

GENERAL NOTES

1. SEE EXISTING AS BUILT DRAWINGS FOR EXISTING AIR DISTRIBUTION
2. ALL NEW DUCTWORK AND CEILING PENETRATION SHALL BE COORDINATED WITH STRUCTURAL JOISTS AND BEAMS. PROVIDE OFFSETS IN PIPES AND DUCTS TO AVOID CUTTING OF BEAMS AND JOISTS.
3. SYMBOL AND ABBREVIATION LISTS ARE COMPOSITE. ALL SYMBOLS AND ABBREVIATIONS MIGHT NOT BE USED ON THIS PROJECT.
4. MAINTAIN CLEAR ACCESS TO SERVICE EQUIPMENT AND OTHER ACCESSORIES REQUIRING SERVICE, VISUAL INSPECTION OR HAND OPERATION PER MANUFACTURERS RECOMMENDATIONS AND LOCAL CODES WHERE INDICATED OR REQUIRED, PROVIDE ACCESS PANELS OF THE TYPE SELECTED TO SUIT MATERIALS IN WHICH INSTALLED.
5. ALL WORK SHALL BE DONE IN ACCORDANCE WITH LATEST APPLICABLE CODES AND REGULATIONS PER CALIFORNIA AND OTHER AUTHORITIES HAVING JURISDICTION.
6. THE MECHANICAL DRAWINGS ARE DIAGRAMMATIC AND SHOULD NOT BE SCALED TO ESTABLISH LOCATION OF WORK. THE CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS AND MAKE ADJUSTMENTS TO DIMENSIONS AS NECESSARY TO COMPLETE THE WORK.
7. THE CONTRACTOR SHALL COORDINATE WITH THE INSPECTOR OF RECORD FOR TIMELY INSPECTIONS.
8. CONTRACTOR SHALL THOROUGHLY EXAMINE PREMISES AND OBSERVE ALL CONDITIONS AND CIRCUMSTANCES UNDER WHICH THE WORK SHALL BE PERFORMED. NO ALLOWANCES WILL BE MADE FOR ERRORS OR NEGLIGENCE IN THIS RESPECT.
9. THE CONTRACTOR'S ATTENTION IS DIRECTED TO THE IMPORTANCE OF PROPER SCHEDULING, STAGING AND PHASING OF THE WORK SO AS TO CAUSE MINIMUM DISTURBANCE TO THE ACTIVITIES IN THE OTHER AREAS WHICH REMAIN OCCUPIED THROUGHOUT THE DURATION OF THE CONTRACT. THE CONTRACTOR'S WORK SCHEDULE, PHASING AND STAGING AREAS SHALL BE SUBMITTED TO AND APPROVED BY THE USERS (EAFB) REPRESENTATIVE.
10. CONTRACTOR SHALL PERFORM WORK ONLY AFTER THE GATHERING OF EXACT FIELD DIMENSIONS OF THE BUILDING STRUCTURE AND CEILINGS ETC. WHICH MAY AFFECT THE INSTALLATION OF THE NEW SYSTEMS.
11. THE CONTRACTOR SHALL FULLY COORDINATE ALL WORK WITH OTHER TRADES TO ASSURE ALL WORK CAN BE PROPERLY INSTALLED WITHOUT INTERFERENCE OR DELAY.
13. CLEAN UP ALL WASTE AND DEBRIS AT THE END OF EACH WORKING DAY AND AT THE COMPLETE OF THE JOB.
14. THE CONTRACTOR SHALL NOT CORE DRILL CONCRETE SLABS WITHOUT THE KNOWLEDGE AND WRITTEN CONSENT OF THE COE ENGINEER AND THE BUILDING USER REPRESENTATIVE.
15. ALL SPECIFIED EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATION, UPC, UMC CHAPTER 6 AND IBC SECTION 1632A AND OTHER AUTHORITIES HAVING JURISDICTION.
16. PROVIDE ONE YEAR WARRANTY FOR ALL WORKMANSHIP AND MATERIALS AFTER THE DATE OF FINAL ACCEPTANCE.
17. PRIOR TO STARTING WORK, SUBMIT SHOP DRAWINGS FOR ALL MECHANICAL EQUIPMENT & ACCESSORIES
18. UPON COMPLETION OF WORK, THE CONTRACTOR SHALL HAVE ALL AH UNITS BALANCED TO INDICATED AIR FLOW QUANTITIES BY A CERTIFIED AABC BALANCING CONTRACTOR. PROVIDE PRE AND POST-CONSTRUCTION AIR BALANCE REPORT.
19. EXACT LOCATIONS OF ALL ZONE DAMPERS CONNECTIONS SHALL BE COORDINATED. DRAWINGS SHALL BE USED ONLY FOR GENERAL DUCT ROUTING AND AIR DISTRIBUTION. ACCESS DOORS SHALL BE PROVIDED ON ALL DAMPERS, AUTOMATIC DAMPERS, MANUAL DAMPERS, AND BYPASS DAMPERS.
20. DUCT SIZES SHOWN ON DRAWINGS ARE IN INCHES (CLEAR INSIDE DIMENSIONS) AND REPRESENT THE FREE OR UNOBSTRUCTED AREA REQUIRED ON THE INSIDE OF THE DUCT.
21. CONTRACTOR SHALL MOUNT AND CONNECT EACH ITEM OF EQUIPMENT IN STRICT ACCORDANCE WITH MANUFACTURER'S RECOMMENDATION, UPC, UMC CHAPTER 6 AND IBC SECTION 1632A AND OTHER AUTHORITIES HAVING JURISDICTION.
22. ALL DUCTWORK SHALL BE GALVANIZED STEEL PER UMC CHAPTER 6 AND SMACNA GUIDELINES.
23. ALL NEW CONNECTING DUCTWORK SHALL BE GALVANIZE SHEET METAL PER UMC
24. ALL OPENINGS IN WALLS, CEILINGS, AND FLOORS RESULTING FROM NEW EQUIPMENT INSTALLATION SHALL BE CLOSED, SEALED AND FINISHED TO MATCH THE SURROUNDING.
25. RUN ALL NEW DUCTWORK AS HIGH AS POSSIBLE UNLESS OTHERWISE NOTED.
26. PROVIDE EXTERNAL TRAPS FOR CONDENSATE DRAIN LINES FOR ALL COOLING COILS. CONDENSATE LINES SHALL BE COPPER TYPE L, INSULATED PER CODES ABOVE CEILING.
27. ALL NEW SUPPLY & RETURN DUCTWORK SHALL BE INSULATED PER LATEST CODES AND TITLE-24 REQUIREMENT.
28. ALL DAMPERS & VALVES MAY NOT BE SHOWN ON PLANS. PROVIDE AS STATED.
29. PROVIDE AIR DISTRIBUTION WITH BLOW PATTERNS INDICATED ON THE DRAWING.
30. CONTRACTOR SHALL FURNISH AND INSTALL DUCT AND PIPE SUPPORT AND BRACING PER LATEST UPC, UMC AND SMACNA REQUIREMENT.
31. ANY EQUIPMENT, DUCTWORK, OR PIPING INSTALLED MORE THAN 1 FT FROM THE LOCATION SHOWN ON THE DRAWINGS SHALL BE CLEARLY DOCUMENTED IN THE FIELD. CONTRACTOR SHALL PROVIDE AS-BUILT DRAWINGS THAT CLEARLY SHOW THE LOCATION OF THE THE EQUIPMENT BEFORE THAN COMPLETION OF THE PROJECT. ALL EXPENSE RELATING TO VERIFY THE AS-BUILT DRAWINGS BY THE OWNER OR ITS REPRESENTATIVE(S) DUE TO INACCURATE OR INCOMPLETE RECORD SHALL BE BORN BY THE CONTRACTOR.
32. ALL MECHANICAL WORK SHALL COMPLY WITH T24 PART 4 UMC-2006.
33. NOTE THE CRITICAL SPACE AVAILABLE. PROVIDE TRANSITION PIECES AT CROSSOVERS, UNDER BEAMS, OVER/UNDER PIPES, AS REQUIRE ACCOMMODATE NEW WORK WITHIN SPACE AVAILABLE, PROVIDING EQUIVALENT SIZES TO THE DIMENSION SHOWN. COORDINATE CLOSELY WITH OTHER SECTIONS TO REDUCE NECESSITY OF TRANSITIONS TO A MINIMUM. NO ADDITIONAL COSTS WILL BE PAID FOR ANY REQUIRED TRANSITIONS OR OTHER SPECIAL CHANGE SHAPE PIECES.
34. PROVIDE NEW CONTROLS WHERE INDICATED ON THESE DRAWINGS.
35. CONTROLS SHALL BE INSTALLED BETWEEN 36" AND 48" ABOVE FINISHED FLOOR.
36. ALL MECHANICAL IS BRACED OR ANCHORED TO RESIST A HORIZONTAL FORCE ACTING IN ANY DIRECTION USING CBC 2007, SEC. 1632A AND TABLE 16A-0. A COPY OF THE GUIDELINES PUBLISHED BY SMACNA AND APPROVED BY LOCAL AUTHORITIES HAVING JURISDICTION SHALL BE PROVIDED BY THE CONTRACTOR AND KEPT ON THE JOB SITE AT ALL TIMES.
37. THE SEISMIC ANCHORAGE OF MECHANICAL AND ELECTRICAL EQUIPMENT SHALL CONFORM TO C.C.R. TITLE 24, 2001 CBC SECTION 1632A AND TABLE 16A-0. ANCHORAGE DETAILS FOR ROOF/FLOOR MOUNTED EQUIPMENT SHALL BE SHOWN ON PLANS.
ALL BRACING OF DUCTS AND PIPING SHALL BE INSTALLED IN ACCORDANCE WITH SMACNA GUIDELINES AS APPROVED BY AUTHORITIES HAVING JURISDICTION .
38. ALL CONTROL CONDUIT AND WIRING SHALL BE BY THE BASE CONTRACTED CONTROL CONTRACTOR
39. MAINTAIN FRESH AIR INTAKE A MINIMUM OF 10" FROM OR 3" BELOW ANY VENT, FLUE OR EXHAUST TERMINATION.
40. THE CONTRACTOR SHALL VISIT THE SITE PRIOR TO THE SUBMISSION OF BID AND THOROUGHLY FAMILIARIZE HIMSELF WITH THE WORKING CONDITIONS AND THE EXACT NATURE AND EXTENT OF THE WORK. HE SHALL VERIFY ALL DIMENSIONS AND CONDITIONS SHOWN ON DRAWINGS AND SHALL NOTIFY THE OWNER'S REPRESENTATIVE OF ANY OMISSION AND/OR DISCREPANCIES AND OBTAIN A WRITTEN DECISION. SUBMISSION OF A BID ACKNOWLEDGES FULL RESPONSIBILITY FOR FURNISHING A COMPLETE AND FUNCTIONAL SYSTEM. ABSOLUTELY NO CHANGES IN THE CONTRACT WILL BE CONSIDERED TO ACCOMMODATE OR ALLOW EXTRA FUNDS FOR ANY OMISSION WHICH RESULTS FROM A FAILURE TO THOROUGHLY EXAMINE THE SCOPE OF WORK.
41. ALL WORK SHALL BE COORDINATED WITH THE OWNER'S REPRESENTATIVE WHO MAY ALSO BE REFERRED TO AS FACILITIES PROJECT MANAGER.
42. CONTRACTOR SHALL PREPARE SCALED DRAWINGS OF EQUIPMENT ROOMS SHOWING THE PROPOSED LAYOUT OF SUBMITTED EQUIPMENT AND SHALL SHOW THE PROPOSED CODE REQUIRED CLEARANCES IN ALL DIRECTIONS AS PART OF THE SUBMITTAL PACKAGE. MINIMUM SCALE OF DRAWINGS SHALL BE 1/4"=1'-0".
43. ANY SUBMITTALS FOR EQUIPMENT DIFFERENT FROM THE SPECIFIED ITEMS SHOWN ON THE PLANS SHALL BE ACCOMPANIED BY CUT SHEETS FOR THE ORIGINAL SPECIFIED ITEM(S). SUBMITTALS WITHOUT THE SPECIFIED CUT SHEETS WILL BE REJECTED AS INCOMPLETE.
44. COORDINATE THE MECHANICAL WORK WITH THE WORK OF OTHER TRADES. ALL MECHANICAL WORK SHALL BE PER THE APPLICABLE CODE. CONTRACTOR SHALL INCLUDE IN HIS BID ALL REQUIRED LABOR, MATERIAL, EXPERTISE AND QUALIFIED PERSONNEL TO COMPLETELY INSTALL IN A CODE COMPLIANT MANNER, ALL WORK SHOWN ON THE PLANS OR REFERRED TO IN THE CONTRACT DOCUMENTS
45. WHEN THERE ARE DISCREPANCIES BETWEEN CONTRACT DOCUMENTS DRAWINGS), OBTAIN CLARIFICATION FROM THE ENGINEER PRIOR TO START OF WORK. THE MORE STRINGENT OR MORE EXPENSIVE REQUIREMENT(S) SHALL APPLY.

DEMOLITION NOTES

WORK UNDER THIS SECTION: THE WORK UNDER THIS SECTION SHALL INCLUDE ALL LABOR, MATERIALS AND EQUIPMENT REQUIRED TO COMPLETE ALL DEMOLITION AS INDICATED AND SPECIFIED.

WORK:

1. REMOVAL OF THE EXISTING SYSTEMS AND MECHANICAL EQUIPMENT AS INDICATED AND/OR AS DIRECTED ON THE PLANS.

MATERIALS:

1. ALL MATERIALS, RUBBISH AND DEBRIS SHALL BE PROMPTLY REMOVED FROM THE BUILDINGS AND FROM THE SITE. ACCUMULATION OF SAME SHALL NOT BE PERMITTED.
2. THE CONTRACTOR SHALL PROTECT PART OF ALL STRUCTURES NOT INCLUDED IN ALTERATION. ANY DAMAGE RESULTING DUE TO ALTERATION SHALL BE REPAIRED AND/OR REPLACED TO THE ORIGINAL CONDITION AS APPROVED BY THE OWNERS REPRESENTATIVE.
3. ANY ITEMS REMOVED TO BE REUSED ARE TO BE PROTECTED AND REINSTALLED IN UNDAMAGED AND WORKABLE CONDITION.
4. THE CONTRACTOR SHALL PROTECT ALL THE TEMPORARILY REMOVED MATERIAL WHICH ISTO BE REINSTALLED AS INDICATED ON THE PLAN.

MEASURES:

1. PROTECTION MEASURES SHALL BE IN EFFECT PRIOR TO COMMENCEMENT OF ANY DEMOLITION WORK. IT IS THE CONTRACTOR'S RESPONSIBILITY TO COMPLETELY ISOLATE HIS WORK FROM ADJACENT IN-SERVICE AREAS OF THE BUILDING.
2. UTILITY SHUT DOWN MUST BE COORDINATED WITH USER FOR A MINIMUM OF 48 HOURS IN ADVANCE.
3. THE LOCATION AND ACTIVE/ INACTIVE STATUS OF ALL EXISTING UTILITIES IN THE IMMEDIATE AREA OF THE WORK MUST BE VERIFIED PRIOR TO ANY CUTTING OPERATIONS.
4. DEBRIS FROM DEMOLITION SHALL BE COLLECTED AND REMOVED AT THE BEGINNING OF THE FOLLOWING WORK DAY. ROUTING OF ANY DEBRIS THROUGH ANY PORTION OF THE EXISTING BUILDING SHALL BE DONE UNDER STRICT OBSERVATION OF THE OWNER'S REPRESENTATIVE. ONLY THOSE ROUTES AND TIMES DESIGNATED BY OWNER SHALL BE ALLOWED.
5. THIS SITE SHALL REMAIN IN OPERATION WHILE THIS WORK IS BEING DONE, COORDINATE WITH THE STATION MANAGER FOR THE PHASING OF THIS WORK SO NOT TO INTERFERE WITH THE NORMAL OPERATION OF THIS SITE.
6. AFTER DEMOLITION COORDINATE FOR THE PATCHING OF ALL WALL, FLOOR AND ROOF OPENINGS IN ACCORDANCE WITH OWNER'S REQUIREMENTS.

LIFE SAFETY CONTROL NOTES

1. INTERCONNECT NEW AH UNITS WITH THE BUILDING FIRE ALARM SYSTEM FOR SHUT DOWN UPON A SIGNAL FROM THE FIRE ALARM SYSTEM.
2. THE EXISTING DUCT SMOKE DETECTORS WILL BE RE-INSTALLED (REFER TO LIFE SAFETY DRAWINGS FOR DETAIL). TO SIGNAL THE FIRE ALARM SYSTEM. THE FIRE ALARM SYSTEM SHALL SHUT DOWN THE AH'S UNITS AS DESCRIBED IN NOTE NO. 1. REFER TO THE LIFE SAFETY DRAWINGS CONTROL PLANS.

TITLE 24 NOTES

1. CONTROLS SHALL BE INSTALLED BETWEEN 36" AND 48" ABOVE FINISHED FLOOR.
2. ALL EQUIPMENT DESIGNED TO BE FIXED IN POSITION SHALL BE SECURELY FIXED IN PLACE, AND IN ACCORDANCE WITH SEISMIC REQUIREMENTS.
3. REQUIRED ROUTINE MAINTENANCE ACTION SHALL BE CLEARLY STATED AND INCORPORATED ON A READILY ACCESSIBLE PERMANENT LABEL. THE LABEL MAY BE LIMITED TO CROSS REFERENCING THE MAINTENANCE MANUAL IF SUCH MAINTENANCE ACTION IS DESCRIBED THEREIN FOR THE LABELED ITEM.
4. AIR HANDLING DUCT SYSTEMS SHALL BE CONSTRUCTED, INSTALLED, SEALED AND INSULATED AS PROVIDED IN THE LATEST EDITION OF THE UNIFORM MECHANICAL CODE CHAPTER 6 OR SMACNA AS A MINIMUM.
5. ALL EQUIPMENT SHALL CONFORM TO AND BE CERTIFIED IN ACCORDANCE WITH THE APPLIANCE STANDARDS AND THE REQUIREMENTS FOR SUCH DEVICES GIVEN IN THE PLANS AND SPECIFICATIONS APPROVED BY THE LOCAL ENFORCEMENT AGENCY.
6. ALL EQUIPMENT SHALL BE LABELED AS TO FUNCTION AND SPACES SERVED. (SEE SCHEDULE).

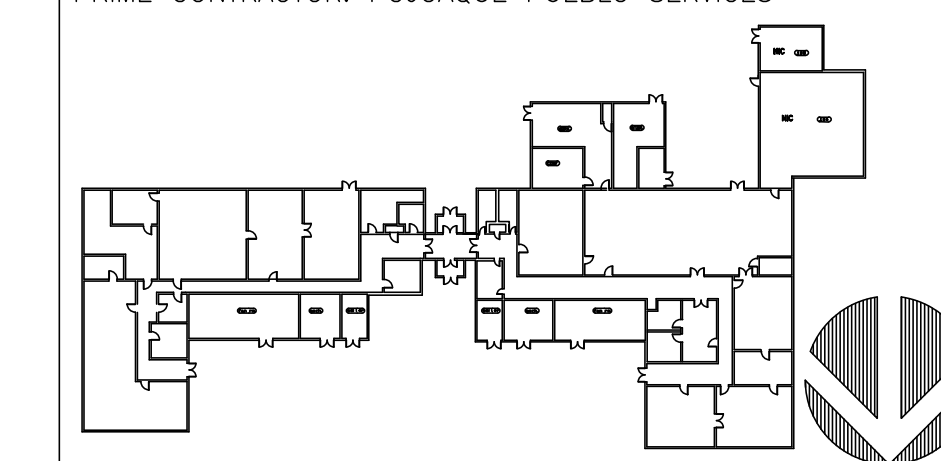
PROJECT NOTES

1. THE INTENT OF THIS PROJECT IS TO REPLACE THE EXISTING NOTED EQUIPMENT WITH NEW INCLUDING BUT NOT LIMITED TO THAT NOTED IN THE PLANS, STATEMENT OF WORK AND GENERAL NOTES. NEW T-24 CONTROLS, NEW VFD MOTORS NEW SEISMIC RESTRAINTS AND ISOLATION, COILS, ACCESSORIES, ETC., WHETHER SHOWN OR NOT, AND TO PROVIDE A COMPLETE WORKABLE SYSTEMS. NEW ECONOMIZER SYSTEM AND WATER SYSTEMS FLUSHING, CLEANING AND BALANCE IS REQUIRED. AIR FLOW (CFM), WATER GPM, AIR DISTRIBUTION SIZES AND EQUIPMENT SIZES ARE UNCHANGED.
2. DRAWING BACKGROUNDS AND EXISTING HVAC SYSTEM CONFIGURATION AND SIZES HAVE BEEN PROVIDED BY THE OWNER AND FIELD VERIFIED (EXPOSED AND VISIBLE EQUIPMENT ONLY). WHILE EXISTING HVAC SYSTEMS CONFIGURATION AND SIZING IS GENERALLY CONSIDERED ACCURATE. SOME INFORMATION AND CONFIGURATION MAY HAVE BEEN CHANGED.
3. SIZE OF THE CONDITIONED SPACE AND EQUIPMENT SIZES HAVE NOT CHANGED. ONLY THE NEW EQUIPMENT MUST MEET THE LATEST CODES AND ENERGY EFFICIENCY STANDARDS.

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DESIGN FOR:

BUILDING 1408

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QUOTE/DWG #:

 DRAWN BY:

 TS

 CHECKED BY:

 DATE:

 12/05/2008

 SCALE:

 AS NOTED

 REVISION HISTORY

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2	
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 PROJECT

 FA9301-06-D-0010

M0.1

RECORD DRAWINGS

 SUBMITTED 11/21/2008