

HVAC ADDITIONS TO MUSIC BUILDING

COMPTON COLLEGE

1111 E. ARTESIA BLVD., COMPTON, CA. 90221

IDENTIFICATION STAMP
 DIV. OF THE STATE ARCHITECT
 APP. 03-119660 INC:
 REVIEWED FOR
 SS FLS ACS
 DATE: 10/25/2019



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APPLICABLE CODES

- 2016 CALIFORNIA BUILDING STANDARDS ADMINISTRATIVE CODE CALIFORNIA CODE OF REGULATIONS (CCR) TITLE 24, PART 1
- 2016 CALIFORNIA BUILDING CODE (CBC) CALIFORNIA CODE OF REGULATIONS (CCR) TITLE 24, PART 2 (2015 INTERNATIONAL BUILDING CODE (IBC) VOLUMES 1-2 W/ 2016 CALIFORNIA AMENDMENTS)
- 2016 CALIFORNIA ELECTRICAL CODE (CEC) CALIFORNIA CODE OF REGULATIONS (CCR) TITLE 24, PART 3 (2014 NATIONAL ELECTRIC CODE (NEC) W/ 2016 CALIFORNIA AMENDMENTS)
- 2016 CALIFORNIA MECHANICAL CODE (CMC) CALIFORNIA CODE OF REGULATIONS (CCR) TITLE 24, PART 4 (2015 UNIFORM MECHANICAL CODE (CMC) W/ 2016 CALIFORNIA AMENDMENTS)
- 2016 CALIFORNIA PLUMBING CODE (CPC) CALIFORNIA CODE OF REGULATIONS (CCR) TITLE 24, PART 5 (2015 UNIFORM PLUMBING CODE (CPC) 2016 W/ CALIFORNIA AMENDMENTS)
- 2013 ASME A17.1(w/A17.1a/CSA B44a-08 ADDENDA) SAFETY CODE FOR ESCALATORS AND ELEVATORS
- 2016 CALIFORNIA FIRE CODE (CFC) CALIFORNIA CODE OF REGULATIONS (CCR) TITLE 24, PART 9 (2015 INTERNATIONAL FIRE CODE (IFC) W/ 2016 CALIFORNIA AMENDMENTS)
- 2016 CALIFORNIA REFERENCED STANDARDS CODE CALIFORNIA CODE OF REGULATIONS (CCR) TITLE 24, PART 12
- AMERICANS WITH DISABILITIES ACT (ADA) ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES (ADAAG)
- CALIFORNIA CODE OF REGULATIONS (CCR) TITLE 24, CALIFORNIA STATE ACCESSIBILITY STANDARDS STATE FIRE MARSHAL REGULATIONS (AS AMENDED TO DATE) CALIFORNIA CODE OF REGULATIONS (CCR) TITLE 19, 2016 EDITION
- 2016 CALIFORNIA ENERGY CODE (CEC) (CCR) TITLE 24, PART 6
- 2016 CALIFORNIA GREEN BUILDING STANDARDS CODE (CCR) TITLE 24, PART 11
- APPLICABLE NFPA STANDARDS
 - NFPA 13 - AUTOMATIC SPRINKLER SYSTEMS, 2016 EDITION
 - NFPA 14 - STANDPIPE SYSTEMS, 2013 EDITION
 - NFPA 17 - DRY CHEMICAL SYSTEMS, 2013 EDITION
 - NFPA 17a - WET CHEMICAL SYSTEMS, 2013 EDITION
 - NFPA 24 - PRIVATE FIRE MAINS, 2016 EDITION
 - NFPA 70E - STANDARD FOR ELECTRICAL SAFETY IN THE WORKPLACE, 2015 EDITION
 - NFPA 72 - NATIONAL FIRE ALARM CODE WITH CALIFORNIA AMENDMENTS, 2016 EDITION SEE UL STD. 1971 FOR "VISUAL DEVICES"
 - NFPA 80 - FIRE DOOR AND OTHER OPENING PROTECTIVES, 2016 EDITION
 - NFPA 92 - STANDARD FOR SMOKE CONTROL SYSTEMS, 2015 EDITION
 - NFPA 253 - CRITICAL RADIANT FLUX OF FLOOR COVERING SYSTEMS, 2015 EDITION
 - NFPA 2001 - CLEAN AGENT FIRE EXTINGUISHING SYSTEMS, 2015 EDITION
 - UL464 - AUDIBLE SIGNAL APPLIANCES, 2003 EDITION
 - UL521 - HEAT DETECTORS FOR FIRE PROTECTIVE SIGNALING SYSTEMS, 1999 EDITION
- REFERENCE CODE SECTION FOR NFPA STANDARDS - 2016 CBC (SFM). SEE CHAPTER 35 FOR STATE OF CALIFORNIA AMENDMENTS TO NFPA STANDARDS

PROJECT TEAM

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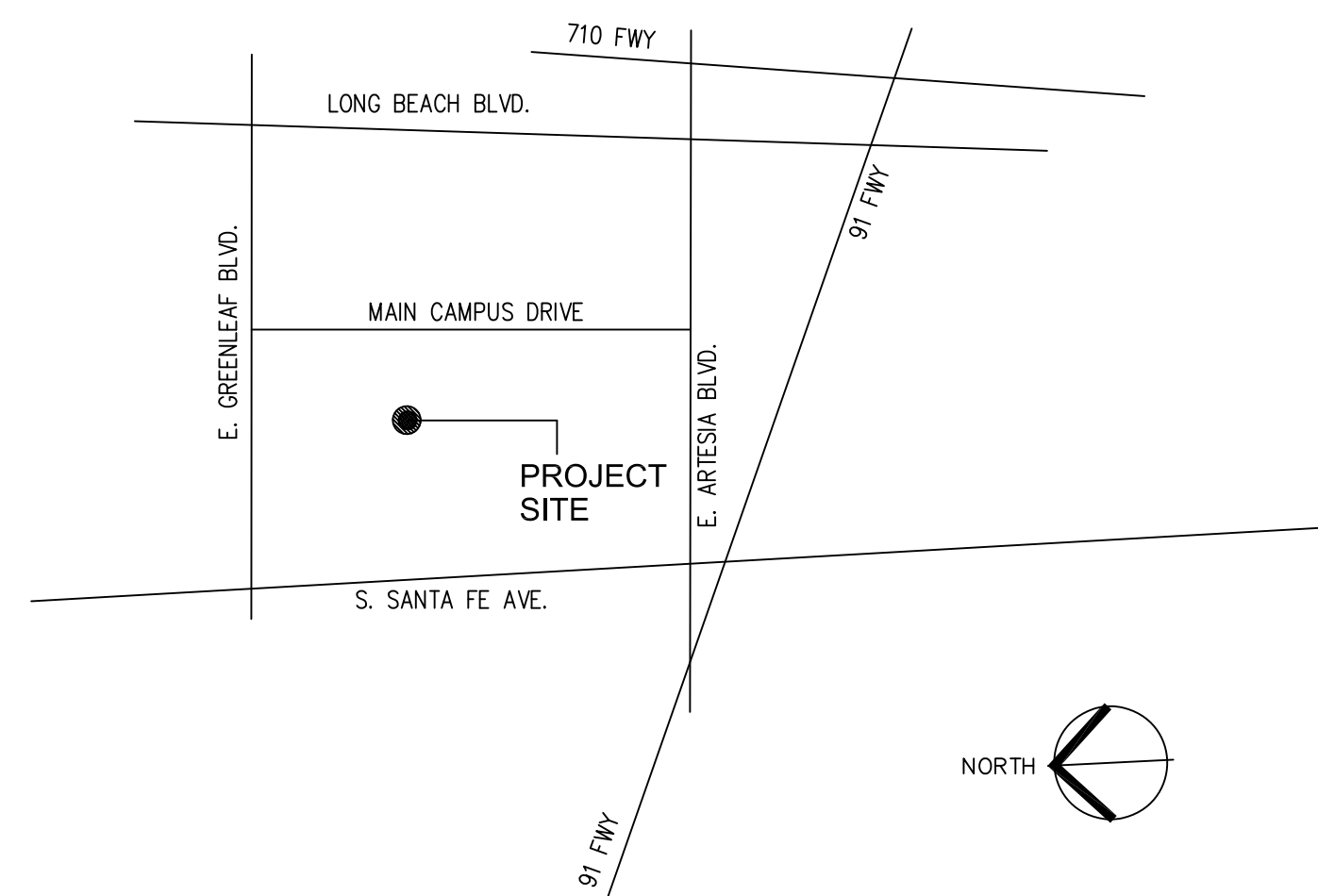
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TYPE OF CONSTRUCTION

BUILDING "B" TYPE **V**B E OCCUPANCY NON FIRE SPRINKLERED



VICINITY MAP

SCOPE OF WORK

THE SCOPE OF THE WORK AS STATED BELOW IS FOR DSA PLAN REVIEW PURPOSES ONLY AND DOES NOT CONSTITUTE A DETAILED AND FULL EXPLANATION OF THE REQUIREMENTS OF THE CONTRACT DOCUMENTS.

SELECTIVE DEMOLITION OF EXISTING HVAC EQUIPMENT AND THE INSTALLATION OF NEW HVAC EQUIPMENT.
 SELECTIVE DEMOLITION OF EXISTING ELECTRICAL RELATED TO THE HVAC EQUIPMENT AND INSTALLATION OF NEW DUCTS NEW CONDUIT, CABLING AS REQUIRED TO RESTORE OPERATION OF THE HVAC SYSTEM.
 ANY REPAIRS OR NEW INSTALLATION AND PENETRATIONS TO ROOF SHALL BE PER SPECIFICATIONS AND ADHERE TO ALL REQUIREMENTS OF THE DISTRICT STANDARD ROOFING SYSTEM.
 INSTALLATION OF NEW AUTOMATIC FIRE ALARM SYSTEM.

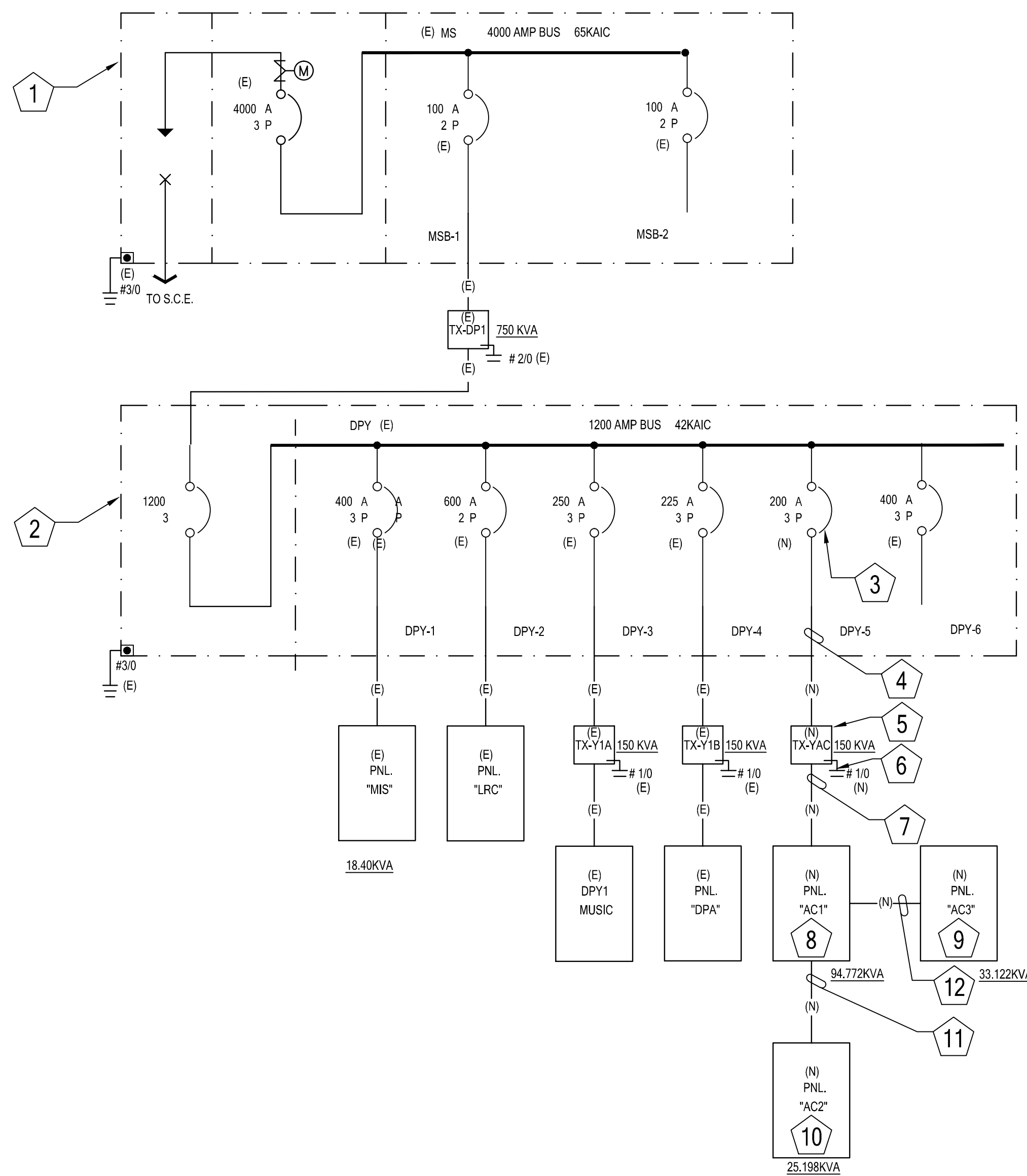
DSA APPROVAL OF THESE PLANS SHALL NOT BE CONSTRUED AS THE CERTIFICATION OF COMPLIANCE FOR THE FOLLOWING BUILDINGS AS REQUIRED BY THE FIELD ACT, EDUCATION CODE SECTION 17280-17316 AND SECTIONS 81130-81147. REFER TO E1.0 SITE PLAN.

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 COLLEGE DISTRICT
 COMPTON COLLEGE
 1111 E. ARTESIA BLVD.
 COMPTON, CA. 90221**

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NO	DATE	BY	DESCRIPTION
REVISIONS			
DRAWN: JC		CHECKED: RFH	
DATE: 8/31/2018		SCALE: AS NOTED	
PROJECT NUMBER:		17-302	

TITLE SHEET

DRAWING NUMBER : **T0.0**



SINGLE LINE DIAGRAM NOTES:

- 1 EXISTING MAIN SWITCH BOARD "MS" NEMA 3R, 12 KV 3 PHASE 4 WIRE 4000 AMP 65000 AIC NEMA 3R.
- 2 EXISTING DISTRIBUTION PANELBOARD "DPY1" NEMA 1, 120/208 VOLT 3 PHASE 4 WIRE 1200 AMP 42000 AIC NEMA 3R.
- 3 PROVIDE NEW SQUARE D CIRCUIT BREAKER, AMPERAGE AS NOTED. MATCH EXISTING IN TYPE, RATING & CHARACTERISTICS.
- 4 2-1/2" C. w/ (4) #3/0 & (1) #4 E/G.
- 5 DRY TRANSFORMER KVA AS NOTED. 480V 3- TO 120/208V 3- 4W NEMA 1. PROVIDE ELECTROSTATICALLY SHIELDED AND ISOLATED TRANSFORMER WITH "K" FACTOR RATING OF 4.0 FOR NON-LINEAR LOADS. REFER TO DET. 1.
- 6 PROVIDE 3/4"x10'-0" COPPER GROUND ROD. #3/0 TO BLDG. COLD WATER & GROUND ROD.
- 7 (2) 3" C. w/ (4) #3/0 & (1) #1/0 E/G IN EACH CONDUIT.
- 8 PANELBOARD "AC1". NEMA 1 SURFACE 120/208 VOLT 3 PHASE 4 WIRE 400 AMP 22000 AIC NEMA 1. REFER TO PANEL SCHEDULE.
- 9 PANELBOARD "AC2". NEMA 1 SURFACE 120/240 VOLT 1 PHASE 3 WIRE 100 AMP 10000 AIC NEMA 1. REFER TO PANEL SCHEDULE.
- 10 PANELBOARD "AC3". NEMA 3R SURFACE 120/240 VOLT 1 PHASE 3 WIRE 1025AMP 10000 AIC NEMA 1. REFER TO PANEL SCHEDULE.
- 11 1-1/2" C. w/ (4) #1 & (1) #6 E/G.
- 12 2" C. w/ (4) #1/0 & (1) #4 E/G.

SCHEDULE FOR PANEL: "AC1"

BUSSING AMPS: 400 VOLTAGE: 120/208 PHASE: 3 WIRE: 4 NEMA: 1
 MAINS: 225A M.L.O. MOUNTING: SURFACE AIC RATING: 22,000

REMARKS: 42 CIRCUIT PANEL COPPER BUSS

LOAD DESCRIPTION	V/A	AMP	PHASE	AMP	V/A	LOAD DESCRIPTION		
1 CU-4	2790	40	A	100	9715	PANEL AC2		
3 "		3/P	B	3/P	8721	"		
5 "	2790		C	125	6762	"		
7 CU-5	2790	40	A	3/P	11758	PANEL AC3		
9 "	2790	3/P	B	20	10546	"		
11 "			C	20	10818	"		
13 CU-6	3744	50	A	20	540	SPARE		
15 "	3744	3/P	B	20	540	SPARE		
17 "	3744		C	20	540	SPARE		
19 FC-4	707	20	A	20	*	SPACE		
21 "	707	2/P	B	20	*	SPACE		
23 FC-5	707	20	C	20	*	SPACE		
25 "	707	2/P	A	20	*	SPACE		
27 FC-6	1344	20	B	20	*	SPACE		
29 "	1344	3/P	C	20	*	SPACE		
31 "			A	20	*	SPACE		
33 SPACE	*	20	B	20	*	SPACE		
35 SPACE	*	20	C	20	*	SPACE		
37 SPACE	*	20	A	20	*	SPACE		
39 SPACE	*	20	B	20	*	SPACE		
41 SPACE	*	20	C	20	*	SPACE		
V/A SUB-TOTAL:		12082	11375	11375	22013	19807	18120	V/A SUB-TOTAL:

VOLTAGMS: PHASE A: 34095 PHASE B: 31182 PHASE C: 29495 TOTAL CONNECTED VA: 94772
 (CONTINUOUS VA (94772) x 1.25 :+ (REMAINDER x 1.00) = 118465 TOTAL DEMAND VA: 118465 TL AMPS: 329.06

SCHEDULE FOR PANEL: "AC2"

BUSSING AMPS: 100 VOLTAGE: 120/208 PHASE: 3 WIRE: 4 NEMA: 1
 MAINS: 100A M.C.B. MOUNTING: SURFACE AIC RATING: 10,000

REMARKS: 30 CIRCUIT PANEL COPPER BUSS
 *PROVIDE LOCK-ON DEVICE PAINT BREAKER HANDLE "RED"

LOAD DESCRIPTION	V/A	AMP	PHASE	AMP	V/A	LOAD DESCRIPTION		
1 HP-Y1	2319	50	A	30	1986	CU-1		
3 "	2319	2/P	B	2/P	1986	"		
5 CU-2	1986	30	C	20	1352	FC-1.1		
7 "	1986	2/P	A	2/P	1352	"		
9 FC-2	1352	20	B	20	1352	FC-1.2		
11 "	1352	2/P	C	2/P	1352	"		
13 FIRE ALARM CONTROL PANEL	360	20	A	20	1352	FC-1.3		
15 FIRE ALARM POWER SUPPLY	360	20	B	2/P	1352	"		
17 SPARE	360	20	C	20	360	SPARE		
19 SPACE	*	20	A	20	360	SPACE		
21 SPACE	*	20	B	20	*	SPACE		
23 SPACE	*	20	C	20	*	SPACE		
25 SPACE	*	20	A	20	*	SPACE		
27 SPACE	*	20	B	20	*	SPACE		
29 SPACE	*	20	C	20	*	SPACE		
V/A SUB-TOTAL:		4665	4031	3698	5050	4690	3064	V/A SUB-TOTAL:

VOLTAGMS: PHASE A: 9715 PHASE B: 8721 PHASE C: 6762 TOTAL CONNECTED VA: 25198
 (CONTINUOUS VA (25198) x 1.25 :+ (REMAINDER x 1.00) = 31498 TOTAL DEMAND VA: 31498 TL AMPS: 87.49

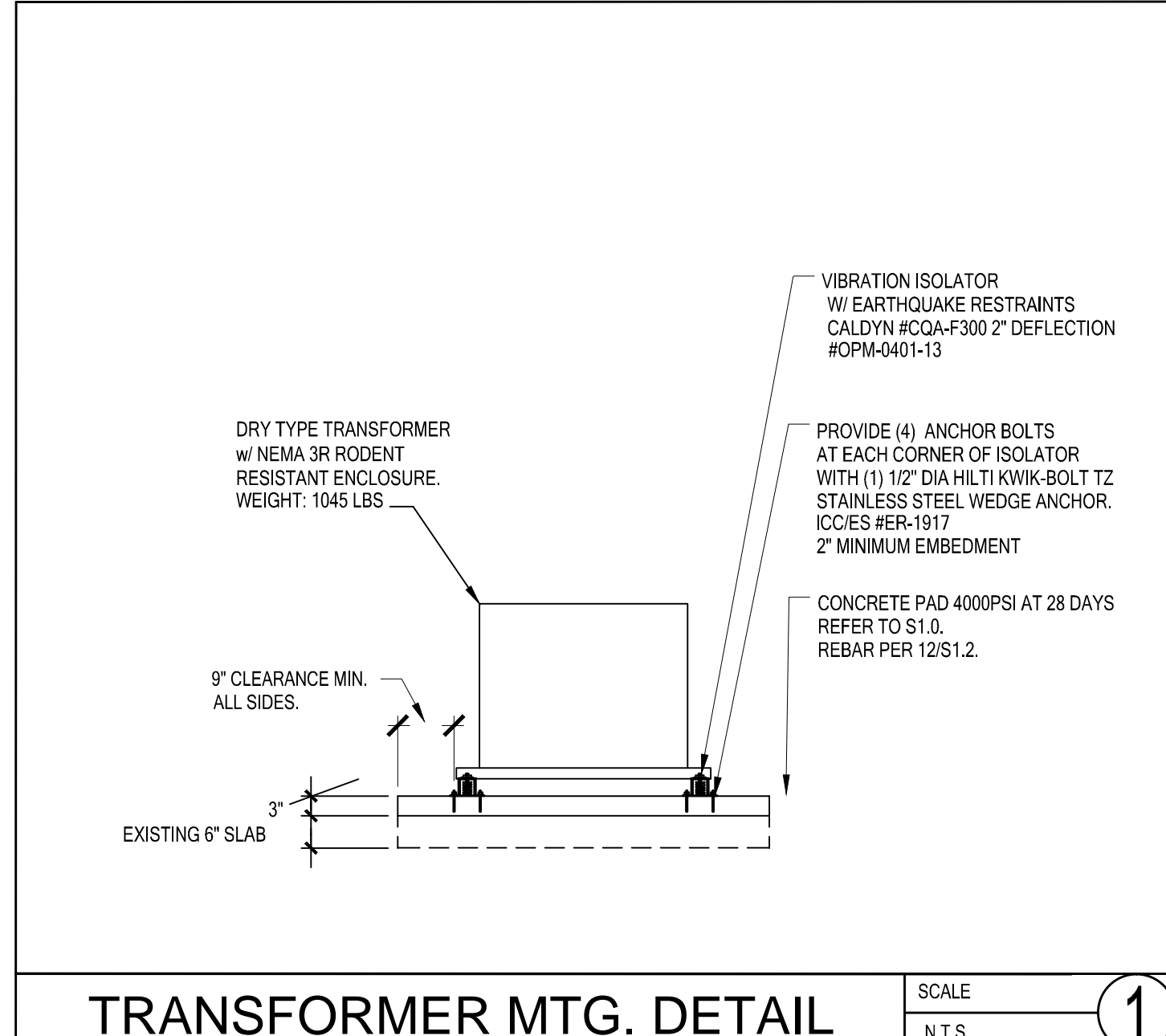
SCHEDULE FOR PANEL: "AC3"

BUSSING AMPS: 125 VOLTAGE: 120/208 PHASE: 3 WIRE: 4 NEMA: 1
 MAINS: 125A M.C.B. MOUNTING: SURFACE AIC RATING: 10,000

REMARKS: 30 CIRCUIT PANEL COPPER BUSS

LOAD DESCRIPTION	V/A	AMP	PHASE	AMP	V/A	LOAD DESCRIPTION		
1 FC-3.1	1352	20	A	50	2319	HP-Y2		
3 "	1352	2/P	B	2/P	2319	"		
5 FC-3.2	1352	20	C	50	2319	HP-Y3		
7 "	1352	2/P	A	2/P	2319	"		
9 FC-3.3	1352	20	B	50	2819	CU-3		
11 "	1352	2/P	C	2/P	2819	"		
13 FC-3.4	1352	20	A	20	1352	FC-3.6		
15 "	1352	2/P	B	2/P	1352	"		
17 FC-3.5	1352	20	C	20	360	SPARE		
19 "	1352	2/P	A	20	360	SPARE		
21 SPACE	*	20	B	20	*	SPACE		
23 SPACE	*	20	C	20	*	SPACE		
25 SPACE	*	20	A	20	*	SPACE		
27 SPACE	*	20	B	20	*	SPACE		
29 SPACE	*	20	C	20	*	SPACE		
V/A SUB-TOTAL:		5408	4056	4056	6350	6490	5498	V/A SUB-TOTAL:

VOLTAGMS: PHASE A: 11758 PHASE B: 10546 PHASE C: 10818 TOTAL CONNECTED VA: 33122
 (CONTINUOUS VA (31222) x 1.25 :+ (REMAINDER x 1.00) = 41403 TOTAL DEMAND VA: 41403 TL AMPS: 115.01



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 Exp. 9/23/2021
 REGISTERED PROFESSIONAL ELECTRICAL ENGINEER
 STATE OF CALIFORNIA

**HVAC ADDITIONS TO
 MUSIC BLDG.**

COMPTON COMMUNITY
 COLLEGE DISTRICT
 COMPTON COLLEGE
 1111 E. ARTESIA BLVD.
 COMPTON, CA. 90221

NO	DATE	BY	DESCRIPTION

REVISIONS

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**SINGLE LINE DIAGRAM
 & PANEL SCHEDULE**

DRAWING NUMBER: **E0.2**

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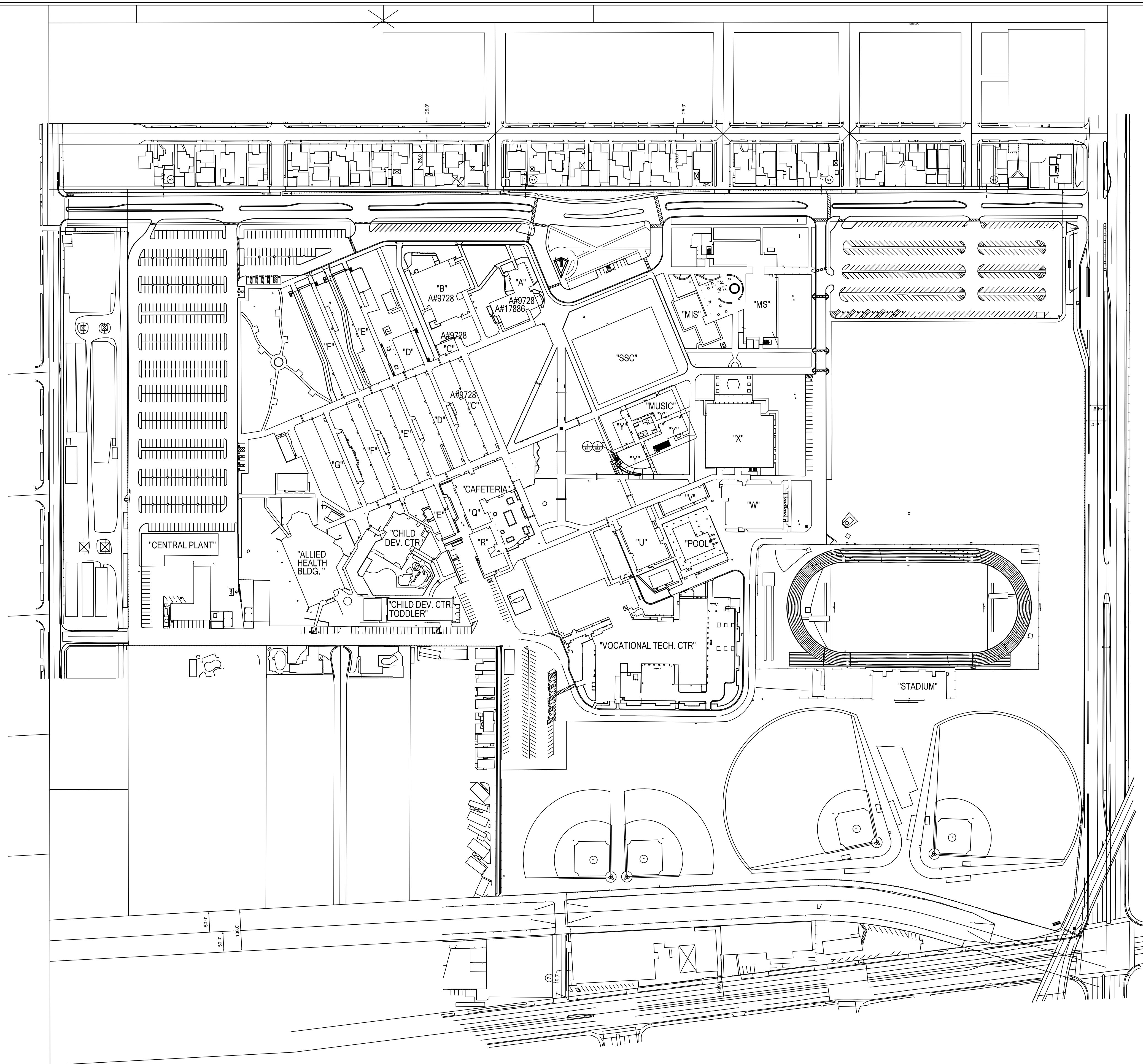
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BUILDING A#'s

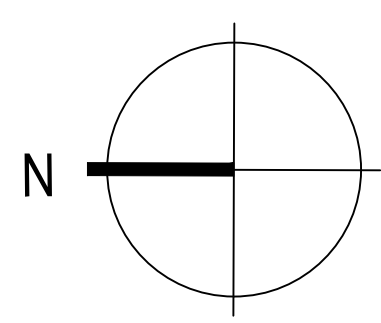
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- BLDG. A A#17886
- BLDG. B A#9728
- BLDG. C A#2999
- BLDG. C A#9728
- BLDG. D A#9728
- BLDG. E A#2454
- BLDG. E A#9728
- BLDG. F A#9728
- BLDG. G A#9728
- BLDG. Q A#3139
- BLDG. R A#4703
- BLDG. U A#27842
- BLDG. W A#
- BLDG. X A#4713
- BLDG. X A#20290
- BLDG. Y A#16578
- BLDG. Y A#115541
- ALLIED HEALTH A#
- CENTRAL PLANT A#113210
- CHILD DEV. CTR. A#42100
- CHILD DEV. CTR. A#104777
- INFANT, TODDLER LEARNING RES. A#10517
- MS A#69120
- MIS A#69120
- SSC A#105117
- STADIUM A#32362



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SITE PLAN
 DRAWING NUMBER: **E1.0**

ELECTRICAL FLOOR

PLAN NOTES:

- 1 EXISTING DISTRIBUTION PANEL "Y" 277/480V 3 PHASE 4 WIRE NEMA 3R. REFER TO S.L.D. E0.2.
- 2 200A 480V 3P NON-FUSED DISCONNECT NEMA 1. REFER TO S.L.D. E0.2. ROUTE FEEDER TO DB "Y" ON EXTERIOR OF BUILDING.
- 3 TRANSFORMER "TX-AC1" 150 KVA 480V-120/208V 150KVA 3 PHASE 4 WIRE. REFER TO S.L.D. E0.2.
- 4 PANEL "AC1" 400A 120/208V 3 PHASE 4 WIRE REFER TO S.L.D. E0.2.
- 5 PANEL "AC2" 100A 120/208V 3 PHASE 4 WIRE REFER TO S.L.D. E0.2. ROUTE FEEDER TO PANEL "AC1" ON EXTERIOR OF BUILDING.
- 6 PANEL "AC3" 125A 120/208V 3 PHASE 4 WIRE REFER TO S.L.D. E0.2. ROUTE FEEDER TO PANEL "AC1" THRU ATTIC OF BUILDING.
- 7 REFER TO MECHANICAL DRAWINGS AND PROVIDE 3/4" TO FANCOIL FOR CONTROL & THERMOSTATS.
- 8 ROUTE CONDUIT TO PANELS & THERMOSTATS THRU ATTIC IN CONCEALED SPACES.

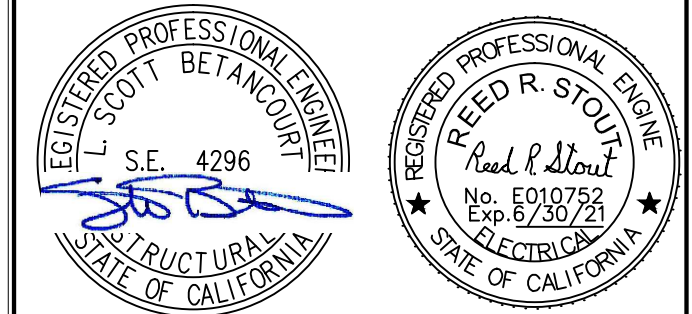
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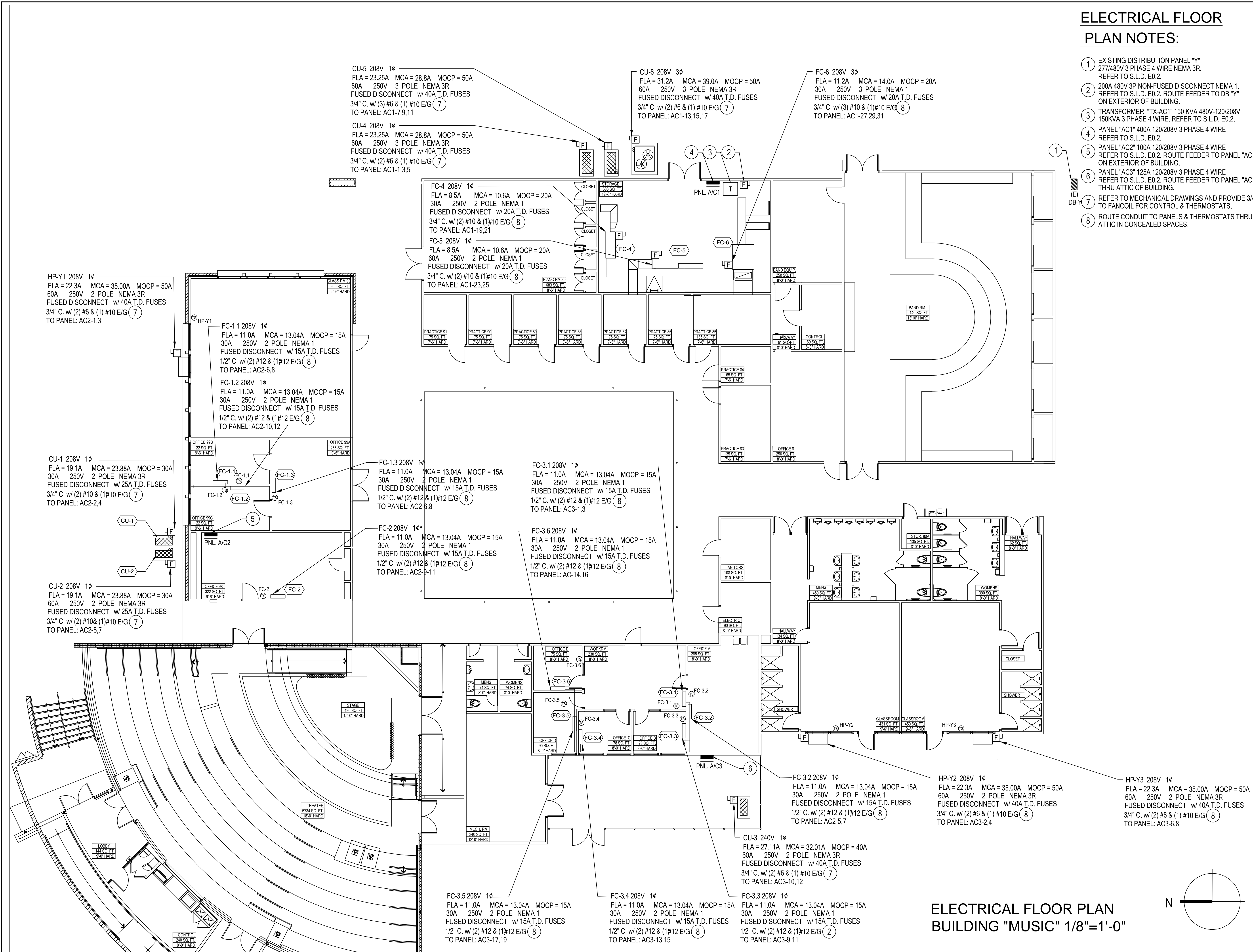
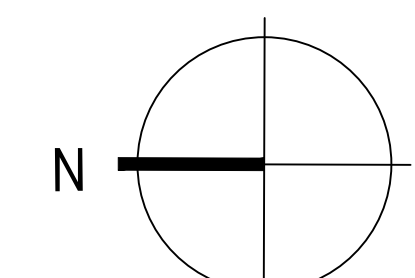
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**ELECTRICAL
FLOOR & ROOF
PLANS**

DRAWING NUMBER: **E1.1**

**ELECTRICAL FLOOR PLAN
BUILDING "MUSIC" 1/8"=1'-0"**



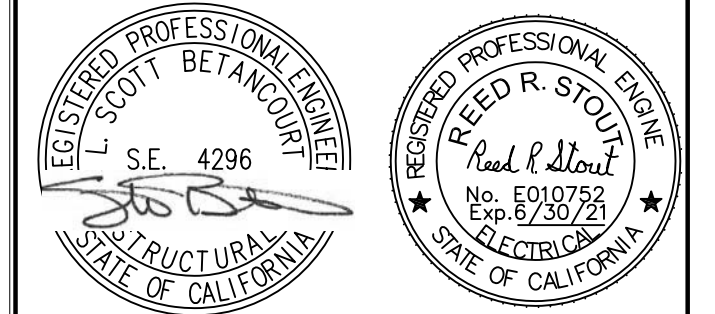
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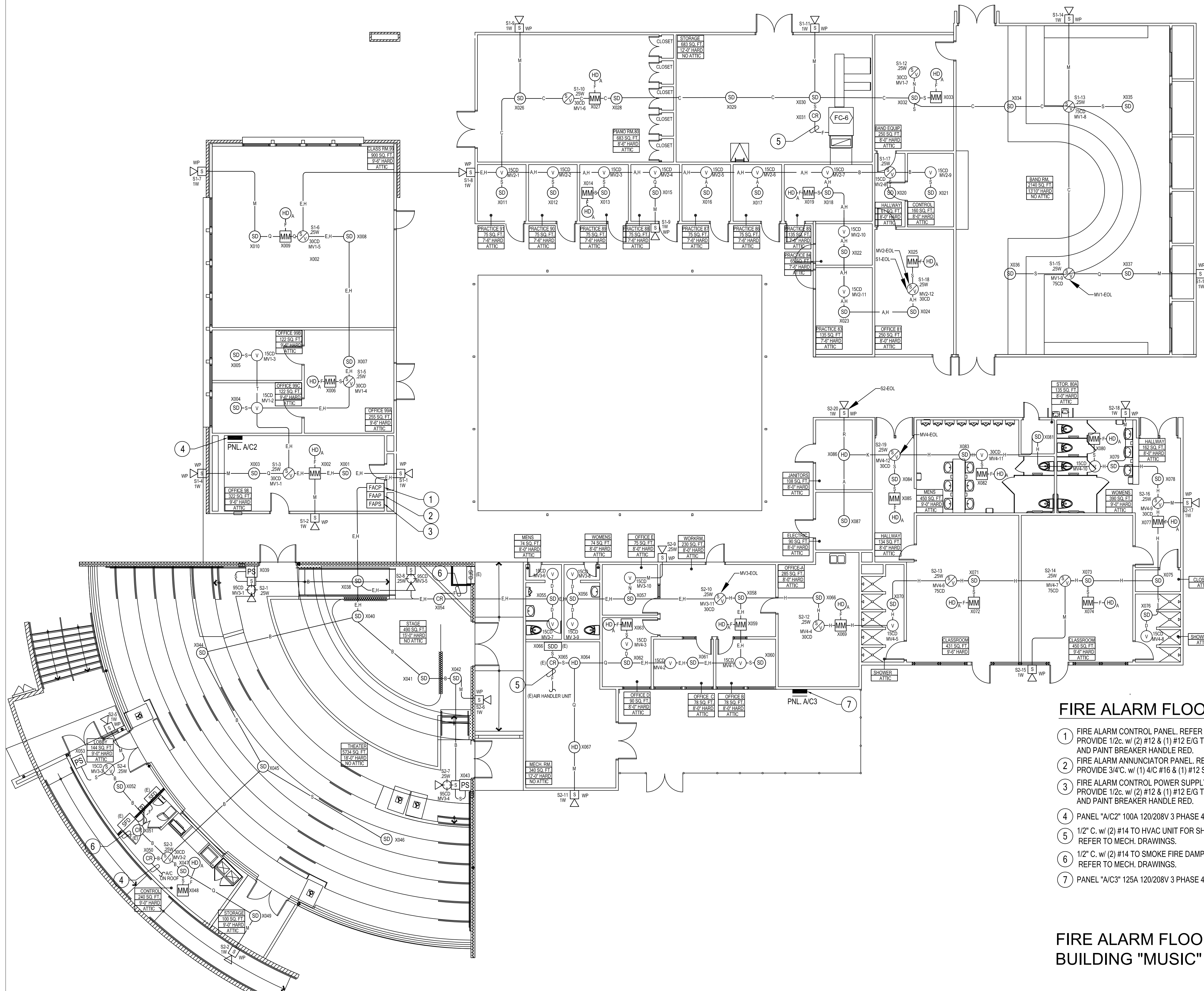
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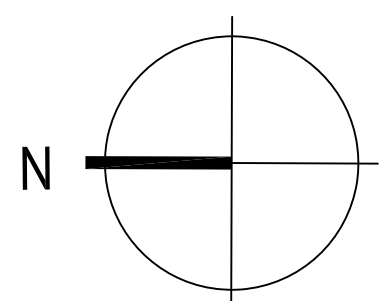
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FIRE ALARM FLOOR PLAN NOTES:

- ① FIRE ALARM CONTROL PANEL. REFER TO FIRE ALARM SUBMITTAL. PROVIDE 1/2c. w/ (2) #12 & (1) #12 E/G TO PANEL "AC2-13". PROVIDE LOCK-ON DEVICE AND PAINT BREAKER HANDLE RED.
- ② FIRE ALARM ANNUCIATOR PANEL. REFER TO FIRE ALARM SUBMITTAL. PROVIDE 3/4"C. w/ (1) 4/C #16 & (1) #12 SPEAKER CABLE TO FACP.
- ③ FIRE ALARM CONTROL POWER SUPPLY. REFER TO FIRE ALARM SUBMITTAL. PROVIDE 1/2c. w/ (2) #12 & (1) #12 E/G TO PANEL "AC2-15". PROVIDE LOCK-ON DEVICE AND PAINT BREAKER HANDLE RED.
- ④ PANEL "A/C2" 100A 120/208V 3 PHASE 4 WIRE. REFER TO SINGLE LINE DIAGRAM.
- ⑤ 1/2" C. w/ (2) #14 TO HVAC UNIT FOR SHUTDOWN UPON FIRE ALARM ACTIVATION. REFER TO MECH. DRAWINGS.
- ⑥ 1/2" C. w/ (2) #14 TO SMOKE FIRE DAMPER FOR SHUTDOWN UPON FIRE ALARM ACTIVATION. REFER TO MECH. DRAWINGS.
- ⑦ PANEL "A/C3" 125A 120/208V 3 PHASE 4 WIRE. REFER TO SINGLE LINE DIAGRAM.

**FIRE ALARM FLOOR PLAN
 BUILDING "MUSIC" 1/8"=1'-0"**



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**FIRE ALARM
 FLOOR PLAN**
 DRAWING NUMBER : **E2.1**

LEGEND		
SYMBOL	ABBR.	DESCRIPTION
	-	SUPPLY AIR RISER
	-	RETURN AIR RISER
	-	EXHAUST AIR RISER
	SAG	SUPPLY AIR GRILLE
	RAG	RETURN AIR GRILLE
	EAG	EXHAUST AIR GRILLE
	SWR	SIDEWALL REGISTER
	(L)	LINED DUCTWORK
	-	FLEXIBLE CONNECTION
	FC	FLEXIBLE CONNECTION
	-	NEW DUCT (SEE PLAN)
	MVD	MANUAL VOLUME DAMPER
	BDD	BACKDRAFT DAMPER
	UC	UNDERCUT DOOR 3/4"
	SFD	SMOKE / FIRE DAMPER
	FD	FIRE DAMPER
	T-STAT	THERMOSTAT
	S	SWITCH
	W/	WITH
	S/M	SHEET METAL
	G.C.	GENERAL CONTRACTOR
	VTR	VENT THRU ROOF
	O/C	ON CENTER
	E	ITEMS FURNISHED AND INSTALLED BY THE ELECTRICAL CONTRACTOR AS SPECIFIED ON THE ELECTRICAL CONTRACT DOCUMENTS
	M	ITEMS FURNISHED AND INSTALLED BY THE MECHANICAL CONTRACTOR AS SPECIFIED ON THE MECHANICAL CONTRACT DOCUMENTS
	EM	ITEMS FURNISHED BY ELECTRICAL CONTRACTOR AND INSTALLED BY MECHANICAL CONTRACTOR
	ME	ITEMS FURNISHED BY MECHANICAL CONTRACTOR AND INSTALLED BY ELECTRICAL CONTRACTOR

GENERAL NOTES

- ENTIRE INSTALLATION SHALL CONFORM TO THE REQUIREMENTS OF THE 2016 CALIFORNIA MECHANICAL CODE, 2016 CALIFORNIA BUILDING CODE, AND ALL OTHER APPLICABLE CODES AND REGULATIONS, INCLUDING 2016 CALIFORNIA ENERGY CONSERVATION STANDARDS DIVISION T-24.
- 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 INSTALLATION. THE MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE ITEMS TO BE PROVIDED BY OTHER TRADES WHERE MENTIONED IN THE CONTRACT DOCUMENTS PRIOR TO BID - NO EXCEPTIONS.
- 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.
- 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.
- ALL DIMENSIONS SHOWN ON THESE PLANS ARE APPROXIMATE AND MUST BE CONFIRMED ON SITE.
- PRIOR TO OCCUPANCY, THE ENTIRE H.V.A.C. SYSTEMS SHALL BE BALANCED IN ACCORDANCE WITH "AABC" OR "NEEB" STANDARDS BY AN INDEPENDENT THIRD PARTY AIR BALANCE CONTRACTOR MEMBER OF "AABC" OR "NEEB". 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 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.
- FOR INACCESSIBLE AREAS THE CONTRACTOR SHALL PROVIDE ACCESS PANELS TO ALL DAMPERS, EQUIPMENT, SMOKE DETECTORS, AND CONTROL DEVICES. THESE PANELS SHALL MATCH THE RATING OF THE WALL AND/OR CEILING THAT THEY ARE LOCATED IN. MINIMUM ACCESS PANEL SIZES SHALL BE AS FOLLOWS:
 - HAND ACCESS: 12"x12".
 - BODY ACCESS: 30"x30" MIN. WHERE A LARGER ACCESS SIZE IS REQUIRED DUE TO INSTALLATION CONSTRAINTS, THE CONTRACTOR SHALL DO SO AT NO ADDITIONAL COST AND SHALL NOTIFY THE ARCHITECT AND ENGINEER OF DEVIATIONS PRIOR TO INSTALLATION.
- 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.
- PLATFORMS, CURBS, AND FLASHINGS FOR MECHANICAL EQUIPMENT SHALL BE AS INDICATED ON THE STRUCTURAL AND ARCHITECTURAL PLANS, UNLESS NOTED OTHERWISE. WHERE THERE IS A CONFLICT WITH THE MECHANICAL PLANS, THE CONTRACTOR SHALL NOTIFY THE ARCHITECT AND ENGINEER PRIOR TO FABRICATION AND INSTALLATION.
- ALL EQUIPMENT, ACCESSORIES, AND RELATED PIPING SHALL BE INSTALLED IN STRICT ACCORDANCE WITH THE EQUIPMENT MANUFACTURER'S RECOMMENDATIONS. PROVIDE ALL FITTINGS, TRANSITIONS, DAMPERS, VALVES, AND OTHER DEVICES REQUIRED FOR A COMPLETE WORKABLE INSTALLATION.
- MAINTENANCE LABEL SHALL BE AFFIXED TO ALL MECHANICAL EQUIPMENT AND A MAINTENANCE MANUAL SHALL BE PROVIDED FOR THE OWNER'S USE.
- PROVIDE MERV 13 MIN. EFFICIENCY THROWAWAY FILTERS FOR ALL AIR CONDITIONING UNITS. SEE EQUIPMENT SCHEDULE AND SPECIFICATIONS 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 AS A COMPLETE ASSEMBLY. AIR FILTERS SHALL BE ACCESSIBLE FOR CLEANING OR REPLACEMENT.
- ALL EQUIPMENT WITH MOVING PARTS SHALL BE PROVIDED WITH FLEXIBLE DUCT AND PIPE CONNECTION.
- ALL HVAC EQUIPMENT SHALL BE CERTIFIED BY THE CALIFORNIA ENERGY COMMISSION TO COMPLY WITH LATEST EFFICIENCY STANDARDS.
- AC UNITS PROVIDED WITH ECONOMY CYCLE DAMPERS SHALL HAVE DAMPERS SET UP TO CLOSE AUTOMATICALLY ON FAN SHUTDOWN.
- PROVIDE MANUAL VOLUME DAMPERS AND BACKDRAFT DAMPERS FOR FRESH AIR INTAKES ON ALL AIR HANDLING EQUIPMENT AND EXHAUST FANS SERVING CONDITIONED SPACES. EXCEPTION: EQUIPMENT WITH FACTORY ECONOMIZERS.
- ALL FRESH AIR INTAKES SHALL MEET CODE REQUIRED CLEARANCES FROM EXHAUST, FLUE, FUEL BURNING APPLIANCE AND PLUMBING VENT OUTLETS. FOR GAS/ELECTRIC AIR CONDITIONING UNITS WHERE THE CODE REQUIRED CLEARANCES ARE NOT MET, A FACTORY FLUE GAS DEFLECTOR AND EXTENSION SHALL BE USED TO MINIMIZE THESE CLEARANCES. CONTRACTOR SHALL DETERMINE LOCATIONS WHERE REQUIRED PRIOR TO BID. THIS SHALL BE PROVIDED AT NO ADDITIONAL COST.
- ALL AIR HANDLING EQUIPMENT SERVING CONDITIONED SPACES SHALL PROVIDE CONTINUOUS FRESH AIR TO SPACES IN OCCUPIED MODE.
- CONTRACTOR SHALL VERIFY ALL CLEARANCES AND AVAILABLE SPACE FOR DUCTWORK PRIOR TO ORDERING AND / OR FABRICATING MATERIAL.
- CONTRACTOR TO SUBMIT ALL EQUIPMENT, DUCTWORK, AIR DISTRIBUTION DEVICES, AND OTHER ACCESSORIES TO THE ENGINEER FOR APPROVAL PRIOR TO ANY ANY ORDERING OF SUCH ITEMS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR COMMISSIONING OF EQUIPMENT AS STIPULATED ON MECH-1-C FORM ON PLANS UNLESS NOTED OTHERWISE.
- PAINT EXPOSED SURFACE, WHETHER OR NOT COLORS ARE DESIGNATED IN SCHEDULES, EXCEPT WHERE A SURFACE OR MATERIAL IS SPECIFICALLY INDICATED NOT TO BE PAINTED OR IS TO REMAIN NATURAL WHERE AN ITEM OR SURFACE IS NOT SPECIFICALLY MENTIONED. PAINT THE SAME AS SIMILAR ADJACENT MATERIALS OR SURFACES. IF COLOR OR FINISH IS NOT DESIGNATED, THE OWNER'S REPRESENTATIVE WILL SELECT FROM STANDARD COLORS OR FINISHES AVAILABLE.

1. PAINTING INCLUDES FIELD PAINTING EXPOSED BARE AND COVERED PIPES AND DUCTS (INCLUDING COLOR CODING), HANGERS, EXPOSED STEEL AND IRON WORK, AND PRIMED METAL SURFACES OF MECHANICAL AND ELECTRICAL EQUIPMENT.
- NOT USED.
- ALL LINE AND LOW VOLTAGE WIRING SHALL BE 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 BODIES HAVING JURISDICTION THEREOF.
- ALL LOW VOLTAGE CONDUIT AND WIRING AS APPLICABLE, INCLUDING FINAL CONNECTIONS, SHALL BE FURNISHED AND INSTALLED BY THE MECHANICAL CONTRACTOR AS INDICATED ON MECHANICAL DRAWINGS OR SPECIFIED IN THE MECHANICAL SECTION OF THE SPECIFICATIONS.
 - ALL LOW VOLTAGE WIRING SHALL BE INSTALLED IN CONDUIT.
 - WHERE THE CONTROLS CONTRACTOR IS RETAINED THEY SHALL BE RESPONSIBLE FOR THE FOLLOWING:
 - FURNISH AND INSTALL ALL 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 FOLLOW ALL SUBMITTAL REQUIREMENTS PER DRAWINGS AND SPECIFICATIONS
 - ALL CONTROL WIRING SHALL BE INSTALLED IN MIN. 3/4" CONDUIT.
- ELECTRICAL CONTRACTOR SHALL PROVIDE REQUIRED RELAY ACCESSORIES FOR CONNECTION OF 120 VOLT, 1 PHASE VENTILATING EQUIPMENT TO 277 VOLT, 1 PHASE LIGHTING AS APPLICABLE.
- NOT USED.
- NOTES:
 - THERMOSTATS THAT ARE PART OF ANY ENERGY MANAGEMENT SYSTEM SHALL FOLLOW CONTROL SPECIFICATIONS AND DRAWING REQUIREMENTS.
 - SHOULD THE LOCATION OF THE THERMOSTAT NOT MEET THE ADA HEIGHT REQUIREMENTS DUE TO OBSTRUCTIONS, THEN AN ALTERNATE LOCATION SHALL BE PROPOSED OR REQUESTED BY CONTRACTOR THAT SHALL BE APPROVED BY THE ENGINEER AND ARCHITECT.
- LINE VOLTAGE THERMOSTATS SHALL BE FURNISHED BY THE MECHANICAL CONTRACTOR AND INSTALLED BY ELECTRICAL CONTRACTOR.
- CONTROLS CONTRACTOR AND AIR BALANCE CONTRACTOR SHALL COORDINATE WORK AND PERFORM NECESSARY TASKS AS REQUIRED TO OBTAIN AIR AND WATER FLOW QUANTITIES FOR SYSTEMS SHOWN HEREIN.
- CONTROLS SHALL BE PROVIDED TO PROVIDE THE MINIMUM RATE OF OUTDOOR AIR REQUIRED BY THE STATE ENERGY REGULATIONS.

AIR DISTRIBUTION

- ALL DUCTWORK SHALL BE SHEET METAL CONSTRUCTED OR SPIRAL, ERECTED, AND TESTED IN ACCORDANCE WITH THE MOST RESTRICTIVE OF LOCAL REGULATIONS, PROCEDURES DETAILED IN THE ASHRAE HANDBOOK OF FUNDAMENTALS, CHAPTER 6 OF UNIFORM MECHANICAL CODE, OR THE APPLICABLE STANDARDS ADOPTED BY THE SHEET METAL AND AIR CONDITIONING CONTRACTORS NATIONAL ASSOCIATION.
- ALL FLEXIBLE DUCTWORK SHALL NOT EXCEED FIVE FEET IN LENGTH TO RESPECTIVE DIFFUSERS, GRILLES, AND REGISTERS, OR OTHER AIR DEVICES.
- PROVIDE SEISMIC RESTRAINTS TO ALL DUCTWORK, PIPE, AND EQUIPMENT SUPPORTS IN ACCORDANCE WITH THE LATEST SMACNA GUIDELINES FOR SEISMIC RESTRAINTS OF MECHANICAL SYSTEMS. SUSPENDED EQUIPMENT SHALL BE PROVIDED WITH SEISMIC ANCHORAGE AND ISOLATION SUPPORTS.
- ALL DUCTS TURNS IN SUPPLY, RETURN, AND EXHAUST DUCTS SHALL HAVE TURNING VANES UNLESS OTHERWISE NOTED.
- ALL INSULATION SHALL HAVE A FLAME SPREAD OF NOT MORE THAN 25 AND A SMOKE DENSITY NOT EXCEEDING 50.
- MANUAL VOLUME DAMPERS SHALL BE PROVIDED IN ALL DUCT BRANCHES TO INDIVIDUAL DIFFUSERS, GRILLES AND REGISTERS, AS WELL AS FRESH AIR INTAKE DUCTS. DAMPERS SHALL BE LOCATED AT THE BRANCH DUCT LOCATIONS. THE MECHANICAL CONTRACTOR SHALL COORDINATE LOCATIONS OF DAMPERS WITH THE AIR BALANCE CONTRACTOR PRIOR TO BID, SO THEY ARE ACCESSIBLE PRIOR TO INSTALLATION. IN LOCATIONS WHERE THESE DAMPERS ARE INACCESSIBLE, CABLE OPERATED ADJUSTMENT CONTROLS SHALL BE PROVIDED AT NO ADDITIONAL COST. OPPOSED BLADE DAMPERS SHALL NOT BE PERMITTED UNLESS NOTED OTHERWISE.
- DUCTWORK HANDLING CONDITIONED AIR SHALL BE INSULATED OR LINED AS INDICATED ON DRAWINGS. SUPPLY AND RETURN DUCT INSULATION SHALL BE MIN 3" THICK, 3/4 LB./CUBIC FT. DENSITY AND HAVE A MIN VALUE OF R-8 WHERE LOCATED IN ONE OR MORE OF THE FOLLOWING SPACES:
 - OUTDOORS, OR
 - IN A SPACE BETWEEN THE ROOF AND AN INSULATED CEILING, OR
 - IN A SPACE DIRECTLY UNDER A ROOF WITH FIXED VENTS OR OPENINGS TO THE OUTSIDE OR UNCONDITIONED SPACES, OR
 - IN AN UNCONDITIONED CRAWLSPACE, OR
 - IN OTHER UNCONDITIONED SPACES

PER 2016 C.E.C., OTHERWISE PROVIDE R-8.0 WHEN LOCATED IN CONDITIONED ATTIC SPACES ABOVE CEILING. ALL DUCTWORK EXPOSED ON ROOF SHALL BE INTERNALLY LINED WITH 1/2" THICK, 1.5 LB./CUBIC FT. DENSITY DUCT LINER UNLESS OTHERWISE INDICATED OR SPECIFIED. ALL DUCT SIZES ARE SHEET METAL SIZES. ALL DUCT JOINTS SHALL BE SEALED PER C.M.C. CHAPTER 6 REQUIREMENTS. PROVIDE PIPING AND DUCT INSULATION IN ACCORDANCE WITH THE LATEST STANDARDS OF THE CALIFORNIA ENERGY COMMISSION.
- AUTOMATIC FIRE DAMPER REQUIREMENTS ARE AS FOLLOWS:
 - PROVIDE AUTOMATIC FIRE DAMPERS AT ALL PENETRATIONS OF FIRE-RATED CEILINGS AND WALLS THROUGHOUT. CONTRACTOR SHALL COORDINATE FIRE-RATED AREAS WITH THE ARCHITECTURAL DRAWINGS AND OTHER TRADES PRIOR TO INSTALL AND SHALL NOTIFY PERTINENT PARTIES PRIOR TO ANY WORK PERFORMED IN THESE AREAS. IN ADDITION, CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE PROPER ACCESS FOR DAMPERS INSTALLED. THE DAMPER FIRE RATING SHALL BE COMPATIBLE WITH THE CEILING/WALL RATING.
 - LOCATION OF FIRE-RATED CEILINGS AND WALLS ARE AS INDICATED ON THE ARCHITECTURAL DRAWINGS.
 - FIRE AND / OR SMOKE DAMPER(S) SHALL BE PROVIDED AS REQUIRED BY THE LATEST CALIFORNIA BUILDING CODE.
 - CONTRACTOR SHALL FURNISH FLUSH MOUNTED FIRE AND / OR SMOKE DAMPERS, SO THAT THAT DAMPER DO NOT EXTEND PASS WALLS, FOR AREAS WITHOUT CEILINGS FOR QUALITY WORKMANSHIP.
- NOT USED.
- ALL DUCT WORK PASSING THROUGH FIRE RATED CORRIDORS AND LOBBIES SHALL BE MIN. 26 GAGE SHEET METAL CONSTRUCTION.
- ALL DUCTWORK, PIPING, CONDUIT, & ETC. PENETRATING FIRE RATED CONSTRUCTION SHALL HAVE APPROVED FIRE STOPPING.
- CONTRACTOR SHALL STUDY COMPLETELY AND THOROUGHLY THE DESIGN OF THE ENTIRE AIR CONDITIONING SYSTEM, AND VERIFY THE CONSTRUCTABILITY WITH OTHER TRADES PRIOR TO BID. NOTIFY THE ARCHITECT AND ENGINEER IMMEDIATELY IF THERE IS A CONFLICT. ALL CONSTRUCTABILITY ISSUES ARISE AFTER BID SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. NO EXCEPTION.
- UNLESS SPECIFICALLY SHOWN ON THESE PLANS NO STRUCTURAL MEMBERS SHALL BE CUT, DRILLED NOR NOTCHED WITHOUT PRIOR WRITTEN AUTHORIZATION FROM THE STRUCTURAL ENGINEER AND THE DISTRICT STRUCTURAL ENGINEER FROM THE DIVISION OF THE STATE ARCHITECT.

IDENTIFICATION STAMP
 DIV. OF THE STATE ARCHITECT
 APP. 03-119660 INC. REVIEWED FOR
 SS FLS ACS
 DATE: 10/25/2019



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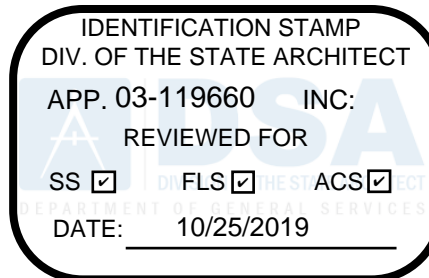
HVAC ADDITIONS TO
 MUSIC BLDG.
 COMPTON COMMUNITY
 COLLEGE DISTRICT
 COMPTON COLLEGE
 1111 E. ARTESIA BLVD.
 COMPTON, CA. 90221

NO	DATE	BY	DESCRIPTION

REVISIONS			
DRAWN: IZ	CHECKED: IP		
DATE: 8/31/2018	SCALE: AS NOTED		
PROJECT NUMBER:	17-302		

MECHANICAL GENERAL NOTES, LEGEND

DRAWING NUMBER : M0.1



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HVAC ADDITIONS TO
MUSIC BLDG.
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COLLEGE DISTRICT
COMPTON COLLEGE
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COMPTON, CA. 90221

PACKAGED HEAT PUMP UNIT SCHEDULE (WALL INSTALLED) - MUSIC BUILDING

SYMBOL	MANUFACTURER & MODEL	LOCATION	AREA SERVED	NOMINAL TONNAGE	CFM	EXT. S.P.	SUPPLY FAN HP	OSA CFM	COOLING			HEATING		ELECTRICAL								WEIGHT		NOTES	ANCHORAGE DETAIL
									TOTAL (mth)	SENSIBLE (mth)	IEER	CAPACITY (mth)	COP	V	PH	HZ	MCA	MOCP	FLA	LRA	CURB	TOTAL			
HP-Y1	BAR W48HA-A	WALL BUILDING "Y"	CLASSROOM Y-	4.0	1,600	0.3	1/2	470	43.9	34.5	10.0	42.5	3.17	208	1	60	35	50			551	-	551	1,2, 3, 4, 5, 6, 7, 8, 9	8 S-4
HP-Y2	BAR W48HA-A	WALL BUILDING "Y"	CLASSROOM Y-	4.0	1,600	0.3	1/2	470	43.9	34.5	10.0	42.5	3.17	208	1	60	35	50	22.3	117	551	-	551	1,2, 3, 4, 5, 6, 7, 8, 9	8 S-4
HP-Y3	BAR W48HA-A	WALL BUILDING "Y"	CLASSROOM Y-	4.0	1,600	0.3	1/2	470	43.9	34.5	10.0	42.5	3.17	208	1	60	35	50	22.3	117	551	-	551	1,2, 3, 4, 5, 6, 7, 8, 9	8 S-4

- NOTES:
- HORIZONTAL DISCHARGE, WALL MOUNTED HEAT PUMP WITH OUTSIDE AIR AND BAROMETRIC RELIEF HOOD, TIME GUARD II CONTROL CIRCUIT, LOW AMBIENT KIT AND CRANKCASE HEATER
 - PROVIDE WITH R410A REFRIGERANT.
 - PROVIDE GLASS FIBER DISPOSABLE MEDIA IN METAL FRAMES, SIZED PER MANUFACTURER WITH MINIMUM ARRESTANCE ACCORDING TO ASHRAE 52.1, AND A MINIMUM EFFICIENCY REPORTING VALUE (MERV) ACCORDING TO ASHRAE 52.2
 - PROVIDE FIELD INSTALLED DISCONNECT SWITCH. SEE ELECTRICAL DRAWINGS.
 - PROVIDE FAN STATUS AND PRESSURE DIFFERENTIAL SENSOR FILTER STATUS.
 - AREAS WITH UNIT SUPPLYING MORE THAN 2,000 CFM SHALL BE EQUIPPED WITH TOTAL COVERAGE DETECTION SYSTEM, ABLE TO SHUT DOWN UNIT(S) WITHIN COVERAGE AREA AND SEND SIGNAL TO BUILDING FIRE ALARM PANEL PER 2016 CMC, SECTION 608. SEE FIRE ALARM DRAWINGS FOR COMPLETE WIRING AND UNIT SHUT DOWN SEQUENCE.
 - PROVIDED WITH REFRIGERATION SERVICE PORTS, FITTED WITH LOCKING TYPE TAMPER RESISTANT CAP OR SHALL BE PROTECTED FROM UNAUTHORIZED ACCESS IN ACCORDANCE WITH 2016 CMC, SECTION 1105.11.
 - PROVIDE AUTOMATED LOGIC CONTROLLER. COORDINATE WITH CONTROLS CONTRACTOR.
 - WALL MOUNT HEAT PUMP WITH OUTSIDE AIR AND BAROMETRIC RELIEF HOOD, LOW AMBIENT KIT AND CRANKCASE HEATER.

INDOOR FAN COIL UNIT SCHEDULE - MUSIC BUILDING

SYMBOL	SERVICE	MANUFACTURER	MODEL	CFM	EXT. S.P."	MOTOR HP	ELECTRICAL			MCA	MOCP	OSA CFM	FILTERS	WGT. LBS.	REMARKS	ANCHORAGE DETAIL
							VOLT	PH	HZ							
FAU-4	SEE PLAN	CARRIER	FV4C	1600	0.8	3/4	208/230	1	60	8.5	15	-	FILTER BANK, MERV 8	207	INTERLOCK WITH CU-4. PROVIDE AUXILIARY CONDENSATE OVERFLOW SAFETY SWITCH 'LITTLE GIANT' MODEL ACS-5 WITH AUDIBLE ALARM FOR CONDENSATE DRAIN LINE.	3 M2.1
FAU-5	SEE PLAN	CARRIER	FV4C	1600	1.0	3/4	208/230	1	60	8.5	15	-	FILTER BANK, MERV 8	207	INTERLOCK WITH CU-5. PROVIDE AUXILIARY CONDENSATE OVERFLOW SAFETY SWITCH 'LITTLE GIANT' MODEL ACS-5 WITH AUDIBLE ALARM FOR CONDENSATE DRAIN LINE.	3 M2.1
FAU-6	SEE PLAN	CARRIER	40RUQ	4000	1.2	3.7	208/230	3	60	14	20	-	FILTER BANK, MERV 8	427	INTERLOCK WITH CU-6. PROVIDE AUXILIARY CONDENSATE OVERFLOW SAFETY SWITCH 'LITTLE GIANT' MODEL ACS-5 WITH AUDIBLE ALARM FOR CONDENSATE DRAIN LINE.	3 M2.1

OUTDOOR HEAT PUMP UNIT SCHEDULE - MUSIC BUILDING

SYMBOL	SERVICE	MANUFACTURER	MODEL	COOLING		HEATING		ELECTRICAL			COMP. RLA	COMP. LRA	COND. FAN FLA	MCA	MOCP	WGT. LBS.	REMARKS	ANCHORAGE DETAIL		
				TOTAL	SEER/EER	INPUT	OUTPUT	EFF.	V	P									HZ	
CU-4	SEE PLAN	CARRIER	25HHA448	45.34 MBTUH	15.0 / 12.0	-	47.05 MBTUH	3.96 COP	208/230	3	60	21.8	117.0	1.45	28.8	50	276	INTERLOCK WITH FAU-4. PROVIDE WITH 6" CONCRETE EQUIPMENT PAD AND MOUNTING BRACKETS. REFRIGERANT PIPES SHALL BE SIZED AND INSTALLED PER MANUFACTURER'S RECOMMENDATION BASED ON TOTAL LENGTH BETWEEN INDOOR AND OUTDOOR UNIT.	2 S-3	5 S-3
CU-5	SEE PLAN	CARRIER	25HHA448	45.34 MBTUH	15.0 / 12.0	-	47.05 MBTUH	3.96 COP	208/230	3	60	21.8	117.0	1.45	28.8	50	276	INTERLOCK WITH FAU-5. PROVIDE WITH 6" CONCRETE EQUIPMENT PAD AND MOUNTING BRACKETS. REFRIGERANT PIPES SHALL BE SIZED AND INSTALLED PER MANUFACTURER'S RECOMMENDATION BASED ON TOTAL LENGTH BETWEEN INDOOR AND OUTDOOR UNIT.	2 S-3	5 S-3
CU-6	SEE PLAN	CARRIER	38AUQ012	119.00 MBTUH	13.8 / 11.0	-	104.48 MBTUH	3.3 COP	208/230	3	60	15.9	110	-	39	50	575	INTERLOCK WITH FAU-6. PROVIDE WITH 6" CONCRETE EQUIPMENT PAD AND MOUNTING BRACKETS. REFRIGERANT PIPES SHALL BE SIZED AND INSTALLED PER MANUFACTURER'S RECOMMENDATION BASED ON TOTAL LENGTH BETWEEN INDOOR AND OUTDOOR UNIT.	2 S-3	5 S-3

- NOTES:
- HEAT PUMP SPLIT SYSTEM WITH R410A REFRIGERANT.
 - PROVIDE WITH FACTORY INSTALLED FILTER DRIER, HIGH-LOW PRESSURE SWITCH, TIME GUARD, CRANKCASE HEATER, SOLENOID VALVE, SIGHT GLASS, EXPANSION VALVE AND EQUALIZER LINE.
 - PROVIDE GLASS FIBER DISPOSABLE MEDIA IN METAL FRAMES, SIZED PER MANUFACTURER WITH MINIMUM ARRESTANCE ACCORDING TO ASHRAE 52.1, AND A MINIMUM EFFICIENCY REPORTING VALUE (MERV) ACCORDING TO ASHRAE 52.2
 - FILTER KIT CONVERSION.
 - PROVIDE FIELD INSTALLED DISCONNECT SWITCH. SEE ELECTRICAL DRAWINGS.
 - UNITS SHALL BE EQUIPPED WITH TOTAL COVERAGE SMOKE DETECTION SYSTEM, ABLE TO SHUT DOWN UNIT(S) WITHIN COVERAGE AREA AND SEND SIGNAL TO BUILDING FIRE ALARM PANEL PER 2016 CMC, SECTION 608. SEE FIRE ALARM DRAWINGS FOR COMPLETE WIRING AND UNIT SHUT DOWN SEQUENCE.
 - HORIZONTAL SUCTION LINES TO BE PITCHED TOWARD COMPRESSOR MINIMUM 1/2" FOR EACH 10 FEET. PROVIDE 1" FOAM INSULATION TO ALL SUCTION PIPES ARE REQUIRED. PROVIDE LONG TURN ELLS ON ALL REFRIGERANT PIPING TURNS. PROVIDE SIGHT GLASS AT CONDENSING UNIT AND PRESSURE TAPS AT FAN COIL UNIT. FOR EXACT INSTALLATION SEE MANUFACTURER'S RECOMMENDED PIPING DETAIL.
 - PROVIDED WITH REFRIGERATION SERVICE PORTS, FITTED WITH LOCKING TYPE TAMPER RESISTANT CAP OR SHALL BE PROTECTED FROM UNAUTHORIZED ACCESS IN ACCORDANCE WITH 2016 CMC, SECTION 1105.11.

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NO	DATE	BY	DESCRIPTION
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REVISIONS

DRAWN: IZ CHECKED: IP

DATE: 8/31/2018 SCALE: AS NOTED

PROJECT NUMBER: 17-302

MECHANICAL SCHEDULES

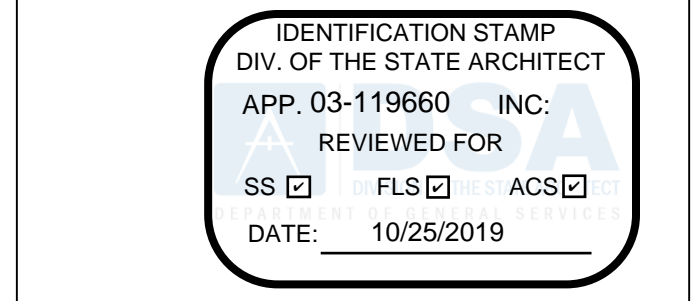
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OFFICES - VRF SPLIT SYSTEM UNIT SCHEDULE - FAN COIL (INDOOR) - MUSIC BUILDING															
SYMBOL	SERVICE	MANUFACTURER	MODEL	CFM	EXT. S.P.**	MOTOR HP	ELECTRICAL			MCA	MOCP	OSA CFM	WGT. LBS.	REMARKS	ANCHORAGE DETAIL
							VOLT	PH.	HZ						
FC-1.1	OFFICE #1	LG	ARNU073SEL2	163	0.3	1/2	208	1	60	13.4	15	-	20	PROVIDE WITH PROGRAMMABLE DIGITAL THERMOSTAT, MOUNTING BRACKETS, R410, CONDENSATE OVERFLOW ACCESSORIES.	3 S-4
FC-1.2	OFFICE #2	LG	ARNU073SEL2	163	0.5	1/2	208	1	60	13.4	15	-	20	PROVIDE WITH PROGRAMMABLE DIGITAL THERMOSTAT, MOUNTING BRACKETS, R410, CONDENSATE OVERFLOW ACCESSORIES.	3 S-4
FC-1.3	OFFICE #3	LG	ARNU073SEL2	200	0.3	1/2	208	1	60	13.4	15	-	20	PROVIDE WITH PROGRAMMABLE DIGITAL THERMOSTAT, MOUNTING BRACKETS, R410, CONDENSATE OVERFLOW ACCESSORIES.	3 S-4
FC-3.1	OFFICE #4	LG	ARNU073SEL2	200	0.3	1/2	208	1	60	13.4	15	-	20	PROVIDE WITH PROGRAMMABLE DIGITAL THERMOSTAT, MOUNTING BRACKETS, R410, CONDENSATE OVERFLOW ACCESSORIES.	3 S-4
FC-3.2	OFFICE #5	LG	ARNU073SEL2	200	0.3	1/2	208	1	60	13.4	15	-	20	PROVIDE WITH PROGRAMMABLE DIGITAL THERMOSTAT, MOUNTING BRACKETS, R410, CONDENSATE OVERFLOW ACCESSORIES.	3 S-4
FC-3.3	OFFICE #6	LG	ARNU073SEL2	200	0.3	1/2	208	1	60	13.4	15	-	20	PROVIDE WITH PROGRAMMABLE DIGITAL THERMOSTAT, MOUNTING BRACKETS, R410, CONDENSATE OVERFLOW ACCESSORIES.	3 S-4
FC-3.4	OFFICE #7	LG	ARNU073SEL2	200	0.3	1/2	208	1	60	13.4	15	-	20	PROVIDE WITH PROGRAMMABLE DIGITAL THERMOSTAT, MOUNTING BRACKETS, R410, CONDENSATE OVERFLOW ACCESSORIES.	3 S-4
FC-3.5	OFFICE #8	LG	ARNU073SEL2	200	0.3	1/2	208	1	60	13.4	15	-	20	PROVIDE WITH PROGRAMMABLE DIGITAL THERMOSTAT, MOUNTING BRACKETS, R410, CONDENSATE OVERFLOW ACCESSORIES.	3 S-4
FC-3.6	OFFICE #9	LG	ARNU073SEL2	200	0.3	1/2	208	1	60	13.4	15	-	20	PROVIDE WITH PROGRAMMABLE DIGITAL THERMOSTAT, MOUNTING BRACKETS, R410, CONDENSATE OVERFLOW ACCESSORIES.	3 S-4

OFFICES - VRF SPLIT SYSTEM UNIT SCHEDULE - CONDENSING (OUTDOOR) - MUSIC BUILDING													
SYMBOL	SERVICE	MANUFACTURER	MODEL	NOMINAL TONS	EER	IEER	ELECTRICAL				WGT. LBS.	REMARKS	ANCHORAGE DETAIL
							POWER	FLA	MOCP	MOCP			
CU-1	FC-1.1, FC-1.2, FC-1.3	LG MULTI V	ARUB024GSS4	2	10.8	20	208-230 / 60 / 1	19.1	23.2	35	540	PROVIDE COMPLETE WITH CONCRETE EQUIPMENT PAD AND MOUNTING BRACKETS. REFRIGERANT PIPES SHALL BE SIZED AND INSTALLED PER MANUFACTURER'S RECOMMENDATION BASED ON TOTAL LENGTH BETWEEN INDOOR AND OUTDOOR UNIT.	3 S-3 5 S-3
CU-3	FC-3.1, FC-3.2, FC-3.3, FC-3.4, FC-3.5, FC-3.6	LG MULTI V	ARUB060GSS4	5	10.8	20	208-230 / 60 / 1	28.4	31.6	40	628	PROVIDE COMPLETE WITH CONCRETE EQUIPMENT PAD AND MOUNTING BRACKETS. REFRIGERANT PIPES SHALL BE SIZED AND INSTALLED PER MANUFACTURER'S RECOMMENDATION BASED ON TOTAL LENGTH BETWEEN INDOOR AND OUTDOOR UNIT.	1 S-3 5 S-3

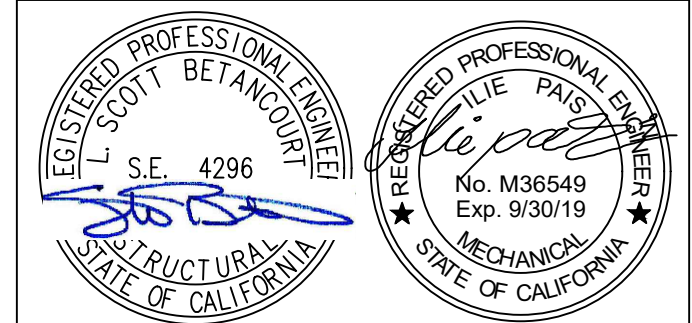
DATA ROOM - SPLIT SYSTEM UNIT SCHEDULE - FAN COIL (INDOOR) - MUSIC BUILDING															
SYMBOL	SERVICE	MANUFACTURER	MODEL	CFM	EXT. S.P.**	MOTOR HP	ELECTRICAL			MCA	MOCP	OSA CFM	WGT. LBS.	REMARKS	ANCHORAGE DETAIL
							VOLT	PH.	HZ						
FC-2	DATA ROOM	LG MULTI V S	ARNU123SJ44	200	0.3	1/2	208	1	60	13.4	15	-	20	PROVIDE WITH PROGRAMMABLE DIGITAL THERMOSTAT, MOUNTING BRACKETS, R410, TXV, SECONDARY DRAIN PAN AND CONDENSATE OVERFLOW SAFETY SWITCH, SLIM DUCT CONNECTOR KIT.	3 S-4

DATA ROOM - SPLIT SYSTEM UNIT SCHEDULE - CONDENSING (OUTDOOR) - MUSIC BUILDING													
SYMBOL	SERVICE	MANUFACTURER	MODEL	NOMINAL TONS	EER	IEER	ELECTRICAL				WGT. LBS.	REMARKS	ANCHORAGE DETAIL
							POWER	FLA	MOCP	MOCP			
CU-2	FC-2	LG MULTI V S	ARUN024GSS4	2	10.8	20	208-230 / 60 / 1	19.1	23.2	35	540	PROVIDE COMPLETE WITH CONCRETE EQUIPMENT PAD AND MOUNTING BRACKETS. REFRIGERANT PIPES SHALL BE SIZED AND INSTALLED PER MANUFACTURER'S RECOMMENDATION BASED ON TOTAL LENGTH BETWEEN INDOOR AND OUTDOOR UNIT.	3 S-3 5 S-3



RFHC
RF Hawkins Consulting
 2357 Naples Avenue
 Mentone, CA 92359-9635
 Tel: (909) 522-4518
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CONSULTANT
 pais consulting group
 18 Pine Hill Lane
 Ladera Ranch, CA 92694
 phone: 949.610.9675



HVAC ADDITIONS TO MUSIC BLDG.
 COMPTON COMMUNITY COLLEGE DISTRICT
 COMPTON COLLEGE
 1111 E. ARTESIA BLVD.
 COMPTON, CA. 90221

NO	DATE	BY	DESCRIPTION

REVISIONS
 DRAWN: IZ CHECKED: IP
 DATE: 8/31/2018 SCALE: AS NOTED
 PROJECT NUMBER: 17-302

MECHANICAL SCHEDULES

DRAWING NUMBER : **M0.3**

STATE OF CALIFORNIA
MECHANICAL SYSTEMS
 CEC-NRCC-MCH-01-E (Revised 01/16)
 CERTIFICATE OF COMPLIANCE
 Mechanical Systems
 Project Name: HVAC ADDITIONS TO CAFETERIA BUILDING 'Y'
 Date Prepared: 01.16.2019
 NRCC-MCH-01-E
 (Page 3 of 4)

CALIFORNIA ENERGY COMMISSION

C. MECHANICAL HVAC ACCEPTANCE FORMS (check box for required compliance documents)

Test Performed By:
Designer:
 This compliance document is to be used by the designer and attached to the plans. Listed below are all the acceptance tests for HVAC systems. The designer is required to check the applicable boxes for all acceptance tests that apply and list all equipment that requires an acceptance test. All equipment of the same type that requires a test, list the equipment description and the number of systems.
Installing Contractor:
 The contractor who installed the equipment is responsible to either conduct the acceptance test themselves or have a qualified entity run the test for them. If more than one person has responsibility for the acceptance testing, each person shall sign and submit the Certificate of Acceptance applicable to the portion of the construction or installation for which they are responsible.
Enforcement Agency:
 Plancheck - The NRCC-MCH-01-E compliance document is not considered a completed document and is not to be accepted by the building department unless the correct boxes are checked. Inspector - Before occupancy permit is granted all newly installed process systems must be tested to ensure proper operations.

Test Description	MCH-12-A	MCH-13-A	MCH-14-A	MCH-15-A	MCH-16-A	MCH-17-A	MCH-18-A	
Equipment Requiring Testing or Verification	# of Units	Fault Detection & Diagnostics for DX Units	Automatic Fault Detection & Diagnostics for Air & Zone	Distributed Energy Storage DX AC Systems	Thermal Energy Storage (TES) Systems	Supply Air Temperature Reset Controls	Condenser Water Reset Controls	ECMS
HP-Y1	1	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
HP-Y2	1	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
HP-Y3	1	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
FAU-4/CU-4	1	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
FAU-5/CU-5	1	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
FAU-6/CU-6	1	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

CA Building Energy Efficiency Standards - 2016 Nonresidential Compliance January 2016

STATE OF CALIFORNIA
MECHANICAL SYSTEMS
 CEC-NRCC-MCH-01-E (Revised 01/16)
 CERTIFICATE OF COMPLIANCE
 Mechanical Systems
 Project Name: HVAC ADDITIONS TO CAFETERIA BUILDING 'Y'
 Date Prepared: 01.16.2019
 NRCC-MCH-01-E
 (Page 1 of 4)

CALIFORNIA ENERGY COMMISSION

A. MECHANICAL COMPLIANCE DOCUMENTS & WORKSHEETS (check box if worksheet is included)

*For detailed instructions on the use of this and all Energy Efficiency Standards compliance forms, refer to the 2016 Nonresidential Manual
 Note: The Enforcement Agency may require all forms to be incorporated onto the building plans.*

YES	NO	Comp. Doc./Worksheet #	Title
<input checked="" type="checkbox"/>	<input type="checkbox"/>	NRCC-MCH-01-E (Part 1 of 3)	Certificate of Compliance, Declaration. Required on plans for all submittals.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	NRCC-MCH-01-E (Part 2 of 3)	Certificate of Compliance, Required Acceptance Tests (MCH-02-A to 11-A). Required on plans for all submittals.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	NRCC-MCH-01-E (Part 3 of 3)	Certificate of Compliance, Required Acceptance Tests (MCH-12-A to 18-A). Required on plans where applicable.
<input type="checkbox"/>	<input checked="" type="checkbox"/>	NRCC-MCH-02-E (Part 1 of 2)	Mechanical Dry Equipment Summary is required for all submittals with Central Air Systems. It is optional on plans.
<input type="checkbox"/>	<input checked="" type="checkbox"/>	NRCC-MCH-02-E (Part 2 of 2)	Mechanical Wet Equipment Summary is required for all submittals with chilled water, hot water or condenser water systems. It is optional on plans.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	NRCC-MCH-03-E	Mechanical Ventilation and Reheat is required for all submittals with multiple zone heating and cooling systems. It is optional on plans.
<input type="checkbox"/>	<input checked="" type="checkbox"/>	NRCC-MCH-07-E (Part 1 of 2)	Power Consumption of Fans. Required on plans where applicable
<input type="checkbox"/>	<input checked="" type="checkbox"/>	NRCC-MCH-07-E (Part 2 of 2)	Power Consumption of Fans, Declaration. Required on plans where applicable

CA Building Energy Efficiency Standards - 2016 Nonresidential Compliance January 2016

STATE OF CALIFORNIA
MECHANICAL SYSTEMS
 CEC-NRCC-MCH-01-E (Revised 01/16)
 CERTIFICATE OF COMPLIANCE
 Mechanical Systems
 Project Name: HVAC ADDITIONS TO CAFETERIA BUILDING 'Q'
 Date Prepared: 01.16.2019
 NRCC-MCH-01-E
 (Page 4 of 4)

CALIFORNIA ENERGY COMMISSION

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

1. I certify that this Certificate of Compliance documentation is accurate and complete.

Documentation Author Name: ILIE PAIS
 Documentation Author Signature: *Ilie Pais*
 Signature Date: 01.16.2019
 Address: 2357 NAPLES AVENUE
 CEAT/HERS Certification Identification (if applicable):
 City/State/Zip: MENTONE, CA 92359-9635
 Phone: (949) 610-9675

RESPONSIBLE PERSON'S DECLARATION STATEMENT

I certify the following under penalty of perjury, under the laws of the State of California:

- The information provided on this Certificate of Compliance is true and correct.
- I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible designer).
- The energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations.
- The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.
- I will ensure that a completed signed copy of this Certificate of Compliance shall be made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections. I understand that a completed signed copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy.

Responsible Designer Name: ILIE PAIS
 Responsible Designer Signature: *Ilie Pais*
 Date Signed: 01.16.2019
 Company: RFHC
 License: M-36549
 Address: 2357 NAPLES AVENUE
 City/State/Zip: MENTONE, CA 92359-9635
 Phone: (949) 610-9675

CA Building Energy Efficiency Standards - 2016 Nonresidential Compliance January 2016

STATE OF CALIFORNIA
MECHANICAL SYSTEMS
 CEC-NRCC-MCH-01-E (Revised 01/16)
 CERTIFICATE OF COMPLIANCE
 Mechanical Systems
 Project Name: HVAC ADDITIONS TO CAFETERIA BUILDING 'Y'
 Date Prepared: 01.16.2019
 NRCC-MCH-01-E
 (Page 2 of 4)

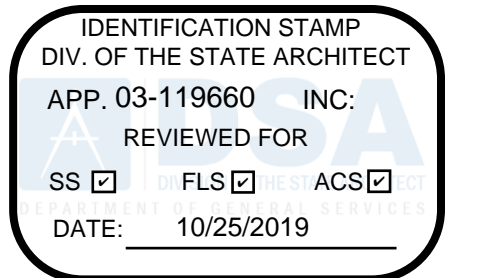
CALIFORNIA ENERGY COMMISSION

B. MECHANICAL HVAC ACCEPTANCE FORMS (check box for required compliance documents)

Test Performed By:
Designer:
 This compliance document is to be used by the designer and attached to the plans. Listed below are all the acceptance tests for HVAC systems. The designer is required to check the applicable boxes for all acceptance tests that apply and list all equipment that requires an acceptance test. All equipment of the same type that requires a test, list the equipment description and the number of systems.
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Enforcement Agency:
 Plancheck - The NRCC-MCH-01-E compliance document is not considered a completed document and is not to be accepted by the building department unless the correct boxes are checked. Inspector - Before occupancy permit is granted all newly installed process systems must be tested to ensure proper operations.

Test Description	MCH-02-A	MCH-03-A	MCH-04-A	MCH-05-A	MCH-06-A	MCH-07-A	MCH-08-A	MCH-09-A	MCH-10-A	MCH-11-A	
Equipment Requiring Testing or Verification <td># of Units <td>Outdoor Air <td>Single Zone Unitary <td>Air Distribution Ducts <td>Economizer Controls <td>Demand Control Ventilation (DCV) <td>Supply Fan VAV <td>Valve Leakage Test <td>Supply Water Temp. Reset <td>Hydronic System Variable Flow Control <td>Automatic Demand Shed Control </td></td></td></td></td></td></td></td></td></td></td>	# of Units <td>Outdoor Air <td>Single Zone Unitary <td>Air Distribution Ducts <td>Economizer Controls <td>Demand Control Ventilation (DCV) <td>Supply Fan VAV <td>Valve Leakage Test <td>Supply Water Temp. Reset <td>Hydronic System Variable Flow Control <td>Automatic Demand Shed Control </td></td></td></td></td></td></td></td></td></td>	Outdoor Air <td>Single Zone Unitary <td>Air Distribution Ducts <td>Economizer Controls <td>Demand Control Ventilation (DCV) <td>Supply Fan VAV <td>Valve Leakage Test <td>Supply Water Temp. Reset <td>Hydronic System Variable Flow Control <td>Automatic Demand Shed Control </td></td></td></td></td></td></td></td></td>	Single Zone Unitary <td>Air Distribution Ducts <td>Economizer Controls <td>Demand Control Ventilation (DCV) <td>Supply Fan VAV <td>Valve Leakage Test <td>Supply Water Temp. Reset <td>Hydronic System Variable Flow Control <td>Automatic Demand Shed Control </td></td></td></td></td></td></td></td>	Air Distribution Ducts <td>Economizer Controls <td>Demand Control Ventilation (DCV) <td>Supply Fan VAV <td>Valve Leakage Test <td>Supply Water Temp. Reset <td>Hydronic System Variable Flow Control <td>Automatic Demand Shed Control </td></td></td></td></td></td></td>	Economizer Controls <td>Demand Control Ventilation (DCV) <td>Supply Fan VAV <td>Valve Leakage Test <td>Supply Water Temp. Reset <td>Hydronic System Variable Flow Control <td>Automatic Demand Shed Control </td></td></td></td></td></td>	Demand Control Ventilation (DCV) <td>Supply Fan VAV <td>Valve Leakage Test <td>Supply Water Temp. Reset <td>Hydronic System Variable Flow Control <td>Automatic Demand Shed Control </td></td></td></td></td>	Supply Fan VAV <td>Valve Leakage Test <td>Supply Water Temp. Reset <td>Hydronic System Variable Flow Control <td>Automatic Demand Shed Control </td></td></td></td>	Valve Leakage Test <td>Supply Water Temp. Reset <td>Hydronic System Variable Flow Control <td>Automatic Demand Shed Control </td></td></td>	Supply Water Temp. Reset <td>Hydronic System Variable Flow Control <td>Automatic Demand Shed Control </td></td>	Hydronic System Variable Flow Control <td>Automatic Demand Shed Control </td>	Automatic Demand Shed Control
HP-K1	1	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
HP-K2	1	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
HP-K3	1	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
FAU-4/CU-4	1	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
FAU-5/CU-5	1	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
FAU-6/CU-6	1	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

CA Building Energy Efficiency Standards - 2016 Nonresidential Compliance January 2016



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 phone: 949.610.9675



HVAC ADDITIONS TO
 MUSIC BLDG.
 COMPTON COMMUNITY
 COLLEGE DISTRICT
 COMPTON COLLEGE
 1111 E. ARTESIA BLVD.
 COMPTON, CA. 90221

NO	DATE	BY	DESCRIPTION

REVISIONS

DRAWN: IZ	CHECKED: IP
DATE: 8/31/2018	SCALE: AS NOTED
PROJECT NUMBER: 17-302	

**BUILDING 'Y'
 TITLE-24
 COMPLIANCE**

DRAWING NUMBER : **M0.4**

STATE OF CALIFORNIA
HVAC SYSTEM REQUIREMENTS
 CEC-NRCC-MCH-02-E (Revised 06/14)
 CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE
 HVAC Wet System Requirements
 (Page 3 of 3)
 Project Name: **HVAC ADDITIONS TO CAFETERIA BUILDING 'Y'** Date Prepared: **01.16.2019**

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT
 I certify that this Certificate of Compliance documentation is accurate and complete.
 Documentation Author Name: **ILIE PAIS** Signature Date: **01.16.2019**
 Company: **RFHC** Address: **2357 NAPLES AVENUE** City/State/Zip: **MENTONE, CA 92359-9635**

RESPONSIBLE PERSON'S DECLARATION STATEMENT
 I certify the following under penalty of perjury, under the laws of the State of California:
 1. The information provided on this Certificate of Compliance is true and correct.
 2. I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible designer).
 3. The energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations.
 4. The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.
 5. I will ensure that a completed signed copy of this Certificate of Compliance shall be made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections. I understand that a completed signed copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy.

CA Building Energy Efficiency Standards - 2016 Nonresidential Compliance January 2016

STATE OF CALIFORNIA
HVAC DRY & WET SYSTEM REQUIREMENTS
 CEC-NRCC-MCH-02-E (Revised 01/16)
 CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE
 HVAC Dry & Wet System Requirements
 (Page 1 of 3)
 Project Name: **HVAC ADDITIONS TO CAFETERIA BUILDING 'Y'** Date Prepared: **01.16.2019**

A. Equipment Tags and System Description¹ – Dry Systems

	FAU-4/UCU-4	FAU-4/UCU-4	FAU-4/UCU-4
MANDATORY MEASURES	<i>Reference to the Requirements in the Contract Documents²</i>		
Heating Equipment Efficiency ³	110.1 or 110.2(a)	M0.2	M0.2
Cooling Equipment Efficiency ³	110.1 or 110.2(a)	M0.2	M0.2
HVAC or Heat Pump Thermostats	110.2(b), 110.2(c)	Heat Pump	Heat Pump
Furnace Standby Loss Control	110.2(d)	N/A	N/A
Low Leakage AHUs	110.2(f)	N/A	N/A
Ventilation ⁴	120.1(b)	M0.2	M0.2
Demand Control Ventilation ⁵	120.1(c)4	N/A	N/A
Occupant Sensor Ventilation Control ⁶	120.1(c)5, 120.2(e)3	N/A	N/A
Shutoff and Reset Controls ⁷	120.2(e)	N/A	N/A
Outdoor Air and Exhaust Damper Control	120.2(f)	M1.1	M1.1
Isolation Zones	120.2(g)	N/A	N/A
Automatic Demand Shed Controls	120.2(h)	N/A	N/A
Economizer FDD	120.2(i)	N/A	N/A
Duct Insulation	120.4	M0.1	M0.1
PRESCRIPTIVE MEASURES	Equipment is sized in conformance with 140.4(a & b)		
Supply Fan Pressure Control	140.4(c)	N	N
Simultaneous Heat/Cool ⁸	140.4(d)	N	N
Economizer	140.4(e)	N	N
Heat and Cool Air Supply Reset	140.4(f)	N	N
Electric Resistance Heating ⁹	140.4(g)	N	N
Duct Leakage Sealing and Testing ¹⁰	140.4(i)	N	N

Notes:
 1. Provide equipment tags (e.g. AHU 1 to 10) and system description (e.g. Single Duct VAV reheat) as appropriate. Multiple units with common requirements can be grouped together.
 2. Provide references to plans (i.e. Drawing Sheet Numbers) and/or specifications (including Section name/number and relevant paragraphs) where each requirement is specified. Enter "N/A" if the requirement is not applicable to this system.
 3. The referenced plans and specifications must include all of the following information: equipment tag, equipment nominal capacity, Title 24 minimum efficiency requirements, and actual rated equipment efficiencies. Where multiple efficiency requirements are applicable (e.g. full- and part-load) include all. Where appliance standards apply (110.1), identify where equipment is required to be listed per Title 20 1601 et seq.
 4. Identify where the ventilation requirements are documented for each central HVAC system. Include references to both central unit schedules and sequences of operation. If one or more spaces is naturally ventilated identify where this is documented in the plans and specifications. Multiple zone central air systems must also provide a MCH-03-E compliance document.
 5. If one or more spaces has demand controlled ventilation identify where it is specified including the sensor specifications and the sequence of operation.
 6. If one or more space has occupant sensor ventilation control identify where it is specified including the sensor specifications and the sequence of operation.
 7. If the system is DDC identify the sequences for the system start/stop, optimal start, setback (if required) and setup (if required). For all systems identify the specification for the thermostats and time clocks (if applicable).
 8. Identify where the heating, cooling and deadband airflows are scheduled for this system. Include a reference to the specification of the zone controls. Provide a MCH-03-E compliance document.
 9. Enter N/A if there is no electric heating. If the system has electric heating indicate which exception to 140.4(g) applies.
 10. If duct leakage sealing and testing is required, a MCH-04-A compliance document must be submitted.

CA Building Energy Efficiency Standards - 2016 Nonresidential Compliance January 2016

STATE OF CALIFORNIA
HVAC DRY & WET SYSTEM REQUIREMENTS
 CEC-NRCC-MCH-02-E (Revised 01/16)
 CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE
 HVAC Dry & Wet System Requirements
 (Page 1 of 3)
 Project Name: **HVAC ADDITIONS TO CAFETERIA BUILDING 'Y'** Date Prepared: **01.16.2019**

A. Equipment Tags and System Description¹ – Dry Systems

	HP-Y1	HP-Y2	HP-Y3
MANDATORY MEASURES	<i>Reference to the Requirements in the Contract Documents²</i>		
Heating Equipment Efficiency ³	110.1 or 110.2(a)	M0.2	M0.2
Cooling Equipment Efficiency ³	110.1 or 110.2(a)	M0.2	M0.2
HVAC or Heat Pump Thermostats	110.2(b), 110.2(c)	Heat Pump	Heat Pump
Furnace Standby Loss Control	110.2(d)	N/A	N/A
Low Leakage AHUs	110.2(f)	N/A	N/A
Ventilation ⁴	120.1(b)	M0.2	M0.2
Demand Control Ventilation ⁵	120.1(c)4	N/A	N/A
Occupant Sensor Ventilation Control ⁶	120.1(c)5, 120.2(e)3	N/A	N/A
Shutoff and Reset Controls ⁷	120.2(e)	N/A	N/A
Outdoor Air and Exhaust Damper Control	120.2(f)	M1.1	M1.1
Isolation Zones	120.2(g)	N/A	N/A
Automatic Demand Shed Controls	120.2(h)	N/A	N/A
Economizer FDD	120.2(i)	N/A	N/A
Duct Insulation	120.4	M0.1	M0.1
PRESCRIPTIVE MEASURES	Equipment is sized in conformance with 140.4(a & b)		
Supply Fan Pressure Control	140.4(c)	N	N
Simultaneous Heat/Cool ⁸	140.4(d)	N	N
Economizer	140.4(e)	N	N
Heat and Cool Air Supply Reset	140.4(f)	N	N
Electric Resistance Heating ⁹	140.4(g)	N	N
Duct Leakage Sealing and Testing ¹⁰	140.4(i)	N	N

Notes:
 1. Provide equipment tags (e.g. AHU 1 to 10) and system description (e.g. Single Duct VAV reheat) as appropriate. Multiple units with common requirements can be grouped together.
 2. Provide references to plans (i.e. Drawing Sheet Numbers) and/or specifications (including Section name/number and relevant paragraphs) where each requirement is specified. Enter "N/A" if the requirement is not applicable to this system.
 3. The referenced plans and specifications must include all of the following information: equipment tag, equipment nominal capacity, Title 24 minimum efficiency requirements, and actual rated equipment efficiencies. Where multiple efficiency requirements are applicable (e.g. full- and part-load) include all. Where appliance standards apply (110.1), identify where equipment is required to be listed per Title 20 1601 et seq.
 4. Identify where the ventilation requirements are documented for each central HVAC system. Include references to both central unit schedules and sequences of operation. If one or more spaces is naturally ventilated identify where this is documented in the plans and specifications. Multiple zone central air systems must also provide a MCH-03-E compliance document.
 5. If one or more spaces has demand controlled ventilation identify where it is specified including the sensor specifications and the sequence of operation.
 6. If one or more space has occupant sensor ventilation control identify where it is specified including the sensor specifications and the sequence of operation.
 7. If the system is DDC identify the sequences for the system start/stop, optimal start, setback (if required) and setup (if required). For all systems identify the specification for the thermostats and time clocks (if applicable).
 8. Identify where the heating, cooling and deadband airflows are scheduled for this system. Include a reference to the specification of the zone controls. Provide a MCH-03-E compliance document.
 9. Enter N/A if there is no electric heating. If the system has electric heating indicate which exception to 140.4(g) applies.
 10. If duct leakage sealing and testing is required, a MCH-04-A compliance document must be submitted.

CA Building Energy Efficiency Standards - 2016 Nonresidential Compliance January 2016

STATE OF CALIFORNIA
MECHANICAL VENTILATION AND REHEAT
 CEC-NRCC-MCH-03-E (Revised 05/16)
 CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE
 Mechanical Ventilation & Reheat
 (Page 2 of 2)
 Project Name: **HVAC ADDITIONS TO CAFETERIA BUILDING 'Y'** Date Prepared: **01.16.2019**

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT
 I certify that this Certificate of Compliance documentation is accurate and complete.
 Documentation Author Name: **ILIE PAIS** Signature Date: **01.16.2019**
 Company: **RFHC** Address: **2357 NAPLES AVENUE** City/State/Zip: **MENTONE, CA 92359-9635**

RESPONSIBLE PERSON'S DECLARATION STATEMENT
 I certify the following under penalty of perjury, under the laws of the State of California:
 1. The information provided on this Certificate of Compliance is true and correct.
 2. I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible designer).
 3. The energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations.
 4. The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.
 5. I will ensure that a completed signed copy of this Certificate of Compliance shall be made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections. I understand that a completed signed copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy.

CA Building Energy Efficiency Standards - 2016 Nonresidential Compliance May 2016

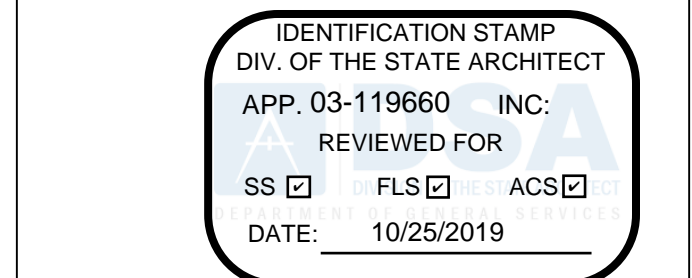
STATE OF CALIFORNIA
MECHANICAL VENTILATION AND REHEAT
 CEC-NRCC-MCH-03-E (Revised 05/16)
 CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE
 Mechanical Ventilation & Reheat
 (Page 1 of 2)
 Project Name: **HVAC ADDITIONS TO CAFETERIA BUILDING 'Y'** Date Prepared: **01.16.2019**

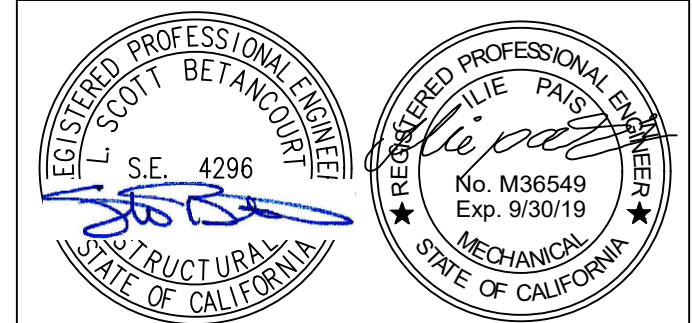
A. Mechanical Ventilation and Reheat

ZONE / SYSTEM / VAV BOX TAG	ACTUAL DESIGN INFO (FROM EQUIPMENT SCHEDULES, ETC)													OCCUPANCY BASIS			ROOM BASIS			MINIMUM			VAV Reheat Primary Air CFM			VAV Deadband Primary Air CFM						
	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	CM PER PERSON	CM PER PERSON	CM PER PERSON	COMPREST	COMPREST	COMPREST	PERCENTAGE REHEAT	PERCENTAGE REHEAT	PERCENTAGE REHEAT	COMPREST	COMPREST
HP-Y1	1,600	N/A	1,600	N	N/A	N	TRANSFER AIRFLOW (CFM)	1,100	0.15	165	31	15	465	165	465	Pass	N/A	N/A	Pass	N/A	N/A	Pass	Fail	Fail	Fail	Fail						
HP-Y2	1,600	N/A	1,600	N	N/A	900	0.15	135	31	15	465	135	465	Pass	N/A	N/A	Pass	N/A	N/A	Pass	Fail	Fail	Fail	Fail	Fail							
HP-Y3	1,600	N/A	1,600	N	N/A	900	0.15	135	31	15	465	135	465	Pass	N/A	N/A	Pass	N/A	N/A	Pass	Fail	Fail	Fail	Fail	Fail							
FAU-4	1,600	N/A	1,600	N	N/A	720	0.15	108	31	15	105	165	465	Pass	N/A	N/A	Pass	N/A	N/A	Pass	Fail	Fail	Fail	Fail	Fail							
FAU-5	1,600	N/A	1,600	N	N/A	880	0.15	132	31	15	465	132	465	Pass	N/A	N/A	Pass	N/A	N/A	Pass	Fail	Fail	Fail	Fail	Fail							
FAU-6	4,000	N/A	4,000	N	N/A	2,810	0.15	422	62	15	930	422	930	Pass	N/A	N/A	Pass	N/A	N/A	Pass	Fail	Fail	Fail	Fail	Fail							

CA Building Energy Efficiency Standards - 2016 Nonresidential Compliance May 2016



CONSULTANT
 pais consulting group
 18 Pine Hill Lane
 Ladera Ranch, CA 92694
 phone: 949.610.9675



HVAC ADDITIONS TO MUSIC BLDG.
 COMPTON COMMUNITY COLLEGE DISTRICT
 COMPTON COLLEGE
 1111 E. ARTESIA BLVD.
 COMPTON, CA. 90221

NO	DATE	BY	DESCRIPTION

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 DATE: 8/31/2018 SCALE: AS NOTED
 PROJECT NUMBER: 17-302

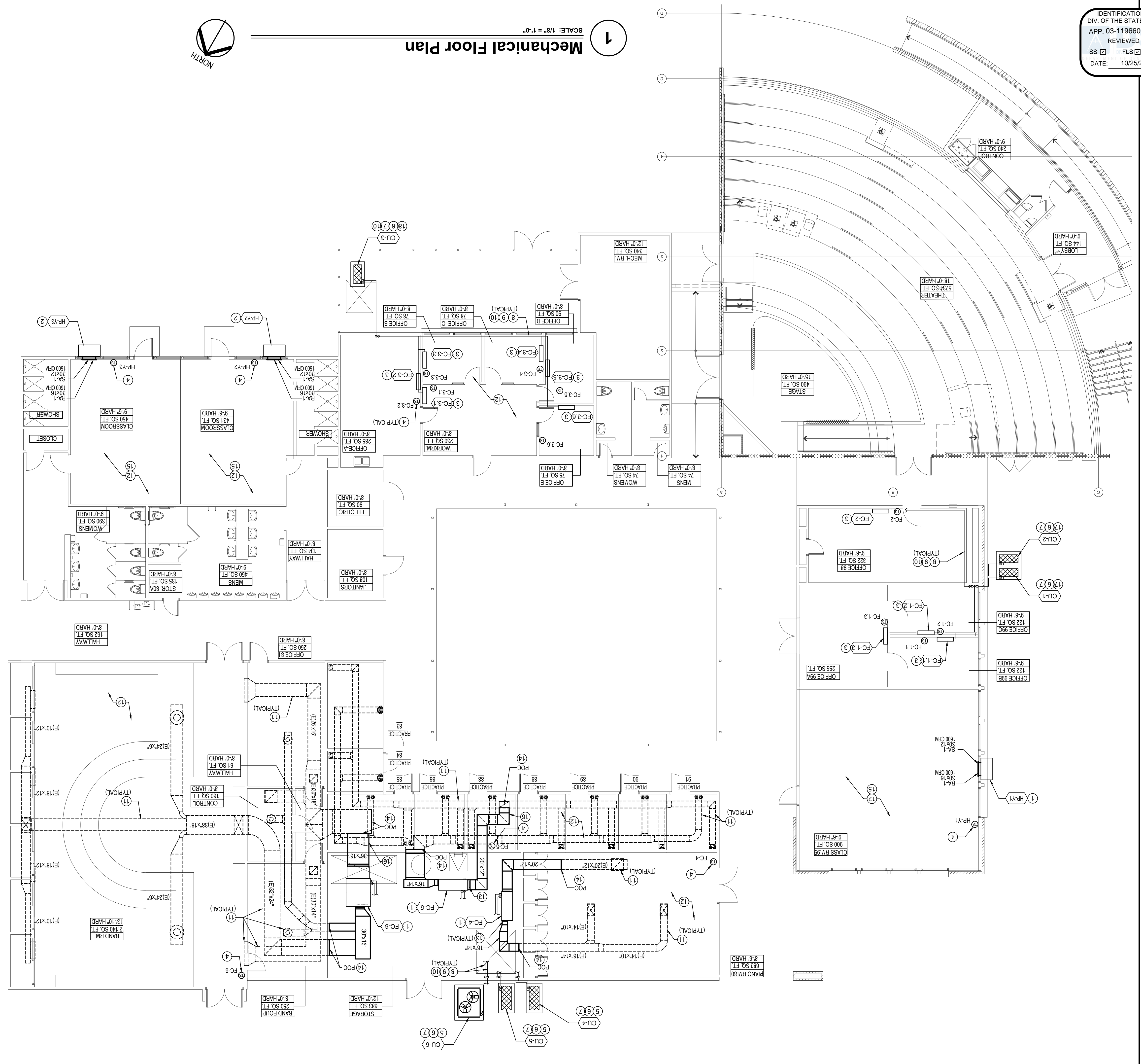
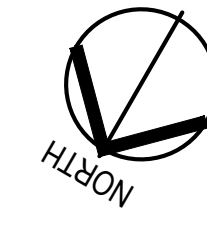
BUILDING 'Y' TITLE-24 COMPLIANCE

DRAWING NUMBER : **M0.5**

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 APP. 03-119660 INC.
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 SS FLS ACS
 DATE: 10/25/2019

Mechanical Floor Plan

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



- PLAN KEY NOTES:**
1. HORIZONTAL INDOOR FAN COIL UNIT, SUSPENDED FROM STRUCTURE ABOVE. REFER TO DETAIL 3M2.1 AND STRUCTURAL DRAWINGS. CONTRACTOR TO VERIFY EXISTING FIELD CONDITION TO PROVIDE ALL REQUIRED CLEARANCES PRIOR TO INSTALLATION.
 2. VERTICAL WALL MOUNTED HEAT PUMP, REFER TO STRUCTURAL DRAWINGS FOR INSTALLATION DETAIL. CONTRACTOR TO VERIFY EXISTING FIELD CONDITION TO PROVIDE ALL REQUIRED CLEARANCES PRIOR TO INSTALLATION.
 3. WALL MOUNTED FAN COIL. CONTRACTOR TO VERIFY EXISTING FIELD CONDITION TO PROVIDE ALL REQUIRED CLEARANCES PRIOR TO INSTALLATION.
 4. INSTALL NEW ROOM TEMPERATURE SENSOR PER DETAIL 1M2.1. CONTRACTOR TO VERIFY EXISTING FIELD CONDITION TO PROVIDE ALL REQUIRED CLEARANCES PRIOR TO BID.
 5. 4" HIGH & 12" BELOW GRADE CONCRETE PAD FOR OUTDOOR CONDENSER UNIT PER DETAIL 2/5-3.
 6. PROVIDE LOCKING CAPS ON ACCESSIBLE A/C/ REFRIGERATION PORTS PER CMG 1106.3.1.
 7. PROVIDE WORKING CLEARANCE AT A/C/ DISCONNECT. 30" CLEAR SPACE IN FRONT.
 8. PROVIDE REFRIGERANT PIPING FROM OUTDOOR A/C UNIT TO INDOOR FAN COIL. REFRIGERANT PIPING LINES SHALL BE INSULATED AND SIZED BY A/C UNIT MANUFACTURER, BASED UPON DETERMINATION OF ACTUAL DEVELOPED LENGTH BETWEEN OUTDOOR AND INDOOR UNITS. REFRIGERANT PIPING FROM OUTDOOR A/C UNIT TO INDOOR FAN COIL SHALL BE INSTALLED AS HIGH AS POSSIBLE AND SECURED AT WALL. PROVIDE COVER FOR ALL EXPOSED PIPING AND PAINT TO MATCH WALL.
 9. EXISTING PIPING LOCATION SHALL BE VERIFIED IN FIELD AND SHALL BE COORDINATED WITH ALL EXISTING ROOM EQUIPMENT AND FIXTURES PRIOR TO INSTALLATION. EXISTING HVAC ROOM CONTROL TO BE REMOVED. CONTRACTOR TO REPAIR WALL TO MATCH EXISTING ADJACENT SURFACE.
 10. PROVIDE FLEX CONNECTION.
 11. EXACT POINT OF CONNECTION AND EXISTING DUCT SIZE SHALL BE VERIFIED IN FIELD AND SHALL BE COORDINATED WITH ALL EXISTING ROOM EQUIPMENT AND FIXTURES PRIOR TO INSTALLATION.
 12. ALL NON-FUNCTIONAL EXISTING CEILING GRILLES/ DIFFUSERS SHALL BE REMOVED. CAP DUCTWORK AND REPLACE AND REPAIR CEILING TO MATCH EXISTING.
 13. INSTALL DUCTWORK ABOVE EXISTING CEILING. REMOVE AND REPLACE CEILING TO MATCH EXISTING AS REQUIRED.
 14. 4" HIGH & 12" BELOW GRADE CONCRETE PAD FOR OUTDOOR CONDENSER UNIT PER DETAIL 2/5-3.
 15. 6" HIGH CONCRETE PAD FOR OUTDOOR CONDENSER UNIT PER DETAILS 2/5-3 AND 4/5-3.

- PLAN NOTES:**
1. FRESH AIR INTAKES SHALL BE 10'-0" MIN. AWAY FROM ALL EXHAUST OUTLETS, PLUMBING VENTS, AND FLUES.
 2. CONTRACTOR SHALL COORDINATE EXACT EQUIPMENT DUCTWORK AND PIPING SIZES AND LOCATIONS WITH OTHER TRADES PRIOR TO INSTALLATION. MAINTAIN MANUFACTURER MIN. CLEARANCES ON ALL ROOF-TOP MECHANICAL EQUIPMENT.
 3. THE MINIMUM VENTILATION RATES IN BREATHING ZONES SHALL BE IN ACCORDANCE WITH CALIFORNIA MECHANICAL CODE TABLE 4-1 AND/OR CALIFORNIA ENERGY CODE TABLE 121-A.
 4. DUCT SIZES SHOWN ON PLAN ARE INSIDE DIMENSIONS.
 5. CONTRACTOR SHALL SHOP DRAWINGS WITHIN 30 DAYS OF AWARD OF CONTRACT. IF SHOP DRAWINGS ARE NOT PROVIDED TO THE ENGINEER FOR APPROVAL, AND ANY CONFLICTS OCCUR BETWEEN TRADES DURING CONSTRUCTION, & ETC. THEN, THE CONTRACTOR SHALL BE RESPONSIBLE AND BEAR ALL COST INCURRED FOR ANY REVISIONS. A/ NO ADDITIONAL COST TO THE CLIENT. THE ARCHITECT AND ENGINEER SHALL NOT BE NOTIFIED IMMEDIATELY PRIOR TO FABRICATION AND INSTALLATION OF ANY CONFLICTS BETWEEN TRADES DURING CONSTRUCTION, & ETC.

MECHANICAL PLANS

DRAWING NUMBER: **M1.1**

NO	DATE	BY	DESCRIPTION

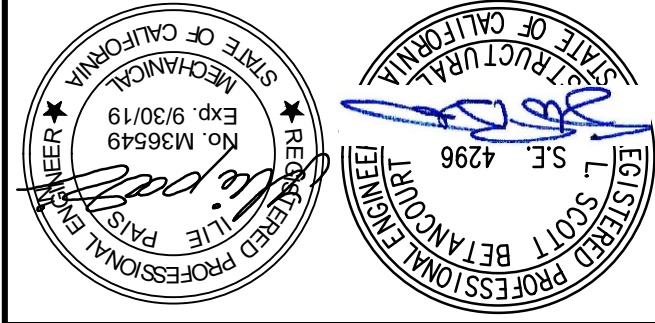
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DATE: 8/31/2018 SCALE: AS NOTED

PROJECT NUMBER: 17-302

HVAC ADDITIONS TO MUSIC BLDG.

COMPTON COMMUNITY COLLEGE DISTRICT
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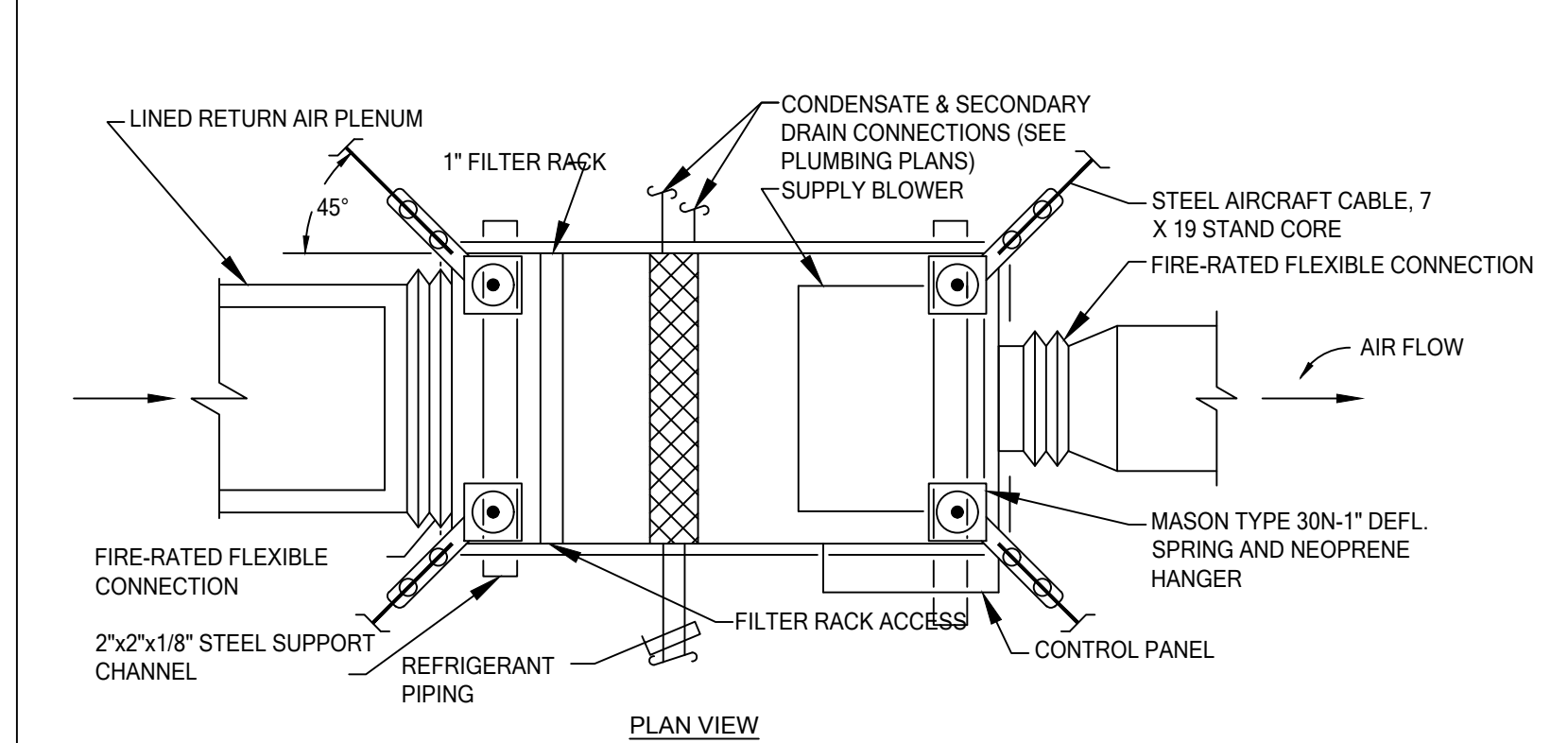
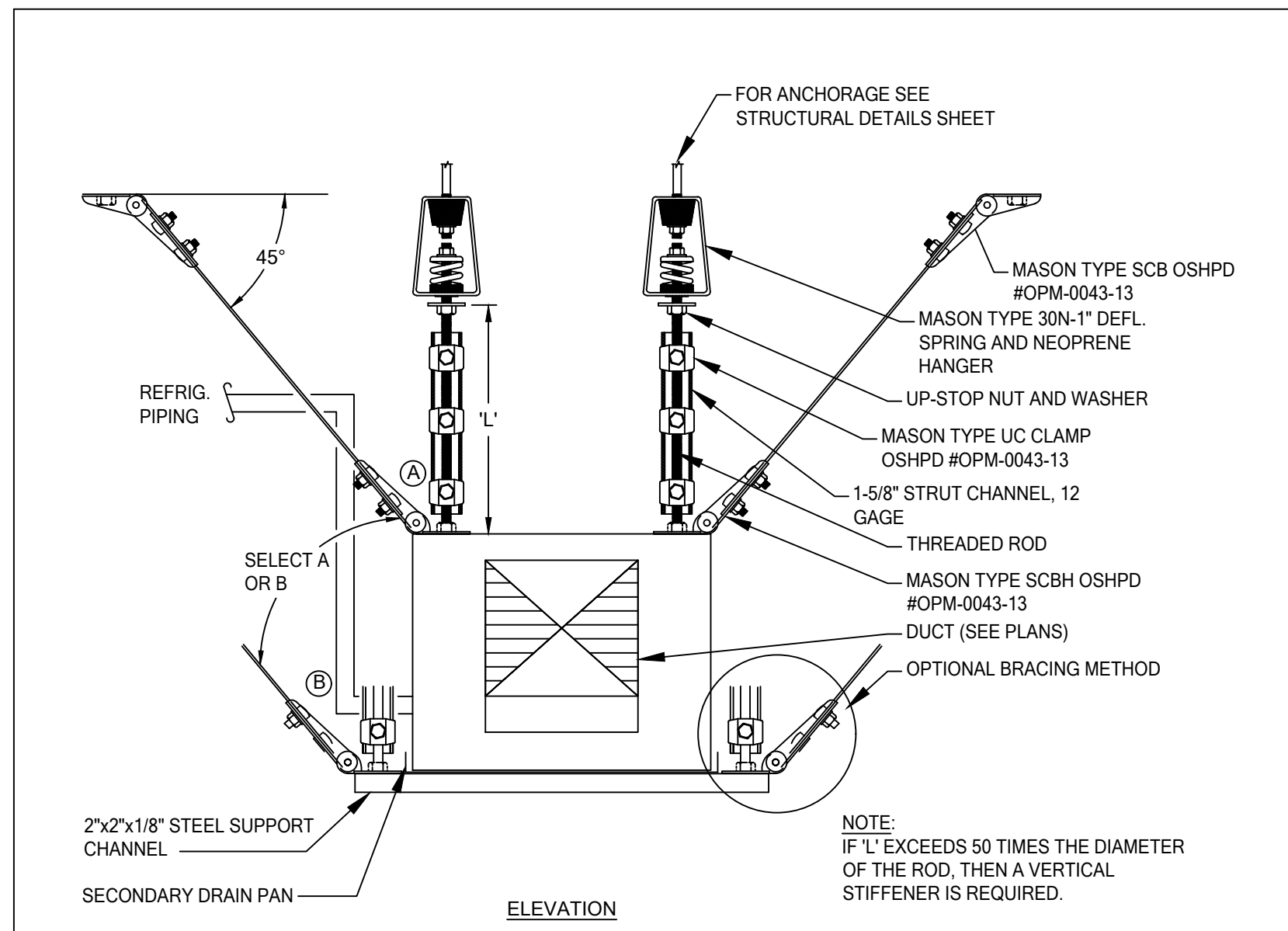
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 DATE: 10/25/2019

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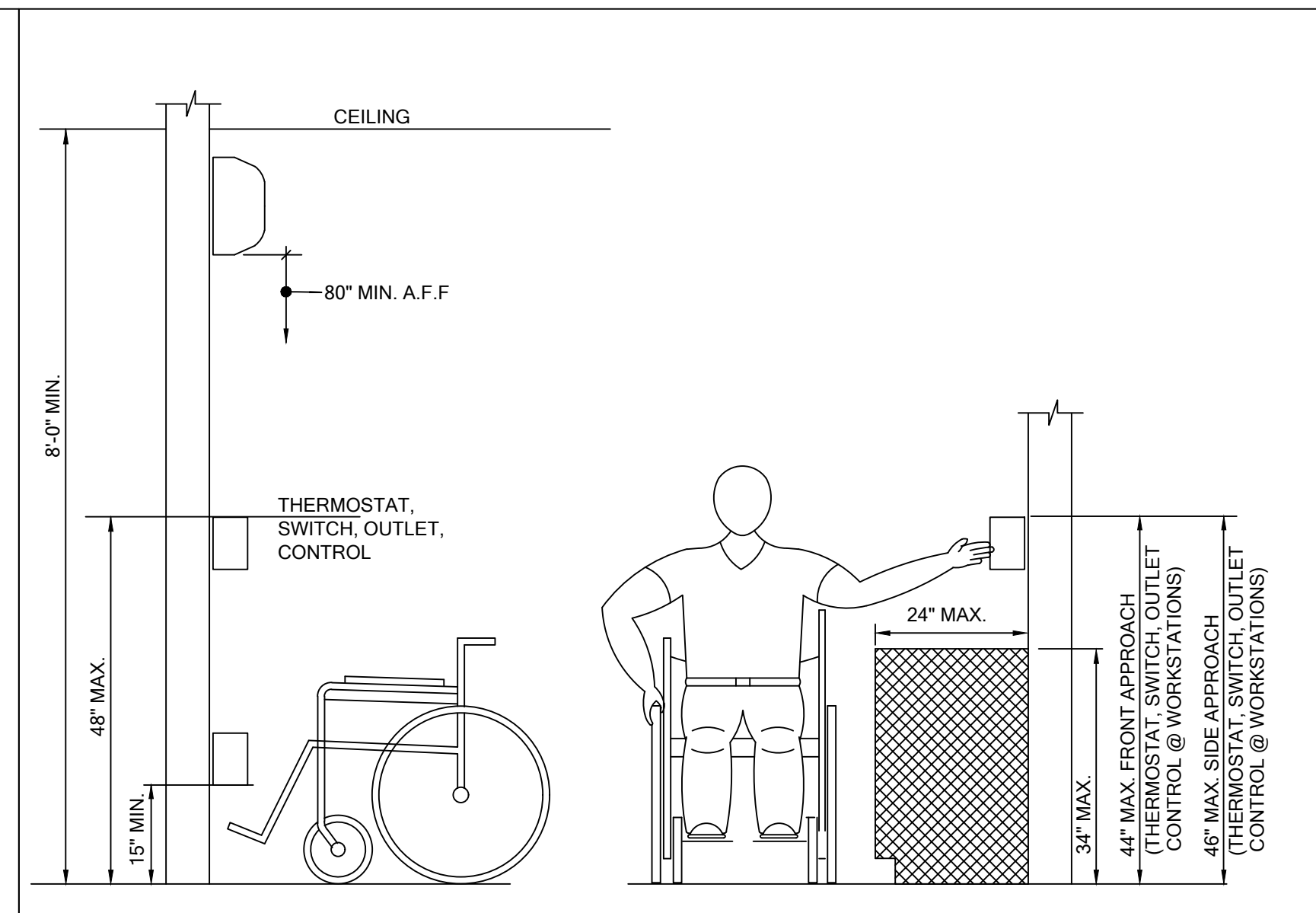


MAXIMUM EQUIPMENT WEIGHT	MASON SCB/SCBH SIZE	STEEL CABLE DIA.	MINIMUM ROD DIAMETER	MASON UC SIZE/ SPACING	SEISMIC ANCHORAGE		
					LT. WT. CONC. DECK	WOOD	STEEL
100	0	3/32	3/8	1/22"	3/8" Dia x 3" Embed.	3/8" Dia x 3" Embed.	3/8
150	1	1/8	3/8	1/22"	1/2" Dia x 4" Embed.	1/2" Dia x 4" Embed.	1/2
250	1	1/8	1/2	1/31"	N/A	1/2" Dia x 4" Embed.	1/2
330	2	3/16	5/8	2/39"	5/8" Dia x 5" Embed.	5/8" Dia x 5" Embed.	5/8
600	2	3/16	5/8	2/39"	(2) 5/8" Dia x 5" Emb.	N/A	5/8

MAX. WEIGHTS BASED ON Ca = 0.66. INCREASE WEIGHTS BY 50% FOR Ca = 0.44. INTERPOLATE FOR VALUES IN BETWEEN.

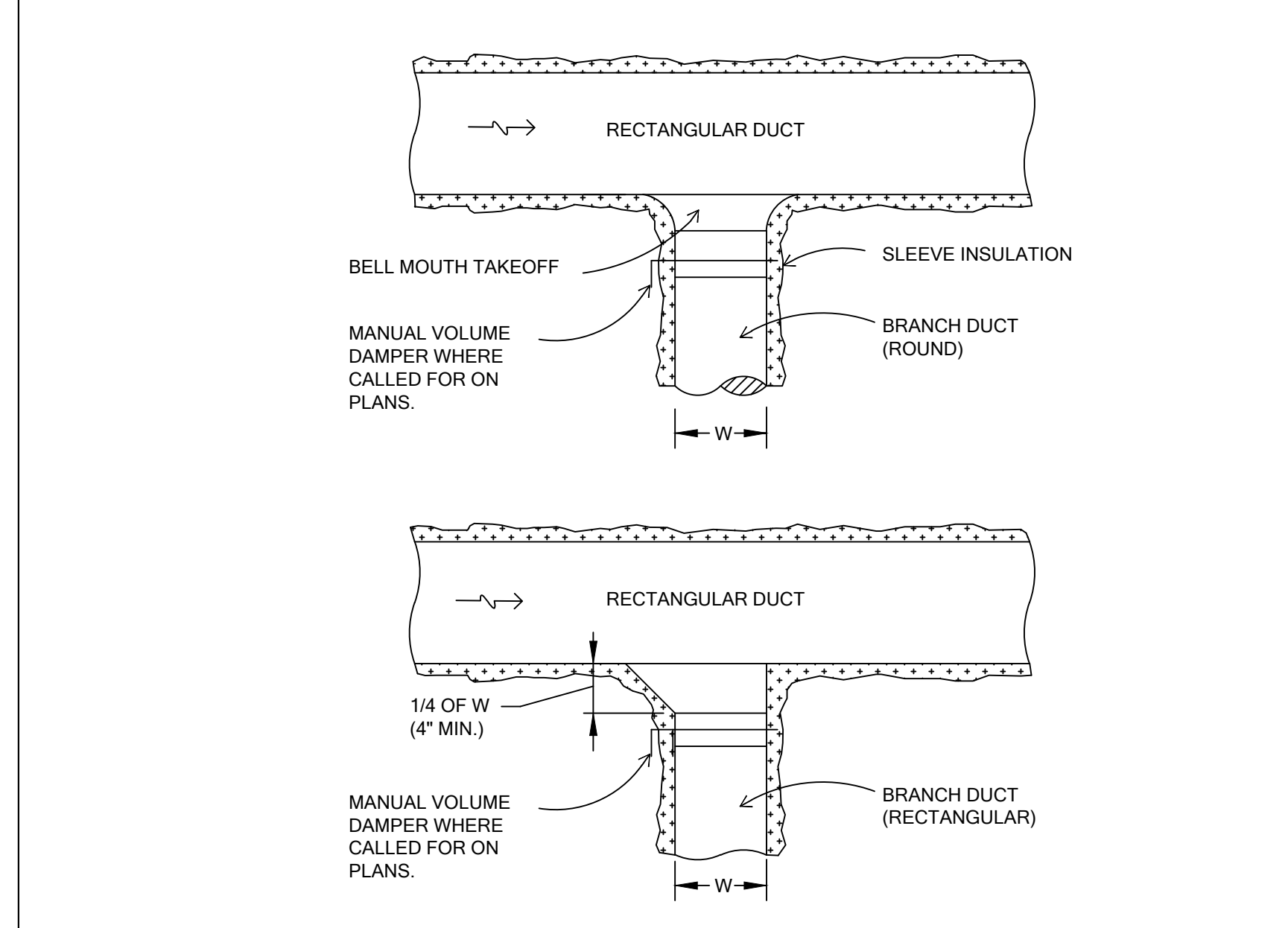
DX FAN COIL MOUNTING DETAIL

SCALE NONE 3



CONTROL DEVICE MOUNTING DETAIL

SCALE NONE 1



BRANCH TAKEOFF (REC)

SCALE NONE 2

**HVAC ADDITIONS TO
 MUSIC BLDG.**
 COMPTON COMMUNITY
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 PROJECT NUMBER: 17-302

**MECHANICAL
 DETAILS**
 DRAWING NUMBER : **M2.1**

SEISMIC ANCHORAGE NOTES

EQUIPMENT ANCHORAGE NOTE:

ALL MECHANICAL AND ELECTRICAL EQUIPMENT SHALL BE ANCHORED OR BRACED TO MEET THE HORIZONTAL AND VERTICAL FORCES PRESCRIBED IN THE 2010 CBC, SECTION 1614A.1.13 AND ASCE 7-05 SECTIONS 13.3, 13.4, 13.6, AND CHAPTER 6.

THE ATTACHMENTS OF THE FOLLOWING ITEMS SHALL BE DESIGNED TO RESIST THE FORCES PRESCRIBED ABOVE, BUT NEED NOT TO BE DETAILED ON THE PLANS, AND THE PROJECT INSPECTOR WILL VERIFY THAT THESE ITEMS (EQUIPMENT) HAVE BEEN ANCHORED.

- A. EQUIPMENT WEIGHING LESS THAN 400 POUNDS SUPPORTED DIRECTLY ON THE FLOOR OR ROOF.
- B. FURNITURE REQUIRED TO BE ATTACHED IN ACCORDANCE WITH ASCE 7-05, SECTION 13.5
- C. TEMPORARY OR MOVABLE EQUIPMENT WITH FLEXIBLE CONNECTION TO POWER OR UTILITIES.
- D. EQUIPMENT WEIGHING LESS THAN 20 POUNDS SUPPORTED BY VIBRATION ISOLATORS.
- E. EQUIPMENT WEIGHING LESS THAN 20 POUNDS SUSPENDED FROM A ROOF OR FLOOR OR HUNG FROM A WALL.

FOR THOSE ELEMENTS THAT DO NOT REQUIRE DETAILS ON THE APPROVED DRAWINGS, THE INSTALLATION SHALL BE SUBJECT TO THE APPROVAL OF THE MECHANICAL/ELECTRICAL ENGINEER. THESE ITEMS (EQUIPMENT) HAVE BEEN ANCHORED.

PIPING, DUCTWORK, AND ELECTRICAL DISTRIBUTION SYSTEM BRACING NOTE:

PIPING, DUCTWORK, AND ELECTRICAL DISTRIBUTION SYSTEM SHALL BE BRACED TO RESIST THE FORCES PRESCRIBED IN ASCE 7-05 SECTION 13.3 AS DEFINED IN ASCE 7-05 SECTION 13.6.8, 13.6.7, 13.6.5.5 ITEM 6.

THE BRACING ATTACHEMENTS TO THE STRUCTURE SHALL COMPLY WITH ONE OF THE OSHPD PRE- APPROVALS WITH AN OPA #, SUCH AS MASON INDUSTRIES (OPA 349), OR ISAT (OPA 485) AS MODIFIED TO SATISFY ANCHORAGE REQUIREMENTS OF ACI 318, APPENDIX D.

COPIES OF THE MANUAL SHALL BE AVAILABLE ON THE JOBSITE PRIOR TO START OF HANGING AND BRACING OF THE PIPE, DUCTWORK, AND ELECTRICAL DISTRIBUTION SYSTEMS.

THE STRUCTURAL ENGINEER OF RECORD SHALL VERIFY THE ADEQUACY OF THE STRUCTURE TO SUPPORT THE HANGER AND BRACE LOADS.

LEGEND

SYMBOL	ABBREVIATION	DESCRIPTION
	S OR W	SOIL OR WASTE ABOVE FLOOR
	S OR W	SOIL OR WASTE BELOW FLOOR OR GRADE
	V	SANITARY VENT
	CW	COLD WATER
	HW	HOT WATER
	CD	CONDENSATE DRAIN
	OCD	OVERFLOW CONDENSATE DRAIN
	TP	TRAP PRIMER
	SOV	SHUT-OFF VALVE
	SOV/GC	SHUT-OFF VALVE OR GAS COCK IN YARD BOX
	FCO	FLOOR CLEANOUT
	WCO	WALL CLEANOUT
		RISER UP
		RISER DOWN
	ABV	ABOVE
	BEL	BELOW
	CLG	CEILING
	CONT	CONTINUATION
	DN	DOWN
	EXIST	EXISTING
	FLR	FLOOR
	FFE	FINISH FLOOR ELEVATION
	HDR	HEADER
	I.E.	INVERT ELEVATION
	POC	POINT OF CONNECTION
	PLCS	PLACES
	SLVE	SLEEVE
	VTR	VENT THRU ROOF
	YB	YARD BOX

GENERAL NOTES

- BEFORE COMMENCEMENT OF WORK, THE CONTRACTOR SHALL VERIFY THE EXACT LOCATIONS, ELEVATIONS AND CHARACTERISTICS OF ALL UTILITIES AND PIPING, AND SHALL IMMEDIATELY NOTIFY THE ARCHITECT OF ANY DISCREPANCIES.
- ALL VALVES, UNIONS, ETC. TO BE SAME SIZE AS PIPE UNLESS OTHERWISE INDICATED ON DRAWINGS.
- ALL PLUMBING FIXTURE VENTS TO TERMINATE A MINIMUM OF 12 INCHES FROM ANY VERTICAL SURFACE AND 10 FEET FROM ANY OUTSIDE AIR INTAKES.
- CONNECTION BETWEEN INCOMPATIBLE MATERIALS ABOVE GRADE AND INSIDE BUILDING SHALL BE MADE WITH TWO (2) DIELECTRIC UNIONS SEPARATED BY A TWELVE INCH (12") SECTION OF RED BRASS PIPE.
- ALL CLEANOUTS SHALL BE INSTALLED WHERE READILY ACCESSIBLE. THE CONTRACTOR SHALL COORDINATE ALL CLEANOUT LOCATIONS WITH EQUIPMENT, CABINETS, ETC., AND THE ARCHITECT PRIOR TO ANY INSTALLATION.
- ALL PLUMBING WORK SHALL BE INSTALLED SO AS TO AVOID INTERFERENCE WITH ELECTRICAL AND MECHANICAL EQUIPMENT AND STRUCTURAL FRAMING.
- ALL WORK AND MATERIAL SHALL BE PERFORMED AND INSTALLED IN COMPLIANCE WITH CALIFORNIA PLUMBING CODE 2013.
- ANY ALTERATIONS TO A STRUCTURAL MEMBER, SUCH AS CUTTING, BORING, BRAZING, DRILLING, WELDING, ETC. SHALL HAVE PRIOR WRITTEN APPROVAL OF ARCHITECT AND STRUCTURAL ENGINEER.
- INSULATION (SEE SPECIFICATION FOR TYPE REQUIRED) AND COVERING ON PIPE AND TUBING SHALL HAVE A FLAME SPREAD RATING NOT TO EXCEED 25 AND A SMOKE DENSITY NOT TO EXCEED 50 WHEN TESTED IN ACCORDANCE WITH 2013 U.B.C. STANDARD NO. 8-1.
- THE SEISMIC ANCHORAGE OF MECHANICAL AND ELECTRIC EQUIPMENT SHALL CONFORM TO ASCE 7-05 CHAPTER 13 TITLE 24 PART 5.

THE SEISMIC BRACING AND ANCHORAGE OF PIPING AND EQUIPMENT SHALL CONFORM TO SEISMIC HAZARD LEVEL "AA" TYPICAL AND BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE "GUIDELINES FOR SEISMIC RESTRAINTS OF MECHANICAL SYSTEMS AND PLUMBING SYSTEMS" PUBLISHED BY SMACNA WITH SUPPLEMENT 2000 AND APPROVED BY THE DSA.

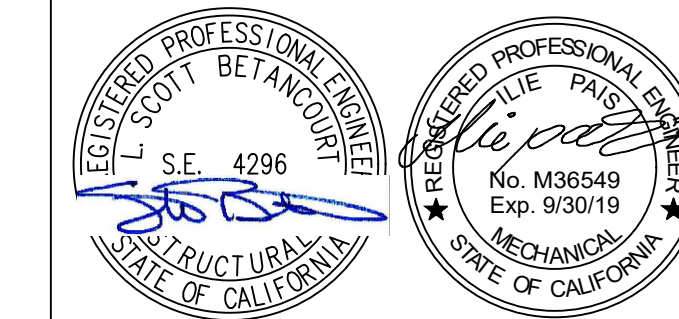
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**HVAC ADDITIONS TO
MUSIC BLDG.**
 COMPTON COMMUNITY
 COLLEGE DISTRICT
 COMPTON COLLEGE
 1111 E. ARTESIA BLVD.
 COMPTON, CA. 90221

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NO	DATE	BY	DESCRIPTION

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DRAWN: IZ	CHECKED: IP
DATE: 8/31/2018	SCALE: AS NOTED
PROJECT NUMBER:	17-302

**PLUMBING GENERAL
NOTES, LEGEND &
DETAILS**

DRAWING NUMBER : **P0.1**

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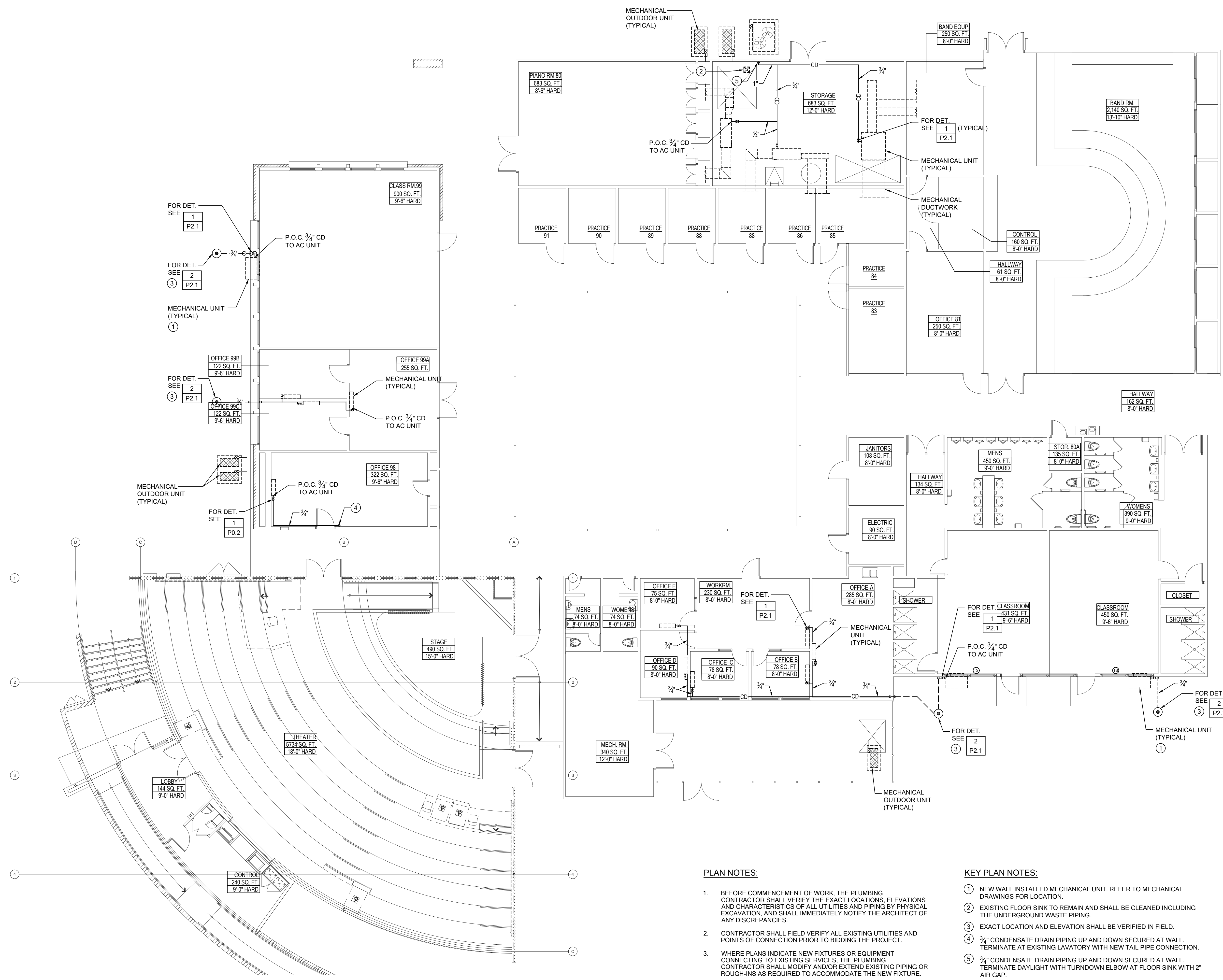
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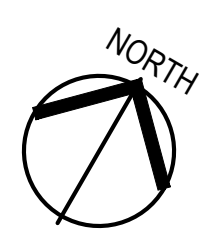
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 phone: 949.610.9675



**HVAC ADDITIONS TO
 MUSIC BLDG.**
 COMPTON COMMUNITY
 COLLEGE DISTRICT
 COMPTON COLLEGE
 1111 E. ARTESIA BLVD.
 COMPTON, CA. 90221



1 Plumbing Floor Plan
 SCALE: 1/8" = 1'-0"



- PLAN NOTES:**
- BEFORE COMMENCEMENT OF WORK, THE PLUMBING CONTRACTOR SHALL VERIFY THE EXACT LOCATIONS, ELEVATIONS AND CHARACTERISTICS OF ALL UTILITIES AND PIPING BY PHYSICAL EXCAVATION, AND SHALL IMMEDIATELY NOTIFY THE ARCHITECT OF ANY DISCREPANCIES.
 - CONTRACTOR SHALL FIELD VERIFY ALL EXISTING UTILITIES AND POINTS OF CONNECTION PRIOR TO BIDDING THE PROJECT.
 - WHERE PLANS INDICATE NEW FIXTURES OR EQUIPMENT CONNECTING TO EXISTING SERVICES, THE PLUMBING CONTRACTOR SHALL MODIFY AND/OR EXTEND EXISTING PIPING OR ROUGH-INS AS REQUIRED TO ACCOMMODATE THE NEW FIXTURE.
 - ALL SLEEVES THRU MASONRY WALLS AND FOOTINGS SHALL BE MINIMUM TWO PIPES SIZES LARGER THAN THE PIPE GOING THRU IT, PROVIDE ALL SLEEVES.
 - ALL CONDENSATE DRAIN PIPING ABOVE CEILING SHALL SLOPE AT 1% UNLESS OTHERWISE NOTED.

- KEY PLAN NOTES:**
- NEW WALL INSTALLED MECHANICAL UNIT. REFER TO MECHANICAL DRAWINGS FOR LOCATION.
 - EXISTING FLOOR SINK TO REMAIN AND SHALL BE CLEANED INCLUDING THE UNDERGROUND WASTE PIPING.
 - EXACT LOCATION AND ELEVATION SHALL BE VERIFIED IN FIELD.
 - 3/4" CONDENSATE DRAIN PIPING UP AND DOWN SECURED AT WALL. TERMINATE AT EXISTING LAVATORY WITH NEW TAIL PIPE CONNECTION.
 - 3/4" CONDENSATE DRAIN PIPING UP AND DOWN SECURED AT WALL. TERMINATE DAYLIGHT WITH TURNDOWN ELBOW AT FLOOR SINK WITH 2" AIR GAP.

NO	DATE	BY	DESCRIPTION

REVISIONS

DRAWN: IZ	CHECKED: IP
DATE: 8/31/2018	SCALE: AS NOTED
PROJECT NUMBER: 17-302	

**PLUMBING
 FLOOR PLAN**

DRAWING NUMBER : **P1.1**

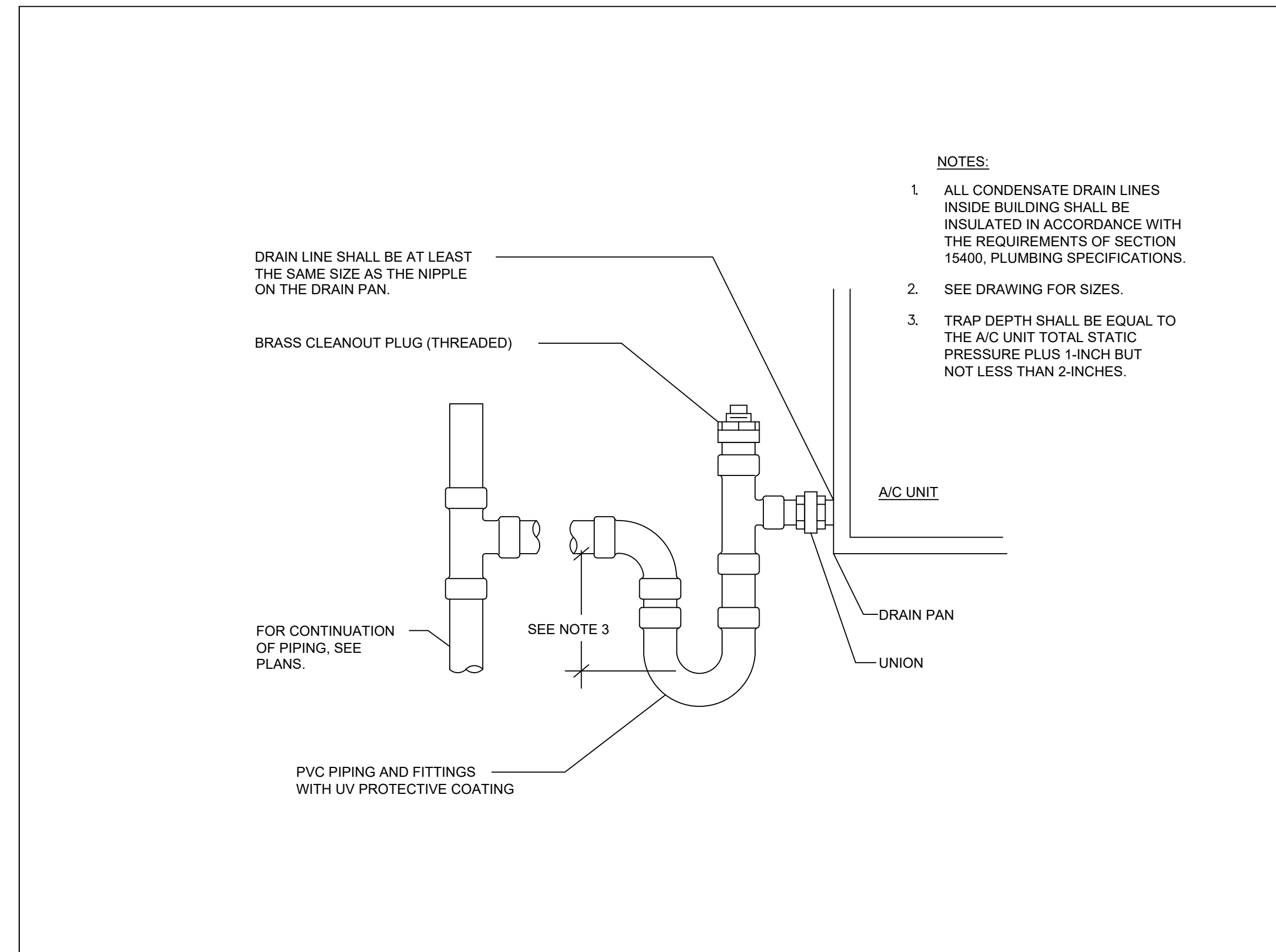
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 REVIEWED FOR
 SS FLS ACS
 DATE: 10/25/2019

RFHC
RF Hawkins Consulting

2357 Naples Avenue
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 design@rfhawkinsconsulting.com

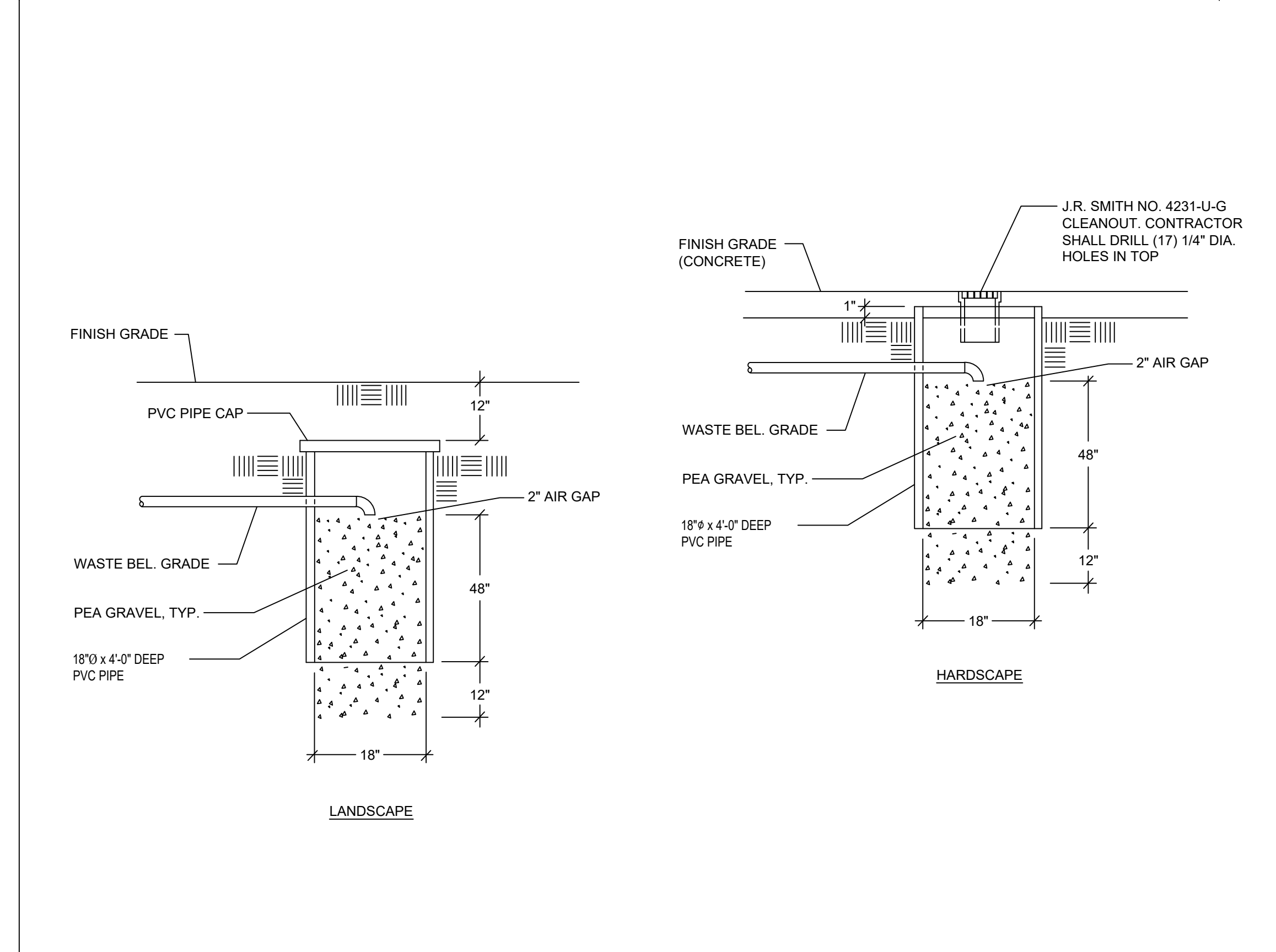
CONSULTANT

pais
 consulting group
 18 Pine Hill Lane
 Ladera Ranch, CA 92694
 phone: 949.610.9675



- NOTES:**
1. ALL CONDENSATE DRAIN LINES INSIDE BUILDING SHALL BE INSULATED IN ACCORDANCE WITH THE REQUIREMENTS OF SECTION 15400, PLUMBING SPECIFICATIONS.
 2. SEE DRAWING FOR SIZES.
 3. TRAP DEPTH SHALL BE EQUAL TO THE A/C UNIT TOTAL STATIC PRESSURE PLUS 1-INCH BUT NOT LESS THAN 2-INCHES.

CONDENSATE TRAP DETAIL SCALE NONE 1



DRYWELL DETAIL SCALE NONE 2

HVAC ADDITIONS TO MUSIC BLDG.
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 COMPTON COLLEGE
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 COMPTON, CA. 90221

NO	DATE	BY	DESCRIPTION

REVISIONS
 DRAWN: IZ CHECKED: IP
 DATE: 8/31/2018 SCALE: AS NOTED
 PROJECT NUMBER: 17-302

PLUMBING DETAILS
 DRAWING NUMBER : **P2.1**

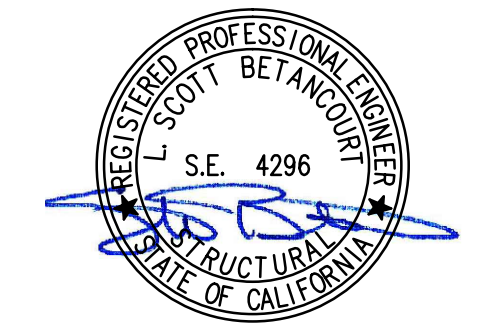
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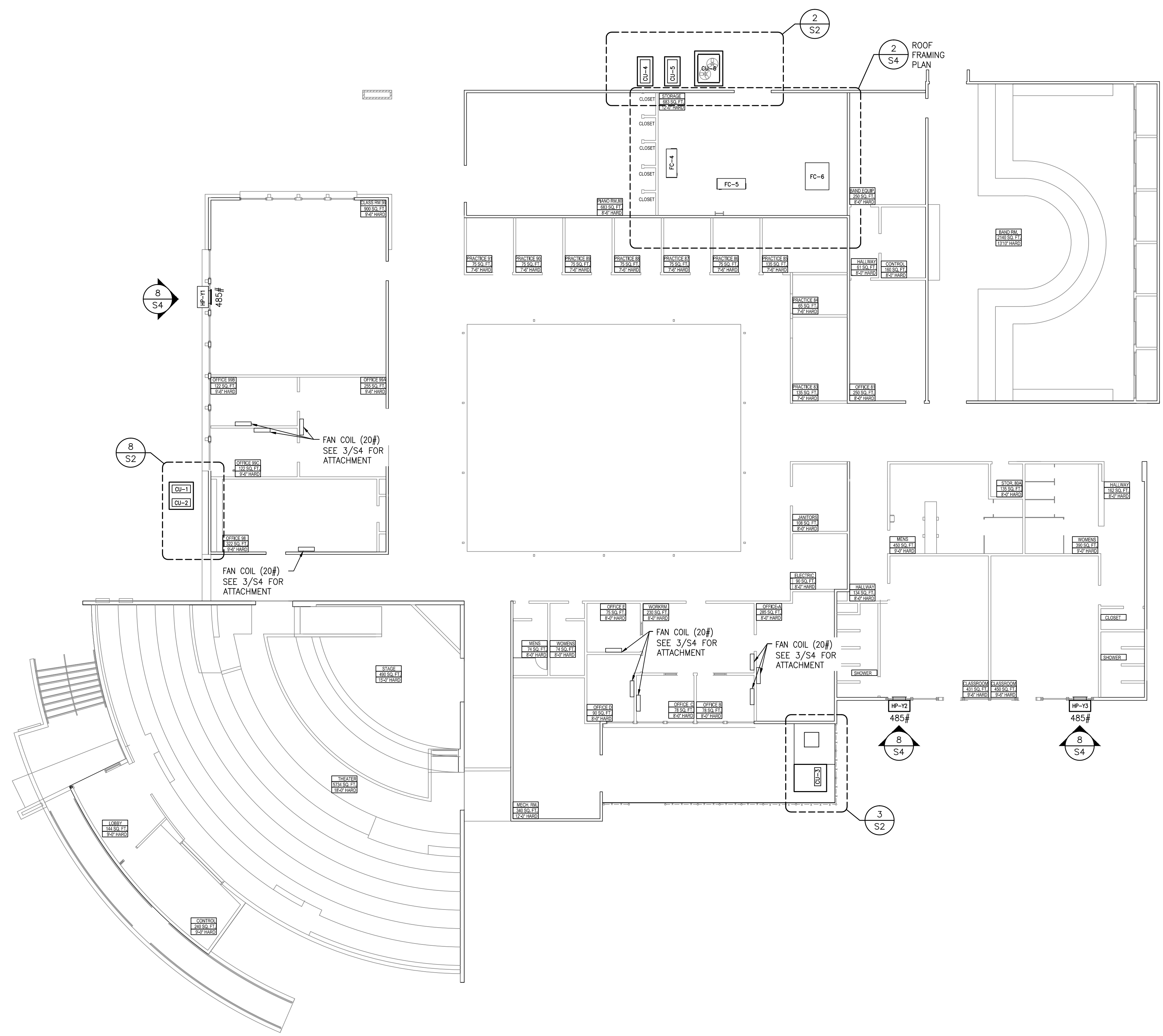
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**HVAC ADDITIONS TO
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△			
△			
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DATE: 02/22/19	SCALE: AS NOTED
PROJECT NUMBER:	AS NOTED

**MUSIC FIRST
 FLOOR PLAN**

DRAWING NUMBER : **S-1**

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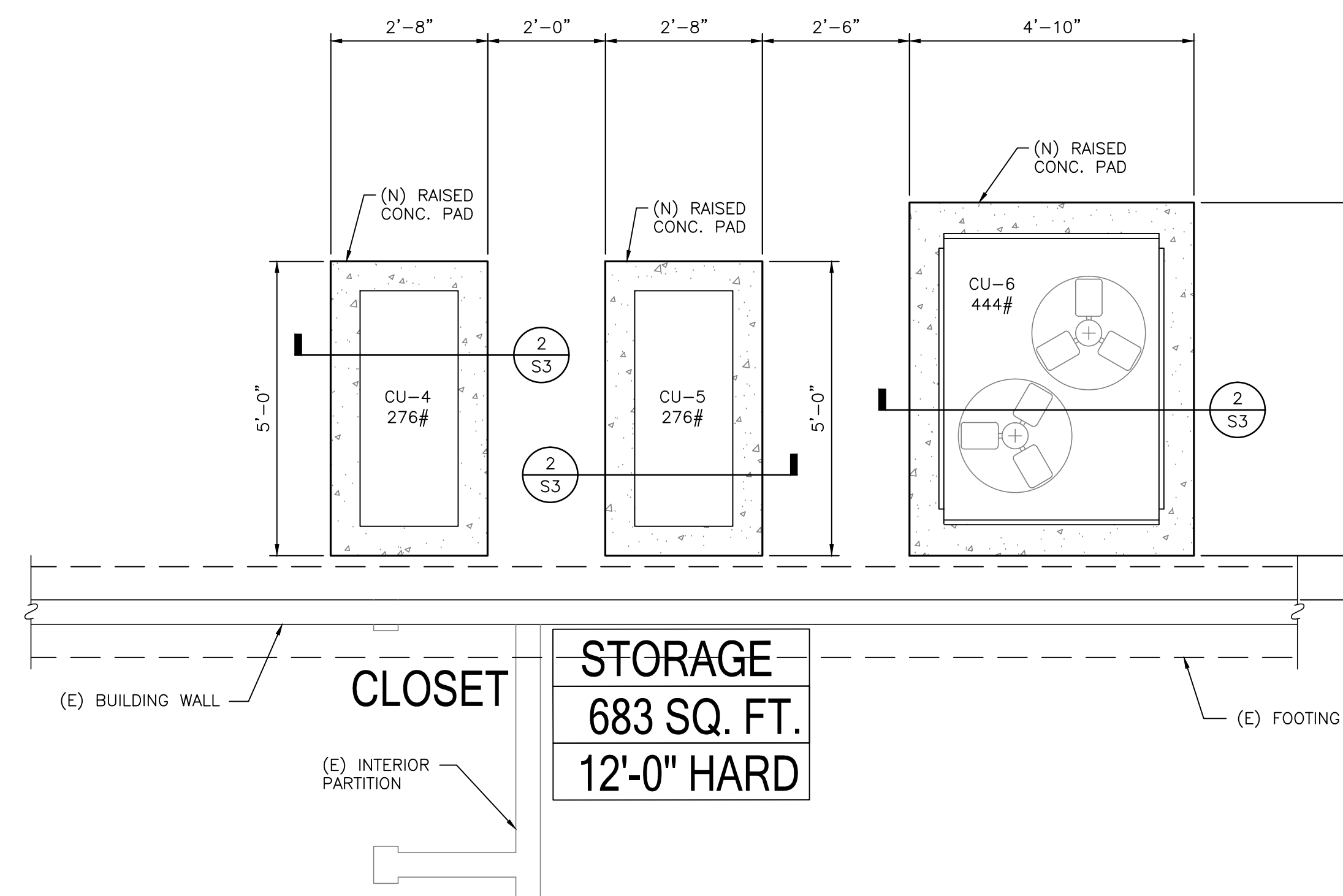
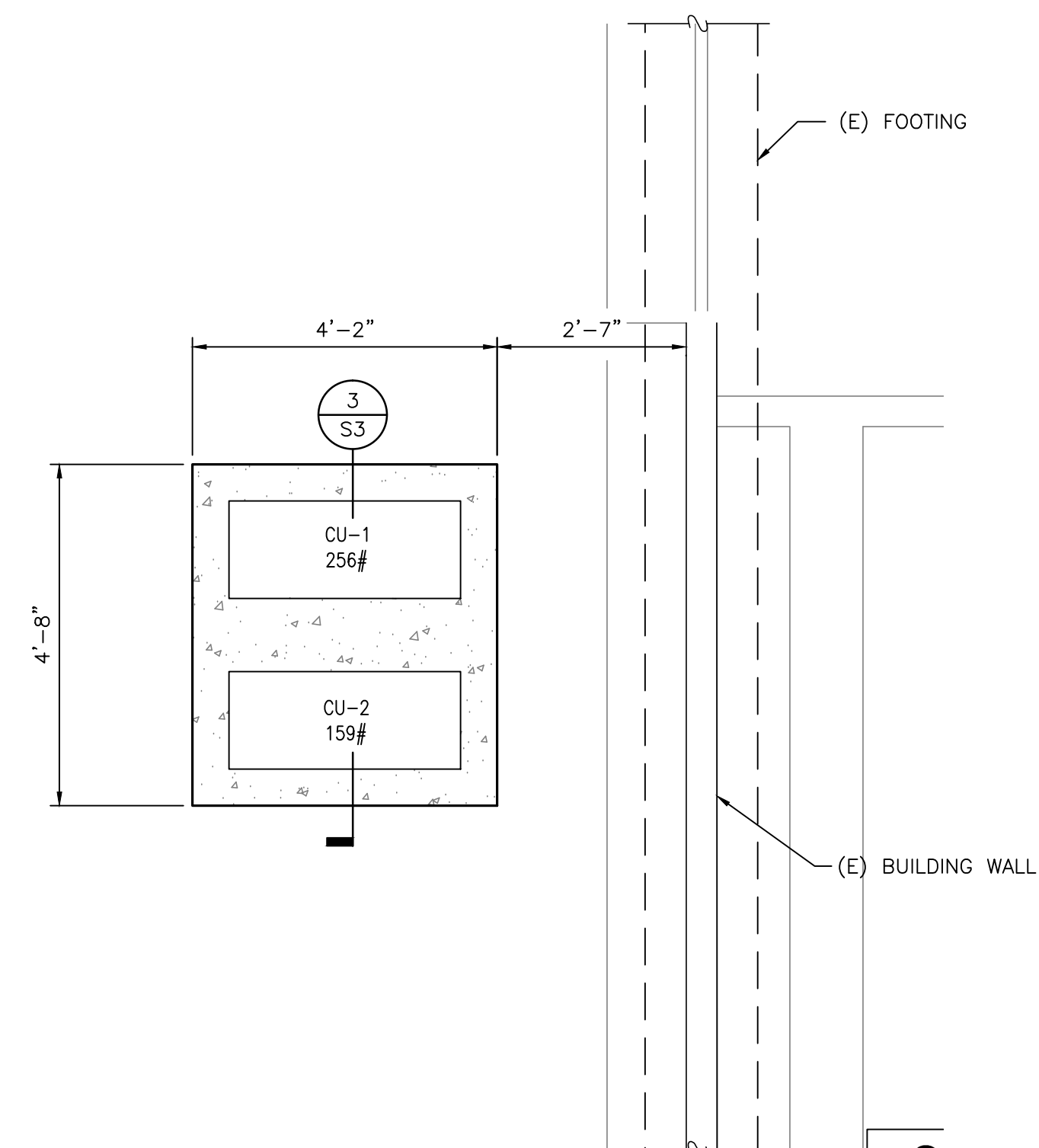
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PROJECT NUMBER:	AS NOTED		

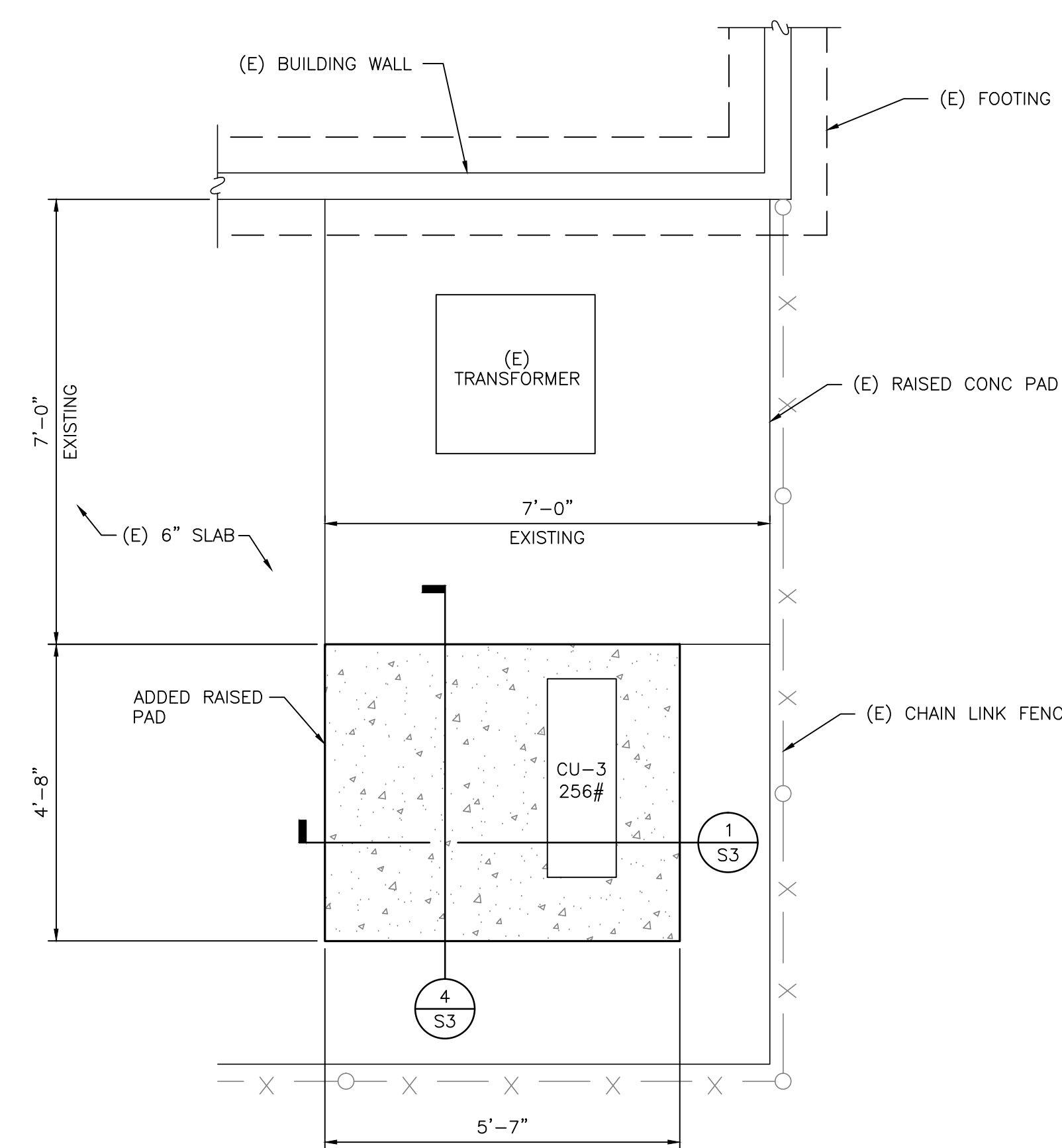
**ENLARGED
 FOUNDATION PLANS**

DRAWING NUMBER : **S-2**



ENLARGED PARTIAL FOUNDATION PLAN

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

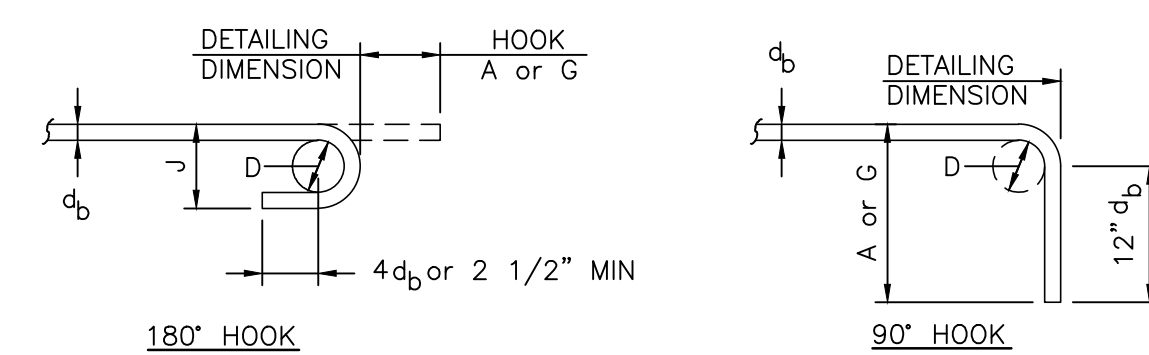


ENLARGED PARTIAL FOUNDATION PLAN

SCALE: 1/2"=1'-0"
 0 1' 2' **3**

ENLARGED PARTIAL FOUNDATION PLAN

SCALE: 1/2"=1'-0"
 0 1' 2' **8**

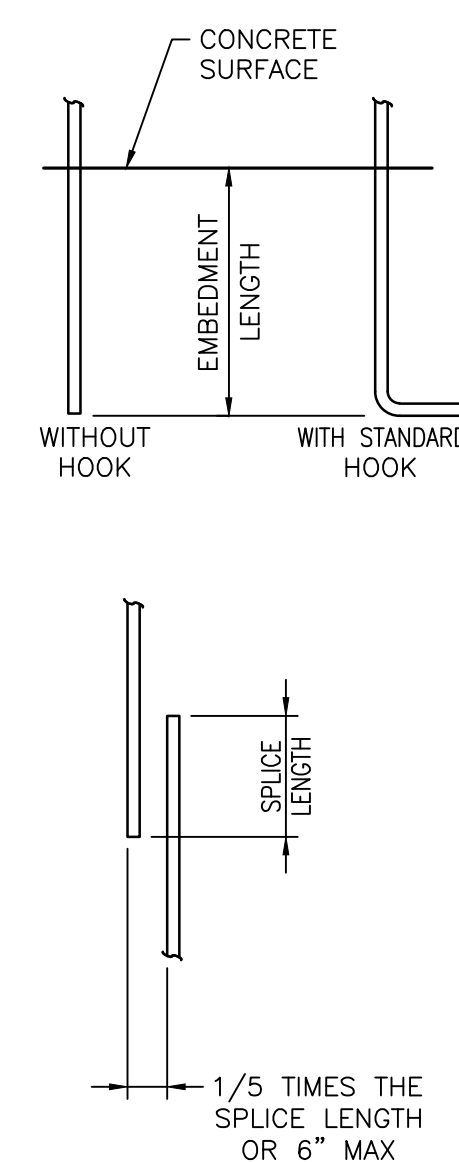


BAR SIZE	D	180° HOOKS		90° HOOKS
		A or G	J	A or G
#3	2 1/4"	5"	3"	6"
#4	3"	6"	4"	8"
#5	3 3/4"	7"	5"	10"
#6	4 1/2"	8"	6"	1'-0"
#7	5 1/4"	10"	7"	1'-2"
#8	6"	11"	8"	1'-4"
#9	9 1/2"	1'-3"	11 3/4"	1'-7"
#10	10 3/4"	1'-5"	1'-1 1/4"	1'-10"
#11	12"	1'-7"	1'-2 3/4"	2'-0"
#14	18 1/4"	2'-3"	1'-9 3/4"	2'-7"
#18	24"	3'-0"	2'-4 1/2"	3'-5"

BAR SCHEDULE

BAR SIZE	EMBEDMENT		SPLICE LENGTH
	WITHOUT HOOK	WITH HOOK	
# 3	12"	8"	1'-9"
# 4	1'-2"	10"	2'-4"
# 5	1'-5"	1'-0"	2'-10"
# 6	1'-9"	1'-3"	3'-5"
# 7	2'-0"	1'-5"	5'-0"
# 8	2'-3"	1'-7"	5'-9"
# 9	2'-7"	1'-10"	6'-5"
# 10	2'-10"	2'-0"	7'-2"

NOTES:
 1. THE ABOVE LENGTHS ARE FOR CAST-IN-PLACE AND PRECAST CONCRETE 2,000 PSI OR GREATER
 2. ALL REINFORCING STEEL LAPS OR SPLICES SHALL BE AS INDICATED ON PLAN. WHERE LAP OR SPLICE LOCATIONS ARE NOT SPECIFICALLY INDICATED, LAPS OR SPLICES SHALL BE STAGGERED AT LEAST 2'-0" o.c.



REBAR EMBEDMENT AND SPLICES IN CONCRETE

9

STANDARD HOOK DIMENSIONS

12

GENERAL NOTES:

- DESIGN CRITERIA:
 - DESIGN CODE: 2016 CALIFORNIA BUILDING CODE (CBC)
 - S_s = 1.67 R = 2 OCCUPANCY CAT = 2
 - S₁ = .611 C_s = .557 SITE CLASS = D
 - F_o = 1.00 RHO = 1.3 S.F.R.S. = IF FRAMED WALLS, OTHER THAN PLYWOOD
 - F_v = 1.50 V = .517xw ANALYSIS PROCEDURE = E.L.F.A.
 - SDS = 1.11 SDC = D WIND SPEED = 85 M.P.H. (A.S.D.)
 - SD1 = .611 I = 1.5 WIND EXPOSURE = B
- ALL MATERIALS AND WORK PERFORMED SHALL CONFORM WITH THE REQUIREMENTS OF THE 2016 CBC AND GOVERNING BUILDING ORDINANCES.
- NOTES AND DETAILS ON DRAWINGS SHALL TAKE PRECEDENCE OVER THESE GENERAL NOTES.
- WHERE A SECTION OR TYPICAL DETAIL IS SHOWN FOR ONE CONDITION, IT SHALL APPLY FOR ALL LIKE OR SIMILAR CONDITIONS UNLESS OTHERWISE NOTED.
- NO CHANGES ARE TO BE MADE TO THESE PLANS WITHOUT THE KNOWLEDGE AND WRITTEN CONSENT OF THIS ENGINEER. UNAUTHORIZED CHANGES RENDER THESE DRAWINGS VOID.
- ANY REFERENCE TO THE WORDS APPROVED, OR APPROVAL IN THESE DOCUMENTS SHALL BE HERE DEFINED TO MEAN GENERAL ACCEPTANCE OR REVIEW AND SHALL NOT RELIEVE THE CONTRACTOR AND/OR HIS SUB-CONTRACTORS OF ANY LIABILITY IN FURNISHING THE REQUIRED MATERIALS OR LABOR SPECIFIED.
- THE CONTRACT DRAWINGS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE AND DO NOT INDICATE THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK AND SHALL BE SOLELY RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES INCLUDING BUT, NOT LIMITED TO BRACING & SHORING. OBSERVATION VISITS TO THE SITE BY FIELD REPRESENTATIVES OF THE ARCHITECT OR ENGINEER SHALL NOT INCLUDE INSPECTIONS OF THE PROTECTIVE MEASURES OR THE CONSTRUCTION PROCEDURES.
- GENERAL CONTRACTOR SHALL VISIT THE JOB SITE AND VERIFY ALL GRADES, DIMENSIONS, AND CONDITIONS PRIOR TO BIDDING AND COMMENCING CONSTRUCTION. ALL DIMENSIONS CONTROLLED BY EXISTING CONDITIONS SHALL BE VERIFIED BY THE CONTRACTOR AT THE SITE.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE ALL EXISTING UTILITIES WHETHER SHOWN HEREON OR NOT, AND TO PROTECT THEM FROM DAMAGE. THE CONTRACTOR SHALL BEAR ALL EXPENSE OF REPAIR OR REPLACEMENT IN CONJUNCTION WITH THE EXECUTION OF THIS WORK.
- GENERAL CONTRACTOR SHALL NOTIFY THE ENGINEER AND ARCHITECT IMMEDIATELY OF ANY DISCREPANCIES FOUND WITHIN THE CONTRACT DOCUMENTS, PRIOR TO STARTING WORK.

CONCRETE:

- ALL CONCRETE MATERIALS AND WORKMANSHIP SHALL CONFORM TO CHAPTER 19A OF THE CODE AND TO ALL REQUIREMENTS OF ACI 301-05, "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS", EXCEPT AS MODIFIED BY THE SUPPLEMENT REQUIREMENTS BELOW.
- MIX DESIGN REQUIREMENTS:
 - A. CEMENT SHALL BE TYPE II.
 - B. COMPRESSIVE STRENGTH = 3,000 PSI.
 - C. CONCRETE SLUMP SHALL NOT EXCEED 5".
- ALL REINFORCING STEEL SHALL BE SECURED IN POSITION AND INSPECTED BY THE BUILDING OFFICIAL PRIOR TO PLACING CONCRETE.
- SEE DETAIL 9/S2 FOR REBAR SPLICES AND EMBEDMENT IN CONCRETE.

REINFORCING STEEL:

- REINFORCING STEEL SHALL CONFORM TO ASTM A-615 GRADE 60 UNLESS OTHERWISE NOTED.
- BARS SHALL BE CLEAN OF MUD, OIL, OR OTHER COATINGS LIKELY TO IMPAIR BONDING.
- ALL REINFORCING SHALL BE SECURED IN PLACE PRIOR TO INSPECTIONS, PLACING CONCRETE, OR GROUTING MASONRY.
- REINFORCING STEEL SHALL BE SPLICED AS SHOWN OR NOTED. SPLICES AT OTHER LOCATIONS SHALL BE REVIEWED BY THE STRUCTURAL ENGINEER. ALL VERTICAL WALL REINFORCEMENT SHALL BE CONTINUOUS BETWEEN SPLICE LOCATIONS SHOWN IN THE DETAILS.
- SEE DETAIL 12/S2 FOR STANDARD BAR BEND DIMENSIONS.

STRUCTURAL STEEL:

- ALL MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE LATEST REVISED EDITION OF THE AISC MANUAL OF STEEL CONSTRUCTION, WHICH INCLUDES THE SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS, THE CODE OF STANDARD PRACTICE AND THE AWS STRUCTURAL WELDING CODE.
- STRUCTURAL STEEL SHOP DRAWINGS SHALL BE REVIEWED BY THE STRUCTURAL ENGINEER PRIOR TO FABRICATION.
- MATERIAL SPECIFICATIONS:
 - W SHAPES: ASTM A992 GRADE 50
 - C, M, ANGLE, BARS, AND PLATES: ASTM 36
 - TUBE STEEL: ASTM A500, GRADE B
 - PIPE COLUMNS: ASTM A53, GRADE B
- GROUTING OF COLUMN BASE PLATES: BASE PLATES SHALL BE DRYPACKED OR GROUTED WITH NON-SHRINK GROUT. MINIMUM COMPRESSIVE STRENGTH SHALL BE 4,000 PSI AT 28 DAYS. ALL SURFACES SHALL BE PROPERLY CLEANED OF FOREIGN MATERIAL PRIOR TO THE GROUTING.
- ALL WELDING SHALL BE ACCOMPLISHED USING THE SHIELDED METAL ARC WELDING PROCESS WITH E70XX ELECTRODES OR THE SUBMERGED ARC WELDING PROCESS WITH E7X-EXXX ELECTRODES. LOW HYDROGEN ELECTRODES SHALL BE USED AND KEPT DRY, AND PARENT METALS SHALL BE PREHEATED IN ACCORDANCE WITH AWS STANDARDS.
- ALL WELDING SHALL BE INSPECTED IN ACCORDANCE WITH AISC 360, TABLES N5.4-1, N5.4-2, AND N5.4-3. WELDING SHALL BE PERFORMED BY AWS CERTIFIED WELDERS.
- ALL EXPOSED WELDS SHALL BE FILLED AND GROUND SMOOTH WHERE METAL COULD COME IN CONTACT WITH THE PUBLIC.
- ALL SHOP AND FIELD BOLTED CONNECTIONS SHALL BE IN ACCORDANCE WITH ASTM A-307 USING UNFINISHED AMERICAN STANDARD REGULAR BOLTS, UNLESS OTHERWISE NOTED.
- NO HOLES OTHER THAN THOSE SPECIFICALLY DETAILED SHALL BE ALLOWED THRU STRUCTURAL STEEL MEMBERS. BOLT HOLES SHALL CONFORM TO AISC SPECIFICATION, AND SHALL BE STANDARD HOLES UNLESS OTHERWISE NOTED. NO CUTTING OR BURNING OF STRUCTURAL STEEL WILL BE PERMITTED WITHOUT PRIOR CONSENT OF THIS ENGINEER.

FRAMING LUMBER:

- ALL VISUALLY GRADED FRAMING LUMBER SHALL CONFORM TO THE GRADING RULES SET FORTH BY THE WEST COAST LUMBER INSPECTION BUREAU (WCLIB) OR THE WESTERN WOOD PRODUCTS ASSOCIATION (WWPA). EACH PIECE SHALL BEAR THE GRADE STAMP OF AN APPROVED GRADING AGENCY, EXCEPT EXPOSED LUMBER SHALL BEAR NO MARKINGS WHICH WILL BE VISIBLE AFTER INSTALLATION.
- FRAMING LUMBER SHALL BE DOUGLAS FIR-LARCH, UNLESS OTHERWISE NOTED. 2x AND 4x SAWN LUMBER SHALL HAVE A MOISTURE CONTENT NOT MORE THAN 19% AT TIME OF FABRICATION. THE FOLLOWING GRADES SHALL BE THE MINIMUM ACCEPTABLE GRADES, UNLESS OTHERWISE NOTED.
 - ITEM MINIMUM GRADE
 - STUDS:
 - 2" THICK, 4" WIDE (STUD HT = 8'-1" MAX).....NO. 2
 - 2" THICK, 4" TO 6" WIDE.....NO. 2
 - STRUCTURAL JOISTS AND LIGHT FRAMING:
 - 2" TO 4" THICK, 4" AND WIDER.....NO. 1
 - BEAMS AND STRINGERS:
 - 5" AND THICKER, 6" AND WIDER.....NO. 1
 - POST AND TIMBERS:
 - 5" x 5" AND LARGER.....NO. 1
- STRUCTURAL PLYWOOD SHALL CONFORM TO U.S. PRODUCT STANDARD PS 1-07. STRUCTURAL USE PANELS SHALL CONFORM TO PS 2-04 (APA PRP-108). APA GRADE STAMP SHALL BE PROVIDED ON ALL SHEATHING. SHEATHING SHALL BE EXPOSURE 1 (EXTERIOR GLUE). INSTALL WITH FACE GRAIN ACROSS SUPPORTS EXCEPT WHERE NOTED ON PLANS OR DETAILS. PROVIDE GAPS AT ALL EDGES AS RECOMMENDED BY APA. ROOF AND FLOOR SHEATHING AND SHEAR WALL PANELS SHALL BE IN PLACE AND INSPECTED BY THE BUILDING OFFICIAL PRIOR TO COVERING.
- FRAMING HARDWARE SHALL BE SIMPSON "STRONG TIE" OR EQUAL, UNLESS OTHERWISE NOTED. SUBSTITUTIONS SHALL BEAR ICC APPROVAL.
- NAILING NOTES:
 - A. ALL NAILS SHALL BE COMMON NAILS IN CONFORMANCE WITH FEDERAL SPECIFICATION NF-105B, UNLESS OTHERWISE SPECIFIED ON DRAWINGS. SINKERS SHALL NOT BE SUBSTITUTED UNLESS SPECIFICALLY APPROVED BY THIS ENGINEER.
 - B. ALL NAILS EXPOSED TO THE WEATHER SHALL BE GALVANIZED.
 - C. TOE NAILS SHALL BE DRIVEN AT AN ANGLE OF 30 DEGREES TO THE PIECE SURFACE AND BE STARTED AT 1/3 THE LENGTH FROM THE EDGE OF THE PIECE.
- WOOD SCREWS SHALL BE IN CONFORMANCE WITH A.N.S.I. B18.6.1.
- BOLTS AND LAG SCREWS SHALL CONFORM TO A.N.S.I. B18.2.1. ALL BOLTS THRU WOOD SHALL HAVE STANDARD CUT WASHERS EXCEPT WHERE METAL SIDE PLATES ARE SPECIFIED. BOLT HOLES SHALL BE BORED 1/32" TO 1/16" LARGER THAN THE BOLT DIAMETER, UNLESS OTHERWISE NOTED. THE CONTRACTOR SHALL INSTALL A SIMPSON BP-5/8-S WITH (4) SDS 1/4 x 1 1/2 SCREWS AT ALL HOLES LARGER THAN 1/16" OVERSIZED AT NO ADDITIONAL COST. ALL BOLTS SHALL BE RETIGHTENED PRIOR TO APPLICATION OF PLASTER, PLYWOOD, ETC.
- ALL WOOD BEARING ON CONCRETE OR MASONRY IF LESS THAN 4'-0" ABOVE GRADE SHALL BE PRESSURE TREATED DOUGLAS FIR.
- STRUCTURAL MEMBERS SHALL NOT BE CUT FOR PIPES, ETC. UNLESS SPECIFICALLY NOTED OR DETAILED.

SPECIAL INSPECTION REQUIREMENTS:

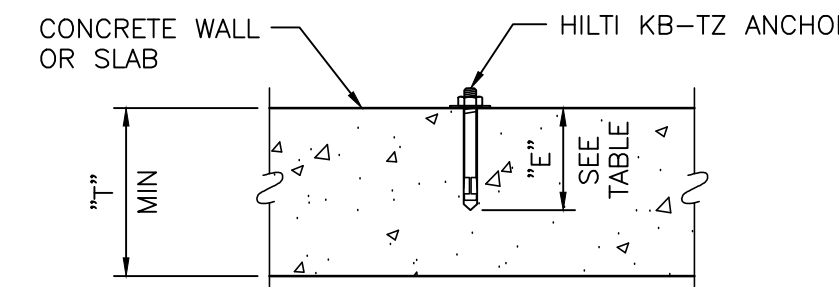
- ALL WORK SHALL CONFORM TO TITLE 24, CALIFORNIA CODE OF REGULATIONS (CCR).
- CHANGES TO THE APPROVED DRAWINGS AND SPECIFICATIONS SHALL BE MADE BY AN ADDENDUM OR A CONSTRUCTION CHANGED DOCUMENT APPROVED BY THE DIVISION OF THE STATE ARCHITECT, AS REQUIRED BY SECTION 4-338, PART 1, TITLE 24, CCR.
- A PROJECT 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, PART 1, TITLE 24, CCR; CLASS 2.

ABBREVIATIONS:

AB - ANCHOR BOLT	ID - INSIDE DIAMETER
AFF - ABOVE FINISH FLOOR	MB - MACHINE BOLT
BLK - BLOCK	MFR - MANUFACTURER
BN - BOUNDARY NAILING	MIN - MINIMUM
BTM - BOTTOM	(N) - NEW
CJ - CEILING JOIST	NS - NEAR SIDE
CLR - CLEAR	NTS - NOT TO SCALE
CONC - CONCRETE	OC - ON CENTER
CONT - CONTINUOUS	OD - OUTSIDE DIAMETER
DIM - DIMENSION	OH - OPPOSITE HAND
DBL - DOUBLE	PLCS - PLACES
DF - DOUGLAS FIR	PLY - PLYWOOD
DIA - DIAMETER	PT - PRESSURE TREATED
(E) - EXISTING	REINF - REINFORCEMENT
EA - EACH	REQ'D - REQUIRED
EN - EDGE NAILING	RR - ROOF RAFTER
EQ - EQUAL	SH'T'G - SHEATHING
EQUIP - EQUIPMENT	SIM - SIMILAR
FDN - FOUNDATION	SQ - SQUARE
FN - FIELD NAILING	STD - STANDARD
FRP - FIBER REINFORCED PLASTIC	STIFF - STIFFENER
FS - FAR SIDE	THK - THICK
FTG - FOOTING	T.O. - TOP OF
GLB - GLU-LAM BEAM	TS - TUBE STEEL
HD - HOLD DOWN	TYP - TYPICAL
HORIZ - HORIZONTAL	UN - UNLESS OTHERWISE NOTED
	VERT - VERTICAL

RAISED PAD EXTENSION

- NOTES:
- SUBSTITUTION OF A HILTI KWIK BOLT TZ ANCHOR WITH OTHER EXPANSION ANCHORS MANUFACTURED BY HILTI OR BY OTHER MANUFACTURERS IS NOT ALLOWED WITHOUT THE WRITTEN APPROVAL OF THIS ENGINEER PRIOR TO INSTALLATION. THE CONTRACTOR SHALL BEAR THE ENTIRE COST OF REPLACEMENT OF NON-APPROVED ANCHORS.
 - THE CONTRACTOR SHALL ACCURATELY LOCATE ALL EXISTING REINFORCING BY X-RAY OR EQUIVALENT METHODS. NO REBAR OR TENDONS SHALL BE CUT. ALL EXPENSES RELATED TO REPAIR OF CUT REBAR OR TENDONS SHALL BE ENTIRELY AT THE EXPENSE OF THE CONTRACTOR.
 - SPECIAL INSPECTION IS REQUIRED FOR INSTALLATION OF ANCHORS.
 - INSTALLATION OF CONCRETE ANCHORS IN MASONRY IS NOT ALLOWED.
 - USE STAINLESS STEEL FOR EXPOSED APPLICATIONS. CARBON STEEL SHALL BE USED FOR INTERIOR APPLICATIONS ONLY.

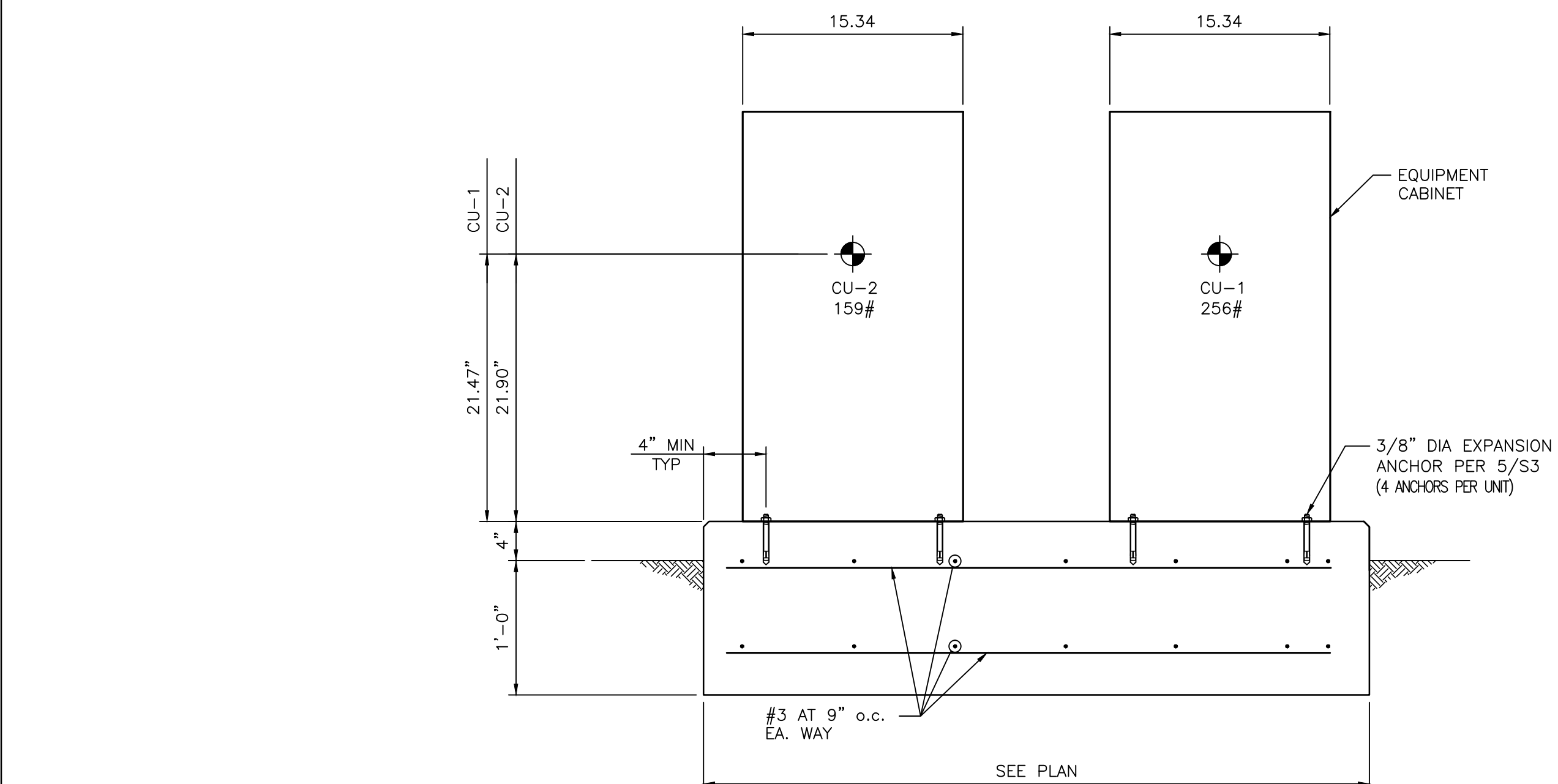


ANCHOR SCHEDULE (1)

BOLT DIA	HOLE DIA	"E" EMBEDMENT	"T" THICKNESS
3/8"	3/8"	2"	4"
1/2"	1/2"	3 1/4"	6"
5/8"	5/8"	4"	6"
3/4"	3/4"	4 3/4"	8"

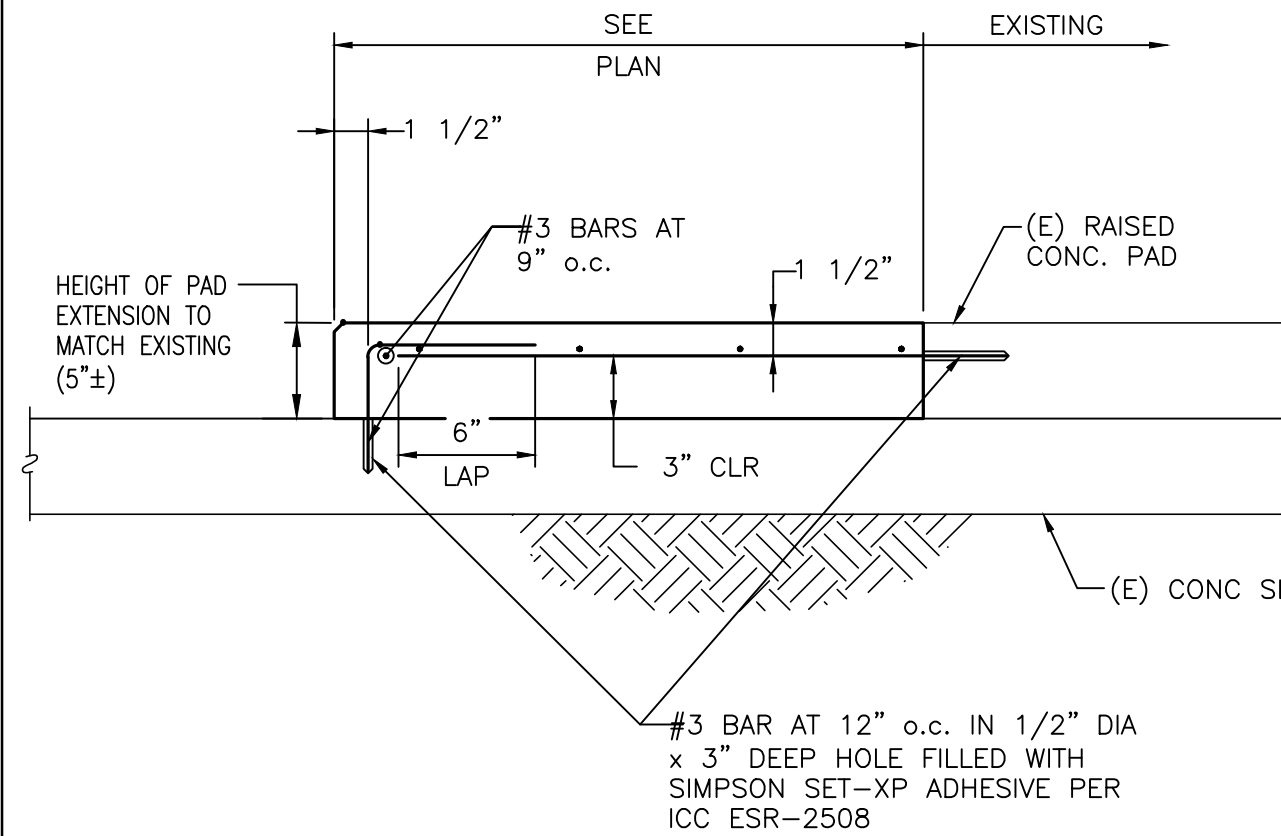
(1) INFORMATION SHOWN IN THIS TABLE IS IN ACCORDANCE WITH ICC REPORT ESR-1917.

HILTI KWIK BOLT TZ EXPANSION ANCHOR



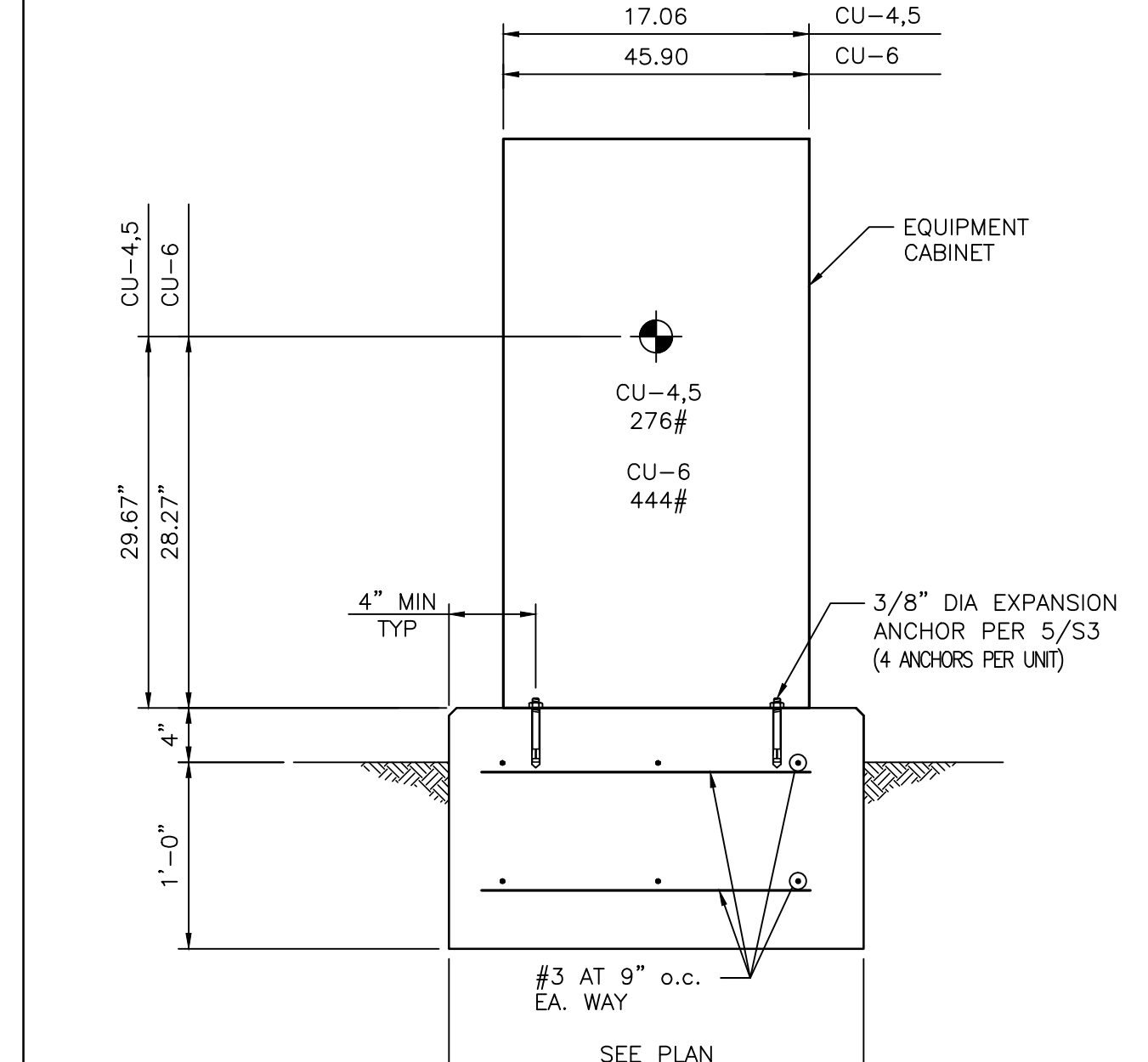
EQUIPMENT PAD

NOTE:
CABINET NOT SHOWN FOR CLARITY
SEE 1/S3 FOR CABINET ANCHORAGE



4

RAISED CONC. PAD ON EXISTING SLAB



5

EQUIPMENT PAD

2

CONSTRUCTION NOTES

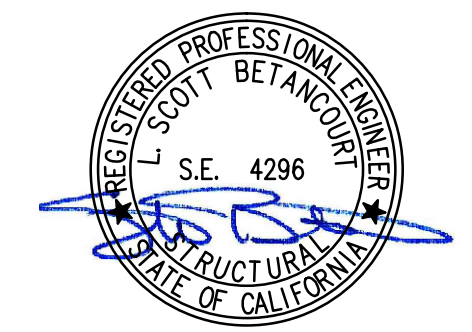
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**CONSTRUCTION
DETAILS**

DRAWING NUMBER : **S-3**

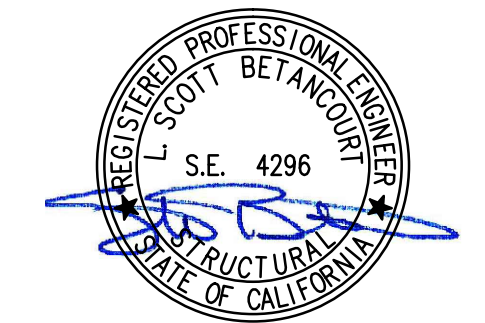
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 SS FLS ACS
 DATE: 10/25/2019

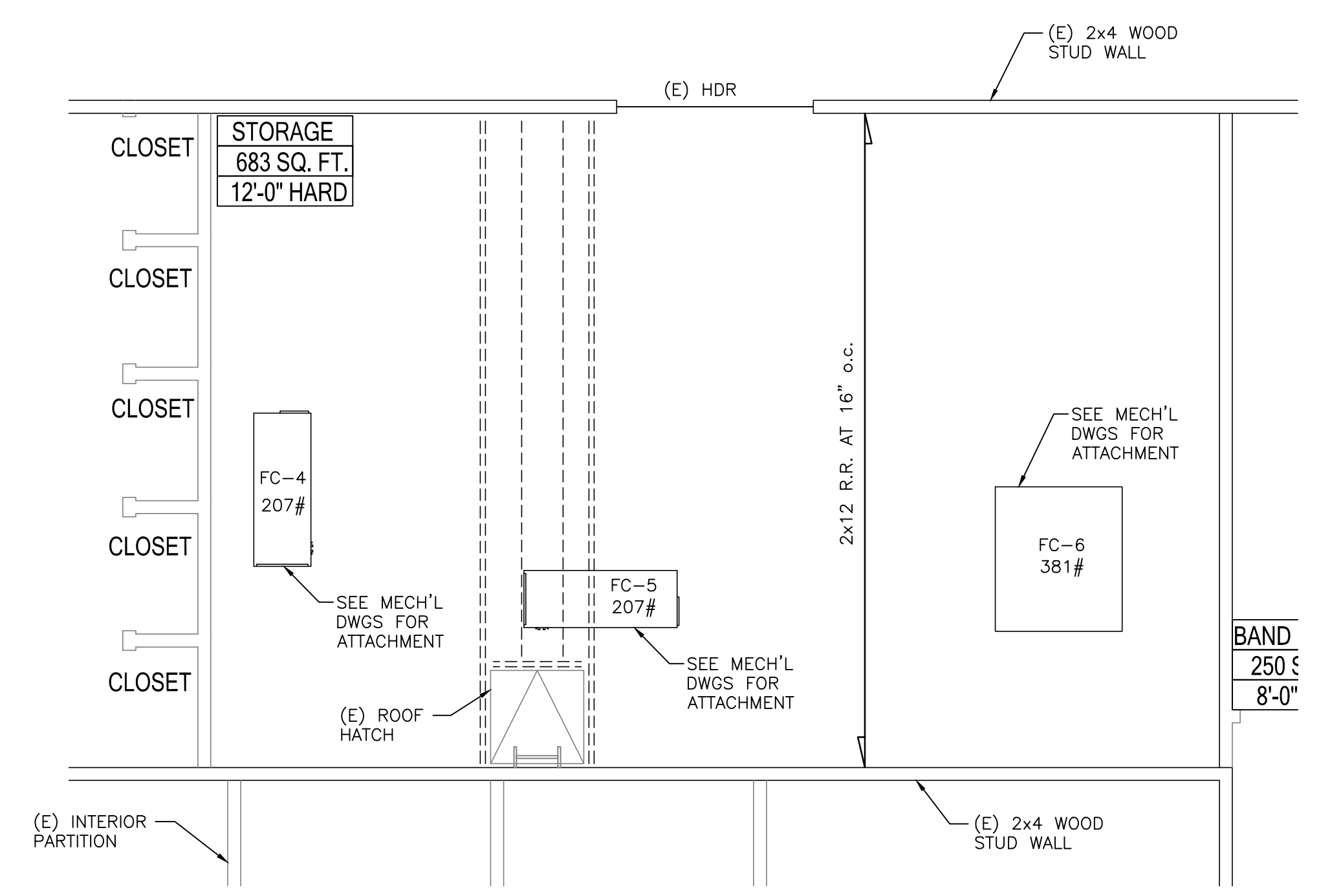
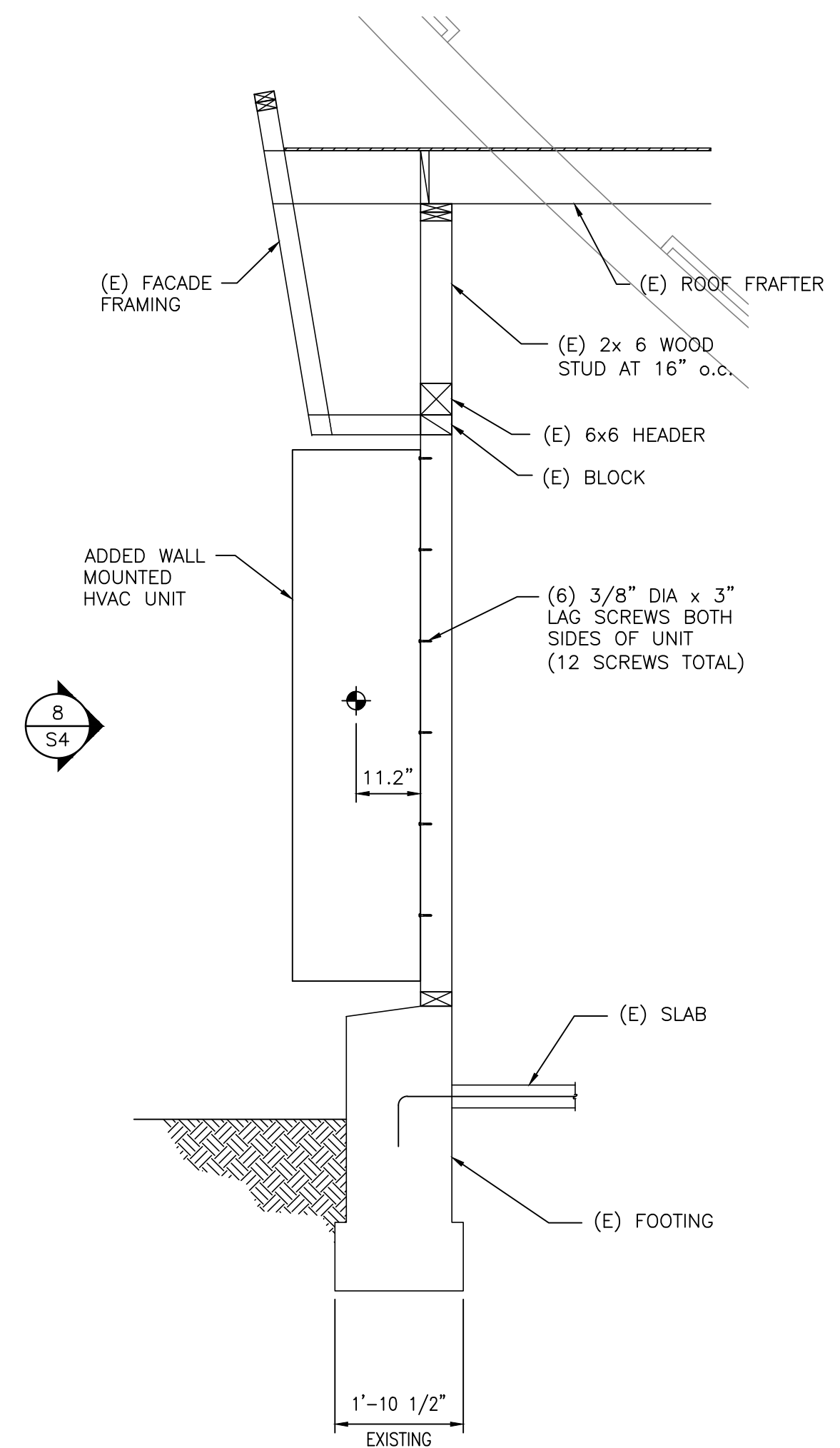
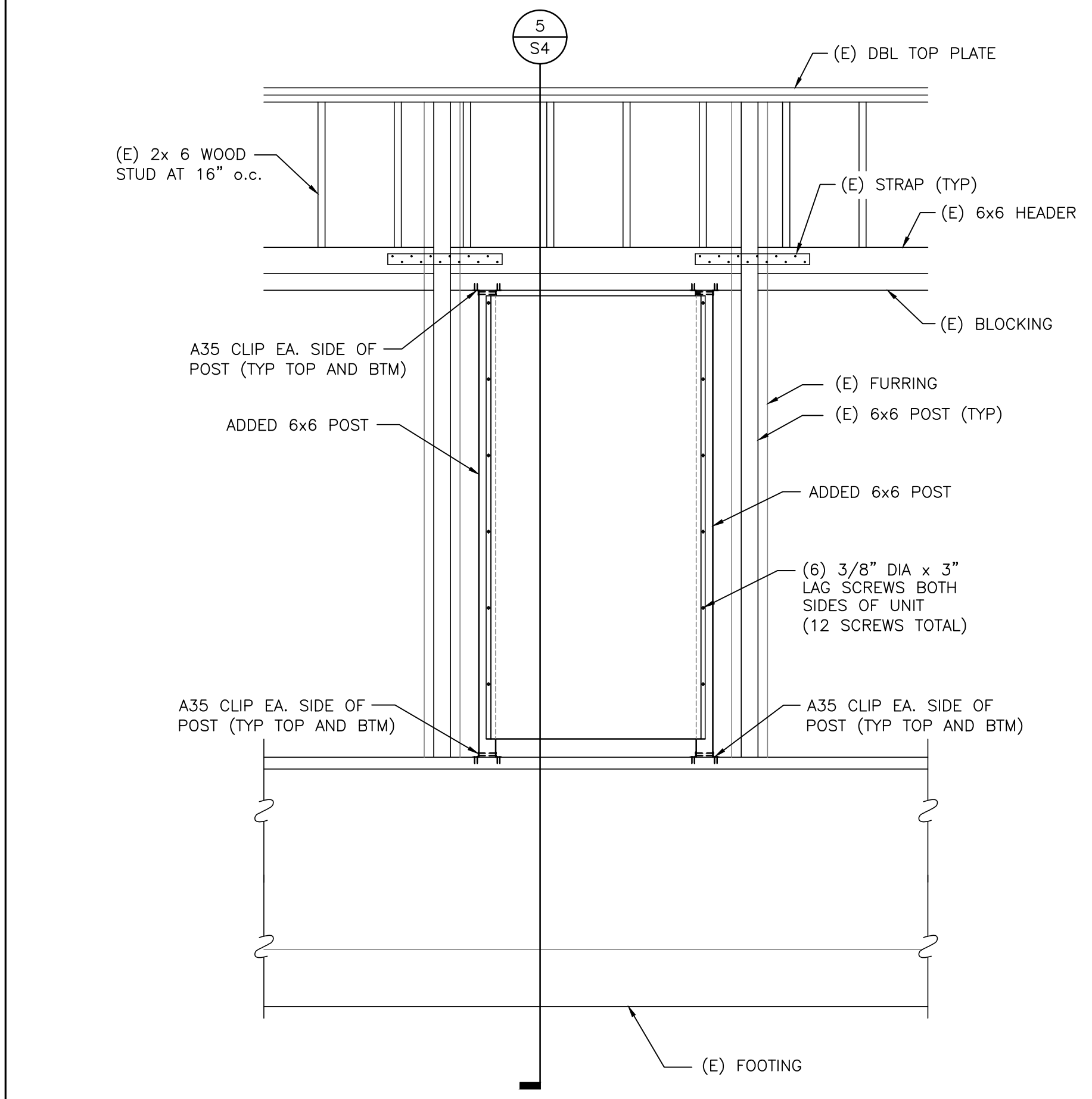
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 REG. JOB # 08-328



**HVAC ADDITIONS TO
 MUSIC BLDG.**
 COMPTON COMMUNITY
 COLLEGE DISTRICT
 COMPTON COLLEGE
 1111 E. ARTESIA BLVD.
 COMPTON, CA. 90221

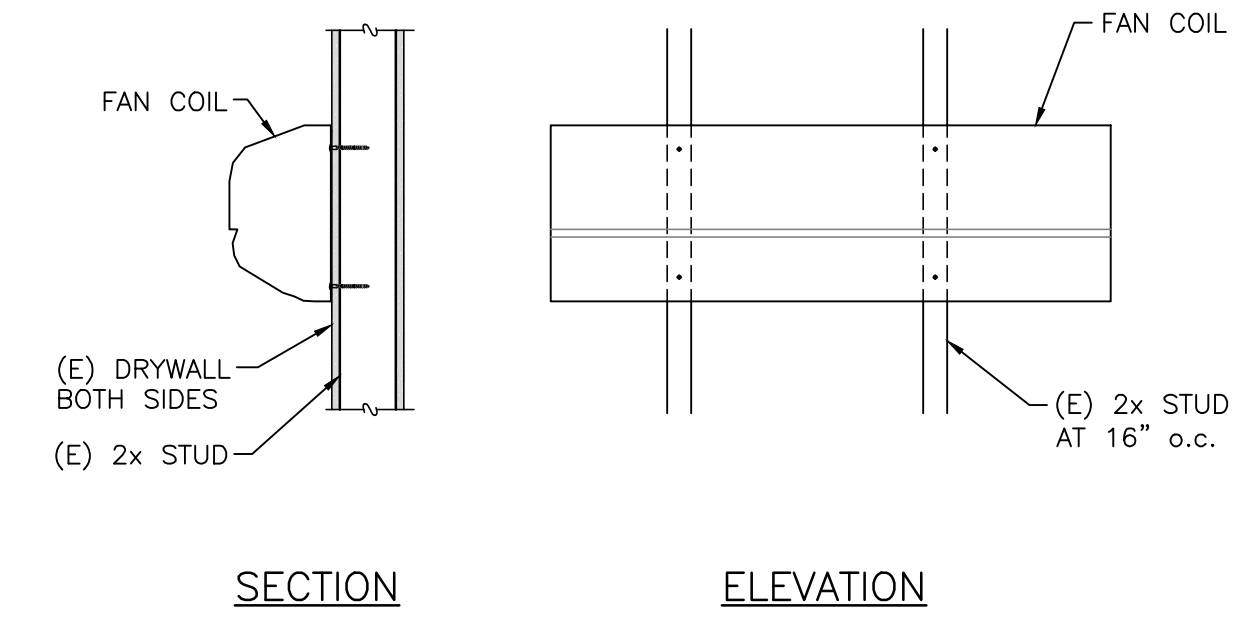


WALL MOUNTED HVAC ELEVATION

8 WALL MOUNTED HVAC SECTION

5 PARTIAL ROOF FRAMING PLAN

SCALE: 1/4"=1'-0"
 0 1' 4' 8'



6 FAN COIL ANCHORAGE

△	02/22/19	SB	100% CD
△			
△			
△			
NO	DATE	BY	DESCRIPTION

REVISIONS	
DRAWN: GMB	CHECKED: SB
DATE: 02/22/19	SCALE: AS NOTED
PROJECT NUMBER:	AS NOTED

**CONSTRUCTION
 DETAILS**

DRAWING NUMBER : **S-4**

12

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