### 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, 26, AND 30:

- ALL PERMANENT EQUIPMENT AND COMPONENTS.
   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
   PEOCEPTACIES HAVING A FLEXIBLE CARLE.
- 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

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 PREAPPROVED INSTALLATION GUIDE (E.G., HCAI 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 DUCTS (MD) DETAILED ON THE APPROVED DRAWINGS WITH PROJECT SPECIFIC NOTES AND DETAILS.

#### **GOVERNING CODES AND STANDARDS** MECHANICAL DUCTWORK AND ACCESSORIES **ABBREVIATIONS** • 2019 CALIFORNIA BUILDING CODE BASED ON THE 2018 INTERNATIONAL BUILDING AUTOMATIC AIR VENT LOW PRESSURE STEAM ADD ADDITION CODE (IBC), WITH CITY OF LOS ANGELES AMENDMENTS. LEAVING WET BULB AFF ABOVE FINISHED FLOOR LWT LEAVING WATER TEMPERATURE • 2019 CALIFORNIA MECHANICAL CODE BASED ON THE 2018 UNIFORM MECHANICAL **AFMS** AIR FLOW MEASURING STATION MOTOR CODE (UMC), WITH CITY OF LOS ANGELES AMENDMENTS. ANNUAL FUEL UTILIZATION EFFICIENCY MAXIMUM DUCT ELBOW WITH TURNING VANES AUTHORITY HAVING JURISDICTION THOUSAND BTU PER HOUR • 2019 CALIFORNIA ENERGY CODE BASED ON TITLE 24, PART 6. MCA MINIMUM CIRCUIT AMPACITY • 2019 CALIFORNIA GREEN BUILDING STANDARDS CODE. ACCESS PANEL MD MOTORIZED DAMPER ARI AMERICAN REFIRGERATION INSTITUTE MECH MECHANICAL • AMERICANS WITH DISABILITY ACT (ADA). SMOOTH RADIUS DUCT ELBOW WITHOUT TURNING VANES AUX MERV **AUXILIARY** MINIMUM EFFICIENCY RATING VALUE STANDARDS BOILER MFG MANUFACTURER BUILDING MANAGEMENT SYSTEM • AMERICAN SOCIETY OF HEATING, REFRIGERATING AND AIR CONDITIONING ENGINEERS MOCP BDD BACKDRAFT DAMPER MINIMUM OVER CURRENT PROTECTION (ASHRAE) BEL BELOW (N) BRAKE HORSEPOWER NOT APPLICABLE a. HANDBOOKS: FUNDAMENTALS, APPLICATIONS, SYSTEMS AND EQUIPMENT NIC NOT IN CONTRACT CONICAL BRANCH FITTING BOD BOTTOM OF DUCT b. STANDARD 15: SAFETY CODE FOR MECHANICAL REFRIGERATION NOM BOP BOTTOM OF PIPE NTS NOT TO SCALE BTU BRITISH THERMAL UNIT c. STANDARD 52: GRAVIMETRIC AND DUST - SPOT PROCEDURES FOR TESTING OA OUTSIDE AIR BTUH BTU PER HOUR AIR-CLEANING DEVICES USED IN GENERAL VENTILATION FOR REMOVING OAT OUTSIDE AIR TEMPERATURE CAP CAPACITY PARTICULATE MATTER OBD OPPOSED BLADE DAMPER CONSTANT AIR VOLUME CAV 45 DEGREE BOOT LO-LOSS BRANCH FITTING OD d. STANDARD 55: THERMAL ENVIRONMENTAL CONDITIONS FOR HUMAN OCCUPANCY OUTSIDE DAMPER CFM CUBIC FEET PER MINUTE PD PRESSURE DROP **CHWP** CHILLED WATER PUMP e. STANDARD 62: VENTILATION FOR ACCEPTABLE INDOOR AIR QUALITY PHASE (ELECTRICAL) **CHWR** CHILLED WATER RETURN POC POINT OF CONNECTION f. STANDARD 90.1: ENERGY EFFICIENT DESIGN OF NEW BUILDINGS EXCEPT LOW **CHWS** CHILLED WATER SUPPLY POD POINT OF DISCONNECTION RISE RESIDENTIAL BUILDINGS CHILLER ACOUSTICAL LINING DUCT 12x6 SA PS PRESSURE SENSOR CENTERLINE (DIMENSION IS INSIDE DIMENSION) g. STANDARD 105: STANDARD METHOD OF MEASURING AND EXPRESSING BUILDING PSI POUNDS PER SQUARE INCH CLG CEILING ENERGY PERFORMANCE PSIA PSI ABSOLUTE CO CLEANOUT **PSIG** PSI GAUGE COP h. STANDARD 111: PRACTICES FOR MEASUREMENT, TESTING, ADJUSTING AND COEFFICIENT OF PERFORMANCE QTY QUANTITY CW COLD WATER SUPPLY DUCT UP BALANCING OF BUILDING HVAC & REFRIGERATION RETURN AIR CONDENSER WATER PUMP REFRIG REFRIGERATION i. STANDARD 114: ENERGY MANAGEMENT CONTROL SYSTEMS INSTRUMENTATION CONDENSER WATER RETURN RELATIVE HUMIDITY CONDENSER WATER SUPPLY CWS STANDARD 135: BACNET A DATA COMMUNICATION PROTOCOL FOR BUILDING RPM REVOLUTIONS PER MINUTE DDC EXHAUST DUCT UP DIRECT DIGITAL CONTROL AUTOMATION AND CONTROL NETWORKS SUPPLY AIR DIAMETER SCFM CFM, STANDARD CONDITIONS • AIR CONDITIONING AND REFRIGERATION INSTITUTE (ARI) STANDARDS SD SMOKE DAMPER DIFFERENTIAL PRESSURE DP a. NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) STANDARDS SEER SEASONAL ENERGY EFFICIENCY RATING DSD DUCT SMOKE DETECTOR RETURN DUCT UP SENS SENSIBLE b. NFPA 90A - INSTALLATION OF AIR CONDITIONING AND VENTILATING SYSTEMS DIRECT EXPANSION SF SQUARE FEET **EXISTING** c. NFPA 101 - LIFE SAFETY CODE SPEC **SPECIFICATIONS** EXHAUST AIR SQ IN SQUARE INCH ENTERING AIR TEMPERATURE • AIR MOVING AND CONDITIONING ASSOCIATION (AMCA) STANDARDS SUPPLY DUCT DOWN THERMOSTAT OR THERMOMETER EWT **ENTERING WATER TEMPERATURE** TRANSFER AIR • SHEET METAL AND AIR CONDITIONING CONTRACTORS NATIONAL ASSOCIATION (SMACNA) EER ENERGY EFFICIENCY RATING **TEMP TEMPERATURE** EXHAUST FAN • OCCUPATIONAL SAFETY AND HEALTH REGULATIONS FOR CONSTRUCTION, 29 CFR. PARTS TENANT IMPROVEMENT **EQUIP** EQUIPMENT 1926 AND 1910 EXHAUST DUCT DOWN TS TEMPERATURE SENSOR (ER) EXISTING RELOCATED TSP TOTAL STATIC PRESSURE • ENVIRONMENTAL PROTECTION AGENCY REGULATIONS EXTERNAL STATIC PRESSURE (TYP) TYPICAL ENTERING WET BULB TEMPERATURE AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI) PUBLICATIONS HEAT TRANSFER COEFFICIENT **FAHRENHEIT** UNDER CUT DOOR RETURN DUCT DOWN HVAC DESIGN CRITERIA FCU FAN COIL UNIT UNDERGROUND FIRE DAMPER A. VENTILATION CRITERIA VOLUME DAMPER FINAL FILTER OR FINISHED FLOOR • PER ASHRAE STANDARD 62.1 AND TITLE 24, WHICHEVER VALUE IS GREATER. VEL VELOCITY RECTANGULAR DUCT SIZE 12x6 SA VARIABLE FREQUENCY DRIVE • EXHAUST TO OUTDOORS: EXHAUST SHALL TERMINATE 10 FEET FROM ANY INTAKE FINS PER INCH (WIDTH x DEPTH IN INCHES + SYSTEM) VFM VENTURI FLOW METER FEET PER SECOND ROUND DUCT SIZE VOLUME VOL FIRE/SMOKE COMBINATION DAMPER FSD 18ø SA B. BUILDING ENVELOPE VENT THROUGH ROOF (DIAMETER IN INCHES + SYSTEM) VTR FOOT OR FEET THE BUILDING ENVELOPE PROPERTIES WILL BE IN COMPLIANCE WITH TITLE 24 MINIMUM WASTE OR WIDTH OR WATTS OVAL DUCT SIZE WET BULB TEMPERATURE GAUGE, GAGE 24x12ø SA (WIDTH x DEPTH IN INCHES + SYSTEM) WC WATER COLUMN **GALLONS** C. INTERNAL HEAT GAIN WG WATER GAUGE **GALLONS PER MINUTE GPM** • LIGHTING: PER TITLE 24 MAXIMUM ALLOWED VALUES BASED ON OCCUPANCY WORKING PRESSURE RECTANGULAR OR ROUND SUPPLY DIFFUSER OR GROUND WPD WATER PRESSURE DROP RECEPTACLE POWER: IN GENERAL, RECEPTACLE AND MISCELLANEOUS LOADS SHALL BE REGISTER (SEE SCHEDULE). 4-WAY THROW UNLESS HEIGHT WT INDICATED OTHERWISE. EXÁMPLE: SB12X12-400S CALCULATED PER THE 2013 ASHRAE FUNDAMENTALS HANDBOOK — CHAPTER 18 HORSEPOWER REFERS TO TAG SB WITH 12"X12" NECK, 400 CFM TAG NECK SIZE-CFM SYSTEM HUMIDITY SENSOR (NONRESIDENTIAL COOLING AND HEATING LOAD CALCULATION PROCEDURES). HEATING, VENTILATING AND AIR CONDITIONING • OCCUPANTS: 250 BTU/HR SENSIBLE AND 250 BTU/HR LATENT HEATING WATER HEATING WATER PUMP • OCCUPANCY CRITERIA FOR VENTILATION BASED ON ANSI/ASHRAE STANDARD 62.1-2007 HEATING WATER RETURN RECTANGULAR OR ROUND EXHAUST GRILLE AND PER OWNERSHIP PROVIDED PEOPLE COUNT IN EACH SPACE REGISTER (SEE OR SCHEDULE) HEATING WATER SUPPLY D. AIR DISTRIBUTION DESIGN CRITERIA FREQUENCY (HERTZ) TAG NECK SIZE-CFM SYSTEM INSIDE DIAMETER • SUPPLY DUCTWORK: 0.08" W.G./100 FT. MAX INCH(ES) • RETURN DUCTWORK: 0.06" W.G./100 FT. MAX KILOWATT KWH KILOWATT HOUR RECTANGULAR OR ROUND RETURN GRILLE • EXHAUST DUCTWORK: 0.08" W.G./100 FT. MAX LENGTH REGISTER (SEE OR SCHEDULE) LEAVING AIR TEMPERATURE OVERHEAD AIR DISTRIBUTION SYSTEM TAG NECK SIZE-CFM SYSTEM POUNDS a. 1500 FPM MAX ABOVE CEILING LDB LEAVING DRY BULB b. 2000 FPM MAX IN SHAFT LINEAR FEET LOW PRESSURE • RETURN VELOCITY: 1500 FPM MAX FLEXIBLE CONNECTION LOW PRESSURE CONDENSATE **\** • EXHAUST VELOCITY: 1500 FPM MAX HVAC SYSTEM MECHANICAL CONTROL SYMBOLS THE PROJECT CONSISTS OF MODERNIZING OF AN EXISTING MULTI-PURPOSE ROOM AND CONVERTING OF EXISTING LOCKER ROOMS AND RESTROOMS INTO ONE (1) STEAM LAB, FLEXIBLE DUCT RUNOUT TO DIFFUSER CLASSROOMS AND STAFF WORKROOMS. THE EXISTING COOLING AND HEATING HVAC UNITS TS TS TEMPERATURE SENSOR WILL REMAIN IN PLACE. NEW DUCTWORK LAYOUT WILL BE PROVIDED PER THE NEW LAYOUT. EXHAUST SYSTEMS SERVING RESTROOM, JANITOR'S CLOSET, STORAGE, ETC WILL THERMOSTAT OR THERMOMETER REMAIN IN PLACE. FIRE DAMPER, SMOKE DAMPER, OR FIRE AND FD SD FSD SMOKE COMBINATION DAMPER CARBON DIOXIDE SENSOR ALL EQUIPMENT SHALL BE TESTED, ADJUSTED AND BALANCED IN ACCORDANCE WITH TABB. NEBB OR AABC. OCCUPANCY SENSOR POINT OF CONNECTION ALL DUCT AND OTHER RELATED AIR DISTRIBUTION COMPONENT OPENINGS SHALL BE COVERED WITH TAPE, PLASTIC OR SHEET METAL UNTIL THE FINAL STARTUP OF THE HVAC **HUMIDITY SENSOR OR HUMIDISTAT** STATIC PRESSURE SENSOR HVAC DRAWING LIST REFRIGERANT SENSOR CARBON MONOXIDE SENSOR M-001 MECHANICAL COVER SHEET M-002 MECHANICAL GENERAL NOTES DUCT SMOKE DETECTOR MECHANICAL SCHEDULES M-101 MECHANICAL ZONING PLAN PRESSURE SENSOR OR SWITCH M-111D MECHANICAL DEMO FLOOR PLAN M-111 MECHANICAL FLOOR PLAN DIFFERENTIAL PRESSURE SENSOR M-112D MECHANICAL DEMO ROOF PLAN M-112 MECHANICAL ROOF PLAN M-401 MECHANICAL TITLE-24 MECHANICAL DETAIL MECHANICAL CONTROL DIAGRAM ISOCURB CUTSHEET - FOR REFERENCE NOTE: NOT ALL SYMBOLS OR ABBREVIATIONS ARE APPLICABLE TO THIS PROJECT. REFER TO DETAILS AND NOTES FOR

MOUNTING HEIGHTS.

MECHANICAL SYMBOLS

AUTHORITY APPROVAL IDENTIFICATION STAMP DIV. OF THE STATE ARCHITECT

APP: 04-121721 INC:

REVIEWED FOR

SS FLS ACS D

DATE: 05/10/2023

CSDA DESIGION GROU

LISTEN COLLABORATE CREATE

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CONSULTANT STAMP

PROFESSION

ONGHU

NO. M38342

EXP. 3-31-25

OF CALIFORNIA

PROJECT OWNER:



CORONA NORCO UNIFIED SCHOOL DISTRICT

2820 Clark Ave, Norco, CA 92860

(951) 736-5000

PROJECT NAME:

CORONA FUNDAMENTAL
INTERMEDIATE SCHOOL - MPR
RENOVATION

1230 S Main St, Corona, CA 92882

<u>IARK</u>	DATE	DESCRIPTION
	12/19/2022	DSA SUBMITTAL
	03/24/2023	DSA BACK-CHECK
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SHEET TITLE:

PROJECT NO.:

MECHANICAL

22063.01

COVER SHEET

HEET NO.:

M-001

3/28/2023

#### MECHANICAL GENERAL NOTES

### (GENERAL NOTES APPLY TO ALL SHEETS)

- 1. ALL WORK SHALL BE COMPLETED AS INDICATED ON THE DRAWINGS AS REQUIRED. ALL WORK SHALL COMPLY WITH CODE AND THE LATEST AUTHORITY HAVING JURISDICTION (AHJ) REQUIREMENTS.
- 2. ALL WORK SHALL COMPLY WITH SECTION 120.0 TO SECTION 120.9 IN SUBCHAPTER 3, NONRESIDENTIAL, HIGH-RISE RESIDENTIAL, HOTEL/MOTEL OCCUPANCIES, AND COVERED PROCESSES - MANDATORY REQUIREMENTS, IN 2019 BUILDING ENERGY EFFICIENCY STANDARDS
- 3. ALL DRAWINGS ARE DIAGRAMMATIC IN NATURE, AND ARE ONLY INTENDED TO CONVEY THE DESIGN INTENT GENERAL ARRANGEMENT. CONTRACTOR SHALL NOT SCALE FOR MATERIAL QUANTITIES. SEE ARCHITECTURAL PLANS FOR DIMENSION AND SCALING. THE EXACT LOCATIONS NECESSARY TO SECURE THE BEST CONDITIONS AND RESULTS MUST BE DETERMINED BY THE PROJECT SITE CONDITIONS AND SHALL BE COORDINATED WITH THE OWNER'S REPRESENTATIVE PRIOR TO INSTALLATION.
- 4. CONTRACTOR IS RESPONSIBLE FOR VERIFICATION OF ALL FIELD CONDITION SUCH AS DIMENSIONS PRIOR TO BIDDING AND CONSTRUCTION.
- 5. CONTRACTOR IS RESPONSIBLE FOR ALL DAMAGES CAUSED BY FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES UNLESS OTHERWISE INDICATED.
- 6. CONTRACTOR SHALL OBTAIN AND PAY FOR ALL REQUIRED FEES, PERMITS AND INSPECTIONS. OBTAIN ALL FIELD APPROVALS ON WORK FROM REGULATING AGENCIES WHERE REQUIRED.
- 7. DURING ENTIRE CONSTRUCTION PERIOD MAINTAIN ADEQUATE 2A:40BC FIRE EXTINGUISHERS READY FOR USE IN CASE OF
- 8. PROTECTION OF PUBLIC: THE CONTRACTOR SHALL PROTECT THE PUBLIC FROM INJURY DURING PROGRESS OF THE WORK BY POSTING WARNING SIGNS, GUARD LIGHTS AND BARRICADES AS REQUIRED.
- 9. COORDINATE ALL WORK WITH VARIOUS TRADES IN INSTALLING ALL WORK TO CLEAR ARCHITECTURAL AND STRUCTURAL MEMBERS. NO WORK SUCH AS PIPE, DUCT, ETC., TO BE IN CONTACT WITH ANY EQUIPMENT OR BUILDING MEMBERS.
- 10. CONTRACTOR IS RESPONSIBLE FOR ALL CUTTING AND PATCHING RELATED TO HIS WORK. COORDINATE WITH GENERAL CONTRACTOR AND ANY DISCIPLINES INVOLVED PRIOR TO ANY CUTTING AND PATCHING WORK.
- 11. COORDINATE WITH STRUCTURAL ENGINEER PRIOR TO CUTTING OR PATCHING ANY STRUCTURAL SYSTEMS. DO NOT CUT ROOF FRAMING.
- 12. EQUIPMENT SHALL BE ACCESSIBLE FOR SERVICE, INSPECTION REPAIR AND REPLACEMENT WITHOUT REMOVING PERMANENT CONSTRUCTION. SUFFICIENT CLEARANCE SHALL BE MAINTAINED TO PERMIT CLEANING, REPLACEMENT OF FILTERS, BLOWERS, MOTORS CONTROLS AND LUBRICATION OF MOVING PARTS. MINIMUM OF 30 INCHES OF CLEARANCE IN DEPTH WIDTH AND HEIGHT SHALL BE PROVIDED TO SERVICE THE EQUIPMENT.

- 13. ACCESS PANELS/DOORS SHALL BE PROVIDED AT MAINTENANCE/SERVICE AREAS FOR ALL CONCEALED EQUIPMENT, DEVICES, DAMPERS, VALVES AND ETC. PANELS/DOORS SHALL BE SIZED PER EQUIPMENT, DEVICES, DAMPERS, VALVES AND ETC AND SHALL NOT BE SMALLER THAN 12"X12". IF INSTALLED ON THE FIRE RATED WALL/CEILING, ACCESS PANELS/DOORS SHALL CARRY THE SAME FIRE RATING AS THE WALL/CEILING.
- 14. SEE STRUCTURAL DESIGN FOR ALL ATTACHMENTS TO THE BUILDING STRUCTURE SYSTEM. REFER TO STRUCTURAL PLANS FOR SEISMIC ATTACHMENT REQUIREMENTS.
- 15. ALL DUCT HANGERS AND SUPPORTS SHALL COMPLY WITH THE MECHANICAL CODE AND THE "SMACNA HVAC DUCT CONSTRUCTION STANDARDS, METAL AND FLEXIBLE".
- 16. ALL SUPPLY, RETURN AND EXHAUST AIR DUCTWORK SHALL BE GALVANIZED SHEET METAL IN ACCORDANCE WITH CMC AND LATEST EDITIONS OF THE "SMACNA HVAC DUCT CONSTRUCTION STANDARDS (HDCS)" AND "ASHRAE STANDARDS." DUCT GAUGE AND CONSTRUCTION SHALL BE SELECTED AT 1.5 TIMES THE DESIGN FAN SUPPLY STATIC.
- 17. ALL SUPPLY DUCTWORK SHALL HAVE TURNING VANES AT EACH RECTANGULAR ELBOW.
- 18. DIMENSIONS OF THE DUCT MAY BE ALTERED TO AVOID INTERFERENCES AND MAINTAIN ADEQUATE CLEARANCES AS LONG AS THE SAME AIR HANDLING CHARACTERISTICS ARE MAINTAINED.
- 19. ALL DUCTWORK DIMENSIONS SHOWN ON THE DRAWINGS ARE INTERNAL CLEAR DIMENSIONS.
- 20. SEAL ALL DUCT JOINTS, INCLUDING LONGITUDINAL JOINTS, WITH WATER BASED SEALANT. MAXIMUM ALLOWABLE DUCTWORK LEAKAGE SHALL NOT EXCEED 5% AND AS DEFINED ELSEWHERE IN DOCUMENTS.
- 21. ALL SUPPLY AND RETURN AIR DUCTWORK SHALL BE INSULATED WITH NOT LESS THAN THE AMOUNT OF INSULATION INDICATED IN ACCORDANCE WITH THE MECHANICAL CODE AND ENERGY CODE.
- 22. ALL EXTERIOR DUCTWORK SHALL BE SANDWICHED INSULATION WITH DOUBLE WALL SHEET METAL CONSTRUCTION.
- 23. IDENTIFY ALL NEW MECHANICAL EQUIPMENT WITH NAMEPLATES PERMANENTLY ENGRAVED WITH 1/2 INCH HIGH WHITE LETTERS ON A BLACK BACKGROUND. IDENTIFY EQUIPMENT WITH TAGS SHOWN ON THE MECHANICAL SCHEDULES/PLANS.
- 24. CONTRACTOR SHALL INSTALL VOLUME DAMPERS AS REQUIRED FOR PROPER AIR BALANCING OF EACH DIFFUSER/GRILLE/BRANCH DUCTWORK. IF VOLUME DAMPERS ARE INSTALLED ABOVE INACCESSIBLE CEILINGS, THEN EXTENDED REGULATORS SHALL BE PROVIDED.
- 25. CONTRACTOR SHALL COORDINATE WITH OTHER TRADE TO PROVIDE FLASHING AND COUNTERFLASHING AT PENETRATIONS THROUGH WALLS OR ROOF TO MAKE WATERPROOF INSTALLATION.
- 26. FRESH AIR INTAKE SHALL NOT BE INSTALLED CLOSER THAN 10 FEET FROM AN APPLIANCE VENT OUTLET. VENT OPENING OF A PLUMBING SYSTEM, OR THE DISCHARGE OUTLET OF EXHAUST FAN.

- 27. CEILING DIFFUSER SIZES SHOWN INDICATE NECK SIZES. PROVIDE FRAMES AS REQUIRED TO MATCH MOUNTING SURFACE.
- 28. CONDENSATE AND PRESSURE RELIEF PIPING SHALL BE TYPE L OR M TUBING WITH WROUGHT COPPER FITTINGS. PRIMARY DRAIN PAN SHALL BE PROVIDED WITH COOLING COIL AND EXTEND BEYOND THE LEAVING SIDE OF THE COIL AND UNDERNEATH THE COOLING COIL CONNECTIONS. PROVIDE SECONDARY DRAIN PIPE OR AUTOMATIC SHUT-OFF SWITCH FOR EQUIPMENT ABOVE CEILINGS.
- 29. SUPPORT ALL PIPING SO THAT IT IS FIRMLY HELD IN PLACE BY APPROVED IRON HANGERS AND SUPPORTS, IN ACCORDANCE WITH RECOMMENDATIONS OF AMERICAN PIPE FITTERS ASSOCIATION AND PIPE HANGER INSTITUTE.
- 30. MOTOR STARTERS AND VARIABLE FREQUENCY DRIVES, WHERE REQUIRED, SHALL BE PROVIDED AND MOUNTED BY THE MECHANICAL INSTALLER AND WIRING/CONDUIT BY ELECTRICAL INSTALLER.
- 31. CONTRACTOR SHALL REFER TO ARCHITECTURAL DRAWING FOR DIFFUSER, REGISTER, AND GRILLE LOCATIONS AND MAKE DUCT MODIFICATIONS AS NEEDED.
- 32. ALL AIR HANDLING, PACKAGED ROOFTOP, FAN COIL UNITS AND ETC SHALL OPERATE WITHOUT MOISTURE CARRYOVER.
- 33. PROVIDE FLEXIBLE CONNECTIONS IN ALL DUCTWORK SYSTEMS (SUPPLY, RETURN, AND EXHAUST) CONNECTED TO AIR HANDLING, PACKAGED ROOFTOP, FAN COIL UNITS AND FANS. FLEXIBLE CONNECTIONS SHALL BE PROVIDED AT THE POINT OF CONNECTION TO THE EQUIPMENT UNLESS OTHERWISE INDICATED.
- 34. ALL DUCTS SHALL BE GROUNDED WITH FLEXIBLE COPPER GROUNDING STRAPS. GROUNDING STRAPS SHALL BE BOLTED OR SOLDERED TO BOTH THE EQUIPMENT AND THE
- 35. INDIVIDUAL RUNS OF FLEXIBLE DUCT SHALL NOT EXCEED FIVE (5) FEET.
- 36. ALL EQUIPMENT, PIPING, DUCTWORK, ETC., SHALL BE SUPPORTED AS REQUIRED TO PROVIDE A VIBRATION FREE INSTALLATION.
- 37. PROVIDE VIBRATION ISOLATION DEVICES FOR ALL MECHANICAL EQUIPMENT TO PREVENT TRANSMISSION OF VIBRATION TO BUILDING STRUCTURE.
- 38. ALL DUCTWORK SHALL BE COORDINATED WITH ALL TRADES INVOLVED. OFFSETS IN DUCTS, INCLUDING DIVIDED DUCTS AND TRANSITIONS AROUND OBSTRUCTIONS, SHALL BE PROVIDED AT NO ADDITIONAL COST TO THE OWNER.
- 39. DUCT MOUNTED PHOTOELECTRIC SMOKE DETECTORS SHALL BE INSTALLED WITH ONE REQUIRED FOR EACH HEATING OR COOLING SYSTEM SUPPLYING AIR IN EXCESS OF 2000 CFM. DETECTOR SHALL BE PROVIDED WITH METAL SAMPLING TUBE AND BE MOUNTED IN THE SUPPLY AIR DUCTWORK. DETECTOR SHALL SHUT DOWN THE AIR-MOVING EQUIPMENT WHEN SMOKE IS DETECTED. PROVIDE REMOTE TEST AND RESET STATION FOR MOUNTING AT THE CEILING OR WALL IN THE VICINITY OF THE SMOKE DETECTOR
- 40. SMOKE DETECTORS SHALL BE FURNISHED AND WIRED BY THE ELECTRICAL INSTALLER. THE MECHANICAL INSTALLER SHALL BE RESPONSIBLE FOR MOUNTING THE SMOKE DETECTOR IN

- DUCTWORK AS SHOWN ON THE DRAWINGS AND IN ACCORDANCE WITH MANUFACTURER S PRINTED INSTRUCTIONS.
- 41. CONTRACTOR SHALL REFER TO ARCHITECTURAL DRAWING FOR LOUVER DETAIL AND INFORMATION. EXTERIOR LOUVERS SHOWN ON THE DRAWINGS ARE INDICATED FOR INFORMATION ONLY.
- 42. UNLESS OTHERWISE SHOWN, LOCATE ALL ROOM SENSORS AT 4'-0" (CENTERLINE) ABOVE FINISHED FLOOR. NOTIFY THE OWNER'S REPRESENTATIVE OF ANY ROOMS WHERE THE ABOVE LOCATION CANNOT BE MAINTAINED OR WHERE THERE IS A QUESTION ON LOCATION.
- 43. PROVIDE ALL DEVICES. CONTROLLERS. SENSORS, CONDUIT, WIRING AND LABOR AS NEEDED TO PROVIDE OWNERSHIP WITH A COMPLETE AND OPERATIONAL CONTROL SYSTEM AND TO MEET PROJECT REQUIREMENTS.
- 44. ALL CONTROL WIRE AND CONDUIT SHALL COMPLY WITH THE ELECTRICAL CODE AND THE SPECIFICATION SECTIONS.
- 45. IT IS CONTRACTOR'S RESPONSIBILITY TO PROVIDE DUCT AND PIPE TRANSITIONS AS REQUIRED FOR PROPER INSTALLATION AND FIELD VERIFY AND COORDINATE ALL DUCT AND PIPING DIMENSION BEFORE FABRICATION.
- 46. CONCRETE HOUSEKEEPING PADS TO SUIT MECHANICAL EQUIPMENT SHALL BE SIZED AND LOCATED BY THE MECHANICAL INSTALLER. MINIMUM CONCRETE PAD THICKNESS SHALL BE 6 INCHES. PAD SHALL EXTEND BEYOND THE EQUIPMENT A MINIMUM OF 6 INCHES ON EACH SIDE. CONCRETE HOUSEKEEPING PADS SHALL BE PROVIDED BY THE GENERAL CONTRACTOR.
- 47. ALL MISCELLANEOUS STEEL REQUIRED TO ENSURE PROPER INSTALLATION AND AS SHOWN IN DETAILS FOR PIPING, DUCTWORK, AND EQUIPMENT (UNLESS OTHERWISE NOTED) SHALL BE FURNISHED AND INSTALLED BY THE MECHANICAL CONTRACTOR.
- 48. MECHANICAL EQUIPMENT, DUCTWORK, AND PIPING SHALL NOT BE SUPPORTED FROM METAL DECK.
- 49. CONTRACTOR SHALL PROVIDE DAMPER AND SEAL WITH CODE REQUIRED AND/OR UL APPROVED SEALANT MATERIALS ON ALL PENETRATIONS THROUGH IN FIRE AND SMOKE RATED WALLS DUE TO DUCTWORK, PIPING, CONDUIT, ETC.
- 50. MECHANICAL DUCT PENETRATIONS OF A NON-FIRE RESISTANCE RATED FLOOR ASSEMBLY SHALL BE PROTECTED WITH A SHAFT ASSEMBLY IN ACCORDANCE WITH THE BUILDING CODE. WHEN THE DUCT CONNECTS NOT MORE THAN TWO STORIES, THE ANNULAR SPACE AROUND THE PENETRATING DUCT MUST BE MATERIAL THAT RESISTS THE FREE PASSAGE OF FLAME AND PRODUCTS OF CONSTRUCTION.
- 51. CONDENSATE DRAIN LINES SHALL BE PROVIDED TO EACH AIR CONDITIONING, PACKAGED ROOFTOP, FAN COIL UNIT, ETC. CONDENSATE DRAIN LINES SHALL HAVE THE SAME SIZE AS THE DRAIN OUTLET ON THE UNIT.
- 52. COORDINATE WITH ELECTRICAL CONTRACTOR FOR 120 VOLT ELECTRICAL OUTLETS WITHIN 25 FEET OF ALL MECHANICAL EQUIPMENT.
- 53. SIZING OF THE GAS FIRED CATEGORY 1 APPLIANCE VENTING SYSTEMS SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE MECHANICAL CODE.

- 55. TYPE I HOODS GREASE EXHAUST HOODS SHALL IS LISTED FOR LESS CLEARANCE.
- 56. OPENINGS ON HORIZONTAL GREASE DUCT STEPLADDER.
- INSULATION IS APPLIED.
- AT LEAST THREE YEARS OF EXPERIENCE.
- 63. A FINAL REPORT FOR THE TESTING AND ADJUSTING OF ALL MECHANICAL SYSTEMS SHALL BE COMPLETED PRIOR TO FINAL APPROVAL BY THE FIELD INSPECTOR. THIS REPORT SHALL BE SIGNED BY THE INDIVIDUAL RESPONSIBLE FOR PERFORMING THESE SERVICES.
- MINIMUM OF ONE YEAR FROM DATE OF CERTIFICATE OF OCCUPANCY.
- OPERATIONS AND MAINTENANCE MANUALS.
- PROVIDED TO OCCUPANT
- 69. IF THE NEW HVAC SYSTEM IS USED DURING CONSTRUCTION, USE RETURN AIR FILTERS WITH A MERV OF 13. REPLACE ALL FILTERS IMMEDIATELY PRIOR TO OCCUPANCY.

54. THE GAS FURNACES SHALL BE INSTALLED IN ACCORDANCE WITH ALL REQUIREMENTS OF THE MANUFACTURER'S LISTING AND INSTALLATION INSTRUCTIONS. CLEARANCE REQUIREMENTS FOR THE FURNACES SHALL BE AS SPECIFIED IN THE MANUFACTURER'S INSTRUCTIONS OR RATING PLATE. CLEARANCES FOR THE VENT PIPE SHALL BE AS REQUIRED BY THE LISTED VENT PIPE MANUFACTURER'S INSTALLATION INSTRUCTIONS.

BE INSTALLED WITH A MINIMUM OF 18 INCHES TO COMBUSTIBLES AND 3 INCHES CLEARANCE TO LIMITED COMBUSTIBLES, UNLESS THE HOOD

- SYSTEMS SHALL BE PROVIDED WITH SAFE ACCESS AND WORK PLATFORM WHEN NOT EASILY ACCESSIBLE FROM A 10 FOOT
- 57. CONTRACTOR SHALL PERFORM TESTS PRIOR TO ANY MECHANICAL EQUIPMENT OR PIPING
- 58. BALANCE AIR FLOW AT ALL AIR INLETS AND OUTLETS TO AIR QUANTITIES SHOWN. MECHANICAL CONTRACTOR SHALL PROVIDE MOTORS, PULLEYS AND BELTS AS REQUIRED TO ACCOMMODATE THE REQUIRED AIR FLOWS. BALANCE ALL WATER FLOWS TO COILS AND MECHANICAL EQUIPMENT TO VALUES SHOWN. INSTALL TEST PLUGS WHERE NECESSARY. BALANCING CONTRACTOR SHALL BE INDEPENDENT OF THE INSTALLING CONTRACTORS AND CERTIFIED BY THE NATIONAL ENVIRONMENTAL BALANCING BUREAU (NEBB) OR ASSOCIATED AIR BALANCE COUNCIL (AABC) WITH
- 64. RESTORE ALL DAMAGE RESULTING FROM YOUR WORK AND LEAVE PREMISES IN CLEAN CONDITION WHEN FINISHED WITH WORK.
- 65. GUARANTEE ALL WORK AND MATERIALS FOR A
- 66. AT COMPLETION OF CONSTRUCTION PROVIDE AS-BUILT MARK-UPS AND COPIES OF BOUND
- 67. A COPY OF THE MANUFACTURERS INSTALLATION INSTRUCTIONS SHALL BE PROVIDED AT THE LOCATION OF EACH PIECE OF EQUIPMENT.
- 68. A COPY OF THE CONSTRUCTION DOCUMENTS OR A COMPARABLE DOCUMENT INDICATING THE INFORMATION FROM THE ENERGY CODE SECTION 110.10(b) THROUGH 110.10(c) SHALL BE

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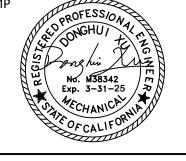
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ARCHITECT STAMP



2866 BIRCH LN. POMONA, CA 91767 (213) 503-2332

**CONSULTANT STAMP** 



PROJECT OWNER: CORONA NORCO UNIFIED SCHOOL DISTRICT



2820 Clark Ave. Norco. CA 92860 (951) 736-5000

PROJECT NAME:

CORONA FUNDAMENTAL INTERMEDIATE SCHOOL - MPR RENOVATION

1230 S Main St, Corona, CA 92882

MARK	DATE	DESCRIPTION
	12/19/2022	DSA SUBMITTAL
	12/19/2022 03/24/2023	DSA BACK-CHECK

SHEET TITLE:

PROJECT NO.:

**MECHANICAL GENERAL NOTES** 

22063.01

SHEET NO.:

	MINI-SPLIT - FAN COIL UNIT SCHEDULE											MINI-S	PLIT - H	EAT I	PUN	IP C	ONDE	NSIN	IG UN	IT SC	HED	ULE								
TAG	MFG	MODEL NUMBER	TYPE	TOTAL CAP (MBTUH)	COOLIN SUPPLY AIR FLOW (CFM)	MIN	ESP	HEATING TOTAL CAP (MBTUH)	V/PH MCA (A)		ERG WER F	FILTER (	UNIT SIZE (L"xW"xH")	OPER. WT. (LBS)	COMMENTS	TAG	MFG	MODEL NUMBER	LOCATION	COOLING CAP. (MBH)	EER	IEER/ SEER	SPF REFF TYP	RIG V/PH	MCA (A)	MOCP (A)	EMERG POWER (Y/N)	UNIT SIZE (L"xW"xH")	OPER. WT. COM	MMENTS
FCU-3	DAIKIN	FDMQ24RVJU	DUCTED	24	780	135	0.3	NA	NOTE #2	2	N 1	NOTE #1	40 X 32 X 10	90	NOTE #3, 1/M-501	CU-3	DAIKIN	RX24RMVJUA	ROOF	24	12.5	18.6	10 R410	A 208/1	16.9	20	N	35 X 13 X 29	120 7	/ <b>/M-5</b> 01
FCU-21	DAIKIN	FDMQ18RVJU	DUCTED	18	670	50	0.3	NA	NOTE #2	2	N 1	NOTE #1	40 X 32 X 10	90	1/M-501	CU-21	DAIKIN	RX18RMVJU9A	ROOF	18	12.5	18.5	10.3 R410	A 208/1	12.8	15	N	35 X 13 X 29	120 7	7/M501
FCU-25	DAIKIN	FTXS24LVJU	WALL MOUNTED	24	716	NOTE #1	NA	NA	NOTE #2	2	N I	NOTE #1	40 X 12 X 12	40 1	NOTE #3, #4, 8/M-501	CU-25	DAIKIN	RXS24LVJU	WALL	24	12.5	20	10.6 R410	A 208/1	16.4	20	N	37 X 14 X 28	160 8	8/M-501

GENERAL NOTES:

D. PROVIDE HARDWIRED THERMOSTAT

A. COORDINATE WITH ELECTRICAL POWER AND DISCONNECT AS REQUIRED.

B. COORDINATE WITH STRUCTURAL CONSULTANT FOR HANGING DETAIL. C. PROVIDE BUILT-IN CONDENSATE PUMP.

KEY NOTES: 1. UNIT SERVING ELEC/IT ROOM.

4. ATTACH UNIT TO WALL PER OSP-0297

2. INDOOR UNIT POWERED BY OUTDOOR UNIT. 3. UNIT IS COOLING ONLY

A. COORDINATE WITH ELECTRICAL FOR POWER AND DISCONNECTS AS REQUIRED. B. PROVIDE REFRIGERANT PIPING PER MANUFACTURER'S REQUIREMENTS.

	PACKAGED ROOFTOP HEAT-PUMP UNIT SCHEDULE																															
			NOMINAL			CC	OLING		REI	FRIGERAI	NT TV	ŀ	HEATING			SUP	PLYFAN			ELECTR	RICAL	DCV	AIR		POWER EXI	HAUST		FILT	ΞR	UNIT	OPER.	
TAG	MANUFACTURER	MODEL NUMBER	RCAPACITY	TOTAL	SENS	LAT	EAT DB/W	B LAT DB/WB	EER S	SEER/ RE	FRIG	FUEL	TOTAL I	EATILA	TAIRFLOV	V MIN OSA	ESP	DRIVE	BHP V/F	PH MCA	MOCP	CONTROLE	CONOMIZER	MODULATING	SEPARATE	V/PH	FLA	TYPE	MERV	SIZE	WT.	REMARKS
			(TONS)	(MBTU)	(MBTU	) (MBTU	J) (°F)	(°F)		IEER   T	YPE	TYPE	(MBTU)	(°F)   (°I	F) (CFM)	(CFM)	(IN.WG.	)		(A)	(A)	(Y/N)	(Y/N)	(Y/N)	ELEC		(A)			(L"xW"xH")	(LBS)	
RTU-C-2	CARRIER	48FCDN07	6	71	69	)	2 85 / 66	58 / 56	11	15 R	410A	GAS	67	65 8	5 2,40	71	0.5	DIRECT	2.03 480	/3 15	20	Υ	Y	Υ	Y	480/3	2.8	2" PLEATED	13	75 X 47 X 42	1,300	
TU-C-3	CARRIER	48FCDN07	6	72	55	5 1	7 80 / 67	58 / 57	11	15 R	410A	GAS	67	70 90	) 2,40	00 32	5 0.5	DIRECT	2.03 480	/3 15	20	Y	Y	Υ	Y	480/3	2.8	2" PLEATED	13	75 X 47 X 42	1,300	
RTU-C-4	CARRIER	48FCDN07	6	72	55	5 1	7 80 / 67	58 / 57	11	15 R	410A	GAS	67	70 90	) 2,40	00 32	5 0.5	DIRECT	2.03 480	/3 15	20	Y	Y	Y	Y	480/3	2.8	2" PLEATED	13	75 X 47 X 42	1,300	
TU-C-5	CARRIER	48FCDN07	6	72	55	5 1	7 80 / 67	58 / 57	11	15 R	410A	GAS	67	70 90	) 2,40	00 32	5 0.5	DIRECT	2.03 480	/3 15	20	Y	Y	Υ	Y	480/3	2.8	2" PLEATED	13	75 X 47 X 42	1,300	
TU-C-6	CARRIER	48FCDN07	6	72	55	5 1	7 80 / 67	58 / 57	11	15 R	410A	GAS	67	70 90	) 2,40	00 32	5 0.5	DIRECT	2.03 480	/3 15	20	Υ	Υ	Υ	Y	480/3	2.8	2" PLEATED	13	75 X 47 X 42	1,300	
TU-C-8	CARRIER	48GCGN06	5	62	59	)	3 85 / 66	58 / 56	9.7	16.1 R	410A	GAS	67	65 90	2,00	00 62	5 0.5	DIRECT	1.52 480	/3 14	20	Υ	Υ	Υ	Y	480/3	2.8	2" PLEATED	13	75 X 47 X 42	1,300	

### GENERAL NOTES

- A. COORDINATE WITH ELECTRICAL FOR POWER AND DISCONNECT AS REQUIRED.
- B. PROVIDE ISO-CURB AND BASE CURB SHALL BE 11" MINIMUM ABOVE FINISH FLOOR.
- C. CONTRACTOR TO INSTALL DUCT SMOKE DETECTOR IN SUPPLY AIR ABOVE 2000 CFM.
- D. PROVIDE MANUFACTURED POWER EXHAUST FAN FOR AIR ECONOMIZER ASSEMBLY. POWERED BY SEPARATE CIRCUIT
- E. PROVIDE SF MODEL#SFTHCTS742WFI THERMOSTAT OR EQUIVALENT F. PROVIDE SENVA SENSORS MODEL#AQW-ABAAAA1 CO2 SENSOR OR EQUIVALENT
- G. PROVIDE HUMIDIMIZER
- H. SEE DETAIL #6/M501 FOR ATTACHMENT DETAIL TO EXISTIING ROOF
- I. PROVIDE MANUFACTURER INSTALLED NON-FUSED DISCONNECT ON THE UNIT

			DIFF	USER AND GRILLE SCHED	ULE		
TAG	MANUFACTURER	MODEL NUMBER	DESCRIPTION	FACE TYPE	FACE SIZE (INCHES)	COLOR	COMMENTS
CD	PRICE	SPD	SQUARE CEILING SUPPLY	PLAQUE DIFFUSER	24 x 24	NOTE #1	
CG	PRICE	PDDR	SQUARE CEILING RETURN	PERFORATED	24 x 24	NOTE #1	
WR	PRICE	510	SUPPLY GRILLE	LOUVERED	SEE PLANS	NOTE #1	NOTE #2
WG	PRICE	530	RETURN GRILLE	LOUVERED	SEE PLANS	NOTE #1	NOTE #2

1. GRILLE/DIFFUSER COLOR SHALL MATCH WALL/CEILING COLOR. COORDINATE WITH ARCHITECT BEFORE INSTALLATION.

2. GRILLE/DIFFUSER MOUNTED DIRECTLY ON EXPOSED DUCT SHALL MATCH COLOR OF DUCT (IF PAINTED) OR SHALL HAVE CLEAR ANODIÆD FINISH (IF DUCT IS UNPAINTED).

### GENERAL NOTES:

- A. MAXIMUM TOTAL PRESSURE DROP SHALL NOT EXCEED 0.15" WG WITH DUCT TRANSITION.
- B. ALL VISIBLE SURFACES AND DUCTWORK BEHIND FACE SHALL BE PAINTED FLAT BLACK. C. COORDINATE WITH ARCHITECTURAL REFLECTED CEILING PLANS FOR BORDER TYPES.
- D. PROVIDE RECTANGULAR/SQUARE TO ROUND TRANSITION AS REQUIRED AND SIZED FOR MAXIMUM 0.01" WG TOTAL PRESSURE DROP.
- E. REGISTER/GRILLE MATERIAL SHALL BE STEEL AND NO OPPOSED BLADE DAMPER SHALL BE USED FOR THIS PROJECT.

	EXHAUST FAN SCHEDULE																
TAG	MANUFACTURER	MODEL NUMBER	LOCATION	DISCH	TYPE DRIVE	AIR FLOW (CFM)	SP (IN.WG.)	FAN RPM	MAX MTR RPM	BHP	HP			EMERG POWER (Y/N)	UNIT SIZE (L"xW"xH")	OPER. WT. (LBS)	REMARKS
EF-1	GREENHECK	G-070-VG	ROOF	DOWNBLAST	CENTRIFUGAL DIRECT	200	0.2	1,464		0.02	1/15	120 / 1	N	N	18 X 18 X 24	120	4/M-501

KEY NOTES:

## GENERAL NOTES:

- A. COORDINATE WITH ELECTRICAL FOR POWER AND DISCONNECT AS REQUIRED.
- B. PROVIDE ECM MOTOR.
- C. PROVIDE VIBRATION ISOLATION AND SEISMIC RESTRAINT PER SPECIFICATIONS. D. PROVIDE BACKDRAFT DAMPER.
- E. PROVIDE COATED FAN AND FAN HOUSING

					VENTILATION TAE		1							I
							l cu	IC CHAPTER	R 4		TITLE			OA
										BY A	REA	BY PI	OPLE	DESIGNED
							PEOPLE	AREA						
				MAX COOLING AIR			OUTDOOR	OUTDOOR	MIN	VENTILATION	MIN	CFM PER	MIN	
		AREA		SUPPLY		AIR SUPPLY	AIR RATE	AIR RATE	OUTDOOR	RATE	OUTDOO	OCCUPAN	OUTDOOR	
ROOM NAME	UNIT TAG	(SF)	OCCUPANCY	(CFM)	SPACE CATEGORY	TYPE	(Rp)	(Ra)	AIR CFM	(CFM/SF)	R AIR CFM	CY	AIR CFM	
1PR - 1	RTU-C3,4,5,6	5590	84	6400	MULTI-ASSEMBLY	Mechanical	7.5	0.06	970	0.15	840	15	1260	13
REAKOUT SPACE - 23	RTU-C2	210	5		BREAK ROOM	Mechanical	5	0.06	40	0.5	105	15	75	1
FFICE - 21	RTU-C1	220	6		OFFICE	Mechanical	5	0.06	45	0.15	35	15	90	]
OCATIONAL - 20	RTU-C2	1050	40		SCIENCE CLASSROOM	Mechanical	10	0.18	590	0.38	3 400	15	600	6
OCATIONAL - 2	RTU-C8	1350	38		SCIENCE CLASSROOM	Mechanical	10	0.18	625	0.38	515	15	570	6:
-D PRITING	FCU-3	240	9	400	SCIENCE CLASSROOM	Mechanical	10	0.18	135	0.15	5 40	15	135	1:

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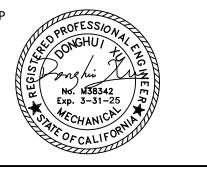
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PROJECT OWNER: CORONA NORCO UNIFIED SCHOOL DISTRICT



2820 Clark Ave, Norco, CA 92860 (951) 736-5000

PROJECT NAME:

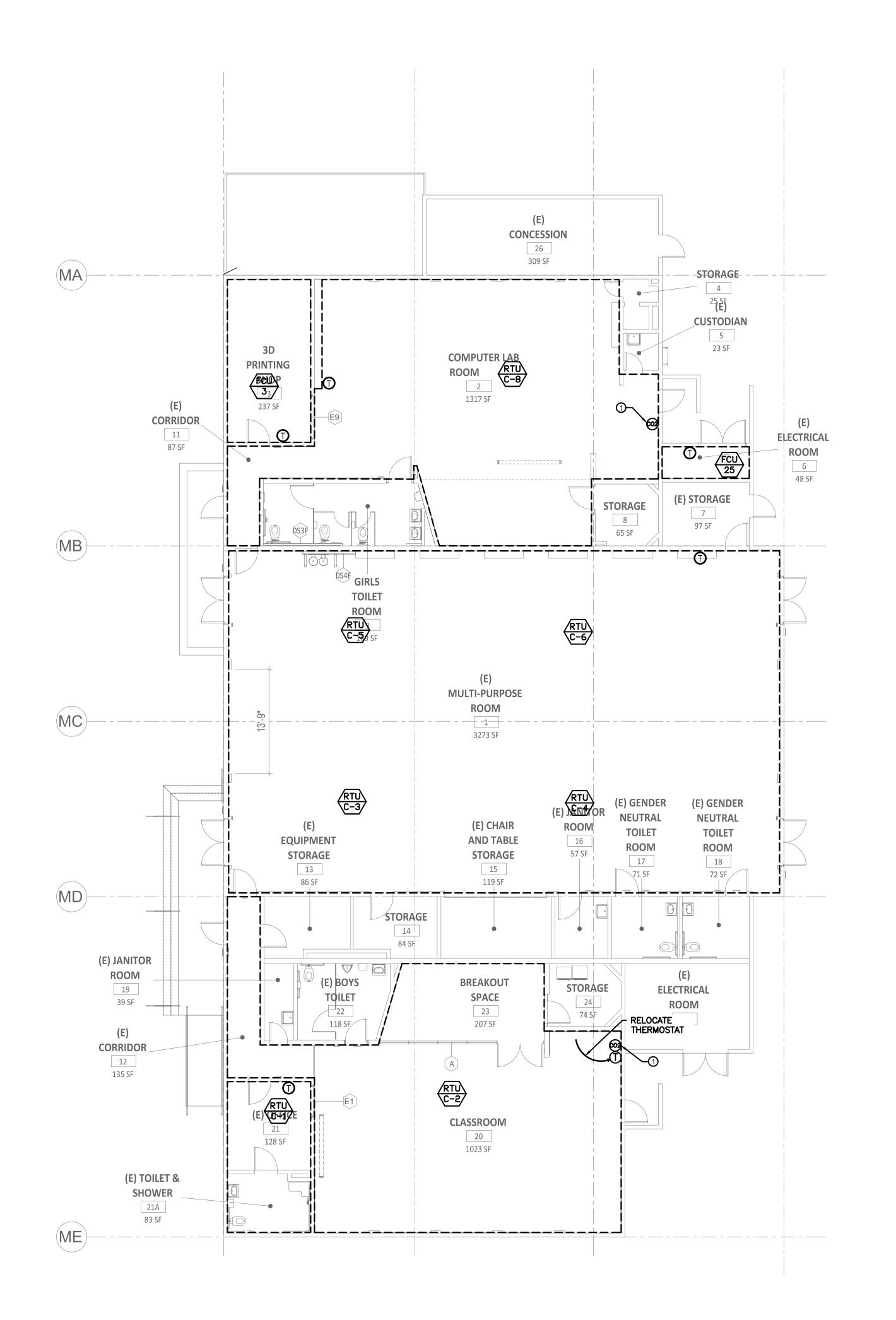
CORONA FUNDAMENTAL INTERMEDIATE SCHOOL - MPR RENOVATION

1230 S Main St, Corona, CA 92882

MARK	DATE	DESCRIPTION
	12/19/2022	DSA SUBMITTAL
	03/24/2023	DSA BACK-CHECK
PRO	JECT NO.:	22063.01

SHEET TITLE:

MECHANICAL **SCHEDULES** 



**KEY NOTES:** 

 PROVIDE NEW CO2 SENSOR, ECONOMIZER AND POWER EXHAUST TO EXISTING RTU. AUTHORITY APPROVAL IDENTIFICATION STAMP DIV. OF THE STATE ARCHITECT APP: 04-121721 INC:

REVIEWED FOR SS FLS ACS DATE: 05/10/2023

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ARCHITECT STAMP

ENGINEERING

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CONSULTANT STAMP

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PROJECT OWNER:

CORONA NORCO UNIFIED SCHOOL DISTRICT



2820 Clark Ave, Norco, CA 92860 (951) 736-5000

PROJECT NAME:

CORONA FUNDAMENTAL
INTERMEDIATE SCHOOL - MPR
RENOVATION

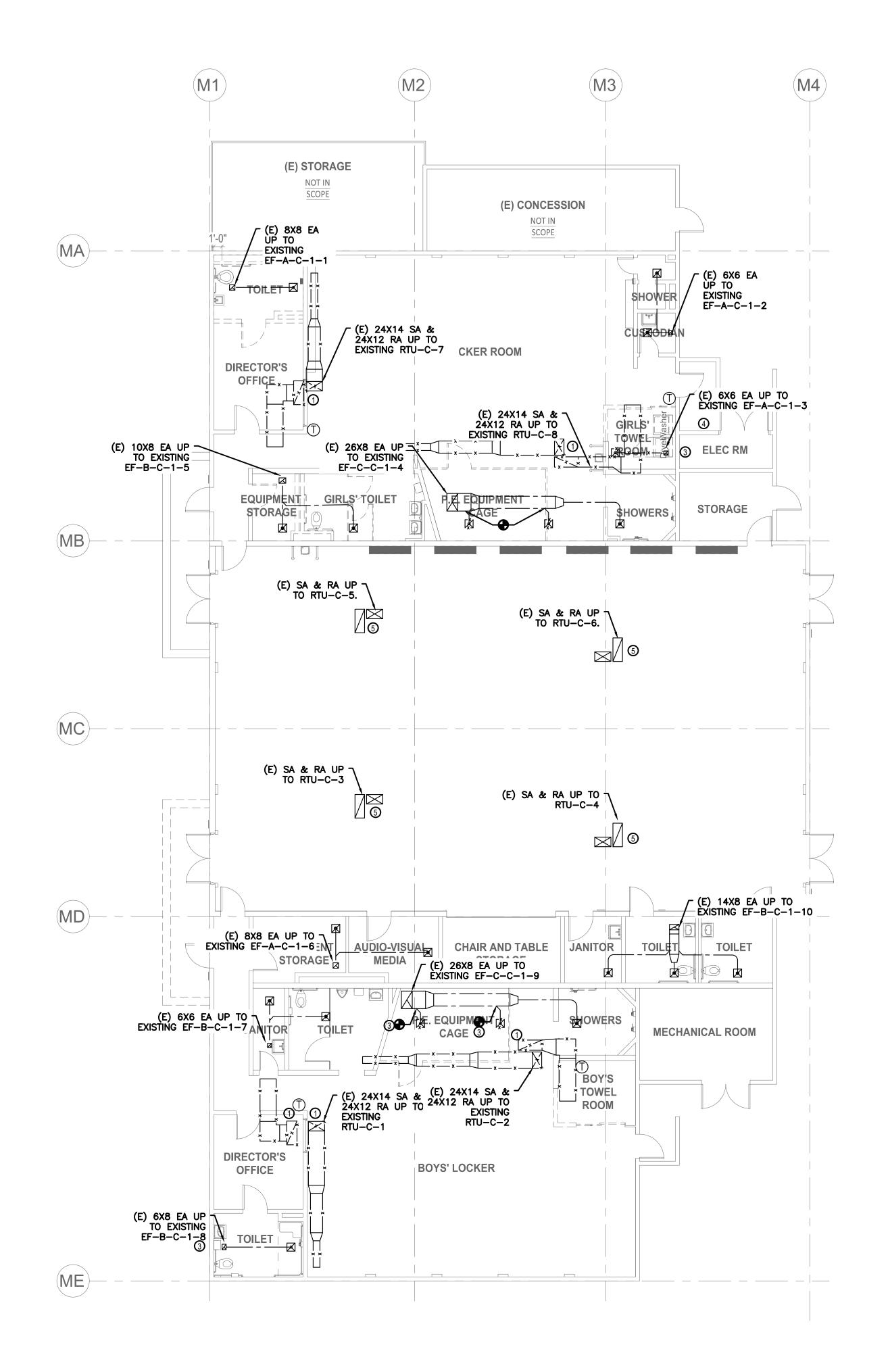
1230 S Main St, Corona, CA 92882

MARK	DATE	DESCRIPTION
	12/19/2022	DSA SUBMITTAL
	03/24/2023	DSA BACK-CHECK
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		+
PRO	JECT NO.:	22063.01

MECHANICAL ZONING PLAN

M-101

MECHANICAL FLOOR PLAN



**KEY NOTES:** 

A. DEMOLISH DUCTWORK UP TO POINT OF DISCONNECT. CONFIRM WITH DISTRICT, SCHOOL, DESIGN TEAM PRIOR TO ANY DEMOLITION NOT SHOWN ON THE FLOOR PLAN.

1. DEMOLISH EXISTING MECHANICAL UNIT, DUCTWORK, AND ITS ASSOCIATED ACCESSORIES SUCH AS THERMOSTAT.

2. NOT USED
3. DEMOLISH DUCTWORK UP TO POINT OF DISCONNECT. CAP AND SEAL OPENING
4. DEMOLISH DUCTWORK UP TO UNDERSIDE OF ROOF AND CAP FOR FUTURE
5. EXISTING DIFFUSER, GRILLE, DUCTWORK AND ITS ACCESSORIES TO REMAIN.
CONTRACTOR TO CLEAN AND VERIFY CONDITION PRIOR TO RE—USE PROVIDE CONNECTION TO NEW RTU.

AUTHORITY APPROVAL IDENTIFICATION STAMP DIV. OF THE STATE ARCHITECT

APP: 04-121721 INC:

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DATE: 05/10/2023

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2820 Clark Ave, Norco, CA 92860 (951) 736-5000

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1230 S Main St, Corona, CA 92882

PROJECT NO..

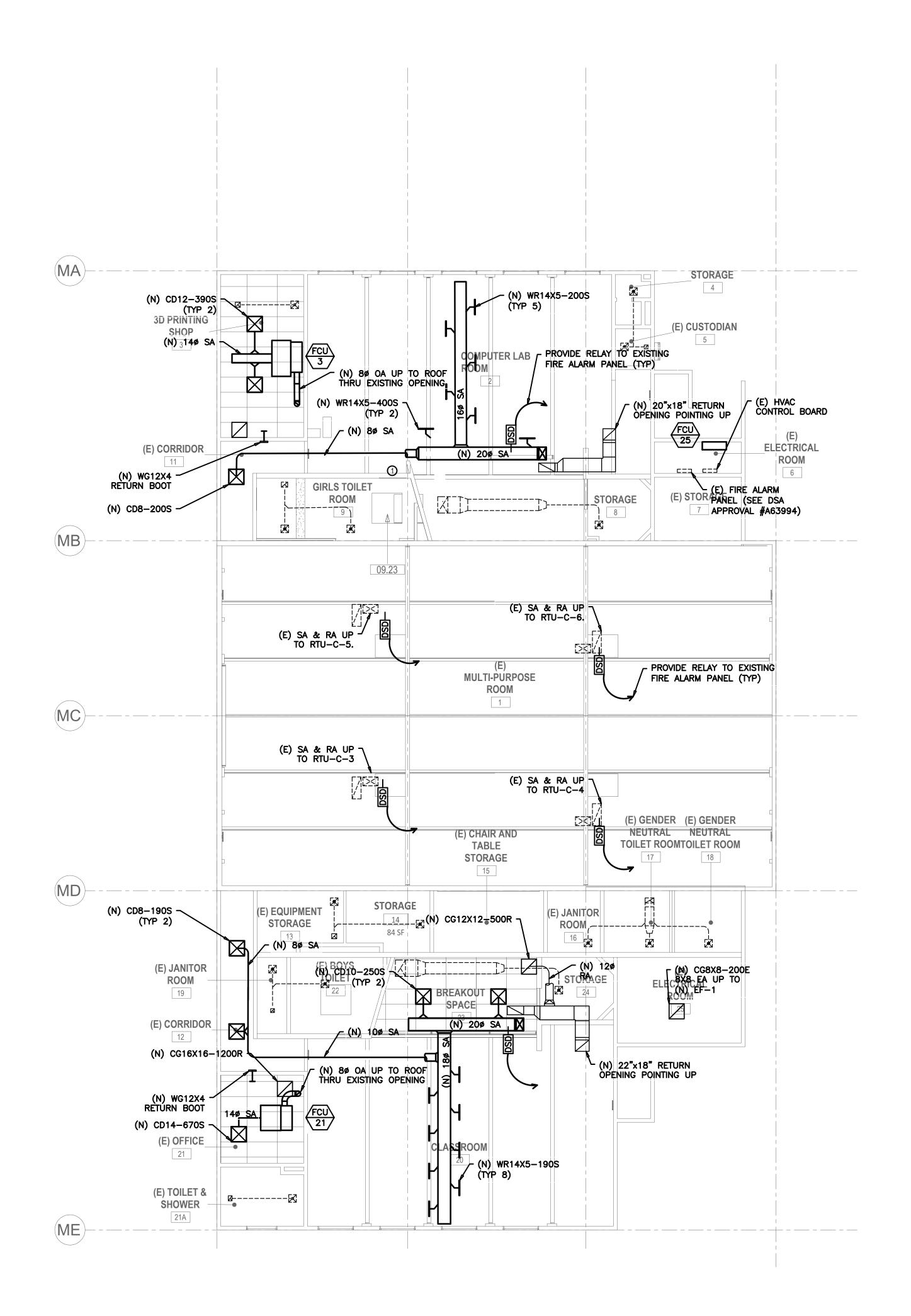
SHEET TITLE:

MECHANICAL DEMO PLAN 22063.01

M-111D

MECHANICAL DEMOLITION PLAN

SCALE: 1/8" = 1'-0"



**KEY NOTES:** 

- A. PROVIDE DUCT LINER ON EXPOSED DUCTWORK. SEE SPEC FOR DUCT LINER SPECIFICATION.
- B. PROVIDE REFRIGERANT PIPE SIZING PER MANUFACTURER'S RECOMMENDATIONS.
  C. PROVIDE INSULATED DUCT ACCESS DOORS FOR ALL ACCESSORIES INSTALLED INSIDE DUCTWORK.

PROVIDE DOOR LOUVER
 CONTINUE DUCTWORK AND PROVIDE TRANSITION TO NEW EXHAUST GRILLE
 LOCATED NEW i-VU NETWORK ROUTER.

- D. SEE DETAIL 1/M501 FOR DUCTED FCU DETAIL

  E. SEE DETAIL 5/M501 FOR DUCTWORK AND PIPING DETAIL

  F. SEE DETAIL 2/M501 FOR DUCT MOUNTED SUPPLY DIFFUSER DETAIL

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2820 Clark Ave, Norco, CA 92860 (951) 736-5000

CORONA FUNDAMENTAL INTERMEDIATE SCHOOL - MPR RENOVATION

1230 S Main St, Corona, CA 92882

ATE DESCRIPTION
2/19/2022 DSA SUBMITTAL 03/24/2023 DSA BACK-CHECK

SHEET TITLE:

MECHANICAL FLOOR

22063.01

M-111

MECHANICAL FLOOR PLAN-test

1. DEMOLISH EXISTING MECHANICAL UNIT AND CURBS. SEE M-111 FOR DUCTWORK DEMOLITION.



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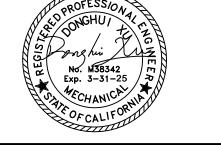
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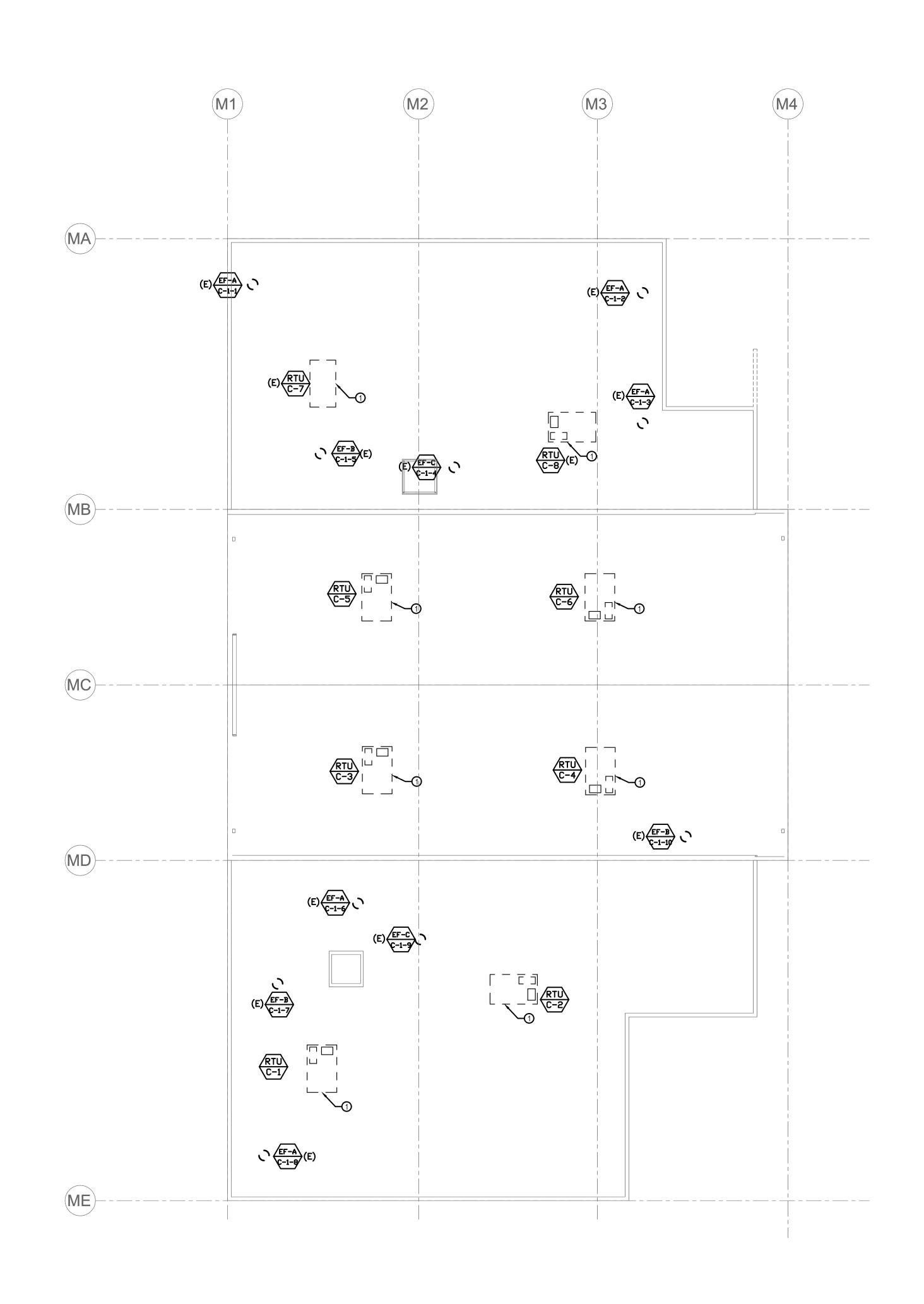
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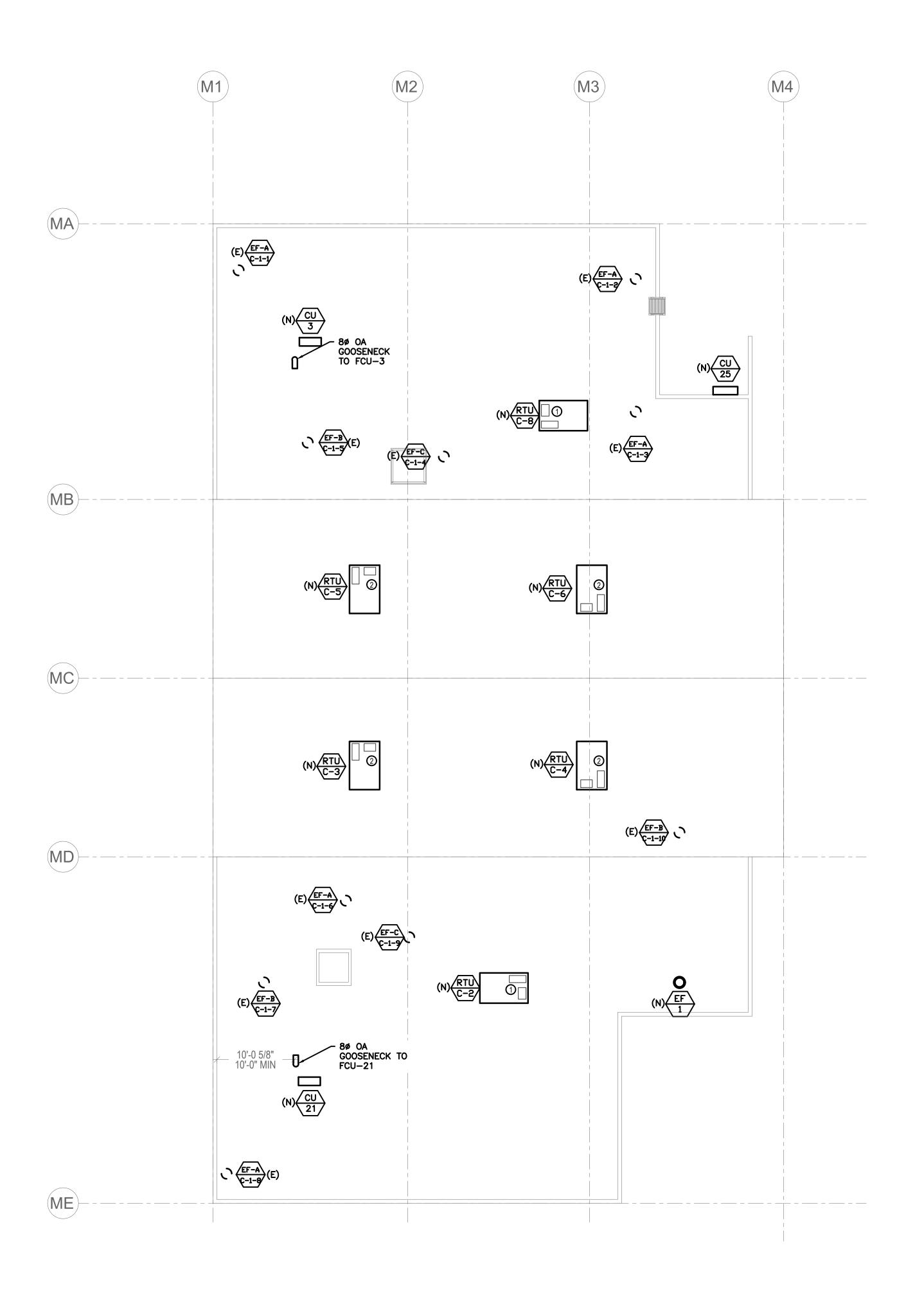
MECHANICAL ROOF DEMO PLAN 22063.01

M-112D



MECHANICAL ROOF DEMOLITION PLAN

SCALE: 1/8" = 1'-0"



**KEY NOTES:** 

A. EXHAUST FAN OUTLET TO BE 10FT FROM ANY OA INLET
B. ROOFTOP UNIT FRESH AIR INTAKE TO BE 10FT FROM ANY EXHAUST FAN OUTLETS. PROVIDE EXTENDED DUCTWORK ON FRESH AIR INTAKE TO BE 10FT AWAY FROM EXHAUST OUTLET AS NEEDED.
C. SEE DETAIL 6/M501 FOR RTU MOUNTING DETAIL
D. SEE DETAIL 7&8/M501 FOR CU MOUNTING DETAIL

EXISTING DUCT OPENING TO REMAIN. ALIGN NEW UNIT OPENING TO EXISTING OPENING. PROVIDE NEW DUCTWORK THRU EXISTING OPENING.
 EXISTING DUCT TO REMAIN. PROVIDE CONNECTION TO NEW RTU

- E. SEE DETAIL 4/M501 FOR EF MOUNTING DETAIL F. SEE DETAIL 3/M501 FOR GOOSENECK DETAIL

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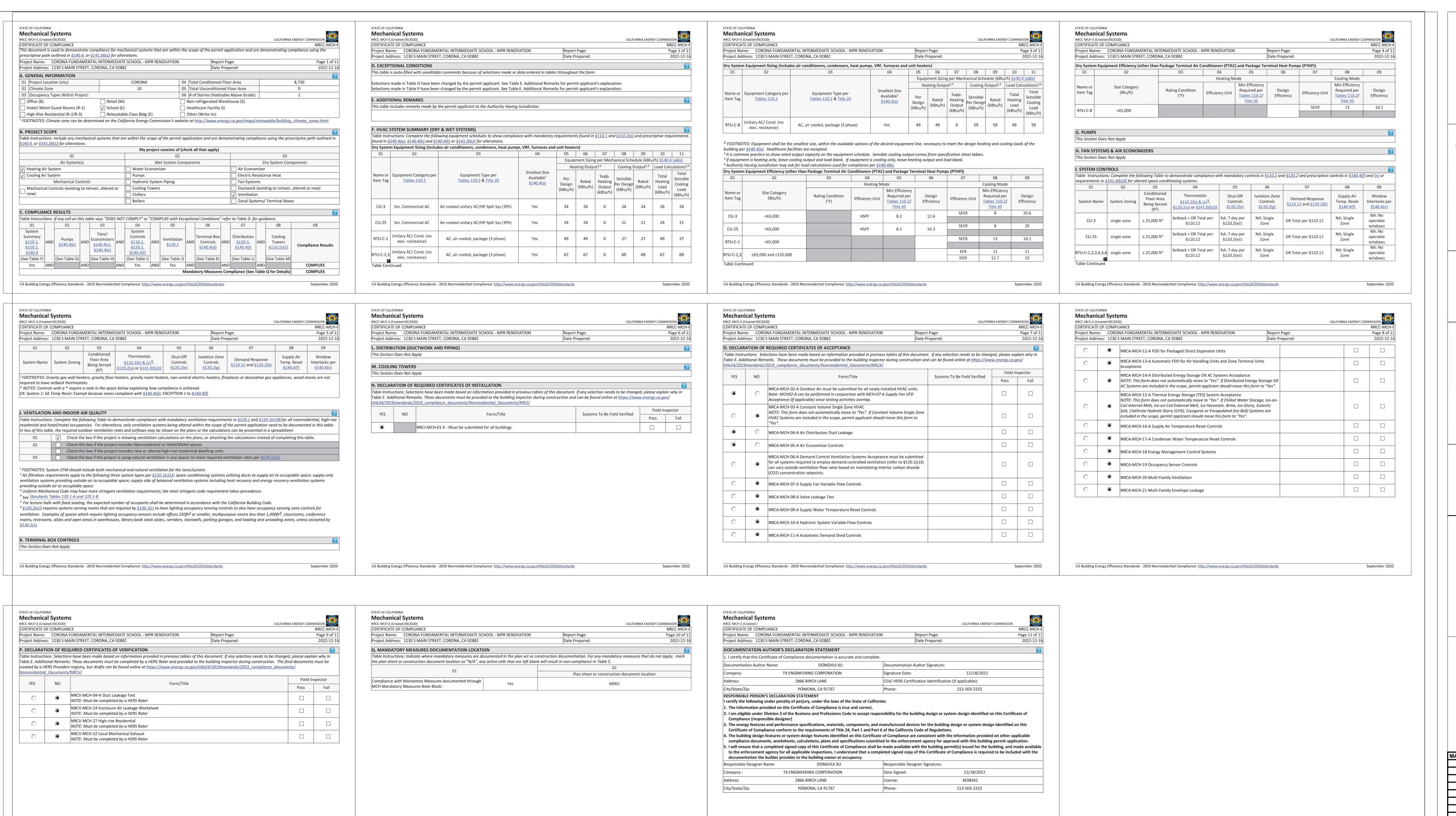
MECHANICAL **ROOF PLAN** 

22063.01

M-112

MECHANICAL ROOF PLAN

SCALE: 1/8" = 1'-0"



September 2020

CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance: <a href="http://www.energy.ca.gov/title24/2019standards">http://www.energy.ca.gov/title24/2019standards</a>

CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance: http://www.energy.ca.gov/title24/2019standards

September 2020

CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance: http://www.energy.ca.gov/title24/2019standards

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APP: 04-121721 INC:

REVIEWED FOR
SS FLS ACS D

DATE: 05/10/2023

SDA DESIGN GROUP

LISTEN COLLABORATE CREATE

889 N. DOUGLAS STREET, SUITE 100 EL SEGUNDO, CA 90245 [T]: 310.821.9200 www.csdadesigngroup.com

ARCHITECT STAMP

CONSULTANT:

2866 BIRCH LN. POMONA, CA 91767 (213) 503-2332

CONSULTANT STAMP



PROJECT OWNER:

CORONA NORCO UNIFIED SCHOOL DISTRICT



2820 Clark Ave, Norco, CA 92860 (951) 736-5000

PROJECT NAME:

CORONA FUNDAMENTAL
INTERMEDIATE SCHOOL - MPR
RENOVATION

1230 S Main St, Corona, CA 92882

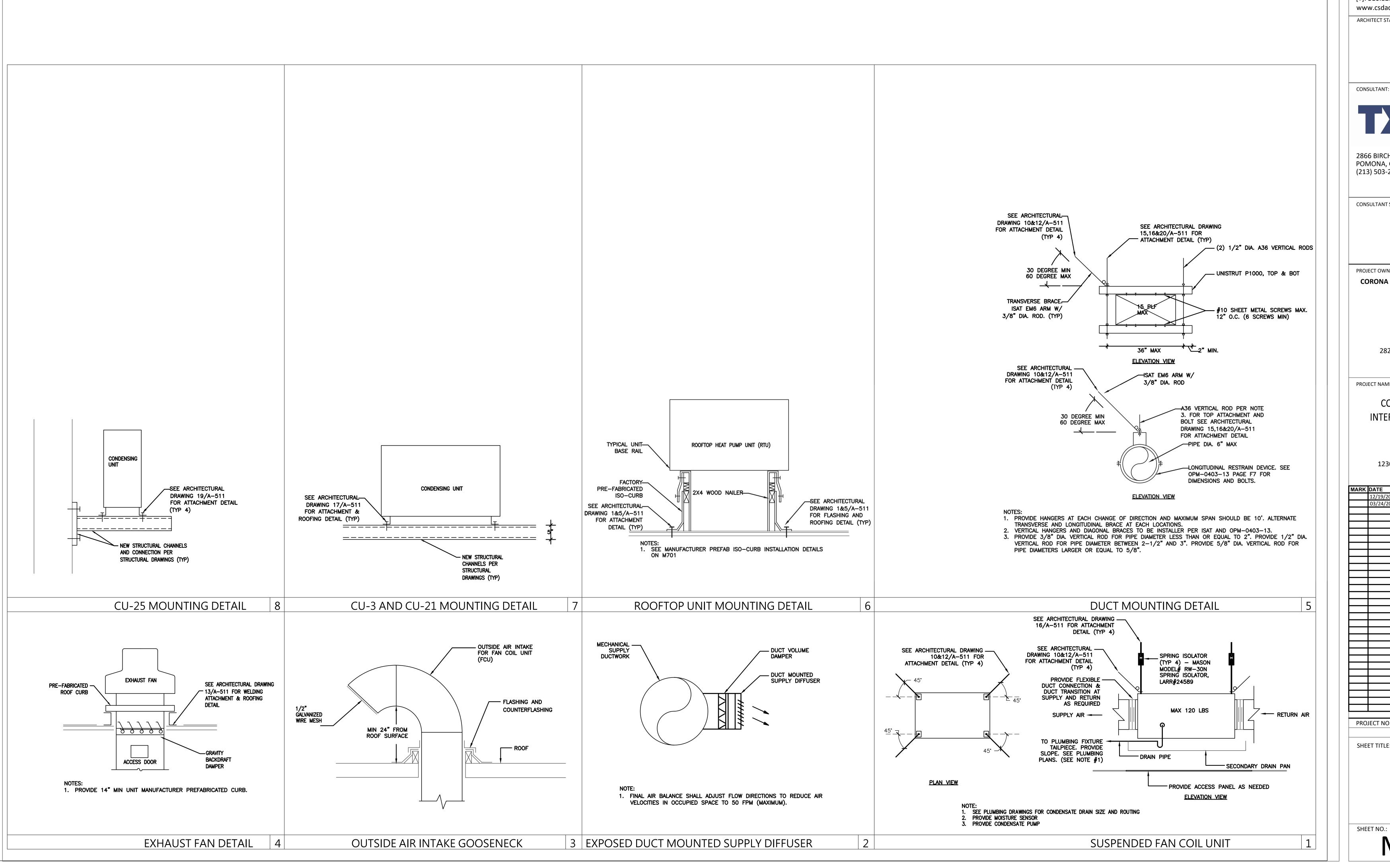
MARK	DATE	DESCRIPTION
	12/19/2022	DSA SUBMITTAL
	03/24/2023	DSA BACK-CHECK

SHEET TITLE:

PROJECT NO.:

MECHANICAL TITLE-24 22063.01

SHEET NO.:



AUTHORITY APPROVAL IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT APP: 04-121721 INC: REVIEWED FOR SS 🗹 FLS 🗹 ACS 🗹

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ARCHITECT STAMP

2866 BIRCH LN. POMONA, CA 91767 (213) 503-2332

No. M38342 m Exp. 3-31-25

**CORONA NORCO UNIFIED SCHOOL DISTRICT** 



2820 Clark Ave, Norco, CA 92860

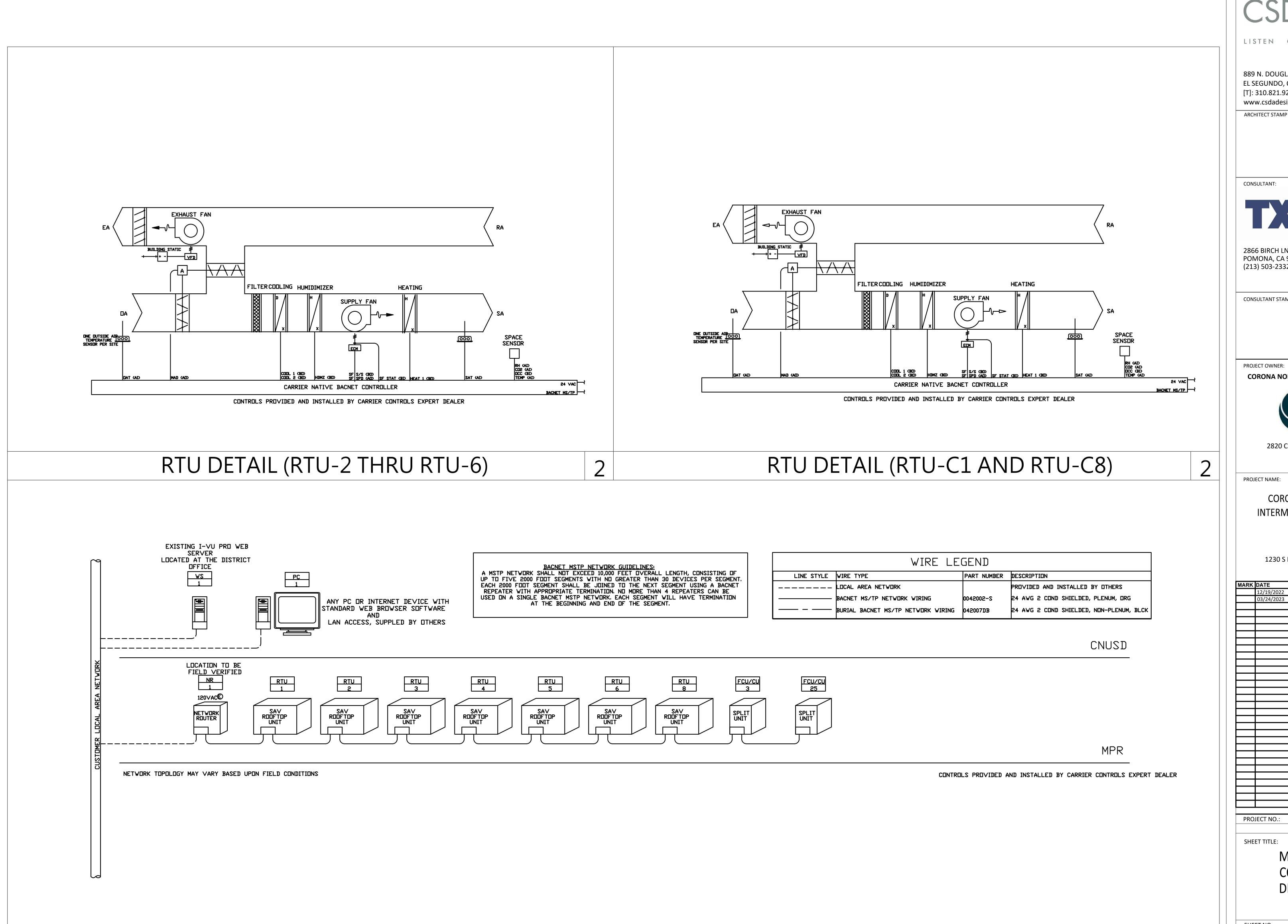
(951) 736-5000

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1230 S Main St, Corona, CA 92882

MARK	DATE	DESCRIPTION		
	12/19/2022	DSA SUBMITTAL		
	03/24/2023	DSA BACK-CHECK		
PROJECT NO.: <b>22063.01</b>				
SHEET TITLE:				

MECHANICAL **DETAILS** 



AUTHORITY APPROVAL IDENTIFICATION STAMP DIV. OF THE STATE ARCHITEC APP: 04-121721 INC: REVIEWED FOR SS 🗸 FLS 🗹 ACS 🗸

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2866 BIRCH LN. POMONA, CA 91767 (213) 503-2332

CORONA NORCO UNIFIED SCHOOL DISTRICT



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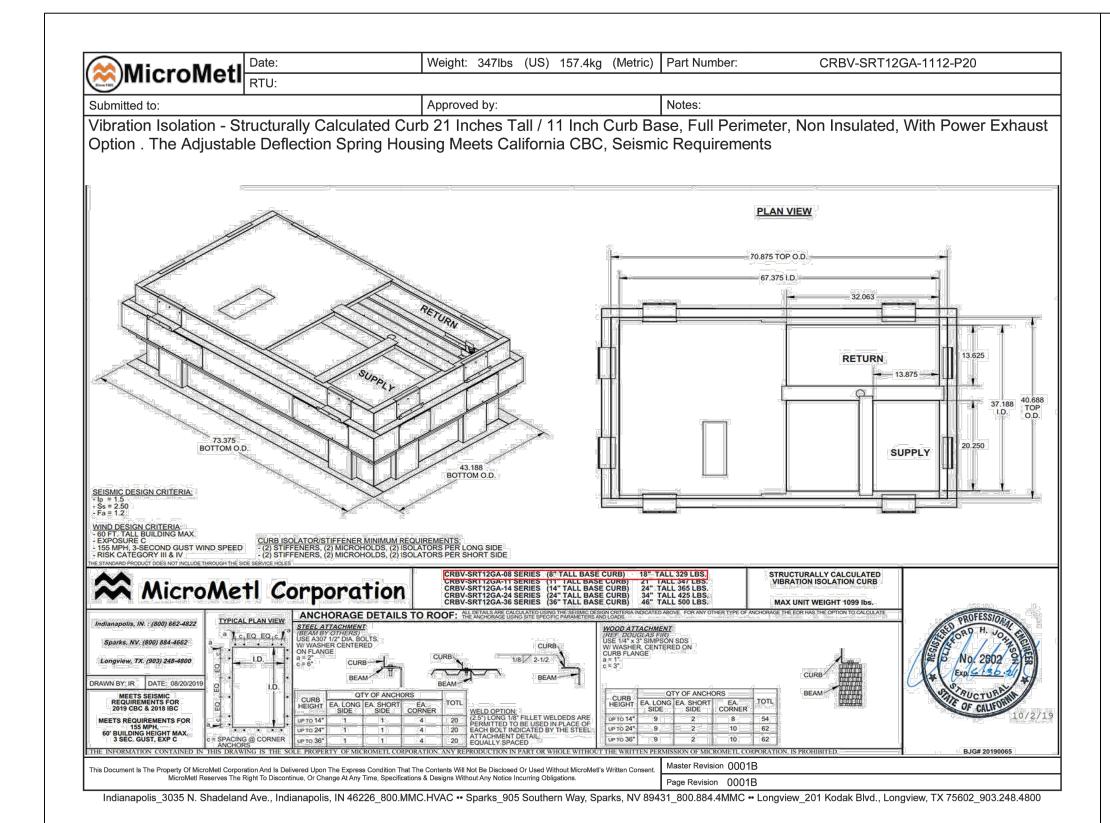
CORONA FUNDAMENTAL INTERMEDIATE SCHOOL - MPR RENOVATION

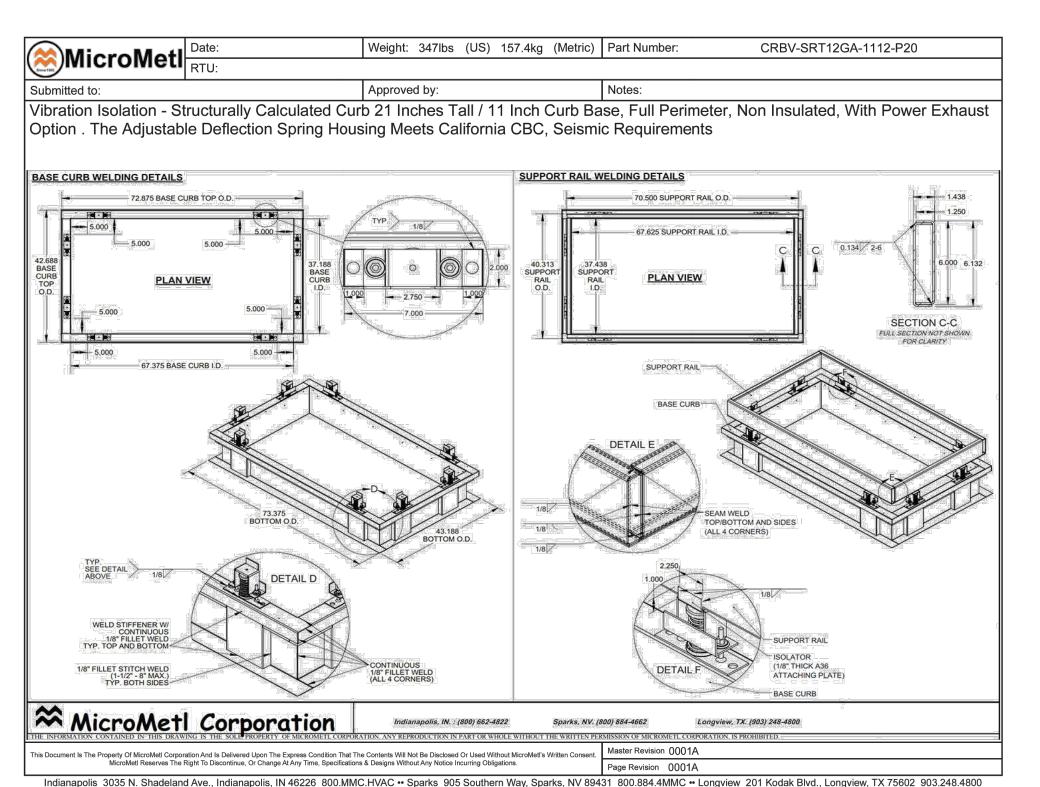
1230 S Main St, Corona, CA 92882

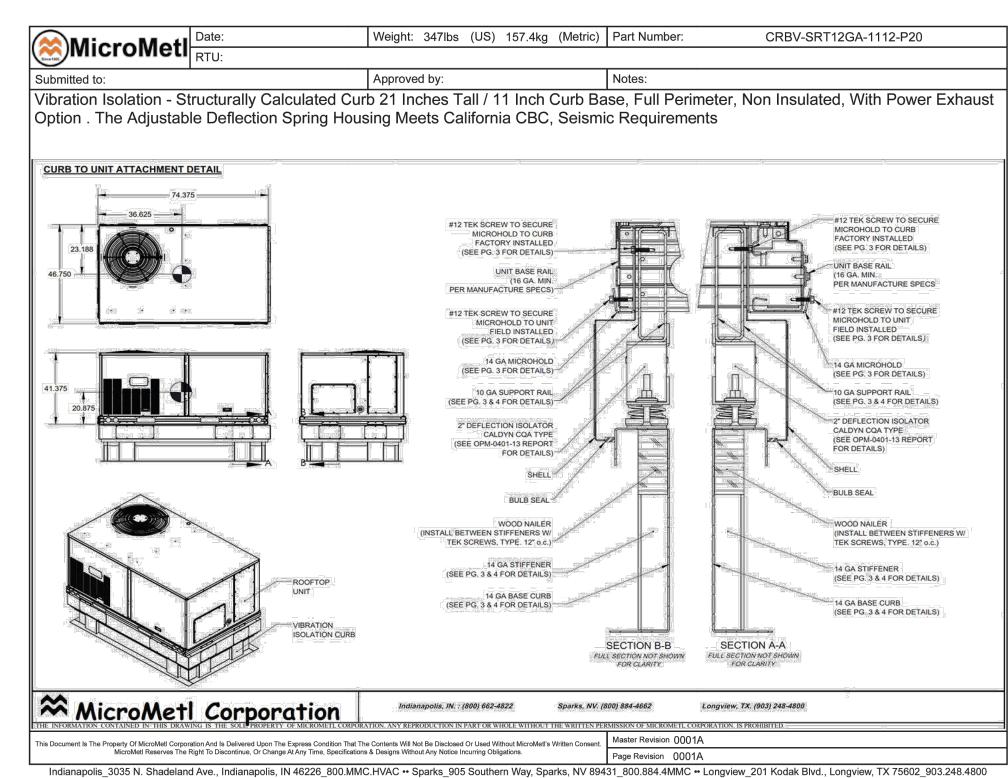
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PRO.	JECT NO.:	22063.01			

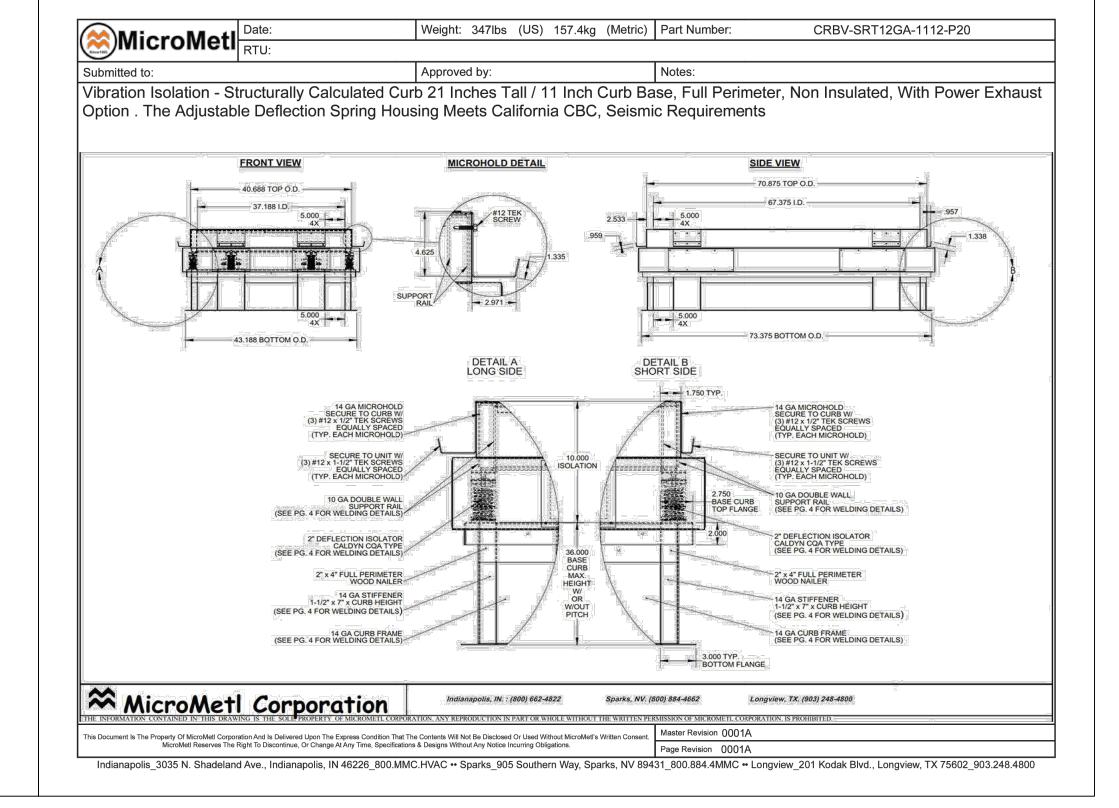
**MECHANICAL** CONTROL DIAGRAM

BACNET RISER DIAGRAM











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**ISOCURB** CUTSHEET