



NEW HVAC AND REROOFING

FOOTHILL HIGH SCHOOL

4375 FOOTHILL ROAD, PLEASANTON, CA 94588

PLEASANTON UNIFIED SCHOOL DISTRICT

GENERAL NOTES

PRE-BID SITE VISIT

CONTRACTOR SHALL VISIT THE PROJECT AREA IN ORDER TO BECOME FAMILIAR WITH EXISTING CONDITIONS AND THE REQUIREMENTS OF THE PROJECT. THE CONTRACTOR MAY CONTACT THE ARCHITECT DURING THE BIDDING PHASE REGARDING CLARIFICATIONS AND PROJECT REQUIREMENTS.

SAFETY

IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE CONTRACTOR WILL BE SOLELY AND COMPLETELY RESPONSIBLE FOR CONDITIONS OF THE JOB SITE INCLUDING SAFETY OF ALL PERSONS AND PROPERTY DURING PERFORMANCE OF THE WORK. THIS REQUIREMENT WILL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS.

DAMAGE TO STRUCTURE OR SYSTEMS TO REMAIN

CONTRACTOR SHALL REIMBURSE THE OWNER FOR REPAIR AND REPLACEMENT, INCLUDING ARCHITECT'S FEES, FOR ANY DAMAGE CAUSED TO STRUCTURES, LANDSCAPE, SITE WORK, OR EXISTING SYSTEMS TO REMAIN, AS THE RESULT OF CONSTRUCTION OPERATIONS.

EXISTING CONDITIONS

ALL EXISTING CONDITIONS ARE SHOWN BASED ON THE BEST INFORMATION AVAILABLE AT THE TIME, BUT WITHOUT GUARANTEE OF ACCURACY. THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS, DIMENSIONS, AND BUILDING DATA AT THE JOB SITE. ANY DISCREPANCIES REQUIRING MODIFICATION TO THE CONSTRUCTION DOCUMENTS SHALL BE REPORTED TO THE ARCHITECT IMMEDIATELY. NO MODIFICATIONS SHALL BE MADE BY THE CONTRACTOR WITHOUT PRIOR APPROVAL FROM THE ARCHITECT.

CONTRACTOR'S EQUIPMENT

COORDINATE WITH OWNER'S REPRESENTATIVE FOR APPROVED LOCATION OF JOB SITE ACCESS, PARKING, AND LOCATION OF CONTRACTOR'S EQUIPMENT AND MATERIAL STORAGE AREA. SEE SITE PLAN FOR ADDITIONAL NOTES.

UTILITY SHUT-DOWNS AND CONNECTIONS

ALL REQUIRED UTILITY SHUT DOWNS SHALL HAVE PRIOR APPROVAL FROM THE OWNER'S REPRESENTATIVE. REQUEST SHALL BE SUBMITTED WITH ADEQUATE ADVANCE NOTICE PER PROJECT REQUIREMENTS.

ASBESTOS AND ASBESTOS PRODUCTS

THE OWNER/OPERATOR AND CONTRACTOR SHALL BE AWARE THAT BUILDINGS CONSTRUCTED PRIOR TO 1979 (OR THEREABOUT) POSSIBLY CONTAIN ASBESTOS IN SOME EXISTING CONSTRUCTION MATERIALS, AND WILL LIKELY BE ENCOUNTERED DURING ALTERATIONS OR REMODELING.

UNDER CALIFORNIA TITLE 8, THE OWNER AND CONTRACTOR BOTH HAVE RESPONSIBILITIES TO DETERMINE THE EXISTENCE OF ASBESTOS CONTAINING MATERIALS IN AREAS TO BE ALTERED OR REMODELED PRIOR TO COMMENCEMENT OF WORK AND TO TAKE APPROPRIATE MEASURES TO PROTECT PERSONNEL. CAL-OSHA HAS JURISDICTION OVER ASBESTOS RELATED WORK. ASBESTOS RELATED WORK SHALL BE DONE IN ACCORDANCE WITH CALIFORNIA GENERAL INDUSTRIAL SAFETY ORDERS, TITLE 8, SECTION 341.6 THROUGH 341.14. ASBESTOS IN THE WORK ENVIRONMENT IS REGULATED BY TITLE 8, SECTION 5208.

THE BAY AREA AIR QUALITY MANAGEMENT DISTRICT AND DISTRICT REGULATION 11-2-401.3 REQUIRES EVERY RENOVATION INVOLVING THE REMOVAL OF 100 SQ. FT., LN.FT. OR GREATER OF REGULATED ASBESTOS CONTAINING MATERIAL, AND FOR EVERY DEMOLITION (EVEN WHEN NO ASBESTOS IS PRESENT), A NOTIFICATION MUST BE SENT TO THE BAAQMD AT LEAST 10 WORKING DAYS PRIOR TO COMMENCEMENT OF DEMOLITION / RENOVATION.

ALL BUILDING MATERIALS MUST BE ASBESTOS FREE.

THESE DOCUMENTS DO NOT ADDRESS CONTAINMENT FOR EXISTING AREAS OF ASBESTOS WHICH MAY BE DISCOVERED DURING CONSTRUCTION. THE OWNER'S ABATEMENT SUBCONTRACTOR IS SOLELY RESPONSIBLE FOR THE DETECTION, REMOVAL, AND THE DISPOSAL OF ANY EXISTING ASBESTOS MATERIAL. ARCHITECTURAL AND ENGINEERING DESIGN AND/OR ARCHITECTURAL DESIGN STATE APPROVALS, AS WELL AS THE COST OF ANY REPAIRS, FOR DAMAGE CAUSED OR REPLACEMENT OF EXISTING SYSTEMS TO REMAIN, DUE TO WORK PERFORMED BY THE ASBESTOS ABATEMENT SUBCONTRACTOR, SHALL BE THE RESPONSIBILITY OF SAID SUBCONTRACTOR.

CONSTRUCTION SCHEDULING

CONTRACTOR SHALL COORDINATE ALL CONSTRUCTION OPERATIONS WITH OWNER'S REPRESENTATIVE PRIOR TO SCHEDULING AND START OF THE WORK. CONTRACTOR SHALL PROVIDE PROTECTION TO ALL EXISTING SPACES AND SYSTEMS WHICH ARE IN USE, ADJOINING THE PROJECT, AND NOT PART OF THE PROJECT.

INTERIOR FINISHES

INTERIOR FINISHES AND ALL WALL COVERING MATERIAL SHALL CONFORM TO CCR TITLE 24, PART 2, CHAPTER 6.

PIPES, DUCTS AND CONDUIT - SUPPORT AND BRACING

PIPES, DUCTS, AND CONDUITS SHALL BE SUPPORTED AND BRACED PER THE SMACNA "GUIDELINES FOR SEISMIC RESTRAINTS OF MECHANICAL SYSTEMS AND PLUMBING PIPING SYSTEMS", 09M 002-13 SEISMIC BRACING AND SUPPORT SYSTEMS.

DRILLED-IN EXPANSION ANCHORS

WHEN INSTALLING DRILLED-IN ANCHORS AND/OR POWDER DRIVEN PINS IN EXISTING NON-PRESTRESSED REINFORCED CONCRETE, USE CARE AND CAUTION TO AVOID CUTTING OR DAMAGING THE EXISTING REINFORCING BARS. WHEN INSTALLING THEM INTO EXISTING PRESTRESSED CONCRETE (PRE- OR POST-TENSIONED), LOCATE THE PRESTRESSED TENDONS BY USING A NON-DESTRUCTIVE METHOD PRIOR TO INSTALLATION. EXERCISE EXTREME CARE AND CAUTION TO AVOID CUTTING OR DAMAGING THE TENDONS DURING INSTALLATION. MAINTAIN A MINIMUM CLEARANCE OF ONE INCH BETWEEN THE REINFORCEMENT AND THE DRILLED-IN ANCHOR AND/OR PIN.

TITLE 24 COMPLIANCE

THE INTENT OF THESE DRAWINGS AND SPECIFICATIONS IS THAT THE WORK OF THE ALTERATION, REHABILITATION OR RECONSTRUCTION IS TO BE IN ACCORDANCE WITH TITLE 24, CALIFORNIA CODE OF REGULATIONS (2019 CBC), SHOULD ANY EXISTING CONDITIONS SUCH AS DETEIORATION OR NON-COMPLYING CONSTRUCTION BE DISCOVERED NOT COVERED BY THE CONTRACT DOCUMENTS WHEREIN THE FINISHED WORK WILL NOT COMPLY WITH TITLE 24, CCR, A CONSTRUCTION CHANGE DOCUMENT OR A SEPARATE SET OF PLANS AND SPECIFICATIONS, DETAILING AND SPECIFYING THE REQUIRED WORK, SHALL BE SUBMITTED TO AND APPROVED BY THE DSA BEFORE PROCEEDING WITH THE WORK.

ADMINISTRATIVE REQUIREMENTS FROM PART 1, TITLE 24, C.C.R.

- CHANGES TO THE APPROVED DRAWINGS AND SPECIFICATIONS SHALL BE MADE BY AN ADDENDUM OR A CONSTRUCTION CHANGE DOCUMENT, AND APPROVED BY DSA, AS PER SECTION 4-338
- A DSA CERTIFIED PROJECT INSPECTOR EMPLOYED BY THE DISTRICT AND APPROVED BY DSA SHALL PROVIDE CONTINUOUS INSPECTION OF WORK PER SECTION 4-342
- A DSA ACCEPTED TESTING LABORATORY DIRECTLY EMPLOYED BY THE DISTRICT SHALL CONDUCT ALL REQUIRED TEST AND INSPECTIONS FOR THE PROJECT.
- SPECIAL INSPECTION PER SECTION 4-333 (C)
- CONTRACTOR SHALL SUBMIT VERIFIED REPORT OR SECTION 4-338 & 4-343 (C)
- ADMINISTRATION OR CONSTRUCTION PER PART 1, TITLE 24, C.C.R.
- DUTIES OF ARCHITECT, STRUCTURAL ENGINEER, OR PROFESSIONAL ENGINEER PER SECTION 4-333 (A) AND 4-341
- DUTIES OF CONTRACTOR PER SECTION 4-343
- VERIFIED REPORTS PER SECTION 4-343 AND 4-338
- A COPY OF PARTS 1 TO 5 OF TITLE 24 SHALL BE KEPT AND AVAILABLE IN THE FIELD DURING CONSTRUCTION
- DSA SHALL BE NOTIFIED AT START OF CONSTRUCTION AND PRIOR TO PLACEMENT OF CONCRETE PER SECTION 4-331
- SUPERVISION BY DSA PER SECTION 4-334
- DSA IS NOT SUBJECT TO ARBITRATION

GENERAL NOTES, cont.

ADMINISTRATIVE REQUIREMENTS

- ADDENDA MUST BE SIGNED BY ARCHITECT AND APPROVED BY DSA
- NO CHANGES OR REVISIONS SHALL BE MADE FOLLOWING WRITTEN APPROVAL WHICH AFFECTS ACCESS COMPLIANCE ITEM UNLESS SUCH CHANGES TO REVISIONS ARE SUBMITTED TO DSA FOR APPROVAL
- SUBSTITUTIONS AFFECTING DSA REGULATED ITEMS SHALL BE SUBMITTED AS A CONSTRUCTION CHANGE DOCUMENT OR ADDENDA, AND SHALL BE APPROVED BY DSA PRIOR TO FABRICATION AND INSTALLATION
- CONSTRUCTION CHANGE DOCUMENTS MUST BE SIGNED BY THE FOLLOWING:
 - ARCHITECT OR ENGINEER OF RECORD
 - STRUCTURAL ENGINEER (WHEN APPLICABLE)
 - DELEGATED PROFESSIONAL ENGINEER
- MATERIALS AND THEIR INSTALLATIONS SHALL COMPLY WITH APPLICABLE CODES.
- PER CBC 11B-104.1 ALL DIMENSIONS ARE SUBJECT TO CONVENTIONAL INDUSTRY TOLERANCES EXCEPT WHERE THE REQUIREMENT IS STATED AS A RANGE WITH SPECIFIC MINIMUM AND MAXIMUM END POINTS.

COMPLIANCE WITH LOCAL ORDINANCES

GRADING PLANS, DRAINAGE IMPROVEMENTS, ROAD AND ACCESS REQUIREMENTS AND ENVIRONMENTAL HEALTH CONSIDERATIONS SHALL COMPLY WITH ALL LOCAL ORDINANCES.

ABBREVIATIONS

(REFER TO CONSULTANT DRAWINGS FOR ADDITIONAL ABBREVIATIONS)

A.F.F.	ABOVE FINISHED FLOOR	LAM.	LAMINATE
A.P.	ACCESS PANEL	LAV.	LAVATORY
ACT	ACOUSTIC TILE	M.B.	MACHINE BOLT
ADJ.	ADJUSTABLE	M.S.	MACHINE SCREW
ALUM.	ALUMINUM	M.H.	MANHOLE
AB.	ANCHOR BOLT	MFG.	MANUFACTURER
APPROX.	APPROXIMATELY	M.T.	MARKER BOARD
ARCH.	ARCHITECT	MAX.	MAXIMUM
AC	ASPHALTIC CONCRETE	MECH.	MECHANICAL
@	AT	MTL.	METAL
B.M.	BENCH MARK	MIN.	MINIMUM
BLKG.	BLOCKING	MISC.	MISCELLANEOUS
BD.	BOARD	MTD.	MOUNTED
B.W.	BOTH WAYS	(N)	NEW
BOT.	BOTTOM	NOM.	NOMINAL
B.D.G.	BUILDING	N.I.C.	NOT IN CONTRACT
B.U.R.	BUILT-UP ROOFING	N.T.S.	NOT TO SCALE
C.B.	CATCH BASIN	NO. or #	NUMBER
CL.	CEILING	OCC.	OCCUPANT(CY)
CEM.	CEMENT	OC.	ON CENTER
C.C or O.C.	CENTER TO CENTER	OPNG.	OPENING
CER. TILE	CERAMIC TILE	OPP.	OPPOSITE
C.O.	CLEANOUT	O.S.	OPPOSITE HAND
C.O.T.G.	CLEANOUT TO GRADE	O.H.	OUTSIDE FACE OF STUD
CLR.	CLEAR	O.F.O.S.	OVAL HEAD WOOD SCREW
C.A.H.R.	CLEAR ALL HEART	O.D.	OVERFLOW DRAIN and/or OUTSIDE DIAMETER
C.W.	COLD WATER	O.F.C.I.	OWNER FURNISHED AND CONTRACTOR INSTALLED
COL.	COLUMN	PR.	PAIR
COM.	COMMON	PART.	PARTITION
CONC.	CONCRETE	PL	PLATE
CONST.	CONSTRUCTION	PENNY (NAILS)	PENNY (NAILS)
C.J.	CONSTRUCTION JOINT	PLAS.	PLASTER
CH.	CONTINUOUS	PLYWD.	PLYWOOD
CONTR.	CONTRACTOR	P.V.C.	POLY VINYL CHLORIDE
COUNTER	COUNTER	P.T.	PRESSURE TREATED
COUNTER SUNK	COUNTER SUNK	P.L.	PROPERTY LINE
DET.	DETAIL	R. or RAD.	RADIUS
DIA. or Ø	DIAMETER	R.W.L.	RAIN WATER LEADER
DIM.	DIMENSION	RWD./R.W.	REDWOOD
D.A.	DISABLED ACCESS	REINF.	REINFORCING
DR.	DOOR	REQD.	REQUIRED
D.S.	DOWNSPOUT	R.A.G.	RETURN AIR GRILLE
DWG.	DRAWING	R.E.	RM ELEVATION
D.F.	DRINKING FOUNTAIN and/or DOUTGLAS FIR	R.M.	ROOM
EA.	EACH	R.O.	ROUGH OPENING
E.W.	EACH WAY	RND.	ROUND
ELEC.	ELECTRIC or ELECTRICAL	R.H.M.S.	ROUND HEAD METAL SCREW
EL. or ELEV.	ELEVATION	R.H.W.S.	ROUND HEAD WOOD SCREW
ENCL.	ENCLOSURE and/or ENCLOSURE	SSD.	SEE STRUCTURAL DRAWINGS
EQ.	EQUAL	S.T.S.M.S.	SELF TAPPING SHEET METAL SCREW
EQUIP.	EQUIPMENT	SHEATH.	SHEATHING
(E)	EXISTING	S.M.	SHEET METAL SCREW
EXP.	EXPANSION	S.O.V.	SHUT OFF VALVE
EXT.	EXPANSION JOINT	S.C.	SOLID CORE
F.C.	FACE OF CONCRETE	SPEC.	SPECIFICATION
F.O.M.	FACE OF MASONRY	SQ.	SQUARE
F.O.S.	FACE OF STUD	S.F.C.	SQUARE FEET
FIN.	FINISH	STAG.	STAGGERED
F.F.	FINISHED FLOOR	STD.	STANDARD
F.S.	FINISH SLAB	S.S.	STAINLESS STEEL
F.E.	FIRE EXTINGUISHER	STL.	STEEL
F.E.C.	FIRE EXTINGUISHER CABINET	STR.	STRUCTURE
F.H.	FIRE HYDRANT	S.A.G.	SUPPLY AIR GRILLE
F.H.M.S.	FLAT HEAD METAL SCREW	THRES.	THRESHOLD
F.H.W.S.	FLAT HEAD WOOD SCREW	T&G.	TONGUE & GROOVE
FL. or FLR.	FLOOR	T.J.	TOOLED JOINT
F.D.	FLOOR DRAIN	T.O.B.	TOP OF BEAM
FTG.	FOOTING	T.O.C.	TOP OF CURB or CONCRETE
FN.	FOUNDATION	T.O.S.	TOP OF STEEL or SHEATHING
GALV.	GALVANIZED	T.O.W.	TOP OF WALK
G.I.	GALVANIZED IRON	TYP.	TYPICAL
GA.	GAUGE	U.O.N.	UNLESS OTHERWISE NOTED
GL.	GLASS	U.O.S.	UNLESS OTHERWISE SHOWN
GLU-LAM	GLUE-LAMINATED	V.T.R.	VERTICAL
GRD.	GRADE	VERT.	VERTICAL
GYP. BD.	GYPSUM BOARD	V.G.	VERTICAL GRAIN
HDW.	HARDWARE	V.I.F.	VERIFY IN FIELD
HT.	HEIGHT	V.C.T.	VINYL COMPOSITION TILE
H.C.	HOLLOW CORE	V.W.C.	VINYL WALL COVERING
H.M.	HOLLOW METAL	V.O.I.P.	VOICE OVER INTERNET PROTOCOL
HORIZ.	HORIZONTAL	W.C.	WATER CLOSET
H.B.	HORSE BIBB	W.H.	WATER HEATER
I.D.	INSIDE DIAMETER	WP.	WATERPROOF
INSUL.	INSULATION	INT.	INTERIOR
INT.	INTERIOR	W.W.M.	WELDED WIRE MESH
INV.	INVERT	W.D.	WINDOW DIMENSION
JT.	JOINT	W/	WITH
J.H.	JOIST HANGER	W/O	WITHOUT
K.D.	KILN DRIED	WD.	WOOD



BUILDING CODES AND STANDARDS:

2019	CALIFORNIA ADMINISTRATIVE CODE (CBC), PART 2, TITLE 24, C.C.R.	
2019	CALIFORNIA BUILDING CODE (CBC), PART 2, TITLE 24, C.C.R. (2018 INTERNATIONAL BUILDING CODE, VOLUMES 1 AND 2, WITH 2019 CALIFORNIA AMENDMENTS.)	
2019	CALIFORNIA ELECTRIC CODE (CEC), PART 3, TITLE 24, C.C.R. (2018 NATIONAL ELECTRIC CODE WITH 2019 CALIFORNIA AMENDMENTS.)	
2019	CALIFORNIA MECHANICAL CODE (CMC), PART 4, TITLE 24, C.C.R. (2018 UNIFORM MECHANICAL CODE WITH 2019 CALIFORNIA AMENDMENTS.)	
2019	CALIFORNIA PLUMBING CODE (CPC), PART 5, TITLE 24, C.C.R. (2018 UNIFORM PLUMBING CODE WITH 2019 CALIFORNIA AMENDMENTS.)	
2019	CALIFORNIA ENERGY CODE (CENC), PART 6, TITLE 24, C.C.R.	
2019	CALIFORNIA FIRE CODE (CFC), PART 9, TITLE 24, C.C.R. (2018 INTERNATIONAL FIRE CODE WITH 2019 CALIFORNIA AMENDMENTS.)	
2019	CALIFORNIA GREEN BUILDING STANDARDS CODE, PART 11, TITLE 24, C.C.R.	
2019	CALIFORNIA REFERENCED STANDARDS, PART 12, TITLE 24, C.C.R.	
2016	ASME A17.1 (W/17-1) (ASCSA B44a-08 ADDENDA) SAFETY CODE FOR ELEVATORS AND ESCALATORS	
2010	ADA STANDARDS FOR ACCESSIBLE DESIGN (28 CFR PART 35 FOR TITLE II ENTITIES)	
CCR TITLE-19, PUBLIC SAFETY, STATE FIRE MARSHAL REGULATIONS.		
NFPA 13	INSTALLATION OF SPRINKLER SYSTEMS (CA AMENDED)	2016 EDITION
NFPA 14	INSTALLATION OF STANDPIPE & HOSE SYSTEMS (CA AMENDED)	2016 EDITION
NFPA 17	DRY CHEMICAL EXTINGUISHING SYSTEMS	2017 EDITION
NFPA 17A	WET CHEMICAL EXTINGUISHING SYSTEM	2017 EDITION
NFPA 20	STATIONARY FIRE PUMPS TO FIRE PROTECTION	2016 EDITION
NFPA 22	WATER TANKS FOR PRIVATE FIRE PROTECTION	2013 EDITION
NFPA 24	PRIVATE FIRE SERVICE MAINS	2016 EDITION
NFPA 25	INSPECTION, TESTING AND MAINTENANCE OF WATER BASED FIRE PROTECTION SYSTEMS (CA AMENDED)	2013 CALIFORNIA EDITION 2016 EDITION
NFPA 72	NATIONAL FIRE ALARM CODE (CA AMENDED)	2016 EDITION
NFPA 80	FIRE DOORS AND OTHER OPENING PROTECTIVES	2016 EDITION
NFPA 92	STANDARD FOR SMOKE CONTROL SYSTEMS	2015 EDITION
NFPA 110	EMERGENCY AND STANDBY POWER SYSTEMS	2016 EDITION
NFPA 170	STANDARD FOR FIRE SAFETY AND EMERGENCY SYMBOLS	2018 EDITION
NFPA 253	CRITICAL RADIANT FLUX OF FLOOR COVERING SYSTEMS	2015 EDITION
NFPA 2001	CLEAN AGENT FIRE EXTINGUISHING SYSTEMS	2015 EDITION
ICC 300	STANDARDS FOR BLEACHERS, FOLDING AND TELESCOPIC SEATING, AND GRANDSTANDS	2017 EDITION
SFM 12-10-1	POWER OPERATED EXIT DOORS	
SFM 12-10-2	SINGLE POINT LATCHING OR LOCKING DEVICES	
SFM 12-10-3	EMERGENCY EXIT & PANIC HARDWARE	
UL 38	MANUAL OPERATING SIGNAL BOXES	1999/2005 EDITION 2009 EDITION
UL 288	SMOKE DETECTORS FOR FIRE PROTECTIVE SIGNALING SYSTEMS	
UL 268A	SMOKE DETECTORS DUCT APPLICATIONS	1998/2003 EDITION 2005 (R2010)
UL 300	FIRE TESTING OF FIRE EXTINGUISHING SYSTEMS FOR PROTECTION OF COMMERCIAL COOKING EQUIPMENT	
UL 305	PANIC HARDWARE	2012 EDITION
UL 464	AUDIBLE SIGNALING DEVICES FOR FIRE ALARM AND SIGNALING SYSTEMS, AND ACCESSORIES	2003 EDITION
UL 521	HEAT DETECTORS FOR FIRE PROTECTIVE SIGNALING SYSTEMS	1999 EDITION
UL 864	CONTROL UNITS FOR FIRE PROTECTIVE SIGNALING SYSTEMS (W/ REVISIONS THROUGH DEC. 2014)	2003 EDITION
UL 1971	SIGNALING DEVICES FOR THE HEARING IMPAIRED	2002 EDITION
COMPLIANCE WITH CFC CHAPTER 33, FIRE SAFETY DURING CONSTRUCTION AND DEMOLITION AND CBC CHAPTER 33, SAFETY DURING CONSTRUCTION WILL BE ENFORCED.		

SYMBOLS LEGEND

1	SECTION / EXTERIOR ELEVATION
A8.1	SECTION IDENTIFICATION SHEET WHERE SECTION IS DRAWN
4	DETAIL
A8.1	DETAIL IDENTIFICATION SHEET WHERE DETAIL IS DRAWN
1	INTERIOR ELEVATION
A7.1	INDICATES ELEVATION SHOWN SHEET WHERE ELEVATION IS DRAWN
CLASSROOM	ROOM IDENTIFICATION
102	ROOM NAME ROOM NUMBER
3	SPECIFIC NOTE
102A	DOOR DESIGNATION
A	WINDOW DESIGNATION
1	ADDENDUM REVISION
CLOUD	CLOUD AROUND REVISION
CCD	CCD REVISION
CLOUD	CLOUD AROUND REVISION
127	FINISH NUMBER
	SEE SPECS AND I.E. DWGS.
A	EQUIPMENT LETTER
	SEE EQUIPMENT SCHEDULE
48'-0"	CEILING HEIGHT
1	WALL TYPE
	MATCH LINE
48'-0"	ELEV. HEIGHT
	CENTER OF
	FACE OF

PROJECT SUMMARY

THE DEMOLITION OF EXISTING ROOFING AND THE INSTALLATION OF NEW BUILD UP ROOFING ON BUILDINGS E, F, AND G. THE REPAIR/REPLACEMENT OF EXISTING ROOF SCREENS INCLUDING REPAIRING OF EXISTING SUPPORTS, NEW GATES, AND METAL WALL PANELS. ADDITIONALLY, THE HVAC UNITS AND PLATFORMS THAT THEY SIT ON WILL BE REPLACED.

THERE ARE NO DEFERRED SUBMITTALS FOR THIS PROJECT.

DESIGN TEAM

ARCHITECT
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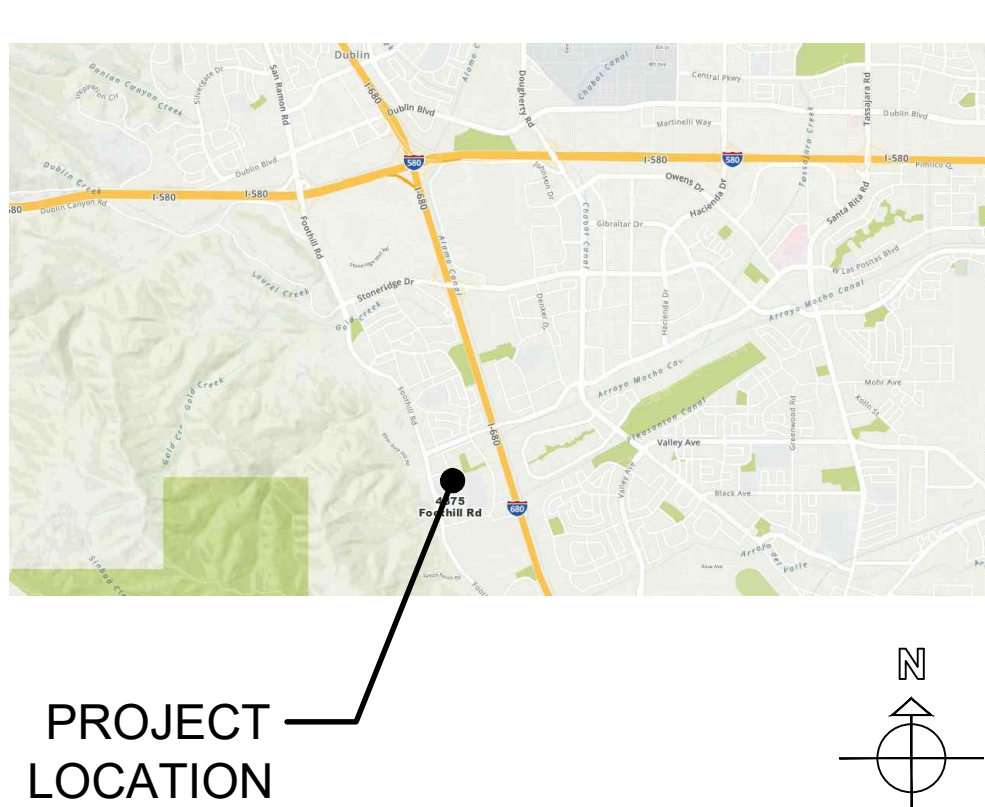
MECHANICAL AND PLUMBING ENGINEER
CYPRESS ENGINEERING GROUP
8 HARRIS COURT, SUITE A8
MONTEREY, CALIFORNIA 93940
(831) 218-1002

ELECTRICAL AND FIRE ALARM ENGINEER
AURUM CONSULTING ENGINEERS
1798 TECHNOLOGY DRIVE, SUITE 242
SAN JOSE, CA 95110
(408) 564-7025

DRAWING INDEX

T1	TITLE SHEET
ARCHITECTURAL	
A0.2	SITE PLAN
A4.1	DEMOLITION ROOF PLAN BUILDING E
A4.2	NEW ROOF PLAN BUILDING E
A4.3	DEMOLITION ROOF PLAN BUILDING F
A4.4	NEW ROOF PLAN BUILDING F
A4.5	DEMOLITION AND NEW ROOF PLANS BUILDING G
A8.1	TYPICAL DETAILS
MECHANICAL / PLUMBING	
MP0.1	SYMBOL LEGENDS, ABBREVIATIONS, NOTES - MECHANICAL & PLUMBING
MP2.2	BUILDING F - DEMOLITION ROOF PLAN - MECHANICAL & PLUMBING
MP3.3	BUILDING G - DEMOLITION ROOF PLAN - MECHANICAL & PLUMBING
MP3.5	BUILDING F - NEW ROOF PLAN - MECHANICAL & PLUMBING
MP3.6	BUILDING G - NEW ROOF PLAN - MECHANICAL & PLUMBING
MP6.1	DETAILS - MECHANICAL & PLUMBING
MP7.2	BLDG F - EXISTING FLOOR PLANS - MECHANICAL / TAB WORK
MP8.1	TITLE 24 FORMS - MECHANICAL
MP8.2	TITLE 24 FORMS - PLUMBING
ELECTRICAL	
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E1.1	ELECTRICAL DETAILS
E2.1	ELECTRICAL SITE PLAN
E3.1	ELECTRICAL DEMOLITION PLANS - BUILDINGS F & G
E4.1	ELECTRICAL ROOF PLANS - BUILDINGS F & G
E4.2	POWER PLAN - BUILDING F
FA0.1	FIRE ALARM SYMBOLS, ABBREVIATIONS, EQUIPMENT LIST, BATTERY CALCULATION, OPERATIONAL MATRIX, NOTES & FIRE ALARM RISER DIAGRAM
FA.1	FIRE ALARM PLAN - BUILDING F
SHEET TOTAL = 27	

VICINITY MAP



TITLE SHEET

REVISED	NO.	ITEM	DATE
1	1		
DRAWN BY: RB			
CHECKED BY: MB			
SFA JOB NO: DATE:			
20090 X/XX/2020			
T1			

- GENERAL NOTES
- A. REFER TO LANDSCAPE, CIVIL, STRUCTURAL, MECHANICAL, PLUMBING, ELECTRICAL, FIRE ALARM, AND FIRE PROTECTION DRAWINGS FOR EXTENT OF OTHER RELATED WORK.
- B. CONTRACTOR TO VERIFY PORTABLE BUILDING NUMBERS WITH THE DISTRICT PRIOR TO SIGNAGE.
- C. CONTRACTOR TO VERIFY ALL BARRIERS IN P.O.T. HAVE BEEN REMOVED.

(DSA STAMP AREA)

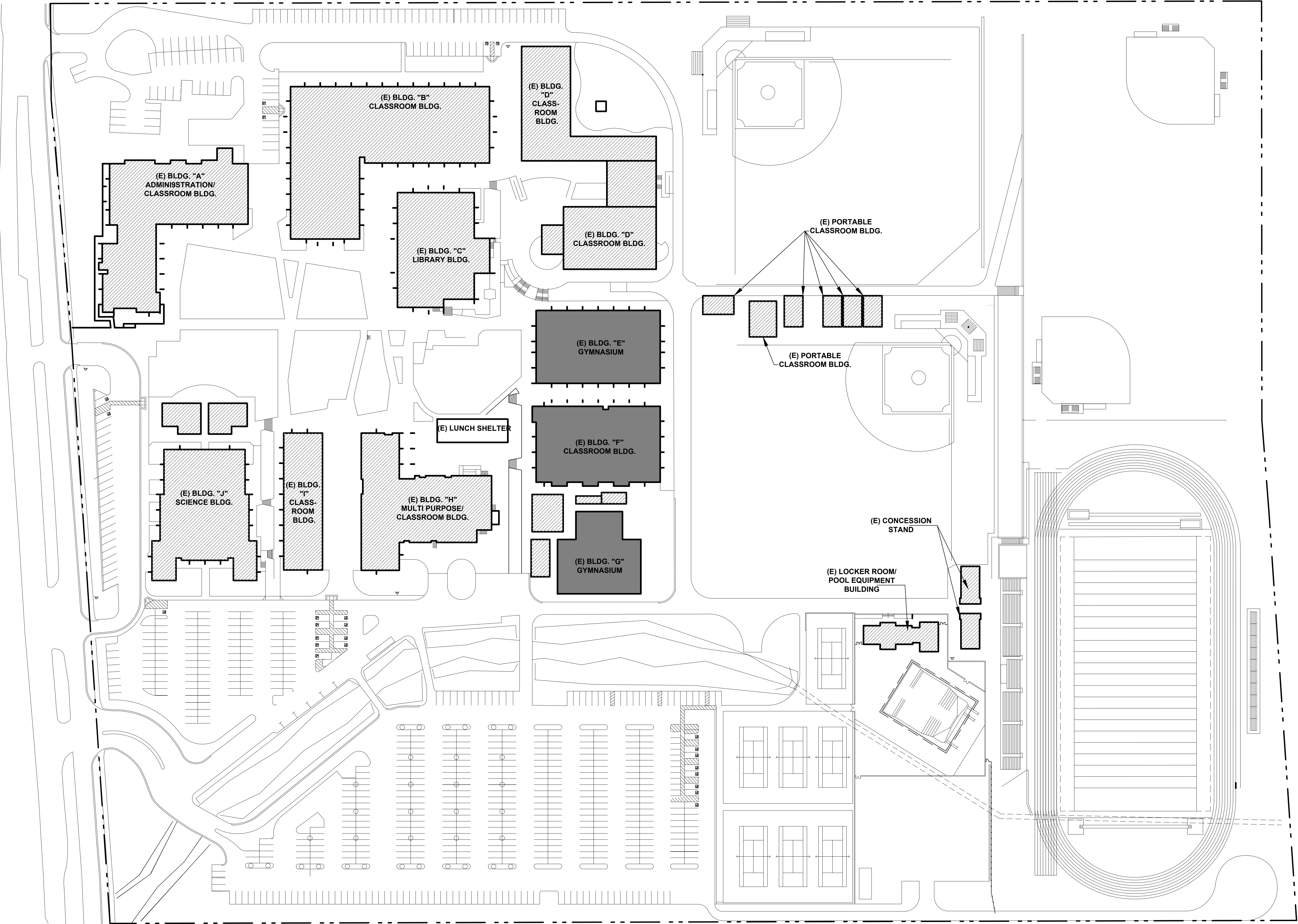
SUGIMURA
FINNEY
ARCHITECTS
SFA
ARCHITECTURE INTERIORS PLANNING

2155 SOUTH BASCOM AVE.
SUITE 200
CAMPBELL, CA 95003
PHONE: 408-879-6600
FAX: 408-377-6555

STATE OF CALIFORNIA
LICENSED ARCHITECT
MARK C. FINNEY
NO. C-24673
EXPIRES 9-30-23

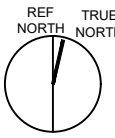
GRAPHIC KEY

- EXISTING PROPERTY LINE
- - - ROOF OVERHANG
- - - CHAINLINK FENCE
- - - WOOD FENCE
- - - DECORATIVE FENCE
- ▨ EXISTING BUILDING
- SCOPE OF WORK



1" = 60'-0"

0 15' 30' 60' 120' 180'



1 SITE PLAN

SITE PLAN

NEW HVAC AND REROOFING
FOOTHILL HIGH SCHOOL
4375 FOOTHILL ROAD, PLEASANTON, CA 94588
PLEASANTON UNIFIED SCHOOL DISTRICT

NO.	REVISIONS	ITEM	DATE
1			

DRAWN BY: RB
CHECKED BY: MB
SFA JOB NO: 20090
DATE: X/XX/2020

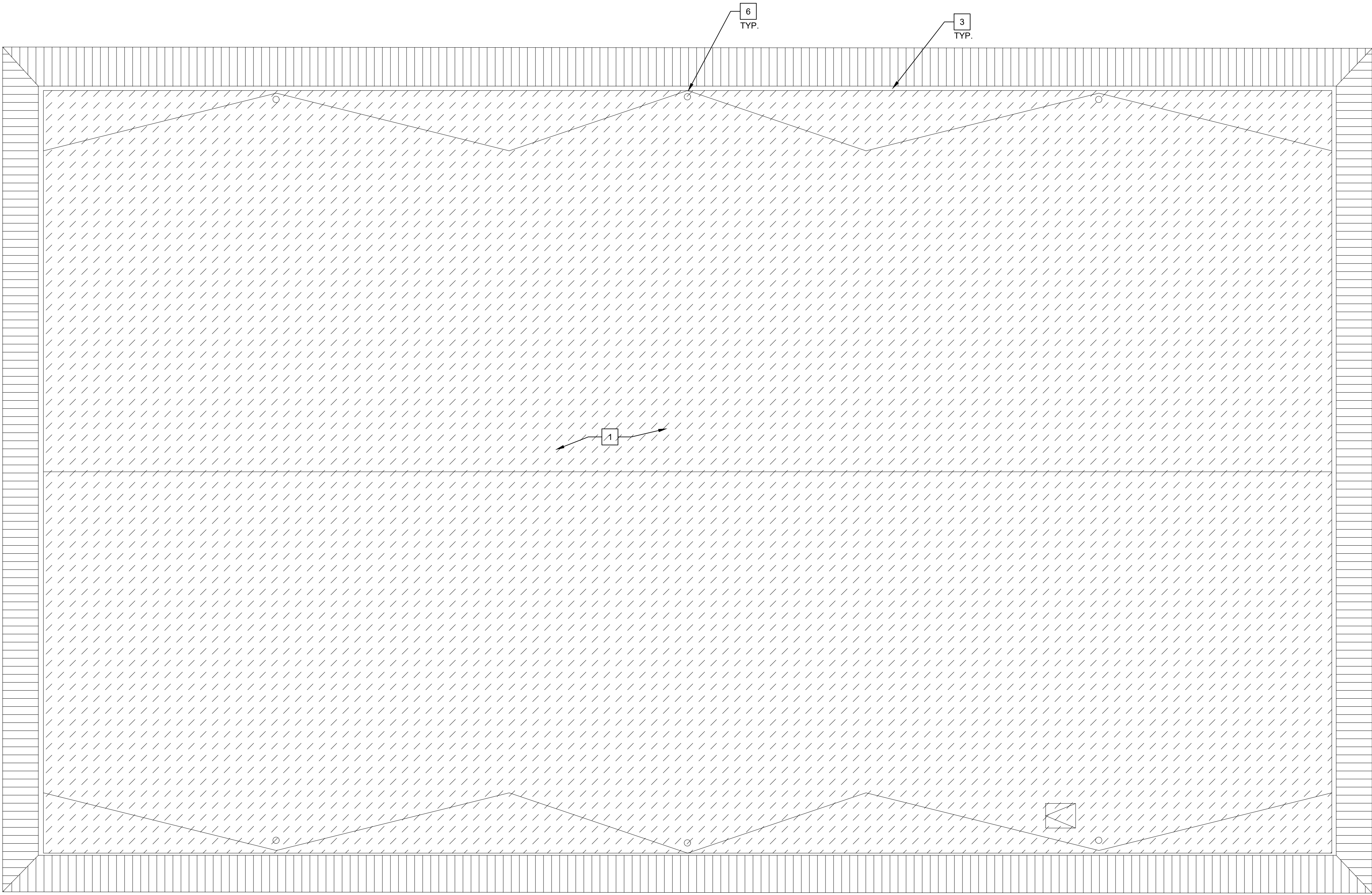
A0.2

1

DEMOLITION ROOF PLAN - BUILDING E

1/8" = 1'-0"

0 2' 4' 8' 16' 24'



GENERAL NOTES

- A. NOT ALL ROOF APPURTENANCES ARE SHOWN ON DRAWINGS. CONTRACTOR TO FIELD VERIFY QUANTITIES AND LOCATIONS OF ALL DEVICES AND EQUIPMENT. REFER TO MECHANICAL AND ELECTRICAL DRAWINGS FOR ADDITIONAL SCOPE OF WORK.
- B. CONTRACTOR TO REMOVE AND REINSTALL MECHANICAL UNITS, DUCTWORK AND ALL OTHER ROOF TOP APPURTENANCES AS REQUIRED FOR INSTALLATION OF ROOFING. CONTRACTOR TO REINSTALL AND RECONNECT ALL DEVICES AND RETURN THEM TO WORKING ORDER. CONTRACTOR TO NOTIFY DISTRICT AND ARCHITECT OF ANY DEVICES NOT FUNCTIONING PRIOR TO REMOVAL.
- C. PATCH AND REPAIR BUILT-UP ROOFING WHERE REQUIRED AS A RESULT OF NEW WORK.
- D. PROVIDE R-30 INSULATION AT ROOF FRAMING.
- E. COORDINATE SLEEPER LOCATIONS WITH MECHANICAL, PLUMBING, AND/OR ELECTRICAL AS REQUIRED. SEE DETAIL XX.
- PM VERIFY THE FOLLOWING:
- F. ALL EXISTING ROOF SYSTEM, INSULATION, FLASHING, ETC., ARE TO BE REMOVED AND PREPARED FOR INSTALLATION OF NEW ROOFING AND FLASHING SYSTEMS.

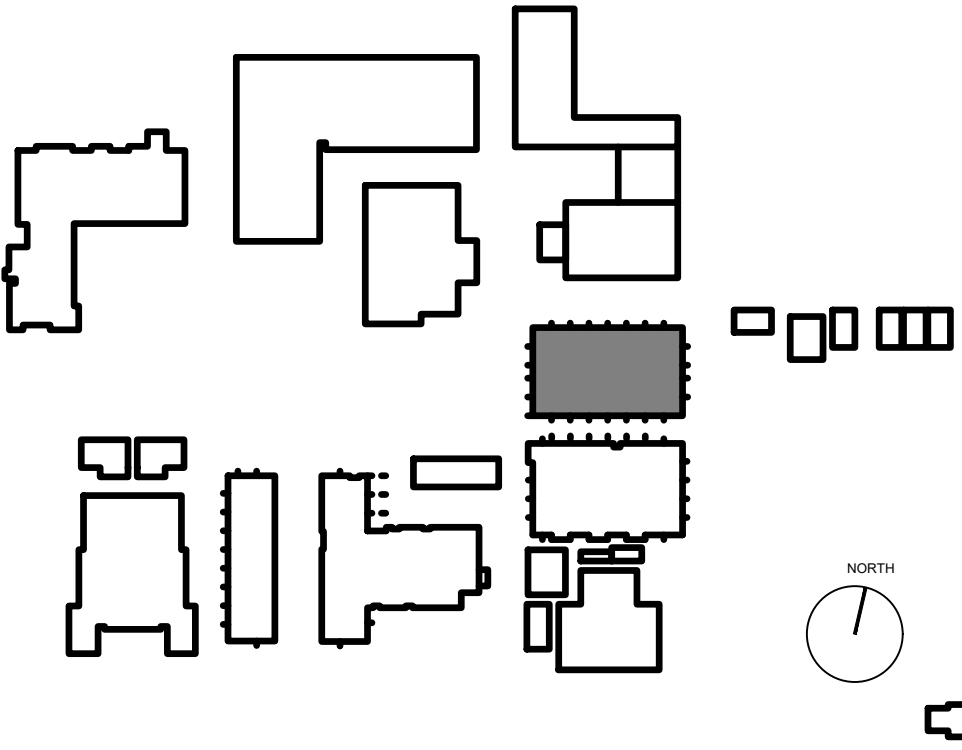
DEMOLITION ROOF PLAN NOTES

1. REMOVE (E) ROOFING TO EXPOSE SHEATHING, PREPARE FOR NEW ROOFING SYSTEM, SEE SPECS.
2. REMOVE (E) AC UNITS, PREPARE AREA FOR NEW HVAC UNITS, SEE MECHANICAL DRAWINGS.
3. REMOVE (E) PARAPET FLASHING AND CAP.
4. (E) SKYLIGHTS TO REMAIN.
5. REMOVE (E) EXHAUST FANS AND RELIEF HOODS, PREPARE FOR NEW FANS AND HOODS, SEE MECHANICAL DRAWINGS.
6. REMOVE (E) ROOF DRAINS, PREPARE FOR NEW DRAINS.

GRAPHIC KEY

- EXISTING TO BE DEMOLISHED
- EXISTING ROOFING TO BE REMOVED

BUILDING KEY



DEMOLITION ROOF PLAN
BUILDING E

NEW HVAC AND REROOFING
FOOTHILL HIGH SCHOOL
4375 FOOTHILL ROAD, PLEASANTON, CA 94588
PLEASANTON UNIFIED SCHOOL DISTRICT

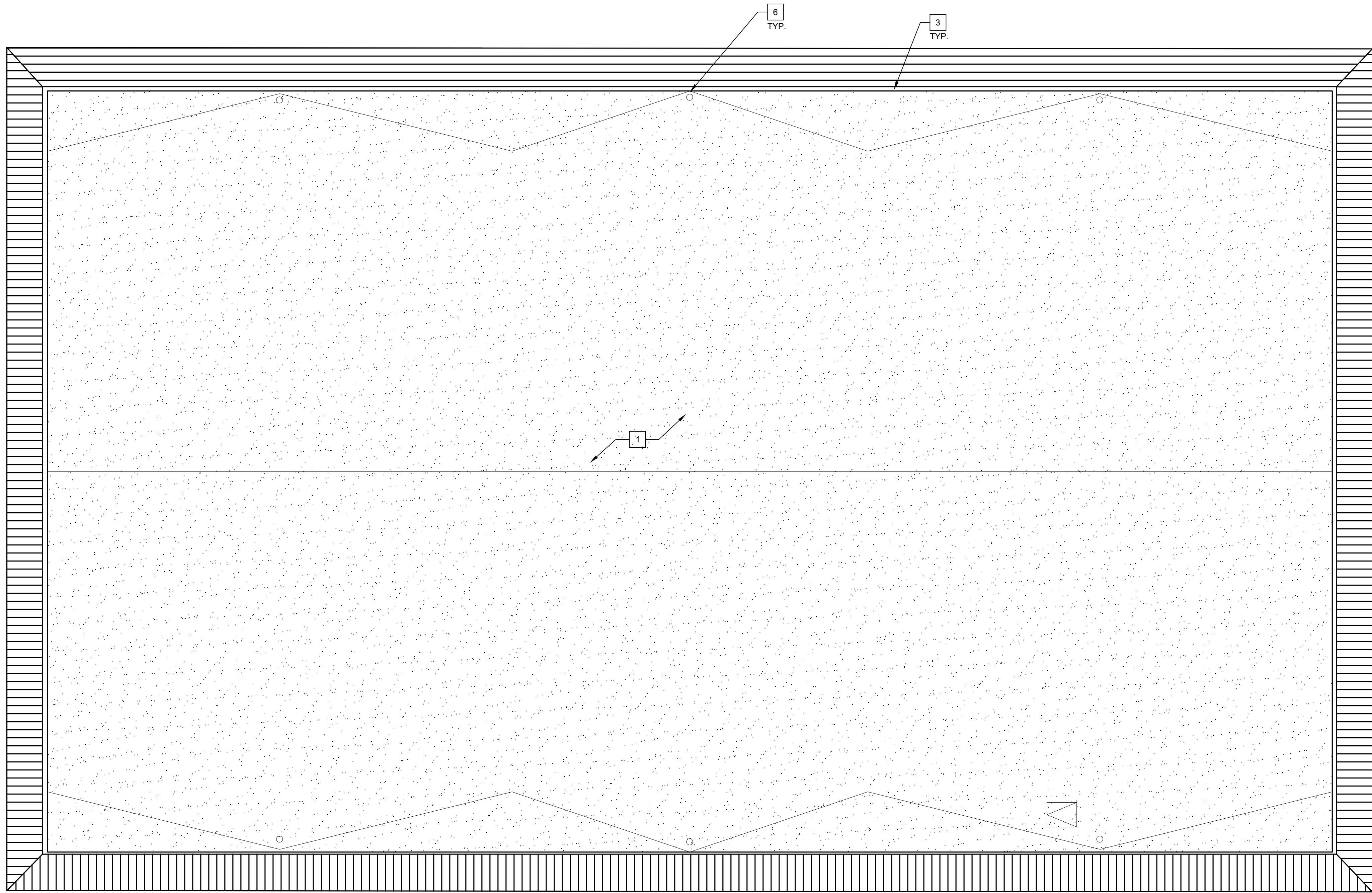
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NO.	ITEM	DATE
DRAWN BY: RB		
CHECKED BY: MB		
SFA JOB NO: 20090		DATE: X/XX/2020

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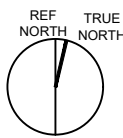
(DSA STAMP AREA)



1 DEMOLITION ROOF PLAN - BUILDING E



1/8" = 1'-0"



GENERAL NOTES

- A. NOT ALL ROOF APPURTENANCES ARE SHOWN ON DRAWINGS. CONTRACTOR TO FIELD VERIFY QUANTITIES AND LOCATIONS OF ALL DEVICES AND EQUIPMENT. REFER TO MECHANICAL AND ELECTRICAL DRAWINGS FOR ADDITIONAL SCOPE OF WORK.
- B. CONTRACTOR TO REMOVE AND REINSTALL MECHANICAL UNITS, DUCTWORK AND ALL OTHER ROOF TOP APPURTENANCES AS REQUIRED FOR INSTALLATION OF ROOFING. CONTRACTOR TO REINSTALL AND RECONNECT ALL DEVICES AND RETURN THEM TO WORKING ORDER. CONTRACTOR TO NOTIFY DISTRICT AND ARCHITECT OF ANY DEVICES NOT FUNCTIONING PRIOR TO REMOVAL.
- C. PATCH AND REPAIR BUILT-UP ROOFING WHERE REQUIRED AS A RESULT OF NEW WORK.
- D. PROVIDE R-30 INSULATION AT ROOF FRAMING.
- E. COORDINATE SLEEPER LOCATIONS WITH MECHANICAL, PLUMBING, AND/OR ELECTRICAL AS REQUIRED. SEE DETAIL XX.
- PM VERIFY THE FOLLOWING:
- F. ALL EXISTING ROOF SYSTEM, INSULATION, FLASHING, ETC., ARE TO BE REMOVED AND PREPARED FOR INSTALLATION OF NEW ROOFING AND FLASHING SYSTEMS.

NEW ROOF PLAN NOTES

1. (N) ROOFING SYSTEM, INCLUDING INSIDE OF PARAPET WALL, SEE SPECS.
2. (N) AC UNITS, SEE MECHANICAL DRAWINGS.
3. (N) PARAPET FLASHING AND CAP.
4. (E) SKYLIGHTS TO REMAIN.
5. (N) EXHAUST FANS AND RELIEF HOODS, SEE MECHANICAL DRAWINGS.
6. (N) ROOF DRAINS.

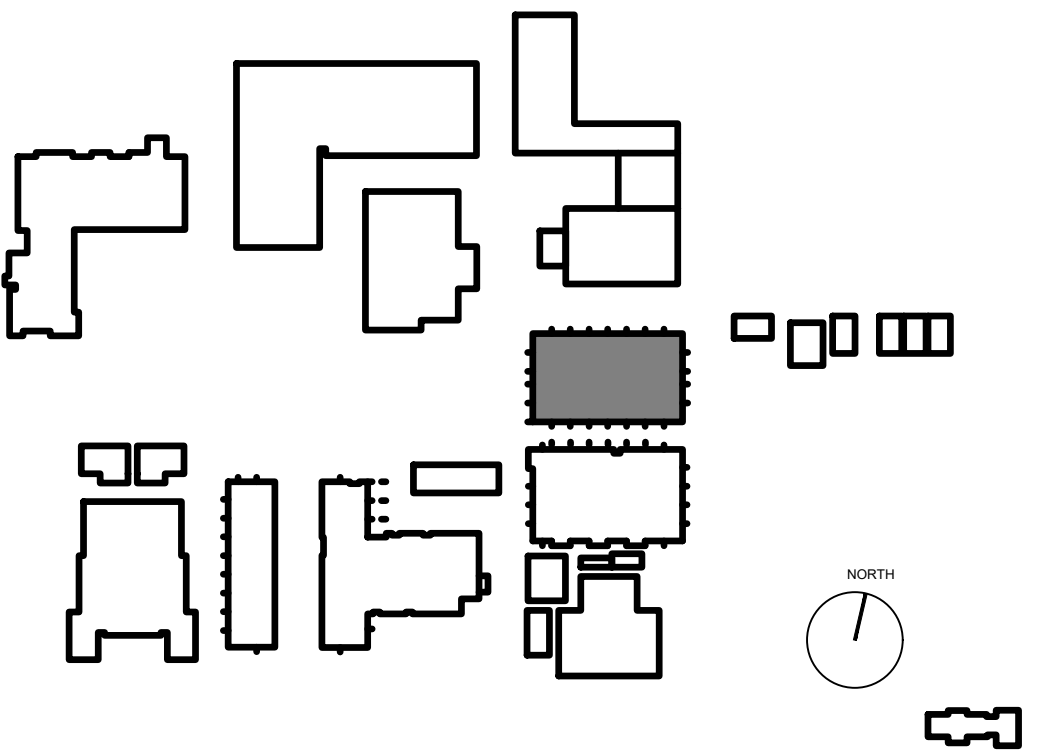
DEMOLITION ROOF PLAN NOTES

1. REMOVE (E) ROOFING TO EXPOSE SHEATHING, INCLUDING SIDE OF PARAPET WALL. PREPARE FOR NEW ROOFING SYSTEM, SEE SPECS.
2. REMOVE (E) AC UNITS, PREPARE AREA FOR NEW HVAC UNITS, SEE MECHANICAL DRAWINGS.
3. REMOVE (E) PARAPET FLASHING AND CAP.
4. (E) SKYLIGHTS TO REMAIN.
5. REMOVE (E) EXHAUST FANS AND RELIEF HOODS, PREPARE FOR NEW FANS AND HOODS, SEE MECHANICAL DRAWINGS.
6. REMOVE (E) ROOF DRAINS, PREPARE FOR NEW DRAINS.

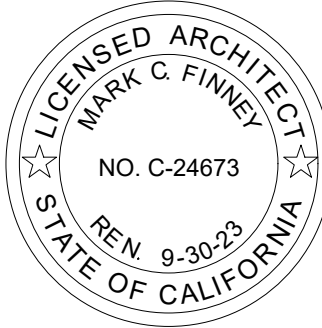
GRAPHIC KEY

- EXISTING TO BE DEMOLISHED
- EXISTING ROOFING TO BE REMOVED
- NEW BUILT-UP ROOFING

BUILDING KEY



(DSA STAMP AREA)

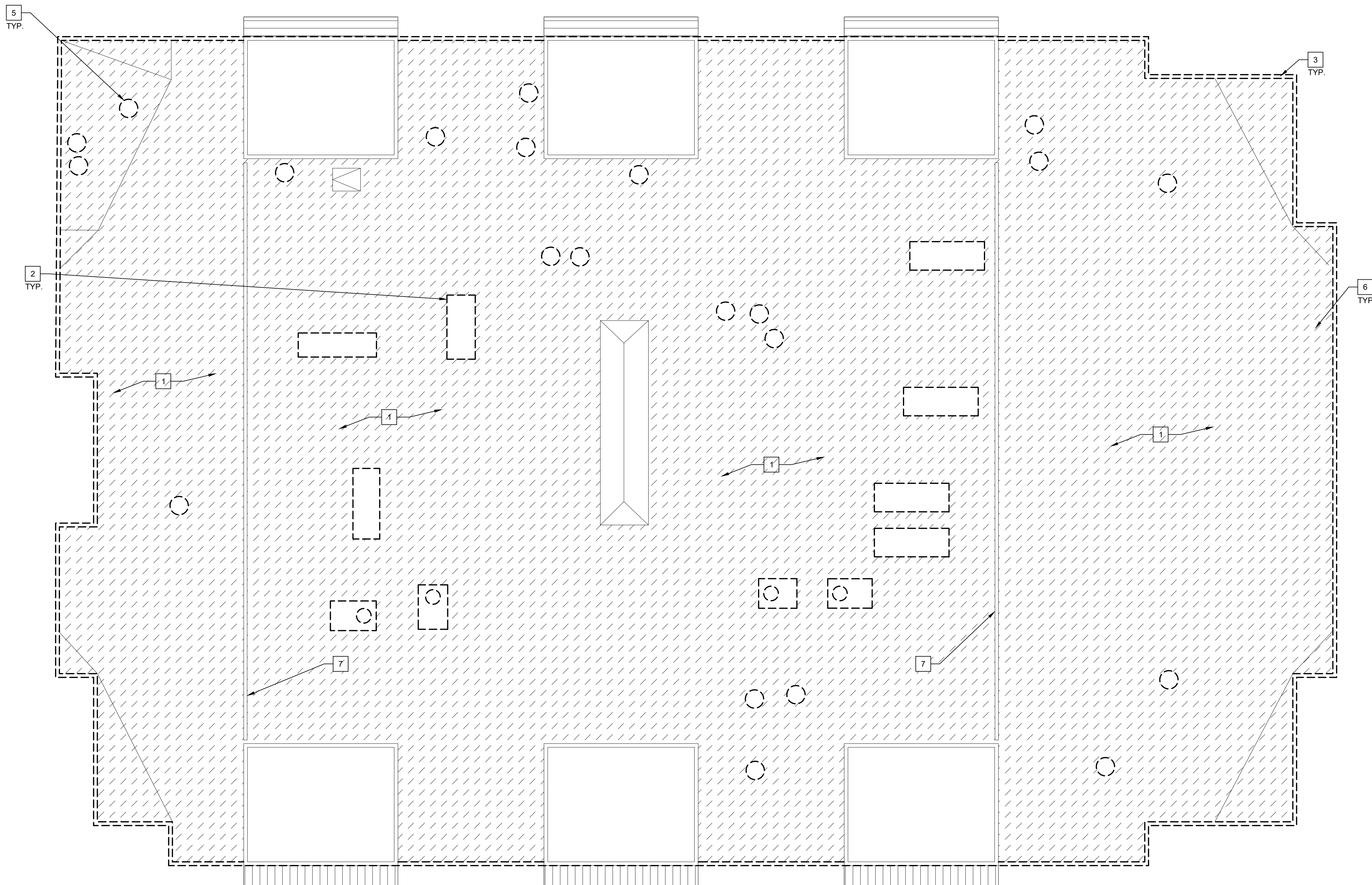


NEW ROOF PLAN
BUILDING E

NEW HVAC AND REROOFING
FOOTHILL HIGH SCHOOL
4375 FOOTHILL ROAD, PLEASANTON, CA 94588
PLEASANTON UNIFIED SCHOOL DISTRICT

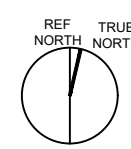
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NO.	ITEM	DATE
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SFA JOB NO: 20090		DATE: X/XX/2020

A4.2



1 DEMOLITION ROOF PLAN - BUILDING F

1/8" = 1'-0"



GENERAL NOTES

- A. NOT ALL ROOF APPURTENANCES ARE SHOWN ON DRAWINGS. CONTRACTOR TO FIELD VERIFY QUANTITIES AND LOCATIONS OF ALL DEVICES AND EQUIPMENT. REFER TO MECHANICAL AND ELECTRICAL DRAWINGS FOR ADDITIONAL SCOPE OF WORK.
- B. CONTRACTOR TO REMOVE AND REINSTALL MECHANICAL UNITS, DUCTWORK AND ALL OTHER ROOF TOP APPURTENANCES AS REQUIRED FOR INSTALLATION OF ROOFING. CONTRACTOR TO REINSTALL AND RECONNECT ALL DEVICES AND RETURN THEM TO WORKING ORDER. CONTRACTOR TO NOTIFY DISTRICT AND ARCHITECT OF ANY DEVICES NOT FUNCTIONING PRIOR TO REMOVAL.
- C. PATCH AND REPAIR BUILT-UP ROOFING WHERE REQUIRED AS A RESULT OF NEW WORK.
- D. PROVIDE R-30 INSULATION AT ROOF FRAMING.
- E. COORDINATE SLEEPER LOCATIONS WITH MECHANICAL, PLUMBING, AND/OR ELECTRICAL AS REQUIRED. SEE DETAIL XX.
- PM VERIFY THE FOLLOWING:
- F. ALL EXISTING ROOF SYSTEM, INSULATION, FLASHING, ETC., ARE TO BE REMOVED AND PREPARED FOR INSTALLATION OF NEW ROOFING AND FLASHING SYSTEMS.

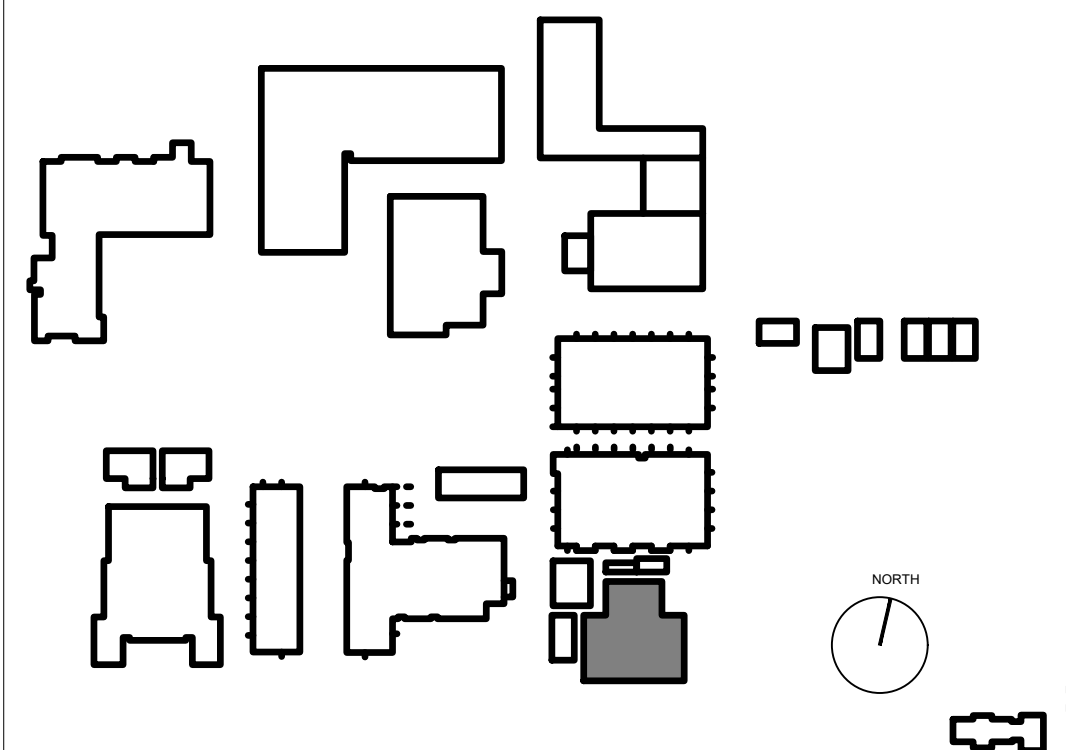
DEMOLITION ROOF PLAN NOTES

1. REMOVE (E) ROOFING TO EXPOSE SHEATHING, INCLUDING SIDE OF PARAPET WALL. PREPARE FOR NEW ROOFING SYSTEM, SEE SPECS.
2. REMOVE (E) AC UNITS, PREPARE AREA FOR NEW HVAC UNITS, SEE MECHANICAL DRAWINGS.
3. REMOVE (E) PARAPET FLASHING AND CAP.
4. (E) SKYLIGHTS TO REMAIN.
5. REMOVE (E) EXHAUST FANS AND RELIEF HOODS, PREPARE FOR NEW FANS AND HOODS, SEE MECHANICAL DRAWINGS.
6. REMOVE (E) ROOF DRAINS, PREPARE FOR NEW DRAINS.
7. PRESSURE WASHER INNER EQUIPMENT SCREEN WALL. PREPARE FOR PAINT.

GRAPHIC KEY

- EXISTING TO BE DEMOLISHED
- EXISTING ROOFING TO BE REMOVED

BUILDING KEY



(DSA STAMP AREA)

SFA
SUGIMURA
FINNEY
ARCHITECTS

2155 SOUTH BASCOM AVE.
SUITE 201
CAMPBELL, CA 95008
PHONE: 408-879-6500
FAX: 408-377-6065

LICENSED ARCHITECT
MARK C. FINNEY
NO. C-24673
RENEW 9-30-25
STATE OF CALIFORNIA

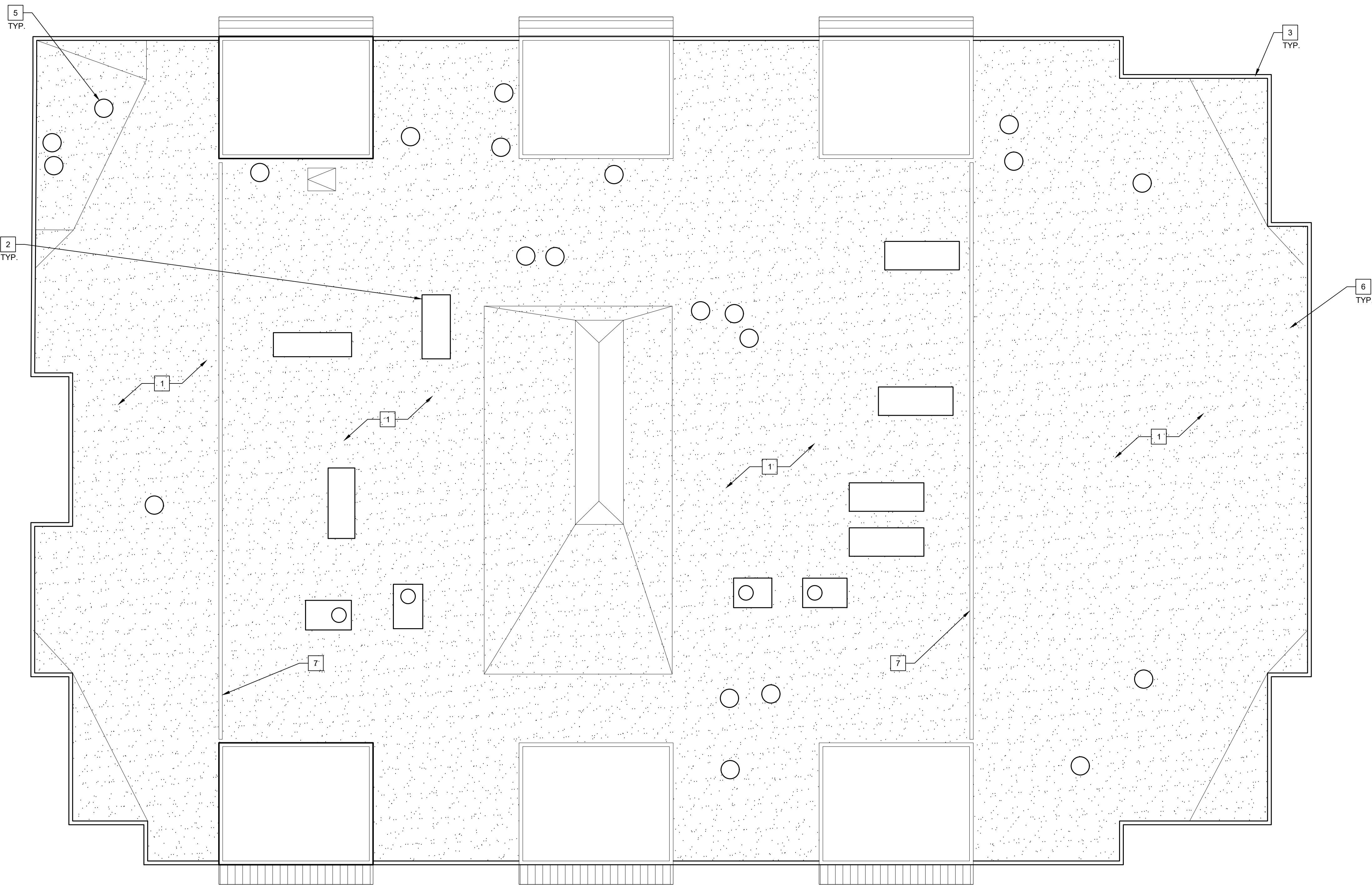
DEMOLITION ROOF PLAN BUILDING F

NEW HVAC AND REROOFING
FOOTHILL HIGH SCHOOL
4375 FOOTHILL ROAD, PLEASANTON, CA 94588
PLEASANTON UNIFIED SCHOOL DISTRICT

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DATE: X/XX/2020

A4.3



1 NEW ROOF PLAN - BUILDING F

1/8" = 1'-0"

0 2' 4' 8' 16' 24'

REF. TO SHEET 10000

GENERAL NOTES

- A. NOT ALL ROOF APPURTENANCES ARE SHOWN ON DRAWINGS. CONTRACTOR TO FIELD VERIFY QUANTITIES AND LOCATIONS OF ALL DEVICES AND EQUIPMENT. REFER TO MECHANICAL AND ELECTRICAL DRAWINGS FOR ADDITIONAL SCOPE OF WORK.
- B. CONTRACTOR TO REMOVE AND REINSTALL MECHANICAL UNITS, DUCTWORK AND ALL OTHER ROOF TOP APPURTENANCES AS REQUIRED FOR INSTALLATION OF ROOFING. CONTRACTOR TO REINSTALL AND RECONNECT ALL DEVICES AND RETURN THEM TO WORKING ORDER. CONTRACTOR TO NOTIFY DISTRICT AND ARCHITECT OF ANY DEVICES NOT FUNCTIONING PRIOR TO REMOVAL.
- C. PATCH AND REPAIR BUILT-UP ROOFING WHERE REQUIRED AS A RESULT OF NEW WORK.
- D. PROVIDE R-30 INSULATION AT ROOF FRAMING.
- E. COORDINATE SLEEPER LOCATIONS WITH MECHANICAL, PLUMBING, AND/OR ELECTRICAL AS REQUIRED. SEE DETAIL XX.
- PM VERIFY THE FOLLOWING:
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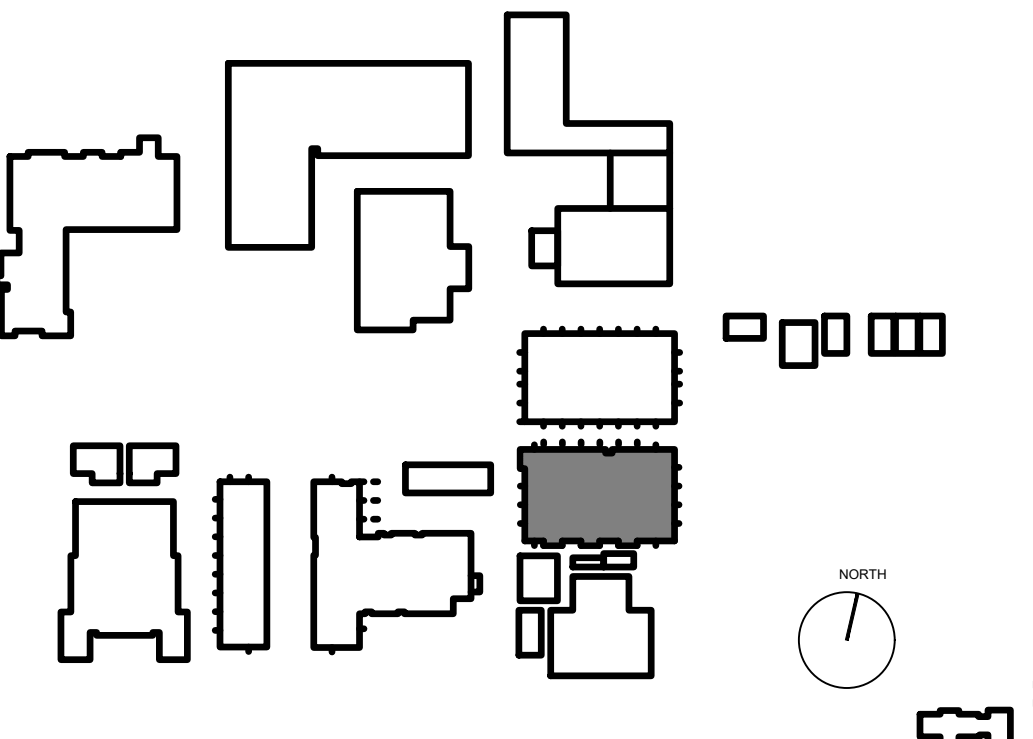
NEW ROOF PLAN NOTES

1. (N) ROOFING SYSTEM, INCLUDING INSIDE OF PARAPET WALL, SEE SPECS.
2. (N) AC UNITS, SEE MECHANICAL DRAWINGS.
3. (N) PARAPET FLASHING AND CAP.
4. (E) SKYLIGHTS TO REMAIN.
5. (N) EXHAUST FANS AND RELIEF HOODS, SEE MECHANICAL DRAWINGS.
6. (N) ROOF DRAINS.
7. PAINT (E) EQUIPMENT SCREEN WALL, REFER TO DISTRICT FOR COLOR.

GRAPHIC KEY

- EXISTING TO BE DEMOLISHED
- NEW BUILT-UP ROOFING

BUILDING KEY



(DSA STAMP AREA)

SUGIMURA
FINNEY
ARCHITECTS

SFA

ARCHITECTURE INTERIORS PLANNING

2155 SOUTH BASCOM AVE.
SUITE 200
CAMPBELL, CA 95008
PHONE: 408-879-6500
FAX: 408-377-6066

LICENSED ARCHITECT

MARK C. FINNEY

NO. C-24673

RENEW 9-30-25

STATE OF CALIFORNIA

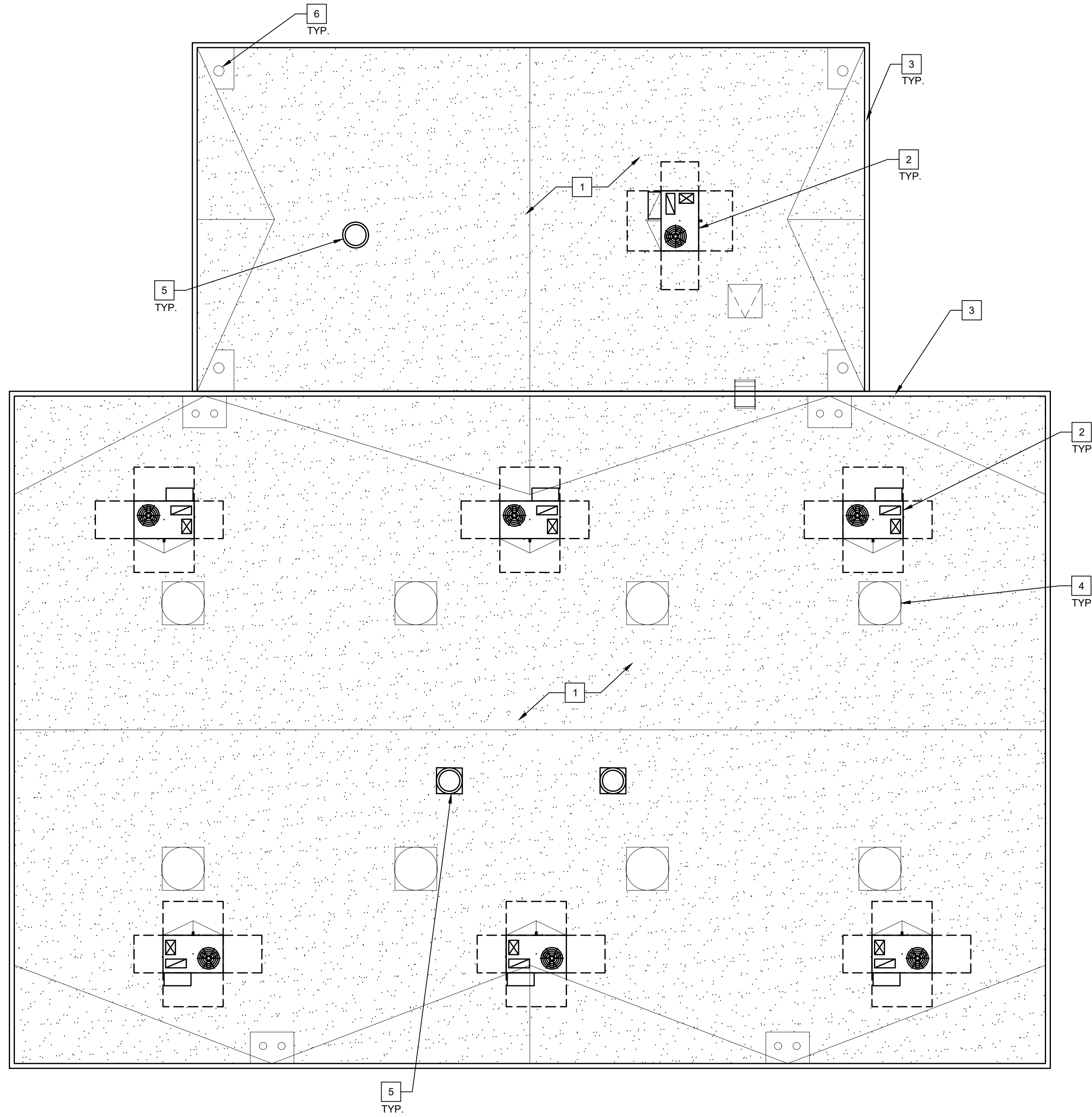
NEW ROOF PLAN
BUILDING F

NEW HVAC AND REROOFING
FOOTHILL HIGH SCHOOL
4375 FOOTHILL ROAD, PLEASANTON, CA 94588
PLEASANTON UNIFIED SCHOOL DISTRICT

REVISIONS		
NO.	ITEM	DATE
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CHECKED BY:	MB
SFA JOB NO:	DATE:
20090	X/XX/2020

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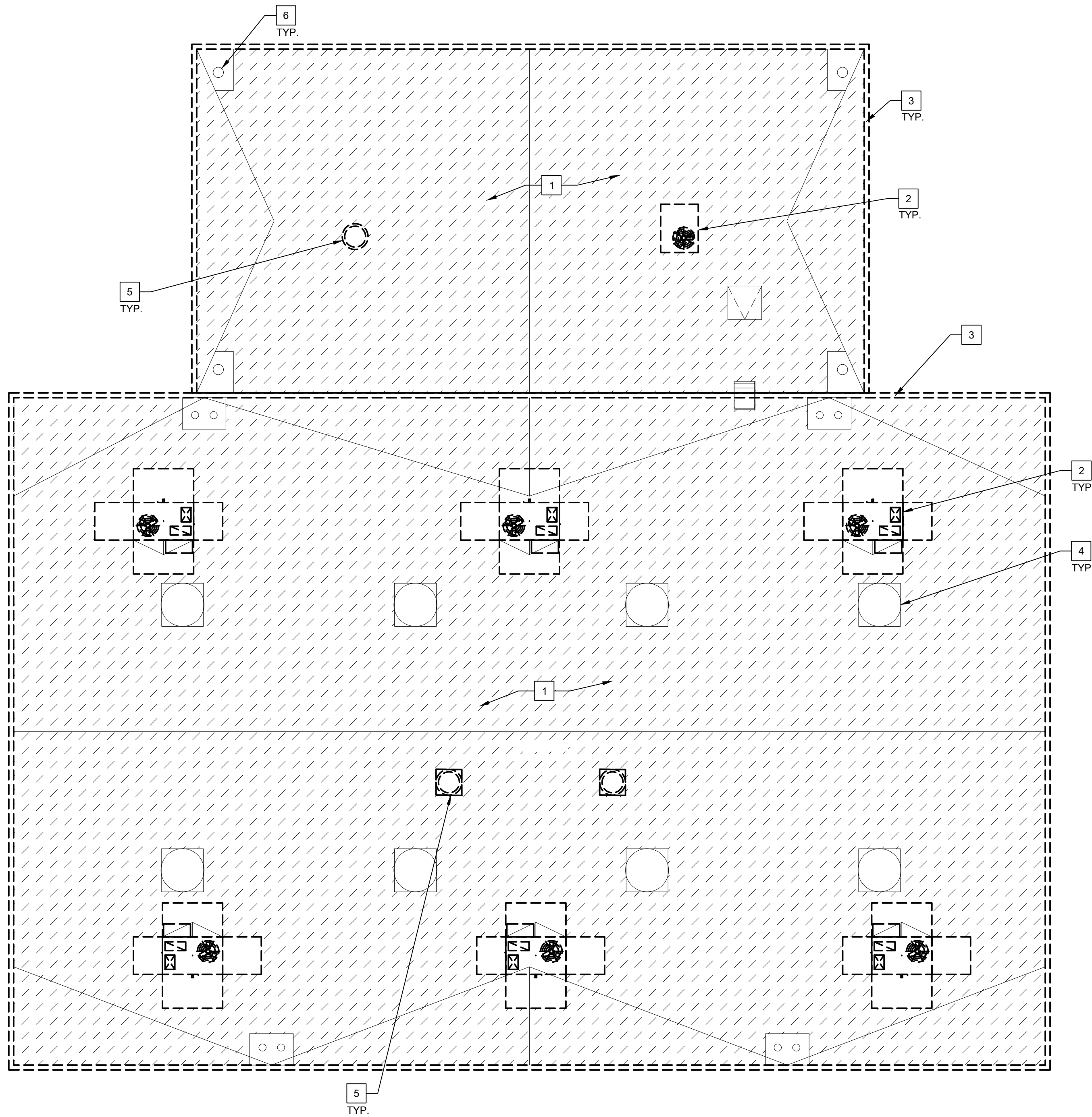


1 NEW ROOF PLAN - BUILDING G

1/8" = 1'-0"

0 2' 4' 8' 16' 24'

REF. NORTH



1 DEMOLITION ROOF PLAN - BUILDING G

1/8" = 1'-0"

0 2' 4' 8' 16' 24'

REF. NORTH

GENERAL NOTES

- A. NOT ALL ROOF APPURTENANCES ARE SHOWN ON DRAWINGS. CONTRACTOR TO FIELD VERIFY QUANTITIES AND LOCATIONS OF ALL DEVICES AND EQUIPMENT. REFER TO MECHANICAL AND ELECTRICAL DRAWINGS FOR ADDITIONAL SCOPE OF WORK.
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- D. PROVIDE R-30 INSULATION AT ROOF FRAMING.
- E. COORDINATE SLEEPER LOCATIONS WITH MECHANICAL, PLUMBING, AND/OR ELECTRICAL AS REQUIRED. SEE DETAIL XX.
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- F. ALL EXISTING ROOF SYSTEM, INSULATION, FLASHING, ETC. ARE TO BE REMOVED AND PREPARED FOR INSTALLATION OF NEW ROOFING AND FLASHING SYSTEMS.

NEW ROOF PLAN NOTES

1. (N) ROOFING SYSTEM, INCLUDING INSIDE OF PARAPET WALL, SEE SPECS.
2. (N) AC UNITS, SEE MECHANICAL DRAWINGS.
3. (N) PARAPET FLASHING AND CAP.
4. (E) SKYLIGHTS TO REMAIN.
5. (N) EXHAUST FANS AND RELIEF HOODS, SEE MECHANICAL DRAWINGS.
6. (N) ROOF DRAINS.

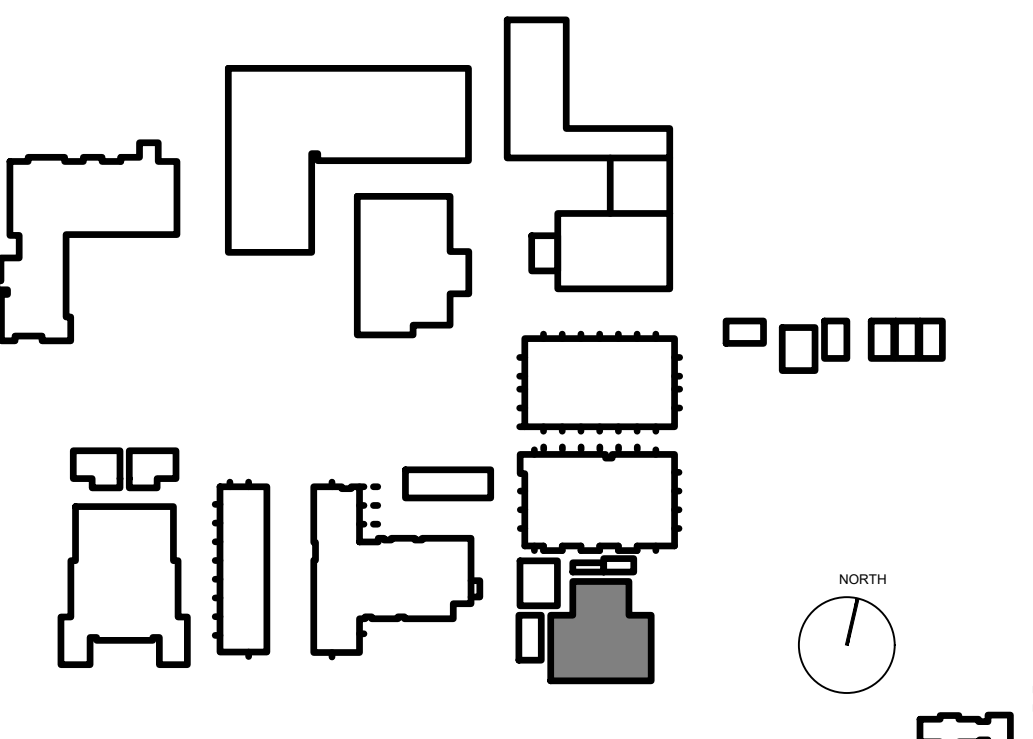
DEMOLITION ROOF PLAN NOTES

1. REMOVE (E) ROOFING TO EXPOSE SHEATHING, INCLUDING SIDE OF PARAPET WALL. PREPARE FOR NEW ROOFING SYSTEM, SEE SPECS.
2. REMOVE (E) AC UNITS, PREPARE AREA FOR NEW HVAC UNITS, SEE MECHANICAL DRAWINGS.
3. REMOVE (E) PARAPET FLASHING AND CAP.
4. (E) SKYLIGHTS TO REMAIN.
5. REMOVE (E) EXHAUST FANS AND RELIEF HOODS, PREPARE FOR NEW FANS AND HOODS, SEE MECHANICAL DRAWINGS.
6. REMOVE (E) ROOF DRAINS, PREPARE FOR NEW DRAINS.

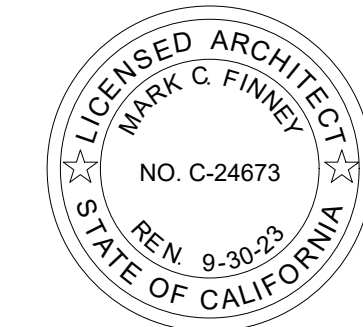
GRAPHIC KEY

- EXISTING TO BE DEMOLISHED
- EXISTING ROOFING TO BE REMOVED
- NEW BUILT-UP ROOFING

BUILDING KEY



(DSA STAMP AREA)



DEMOLITION AND NEW ROOF PLANS

BUILDING G

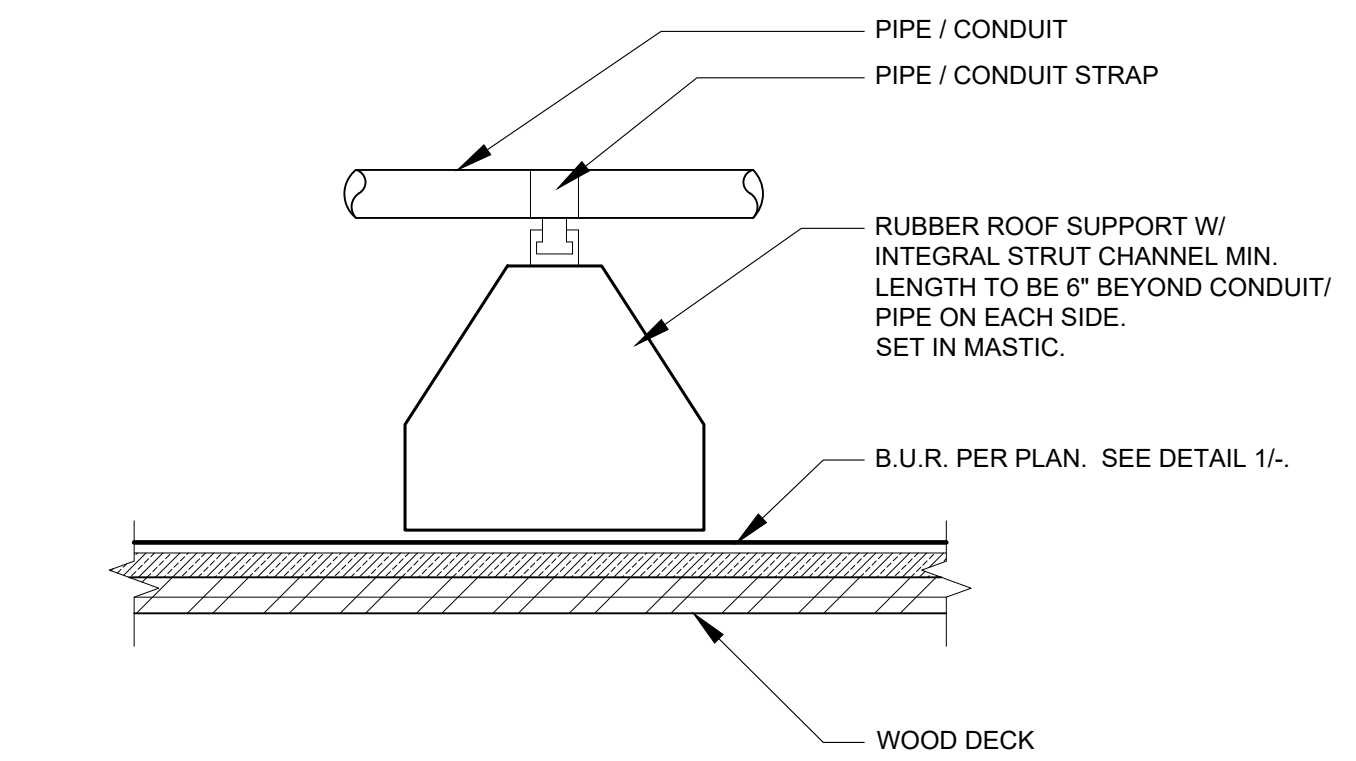
NEW HVAC AND REROOFING
FOOTHILL HIGH SCHOOL
4375 FOOTHILL ROAD, PLEASANTON, CA 94588
PLEASANTON UNIFIED SCHOOL DISTRICT

REVISIONS

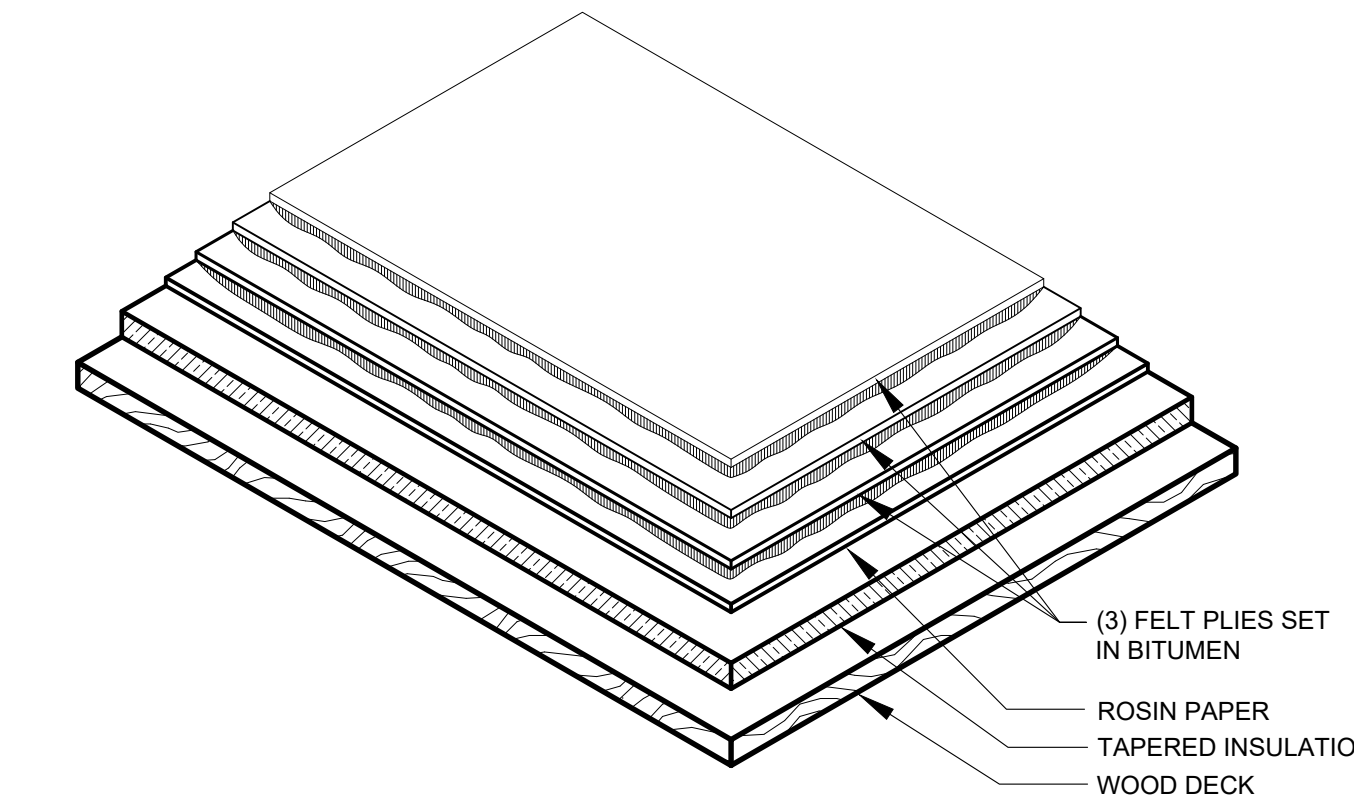
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DATE: X/XX/2020

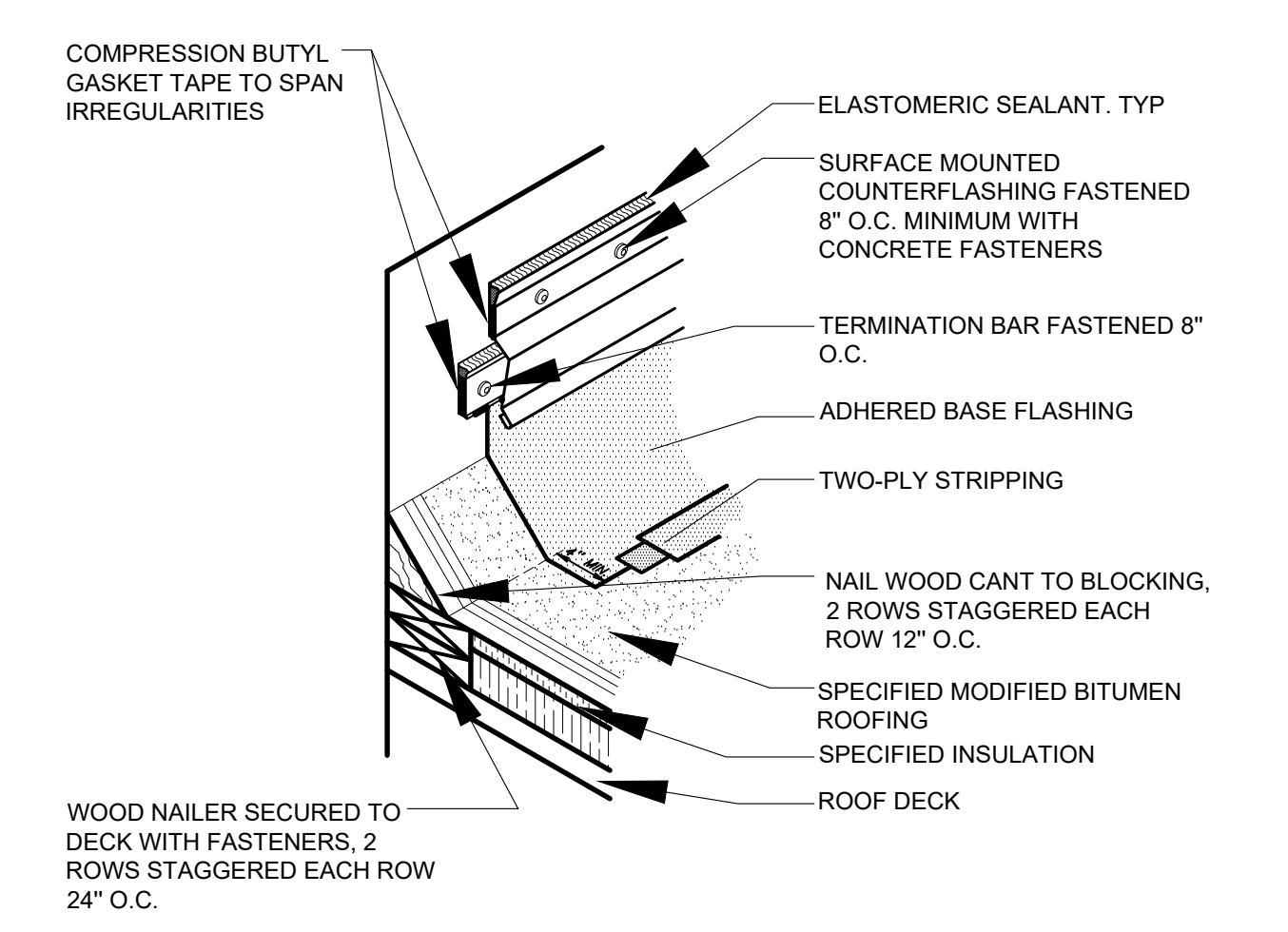
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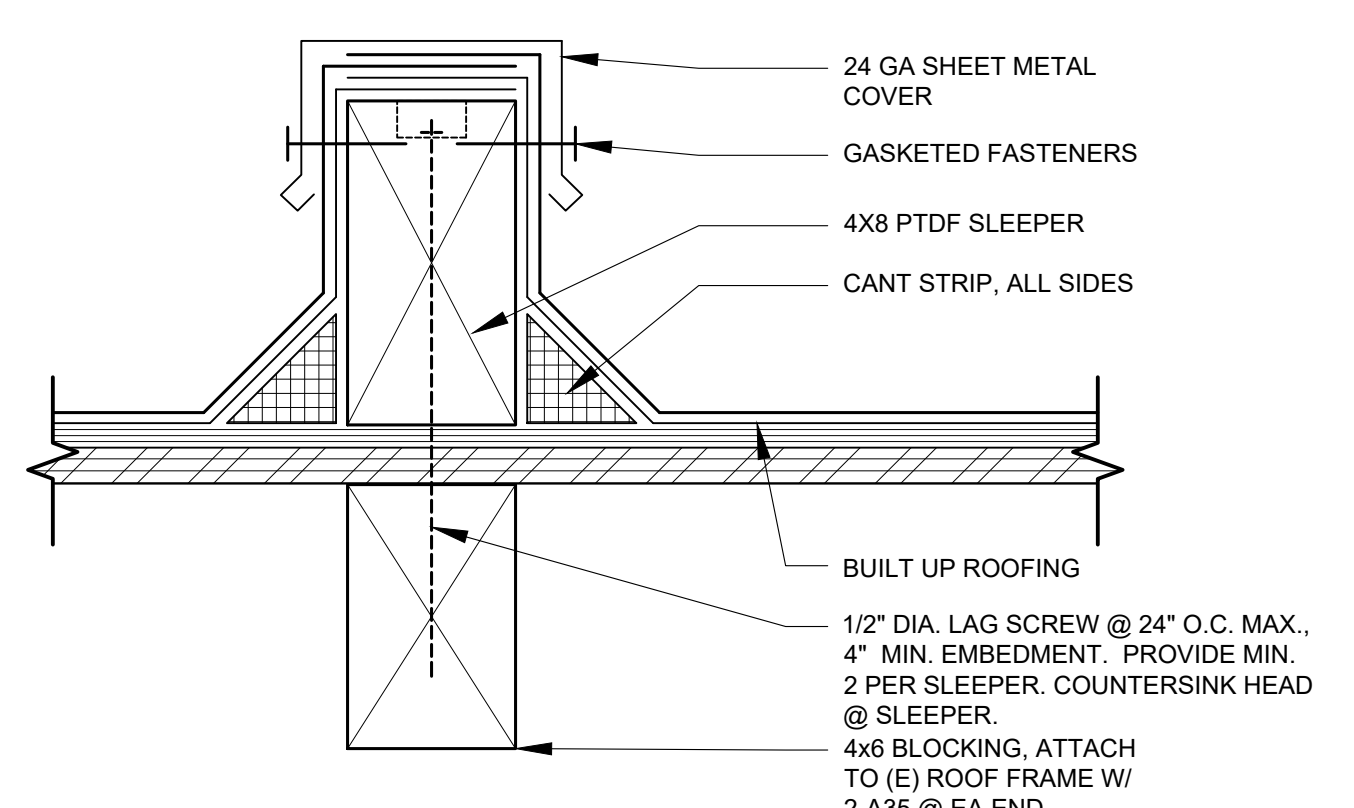
5 FLOATING SLEEPER 3"=1'-0" NTS



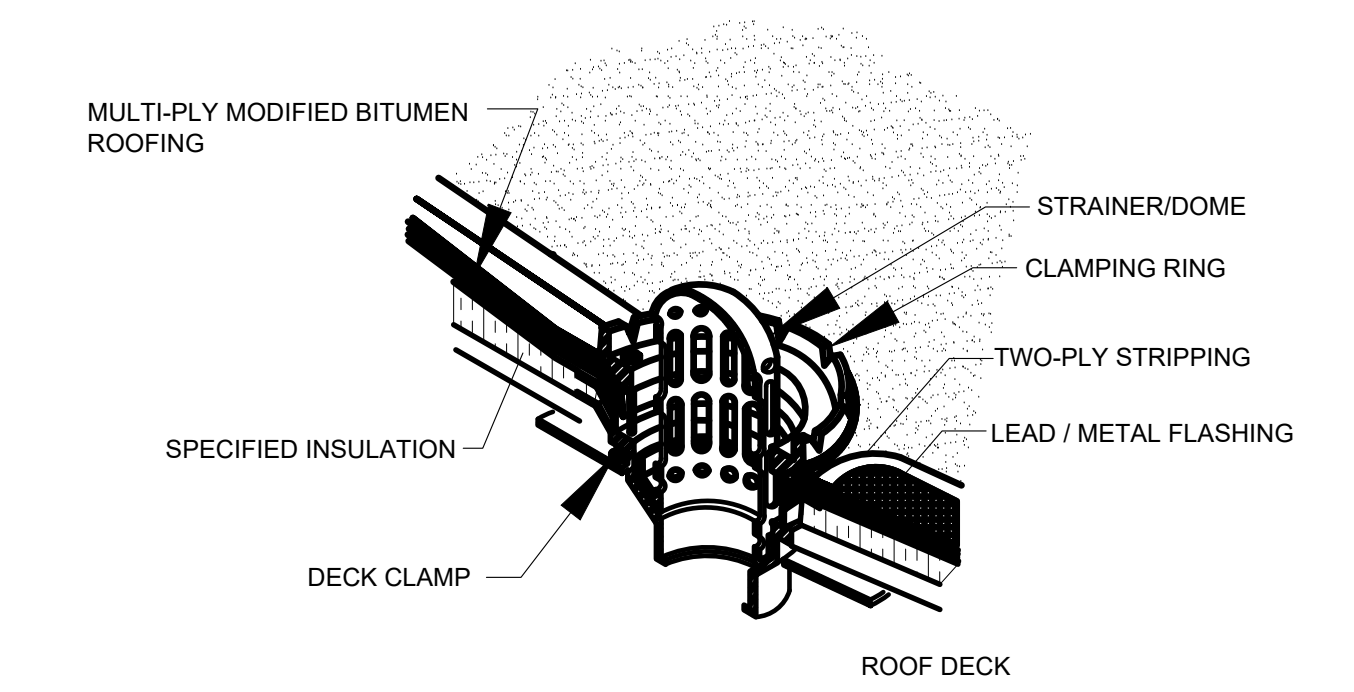
1 BUILT UP ROOFING NTS



2 WALL FLASHING FOR PARAPETS TRIMCO DWG NO. 06 NTS



3 EQUIPMENT/ PIPE SLEEPER 3"=1'-0"



4 ROOF DRAIN TRIMCO DWG NO. 13A NTS

TYPICAL DETAILS

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1			

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NEW HVAC AND REROOFING
FOOTHILL HIGH SCHOOL
4375 FOOTHILL ROAD, PLEASANTON, CA 94588
PLEASANTON UNIFIED SCHOOL DISTRICT

(DSA STAMP AREA)

SUGIMURA
FINNEY
ARCHITECTS

SFA

ARCHITECTURE INTERIORS PLANNING

2155 SOUTH BASCOM AVE.
SUITE 200
CAMPBELL, CA 95003
PHONE: 408-878-6600
FAX: 408-377-6555

STATE OF CALIFORNIA

NO. C-24673

MARK C. FINNEY

9-30-23

1. WEIGHT INCLUDES ALL OPTIONS AND ACCESSORIES.
2. PROVIDE WITH LOW LEAK ECONOMIZER DRY BULB 0-100% WITH BAROMETRIC RELIEF.
3. PROVIDE WITH LOW VOLTAGE HMI GUARDS, UNPOWERED CONVENIENCE OUTLET, AND HINGED ACCESS PANELS.
4. PROVIDE WITH 2" MERV 13 FILTERS.
5. PROVIDE WITH WIRELESS PEARL ECONOMIZER CONTROLLER. CONTROLLER TO BE FIELD INSTALLED. COORDINATE WITH MANUFACTURER.
6. VERTICAL DISCHARGE CONFIGURATION.
7. PROVIDE FLAT PLANGED CURVE ADAPTOR. CONTRACTOR SHALL FIELD VERIFY DIMENSION PRIOR TO ORDERING.
8. PROVIDE MANUAL FRESH AIR HOOD WITH BRUSCREEN.

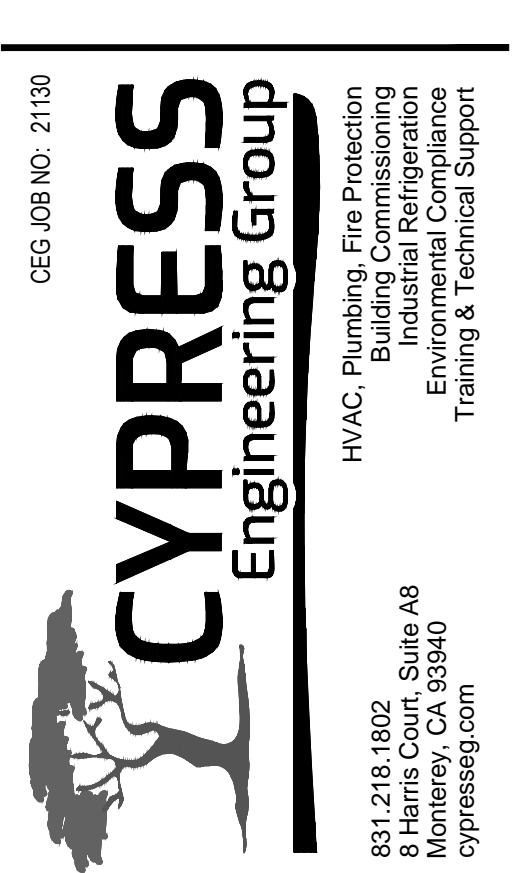
1. PROVIDE WITH ROOF CURB TO MATCH EXISTING OPENING. PROVIDE CURB CAP ADAPTER OR REDUCER AS REQUIRED.
2. PROVIDE WITH BACK DRAFT DAMPER AND BIRD SCREEN.
3. INTERCONNECT EXHAUST FAN WITH LIGHTS.
4. WEIGHT INCLUDES ACCESSORIES AND CURB.
5. EXHAUST FAN TO BE CONTROLLED BY A LINE VOLTAGE (E) T-STAT SET TO START THE FAN AT 80° F AND SHUT DOWN AT 70° F.
6. FAN TO BE INTERLOCKED WITH UNIT AC-F-3

1. WEIGHT INCLUDES ALL OPTIONS AND ACCESSORIES.	6. VERTICAL DISCHARGE CONFIGURATION.
2. PROVIDE WITH TEMP. UROL LOW LEAK WITH BARRIERS WITH BARRIERS RELIEF.	7. PROVIDE WITH FLAT-SLIDED MICROMET. CA-CAR-537-RR-002-24 CURB ADAPTOR. CONTRACTOR SHOULD FIELD VERIFY DIMENSION PRIOR TO ORDER.
3. PROVIDE WITH LOUVERED HAIL GUARDS, UNPOMPERED CONVENTION OUTLET, AND HINGED ACCESS PANELS.	8. PROVIDE WITH FLAT-SLIDED MICROMET. CA-CAR-SDCM-RR-012 CURB ADAPTOR. CONTRACTOR SHOULD FIELD VERIFY DIMENSION PRIOR TO ORDER.
4. PROVIDE WITH 2" MERV 13 FILTERS.	9. PROVIDE WITH OUT-PLATE AIR HOOD WITH MOTORIZED DAMPER.
5. PROVIDE PELICAN WIRELESS PEARL ECONOMIZER CONTROLLER. CONTROLLER TO BE FIELD INSTALLED. COORDINATE WITH MANUFACTURER.	

1. PROVIDE WITH ROOF CURB TO MATCH EXISTING OPENING. PROVIDE CURB CAP ADAPTER OR REDUCER AS REQUIRED.
2. PROVIDE WITH BACK DRAFT DAMPER AND BIRD SCREEN.
3. INTERCONNECT EXHAUST FAN WITH LIGHTS.
4. WEIGHT INCLUDES ACCESSORIES.
5. PROVIDE GREENHECK GPI ROOF CURB.

1. PROVIDE WITH ROOF CURB TO MATCH EXISTING OPENING. PROVIDE CURB CAP ADAPTER OR REDUCER AS REQUIRED.
2. PROVIDE WITH BACK DRAFT DAMPER AND BIRD SCREEN.
3. WEIGHT INCLUDES ACCESSORIES.
4. PROVIDE GREENHECK GPI ROOF CURB.

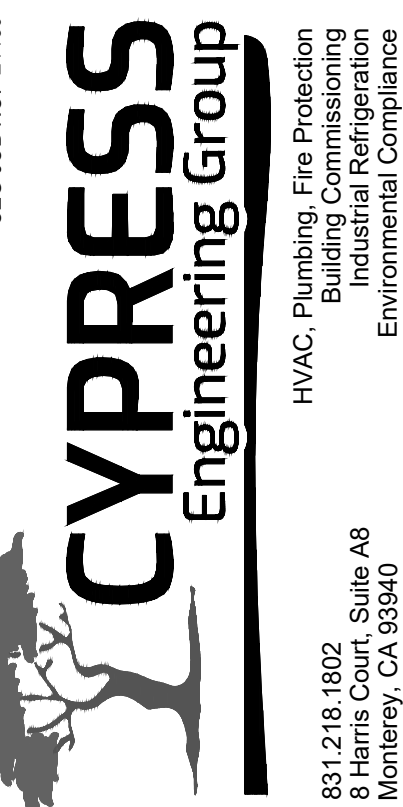
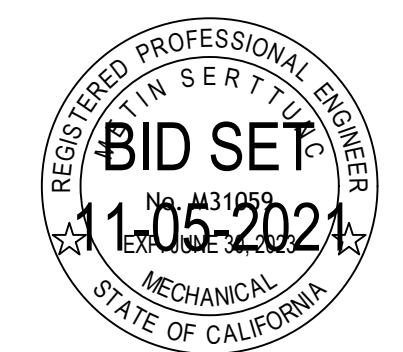
PELICAN CONTROLS AND SEQUENCE OF OPERATION



NEW HVAC AND REROOFING
FOOTHILL HIGH SCHOOL
4375 FOOTHILL ROAD, PLEASANTON, CA 94588
PLEASANTON UNIFIED SCHOOL DISTRICT

MP0.2

MP0.2

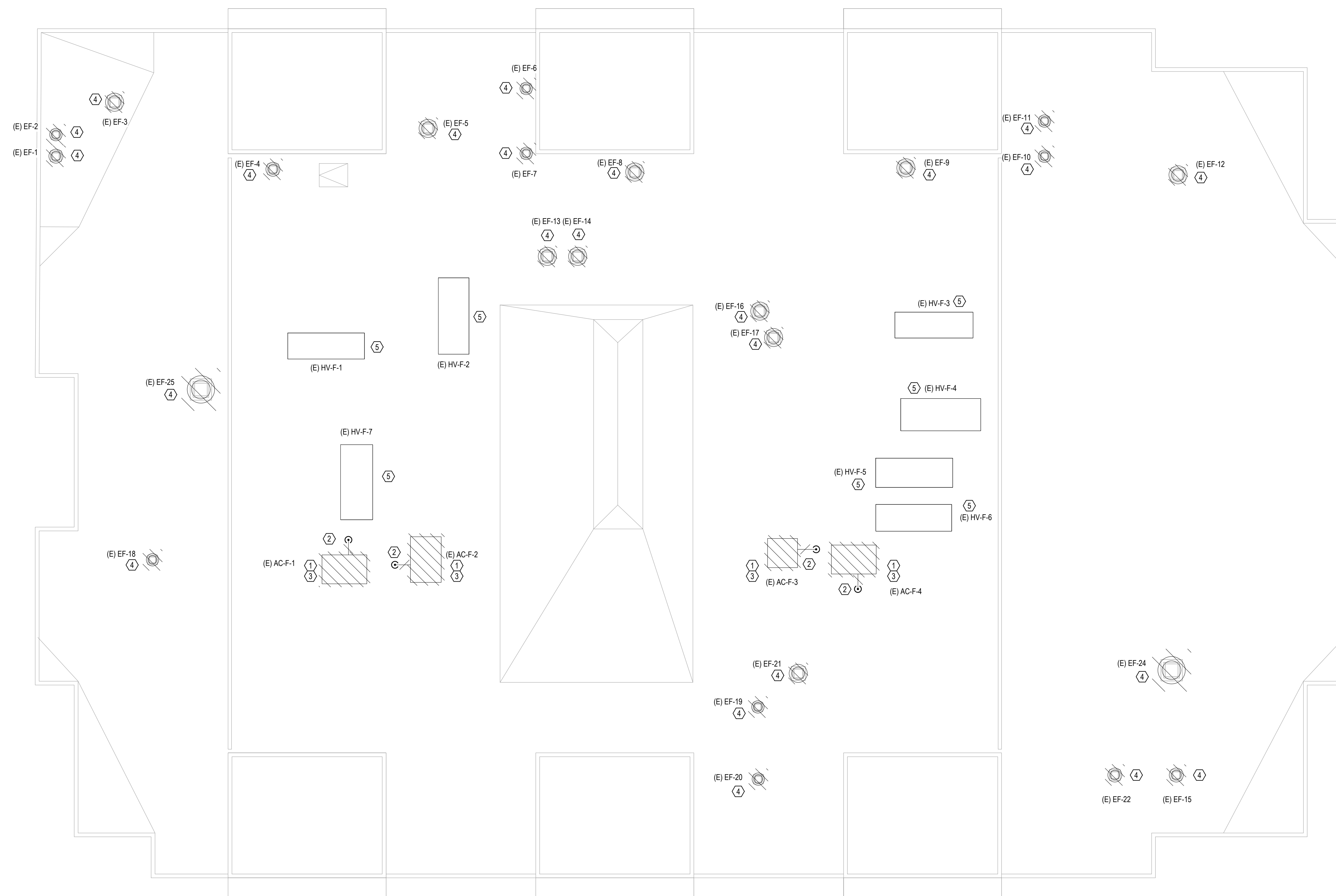


**BUILDING F - DEMOLITION ROOF PLAN -
MECHANICAL & PLUMBING**

NEW HVAC AND REROOFING
FOOTHILL HIGH SCHOOL
4375 FOOTHILL ROAD, PLEASANTON, CA 94588
PLEASANTON UNIFIED SCHOOL DISTRICT

[illegible]

MP3.2

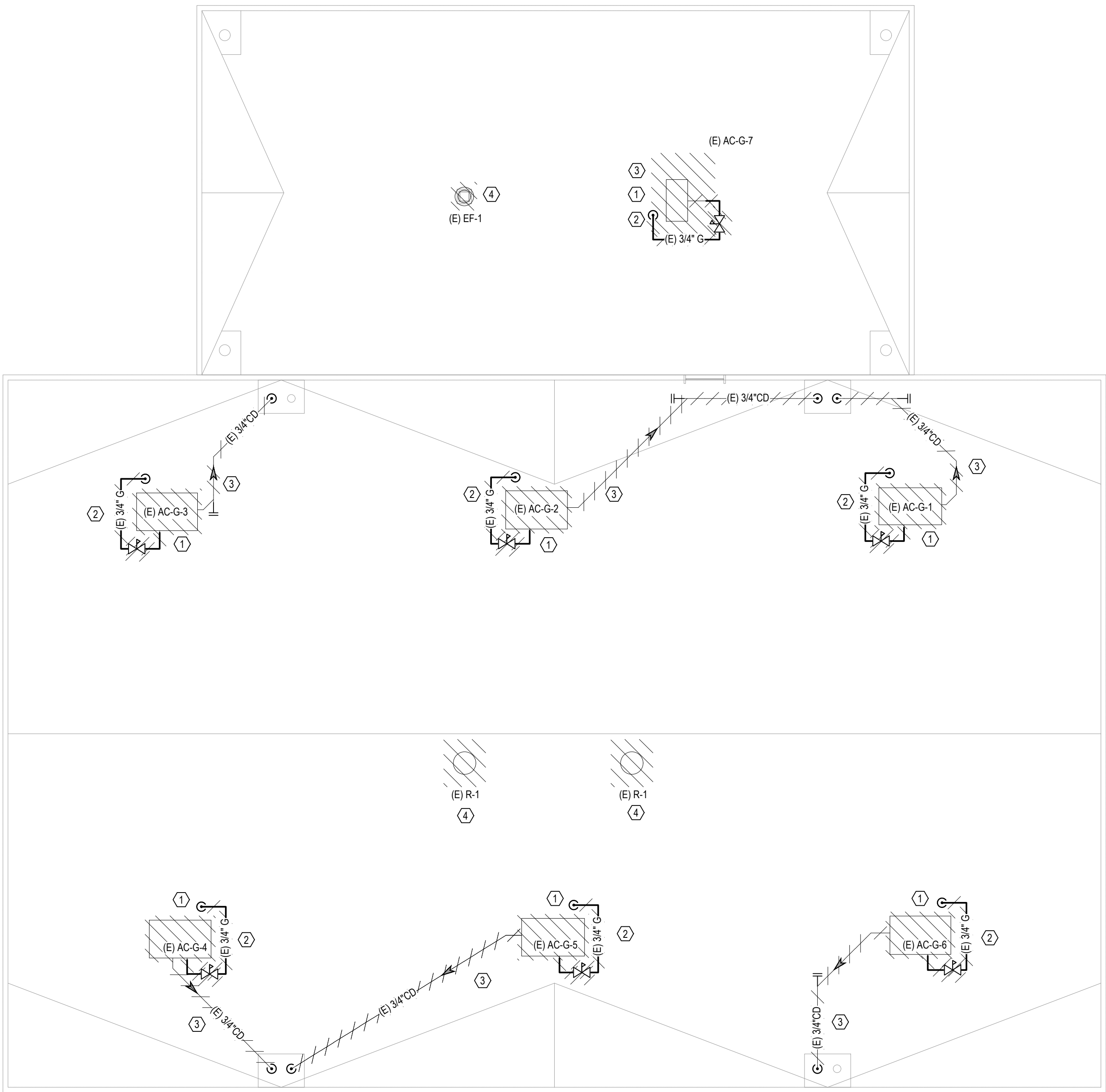


1 BUILDING F - DEMO ROOF PLAN
MP3.2 SCALE: 1/8" = 1'-0"

1. REMOVE (E) AC UNIT. REMOVE (E) ROOF CURB. PRESERVE ROOF OPENING FOR NEW AC UNIT.
2. REMOVE (E) GAS PIPING ON ROOF. PROTECT ROOF OPENING FOR NEW GAS PIPING CONNECTION TO NEW AC UNIT
3. REMOVE (E) CD PIPING ON ROOF.
4. REMOVE (E) ROOF EXHAUST FAN. REMOVE (E) ROOF CURB. PRESERVE ROOF OPENING FOR NEW ROOF EXHAUST FAN UNIT
5. (E) HV UNITS TO REMAIN.

1. CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL EXISTING AND NEW BUILDING STRUCTURES, SERVICES AND OWNER'S PROPERTY DURING THE ENTIRE PERIOD OF CONSTRUCTION.
2. COORDINATE THE LOCATIONS OF ROOF/WALL OPENINGS, PENETRATIONS, DUCTWORK AND ALL MECHANICAL EQUIPMENT WITH RESPECT TO BUILDING STRUCTURE AND OTHER BUILDING SERVICES TO AVOID CONFLICT.
3. CONTRACTOR SHALL CONNECT (E) PELICAN THERMOSTATS TO NEW UNITS AND PELICAN ECONOMIZER CONTROLLER.
4. CONTRACTOR TO VERIFY ALL EXISTING CURB DIMENSIONS BEFORE SUBMITTAL PROCESS / ORDERING EQUIPMENT AND PROVIDE CURB ADAPTERS AS REQUIRED.
5. ALL PLUMBING VENTS TO STAY IN PLACE. EXTEND VENTS ABOVE NEW ROOF LEVEL WHERE REQUIRED.

BUILDING KEY



1
MP3.3

BUILDING G - DEMO ROOF PLAN
SCALE: 1/8" = 1'-0"

DEMOLITION SHEET NOTES

1. REMOVE (E) AC UNIT. REMOVE (E) ROOF CURB. PRESERVE ROOF OPENING FOR NEW AC UNIT.
2. REMOVE (E) GAS PIPING ON ROOF. REMOVE (E) GPR ON ROOF. PROTECT ROOF OPENING FOR NEW GAS PIPING CONNECTION TO NEW AC UNIT.
3. REMOVE (E) CD PIPING ON ROOF. CAP PIPING GOING THRU ROOF.
4. REMOVE (E) ROOF EXHAUST FAN. REMOVE (E) ROOF CURB. PRESERVE ROOF OPENING FOR NEW ROOF EXHAUST FAN UNIT.
5. REMOVE (E) RELIEF VENT. REMOVE (E) ROOF CURB. PRESERVE ROOF OPENING FOR NEW RELIEF HOOD.

GENERAL NOTES

1. CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL EXISTING AND NEW BUILDING STRUCTURES, SERVICES AND OWNER'S PROPERTY DURING THE ENTIRE PERIOD OF CONSTRUCTION.
2. COORDINATE THE LOCATIONS OF ROOF/WALL OPENINGS, PENETRATIONS, DUCTWORK AND ALL MECHANICAL EQUIPMENT WITH RESPECT TO BUILDING STRUCTURE AND OTHER BUILDING SERVICES TO AVOID CONFLICT.
3. CONTRACTOR SHALL CONNECT (E) PELICAN THERMOSTATS TO NEW UNITS AND PELICAN ECONOMIZER CONTROLLER.
4. CONTRACTOR TO VERIFY ALL EXISTING CURB DIMENSIONS BEFORE SUBMITTAL PROCESS / ORDERING EQUIPMENT AND PROVIDE CURB ADAPTERS AS REQUIRED.
5. ALL PLUMBING VENTS TO STAY IN PLACE. EXTEND VENTS ABOVE NEW ROOF LEVEL WHERE REQUIRED.
6. PLANS ARE DRAWN FROM AVAILABLE RECORD DRAWINGS AND LIMITED FIELD VERIFICATION. CONTRACTOR SHALL FIELD VERIFY ALL CONDITIONS AND MAKE ADJUSTMENTS PRIOR TO ORDERING/FABRICATION.

BUILDING KEY

BUILDING G - DEMOLITION ROOF PLAN -
MECHANICAL & PLUMBING

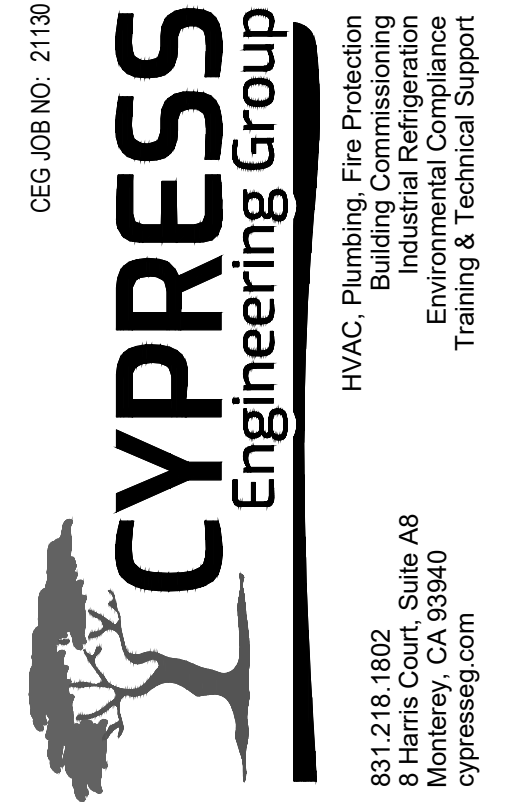
NEW HVAC AND REROOFING
FOOTHILL HIGH SCHOOL
4375 FOOTHILL ROAD, PLEASANTON, CA 94588
PLEASANTON UNIFIED SCHOOL DISTRICT

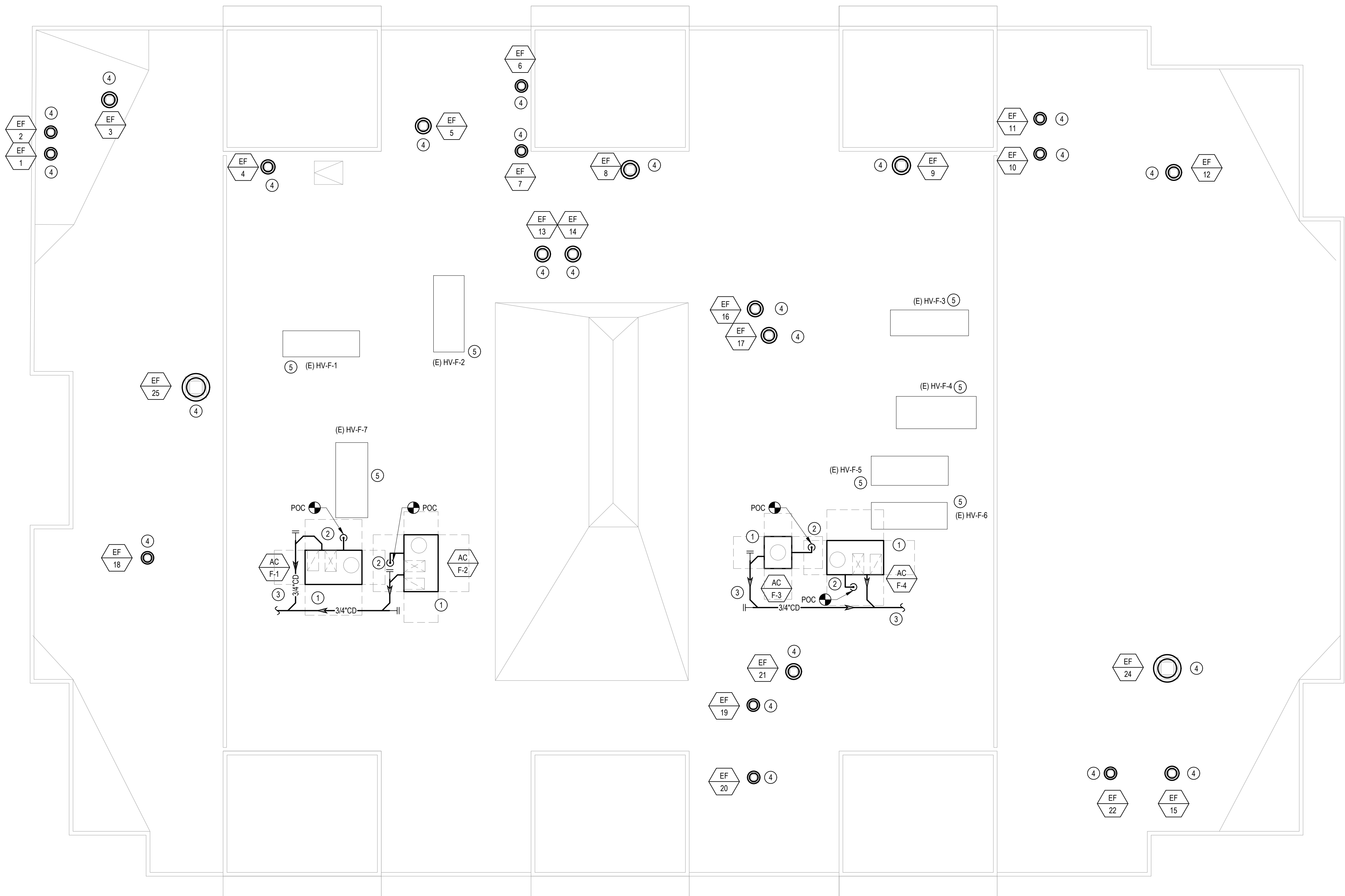
REVISIONS NO.	ITEM	DATE
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DRAWN BY: CAD
CHECKED BY: CS
SFA JOB NO: DATE:
20090 11/05/2021

MP3.3

(DSA STAMP AREA)





1 BUILDING F - NEW ROOF PLAN
MP3.5 SCALE: 1/8" = 1'-0"

- NEW SHEET NOTES**

 - INSTALL NEW AC UNIT ON NEW ROOF CURB. ENSURE CORRECT UNIT ORIENTATION.
 - INSTALL NEW GAS PIPING WITH SHUTOFF VALVE, DIRT LEG, AND FLEX CONNECTION AT NEW AC UNIT. NEW GAS PIPE SIZE TO MATCH SIZE OF EXISTING PIPE AT POC. CONNECT GAS PIPING TO AC UNIT PER DETAIL 3MP6.1 FOR PIPE SUPPORT SEE DETAIL 4MP6.1.
 - INSTALL NEW CD PIPING WITH P-TRAP TO NEW AC UNIT. ROUTE TO NEAREST ROOF DRAIN AND SPILL WITH 1" AIR GAP. CONNECT CD PIPING TO AC UNIT PER DETAIL 3MP6.1. FOR PIPE SUPPORT SEE DETAIL 4MP6.1.
 - INSTALL NEW ROOF EXHAUST FAN ON NEW ROOF CURB. CONNECT TO (E) DUCTWORK.
 - (E) HV UNITS TO REMAIN.
- GENERAL NOTES**

 - CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL EXISTING AND NEW BUILDING STRUCTURES, SERVICES AND OWNER'S PROPERTY DURING THE ENTIRE PERIOD OF CONSTRUCTION.
 - COORDINATE THE LOCATIONS OF ROOF/WALL OPENINGS, PENETRATIONS, DUCTWORK AND ALL MECHANICAL EQUIPMENT WITH RESPECT TO BUILDING STRUCTURE AND OTHER BUILDING SERVICES TO AVOID CONFLICT.
 - CONTRACTOR SHALL CONNECT (E) PELICAN THERMOSTATS TO NEW UNITS AND PELICAN ECONOMIZER CONTROLLER.
 - CONTRACTOR TO VERIFY ALL EXISTING CURB DIMENSIONS BEFORE SUBMITTAL PROCESS / ORDERING EQUIPMENT AND PROVIDE CURB ADAPTERS AS REQUIRED.
 - ALL PLUMBING VENTS TO STAY IN PLACE. EXTEND VENTS ABOVE NEW ROOF LEVEL WHERE REQUIRED.
 - CHECK THE UNITS FOR HEATING, COOLING, ECONOMIZER, AND CONTINUOUS FAN OPERATION. COORDINATE WITH SCHOOL DISTRICT TO PROGRAM THERMOSTATS FOR OCCUPIED SCHEDULE HOURS.

BUILDING KEY

BUILDING F - NEW ROOF PLAN -
MECHANICAL & PLUMBING

NEW HVAC AND REROOFING
FOOTHILL HIGH SCHOOL
4375 FOOTHILL ROAD, PLEASANTON, CA 94588
PLEASANTON UNIFIED SCHOOL DISTRICT

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NO.	ITEM	DATE

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CHECKED BY: CS
SFA JOB NO: 20090 DATE: 11/05/2021

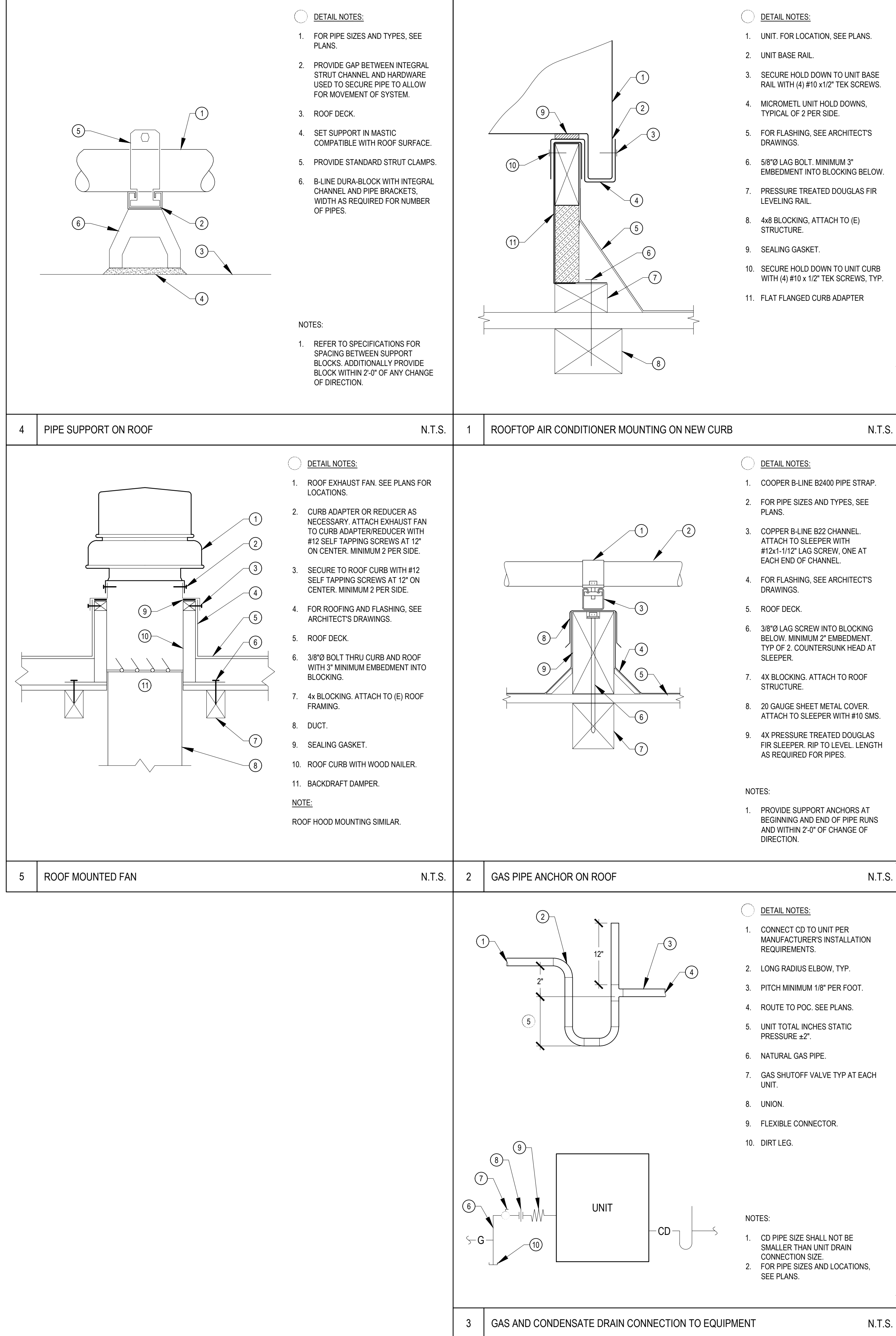
MP3.5

(DSA STAMP AREA)

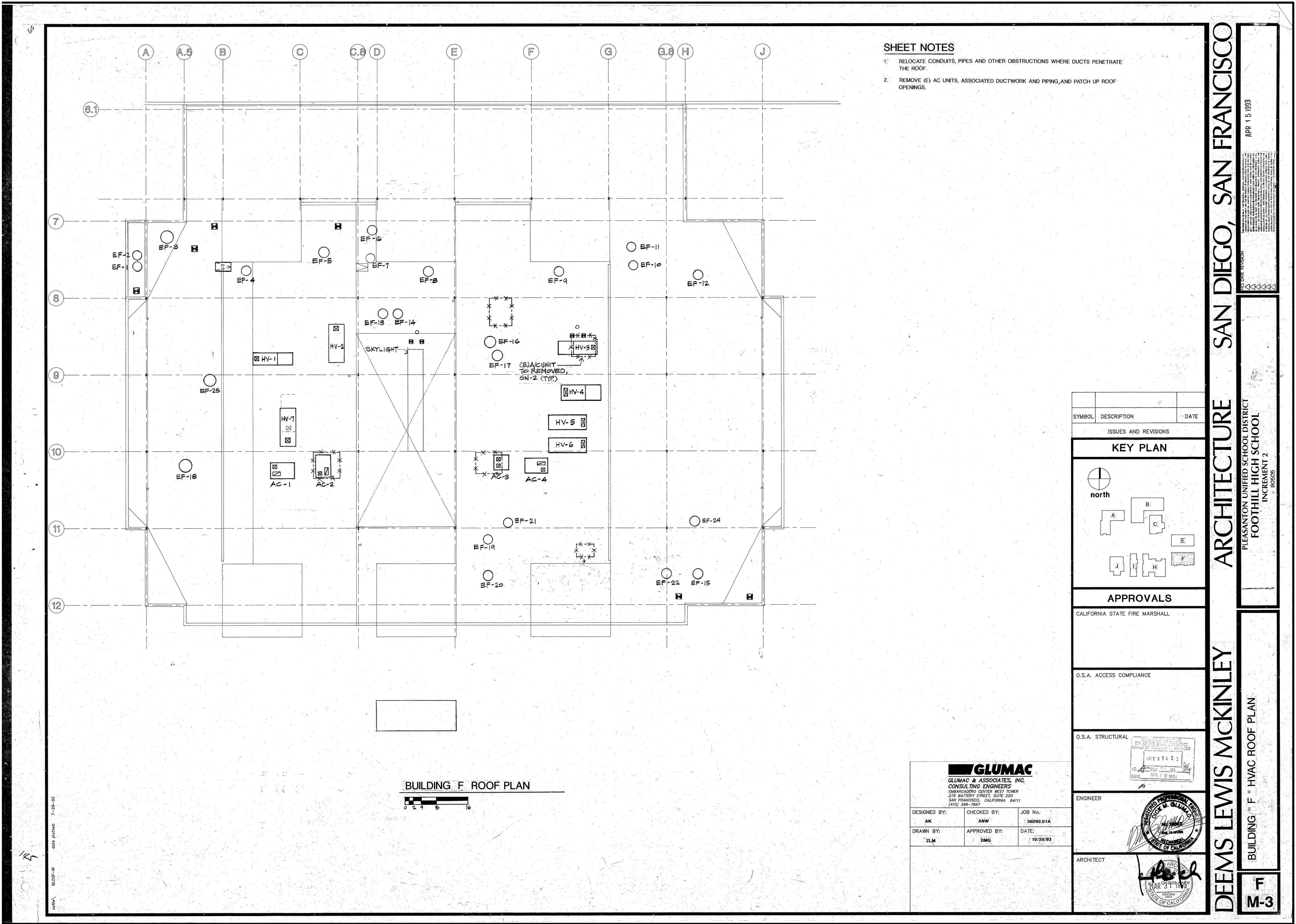
SUGIMURA
FINNEY
ARCHITECTS
SFA
2155 SOUTH BASCOM AVE
SUITE 200
CAMPBELL, CA 95008
PHONE: 408.735.8313
FAX: 408.735.7400

REGISTERED PROFESSIONAL ENGINEER
BID SET
11-05-2021
MECHANICAL
STATE OF CALIFORNIA

CEG JOB NO: 21130
CYPRESS
Engineering Group
HVAC, Plumbing, Fire Protection
Building Commissioning
Mechanical & Electrical
Environmental Compliance
Training & Technical Support
83128 11802, Suite A8
Montebello, CA 91704
cypressseg.com



<p>(DSA STAMP AREA)</p>										
<p>CEG JOB NO.: 21130</p> <p>CYPRESS Engineering Group</p> <p>HVAC, Plumbing, Sanitation, Building Commissioning Industrial Refrigeration Energy Conservation Training & Technical Support</p> <p>831.218.1802 8 Harris Court, Suite A8 Pleasanton, CA 94566 cypresseng.com</p>										
<p>DETAILS - MECHANICAL & PLUMBING</p> <p>NEW HVAC AND REROOFING FOOTHILL HIGH SCHOOL 4375 FOOTHILL ROAD, PLEASANTON, CA 94568</p> <p>PLEASANTON UNIFIED SCHOOL DISTRICT</p>										
<table border="1"> <thead> <tr> <th colspan="3">REVISIONS</th> </tr> <tr> <th>NO.</th> <th>ITEM</th> <th>DATE</th> </tr> </thead> <tbody> <tr> <td colspan="3"> <p>DRAWN BY: CAD</p> <p>CHECKED BY: CS</p> <p>SFA JOB NO. DATE:</p> <p>20090 11/05/2021</p> </td> </tr> </tbody> </table>		REVISIONS			NO.	ITEM	DATE	<p>DRAWN BY: CAD</p> <p>CHECKED BY: CS</p> <p>SFA JOB NO. DATE:</p> <p>20090 11/05/2021</p>		
REVISIONS										
NO.	ITEM	DATE								
<p>DRAWN BY: CAD</p> <p>CHECKED BY: CS</p> <p>SFA JOB NO. DATE:</p> <p>20090 11/05/2021</p>										
<p>MP6.1</p>										



1 BUILDING F - MECHANICAL / TAB WORK
MP7.1 SCALE: 1/8" = 1'-0"

GENERAL NOTES

- EXISTING FLOOR PLANS FROM RECORD DRAWINGS SHOWN FOR REFERENCE ONLY.
- ADJUST AND BALANCE AIR FLOW TO CFMS SHOWN ON AIR BALANCE SCHEDULE FOR EACH BUILDING.

AIR BALANCE SCHEDULE - BLD-F

UNIT NUMBER	SUPPLY CFM	RETURN CFM
AC-F-1	2000	-
AC-F-2	2000	-
AC-F-3	815	-
AC-F-4	2000	-

(DSA STAMP AREA)

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FAX: 408.737.4100

BID SET
11-05-2021
REGISTERED PROFESSIONAL ENGINEER
MECHANICAL
STATE OF CALIFORNIA

CEG JOB NO: 21130
CYPRESS Engineering Group
HVAC, Plumbing, Fire Protection
Building Commissioning
Environmental Compliance
Training & Technical Support
83128 11802, Suite A8
Menlo Park, CA 94025
cypresseg.com

BLDG F - EXISTING FLOOR PLANS - MECHANICAL / TAB WORK

NEW HVAC AND REROOFING
FOOTHILL HIGH SCHOOL
4375 FOOTHILL ROAD, PLEASANTON, CA 94588
PLEASANTON UNIFIED SCHOOL DISTRICT

REVISIONS

NO.	ITEM	DATE
1	NEW HVAC AND REROOFING	11/05/2021

DRAWN BY: **CS**
CHECKED BY: **CS**
SFA JOB NO: **20090** DATE: **11/05/2021**

MP7.1

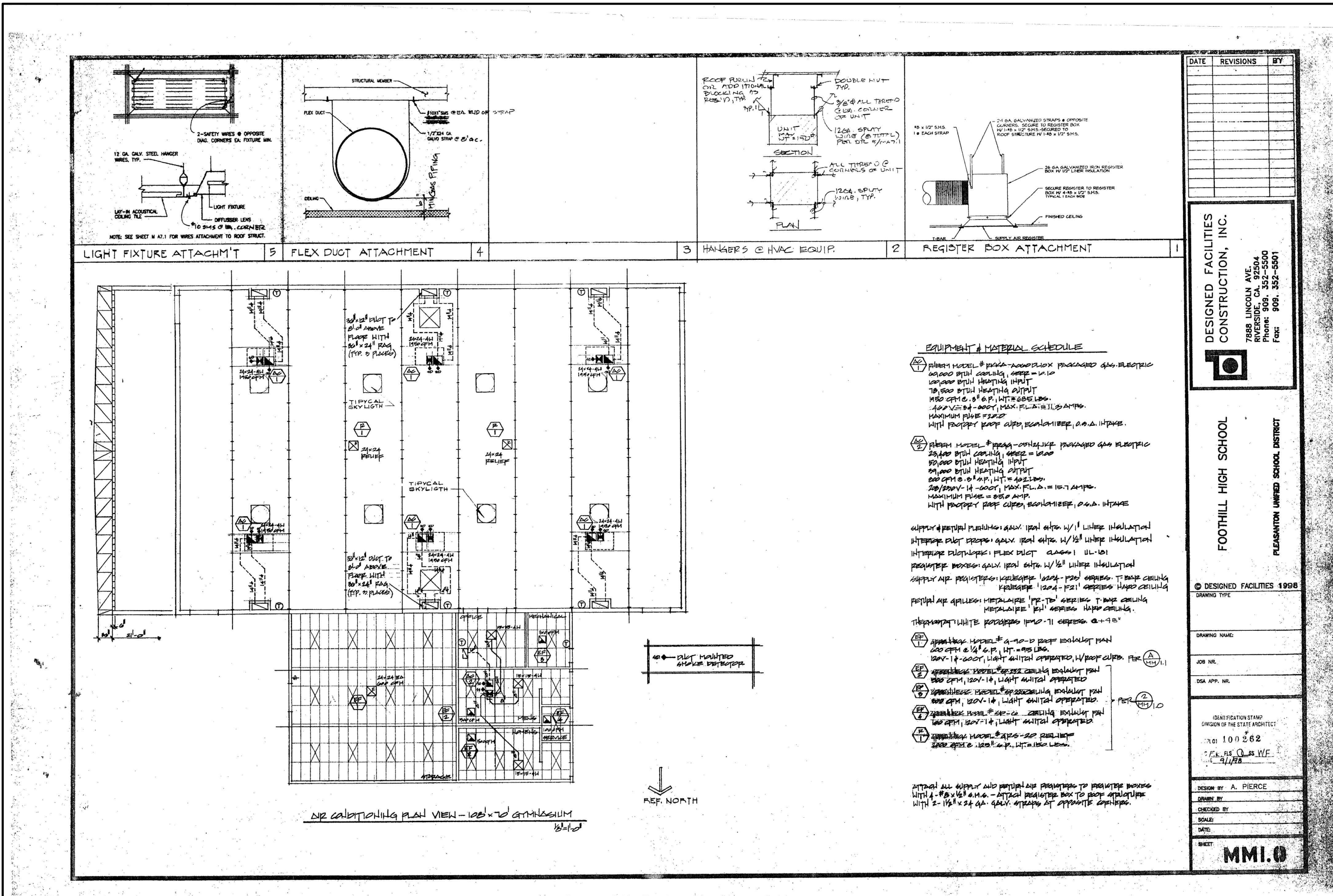
GENERAL NOTES

1. EXISTING FLOOR PLANS FROM RECORD DRAWINGS SHOWN FOR REFERENCE ONLY.

2. ADJUST AND BALANCE AIR FLOW TO CFMS SHOWN ON AIR BALANCE SCHEDULE FOR EACH BUILDING.

AIR BALANCE SCHEDULE - BLD-G

UNIT NUMBER	SUPPLY CFM	RETURN CFM
AC-G-1	2000	-
AC-G-2	2000	-
AC-G-3	2000	-
AC-G-4	2000	-
AC-G-5	2000	-
AC-G-6	2000	-
AC-G-7	859	-



1 BUILDING G - MECHANICAL / TAB WORK
MP7.2 SCALE: 1/8" = 1'-0"

(DSA STAMP AREA)

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FINNEY
ARCHITECTS
SFA

2155 SOUTH FARROW AVE
SUITE 200
CAMPBELL, CA 95008
PHONE: 408.273.8303
FAX: 408.273.8304

REGISTERED PROFESSIONAL ENGINEER
BID SET
11-05-2021
MECHANICAL
STATE OF CALIFORNIA

CEG JOB NO: 21130

CYPRESS
Engineering Group

HVAC, Plumbing, Fire Protection
Building Commissioning
Environmental Compliance
Training & Technical Support

831.218.1802 Suite A8
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BLDG G - EXISTING FLOOR PLANS -
MECHANICAL / TAB WORK

NEW HVAC AND REROOFING
FOOTHILL HIGH SCHOOL
4375 FOOTHILL ROAD, PLEASANTON, CA 94588
PLEASANTON UNIFIED SCHOOL DISTRICT

REVISIONS

NO.	ITEM	DATE
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DRAWN BY: CAD

CHECKED BY: CS

SFA JOB NO: DATE:

20090 11/05/2021

MP7.2

STATE OF CALIFORNIA
Mechanical Systems
 NRCC-MCH-E (Created 09/2020) CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE
 Project Name: Roofing and HVAC Replacement Foothill High School Report Page: Page 7 of 11
 Project Address: 4375 Foothill Rd, Pleasanton, CA 94588 Date Prepared: 2021-11-03

O. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE
 Table Instructions: Selections have been made based on information provided in previous tables of this document. If any selection needs to be changed, please explain why in Table E. Additional Remarks. These documents must be provided to the building inspector during construction and can be found online at https://www.energy.ca.gov/title24/2019standards/2019_compliance_documents/Nonresidential_Documents/NRCA/.

YES	NO	Form/Title	Systems To Be Field Verified	Field Inspector	
				Pass	Fail
<input checked="" type="radio"/>	<input type="radio"/>	NRCA-MCH-02-A Outdoor Air must be submitted for all newly installed HVAC units. Note: MCH02-A can be performed in conjunction with MCH-07-A Supply Fan VFD Acceptance (if applicable) since testing activities overlap.		<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="radio"/>	<input type="radio"/>	NRCA-MCH-03-A Constant Volume Single Zone HVAC. NOTE: This form does not automatically move to "Yes". If Constant Volume Single Zone HVAC Systems are included in the scope, permit applicant should move this form to "Yes".		<input type="checkbox"/>	<input type="checkbox"/>
<input type="radio"/>	<input checked="" type="radio"/>	NRCA-MCH-04-A Air Distribution Duct Leakage		<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="radio"/>	<input type="radio"/>	NRCA-MCH-05-A Air Economizer Controls		<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="radio"/>	<input type="radio"/>	NRCA-MCH-06-A Demand Control Ventilation Systems Acceptance must be submitted for all systems required to employ demand controlled ventilation (refer to §120.1(c)(3)) can vary outside ventilation flow rates based on maintaining interior carbon dioxide (CO2) concentration setpoints.		<input type="checkbox"/>	<input type="checkbox"/>
<input type="radio"/>	<input checked="" type="radio"/>	NRCA-MCH-07-A Supply Fan Variable Flow Controls		<input type="checkbox"/>	<input type="checkbox"/>
<input type="radio"/>	<input checked="" type="radio"/>	NRCA-MCH-08-A Valve Leakage Test		<input type="checkbox"/>	<input type="checkbox"/>
<input type="radio"/>	<input checked="" type="radio"/>	NRCA-MCH-09-A Supply Water Temperature Reset Controls		<input type="checkbox"/>	<input type="checkbox"/>
<input type="radio"/>	<input checked="" type="radio"/>	NRCA-MCH-10-A Hydronic System Variable Flow Controls		<input type="checkbox"/>	<input type="checkbox"/>
<input type="radio"/>	<input checked="" type="radio"/>	NRCA-MCH-11-A Automatic Demand Shed Controls		<input type="checkbox"/>	<input type="checkbox"/>

CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance: <http://www.energy.ca.gov/title24/2019standards/> September 2020

STATE OF CALIFORNIA
Mechanical Systems
 NRCC-MCH-E (Created 09/2020) CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE
 Project Name: Roofing and HVAC Replacement Foothill High School Report Page: Page 8 of 11
 Project Address: 4375 Foothill Rd, Pleasanton, CA 94588 Date Prepared: 2021-11-03

<input checked="" type="radio"/>	<input type="radio"/>	NRCA-MCH-12-A FDD for Packaged Direct Expansion Units		<input type="checkbox"/>	<input type="checkbox"/>
<input type="radio"/>	<input checked="" type="radio"/>	NRCA-MCH-13-A Automatic FDD for Air Handling Units and Zone Terminal Units Acceptance		<input type="checkbox"/>	<input type="checkbox"/>
<input type="radio"/>	<input checked="" type="radio"/>	NRCA-MCH-14-A Distributed Energy Storage DX AC Systems Acceptance. NOTE: This form does not automatically move to "Yes". If Distributed Energy Storage DX AC Systems are included in the scope, permit applicant should move this form to "Yes".		<input type="checkbox"/>	<input type="checkbox"/>
<input type="radio"/>	<input checked="" type="radio"/>	NRCA-MCH-15-A Thermal Energy Storage (TES) System Acceptance. NOTE: This form does not automatically move to "Yes". If Chilled Water Storage, Ice-on-Coil Internal Melt, Ice-on-Coil External Melt, Ice Harvester, Brine, Ice-Slurry, Eutectic Salt, Clathrate Hydrate Slurry (CHS), Cryogenic or Encapsulated (Ice Ball) Systems are included in the scope, permit applicant should move this form to "Yes".		<input type="checkbox"/>	<input type="checkbox"/>
<input type="radio"/>	<input checked="" type="radio"/>	NRCA-MCH-16-A Supply Air Temperature Reset Controls		<input type="checkbox"/>	<input type="checkbox"/>
<input type="radio"/>	<input checked="" type="radio"/>	NRCA-MCH-17-A Condenser Water Temperature Reset Controls		<input type="checkbox"/>	<input type="checkbox"/>
<input type="radio"/>	<input checked="" type="radio"/>	NRCA-MCH-18 Energy Management Control Systems		<input type="checkbox"/>	<input type="checkbox"/>
<input type="radio"/>	<input checked="" type="radio"/>	NRCA-MCH-19 Occupancy Sensor Controls		<input type="checkbox"/>	<input type="checkbox"/>
<input type="radio"/>	<input checked="" type="radio"/>	NRCA-MCH-20 Multi-Family Ventilation		<input type="checkbox"/>	<input type="checkbox"/>
<input type="radio"/>	<input checked="" type="radio"/>	NRCA-MCH-21 Multi-Family Envelope Leakage		<input type="checkbox"/>	<input type="checkbox"/>

CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance: <http://www.energy.ca.gov/title24/2019standards/> September 2020

STATE OF CALIFORNIA
Mechanical Systems
 NRCC-MCH-E (Created 09/2020) CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE
 Project Name: Roofing and HVAC Replacement Foothill High School Report Page: Page 9 of 11
 Project Address: 4375 Foothill Rd, Pleasanton, CA 94588 Date Prepared: 2021-11-03

P. DECLARATION OF REQUIRED CERTIFICATES OF VERIFICATION
 Table Instructions: Selections have been made based on information provided in previous tables of this document. If any selection needs to be changed, please explain why in Table E. Additional Remarks. These documents must be completed by a HERS Rater and provided to the building inspector during construction. The final documents must be created by a HERS Providers registry, but drafts can be found online at https://www.energy.ca.gov/title24/2019standards/2019_compliance_documents/Nonresidential_Documents/NRCV/.

YES	NO	Form/Title	Field Inspector	
				Pass
<input type="radio"/>	<input checked="" type="radio"/>	NRCV-MCH-04-H Duct Leakage Test. NOTE: Must be completed by a HERS Rater	<input type="checkbox"/>	<input type="checkbox"/>
<input type="radio"/>	<input checked="" type="radio"/>	NRCV-MCH-24 Enclosure Air Leakage Worksheet. NOTE: Must be completed by a HERS Rater	<input type="checkbox"/>	<input type="checkbox"/>
<input type="radio"/>	<input checked="" type="radio"/>	NRCV-MCH-27 High-rise Residential. NOTE: Must be completed by a HERS Rater	<input type="checkbox"/>	<input type="checkbox"/>
<input type="radio"/>	<input checked="" type="radio"/>	NRCV-MCH-32 Local Mechanical Exhaust. NOTE: Must be completed by a HERS Rater	<input type="checkbox"/>	<input type="checkbox"/>

CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance: <http://www.energy.ca.gov/title24/2019standards/> September 2020

STATE OF CALIFORNIA
Mechanical Systems
 NRCC-MCH-E (Created 09/2020) CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE
 Project Name: Roofing and HVAC Replacement Foothill High School Report Page: Page 4 of 11
 Project Address: 4375 Foothill Rd, Pleasanton, CA 94588 Date Prepared: 2021-11-03

I. SYSTEM CONTROLS
 Table Instructions: Complete the following Table to demonstrate compliance with mandatory controls in §110.2 and §120.2 and prescriptive controls in §140.4(i) and (j) or requirements in §141.0(b)(2) for altered space conditioning systems.

01	02	03	04	05	06	07	08	09
System Name	System Zoning	Conditioned Floor Area Being Served (ft²)	Thermostats §110.2(b) & (c)¹ §120.2(a) or §141.0(b)(2)²	Shut-Off Controls §120.2(e)	Isolation Zone Controls §120.2(g)	Demand Response §110.12 and §120.2(b)	Supply Air Temp. Reset §140.4(f)	Window Interlocks per §140.4(n)
AC	single zone	≤ 25,000 ft²	Setback + DR Tstat per §110.12	NA: 7 day per §120.2(e)¹	NA: Single Zone	DR Tstat per §110.12	NA: Single Zone	NA: Alteration project

¹ FOOTNOTES: Gravity gas wall heaters, gravity floor heaters, gravity room heaters, non-central electric heaters, fireplaces or decorative gas appliances, wood stoves are not required to have setback thermostats.
 ² NOTES: Controls with a * require a note in the space below explaining how compliance is achieved.
 EX-System 1: SA Temp Reset: Exempt because zones compliant with §140.4(d); EXCEPTION 1 to §140.4(i)

J. VENTILATION AND INDOOR AIR QUALITY
 Table Instructions: Complete the following Table to demonstrate compliance with mandatory ventilation requirements in §120.1 and §120.2(c)(3) for all nonresidential, high-rise residential and hotel/motel occupancies. For alterations, only ventilation systems being altered within the scope of the permit application need to be documented in this table. In lieu of this table, the required outdoor ventilation rates and airflow may be shown on the plans or the calculations can be presented in a spreadsheet.

01	02	03
<input checked="" type="checkbox"/>	Check the box if the project is showing ventilation calculations on the plans, or attaching the calculations instead of completing this table.	
<input type="checkbox"/>	Check this box if the project includes Nonresidential or Hotel/Motel spaces	
<input type="checkbox"/>	Check this box if the project includes new or altered high-rise residential dwelling units	
<input type="checkbox"/>	Check the box if the project is using natural ventilation in any spaces to meet required ventilation rates per §120.1(c)(2).	

CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance: <http://www.energy.ca.gov/title24/2019standards/> September 2020

STATE OF CALIFORNIA
Mechanical Systems
 NRCC-MCH-E (Created 09/2020) CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE
 Project Name: Roofing and HVAC Replacement Foothill High School Report Page: Page 5 of 11
 Project Address: 4375 Foothill Rd, Pleasanton, CA 94588 Date Prepared: 2021-11-03

¹ FOOTNOTES: System CFM should include both mechanical and natural ventilation for the zone/system.
 ² Air filtration requirements apply to the following three system types per §120.1(c)(1): space conditioning systems utilizing ducts to supply air to occupiable space; supply-only ventilation systems providing outside air to occupiable space; supply side of balanced ventilation systems including heat recovery and energy recovery ventilation systems providing outside air to occupiable space.
 ³ Uniform Mechanical Code may have more stringent ventilation requirements; the most stringent code requirement takes precedence.
 ⁴ See Standards Tables 120.1-A and 120.1-B
 ⁵ For lecture halls with fixed seating, the expected number of occupants shall be determined in accordance with the California Building Code.
 ⁶ §120.2(a)(2) requires systems serving rooms that are required by §130.1(c) to have lighting occupancy sensing controls to also have occupancy sensing zone controls for ventilation. Examples of spaces which require lighting occupancy sensors include offices 250ft² or smaller, multipurpose rooms less than 1,000ft², classrooms, conference rooms, restrooms, aisles and open areas in warehouses, library book stack aisles, corridors, stairwells, parking garages, and loading and unloading zones, unless exempt by §130.1(c).

K. TERMINAL BOX CONTROLS
 This Section Does Not Apply

L. DISTRIBUTION (DUCTWORK AND PIPING)
 Table Instructions: Complete the following tables to show compliance with mandatory pipe insulation requirements found in §120.3 and prescriptive requirements found in §140.4(i) for duct leakage testing.

Duct Leakage Sealing

11	12	13	14
No	Yes	Yes	No
The scope of the project includes only duct systems serving healthcare facilities.	Duct system provides conditioned air to an occupiable space for a constant volume, single zone, space-conditioning system.	The space conditioning system serves less than 5,000 ft² of conditioned floor area.	The combined surface area of the ducts in the following locations is more than 25% of the total surface area of the entire duct system:
<input type="checkbox"/> Outdoors	<input type="checkbox"/> In a space directly under a roof that has a U-factor greater than the U-factor of the ceiling, or if the roof does not meet the requirements of §140.3(a)(1)(8) or if the roof has fixed vents or openings to the outdoors/unconditioned spaces	<input type="checkbox"/> In an unconditioned crawlspace	<input type="checkbox"/> In other unconditioned spaces
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15	No	The scope of the project includes extending an existing duct system, which is constructed, insulated or sealed with asbestos.	
16	No	The scope of the project includes an existing duct system that is documented to have been previously sealed as confirmed through field verification and diagnostic testing in accordance with procedures in the Reference Nonresidential Appendix NA2.	

Table Continued

CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance: <http://www.energy.ca.gov/title24/2019standards/> September 2020

STATE OF CALIFORNIA
Mechanical Systems
 NRCC-MCH-E (Created 09/2020) CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE
 Project Name: Roofing and HVAC Replacement Foothill High School Report Page: Page 6 of 11
 Project Address: 4375 Foothill Rd, Pleasanton, CA 94588 Date Prepared: 2021-11-03

Table Continued

17	18
	Duct system shall be sealed in accordance with the California Mechanical Code.

M. COOLING TOWERS
 This Section Does Not Apply

N. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION
 Table Instructions: Selections have been made based on information provided in previous tables of this document. If any selection needs to be changed, please explain why in Table E. Additional Remarks. These documents must be provided to the building inspector during construction and can be found online at https://www.energy.ca.gov/title24/2019standards/2019_compliance_documents/Nonresidential_Documents/NRCI/.

YES	NO	Form/Title	Systems To Be Field Verified	Field Inspector	
				Pass	Fail
<input checked="" type="radio"/>	<input type="radio"/>	NRCI-MCH-01-E - E - Must be submitted for all buildings.		<input type="checkbox"/>	<input type="checkbox"/>

CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance: <http://www.energy.ca.gov/title24/2019standards/> September 2020

STATE OF CALIFORNIA
Mechanical Systems
 NRCC-MCH-E (Created 09/2020) CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE
 Project Name: Roofing and HVAC Replacement Foothill High School Report Page: Page 1 of 11
 Project Address: 4375 Foothill Rd, Pleasanton, CA 94588 Date Prepared: 2021-11-03

A. GENERAL INFORMATION
 01 Project Location (city) Pleasanton
 02 Climate Zone 12
 04 Total Conditioned Floor Area
 05 Total Unconditioned Floor Area
 06 # of Stories (Habitable Above Grade)
 07 Occupancy Types Within Project:
☐ Office (B) ☐ Retail (M)
☐ Hotel/ Motel Guest Rooms (R-1) ☒ School (E)
☐ High Rise Residential (R-2/R-3) ☐ Relocatable Class Bldg (E)
☐ Other (Write In):
 FOOTNOTES: Climate zone can be determined on the California Energy Commission's website at http://www.energy.ca.gov/maps/renewable/building_climate_zones.html

B. PROJECT SCOPE
 Table Instructions: Include any mechanical systems that are within the scope of the permit application and are demonstrating compliance using the prescriptive path outlined in §140.6, or §141.0(b)(2) for alterations.

My project consists of (check all that apply)		
01	02	03
Air System(s)	Wet System Components	Dry System Components
<input checked="" type="checkbox"/> Heating Air System	<input type="checkbox"/> Water Economizer	<input checked="" type="checkbox"/> Air Economizer
<input checked="" type="checkbox"/> Cooling Air System	<input type="checkbox"/> Pumps	<input type="checkbox"/> Electric Resistance Heat
<input type="checkbox"/> Mechanical Controls	<input type="checkbox"/> Hydronic System Piping	<input type="checkbox"/> Fan Systems
<input checked="" type="checkbox"/> Mechanical Controls (existing to remain, altered or new)	<input checked="" type="checkbox"/> Cooling Towers	<input checked="" type="checkbox"/> Ductwork (existing to remain, altered or new)
	<input type="checkbox"/> Chillers	<input type="checkbox"/> Ventilation
	<input type="checkbox"/> Boilers	<input type="checkbox"/> Zonal Systems/ Terminal Boxes

C. COMPLIANCE RESULTS
 Table Instructions: If any cell on this table says "DOES NOT COMPLY" or "COMPLIES with Exceptional Conditions" refer to Table D. for guidance.

01	02	03	04	05	06	07	08	09
System Summary §110.1, §110.2, §140.4	Pumps §140.4(a)	Fans/ Economizers §140.4(a), §140.4(c)	System Controls §110.2, §120.2, §140.4(f)	Ventilation §120.1	Terminal Box Controls §140.4(d)	Distribution §120.3, §140.4(i)	Cooling Towers §110.2(e)(2)	Compliance Results
(See Table F)	(See Table G)	(See Table H)	(See Table I)	(See Table J)	(See Table K)	(See Table L)	(See Table M)	
Yes	AND	AND	Yes	AND	Yes	AND	Yes	AND
Mandatory Measures Compliance (See Table Q for Details)								COMPLIES

CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance: <http://www.energy.ca.gov/title24/2019standards/> September 2020

STATE OF CALIFORNIA
Mechanical Systems
 NRCC-MCH-E (Created 09/2020) CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE
 Project Name: Roofing and HVAC Replacement Foothill High School Report Page: Page 2 of 11
 Project Address: 4375 Foothill Rd, Pleasanton, CA 94588 Date Prepared: 2021-11-03

D. EXCEPTIONAL CONDITIONS
 This table is auto-filled with uneditable comments because of selections made or data entered in tables throughout the form.

Table H indicates a Fan Power System Index that exceeds the maximum allowed per §140.4(c). Please revise to demonstrate compliance. Selections made in Table D have been changed by the permit applicant. See Table E. Additional Remarks for permit applicant's explanation.

E. ADDITIONAL REMARKS
 This table includes remarks made by the permit applicant to the Authority Having Jurisdiction.

F. HVAC SYSTEM SUMMARY (DRY & WET SYSTEMS)
 Table Instructions: Complete the following equipment schedules to show compliance with mandatory requirements found in §110.1 and §110.2(a) and prescriptive requirements found in §140.4(a), §140.4(b) and §140.4(c) or §141.0(b)(2) for alterations.

Dry System Equipment Sizing (includes air conditioners, condensers, heat pumps, VRF, furnaces and unit heaters)

01	02	03	04	05	06	07	08	09	10	11
Name or Item Tag	Equipment Category per Tables 110.2	Equipment Type per Tables 110.2 & Title 20	Smallest Size Available¹ §140.4(a)	Equipment Sizing per Mechanical Schedule (kBtu/h) §140.4(a)(8)		Cooling Output²³		Load Calculations³⁴		
				Per Design (kBtu/h)	Rated (kBtu/h)	Supp. Heating Output (kBtu/h)	Sensible Per Design (kBtu/h)	Rated (kBtu/h)	Total Heating Load (kBtu/h)	Total Sensible Cooling Load (kBtu/h)
AC	Unitary AC/ Condensers	AC, air cooled, package (3 phase)	Yes	54	67		46	60		

¹ FOOTNOTES: Equipment shall be the smallest size, within the available options of the desired equipment line, necessary to meet the design heating and cooling loads of the building per §140.4(a). Healthcare facilities are exempted.
 ² It is common practice to show rated output capacity on the equipment schedule. Sensible cooling output comes from specification sheet tables.
 ³ If equipment is heating only, leave cooling output and load blank. If equipment is cooling only, leave heating output and load blank.
 ⁴ Authority Having Jurisdiction may ask for load calculations used for compliance per §140.4(b).
 Table Continued

CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance: <http://www.energy.ca.gov/title24/2019standards/> September 2020

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Dry System Equipment Efficiency (other than Package Terminal Air Conditioners (PTAC) and Package Terminal Heat Pumps (PTHP))

01	02	03	04	05	06	07	08	09
Name or Item Tag	Size Category (Btu/h)	Rating Condition (°F)	Efficiency Unit	Heating Mode	Min Efficiency Required per Tables 110.2/ Title 20	Design Efficiency	Efficiency Unit	Cooling Mode
AC	<65,000				0.8		SEER	16

G. PUMPS
 This Section Does Not Apply

H. FAN SYSTEMS & AIR ECONOMIZERS
 Table Instructions: Complete the following Table for fan systems to demonstrate compliance with prescriptive requirements found in §140.4(c), §140.4(e) and §140.4(m). First document the system details, then add fans within that system to document compliance with fan power requirements. Fan systems serving only process loads are exempt from these requirements and do not need to be included in Table H.

System Name:	AC	Economizer¹	Differential Temperature	Economizer Controls:	Designed per §140.4(e) and (m)	System Fan Type:	Constant Volume
01	02	03	04	05	06	07	08
Fan Name or Item Tag	Fan Function	Qty	Maximum Design Supply Airflow (CFM)	HP Unit²	Design HP	Fan Power Pressure Drop Adjustment - Table 140.4-B	Design Airflow through Device (CFM)
AC	Supply	1	1,800	BHP	1.05	None used Calculated Adjustment (in H ₂ O)	
Total System Design Supply Airflow (CFM):		1,800	Total System Design (B)HP:		1.05	Maximum System Fan Power (B)HP:	

¹ FOOTNOTE: Computer room economizers must meet requirements of §140.9(a) and will be documented on the NRCC-PRC-E document.
 ² The unit used for HP must be consistent for all fans within a system.

CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance: <http://www.energy.ca.gov/title24/2019standards/> September 2020

(DSA STAMP AREA)

SUCIURAY FINNEY ARCHITECTS
 SFA
 2155 SOUTH BASCOM AVE
 SUITE 200
 PALM BEACH, CA 94964
 PHONE: 707.761.1111
 FAX: 707.761.1112

REGISTERED PROFESSIONAL ENGINEER
 BID SET
 11-05-2021
 MECHANICAL
 STATE OF CALIFORNIA

CEG JOB NO: 21130
CYPRESS
 Engineering Group
 HVAC, Plumbing, Fire Protection
 Building Commissioning
 Environmental Compliance
 Training & Technical Support
 881.218.1802 Suite A8
 Monterey, CA 93940
 cypresseng.com

TITLE 24 FORMS - MECHANICAL

NEW HVAC AND REROOFING
 FOOTHILL HIGH SCHOOL
 4375 FOOTHILL ROAD, PLEASANTON, CA 94588
 PLEASANTON UNIFIED SCHOOL DISTRICT

REVISIONS
 NO. ITEM DATE

DRAWN BY: CAD
 CHECKED BY: CS
 SFA JOB NO: DATE:
 20090 11/05/2021

MP8.1

STATE OF CALIFORNIA
Mechanical Systems
NRCC-MCH-E (Created 09/2020)
CERTIFICATE OF COMPLIANCE
Project Name: Roofing and HVAC Replacement Foothill High School
Project Address: 4375 Foothill Rd, Pleasanton, CA 94588
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CALIFORNIA ENERGY COMMISSION
NRCC-MCH-E
Table Instructions: Indicate where mandatory measures are documented in the plan set or construction documentation. For any mandatory measures that do not apply, mark the plan sheet or construction document location as "N/A", any active cells that are left blank will result in non-compliance in Table C.

Q. MANDATORY MEASURES DOCUMENTATION LOCATION	
01	02
Compliance with Mandatory Measures documented through MCH Mandatory Measures Note Block:	No
03	04
Mandatory Measure	Plan sheet or construction document location
Heating Equipment Efficiency per §110.1	MP8.2
Cooling Equipment Efficiency per §110.1	MP8.2
Furnace Standby Loss Control per §110.2(d)	NA
Duct Insulation per §120.4	230500
Heating Hot Water Equipment Efficiency per §110.1	NA
Cooling Chilled and Condenser Water Equipment Efficiency per §110.1	NA
Open and Closed Circuit Cooling Towers conductivity of flow-based controls per §110.2(e)1	NA
Open and Closed Circuit Cooling Towers Flow Meter with analog output per §110.2(e)3	NA
Open and Closed Circuit Cooling Towers Overflow Alarm per §110.2(e)4	NA
Open and Closed Circuit Cooling Towers Efficient Drift Eliminators per §110.2(e)5	NA
Pipe Insulation per §120.3(b)	NA
Combustion air shutoff, combustion air fan controls and stack design and controls for boilers per §120.9	NA
Heat Pump with Supplementary Electric Resistance Heater Controls per §110.2(b)	NA
The air duct and plenum system is designed per §120.4(a)-(f)	NA
Kitchen range hoods shall be rated for sound in accordance with Section 7.2 of ASHRAE 62.2	NA

CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance: <http://www.energy.ca.gov/title24/2019standards>
September 2020

STATE OF CALIFORNIA
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Date Prepared: 2021-11-03

CALIFORNIA ENERGY COMMISSION
NRCC-MCH-E
DOCUMENTATION AUTHOR'S DECLARATION STATEMENT
1. I certify that this Certificate of Compliance documentation is accurate and complete.
Documentation Author Name: Chahan Shah
Documentation Author Signature: Chahan S. Shah
Company: Cypress Engineering Group
Signature Date: 11/3/21
Address: 8 Harris Court, Suite A8
CEA/HERS Certification Identification (if applicable):
City/State/Zip: Monterey, CA 93940
Phone: 8312181802
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.
Responsible Designer Name: Metin Serttunc
Responsible Designer Signature: Metin Serttunc
Company: Cypress Engineering Group
Date Signed: 11/3/21
Address: 8 Harris Court, Suite A8
License: M31059
City/State/Zip: Monterey, CA 93940
Phone: 8312181802
CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance: <http://www.energy.ca.gov/title24/2019standards>

REVISIONS
NO. ITEM DATE

DRAWN BY: CAD
CHECKED BY: CS
SFA JOB NO: 20090
DATE: 11/05/2021

TITLE 24 FORMS - PLUMBING

NEW HVAC AND REROOFING
FOOTHILL HIGH SCHOOL
4375 FOOTHILL ROAD, PLEASANTON, CA 94588
PLEASANTON UNIFIED SCHOOL DISTRICT

CEG JOB NO: 21130
CYPRESS Engineering Group
HVAC, Plumbing, Fire Protection
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8312181802, Suite A8
Monterey, CA 93940
cypressseg.com

BID SET
11-05-2021
REGISTERED PROFESSIONAL DESIGNER
MECHANICAL
STATE OF CALIFORNIA

(DSA STAMP AREA)
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SFA
2155 SOUTH DARTMOUTH AVE
SUITE 200
CAMPBELL, CA 95008
PHONE: 408.273.8571
FAX: 408.273.4140

GENERAL CONSTRUCTION NOTES	
1.	CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE CODES AND REGULATIONS. MATERIALS AND EQUIPMENT SHALL BE U.L. LISTED AND LABELED FOR THE APPLICATION.
2.	THE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL PERMITS, LICENSES AND INSPECTION FEES REQUIRED BY THIS CONTRACT WORK.
3.	CONTRACTOR SHALL VISIT THE PROJECT SITE PRIOR TO BIDDING AND ALLOW FOR ALL FIELD CONDITIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ELECTRICAL WORK NOTED AND CALLED OUT ON ALL CONTRACT DOCUMENTS. THE CONTRACTOR SHALL OBTAIN INFORMATION AND BE FAMILIAR WITH ALL OTHER TRADES WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION BETWEEN OTHER TRADES ON PROJECT.
4.	CONTRACTOR SHALL BE RESPONSIBLE FOR THE SAFETY OF PERSONS AND PROPERTY AND SHALL PROVIDE INSURANCE COVERAGE AS NECESSARY FOR LIABILITY AND PERSONAL PROPERTY DAMAGE, TO FULLY PROTECT THE OWNER, ARCHITECT AND ENGINEER FROM ANY AND ALL CLAIMS RESULTING FROM THIS WORK.
5.	CONTRACTOR SHALL MAINTAIN RECORD DRAWINGS AT THE PROJECT SITE INDICATING ALL MODIFICATIONS TO ELECTRICAL SYSTEMS. THE CONTRACTOR SHALL AT THE CONCLUSION OF THE PROJECT PROVIDE ACCURATE "AS-BUILT" DRAWINGS ACCEPTABLE TO THE ARCHITECT.
6.	ALL MATERIALS PROVIDED TO THE PROJECT SHALL BE NEW. THE CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE AND INSTALL ALL INCIDENTAL MATERIALS REQUIRED FOR A COMPLETE INSTALLATION.
7.	CONTRACTOR SHALL PROVIDE TO THE ARCHITECT A CONSTRUCTION SCHEDULE OF ELECTRICAL WORK. THE CONSTRUCTION SCHEDULE SHALL IDENTIFY ALL SIGNIFICANT MILESTONES WITH COMPLETION DATES.
8.	CONTRACTOR SHALL PROVIDE ALL REQUIRED "CUTTING, PATCHING, EXCAVATION, BACKFILL AND REPAIRS" NECESSARY TO RESTORE DAMAGED SURFACES TO EQUAL OR BETTER THAN ORIGINAL CONDITIONS EXISTING AT START OF WORK.
9.	CONTRACTOR SHALL BE RESPONSIBLE FOR PAINTING ALL EXPOSED CONDUITS AND ELECTRICAL EQUIPMENT. REFER TO ARCHITECTS PAINTING SECTION FOR REQUIREMENTS.
10.	ALL ELECTRICAL EQUIPMENT INSTALLED OUTDOORS SHALL BE WEATHERPROOF. EXTERIOR CONDUITS RUN INTO BUILDINGS SHALL BE INSTALLED WITH FLASHING, CAULKED AND SEALED. CONDUITS FOR EXTERIOR ELECTRICAL DEVICES SHALL BE RUN INSIDE BUILDING UNLESS OTHERWISE NOTED ON DRAWINGS.
11.	ALL CONDUITS UNLESS OTHERWISE NOTED ON DRAWINGS SHALL HAVE AS A MINIMUM: TWO (2) #12s WITH ONE (1) #12 GROUND. "TICK" MARKS SHOWN ON CIRCUITRY ARE FOR ROUGH ESTIMATING ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL WIRES AND WIRE SIZES REQUIRED BY LATEST CODE.
12.	ALL BRANCH CIRCUITS SHALL HAVE INDIVIDUAL NEUTRALS. SHARED NEUTRALS ON MULTIWIRE CIRCUITS IS NOT ALLOWED.
13.	COORDINATE ALL CONDUIT RUNS, ELECTRICAL EQUIPMENT AND PANELS WITH ALL OTHER WORK TO AVOID CONFLICTS.
14.	CONTRACTOR SHALL PROVIDE IN EVERY NEW EMPTY CONDUIT A DRAW STRING FOR USE IN FUTURE CONSTRUCTION.
15.	ALL CONDUIT SHALL BE CONCEALED WHERE POSSIBLE. CUT AND PATCH EXISTING WALLS WHERE NECESSARY. WHERE IT IS NECESSARY TO CUT OR BORE EXISTING STRUCTURAL WALLS FOR NEW ELECTRICAL WORK OBTAIN PERMISSION FROM THE ARCHITECT PRIOR TO STARTING WORK. REUSE EXISTING CONDUIT WHERE POSSIBLE.
16.	WHERE IT IS NOT POSSIBLE TO REUSE EXISTING CONDUIT OR RUN NEW CONCEALED CONDUIT USE NON-METALLIC SURFACE RACEWAY AND BOXES. ROUTING OF ALL NON-METALLIC RACEWAYS SHALL BE APPROVED BY THE ARCHITECT OR OWNER'S REPRESENTATIVE PRIOR TO ROUGH-IN.
17.	CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DAMAGE TO EXISTING UNDERGROUND SYSTEMS (GAS, WATER, TELEPHONE, ELECTRICAL, SEWER, ETC.). THE CONTRACTOR SHALL REPAIR & PAY ALL EXPENSES FOR DAMAGE TO EXISTING UNDERGROUND SYSTEMS AS A RESULT OF NEW WORK. REPAIR TO DAMAGED UNDERGROUND SYSTEMS SHALL BE TO THE OWNERS SATISFACTION WITHOUT EXTRA EXPENSE TO THE OWNER.
18.	WHERE NON-METALLIC SHEATHED CONDUCTORS ARE FOUND, THE CONTRACTOR SHALL REMOVE TO FULLEST EXTENT PER THE GENERAL DEMOLITION NOTES AND REPLACE WITH CONDUIT. METAL CLAD CABLE WILL BE PERMITTED ON A CASE-BY-CASE BASIS ONLY BY WRITTEN APPROVAL FROM THE ARCHITECT.
19.	ALL INSTALLATION OF EXPOSED SURFACE MOUNTED RACEWAY IN PUBLIC AREAS SHALL BE REVIEWED BY ARCHITECT BEFORE ROUGH-IN. CONTRACTOR IS TO DETERMINE THE ACCESSIBILITY OF ATTIC, FURRED SPACE, HOLLOW WALLS, ETC. IN EACH AREA AND REVIEW WITH ARCHITECT. IF SYSTEM CAN BE ROUTED CONCEALED EITHER BY FISHING OR ACCESSIBILITY, CONTRACTOR IS TO DO SO. IF INACCESSIBILITY IS DETERMINED, CONTRACTOR SHALL INSTALL SURFACE MOUNTED RACEWAY IN THE MOST AESTHETICALLY PLEASING MEANS AS DETERMINED BY THE ARCHITECT. NO ALLOWANCE FOR ADDITIONAL COMPENSATION DUE TO ROUTING AS DIRECTED BY THE ARCHITECT WILL BE MADE.

GENERAL DEMOLITION NOTES	
A.	CONTRACTOR SHALL FIELD VERIFY EXTENT OF ELECTRICAL DEMOLITION AND QUANTITIES OF ELECTRICAL TO BE REMOVED AS DICTATED BY THE REQUIREMENTS OF THE PROJECT.
B.	REMOVAL SHALL INCLUDE WIRING, RACEWAY, BOXES, SWITCHES, LIGHT FIXTURES, ETC. AS INDICATED ON THE PLANS AND AS REQUIRED BY THESE DEMOLITION NOTES.
C.	RACEWAYS ASSOCIATED WITH ELECTRICAL BEING DEMOLISHED WHICH ARE CONCEALED IN EXISTING REMAINING WALLS MAY BE ABANDONED IN PLACE. REMOVE WIRING FROM CONDUIT.
D.	RACEWAYS ASSOCIATED WITH ELECTRICAL BEING DEMOLISHED WHICH ARE EXPOSED SHALL BE REMOVED.
E.	WHERE REMOVAL OF EQUIPMENT OR WIRING IS INDICATED, IT SHALL INCLUDE ALL ASSOCIATED WIRING BACK TO LAST ACTIVE REMAINING OUTLET, DEVICE, FIXTURE OR PANEL.
F.	ELECTRICAL CONTRACTOR SHALL INSURE THAT ALL REMAINING ACTIVE CIRCUITS, DEVICES, OUTLETS, LIGHT FIXTURES, ETC. HAVE NOT BEEN DISCONNECTED OR MADE INOPERATIVE DURING DEMOLITION. ELECTRICAL CONTRACTOR SHALL RESTORE ALL INTERRUPTED OR DISCONNECTED CIRCUITS TO OPERATION.
G.	ELECTRICAL CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL REMOVED ELECTRICAL EQUIPMENT AND MATERIAL.
H.	NO REMOVED EQUIPMENT OR MATERIAL SHALL BE REUSED AS PART OF NEW WORK, U.O.N.
I.	EXISTING REMAINING CONCEALED RACEWAYS MAY BE REUSED FOR NEW WORK PROVIDED THEY MEET ALL REQUIREMENTS OF THE SPECIFICATION FOR NEW WORK.
J.	EXISTING FLUSH OUTLETS MAY BE REUSED FOR NEW WORK PROVIDED THEY MEET ALL REQUIREMENTS OF THE SPECIFICATION FOR NEW WORK. MEET THE REQUIREMENTS OF THE CURRENT C.E.C. FOR VOLUME AND COINCIDE WITH LOCATION SHOWN FOR THE NEW WORK.
K.	FLUSH OUTLET BOXES IN EXISTING WALLS TO REMAIN MAY BE ABANDONED IN PLACE. REMOVE DEVICES AND WIRING, PLUG OPENING AND PROVIDE AND INSTALL A BLANK DEVICE PLATE.
L.	EXISTING WIRING SHOWN HAS BEEN TAKEN FROM OLD PLANS AND IS ASSUMED TO BE CORRECT. ELECTRICAL CONTRACTOR SHALL FIELD VERIFY ACTUAL CONDITIONS AND MAKE ADJUSTMENTS TO SUIT ACTUAL CONDITIONS AND TO MEET THE INTENT OF THE CONTRACT DOCUMENTS.
M.	WHERE TELEPHONE, COMPUTER DATA, FIBER OPTICS, FIRE ALARM OR OTHER COMMUNICATIONS OUTLETS OR WIRING IS TO BE DEMOLISHED IT SHALL BE REMOVED BACK TO THE NEXT TERMINAL POINT. ELECTRICAL CONTRACTOR SHALL COORDINATE WITH OWNER OR HIS REPRESENTATIVE TO HAVE EQUIPMENT AND WIRING DESIGNATED FOR REMOVAL OR PRESERVATION PRIOR TO REMOVAL OF OUTLET BOXES, CONDUIT OR WIRING BY ELECTRICAL CONTRACTOR.
N.	COORDINATE WITH OWNER PRIOR TO START OF DEMOLITION TO MINIMIZE POWER INTERRUPTIONS. WORK MAY HAVE TO OCCUR DURING NON-REGULAR BUSINESS HOURS. COORDINATE IN WRITING WITH OWNER ONE WEEK PRIOR TO PLANNED POWER INTERRUPTIONS.

ELECTRICAL SYMBOLS & ABBREVIATIONS	
SYMBOLS & ABBREVIATIONS SHOWN ARE FOR GENERAL USE. DISREGARD THOSE WHICH DO NOT APPEAR ON THE PLANS.	
	SECURITY DOOR CONTACTS
	SECURITY MOTION DETECTOR
	CCTV CAMERA
	SECURITY SYSTEM KEYPAD
	DOOR BELL PUSHBUTTON
	DOOR CHIME WITH LED
	RECEPTACLE - DUPLEX *
	DUPLEX RECEPTACLE MOUNTED ABOVE COUNTER - FIELD VERIFY HEIGHT
	GFCI CONVENIENCE RECEPTACLE - DUPLEX *
	GFCI CONVENIENCE DUPLEX RECEPTACLE MOUNTED ABOVE COUNTER - FIELD VERIFY HEIGHT
	RECEPTACLE - DOUBLE DUPLEX *
	HALF SWITCHED DUPLEX RECEPTACLE *
	SINGLE RECEPTACLE *
	DUPLEX RECEPTACLE - CEILING MOUNTED
	LETTER INDICATES DUPLEX HALF CONTROLLED RECEPTACLE *
	LETTER INDICATES DUPLEX FULLY CONTROLLED RECEPTACLE *
	FLOOR MOUNTED DUPLEX RECEPTACLE
	FLOOR MOUNTED BOX
	POWER OUTLET - SEE PLANS FOR NEMA TYPE *
	POWER POLE
	WALL TELEPHONE OUTLET **
	VOICE/DATA WALL OUTLET *
	VOICE/DATA OUTLET MOUNTED ABOVE COUNTER - FIELD VERIFY HEIGHT
	SURFACE MOUNTED VOICE/DATA WALL OUTLET *
	SURFACE MOUNTED VOICE/DATA OUTLET MOUNTED ABOVE COUNTER - FIELD VERIFY HEIGHT
	WIRELESS ACCESS POINT (WAP) - CEILING MOUNTED
	WIRELESS ACCESS POINT (WAP) - WALL MOUNTED - FIELD VERIFY HEIGHT
	VOICE/DATA OUTLET - FLOOR MOUNTED
	TV OUTLET *
	VOICE/DATA OUTLET - CEILING MOUNTED
	INTERIOR SPEAKERS CEILING MOUNTED
	INTERIOR SPEAKERS WALL MOUNTED
	CLOCK +8-0 AFF U.O.N. VERIFY BEFORE INSTALLATION
	PANELBOARD - FLUSH MOUNTED
	EQUIPMENT PANEL - FLUSH MOUNTED
	PANELBOARD - SURFACE MOUNTED
	EQUIPMENT PANEL - SURFACE MOUNTED
	METER W/ CURRENT TRANSFORMER
	JUNCTION BOX - CEILING OR WALL MOUNTED, SIZE PER CODE, TAPE AND TAG WIRES
	MOTOR CONNECTION
	NON-FUSED DISCONNECT SWITCH
	FUSED DISCONNECT SWITCH; FUSED WITH DUAL-ELEMENT FUSES SIZED PER EQUIPMENT MFG'S NAMEPLATE DATA
	COMBINATION STARTER/FUSED DISCONNECT SWITCH; FUSED DISCONNECT SWITCH ELEMENT FUSES SIZED PER EQUIPMENT MFG'S NAMEPLATE DATA
	MAGNETIC STARTER - NEMA SIZE INDICATED NEMA 3R ENCLOSURE UNLESS OTHERWISE SPECIFIED
	CIRCUIT BREAKER
	GROUND ROD WITH GROUNDWELL BOX
	GROUND ELECTRODE
	NORMALLY OPEN CONTACT
	NORMALLY CLOSED CONTACT
	TRANSFORMER - SEE SINGLE LINE FOR SIZE
	PULLBOX
	FLEX CONDUIT WITH CONNECTION
	CONDUIT - UP
	CONDUIT - DOWN
	SURFACE METAL OR NON-METALLIC RACEWAY
	CONDUIT - EXISTING
	CONDUIT - CONCEALED IN WALLS OR CEILING
	CONDUIT - BELOW SLAB OR UNDERGROUND; 3/4" MIN.
	CAPPED OR STUB-OUT CONDUIT
	CONDUIT CONTINUATION
	CONDUIT - HOME RUN TO PANEL, TERMINAL CABINET, ETC. AS INDICATED
	RUNS MARKED WITH CROSSHATCHES INDICATE NUMBER OF #12 AWG WIRES WHEN MORE THAN TWO. SIZE CONDUIT ACCORDING TO SPECIFICATIONS AND APPLICABLE CODE.
	CROSS HATCHES WITH NUMBER ADJACENT INDICATES WIRE SIZE OTHER THAN #12 AWG.
	SHEET NOTE REFERENCE SYMBOL; SEE ASSOCIATED NOTE ON SAME SHEET
	SCHEDULE SYMBOL; SEE ASSOCIATED NOTE ON SAME SHEET
	DETAIL NOTE REFERENCE SYMBOL; SEE ASSOCIATED NOTE ON SAME DETAIL
	DETAIL NUMBER DETAIL OR SECTION REFERENCE SHEET NUMBER
	INDICATES QUANTITY OF TELEPHONE OUTLETS
	INDICATES QUANTITY OF DATA OUTLETS
ABBREVIATIONS	
A AMPERE	GFCI GROUND FAULT
AFF ABOVE FINISHED FLOOR	GFI INTERRUPTING
ALUM/AL ALUMINUM	GRD, G GROUND
ARCH ARCHITECT	GRS GALVANIZED RIGID
AWG AMERICAN WIRE	HT STEEL
BKR BREAKER	HT HEIGHT
CB CONDUIT	IC INTERCOM
CATV CABLE TV	IDF INTERMEDIATE DISTRIBUTION FRAME
CB CIRCUIT BREAKER	INCAND INCANDESCENT
CCTV CLOSED CIRCUIT TV	JB JUNCTION BOX
CKT CIRCUIT	KV KILOVOLT
CL CENTER LINE	KVA KILOVOLT AMPERES
CLG CEILING	KW KILOWATT
C.O. CONDUIT ONLY	LCP LIGHTING CONTROL
CTR DIMMER	LTG LIGHTING
D DIMENSION	LV LOW VOLTAGE
DIST DISTRIBUTION	KCM THOUSAND
EXISTING EXISTING	LV LOW VOLTAGE
EC ELECTRICAL CONTRACTOR	M.B. MAIN CIRCUIT BREAKER
EL EVENING LIGHT	MCA MINIMUM
EM EMERGENCY	CIRCUIT AMPS
EMT ELECTRICAL	MDF MAIN DISTRIBUTION FRAME
MECH METALLIC TUBING	MECH MECHANICAL
EQ EQUIPMENT	MH METAL HALIDE
EV ELECTRICAL VEHICLE	MLO MAIN LUGS ONLY
FA FIRE ALARM	MPOE MAIN POINT OF ENTRANCE
FACP FIRE ALARM CONTROL PANEL	MOUNTED MOUNTING
FC FOOT CANDLE	MCCP MAXIMUM OVER CURRENT PROTECTION
FIN FINISH	(N) NEW
FL FLOOR	NIC NOT IN CONTRACT
FLA FULL LOAD AMPS	NIEC NOT IN ELECTRICAL CONTRACT
FLUOR FLUORESCENT	FUT FUTURE
GC GENERAL CONTRACTOR	(NL) NO. NUMBER
	NOM NOMINAL
	NTS NOT TO SCALE
	OH OVERALL HEIGHT
	OC ON CENTER
	OH OVERHEAD
	PA PUBLIC ADDRESS
	PB PULL BOX
	PF POWER FACTOR
	PH PHASE
	PIR PASSIVE INFRARED
	PNL PANEL
	PO PHOTOVOLTAIC
	PVC POLYVINYL CHLORIDE
	PWR POWER
	REQD REQUIRED
	(RP) REMOVABLE POLE
	RECPPTS RECEPTACLES
	REQD REQUIRED
	REQMTS REQUIREMENT(S)
	SHT SHEET
	SLD SINGLE LINE DIAGRAM
	STC SYSTEMS TERMINATION
	SW SWITCH
	SWBD SWITCHBOARD
	TTB TELEPHONE TERMINAL
	BACKBOARD
	TYP TYPICAL
	UNON UNLESS OTHERWISE NOTED
	UNDERGROUND
	US VOLT
	VD VOLTAGE DROP
	W WATT
	W/ WITH
	WP WEATHERPROOF
	XFMR TRANSFORMER

EQUIPMENT ANCHORAGE	
<u>MEIP COMPONENT ANCHORAGE NOTES:</u>	
ALL MECHANICAL, PLUMBING AND ELECTRICAL COMPONENTS SHALL BE ANCHORED AND INSTALLED PER THE DETAILS ON THE DSA APPROVED CONSTRUCTION DOCUMENTS. WHERE NO DETAIL IS INDICATED, THE FOLLOWING COMPONENTS SHALL BE ANCHORED OR BRACED TO MEET THE FORCE AND DISPLACEMENT REQUIREMENTS PRESCRIBED IN THE 2019 CBC, SECTION 1617A.1.18 THROUGH 1617A.1.26 AND ASCE 7-16 CHAPTER 13, 26 & 30:	
1. ALL PERMANENT EQUIPMENT AND COMPONENTS.	
2. TEMPORARY OR MOVABLE EQUIPMENT THAT IS PERMANENTLY ATTACHED (e.g. HARD WIRE) TO THE BUILDING UTILITY SERVICES SUCH AS ELECTRICITY, GAS OR WATER, "PERMANENTLY ATTACHED" SHALL INCLUDE ALL ELECTRICAL CONNECTIONS EXCEPT PLUGS FOR 120 / 220 VOLT RECEPTACLES HAVING A FLEXIBLE CABLE.	
3. TEMPORARY, MOVABLE OR MOBILE EQUIPMENT WHICH IS HEAVIER THAN 400 POUNDS OR HAS A CENTER OF MASS LOCATED 4 FEET OR MORE ABOVE THE ADJACENT FLOOR OR ROOF LEVEL THAT DIRECTLY SUPPORT THE COMPONENT IS REQUIRED TO BE RESTRAINED IN A MANNER APPROVED BY DSA.	
THE FOLLOWING MECHANICAL AND ELECTRICAL COMPONENTS SHALL BE POSITIVELY ATTACHED TO THE STRUCTURE, BUT NEED NOT BE DETAILED IN THE PLANS. THESE COMPONENTS SHALL HAVE FLEXIBLE CONNECTIONS PROVIDED BETWEEN THE COMPONENT AND ASSOCIATED DUCTWORK, PIPING AND CONDUIT. FLEXIBLE CONNECTIONS MUST ALLOW MOVEMENT IN BOTH TRANSVERSE AND LONGITUDINAL DIRECTIONS.	
A. COMPONENTS WEIGHING LESS THAN 400 POUNDS AND HAVE A CENTER OF MASS LOCATED 4 FEET OR LESS ABOVE THE ADJACENT FLOOR OR ROOF LEVEL THAT DIRECTLY SUPPORT THE COMPONENT.	
B. COMPONENTS WEIGHING LESS THAN 20 POUNDS, OR IN THE CASE OF DISTRIBUTED SYSTEMS, LESS THAN 5 POUNDS PER FOOT, WHICH ARE SUSPENDED FROM A ROOF OR FLOOR OR HUNG FROM A WALL.	
THE ANCHORAGE OF ALL MECHANICAL, ELECTRICAL AND PLUMBING COMPONENTS SHALL BE SUBJECT OF THE APPROVAL OF THE DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE OR STRUCTURAL ENGINEER DELEGATED RESPONSIBILITY AND ACCEPTANCE BY DSA. THE PROJECT INSPECTOR WILL VERIFY THAT ALL COMPONENTS AND EQUIPMENT HAVE BEEN ANCHORED IN ACCORDANCE WITH ABOVE REQUIREMENTS.	
<u>PIPING, DUCTWORK AND ELECTRICAL DISTRIBUTION SYSTEM BRACING NOTE</u>	
PIPING, DUCTWORK AND ELECTRICAL DISTRIBUTION SYSTEMS SHALL BE BRACED TO COMPLY WITH THE FORCES AND DISPLACEMENTS PRESCRIBED IN ASCE 7-16 SECTION 13.3 AS DEFINED IN ASCE 7-16 SECTION 13.6.5, 13.6.6, 13.6.7, 13.6.8 AND 2019 CBC, SECTIONS 1617A.1.24, 1617A.1.25 AND 1617A.1.26.	
THE METHOD OF SHOWING BRACING AND ATTACHMENTS TO THE STRUCTURE FOR THE IDENTIFIED DISTRIBUTION SYSTEM ARE AS NOTED BELOW. WHEN BRACING AND ATTACHMENTS ARE BASED ON PRE-APPROVED INSTALLATION GUIDE (e.g. OSHPD OPM FOR 2013 CBC OR LATER), COPIES OF THE BRACING SYSTEM INSTALLATION GUIDE OR MANUAL SHALL BE AVAILABLE ON THE JOBSITE PRIOR TO THE START OF AND DURING THE HANGING AND BRACING OF THE DISTRIBUTION SYSTEMS. THE STRUCTURAL ENGINEER OF RECORD SHALL VERIFY THE ADEQUACY OF THE STRUCTURE TO SUPPORT THE HANGER AND BRACE LOADS.	
MECHANICAL PIPING (MP), MECHANICAL DUCTS (MD), PLUMBING PIPING (PP), ELECTRICAL DISTRIBUTION SYSTEMS (E):	
MP □ MD □ PP □ E ■ - OPTION 1: DETAILED ON THE APPROVED DRAWINGS WITH PROJECT SPECIFIC NOTES AND DETAILS.	
MP □ MD □ PP □ E □ - OPTION 2: SHALL COMPLY WITH THE APPLICABLE OSHPD PRE-APPROVED (OPM #) # _____.	

APPLICABLE CODES & STANDARDS	
<u>CODES:</u>	
1.	2019 CALIFORNIA ADMINISTRATIVE CODE C.C.R., TITLE 24, PART 1.
2.	2019 CALIFORNIA BUILDING CODE (CBC) C.C.R., TITLE 24, VOL. 1 & 2 BASED ON THE 2018 INTERNATIONAL BUILDING CODE (IBC) WITH CALIFORNIA AMENDMENTS.
3.	2019 CALIFORNIA ELECTRICAL CODE (CEC) C.C.R., TITLE 24, PART 3 BASED ON THE 2017 NATIONAL ELECTRICAL CODE (NEC) WITH CALIFORNIA AMENDMENTS.
4.	2019 CALIFORNIA MECHANICAL CODE (CMC) C.C.R., TITLE 24, PART 4 BASED ON THE 2018 UNIFORM MECHANICAL CODE (UMC) WITH CALIFORNIA AMENDMENTS.
5.	2019 CALIFORNIA PLUMBING CODE (CPC) C.C.R., TITLE 24, PART 5 BASED ON THE 2018 UNIFORM PLUMBING CODE (UPC) WITH CALIFORNIA AMENDMENTS.
6.	2019 CALIFORNIA ENERGY CODE C.C.R., TITLE 24, PART 6.
7.	2019 CALIFORNIA FIRE CODE (FC) C.C.R., TITLE 24, PART 9 BASED ON THE 2018 INTERNATIONAL FIRE CODE (IFC) WITH CALIFORNIA AMENDMENTS.
8.	2019 CALIFORNIA GREEN BUILDING STANDARDS CODE C.C.R., TITLE 24, PART 11.
9.	2019 CALIFORNIA REFERENCED STANDARDS CODE C.C.R., TITLE 24, PART 12.
10.	TITLE 19 C.C.R., PUBLIC SAFETY, STATE FIRE MARSHAL REGULATIONS.
11.	NATIONAL FIRE ALARM CODE (NFPA 72) 2016.
<u>STANDARDS:</u>	
1.	AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)
2.	ELECTRONICS INDUSTRIES ASSOCIATION (EIA)
3.	INSTITUTE OF ELECTRICAL AND ELECTRONIC ENGINEERS (IEEE)
4.	NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION (NEMA)
5.	NATIONAL ELECTRICAL TESTING ASSOCIATION (NETA)
6.	UNDERWRITER LABORATORIES (UL)
7.	CALIFORNIA OCCUPATIONAL SAFETY AND HEALTH ACT STANDARDS (CAL/OSHA)

SHEET INDEX	
E0.1	SYMBOLS, ABBREVIATIONS, CODES, STANDARDS, EQUIPMENT ANCHORAGE, NOTES & SHEET INDEX.
E1.1	PARTIAL ELECTRICAL SINGLE LINE DIAGRAM, DETAILS & PANELBOARD SCHEDULE.
E2.1	ELECTRICAL SITE PLAN.
E3.1	ELECTRICAL DEMOLITION PLANS - BUILDINGS F & G.
E4.1	ELECTRICAL ROOF PLANS - BUILDINGS F & G.
E4.2	POWER PLAN - BUILDING F.
FA0.1	FIRE ALARM SYMBOLS, ABBREVIATIONS, EQUIPMENT LIST, BATTERY CALCULATION, OPERATIONAL MATRIX, NOTES & FIRE ALARM RISER DIAGRAM.
FA4.1	FIRE ALARM PLAN - BUILDING F.

(DSA STAMP AREA)

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REGISTERED PROFESSIONAL
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BID SET
ELECTRICAL
SHEET NO. E0.1

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SYMBOLS, ABBREVIATIONS, CODES, STANDARDS,
EQUIPMENT ANCHORAGE, NOTES & SHEET INDEX

NEW HVAC AND REROOFING
FOOTHILL HIGH SCHOOL
4375 FOOTHILL ROAD, PLEASANTON, CA 94588
PLEASANTON UNIFIED SCHOOL DISTRICT

REVISIONS

NO. 1
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DATE

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DATE: 11/12/2021

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Model:	277/480V, 3ø													Bussing:	225A
Wye:	4W													Feed:	BOTTOM
Type:	NEMA 3R													Mounting:	SURFACE
Main:	M.L.O.													A.L.C.	10,000

PANEL FHR																	
Load		A	B	C	Brk	CL	abc	CL	Brk	A	B	C	Load	AC-2			
AC-1	3326				1/3	3	1	4	1/3	3326				AC-2			
AC-1		3326				5	1	6			3326			AC-2			
AC-3	3326					7	1	8		1331				RV-2			
AC-3		3326			1/3	9	1	10			1331		1331	RV-2			
AC-3			3326			11	1	12					1331	RV-2			
RV-1	1331					13	1	14		1331				RV-4			
RV-1		1331			1/3	15	1	16	1/3		1331			RV-4			
RV-1			1331			17	1	18				1331		RV-4			
RV-3	1331					19	1	20		1331				RV-6			
RV-3		1331			1/3	21	1	22	1/3		1331		1331	RV-6			
RV-3			1331			23	1	24				1331		RV-6			
RV-5	1331					25	1	26		1331				RV-7			
RV-5		1331			1/3	27	1	28	1/3		1331		1331	RV-7			
RV-5			1331			29	1	30				1331		RV-7			
SPACE ONLY					-	31	1	32	-					SPACE ONLY			
SPACE ONLY					-	33	1	34	-					SPACE ONLY			
SPACE ONLY					-	35	1	36	-					SPACE ONLY			
SPACE ONLY					-	37	1	38	-					SPACE ONLY			
SPACE ONLY					-	39	1	40	-					SPACE ONLY			
SPACE ONLY					-	41	1	42	-					SPACE ONLY			
	10649	10649	10649							8652	8652	8652					

1 SUBMITTAL SHALL MATCH EXACT BREAKER LOCATIONS SHOWN.

2 LABEL PANEL FOR SHORT CIRCUIT AMPS AVAILABLE PER CED 110-24.

KVA Phase A	19.3	
KVA Phase B	19.3	
KVA Phase C	19.3	

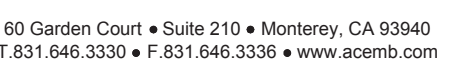
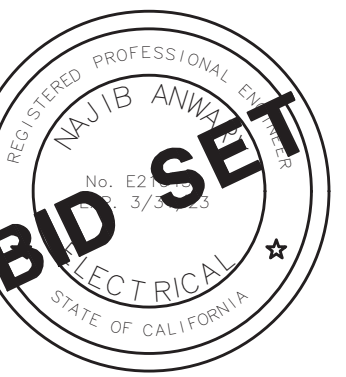
Total Connected Load KVA	57.9
Total Load Amperes	70

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SINGLE LINE DIAGRAM LEGEND	
#####	(DEMOLISH)
=====	(EXISTING)
_____	(NEW)
-----	(E) FLOOR/PAD MOUNTED EQUIPMENT
-----	(N) FLOOR/PAD MOUNTED EQUIPMENT

PARTIAL ELECTRICAL SINGLE LINE DIAGRAM

NEW HVAC AND REROOFING
FOOTHILL HIGH SCHOOL
4375 FOOTHILL ROAD, PLEASANTON, CA 94588
PLEASANTON UNIFIED SCHOOL DISTRICT

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(DSA STAMP AREA)

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ELECTRICAL SITE PLAN

NEW HVAC AND REROOFING
FOOTHILL HIGH SCHOOL
4375 FOOTHILL ROAD, PLEASANTON, CA 94588
PLEASANTON UNIFIED SCHOOL DISTRICT

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E2.1

SHEET NOTES

1. DEMOLISH EXISTING AIR CONDITIONING UNIT AND ASSOCIATED FEEDER CONDUITS PER GENERAL DEMOLITION NOTES ON SHEET E0.1; SEE SHEET E4.1 FOR NEW WORK.
2. DEMOLISH EXISTING AIR CONDITIONING UNIT PER GENERAL DEMOLITION NOTES ON SHEET E0.1. CONTRACTOR SHALL CUT BACK FEEDER CONDUIT TO NEAREST ACCESSIBLE CEILING SPACE AND PRESERVE FOR CONNECTION OF NEW AIR CONDITIONING UNIT UNDER NEW WORK; SEE SHEET E4.1 FOR NEW WORK.
3. DEMOLISH EXISTING EXHAUST FAN PER GENERAL DEMOLITION NOTES ON SHEET E0.1. CONTRACTOR SHALL CUT BACK FEEDER CONDUIT TO NEAREST ACCESSIBLE CEILING SPACE AND PRESERVE FOR CONNECTION OF NEW EXHAUST FAN UNIT UNDER NEW WORK; SEE SHEET E4.1 FOR NEW WORK. CONTRACTOR SHALL PRESERVE EXISTING CONTROL WIRING/CONNECTIONS FOR RECONNECTION TO NEW EXHAUST FAN.
4. CONTRACTOR SHALL PRESERVE EXISTING HV UNIT ELECTRICAL CONNECTION DURING ROOF WORK, DISCONNECT EXISTING CONDUITS/WIRES AND REINSTALL AFTER ROOF WORK IS COMPLETE; HV UNIT SHALL BE MADE ACTIVE COMPLETE.
5. CONTRACTOR SHALL DEMOLISH EXISTING ELECTRICAL PANEL/MOTOR DISCONNECT PANEL COMPLETE. PRESERVE EXISTING (7) FEEDERS FOR HVAC UNITS NOT BEING REPLACED. CONTRACTOR SHALL RECONNECT EXISTING (7) HVAC UNITS UNDER NEW WORK TO NEW PANEL/NEW BREAKERS; SEE 1/E4.1 FOR NEW WORK.

GENERAL NOTE:

ELECTRICAL CONTRACTOR SHALL COORDINATE WITH ROOFING CONTRACTOR TO PRESERVE EXISTING ELECTRICAL CONDUITS NOT PART OF HVAC POWER SUPPLIES TO REMAIN. EXISTING ELECTRICAL PANELS/TRANSFORMERS AT ROOF TO BE PRESERVED AND REMAIN DURING REROOFING WORK, U.O.N.

(DSA STAMP AREA)



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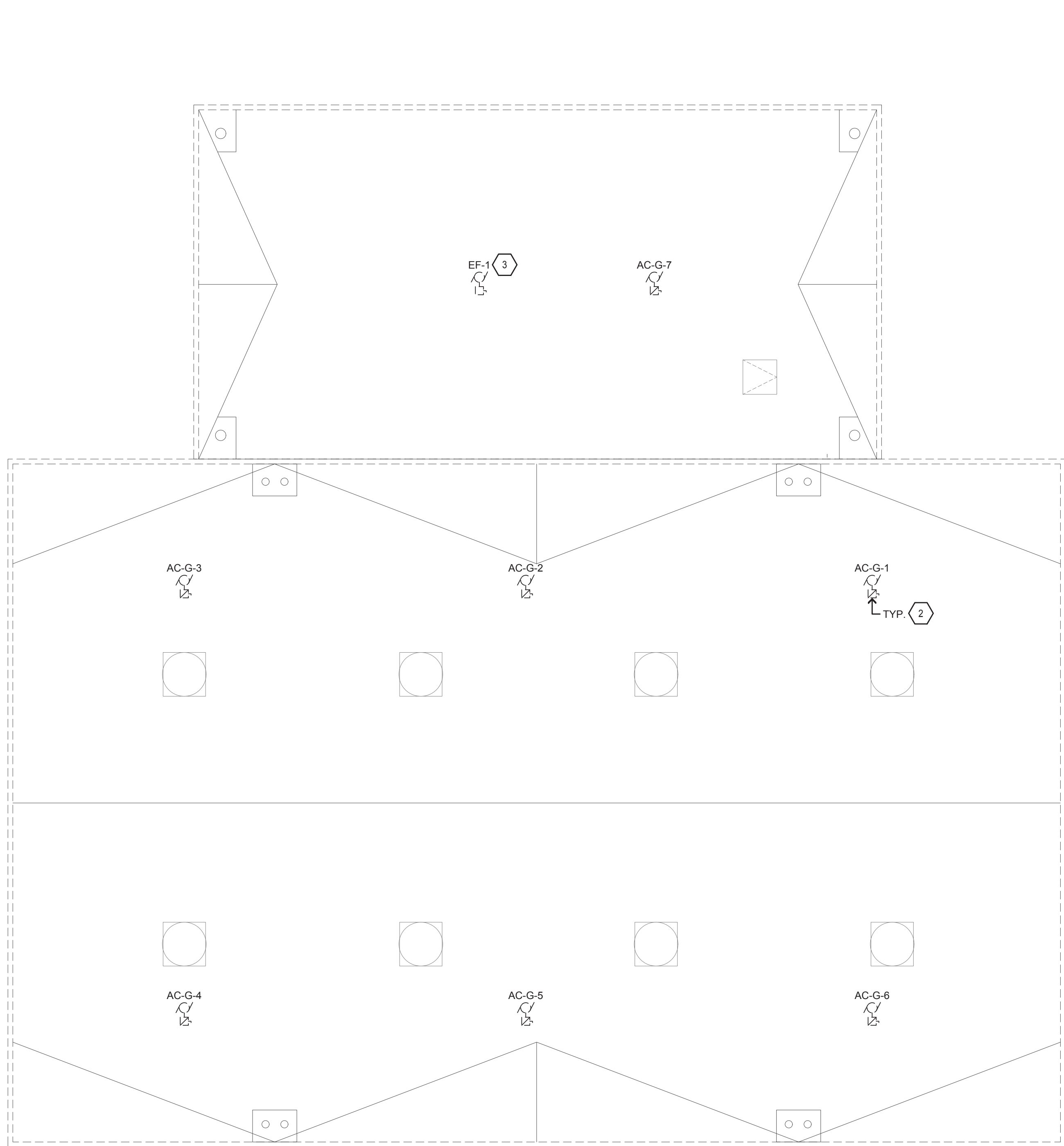
ELECTRICAL DEMOLITION PLANS - BUILDINGS F & G

NEW HVAC AND REROOFING
FOOTHILL HIGH SCHOOL
4375 FOOTHILL ROAD, PLEASANTON, CA 94588
PLEASANTON UNIFIED SCHOOL DISTRICT

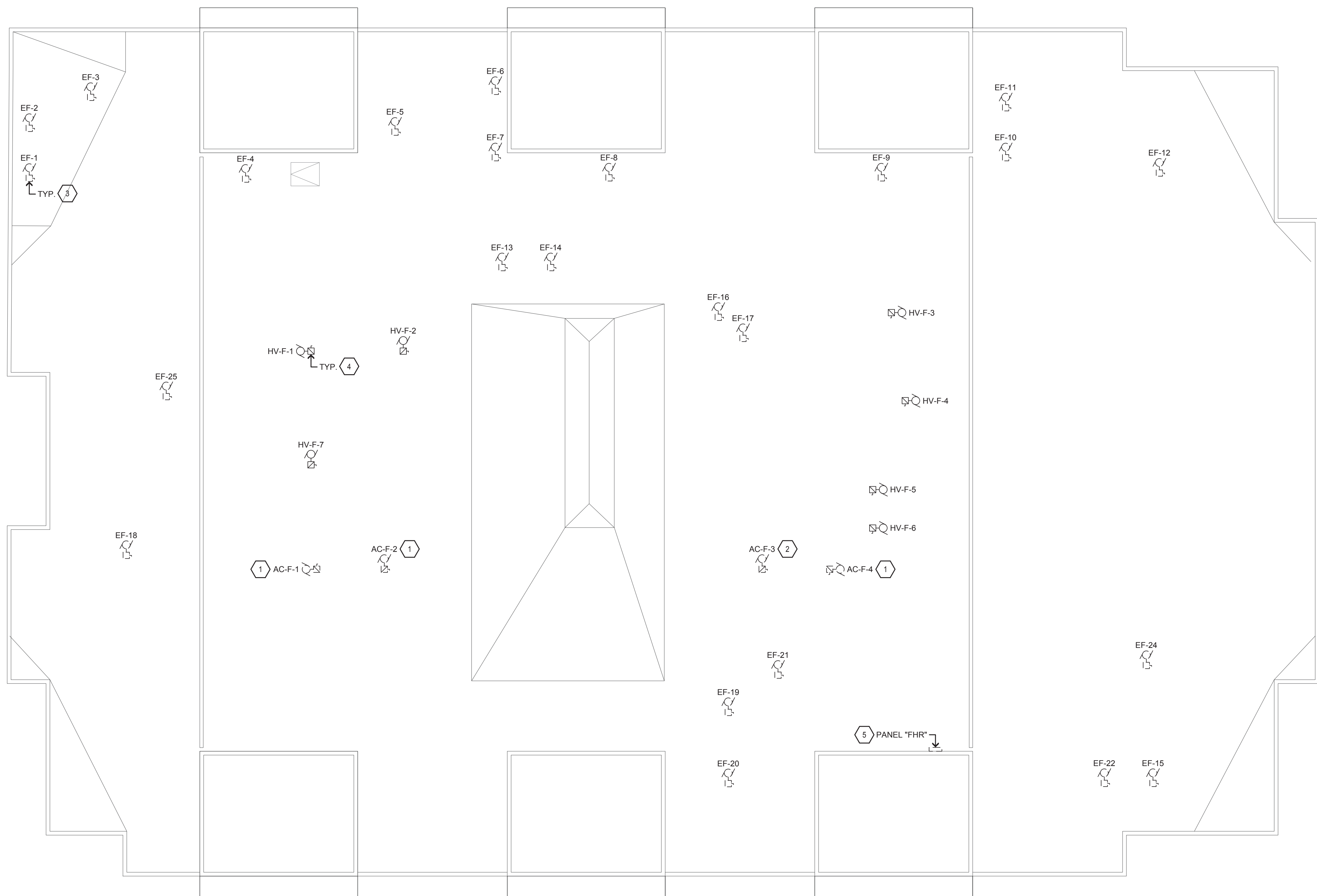
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E3.1



2 ELECTRICAL DEMOLITION PLAN - BUILDING G
SCALE: 1/8"=1'-0"



1 ELECTRICAL DEMOLITION PLAN - BUILDING F
SCALE: 1/8"=1'-0"

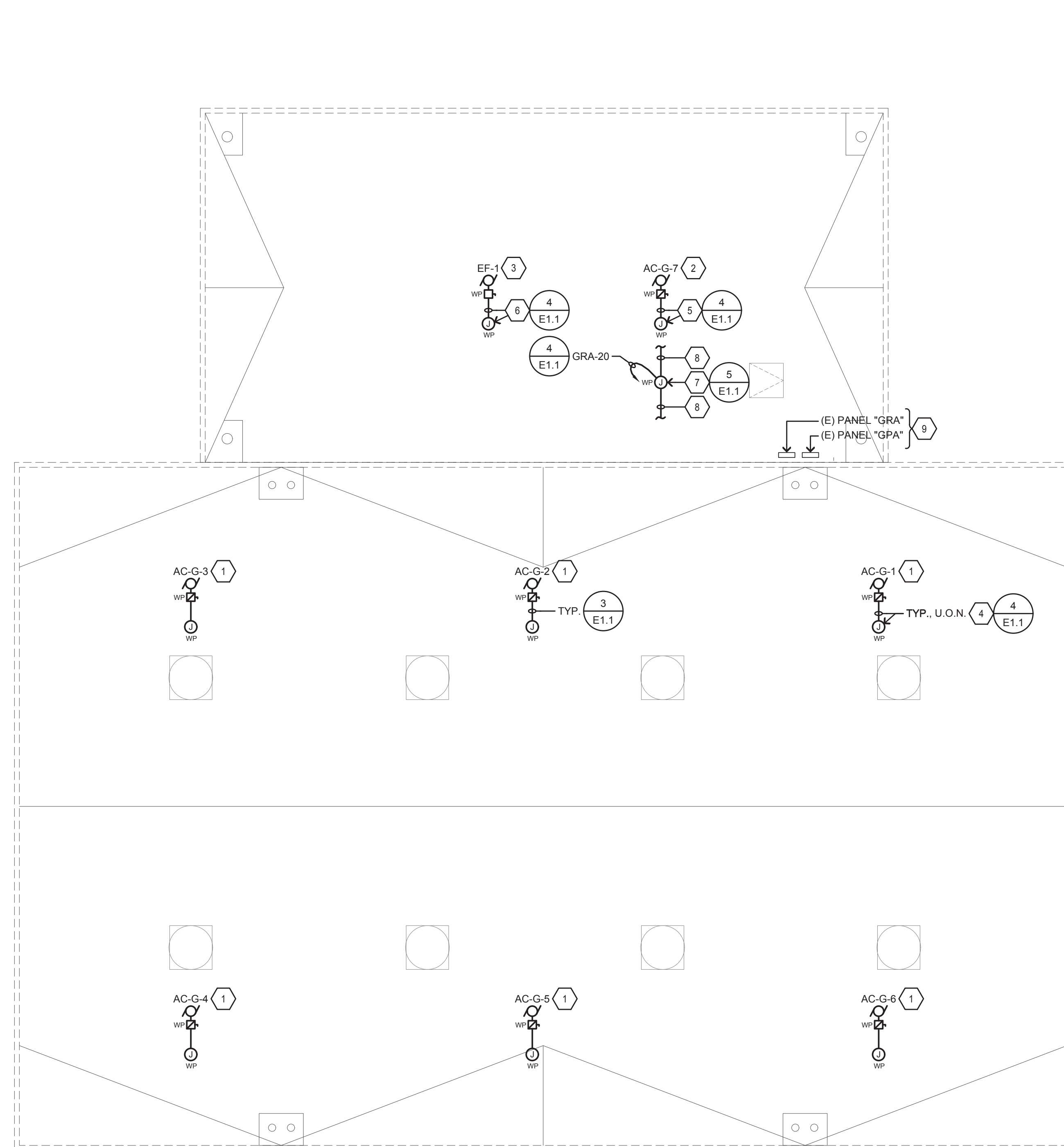
BRANCH CIRCUIT CONDUCTOR SIZING TABLE		
CIRCUIT AMPACITY RATING	CIRCUIT LENGTH	REQUIREMENT
20/120	56'-90"	1/2" C., 2 #10 & 1 #10 GND.
20/120	91'-140"	1/2" C., 2 #8 & 1 #10 GND.
20/277	131'-205"	1/2" C., 2 #10 & 1 #10 GND.
20/277	206'-330"	1/2" C., 2 #8 & 1 #10 GND.
NOTE:		
CONTRACTOR SHALL SIZE BRANCH CIRCUIT CONDUCTORS PER THE TABLE ABOVE AS DETERMINED BY THE CIRCUIT CONDUCTOR LENGTH. U.D. CONTRACTOR SHALL SPlice TO #12 AWG WITHIN TERMINATION BOX FOR DEVICE CONNECTION IF NECESSARY.		

 SHEET NOTES

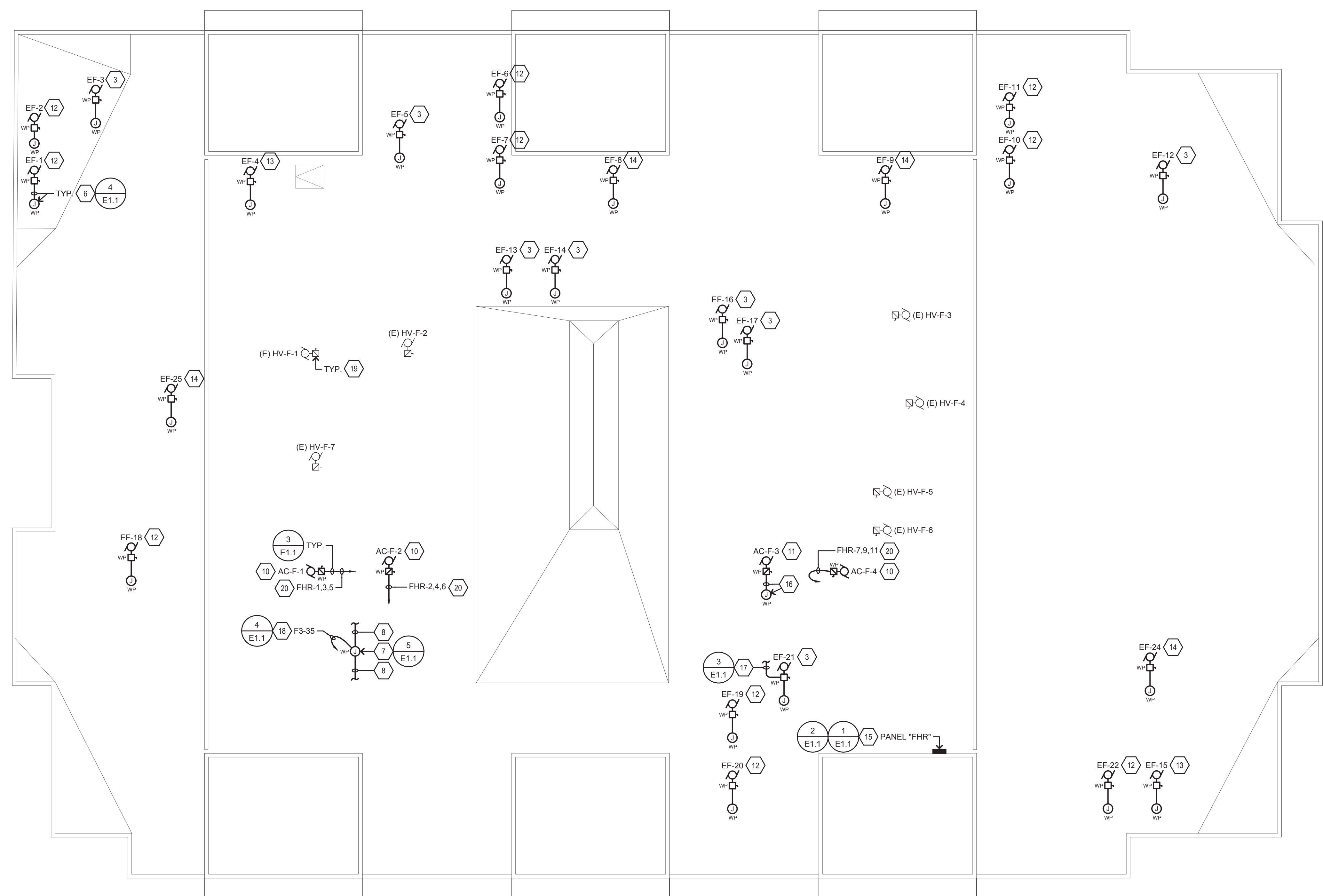
1. AIR CONDITIONING UNIT; 16 MCA, 480V, 3Ø.
2. AIR CONDITIONING UNIT; 19.4 MCA, 208V, 1Ø.
3. EXHAUST FAN; 1/4 HP, 120V, 1Ø. CONNECT VIA EXISTING LIGHTING CONTROLS.
4. CONTRACTOR SHALL INTERCEPT EXISTING FEEDER CONDUIT PRESERVED DURING DEMOLITION WORK WITH JUNCTION BOX AT ACCESSIBLE CEILING SPACE AND SPLICE AND EXTEND WITH 3/4" C, 3 #10 & 1 #10 GND. TO NEW AIR CONDITIONING UNIT.
5. CONTRACTOR SHALL INTERCEPT EXISTING FEEDER CONDUIT PRESERVED DURING DEMOLITION WORK WITH JUNCTION BOX AT ACCESSIBLE CEILING SPACE AND SPLICE AND EXTEND WITH 3/4" C, 2 #8 & 1 #10 GND. TO NEW AIR CONDITIONING UNIT.
6. CONTRACTOR SHALL INTERCEPT EXISTING FEEDER CONDUIT PRESERVED DURING DEMOLITION WORK WITH JUNCTION BOX AT ACCESSIBLE CEILING SPACE AND SPLICE AND EXTEND WITH 3/4" C, 2 #10 & 1 #10 GND. TO NEW ROOF EXHAUST FAN.
7. CONTRACTOR SHALL PROVIDE AND INSTALL 8" SQ. X 4" DEEP NEMA 3R PULLCAN. CONTRACTOR SHALL INSTALL MINIMUM OF (2) AS NECESSARY TO NOT EXCEED 270 DEGREES OF CONDUIT BENDS.
8. CONNECT ALL CONVENIENCE RECEPTABLES FURNISHED WITH NEW AIR CONDITIONING UNITS; (10) RECEPTABLES MAX. PER 120V CIRCUIT.
9. LOCATED IN ELECTRICAL ROOM BELOW: FIELD VERIFY EXACT LOCATION.
10. AIR CONDITIONING UNIT; 12 MCA, 480V, 3Ø.
11. AIR CONDITIONING UNIT; 25 MCA, 208V, 1Ø.
12. EXHAUST FAN; 1/15 HP, 120V, 1Ø. CONNECT VIA EXISTING LIGHTING CONTROLS.
13. EXHAUST FAN; 1/10 HP, 120V, 1Ø. CONNECT VIA EXISTING LIGHTING CONTROLS.
14. EXHAUST FAN; 1/2 HP, 120V, 1Ø. CONNECT VIA EXISTING LIGHTING CONTROLS.
15. CONTRACTOR SHALL INTERCEPT EXISTING (7) HVAC UNITS FEEDERS/CONDUITS IN WEATHERPROOF J-BOXES. 12" SQ. X 6" DEEP FOR EACH OF THE (7) CONNECTIONS; SPLICE AND EXTEND EXISTING CIRCUITS AND RE-TERMINATE AT NEW ROOF PANEL BREAKERS. INSTALL 3/4" C, 3 #10 & 1 #10 GND FOR EACH OF THE (7) HVAC UNITS RECONNECTION TO NEW PANELBREAKERS.
16. CONTRACTOR SHALL INTERCEPT EXISTING FEEDER CONDUIT PRESERVED DURING DEMOLITION WORK WITH JUNCTION BOX AT ACCESSIBLE CEILING SPACE AND SPLICE AND EXTEND WITH 3/4" C, 2 #10 & 1 #10 GND. TO NEW AIR CONDITIONING UNIT.
17. PROVIDE AND INSTALL 3/4" C. FOR INTERLOCK CONNECTION TO AC-F-3; SEE MECHANICAL PLANS FOR EXACT REQUIREMENTS.
18. CONTRACTOR PROVIDE AND INSTALL 20A, 1-POLE BREAKER WITH ASSOCIATED MOUNTING HARDWARE AT EXISTING PANEL. NEW BREAKER SHALL MATCH EXISTING IN TYPE AND AIC RATING.
19. CONTRACTOR SHALL RECONNECT EXISTING MECHANICAL UNITS TO EXISTING FEEDERS PRESERVED DURING DEMOLITION WORK AFTER ALL ROOFING WORK IS COMPLETE.
20. 3/4" C, 3 #10 & 1 #10 GND. CONTRACTOR SHALL PROVIDE AND INSTALL 8" SQ. X 4" DEEP NEMA 3R PULLCANS AS NECESSARY TO NOT EXCEED 270 DEGREES OF CONDUIT BENDS.

GENERAL NOTE:

SEAL ALL EXTERIOR/INTERIOR BUILDING PENETRATIONS, CUT AND PATCH WALLS/CEILINGS FOR CONDUIT ROUTING AS NECESSARY. PAINT/FINISH EXPOSED CONDUITS/BOXES TO MATCH BUILDING FINISH. COORDINATE WITH DISTRICT & ARCHITECT FOR EXACT REQUIREMENTS.



2 ELECTRICAL ROOF PLAN - BUILDING G
SCALE: 1/8"=1'-0"



1 ELECTRICAL ROOF PLAN - BUILDING F
SCALE: 1/8"=1'-0"



ELECTRICAL ROOF PLANS - BUILDINGS F & G

NEW HVAC AND REROOFING
FOOTHILL HIGH SCHOOL
4375 FOOTHILL ROAD, PLEASANTON, CA 94588
PLEASANTON UNIFIED SCHOOL DISTRICT

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BRANCH CIRCUIT CONDUCTOR SIZING TABLE		
CIRCUIT AMPACITY/VOLTAGE	CIRCUIT LENGTH	REQUIREMENT
20/120	56'-90"	1/2" C., 2 #10 & 1 #10 GND.
20/120	91'-140'	1/2" C., 2 #8 & 1 #10 GND.
20/277	131'-205'	1/2" C., 2 #10 & 1 #10 GND.
20/277	206'-330'	1/2" C., 2 #8 & 1 #10 GND.
NOTE: CONTRACTOR SHALL SIZE BRANCH CIRCUIT CONDUCTORS PER THE TABLE ABOVE AS DETERMINED BY THE CIRCUIT CONDUCTOR LENGTH, U.O.N. CONTRACTOR SHALL SPLICE TO #12 AWG WITHIN TERMINATION BOX FOR DEVICE CONNECTION IF NECESSARY.		

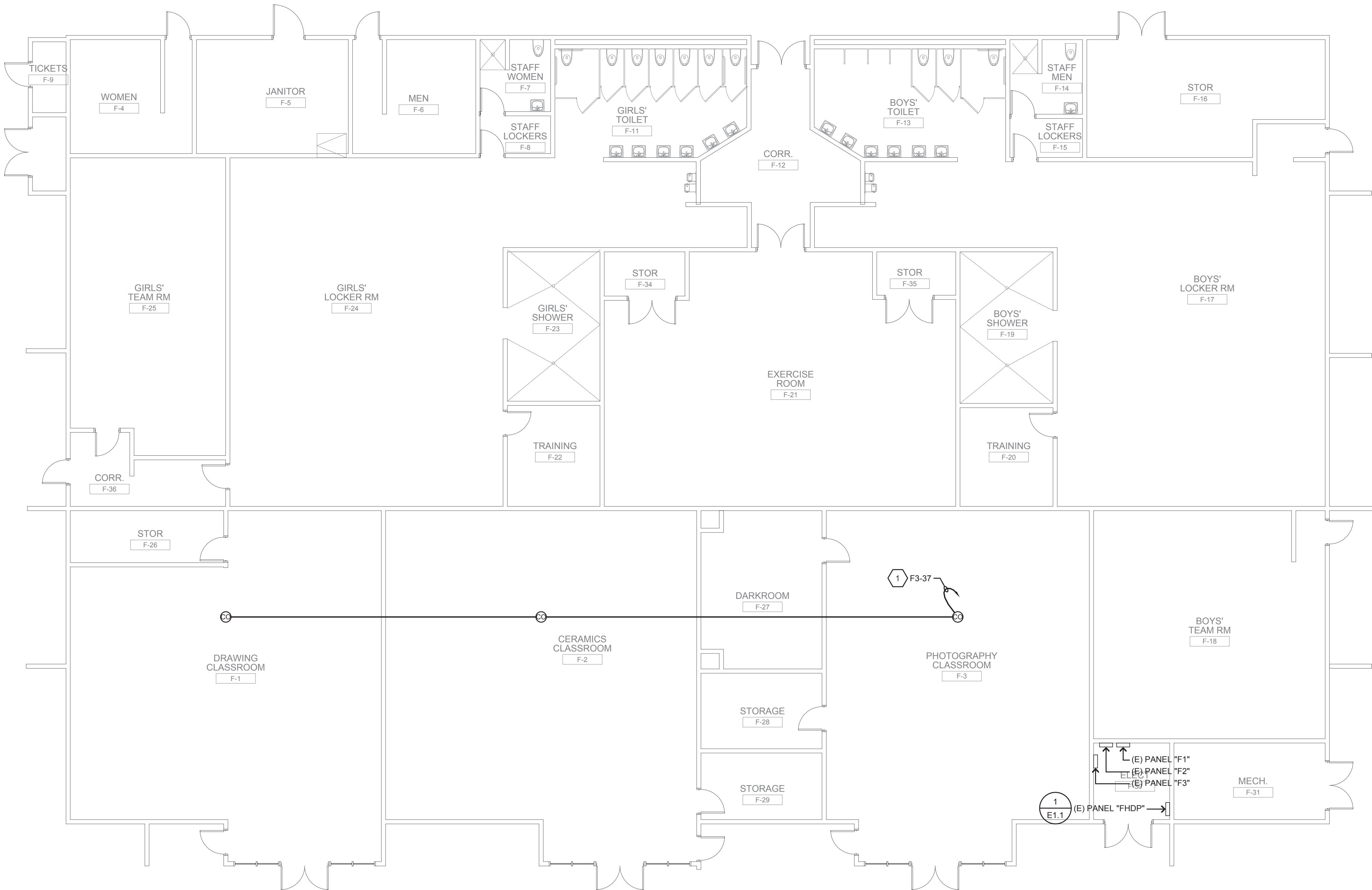
SHEET NOTES

1.

CONTRACTOR SHALL PROVIDE AND INSTALL 20 AMP, 1-POLE BREAKER WITH ASSOCIATED MOUNTING HARDWARE AND LOCK ON DEVICE, RED IN COLOR, NEW BREAKER SHALL MATCH EXISTING IN RATING AND TYPE.

GENERAL NOTE:

SEAL ALL EXTERIOR/INTERIOR BUILDING PENETRATIONS, CUT AND PATCH WALLS/CEILINGS FOR CONDUIT ROUTING AS NECESSARY. PAINT/FINISH EXPOSED CONDUITS/BOXES TO MATCH BUILDING FINISH. COORDINATE WITH DISTRICT & ARCHITECT FOR EXACT REQUIREMENTS.



8"0"2"4"6"8"

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

NORTH

(DSA STAMP AREA)

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MARK C. FINNEY

NO. E-1010

9-30-23

STATE OF CALIFORNIA

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POWER PLAN - BUILDING F

NEW HVAC AND REROOFING
FOOTHILL HIGH SCHOOL
4375 FOOTHILL ROAD, PLEASANTON, CA 94588
PLEASANTON UNIFIED SCHOOL DISTRICT

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DATE: 11/12/2021

E4.2

FIRE ALARM EQUIPMENT LIST			
SYMBOL	DESCRIPTION AND MODEL NUMBER	MFGR'S PART No.	CSFM LISTING
[FACP]	(E) ANALOG FIRE ALARM CONTROL PANEL, FIRE CONTROL INSTRUMENTS 7200 SERIES.	FCI 7200A	7165-0694-0174
[M]	ADDRESSABLE MONITOR MODULE, NOTIFIER FMM SERIES.	FMM-1	7300-0028-0219
[CO]	CARBON MONOXIDE DETECTOR WITH CONTACT RELAY WITH SOUNDER BASE (TEMPORAL 4 PATTERN), GENTEX CO1209.	CO1209	5278-0659-0143

BATTERY CALCULATIONS						
EXISTING FIRE ALARM CONTROL PANEL "FACP"						
QTY	PRODUCT ID	DESCRIPTION	STANDBY		ALARM	
			EACH	TOTAL	EACH	TOTAL
1	FCI 7200A	(E) PRIMARY INPUT POWER UNIT	0.1300	0.1300	0.0000	0.0000
PANEL STANDBY CURRENT			0.1300			
PANEL ALARM CURRENT					0.0000	
FIELD DEVICES						
QTY	PRODUCT ID	DESCRIPTION	STANDBY		ALARM	
			EACH	TOTAL	EACH	TOTAL
3	FMM-1	ADDRESSABLE MONITOR MODULE	0.0004	0.0011	0.0004	0.0011
CONTROL PANEL				0.1300		0.0000
FIELD DEVICES				0.0011		0.0011
TOTAL STANDBY CURRENT				0.1316		
24 HOUR STANDBY				3.1660		
TOTAL ALARM CURRENT						0.0003
15 MINUTES OF ALARM (x .35)						0.0109
TOTAL BATTERY REQUIREMENT						3.1864
SAFETY MARGIN (20%)						0.6363
BATTERY SUPPLIED						(3) 12V 30AH

- ### FIRE ALARM GENERAL NOTES
1. WIRING MUST BE LISTED FOR USE AS REQUIRED BY TITLE 24/CEC, ARTICLE 760.
 2. WIRE USED IN WET LOCATIONS SHALL BE OF AN APPROVED TYPE IN ACCORDANCE WITH 3-310-8, T24/CEC (I.E. THHW OR EQUAL).
 3. UNDER GROUND AND EXTERIOR CONDUITS TO HAVE WATERTIGHT FITTINGS AND WIRES APPROVED FOR WET LOCATION.
 4. ALL CONDUCTORS SHALL BE ROUTED IN CONDUIT UNLESS SPECIFICALLY NOTED OTHERWISE ON PLANS. MINIMUM CONDUIT SIZE SHALL BE 3/4".
 5. THE CONDUIT AND WIRE SHOWN ON THESE PLANS ARE SHOWN DIAGRAMMATICALLY. EXACT LOCATIONS SHALL BE DETERMINED IN THE FIELD TO SUIT FIELD CONDITIONS. "AS-BUILT" PLANS SHALL BE MAINTAINED AND BE PROVIDED AS REQUIRED BY THE PROJECT INSPECTOR OF RECORD.
 6. PENETRATIONS OF FIRE RATED WALLS SHALL BE PROTECTED IN ACCORDANCE WITH CALIFORNIA BUILDING CODE, CHAPTER 7, TITLE 24. PROVIDE DETAILS OF THROUGH PENETRATION FIRE-STOP SYSTEMS FOR ALL PIPE/CABLE/CONDUIT PASSING THROUGH FIRE RATED WALLS/FLOORS REQUIRING PROTECTED OPENINGS.
 7. ALL DEVICES SHALL BE "CSFM" LISTED.
 8. EXTERIOR DEVICES SHALL BE LISTED FOR EXTERIOR USE BY "CSFM."
 9. AUDIBLE ALARM PRODUCED BY "FACP" SHALL SOUND THE CALIFORNIA UNIFORM SIGNAL IN TEMPORAL MODE.
 10. AUDIBLE FIRE ALARM SOUND LEVEL SHALL BE AT LEAST 15DBA ABOVE THE AVERAGE SOUND LEVEL.
 11. AUDIBLE SIGNALS INTENDED FOR OPERATION IN THE PUBLIC SHALL HAVE A SOUND LEVEL OF NOT LESS THAN 75DBA AT 10 FEET OR MORE THAN 110DBA AT THE MINIMUM HEARING DISTANCES FROM THE AUDIBLE APPLIANCE.
 12. WHERE VISUAL DEVICES ARE REQUIRED, VISUAL DEVICE SHOULD NOT EXCEED 2 FLASHES PER SECOND AND SHOULD NOT BE SLOWER THAN 1 FLASH EVERY SECOND. THE DEVICE SHALL HAVE A PULSING LIGHT SOURCE NOT LESS THAN 15 CANDELA. NO PLACE IN ANY ROOM SHALL BE MORE THAN 50 FEET FROM A DEVICE.
 13. APPROVED BY THE "DIVISION OF THE STATE ARCHITECT/OFFICE OF REGULATION SERVICES." CONTRACTOR SHALL PROVIDE COPIES OF APPROVED PLANS TO THE PROJECT INSPECTOR OF RECORD PRIOR TO BEGINNING WORK. THE CONTRACTOR SHALL SUBMIT SHOP DRAWING TO ENGINEER PRIOR TO PURCHASE FOR REVIEW. THE FIRE PROTECTION SYSTEM SHALL NOT BE INSTALLED UNTIL SHOP DRAWINGS HAVE BEEN SUBMITTED TO AND RECEIVED BY THE ENGINEER OF RECORD.
 14. FINAL ALARM TEST SHALL BE WITNESSED BY THE DSA INSPECTOR OF RECORD (IOR) BOTH THE DSA INSPECTOR OF RECORD (IOR) AND THE LOCAL FIRE AUTHORITY SHALL BE NOTIFIED OF DATE AND TIME OF FINAL FIRE ALARM TESTING BY THE FIRE ALARM CONTRACTOR. FIRE ALARM CONTRACTOR SHALL PROVIDE "RECORD OF COMPLETION" TO THE INSPECTOR OF RECORD (IOR)/DSA AFTER COMPLETION OF OPERATIONAL ACCEPTANCE TEST.
 15. POWER SERVICE SHALL BE ON A DEDICATED, 120V BRANCH CIRCUIT, WITH A RED MARKING AND IDENTIFIED AS "FIRE ALARM CIRCUIT CONTROL."
 16. AUTOMATIC FIRE ALARM SYSTEM SHALL TRANSMIT THE ALARM, SUPERVISORY AND TROUBLE SIGNALS TO AN APPROVED SUPERVISING STATION AS REQUIRED BY NFPA 72 AS AMENDED BY CFC CHAPTER 80. THE SUPERVISING STATION SHALL BE LISTED AS EITHER UUPX OR UUIS BY UNDERWRITERS LABORATORY OR SHALL MEET THE REQUIREMENTS OF FACTORY MUTUAL RESEARCH APPROVAL STANDARD 3011.

SYMBOLS & ABBREVIATIONS

SYMBOLS

- CONDUIT - CONCEALED IN WALLS OR CEILING.
- CONDUIT - IN OR BELOW FLOOR: 3/4" MIN.
- CONDUIT CONTINUATION.
- 201 ROOM NUMBER.
- 2 SHEET NOTE REFERENCE SYMBOL; SEE ASSOCIATED NOTE ON SAME SHEET.
- 2 E1 DETAIL OR SECTION DESIGNATION.

ABBREVIATIONS

ARCH.	ARCHITECT	FSD	FIRE SMOKE DAMPER
AWG	AMERICAN WIRE GAUGE	IDC	INITIATING DEVICE CIRCUITS
BKR	BREAKER	(N)	NEW
C	CONDUIT	NAC	NOTIFICATION APPLIANCE CIRCUITS
CB	CIRCUIT BREAKER	NIC	NOT IN CONTRACT
CKT	CIRCUIT	NO	NUMBER
CLG	CEILING	SLC	SIGNALING LINE CIRCUITS
(E)	EXISTING	TYP	TYPICAL
EOL	END OF LINE	UON	UNLESS OTHERWISE NOTED
FA	FIRE ALARM	WP	WEATHERPROOF
FACP	FIRE ALARM CONTROL PANEL		
FBO	FURNISHED BY OTHERS		

TYPICAL ZONE NOMENCLATURE

"S2" DENOTES SIGNAL CIRCUIT #2
"75CD" DENOTES CANDELA RATING
"4" DENOTES DEVICE #4
"M" DENOTES MODULE DEVICE; "D" DENOTES DETECTOR DEVICE
"1" DENOTES LOOP#
"5" DENOTES DEVICE #5
CROSSHATCH INDICATES NUMBER OF WIRES REQUIRED. SUBSCRIPT LETTER INDICATES TYPE OF CIRCUIT. SEE GENERAL NOTES THIS SHEET FOR NUMBER & TYPE OF WIRES AND CIRCUIT TYPE.

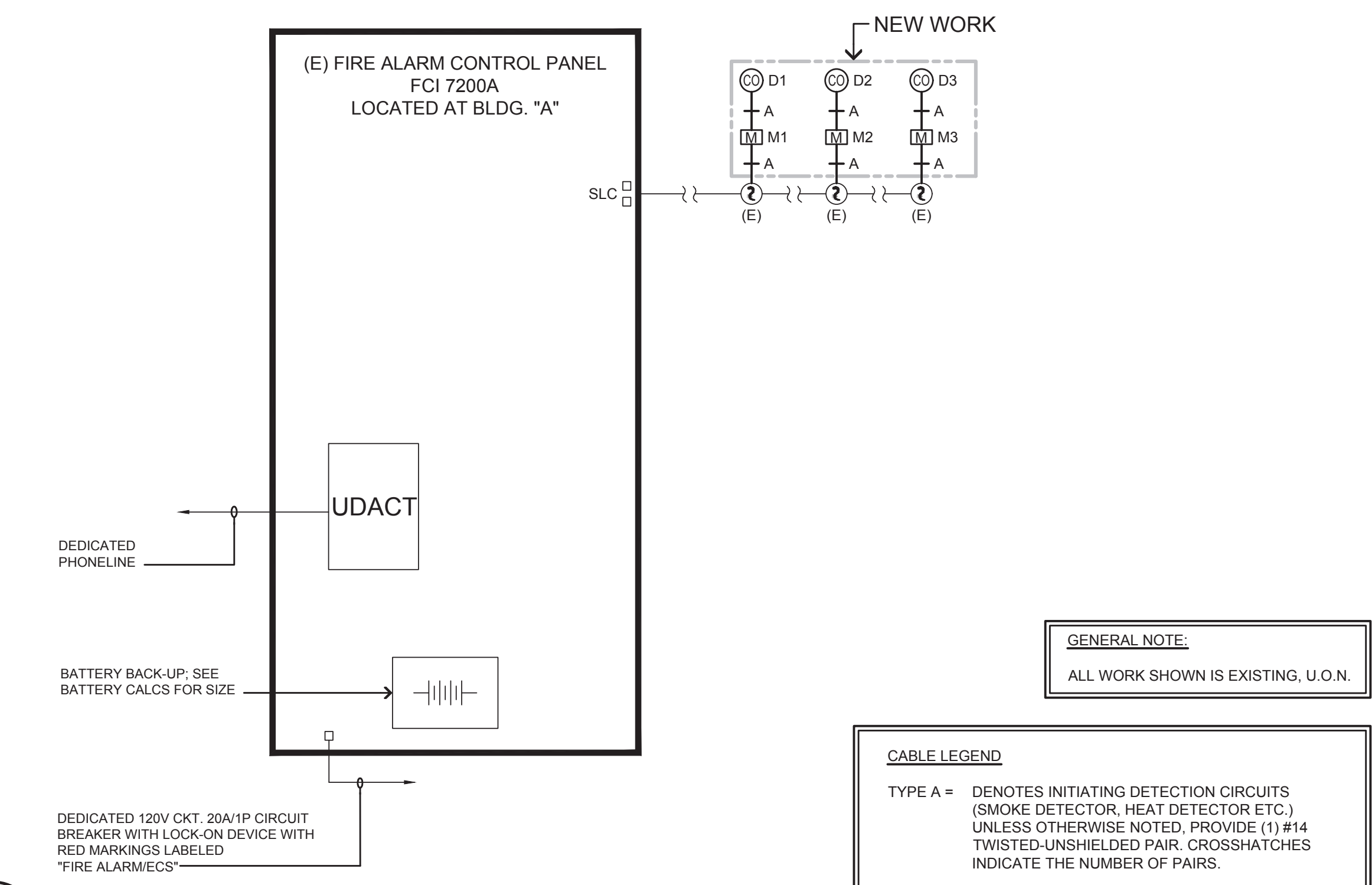
PROJECT DESCRIPTION

SCOPE OF WORK:
EXTENSION OF INITIATION DETECTION CIRCUIT FOR ADDITION OF CARBON MONOXIDE DEVICES IN EXISTING CLASSROOMS IN EXISTING BUILDING "F".

SYSTEM DESCRIPTION:
SLC = CLASS B
IDC = CLASS B
NAC = CLASS B

FIRE ALARM SYSTEM DESIGN BY:
NAJIB ANWARY PE.

FIRE ALARM SYSTEM OPERATIONAL MATRIX													
CAUSE	EFFECT	ALARM TEST	ALARM INITIATION	ALARM ANNUNCIATOR	ALARM AT DSA	ALARM AT FIRE DEPT	TROUBLE	TROUBLE AT DSA	TROUBLE AT FIRE DEPT	SUPERVISORY	SUPERVISORY AT DSA	SUPERVISORY AT FIRE DEPT	MISC
CARBON MONOXIDE													
SIGNAL SILENCE													
SYSTEM RESET													
AC POWER FAILURE													
TROUBLE (OPEN, SHORTS, GROUND)													
ON INITIATION OR SIGNAL CIRCUITS													



EXISTING FIRE ALARM RISER DIAGRAM

NO SCALE

(DSA STAMP AREA)

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FIRE ALARM SYMBOLS, ABBREVIATIONS, EQUIPMENT LIST, BATTERY CALCULATION, OPERATIONAL MATRIX, NOTES & FIRE ALARM RISER DIAGRAM

NEW HVAC AND REROOFING
FOOTHILL HIGH SCHOOL
4375 FOOTHILL ROAD, PLEASANTON, CA 94588
PLEASANTON UNIFIED SCHOOL DISTRICT

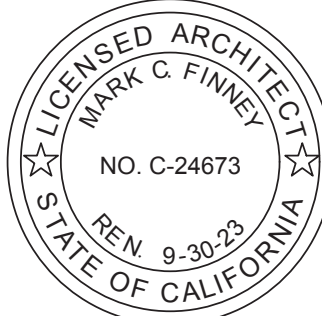
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20090	11/12/2021

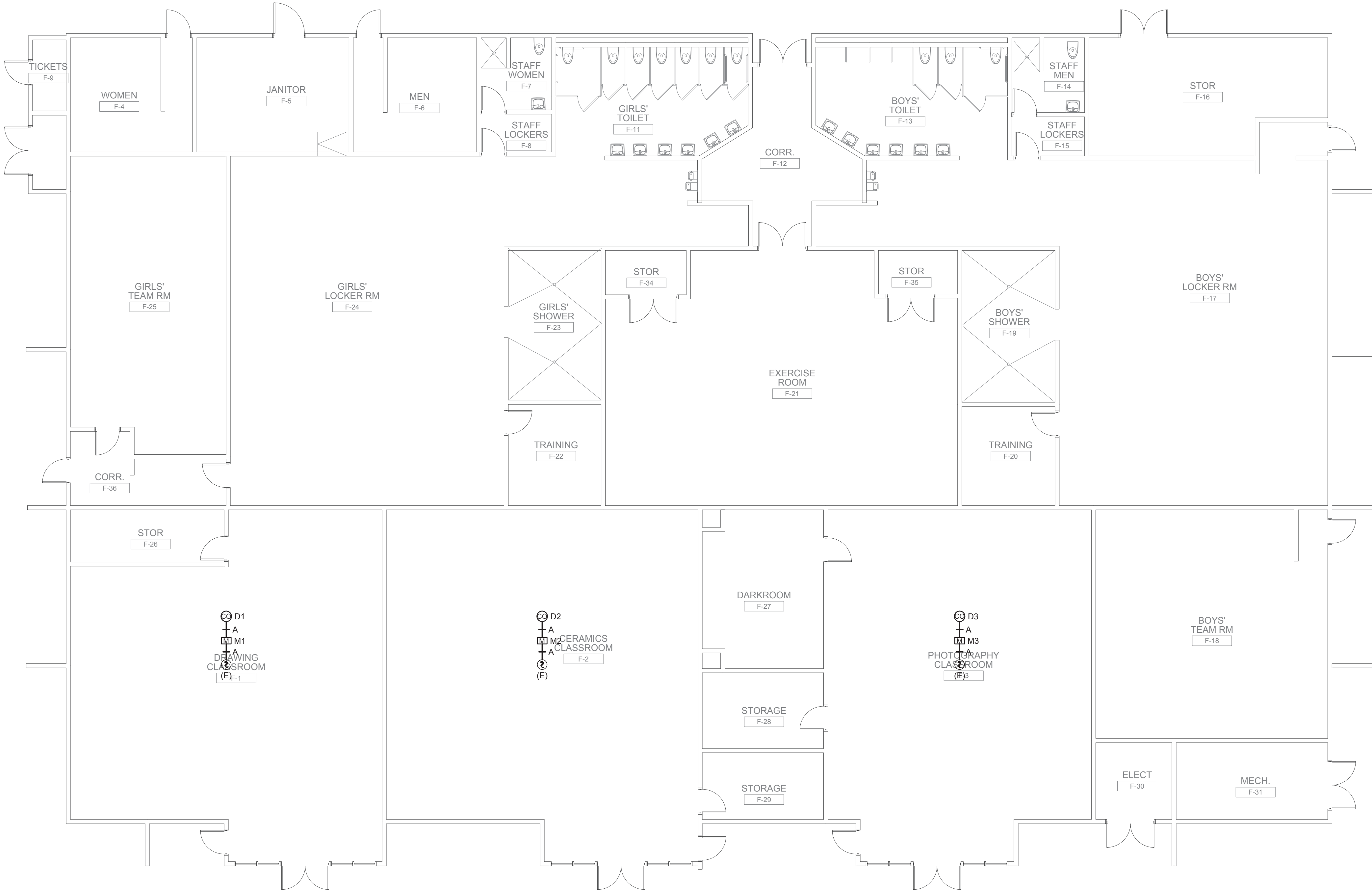
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CABLE LEGEND
TYPE A = DENOTES INITIATING DETECTION CIRCUITS (SMOKE DETECTOR, HEAT DETECTOR ETC.)
UNLESS OTHERWISE NOTED, PROVIDE (1) #14 TWISTED-UNSHIELDED PAIR, CROSSHATCHES INDICATE THE NUMBER OF PAIRS.

(DSA STAMP AREA)



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8" 0" 2" 4" 6" 8"
SCALE: 1/8"=1'-0"



FIRE ALARM PLAN - BUILDING F

NEW HVAC AND REROOFING
FOOTHILL HIGH SCHOOL
4375 FOOTHILL ROAD, PLEASANTON, CA 94588
PLEASANTON UNIFIED SCHOOL DISTRICT

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