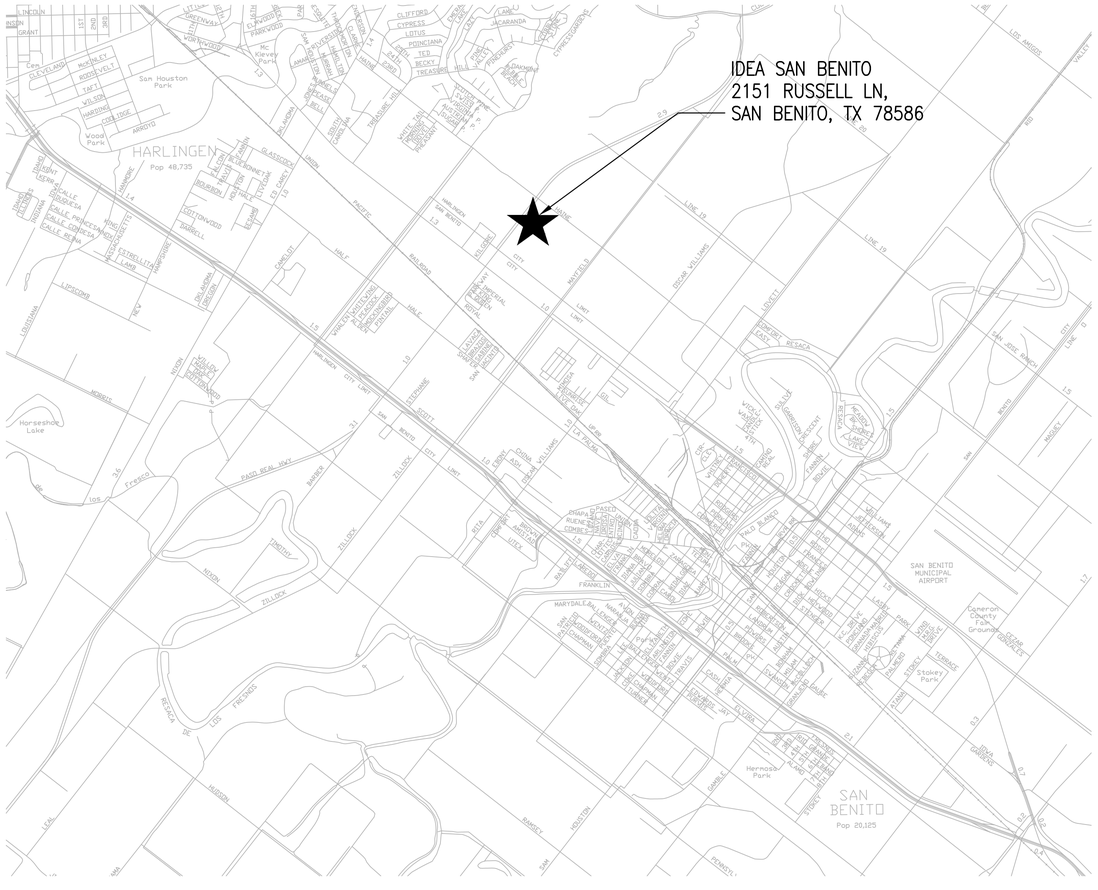
IDEA PUBLIC SCHOOLS

SAN BENITO
HVAC / CONTROLS
SAN BENITO, TEXAS

VICINITY MAP



SCOPE OF WORK:

SCOPE OF WORK: PROVIDE ALL MATERIALS AND LABOR ASSOCIATED WITH NEW FULLY-OPERATIONAL MECHANICAL AND CONTROLS SYSTEMS FOR THE PROJECT "IDEA SAN BENITO HVAC UPGRADES", INCLUDING BUT NOT LIMITED TO THE FOLLOWING:

1. RETAIN AND REUSE EXISTING DX AHUS, VAV BOXES, EFS AND RELATED DUCTWORK AS NOTED ON THE DRAWINGS.
2. WHERE INDICATED, SAVE EXISTING POWER AND CONTROL WIRING, CONDUITS, AND CIRCUIT BREAKERS FOR REUSE. VERIFY SIZE AND CONDITION OF CIRCUIT BREAKERS, CONDUITS AND WIRING TO BE REUSED.
3. SAVE EXISTING SMOKE DETECTORS, WIRING AND SAFETIES FOR REUSE. DOCUMENT DEVICES THAT ARE NOT IN WORKING ORDER.
4. RETAIN AND REUSE EXISTING REFRIGERANT PIPING AND SUPPORTS. VERIFY THAT LINE SIZES ARE APPROPRIATE AND APPROVED BY MANUFACTURER OF HVAC EQUIPMENT.
   a. EVACUATE REFRIGERANT, CLEAN IT, AND DELIVER TO OWNER.
   b. NITROGEN-PURGE. PRESSURE-TEST CIRCUITS WITH DRY NITROGEN TO VERIFY THERE ARE NO LEAKS.
   c. AFTER PASSING THE PRESSURE TEST, PERFORM A DEEP EVACUATION (PREFERABLY WITH A NITROGEN SWEEP/TRIPLE EVACUATION ON LARGE SYSTEMS) TO BELOW 500 MICRONS, VERIFY THE VACUUM HOLDS, AND THEN RECHARGE WITH NEW REFRIGERANT.
   d. REMOVE INSULATION AND PREPARE PIPING FOR RE-INSULATION AND JACKETING.
2. DEMOLITION: DEMOLISH LISTED EQUIPMENT AND MATERIALS. THE OWNER HAS THE RIGHT OF FIRST REFUSAL. DISPOSE OF REMOVED ITEMS THAT THE OWNER NO LONGER WISHES TO KEEP.
   a. REMOVE LISTED AIR HANDLING UNITS, AIR-COOLED CONDENSING UNITS, REFRIGERANT SPECIALTIES, MISCELLANEOUS HVAC, ELECTRICAL, AND CONTROLS EQUIPMENT AND MATERIALS.
   b. WHERE REFRIGERANT PIPING CANNOT BE REUSED, REMOVE PIPING AND PIPING SUPPORTS AS INDICATED IN PLANS TO MAKE ROOM FOR NEW EQUIPMENT.
   c. DEMOLISH ELECTRICAL EQUIPMENT AND OTHER MISCELLANEOUS MATERIALS AS NOTED.
   d. DEMOLISH CONTROLS IN THEIR ENTIRETY.
   e. CLEAR AREA AND PREPARE FOR NEW WORK.
3. NEW WORK: PROVIDE ALL MATERIALS AND LABOR ASSOCIATED WITH NEW FULLY OPERATIONAL MECHANICAL AND CONTROLS SYSTEMS, INCLUDING BUT NOT LIMITED TO THE FOLLOWING:
   a. AIR HANDLING UNITS, TO MATCH WITH EXISTING ACCUS THAT WILL BE RETAINED AND REUSED.
   b. AIR-COOLED CONDENSING UNITS TO MATCH WITH EXISTING AHUS THAT WILL BE RETAINED AND REUSED.
   c. PROVIDE RELATED ELECTRICAL AND CONTROLS.
   d. PROVIDE MODIFICATION OF DUCTWORK, REFRIGERANT PIPING (WHERE INDICATED), PIPING SUPPORTS, INSULATION, CONTROLS, AND ELECTRICAL SYSTEMS.
   e. NEW PIPING SPECIALTIES, PIPE INSULATION, JACKETING, AND MISCELLANEOUS ACCESSORIES.
   f. NEW BUILDING AUTOMATION SYSTEM (BAS) CONTROLS FOR ALL EXISTING AND NEW EQUIPMENT, INCLUDING CONTROLLERS, SENSORS, DAMPER ACTUATORS FOR OA, RA, BYPASS, RELAYS, GRAPHICS, SEQUENCES, PROGRAMMING, ETC. COORDINATE BACNET POINTS FOR NEW EQUIPMENT. COMMISSION CONTROLS SEQUENCES.
   g. ALL OTHER ACCESSORIES TO DELIVER A COMPLETE AND OPERATIONAL SYSTEM.
   h. TESTING, ADJUSTING, AND BALANCING.
   i. CUTTING AND PATCHING AND TOUCHUP PAINTING AS REQUIRED.
   j. CONCRETE WORK AS NEEDED.
   k. SHOP DRAWING SUBMITTALS FOR ALL MECHANICAL SYSTEMS INCLUDING BUT NOT LIMITED TO EQUIPMENT, DUCTWORK AND PIPING. THESE INCLUDE COORDINATION DRAWINGS FOR PLACING OF MECHANICAL SYSTEMS IN RELATION TO WORK BY OTHER DISCIPLINES.
   l. WINDSTORM RESTRAINTS FOR EXTERIOR MOUNTED EQUIPMENT, ALONG WITH SEALED DRAWINGS AND CALCULATIONS SHOWING THAT RESTRAINTS MEET IBC REQUIREMENTS.
   m. COORDINATE ELECTRICAL WORK WITH DIV. 26 AS REQUIRED.
   n. COORDINATE FIRE ALARM RELATED WORK WITH FIRE ALARM CONTRACTOR. PROVIDE SMOKE DETECTORS, WIRING AND CONTROLS FOR UNITS, 2000 CFM AND LARGER, WHERE NONE EXIST.
4. PAINTING: SEE DIVISION 9 SPECIFICATIONS. PAINT ALL EXPOSED PIPING, DUCTWORK, INSULATION, HANGERS, ACCESSORIES IN INTERIOR EXPOSED AREAS. PAINT EXTERIOR PIPE SUPPORTS. COORDINATE PAINT TYPE, COLOR AND SCOPE OF WORK WITH ARCHITECT.
5. COMMISSIONING: PROVIDE ASSISTANCE WITH COMMISSIONING SERVICES PER SPECIFICATIONS. THIS INCLUDES COMPLETING SYSTEMS READINESS CHECKLISTS, PERFORMING FUNCTIONAL TESTING, PROVIDING OPERATOR TRAINING, ETC.
6. NEW ELECTRICAL WORK: PROVIDE ALL MATERIALS AND LABOR ASSOCIATED WITH NEW FULLY OPERATIONAL ELECTRICAL SYSTEMS, INCLUDING BUT NOT LIMITED TO THE FOLLOWING:
   a. ELECTRICAL SERVICE: EXISTING TO REMAIN AS IS WITH MODIFICATIONS.
   b. ELECTRICAL DEMOLITION: DISCONNECT EXISTING HVAC EQUIPMENT FOR INSTALLATION OF NEW EQUIPMENT AS NOTED ON DRAWINGS.
   c. FIRE ALARM SYSTEM: PROVIDE CONNECTIONS FOR NEW H.V.A.C. EQUIPMENT.
   d. VOICE AND DATA COMMUNICAITON CABLING EQUIPMENT: PROVIDE CABLING, CONNECTORS, PATCH PANELS, RACKS, ETC TO PROVIDE END-TO-END CONNECTIVITY FOR THE HVAC CONTROLS.
   e. COMMISSIONING: PROVIDE FOR THE HVAC EQUIPMENT AS REQUIRED PER IECC 2018.

DATE OF ISSUE

NOVEMBER 3, 2026

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ME3.01	MECHANICAL & ELECTRICAL RENOVATION PLANS – BUILDING B
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STATE OF TEXAS
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DATE: NOVEMBER 3, 2026
CHECKED BY: B. BURKE
DRAWN BY: J.R. / B.T.
PROJECT NO.: 26v23
CAD FILE:
SHEET: COVER

CODES & ORDINANCES:

1. GENERAL:
   a. UNLESS DRAWINGS OR SPECIFICATIONS HAVE MORE STRINGENT REQUIREMENTS, PERFORM ALL WORK PER APPLICABLE VERSION OF INTERNATIONAL BUILDING CODES, LOCAL CODES, AND ORDINANCES.
   b. PRIOR TO SUBMITTING PROPOSAL, NOTIFY ENGINEER OF ANY ASPECTS OF DESIGN WHICH ARE THOUGHT TO BE IN NONCOMPLIANCE WITH APPLICABLE CODES.
2. WIND STORM CERTIFICATION:
   a. CONTRACTOR SHALL DESIGN, CONSTRUCT, AND INSTALL EXTERIOR AND ROOF MOUNTED EQUIPMENT TO MEET GOVERNING BUILDING CODES.
3. PERMITS:
   a. CONTRACTOR IS RESPONSIBLE FOR ALL PERMITS AND FEES ASSOCIATED WITH PROJECT, INCLUDING FEES FOR INSPECTIONS, APPLICATIONS, AND PROVISION OF NEW SERVICES.
   b. CONTRACTOR WHO WILL ACTUALLY PERFORM WORK MUST APPLY FOR ALL REQUIRED PERMITS.
4. APPROVALS AND INSPECTIONS:
   a. OBTAIN APPROVAL FROM CITY FIRE DEPARTMENT AND BUILDING AND SAFETY DEPARTMENT PRIOR TO INSTALLATION OF ANY FIRE RELATED ITEMS.
   b. COORDINATE PRESSURE TESTS, INSPECTIONS AND APPROVAL FOR ALL SYSTEMS WITH PERMITTING OFFICER, OWNER AND ENGINEER.

PIPING:

1. DRAWINGS ARE DIAGRAMMATIC IN NATURE. FOR CLARITY SAKE, MOST PIPING OFFSETS/RISES/DROPS ARE NOT SHOWN IN DRAWINGS.
2. COORDINATE LOCATION OF MECHANICAL SYSTEMS WITH PLUMBING, ELECTRICAL, AND OTHER TRADES.
3. SEAL ALL PENETRATIONS IN FIRE RATED WALLS WITH APPROVED FIRE RATED SEALANT. SEE SPECIFICATIONS. SEE ARCHITECTURAL DRAWINGS FOR FIRE WALL LOCATIONS.
4. ROUTE INSULATED PIPING TIGHT AGAINST CEILING STRUCTURE AND WRAP PIPING BELOW BEAMS. CONCEAL PIPING ABOVE SUSPENDED CEILING TO EXTENT POSSIBLE. DO NOT ROUTE ANY PIPING ABOVE ELECTRICAL AND TELECOMMUNICATION ROOMS. COORDINATE LAYOUT WITH OTHER TRADES SUCH AS DUCTWORK, PLUMBING, LIGHTING, ELECTRICAL, FIRE PROTECTION, ETC. PROVIDE SHOP DRAWINGS TO CLEARLY SHOW PIPING ROUTING AND COORDINATION WITH OTHER ELEMENTS. IN CASE OF CONFLICT, COORDINATE REROUTING OF UTILITIES WITH ENGINEER.
5. INSTALL ALL PIPING PENETRATING WALLS, PERPENDICULAR TO WALL. DRAWINGS INDICATE GENERAL ROUTING ONLY.
6. SLEEVE ALL EXTERIOR WALL AND GRADE BEAM PENETRATIONS. GRADE BEAM PENETRATIONS SHALL BE MADE WITHIN MIDDLE 1/3 OF VERTICAL SPAN OF BEAM.

MECHANICAL SYMBOLS LEGEND

12x12	DUCT SIZE: FIRST FIGURE IS SIDE SHOWN	T	THERMOSTAT
(12x12)	BELOW DUCT SIZE: FIRST FIGURE IS SIDE SHOWN	RH	SPACE HUMIDITY SENSOR
	DIRECTION OF FLOW–RETURN	RH	DUCT HUMIDITY SENSOR
	DIRECTION OF FLOW–SUPPLY	C	SPACE CARBON DIOXIDE SENSOR
FD	FIRE DAMPER	SP	STATIC PRESSURE SENSOR
8"Ø	FLEXIBLE DUCT	C	DUCT CARBON DIOXIDE SENSOR
		CHR	CHILLED WATER RETURN
EG-X / cfm	EXHAUST AIR GRILLE	CHS	CHILLED WATER SUPPLY
		CD	CONDENSATE PIPING
RG/TG-X / cfm	RETURN AIR/TRANSFER AIR GRILLE		BUTTERFLY VALVE
SD-X / cfm	SUPPLY AIR DIFFUSER		MANUAL VALVE
	SIDE TAP WITH DAMPER		AUTOMATIC VALVE
	BACKDRAFT DAMPER		CHECK VALVE
AFR	AUTO–FLOW REGULATOR		PRESSURE GAUGE & COCK
	DRAIN VALVE	TS	TEMPERATURE SENSOR
	BALL VALVE	TW	THERMOMETER WELL

ABBREVIATIONS

A	AMPS	DMPR.	DAMPER	MZ	MULTI–ZONE
ACCU	AIR COOLED CONDENSING UNIT	DISC.	DISCONNECT	NC	NORMALLY CLOSED
ACT	ACTUATOR	EMS	ENERGY MANAGEMENT SYSTEM	NO	NORMALLY OPEN
AFF	ABOVE FINISHED FLOOR			NTS	NOT TO SCALE
AHU	AIR HANDLING UNIT	EAG/EG	EXHAUST AIR GRILLE	OA	OUTSIDE AIR
B.	BOTTOM	ENT.	ENTERING	PH	PHASE
BAS	BUILDING AUTOMATION SYSTEM	EXT.	EXTERNAL OR EXTERIOR	RA	RETURN AIR
BOP	BOTTOM OF PIPE	FCU	FAN COIL UNIT	RAG/RG	RETURN AIR GRILLE
BOTT.	BOTTOM	FD	FIRE DAMPER	RD	ROOF DRAIN
C.	CONDUIT OR COMMON	FM	FLOW METER	RM.	ROOM
CHR	CHILLED WATER RETURN	FS	FLOW SWITCH	RPZ	REDUCED PRESSURE ZONE
CHS	CHILLED WATER SUPPLY	FPI	FINS PER INCH	SA	SUPPLY AIR
CHW	CHILLED WATER	G.	GROUND	SD	SUPPLY AIR DIFFUSER
CHWP	CHILLED WATER PUMP	GA.	GAGE	SS	STAINLESS STEEL
CR	CONDENSER WATER RETURN	GALV.	GALVANIZED	SZ	SINGLE ZONE
CS	CONDENSER WATER SUPPLY	GPM	GALLONS PER MINUTE	TAB	TESTING & BALANCING
CLG.	CEILING OR COOLING	GRND.	GROUND	T.O.L.	TOP OF LOUVER
COMB.	COMBINATION	HB	HOSE BIBB	TS	TEMPERATURE SENSOR
CONC.	CONCRETE	HP	HORSEPOWER	TSTAT	THERMOSTAT
COND.	CONDUIT	HS	HUMIDITY SENSOR	UG	UNDERGROUND
CT	COOLING TOWER	HVAC	HEATING, VENTILATION, & AIR CONDITIONING	UNO	UNLESS OTHERWISE NOTED
CU.	COPPER			V	VOLTS
CW	CITY WATER	LVG.	LEAVING	VAV	VARIABLE AIR VOLUME
DDC	DIRECT DIGITAL CONTROLS	MECH	MECHANICAL	VFD	VARIABLE FREQUENCY DRIVE
DDP	DIRECT DRIVE PLENUM	MS	MOTOR STARTER	W	WIRE

COORDINATION:

1. GENERAL:
   a. CONTRACTOR SHALL REVIEW COMPLETE DOCUMENTS PRIOR TO SUBMITTAL OF PROPOSAL TO GAIN COMPLETE UNDERSTANDING OF PROJECT SCOPE, WORK BY OTHERS, AND MECHANICAL WORK ASSOCIATED WITH OTHER DISCIPLINES.
2. SITE:
   a. TIME OR MONEY ALLOWANCES WILL NOT BE MADE TO ACCOMMODATE UTILITY CONFLICTS THAT CAN BE REASONABLY RESOLVED BY COORDINATION DURING SHOP DRAWING STAGE.
3. ARCHITECTURAL AND STRUCTURAL:
   a. REFER TO ARCHITECTURAL AND STRUCTURAL PLANS FOR DETAILS OF CONSTRUCTION, INCLUDING BEAMS, FLOOR AND WALL PENETRATIONS, CHASES, AND REFLECTED CEILING PLANS. VERIFY OPENING SIZES WITH EQUIPMENT FURNISHED.
   b. SLEEVE ALL EXTERIOR WALL AND GRADE BEAM PENETRATIONS. GRADE BEAM PENETRATIONS SHALL BE MADE WITHIN MIDDLE 1/3 OF VERTICAL SPAN OF BEAM.
   c. SEAL AROUND DUCTS AND PIPING AT ALL WALLS, A/C ROOMS, AND WALL LOUVER PENETRATIONS WITH FIREPROOF CAULKING. RE: SPECS. PROVIDE ESCUTCHEON PLATES AND FLASHING AROUND PENETRATION, BOTH INSIDE AND OUTSIDE, TO PROVIDE FINISHED LOOK.
4. SPATIAL COORDINATION:
   a. COORDINATE ALL WORK WITH OTHER TRADES; COORDINATE SCHEDULE OF WORK WITH ALL SUB–CONTRACTORS TO ACHIEVE SMOOTH FLOW OF CONSTRUCTION.
   b. SPACES ABOVE CEILING ARE CONGESTED. DESIGN INTENT IS THAT UTILITIES BE INSTALLED TIGHT AGAINST CEILING STRUCTURE TO EXTENT POSSIBLE, WHILE RETAINING ADEQUATE MAINTENANCE ACCESS PER CODES.
   c. IN CASE OF CONFLICTS, ITEMS SHALL BE ARRANGED ACCORDING TO THE FOLLOWING PRIORITIES: LIGHTING, FIRE PROTECTION, HVAC. PROVIDE OFFSETS/RISES/DROPS REQUIRED TO RESOLVE CONFLICTS WITH OTHER UTILITIES, AND TO ACCOMMODATE ALL UTILITIES ABOVE CEILINGS.
   d. IN GENERAL, REROUTE SMALLER DUCTS/PIPES THROUGH JOISTS TO RESOLVE CONFLICTS WITH LARGER. PERFORM REROUTING IN MOST EFFICIENT MANNER POSSIBLE, AND IN ACCORDANCE WITH INDUSTRY STANDARDS.
   e. PROVIDE COORDINATION DRAWINGS OF REFLECTED CEILING PLAN AND SECTION ABOVE CEILING SHOWING WORK OF ALL AFFECTED TRADES. DO NOT PROCEED WITH FABRICATION WORK UNTIL COORDINATION DRAWINGS HAVE BEEN APPROVED BY A/E.
   f. IN GENERAL ROUTE DUCTS/PIPES IN MOST EFFICIENT MANNER POSSIBLE, AND IN ACCORDANCE WITH INDUSTRY STANDARDS.
   g. SEE ELECTRICAL PLANS FOR EXACT LOCATION OF ELECTRICAL PANELS TO AVOID DUCTWORK AND PIPING RUNNING OVER THESE AREAS. COORDINATE WITH ELECTRICAL CONTRACTOR.
   h. LOCATE AIR DEVICES AS SHOWN. COORDINATE WITH OTHER TRADES TO AVOID CONFLICT AND ADJUST LOCATION IF NEEDED WITHOUT COMPROMISING AIR DEVICES PERFORMANCE.
5. CONTROLS:
   a. REFER TO SPECIFICATIONS FOR CONTROL COMPONENTS AND DEVICES TO BE COORDINATED WITH MECHANICAL WORK.
   b. CONTROLS CONTRACTOR SHALL PROVIDE BUILDING AUTOMATION SYSTEM (BAS) THAT CONTROLS EQUIPMENT SHOWN ON DRAWINGS. CONTROLS CONTRACTOR IS RESPONSIBLE FOR INSTALLING LOW VOLTAGE POWER AND COMMUNICATIONS. REFERENCE SPECIFICATIONS FOR CONTROL COMPONENTS AND SEQUENCING TO BE COORDINATED W/ MECH. WORK.
   c. DRAWINGS SHOW GENERAL LOCATION OF DDC SENSORS (T, RH, AND CO2). UNLESS NOTED OTHERWISE, INSTALL SENSORS AT 48" ABOVE FINISHED FLOOR. WIRING SHALL BE IN CONCEALED WALLS. IN CASE OF CONFLICTS WITH FURNITURE, WINDOWS, ETC., COORDINATE EXACT LOCATION WITH ENGINEER.

GENERAL NOTES:

1. CONTRACT RELATED:
   a. COORDINATE WORK AMONG ALL DISCIPLINES. IT IS NOT THE INTENT OF THESE DOCUMENTS TO DICTATE WHO MUST DO THE WORK. ALL WORK SHOWN IS THE RESPONSIBILITY OF THE (PRIME) CONTRACTOR.
   b. WORK TO BE DONE UNDER ALLOWANCES BECOMES AN INTEGRAL PART OF THE PROJECT AND RESPONSIBILITY OF CONTRACTOR ONCE ALLOWANCE IS APPROVED.
   c. CONTRACTOR SHALL NOT PROCEED WITH ANY WORK INVOLVING A CHANGE IN PROJECT SCOPE OR COST WITHOUT FIRST HAVING OBTAINED ENGINEER'S APPROVAL IN WRITING. UNLESS ENGINEER HAS AGREED TO SUCH CHANGE PRIOR TO IT BEING DONE, AND HAS AGREED THAT AN INCREASE IN COST ASSOCIATED WITH SUCH CHANGE IS WARRANTED, CONTRACTOR WILL NOT BE REIMBURSED FOR SUCH CHANGE.
2. TEST & BALANCE:
   a. TEST & BALANCE SHALL BE PERFORMED UNDER GENERAL CONTRACTOR, SEPARATE FROM MECHANICAL CONTRACT. DURING BIDDING, CONTRACTOR SHALL SUBMIT A COPY OF EVIDENCE THAT TAB AGENT MEETS THE QUALIFICATIONS SPECIFIED UNDER DIV. 23 SECTION 230593 TO PRIME CONTRACTOR.
   b. TEST & BALANCE TO COORDINATE MINIMUM AND MAXIMUM OUTSIDE AIR DAMPER SETTINGS WITH DDC CONTROLS AND ENGINEER. PROVIDE TIME ALLOTMENT FOR MULTIPLE DAMPER SETTINGS IN SOME CASES.
   c. CONTRACTOR SHALL COORDINATE TAB ACTIVITIES WITH TAB CONTRACTOR.

CONTROLS:

1. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE ALL HARDWARE, SOFTWARE, CONTROL AND MONITORING DEVICES, AUXILIARY DEVICES, CABLES AND WIRE, PROGRAMMING AND INSTALLATION SERVICES TO RESULT IN A FULLY FUNCTIONAL SYSTEM WHICH PERFORMS IN MANNER EXPECTED BY OWNER AND ENGINEER.
2. COOPERATE AND COORDINATE FULLY WITH PROVIDER AND INSTALLER OF NEW HVAC UNITS TO ENSURE COMPLETE AND EFFECTIVE CONTROL OF UNITS IS ACHIEVED.
3. CONTRACTOR SHALL COOPERATE AND COORDINATE WORK ACTIVITIES EQUIPMENT SUPPLIER TO ENSURE SMOOTH TROUBLE–FREE INSTALLATION.
4. WHERE NOT SPECIFICALLY INDICATED ON PLANS, CONTRACTOR IS RESPONSIBLE FOR ALL CONTROL RELAYS AND CONTACTORS, POWER TO PANELS, AND OTHER CONTROL ELEMENTS. ALTHOUGH CONTRACTOR MAY COORDINATE WITH OTHER TRADES TO PROVIDE MISCELLANEOUS ELECTRICAL WORK, THE FINAL RESPONSIBILITY FOR ACHIEVEMENT OF CONTROL SEQUENCES LIES WITH CONTRACTOR.
5. REFER TO OPERATING SEQUENCE IN SPECIFICATIONS FOR ALARMS AND SEQUENCES REQUIRED.
6. ALL REFERENCES TO CONTROLLED / MONITORED POINTS AND / OR GRAPHICS WHICH ARE ON A CURRENT CONTROL SYSTEM, AND WHICH WILL BE REMOVED DURING COURSE OF CONSTRUCTION OF THIS PROJECT, MUST BE COMPLETELY REMOVED FROM CONTROL SYSTEM SOFTWARE, CONTROL SYSTEM WIRING AND CONTROLLERS TO SUCH POINTS MUST BE REMOVED AS WELL.
7. RECOMMENDED DIVISION OF RESPONSIBILITIES BETWEEN SUB–CONTRACTORS IS AS FOLLOWS:
   a. WITH OWNER COORDINATE ETHERNET CONNECTION AND EXTEND IT FROM OWNER DESIGNATED LOCATION TO NEW DDC PANELS AS APPLICABLE.
   b. CONTRACTOR SHALL COORDINATE CONTROL WIRING BETWEEN CONTROL PANELS AND UNITARY CONTROLLERS. PROVIDE MEANS TO SUPPORT WIRING (J–HOOKS). DO NOT SUPPORT WIRING FROM EXISTING DATA OR FIRE ALARM WIRING SUPPORTS.
   c. WITH ELECTRICAL SUB CONTRACTOR, CONTRACTOR COORDINATES 120V POWER WIRING AND CONDUIT TO NEW CONTROLLERS (AND CIRCUIT BREAKERS, IF NO SPARES EXIST).
   d. CONTRACTOR IS RESPONSIBLE FOR:
   - VALVES AND ACTUATORS
   - GATEWAY INTERFACES AND ALL RELATED ACCESSORIES FOR FULL COMMUNICATION
   - SOFTWARE, PROGRAMMING.
   - ALL NETWORK CONTROL PANELS, CONTROLLERS, SOFTWARE AND PROGRAMMING.
   - WIRING CONDUIT FOR CONTROL AND MONITORING DEVICES
   - CONTROL RELAYS
   - SHOP DRAWINGS PER SPECIFICATIONS.

INSULATION:

1. FIBERGLASS INSULATION MAY NOT BE USED ON ANY COLD SURFACES; ONLY CLOSED CELL INSULATION IS ACCEPTABLE.
2. PROVIDE INSULATION ON ALL SURFACES CAPABLE OF CREATING CONDENSATION.

DUCTWORK:

1. DUCTWORK GENERAL:
   a. DRAWINGS ARE DIAGRAMMATIC IN NATURE. FOR CLARITY SAKE, MOST DUCT OFFSETS/RISES/DROPS ARE NOT SHOWN. WHERE DUCTS PENETRATE WALLS, INSTALL THEM PERPENDICULAR TO WALL.
   b. RECTANGULAR AND ROUND DUCTWORK SHALL BE GALVANIZED STEEL. SIZES SHOWN ARE INSIDE CLEAR DIMENSION, UNLESS NOTED OTHERWISE.
   c. VERIFY BOTTOM OF DUCT ELEVATION AND COORDINATE WITH OTHER TRADES.
   d. CONSTRUCT AND LEAKAGE TEST ALL DUCTWORK BASED ON SPECIFICATIONS AND SMACNA REQUIREMENTS, WHICHEVER IS MORE STRINGENT. COORDINATE PRESSURE CLASSES WITH EQUIPMENT SCHEDULES.
   e. FLEXIBLE DUCTS MAXIMUM LENGTH SHALL NOT EXCEED 6 FEET. USE OF FLEXIBLE DUCTWORK IS LIMITED TO AREAS WITH AN ACCESSIBLE SUSPENDED CEILING. PINCHED DUCT WILL HAVE TO BE REPLACED.
   f. IN AREAS WHERE DUCT CONFLICTS CANNOT BE AVOIDED, ROUTE SMALLER DUCTS THROUGH ROOF JOISTS.
   g. LOCATE AIR DEVICES AS SHOWN. COORDINATE WITH ELECTRICAL, IF NEEDED. RELOCATE DIFFUSER TO ADJACENT TILE.
2. DUCTWORK INSULATION:
   a. WRAP ALL OUTSIDE AIR, SUPPLY, AND RETURN DUCTWORK UNLESS NOTED OTHERWISE.
   b. IN ADDITION, FOR ACOUSTICAL PERFORMANCE INTERNALLY LINE FIRST 10' OF SUPPLY AND LAST 10' OF RETURN DUCTWORK.
   c. PROVIDE ACOUSTICAL LINING FOR ALL TRANSFER DUCTS AND RETURN AIR ELBOWS.
   d. INSULATION ON DUCT SHOULD BE PROPERLY TAPED AND MASTICS MUST BE APPLIED ON SEAMS AND JOINTS AND AT ENDS ADJACENT TO DUCT FLANGES AND FITTINGS. FOR DUCT SIDES WITH DIMENSIONS LARGER THAN 18 INCHES, APPLY ADDITIONAL PINS AND CLIPS TO HOLD INSULATION TIGHTLY AGAINST SURFACE AT CROSS BRACING.
3. DUCT FITTINGS:
   a. WHERE RECTANGULAR TEE FITTINGS ARE SHOWN, PROVIDE FITTING WITH ADJUSTABLE DIVIDER SHEET AND TURNING VANES.
   b. WHERE RECTANGULAR MAIN AND BRANCH CONNECTIONS ARE SHOWN, PROVIDE EXTRACTOR VANES. NOT APPLICABLE TO DUCTWORK DOWNSTREAM OF VAV BOXES.
   c. PROVIDE TURNING VANES IN ALL ELBOWS PER SPECS.
4. DAMPERS:
   a. IN AN ACCESSIBLE LOCATION, PROVIDE MANUAL–TYPE VOLUME BALANCING DUCT DAMPERS IN ALL SUPPLY, RETURN, AND EXHAUST DUCT BRANCHES TO INDIVIDUAL GRILLES, REGISTERS, AND DIFFUSERS (GRD). TO MINIMIZE NOISE INSTALL DAMPERS CLOSER TO THE BRANCH CONNECTION THAN TO THE GRD. IN DUCTWORK, PROVIDE ACCESS DOORS TO ALL DAMPERS.
   b. ABOVE INACCESSIBLE CEILINGS AND IN CASE DUCT CONFIGURATION DOES NOT ALLOW FOR INSTALLATION OF DAMPER IN DUCTWORK, PROVIDE REMOTE MANUAL DAMPER BY YOUNG REGULATOR OR EQUAL, (CABLE OPERATED SYSTEM) WITH ENGINEER'S PERMISSION CONTRACTOR MAY PROVIDE VOLUME DAMPER THAT IS INTEGRAL TO GRD.
   c. PROVIDE DYNAMIC FIRE DAMPERS (RUSKIN DIDB20, TYPE B OR EQUAL) IN ACCORDANCE WITH CODE REQUIREMENT, IN ALL PENETRATIONS OF FIRE RATED WALLS, OCCUPANCY SEPARATION WALLS, BARRIERS AND PARTITIONS, AND EXIT CORRIDORS. REFER TO ARCHITECTURAL PLANS FOR RATED WALLS. PROVIDE ACCESS DOORS AS PER CODE REQUIREMENTS, EQUAL TO RUSKIN ADH–22 FOR RECTANGULAR DUCT, ACUDOR RD FOR ROUND DUCT. WHERE GRILLE ACCESS IS INDICATED, ADDITIONAL DUCT ACCESS DOOR IS NOT REQUIRED. WHERE THE CEILING IS FIRE RATED PROVIDE FIRE RATED AIR DEVICES FOR TRANSFER & RETURN AIR GRILLES AND SUPPLY AIR DIFFUSERS AS PER CODE REQUIREMENTS. REFER TO ARCHITECTURAL PLANS FOR RATED CEILINGS.
   d. PROVIDE ACCESS DOORS (NOT SHOWN IN DRAWINGS) FOR INSPECTION OF DUCT MOUNTED EQUIPMENT SUCH AS FIRE/SMOKE DAMPERS, MANUAL BALANCING DAMPERS AND TURNING VANES. IN AREAS WITH HARD CEILING COORDINATE ACCESS DOOR LOCATIONS AND CEILING ACCESS PANELS WITH OTHER TRADES.

EXISTING CONDITIONS COORDINATION/RENO.:

1. COORDINATE SUMMER SCHOOL SCHEDULES AND PROJECT COMPLETION DATES WITH OWNER. PERFORM WORK IN CLOSE COORDINATION WITH OWNER. MAJORITY OF WORK SHALL BE PERFORMED WHEN SCHOOLS ARE UNOCCUPIED, SUCH AS WEEKENDS, AFTER HOURS, SPRING AND SUMMER BREAK OR AT OWNER APPROVED TIME.
2. COORDINATE WORK AMONG ALL DISCIPLINES. IT IS NOT THE INTENT OF THESE DOCUMENTS TO DICTATE WHO MUST DO THE WORK. ALL WORK SHOWN IS THE RESPONSIBILITY OF THE (PRIME) CONTRACTOR.
3. PROVIDE LIGHTED SAFETY BARRIERS AROUND WORK AREAS AT ALL TIMES.
4. WORK TO BE DONE UNDER ALLOWANCES BECOMES AN INTEGRAL PART OF THE WORK AND THE RESPONSIBILITY OF THE CONTRACTOR ONCE THE ALLOWANCE IS APPROVED.
5. COORDINATE WITH OWNER AND ENGINEER FOR ANY DISRUPTION IN UTILITY SERVICES, PARTICULARLY THOSE THAT MIGHT AFFECT OTHER BUILDINGS ON CAMPUS.
6. CONTRACTOR SHALL NOT PROCEED WITH ANY WORK INVOLVING A CHANGE IN PROJECT SCOPE OR COST WITHOUT FIRST HAVING OBTAINED ENGINEER'S APPROVAL IN WRITING. UNLESS ENGINEER HAS AGREED TO SUCH CHANGE PRIOR TO IT BEING DONE, AND HAS AGREED THAT AN INCREASE IN COST ASSOCIATED WITH SUCH CHANGE IS WARRANTED; CONTRACTOR WILL NOT BE REIMBURSED FOR SUCH CHANGE.
7. OWNER'S EQUIPMENT, MATERIALS, FURNISHINGS, CARPETS, AND INTERIOR SURFACES ARE TO BE PROTECTED FROM DUST ACCUMULATION AND DAMAGE, AND MUST BE THOROUGHLY CLEANED PRIOR TO SUBSTANTIAL COMPLETION. CARPETS ARE TO BE PROTECTED WITH HEAVY DUTY PLASTIC SHEETING. REFER TO SPECIFICATIONS SECTION 01700 EXECUTION REQUIREMENTS FOR FURTHER DETAIL.
8. MAINTAIN PROJECT SITE FREE OF WASTE MATERIALS AND DEBRIS, AND CLEAN SITE AT END OF EACH WORK DAY TO GREATEST EXTENT POSSIBLE.
9. SUBMISSION OF PROPOSAL IS CONSIDERED AN ACKNOWLEDGEMENT THAT CONTRACTOR VISITED SITE, VERIFIED ALL EXISTING CONDITIONS, AND INCLUDED ANY MODIFICATIONS TO EXISTING AND NEW WORK REQUIRED FOR INSTALLATION OF A COMPLETE AND OPERATIONAL SYSTEM.
10. TIME OR MONEY ALLOWANCES WILL NOT BE MADE TO ACCOMMODATE CONDITIONS THAT COULD HAVE BEEN VERIFIED PRIOR TO SUBMITTING PROPOSAL.
11. DRAWINGS SHOWING ALL EQUIPMENT LOCATIONS, DUCT AND PIPE SIZES, ELEVATIONS, AND ELECTRICAL INFORMATION HAVE BEEN RECREATED USING DRAWINGS AND SITE SURVEYS. CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL SITE CONDITIONS IN ORDER TO MAKE ANY NECESSARY ADJUSTMENTS, PRIOR TO ORDERING MATERIALS OR COMMENCING INSTALLATION. CHANGE ORDERS WILL NOT BE APPROVED FOR DIMENSIONAL VERIFICATIONS REQUIRING MINOR ADJUSTMENTS NEEDED TO COMPLETE INSTALLATION.
12. PROVIDE SHOP DRAWINGS TO COORDINATE EXISTING AND NEW WORK.
13. IT IS THE CONTRACTOR'S RESPONSIBILITY TO REMOVE AND DISPOSE OF ALL ITEMS INDICATED TO BE REMOVED. ONLY EXPRESSLY DESIGNATED ITEMS SHALL BE TURNED OVER TO OWNER.
14. OWNER SHALL HAVE FIRST RIGHT OF REFUSAL OF ALL MATERIAL REMOVED. CONTRACTOR SHALL DISPOSE OF ALL MATERIALS WHICH THE OWNER DOES NOT WANT.
15. REMOVE ALL EQUIPMENT, MATERIALS, CONTROL DEVICES, BOXES, POWER AND CONTROL WIRING, SAFETY SWITCHES, TUBING, ELECTRICAL CONDUIT, PIPING, SENSORS, ELECTRICAL DISCONNECTS, SUPPORTING DEVICES AND STRUCTURES, AND ALL RELATED AUXILIARY ITEMS ASSOCIATED WITH EQUIPMENT AND MATERIALS WHICH WILL NO LONGER BE USED AFTER THE PROJECT IS COMPLETE.
16. CONTRACTOR IS RESPONSIBLE FOR RESTORING ANY DISTURBED SURFACE TO ITS ORIGINAL CONDITION. ANY ROAD, TRAFFIC, OR OTHER PAINTED OR ERECTED SIGNS DAMAGED AS A RESULT OF WORK PERFORMED IN THOSE AREAS SHALL BE RESTORED TO THEIR ORIGINAL CONDITION.
17. CUTTING AND PATCHING OF WALLS DAMAGED IN THE REMOVAL OF ITEMS SHALL BE DONE, WHETHER OR NOT DRAWINGS SPECIFICALLY CALL FOR SUCH REPAIRS.
18. ABOVE CEILING WORK: FIELD VERIFY LOCATIONS OF EXISTING LIGHTING FIXTURES, SPEAKERS, HORN STROBES, SMOKE DETECTORS ETC. THAT WILL BE RETAINED. ENSURE THAT THESE ARE IN WORKING CONDITION PRIOR TO DEMOLITION. IF ANY OF THE ABOVE ITEMS ARE IN NON–WORKING CONDITION, SUBMIT A WRITTEN REPORT TO OWNER/ENGINEER.
19. PRIOR TO DEMOLITION WORK, SUBMIT A DETAILED DEMOLITION AND CONSTRUCTION SCHEDULE TO OWNER AND ENGINEER. DO NOT PROCEED WITH WORK UNTIL PROPOSED SCHEDULE IS APPROVED BY ALL PARTIES. PROVIDE OWNER WITH MINIMUM 10 DAYS ADVANCE NOTICE OF INTENT TO PERFORM ANY WORK WHICH WILL REQUIRE CHILLER, BOILER PLANT OR ELECTRICAL SERVICE TO BE SHUT DOWN.
20. PROVIDE DUCTWORK MODIFICATION AND TRANSITION PIECES PER SMACNA RECOMMENDATION, AND AS REQUIRED TO ACCOMMODATE NEW UNITS. IF APPLICABLE, SEAL DUCT–LINER ON EXISTING DUCTWORK SUCH THAT LOOSE INSULATION IS NOT IN THE AIR STREAM. EXTEND EXTERNAL INSULATION ON NEW DUCT 12" PAST THE CONNECTION POINT OF NEW AND OLD DUCTWORK.

EQUIPMENT:

1. EQUIPMENT INSPECTION:
   a. FIELD VERIFY ALL CONDITIONS AND MEASURE DIMENSIONS WITHIN THE BUILDING PRIOR TO ORDERING EQUIPMENT AND/OR PROCEEDING WITH INSTALLATION.
   b. ALL EQUIPMENT SHALL BE FACTORY TESTED, AND CONTRACTOR SHALL VERIFY EQUIPMENT CONDITION PRIOR TO INSTALLATION. CONTRACTOR IS RESPONSIBLE FOR EQUIPMENT DAMAGED DURING MOVING AND INSTALLATION.
   c. EQUIPMENT FOUND DEFECTIVE PRIOR TO FINAL ACCEPTANCE SHALL BE REPLACED AT NO COST TO OWNER.
2. EQUIPMENT INSTALLATION:
   a. AFFIX ID TAGS TO ALL MECHANICAL EQUIPMENT PER SPECIFICATIONS.
3. EQUIPMENT INSULATION:
   a. INSULATE ALL SURFACES THAT ARE CAPABLE OF BECOMING COLD AND COLLECTING CONDENSATE. THIS INCLUDES SUPPLY DIFFUSERS AND CONNECTING DUCTWORK / TRANSITION PIECES.
4. MECHANICAL:
   a. MECHANICAL CONTRACTOR IS TO COORDINATE WITH TESTING, ADJUSTING, AND BALANCING (TAB) FIRM TO PROVIDE REPLACEMENT SHEAVES / PULLEYS FOR MOTORS IF / AS REQUIRED BY TAB TO ACHIEVE SPECIFIED FLOW RATES FOR EQUIPMENT.
5. ELECTRICAL:
   a. CONTRACTOR IS RESPONSIBLE FOR COORDINATION WITH ELECTRICAL CONTRACTOR REGARDING EQUIPMENT SIZES AND TYPES OF ELECTRICAL INTERFACE EQUIPMENT REQUIRED.
   b. DUE TO VARIATIONS IN EQUIPMENT CHARACTERISTICS BY DIFFERENT EQUIPMENT SUPPLIERS, MECHANICAL EQUIPMENT ULTIMATELY PROVIDED MAY DIFFER IN HORSEPOWER OR AMPERAGE REQUIREMENTS FROM THAT SPECIFIED IN THESE DRAWINGS. COORDINATE WITH GENERAL CONTRACTOR PRIOR TO BIDDING, AND PRIOR TO SUBMITTALS AND ORDERING EQUIPMENT, TO ENSURE THAT EQUIPMENT ELECTRICAL REQUIREMENTS ARE CONVEYED TO ELECTRICAL CONTRACTOR. IT IS SOLELY CONTRACTOR'S RESPONSIBILITY TO ENSURE COMPATIBILITY ISSUES ARE COORDINATED.
6. PLUMBING:
   a. COORDINATE LOCATIONS WITH PLUMBING CONTRACTOR.
   b. PROVIDE INSULATED AND TRAPPED CONDENSATE DRAIN LINES FROM ALL AIR CONDITIONING EQUIPMENT AND TERMINATE TO NEAREST CONDENSATE DRAIN RECEPTORS OR OTHER APPROVED RECEPTACLES. COORDINATE WITH PLUMBING.

ELECTRICAL:

1. ALL ELECTRICAL WORK SHALL BE UNDER THE MASTER ELECTRICIAN WHO PULLED THE PERMIT AND ITS JOURNEYMAN ELECTRICIANS.
2. PERFORM ALL WORK PER ADOPTED N.E.C. AND APPLICABLE STATE STANDARDS, UNLESS DRAWINGS OR SPECIFICATIONS HAVE MORE STRINGENT REQUIREMENTS.
3. UNLESS NOTED OTHERWISE, MINIMUM POWER CIRCUIT IS TO BE #12 THWN WITH #12 GROUND IN 3/4" CONDUIT, WITH THE EXCEPTION THAT ANY CIRCUIT LONGER THAN 100 FEET SHALL BE MINIMUM #10 AWG WITH #10 GROUND WIRE. CIRCUIT LONGER THAN 200 FEET SHALL BE MINIMUM #8 AWG WITH #10 GROUND WIRE MINIMUM.
4. ALL EXISTING ID NAMETAGS AND CIRCUIT IDENTIFICATION MUST BE REVISED TO REFLECT CURRENT CONDITIONS FOR ALL EQUIPMENT WHICH IS NEW, REPLACED, OR DEMOLISHED. REMOVE ID NAMETAGS FOR DEMOLISHED EQUIPMENT. REPLACE EXISTING NAMETAGS WITH NEW FOR REPLACED EQUIPMENT, IF REPLACEMENT EQUIPMENT HAS DIFFERENT NAME. PROVIDE NEW NAMETAGS FOR ALL NEW EQUIPMENT. ALL CIRCUIT BREAKER DIRECTORIES FOR PANELS IN WHICH NEW WORK TAKES PLACE ARE TO BE REPLACED WITH NEW DIRECTORIES WHICH LIST EXISTING CIRCUITS AND NEW. ALL UNUSED CIRCUITS ARE TO BE MARKED AS 'SPARE' IN THE DIRECTORIES. DIRECTORIES ARE TO BE COMPUTER GENERATED; NO HAND WRITTEN DIRECTORIES ARE ACCEPTABLE.
5. HAND–WRITTEN CIRCUIT BREAKER DIRECTORIES WILL NOT BE ACCEPTED. DIRECTORIES MUST BE COMPUTER GENERATED AND PRINTED TO REFLECT FINAL INSTALLED CONDITIONS.
6. MARK ALL J–BOXES WITH INDELIBLE INK, INDICATING POWER CIRCUITRY INFORMATION. LABEL ALL EQUIPMENT ITEMS PER SPECIFICATIONS.
7. ALL EXTERIOR RACEWAYS ABOVE GROUND SHALL BE RIGID GALVANIZED (GRC).
8. UNDER NO CIRCUMSTANCES SHALL MORE THAN THREE CIRCUITS SHARE THE SAME NEUTRAL, AND SUCH CIRCUITS MUST BE SEPARATE PHASE.
9. SINCE ELECTRICAL CHARACTERISTIC OF EQUIPMENT (SUCH AS HORSEPOWER, KW, AMPERAGE, VOLTAGE, ETC.) SUBMITTED MAY DIFFER FROM THOSE SPECIFIED IN DRAWINGS, CONTRACTOR IS RESPONSIBLE FOR COORDINATION WITH MECHANICAL AND OTHER CONTRACTORS TO ENSURE COMPATIBILITY BETWEEN ELECTRICAL AND MECHANICAL EQUIPMENT SIZES AND TYPES OF ELECTRICAL INTERFACE EQUIPMENT REQUIRED.
10. USE LONG–SWEEPS FOR ALL CHANGES IN DIRECTION ON CONDUIT RUNS.
11. ALL INTERIOR RACEWAYS SHALL BE EMT.
12. FIELD VERIFY PROJECT SITE EXISTING CONDITIONS AND ELEVATIONS PRIOR TO BEGINNING ANY WORK.
13. PHASING AND SEQUENCE OF CONSTRUCTION SHALL BE PER DRAWINGS AND SPECIFICATIONS.
14. ALL MATERIALS AND LABOR, WHETHER SPECIFICALLY INDICATED ON PLANS OR NOT, WHICH ARE NECESSARY FOR THE PROPER INSTALLATION AND FUNCTION OF THE SYSTEM SHALL BE FURNISHED BY THIS CONTRACTOR. INCLUDE ALL COSTS OF CHANGES, IF/AS REQUIRED IN BID PROPOSAL.
15. ELECTRICAL WIRING SHALL NOT BE SPLICED BELOW GRADE.
16. CONTRACTOR IS RESPONSIBLE FOR ALL PERMITS AND FEES ASSOCIATED WITH PROJECT, INCLUDING FEES FOR INSPECTIONS, APPLICATIONS, AND PROVISION OF NEW SERVICES.
17. CONTRACTOR WHO WILL ACTUALLY PERFORM WORK MUST APPLY FOR ALL REQUIRED PERMITS.
18. NOTIFY ENGINEER OF ANY ASPECTS OF DESIGN WHICH ARE THOUGHT TO BE IN NONCOMPLIANCE WITH APPLICABLE CODES.
19. COORDINATE ALL WORK WITH OTHER TRADES; COORDINATE SCHEDULE OF WORK WITH ALL SUB–CONTRACTORS TO ACHIEVE SMOOTH FLOW OF CONSTRUCTION.
20. SEAL AROUND ELECTRICAL RACEWAYS AT ALL WALLS AND WALL LOUVER PENETRATIONS WITH FIREPROOF CAULKING. RE: SPECS. PROVIDE FLASHING AROUND PENETRATION, BOTH INSIDE AND OUTSIDE, TO PROVIDE FINISHED LOOK.
21. CONTRACTOR SHALL REVIEW COMPLETE DOCUMENTS PRIOR TO SUBMITTAL OF PROPOSAL TO GAIN COMPLETE UNDERSTANDING OF PROJECT SCOPE, WORK BY OTHERS, AND ELECTRICAL WORK ASSOCIATED WITH OTHER DISCIPLINES.
22. MAINTAIN MANUFACTURER RECOMMENDED CLEARANCE AROUND ALL EQUIPMENT.
23. AFFIX ID TAGS TO ALL DIVISION 26 EQUIPMENT.
24. CONTRACTOR IS RESPONSIBLE FOR COORDINATION WITH MECHANICAL AND PLUMBING CONTRACTOR REGARDING EQUIPMENT SIZES AND TYPES OF ELECTRICAL INTERFACE EQUIPMENT REQUIRED.
25. FIELD VERIFY ALL CONDITIONS AND MEASURE DIMENSIONS WITHIN THE BUILDING PRIOR TO ORDERING EQUIPMENT AND/OR PROCEEDING WITH INSTALLATION.
26. ALL EQUIPMENT SHALL BE FACTORY TESTED, AND CONTRACTOR SHALL VERIFY THEIR CONDITION PRIOR TO INSTALLATION. CONTRACTOR IS RESPONSIBLE FOR EQUIPMENT DAMAGED DURING MOVING AND INSTALLATION.
27. EQUIPMENT FOUND DEFECTIVE PRIOR TO FINAL ACCEPTANCE SHALL BE REPLACED AT NO COST TO OWNER.
28. SLEEVE ALL EXTERIOR WALL PENETRATIONS.
29. PRIOR TO ANY DEMOLITION, CONTRACTOR SHALL CONDUCT A DETAILED INSPECTION OF EXISTING CONDITIONS AND COMPARE AGAINST DEMOLITION DRAWINGS. CONTRACTOR SHALL REQUEST CLARIFICATION AS TO THE REMOVAL OF ANY ELECTRICAL COMPONENTS FOUND IN THE FIELD THAT ARE NOT SPECIFICALLY NOTED TO BE DEMOLISHED.
30. THE DESIGN INTENT IS TO REUSE TO EXTENT POSSIBLE EXISTING ELECTRICAL AND SAFETY SYSTEMS INCLUDING CIRCUIT BREAKERS, WIRING AND CONDUITS, SAFETY AND OTHER HARD WIRED INTERLOCKS, ETC. EXISTING SYSTEMS TO BE REUSED SHALL BE PROTECTED FROM DAMAGE DURING CONSTRUCTION. SEE PLANS
31. PROVIDE ADDITIONAL SPARE MATERIALS DESCRIBED BELOW. PROVIDE PROTECTIVE COVERING FOR STORAGE & IDENTIFIED WITH LABELS DESCRIBING THE CONTENTS. INCLUDE THE INSTALLATION COST, FITTINGS AND SUPPORTS IN THE BASE BID PROPOSAL:
   A. 500 LINEAR FEET (EMT): 1/2"–2#12 & 12G
   B. 100 LINEAR FEET (EMT): 3/4"–2#10 & #10G

NO: REVISION: BY:

COPY NO:
CSP # 16-SBHVAC-1226

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RAJESH A. KAPILESHWARI
86959
PROFESSIONAL ENGINEER
11.03.2026

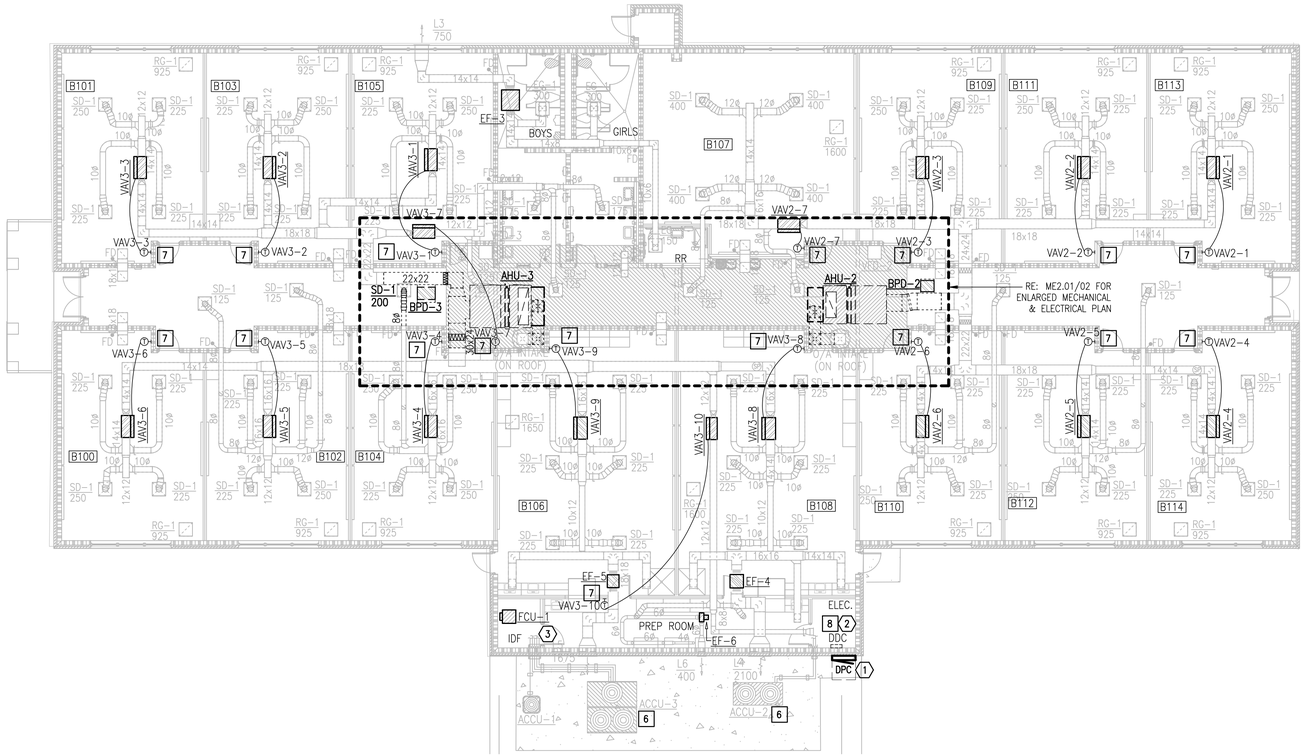
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SAN BENITO HVAC / CONTROLS

SAN BENITO

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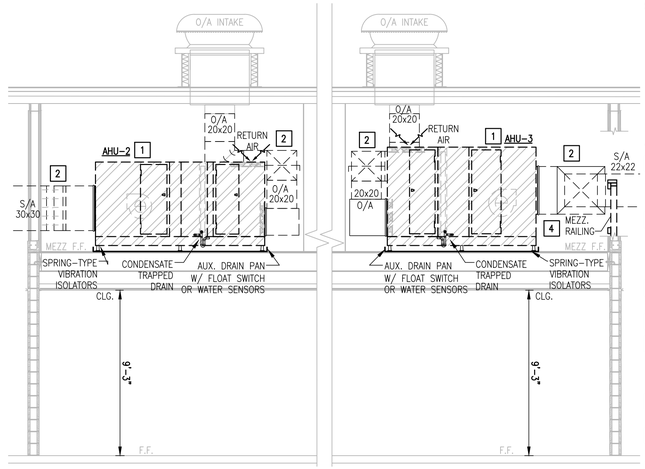
DATE: NOVEMBER 3, 2026
CHECKED BY: B. BURKE
DRAWN BY: J.R. / B.T.
PROJECT NO.: 26v23
CAD FILE:
SHEET:
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01 OVERALL BUILDING "B" MECHANICAL & ELECTRICAL DEMOLITION PLAN

SCALE : 3/32" = 1'

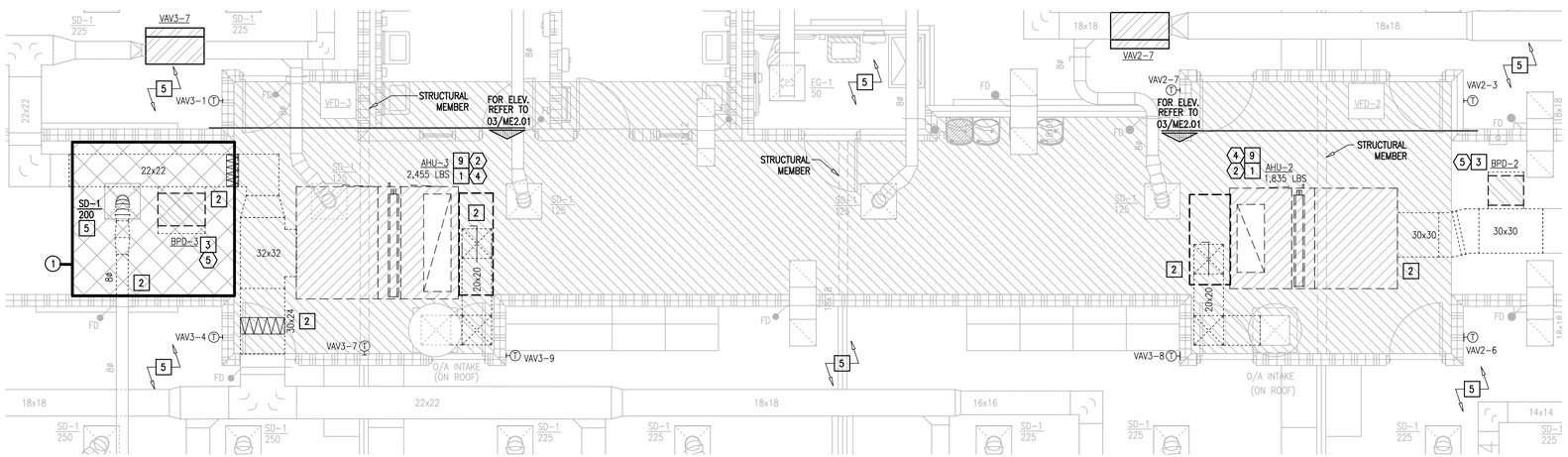
PLAN NORTH TRUE NORTH



03 BUILDING "B" MECHANICAL ELEVATION DEMOLITION PLAN

SCALE : 1/4" = 1'

PLAN NORTH TRUE NORTH



02 ENLARGED BUILDING "B" MECHANICAL & ELECTRICAL DEMOLITION PLAN

SCALE : 1/4" = 1'

PLAN NORTH TRUE NORTH

CEILING DEMO GENERAL NOTES:

1. PRIOR TO DEMOLITION, IN CEILINGS SCHEDULED TO BE REMOVED PREPARE REFLECTED CEILING PLAN SKETCH SHOWING LOCATIONS OF ALL CEILING COMPONENTS AND DEVICES TO BE RE-USED INCLUDING BUT NOT LIMITED TO: EXISTING LIGHT FIXTURES, SPEAKERS, FIRE ALARM DEVICES, EMERGENCY LIGHTING, ETC. IF ANY OF THE ABOVE ITEMS ARE IN NON-WORKING CONDITION, SUBMIT A WRITTEN REPORT TO OWNER/ENGINEER.
2. CONTRACTOR TO EVALUATE CEILING GRID PRIOR TO DEMOLITION AND DOCUMENT ALL BROKEN, CRACKED, MISSING TILES, ETC. AND PROVIDE REPORT TO OWNER AND ENGINEER.

CEILING DEMO KEYED NOTES:

(1) TEMPORARILY REMOVE EXISTING CEILING TILES/GRID, LIGHT FIXTURES, FIRE ALARM DEVICES, FIRE SPRINKLERS, SENSORS, DUCTWORK, PIPING, ETC. AS NECESSARY FOR DEMOLITION AND PROVISION OF MEP SYSTEMS (ELECTRICAL CONDUITS, ETC.) AND RE-INSTALL AFTER WORK ABOVE CEILING HAS BEEN COMPLETED.

DEMOLITION GENERAL NOTES:

1. ALL DEMOLITION WORK SHALL BE DONE IN ACCORDANCE WITH ALL APPLICABLE CODES INCLUDING THOSE PUBLISHED BY OSHA.
2. PROVIDE ALL DEMOLITION WORK REQUIRED FOR THE REMOVAL OF MECHANICAL EQUIPMENT AND ASSOCIATED DEVICES. PROVIDE A COMPLETE AND OPERABLE SYSTEM UPON COMPLETION OF THE PROJECT.
3. ALL EXISTING EQUIPMENT REMOVED DURING CONSTRUCTION, THAT IS NOT TO BE REUSED, SHALL BE REMOVED FROM THE JOB SITE AND PROPERLY RETURNED TO THE OWNER, IF DESIRED BY OWNER. DISPOSE OF EQUIPMENT AND MATERIALS THAT OWNER DOES NOT RETAIN
4. CONTRACTOR SHALL NOT DAMAGE STRUCTURAL INTEGRITY OF BUILDING ELEMENTS WITHOUT THE EXPRESSED WRITTEN CONSENT OF THE ENGINEER, CONTRACTOR SHALL GAIN CONSENT OF ENGINEER PRIOR TO COMPROMISING INTEGRITY OF STRUCTURAL BEAMS, IN WORK ASSOCIATED WITH BOTH DEMOLITION AND INSTALLATION.
5. COORDINATE CUTTING AND PATCHING OF ARCHITECTURAL ELEMENTS LIKE WALLS, FLOORS, ROOFS WITH OWNER/ENGINEER. PATCH UNUSED ROOF AND WALL PENETRATIONS, AND FINISH TO MATCH EXISTING ARCHITECTURAL ELEMENTS. RETAIN AND REUSE EXISTING REFRIGERANT PIPING, AFTER IT IS VACUUMED AND PRESSURE TESTED. REPLACE PIPING IF MANUFACTURER DEEMS IT INADEQUATE AND RECOMMENDS REPLACEMENT.
6. REMOVE EXISTING CARRIER CCN AND IVU CONTROL SYSTEMS, INCLUDING BUT NOT LIMITED TO: CONTROLLERS, CONTROLS ARCHITECTURE, COMMUNICATION BACKBONE, SOFTWARE, SEQUENCES, GRAPHICS, FLOOR PLANS, LCD SPACE SENSORS (T, RH, CO2) AND RELATED WIRING. EXISTING CONTROLLERS AND SPACE SENSORS THAT ARE REMOVED SHALL BE RETURNED TO THE OWNER FOR SPARE PARTS USE. REFER TO SPECIFICATIONS.

MECHANICAL DEMOLITION KEYED NOTES:

1. DEMOLISH EXISTING AIR HANDLING UNIT (AHU) THAT WILL NO LONGER BE USED INCLUDING ASSOCIATED DUCT CONNECTIONS, REFRIGERANT PIPING CONNECTIONS, CONDENSATE PIPING CONNECTIONS, AND ASSOCIATED ACCESSORIES.
2. DEMOLISH EXISTING DUCTWORK, TRANSITIONS, AND DAMPERS AS NECESSARY FOR AHU REMOVAL FROM MEZZANINE AS SHOWN. CONTRACTOR SHALL CONFIRM EXACT LOCATION AND ROUTING OF DUCTWORK PRIOR TO DEMOLITION. PREPARE AREA FOR NEW AHU. REFER TO NEW PLAN FOR MORE INFORMATION.
3. DEMOLISH EXISTING BYPASS DAMPER AND ASSOCIATED DUCTWORK AS SHOWN.
4. DEMOLISH EXISTING MEZZANINE RAILING TO FACILITATE AHU REMOVAL.
5. RETAIN AND REUSE EXISTING DUCTWORK, ASSOCIATED AIR DEVICES, AND HVAC EQUIPMENT AS SHOWN. CONTRACTOR SHALL CONFIRM EXACT LOCATION AND ROUTING OF DUCTWORK PRIOR TO COMMENCING WORK. REFER TO NEW PLAN FOR MORE INFORMATION. (TYP.)
6. RETAIN AND REUSE EXISTING AIR-COOLED CONDENSING UNIT (ACCU) INCLUDING ASSOCIATED REFRIGERANT PIPING AS SHOWN.
7. DEMOLISH EXISTING SENSORS, INCLUDING BUT NOT LIMITED TO: T-STATS, RH, AND CO2.
8. DEMOLISH EXISTING DDC CONTROLLER IN THIS AREA AS SHOWN.
9. DEMOLISH EXISTING DAMPER ACTUATORS AT OUTSIDE/RETURN AIR DUCT CONNECTIONS OF AHUS TO BE REPLACED. DEMOLISH EXISTING CONTROLS, CONTROLLERS, SENSORS, ETC., AT THE AHUS AND EXISTING ACCUS.

ELECTRICAL DEMOLITION KEYED NOTES:

(1) APPROXIMATE LOCATION OF EXISTING PANELBOARD SERVING EXISTING HVAC EQUIPMENT.

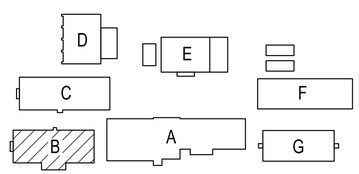
(2) DISCONNECT EXISTING HVAC EQUIPMENT. SEE EQUIPMENT CONNECTION SCHEDULE.

(3) APPROXIMATE LOCATION OF EXISTING FIRE ALARM CONTROL PANEL. PRIME CONTRACTORS SHALL CONTACT PRE-APPROVED SUBCONTRACTORS TO WORK ON SYSTEMS INCLUDING BUT NOT LIMITED TO: SAFEGUARD FIRE SECURITY – ESTIMATING DEPARTMENT – (956) 618-1478, TCR THE BEST ALARM COMPANY – (956) 330-2733.

(4) DEPROGRAM AND TEMPORARILY DISCONNECT EXISTING DUCT SMOKE DETECTOR.

(5) DISCONNECT EXISTING BYPASS DAMPER.

LEGEND:			
	EQUIPMENT TO BE DEMOLISHED	6x6	EXISTING DUCTWORK TO REMAIN
	EQUIPMENT TO REMAIN	6x6	DUCTWORK TO BE DEMOLISHED
	EQUIPMENT CONTROLS TO BE REPLACED	T	T-STAT TO BE REPLACED
	EXISTING AIR DEVICE TO REMAIN		EXISTING PIPING TO REMAIN



IDEA SAN BENITO KEYPLAN

NO:	REVISION:	BY:

COPY NO:

CSP # 16-SBHVAC-1226

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RAJESH A. KAPILESHWARI
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LICENSED PROFESSIONAL ENGINEER
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DATE: NOVEMBER 3, 2026

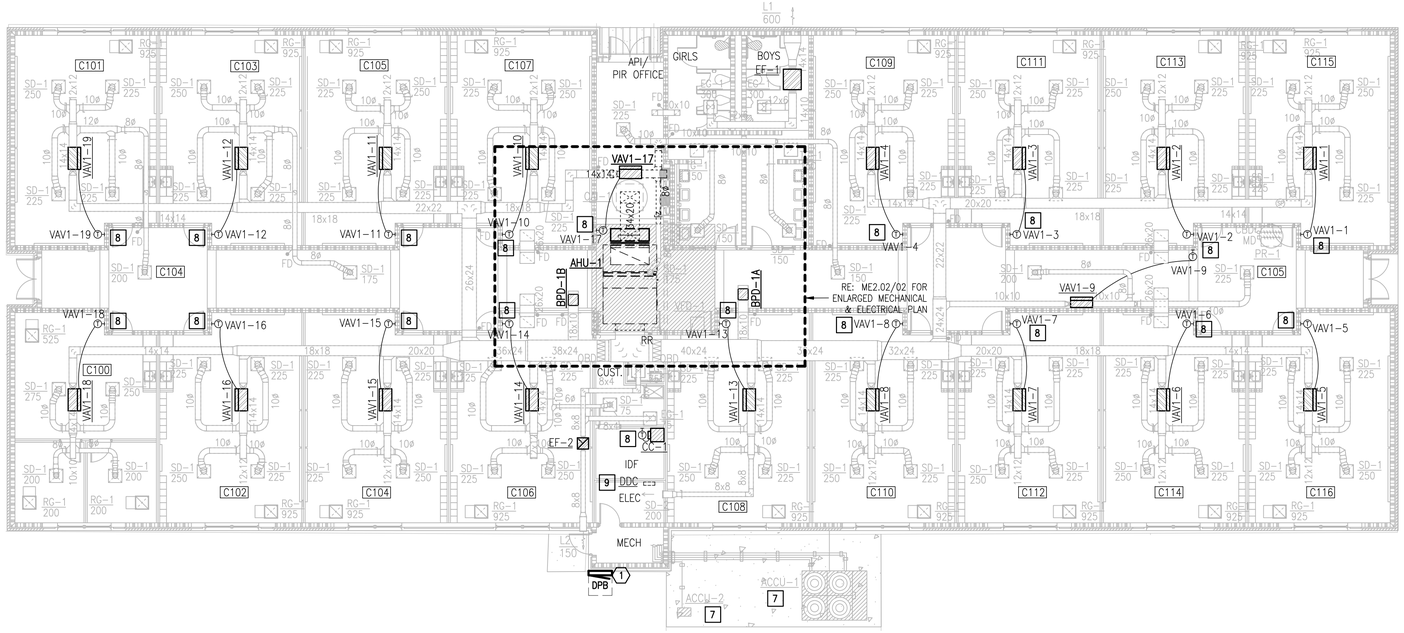
CHECKED BY: B. BURKE

DRAWN BY: J.R. / B.T.

PROJECT NO.: 26v23

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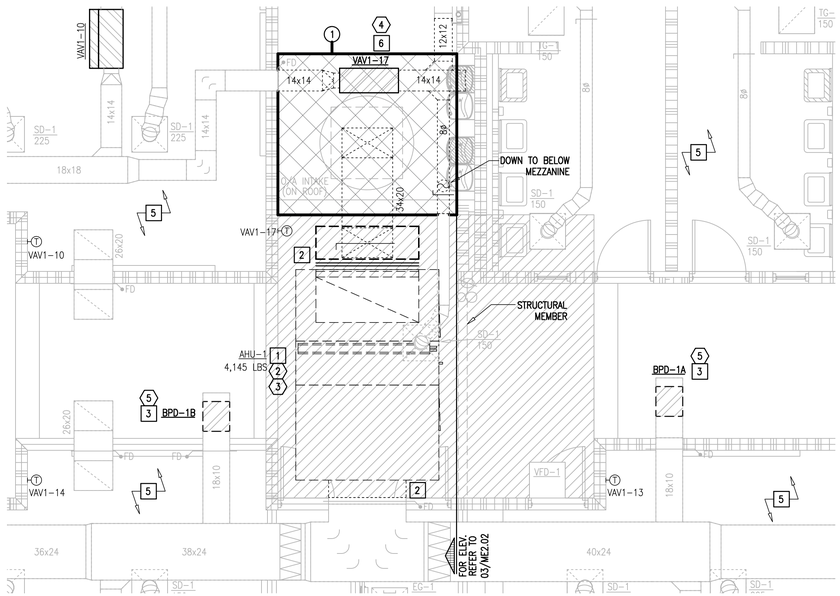
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01 OVERALL BUILDING "C" MECHANICAL & ELECTRICAL DEMOLITION PLAN

SCALE : 3/32" = 1'

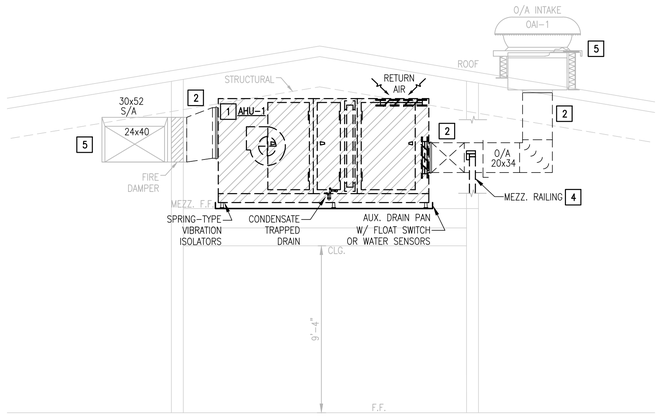
PLAN NORTH TRUE NORTH



02 ENLARGED BUILDING "C" MECHANICAL & ELECTRICAL DEMOLITION PLAN

SCALE : 1/4" = 1'

PLAN NORTH TRUE NORTH



03 BUILDING "C" MECHANICAL ELEVATION DEMOLITION PLAN

SCALE : 1/4" = 1'

PLAN NORTH TRUE NORTH

CEILING DEMO GENERAL NOTES:

1. PRIOR TO DEMOLITION, IN CEILINGS SCHEDULED TO BE REMOVED PREPARE REFLECTED CEILING PLAN SKETCH SHOWING LOCATIONS OF ALL CEILING COMPONENTS AND DEVICES TO BE RE-USED INCLUDING BUT NOT LIMITED TO: EXISTING LIGHT FIXTURES, SPEAKERS, FIRE ALARM DEVICES, EMERGENCY LIGHTING, ETC. IF ANY OF THE ABOVE ITEMS ARE IN NON-WORKING CONDITION, SUBMIT A WRITTEN REPORT TO OWNER/ENGINEER.
2. CONTRACTOR TO EVALUATE CEILING GRID PRIOR TO DEMOLITION AND DOCUMENT ALL BROKEN, CRACKED, MISSING TILES, ETC. AND PROVIDE REPORT TO OWNER AND ENGINEER.

CEILING DEMO KEYED NOTES:

(1) TEMPORARILY REMOVE EXISTING CEILING TILES/GRID, LIGHT FIXTURES, FIRE ALARM DEVICES, FIRE SPRINKLERS, SENSORS, DUCTWORK, PIPING, ETC. AS NECESSARY FOR DEMOLITION AND PROVISION OF MEP SYSTEMS (ELECTRICAL CONDUITS, ETC.) AND RE-INSTALL AFTER WORK ABOVE CEILING HAS BEEN COMPLETED.

DEMOLITION GENERAL NOTES:

1. ALL DEMOLITION WORK SHALL BE DONE IN ACCORDANCE WITH ALL APPLICABLE CODES INCLUDING THOSE PUBLISHED BY OSHA.
2. PROVIDE ALL DEMOLITION WORK REQUIRED FOR THE REMOVAL OF MECHANICAL EQUIPMENT AND ASSOCIATED DEVICES. PROVIDE A COMPLETE AND OPERABLE SYSTEM UPON COMPLETION OF THE PROJECT.
3. ALL EXISTING EQUIPMENT REMOVED DURING CONSTRUCTION, THAT IS NOT TO BE REUSED, SHALL BE REMOVED FROM THE JOB SITE AND PROPERLY RETURNED TO THE OWNER, IF DESIRED BY OWNER. DISPOSE OF EQUIPMENT AND MATERIALS THAT OWNER DOES NOT RETAIN
4. CONTRACTOR SHALL NOT DAMAGE STRUCTURAL INTEGRITY OF BUILDING ELEMENTS WITHOUT THE EXPRESSED WRITTEN CONSENT OF THE ENGINEER, CONTRACTOR SHALL GAIN CONSENT OF ENGINEER PRIOR TO COMPROMISING INTEGRITY OF STRUCTURAL BEAMS, IN WORK ASSOCIATED WITH BOTH DEMOLITION AND INSTALLATION.
5. COORDINATE CUTTING AND PATCHING OF ARCHITECTURAL ELEMENTS LIKE WALLS, FLOORS, ROOFS WITH OWNER/ENGINEER. PATCH UNUSED ROOF AND WALL PENETRATIONS, AND FINISH TO MATCH EXISTING ARCHITECTURAL ELEMENTS. RETAIN AND REUSE EXISTING REFRIGERANT PIPING, AFTER IT IS VACUUMED AND PRESSURE TESTED. REPLACE PIPING IF MANUFACTURER DEEMS IT INADEQUATE AND RECOMMENDS REPLACEMENT.
6. REMOVE EXISTING CARRIER CCN AND IVU CONTROL SYSTEMS, INCLUDING BUT NOT LIMITED TO: CONTROLLERS, CONTROLS ARCHITECTURE, COMMUNICATION BACKBONE, SOFTWARE, SEQUENCES, GRAPHICS, FLOOR PLANS, LCD SPACE SENSORS (T, RH, CO2) AND RELATED WIRING. EXISTING CONTROLLERS AND SPACE SENSORS THAT ARE REMOVED SHALL BE RETURNED TO THE OWNER FOR SPARE PARTS USE. REFER TO SPECIFICATIONS.

MECHANICAL DEMOLITION KEYED NOTES:

[1] DEMOLISH EXISTING AIR HANDLING UNIT (AHU) THAT WILL NO LONGER BE USED INCLUDING ASSOCIATED DUCT CONNECTIONS, REFRIGERANT PIPING CONNECTIONS, CONDENSATE PIPING CONNECTIONS, AND ASSOCIATED ACCESSORIES.

[2] DEMOLISH EXISTING DUCTWORK, TRANSITIONS, AND DAMPERS AS NECESSARY FOR AHU REMOVAL FROM MEZZANINE AS SHOWN. CONTRACTOR SHALL CONFIRM EXACT LOCATION AND ROUTING OF DUCTWORK PRIOR TO DEMOLITION. PREPARE AREA FOR NEW AHU. REFER TO NEW PLAN FOR MORE INFORMATION.

[3] DEMOLISH EXISTING BYPASS DAMPER AND ASSOCIATED DUCTWORK AS SHOWN.

[4] DEMOLISH EXISTING MEZZANINE RAILING TO FACILITATE AHU REMOVAL.

[5] RETAIN AND REUSE EXISTING DUCTWORK, ASSOCIATED AIR DEVICES, AND HVAC EQUIPMENT AS SHOWN. CONTRACTOR SHALL CONFIRM EXACT LOCATION AND ROUTING OF DUCTWORK PRIOR TO COMMENCING WORK. REFER TO NEW PLAN FOR MORE INFORMATION. (TYP.)

[6] TEMPORARILY REMOVE EXISTING VAV BOX TO FACILITATE AHU REMOVAL. RETAIN FOR REINSTALLATION AFTER NEW UNIT IS INSTALLED.

[7] RETAIN AND REUSE EXISTING AIR-COOLED CONDENSING UNIT (ACCU) INCLUDING ASSOCIATED REFRIGERANT PIPING AS SHOWN.

[8] DEMOLISH EXISTING SENSORS, INCLUDING BUT NOT LIMITED TO: T-STATS, RH, AND CO2.

[9] DEMOLISH EXISTING DDC CONTROLLER AS SHOWN.

[10] DEMOLISH EXISTING DAMPER ACTUATORS AT OUTSIDE/RETURN AIR DUCT CONNECTIONS OF AHUS TO BE REPLACED. DEMOLISH EXISTING CONTROLS, CONTROLLERS, SENSORS, ETC., AT THE AHUS AND EXISTING ACCUS.

ELECTRICAL DEMOLITION KEYED NOTES:

(1) APPROXIMATE LOCATION OF EXISTING PANELBOARD SERVING EXISTING HVAC EQUIPMENT.

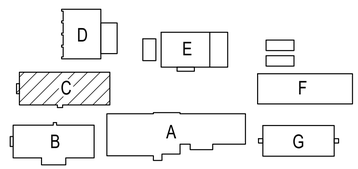
(2) DISCONNECT EXISTING HVAC EQUIPMENT. SEE EQUIPMENT CONNECTION SCHEDULE.

(3) DEPROGRAM AND TEMPORARILY DISCONNECT EXISTING DUCT SMOKE DETECTOR.

(4) TEMPORARILY DISCONNECT EXISTING VAV BOX TO FACILITATE AHU REMOVAL. RECONNECT AFTER NEW UNIT HAS BEEN INSTALLED.

(5) DISCONNECT EXISTING BYPASS DAMPER.

LEGEND:			
	EQUIPMENT TO BE DEMOLISHED	6x6	EXISTING DUCTWORK TO REMAIN
	EQUIPMENT TO REMAIN	6x6	DUCTWORK TO BE DEMOLISHED
	EQUIPMENT CONTROLS TO BE REPLACED	T	T-STAT TO BE REPLACED
	EXISTING AIR DEVICE TO REMAIN		EXISTING PIPING TO REMAIN



IDEA SAN BENITO KEYPLAN

NO:	REVISION:	BY:

COPY NO:

CSP # 16-SBHVAC-1226

STATE OF TEXAS
RAJESH A. KAPILESHWARI
86969
LICENSED PROFESSIONAL ENGINEER
11.03.2026

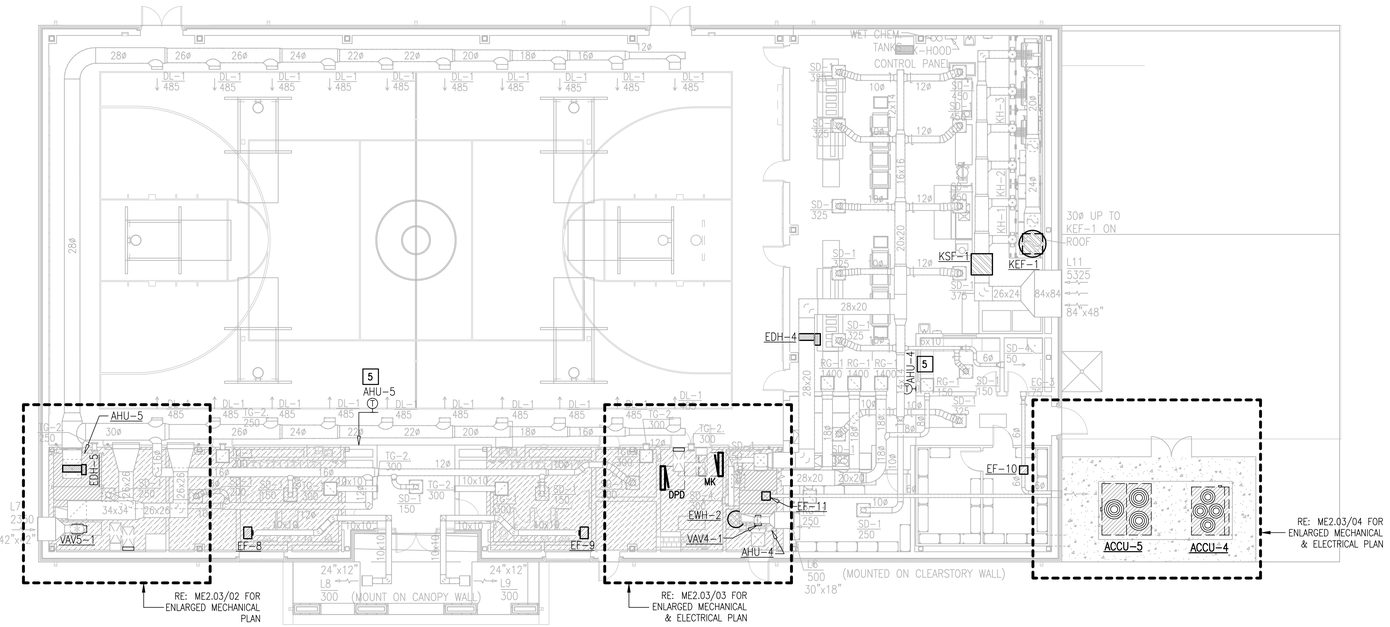
TEXAS

SAN BENITO HVAC / CONTROLS

SAN BENITO

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1126 SOUTH COMMERCE ST.
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PHONE: 956-230-3435
TEXAS REGISTERED
ENGINEERING FIRM
F-15998

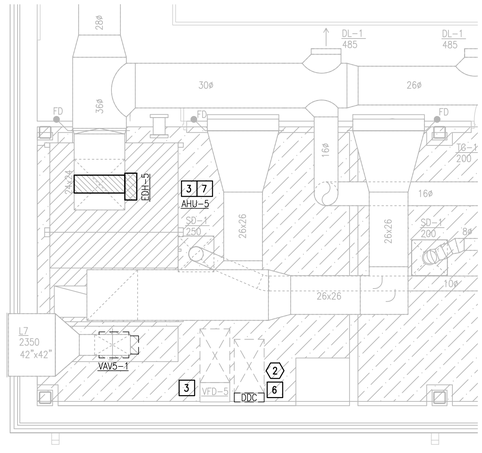
DATE: NOVEMBER 3, 2026
CHECKED BY: B. BURKE
DRAWN BY: J.R. / B.T.
PROJECT NO.: 26v23
CAD FILE:
SHEET:
ME2.02



01 OVERALL BUILDING "E" MECHANICAL & ELECTRICAL DEMOLITION PLAN

SCALE : 3/32" = 1'

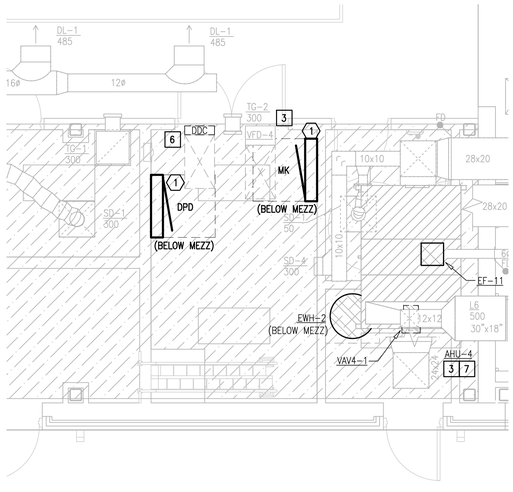
PLAN NORTH TRUE NORTH



02 ENLARGED BUILDING "E" MECHANICAL DEMOLITION PLAN

SCALE : 1/4" = 1'

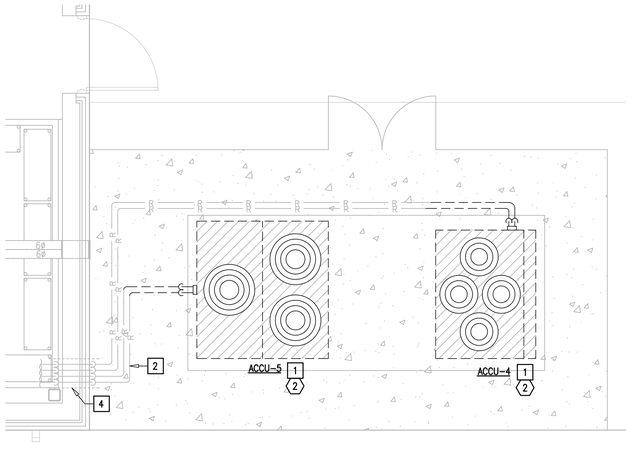
PLAN NORTH TRUE NORTH



03 ENLARGED BUILDING "E" MECHANICAL & ELECTRICAL DEMOLITION PLAN

SCALE : 1/4" = 1'

PLAN NORTH TRUE NORTH



04 ENLARGED BUILDING "E" MECHANICAL & ELECTRICAL DEMOLITION PLAN

SCALE : 1/4" = 1'

PLAN NORTH TRUE NORTH

DEMOLITION GENERAL NOTES:

1. ALL DEMOLITION WORK SHALL BE DONE IN ACCORDANCE WITH ALL APPLICABLE CODES INCLUDING THOSE PUBLISHED BY OSHA.
2. PROVIDE ALL DEMOLITION WORK REQUIRED FOR THE REMOVAL OF MECHANICAL EQUIPMENT AND ASSOCIATED DEVICES. PROVIDE A COMPLETE AND OPERABLE SYSTEM UPON COMPLETION OF THE PROJECT.
3. ALL EXISTING EQUIPMENT REMOVED DURING CONSTRUCTION, THAT IS NOT TO BE REUSED, SHALL BE REMOVED FROM THE JOB SITE AND PROPERLY RETURNED TO THE OWNER, IF DESIRED BY OWNER. DISPOSE OF EQUIPMENT AND MATERIALS THAT OWNER DOES NOT RETAIN
4. CONTRACTOR SHALL NOT DAMAGE STRUCTURAL INTEGRITY OF BUILDING ELEMENTS WITHOUT THE EXPRESSED WRITTEN CONSENT OF THE ENGINEER, CONTRACTOR SHALL GAIN CONSENT OF ENGINEER PRIOR TO COMPROMISING INTEGRITY OF STRUCTURAL BEAMS, IN WORK ASSOCIATED WITH BOTH DEMOLITION AND INSTALLATION.
5. COORDINATE CUTTING AND PATCHING OF ARCHITECTURAL ELEMENTS LIKE WALLS, FLOORS, ROOFS WITH OWNER/ENGINEER. PATCH UNUSED ROOF AND WALL PENETRATIONS, AND FINISH TO MATCH EXISTING ARCHITECTURAL ELEMENTS. RETAIN AND REUSE EXISTING REFRIGERANT PIPING, AFTER IT IS VACUUMED AND PRESSURE TESTED. REPLACE PIPING IF MANUFACTURER DEEMS IT INADEQUATE AND RECOMMENDS REPLACEMENT.
6. REMOVE EXISTING CARRIER CCN AND IVU CONTROL SYSTEMS, INCLUDING BUT NOT LIMITED TO: CONTROLLERS, CONTROLS ARCHITECTURE, COMMUNICATION BACKBONE, SOFTWARE, SEQUENCES, GRAPHICS, FLOOR PLANS, LCD SPACE SENSORS (T, RH, CO2) AND RELATED WIRING. EXISTING CONTROLLERS AND SPACE SENSORS THAT ARE REMOVED SHALL BE RETURNED TO THE OWNER FOR SPARE PARTS USE. REFER TO SPECIFICATIONS.

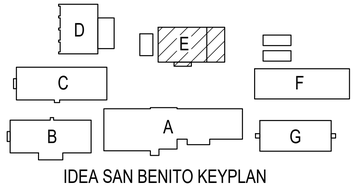
MECHANICAL DEMOLITION KEYED NOTES:

1. DEMOLISH EXISTING DX AIR COOLED CONDENSING UNIT (ACCU) LOCATED IN MECHANICAL YARD. DEMOLISH ASSOCIATED MATERIAL THAT WILL NO LONGER BE NEEDED SUCH AS, REFRIGERANT PIPING, ETC.
2. RETAIN AND REUSE EXISTING REFRIGERANT PIPING AS SHOWN. CLEAN AND VACUUM REFRIGERANT PIPING FOR REINSTALLATION. DEMOLISH ASSOCIATED REFRIGERANT SPECIALTIES, SERVICE VALVES, GASKETS, EXPANSION VALVES, ETC.
3. RETAIN AND REUSE EXISTING DX AHUS AND VFDS LOCATED INSIDE MECHANICAL ROOM.
4. RETAIN EXISTING SLEEVE AT ALL PIPING PENETRATIONS PER SPECIFICATION WHERE POSSIBLE. REFER TO NEW PLAN FOR MORE INFORMATION.
5. DEMOLISH EXISTING SENSORS, INCLUDING BUT NOT LIMITED TO: T-STATS, RH, AND CO2.
6. DEMOLISH EXISTING DDC CONTROLLER AS SHOWN.
7. DEMOLISH EXISTING DAMPER ACTUATORS AT OUTSIDE/RETURN AIR DUCT CONNECTIONS AND AT BYPASS DAMPERS OF EXISTING AHUS ASSOCIATED WITH DEMOLISHED ACCUS. DEMOLISH VAVS USED FOR MEASURING OA FLOW AT THE EXISTING AHUS. DEMOLISH EXISTING CONTROLS, CONTROLLERS, SENSORS, ETC., AT THE EXISTING AHUS AND REPLACEMENT ACCUS.

ELECTRICAL DEMOLITION KEYED NOTES:

1. APPROXIMATE LOCATION OF EXISTING PANELBOARD SERVING EXISTING HVAC EQUIPMENT.
2. DISCONNECT EXISTING HVAC EQUIPMENT. SEE EQUIPMENT CONNECTION SCHEDULE.

LEGEND:			
	EQUIPMENT TO BE DEMOLISHED	6x6	EXISTING DUCTWORK TO REMAIN
	EQUIPMENT TO REMAIN	6x6	DUCTWORK TO BE DEMOLISHED
	EQUIPMENT CONTROLS TO BE REPLACED	T	T-STAT TO BE REPLACED
	EXISTING AIR DEVICE TO REMAIN		EXISTING PIPING TO REMAIN



IDEA SAN BENITO KEYPLAN

NO:	REVISION:	BY:

COPY NO:

CSP # 16-SBHVAC-1226

STATE OF TEXAS
RAJESH A. KAPILESHWARI
86969
LICENSED PROFESSIONAL ENGINEER
11.03.2026

TEXAS

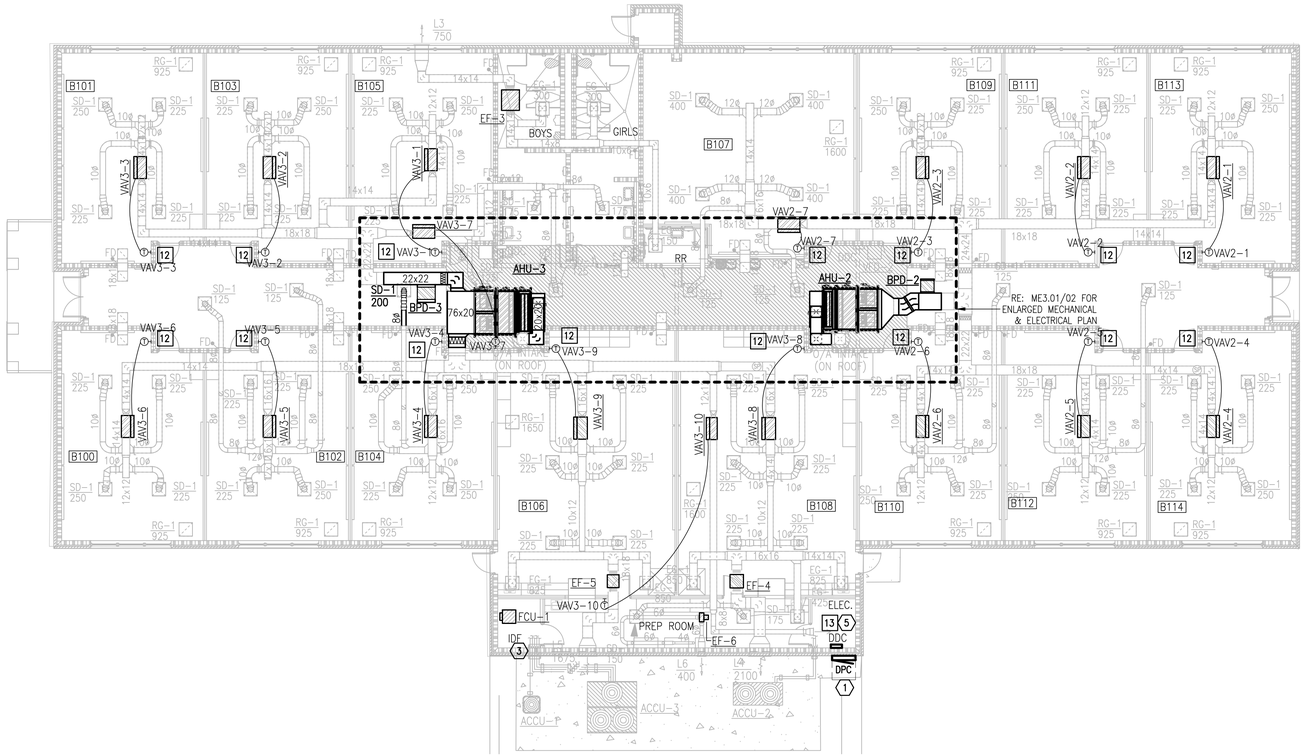
SAN BENITO HVAC / CONTROLS

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ME2.03



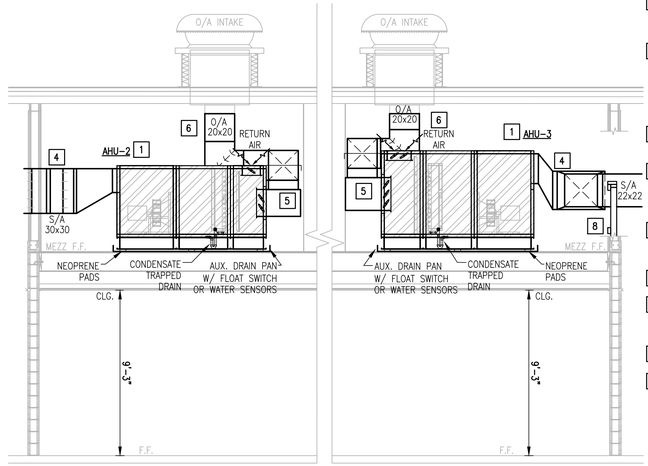
OVERALL BUILDING "B" MECHANICAL & ELECTRICAL RENOVATION PLAN

01 SCALE : 3/32" = 1'

PLAN NORTH TRUE NORTH

GENERAL NOTES:

1. PRIOR TO LABELING EQUIPMENT, COORDINATE DESIGNATION AND IDENTIFICATION WITH OWNER AND BUILDING AUTOMATION SYSTEM.
2. PROVIDE NEW AUTOMATED LOGIC CONTROLS (ALC) CONTROLS SYSTEM TO REPLACE EXISTING CONTROLS, INCLUDING BUT NOT LIMITED TO: CONTROLLERS, CONTROLS ARCHITECTURE, COMMUNICATION BACKBONE, SOFTWARE, SEQUENCES, GRAPHICS, FLOOR PLANS, LCD SPACE SENSORS (T, RH, CO2) AND RELATED WIRING. INTEGRATE EXISTING AND NEW MECHANICAL EQUIPMENT WITH NEW CONTROLS TO ATTAIN A COMPLETE AND FUNCTIONAL SYSTEM. REFER TO SEQUENCE OF OPERATION FOR ALL OTHER POINTS, SENSORS, END DEVICES, ETC.



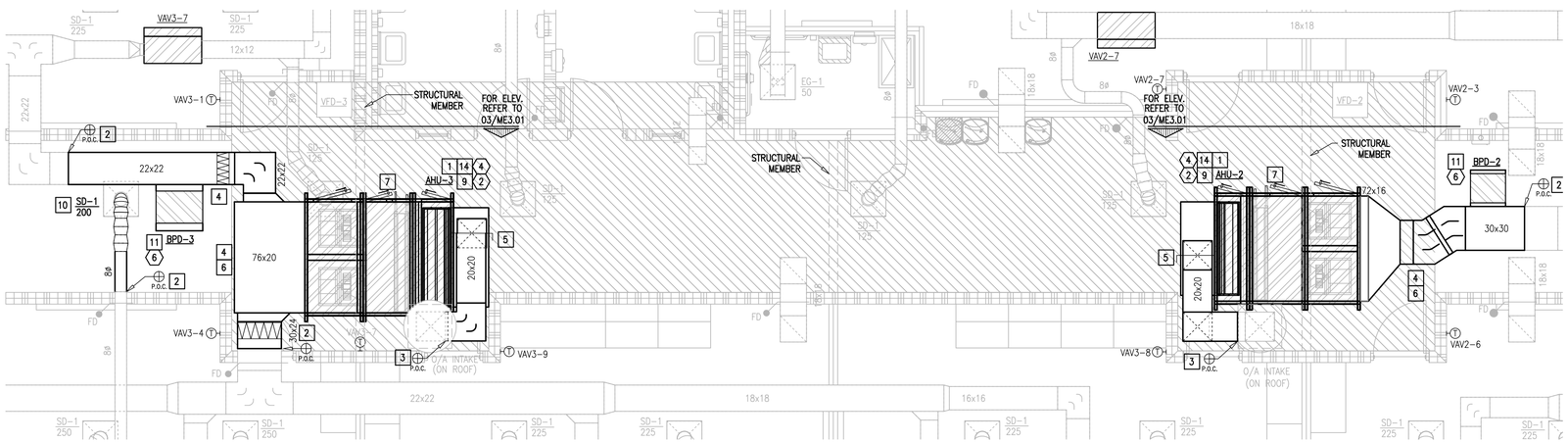
BUILDING "B" MECHANICAL ELEVATION RENOVATION PLAN

03 SCALE : 1/4" = 1'

PLAN NORTH TRUE NORTH

MECHANICAL RENOVATION KEYED NOTES:

1. PROVIDE NEW DX AIR HANDLING UNIT AS SCHEDULED. ROUTE COPPER CONDENSATE LINE TO EXISTING PLUMBING RECEPTACLE AND INSULATE PER SPECIFICATIONS. POSITION UNIT TO ALLOW REQUIRED CLEARANCES, AND ALIGN TO MINIMIZE DUCTWORK TRANSITIONS BETWEEN UNIT OPENINGS AND DUCT TRUNKS. REFER TO AHU ELEVATION. COORDINATE UNIT DIMENSIONS, ORIENTATION, CONFIGURATION, AND CONNECTION LOCATIONS PRIOR TO ORDERING.
2. CONNECT NEW SUPPLY/RETURN AIR DUCT INTO EXISTING SUPPLY/RETURN AIR DUCT AT THIS APPROXIMATE LOCATION.
3. CONNECT NEW OUTSIDE AIR DUCT INTO EXISTING OUTSIDE AIR DUCT AT THIS APPROXIMATE LOCATION. ROUTE OUTSIDE AIR DUCT TO INTAKE CONNECTION AT AHU. ROUTE DUCT AS HIGH AS POSSIBLE. INSULATE WITH 2" DUCT WRAP. PROVIDE MANUAL DAMPER.
4. PROVIDE NEW DUCTWORK, TRANSITIONS, DAMPERS, AND ASSOCIATED AIR DEVICES AS NECESSARY TO ATTAIN A COMPLETE AND FUNCTIONAL SYSTEM.
5. PROVIDE NEW DAMPER ACTUATORS AT OUTSIDE AND RETURN AIR DUCT CONNECTIONS OF REPLACEMENT AHUS. PROVIDE NEW CONTROLS, CONTROLLERS, SENSORS, GRAPHICS, SEQUENCES, ETC., AT THE REPLACEMENT AHUS AND ACCUS.
6. DUCTWORK ROUTING IS DIAGRAMMATIC IN NATURE. FIELD-VERIFY STRUCTURE AND SPACE AVAILABILITY PRIOR TO SUBMITTING SHOP DRAWINGS. COORDINATE WITH ENGINEER IN CASE OF CONFLICTS. (TYP.)
7. RETAIN EXISTING REFRIGERANT PIPING FOR REINSTALLATION. CLEAN AND VACUUM REFRIGERANT PIPING. REPLACE ALL REFRIGERANT SPECIALTIES, SERVICE VALVES, GASKETS, EXPANSION VALVES, ETC. PROVIDE NEW PIPING CONNECTIONS FROM EXISTING LINES TO UNITS' CONNECTIONS. RECONNECT TO EXISTING PIPING TO CREATE A FULLY OPERATIONAL SYSTEM.
8. PROVIDE NEW MEZZANINE RAILING FOLLOWING SUCCESSFUL INSTALLATION OF NEW AHU.
9. AFTER ALL NEW EQUIPMENT HAS BEEN INSTALLED PERFORM TAB ACTIVITIES ON THIS SYSTEM, INCLUDING BUT NOT LIMITED TO: AHU, AIR DEVICES, ETC. REFER TO ASSOCIATED SCHEDULES AND SPECIFICATIONS FOR MORE INFORMATION.
10. REINSTALL EXISTING AIR DEVICE AS SHOWN. INTEGRATE INTO NEW DUCTWORK SUCH AS TO PROVIDE A COMPLETE AND FUNCTIONAL SYSTEM.
11. PROVIDE NEW BYPASS DAMPER AS SCHEDULED.
12. PROVIDE TEMPERATURE, RH, AND CO2 SENSORS WHERE INDICATED. INSTALL 48" A.F.F. IN COMPLIANCE WITH ADA REQUIREMENTS. COORDINATE LOCATION WITH OWNER.
13. PROVIDE NEW DDC CONTROLLER IN THIS AREA AS SHOWN.
14. PROVIDE NEW DAMPER ACTUATORS AT OUTSIDE/RETURN AIR DUCT CONNECTIONS AND BYPASS DAMPERS OF REPLACEMENT AHUS. PROVIDE NEW CONTROLS, CONTROLLERS, SENSORS, GRAPHICS, SEQUENCES, ETC., AT THE REPLACEMENT AHUS AND EXISTING ACCUS.



ENLARGED BUILDING "B" MECHANICAL & ELECTRICAL RENOVATION PLAN

02 SCALE : 1/4" = 1'

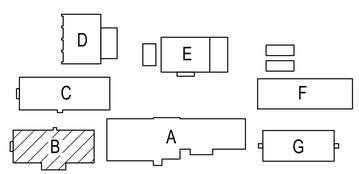
PLAN NORTH TRUE NORTH

ELECTRICAL RENOVATION KEYED NOTES:

1. APPROXIMATE LOCATION OF EXISTING PANELBOARD SERVING NEW HVAC EQUIPMENT.
2. CONNECT NEW HVAC EQUIPMENT. SEE EQUIPMENT CONNECTION SCHEDULE.
3. APPROXIMATE LOCATION OF EXISTING FIRE ALARM CONTROL PANEL. PRIME CONTRACTORS SHALL CONTACT PRE-APPROVED SUBCONTRACTORS TO WORK ON SUCH SYSTEM AS BUT NOT LIMITED TO: SAFEGUARD FIRE SECURITY – ESTIMATING DEPARTMENT – (956) 618-1478, TCR THE BEST ALARM COMPANY – (956) 330-2733.
4. REPROGRAM AND RECONNECT EXISTING DUCT SMOKE DETECTOR.
5. CONNECT NEW HVAC DDC PANEL. RETAIN AND REUSE EXISTING BRANCH CIRCUIT. IF EXISTING BRANCH CIRCUIT DOES NOT REACH NEW DDC PANEL POINT OF CONNECTION PROVIDE A J-BOX TO SPLICE AND EXTEND WIRING.
6. CONNECT NEW BYPASS DAMPERS REUSE EXISTING BRANCH CIRCUIT. IF EXISTING BRANCH CIRCUIT DOES NOT REACH NEW BYPASS DAMPER POINT OF CONNECTION PROVIDE A J-BOX TO SPLICE AND EXTEND WIRING.

LEGEND:

	NEW EQUIPMENT		EQUIPMENT CONTROLS TO BE REPLACED
	EXISTING EQUIPMENT	6x6	EXISTING DUCTWORK
	NEW PIPING	T	NEW T-STAT
	EXISTING PIPING		EXISTING AIR DEVICE



IDEA SAN BENITO KEYPLAN

NO:	REVISION:	BY:

COPY NO:

CSP # 16-SBHVAC-1226

STATE OF TEXAS
RAJESH A. KAPILESHWARI
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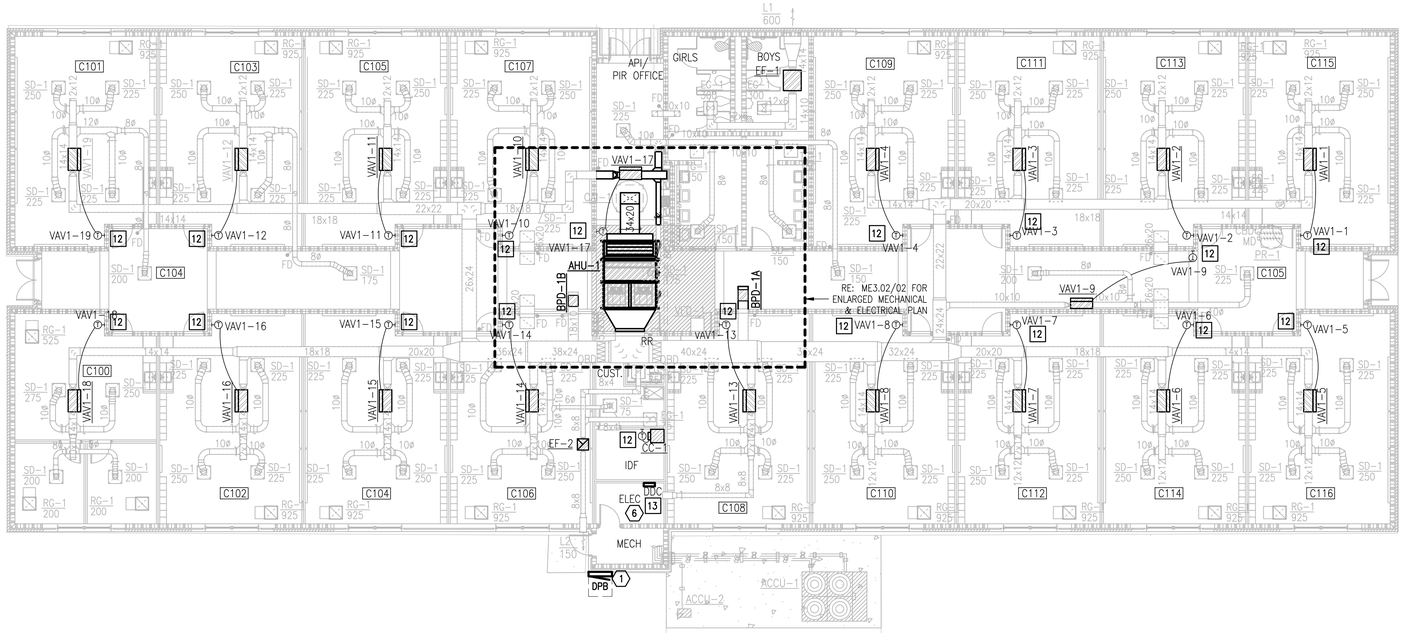
HVAC / CONTROLS

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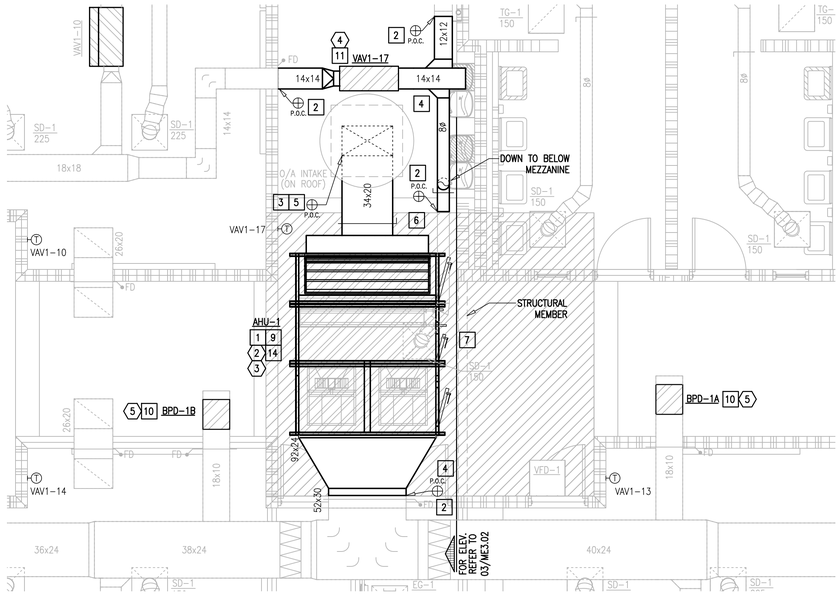
DATE: NOVEMBER 3, 2026
CHECKED BY: B. BURKE
DRAWN BY: J.R. / B.T.
PROJECT NO.: 26v23
CAD FILE:
SHEET: ME3.01



01 OVERALL BUILDING "C" MECHANICAL & ELECTRICAL RENOVATION PLAN

SCALE : 3/32" = 1'

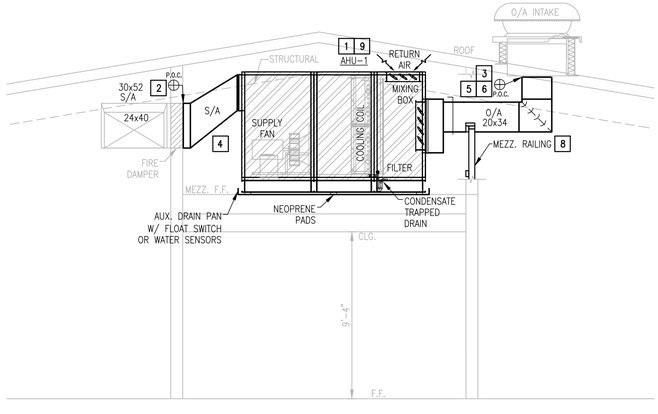
PLAN NORTH TRUE NORTH



02 ENLARGED BUILDING "C" MECHANICAL & ELECTRICAL RENOVATION PLAN

SCALE : 1/4" = 1'

PLAN NORTH TRUE NORTH



03 BUILDING "C" MECHANICAL ELEVATION RENOVATION PLAN

SCALE : 1/4" = 1'

PLAN NORTH TRUE NORTH

GENERAL NOTES:

1. PRIOR TO LABELING EQUIPMENT, COORDINATE DESIGNATION AND IDENTIFICATION WITH OWNER AND BUILDING AUTOMATION SYSTEM.
2. PROVIDE NEW AUTOMATED LOGIC CONTROLS (ALC) CONTROLS SYSTEM TO REPLACE EXISTING CONTROLS, INCLUDING BUT NOT LIMITED TO: CONTROLLERS, CONTROLS ARCHITECTURE, COMMUNICATION BACKBONE, SOFTWARE, SEQUENCES, GRAPHICS, FLOOR PLANS, LOD SPACE SENSORS (T, RH, CO2) AND RELATED WIRING. INTEGRATE EXISTING AND NEW MECHANICAL EQUIPMENT WITH NEW CONTROLS TO ATTAIN A COMPLETE AND FUNCTIONAL SYSTEM. REFER TO SEQUENCE OF OPERATION FOR ALL OTHER POINTS, SENSORS, END DEVICES, ETC.

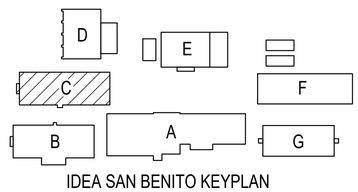
ELECTRICAL RENOVATION KEYED NOTES:

1. APPROXIMATE LOCATION OF EXISTING PANELBOARD SERVING NEW HVAC EQUIPMENT.
2. CONNECT NEW HVAC EQUIPMENT. SEE EQUIPMENT CONNECTION SCHEDULE.
3. REPROGRAM AND RECONNECT EXISTING DUCT SMOKE DETECTORS.
4. RECONNECT EXISTING HVAC EQUIPMENT. REUSE EXISTING BRANCH CIRCUIT WIRING.
5. CONNECT NEW BYPASS DAMPERS REUSE EXISTING BRANCH CIRCUIT. IF EXISTING BRANCH CIRCUIT DOES NOT REACH NEW BYPASS DAMPER POINT OF CONNECTION PROVIDE A J-BOX TO SPLICE AND EXTEND WIRING.
6. CONNECT NEW HVAC DDC PANEL. RETAIN AND REUSE EXISTING BRANCH CIRCUIT. IF EXISTING BRANCH CIRCUIT DOES NOT REACH NEW DDC PANEL POINT OF CONNECTION PROVIDE A J-BOX TO SPLICE AND EXTEND WIRING.

MECHANICAL RENOVATION KEYED NOTES:

1. PROVIDE NEW DX AIR HANDLING UNIT AS SCHEDULED. ROUTE COPPER CONDENSATE LINE TO EXISTING PLUMBING RECEPTACLE AND INSULATE PER SPECIFICATIONS. POSITION UNIT TO ALLOW REQUIRED CLEARANCES, AND ALIGN TO MINIMIZE DUCTWORK TRANSITIONS BETWEEN UNIT OPENINGS AND DUCT TRUNKS. REFER TO AHU ELEVATION. COORDINATE UNIT DIMENSIONS, ORIENTATION, CONFIGURATION, AND CONNECTION LOCATIONS PRIOR TO ORDERING.
2. CONNECT NEW SUPPLY/RETURN AIR DUCT INTO EXISTING SUPPLY/RETURN AIR DUCT AT THIS APPROXIMATE LOCATION.
3. CONNECT NEW OUTSIDE AIR DUCT INTO EXISTING OUTSIDE AIR DUCT AT THIS APPROXIMATE LOCATION. ROUTE OUTSIDE AIR DUCT TO INTAKE CONNECTION AT AHU. ROUTE DUCT AS HIGH AS POSSIBLE. INSULATE WITH 2" DUCT WRAP. PROVIDE MANUAL DAMPER.
4. PROVIDE NEW DUCTWORK, TRANSITIONS, DAMPERS, AND ASSOCIATED AIR DEVICES AS NECESSARY TO ATTAIN A COMPLETE AND FUNCTIONAL SYSTEM.
5. PROVIDE NEW DAMPER ACTUATORS AT OUTSIDE AND RETURN AIR DUCT CONNECTIONS OF REPLACEMENT AHUS. PROVIDE NEW CONTROLS, CONTROLLERS, SENSORS, GRAPHICS, SEQUENCES, ETC., AT THE REPLACEMENT AHUS AND ACCUS.
6. DUCTWORK ROUTING IS DIAGRAMMATIC IN NATURE. FIELD-VERIFY STRUCTURE AND SPACE AVAILABILITY PRIOR TO SUBMITTING SHOP DRAWINGS. COORDINATE WITH ENGINEER IN CASE OF CONFLICTS. (TYP.)
7. RETAIN EXISTING REFRIGERANT PIPING FOR REINSTALLATION. CLEAN AND VACUUM REFRIGERANT PIPING. REPLACE ALL REFRIGERANT SPECIALTIES, SERVICE VALVES, GASKETS, EXPANSION VALVES, ETC. PROVIDE NEW PIPING CONNECTIONS FROM EXISTING LINES TO UNITS' CONNECTIONS. RECONNECT TO EXISTING PIPING TO CREATE A FULLY OPERATIONAL SYSTEM.
8. PROVIDE NEW MEZZANINE RAILING FOLLOWING SUCCESSFUL INSTALLATION OF NEW AHU.
9. AFTER ALL NEW EQUIPMENT HAS BEEN INSTALLED PERFORM TAB ACTIVITIES ON THIS SYSTEM, INCLUDING BUT NOT LIMITED TO: AHU, AIR DEVICES, ETC. REFER TO ASSOCIATED SCHEDULES AND SPECIFICATIONS FOR MORE INFORMATION.
10. PROVIDE NEW BYPASS DAMPER AS SCHEDULED.
11. REINSTALL EXISTING VAV BOX FOLLOWING SUCCESSFUL INSTALLATION OF NEW AHU. PROVIDE NEW ASSOCIATED DUCTWORK.
12. PROVIDE TEMPERATURE, RH, AND CO2 SENSORS WHERE INDICATED. INSTALL 48" A.F.F. IN COMPLIANCE WITH ADA REQUIREMENTS. COORDINATE LOCATION WITH OWNER.
13. PROVIDE NEW DDC CONTROLLER AS SHOWN.
14. PROVIDE NEW DAMPER ACTUATORS AT OUTSIDE/RETURN AIR DUCT CONNECTIONS AND BYPASS DAMPERS OF REPLACEMENT AHUS. PROVIDE NEW CONTROLS, CONTROLLERS, SENSORS, GRAPHICS, SEQUENCES, ETC., AT THE REPLACEMENT AHUS AND EXISTING ACCUS.

LEGEND:			
	NEW EQUIPMENT		EQUIPMENT CONTROLS TO BE REPLACED
	EXISTING EQUIPMENT	6x6	EXISTING DUCTWORK
—•—	NEW PIPING	T	NEW T-STAT
—·—	EXISTING PIPING		EXISTING AIR DEVICE



IDEA SAN BENITO KEYPLAN

NO:	REVISION:	BY:

COPY NO:

CSP # 16-SBHVAC-1226

RAJESH A. KAPILESHWARI
86999
LICENSED PROFESSIONAL ENGINEER
STATE OF TEXAS
11.03.2026

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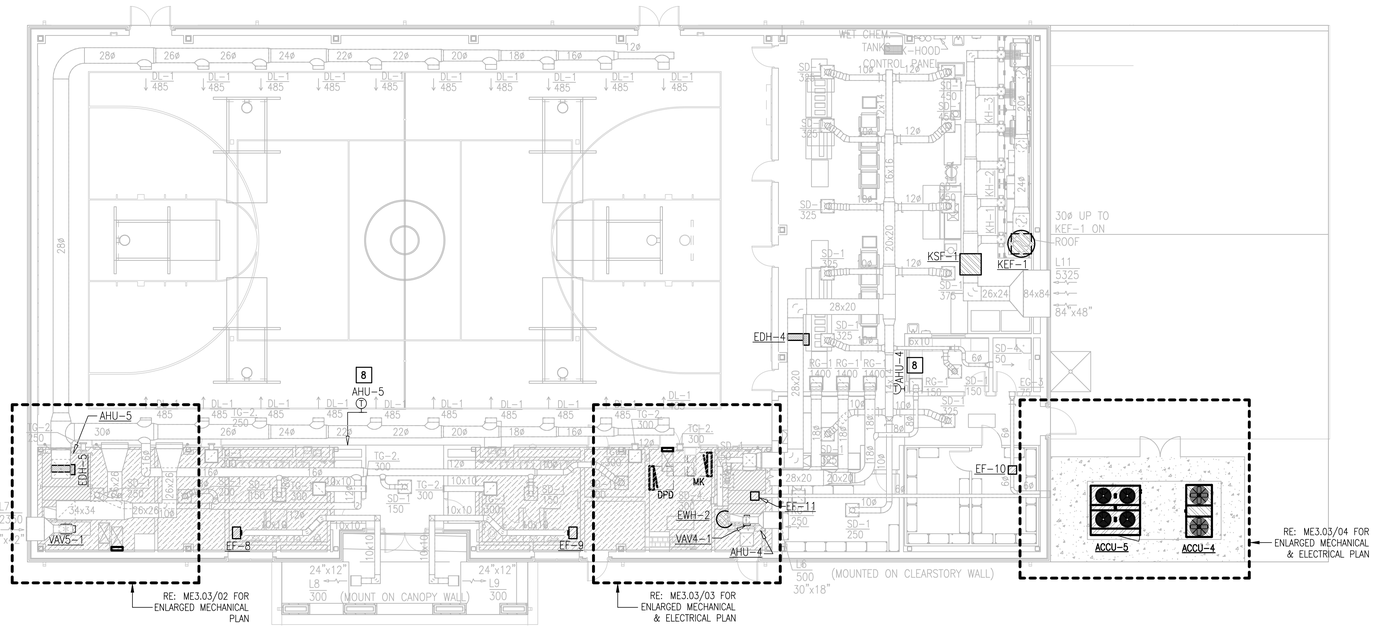
SAN BENITO HVAC / CONTROLS

SAN BENITO

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DATE: NOVEMBER 3, 2026
CHECKED BY: B. BURKE
DRAWN BY: J.R. / B.T.
PROJECT NO.: 26v23
CAD FILE:
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ME3.02



01 OVERALL BUILDING "E" MECHANICAL & ELECTRICAL RENOVATION PLAN

SCALE : 3/32" = 1'

PLAN NORTH TRUE NORTH

GENERAL NOTES:

1. PRIOR TO LABELING EQUIPMENT, COORDINATE DESIGNATION AND IDENTIFICATION WITH OWNER AND BUILDING AUTOMATION SYSTEM.
2. PROVIDE NEW AUTOMATED LOGIC CONTROLS (ALC) CONTROLS SYSTEM TO REPLACE EXISTING CONTROLS, INCLUDING BUT NOT LIMITED TO: CONTROLLERS, CONTROLS ARCHITECTURE, COMMUNICATION BACKBONE, SOFTWARE, SEQUENCES, GRAPHICS, FLOOR PLANS, LCD SPACE SENSORS (T, RH, CO2) AND RELATED WIRING. INTEGRATE EXISTING AND NEW MECHANICAL EQUIPMENT WITH NEW CONTROLS TO ATTAIN A COMPLETE AND FUNCTIONAL SYSTEM. REFER TO SEQUENCE OF OPERATION FOR ALL OTHER POINTS, SENSORS, END DEVICES, ETC.

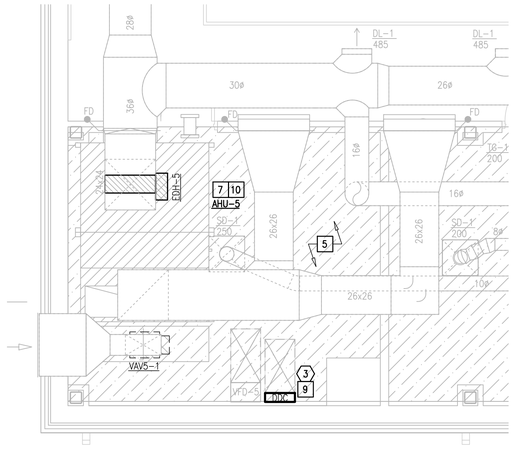
MECHANICAL RENOVATION KEYED NOTES:

1. PROVIDE NEW AIR COOLED CONDENSING UNIT AND INSULATE REFRIGERANT PIPING PER SPECIFICATIONS. MAINTAIN MANUFACTURER'S RECOMMENDED CLEARANCES AND REUSE EXISTING HOUSEKEEPING CONCRETE PADS TO ACCOMMODATE NEW EQUIPMENT. REFRIGERANT PIPING SHOWN IS STRICTLY SCHEMATIC, VERIFY NUMBER OF CIRCUITS AND PIPE SIZES WITH MANUFACTURER'S DATA. BOLT EQUIPMENT DOWN TO CONCRETE SLAB. ATTACHMENT SHALL BE CAPABLE OF WITHSTANDING THE LOCAL WIND PRESSURES.
2. PROVIDE NEW 1" INSULATION ON ALL REFRIGERANT LINES BOTH NEW AND EXISTING. PROVIDE ALUMINUM JACKET ON EXPOSED REFRIGERANT LINES. SEE SPECIFICATIONS. PROVIDE REFRIGERANT LINE SUPPORTS PER SPECIFICATIONS. SEE ASSOCIATED DETAIL.
3. RETAIN EXISTING SLEEVE AT ALL PENETRATIONS PER SPECIFICATIONS WHERE POSSIBLE. SEAL AROUND NEW PIPING WITH FIRE PROOF CAULKING. PROVIDE NEW ESCUTCHEON PLATES AND FLASHING AROUND PENETRATION BOTH INSIDE AND OUTSIDE TO PROVIDE FINISHED LOOK WHERE NECESSARY.
4. RETAIN EXISTING REFRIGERANT PIPING FOR REINSTALLATION. CLEAN AND VACUUM REFRIGERANT PIPING. REPLACE ALL REFRIGERANT SPECIALTIES, SERVICE VALVES, GASKETS, EXPANSION VALVES, ETC. PROVIDE NEW PIPING CONNECTIONS FROM EXISTING LINES TO UNITS' CONNECTIONS. RECONNECT TO EXISTING PIPING TO CREATE A FULLY OPERATIONAL SYSTEM.
5. EXISTING MECHANICAL EQUIPMENT TO REMAIN. REFER TO CONTROLS SCOPE.
6. ENSURE ACCU MAINTAINS 6'-0" CLEARANCE BETWEEN ADJACENT UNITS AND 3'-0" CLEARANCE FROM SOLID AIRFLOW OBSTRUCTIONS AS REQUIRED BY EQUIPMENT MANUFACTURER. EXTEND CONCRETE PAD AS NECESSARY.
7. WASH AND CLEAN EXISTING AHU COILS, CLEAN DRAIN PAN, ETC.
8. PROVIDE TEMPERATURE, RH, AND CO2 SENSORS WHERE INDICATED. INSTALL 48" A.F.F. IN COMPLIANCE WITH ADA REQUIREMENTS. COORDINATE LOCATION WITH OWNER.
9. PROVIDE NEW DDC CONTROLLER AS SHOWN.
10. PROVIDE NEW DAMPER ACTUATORS AT OUTSIDE/RETURN AIR DUCT CONNECTIONS AND BYPASS DAMPERS OF EXISTING AHUS. PROVIDE SPOOL PIECE TO REPLACE DEMOLISHED VAV AT EXISTING AHUS. PROVIDE NEW CONTROLS, CONTROLLERS, SENSORS, GRAPHICS, SEQUENCES, ETC., AT THE EXISTING AHUS AND REPLACEMENT ACCUS.
11. SEE SPECIFICATION SECTION 23 0993 SEQUENCE OF OPERATION FOR POWER MONITORING REQUIREMENTS. REFER TO KEY PLAN FOR PANELBOARD "MSB" LOCATION.

ELECTRICAL RENOVATION KEYED NOTES:

1. APPROXIMATE LOCATION OF EXISTING PANELBOARD SERVING NEW HVAC EQUIPMENT.
2. CONNECT NEW HVAC EQUIPMENT. SEE EQUIPMENT CONNECTION SCHEDULE.
3. CONNECT NEW HVAC DDC PANEL. RETAIN AND REUSE EXISTING BRANCH CIRCUIT. IF EXISTING BRANCH CIRCUIT DOES NOT REACH NEW DDC PANEL POINT OF CONNECTION PROVIDE A J-BOX TO SPLICE AND EXTEND WIRING.

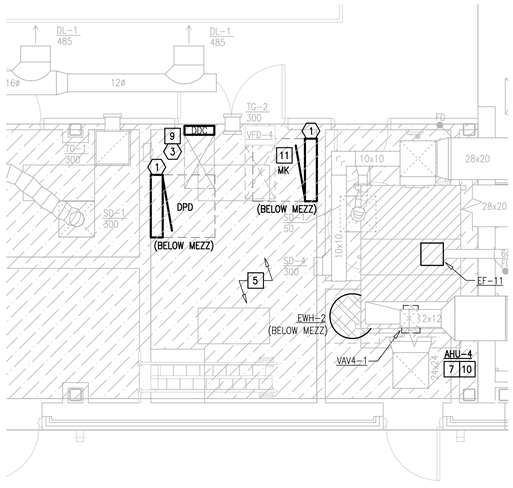
LEGEND:			
	NEW EQUIPMENT		EQUIPMENT CONTROLS TO BE REPLACED
	EXISTING EQUIPMENT	6x6	EXISTING DUCTWORK
	NEW PIPING	T	NEW T-STAT
	EXISTING PIPING		EXISTING AIR DEVICE



02 ENLARGED BUILDING "E" MECHANICAL RENOVATION PLAN

SCALE : 1/4" = 1'

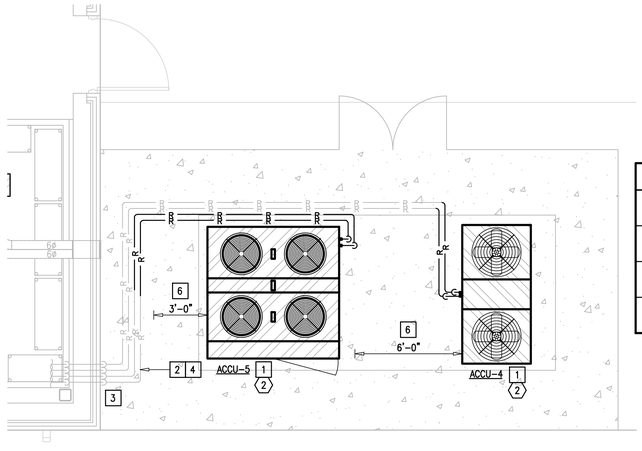
PLAN NORTH TRUE NORTH



03 ENLARGED BUILDING "E" MECHANICAL & ELECTRICAL RENOVATION PLAN

SCALE : 1/4" = 1'

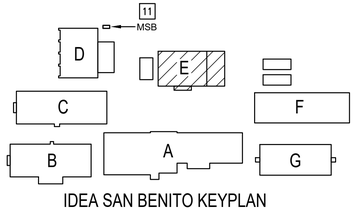
PLAN NORTH TRUE NORTH



04 ENLARGED BUILDING "E" MECHANICAL & ELECTRICAL RENOVATION PLAN

SCALE : 1/4" = 1'

PLAN NORTH TRUE NORTH



IDEA SAN BENITO KEYPLAN

NO:	REVISION:	BY:

COPY NO:

CSP # 16-SBHVAC-1226

RAJESH A. KAPILESHWARI 86969 LICENSED PROFESSIONAL ENGINEER STATE OF TEXAS

11.03.2026

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SHEET:

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IDEA SAN BENITO AIR HANDLING UNIT SCHEDULE

MARK	TOTAL CFM	OUTSIDE AIR CFM	ESP IN WG	MOTOR HP	MOTOR FLA	ELECTRICAL V-PH-HZ	(CIRCUIT) MCA	(CIRCUIT) MOCP	COOLING TOTAL BTUH	COOLING SENS. BTUH	COOLING EAT DB/WB (F)	COOLING LAT DB/WB (F)	HEATER SECTION HEAT KW	HEAT CFM	ELECT. V-PH-HZ	STAGES	WEIGHT (LBS.)	NOTES	MANUFACTURER	MODEL NUMBER	EXISTING MANUFACTURER	EXISTING MODEL NUMBER	EXISTING SERIAL NUMBER
BUILDING B																							
AHU-2	7,650	2,350	1.37	2 X 5 HP	6.7A EA	480-3-60	15.1	20	365,500	240,700	82.8/68.2	54.0/52.7	-	-	-	-	2417	ALL	DAIKIN	CAH018GDGM	CARRIER	39MN17C010DYF12XDS	2508U17147
AHU-3	9,875	2,975	1.5	2 X 7.5 HP	9.5A EA	480-3-60	21.4	30	456,400	302,970	82.6/68.1	54.5/53.2	-	-	-	-	2820	ALL	DAIKIN	CAH023GDGM	CARRIER	39MN21C010DYG12XDS	2508U17149
BUILDING C																							
AHU-1	17,650	5,675	2.00	2 X 15 HP	18.1A EA	480-3-60	40.7	50	895,870	497,370	79.9/69.3	54.1/53.2	-	-	-	-	4268	ALL	DAIKIN	CAH037GDGM	YORK	XTI-072X096-FAMA046A	ADVMXT0075

NOTES:

1. MANUFACTURER AND MODEL NUMBER LISTED ARE "OR APPROVED EQUAL". SEE SPECIFICATIONS FOR APPROVED MANUFACTURERS AND SUBSTITUTION PROCEDURES.
2. ESP IS STRICTLY EXTERNAL STATIC PRESSURE AND IS IN ADDITION TO ANY FILTERS, COILS, OR OTHER ACCESSORIES INCLUDED WITH THE AIR HANDLING UNIT.
3. PROVIDE GALVANIZED STEEL FILTER PAD FRAMES NO LONGER THAN 24" UNLESS APPROVED BY ENGINEER.
4. PROVIDE STAINLESS STEEL COIL CASING AND STAINLESS STEEL DRAIN PAN.
5. ALL MOTORS SHALL BE NON-OVERLOADING TYPE, PREMIUM EFFICIENCY (E+3 RATING), TEFC RATED AND MOTOR SHAFT GROUNDING KITS.
6. PROVIDE INVERTER RATED MOTORS FOR VFD DUTY.
7. UNIT CONFIGURATION (VERTICAL COIL SECTIONS, COIL CONNECTION SIDES, ACCESS DOORS, ETC.) SHALL MATCH BASIS OF DESIGN UNITS PRECISELY.
8. PROVIDE AIR HANDLING UNIT WITH TWO CIRCUIT INTERLACED DX COIL THAT PROVIDES FULL FACE ACTIVATION AT PART LOADS, MINIMUM 4 STAGES TOTAL.
9. PROVIDE DEDICATED ELECTRICAL POINTS OF CONNECTION FOR FAN MOTOR. DISCONNECT BY DIV.26. COORDINATE WITH ELECTRICAL CONTRACTOR.
10. PROVIDE DDC CONTROLLER FOR 4 STAGES OF COOLING CAPACITY. COORDINATE WITH CONTROLS CONTRACTOR.
11. PROVIDE APR VALVE.
12. PROVIDE DUAL DIRECT DRIVE PLENUM FANS WITH MANUAL BLANKOFF PLATE, ACCESS DOORS ON SERVICE SIDE
13. COILS SHALL BE A MAXIMUM OF 6 ROWS WITH 12 FINS PER INCH OR LESS OR 8 ROWS WITH 10 FINS PER INCH OR LESS
14. PROVIDE AHU WITH 8" BASE RAIL.

IDEA SAN BENITO ACCU SCHEDULE

MARK	SERVING	TOTAL MBTUH	NOMINAL TONS	COND DB	ELECTRICAL V-PH-HZ	EER / IEER AT ARI	NUMBER OF CIRCUITS	(CIRCUIT) MCA	(CIRCUIT) MOCP	WEIGHT (LBS.)	NOTES	MANUFACTURER	MODEL NUMBER	EXISTING MANUFACTURER	EXISTING MODEL NUMBER	EXISTING SERIAL NUMBER
BUILDING E																
ACCU-4	AHU-4	182.0	20	95	460-3-60	11.5	2	40	50	771	ALL	TRANE	TTA240	CARRIER	38AUZB25A0P6A0A0A0	4410U32754
ACCU-5	AHU-5	526.0	40	95	460-3-60	11.7	2	85	100	2482	ALL	TRANE	RAUJC40	CARRIER	38APS04065A18024	4210Q40771

NOTES:

1. MANUFACTURER AND MODEL NUMBER LISTED ARE "OR APPROVED EQUAL". SEE SPECIFICATIONS FOR APPROVED MANUFACTURERS AND SUBSTITUTION PROCEDURES.
2. EER SHALL EXCEED IECC MINIMUM EFFICIENCY AT DESIGN CONDITIONS.
3. PROVIDE CONDENSER COIL HAIL GUARDS, E-COATED COILS, AND LOW AMBIENT CONTROL
4. PROVIDE MULTIPLE COMPRESSOR STAGING, COORDINATE STAGES WITH EXISTING CONTROLS CONTRACTOR. PROVIDE DIGITAL SCROLLS ON UNITS ABOVE 25 TONS
5. SAFETY DISCONNECT TO BE PROVIDED BY DIV. 26.
6. INSULATE REFRIGERANT LINES AS PER SPECIFICATIONS. PROVIDE UV RESISTANT PAINTED JACKETING AROUND INSULATION FOR ALL EXTERIOR EXPOSED LINES.
7. PROVIDE ALL NEW REFRIGERANT (R-410A) SPECIALTIES, EXPANSION VALVES, ETC., CONTRACTOR TO CONFIRM EXISTING REFRIGERANT LINE CONDITIONS.

IDEA SAN BENITO EXISTING AHU SCHEDULE

MARK	UNIT TYPE	TOTAL CFM	OA CFM	SERVES	ESP IN WG	MIN. HP	ELECT. V/P/H	COOLING COIL TOTAL BTUH	COOLING COIL SENS. BTUH	COOLING COIL EAT (F) DB	COOLING COIL EAT (F) WB	COOLING COIL LAT (F) DB	COOLING COIL LAT (F) WB	HEATER KW	HEATER CFM	HEATER STG	TYPE	BPD CFM	WEIGHT (LBS.)	NOTES	EXISTING MANUFACTURER & MODEL NO.
BUILDING E																					
AHU-4	DX	4800	500	SEE PLAN	1.50	5	460/3/60	181,951	121,306	78.40	67.40	55.00	55.00	20.0	2400	3	SINGLE-ZONE VAV	-	1,905	ALL	CARRIER 39MDSTN05FFPCCXX1X
AHU-5	DX	10900	2350	SEE PLAN	1.50	10	460/3/60	420,984	262,516	77.30	67.60	55.00	55.00	60.0	5450	SCR	SINGLE-ZONE VAV	-	3,427	ALL	CARRIER 39MDSTN05LFPCCXX1X

NOTES:

1. EXISITING AHU SCHEDULE SHOWN FOR REFERENCE PURPOSES ONLY.

IDEA SAN BENITO EXISTING ACCU SCHEDULE

MARK	SERVING	TOTAL MBTUH	NOMINAL TONS	COND DB	ELECTRICAL V-PH-HZ	EER / IEER AT ARI	NUMBER OF CIRCUITS	(CIRCUIT) MCA	(CIRCUIT) MOCP	WEIGHT (LBS.)	NOTES	EXISTING MANUFACTURER	EXISTING MODEL NUMBER
BUILDING B													
ACCU-2	AHU-2	333.6	30	105	460-3-60	-	1	66.3	90	-	ALL	CARRIER	38APS0306HA22034
ACCU-3	AHU-3	426.8	40	105	460-3-60	-	2	82.4	100	-	ALL	CARRIER	38APD0406HA22034
BUILDING C													
ACCU-1	AHU-1	836.2	80	105	460-3-60	-	2	154	175	3973	ALL	YORK	YLUA0078ZE46XBAS

NOTES:

1. EXISTING ACCU SCHEDULE SHOWN FOR REFERENCE PURPOSES ONLY.

BYPASS DAMPER SCHEDULE

MARK	SERVES	AIRFLOW THROUGH DAMPER (CFM)	RECTANGULAR BYPASS DAMPER SIZE	DUCT SIZE	NOTES	MANUFACTURER	MODEL NUMBER
BPD-1A	AHU-1	1500	18 X 10	18 X 10	ALL	TITUS	DQCV-H
BPD-1B	AHU-1	1500	18 X 10	18 X 10	ALL	TITUS	DQCV-H
BPD-2	AHU-2	5355	24 X 18	24 X 20	ALL	TITUS	DQCV-N
BPD-3	AHU-3	6915	30 X 20	32 X 22	ALL	TITUS	DQCV-P

NOTES:

1. MANUFACTURER AND MODEL NUMBER LISTED ARE "OR APPROVED EQUAL". SEE SPECIFICATIONS FOR APPROVED MANUFACTURERS.
2. PROVIDE FIELD INSTALLED GASKETS TO ASSURE TIGHT SEAL.
3. PROVIDE FLANGE FOR FASTENING DEVICE TO METAL DUCT WITH SHEET METAL SCREWS.

EQUIPMENT CONNECTION SCHEDULE:

DESIGN	NEW MCA	EXISTING MOCP	NEW MOCP	VOLTAGE	EXISTING MEANS OF DISCONNECT	NEW MEANS OF DISCONNECT	EXISTING BRANCH CIRCUIT 75°C (COPPER)	NEW BRANCH CIRCUIT 60°C (COPPER) ≤ 100A (MOCP) 75°C (COPPER) > 100A (MOCP)	POWER SOURCE
IDEA SAN BENITO - BUILDING B									
AHU-2	15.1	30	2) 20	480V/3PHASE	VARIABLE FREQUENCY DRIVE	RETAIN EXISTING	3/4" - 3#10 & #10G	RETAIN EXISTING	DPC
AHU-3	21.4	30	1) 30	480V/3PHASE	VARIABLE FREQUENCY DRIVE	RETAIN EXISTING	3/4" - 3#10 & #10G	RETAIN EXISTING	DPC
IDEA SAN BENITO - BUILDING C									
AHU-1	40.7	70	2) 50	480V/3PHASE	VARIABLE FREQUENCY DRIVE	RETAIN EXISTING	1" - 3#4 & #8G	RETAIN EXISTING	DPB
IDEA SAN BENITO - BUILDING E									
ACCU-4	40	50	1) 50	480V/3PHASE	60A, 3PNF, 600V, NEMA 3R	RETAIN EXISTING	3/4" - 3#6 & #8G	RETAIN EXISTING	MK
ACCU-5	85	100	1) 100	480V/3PHASE	100A, 3PNF, 600V, NEMA 3R	RETAIN EXISTING	1.25" - 3#3 & #6G	RETAIN EXISTING	DPD

GENERAL NOTES:
A) LOCATE EQUIPMENT MEANS OF DISCONNECT WITHIN EQUIPMENT SIGHT. DO NOT INSTALL BELOW DUCTWORK OR PLUMBING LINES.
B) PROVIDE NEW BRANCH CONNECTION, CONDUIT AND RACEWAY FROM DISCONNECT TO EQUIPMENT. TYPICAL FOR ALL NEW HVAC EQUIPMENT.

NOTES:
1) RETAIN AND REUSE EXISTING CIRCUIT BREAKER
2) REMOVE EXISTING CIRCUIT BREAKER AND PROVIDE NEW TO MATCH NEW MOCP. PROVIDE ALL UL LISTED UNIT FROM EXISTING MANUFACTURER. MATCH EXISTING KAIC.

IDEA SAN BENITO:
PANELBOARD "DPB" (EXISTING): CUTLER-HAMMER POW-R-LINE "C" , 400A, 480Y/277V, 3Ø, 4W, 35KAIC.
PANELBOARD "DPC" (EXISTING): SIEMENS TYPE P3, 500A, 480Y/277V, 3Ø, 4W, 25KAIC.
PANELBOARD "DPD" (EXISTING): SIEMENS TYPE P1, 400A, 480Y/277V, 3Ø, 4W, 25KAIC.
PANELBOARD "MK" (EXISTING): SIEMENS TYPE P4, 400A, 480Y/277V, 3Ø, 4W, 25KAIC.

NO: REVISION: BY:

COPY NO:

CSP # 16-SBHVAC-1226

STATE OF TEXAS
RAJESH A. KAPILESHWARI
86969
11.03.2026

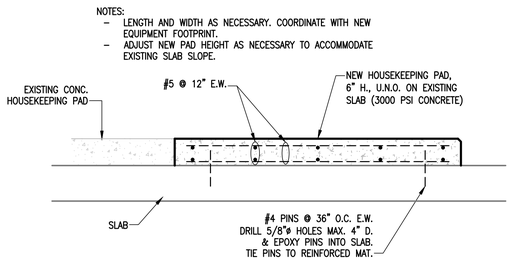
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SAN BENITO HVAC / CONTROLS

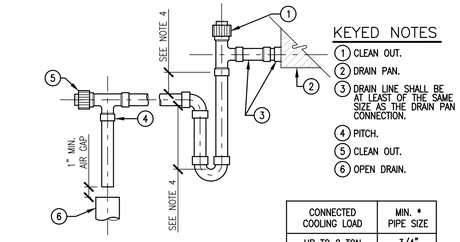
SAN BENITO

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DATE: NOVEMBER 3, 2026
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DRAWN BY: J.R. / B.T.
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CAD FILE:
SHEET: ME4.01



01 HOUSEKEEPING PAD EXTENSION DETAIL
SCALE: NOT TO SCALE

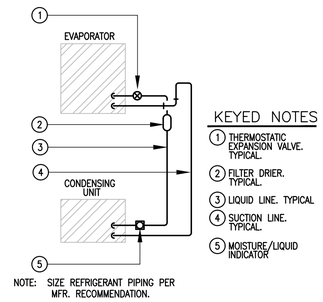


NOTES:
1. MANUALLY PRIME TRAP BEFORE START UP.
2. SUPPORT DRAIN LINES TO PREVENT SAG.
3. ALLOW SUFFICIENT SPACE BELOW PAN FOR TRAP AND PITCH TO DRAIN.
4. COORDINATE WITH MANUFACTURER OF AHU.

CONNECTED COOLING LOAD	MIN. * PIPE SIZE
UP TO 2 TON	3/4"
2–5	1"
5–30	1–1/4"
30–50	1–1/2"
50–160	2"
160–300	3"
300–430	4"

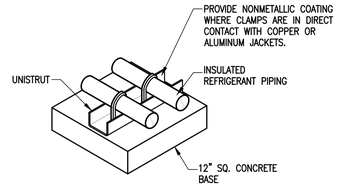
* NOT SMALLER THAN OUTLET SIZE.

02 CONDENSATE DRAIN TRAP PIPE DETAIL
SCALE: NOT TO SCALE

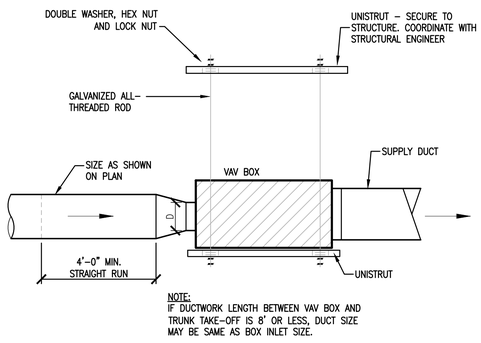


NOTE: SIZE REFRIGERANT PIPING PER MFR. RECOMMENDATION.

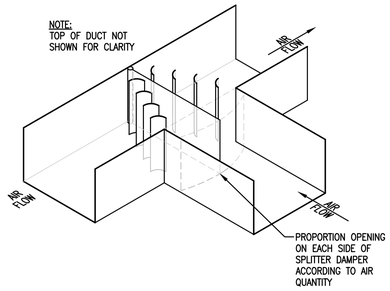
03 REFRIGERANT PIPING DIAGRAM
SCALE: NOT TO SCALE



04 REFRIGERANT PIPING SUPPORT DETAILS
SCALE: NOT TO SCALE

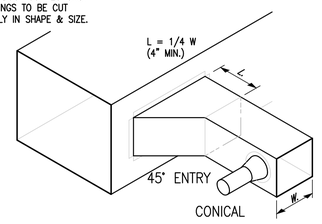


05 TYPICAL VAV BOX DUCT CONNECTION DETAIL
SCALE: NOT TO SCALE

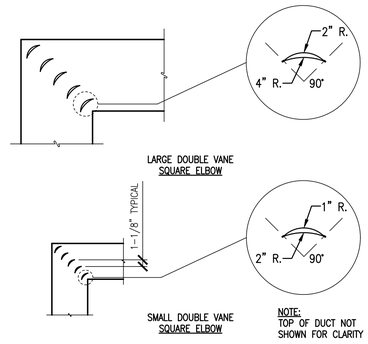


06 TYPICAL SPLITTER DAMPER DETAIL
SCALE: NOT TO SCALE

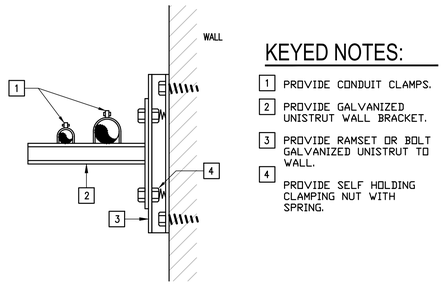
NOTES:
1. FIT ALL CONNECTIONS TO AVOID VISIBLE OPENINGS & SECURE SUITABLY FOR THE PRESSURE CLASS.
2. ADDITIONAL MECHANICAL FASTENERS REQ'D. FOR 4" W.G. & OVER.
3. DO NOT EXPOSE LINER EDGES ON LINED DUCT CONNECTIONS.
4. ALL OPENINGS TO BE CUT ACCURATELY IN SHAPE & SIZE.



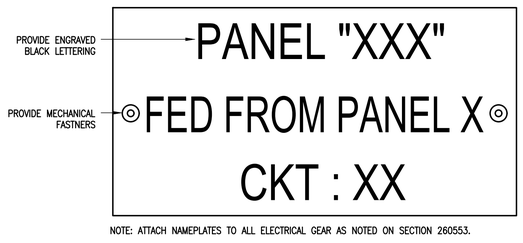
07 BRANCH CONNECTION DETAIL
SCALE: NOT TO SCALE



08 TYPICAL VANED DUCT ELBOWS
SCALE: NOT TO SCALE



09 RACEWAY RUNS SUPPORT DETAIL
SCALE : NOT TO SCALE



NOTE: ATTACH NAMEPLATES TO ALL ELECTRICAL GEAR AS NOTED ON SECTION 260553.

10 EQUIPMENT IDENTIFICATION LABEL DETAIL
SCALE : NOT TO SCALE

NO:	REVISION:	BY:

COPY NO:

CSP # 16-SBHVAC-1226

STATE OF TEXAS
RAJESH A. KAPILESHWARI
86959
LICENSED MECHANICAL ENGINEER
11.03.2026

TEXAS

SAN BENITO HVAC / CONTROLS

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