

BUILDING CODE ANALYSIS				
BUILDING	CONSTRUCTION TYPE OCCUPANCY TYPE	AREA (SQ.FT.)	*ALLOWABLE (SQ.FT.)	# OF STORIES
BUILDING A	V-1 HR / A2.1	4,538	9,100	1
BUILDING B	V-N / B	2,544	9,100	1
BUILDING C	V-N / E-1	2,450	9,100	1
BUILDING D	V-N / E-1	4,647	9,100	1
BUILDING E	V-N / E-1	5,582	9,100	1
BUILDING F	V-N / E-1	624	9,100	1
BUILDING G	V-N / E-1	10,553	9,100	1
BUILDING H	V-N / E-1	1,930	9,100	1
BUILDING J	V-N / E-1	9,690	9,100	1
BUILDING K	V-N / E-1	3,380	9,100	1
CHILD CARE	V-N / E-3	960	9,100	1

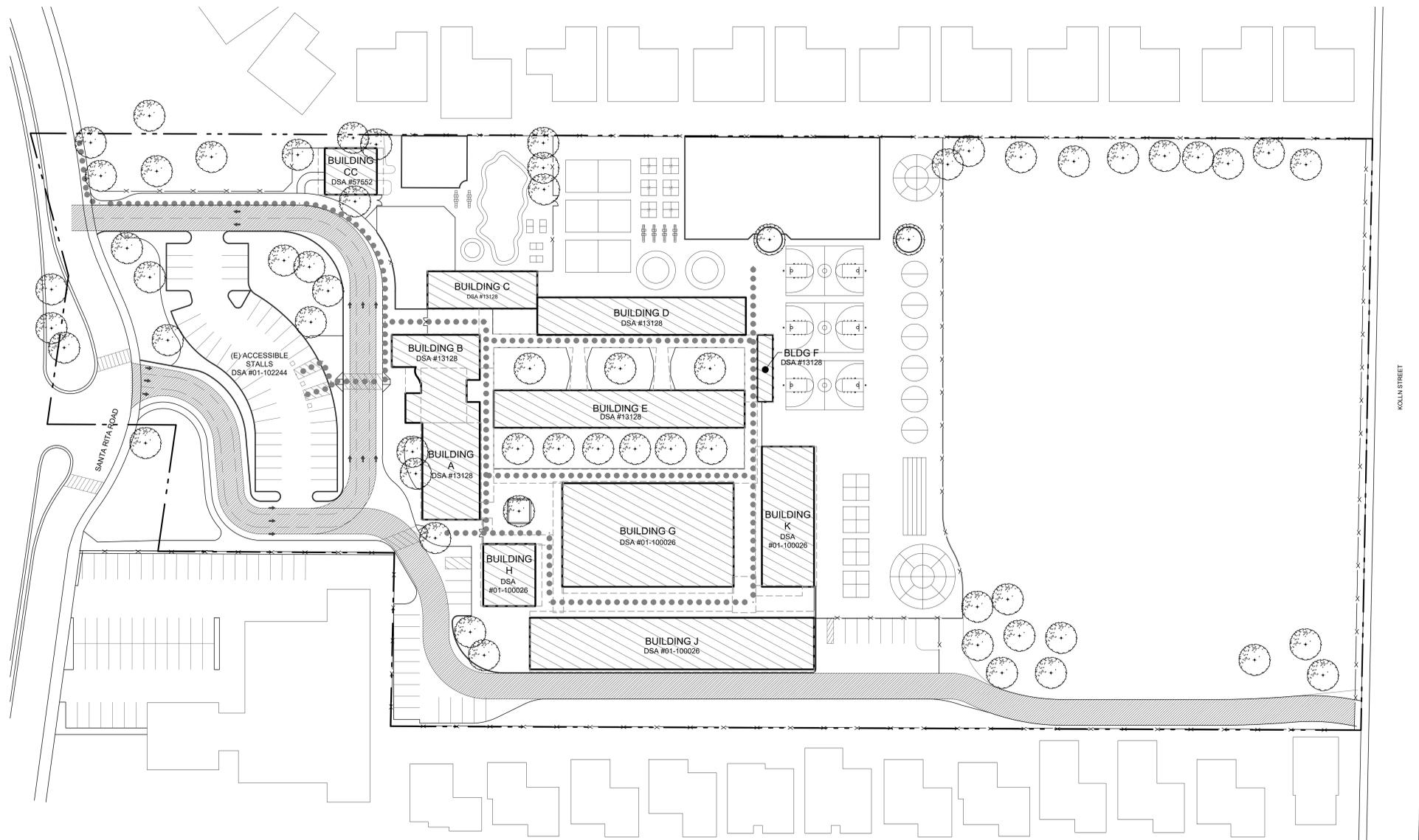
* AREA INCREASE USED FOR ORIGINAL CONSTRUCTION.
NEW SCOPE OF WORK DOES NOT ENCROACH OPEN AREA.

PROJECT SUMMARY

REPLACING EXISTING FIRE ALARM SYSTEM WITH NEW ADDRESSABLE FIRE ALARM AND EMVOICE EVACUATION SYSTEM ACROSS ENTIRE SITE.

GENERAL NOTES

- A. THIS SHEET IS FOR FIRE LIFE SAFETY CODE RELATED ITEMS. FOR SCOPE OF WORK SEE SHEETS A0.1 AND A0.2.
- B. REFER TO FIRE ALARM AND FIRE PROTECTION DRAWINGS FOR EXTENT OF OTHER RELATED WORK.



GRAPHIC KEY

- EXISTING PROPERTY LINE
- - - ROOF OVERHANG
- - - CHAIN LINK FENCE
- ▨ EXISTING BUILDING
- ▤ EXISTING RESTROOMS
- ▨ FIRE DEPARTMENT ACCESS.
- ▤ FIRE DEPARTMENT ACCESS IS 20'-0" WIDE AND RATED FOR 90,000 LBS.
- ⊕ (E) FIRE HYDRANT
- ⊕ (E) SIGN

1 SITE PLAN - FIRE LIFE SAFETY

1" = 40'-0"
0 10' 20' 40' 80' 120'

(DSA STAMP AREA)

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**SITE PLAN
FIRE LIFE SAFETY**

ALISAL FIRE ALARM UPGRADE
ALISAL ELEMENTARY SCHOOL
1454 SANTA RITA ROAD, PLEASANTON, CALIFORNIA 94566
PLEASANTON UNIFIED SCHOOL DISTRICT

REVISIONS NO.	ITEM	DATE

DRAWN BY: TR
CHECKED BY: MB
SFA JOB NO: 21079
DATE: 12/06/2021

FIRE ALARM EQUIPMENT LIST			
SYMBOL	DESCRIPTION AND MODEL NUMBER	MFGRS PART No.	CSFM LISTING
[FACP]	ADDRESSABLE FIRE ALARM CONTROL PANEL, NOTIFIER NFS2 SERIES. UDNCT, FIBER MODULES FOR EACH AMPLIFIER CONNECTION, INSTALL SEMI-FLUSH MOUNTING CABINET, CAB-4 SERIES. PROVIDE & INSTALL FIRE ALARM DOCUMENT CABINET NEXT TO FACP.	NFS2-3030	7165-0028-0224
[DVC]	DIGITAL VOICE COMMAND CONTROL SYSTEM WITH DIGITAL AUDIO LOOP TECHNOLOGY. WITH UP TO 8 CHANNELS OF AUDIO AND UP TO 5 CHANNELS OF FIREFIGHTER TELEPHONE COMMUNICATIONS. LOCAL KEYPAD FOR LOCAL ANNUNCIATION AND CONTROLS (DVC-KD).	NOTIFIER DVC-EM	7165-0028-0224
[PSE]	10.0A AUXILIARY POWER SUPPLY WITH 4 NAC OUTPUT CIRCUITS AND BUILT-IN SYNCHRONIZATION. NOTIFIER PSE-10 SERIES.	PSE-10	7315-0028-0513
[DAA]	50 WATT, 70.7VRMS DIGITAL AUDIO AMPLIFIER WITH CHARGING POWER SUPPLY AND 2 CLASS B OR 2 CLASS A OUTPUTS. NOTIFIER DAA SERIES.	DAA2-5070	7165-0028-0224
[A]	ADDRESSABLE PHOTO ELECTRIC FIRE ALARM SMOKE DETECTOR AND BASE, NOTIFIER FSP-951 SERIES.	FSP-951	7272-0028-0503
[A]	ADDRESSABLE FIRE ALARM HEAT DETECTOR AND BASE, 135 DEG. FIXED TEMPERATURE AND RATE-OF-RISE, NOTIFIER FST-951 SERIES.	FST-951	7270-0028-0502
[P]	ADDRESSABLE FIRE ALARM MANUAL PULL STATION, DUAL-ACTION WITH KEY RESET, NOTIFIER NBG-12LX SERIES.	NBG-12LX	7150-0028-0199
[R]	ADDRESSABLE REFLECTOR-TYPE LINEAR OPTICAL BEAM SMOKE DETECTOR, NOTIFIER FS-OSI-R1 SERIES.	FS-OSI-R1	7280-0028-0509
[M]	ADDRESSABLE MONITOR MODULE NOTIFIER FMM-1 SERIES.	FMM-1	7300-0028-0219
[C]	ADDRESSABLE CONTROL MODULE NOTIFIER FCM-1 SERIES.	FCM-1	7300-0028-0219
[SRL]	WALL MOUNTED MULTI-CANDELA SMOKE DETECTOR WITH FIELD SELECTABLE CANDELA SETTINGS OF 15, 30, 75 AND 110 CANDELA. SYSTEM SENSOR, SRL SERIES.	SRL	7125-1653-0504
[SCRL]	CEILING MOUNTED MULTI-CANDELA SMOKE DETECTOR WITH FIELD SELECTABLE CANDELA SETTINGS OF 15, 30, 75 AND 110 CANDELA. SYSTEM SENSOR, SCRL SERIES.	SCRL	7125-1653-0504
[SPSR]	WALL MOUNTED MULTI-CANDELA SPEAKER SMOKE DETECTOR WITH FIELD SELECTABLE CANDELA SETTINGS OF 15, 30, 75 & 110 CANDELA WITH VOLTAGE SETTING OF 70.7 VRMS AND POWER SETTINGS OF 1/2, 1 & 2 WATTS. SYSTEM SENSOR, SPSR SERIES.	SPSR	7320-1653-0505
[SPSCR]	CEILING MOUNTED MULTI-CANDELA SPEAKER SMOKE DETECTOR WITH FIELD SELECTABLE CANDELA SETTINGS OF 15, 30, 75 & 110 CANDELA WITH VOLTAGE SETTING OF 70.7 VRMS AND POWER SETTINGS OF 1/2, 1 & 2 WATTS. SYSTEM SENSOR, SPSCR SERIES.	SPSCR	7320-1653-0505
[SPRK]	WALL MOUNTED WEATHERPROOF FIRE ALARM/VOICE EVACUATION SPEAKER WITH VOLTAGE SETTING OF 70.7 VRMS AND POWER SETTINGS OF 1/2, 1 & 2 WATTS. SYSTEM SENSOR, SPRK SERIES.	SPRK	7320-1653-0201
[EOL]	END OF LINE DEVICE.		

- ### FIRE ALARM GENERAL NOTES
- WIRING MUST BE LISTED FOR USE AS REQUIRED BY TITLE 24/CEC, ARTICLE 760.
 - WIRE USED IN WET LOCATIONS SHALL BE OF AN APPROVED TYPE IN ACCORDANCE WITH 3-310-8, T24/CEC (I.E. THHW OR EQUAL).
 - UNDER GROUND AND EXTERIOR CONDUITS TO HAVE WATERTIGHT FITTINGS AND WIRES APPROVED FOR WET LOCATION.
 - ALL CONDUCTORS SHALL BE ROUTED IN CONDUIT UNLESS SPECIFICALLY NOTED OTHERWISE ON PLANS. MINIMUM CONDUIT SIZE SHALL BE 3/4".
 - 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.
 - 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.
 - ALL DEVICES SHALL BE "CSFM" LISTED.
 - EXTERIOR DEVICES SHALL BE LISTED FOR EXTERIOR USE BY "CSFM".
 - AUDIBLE FIRE ALARM SOUND LEVEL SHALL BE AT LEAST 15DBA ABOVE THE AVERAGE SOUND LEVEL.
 - 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.
 - 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.
 - 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.
 - 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.
 - POWER SERVICE SHALL BE ON A DEDICATED, 120V BRANCH CIRCUIT, WITH A RED MARKING AND IDENTIFIED AS "FIRE ALARM CIRCUIT CONTROL."
 - 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 ULFVX OR ULJVS BY UNDERWRITERS LABORATORY OR SHALL MEET THE REQUIREMENTS OF FACTORY MUTUAL RESEARCH APPROVAL STANDARD 3011.
 - EXISTING FIELD DEVICES AND FACP SHALL REMAIN IN PLACE UNTIL NEW FIELD DEVICES ARE IN PLACE AND NEW WIRING HAS BEEN HOMERAN TO NEW LOCATION OF FACP. COORDINATE THE RELOCATION OF THE FACP TO MINIMIZE THE DOWN TIME OF FIRE ALARM SYSTEM. CONTRACTOR SHALL COORDINATE WITH SCHOOL DISTRICT TO PROVIDE AN APPROVED 24 HOUR FIRE WATCH UNTIL NEW FIRE ALARM SYSTEM IS OPERATIONAL.

- ### GENERAL CONSTRUCTION NOTES
- CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE CODES AND REGULATIONS. MATERIALS AND EQUIPMENT SHALL BE U.L. LISTED AND LABELED FOR THE APPLICATION.
 - THE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL PERMITS, LICENSES AND INSPECTION FEES REQUIRED BY THIS CONTRACT WORK.
 - 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.
 - 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.
 - 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.
 - 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.
 - CONTRACTOR SHALL PROVIDE TO THE ARCHITECT A CONSTRUCTION SCHEDULE OF ELECTRICAL WORK. THE CONSTRUCTION SCHEDULE SHALL IDENTIFY ALL SIGNIFICANT MILESTONES WITH COMPLETION DATES.
 - 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.
 - CONTRACTOR SHALL BE RESPONSIBLE FOR PAINTING ALL EXPOSED CONDUITS AND ELECTRICAL EQUIPMENT. REFER TO ARCHITECTS PAINTING SECTION FOR REQUIREMENTS.
 - ALL ELECTRICAL EQUIPMENT INSTALLED OUTDOORS SHALL BE WEATHERPROOF. EXTERIOR CONDUITS RUN INTO BUILDINGS SHALL BE INSTALLED WITH FLASHING, CALKED AND SEALED. CONDUITS FOR EXTERIOR ELECTRICAL DEVICES SHALL BE RUN INSIDE BUILDING UNLESS OTHERWISE NOTED ON DRAWINGS.
 - ALL CONDUITS UNLESS OTHERWISE NOTED ON DRAWINGS SHALL HAVE 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.
 - ALL BRANCH CIRCUITS SHALL HAVE INDIVIDUAL NEUTRALS. SHARED NEUTRALS ON MULTIWIRE CIRCUITS IS NOT ALLOWED.
 - COORDINATE ALL CONDUIT RUNS, ELECTRICAL EQUIPMENT AND PANELS WITH ALL OTHER WORK TO AVOID CONFLICTS.
 - CONTRACTOR SHALL PROVIDE IN EVERY NEW EMPTY CONDUIT A DRAW STRING FOR USE IN FUTURE CONSTRUCTION.
 - 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.
 - 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.
 - EXTENSION RINGS OR RESET BOXES TO BE FLUSH WITH NEW WALL THICKNESS.
 - 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. DAMAGE TO DAMAGED UNDERGROUND SYSTEMS SHALL BE TO THE OWNERS SATISFACTION WITHOUT EXTRA EXPENSE TO THE OWNER.
 - 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.
 - 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.
 - 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 MILLIONS, 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.

SYMBOLS & ABBREVIATIONS

SYMBOLS

[M]	MANUAL PULL STATION	[BELL]	BELL (GONG)
[S]	STROBE ONLY	[FACP]	FIRE ALARM CONTROL PANEL
[C]	STROBE ONLY (CEILING MOUNTED)	[RPS]	REMOTE POWER SUPPLY
[SPEAKER]	SPEAKER ONLY	[AMP]	DIGITAL AUDIO AMPLIFIER
[MH]	MINI HORN	[EOL]	END OF LINE
[S/S]	SPEAKERS/STROBE	[JUNCTION]	JUNCTION BOX - CEILING/WALL MOUNTED, SIZE PER CODE, TAPE AND TAG WIRES
[S/S]	SPEAKERS/STROBE (CEILING MOUNTED)	[PB]	PULLBOX
[CHIME]	CHIME/STROBE	[CONDUIT]	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.
[HDT]	HEAT DETECTOR (ABOVE ACCESSIBLE CEILING)	[CONDUIT - EXISTING]	CONDUIT - EXISTING
[SD]	SMOKE DETECTOR	[CONDUIT - CONCEALED]	CONDUIT - CONCEALED IN WALLS OR CEILING
[DSD]	DUCT SMOKE DETECTOR	[CONDUIT - IN OR BELOW FLOOR]	CONDUIT - IN OR BELOW FLOOR, 3/4" MIN.
[TS]	TAMPER SWITCH	[CONDUIT CONTINUATION]	CONDUIT CONTINUATION.
[FS]	FLOW SWITCH	[R]	ROOM NUMBER.
[PIV]	POST INDICATING VALVE	[2]	SHEET NO. REFERENCE SYMBOL. SEE ASSOCIATED NOTE ON SAME SHEET.
		[E1]	DETAIL OR SECTION DESIGNATION.

ABBREVIATIONS

ARCH	ARCHITECT	FS	FIRE SMOKE DAMPER
AWG	AMERICAN WIRE GAUGE	IDC	INITIATING DEVICE CIRCUITS
BKR	BREAKER	(N)	NEW
C	CONDUIT	NAC	NOTIFICATION APPLIANCE CIRCUITS
CO	CONDUIT ONLY	NO	NUMBER
CB	CIRCUIT BREAKER	SLC	SIGNALING LINE CIRCUITS
CKT	CIRCUIT	(E)	EXISTING
CLG	CEILING	EOL	END OF LINE
(E)	EXISTING	FA	FIRE ALARM
EOL	END OF LINE	FACP	FIRE ALARM CONTROL PANEL
FA	FIRE ALARM	FBO	FURNISHED BY OTHERS
FACP	FIRE ALARM CONTROL PANEL		
FBO	FURNISHED BY OTHERS		

TYPICAL NOME NENCLATURE

"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.

FIRE ALARM SYSTEM OPERATIONAL MATRIX

CAUSE	EFFECT										REMARKS
	ALARM	TROUBLE	SUPERVISORY	MISC.	ALARM	TROUBLE	SUPERVISORY	MISC.	ALARM	TROUBLE	
SMOKE DETECTORS	*	*	*	*	*	*	*	*	*	*	
HEAT DETECTORS	*	*	*	*	*	*	*	*	*	*	
FLOW SWITCH	*	*	*	*	*	*	*	*	*	*	
TAMPER SWITCH	*	*	*	*	*	*	*	*	*	*	
SYSTEM RESET	*	*	*	*	*	*	*	*	*	*	
SIGNAL SILENCE	*	*	*	*	*	*	*	*	*	*	
AC POWER FAILURE	*	*	*	*	*	*	*	*	*	*	
CARBON MONOXIDE	*	*	*	*	*	*	*	*	*	*	
FIRE ALARM TROUBLE (OPEN, SHORTS, OR GROUNDS) ON INITIATION OR SIGNALING CIRCUITS	*	*	*	*	*	*	*	*	*	*	

SHEET INDEX

FA01	FIRE ALARM SYMBOLS, ABBREVIATIONS, EQUIPMENT LIST, OPERATIONAL MATRIX, DETAILS & NOTES.
FA02	FIRE ALARM DETAILS.
FA11	FIRE ALARM RISER DIAGRAM.
FA12	FIRE ALARM RISER DIAGRAM.
FA13	FIRE ALARM BATTERY & VOLTAGE DROP CALCULATIONS.
FA21	FIRE ALARM SITE PLAN.
FA31	FIRE ALARM DEMOLITION PLAN.
FA41	FIRE ALARM PLAN - BUILDINGS A, B & CC.
FA42	FIRE ALARM PLAN - BUILDINGS C, D, E, F, G & H.
FA43	FIRE ALARM PLAN - BUILDINGS J & K.

PROJECT DESCRIPTION

SCOPE OF WORK:
 FIRE ALARM SYSTEM REPLACEMENT FOR EXISTING CAMPUS TO MEET CURRENT CODE REQUIREMENTS. THE INTENT OF THE PROJECT IS TO REPLACE EXISTING FIRE ALARM SYSTEM COMPLETE.

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

FIRE ALARM SYSTEM DESIGN BY:
 NAJIB ANWARY

EQUIPMENT ANCHORAGE

M/E/P COMPONENT ANCHORAGE NOTES:

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.1.25 AND ASCE 7-16 CHAPTER 13, 26 & 30:

- ALL PERMANENT EQUIPMENT AND COMPONENTS.
- 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.
- 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.

- COMPONENTS WEIGHTING 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.
- COMPONENTS WEIGHTING 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.

PIPING, DUCTWORK AND ELECTRICAL DISTRIBUTION SYSTEM BRACING NOTE

PIPING, DUCTWORK AND ELECTRICAL DISTRIBUTION SYSTEMS SHALL BE BRACED TO COMPLY WITH THE FORCES AND DISPLACEMENTS PRESCRIBED IN ASCE 7-16 SECTION 13.3 AS DEFINED IN ASCE 7-16 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 JOB SITE 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

CODES:

- 2019 CALIFORNIA ADMINISTRATIVE CODE C.C.R., TITLE 24, PART 1.
- 2019 CALIFORNIA BUILDING CODE (CBC) C.C.R., TITLE 24, VOL. 1 & 2 BASED ON THE 2018 INTERNATIONAL BUILDING CODE (IBC) WITH CALIFORNIA AMENDMENTS.
- 2019 CALIFORNIA RESIDENTIAL CODE C.C.R., TITLE 24, PART 2.5 BASED ON THE 2018 INTERNATIONAL RESIDENTIAL CODE WITH CALIFORNIA AMENDMENTS.
- 2019 CALIFORNIA ELECTRICAL CODE (CEC) C.C.R., TITLE 24, PART 3 BASED ON THE 2017 NATIONAL ELECTRICAL CODE (NEC) WITH CALIFORNIA AMENDMENTS.
- 2019 CALIFORNIA MECHANICAL CODE (CMC) C.C.R., TITLE 24, PART 4 BASED ON THE 2018 UNIFORM MECHANICAL CODE (UMC) WITH CALIFORNIA AMENDMENTS.
- 2019 CALIFORNIA PLUMBING CODE (CPC) C.C.R., TITLE 24, PART 5 BASED ON THE 2018 UNIFORM PLUMBING CODE (UPC) WITH CALIFORNIA AMENDMENTS.
- 2019 CALIFORNIA ENERGY CODE C.C.R., TITLE 24, PART 6.
- 2019 CALIFORNIA FIRE CODE (CFC) C.C.R., TITLE 24, PART 9 BASED ON THE 2018 INTERNATIONAL FIRE CODE (IFC) WITH CALIFORNIA AMENDMENTS.
- 2019 CALIFORNIA GREEN BUILDING STANDARDS CODE C.C.R., TITLE 24, PART 11.
- 2019 CALIFORNIA REFERENCED STANDARDS CODE C.C.R., TITLE 24, PART 12.
- TITLE 19 C.C.R., PUBLIC SAFETY, STATE FIRE MARSHAL REGULATIONS.
- NATIONAL FIRE ALARM CODE (NFPA 72) 2016.

STANDARDS:

- AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)
- ELECTRONICS INDUSTRIES ASSOCIATION (EIA)
- INSTITUTE OF ELECTRICAL AND ELECTRONIC ENGINEERS (IEEE)
- NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION (NEMA)
- NATIONAL ELECTRICAL TESTING ASSOCIATION (NETA)
- UNDERWRITER LABORATORIES (UL)
- CALIFORNIA OCCUPATIONAL SAFETY AND HEALTH ACT STANDARDS (CAL/OSHA)
- NATIONAL FIRE PROTECTION ASSOCIATION, INSTALLATION OF CARBON MONOXIDE (NFPA 720)

(DSA STAMP AREA)

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FIRE ALARM SYMBOLS, ABBREVIATIONS, EQUIPMENT LIST, OPERATIONAL MATRIX, DETAILS & NOTES

ALISAL FIRE ALARM UPGRADE
 ALISAL ELEMENTARY SCHOOL
 1454 SANTA RITA ROAD, PLEASANTON, CALIFORNIA 94566
 PLEASANTON UNIFIED SCHOOL DISTRICT

REVISIONS

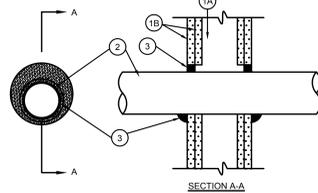
NO.	ITEM	DATE

DRAWN BY: CADD
 CHECKED BY: MB
 SFA JOB NO: DATE:
 21079 09/01/2021

FA0.1

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SEE FLOOR PLAN DRAWINGS
FOR RATED WALL LOCATIONS
U.L. System No. W-L-1049
F Rating-1 and 2 Hr (See Item 1B)
T Rating-0 HR
L Rating At Ambient-Less Than 1 CFM/sq ft
L Rating At 400F-Less Than 1 CFM/sq ft

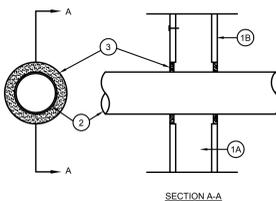


1. Wall Assembly-The 1 or 2 hr fire-rated gypsum wallboard/stud wall assembly shall be constructed of the materials and in the manner described in the individual U300 or U400 Series Wall or Partition Design in the UL Fire Resistance Directory and shall include the following construction features:
 - A. Studs-Wall framing may consist of either wood studs or steel channel studs. Wood studs to consist of nom 2 by 4 in. lumber spaced 16 in. OC. Steel studs to be min 3-5/8 in. wide and spaced max 24 in. OC. When steel studs are used and the diam of opening exceeds the width of stud cavity, the opening shall be framed on all sides using lengths of steel stud installed between the vertical studs and screw-attached to the steel studs at each end. The framed opening in the wall shall be 4 to 6 in. wider and 4 to 6 in. higher than the diam of the penetrating item such that, when the penetrating item is installed in the opening, a 2 to 3 in. clearance is present between the penetrating item and the framing on all four sides.
 - B. Wallboard, Gypsum-5/8 in. thick, 4 ft wide with square or tapered edges. The gypsum wallboard type, thickness, number of layers, fastener type and sheet orientation shall be as specified in the individual U300 or U400 Series Wall or Partition Design in the UL Fire Resistance Directory. Max diam of opening is 25-3/4 in. for steel stud walls. Max diam of opening is 14-1/2 in. for wood stud walls. The hourly F Rating of the firestop system is equal to the hourly fire rating of the wall assembly in which it is installed.
2. Through Penetrant-One metallic pipe, conduit or tubing to be installed either concentrically or eccentrically within the firestop system. The annular space between pipe, conduit or tubing and periphery of opening shall be min 0 in. (point contact) to max 1-3/4 in. Pipe, conduit or tubing to be rigidly supported on both sides of wall assembly. The following types and sizes of metallic pipes, conduits or tubing may be used:
 - A. Steel Pipe-Nom 24 in. diam (or smaller) Schedule 10 (or heavier) steel pipe.
 - B. Iron Pipe-Nom 24 in. diam (or smaller) cast or ductile iron pipe.
 - C. Conduit-Nom 4 in. diam (or smaller) steel electrical metallic tubing, nom 6 in. diam (or smaller) steel conduit or nom 1 in. diam (or smaller) flexible steel conduit.
 - D. Copper Tubing-Nom 6 in. diam (or smaller) Type L (or heavier) copper tubing.
 - E. Copper Pipe-Nom 6 in. diam (or smaller) Regular (or heavier) copper pipe.
3. Fill, Void or Cavity Material-Sealant-Min 5/8 in. thickness of fill material applied within annulus, flush with both surfaces of wall. At the point contact location between through penetrant and gypsum wallboard, a min 3/8 in. diam bead of fill material shall be applied at the gypsum wallboard/through penetrant interface on both surfaces of wall.

Specified Technologies Inc.-SpecSeal 100, 101, 102 or 105 Sealant
Bearing the UL Classification Marking

12 2-HR FIRE-RATED WALL PENETRATION
NO SCALE

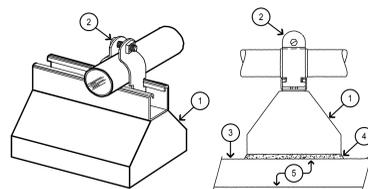
SEE FLOOR PLAN DRAWINGS
FOR RATED WALL LOCATIONS
U.L. System No. W-L-1062
F Rating-1 HR
T Rating-0 HR
L Rating At Ambient-Less Than 1 CFM/sq ft
L Rating At 400F-Less Than 1 CFM/sq ft



1. Wall Assembly-The fire-rated gypsum wallboard/stud wall assembly shall be constructed of the materials and in the manner specified in the individual U300 or U400 Series Wall and Partition Designs in the UL Fire Resistance Directory and shall include the following construction features:
 - A. Studs-Wall framing may consist of either wood studs or steel channel studs. Wood studs to consist of nom 2 by 4 in. lumber spaced 16 in. OC. Steel studs to be min 3(5/8)W(A)S in. wide and spaced max 24 in. OC.
 - B. Wallboard Gypsum-One Layer of nom 1(5/8)W(A)S in. thick gypsum wallboard as specified in the individual Wall and Partition Design. Max diam of opening is 4(3/4)W(A)S in.
2. Through Penetrants-One metallic conduit to be installed within the firestop system. The space between the conduit and periphery of opening shall be a min 1(1/4)W(A)S in. to a max 3(5/8)W(A)S in. Conduit to be rigidly supported on both sides of wall assembly. A nominal 4 in. diameter (or smaller) electrical metallic tubing or steel conduit may be used.
3. Fill, Void or Cavity Material-Caulk-Min 1(1/4)W(A)S in. thickness of fill material applied within the annulus, flush with both surfaces of wall.

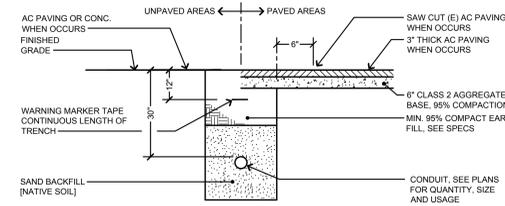
General Electric Co.-Pensit 100 Caulk.
Specified Technologies Inc.-Pensit 100 Sealant and Pensit 300 Sealant.
*Bearing the UL Classification Marking

11 1-HR FIRE-RATED WALL PENETRATION
NO SCALE



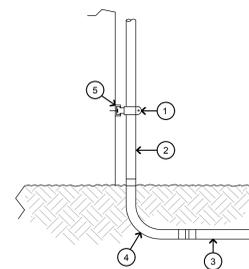
1. ROOF TOP CONDUIT SUPPORT: 5" x 6" x 9.5" WITH 1" HIGH 14 GA. GALVANIZED CHANNEL STRUT, COOPER B-LINE "DB" SERIES.
2. 14 GA. RIGID CONDUIT CLAMP WITH RECESS HEX HEAD MACHINE SCREW AND SQUARE NUT COMBINATION, COOPER B-LINE B2000 SERIES.
3. CLEAN (E) ROOF AREA AS REQUIRED.
4. SET SUPPORT IN MASTIC.
5. ROOF STRUCTURE.

10 ROOF MOUNTED CONDUIT SUPPORT DETAIL
NO SCALE



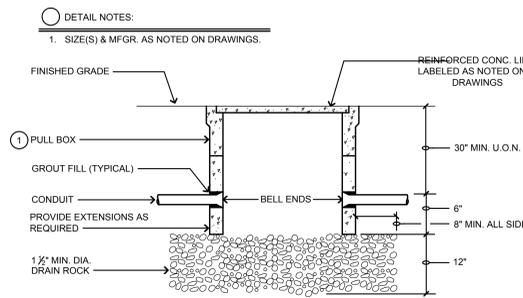
- NOTES:
1. SAW CUT, TRENCH & BACKFILL FOR (N) CONDUITS, PATCH WALKWAY TO MATCH (E) SURROUNDING SURFACES. CARE SHALL BE TAKEN TO PROTECT EXISTING TREES, RESEED OR RESOD (E) DISTURBED PLANTED AREAS TO ARCHITECT'S SATISFACTION.
 2. EXISTING A.C. SHALL BE CUT AND REMOVED IN SUCH A MANNER SO AS NOT TO TEAR BULGE OR DISPLACE ADJACENT PAVEMENT. EDGES SHALL BE CLEAN AND VERTICAL. ALL CUTS SHALL BE PARALLEL OR PERPENDICULAR TO STREET CENTERLINE, WHEN PRACTICAL.
 3. BASE MATERIAL TO BE REPLACED TO THE DEPTH OF EXISTING BASE AND COMPACTED TO A MIN. 95% RELATIVE COMPACTION. A.C. MAY BE SUBSTITUTED FOR BASE MATERIAL. WHEN USED AS BACKFILL, CLASS 100-E-100 P.C.C. MAY BE SUBSTITUTED FOR BASE MATERIAL.
 4. A TACK COAT OF ASPHALTIC EMULSION OR PAVING ASPHALT SHALL BE APPLIED TO EXISTING A.C. AT ALL CONTACT SURFACES, PRIOR TO RESURFACING.
 5. ASPHALTIC CONCRETE RESURFACING:
 - A) MINIMUM TOTAL THICKNESS SHALL BE ONE INCH GREATER THAN EXISTING A.C.
 - B) A.C. SHALL BE HOT PLANT MIX.
 6. ALL A.C. RESURFACING SHALL BE SEAL COATED WITH AN EMULSIFIED ASPHALT AND COVERED WITH CLEAN SAND.

9 TYPICAL TRENCH SECTION
NO SCALE



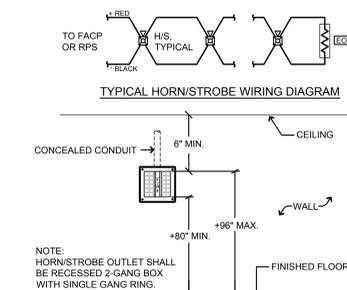
- DETAIL NOTES:
1. UNISTRUT BRACKET.
 2. GALVANIZED RIGID STEEL CONDUIT.
 3. SCHEDULE 40 PVC.
 4. WRAPPED GALVANIZED RIGID STEEL ELBOW AND UNDERGROUND RISER.
 5. UNISTRUT CHANNEL.
- GENERAL NOTES:
- A. FOR WOOD STUD WALL: USE 3/4" LAG BOLT WITH MIN. 3/4" EMBEDMENT INTO STUDS. (ONE AT EACH END OF BRACKET)
 - B. FOR CONCRETE WALL: USE 3/4" WEDGE ANCHOR WITH MIN. 2 1/2" EMBEDMENT INTO CONCRETE WALL. (ONE AT EACH END OF BRACKET)

8 UNDERGROUND CONDUIT RISER DETAIL
NO SCALE



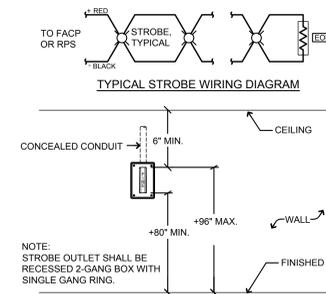
- DETAIL NOTES:
1. SIZE(S) & MFR. AS NOTED ON DRAWINGS.

7 TYPICAL PULLBOX DETAIL
NO SCALE

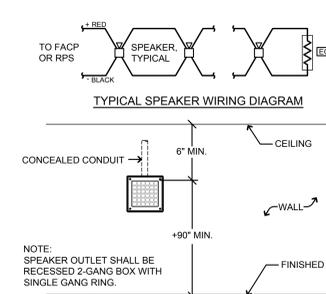


- DETAIL NOTES:
1. TO FACP OR PREVIOUS ADDRESSABLE DEVICE IN THE SAME LOOP
 2. TO NEXT ADDRESSABLE DEVICE IN THE SAME LOOP
- NOTE: HORN/STROBE OUTLET SHALL BE RECESSED 2-GANG BOX WITH SINGLE GANG RING.

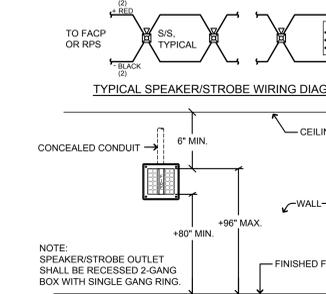
6 HORN/STROBE INSTALLATION DETAIL
NO SCALE



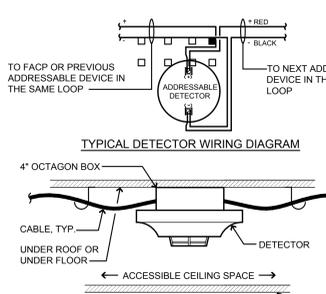
5 STROBE INSTALLATION DETAIL
NO SCALE



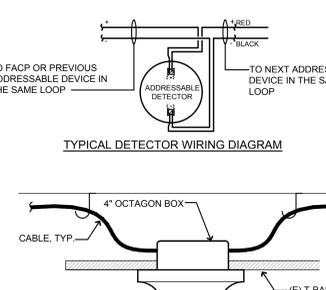
4 SPEAKER INSTALLATION DETAIL
NO SCALE



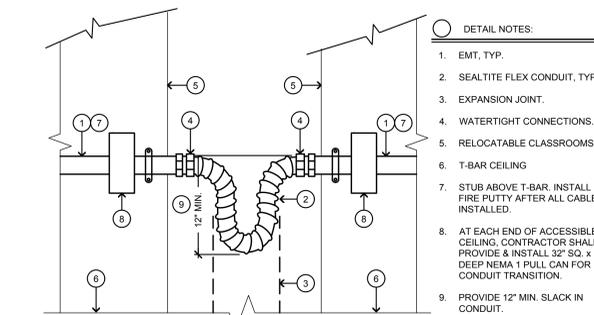
3 SPEAKER/STROBE INSTALLATION DETAIL
NO SCALE



2 DETECTOR MOUNTING DETAIL
NO SCALE



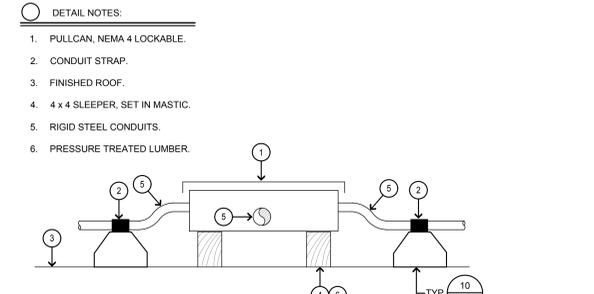
1 DETECTOR MOUNTING DETAIL
NO SCALE



- DETAIL NOTES:
1. EMT, TYP.
 2. SEALTITE FLEX CONDUIT, TYP.
 3. EXPANSION JOINT.
 4. WATERTIGHT CONNECTIONS.
 5. RELOCATABLE CLASSROOMS.
 6. T-BAR CEILING.
 7. STUB ABOVE T-BAR, INSTALL FIRE PUTTY AFTER ALL CABLES INSTALLED.
 8. AT EACH END OF ACCESSIBLE CEILING, CONTRACTOR SHALL PROVIDE & INSTALL 32" SQ. x 12" DEEP NEMA 1 PULL CAN FOR CONDUIT TRANSITION.
 9. PROVIDE 12" MIN. SLACK IN CONDUIT.

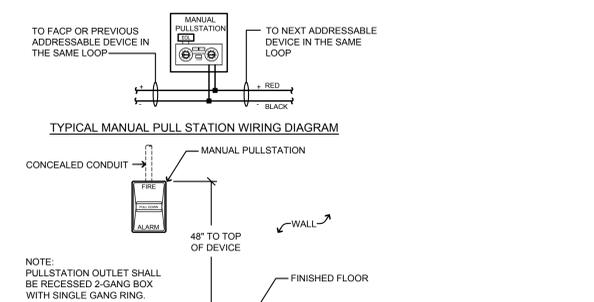
GENERAL NOTE:
SEAL CONDUITS WITH FIRE PUTTY AFTER ALL SYSTEMS CABLES HAVE BEEN INSTALLED.

15 CONDUIT TRANSITION BETWEEN BUILDINGS
NO SCALE



- DETAIL NOTES:
1. PULLCAN, NEMA 4 LOCKABLE.
 2. CONDUIT STRAP.
 3. FINISHED ROOF.
 4. 4 x 4 SLEEPER, SET IN MASTIC.
 5. RIGID STEEL CONDUITS.
 6. PRESSURE TREATED LUMBER.

14 PULLCAN AT ROOF DETAIL
NO SCALE



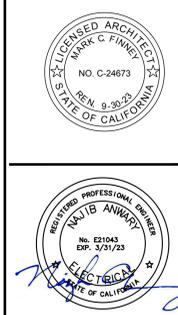
- NOTE: PULLSTATION OUTLET SHALL BE RECESSED 2-GANG BOX WITH SINGLE GANG RING.

13 PULL STATION MOUNTING DETAIL
NO SCALE

10 ROOF MOUNTED CONDUIT SUPPORT DETAIL
NO SCALE

6 HORN/STROBE INSTALLATION DETAIL
NO SCALE

1 DETECTOR MOUNTING DETAIL
NO SCALE



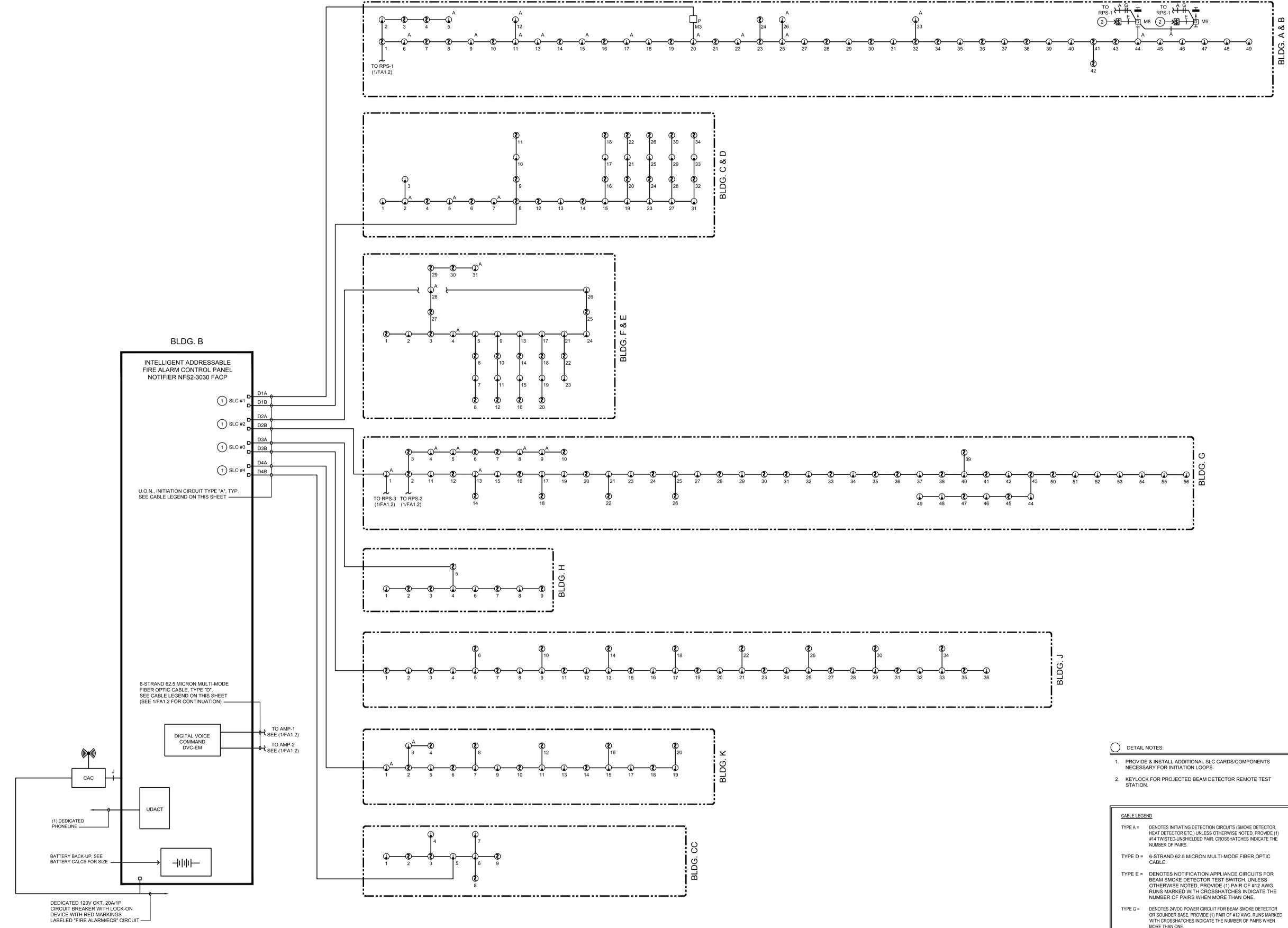
FIRE ALARM DETAILS
ALISAL FIRE ALARM UPGRADE
ALISAL ELEMENTARY SCHOOL
1454 SANTA RITA ROAD, PLEASANTON, CALIFORNIA 94566
PLEASANTON UNIFIED SCHOOL DISTRICT

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1 FIRE ALARM RISER DIAGRAM



- DETAIL NOTES:**
1. PROVIDE & INSTALL ADDITIONAL SLC CARDS/COMPONENTS NECESSARY FOR INITIATION LOOPS.
 2. KEY-LOCK FOR PROJECTED BEAM DETECTOR REMOTE TEST STATION.

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.

TYPE D = 6-STRAND 62.5 MICRON MULTI-MODE FIBER OPTIC CABLE.

TYPE E = DENOTES NOTIFICATION APPLIANCE CIRCUITS FOR BEAM SMOKE DETECTOR TEST SWITCH. UNLESS OTHERWISE NOTED, PROVIDE (1) PAIR OF #12 AWG. RUNS MARKED WITH CROSSHATCHES INDICATE THE NUMBER OF PAIRS WHEN MORE THAN ONE.

TYPE G = DENOTES 24VDC POWER CIRCUIT FOR BEAM SMOKE DETECTOR OR SOUNDER BASE. PROVIDE (1) PAIR OF #12 AWG. RUNS MARKED WITH CROSSHATCHES INDICATE THE NUMBER OF PAIRS WHEN MORE THAN ONE.

(ISA STAMP AREA)

SUGIMURA FINNEY ARCHITECTS

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ARCHITECTURE INTERIOR PLANNING

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FIRE ALARM RISER DIAGRAM

ALISAL FIRE ALARM UPGRADE

ALISAL ELEMENTARY SCHOOL

1454 SANTA RITA ROAD, PLEASANTON, CALIFORNIA 94566

PLEASANTON UNIFIED SCHOOL DISTRICT

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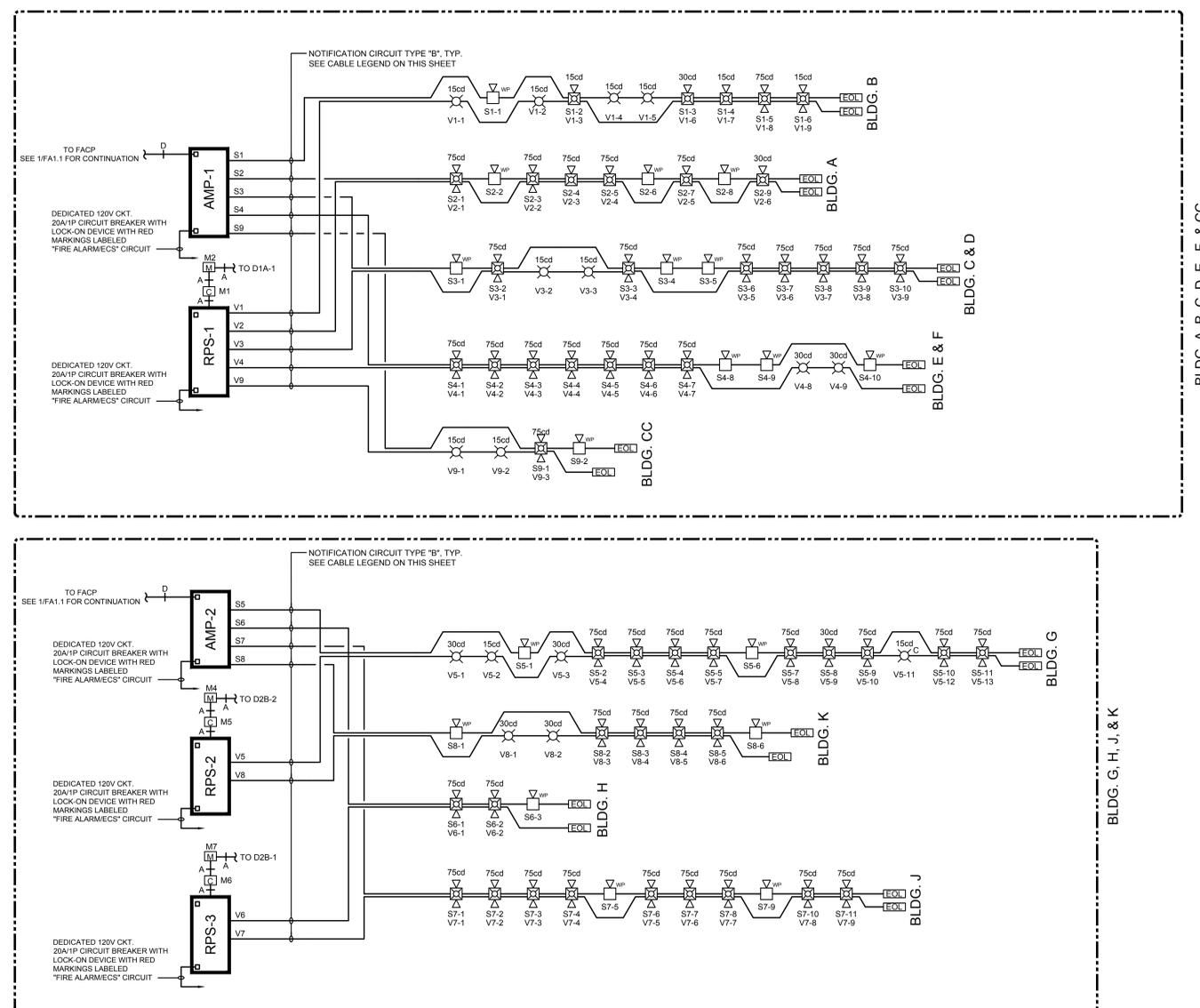


FIRE ALARM RISER DIAGRAM
ALISAL FIRE ALARM UPGRADE
ALISAL ELEMENTARY SCHOOL
1454 SANTA RITA ROAD, PLEASANTON, CALIFORNIA 94566
PLEASANTON UNIFIED SCHOOL DISTRICT

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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.

TYPE B = DENOTES NOTIFICATION APPLIANCE CIRCUITS (HORN, STROBES, BELL ETC.) UNLESS OTHERWISE NOTED, PROVIDE (1) PAIR OF #12 AWG. CROSSHATCHES INDICATE THE NUMBER OF PAIRS.

TYPE D = 6-STRAND 62.5 MICRON FIBER OPTIC CABLE.

1 FIRE ALARM RISER DIAGRAM
NO SCALE

- ### SHEET NOTES
1. PROVIDE & INSTALL 2" C. FOR FIRE ALARM CABLES.
 2. ROUTE CONDUIT VIA CANOPY.
 3. PROVIDE & INSTALL 18" SQ. x 6" DEEP, NEMA 3R PULL CAN ON ROOF OF CANOPY.
 4. PROVIDE & INSTALL IN-GRADE CHRISTY #8 PULLBOX, WITH LID LABELED "FIRE ALARM".

- #### 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.
- TYPE B = DENOTES NOTIFICATION APPLIANCE CIRCUITS (HORN, STROBES, BELL ETC.) UNLESS OTHERWISE NOTED, PROVIDE (1) PAIR OF #12 AWG, CROSSHATCHES INDICATE THE NUMBER OF PAIRS.
- TYPE D = 6-STRAND 62.5 MICRON MULTI-MODE FIBER OPTIC CABLE, SUITABLE FOR UNDERGROUND USE.

- #### GENERAL NOTES
- A. CONTRACTOR SHALL LOCATE ALL (E) UNDERGROUND UTILITIES PRIOR TO TRENCHING AND TAKE CAUTION TO AVOID DAMAGE DURING TRENCHING. HAND TRENCH IF NECESSARY. CONTRACTOR SHALL MAKE ALL REPAIRS TO DAMAGED UTILITIES AT NO CHARGE TO OWNER.
- B. SEAL ALL EXTERIOR/INTERIOR BUILDING PENETRATIONS, CUT AND PATCH WALLS/CEILING FOR CONDUIT ROUTING AS NECESSARY. PAINT/FINISH EXPOSED CONDUITS/BOXES TO MATCH BUILDING FINISH. COORDINATE WITH FACILITIES MANAGER & ARCHITECT FOR EXACT REQUIREMENTS.



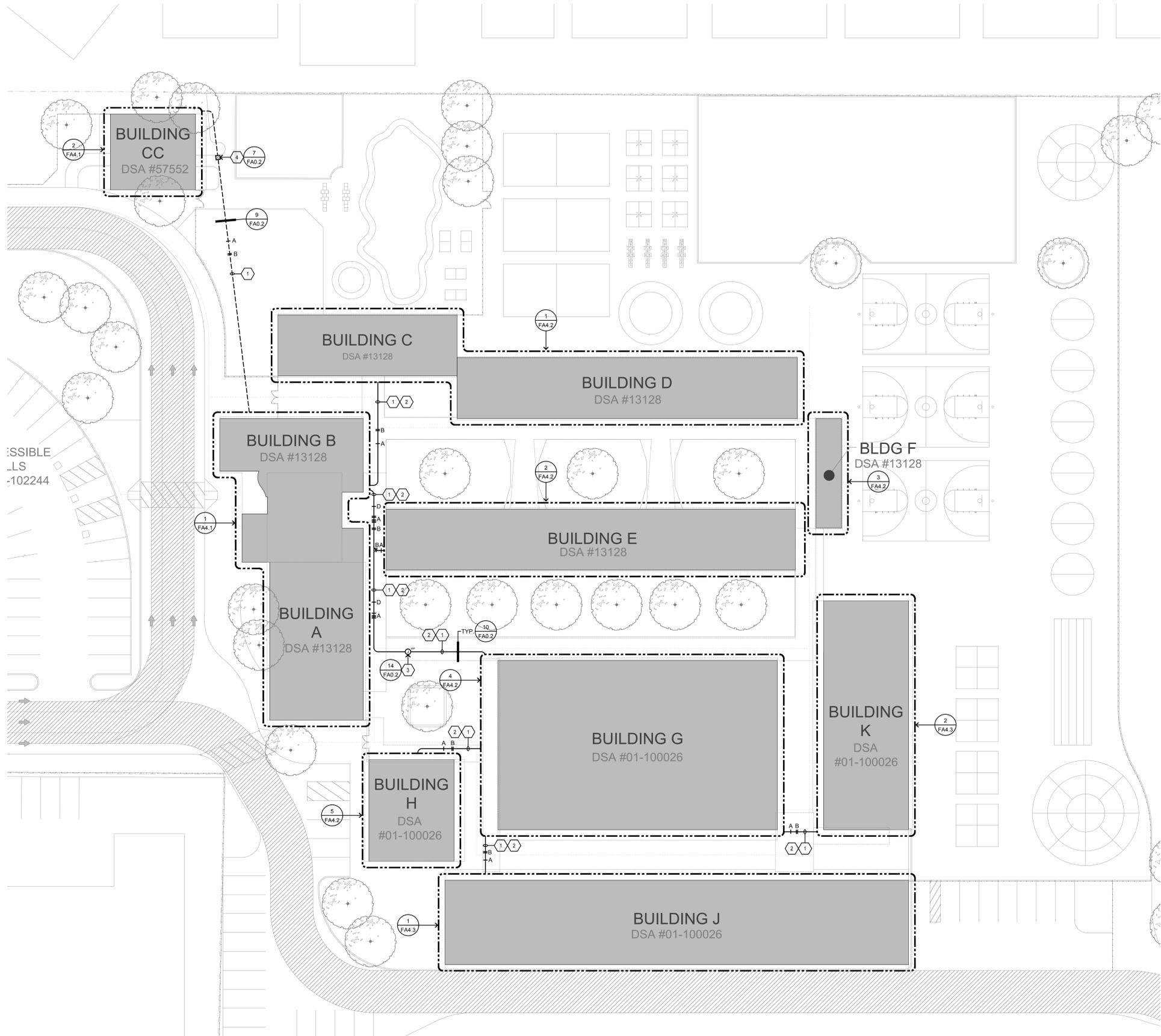
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FIRE ALARM SITE PLAN
ALISAL FIRE ALARM UPGRADE
ALISAL ELEMENTARY SCHOOL
1454 SANTA RITA ROAD, PLEASANTON, CALIFORNIA 94566
PLEASANTON UNIFIED SCHOOL DISTRICT

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1 FIRE ALARM SITE PLAN
SCALE: 1"=20'-0"

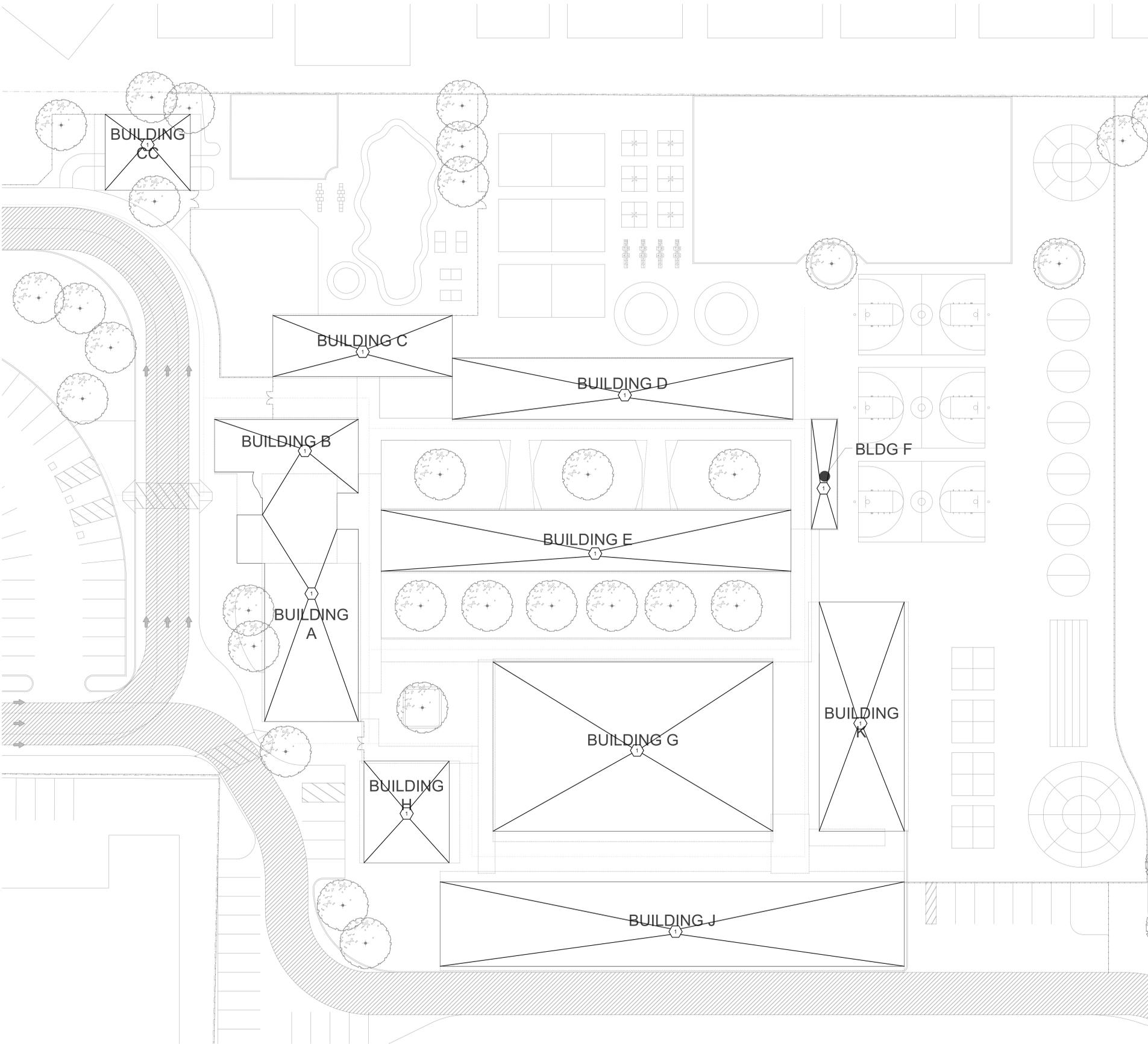
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SHEET NOTES

1. PER GENERAL DEMOLITION NOTES; CONTRACTOR SHALL DEMOLISH ALL FIRE ALARM AT THIS BUILDING COMPLETE. CONTRACTOR SHALL PROVIDE & INSTALL BLANK COVER PLATE AT LOCATIONS WHERE DEVICES WERE REMOVED. PAINT/FINISH DEVICE PLATES TO MATCH EXISTING WALLS/CEILINGS. WHERE SURFACE RACEWAYS ARE EXISTING FOR FIRE ALARM CONNECTIONS, REMOVE COMPLETE & PAINT/FINISH WALLS/CEILINGS.

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.



1 FIRE ALARM DEMOLITION PLAN
SCALE: 1"=20'-0"

(DSA STAMP AREA)



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MONTEREY BAY, INC.
Project No. 21-140.00
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FIRE ALARM DEMOLITION PLAN
ALISAL FIRE ALARM UPGRADE
ALISAL ELEMENTARY SCHOOL
1454 SANTA RITA ROAD, PLEASANTON, CALIFORNIA 94566
PLEASANTON UNIFIED SCHOOL DISTRICT

NO.	ITEM	DATE

DRAWN BY: CADD
CHECKED BY: MB
SFA JOB NO: 21079
DATE: 09/01/2021

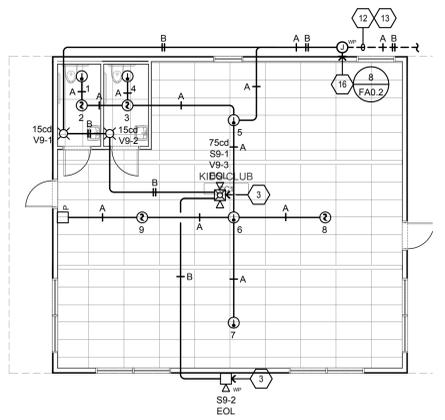
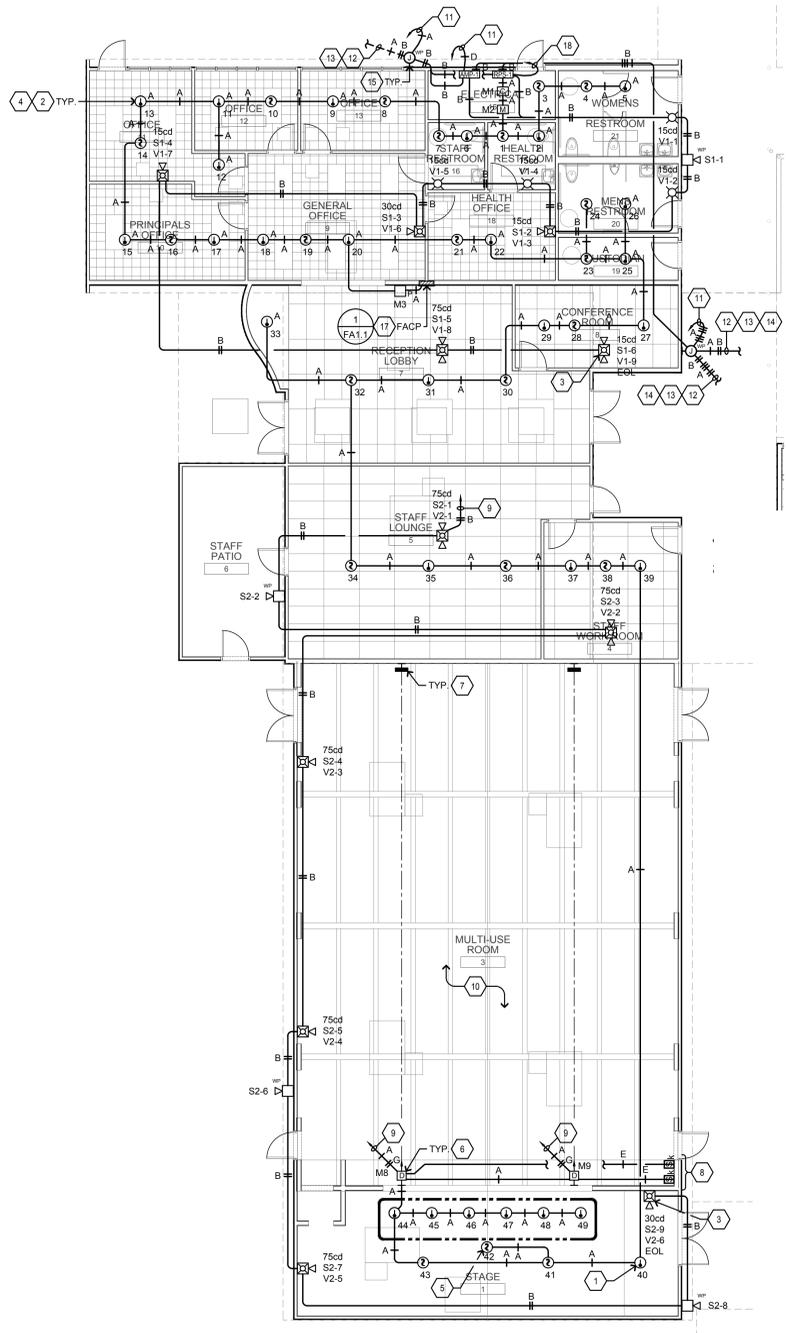
FA3.1

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1 FIRE ALARM PLAN - BUILDING A & B
SCALE: 1/8"=1'-0"

2 FIRE ALARM PLAN - BUILDING CC
SCALE: 1/8"=1'-0"



SHEET NOTES

1. MOUNT TO STRUCTURE IN SOFFIT ABOVE ACCESSIBLE CEILING SPACE.
2. WHERE NECESSARY, PROVIDE & INSTALL ACCESS PANEL FOR HEAT DETECTOR ABOVE CEILING, 24" SQ. OPENING MINIMUM.
3. PROVIDE & INSTALL ENGRAVED LAMICOID NAMEPLATE ON FACE OF DEVICE READING "EOL".
4. UNLESS OTHERWISE NOTED, MOUNT TO STRUCTURE ABOVE ACCESSIBLE CEILING SPACE.
5. PROVIDE & INSTALL HEAT DETECTOR AT STAGE SKYLIGHT.
6. BEAM SMOKE DETECTOR TRANSMITTER; INSTALL WITH DIRECT LINE OF SIGHT TO REFLECTOR PLATE. FIELD VERIFY MOUNTING HEIGHT.
7. REFLECTOR PLATE; INSTALL WITH DIRECT LINE OF SIGHT TO TRANSMITTER. FIELD VERIFY MOUNTING HEIGHT.
8. PROJECTED BEAM DETECTOR REMOTE TEST STATION WITH KEYLOCK. CONNECT TO TRANSMITTER PER MANUFACTURER'S INSTALLATION INSTRUCTIONS. MOUNT AT +44" TO TOP OF BOX. VERIFY EXACT LOCATION WITH ARCHITECT.
9. HOMERUN TO RPS-1.
10. PROVIDE & INSTALL CSFM LISTED WIREGUARD FOR ALL DEVICES IN MULTI-USE ROOM.
11. HOMERUN TO FIRE ALARM CONTROL PANEL (FACP) LOCATED IN RECEPTION LOBBY.
12. PROVIDE & INSTALL 2" C. FOR FIRE ALARM CABLES.
13. SEE FA2.1 FOR CONTINUATION.
14. ROUTE CONDUIT VIA CANOPY.
15. PROVIDE & INSTALL 24" SQ. x 8" DEEP, NEMA 3R PULL CAN.
16. PROVIDE & INSTALL 18" SQ. x 6" DEEP, NEMA 3R PULL CAN.
17. SEMI-FLUSH FIRE ALARM CONTROL PANEL; CONTRACTOR SHALL CUT & PATCH WALL AS NECESSARY.
18. CIRCUIT VIA 1/2" C. 2 #12 & 1 #12 GND TO NEAREST ELECTRICAL PANEL; AT PANEL PROVIDE AND INSTALL 20 AMP, 1-POLE BREAKER WITH LOCK-ON DEVICE WITH RED MARKINGS LABELED "FIRE ALARMECS".

GENERAL NOTES:

A. CONTRACTOR SHALL LOCATE ALL (E) UNDERGROUND UTILITIES PRIOR TO TRENCHING AND TAKE CAUTION TO AVOID DAMAGE DURING TRENCHING. HAND TRENCH IF NECESSARY. CONTRACTOR SHALL MAKE ALL REPAIRS TO DAMAGED UTILITIES AT NO CHARGE TO OWNER.

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

C. ALL INDOOR SPEAKERS/HORNS SHALL BE 0.5 WATTS RATED MINIMUM. ALL OUTDOOR SPEAKERS/HORNS SHALL BE 2 WATTS RATED MINIMUM.

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.

TYPE B = DENOTES NOTIFICATION APPLIANCE CIRCUITS (HORN, STROBES, BELL ETC.) UNLESS OTHERWISE NOTED, PROVIDE (1) PAIR OF #12 AWG. CROSSHATCHES INDICATE THE NUMBER OF PAIRS.

TYPE D = 6-STRAND 62.5 MICRON MULTI-MODE FIBER OPTIC CABLE, SUITABLE FOR UNDERGROUND USE.



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FIRE ALARM PLAN - BUILDING A, B & CC
ALISAL FIRE ALARM UPGRADE
ALISAL ELEMENTARY SCHOOL
1454 SANTA RITA ROAD, PLEASANTON, CALIFORNIA 94566
PLEASANTON UNIFIED SCHOOL DISTRICT

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FA4.1

SHEET NOTES

1. MOUNT TO STRUCTURE IN SOFFIT ABOVE ACCESSIBLE CEILING SPACE.
2. WHERE NECESSARY PROVIDE & INSTALL ACCESS PANEL FOR HEAT DETECTOR ABOVE CEILING. 24" SQ. OPENING MINIMUM.
3. PROVIDE & INSTALL ENGRAVED LAMCROID NAMEPLATE ON FACE OF DEVICE READING "EOL".
4. UNLESS OTHERWISE NOTED, MOUNT TO STRUCTURE ABOVE ACCESSIBLE CEILING SPACE.
5. PROVIDE & INSTALL 2" C. FOR FIRE ALARM CABLES.
6. ROUTE CONDUIT VIA CANOPY.
7. SEE FA2.1 FOR CONTINUATION.
8. PROVIDE & INSTALL 18" SQ. x 6" DEEP, NEMA 3R PULL CAN.
9. SEE 3/FA4.2 FOR CONTINUATION.
10. SEE 2/FA4.2 FOR CONTINUATION.
11. PROVIDE & INSTALL 18" SQ. x 6" DEEP, NEMA 3R PULL CAN ON ROOF OF CANOPY.
12. CIRCUIT VIA 2" C. 2 #12 & 1 #12 GND TO NEAREST ELECTRICAL PANEL; AT PANEL PROVIDE AND INSTALL 20 AMP, 1-POLE BREAKER WITH LOCK-ON DEVICE WITH RED MARKINGS LABELED "FIRE ALARMECS".

GENERAL NOTES:

A. CONTRACTOR SHALL LOCATE ALL (E) UNDERGROUND UTILITIES PRIOR TO TRENCHING AND TAKE CAUTION TO AVOID DAMAGE DURING TRENCHING. HAND TRENCH IF NECESSARY. CONTRACTOR SHALL MAKE ALL REPAIRS TO DAMAGED UTILITIES AT NO CHARGE TO OWNER.

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

C. ALL INDOOR SPEAKERS/HORNS SHALL BE 0.5 WATTS RATED MINIMUM. ALL OUTDOOR SPEAKERS/HORNS SHALL BE 2 WATTS RATED MINIMUM.

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.

TYPE B = DENOTES NOTIFICATION APPLIANCE CIRCUITS (HORN, STROBES, BELL ETC.) UNLESS OTHERWISE NOTED, PROVIDE (1) PAIR OF #12 AWG. CROSSHATCHES INDICATE THE NUMBER OF PAIRS.

TYPE D = 6-STRAND 62.5 MICRON MULTI-MODE FIBER OPTIC CABLE, SUITABLE FOR UNDERGROUND USE.



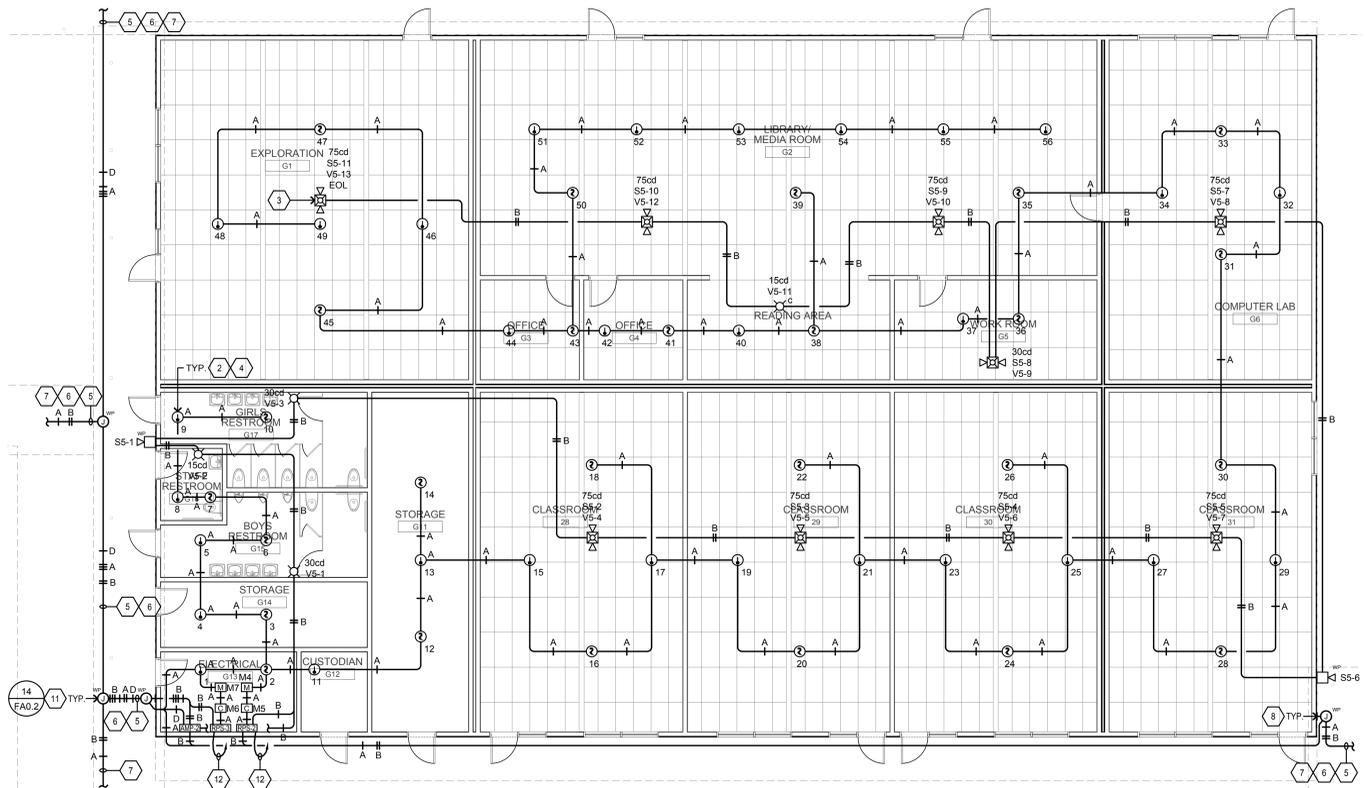
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FIRE ALARM PLAN - BUILDING C, D, E, F, G & H
ALISAL FIRE ALARM UPGRADE ALISAL ELEMENTARY SCHOOL
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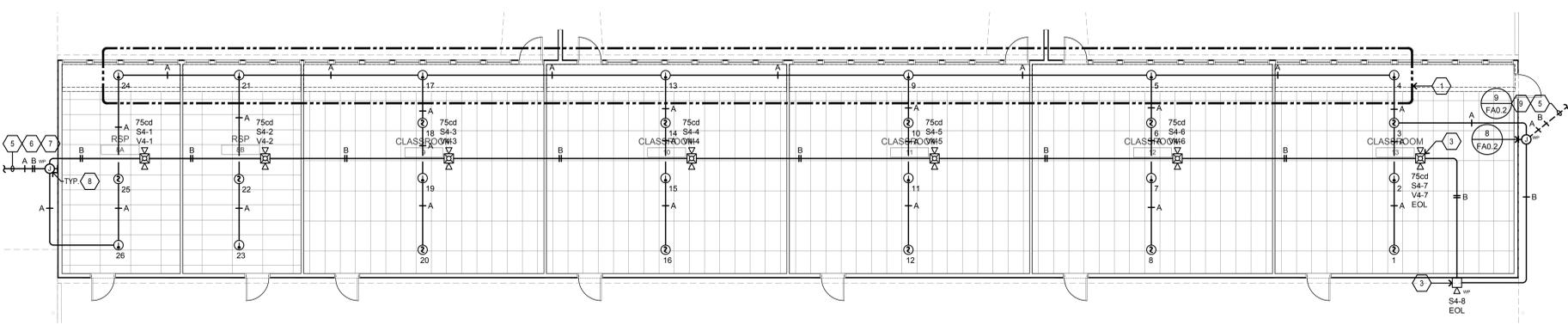
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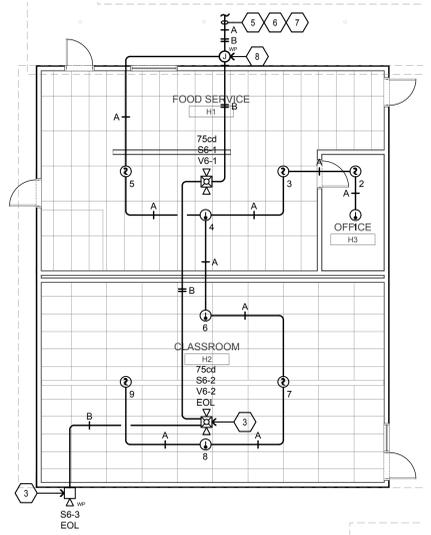
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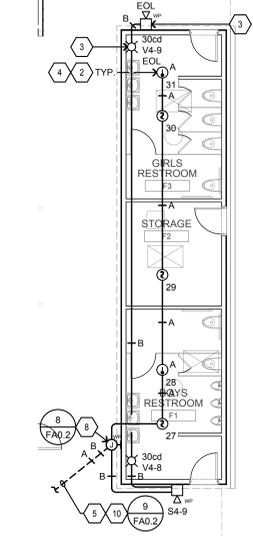
4 FIRE ALARM PLAN - BUILDING G
 SCALE: 1/8"=1'-0"
 NORTH



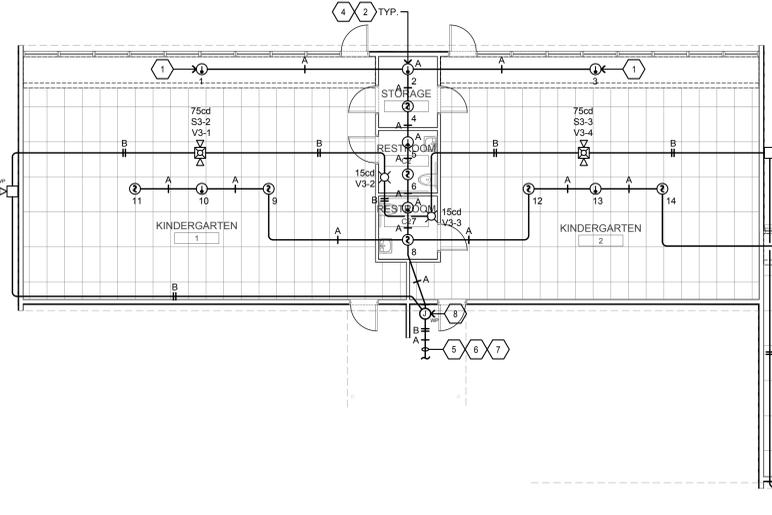
2 FIRE ALARM PLAN - BUILDING E
 SCALE: 1/8"=1'-0"
 NORTH



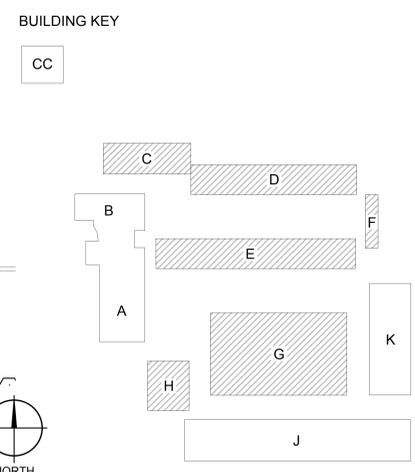
5 FIRE ALARM PLAN - BUILDING H
 SCALE: 1/8"=1'-0"
 NORTH



3 FIRE ALARM PLAN - BUILDING F
 SCALE: 1/8"=1'-0"
 NORTH



1 FIRE ALARM PLAN - BUILDING C & D
 SCALE: 1/8"=1'-0"
 NORTH



SHEET NOTES

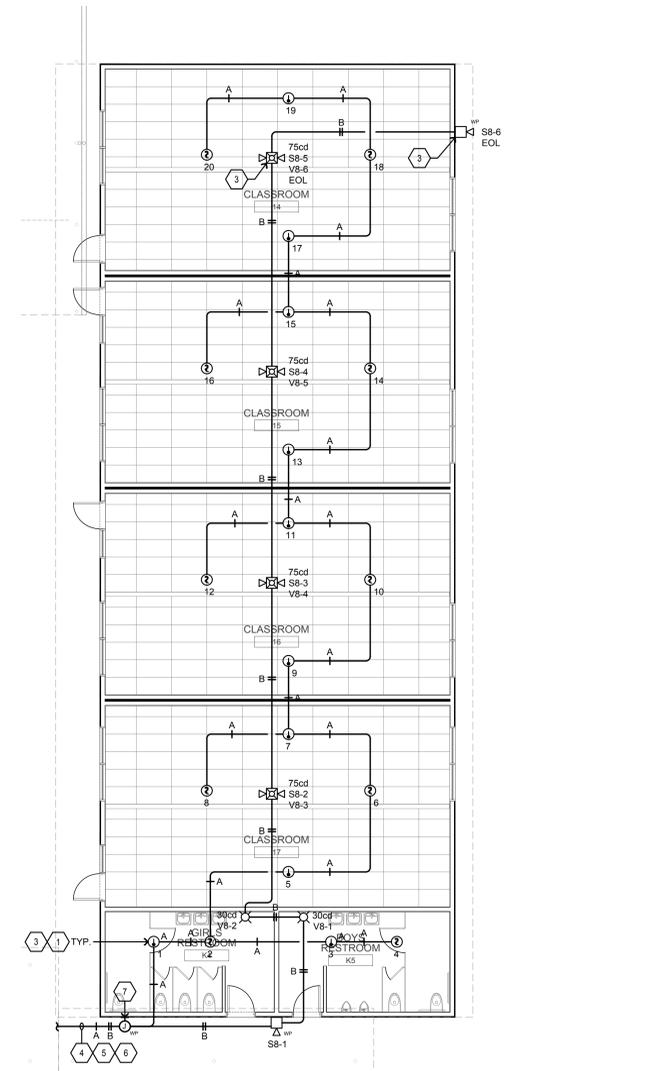
- WHERE NECESSARY PROVIDE & INSTALL ACCESS PANEL FOR HEAT DETECTOR ABOVE CEILING, 24" SQ. OPENING MINIMUM.
- PROVIDE & INSTALL ENGRAVED LAMICOID NAMEPLATE ON FACE OF DEVICE READING "EOL".
- UNLESS OTHERWISE NOTED, MOUNT TO STRUCTURE ABOVE ACCESSIBLE CEILING SPACE.
- PROVIDE & INSTALL 2" C. FOR FIRE ALARM CABLES.
- ROUTE CONDUIT VIA CANOPY.
- SEE FA2.1 FOR CONTINUATION.
- PROVIDE & INSTALL 18" SQ. x 6" DEEP, NEMA 3R PULL CAN.

GENERAL NOTES:

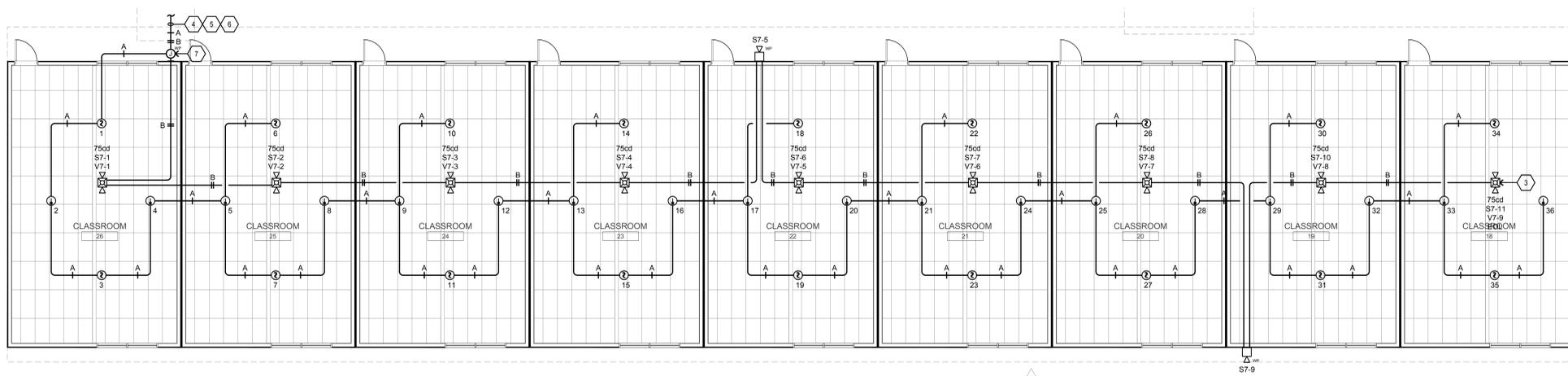
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- ALL INDOOR SPEAKERS/HORNS SHALL BE 0.5 WATTS RATED MINIMUM. ALL OUTDOOR SPEAKERS/HORNS SHALL BE 2 WATTS RATED MINIMUM.

CABLE LEGEND

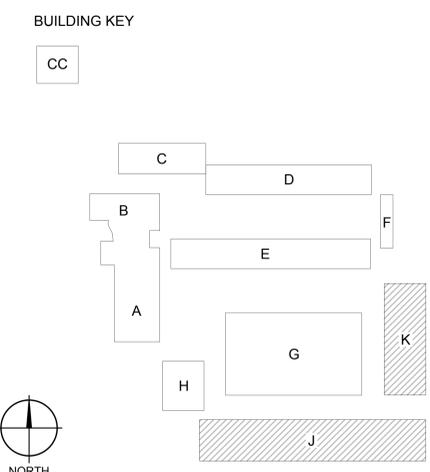
- TYPE A = DENOTES INITIATING DETECTION CIRCUITS (SMOKE DETECTOR, HEAT DETECTOR ETC.) UNLESS OTHERWISE NOTED, PROVIDE (1) #14 TWISTED-UNSHIELDED PAIR. CROSSHATCHES INDICATE THE NUMBER OF PAIRS.
- TYPE B = DENOTES NOTIFICATION APPLIANCE CIRCUITS (HORN, STROBES, BELL ETC.) UNLESS OTHERWISE NOTED, PROVIDE (1) PAIR OF #12 AWG. CROSSHATCHES INDICATE THE NUMBER OF PAIRS.
- TYPE D = 6-STRAND 62.5 MICRON MULTI-MODE FIBER OPTIC CABLE, SUITABLE FOR UNDERGROUND USE.



2 FIRE ALARM PLAN - BUILDING K
SCALE: 1/8"=1'-0"



1 FIRE ALARM PLAN - BUILDING J
SCALE: 1/8"=1'-0"



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FIRE ALARM PLAN - BUILDING J & K
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FA4.3

BUILDING CODE ANALYSIS

BUILDING	CONSTRUCTION TYPE OCCUPANCY TYPE	AREA (SQ.FT.)	* ALLOWABLE (SQ.FT.)	# OF STORIES
BUILDING A	V-1 / A2.1	5,594	10,500	1
BUILDING J	V-1 / E1	10,255	15,700	2
** TOTAL AREA	V-N / E1	22,400	***	1
BUILDING B	V-N / E1	2,880	9,500	1
BUILDING C	V-N / E1	2,320	9,500	1
BUILDING D	V-N / B2	3,072	9,500	1
BUILDING E	V-N / E1	2,622	9,500	1
PORTABLE KIDS CLUB	V-N / E3	1,504	9,500	1

* AREA INCREASE USED FOR ORIGINAL CONSTRUCTION. NEW SCOPE OF WORK DOES NOT ENCRoACH OPEN AREA.
 ** BUILDINGS "R1, 2, 3, 4, 5, 6, 7, 8, 9 & R10", BUILDING "H", & BUILDING "G".
 *** ALLOWABLE DURING ORIGINAL CONSTRUCTION.

PROJECT SUMMARY

REPLACING EXISTING FIRE ALARM SYSTEM WITH NEW ADDRESSABLE FIRE ALARM AND EMVOICE EVACUATION SYSTEM ACROSS ENTIRE SITE.

GENERAL NOTES

- A. THIS SHEET IS FOR FIRE LIFE SAFETY CODE RELATED ITEMS. FOR SCOPE OF WORK SEE SHEETS A0.1 AND A0.2.
- B. REFER TO FIRE ALARM AND FIRE PROTECTION DRAWINGS FOR EXTENT OF OTHER RELATED WORK.



GRAPHIC KEY

- EXISTING PROPERTY LINE
- - - ROOF OVERHANG
- - - CHAIN LINK FENCE
- ▨ EXISTING BUILDING
- ▤ EXISTING RESTROOMS
- ▨ FIRE DEPARTMENT ACCESS. FIRE DEPARTMENT ACCESS IS 20'-0" WIDE AND RATED FOR 90,000 LBS.
- ⊕ (E) FIRE HYDRANT
- ⊕ (E) SIGN

1 SITE PLAN - FIRE LIFE SAFETY

1" = 30'-0"
 0 7.5' 15' 30' 60' 90'

(DSA STAMP AREA)

SUGIMURA FINNEY ARCHITECTS
SFA
 ARCHITECTURE INTERIORS PLANNING

2155 SOUTH BASCOM AVE.
 SUITE 209
 CAMPBELL, CA 95008
 PHONE: 408-878-0600
 FAX: 408-277-6555



**SITE PLAN
 FIRE LIFE SAFETY**

CAMPUS-WIDE FIRE ALARM REPLACEMENT
 MOHR ELEMENTARY SCHOOL
 3300 DENNIS DRIVE, PLEASANTON, CA 94588
 PLEASANTON UNIFIED SCHOOL DISTRICT

REVISIONS NO.	ITEM	DATE

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 DATE: 12/06/2021

FIRE ALARM EQUIPMENT LIST			
SYMBOL	DESCRIPTION AND MODEL NUMBER	MFG'S PART No.	CSFM LISTING
[FACP]	ADDRESSABLE FIRE ALARM CONTROL PANEL, NOTIFIER NFS2 SERIES. UNACT. FIBER MODULES FOR EACH AMPLIFIER CONNECTION. INSTALL SEMI-FLUSH MOUNTING CABINET, CAB-4 SERIES. PROVIDE & INSTALL FIRE ALARM DOCUMENT CABINET NEXT TO FACP.	NFS2-3030	7165-0028.0224
[DVC]	DIGITAL VOICE COMMAND CONTROL SYSTEM WITH DIGITAL AUDIO LOOP TECHNOLOGY. WITH UP TO 8 CHANNELS OF AUDIO AND UP TO 5 CHANNELS OF FIREFIGHTER TELEPHONE COMMUNICATIONS. LOCAL KEYPAD FOR LOCAL ANNUNCIATION AND CONTROLS (DVC-KD).	NOTIFIER DVC-EM	7165-0028.0224
[PSE]	10.0A AUXILIARY POWER SUPPLY WITH 4 NAC OUTPUT CIRCUITS AND BUILT-IN SYNCHRONIZATION. NOTIFIER PSE-10 SERIES.	PSE-10	7315-0028.0513
[DAA]	50 WATT, 70 V RMS DIGITAL AUDIO AMPLIFIER WITH CHARGING POWER SUPPLY AND 2 CLASS B OR 2 CLASS A OUTPUTS. NOTIFIER DAA SERIES.	DAA2-5070	7165-0028.0224
[A]	ADDRESSABLE PHOTO ELECTRIC FIRE ALARM SMOKE DETECTOR AND BASE, NOTIFIER FSP-951 SERIES.	FSP-951	7272-0028.0503
[A]	ADDRESSABLE FIRE ALARM HEAT DETECTOR AND BASE, 135 DEG. FIXED TEMPERATURE AND RATE-OF-RISE, NOTIFIER FST-951 SERIES.	FST-951	7270-0028.0502
[P]	ADDRESSABLE FIRE ALARM MANUAL PULL STATION, DUAL-ACTION WITH KEY RESET, NOTIFIER NBG-12LX SERIES.	NBG-12LX	7150-0028.0199
[R]	ADDRESSABLE REFLECTOR-TYPE LINEAR OPTICAL BEAM SMOKE DETECTOR, NOTIFIER FS-OSI-R1 SERIES.	FS-OSI-R1	7280-0028.0509
[M]	ADDRESSABLE MONITOR MODULE NOTIFIER FMM-1 SERIES.	FMM-1	7300-0028.0219
[C]	ADDRESSABLE CONTROL MODULE NOTIFIER FCM-1 SERIES.	FCM-1	7300-0028.0219
[SRL]	WALL MOUNTED MULTI-CANDELA SMOKE DETECTOR WITH FIELD SELECTABLE CANDELA SETTINGS OF 15, 30, 75 AND 110 CANDELA. SYSTEM SENSOR, SRL SERIES.	SRL	7125-1653.0504
[SCRL]	CEILING MOUNTED MULTI-CANDELA SMOKE DETECTOR WITH FIELD SELECTABLE CANDELA SETTINGS OF 15, 30, 75 AND 110 CANDELA. SYSTEM SENSOR, SCRL SERIES.	SCRL	7125-1653.0504
[SPSR]	WALL MOUNTED MULTI-CANDELA SPEAKER SMOKE DETECTOR WITH FIELD SELECTABLE CANDELA SETTINGS OF 15, 30, 75 & 110 CANDELA WITH VOLTAGE SETTING OF 70.7 VRMS AND POWER SETTINGS OF 1/2, 1 & 2 WATTS. SYSTEM SENSOR, SPSR SERIES.	SPSR	7320-1653.0505
[SPSCR]	CEILING MOUNTED MULTI-CANDELA SPEAKER SMOKE DETECTOR WITH FIELD SELECTABLE CANDELA SETTINGS OF 15, 30, 75 & 110 CANDELA WITH VOLTAGE SETTING OF 70.7 VRMS AND POWER SETTINGS OF 1/2, 1 & 2 WATTS. SYSTEM SENSOR, SPSCR SERIES.	SPSCR	7320-1653.0505
[SPRK]	WALL MOUNTED WEATHERPROOF FIRE ALARM/VOICE EVACUATION SPEAKER WITH VOLTAGE SETTING OF 70.7 VRMS AND POWER SETTINGS OF 1/2, 1 & 2 WATTS. SYSTEM SENSOR, SPRK SERIES.	SPRK	7320-1653.0201
[EOL]	END OF LINE DEVICE.		

- ### FIRE ALARM GENERAL NOTES
- WIRING MUST BE LISTED FOR USE AS REQUIRED BY TITLE 24/CEC, ARTICLE 760.
 - WIRE USED IN WET LOCATIONS SHALL BE OF AN APPROVED TYPE IN ACCORDANCE WITH 3-310-8, T24/CEC (I.E. THHW OR EQUAL).
 - UNDER GROUND AND EXTERIOR CONDUITS TO HAVE WATERTIGHT FITTINGS AND WIRES APPROVED FOR WET LOCATION.
 - ALL CONDUCTORS SHALL BE ROUTED IN CONDUIT UNLESS SPECIALLY NOTED OTHERWISE ON PLANS. MINIMUM CONDUIT SIZE SHALL BE 3/4".
 - 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.
 - 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.
 - ALL DEVICES SHALL BE "CSFM" LISTED.
 - EXTERIOR DEVICES SHALL BE LISTED FOR EXTERIOR USE BY "CSFM".
 - AUDIBLE FIRE ALARM SOUND LEVEL SHALL BE AT LEAST 15DBA ABOVE THE AVERAGE SOUND LEVEL.
 - 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.
 - 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.
 - 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.
 - 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.
 - POWER SERVICE SHALL BE ON A DEDICATED, 120V BRANCH CIRCUIT, WITH A RED MARKING AND IDENTIFIED AS "FIRE ALARM CIRCUIT CONTROL."
 - 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 UJFX OR UJUS BY UNDERWRITERS LABORATORY OR SHALL MEET THE REQUIREMENTS OF FACTORY MUTUAL RESEARCH APPROVAL STANDARD 3011.
 - EXISTING FIELD DEVICES AND FACP SHALL REMAIN IN PLACE UNTIL NEW FIELD DEVICES ARE IN PLACE AND NEW WIRING HAS BEEN HOMERAN TO NEW LOCATION OF FACP. COORDINATE THE RELOCATION OF THE FACP TO MINIMIZE THE DOWN TIME OF FIRE ALARM SYSTEM. CONTRACTOR SHALL COORDINATE WITH SCHOOL DISTRICT TO PROVIDE AN APPROVED 24 HOUR FIRE WATCH UNTIL NEW FIRE ALARM SYSTEM IS OPERATIONAL.

- ### GENERAL CONSTRUCTION NOTES
- CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE CODES AND REGULATIONS. MATERIALS AND EQUIPMENT SHALL BE U.L. LISTED AND LABELED FOR THE APPLICATION.
 - THE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL PERMITS, LICENSES AND INSPECTION FEES REQUIRED BY THIS CONTRACT WORK.
 - 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.
 - 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.
 - 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.
 - 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.
 - CONTRACTOR SHALL PROVIDE TO THE ARCHITECT A CONSTRUCTION SCHEDULE OF ELECTRICAL WORK. THE CONSTRUCTION SCHEDULE SHALL IDENTIFY ALL SIGNIFICANT MILESTONES WITH COMPLETION DATES.
 - 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.
 - CONTRACTOR SHALL BE RESPONSIBLE FOR PAINTING ALL EXPOSED CONDUITS AND ELECTRICAL EQUIPMENT. REFER TO ARCHITECTS PAINTING SECTION FOR REQUIREMENTS.
 - ALL ELECTRICAL EQUIPMENT INSTALLED OUTDOORS SHALL BE WEATHERPROOF. EXTERIOR CONDUITS RUN INTO BUILDINGS SHALL BE INSTALLED WITH FLASHING, CALKED AND SEALED. CONDUITS FOR EXTERIOR ELECTRICAL DEVICES SHALL BE RUN INSIDE BUILDING UNLESS OTHERWISE NOTED ON DRAWINGS.
 - ALL CONDUITS UNLESS OTHERWISE NOTED ON DRAWINGS SHALL HAVE 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.
 - ALL BRANCH CIRCUITS SHALL HAVE INDIVIDUAL NEUTRALS. SHARED NEUTRALS ON MULTIWIRE CIRCUITS IS NOT ALLOWED.
 - COORDINATE ALL CONDUIT RUNS, ELECTRICAL EQUIPMENT AND PANELS WITH ALL OTHER WORK TO AVOID CONFLICTS.
 - CONTRACTOR SHALL PROVIDE IN EVERY NEW EMPTY CONDUIT A DRAW STRING FOR USE IN FUTURE CONSTRUCTION.
 - 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.
 - 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.
 - EXTENSION RINGS OR RESET BOXES TO BE FLUSH WITH NEW WALL THICKNESS.
 - 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. DAMAGE TO DAMAGED UNDERGROUND SYSTEMS SHALL BE TO THE OWNERS SATISFACTION WITHOUT EXTRA EXPENSE TO THE OWNER.
 - 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.
 - 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.
 - 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 MILLIONS, 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.

SYMBOLS & ABBREVIATIONS

SYMBOLS

[M]	MANUAL PULL STATION	[BELL]	BELL (GONG)
[S]	STROBE ONLY	[FACP]	FIRE ALARM CONTROL PANEL
[C]	STROBE ONLY (CEILING MOUNTED)	[RPS]	REMOTE POWER SUPPLY
[SPEAKER]	SPEAKER ONLY	[AMP]	DIGITAL AUDIO AMPLIFIER
[MH]	MINI HORN	[EOL]	END OF LINE
[S/S]	SPEAKERS/STROBE	[JUNCTION]	JUNCTION BOX - CEILING/WALL MOUNTED, SIZE PER CODE, TAPE AND TAG WIRES
[S/S]	SPEAKERS/STROBE (CEILING MOUNTED)	[PB]	PULLBOX
[CS]	CHIME/STROBE	[CONDUIT]	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.
[H]	HEAT DETECTOR	[CONDUIT - EXISTING]	CONDUIT - EXISTING
[A]	HEAT DETECTOR (ABOVE ACCESSIBLE CEILING)	[CONDUIT - IN OR BELOW FLOOR]	CONDUIT - IN OR BELOW FLOOR, 3/4" MIN.
[D]	DUCT SMOKE DETECTOR	[CONDUIT CONTINUATION]	CONDUIT CONTINUATION.
[TS]	TAMPER SWITCH	[R]	ROOM NUMBER.
[FS]	FLOW SWITCH	[2]	SHEET NO. REFERENCE SYMBOL. SEE ASSOCIATED NOTE ON SAME SHEET.
[PIV]	POST INDICATING VALVE	[E1]	DETAIL OR SECTION DESIGNATION.

ABBREVIATIONS

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

TYPICAL NOME NENCLATURE

"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.

(DSA STAMP AREA)

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REGISTERED ARCHITECT
 MARK C. FINNEY
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 EXPIRES 9/30/20

REGISTERED PROFESSIONAL ENGINEER
 NAJIB ANWARY
 NO. E21045
 EXP. 3/31/23

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THESE PLANS AND SPECIFICATIONS HAVE BEEN PREPARED BY THE ARCHITECT AND ENGINEER AND ARE TO BE USED ONLY FOR THE PROJECT AND SITE SPECIFICALLY IDENTIFIED HEREIN. THE ARCHITECT AND ENGINEER SHALL NOT BE RESPONSIBLE FOR ANY OTHER USE OF THESE PLANS AND SPECIFICATIONS WITHOUT THE WRITTEN CONSENT OF THE ARCHITECT AND ENGINEER. THE ARCHITECT AND ENGINEER SHALL NOT BE RESPONSIBLE FOR ANY DAMAGE TO PERSONS OR PROPERTY ARISING FROM THE USE OF THESE PLANS AND SPECIFICATIONS WITHOUT THE WRITTEN CONSENT OF THE ARCHITECT AND ENGINEER. THE ARCHITECT AND ENGINEER SHALL NOT BE RESPONSIBLE FOR ANY DAMAGE TO PERSONS OR PROPERTY ARISING FROM THE USE OF THESE PLANS AND SPECIFICATIONS WITHOUT THE WRITTEN CONSENT OF THE ARCHITECT AND ENGINEER.

FIRE ALARM SYSTEM OPERATIONAL MATRIX

CAUSE	ALARM				TROUBLE				SUPERVISORY				MISC.				
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	
SMOKE DETECTORS	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
HEAT DETECTORS	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
FLOW SWITCH	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
TAMPER SWITCH	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
SYSTEM RESET	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
SIGNAL SILENCE	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
AC POWER FAILURE	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
CARBON MONOXIDE	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
FIRE ALARM TROUBLE (OPEN, SHORTS, OR GROUNDS) ON INITIATION OR SIGNALING CIRCUITS	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*

SHEET INDEX

FA0.1	FIRE ALARM SYMBOLS, ABBREVIATIONS, EQUIPMENT LIST, OPERATIONAL MATRIX, DETAILS & NOTES.
FA0.2	FIRE ALARM DETAILS.
FA1.1	FIRE ALARM RISER DIAGRAM.
FA1.2	FIRE ALARM RISER DIAGRAM.
FA1.3	FIRE ALARM BATTERY & VOLTAGE DROP CALCULATIONS.
FA1.4	FIRE ALARM BATTERY & VOLTAGE DROP CALCULATIONS.
FA2.1	FIRE ALARM SITE PLAN.
FA3.1	FIRE ALARM DEMOLITION PLAN.
FA4.1	FIRE ALARM PLAN - BUILDINGS A, B, C, D, E, G & H.
FA4.2	FIRE ALARM PLAN - BUILDINGS J, R1 & R2.
FA4.3	FIRE ALARM PLAN - BUILDINGS R3, R4, R5, R6, R7 & R8.
FA4.4	FIRE ALARM PLAN - BUILDING R9 & R10.

PROJECT DESCRIPTION

SCOPE OF WORK:
 FIRE ALARM SYSTEM REPLACEMENT FOR EXISTING CAMPUS TO MEET CURRENT CODE REQUIREMENTS. THE INTENT OF THE PROJECT IS TO REPLACE EXISTING FIRE ALARM SYSTEM COMPLETE.

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

FIRE ALARM SYSTEM DESIGN BY:
 NAJIB ANWARY

EQUIPMENT ANCHORAGE

M/E/P COMPONENT ANCHORAGE NOTES:

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.1.25 AND ASCE 7-16 CHAPTER 13, 26 & 30:

- ALL PERMANENT EQUIPMENT AND COMPONENTS.
- 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.
- 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.

PIPING, DUCTWORK AND ELECTRICAL DISTRIBUTION SYSTEM BRACING NOTE

PIPING, DUCTWORK AND ELECTRICAL DISTRIBUTION SYSTEMS SHALL BE BRACED TO COMPLY WITH THE FORCES AND DISPLACEMENTS PRESCRIBED IN ASCE 7-16 SECTION 13.3 AS DEFINED IN ASCE 7-16 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 JOB SITE 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

CODES:

- 2019 CALIFORNIA ADMINISTRATIVE CODE C.C.R., TITLE 24, PART 1.
- 2019 CALIFORNIA BUILDING CODE (CBC) C.C.R., TITLE 24, VOL. 1 & 2 BASED ON THE 2018 INTERNATIONAL BUILDING CODE (IBC) WITH CALIFORNIA AMENDMENTS.
- 2019 CALIFORNIA RESIDENTIAL CODE C.C.R., TITLE 24, PART 2.5 BASED ON THE 2018 INTERNATIONAL RESIDENTIAL CODE WITH CALIFORNIA AMENDMENTS.
- 2019 CALIFORNIA ELECTRICAL CODE (CEC) C.C.R., TITLE 24, PART 3 BASED ON THE 2017 NATIONAL ELECTRICAL CODE (NEC) WITH CALIFORNIA AMENDMENTS.
- 2019 CALIFORNIA MECHANICAL CODE (CMC) C.C.R., TITLE 24, PART 4 BASED ON THE 2018 UNIFORM MECHANICAL CODE (UMC) WITH CALIFORNIA AMENDMENTS.
- 2019 CALIFORNIA PLUMBING CODE (CPC) C.C.R., TITLE 24, PART 5 BASED ON THE 2018 UNIFORM PLUMBING CODE (UPC) WITH CALIFORNIA AMENDMENTS.
- 2019 CALIFORNIA ENERGY CODE C.C.R., TITLE 24, PART 6.
- 2019 CALIFORNIA FIRE CODE (CFC) C.C.R., TITLE 24, PART 9 BASED ON THE 2018 INTERNATIONAL FIRE CODE (IFC) WITH CALIFORNIA AMENDMENTS.
- 2019 CALIFORNIA GREEN BUILDING STANDARDS CODE C.C.R., TITLE 24, PART 11.
- 2019 CALIFORNIA REFERENCED STANDARDS CODE C.C.R., TITLE 24, PART 12.
- TITLE 19 C.C.R., PUBLIC SAFETY, STATE FIRE MARSHAL REGULATIONS.
- NATIONAL FIRE ALARM CODE (NFPA 72) 2016.

STANDARDS:

- AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)
- ELECTRONICS INDUSTRIES ASSOCIATION (EIA)
- INSTITUTE OF ELECTRICAL AND ELECTRONIC ENGINEERS (IEEE)
- NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION (NEMA)
- NATIONAL ELECTRICAL TESTING ASSOCIATION (NETA)
- UNDERWRITER LABORATORIES (UL)
- CALIFORNIA OCCUPATIONAL SAFETY AND HEALTH ACT STANDARDS (CAL/OSHA)
- NATIONAL FIRE PROTECTION ASSOCIATION, INSTALLATION OF CARBON MONOXIDE (NFPA 720)

FIRE ALARM SYMBOLS, ABBREVIATIONS, EQUIPMENT LIST, OPERATIONAL MATRIX, DETAILS & NOTES

CAMPUS-WIDE FIRE ALARM REPLACEMENT
 MOHR ELEMENTARY SCHOOL
 3300 DENNIS DRIVE, PLEASANTON, CA 94588
 PLEASANTON UNIFIED SCHOOL DISTRICT

REVISIONS

NO.	ITEM	DATE

DRAWN BY: CADD
 CHECKED BY: MB
 SFA JOB NO: 21081
 DATE: X/XX/2021

FA0.1

(DSA STAMP AREA)



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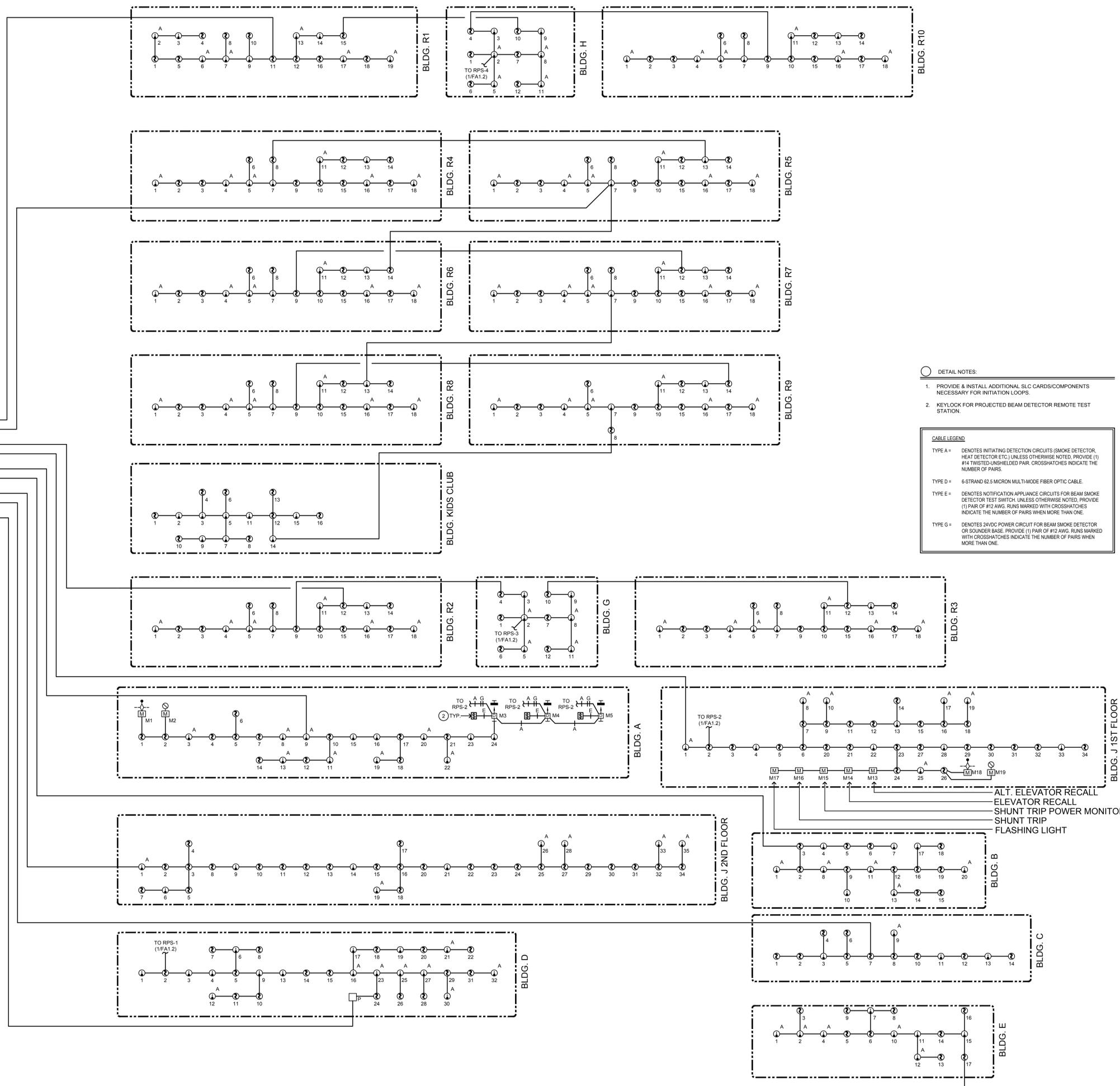
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FIRE ALARM RISER DIAGRAM
CAMPUS-WIDE FIRE ALARM REPLACEMENT
MOHR ELEMENTARY SCHOOL
3300 DENNIS DRIVE, PLEASANTON, CA 94588
PLEASANTON UNIFIED SCHOOL DISTRICT

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FA1.1



- DETAIL NOTES:
- PROVIDE & INSTALL ADDITIONAL SLC CARDS/COMPONENTS NECESSARY FOR INITIATION LOOPS.
 - KEYLOCK FOR PROJECTED BEAM DETECTOR REMOTE TEST STATION.

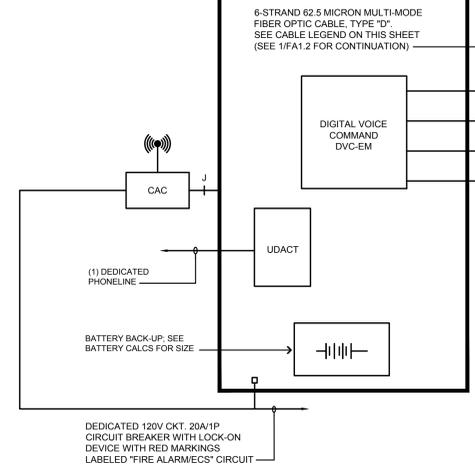
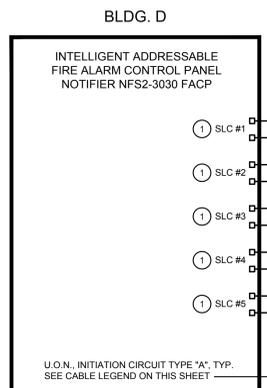
CABLE LEGEND

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.

TYPE D = 6-STRAND 62.5 MICRON MULTI-MODE FIBER OPTIC CABLE.

TYPE E = DENOTES NOTIFICATION APPLIANCE CIRCUITS FOR BEAM SMOKE DETECTOR TEST SWITCH UNLESS OTHERWISE NOTED. PROVIDE (1) PAIR OF #12 AWG. RUNS MARKED WITH CROSSHATCHES INDICATE THE NUMBER OF PAIRS WHEN MORE THAN ONE.

TYPE G = DENOTES 24VDC POWER CIRCUIT FOR BEAM SMOKE DETECTOR OR SOUNDER BASE. PROVIDE (1) PAIR OF #12 AWG. RUNS MARKED WITH CROSSHATCHES INDICATE THE NUMBER OF PAIRS WHEN MORE THAN ONE.



1 FIRE ALARM RISER DIAGRAM
NO SCALE

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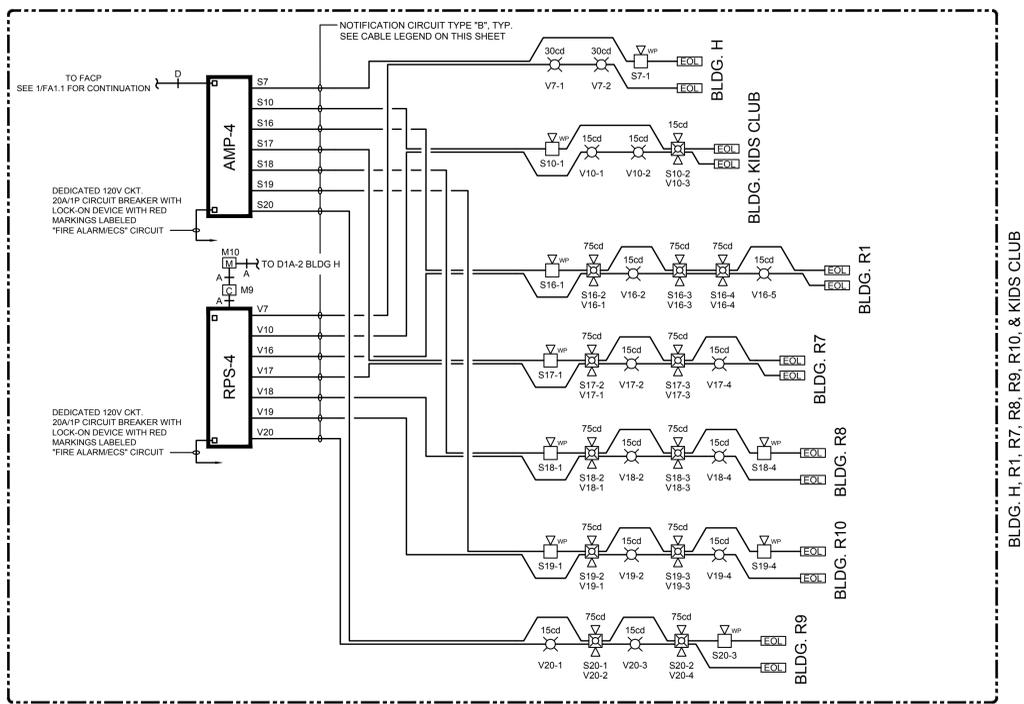
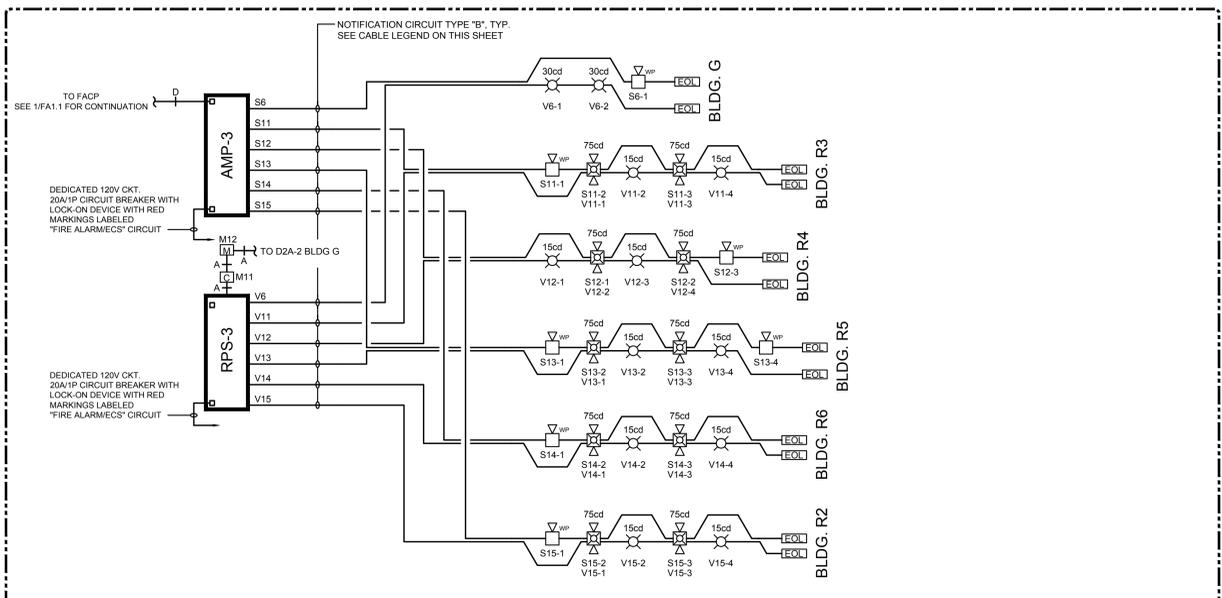
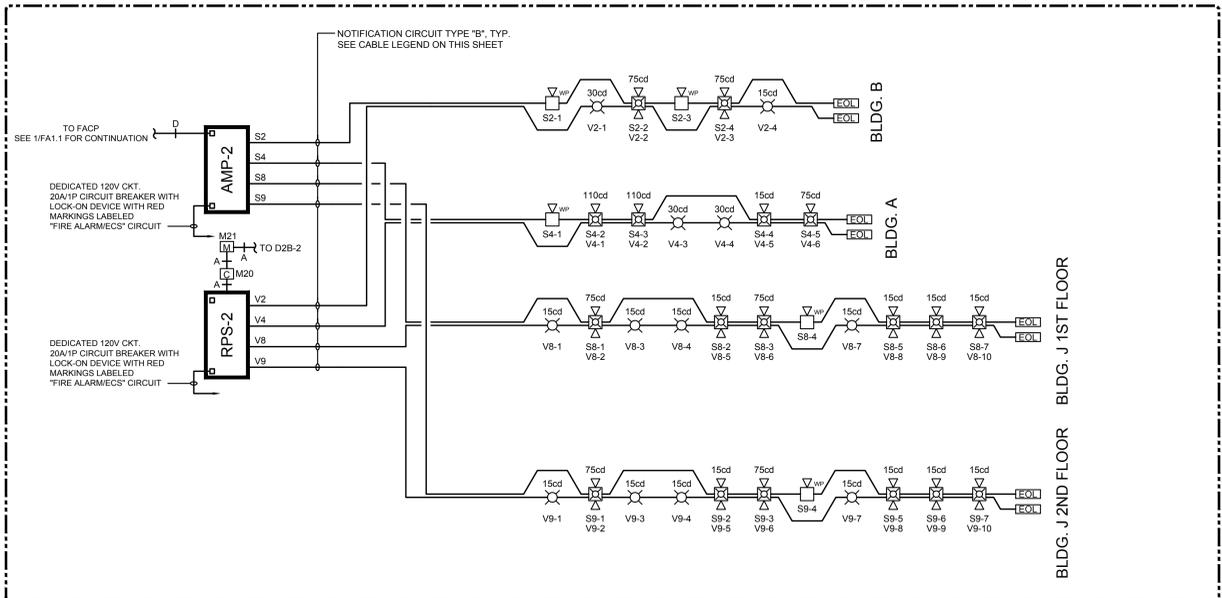
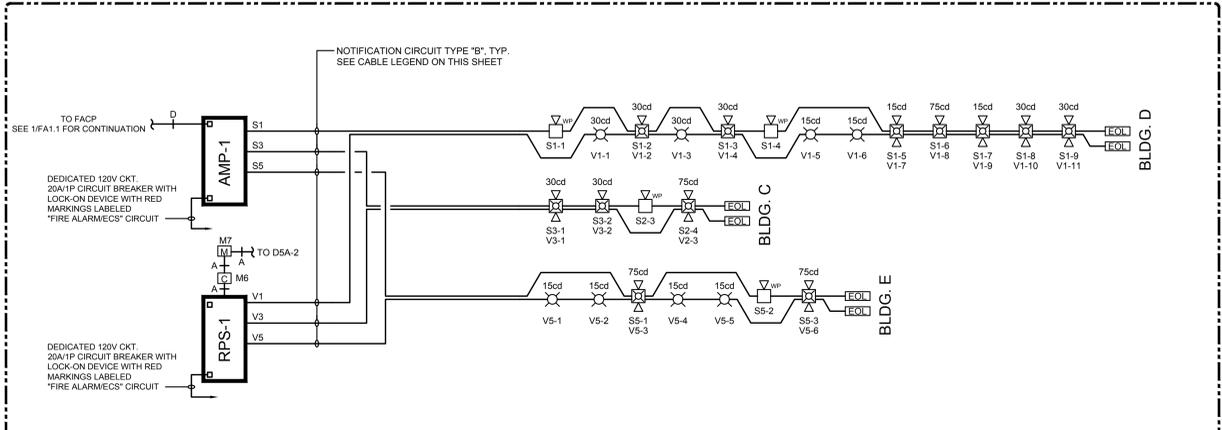


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FIRE ALARM RISER DIAGRAM CAMPUS-WIDE FIRE ALARM REPLACEMENT MOHR ELEMENTARY SCHOOL 3300 DENNIS DRIVE, PLEASANTON, CA 94588 PLEASANTON UNIFIED SCHOOL DISTRICT

REVISIONS table with columns NO., ITEM, DATE

DRAWN BY: CADD CHECKED BY: MB SFA JOB NO: 21081 DATE: X/XX/2021



CABLE LEGEND table with entries for TYPE A (Detection Circuits), TYPE B (Notification Circuits), and TYPE D (Fiber Optic Cable).



- ### SHEET NOTES
1. PROVIDE & INSTALL 2" C. FOR FIRE ALARM CABLES.
 2. PROVIDE & INSTALL IN-GRADE CHRISTY #N16 PULL BOX, WITH LID LABELED "FIRE ALARM".
 3. PROVIDE & INSTALL (2) 2" C. FOR FIRE ALARM CABLES.

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.

TYPE B = DENOTES NOTIFICATION APPLIANCE CIRCUITS (HORN, STROBES, BELL ETC.) UNLESS OTHERWISE NOTED, PROVIDE (1) PAIR OF #12 AWG. CROSSHATCHES INDICATE THE NUMBER OF PAIRS.

TYPE D = 6 STRAND 50.5 MICRON MULTI-MODE FIBER OPTIC CABLE, SUITABLE FOR UNDERGROUND USE.

GENERAL NOTES

A. CONTRACTOR SHALL LOCATE ALL (E) UNDERGROUND UTILITIES PRIOR TO TRENCHING AND TAKE CAUTION TO AVOID DAMAGE DURING TRENCHING. HAND TRENCH IF NECESSARY. CONTRACTOR SHALL MAKE ALL REPAIRS TO DAMAGED UTILITIES AT NO CHARGE TO OWNER.

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



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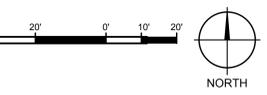
FIRE ALARM SITE PLAN

CAMPUS-WIDE FIRE ALARM REPLACEMENT
MOHR ELEMENTARY SCHOOL
 3300 DENNIS DRIVE, PLEASANTON, CA 94588
 PLEASANTON UNIFIED SCHOOL DISTRICT

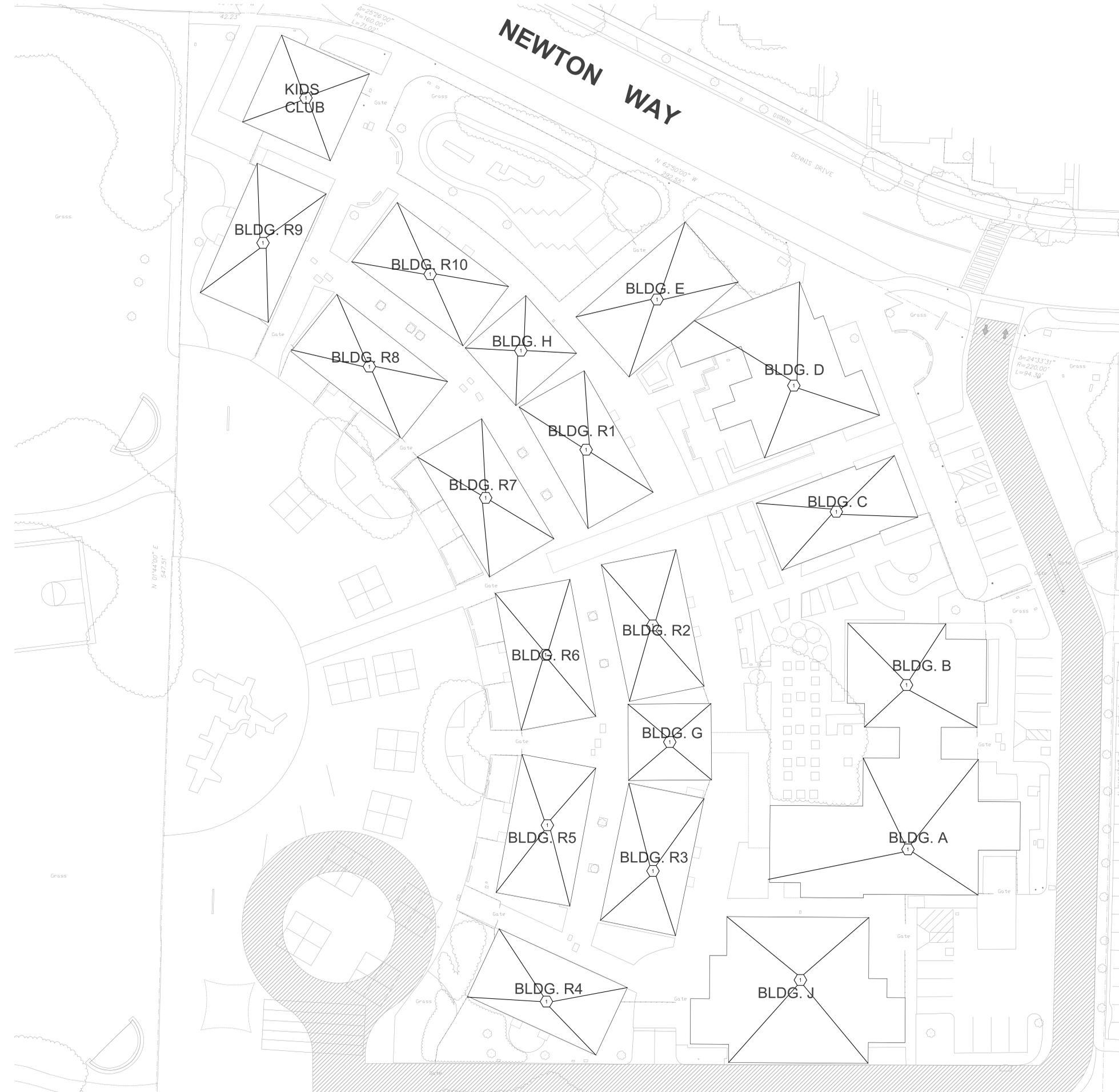
NO.	ITEM	DATE

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 CHECKED BY: MB
 SFA JOB NO: DATE:
 21081 XXX/2021

1 FIRE ALARM SITE PLAN
 SCALE: 1"=20'-0"



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- SHEET NOTES**
- PER GENERAL DEMOLITION NOTES; CONTRACTOR SHALL DEMOLISH ALL FIRE ALARM AT THIS BUILDING COMPLETE. CONTRACTOR SHALL PROVIDE & INSTALL BLANK COVER PLATE AT LOCATIONS WHERE DEVICES WERE REMOVED. PAINT/FINISH DEVICE COVERS TO MATCH EXISTING WALLS/CEILINGS. WHERE SURFACE RACEWAYS ARE EXISTING FOR FIRE ALARM CONNECTIONS, REMOVE COMPLETE & PAINT/FINISH WALLS/CEILINGS.
- GENERAL DEMOLITION NOTES**
- CONTRACTOR SHALL FIELD VERIFY EXTENT OF ELECTRICAL DEMOLITION AND QUANTITIES OF ELECTRICAL TO BE REMOVED AS DICTATED BY THE REQUIREMENTS OF THE PROJECT.
 - REMOVAL SHALL INCLUDE WIRING, RACEWAY, BOXES, SWITCHES, LIGHT FIXTURES, ETC. AS INDICATED ON THE PLANS AND AS REQUIRED BY THESE DEMOLITION NOTES.
 - RACEWAYS ASSOCIATED WITH ELECTRICAL BEING DEMOLISHED WHICH ARE CONCEALED IN EXISTING REMAINING WALLS MAY BE ABANDONED IN PLACE. REMOVE WIRING FROM CONDUIT.
 - RACEWAYS ASSOCIATED WITH ELECTRICAL BEING DEMOLISHED WHICH ARE EXPOSED SHALL BE REMOVED.
 - WHERE REMOVAL OF EQUIPMENT OR WIRING IS INDICATED, IT SHALL INCLUDE ALL ASSOCIATED WIRING BACK TO LAST ACTIVE REMAINING OUTLET, DEVICE, FIXTURE OR PANEL.
 - 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.
 - ELECTRICAL CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL REMOVED ELECTRICAL EQUIPMENT AND MATERIAL.
 - NO REMOVED EQUIPMENT OR MATERIAL SHALL BE REUSED AS PART OF NEW WORK, U.O.N.
 - EXISTING REMAINING CONCEALED RACEWAYS MAY BE REUSED FOR NEW WORK PROVIDED THEY MEET ALL REQUIREMENTS OF THE SPECIFICATION FOR NEW WORK.
 - 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.
 - 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.
 - 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.
 - 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.
 - 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.

(DSA STAMP AREA)

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REGISTERED ARCHITECT
 MARK C. FINNEY
 NO. C-24673
 STATE OF CALIFORNIA
 9-30-20

REGISTERED PROFESSIONAL ENGINEER
 KEVIN J. ANASTAS
 No. E21043
 Exp. 3/31/23
 ELECTRICAL
 STATE OF CALIFORNIA

AURUM CONSULTING ENGINEERS
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 Project No. 21-142.00
 60 Garden Court • Suite 210 • Monterey, CA 93940
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FIRE ALARM DEMOLITION PLAN

CAMPUS-WIDE FIRE ALARM REPLACEMENT
 MOHR ELEMENTARY SCHOOL
 3300 DENNIS DRIVE, PLEASANTON, CA 94588
 PLEASANTON UNIFIED SCHOOL DISTRICT

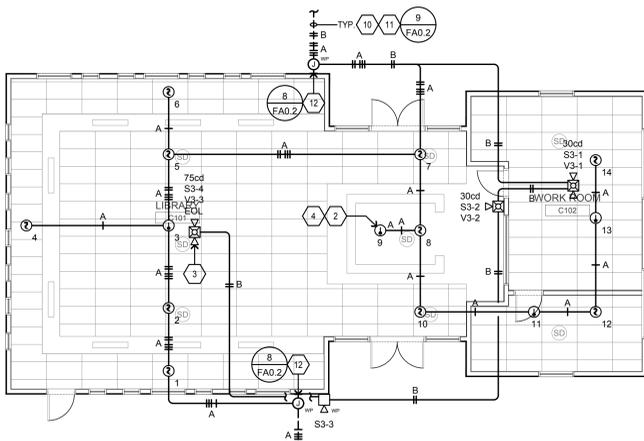
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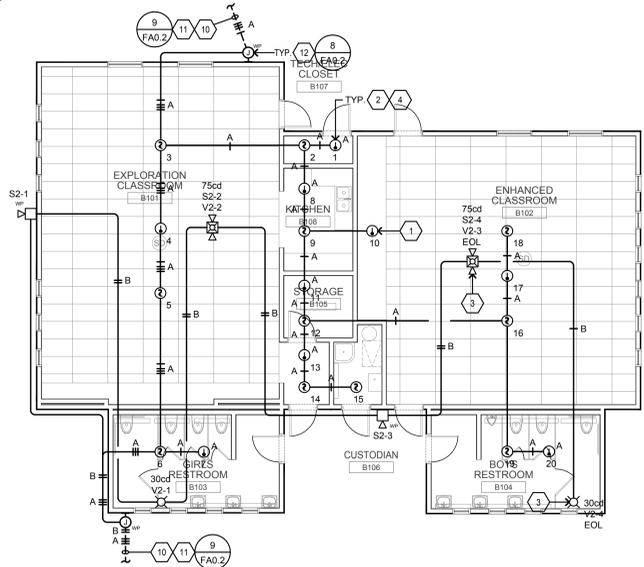
1 FIRE ALARM DEMOLITION PLAN
 SCALE: 1"=20'-0"



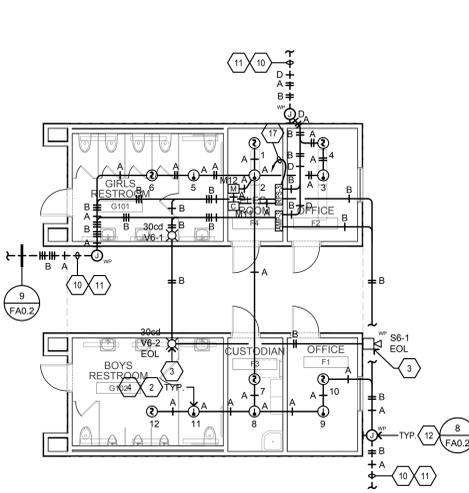
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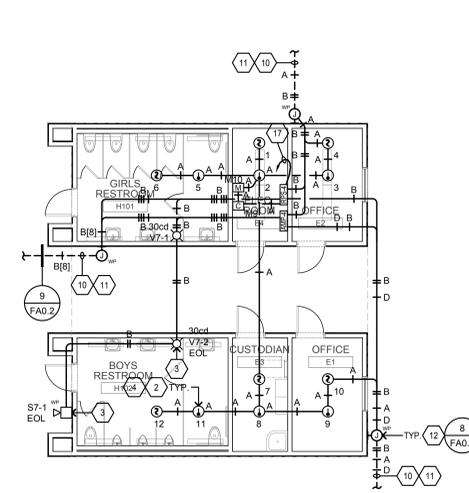
7 FIRE ALARM PLAN - BUILDING C
SCALE: 1/8"=1'-0"



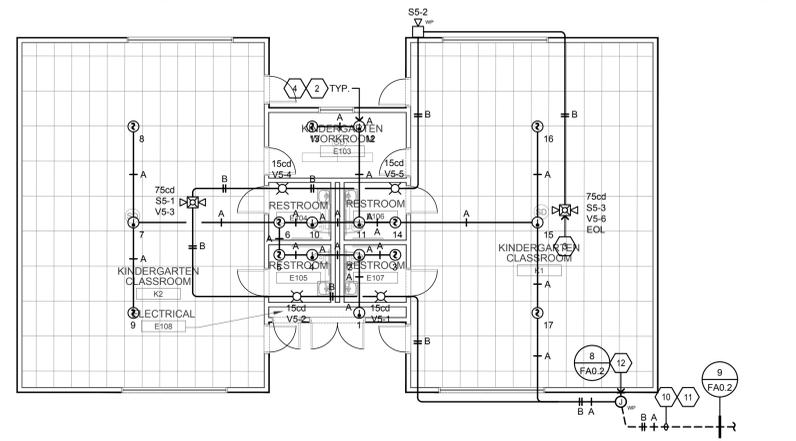
6 FIRE ALARM PLAN - BUILDING B
SCALE: 1/8"=1'-0"



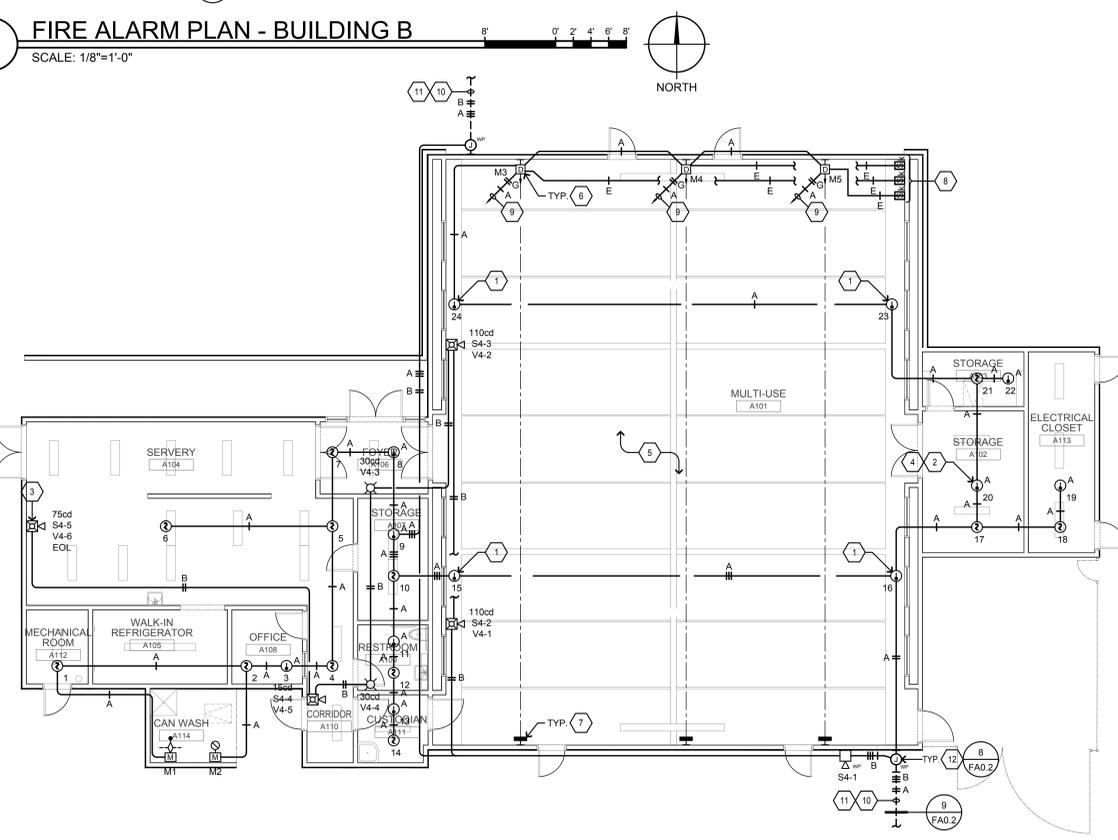
5 FIRE ALARM PLAN - BUILDING G
SCALE: 1/8"=1'-0"



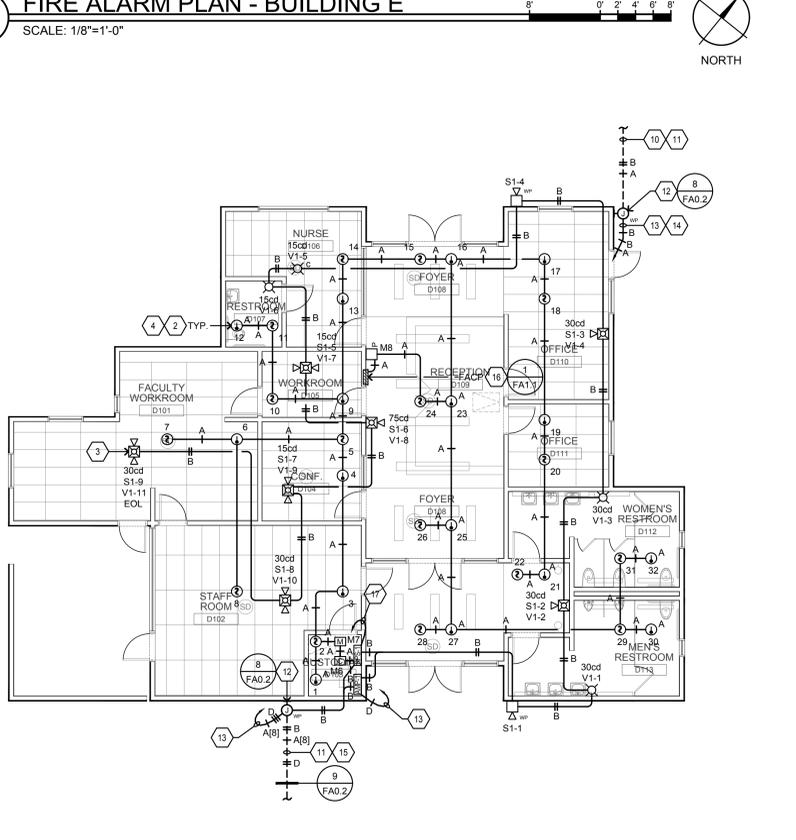
4 FIRE ALARM PLAN - BUILDING H
SCALE: 1/8"=1'-0"



3 FIRE ALARM PLAN - BUILDING E
SCALE: 1/8"=1'-0"



1 FIRE ALARM PLAN - BUILDING A
SCALE: 1/8"=1'-0"



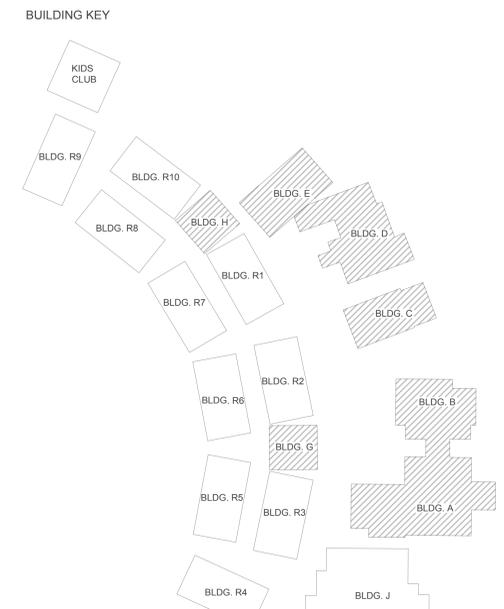
2 FIRE ALARM PLAN - BUILDING D
SCALE: 1/8"=1'-0"

SHEET NOTES

1. MOUNT TO STRUCTURE IN SOFFIT ABOVE ACCESSIBLE CEILING SPACE.
2. WHERE NECESSARY, PROVIDE & INSTALL ACCESS PANEL FOR HEAT DETECTOR ABOVE CEILING, 24" SQ. OPENING MINIMUM.
3. PROVIDE & INSTALL ENGRAVED LAMICOID NAMEPLATE ON FACE OF DEVICE READING "EOL".
4. UNLESS OTHERWISE NOTED, MOUNT TO STRUCTURE ABOVE ACCESSIBLE CEILING SPACE.
5. PROVIDE & INSTALL CSFM LISTED WIREGUARD FOR ALL DEVICES IN MULTI-USE ROOM.
6. BEAM SMOKE DETECTOR TRANSMITTER; INSTALL WITH DIRECT LINE OF SIGHT TO REFLECTOR PLATE. FIELD VERIFY MOUNTING HEIGHT.
7. REFLECTOR PLATE; INSTALL WITH DIRECT LINE OF SIGHT TO TRANSMITTER. FIELD VERIFY MOUNTING HEIGHT.
8. PROJECTED BEAM DETECTOR REMOTE TEST STATION WITH KEYLOCK. CONNECT TO TRANSMITTER PER MANUFACTURER'S INSTALLATION INSTRUCTIONS. MOUNT AT +44" TO TOP OF BOX. VERIFY EXACT LOCATION WITH ARCHITECT.
9. HOMERUN TO REMOTE POWER SUPPLY "RPS-2" LOCATED IN BUILDING J 1ST FLOOR. SEE 1/FA4.2.
10. PROVIDE & INSTALL 2"C. FOR FIRE ALARM CABLES.
11. SEE 1/FA2.1 FOR CONTINUATION.
12. PROVIDE & INSTALL 18" SQ. x 6" DEEP, NEMA 3R PULL CAN UP HIGH ON WALL.
13. HOMERUN TO FIRE ALARM CONTROL PANEL FACP LOCATED IN RECEPTION D109.
14. HOMERUN TO REMOTE POWER SUPPLY "RPS-1" AND DIGITAL AUDIO AMPLIFIER "AMP-1" LOCATED IN CUSTODIAN D103.
15. PROVIDE & INSTALL (2) 2"C. FOR FIRE ALARM CABLES.
16. SEMI-FLUSH FIRE ALARM CONTROL PANEL; CONTRACTOR SHALL CUT & PATCH WALL AS NECESSARY.
17. CIRCUIT VIA 1/2"C. #2 & #12 GND TO NEAREST ELECTRICAL PANEL; AT PANEL PROVIDE AND INSTALL 20 AMP, 1-POLE BREAKER WITH LOCK-ON DEVICE WITH RED MARKINGS LABELED "FIRE ALARMECS".

- GENERAL NOTES:**
- A. CONTRACTOR SHALL LOCATE ALL (E) UNDERGROUND UTILITIES PRIOR TO TRENCHING AND TAKE CAUTION TO AVOID DAMAGE DURING TRENCHING. HAND TRENCH IF NECESSARY. CONTRACTOR SHALL MAKE ALL REPAIRS TO DAMAGED UTILITIES AT NO CHARGE TO OWNER.
 - B. SEAL ALL EXTERIOR/INTERIOR BUILDING PENETRATIONS, CUT AND PATCH WALLS/CEILING FOR CONDUIT ROUTING AS NECESSARY. PAINT/FINISH EXPOSED CONDUITS/BOXES TO MATCH BUILDING FINISH. COORDINATE WITH FACILITIES MANAGER & ARCHITECT FOR EXACT REQUIREMENTS.
 - C. ALL INDOOR SPEAKERS/HORNS SHALL BE 0.5 WATTS RATED MINIMUM. ALL OUTDOOR SPEAKERS/HORNS SHALL BE 2 WATTS RATED MINIMUM.

- 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.
- TYPE B = DENOTES NOTIFICATION APPLIANCE CIRCUITS (HORN, STROBES, BELL ETC.) UNLESS OTHERWISE NOTED, PROVIDE (1) PAIR OF #12 AWG. CROSSHATCHES INDICATE THE NUMBER OF PAIRS.
- TYPE D = 6-STRAND 62.5 MICRON MULTI-MODE FIBER OPTIC CABLE, SUITABLE FOR UNDERGROUND USE.



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FIRE ALARM PLAN - BUILDING A, B, C, D, E, G & H

CAMPUS-WIDE FIRE ALARM REPLACEMENT
MOHR ELEMENTARY SCHOOL
3300 DENNIS DRIVE, PLEASANTON, CA 94588
PLEASANTON UNIFIED SCHOOL DISTRICT

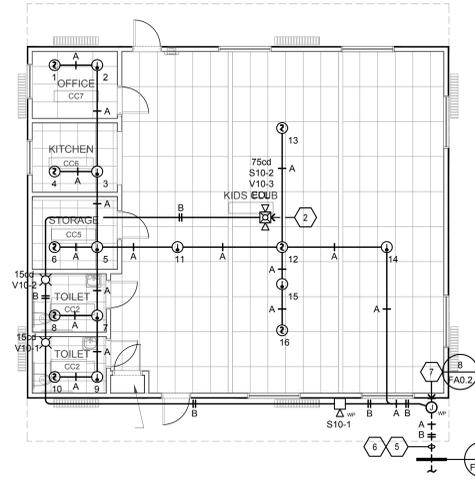
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- ### SHEET NOTES
- WHERE NECESSARY, PROVIDE & INSTALL ACCESS PANEL FOR HEAT DETECTOR ABOVE CEILING; 24" SQ. OPENING MINIMUM.
 - PROVIDE & INSTALL ENGRAVED LAMICOID NAMEPLATE ON FACE OF DEVICE READING "EOL".
 - UNLESS OTHERWISE NOTED, MOUNT TO STRUCTURE ABOVE ACCESSIBLE CEILING SPACE.
 - SEE FIRE ALARM RISER DIAGRAM, 1FA1.1, FOR MODULE DESIGNATIONS.
 - PROVIDE & INSTALL 2" C. FOR FIRE ALARM CABLES.
 - SEE 1FA2.1 FOR CONTINUATION.
 - PROVIDE & INSTALL 18" SQ. x 6" DEEP, NEMA 3R PULL CAN UP HIGH ON WALL.
 - SEE 2FA4.2 FOR CONTINUATION.
 - SEE 1FA4.2 FOR CONTINUATION.
 - HOMERUN TO REMOTE POWER SUPPLY "RPS-2" AND DIGITAL AUDIO AMPLIFIER "AMP-2" LOCATED IN ELECTRICAL ROOM 116.
 - CIRCUIT VIA 2" C. 2 #12 & 1 #12 GND TO NEAREST ELECTRICAL PANEL; AT PANEL PROVIDE AND INSTALL 20 AMP, 1-POLE BREAKER WITH LOCK-ON DEVICE WITH RED MARKINGS LABELED "FIRE ALARMECS".

- ### GENERAL NOTES
- CONTRACTOR SHALL LOCATE ALL (E) UNDERGROUND UTILITIES PRIOR TO TRENCHING AND TAKE CAUTION TO AVOID DAMAGE DURING TRENCHING; HAND TRENCH IF NECESSARY; CONTRACTOR SHALL MAKE ALL REPAIRS TO DAMAGED UTILITIES AT NO CHARGE TO OWNER.
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 - ALL INDOOR SPEAKERS/HORNS SHALL BE 0.5 WATTS RATED MINIMUM; ALL OUTDOOR SPEAKERS/HORNS SHALL BE 2 WATTS RATED MINIMUM.

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SHEET NOTES

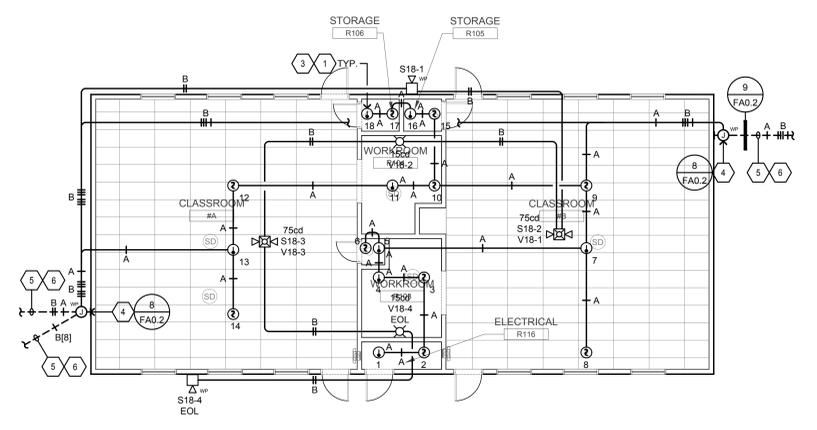
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- PROVIDE & INSTALL 2" C. FOR FIRE ALARM CABLES.
- SEE 1/FA2.1 FOR CONTINUATION.

GENERAL NOTES

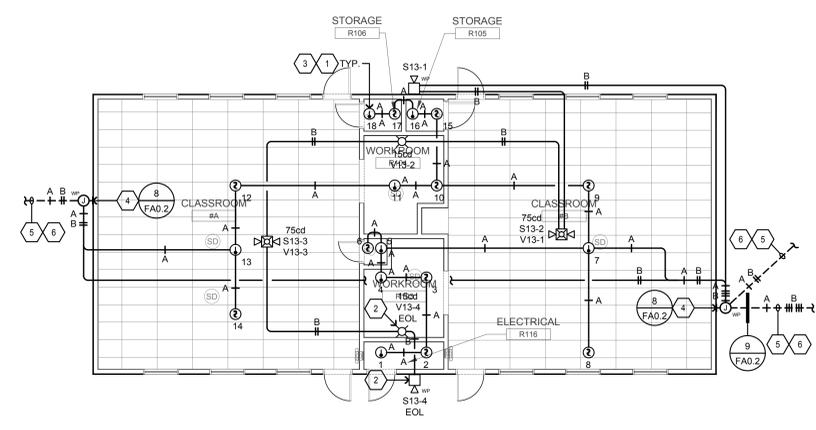
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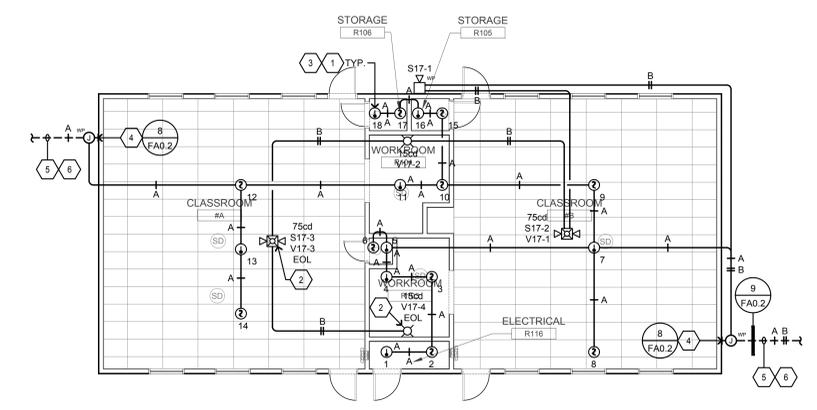
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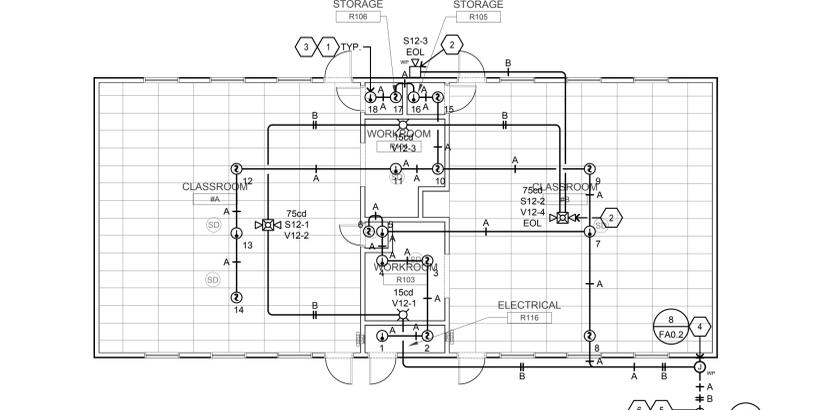
6 FIRE ALARM PLAN - BUILDING R6
SCALE: 1/8"=1'-0" NORTH



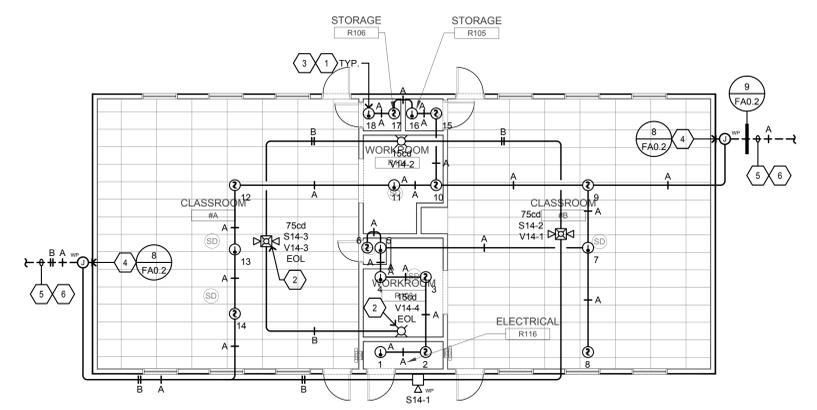
3 FIRE ALARM PLAN - BUILDING R5
SCALE: 1/8"=1'-0" NORTH



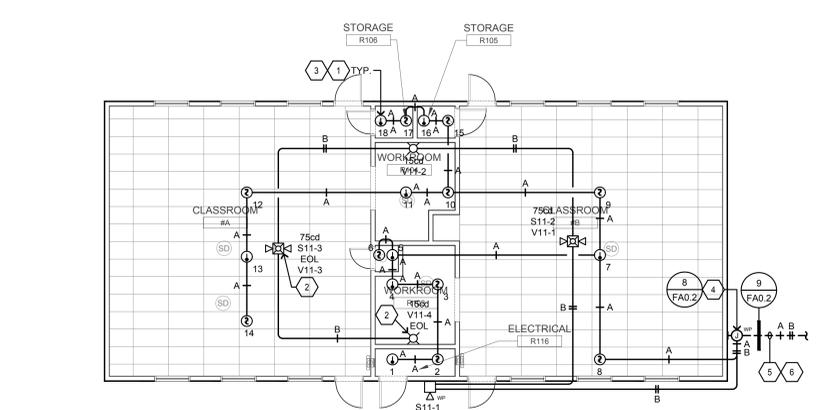
5 FIRE ALARM PLAN - BUILDING R7
SCALE: 1/8"=1'-0" NORTH



2 FIRE ALARM PLAN - BUILDING R4
SCALE: 1/8"=1'-0" NORTH

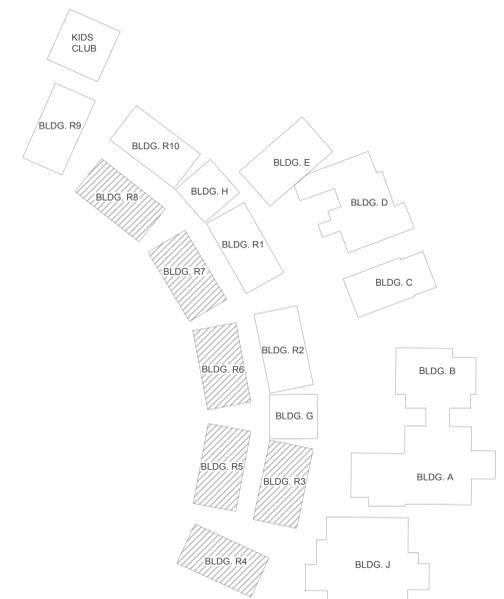


4 FIRE ALARM PLAN - BUILDING R8
SCALE: 1/8"=1'-0" NORTH



1 FIRE ALARM PLAN - BUILDING R3
SCALE: 1/8"=1'-0" NORTH

BUILDING KEY



(DSA STAMP AREA)

SUGIMURA FINNEY ARCHITECTS

SFA

2155 SOUTH BASCOM AVE.
SUITE 100
CAMPBELL, CA 95008
PHONE: 408.734.0100
FAX: 408.734.0100

REGISTERED ARCHITECT

MARK C. FINNEY

NO. C-24673

EXPIRES 9/30/2021

STATE OF CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER

MARK C. FINNEY

NO. E21043

EXP. 3/31/23

ELECTRICAL

STATE OF CALIFORNIA

AURUM CONSULTING ENGINEERS

MONTEREY BAY, INC.

Project No. 21-142.00

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FIRE ALARM PLAN - BUILDING R3, R4, R5, R6, R7 & R8

CAMPUS-WIDE FIRE ALARM REPLACEMENT MOHR ELEMENTARY SCHOOL

3300 DENNIS DRIVE, PLEASANTON, CA 94588

PLEASANTON UNIFIED SCHOOL DISTRICT

NO.	ITEM	DATE

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21081 X/XX/2021

FA4.3

SHEET NOTES

1. WHERE NECESSARY, PROVIDE & INSTALL ACCESS PANEL FOR HEAT DETECTOR ABOVE CEILING; 24" SQ. OPENING MINIMUM.
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5. PROVIDE & INSTALL 2"C. FOR FIRE ALARM CABLES.
6. SEE 1FA2.1 FOR CONTINUATION.

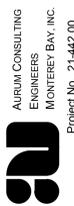
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(DSA STAMP AREA)



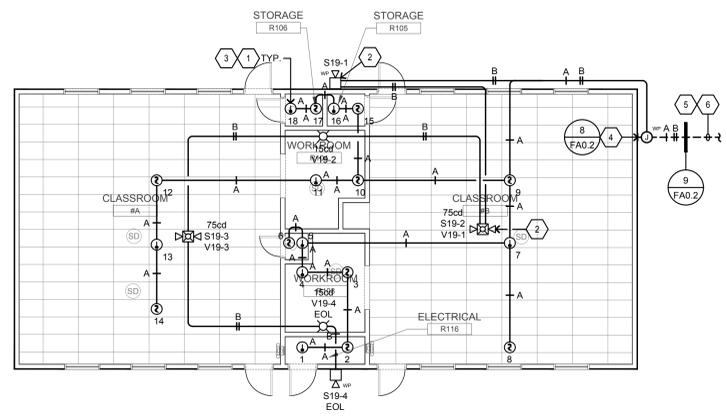
AURUM CONSULTING ENGINEERS
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FIRE ALARM PLAN - BUILDING R9 & R10
CAMPUS-WIDE FIRE ALARM REPLACEMENT
MOHR ELEMENTARY SCHOOL
3300 DENNIS DRIVE, PLEASANTON, CA 94588
PLEASANTON UNIFIED SCHOOL DISTRICT

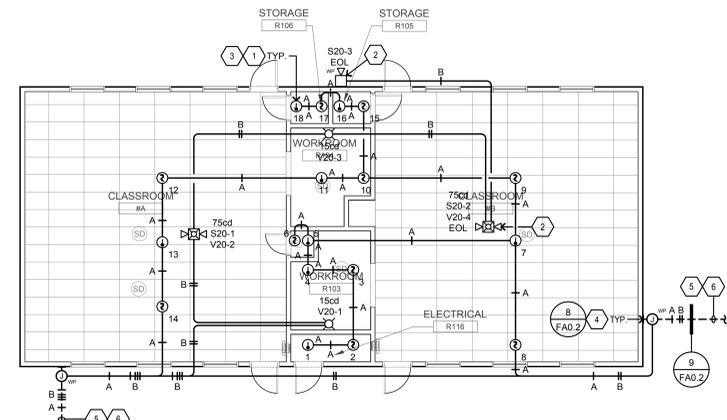
REVISIONS		
NO.	ITEM	DATE

DRAWN BY: CADD
CHECKED BY: MB
SFA JOB NO: 21081 DATE: X/XX/2021

FA4.4



2 FIRE ALARM PLAN - BUILDING R10
SCALE: 1/8"=1'-0"
NORTH



1 FIRE ALARM PLAN - BUILDING R9
SCALE: 1/8"=1'-0"
NORTH



VALLEY VIEWS ELEMENTARY SCHOOL CAMPUS WIDE FIRE ALARM REPLACEMENT

480 ADAMS WAY, PLEASANTON, CA 94566

PLEASANTON UNIFIED SCHOOL DISTRICT

DSA Test Mark - EPR Admin Change to "INCORPORATE"

(DSA STAMP AREA)



DSA FILE NUMBER 01-32
DSA APPLICATION NUMBER 01-119910
OPSC TRACKING NUMBER 75101-107

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 OWNERS REPRESENTATIVE FOR APPROVED LOCATION OF JOB SITE ACCESS, PARKING, AND LOCATION OF CONTRACTORS 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 1978 (OR THEREABOUTS) POSSIBILITY 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 FEES FOR ASSISTANCE TO OBTAIN 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 CONTRACTOR OR ANY SUBCONTRACTOR, SHALL BE THE RESPONSIBILITY OF SAID SUBCONTRACTOR.

CONSTRUCTION SCHEDULING
CONTRACTOR SHALL COORDINATE ALL CONSTRUCTION OPERATIONS WITH OWNERS 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; OPM 0062-13 SEISMIC BRACING AND SUPPORT SYSTEMS.

DRILLED-IN EXPANSION ANCHORS
WHEN INSTALLING DRILLED-IN ANCHORS ANCHOR 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 DETERIORATION 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. DETAILS 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
A.B.	ANCHOR BOLT	MFG.	MANUFACTURER
APPROX.	APPROXIMATELY	M.B.	MARKER BOARD
ARCH.	ARCHITECT	MATL.	MATERIAL
AC	ASPHALTIC CONCRETE	MAX.	MAXIMUM
@	BENCH MARK	MECH.	MECHANICAL
B.M.	BLOCKING BOARD	MTL.	METAL
BLKG.	BOTTOM	MIN.	MINIMUM
BD.	BUILDING	MISC.	MISCELLANEOUS
B.W.	BOTH WAYS	MTD.	MOUNTED
BOT.	BOTTOM	(N)	NEW
B.LDG.	BUILDING	NOM.	NOMINAL
B.U.R.	BUILT-UP ROOFING	N.I.C.	NOT IN CONTRACT
C.B.	CATCH BASIN	N.T.S.	NOT TO SCALE
C.L.	CEILING	NO. or #	NUMBER
CEM.	CEMENT	OCC.	OCCUPANT(CY) ON CENTER
C.C or O.C.	CENTER TO CENTER	OPNG.	OPENING
CER. TILE	CERAMIC TILE	OPP.	OPPOSITE
C.O.	CLEANOUT	O.S.H.	OPPOSITE HAND
C.O.T.G.	CLEANOUT TO GRADE	O.S.	OUTSIDE FACE OF STUD
CLR.	CLEAR	O.H.W.S.	OVAL HEAD WOOD SCREW
C.A.H.R.	CLEAR ALL HEART REDWOOD	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	P	PENNY (NAILS)
C.H.	CONSTRUCTION HEART	PLAS.	PLASTER
CONSTR. JOINT	CONSTRUCTION JOINT	PLYWD.	PLYWOOD
CONT.	CONTINUOUS	PLYV.C.	POLY VINYL CHLORIDE
CONTR.	CONTRACTOR	P.T.	PRESSURE TREATED
COUNTER	COUNTER	P.L.	PROPERTY LINE
COUNTER SUNK	COUNTER SUNK	R or RAD.	RADIUS
DET.	DETAIL	R.W.L.	RAIN WATER LEADER
Ø	DIAMETER	RWD./R.W.	REDWOOD
DIA.	DIMENSION	REINP.	REINFORCING
D.S.	DISABLED ACCESS	REINQ.	REINFORCED
DR.	DOOR	R.A.G.	RETURN AIR GRILLE
D.A.	DOWNSPOUT	R.E.	RM ELEVATION
DWG.	DRAWING	R.F.D.	ROOF DRAIN
D.F.	DRINKING FOUNTAIN and/or DOUGLAS FIR	RM.	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.	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
EX.	EXPANSION	S.M.S.	SHEET METAL SCREW
E.J.	EXPANSION JOINT	S.O.V.	SHUT OFF VALVE
EXP.	EXPOSED	SM.	SIMILAR
EXT.	EXTERIOR	S.C.	SOLID CORE
F.O.C.	FACE OF CONCRETE	SPEC.	SPECIFICATION
F.O.M.	FACE OF MASONRY	S.Q.	SQUARE
F.O.S.	FACE OF STUD	S.F.	SQUARE FEET
F.O.F.	FACE OF FINISH	STAG.	STAGGERED
FIN.	FINISH	STD.	STANDARD
F.F.	FINISHED FLOOR	S.S.	STAINLESS STEEL
F.S.	FINISH SLAB	STL.	STEEL
F.E.	FIRE EXTINGUISHER	STOR.	STORAGE
F.E.C.	FIRE EXTINGUISHER CABINET	STRUC.	STRUCTURAL
F.H.	FIRE HYDRANT	STRUC.	STRUCTURAL
F.H.M.S.	FLAT HEAD METAL SCREW	SUPPLY AIR GRILLE	SUPPLY AIR GRILLE
F.H.W.S.	FLAT HEAD WOOD SCREW	THRES.	THRESHOLD
FL. or FLR.	FLOOR	T&G	TONGUE & GROOVE
F.D.	FLOOR DRAIN	T.J.	TOOLED JOINT
FTG.	FOOTING	T.O.B.	TOP OF BEAM
FD.	FOUNDATION	T.O.C.	TOP OF CURB OR CONCRETE
GALV.	GALVANIZED	T.O.S.	TOP OF STEEL OR SHEATHING
G.I.	GALVANIZED IRON	T.O.W.	TOP OF WALK
GA.	GAUGE	TYR	TYPICAL
GL.	GLASS	U.O.N.	UNLESS OTHERWISE NOTED
GLU-LAM	GLUE-LAMINATED	U.O.S.	UNLESS OTHERWISE SHOWN
GRD.	GRADE	V.T.R.	VENT THROUGH ROOF
GYP. BD.	GYPSUM BOARD	VERT.	VERTICAL
HDW.	HARDWARE	V.G.	VERTICAL GRAIN
H.T.	HEIGHT	VERT.	VERTICAL
H.C.	HOLLOW CORE	V.C.T.	VINYL COMPOSITION TILE
H.M.	HOLLOW METAL	V.V.C.	VINYL WALL COVERING
HORIZ.	HORIZONTAL	V.O.I.P.	VOICE OVER INTERNET PROTOCOL
H.S.	HORSE BIRE	W.C.	WATER CLOSET
I.D.	INSIDE DIAMETER	W.H.	WATER HEATER
INSUL.	INSULATION	WP.	WATERPROOF
INT.	INTERIOR	W.R.	WATER RESISTANT
INV.	INVERT	W.W.M.	WELDED WIRE MESH
J.T.	JOINT	W.D.	WINDOW DIMENSION
J.H.	JOIST HANGER	W/	WITH
K.D.	KILN DRIED	W/O.	WITHOUT
WD.	WOOD	WOOD	WOOD

BUILDING CODES AND STANDARDS:

2019	CALIFORNIA ADMINISTRATIVE CODE, PART 1, TITLE 24, C.C.R.	
2019	CALIFORNIA BUILDING CODE (CBC), PART 2, TITLE 24, C.C.R.	
2019	(2018 INTERNATIONAL BUILDING CODE, VOLUMES 1 AND 2, WITH 2019 CALIFORNIA AMENDMENTS.)	
2019	CALIFORNIA ELECTRIC CODE (CEC), PART 3, TITLE 24, C.C.R.	
2019	(2018 NATIONAL ELECTRIC CODE WITH 2019 CALIFORNIA AMENDMENTS).	
2019	CALIFORNIA MECHANICAL CODE (CMC), PART 4, TITLE 24, C.C.R.	
2019	(2018 UNIFORM MECHANICAL CODE WITH 2019 CALIFORNIA AMENDMENTS).	
2019	CALIFORNIA PLUMBING CODE (CPC), PART 5, TITLE 24, C.C.R.	
2019	(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.	
2019	(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.	
2019	ASME A17.1 (W/ART. 1) IBCS A 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 (CA AMENDED)	2016 EDITION
NFPA 25	INSPECTION, TESTING AND MAINTENANCE OF WATER BASED FIRE PROTECTION SYSTEMS (CA AMENDED)	2013 CALIFORNIA EDITION
NFPA 72	NATIONAL FIRE ALARM CODE (CA AMENDED)	2016 EDITION
NFPA 80	SMOKE DETECTORS FOR 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 268	SMOKE DETECTORS FOR FIRE PROTECTIVE SIGNALING SYSTEMS	
UL 268A	SMOKE DETECTORS DUCT APPLICATIONS	1998/2003 EDITION
UL 300	FIRE TESTING OF FIRE EXTINGUISHING SYSTEMS FOR PROTECTION OF COMMERCIAL COOKING EQUIPMENT	2005 (R2010)
UL 305	PANIC HARDWARE	2012 EDITION
UL 464	AUDIBLE SIGNALING DEVICES FOR FIRE ALARM AND SIGNALING SYSTEMS, AND ACCESSORIES	
UL 521	HEAT DETECTORS FOR FIRE PROTECTIVE SIGNALING SYSTEMS	2003 EDITION
UL 864	CONTROL UNITS FOR FIRE PROTECTIVE SIGNALING SYSTEMS (W/ REVISIONS THROUGH DEC. 2014)	1999 EDITION
UL 1971	SIGNALING DEVICES FOR THE HEARING IMPAIRED	2002 EDITION

SYMBOLS LEGEND

	SECTION / EXTERIOR ELEVATION
	SECTION IDENTIFICATION SHEET WHERE SECTION IS DRAWN
	DETAIL
	DETAIL IDENTIFICATION SHEET WHERE DETAIL IS DRAWN
	INTERIOR ELEVATION
	INDICATES ELEVATION SHOWN SHEET WHERE ELEVATION IS DRAWN
	CLASSROOM ROOM IDENTIFICATION
	ROOM NAME ROOM NUMBER
	SPECIFIC NOTE
	DOOR DESIGNATION
	WINDOW DESIGNATION
	ADDENDUM REVISION
	CLOUD AROUND REVISION
	CCD REVISION
	CLOUD AROUND REVISION
	FINISH NUMBER
	SEE SPECS AND I.E. DWGS.
	EQUIPMENT LETTER
	SEE EQUIPMENT SCHEDULE
	CEILING HEIGHT
	WALL TYPE
	MATCH LINE
	ELEV. HEIGHT
	CENTER OF
	FACE OF

PROJECT SUMMARY

REPLACING EXISTING FIRE ALARM SYSTEM WITH NEW ADDRESSABLE FIRE ALARM AND EM/VOICE EVACUATION SYSTEM ACROSS ENTIRE SITE.

THERE ARE NO DEFERRED SUBMITTALS FOR THIS PROJECT.

DESIGN TEAM

ARCHITECT
SUGIMURA FINNEY ARCHITECTS
2155 SOUTH BASCOM AVENUE SUITE 200
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(408) 377-6066 FAX
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ELECTRICAL AND FIRE ALARM ENGINEER
AURUM CONSULTING ENGINEERS
1798 TECHNOLOGY DRIVE, SUITE 242
SAN JOSE, CA 95110
(408) 564-7925

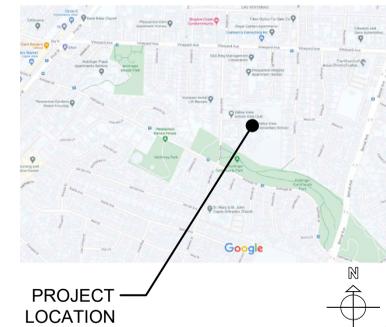
DRAWING INDEX

T1	TITLE SHEET
T3	SITE PLAN - FIRE LIFE SAFETY

FIRE ALARM	
FA0.1	FIRE ALARM SYMBOLS, ABBRE., EQUIPMENT LIST, OPERATIONAL MATRIX, DETAILS & NOTES
FA1.1	FIRE ALARM RISER DIAGRAM
FA1.2	BATTERY & VOLTAGE DROP CALCULATIONS
FA2.1	FIRE ALARM DEMOLITION PLAN
FA3.1	FIRE ALARM SITE PLAN
FA4.1	FIRE ALARM PLANS - BUILDINGS A & B
FA4.2	FIRE ALARM PLANS - BUILDINGS C & D
FA4.3	FIRE ALARM PLANS - BUILDINGS E, F, G, H, J & CC
FA5.1	FIRE ALARM DETAILS

SHEET TOTAL = 11

VICINITY MAP



PROJECT LOCATION

STATEMENT OF GENERAL CONFORMANCE

FOR ARCHITECTS / ENGINEERS WHO UTILIZE PLANS, INCLUDING BUT NOT LIMITED TO SHOP DRAWINGS, PREPARED BY OTHER LICENSED DESIGN PROFESSIONALS AND / OR OTHER CONSULTANTS

APPLICATION NO.: 01-119910 FILE NO.: 01-32
 THE DRAWINGS OR SHEETS LISTED ON THE COVER OR INDEX SHEET
 THIS DRAWING, PAGE OF SPECIFICATIONS / CALCULATIONS

HAVE BEEN PREPARED BY OTHER DESIGN PROFESSIONALS OR CONSULTANTS WHO ARE LICENSED AND / OR AUTHORIZED TO PREPARE SUCH DRAWINGS IN THIS STATE. IT HAS BEEN EXAMINED BY ME FOR:

- DESIGN INTENT AND APPEARS TO MEET THE APPROPRIATE REQUIREMENTS OF TITLE 24, CALIFORNIA CODE OF REGULATIONS AND THE PROJECT SPECIFICATIONS PREPARED BY ME, AND
- COORDINATION WITH MY PLANS AND SPECIFICATIONS AND IS ACCEPTABLE FOR INCORPORATION INTO THE CONSTRUCTION OF THIS PROJECT.

THE STATEMENT OF GENERAL CONFORMANCE "SHALL NOT BE CONSTRUED AS RELIEVING ME OF MY RIGHTS, DUTIES, AND RESPONSIBILITIES UNDER SECTIONS 4302 AND 4303 OF THE EDUCATION CODE AND SECTIONS 4-336, 4-341 AND 4-344" OF TITLE 24, PART 1, (TITLE 24, PART 1, SECTION 4-317(B))

I FIND THAT:
 ALL DRAWINGS OR SHEETS LISTED ON THE COVER OR INDEX SHEET
 THIS DRAWING OR PAGE

IS / ARE IN GENERAL CONFORMANCE WITH THE PROJECT DESIGN, AND
 HAS / HAVE BEEN COORDINATED WITH THE PROJECT PLANS AND SPECIFICATIONS.

MARK FINNEY 12/01/2021 DATE
C-24673 9/30/2023 DATE
LICENSE NUMBER EXPIRATION DATE

TITLE SHEET

REVISIONS	NO.	ITEM	DATE
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DRAWN BY: TR
CHECKED BY: MB
SFA JOB NO: DATE
21082 12/06/2021

BUILDING CODE ANALYSIS				
BUILDING	CONSTRUCTION TYPE OCCUPANCY TYPE	AREA (SQ.FT.)	* ALLOWABLE (SQ.FT.)	# OF STORIES
BUILDING A	V-N / E1	9,979	9,100	1
BUILDING B	V-N / E1	7,521	9,100	1
BUILDING C	V-N / E1	9,655	9,100	1
BUILDING D	V-N / E1	6,802	9,100	1
PORTABLE KIDS CLUB	V-N / E3	1,440	9,100	1
BUILDING E	V-N / E1	4,335	9,100	1
BUILDING F	V-N / E1	3,855	9,100	1
BUILDING G	V-N / E1	1,920	9,100	1
BUILDING H	V-1 / A2.1	6,840	10,500	1

* AREA INCREASE USED FOR ORIGINAL CONSTRUCTION.
NEW SCOPE OF WORK DOES NOT ENCRoACH OPEN AREA.

PROJECT SUMMARY

REPLACING EXISTING FIRE ALARM SYSTEM WITH NEW ADDRESSABLE FIRE ALARM AND EMVOICE EVACUATION SYSTEM ACROSS ENTIRE SITE.

GENERAL NOTES

- A. THIS SHEET IS FOR FIRE LIFE SAFETY CODE RELATED ITEMS. FOR SCOPE OF WORK SEE SHEETS A0.1 AND A0.2.
- B. REFER TO FIRE ALARM AND FIRE PROTECTION DRAWINGS FOR EXTENT OF OTHER RELATED WORK.

SITE PLAN - FIRE LIFE SAFETY NOTES

- 1. EXISTING FIRE HYDRANT.



GRAPHIC KEY

- EXISTING PROPERTY LINE
- - - ROOF OVERHANG
- - - CHAIN LINK FENCE
- ▨ EXISTING BUILDING
- ▤ EXISTING RESTROOMS
- ▨ FIRE DEPARTMENT ACCESS.
- ▨ FIRE DEPARTMENT ACCESS IS 20'-0" WIDE AND RATED FOR 90,000 LBS.
- ⊕ (E) FIRE HYDRANT
- ⊕ (E) SIGN

1 SITE PLAN - FIRE LIFE SAFETY

1" = 30'-0"
0 7.5' 15' 30' 60' 90'

(DSA STAMP AREA)

SUGIMURA
FINNEY
ARCHITECTS

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**SITE PLAN
FIRE LIFE SAFETY**

CAMPUS-WIDE FIRE ALARM REPLACEMENT
VALLEY VIEWS ELEMENTARY SCHOOL
480 ADAMS WAY, PLEASANTON, CA 94566
PLEASANTON UNIFIED SCHOOL DISTRICT

REVISIONS NO.	ITEM	DATE

DRAWN BY: TR
CHECKED BY: MB
SFA JOB NO: 21082
DATE: 12/06/2021

FIRE ALARM EQUIPMENT LIST			
SYMBOL	DESCRIPTION AND MODEL NUMBER	MFGRS PART No.	CSFM LISTING
[EACP]	SEMI-FLUSH MOUNTED ADDRESSABLE FIRE ALARM CONTROL PANEL WITH DVC EM AUDIO OPTION AND INTEGRATED UDACT, FIBER MODULES FOR EACH DAA CONNECTION NOTIFIER NFS2 SERIES. PROVIDE & INSTALL FIRE ALARM DOCUMENT CABINET NEXT TO FACP.	NFS2-3030	7165-0028-0224
[DVC]	DIGITAL VOICE COMMAND CONTROL SYSTEM WITH DIGITAL AUDIO LOOP TECHNOLOGY, WITH UP TO 5 CHANNELS OF AUDIO AND UP TO 5 CHANNELS OF FIREFIGHTER TELEPHONE COMMUNICATIONS. LOCAL KEYPAD FOR LOCAL ANNUNCIATION AND CONTROLS (DVC-ND).	NOTIFIER DVC-EM	7165-0028-0224
[RPS]	10.0A AUXILIARY POWER SUPPLY WITH 4 NAC OUTPUT CIRCUITS AND BUILT-IN SYNCHRONIZATION. NOTIFIER PSE-10 SERIES.	PSE-10	7315-0028-0513
[AMP]	50 WATT, 70.7VRMS DIGITAL AUDIO AMPLIFIER WITH CHARGING POWER SUPPLY AND 2 CLASS B OR 2 CLASS A OUTPUTS. NOTIFIER DAA2 SERIES.	DAA2-5025	7165-0028-0224
[2]	ADDRESSABLE PHOTO ELECTRIC FIRE ALARM SMOKE DETECTOR AND BASE, NOTIFIER FSP-951 SERIES.	FSP-951	7272-0028-0503
[4]	ADDRESSABLE FIRE ALARM HEAT DETECTOR AND BASE, 130 DEG. FIXED TEMPERATURE AND RATE-OF-RISE, NOTIFIER FST-951 SERIES. (DEVICES WITH "A" INDICATE ABOVE CEILING).	FST-951	7270-0028-0502
[H]	ADDRESSABLE REFLECTOR-TYPE LINEAR OPTICAL BEAM SMOKE DETECTOR, NOTIFIER FS-OSI-RI SERIES.	FS-OSI-RI	7280-0028-0509
[P]	ADDRESSABLE FIRE ALARM MANUAL PULLSTATION, DUAL-ACTION WITH KEY RESET, MOLDED POLYCARBONATE HOUSING, FIRE-LITE NO SERIES.	NG-12XL	7150-0028-0199
[M]	ADDRESSABLE MONITOR MODULE FIRE-LITE FMM-1 SERIES.	FMM-1	7300-0028-0219
[C]	ADDRESSABLE CONTROL MODULE FIRE-LITE FCM-1 SERIES.	FCM-1	7300-0028-0219
[C]	CEILING MOUNTED MULTI-CANDELA STROBE WITH FIELD SELECTABLE CANDELA SETTINGS OF 15, 30, 75 AND 110 CANDELA. SYSTEM SENSOR, SWL SERIES.	SWL	7125-1653-0504
[C]	WALL MOUNTED MULTI-CANDELA STROBE WITH FIELD SELECTABLE CANDELA SETTINGS OF 15, 30, 75 & 110 CANDELA WITH VOLTAGE SETTING OF 70.7 VRMS AND POWER SETTINGS OF 1/2, 1 & 2 WATTS. SYSTEM SENSOR, SPSWL SERIES.	SPSWL	7320-1653-0505
[C]	CEILING MOUNTED MULTI-CANDELA SPEAKER STROBE WITH FIELD SELECTABLE CANDELA SETTINGS OF 15, 30, 75 & 110 CANDELA WITH VOLTAGE SETTING OF 70.7 VRMS AND POWER SETTINGS OF 1/2, 1 & 2 WATTS. SYSTEM SENSOR, SPSWCL SERIES.	SPSWCL	7320-1653-0505
[VWP]	WALL MOUNTED WEATHERPROOF FIRE ALARM/VOICE EVACUATION SPEAKER WITH VOLTAGE SETTING OF 70.7 VRMS AND POWER SETTINGS OF 1/2, 1 & 2 WATTS. SYSTEM SENSOR, SPWK SERIES.	SPWK	7320-1653-0201
[EOL]	END OF LINE DEVICE.		

- ### FIRE ALARM GENERAL NOTES
- WIRING MUST BE LISTED FOR USE AS REQUIRED BY TITLE 24/CEC, ARTICLE 760.
 - WIRE USED IN WET LOCATIONS SHALL BE OF AN APPROVED TYPE IN ACCORDANCE WITH 3-310-8, T24/CEC (I.E. THHW OR EQUAL).
 - UNDER GROUND AND EXTERIOR CONDUITS TO HAVE WATERTIGHT FITTINGS AND WIRES APPROVED FOR WET LOCATION.
 - ALL CONDUCTORS SHALL BE ROUTED IN CONDUIT UNLESS SPECIFICALLY NOTED OTHERWISE ON PLANS. MINIMUM CONDUIT SIZE SHALL BE 3/4".
 - 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.
 - 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.
 - ALL DEVICES SHALL BE "CSFM" LISTED.
 - EXTERIOR DEVICES SHALL BE LISTED FOR EXTERIOR USE BY "CSFM".
 - AUDIBLE FIRE ALARM SOUND LEVEL SHALL BE AT LEAST 15DBA ABOVE THE AVERAGE SOUND LEVEL.
 - 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.
 - 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.
 - 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.
 - 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.
 - POWER SERVICE SHALL BE ON A DEDICATED, 120V BRANCH CIRCUIT, WITH A RED MARKING AND IDENTIFIED AS "FIRE ALARM CIRCUIT CONTROL."
 - 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 UJFX OR UJUS BY UNDERWRITERS LABORATORY OR SHALL MEET THE REQUIREMENTS OF FACTORY MUTUAL RESEARCH APPROVAL STANDARD 3011.
 - EXISTING FIELD DEVICES AND FACP SHALL REMAIN IN PLACE UNTIL NEW FIELD DEVICES ARE IN PLACE AND NEW WIRING HAS BEEN HOMERAN TO NEW LOCATION OF FACP. CONTRACTOR SHALL COORDINATE WITH SCHOOL DISTRICT TO PROVIDE AN APPROVED 24 HOUR FIRE WATCH UNTIL NEW FIRE ALARM SYSTEM IS OPERATIONAL.

- ### GENERAL CONSTRUCTION NOTES
- CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE CODES AND REGULATIONS. MATERIALS AND EQUIPMENT SHALL BE U.L. LISTED AND LABELED FOR THE APPLICATION.
 - THE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL PERMITS, LICENSES AND INSPECTION FEES REQUIRED BY THIS CONTRACT WORK.
 - CONTRACTOR SHALL VISIT THE PROJECT SITE PRIOR TO BIDDING AND ALLOW FOR ALL FIELD CONDITIONS. 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.
 - 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.
 - 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.
 - 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.
 - CONTRACTOR SHALL PROVIDE TO THE ARCHITECT A CONSTRUCTION SCHEDULE OF ELECTRICAL WORK. THE CONSTRUCTION SCHEDULE SHALL IDENTIFY ALL SIGNIFICANT MILESTONES WITH COMPLETION DATES.
 - 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.
 - CONTRACTOR SHALL BE RESPONSIBLE FOR PAINTING ALL EXPOSED CONDUITS AND ELECTRICAL EQUIPMENT. REFER TO ARCHITECTS PAINTING SECTION FOR REQUIREMENTS.
 - ALL ELECTRICAL EQUIPMENT INSTALLED OUTDOORS SHALL BE WEATHERPROOF. EXTERIOR CONDUITS RUN INTO BUILDINGS SHALL BE INSTALLED WITH FLASHING, CALKED AND SEALED. CONDUITS FOR EXTERIOR ELECTRICAL DEVICES SHALL BE RUN INSIDE BUILDING UNLESS OTHERWISE NOTED ON DRAWINGS.
 - ALL CONDUITS UNLESS OTHERWISE NOTED ON DRAWINGS SHALL HAVE 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.
 - ALL BRANCH CIRCUITS SHALL HAVE INDIVIDUAL NEUTRALS. SHARED NEUTRALS ON MULTIWIRE CIRCUITS IS NOT ALLOWED.
 - COORDINATE ALL CONDUIT RUNS, ELECTRICAL EQUIPMENT AND PANELS WITH ALL OTHER WORK TO AVOID CONFLICTS.
 - CONTRACTOR SHALL PROVIDE IN EVERY NEW EMPTY CONDUIT A DRAW STRING FOR USE IN FUTURE CONSTRUCTION.
 - 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.
 - 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.
 - EXTENSION RINGS OR RESET BOXES TO BE FLUSH WITH NEW WALL THICKNESS.
 - 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.
 - 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.
 - 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.
 - 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 MULLIONS, 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.

SYMBOLS & ABBREVIATIONS

SYMBOLS

[P]	MANUAL PULL STATION	[BELL]	BELL (GONG)
[S]	STROBE ONLY	[EACP]	FIRE ALARM CONTROL PANEL
[C]	STROBE ONLY (CEILING MOUNTED)	[RPS]	REMOTE POWER SUPPLY
[V]	SPEAKER ONLY	[AMP]	DIGITAL AUDIO AMPLIFIER
[M]	MINI HORN	[EOL]	END OF LINE
[S/S]	SPEAKER/STROBE	[J/B]	JUNCTION BOX - CEILING/WALL MOUNTED, SIZE PER CODE, TAPE AND TAG WIRES
[S/S]	SPEAKER/STROBE (CEILING MOUNTED)	[PULL]	PULLBOX
[C/S]	CHIME/STROBE	[CON]	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.
[H]	HEAT DETECTOR	[CON-]	CONDUIT - EXISTING
[A]	HEAT DETECTOR (ABOVE ACCESSIBLE CEILING)	[CON-]	CONDUIT - CONCEALED IN WALLS OR CEILING
[2]	SMOKE DETECTOR	[CON-]	CONDUIT - IN OR BELOW FLOOR, 3/4" MIN.
[S]	DUCT SMOKE DETECTOR	[CON-]	CONDUIT CONTINUATION.
[T]	TAMPER SWITCH	[R]	ROOM NUMBER.
[F]	FLOW SWITCH	[2]	SHEET NOTE REFERENCE SYMBOL: SEE ASSOCIATED NOTE ON SAME SHEET.
[V]	POST INDICATING VALVE	[E]	DETAIL OR SECTION DESIGNATION.

ABBREVIATIONS

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

TYPICAL NOME NENCLATURE

"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.

(DSA STAMP AREA)

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I hereby certify that I am a duly Licensed Professional Engineer and the design and construction of the above described project was supervised and sealed and the work was done in accordance with the approved contract documents and the provisions of the California Engineering Act and the rules and regulations of the State Board of Professional Engineers, Architects, and Surveyors.

FIRE ALARM SYSTEM OPERATIONAL MATRIX

CAUSE	ALARM	TROUBLE	SUPERVISORY	MISC.	REMARKS
SMOKE DETECTORS	•	•	•	•	
HEAT DETECTORS	•	•	•	•	
FLOW SWITCH	•	•	•	•	
TAMPER SWITCH	•	•	•	•	
SYSTEM RESET	•	•	•	•	
SIGNAL SILENCE	•	•	•	•	
AC POWER FAILURE	•	•	•	•	
FIRE ALARM TROUBLE (OPEN, SHORTS, OR GROUNDS) ON INITIATION OR SIGNALING CIRCUITS	•	•	•	•	

- ### SHEET INDEX
- FA0.1 FIRE ALARM SYMBOLS, ABBREVIATIONS, EQUIPMENT LIST, OPERATIONAL MATRIX & NOTES.
 - FA1.1 FIRE ALARM RISER DIAGRAM.
 - FA1.2 BATTERY & VOLTAGE DROP CALCULATIONS.
 - FA2.1 FIRE ALARM DEMOLITION PLAN.
 - FA3.1 FIRE ALARM SITE PLAN.
 - FA4.1 FIRE ALARM PLANS - BUILDINGS A & B.
 - FA4.2 FIRE ALARM PLANS - BUILDINGS C & D.
 - FA4.3 FIRE ALARM PLANS - BUILDINGS E, F, F.2, G, G.2, H, J & CC.
 - FA5.1 FIRE ALARM DETAILS.

PROJECT DESCRIPTION

SCOPE OF WORK:
 REPLACING EXISTING FIRE ALARM SYSTEM WITH NEW ADDRESSABLE FIRE ALARM AND EMPLOYEE EVACUATION SYSTEM ACROSS ENTIRE SITE.

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

FIRE ALARM SYSTEM DESIGN BY:
 NAJIB ANWARY

EQUIPMENT ANCHORAGE

M/E/P COMPONENT ANCHORAGE NOTES.

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.1.15 THROUGH 1617A.1.25 AND ASCE 7-16 CHAPTER 13, 20 & 30:

- ALL PERMANENT EQUIPMENT AND COMPONENTS.
- 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.
- 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 WEIGHTING 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 WEIGHTING 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.

PIPING, DUCTWORK AND ELECTRICAL DISTRIBUTION SYSTEM BRACING NOTE

PIPING, DUCTWORK AND ELECTRICAL DISTRIBUTION SYSTEMS SHALL BE BRACED TO COMPLY WITH THE FORCES AND DISPLACEMENTS PRESCRIBED IN ASCE 7-16 SECTION 13.3 AS DEFINED IN ASCE 7-16 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 BRACINGS AND ATTACHMENTS ARE BASED ON PRE-APPROVED INSTALLATION GUIDE (e.g. OSHPD OPIA FOR 2015 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
- CODES:**
- 2019 CALIFORNIA ADMINISTRATIVE CODE C.C.R., TITLE 24, PART 1.
 - 2019 CALIFORNIA BUILDING CODE (CBC) C.C.R., TITLE 24, VOL. 1 & 2 BASED ON THE 2018 INTERNATIONAL BUILDING CODE (IBC) WITH CALIFORNIA AMENDMENTS.
 - 2019 CALIFORNIA RESIDENTIAL CODE C.C.R., TITLE 24, PART 2.5 BASED ON THE 2018 INTERNATIONAL RESIDENTIAL CODE WITH CALIFORNIA AMENDMENTS.
 - 2019 CALIFORNIA ELECTRICAL CODE (CEC) C.C.R., TITLE 24, PART 3 BASED ON THE 2017 NATIONAL ELECTRICAL CODE (NEC) WITH CALIFORNIA AMENDMENTS.
 - 2019 CALIFORNIA MECHANICAL CODE (CMC) C.C.R., TITLE 24, PART 4 BASED ON THE 2018 UNIFORM MECHANICAL CODE (UMC) WITH CALIFORNIA AMENDMENTS.
 - 2019 CALIFORNIA PLUMBING CODE (CPC) C.C.R., TITLE 24, PART 5 BASED ON THE 2018 UNIFORM PLUMBING CODE (UPC) WITH CALIFORNIA AMENDMENTS.
 - 2019 CALIFORNIA ENERGY CODE C.C.R., TITLE 24, PART 6.
 - 2019 CALIFORNIA FIRE CODE (CFC) C.C.R., TITLE 24, PART 9 BASED ON THE 2018 INTERNATIONAL FIRE CODE (IFC) WITH CALIFORNIA AMENDMENTS.
 - 2019 CALIFORNIA GREEN BUILDING STANDARDS CODE C.C.R., TITLE 24, PART 11.
 - 2019 CALIFORNIA REFERENCED STANDARDS CODE C.C.R., TITLE 24, PART 12.
 - TITLE 19 C.C.R., PUBLIC SAFETY, STATE FIRE MARSHAL REGULATIONS.
 - NATIONAL FIRE ALARM CODE (NFPA 72) 2016.
- STANDARDS:**
- AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)
 - ELECTRONICS INDUSTRIES ASSOCIATION (EIA)
 - INSTITUTE OF ELECTRICAL AND ELECTRONIC ENGINEERS (IEEE)
 - NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION (NEMA)
 - NATIONAL ELECTRICAL TESTING ASSOCIATION (NETA)
 - UNDERWRITER LABORATORIES (UL)
 - CALIFORNIA OCCUPATIONAL SAFETY AND HEALTH ACT STANDARDS (CAL/OSHA)
 - NATIONAL FIRE PROTECTION ASSOCIATION. INSTALLATION OF CARBON MONOXIDE (NFPA 720)

FIRE ALARM SYMBOLS, ABBREVIATIONS, EQUIPMENT LIST, OPERATIONAL MATRIX, DETAILS & NOTES

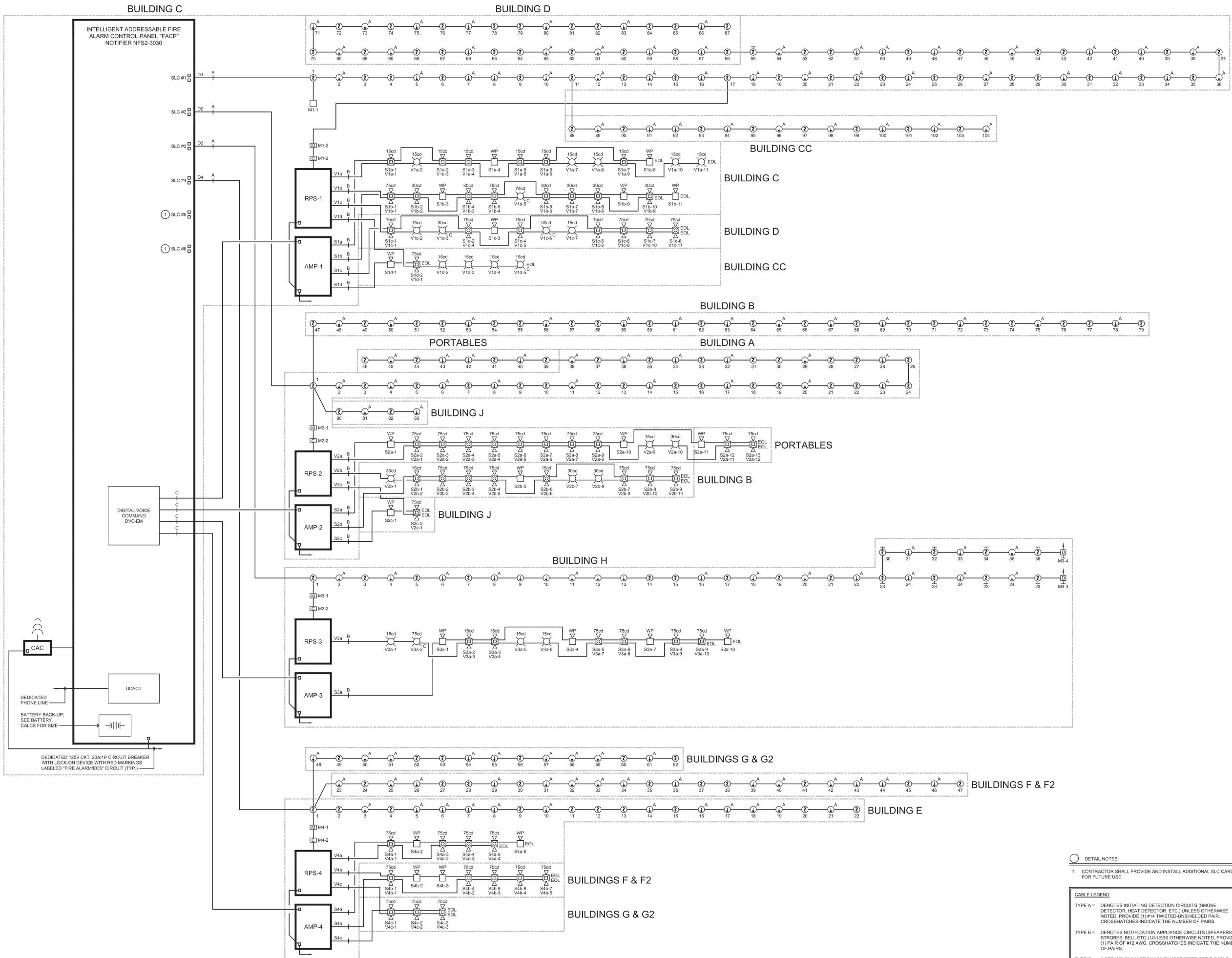
CAMPUS-WIDE FIRE ALARM REPLACEMENT
 VALLEY VIEWS ELEMENTARY SCHOOL
 480 ADAMS WAY, PLEASANTON, CA 94566
 PLEASANTON UNIFIED SCHOOL DISTRICT

REVISIONS

NO.	ITEM	DATE

DRAWN BY: FS
 CHECKED BY: NA
 SFA JOB NO: DATE:
 21082 12/01/2021

FA0.1



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FIRE ALARM RISER DIAGRAM
 CAMPUS-WIDE FIRE ALARM REPLACEMENT
 VALLEY VIEWS ELEMENTARY SCHOOL
 480 ADAMS WAY, PLEASANTON, CA 94566
 PLEASANTON UNIFIED SCHOOL DISTRICT

NO.	ITEM	DATE

DETAIL NOTES:

- CONTRACTOR SHALL PROVIDE AND INSTALL ADDITIONAL SLC CARDS FOR FUTURE USE.

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.

TYPE B = DENOTES NOTIFICATION APPLIANCE CIRCUITS (SPEAKERS, STROBES, BELL ETC.) UNLESS OTHERWISE NOTED, PROVIDE (1) PAIR OF #12 AWG. CROSSHATCHES INDICATE THE NUMBER OF PAIRS.

TYPE C = 6-STRAND 62.5 MICRON MULTI-MODE FIBER OPTIC CABLE, SUITABLE FOR UNDERGROUND USE.

DRAWN BY: FS
 CHECKED BY: NA
 SFA JOB NO: 21082
 DATE: 12/01/2021

FA1.1

VOLTAGE DROP CALCULATIONS (VISUAL CIRCUITS)

VOLTAGE DROP (VD) CALCULATION - VISUAL CIRCUIT No. V43	WIRE									
	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th
GAUGE WIRE	12	12	12	12	12	12	12	12	12	12
DISTANCE (FT)	30	70	55	45	35	25	30	30	30	40
AMPS OF DEVICE	0.111	0.111	0.111	0.111	0.111	0.111	0.111	0.111	0.111	0.111
TOTAL AMPS@DEV	0.444	0.333	0.222	0.111	0	0	0	0	0	0
VOLT. DROP @ DEV	0.044	0.077	0.04	0.017	0	0	0	0	0	0
TOTAL CIRCUIT AMPS =	0.444									
WIRE RESIS. CIRC. FORMULA	SIZE / (M.F.T. M.I.S.)									
TOTAL VOLT. DROP =	0.178									
CKT VOLTAGE =	20.4									
% VOLTAGE DROP =	0.9%									

VOLTAGE DROP (VD) CALCULATION - VISUAL CIRCUIT No. V26	WIRE									
	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th
GAUGE WIRE	12	12	12	12	12	12	12	12	12	12
DISTANCE (FT)	45	85	45	55	40	55	50	45	35	20
AMPS OF DEVICE	0.111	0.111	0.111	0.111	0.111	0.111	0.111	0.111	0.111	0.111
TOTAL AMPS@DEV	1.216	1.005	0.884	0.883	0.772	0.661	0.55	0.438	0.328	0.285
VOLT. DROP @ DEV	0.181	0.201	0.148	0.161	0.102	0.12	0.091	0.065	0.052	0.019
TOTAL CIRCUIT AMPS =	1.216									
WIRE RESIS. CIRC. FORMULA	SIZE / (M.F.T. M.I.S.)									
TOTAL VOLT. DROP =	1.248									
CKT VOLTAGE =	20.4									
% VOLTAGE DROP =	6.1%									

VOLTAGE DROP (VD) CALCULATION - VISUAL CIRCUIT No. V16	WIRE									
	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th
GAUGE WIRE	12	12	12	12	12	12	12	12	12	12
DISTANCE (FT)	20	45	15	30	35	30	30	30	30	40
AMPS OF DEVICE	0.043	0.043	0.043	0.043	0.043	0.107	0.043	0.043	0.043	0.043
TOTAL AMPS@DEV	0.537	0.494	0.451	0.408	0.365	0.322	0.215	0.172	0.138	0.093
VOLT. DROP @ DEV	0.036	0.074	0.022	0.04	0.042	0.021	0.014	0.017	0.028	0.011
TOTAL CIRCUIT AMPS =	0.537									
WIRE RESIS. CIRC. FORMULA	SIZE / (M.F.T. M.I.S.)									
TOTAL VOLT. DROP =	0.309									
CKT VOLTAGE =	20.4									
% VOLTAGE DROP =	1.5%									

VOLTAGE DROP (VD) CALCULATION - VISUAL CIRCUIT No. V46	WIRE									
	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th
GAUGE WIRE	12	12	12	12	12	12	12	12	12	12
DISTANCE (FT)	100	150	45	45	75					
AMPS OF DEVICE	0.111	0.111	0.111	0.111	0.111					
TOTAL AMPS@DEV	0.555	0.444	0.333	0.222	0.111	0	0	0	0	0
VOLT. DROP @ DEV	0.184	0.191	0.05	0.033	0.028	0	0	0	0	0
TOTAL CIRCUIT AMPS =	0.555									
WIRE RESIS. CIRC. FORMULA	SIZE / (M.F.T. M.I.S.)									
TOTAL VOLT. DROP =	0.868									
CKT VOLTAGE =	20.4									
% VOLTAGE DROP =	4.2%									

VOLTAGE DROP (VD) CALCULATION - VISUAL CIRCUIT No. V26	WIRE									
	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th
GAUGE WIRE	12	12	12	12	12	12	12	12	12	12
DISTANCE (FT)	30	45	35	40	60	35	35	60	45	
AMPS OF DEVICE	0.093	0.041	0.111	0.111	0.041	0.063	0.063	0.111	0.111	
TOTAL AMPS@DEV	0.712	0.166	0.333	0.333	0.166	0.252	0.252	0.459	0.459	
VOLT. DROP @ DEV	0.063	0.111	0.096	0.096	0.091	0.099	0.093	0.166	0.166	
TOTAL CIRCUIT AMPS =	0.937									
WIRE RESIS. CIRC. FORMULA	SIZE / (M.F.T. M.I.S.)									
TOTAL VOLT. DROP =	0.818									
CKT VOLTAGE =	20.4									
% VOLTAGE DROP =	4.0%									

VOLTAGE DROP (VD) CALCULATION - VISUAL CIRCUIT No. V16	WIRE									
	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th
GAUGE WIRE	12	12	12	12	12	12	12	12	12	12
DISTANCE (FT)	45	85	45	55	40	55	50	45	35	20
AMPS OF DEVICE	0.111	0.063	0.063	0.111	0.111	0.063	0.063	0.063	0.063	0.063
TOTAL AMPS@DEV	0.712	0.166	0.166	0.333	0.333	0.166	0.166	0.166	0.166	0.166
VOLT. DROP @ DEV	0.165	0.089	0.096	0.166	0.166	0.096	0.096	0.096	0.096	0.096
TOTAL CIRCUIT AMPS =	0.712									
WIRE RESIS. CIRC. FORMULA	SIZE / (M.F.T. M.I.S.)									
TOTAL VOLT. DROP =	0.883									
CKT VOLTAGE =	20.4									
% VOLTAGE DROP =	4.3%									

VOLTAGE DROP (VD) CALCULATION - VISUAL CIRCUIT No. V46	WIRE									
	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th
GAUGE WIRE	12	12	12	12	12	12	12	12	12	12
DISTANCE (FT)	200	45	45							
AMPS OF DEVICE	0.111	0.111	0.111							
TOTAL AMPS@DEV	0.333	0.222	0.111	0	0	0	0	0	0	0
VOLT. DROP @ DEV	0.22	0.033	0.017	0	0	0	0	0	0	0
TOTAL CIRCUIT AMPS =	0.333									
WIRE RESIS. CIRC. FORMULA	SIZE / (M.F.T. M.I.S.)									
TOTAL VOLT. DROP =	0.27									
CKT VOLTAGE =	20.4									
% VOLTAGE DROP =	1.3%									

VOLTAGE DROP (VD) CALCULATION - VISUAL CIRCUIT No. V26	WIRE									
	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th
GAUGE WIRE	12	12	12	12	12	12	12	12	12	12
DISTANCE (FT)	30	40	55	35	40	60	35	35	60	45
AMPS OF DEVICE	0.111	0.111	0.111	0.111	0.111	0.111	0.111	0.111	0.111	0.111
TOTAL AMPS@DEV	1.111	0.884	0.883	0.772	0.661	0.55	0.438	0.328	0.285	0.242
VOLT. DROP @ DEV	0.122	0.138	0.106	0.119	0.077	0.091	0.065	0.052	0.039	0.015
TOTAL CIRCUIT AMPS =	1.111									
WIRE RESIS. CIRC. FORMULA	SIZE / (M.F.T. M.I.S.)									
TOTAL VOLT. DROP =	0.818									
CKT VOLTAGE =	20.4									
% VOLTAGE DROP =	4.0%									

VOLTAGE DROP (VD) CALCULATION - VISUAL CIRCUIT No. V16	WIRE									
	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th
GAUGE WIRE	12	12	12	12	12	12	12	12	12	12
DISTANCE (FT)	45	85	45	55	40	55	50	45	35	20
AMPS OF DEVICE	0.041	0.043	0.063	0.111	0.111	0.063	0.043	0.041	0.111	0.111
TOTAL AMPS@DEV	0.309	0.285	0.322	0.459	0.459	0.285	0.215	0.172	0.459	0.459
VOLT. DROP @ DEV	0.037	0.074	0.022	0.04	0.042	0.021	0.014	0.017	0.028	0.011
TOTAL CIRCUIT AMPS =	0.309									
WIRE RESIS. CIRC. FORMULA	SIZE / (M.F.T. M.I.S.)									
TOTAL VOLT. DROP =	0.266									
CKT VOLTAGE =	20.4									
% VOLTAGE DROP =	1.3%									

VOLTAGE DROP (VD) CALCULATION - VISUAL CIRCUIT No. V46	WIRE									
	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th
GAUGE WIRE	12	12	12	12	12	12	12	12	12	12
DISTANCE (FT)	200	45	45							
AMPS OF DEVICE	0.111	0.111	0.111							
TOTAL AMPS@DEV	0.333	0.222	0.111	0	0	0	0	0	0	0
VOLT. DROP @ DEV	0.22	0.033	0.017	0	0	0	0	0	0	0
TOTAL CIRCUIT AMPS =	0.333									
WIRE RESIS. CIRC. FORMULA	SIZE / (M.F.T. M.I.S.)									
TOTAL VOLT. DROP =	0.27									
CKT VOLTAGE =	20.4									
% VOLTAGE DROP =	1.3%									

VOLTAGE DROP (VD) CALCULATION - VISUAL CIRCUIT No. V26	WIRE									
	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th
GAUGE WIRE	12	12	12	12	12	12	12	12	12	12
DISTANCE (FT)	30	40	55	35	40	60	35	35	60	45
AMPS OF DEVICE	0.111	0.111	0.111	0.111	0.111	0.111	0.111	0.111	0.111	0.111
TOTAL AMPS@DEV	1.111	0.884	0.883	0.772	0.661	0.55	0.438	0.328	0.285	0.242
VOLT. DROP @ DEV	0.122	0.138	0.106	0.119	0.077	0.091	0.065	0.052	0.039	0.015
TOTAL CIRCUIT AMPS =	1.111									
WIRE RESIS. CIRC. FORMULA	SIZE / (M.F.T. M.I.S.)									
TOTAL VOLT. DROP =	0.818									
CKT VOLTAGE =	20.4									
% VOLTAGE DROP =	4.0%									

VOLTAGE DROP (VD) CALCULATION - VISUAL CIRCUIT No. V16	WIRE									
	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th
GAUGE WIRE	12	12	12	12	12	12	12	12	12	12
DISTANCE (FT)	45	85	45	55	40	55	50	45	35	20
AMPS OF DEVICE	0.041	0.043	0.063	0.111	0.111	0.063	0.043	0.041	0.111	0.111
TOTAL AMPS@DEV	0.309	0.285	0.322	0.459	0.459	0.285	0.215	0.172	0.459	0.459
VOLT. DROP @ DEV	0.037	0.074	0.022	0.04	0.042	0.021	0.014	0.017	0.028	0.011
TOTAL CIRCUIT AMPS =	0.309									
WIRE RESIS. CIRC. FORMULA	SIZE / (M.F.T. M.I.S.)									
TOTAL VOLT. DROP =	0.266									
CKT VOLTAGE =	20.4									
% VOLTAGE DROP =	1.3%									

VOLTAGE DROP (VD) CALCULATION - VISUAL CIRCUIT No. V46	WIRE									
	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th
GAUGE WIRE	12	12	12	12	12	12	12	12	12	12
DISTANCE (FT)	200	45	45							
AMPS OF DEVICE	0.111	0.111	0.111							
TOTAL AMPS@DEV	0.333	0.222	0.111	0	0	0	0	0	0	0
VOLT. DROP @ DEV	0.22	0.033	0.017	0	0	0	0	0	0	0
TOTAL CIRCUIT AMPS =	0.333									
WIRE RESIS. CIRC. FORMULA	SIZE / (M.F.T. M.I.S.)									
TOTAL VOLT. DROP =	0.27									
CKT VOLTAGE =	20.4									
% VOLTAGE DROP =	1.3%									

VOLTAGE DROP (VD) CALCULATION - VISUAL CIRCUIT No. V26	WIRE									
	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th
GAUGE WIRE	12	12	12	12	12	12	12	12	12	12
DISTANCE (FT)	30	40	55	35	40	60	35	35	60	45
AMPS OF DEVICE	0.043	0.111	0.041	0.043	0.043	0.107	0.107	0.107	0.107	0.107
TOTAL AMPS@DEV	0.750	0.707	0.595	0.554	0.471	0.428	0.321	0.214	0.107	0.107
VOLT. DROP @ DEV	0.062	0.094	0.108	0.084	0.084	0.023	0.027	0.053	0.078	0.018
TOTAL CIRCUIT AMPS =	0.75									
WIRE RESIS. CIRC. FORMULA	SIZE / (M.F.T. M.I.S.)									
TOTAL VOLT. DROP =	0.581									
CKT VOLTAGE =	20.4									
% VOLTAGE DROP =	2.9%									

VOLTAGE DROP (VD) CALCULATION - VISUAL CIRCUIT No. V16	WIRE									
	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th
GAUGE WIRE	12	12	12	12	12	12	12	12	12	12
DISTANCE (FT)	45	85	45	55	40	55	50	45	35	20
AMPS OF DEVICE	0.111	0.								

SHEET NOTES

1. CONTRACTOR SHALL DEMOLISH ALL FIRE ALARM AT THIS BUILDING COMPLETE PER GENERAL DEMOLITION NOTES ON THIS SHEET. CONTRACTOR SHALL ASSUME QUANTITY OF EXISTING DEVICES TO BE DEMOLISHED EQUAL TO THAT OF NEW DEVICES SHOWN ON NEW PLANS. CONTRACTOR SHALL PROVIDE AND INSTALL BLANK COVER PLATE AT LOCATIONS WHERE DEVICES WERE REMOVED. PAINT/FINISH DEVICE PLATES TO MATCH EXISTING WALLS/CEILINGS. WHERE SURFACE RACEWAYS ARE EXISTING FOR FIRE ALARM CONNECTIONS; REMOVE COMPLETE & PAINT/FINISH WALLS/CEILINGS.

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.



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FIRE ALARM DEMOLITION PLAN
CAMPUS-WIDE FIRE ALARM REPLACEMENT
VALLEY VIEWS ELEMENTARY SCHOOL
480 ADAMS WAY, PLEASANTON, CA 94566
PLEASANTON UNIFIED SCHOOL DISTRICT

NO.	ITEM	DATE

DRAWN BY: FS
CHECKED BY: NA
SFA JOB NO: 21082
DATE: 12/01/2021

FA2.1

SHEET NOTES

1. CONTRACTOR SHALL PROVIDE AND INSTALL 1" C. FOR FIRE ALARM CABLES.
2. CONTRACTOR SHALL PROVIDE AND INSTALL 2" C. FOR FIRE ALARM CABLES.
3. PROVIDE AND INSTALL CHRISTY #N16 PULLBOX WITH LID LABELED "FIRE ALARM".
4. CONTRACTOR SHALL PROVIDE AND INSTALL 1" C. FOR FIRE ALARM CABLES. ROUTE CONDUIT ON ROOF OF BUILDING AND ABOVE EXISTING CANOPY BETWEEN BUILDINGS; PAINT/FINISH EXPOSED CONDUITS TO MATCH CANOPY FINISH.
5. PROVIDE AND INSTALL 12" SQ. X 4" DEEP NEMA 3R PULLCAN.

GENERAL NOTES:

- A. CONTRACTOR SHALL LOCATE ALL (E) UNDERGROUND UTILITIES PRIOR TO TRENCHING AND TAKE CAUTION TO AVOID DAMAGE DURING TRENCHING. HAND TRENCH IF NECESSARY. CONTRACTOR SHALL MAKE ALL REPAIRS TO DAMAGED UTILITIES AT NO CHARGE TO OWNER.
- B. SEAL ALL EXTERIOR/INTERIOR BUILDING PENETRATIONS, CUT AND PATCH WALLS/CEILING FOR CONDUIT ROUTING AS NECESSARY. PAINT/FINISH EXPOSED CONDUITS/BOXES TO MATCH BUILDING FINISH. COORDINATE WITH DISTRICT & ARCHITECT FOR EXACT REQUIREMENTS.

(DSA STAMP AREA)



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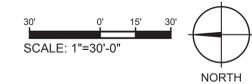
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FIRE ALARM SITE PLAN
CAMPUS-WIDE FIRE ALARM REPLACEMENT
VALLEY VIEWS ELEMENTARY SCHOOL
480 ADAMS WAY, PLEASANTON, CA 94566
PLEASANTON UNIFIED SCHOOL DISTRICT

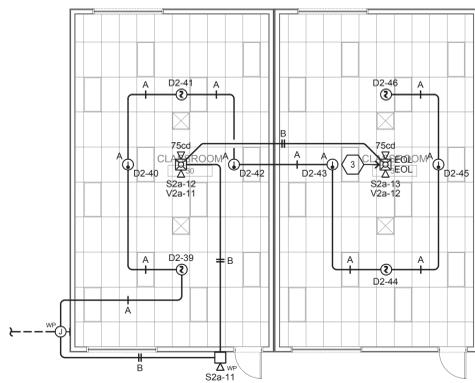
NO.	ITEM	DATE

DRAWN BY: FS
CHECKED BY: NA
SFA JOB NO: 21082
DATE: 12/01/2021

FA3.1

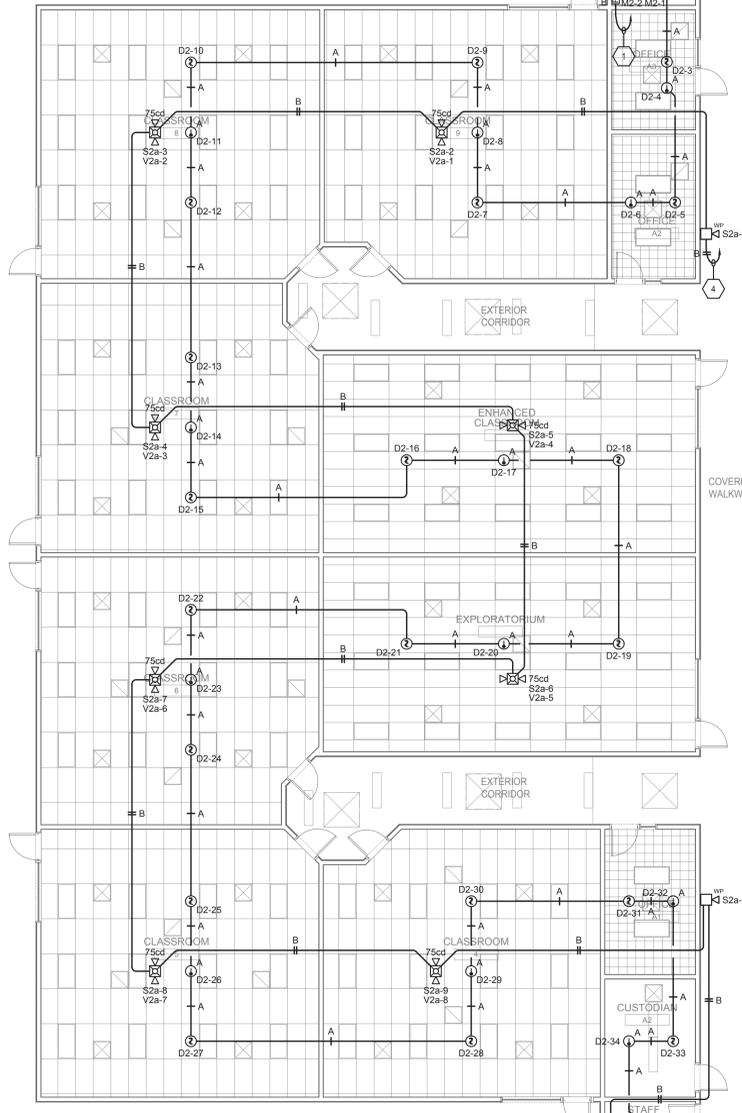


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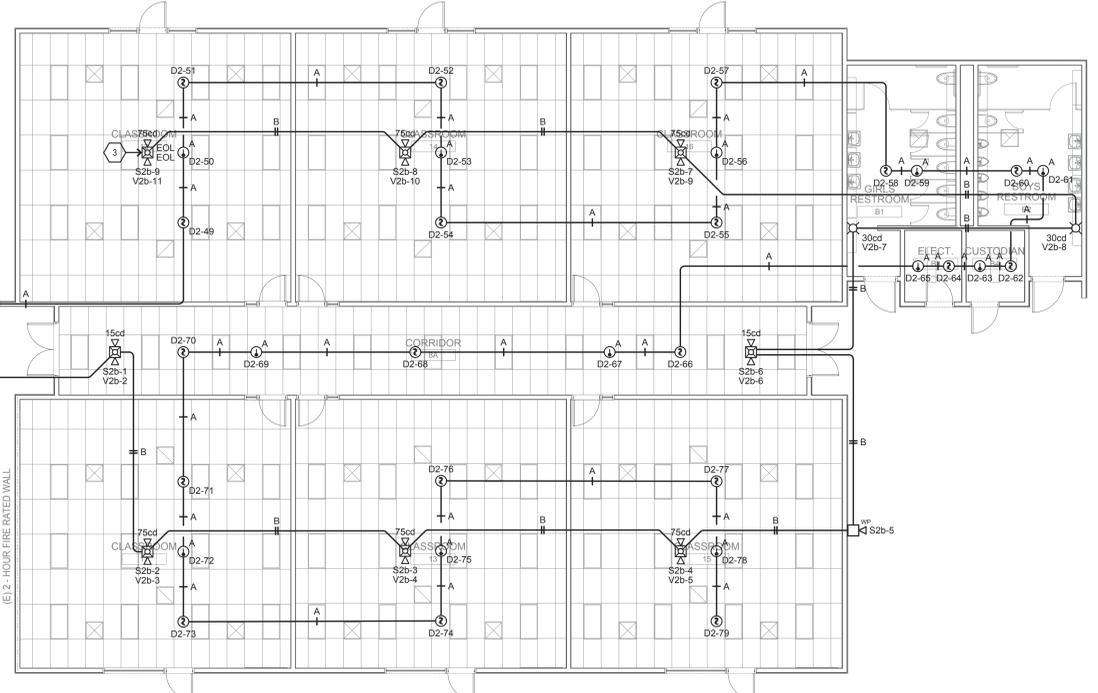


2 FIRE ALARM PLAN - PORTABLES

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



BUILDING A



BUILDING B



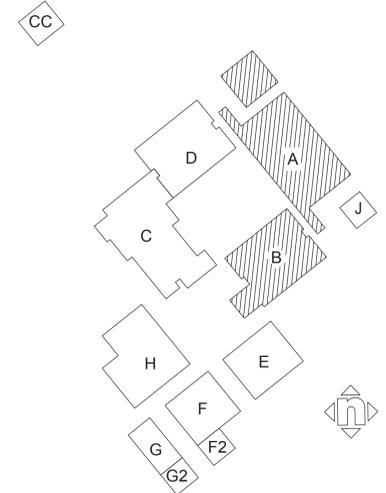
BUILDING D

- SHEET NOTES**
- CIRCUIT VIA 1/2" 2 #12 & 1 #12 GND TO NEAREST ELECTRICAL PANEL. AT PANEL PROVIDE AND INSTALL 20 AMP, 1-POLE BREAKER WITH LOCK-ON DEVICE WITH RED MARKINGS LABELED "FIRE ALARMECS".
 - WHERE NECESSARY PROVIDE & INSTALL ACCESS PANEL FOR HEAT DETECTOR ABOVE CEILING. 24" SQ. OPENING MINIMUM.
 - PROVIDE AND INSTALL LAMICOID NAMEPLATE ON DEVICE READING "EOL".
 - HOMERUN TO REMOTE POWER SUPPLY "RPS-2" AND DIGITAL AUDIO AMPLIFIER "AMP-2" LOCATED IN ELECTRICAL ROOM AS.
 - CONTRACTOR SHALL PROVIDE AND INSTALL 1" C. FOR FIRE ALARM CABLES.
 - PROVIDE AND INSTALL 12" SQ. X 6" DEEP NEMA 3R PULLCAN.
 - PROVIDE AND INSTALL 18" SQ. X 6" DEEP NEMA 3R PULLCAN.
 - SEE SHEET E2.1 FOR CONTINUATION.

- GENERAL NOTES:**
- 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.
 - ALL INDOOR SPEAKERS/HORNS SHALL BE 0.5 WATTS RATED MINIMUM. ALL OUTDOOR SPEAKERS/HORNS SHALL BE 2 WATTS RATED MINIMUM.

- 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.
- TYPE B = DENOTES NOTIFICATION APPLIANCE CIRCUITS (SPEAKERS, STROBES, BELL ETC.) UNLESS OTHERWISE NOTED. PROVIDE (1) PAIR OF #12 AWG. CROSSHATCHES INDICATE THE NUMBER OF PAIRS.
- TYPE C = 6-STRAND 62.5 MICRON MULTI-MODE FIBER OPTIC CABLE, SUITABLE FOR UNDERGROUND USE.

BUILDING KEY



(DSA STAMP AREA)

SUGIMURA FINNEY ARCHITECTS

SFA

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NO. C-24673

STATE OF CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER

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NO. E-10153

STATE OF CALIFORNIA

AURUM CONSULTING ENGINEERS

MONTEREY BAY, INC.

Project No. 21-443-00

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FIRE ALARM PLANS - BUILDINGS A & B

CAMPUS-WIDE FIRE ALARM REPLACEMENT
VALLEY VIEWS ELEMENTARY SCHOOL
480 ADAMS WAY, PLEASANTON, CA 94566
PLEASANTON UNIFIED SCHOOL DISTRICT

REVISIONS	NO.	ITEM	DATE

DRAWN BY: FS
CHECKED BY: NA
SFA JOB NO: 21082
DATE: 12/01/2021

FA.1

SHEET NOTES

1. CIRCUIT VIA 1/2" 2 #12 & 1 #12 GND TO NEAREST ELECTRICAL PANEL; AT PANEL PROVIDE AND INSTALL 20 AMP, 1-POLE BREAKER WITH LOCK-ON DEVICE WITH RED MARKINGS LABELED "FIRE ALARMECS".
2. WHERE NECESSARY PROVIDE & INSTALL ACCESS PANEL FOR HEAT DETECTOR ABOVE CEILING.
3. PROVIDE AND INSTALL LAMICOID NAMEPLATE ON DEVICE READING "EOL".
4. HOMERUN TO REMOTE POWER SUPPLY "RPS-1" AND DIGITAL AUDIO AMPLIFIER "AMP-1" LOCATED IN ELECTRICAL ROOM C10.
5. CONTRACTOR SHALL PROVIDE AND INSTALL 2" C. FOR FIRE ALARM CABLES.
6. PROVIDE AND INSTALL 18" SQ. X 6" DEEP NEMA 3R PULLCAN.
7. SEE SHEET E2.1 FOR CONTINUATION.
8. SEMI-FLUSH FIRE ALARM CONTROL PANEL; CONTRACTOR SHALL CUT AND PATCH WALL AS NECESSARY.
9. MOUNT BATTERY CABINET ON BACK SIDE OF WALL ADJACENT TO FACP.

GENERAL NOTES:

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

B. ALL INDOOR SPEAKERS/HORNS SHALL BE 0.5 WATTS RATED MINIMUM. ALL OUTDOOR SPEAKERS/HORNS SHALL BE 2 WATTS RATED MINIMUM.

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.

TYPE B = DENOTES NOTIFICATION APPLIANCE CIRCUITS (SPEAKERS, STROBES, BELL ETC.) UNLESS OTHERWISE NOTED, PROVIDE (1) PAIR OF #12 AWG. CROSSHATCHES INDICATE THE NUMBER OF PAIRS.

TYPE C = 6-STRAND 62.5 MICRON MULTI-MODE FIBER OPTIC CABLE, SUITABLE FOR UNDERGROUND USE.

(DSA STAMP AREA)



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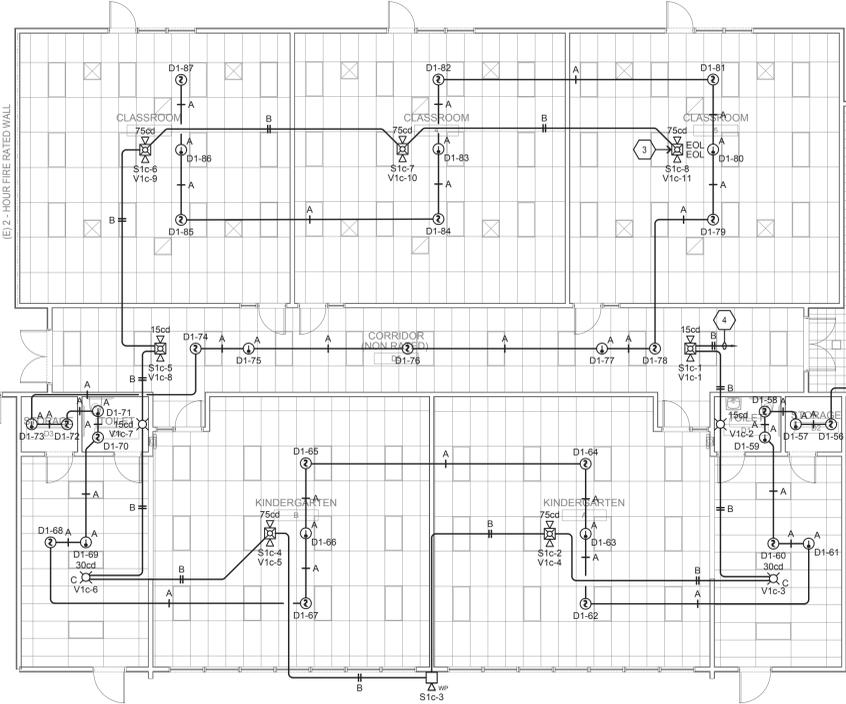
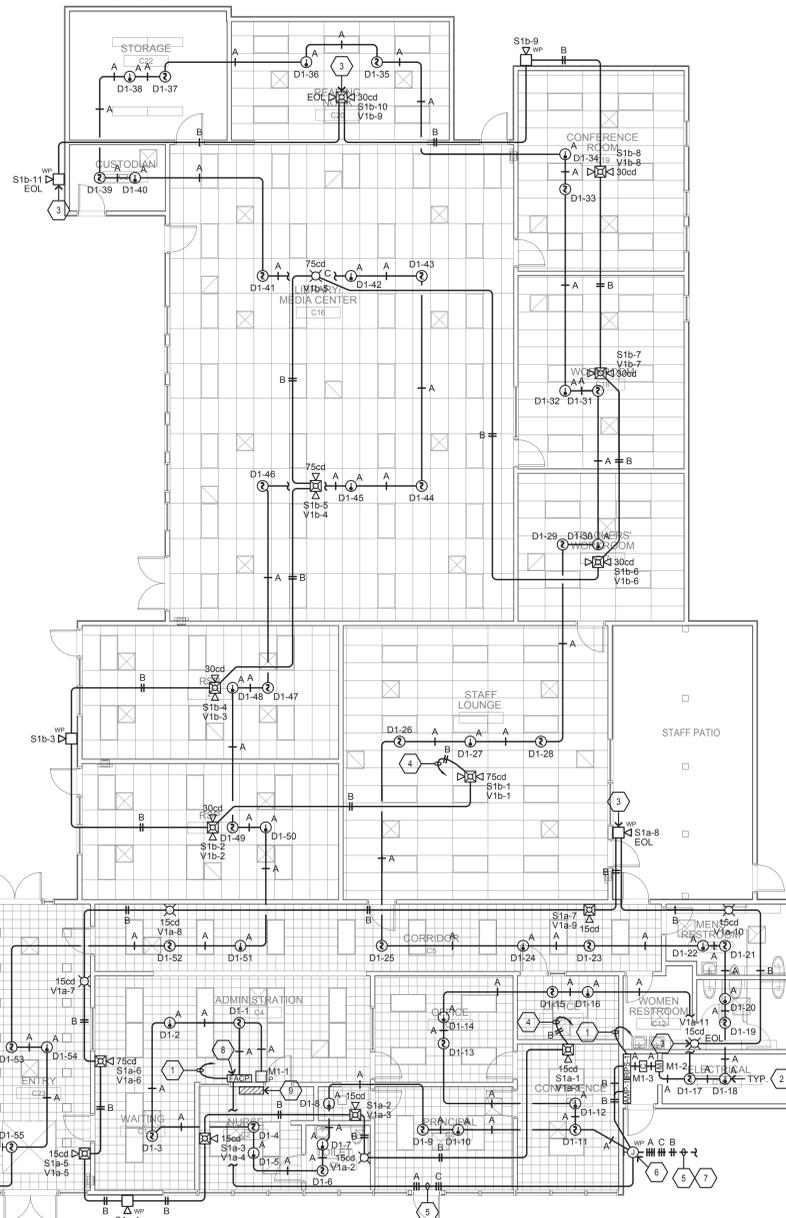
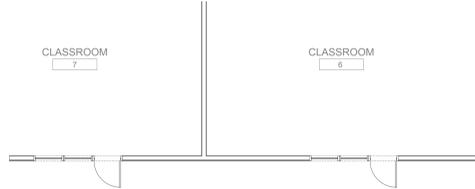
FIRE ALARM PLANS - BUILDINGS C & D
CAMPUS-WIDE FIRE ALARM REPLACEMENT
VALLEY VIEWS ELEMENTARY SCHOOL
480 ADAMS WAY, PLEASANTON, CA 94566
PLEASANTON UNIFIED SCHOOL DISTRICT

REVISIONS

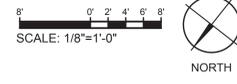
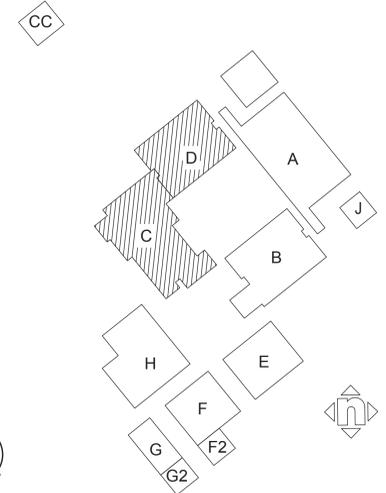
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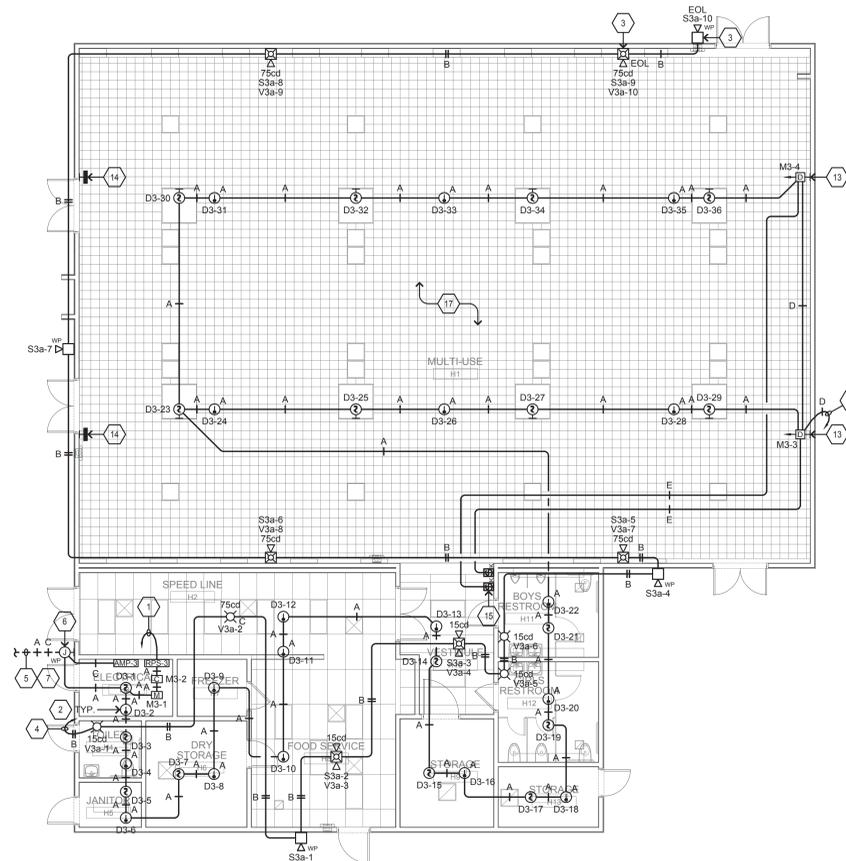
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FA4.2



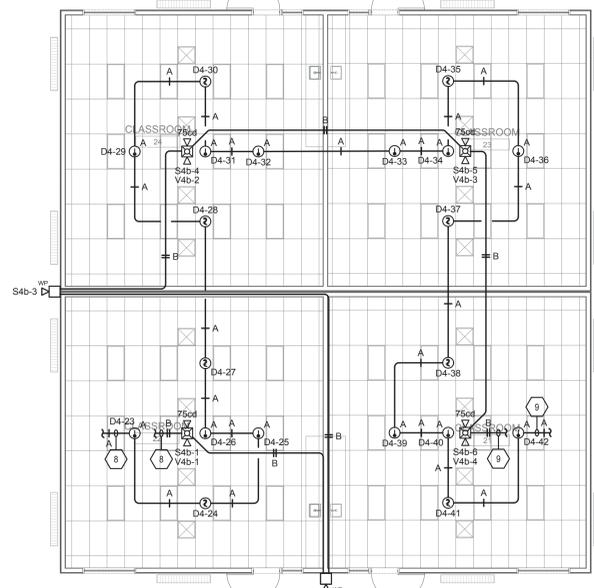
BUILDING KEY



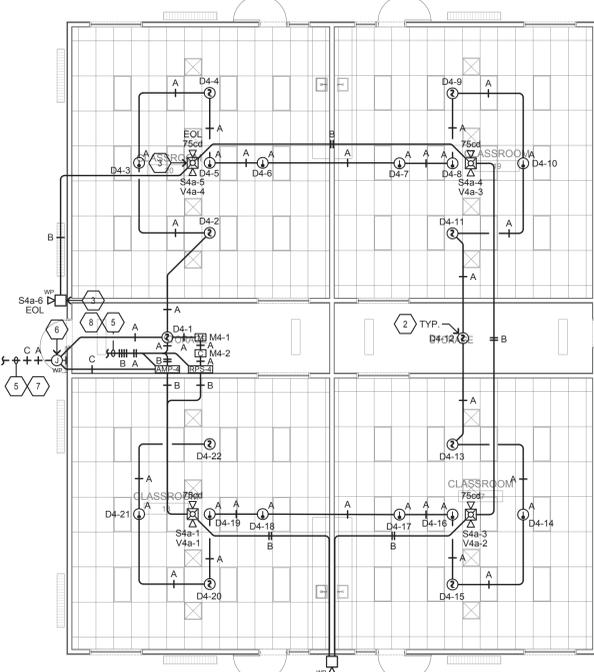


3 FIRE ALARM PLAN - BUILDING F2
SCALE: 1/4"=1'-0"

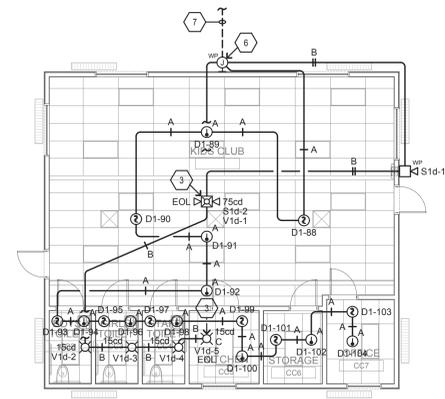
6 FIRE ALARM PLAN - BUILDING H
SCALE: 1/8"=1'-0"



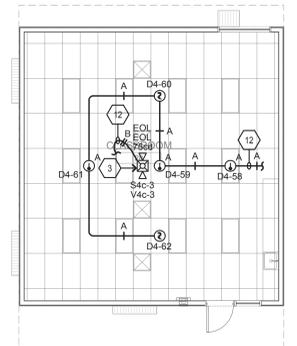
2 FIRE ALARM PLAN - BUILDING F
SCALE: 1/8"=1'-0"



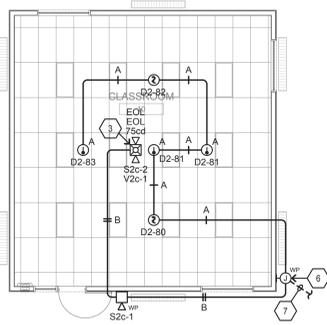
1 FIRE ALARM PLAN - BUILDING E
SCALE: 1/8"=1'-0"



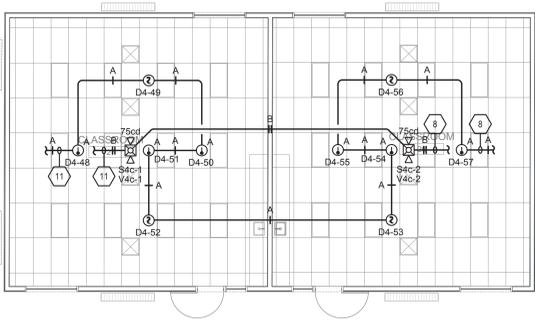
8 FIRE ALARM PLAN - BUILDING CC
SCALE: 1/8"=1'-0"



5 FIRE ALARM PLAN - BUILDING G2
SCALE: 1/8"=1'-0"



7 FIRE ALARM PLAN - BUILDING J
SCALE: 1/8"=1'-0"



4 FIRE ALARM PLAN - BUILDING G
SCALE: 1/8"=1'-0"

- SHEET NOTES**
- CIRCUIT VIA 2/C, 2 #12 & 1 #12 GND TO NEAREST ELECTRICAL PANEL; AT PANEL PROVIDE AND INSTALL 20 AMP, 1-POLE BREAKER WITH LOCK-ON DEVICE WITH RED MARKINGS LABELED "FIRE ALARMECS".
 - WHERE NECESSARY PROVIDE & INSTALL ACCESS PANEL FOR HEAT DETECTOR ABOVE CEILING; 24" SQ. OPENING MINIMUM.
 - PROVIDE AND INSTALL LAMICOID NAMEPLATE ON DEVICE READING "EOL".
 - HOMERUN TO REMOTE POWER SUPPLY "RPS-3" AND DIGITAL AUDIO AMPLIFIER "AMP-3" LOCATED IN ELECTRICAL ROOM H3.
 - CONTRACTOR SHALL PROVIDE AND INSTALL 1"C. FOR FIRE ALARM CABLES.
 - PROVIDE AND INSTALL 12" SQ. X 4" DEEP NEMA 3R PULLCAN.
 - SEE SHEET E2.1 FOR CONTINUATION.
 - UP TO PULLCAN ON ROOF; SEE SHEET E2.1 FOR CONTINUATION.
 - SEE DETAIL 3/FA4.1 FOR CONTINUATION.
 - SEE DETAIL 2/FA4.1 FOR CONTINUATION.
 - SEE DETAIL 5/FA4.1 FOR CONTINUATION.
 - SEE DETAIL 4/FA4.1 FOR CONTINUATION.
 - BEAM SMOKE DETECTOR TRANSMITTER. INSTALL WITH DIRECT LINE OF SIGHT OF REFLECTOR PLATE; FIELD VERIFY EXACT MOUNTING HEIGHT.
 - REFLECTOR PLATE. INSTALL WITH DIRECT LINE OF SIGHT OF TRANSMITTER; FIELD VERIFY EXACT MOUNTING HEIGHT.
 - PROJECTED BEAM DETECTOR REMOTE TEST STATION WITH KEYLOCK; CONNECT PER MANUFACTURER'S INSTALLATION INSTRUCTIONS. MOUNT AT +44" A.F.F. TO TOP OF BOS; VERIFY EXACT LOCATION WITH ARCHITECT.
 - HOMERUN TO REMOTE POWER SUPPLY "RPS-3" LOCATED IN ELECTRICAL ROOM H3.
 - PROVIDE AND INSTALL CSFM LISTED WIREGUARD FOR ALL DEVICES IN MULTI-USE ROOM.

GENERAL NOTES:

A. 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.

B. ALL INDOOR SPEAKERS/HORNS SHALL BE 0.5 WATTS RATED MINIMUM. ALL OUTDOOR SPEAKERS/HORNS SHALL BE 2 WATTS RATED MINIMUM.

CABLE LEGEND

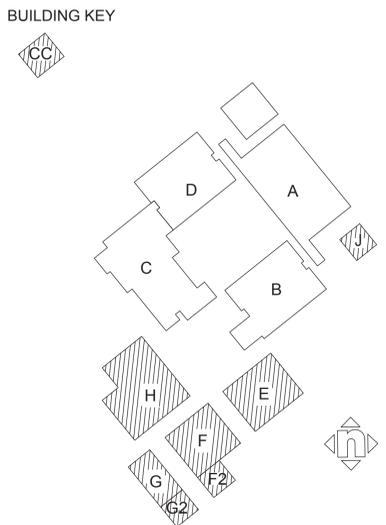
TYPE A = DENOTES INITIATING DETECTION CIRCUITS (SMOKE DETECTOR, HEAT DETECTOR, ETC.) UNLESS OTHERWISE NOTED, PROVIDE (1) #14 TWISTED-UNSHIELDED PAIR. CROSSHATCHES INDICATE THE NUMBER OF PAIRS.

TYPE B = DENOTES NOTIFICATION APPLIANCE CIRCUITS (SPEAKERS, STROBES, BELL ETC.) UNLESS OTHERWISE NOTED, PROVIDE (1) PAIR OF #12 AWG. CROSSHATCHES INDICATE THE NUMBER OF PAIRS.

TYPE C = 6-STRAND 62.5 MICRON MULTI-MODE FIBER OPTIC CABLE, SUITABLE FOR UNDERGROUND USE.

TYPE D = DENOTES 24VDC CONSTANT POWER CIRCUITS FOR DUCT SMOKE DETECTOR OR BEAM SMOKE DETECTOR. UNLESS OTHERWISE NOTED, PROVIDE (1) PAIR OF #12 AWG. CROSSHATCHES INDICATE THE NUMBER OF PAIRS.

TYPE E = DENOTES NOTIFICATION APPLIANCE CIRCUITS FOR BEAM SMOKE DETECTOR TEST SWITCH. UNLESS OTHERWISE NOTED, PROVIDE (1) PAIR OF #12 AWG. CROSSHATCHES INDICATE THE NUMBER OF PAIRS.



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FIRE ALARM PLANS - BUILDINGS E, F, F2, G, G2, H, J & CC

CAMPUS-WIDE FIRE ALARM REPLACEMENT
VALLEY VIEWS ELEMENTARY SCHOOL
480 ADAMS WAY, PLEASANTON, CA 94566
PLEASANTON UNIFIED SCHOOL DISTRICT

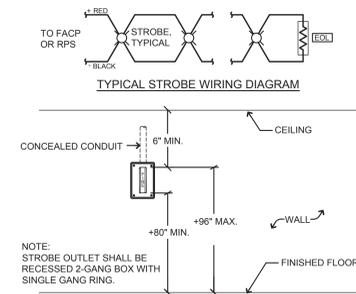
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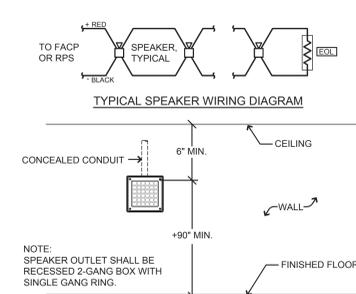
FA4.3

REVISIONS NO.	ITEM	DATE

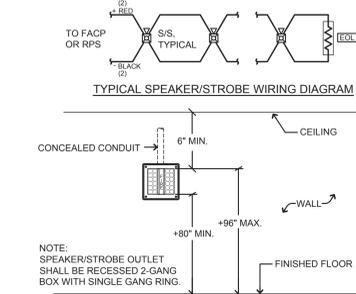
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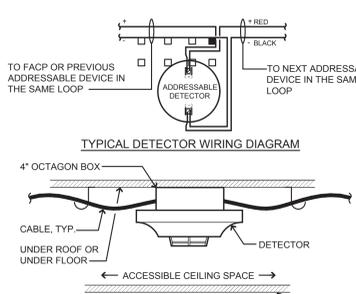
5 STROBE INSTALLATION DETAIL
NO SCALE



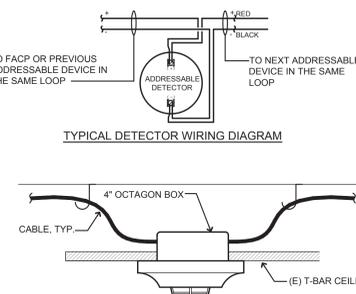
4 SPEAKER INSTALLATION DETAIL
NO SCALE



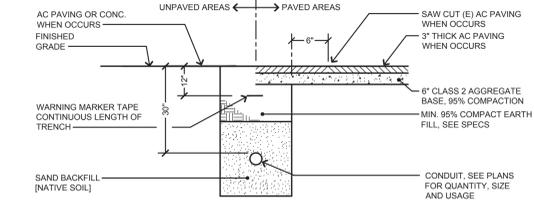
3 SPEAKER/STROBE INSTALLATION DETAIL
NO SCALE



2 DETECTOR MOUNTING DETAIL
NO SCALE (ABOVE CEILING)

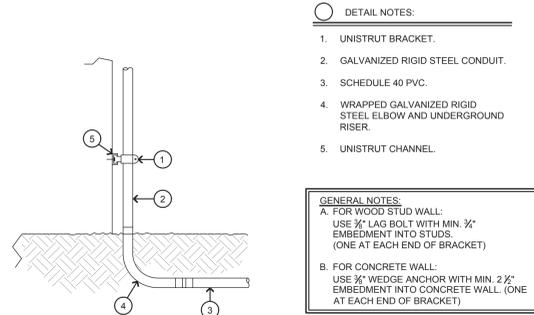


1 DETECTOR MOUNTING DETAIL
NO SCALE

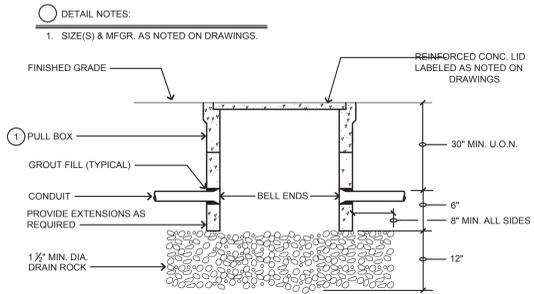


- NOTES:**
- SAW CUT, TRENCH & BACKFILL FOR (N) CONDUITS. PATCH WALKWAY TO MATCH (E) SURROUNDING SURFACES. CARE SHALL BE TAKEN TO PROTECT EXISTING TREES, RESEED OR RESOD (E) DISTURBED PLANTED AREAS TO ARCHITECT'S SATISFACTION.
 - EXISTING A.C. SHALL BE CUT AND REMOVED IN SUCH A MANNER SO AS NOT TO TEAR BULGE OR DISPLACE ADJACENT PAVEMENT. EDGES SHALL BE CLEAN AND VERTICAL. ALL CUTS SHALL BE PARALLEL OR PERPENDICULAR TO STREET CENTERLINE, WHEN PRACTICAL.
 - BASE MATERIAL TO BE REPLACED TO THE DEPTH OF EXISTING BASE AND COMPACTED TO A MIN. 95% RELATIVE COMPACTION. A.C. MAY BE SUBSTITUTED FOR BASE MATERIAL. WHEN USED AS BACKFILL, CLASS 100-E-100 P.C.C. MAY BE SUBSTITUTED FOR BASE MATERIAL.
 - A TACK COAT OF ASPHALTIC EMULSION OR PAVING ASPHALT SHALL BE APPLIED TO EXISTING A.C. AT ALL CONTACT SURFACES, PRIOR TO RESURFACING.
 - ASPHALTIC CONCRETE RESURFACING:
A) MINIMUM TOTAL THICKNESS SHALL BE ONE INCH GREATER THAN EXISTING A.C.
B) A.C. SHALL BE HOT PLANT MIX.
 - ALL A.C. RESURFACING SHALL BE SEAL COATED WITH AN EMULSIFIED ASPHALT AND COVERED WITH CLEAN SAND.

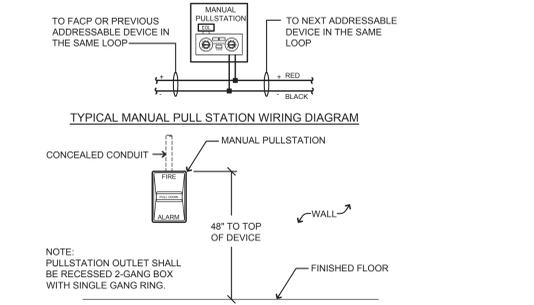
9 TYPICAL TRENCH SECTION
NO SCALE



8 UNDERGROUND CONDUIT RISER DETAIL
NO SCALE

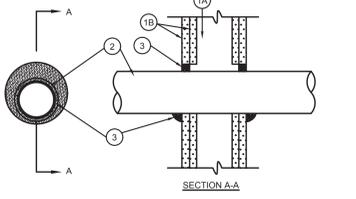


7 TYPICAL PULLBOX DETAIL
NO SCALE



6 PULL STATION MOUNTING DETAIL
NO SCALE

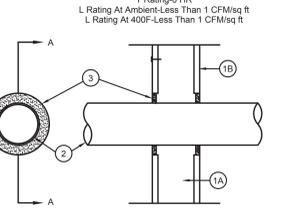
SEE FLOOR PLAN DRAWINGS FOR RATED WALL LOCATIONS
U.L. System No. W-L-1049
 F Rating-1 and 2 Hr (See Item 1B)
 T Rating-0 HR
 L Rating At Ambient-Less Than 1 CFM/sq ft
 L Rating At 400F-Less Than 1 CFM/sq ft



- Wall Assembly-The 1 or 2 hr fire-rated gypsum wallboard/stud wall assembly shall be constructed of the materials and in the manner described in the individual U300 or U400 Series Wall or Partition Design in the UL Fire Resistance Directory and shall include the following construction features:
 A. Studs-Wall framing may consist of either wood studs or steel channel studs. Wood studs to consist of nom 2 by 4 in. lumber spaced 16 in. OC. Steel studs to be min 3-5/8 in. wide and spaced max 24 in. OC. When steel studs are used and the diam of opening exceeds the width of stud cavity, the opening shall be framed on all sides using lengths of steel stud installed between the vertical studs and screw-attached to the steel studs at each end. The framed opening in the wall shall be 4 to 6 in. wider and 4 to 6 in. higher than the diam of the penetrating item such that, when the penetrating item is installed in the opening, a 2 to 3 in. clearance is present between the penetrating item and the framing on all four sides.
 B. Wallboard, Gypsum-5/8 in. thick, 4 ft wide with square or tapered edges. The gypsum wallboard type, thickness, number of layers, fastener type and sheet orientation shall be as specified in the individual U300 or U400 Series Design in the UL Fire Resistance Directory. Max diam of opening is 25-3/4 in. for steel stud walls. Max diam of opening is 14-1/2 in. for wood stud walls. The hourly F Rating of the firestop system is equal to the hourly fire rating of the wall assembly in which it is installed.
 2. Through Penetrant-One metallic pipe, conduit or tubing to be installed either concentrically or eccentrically within the firestop system. The annular space between pipe, conduit or tubing and periphery of opening shall be min 0 in. (point contact) to max 1-3/4 in. Pipe, conduit or tubing to be rigidly supported on both sides of wall assembly. The following types and sizes of metallic pipes, conduits or tubing may be used:
 A. Steel Pipe-Nom 24 in. diam (or smaller) Schedule 10 (or heavier) steel pipe.
 B. Iron Pipe-Nom 24 in. diam (or smaller) cast or ductile iron pipe.
 C. Conduit-Nom 4 in. diam (or smaller) steel electrical metallic tubing, nom 6 in. diam (or smaller) steel conduit or nom 1 in. diam (or smaller) flexible steel conduit.
 D. Copper Tubing-Nom 6 in. diam (or smaller) Type L (or heavier) copper tubing.
 E. Copper Pipe-Nom 6 in. diam (or smaller) Regular (or heavier) copper pipe.
 3. Fill, Void or Cavity Material-Sealant-Min 5/8 in. thickness of fill material applied within annulus, flush with both surfaces of wall. At the point contact location between penetrant and gypsum wallboard, a min 3/8 in. diam bead of fill material shall be applied at the gypsum wallboard/through penetrant interface on both surfaces of wall.
 Specified Technologies Inc.-SpecSeal 100, 101, 102 or 105 Sealant
 *bearing the UL Classification Marking

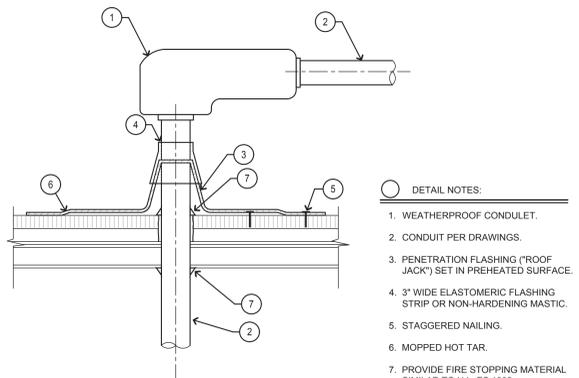
11 2-HR FIRE-RATED WALL PENETRATION
NO SCALE

SEE FLOOR PLAN DRAWINGS FOR RATED WALL LOCATIONS
U.L. System No. W-L-1062
 F Rating-1 HR
 T Rating-0 HR
 L Rating At Ambient-Less Than 1 CFM/sq ft
 L Rating At 400F-Less Than 1 CFM/sq ft



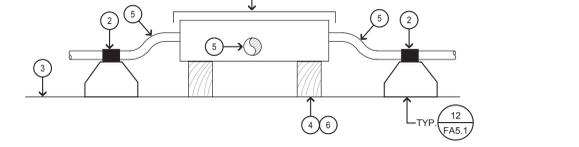
- Wall Assembly-The fire-rated gypsum wallboard/stud wall assembly shall be constructed of the materials and in the manner specified in the individual U300 or U400 Series Wall and Partition Designs in the UL Fire Resistance Directory and shall include the following construction features:
 A. Studs-Wall framing may consist of either wood studs or steel channel studs. Wood studs to consist of nom 2 by 4 in. lumber spaced 16 in. OC. Steel studs to be min 3/25(W)/A8(S) in. wide and spaced max 24 in. OC.
 B. Wallboard Gypsum-One Layer of nom 1/25(W)/A8(S) in. thick gypsum wallboard as specified in the individual Wall and Partition Design. Max diam of opening is 4(Q3(W)/A4(S) in.
 2. Through Penetrants-One metallic conduit to be installed within the firestop system. The space between the conduit and periphery of opening shall be a min 1(Q1(W)/A4(S) in. to a max 1(Q3(W)/A8(S) in. Conduit to be rigidly supported on both sides of wall assembly. A nominal 4 in. diameter (or smaller) electrical metallic tubing or steel conduit may be used.
 3. Fill, Void or Cavity Material-Caulk-Min 1(Q1(W)/A2(S) in. thickness of fill material applied within the annulus, flush with both surfaces of wall.
 General Electric Co.-Pensil 100 Caulk.
 Specified Technologies Inc.-Pensil 100 Sealant and Pensil 300 Sealant.
 *bearing the UL Classification Marking

10 1-HR FIRE-RATED WALL PENETRATION
NO SCALE

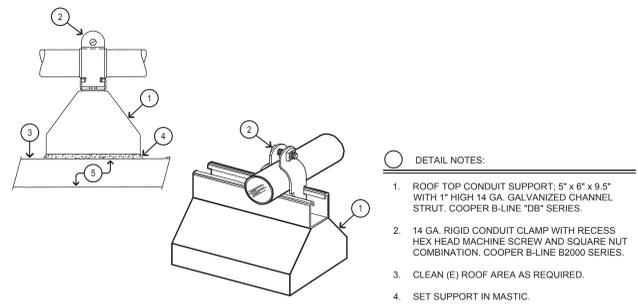


14 CONDUIT PENETRATION
NO SCALE

- DETAIL NOTES:**
- PULLCAN, NEMA 4 LOCKABLE.
 - CONDUIT STRAP.
 - FINISHED ROOF.
 - 4 x 4 SLEEPER, SET IN MASTIC.
 - RIGID STEEL CONDUITS.
 - PRESSURE TREATED LUMBER.



13 PULLCAN AT ROOF DETAIL
NO SCALE



12 ROOF MOUNTED CONDUIT SUPPORT DETAIL
NO SCALE

- DETAIL NOTES:**
- ROOF TOP CONDUIT SUPPORT; 5" x 6" x 9.5" WITH 1" HIGH 14 GA. GALVANIZED CHANNEL STRUT. COOPER B-LINE "DB" SERIES.
 - 14 GA. RIGID CONDUIT CLAMP WITH RECESS HEX HEAD MACHINE SCREW AND SQUARE NUT COMBINATION. COOPER B-LINE B2000 SERIES.
 - CLEAN (E) ROOF AREA AS REQUIRED.
 - SET SUPPORT IN MASTIC.
 - ROOF STRUCTURE.