

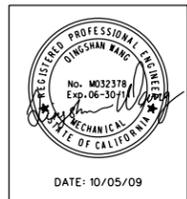
MECHANICAL AND HVAC NOTES:

1. GENERAL MECHANICAL AND HVAC NOTES APPLY TO ALL MECHANICAL AND HVAC DRAWINGS.
2. ALL PIPE PENETRATIONS THROUGH WALLS AND FLOOR SLABS SHALL BE PROVIDED WITH SLEEVES PER TYPICAL DETAIL AS SHOWN ON DRAWINGS UNLESS NOTED OTHERWISE.
3. ALL PIPE PENETRATIONS THROUGH DRY WALLS SHALL BE PROVIDED WITH SLEEVES PER SPECIFICATIONS AND APPLICABLE STANDARD DETAILS.
4. NOT ALL THE REQUIRED PIPE SUPPORTS ARE SHOWN ON THE DRAWINGS. THE CONTRACTOR SHALL PROVIDE ALL THE PIPE SUPPORTS SHOWN ON THE DRAWINGS AND ADDITIONAL PIPE SUPPORTS AND BRACINGS REQUIRED PER SPECIFICATIONS AND PER CONTRACTOR'S PIPE SUPPORT CALCULATIONS.
5. NOT ALL THE REQUIRED FITTINGS ARE SHOWN ON THE DRAWINGS. THE CONTRACTOR SHALL PROVIDE ALL THE FITTINGS SHOWN ON THE DRAWINGS AND ADDITIONAL FITTINGS AS REQUIRED FOR A COMPLETE PIPING SYSTEM AS SHOWN ON THE DRAWINGS AND PER EQUIPMENT FURNISHED.
6. SUCTION AND DISCHARGE PIPING OF PUMPS SHALL BE INSTALLED AND SUPPORTED IN SUCH A MANNER SO THAT THEY SHALL NOT IMPART STRAIN ON PUMPS.
7. PIPING IS SHOWN DIAGRAMMATICALLY ON THE DRAWINGS. NOT EVERY OFFSET AND FITTING OR STRUCTURAL DIFFICULTY THAT MAY BE ENCOUNTERED HAS BEEN SHOWN ON THE DRAWINGS. THE CONTRACTOR SHALL MAKE MODIFICATIONS TO PIPING ALIGNMENT WHERE NECESSARY. MODIFICATIONS SHALL BE DONE AT NO ADDITIONAL COST TO THE DISTRICT AND SHALL BE DONE AFTER DISTRICT APPROVAL.
8. NOT ALL THE ITEMS ARE SHOWN IN PLANS, SECTIONS, DETAILS, SCHEMATICS, ISOMETRICS AND P & ID DRAWINGS. THE CONTRACTOR SHALL PROVIDE ALL THE ITEMS EVEN IF THEY ARE SHOWN AT ANY ONE LOCATION ON THE DRAWINGS OR SPECIFIED ONLY IN THE SPECIFICATIONS.
9. THE CONTRACTOR SHALL PROVIDE ALL THE ITEMS REQUIRED PER SPECIFICATIONS WHETHER OR NOT THEY ARE SHOWN ON THE DRAWINGS.
10. IN CASE OF A CONFLICT BETWEEN THE DRAWINGS, THE MOST STRINGENT REQUIREMENTS SHALL GOVERN UNLESS SPECIFICALLY APPROVED OTHERWISE BY THE DISTRICT.
11. OVERALL PHYSICAL SIZE OF THE EQUIPMENT SELECTED BY THE CONTRACTOR SHALL NOT EXCEED THE SIZE SHOWN ON THE DRAWINGS OR SPECIFIED CLEARANCES, DIMENSIONS OR SCALED MEASUREMENTS FROM THE DRAWINGS SHALL BE MAINTAINED. THE CONTRACTOR SHALL INCLUDE THE COST OF THE ASSOCIATED CHANGES AND ADDITIONS INCLUDING CHANGES TO BUILDINGS AND STRUCTURE SIZES, DUE TO DEVIATION IN EQUIPMENT PHYSICAL SIZES IN HIS BID. ALL CHANGES AND ADDITIONS SHALL BE SUBMITTED FOR DISTRICT REVIEW AND SHALL BE DONE AFTER DISTRICT APPROVAL AT NO ADDITIONAL COST TO THE DISTRICT.
12. WARNING SIGNS SHALL BE PROVIDED PER SPECIFICATIONS ON FRONT AND BACK OF ALL REMOTELY CONTROLLED EQUIPMENT.
13. DUCTWORK SHALL BE FABRICATED, REINFORCED, SUPPORTED, AND SEALED FOR OPERATING PRESSURES INDICATED IN THE SCHEDULES FOR THE EQUIPMENT IT SERVES. ALL DUCTWORK SHALL HAVE A MINIMUM SMACNA PRESSURE CLASSIFICATION OF TWO INCHES WG.
14. DUCT SIZES INDICATED ARE CLEAR DIMENSIONS INSIDE THE DUCT OR DUCT LINING.
15. AIRTIGHT ACCESS DOORS SHALL BE PROVIDED TO ALLOW INSPECTION OF ALL CONTROL DAMPERS AND FILTERS. THE ACCESS DOOR SHALL BE OF A SIZE SUITABLE FOR THE DUCTWORK DIMENSIONS AND SHALL NOT BE LESS THAN 12" X 12" UNLESS OTHERWISE INDICATED.
16. THE LOCATION OF PIPING AND VALVES TO THE AIR HANDLING EQUIPMENT SHALL NOT INTERFERE WITH FILTER REMOVAL OR AIR HANDLING EQUIPMENT SERVICING.
17. BOTTOM ELEVATION OF UNIT HEATERS SHALL BE 8'-0" ABOVE FINISHED FLOOR UNLESS OTHERWISE INDICATED.
18. NOT ALL HANGERS, BRACKETS, SUPPORTS OR BRACES FOR DUCTWORK ARE INDICATED ON THE DRAWINGS. REFER TO THE SPECIFICATIONS FOR SUPPPORT REQUIREMENTS NOT SHOWN ON THE DRAWINGS.
19. DUCT CONNECTIONS TO EQUIPMENT, PIPING SIZES TO EQUIPMENT, AND EQUIPMENT SUPPORTS SHALL BE VERIFIED AND ADJUSTED TO MATCH ACTUAL EQUIPMENT FURNISHED AT NO ADDITIONAL COST TO DISTRICT.
20. POWER ROOF VENTILATORS AND ROOF HOODS SHALL BE PROVIDED WITH BIRD SCREEN OVER ALL OPENINGS UNLESS NOTED OTHERWISE.
21. ALL PIPING JOINTS SHALL BE PER PIPE SCHEDULE IN THE SPECIFICATIONS.
22. ALL CHEMICAL PIPING (CARRIER, CONTAINMENT & DOUBLE WALL PIPING) ARE NOT SHOWN TO SCALE, BUT REQUIRED SIZES ARE SPECIFIED AND INDICATED IN THESE CONSTRUCTION DOCUMENTS.
23. VERIFY LOCATIONS, SIZES, AND CONNECTION MATERIALS OF EXISTING PIPING AND EQUIPMENT BEFORE FABRICATING NEW PIPE.
24. CONTRACTOR SHALL SUPPLY ONE MATCHING SPOOL PIECE FOR EACH SIZE (DIAMETER AND LENGTH) OF MAGNETIC FLOW METER WHICH CAN BE USED TO REPLACE THE METER WHEN MAINTENANCE IS REQUIRED. EACH SPARE SPOOL PIECE SHALL BE CLEARLY LABELED BY SIZE AND SERVICE.
25. ALL PIPING UNDER STRUCTURES OR CONCRETE SLABS SHALL BE CONCRETE ENCASED PER STANDARD DETAILS (0330-016) (0330-017) (0330-018) AND SPECIFICATIONS.
26. ALL FLEXIBLE COUPLINGS SHALL BE RESTRAINED PER SPECIFICATIONS AND APPLICABLE STANDARD DETAILS (4005-540) (4005-542) UNLESS NOTED OTHERWISE.
27. ALL AIR VALVE INSTALLATIONS SHALL BE PER STANDARD DETAIL (4027-165) .
28. PIPE ENCASEMENT SHALL BE PER STRUCTURAL DRAWINGS AND NOTES.
29. PROVIDE PRESSURE REDUCING VALVES FOR HIGH PRESSURE SAMPLE LINES. MANUAL SAMPLE PORT SHALL BE PER STANDARD DETAIL (4027-190) .

30. NUMBER AND LOCATION OF UNIONS SHOWN IN THESE CONSTRUCTION DOCUMENTS IS ONLY APPROXIMATE. PROVIDE ALL UNIONS NECESSARY TO FACILITATE CONVENIENT REMOVAL OF VALVES, REMOVABLE PIPING AND MECHANICAL EQUIPMENT.

PLOT DATE: 2/19/2010 PLOT TIME: 10:52:45 AM

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EASTERN MUNICIPAL WATER DISTRICT
PERRIS II DESALINATION FACILITY
PERRIS, CALIFORNIA
**MECHANICAL
AND HVAC NOTES**

DESIGNED BY: Q WANG
DRAWN BY: A GORDEN
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U.S. ARMY ENGINEER DISTRICT
LOS ANGELES
CORPS OF ENGINEERS
ART. JUNG, P.E.
CHIEF, DESIGN BRANCH

L.A. DISTRICT FILE NO. XXX-XXXX
SPEC. NO. : NOT APPLICABLE
CADD FILE NAME: PDFg01td.dgn

SYMBOL

DESCRIPTIONS

REVISIONS

DATE

APPROVAL