

GENERAL NOTES:
A. ALL WORK SHALL BE IN ACCORDANCE WITH ALL FEDERAL CODES AND ORDINANCES.
B. THE CONTRACTOR SHALL READ ALL OF THE GENERAL NOTES, SPECIFICATIONS AND PLANS AND SHALL BE SATISFIED TO THEIR TRUE MEANING AND INTENT AND SHALL BE RESPONSIBLE FOR COMPLYING WITH EACH. WHEREVER TWO OR MORE SPECIFICATIONS OR PLANS AND SPECIFICATIONS MAY CONFLICT, THE MORE STRINGENT SPECIFICATION SHALL TAKE PRECEDENCE.
C. IT IS INTENDED THAT THESE PLANS AND SPECIFICATIONS REQUIRE ALL LABOR AND MATERIAL NECESSARY AND PROPER FOR THE WORK CONTEMPLATED AND THAT THIS WORK BE COMPLETED IN ACCORDANCE WITH THEIR TRUE INTENT AND PURPOSE. THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION MANAGER IMMEDIATELY REGARDING ANY DISCREPANCIES OR AMBIGUITIES THAT MAY EXIST IN THE PLANS AND/OR SPECIFICATIONS PRIOR TO SUBMITTING BID. THE CONSTRUCTION MANAGER AND THE ENGINEER'S INTERPRETATION THEREOF SHALL BE CONCLUSIVE.
D. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ANY FIELD CHANGES MADE WITHOUT PRIOR WRITTEN AUTHORIZATION FROM THE CONSTRUCTION MANAGER.
E. CONTRACTOR SHALL INSTALL ALL PIPING AND DUCTWORK SYSTEMS TO BEST SUIT FIELD CONDITIONS, AND COORDINATE WITH THE INSTALLATION WORK OF OTHER TRADES. THE DRAWINGS ARE DIAGRAMMATIC BUT MAY BE SCALED TO DETERMINE THE APPROXIMATE LOCATION OF PIPING AND DUCTWORK. NOTIFY THE CONSTRUCTION MANAGER OF ANY DEVIATIONS FROM THESE DRAWINGS PRIOR TO FABRICATION AND/OR INSTALLATION.
F. LOCATIONS AND DIMENSIONS OF EQUIPMENT, PIPING, AND THEIR SUPPORTS ARE SHOWN DIAGRAMMATICALLY BUT MAY BE SCALED TO DETERMINE THE APPROXIMATE LOCATION OF PIPING OR DUCTWORK. ACTUAL DIMENSIONS AND LOCATIONS ARE DEPENDENT ON MATERIAL SUPPLIED BY CONTRACTORS. CONTRACTORS SHALL PROVIDE OR DETERMINE DIMENSIONS AND PROVIDE LAYOUT DRAWINGS FOR COORDINATION WITH OTHER TRADES IN ACCORDANCE WITH THE SPECIFICATIONS.
G. DEAD LEGS OVER 6" LONG IN PIPING ARE PROHIBITED.
H. ACCESS AROUND CABLE TRAYS SHALL BE MAINTAINED AS FOLLOWS: 24" ON EITHER SIDE, 12" ABOVE. OTHER SYSTEMS SHALL NOT BE MOUNTED TO CHANNEL SUPPORT TRAYS FOR THE CABLE TRAY OR TO CABLE TRAY. SEE ELECTRICAL DRAWINGS FOR CABLE TRAY LOCATIONS.
I. CLEAN ALL DUCTWORK IN THE SHOP PRIOR TO SHIPPING. ALL DUCTWORK SHALL BE TRANSPORTED TO THE SITE IN COVERED VANS TO ELIMINATE CONTAMINATION OR SHALL BE SEALED PRIOR TO SHIPMENT AND SHALL BE PROTECTED FROM CONTAMINATION AT THE SITE. AFTER FABRICATION, AND DURING AND AFTER INSTALLATION, SEAL SECTIONS OF OPEN DUCTWORK WITH PLASTIC SHEETING TO PREVENT THE INTRUSION ON DIRT AND DEBRIS.
J. CONTRACTOR SHALL REMOVE RUBBISH WASTE MATERIALS ON DAILY BASIS AND PROTECT AREAS FROM DAMAGE WHICH MAY OCCUR DURING CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE WHICH MAY OCCUR.
K. PROVIDE A VALVED DRAIN SYSTEM AT THE LOW POINT IN EACH PIPING SYSTEM AND A MANUAL AIR VENT IN EACH PIPING SECTION THAT CAN TRAP AIR.
L. ALL VALVES AND OTHER PIPING SYSTEM SPECIALTIES SHALL BE LINE SIZE UNLESS OTHERWISE NOTED.
M. ALL PIPING IS TO BE FLUSHED AND TESTED IN ACCORDANCE WITH THE SPECIFICATIONS.
N. UNIONS, BRUSHINGS, TRANSITIONS AND/OR REDUCING INSERTS, ETC. NOT SHOWN ON DRAWINGS BUT REQUIRED FOR INSTALLATION, SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR.
O. CONTRACTOR IS RESPONSIBLE FOR FIELD ROUTING DRAIN PIPING FROM EQUIPMENT, ETC. TO THE APPROPRIATE WASTE WATER SYSTEM.
P. WATER PIPE CONNECTIONS TO AIR HEATING AND COOLING COILS SHALL BE MADE SO THERE WILL BE COUNTER FLOW BETWEEN WATER AND AIR.
Q. REFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR EXACT LOCATION OF CEILING DIFFUSERS, REGISTER, AND GRILLES.
R. FURNISH AND INSTALL SYSTEMS, UNITS, EQUIPMENT, AND PARTS TO MEET OR EXCEED CURRENT APPLICABLE REQUIREMENTS FOR SEISMIC RESISTANCE SPECIFIED BY CODES, REGULATIONS, OR AGENCIES HAVING JURISDICTION. INCLUDE ALL SUPPORTS, ANCHORS, BRACES, AND OTHER RESTRAINING DEVICES REQUIRED. ALL SEISMIC RESTRAINTS SHALL MEET SEISMIC ZONE 2A REQUIREMENTS AND ARE THE RESPONSIBILITY OF THE CONTRACTOR. SEISMIC JOINTS HAVE 6" MOVEMENT IN ALL DIRECTIONS AT INTERCONNECT AND 4" MOVEMENT AT ALL OTHER LOCATIONS.
S. ALL PIPES AND DUCTS PENETRATING FIRE SEPARATIONS SHALL HAVE AN APPROVED FIRE RATED ASSEMBLY.
T. ALL WORK SHOWN ANYWHERE ON THE DRAWINGS IS INCLUDED; SHOULD AN ITEM (SUCH AS A VALVE) BE SHOWN ON A DETAIL OR SCHEMATIC BUT NOT ON A PLAN VIEW OR VICE VERSA, IT MUST BE PROVIDED AS THOUGH IT WERE SHOWN IN ALL PLACES ON THE DRAWINGS.
U. THE CONTRACTOR SHALL PROVIDE RECORD DRAWINGS IN FULL COMPLIANCE WITH SPECIFICATIONS.
V. PROVIDE ACCESS DOORS FOR ALL ITEMS CONCEALED WITHIN BUILDING STRUCTURE WHICH REQUIRE SERVICE.
W. KEEP DUCTS A MINIMUM OF 12" ABOVE CEILING EXCEPT FOR BRANCH DUCTS TO SERVE DIFFUSERS.
X. ALL DUCT PENETRATIONS OF THE FIRE-RESISTIVE CONSTRUCTION OF HORIZONTAL EXIT CORRIDORS SERVING AS MEANS OF EGRESS AND HAVING NO OPENING SERVING THE CORRIDOR SHALL BE OF NOT LESS THAN 0.019 INCH THICKNESS (NO 26 GALVANIZED SHEET STEEL GAGE).
Y. ALL EQUIPMENT, PIPING AND DUCTWORK SHALL BE PERMANENTLY IDENTIFIED AND LABELED AS REQUIRED IN THE SPECIFICATIONS.
Z. COORDINATE ANY BELOW SLAB WORK OR PENETRATIONS THRU CONCRETE WITH STRUCTURAL MEMBERS.
AA. KEEP ALL PIPING BOP ELEVATIONS WHERE INDICATED AND OFFSET AS REQUIRED.
BB. WHERE MAIN PIPE SIZE IS NOT INDICATED BETWEEN BRANCH CONNECTIONS IN THE DRAWING, THE PIPE SIZE SHALL BE OF THE LARGER PRECEDING PIPE SIZE.
CC. ALL MECHANICAL UTILITY PIPING AND DUCTWORK SHALL BE INSTALLED TO 5'-0" BEYOND THE NORMAL ENVELOPE OF THE BUILDING OR AS SHOWN ON DRAWINGS.
DD. ALL UNDERGROUND MECHANICAL UTILITY PIPING AND DUCTWORK SHALL HAVE A MINIMUM OF 3'-0" OF COMPACTED EARTH COVER.
EE. ALL PROCESS WASTE PIPING FLOWING BY GRAVITY SHALL HAVE A MINIMUM SLOPE OF ONE PERCENT, AS NOTED ON DRAWINGS.
FF. ALL MECHANICAL UTILITY SERVICES SHOWN ON THESE DRAWINGS ARE LABELED FROM LEFT TO RIGHT AND FROM TOP TO BOTTOM WHEN A GROUP OF PIPING OR DUCTWORK ARE IDENTIFIED.
GG. ALL HOPE PROCESS EXHAUST PIPING SHALL TRANSITION TO 304L STAINLESS STEEL DUCTWORK OF THE SAME DIAMETER 20'-0" PRIOR TO ITS PENETRATION OF A BUILDING ENVELOPE.
HH. SITE UTILITIES DRAWINGS (UHU SERIES DRAWINGS) NORTH (N) AND EAST (E) COORDINATES REFER TO THE SNS COORDINATE SYSTEM MAD 63 (88). THE SNS GRID ORIGIN POINT IS LOCATED AT X-Y GRID COORDINATES N-271612.73050 AND E-38106.14470 WITH THE SNS GRID BEING ROTATED 8 DEGREES CLOCKWISE FROM THE X-Y GRID AT THAT POINT. (88) REFERS TO THE YEAR MARTIN MARIETTA ENERGY SYSTEM (MMES) ESTABLISHED G.P.S. MONUMENTS ON THE OAK RIDGE RESERVATION USING VALUES PUBLISHED IN 1986 BY THE TN DEPARTMENT OF TRANSPORTATION, WHICH TIED THE MMES G.P.S. MONUMENTS TO THE TN GEODETIC REFERENCE NETWORK SYSTEM. MAXIMUM LENGTH OF FLEX DUCT RUNOUTS SHALL NOT EXCEED 4'-0".
II. FINAL DUCT TIE-INS TO EQUIPMENT SHALL BE ADJUSTED TO ACCOMMODATE ACTUAL CONNECTION SIZES.
JJ. UNLESS NOTED, ALL CONNECTIONS TO VAV INLETS WILL BE THE SAME SIZE AS THE TERMINAL BOX CONNECTION.
KK. NETWORK SYSTEM. MAXIMUM LENGTH OF FLEX DUCT RUNOUTS SHALL NOT EXCEED 4'.

MECHANICAL LEGEND

Table with columns for PLUMBING, HVAC, and HVAC - CONTROLS. Each column contains symbols and their corresponding descriptions. Includes sections for PLUMBING, HVAC, and HVAC - CONTROLS with sub-sections for SYMBOL and DESCRIPTION.

108000000-H8E-8000-A001
Knight Jacobs
Knight Advanced Technology
UT-BATTELLE
SPALLATION NEUTRON SOURCE
MECHANICAL SYMBOLS

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Table with columns for DSN, CHK, DEPT, DATE, PE, DATE, PJ, DATE, REQ, DATE, UTB, DATE, RPE, RPE, NG, DATE, ST, CV, EC, EE, EM, IE, M, PD, SE, AR. Includes a section for CHANGE CONTROL and ENGINEERING PROCEDURE.

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