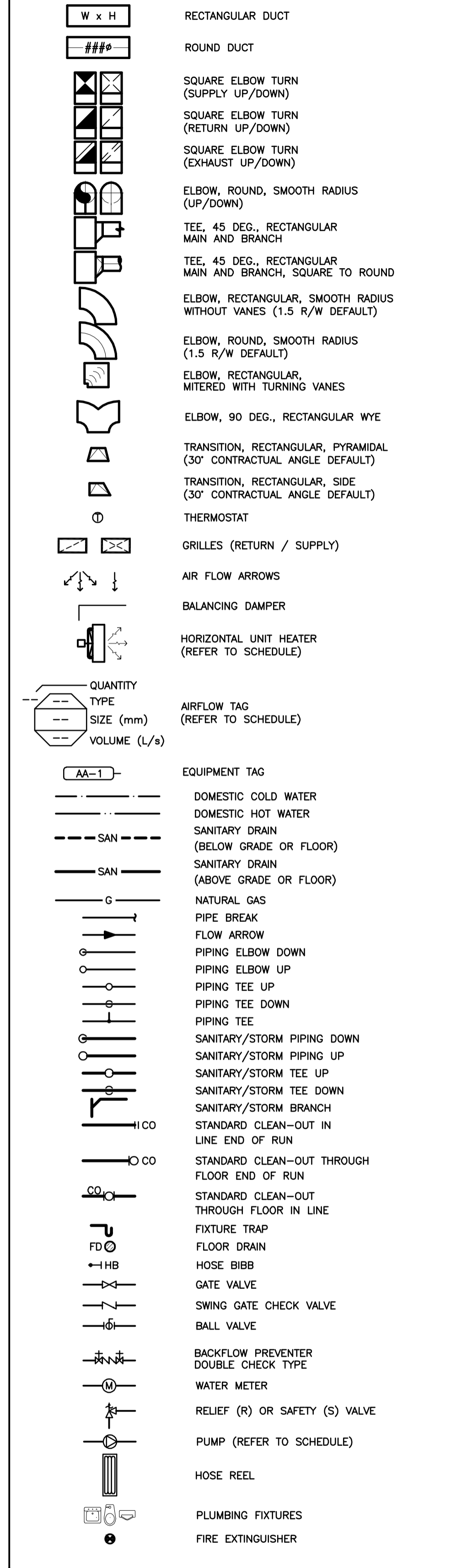


**MECHANICAL SYMBOLS**

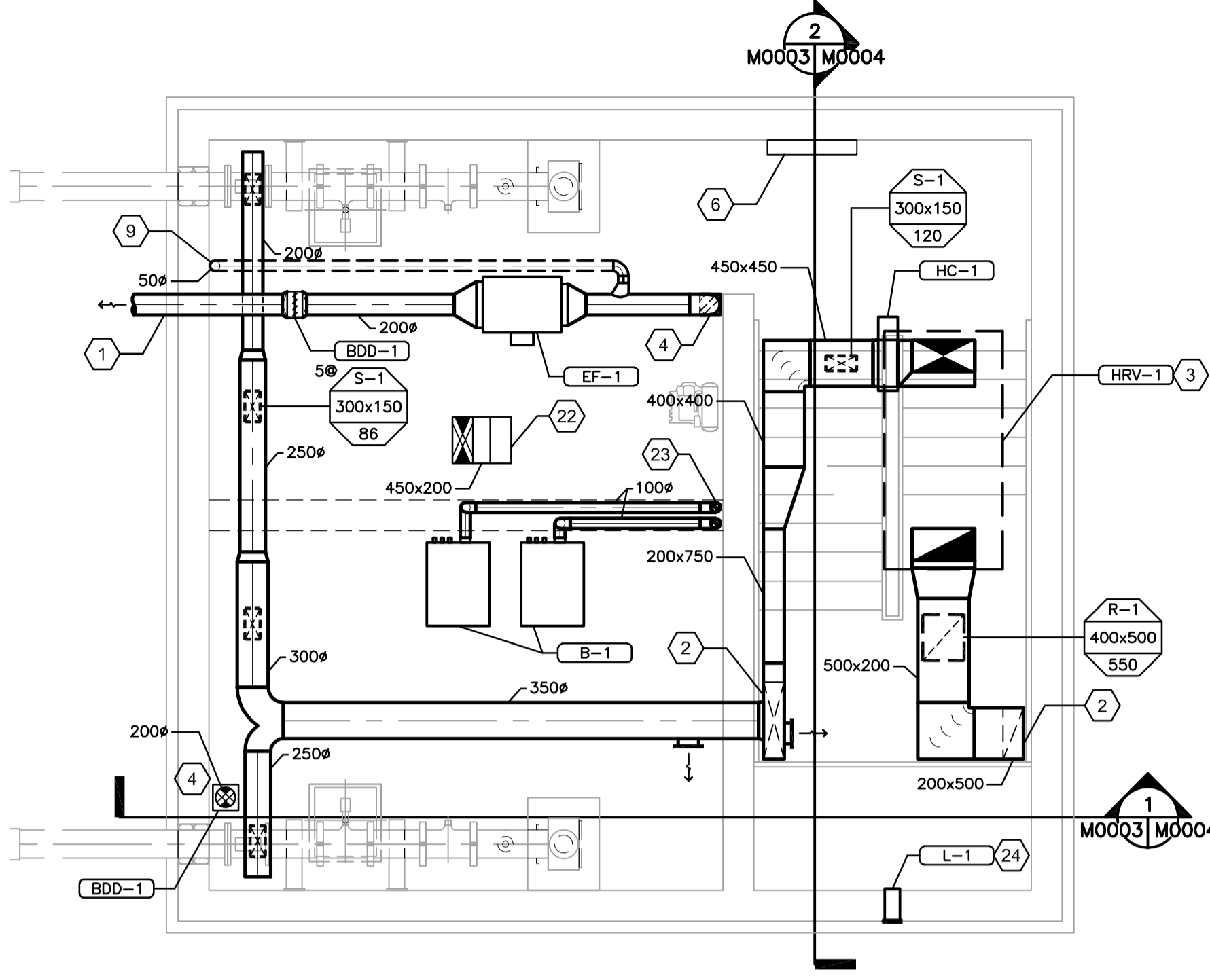


**GENERAL NOTES**

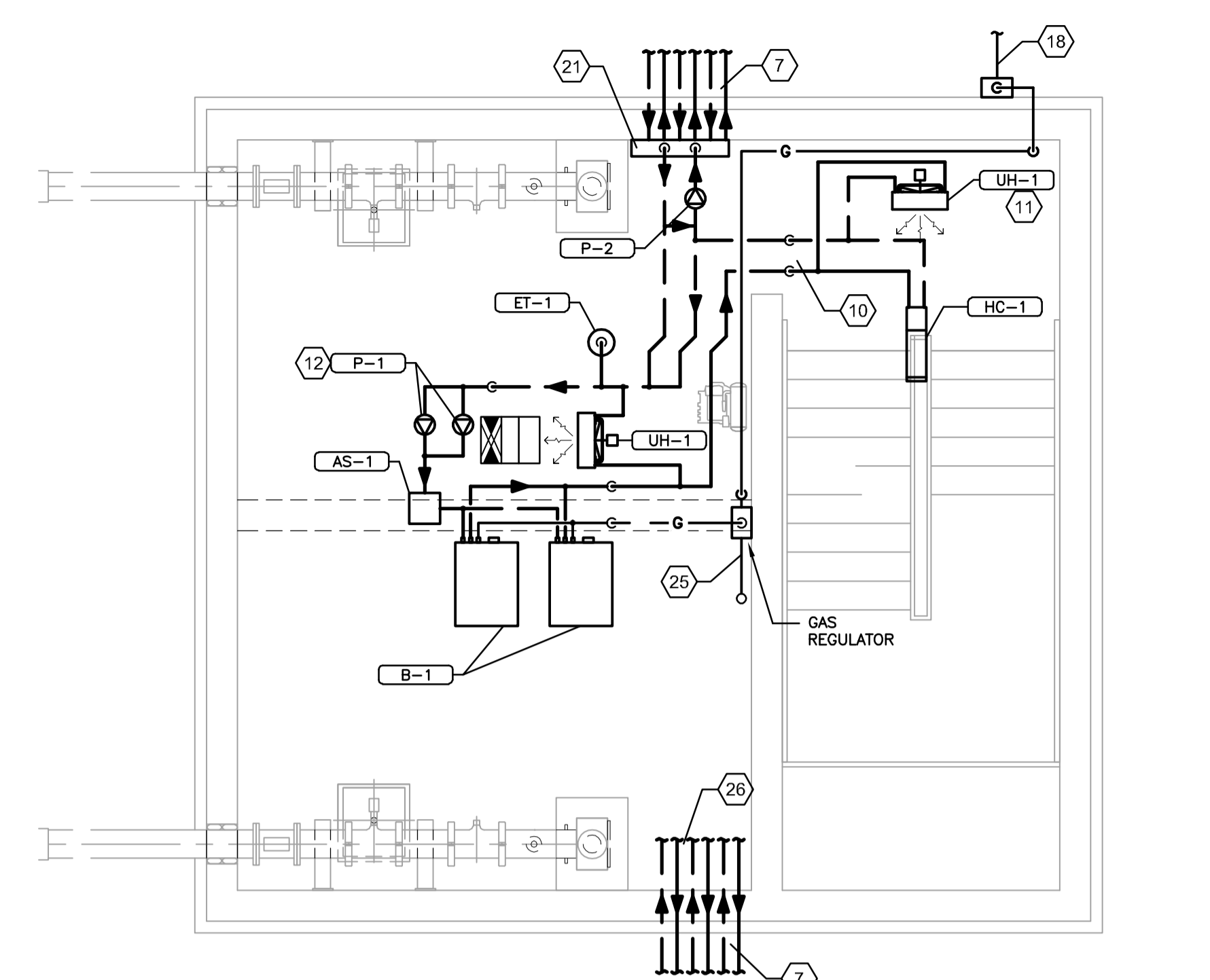
- COORDINATE WITH OTHER TRADES.
- CONFORM TO SPECIFICATIONS FOR DUCTWORK, MATERIALS, AND INSTALLATION.
- SEE DRAWINGS 9,10,11/M0005-02 FOR DUCTWORK MOUNTING DETAILS.
- PROVIDE 25mm THERMAL INSULATION FOR ALL SUPPLY AIR AND OUTSIDE AIR DUCTWORK.
- PROVIDE 50mm THERMAL INSULATION FOR ALL DUCTWORK EXPOSED TO OUTSIDE.
- SEE ARCHITECTURAL AND STRUCTURAL FOR ALL WALL AND ROOF PENETRATIONS.
- SUPPORT ALL HYDRONIC AND DOMESTIC WATER PIPING FROM WALL AT HIGH LEVEL. MAINTAIN APPROPRIATE HEAD CLEARANCES WHEN CROSSING WALKWAYS.
- SEE DRAWING M0006 FOR HEAT RECOVERY VENTILATOR, DOMESTIC WATER, AND HYDRONIC SYSTEM SCHEMATIC DIAGRAMS (INCL. PIPE SIZES).
- INSTALL ONE O/A TEMPERATURE SENSOR ON NORTH WALL.
- PROVIDE PLUMBING VENTS AND CLEANOUTS AS PER CODE.
- INSTALL FIRE EXTINGUISHERS IN ACCORDANCE WITH NFPA 10- STANDARD FOR PORTABLE FIRE EXTINGUISHERS.
- ALL SANITARY PIPE GREATER THAN 75# @1% SLOPE, UNLESS SPECIFIED.
- ALL SANITARY PIPE EQUAL OR SMALLER THAN 75# @2% SLOPE, UNLESS SPECIFIED.
- PROVIDE BALANCING DAMPERS TO ALL SUPPLY/RETURN DIFFUSERS.
- ALL HANGING RODS, BRACKETS, FLOOR SUPPORTS, AND SUPPORT ACCESSORIES TO BE TYPE 316L STAINLESS STEEL.

**MECHANICAL KEYNOTES**

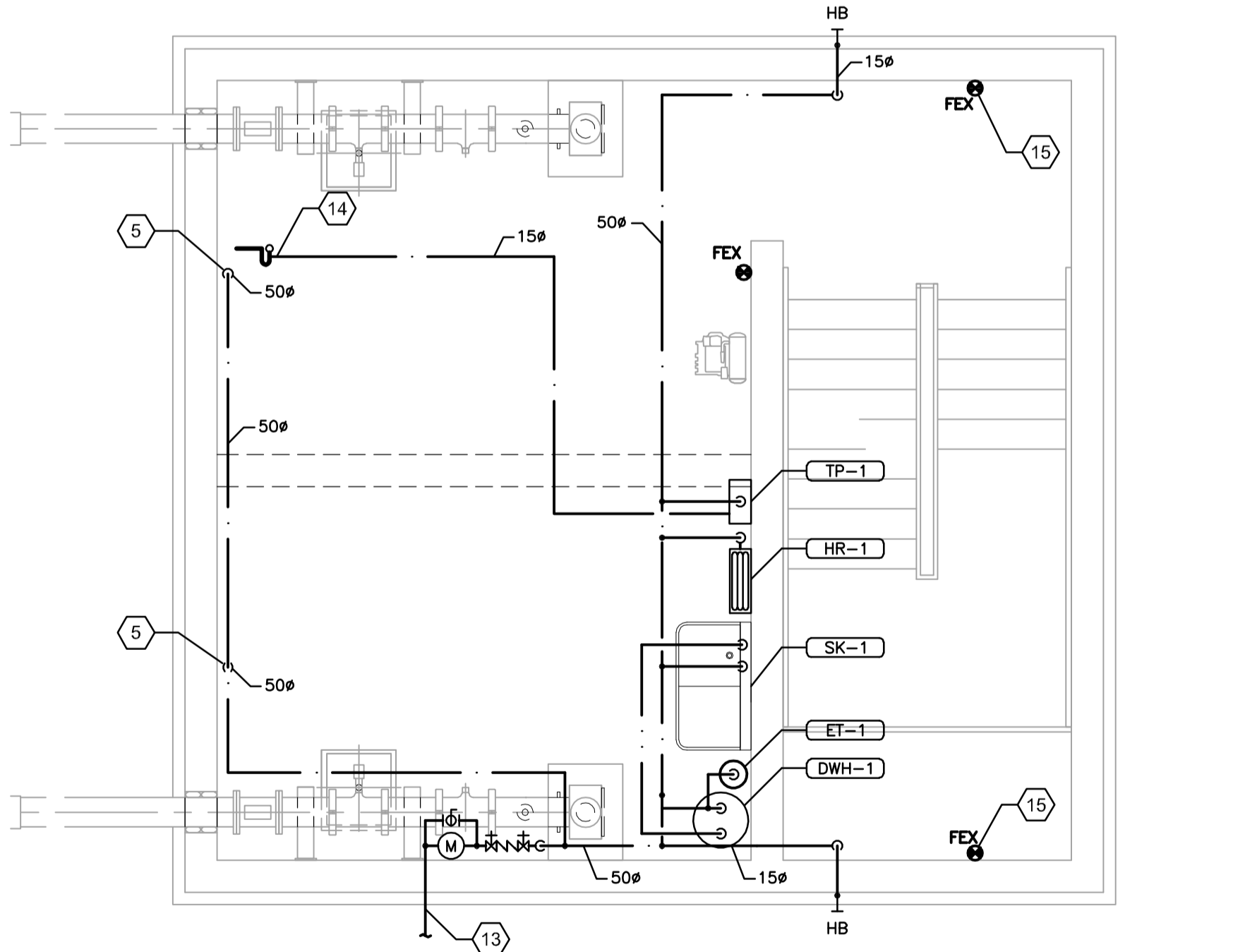
- CONNECT EXHAUST TO BURIED VENT PIPING LEADING TO OXIDIZER. SEE DRAWING 1/M0002 FOR CONTINUATION.
- DUCTWORK RISER TO EXTEND TO ROOF LEVEL. SEE DRAWING M0004 FOR SECTION VIEWS.
- LOCATE HEAT RECOVERY VENTILATOR ON ROOF CURB PROVIDED BY ARCHITECTURAL. SEE ARCHITECTURAL DRAWINGS FOR DETAILS.
- PROVIDE MANUALLY-OPERATED DAMPER TO BE CLOSED WHEN SERVICING EXHAUST FAN. WELD 15x15 WIRE MESH AT END OF DUCT INSIDE HOLDING TANK.
- PROVIDE FLUSHING PIPE FOR HOLDING TANK. SEE DRAWING 7/M0005-01 FOR DETAILS.
- LOCATE HRV-1 CONTROL PANEL AT TOP LEVEL OF STAIRCASE, INSIDE ENTRY DOOR.
- HYDRONIC PIPING TO MANHOLE PADS. SEE MECHANICAL SITE PLAN, DRAWING 1/M0002, FOR CONTINUATION.
- SLOPE FLOOR TO FLOOR DRAINS. COORDINATE WITH STRUCTURAL.
- CONNECT SANITARY VENTS TO HOLDING TANK EXHAUST DUCT.
- HYDRONIC PIPING RISERS UP TO ROOF LEVEL TO SERVE UNIT HEATER (UH-1) AND HEATING COIL (HC-1).
- UNIT HEATER SUSPENDED FROM ROOF AT TOP LEVEL OF STAIRCASE.
- SEE DRAWING 4/M0005-01 FOR PUMP INSTALLATION DETAILS.
- CONNECT TO DOMESTIC WATER SERVICE, SEE SITE PLAN FOR CONTINUATION. SEE DRAWING 6/M0005-01 FOR WATER SERVICE ENTRY DETAIL.
- CONNECT WATER LINE FROM TRAP PRIMER (TP-1) TO COMMON SANITARY TRAP. SEE DRAWINGS 1,5/M0005-01 FOR DETAILS.
- LOCATE FIRE EXTINGUISHER AT TOP LEVEL OF STAIRCASE ADJACENT TO EXTERIOR DOOR.
- SANITARY LINE TO DRAIN INTO HOLDING TANK. SEE DRAWING 1/M0005-01 FOR DETAILS.
- PIPING FROM SUMP PIT TO PENETRATE LOWER WALL INTO HOLDING TANK AT HIGH LEVEL FOR SUMP DRAINAGE. SEE DRAWING M0004 FOR SECTION VIEWS.
- NATURAL GAS METER PROVIDED BY MANITOBA HYDRO. SEE CIVIL SITE PLAN FOR CONTINUATION.
- PROVIDE 25mm# DRAINAGE PIPING FROM HEATING COIL (HC-1) AND HEAT RECOVERY VENTILATOR (HRV-1) TO FUNNEL FLOOR DRAIN (FD-2) AT TOP LEVEL OF STAIRCASE. SEE DRAWING M0004 FOR SECTION VIEWS.
- 500x500x700 SUMP PIT LOCATED AT BOTTOM LEVEL OF STAIRCASE. SEE DRAWING 15/M0005-02 FOR DETAILS. COORDINATE WITH STRUCTURAL.
- HYDRONIC MANIFOLD.
- COMBUSTION AIR INTAKE TO PENETRATE ROOF. CONFORM TO CURRENT MANITOBA GAS CODE. SEE DRAWING M0004 FOR SECTION VIEWS.
- BOILER FLUE VENTS TO PENETRATE ROOF. PIPE CONDENSATE FROM VENT CLEANOUT THROUGH NEUTRALIZER KIT TO NEAREST FLOOR DRAIN. CONFORM TO CURRENT MANITOBA GAS CODE. SEE DRAWING M0004 FOR SECTION VIEWS.
- PROVIDE LOUVER FOR VENTILATION AIR. CONFORM TO CURRENT MANITOBA GAS CODE.
- PROVIDE GAS PRESSURE REGULATOR, PIPE CONDENSATE FROM REGULATOR TO NEAREST FLOOR DRAIN. PIPE GAS RELIEF VENT FROM REGULATOR THROUGH ROOF. CONFORM TO CURRENT MANITOBA GAS CODE.
- CONNECT HYDRONIC PIPING TO MANIFOLD. SEE DRAWING M0006.



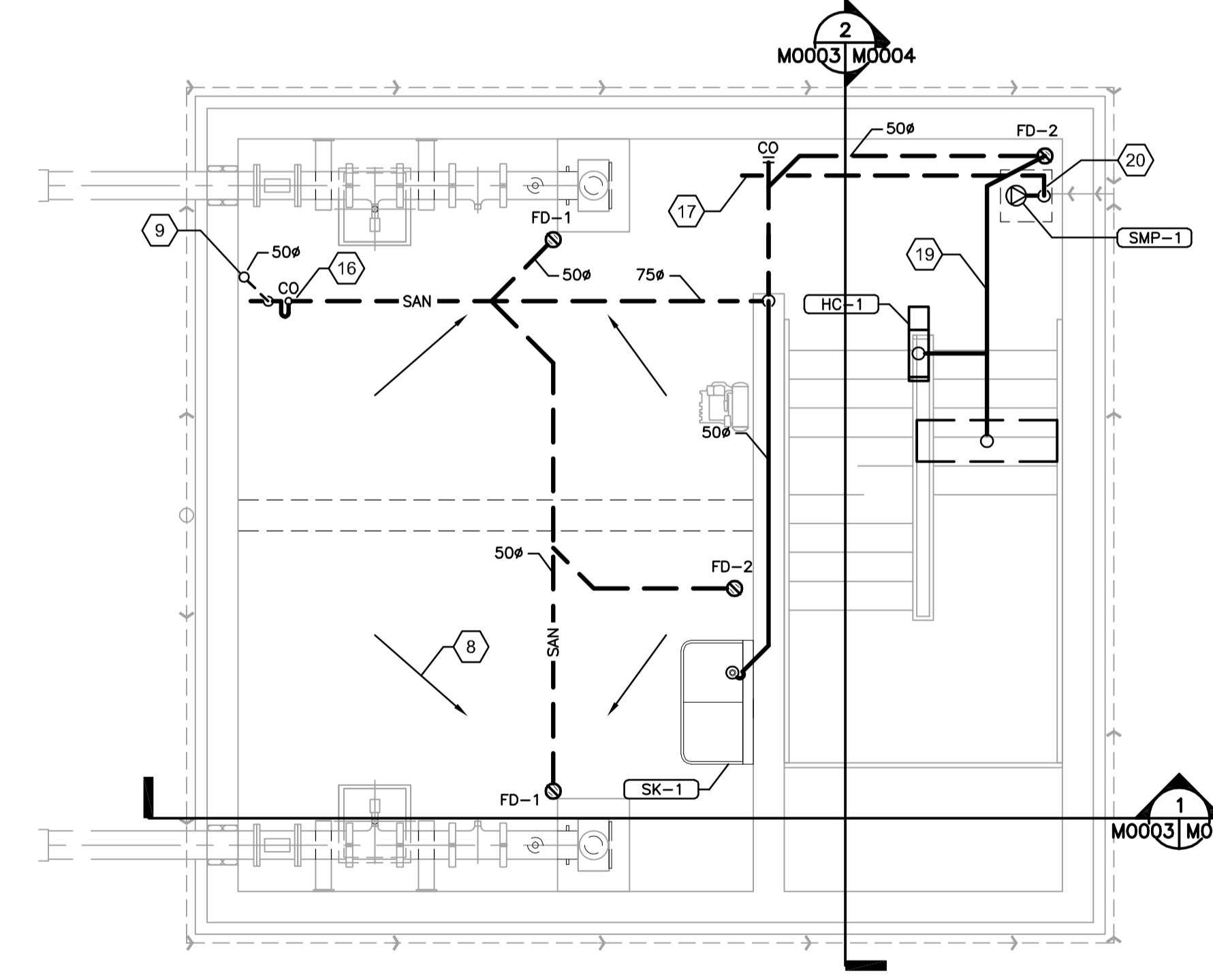
**1 HVAC PLAN**  
 M0003 1:50



**2 HYDRONIC PLAN**  
 M0003 1:50



**3 PLUMBING & FIRE PROTECTION PLAN**  
 M0003 1:50



**4 SANITARY PLAN**  
 M0003 1:50

<b>LOCATION APPROVED UNDERGROUND STRUCTURES</b> SUPV. U/G STRUCTURES COMMITTEE DATE		B.M. ELEV.		<b>Stantec Consulting Ltd.</b> 905 Waverley Street, Winnipeg, Manitoba Tel 204-489-5900 Fax 204-453-9012		ENGINEER'S SEAL		<b>THE CITY OF WINNIPEG</b> WATER AND WASTE DEPARTMENT	
NOTE: LOCATION OF UNDERGROUND STRUCTURES AS SHOWN ARE BASED ON THE BEST INFORMATION AVAILABLE BUT NO GUARANTEE IS GIVEN THAT ALL EXISTING UTILITIES ARE SHOWN OR THAT THE GIVEN LOCATIONS ARE EXACT. CONFIRMATION OF EXISTENCE AND EXACT LOCATION OF ALL SERVICES MUST BE OBTAINED FROM THE INDIVIDUAL UTILITIES BEFORE PROCEEDING WITH CONSTRUCTION.		DESIGNED BY: L.W. CHECKED BY: A.B.		DRAWN BY: J.L.T. APPROVED BY: A.B.		HOR. SCALE: AS NOTED VERTICAL:		RELEASED FOR CONSTRUCTION:	
A ISSUED FOR TENDER 10.02.16 L.W.		NO. REVISIONS		DATE 09.11.13		DATE		BID OPPORTUNITY NO. 822-2009	
Certificate of Authorization Stantec Consulting Ltd. No. 1301 Date:		APEGM Certificate of Authorization Stantec Consulting Ltd. No. 1301 Date:		SOUTH END WATER POLLUTION CONTROL CENTRE HAULED WASTEWATER RECEIVING FACILITIES HAULED WASTEWATER RECEIVING BUILDING MECHANICAL PLANS		CITY DRAWING NUMBER 1-0102A-M0003-001		SHEET 1 OF 1	