NOTE USED.

- 3. ALL ELECTRICAL PREFABRICATED EQUIPMENT SHALL BE DESIGNED AND CONSTRUCTED IN SUCH A MANNER THAT ALL PORTIONS. ELEMENTS. SUB-ASSEMBLIES AND/OR PARTS OF SAID EQUIPMENT, AND THE EQUIPMENT AS A WHOLE INCLUDING ITS ATTACHMENTS, WILL RESIST A LOAD WHICH EXCEEDS THE FORCE LEVEL USED TO RESTRAIN AND ANCHOR THE EQUIPMENT TO THE SUPPORTING STRUCTURE.
- ALL ELECTRICAL MATERIALS AND EQUIPMENT SHALL BE NEW AND SHALL BE LISTED BY UNDERWRITER'S LABORATORIES (UL) AND BEAR THEIR LABEL, OR LISTED AND CERTIFIED BY A NATIONALLY RECOGNIZED TESTING AUTHORITY WHERE UL DOES NOT HAVE A LISTING. CUSTOM MADE EQUIPMENT SHALL HAVE COMPLETE TEST DATA SUBMITTED BY THE MANUFACTURER ATTESTING TO ITS SAFETY. IN ADDITION, THE MATERIALS, EQUIPMENT, AND INSTALLATION SHALL COMPLY WITH THE REQUIREMENTS OF THE FOLLOWING:

AMERICAN SOCIETY OF TESTING MATERIALS (ASTM) INSULATED POWER CABLE ENGINEERS ASSOCIATION (IPCEA) NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION (NEMA) AMERICAN STANDARD ASSOCIATION (ASA) NATIONAL FIRE PROTECTION AGENCY (NFPA) AMERICAN NATIONAL STANDARD INSTITUTE (ANSI) CALIFORNIA ELECTRICAL CODE (CEC) - LATEST EDITION CALIFORNIA CODE OF REGULATIONS TITLE 24 (CCR) INSTITUTE OF ELECTRICAL AND ELECTRONIC ENGINEERS (IEEE) ALL LOCAL CODES HAVING JURISDICTION.

WHERE THE CODES HAVE DIFFERENT LEVELS OF REQUIREMENTS, THE MOST STRINGENT RULE SHALL APPLY.

THE CONTRACTOR SHALL VISIT THE SITE INCLUDING ALL AREAS INDICATED ON THE DRAWINGS. HE SHALL THOROUGHLY FAMILIARIZE HIMSELF WITH THE EXISTING CONDITIONS AND BY SUBMITTING A BID, ACCEPTS THE CONDITIONS UNDER WHICH HE SHALL BE REQUIRED TO

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN A COMPLETE SET OF CONTRACT DOCUMENTS, ADDENDA, DRAWINGS AND SPECIFICATIONS. HE SHALL CHECK THE DRAWINGS OF THE OTHER TRADES AND SHALL CAREFULLY READ THE ENTIRE SPECIFICATIONS AND DETERMINE HIS RESPONSIBILITIES. FAILURE TO DO SO SHALL NOT RELEASE THE CONTRACTOR FROM DOING THE WORK IN COMPLETE ACCORDANCE WITH THE DRAWINGS AND SPECIFICATIONS.

THE CONTRACTOR SHALL COORDINATE HIS WORK WITH OTHER TRADES AT THE SITE. ANY COSTS TO INSTALL WORK TO ACCOMPLISH SAID COORDINATION WHICH DIFFERS FROM THE WORK AS SHOWN ON THE DRAWINGS SHALL BE INCURRED BY THE CONTRACTOR. ANY DISCREPANCIES, AMBIGUITIES OR CONFLICTS SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER DURING BID TIME FOR CLARIFICATION. ANY SUCH CONFLICTS NOT CLARIFIED PRIOR TO BID SHALL BE SUBJECT TO THE INTERPRETATION OF THE OWNER AT NO ADDITIONAL COST TO THE OWNER.

- THE CONTRACTOR SHALL PROVIDE AND KEEP UP-TO-DATE A COMPLETE RECORD SET OF DRAWINGS. THESE PRINTS SHALL BE CORRECTED DAILY AND SHOW EVERY CHANGE FROM THE ORIGINAL DRAWINGS. THIS SET OF DRAWINGS SHALL BE KEPT ON THE JOB SITE AND SHALL BE USED ONLY AS A RECORD SET. THIS SHALL NOT BE CONSTRUED AS AUTHORIZATION FOR THE CONTRACTOR TO MAKE CHANGES IN THE LAYOUT WITHOUT DEFINITE INSTRUCTION IN EACH CASE. UPON COMPLETION OF THE WORK, ALL CHANGES AS NOTED ON THE RECORD SET OF DRAWINGS SHALL BE INCORPORATED ON REPRODUCIBLE VELLUM WITH BLACK INK IN A NEAT, LEGIBLE, UNDERSTANDABLE AND PROFESSIONAL MANNER. FAILURE TO KEEP RECORD DRAWINGS UP-TO-DATE SHALL CONSTITUTE CAUSE FOR WITHHOLDING OF PROGRESS PAYMENTS.
- IN SOME INSTANCES, IT MAY BE NECESSARY TO DEFER WORK IN CERTAIN AREAS AND LOCATIONS UNTIL SUCH TIME AS EXISTING FACILITIES CAN BE TEMPORARILY OR PERMANENTLY REARRANGED BY THE OWNER. THEREFORE, WHENEVER IT BECOMES NECESSARY FOR THE CONTRACTOR TO PERFORM WORK UNDER THIS CONTRACT IN EXISTING AREAS IN WHICH THE OWNER'S WORK IS BEING PERFORMED, THE CONTRACTOR SHALL ADVISE THE OWNER AND THE OWNER RELATIVE TO THIS REQUIREMENT AND SHALL FOLLOW CLOSELY THE DIRECTIVE ISSUED BY THE OWNER INSOFAR AS TIME AND PROCEDURE ARE CONCERNED. THE CONTRACTOR SHALL INCLUDE IN HIS BID ALL PREMIUM TIME TO WHICH HE MAY BE SUBJECTED FOR PERFORMING WORK IN SUCH PROCEDURE AND AT SUCH TIMES AS MAY BE NECESSARY TO CAUSE THE LEAST INTERFERENCE WITH THE OPERATIONS OF THE OWNER.
- 7. ALL INTERRUPTION OF ELECTRICAL POWER SHALL BE KEPT TO A MINIMUM. HOWEVER, WHEN AN INTERRUPTION IS NECESSARY, THE SHUTDOWN MUST BE COORDINATED WITH THE OWNER 14 DAYS PRIOR TO THE OUTAGE. ANY OVERTIME PAY AND WORK REQUIRED TO BE ACCOMPLISHED ON WEEKENDS SHALL BE INCLUDED IN THE CONTRACTOR'S BID. WORK IN EXISTING SWITCHBOARDS OR PANELBOARDS SHALL BE COORDINATED WITH THE OWNER PRIOR TO REMOVING ACCESS PANELS OR DOORS.
- 8. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE TEMPORARY POWER FACILITIES AND CONNECTIONS FOR ALL FEEDERS OR SYSTEMS BEING DISCONNECTED IN ORDER TO MAINTAIN SYSTEMS IN OPERATION OR WHERE SAID FEEDERS OR SYSTEMS REQUIRE EMERGENCY STANDBY POWER.
- SHOP DRAWINGS SHALL BE SUBMITTED WITHIN THIRTY DAYS AFTER AWARD OF THE CONTRACT. THE CONTRACTOR SHALL SUBMIT EIGHT COPIES OF A COMPLETE LIST OF MATERIALS AND EQUIPMENT INCLUDING MANUFACTURER AND MODEL NUMBER PROPOSED FOR THE JOB. SHOP DRAWINGS SHALL INCLUDE JOB DESCRIPTION, OWNER AND ENGINEER IDENTIFICATION, AND ALL DATA WITH CAPACITIES, SIZES, DIMENSIONS, CATALOG NUMBERS, AND MANUFACTURER'S BROCHURES. SHOP DRAWINGS SHALL BE SUBMITTED FOR ITEMS LISTED IN SPECIFICATIONS. PARTIAL, INCOMPLETE, OR UNBOUND SUBMITTALS WILL BE RETURNED WITHOUT REVIEW. CONTRACTOR SHALL SUBMIT A SCHEDULE OF ALL SHOP DRAWINGS AND SUBMITTALS WHICH ARE TO BE REVIEWED WITHIN 15 DAYS OF CONTRACT
- 10. AFTER ALL REQUIREMENTS OF THE SPECIFICATIONS AND/OR THE DRAWINGS HAVE BEEN FULLY COMPLETED, REPRESENTATIVES OF THE OWNER WILL INSPECT THE WORK. THE CONTRACTOR SHALL PROVIDE COMPETENT PERSONNEL TO DEMONSTRATE THE OPERATION OF ANY ITEM OR SYSTEM TO THE FULL SATISFACTION OF EACH REPRESENTATIVE. FINAL ACCEPTANCE OF THE WORK WILL BE MADE BY THE OWNER AFTER RECEIPT OF APPROVAL AND RECOMMENDATION OF ACCEPTANCE FROM EACH REPRESENTATIVE.
- 11. THE CONTRACTOR SHALL FURNISH A ONE YEAR WRITTEN GUARANTEE OF MATERIALS AND WORKMANSHIP FROM THE DATE OF SUBSTANTIAL COMPLETION.
- 12. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REVIEW AND TO COORDINATE WITH THE MECHANICAL, FIRE PROTECTION AND PLUMBING DRAWINGS FOR DUCTS, LINES AND
- 13. ALL FINAL CONNECTIONS TO OWNER FURNISHED EQUIPMENT SHALL BE MADE BY THE
- 14. COORDINATE WITH OTHER TRADES AS TO THE EXACT LOCATION OF THEIR RESPECTIVE EQUIPMENT. SUPPLY POWER AND MAKE CONNECTION TO MOTORS AND EQUIPMENT REQUIRING ELECTRICAL CONNECTIONS AS INDICATED ON THE SINGLE LINE DIAGRAM, ELECTRICAL DRAWINGS, AND DRAWINGS OF OTHER TRADES. REVIEW THE DRAWINGS OF OTHER TRADES FOR CONTROL DIAGRAMS, SIZE AND LOCATION OF EQUIPMENT. DISCONNECT SWITCHES, STARTERS, WIRING, CONTROLS, AND CONDUIT FOR MECHANICAL AND PLUMBING OPERATIONS SHALL BE PROVIDED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING MANUFACTURER'S SHOP DRAWINGS PRIOR TO ROUGHING IN ALL CONDUIT TO THIS EQUIPMENT.

15. EXACT METHOD AND LOCATION OF CONDUIT PENETRATION AND OPENINGS IN CONCRETE WALLS OR FLOORS OR STRUCTURAL STEEL MEMBERS SHALL BE AS DIRECTED BY THE STRUCTURAL ENGINEER. PERFORM CORING, SAWCUTTING, PATCHING, AND REFINISHING OF EXISTING WALLS AND SURFACES WHEREVER IT IS NECESSARY TO PENETRATE. OPENINGS SHALL BE SEALED IN AN APPROVED METHOD TO MEET THE FIRE RATING OF THE PARTICULAR WALL, FLOOR OR CEILING. EXACT METHOD AND LOCATIONS OF CONDUIT PENETRATIONS AND OPENINGS IN CONCRETE WALLS OR FLOORS SHALL BE UL APPROVED. ALL FLOOR PENETRATIONS MUST BE X-RAYED BEFORE ANY CORING IS DONE.

GENERAL NOTES

16. CONNECTIONS TO MECHANICAL EQUIPMENT AND VIBRATING EQUIPMENT:

LIQUID-TIGHT FLEXIBLE STEEL CONDUIT IN DRY INTERIOR LOCATIONS, LIQUID-TIGHT FLEXIBLE STEEL CONDUIT IN AREAS EXPOSED TO WEATHER, DAMP LOCATIONS, CONNECTIONS TO TRANSFORMER ENCLOSURES, AND FINAL CONNECTIONS TO MOTORS

PROVIDE A SEPARATE INSULATED EQUIPMENT GROUNDING CONDUCTOR IN ALL FLEXIBLE CONDUIT RUNS. MAXIMUM LENGTH SHALL BE THIRTY-SIX INCHES UNLESS OTHERWISE NOTED.

17. UTILITY PENETRATIONS OF ANY KIND IN FIRE AND SMOKE PARTITIONS AND CEILING ASSEMBLIES, SHALL BE FIRE-STOPPED AND SEALED WITH AN APPROVED MATERIAL SECURELY INSTALLED. STEEL ELECTRICAL OUTLET BOXES WHICH DO NOT EXCEED 16 SQUARE INCHES IN AREA, NEED NOT BE PROTECTED IN ONE HOUR OR TWO HOUR FIRE RATED WALLS, PARTITIONS, CEILINGS, OR AREA SEPARATION UNLESS THEY:

OCCUR ON OPPOSITE SIDES OF THE WALL WITHIN 24 INCH HORIZONTAL DISTANCE OF ONE ANOTHER. IN THIS CASE, ONLY ONE OUTLET BOX NEED TO PROTECTED BY AN APPROVED FIRESTOP MATERIAL OR DETAIL TO CORRECT THIS CONDITION

OCCUR IN COMBINATION WITH OUTLET BOXES OF ANY SIZE SUCH THAT THE AGGREGATE AREA OF UNPROTECTED OUTLET BOXES EXCEEDS 100 SQUARE INCHES IN ANY 100 SQUARE FEET OF WALL AREA. IN THIS CASE, ONLY A SUFFICIENT NUMBER OF OUTLET BOXES NEED BE PROTECTED BY AN APPROVED MATERIAL OR DETAIL TO DECREASE THE AGGREGATE AREA OF UNPROTECTED UTILITY BOXES TO LESS THAN 100 SQUARE INCHES IN ANY 100 SQUARE FEET OF WALL.

CABLE TRAY PENETRATIONS THROUGH FIRE RATED WALLS SHALL COMPLY TO U.L. SYSTEM NO. W-L-4003.

STEEL ELECTRICAL OUTLET BOXES WHICH EXCEED 16 SQUARE INCHES IN AREA, AND ALL OTHER STEEL UTILITY OUTLET BOXES REGARDLESS OF SIZE, SHALL BE PROTECTED BY AN APPROVED FIRESTOP MATERIAL AS LISTED OR EQUAL.

FIRESTOPPING MATERIAL: MPP-1 MOLDABLE PUTTY PADS 3M CONTRACTOR PRODUCTS MINNEAPOLIS, MN 3M TEST REPORT NO. 1167 DATED AUGUST 21, 1987 ANSI/UL 263 "FIRE TEST OF BUILDING CONSTRUCTION AND MATERIALS" FSP FIRESTOP PUTTY PADS

TULSA, OK

OAKHURST, NJ

FLAMESAFE FSP 1077 FIRESTOP PADS INTERNATIONAL PROTECTIVE COATINGS

HEVI-DUTY NELSON PRODUCTS

UTILITY AND ELECTRICAL OUTLETS OR BOXES SHALL BE SECURELY FASTENED TO THE STUD OF FRAMING OF THE WALL, PARTITION OR CEILING ASSEMBLY. THE OPENING IN THE GYPSUM BOARD FACING SHALL BE CUT SO THAT THE CLEARANCE BETWEEN THE BOX AND THE GYPSUM BOARD DOES NOT EXCEED 1/8 INCH. IN SMOKE WALLS OR PARTITIONS, THE 1/8 INCH CLEARANCE SHALL BE FILLED WITH AN APPROVED FIRE-RATED SEALANT.

- 18. EQUIPMENT OUTLETS, LIGHTING FIXTURES, CONDUIT, WIRE, AND CONNECTION METHODS IN HVAC AIR-PLENUMS SHALL BE APPROVED FOR USE IN PLENUMS AND SHALL CONFORM TO THE
- 19. ROUTE EXPOSED CONDUIT AND CONDUIT ABOVE ACCESSIBLE CEILING SPACES PARALLEL AND PERPENDICULAR TO WALLS AND ADJACENT PIPING. ARRANGE CONDUIT TO MAINTAIN HEADROOM AND TO PRESENT A NEAT APPEARANCE.
- ALL CONDUCTORS SHALL BE COPPER #12 AWG MINIMUM SIZE, TYPE THHN/THWN THERMOPLASTIC, 600 VOLT, 75 DEGREES CELSIUS WET AND 90 DEGREES CELSIUS DRY AND UL LISTED. CONDUCTORS #12 AWG AND SMALLER SHALL BE SOLID. CONDUCTORS #10 AWG AND LARGER SHALL BE STRANDED.
- 21. JUNCTION AND PULL BOXES: FOR INTERIOR DRY LOCATIONS, BOXES SHALL BE GALVANIZED ONE-PIECE, DRAWN STEEL, KNOCKOUT TYPE WITH REMOVABLE MACHINE SCREW SECURED COVERS. FOR OUTSIDE, DAMP, OR SURFACE LOCATIONS, BOXES SHALL BE GALVANIZED CAST IRON WITH REMOVABLE, GASKETED, NON-FERROUS MACHINE SCREW SECURED COVERS. BOXES SHALL BE SIZED FOR THE NUMBER AND SIZES OF CONDUCTORS AND CONDUIT ENTERING THE BOX AND EQUIPPED WITH PLASTER EXTENSION RINGS WHERE REQUIRED. BOXES SHALL BE LABELED TO INDICATE PANEL AND CIRCUIT NUMBER, OR TYPE OF SIGNAL OR COMMUNICATIONS SYSTEM.
- 22. WHERE CONDUIT ENTERS PANEL, PROVIDE GROUNDING CONDUCTOR BONDING CONDUIT GROUNDING BUSHING TO PANEL GROUND.
- 24. SERVICE EQUIPMENT SHALL BE FIELD MARKED WITH THE MAXIMUM AVAILABLE FAULT CURRENT, INCLUDING THE DATE THE FAULT CURRENT CALCULATION WAS PERFORMED, PER N.E.C. ARTICLE 110.24.
- 25. CONTRACTOR SHALL SEAL ANY AND ALL CONDUIT(S) OR RACEWAY(S) WHICH ENTER A BUILDING FROM AN UNDERGROUND DISTRIBUTION SYSTEM, PER N.E.C. ARTICLE(S) 225.7 AND 300.5 (G).
- 26. PROVIDE IDENTIFICATION LABEL INDICTING FEEDER SOURCE AT ALL PANELBOARDS AND SWITCHBOARDS, PER N.E.C. ARTICLE 408.4(B).
- 27. ALL FLEXIBLE METAL CONDUIT AND LIQUID TIGHT FLEXIBLE METAL CONDUIT SHALL INCLUDE AN "EQUIPMENT BONDING JUMPER OF THE WIRE TYPE IN COMPLIANCE WITH NEC ARTICLE 250.102", PER N.E.C. ARTICLE 501.30(B).
- 28. ELECTRICAL EQUIPMENT SHALL BE LISTED BY FUSD RECOGNIZED ELECTRICAL TESTING LABORATORY OR APPROVED BY THE DEPARTMENT.
- 29. NO PIPING, DUCTS OR EQUIPMENT FOREIGN TO ELECTRICAL EQUIPMENT SHALL BE PERMITTED TO BE LOCATED WITHIN THE DEDICATED SPACE ABOVE THE ELECTRICAL EQUIPMENT.
- 30. WHENEVER A DISCREPANCY IN QUANTITY OR SIZE OF CONDUIT, WIRE, EQUIPMENT DEVICES, CIRCUIT BREAKERS, GROUND FAULT PROTECTION SYSTEMS, ETC. (ALL MATERIALS), ARISES ON THE DRAWINGS OR SPECIFICATIONS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND INSTALLING ALL MATERIAL AND SERVICES REQUIRED BY THE STRICTEST CONDITIONS NOTED ON THE DRAWINGS OR IN THE SPECIFICATIONS TO ENSURE COMPLETE AND OPERABLE SYSTEMS AS REQUIRED BY THE OWNER AND ARCHITECT/ENGINEER.
- MAXIMUM NUMBER OF CONDUCTORS IN OUTLET OR JUNCTION BOXES SHALL CONFORM TO THE CALIFORNIA ELECTRICAL CODE, ARTICLE 370-6, BUT IN NO CASE SHALL CONTAIN MORE THAN THE FOLLOWING NUMBER OF #12 AWG CONDUCTORS FOR THE SIZE OF BOX INDICATED. THE MINIMUM SIZE OUTLET OR JUNCTION BOX PERMITTED IN A WALL IS FOUR INCHES SQUARE BY 1 1/2 INCHES DEEP.

SQUARE BY 1 1/2" D = 9 CONDUCTORS 4" SQUARE BY 2 1/8" D = 13 CONDUCTORS

- 4 11/16" SQUARE BY 1 1/2" D = 11 CONDUCTORS
- 4 11/16" SQUARE BY 2 1/8" D = 18 CONDUCTORS ALL OUTLET BOXES CONTAINING MORE THAN ONE DEVICE SHALL BE GANGED. TWO DEVICES DOUBLE GANGED, MINIMUM.
- 32. STRAIGHT FEEDER, BRANCH CIRCUIT, AND CONDUIT RUNS SHALL BE PROVIDED WITH SUFFICIENT PULL BOXES OR JUNCTION BOXES TO LIMIT THE MAXIMUM LENGTH OF ANY SINGLE CABLE PULL TO 100 FEET. PULL BOXES SHALL BE SIZED PER CODE OR AS INDICATED ON DRAWINGS. LOCATIONS SHALL BE DETERMINED IN THE FIELD OR AS INDICATED ON THE DRAWINGS.

- 33. WHERE MULTI-HOMERUNS ARE INDICATED ON DRAWINGS INDICATING THE SAME PANELBOARD CIRCUIT NUMBER, PROVIDE JUNCTION BOX ABOVE ACCESSIBLE CEILING AND ROUTE ONE SET OF WIRES TO CIRCUIT BREAKERS.
- 34. IDENTIFICATION NAMEPLATES SHALL BE MICARTA 1/8 INCH THICK AND OF APPROVED SIZE WITH BEVELED EDGES AND ENGRAVED WHITE LETTERS A MINIMUM OF 1/4 INCH HIGH ON BLACK BACKGROUND. NAMEPLATES SHALL BE PROVIDED FOR ALL CIRCUITS IN THE SERVICE DISTRIBUTION AND POWER DISTRIBUTION SWITCHBOARDS OR PANELBOARDS, MOTOR CONTROL CENTERS, LIGHTING DISTRIBUTION PANELBOARDS, SEPARATELY MOUNTED STARTING SWITCHES, DISCONNECTING SWITCHES, MOTOR CONTROL PUSH-BUTTON STATIONS. SELECTOR SWITCHES, TRANSFORMERS, TERMINAL CABINETS, TELEPHONE CABINETS, ETC. ALL NAMEPLATES SHALL BE ATTACHED WITH SCREWS. (SEE SPECIFICATIONS) PULLBOXES, JUNCTION BOXES, AND DEVICE BOXES SHALL BE MARKED WITH A PERMANENT MARKER.
- 35. THE EXACT LOCATION OF ALL ELECTRICAL DEVICES AND EQUIPMENT SHALL BE COORDINATED WITH THE ARCHITECTURAL ELEVATIONS, DETAILS, OR SECTIONS PRIOR TO INSTALLATION. ALL ELECTRICAL DEVICES AND EQUIPMENT SHALL BE SURFACE MOUNTED UNLESS OTHERWISE NOTED. OUTLETS NOT INDICATED ON ARCHITECTURAL ELEVATIONS SHALL BE COORDINATED WITH THE ARCHITECT PRIOR TO ROUGH-IN. UNLESS OTHERWISE NOTED, MOUNT ELECTRICAL DEVICES AT THE FOLLOWING HEIGHTS:

WALL SWITCH AT CMU WALL +48" SET VERTICALLY WALL SWITCH AT DRY WALL +48" SET VERTICALLY CONVENIENCE RECEPTACLE AT CMU WALL +1'-6" SET VERTICALLY. **OUTLETS AT COUNTERS WITHOUT SINK 38" SET VERTICALLY**

MOUNTING HEIGHTS OF ALL DEVICES AND EQUIPMENT ARE FROM FINISHED FLOOR TO CENTER OF DEVICES AND EQUIPMENT UNLESS OTHERWISE NOTED. BOXES INSTALLED IN LOCATIONS NOT APPROVED BY THE ARCHITECT SHALL BE RELOCATED AS DIRECTED BY THE ARCHITECT AT NO ADDITIONAL COST TO THE OWNER

- 36. DRAWINGS ARE DIAGRAMMATIC ONLY AND DO NOT SHOW SPECIAL CONDUIT ROUTING OR LENGTHS REQUIRED FOR A COMPLETE INSTALLATION. ROUTING OF RACEWAYS SHALL BE AT THE OPTION OF THE CONTRACTOR BUT SHALL BE IN STRICT COMPLIANCE WITH STRUCTURAL REQUIREMENTS AND SPECIFICATIONS UNLESS OTHERWISE NOTED AND SHALL BE COORDINATED WITH OTHER TRADES. NO CONDUIT SHALL BE ROUTED HORIZONTALLY IN MASONRY WALLS IN EXCESS OF 48". DO NOT SCALE THE ELECTRICAL DRAWINGS FOR LOCATIONS OF ANY ELECTRICAL, ARCHITECTURAL, STRUCTURAL, CIVIL, OR MECHANICAL ITEMS OR FEATURES, REFER TO ARCHITECTURAL AND STRUCTURAL DIMENSIONAL DRAWINGS.
- 37. THE EQUIPMENT GROUNDING CONDUCTOR ALTHOUGH NOT SHOWN ON CONDUIT RUNS, SHALL BE INSTALLED AND RUN CONTINUOUS FROM PANEL TO LAST OUTLET. THIS WIRE SHALL BE PIGTAILED IN EACH OUTLET FOR CONNECTION TO BOX AND DEVICE SO THAT IF DEVICE IS REMOVED, GROUND WILL NOT BE INTERRUPTED. ALL EQUIPMENT GROUNDING CONDUCTORS SHALL BE INSULATED GREEN CONDUCTORS-ALTERNATE METHODS OF IDENTIFICATION SHALL NOT BE USED. CONTRACTOR SHALL NOTIFY ELECTRICAL ENGINEER TO EXAMINE CONDUCTOR INSTALLATION PRIOR TO INSTALLATION OF DEVICES.

SHT. NO.	DESCRIPTION
E0.1	GENERAL NOTES, APPLICABLE CODES AND SHEET INDEX
E0.2	SYMBOLS LIST, ABBREVIATIONS AND DEMOLITION NOTES
E0.3	SINGLE LINE DIAGRAM
E0.4	PANEL SCHEDULE AND LIGHTING SCHEDULE
E0.5	TITLE-24 COMPLIANCE FORMS
E0.6	PHOTOMETRIC CALCULATIONS
E1.1	ELECTRICAL SITE PLAN
E2.1D	DEMOLITION POWER FLOOR PLAN
E2.1	REMODEL POWER FLOOR PLAN
F2 2	DEMOLITION AND REMODEL LIGHTING PLANS

SHEET INDEX

EF3.1

EF3.2

E0.4 E0.5 E0.6 E1.1 E2.1D REMODEL POWER ROOF PLAN E2.3 E3.1D DEMOLITION SIGNAL AND COMMUNICATION FLOOR PLAN REMODEL SIGNAL AND COMMUNICATION FLOOR PLAN E4.1 ELECTRICAL DETAILS E4.2 ELECTRICAL DETAILS FIRE ALARM NOTES AND SYMBOLS LIST FIRE ALARM RISER DIAGRAM AND CALCULATIONS FIRE ALARM SITE PLAN EF2.1D DEMOLITION FIRE ALARM PLANS

SCOPE OF WORK

PROVIDE NEW LIGHTING, POWER AND LOW VOLTAGE SYSTEMS FOR THE MODERNIZATION OF THE CULINARY ART CLASSROOM. INCLUDING BUT NOT LIMITED TO LIGHTING, POWER, NEW CULINARY ARTS EQUIPMENT AND LOW VOLTAGE SYSTEM NOTED IN THE PLANS.

ALL MECHANICAL. PLUMBING. AND ELECTRICAL COMPONENTS SHALL BE ANCHORED AND INSTALLED PER THE DETAILS ON THE DSA APPROVED CONSTRUCTION DOCUMENTS. THE FOLLOWING COMPONENTS SHALL BE ANCHORED OR BRACED TO MEET THE FORCE AND DISPLACEMENT REQUIREMENTS PRESCRIBED IN THE 2019 CBC SECTIONS 1617A.1.18 THROUGH 1617A.1.26 AND ASCE 7-16 CHAPTERS 13, 26, AND 30:

MEP COMPONENT ANCHORAGE NOTES

- 1. ALL PERMANENT EQUIPMENT AND COMPONENTS.
- 2. TEMPORARY, MOVABLE OR MOBILE EQUIPMENT THAT IS PERMANENTLY ATTACHED (E.G. HARD WIRED) TO THE BUILDING UTILITY SERVICES SUCH AS ELECTRICITY, GAS OR WATER. "PERMANENTLY ATTACHED" SHALL INCLUDE ALL ELECTRICAL CONNECTIONS EXCEPT PLUGS FOR 110/220 VOLT RECEPTACLES HAVING A FLEXIBLE CABLE.
- 3. TEMPORARY, MOVABLE OR MOBILE EQUIPMENT WHICH IS HEAVIER THAN 400 POUNDS OR HAS A CENTER OF MASS LOCATED 4 FEET OR MORE ABOVE THE ADJACENT FLOOR OR ROOF LEVEL THAT DIRECTLY SUPPORT THE COMPONENT IS REQUIRED TO BE RESTRAINED IN A MANNER APPROVED BY DSA.

THE FOLLOWING MECHANICAL AND ELECTRICAL COMPONENTS SHALL BE POSITIVELY ATTACHED TO THE STRUCTURE BUT NEED NOT DEMONSTRATE DESIGN COMPLIANCE WITH THE REFERENCES NOTED ABOVE. THESE COMPONENTS SHALL HAVE FLEXIBLE CONNECTIONS PROVIDED BETWEEN THE COMPONENT AND ASSOCIATED DUCTWORK, PIPING, AND CONDUIT. FLEXIBLE CONNECTIONS MUST ALLOW MOVEMENT IN BOTH TRANSVERSE AND LONGITUDINAL DIRECTIONS:

- A. COMPONENTS WEIGHING LESS THAN 400 POUNDS AND HAVING A CENTER OF MASS LOCATED 4 FEET OR LESS ABOVE THE ADJACENT FLOOR OR ROOF LEVEL THAT DIRECTLY SUPPORT THE COMPONENT.
- B. COMPONENTS WEIGHING LESS THAN 20 POUNDS, OR IN THE CASE OF DISTRIBUTED SYSTEMS, LESS THAN 5 POUNDS PER FOOT, WHICH ARE SUSPENDED FROM A ROOF OR FLOOR OR HUNG FROM A WALL.

THE ANCHORAGE OF ALL MECHANICAL, ELECTRICAL AND PLUMBING COMPONENTS SHALL BE SUBJECT TO THE APPROVAL OF THE DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE OR STRUCTURAL ENGINEER DELEGATED RESPONSIBILITY AND ACCEPTANCE BY DSA. THE PROJECT INSPECTOR WILL VERIFY THAT ALL COMPONENTS AND EQUIPMENT HAVE BEEN ANCHORED IN ACCORDANCE WITH THE ABOVE REQUIREMENTS.

PIPING, DUCTWORK. AND ELECTRICAL DISTRIBUTION SYSTEM BRACING NOTE

PIPING, DUCTWORK, AND ELECTRICAL DISTRIBUTION SYSTEMS SHALL BE BRACED TO COMPLY WITH THE FORCES AND DISPLACEMENTS PRESCRIBED IN ASCE 7-16 SECTION 13.3 AS DEFINED IN ASCE 7-16 SECTIONS 13.6.5. 13.6.6, 13.6.7, 13.6.8; AND 2019 CBC, SECTIONS 1617A.1.24, 1617A.1.25 AND 1617A.1.26.

THE METHOD OF SHOWING BRACING AND ATTACHMENTS TO THE STRUCTURE FOR THE IDENTIFIED DISTRIBUTION SYSTEM ARE AS NOTED BELOW. WHEN BRACING AND ATTACHMENTS ARE BASED ON A PRE-APPROVED INSTALLATION GUIDE (E.G., OSHPD OPM FOR 2013 CBC OR LATER). COPIES OF THE BRACING SYSTEM INSTALLATION GUIDE OR MANUAL SHALL BE AVAILABLE ON THE JOBSITE PRIOR TO THE START OF AND DURING THE HANGING AND BRACING OF THE DISTRIBUTION SYSTEMS. THE STRUCTURAL ENGINEER OF RECORD SHALL VERIFY THE ADEQUACY OF THE STRUCTURE TO SUPPORT THE HANGER AND BRACE

MECHANICAL PIPING (MP), MECHANICAL DUCTS (MD), PLUMBING PIPING (PP), ELECTRICAL DISTRIBUTION SYSTEMS (E):

MP□ MD□ PP□ E☑ - OPTION 1: DETAILED ON APPROVED DRAWINGS WITH PROJECT SPECIFIC NOTES AND DETAILS.

MP□ MD□ PP□ E□ - OPTION 2: SHALL COMPLY WITH THE APPLICABLE OSHPD PRE-APPROVAL (OPM #)

APPLICABLE CODES

PARTIAL LIST OF APPLICABLE CODES • 2019 CALIFORNIA ADMINISTRATIVE CODE (CAC), PART 1, TITLE 24 CCR

REMODEL FIRE ALARM PLANS

FIRE ALARM DETAILS

FIRE ALARM DETAILS

- 2019 CALIFORNIA BUILDING CODE (CBC), PART 2, TITLE 24 CCR (2018 INTERNATIONAL BUILDING CODE, VOL. 1 & 2, AND 2019 CALIFORNIA AMENDMENTS)
- 2019 CALIFORNIA ELECTRICAL CODE (CEC), PART 3, TITLE 24 CCR (2017 NATIONAL ELECTRICAL CODE AND 2019 CALIFORNIA AMENDMENTS)
- 2019 CALIFORNIA MECHANICAL CODE (CMC), PART 4, TITLE 24 CCR (2018 IAPMO UNIFORM MECHANICAL CODE AND 2019 CALIFORNIA AMENDMENTS)
- 2019 CALIFORNIA PLUMBING CODE (CPC), PART 5, TITLE 24 CCR
- (2018 IAPMO UNIFORM PLUMBING CODE AND 2019 CALIFORNIA AMENDMENTS)
- 2019 CALIFORNIA ENERGY CODE (CEC), PART 6, TITLE 24 CCR
- 2019 CALIFORNIA FIRE CODE (CFC), PART 9, TITLE 24 CCR (2018 INTERNATIONAL FIRE CODE AND 2019 CALIFORNIA AMENDMENTS)
- 2019 CALIFORNIA EXISTING BUILDING CODE (CEBC), PART 10, TITLE 24 CCR
- (2018 INTERNATIONAL EXISTING BUILDING CODE AND 2019 CALIFORNIA AMENDMENTS) 2019 CALIFORNIA GREEN BUILDING STANDARDS CODE (CALGREEN), PART 11, TITLE 24 CCR
- 2019 CALIFORNIA REFERENCED STANDARDS, PART 12, TITLE 24 CCR
- TITLE 19 CCR, PUBLIC SAFETY, STATE FIRE MARSHAL REGULATIONS

IDENTIFICATION STAMP DIV. OF THE STATE ARCHITEC APP: 03-121968 INC: REVIEWED FOR SS 🗹 FLS 🗹 ACS 🗹 12/20/2022



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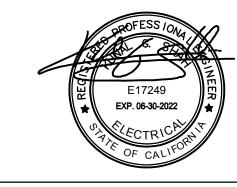
ARCHITECTS STAMP:



CONSULTANT:



CONSULTANTS STAMP:



SCHOOL DISTRICT **BONITA UNIFIED** SCHOOL DISTRICT

PROJECT: SAN DIMAS HIGH SCHOOL

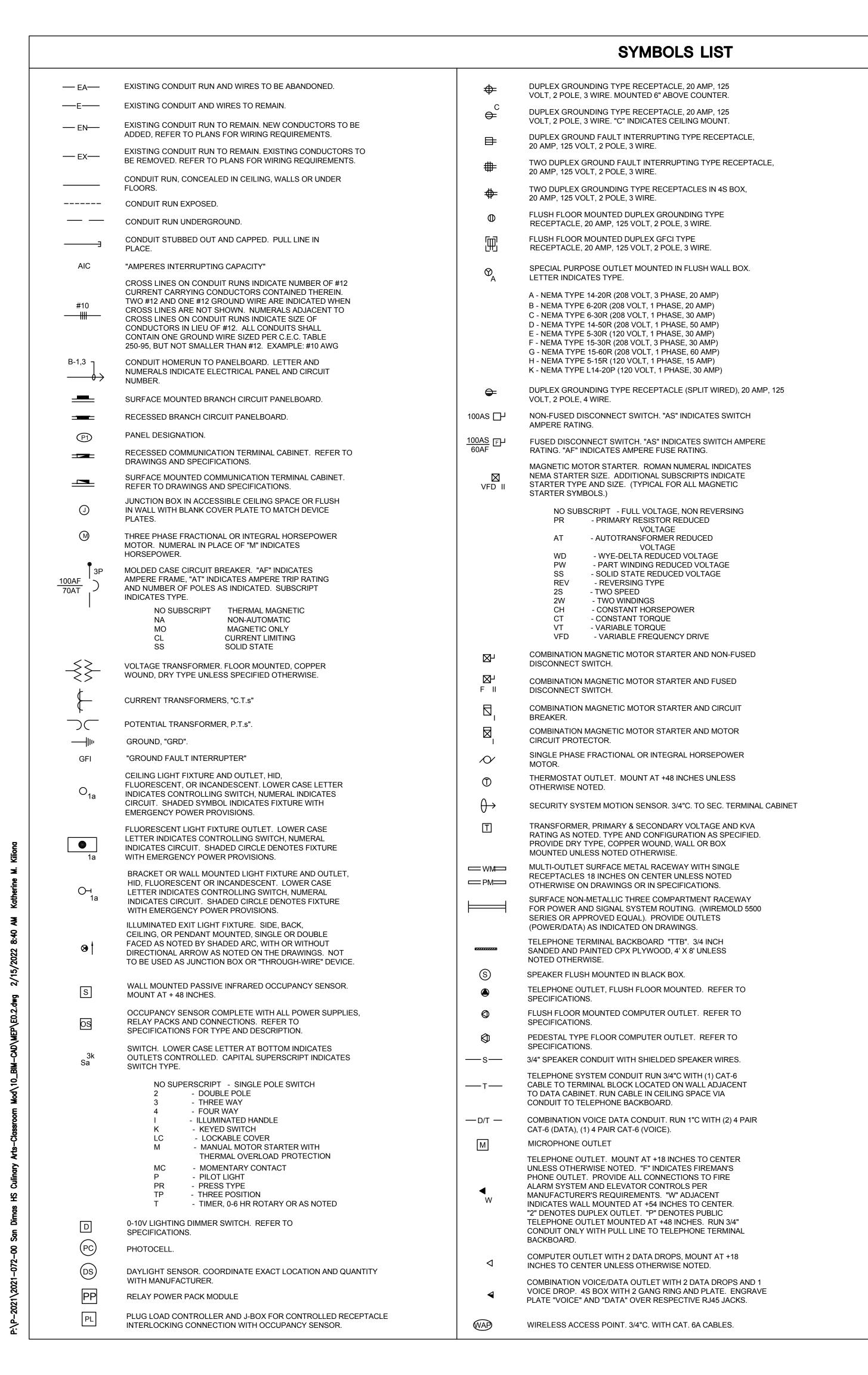
CULINARY ARTS CLASSROOM **MODERNIZATION**

JOB NUMBER: 12.03.00 DATE: 08/25/21

REVISION: 2 DATE:

DRAWING TITLE:

GENERAL NOTES & SHEET INDEX



SURGE PROTECTION DEVICE.

EXISTING EQUIPMENT WITH "E" ADJACENT IS TO REMAIN.

EXISTING EQUIPMENT WITH "R" ADJACENT IS TO BE COMPLETELY DISCONNECTED AND REMOVED.

EXISTING EQUIPMENT WITH "RR" ADJACENT IS TO BE DISCONNECTED, REMOVED AND RELOCATED TO NEW LOCATION AND RECONNECTED AS REQUIRED.

RELOCATED EQUIPMENT SHOWN IN NEW LOCATION.

BRANCH CIRCUIT PANELBOARD, 3Ø,4W SYSTEM UNLESS NOTED OTHERWISE. SEE PANEL SCHEDULES FOR TYPE AND DETAIL.

PULLBOX. REFER TO DRAWINGS FOR REQUIREMENTS.

DETAIL NO.

- ENLARGED
REFERRENCE
SHEET NO.

<u>KEYNOTES</u>

AMPERE FINISHED FLOOR

TYPICAL REMODEL KEYNOTE SYMBOL

TYPICAL DEMOLITION KEYNOTE SYMBOL

ABBREVIATIONS

AFU AMPERE FUSE RATING AMPS INTERRUPTING CAPACITY RATING (RMS SYMMETRICAL) **AMPERES** AMPERE SWITCH RATING AMPERE TRIP RATING OF BREAKER AWG AMERICAN WIRE GAUGE BKR **BREAKER** CONDUIT CAB CABINET CAT. CATEGORY CCTV CLOSE CIRCUIT TELEVISION C.O. CONDUIT ONLY CONTROL RELAY (MAGNETICALLY HELD CR UNLESS NOTED OTHERWISE) CU COPPER DEMOLISH/REMOVE DISTR DISTRIBUTION DWG DRAWING **ELEV ELEVATION** FMFRG **EMERGENCY EQPT EQUIPMENT EXHAUST** E, EX **EXISTING TO REMAIN** FIRE ALARM ANNUNCIATOR FAA FDR **FEEDER** FINISHED FLOOR FINISHED GRADE FLOW SWITCH FLEX **FLEXIBLE** FLUOR **FLUORESCENT** F.O. FIBER OPTIC FUT **FUTURE** GND GROUND HTR HEATER HERTZ INTERMEDIATE DISTRIBUTION FRAME IDF JUNCTION BOX J.B. THOUSAND (KILO) KILOVOLTS KILOWATTS ΚW KWH KILOWATT HOURS KVA KILOVOLT AMPERES LS LIMIT SWITCH LT, LTS LIGHT, LIGHTS LTG LIGHTING MDF MAIN DISTRIBUTION FRAME MAX MAXIMUM MCB MAIN CIRCUIT BREAKER MCC MOTOR CONTROL CENTER MCM THOUSAND CIRCULAR MILS MANHOLE MANUAL MOTOR STARTER MTD MOUNTED NEC NATIONAL ELECTRICAL CODE NUMBER NTS NOT TO SCALE PNL PANEL **PWR** POWER **PULLBOX** PB **RELOCATE** RELOCATE EXISTING RECPTS RECEPTACLES REQD REQUIRE SCH SCHEDULE SEC SECONDS, SECONDARY **SEQ** SEQUENCE SHEET SINGLE MODE SPECS SPECIFICATIONS STA STATION SYS SYSTEM TBD TO BE DETERMINED TR TIME DELAY RELAY TS TAMPER SWITCH TTB TELEPHONE TERM. BKBD TYP TYPICAL **UNLESS NOTED OTHERWISE** UNO **UGPS** UNDERGROUND PULL SECTION VOLTMETER VARIABLE FREQUENCY DRIVE VFD WATT HOUR METER

WEATHERPROOF

TRANSFORMER

XFMR

DEMOLITION NOTES

- 1. IN GENERAL, THE DEMOLITION PLAN SHOWS ALL EXISTING EQUIPMENT TO BE REMOVED; HOWEVER, ELECTRICAL EQUIPMENT, WHETHER SHOWN ON THIS DRAWINGS OR NOT THAT IS LOCATED IN REMOVED WALLS, FLOORS OR CEILINGS, SHALL BE REMOVED UNLESS OTHERWISE NOTED.
- 2. THE CONTRACTOR SHALL VISIT THE SITE SPECIFICALLY INCLUDING ALL AREAS INDICATED ON THE DRAWINGS. HE SHALL THOROUGHLY FAMILIARIZE HIMSELF WITH THESE EXISTING CONDITIONS, AND BY SUBMITTING A BID ACCEPTS CONDITIONS UNDER WHICH HE WILL BE REQUIRED TO PERFORM HIS WORK.
- 3. IT SHALL BE THE ELECTRICAL CONTRACTOR'S RESPONSIBILITY TO DISCONNECT AND REMOVE ALL EXISTING RECEPTACLES, ELECTRICAL EQUIPMENT, ETC., AFFECTED BY THE REMODELED AREA. THIS WILL INCLUDE REROUTING, OR THE EXTENSION OF, EXISTING CONDUIT AND FEEDERS WHERE NECESSARY TO MAINTAIN THE CONTINUITY OF EXISTING EQUIPMENT REMAINING.
- 4. ALL CIRCUIT NUMBERS AND EXISTING CONDUIT HOMERUNS SHOWN ON THESE DRAWINGS WERE TAKEN FROM EXISTING RECORD DRAWINGS. IT IS THIS CONTRACTOR'S RESPONSIBILITY TO VERIFY LOCATIONS OF HOMERUNS, AND ADJUST CIRCUIT NUMBERS ACCORDING TO EXISTING CONDITIONS IF REQUIRED.
- 5. EXISTING CONDUIT FEEDS UP THROUGH FLOOR SHALL BE CUT OFF AND PLUGGED FLUSH WITH FLOOR WHERE EXISTING WALL, ETC., IS REMOVED. REMOVE CONDUCTORS FROM THIS POINT BACK TO LAST OUTLET REMAINING IN SERVICE.
- 6. WHERE EXISTING WALLS HAVE BEEN REMOVED, AND THERE ARE EXISTING CONDUIT FEEDS WHICH HAVE BEEN CUT-OFF AND CAPPED FLUSH WITH FLOOR, IT IS THE CONTRACTOR'S RESPONSIBILITY TO IDENTIFY AND DIMENSION ALL SUCH CONDUITS ON THE "AS-BUILT" DRAWINGS UNLESS OTHERWISE NOTED.
- 7. IT SHALL BE THE RESPONSIBILITY FOR THIS CONTRACTOR TO MAINTAIN CONTINUITY OF ALL ELECTRICAL SYSTEMS, EQUIPMENT, ETC., REMAINING IN OPERATION WHICH ARE BEING FED BY AN ABANDONED OUTLET. MAINTAINING CONTINUITY SHALL CONSIST OF REROUTING CONDUIT, WIRING, ETC., AS REQUIRED.
- 8. ALL ELECTRICAL FIXTURES, OUTLETS, DEVICES, ETC., THAT ARE REMOVED, SHALL BE REMOVED COMPLETELY, INCLUDING CONDUIT AND WIRING BACK TO THE LAST FIXTURE, OUTLET, DEVICE, ETC., REMAINING IN SERVICE.
- 9. EXISTING CIRCUITS WHICH ARE REMOVED AND NOT REUSED SHALL BE IDENTIFIED ON THE PANEL SCHEDULE AS "SPARE".
- 10. THE ELECTRICAL CONTRACTOR SHALL COORDINATE WITH THE OWNER PRIOR TO REMOVAL OF EXISTING ELECTRICAL EQUIPMENT, AND TURN OVER REMOVED EQUIPMENT THAT THE OWNER REQUESTS IN AN "AS- FOUND" CONDITION. EQUIPMENT THAT IS TO BE TURNED OVER SHALL BE BOXED AND TAGGED TO IDENTIFY THE SPECIFIC EQUIPMENT.
- 11. WHERE NEW CIRCUITS ARE SHOWN TO EXISTING PANELS, INSTALL NEW BREAKERS (MINIMUM 20 AMP, SINGLE POLE) AS CALLED FOR ON DRAWINGS. IDENTIFY EACH NEW CIRCUIT ON PANEL SCHEDULE.
- 12. EXISTING CONDUIT MAY BE REUSED IF ADEQUATELY SIZED.
- 13. IN SOME INSTANCES, IT MAY BE NECESSARY FOR THE ELECTRICAL CONTRACTOR TO TEMPORARILY RELOCATE, REROUTE, ETC., EXISTING ELECTRICAL EQUIPMENT. THIS SHALL BE DONE SO THAT THE SYSTEMS IN ALL PHASES (THOSE COMPLETED AND THOSE YET TO BEGIN), ARE IN COMPLETE, OPERABLE, CONDITION AS CONSTRUCTION PROCEEDS THROUGH EACH PHASE.
- 14. DURING EACH PHASE OF DEMOLITION, ALL CIRCUITS FROM EXISTING PANELS WHICH FEED AREAS OUTSIDE THE BOUNDARIES OF THAT PHASE, SHALL BE MAINTAINED.
- 15. PANELS OR TERMINAL CABINETS WHICH ARE LOCATED IN A WALL THAT IS TO BE DEMOLISHED, SHALL REMAIN IN AN OPERATIVE CONDITION UNTIL ALL AREAS FED BY THE RELATED PANELS HAVE BEEN DEMOLISHED. THIS CONTRACTOR SHALL PROVIDE AND INSTALL ALL EQUIPMENT REQUIRED TO TEMPORARILY SUPPORT PANELS. PANELS MAY BE TEMPORARILY FREESTANDING, MOUNTED IN TEMPORARY PORTION OF WALLS TO BE DEMOLISHED LATER, ETC. CHECK WITH ARCHITECT AND ENGINEER FOR APPROVAL OF SUPPORTS. IT SHALL ALSO BE THIS CONTRACTOR'S RESPONSIBILITY TO RELOCATE AND RECONNECT ALL CIRCUITS ON A TEMPORARY BASIS IF THE PANELS, TERMINAL CABINETS, NURSE CALL TERMINAL CABINETS, ETC., CONFLICT WITH THE NEW CONSTRUCTION PHASES, AND THEN REMOVED AFTER COMPLETION OF PHASES.
- 16. ALL ABANDONED OUTLETS INCLUDING RECEPTACLES, TELEPHONE, ETC., SHALL BE COVERED AND PATCHED TO MATCH THE FINISH OF SURROUNDING WALL OR CEILING TO THE SATISFACTION OF THE OWNER.
- 17. WHERE EXISTING WALL TO BE REMOVED AND THERE ARE EXISTING CONDUIT FEEDS IN THESE WALL, IT IS THE CONTRACTOR'S RESPONSIBILITY TO DISCONNECT AND REMOVE THESE CONDUITS, AFFECTED BY THE REMODELED AREA. THIS WILL INCLUDE REROUTING WITH NEW CONDUITS AND WIRES (MATCH EXISTING), J-BOXES AND EXTENSION OF EXISTING CONDUITS WHERE NECESSARY TO MAINTAIN THE CONTINUITY OF EXISTING EQUIPMENT REMAINING.
- 18. WHERE EXISTING WALL TO BE REMOVED AND THERE ARE EXISTING CONDUIT FEEDS IN THESE WALL, IT IS THE CONTRACTOR'S RESPONSIBILITY TO DISCONNECT AND REMOVE THESE CONDUITS, AFFECTED BY THE REMODELED AREA. THIS WILL INCLUDE REROUTING WITH NEW CONDUITS AND WIRES (MATCH EXISTING), J-BOXES AND EXTENSION OF EXISTING CONDUITS WHERE NECESSARY TO MAINTAIN THE CONTINUITY OF EXISTING EQUIPMENT REMAINING.
- 19. DRAWINGS DO NOT SHOW ALL EXISTING EQUIPMENT TO REMAIN. WHERE EXISTING PANEL IS REPLACED WITH NEW PANEL, CONTRACTOR SHALL BE RESPONSIBLE FOR RECONNECTION OF ALL EXISTING CIRCUITS TO REMAIN TO NEW PANELS, THIS INCLUDE REROUTING AND EXTENDING EXISTING CIRCUITS AS NECESSARY TO MAINTAIN CIRCUIT CONTINUITY FOR EXISTING DEVICES AND EQUIPMENT, WHETHER OR NOT SHOWN ON THE FLOOR PLAN OR PANEL SCHEDULES. INCLUDE SUCH COST IN BID.
- 20. IT SHALL BE THE ELECTRICAL CONTRACTOR'S RESPONSIBILITY TO DISCONNECT AND REMOVE ALL EXISTING LIGHTING FIXTURES, RECEPTACLES, ELECTRICAL EQUIPMENT, ETC., AFFECTED BY THE REMODELED AREA. THIS WILL INCLUDE REROUTING, OR THE EXTENSION OF, EXISTING CONDUIT AND FEEDERS WHERE NECESSARY TO MAINTAIN THE CONTINUITY OF EXISTING EQUIPMENT REMAINING.

IDENTIFICATION STAMP DIV. OF THE STATE ARCHITECT APP: 03-121968 INC:

REVIEWED FOR
SS FLS ACS DATE: 12/20/2022

Architecture

8816 Foothill Boulevard, Suite 103-224 Rancho Cucamonga, CA. 91730 a9contact@architecture9.com

ARCHITECTS STAMP:



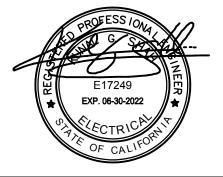
CONSULTANT:



Glendora, CA 91740
T. 626.650.0350 F. 626.650.0352
www.pbsengineers.com Job no. 2021-072-00

2100 East Route 66, Suite 210

CONSULTANTS STAMP:



BONITA UNIFIED
SCHOOL DISTRICT

PROJECT:

SAN DIMAS
HIGH SCHOOL
CULINARY ARTS
CLASSROOM
MODERNIZATION

JOB NUMBER: 12.03.00 DATE: 08/25/21

REVISION: DATE: ...

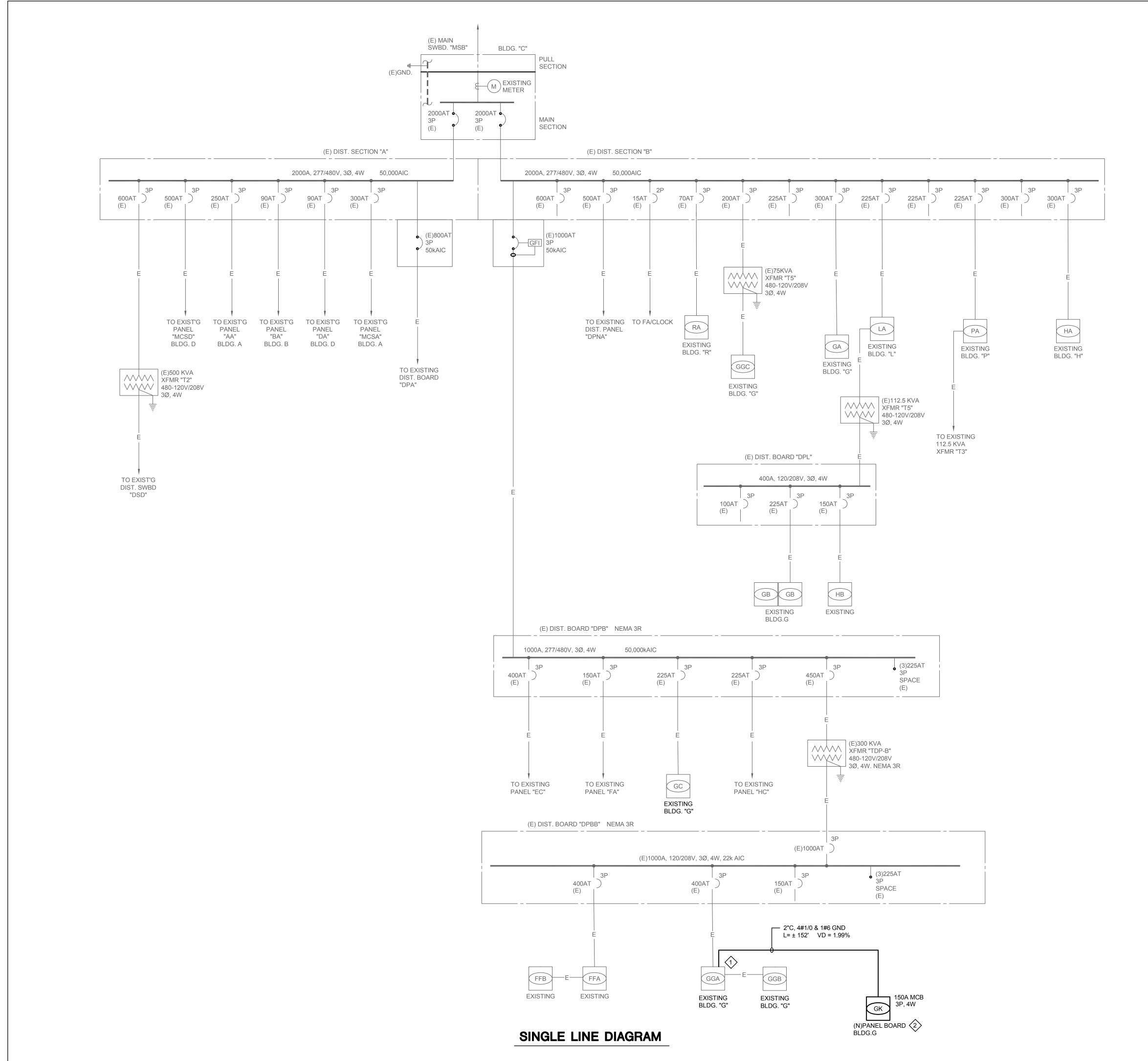
REVISION: DATE: ...

DRAWING TITLE:

SYMBOLS LIST, ABBREVIATION AND DEMO NOTES

DRAWING NO.:

E0.2



GENERAL NOTES

- 1. REFER TO E0.1 & E0.2 FOR FURTHER NOTES.
- 2. UNLESS OTHERWISE NOTED, ALL NEW ELECTRICAL EQUIPMENT SHALL BE RATED FOR 65k AIC.
- 3. THE FEEDER LENGTHS SHOWN ON THE SINGLE LINE DIAGRAM ARE FOR VOLTAGE DROP AND SHORT CIRCUIT CALCULATIONS ONLY, AND ARE NOT VALID FOR BIDDING OR CONSTRUCTION.
- 4. ALL BRANCH PANELBOARDS SHALL BE FULLY RATED.

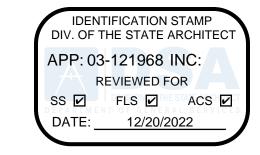
SINGLE LINE NOTES

(1) CONTRACTOR SHALL DISCONNECT AND REMOVE 3 SPARE CIRCUIT BREAKERS AND REPLACE WITH NEW 150AT/225AF, 3P CIRCUIT

2 REFER TO SHEET E4.1 DETAIL #6 FOR RECESSED MOUNTED PANEL

INSTALLTION.

BREAKER. AIC RATING SHALL MATCH WITH THE EXISTING SYSTEM.



Architecture



8816 Foothill Boulevard, Suite 103-224 Rancho Cucamonga, CA. 91730 a9contact@architecture9.com

ARCHITECTS STAMP:



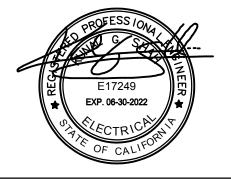
CONSULTANT:



T. 626.650.0350 F. 626.650.0352 www.pbsengineers.com Job no. 2021-072-00

CONSULTANTS STAMP:

Glendora, CA 91740



SCHOOL DISTRICT: **BONITA UNIFIED** SCHOOL DISTRICT

PROJECT:

SAN DIMAS HIGH SCHOOL **CULINARY ARTS** CLASSROOM MODERNIZATION

JOB NUMBER: 12.03.00 DATE: 08/25/21

REVISION: 1 DATE: REVISION: DATE:

DRAWING TITLE:

SINGLE LINE DIAGRAM

DRAWING NO.:

E0.3

_																					
	MOUNTING: SURFACE				PA	ANE	EL	- C	SC	(E)	XIS	STI	N	G)				LOCA	ATION:	BLDG. G ROOM "G4"	
	VOLTAGE: 277/480V,3Ø,4W											AIC	SY	/M			225 AN	MP BUS	;	225A-3P MAIN CB	
N O T	DESCRIPTION	VOL ØA	T-AMPE ØB	RES ØC	L I T E		s l l	P O L E	B R K R	C C R F	। २	B R K R	P O L E	M	ВЕСР	ПНГ	VOL ØA	T-AMPE ØB	RES ØC	DESCRIPTION	N O T E
E	(N)13.5 KW TANK TYPE	4500				P	_		25	1 2	+-	25	3	-	Г		4609			(N)MAU-1 (CUL. ARTS)	3
۴	ELECTRIC WATER	1000	4500]			+	+	-	3 4	\vdash						1000	4609		(14)1111110	+ $$
	HEATER			4500					-	5 6	_								4609		+
2	(E)CU-1 (RM G-3)	1690]				1 ;	3	15	7 8		15	3	1			1684			(N)CU-10 (CUL. ARTS)	1
	-		1690]				-	-	9 1	_	- 1	-1					1684		-	\top
	-			1690				-	- 1	11 1	_	-	-1						1684	-	
2	(E)CU-3 (RM G-3)	2493]				1 ;	3	15	13 1	4 1	15	3	1			1684			(N)CU-9 (CUL. ARTS)	1
	-		2493]				-	-	15 1	6	-	-					1684		-	
	-			2493				-	-	17 1	-	-	-						1684	-	
2	(E)CU-3 (RM G-4)	2493]				1 :	3	15	19 2	0 1	15	3	1			1684	'		(N)CU-8 (CUL. ARTS)	1
	-		2493					-	-	21 2	2	-	-					1684		-	
	-			2493				-	-	23 2	4	-	-						1684	-	
2	(E)CU-4 (RM G-4)	2493]				1 :	3	15	25 2	6 1	15	3	1			1690			(E)CU-3 (RM G-6)	2
	-		2493					-	-	27 2	8	-	-					1690		-	
	-			2493				-	-	29 3	0	-	-						1690	-	
2	(E)CU-4 (RM G-1)	2493					1 :	3	15	31 3	2 1	15	3	1			2493	,		(E)CU-4 (RM G-7)	2
	-		2493					-	-	33 3	4	-	-					2493		-	
	-			2493				-		35 3	6	-	-						2493	-	
2	(E)CU-3 (RM G-1)	2493					1 :	3	15	37 3	8 1	15	3	1			2493			(E)CU-3 (RM G-2)	2
	-		2493					-	-	39 4	0	-	-					2493		-	
	-			2493				-	-	41 4	2	-	-						2493	-	
	VA PER PHASE	18655	18655	18655													16337	16337		VA PER PHASE	
																	34992	34992		TOTAL VA PER PHASE	
	CONTINUOUS LOAD		x1.25=			VA												10497	3	TOTAL CONNECTED VA	
				104976		VA							_							NOTES	
	Т	OTAL I	_OAD=	104976	3	VA		1	26		_ ^	١MF	PS				1			RCUIT BREAKER TO REMAIN	
	CEILING OUTLETS =	0															2			RCUIT TO REMAIN	
	CONV. OUTLETS =				TH	HIS P	ANE	EL IS	S FE) BY	: S	SWE	BD.	"DF	PB"		3	NEW (C.B. TO	MATCH EXISTING	
	MISC. OUTLETS =	12															4				

	LIGHTING	FIXTUF	RE SC	CHEDUL	ES	
Type Mark	Description	Lamp	Unit Watts	Manufacturer	Model	Voltage
L1	2'X4' RECESSED LED LIGHT FIXTURE.	LED	21.5W	LITHONIA LIGHTING	2WRTL-xx-L48-3000LM-xx-AFL-MVOLT-GZ1-40K -80CRI-WH	277
L1E	2'X4' RECESSED LED LIGHT FIXTURE WITH 90 MINUTES MINIMUM EMERGENCY BATTERY PACK	LED	21.5W	LITHONIA LIGHTING	2WRTL-xx-L48-3000LM-xx-AFL-MVOLT-GZ1-40K -80CRI-E10WLCP-WH	277
	EXIT LIGHT WITH 90 MINUTES MINIMUM EMERGENCY BATTERY PACK	LED	5W	LITHONIA LIGHTING	LQM-S-W-3-G-120/277-ELN-SD	277

NOTES:

- 1. REFER TO LIGHTING FIXTURE SCHEDULE FOR TYPE OF FIXTURE TO BE PROVIDED AND INSTALLED.
- 2. REFER TO GENERAL NOTES, DRAWING E0.1 FOR ADDITIONAL REQUIREMENTS.
- 3. ALL LIGHT FIXTURES SHALL BE INSTALLED PER MANUFACTURERS RECOMMENDATIONS AND PER BUILDING ENGINEERS CONSTRUCTION REQUIREMENTS.
- 4. PROVIDE ALL HANGERS, CLIPS AND NECESSARY HARDWARE TO INSTALL THE SPECIFIED FIXTURE AS INTENDED BY THE MANUFACTURER, THE ENGINEER AND TO INSURE U.L. INTEGRITY. ALL PENDANT MOUNTED FIXTURES SHALL BE PROVIDED WITH SEISMIC SAFETY AIRCRAFT TYPE CABLE INSIDE PENDANT SECURED TO MAIN FIXTURE HOUSING AND STRUCTURE ABOVE.
- 5. CONFLICTS BETWEEN CATALOG NUMBERS AND FIXTURE DESCRIPTIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER FOR CLARIFICATION.
- 6. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY ALL CEILING TYPES AND CONDITIONS PRIOR TO RELEASING FIXTURE ORDERS. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL NECESSARY HARDWARE FOR MOUNTING THE SPECIFIED FIXTURE IN THE VERIFIED CEILING TYPE. NOTIFY THE ENGINEER FOR CLARIFICATION IMMEDIATELY.
- 7. NOTIFY THE ARCHITECT AND ENGINEER UPON COMPLETION OF ROUGH-IN AND PRIOR TO CLOSING CEILINGS SO THAT FIELD INSPECTIONS CAN BE ARRANGED.
- 8. FINAL AND EXACT LOCATION OF LIGHTING FIXTURES AND DEVICES SHALL BE DETERMINED BY THE ARCHITECT AND/OR THE ARCHITECTURAL REFLECTED CEILING PLANS. CONFLICTS BETWEEN THE ENGINEER'S PLANS AND THE ARCHITECTS SHALL BE CLARIFIED PRIOR TO COMMENCING WORK. THE CONTRACTOR IS REQUIRED TO MAKE ANY ADJUSTMENTS TO AVOID INTERFERENCE WITH THE LIGHTING FIXTURES AND CEILING GRIDS.
- 9. UNLESS SPECIFICALLY CALLED OUT IN THE DESCRIPTION OR MODEL NUMBER, THE COLOR AND FINISH OF THE FIXTURE SHALL BE SELECTED FROM THE SPECIFIED MANUFACTURER'S STANDARD COLORS AND FINISHES. SUBMIT MANUFACTURER'S STANDARD COLOR CHART AND FINISH SCHEDULE WITH SHOP DRAWINGS FOR ARCHITECTURAL APPROVAL & DESIGNATION.

- 10. LIGHTING HAS BEEN DESIGNED TO SUBSTANTIALLY COMPLY WITH TITLE 24. DIVISION 9 REQUIREMENTS (TYPICAL).
- 11. ALL LIGHTING FIXTURES OF ONE TYPE SHALL BE MANUFACTURED BY THE SAME
- 12. ALL EXIT SIGNS SHALL BE EQUIPPED WITH A SEPARATE JUNCTION BOX FOR TERMINATION OF CONDUITS, NO "THROUGH-WIRING" IS ALLOWED. VERIFY IN THE FIELD FOR MOUNTING TYPE, NUMBER OF FACES AND DIRECTIONAL ARROWS PRIOR
- 13. DETAIL FOR SENSOR AND LOCATION IS FOR GENERAL GUIDELINES ONLY.
 CONTRACTOR TO CONSULT WITH MANUFACTURER FOR TYPE OF SENSOR PER
 COVERAGE AREA AND PROVIDE APPROPRIATE NUMBER OF POWER RACKS PRIOR TO
 ROUGH-IN. MAKE NECESSARY ADJUSTMENT AS REQUIRED. CONSULT
 MANUFACTURER'S REQUIREMENT PRIOR TO BID OF THIS PROJECT.
- 14. EACH BRANCH CIRCUIT HOMERUN SHALL HAVE NO MORE THAN THREE CIRCUITS. EACH BRANCH CIRCUIT HOMERUN SHALL HAVE A SEPARATE GREEN INSULATED EQUIPMENT GROUNDING CONDUCTOR.
- 15. FIXTURES SHALL HAVE APPROPRIATE UL LABEL, DAMP OR WET AS REQUIRED BY CODES AND ORDINANCES.
- 16. CONTRACTOR SHALL VERIFY FIXTURE VOLTAGES AND CEILING TRIM COMPATIBILITY PRIOR TO ORDERING FIXTURE.
- 17. CONTRACTOR SHALL ROUTE ALL CONDUIT IN A NEAT AND ORGANIZED MANNER TO MAINTAIN AESTHETIC APPEAL OF THE CEILING.

MOUNTING: FLUSH				P	4N	EL	_ (GK	(NI	 EV	N)						LOCA	ATION:	BLDG. G ROOM "G9"	
VOLTAGE: 120/208V,3Ø,4W									10,	,00	00 AI	C S	SYN	1		225 AI	MP BUS		150A-3P MAIN CB	
DESCRIPTION T	VOL ØA	T-AMPE ØB	RES ØC	LITE	E C	M I S C	P 0 L E	B R K R	C C	I R	B R K R	P O L E	M - s c	R E C P	L I T E	VOL ØA	T-AMPE ØB	RES ØC	DESCRIPTION	N O T E
RECEP - COUNTER/ETP	820					1	1	20	-		20	1	1			828			2-DR REFFRIGERATOR	\top
RECEP - COUNTER/ETP		820]		4		1	20			20	1	1				1152		UPRIGHT FREEZER	+
RECEP			360		2		1	20	-		20	1	1			1		660	ICE MACHINE	+
RECEP	360]			2		1	20		- 1	20	1	1			700] '		WASHER	+
RES. HOOD (H1-H3)		450]			3	1	20		- 1	20	1	1				500		DRYER	+
RES. HOOD (H3-H6)			450			3	1	20	11 1	_	20	1	1			1		828	3-DR REFRIGERATOR	+
1 PIZZA OVEN - ELECTRIC	5334]				1	3	60	13 1		20	1	3			600] '		GAS RANGE - CONTROL	+
-		5334]				-	-	15 1	-	15	2	1				450		GAS COMBI OVEN	1
-			5334				-	-	17 1	_	- 1	-				1		450	-	+
HOOD CONTROL	600]				1	1	20	19 2	_	20	1	3			600] '		GAS RANGE - CONTROL	+
SALAMANDER (FUTURE)		2250]				2		21 2	_	20	1		2			360		RECEP - ROOF/OUTDOOR	+
-			2250				-	-	23 2	_	20	1	5			1		400	DUCT DETECTOR	1
SALAMANDER (FUTURE)	2250]					2	30	25 2	_	20	1	1			300] '		ANSUL SYSTEM	+
-		2250]				-	-	27 2	_	30	2					2250		SALAMANDER (FUTURE)	+
GAS RELAY CONT'L PANEL			200			1	1	20	29 3	_	-	-				1		2250	-	+
SPARE]					1		31 3		20	1] '		SPARE	+
SPARE]				1		33 3		20	1							SPARE	1
SPARE							1		35 3	_	20	1				1			SPARE	+
SPARE]					1		37 3	_	20	1] '		SPARE	+
SPARE]				1		39 4	_	20	1							SPARE	1
SPARE							1		41 4	_	20	1				1			SPARE	1
VA PER PHASE	9364	11104	8594		I										I	3028	4712	4588	VA PER PHASE	
		I	1													12392	15816	13182	TOTAL VA PER PHASE	
CONTINUOUS LOAD	0	x1.25=	0		VA												41390		TOTAL CONNECTED VA	
	+ O	ΓHER=	41390		VA														NOTES	
	TOTAL L	_OAD=	41390		VA			115		1	AMF	PS				1	CB WI	TH SH	JNT TRIP	
CEILING OUTLETS =	: 0						•			_						2				
CONV. OUTLETS =	: 14			Т	HIS F	PAN	EL I	IS FE	D BY	<u>/: </u>	PNL	G	ЭΑ			3				-
MISC. OUTLETS =	: 29															4				

MOUNTING: SURFACE				PA	NEI		GG	iA ((E)	XIS	TIN	NG))			LOCA	TION:	BLDG. G ROOM "G4"	
VOLTAGE: 120/208V,3Ø,4W								10	,00	00 AI	IC S	YM			400 AN	IP BUS		400A-3P MAIN CB	
DESCRIPTION T	VOL ØA	T-AMPE ØB	RES ØC	L F I E T C	S	P O L E	B R K R	C I R C		B R K R	P O L E	I S	- 1	L I T E	VOL ⁻ ØA	Γ-AMPE ØB	RES ØC	DESCRIPTION	N O T E
(E)RECEP-C. ROOM G1	1800				+	1	20	+	_	20	1		+	_	1800			(E)RECEP-C. ROOM G2	† -
(E)RECEP-C. ROOM G1		1800				1	20	3	_	20	1					1800		(E)RECEP-C. ROOM G2	
(E)RECEP-C. ROOM G1	1		1700			1	20	+		20	1				L		1800	(E)RECEP-C. ROOM G2	
(E)RECEP-C. ROOM G3	1800					1	20	7	-	20	1				1656	L		(N) G. DISPOSAL (G9)	2
(E)RECEP-C. ROOM G3		1800				1	20	9	_	20	1		\top			1656		(N) G. DISPOSAL (G9)	2
(E)RECEP-C. ROOM G3	1		1800			1	20	11	-	20	1				L		1656	(N) G. DISPOSAL (G9)	2
(E)RECEP-C. ROOM G7	1200					1	20	13	_	20	1	2			800	L		(N)RECEP-P. REEL(G9)	2
(E)RECEP-C. ROOM G7		1200				1	20	15		20	1	2	\top			800		(N)RECEP-P. REEL(G9)	2
(E)RECEP-C. ROOM G7	1		1200			1	20	17	-	20	1	2	\top		L		800	(N)RECEP-P. REEL(G9)	12
(E)RECEP-C. ROOM G4	1200					1	20	19	_	20	1		\top		1800	L		(E)RECEP-C. ROOM G8	
(E)RECEP-C. ROOM G4		1200				1	20	21	-	20	1		\top			1800		(E)RECEP-C. ROOM G6	
(E)RECEP-C. ROOM G4	1		1200			1	20	23		20	1		\top		L		1800	(E)RECEP-C. ROOM G6	
(E)RECEP-C. ROOM G4	1200					1	20	25	-	20	1		\top		1000	L		(E)RECEP-PROJ'R G1 & G2	
(E)RECEP-C. ROOM G4		1800				1	20	-	_	20	1		\top			1000		(E)RECEP-PROJ'R G3 & G4	
(E)RECEP-C. ROOM G4	1		1200			1	20		_	20	1		\top		L		1000	(E)RECEP-PROJ'R G8 & G9	
(E)RECEP-C. ROOM G4	1200					1	20		-	20	1		\top		1000	L		(E)RECEP-PROJ'R G8 & G7	
(E)RECEP-C. ROOM G5		200				1	20	33	-	20	1		\top			1000		(E)RECEP-CHARGER G1	
SPARE	1					1	20	-	_	20	1		\top		L		1000	(E)RECEP-CHARGER G1	
(E)SUB-PANEL "GGB"	10363				1	3		\rightarrow	-	150	3	1	\top	1	12392	L		(N)SUB-PANEL "GK"	1
-		8523				-	† -	39		-	-		\top			15816		-	
-	1		6227			-	† -	41		-	-		\top		L		13182	-	
VA PER PHASE	18763	16523	13327		_		1	1 1						1	20448	23872	21238	VA PER PHASE	
	1																	TOTAL VA PER PHASE	
CONTINUOUS LOAD	0	x1.25=	0	V	Ά											114171		TOTAL CONNECTED VA	
	+ 07		11417	<u> </u>	Ά													NOTES	
٦	OTAL L				Ά		317			AMF	PS				1	NEW C	B. TO	MATCH EXISTING	
CEILING OUTLETS =														一	2			NDLE TIE	
CONV. OUTLETS =				THI	S PAI	NEL	IS FF	ED B	Y: -	SWE	3D.	"DP	BB'	•	3				
MISC. OUTLETS =					- · · · ·				-					F	4				

	MOUNTING: SURFACE				P/	NF	Π.	- G	GR	(F	XIS		NG)			1.00	\TION!	BLDG. G ROOM "G4"	
	MOUNTING. SURFACE				. ,				OD	(_	./\IC	, , ,,	10)			LUCA	ATION.	BLDG. G ROOM G4	
	VOLTAGE: 120/208V,3Ø,4W								_		AI	<u> 2 S</u>	ΥM		225 A	MP BUS	3	100A-3P MAIN CB	
N O T E	DESCRIPTION	VOL ⁻ ØA	T-AMPE ØB	RES ØC	I T	R N E I C S P C	C S L) F _	3 C R R R	l R R	B R K R	P O L E	I I	R	ØΑ	T-AMPE ØB	RES ØC	DESCRIPTION	N O T E
	(E)FAU-3 (RM. G1)	1656			-		1	_			20	1	1		1047			(N)FAU-10 (RM G9)	1
	(E)FAU-3 (RM. G2)	1000	1656			+	1			-	20	1	1	+	1017	1047		(N)FAU-9 (RM G9)	$\frac{1}{1}$
	(E)FAU-3 (RM. G3)	l	1000	1656		+	1			_	20	1	1	+		1017	1047	(N)FAU-8 (RM G8)	$\frac{1}{1}$
	(E)FAU-3 (RM. G4)	1656		1000		+	1	_			20	1			1656	1	1017	(E)FAU-1 RM G7	+
	(E)FAU-3 (RM. G4)	1000	1656			+	+	_		+		1			1000	1656		(E)FAU-1 RM G6	+
2	(N) G. DISPOSAL (G9)	١		1656		+	1	_	_	1 12		1	1	+			1068	(N)KEF-1 (CULINARY)	1
<u>-</u> 2	(N) G. DISPOSAL(G9)	1656		1000		+	+	_	_	3 14		1	1		1392	1	1000	(N)MAU-2 (CULINARY)	3
<u>-</u>	` '	.000	1656			+	1	_				1 -	1		1002	132		(N) CIRC. PUMP (CP-1)	$\frac{3}{1}$
_	(E)RECEP-IDF-5	L		800		+	1	_		7 18		Ė	<u> </u>	_				SPACE	+
	(E)FATC	800				\top	1	_		9 20						1		SPACE	
	(E)RECEP-C. ROOM G4		720			+	1	_	_	1 22								SPACE	
	SPACE	l				\perp		+-	_	3 24								SPACE	
	SPACE							+		5 26						1		SPACE	
	SPACE							\top		7 28								SPACE	
	SPACE	l						\top		9 30								SPACE	
	SPACE					\top		\top	-	$\overline{}$		1			500	1		EXISTING LOAD	
	SPACE							+	-	3 34								SPACE	
	SPACE					\top				5 36								SPACE	
	SPACE								_	7 38						1		SPACE	
	SPACE									9 40								SPACE	
	SPACE	·							-	1 42								SPACE	
	VA PER PHASE	5768	5688	4112	•					-				-	4595	2835	2115	VA PER PHASE	
															10363	8523	6227	TOTAL VA PER PHASE	
	CONTINUOUS LOAD	0	x1.25=	0		VA										25113		TOTAL CONNECTED VA	
		+ OT	HER=	25113		VA												NOTES	
	Т	OTAL L	OAD=	25113		VA		7	' 0		AM	PS			1	EXIST	ING C.E	B. WITH NEW LOAD	
	CEILING OUTLETS =	0													2	PROV	IDE HA	NDLE TIE	
	CONV. OUTLETS =	0			TH	HIS PA	ANE	LIS	FED	BY:	PNI	"(GA"		3	NEW (C.B. TO	MATCH EXISTING	
	MISC. OUTLETS =														4				

IDENTIFICATION STAMP DIV. OF THE STATE ARCHITECT APP: 03-121968 INC:

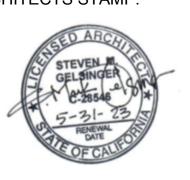
REVIEWED FOR
SS FLS ACS DATE: 12/20/2022

Architecture



8816 Foothill Boulevard, Suite 103-224 Rancho Cucamonga, CA. 91730 a9contact@architecture9.com

ARCHITECTS STAMP:

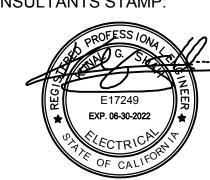


CONSULTANT:



www.pbsengineers.com Job no. 2021-072-00

CONSULTANTS STAMP:



SCHOOL DISTRICT:

BONITA UNIFIED

SCHOOL DISTRICT

PROJECT:

SAN DIMAS
HIGH SCHOOL
CULINARY ARTS
CLASSROOM
MODERNIZATION

JOB NUMBER: 12.03.00 DATE: 08/25/21

REVISION: A DATE: ...
REVISION: DATE: ...

DRAWING TITLE:

PANEL SCHEDULE
AND LIGHTING
SCHEDULE

DRAWING NO.:

E0.4

03 Occupancy Types Within P	roject (select al	l that apply):			06	# of Stories (Hab	oitable Above Grade)		1		
Office		Retail		Warehouse		Hotel/Motel			School		Support Areas
☐ Parking Garage		High-Rise Residential		Relocatable		Healthcare		\boxtimes	Other (Write in)	П	See Table I
B. PROJECT SCOPE This table includes any lighting §141.0(b)2 for alterations.	systems that a	re within the scope of t	he p	ermit application o	and are de	emonstrating com	npliance using the pre	scrij	otive path outlined	in <u>§</u> 1	1 <u>40.6</u> or
-7	Scope of Wor	k			Co	nditioned Spaces	i		Uncondition	ned S	paces
	7777777				12.2				2.1		100000
	01				02		03		04		05

Area Category Method

05 Total Unconditioned Floor Area (ft²)

1940

Area Category Method

Report Generated: 2021-07-29 09:03:42

CALIFORNIA ENERGY COMMISSION

10/2 CU.

NRCC-LTI-E

(Page 7 of 7)

Registration Number: Registration Date/Time: Registration Provider: Energysoft Report Generated: 2021-07-29 09:03:42 CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance Report Version: 2019.1.003

Schema Version: rev 20200601

STATE OF CALIFORNIA Indoor Lighting

02 Climate Zone

☐ New Lighting System

☑ Altered Lighting System

■ New Lighting System - Parking Garage

Total Area of Work (ft²)

illuool Lighting			
NRCC-LTI-E			CALIFORNIA ENERGY COMMISSION
CERTIFICATE OF COMPLIANCE			NRCC-LTI-E
Project Name:	CULINARY ARTS CLASSROOM MODERNIZATION	Report Fage:	(Page 4 of 7)
Project Address:	800 W COVINA BLVD	Date Prepared:	7/29/2021

H. INDOOR LIGHTING CONTROLS (Not including FAFs)	5 A 3
*NOTES: Controls with a * require a note in the space below explaining how compliance is achieved.	13
EX: Conference 1: Primary/Skylight Daylighting: Exempt because less than 120 watts of general lighting; EXCEPTION 1 to \$130.1(d)2	Plan Sheet Showing Daylit Zones:

I. LIGHTING POWER ALLOWANCE: COMPLETE BUILDING OR AREA CATEGORY METHODS Each area complying using the Complete Building or Area Category Methods per §140.6(b) are included in this table. Column 06 indicates if additional lighting power allowances per §140.6(c) or adjustments per §140.6(a) are being used. onditioned Spaces

01	02	03	04	05	06	i e
Area Description	Complete Building or Area Category Primary	Allowed Density	Area (ft²)	Allowed Wattage	Additional Allowar	nce / Adjustment
Area Description	Function Area	(W/ft²)	Area (Tt-)	(Watts)	Area Category	PAF
CLASSROOM	Classroom, Lecture, or Training Vocational Area	0.7	1,940	1,358	No	No
		TOTALS:	1,940	1,358	See Tables J, o	r P for detail

J. ADDITIONAL ALLOWANCE: AREA CATEGORY METHOD QUALIFYING LIGHT	110 5151 EW
This section does not apply to this project.	
K. TAILORED METHOD GENERAL LIGHTING POWER ALLOWANCE	

This section does not apply to this project.		
M. ADDITIONAL LIGHTING ALLOWANCE: TAILORED	LOOR AND TASK LIGHTING	
I. ADDITIONAL LIGHTING ALLOWANCE: TAILORED	LOOR AND TASK LIGHTING	

N. ADDITIONAL LIGHTING ALLOWANCE: TAILORED ORNAMENTAL/SPECIAL EFFECTS

Registration Number: Registration Date/Time: Registration Provider: Energysoft

Report Version: 2019.1.003

Schema Version: rev 20200601

STATE OF CALIFORNIA Indoor Lighting

Project Name:

Kunal Gautam Shah

PBS Engineers, Inc.

Glendora CA 91740

2100 East Route 66, Suite 210

CERTIFICATE OF COMPLIANCE

This section does not apply to this project.

CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance

Project Address:	800 W COVINA BLVD	Date Prepared:	7/29/202			
DOCUMENTATION AUTHOR'S DECLARAT	ION STATEMENT					
I certify that this Certificate of Complian	ce documentation is accurate and comple	te.				
Documentation Author Name: Darshan Patel		Documentation Author Signature:	DARSHAM PATEL			
Company: PBS Engineers		Signature Date: 2021-07-29				
Address: 2100 E Route 66, Suite 210		CEA/ HERS Certification Identification (if applica	ble):			
City/State/Zip: Glendora CA 91740		Phone: (626) 650-0350				
 The energy features and performance specific of Title 24, Part 1 and Part 6 of the California The building design features or system design plans and specifications submitted to the enion limit of the enion system of the system of the enion system of the enion	e laws of the State of California: of Complian:e is true and correct. and Professions Code to accept responsibility for the build ications, materials, components, and manufactured device Code of Regulations. In features identified on this Certificate of Compliance are of forcement agency for approval with this building permit agency.	es for the building design or system design identif consistent with the information provided on othe oplication. In the building permit(s) issued for the building, a	ried on this Certificate of Compliance conform to the requirement er applicable compliance documents, worksheets, calculations, and made available to the enforcement agency for all applicable			
Responsible Designer Name:	E	Responsible Designer Signature:	VII CO			

CULINARY ARTS CLASSROOM MODERNIZATION Report Page:

Registration Number: Registration Date/Time: Registration Provider: Energysoft CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance Report Version: 2019.1.003 Report Generated: 2021-07-29 09:03:42 Schema Version: rev 20200601

2021-07-29

(626) 650-0350

17249

STATE OF CALIFORNIA Indoor Lighting CALIFORNIA ENERGY COMMISSION NRCC-LTI-E CERTIFICATE OF COMPLIANCE NRCC-LTI-E CULINARY ARTS CLASSROOM MODERNIZATION Report Page: (Page 2 of 7) Project Nane:

C. COMPLIANCE RESULTS If any cell on this table says "DOES NOT COMPLY" or "COMPLIES with Exceptional Conditions" refer to Table D. for guidance. Adjusted Lighting Power per §140.6(a) (Watts) conditioned and Area Adjustments unconditioned Category Tailored Total PAF Lighting Total Acjusted spaces must not be Building Category Additional §140.6(c)3 Designed Control Credits (Watts) 05 must be >= 08 combined for Allowed (Watts) §140.6(a)2 §140.6(c)1 §140.6(c)2 §140.6(c)2G (+) *Includes compliance per (Watts) (See Table I) (See Table I) (See Table J) (See Table K) (See Table F) (See Table P) 1,358 Conditioned 946 COMPLIES 1,358 | 2 COMPLIES Rated Power Reduction Compliance (See Table Q for Details)

800 W COVINA BLVD Date Prepared:

D. EXCEPTIONAL CONDITIONS This tableis auto-filled with uneditable comments because of selections made or data entered in tables throughout the form. E. ADDITONAL REMARKS This tableincludes remarks made by the permit applicant to the Authority Having Jurisdiction. F. INDOCR LIGHTING FIXTURE SCHEDULE his tableincludes all permanent designed lighting and all portable lighting in offices. esigned Wattage: Conditioned Spaces 03 04 05 06 07 08 09 Field Inspector Watts per How is Wattage | Total Number | Excluded per Name or tem Complete Luminaire Aperture & Design Watts luminaire² determined of Luminaires §140.6(a)3 (Track) Fixture Description Pass Fail Color Change¹ No No 21.5 CEC Default 36 No Registration Provider: Energysoft

Registration Number: Registration Date/Time: Report Generated: 2021-07-29 09:03:42 CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance Report Version: 2019.1.003 Schema Version: rev 20200601

STATE OF CALIFORNIA **Indoor Lighting**

Project Address:

(Page 1 of 7)

NRCC-LTI-E			CALIFORNIA ENERGY COMMISSION
CERTIFICATE OF COMPLIANCE		-	NRCC-LTI-E
Project Nane:	CULINARY ARTS CLASSROOM MODERNIZATION	Report Page:	(Page 5 of 7)
Project Address:	800 W COVINA BLVD	Date Prepared:	7/29/2021

O. ADDITIONAL LIGHTING ALLOWANCE: TAILORED VERY VALUABLE MERCHANDISE This section does not apply to this project. P. POWER ADJUSTMENT: LIGHTING CONTROL CREDIT (POWER ADJUSTMENT FACTOR (PAF)) This section does not apply to this project. Q. RATED POWER REDUCTION COMPLIANCE FOR ALTERATIONS This section does not apply to this project.

This section does not apply to this project.	
	·
R. 80% LIGHTING POWER FOR ALL ALTERATIONS - CONT	TROLS EXCEPTIONS
This section does not apply to this project.	
S. DAYLIGHT DESIGN POWER ADJUSTMENT FACTOR (PA	(F)
This section does not apply to this project.	
T. DECLARATION OF REQUIRED CERTIFICATES OF INSTAI	LATION
	this document. If any selection have been changed by permit applicant, an explanation should be included in Table E. e building inspector during construction and can be found online at

Yes	No	Form/Title		Field Inspector	
ies	res No Formy ride		Pass	Fail	
•		NRCI-LTI-01-E - Must be submitted for all buildings			
0	•	NRCI-LTI-02-E- Must be submitted for a lighting control system, or for an Energy Management Control System (EMCS), to be recognized for compliance.			
0	•	NRCI-LTI-04-E - Must be submitted for two interlocked systems serving an auditorium, a convention center, a conference room, a multipurpose room or a theater to be recognized for compliance.			
	•	NRCI-LTI-05-E- Must be submitted for a Power Adjustment Factor (PAF) to be recognized for compliance.			
	•	NRCI-LTI-06-E- Must be submitted for additional wattage installed in a video conferencing studio to be recognized for compliance.			

Registration Provider: Energysoft Registration Number: Registration Date/Time: Report Generated: 2021-07-29 09:03:42 CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance Report Version: 2019.1.003

Schema Version: rev 20200601

STATE OF CALIFORNIA

the lamp.

Building Level Controls

7/29/2022

Indoor Lighting			
NRCC-LTI-E			CALIFORNIA ENERGY COMMISSION
CERTIFICATE OF COMPLIANCE			NRCC-LTI-E
Project Name:	CULINARY ARTS CLASSROOM MODERNIZATION	Report Page:	(Page 3 of 7)
Project Address:	800 W COVINA BLVD	Date Prepared:	7/29/2021

L1E	L1E	No	No	21.5	CEC Default	8	No	172	
					Total Designed	d Watts: CON	DITIONED SPACES	946	

this adjustment, the permit applicant should enter full rated wattage in column 05. ²Authority Having Jurisdiction may ask for Luminaire cut sheets to confirm wattage used for compliance per §130.0(c) Wattage used must be the maximum rated for the luminaire, not

G. MODULAR LIGHTING SYSTEMS This section does not apply to this project.

H. INDOOR LIGHTING CONTROLS (Not including FAFs) This table includes lighting controls for conditioned and unconditioned spaces. When a control having a * is shown, the notes section of this table provides more detail on how compliance is achieved. The lighting controls section of the Compliance Summary Table on the first page will show "DOES NOT COMPLY" if the notes are left blank.

	01				02				03		
Mandatory F	Demand Response §110.12(c)		Shut-off controls §130.1(c)					Field Inspector			
ivialidator y t		Shat-on controls 4130.1(c)					Pass	Fail			
Not F	Required <= 10,000 SF	See Area/Space Level Controls									
Area Level Controls											
04	05	06	07	08	09	10	11	1	2		
Area Description	Complete Building or Area Category Primary Function Area	Area Controls §130.1(a)	Multi-Level Controls §130.1(b)	Shut-Off Controls §130.1(c)	Primary/Sky lit Daylighting §130.1(d)	Daylighting Systems		Field In:			
					***************************************			Pass	Fail		
CULINARY ARTS CLASSROOM	Classroom, Lecture, or Training Vocational Area	Manual ON/OFF	Dimmer	Occupancy Sensor	N/A	N/A	No				

Registration Number: Registration Date/Time: Registration Provider: Energysoft CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance Report Version: 2)19.1.003 Report Generated: 2021-07-29 09:03:42

Schema Version: rev 20200601

STATE OF CALIFORNIA Indoor Lighting

illuool Lighting		
NRCC-LTI-E		CALIFORNIA ENERGY COMMISSION
CERTIFICATE OF COMPLIANCE		NRCC-LTI-I
Project Name:	CULINARY ARTS CLASSROOM MODERNIZATION Report Page:	(Page 6 of 7
Desires Address	200 W COMINA DIVID DOM DOM -	7/20/202

U. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE

Selections have been made based on information provided in this document. If any selection have been changed by the permit applicant, an explanation should be included in Table E. Additional Remarks. These documents must be provided to the building inspector during construction and any with "-A" in the form name must be completed through an Acceptance

Yes	No	Form/Title	Field Inspector	
163	, NO Polity fide		Pass	Fa
•		NRCA-LTI-02-A - Must be submitted for occupancy sensors and automatic time switch controls.		
0	•	NRCA-LTI-03-A - Must be submitted for automatic daylight controls.		
0	•	NRCA-LTI-04-A - Must be submitted for demand responsive lighting controls.		
0	•	NRCA-LTI-05-A Must be submitted for institutional tuning power adjustment factor (PAF)		

Registration Date/Time: Registration Provider: Energysoft Registration Number: CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance Report Version: 2019.1.003 Report Generated: 2021-07-29 09:03:42 Schema Version: rev 20200601

IDENTIFICATION STAMP DIV. OF THE STATE ARCHITEC APP: 03-121968 INC: **REVIEWED FOR** SS 🗹 FLS 🗹 ACS 🗹

8816 Foothill Boulevard, Suite 103-224 Rancho Cucamonga, CA. 91730 a9contact@architecture9.com

ARCHITECTS STAMP:



CONSULTANT:



CONSULTANTS STAMP:



SCHOOL DISTRICT: BONITA UNIFIED SCHOOL DISTRICT

PROJECT: SAN DIMAS HIGH SCHOOL **CULINARY ARTS** CLASSROOM

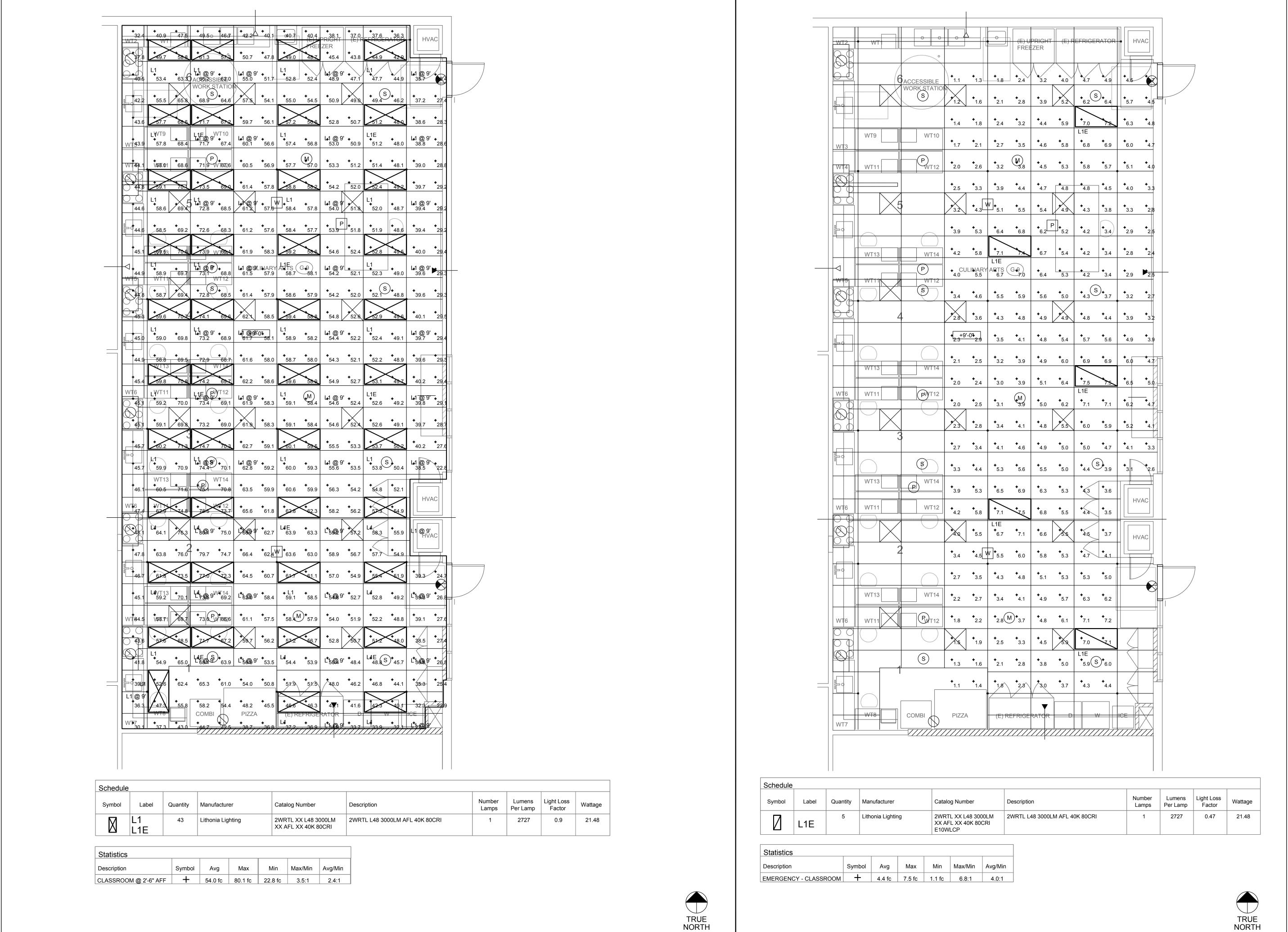
MODERNIZATION

JOB NUMBER: 12.03.00 DATE: 08/25/21

REVISION: 1 DATE: REVISION: 2 DATE:

DRAWING TITLE: TITLE-24 COMPLIANCE

FORMS



1/4" = 1'-0"

IDENTIFICATION STAME DIV. OF THE STATE ARCHITEC APP: 03-121968 INC: REVIEWED FOR SS 🗹 FLS 🗹 ACS 🗹

Architecture



8816 Foothill Boulevard, Suite 103-224 Rancho Cucamonga, CA. 91730 a9contact@architecture9.com

ARCHITECTS STAMP:



CONSULTANT:



www.pbsengineers.com Job no. 2021-072-00

CONSULTANTS STAMP:



SCHOOL DISTRICT: **BONITA UNIFIED** SCHOOL DISTRICT

PROJECT:

SAN DIMAS HIGH SCHOOL **CULINARY ARTS** CLASSROOM MODERNIZATION

JOB NUMBER: 12.03.00 DATE: 08/25/21

REVISION: 1 DATE: _ REVISION: 2 DATE: .

DRAWING TITLE:

PHOTOMETRIC CALCULATIONS

DRAWING NO.:

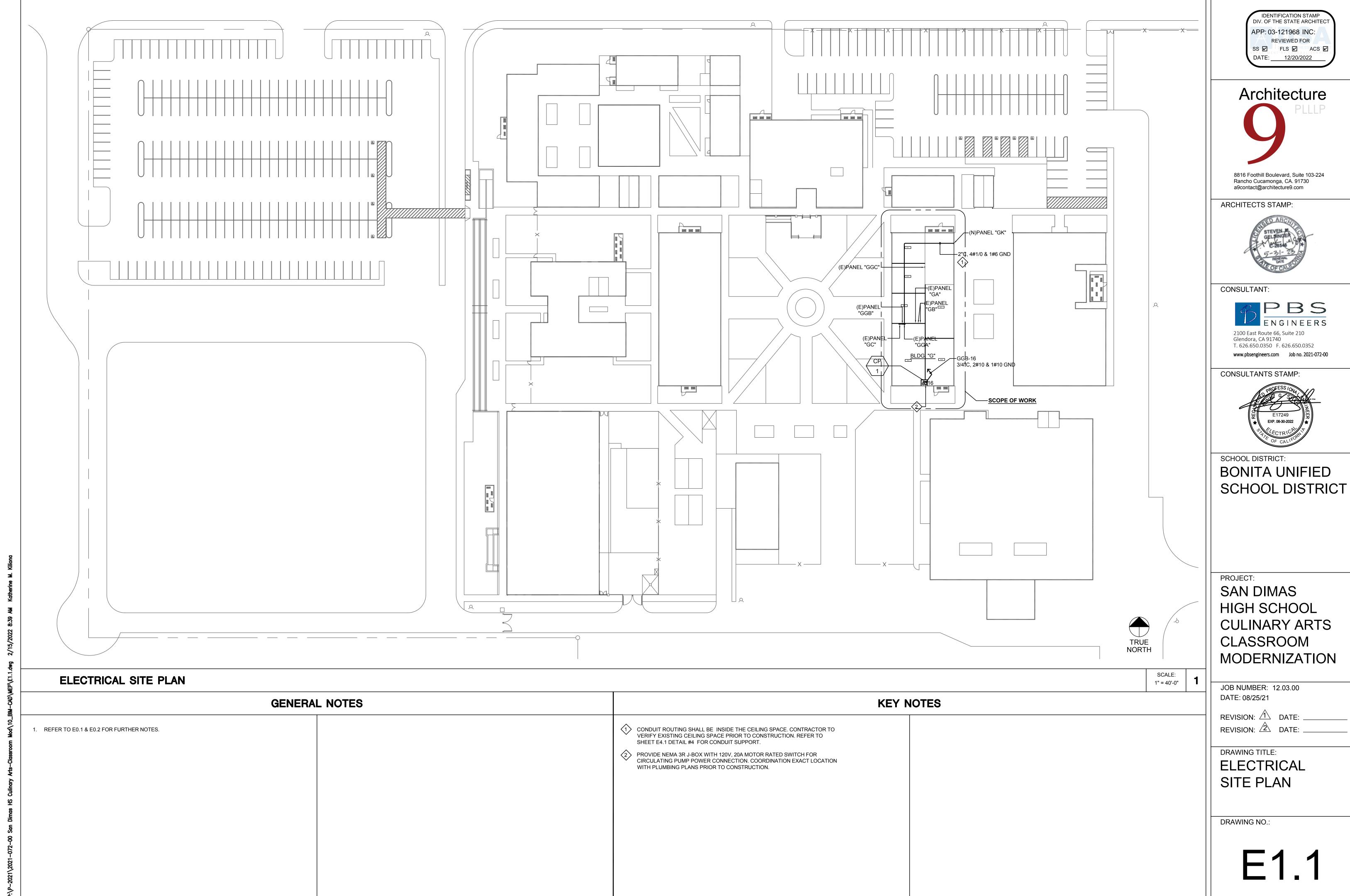
E0.6

NORMAL PHOTOMETRIC CALCULATION

EMERGENCY PHOTOMETRIC CALCULATION

SCALE:

1/4" = 1'-0"



GENERAL NOTES

- 1. ALL ELECTRICAL EQUIPMENT SHALL BE DE-ENERGIZED PRIOR TO COMMENCING ANY DEMOLITION WORK
- 2. FOLLOW ALL LOCKOUT/TAGOUT PROCEDURE PER NFPA 70E.
- 3. ALL EXISTING DEVICES SHOWN ARE BASED ON ENGINEER'S FIELD OBSERVATION ONLY. ALL DEVICES MAY NOT HAVE BEEN ABLE TO BE OBSERVED. VERIFY AND REMOVE ALL HIDDEN DEVICES AS REQUIRED.
- DEMOLISH ELECTRICAL CIRCUITS AS NECESSARY TO ACCOMMODATE RENOVATION WORK. REMOVE ALL ELECTRICAL DEVICES (DISCONNECTS, STARTERS, WIRING, CONDUITS, ETC.) ASSOCIATED WITH EQUIPMENT REMOVED BY OTHERS. EXISTING CIRCUITS SERVING RECEPTACLES FOR A GIVEN AREA SHALL BE REUSED TO THE FULLEST EXTENT POSSIBLE AND SHALL SERVE THE NEW LAYOUT FOR THAT AREA. PROVIDE CIRCUIT MODIFICATIONS INDICATED OR AS OTHERWISE REQUIRED TO MAINTAIN THE CONTINUITY OF EXISTING CIRCUITS
- REFER TO ARCHITECTURAL DEMOLITION PLANS FOR EXISTING BUILDINGS, WALLS, EQUIPMENT, ETC., TO BE DEMOLISHED. ALL ELECTRICAL DEVICES, ASSOCIATED CONDUITS AND WIRES SHALL BE DISCONNECTED AND REMOVED.

DEMO KEY NOTES

(1) DISCONNECT AND REMOVE EXISTING RECEPTACLE, CONDUIT AND WIRES. IF

(2) DISCONNECT ALL CONDUIT AND WIRES IN THE EXISTING PANEL "GGC".

(3) DISCONNECT AND REMOVE EXISTING WIRE MOLD AND ALL ASSOCIATED

FROM THE REMAINING DEVICES BACK TO ORIGINAL CIRCUITS.

REMAINING DEVICES BACK TO ORIGINAL CIRCUITS.

AND WIRES TO THEIR RESPECTIVE BRANCH CIRCUITS.

THE RECEPTACLE IS SHARING SAME CIRCUIT WITH OTHER DEVICES TO REMAIN CONTRACTOR SHALL EXTEND CONDUIT AND WIRES FROM THE

CONTRACTOR SHALL ROTATE THE EXISTING PANEL "GGC" 180 DEGREES TO

6. NOT USED.

IDENTIFICATION STAMP DIV. OF THE STATE ARCHITEC APP: 03-121968 INC: REVIEWED FOR SS 🗹 FLS 🗹 ACS 🗹 12/20/2022

Architecture



8816 Foothill Boulevard, Suite 103-224 Rancho Cucamonga, CA. 91730 a9contact@architecture9.com

ARCHITECTS STAMP:



CONSULTANT:



FACE THE PANEL TO G2 CLASS ROOM. RE-TERMINATE ALL EXISTING CONDUIT CONNECTION. IF THERE ARE CIRCUITS SHARING SAME CIRCUIT WITH OTHER

(4) DISCONNECT POWER AND REMOVE ALL EXISTING EQUIPMENT, RECEPTACLE, CONDUIT AND WIRES IN THIS AREA. VERIFY AND COORDINATE ALL DEMOLITION WORKS WITH OTHER TRADES PRIOR TO CONSTRUCTION. ALL CIRCUITS IN THE EXISTING PANELBOARDS THAT ARE PART OF DEMOLITION WORKS SHALL BE MARKED AS SPARE CIRCUIT BREAKER. VERIFY AND COORDINATE ALL DEMOLITIONS WORKS WITH OTHER TRADES PRIOR TO

DEVICES TO REMAIN CONTRACTOR SHALL EXTEND CONDUIT AND WIRES

(5) EXISTING HVAC EQUIPMENT TO BE DEMOLISHED.

CONSTRUCTION.

6 NOT IN SCOPE OF WORK. EXISTING HVAC TO REMAIN AND PROTECTED IN PLACE.

(7) EXISTING DISCONNECT SWITCH AND ALL ASSOCIATED CONNECTION TO CONSTRUCTION.

8 EXISTING DISCONNECT SWITCH TO BE RE-USE. CONTRACTOR SHALL DISCONNECT EXISTING CONDUIT AND WIRES CONNECTING TO MECHANICAL EQUIPMENT TO BE REMOVE. EXISTING HOMERUNS AND CIRCUIT TO REMAIN. COORDINATION DEMOLITION WORKS WITH MECHANICAL PRIOR TO ROUGH-IN AND CONSTRUCTION.

(9) EXISTING HVAC EQUIPMENT TO BE DEMOLISHED. EXISTING MOTOR RATED DISCONNECT SWITCH, HOMERUNS AND CIRCUIT TO BE REUSE. PROTECT IN PLACE DURING CONSTRUCTION. CONTRACTOR SHALL EXTEND CONDUIT AND WIRES TO NEW MECHANICAL EQUIPMENT. COORDINATE WITH MECHANICAL PRIOR TO ROUGH-IN AND CONSTRUCTION.

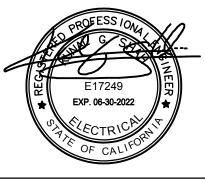
(10) DISCONNECT AND REMOVE EXISTING RECEPTACLE, CONDUIT AND WIRES. CIRCUITS IN THE EXISTING PANELBOARD SHALL BE MARKED AS SPARE CIRCUIT BREAKER.

- (11) EXISTING J-BOX, HOMERUNS, CONDUITS TO REMAIN. CONTRACTOR SHALL CIRCUIT TRACE AND DISCONNECT ALL THE CONNECTED LOADS TO BE DEMOLISH. PROTECT IN PLACE DURING CONSTRUCTION. EXISTING HOMERUNS AND CIRCUITS ARE TO BE REUSE FOR THE REMODELING OF THE
- 12) DISCONNECT AND REMOVE EXISTING FLOOR RECEPTACLE. IF THE RECEPTACLE IS SHARING SAME CIRCUIT WITH OTHER DEVICES TO REMAIN CONTRACTOR SHALL EXTEND CONDUIT AND WIRES FROM THE REMAINING DEVICES BACK TO ORIGINAL CIRCUITS.
- (13) DISCONNECT AND REMOVE EXISTING QUAD RECEPTACLE. CONTRACTOR SHALL PROTECT IN PLACE THE EXISTING CONDUIT, WIRES AND BOX DURING WALL DEMOLITION WORKS. EXISTING RECEPTACLE SHALL BE REINSTALLED TO NEW WALL DURING RENOVATION WORKS.



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CONSULTANTS STAMP:



SCHOOL DISTRICT: **BONITA UNIFIED** SCHOOL DISTRICT

PROJECT:

SAN DIMAS HIGH SCHOOL **CULINARY ARTS** CLASSROOM MODERNIZATION

JOB NUMBER: 12.03.00 DATE: 08/25/21

REVISION: 1 DATE:

REVISION: 2 DATE:

DRAWING TITLE:

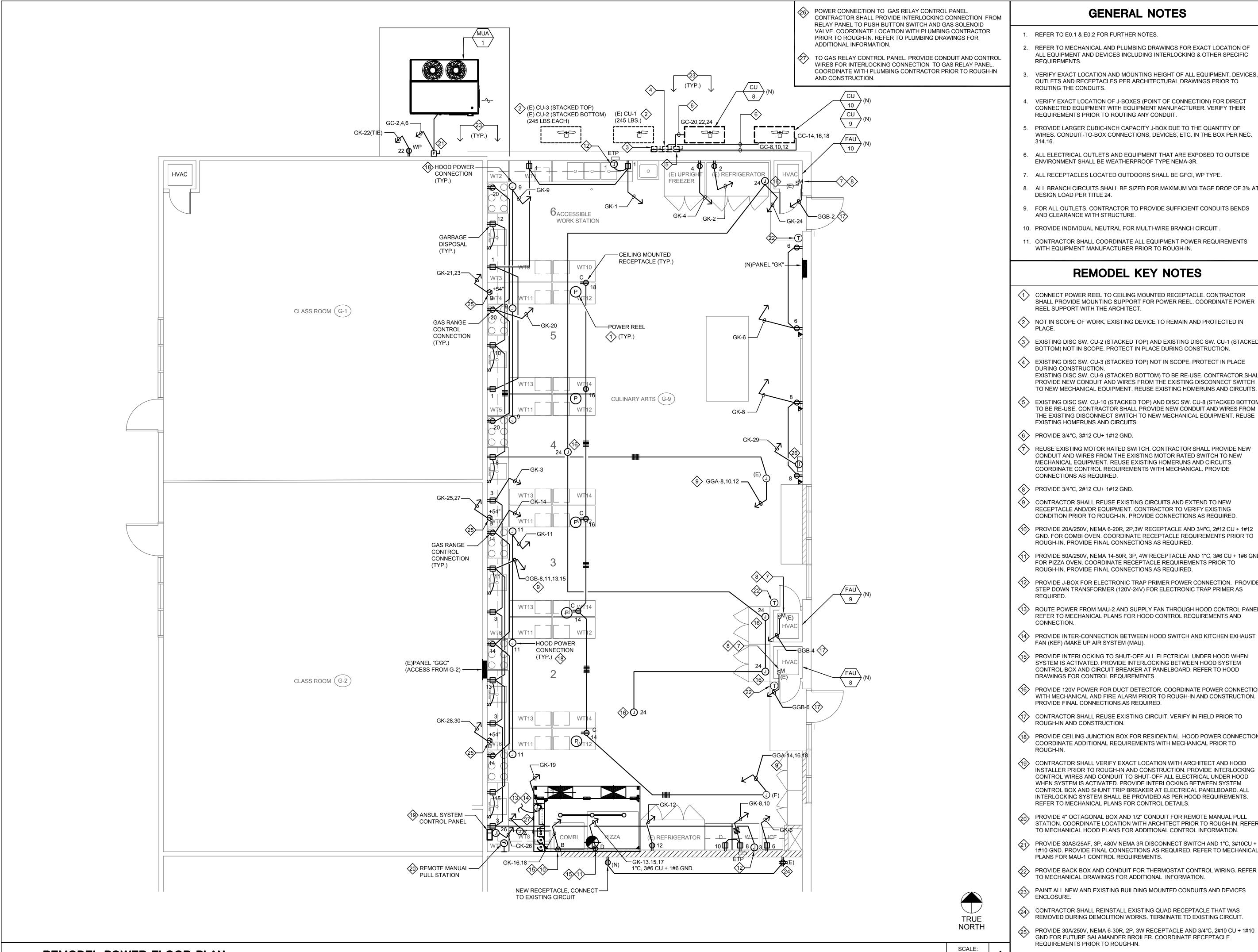
DEMOLITION POWER FLOOR PLAN

DRAWING NO.:

E2.1D

TRUE NORTH

SCALE: 1/4" = 1'-0"



REMODEL POWER FLOOR PLAN

GENERAL NOTES

- 1. REFER TO E0.1 & E0.2 FOR FURTHER NOTES.
- 2. REFER TO MECHANICAL AND PLUMBING DRAWINGS FOR EXACT LOCATION OF ALL EQUIPMENT AND DEVICES INCLUDING INTERLOCKING & OTHER SPECIFIC
- VERIFY EXACT LOCATION AND MOUNTING HEIGHT OF ALL EQUIPMENT, DEVICES, OUTLETS AND RECEPTACLES PER ARCHITECTURAL DRAWINGS PRIOR TO ROUTING THE CONDUITS.
- VERIFY EXACT LOCATION OF J-BOXES (POINT OF CONNECTION) FOR DIRECT CONNECTED EQUIPMENT WITH EQUIPMENT MANUFACTURER. VERIFY THEIR REQUIREMENTS PRIOR TO ROUTING ANY CONDUIT.
- PROVIDE LARGER CUBIC-INCH CAPACITY J-BOX DUE TO THE QUANTITY OF WIRES. CONDUIT-TO-BOX CONNECTIONS, DEVICES, ETC. IN THE BOX PER NEC.
- 6. ALL ELECTRICAL OUTLETS AND EQUIPMENT THAT ARE EXPOSED TO OUTSIDE ENVIRONMENT SHALL BE WEATHERPROOF TYPE NEMA-3R.
- 7. ALL RECEPTACLES LOCATED OUTDOORS SHALL BE GFCI, WP TYPE.
- 8. ALL BRANCH CIRCUITS SHALL BE SIZED FOR MAXIMUM VOLTAGE DROP OF 3% AT DESIGN LOAD PER TITLE 24.
- 9. FOR ALL OUTLETS, CONTRACTOR TO PROVIDE SUFFICIENT CONDUITS BENDS AND CLEARANCE WITH STRUCTURE.
- 10. PROVIDE INDIVIDUAL NEUTRAL FOR MULTI-WIRE BRANCH CIRCUIT.
- 11. CONTRACTOR SHALL COORDINATE ALL EQUIPMENT POWER REQUIREMENTS WITH EQUIPMENT MANUFACTURER PRIOR TO ROUGH-IN.

CONNECT POWER REEL TO CEILING MOUNTED RECEPTACLE. CONTRACTOR SHALL PROVIDE MOUNTING SUPPORT FOR POWER REEL. COORDINATE POWER REEL SUPPORT WITH THE ARCHITECT.

REMODEL KEY NOTES

- NOT IN SCOPE OF WORK. EXISTING DEVICE TO REMAIN AND PROTECTED IN
- 3 EXISTING DISC SW. CU-2 (STACKED TOP) AND EXISTING DISC SW. CU-1 (STACKED BOTTOM) NOT IN SCOPE. PROTECT IN PLACE DURING CONSTRUCTION.
- EXISTING DISC SW. CU-3 (STACKED TOP) NOT IN SCOPE. PROTECT IN PLACE DURING CONSTRUCTION. EXISTING DISC SW. CU-9 (STACKED BOTTOM) TO BE RE-USE. CONTRACTOR SHALL PROVIDE NEW CONDUIT AND WIRES FROM THE EXISTING DISCONNECT SWITCH
- EXISTING DISC SW. CU-10 (STACKED TOP) AND DISC SW. CU-8 (STACKED BOTTOM) TO BE RE-USE. CONTRACTOR SHALL PROVIDE NEW CONDUIT AND WIRES FROM THE EXISTING DISCONNECT SWITCH TO NEW MECHANICAL EQUIPMENT. REUSE EXISTING HOMERUNS AND CIRCUITS.
- 6 PROVIDE 3/4"C, 3#12 CU+ 1#12 GND.
- REUSE EXISTING MOTOR RATED SWITCH, CONTRACTOR SHALL PROVIDE NEW CONDUIT AND WIRES FROM THE EXISTING MOTOR RATED SWITCH TO NEW MECHANICAL EQUIPMENT. REUSE EXISTING HOMERUNS AND CIRCUITS. COORDINATE CONTROL REQUIREMENTS WITH MECHANICAL. PROVIDE CONNECTIONS AS REQUIRED.
- 8 PROVIDE 3/4"C, 2#12 CU+ 1#12 GND.
- (9) CONTRACTOR SHALL REUSE EXISTING CIRCUITS AND EXTEND TO NEW RECEPTACLE AND/OR EQUIPMENT. CONTRACTOR TO VERIFY EXISTING CONDITION PRIOR TO ROUGH-IN. PROVIDE CONNECTIONS AS REQUIRED.
- PROVIDE 20A/250V, NEMA 6-20R, 2P,3W RECEPTACLE AND 3/4"C, 2#12 CU + 1#12 GND. FOR COMBI OVEN. COORDINATE RECEPTACLE REQUIREMENTS PRIOR TO ROUGH-IN. PROVIDE FINAL CONNECTIONS AS REQUIRED.
- (11) PROVIDE 50A/250V, NEMA 14-50R, 3P, 4W RECEPTACLE AND 1"C, 3#6 CU + 1#6 GND. FOR PIZZA OVEN. COORDINATE RECEPTACLE REQUIREMENTS PRIOR TO ROUGH-IN. PROVIDE FINAL CONNECTIONS AS REQUIRED.
- PROVIDE J-BOX FOR ELECTRONIC TRAP PRIMER POWER CONNECTION. PROVIDE STEP DOWN TRANSFORMER (120V-24V) FOR ELECTRONIC TRAP PRIMER AS
- ROUTE POWER FROM MAU-2 AND SUPPLY FAN THROUGH HOOD CONTROL PANEL. REFER TO MECHANICAL PLANS FOR HOOD CONTROL REQUIREMENTS AND
- PROVIDE INTER-CONNECTION BETWEEN HOOD SWITCH AND KITCHEN EXHAUST FAN (KEF) /MAKE UP AIR SYSTEM (MAU).
- PROVIDE INTERLOCKING TO SHUT-OFF ALL ELECTRICAL UNDER HOOD WHEN SYSTEM IS ACTIVATED. PROVIDE INTERLOCKING BETWEEN HOOD SYSTEM CONTROL BOX AND CIRCUIT BREAKER AT PANELBOARD. REFER TO HOOD DRAWINGS FOR CONTROL REQUIREMENTS.
- (16) PROVIDE 120V POWER FOR DUCT DETECTOR. COORDINATE POWER CONNECTION WITH MECHANICAL AND FIRE ALARM PRIOR TO ROUGH-IN AND CONSTRUCTION. PROVIDE FINAL CONNECTIONS AS REQUIRED.
- CONTRACTOR SHALL REUSE EXISTING CIRCUIT. VERIFY IN FIELD PRIOR TO ROUGH-IN AND CONSTRUCTION.
- PROVIDE CEILING JUNCTION BOX FOR RESIDENTIAL HOOD POWER CONNECTION. COORDINATE ADDITIONAL REQUIREMENTS WITH MECHANICAL PRIOR TO
- (19) CONTRACTOR SHALL VERIFY EXACT LOCATION WITH ARCHITECT AND HOOD INSTALLER PRIOR TO ROUGH-IN AND CONSTRUCTION. PROVIDE INTERLOCKING CONTROL WIRES AND CONDUIT TO SHUT-OFF ALL ELECTRICAL UNDER HOOD WHEN SYSTEM IS ACTIVATED. PROVIDE INTERLOCKING BETWEEN SYSTEM CONTROL BOX AND SHUNT TRIP BREAKER AT ELECTRICAL PANELBOARD. ALL INTERLOCKING SYSTEM SHALL BE PROVIDED AS PER HOOD REQUIREMENTS. REFER TO MECHANICAL PLANS FOR CONTROL DETAILS.
- PROVIDE 4" OCTAGONAL BOX AND 1/2" CONDUIT FOR REMOTE MANUAL PULL STATION. COORDINATE LOCATION WITH ARCHITECT PRIOR TO ROUGH-IN. REFEF TO MECHANICAL HOOD PLANS FOR ADDITIONAL CONTROL INFORMATION.
- PROVIDE 30AS/25AF, 3P, 480V NEMA 3R DISCONNECT SWITCH AND 1"C, 3#10CU + 1#10 GND. PROVIDE FINAL CONNECTIONS AS REQUIRED. REFER TO MECHANICAL PLANS FOR MAU-1 CONTROL REQUIREMENTS.
- PROVIDE BACK BOX AND CONDUIT FOR THERMOSTAT CONTROL WIRING. REFER TO MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION.
- PAINT ALL NEW AND EXISTING BUILDING MOUNTED CONDUITS AND DEVICES ENCLOSURE ENCLOSURE.

1/4" = 1'-0"

- CONTRACTOR SHALL REINSTALL EXISTING QUAD RECEPTACLE THAT WAS REMOVED DURING DEMOLITION WORKS. TERMINATE TO EXISTING CIRCUIT.
- PROVIDE 30A/250V, NEMA 6-30R, 2P, 3W RECEPTACLE AND 3/4"C, 2#10 CU + 1#10 GND FOR FUTURE SALAMANDER BROILER. COORDINATE RECEPTACLE REQUIREMENTS PRIOR TO ROUGH-IN.

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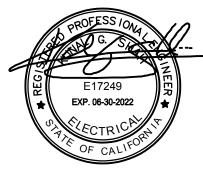


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CONSULTANTS STAMP:



SCHOOL DISTRICT: **BONITA UNIFIED** SCHOOL DISTRICT

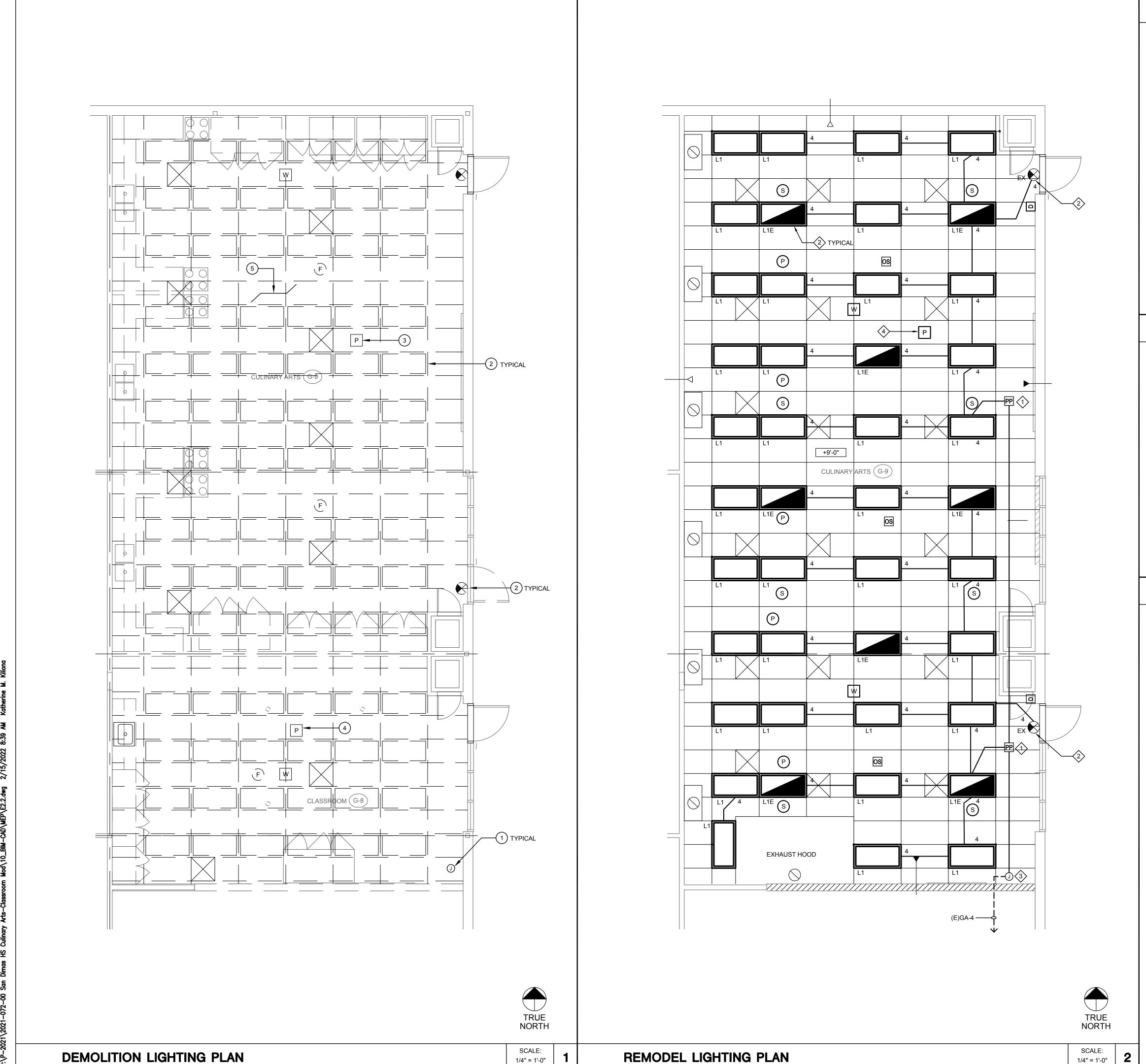
PROJECT:

SAN DIMAS HIGH SCHOOL **CULINARY ARTS** CLASSROOM MODERNIZATION

JOB NUMBER: 12.03.00 DATE: 08/25/21

REVISION: 1 DATE: REVISION: 🖄 DATE:

DRAWING TITLE: REMODEL POWER FLOOR PLAN



GENERAL NOTES

- 1. REFER TO E0.1 & E0.2 FOR FURTHER NOTES.
- 2. COORDINATE ALL LIGHTING FIXTURE LOCATIONS AND ELEVATIONS WITH ARCHITECTURAL DRAWING PRIOR TO ROUGH IN. NOTIFY THE ARCHITECT OF ANY DISCREPANCIES PRIOR TO START OF WORK.
- 3. ALL ELECTRICAL CIRCUIT WIRING SHALL BE PROVIDED WITH GROUND WIRE.
- 4. ALL LIGHTING FIXTURES/EQUIPMENT SHALL BE U.L. LISTED, LABELED AND APPROVED BY THE CITY.
- 5. PROVIDE UN-SWITCHED HOT WIRE TO EXIT SIGNS AND /OR EMERGENCY BATTERY PACK.
- 6. ALL CONDUCTORS SHALL HAVE UNDERWRITER'S LABORATORIES, INC. (UL LISTED, 600 VOLTS INSULATION FOR TYPE SPECIFIED BELOW OR ELSEWHERE IN THE SPECIFICATIONS, ALL CONDUCTOR SHALL BE COPPER.

BRANCH CIRCUITS - LIGHTING AND POWER:

a. #10 AWG AND SMALLER, SOLID WIRE TYPE THW OR THHN / THWN, THHW (THHN FOR DRY LOCATION ONLY).

b. #8 AWG AND LARGER, STRANDED TYPE THW OR THHN / THHW.

- PROVIDE U.L. 924 CONTROL RELAY FOR EMERGENCY LIGHTING CONTROL.
- 8. WHERE ROOM CONTROLLERS (RELAY POWER PACK MODULE) ARE SHOWN, PROVIDE POWER TO ROOM CONTROLLER FROM SAME CIRCUIT SHOWN TO POWER THE LIGHTS. CIRCUIT TO POWER THE LIGHTS SHALL FIRST BE WIRE TO ROOM CONTROLLER.
- 9. EACH MULTI-WIRE BRANCH CIRCUIT SHALL BE PROVIDED WITH MEANS TO SIMULTANEOUSLY DISCONNECT ALL UNGROUNDED CONDUCTORS PER CEC 210.4(B) & (D).

DEMO KEY NOTES

- (1) CONTRACTOR SHALL INTERCEPT EXISTING CONDUIT, WIRES AND EXTEND TO NEW LIGHTING LOCATION. CONTRACTOR TO VERIFY AND REUSE EXISTING LIGHTING CIRCUITS. PROTECT IN PLACE DURING CONSTRUCTION. IF THE EXISTING CIRCUIT IS SHARING SAME CIRCUIT WITH OTHER LIGHT FIXTURES TO REMAIN CONTRACTOR SHALL EXTEND CONDUIT AND WIRES FROM REMAINING LIGHT FIXTURES BACK TO ORIGINAL BRANCH CIRCUITS.
- 2 CONTRACTOR SHALL DISCONNECT AND REMOVED EXISTING LIGHT FIXTURES, CONDUIT, WIRES AND ALL ASSOCIATED CONNECTION.
- 3 EXISTING PROJECTOR MOUNTING BRACKET TO REMAIN. REMOVE AND REINSTALL PER ARCHITECTURAL.
- REMOVE EXISTING PROJECTOR AND ALL ASSOCIATED WIRING CONNECTIONS AND RETURN TO DISTRICT. IF THERE ARE CIRCUITS SHARING SAME CIRCUIT WITH OTHER DEVICES TO REMAIN CONTRACTOR SHALL EXTEND CONDUIT AND WIRES FROM THE REMAINING DEVICES BACK TO ORIGINAL CIRCUITS.
- (5) REFER TO ARCHITECTURAL DEMOLITION PLAN FOR ADDITIONAL INFORMATION.

REMODEL KEY NOTES

- PROVIDE RELAY PACK MODULE (ROOM CONTROLLER). COORDINATE AND VERIFY REQUIREMENTS, MODEL # WITH MANUFACTURER PRIOR TO CONSTRUCTION. THE ELECTRICAL CIRCUIT TO POWER THE LIGHTS SHALL FIRST BE WIRE TO THE RELAY POWER PACK MODULE. PROVIDE FINAL CONNECTIONS AS REQUIRED.
- PROVIDE UNSWITCHED HOT WIRE TO LIGHT FIXTURE WITH EMERGENCY BATTERY PACK AND EXIT SIGNS. PROVIDE FINAL CONNECTIONS AS
- CONTRACTOR SHALL INTERCEPT AND RE-USE EXISTING LIGHTING CIRCUIT AND CONNECT TO NEW LIGHT FIXTURES. CONTRACTOR SHALL VERIFY CONDITION PRIOR TO ROUGH-IN AND CONSTRUCTION.
- RE-INSTALL EXISTING PROJECTOR PER ARCHITECTURAL. CONTRACTOR SHALL TEST TO MAKE SURE THE EXISTING PROJECTOR IS WORKING PROPERLY FOR A COMPLETE OPERABLE SYSTEM.

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APP: 03-121968 INC:

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DATE: 12/20/2022

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CONSULTANTS STAMP:

PROFESS 10/4 E17249 EXP. 06-30-2022

SCHOOL DISTRICT:

BONITA UNIFIED

SCHOOL DISTRICT

PROJECT:

SAN DIMAS
HIGH SCHOOL
CULINARY ARTS
CLASSROOM
MODERNIZATION

JOB NUMBER: 12.03.00 DATE: 08/25/21

REVISION: A DATE:

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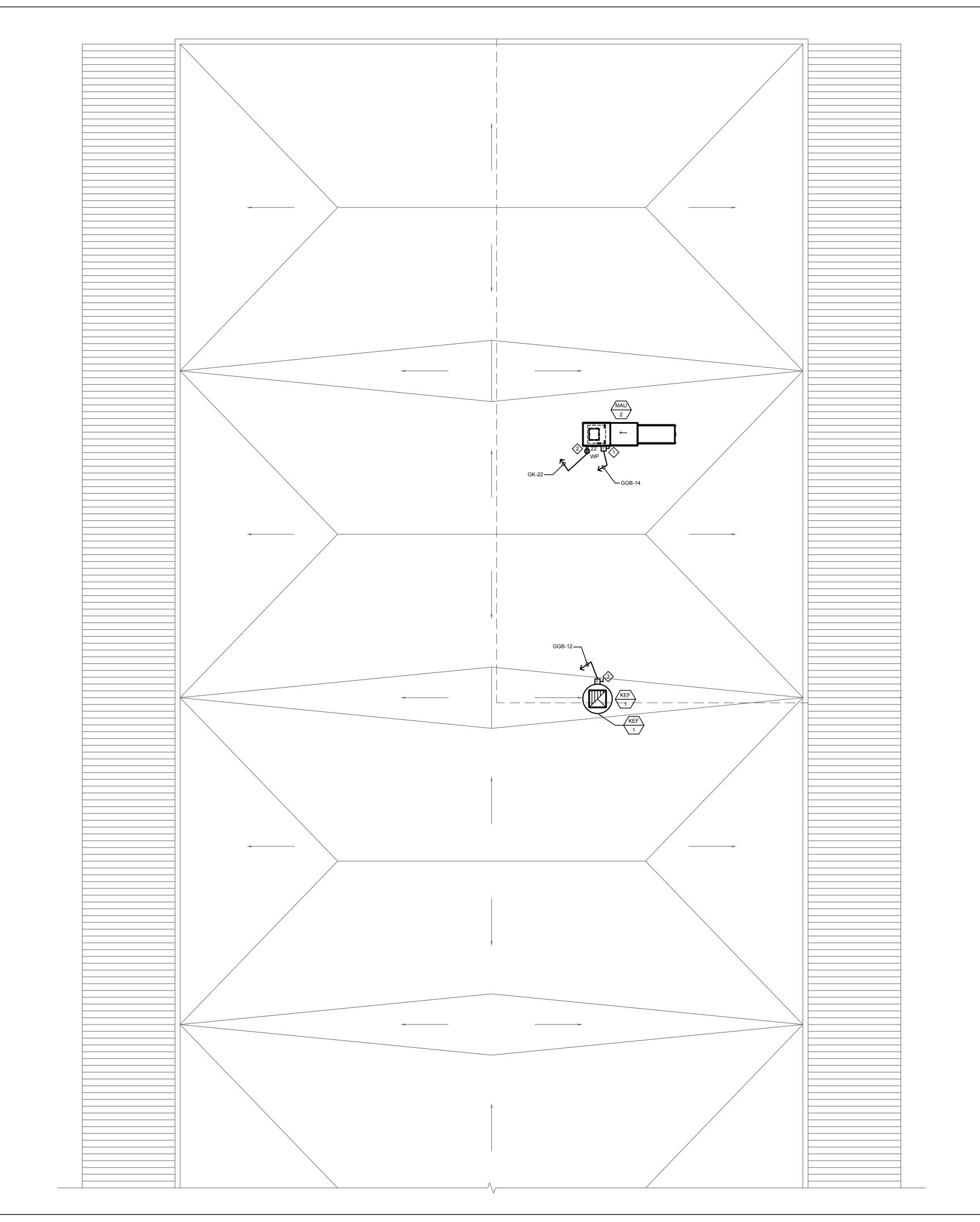
REVISION: DATE:

DRAWING TITLE:

DEMO & REMODEL LIGHTING FLOOR PLANS

DRAWING NO.:

E2.2



GENERAL NOTES

- 1. REFER TO E0.1 & E0.2 FOR FURTHER NOTES.
- 2. REFER TO MECHANICAL AND PLUMBING DRAWINGS FOR EXACT LOCATION OF ALL EQUIPMENT AND DEVICES INCLUDING INTERLOCKING & OTHER SPECIFIC REQUIREMENTS.
- 3. VERIFY EXACT LOCATION AND MOUNTING HEIGHT OF ALL EQUIPMENT, DEVICES, OUTLETS AND RECEPTACLES PER ARCHITECTURAL DRAWINGS PRIOR TO ROUTING THE CONDUITS.
- 4. VERIFY EXACT LOCATION OF J-BOXES (POINT OF CONNECTION) FOR DIRECT CONNECTED EQUIPMENT WITH EQUIPMENT MANUFACTURER. VERIFY THEIR REQUIREMENTS PRIOR TO ROUTING ANY CONDUIT.
- 5. ALL ELECTRICAL OUTLETS AND EQUIPMENT THAT ARE EXPOSED TO OUTSIDE ENVIRONMENT SHALL BE WEATHERPROOF TYPE NEMA-3R.
- 6. ALL RECEPTACLES LOCATED OUTDOORS SHALL BE GFCI, WP TYPE.
- 7. ALL BRANCH CIRCUITS SHALL BE SIZED FOR MAXIMUM VOLTAGE DROP OF 3% AT DESIGN LOAD PER TITLE 24.
- 8. FOR ALL OUTLETS, CONTRACTOR TO PROVIDE SUFFICIENT CONDUITS BENDS AND CLEARANCE WITH STRUCTURE.
- 9. PROVIDE INDIVIDUAL NEUTRAL FOR MULTI-WIRE BRANCH CIRCUIT .
- 10. CONTRACTOR SHALL COORDINATE ALL EQUIPMENT POWER REQUIREMENTS WITH EQUIPMENT MANUFACTURER PRIOR TO ROUGH-IN.

REMODEL KEY NOTES

- PROVIDE 30AS/25AF, 1P, 120V NEMA 3R DISCONNECT SWITCH WITH NEMA 3R ENCLOSURE FOR MAU-2 POWER CONNECTION. PROVIDE 3/4"C, 2#10CU + 1#10 GND. MAU-2 SHALL BE INTERLOCK WITH KEF-1. PROVIDE FINAL CONNECTIONS AS REQUIRED. ROUTE POWER THROUGH HOOD CONTROL PANEL. REFER TO MECHANICAL PLANS FOR CONTROL REQUIREMENTS.
- PROVIDE ROOF MOUNTED RECEPTACLE WITH NEMA 3R BOX AND WEATHER PROOF COVER.
- PROVIDE 30AS/25AF, 1P, 120V MOTOR RATED SWITCH WITH NEMA 3R ENCLOSURE FOR KEF-1 POWER CONNECTION. PROVIDE 3/4"C, 2#10 CU + 1#10 GND. KEF-1 SHALL BE INTERLOCK WITH MAKE UP AIR UNIT (MAU-2). PROVIDE CONTROL WIRING CONNECTIONS AND RELAY FOR INTERLOCKING. ROUTE POWER THROUGH HOOD CONTROL PANEL. REFER TO MECHANICAL PLANS FOR CONTROL REQUIREMENTS.

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SCHOOL DISTRICT: BONITA UNIFIED SCHOOL DISTRICT

PROJECT:

SAN DIMAS HIGH SCHOOL **CULINARY ARTS** CLASSROOM MODERNIZATION

JOB NUMBER: 12.03.00 DATE: 08/25/21

REVISION: 1 DATE: _ REVISION: 2 DATE:

DRAWING TITLE:

REMODEL POWER **ROOF PLAN**

DRAWING NO.:

E2.3

TRUE NORTH

REMODEL POWER ROOF PLAN

SCALE: 1/4" = 1'-0"

CULINARY ARTS (G-9)

CLASSROOM G-8

GENERAL NOTES

1. COORDINATE ALL DEMOLITION SCOPE OF WORK WITH OTHER DISCIPLINES

DEMO KEY NOTES

PROTECTED FOR THE REINSTALLATION. REFER TO REMODEL PLAN FOR THE ADDITIONAL INFORMATION. ALL CONDUIT AND WIRING FOR SUCH SYSTEMS

AND PROTECTED FOR THE REINSTALLATION. REFER TO REMODEL PLAN FOR

1 EXISTING SECURITY SYSTEM DEVICES TO BE DISCONNECTED AND

(2) EXISTING WIRELESS ACCESS POINT "WAP" DEVICE TO BE DISCONNECTED

TO BE REMOVED BACK TO SOURCE.

THE ADDITIONAL INFORMATION.

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CONSULTANTS STAMP:



BONITA UNIFIED
SCHOOL DISTRICT

PROJECT:

SAN DIMAS
HIGH SCHOOL
CULINARY ARTS
CLASSROOM
MODERNIZATION

JOB NUMBER: 12.03.00 DATE: 08/25/21

REVISION: DATE: _
REVISION: DATE: _

DRAWING TITLE:

DEMO SIGNAL & COMMUNICATION FLOOR PLAN

DRAWING NO.:

E3.1D

TRUE NORTH

SCALE: 1/4" = 1'-0"

GENERAL NOTES

REMODEL KEY NOTES

RECONNECT EXISTING PA SPEAKERS. PROVIDE 3/4"C. WITH SPEAKER CABLES TERMINATE AT EXISTING PA CABINET.

PROVIDE 3/4"C. TO SECURITY SYSTEM CABINET CABLES AS REQUIRED BY MANUFACTURER.

PROVIDE 3/4"C. (2) CAT. 6 DATA CABLE TO EXISTING IDF.

PROVIDE 1"C. WITH (2) CAT. 6A CABLES TERMINATE AT EXISTING DATA EQUIPMENT RACK.

PROVIDE 3/4"C. WITH (1) CAT. 6A CABLE

- 1. ALL CABLES SHALL BE ROUTED IN CONDUITS.
- MINIMUM CONDUIT SIZE SHALL BE 3/4"C. VERIFY PLACEMENT OF CEILING DEVICES WITH ARCHITECT REFLECTED CEILING
- IDENTIFICATION STAMP DIV. OF THE STATE ARCHITECT APP: 03-121968 INC: REVIEWED FOR SS FLS ACS

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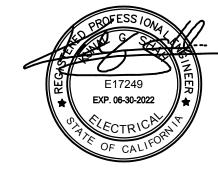




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CONSULTANTS STAMP:



SCHOOL DISTRICT: BONITA UNIFIED SCHOOL DISTRICT

PROJECT:

SAN DIMAS HIGH SCHOOL **CULINARY ARTS** CLASSROOM MODERNIZATION

JOB NUMBER: 12.03.00 DATE: 08/25/21

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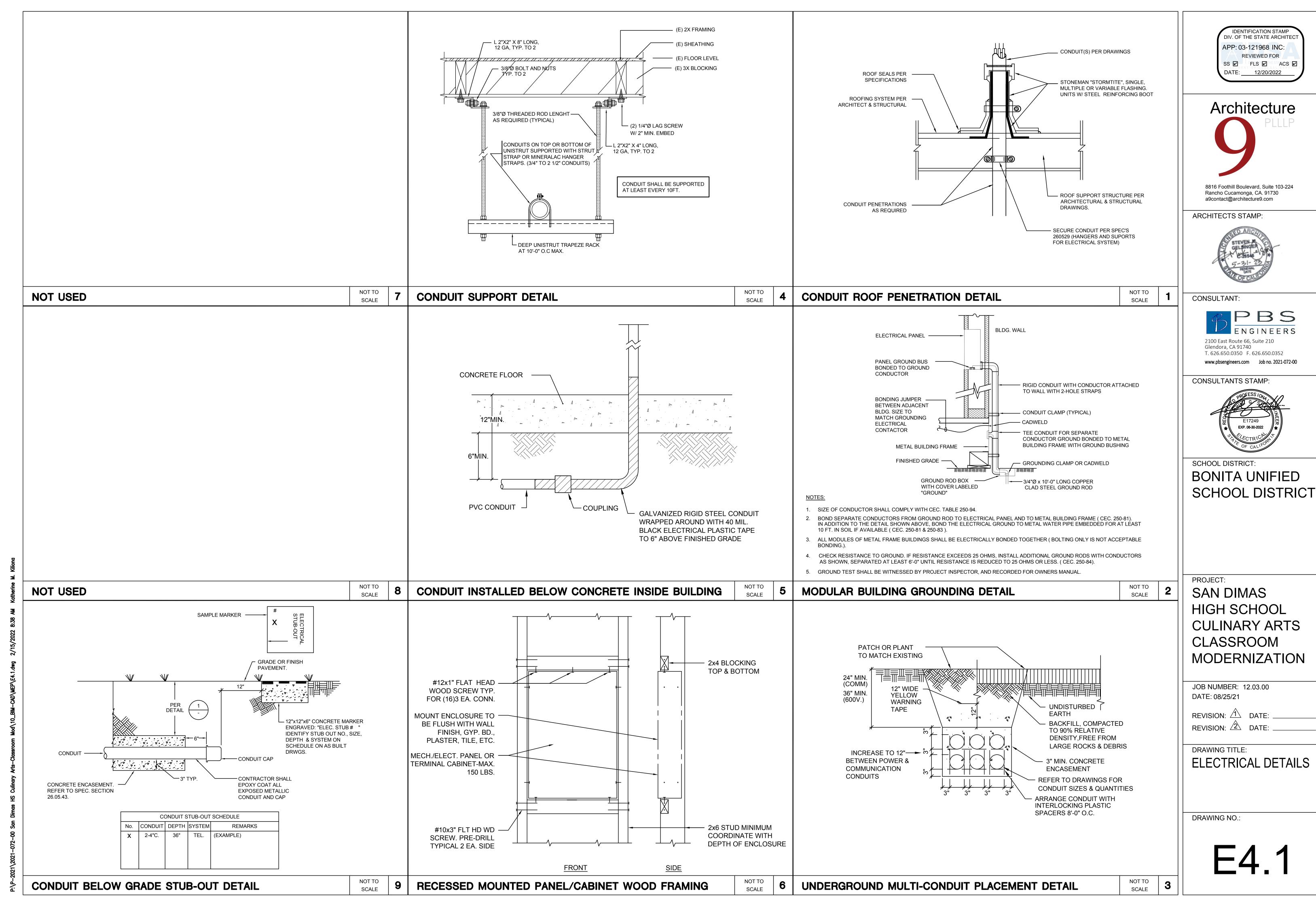
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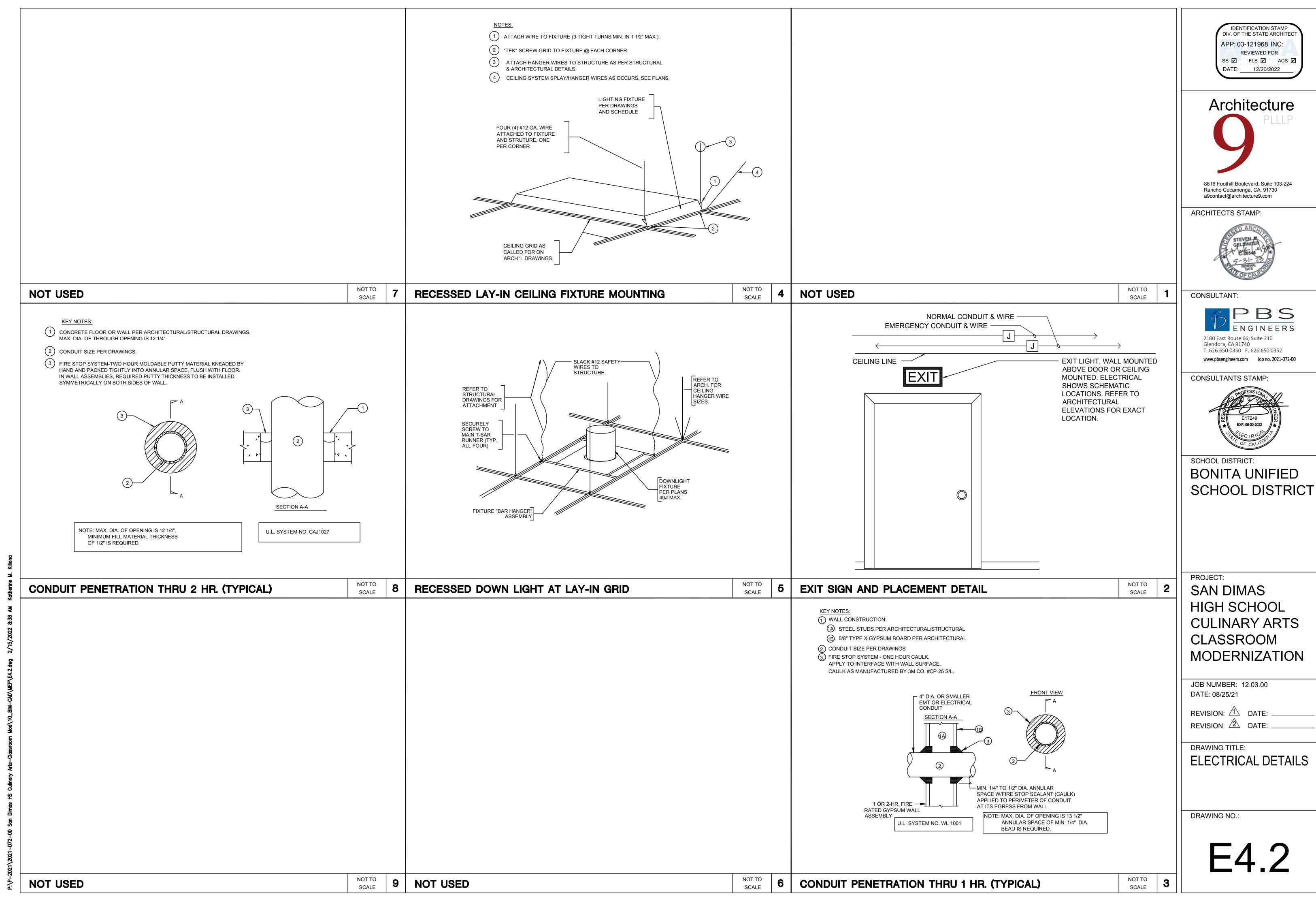
REMODEL SIGNAL & COMMUNICATION FLOOR PLAN

DRAWING NO.:

SCALE: 1/4" = 1'-0"

REMODEL SIGNAL & COMMUNICATION FLOOR PLAN





FIRE ALARM WORK SCOPE

THE CONTRACTOR IS TO ACCOMPLISH THE FOLLOWING:

- INSTALL SMOKE DETECTORS, SPEAKERS/STROBES IN AREAS AS SHOWN ON THE PLAN DRAWINGS.
- RE-PROGRAM AND RE-TEST THE (E) FIRE ALARM CONTROL PANEL AND AL AFFECTED CIRCUITS. UPDATE THE GRAPHIC ANNUNCIATOR TO ACCEPT

%	VOLTAGE DROP

OPERATING VOLTAGE = 24-VD

- D: DISTANCE, FEET (LENGTH ONE WAY FROM THE POWER SUPPLY).
- K: DIRECT CURRENT CONSTANT, CONDUCTOR RESISTANCE IN OHMS PER 1000 FEET. COPPER=12.9 ALUM=21.2
- I: TOTAL LOAD CURRENT (AMPERES) IN 100%.
- CM: CIRCULAR MILS OF THE CIRCUIT CONDUCTOR AS LISTED IN CHAPTER 9. TABLE 8
- 24: 24 VOLT DC

 $VD = 2 \times K \times I \times D$

SEQUENCE OF OPERATION							
DEVICE	MANUAL PULL STATION	AREA SMOKE/ HEAT DETECTOR	120VAC POWER FAILURE	DUCT SMOKE DETECTOR	SPRINKLE POST INDICATOI SWITCH		
SOUND CONTROL PANEL TROUBLE BUZZER	ON WIRING FAULT	ON WIRING FAULT	YES	ON WIRING FAULT	YES		
ACTIVATE RELAY FOR MONITORING (ALARM OR TROUBLE)	YES	YES	YES	YES	YES		
SOUND SPRINKLER BELL	NO	NO	NO	NO	NO		
ANNUNCIATE AT CENTRAL STATION FACP (ALARM OR TROUBLE)	YES	YES	YES	YES	YES		
ANNUNCIATE AT REMOTE FA ANNUNCIATOR (ALARM OR TROUBLE)	YES	YES	YES	YES	YES		
ACTIVATE AUDIBLE/VISUAL ALARM SIGNAL THROUGHOUT BILDING	YES	YES	NO	YES	NO		
SHUT DOWN ALL AIR HANDLING (HVAC) UNITS	-	YES	NO	YES	NO		
RELEASE ALL ELECTRO MAGNETICALLY HELD DOORS THROUGHOUT BUILDING	YES	YES	YES	NO	YES		
ACTIVATE ELEVATOR SHAFT SMOKE DAMPER	NO	NO	NO	NO	NO		
CLOSE SMOKE/FIRE DAMPER	NO	NO	NO	NO	NO		
SOUND SPRINKLER BELL	NO	YES	YES	YES	NO		

	FIRE ALARM SYMBOL LIST							
SYMBOL	MFG.	PART NO.	DESCRIPTION	MNTG. HEIGHT/ DETAILS	CSFM LISTING NO.			
(E) FACP	NOTIFIER	AM-2020	(E) FIRE ALARM CONTROL PANEL		EXISTING			
(E) ANN	NOTIFIER	LCD-80	(E) REMOTE ANNUNCIATOR		EXISTING			
(E) FAPS	NOTIFIER	FCPS-24S8	(E) REMOTE POWER SUPPLY		EXISTING			
СМ	NOTIFIER	FCM-1	CONTROL MODULE	WALL /CEILING MOUNTED	7300-0028:0219			
MM	NOTIFIER	FMM-1	MONITOR MODULE	WALL /CEILING MOUNTED	7300-0028:0219			
⊠∙	SYSTEM SENSOR	SPSV	WALL MOUNTED MULTI 'FIRE SPEAKER/STROBE	WALL MOUNTED	7320-1653:0201			
	NOTIFIER	FCO-951	MULTI-CRITERIA FIRE/CO SMOKE DETECTOR	ON CEILING	7272-0028:0510			
S	SYSTEM SENSOR	B200S	STANDARD BASE	ON CEILING	7300-1653:0238			
\Box	NOTIFIER	FST-851	AREA HEAT DETECTOR (ADDRESSABLE) - ATTIC	ABOVE CEILING	7270-0028:0196			
L A	NOTIFIER	B710LP	STANDARD BASE	7.50VE OFFERING	7300-0028:0173			

DEVICE IDENTIFICATION F=INITIATION, N= NOTIFICATION — | | L DEVICE NO. G = CLASSROOM BUILDING "G" — CIRCUIT NO.

CENTRAL MONITORING STATION

MONITORING STATION PROVIDER: BAY ALARM: 740 S. ROCHESTER AVE. SUITE D, ONTARIO, CA 91761 CONTACT NUMBER: +1-800-470-1000

SAN DIMAS HIGH SCHOOL ACCOUNT NUMBER: 4076732

DEVICE	MANUAL PULL STATION	AREA SMOKE/ HEAT DETECTOR	120VAC POWER FAILURE	DUCT SMOKE DETECTOR	SPRINKLER POST INDICATOR SWITCH
SOUND CONTROL PANEL TROUBLE BUZZER	ON WIRING FAULT	ON WIRING FAULT	YES	ON WIRING FAULT	YES
ACTIVATE RELAY FOR MONITORING (ALARM OR TROUBLE)	YES	YES	YES	YES	YES
SOUND SPRINKLER BELL	NO	NO	NO	NO	NO
ANNUNCIATE AT CENTRAL STATION FACP (ALARM OR TROUBLE)	YES	YES	YES	YES	YES
ANNUNCIATE AT REMOTE FA ANNUNCIATOR (ALARM OR TROUBLE)	YES	YES	YES	YES	YES
ACTIVATE AUDIBLE/VISUAL ALARM SIGNAL THROUGHOUT BILDING	YES	YES	NO	YES	NO
SHUT DOWN ALL AIR HANDLING (HVAC) UNITS	-	YES	NO	YES	NO
	1			1	

CONTRACTOR SUBMITTAL REQUIREMENT

WHERE CONDUIT IS INSTALLED, CONDUIT FILL SHALL COMPLY WITH 2019 NEC FILL TABLE C.1 (BASED ON TABLE 1, CHAPTER 9)

CONDUIT AND WIRE SPECIFICATIONS

CONDUIT SIZE (UNO)

3/4" MIN.

3/4" MIN.

3/4" MIN.

3/4" MIN.

1" MIN.

1" MIN.

1" MIN.

1" MIN.

3/4" MIN.

3/4" MIN.

3/4" MIN.

3/4" MIN

1" MIN.

1" MIN.

1" MIN.

3/4" MIN.

3/4" MIN.

1" MIN.

DESCRIPTION OF CONTENTS

FIRE ALARM SYSTEM

LABEL

(1)-2/16

(2)-2/16

(3)-2/16 PLUS

 2/16 = WESTPENN CABLE #990; INSIDE ONLY. 2. 2/16 = ALLSTAR CABLE #3216B2-S1-0; UNDERGROUND.

3. #12 = GENERAL CABLE; 12AWG THWN STRANDED

4. #16 = GENERAL CABLE; 16AWG THHN STRANDED

(2)-#12THWN CU WIRES

(4)-#12THWN CU WIRES

(6)-#12THWN CU WIRES

(8)-#12THWN CU WIRES

(1)-2/16 PLUS (2)-#12THWN CU WIRES

(1)-2/16 PLUS (4)-#12THWN CU WIRES

(1)-2/16 PLUS (6)-#12THWN CU WIRES

(1)-2/16 PLUS (8)-#12THWN CU WIRES

(2)-2/16 PLUS (2)-#12THWN CU WIRES

(2)-2/16 PLUS (4)-#12THWN CU WIRES

PLUS (1)-2/14 TWISTED PAIR SHLD. WIRES

PLUS (2)-2/14 TWISTED PAIR SHLD. WIRES

PLUS (3)-2/14 TWISTED PAIR SHLD. WIRES

(2)-#16THHN STRANDED WIRES

(4)-#16THHN STRANDED WIRES

(6)-#16THHN STRANDED WIRES

5. "THWN", "AQUASEAL", OR EQUAL TO BE USED IN WET LOCATIONS.

ALL WIRING TO BE LISTED FOR USE AS REQUIRED BY TITLE 24/CEC. ART. 760.

F1

F2

F3

F4

F5

F10

F11

F12

F20

F#-1

F#-2

- EVIDENCE OF QUALIFICATION FOR SYSTEM INSTALLER. CERTIFICATE FROM FIRE ALARM SYSTEM MANUFACTURER INDICATING THE COMPANY IS FACTORY AUTHORIZED AND CERTIFIED TO INSTALL THE FIRE ALARM SYSTEM AS SPECIFIED ON DRAWINGS.
- SITE PLAN SHOWING CONDUIT AND WIRING BETWEEN BUILDINGS.
- 3. FLOOR PLANS SHOWING DEVICES AND WIRING.
- 4. DRAWINGS SHOWING a) RISER DIAGRAM, b) BATTERY AND VOLTAGE DROP CALCULATIONS, c) TYPICAL DEVICE WIRING DIAGRAMS, d) EQUIPMENT AND WIRING LEGEND, e) APPLICABLE CODES REFERENCE f) SEQUENCE OF
- 5. EQUIPMENT CUT SHEETS WITH CSFM LISTING SHEETS

ALL OTHER LOW VOLTAGE SYSTEMS

- 1. EVIDENCE OF QUALIFICATION FOR SYSTEM INSTALLER.
- 2. SITE PLAN SHOWING CONDUIT AND WIRING BETWEEN BUILDINGS.
- FLOOR PLANS SHOWING DEVICES AND WIRING
- 4. DRAWINGS SHOWING a) RISER DIAGRAM/BLOCK DIAGRAMS, b) TYPICAL DEVICES WIRING DIAGRAMS, c) MAJOR EQUIPMENT ELEVATION, d) EQUIPMENT AND WIRING LEGEND, e) CALCULATION (IF REQUIRED).
- 5. EQUIPMENT CUT SHEETS WITH CLEAR IDENTIFICATION.
- 6. BILL OF MATERIALS.

GENERAL NOTES

- 1. SITE PLAN, FLOOR PLANS, RISER DIAGRAMS, WIRING DIAGRAMS, CALCULATIONS MUST BE SUBMITTED IN AUTO CAD FORMAT. THE CONTRACTOR SHALL COMPLY WITH OWNER'S LABELING FORMAT AND STANDARDS.
- AFTER COMPLETION OF THE PROJECT, THE CONTRACTOR MUST SUBMIT (4) FOUR COPIES OF "AS-BUILT" CONSTRUCTION DRAWINGS WITH PROJECT CLOSING DOCUMENTS INCLUDING TEST REPORT AS REQUIRED PER
- 3. REFER TO ADDITIONAL REQUIREMENT IN RESPECTIVE SYSTEM SPECIFICATION.

COMPLETE FIRE ALARM SYSTEM APPROVAL REQUESTED SUBMITTAL PER DSA GL 2

DSA NOTES, STANDARDS AND GUIDES

- 1. ALL WIRING SHALL BE INSTALLED IN ACCORDANCE WITH C.E.C. ARTICLE 760, POWER LIMITED FIRE PROTECTIVE SIGNALING
- 2. FIRE ALARM DEVICES SHALL BE INSTALLED PER N.F.P.A. 72, 2016 EDITION.
- 3. FIRE ALARM SYSTEM SHALL BE CONNECTED TO DEDICATED POWER SUPPLY WITH CIRCUIT BREAKER WITH LOCK-ON DEVICE AND SHALL INCORPORATE INTERNAL RECHARGEABLE BATTERIES TO PROVIDE A STAND BY OPERATION (100% OF APPLICABLE COMPONENTS FOR 24 HOURS) AND ALARM OPERATION (100% OF APPLICABLE COMPONENTS FOR 5 MINUTES; 15 MINUTES FOR EVAC) AFTER 24 HOURS OF STANDBY OPERATION IN ACCORDANCE WITH N.F.P.A. CHAPTER 10, 2016 EDITION.
- 4. ALL WIRING, ANNUNCIATING DEVICES AND ANNUNCIATOR PANEL SHALL BE SUPERVISED AT THE PRINCIPAL POINT OF ANNUNCIATION. (F/A PANEL TO SUPERVISE ALL CIRCUITS AND INITIATING DEVICES)
- 5. POINT AND COMMON ANNUNCIATION AND T-TAPPING IS PROHIBITED
- PROVIDE ALL NECESSARY BACK BOXES FOR F/A DEVICES, TYPE 45 OR AS REQUIRED.

SHALL BE MADE IN THE PRESENCE OF THE DSA-CERTIFIED PROJECT INSPECTOR.

- 7. VERTICAL RUNS OF FIRE ALARM SYSTEM CONDUCTORS AND CABLES SHALL BE ENCLOSED IN METAL RACEWAYS.
- 8. UPON COMPLETION OF THE INSTALLATION OF THE FIRE ALARM SYSTEM, A SATISFACTORY TEST OF THE ENTIRE SYSTEM
- 9. A STAMPED SET OF APPROVED FIRE ALARM PLANS SHALL BE ON THE JOB SITE AND USED FOR INSTALLATION.
- 10. ANY DEVIATION FROM APPROVED PLANS, INCLUDING THE SUBMITTAL OF DEVICES, SHALL BE APPROVED BY THE DSA.
- 11. ANY DISCREPANCIES BETWEEN THE DRAWINGS AND THE CODE OF RECOGNIZED STANDARDS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER.
- 12. ALL DEVICES ON THE FIRE ALARM SYSTEM SHALL BE APPROVED AND LISTED BY THE CALIFORNIA STATE FIRE MARSHAL..
- 13. CERTIFICATE OF COMPLIANCE SHALL BE SUBMITTED TO THE DSA. AN ACCEPTABLE TEST WITNESSED BY THE DSA SHALL BE PERFORMED PRIOR TO FINAL APPROVAL PER NFPA 72 2016 CHAPTER 14.4.1.1 TESTING.
- 14. ALL CONDUCTORS SHALL BE POWER LIMITED COPPER AND INSTALLED WITHIN A METALLIC RACEWAY, CONDUITS SHALL BE A
- 15. SEAL ALL CONDUIT PENETRATIONS THROUGH THE FIRE RATED WALLS AND FLOORS WITH APPROVED SAME RATING FIRE
- 16. PROVIDE SUPPORT FOR ALL CONDUITS AND VERTICAL WIRING AS REQUIRED BY N.E.C.
- 17. REFER TO FIRE ALARM SPECS FOR MANUFACTURERS CUT SHEETS AND CALIFORNIA STATE FIRE MARSHAL LISTINGS.
- 18. UPON COMPLETION OF THE INSTALLATION A SATISFACTORY TEST OF THE ENTIRE SYSTEM SHALL BE MADE IN THE PRESENCE OF THE ENFORCING AGENCY.
- 19. THE FIRE ALARM SYSTEM SHALL CONFORM TO THE C.E.C. ARTICLE 760, DEVICES SHALL BE INSTALLED PER 2016 NFPA 72. PROVIDE ALL WIRING BY THE ELECTRICAL CONTRACTOR.
- 20. WIRING SHALL NOT BE LOOPED THROUGH DEVICES; WIRE MUST BE CUT FOR IN AND OUT.
- 21. ALL DEVICES IN THE ALARM SYSTEM SHALL BE COMPATIBLE AND INSTALLED TO MANUFACTURERS SPECIFICATIONS.
- 22. AREAS HAVING MORE THAN 2 STROBES IN THE FIELD OF VIEW SHALL BE SYNCHRONIZED.
- 23. SMOKE DETECTORS AND HEAT DETECTOR LOCATIONS ARE BASED ON SMOOTH CEILING WITH MAXIMUM HEIGHT OF 10 FEET UNLESS OTHERWISE NOTED.
- 24. STROBE LOCATION IS BASED ON 10 FOOT CEILING HEIGHT AND ARE INSTALLED ACCORDING TO NFPA 72, 2016 EDITION REQUIREMENTS UNLESS OTHERWISE NOTED.
- 25. WALL-MOUNTED STROBES SHALL HAVE THEIR BOTTOM LEN NOT LESS THAN 80 INCHES ABOVE FINISHED FLOOR AND NO GREATER THAN 96 INCHES TO THE TOP OF THE LENS ABOVE FINISHED FLOOR.
- 26. TOP OF PULL STATIONS SHALL BE MOUNTED AT 48" ABOVE FLOOR LEVEL
- 27. ALL FIRE ALARM DEVICES ON THE CAMPUS SHALL BE SYNCHRONIZED.
- 28. ALL FIRE ALARM CIRCUITS SHALL BE LABELED AT CONNECTIONS AND AT JUNCTION BOXES. ALL CONCEALED CONDUIT, JUNCTION BOXES AND COVERS SHALL BE RED IN COLOR, ALL CONDUIT SHALL BE CONCEALED WHERE POSSIBLE, ALL EXPOSED CONDUITS SHALL NOT BE RED AND SHALL BE WIREMOLD 700 OR EQUAL
- 29. FIRE ALARM DRAWINGS ARE SCHEMATIC IN NATURE ONLY. CONTRACTOR TO ROUTE CONDUIT AS FIELD CONDITIONS
- 30. CONDUIT AND JUNCTION/BACK BOXES ARE NOT TO BE USED FOR UNRELATED WIRING. ALL WIRING SHALL BE IN CONDUIT.
- ALL CONDUIT SIZES INDICATED IN DRAWINGS ARE MINIMUM. 31. FIRE ALARM SYSTEM SHALL BE INSTALLED BY FACTORY NOTIFIER OR APPROVED EQUAL AUTHORIZED REPRESENTATIVE.
- 32. PER CFC 901.5.1: OCCUPANCY TO ANY PORTION OF BUILDING/STRUCTURE PROHIBITED UNTIL THE REQUIRED SYSTEM IS
- INSTALL AND CERTIFIED.
- 33. PER CFC LASTED CODE SECTION: RECORD (AS-BUILT) DRAWINGS SHALL BE MAINTAINED ON PREMISES MINIMUM THREE (3)
- 34. PER CFC 907.8.4: SMOKE DETECTOR(S) SHALL BE TESTED BY MANUFACTURER'S CALIBRATED SENSITIVITY TEST METHOD. SENSITIVITY TEST INSTRUMENT OR OTHER CALIBRATED SENSITIVITY TEST METHOD. SENSITIVITY REPORT SHALL REMAIN ON PREMISE WITH RECORD DRAWING.
- 35. VISIBLE DEVICES SHOULD NOT EXCEED TWO FLASHES PER SECOND AND SHOULD NOT BE SLOWER THAN ONE FLASH EVER'S SECOND. THE DEVICE SHALL HAVE A PULSING LIGHT SOURCE NOT LESS THAN 15 CANDELLA. VISIBLE DEVICES WITHIN 55' FROM EACH OTHER SHALL BE SYNCHRONIZED.
- 36. CHANGES TO THE APPROVED DRAWINGS AND SPECIFICATIONS SHALL BE MADE BY ADDENDA OR CHANGE ORDERS APPROVED BY THE DIVISION OF THE STATE ARCHITECT, AS REQUIRED BY SECTION 4-338, PART 1, TITLE 24, CCR.
- 37. A "DSA CERTIFIED" PROJECT INSPECTOR EMPLOYED BY THE DISTRICT (OWNER) AND APPROVED BY THE DIVISION OF THE STATE ARCHITECT SHALL PROVIDE CONTINUOUS INSPECTION OF THE WORK. THE DUTIES OF THE INSPECTOR ARE DEFINED IN SECTION 4-342, CALIFORNIA BUILDING STANDARD ADMINISTRATIVE CODE (PART 1, TITLE 24, CCR).
- 38. A DSA INSPECTOR WITH CLASS 2 RBIP CERTIFICATION IS REQUIRED FOR THIS PROJECT.
- 39. THE INTENT OF THESE DRAWINGS AND SPECIFICATIONS IS THAT THE WORK OF THE ALTERATION, REHABILITATION OR RECONSTRUCTION IS TO BE IN ACCORDANCE WITH TITLE 24, CALIFORNIA CODE OF REGULATIONS. SHOULD ANY EXISTING CONDITIONS SUCH AS DETERIORATION OR NON-COMPLYING CONSTRUCTION BE DISCOVERED WHICH IS NOT COVERED BY THE CONTRACT DOCUMENTS WHEREIN THE FINISHED WORK WILL NOT COMPLY WITH TITLE 24, CALIFORNIA CODE OF REGULATIONS, A CHANGE ORDER, OR A SEPARATE SET OF PLANS AND SPECIFICATION, DETAILING AND SPECIFYING THE REQUIRED WORK SHALL BE SUBMITTED TO AND APPROVED BY THE DIVISION OF THE STATE ARCHITECT BEFORE PROCEEDING WITH THE WORK. {REFERENCE: SECTION 4-317 (c), CALIFORNIA BUILDING STANDARDS ADMINISTRATIVE CODE (PART 1, TITLE 24, CCR)}
- 40. AUTOMATIC FIRE ALARM SYSTEMS SHALL TRANSMIT THE ALARM, SUPERVISORY AND TROUBLE SIGNALS TO AN APPROVED SUPERVISING STATION AS REQUIRED BY NFPA 72 AS AMENDED BY ARTICLE 91. THE SUPERVISION STATION SHOULD BE LISTED AS EITHER UUFX OR UUJS BY UNDERWRITERS LABORATORY OR SHALL MEET THE REQUIREMENTS OF FACTORY MUTUAL RESEARCH APPROVAL STANDARD 3011. SUPERVISION OF SYSTEM AND LEASED TELEPHONE LINES SHALL BE ARRANGED BY OWNER.
- 41. PROJECT INSPECTOR SHALL PROVIDE DSA DISTRICT FIELD ENGINEER, OWNER (AOR) & LOCAL FIRE AUTHORITY WITH COPY OF FIRE ALARM RECORD OF COMPLETION.
- 42. AUDIBLE APPLIANCES SHALL PROVIDE 15 dba. ABOVE AMBIENT NOISE LEVELS IN ALL OCCUPIED AREAS.
- 43. CUTTING, BORING, SAW CUTTING, OR DRILLING THROUGH THE NEW OR EXISTING STRUCTURAL ELEMENTS TO BE DONE ONLY WHEN SO DETAILED IN THE DRAWINGS OR ACCEPTED BY THE LAUSD ARCHITECT AND STRUCTURAL ENGINEER WITH DAS
- 44. AN INSPECTOR WHO IS SPECIFICALLY QUALIFIED IN MECHANICAL & ELECTRICAL WORK WILL BE REQUIRED FOR THIS
- 45. CUTTING, BORING, SAW CUTTING, OR DRILLING THROUGH THE NEW OR EXISTING STRUCTURAL MEMBERS ARE TO BE DONE ONLY WHEN SO DETAILED IN THE DRAWINGS, OR ACCEPTED BY THE ARCHITECT AND STRUCTURAL ENGINEER WITH APPROVAL OF DSA.

IDENTIFICATION STAMP DIV. OF THE STATE ARCHITEC APP: 03-121968 INC: **REVIEWED FOR** SS 🗹 FLS 🗹 ACS 🗹 12/20/2022

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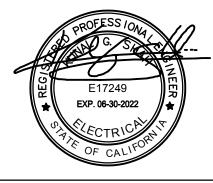
ARCHITECTS STAMP:



CONSULTANT:



CONSULTANTS STAMP:



SCHOOL DISTRICT: **BONITA UNIFIED** SCHOOL DISTRICT

PROJECT:

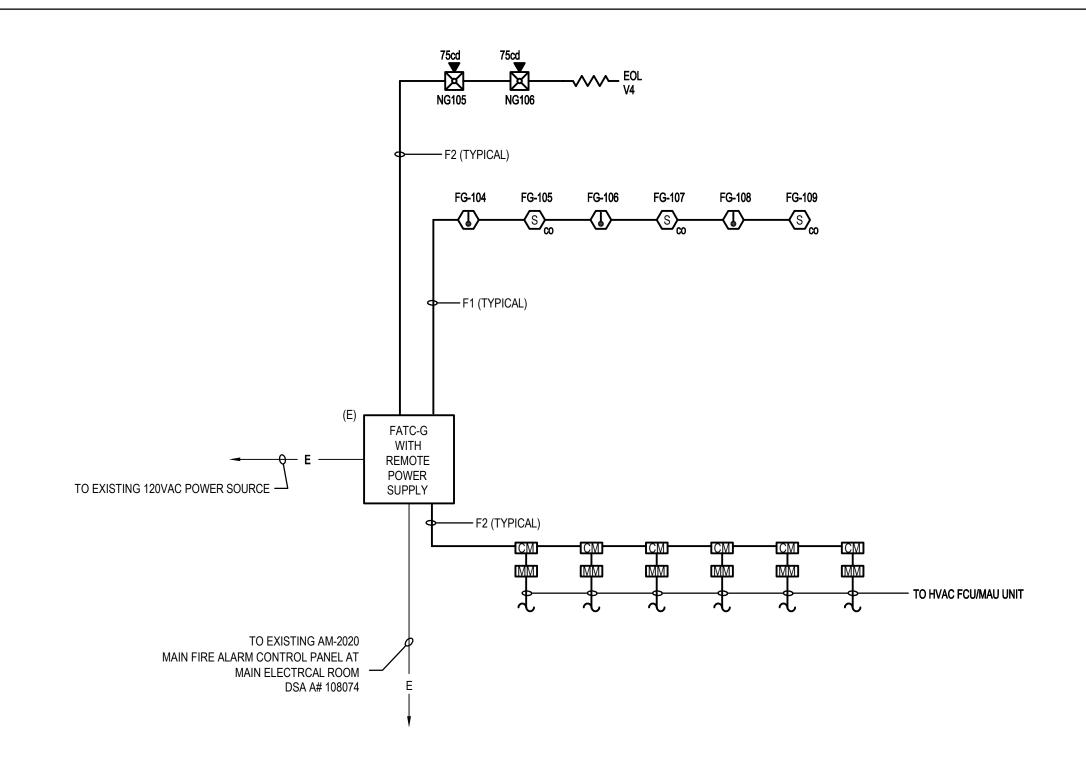
SAN DIMAS HIGH SCHOOL **CULINARY ARTS** CLASSROOM **MODERNIZATION**

JOB NUMBER: 12.03.00 DATE: 08/25/21

REVISION: 2 DATE:

DRAWING TITLE:

FIRE ALARM NOTES & SYMBOLS LIST



FIRE ALARM SYSTEM WIRING DIAGRAM

NOTE: NOT TO SCALE

			ry Calculatio				
			mas Highso				
		DI	NG G, FAP	<u>S</u> –(
Description	Quantity		Standby		Total	Alarm	Total
			(Amps)		Standby	(Amps)	Alarm
					(Amps)		(Amps)
(E) FACP	0	x	0.031000	T	0.000000	0.223000	0.00000
(E) FMM-1	1	x	0.000200	T	0.000200	0.000200	0.00020
(E) FCM-1	1	х	0.000300	Т	0.000300	0.000300	0.00030
(E) FRM-1	1	х	0.000300		0.000300	0.000300	0.00030
(E) PULL STATION	0	х	0.000300		0.000000	0.000300	0.00000
(E) STROBE 15CD	0	х	0.000000		0.000000	0.041000	0.00000
(E) STROBE 30CD	6	х	0.000000		0.000000	0.065000	0.39000
(E) STROBE 75CD	1	х	0.000000		0.000000	0.116000	0.11600
(E) STROBE 110CD	0	х	0.000000		0.000000	0.155000	0.00000
(E) HORN/STROBE 15CD	0	х	0.000000		0.000000	0.093000	0.00000
(E) HORN/STROBE 30CD	0	х	0.000000		0.000000	0.144000	0.00000
(E) HORN/STROBE 60CD	0	х	0.000000		0.000000	0.157000	0.00000
(E) HORN/STROBE 110CD	0	х	0.000000		0.000000	0.197000	0.00000
(E) HORN (WP)	2	х	0.000000		0.000000	0.050000	0.10000
(E) HORN	0	х	0.000000		0.000000	0.050000	0.00000
(E) SMOKE DETECTOR	10	х	0.000200		0.002600	0.000200	0.00260
(E) HEAT DETECTOR	6	х	0.000200		0.001800	0.000200	0.00180
(E) FCPS (ALTRONIX)	1	х	0.005000		0.005000	0.001750	0.00175
(E) UDACT	1	x	0.100000		0.000000	0.100000	0.00000
(E) UZC-256	1	x	0.035000		0.000000	0.035000	0.00000
(N) SPEAKER/STROBE 75CD	2	×	0.000000		0.000000	0.158000	0.31600
(N) SMOKE DETECTOR (CO)	3	x	0.000200		0.000600	0.000200	0.00060
(N) HEAT DETECTOR	3	x	0.000200		0.000600	0.000200	0.00060
Total:				_=	0.011400		0.93015
Battery Calculation		Mı	ıltiplier	L	Amp Hours		
Supervisory Hours	24	x	0.011400	=	0.27360000		
Alarm Hours (5 Minutes)	0.083	х	0.930150	=	0.07720245		
Total Amp Hours				=	0.35080245		
Battery Used (2) (7AH)				<u> =</u>	14.0000000		
Battery Spare (AH)				=	13.6491976		

Worst Case V	oltage Dro	р (Calculations		
San D	imas High	sch	nool		
BUILDING G	, FAPS-0	C	IRCUIT 4		
Description	Quantity		Alarm (Amps)		Total Alarm (Amps)
SPEAKER/STROBE 75CD	2	x	0.158000	=	0.316000
				Ш	
Total Current Draw:				=	0.316000
Wire Size 14	0	x	4110	=	0
Wire Size 12	1	×	6530	=	6530
Wire Used Circular Mills				=	6530
Distance to End of Circuit:				=	200
Multiplier				=	21.6
Voltage				=	24
Multiplier				=	4.166
Percentage Voltage Drop			_	=	0.871

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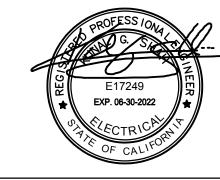
ARCHITECTS STAMP:



CONSULTANT:



CONSULTANTS STAMP:



BONITA UNIFIED
SCHOOL DISTRICT

PROJECT:

SAN DIMAS
HIGH SCHOOL
CULINARY ARTS
CLASSROOM
MODERNIZATION

JOB NUMBER: 12.03.00 DATE: 08/25/21

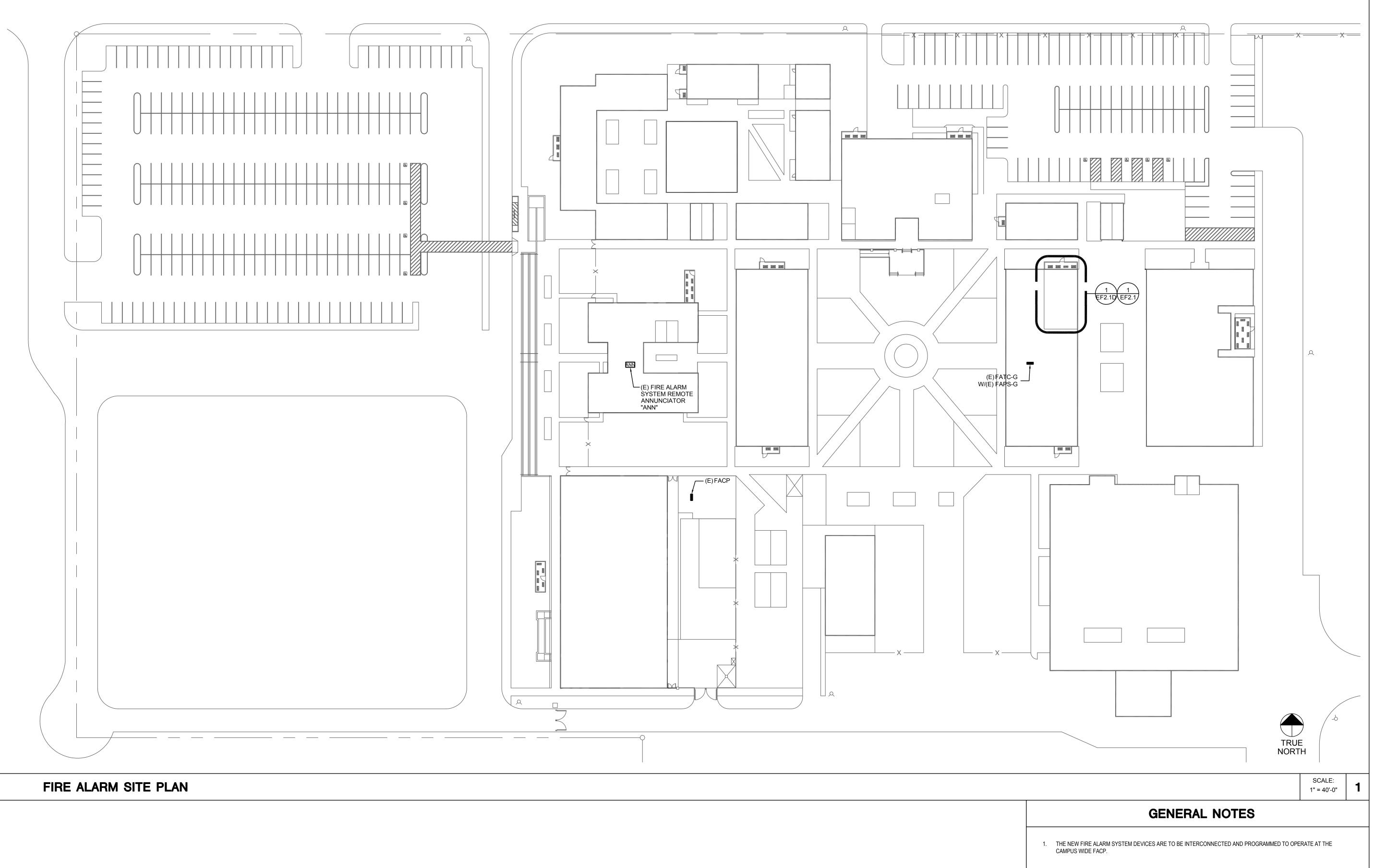
REVISION: 1 DATE: ____

DRAWING TITLE:

F.A. VOLTAGE DROP CALCULATIONS & BATTERY SIZING

DRAWING NO.:

EF0.2



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ARCHITECTS STAMP:



CONSULTANT:



T. 626.650.0350 F. 626.650.0352 www.pbsengineers.com Job no. 2021-072-00

CONSULTANTS STAMP:



BONITA UNIFIED
SCHOOL DISTRICT

PROJECT:

SAN DIMAS
HIGH SCHOOL
CULINARY ARTS
CLASSROOM
MODERNIZATION

JOB NUMBER: 12.03.00 DATE: 08/25/21

REVISION: DATE: _
REVISION: DATE: _

DRAWING TITLE:

FIRE ALARM SITE PLAN

DRAWING NO.:

EF1.1

ZUZI (ZUZI -U/Z-UU SAN DIMAS NS CAIINATY AUS-CIASSIOOM MOA (10_BIM-CAD (MER (Eri.1.amg Z/10)

CULINARY ARTS G-9 CLASSROOM G-8

GENERAL NOTES

- EXISTING FIRE ALARM SYSTEM NOT IN AREA OF WORK SHALL REMAIN OPERATIONAL AT ALL TIMES.
- EXISTING FIRE ALARM SYSTEM IN AREA SCOPE OF WORK TO BE DEMO BACK TO SOURCE.

DEMO KEY NOTES

1) EXISTING DEVICES TO BE DEMO, CONDUITS AND WIRES TO BE REMOVED BACK TO SOURCE.

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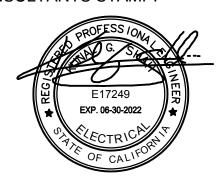
ARCHITECTS STAMP:



CONSULTANT:



CONSULTANTS STAMP:



BONITA UNIFIED
SCHOOL DISTRICT

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SAN DIMAS
HIGH SCHOOL
CULINARY ARTS
CLASSROOM
MODERNIZATION

JOB NUMBER: 12.03.00 DATE: 08/25/21

REVISION: DATE: _
REVISION: DATE: _

DEMO

FIRE ALARM FLOOR PLAN

DRAWING NO.:

EF2.1D

TRUE NORTH

SCALE: 1/4" = 1'-0"

1. ALL INITIATING AND AUDIBLE DEVICES SHALL BE CLASS "B" WIRING SYSTEM, IN CLASS "B" CONDUIT SYSTEM. PROVIDE WIRES PER MANUFACTURES SPECIFICATIONS.

GENERAL NOTES

- 2. CONDUIT SHALL BE MINIMUM OF 3/4", UNLESS OTHERWISE NOTED. FOR WIRING SEE MANUFACTURER SPECIFICATIONS.
- 3. FOR DEVICES LOCATION AND QUANTITY REFER TO THE FLOOR PLANS.
- 4. THE FIRE ALARM SYSTEM DEVICES SHALL BE OPERATED AT 24V D.C. ALL DEVICES SHALL BE SUPPLIED FROM THE FIRE ALARM BATTERY UNIT, UNLESS OTHERWISE NOTED.
- 5. THE FIRE ALARM SYSTEM SHALL CONFORM TO ARTICLE 760 OF CALIFORNIA ELECTRICAL CODE UPON COMPLETION OF THE INSTALLATION OF THE FIRE ALARM SYSTEM.
- 6. THE FIRE ALARM SYSTEM TEST SHALL BE PERFORMED IN THE PRESENCE OF THE IOR AND ENGINEER.
- 7. THE CONTRACTOR SHALL PROVIDE ALL REQUIRED CONTROL AND MONITOR RELAY MODULES NEEDED TO ALLOW THE NEW FIRE ALARM SYSTEM TO COMMUNICATE WITH THE EXISTING BUILDING SYSTEM THAT MUST REMAIN SUCH AS, TAMPER SWITCHES, FLOW SWITCHES, CONTROL MODULES, ETC.
- 8. THE ELECTRICAL CONTRACTOR SHALL ESTABLISH A FINE WATCH PROTOCOL WITH DSA/IOR FOR ALL INSTANCES WHEN THE CAMPUS FIRE ALARM SYSTEM IS NOT IN OPERATION.
- 9. ALL SURFACE MOUNTED RACEWAYS SHALL BE WIRE MOLD AND PAINTED TO MATCH BUILDING SURFACE.
- 10. ALL CONDUITS ROUTED BETWEEN BUILDING SHALL BE A MINIMUM OF 1" CONDUIT.
- 11. REFER TO FIRE ALARM SITE PLAN, SHEET EF1.1 AND RISER DIAGRAM SHEET EF0.2 FOR ADDITIONAL INFORMATION.
- 12. CONTRACTOR SHALL COORDINATE THE NEW FA SYSTEM DEVICES TO BE INTEGRATED INTO THE EXISTING CAMPUS WIDE FA SYSTEM. PROGRAM THE EXISTING FACP TO ACCEPT THE NEW DEVICES.

REMODEL KEY NOTES

- PROVIDE MONITOR AND CONTROL MODULE FOR INTERFACE WITH MUA-1 FOR FAN SHUTDOWN.
- PROVIDE MONITOR AND CONTROL MODULE FOR INTERFACE WITH MUA-2 FOR
- PROVIDE MONITOR AND CONTROL MODULE FOR INTERFACE WITH FCU FOR HVAC SHUTDOWN HVAC SHUTDOWN.
- PROVIDE MONITOR AND CONTROL MODULE FOR INTERFACE WITH ANSUL

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ARCHITECTS STAMP:



CONSULTANT:



Glendora, CA 91740 T. 626.650.0350 F. 626.650.0352 www.pbsengineers.com Job no. 2021-072-00

CONSULTANTS STAMP:



SCHOOL DISTRICT: BONITA UNIFIED SCHOOL DISTRICT

PROJECT:

SAN DIMAS HIGH SCHOOL **CULINARY ARTS** CLASSROOM MODERNIZATION

JOB NUMBER: 12.03.00 DATE: 08/25/21

REVISION: 1 DATE: REVISION: 2 DATE:

DRAWING TITLE: REMODEL FIRE ALARM FLOOR PLAN

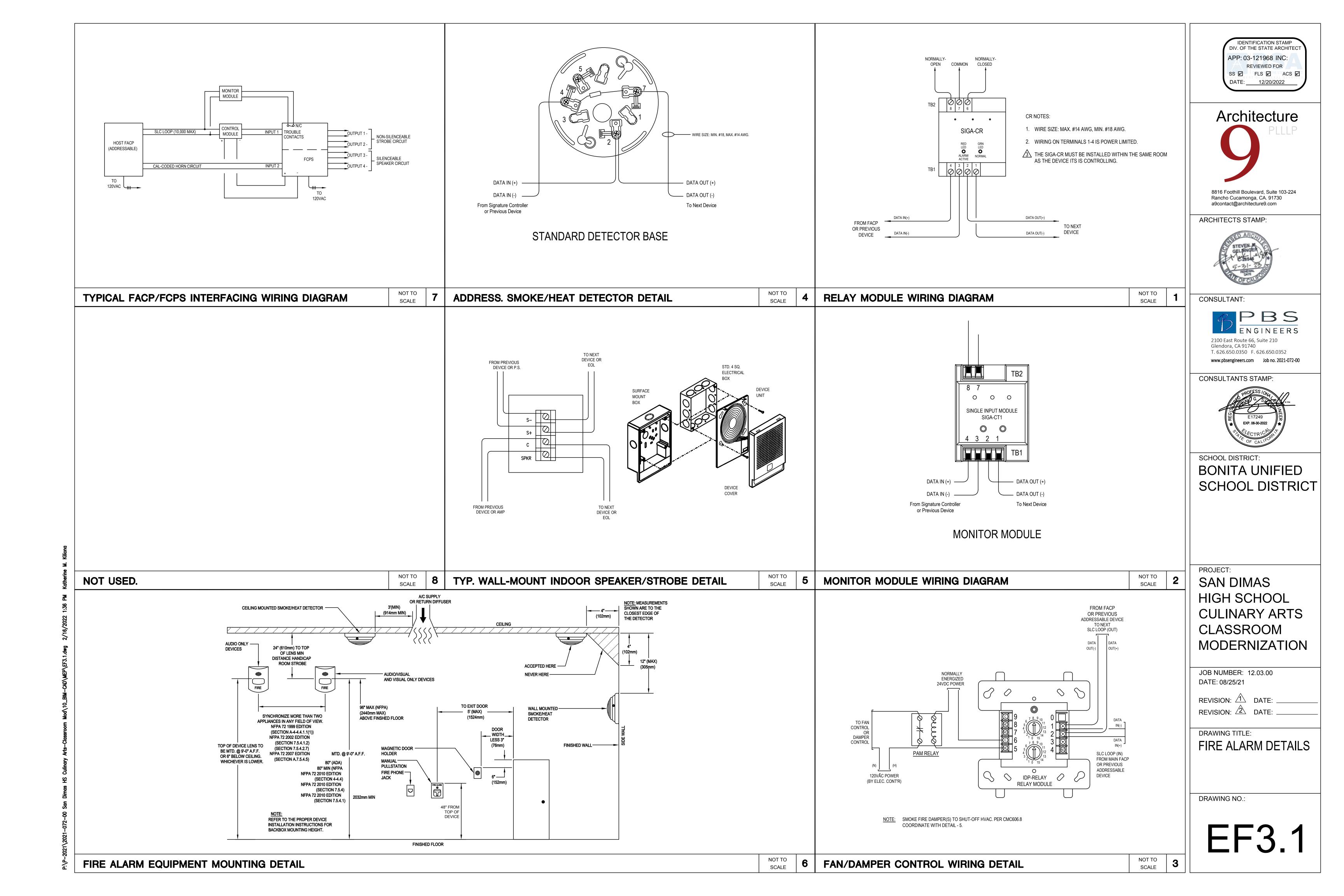
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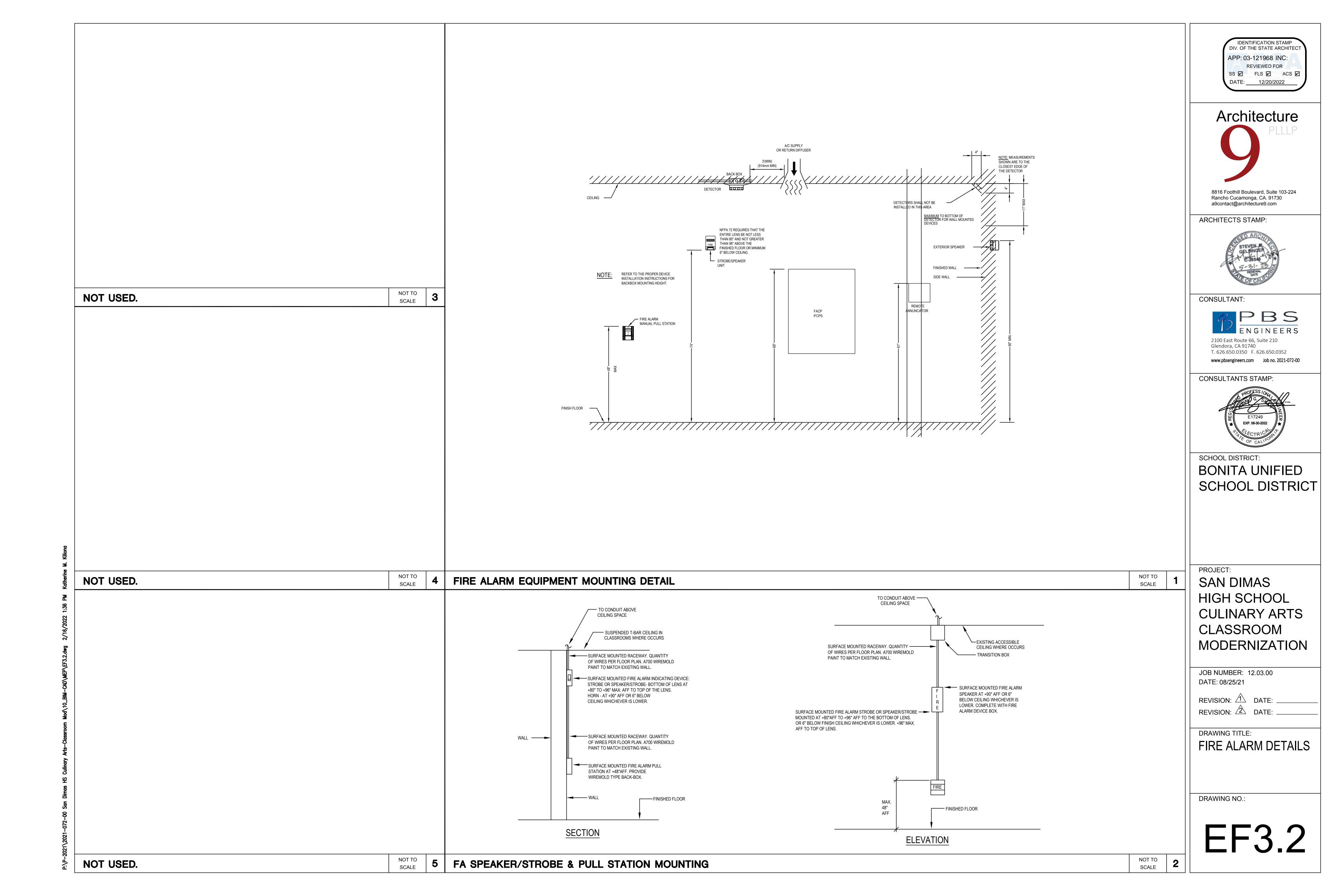
EF2.1

TRUE NORTH

REMODEL FIRE ALARM FLOOR PLAN

SCALE: 1/4" = 1'-0"





- INTENT OF THE DRAWINGS THE NOTES DESCRIBING THE SCOPE OF THE WORK ARE INTENDED AS A GUIDE TO OUTLINE THE NATURE AND EXTENT OF THE WORK. OTHER PARTS OF THE CONTRACT DOCUMENTS, INCLUDING THE DRAWINGS AND SPECIFICATIONS. MAY SHOW AND/OR REFERENCE WORK NOT INCLUDED IN THE NOTES. THE CONTRACTOR SHALL VISIT THE SITE AND EXAMINE THE CONDITIONS THERE AND THOROUGHLY ACQUAINT ONESELF WITH OBSTACLES AND ADVANTAGES FOR PERFORMING THE WORK, AND CAREFULLY REVIEW ALL DRAWINGS AND SECTIONS OF THE SPECIFICATIONS AS THERE ARE REQUIREMENTS SHOWN ON THE DRAWINGS AND CONTAINED IN THE SPECIFICATIONS THAT SIGNIFICANTLY AFFECT THE SCOPE OF THE WORK AS OUTLINED IN THESE NOTES. NO ADDITIONAL CHARGE(S) WILL BE ALLOWED FOR WORK CAUSED BY THE CONTRACTOR'S UNFAMILIARITY WITH THE SITE, AND THE DRAWINGS AND SPECIFICATIONS, OR FAILURE OF THE OWNER OR THE OWNER'S DESIGNATED REPRESENTATIVE OR OWNER'S CONSULTANTS TO ENUMERATE THE COMPLETE SCOPE OF WORK, AS REQUIRED BY THE CONTRACT DOCUMENTS, IN THE ACCOMPANYING NOTES.
- GENERIC NAMES THE DRAWINGS IDENTITY MATERIALS BY GENERIC NAME. FOR A DESCRIPTION OF APPROVED MATERIALS AND INSTALLATION PROCEDURES SEE THE SPECIFICATIONS.
- FINISHES UNLESS OTHERWISE NOTED ON THE DRAWING OR IN THE SPECIFICATIONS THE SELECTION OF COLORS AND TEXTURES FOR FINISH MATERIALS SHALL BE PROVIDED BY THE ARCHITECT PRIOR TO EXECUTION OF THE WORK.
- PROJECT COORDINATION SEE THE GENERAL CONDITIONS, THE SUPPLEMENTARY CONDITIONS AND DIVISION 1, OF THE SPECIFICATIONS FOR SPECIFIC REQUIREMENTS RELATED TO PROJECT COORDINATION.
- 6. CODES AND REGULATIONS ALL WORK SHALL CONFORM TO TITLE 24, CALIFORNIA CODE OF REGULATIONS (CCR).
- THE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL PERMITS REQUIRED BY GOVERNING AUTHORITIES FOR THE COMPLETION OF THE WORK. THE FEES, CHARGES OR OTHER COSTS PAID BY THE CONTRACTOR FOR SAID PERMITS WILL BE REIMBURSED TO THE CONTRACTOR BY THE OWNER IN THE AMOUNTS SO PAID.
- THE CONTRACTOR SHALL PROCURE ALL NOTICES AND LICENSES REQUIRED FOR THE COMPLETION OF THE WORK. THE COST OF THESE NOTICES AND LICENSES IS INCIDENTAL TO OTHER ITEMS OF WORK AND NO ADDITIONAL PAYMENT WILL BE MADE FOR COSTS INCURRED BY OBTAINING NOTICES AND LICENSES OR IN CONFORMING TO THE REQUIREMENTS THEREOF.
- PRIOR TO THE ISSUANCE OF A BUILDING PERMIT, THE CONTRACTOR SHALL HAVE EVIDENCE OF CURRENT WORKMAN'S COMPENSATION INSURANCE COVERAGE.
- GENERAL CONDITIONS THE GENERAL CONDITIONS AND ANY SUPPLEMENTAL CONDITIONS WHICH MAY BE ATTACHED OR INCLUDED AS PART OF OWNER - CONTRACTOR AGREEMENT ARE A PART OF THESE CONTRACT DOCUMENTS.
- THE SPECIFICATIONS WHICH ARE BOUND SEPARATELY ARE PART OF THE CONTRACT. REFERENCE TO SECTIONS OF THE SPECIFICATION IN THE NOTES DESCRIBING THE SCOPE OF WORK TO ASSIST THE CONTRACTOR IN UNDERSTANDING THE COMPLETE SCOPE OF WORK.
- BIDDING ALL CONTRACTORS, SUB OR GENERAL, BIDDING OR CONSTRUCTING ANY PORTION OF THIS PROJECT, SHALL BE HELD TO BE RESPONSIBLE TO REVIEW AND INCLUDE IN ANY BID SUBMITTED, ALL OTHER DRAWINGS AND ARCHITECTURAL, GENERAL NOTES, CIVIL, LANDSCAPE, STRUCTURAL, MECHANICAL, PLUMBING, ELECTRICAL AND EQUIPMENT PLANS AS MAY APPLY TO SAID TRADE BIDDING.
- VERIFICATION THE CONTRACTOR SHALL VERIFY ALL SIZES OR PREPARATORY WORK FOR EQUIPMENT OF OTHERS AND SHALL COORDINATE THE WORK ON THIS CONTRACT WITH ALL WORK FURNISHED BY OTHERS.

CONTRACT DOCUMENTS.

- <u>DISCREPANCIES</u>
 2.1. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, ELEVATIONS AND ALL EXISTING CONDITIONS AT THE SITE BEFORE COMMENCING WORK AND REPORT ANY DISCREPANCIES TO THE ARCHITECT PRIOR TO THE START OF WORK. IN CASE OF CONFLICT BETWEEN ARCHITECTURAL AND CONSULTANT DRAWINGS THE ARCHITECT WILL DETERMINE THE CORRECT INTENT OF THE WORK.
- 12.2. SHOULD THE DRAWINGS IN THEMSELVES OR WITH THE SPECIFICATIONS OR SHOULD THE SPECIFICATIONS DISAGREE IN THEMSELVES THE BETTER QUALITY AND / OR GREATER QUANTITY OF WORK OR MATERIAL SHALL BE ESTIMATED UPON, AND UNLESS OTHERWISE ORDERED IN WRITING SHALL BE FURNISHED AND INSTALLED.
- IF ANY ERRORS OR OMISSIONS APPEAR IN THE CONTRACT DOCUMENTS, THE CONTRACTOR SHALL NOTIFY ARCHITECT IN WRITING OF SUCH ERRORS OR OMISSIONS. IF CONTRACTOR FAILS TO GIVE SUCH NOTICE, HE WILL BE HELD RESPONSIBLE FOR RESULTS OF SUCH ERRORS OR OMISSIONS AND FOR THE COST OF
- DESIGN INTENT THE CONTRACTOR SHALL NOT DEVIATE FROM CONSTRUCTION DESIGN INTENT AND CONSTRUCTION DETAILS WITHOUT OBTAINING PRIOR APPROVAL FROM THE OWNER AND THE ARCHITECT.
- DETAILS DETAILS ARE INTENDED TO SHOW METHOD AND MANNER OF ACCOMPLISHING THE WORK. MINOR MODIFICATIONS MAY BE REQUIRED TO SUIT THE JOB DIMENSIONS OR CONDITIONS AND SHALL BE INCLUDED AS PART OF THE WORK.
- DIMENSIONS DIMENSIONS ARE TO FACE OF STUDS, FACE OF CONCRETE, AND FACE OF MASONRY UNLESS NOTED OTHERWISE. DIMENSIONS AS SHOWN TAKE PRECEDENCE OVER ANY CONDITIONS GRAPHICALLY SHOWN ON THE DRAWINGS. DO NOT SCALE THE DRAWINGS. WHEN IN DOUBT, ASK THE ARCHITECT FOR A CLARIFICATION.
- "TYPICAL" MEANS ALL EXCEPT AS SPECIFICALLY NOTED. "SIMILAR" MEANS THERE ARE SLIGHT VARIATIONS AMONG CONDITIONS WHERE THE DETAILS OCCUR.
- THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE TIMELY ARRIVAL OF ALL SPECIFIED FINISH MATERIALS, EQUIPMENT, LIGHT FIXTURES AND OTHER SUCH MATERIAL(S) TO BE UTILIZED ON THIS PROJECT. THE GENERAL CONTRACTOR SHALL NOTIFY THE ARCHITECT IN WRITING WITHIN 30 DAYS OF THE DATE OF CONTRACT OF THOSE SPECIFIED ITEMS THAT MAY NOT BE READILY AVAILABLE AND OF EQUAL QUANTITY AND DESCRIPTION. IF NOTIFICATION IS NOT RECEIVED BY THE ARCHITECT, THE CONTRACTOR SHALL ACCEPT RESPONSIBILITY FOR THE PROPER ORDERING AND FOLLOW UP ON SPECIFIED ITEMS AND SHALL PURSUE WHATEVER MEANS NECESSARY AT NO ADDITIONAL COST TO THE OWNER, TO INSURE AVAILABILITY OF ALL SPECIFIED ITEMS SO AS NOT TO CREATE A HARDSHIP ON THE OWNER AND NOT TO DELAY PROGRESS OF THE WORK. NO EXTENSION OF TIME TO THE CONTRACT WILL BE ALLOWED FOR THE CONTRACTOR'S INABILITY TO SECURE SPECIFIED ITEMS
- 17.2. THE CONTRACTOR SHALL COORDINATE HIS WORK WITH ALL TRADES AT THE SITE. ANY COSTS TO INSTALL WORK TO ACCOMPLISH SAID COORDINATION WHICH DIFFERS FROM THE WORK AS SHOWN ON THE PLANS SHALL BE INCURRED BY THE CONTRACTOR. ANY DISCREPANCIES, AMBIGUITIES OR CONFLICTS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/ENGINEER FOR CLARIFICATION. ANY SUCH CONFLICTS SHALL BE SUJBECT TO THE INTERPRETATION OF THE ARCHITECT AT NO ADDITIONAL COST TO THE OWNER.
- COORDINATE ENTIRE INSTALLATION OF THE HVAC SYSTEM WITH THE WORK OF ALL OTHER TRADES PRIOR TO ANY FABRICATION OR INSTALLATION. PROVIDE ALL FITTINGS, OFFSETS, AND TRANSITIONS AS REQUIRED FOR A COMPLETE WORKABLE AND OPERABLE INSTALLATION. THE MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE COORDINATE ITEMS TO BE PROVIDED BY OTHER TRADES WHERE MENTIONED IN THE CONTRACT DOCUMENTS PRIOR TO BID - NO EXCEPTIONS.
- 17.4. ALL EQUIPMENT, DUCTS, PIPING, AND OTHER DEVICES AND MATERIALS INSTALLED OUTSIDE OF THE BUILDING OR OTHERWISE EXPOSED TO THE WEATHER SHALL BE COMPLETELY WEATHER PROOFED AND PAINTED TO MATCH, COORDINATE WITH ARCHITECT PRIOR TO PAINTING.
- COORDINATE THE LOCATIONS OF ALL CEILING DIFFUSERS, REGISTERS, AND GRILLES WITH THE ARCHITECTURAL REFLECTIVE CEILING PLAN, ELECTRICAL LIGHTING LAYOUT, AND ARCHITECTURAL ROOM ELEVATIONS, THE ARCHITECT AND ENGINEER SHALL BE IMMEDIATELY NOTIFIED OF ANY CONFLICTS PRIOR TO FABRICATION AND INSTALLATION.

- 17.6. BEFORE ORDERING ANY PIECE OF EQUIPMENT, THE CONTRACTOR SHALL PROVIDE EQUIPMENT SUBMITTALS, AND SHOP DRAWINGS WITH EQUIPMENT DIMENSIONS, AND SITE CLEARANCE AVAILABLE. WHERE REQUIRED BY SPACE LIMITATIONS, HAVE UNITS SHIPPED IN SECTIONS. ALL CONTRACTOR'S SUBMITTAL REQUIRED ASSIGNED ENGINEER STAMP APPROVAL PRIOR TO ORDERING EQUIPMENT AND SUPPORTING MATERIALS.
- PROVIDE MERV 13 EFFICIENCY THROWAWAY FILTERS FOR ALL AIR CONDITIONING UNITS. SEE EQUIPMENT SCHEDULE AND SPECIFICATION FOR TYPE. SIZES SHALL BE AS RECOMMENDED BY THE MANUFACTURER, UNLESS OTHERWISE SPECIFIED. AIR FILTERS SHALL BE STATE FIRE MARSHALL APPROVED AND LISTED. PREFORMED FILTERS HAVING COMBUSTIBLE FRAMING SHALL BE TESTED FOR A COMPLETE ASSEMBLY. AIR FILTERS SHALL BE ACCESSIBLE FOR CLEANING OR REPLACEMENT.
- 17.8. DUCTWORK HANDLING CONDITIONED AIR SHALL BE INSULATED OR LINED AS INDICATED ON DRAWINGS. SUPPLY AND RETURN DUCT INSULATION SHALL BE MIN. 2" THICK. 1.5 LB./CUBIC FT. DENSITY AND HAVE A MIN VALUE OF R-8 WHERE LOCATED IN ONE OR MORE OF THE FOLLOWING SPACES:

GENERAL NOTES

- 17.8.2. IN A SPACE BETWEEN THE ROOF AND AN INSULATED CEILING, OR
- 17.8.3. IN AN UNCONDITIONED CRAWLSPACE; OR 17.8.4. IN OTHER UNCONDITIONED SPACES
 - PER 2019 T24 ENERGY EFFICIENCY STANDARD, OTHERWISE PROVIDE R-4.2 WHEN LOCATED IN CONDITIONED ATTIC SPACES ABOVE CEILINGS. ALL DUCTWORK ARE NET CLEAR INSIDE DIMENSIONS. ALL DUCT JOINTS SHALL BE SEALED PER CHAPTER MECHANICAL CODE REQUIREMENTS. PROVIDE PIPING AND DUCT INSULATION IN ACCORDANCE WITH LATEST STANDARDS OF THE CALIFORNIA ENERGY COMMISSION.
- 17.9. CONTRACTOR SHALL PROVIDE AND LOCATE ACCESS PANELS AS REQUIRED AFTER INSTALLATION OF MECHANICAL DUCTS, PLUMBING AND ELECTRICAL WORK. COORDINATE WITH ARCHITECT.
- 17.10. WHERE FACTORY FINISHED OR FACTORY PRIMED ITEMS OCCUR SUCH AS GRILLES, DIFFUSERS, METAL TRIM AND ACCESSORIES, ETC., THEY SHALL BE PAINTED TO MATCH THE ADJACENT SURFACE AS DIRECTED BY THE
- 17.11. THE CONTRACTOR SHALL COORDINATE THE WORK AMONG ALL TRADES RELATING TO THE MOUNTING AND ATTACHMENTS OF ALL EQUIPMENT AS REQUIRED.
- 17.12. THE CONTRACTOR SHALL PROVIDE AND COORDINATE THE EXACT DIMENSIONS, SIZES AND POSITIONS OF OPENINGS IN SLABS AND WALLS NECESSARY FOR THE INSTALLATION OF THE WORK.
- 17.13. THE CONTRACTOR SHALL PROVIDE MOUNTING PLATES AS REQUIRED BEHIND ALL WALL-MOUNTED ITEMS SUCH AS HANDRAILS, TOILET PARTITIONS, TOILET ROOM ACCESSORIES, LIGHT FIXTURES. ETC.
- 17.14. MAINTENANCE LABEL SHALL AFFIXED TO ALL MECHANICAL EQUIPMENT AND A MAINTEANCE MANUAL SHALL BE PROVIDED FOR THE OWNER'S USE.
- 17.15. COORDINATE THE LOCATION OF ALL ROOF OPENINGS AND THE LOCATION OF ALL ROOF MOUNTED EQUIPMENT WITH THE STRUCTURAL AND ARCHITECTURAL PLANS PRIOR TO ANY INSTALLATION.
- 17.16. ALL INSULATION SHALL HAVE A FLAME SPREAD OF NOT MORE THAN 25 AND A SMOKE DENSITY NOT EXCEEDING
- 17.17. UNLESS SPECIFICALLY SHOWN ON THE CONSTRUCTION DOCUMENT, NO STRUCTURAL MEMBER SHALL BE CUT, DRILLED OR NOTCHED WITHOUT PRIOR WRITTEN AUTHORIZATION FROM THE STRUCTURAL ENGINEER, THE DISTRICT STRUCTURAL ENGINEER, AND THE DIVISION OF THE STATE ARCHITECT.
- 18. TEST AND AIR BALANCE PRIOR TO OCCUPANCY, THE ENTIRE H.V.A.C SYSTEMS SHALL BE BALANCED IN ACCORDANCE WITH (AABC) ASSOCIATED AIR BALANCE COUNCIL STANDARDS BY AN INDEPENDENT AIR BALANCE CONTRACTOR. CERTIFICATION SHALL BE PROVIDED BY THE CONTRACTOR FOR AIR AND HYDRONIC AS APPLICABLE SYSTEMS SHALL BE BALANCED AS INDICATED ON PLANS INCLUDING FRESH AIR VENTILATION. WHERE THERE IS A CONFLICT WITH THE MECHANICAL PLANS, THE AIR BALANCE CONTRACTOR SHALL NOTIFY THE ENGINEER PRIOR TO BALANCING OF SYSTEM. IF NOT, THE AIR BALANCE CONTRACTOR SHALL BEAR ALL COSTS INCURRED FOR WORK THAT MUST BE RE-BALANCED DUE TO CONFLICTS ON CONTRACT DOCUMENTS. CONTRACTOR SHALL PROVIDE THREE COPIES OF THE AIR BALANCE REPORT TO THE ENGINEER FOR APPROVAL.

- CONTROL SCHEMATICS ARE SEQUENCE ONLY. REFER TO ELECTRICAL DRAWINGS AND SPECIFICATIONS ALL ELECTRICAL REQUIRED.
- ALL LINE VOLTAGE WIRING SHALL INSTALLED IN CONDUIT. ALL LINE VOLTAGE CONDUIT AND WIRING, INCLUDING FINAL CONNECTIONS, SHALL BE FURNISHED AND INSTALLED BY THE ELECTRICAL CONTRACTOR AS INDICATED ON THE ELECTRICAL DRAWINGS OR SPECIFIED IN THE ELECTRICAL SECTION OF THE SPECIFICATIONS. ALL ELECTRICAL WORK SHALL BE INSTALLED IN ACCORDANCE WITH ALL APPLICABLE CODES AND REGULATIONS OF ALL GOVERNING CODES AND REGULATIONS OF ALL GOVERNING BODIES HAVING JURISDICTION THEREOF.
- 19.3. ALL LOW VOLTAGE CONDUIT AND WIRING AS APPLICABLE, INCLUDING FINAL CONNECTIONS, SHALL BE FURNISHED AND INSTALLED BY THE MECHANICAL CONTRACTOR AS INDICATED ON THE MECHANICAL DRAWINGS.
- FURNISH AND INSTALL DEVICES, WIRING, AND TERMINATIONS REQUIRED FOR A COMPLETE AND FUNCTIONAL INSTALLATION.
- COORDINATE ALL WORK AND REQUIREMENTS WITH OTHER TRADES INCLUDING GENERAL, MECHANICAL, AND ELECTRICAL CONTRACTORS PRIOR TO BID.
- CONTRACTOR SHALL ALL SUBMITTAL REQUIREMENTS PER DRAWINGS.
- ELECTRICAL CONTRACTOR SHALL PROVIDE REQUIRED RELAY ACCESSORIES FOR CONNECTION OF 120 VOLT/ 1 PHASE VENTILATION EQUIPMENT TO 277 VOLT 1 PHASE LIGHTING AS APPLICABLE.
- 20. PROTECTION OF EXISTING UTILITIES THE CONTRACTOR SHALL MAINTAIN THE UTILITIES TO THE EXISTING BUILDING OR PROVIDE TEMPORARY SERVICE CONNECTIONS AS REQUIRED.
- 21. DAMAGE AND THEFT ANY WORK OR MATERIALS OF ONE TRADE DAMAGED BY ANOTHER TRADE BECOMES THE RESPONSIBILITY OF THE OFFENDING TRADE. THE DAMAGED WORK SHALL BE REPAIRED OR REPLACED BY THE ORIGINAL INSTALLER AND THE COSTS BORN BY THE OFFENDER. ANY MATERIALS STOLEN FROM THE PREMISES OR DAMAGED EITHER BEFORE OR AFTER INSTALLATION SHALL BE REPLACED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS SUCH AS BARRICADES, GUARDS, ETC., AS REQUIRED TO PREVENT DAMAGE AND THEFT. SPECIAL CARE SHALL BE TAKEN TO PROTECT WORK IN PLACE, MATERIALS AND EQUIPMENT STORED, ETC., FROM THEFT AND VANDALISM.
- 22. DUST CONTROL AND INTERIOR BARRICADES CONTRACTOR SHALL MAINTAIN CONTINUOUS DUST ABATEMENT PROCEDURES INCLUDING VACUUMING, TRASH REMOVAL AND MATS AT ALL ENTRIES TO THE CONSTRUCTION AREA. PROVIDE EFFECTIVE DUST CONTROL BY MEANS OF FREQUENT SPRINKLING AND WATERING. EXCESSIVE BLOWING OF DUST OR CONCRETE MAY BE PUMPED. THE JOB SITE SHALL BE LEFT CLEAN AND ORDERLY AT THE END OF EACH DAY
- 23. CLEANUP THE CONTRACTOR SHALL AT ALL TIMES KEEP THE SITE CLEAN AND FREE OF ALL WASTE MATERIAL OR RUBBISH CAUSED BY HIS OPERATIONS. AT THE COMPLETION OF THE WORK, THE CONTRACTOR SHALL REMOVE ALL WASTE MATERIALS AND RUBBISH FROM AND ABOUT THE PROJECT AS WELL AS ALL TOOLS, CONSTRUCTION EQUIPMENT, MACHINERY AND SURPLUS MATERIALS.
- 24. a) ALL WORK SHALL CONFORM TO 2019 TITLE 24, CALIFORNIA CODE OF REGULATIONS (CCR) b) CHANGES TO THE APPROVED DRAWINGS AND SPECIFICATIONS SHALL BE MADE BY AN ADDENDUM OR A CONSTRUCTION CHANGED DOCUMENT (CCD) APPROVED BY THE DIVISION OF THE STATE ARCHITECT, AS REQUIRED BY SECTION 4-338, PART 1, TITLE 24, CCR. c) A "DSA CERTIFIED" PROJECT INSPECTOR EMPLOYED BY THE DISTRICT (OWNER) AND APPROVED BY THE DSA
- SHALL PROVIDE CONTINUOUS INSPECTION OF THE WORK. THE DUTIES OF THE INSPECTOR ARE DEFINED IN SECTION 4-342, PART 1, TITLE 24 CCR. d) A DSA ACCEPTED TESTING LABORATORY DIRECTLY EMPLOYED BY THE DISTRICT (OWNER) SHALL CONDUCT ALL THE REQUIRED TESTS AND INSPECTIONS FOR THE PROJECT.
- 25. A PROJECT INSPECTOR EMPLOYED BY THE DISTRICT (OWNER) AND APPROVED BY THE DIVISION OF THE STATE ARCHITECT SHALL PROVIDE CONTINUOUS INSPECTION OF WORK. THE DUTIES OF THE INSPECTOR ARE DEFINED IN SECTION 4-342, PART 1, TITLE 24, CCR.

26. THE DISTRICT RESERVES THE RIGHT TO APPROVE OR DISAPPROVE ALL MATERIALS AND EQUIPMENTS USED IN THIS

- PROJECT.
- 27. IN CASE OF DEVIATION FROM BASIS OF DESIGN THAT IS NOT AN ADDED OR REVISED SCOPE, CONTRACTOR IS RESPONSIBLE FOR ANY ADDITIONAL COST AND EXTRA COST.
- 28. THE PROVISIONS OF THE CBC AND CFC CHAPTER 33 SHALL BE ENFORCED ON THIS PROJECT.
- SERVICE. NEVERTHELESS, THE PLANS PREPARED UNDER THIS AGREEMENT SHALL BECOME THE PROPERTY OF THE OWNER UPON COMPLETION OF THE WORK. THE OWNER AGREES TO HOLD HARMLESS AND INDEMNIFY THE DESIGN PROFESSIONAL AGAINST ALL DAMAGES, CLAIMS AND LOSSES, INCLUDING DEFENSE COSTS, ARISING OUT OF ANY RESCUE OF THE PLANS WITHOUT THE WRITTEN AUTHORIZATION OF THE DESIGN PROFESSIONAL

29. THE OWNER ACKNOWLEDGES THAT THE DESIGN PROFESSIONAL'S PLANS ARE INSTRUMENTS OF PROFESSIONAL

		LEGEND	
SYMBOL	ABBREV.	DESCRIPTION	SHT.
\$	\$	SQUARE OR RECTANGULAR DUCT	MO
	3	ROUND DUCT	M0.
\$ (L) \$	(L)	DUCT WITH ACOUSTIC LINER (IN ADDITION TO WHERE SPECIFIED)	M0.
		EXISTING DUCT OR EQUIPMENT TO REMAIN	M2.
~~	3	FLEXIBLE ROUND DUCT	M2.
UP (OR DN)		DUCT SLOPE DIRECTION	M3.
_	•	DUCT UP OR DOWN	M3.
\$ //// \$		EXISTING DUCT OR EQUIPMENT TO BE REMOVED	M3.
$\overline{}$		RADIUS ELBOW (FIG. 2-2) **	M4.
<u> </u>		RECTANGULAR/SQUARE DUCT THROAT ELBOW WITH VANES (FIG. 2-2)	M4.
OR		SQUARE 45 DEGREE ENTRY BRANCH CONNECTION (FIG. 2-8) **	M4.
	7	ROUND DUCT WYE FITTING (FIG. 3-5) **	M4.
OR		RECTANGULAR DUCT PARALLEL FLOW BRANCH (FIG. 2-7)	M4.
"TH OR	/	THROAT SIZE ON RECTANGULAR DUCT SPLIT	M4.
JET IN ON LI		DUCT TAKE-OFF FROM BOTTOM	M4.
	- 1	DUCT TAKE-OFF FROM TOP	M4.1
	커 - 2 귀		-
\$	\$ F.D.	FIRE DAMPER	4
\$;	\$ FD-SD	FIRE DAMPER/SMOKE DAMPER	\vdash
	\$ M.V.D.	MANUAL VOLUME DAMPER	_
+ * ! : : : :	\$ 	MOTORIZED DAMPER	
	\$	BAROMETRIC DAMPER	1. 2.
	C.R.	CEILING REGISTER (RETURN OR OUTSIDE AIR)	
X	C.D.	CEILING DIFFUSER (SUPPLY)	
\mathcal{A}	C.R.	CEILING REGISTER (EXHAUST AIR)	_
		SUPPLY AIR DUCT SECTION	Ī
		RETURN OR OUTSIDE AIR DUCT SECTION	7
		EXHAUST AIR DUCT SECTION	-
		SUPPLY AIR DUCT UP THRU FLOOR OR ROOF	
		RETURN OROUTSIDE AIR DUCT UP THRU FLOOR OR ROOF	1
		EXHAUST AIR DUCT UP THRU FLOOR OR ROOF	1
		THERMOSTAT WITH ZONE NUMBER MOUNTED AT 48" AFF	
4①—	T'STAT.	WITH 30"X48" CLEAR FLOOR SPACE FOR ACCESS	
	TEMP.	TEMPERATURE	4
	TYP.	TYPICAL DODGE AND 0175	4
	D/L -x-	DOOR LOUVER AND SIZE	-
		UNDERCUT DOOR 3/4 "	-
			-
1	S.P.	STATIC PRESSURE	4
Φ	DIA.	ROUND(DIAMETER)	
	RL	REFRIGERANT LIQUID	4
	RS	REFRIGERANT SUCTION	
	IBJS	IN BETWEEN BEAM SPACE	_
	W/CLG. F.D.	WITH CEILING FIRE DAMPER	
	C.G.	CEILING GRILLE	
_	CFM	CUBIC FEET PER MINUTE	7
	CFME	CUBIC FEET PER MINUTE OF EXHAUST AIR	7
	CFMS	CUBIC FEET PER MINUTE OF SUPPLY AIR	7
	CFMR	CUBIC FEET PER MINUTE OF RETURN AIR	1
	EA OR EXH.	EXHAUST AIR	1
	O.S.A.	OUTSIDE AIR	1
		RETURN AIR	- T
045	RA OR RET.		- 7
SAR		SUPPLY AIR REGISTER	_ É
	POD	POINT OF DISCONNECTION	4
•	POC	POINT OF CONNECTION	_
	LBS,#	POUNDS	_[
	(E)	EXISTING	_[
	MZ	MULTIZONE UNIT	_ 7
(D)		DUCT DETECTOR	-
XX X		EQUIPMENT NUMBER	-
<u> </u>		PIPING	- <u>F</u>
		EXISTING PIPING TO REMAIN	- F
(INAIVIE)			- [
+++-/- <i> </i> -+++	_	EXISTING PIPING, EQUIPMENTS AND DEVICES TO BE REMOVED	-
	D	DRAIN	-
⊱— D ——∫			. t
		ATMOSPHERIC VENT	_ 7
⊱— D ——∫	CD	ATMOSPHERIC VENT CONDENSATE DRAIN	- - -

		SHEET INDEX
	SHT. NO.	DESCRIPTION
	M0.1	GENERAL NOTES, LEGEND, CODES AND SHEET INDEX
	M0.2	MECHANICAL SCHEDULES
	M0.3	MECHANICAL SCHEDULES
FIED)	M0.4	MECHANICAL TITLE 24
-IED)	M1.1	MECHANICAL SITE PLAN
	M2.0	DEMOLITION MECHANICAL FLOOR PLANS
	M2.1	REMODEL MECHANICAL FLOOR PLANS
	M2.2	MECHANICAL ROOF PLAN
	M3.1	MECHANICAL DETAILS
	M3.2	MECHANICAL DETAILS
	M3.3	MECHANICAL DETAILS
	M3.4	MECHANICAL DETAILS
	M4.1	CAPTIVEAIRE DRAWING
	M4.2	CAPTIVEAIRE DRAWING
(FIG. 2-2)	M4.3	CAPTIVEAIRE DRAWING
s) *	M4.4	CAPTIVEAIRE DRAWING
	M4.5	CAPTIVEAIRE DRAWING
	M4.6	CAPTIVEAIRE DRAWING
(M4.7	CAPTIVEAIRE DRAWING
	M4.8	CAPTIVEAIRE DRAWING
	M4.9	CAPTIVEAIRE DRAWING
	M4.10	CAPTIVEAIRE DRAWING
	1	

SCOPE OF WORK

REMOVE REPLACE (3) SPLIT DX SYSTEMS SERVING THE EXPANDED CULINARY CLASSROOM. PROVIDE NEW RESIDENTIAL HOOD, TYPE 1 HOOD WITH ANSUL FIRE SUPRESSION SYSTEM, MAKE UP AIR AND EXHAUST AIR SYSTEM.

APPLICABLE CODES

APPLICABLE CODES

- 2019 BUILDING STANDARDS ADMINISTRATIVE CODE, TITLE 24 C.C.R. (2018 INTERNATIONAL BUILDING CODE & CALIFORNIA AMENDMENTS)
- PART 2 2019 CALIFORNIA BUILDING CODE (CBC), TITLE 24. C.C.R.;
- (2018 INTERNATIONAL BUILDING CODE & CALIFORNIA AMENDMENTS) 2019 CALIFORNIA ELECTRICAL CODE (CEC), TITLE 24 C.C.R.; (2017 NATIONAL
- ELECTRICAL CODE OF THE NATIONAL FIRE PROTECTION ASSOCIATION, NFPA) PART 4 2019 CALIFORNIA MECHANICAL CODE (CMC), TITLE 24 C.C.R.; (2018 UNIFORM MECHANICAL CODE OF THE INTERNATIONAL ASSOCIATION OF PLUMBING
- AND MECHANICAL OFFICIALS, IAMPO) PART 5 2019 CALIFORNIA PLUMBING CODE (CPC), TITLE 24 C.C.R.;
- (2018 UNIFORM PLUMBING CODE OF THE IAMPO)
- PART 6 2019 CALIFORNIA ENERGY CODE, TITLE 24 C.C.R. PART 8 2019 CALIFORNIA HISTORICAL CODE, TITLE 24 C.C.R.
- PART 9 2019 CALIFORNIA FIRE CODE (CFC), TITLE 24, C.C.R.:
- (2015 INTERNATIONAL FIRE CODE OF THE INTERNATIONAL CODE COUNCIL) PART 10 2019 CALIFORNIA EXISTING BUILDING CODE. TITLE 24. C.C.R.:
- (2018 IBC OF INTERNATIONAL CODE COUNCIL, WITH CALIFORNIA AMENDMENTS)
- PART 11 2019 CALIFORNIA GREEN BUILDING STANDARDS CODE, TITLE 24 C.C.R. PART 12 2019 CALIFORNIA REFERENCED STANDARDS CODE, TITLE 24 C.C.R.

MEP COMPONENT ANCHORAGE NOTE

ALL MECHANICAL. PLUMBING. AND ELECTRICAL COMPONENTS SHALL BE ANCHORED AND INSTALLED PER THE DETAILS ON THE DSA APPROVED CONSTRUCTION DOCUMENTS. THE FOLLOWING COMPONENTS SHALL BE ANCHORED OR BRACED TO MEET THE FORCE AND DISPLACEMENT REQUIREMENTS PRESCRIBED IN THE 2019 CBC SECTIONS 1617A.1.18 THROUGH 1617A.1.26 AND ASCE 7-16 CHAPTERS 13.

- 1. ALL PERMANENT EQUIPMENT AND COMPONENTS.
- 2. TEMPORARY, MOVABLE OR MOBILE EQUIPMENT THAT IS PERMANENTLY ATTACHED (E.G. HARD WIRED) TO THE BUILDING UTILITY SERVICES SUCH AS ELECTRICITY, GAS OR WATER. "PERMANENTLY ATTACHED" SHALL INCLUDE ALL ELECTRICAL CONNECTIONS EXCEPT PLUGS FOR 110/220 VOLT RECEPTACLES HAVING A FLEXIBLE CABLE.
- 3. TEMPORARY, MOVABLE OR MOBILE EQUIPMENT WHICH IS HEAVIER THAN 400 POUNDS OR HAS A CENTER OF MASS LOCATED 4 FEET OR MORE ABOVE THE ADJACENT FLOOR OR ROOF LEVEL THAT DIRECTLY SUPPORT THE COMPONENT IS REQUIRED TO BE RESTRAINED IN A MANNER APPROVED

THE FOLLOWING MECHANICAL AND ELECTRICAL COMPONENTS SHALL BE POSITIVELY ATTACHED TO THE STRUCTURE BUT NEED NOT DEMONSTRATE DESIGN COMPLIANCE WITH THE REFERENCES NOTED ABOVE THESE COMPONENTS SHALL HAVE FLEXIBLE CONNECTIONS PROVIDED BETWEEN THE COMPONENT AND ASSOCIATED DUCTWORK, PIPING, AND CONDUIT. FLEXIBLE CONNECTIONS MUST ALLOW MOVEMENT IN BOTH TRANSVERSE AND LONGITUDINAL DIRECTIONS:

- A. COMPONENTS WEIGHING LESS THAN 400 POUNDS AND HAVING A CENTER OF MASS LOCATED 4 FEET OR LESS ABOVE THE ADJACENT FLOOR OR ROOF LEVEL THAT DIRECTLY SUPPORT THE COMPONENT
- B. COMPONENTS WEIGHING LESS THAN 20 POUNDS, OR IN THE CASE OF DISTRIBUTED SYSTEMS, LESS THAN 5 POUNDS PER FOOT, WHICH ARE SUSPENDED FROM A ROOF OR FLOOR OR HUNG FROM A WALL.

THE ANCHORAGE OF ALL MECHANICAL, ELECTRICAL AND PLUMBING COMPONENTS SHALL BE SUBJECT TO THE APPROVAL OF THE DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE OR STRUCTURAL ENGINEER DELEGATED RESPONSIBILITY AND ACCEPTANCE BY DSA. THE PROJECT INSPECTOR WILL VERIFY THAT ALL COMPONENTS AND EQUIPMENT HAVE BEEN ANCHORED IN ACCORDANCE WITH THE ABOVE REQUIREMENTS.

PIPING, DUCTWORK. AND ELECTRICAL DISTRIBUTION SYSTEM BRACING NOTE

PIPING, DUCTWORK, AND ELECTRICAL DISTRIBUTION SYSTEMS SHALL BE BRACED TO COMPLY WITH THE FORCES AND DISPLACEMENTS PRESCRIBED IN ASCE 7-16 SECTION 13.3 AS DEFINED IN ASCE 7-16 SECTIONS 13.6.5. 13.6.6, 13.6.7, 13.6.8; AND 2019 CBC, SECTIONS 1617A.1.24, 1617A.1.25 AND 1617A.1.26.

THE METHOD OF SHOWING BRACING AND ATTACHMENTS TO THE STRUCTURE FOR THE IDENTIFIED DISTRIBUTION SYSTEM ARE AS NOTED BELOW. WHEN BRACING AND ATTACHMENTS ARE BASED ON A PRE-APPROVED INSTALLATION GUIDE (E.G., OSHPD OPM FOR 2013 CBC OR LATER). COPIES OF THE BRACING SYSTEM INSTALLATION GUIDE OR MANUAL SHALL BE AVAILABLE ON THE JOBSITE PRIOR TO THE START OF AND DURING THE HANGING AND BRACING OF THE DISTRIBUTION SYSTEMS. THE STRUCTURAL ENGINEER OF RECORD SHALL VERIFY THE ADEQUACY OF THE STRUCTURE TO SUPPORT THE HANGER AND BRACE LOADS.

MECHANICAL PIPING (MP), MECHANICAL DUCTS (MD), PLUMBING PIPING (PP), ELECTRICAL DISTRIBUTION

MP ☑ MD ☑ PP ☐ E ☐ - OPTION 1: DETAILED ON APPROVED DRAWINGS WITH PROJECT SPECIFIC NOTES

MP ☐ MD ☐ PP ☐ E ☐ - OPTION 2: SHALL COMPLY WITH THE APPLICABLE OSHPD PRE-APPROVAL (OPM #)

IDENTIFICATION STAMP DIV. OF THE STATE ARCHITEC APP: 03-121968 INC: REVIEWED FOR SS 🗹 FLS 🗹 ACS 🗹 12/20/2022

Architecture



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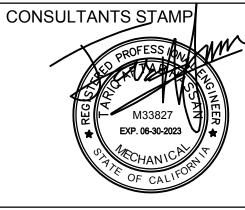




T. 626.650.0350 F. 626.650.0352 www.pbsengineers.com Job no. 2021-072-00

2100 East Route 66, Suite 210

Glendora. CA 91740



SCHOOL DISTRICT **BONITA UNIFIED** SCHOOL DISTRICT

PROJECT

SAN DIMAS HIGH SCHOOL **CULINARY ARTS** CLASSROOM **MODERNIZATION**

JOB NUMBER: 12.03.00 DATE: 08/25/21

REVISION: $\angle 2$ DATE:

DRAWING TITLE:

GENERAL NOTES, LEGEND, CODES & SHEET INDEX

TAG	MFR &	AREA	HEATING CAPACITY INPUT/OUTPUT	SA (CFM)	OSA (CFM)	ESP	AFUE(%)		EL	LECTRIC	AL		OPER. WT	(LBS)	APPROXIMA	TE WxLxH (IN)	TAC	MFR &	COOLING	CAPACITY	INTERLOCK	OPER. W	T (LBS)	APPROXIMAT	E WxLxH (IN)	ANCHORAGE	REMARKS
	MODEL#	SERVICED	(BTU/HR)	SA (CFIVI)	USA (CFIVI)	ESP	AFUE(%)	V	PH	HZ	MCA	МОСР	ORIGINAL	- NEW	ORIGINAL	NEW	TAG	MODEL#	TOTAL (MBH)	SEN (MBH)	WITH	ORIGINAL	NEW	ORIGINAL	NEW	DETAIL	REWARNS
FAU 9 FAU 10	CARRIER 59SP5A080E2120	CULINARY CLASSROOM	80,000/78,000	1,600	400	0.6	95	115	1	60	13.6	15	185	170	21x28-1/2x40	21x29-1/2x35	CC 8	CARRIER CNPVP6124ALA	41,330	38,530	CU 8	60	85	20-3/4x28-1/2x24-9/16	24-1/2x21x32-1/2	1 M-3.2	1, 2, 3, 4, 5, 6
FAU 9	CARRIER 59SP5A080E2120	CULINARY CLASSROOM	80,000/78,000	1,600	400	0.6	95	115	1	60	13.6	15	185	170	21x28-1/2x40	21x29-1/2x35	CC 9	CARRIER CNPVP6124ALA	41,330	38,530	CU 9	60	85	20-3/4x28-1/2x24-9/16	24-1/2x21x32-1/2	1 M-3.2	1, 2, 3, 4, 5, 6
FAU 10	CARRIER 59SP5A080E2120	CULINARY CLASSROOM	80,000/78,000	1,600	400	0.6	95	115	1	60	13.6	15	185	170	21x28-1/2x40	21x29-1/2x35	CC 10	CARRIER CNPVP6124ALA	41,330	38,530	(CU) 10	60	85	20-3/4x28-1/2x24-9/16	24-1/2x21x32-1/2	1 M-3.2	1, 2, 3, 4, 5, 6

. PROVIDE WIRED T-STAT. (CARRIER CONNECT WI-FI THERMOSTAT OR APPROVED EQUAL.) 2. PROVIDE CONDENSATE NEUTRALIZER KIT FOR CONDENSING FURNACE .

3. PROVIDE CONCENTRIC VENT KIT FOR COMBUSTION AIR INTAKE AND FLUE EXHAUST.

4. PROVIDE ADP 2 INCH BASE FILTER RACK FOR FIELD PROVIDED MERV 13 FILTER. 5. PROVIDE LOW-VOLTAGE OVERFLOW SWITCH TO SECONDARY DRAIN CONNECTION OF EVAPORATOR COIL. (MODEL SS3 OR APPROVED EQUAL.)

6. TIED INTO AREA SMOKE DETECTOR SYSTEM FOR UNIT SHUTDOWN. THE AREA TYPE SMOKE DETECTORS SHALL SEND A SIGNAL TO THE BUILDING FIRE ALARM SYSTEM WHICH SHALL SEQUENCE THE SHUT-DOWN OF THE UNIT PER CMC 608.0 EXCEPTION 1

- INSTALL UNITS AND PROVIDE ALL ACCESSORIES AS PER MANUFACTURER GUIDELINES.

SPLIT SYSTEM CONDENSING UNIT SCHEDULE (OUTDOOR)

		MFR &	LOCATION	COOLING (CAPACITY		E	LECTRIC/	AL		SEER/EER	OPER. W	T (LBS)	APPROXIMA ⁻	ΓΕ WxLxH (IN)	INTERLOCK	ANCHORAGE	REMARKS
''	\G	MODEL#	LOCATION	TOT(BTU/HR)	SEN(BTU/HR)	V	PH	HZ	MCA	MOCP	SEER/EER	ORIGINAL	NEW	ORIGINAL	NEW	WITH	DETAIL	REMARKS
/cl	\overline{Z}	CARRIER	GROUND	41,330	38,530	460	3	60	8.4	15	14.0/11.7	285	250	35x30x40	45x17x37	FAU	5	1, 2
8	7	24AHA448006	GROOND	41,550	30,330	400	3	00	0.4	13	14.0/11.7	200	230	33830840	45817857	8	M-3.2	,
/cı	\overline{Z}	CARRIER	GROUND	41,330	38,530	460	3	60	8.4	15	14.0/11.7	285	250	35x30x40	45x17x37	FAU	5	1, 2
9		24AHA448006	GROOND	41,550	30,330	400	<u> </u>	00	0.4	10	14.0/11.7	200	230	33830840	40011701	9	M-3.2	,
/cı		CARRIER	GROUND	41,330	38,530	460	3	60	8.4	15	14.0/11.7	285	250	35x30x40	45x17x37	FAU 10	5	1, 2
10	/	24AHA448006	GNOOND	71,330	30,330	400	<u>.</u>		0.4	13	17.0/11.7	200	230	33230240	40/11/01	10	M-3.2	,

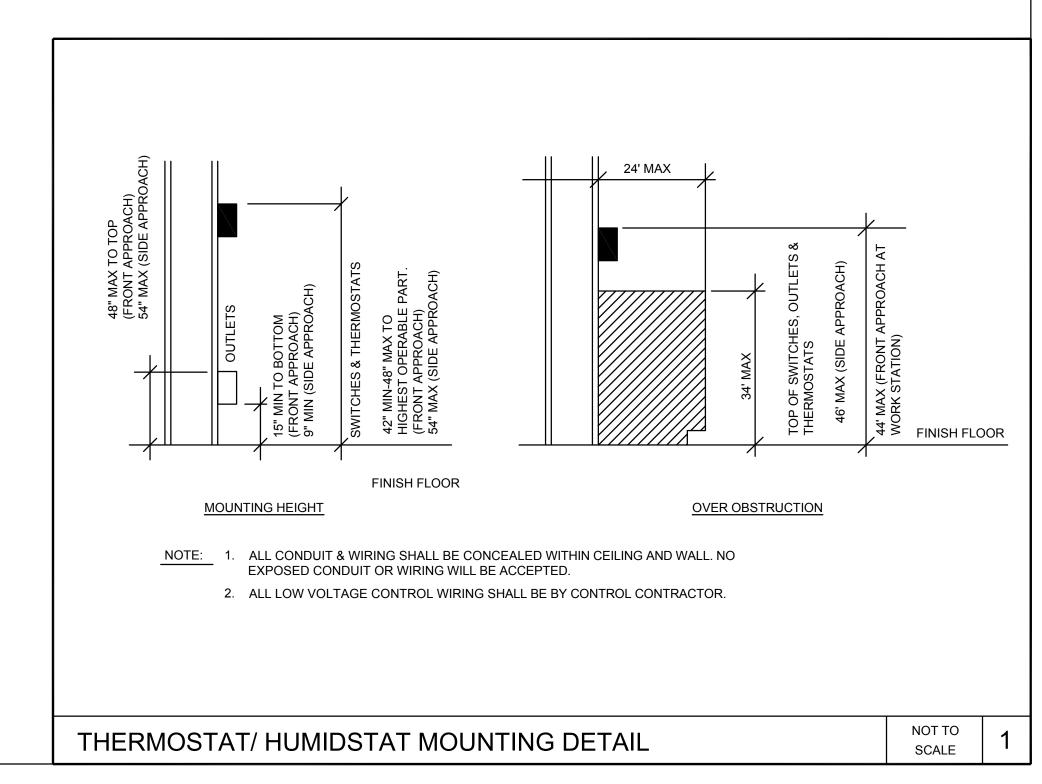
1. 3/8" LIQUID REFRIGERANT LINE. 7/8" SUCTION REFRIGERANT LINE. CONFIRM LINE SIZES IN FIELD BASED ON TOTAL EQUIVALENT LENGTH OF REFRIGERANT PIPING LENGTHS INSTALLED.

2. PROVIDE NEOPRENE PAD

			DIFFU	SER SCHE	DULE				
SYMBOL	MANUFACTURER & MODEL N0.	TYPE	NECK SIZE (IN)	OVERALL VISIBLE DIMENSION (INXIN)	CFM RANGE	OBD	MAX NC	NOTES	REMARKS
A	TITUS PAR	STEEL PERFORATED PANEL / T-BAR / CEILING	6"Ø	24x24	0-100	N	< 25	T-BAR	12
A	TITUS PAR	RETURN	8"Ø	24x24	101-180	N	< 25	T-BAR	12
A	TITUS PAR		10"Ø	24x24	181-285	N	< 25	T-BAR	12
A	TITUS PAR		12"Ø	24x24	286-410	N	< 25	T-BAR	12
A	TITUS PAR		14"Ø	24x24	411-560	N	< 25	T-BAR	12
A	TITUS PAR		16"Ø	24x24	561-730	N	< 25	T-BAR	12
A	TITUS PAR		18 x 18	24x24	731-1180	N	< 25	T-BAR	12
B	TITUS MCD	STEEL MODULAR CORE / SQUARE SUPPLY	6 x 6	24x24	0-125	N	< 25	T-BAR	12
B	TITUS MCD	CEILING DIFFUSER	8 x 8	24x24	126-220	N	< 25	T-BAR	12
B	TITUS MCD		10 x 10	24x24	221-350	N	< 25	T-BAR	12
B	TITUS MCD		12 x 12	24x24	351-500	N	< 25	T-BAR	12
B	TITUS MCD		14 x 14	24x24	501-680	N	< 25	T-BAR	12
B	TITUS MCD		16 x 16	24x24	681-855	N	< 25	T-BAR	12
B	TITUS MCD		18 x 18	24x24	856-1000	N	< 25	T-BAR	12
C	CAPTIVE AIRE DI-DSP	DROP-IN PERFORATED SUPPLY PLENUM DIFFUSER	12"Ø	24x24	600	N	< 30	T-BAR	12

PROVIDE SQUARE TO ROUND NECK ADAPTORS AS REQUIRED ON PLANS.

2 CONTRACTOR TO COORDINATE WITH ARCHITECT FOR BORDER, COLOR, & FINISHES.



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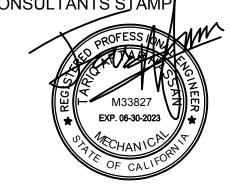
ARCHITECTS STAMP:



CONSULTANT:



CONSULTANTS STAMP



SCHOOL DISTRICT: BONITA UNIFIED SCHOOL DISTRICT

PROJECT:

SAN DIMAS HIGH SCHOOL **CULINARY ARTS** CLASSROOM MODERNIZATION

JOB NUMBER: 12.03.00 DATE: 08/25/21

REVISION: 2 DATE:

DRAWING TITLE:

MECHANICAL SCHEDULES

DRAWING NO.:

M0.2

												Κľ	TCHE	N MAł	KE UP AIF	R UNIT												
ITEM	MANUFACTURER	AREA LOCATION	FUNCTION	FAN TYPE	DRIVE	AIR FLOW	E.S.P.	EST. FAN	EST. FAN	[X COOLIN	IG PERFOR			DX REHEAT I	PERFORMANCE			INDIRECT O			ELEC	TRICAL MO	TOR DATA	NOISE LEVEL	WEIGHT	MOUNTING	REMARKS
NO.	MODEL NO.	SERVED	FUNCTION	TAN THE		CFM	H2O	RPM	BHD	TOTAL CAPACITY (SENS. CAPACITY	REF. TYPE °I	EAT FDB/°FWB	LAT °FDB/°FWB	MAX REHEAT CAPACITY	LAT °FDB/°FWB	BTU INPUT	BTU OUTPUT	EAT °F	LAT °F	AFUE HP	V-Ø-HZ	FLA N	иса моср		[LBS]	DETAIL	KLIMAKKO
MUA 1	CAPTIVE AIRE CASRTU2-I.150-18 -7.5T-DOAS	KITCHEN ON GROUND	MAKEUP AIR	PLENUM	DIRECT	2525	0.5	-	1.37	102,000 BTUH	102,000 BTUH	R410A	70.0	59.6 56.2	60,000 BTUH	70.0 60.12	150,000 BTUH	120,000 BTUH	36.0	72.0	80% 5.0	460-3-60	- 2	20.8 25	-	1291	M3.2	12345679
MUA 2	CAPTIVE AIRE AI-15D	KITCHEN ROOFTOP	MAKEUP AIR	PLENUM	DIRECT	1450	0.5	1580	0.5790		NOT	APPLICAB	BLE		NOT APP	LICABLE			NOT APPL	ICABLE	1.0	115-1-60	11.6	14.5 25	-	345	1 M3.3	245689

1	KITCHEN EXHAUST FANS AND MAKEUP AIR FAN TO BE INTERLOCKED TO AUTOMITICALLY OPERATE UPON DETECTION OF Δ15°F FROM ROOM TEMPERATURE SENSOR AND DUCT LOCATED TEMPERATURE SENSOR IN ACCORDANCE TO IMC 507.2.1.1. MANUAL SWITCH ACTIVATION ALSO TO BE PROVIDED.

REMARKS:

\bigcirc	OPERATING WEIGHT INCLUDES SUM OF FAN WEIGHT AND ALL CURBS
	AND ACCESSORIES

	7.11.27.10020001.1120.
(3)	PROVIDE DISCHARGE AIR TEMPERATURE SENSOR - WIRED IN UNIT,
	MOUNTED IN SUPPLY DUCT.

$\overline{}$	
(4)	PROVIDE OUTSIDE AIR TEMPERATURE SENSOR, DIRTY FILTER ON/OFF
\bigcirc	SWITCH

5 PROVIDE 2" MERV 8 AND 4" MERV 13, 8-20x20x2 FILTERS.

6 V-BANK TA-13 FILTERS W/INTAKE EZ FILTERS -OUTDOOR

7	HORIZONTAL DISCHRAGE.
8	DOWN DISCHARGE.

9 TIED INTO AREA SMOKE DETECTOR SYSTEM FOR UNIT SHUTDOWN. THE AREA TYPE SMOKE DETECTORS SHALL SEND A SIGNAL TO THE BUILDING FIRE ALARM SYSTEM WHICH SHALL SEQUENCE THE SHUT-DOWN OF THE UNIT PER CMC 608.0 EXCEPTION 1.

	KITCHEN EXHAUST FAN SCHEDULE																
ITEM	MANUFACTURER	AREA	LOCATION	FAN TYPE	PE DRIVE MOTOR AIR QTY IN FAN RPM				CAL	FLA	NOISE LEVEL	WEIGHT		REMARKS			
NO.	& MODEL NO.	SERVED	200,411014			ENCL.	CFM	H ₂ O	RPM	B.H.P	H.P	V-Ø-HZ		SONES	[LBS]	DETAIL	
KEF 1	CAPTIVEAIRE DU85HFA	HOOD #1	ROOF	ROOFTOP UPBLAST	DIRECT	ODP, PREMIUM	1575	1.00	1309	309 0.3940 0.750 115-1-60 8.9 12 100 M							1234567
1 TH	REMARKS 1 THERMAL OVERLOAD MOTOR. 2 BACK DRAFT DAMPER. 3 INTERLOCK EXHAUST FAN WITH MUA-1. 4 FIRE SUPPRESSION SYSTEM AND KITCHEN HOOD EXHAUST SYSTEM.																
5 RO	5 ROOF CURB PROVIDED BY CAPTIVEAIRE. 5 UL705 AND UL762 AND ULC-S645 6 HIGH HEAT OPERATION 300F (149C) 7 NEMA 3R SAFETY DISCONNECT SWITCH.																

AIR BALANCE SCHEDULE										
EQUIPMENT	EXHAUST AIR (CFM)	MAKE-UP AIR (CFM)	SUPPLY AIR (CFM)	RETURN AIR (CFM)	OUTSIDE AIR (CFM)	REMARKS				
KEF-1 (SERVES H-2; QTY: 1)	(1575)					INTERLOCK KEF-1 & MUA-1				
H-1 (QTY: 6)	(3600)									
MUA-1		(2525)								
MUA-2		(1450)								
FAU-8			(1600)	(1200)	(400)					
FAU-9			(1600)	(1200)	(400)					
FAU-10			(1600)	(1200)	(400)					
SUB-TOTAL	(5175)	(3975)			(1200)					
TOTAL =	(5175)	(3975)				PRESSURIZATION IS NEUTRAL				

* FURNISHED BY CAPTIVEAIRE. INTERLOCKING CONTROL FURNISHED AND INSTALLED BY CAPTIVEAIRE. REFER TO SHEETS M3.5 AND M3.6.

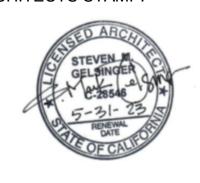


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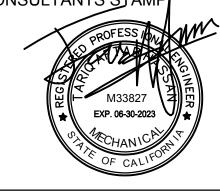
ARCHITECTS STAMP:



CONSULTANT:



CONSULTANTS STAMP



SCHOOL DISTRICT: BONITA UNIFIED SCHOOL DISTRICT

PROJECT:

SAN DIMAS HIGH SCHOOL **CULINARY ARTS** CLASSROOM MODERNIZATION

JOB NUMBER: 12.03.00 DATE: 08/25/21

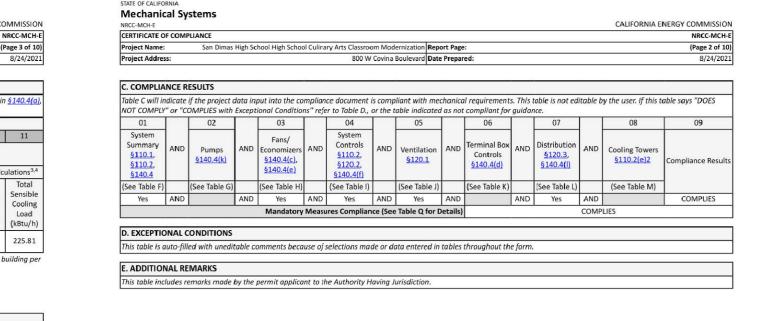
REVISION: A DATE: ____

DRAWING TITLE:

MECHANICAL SCHEDULES

DRAWING NO.:

M0.3



NRCC-MCH-E

(Page 7 of 10)

16

1	03	_	04	-	05	-	06	-	07		08	09	02 Climate Zone 9 05 Total Unconditioned Floor	Area	
L	Fans		System Controls				Terminal Box Controls		Distribution				03 Occupancy Types Within Project: 06 # of Stories (Habitable Abo	ove Grad	e)
	ND Economi		§110.2,	AND		AND		AND	§120.3,	AND			☐ Office (B) ☐ Retail (M) ☐ Non-refrigerated Warehou	use (S)	Т
L	§140.4(§120.2,		§120.1		§140.4(d)		§140.4(I)		§110.2(e)2	Compliance Results	☐ Hotel/ Motel Guest Rooms (R-1) ☐ School (E) ☐ Healthcare Facility (I)		
Ļ	Para and the	T.SPR	§140.4(f)	_		_							☐ High-Rise Residential (R-2/R-3) ☐ Relocatable Class Bldg (E) ☐ Other (write in)		
	(See Tabl		(See Table I)	_	(See Table J)	-	(See Table K)	_	(See Table L)	_	(See Table M)				_
I A	ND Yes	AND	Yes	AND	30.22	AND		AND	Yes	AND		COMPLIES	B. PROJECT SCOPE		
	Mandatory Measures Compliance (See Table Q for Details) COMPLIES This table Includes mechanical systems or components that are within the scope of the permit application and are demonstrating compared by the permit application and are demonstrating by the permit application and a											ing comp	olia		
8													01 02		
tak	le comments	mments because of selections made or data entered in tables throughout the form. Air System(s) Wet System Con							Air System(s) Wet System Components						
													☑ Heating Air System ☐ Water Economizer		Α
													⊠ Cooling Air System		E
bу	the permit ap	licant to t	he Authority H	laving J	Jurisdiction.								Mechanical Controls System Piping	\boxtimes	F
													Mechanical Controls (existing to remain, altered or new)	\boxtimes	D
													Chillers	\boxtimes	٧
													☐ Boilers		Z

									Chille	rs			⋈	Ventilation	
									Boiler	s				Zonal Systems/ Term	inal Boxes
Registration Numb	oer: y Efficiency Standards - 2019 No	nresidential Compliance	Registration Date/Time: Report Version: 2019.1.003 Schema Version: rev 20200601	Registration Provider: Energysoft Report Generated: 2021-08-24 23:10:49	Registration I CA Building E		y Standards - 2019 Nonreside	ential Compliance		Report V	tion Date/Ti /ersion: 201 Version: rev	9.1.003			gistration Provider: Energysol enerated: 2021-08-24 23:10:4
STATE OF CALIFORNIA Mechanical S NRCC-MCH-E CERTIFICATE OF COI	100			CALIFORNIA ENERGY COMMISSION NRCC-MCH-E		al Systen								CALIFO	DRNIA ENERGY COMMISSIC NRCC-MCH
Project Name:	San Dimas High School	High School Culinary Arts Classroom	Modernization Report Page:	(Page 6 of 10)	Project Name:	Sa	n Dimas High School High Sc	hool Culinary Art	s Classroom N	Modernization	Report Pag	ge:			(Page 5 of 1
Project Address:		800 W Co	ovina Boulevard Date Prepared:	8/24/2021	Project Addre	s:			800 W Cov	ina Boulevard	Date Prepa	ared:			8/24/202
⁴ See Standards Ta ⁵ For lecture halls v ⁶ §120.2(e)3 requi Examples of space	ables 120.1-A and 120.1-B. with fixed seating, the expedings systems serving rooms to see which require lighting occurs.	rted number of occupants shall b hat are required by <u>§130.1(c)</u> to upancy sensors include offices 25	; the most stringent code requirement takes preceder he shall be determined in accordance with the Californ have lighting occupancy sensing controls to also hav 50ft ² or smaller, multipurpose rooms less than 1,000 f	nia Building Code. The occupancy sensing zone controls for ventilation. Tright classrooms, conference rooms, restrooms, aisles	J. VENTILAT This table is a	ON AND IN	DOOR AIR QUALITY Instrate compliance with man, only ventialtion system	nandatory ventil	lation require	ements in §1	1 <u>20.1</u> and	§120.2(e)3	B for all nonresiden	tial, high-rise residentia	al and hotel/motel
and open areas in	warehouses, library book st	ack aisles, corridors, stairwells, p	parking garages, and loading and unloading zones, ur	nless excepted by §130.1(c).	outdoor vent	lation rates a	and airflows may be show	n on the plans o	r the calcula	tions can be	presented	l in a sprea	dsheet.	2.00	
K. TERMINAL BO	OX CONTROLS				01		Check the box if the pro						ming the calculation	instead of completing	triis table.
This section does	not apply to this project.				02		Check this box if the pr Check this box if the pr						nits		
					7 03		Check the box if the pre							eat required ventilation	rates per \$120 1/a\2
	N (DUCTWORK and PIPIN	10 70 T 10 10 10 10 10 10 10 10 10 10 10 10 10			L .		Motel Ventilation Syster		curai ventila	don in any n	omesiden	uai of note	in moter spaces to m	eet required ventilation	rates per <u>VIZU.I(C)Z</u> .
		indatory pipe insulation requirer	ments found in §120.3 and prescriptive requirements	found in §140.4(I) for duct leakage testing.	Nonresident		4	113	05			-	06		07
Duct Leakage Seal			· ·			T			03					Air Eiltration	§120.1(c) and §141.0(b)2 ²
	e questions below apply to			iggered for these systems? No	System Nam		FAU 8-10	System Desig		756	System		0		
11			t systems serving healthcare facilities		J			Airflo	ow¹	, , , ,	Transfer	Air CFM	l		oer §120.1(c) (NR and otel/Motel))
12	100		n occupiable space for a constant volume, single zone	e, space-conditioning system.	- 08		09	10	11	12	13	14	15	11	16
13	Yes The space	conditioning system serves less	than 5,000 ft ² of conditioned floor area.]		Mechanical Ventila	10000	2777027			A11755	Vent per §120.1(c)4		(Artis)
14	No The comb	ined surface area of the ducts in	the following locations is more than 25% of the total	surface area of the entire duct system:	Space Name		Wiccitatical velicity	Conditioned			Required	LAIT.	The strong	DCV or Sensor	Controls per §120.1(d)3,
		Outdoors			ot item Tag		Occupancy Type ⁴	Floor Area	heads/	# of	Min OA	Required	Provided per Desi	mn .)5, and §120.1(e)3 ⁶
			a roof that has a U-factor greater than the u-factor of a)1B or if the roof has fixed vents or openings to the					(ft²)	toilets	people ⁵	CFM	Min CFM	CFM		Problem Co. C. Collection (Inc.) and Co.
				* * * * * * * * * * * * * * * * * * * *	1 0.5									DCV	NA: Not required pe §120.1(d)3
				<u>.</u>	_ Culinary Classroom		Art Classroom	1908			286.2	1335.6	4375		NA: Not required
15	1000		ng an existing duct system, which is constructed, insu	ated or sealed with asbestos.	1									Occ Sensor	space type
	71	for the form			1 47	T . IC .	D : 114: 01 6F14	-			75.6	40	17 -11 -1 6	.1. 6 . 6 . 1. 3	1 4

Registration Provider: Energysoft



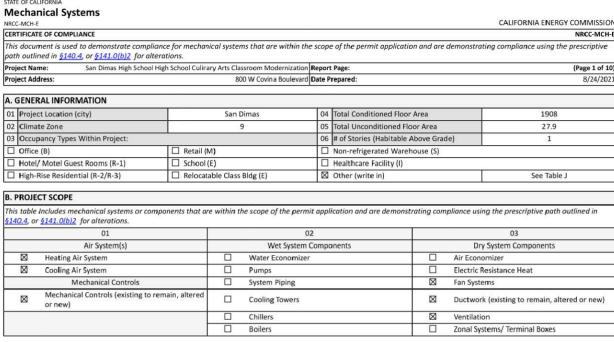
The scope of the project includes an existing duct system that is documented to have been previously sealed as confirmed through field verification

and diagnostic testing in accordance with procedures in the Reference Nonresidential Appendix NA2.

Registration Date/Time:

Duct system shall be sealed in acordance with the California Mechanical Code

Registration Number:	Registration Date/Time:	Registration Provider: Energysoft
CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance	Report Version: 2019.1.003	Report Generated: 2021-08-24 23:10:49



17 Total System Required Min OA CFM FOOTNOTES: System CFM should include both mechanical and natural ventilation for the zone/system ² Air filtration requirements apply to the following three system types per §120.1(c)1A: space conditioning systems utilizing ducts to supply air to occupiable space; supply-only outside air to occupiable space. Registration Number: Registration Date/Time: Registration Provider: Energysoft

Report Version: 2019.1.003

Schema Version: rev 20200601

Report Generated: 2021-08-24 23:10:49

Registration Provider: Energysoft

Report Generated: 2021-08-24 23:10:49

Mechanical Systems CALIFORNIA ENERGY COMMISSION NRCC-MCH-E
CERTIFICATE OF COMPLIANCE NRCC-MCH-E Project Name: San Dimas High School High School Culinary Arts Classroom Modernization Report Page: (Page 9 of 10) 8/24/2021 O. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE NRCA-MCH-15-A Thermal Energy Storage (TES) System Acceptance NOTE: This form does no automatically move to "Yes". If Chilled water Storage, Ice-on-Coil Internal Melt, Ice-on-Coil External melt, Ice Harvester, Brine, Ice-Slurry, Eutecti Salt, Clathrate Hydrate Slurry (CHS).

Cryogenic or Encapsulated (Ice Ball) Systems are included in the scope, permit applicant shou move this form to 'Yes". NRCA-MCH-16-A Supply Air Temperature Reset Controls NRCA-MCH-17-A Condenser Water Temperature Reset Controls NRCA-MCH-18-A Energy Management Control Systems NRCA-MCH-19-A Occupancy Sensor Controls NRCA-MCH-20 Multi-Family Ventilation NRCA-MCH-21 Multi-Family Envelope Leakage P. DECLARATION OF REQUIRED CERTIFICATES OF VERIFICATION elections have been made based on information provided in previous tables of this document. If any selection needs to be changed, please explain why in Table E Additional Remarks. hese documents must be completed by a HERS Rater and provided to the building inspector during construction. The final documents must be created by a HERS Provider's registry, bu $drafts\ can\ be\ found\ on line\ at\ https://www.energy.ca.gov/title 24/2019 standards/2019_compliance_documents/Nonresidential_Documents/NRCV/2019_compliance_documents/Nonresidential_Documents/NRCV/2019_compliance_documents/Nonresidential_Documents/NRCV/2019_compliance_documents/Nonresidential_Documents/NRCV/2019_compliance_documents/Nonresidential_Documents/NRCV/2019_compliance_documents/Nonresidential_Documents/NRCV/2019_compliance_documents/Nonresidential_Documents/NRCV/2019_compliance_documents/Nonresidential_Documents/NRCV/2019_compliance_documents/Nonresidential_Documents/NRCV/2019_compliance_documents/Nonresidential_Documents/NRCV/2019_compliance_documents/Nonresidential_Documents/NRCV/2019_compliance_documents/Nonresidential_Documents/NRCV/2019_compliance_documents/NRCV/2019_complianc$ NRCV-MCH-04-H Duct Leakaage Test NOTE: Must be completed by a HERS Rater NRCV-MCH-24 Enclosure Air Leakaage Worksheet NOTE: Must be completed by a HERS Rate NRCV-MCH-27 High-rise Resdential NOTE: Must be completed by a HERS Rater NRCV-MCH-32 Local Mechanical Exhaust NOTE: Must be completed by a HERS Rate.

Q. MANDATORY MEASURES DOCUMENTATION LOCATION

CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance

Registration Number:

CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance

empliance with Mandatory Measures documented through MCH andatory Measures Note Block

Registration Date/Time:

Report Version: 2019.1.003 Schema Version: rev 20200601

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Architecture

8816 Foothill Boulevard, Suite 103-224 Rancho Cucamonga, CA. 91730 a9contact@architecture9.com

ARCHITECTS STAMP:



CONSULTANT:



CONSULTANTS STAMP M33827

SCHOOL DISTRICT: **BONITA UNIFIED** SCHOOL DISTRICT

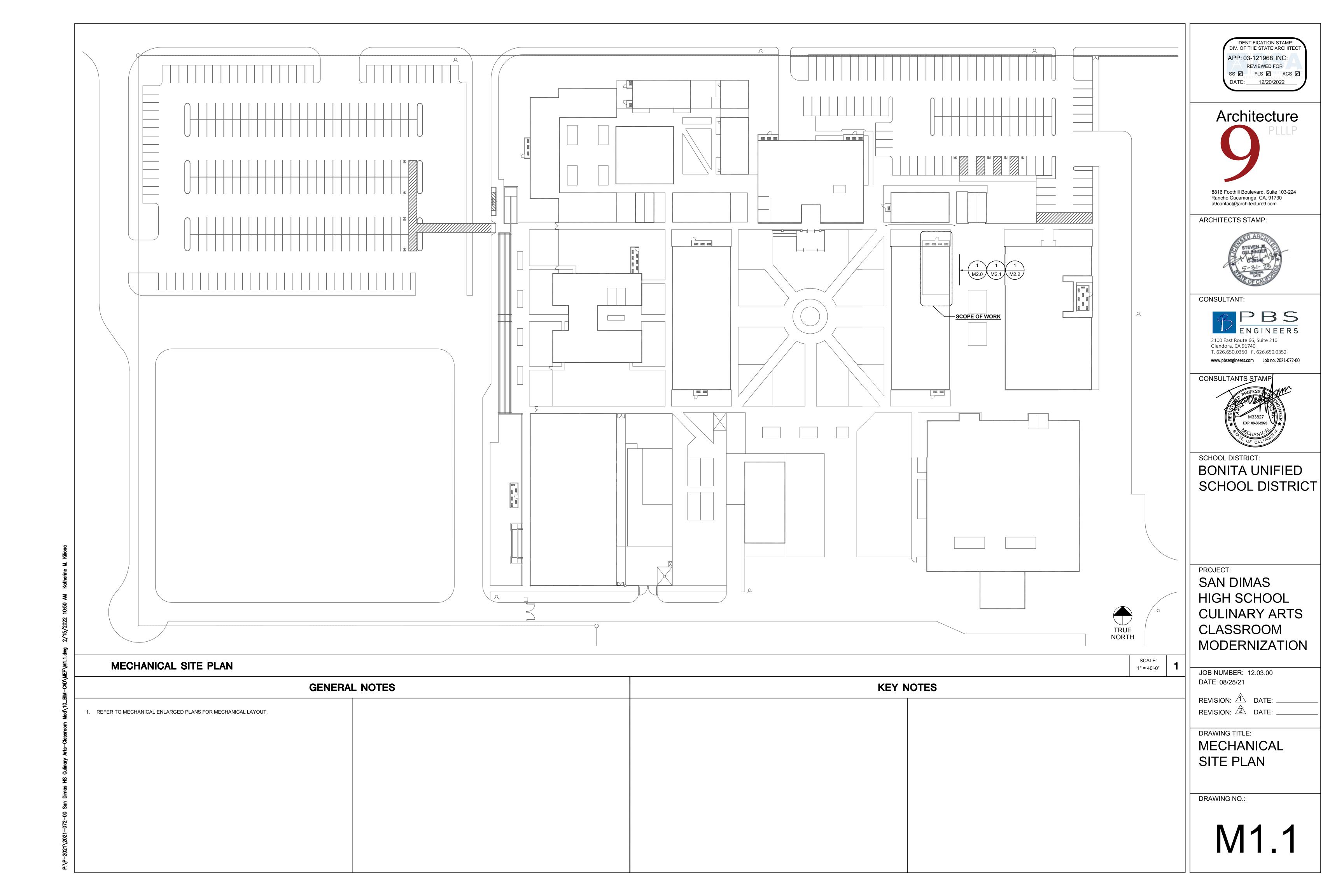
PROJECT: SAN DIMAS HIGH SCHOOL **CULINARY ARTS** CLASSROOM MODERNIZATION

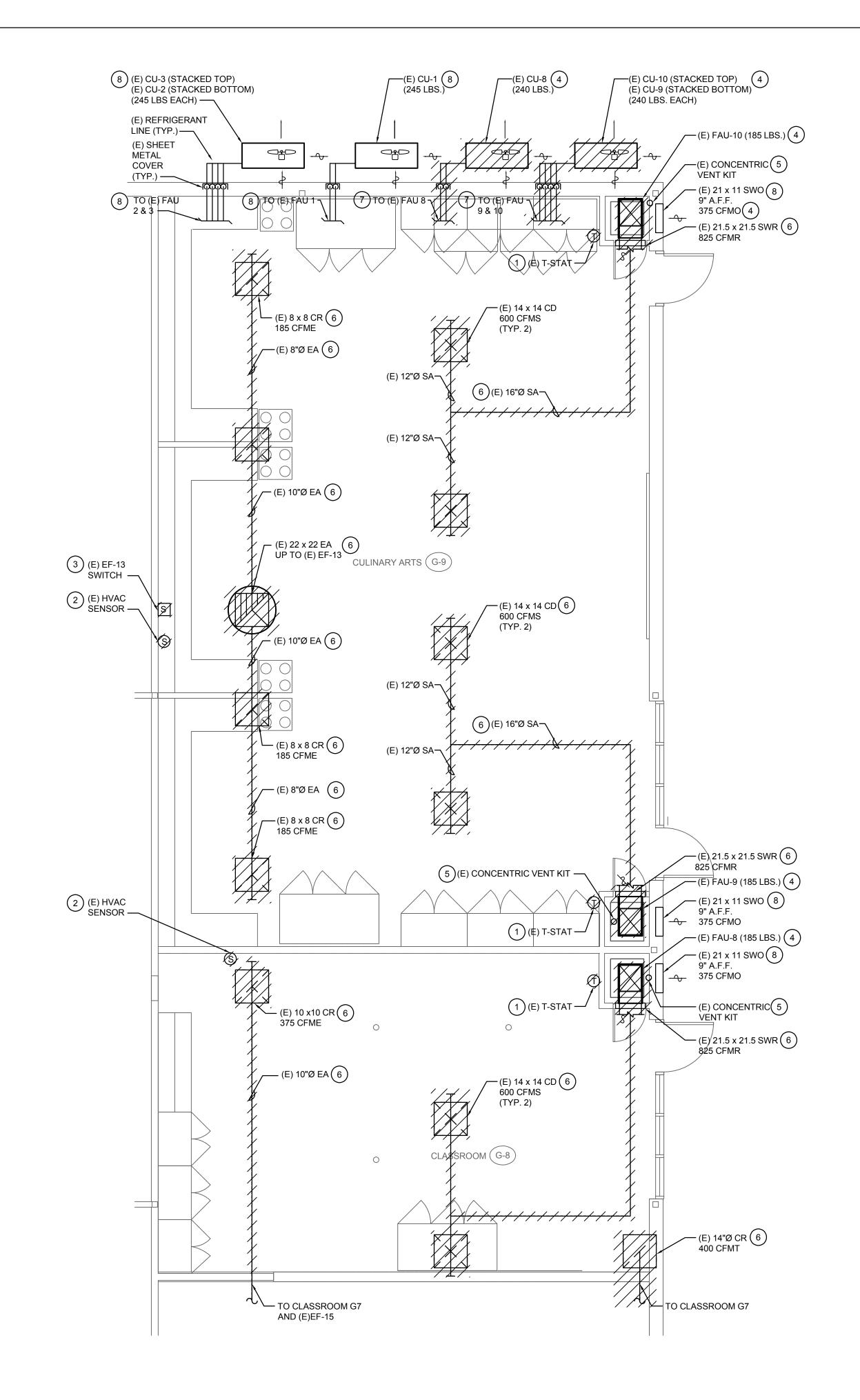
JOB NUMBER: 12.03.00 DATE: 08/25/21

REVISION: 1 DATE: REVISION: 2 DATE:

DRAWING TITLE:

MECHANICAL TITLE 24





GENERAL DEMOLITION NOTES

- CONTRACTOR SHALL VISIT THE JOB SITE AND VERIFY THE SCOPE OF DEMOLITION AND NEW WORK.
- 2. DEMOLITION IS INDICATED AS A CONVENIENCE FOR THE CONTRACTOR AND MAY NOT INDICATE THE FULL SCOPE OF DEMOLITION TO COMPLETE THE NEW
- 3. ANY VENTS, CONDUIT, & GAS LINES LOCATED ON THE ROOF THAT ARE NOT SHOWN ON THIS SHEET AND/OR NOT EXPLICITLY INDICATED TO BE DEMOLISHED, SHALL REMAIN AND BE PROTECTED IN PLACE. CONTRACTOR TO FIELD VERIFY EXISTING ROOF CONDITIONS, AND TAKE MEASURES TO DEMOLISH ON THE ITEMS INDICATED. SEE ELECTRICAL AND PLUMBING DRAWINGS FOR DETAILS.
- 4. PATCH AND REPAIR EXISTING SURFACES AS REQUIRED TO COMPLETE THE NEW WORK.
- 5. ALL EXISTING EXPOSED GAS PIPING, ELECTRICAL CONDUIT, AND DUCTWORK NO LONGER BEING USED SHALL BE REMOVED FROM THE EQUIPMENT CLOSET, CLASSROOMS, AND ROOF.
- 6. BEFORE COMMENCEMENT OF WORK, CONTRACTOR SHALL VERIFY THE EXACT LOCATIONS AND DIMENSIONS OF ALL EXISTING EQUIPMENT AND ELECTRICAL SERVICES IN THE AREA OF CONSTRUCTION. NOTIFY THE ARCHITECT AND ENGINEER OF ANY DISCREPANCIES.

DEMO KEY NOTES

- 1) EXISTING T-STAT TO BE DEMOLISHED.
- 2 EXISTING SENSOR TO BE DEMOLISHED.
- (3) EXISTING SWITCH TO BE DEMOLISHED.
- EXISTING SWITCH TO BE DEMOLISHED.

 EXISTING HVAC EQUIPMENT TO BE DEMOLISHED.
- 5 EXISTING CONCENTRIC VENT KIT TO BE DEMOLISHED. ROOF OPENING WILL
- (6) EXISTING DUCTWORK AND AIR DISTRIBUTION DEVICE TO BE DEMOLISHED.
- 7 EXISTING REFRIGERANT PIPING TO BE DEMOLISHED. WALL OPENING WILL BE REUSED.
- 8 NOT IN SCOPE OF WORK. EXISTING DEVICE TO REMAIN AND PROTECTED IN PLACE.

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DIV. OF THE STATE ARCHITECT

APP: 03-121968 INC:

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DATE: 12/20/2022

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CONSULTANTS STAMP

PROFESS

MANAGEMENT

M33827

EXP. 06-30-2023

CHANICA

OF CALIFORN

OF CALIFO

SCHOOL DISTRICT:
BONITA UNIFIED
SCHOOL DISTRICT

PROJECT:

SAN DIMAS
HIGH SCHOOL
CULINARY ARTS
CLASSROOM
MODERNIZATION

JOB NUMBER: 12.03.00 DATE: 08/25/21

REVISION: A DATE:

REVISION: DATE:

DRAWING TITLE:

DEMOLITION
MECHANICAL
FLOOR PLANS

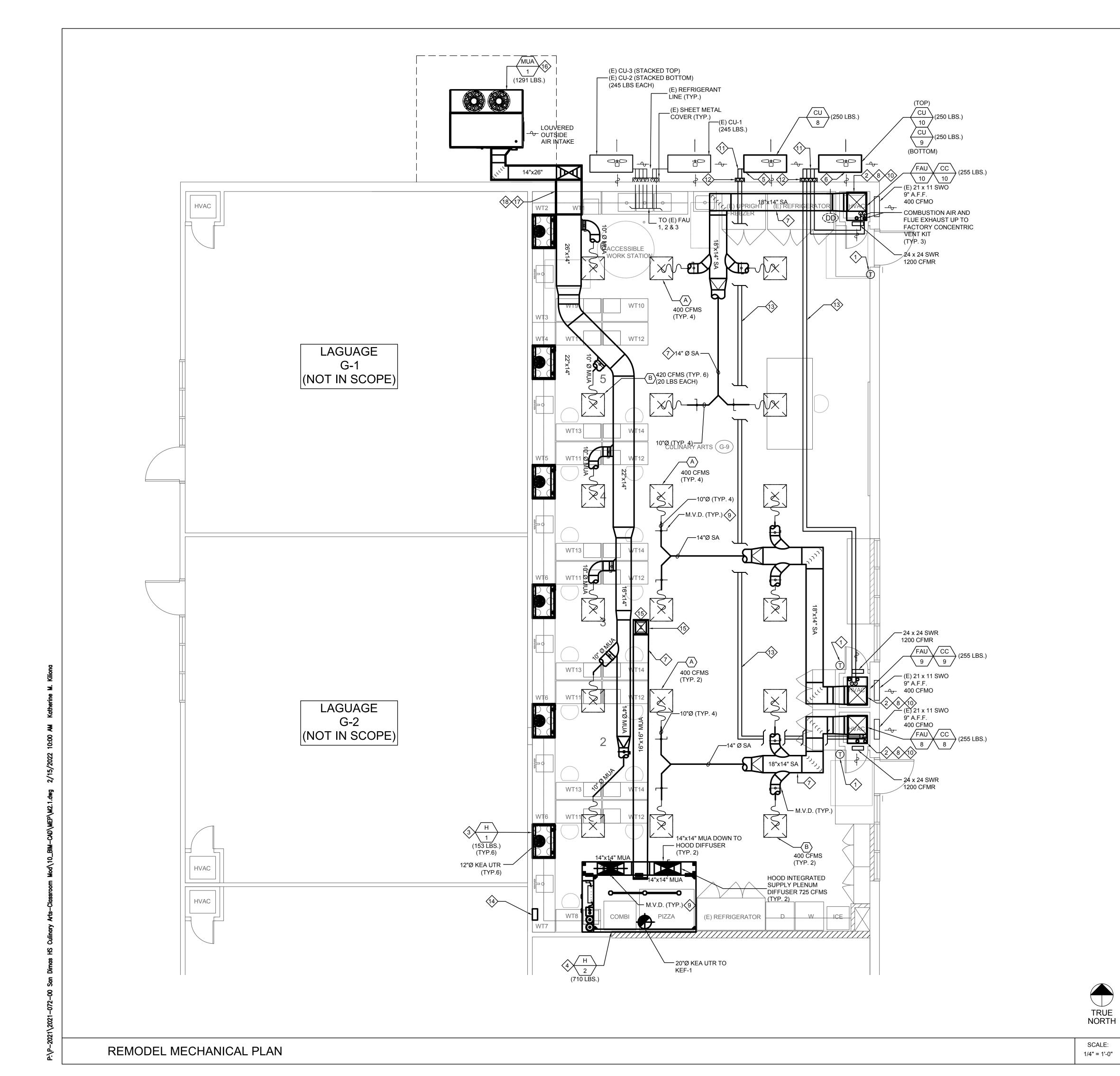
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M2.0

TRUE

SCALE: 1/4" = 1'-0"

DEMOLITION MECHANICAL PLAN



GENERAL REMODEL NOTES

1. CONTRACTOR SHALL COORDINATE WORK WITH OTHER TRADES AS NECESSARY PRIOR TO INSTALLATION.

PLUMBING VENTS, AND FLUES.

- 2. CONTRACTOR SHALL MAINTAIN PROPER CLEARANCES FROM ALL ELECTRICAL EQUIPMENT AND SERVICE CLEARANCES FOR MECHANICAL EQUIPMENT.
- 3. CONTRACTOR SHALL INSTALL REFRIGERANT PIPING SUCH THAT EQUIPMENT AND ALL APPURTENANCES ARE EASILY SERVICEABLE.
- 4. FRESH AIR INTAKES SHALL BE 10'-0" MIN AWAY FROM ALL EXHAUST OUTLETS,
- 5. CONTRACTOR SHALL COORDINATE EXACT EQUIPMENT PAD SIZES AND LOCATIONS WITH OTHER TRADES PRIOR TO INSTALLATION.
- 6. CONTRACTOR SHALL INSULATE ALL REFRIGERANT PIPING INCLUDING JOINTS & PIPING SUPPORTS AND ALL DUCTWORK. INSULATION WALL THICKNESS SHALL BE PER 2019 ENERGY CODE REQUIREMENT. PROVIDE WEATHER JACKETING FOR ALL EXTERIOR REFRIGERANT PIPING.
- 7. BEFORE COMMENCEMENT OF WORK, THE CONTRACTOR SHALL VERIFY THE EXACT LOCATIONS AND DIMENSIONS OF ALL EXISTING EQUIPMENT, ELECTRICAL SERVICE IN THE AREA OF CONSTRUCTION, AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES.
- 8. NEW SUPPLY AND RETURN GRILLES SHALL NOT BE LOCATED WITHIN 36" OF AN EXISTING FIRE ALARM (FA) DETECTOR/ DEVICE.
- 9. CONTRACTOR TO HAVE ALL SALVAGE RIGHTS TO ALL DEMOLISHED COMPONENTS AND EQUIPMENT. SALVAGE RIGHTS TO BE REFLECTED IN THE BID PROPOSAL TO THE "DISTRICT" BY WAY OF A BID COST REDUCTION. THE "DISTRICT" DOES NOT WANT ANY DEMOLISHED COMPONENTS OR EQUIPMENT BACK.

REMODEL KEY NOTES

- PROVIDE HARDWIRED THERMOSTAT. MOUNT AT 48" A.F.F. REFER TO MECHANICAL SCHEDULE FOR TSTAT MODEL. SEE DETAIL 1/M0.2.
- 2 CLOSET TYPE FORCED AIR FURNACE UNIT AND EVAPORATOR COIL. SEE DETAIL 1/M3.2.
- RESIDENTIAL KITCHEN EXHAUST HOOD WITH INTEGRATED EXHAUST FAN. SEE
- 4 TYPE I KITCHEN EXHAUST HOOD WITH ANSUL SYSTEM. SEE SHEET M4.2.
- (5) OUTDOOR CONDENSING UNIT ON GRADE. SEE DETAIL 5/M3.2.
- (6) STACKED OUTDOOR CONDENSING UNITS. SEE DETAIL 5/M3.2.
- CEILING HUNG DUCTWORK. SEE DETAIL 3/M3.1.
- (8) INTERLOCK TO (E) AREA SMOKE DETECTION SYSTEM FOR SHUTDOWN.
- (9) MANUAL VOLUME DAMPER.
- PROVIDE FACTORY CONCENTRIC VENT KIT FOR FORCED AIR FURNACE UNIT COMBUSTION AIR INTAKE AND FLUE EXHAUST. REUSE EXISTING OPENING. SEE DETAIL 7/M3.1.
- 3/8 " (RL) AND 5/8" (RS) FROM OUTDOOR CONDENSING UNIT TO INDOOR CLOSET FURNACE EVAPORATOR COIL. SEE DETAIL 7/M3.2.
- (12) WALL MOUNTED REFRIGERANT PIPING. PROVIDE SHEET METAL COVER ON REFRIGERANT PIPING. SEE DETAIL 6/M3.1.
- CEILING HUNG REFRIGERANT PIPING. SEE DETAIL 5/M3.1
- ANSUL SYSTEM CONTROL PANEL. CONTRACTOR TO FIELD VERIFY ITS
- (15) 16"x16" MUA UP TO ROOF AND TRANSITION TO MUA-2.
- PROVIDE PACKAGED DEDICATED OUTSIDE AIR UNIT MOUNTED ON 6"
 CONCRETE PAD. UNIT SHALL BE INSTALLED WITH SMOOTH DUCTS TRANSITION TO SUPPLY(L) AIR DUCT OPENING. SEE DETAIL 2/M3.2.
- PROVIDE 29"X17" WALL OPENING FOR SUPPLY AIR DUCT. REFER TO DETAIL 13/S0.3 FOR DUCT OPENING TO THE SHEAR WALL.
- PROVIDE DOUBLE WALL INSULTED DUCTWORK FOR EXPOSED DUCTWORK OUTSIDE THE BUILDING.

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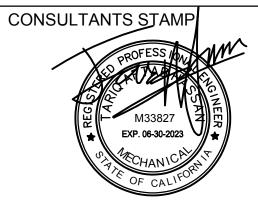


CONSULTANT:



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www.pbsengineers.com Job no. 2021-072-00



SCHOOL DISTRICT: **BONITA UNIFIED** SCHOOL DISTRICT

PROJECT:

SAN DIMAS HIGH SCHOOL **CULINARY ARTS** CLASSROOM MODERNIZATION

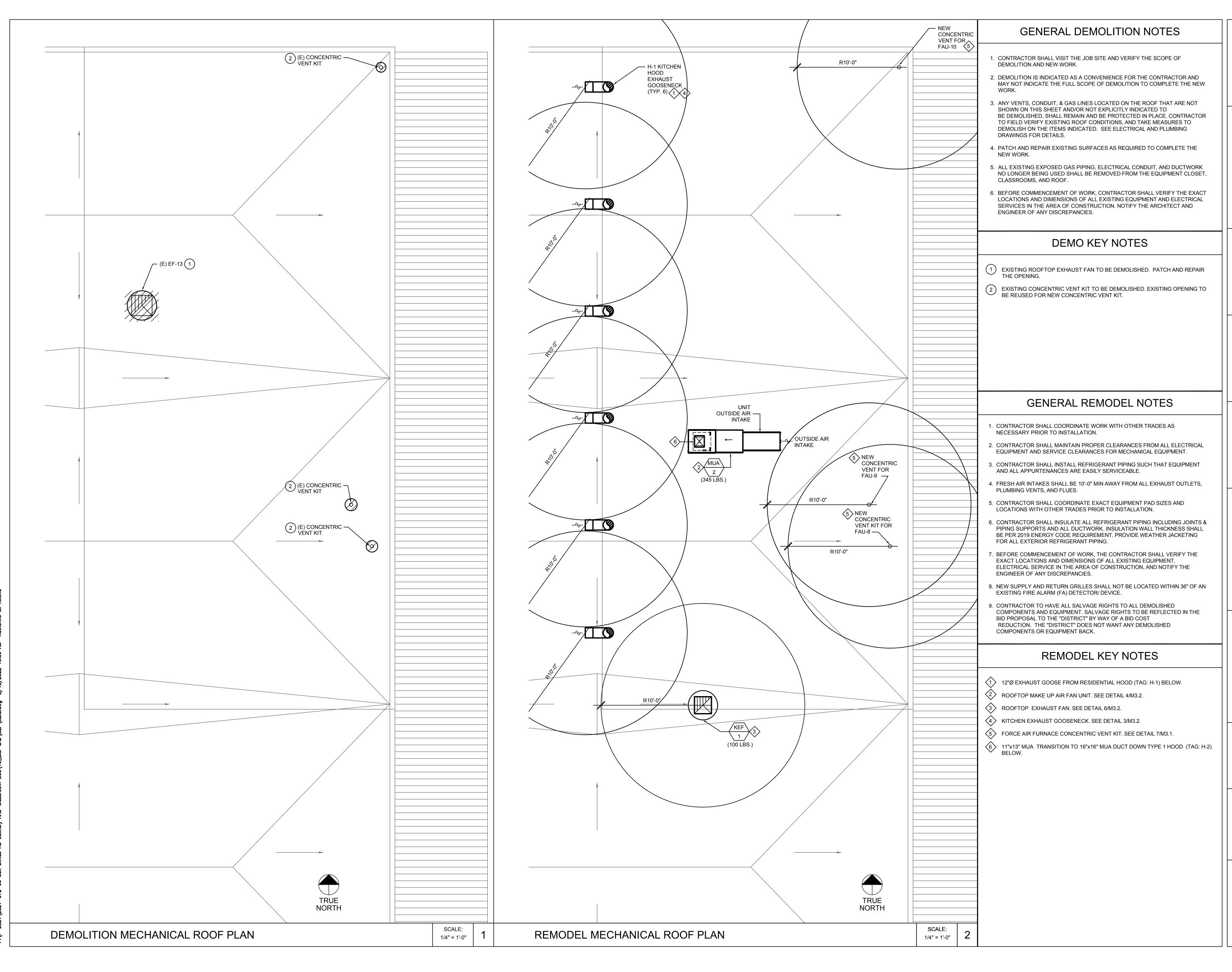
JOB NUMBER: 12.03.00 DATE: 08/25/21

REVISION: 1 DATE:

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DRAWING TITLE:

REMODEL **MECHANICAL** FLOOR PLANS



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CONSULTANTS STAMP

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BONITA UNIFIED SCHOOL DISTRICT

PROJECT:

SAN DIMAS HIGH SCHOOL **CULINARY ARTS** CLASSROOM MODERNIZATION

JOB NUMBER: 12.03.00 DATE: 08/25/21

REVISION: 1 DATE:

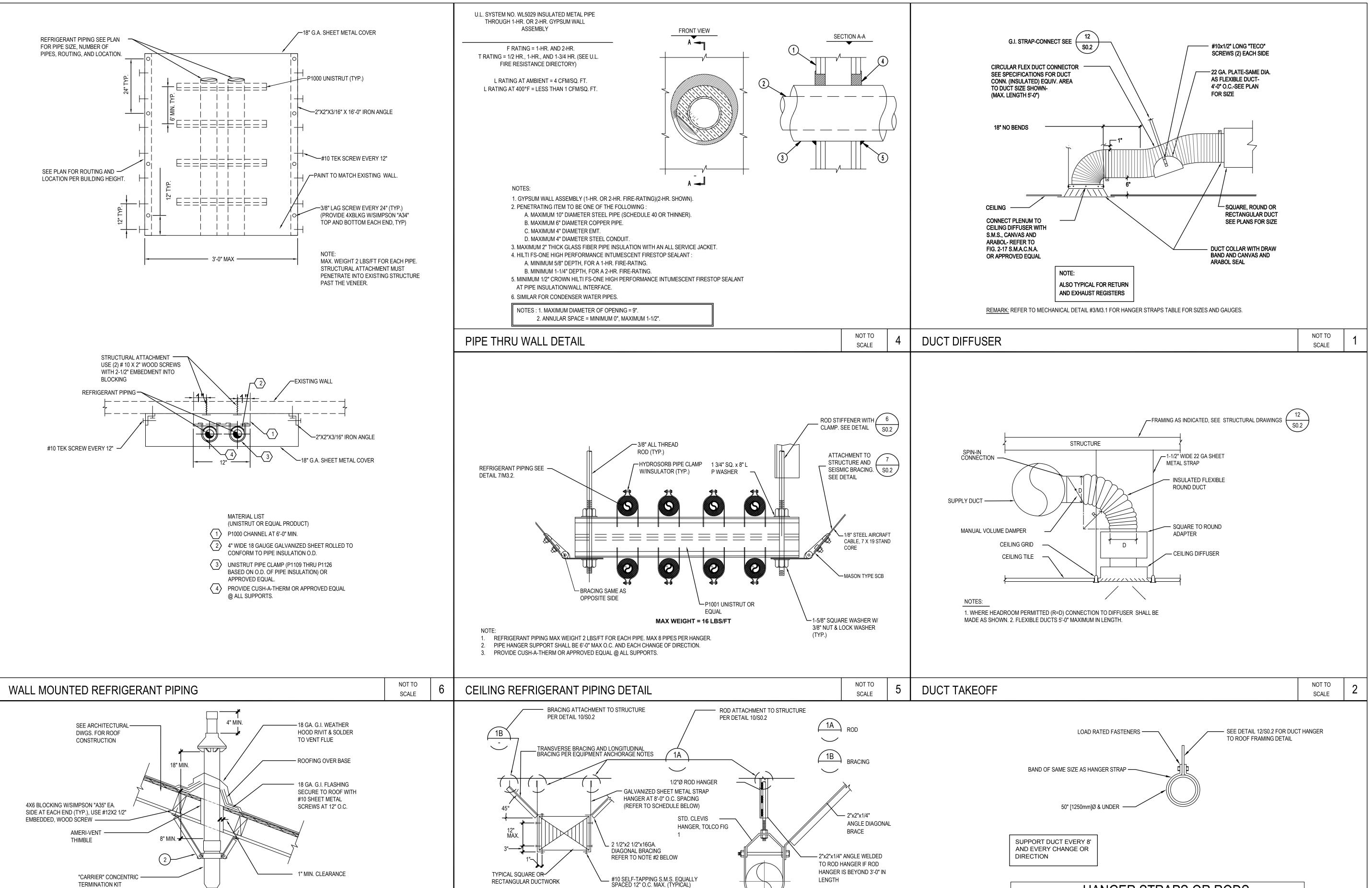
REVISION: 2 DATE:

DRAWING TITLE:

MECHANICAL DEMO AND REMODEL **ROOF PLAN**

DRAWING NO.:

M2.2



HANGER STRAPS OR RODS QUANTITY/SIZE MAX. LOAD SPACING IN. [mm] LBS. [kg] IN. [mm] 260 [119] 144 [3600] ONE 1 [25] x 22 GA STRAP 420 [190] 144 [3600] ONE 1 [25] x 18 GA STRAP ONE 1 [25] x 16 GA STRAP 700 [317] 144 [3600]

NOTE: TABULATED DATA FROM SMACNA ALLOWS FOR DUCT REINFORCING AND INSULATION, BUT NO EXTERNAL LOAD.

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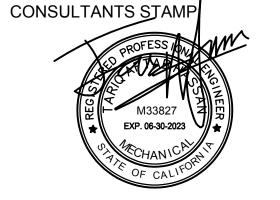
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SCHOOL DISTRICT: **BONITA UNIFIED** SCHOOL DISTRICT

PROJECT:

SAN DIMAS HIGH SCHOOL **CULINARY ARTS** CLASSROOM MODERNIZATION

JOB NUMBER: 12.03.00 DATE: 08/25/21

REVISION: 1 DATE: REVISION: 2 DATE:

DRAWING TITLE:

MECHANICAL DETAILS

DRAWING NO.:

NOT TO

SCALE

DETAIL NOTES:

SUBMIT COMPLETE SHOP DRAWINGS FOR ENGINEER APPROVAL PRIOR TO

CONCENTRIC VENT KIT

VENT EXHAUST -SEE PLANS FOR

SIZE & LOCATION

TERMINATION KIT

TYPICAL EACH FURNACE

FABRICATION AND INSTALLATION.

FLUE SHALL BE SUPPORTED WITH "B-LINE" FIG. B3140 STANDARD PIPE CLAMP. FURNISH AND INSTALL TWO (2) 2"x2"x1/8" STEEL SUPPORT ANGLES, LENGTH AS REQUIRED AND SECURE TO PIPE CLAMP AND STRUCTURE. SECURE ANGLES TO

> NOT TO SCALE

DUCT HANGER AND ROD

MAX. HALF OF DUCT

P/2 = 72

PERIMETER/IN.

MAX. LOAD EACH

HANGER/LBS.

MANUAL, 3RD EDITION) NO BRACING REQUIRED IF DUCT IS SUSPENDED 12" OR LESS IN LENGTH. NOT REQUIRED WITH CROSS SECTIONAL AREAS LESS THAN 6.0 SF FOR RECTANGULAR AND 28" DIA. FOR ROUND DUCTS.

RECTANGULAR DUCT

PAIR AT 8 FT.

1"X 20 GA.

SPACING

MAX. DUCT Ø

IN. [mm]

26 [650]

36 [900]

50 [1250]

INTAKE/COMBUSTION

AIR. SEE PLANS FOR SIZE &

LOCATION

TO FURNACE

EXCERPT FROM TABLES 5.1 & 5.2 FROM THE SMACNA HVAC DUCT CONSTRUCTION AND STANDARD. PROVIDE TRANSVERSE BRACING AT 40 FT. AND LONGITUDINAL BRACING AT 80 FT. (2008 SMACNA SEISMIC RESTRAINT

UP TO 24"

SECTION

DIAMETER

/INCHES

ROUND DUCT

MAX. LOAD EACH

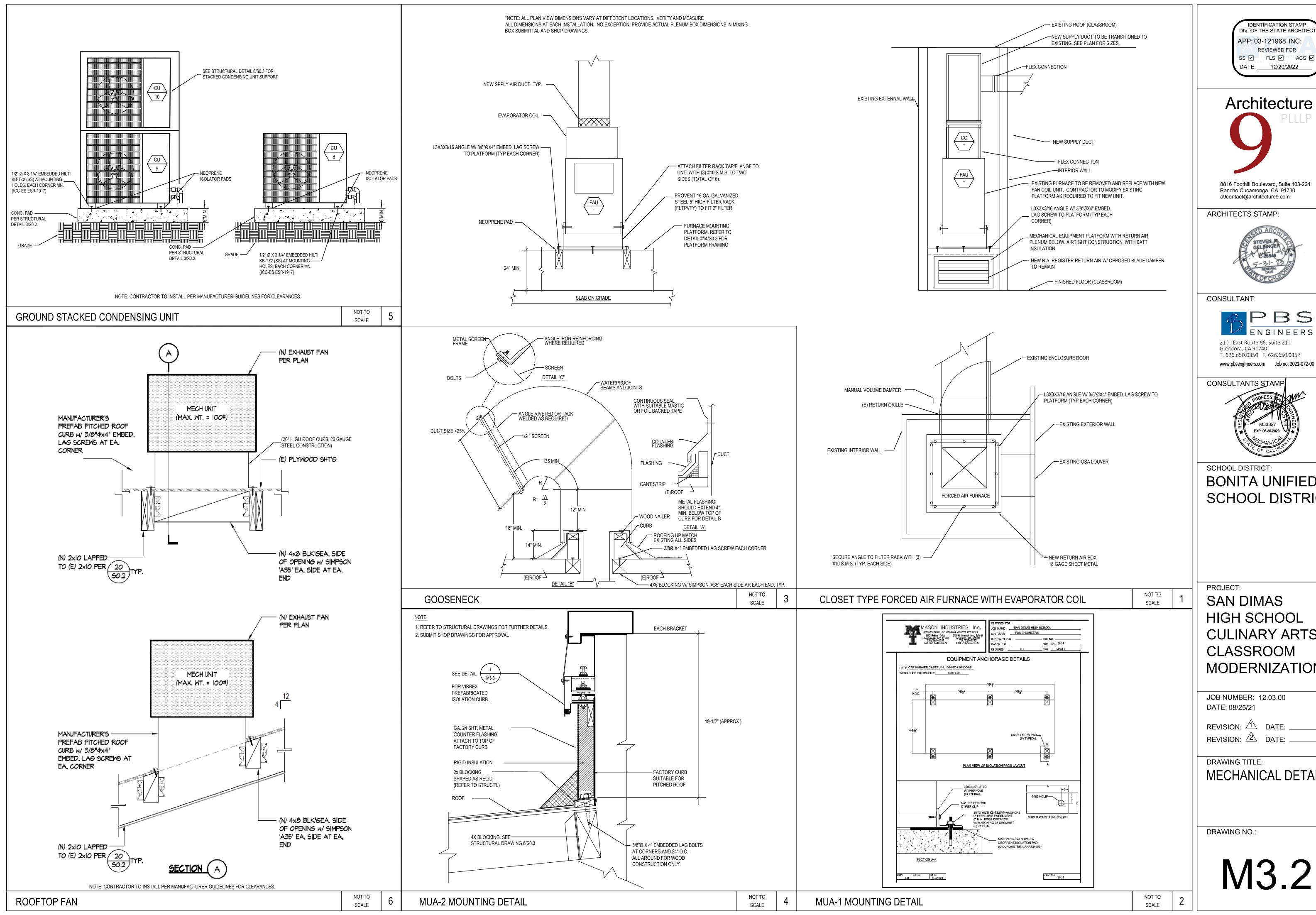
50

HANGER/LBS.

STRAP AT 12

FT. SPACING

1"X 22 GA.



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BONITA UNIFIED SCHOOL DISTRICT

SAN DIMAS HIGH SCHOOL **CULINARY ARTS** CLASSROOM MODERNIZATION

MECHANICAL DETAILS

M3.2

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SCHOOL DISTRICT

SAN DIMAS
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CULINARY ARTS
CLASSROOM
MODERNIZATION

JOB NUMBER: 12.03.00 DATE: 08/25/21

REVISION: A DATE: .

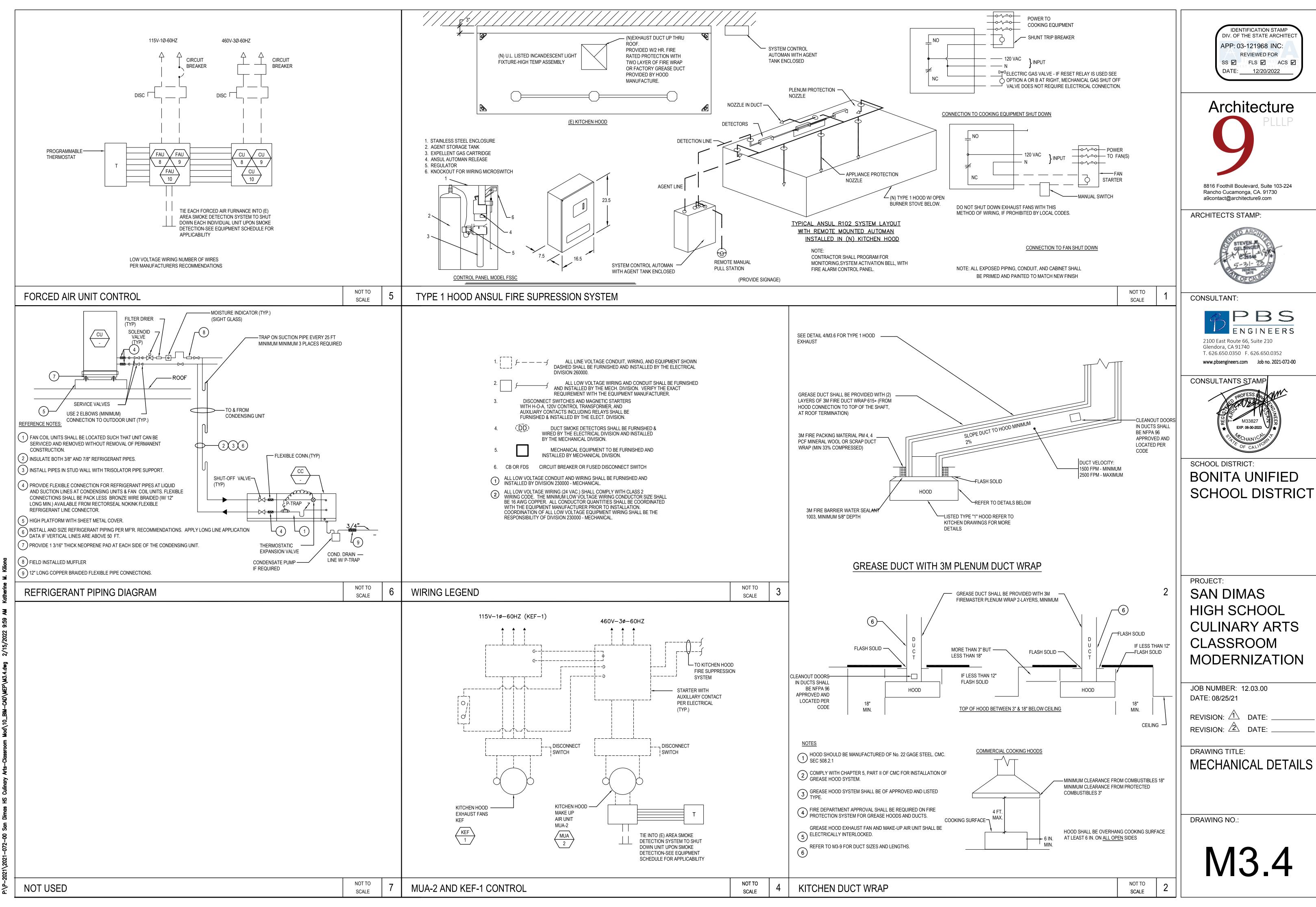
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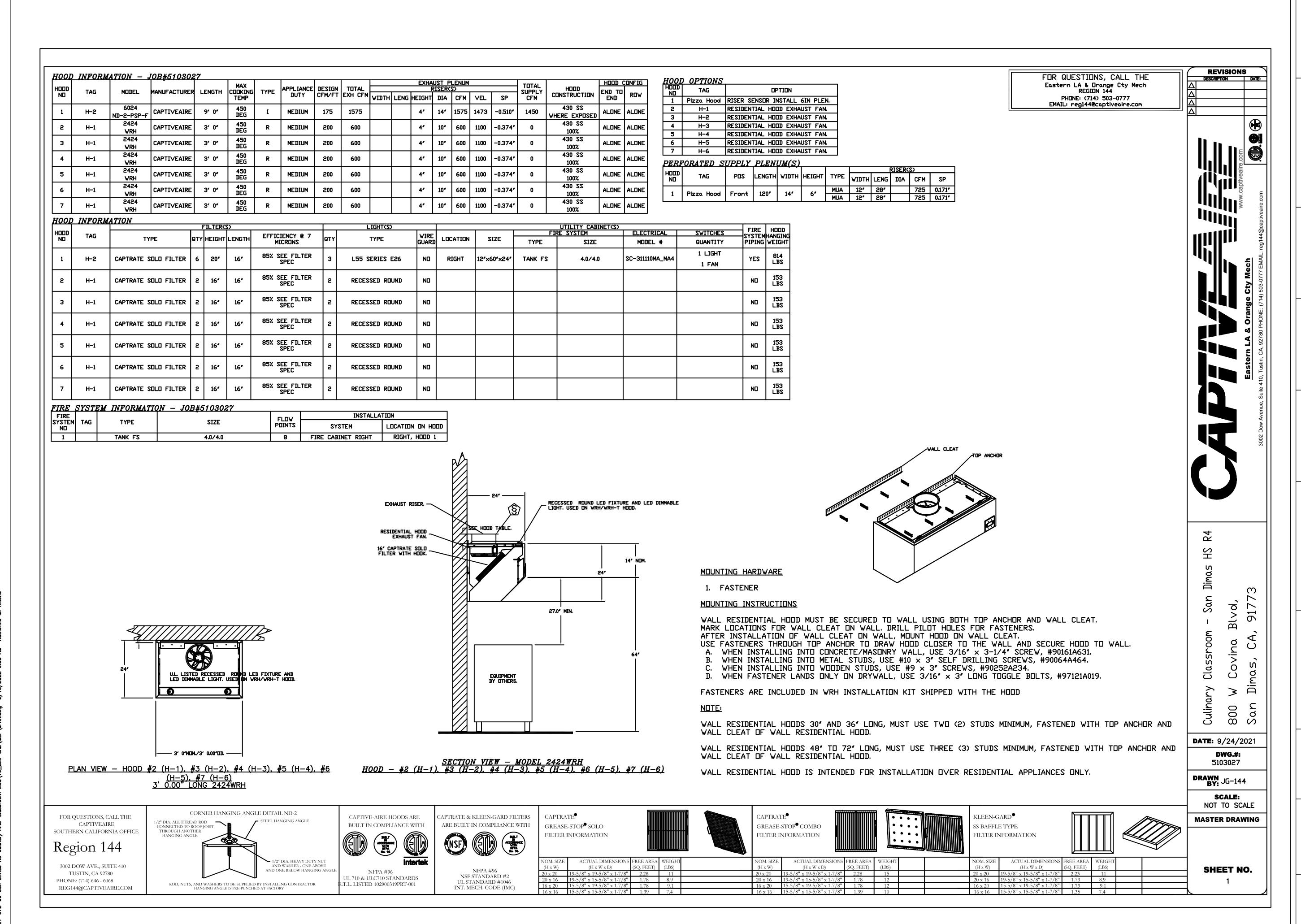
DRAWING TITLE:

MECHANICAL DETAILS

DRAWING NO.:

M3.3





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BONITA UNIFIED
SCHOOL DISTRICT

SAN DIMAS
HIGH SCHOOL
CULINARY ARTS
CLASSROOM
MODERNIZATION

JOB NUMBER: 12.03.00 DATE: 08/25/21

REVISION: DATE:

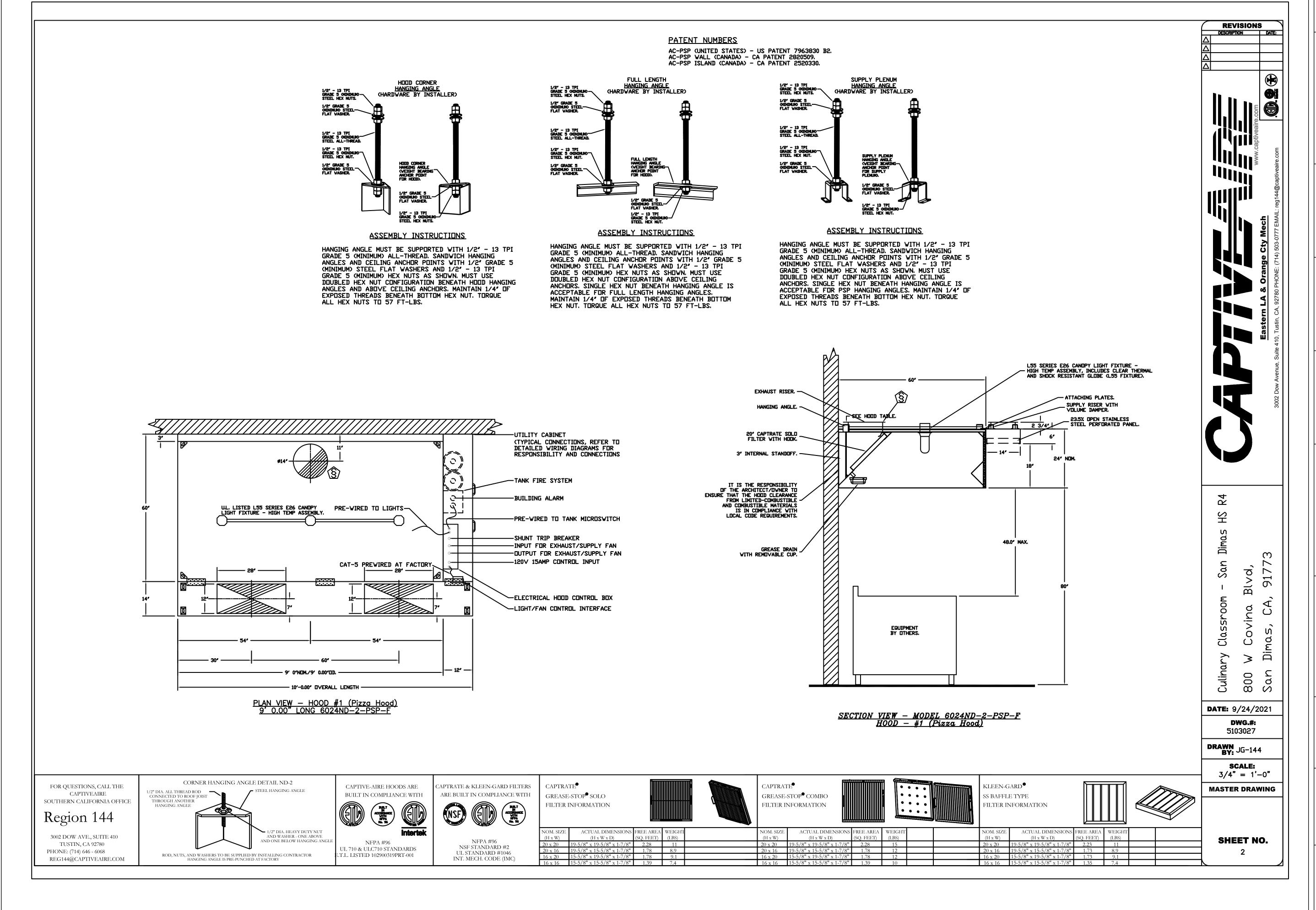
REVISION: DATE:

DRAWING TITLE:

CAPTIVEAIRE DRAWINGS

DRAWING NO.:

M4.1



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DATE: 12/20/2022

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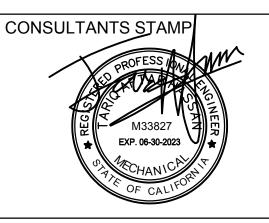
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BONITA UNIFIED
SCHOOL DISTRICT

PROJECT:
SAN DIMAS
HIGH SCHOOL
CULINARY ARTS
CLASSROOM
MODERNIZATION

JOB NUMBER: 12.03.00 DATE: 08/25/21

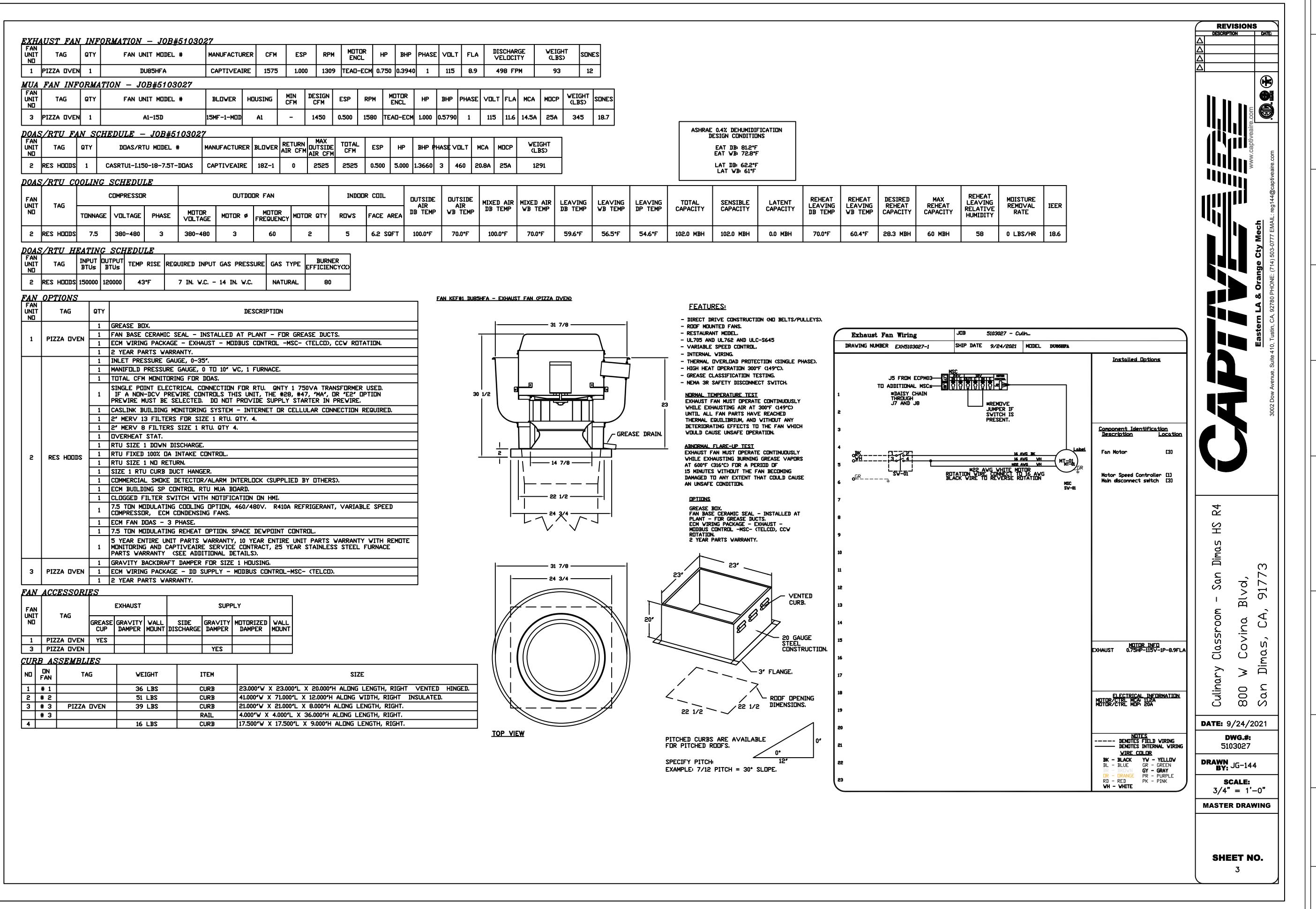
REVISION: DATE: _
REVISION: DATE: _

DRAWING TITLE:

CAPTIVEAIRE DRAWING

DRAWING NO.:

M4.2



Architecture
PLLLP

8816 Footbill Roulovard, Suita 103, 224

8816 Foothill Boulevard, Suite 103-224 Rancho Cucamonga, CA. 91730 a9contact@architecture9.com

ARCHITECTS STAMP:



CONSULTANT:



CONSULTANTS STAMP

PROFESS MARKET MANAGEMENT OF THE CHANGE OF THE CHANGE

SCHOOL DISTRICT:
BONITA UNIFIED
SCHOOL DISTRICT

PROJECT:
SAN DIMAS
HIGH SCHOOL
CULINARY ARTS
CLASSROOM
MODERNIZATION

JOB NUMBER: 12.03.00 DATE: 08/25/21

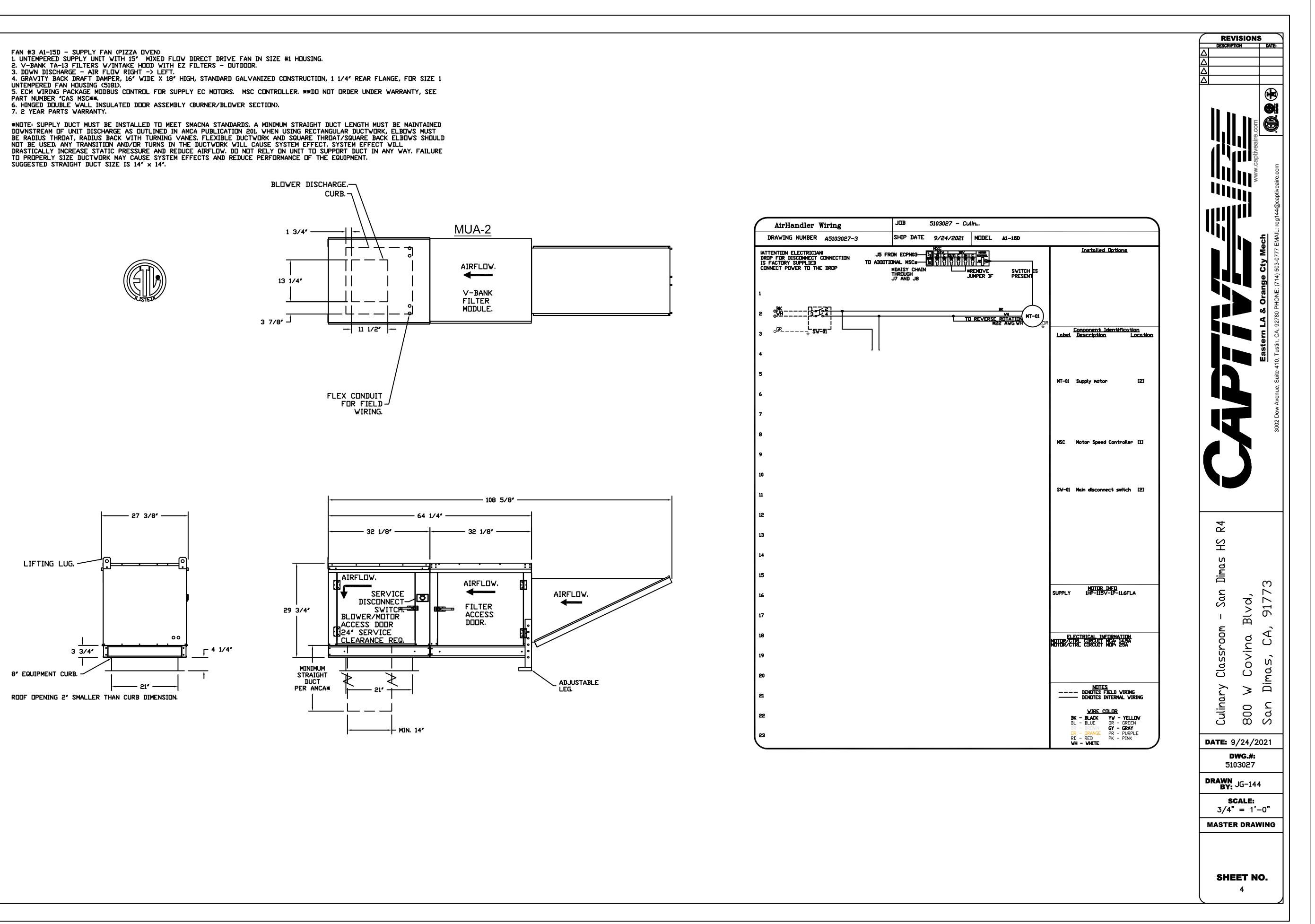
REVISION: DATE:

REVISION: DATE:

DRAWING TITLE:

CAPTIVEAIRE DRAWING

DRAWING NO.:



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PLLLP
PLLLP

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BONITA UNIFIED
SCHOOL DISTRICT

SAN DIMAS
HIGH SCHOOL
CULINARY ARTS
CLASSROOM
MODERNIZATION

JOB NUMBER: 12.03.00 DATE: 08/25/21

REVISION: A DATE: _
REVISION: DATE: _

DRAWING TITLE:

CAPTIVEAIRE DRAWING

DRAWING NO.:

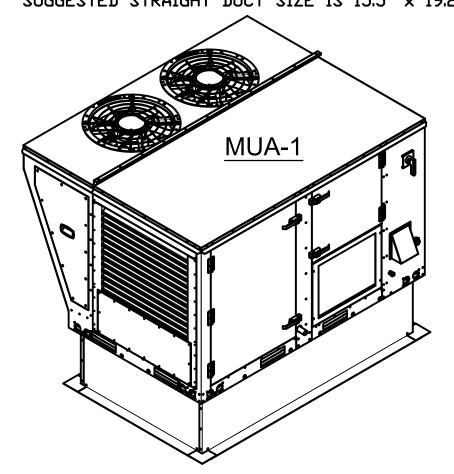
FAN #2 CASRTU1-I.150-18Z-7.5T-DOAS - HEATER (RES HOODS)

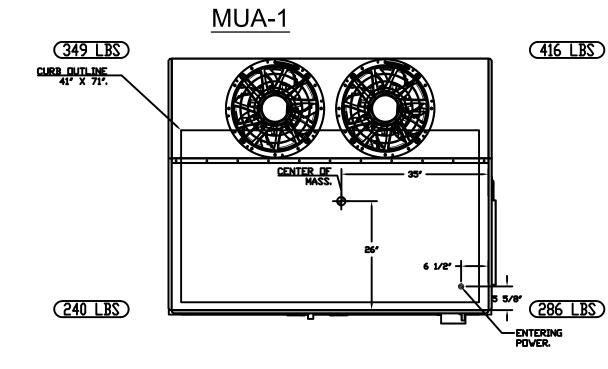
NOTES:

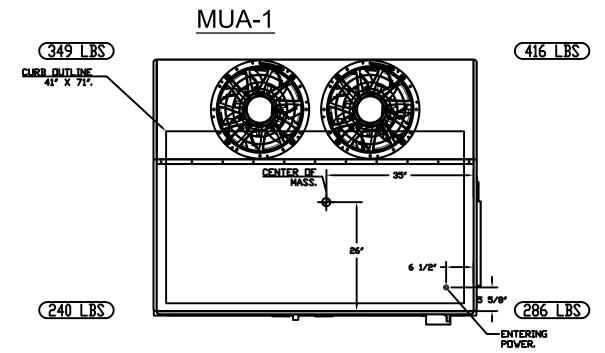
- DO NOT OBSTRUCT OUTSIDE AIR INLET, OUTSIDE AIR COIL
- OR DUTSIDE AIR FAN.
- DENOTES CORNER WEIGHT.
- ROOF OPENING MUST BE 2" SMALLER THAN CURB DIMENSIONS

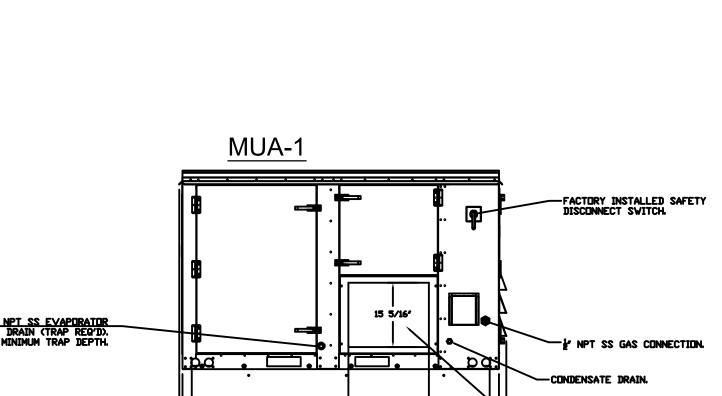
IN BOTH DIRECTIONS.

*NOTE: SUPPLY DUCT MUST BE INSTALLED TO MEET SMACNA STANDARDS. A MINIMUM STRAIGHT DUCT LENGTH MUST BE MAINTAINED DOWNSTREAM OF UNIT DISCHARGE AS OUTLINED IN AMCA PUBLICATION 201. WHEN USING RECTANGULAR DUCTWORK, ELBOWS MUST BE RADIUS THROAT, RADIUS BACK WITH TURNING VANES. FLEXIBLE DUCTWORK AND SQUARE THROAT/SQUARE BACK ELBOWS SHOULD NOT BE USED. ANY TRANSITION AND/OR TURNS IN THE DUCTWORK WILL CAUSE SYSTEM EFFECT. SYSTEM EFFECT WILL DRASTICALLY INCREASE STATIC PRESSURE AND REDUCE AIRFLOW. DO NOT RELY ON UNIT TO SUPPORT DUCT IN ANY WAY, FAILURE TO PROPERLY SIZE DUCTWORK MAY CAUSE SYSTEM EFFECTS AND REDUCE PERFORMANCE OF THE EQUIPMENT. SUGGESTED STRAIGHT DUCT SIZE IS 15.5" × 19.25".

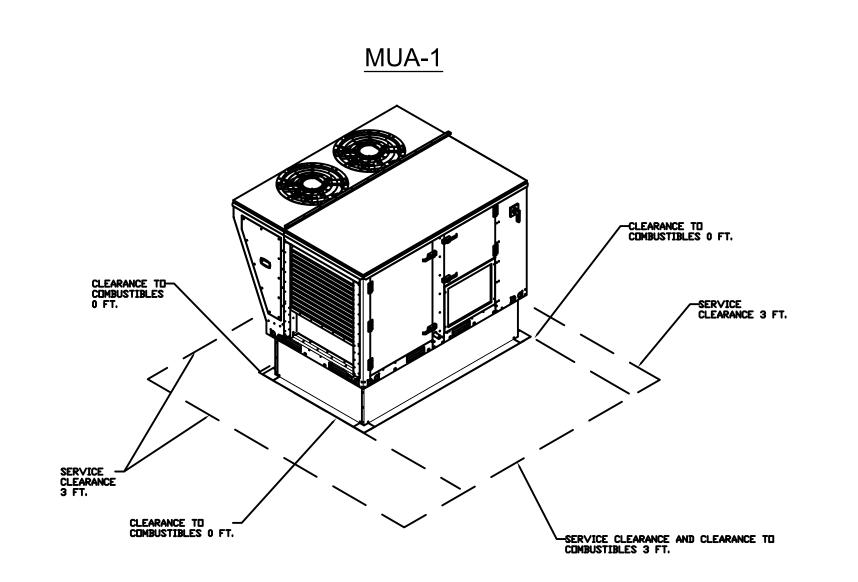












REVISIONS DESCRIPTION DATE: 1. INLET PRESSURE GAUGE, 0-35". 2. MANIFOLD PRESSURE GAUGE, 0 TO 10" WC, 1 FURNACE. 3. RTU TOTAL CFM MONITORING. 4. SINGLE POINT ELECTRICAL CONNECTION FOR RTU. 750VA TRANSFORMER USED, IF A NON-DCV PREWIRE CONTROLS THIS UNIT, THE #28, #47, "MA", OR "E2" PREWIRE OPTION MUST BE SELECTED, DOES NOT PROVIDE SUPPLY STARTER IN PREWIRE. 5. CASLINK BUILDING MONITORING SYSTEM - INTERNET OR CELLULAR CONNECTION REQUIRED. 6. 2" MERV 13 FILTERS FOR RTU1 (QTY. 4). 7. 2" MERV 8 FILTERS FOR RTU1 (QTY. 4). 8. DVERHEAT STAT. 9. RTU FIXED 100% DA INTAKE CONTROL. 10. RTU1 NO RETURN. 11. RTU1 CURB DUCT HANGER. 12. COMMERCIAL SMOKE DETECTOR/ALARM INTERLOCK - ALARM SUPPLIED BY OTHERS. 13. ECM BUILDING SP CONTROL RTU MUA BOARD. 14. CLOGGED FILTER SWITCH - NOTIFICATION ON HMI. 15. 7.5 TON MODULATING COOLING OPTION, 460/480V. R410A REFRIGERANT, VARIABLE SPEED COMPRESSOR, ECM CONDENSING 16. ECM FAN DOAS - 3 PHASE. 17. 7.5 TON MODULATING REHEAT OPTION - SPACE DEWPOINT 18. RTU1 SIDE DISCHARGE. 19, 5 YEAR ENTIRE UNIT PARTS WARRANTY, 10 YEAR ENTIRE UNIT PARTS WARRANTY WITH REMOTE MONITORING AND CAPTIVEAIRE SERVICE CONTRACT, 25 YEAR STAINLESS STEEL FURNACE PARTS WARRANTY (SEE ADDITIONAL DETAILS).



PROJECT: SAN DIMAS HIGH SCHOOL CLASSROOM 800 San

REVISION: 1 DATE:

DRAWING TITLE:

DRAWING



<u>OPTIONS</u>

FANS.

CONTROL.

Blvd,

Culinary

DATE: 10/13/2021

DWG.#: 5135753

DRAWN BY: jake.galas

SCALE: 1/2" = 1'-0"

MASTER DRAWING

CULINARY ARTS MODERNIZATION

IDENTIFICATION STAMP DIV. OF THE STATE ARCHITEC

REVIEWED FOR SS 🗹 FLS 🗹 ACS 🗹

APP: 03-121968 INC:

DATE: 12/20/2022

Architecture

8816 Foothill Boulevard, Suite 103-224 Rancho Cucamonga, CA. 91730

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Glendora, CA 91740

CONSULTANTS STAMP

SCHOOL DISTRICT:

BONITA UNIFIED

SCHOOL DISTRICT

ARCHITECTS STAMP:

CONSULTANT:

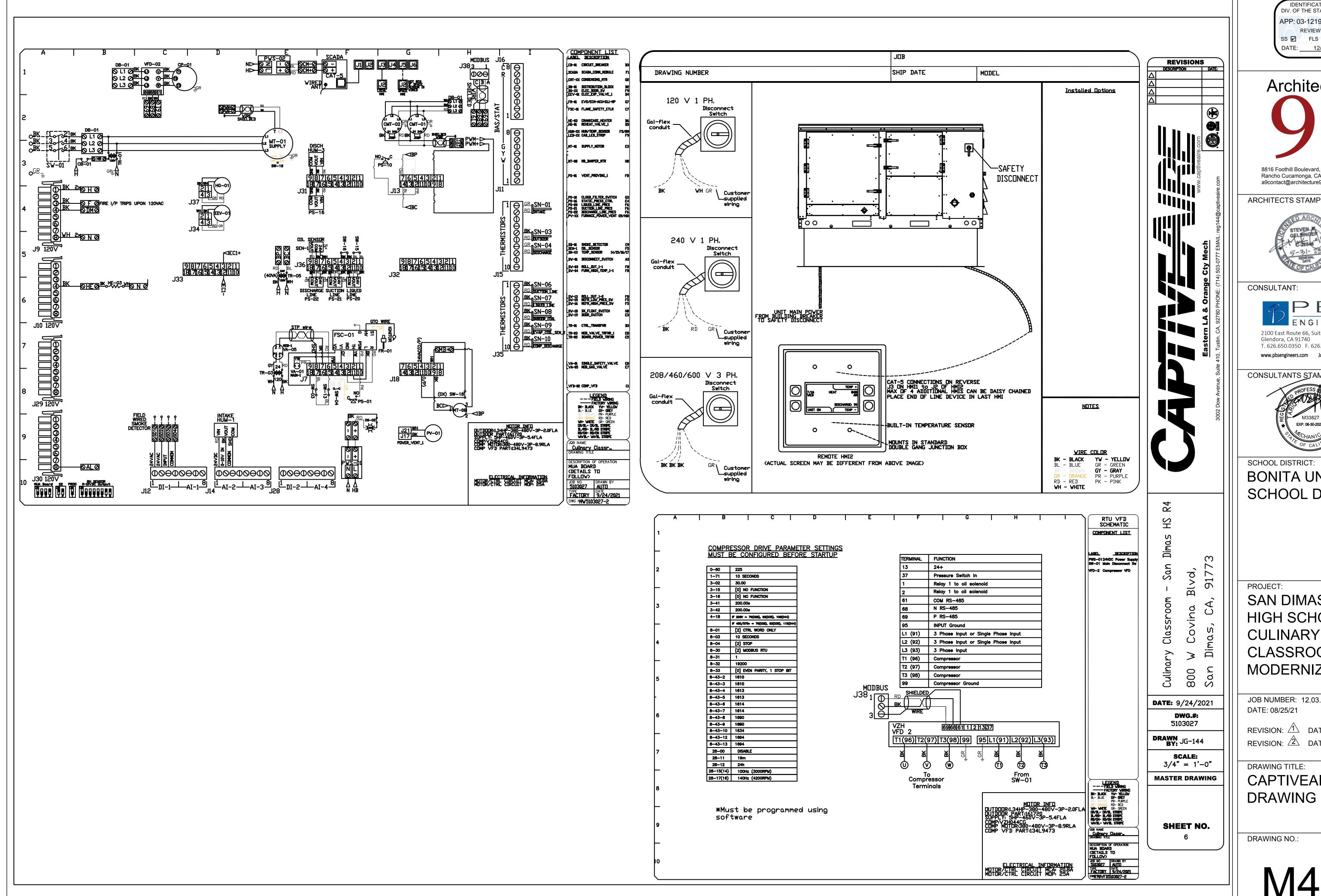
JOB NUMBER: 12.03.00 DATE: 08/25/21

REVISION: 2 DATE:

CAPTIVEAIRE

SHEET NO.

DRAWING NO.:



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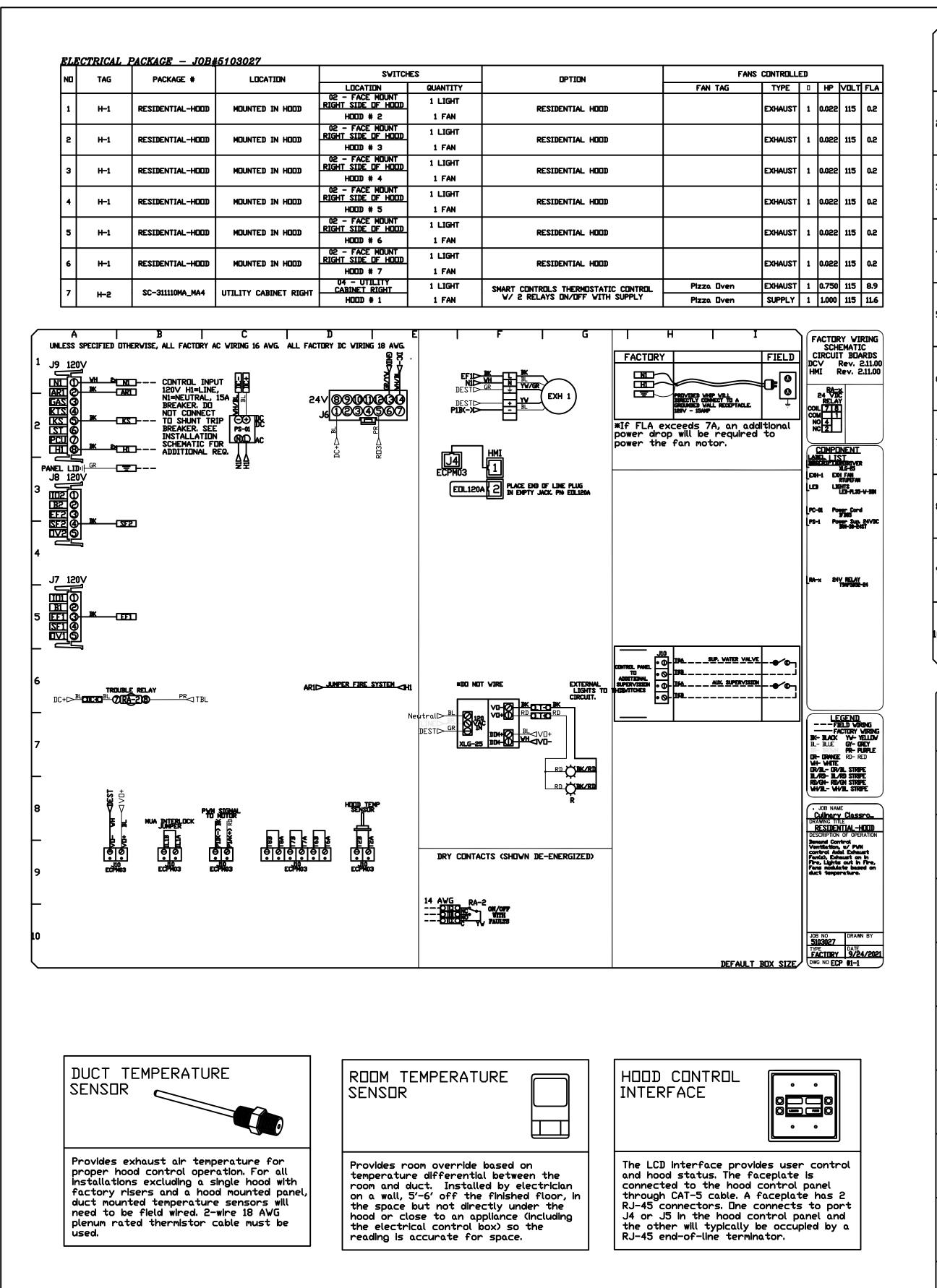
SCHOOL DISTRICT: **BONITA UNIFIED** SCHOOL DISTRICT

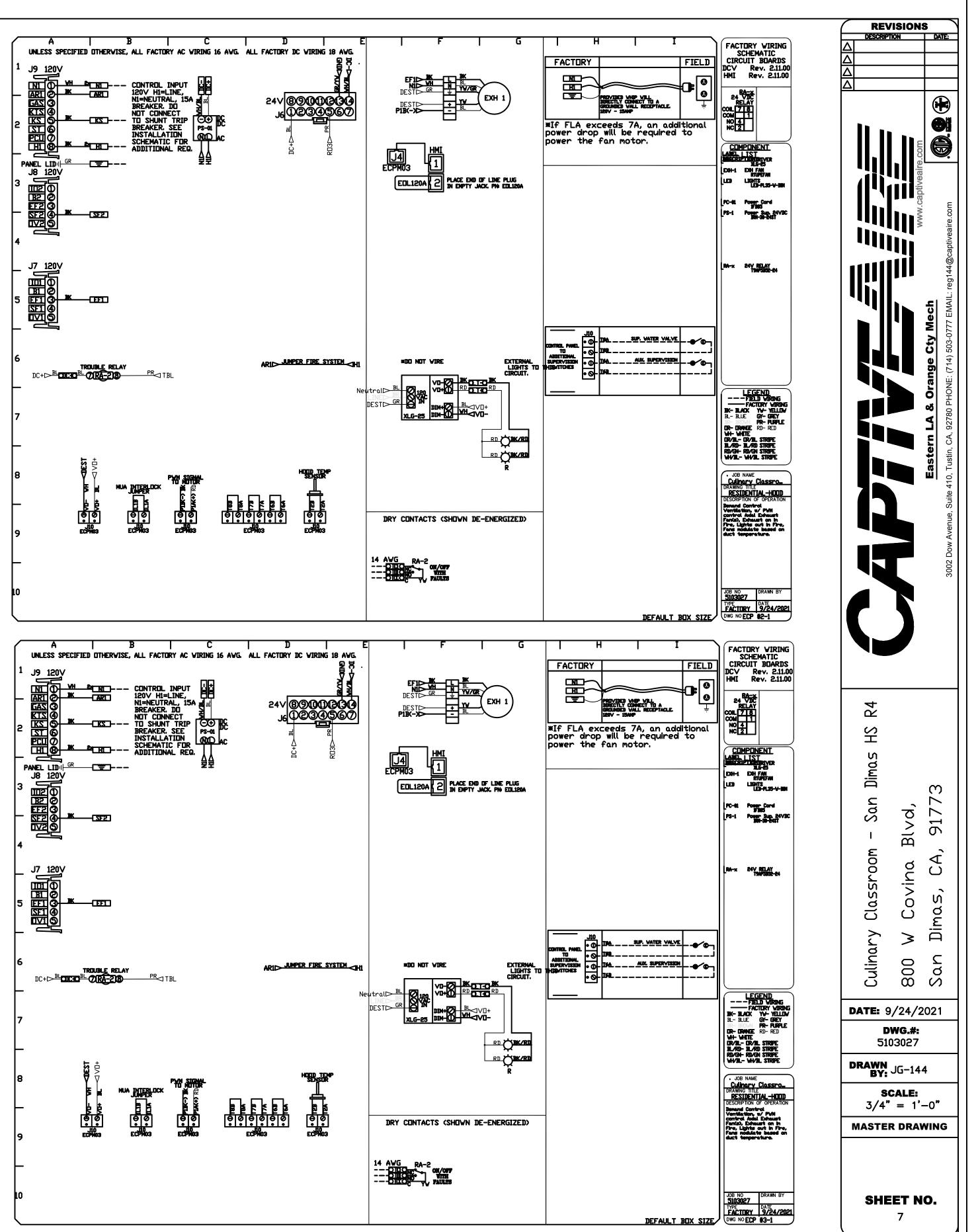
PROJECT: SAN DIMAS HIGH SCHOOL **CULINARY ARTS** CLASSROOM MODERNIZATION

JOB NUMBER: 12.03.00 DATE: 08/25/21

REVISION: 1 DATE: REVISION: 2 DATE:

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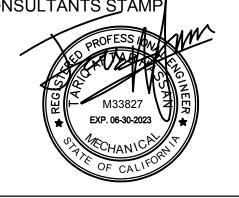
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PROJECT:
SAN DIMAS
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CULINARY ARTS
CLASSROOM
MODERNIZATION

JOB NUMBER: 12.03.00 DATE: 08/25/21

REVISION: DATE:

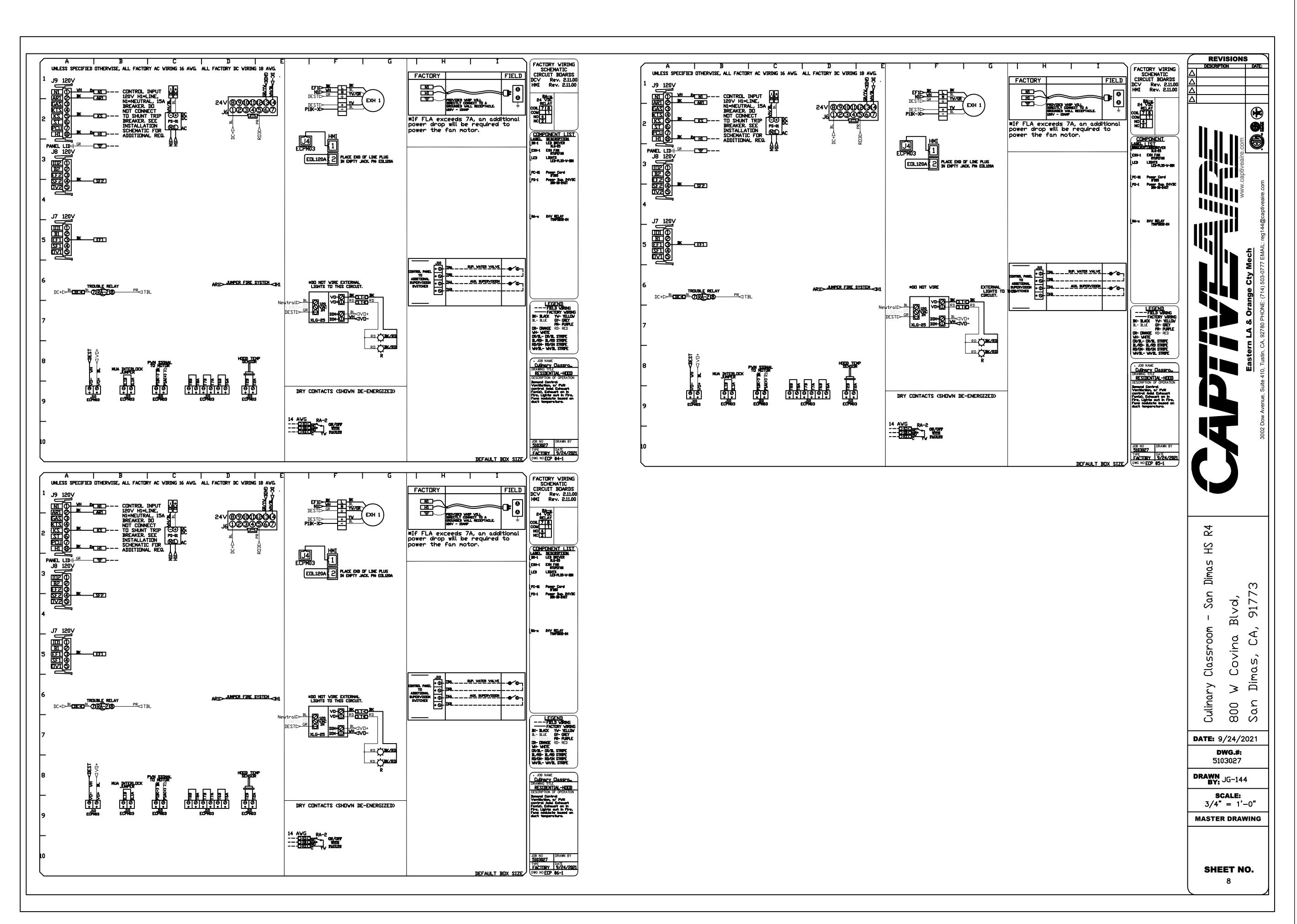
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DRAWING

DRAWING TITLE:

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Architecture
PLLLP

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ARCHITECTS STAMP:



CONSULTANT:



CONSULTANTS STAMP

PROFESS

M33827

EXP. 06-30-2023

CONSULTANTS STAMP

BONITA UNIFIED
SCHOOL DISTRICT

PROJECT:
SAN DIMAS
HIGH SCHOOL
CULINARY ARTS
CLASSROOM
MODERNIZATION

JOB NUMBER: 12.03.00 DATE: 08/25/21

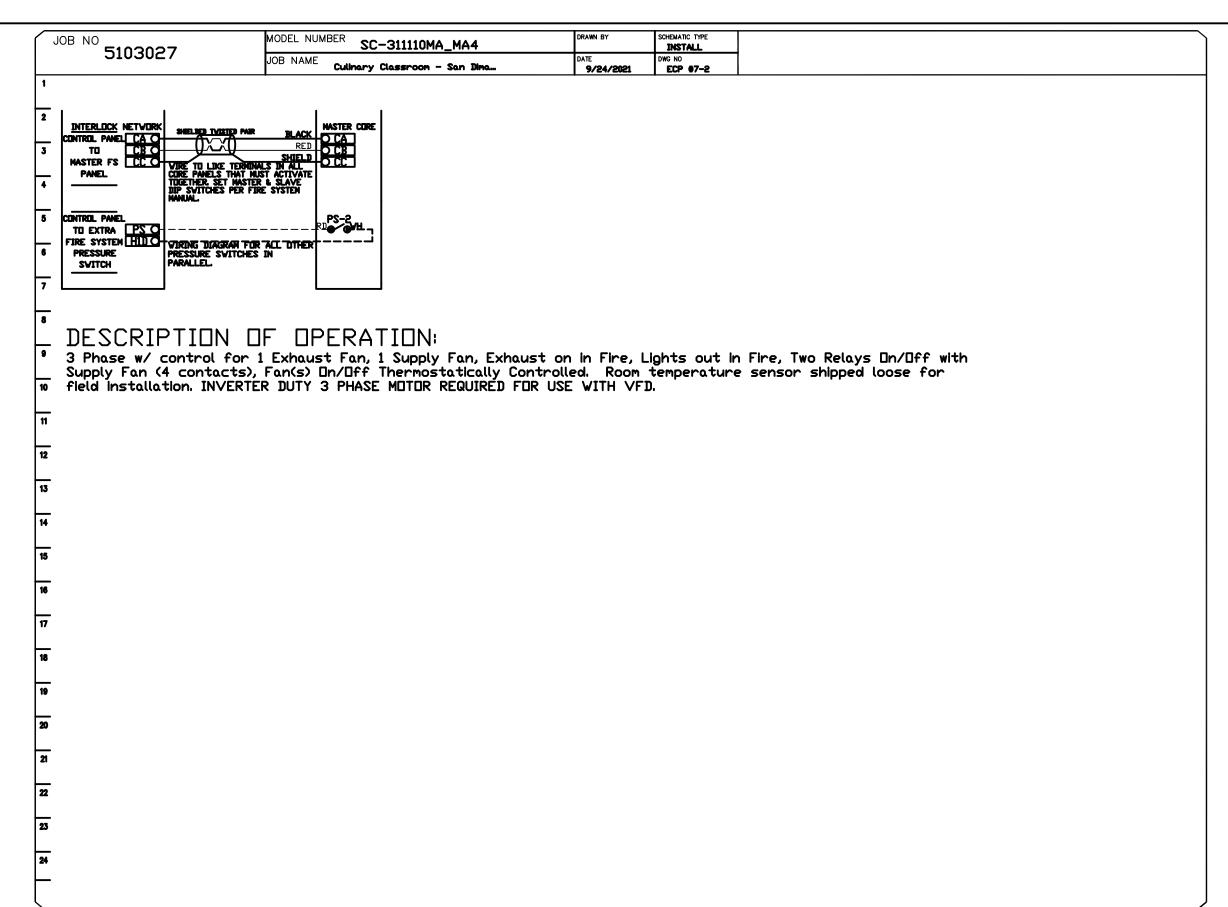
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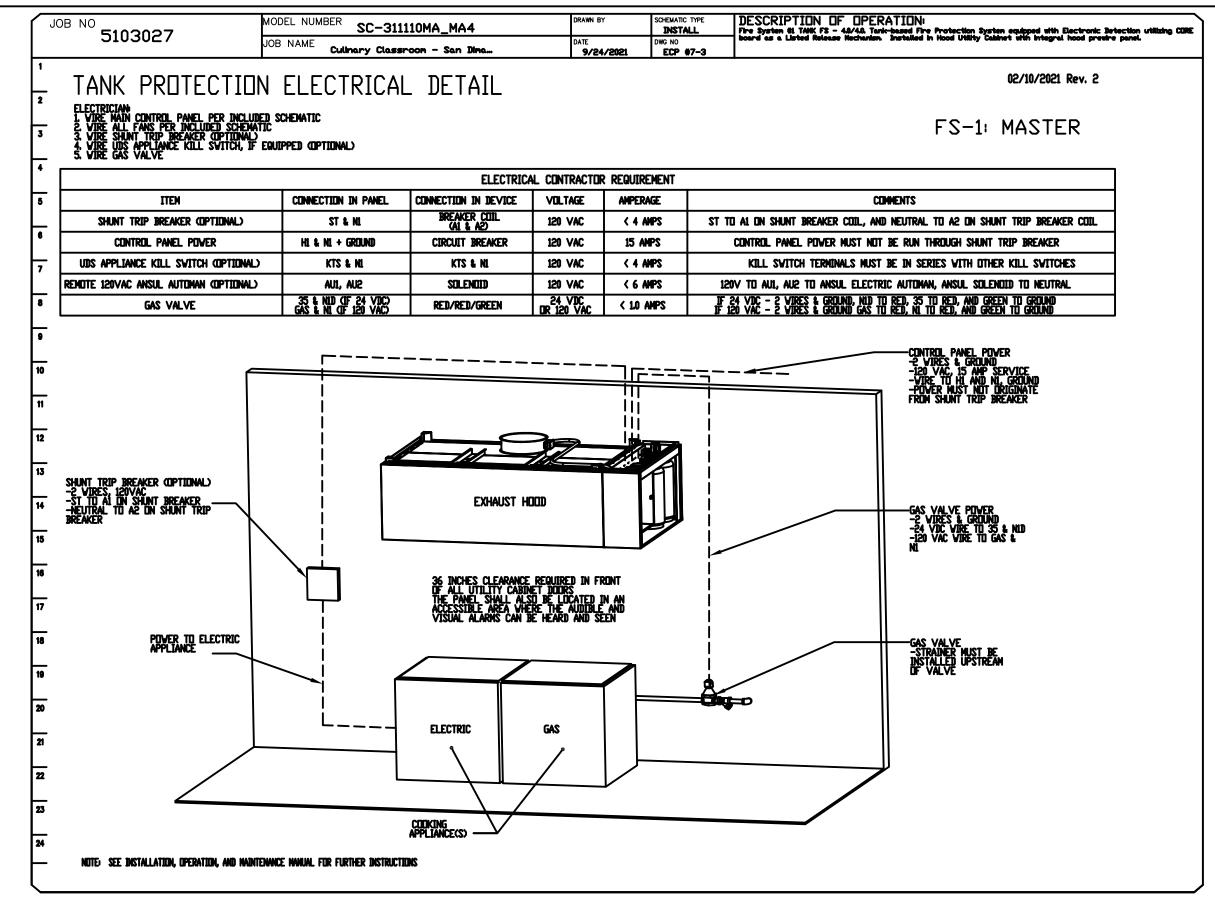
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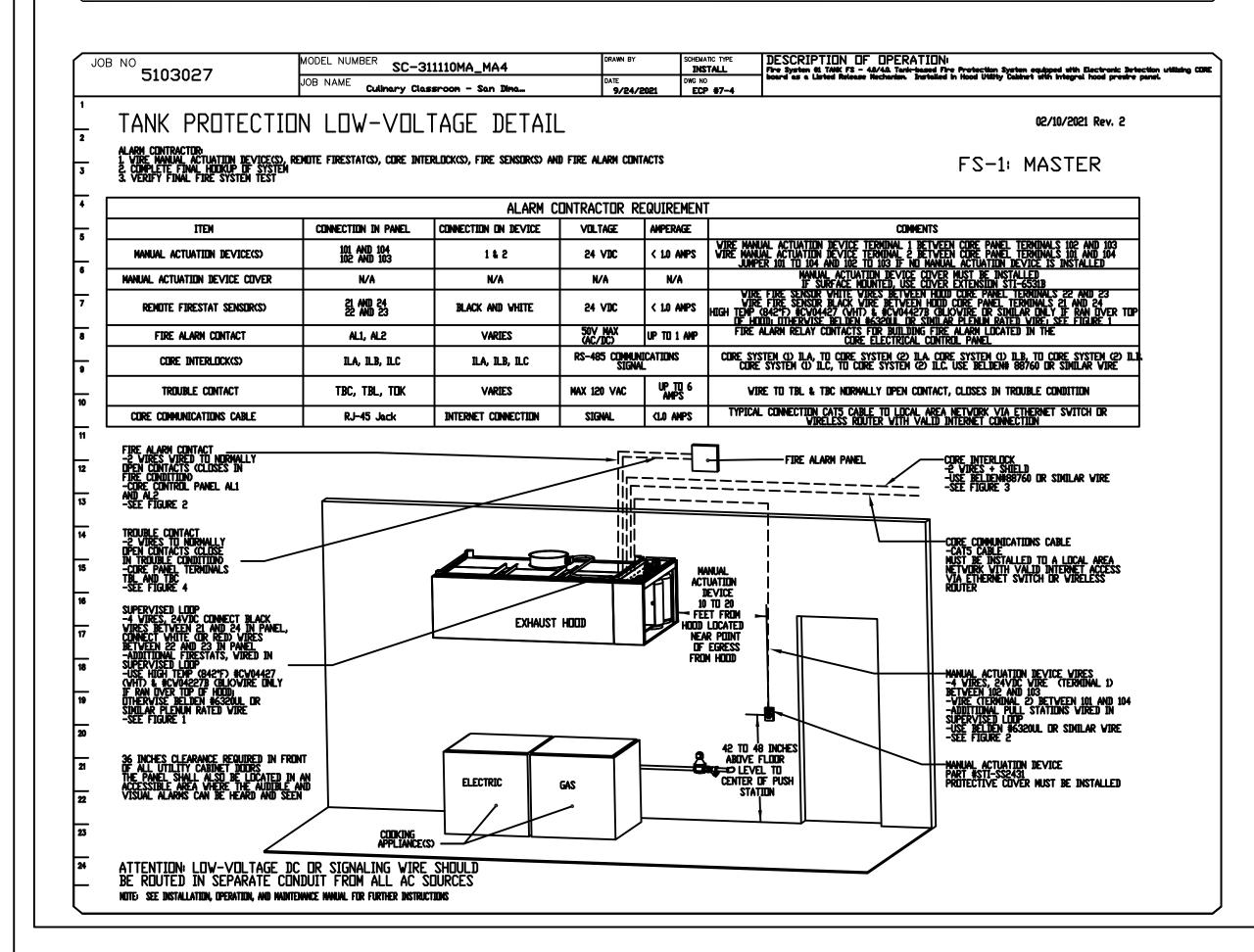
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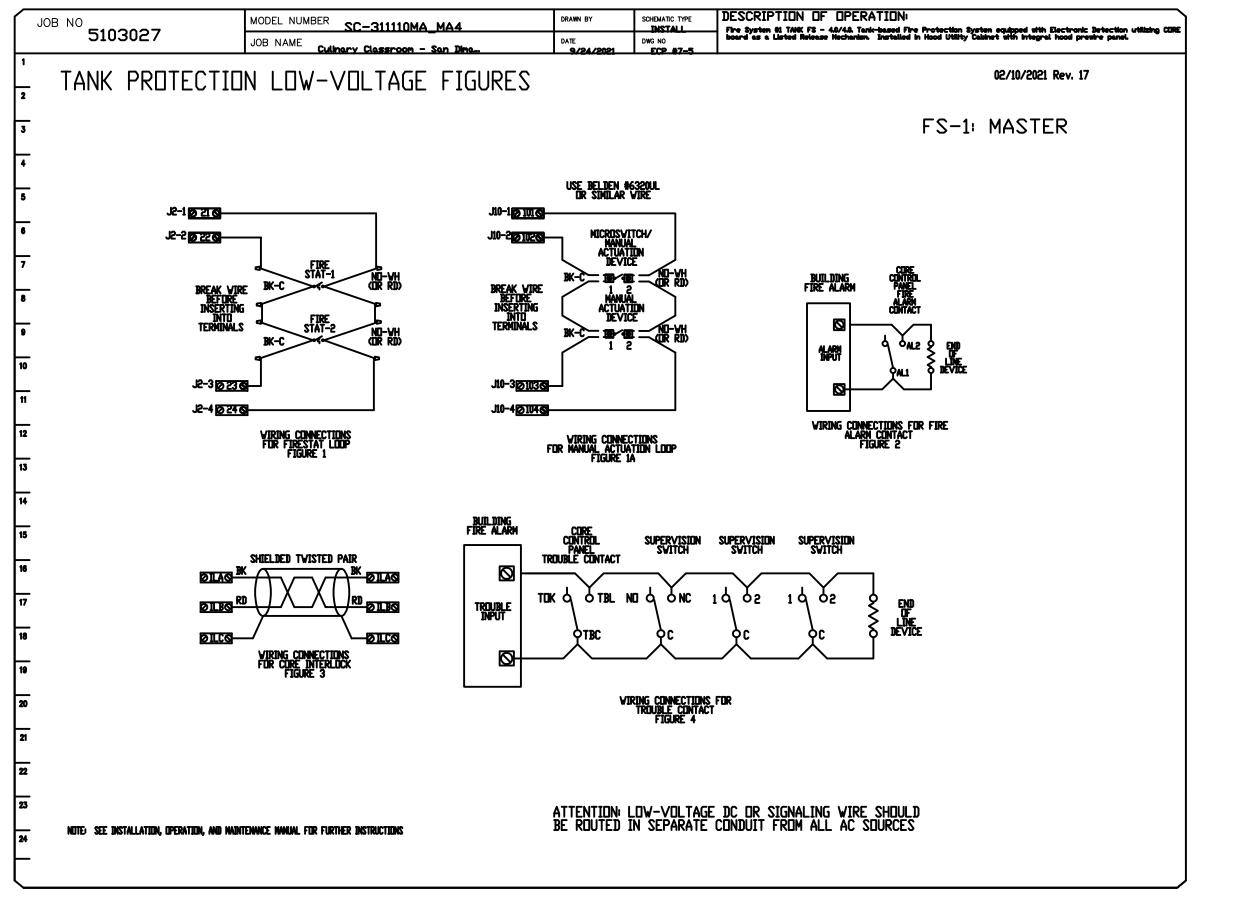
CAPTIVEAIRE DRAWING

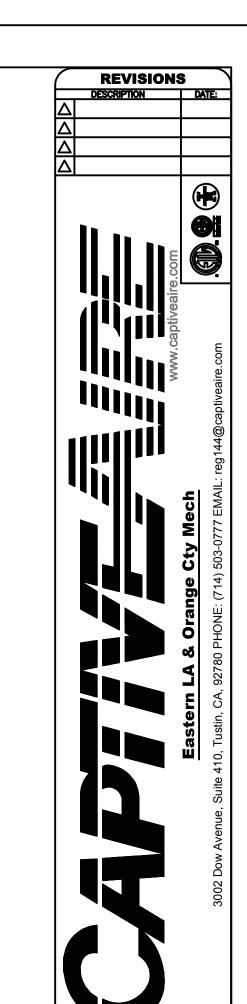
DRAWING NO.:











PROJECT: SAN DIMAS **CULINARY ARTS** CLASSROOM MODERNIZATION

REVISION: 1 DATE: _

DRAWING TITLE: CAPTIVEAIRE

BONITA UNIFIED SCHOOL DISTRICT **R4**

800 San

DATE: 9/24/2021

5103027

SCALE: 3/4" = 1'-0"

MASTER DRAWING

SHEET NO.

DRAWN BY: JG-144

HIGH SCHOOL

IDENTIFICATION STAMP DIV. OF THE STATE ARCHITEC

REVIEWED FOR SS 🗹 FLS 🗹 ACS 🗹

APP: 03-121968 INC:

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SCHOOL DISTRICT:

ARCHITECTS STAMP:

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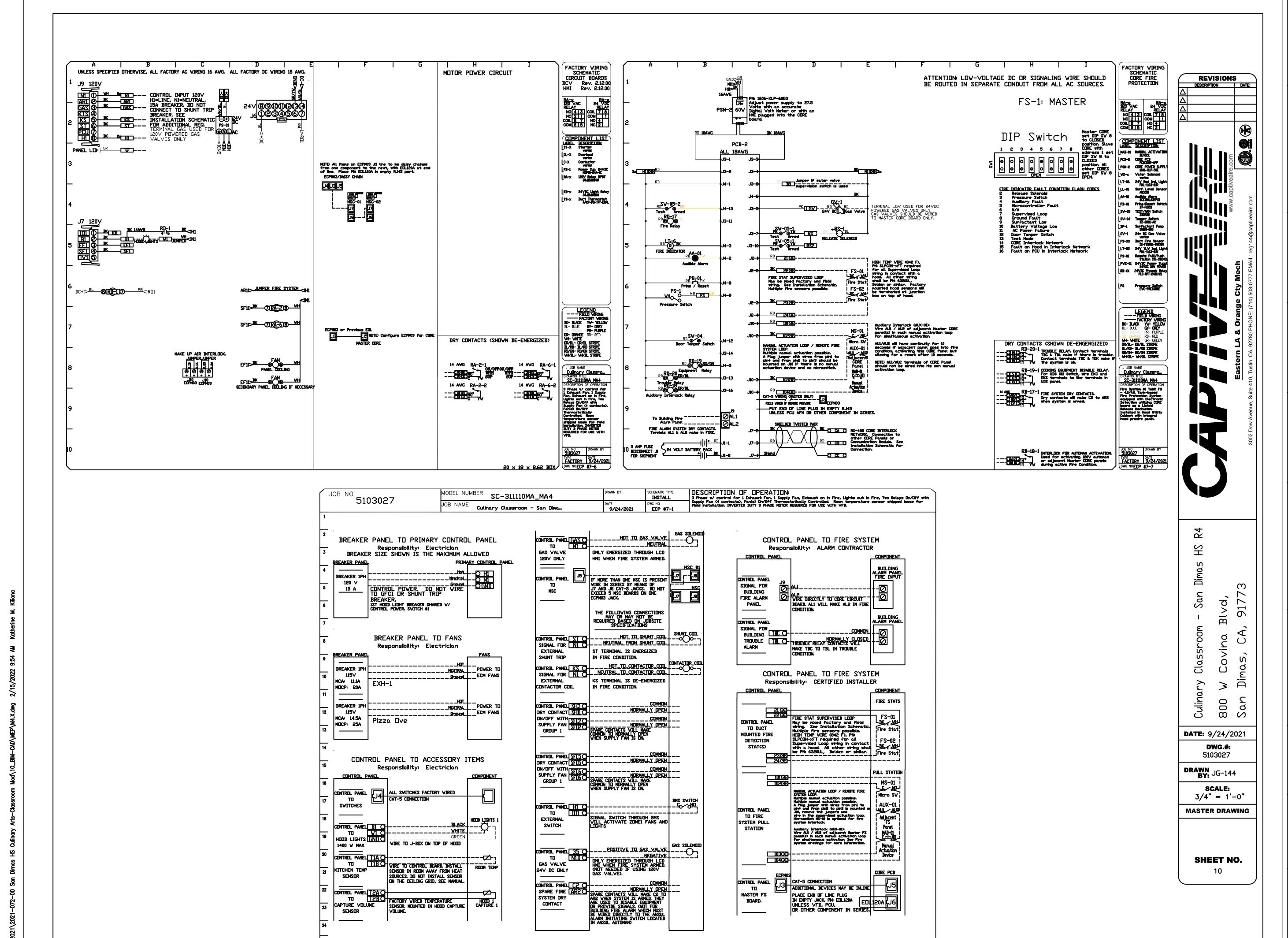
JOB NUMBER: 12.03.00

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EXP. 06-30-2023

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BONITA UNIFIED
SCHOOL DISTRICT

PROJECT:
SAN DIMAS
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CULINARY ARTS
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JOB NUMBER: 12.03.00 DATE: 08/25/21

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CAPTIVEAIRE

DRAWING NO.:

DRAWING

LEGEND ANCHOR BOLT BLKG. BLOCKING BM. BEAM BOUNDARY NAILING BOTTOM OF BEAM BOUNDARY SCREW CAMBER CARRIAGE BOLT CLEAR CONSTRUCTION JOINT C.N. CONT. NAILING COL. COLUMN CONC. CONCRETE CONNECTION CONN. CONTINUOUS COMPLETE PENETRATION CONT. PANEL EDGES D.B.A. DEFORMED BAR ANCHOR DBL. DOUBLE D.B. DRAG BAR DIAMETER DIA. DO. DITTO DRWG. DRAWING EACH ELEV. ELEVATION EXISTING EXPANSION JOINT E.N. EDGE NAILING E.S.

EDGE SCREW EQUAL EXTERIOR FOUNDATION FINISH GRADE FLAT HEAD WOOD SCREWS F.H.W.S. FIELD NAILING FACE OF CONCRETE F.O.C. FACE OF MASONRY FACE OF STUD F.O.S. FAR SIDE FRMG. FRAMING T.O.PAR. FOOTING T.O.S. GALV. GALVANIZED T.S. GAUGE GLUE LAMINATED BEAM U.N.O.

EQ.

EXT.

FDN.

F.S.

GYPSUM BOARD

DETAIL REFERENCE

SHEET NO. WHERE DRAWN

- WALL ELEVATION LETTER

_ SHEET NO. WHERE DRAWN

DETAIL NUMBER

WALL ELEVATION

WALL SECTION A WALL SECTION LETTER

SHEET NO. WHERE DRAM

H.D.	HOLD DOWN
HORIZ.	HORIZONTAL
H.S.A.	HEADED STUD ANCHOR
H.S.B.	HIGH STRENGTH BOLT
H.S.S.	HOLLOW STRUCTURAL SECTION
⊓.S.S. JST.	JOIST
LT. WT.	LIGHT WEIGHT
MAS.	MASONRY
MAS. M.B.	
	MACHINE BOLT
(N)	NEW
N.S.	NEAR SIDE
N.T.S.	NOT TO SCALE
0.0.	ON CENTER
<i>O</i> .H.	OPPOSITE HAND
OPNG.	OPENING
P.J.	POUR JOINT
PLT.	PLATE
PLYWD.	PLYWOOD
P.T.	PRESSURE TREATED
REQD.	REQUIRED
REM.	REMAINDER
R.S.	ROUGH SAWN
R.H.W.S.	ROUND HEAD WOOD SCREW
SHTG.	SHEATHING
S.J.	SEPARATION JOINT
5 Q.	SQUARE
SIM.	SIMILAR
S.M.	SHEET METAL
S.P.	SEE PLAN
STAGG.	STAGGERED
STD.	STANDARD
STL.	STEEL
STL. JST.	STEEL JOIST
T. ₿.	TOP AND BOTTOM
T.O.C.	TOP OF CONCRETE
T.O.M.	TOP OF MASONRY
T.O.M.D.	TOP OF METAL DECK
T.O.P.	TOP OF PLYWOOD

HEADED ANCHOR BOLT

TOP OF PARAPET

UNLESS NOTED OTHERWISE

WELDED ALL THREAD STUD

WEAKENED PLANE JOINT

WELDED WIRE FABRIC

WHERE OCCURS

TOP OF STEEL

TUBE STEEL

TYPICAL

VERTICAL

YERT.

W.A.S

PROOF LOAD TESTS FOR EXPANSION TYPE ANCHOR BOLTS

AND TO THE ANCHOR OUTSIDE DIAMETER FOR THE SLEEVE CATEGORY.

- ANCHOR DIAMETER REFERS TO THE TREAD SIZE FOR THE WEDGE & SHELL CATEGORIES,
- 2. APPLY PROOF TEST LOADS TO WEDGE & SLEEVE ANCHORS WITHOUT REMOVING THE NUT IF POSSIBLE. IF NOT, REMOVE NUT AND INSTALL A TREADED COUPLER TO THE SAME TIGHTNESS AS THE ORIGINAL NUT USING A TORQUE WRENCH TO APPLY THE TEST LOAD.
- 3. FOR SLEEVE/SHELL INTERNALLY THREATED CATEGORIES, VERIFY THAT THE ANCHOR IS NOT PREVENTED FROM WITHDRAWING BY A BASEPLATE OR OTHER FIXTURES. IF
- RESTRAINT IS FOUND, LOOSEN AND SHIM OR REMOVE FIXTURE(S) PRIOR TO TESTING. 4. REACTION LOADS FROM TEST FIXTURES MAY BE APPLIED CLOSE TO THE ANCHOR BEING TESTED, PROVIDED THE ANCHOR IS NOT RESTRAINED FROM WITHDRAWING BY THE
- 5. SHELL TYPE ANCHOR SHOULD BE TESTED AS FOLLOWS:
- a. VISUALLY INSPECT 25% FOR FULL EXPANSION AS EVIDENCE BY THE LOCATION OF THE EXPANSION PLUG IN THE ANCHOR BODY. PLUG LOCATION OF A FULLY EXPANDED ANCHOR SHOULD BE AS RECOMMENDED BY THE MANUFACTURER, OR, IN THE ABSENCE OF SUCH RECOMMENDATION, AS DETERMINED ON THE JOB SITE FOLLOWING THE MANUFACTURER'S INSTALLATION INSTRUCTIONS. AT LEAST 5% OF THE ANCHORS SHALL BE PROOF LOADED AS INDICATED IN THE TABLE BELOW, BUT NOT LESS THAN THREE ANCHORS PER DAY FOR EACH DIFFERENT PERSON OR CREW INSTALLING ANCHORS, OR;
- b. TEST INSTALLED ANCHORS PER SECTION 1910A 6. TEST EQUIPMENT (INCLUDING TORQUE WRENCHES) IS TO BE CALIBRATED BY AN
- APPROVED TESTING LABORATORY IN ACCORDANCE WITH STANDARD RECOGNIZED PROCEDURES. 7. ALTERNATE TORQUE TEST PROCEDURES AND TEST VALUES FOR SHELL TYPE ANCHOR
- MAY BE SUBMITTED TO THE ENFORCEMENT AGENCY FOR REVIEW AND APPROVAL ON A CASE-BY-CASE BASIS WHEN TEST PROCEDURES ARE SUBMITTED AND APPROVED BY THE ENFORCEMENT AGENCY. 8. THE FOLLOWING CRITERIA APPLY FOR THE ACCEPTANCE OF ANCHORS:
- a. HYDRAULIC RAM METHOD: THE ANCHOR SHOULD HAVE NO OBSERVABLE MOVEMENT AT APPLICABLE TEST LOAD. FOR WEDGE AND SLEEVE TYPE ANCHORS. A PRACTICAL WAY TO DETERMINE OBSERVABLE MOVEMENT IS THAT THE WASHER
- UNDER THE NUT BECOMES LOOSE. b. <u>TORQUE WRENCH METHOD:</u> THE APPLICABLE TEST TORQUE MUST BE REACHED

9. IF THE MANUFACTURER'S RECOMMENDED INSTALLATION TORQUE IS LESS THAN THE

TORQUE NOTED IN THE TABLE, THE MANUFACTURER'S RECOMMENDED INSTALLATION

- WITHIN THE FOLLOWING LIMITS: i. WEDGE OR SLEEVE TYPE: ONE HALF (1/2) TURN OF THE NUT. ii ONE-QUARTER (1/4) TURN OF THE NUT FOR THE 3/8". SLEEVE ANCHOR ONLY.
- TORQUE SHOULD BE USED IN LIEU OF THE TABULATED VALUES. IO. TESTING FREQUENCY SHALL BE AS FOLLOWS (1910A.5.3):
- a. WHEN POST-INSTALLED ANCHORS ARE USED FOR SILL PLATE BOLTING APPLICATIONS, IO PERCENTS OF THE ANCHORS SHALL BE TESTED.
- b. WHEN POST-INSTALLED ANCHORS ARE USED FOR OTHER STRUCTURAL APPLICATIONS, ALL SUCH ANCHORS SHALL BE TESTED.
- c. WHEN POST-INSTALLED ANCHORS ARE USED FOR NONSTRUCTURAL COMPONENTS, SUCH AS EQUIPMENT ANCHORAGE, 50 PERCENT OR ALTERNATE BOLTS IN A GROUP, INCLUDING AT LEAST ONE-HALF THE ANCHORS IN EACH GROUP, SHALL BE TESTED.
- II. AVOID DAMAGING EXISTING REINFORCING STEEL. CONTRACTOR TO USE NON-DESTRUCTIVE TESTING TO VERIFY LOCATION OF EXISTING REINFORCING STEEL.

	ON ANCHORS 1 CONCRETE KB-TZ2 (SS) (ICC-E	
ANCHOR	<u>WEDGE</u>	
DIA. (in)	TORQUE (ft-lbs)	EMBED. (in)
3/8"	30	2 1/2"
1/2"	50	2 1/2"

<u>LUMBER:</u>

- I. ALL STRUCTURAL LUMBER SHALL BE DOUGLAS FIR OF THE GRADES INDICATED UNLESS OTHERWISE NOTED:
- SILL PLATES: DOUGLAS FIR PRESSURE TREATED (NO. 2) STRUCTURAL FRAMING:
- 2"-4" THICK 2"-4" WIDE NO. 2 2"-4" THICK 5" AND WIDER NO. BEAMS 5" & THICKER: SELECT STRUCT.
- POSTS AND TIMBERS: 5" x 5" & LARGER SELECT STRUCT.
- 2. LUMBER SHALL BE KILN-DRY (KD) OR SURFACE-DRY (S-DRY) TO A MAXIMUM MOISTURE CONTENT OF 19 PERCENT.
- 4. ALL LUMBER SHALL BE DRESSED LUMBER, SURFACED FOUR SIDES (545) U.N.O. 5. ALL STRUCTURAL LUMBER SHALL BE GRADED IN ACCORDANCE WITH THE STANDARDS
- OF THE WEST COAST LUMBER INSPECTION BUREAU.
- 6. ALL WOOD BEARING ON MASONRY OR CONCRETE SHALL BE PRESSURE TREATED DOUGLAS FIR AS OUTLINED IN 2019 C.B.C. SECTION 2303.1.9 AND A.W.P.A. STANDARD UI
- 7. PLYWOOD ROOF AND SHEAR WALL SHEATHING SHALL BE GRADE MARKED STRUCTURAL I PS I-09, WITH EXTERIOR GLUE.
- 8. FRAMING BOLTS FOR WOOD CONNECTION SHALL BE ASTM A-301 GRADE A. PROVIDE STANDARD OUT WASHER BETWEEN BOLT HEADS AND NUTS AND THE WOOD. WHERE BOLTS ARE IN TENSION PROVIDE MALLEABLE IRON WASHERS.
- 9. STRUCTURAL LUMBER MEMBERS SHALL NOT BE CUT OR NOTCHED FOR PIPES OR CONDUITS ETC. UNLESS SPECIFICALLY DETAILED OR NOTED. 10. PROVIDE APPROVED METAL CROSS BRIDGING AT 8'-0" ON CENTER FOR JOISTS AND
- RAFTERS GREATER THAN 12" IN DEPTH.
- II. 2" SOLID BLOCKING SHALL BE PROVIDED BETWEEN JOISTS AND RAFTERS AT ALL BEARING SUPPORTS.
- 12. NOTCH, AS REQUIRED, ALL JOISTS AND RAFTERS TO PROVIDE LEVEL, FULL BEARING AT JOISTS HANGERS, PLATES AND SUPPORTS.
- 13. BORE HOLES FOR BOLTS 1/16" LARGER THAN THE NOMINAL BOLT DIAMETER. 14. BORED HOLES EXCEEDING ONE THIRD OF THE WIDTH OF THE MEMBER BEING PENETRATED SHALL NOT BE PLACED IN STUDS UNLESS FULLY DETAILED ON THE APPROVED PLANS. HOLES NOT EXCEEDING ONE THIRD OF THE WIDTH SHALL BE NEATLY BORED AND SHALL BE LOCATED IN THE CENTER OF THE MEMBER BEING
- 15. RETIGHTEN ALL BOLTS PRIOR TO COVERING, AND MAKING THE BOLTED CONNECTION INACCESSIBLE.
- 16. ALL NAILS ARE TO BE COMMON NAILS AND ARE TO BE GALVANIZED WHEN EXPOSED. 17. ALL NAILS, LAGS, BOLTS, WASHERS AND NUTS IN CONTACT WITH PRESERVATIVE-TREATED WOOD AND FIRE-RETARDANT-TREATED WOOD IN INTERIOR, EXTERIOR, WET OR DAMP APPLICATIONS SHALL BE HOT DIPPED ZINC-COATED GALVANIZED STEEL PER ASTM AI53. ALL OTHER FASTENERS SHALL BE MECHANICALLY
- DEPOSITED ZINC COATED STEEL PER ASTM B 695, CLASS 55 MINIMUM. 18. HEADER SCHEDULE (UNLESS NOTED OTHERWISE ON PLAN)

HEADER SIZE NON BEARING WALL (OPENING WIDTH) (SOLID MEMBER) 3'-0" or less stud width x 4" 3'-1" to 6'-0" stud width \times 6" 6'-1" to 8'-0" stud width $\times 8$ "

- 19. TREATED WOOD SILLS WHERE CUT, DRILLED OR NOTCHED SHALL BE TREATED WITH A PRESERVATIVE AND APPROVED BY THE ARCHITECT AND THE ENFORCEMENT AGENCY ON ALL EXPOSED SURFACES FROM WHICH PRESERVATIVE TREATMENT HAS BEEN
- 20. SILL PLATE ANCHOR BOLTS IN CONTACT W/ PRESERVATIVE TREATED WOOD \$ WOOD FIRE RETARDENT-TREATED WOOD SHALL BE ASTM A-301 GRADE A (HOT DIPPED GALV. PER ASTM AI53).

STRUCTURAL OBSERVATION:

- VISUAL OBSERVATION OF THE STRUCTURAL SYSTEM SHALL BE PROVIDED BY THE STRUCTURAL ENGINEER OF RECORD FOR GENERAL CONFORMANCE TO THE APPROVED CONSTRUCTION DOCUMENTS. STRUCTURAL OBSERVATION DOES NOT INCLUDE OR WAIVE THE RESPONSIBILITY FOR THE INSPECTION REQUIRED BY SECTION IIO, 1705A OR OTHER SECTIONS OF THE CODE. (SECTION 1702A)
- . STRUCTURAL OBSERVATION SHALL BE PROVIDED BY THE STRUCTURAL ENGINEER OF RECORD AT THE FOLLOWING PHASES AS A MINIMUM. A. UPON COMPLETION OF FOUNDATION REINFORCEMENT, IMMEDIATELY PRIOR TO
- CONCRETE POUR. B. ADDITIONAL VISITATION AS DEEMED NECESSARY BY THE STRUCTURAL ENGINEER OF RECORD.
- 3. FOR ALL ITEMS THE CONTRACTOR SHALL NOTIFY THE STRUCTURAL ENGINEER 48 HOURS PRIOR TO COMPLETION OF THE WORK TO BE OBSERVED.

MECHANICAL UNIT FRAMING NOTES

- THE GENERAL CONTRACTOR SHALL COORDINATE THE MECHANICAL UNIT TYPE AND QUANTITY WITH THE MECHANICAL AND STRUCTURAL DRAWINGS. NOTIFY THE MECHANICAL ENGINEER OF ANY DISCREPANCIES PRIOR TO THE STRUCTURAL STEEL SHOP DRAWING
- 2. IT SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO FULLY COORDINATE THE SUPPORT FRAME DIMENSIONS (LENGTH AND WIDTH) WHERE THE NEW MECHANICAL UNIT ATTACHES DIRECTLY TO THE SUPPORT FRAMING. NOTIFY THE MECHANICAL ENGINEER OF ANY DISCREPANCIES PRIOR TO THE STRUCTURAL STEEL SHOP DRAWING PHASE.
- THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH THE MECHANICAL SUB-CONTRACTOR AND THE MECHANICAL ENGINEER THE HEIGHT OF THE SUPPORT FRAME SO AS EXISTING DUCT TO NEW DUCT TRANSITIONS HAVE SUFFICIENT VERTICAL CLEARANCES FOR THERE ATTACHMENTS. NOTIFY THE MECHANICAL ENGINEER OF ANY DISCREPANCIES PRIOR TO THE STRUCTURAL STEEL SHOP DRAWING PHASE.
- MECHANICAL UNIT SUBSTITUTIONS MAY IMPACT THE SUPPORT FRAMING DUE TO UNIT WEIGHT OR SIZE AS SHOWN ON THE MECHANICAL DRAWINGS. ANY COSTS INCURRED FROM ANY SUBSTITUTION MADE BY THE CONTRACTOR WHICH REQUIRES RE-DESIGN OR MODIFICATIONS TO THE CONSTRUCTION DOCUMENTS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR MAY WISH TO INQUIRE AS TO THE PROBABLE EXTENT OF THESE COSTS PRIOR TO INTRODUCING A SUBSTITUTION.
- IT SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO COORDINATE AND PROVIDE ALL FLASHING AND ROOFING AS REQUIRED AT ALL MECHANICAL UNIT ROOF ATTACHMENT PENETRATIONS SO AS ROOF WILL BE COMPLETELY SEALED FROM WATER INTRUSION.

SPECIAL INSPECTION:

- GENERAL: THE OWNER SHALL EMPLOY ONE OR MORE APPROVED AGENCIES TO PERFORM INSPECTIONS DURING CONSTRUCTION ON THE TYPES OF WORK LISTED UNDER SECTION 1705A. THESE INSPECTIONS ARE IN ADDITION TO THE INSPECTIONS IDENTIFIED IN SECTION 110. THE SPECIAL INSPECTOR SHALL BE A QUALIFIED PERSON WHO SHALL DEMONSTRATE COMPETENCE, TO THE SATISFACTION OF THE BUILDING OFFICIAL, FOR THE INSPECTION OF THE PARTICULAR TYPE OF CONSTRUCTION OR OPERATION REQUIRING SPECIAL INSPECTION.
- <u>REPORT REQUIREMENTS:</u> THE INSPECTOR OF RECORD AND SPECIAL INSPECTORS SHALL KEEP RECORDS OF INSPECTIONS. THE INSPECTOR OF RECORD AND SPECIAL INSPECTOR SHALL FURNISH INSPECTION REPORTS TO THE BUILDING OFFICIAL, AND TO THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE AS REQUIRED BY TITLE 24, PART I. REPORTS SHALL INDICATE THAT WORK INSPECTED WAS OR WAS NOT COMPLETED IN CONFORMANCE TO APPROVED CONSTRUCTION DOCUMENTS AS REQUIRED BY TITLE 24, PARTS I AND 2. DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR FOR CORRECTION. IF THEY ARE NOT CORRECTED, THE DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE BUILDING OFFICIAL AND TO THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE PRIOR TO THE COMPLETION OF THAT PHASE OF THE WORK, A FINAL REPORT DOCUMENTING REQUIRED SPECIAL INSPECTIONS AND CORRECTION OF ANY DISCREPANCIES NOTED IN THE INSPECTIONS SHALL BE SUBMITTED AT A POINT IN TIME AGREED UPON PRIOR TO THE START OF WORK BY THE APPLICANT AND THE BUILDING OFFICIAL.

STRUCTURAL STEEL:

- STEEL SHALL COMPLY WITH THE REQUIREMENTS OF THE FOLLOWING A.S.T.M. DESIGNATIONS.
- GENERAL SHAPES & PLATES - - ASTM A-36 STEEL TUBE - - - - - - - - - ASTM A-500 GRADE B, Fy=46 KSI THREADED RODS - - - - - ASTM A-36 MACHINE BOLTS - - - - - - - ASTM A-307 GRADE A HEADED ANCHOR RODS IN CONCRETE - ASTM FI554 GRADE 36
- UNHEADED ANCHOR RODS IN CONCRETE ASTM F1554 GRADE 36 2. NO STRUCTURAL STEEL SHALL BE FABRICATED OR ERECTED PRIOR TO REVIEW OF
- SHOP DRAWINGS BY THE STRUCTURAL ENGINEER. 3. ALL ERECTION AND FABRICATION SHALL COMPLY WITH THE LATEST EDITION OF THE
- 4. WELDING SHALL BE PERFORMED ONLY BY CERTIFIED WELDERS. ALL SHOP WELDING
- SHALL BE DONE IN THE SHOP OF AN APPROVED FABRICATOR. NO FIELD CUTTING OR BURNING OF STRUCTURAL STEEL WILL BE PERMITTED WITHOUT WRITTEN CONSENT OF THE STRUCTURAL ENGINEER.
- 6. WELD FILLER SHALL BE ETOXX (TOKSI).

<u>DESIGN LOADS:</u>

	ROOF DESIGN LOADS: ROOF LIVE LOAD (REDUCIBLE PER SECTION 1601A.12.2.1) 20 P.S.F. ROOF DEAD LOAD 20 P.S.F.
	WIND DESIGN DATA: BASIC WIND SPEED
l. 2.	SEISMIC DESIGN DATA: RISK CATEGORY III SEISMIC IMPORTANCE FACTOR I.50 SITE CLASS D
4. 5. 6.	MAPPED SPECTRAL RESPONSE ACCELERATIONS (S _s) 1.676 MAPPED SPECTRAL RESPONSE ACCELERATIONS (S ₁) 0.623 SPECTRAL RESPONSE COEFFICIENTS (S _{DS}) 1.340
8.	SPECTRAL RESPONSE COEFFICIENTS (SDI) NULL SEISMIC DESIGN CATEGORY (SDC) D ANALYSIS PROCEDURE USED: MECHANICAL ANCHORAGE SEISMIC DESIGN DEMANDS ON NON-STRUCUTRAL COMPONENTS (ASCE 7-16 13.3.1)

<u>GENERAL:</u>

- ALL CONSTRUCTION SHALL COMPLY WITH THE 2019 C.A.C. TITLE 24, PART I, AND 2019
- C.B.C. TITLE 24, PART 2, FOR DSA/SS. 2. FRAMING CONDITIONS NOT SPECIFICALLY SHOWN OR INDICATED SHALL BE FRAMED
- SIMILAR TO DETAILS SHOWN FOR THE RESPECTIVE MATERIALS OR CONDITIONS. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL DIMENSIONS BEFORE
- STARTING WORK AND REPORT ANY DISCREPANCIES TO THE ARCHITECT. . WITHOUT EXCLUSION OF ANY REFERENCE IN THE CONSTRUCTION DOCUMENTS TO ANY RULE OR REGULATION, THE STRUCTURAL ENGINEER IS NOT ASSUMING ANY PROVISIONS
- OF SUPERVISION OF CONSTRUCTION METHODS OR PROCESSES. 5. CHANGES TO THE APPROVED DRAWINGS AND SPECIFICATIONS SHALL BE MADE BY A CONSTRUCTION CHANGE DOCUMENT (CCD) APPROVED BY THE DIVISION OF THE

STATE ARCHITECT, AS DEFINED IN 2019 C.A.C. TITLE 24, PART I, SECTION 4-338.

CONCRETE:

- THE MINIMUM STRENGTH OF CONCRETE AT END OF 28 DAYS SHALL BE: <u>SLABS ON GRADE</u> - - - - - 150 PCF MAXIMUM WATER-CEMENT MATERIALS RATIO - - 0.45 AGGREGATE SIZE - - - - - - - 3/4" MINIMUM CEMENTITIOUS MATERIALS CONTENT - - 540 LBS/CU. YD. SLUMP LIMIT - - - - - - - - - - - - 3" MIN., 5" MAX. FOOTINGS AND EQUIPMENT PADS - - - - - - - 3500 PSI - - - 150 PCF MAXIMUM WATER-CEMENT MATERIALS RATIO - - 0.50 AGGREGATE SIZE - - - - - - - - | "
- SLUMP LIMIT - - - - - 4" MIN., 6" MAX. 2. REINFORCING:
- A. DEFORMED REINFORCING STEEL: ASTM A615 REINFORCING GRADES: GRADE 60 (#5 AND LARGER) GRADE 40 (#4 AND SMALLER)
- B. STAGGER ALL SPLICES OF ALL HORIZONTAL REINFORCING. PROVIDE MILL CERTIFICATE ON ALL REINFORCING STEEL. TESTING REQUIRED ON
- UNIDENTIFIED REINFORCING STEEL D. INSPECTION OF MATERIAL: I. ALL REINFORCING STEEL SHALL BE PROPERLY IDENTIFIED BY THE DEPUTY INSPECTOR OR AT THE TIME OF DELIVERY TO THE PROJECT SITE OR TO THE
- FABRICATORS SHOP. E. STAGGER ALL SPLICES OF ALL HORIZONTAL REINFORCING.
- WALL AND COLUMN DOWELS SHALL BE THE SAME SIZE AND SPACING AS WALL
- AND COLUMN REINFORCING, UNLESS NOTED OTHERWISE 6. PROVIDE MILL CERTIFICATE ON ALL REINFORCING STEEL. TESTING REQ'D ON
- UNIDENTIFIED REINFORCING STEEL H. THE FOLLOWING MINIMUM CONCRETE COVERAGES SHALL BE MAINTAINED UNLESS
- NOTED OTHERWISE: 1. SLABS ON GRADE ------ CENTER OF SLAB 2. CONCRETE CAST AGAINST AND EXPOSED TO EARTH - - - - - 3" 3. CONCRETE EXPOSED TO EARTH OR WEATHER
- #6 AND LARGER - - 2" #5 AND SMALLER - - - - - - 1 1/2" 4. CONCRETE NOT EXPOSED TO WEATHER OR IN CONTACT WITH GROUND: SLABS, WALLS, JOISTS: #14 AND LARGER - - - - - - 1 1/2"
- #II AND SMALLER - - - 3/4" BEAMS AND COLUMNS: PRIMARY REINFORCEMENT, TIES, STIRRUPS, SPIRALS - - - - - 1 1/2" 5. CONCRETE TILT-UP PANELS CAST AGAINST CONC. SLAB AND EXPOSED TO
 - #9 AND LARGER - - 2"
- #8 AND SMALLER - - - I" 6. THE MINIMUM CLEAR SPACING BETWEEN PARALLEL BARS IN A LAYER SHALL
- BE ONE BAR DIAMETER BUT NOT LESS THAN I INCH. 3. CONCRETE: READY-MIXED CONCRETE ASTM C94.
- 4. CEMENT: PORTLAND CEMENT TYPE I/II LOW ALKALI; ASTM C-150 NORMAL WT. CONC. - AGGREGATES: NATURAL ROCK AND SAND: ASTM C-33
- LIGHT WT. CONC. AGGREGATES: LIGHT WEIGHT ROCK AND SAND: ASTM C-330 5. DOWELS, ANCHOR BOLTS, INSERTS, ETC., SHALL BE SECURELY TIED IN PLACE PRIOR TO
- POURING OF CONCRETE OR GROUT. 6. ANCHOR BOLTS WITH UPSET THREADS SHALL NOT BE USED. 7. NO PIPES, DUCTS, OR CONDUIT SHALL BE PLACED IN CONCRETE UNLESS SPECIFICALLY DETAILED OR NOTED.
- 8. ROUGHEN AND CLEAN CONSTRUCTION JOINTS PER ACI 318-14 26.56. THE CONSTRUCTION JOINT NEEDS TO BE FREE OF LAITANCE AND ROUGHENED TO A FULL AMPLITUDE OF 1/4". THE JOINT SHOULD ALSO BE SATURATED BEFORE PLACEMENT OF NEW CONCRETE. NO STANDING WATER IS ALLOWED BETWEEN NEW CONCRETE AND THE EXISTING

FOUNDATIONS:

- ALL FILL SHALL BE COMPACTED TO A MINIMUM OF 90% IN ACCORDANCE WITH THE
- SPECIFICATIONS. 2. MAXIMUM ALLOWABLE SOIL BEARING PRESSURE: 1500 PSF
- 3. IT IS THE CONTRACTORS RESPONSIBILITY TO COORDINATE ALL FOOTINGS AND UTILITY LINE RELATIONSHIPS SO THAT NEW FOOTINGS DO NOT INTERFERE WITH EXISTING UTILITY LINES.

IDENTIFICATION STAMP DIV. OF THE STATE ARCHITEC APP: 03-121968 INC: REVIEWED FOR SS 🗹 FLS 🗹 ACS 🗹 DATE: 12/20/2022

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ARCHITECTS STAMP:



CONSULTANT:



CONSULTANTS STAMP:



SCHOOL DISTRICT:

BONITA UNIFIED SCHOOL DISTRICT

115 W. ALLEN AVE., SAN DIMAS CA 91773

(909) 971-8200

PROJECT:

SAN DIMAS **HIGH SCHOOL CULINARY ARTS CLASSROOM MODERNIZATION**

JOB NUMBER:

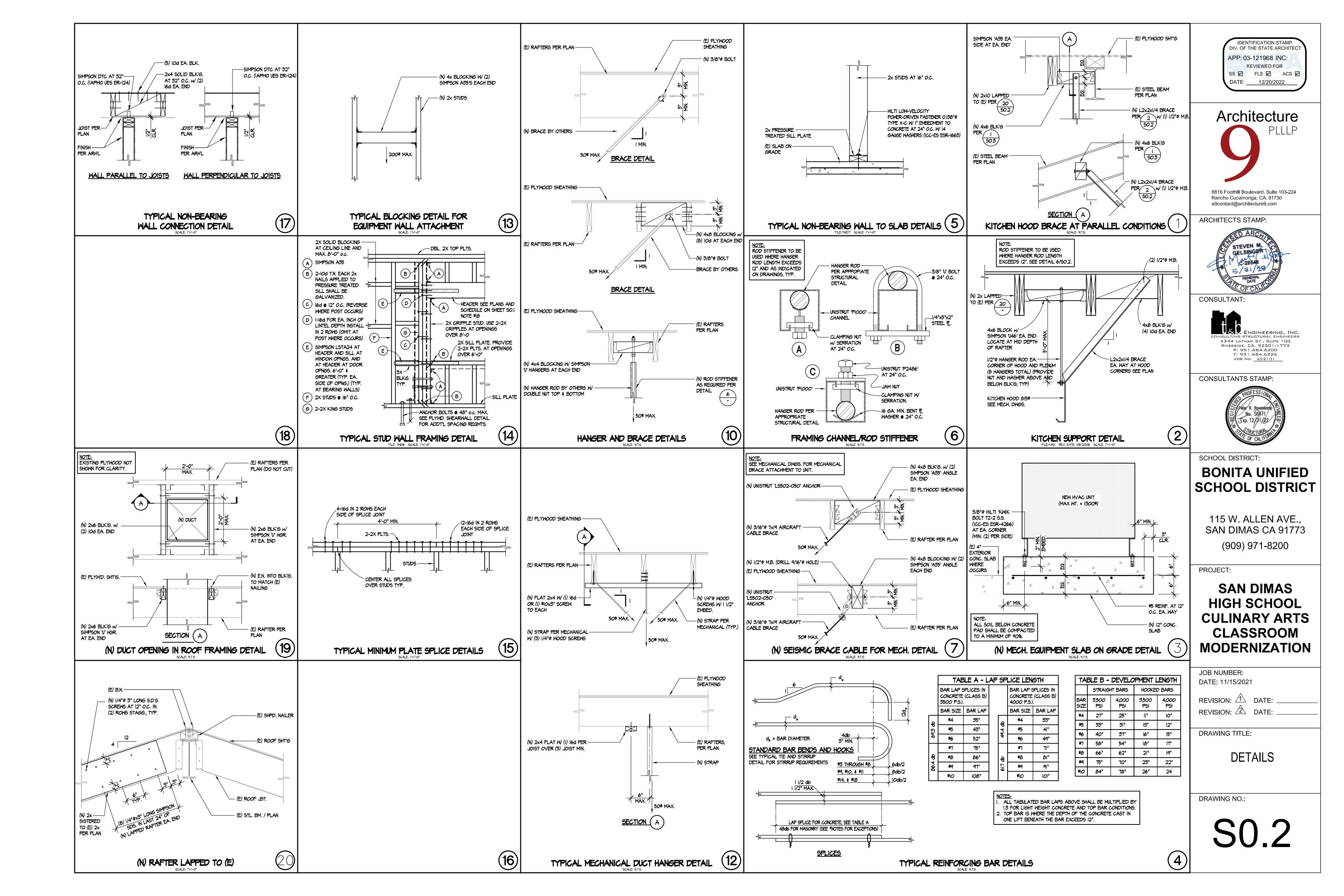
DATE: 11/15/2021

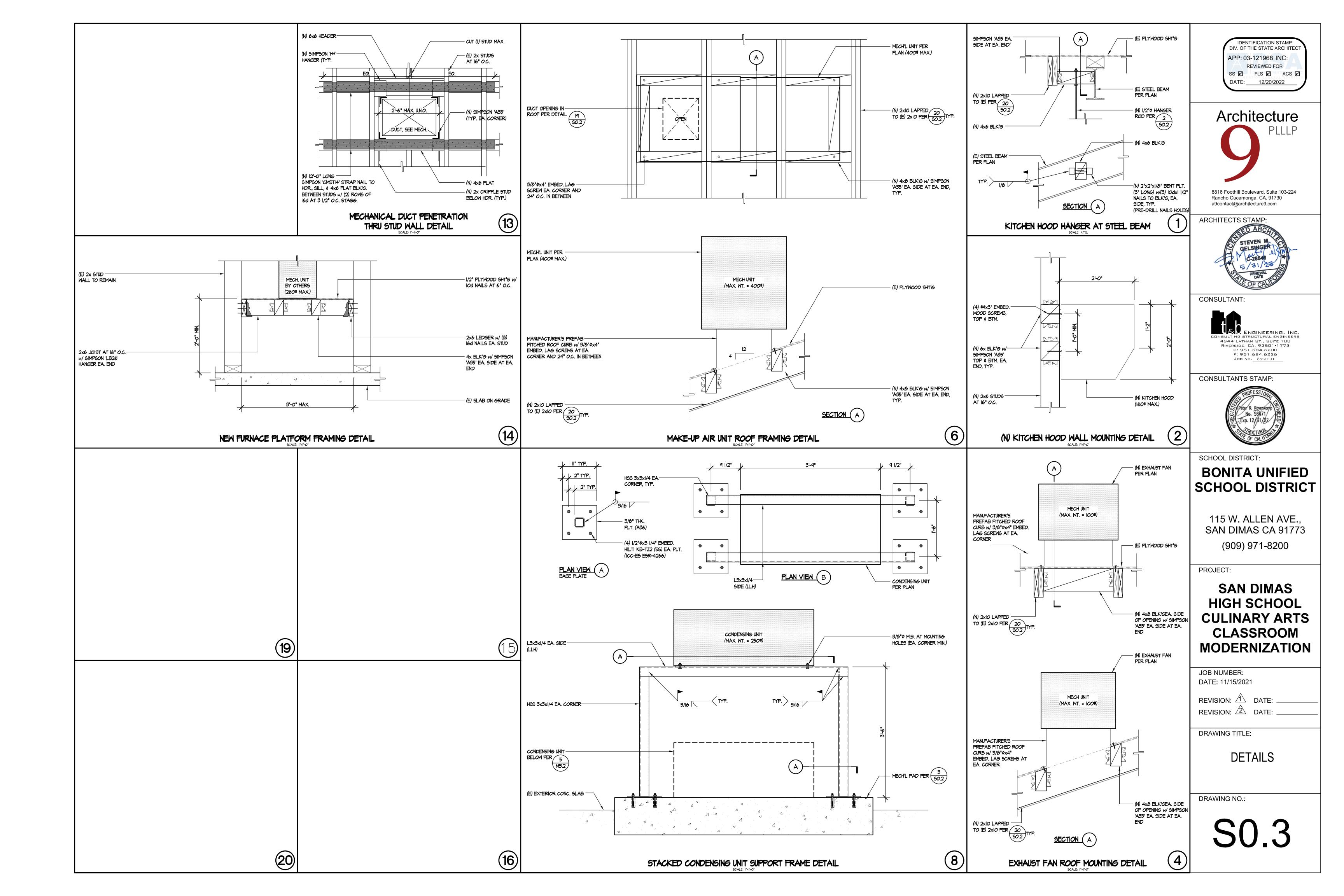
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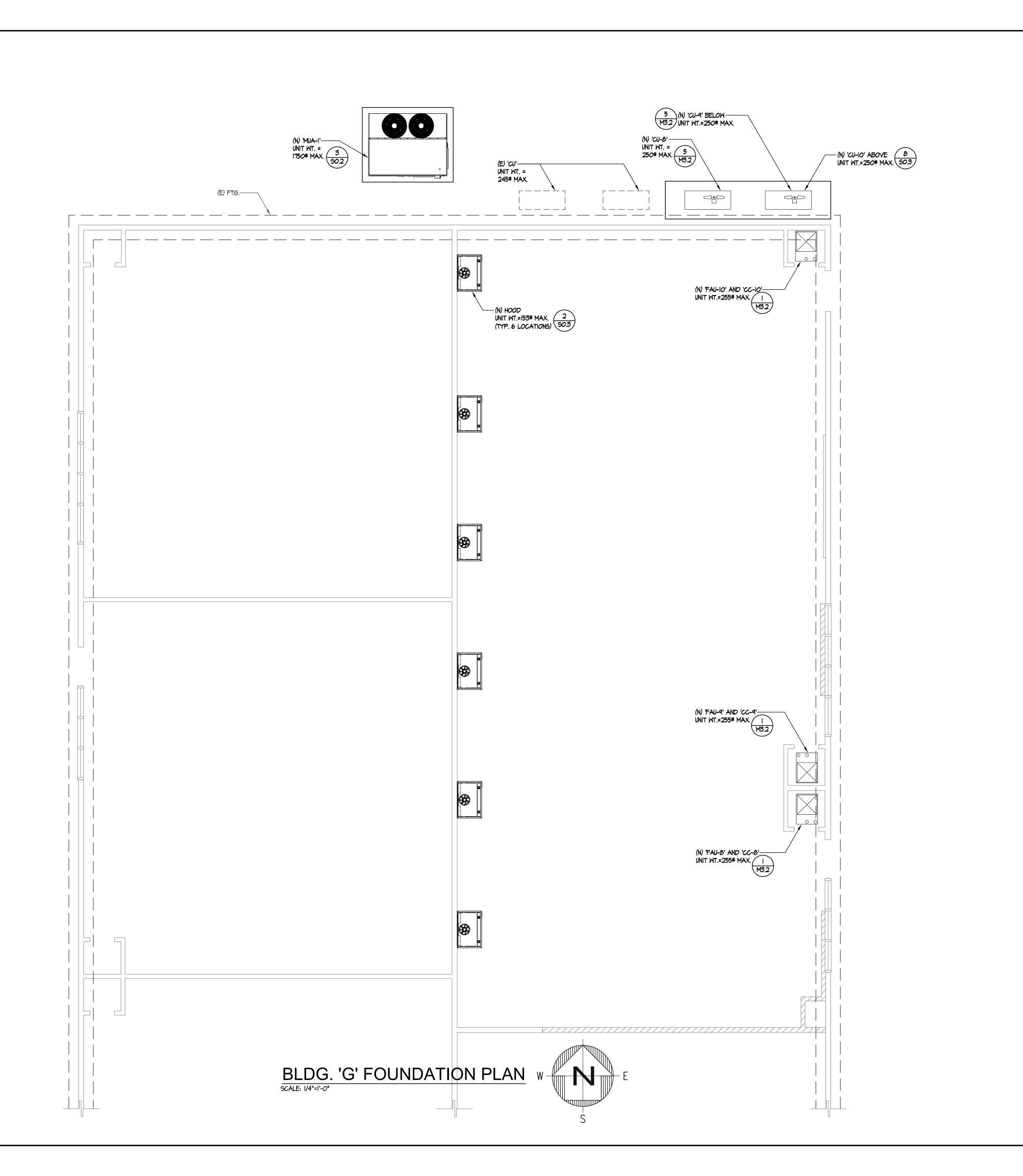
DRAWING TITLE:

GENERAL NOTES

DRAWING NO.:







FOUNDATION PLAN NOTES

- SEE GENERAL NOTES AND ABBREVIATIONS ON SHEET SO.I.
- VERIFY ALL DIMENSIONS AND SLAB ELEVATIONS WITH ARCHITECTURAL DRAWINGS.
- 3. ALL DIMENSIONS ARE TO FACE OF STUD UNLESS NOTED OTHERWISE.
- 4. TYPICAL FOUNDATION FORMING DETAILS PER I/SO.2.
- 5. CONTRACTOR TO DEMO PLUMBING AT PAD FOOTINGS AND REPLACE W NEW PLUMBING IF PAD FOOTINGS INTERFERE W EXISTING PLUMBING LINES.

IDENTIFICATION STAMP DIV. OF THE STATE ARCHITECT

APP: 03-121968 INC:

REVIEWED FOR

SS FLS ACS D

DATE: 12/20/2022

Architecture

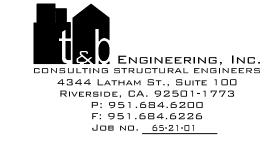


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CULINARY ARTS
CLASSROOM
MODERNIZATION

JOB NUMBER: DATE: 11/15/2021

REVISION: 1 DATE:

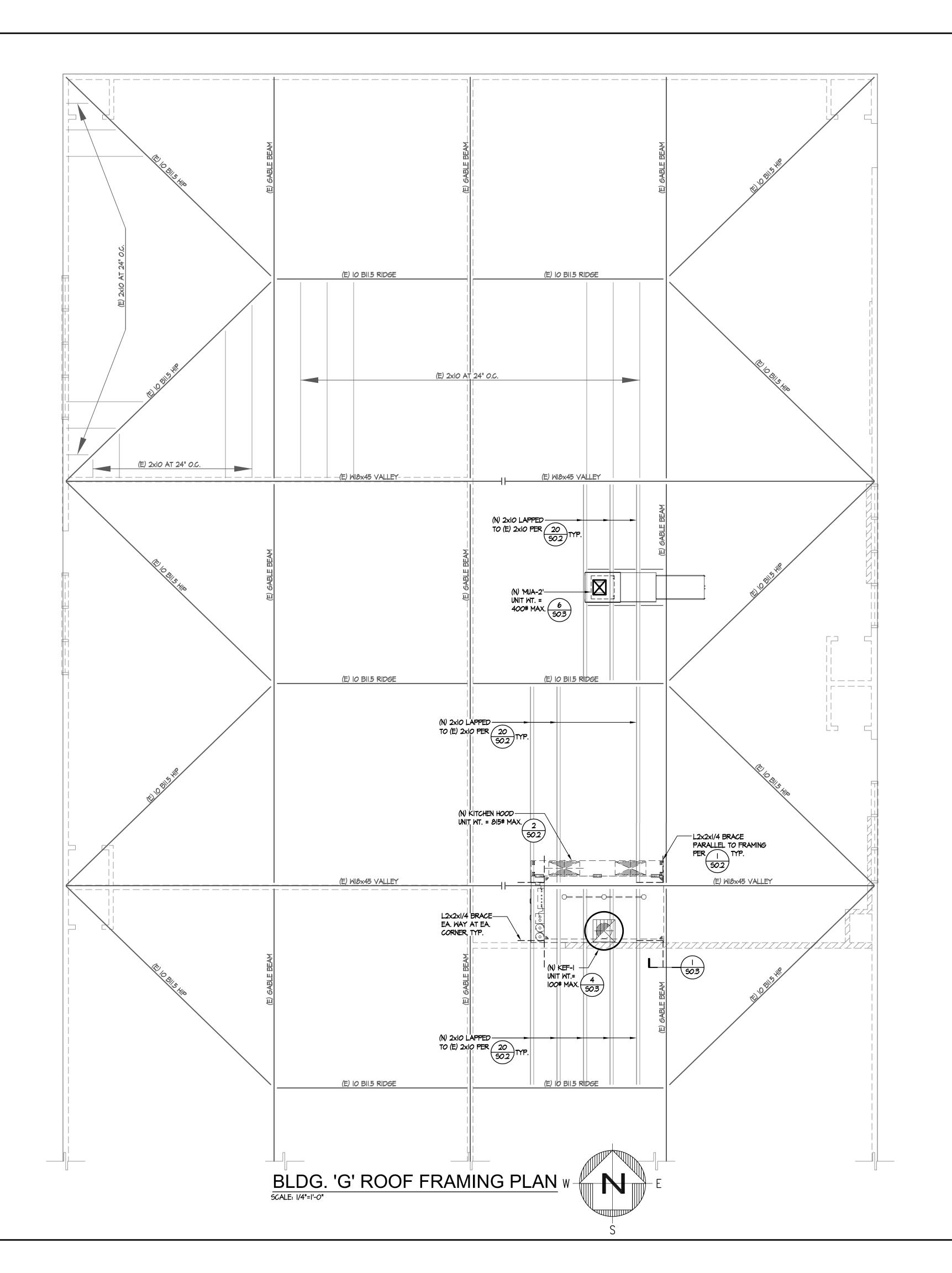
REVISION: A DATE: _
REVISION: A DATE: _

DRAWING TITLE:

BUILDING 'G' FOUNDATION PLAN

DRAWING NO.:

S1.1



ROOF FRAMING PLAN NOTES

- I. SEE HEADER SCHEDULE SHEET SO.I LUMBER NOTE #18 FOR ALL HEADERS AND LINTEL SIZES NOT IDENTIFIED. FOR HEADER FRAMING DETAIL SEE DETAIL 14/50.2.
- 2. ALL SOFFIT AND CEILING FRAMING WHICH IS HUNG FROM ROOF RAFTERS SHALL NOT BE INSTALLED UNTIL ALL ROOF LOADS WHICH MAY CAUSE DEFLECTION ARE INSTALLED. THE CONTRACTOR SHALL MAKE A FINAL CHECK FOR PLUMB PRIOR TO INSTALLATION OF THE SOFFIT AND CEILING COVERINGS, AND MAKE ANY REQUIRED ADJUSTMENTS.
- 3. FRAMING AT WALL OPENINGS PER TYPICAL STUD WALL FRAMING DETAIL 14/50.2.
- 4. WHERE ROOFING IS TO BE REPLACED, EXISTING ROOFING SHALL BE REMOVED ENTIRELY AND REPLACED. IT IS NOT ACCEPTABLE TO INSTALL NEW ROOFING OVER EXISTING.

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DATE: 12/20/2022

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ARCHITECTS STAMP:



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SCHOOL DISTRICT:

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PROJECT:

SAN DIMAS
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CLASSROOM
MODERNIZATION

JOB NUMBER: DATE: 11/15/2021

REVISION: DATE: .

DRAWING TITLE:

BUILDING 'G' ROOF FRAMING PLAN

DRAWING NO.:

S2.1