MECHANICAL ABBREVIATIONS MECHANICAL SYMBOLS LEGEND AREA DRAIN ISO ISOLATION EXHAUST PLUMBING /PIPING **PLUMBING** DUCTWORK ANNOTATION ABOVE FINISHED FLOOR KW KILOWATT — AV ——— ACID VENT BELOW GRADE **ELBOW DOWN** SUPPLY AIR QUANTITY \leftarrow - TYPE - SIZE AFMS AIR FLOW MEASURING STATION LAT LEAVING AIR TEMPERATURE GRILLE, REGISTER, & __(4)A-12"Ø< — AV ——— ACID VENT ABOVE GRADE PIPE CAP **RETURN AIR** DIFFUSER IDENTIFICATION AIR HANDLING UNIT | LAV - CFM ACID WASTE BELOW GRADE ELBOW UP $\leftarrow \land \frown$ — AW ——— EXHAUST AIR ACID NEUTRALIZING BASIN | LWT | LEAVING WATER TEMPERATURE — AW ——— ACID WASTE ABOVE GRADE TEE, OUTLET UP ACTIVE HYDRONIC FINNED TUBE STANDARD BRANCH, NO SPLITTER -ACCESS PANEL | MBH BTU PER HOUR (THOUSANDS) ELEMENT RADIATION & RADIANT **DEIONIZED WATER** TEE, OUTLET DOWN — DI ——— SUPPLY FLOW TO RIGHT 0.5 RETURN/EXHAUST FLOW TO LEFT | GPM PANEL IDENTIFICATION LENGTH ARCHITECT | MCF THOUSAND CUBIC FEET — cw ——— DOMESTIC COLD WATER CONNECTION, BOTTOM AIR SEPARATOR | MH MANHOLE -cwv-----**CLEAR WATER VENT** TYPE → EBR 01 6'-5" **ELECTRIC BASEBOARD** ACTIVE BUTTERFLY DAMPER RADIATION NOISE CRITERIA OR -cww -----**CLEAR WATER WASTE** ELEMENT BELLMOUTH WITH BALANCING IDENTIFICATION NORMALLY CLOSED CONNECTION, TOP BELOW GRADE FILTERED WATER — FW ——— DETAIL NUMBER BRITISH THERMAL UNIT | NEG NEGATIVE — GW ——— GREASE WASTE **ECCENTRIC REDUCER** SHEET NUMBER NOT IN CONTRACT BACKWATER VALVE | NIC DOMESTIC HOT WATER CONCENTRIC REDUCER — HW ——— FLEXIBLE DUCT SECTION NUMBER HUNDRED CUBIC FEET NO NORMALLY OPEN SHEET NUMBER — 140 — DOMESTIC HOT WATER (TEMP. INDICATED) FLEXIBLE CONNECTION CUBIC FEET PER HOUR NTS NOT TO SCALE EQUIP DESIGNATION — 140 RHW — DOM. RECIRC. HOT WATER (TEMP. INDICATED) **EXPANSION JOINT** EQUIP NUMBER -CUBIC FEET PER MINUTE | OA OUTSIDE AIR TURNING VANES DOMESTIC RECIRC. HOT WATER — RHW ——— PIPE ANCHOR POINT OF CONNECTION, NEW TO EXISTING CENTER LINE OBD OPPOSED BLADE DAMPER HARD COLD WATER ALIGNMENT GUIDE -HARD-----POINT OF DISCONNECTION OVERFLOW ROOF DRAIN CEILING ORD -NPCW----NON-POTABLE COLD WATER CHECK VALVE FLEXIBLE CONNECTION CLEAN OUT | PD PRESSURE DROP OR DIFFERENCE MEDICAL GAS -NPHW-----NON-POTABLE HOT WATER SHUTOFF VALVE CONTR CONTRACTOR PE PNEUMATIC-ELECTRIC MEDICAL VACUUM — OSD — OVERFLOW STORM DRAIN BELOW GRADE PLUG VALVE MANUAL VOLUME DAMPER CONVECTOR | PLBG PLUMBING WASTE ANESTHETIC GAS DISPOSAL ─WAGD ─── OSD ——— OVERFLOW STORM DRAIN ABOVE GRADE COMBINATION BALANCE VALVE CABINET UNIT HEATER PRESSURE REDUCING VALVE AND FLOW METER —co2 —— **CARBON DIOXIDE** REVERSE OSMOSIS WATER OR POWER ROOF VENTILATOR MOTORIZED DAMPER COLD WATER OXYGEN SANITARY VENT BELOW GRADE STRAINER DECIBEL PSIA POUNDS/SQ INCH ABSOLUTE NITROGEN ___ N ____ ___ v ____ SANITARY VENT ABOVE GRADE STRAINER W/BLOWDOWN FIRE DAMPER & ACCESS DRINKING FOUNTAIN | PSIG POUNDS/SQ INCH GAUGE CAP AND VALVE NITROUS OXIDE — N2O —— — w —— SANITARY WASTE PANEL DIAMETER | PVC POLY VINYL CHLORIDE MEDICAL AIR —ма*-----*—— ss ——— SANITARY SEWER PRESSURE REDUCING VALVE **SMOKE DAMPER &** DIFFUSER | RA RETURN AIR **INSTRUMENT AIR** (SETTING AS NOTED, PSI ACCESS PANEL — SDT ——— SOIL DRAINAGE TILE DISCHARGE | RCP REINFORCED CONCRETE PIPE ZVB ZONE VALVE BOX —SOFT—— SOFTENED COLD WATER - AUTOMATIC CONTROL VALVE, 2-WAY COMBINATION FIRE/SMOKE DAMPER RD **ROOF DRAIN** AREA ALARM PANEL DAMPER & ACCESS PANEI — SHW ——— SOFTENED HOT WATER DOWN RECIRC RECIRCULATING MASTER ALARM PANE AUTOMATIC CONTROL VALVE, 3-WAY — TW —— TEMPERED WATER SUPPLY GRILLE OR REGISTER DRAIN REG REGISTER COMBINATION AREA/MASTER ALARM PANEL STORM DRAIN BELOW GRADE — SD —— AUTOMATIC AIR VENT DOWNSPOUT | RET RETURN MANUAL AIR VENT PROCESS AND LABORATORY — SD —— STORM DRAIN ABOVE GRADE RETURN OR EXHAUST GRILLE DRAWING RH RELATIVE HUMIDITY PRESSURE RELIEF/SAFETY OR REGISTER WELL WATER LABORATORY AIR VALVES(SETTING AS NOTED, PSI EAT ENTERING AIR TEMPERATURE | RH REHEAT EXISTING PLUMBING TO REMAIN SUPPLY DUCT UP, POSITIVE — LV —— LABORATORY VACUUM EDR EQUIVALENT DIRECT RADIATION | RHC REHEAT COIL DRAIN VALVE PRESSURE ----- EXISTING PLUMBING TO BE REMOVED —CDA ——— CLEAN DRY AIR RECIRCULATED HOT WATER ELECTRIC-PNEUMATIC RHW BALL VALVE MECHANICAL PIPING — RO ——— REVERSE OSMOSIS RETURN DUCT UP, NEGATIVE ELECTRIC WATER COOLER | RLF **BUTTERFLY VALVE DEIONIZED WATER** — DI ——— ____ BF ____ **BOILER FEED** EWT ENTERING WATER TEMPERATURE | RM ROOM EXHAUST DUCT UP, NEGATIVE NITROGEN CHILLED WATER SUPPLY DIAPHRAGM EXHAUST RPM REVOLUTIONS PER MINUTE PRESSURE ——HV ——— HOUSE VACUUM CHILLED WATER RETURN -CWR----**EXPANSION** GLOBE ANGLE VALVE REDUCED ZONE BACKFLOW SUPPLY DUCT DN, POSITIVE COMPRESSED AIR (PSI INDICATED) **FAHRENHEIT** PRESSURE 0. S.& Y. VALVE ACID VENT _____AV _____ — CD —— CONDENSATE DRAIN FAN COIL | SA SUPPLY AIR ACID WASTE —— AW ——— REDUCED PRESSURE ZONE RETURN DUCT DN. NEGATIVE — cs —— CONDENSER WATER SUPPLY FLOOR CLEAN OUT | SAN SANITARY BACK FLOW PREVENTER PRESSURE — CR ——— CONDENSER WATER RETURN FIRE PROTECTION FLOOR DRAIN SCFM CFM, STANDARD CONDITIONS EXHAUST DUCT DN, NEGATIVE SOLENOID VALVE —FOS ——— FUEL OIL SUPPLY FIRE HOSE CABINET SD SMOKE DAMPER —— F ——— FIRE PROTECTION PRESSURE —FOR ——— **FUEL OIL RETURN** FIRE PROTECTION (DRY SYSTEM) STATIC PRESSURE FLOW LIMITING VALVE FIRE HOSE RACK | SP SUPPLY DIFFUSER/REGISTER —FOV ——— FUEL OIL VENT FLOOR SPECS **SPECIFICATIONS** POST INDICATOR VALVE (PIV) BLANKOFF INDICATED REFRIGERANT SIGHT GLASS —— FOF ——— FUEL OIL FILL FIRE HYDRANT WITH SHUTOFF VALVE FLEXIBLE SUP SUPPLY **GLOBE VALVE** —— GS ——— GLYCOL SUPPLY RETURN GRILLE/REGISTER FIRE MAIN SQ SQUARE RECESSED FIRE DEPT CABINET GAS PRESSURE REGULATOR VALVE —— GR ——— GLYCOL RETURN FEET PER MINUTE STM SURFACE MOUNTED FIRE DEPT CABINET **BACKWATER VALVE** HEAT RECOVERY SUPPLY —HRS ——— EXHAUST GRILLE/REGISTER TEMPERATURE DIFFERENCE FEET PER SECOND | TD FIRE PROTECTION RISER REFRIGERANT DRYER HEAT RECOVERY RETURN —HRR ——— **TEMPERATURE** UPRIGHT SPRINKLER HEAD W/GUARD FEET OR FOOT | TEMP FLOW DIRECTION HEATING WATER SUPPLY LINEAR DIFFUSER —HWS-----FLOAT AND THERMOSTATIC | TONS TONS OF REFRIGERATION PENDANT SPRINKLER HEAD FLOW DIRECTION W/PITCH -HWR----HEATING WATER RETURN **THERMOSTAT** UPRIGHT SPRINKLER HEAD FOOTING | T-STAT CONCENTRIC DUCT TRANSITION INTERRUPTIBLE GAS **DUPLEX STRAINER** FINNED TUBE RADIATION TYP **TYPICAL** SIDEWALL SPRINKLER HEAD ____ LV _____ LABORATORY VACUUM FACE VELOCITY UB **UP-BLAST** BUTTERFLY VALVE W/TAMPER SWITCH PIPE UNION ECCENTRIC DUCT TRANSITION LABORATORY AIR —— LA ——— GAUGE UG UNDERGROUND DETECTOR CHECK W/BYPASS METER PIPE FLANGE —— LPG ——— LIQUIFIED PETROLEUM GAS **UNIT HEATER** GRADE FIRE DEPT CONNECTION GALLON UH RECTANGULAR-TO-ROUND DUC NATURAL GAS (PSI INDICATED) FLUSH FIRE DEPT CONNECTION **GEXH** GREASE EXHAUST UR URINAL TRANSITION — PV —— PLANT VACUUM PRESSURE GAUGE W/PIGTAIL 8 GALLONS PER HOUR V SANITARY VENT PETCOCK FIRE DEPT VALVE W/CAP AND CHAIN PUMPED CONDENSATE VAV BOX GALLONS PER MINUTE | VAV VARIABLE AIR VOLUME THERMOMETER -RADS----RADIATION WATER SUPPLY **VOLUME DAMPER** GRILLE VD PRESSURE/TEMPERATURE TEST PORT O.S. & Y. VALVE W/TAMPER SWITCH RADR-RADIATION WATER RETURN VAV BOX W/REHEAT COIL HOSE BIBB | VEL VELOCITY STEAM TRAP (TYPE INDICATED) — RL —— REFRIGERANT LIQUID HEAD VFD VARIABLE FREQUENCY DRIVE DRY PIPE VALVE — RS ——— REFRIGERANT SUCTION FLOW MEASURING STATION REHEAT COIL HANDS-OFF-AUTOMATIC VOL VOLUME (FLOW INDICATED) REFRIGERANT HOT GAS BYPASS —RHG ——— VENT THROUGH ROOF HEATING VTR PREACTION VALVE FLOW SWITCH RISE DROR RHS----REHEAT WATER SUPPLY **DUCT OFFSETS** SANITARY WASTE HEATER | W PS PRESSURE SWITCH — RHR-----REHEAT WATER RETURN HEATING, VENTILATION, W/ AND AIR CONDITIONING | W/0 —RRS——— REMOTE RADIATOR SUPPLY DUCT CUTLINE WITHOUT SHOCK ABSORBER RRR-REMOTE RADIATOR RETURN HYDRANT WC WATER CLOSET GAS COCK VALVE CONTROLS -SHWS-SECONDARY HEATING WATER SUPPLY HOT WATER | WCO WALL CLEANOUT **ELBOW** —SHWR——— SECONDARY HEATING WATER RETURN WALL HYDRANT GRADE CLEANOUT | WH TAMPERPROOF THERMOSTAT SNOW MELT SUPPLY INSUL INSULATION WTR WATER FLOOR DRAIN — SMR ——— SNOW MELT RETURN **ROOM PRESSURE** INVERT MONITOR —10#STM ——— STEAM SUPPLY (PSI INDICATED) FLOOR SINK ----- 10#R ------STEAM RETURN (PSI INDICATED) AQUA STAT WALL HYDRANT EXISTING PIPING TO REMAIN HOSE BIBB EXISTING PIPING TO BE REMOVED THERMOSTAT W/GUARD _____ CLEANOUT CARBON MONOXIDE SENSOR WALL CLEANOUT HUMIDISTAT OR R.H. SENSOR **ROOF DRAIN** REFRIGERANT SENSOR DRAIN ABOVE SMOKE DETECTOR SPACE TEMPERATURE SENSOR CATCH BASIN STATIC PRESSURE SENSOR THERMOSTAT MANHOLE CARBON DIOXIDE SENSOR

MECHANICAL SHEET LIST SHEET **NUMBER** SHEET NAME MECHANICAL TITLE SHEET MHD002 FOUNDATION/TUNNEL DEMOLITION HVAC PLAN - AREA B FOUNDATION/TUNNEL HVAC PLAN - AREA A FOUNDATION/TUNNEL HVAC PLAN - AREA B GROUND LEVEL DEMOLITION HVAC PLAN - AREA A MHD102 GROUND LEVEL DEMOLITION HVAC PLAN - AREA B MH101 GROUND LEVEL HVAC PLAN - AREA A GROUND LEVEL HVAC PLAN - AREA B FIRST FLOOR MECHANICAL ROOM HVAC PLAN MHD122 MECHANICAL DEMOLITION ROOF PLAN - AREA B MECHANICAL ROOF PLAN - AREA A MECHANICAL ROOF PLAN - AREA B FOUNDATION/TUNNEL PIPING PLAN - AREA A FOUNDATION/TUNNEL PIPING PLAN - AREA B MPD101 GROUND LEVEL DEMOLITION PIPING PLAN - AREA A MPD102 GROUND LEVEL DEMOLITION PIPING PLAN - AREA B GROUND LEVEL PIPING PLAN - AREA A MP102 GROUND LEVEL PIPING PLAN - AREA B GROUND LEVEL PIPING PLAN - BASE BID SNOWMELT AREA GROUND LEVEL PIPING PLAN - DEDUCT ALT #5 SNOWMELT AREA MP104 FIRST FLOOR DEMOLITION PIPING PLAN - AREA A FIRST FLOOR DEMOLITION PIPING PLAN - AREA B FIRST FLOOR HVAC PIPING PLAN - AREA A FIRST FLOOR HVAC PIPING PLAN - AREA B MP113 FIRST FLOOR MECHANICAL ROOM HVAC PIPING PLAN PIPING FLOW DIAGRAM AND DETAILS ENLARGED FIRST FLOOR MECHANICAL ROOM PLAN AIR HANDLING UNIT DETAILS MECHANICAL DETAILS MECHANICAL DETAILS MECHANICAL 3D VIEWS MECHANICAL SECTIONS MECHANICAL SCHEDULES MECHANICAL/ ELECTRICAL AHU SCHEDULES MECHANICAL/ ELECTRICAL SCHEDULES MECHANICAL/ ELECTRICAL SCHEDULES SEQUENCES OF OPERATION SEQUENCES OF OPERATION TUNNEL - FIRST FLOOR FIRE PROTECTION PLANS UNDERFLOOR DEMOLITION PLUMBING PLAN - AREA B UNDERFLOOR/TUNNEL PLUMBING PLAN - AREA A UNDERFLOOR/TUNNEL PLUMBING PLAN - AREA B GROUND LEVEL DEMOLITION PLUMBING PLAN - AREA A GROUND LEVEL DEMOLITION PLUMBING PLAN - AREA B GROUND LEVEL PLUMBING PLAN - AREA A GROUND LEVEL PLUMBING PLAN - AREA B GROUND LEVEL PLUMBING PLAN - OVERALL FIRST FLOOR PLUMBING PLAN WASTE AND VENT RISER DIAGRAM - GROUND LEVEL AREA A WASTE AND VENT RISER DIAGRAM - GROUND LEVEL AREA B DOMESTIC WATER RISER DIAGRAM - GROUND LEVEL AREA A DOMESTIC WATER RISER DIAGRAM - GROUND LEVEL AREA B PLUMBING RISERS - FIRST FLOOR AREA B PLUMBING DETAILS

Project Number

VA #438-480

Building Number

Drawing Number

Checked

JRG

Drawn

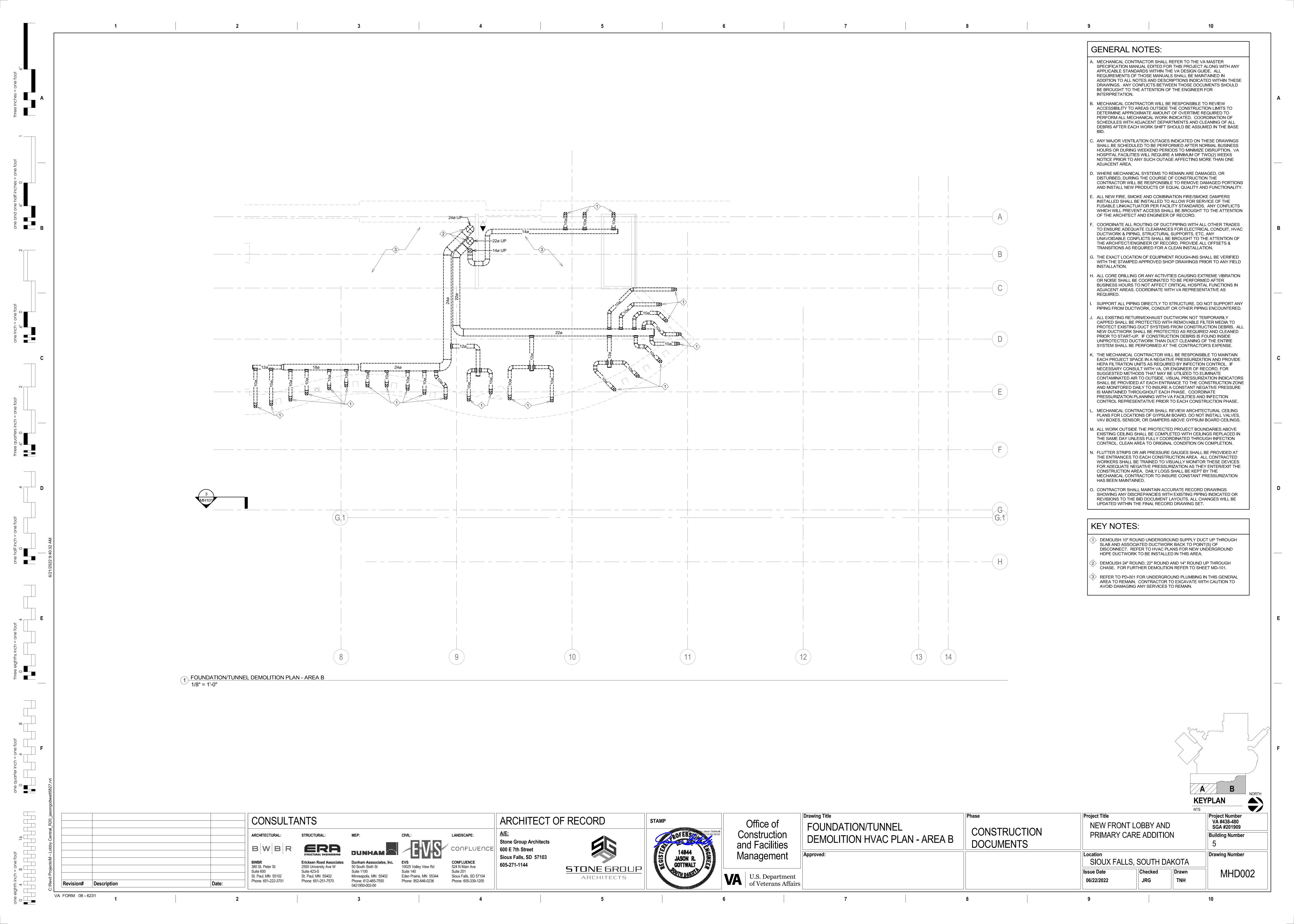
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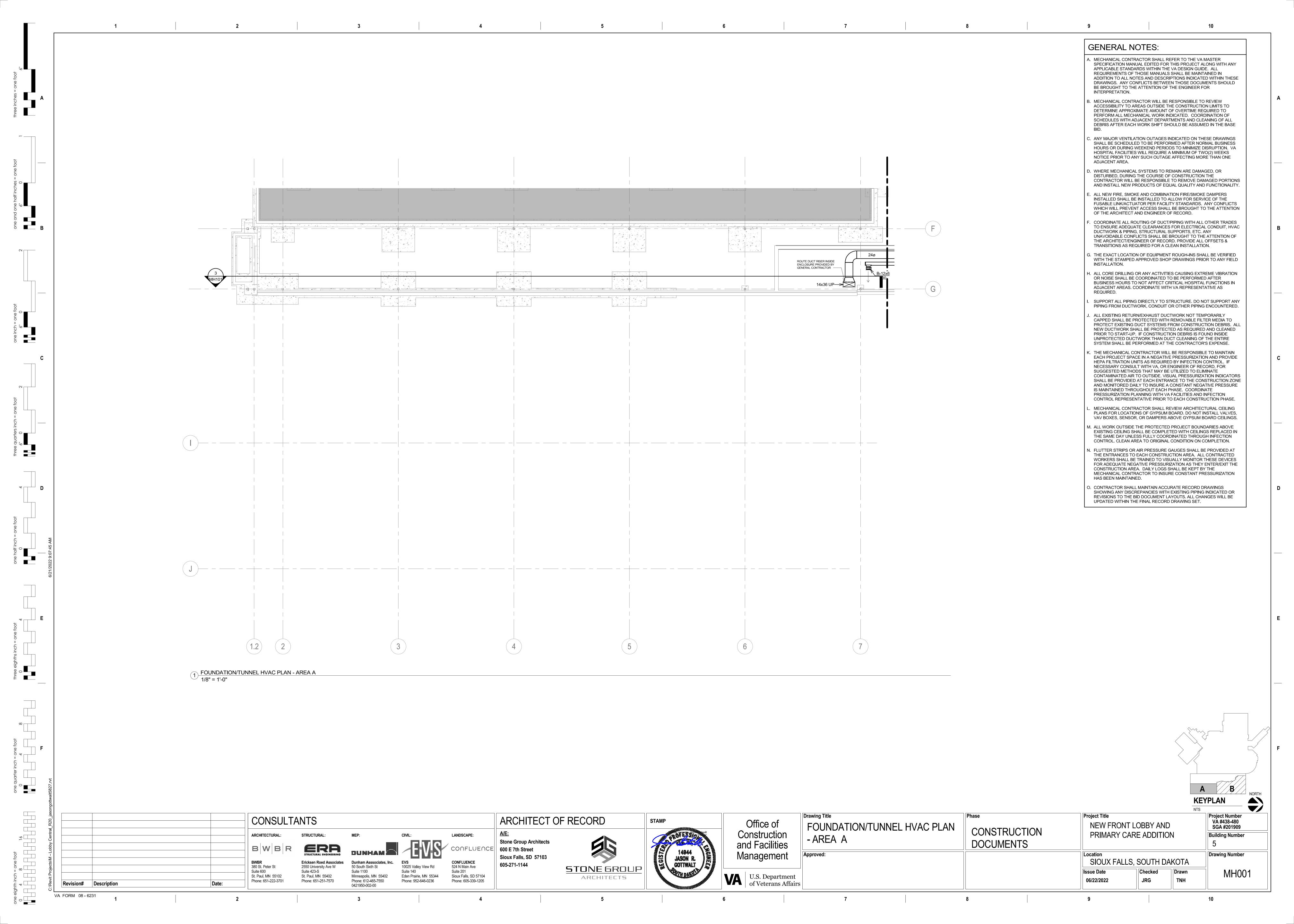
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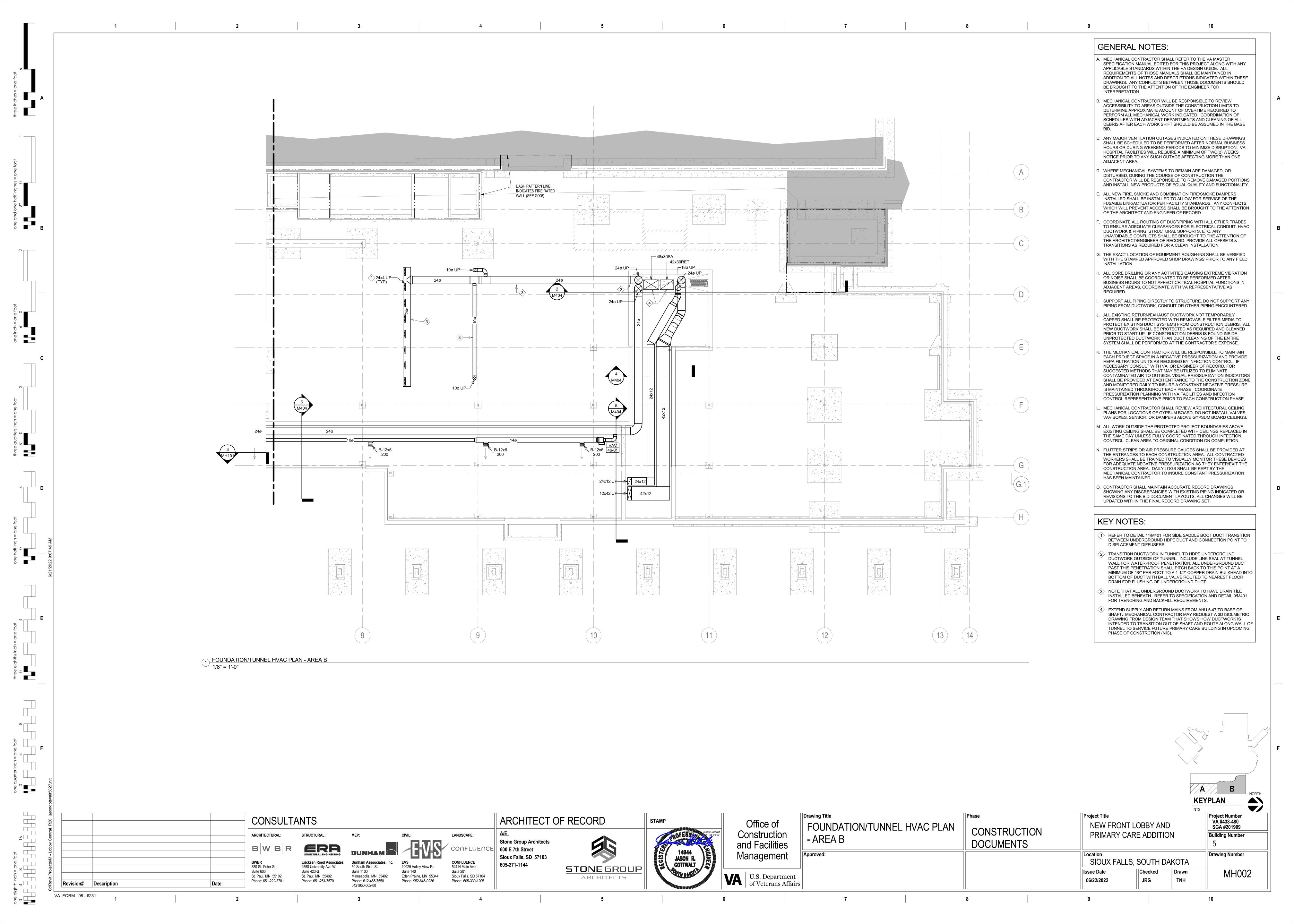
SGA #201909

PLUMBING/ELECTRICAL SCHEDULES SHEET TOTAL: 55

Project Title Drawing Title ARCHITECT OF RECORD CONSULTANTS STAMP Office of **NEW FRONT LOBBY AND** MECHANICAL TITLE SHEET CONSTRUCTION Construction PRIMARY CARE ADDITION LANDSCAPE: **Stone Group Architects DOCUMENTS** and Facilities ERA 600 E 7th Street Management Sioux Falls, SD 57103 JASON R. SIOUX FALLS, SOUTH DAKOTA GOTTWALT 605-271-1144 380 St. Peter St 50 South Sixth St 524 N Main Ave 2550 University Ave W **STONE** GROUP Suite 423-S **VA** U.S. Department of Veterans Affairs St. Paul, MN 55102 St. Paul, MN 55402 Eden Prairie, MN 55344 Sioux Falls, SD 57104 Minneapolis, MN 55402 ARCHITECT5 Phone: 605-339-1205 Phone: 651-222-3701 Phone: 651-251-7570 Phone: 612-465-7550 Phone: 952-646-0236 Revision# Description 0421950-002-00 VA FORM 08 - 6231







CAP <4> RELOCATE DUCT STATIC SENSOR

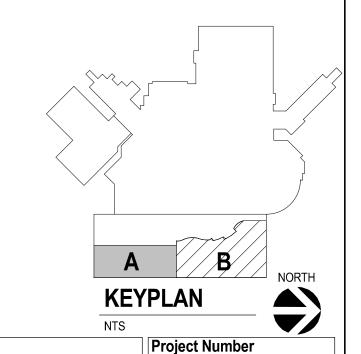
> ONCE ALL DEMOLITION IS COMPLETE, AND POINTS OF DISCONNECTION ARE CAPPED, THE CONTRACTOR SHALL REBALANCE THE ENTIRE AREA INDICATED ON THIS DRAWING. NOTE THAT ALL EXSITING DIFFUSERS, REGISTERS, AND GRILLES ARE SHOWN WITH AIRFLOW VALUES TO BALANCE. REPORT ANY DISCREPANCIES FOUND DURING BALANCING TO THE ENGINEER-OF-RECORD, OR VA COTR, TO RESOLVE.

GENERAL NOTES:

- . MECHANICAL CONTRACTOR SHALL REFER TO THE VA MASTER SPECIFICATION MANUAL EDITED FOR THIS PROJECT ALONG WITH ANY APPLICABLE STANDARDS WITHIN THE VA DESIGN GUIDE. ALL REQUIREMENTS OF THOSE MANUALS SHALL BE MAINTAINED IN ADDITION TO ALL NOTES AND DESCRIPTIONS INDICATED WITHIN THESE DRAWINGS. ANY CONFLICTS BETWEEN THOSE DOCUMENTS SHOULD BE BROUGHT TO THE ATTENTION OF THE ENGINEER FOR INTERPRETATION.
- . MECHANICAL CONTRACTOR WILL BE RESPONSIBLE TO REVIEW ACCESSIBILITY TO AREAS OUTSIDE THE CONSTRUCTION LIMITS TO DETERMINE APPROXIMATE AMOUNT OF OVERTIME REQUIRED TO PERFORM ALL MECHANICAL WORK INDICATED. COORDINATION OF SCHEDULES WITH ADJACENT DEPARTMENTS AND CLEANING OF ALL DEBRIS AFTER EACH WORK SHIFT SHOULD BE ASSUMED IN THE BASE
- ANY MAJOR VENTILATION OUTAGES INDICATED ON THESE DRAWINGS SHALL BE SCHEDULED TO BE PERFORMED AFTER NORMAL BUSINESS HOURS OR DURING WEEKEND PERIODS TO MINIMIZE DISRUPTION. VA HOSPITAL FACILITIES WILL REQUIRE A MINIMUM OF TWO(2) WEEKS NOTICE PRIOR TO ANY SUCH OUTAGE AFFECTING MORE THAN ONE ADJACENT AREA.
- . WHERE MECHANICAL SYSTEMS TO REMAIN ARE DAMAGED, OR DISTURBED, DURING THE COURSE OF CONSTRUCTION THE CONTRACTOR WILL BE RESPONSIBLE TO REMOVE DAMAGED PORTIONS AND INSTALL NEW PRODUCTS OF EQUAL QUALITY AND FUNCTIONALITY.
- ALL NEW FIRE, SMOKE AND COMBINATION FIRE/SMOKE DAMPERS INSTALLED SHALL BE INSTALLED TO ALLOW FOR SERVICE OF THE FUSABLE LINK/ACTUATOR PER FACILITY STANDARDS. ANY CONFLICTS WHICH WILL PREVENT ACCESS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT AND ENGINEER OF RECORD.
- COORDINATE ALL ROUTING OF DUCT/PIPING WITH ALL OTHER TRADES TO ENSURE ADEQUATE CLEARANCES FOR ELECTRICAL CONDUIT. HVAC DUCTWORK & PIPING, STRUCTURAL SUPPORTS, ETC. ANY UNAVOIDABLE CONFLICTS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/ENGINEER OF RECORD. PROVIDE ALL OFFSETS & TRANSITIONS AS REQUIRED FOR A CLEAN INSTALLATION.
- THE EXACT LOCATION OF EQUIPMENT ROUGH-INS SHALL BE VERIFIED WITH THE STAMPED APPROVED SHOP DRAWINGS PRIOR TO ANY FIELD
- . ALL CORE DRILLING OR ANY ACTIVITIES CAUSING EXTREME VIBRATION OR NOISE SHALL BE COORDINATED TO BE PERFORMED AFTER BUSINESS HOURS TO NOT AFFECT CRITICAL HOSPITAL FUNCTIONS IN ADJACENT AREAS. COORDINATE WITH VA REPRESENTATIVE AS
- SUPPORT ALL PIPING DIRECTLY TO STRUCTURE. DO NOT SUPPORT ANY PIPING FROM DUCTWORK, CONDUIT OR OTHER PIPING ENCOUNTERED.
- ALL EXISTING RETURN/EXHAUST DUCTWORK NOT TEMPORARILY CAPPED SHALL BE PROTECTED WITH REMOVABLE FILTER MEDIA TO PROTECT EXISTING DUCT SYSTEMS FROM CONSTRUCTION DEBRIS. ALL NEW DUCTWORK SHALL BE PROTECTED AS REQUIRED AND CLEANED PRIOR TO START-UP. IF CONSTRUCTION DEBRIS IS FOUND INSIDE UNPROTECTED DUCTWORK THAN DUCT CLEANING OF THE ENTIRE SYSTEM SHALL BE PERFORMED AT THE CONTRACTOR'S EXPENSE.
- THE MECHANICAL CONTRACTOR WILL BE RESPONSIBLE TO MAINTAIN EACH PROJECT SPACE IN A NEGATIVE PRESSURIZATION AND PROVIDE HEPA FILTRATION UNITS AS REQUIRED BY INFECTION CONTROL. IF NECESSARY CONSULT WITH VA, OR ENGINEER OF RECORD, FOR SUGGESTED METHODS THAT MAY BE UTILIZED TO ELIMINA⁻ CONTAMINATED AIR TO OUTSIDE. VISUAL PRESSURIZATION INDICATORS SHALL BE PROVIDED AT EACH ENTRANCE TO THE CONSTRUCTION ZONE AND MONITORED DAILY TO INSURE A CONSTANT NEGATIVE PRESSURE IS MAINTAINED THROUGHOUT EACH PHASE. COORDINATE PRESSURIZATION PLANNING WITH VA FACILITIES AND INFECTION CONTROL REPRESENTATIVE PRIOR TO EACH CONSTRUCTION PHASE.
- MECHANICAL CONTRACTOR SHALL REVIEW ARCHITECTURAL CEILING PLANS FOR LOCATIONS OF GYPSUM BOARD. DO NOT INSTALL VALVES, VAV BOXES, SENSOR, OR DAMPERS ABOVE GYPSUM BOARD CEILINGS.
- I. ALL WORK OUTSIDE THE PROTECTED PROJECT BOUNDARIES ABOVE EXISTING CEILING SHALL BE COMPLETED WITH CEILINGS REPLACED IN THE SAME DAY UNLESS FULLY COORDINATED THROUGH INFECTION CONTROL, CLEAN AREA TO ORIGINAL CONDITION ON COMPLETION.
- . FLUTTER STRIPS OR AIR PRESSURE GAUGES SHALL BE PROVIDED AT THE ENTRANCES TO EACH CONSTRUCTION AREA. ALL CONTRACTED WORKERS SHALL BE TRAINED TO VISUALLY MONITOR THESE DEVICES FOR ADEQUATE NEGATIVE PRESSURIZATION AS THEY ENTER/EXIT THE CONSTRUCTION AREA. DAILY LOGS SHALL BE KEPT BY THE MECHANICAL CONTRACTOR TO INSURE CONSTANT PRESSURIZATION HAS BEEN MAINTAINED.
- . CONTRACTOR SHALL MAINTAIN ACCURATE RECORD DRAWINGS SHOWING ANY DISCREPANCIES WITH EXISTING PIPING INDICATED OR REVISIONS TO THE BID DOCUMENT LAYOUTS. ALL CHANGES WILL BE UPDATED WITHIN THE FINAL RECORD DRAWING SET.

KEY NOTES:

- DEMOLISH SUPPLY AIR MAIN BACK TO POINT OF DISCONNECT. DEMOLISH ALL SUPPLY BRANCHES, VAV BOXES, FVAV UNITS AND DIFFUSERS/GRILLES AS INDICATED BY DEMOLITION LINES. PERMANENTLY CAP AND SEAL END OF MAIN AND REPLACE DAMAGED INSULATION AS REQUIRED.
- DEMOLISH RETURN AIR MAIN BACK TO POINT OF DISCONNECT DEMOLISH ALL RETURN BRANCHES AND GRILLES AS INDICATED BY DEMOLITION LINES. PERMANENTLY CAP AND SEAL END OF MAIN AND CHECK/VERIFY BALANCE OF UPSTREAM GRILLES WERE NOT ADVERSELY AFFECTED (MINIMUM SAMPLE SIZE OF 12 LOCATIONS TO
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- CONTROLS CONTRACTOR TO VERIFY LOCATION OF EXISTING DUCT STATIC PRESSURE SENSOR AND RELOCATE TO LOCATION INDICATED. RECALIBRATE SETPOINT AFTER ALL DUCTWORK DEMOLITION IS COMPLETE. CONTROLS CONTRACTOR SHALL VERIFY ECONOMIZER CONTROLS OF ASSOCIATED AHU AND ADJUST OFFSET FOR NEW



CONSULTANTS 380 St. Peter St St. Paul, MN 55102

one eighth inch = one foot 0 4 8 16

Revision# Description

VA FORM 08 - 6231

GROUND LEVEL DEMOLITION HVAC PLAN - AREA A

¹/ 1/8" = 1'-0"

ERA 2550 University Ave W

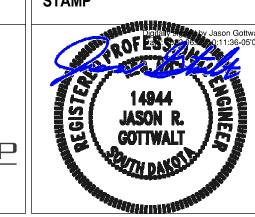
Phone: 651-222-3701

50 South Sixth St Suite 423-S St. Paul, MN 55402 Minneapolis, MN 55402 Phone: 651-251-7570 Phone: 612-465-7550 0421950-002-00

524 N Main Ave Eden Prairie, MN 55344 Sioux Falls, SD 57104 Phone: 952-646-0236 Phone: 605-339-1205

ARCHITECT OF RECORD 600 E 7th Street Sioux Falls, SD 57103 605-271-1144







Drawing Title GROUND LEVEL DEMOLITION HVAC PLAN - AREA A

CONSTRUCTION **DOCUMENTS**

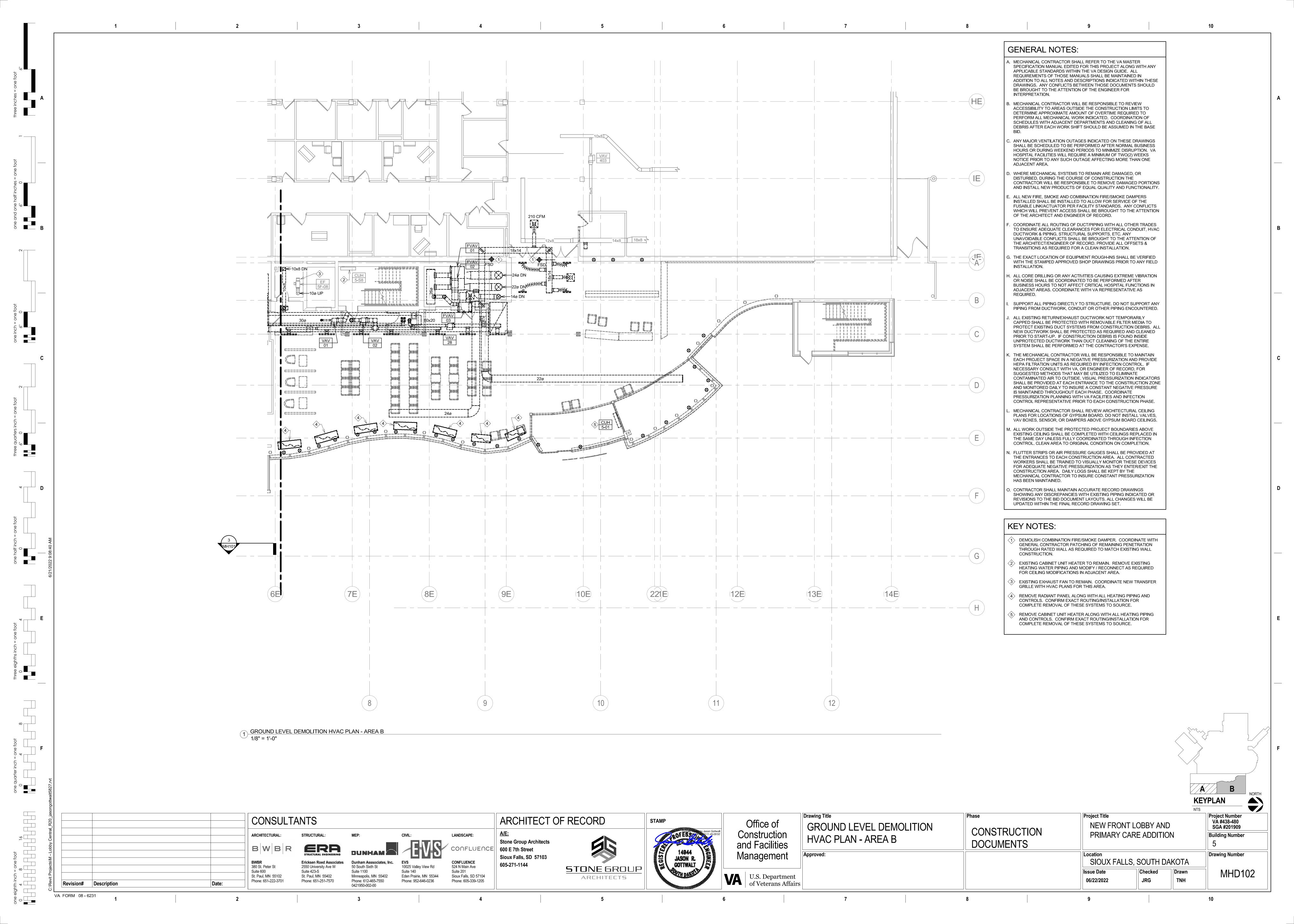
Project Title NEW FRONT LOBBY AND PRIMARY CARE ADDITION

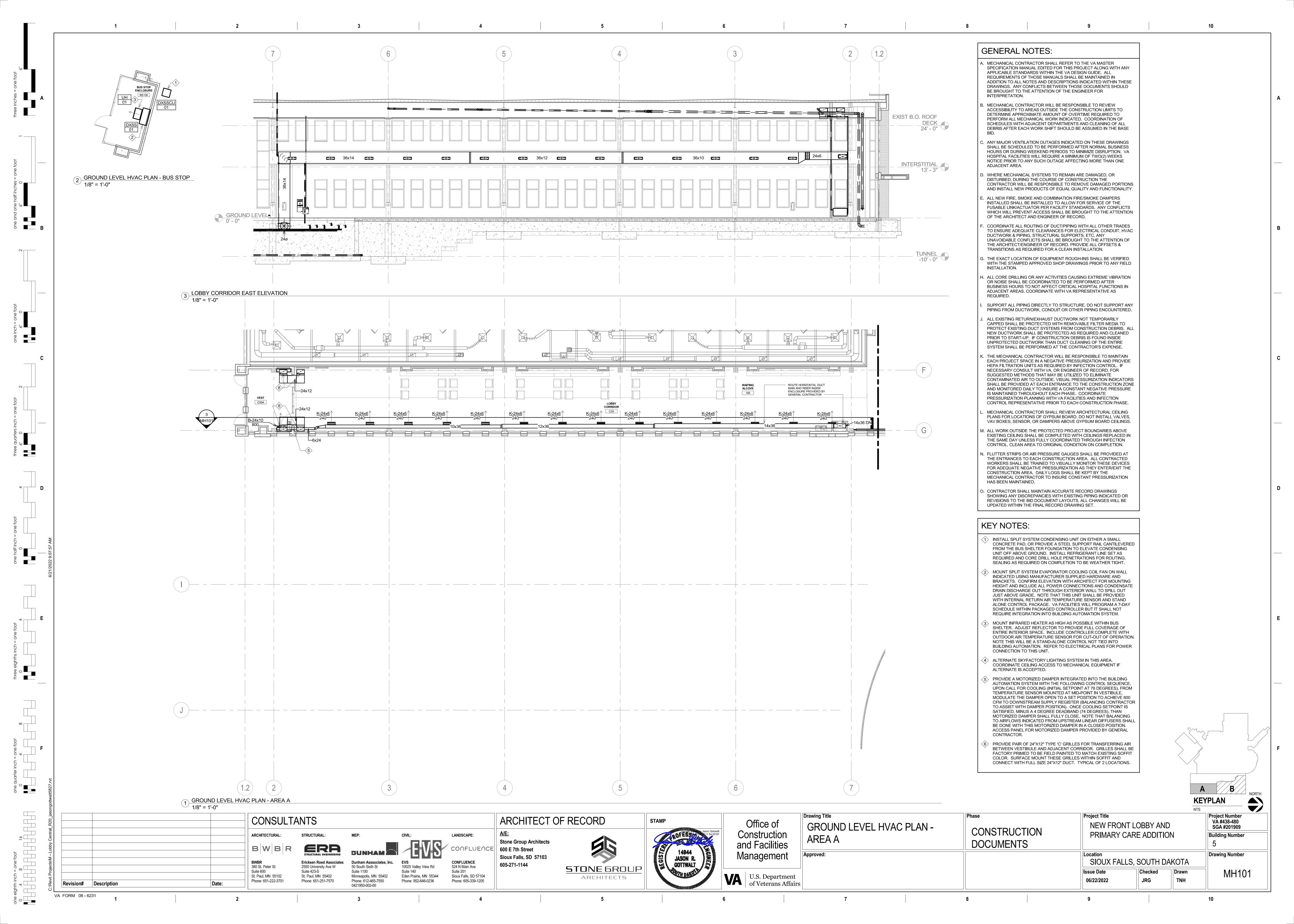
VA #438-480 SGA #201909 Drawing Number

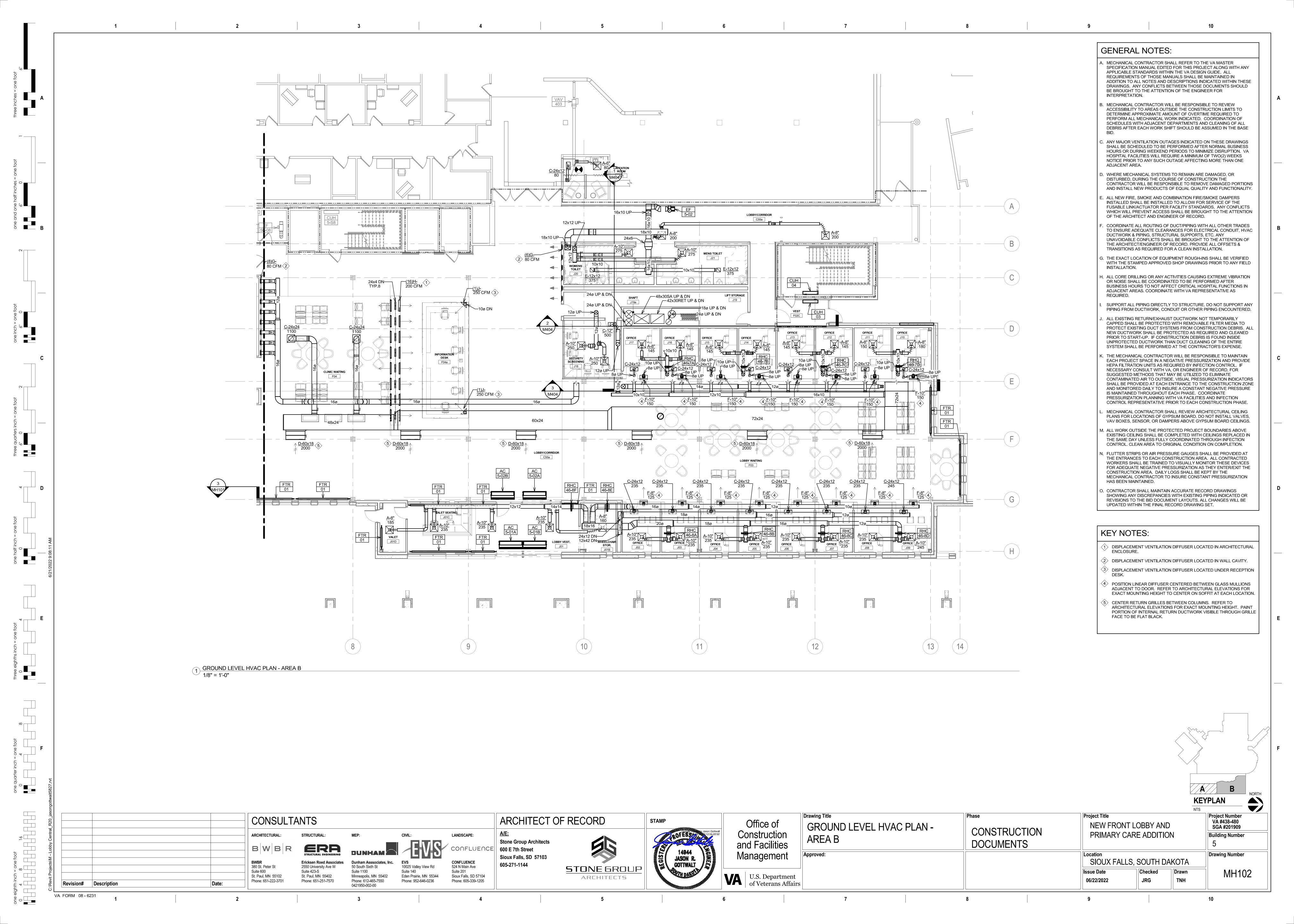
SIOUX FALLS, SOUTH DAKOTA MHD101 Drawn

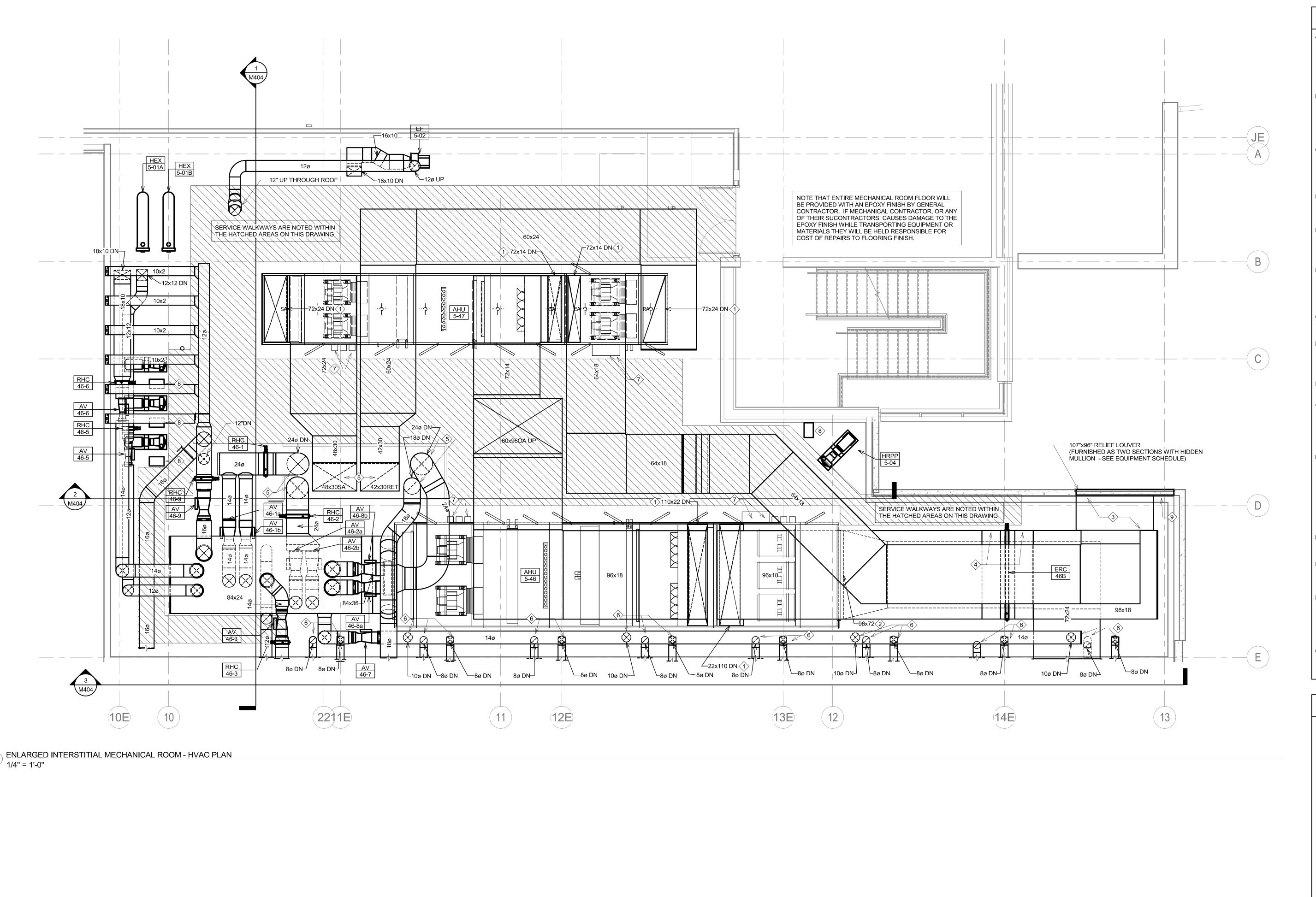
TNH

JRG









GENERAL NOTES:

ADJACENT AREA.

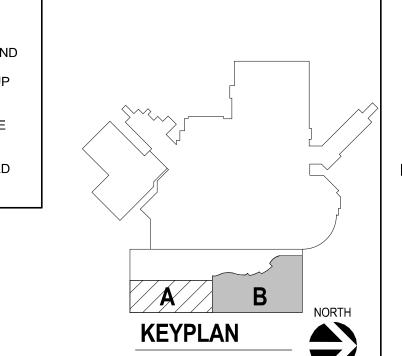
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- COORDINATE ALL ROUTING OF DUCT/PIPING WITH ALL OTHER TRADES TO ENSURE ADEQUATE CLEARANCES FOR ELECTRICAL CONDUIT, HVAC DUCTWORK & PIPING, STRUCTURAL SUPPORTS, ETC. ANY UNAVOIDABLE CONFLICTS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/ENGINEER OF RECORD. PROVIDE ALL OFFSETS & TRANSITIONS AS REQUIRED FOR A CLEAN INSTALLATION.
- G. THE EXACT LOCATION OF EQUIPMENT ROUGH-INS SHALL BE VERIFIED WITH THE STAMPED APPROVED SHOP DRAWINGS PRIOR TO ANY FIELD INSTALLATION.
- H. ALL CORE DRILLING OR ANY ACTIVITIES CAUSING EXTREME VIBRATION OR NOISE SHALL BE COORDINATED TO BE PERFORMED AFTER BUSINESS HOURS TO NOT AFFECT CRITICAL HOSPITAL FUNCTIONS IN ADJACENT AREAS. COORDINATE WITH VA REPRESENTATIVE AS
 - SUPPORT ALL PIPING DIRECTLY TO STRUCTURE. DO NOT SUPPORT ANY PIPING FROM DUCTWORK, CONDUIT OR OTHER PIPING ENCOUNTERED.
- ALL EXISTING RETURN/EXHAUST DUCTWORK NOT TEMPORARILY CAPPED SHALL BE PROTECTED WITH REMOVABLE FILTER MEDIA TO PROTECT EXISTING DUCT SYSTEMS FROM CONSTRUCTION DEBRIS. ALL NEW DUCTWORK SHALL BE PROTECTED AS REQUIRED AND CLEANED PRIOR TO START-UP. IF CONSTRUCTION DEBRIS IS FOUND INSIDE UNPROTECTED DUCTWORK THAN DUCT CLEANING OF THE ENTIRE SYSTEM SHALL BE PERFORMED AT THE CONTRACTOR'S EXPENSE.
- THE MECHANICAL CONTRACTOR WILL BE RESPONSIBLE TO MAINTAIN EACH PROJECT SPACE IN A NEGATIVE PRESSURIZATION AND PROVIDE HEPA FILTRATION UNITS AS REQUIRED BY INFECTION CONTROL. IF NECESSARY CONSULT WITH VA, OR ENGINEER OF RECORD, FOR SUGGESTED METHODS THAT MAY BE UTILIZED TO ELIMINATE CONTAMINATED AIR TO OUTSIDE. VISUAL PRESSURIZATION INDICATORS SHALL BE PROVIDED AT EACH ENTRANCE TO THE CONSTRUCTION ZONE AND MONITORED DAILY TO INSURE A CONSTANT NEGATIVE PRESSURE IS MAINTAINED THROUGHOUT EACH PHASE. COORDINATE PRESSURIZATION PLANNING WITH VA FACILITIES AND INFECTION
- MECHANICAL CONTRACTOR SHALL REVIEW ARCHITECTURAL CEILING PLANS FOR LOCATIONS OF GYPSUM BOARD. DO NOT INSTALL VALVES, VAV BOXES, SENSOR, OR DAMPERS ABOVE GYPSUM BOARD CEILINGS.

CONTROL REPRESENTATIVE PRIOR TO EACH CONSTRUCTION PHASE.

- M. ALL WORK OUTSIDE THE PROTECTED PROJECT BOUNDARIES ABOVE EXISTING CEILING SHALL BE COMPLETED WITH CEILINGS REPLACED IN THE SAME DAY UNLESS FULLY COORDINATED THROUGH INFECTION CONTROL. CLEAN AREA TO ORIGINAL CONDITION ON COMPLETION.
- N. FLUTTER STRIPS OR AIR PRESSURE GAUGES SHALL BE PROVIDED AT THE ENTRANCES TO EACH CONSTRUCTION AREA. ALL CONTRACTED WORKERS SHALL BE TRAINED TO VISUALLY MONITOR THESE DEVICES FOR ADEQUATE NEGATIVE PRESSURIZATION AS THEY ENTER/EXIT THE CONSTRUCTION AREA. DAILY LOGS SHALL BE KEPT BY THE MECHANICAL CONTRACTOR TO INSURE CONSTANT PRESSURIZATION HAS BEEN MAINTAINED.
-). CONTRACTOR SHALL MAINTAIN ACCURATE RECORD DRAWINGS SHOWING ANY DISCREPANCIES WITH EXISTING PIPING INDICATED OR REVISIONS TO THE BID DOCUMENT LAYOUTS. ALL CHANGES WILL BE UPDATED WITHIN THE FINAL RECORD DRAWING SET.

KEY NOTES:

- CONNECT INTO TOP OF AHU AT DAMPER FURNISHED WITH AHU (ACTUATOR BY CONTROLS CONTRACTOR). FIELD VERIFY EXACT CONNECTION SIZE AND TRANSITION WITH FLARED CONNECTION NOT EXCEEDING 45 DEGREES IN ANY DIRECTION.
- CONNECT INTO FRONT/REAR PANEL AHU AT DAMPER FURNISHED WITH AHU (ACTUATOR BY CONTROLS CONTRACTOR). FIELD VERIFY EXACT CONNECTION SIZE AND TRANSITION WITH FLARED CONNECTION NOT EXCEEDING 45 DEGREES IN ANY DIRECTION.
- B> PROVIDE A SHEETMETAL PLENUM BEHIND LOUVER INDICATED. PLENUM SHALL BE MINIMUM OF 36" DEEP WITH PITCHED BOTTOM TO 1' COPPER DRAIN PIPE ROUTED TO NEAREST FLOOR DRAIN. PROVIDE MINIMUM OF 24"X24" ACCESS DOOR TO ALLOW FOR ENTRY INTO PLENUM FOR SERVICE/CLEANING. INCLUDE UNISTRUT STAND AND FLOOR BRACING ON BOTTOM OF PLENUM CAPABLE OF SUPORTING AT LEAST 500 LBS.
- PROVIDE MINIMUM 24"X48" HINDGED ACCESS DOORS ON BOTH SIDES OF HEAT RECOVERY COIL FOR CLEANING PURPOSES. PROVIDE PITCHED BOTTOM TO 1" COPPER FLOOR DRAIN WITH TRAP ROUTED TO NEAREST FLOOR DRAIN.
- 5 SEAL AROUND ALL FLOOR PENETRATIONS INTO SHAFT WITH 4" HIGH CONCRETE CURB TO AVOID WATER INFILTRATIONS INTO FLOORS BELOW. REFER TO LIFE SAFETY PLAN FOR FIRE SEALING AS REQUIRED.
- B> PENTRATE MECHANICAL ROOM FLOOR FOR HVAC SERVICE TO OFFICES BELOW WITH TIGHT CEILING PLENUM SPACE, REFER TO SECTION 3/M404. FIRE SEAL EACH FLOOR PENETRAITON AS REQUIRED AND PROVIDE EITHER CONCRETE CURB AROUND PERIMETER, OR SLEEVE THAT EXTENDS AT LEAST 2" ABOVE FLOOR LEVEL, TO PREVENT WATER MIGRATION TO FLOOR BELOW.
- COORDINATE A MINIMUM OF 36" CLEARANCE IN FRONT OF VFD CONTROLLER MOUNTED TO AHU. COORDINATE ON-SITE WIRING AND INSTALLATION REQUIREMENTS WITH MANUFACTURER AND ELECTRICAL SUBCONTRACTOR AS REQUIRED. PERFORM START-UP AND PROGRAMMING WITH CONTROLS CONTRACTOR ASSISTANCE.
- 8 SAME AS KEY NOTE 7 ABOVE EXCEPT THESE PUMP VFD'S SHALL BE PROVIDED WITH A UNISTRUT STAND SECURED TO FLOOR.
- 9 BLANK-OFF PORTION OF LOUVER BEHIND COLUMN WITH INSULATED PANEL, FIELD VERIFY EXACT DIMENSION.



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CONSULTANTS St. Paul, MN 55102 Phone: 651-222-3701 Revision# Description

one eighth inch = one foot 0 4 8 16

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STONE GROUP ARCHITECTS

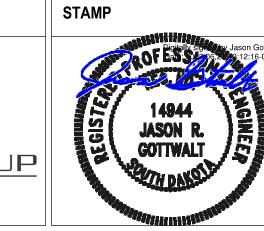
ARCHITECT OF RECORD

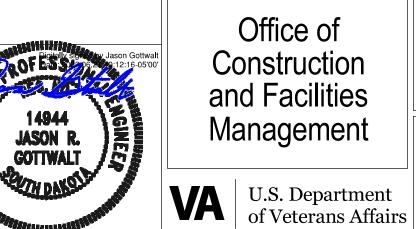
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Drawing Title FIRST FLOOR MECHANICAL ROOM **HVAC PLAN**

DOCUMENTS

Project Title NEW FRONT LOBBY AND CONSTRUCTION PRIMARY CARE ADDITION

Building Number Drawing Number SIOUX FALLS, SOUTH DAKOTA

Checked Drawn MH113 JRG TNH

