| ABBREV | DESCRIPTION | ABBREV | DESCRIPTION |
|---------------|-------------------------------------|---------------|--|
| ACV | AUTOMATIC CONTROL VALVE | LAT | LEAVING AIR TEMPERATURE |
| AFF | ABOVE FINISHED FLOOR | LPCR | LOW PRESSURE CONDENSATE |
| AFG | ABOVE FINISHED GRADE | | RETURN (LESS THAN 15 PSI) |
| ALD | ACOUSTICAL LINED DUCT | LPS | LOW PRESSURE STEAM(LESS THAI |
| AMS | AIRFLOW MEASURING STATION | | 15 PSI) |
| APD | AIR PRESSURE DROP | LRA | LOCKED ROTOR AMPS |
| ATC | AUTOMATIC TEMPERATURE | LSGV | LOCK & SHIELD GATE VALVE |
| 7110 | CONTROL | LWT | LEAVING WATER TEMPERATURE |
| В | BAROMETRIC DAMPER | M | MOTORIZED DAMPER |
| BD | BACKDRAFT DAMPER | MAX | MAXIMUM |
| BHP | BRAKE HORSEPOWER | MBH | 1000 BRITISH THERMAL UNITS |
| BPD | BYPASS DAMPER | MCA | MINIMUM CIRCUIT AMPS |
| BTU | BRITISH THERMAL UNITS | MIN | MINIMUM |
| 510 | BRITION THERWIZE ONTO | MOPD | MAXIMUM OVERCURRENT |
| CBD | COUNTERBALANCED BACKDRAFT DAMPER | MPCR | PROTECTIVE DEVICE MEDIUM PRESSURE CONDENSATE |
| CFM | CUBIC FEET PER MINUTE | | RETURN(16-30 PSIG) |
| CHWR | CHILLED WATER RETURN | MPS | MEDIUM PRESSURE STEAM (16-30 |
| CHWS | CHILLED WATER SUPPLY | | PSIG) |
| CO | | | |
| | CLEANOUT | NA | NOT APPLICABLE |
| CTE | CONNECT TO EXISTING | NC | NOISE CRITERIA |
| CWR | CONDENSER WATER RETURN | NIC | NOT IN CONTRACT |
| CWS | CONDENSER WATER SUPPLY | NO | NORMALLY OPEN |
| | | NTS | NOT TO SCALE |
| DCW | DOMESTIC COLD WATER | 1410 | NOT TO COME |
| DEG.F | DEGREES FAHRENHEIT | OA | OUTSIDE AIR |
| DHW | DOMESTIC HOT WATER | OC | ON CENTER |
| DIA | DIAMETER | OED | OPEN END DUCT |
| DN | DOWN | OS&Y | OUTSIDE SCREW & YOKE GATE |
| | | USAT | VALVE |
| EAT | ENTERING AIR TEMPERATURE | | V/ \L V L |
| ESP | EXTERNAL STATIC PRESSURE | PD | PRESSURE DROP |
| EWT | ENTERING WATER TEMPERATURE | PRD | PRESSURE RELIEF DAMPER |
| EXG | EXISTING | PRV | PRESSURE REDUCING VALVE |
| EXH | EXHAUST | PSI | POUNDS PER SQUARE INCH |
| F&T | FLOAT & THERMOSTATIC TRAP | | |
| FD | FIRE DAMPER | RET | RETURN |
| | | RET | RETURN |
| FL | FINNED LENGTH OF RADIATION | RL | RIFRIGERANT LIQUID |
| FM | FLOW METER | RLA | RATED LOAD AMPERES |
| FOR | FUEL OIL RETURN | RPM | REVOLUTIONS PER MINUTE |
| FOS | FUEL OIL SUPPLY | RS | REFRIGERANT SUCTION |
| FPF | FINS PER FOOT | | |
| FPI | FINS PER/INCH | S | SMOKE DAMPER |
| FPM | FEET PER MINUTE | S/F | SMOKE AND FIRE COMBINATION |
| FT | FEET | | DAMPER |
| FT-HD | FEET OF HEAD | SP | STATIC PRESSURE |
| FT-WG | FEET WATER GAUGE | SS | STAINLESS STEEL |
| FTR | FIN TUBE RADIATOR | SUP | SUPPLY |
| GAL | GALLONS | TEMP | TEMPEDATURE |
| GPM | GALLONS PER MINUTE | TEMP | TEMPERATURE |
| OI W | O/CEONOT ER MINOTE | TT | THERMOSTATIC TRAP |
| HP | HORSEPOWER | TYP | TYPICAL |
| HPCR | HIGH PRESSURE CONDENSATE | | |
| HPCK | RETURN (OVER 30 PSIG) | V | VOLUME DAMPER |
| HPS | HIGH PRESSURE STEAM (OVER | VFD | VARIABLE FREQUENCY DRIVE |
| 111 0 | 30PSIG) | | |
| HRR | HEAT RECOVERY RETURN | VV/ | WITH |
| HRS | HEAT RECOVERY SUPPLY | W/O | WITHOUT |
| HWR | HOT WATER RETURN | WC | WATER COLUMN |
| HWS | HOT WATER SUPPLY | WG | WATER GAUGE |
| LIVVO | HOT WATER SUFFLY | WPD | WATER PRESSURE DROP |
| IN | INCHES | WWMS | WELDED WIRE MESH SCREEN |
| 1.5 | | Z | ZONE DAMPER |
| | | _ | LOIGE DAWN LIX |
| | | PREFIX OF X | EXISTING |
| | | | |

EXISTING EQUIPMENT TO REMAIN PETCOCK FOR GAUGE CONNECTION NEW EQUIPMENT —× PIPE ANCHOR C-PIPE DOWN ——— EXISTING SUPPLY PIPING TO REMAIN — — EXISTING RETURN PIPING TO REMAIN O— PIPE UP EXISTING DUCTWORK TO REMAIN —= PIPE GUIDE **NEW DUCTWORK** PITCH DOWN → PLUG VALVE NEW SUPPLY PIPING — NEW RETURN PIPING PRESSURE GAUGE PRESSURE REDUCING VALVE ACOUSTICALLY LINED DUCT ACV 2 - WAY PRESSURE RELIEF VALVE ACV 3 - WAY PRD PRESSURE RELIEF DAMPER 10-0" FL/D RADIATION I.D. (TYPE A, 10-0" FINNED LENGTH, 10,000 BTU/HR) WITH DAMPER AMS AIRFLOW MEASURING STATION 10-0" FL RADIATION I.D. (TYPE A, 10-0" FINNED LENGTH, 10,000 BTU/HR) WITHOUT DAMPER BALANCE VALVE REDUCER - CONCENTRIC BD BACKDRAFT DAMPER CAP - PIPE REDUCER - ECCENTRIC CHECK VALVE -√-► RETURN AIR SECTION I.D. (SECTION SMOKE DAMPER COMBINATION BALANCING, FLOW MEASURING & TIGHT SHUT-OFF VALVE SECTION I.D. (SECTION A SHOWN ON DWG. M10.1) CB COUNTERBALANCED DAMPER SDH DUCT MOUNTED SMOKE DETECTOR DIFFERENTIAL PRESSURE SENSOR DUCT DIAMETER | | STRAINER DUCT SECTION - SUPPLY/OUTDOOR AIR STATIC PRESSURE SENSOR DUCT SECTION - RETURN AIR SUPPLY AIR **DUCT SECTION - EXHAUST AIR** TAKE - OFF FROM BOTTOM OF PIPE DUCT TURNING VANES —η— TAKE - OFF FROM TOP OF PIPE F FIRE DAMPER (1 1/2 HOUR RATED) TEMPERATURE SENSOR FD (3 HR) FIRE DAMPER (3 HOUR RATED) THERMOMETER | | | | | | | | | FLEXIBLE DUCT THERMOMETER WELL FLOAT & THERMOSTATIC TRAP THERMOSTAT → ISOLATION VALVE THERMOSTAT COOLING —— GLOBE VALVE THERMOSTAT HEATING HUMIDISTAT THERMOSTAT - NIGHT HUMIDITY SENSOR THERMOSTAT - HEATING/COOLING INVERTED BUCKET TRAP THERMOSTATIC TRAP LOCKSHIELD GATE VALVE ——∣—— UNION LOUVER V → VOLUME DAMPER /—S (SUPPLY) R (RETURN) E (EXHAUST) T (TRANSFER) M MOTORIZED DAMPER SUPPLY DIFFUSER (TYPE 2) OS&Y GATE VALVE → DIFFUSER DESCRIPTION (SEE REG., GRILLES & DIFF SCHEDULE) CONNECTION - NEW TO EXISTING S2 4—QUANTITY

SYMBOL DESCRIPTION

SYMBOL DESCRIPTION

GENERAL NOTES

1 VISIT THE BUILDING SITE PRIOR TO BIDDING TO BECOME FAMILIAR WITH EXISTING CONDITIONS, AND TO TAKE MEASUREMENTS AS NECESSARY FOR COMPLETION OF THE WORK ASSOCIATED WITH THE DESIGN INTENT OF THE CONTRACT DOCUMENTS.

─400 CFM EA

- 2 COORDINATE WORK OF MECHANICAL SUBCONTRACTOR WITH WORK OF OTHER TRADES.
- 3 DUCTWORK, PIPING AND EQUIPMENT ARE INDICATED DIAGRAMMATICALLY. FIELD-VERIFY LOCATIONS. 4 PRIOR TO FABRICATING DUCTWORK, COORDINATE WITH OTHER TRADES TO ENSURE THAT THE DUCTWORK
- CAN BE INSTALLED WITH THE INDICATED SIZES AND LOCATIONS FIELD-VERIFY EXISTING DUCT SIZES AND CONDITIONS.SUBMIT ANY DISCREPANCIES OR PROPOSED CHANGES.
- 5 REFER TO ARCHITECTURAL REFLECTED CEILING PLAN FOR LOCATIONS OF CEILING DIFFUSERS AND REGISTERS.PROVIDE VOLUME DAMPERS SO THAT EVERY REGISTER, GRILLE AND DIFFUSER (SUPPLY, RETURN, AND EXHAUST) CAN BE INDIVIDUALLY BALANCED.
- 6 VERIFY INSTALLATION OF EXISTING VOLUME DAMPERS AT EACH BRANCH IN EXISTING SUPPLY DUCT. PROVIDE ADDITIONAL VOLUME DAMPERS WHERE REQUIRED.
- 7 LOCATE VOLUME DAMPERS AS FAR AWAY FROM REGISTERS, GRILLES AND DIFFUSERS AS POSSIBLE TO MINIMIZE NOISE. LOCATE TO BE UNOBSTRUCTED AND EASILY ACCESSIBLE FOR TESTING AND BALANCING. LOCATE POSSIBLE. WHERE VOLUME DAMPERS MUST BE LOCATED ABOVE HARD CEILINGS SUCH AS GYPSUM WALLBOARD, PROVIDE ACCESS PANELS AS SPECIFIED, AND NOTIFY THE ARCHITECT OF SUCH LOCATIONS VERBALLY AND IN WRITING. OBTAIN PERMISSION FROM THE ARCHITECT BEFORE INSTALLING
- 8 DUCT ELBOWS SHALL BE LONG-RADIUS TYPE (THROAT RADIUS EQUAL TO OR GREATER THAN DUCT WIDTH IN THE PLANE OF THE TURN) WHEREVER SPACE ALLOWS. IF SPACE IS NOT ADEQUATE, PROVIDE MITERED ELBOWS WITH TURNING VANES.
- 9 PROVIDE 16 GAUGE SINGLE-THICKNESS TURNING VANES AT MITERED DUCT ELBOWS. VANE EDGES (LEADING AND TRAILING) SHALL BE TANGENTIAL TO AIRFLOW.
- 10 FLEXIBLE DUCT LENGTHS SHALL NOT EXCEED 5-0"

ACCESS PANELS.

- 11 PAINT DUCTWORK VISIBLE THRU CEILING OPENINGS, DUCT OPENINGS, AND REGISTERS, GRILLES, AND DIFFUSERS WITH BLACK PAINT IN ACCORDANCE WITH DIVISION 09 SECTION "PAINTING."
- 12 MOUNT THERMOSTATS AND TEMPERATURE AND HUMIDITY SENSORS AT 48 INCHES AFF TO TOP OF ITEM. PROVIDE ELECTRICAL WALL BOX ATTACHED TO FRAMING.
- 13 WHERE THERMOSTATS/TEMPERATURE SENSORS ARE LOCATED NEAR LIGHT SWITCHES, INSTALL SO THAT LIGHT SWITCHES ARE NEARER TO THE DOOR JAMBS. THE INTENT IS TO LOCATE THERMOSTATS/
- TEMPERATURE SENSORS SO THEY WILL NOT INTERFERE WITH ACCESSIBILITY OF LIGHT SWITCHES. 14 PIPING INDICATED IN OUTSIDE WALLS SHALL BE RUN ON THE WARM SIDE OF BUILDING INSULATION AND
- VAPOR BARRIER. BUILDING INSULATION BEHIND SUCH PIPING SHALL BE CONTINUOUS, WITHOUT JOINTS OR
- 15 PIPING SHALL BE CONCEALED EXCEPT IN MECHANICAL ROOMS AND AS INDICATED. WHERE PIPES DROP IN
- BLOCK WALLS, PROVIDE 1/2" THICK INSULATION MINIMUM.
- 16 SEAL DUCTWORK AND PIPING THRU MECHANICAL ROOM FLOORS AND PARTITIONS, AND THRU FIRE-RATED ASSEMBLIES, WITH FIRESTOP MATERIAL AS SPECIFIED.



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CENTRAL MAINE COMMUNITY COLLEGE ECE AREA RENOVATION

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LEGEND & GENERAL NOTES