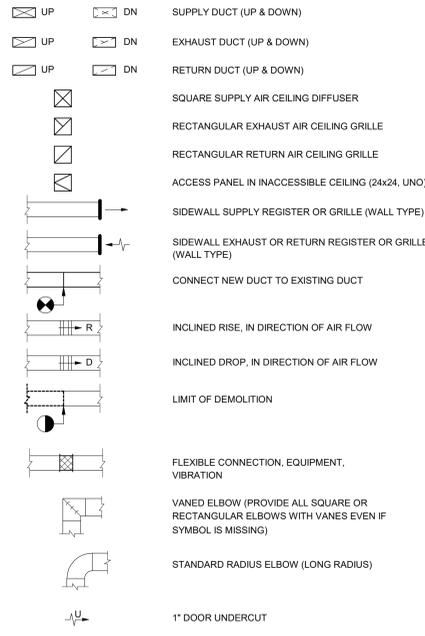
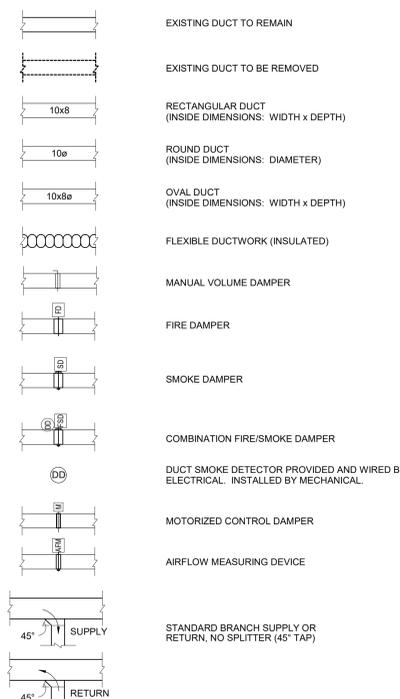


**MECHANICAL LEGEND**

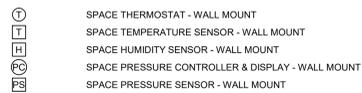
**AIR DISTRIBUTION SYMBOLS**



**AIR DISTRIBUTION SYMBOLS**



**CONTROLS DEVICE SYMBOLS**



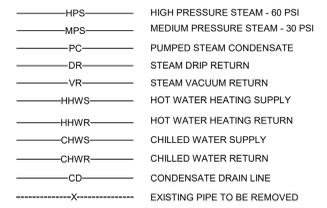
**AIR TERMINAL SYMBOLS**



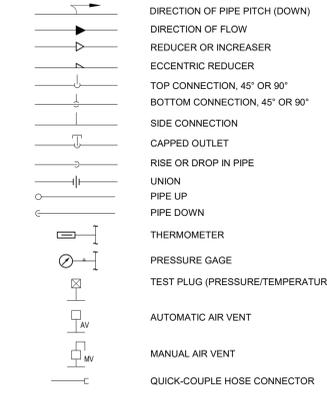
**DRAWING SYMBOLS**



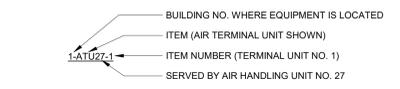
**PIPING SYMBOLS**



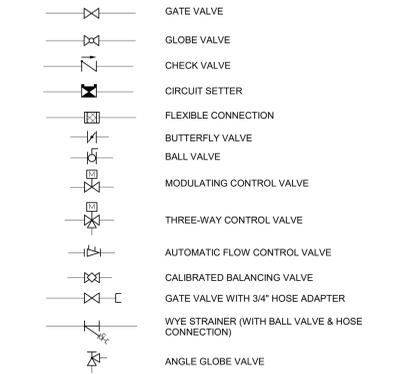
**GENERAL PIPING SYMBOLS**



**EQUIPMENT ANNOTATIONS**



**VALVE SYMBOLS**



**MECHANICAL NOTES**

- CONTRACTOR IS RESPONSIBLE FOR VERIFICATION OF FIELD CONDITIONS PRIOR TO BEGINNING WORK AND ORDERING EQUIPMENT, AND FOR COORDINATING NEW EQUIPMENT DIMENSIONS AND MEANS AND METHODS FOR INSTALLATION WITH FIELD CONDITIONS.
- CONTRACTOR IS RESPONSIBLE TO COORDINATE WITH SUBMITTED EQUIPMENT TO ENSURE ALL INLET/OUTLET CONNECTIONS COORDINATE WITH FIELD INSTALLED DUCTWORK AND MAKE ANY NECESSARY DUCT MODIFICATIONS TO ENSURE PROPER OPERATION OF MECHANICAL EQUIPMENT.
- SUBMITTALS SHALL MEET SCHEDULED DESIGN CHARACTERISTICS, INCLUDING BUT NOT LIMITED TO CFMS, EAT(OB/WB), ESP, CAPACITIES, VOLTAGES/PHASES, MCA/MOCP, SONES, ETC.
- ALL DUCT CONSTRUCTION, INSTALLATION, AND SUPPORTS ARE TO COMPLY WITH LATEST EDITION OF SMACNA'S HVAC DUCT CONSTRUCTION STANDARDS METAL AND FLEXIBLE DUCT.
- INSULATE ALL DUCTWORK ACCORDING TO SPECIFICATIONS.
- ALL WALL-MOUNTED THERMOSTATS AND/OR TEMPERATURE SENSORS SHALL BE INSTALLED AT AN ELEVATION OF 48\"/>

**GENERAL NOTES**

- THESE DRAWINGS ARE DIAGRAMMATIC IN NATURE AND INDICATIVE OF WORK TO BE PROVIDED (FURNISHED AND INSTALLED) UNDER THIS CONTRACT. DRAWINGS SHOULD NOT BE SCALED.
- THE CONTRACTOR IS RESPONSIBLE TO EXAMINE THE EXISTING CONDITIONS UNDER WHICH THEY SHALL OPERATE AND VERIFY THE EXTENT OF WORK REQUIRED TO COMPLETE THE WORK UNDER THIS CONTRACT.
- PRIOR TO ORDERING AND FABRICATING ANY EQUIPMENT, IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO EXAMINE THE PHYSICAL CONDITIONS AT THE PROJECT SITE AND VERIFY SPACE AND SUFFICIENT CLEARANCES ARE AVAILABLE FOR INSTALLING EQUIPMENT, DUCTWORK, PIPING, AND APPURTENANCES, AND TO DETERMINE ANY NECESSARY MODIFICATIONS.
- PERFORM ALL WORK IN COMPLIANCE WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL CODES, REGULATIONS, AND STANDARDS ADOPTED BY THE AUTHORITY HAVING JURISDICTION. IF CONFLICTS EXIST BETWEEN THESE ENGINEERING DOCUMENTS AND CODES, THE MOST STRINGENT REQUIREMENTS SHALL GOVERN.
- ALL CONSTRUCTION WORK SHALL ALSO MEET THE FOLLOWING CODE REQUIREMENTS:
  - INTERNATIONAL BUILDING CODE (IBC) 2018
  - INTERNATIONAL EXISTING BUILDING CODE 2018
  - IBC MECHANICAL 2018
  - IBC PLUMBING 2018
  - IBC ENERGY CONSERVATION 2018
  - INTERNATIONAL FIRE CODE 2018
  - NFPA 1-2018, THE UNIFORM FIRE CODE
  - NFPA 101-2018, THE LIFE SAFETY CODE
  - NFPA 518-2019, STANDARD FOR FIRE PREVENTION DURING WELDING, CUTTING AND OTHER HOT WORK
  - NFPA 13-2019, STANDARD FOR THE INSTALLATION OF SPRINKLER SYSTEMS
  - NFPA 70-2017, NATIONAL ELECTRICAL CODE
  - NFPA 99A-2018, STANDARD FOR THE INSTALLATION OF AIR CONDITIONING AND VENTING SYSTEMS
  - NFPA 99-2018, STANDARD FOR HEALTH CARE FACILITIES
  - NFPA 241-2019, STANDARD FOR SAFEGUARDING CONSTRUCTION, ALTERATION AND DEMOLITION OPERATIONS.
  - ALL APPLICABLE VA DESIGN MANUALS
- CONTRACTOR SHALL COORDINATE AND SEQUENCE DEMOLITION, CLEANING, AND CONSTRUCTION WORK.
- CONTRACTOR SHALL NOTE ANY SPECIAL REQUIREMENTS FOR INSTALLATION OF WORK UNDER THIS CONTRACT. DISMANTLE AND REASSEMBLE EQUIPMENT AS NECESSARY FOR ENTRY INTO THE BUILDING AND THE LOCATION OF INSTALLATION.
- THE CONTRACTOR SHALL MAINTAIN A COMPLETE PROJECT SCHEDULE AND SHALL UPDATE THIS SCHEDULE WEEKLY. ANY CHANGES SHALL BE NOTED AND AN UPDATED SCHEDULE SHALL BE PROVIDED TO THE OWNER.
- ALL PERMITS, FEES, TAXES, ETC SHALL BE PAID BY CONTRACTOR AS PART OF THE TOTAL PROJECT COST.
- MAINTAIN THE INTEGRITY OF ALL FIRE AND SMOKE RATED WALLS, PARTITIONS, CEILINGS, AND FLOORS. SEAL ALL PENETRATIONS THROUGH RATED ASSEMBLIES WITH FIRESTOP MATERIAL IN ACCORDANCE WITH U.L. REQUIREMENTS TO MAINTAIN THE ASSEMBLY RATING.
- CONTRACTOR SHALL FURNISH U.L. APPROVED DRAWINGS FOR EACH TYPE OF FIRE AND SMOKE RATED ASSEMBLY PENETRATION BY DUCTS, PIPES, OR CONDUITS, AND SHALL DISPLAY THESE DRAWINGS ON THE JOB SITE AT ALL TIMES DURING CONSTRUCTION.
- CONTRACTOR SHALL REFER TO ALL DETAILS FOR PROPER GUIDANCE.
- THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS AND EQUIPMENT SUBMITTALS FOR ALL PRODUCTS USED ON PROJECT.
- THE COR'S APPROVAL OF SUBMITTAL DATA SHALL NOT RELIEVE THE CONTRACTOR OF RESPONSIBILITY FOR DEVIATIONS FROM THE REQUIREMENTS OF CONTRACT DOCUMENTS UNLESS THE CONTRACTOR HAS RECEIVED WRITTEN APPROVAL FROM THE ENGINEER TO THE SPECIFIC DEVIATION. THE ENGINEER'S APPROVAL OF SUBMITTAL DATA SHALL NOT RELIEVE THE CONTRACTOR OF RESPONSIBILITY FOR ERRORS OR OMISSIONS IN HIS OR HER SUBMITTAL DATA.
- THE CONTRACTOR IS REQUIRED TO SUBMIT THREE COMPLETE O&M MANUALS IN THREE RING BINDERS AT SUBSTANTIAL COMPLETION. MANUALS SHALL INCLUDE INSTALLATION AND MAINTENANCE DATA ON ALL NEW EQUIPMENT AND MATERIALS, CERTIFIED TECHNICAL PRODUCT DATA, EQUIPMENT SHOP DRAWINGS, SPARE PARTS DATA, ETC. PROVIDE AN INDEX AND ASSOCIATED VIDEOS.
- CLOSE OUT DOCUMENTS: THE CONTRACTOR IS TO MAINTAIN ONE SET OF CONSTRUCTION DRAWINGS ON SITE AND KEEP CURRENT WITH MARK UP AS-BUILT CONDITIONS DURING CONSTRUCTION OF THE PROJECT. THIS SET IS TO INCLUDE ALL CONTRACT CHANGES, MODIFICATIONS AND CLARIFICATIONS. THIS SET ALONG WITH ALL SHOP DRAWINGS SHALL BE TURNED OVER TO THE ARCHITECT/ENGINEER AFTER CONSTRUCTION COMPLETION.
- IT IS THE RESPONSIBILITY OF ALL BIDDERS TO THOROUGHLY REVIEW AND UNDERSTAND ALL CONSTRUCTION DOCUMENTS. THIS INCLUDES BUT IS NOT LIMITED TO ALL DRAWINGS, SPECIFICATION SECTIONS, ETC. THE DRAWINGS ARE SCHEMATIC IN NATURE. THEREFORE BEFORE STARTING ANY WORK, THE CONTRACTOR SHALL REVIEW ALL OTHER CONSTRUCTION DOCUMENTS, VERIFY FIELD CONDITIONS AND SHALL MAKE ANY REQUIRED MINOR ADJUSTMENTS WITHOUT EXTRA COST TO THE OWNER. ANY MAJOR DISCREPANCIES FOUND SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/ENGINEER. THE BASE BID SHALL REFLECT THE TOTAL COST OF NEW EQUIPMENT INSTALLATION. THIS INCLUDES LABOR, EQUIPMENT AND MATERIALS. NO CHANGE ORDERS SHALL BE ISSUED WITHOUT WRITTEN CONSENT AND APPROVAL FROM THE CONTRACTING OFFICER.

**ABBREVIATIONS**

(E)	EXISTING	GPM	GALLONS PER MINUTE
ADJ	ADJUSTABLE	HCV	HEATING CONTROL VALVE
AFF	ABOVE FINISHED FLOOR	HHWR	HEATING HOT WATER RETURN
AFM	AIRFLOW MEASURING DEVICE	HHWS	HEATING HOT WATER SUPPLY
AHU	AUTHORITY HAVING JURISDICTION	HP	HORSEPOWER
AHU	AIR HANDLING UNIT	HPS	HIGH PRESSURE STEAM (60 PSI)
ATU	AIR TERMINAL UNIT	IBC	INTERNATIONAL BUILDING CODE
BAS	BUILDING AUTOMATION SYSTEM	IN	INCH
BHP	BRAKE HORSEPOWER	KW	KILOWATT
BOD	BOTTOM OF DUCT	LAT	LEAVING AIR TEMPERATURE
BOT	BOTTOM OF STRUCTURE	LMT	LEAVING WATER TEMPERATURE
BTUH	BRITISH THERMAL UNIT PER HOUR	LPS	LOW PRESSURE STEAM (5 PSI)
CAV	CONSTANT AIR VOLUME	MBTUH	1,000 BTUH
CCV	COOLING CONTROL VALVE	MCA	MINIMUM CIRCUIT AMPACITY
CD	CEILING SUPPLY AIR DIFFUSER	MOCP	MAXIMUM OVERCURRENT PROTECTION
CFM	CUBIC FEET	MPS	MEDIUM PRESSURE STEAM (20 PSI)
CFM	CUBIC FEET PER MINUTE	MUA	MAKE UP AIR
CG	CEILING GRILLE	NC	NEW CONNECTION / NOISE CRITERIA
CHWR	CHILLED WATER RETURN	OA	OUTSIDE AIR
CHWS	CHILLED WATER SUPPLY	OSL	OUTSIDE AIR LOUVER
COR	CONTRACTING OFFICER'S REPRESENTATIVE	OSD	OPPOSED BLADE DAMPER
CVE	CONNECT TO EXISTING	PH	PHASE
CU	CONDENSING UNIT	PSIG	POUNDS PER SQUARE INCH GAGE
CV	CONSTANT AIR VOLUME	RA	RETURN AIR
DD	DUCT MOUNTED SMOKE DETECTOR	REF	REFRIGERANT
DIA	DIAMETER	RG	RETURN AIR GRILLE
DSSI	DUCTLESS SPLIT SYSTEM INDOOR UNIT	RH	RELATIVE HUMIDITY
DSSO	DUCTLESS SPLIT SYSTEM OUTDOOR UNIT	RPD	REVOLUTIONS PER MINUTE
EA	EXHAUST AIR	SA	SUPPLY AIR
EAT	ENTERING AIR TEMPERATURE	SD	SMOKE DAMPER
EDH	ELECTRIC DUCT HEATER	SF	SQUARE FEET
EG	EXHAUST FAN	SR	SUPPLY AIR REGISTER
EG	EXHAUST AIR GRILLE	TAB	TEST AND BALANCE
EWTF	ENTERING WATER TEMPERATURE	TOD	TOP OF DUCT
FCU	FAN COIL UNIT	TYP	TYPICAL
FV	FIRE DAMPER	V	VOLTAGE
FLEX	FLEXIBLE	VAV	VARIABLE AIR VOLUME
FO	FLAT OVER	VD	VOLUME DAMPER
FPM	FEET PER MINUTE	VFD	VARIABLE FREQUENCY DRIVE
FS	COMBINATION FIRE SMOKE DAMPER	WG	WATER GAUGE
FT	FEET		

**DRAWING INDEX - HVAC**

M-001	NOTES AND LEGEND - HVAC
M-002	SCHEDULES - HVAC
M-003	SCHEDULES - HVAC
MH100	MECHANICAL FLOOR PLAN - BASEMENT
MH101	MECHANICAL OVERALL PLAN - LEVEL 1
MH101A	MECHANICAL FLOOR PLAN - LEVEL 1 - AREA A
MH101B	MECHANICAL FLOOR PLAN - LEVEL 1 - AREA B
MH102	MECHANICAL FLOOR PLAN - PENTHOUSE
MH102A	MECHANICAL FLOOR PLAN - PENTHOUSE - AREA A
MH102B	MECHANICAL FLOOR PLAN - PENTHOUSE - AREA B
MH201A	MECHANICAL AIRFLOWS PLAN - LEVEL 1 - AREA A
MH201B	MECHANICAL AIRFLOWS PLAN - LEVEL 1 - AREA B
MH301	MECHANICAL SECTIONS
MH401	ENLARGED VIEWS - HVAC
MH402	ENLARGED VIEWS - HVAC
MH403	ENLARGED VIEWS - HVAC
MP101	MECHANICAL OVERALL PIPING PLAN - LEVEL 1
MP101A	MECHANICAL PIPING PLAN - LEVEL 1 - AREA A
MP101B	MECHANICAL PIPING PLAN - LEVEL 1 - AREA B
MP102	MECHANICAL PIPING PLAN - PENTHOUSE
M-501	DETAILS - HVAC
M-502	DETAILS - HVAC
M-503	DETAILS - HVAC
M-504	DETAILS - HVAC
M-601	CONTROLS - HVAC
M-602	CONTROLS - HVAC
M-603	CONTROLS - HVAC
M-604	CONTROLS - HVAC

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**STAMP**



**Office of Construction and Facilities Management**  
U.S. Department of Veterans Affairs

**Drawing Title**

NOTES AND LEGEND - HVAC

Approved:

**Phase**

ISSUED FOR CONSTRUCTION

FULLY SPRINKLERED

**Project Title**

NEW COMMUNITY LIVING CENTER

Location  
2094 Albany Post Road, Montrose, NY 10548

Issue Date  
05/09/2022

Checked  
CJF/NPS

Drawn  
NS

**Project Number**

620-334

Building Number  
CLC

Drawing Number  
M-001