

HVAC NOTES AND SPECIFICATIONS

SECTION I: SCOPE OF WORK

- NEW RESTROOM VENTILATION & NEW KITCHEN HOOD SYSTEM 2. DUCT WORK, ELBOWS, FITTINGS, & DUCT INSULATION.
- 3. DIFFUSERS, REGISTERS, AND GRILLES

SECTION 2: FEES, PERMITS & INSPECTIONS

- 4. HVAC CONTROL SYSTEMS
- 5. TESTING AND BALANCING.

6. PERMIT AND INSPECTION.

- a) CONTRACTOR MUST PAY FEES AND OBTAIN PERMITS, LICENSES, INSPECTIONS, ETC. AS REQUIRED BY ANY LEGALLY CONSTITUTE AUTHORIT
- b) CONTRACTOR SHALL NOT MAKE HIS WORK COVERED OR CLOSED UNTIL THE WORK HAS BEEN INSPECTED AND APPROVED BY ALL AUTHORITIES HAVING JURISDICTION, ANY EXPENSES FOR ADDITIONAL WORK DUE TO THE VIOLATION OF THIS REQUIREMENT WILL BE PAID BY THE CONTRACTOR.
- THIS DOCUMENT IS NOT FOR BID OR CONSTRUCTION UNTIL THE PLAN HAS BEEN REVIEWED AND APPROVED BY ALL AUTHORITIES HAVING JURISDICTION AND THE PERMIT IS OBTAINED. NO COMPENSATION WILL BE MADE FOR ADDITIONAL MORK DUE TO THE VIOLATION OF THIS REGUIREMENT.

SECTION 3: GENERAL REQUIREMENTS

- a) ANY EXISTING CONDITIONS ARE BASED ON LIMITED FIELD VERIFICATION. CONTRACTOR SHALL ADJIST TO ACTUAL FIELD CONDITIONS AT NO ADDITIONAL EXPENSE TO THE TENANT.
- ALL CONTRACTORS SHALL REVIEW A COMPLETE SET OF CONSTRUCTION DOCUMENTS.
- c) CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH DEMOLITION PRIOR TO BIDDING AND START OF WORK, CONTRACTOR IS RESPONSIBLE FOR DEMO OF EXISTING ITEMS, AS REQUIRED, FOR INSTALLATION/CONSTRUCTION OF NEW WORK.
- d) CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFICATION OF ALL EXISTING CONDITIONS PRIOR TO SUBMITTING HIS BID. NO ADDITIONAL COMPENSATION WILL BE MADE FOR ANY EXTRA COSTS DUE TO CONTRACTOR'S FAILURE TO VISIT THE JOBSITE AND/OR PREDETERNINE ALL EXISTING CONDITIONS BEFORE SUBMITTING HIS BID, ANY DISCREPANCIES SHALL BE IMMEDIATELY REPORTED TO THE ARCHITECT FOR RESOLUTION. NO EXCEPTION.
- e) CONTRACTOR SHALL BE RESPONSIBLE FOR THE FIELD VERIFICATION OF ALL UTILITY RINS, INDERGROUND AND ABOVE GROUND PIPING AND/OR OTHER IMPROVEMENTS LOCATED ON THE PREMISES, CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR ALL COSTS RELATING TO THE RELOCATION OF, DAMAGE TO REPAIR OF ANY EXISTING UTILITY RINS AND/OR IMPROVEMENTS WHICH ARE DAMAGED AS A RESULT OF WORK IN OR AROUND THE PREMISES.
- F) THE MECHANICAL CONTRACTOR SHALL INSPECT AND TEST RUN ALL EXISTING UNITS AT THE START OF CONSTRUCTION AND INFORM THE ARCHITECT OF ANY NECESSARY EPERING FOR APPROVAL IN A TIMELY MANNER TO NOT DELAY THE OPENING DATE
- g) ALL APPLIANCES DESIGNED TO BE FIXED IN POSITION SHALL BE SECURELY FASTENED IN PLACE PER BUILDING CODE REQUIREMENTS OR APPLICABLE MANUFACTURER INSTALLATION REQUIREMENTS.
- h) THE CONTRACTOR SHALL INSTALL ALL EQUIPMENTS AS REQUIRED TO CONFORM TO THE STRUCTURE. AVOID OBSTRUCTIONS AND MAKE ALL EQUIPMENT REQUIRING MAINTENANCE OR REPAIR ACCESSIBLE.
- ALL EQUIPMENT FURNISHED SHALL FIT THE SPACE AVAILABLE WITH ALL EQUIPMENT FURNISHED SHALL FIT THE SPACE AVAILABLE WITH CONNECTIONS IN THE REQUIRED LOCATIONS AND WITH ADEQUATE SPACE FOR OPERATING AND SERVICING, THE DRAWINGS ARE SENERALLY DIAGRAMMATIC AND INDICATE THE MANNER AND METHOD OF THE INSTALLATION WHILE THE SPECIFICATIONS AND EQUIPMENT LIST DENOTE THE TYPE AND JUALITY OF MATERIAL AND WORKMANSHIP TO BE USED. THE DRAWINGS SHALL NOT BE SCALLED FOR EXACT MEASUREMENTS, WHERE A CONFLICT EXISTS DETMEEN THE DRAWINGS AND THE SPECIFICATIONS. THE CONTRACTOR SHALL PROMPTLY NOTIFY THE ARCHITECT INFOSE DECISION SHALL BE FINAL. NO ALLOWANCE WILL BE MADE SUBSEQUENTLY IN THIS CONNECTION ON BEHALF OF THE CONTRACTOR AFTER AWARD OF THE CONTRACT.
- ALL WORK SHALL BE COMPLETED IN ACCORDANCE WITH ALL APPLICABLE ALL YORK SHALL, STATE AND LOCAL CODES (NPPA, UBC, UMC AND LOCAL BODIES HAVING JIRISDICTION). APPLICABLE CODE: CMC 2022, CPC 2022, CALIFORNIA ENERGY EFFICIENCY CODE 2022, CALIFORNIA ELECTRICAL CODE
- k) THE CONTRACTOR SHALL COOPERATE WITH THE OTHER TRADES SO THAT THE INSTALLATION OF ALL EQUIPMENT MAY BE PROPERLY COORDINATED k.I) DISCONNECT SWITCHES & LINE VOLTAGE CONNECTIONS (BY ELECTRICAL) k.2) ALL LINE VOLTAGE WIRING AND CONDUIT (BY ELECTRICAL)
 k.3) CONDENSATE PIPING (PLUMBING)
- ALL ROOFING WORK SHALL BE PERFORMED BY A DULY LICENSED ROOFING CONTRACTOR, WORKING UNDER THE GENERAL CONTRACTOR.
- m) DISPOSE OF ALL EQUIPMENT NOT REUSED AS A PART OF THE NEW WORK AS
- n) ALL ROOF MOUNTED EQUIPMENT SHALL BE LABELED AS TO THE SPACE IT SERVES WITH 3" HIGH WEATHERPROOF VINYL LETTERS.
- a) ALL APPLIANCE AND PLUMBING VENTS AND THE DISCHARGE OUTLET OF EXHAUST FANS SHALL BE LEAST TEN (IO) FEET IN A HORIZONTAL DIRECTION, OR THREE(3) FEET ABOVE THE OUTSIDE-AIR INTAKES FOR HVAC UNITS.

BASIS OF BEARINGS:

- MATERIALS EXPOSED WITHIN DUCTS OR PLENUMS SHALL BE NONCOMBUSTIBLE OR SHALL HAVE A FLAMESPREAD RATING NOT GREATER THAN TWENTY-FIVE(25) AND A SMOKE DEVELOPED RATING NOT GREATER THAN HUNDRED PIETY(50) WHEN TESTED AS A COMPOSITE PER APPLICABLE TESTING STANDARD.
- Q) AFTER INSTALLING WALL, CEILING, OR FLOOR INSULATION THE INSTALLER SHALL MAKE AVAILABLE TO THE ENFORCEMENT AGENCY OR POST IN A CONSPICUOUS LOCATION IN THE BUILDING, A CERTIFICATE SIGNED BY THE INSTALLER STATING THAT THE INSTALLER STATING DESCRIBED IN SEC IO.109(A)2A. THE CERTIFICATE SHALL ALSO STATE THE MANUFACTURER'S NAME, MATERIAL IDENTIFICATION, AND THE INSTALLED R-VALUE.
- INSTALL DUCT INSULATION ONLY AFTER DUCTWORK HAS BEEN INSPECTED AND
- REGISTERS, GRILLES, AND DIFFUSERS SHALL BE INSTALLED ONLY AFTER ALL CEILINGS AND WALLS ARE FINISHED INCLUDING FINAL PAINTING. CEILING MOUNTED UNITS SHALL BE INSTALLED WITH KIMS TIGHT AGAINST CEILING, WALL MOUNTED UNITS SHALL BE INSTALLED AT LEAST 6 INCHES BELOW THE CEILING UNLESS OTHERWISE NOTED. DAMPERS PROVIDED WITH DIFFUSERS AND REGISTERS SHALL NOT BE USED FOR SYSTEM BALANCING INSIDE OF DICT BEHIND SEE-THROUGH REGISTERS AND GRILLES SHALL BE PAINTED BLACK.
- ROUND SHEET METAL DUCTS SUSPENDED IN THE AIR SHOULD BE SUPPORTED BY HANGERS AT LEAST EVERY IO FEET. FLEXIBLE DUCTS SUSPENDED IN THE AIR SHOULD BE SUPPORTED AT LEAST EVERY 4 FEET BY STRAPS THAT ARE AT LEAST HIVE TO 1-34'N HOHES NIDE, AND THEY SHOULD NOT 504 MORE THAN 1/2" FOR EACH FOOT OF DISTANCE BETWEEN THE SUPPORTS, STRAPS USED ON FLEXIBLE DUCTS SHOULD NOT CONSTRICT THE INNER DIAMETER OF THE DUCT OR CUT THE OUTER JACKET.
- CUT THE OUTER JACKET.

 DUCT SLEEVES AND PREPARED OPENINGS SHALL BE PROVIDED WHERE DUCTS PENETRATE FLOORS, WALLS, CEILINGS OR ROOFS, AND SHALL BE INSTALLED DURING CONSTRUCTION OF THE FLOOR, WALL, CEILING OR ROOF. MECHANICAL CONTRACTOR SHALL CORDINATE LOCATION OF ALL DUCT PENETRATIONS OF STRUCTURE WITH GENERAL CONTRACTOR.
- DUCT SLEEVES SHALL BE FABRICATED FROM MINIMUM 20 GAUGE GALVANIZED SHET STELL SLEEVE SHALL HAVE ONE() INCH CLEARANCE BETWEEN THE DUCT AND THE SLEEVE, OR ONE() INCH CLEARANCE BETWEEN THE INSULATION AND THE SLEEVE FOR INSULATED DUCTS, DUCT SLEEVES EMBEDDED IN CONCRETE SHALL BE CONSTRUCTED OF 1/4 INCH THICK CARBON STELL PLATE, AND SHALL BE WELDED IN ACCORDANCE WITH AMS DI.I.
- w) DEMAND CONTROL VENTILATION DEVICES (CO2 SENSORS) SHALL BE INSTALLED IN ACCORDANCE WITH CMC 121(C)4

SECTION 4: PRODUCTS

- THERMOSTAT SHALL BE INSTALLED MITH T-DAY PROGRAMMABLE AUTO-CHANGE OVER FEATURE. MOUNTING HEIGHT IS 4 FEET ABOVE FINISHED FLOOR TO TOP OF
- J-BOX.

 ALL AIR DISTRIBUTION SYSTEM DUCTS AND PLENMS, INCLUDING, BUT NOT LIMITED TO, BUILDING CAVITIES, MECHANICAL CLOSETS, AIR-HANDLER BOXES AND SUPPORT PLATFORMS USED AS DUCTS OR PLENMS, SHALL BE INSTALLED, SEALED AND INSULATED TO MEET THE REQUIREMENTS OF CHAPTER 6 OF THE CALIFORNIA MECHANICAL CODE, SUPPLY-AIR AND RETURN-AIR DUCTS CONVEYING HEATED OR COOLED AIR SHALL BE INSULATED TO A MINIMUM INSTALLED LEVEL OF R-8, INLESS NOTED OTHERWISE. INSULATION IS NOT REQUIRED ON LINED DUCTS AND DUCTS EXPOSED TO CONDITIONED SPACE. PROVIDE RFI TO ENGINEER BEFORE CLASSIFYING THE SPACE AS CONDITIONED SPACE. NO COMPENSATION WILL BE MADE IF THE CONTRACTOR FAILS TO VERIFY.
- c) DUCT PLENUM SHALL BE GALVANIZED STEEL DUCT, ALL JOINTS, LONGITUDINAL AND TRANSVERSE SEAMS, AND CONNECTIONS IN DUCTWORK, SHALL BE SECURELY FASTENED AND SEALED WITH WELDS, GASKETS, MASTICS (ADHESIVES), MASTIC-PLUS-EMBEDDED-FABRIC SYSTEMS, OR TAPS. TAPS AND MASTICS USED TO SEAL DUCTWORK SHALL BE LISTED AND LABELED IN ACCORDANCE WITH ULIBIA OR ULIBIB. DUCT CONNECTIONS TO FLANGES OF AIR DISTRIBUTION SYSTEM EQUIPMENT SHALL BE SEALED AND MECHANICALLY FASTENED, DUCT TAPE IS NOT PERMITTED AS A SEALANT ON ANY METAL DUCTS. [IEGG 2021]
- d) FLEXIBLE DUCTMORK SHALL BE IN ACCORDANCE WITH ULIBI AND NFPA 40A AND NFPA 40B. ALL TAKEOFFS FROM MAIN AND BRANCH DUCT SHALL BE 45° TAPS WITH VOLUME DAMPERS AS SHOWN ON THE DRAWINGS, GLAS-FLEX TYPE DUCT MAY, BE USED AT ENTRANCE TO DIFFUSERS BUT MUST BE NO GREATER THAN
- e) DUCT SUPPORTS AND HANGERS: PROVIDE HANGERS AND SUPPORTS OF STEEL SHAPES AND RODS CONFORMING TO ASTM A36/A36M, SALVANIZED IN ACCORDANCE MITH ASTM A128 HANGERS AND SUPPORTS SHALL BE GALVANIZED IN ACCORDANCE MITH ASTM A183/A153M, HANGERS AND SUPPORTS SHALL BE FABRICATED IN ACCORDANCE MITH SMACNA HVAC DUCT CONSTRUCTION STRANDARDS METAL AND FLEXIBLE, AND SMACNA HVAC SYSTEMS DUCT DESIGN.
- f) BUILDING ATTACHMENT: CONCRETE INSERTS, POWER-ACTUATED FASTENERS, OR STRUCTURAL STEEL FASTENERS APPROPRIATE FOR BUILDING MATERIALS, DO NOT USE PONDER-ACTUATED CONCRETE FASTENERS FOR LIGHTNEIGHT AGGREGATE CONCRETE'S OR FOR SLABS LESS THAN 4 INCHES THICK.
- a) STRAPS AND ROD SIZES: CONFORM WITH TABLE 4-LIN SMACNA HVAC DUCT CONSTRUCTION STANDARDS - METAL AND FLEXIBLE, FOR SHEET STEEL WIDTH AND GALGE AND STEEL ROD DIAMETERS.

- DUCT ATTACHMENTS. SHEET METAL SCREWS, BLIND RIVETS, OR SELF-DRILLING SELF-TAPPING METAL SCREWS; COMPATIBLE WITH DUCT MATERIALS.
- KITCHEN HOOD EXHAUST DUCTWORK; FABRICATE IN ACCORDANCE WITH SMACNA HYAC DUCT CONSTRUCTION STANDARDS METAL AND FLEXIBLE AND NFPA 96. CONSTRUCT OF 16 GAUSE STAINLESS STELL, USING CONTINUOUS EXTERNAL WELDED JOINTS, TYPE II EXHAUST DUCTS TO BE STAINLESS STELL.
- VOLIME DAMPERS, PROVIDE VOLIME DAMPERS IN DICTS CONSTRUCTED OF 22 GAISE GALVANIZED FOR DICTS SMALLER THAN II INCHES, 20 GAISE FOR DICTS SMALLER THAN 21 INCHES, AND IS GAISE FOR DICTS LARGER THAN 21 INCHES, AND IS GAISE FOR DICTS LARGER THAN 21 INCHES, PROVIDE LOCKING OLDARANTS AS REQUIRED, MANUALLY AD JISTABLE BALANCING DAMPERS SHALL BE PROVIDED TO SUPPLY, RETURN AND EXHAUST DICTS AT POINTS MERE BRANCHES ARE TAKEN FROM LARGER DICTS AND IN BRANCH DUCT TO INDIVIDUAL DIFFLORES, GRILLES, AND REGISTERS, I. DAMPER ANLES SHALL BE CONTINUOUS SOURCE RODS NOT SMALLER THAN 3/6-INCH, MITH MACHINED ENDS AND BEARING AT BOTH ENDS. 2. SINSLE-BLADE DAMPER SHALL BE PROVIDED FOR DUCT SIZES UP TO 16 INCH, MILTIELADE DAMPERS OF OPPOSED BLADE PATTERN SHALL BE PROVIDED FOR DUCT SIZE LARGER THAN 16 INCH. VOLUME DAMPERS: PROVIDE VOLUME DAMPERS IN DUCTS CONSTRUCTED OF 22
- k) T-BAR CEILING SUPPLY DIFFUSER: KRUEGER MODEL 6500 OR APPROVED EQUAL. I) T-BAR CEILING RETURN DIFFUSER: KRUEGER MODEL 6690 OR APPROVED EQUAL.
- m) DUCT HEATER: WHERE ELECTRICAL HEATER ARE INSTALLED IN AIR DUCTS, THE DUCT SHALL BE INSULATED WITH NONCOMBUSTIBLE INSULATION EXTENDING IN EACH DIRECTION FROM THE HEATER. DISTANCE SHALL BE AS RECOMMENDED BY THE HEATER MANUFACTURER.
- LINED EXPOSED EXTERIOR DUCTWORK SHALL BE 2" THICK, ISPCF DENSITY LINING, DUCT SIZE SHOWN ON PLAN SHALL REFER TO OUTER DIMENSIONS UNLESS SPECIFIED OTHERWISE.

 VOLUME DAMPER MUST BE INSTALLED AT BRANCH TAKE-OFF FROM MAIN SUPPLY DUCT, FROVIDE YOUNG REGULATOR CABLES FOR ADJISTMENT OF YOUNG ANTERS IN HARD LID CEILING WHERE ACCESS FANELS ARE NOT PROVIDED.

SECTION 5: EQUIPMENT SUBMITTALS

SUBMITTALS FOR MECHANICAL EQUIPMENTS SHALL BE SUBMITTED TO ARCHITECT AND ENGINEER FOR APPROVAL BEFORE ORDERING SUCH EQUIPMENTS, NO

- AFTER COMPLETION OF WORK, TESTS ON THE HVAC SYSTEMS, INCLUDING A DUCT LEAKAGE TEST, AND ON AIR BALANCE PERFORMANCE ARE REQUIRED. THE AIR CAUALITY RESULTS SHOULD CONFORM WITH THE VOLUME SHOWN ON THE PLAN, PROVIDE ALL NECESSARY TESTING EQUIPMENTS AND LABORS AT NO COST TO THE OWNER.
- THE TESTED AIR QUALITY SHOULD BE WITHIN 5% OF THE DESIGN VALUE INDICATED ON PLANS, NOTIFY ENGINEER IMMEDIATELY IF AIR QUALITY IS OUT OF THE RANGE, NO EXCEPTION.

SECTION 7: OPERATING INSTRUCTIONS

PROVIDE TO EACH AREA.

THE BUILDER SHALL PROVIDE THE BUILDING OWNER OR PERSON(S) RESPONSIBLE FOR BUILDING MAINTENANCE (IN CASE OF MULTI-TENANT OR CENTRALLY OPERATED BUILDINGS) AT OCCUPANCY THE FOLLOWING:

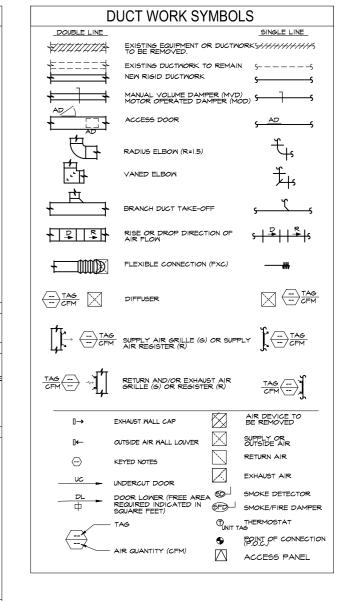
I/OPERATING INFORMATION: THE APPROPRIATE CERTIFICATE(S) OF COMPLIANCE AND A LIST OF THE FEATURES, MATERIALS, COMPONENTS, AND MECHANICAL DEVICES INSTALLED IN THE BUILDING AND INSTRUCTIONS ON HOM TO OPERATE 2) MAINTENANCE INFORMATION: REQUIRED ROUTINE MAINTENANCE ACTIONS

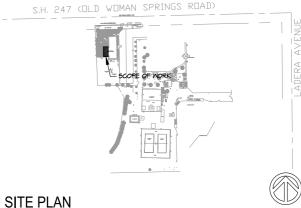
SHALL BE CLEARLY STATED AND INCORPORATED ON A READILY ACCESSIBLE LABEL. THE LABEL MAY BE LIMITED TO IDENTIFYING THE OPERATION AND 3) VENTILATION INFORMATION: A DESCRIPTION OF THE QUANTITIES OF OUTDOOR AND RECIRCULATED AIR THAT THE VENTILATION SYSTEMS ARE DESIGNED TO

CONTRACTOR SHOULD PREPARE AT LEAST THREE SETS MANUALS, COVERING I, OIL AND LUBRICATION INSTRUCTIONS 2. PARTS SCHEDULE AND REPLACEMENT INSTRUCTIONS 3. AIR FLOW AND AIR BALANCE REPORT.

SECTION 8: WARRANTY

THE CONTRACTOR SHALL PROVIDE OWNER WITH A WRITTEN MINIMUM TWO (2) YEAR MANUFACTURING WARRANTY ON ALL HVAC EQUIPMENT PROVIDED AND/OR INSTALLED, THE WARRANTY SHALL INCLUDE ALL LABOR, MATERIALS, AND THREE (3) ROUTING SERVICES WITH FILTER CHANGES DURING A ONE (1) YEAR PERIOD.







06-20-2024

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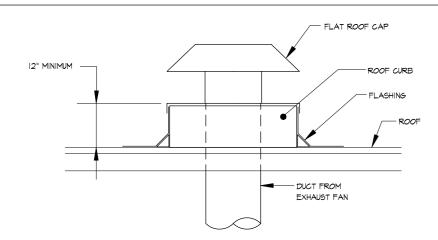
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PLANS APPROVED BY: SAN BERNARDINO COUNTY - PUBLIC WORKS SPECIAL DISTRICTS avid R. Doublet INITIAL DATE Alfonso Fausto Date: 2004.06.29 General Fausto OPS, DIVISION MANAGER Henry Mac PM, DIVISION MANAGER Noel Mondragon

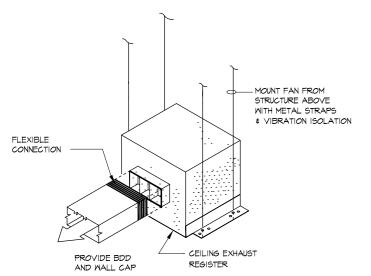
CSA 29 LUCERNE VALLEY COMMUNITY CENTER RENOVATION PROJECT **HVAC GENERAL NOTES** AND LEGENDS

IMPROVEMENT PLANS

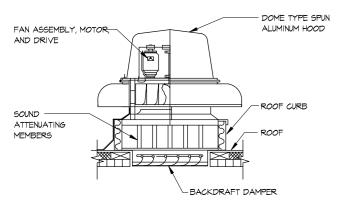
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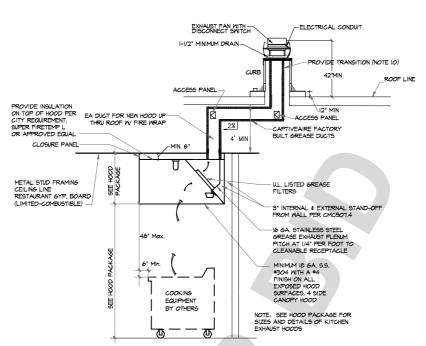
FLAT ROOF CAP DETAIL



CEILING EXHAUST FAN DETAIL



ROOF MUSHROOM EXHAUST FAN DETAIL

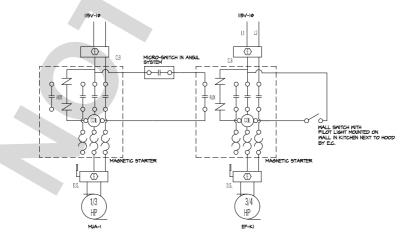


NOTES:

- MANUAL ACTIVATION DEVICE FOR THE KITCHEN HOOD SUPPRESSION SYSTEM SHALL. BE IO TO 20 FEET AWAY FROM THE HOOD SYSTEM IN THE DIRECTION OF EGRESS.
- ACCEPTANCE AND DISCHARGE TESTS SHALL BE REQUIRED FOR THE KITCHEN HOOD FIRE SUPPRESSION SYSTEM.
- STS) EM.

 GREASE EXHAUST DUCTS ARE TO BE WRAPPED IN ACCORDANCE WITH NFPA 46. UL LISTED GREASE EXHAUST DUCT SYSTEMS MANUFACTURED BY METAL-FAB OR APPROVED EQUAL SHALL ALSO BE ACCEPTED PROVIDED ALL APPLICABLE CODES ARE MET.

 PROVIDE OPENING W ACCESS PANEL ON DUCT AT CHANGE OF DIRECTION PER CMC 2022 5I0.3.4. PROVIDE OPENING W ACCESS PANEL AT 12' INTERVALS PER CMC 2022 5I0.3.4 IF THE ACCESS PANEL IS LESS THAN 20'X20'.
- 5. REFER TO FIRE WRAP MANUFACTURER FOR DETAILS ABOUT PENETRATING CEILING & ROOF
- 6. GREASE DUCT MATERIAL IS 16 GA. STAINLESS STEEL.
- THE INSIDE EDGE OF THE HOOD SHALL OVERHANG OR EXTEND A HORIZONTAL DISTANCE OF NOT LESS THAN 6 INCHES BEYOND THE EDGE OF THE COOKING SURFACE ON OPEN SIDES, THE VERTICAL DISTANCE BETWEEN THE LIP OF THE HOOD AND THE COOKING SURFACE SHALL NOT EXCED 4 FEET.
- SREASE REMOVAL DEVICES IN HOOD SHALL NOT BE LESS THAN 48" ABOVE COOKING SURFACE, CMC 509.2.1.
- 9. MAINTAIN KITCHEN HOOD DUCT TERMINATION CLEARANCES PER CMC 510.8.
- IO. OPENING TO BE CENTERED AND SHOULD BE GRADUALLY INCREASED TO COVER THE FAN INLET. GREASE EXHAUST SYSTEM



MAKE-UP-AIR AND EXHAUST WIRING DIAGRAM

(EF) FAN SCHEDULE STATIC MOTOR MANUFACTURER & SERVICE LOCATION CFM EQUIPMENT NO OPTIONS-ACCESSORIES IN M.G.) MATTS HP RPM VOLT.-PH.-CY. CONTROLLED BY SMITCH AND ANSUL SYSTEM OPER, WT. = 40 LBS NOTE #! BACKDRAFT DAMPER CONTROLLED BY OCCUPANCY SENSOR OPERATION WT. = 24 LBS BACKDRAFT DAMPER CONTROLLED BY TIME CLOCK COPERATION WT. = 25 LBS (EF) KI 1.15 KITCHEN ROOF 1500 1316 115-1-60 EF EF RI R2 CEILING 0.5 50 900 (EF) GREENHECK SP-A200 OR EQUAL JANITOR CEILING 120 0.5 47.8 900 115-1-60 NOTES: I. ELECT INTERLOCK W/ MUA-I.

		AIR UNIT	XMUA				
EQUIPMENT	MODEL	SERVING	GFM	STATIC PRESS.		MOTOR	REMARKS
NO.	PODEL	SERVINO	OI III	(IN M.G.)	HP	VOLTPHCY.	TENANS
XMUA I	FRIGIKING FS450A	KITCHEN	1475	0.5	1/3	115-1-60	INTERLOCK W/ EF-KI CONTROLLED BY SWITCH AND ANSUL SYSTEM
NOTES:							

AIR CURTAIN									
EQUIPMENT	MANUFACTURER	WEIGHT					MOTOR	DEMARKS	
NO.	# MODEL	(LBS)	LOCATION	CFM	FPM	HP	VOLTPHCY.	REMARKS	
(AD)	CURTRON AP-2-36-1-55	43	ABV DOOR	1220	3150	1/3		PROVIDE MICRO DOOR SMITCH UNIT SHALL PROVIDE 3150 FPM VELOCIT AT 3FT ABOVE THE FLOOR NSF/ANST STANDARD 37	

VENTILATION CALCULATION											
OCCUPANCY CATEGORY	FLOOR AREA (SQ.FT.)	*AREA OUTDOOR AIR RATE (CFM/SQ.FT.)	AREA OUTDOOR AIR REQUIREMENT (CFM)	PERSONS (QTY.)	*PEOPLE OUTDOOR AIR RATE (CFM/PERSON)	PEOPLE OUTDOOR AIR REQUIREMENT (CFM)	OUTSIDE AIR PROVIDED (CFM)				
KITCHEN	455	0.12	54.6	9.1	7.5	68.25	125				
NOTES: *PER CMC TAI											

	KITCHEN AIR BALANCE SCHEDULE										
UNIT	SUPPLY	RETURN	OUTSIDE	MAKE UP	EXHAUST	SERVING					
XMUA-I	EF-KI			1475		H00D					
EF-KI			-1500		-1500	HOOD I					
TOTAL			0 1475								
	TOTAL OUTSIDE	AIR	147	5	-1500	TOTAL EXHAUST					
					-25	TOTAL BUILDING AIR FLOW					

EXHAUST CALCULATION							
OCCUPANCY CATEGORY	FLOOR AREA (SQ.FT.)	*EXHAUST RATE (CFM/SQFT.)	EXHAUST REQUIREMENTS (CFM)	EXHAUST PROVIDED (CFM)			
MOMEN	130	70	140	150			
MEN	136	70	140	150			



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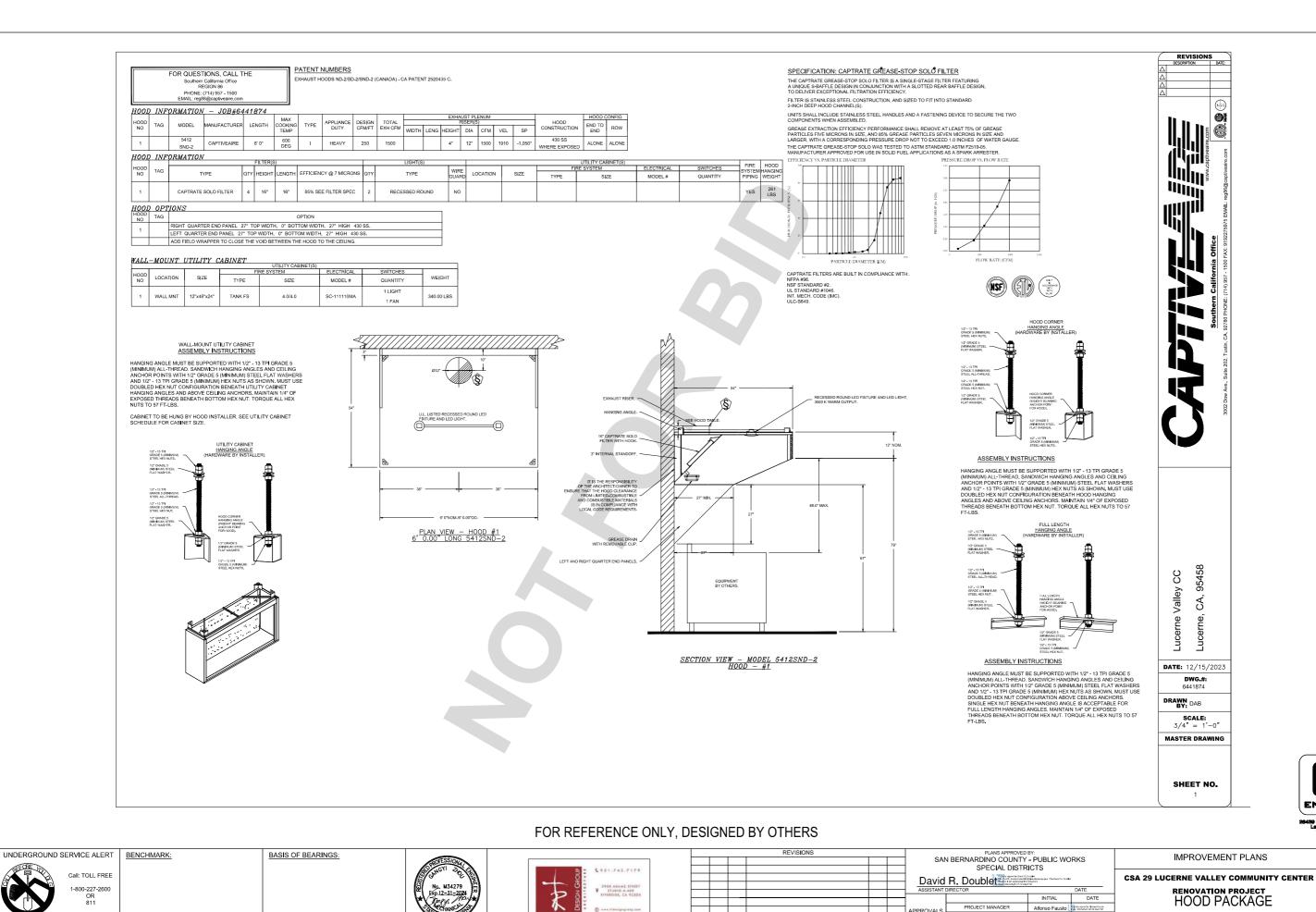
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	PLANS APPROVED BY: SAN BERNARDINO COUNTY - PUBLIC WORKS SPECIAL DISTRICTS									
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CSA 29 LUCERNE VALLEY COMMUNITY CENTER RENOVATION PROJECT **HVAC EQUIPMENT SCHEDULES & DETAILS**

IMPROVEMENT PLANS

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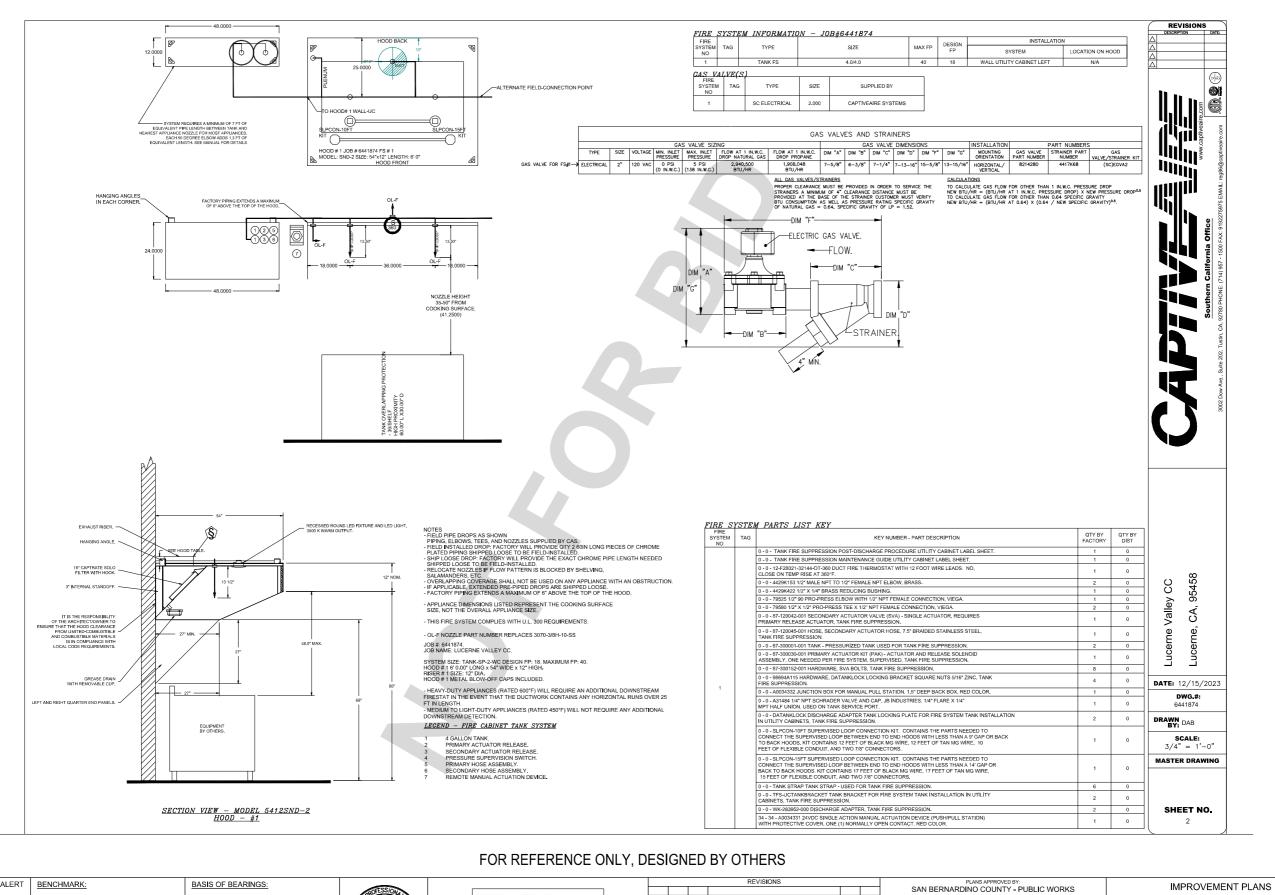
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06-20-2024

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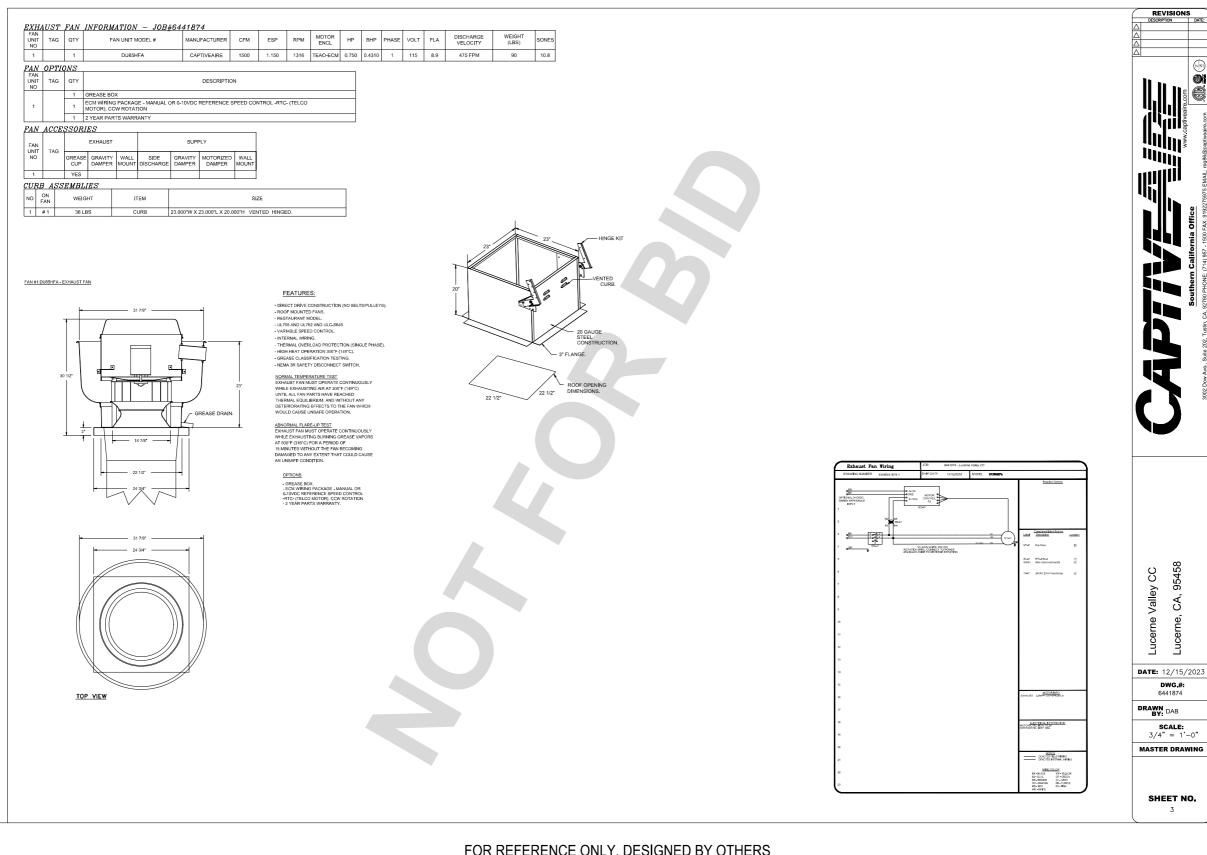
OPS, DIVISION MANAGER

CSA 29 LUCERNE VALLEY COMMUNITY CENTER
RENOVATION PROJECT
HOOD PACKAGE

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06-20-2024







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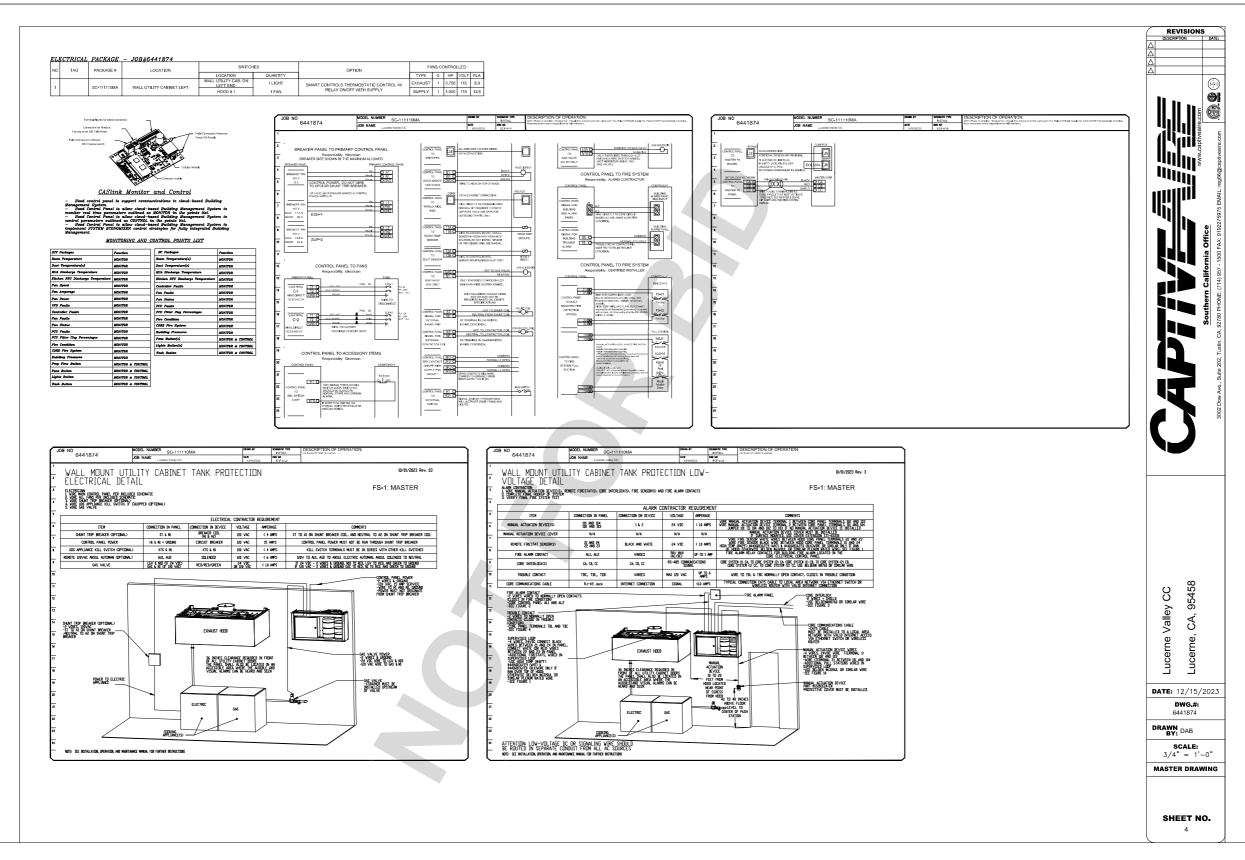
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PLANS APPROVED BY: SAN BERNARDINO COUNTY - PUBLIC WORKS SPECIAL DISTRICTS David R. Doublet Total street to Brief R. Bridden Street Committee PROJECT MANAGER Alfonso Fausto
PPS, DIVISION MANAGER Henry Mac OPS, DIVISION MANAGER Henry Mac
PM, DIVISION MANAGER Noel Mondragon

IMPROVEMENT PLANS CSA 29 LUCERNE VALLEY COMMUNITY CENTER RENOVATION PROJECT HOOD PACKAGE



ENGINEERS



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PLANS APPROVED BY:
SAN BERNARDINO COUNTY - PUBLIC WORKS
SPECIAL DISTRICTS

David R. Double The Public Plant County of the Public

PM, DIVISION MANAGER Noel Mondrago

OPS, DĮVĮSĮON MANAGER

CSA 29 LUCERNE VALLEY COMMUNITY CENTER
RENOVATION PROJECT
HOOD PACKAGE

06-20-2024

DWG NO.

FILE NO.

SHEET M-1.5

ENGINEERS