## MECHANICAL GENERAL NOTES

1. THE FIRST FIGURE OF DUCT SIZE INDICATES DIMENSION OF FACE SHOWN OR INDICATED. DUCT SIZED ARE NET INSIDE DIMENSIONS.
2. TOTAL STATIC PRESSURE NOTES IN THE SCHEDULES INCLUDED DUCT SYSTEM, TERMINAL UNITS, FILTERS, COILS, ETC. LOSS FOR FILTERS SHALL BE FOR FILTERS AT 50% LOADING.
3. ALL DUCT AND PIPE ROUTING AND CONSTRUCTION SHOWN ON THE DRAWINGS IS DIAGRAMMATIC IN NATURE AND MAY NOT BE SHOWN IN EXACT LOCATIONS OR WITH ALL ANCILLARY ITEMS REQUIRED FOR A COMPLETE AND OPERATING SYSTEM. CONTRACTOR SHALL COORDINATE ROUTING OF ALL DUCTWORK AND PIPING PER TYPICAL CONSTRUCTION PRACTICE IN THE MOST EFFICIENT WAY POSSIBLE WHILE ADHERING AS CLOSELY TO THE DRAWINGS AS POSSIBLE.
4. CONTRACTOR IS RESPONSIBLE FOR COORDINATING ALL INSTALLATION WITH THE WORK OF OTHER TRADES. FIELD MODIFICATIONS SUCH AS OFFSETS IN PIPING OR DUCTWORK NEEDED DUE TO OBSTRUCTIONS OR INTERFERENCES SHALL BE PROVIDED AT NO ADDITIONAL COST.
5. ALL WORK SHALL BE PERFORMED IN A NEAT AND WORKMANLIKE MANNER WITHIN STANDARD OF CARE FOR PROFESSION. ALL LABOR, MATERIAL, TOOLS, PERMITS, INSPECTIONS, TESTING, CERTIFICATION, ETC. REQUIRED FOR A COMPLETE AND SATISFACTORY INSTALLATION TO DESIGN INTENT SHALL BE FURNISHED BY CONTRACTOR. PROVIDE, AT NO ADDITIONAL COST, INCLUDING INCIDENTAL ITEMS NOT SHOWN WHEN REQUIRED FOR TYPICAL COMPLETION OF WORK.
6. DRAWINGS NOT BEARING THE STAMP OR SEAL AND SIGNATURE OF A REGISTERED PROFESSIONAL ENGINEER SHALL NOT BE USED FOR BIDDING OR CONSTRUCTION PURPOSES UNLESS EXPRESSLY APPROVED IN WRITING BY THE ARCHITECT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT ALL DRAWINGS AND SPECIFICATIONS BEING USED FOR BIDDING AND CONSTRUCTION PURPOSES ARE OF THE LATEST REVISION AVAILABLE AND ALL ADDENDUM DOCUMENTS HAVE BEEN INCORPORATED EITHER BY REVISION RELEASE OF DRAWINGS/SPECIFICATIONS OR ATTACHMENT OF SKETCHES OR OTHER ADDENDUM INFORMATION.
7. THE MECHANICAL CONTRACTOR SHALL FURNISH AND INSTALL NEW PRODUCTS OF ESTABLISHED AND REPUTABLE MANUFACTURERS. NO EQUIPMENT SUBSTITUTIONS SHALL BE MADE THAT WOULD LEAVE INADEQUATE OPERATING OR SERVICE SPACE. EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDED INSTALLATION PROCEDURES AND IN AN ARRANGEMENT THAT WILL GIVE THE GREATEST PRACTICAL EASE OF OPERATION AND SERVICE TO THE OWNER.
8. ALL EQUIPMENT WHICH IS INDICATED TO BE FURNISHED AND/OR INSTALLED BY OTHERS OR BY OWNER IS INCLUDED FOR REFERENCE ONLY UNLESS NOTED OTHERWISE. DESIGN OF MECHANICAL SYSTEMS IN THESE AREAS IS BASED ON INFORMATION AVAILABLE AT THE TIME OF DESIGN. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING AND VERIFYING INSTALLATION REQUIREMENTS OF THIS EQUIPMENT WITH THE APPLICABLE SUPPLIER OR THE OWNER. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER.
9. IT IS THE RESPONSIBILITY OF THE MECHANICAL CONTRACTOR TO PAY FOR ALL NECESSARY PERMITS AND APPROVALS FOR THIS INSTALLATION.
10. DUCT CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE SMACNA HVAC DUCT CONSTRUCTION STANDARD CLASS A.
11. ALL EQUIPMENT, DUCTWORK, ETC., SHALL BE SUPPORTED AS DETAILED AND/OR SPECIFIED. PROVIDE ADDITIONAL SUPPORTS AS REQUIRED TO PROVIDE A VIBRATION-FREE, RIGID INSTALLATION.
12. DUCTWORK DIMENSIONS SHOWN ON DRAWINGS ARE INSIDE CLEAR DIMENSIONS. DIMENSIONS MAY BE CHANGED SO LONG AS THE NET FREE FACE AREA IS MAINTAINED.
13. EXHAUST DUCTS SHALL TERMINATE IN ACCORDANCE WITH ASHRAE 170-2013 AND BE EQUIPPED WITH A BACKDRAFT DAMPER.
14. CONTRACTOR SHALL PROVIDE ALL AUTOMATIC TEMPERATURE CONTROLS INCLUDING WIRING, THERMOSTATS AND ALL MISCELLANEOUS APPURTENANCES TO MEET THE INTENT OF THESE DOCUMENTS.
15. PENETRATIONS OF WALLS OR FLOORS FOR THE PASSAGE OF PIPING, DUCTWORK, OR OTHER EQUIPMENT SHALL BE PROPERLY SEALED AFTER INSTALLATION OF ITEMS AND EQUIPMENT.
16. PIPING, DUCTWORK, LEAK PROTECTION APPARATUS, OR OTHER EQUIPMENT FOREIGN TO ELECTRICAL SWITCHBOARDS, PANELBOARDS, DISTRIBUTION BOARDS, OR MOTOR CONTROL CENTERS SHALL NOT BE INSTALLED WITHIN THE REQUIRED SPACE FOR WORKING CLEARANCES OR DEDICATED SPACES OF THE ELECTRICAL EQUIPMENT, EXTENDING IN FRONT OF AND FROM FLOOR TO STRUCTURAL CEILING WITH A WIDTH AND DEPTH OF THE ELECTRICAL EQUIPMENT IN ACCORDANCE WITH NEC-110.26.

## LEGEND

| SYMBOL | DESCRIPTION | SYMBOL | DESCRIPTION |
|---|---|---|---|
| | EXISTING EQUIPMENT TO BE DEMOLISHED | | BALL VALVE |
| | EXISTING EQUIPMENT TO REMAIN | | GATE VALVE |
| | NEW EQUIPMENT | | BUTTERFLY VALVE (LEVER HANDLE) |
| | NEW EXHAUST AIR DUCTWORK | | BUTTERFLY VALVE (GEAR OPERATOR) |
| | EXSITING DUCTWORK | | OS & Y GATE VALVE |
| | NEW CHILLED WATER SUPPLY (CHS) PIPING | | GLOBE VALVE |
| | NEW CHILLED WATER RETURN (CHR) PIPING | | CHECK VALVE (SWING CHECK) |
| | NEW HEATING WATER SUPPLY (HWS) PIPING | | CHECK VALVE (BUTTERFLY CHECK) |
| | NEW HEATING WATER RETURN (HWR) PIPING | | STRAINER W/ DRAIN VALVE |
| | NEW NATURAL GAS (NG) PIPING | | UNION |
| | EXISTING PIPING | | CONTROL VALVE (2-WAY) ELECTRIC |
| | POINT OF CONNECTION TO EXISTING | | CONTROL VALVE (3-WAY) ELECTRIC |
| | POINT OF DEMOLITION | | ELBOW, TURNED UP |
| 1 | REVISION DELTA | | ELBOW, TURNED DOWN |
| MBD | MANUAL BALANCING DAMPER | | RISE OR DROP IN PIPE |
| | STREAMLINE CONNECTION (RECT. TO ROUND) | | TEE, SIDE CONNECTION |
| | STREAMLINE CONNECTION (RECT. TO RECT.) | | TEE, OUTLET UP |
| | STREAMLINE CONNECTION WITH MANUAL VOLUME DAMPER (RECT. TO ROUND) | | TEE, OUTLET DOWN |
| X ### | GRILLE DESIGNATION ( GRILLE SCHEDULE DESIGNATION / CFM AIRFLOW ) | | CAPPED PIPE |
| | SINGLE LINE CONTINUATION | | |
| | AIR FLOW ARROW | | |
| EA | EXHAUST AIR DUCT | | |
| CFM | CUBIC FEET PER MINUTE | | |
| Ø | ROUND DIAMETER | | |

STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER NO. 19764 FALLON A LEE
03-18-25

CERTIFICATE OF AUTHORIZATION INSIGHT ENGINEERING, PLLC No. 3523 ARKANSAS

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REVISIONS:

| No. | Description | Date |
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CONSTRUCTION DOCUMENTS

ISSUE DATE: 03-18-25

PROJECT NUMBER: 24-113

SHEET TITLE: GENERAL NOTES AND LEGEND - HVAC

SHEET NUMBER: M001