEHIND LOUVER TO BE SAME SIZE AS LOUVER. COORDINATE EXACT LOUVER LOCATION AND ALL WORK WITH ARCHITECT PRIOR TO INSTALL.
- 16 ROUTE NEW CONDENSATE WATER DOWN TO FLOOR BELOW. REFER TO MECHANICAL HYDRONIC PLANS FOR CONTINUATION.
- 17 OUTSIDE AIR DUCT RISER UP THROUGH FLOOR AND LEVELS ABOVE TO ROOF INTAKE HOOD. REFER TO MECHANICAL PLANS FOR CONTINUATION.
- 18 PROVIDE AND INSTALL NEW DIFFERENTIAL PRESSURE SENSOR IN OUTSIDE AIR DUCT. INTERLOCK CONTROL OF SENSOR WITH SUPPLY FAN VFD.
- 19 PROVIDE DUCT MOUNTED SMOKE DETECTOR. DETECTOR SHALL CONSIST OF A CLEAR MOLDED PLASTIC ENCLOSURE (OR REMOTE MOUNTED LED STATUS INDICATOR SHALL BE PROVIDED NEXT TO THE SMOKE DETECTOR) WITH INTEGRAL KNOCKOUTS TO PROVIDE VISUAL VIEWING OF DETECTOR/SENSOR FOR MONITORING SENSOR OPERATION AND CHAMBER CONDITION. THE DUCT HOUSING SHALL BE PROVIDED WITH GASKET SEALS TO INSURE PROPER SEATING OF THE HOUSING TO THE ASSOCIATED DUCTWORK. EACH UNIT'S SAMPLING TUBES SHALL EXTEND THE WIDTH OF THE DUCT AND BE PROVIDED WITH POROSITY FILTERS TO REDUCE SENSOR/CHAMBER CONTAMINATION. DETECTOR SHALL COMPLY WITH NATION FIRE PROTECTION ASSOCIATION (NFPA) SECTION NFPA 72, NFPA 90A, NFPA 101, ACCEPTABLE MANUFACTURERS: AUTOCALL, SIMPLEX, SIEMENS, NOTIFIER, GAMEWELL, PYROTRONICS. TYPICAL OF ALL AHU'S.
- 20 PROVIDE AND INSTALL NEW FIRE DAMPER AS SHOWN. PROVIDE NEW DUCT SEALING AND FIRE CAULK/SEAL AROUND NEW DUCT. REFER TO DETAIL. FIELD VERIFY ALL SIZES. ALL FIRE DAMPERS INSTALLED IN NEW DUCTS TO MATCH NEW DUCTWORK SIZES.
- 21 PROVIDE AND INSTALL DUCT SILENCER IN TRANSFER/RETURN DUCT/BOOT. REFER TO SCHEDULE AND SPECIFICATIONS.

MECHANICAL GENERAL NOTES

- 1 ALL DUCT SIZES SHOWN ARE INSIDE CLEAR. INCREASE ACCORDINGLY WHERE INTERIOR LINER IS SHOWN OR SPECIFIED.
- 2 COORDINATE IN THE FIELD THE EXACT LOCATION OF ALL CEILING MOUNTED GRILLES AND DIFFUSERS WITH LIGHT FIXTURES AND ARCHITECT'S REFLECTED CEILING PLAN.
- 3 CONTRACTOR TO PROPERLY SEAL ALL NEW OR MODIFIED DUCTWORK.
- 4 SHOP PRIME ALL MISCELLANEOUS INTERIOR BRACKETS AND HANGERS UNLESS GALVANIZED OR STAINLESS STEEL. ALL EXTERIOR BRACKETS, CLAMPS, AND HANGERS SHALL BE HOT DIPPED GALVANIZED. COAT ALL CUT ENDS AND WELDS WITH ZINC COLD GALVANIZING COMPOUND.
- 5 FIELD COORDINATE WITH STRUCTURAL. OFFSET AND TRANSITION DUCTWORK AS REQUIRED.
- 6 THESE CONSTRUCTION DRAWINGS ARE DIAGRAMMATIC, AND DO NOT NECESSARILY REFLECT ACTUAL DIMENSIONS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD VERIFY ALL DIMENSIONS AND COORDINATE PLACEMENT OF ALL EQUIPMENT AND ROUTING OF ALL PIPING AND/OR DUCT SYSTEMS.
- 7 ALL CONSTRUCTION IS TO CONFORM TO MORE STRINGENT OF PLAN, SPECIFICATION REQUIREMENTS AND LOCAL CODES. CONFORM TO SMACNA HVAC CONSTRUCTION STANDARDS AS A MINIMUM WHERE NO OTHER SPECIFICATIONS OR CODE REQUIREMENTS APPLY.
- 8 RETURN AIR IS THROUGH RETURN GRILLES AND BACK THROUGH RETURN AIR OPENINGS TO THE MECHANICAL ROOM. CONTRACTOR TO MAINTAIN RETURN AIR PATH. PROVIDE OPENINGS OR RETURN AIR BOOTS AS REQUIRED.
- 9 ALL DUCTWORK 15 FEET DOWNSTREAM OF AHU'S AND 10 FEET DOWNSTREAM OF FPD'S TO BE PROVIDED WITH KNAUF PERFORMANCE+ INTERNAL LINER OR APPROVED EQUAL.
- 10 ALL TRANSFER AIR DUCTS/BOOTS TO BE PROVIDED WITH INTERNAL LINING.
- 11 PROVIDE RETURN AIR BOOTS ON ALL RETURN GRILLES FOR OFFICES, CONFERENCE ROOMS, ETC ON 4TH FLOOR.