



DONLON ELEMENTARY SCHOOL CAMPUS WIDE FIRE ALARM REPLACEMENT

4150 DORMAN ROAD, PLEASANTON, CA 94588

PLEASANTON UNIFIED SCHOOL DISTRICT

DSA FILE NUMBER 01-32
DSA APPLICATION NUMBER 01-119913
OPSC TRACKING NUMBER 75101-104

GENERAL NOTES

PRE-BID SITE VISIT

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

SAFETY

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

DAMAGE TO STRUCTURE OR SYSTEMS TO REMAIN

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

EXISTING CONDITIONS

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

CONTRACTOR'S EQUIPMENT

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

UTILITY SHUT-DOWNS AND CONNECTIONS

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

ASBESTOS AND ASBESTOS PRODUCTS

THE OWNER/OPERATOR AND CONTRACTOR SHALL BE AWARE THAT BUILDINGS CONSTRUCTED PRIOR TO 1979 (OR THEREABOUT) 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 CONTAMINANT 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 ADDITIONAL DESIGN EFFORT 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. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE DETECTION, REMOVAL, AND THE DISPOSAL OF ANY EXISTING ASBESTOS MATERIAL, ARCHITECTURAL AND ENGINEERING FEES FOR ADDITIONAL DESIGN EFFORT 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. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE DETECTION, REMOVAL, AND THE DISPOSAL OF ANY EXISTING ASBESTOS MATERIAL, ARCHITECTURAL AND ENGINEERING FEES FOR ADDITIONAL DESIGN EFFORT 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.

CONSTRUCTION SCHEDULING

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

INTERIOR FINISHES

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

PIPES, DUCTS AND CONDUIT - SUPPORT AND BRACING

PIPES, DUCTS, AND CONDUITS SHALL BE SUPPORTED AND BRACED PER THE SMACNA "GUIDELINES FOR SEISMIC RESTRAINTS OF MECHANICAL SYSTEMS AND PLUMBING PIPING SYSTEMS", DPM 0052-13 SEISMIC BRACING AND SUPPORT SYSTEMS.

DRILLED-IN EXPANSION ANCHORS

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

TITLE 24 COMPLIANCE

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

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

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

GENERAL NOTES, cont.

ADMINISTRATIVE REQUIREMENTS

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

COMPLIANCE WITH LOCAL ORDINANCES

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

ABBREVIATIONS

(REFER TO CONSULTANT DRAWINGS FOR ADDITIONAL ABBREVIATIONS)

A.F.F.	ABOVE FINISHED FLOOR	LAM.	LAMINATE
A.P.	ACCESS PANEL	LAV.	LAVATORY
ACT	ACOUSTIC TILE	M.B.	MACHINE BOLT
ADJ.	ADJUSTABLE	M.S.	MACHINE SCREW
ALUM.	ALUMINUM	M.H.	MANHOLE
A.B.	ANCHOR BOLT	MFG.	MANUFACTURER
APPROX.	APPROXIMATELY	M.B.	MARKER BOARD
ARCH.	ARCHITECT	MATL.	MATERIAL
AC	ASPHALTIC CONCRETE	MAX.	MAXIMUM
@	AT	MECH.	MECHANICAL
B.M.	BENCH MARK	MTL.	METAL
BLKG.	BLOCKING	MIN.	MINIMUM
BD.	BOARD	MISC.	MISCELLANEOUS
B.W.	BOTH WAYS	MTD.	MOUNTED
BOT.	BOTTOM	(N)	NEW
BLDG.	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)
C.C or O.C.	CENTER TO CENTER	O.C.	ON CENTER
	CERAMIC TILE	OPNG.	OPENING
CER. TILE	CERAMIC TILE	OPP.	OPPOSITE
C.O.	CLEANOUT	O.P.	OPPOSITE HAND
C.O.T.G.	CLEANOUT TO GRADE	O.H.	OUTSIDE
CLR.	CLEAR	O.H.W.S.	OVAL HEAD WOOD SCREW
C.A.H.R.	CLEAR ALL HEART	O.D.	OVERFLOW DRAIN and/or OUTSIDE DIAMETER
	REDWOOD	O.F.C.I.	OWNER FURNISHED AND CONTRACTOR INSTALLED
C.W.	COLD WATER	PR.	PARTITION
COL.	COLUMN	PL	PLATE
COM.	COMMON	P.	PENNY (NAILS)
CONC.	CONCRETE	PLAS.	PLASTER
CONST.	CONSTRUCTION	PLYWD.	PLYWOOD
C.H.	CONSTRUCTION HEART	P.V.C.	POLY VINYL CHLORIDE
C.H.	CONSTRUCTION JOINT	P.T.	PRESSURE TREATED
CONT.	CONTINUOUS	P.L.	PROPERTY LINE
CONTR.	CONTRACTOR	R.	RADIUS
COUNTER	COUNTER	R.W.L.	RAIN WATER LEADER
COUNTER SUNK	COUNTER SUNK	RWD./R.W.	REDWOOD
DET.	DETAIL	REINF.	REINFORCING
DIA. or Ø	DIAMETER	REQD.	REQUIRED
DIM.	DIMENSION	R.A.G.	RETURN AIR GRILLE
D.A.	DISABLED ACCESS	R.E.	RM ELEVATION
DR.	DOOR	R.D.	ROOF DRAIN
D.S.	DOWNSPOUT	RM.	ROOM
DWG.	DRAWING	R.O.	ROUGH OPENING
D.F.	DRINKING FOUNTAIN and/or DOWNGLAS FIR	RND.	ROUND
EA.	EACH	R.H.M.S.	ROUND HEAD METAL SCREW
E.W.	EACH WAY	R.H.W.S.	ROUND HEAD WOOD SCREW
ELEC.	ELECTRIC OR ELECTRICAL	SSD.	SEE STRUCTURAL DRAWINGS
EL.	ELEVATION	S.T.S.M.S.	SELF TAPPING SHEET METAL SCREW
ENCLOS.	ENCLOSURE and/or ENCLOSURE	SHEATH.	SHEATHING
EQ.	EQUAL	S.M.	SHEET METAL
EQUIP.	EQUIPMENT	S.M.S.	SHEET METAL SCREW
(E)	EXISTING	S.O.V.	SHUT OFF VALVE
EXP.	EXPANSION	SIM.	SIMILAR
E.J.	EXPANSION JOINT	S.C.	SOLID CORE
EXT.	EXPOSED	SPEC.	SPECIFICATION
F.O.C.	FACE OF CONCRETE	SQ.	SQUARE
F.O.M.	FACE OF MASONRY	S.F.	SQUARE FEET
F.O.F.	FACE OF STUD	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	S.A.G.	SUPPLY AIR GRILLE
F.H.M.S.	FLAT HEAD METAL SCREW	THRES.	THRESHOLD
F.H.W.S.	FLAT HEAD WOOD SCREW	T&O.	TONGUE & GROOVE
FL. or FLR.	FLOOR	T.J.	TOOLED JOINT
F.D.	FLOOR DRAIN	T.O.B.	TOP OF BEAM
FTG.	FOOTING	T.O.C.	TOP OF CURB OR CONCRETE
FD.	FOUNDATION	T.O.S.	TOP OF STEEL OR SHEATHING
GALV.	GALVANIZED	T.O.W.	TOP OF WALK
G.I.	GALVANIZED IRON	TYP.	TYPICAL
GA.	GAUGE	U.O.N.	UNLESS OTHERWISE NOTED
GLU.	GLUE	U.O.S.	UNLESS OTHERWISE SHOWN
LAM	LAMINATED	V.T.R.	VENT THROUGH ROOF
GRD.	GRADE	VERT.	VERTICAL
GYP. BD.	GYPSUM BOARD	V.G.	VERTICAL GRAIN
HDW.	HARDWARE	V.I.F.	VERIFY IN FIELD
H.T.	HEIGHT	V.C.T.	VINYL COMPOSITION TILE
H.C.	HOLLOW CORE	V.W.C.	VINYL WALL COVERING
HORIZ.	HORIZONTAL	V.O.I.P.	VOICE OVER INTERNET PROTOCOL
H.B.	HORSE BIRD	W.C.	WATER CLOSET
I.D.	INSIDE DIAMETER	W.H.	WATER HEATER
INSUL.	INSULATION	WP.	WATERPROOF
INT.	INTERIOR	W.W.M.	WELDED WIRE MESH
INV.	INVERT	W.D.	WINDOW DIMENSION
JT.	JOINT	W/	WITH
J.H.	JOIST HANGER	WO	WITHOUT
K.D.	KILN DRIED	WD.	WOOD

BUILDING CODES AND STANDARDS:

2019	CALIFORNIA ADMINISTRATIVE CODE, PART 2, TITLE 24, C.C.R.
2019	CALIFORNIA BUILDING CODE (CBC), PART 2, TITLE 24, C.C.R. (2018 INTERNATIONAL BUILDING CODE, VOLUMES 1 AND 2, WITH 2019 CALIFORNIA AMENDMENTS.)
2019	CALIFORNIA ELECTRIC CODE (CEC), PART 3, TITLE 24, C.C.R. (2018 NATIONAL ELECTRIC CODE WITH 2019 CALIFORNIA AMENDMENTS).
2019	CALIFORNIA MECHANICAL CODE (CMC), PART 4, TITLE 24, C.C.R. (2018 UNIFORM MECHANICAL CODE WITH 2019 CALIFORNIA AMENDMENTS).
2019	CALIFORNIA PLUMBING CODE (CPC), PART 5, TITLE 24, C.C.R. (2018 UNIFORM PLUMBING CODE WITH 2019 CALIFORNIA AMENDMENTS).
2019	CALIFORNIA ENERGY CODE (CENC), PART 6, TITLE 24, C.C.R.
2019	CALIFORNIA FIRE CODE (CFC), PART 9, TITLE 24, C.C.R. (2018 INTERNATIONAL FIRE CODE WITH 2019 CALIFORNIA AMENDMENTS).
2019	CALIFORNIA GREEN BUILDING STANDARDS CODE, PART 11, TITLE 24, C.C.R.
2019	CALIFORNIA REFERENCED STANDARDS, PART 12, TITLE 24, C.C.R.
2016	ASME A17.1 (W/17-1) IBCS A B44a-08 ADDENDA) SAFETY CODE FOR ELEVATORS AND ESCALATORS
2010	AIA STANDARDS FOR ACCESSIBLE DESIGN (2008 IBC PART 305 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	2013 CALIFORNIA EDITION
NFPA 72	NATIONAL FIRE ALARM CODE (CA AMENDED)	2016 EDITION
NFPA 80	SMOKE DETECTORS FOR FIRE PROTECTIVE SIGNALING SYSTEMS	2016 EDITION
NFPA 92	STANDARD FOR SMOKE CONTROL SYSTEMS	2015 EDITION
NFPA 110	EMERGENCY AND STANDBY POWER SYSTEMS	2016 EDITION
NFPA 117	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
UL 288	SMOKE DETECTORS FOR FIRE PROTECTIVE SIGNALING SYSTEMS	2009 EDITION
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	2003 EDITION
UL 521	HEAT DETECTORS FOR FIRE PROTECTIVE SIGNALING SYSTEMS	1999 EDITION
UL 864	CONTROL UNITS FOR FIRE PROTECTIVE SIGNALING SYSTEMS	2003 EDITION
UL 1971	(W/ REVISIONS THROUGH DEC. 2014) SIGNALING DEVICES FOR THE HEARING IMPAIRED	2002 EDITION

COMPLIANCE WITH CFC CHAPTER 33, FIRE SAFETY DURING CONSTRUCTION AND DEMOLITION AND CBC CHAPTER 33, SAFETY DURING CONSTRUCTION WILL BE ENFORCED.

SYMBOLS LEGEND

1 A8.1	SECTION / EXTERIOR ELEVATION SECTION IDENTIFICATION SHEET WHERE SECTION IS DRAWN
4 A8.1	DETAIL DETAIL IDENTIFICATION SHEET WHERE DETAIL IS DRAWN
1 A7.1	INTERIOR ELEVATION INDICATES ELEVATION SHOWN SHEET WHERE ELEVATION IS DRAWN
CLASSROOM 102	ROOM IDENTIFICATION ROOM NAME ROOM NUMBER
3	SPECIFIC NOTE
102A	DOOR DESIGNATION
A	WINDOW DESIGNATION
1	ADDENDUM REVISION CLOUD AROUND REVISION
A	CCD REVISION CLOUD AROUND REVISION
127	FINISH NUMBER SEE SPECS AND I.E. DWGS.
A	EQUIPMENT LETTER SEE EQUIPMENT SCHEDULE
48'-0"	CEILING HEIGHT
1	WALL TYPE
1	MATCH LINE
18'-0"	ELEV. HEIGHT
1	CENTER OF
1	FACE OF

PROJECT SUMMARY

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

DESIGN TEAM

ARCHITECT
SUGIMURA FINNEY ARCHITECTS
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(408) 879-0600
(408) 377-6066 FAX
ATTN: MARK FINNEY MARK@SUGIMURA.COM

ELECTRICAL AND FIRE ALARM ENGINEER

AURUM CONSULTING ENGINEERS
1798 TECHNOLOGY DRIVE, SUITE 242
SAN JOSE, CA 95110
(408) 964-7925

DRAWING INDEX

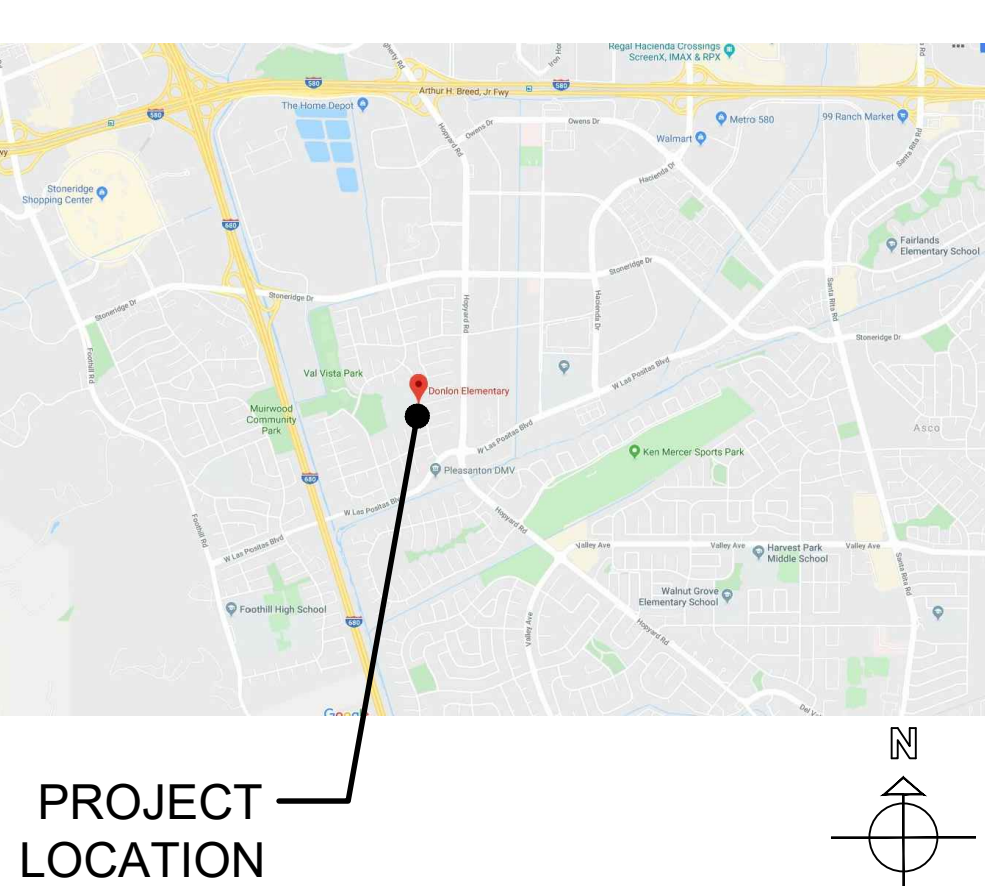
T1 TITLE SHEET
T3 SITE PLAN - FIRE LIFE SAFETY

FIRE ALARM

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

SHEET TOTAL = 12

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.: 01-119913 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:

1) DESIGN INTENT AND APPEARS TO MEET THE APPROPRIATE REQUIREMENTS OF TITLE 24, CALIFORNIA CODE OF REGULATIONS AND THE PROJECT SPECIFICATIONS PREPARED BY ME, AND
2) 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 SECTION 26100 OF THE CALIFORNIA CIVIL CODE AND SECTION 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
C-24673
LICENSE NUMBER

12/01/2021
DATE

9/30/2023
EXPIRATION DATE

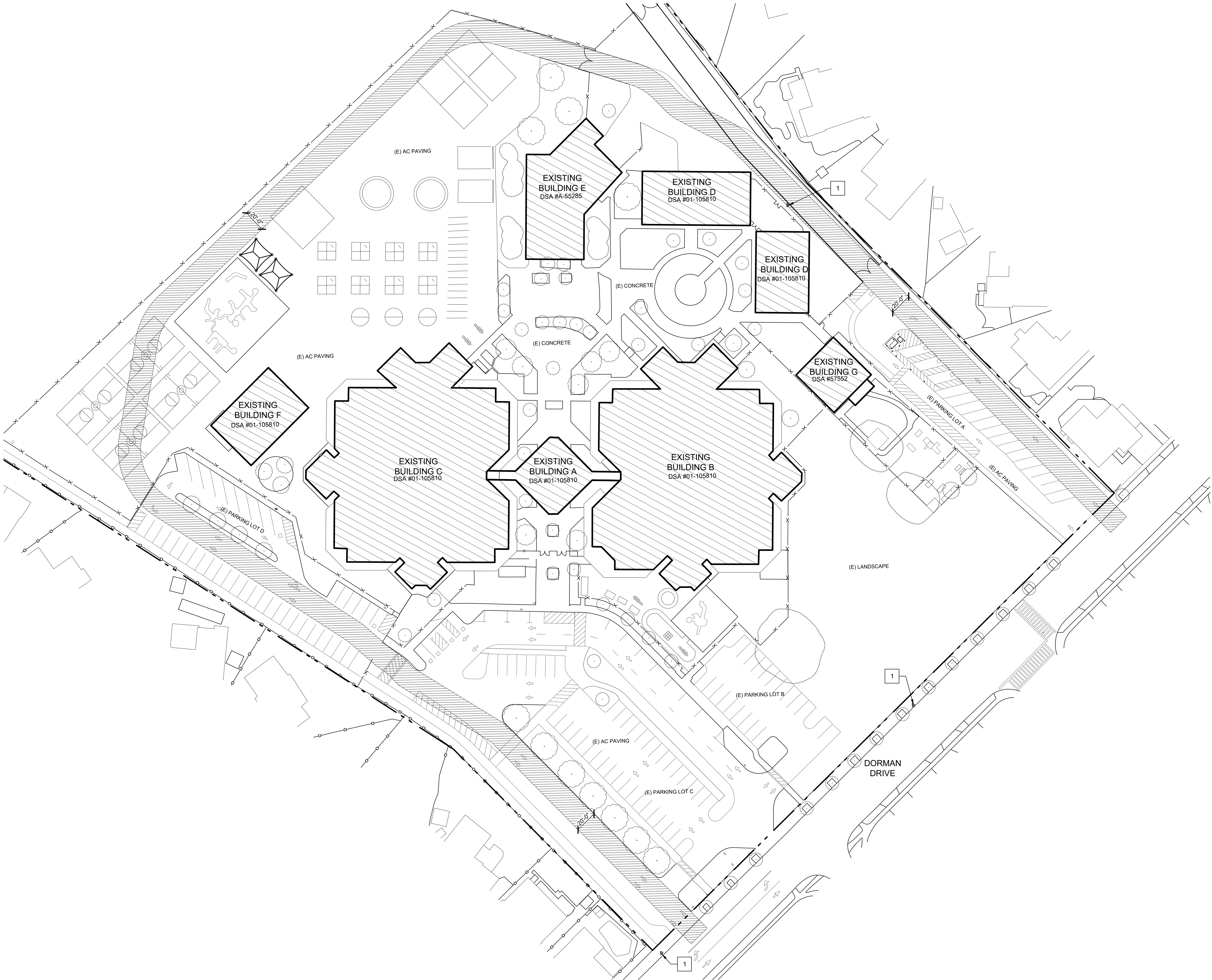


REVISIONS		
NO.	ITEM	DATE

DRAWN BY: TR
CHECKED BY: MB
SFA JOB NO: 21080
DATE: 12/06/2021

BUILDING CODE ANALYSIS				
BUILDING	CONSTRUCTION TYPE OCCUPANCY TYPE	AREA (SQ.FT.)	*ALLOWABLE (SQ.FT.)	# OF STORIES
BUILDING A	V-1 HR / E-1	1,463	15,700	1
BUILDING B1	V-1 HR / E-1	18,037 + 936 = 18,973	15,700 + 3,297 = 18,997	1
BUILDING B2	V-1 HR / E-1	4,844	4,844	1
BUILDING C1	V-1 HR / E-1	17,173 + 832 = 18,005	15,700 + 2,355 = 18,055	1
BUILDING C2	V-1 HR / E-1	9,432	15,700	1
BUILDING D	V-N / E-1	6,720	9,100	1
BUILDING E	V-1 HR / A-2.1	6,094	10,500	1
BUILDING F	V-N / E-3	3,880	9,100	1
BUILDING G	V-N / E-3	1,910	9,100	1
SHADE STRUCTURE	V-B / A-3	400	6,000	1

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



PROJECT SUMMARY
REPLACING EXISTING FIRE ALARM SYSTEM WITH NEW ADDRESSABLE FIRE ALARM AND EM/VOICE 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 98,000 LBS.

(E) FIRE HYDRANT

(E) SIGN

(DSA STAMP AREA)

SUGIMURA
OF FINNEY
ARCHITECTS

SFA

ARCHITECTURE INTERIORS PLANNING

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REGISTERED ARCHITECT
MARK C. FINNEY
NO. C-24873
STATE OF CALIFORNIA
EXPIRES 9-30-2024

SITE PLAN
FIRE LIFE SAFETY

CAMPUS WIDE FIRE ALARM REPLACEMENT
DONLON ELEMENTARY SCHOOL
4150 DORMAN ROAD, PLEASANTON, CA 94588
PLEASANTON UNIFIED SCHOOL DISTRICT

REVISIONS NO.	ITEM	DATE

DRAWN BY: TR

CHECKED BY: MB

SFA JOB NO: 2108Q

DATE: 12/06/2021

FIRE ALARM EQUIPMENT LIST			
SYMBOL	DESCRIPTION AND MODEL NUMBER	MFGR'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 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
[ANN]	SEMI FLUSH FIRE ALARM REMOTE ANNUNCIATOR WITH 640 CHARACTER LIQUID CRYSTAL DISPLAY. WHITE FINISH NOTIFIER LCD SERIES.	LCD-160	7165-0028-0224
[MIC]	SEMI FLUSH FIRE ALARM REMOTE MICROPHONE. PROVIDE & INSTALL INSIDE STAND ALONE CABINET.	RM-1SA	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
[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
[]	ADDRESSABLE PHOTO ELECTRIC FIRE ALARM SMOKE DETECTOR AND BASE, NOTIFIER FSP-951 SERIES.	FSP-951	7272-0028-0503
[]	ADDRESSABLE FIRE ALARM HEAT DETECTOR AND BASE, 135 DEG. FIXED TEMPERATURE AND RATE-OF-RISE, NOTIFIER FST-951 SERIES.	FST-951	7270-0028-0502
[]	ADDRESSABLE MULTI-CRITERIA SMOKE/CARBON MONOXIDE DETECTOR, NOTIFIER FCO-951(A) SERIES.	FCO-951(A)	7272-0028-0510
[]	ADDRESSABLE REFLECTOR-TYPE LINEAR OPTICAL BEAM SMOKE DETECTOR, NOTIFIER FS-OSI-RI SERIES.	FS-OSI-RI	7260-0028-0509
[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
[]	WALL MOUNTED MULTI-CANDELA STROBE WITH FIELD SELECTABLE CANDELA SETTINGS OF 15, 30, 75 AND 110 CANDELA SYSTEM SENSOR, SRL SERIES.	SRL	7125-1653-0504
[]	CEILING MOUNTED MULTI-CANDELA STROBE WITH FIELD SELECTABLE CANDELA SETTINGS OF 15, 30, 75 AND 115 CANDELA SYSTEM SENSOR, SCRL SERIES.	SCRL	7125-1653-0504
[]	WALL 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, SPSR SERIES.	SPSR	7320-1653-0505
[]	CEILING MOUNTED MULTI-CANDELA SPEAKER-STROBE WITH FIELD SELECTABLE CANDELA SETTINGS OF 15, 30, 75 & 115 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
[]	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
1. WIRING MUST BE LISTED FOR USE AS REQUIRED BY TITLE 24/CEC, ARTICLE 760.
 2. WIRE USED IN WET LOCATIONS SHALL BE OF AN APPROVED TYPE IN ACCORDANCE WITH 3-310-8, T24/CEC (I.E. THHW OR EQUAL).
 3. UNDER GROUND AND EXTERIOR CONDUITS TO HAVE WATERTIGHT FITTINGS AND WIRES APPROVED FOR WET LOCATION.
 4. ALL CONDUCTORS SHALL BE ROUTED IN CONDUIT UNLESS SPECIFICALLY NOTED OTHERWISE ON PLANS. MINIMUM CONDUIT SIZE SHALL BE 3/4".
 5. THE CONDUIT AND WIRE SHOWN ON THESE PLANS ARE SHOWN DIAGRAMMATICALLY. EXACT LOCATIONS SHALL BE DETERMINED IN THE FIELD TO SUIT FIELD CONDITIONS. "AS-BUILT" PLANS SHALL BE MAINTAINED AND BE PROVIDED AS REQUIRED BY THE PROJECT INSPECTOR OF RECORD.
 6. PENETRATIONS OF FIRE RATED WALLS SHALL BE PROTECTED IN ACCORDANCE WITH CALIFORNIA BUILDING CODE, CHAPTER 7, TITLE 24. PROVIDE DETAILS OF THROUGH PENETRATION FIRE-STOP SYSTEMS FOR ALL PIPE/CABLE/CONDUIT PASSING THROUGH FIRE RATED WALLS/FLOORS REQUIRING PROTECTED OPENINGS.
 7. ALL DEVICES SHALL BE "CSFM" LISTED.
 8. EXTERIOR DEVICES SHALL BE LISTED FOR EXTERIOR USE BY "CSFM."
 9. AUDIBLE FIRE ALARM SOUND LEVEL SHALL BE AT LEAST 15DBA ABOVE THE AVERAGE SOUND LEVEL.
 10. 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.
 11. 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.
 12. 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.
 13. 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.
 14. POWER SERVICE SHALL BE ON A DEDICATED, 120V BRANCH CIRCUIT, WITH A RED MARKING AND IDENTIFIED AS "FIRE ALARM CIRCUIT CONTROL."
 15. 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.
 16. 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
1. CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE CODES AND REGULATIONS. MATERIALS AND EQUIPMENT SHALL BE U.L. LISTED AND LABELED FOR THE APPLICATION.
 2. THE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL PERMITS, LICENSES AND INSPECTION FEES REQUIRED BY THIS CONTRACT WORK.
 3. CONTRACTOR SHALL VISIT THE PROJECT SITE PRIOR TO BIDDING AND ALLOW FOR ALL FIELD CONDITIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ELECTRICAL WORK NOTED AND CALLED OUT ON ALL CONTRACT DOCUMENTS. THE CONTRACTOR SHALL OBTAIN INFORMATION AND BE FAMILIAR WITH ALL OTHER TRADES WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION BETWEEN OTHER TRADES ON PROJECT.
 4. CONTRACTOR SHALL BE RESPONSIBLE FOR THE SAFETY OF PERSONS AND PROPERTY AND SHALL PROVIDE INSURANCE COVERAGE AS NECESSARY FOR LIABILITY AND PERSONAL, PROPERTY DAMAGE, TO FULLY PROTECT THE OWNER, ARCHITECT AND ENGINEER FROM ANY AND ALL CLAIMS RESULTING FROM THIS WORK.
 5. CONTRACTOR SHALL MAINTAIN RECORD DRAWINGS AT THE PROJECT SITE INDICATING ALL MODIFICATIONS TO ELECTRICAL SYSTEMS. THE CONTRACTOR SHALL AT THE CONCLUSION OF THE PROJECT PROVIDE ACCURATE "AS-BUILT" DRAWINGS ACCEPTABLE TO THE ARCHITECT.
 6. ALL MATERIALS PROVIDED TO THE PROJECT SHALL BE NEW. THE CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE AND INSTALL ALL INCIDENTAL MATERIALS REQUIRED FOR A COMPLETE INSTALLATION.
 7. CONTRACTOR SHALL PROVIDE TO THE ARCHITECT A CONSTRUCTION SCHEDULE OF ELECTRICAL WORK. THE CONSTRUCTION SCHEDULE SHALL IDENTIFY ALL SIGNIFICANT MILESTONES WITH COMPLETION DATES.
 8. CONTRACTOR SHALL PROVIDE ALL REQUIRED "CUTTING, PATCHING, EXCAVATION, BACKFILL AND REPAIRS" NECESSARY TO RESTORE DAMAGED SURFACES TO EQUAL OR BETTER THAN ORIGINAL CONDITIONS EXISTING AT START OF WORK.
 9. CONTRACTOR SHALL BE RESPONSIBLE FOR PAINTING ALL EXPOSED CONDUITS AND ELECTRICAL EQUIPMENT. REFER TO ARCHITECT'S PAINTING SECTION FOR REQUIREMENTS.
 10. ALL ELECTRICAL EQUIPMENT INSTALLED OUTDOORS SHALL BE WEATHERPROOF. EXTERIOR CONDUITS RUN INTO BUILDINGS SHALL BE INSTALLED WITH FLASHING, CAULKED AND SEALED. CONDUITS FOR EXTERIOR ELECTRICAL DEVICES SHALL BE RUN INSIDE BUILDING UNLESS OTHERWISE NOTED ON DRAWINGS.
 11. ALL CONDUITS UNLESS OTHERWISE NOTED ON DRAWINGS SHALL HAVE A MINIMUM: TWO (2) #12s WITH ONE (1) #12 GROUND. "TICK" MARKS SHOWN ON CIRCUITRY ARE FOR ROUGH ESTIMATING ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL WIRES AND WIRE SIZES REQUIRED BY LATEST CODE.
 12. ALL BRANCH CIRCUITS SHALL HAVE INDIVIDUAL NEUTRALS. SHARED NEUTRALS ON MULTIWIRE CIRCUITS IS NOT ALLOWED.
 13. COORDINATE ALL CONDUIT RUNS, ELECTRICAL EQUIPMENT AND PANELS WITH ALL OTHER WORK TO AVOID CONFLICTS.
 14. CONTRACTOR SHALL PROVIDE IN EVERY NEW EMPTY CONDUIT A DRAW STRING FOR USE IN FUTURE CONSTRUCTION.
 15. ALL CONDUIT SHALL BE CONCEALED WHERE POSSIBLE. CUT AND PATCH EXISTING WALLS WHERE NECESSARY. WHERE IT IS NECESSARY TO CUT OR BORE EXISTING STRUCTURAL WALLS FOR NEW ELECTRICAL WORK OBTAIN PERMISSION FROM THE ARCHITECT PRIOR TO STARTING WORK. REUSE EXISTING CONDUIT WHERE POSSIBLE.
 16. WHERE IT IS NOT POSSIBLE TO REUSE EXISTING CONDUIT OR RUN NEW CONCEALED CONDUIT USE NON-METALLIC SURFACE RACEWAY AND BOXES. ROUTING OF ALL NON-METALLIC RACEWAYS SHALL BE APPROVED BY THE ARCHITECT OR OWNER'S REPRESENTATIVE PRIOR TO ROUGH-IN.
 17. EXTENSION RINGS OR RESET BOXES TO BE FLUSH WITH NEW WALL THICKNESS.
 18. 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.
 19. 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.
 20. 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.
 21. 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

[]	MANUAL PULL STATION	[BELL]	BELL (GONG)
[]	STROBE ONLY	[FACP]	FIRE ALARM CONTROL PANEL
[]	STROBE ONLY (CEILING MOUNTED)	[RPS]	REMOTE POWER SUPPLY
[]	SPEAKER ONLY	[AMP]	DIGITAL AUDIO AMPLIFIER
[]	MINI HORN	[EOL]	END OF LINE
[]	SPEAKER/STROBE	[]	JUNCTION BOX - CEILING/WALL MOUNTED, SIZE PER CODE, TAPE AND TAG WIRES
[]	SPEAKER/STROBE (CEILING MOUNTED)	[]	PULLBOX
[]	CHIME/STROBE	[]	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.
[]	HEAT DETECTOR	[]	CROSS HATCHES WITH NUMBER ADJACENT INDICATES WIRE SIZE OTHER THAN #12 AWG.
[]	HEAT DETECTOR (ABOVE ACCESSIBLE CEILING)	[]	CONDUIT - EXISTING
[]	SMOKE DETECTOR	[]	CONDUIT - CONCEALED IN WALLS OR CEILING.
[]	DUCT SMOKE DETECTOR	[]	CONDUIT - IN OR BELOW FLOOR; 3/4" MIN.
[]	TAMPER SWITCH	[]	CONDUIT CONTINUATION.
[]	FLOW SWITCH	[201]	ROOM NUMBER.
[]	POST INDICATING VALVE	[2]	SHEET NOTE REFERENCE SYMBOL: SEE ASSOCIATED NOTE ON SAME SHEET.
		[E1]	DETAIL OR SECTION DESIGNATION.

ABBREVIATIONS

ARCH.	ARCHITECT	FSD	FIRE SMOKE DAMPER
AWG	AMERICAN WIRE GAUGE	IDC	INITIATING DEVICE CIRCUITS
BKR	BREAKER	(N)	NEW
C	CONDUIT	NAC	NOTIFICATION APPLIANCE CIRCUITS
CO	CONDUIT ONLY	NIC	NOT IN CONTRACT
CB	CIRCUIT BREAKER	NO	NUMBER
CKT	CIRCUIT	SLC	SIGNALING LINE CIRCUITS
CLG	CEILING		
(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 ZONE NOMENCLATURE

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

FIRE ALARM SYSTEM OPERATIONAL MATRIX																		
CAUSE	EFFECT										ALARM		TROUBLE		SUPERVISORY		MISC.	
	ALARM TROUBLE (OPEN, SHORTS, OR GROUNDS) ON INITIATION OR SIGNALING CIRCUITS	ALARM TROUBLE (OPEN, SHORTS, OR GROUNDS) ON TROUBLE SIGNALING CIRCUITS	ALARM TROUBLE (OPEN, SHORTS, OR GROUNDS) ON SUPERVISORY CIRCUITS	ALARM TROUBLE (OPEN, SHORTS, OR GROUNDS) ON TROUBLE SIGNALING CIRCUITS	ALARM TROUBLE (OPEN, SHORTS, OR GROUNDS) ON SUPERVISORY CIRCUITS	ALARM TROUBLE (OPEN, SHORTS, OR GROUNDS) ON TROUBLE SIGNALING CIRCUITS	ALARM TROUBLE (OPEN, SHORTS, OR GROUNDS) ON SUPERVISORY CIRCUITS	ALARM TROUBLE (OPEN, SHORTS, OR GROUNDS) ON TROUBLE SIGNALING CIRCUITS	ALARM TROUBLE (OPEN, SHORTS, OR GROUNDS) ON SUPERVISORY CIRCUITS	ALARM TROUBLE (OPEN, SHORTS, OR GROUNDS) ON TROUBLE SIGNALING CIRCUITS	SUPERVISORY TROUBLE (OPEN, SHORTS, OR GROUNDS) ON INITIATION OR SIGNALING CIRCUITS	SUPERVISORY TROUBLE (OPEN, SHORTS, OR GROUNDS) ON TROUBLE SIGNALING CIRCUITS	SUPERVISORY TROUBLE (OPEN, SHORTS, OR GROUNDS) ON SUPERVISORY CIRCUITS	SUPERVISORY TROUBLE (OPEN, SHORTS, OR GROUNDS) ON TROUBLE SIGNALING CIRCUITS	SUPERVISORY TROUBLE (OPEN, SHORTS, OR GROUNDS) ON SUPERVISORY CIRCUITS	SUPERVISORY TROUBLE (OPEN, SHORTS, OR GROUNDS) ON TROUBLE SIGNALING CIRCUITS		
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.
 - FA2.1 FIRE ALARM SITE PLAN.
 - FA3.1 FIRE ALARM DEMOLITION PLAN.
 - FA4.1 FIRE ALARM PLAN - BUILDING C.
 - FA4.2 FIRE ALARM PLAN - BUILDING B.
 - FA4.3 FIRE ALARM PLAN - BUILDING A, D, E, F, & G.

- ### 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, 26 & 30:
1. ALL PERMANENT EQUIPMENT AND COMPONENTS.
 2. TEMPORARY OR MOVABLE EQUIPMENT THAT IS PERMANENTLY ATTACHED (e.g. HARD WIRE) TO THE BUILDING UTILITY SERVICES SUCH AS ELECTRICITY, GAS OR WATER. "PERMANENTLY ATTACHED" SHALL INCLUDE ALL ELECTRICAL CONNECTIONS EXCEPT PLUGS FOR 120/220 VOLT RECEPTACLES HAVING A FLEXIBLE CABLE.
 3. TEMPORARY, MOVABLE OR MOBILE EQUIPMENT WHICH IS HEAVIER THAN 400 POUNDS OR HAS A CENTER OF MASS LOCATED 4 FEET OR MORE ABOVE THE ADJACENT FLOOR OR ROOF LEVEL THAT DIRECTLY SUPPORT THE COMPONENT IS REQUIRED TO BE RESTRAINED IN A MANNER APPROVED BY DSA.
- THE FOLLOWING MECHANICAL AND ELECTRICAL COMPONENTS SHALL BE POSITIVELY ATTACHED TO THE STRUCTURE, BUT NEED NOT BE DETAILED IN THE PLANS. THESE COMPONENTS SHALL HAVE FLEXIBLE CONNECTIONS PROVIDED BETWEEN THE COMPONENT AND ASSOCIATED DUCTWORK, PIPING AND CONDUIT. FLEXIBLE CONNECTIONS MUST ALLOW MOVEMENT IN BOTH TRANSVERSE AND LONGITUDINAL DIRECTIONS:
- A. COMPONENTS 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 BRACING AND ATTACHMENTS ARE BASED ON PRE-APPROVED INSTALLATION GUIDE (e.g. OSHPD OPM FOR 2013 CBC OR LATER), COPIES OF THE BRACING SYSTEM INSTALLATION GUIDE OR MANUAL SHALL BE AVAILABLE ON THE JOBSITE PRIOR TO THE START OF AND DURING THE HANGING AND BRACING OF THE DISTRIBUTION SYSTEMS. THE STRUCTURAL ENGINEER OF RECORD SHALL VERIFY THE ADEQUACY OF THE STRUCTURE TO SUPPORT THE HANGER AND BRACE LOADS.
- MECHANICAL PIPING (MP), MECHANICAL DUCTS (MD), PLUMBING PIPING (PP), ELECTRICAL DISTRIBUTION SYSTEMS (E):
- MP □ MD □ PP □ E ■ - OPTION 1: DETAILED ON THE APPROVED DRAWINGS WITH PROJECT SPECIFIC NOTES AND DETAILS.
MP □ MD □ PP □ E □ - OPTION 2: SHALL COMPLY WITH THE APPLICABLE OSHPD PRE-APPROVED (OPM #) #.

- ### 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
- ### APPLICABLE CODES & STANDARDS
- CODES:
1. 2019 CALIFORNIA ADMINISTRATIVE CODE C.C.R., TITLE 24, PART 1.
 2. 2019 CALIFORNIA BUILDING CODE (CBC) C.C.R., TITLE 24, VOL. 1 & 2 BASED ON THE 2018 INTERNATIONAL BUILDING CODE (IBC) WITH CALIFORNIA AMENDMENTS.
 3. 2019 CALIFORNIA RESIDENTIAL CODE C.C.R., TITLE 24, PART 2.5 BASED ON THE 2018 INTERNATIONAL RESIDENTIAL CODE WITH CALIFORNIA AMENDMENTS.
 4. 2019 CALIFORNIA ELECTRICAL CODE (CEC) C.C.R., TITLE 24, PART 3 BASED ON THE 2017 NATIONAL ELECTRICAL CODE (NEC) WITH CALIFORNIA AMENDMENTS.
 5. 2019 CALIFORNIA MECHANICAL CODE (CMC) C.C.R., TITLE 24, PART 4 BASED ON THE 2018 UNIFORM MECHANICAL CODE (UMC) WITH CALIFORNIA AMENDMENTS.
 6. 2019 CALIFORNIA PLUMBING CODE (CPC) C.C.R., TITLE 24, PART 5 BASED ON THE 2018 UNIFORM PLUMBING CODE (UPC) WITH CALIFORNIA AMENDMENTS.
 7. 2019 CALIFORNIA ENERGY CODE C.C.R., TITLE 24, PART 6.
 8. 2019 CALIFORNIA FIRE CODE (CFC) C.C.R., TITLE 24, PART 9 BASED ON THE 2018 INTERNATIONAL FIRE CODE (IFC) WITH CALIFORNIA AMENDMENTS.
 9. 2019 CALIFORNIA GREEN BUILDING STANDARDS CODE C.C.R., TITLE 24, PART 11.
 10. 2019 CALIFORNIA REFERENCED STANDARDS CODE C.C.R., TITLE 24, PART 12.
 11. TITLE 19 C.C.R., PUBLIC SAFETY, STATE FIRE MARSHAL REGULATIONS.
 12. NATIONAL FIRE ALARM CODE (NFPA 72) 2016.
- STANDARDS:
1. AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)
 2. ELECTRONICS INDUSTRIES ASSOCIATION (EIA)
 3. INSTITUTE OF ELECTRICAL AND ELECTRONIC ENGINEERS (IEEE)
 4. NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION (NEMA)
 5. NATIONAL ELECTRICAL TESTING ASSOCIATION (NETA)
 6. UNDERWRITER LABORATORIES (UL)
 7. CALIFORNIA OCCUPATIONAL SAFETY AND HEALTH ACT STANDARDS (CAL/OSHA)
 8. NATIONAL FIRE PROTECTION ASSOCIATION: INSTALLATION OF CARBON MONOXIDE (NFPA 720)

(DSA STAMP AREA)

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SFA
2151 SOUTH BASCOM AVE. SUITE 200
CAMPBELL, CA 95008
PHONE: 415-477-7777
FAX: 415-477-7778

REGISTERED ARCHITECT
MARK C. FINNEY
No. C-24673
RENEWED 9-30-20

REGISTERED PROFESSIONAL ENGINEER
NAJIB ANWARY
No. E21043
EXP. 3/31/23
REGISTERED ELECTRICAL ENGINEER
FACED SIGNATURE

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

DONLON FIRE ALARM UPGRADE
DONLON ELEMENTARY SCHOOL
4150 DORMAN ROAD, PLEASANTON, CA 94588
PLEASANTON UNIFIED SCHOOL DISTRICT

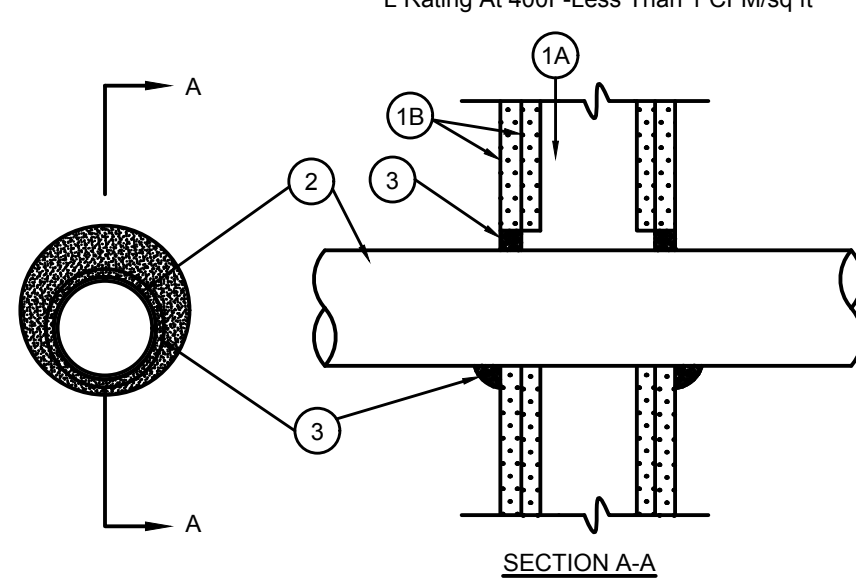
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DATE: X/XX/2021

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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

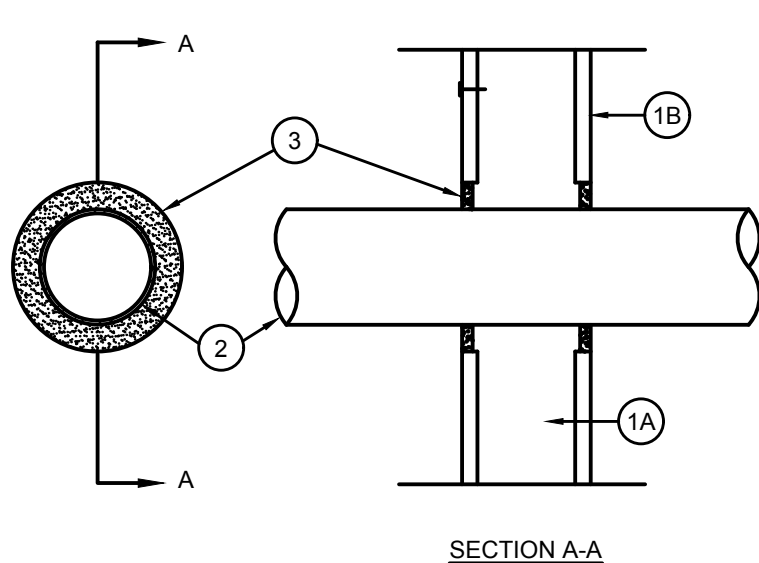


1. Wall Assembly-The 1 or 2 hr fire-rated gypsum wallboard/stud wall assembly shall be constructed of the materials and in the manner described in the individual U300 or U400 Series Wall or Partition Design in the UL Fire Resistance Directory and shall include the following construction features:
 - 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 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



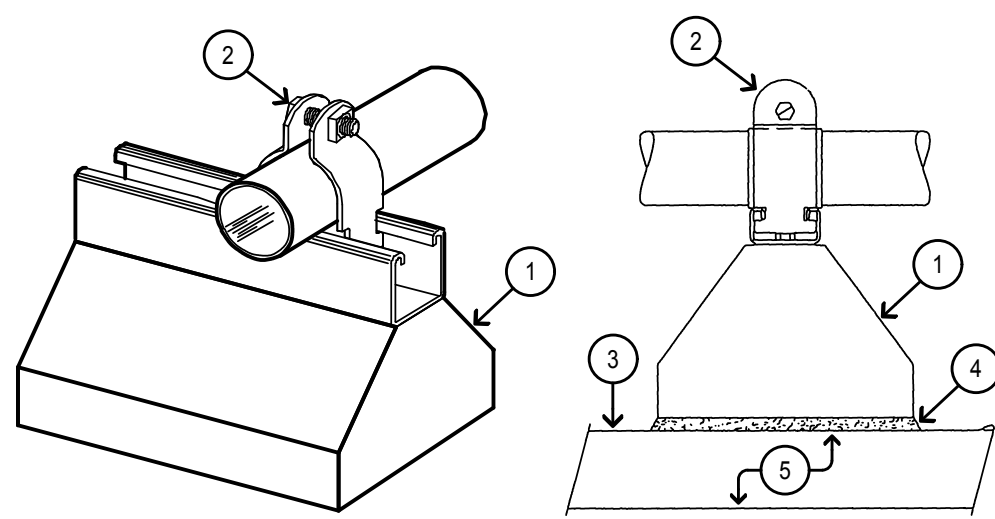
1. Wall Assembly-The fire-rated gypsum wallboard/stud wall assembly shall be constructed of the materials and in the manner specified in the individual U300 or U400 Series Wall and Partition Designs in the UL Fire Resistance Directory and shall include the following construction features:
 - A. Studs-Wall 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)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)W(A)S in. to a max 4(3)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)W(A)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.

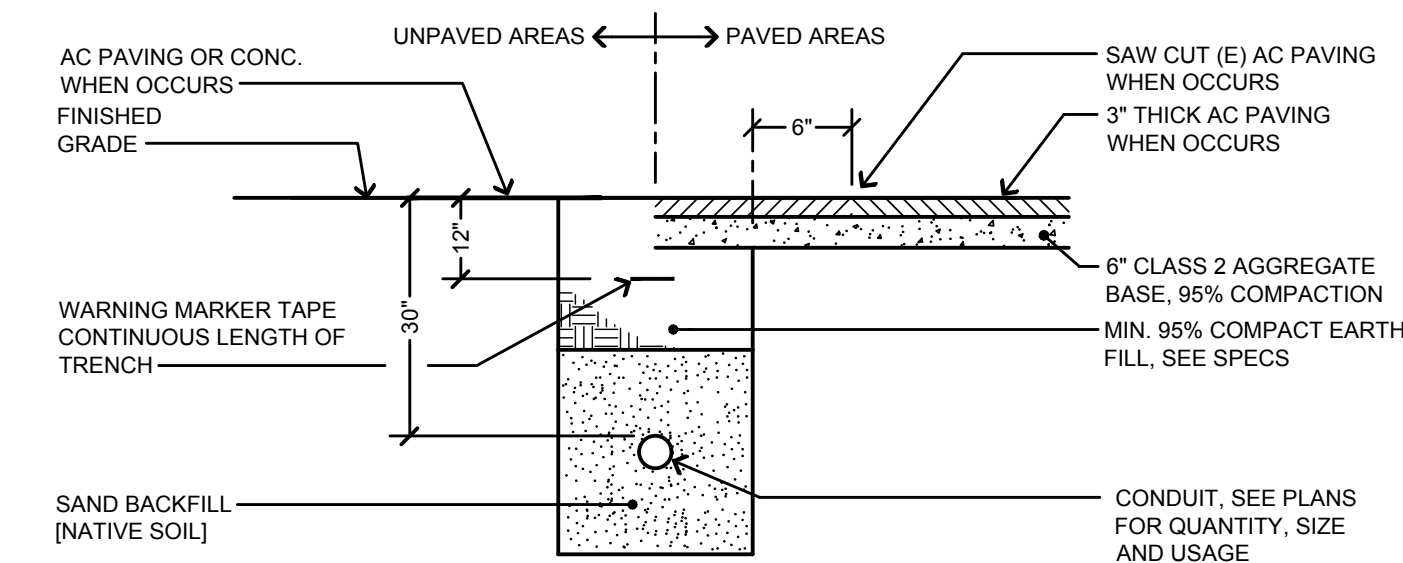
*Bearing the UL Classification Marking

11 1-HR FIRE-RATED WALL PENETRATION
NO SCALE



1. ROOF TOP CONDUIT SUPPORT: 5" x 6" x 9-5/8" 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.

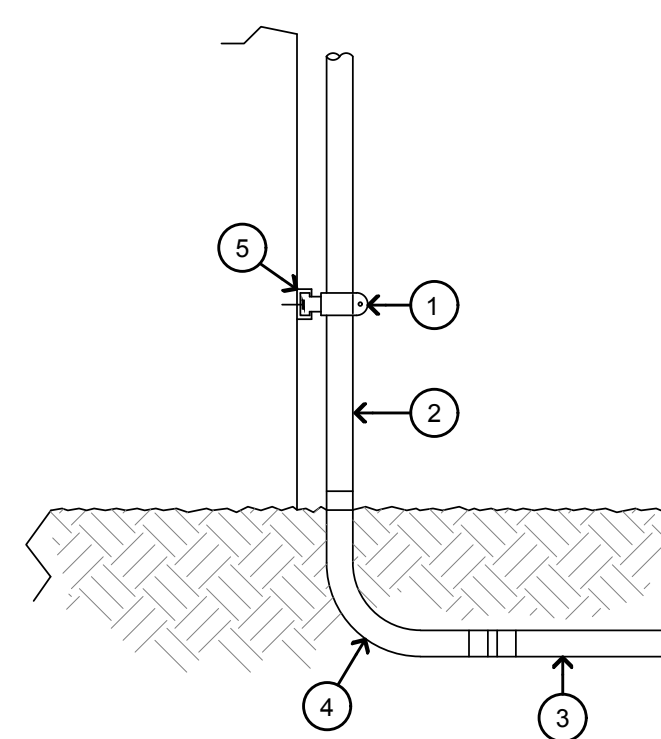
10 ROOF MOUNTED CONDUIT SUPPORT DETAIL
NO SCALE



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:

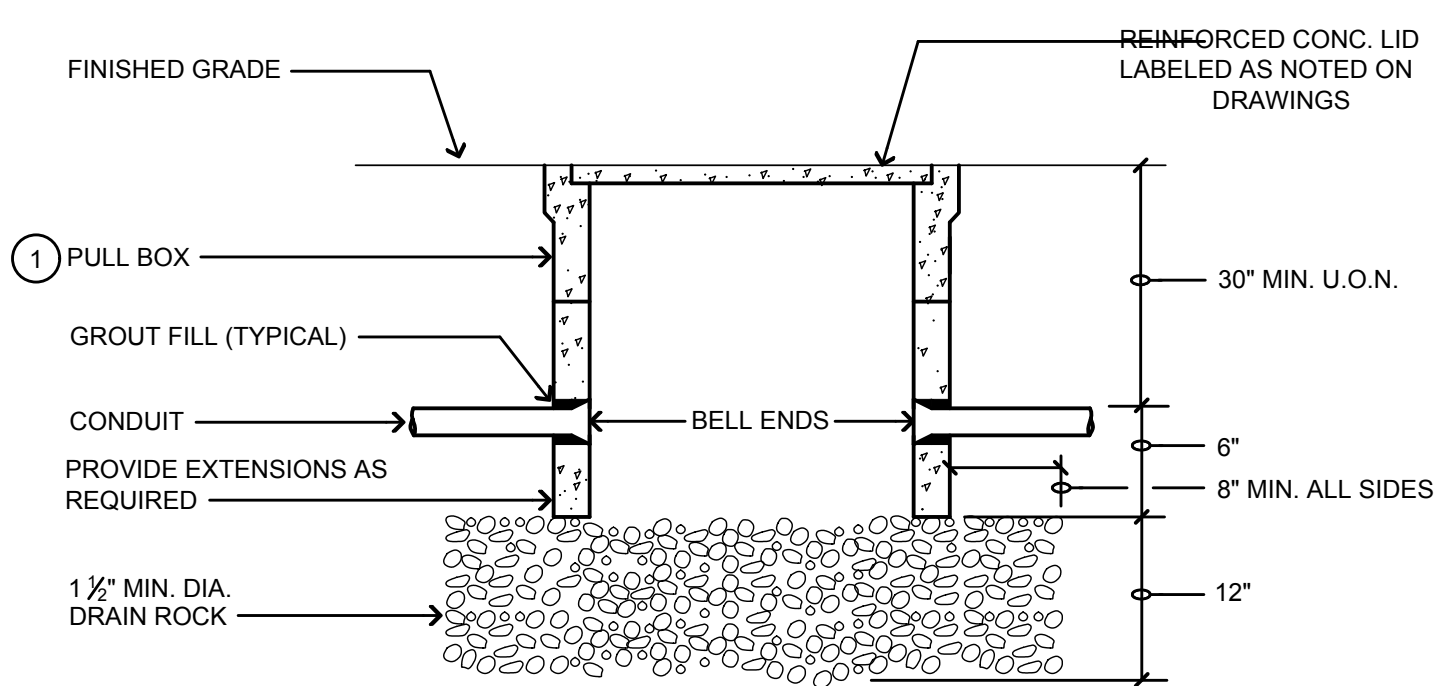
1. UNISTRUT BRACKET.
2. GALVANIZED RIGID STEEL CONDUIT.
3. SCHEDULE 40 PVC.
4. WRAPPED GALVANIZED RIGID STEEL ELBOW AND UNDERGROUND RISER.
5. UNISTRUT CHANNEL.

- 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 3/4" EMBEDMENT INTO CONCRETE WALL. (ONE AT EACH END OF BRACKET)

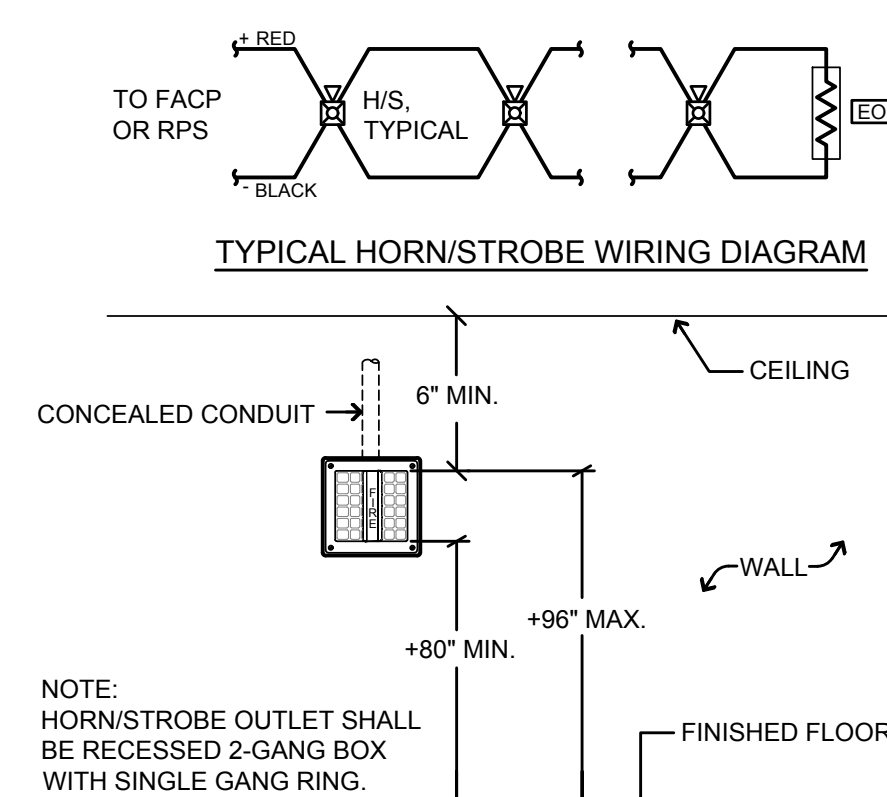
8 UNDERGROUND CONDUIT RISER DETAIL
NO SCALE

DETAIL NOTES:

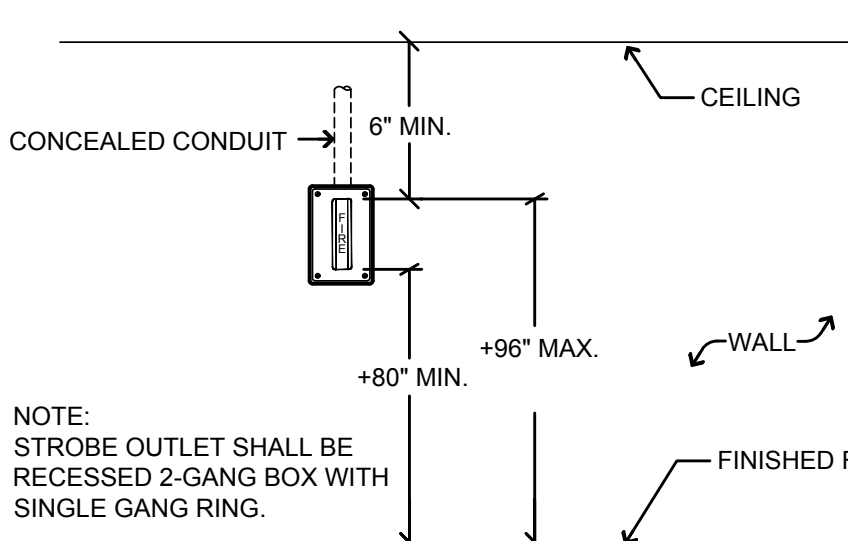
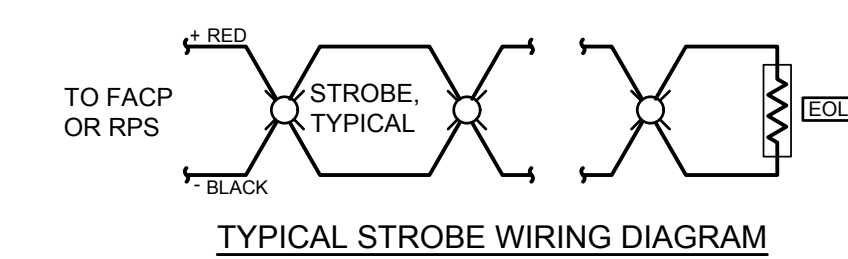
1. SIZE(S) & MFG. AS NOTED ON DRAWINGS.



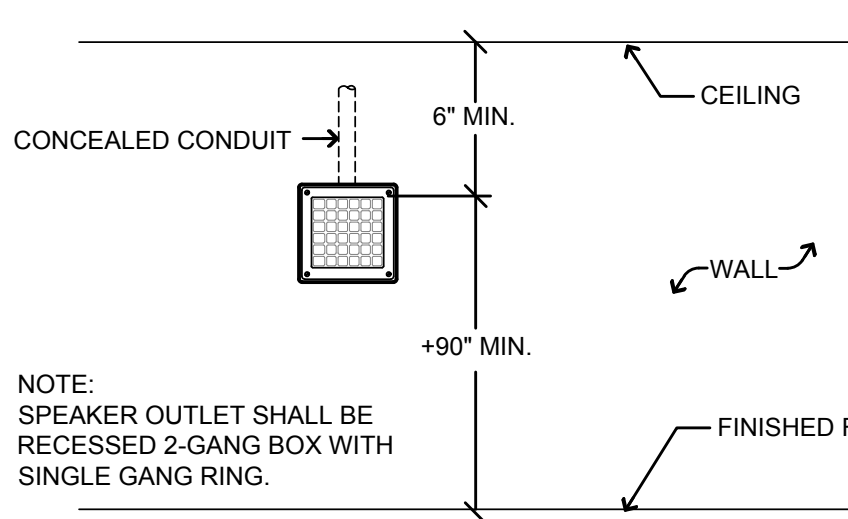
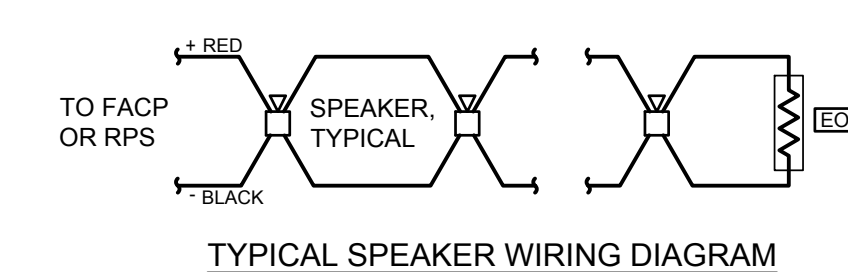
7 TYPICAL PULLBOX DETAIL
NO SCALE



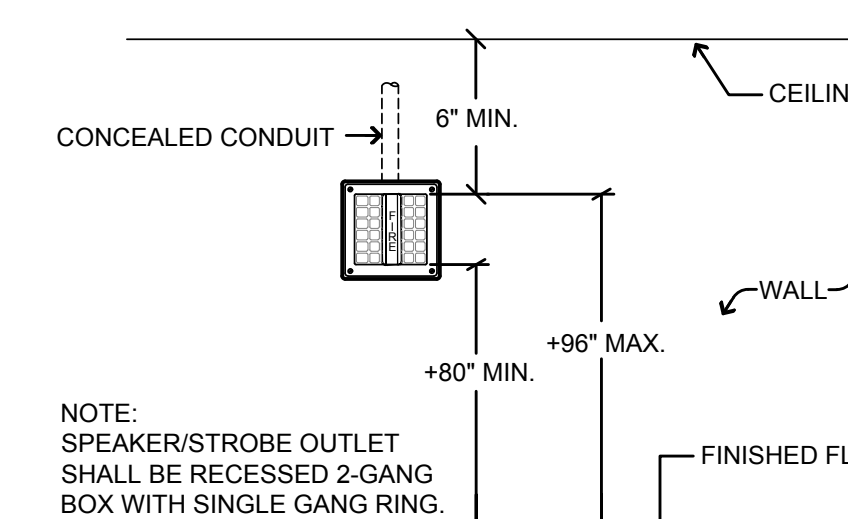
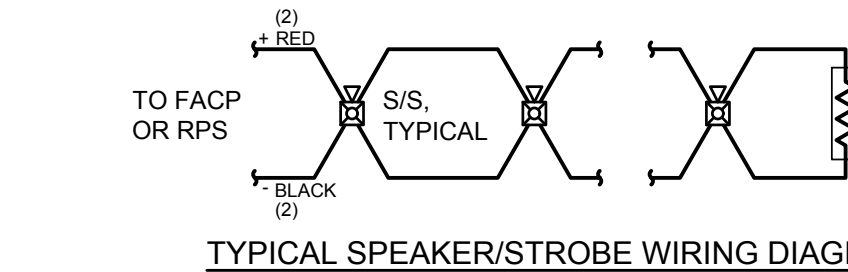
6 HORN/STROBE INSTALLATION DETAIL
NO SCALE



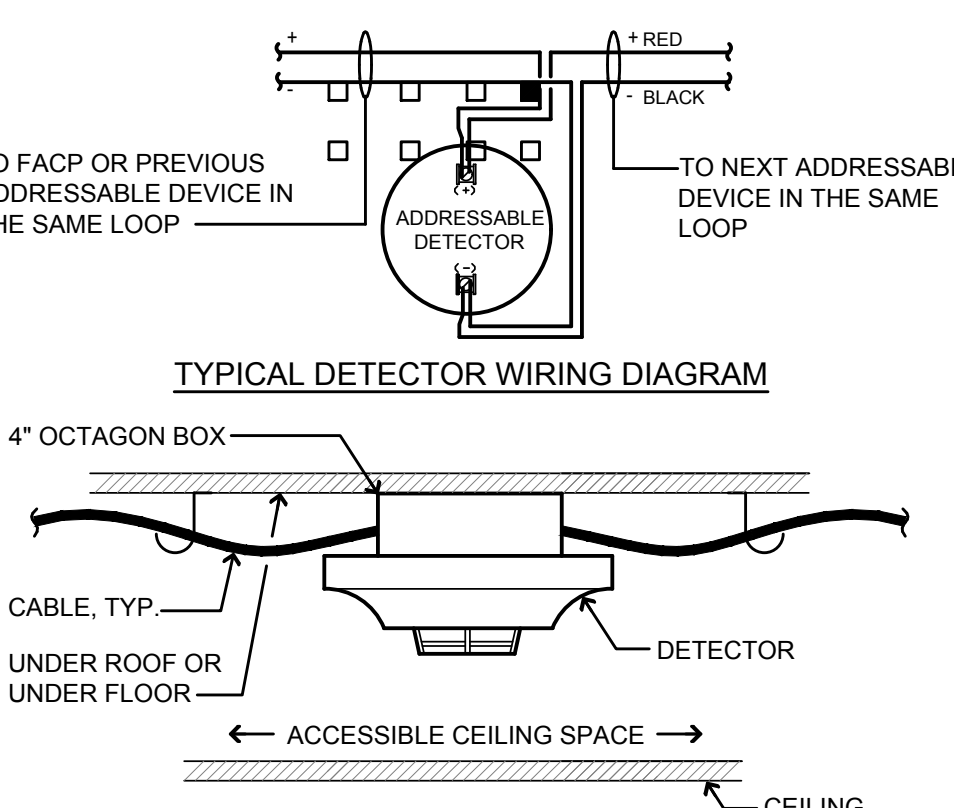
5 STROBE INSTALLATION DETAIL
NO SCALE



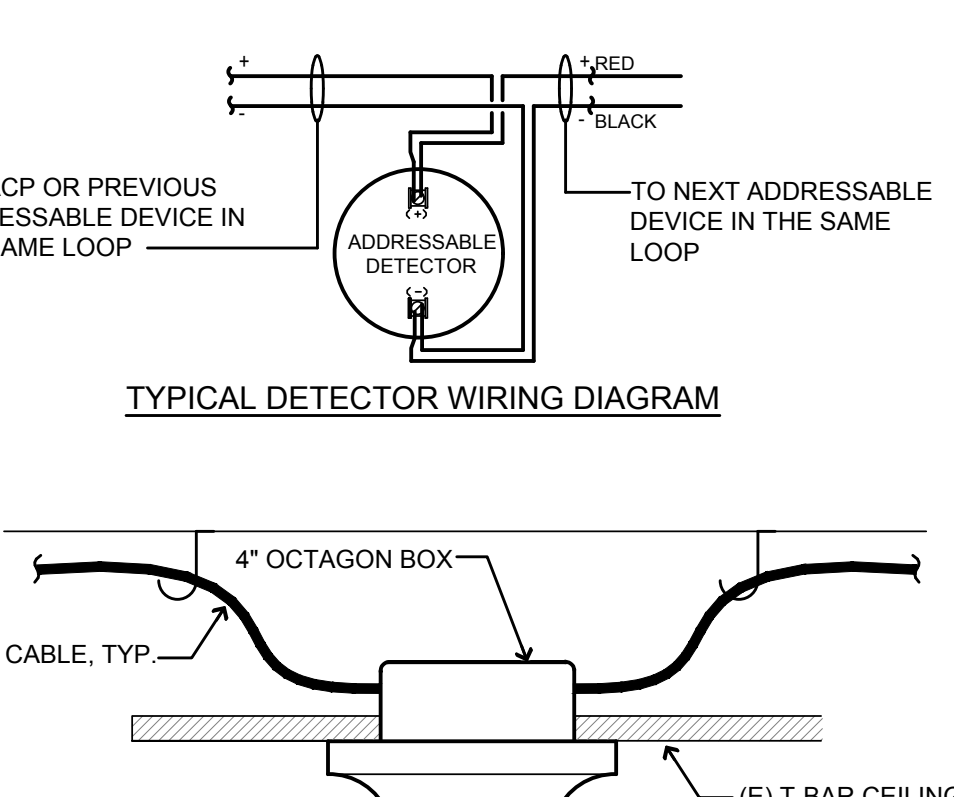
4 SPEAKER INSTALLATION DETAIL
NO SCALE



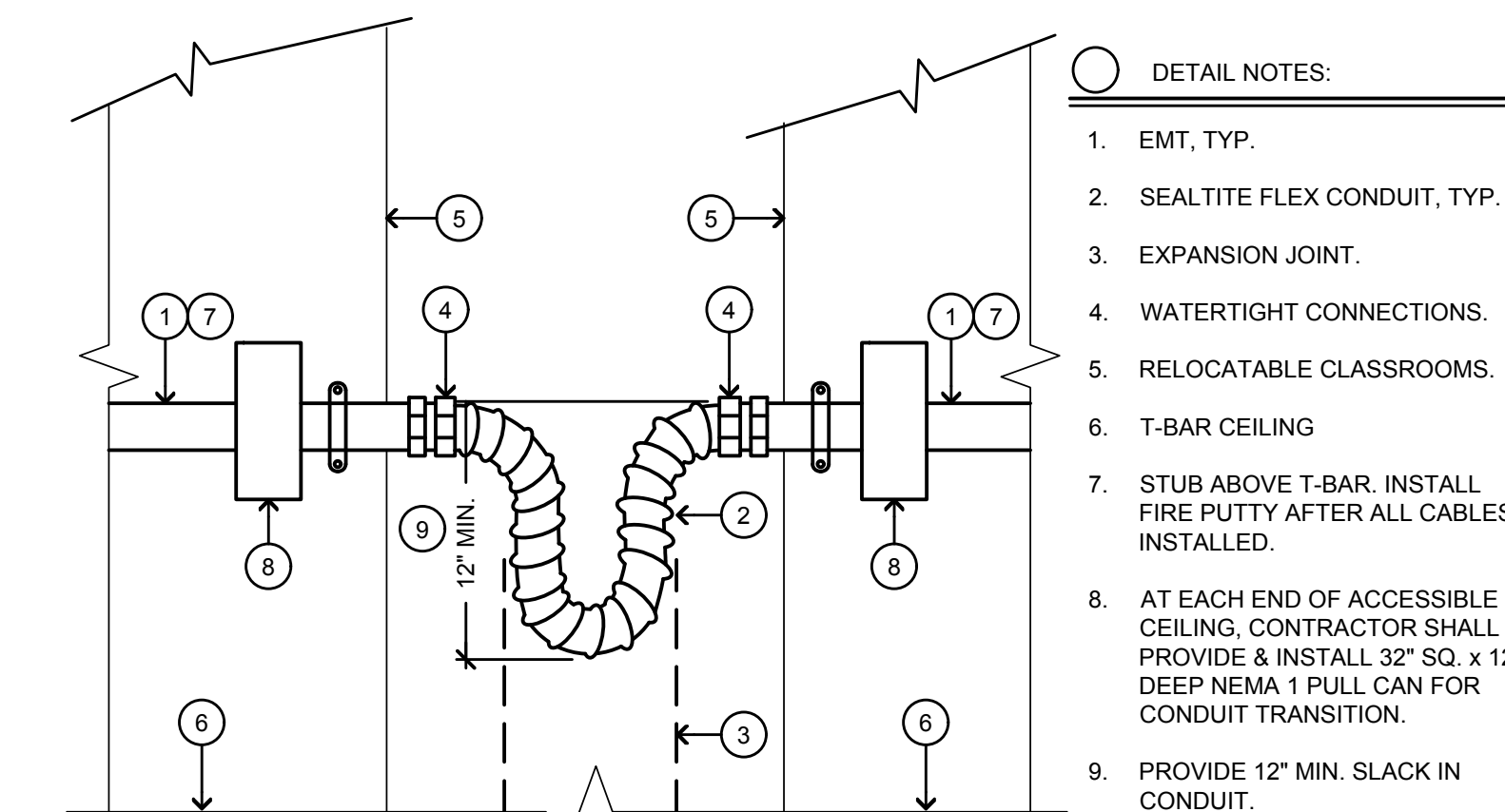
3 SPEAKER/STROBE INSTALLATION DETAIL
NO SCALE



2 DETECTOR MOUNTING DETAIL
NO SCALE (ABOVE CEILING)



1 DETECTOR MOUNTING DETAIL
NO SCALE



DETAIL NOTES:

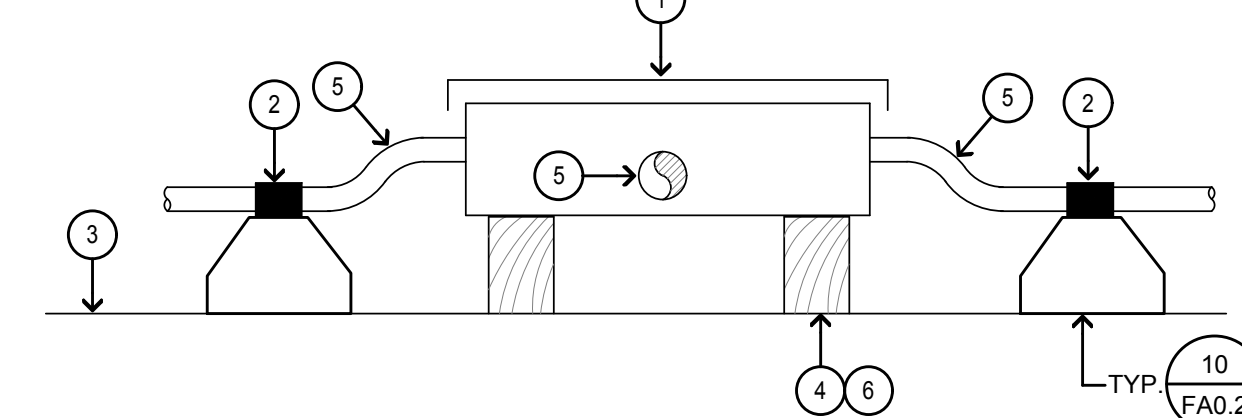
1. EMT, TYP.
2. SEALTITE FLEX CONDUIT, TYP.
3. EXPANSION JOINT.
4. WATERTIGHT CONNECTIONS.
5. RELOCATABLE CLASSROOMS.
6. T-BAR CEILING.
7. STUB ABOVE T-BAR, INSTALL FIRE PUTTY AFTER ALL CABLES INSTALLED.
8. AT EACH END OF ACCESSIBLE CEILING, CONTRACTOR SHALL PROVIDE & INSTALL 32" SQ. x 12" DEEP NEMA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

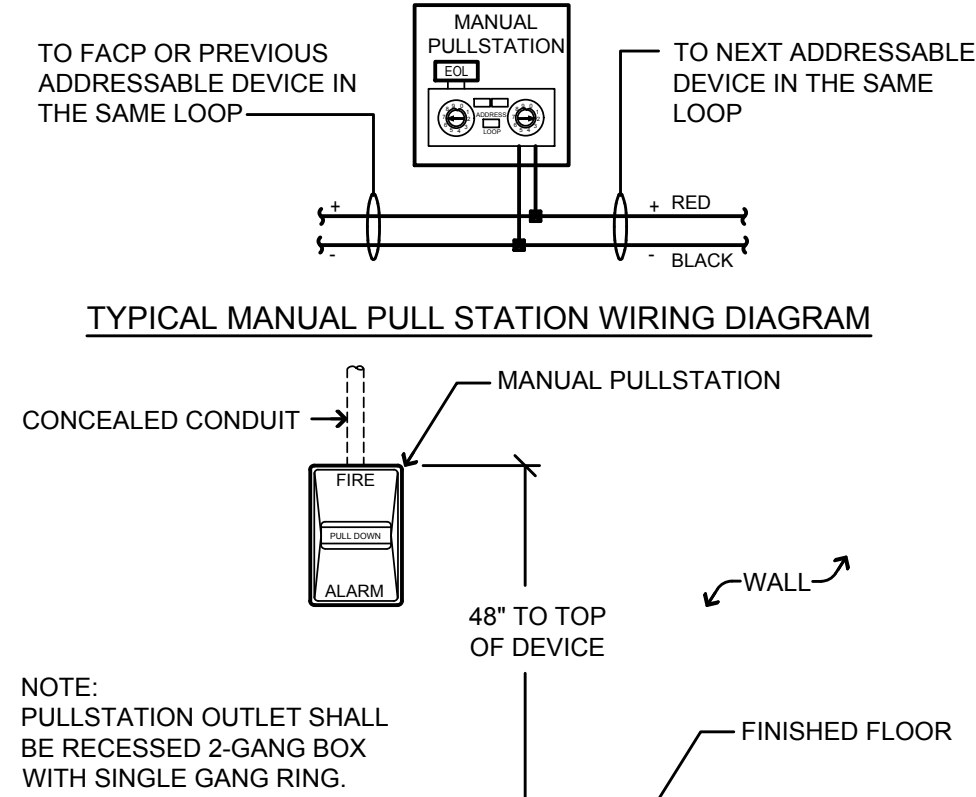
15 CONDUIT TRANSITION BETWEEN BUILDINGS
NO SCALE

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.

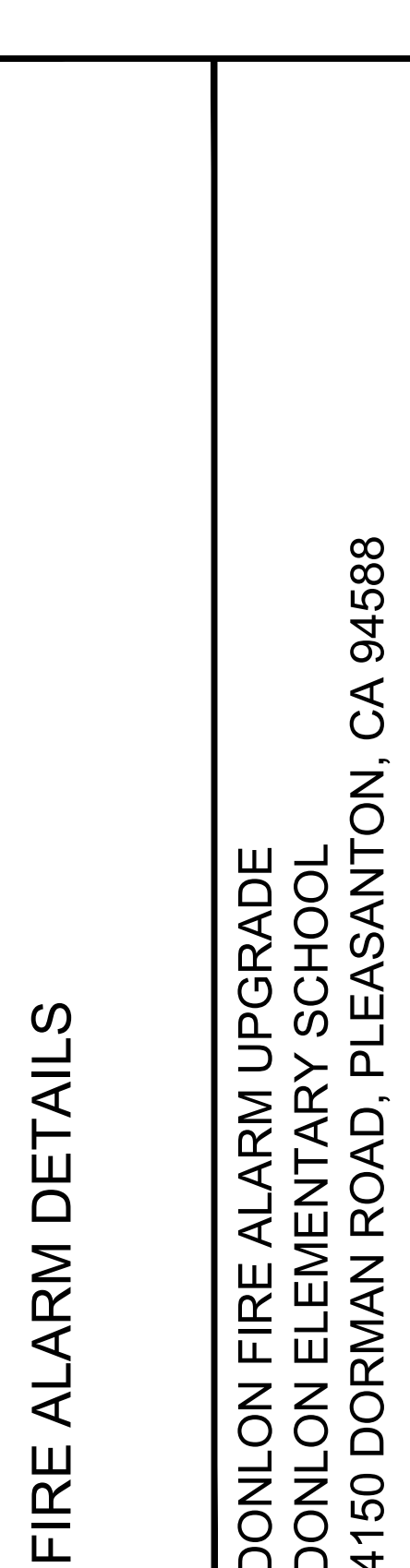
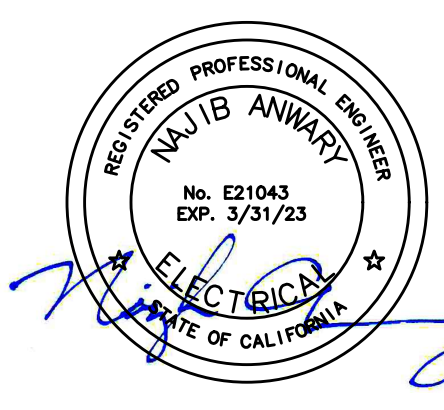
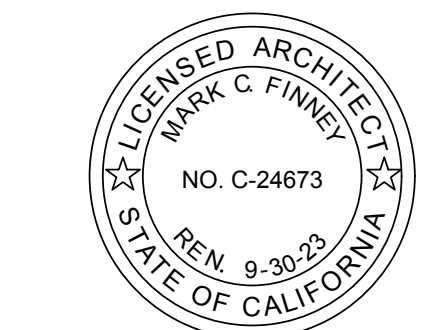


14 PULLCAN AT ROOF DETAIL
NO SCALE



13 PULL STATION MOUNTING DETAIL
NO SCALE

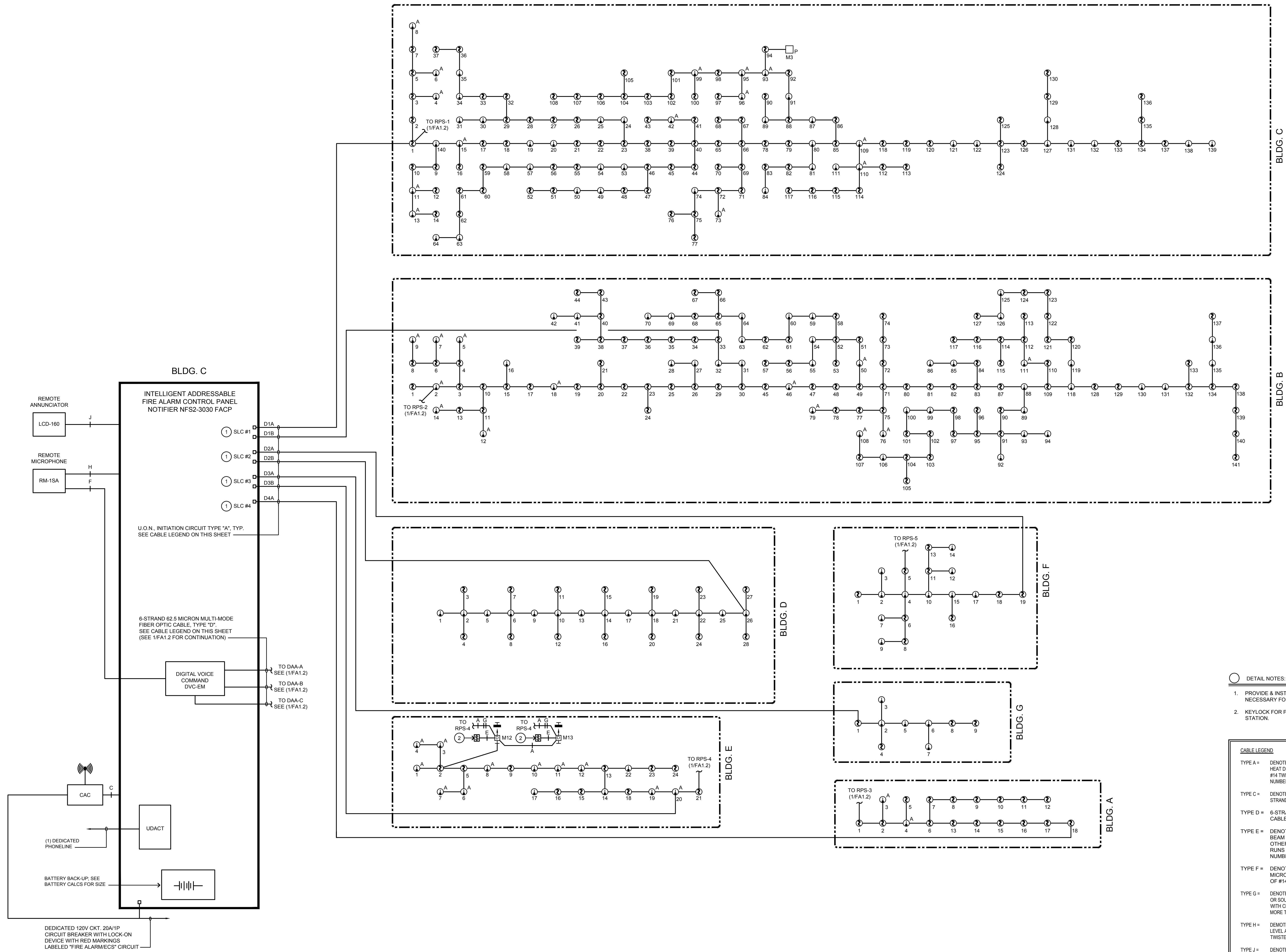
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1 FIRE ALARM RISER DIAGRAM
NO SCALE



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 C = DENOTES SUPERVISORY RELAY TRIPS FOR CAC. PROVIDE (2) STRANDED #14 AWG.

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 F = DENOTES 24VDC POWER CIRCUIT FOR REMOTE MICROPHONE. POWERED FROM DVC. PROVIDE (1) PAIR OF #14 AWG.

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.

TYPE H = DENOTES TROUBLE CONTACTS MONITORED BY FACP AND LOW LEVEL AUDIO INPUT FROM REMOTE MICROPHONE. PROVIDE (2) TWISTED UNSHIELDED PAIR #14 AWG.

TYPE J = DENOTES 24VDC NON-RESETTABLE POWER CIRCUIT AND RDP BUS FOR REMOTE ANNUNCIATION. PROVIDE (2) TWISTED SHIELDED PAIR #14 AWG.

FIRE ALARM RISER DIAGRAM

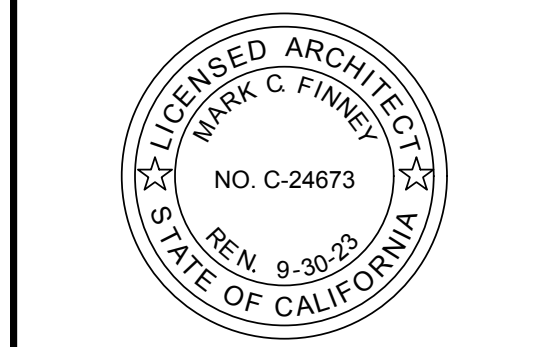
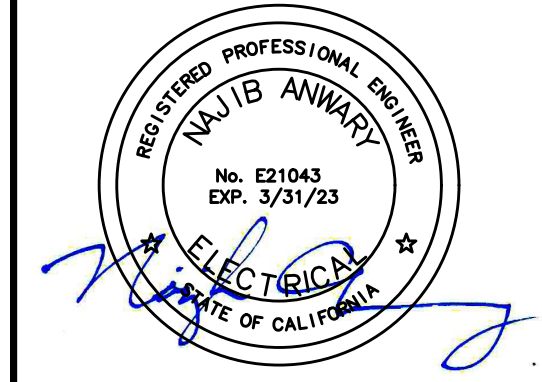
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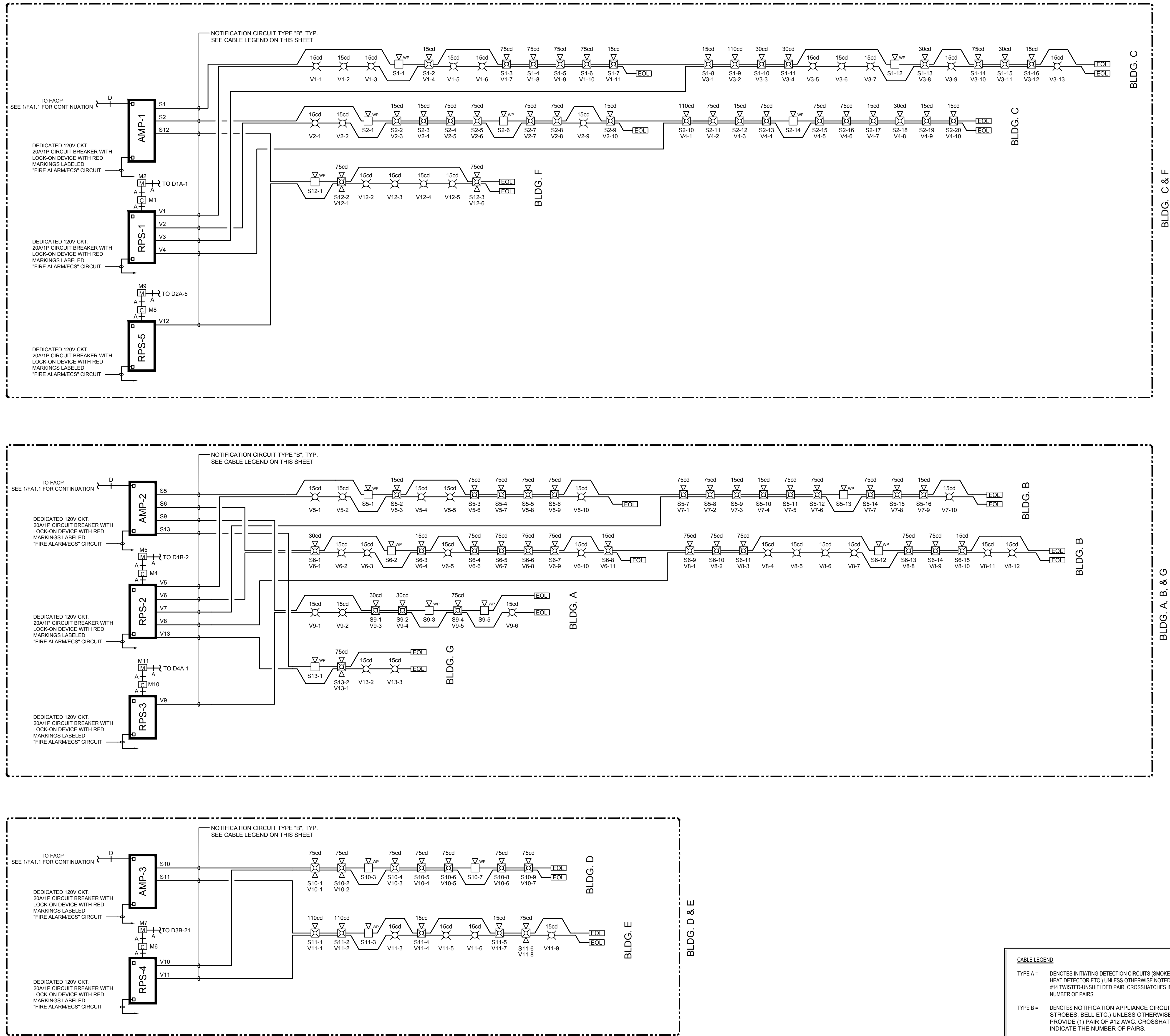
DONLON FIRE ALARM UPGRADE
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1 FIRE ALARM RISER DIAGRAM
NO SCALE



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.	

FIRE ALARM RISER DIAGRAM

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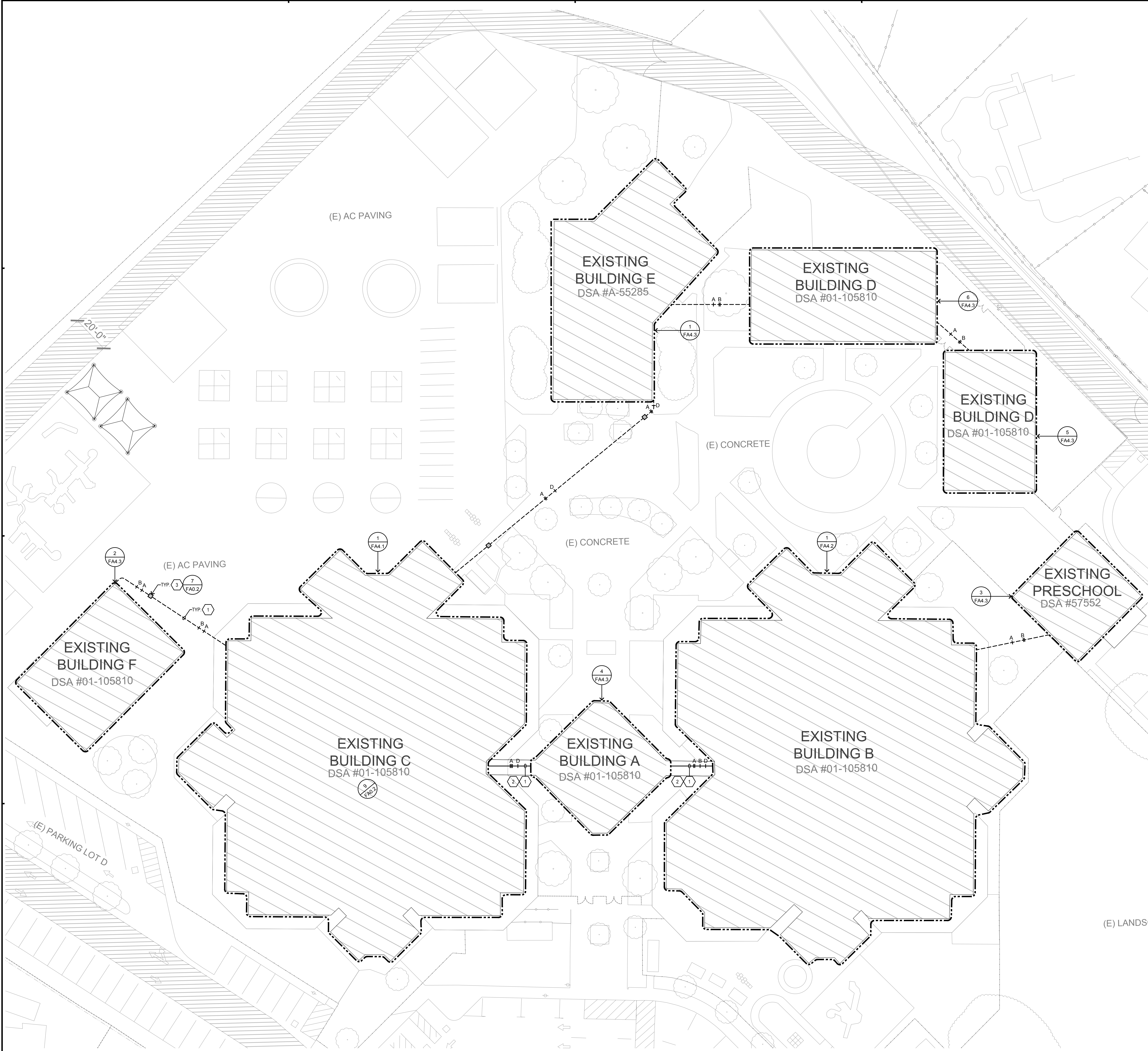
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1 FIRE ALARM SITE PLAN
SCALE: 1"=20'-0"



SHEET NOTES

1. PROVIDE & INSTALL 2" C. FOR FIRE ALARM CABLES.
2. ROUTE CONDUIT ON ROOF.
3. PROVIDE & INSTALL IN-GRADE CHRISTY #N8 PULL BOX, WITH LID LABELED "FIRE ALARM".

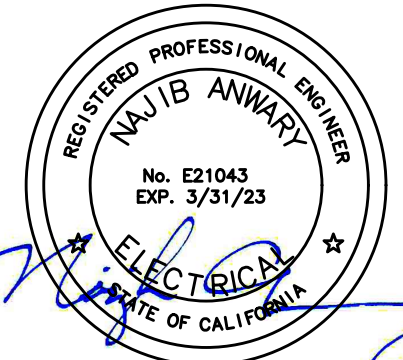
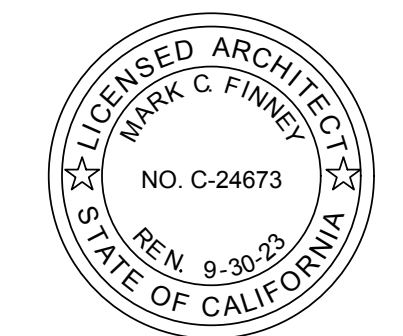
GENERAL NOTES:

- 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/CEILINGS 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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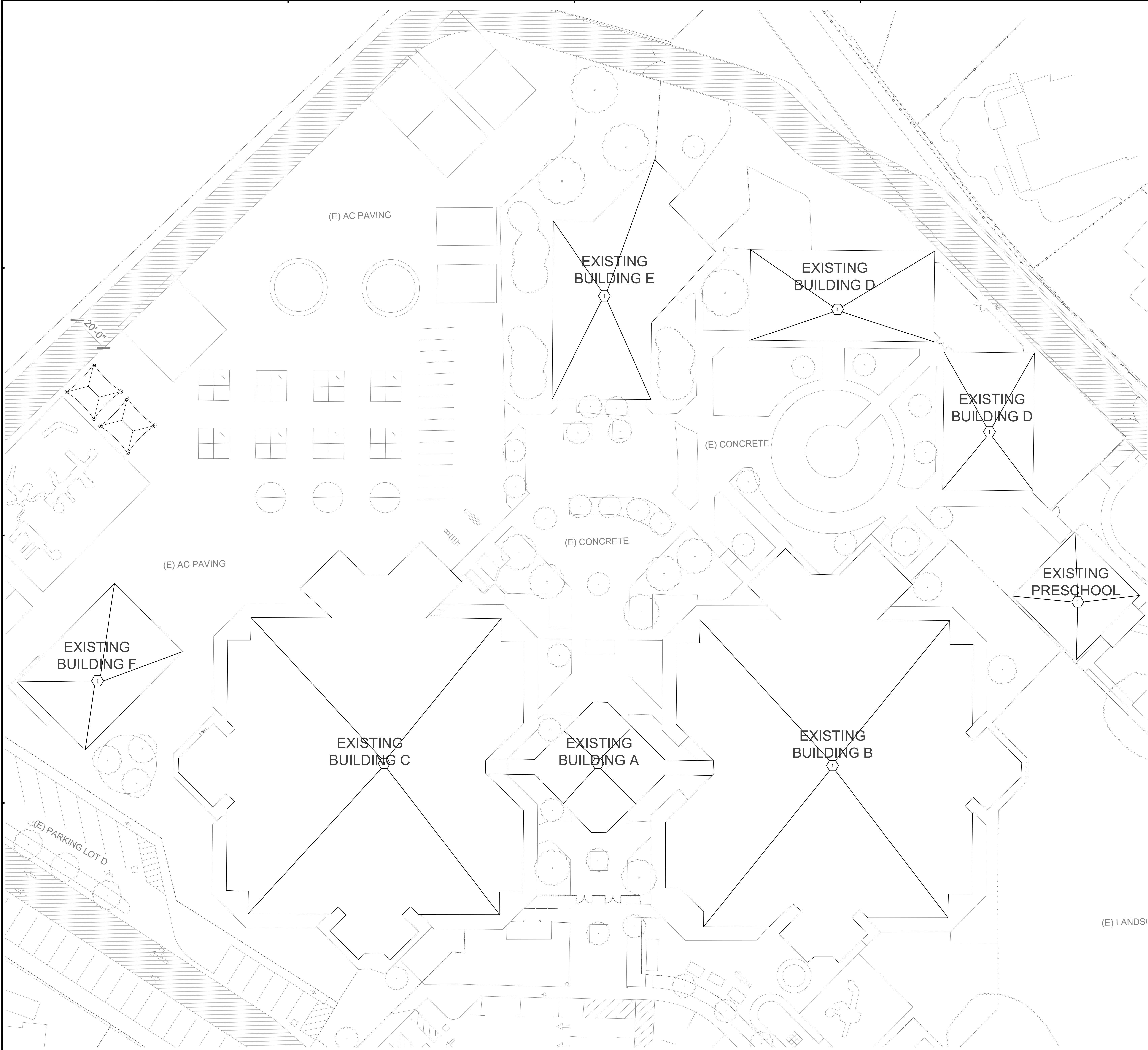
FIRE ALARM SITE PLAN

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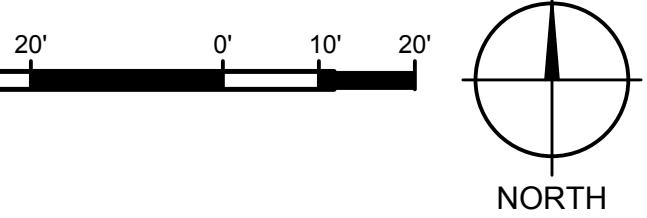
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1 FIRE ALARM DEMOLITION PLAN
SCALE: 1"=20'-0"



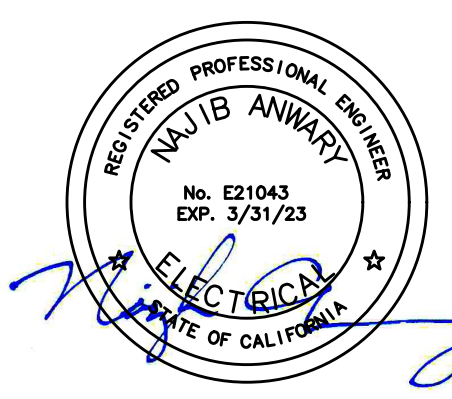
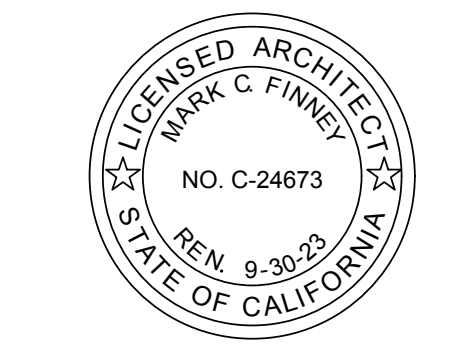
SHEET NOTES

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.

(DSA STAMP AREA)



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Project No. 21-441.00
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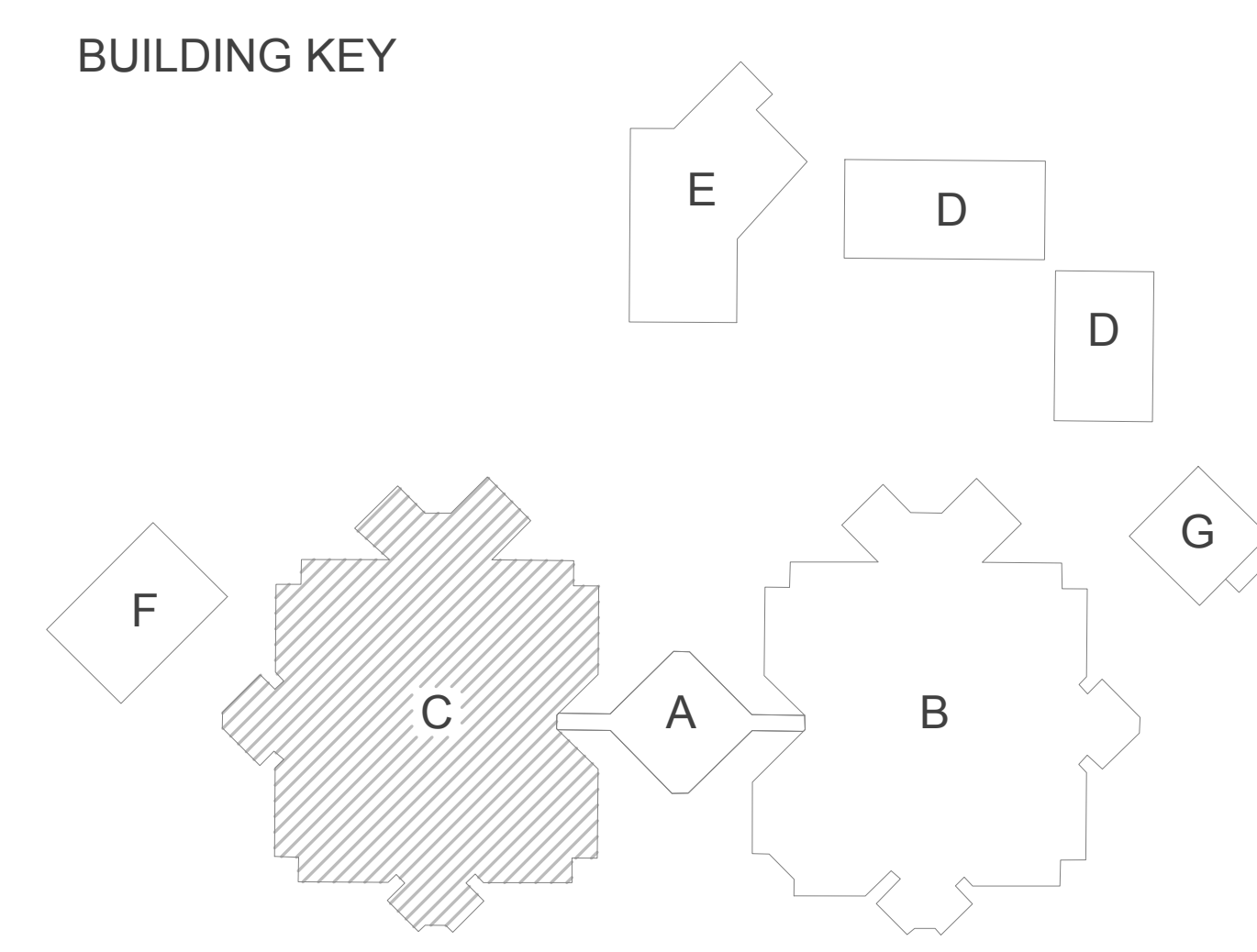
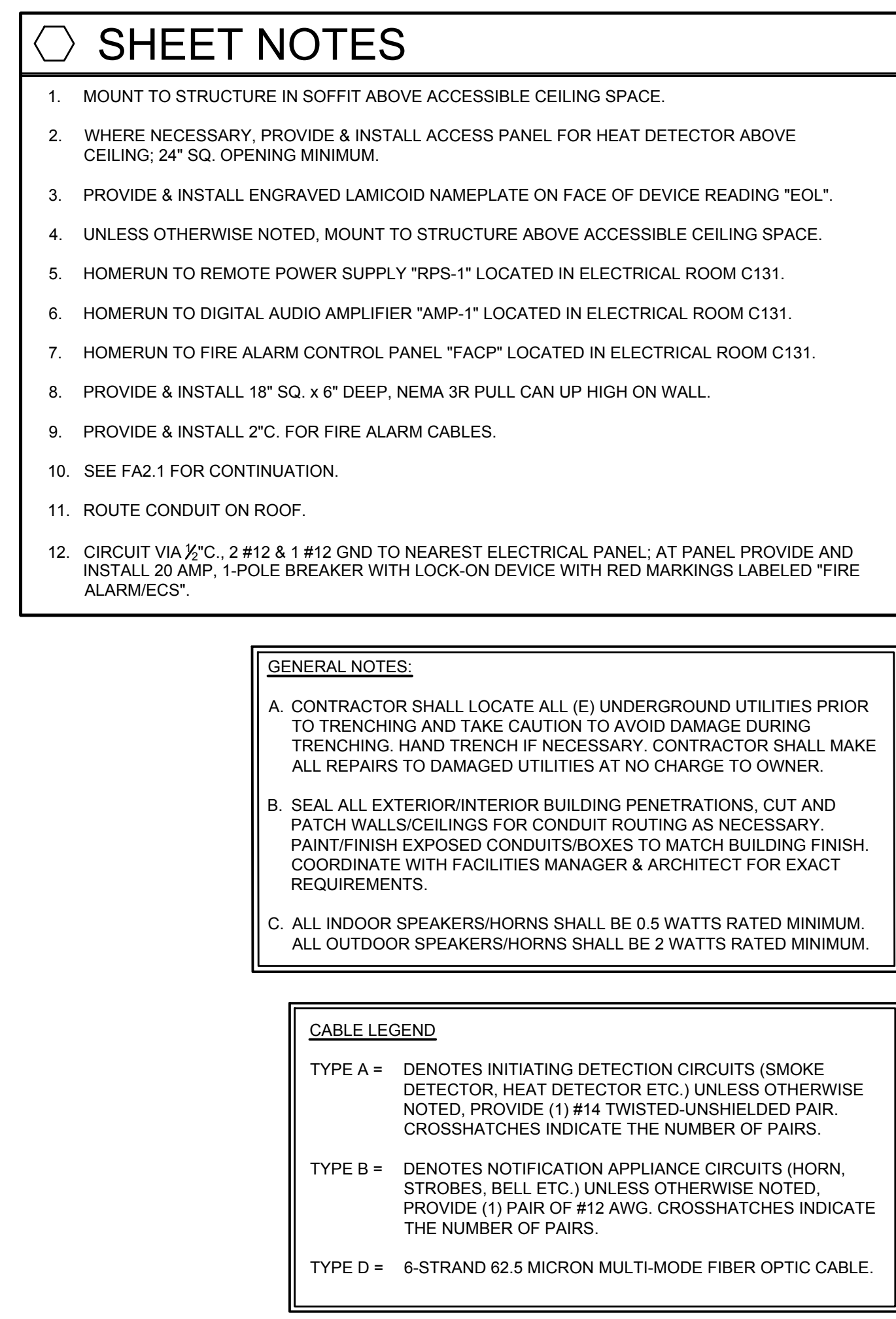
FIRE ALARM DEMOLITION PLAN

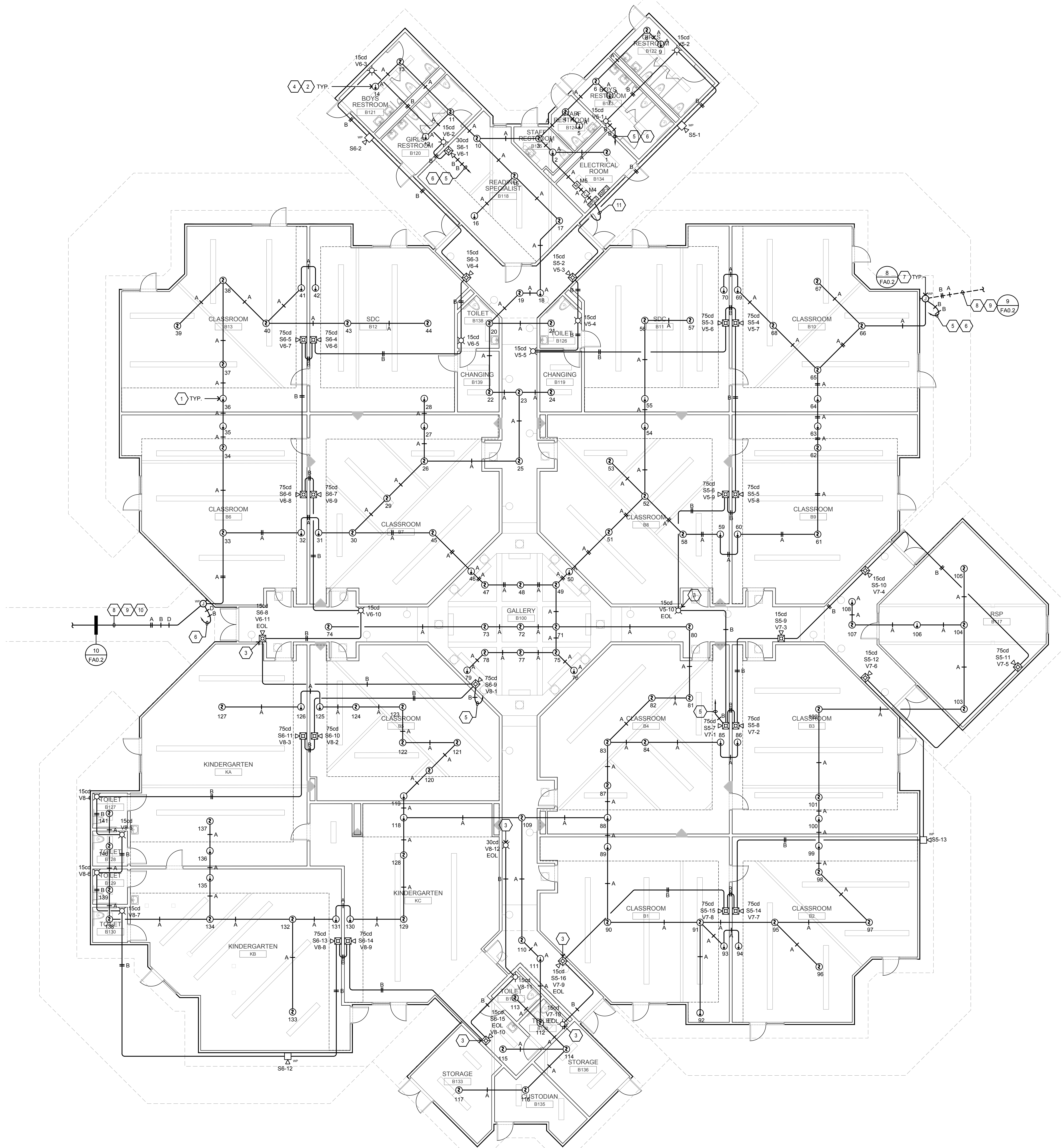
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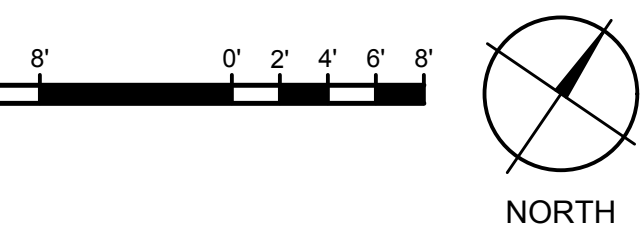
FA3.1

DONLON FIRE ALARM UPGRADE
DONLON ELEMENTARY SCHOOL
4150 DORMAN ROAD, PLEASANTON, CA 94588
PLEASANTON UNIFIED SCHOOL DISTRICT

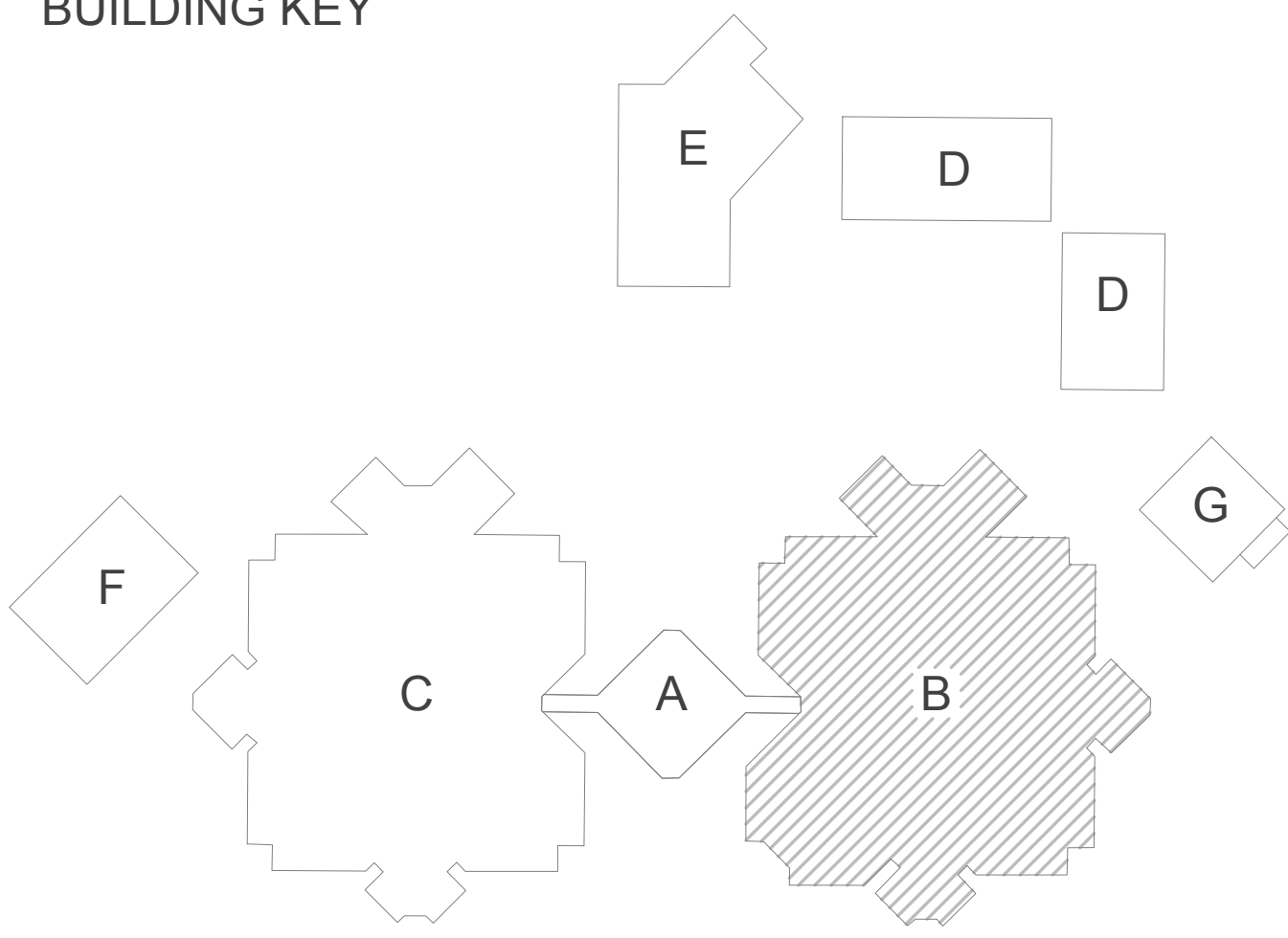
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1 FIRE ALARM PLAN - BUILDING B
SCALE: 1/8"=1'-0"



BUILDING KEY



- 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. HOMERUN TO REMOTE POWER SUPPLY 'RPS-2' LOCATED IN ELECTRICAL ROOM B134.
 6. HOMERUN TO DIGITAL AUDIO AMPLIFIER 'AMP-2' LOCATED IN ELECTRICAL ROOM B134.
 7. PROVIDE & INSTALL 18" SQ. x 6" DEEP, NEMA 3R PULL CAN UP HIGH ON WALL.
 8. PROVIDE & INSTALL 2"C. FOR FIRE ALARM.
 9. SEE FA2.1 FOR CONTINUATION.
 10. ROUTE CONDUIT ON ROOF.
 11. 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 ALARMEGS'.
- 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/CEILINGS 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.

(DSA STAMP AREA)

SUGIMURA FINNEY ARCHITECTS
SFA
ARCHITECTS, INC. PLANNERS

2151 SOUTH BASCOM AVE.
SUITE 500
CAMPBELL, CA 95008
PHONE: 408.734.7414
FAX: 408.734.7415

REGISTERED ARCHITECT
MARK C. FINNEY
NO. C-24673
EXPIRATION: 9-30-23
STATE OF CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
ARVID ANJURY
No. E21043
Exp. 3/31/23
ELECTRICAL
STATE OF CALIFORNIA

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ENGINEERS
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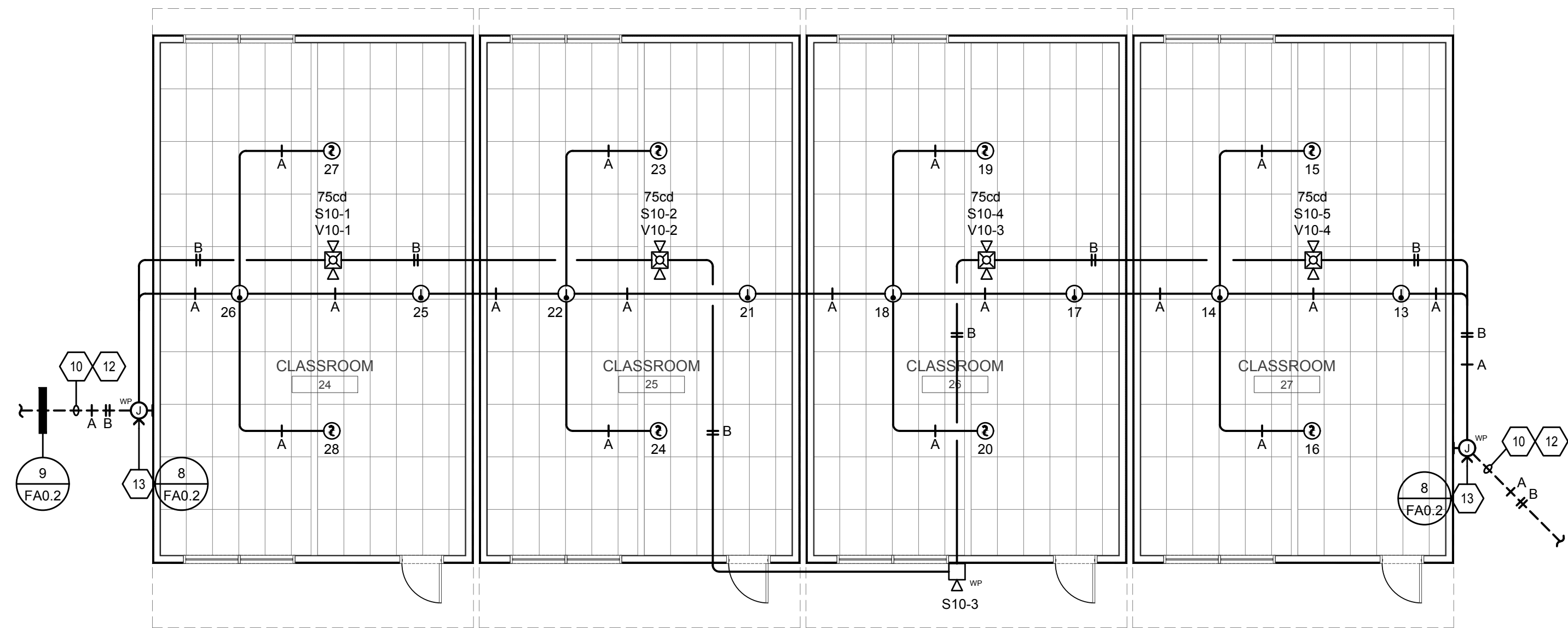
FIRE ALARM PLAN - BUILDING B

DONLON FIRE ALARM UPGRADE
DONLON ELEMENTARY SCHOOL
4150 DORMAN ROAD, PLEASANTON, CA 94588
PLEASANTON UNIFIED SCHOOL DISTRICT

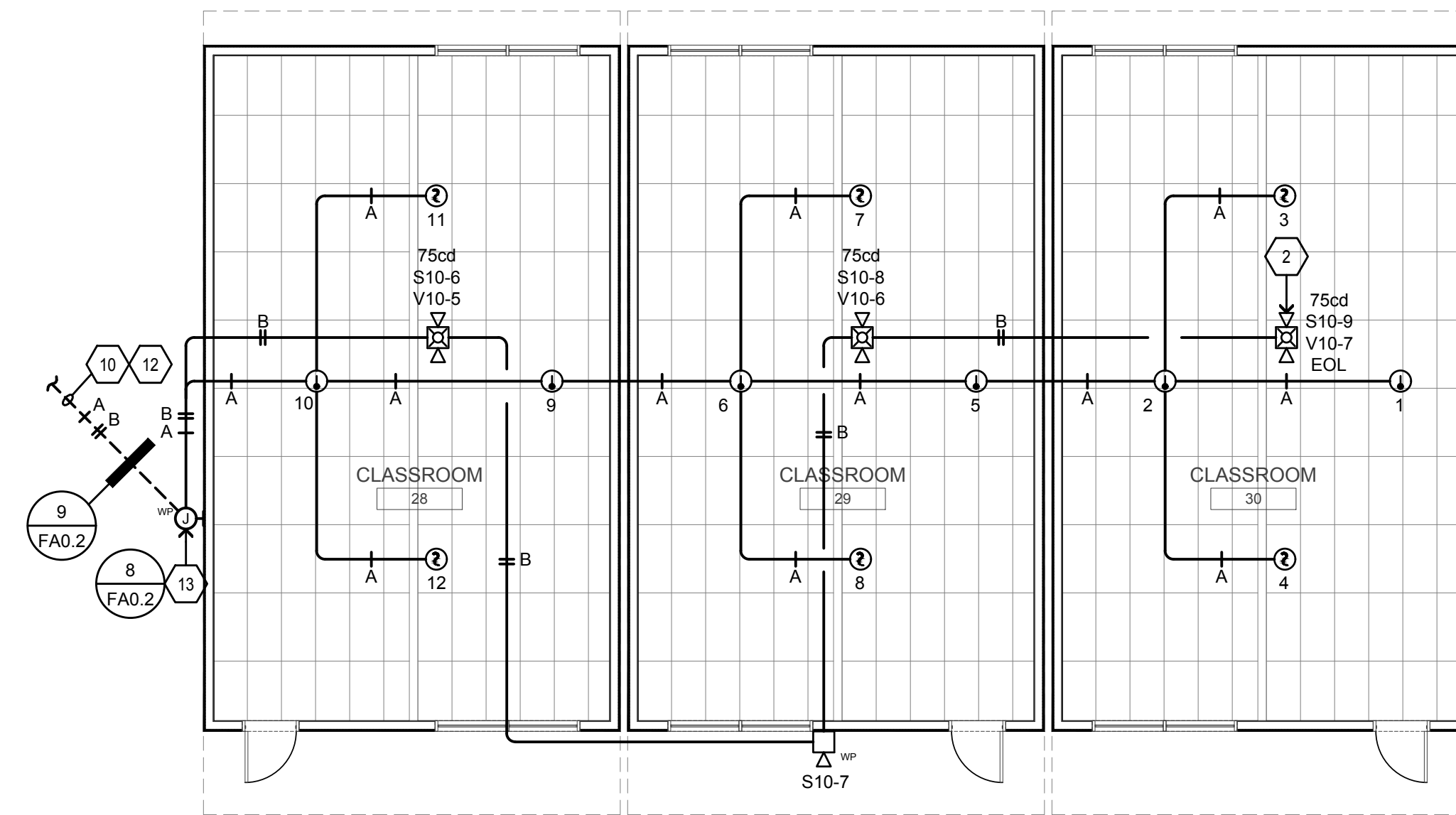
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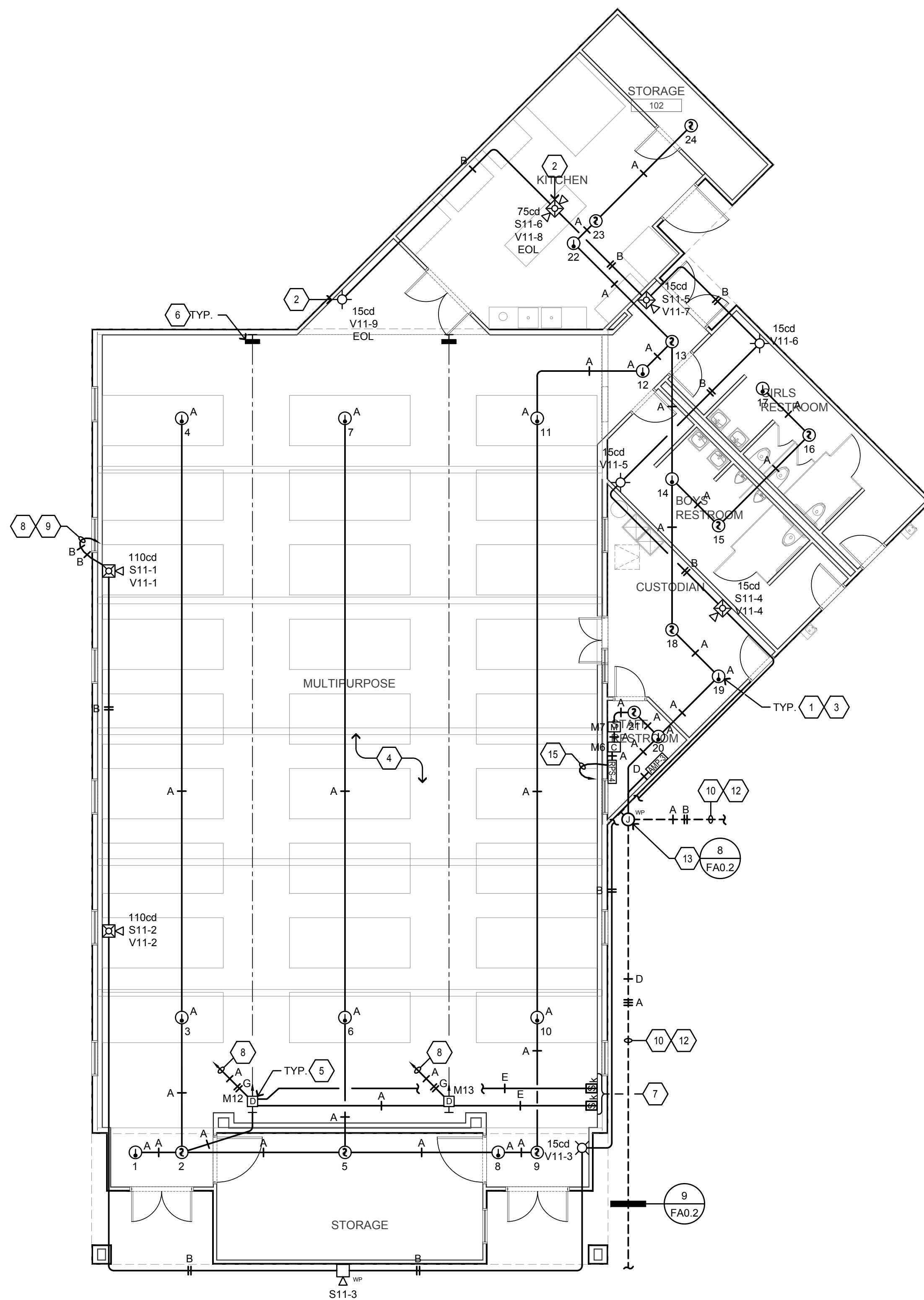
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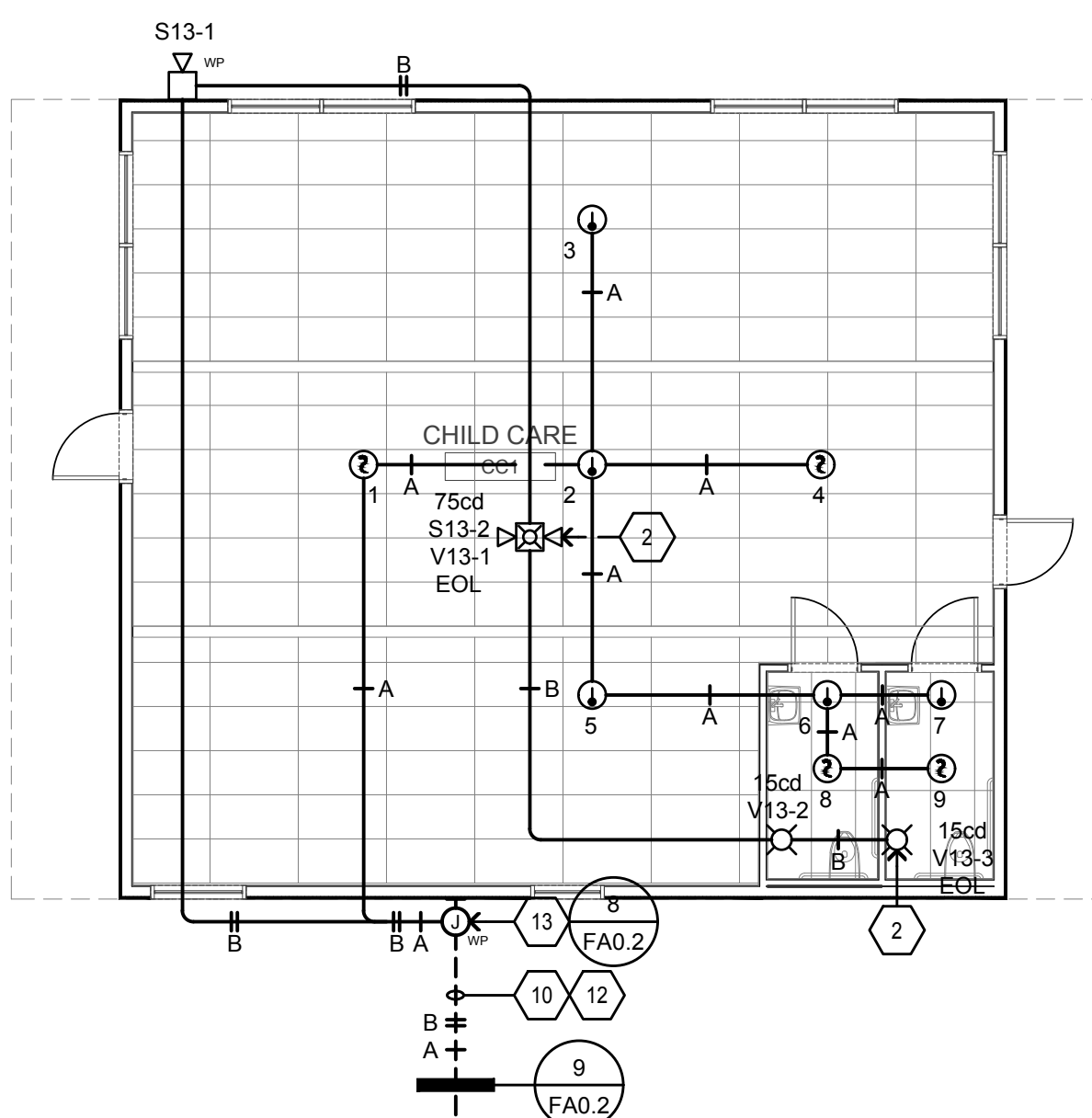
6 FIRE ALARM PLAN - BUILDING D
SCALE: 1/8"=1'-0"



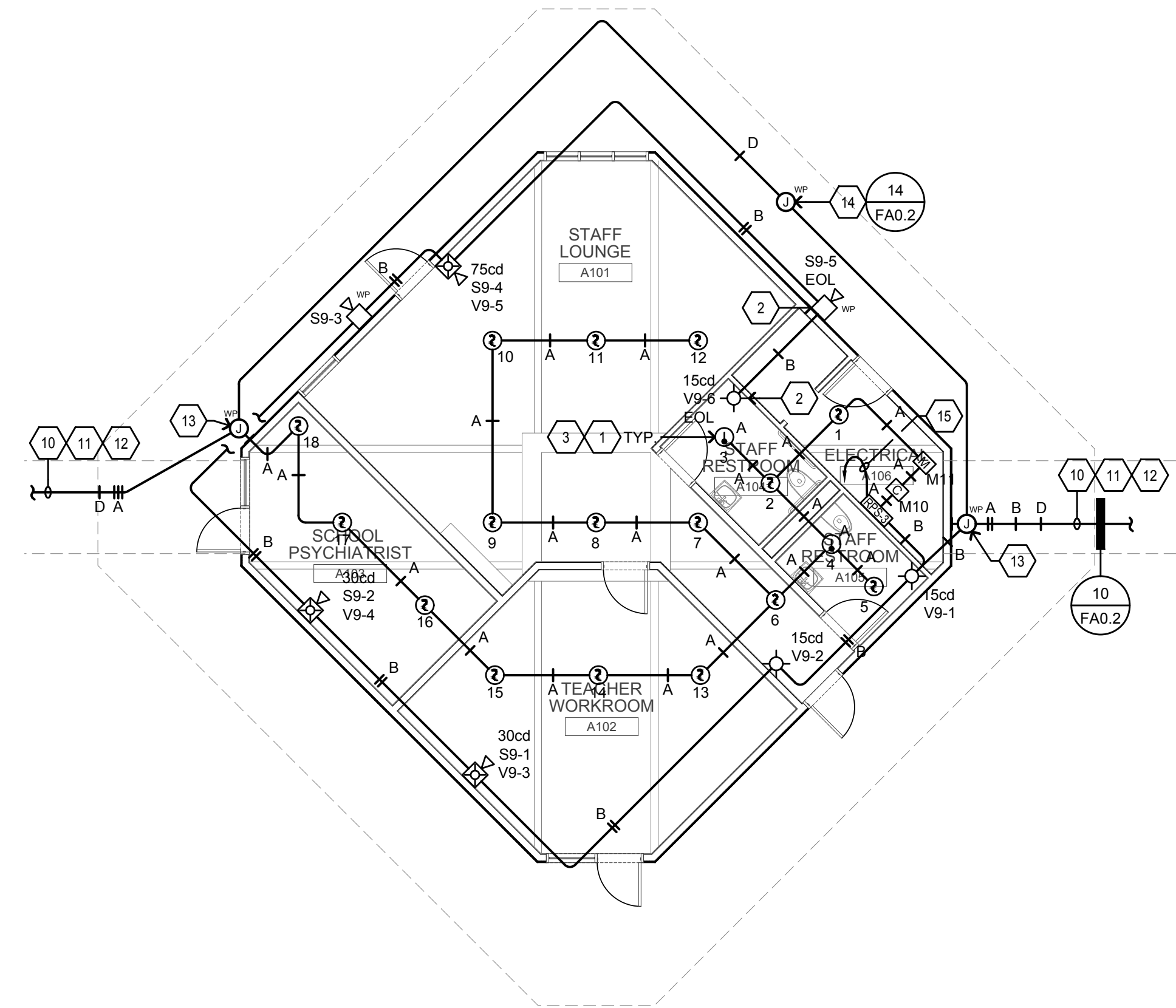
5 FIRE ALARM PLAN - BUILDING D
SCALE: 1/8"=1'-0"



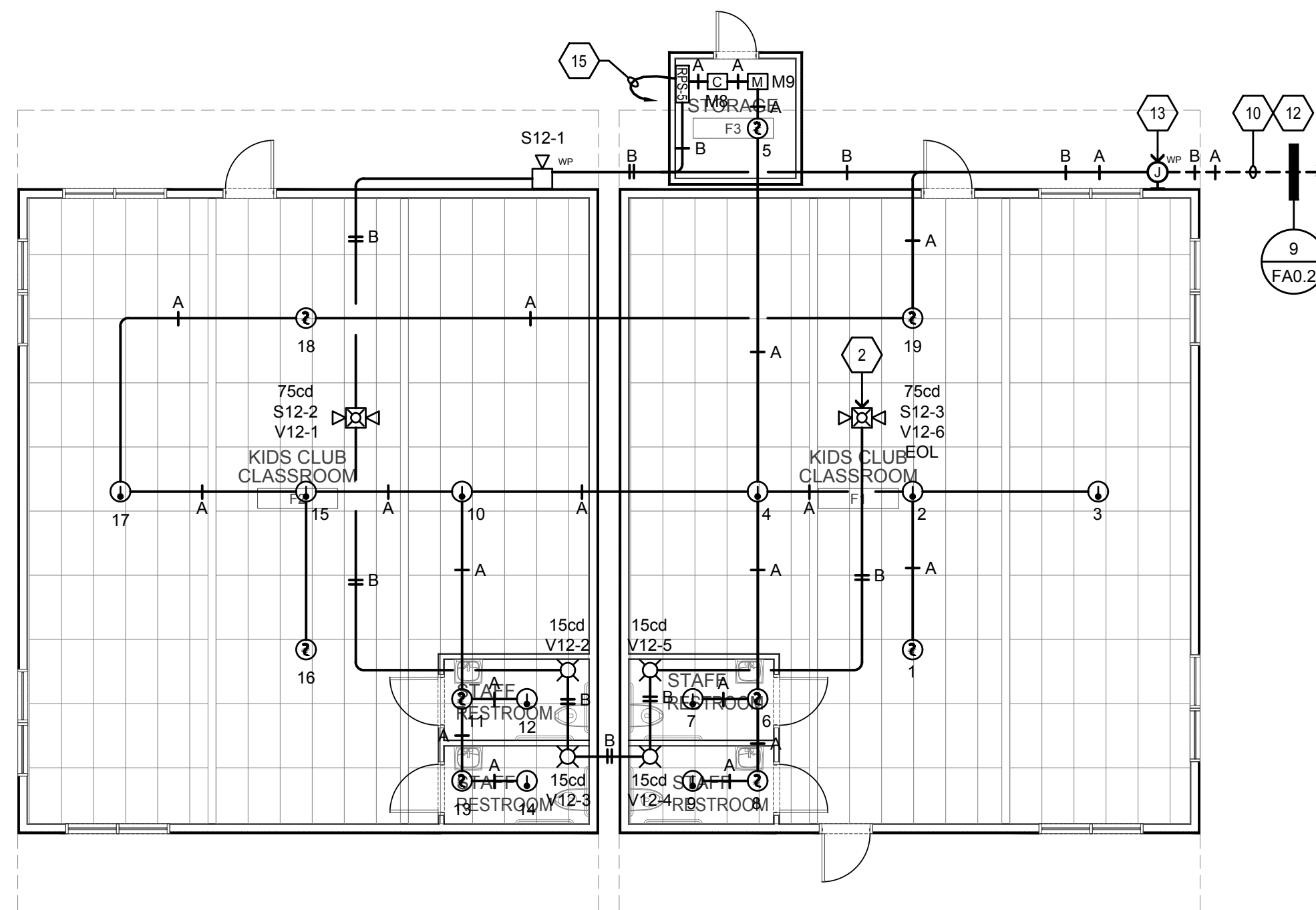
1 FIRE ALARM PLAN - BUILDING E
SCALE: 1/8"=1'-0"



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



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



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

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 CSFM LISTED WIREGUARD FOR ALL DEVICES IN MULTI-USE ROOM.
- BEAM SMOKE DETECTOR TRANSMITTER: INSTALL WITH DIRECT LINE OF SIGHT TO REFLECTOR PLATE. FIELD VERIFY MOUNTING HEIGHT.
- REFLECTOR PLATE: INSTALL WITH DIRECT LINE OF SIGHT TO TRANSMITTER. FIELD VERIFY MOUNTING HEIGHT.
- 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.
- HOMERUN TO REMOTE POWER SUPPLY "RPS-4" LOCATED IN STAFF RESTROOM.
- HOMERUN TO DIGITAL AUDIO AMPLIFIER "AMP-3" LOCATED IN STAFF RESTROOM.
- PROVIDE & INSTALL 2" C. FOR FIRE ALARM CABLES.
- ROUTE CONDUIT ON ROOF.
- SEE 1/FA2.1 FOR CONTINUATION.
- PROVIDE & INSTALL 18" SQ. x 6" DEEP, NEMA 3R PULL CAN UP HIGH ON WALL.
- PROVIDE & INSTALL 12" SQ. x 4" DEEP, NEMA 3R PULL CAN ON ROOF.
- 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".

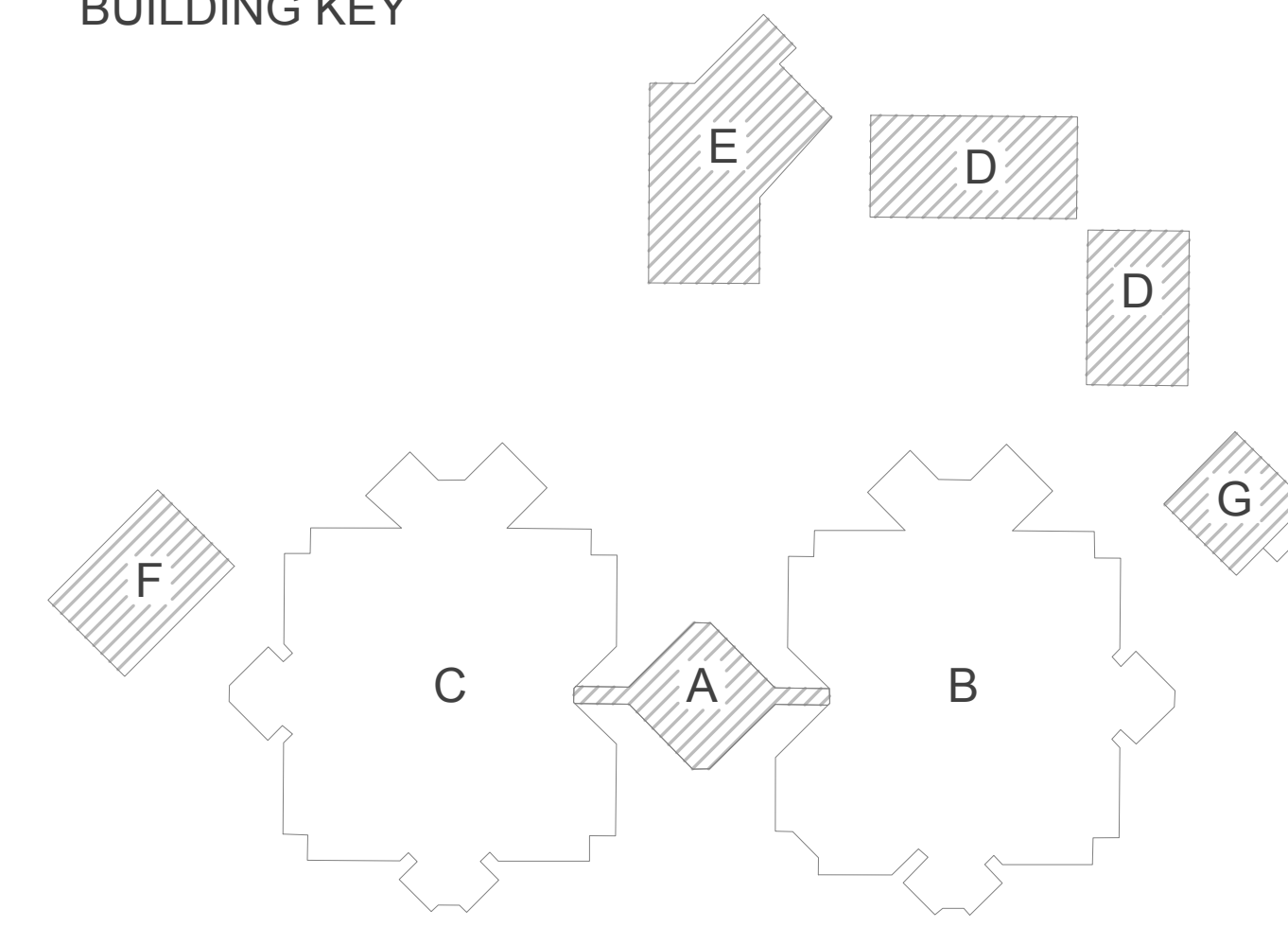
GENERAL NOTES:

- 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/CEILINGS 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.

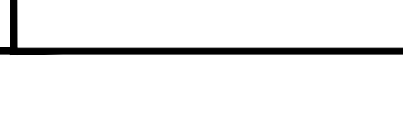
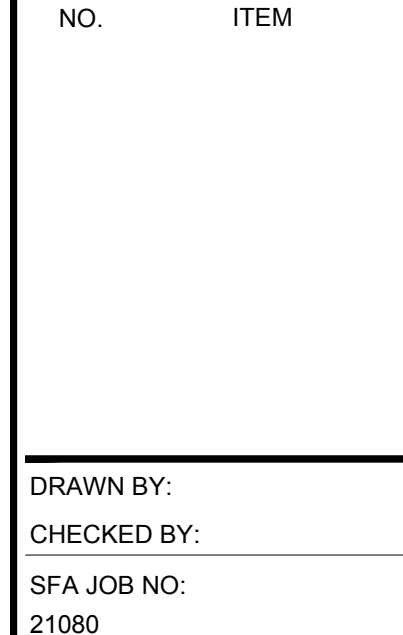
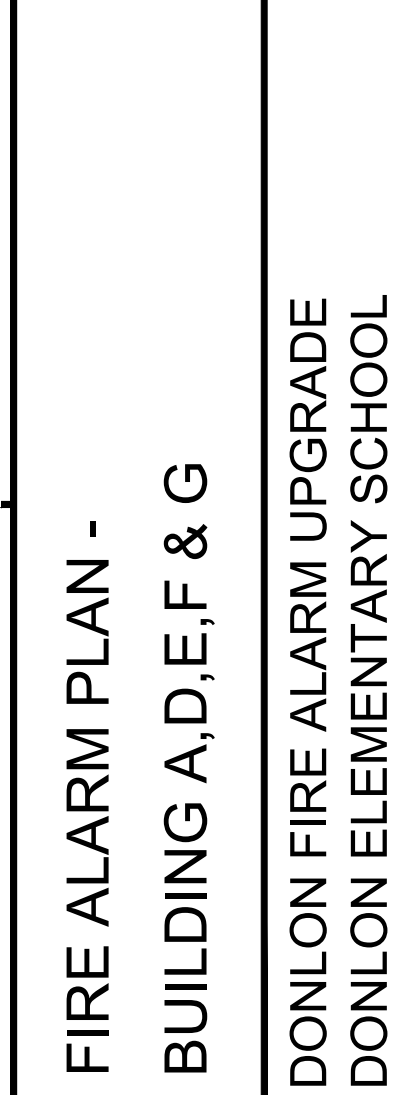
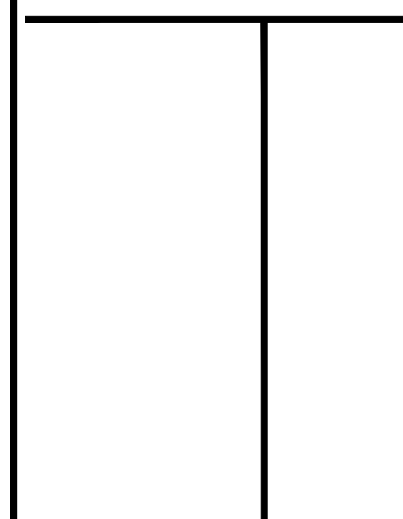
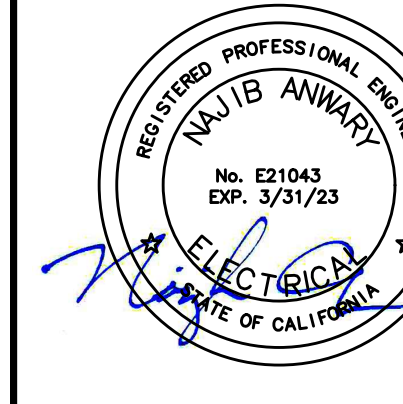
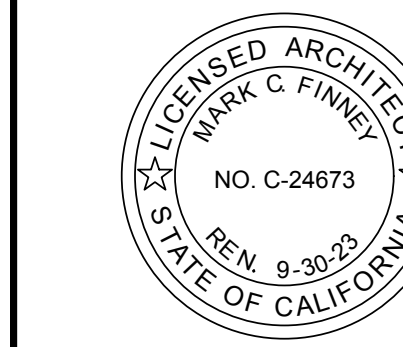
CABLE LEGEND

- 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.

BUILDING KEY



(DSA STAMP AREA)





WALNUT GROVE ELEMENTARY SCHOOL CAMPUS WIDE FIRE ALARM REPLACEMENT

1999 HARVEST RD, PLEASANTON, CA 94566

PLEASANTON UNIFIED SCHOOL DISTRICT

DSA FILE NUMBER 01-32
DSA APPLICATION NUMBER 01-119914
OPSC TRACKING NUMBER 75101-108

GENERAL NOTES

PRE-BID SITE VISIT

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

SAFETY

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

DAMAGE TO STRUCTURE OR SYSTEMS TO REMAIN

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

EXISTING CONDITIONS

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

CONTRACTOR'S EQUIPMENT

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

UTILITY SHUT-DOWNS AND CONNECTIONS

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

ASBESTOS AND ASBESTOS PRODUCTS

THE OWNER/OPERATOR AND CONTRACTOR SHALL BE AWARE THAT BUILDINGS CONSTRUCTED PRIOR TO 1979 (OR THEREABOUT) 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 ADDITIONAL DESIGN EFFORT 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 SUBCONTRACTOR, SHALL BE THE RESPONSIBILITY OF SAID SUBCONTRACTOR.

CONSTRUCTION SCHEDULING

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

INTERIOR FINISHES

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

PIPES, DUCTS AND CONDUIT - SUPPORT AND BRACING

PIPES, DUCTS, AND CONDUITS SHALL BE SUPPORTED AND BRACED PER THE SMACNA "GUIDELINES FOR SEISMIC RESTRAINTS OF MECHANICAL SYSTEMS AND PLUMBING PIPING SYSTEMS", OPN 0032-13 SEISMIC BRACING AND SUPPORT SYSTEMS.

DRILLED-IN EXPANSION ANCHORS

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

TITLE 24 COMPLIANCE

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

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

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

GENERAL NOTES, cont.

ADMINISTRATIVE REQUIREMENTS

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

COMPLIANCE WITH LOCAL ORDINANCES

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

ABBREVIATIONS

(REFER TO CONSULTANT DRAWINGS FOR ADDITIONAL ABBREVIATIONS)

A.F.F.	ABOVE FINISHED FLOOR	LAM.	LAMINATE
A.P.	ACCESS PANEL	LAV.	LAVATORY
ACT	ACOUSTIC TILE	M.B.	MACHINE BOLT
ADJ.	ADJUSTABLE	M.S.	MACHINE SCREW
ALUM.	ALUMINUM	M.H.	MANHOLE
AB.	ANCHOR BOLT	MFG.	MANUFACTURER
APPROX.	APPROXIMATELY	M.B.	MARKER BOARD
ARCH.	ARCHITECT	MATL.	MATERIAL
AC	ASPHALTIC CONCRETE	MAX.	MAXIMUM
B	AT	MECH.	MECHANICAL
B.M.	BENCH MARK	MTL.	METAL
BLKG.	BLOCKING	MIN.	MINIMUM
BD.	BOARD	MISC.	MISCELLANEOUS
B.W.	BOTH WAYS	MTD.	MOUNTED
BOT.	BOTTOM	(N)	NEW
BLDG.	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)
C.C or O.C.	CENTER TO CENTER	O.C.	ON CENTER
	CERAMIC TILE	OPNG.	OPENING
CER. TILE	CERAMIC TILE	OPP.	OPPOSITE
C.O.	CLEANOUT	O.P.	OPPOSITE HAND
C.O.T.G.	CLEANOUT TO GRADE	O.H.	OUTSIDE
CLR.	CLEAR	O.F.O.S.	OUTSIDE FACE OF STUD
C.A.H.R.	CLEAR ALL HEART	O.H.W.S.	OVAL HEAD WOOD SCREW
	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.	PARTITION
COM.	COMMON	PL	PLATE
CONC.	CONCRETE	PENNY (NAILS)	PENNY (NAILS)
CONST.	CONSTRUCTION	PLAS.	PLASTER
C.H.	CONSTRUCTION HEART	PLYWD.	PLYWOOD
CONJ.	CONSTRUCTION JOINT	P.V.C.	POLY VINYL CHLORIDE
CONT.	CONTINUOUS	PR.	PRESSURE TREATED
CONTR.	CONTRACTOR	P.L.	PROPERTY LINE
CTR.	COUNTER	R.O.	ROUGH OPENING
COUNTER SUNK	COUNTER SUNK	R.W.L.	RAIN WATER LEADER
DET.	DETAIL	RWD./R.W.	REDWOOD
DIA. or Ø	DIAMETER	REINF.	REINFORCING
DIM.	DIMENSION	REQD.	REQUIRED
D.A.	DISABLED ACCESS	R.A.G.	RETURN AIR GRILLE
DR.	DOOR	R.E.	RAIN ELEVATION
D.S.	DOWNSPOUT	R.D.	ROOF DRAIN
DWG.	DRAWING	RM.	ROOM
D.F.	DRINKING FOUNTAIN and/or DRINKING FOUNTAIN	R.O.	ROUGH OPENING
EA.	EACH	RND.	ROUND
E.W.	EACH WAY	R.H.M.S.	ROUND HEAD METAL SCREW
ELEC.	ELECTRIC OR ELECTRICAL	R.H.W.S.	ROUND HEAD WOOD SCREW
EL.	ELEVATION	SSD.	SEE STRUCTURAL DRAWINGS
ENCLOS.	ENCLOSURE	S.T.S.M.S.	SELF TAPPING SHEET METAL SCREW
EQ.	EQUAL	SHEATH.	SHEATHING
EQUIP.	EQUIPMENT	S.M.	SHEET METAL
(E)	EXISTING	S.M.S.	SHEET METAL SCREW
EXP.	EXPANSION	S.O.V.	SHUT OFF VALVE
E.J.	EXPANSION JOINT	SIM.	SIMILAR
EXT.	EXPOSED	S.C.	SOLID CORE
F.O.C.	FACE OF CONCRETE	SPEC.	SPECIFICATION
F.O.M.	FACE OF MASONRY	SQ.	SQUARE
F.O.S.	FACE OF STUD	S.F.	SQUARE FEET
FIN.	FINISH	STAG.	STAGGERED
F.F.	FINISHED FLOOR	STD.	STANDARD
F.S.	FINISH SLAB	S.S.	STAINLESS STEEL
F.E.	FIRE EXTINGUISHER	STL.	STEEL
F.E.C.	FIRE EXTINGUISHER CABINET	STOR.	STORAGE
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	TYP.	TYPICAL
GLASS	GLASS	U.O.N.	UNLESS OTHERWISE NOTED
GLUE-LAMINATED	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	VERIF. IN FIELD	VERIFY IN FIELD
H.C.	HOLLOW CORE	V.C.T.	VINYL COMPOSITION TILE
HORIZ.	HOLLOW METAL	V.W.C.	VINYL WALL COVERING
H.B.	HORIZONTAL	V.O.I.P.	VOICE OVER INTERNET PROTOCOL
I.D.	INSIDE DIAMETER	W.C.	WATER CLOSET
INSUL.	INSULATION	W.H.	WATER HEATER
INT.	INTERIOR	WP.	WATERPROOF
INV.	INVERT	W.W.M.	WELDED WIRE MESH
JT.	JOINT	W.D.	WINDOW DIMENSION
J.H.	JOIST HANGER	W/	WITH
K.D.	KILN DRIED	W/O	WITHOUT
		WD.	WOOD

BUILDING CODES AND STANDARDS:

2019	CALIFORNIA ADMINISTRATIVE CODE (CAC), PART 2, TITLE 24, C.C.R.
2019	CALIFORNIA BUILDING CODE (CBC), PART 2, TITLE 24, C.C.R. (2018 INTERNATIONAL BUILDING CODE, VOLUMES 1 AND 2, WITH 2019 CALIFORNIA AMENDMENTS.)
2019	CALIFORNIA ELECTRIC CODE (CEC), PART 3, TITLE 24, C.C.R. (2018 NATIONAL ELECTRIC CODE WITH 2019 CALIFORNIA AMENDMENTS.)
2019	CALIFORNIA MECHANICAL CODE (CMC), PART 4, TITLE 24, C.C.R. (2018 INTERNATIONAL MECHANICAL CODE WITH 2019 CALIFORNIA AMENDMENTS.)
2019	CALIFORNIA PLUMBING CODE (CPC), PART 5, TITLE 24, C.C.R. (2018 UNIFORM PLUMBING CODE WITH 2019 CALIFORNIA AMENDMENTS.)
2019	CALIFORNIA FIRE CODE (CFC), PART 9, TITLE 24, C.C.R. (2018 INTERNATIONAL FIRE CODE WITH 2019 CALIFORNIA AMENDMENTS.)
2019	CALIFORNIA GREEN BUILDING STANDARDS CODE, PART 11, TITLE 24, C.C.R.
2019	CALIFORNIA REFERENCED STANDARDS, PART 12, TITLE 24, C.C.R.
2016	ASME A17.1 (W/17-1) IBCSA B44a-08 ADDENDA) SAFETY CODE FOR ELEVATORS AND ESCALATORS
2010	AIA STANDARDS FOR ACCESSIBLE DESIGN (2008 IBC PART 305 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	2013 CALIFORNIA EDITION
NFPA 72	NATIONAL FIRE ALARM CODE (CA AMENDED)	2016 EDITION
NFPA 80	FIRE DOORS AND OTHER OPENING PROTECTIVES	2016 EDITION
NFPA 92	STANDARD FOR SMOKE CONTROL SYSTEMS	2015 EDITION
NFPA 110	EMERGENCY AND STANDBY POWER SYSTEMS	2016 EDITION
NFPA 117	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
UL 268	SMOKE DETECTORS FOR FIRE PROTECTIVE SIGNALING SYSTEMS	2009 EDITION
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	2003 EDITION
UL 521	HEAT DETECTORS FOR FIRE PROTECTIVE SIGNALING SYSTEMS	1999 EDITION
UL 864	CONTROL UNITS FOR FIRE PROTECTIVE SIGNALING SYSTEMS (W/ REVISIONS THROUGH DEC. 2014)	2003 EDITION
UL 1971	SIGNALING DEVICES FOR THE HEARING IMPAIRED	2002 EDITION

COMPLIANCE WITH CFC CHAPTER 33, FIRE SAFETY DURING CONSTRUCTION AND DEMOLITION AND CBC CHAPTER 33, SAFETY DURING CONSTRUCTION WILL BE ENFORCED.

SYMBOLS LEGEND

1 A8.1	SECTION / EXTERIOR ELEVATION
4 A8.1	SECTION IDENTIFICATION SHEET WHERE SECTION IS DRAWN
4 A8.1	DETAIL
4 A8.1	DETAIL IDENTIFICATION SHEET WHERE DETAIL IS DRAWN
1 A7.1	INTERIOR ELEVATION
1 A7.1	INDICATES ELEVATION SHOWN SHEET WHERE ELEVATION IS DRAWN
CLASSROOM 102	ROOM IDENTIFICATION
102	ROOM NAME
102	ROOM NUMBER
3	SPECIFIC NOTE
102A	DOOR DESIGNATION
A	WINDOW DESIGNATION
1	ADDENDUM REVISION
1	CLOUD AROUND REVISION
1	CCD REVISION
1	CLOUD AROUND REVISION
127	FINISH NUMBER
127	SEE SPECS AND I.E. DWGS.
A	EQUIPMENT LETTER
A	SEE EQUIPMENT SCHEDULE
48'-0"	CEILING HEIGHT
1	WALL TYPE
1	MATCH LINE
1	ELEV. HEIGHT
1	CENTER OF
1	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
CAMPBELL, CALIFORNIA 95008
(408) 879-0600
(408) 377-6066 FAX
ATTN: MARK FINNEY MARK@SUGIMURA.COM

ELECTRICAL AND FIRE ALARM ENGINEER

AURUM CONSULTING ENGINEERS
1798 TECHNOLOGY DRIVE, SUITE 242
SAN JOSE, CA 95110
(408) 564-7525

DRAWING INDEX

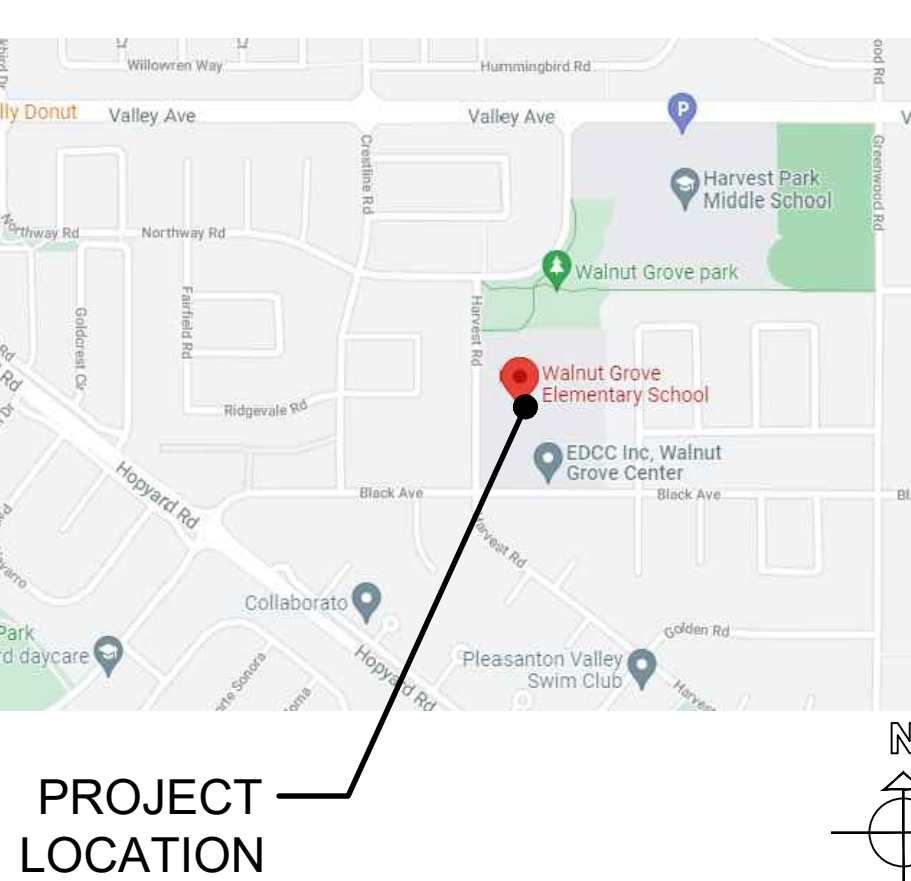
T1	TITLE SHEET
T3	SITE PLAN - FIRE LIFE SAFETY

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, E & KID'S CLUB
FA4.3	FIRE ALARM PLANS - BUILDINGS F, G & PORTABLES
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.: 01-119914 FILE NO.: 01-32
- ☒ THE DRAWINGS OR SHEETS LISTED ON THE COVER OR INDEX SHEET
☐ THIS DRAWING, PAGE OF SPECIFICATIONS / CALCULATIONS
- THIS STATEMENT OF GENERAL CONFORMANCE "SHALL NOT BE CONSTRUED AS RELIEVING ME OF MY RIGHTS, DUTIES, AND RESPONSIBILITIES UNDER SECTION 17922 OF THE CALIFORNIA CIVIL CODE AND SECTION 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 C-24673 LICENSE NUMBER	12/01/2021 DATE 9/30/2023 EXPIRATION DATE
--	--

TITLE SHEET

REVISIONS	NO.	ITEM	DATE
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DRAWN BY:	TR
CHECKED BY:	MB
SFA JOB NO:	21083
DATE:	12/06/2021































FIRE ALARM EQUIPMENT LIST			
SYMBOL	DESCRIPTION AND MODEL NUMBER	MFGR'S PART No.	CSFM LISTING
	ADDRESSABLE FIRE ALARM CONTROL PANEL WITH DVC-EM AUDIO OPTION, FIBER MODULES AS NECESSARY AND INTEGRATED UDCAT, NOTIFIER NFS2 SERIES, PROVIDE & INSTALL FIRE ALARM DOCUMENT CABINET NEXT TO FACP.	NFS2-3030	7165-0028-0224
	DIGITAL VOICE COMMAND CONTROL SYSTEM WITH DIGITAL AUDIO LOOP TECHNOLOGY WITH UP 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
	10.0A AUXILIARY POWER SUPPLY WITH 4 NAC OUTPUT CIRCUITS AND BUILT-IN SYNCHRONIZATION, NOTIFIER PSE-10 SERIES.	PSE-10	7315-0028-0513
	50 WATT, 70 VRMS DIGITAL AUDIO AMPLIFIER WITH CHARGING POWER SUPPLY AND 2 CLASS B OR 2 CLASS A OUTPUTS, NOTIFIER DAA2 SERIES.	DAA2-5025	7165-0028-0224
	ADDRESSABLE PHOTO ELECTRIC FIRE ALARM SMOKE DETECTOR AND BASE, NOTIFIER FSP-951 SERIES.	FSP-951	7272-0028-0503
	ADDRESSABLE FIRE ALARM HEAT DETECTOR AND BASE, 135 DEG. FIXED TEMPERATURE AND RATE-OF-RISE, NOTIFIER FST1951 SERIES, (DEVICES WITH "A" INDICATE ABOVE CEILING).	FST-951	7270-0028-0502
	ADDRESSABLE REFLECTOR-TYPE LINEAR OPTICAL BEAM SMOKE DETECTOR, NOTIFIER FS-OSI-RI SERIES.	FS-OSI-RI	7260-0028-0509
	ADDRESSABLE MONITOR MODULE FIRE-LITE FMM-1 SERIES.	FMM-1	7300-0028-0219
	ADDRESSABLE CONTROL MODULE FIRE-LITE FCM-1 SERIES.	FCM-1	7300-0028-0219
	WALL MOUNTED MULTI-CANDELA STROBE WITH FIELD SELECTABLE CANDELA SETTINGS OF 15, 30, 75 AND 110 CANDELA, SYSTEM SENSOR, SWL SERIES.	SWL	7125-1653-0504
	CEILING MOUNTED MULTI-CANDELA STROBE WITH FIELD SELECTABLE CANDELA SETTINGS OF 15, 30, 75 AND 115 CANDELA, SYSTEM SENSOR, SCWL SERIES.	SCWL	7125-1653-0504
	WALL MOUNTED MULTI-CANDELA, SPEAKER-STROBE WITH FIELD SELECTABLE CANDELA SETTINGS OF 15, 30, 75 & 115 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
	CEILING MOUNTED MULTI-CANDELA, SPEAKER-STROBE WITH FIELD SELECTABLE CANDELA SETTINGS OF 15, 30, 75 & 115 CANDELA WITH VOLTAGE SETTING OF 70.7 VRMS AND POWER SETTINGS OF 1/2, 1 & 2 WATTS, SYSTEM SENSOR, SPSCWL SERIES.	SPSCWL	7320-1653-0505
	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
	END OF LINE DEVICE.		

- ### FIRE ALARM GENERAL NOTES
1. WIRING MUST BE LISTED FOR USE AS REQUIRED BY TITLE 24/CEC, ARTICLE 760.
 2. WIRE USED IN WET LOCATIONS SHALL BE OF AN APPROVED TYPE IN ACCORDANCE WITH 3-310-8, T24/CEC (I.E. THHW OR EQUAL).
 3. UNDER GROUND AND EXTERIOR CONDUITS TO HAVE WATERTIGHT FITTINGS AND WIRES APPROVED FOR WET LOCATION.
 4. ALL CONDUCTORS SHALL BE ROUTED IN CONDUIT UNLESS SPECIFICALLY NOTED OTHERWISE ON PLANS. MINIMUM CONDUIT SIZE SHALL BE 3/4".
 5. THE CONDUIT AND WIRE SHOWN ON THESE PLANS ARE SHOWN DIAGRAMMATICALLY. EXACT LOCATIONS SHALL BE DETERMINED IN THE FIELD TO SUIT FIELD CONDITIONS. "AS-BUILT" PLANS SHALL BE MAINTAINED AND BE PROVIDED AS REQUIRED BY THE PROJECT INSPECTOR OF RECORD.
 6. PENETRATIONS OF FIRE RATED WALLS SHALL BE PROTECTED IN ACCORDANCE WITH CALIFORNIA BUILDING CODE, CHAPTER 7, TITLE 24. PROVIDE DETAILS OF THROUGH PENETRATION FIRE-STOP SYSTEMS FOR ALL PIPE/CABLE/CONDUIT PASSING THROUGH FIRE RATED WALLS/FLOORS REQUIRING PROTECTED OPENINGS.
 7. ALL DEVICES SHALL BE "CSFM" LISTED.
 8. EXTERIOR DEVICES SHALL BE LISTED FOR EXTERIOR USE BY "CSFM."
 9. AUDIBLE FIRE ALARM SOUND LEVEL SHALL BE AT LEAST 15DBA ABOVE THE AVERAGE SOUND LEVEL.
 10. 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.
 11. 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.
 12. 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.
 13. 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.
 14. POWER SERVICE SHALL BE ON A DEDICATED, 120V BRANCH CIRCUIT, WITH A RED MARKING AND IDENTIFIED AS "FIRE ALARM CIRCUIT CONTROL."
 15. 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 UJXF OR UJUS BY UNDERWRITERS LABORATORY OR SHALL MEET THE REQUIREMENTS OF FACTORY MUTUAL RESEARCH APPROVAL STANDARD 3011.
 16. 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
1. CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE CODES AND REGULATIONS. MATERIALS AND EQUIPMENT SHALL BE U.L. LISTED AND LABELED FOR THE APPLICATION.
 2. THE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL PERMITS, LICENSES AND INSPECTION FEES REQUIRED BY THIS CONTRACT WORK.
 3. CONTRACTOR SHALL VISIT THE PROJECT SITE PRIOR TO BIDDING AND ALLOW FOR ALL FIELD CONDITIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ELECTRICAL WORK NOTED AND CALLED OUT ON ALL CONTRACT DOCUMENTS. THE CONTRACTOR SHALL OBTAIN INFORMATION AND BE FAMILIAR WITH ALL OTHER TRADES WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION BETWEEN OTHER TRADES ON PROJECT.
 4. CONTRACTOR SHALL BE RESPONSIBLE FOR THE SAFETY OF PERSONS AND PROPERTY AND SHALL PROVIDE INSURANCE COVERAGE AS NECESSARY FOR LIABILITY AND PERSONAL, PROPERTY DAMAGE, TO FULLY PROTECT THE OWNER, ARCHITECT AND ENGINEER FROM ANY AND ALL CLAIMS RESULTING FROM THIS WORK.
 5. CONTRACTOR SHALL MAINTAIN RECORD DRAWINGS AT THE PROJECT SITE INDICATING ALL MODIFICATIONS TO ELECTRICAL SYSTEMS. THE CONTRACTOR SHALL AT THE CONCLUSION OF THE PROJECT PROVIDE ACCURATE "AS-BUILT" DRAWINGS ACCEPTABLE TO THE ARCHITECT.
 6. ALL MATERIALS PROVIDED TO THE PROJECT SHALL BE NEW. THE CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE AND INSTALL ALL INCIDENTAL MATERIALS REQUIRED FOR A COMPLETE INSTALLATION.
 7. CONTRACTOR SHALL PROVIDE TO THE ARCHITECT A CONSTRUCTION SCHEDULE OF ELECTRICAL WORK. THE CONSTRUCTION SCHEDULE SHALL IDENTIFY ALL SIGNIFICANT MILESTONES WITH COMPLETION DATES.
 8. CONTRACTOR SHALL PROVIDE ALL REQUIRED "CUTTING, PATCHING, EXCAVATION, BACKFILL AND REPAIRS" NECESSARY TO RESTORE DAMAGED SURFACES TO EQUAL OR BETTER THAN ORIGINAL CONDITIONS EXISTING AT START OF WORK.
 9. CONTRACTOR SHALL BE RESPONSIBLE FOR PAINTING ALL EXPOSED CONDUITS AND ELECTRICAL EQUIPMENT. REFER TO ARCHITECT'S PAINTING SECTION FOR REQUIREMENTS.
 10. ALL ELECTRICAL EQUIPMENT INSTALLED OUTDOORS SHALL BE WEATHERPROOF. EXTERIOR CONDUITS RUN INTO BUILDINGS SHALL BE INSTALLED WITH FLASHING, CAULKED AND SEALED. CONDUITS FOR EXTERIOR ELECTRICAL DEVICES SHALL BE RUN INSIDE BUILDING UNLESS OTHERWISE NOTED ON DRAWINGS.
 11. ALL CONDUITS UNLESS OTHERWISE NOTED ON DRAWINGS SHALL HAVE AS A MINIMUM: TWO (2) #12s WITH ONE (1) #12 GROUND. "TICK" MARKS SHOWN ON CIRCUITRY ARE FOR ROUGH ESTIMATING ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL WIRES AND WIRE SIZES REQUIRED BY LATEST CODE.
 12. ALL BRANCH CIRCUITS SHALL HAVE INDIVIDUAL NEUTRALS. SHARED NEUTRALS ON MULTIWIRE CIRCUITS IS NOT ALLOWED.
 13. COORDINATE ALL CONDUIT RUNS, ELECTRICAL EQUIPMENT AND PANELS WITH ALL OTHER WORK TO AVOID CONFLICTS.
 14. CONTRACTOR SHALL PROVIDE IN EVERY NEW EMPTY CONDUIT A DRAW STRING FOR USE IN FUTURE CONSTRUCTION.
 15. ALL CONDUIT SHALL BE CONCEALED WHERE POSSIBLE. CUT AND PATCH EXISTING WALLS WHERE NECESSARY. WHERE IT IS NECESSARY TO CUT OR BORE EXISTING STRUCTURAL WALLS FOR NEW ELECTRICAL WORK OBTAIN PERMISSION FROM THE ARCHITECT PRIOR TO STARTING WORK. REUSE EXISTING CONDUIT WHERE POSSIBLE.
 16. WHERE IT IS NOT POSSIBLE TO REUSE EXISTING CONDUIT OR RUN NEW CONCEALED CONDUIT USE NON-METALLIC SURFACE RACEWAY AND BOXES. ROUTING OF ALL NON-METALLIC RACEWAYS SHALL BE APPROVED BY THE ARCHITECT OR OWNER'S REPRESENTATIVE PRIOR TO ROUGH-IN.
 17. EXTENSION RINGS OR RESET BOXES TO BE FLUSH WITH NEW WALL THICKNESS.
 18. 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.
 19. 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.
 20. 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.
 21. 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

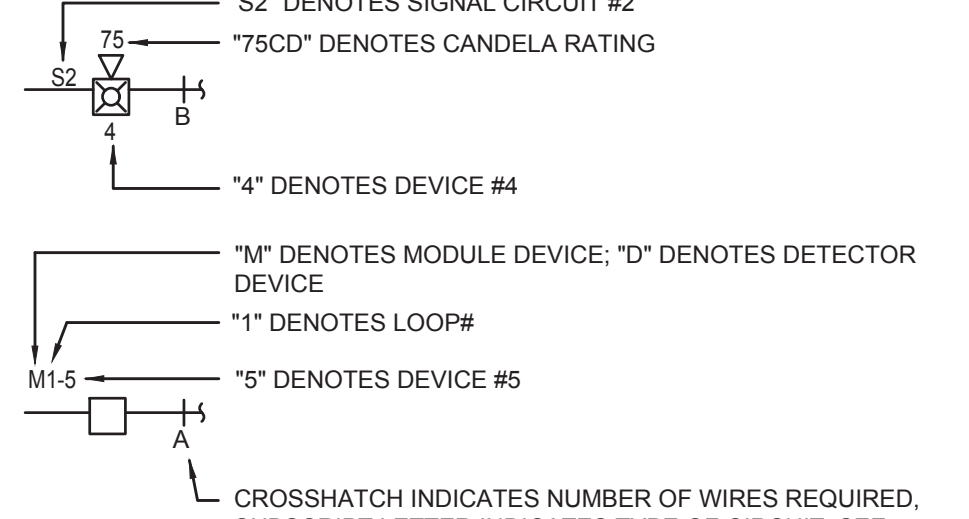
SYMBOLS

	MANUAL PULL STATION		BELL (GONG)
	STROBE ONLY		FIRE ALARM CONTROL PANEL
	STROBE ONLY (CEILING MOUNTED)		REMOTE POWER SUPPLY
	SPEAKER ONLY		DIGITAL AUDIO AMPLIFIER
	MINI HORN		END OF LINE
	SPEAKER/STROBE		JUNCTION BOX - CEILING/WALL MOUNTED, SIZE PER CODE, TAPE AND TAG WIRES
	SPEAKER/STROBE (CEILING MOUNTED)		PULLBOX
	CHIME/STROBE		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.
	HEAT DETECTOR		CONDUIT - EXISTING
	HEAT DETECTOR (ABOVE ACCESSIBLE CEILING)		CONDUIT - CONCEALED IN WALLS OR CEILING.
	SMOKE DETECTOR		CONDUIT - IN OR BELOW FLOOR, 3/4" MIN.
	DUCT SMOKE DETECTOR		CONDUIT CONTINUATION.
	TAMPER SWITCH		ROOM NUMBER.
	FLOW SWITCH		SHEET NOTE REFERENCE SYMBOL: SEE ASSOCIATED NOTE ON SAME SHEET.
	POST INDICATING VALVE		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	NIC	NOT IN CONTRACT
CB	CIRCUIT BREAKER	NO	NUMBER
CKT	CIRCUIT	SLC	SIGNALING LINE CIRCUITS
CLG	CEILING		
(E)	EXISTING	TYP	TYPICAL
EOL	END OF LINE	UON	UNLESS OTHERWISE NOTED
FA	FIRE ALARM	WP	WEATHERPROOF
FACP	FIRE ALARM CONTROL PANEL		
FBO	FURNISHED BY OTHERS		

TYPICAL SCENE NOMENCLATURE



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

FIRE ALARM SYSTEM OPERATIONAL MATRIX									
CAUSE	ALARM				TROUBLE		SUPERVISORY		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	
REPLACING EXISTING FIRE ALARM SYSTEM WITH NEW ADDRESSABLE FIRE ALARM AND EMVOICE EVACUATION SYSTEM AT EXISTING SITE.									
ALL EXISTING BUILDINGS WITH EXISTING COMPATIBLE MANUFACTURER INITIATION DEVICES (SMOKES, HEATS, DUCT SMOKE DETECTORS, MONITOR MODULES, CONTROLS MODULES, ETC.) SHALL REMAIN CONNECTED.									
SYSTEM DESCRIPTION: SLC = CLASS B IDC = CLASS B NAC = CLASS B									
FIRE ALARM SYSTEM DESIGN BY: NAJIB ANWARY									

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, E & KID'S CLUB.
FA4.3	FIRE ALARM PLANS - BUILDINGS F, G & PORTABLES.
FA5.1	FIRE ALARM DETAILS.

PROJECT DESCRIPTION	
SCOPE OF WORK: REPLACING EXISTING FIRE ALARM SYSTEM WITH NEW ADDRESSABLE FIRE ALARM AND EMVOICE EVACUATION SYSTEM AT EXISTING SITE.	
ALL EXISTING BUILDINGS WITH EXISTING COMPATIBLE MANUFACTURER INITIATION DEVICES (SMOKES, HEATS, DUCT SMOKE DETECTORS, MONITOR MODULES, CONTROLS MODULES, ETC.) SHALL REMAIN CONNECTED.	
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FIRE ALARM SYSTEM DESIGN BY: NAJIB ANWARY	



FIRE ALARM SYSTEM OPERATIONAL MATRIX									
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	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	
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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.1.16 THROUGH 1617A.1.26 AND ASCE 7-16 CHAPTER 13, 26 & 30:
1. ALL PERMANENT EQUIPMENT AND COMPONENTS.
 2. TEMPORARY OR MOVABLE EQUIPMENT THAT IS PERMANENTLY ATTACHED (e.g. HARD WIRE) TO THE BUILDING UTILITY SERVICES SUCH AS ELECTRICITY, GAS OR WATER, "PERMANENTLY ATTACHED" SHALL INCLUDE ALL ELECTRICAL CONNECTIONS EXCEPT PLEGS FOR 120 / 220 VOLT RECEPTACLES HAVING A FLEXIBLE CABLE.
 3. TEMPORARY, MOVABLE OR MOBILE EQUIPMENT WHICH IS HEAVIER THAN 400 POUNDS OR HAS A CENTER OF MASS LOCATED 4 FEET OR MORE ABOVE THE ADJACENT FLOOR OR ROOF LEVEL THAT DIRECTLY SUPPORT THE COMPONENT IS REQUIRED TO BE RESTRAINED IN A MANNER APPROVED BY DSA.
- THE FOLLOWING MECHANICAL AND ELECTRICAL COMPONENTS SHALL BE POSITIVELY ATTACHED TO THE STRUCTURE, BUT NEED NOT BE DETAILED IN THE PLANS. THESE COMPONENTS SHALL HAVE FLEXIBLE CONNECTIONS PROVIDED BETWEEN THE COMPONENT AND ASSOCIATED DUCTWORK, PIPING AND CONDUIT. FLEXIBLE CONNECTIONS MUST ALLOW MOVEMENT IN BOTH TRANSVERSE AND LONGITUDINAL DIRECTIONS.
- A. COMPONENTS 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 2019 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 #) #.

(DSA STAMP AREA)



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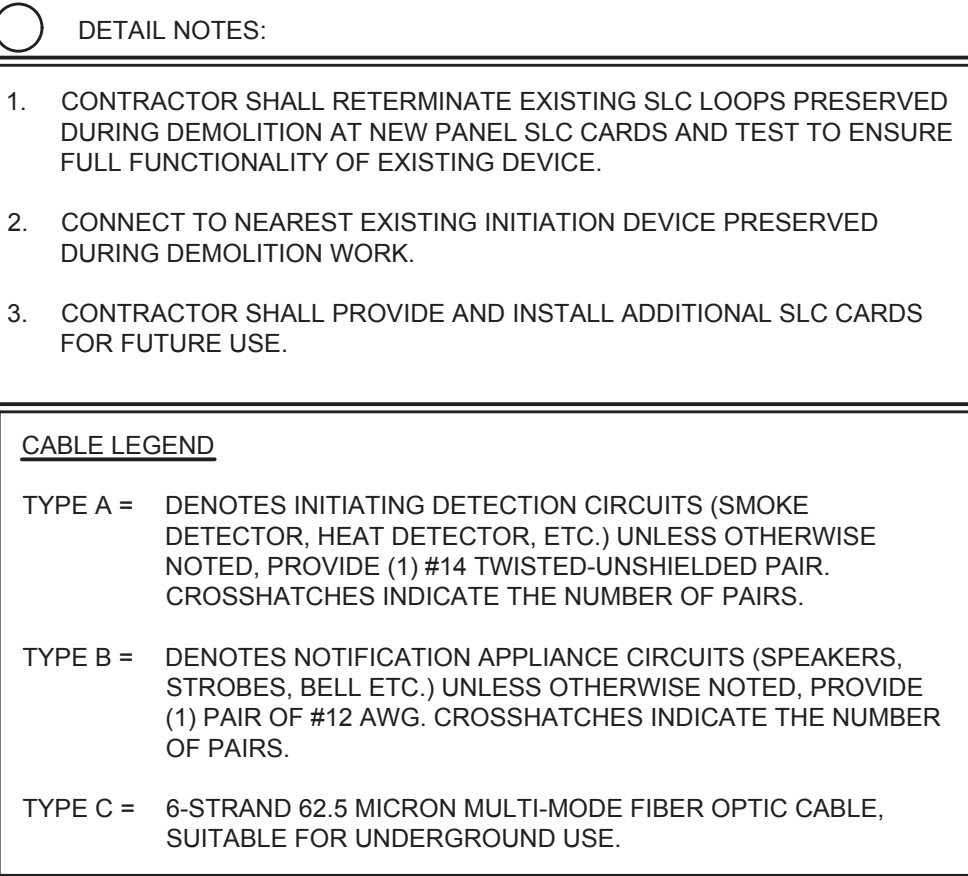
FIRE ALARM SYMBOLS, ABBRE., EQUIPMENT LIST, OPERATIONAL MATRIX, DETAILS & NOTES

CAMPUS-WIDE FIRE ALARM REPLACEMENT
WALNUT GROVE ELEMENTARY SCHOOL
1999 HARVEST RD, PLEASANTON, CA 94566
PLEASANTON UNIFIED SCHOOL DISTRICT

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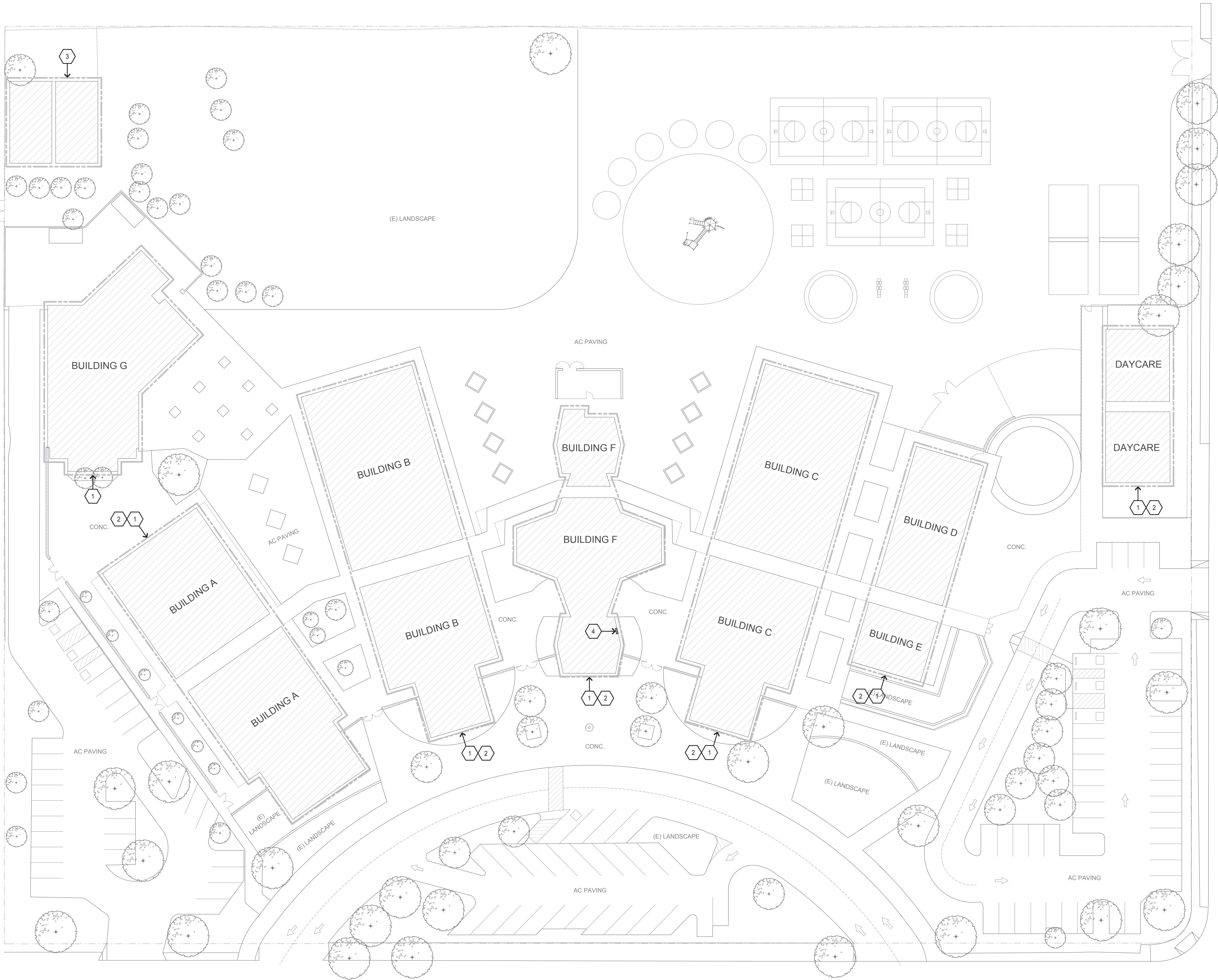
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FIRE ALARM RISER DIAGRAM

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SHEET NOTES

1. CONTRACTOR SHALL DEMOLISH FIRE ALARM NOTIFICATION DEVICES AND ASSOCIATED WIRING PER GENERAL DEMOLITION NOTES ON THIS SHEET. PROVIDE AND INSTALL DEVICE COVER PLATES OVER OPENINGS FROM REMOVED DEVICES; PAINT/FINISH TO MATCH EXISTING WALLS.
2. CONTRACTOR SHALL PRESERVE AND PROTECT EXISTING FIRE ALARM INITIATION DEVICES AND ASSOCIATED WIRING DURING DEMOLITION WORK FOR RECONNECTION TO NEW FIRE ALARM CONTROL PANEL.
3. CONTRACTOR SHALL DEMOLISH FIRE ALARM CONTROL PANEL COMPLETE AND ALL FIRE ALARM DEVICES AND WIRING PER GENERAL DEMOLITION NOTES ON THIS SHEET.
4. CONTRACTOR SHALL DEMOLISH EXISTING FIRE ALARM CONTROL PANEL. CONTRACTOR SHALL PRESERVE EXISTING SLG LOOPS SERVED BY EXISTING FACP TO BE REMOVED/REPLACED WITH NEW FACP; SEE 1/FM4.3 FOR NEW FACP AND RETERMINATION OF EXISTING SLG LOOPS.

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.

(DSA STAMP AREA)

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FIRE ALARM DEMOLITION PLAN

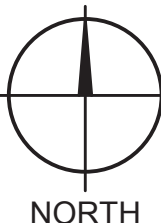
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FA2.1

30' 0' 15' 30'
SCALE: 1"=30'-0"

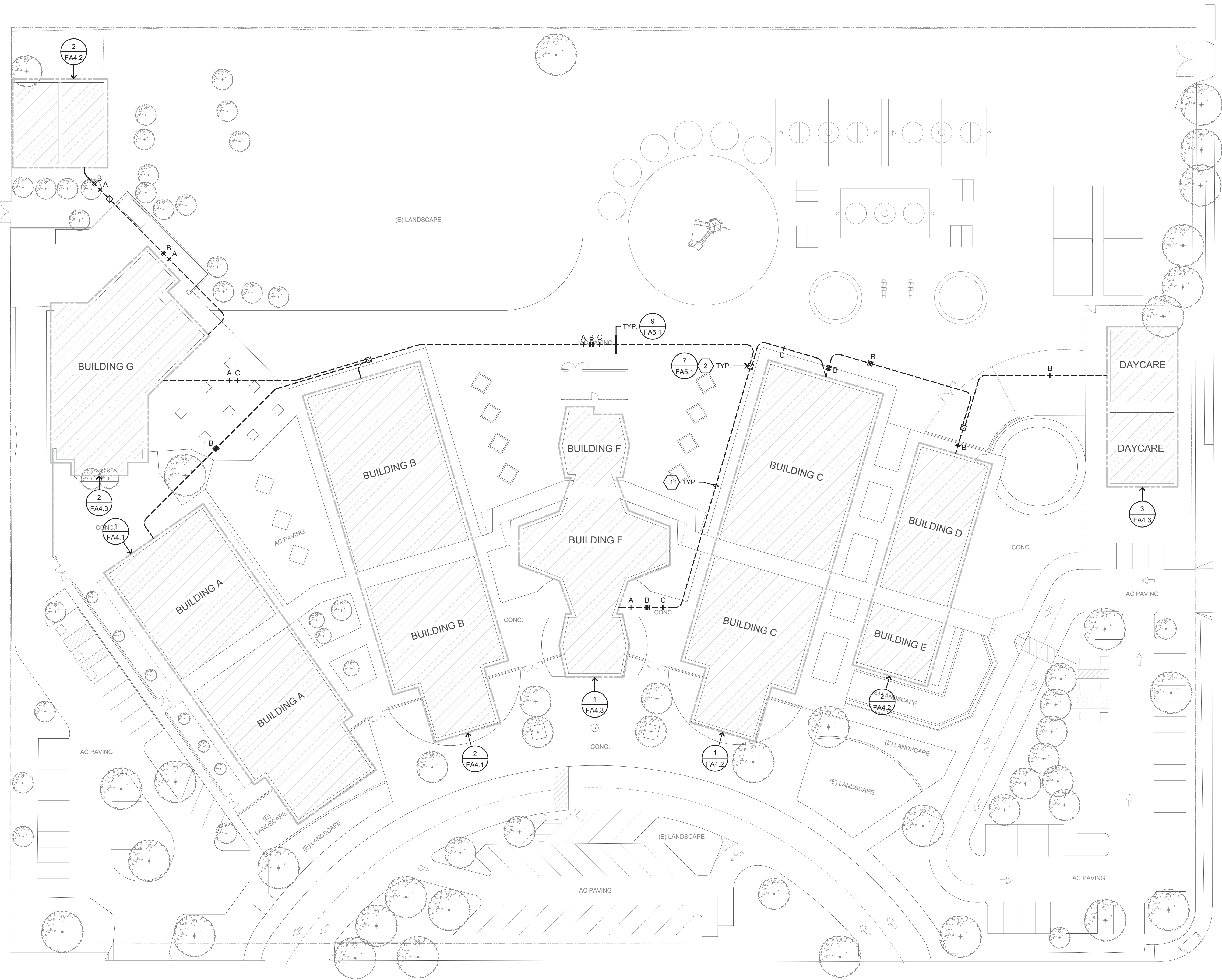


SHEET NOTES

- CONTRACTOR SHALL PROVIDE AND INSTALL 2" C. FOR FIRE ALARM CABLES.
- PROVIDE AND INSTALL CHRISTY #N16 PULLBOX WITH LID LABELED "FIRE ALARM".

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/CEILINGS FOR CONDUIT ROUTING AS NECESSARY. PAINT/FINISH EXPOSED CONDUITS/BOXES TO MATCH BUILDING FINISH. COORDINATE WITH FACILITIES MANAGER & ARCHITECT FOR EXACT REQUIREMENTS.



30' 0' 15' 30'
SCALE: 1"=30'-0"



FIRE ALARM SITE PLAN

CAMPUS-WIDE FIRE ALARM REPLACEMENT
WALNUT GROVE ELEMENTARY SCHOOL
1999 HARVEST RD, PLEASANTON, CA 94566
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DATE: 12/01/2021

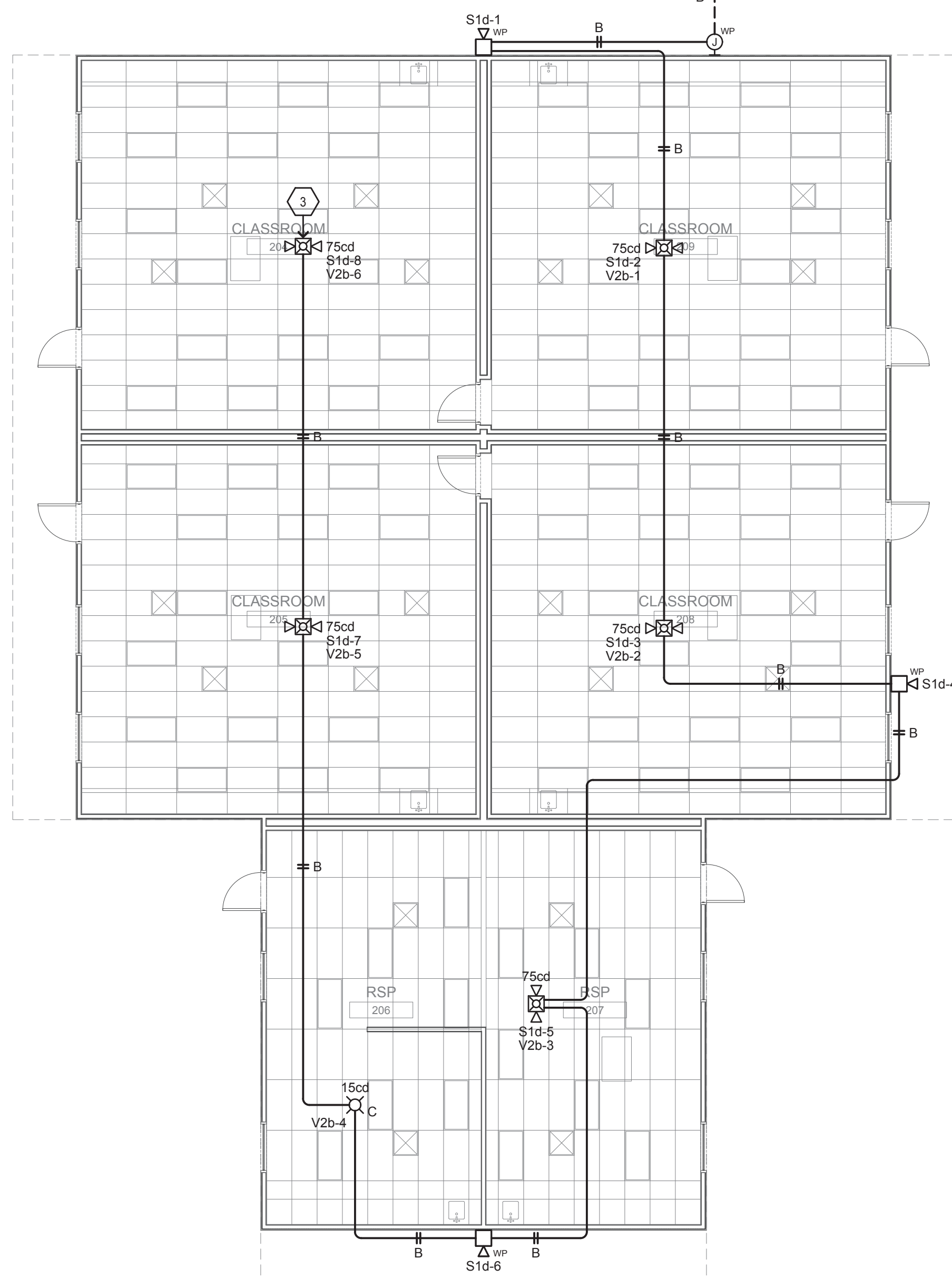
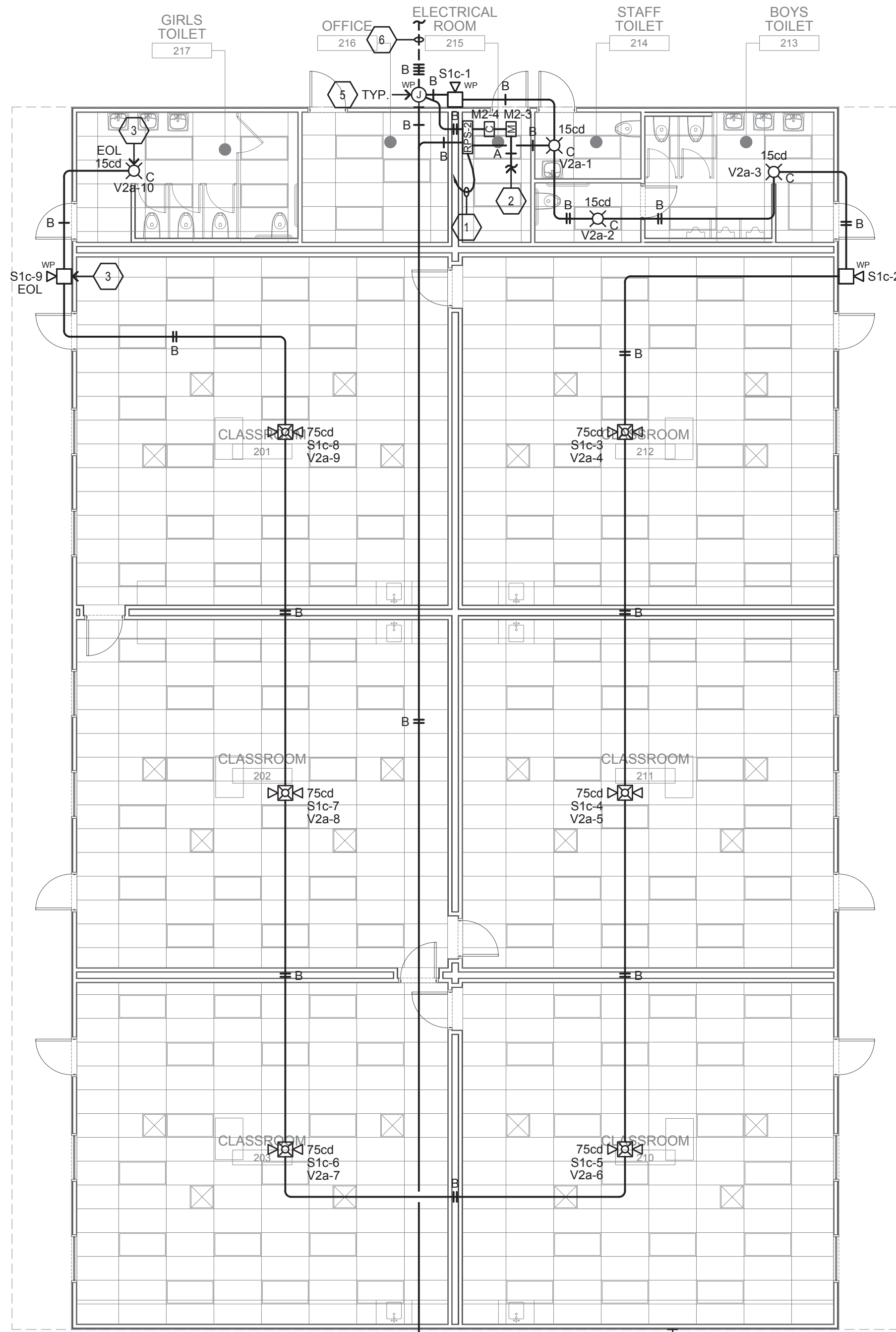
FA3.1

(DSA STAMP AREA)

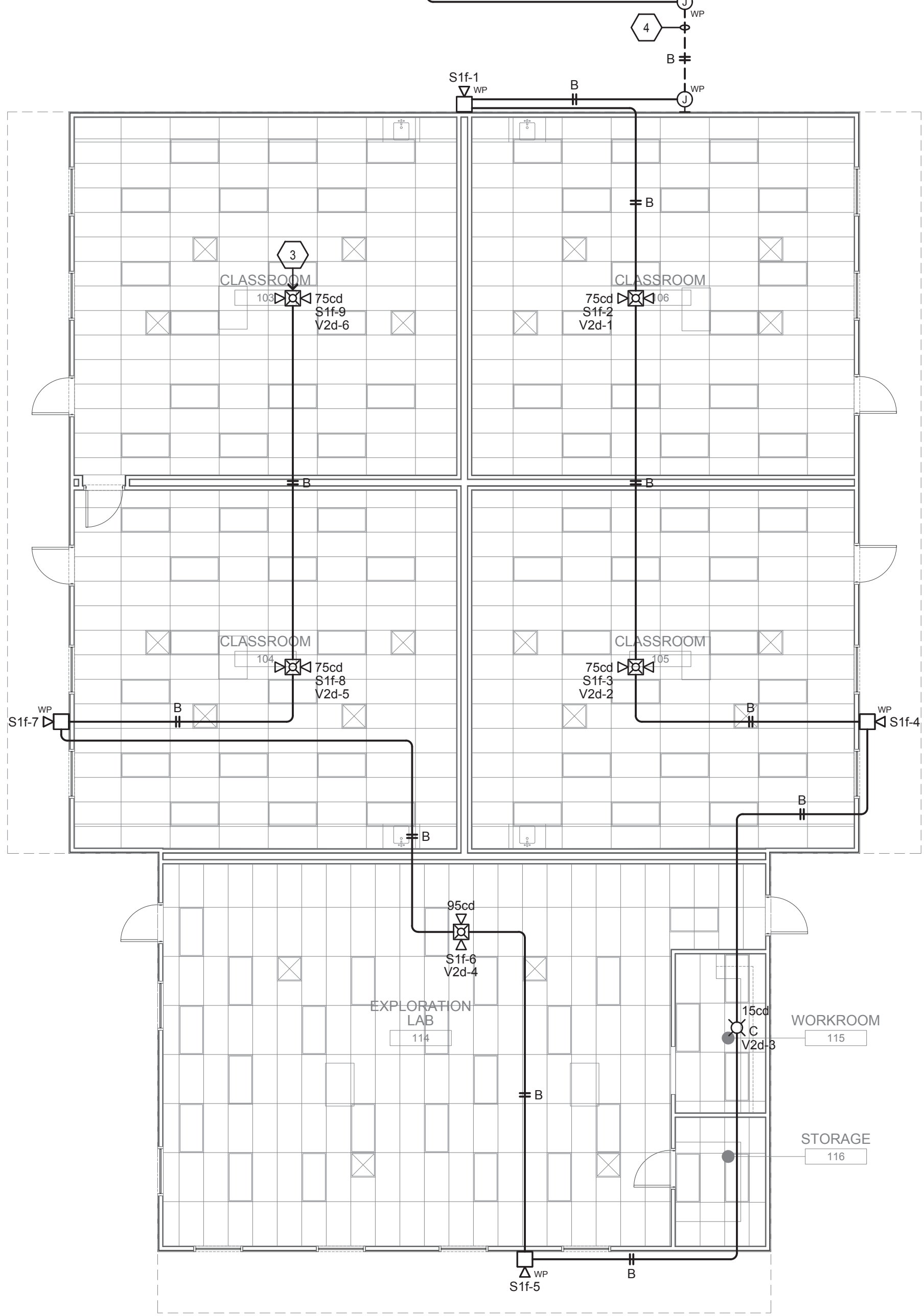
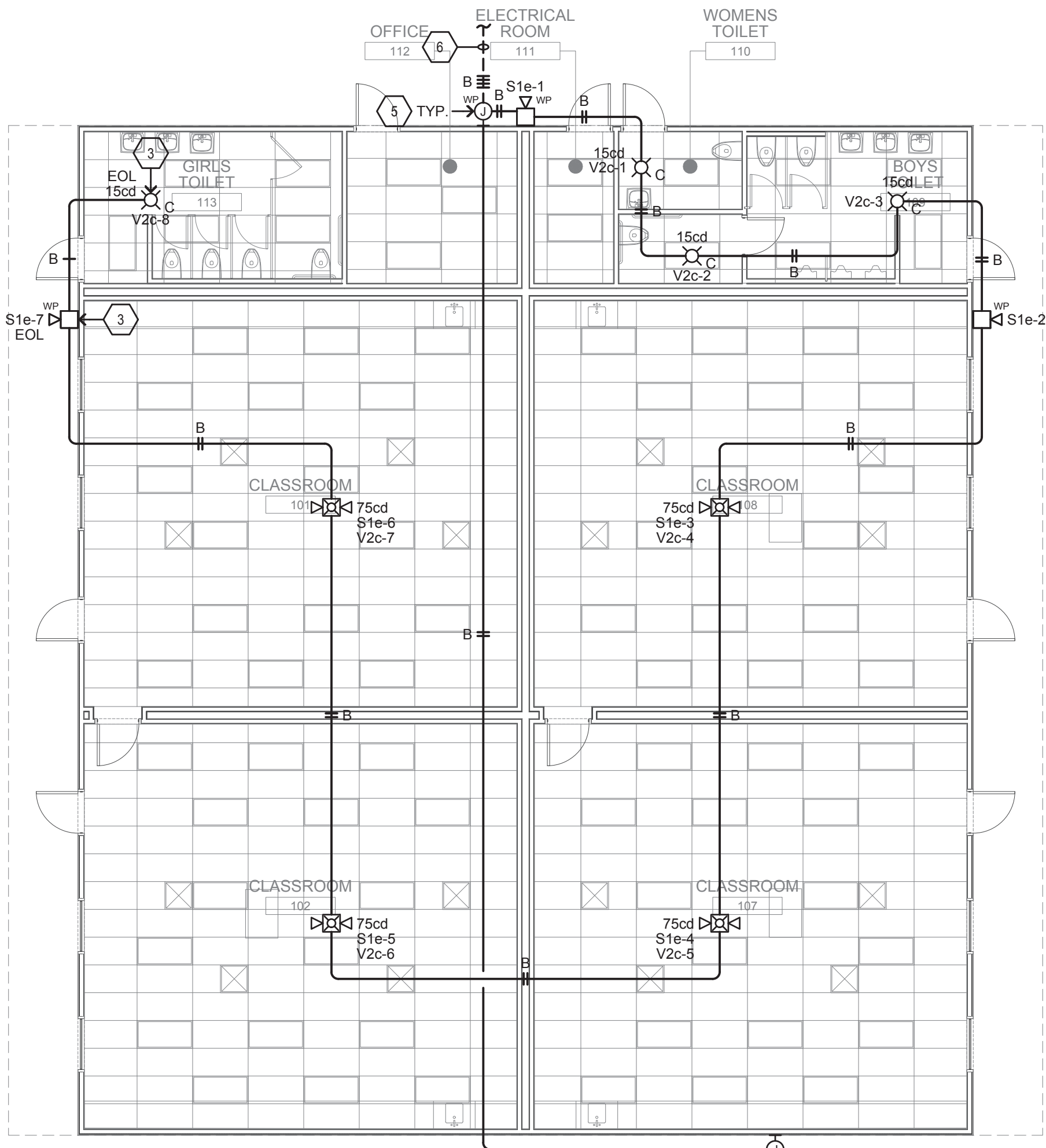


AURUM CONSULTING ENGINEERS
MONTEREY BAY, INC.
Project No. 21-444-00
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2 FIRE ALARM PLAN - BUILDING B
SCALE: 1/8"=1'-0"



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

SHEET NOTES

1. CIRCUIT VIA 3/4" C. 2 #12 & 1 #12 GND TO PANEL "DPS" LOCATED IN SAME ROOM, AT PANEL PROVIDE AND INSTALL 20 AMP, 1-POLE BREAKER WITH LOCK-ON DEVICE WITH RED MARKINGS LABELED "FIRE ALARMECS".
2. CONNECT TO NEAREST EXISTING INITIATION DEVICE PRESERVED DURING DEMOLITION WORK.
3. PROVIDE AND INSTALL LAMICOID NAMEPLATE ON DEVICE READING "EOL".
4. CONTRACTOR SHALL PROVIDE AND INSTALL 3/4" C. FOR FIRE ALARM CABLES.
5. PROVIDE AND INSTALL 12" SQ. X 4" DEEP NEMA 3R PULLCAN.
6. SEE SHEET E2.1 FOR CONTINUATION.

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 FACILITIES MANAGER & ARCHITECT FOR EXACT REQUIREMENTS.

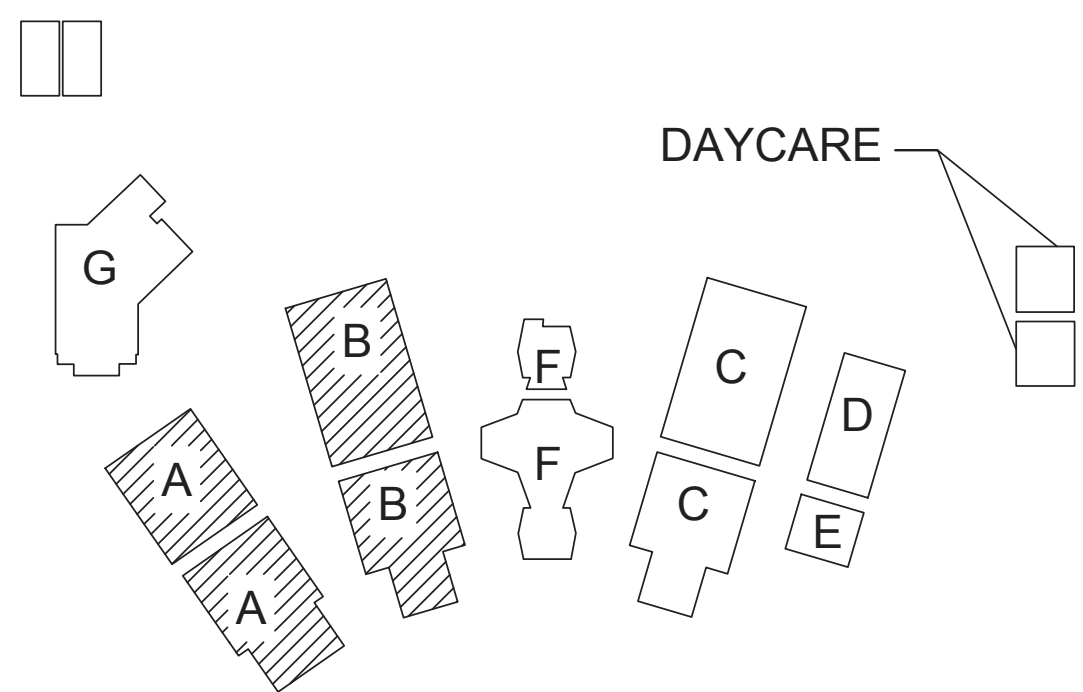
B. ALL INDOOR SPEAKERS/HORNS SHALL BE 0.5 WATTS RATED MINIMUM. ALL OUTDOOR SPEAKERS/HORNS SHALL BE 2 WATTS RATED MINIMUM.

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.

BUILDING KEY



DAYCARE

FIRE ALARM PLANS - BUILDINGS A & B

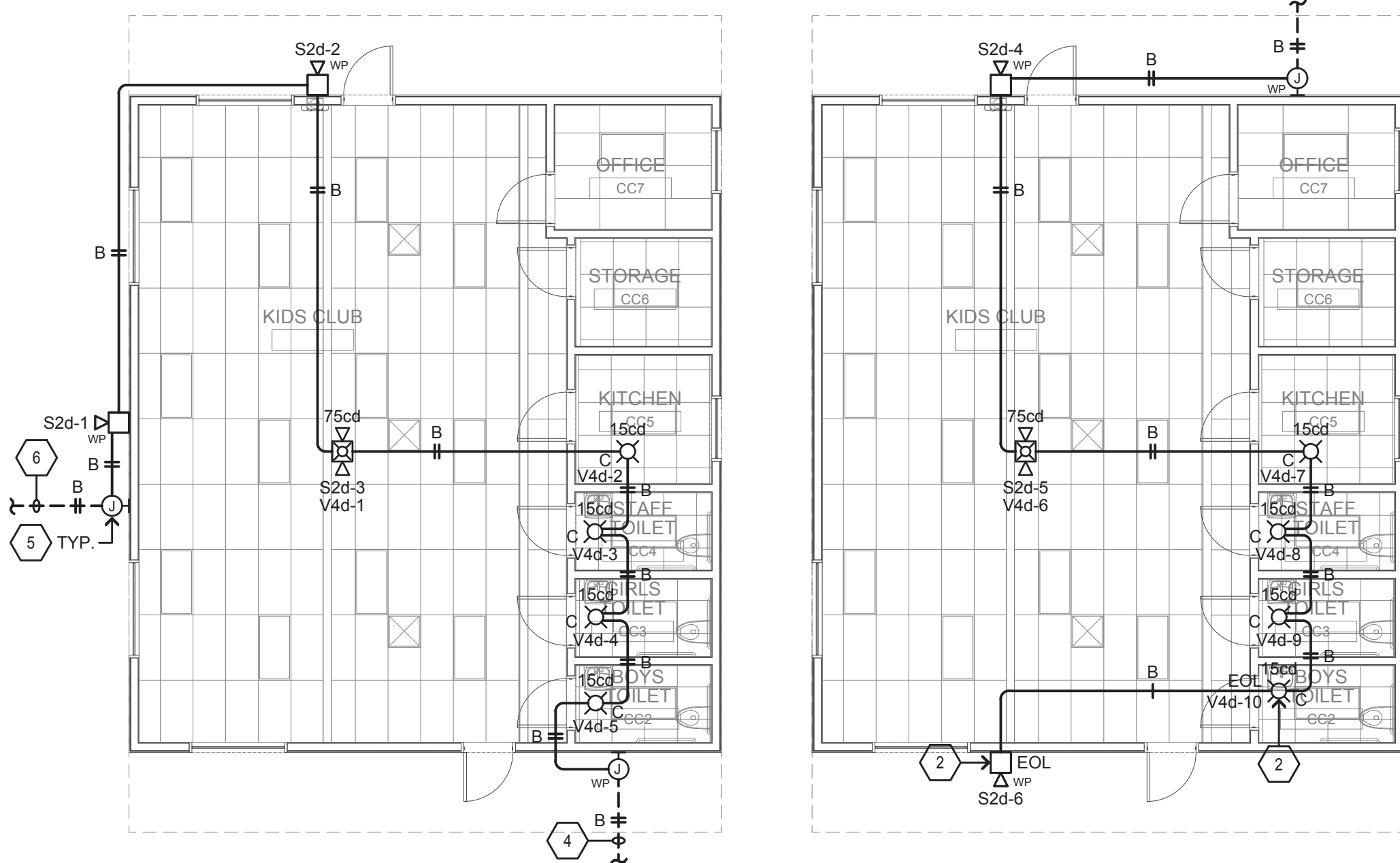
CAMPUS-WIDE FIRE ALARM REPLACEMENT
WALNUT GROVE ELEMENTARY SCHOOL
1999 HARVEST RD, PLEASANTON, CA 94566
PLEASANTON UNIFIED SCHOOL DISTRICT

REVISIONS

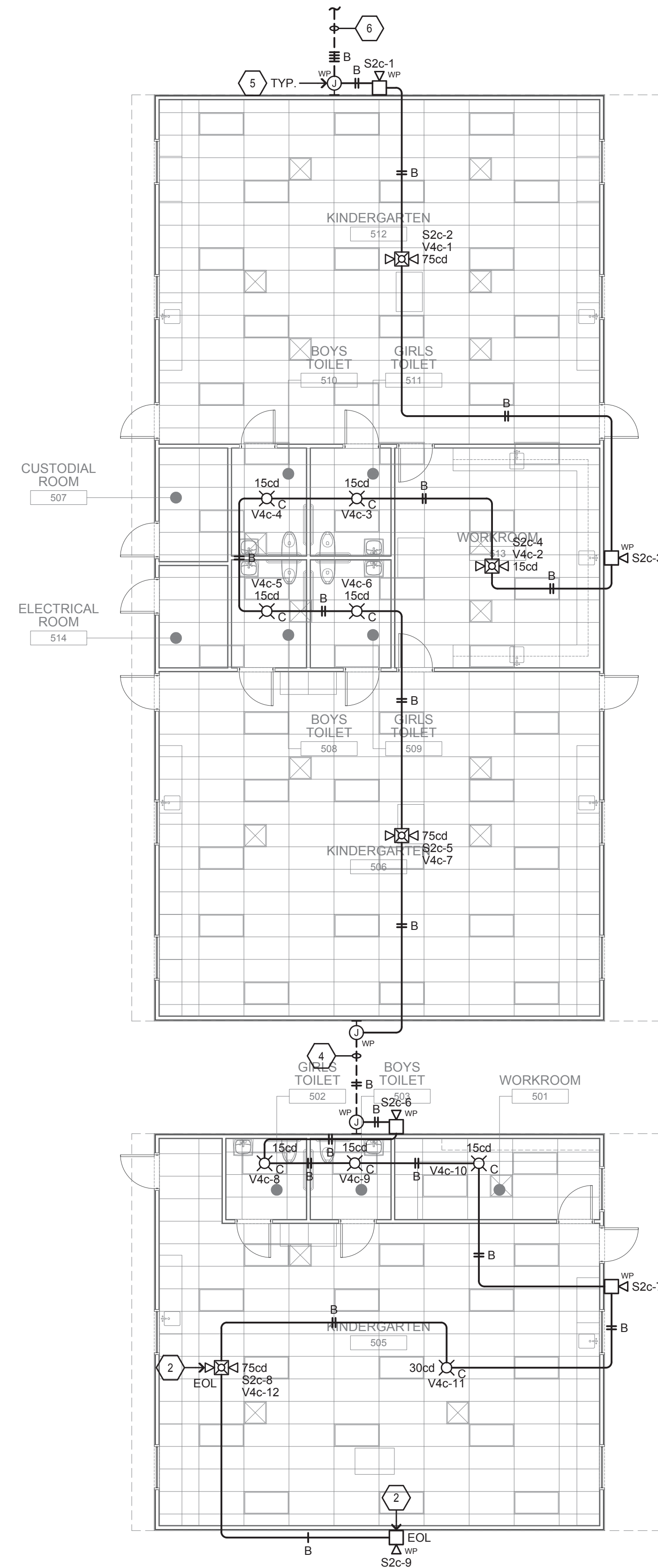
NO.	ITEM	DATE

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SFA JOB NO: 21083
DATE: 12/01/2021

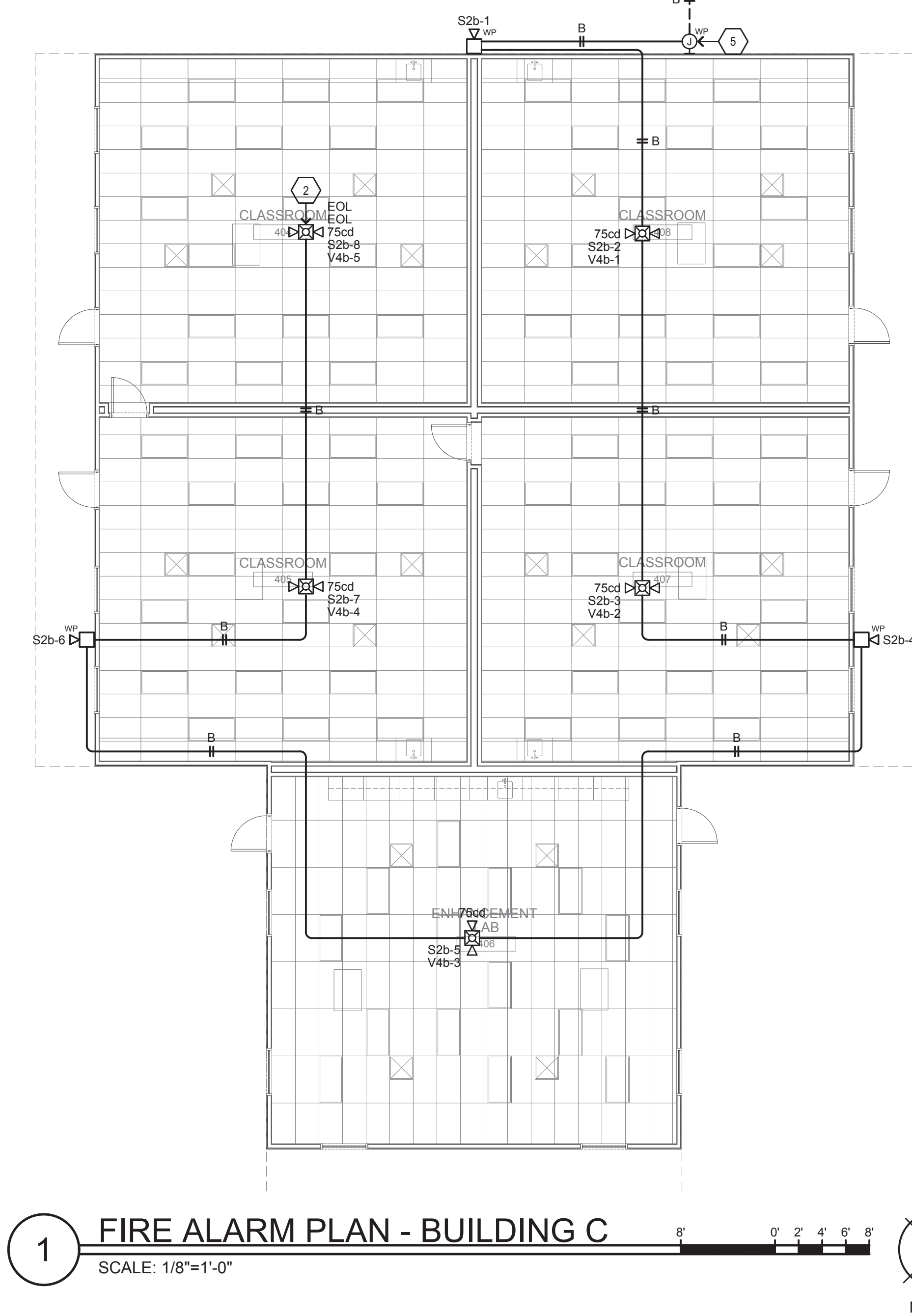
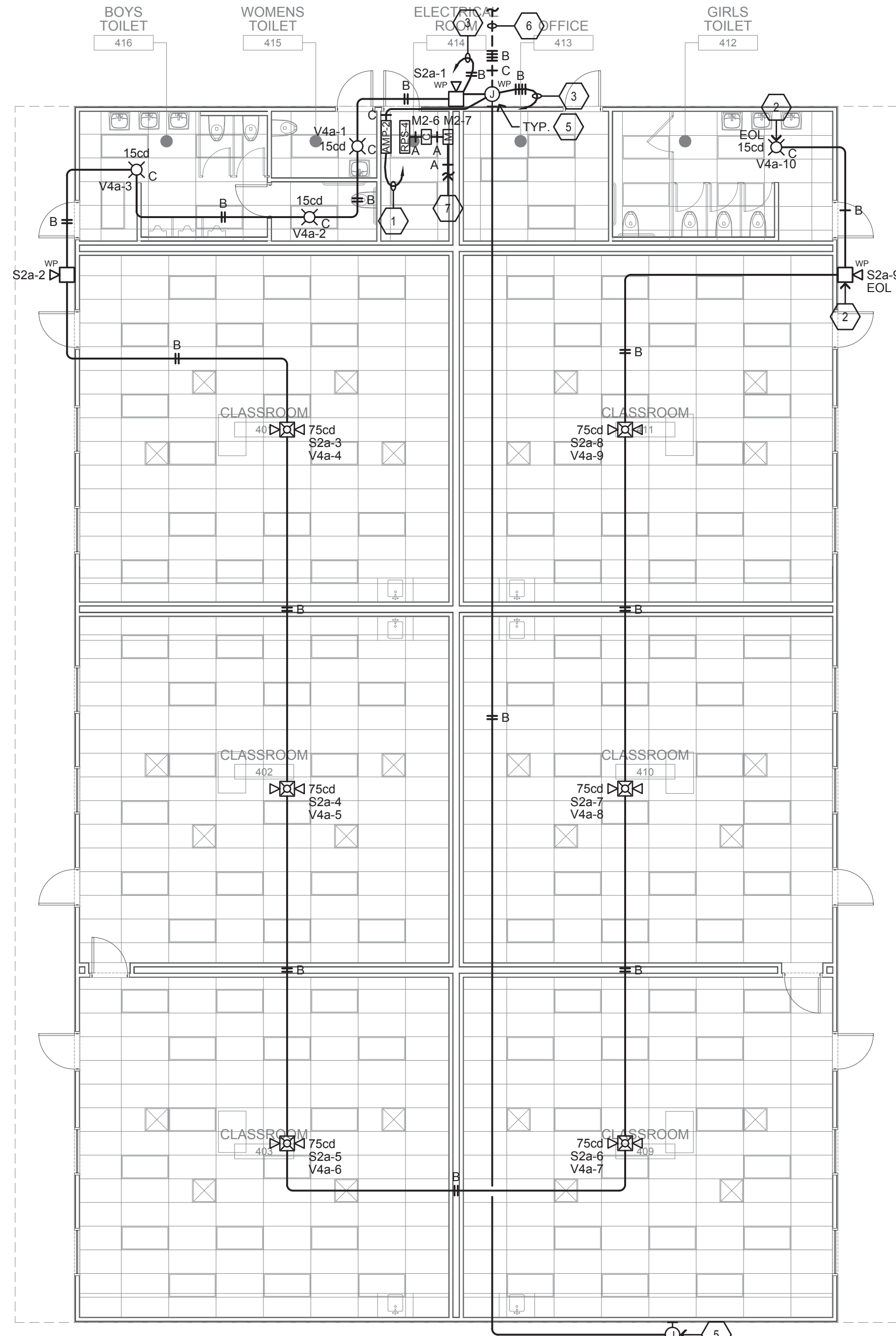
FA4.1



3 FIRE ALARM PLAN - KID'S CLUB
SCALE: 1/8"=1'-0"



2 FIRE ALARM PLAN - BUILDINGS D & E
SCALE: 1/8"=1'-0"

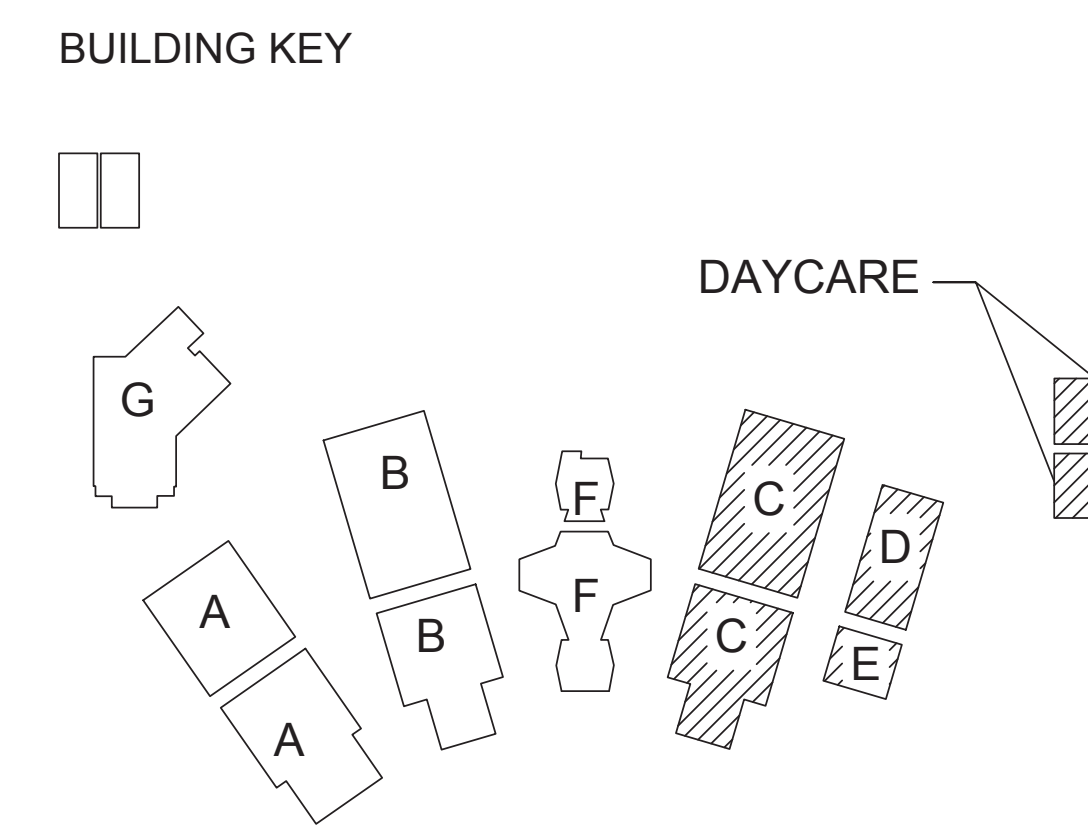


1 FIRE ALARM PLAN - BUILDING C
SCALE: 1/8"=1'-0"

- ### SHEET NOTES
- CIRCUIT VIA 3/4" C. 2 #12 & 1 #12 GND TO PANEL "DPC" LOCATED IN SAME ROOM. AT PANEL, PROVIDE AND INSTALL 20 AMP, 1-POLE BREAKER WITH LOCK-ON DEVICE WITH RED MARKINGS LABELED "FIRE ALARMECS".
 - PROVIDE AND INSTALL LAMICOID NAMEPLATE ON DEVICE READING "EOL".
 - HOMERUN TO REMOTE POWER SUPPLY "RPS-4" AND DIGITAL AUDIO AMPLIFIER "AMP-2" LOCATED IN ELECTRICAL ROOM 414.
 - CONTRACTOR SHALL PROVIDE AND INSTALL 3/4" C. FOR FIRE ALARM CABLES.
 - PROVIDE AND INSTALL 12" SQ. X 4" DEEP NEMA 3R PULLCAN.
 - SEE SHEET E2.1 FOR CONTINUATION.
 - CONNECT TO NEAREST EXISTING INITIATION DEVICE PRESERVED DURING DEMOLITION WORK.

- ### 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 FACILITIES MANAGER & 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.



(DSA STAMP AREA)

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FIRE ALARM PLANS - BUILDINGS C, D, E & KID'S CLUB

CAMPUS-WIDE FIRE ALARM REPLACEMENT
WALNUT GROVE ELEMENTARY SCHOOL
1999 HARVEST RD, PLEASANTON, CA 94566
PLEASANTON UNIFIED SCHOOL DISTRICT

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DATE: 12/01/2021

FA4.2

SHEET NOTES

- CONTRACTOR SHALL DETERMINATE EXISTING SLC LOOPS PRESERVED DURING DEMOLITION AT NEW PANEL SLC CARDS AND TEST TO ENSURE FULL FUNCTIONALITY OF EXISTING DEVICE.
- CIRCUIT VIA X/C. 2 #12 & 1 #12 GND TO PANEL "F3" LOCATED IN DATA ROOM 318; AT PANEL PROVIDE AND INSTALL 20 AMP, 1-POLE BREAKER WITH LOCK-ON DEVICE WITH RED MARKINGS LABELED "FIRE ALARMECS".
- HOMERUN TO FIRE ALARM CONTROL PANEL "FACP" LOCATED IN RECEPTION 313.
- PROVIDE AND INSTALL LAMICOID NAMEPLATE ON DEVICE READING "EOL".
- HOMERUN TO REMOTE POWER SUPPLY "RPS-1" AND DIGITAL AUDIO AMPLIFIER "AMP-1" LOCATED IN DATA ROOM 318.
- PROVIDE AND INSTALL 18" SQ. X 6" DEEP NEMA 3R PULLCAN.
- SEE SHEET E2.1 FOR CONTINUATION.
- PROVIDE AND INSTALL 12" SQ. X 4" DEEP NEMA 3R PULLCAN.
- PROVIDE AND INSTALL CSFM LISTED WIREGUARD FOR ALL DEVICES IN MULTI-USE ROOM.
- WHERE NECESSARY PROVIDE & INSTALL ACCESS PANEL FOR HEAT DETECTOR ABOVE CEILING; 24" SQ. OPENING MINIMUM.
- 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 106.

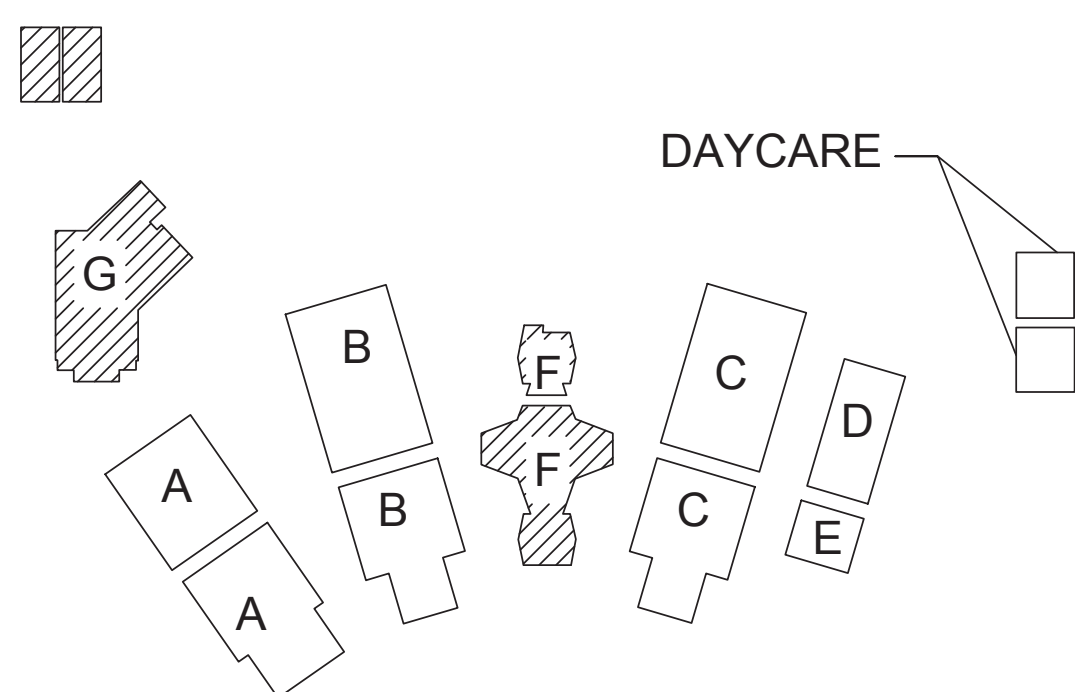
GENERAL NOTES:

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

BUILDING KEY



FIRE ALARM PLANS - BUILDINGS F, G & PORTABLES

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SFA JOB NO: 21083
DATE: 12/01/2021

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(DSA STAMP AREA)

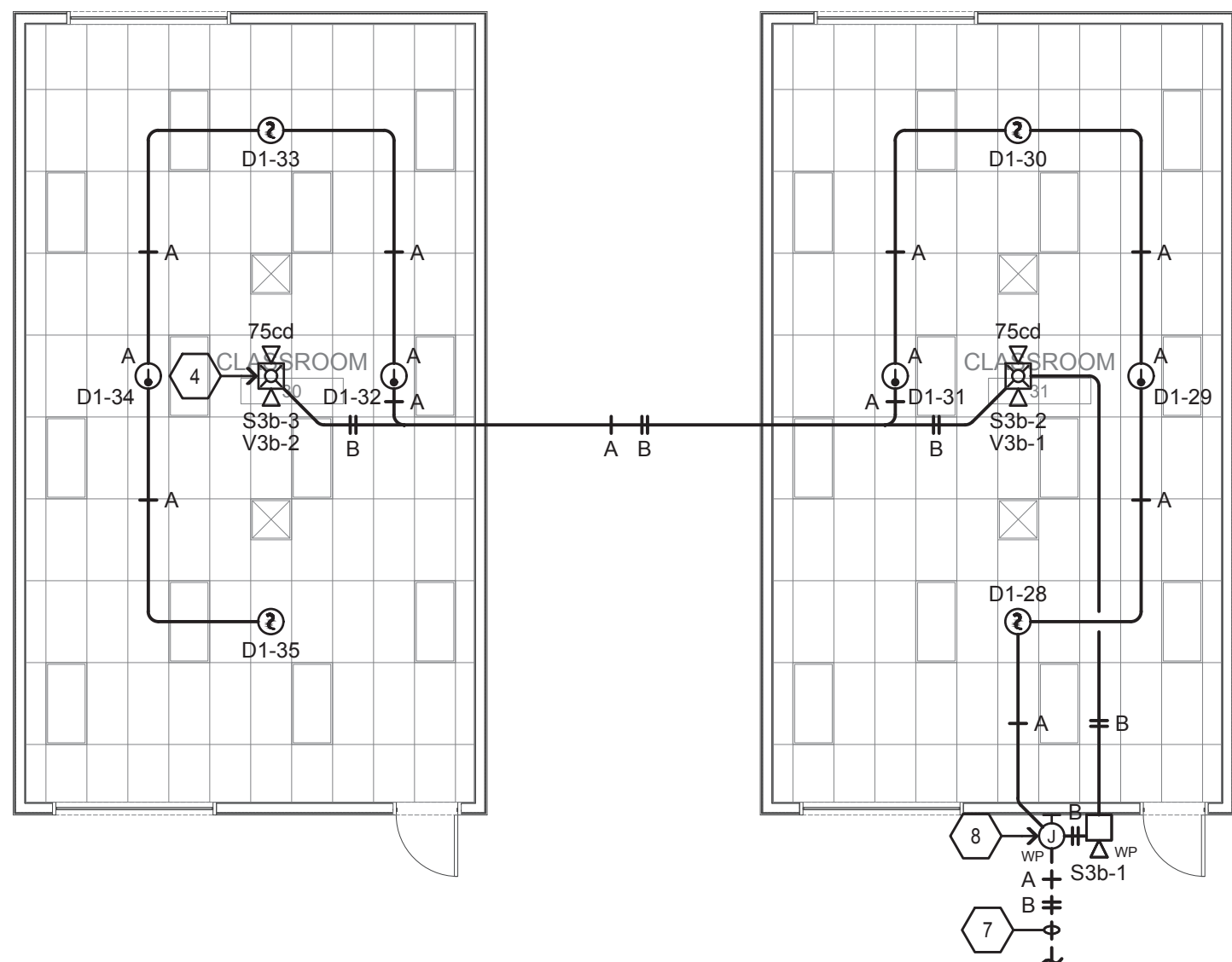


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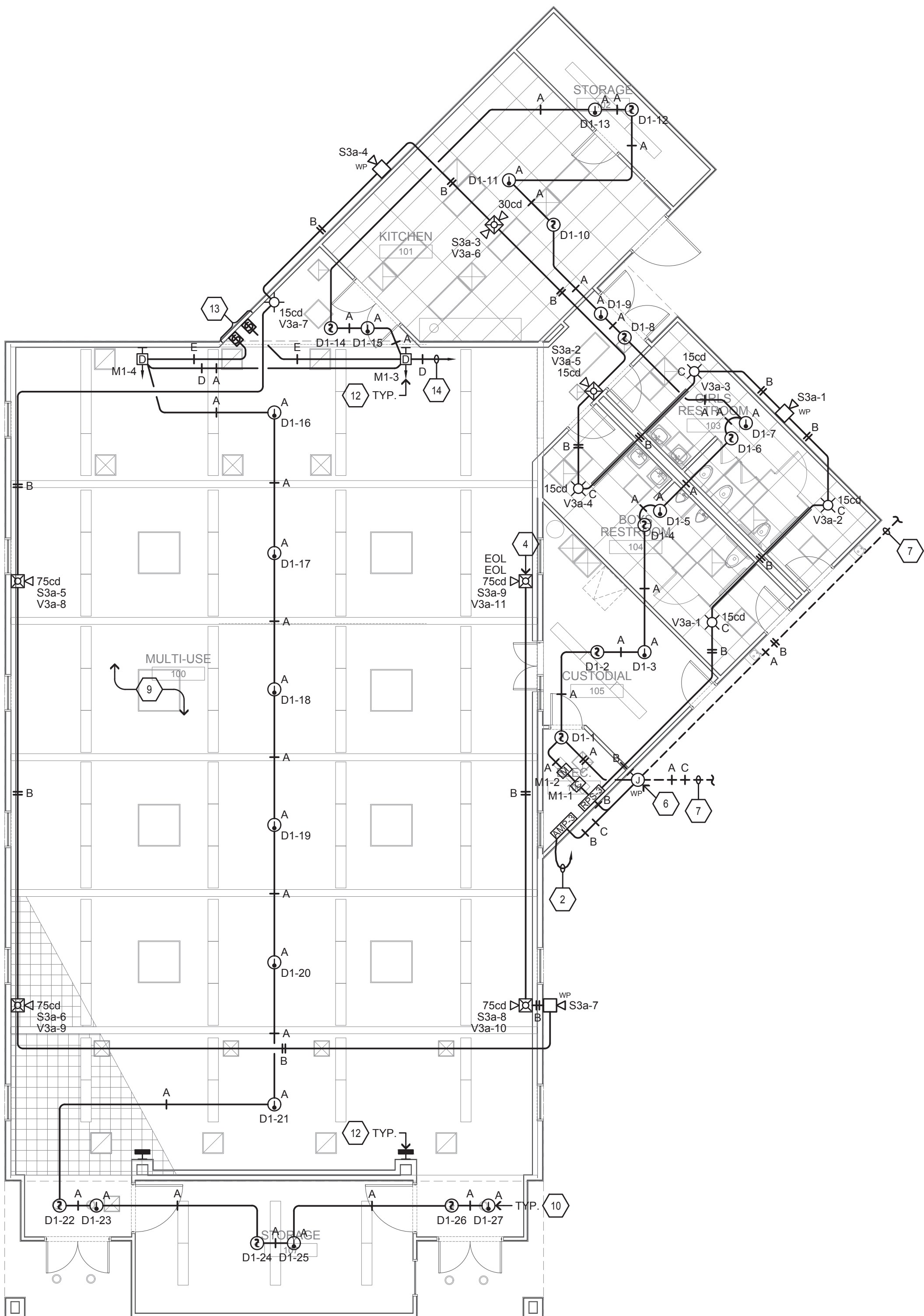
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CAMPUS-WIDE FIRE ALARM REPLACEMENT
WALNUT GROVE ELEMENTARY SCHOOL
1999 HARVEST RD, PLEASANTON, CA 94566
PLEASANTON UNIFIED SCHOOL DISTRICT



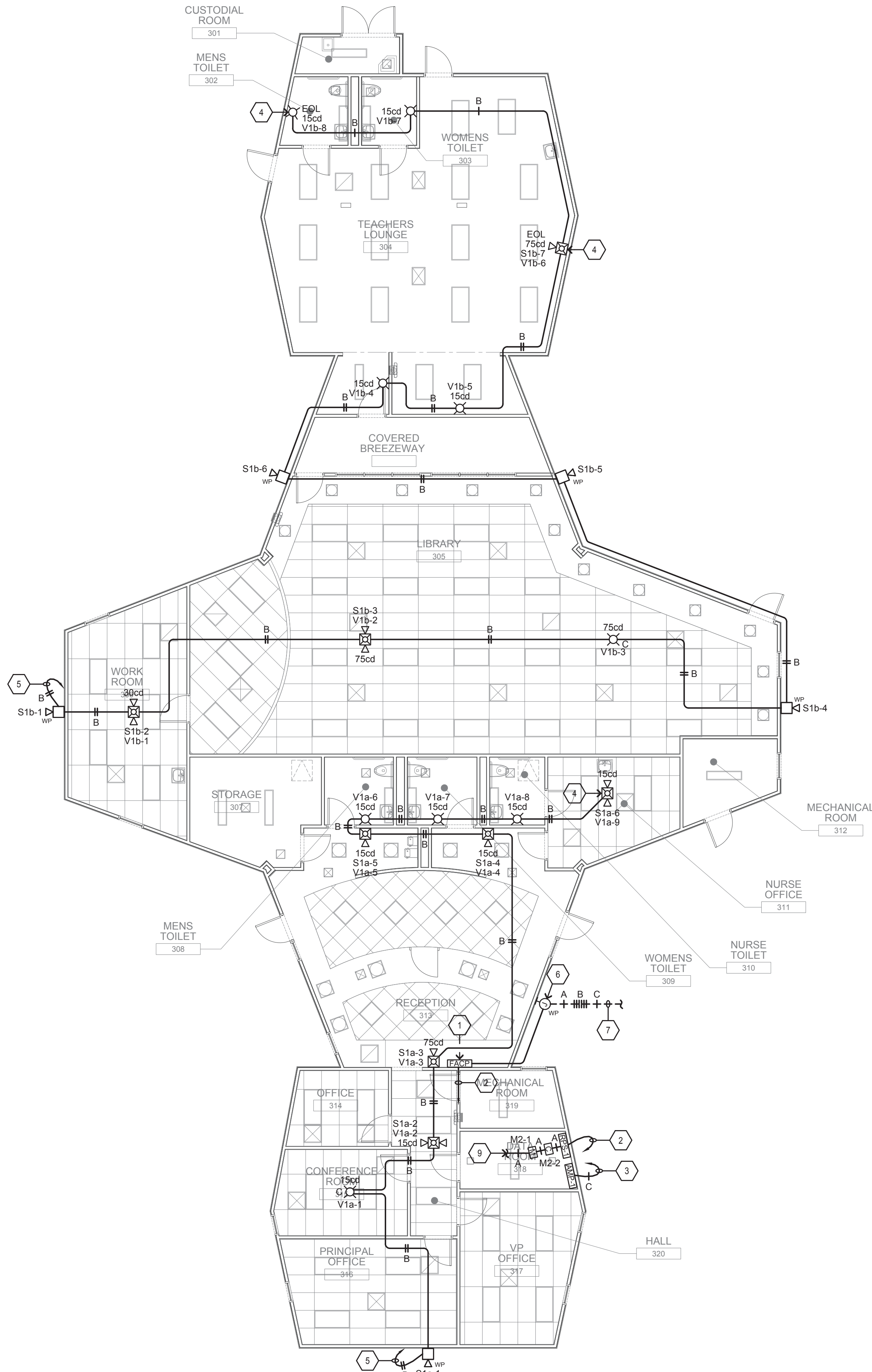
3 FIRE ALARM PLAN - PORTABLES

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



2 FIRE ALARM PLAN - BUILDING G

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

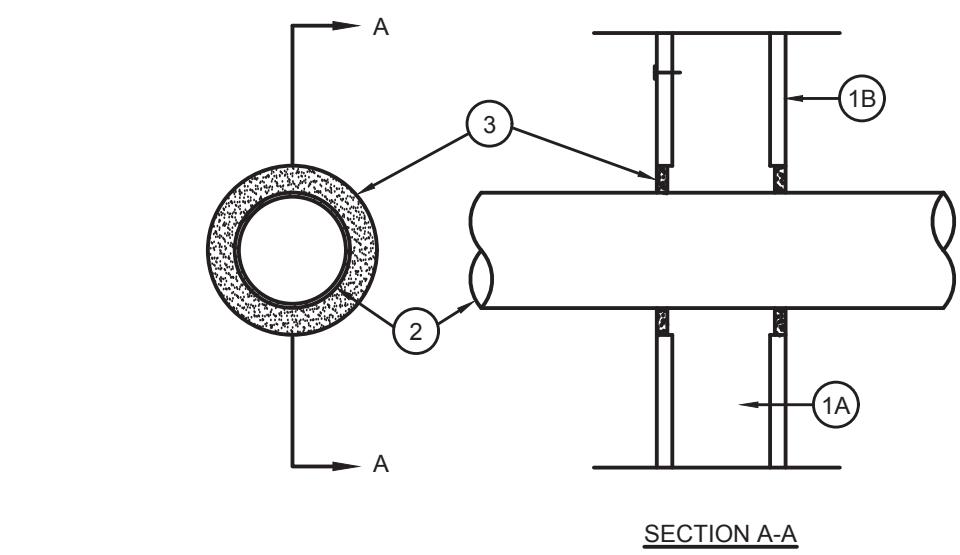


1 FIRE ALARM PLAN - BUILDING F

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



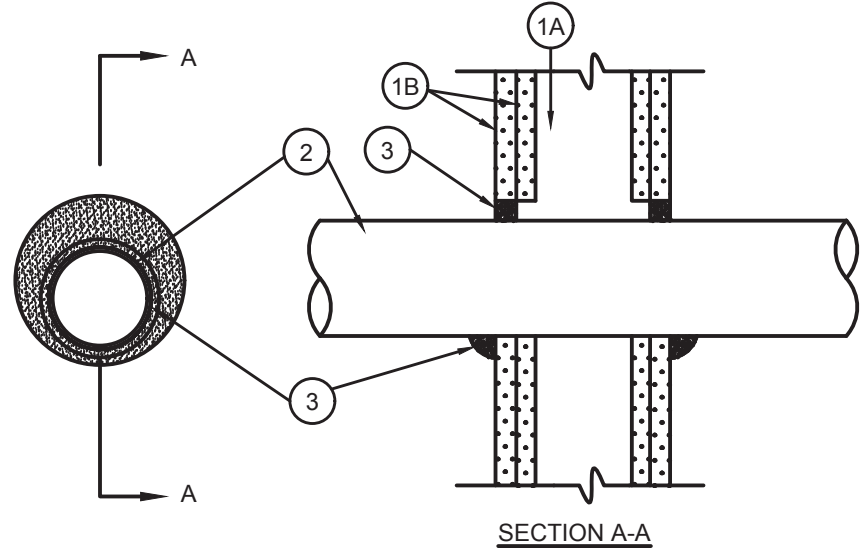
10 1-HR FIRE-RATED WALL PENETRATION
NO SCALE



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 in. wide and spaced max 24 in. OC.
- B. Wallboard Gypsum*-One Layer of nom [Q5W]A[S] in. thick gypsum wallboard as specified in the individual Wall and Partition Design. Max diam of opening is 4-[Q3W]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 [Q1W]A4[S] in. to a max [Q3W]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/[Q1W]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

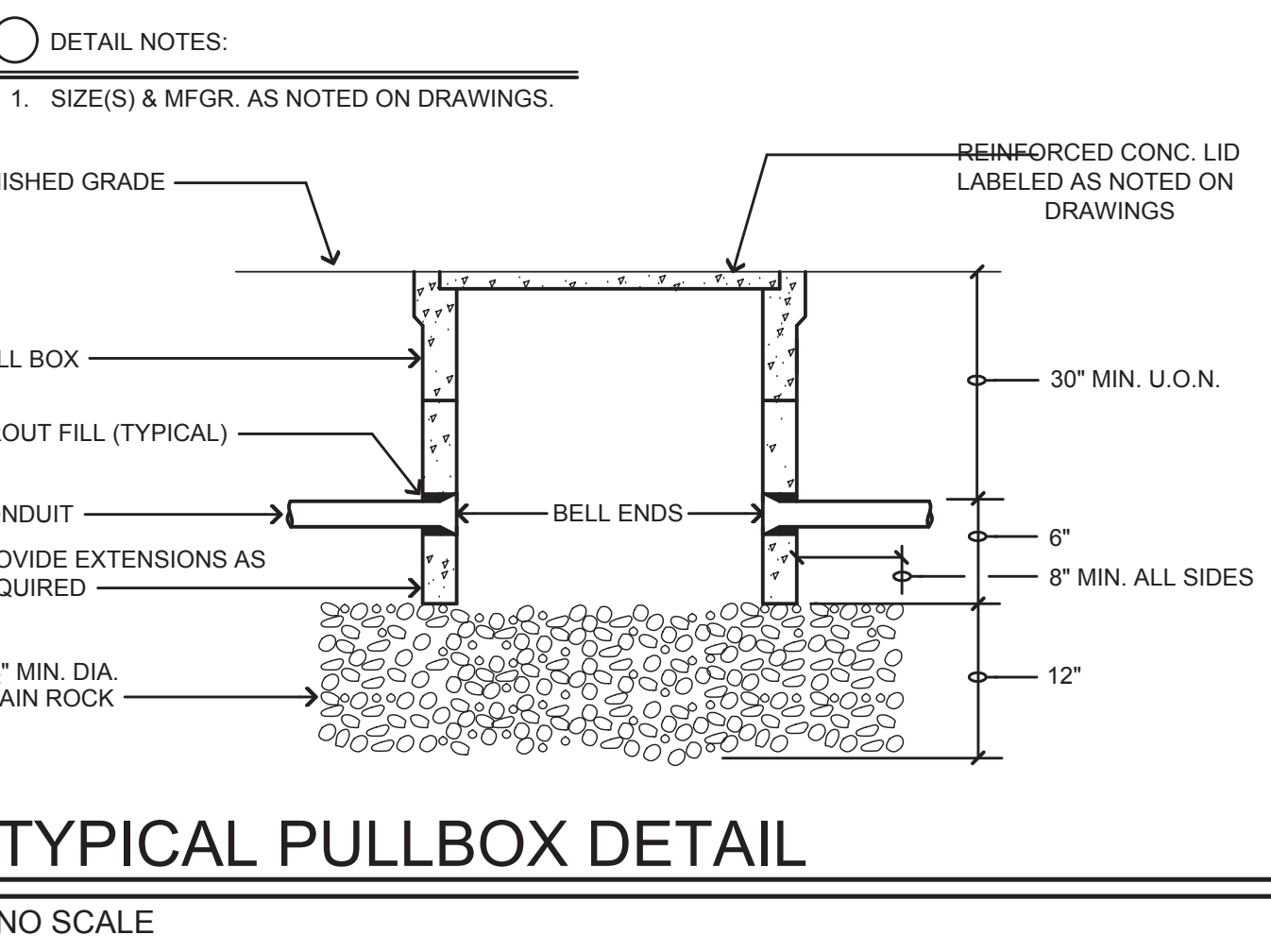
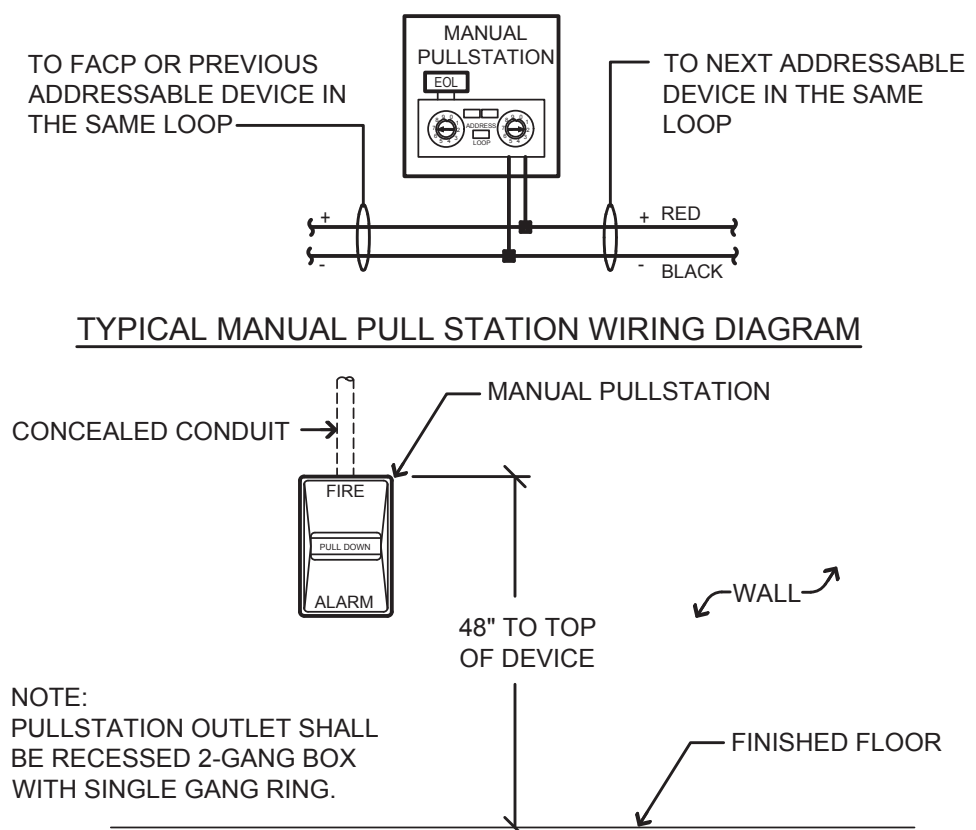
11 2-HR FIRE-RATED WALL PENETRATION
NO SCALE



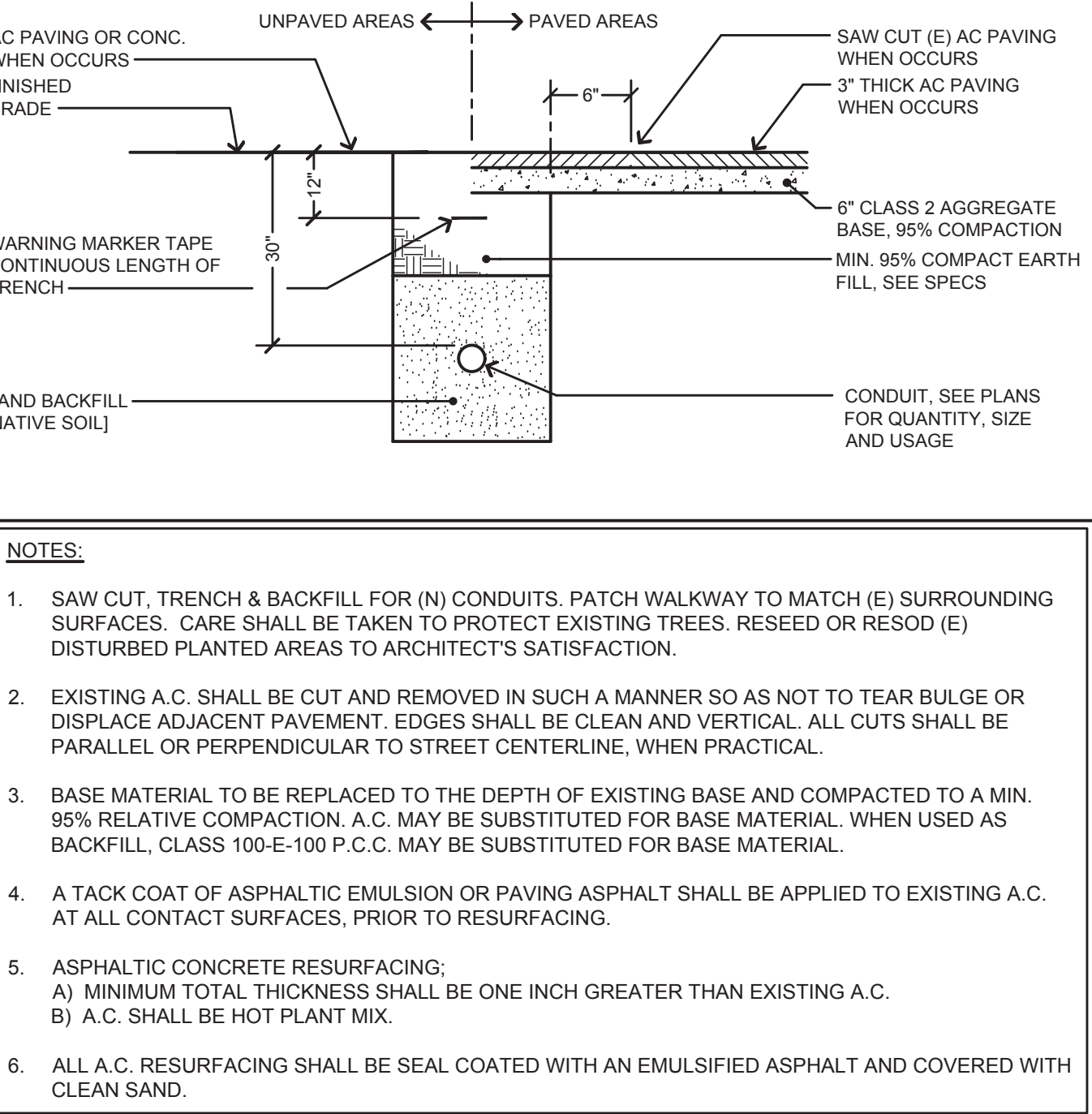
SEE FLOOR PLAN DRAWINGS
FOR RATED WALL LOCATIONS
U.L. System No. W-L-1049
F Rating-1 and 2 Hr (See Item 1B)
T Rating-0 HR
L Rating At Ambient-Less Than 1 CFM/sq ft
L Rating At 400F-Less Than 1 CFM/sq ft

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 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

6 PULL STATION MOUNTING DETAIL
NO SCALE

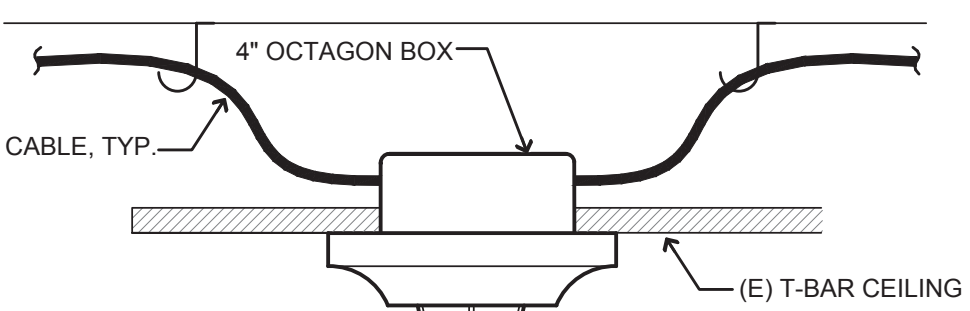


9 TYPICAL TRENCH SECTION
NO SCALE

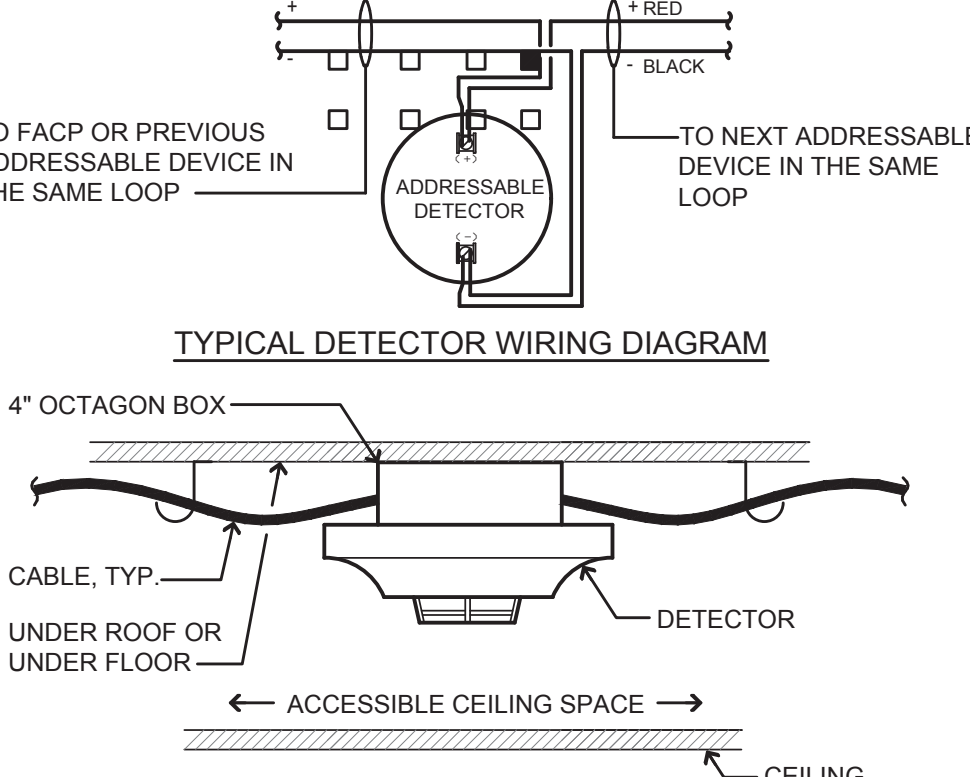


- NOTES:
- SAW CUT, TRENCH & BACKFILL FOR (N) CONDUITS. PATCH WALKWAY TO MATCH (E) SURROUNDING SURFACES. CARE SHALL BE TAKEN TO PROTECT EXISTING TREES. RESEED OR RESOD (E) DISTURBED PLANTED AREAS TO ARCHITECT'S SATISFACTION.
 - EXISTING A.C. SHALL BE CUT AND REMOVED IN SUCH A MANNER SO AS NOT TO TEAR 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.

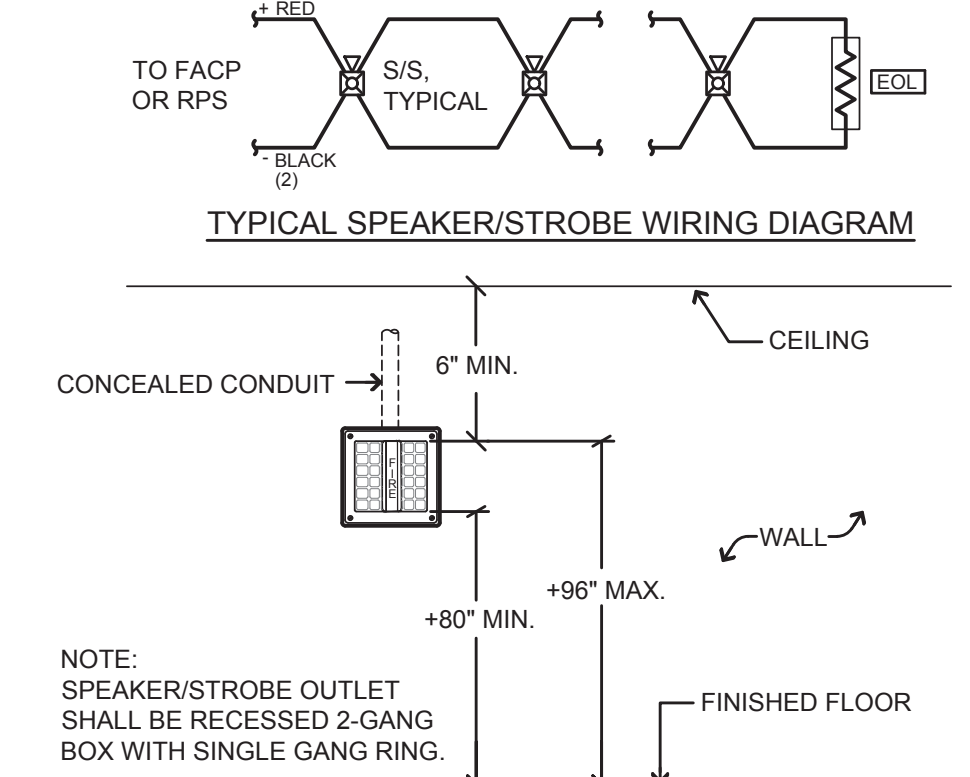
1 DETECTOR MOUNTING DETAIL
NO SCALE



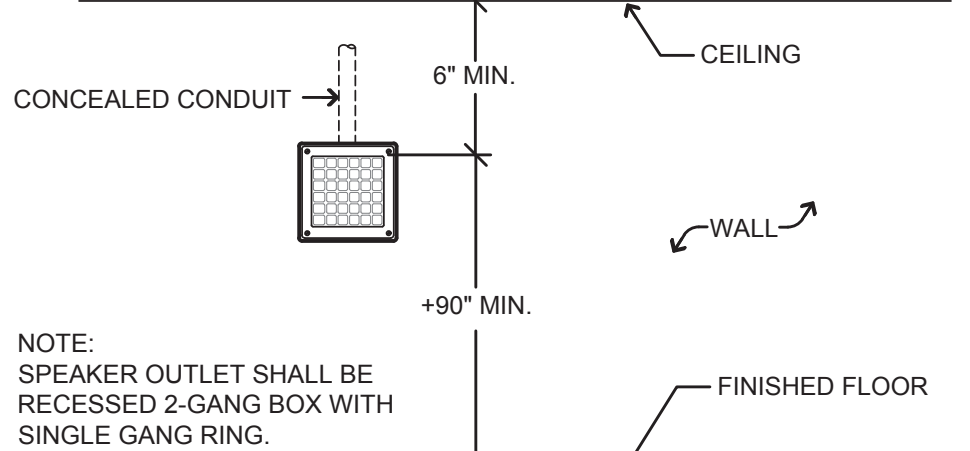
2 DETECTOR MOUNTING DETAIL
NO SCALE



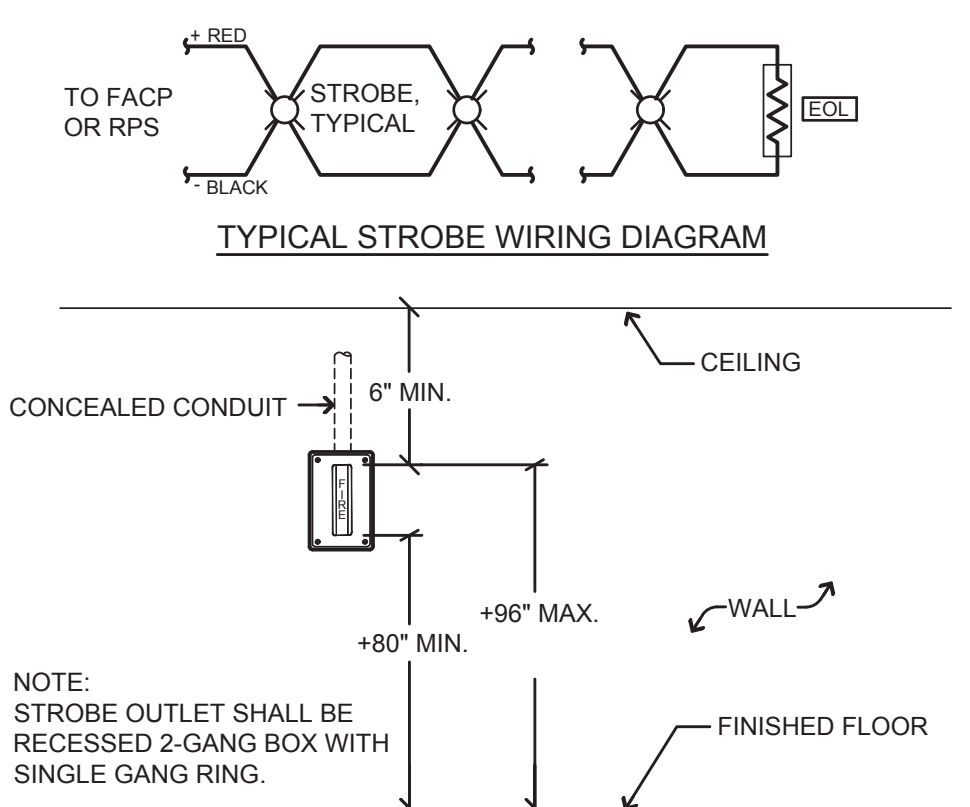
3 SPEAKER/STROBE INSTALLATION DETAIL
NO SCALE



4 SPEAKER INSTALLATION DETAIL
NO SCALE



5 STROBE INSTALLATION DETAIL
NO SCALE



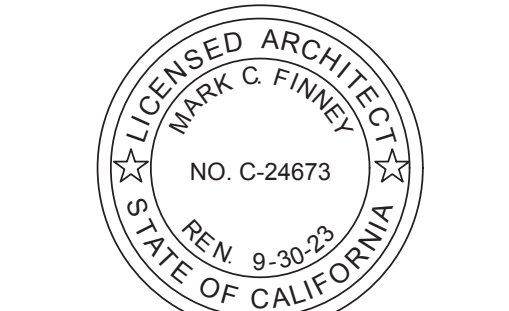
FIRE ALARM DETAILS

CAMPUS-WIDE FIRE ALARM REPLACEMENT
WALNUT GROVE ELEMENTARY SCHOOL
1999 HARVEST RD, PLEASANTON, CA 94566
PLEASANTON UNIFIED SCHOOL DISTRICT

REVISIONS		
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SFA JOB NO:	DATE:
21083	12/01/2021

FA5.1



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(DSA STAMP AREA)

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FAX: 408.274.8870

BUILDING CODE ANALYSIS				
BUILDING	CONSTRUCTION TYPE OCCUPANCY TYPE	AREA (SQ.FT.)	* ALLOWABLE (SQ.FT.)	# OF STORIES
BUILDING A	V-N / E	15,000	18,200	1
BUILDING B	V-N / E1	13,738	13738 ≤ 13,650	1
BUILDING C	V1 / A2.1-E1	9,819	15,700	1
BUILDING D	V-N / E1	13,657	1,3657 ≤ 1,3195	1
BUILDING E	V-N / E1	14,560	16,562	1
BUILDING F	V-N / E1	3,150	9,100	1
GYMNASIUM	2 / A2.1-E1	26,000	40,500	1
PORTABLE CLUSTER	V-N / E1	8,160	18,200	1

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

PROJECT SUMMARY

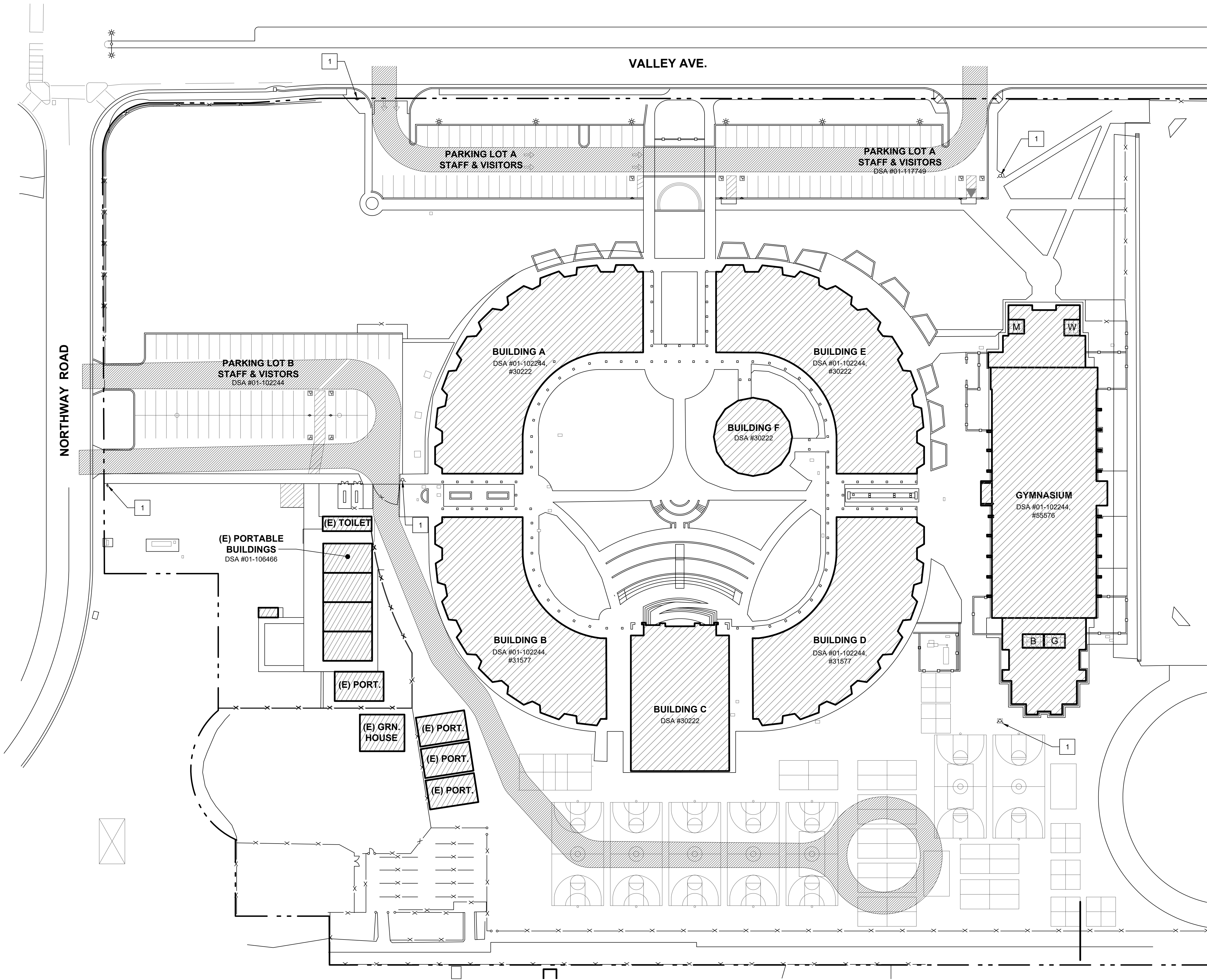
REPLACING EXISTING FIRE ALARM SYSTEM WITH NEW ADDRESSABLE FIRE ALARM AND EMVOICE EVACUATION SYSTEM
ACROSS ENTIRE SITE.

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.



1 SITE PLAN - FIRE LIFE SAFETY

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

GRAPHIC KEY

- EXISTING PROPERTY LINE
--- ROOF OVERHANG
--- CHAIN LINK FENCE
[Hatched Box] EXISTING BUILDING
[Grid Box] EXISTING RESTROOMS
[Hatched Box] FIRE DEPARTMENT ACCESS.
FIRE DEPARTMENT ACCESS IS 20'-0"
WIDE AND RATED FOR 98,000 LBS.
[Hydrant Symbol] (E) FIRE HYDRANT
[Sign Symbol] (E) SIGN

(DSA STAMP AREA)

**SUGIMURA
OF FINNEY
ARCHITECTS**
SFA
ARCHITECTURE INTERIORS PLANNING
2155 SOUTH BASCOM AVE.
SUITE 200
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REGISTERED ARCHITECT
MARK C. FINNEY
NO. C-24873
STATE OF CALIFORNIA
EXPIRES 9-30-2024

**SITE PLAN
FIRE LIFE SAFETY**
CAMPUS-WIDE FIRE ALARM REPLACEMENT
HARVEST PARK MIDDLE SCHOOL
4900 VALLEY AVE, PLEASANTON, CA 94566
PLEASANTON UNIFIED SCHOOL DISTRICT

REVISIONS NO.	ITEM	DATE

DRAWN BY: TR
CHECKED BY: MB
SFA JOB NO: 21084
DATE: 12/06/2021


FIRE ALARM EQUIPMENT LIST			
SYMBOL	DESCRIPTION AND MODEL NUMBER	MFGR'S PART No.	CSFM LISTING
[FACP]	ADDRESSABLE FIRE ALARM CONTROL PANEL WITH DVC-EM AUDIO OPTION AND INTEGRATED UDAC7, NOTIFIER NFS2 SERIES; PROVIDE & INSTALL FIRE ALARM DOCUMENT CABINET NEXT TO FACP.	NFS2-3030	7165-0028-0224
[RM-1]	REMOTE MICROPHONE WITH BLACK STAND-ALONE CABINET, NOTIFIER RM-1 SERIES.	RM-1SA	7165-0028-0224
[ANN-1]	FIRE ALARM REMOTE ANNUNCIATOR WITH 640 CHARACTER LIQUID CRYSTAL DISPLAY; WHITE FINISH NOTIFIER LCD SERIES.	LCD-160	7165-0028-0224
[DVC-EM]	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
[RPS-10]	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 V/RMS DIGITAL AUDIO AMPLIFIER WITH CHARGING POWER SUPPLY AND 2 CLASS B OR 2 CLASS A OUTPUTS, NOTIFIER DAA2 SERIES.	DAA2-0025	7165-0028-0224
[E]	ADDRESSABLE PHOTO ELECTRIC FIRE ALARM SMOKE DETECTOR AND BASE, NOTIFIER FSP-951 SERIES.	FSP-951	7272-0028-0503
[I]	ADDRESSABLE FIRE ALARM HEAT DETECTOR AND BASE, 135 DEG. FIXED TEMPERATURE AND RATE-OF-RISE, NOTIFIER FST-951 SERIES. (DEVICES WITH "A" INDICATE ABOVE CEILING).	FST-951	7270-0028-0502
[I-IR]	ADDRESSABLE REFLECTOR-TYPE LINEAR OPTICAL BEAM SMOKE DETECTOR, NOTIFIER FS-OSI-R SERIES.	FS-OSI-R	7280-0028-0509
[P]	ADDRESSABLE FIRE ALARM MANUAL PULLSTATION, DUAL-ACTION WITH KEY RESET, MOLDED POLYCARBONATE HOUSING, FIRE-LITE NO SERIES.	NG-12LX	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
[X]	WALL MOUNTED MULTI-CANDELA STROBE WITH FIELD SELECTABLE CANDELA SETTINGS OF 15, 30, 75 AND 110 CANDELA. SYSTEM SENSOR, SWL SERIES.	SWL	7125-1653-0504
[X-C]	CEILING MOUNTED MULTI-CANDELA STROBE WITH FIELD SELECTABLE CANDELA SETTINGS OF 15, 30, 75 AND 115 CANDELA. SYSTEM SENSOR, SCWL SERIES.	SCWL	7125-1653-0504
[X-SP]	WALL MOUNTED MULTI-CANDELA SPEAKER-STROBE WITH FIELD SELECTABLE CANDELA SETTINGS OF 15, 30, 75 & 110 CANDELA WITH VOLTAGE SETTINGS OF 70.7 VRMS AND POWER SETTINGS OF 1/2, 1 & 2 WATTS. SYSTEM SENSOR, SP8WL SERIES.	SP8WL	7320-1653-0505
[X-SP-CWL]	CEILING MOUNTED MULTI-CANDELA SPEAKER-STROBE WITH FIELD SELECTABLE CANDELA SETTINGS OF 15, 30, 75 & 115 CANDELA WITH VOLTAGE SETTING OF 70.7 VRMS AND POWER SETTINGS OF 1/2, 1 & 2 WATTS. SYSTEM SENSOR, SPSCWL SERIES.	SPSCWL	7320-1653-0505
[X-SPWK]	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
1. WIRING MUST BE LISTED FOR USE AS REQUIRED BY TITLE 24/CEC, ARTICLE 760.
 2. WIRE USED IN WET LOCATIONS SHALL BE OF AN APPROVED TYPE IN ACCORDANCE WITH 3-310-8, T24/CEC (I.E. THHW OR EQUAL).
 3. UNDER GROUND AND EXTERIOR CONDUITS TO HAVE WATERTIGHT FITTINGS AND WIRES APPROVED FOR WET LOCATION.
 4. ALL CONDUCTORS SHALL BE ROUTED IN CONDUIT UNLESS SPECIFICALLY NOTED OTHERWISE ON PLANS. MINIMUM CONDUIT SIZE SHALL BE 3/4".
 5. THE CONDUIT AND WIRE SHOWN ON THESE PLANS ARE SHOWN DIAGRAMMATICALLY. EXACT LOCATIONS SHALL BE DETERMINED IN THE FIELD TO SUIT FIELD CONDITIONS. "AS-BUILT" PLANS SHALL BE MAINTAINED AND BE PROVIDED AS REQUIRED BY THE PROJECT INSPECTOR OF RECORD.
 6. PENETRATIONS OF FIRE RATED WALLS SHALL BE PROTECTED IN ACCORDANCE WITH CALIFORNIA BUILDING CODE, CHAPTER 7, TITLE 24. PROVIDE DETAILS OF THROUGH PENETRATION FIRE-STOP SYSTEMS FOR ALL PIPE/CABLE/CONDUIT PASSING THROUGH FIRE RATED WALLS/FLOORS REQUIRING PROTECTED OPENINGS.
 7. ALL DEVICES SHALL BE "CSFM" LISTED.
 8. EXTERIOR DEVICES SHALL BE LISTED FOR EXTERIOR USE BY "CSFM."
 9. AUDIBLE FIRE ALARM SOUND LEVEL SHALL BE AT LEAST 15DBA ABOVE THE AVERAGE SOUND LEVEL.
 10. 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.
 11. 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.
 12. 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.
 13. 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.
 14. POWER SERVICE SHALL BE ON A DEDICATED, 120V BRANCH CIRCUIT, WITH A RED MARKING AND IDENTIFIED AS "FIRE ALARM CIRCUIT CONTROL."
 15. 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 301.
 16. 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
1. CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE CODES AND REGULATIONS. MATERIALS AND EQUIPMENT SHALL BE U.L. LISTED AND LABELED FOR THE APPLICATION.
 2. THE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL PERMITS, LICENSES AND INSPECTION FEES REQUIRED BY THIS CONTRACT WORK.
 3. CONTRACTOR SHALL VISIT THE PROJECT SITE PRIOR TO BIDDING AND ALLOW FOR ALL FIELD CONDITIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ELECTRICAL WORK NOTED AND CALLED OUT ON ALL CONTRACT DOCUMENTS. THE CONTRACTOR SHALL OBTAIN INFORMATION AND BE FAMILIAR WITH ALL OTHER TRADES WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION BETWEEN OTHER TRADES ON PROJECT.
 4. CONTRACTOR SHALL BE RESPONSIBLE FOR THE SAFETY OF PERSONS AND PROPERTY AND SHALL PROVIDE INSURANCE COVERAGE AS NECESSARY FOR LIABILITY AND PERSONAL, PROPERTY DAMAGE, TO FULLY PROTECT THE OWNER, ARCHITECT AND ENGINEER FROM ANY AND ALL CLAIMS RESULTING FROM THIS WORK.
 5. CONTRACTOR SHALL MAINTAIN RECORD DRAWINGS AT THE PROJECT SITE INDICATING ALL MODIFICATIONS TO ELECTRICAL SYSTEMS. THE CONTRACTOR SHALL AT THE CONCLUSION OF THE PROJECT PROVIDE ACCURATE "AS-BUILT" DRAWINGS ACCEPTABLE TO THE ARCHITECT.
 6. ALL MATERIALS PROVIDED TO THE PROJECT SHALL BE NEW. THE CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE AND INSTALL ALL INCIDENTAL MATERIALS REQUIRED FOR A COMPLETE INSTALLATION.
 7. CONTRACTOR SHALL PROVIDE TO THE ARCHITECT A CONSTRUCTION SCHEDULE OF ELECTRICAL WORK. THE CONSTRUCTION SCHEDULE SHALL IDENTIFY ALL SIGNIFICANT MILESTONES WITH COMPLETION DATES.
 8. CONTRACTOR SHALL PROVIDE ALL REQUIRED "CUTTING, PATCHING, EXCAVATION, BACKFILL AND REPAIRS" NECESSARY TO RESTORE DAMAGED SURFACES TO EQUAL OR BETTER THAN ORIGINAL CONDITIONS EXISTING AT START OF WORK.
 9. CONTRACTOR SHALL BE RESPONSIBLE FOR PAINTING ALL EXPOSED CONDUITS AND ELECTRICAL EQUIPMENT. REFER TO ARCHITECTS PAINTING SECTION FOR REQUIREMENTS.
 10. ALL ELECTRICAL EQUIPMENT INSTALLED OUTDOORS SHALL BE WEATHERPROOF. EXTERIOR CONDUITS RUN INTO BUILDINGS SHALL BE INSTALLED WITH FLASHING, CAULKED AND SEALED. CONDUITS FOR EXTERIOR ELECTRICAL DEVICES SHALL BE RUN INSIDE BUILDING UNLESS OTHERWISE NOTED ON DRAWINGS.
 11. ALL CONDUITS UNLESS OTHERWISE NOTED ON DRAWINGS SHALL HAVE A MINIMUM: TWO (2) #12s WITH ONE (1) #12 GROUND. "TICK" MARKS SHOWN ON CIRCUITRY ARE FOR ROUGH ESTIMATING ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL WIRES AND WIRE SIZES REQUIRED BY LATEST CODE.
 12. ALL BRANCH CIRCUITS SHALL HAVE INDIVIDUAL NEUTRALS. SHARED NEUTRALS ON MULTIWIRE CIRCUITS IS NOT ALLOWED.
 13. COORDINATE ALL CONDUIT RUNS, ELECTRICAL EQUIPMENT AND PANELS WITH ALL OTHER WORK TO AVOID CONFLICTS.
 14. CONTRACTOR SHALL PROVIDE IN EVERY NEW EMPTY CONDUIT A DRAW STRING FOR USE IN FUTURE CONSTRUCTION.
 15. ALL CONDUIT SHALL BE CONCEALED WHERE POSSIBLE. CUT AND PATCH EXISTING WALLS WHERE NECESSARY. WHERE IT IS NECESSARY TO CUT OR BORE EXISTING STRUCTURAL WALLS FOR NEW ELECTRICAL WORK OBTAIN PERMISSION FROM THE ARCHITECT PRIOR TO STARTING WORK. REUSE EXISTING CONDUIT WHERE POSSIBLE.
 16. WHERE IT IS NOT POSSIBLE TO REUSE EXISTING CONDUIT OR RUN NEW CONCEALED CONDUIT USE NON-METALLIC SURFACE RACEWAY AND BOXES. ROUTING OF ALL NON-METALLIC RACEWAYS SHALL BE APPROVED BY THE ARCHITECT OR OWNER'S REPRESENTATIVE PRIOR TO ROUGH-IN.
 17. EXTENSION RINGS OR RESET BOXES TO BE FLUSH WITH NEW WALL THICKNESS.
 18. 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.
 19. 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.
 20. 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.
 21. ALL INSTALLATION OF EXPOSED SURFACE MOUNTED RACEWAY IN PUBLIC AREAS SHALL BE REVIEWED BY ARCHITECT BEFORE ROUGH-IN. CONTRACTOR IS TO DETERMINE THE ACCESSIBILITY OF ATTIC, FURRED SPACE, HOLLOW WALLS, ETC. IN EACH AREA AND REVIEW WITH ARCHITECT. IF SYSTEM CAN BE ROUTED CONCEALED EITHER BY FISHING OR ACCESSIBILITY, CONTRACTOR IS TO DO SO. IF INACCESSIBILITY IS DETERMINED, CONTRACTOR SHALL INSTALL SURFACE MOUNTED RACEWAY IN THE MOST AESTHETICALLY PLEASING MEANS AS DETERMINED BY THE ARCHITECT. NO ALLOWANCE FOR ADDITIONAL COMPENSATION DUE TO ROUTING AS DIRECTED BY THE ARCHITECT WILL BE MADE.


SYMBOLS & ABBREVIATIONS


SYMBOLS


MANUAL PULL STATION


STROBE ONLY


STROBE ONLY (CEILING MOUNTED)


SPEAKER ONLY


MINI HORN


SPEAKER/STROBE


SPEAKER/STROBE (CEILING MOUNTED)


CHIME/STROBE


HEAT DETECTOR


HEAT DETECTOR (ABOVE ACCESSIBLE CEILING)


SMOKE DETECTOR


DUCT SMOKE DETECTOR


TAMPER SWITCH


FLOW SWITCH


POST INDICATING VALVE


BELL (GONG)


FIRE ALARM CONTROL PANEL


REMOTE POWER SUPPLY


DIGITAL AUDIO AMPLIFIER


END OF LINE


JUNCTION BOX - CEILING/WALL MOUNTED, SIZE PER CODE, TAPE AND TAG WIRES


PULLBOX


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.


CONDUIT - EXISTING

CONDUIT - CONCEALED IN WALLS OR CEILING.

CONDUIT - IN OR BELOW FLOOR, 3/4" MIN.

CONDUIT CONTINUATION.

SHEET NOTE REFERENCE SYMBOL: SEE ASSOCIATED NOTE ON SAME SHEET

DETAIL OR SECTION DESIGNATION.

ABBREVIATIONS

ARCH

AWG

BKR

C

CB

CKT

CLG

(E)

EOL

FA

FACP

FBO

ARCHITECT

AMERICAN WIRE GAUGE

BREAKER

CONDUIT

CONDUIT ONLY

CIRCUIT BREAKER

CIRCUIT

CEILING

EXISTING

END OF LINE

FIRE ALARM

FIRE ALARM CONTROL PANEL

FURNISHED BY OTHERS

FSD

IDC

(N)

NAC

NIC

NO

SLC

TYP

UON

WP

FIRE SMOKE DAMPER

INITIATING DEVICE CIRCUITS

NEW

NOTIFICATION APPLIANCE

NOT IN CONTRACT

NUMBER

SIGNALING LINE CIRCUITS

TYPICAL

UNLESS OTHERWISE NOTED

WEATHERPROOF

TYPICAL ZONE NOMENCLATURE



FIRE ALARM SYSTEM OPERATIONAL MATRIX

	ALARM				TROUBLE				SUPERVISORY				MISC.				REMARKS
CAUSE	EFFECT	FA0.1	FA1.1	FA1.2	FA1.3	FA1.4	FA2.1	FA2.2	FA3.1	FA4.1	FA4.2	FA4.3	FA4.4	FA4.5	FA4.6	FA4.7	
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 FIRE ALARM RISER DIAGRAM.
- FA1.3 BATTERY & VOLTAGE DROP CALCULATIONS.
- FA1.4 VOLTAGE DROP CALCULATIONS (SPEAKER CIRCUITS).
- FA2.1 FIRE ALARM DEMOLITION PLAN.
- FA3.1 FIRE ALARM SITE PLAN.
- FA4.1 FIRE ALARM PLAN - BUILDING A.
- FA4.2 FIRE ALARM PLAN - BUILDING B.
- FA4.3 FIRE ALARM PLAN - BUILDING C & PRE-SCHOOL PORTABLES.
- FA4.4 FIRE ALARM PLAN - BUILDING D.
- FA4.5 FIRE ALARM PLAN - BUILDINGS E & F.
- FA4.6 FIRE ALARM PLAN - GYM (AREA A).
- FA4.7 FIRE ALARM PLAN - GYM (AREA B).
- FA5.1 FIRE ALARM DETAILS.

PROJECT DESCRIPTION

SCOPE OF WORK:
REPLACING EXISTING FIRE ALARM SYSTEM WITH NEW ADDRESSABLE FIRE ALARM AND EMVOICE EVACUATION SYSTEM AT EXISTING SITE.

ALL EXISTING BUILDINGS WITH EXISTING COMPATIBLE MANUFACTURER INITIATION DEVICES (SMOKES, HEATS, DUCT SMOKE DETECTORS, MONITOR MODULES, CONTROLS MODULES, ETC.) SHALL REMAIN CONNECTED.

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.1.26 AND ASCE 7-16 CHAPTER 13, 26 & 30:
1. ALL PERMANENT EQUIPMENT AND COMPONENTS.
 2. TEMPORARY OR MOVABLE EQUIPMENT THAT IS PERMANENTLY ATTACHED (e.g. HARD WIRE) TO THE BUILDING UTILITY SERVICES SUCH AS ELECTRICITY, GAS OR WATER. "PERMANENTLY ATTACHED" SHALL INCLUDE ALL ELECTRICAL CONNECTIONS EXCEPT PLUGS FOR 120 / 220 VOLT RECEPTACLES HAVING A FLEXIBLE CABLE.
 3. TEMPORARY, MOVABLE OR MOBILE EQUIPMENT WHICH IS HEAVIER THAN 400 POUNDS OR HAS A CENTER OF MASS LOCATED 4 FEET OR MORE ABOVE THE ADJACENT FLOOR OR ROOF LEVEL THAT DIRECTLY SUPPORT THE COMPONENT IS REQUIRED TO BE RESTRAINED IN A MANNER APPROVED BY DSA.
- THE FOLLOWING MECHANICAL AND ELECTRICAL COMPONENTS SHALL BE POSITIVELY ATTACHED TO THE STRUCTURE, BUT NEED NOT BE DETAILED IN THE PLANS. THESE COMPONENTS SHALL HAVE FLEXIBLE CONNECTIONS PROVIDED BETWEEN THE COMPONENT AND ASSOCIATED DUCTWORK, PIPING AND CONDUIT. FLEXIBLE CONNECTIONS MUST ALLOW MOVEMENT IN BOTH TRANSVERSE AND LONGITUDINAL DIRECTIONS.
- A. COMPONENTS 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 13.3.5 AS DEFINED IN ASCE 7-16 SECTION 13.6.5, 13.6.6, 13.6.7, 13.6.8 AND 2019 CBC, SECTIONS 1617A.1.24, 1617A.1.25 AND 1617A.1.26.
- THE METHOD OF SHOWING BRACING AND ATTACHMENTS TO THE STRUCTURE FOR THE IDENTIFIED DISTRIBUTION SYSTEM ARE AS NOTED BELOW. WHEN BRACING AND ATTACHMENTS ARE BASED ON PRE-APPROVED INSTALLATION GUIDE (e.g. OSHPD OPM FOR 2013 CBC OR LATER), COPIES OF THE BRACING SYSTEM INSTALLATION GUIDE OR MANUAL SHALL BE AVAILABLE ON THE JOBSITE PRIOR TO THE START OF AND DURING THE HANGING AND BRACING OF THE DISTRIBUTION SYSTEMS. THE STRUCTURAL ENGINEER OF RECORD SHALL VERIFY THE ADEQUACY OF THE STRUCTURE TO SUPPORT THE HANGER AND BRACE LOADS.
- MECHANICAL PIPING (MP), MECHANICAL DUCTS (MD), PLUMBING PIPING (PP), ELECTRICAL DISTRIBUTION SYSTEMS (E):
- MP □ MD □ PP □ E ■ - OPTION 1: DETAILED ON THE APPROVED DRAWINGS WITH PROJECT SPECIFIC NOTES AND DETAILS
MP □ MD □ PP □ E □ - OPTION 2: SHALL COMPLY WITH THE APPLICABLE OSHPD PRE-APPROVED (OPM #) # _____


APPLICABLE CODES & STANDARDS

- CODES:
1. 2019 CALIFORNIA ADMINISTRATIVE CODE C.C.R., TITLE 24, PART 1.
 2. 2019 CALIFORNIA BUILDING CODE (CBC) C.C.R., TITLE 24, VOL. 1 & 2 BASED ON THE 2018 INTERNATIONAL BUILDING CODE (IBC) WITH CALIFORNIA AMENDMENTS.
 3. 2019 CALIFORNIA RESIDENTIAL CODE C.C.R., TITLE 24, PART 2.5 BASED ON THE 2018 INTERNATIONAL RESIDENTIAL CODE WITH CALIFORNIA AMENDMENTS.
 4. 2019 CALIFORNIA ELECTRICAL CODE (CEC) C.C.R., TITLE 24, PART 3 BASED ON THE 2017 NATIONAL ELECTRICAL CODE (NEC) WITH CALIFORNIA AMENDMENTS.
 5. 2019 CALIFORNIA MECHANICAL CODE (CMC) C.C.R., TITLE 24, PART 4 BASED ON THE 2018 UNIFORM MECHANICAL CODE (UMC) WITH CALIFORNIA AMENDMENTS.
 6. 2019 CALIFORNIA PLUMBING CODE (CPO) C.C.R., TITLE 24, PART 5 BASED ON THE 2018 UNIFORM PLUMBING CODE (UPC) WITH CALIFORNIA AMENDMENTS.
 7. 2019 CALIFORNIA ENERGY CODE C.C.R., TITLE 24, PART 6.
 8. 2019 CALIFORNIA FIRE CODE (CFC) C.C.R., TITLE 24, PART 9 BASED ON THE 2018 INTERNATIONAL FIRE CODE (IFC) WITH CALIFORNIA AMENDMENTS.
 9. 2019 CALIFORNIA GREEN BUILDING STANDARDS CODE C.C.R., TITLE 24, PART 11.
 10. 2019 CALIFORNIA REFERENCED STANDARDS CODE C.C.R., TITLE 24, PART 12.
 11. TITLE 19 C.C.R., PUBLIC SAFETY, STATE FIRE MARSHAL REGULATIONS.
 12. NATIONAL FIRE ALARM CODE (NFPA 72) 2016.
- STANDARDS:
1. AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)
 2. ELECTRONICS INDUSTRIES ASSOCIATION (EIA)
 3. INSTITUTE OF ELECTRICAL AND ELECTRONIC ENGINEERS (IEEE)
 4. NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION (NEMA)
 5. NATIONAL ELECTRICAL TESTING ASSOCIATION (NETA)
 6. UNDERWRITER LABORATORIES (UL)
 7. CALIFORNIA OCCUPATIONAL SAFETY AND HEALTH ACT STANDARDS (CAL/OSHA)
 8. NATIONAL FIRE PROTECTION ASSOCIATION: INSTALLATION OF CARBON MONOXIDE (NFPA 720)


(DSA STAMP AREA)



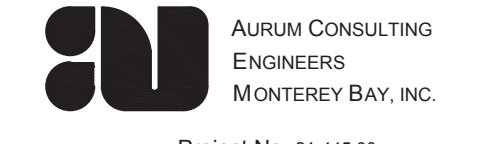
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REGISTERED ARCHITECT
MARK C. FINNEY
NO. C-24673
EXPIRATION DATE: 9-30-23
STATE OF CALIFORNIA



REGISTERED PROFESSIONAL ENGINEER
NAJIB ANWARY
NO. E-21043
EXPIRATION DATE: 12-31-23
STATE OF CALIFORNIA



AURUM CONSULTING
ENGINEERS
MONTEREY BAY, INC.
Project No. 21-445-00
60 Garden Court • Suite 210 • Monterey, CA 93940
T.831.646.3330 • F.831.646.3336 • www.aecomb.com

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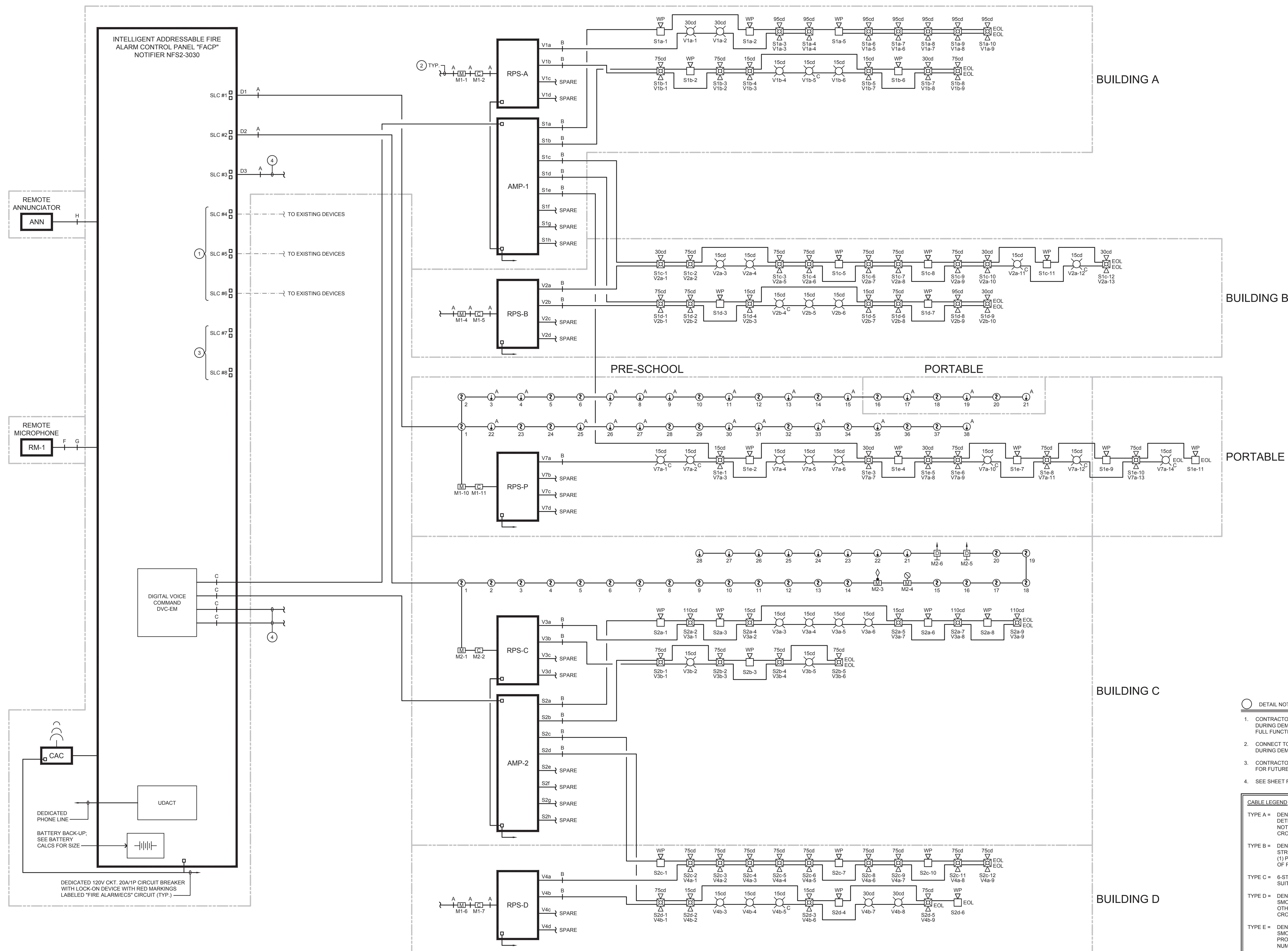
FIRE ALARM SYMBOLS, ABBRE., EQUIPMENT LIST, OPERATIONAL MATRIX, DETAILS & NOTES

CAMPUS-WIDE FIRE ALARM REPLACEMENT
HARVEST PARK MIDDLE SCHOOL
4900 VALLEY AVE., PLEASANTON, CA 94566
PLEASANTON UNIFIED SCHOOL DISTRICT

REVISIONS
NO. ITEM DATE

DRAWN BY: FS
CHECKED BY: NA
SFA JOB NO: DATE:
21084 12/01/2021

FA0.1



DETAIL NOTES:

- CONTRACTOR SHALL RETERMINATE EXISTING SLC LOOPS PRESERVED DURING DEMOLITION AT NEW PANEL SLC CARDS AND TEST TO ENSURE FULL FUNCTIONALITY OF EXISTING DEVICE.
- CONNECT TO NEAREST EXISTING INITIATION DEVICE PRESERVED DURING DEMOLITION WORK.
- CONTRACTOR SHALL PROVIDE AND INSTALL ADDITIONAL SLC CARDS FOR FUTURE USE.
- SEE SHEET FA1.2 FOR CONTINUATION.

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.
- TYPE F =** DENOTES 24VDC POWER CIRCUIT FOR REMOTE MICROPHONE POWERED FROM DVC. PROVIDE (1) PAIR OF #14 AWG.
- TYPE G =** DENOTES TROUBLE CONTACTS MONITORED BY FACP AND LOW LEVEL AUDIO INPUT FROM REMOTE MICROPHONE. PROVIDE (2) TWISTED UNSHIELDED PAIR #14 AWG.
- TYPE H =** DENOTES 24VDC NON-RESETTABLE POWER CIRCUIT AND RDP BUS FOR REMOTE ANNUNCIATION. PROVIDE (2) TWISTED SHIELDED PAIR #14 AWG.

(DSA STAMP AREA)



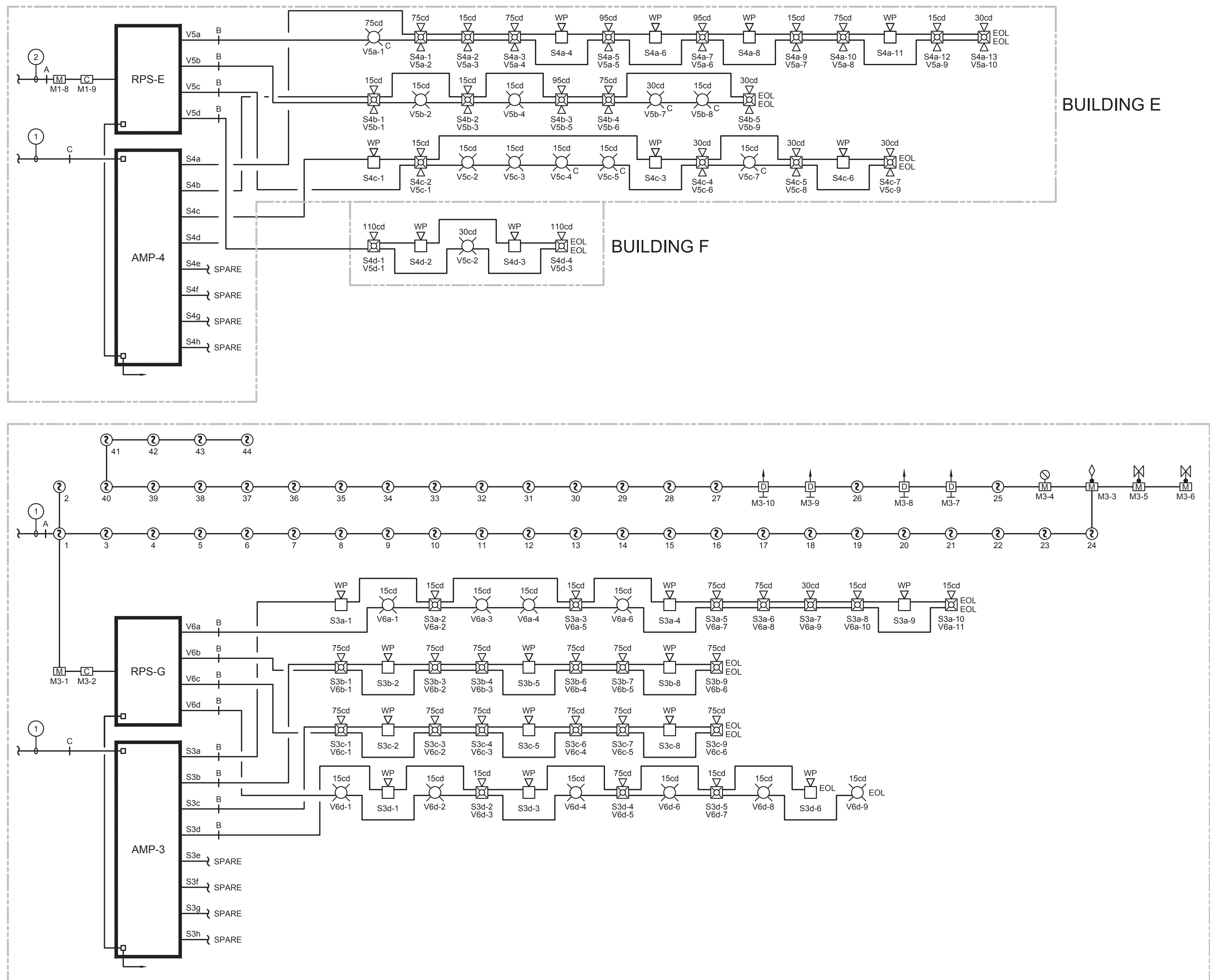
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FIRE ALARM RISER DIAGRAM

REVISIONS
 NO. ITEM DATE

DRAWN BY: FS
 CHECKED BY: NA
 SFA JOB NO: 21084
 DATE: 12/01/2021

FA1.1



DETAIL NOTES:

- SEE SHEET FA1.1 FOR CONTINUATION.
- CONNECT TO NEAREST EXISTING INITIATION DEVICE PRESERVED DURING DEMOLITION WORK.

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.

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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.

TYPE F = DENOTES 24VDC POWER CIRCUIT FOR REMOTE MICROPHONE POWERED FROM DVC. PROVIDE (1) PAIR OF #14 AWG.

TYPE G = DENOTES TROUBLE CONTACTS MONITORED BY FACP AND LOW LEVEL AUDIO INPUT FROM REMOTE MICROPHONE. PROVIDE (2) TWISTED UNSHIELDED PAIR #14 AWG.

TYPE H = DENOTES 24VDC NON-RESETTABLE POWER CIRCUIT AND RDP BUS FOR REMOTE ANNUNCIATION. PROVIDE (2) TWISTED SHIELDED PAIR #14 AWG.

FIRE ALARM RISER DIAGRAM

CAMPUS-WIDE FIRE ALARM REPLACEMENT
HARVEST PARK MIDDLE SCHOOL
4900 VALLEY AVE, PLEASANTON, CA 94566
PLEASANTON UNIFIED SCHOOL DISTRICT

REVISIONS		
NO.	ITEM	DATE

DRAWN BY:	FS
CHECKED BY:	NA
SFA JOB NO:	DATE:
21084	12/01/2021

FA1.2

(DSA STAMP AREA)

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MARK C. FINNEY
NO. C-24873
EXPIRATION: 9-30-23
STATE OF CALIFORNIA

MARK C. FINNEY
REGISTERED PROFESSIONAL ENGINEER
ELECTRICAL
NO. 21043
EXPIRATION: 12-31-23
STATE OF CALIFORNIA

AURUM CONSULTING ENGINEERS
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[illegible][illegible]

VOLTAGE DROP [V] CALCULATION - VISUAL CIRCUIT No. V5a										
REVICE #:	1d	2cd	3cd	4cd	5cd	6th	7th	8th	9th	10th
CABLE WIRE										
DISTANCE [FT]	30	45	40	45	110	105	100	105	40	50
WIRE SIZE [AWG]	0.111	0.111	0.041	0.111	0.138	0.041	0.111	0.041	0.041	0.041
TOTAL AMPERE-DEVS.	0.628	0.077	0.676	0.635	0.524	0.39	0.256	0.215	0.104	0.663
VOLT. DROP @ DEV.	0.062	0.117	0.089	0.095	0.191	0.135	0.085	0.028	0.017	0.005
TOTAL CIRCUIT AMP'S = 0.828		WIRE REISIC		CIRCUIT FORMULA						
		SIZE		M.TI		M.SLS				
		10		29		10380				
TOTAL VOLT. DROP = 0.845		12		2.01		6330				
		14		3.19		4110				
CKT. VOLTAGE = 20.4		16		5.08		2580				
% VOLTAGE DROP = 41.4										

[illegible]

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[illegible][illegible]

	TOTAL ALARM CURRENT (B)	0.169A	1.51
	TERMINALS OF ALARM (28)		0.00
	TOTAL BATTERY REQUIREMENT (A+B)		0.00
	BATTERY WATTAGE (20%)		4.78W
	BATTERY SUPPLIED (2) 18AH		18Ah

**AURUM CONSULTING
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FA1.3

VOLTAGE DROP CALCULATIONS (SPEAKER CIRCUITS)

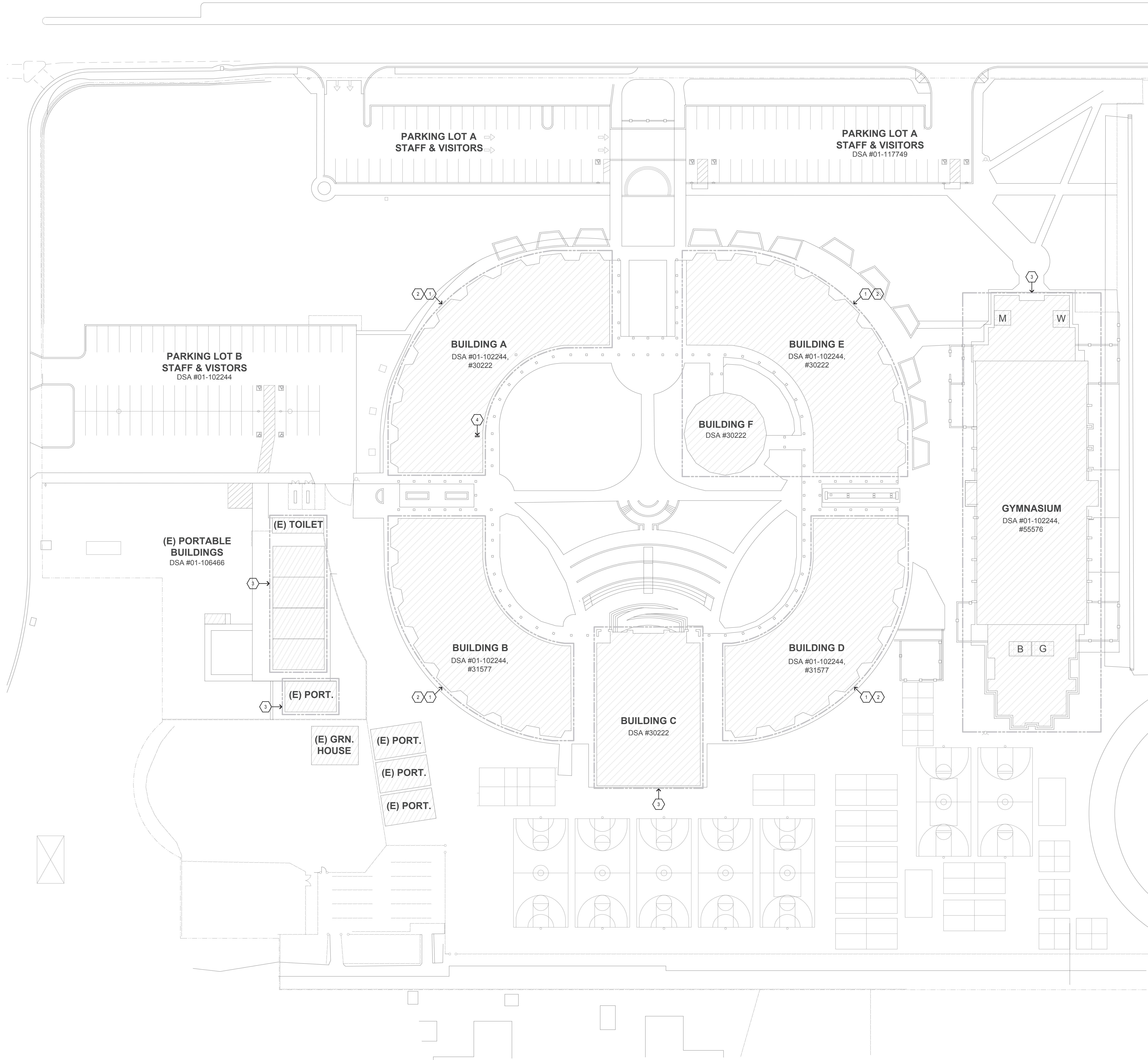
SPEAKER CIRCUIT No. S4c									
Nominal Speaker Voltage (25 or 70)									
Minimum Device Voltage									
Total Circuit Current in amps									
Total Circuit Power									
Distance from source to 1st device									
Wire Gauge for balance of circuit									
Calculated									
Device	Device	previous	Device	At	Drop from	Percent			
Number	Power	device	Current	Device	source	Drop			
Device 1	0.500	100	0.000	24.87	0.127	0.51%			
Device 2	0.500	40	0.000	24.84	0.185	0.69%			
Device 3	0.500	65	0.000	24.75	0.247	0.99%			
Device 4	0.500	45	0.000	24.73	0.272	1.06%			
Device 5	0.500	50	0.000	24.69	0.266	1.08%			
Device 6	0.500	20	0.000	24.70	0.304	1.23%			
Device 7	0.500	40	0.000	24.69	0.307	1.23%			
END	0.000	24.69	0.307	1.23%					
END	0.000	24.69	0.307	1.23%					
END	0.000	24.69	0.307	1.23%					
END	0.000	24.69	0.307	1.23%					
END	0.000	24.69	0.307	1.23%					
END	0.000	24.69	0.307	1.23%					
END	0.000	24.69	0.307	1.23%					
END	0.000	24.69	0.307	1.23%					
Totals	8.000	360	End of Line Voltage		24.69				

SPEAKER CIRCUIT No. S4d									
Nominal Speaker Voltage (25 or 70)									
Minimum Device Voltage									
Total Circuit Current in amps									
Total Circuit Power									
Distance from source to 1st device									
Wire Gauge for balance of circuit									
Calculated									
Device	Device	previous	Device	At	Drop from	Percent			
Number	Power	device	Current	Device	source	Drop			
Device 1	0.500	185	0.000	24.85	0.147	0.59%			
Device 2	0.500	100	0.000	24.80	0.198	0.77%			
Device 3	0.500	60	0.000	24.81	0.192	0.77%			
Device 4	0.500	50	0.000	24.80	0.197	0.79%			
END	0.000	24.80	0.198	0.79%					
END	0.000	24.80	0.198	0.79%					
END	0.000	24.80	0.198	0.79%					
END	0.000	24.80	0.198	0.79%					
END	0.000	24.80	0.198	0.79%					
END	0.000	24.80	0.198	0.79%					
END	0.000	24.80	0.198	0.79%					
END	0.000	24.80	0.198	0.79%					
Totals	0.000	325	End of Line Voltage		24.80				

SPEAKER CIRCUIT No. S4e									
Nominal Speaker Voltage (25 or 70)									
Minimum Device Voltage									
Total Circuit Current in amps									
Total Circuit Power									
Distance from source to 1st device									
Wire Gauge for balance of circuit									
Calculated									
Device	Device	previous	Device	At	Drop from	Percent			
Number	Power	device	Current	Device	source	Drop			
Device 1	0.500	65	0.000	24.87	0.129	0.51%			
Device 2	0.500	20	0.000	24.82	0.094	0.38%			
Device 3	0.500	45	0.000	24.71	0.287	1.15%			
Device 4	0.500	50	0.000	24.69	0.266	1.08%			
Device 5	0.500	65	0.000	24.63	0.474	1.90%			
Device 6	0.500	20	0.000	24.68	0.342	1.37%			
Device 7	0.500	45	0.000	24.68	0.359	1.44%			
Device 8	0.500	20	0.000	24.74	0.467	1.89%			
Device 9	0.500	70	0.000	24.70	0.501	2.01%			
Device 10	0.500	40	0.000	24.75	0.288	1.16%			
Device 11	0.500	10	0.000	24.75	0.246	0.98%			
Device 12	0.500	25	0.000	24.75	0.244	0.98%			
Device 13	0.500	25	0.000	24.75	0.246	0.98%			
END	0.000	24.75	0.246	0.98%					
END	0.000	24.75	0.246	0.98%					
END	0.000	24.75	0.246	0.98%					
END	0.000	24.75	0.246	0.98%					
END	0.000	24.75	0.246	0.98%					
END	0.000	24.75	0.246	0.98%					
END	0.000	24.75	0.246	0.98%					
END	0.000	24.75	0.246	0.98%					
Totals	12.000	635	End of Line Voltage		24.75				

SPEAKER CIRCUIT No. S4b									
Nominal Speaker Voltage (25 or 70)									
Minimum Device Voltage									
Total Circuit Current in amps									
Total Circuit Power									
Distance from source to 1st device									
Wire Gauge for balance of circuit									
Calculated									
Device	Device	previous	Device	At	Drop from	Percent			
Number	Power	device	Current	Device	source	Drop			
Device 1	0.500	45	0.000	24.96	0.104	0.42%			
Device 2	0.500	45	0.000	24.75	0.266	1.08%			
Device 3	0.500	45	0.000	24.94	0.067	0.27%			
Device 4	0.500	95	0.000	24.84	0.067	0.27%			
END	0.000	24.84	0.067	0.27%					
END	0.000	24.84	0.067	0.27%					
END	0.000	24.84	0.067	0.27%					
END	0.000	24.84	0.067	0.27%					
END	0.000	24.84	0.067	0.27%					
END	0.000	24.84	0.067	0.27%					
END	0.000	24.84	0.067	0.27%					
END	0.000	24.84	0.067	0.27%					
Totals	2.500	275	End of Line Voltage		24.84				

SPEAKER CIRCUIT No. S5a									
Nominal Speaker Voltage (25 or 70)									
Minimum Device Voltage									
Total Circuit Current in amps									
Total Circuit Power									
Distance from source to 1st device									
Wire Gauge for balance of circuit									
Calculated									
Device	Device	previous	Device	At	Drop from	Percent			
Number	Power	device	Current	Device	source	Drop			
Device 1	0.500	125	0.000	24.92	0.178	0.71%			
Device 2	0.500	125	0.000	24.88	0.189	0.76%			
Device 3	0.500	125	0.000	24.84	0.200	0.81%			
Device 4	0.500	125	0.000	24.80	0.211	0.86%			
Device 5	0.500	125	0.000	24.76	0.222	0.91%			
Device 6	0.500	125	0.000	24.72	0.233	0.96%			
Device 7	0.500	125	0.000	24.68	0.244	1.01%			
Device 8	0.500	125	0.000	24.64	0.255	1.06%			
Device 9	0.500	125	0.000	24.60	0.266	1.11%			
Device 10	0.500	125	0.000	24.56	0.277	1.16%			
Device 11	0.500	125	0.000	24.52	0.288	1.21%			
Device 12	0.500	125	0.000	24.48	0.299	1.26%			
Device 13	0.500	125	0.000	24.44	0.310	1.31%			
Device 14	0.500	125	0.000	24.40	0.321	1.36%			
Device 15	0.500	125	0.000	24.36	0.332	1.41%			
Device 16	0.500	125	0.000	24.32	0.343	1.46%			
Device 17	0.500	125	0.000	24.28	0.354	1.51%			
Device 18	0.500	125	0.000	24.24	0.365	1.56%			
Device 19	0.500	125	0.000	24.20	0.376	1.61%			
Device 20	0.500	125	0.000	24.16	0.387	1.66%			
Device 21	0.500	125	0.000	24.12	0.398	1.71%			
Device 22	0.500	125	0.000	24.08	0.409	1.76%			
Device 23	0.500	125	0.000	24.04	0.420	1.81%			
Device 24	0.500	125	0.000	24.00	0.431	1.86%			
Device 25	0.500	125	0.000	23.96	0.442	1.91%			
Device 26	0.500	125	0.000	23.92	0.453	1.96%			
Device 27	0.500	125	0.000	23.88	0.464	2.01%			
Device 28	0.500	125	0.000	23.84	0.475	2.06%			
Device 29	0.500	125	0.000	23.80	0.486	2.11%			
Device 30	0.500	125	0.000	23.76	0.497	2.16%			
Device 31	0.500	125	0.000	23.72	0.508	2.21%			
Device 32	0.500	125	0.000	23.68	0.519	2.26%			
Device 33	0.500	125	0.000	23.64	0.530	2.31%			
Device 34	0.500	125	0.000	23.60	0.541	2.36%			
Device 35	0.500	125	0.000	23.56	0.552	2.41%			
Device 36	0.500	125	0.000	23.52	0.563	2.46%			
Device 37	0.500	125	0.000	23.48	0.574	2.51%			
Device 38	0.500	125	0.000	23.44	0.585	2.56%			
Device 39	0.500	125	0.000	23.40	0.596	2.61%			
Device 40	0.500	125	0.000	23.36	0.607	2.66%			
Device 41	0.500	125	0.000	23.32	0.618	2.71%			
Device 42	0.500	125	0.000	23.28	0.629	2.76%			
Device 43	0.500	125	0.000	23.24	0.640	2.81%			
Device 44	0.500	125	0.000	23.20	0.651	2.86%			
Device 45	0.500	125	0.000	23.16	0.662	2.91%			
Device 46	0.500	125	0.000	23.12	0.673	2.96%			
Device 47	0.500	125	0.000	23.08	0.684	3.01%			
Device 48	0.500	125	0.000	23.04	0.695	3.06%			
Device 49	0.500	125	0.000	23.00	0.706	3.11%			
Device 50	0.500	125	0.000	22.96	0.717	3.16%			
Device 51	0.500	125	0.000	22.92	0.728	3.21%			
Device 52	0.500	125	0.000	22.88	0.739	3.26%			
Device 53	0.500	125	0.000	22.84	0.750	3.31%			
Device 54	0.500	125	0.000	22.80	0.761	3.36%			
Device 55	0.500	125	0.000	22.76	0.772	3.41%			
Device 56	0.500	125	0.000	22.72	0.783	3.46%			
Device 57	0.500	125	0.000	22.68	0.794	3.51%			
Device 58	0.500	125	0.000	22.64	0.805	3.56%			
Device 59	0.500	125	0.000	22.60	0.816	3.61%			
Device 60	0.500	125	0.000	22.56	0.827	3.66%			
Device 61	0.500	125	0.000	22.52	0.838	3.71%			
Device 62	0.500	125	0.000	22.48	0.849	3.76%			
Device 63	0.500	125	0.000	22.44	0.860	3.81%			
Device 64	0.500	125	0.000	22.40	0.871	3.86%			
Device 65	0.500	125	0.000	22.36	0.882	3.91%			
Device 66	0.500	125	0.000	22.32	0.893	3.96%			
Device 67	0.500	125	0.000	22.28	0.904	4.01%			
Device 68	0.500	125	0.000	22.24	0.915	4.06%			
Device 69	0.500	125	0.000	22.20	0.926	4.11%			
Device 70	0.500	125	0.000	22.16	0.937	4.16%			
Device 71	0.500	125	0.000	22.12	0.948	4.21%			
Device 72	0.500	125	0.000	22.08	0.959	4.26%			
Device 73	0.500	125	0.000	22.04	0.970	4.31%			
Device 74	0.500	125	0.000	22.00	0.981	4.36%			
Device 75	0.500	125	0.000	21.96	0.992	4.41%			
Device 76	0.500	125	0.000	21.92	1.003	4.46%			
Device 77	0.500	125	0.000	21.88	1.014	4.51%			
Device 78	0.500	125	0.000	21.84	1.025	4.56%			
Device 79	0.500	125	0.000	21.80	1.036	4.61%			
Device 80	0.500	125	0.000	21.76	1.047	4.66%			
Device 81	0.500	125	0.000	21.72	1.058	4.71%			
Device 82	0.500	125	0.000	21.68	1.069	4.76%			
Device 83	0.500	125	0.000	21.64	1.080	4.81%			
Device 84	0.500	125	0.000	21.60	1.091	4.86%			
Device 85	0.500	125	0.000	21.56	1.102	4.91%			
Device 86	0.500	125	0.000	21.52	1.113	4.96%			
Device 87	0.500	125	0.000	21.48	1.124	5.01%			
Device 88	0.500	125	0.000	21.44	1.135	5.06%			
Device 89	0.500	125	0.000	21.40	1.146	5.11%			
Device 90	0.500	125	0.000	21.36	1.157	5.16%			
Device 91	0.500								



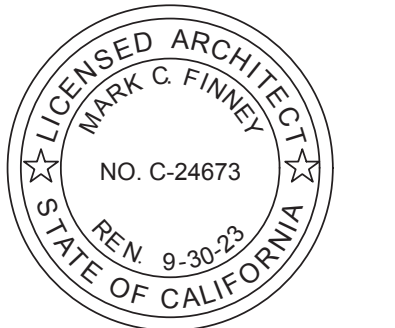
SHEET NOTES

1. CONTRACTOR SHALL DEMOLISH FIRE ALARM NOTIFICATION DEVICES AND ASSOCIATED WIRING PER GENERAL DEMOLITION NOTES ON THIS SHEET. PROVIDE AND INSTALL DEVICE COVER PLATES OVER OPENINGS FROM REMOVED DEVICES; PAINT/FINISH TO MATCH EXISTING WALLS.
2. CONTRACTOR SHALL PRESERVE AND PROTECT EXISTING FIRE ALARM INITIATION DEVICES AND ASSOCIATED WIRING DURING DEMOLITION WORK FOR RECONNECTION TO NEW FIRE ALARM CONTROL PANEL.
3. CONTRACTOR SHALL DEMOLISH FIRE ALARM CONTROL PANEL COMPLETE AND ALL FIRE ALARM DEVICES AND WIRING PER GENERAL DEMOLITION NOTES ON THIS SHEET.
4. CONTRACTOR SHALL DEMOLISH EXISTING FIRE ALARM CONTROL PANEL. CONTRACTOR SHALL PRESERVE EXISTING SLG LOOPS SERVED BY EXISTING FACP TO BE REMOVED/REPLACED WITH NEW FACP; SEE 1/FAC.1 FOR NEW FACP AND RETERMINATION OF EXISTING SLG LOOPS.

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

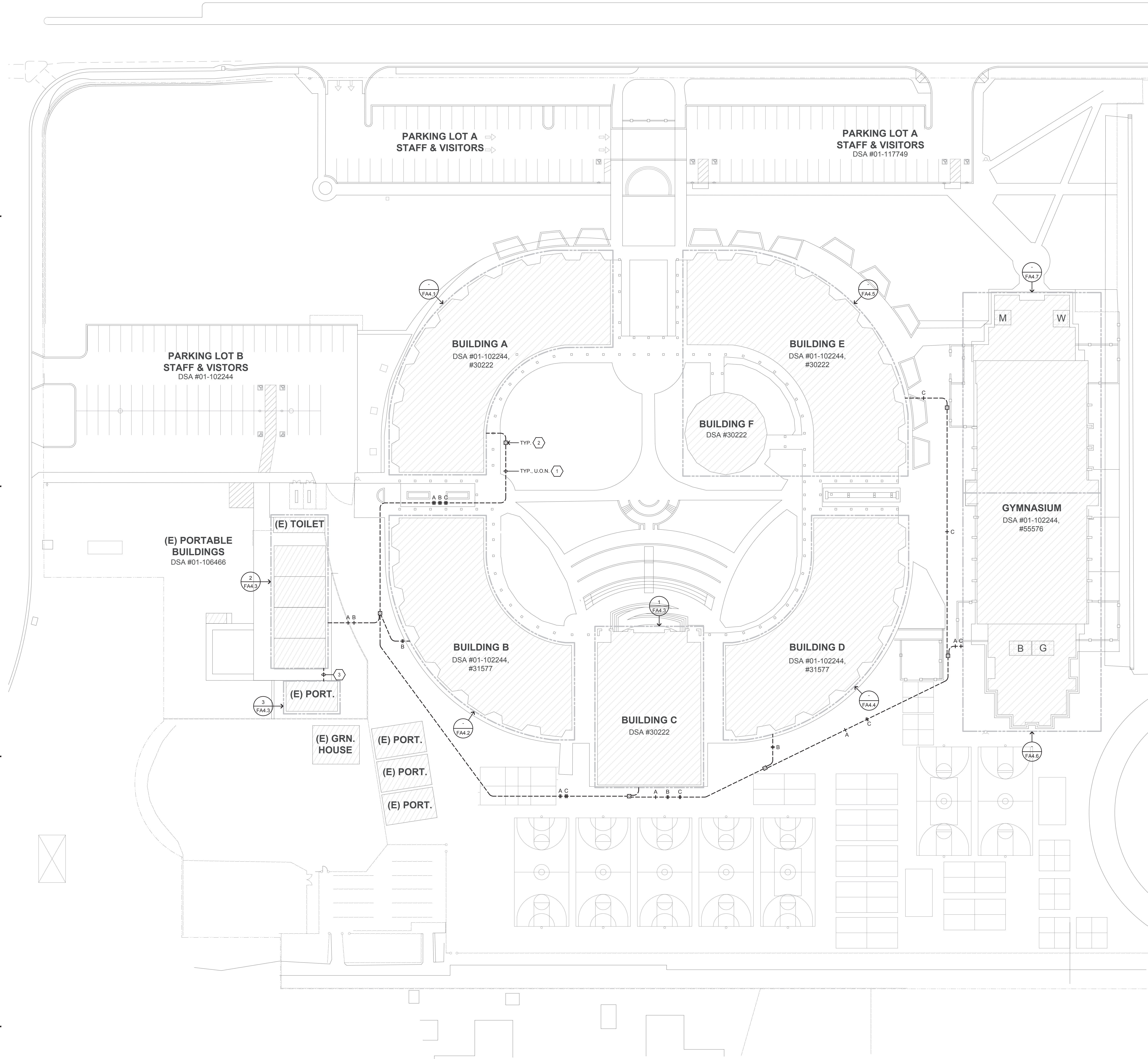
CAMPUS-WIDE FIRE ALARM REPLACEMENT
HARVEST PARK MIDDLE SCHOOL
4900 VALLEY AVE., PLEASANTON, CA 94566
PLEASANTON UNIFIED SCHOOL DISTRICT

REVISIONS
NO. ITEM DATE

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DATE: 12/01/2021

FA2.1

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SHEET NOTES

1. PROVIDE AND INSTALL 2" C. FOR FIRE ALARM CABLES.
2. PROVIDE AND INSTALL CHRISTY #N16 PULLBOX WITH LID LABELED "FIRE ALARM".
3. PROVIDE AND INSTALL 1" C. FOR FIRE ALARM CABLES.

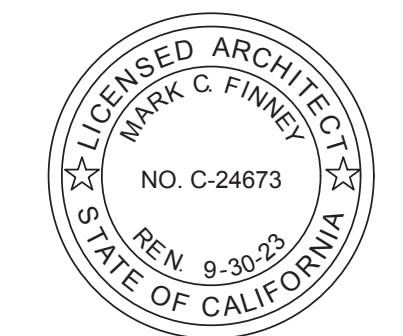
GENERAL NOTES:

- 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/CEILINGS FOR CONDUIT ROUTING AS NECESSARY. PAINT/FINISH EXPOSED CONDUITS/BOXES TO MATCH BUILDING FINISH. COORDINATE WITH DISTRICT & ARCHITECT FOR EXACT REQUIREMENTS.

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.

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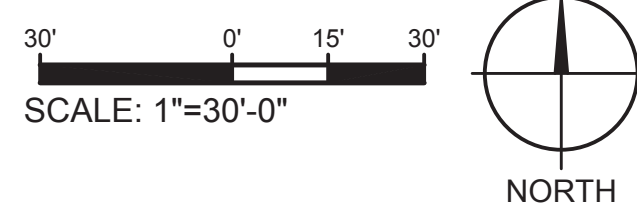
FIRE ALARM SITE PLAN

CAMPUS-WIDE FIRE ALARM REPLACEMENT
HARVEST PARK MIDDLE SCHOOL
4900 VALLEY AVE., PLEASANTON, CA 94566
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SHEET NOTES

- CONTRACTOR SHALL RETERMINATE EXISTING SLC LOOPS PRESERVED DURING DEMOLITION AT NEW PANEL SLC CARDS AND TEST TO ENSURE FULL FUNCTIONALITY OF EXISTING DEVICE.
- CIRCUIT VIA 2/C. 2 #12 & 1 #12 GND TO PANEL "RA" LOCATED IN CUSTODIAN ROOM A116. AT PANEL PROVIDE AND INSTALL 20 AMP, 1-POLE BREAKER WITH LOCK-ON DEVICE WITH RED MARKINGS LABELED "FIRE ALARMECS".
- CONNECT TO NEAREST EXISTING INITIATION DEVICE PRESERVED DURING DEMOLITION WORK.
- HOMERUN TO REMOTE POWER SUPPLY "RPS-A" AND DIGITAL AUDIO AMPLIFIER "AMP-1" LOCATED IN CUSTODIAN ROOM A116.
- PROVIDE AND INSTALL LAMICOID NAMEPLATE ON DEVICE READING "EOL".
- PROVIDE AND INSTALL 18" X 6" DEEP NEMA 3R PULLCAN.
- SEE SHEET E2.1 FOR CONTINUATION.

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.



BUILDING KEY

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



(DSA STAMP AREA)



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FIRE ALARM PLAN - BUILDING A

CAMPUS-WIDE FIRE ALARM REPLACEMENT
HARVEST PARK MIDDLE SCHOOL
4900 VALLEY AVE, PLEASANTON, CA 94566
PLEASANTON UNIFIED SCHOOL DISTRICT

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SHEET NOTES

1. CIRCUIT VIA 2/C. 2 #12 & 1 #12 GND TO PANEL "B" LOCATED IN ELECTRICAL ROOM B112. AT PANEL PROVIDE AND INSTALL 20 AMP, 1-POLE BREAKER WITH LOCK-ON DEVICE WITH RED MARKINGS LABELED "FIRE ALARMECS".
2. CONNECT TO NEAREST EXISTING INITIATION DEVICE PRESERVED DURING DEMOLITION WORK.
3. HOMERUN TO REMOTE POWER SUPPLY "RPS-B" LOCATED IN ELECTRICAL ROOM B112.
4. PROVIDE AND INSTALL LAMICOID NAMEPLATE ON DEVICE READING "EOL".
5. PROVIDE AND INSTALL 18" X 6" DEEP NEMA 3R PULLCAN.
6. SEE SHEET E2.1 FOR CONTINUATION.

GENERAL NOTES:

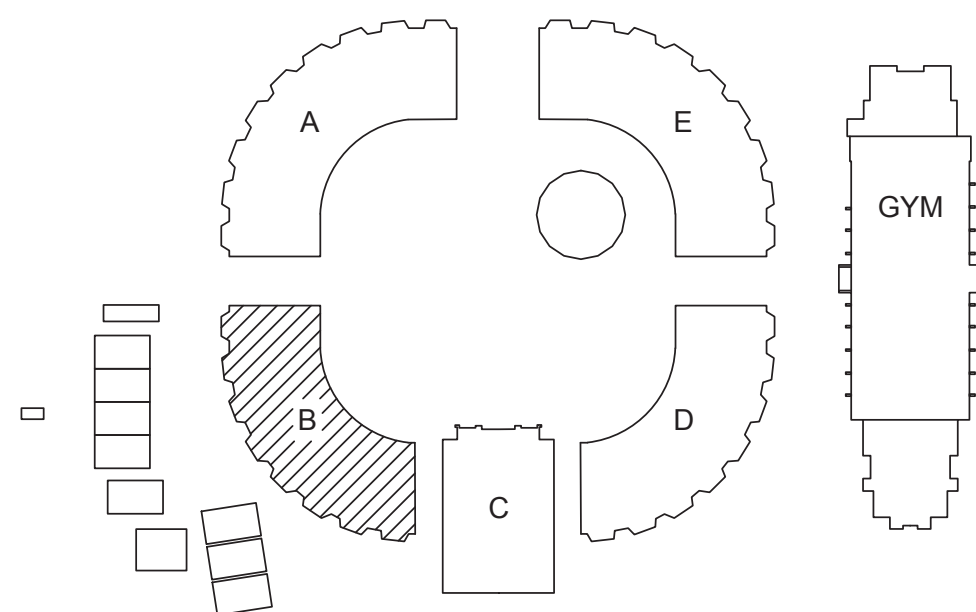
- A. SEAL ALL EXTERIOR/INTERIOR BUILDING PENETRATIONS, CUT AND PATCH WALLS/CEILINGS FOR CONDUIT ROUTING AS NECESSARY. PAINT/FINISH EXPOSED CONDUITS/BOXES TO MATCH BUILDING FINISH. COORDINATE WITH DISTRICT & ARCHITECT FOR EXACT REQUIREMENTS.
- B. ALL INDOOR SPEAKERS/HORNS SHALL BE 0.5 WATTS RATED MINIMUM. 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.



BUILDING KEY



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



(DSA STAMP AREA)



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FIRE ALARM PLAN - BUILDING B

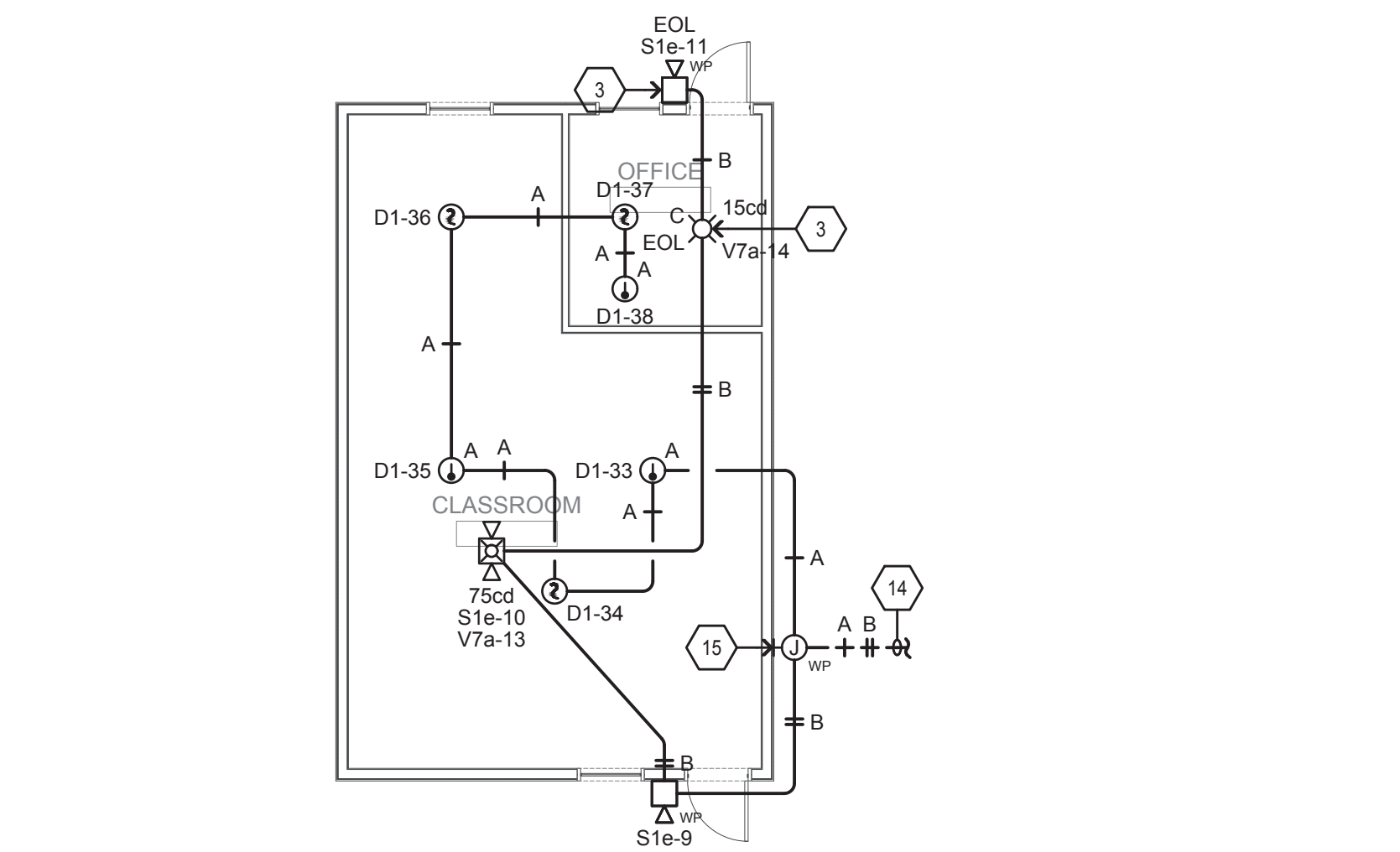
CAMPUS-WIDE FIRE ALARM REPLACEMENT
HARVEST PARK MIDDLE SCHOOL
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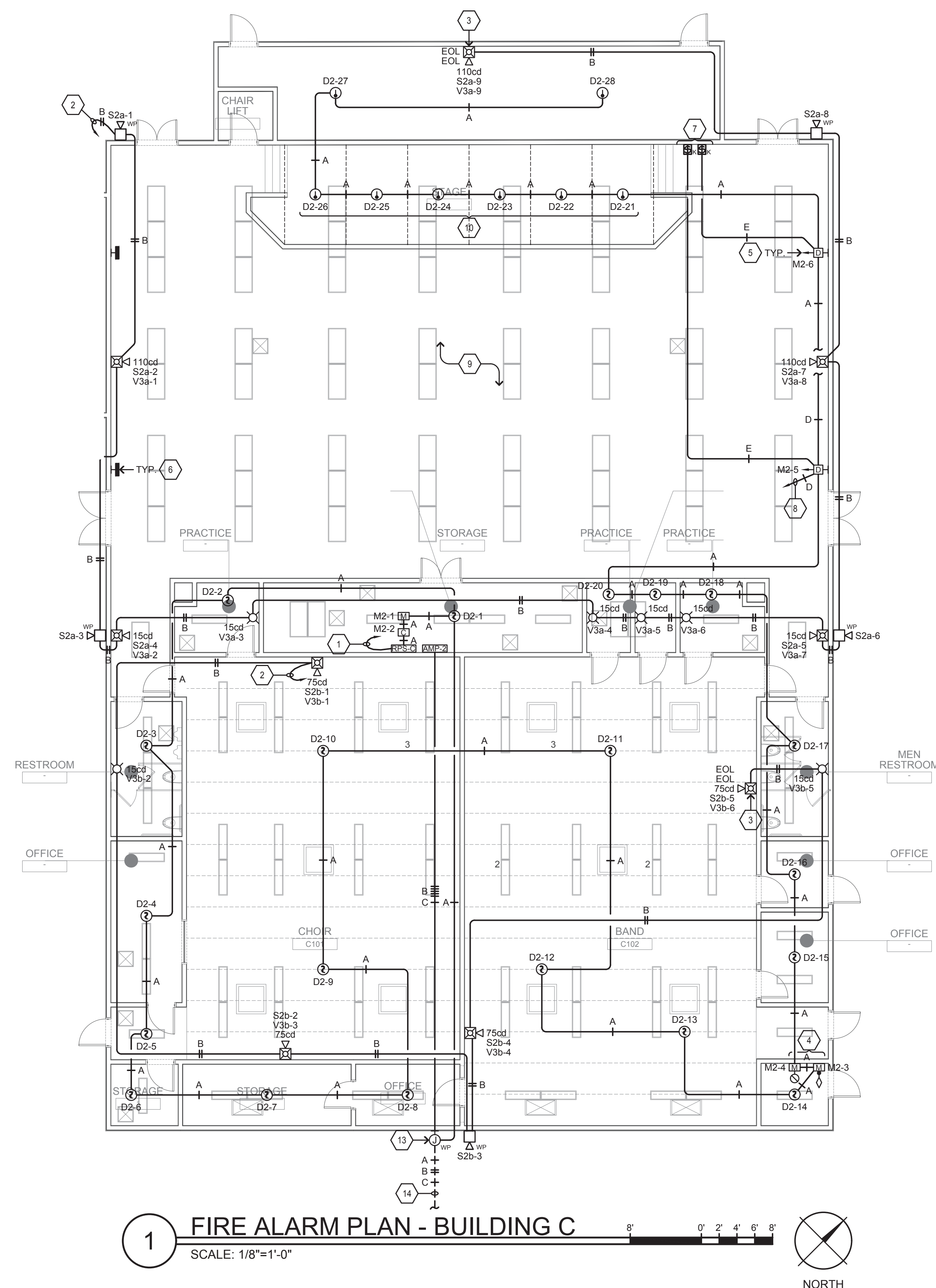
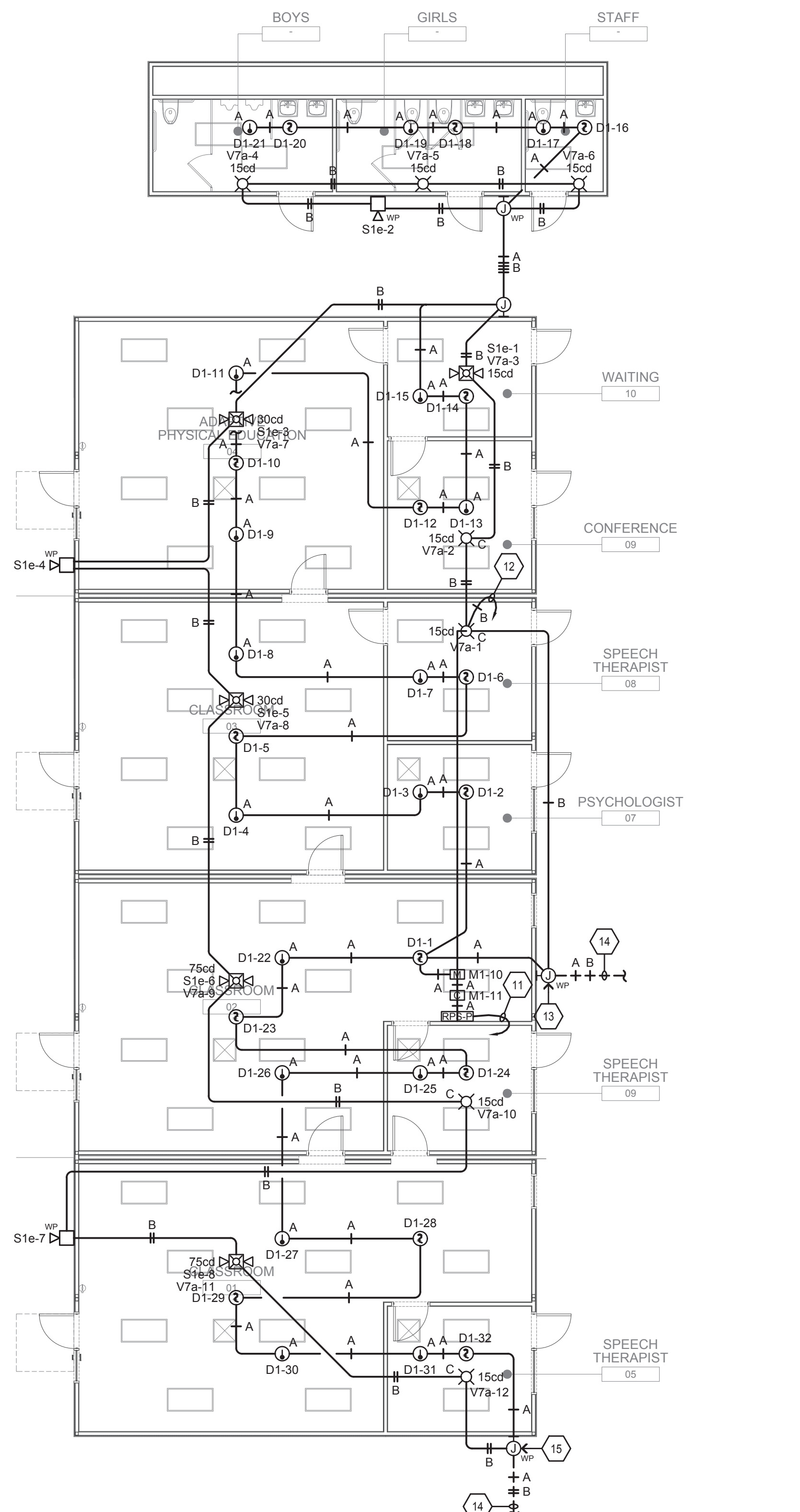
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FA4.2

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



2 FIRE ALARM PLAN - PRE-SCHOOL
SCALE: 1/8"=1'-0"



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

SHEET NOTES

- CIRCUIT VIA 2/C. 2 #12 & 1 #12 GND TO PANEL "BA" LOCATED IN ELECTRICAL ROOM B112. AT PANEL PROVIDE AND INSTALL 20 AMP, 1-POLE BREAKER WITH LOCK-ON DEVICE WITH RED MARKINGS LABELED "FIRE ALARMECS".
- HOMERUN TO REMOTE POWER SUPPLY "RPS-C" AND DIGITAL AUDIO AMPLIFIER "AMP-2" LOCATED IN STORAGE ROOM.
- PROVIDE AND INSTALL LAMICOID NAMEPLATE ON DEVICE READING "EOL".
- LOCATE FOR TAMPER AND FLOW SWITCH.
- 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-C" LOCATED IN STORAGE ROOM.
- PROVIDE AND INSTALL CSFM LISTED WIREGUARD FOR ALL DEVICES IN MULTI-USE ROOM.
- INSTALL HEAT DETECTORS IN BAYS UNDER STAGE.
- CIRCUIT VIA 2/C. 2 #12 & 1 #12 GND TO PANEL "P2" LOCATED AT SAME PORTABLE. AT PANEL PROVIDE AND INSTALL 20 AMP, 1-POLE BREAKER WITH LOCK-ON DEVICE WITH RED MARKINGS LABELED "FIRE ALARMECS".
- HOMERUN TO REMOTE POWER SUPPLY "RPS-P" LOCATED IN CLASSROOM 02.
- PROVIDE AND INSTALL 18" X 6" DEEP NEMA 3R PULLCAN.
- SEE SHEET E2.1 FOR CONTINUATION.
- PROVIDE AND INSTALL 12" X 4" DEEP NEMA 3R PULLCAN.

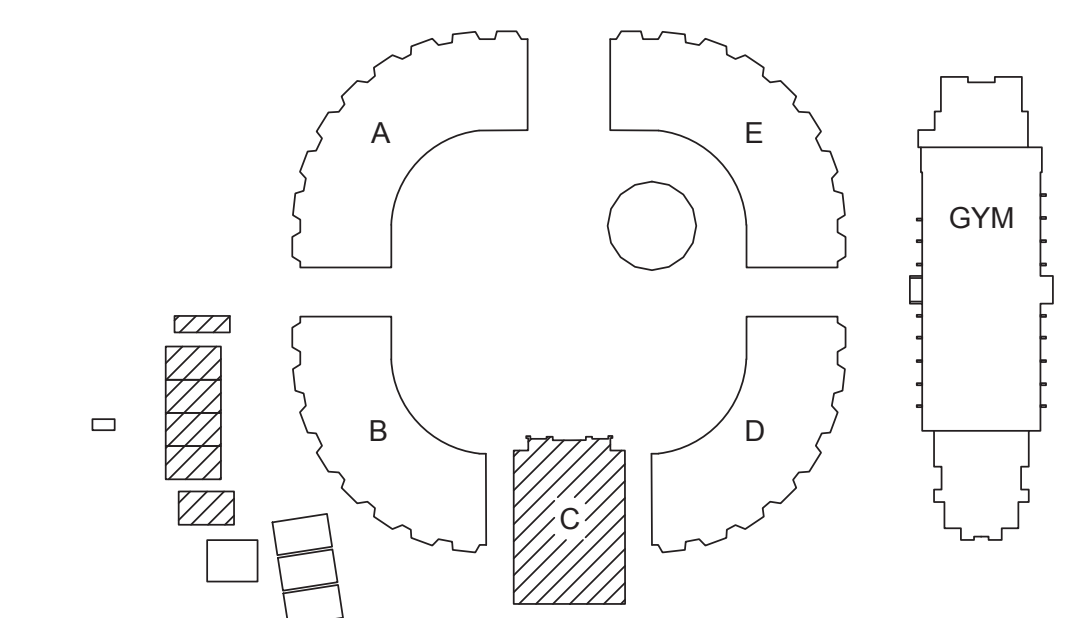
GENERAL NOTES:

- 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 = 8-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.

BUILDING KEY



(DSA STAMP AREA)



AURLIN CONSULTING ENGINEERS, INC.
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FIRE ALARM PLAN - BUILDING C & PRE-SCHOOL PORTABLES

CAMPUS-WIDE FIRE ALARM REPLACEMENT
HARVEST PARK MIDDLE SCHOOL
4900 VALLEY AVE., PLEASANTON, CA 94566
PLEASANTON UNIFIED SCHOOL DISTRICT

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SHEET NOTES

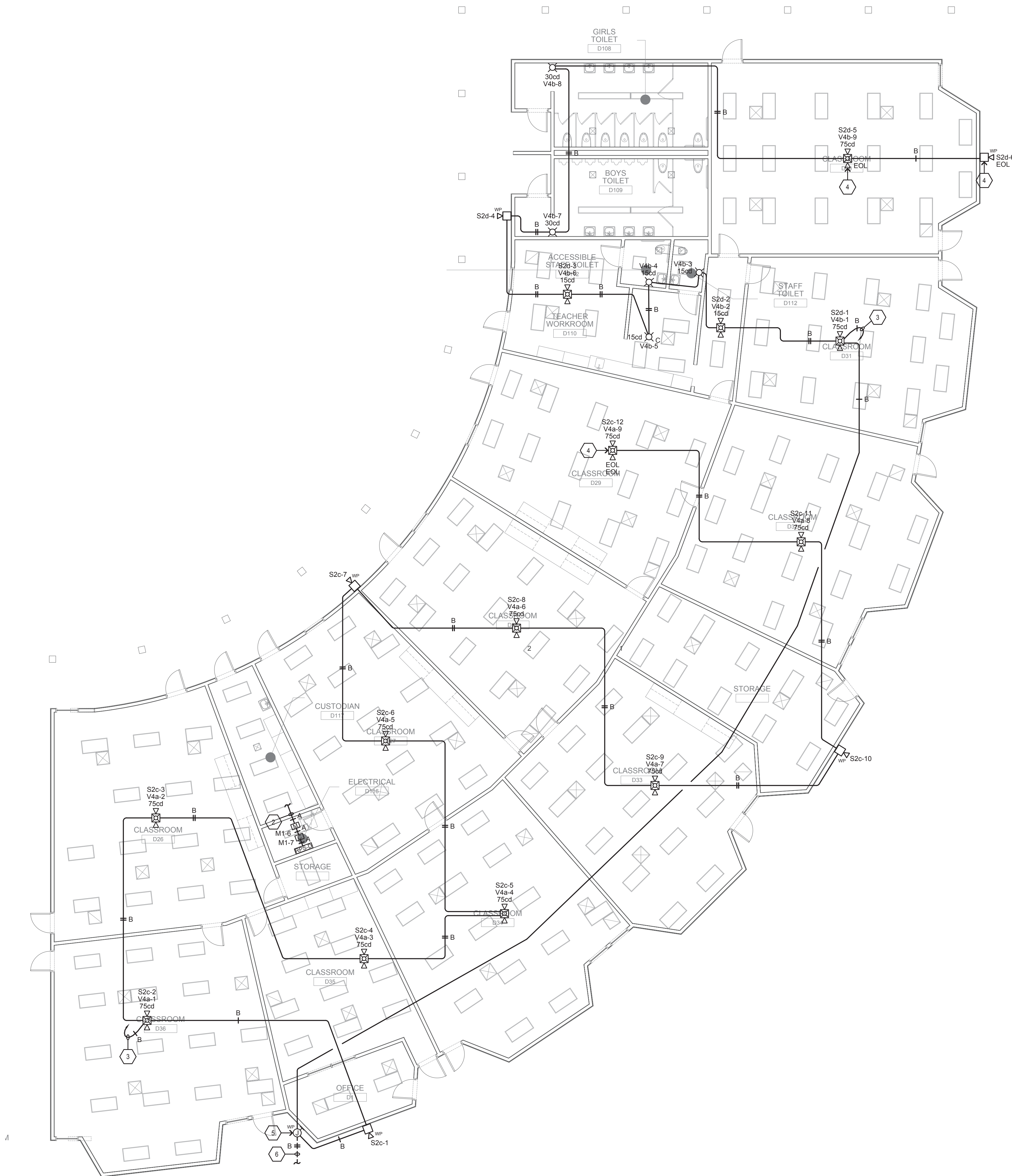
1. CIRCUIT VIA 3/4" 2 #12 & 1 #12 GND TO PANEL "DA" LOCATED IN ELECTRICAL ROOM D116; AT PANEL PROVIDE AND INSTALL 20 AMP, 1-POLE BREAKER WITH LOCK-ON DEVICE WITH RED MARKINGS LABELED "FIRE ALARMECS".
2. CONNECT TO NEAREST EXISTING INITIATION DEVICE PRESERVED DURING DEMOLITION WORK.
3. HOMERUN TO REMOTE POWER SUPPLY "RPS-D" LOCATED IN ELECTRICAL ROOM D116.
4. PROVIDE AND INSTALL LAMICOID NAMEPLATE ON DEVICE READING "EOL".
5. PROVIDE AND INSTALL 18" X 6" DEEP NEMA 3R PULLCAN.
6. SEE SHEET E2.1 FOR CONTINUATION.

GENERAL NOTES:

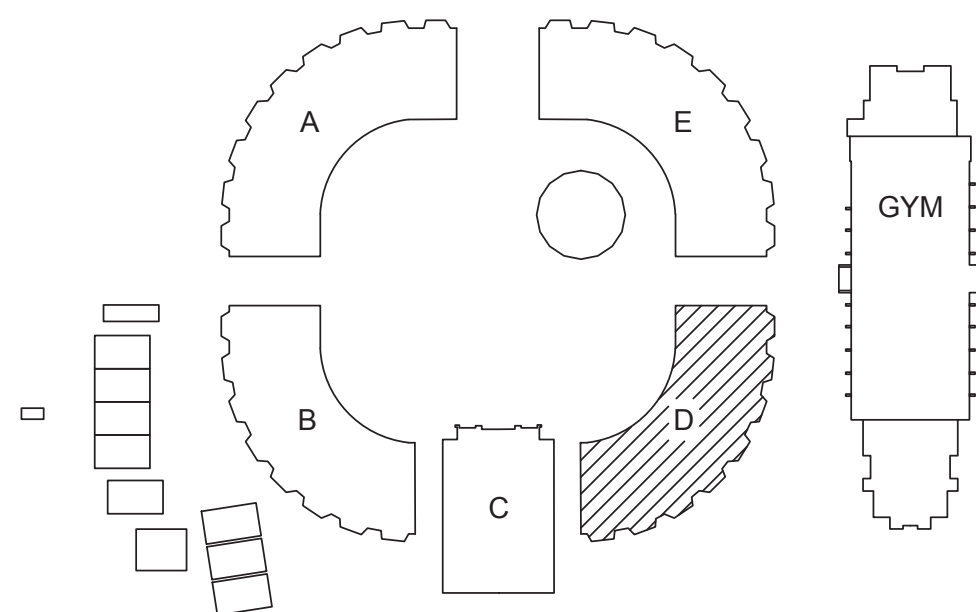
- A. SEAL ALL EXTERIOR/INTERIOR BUILDING PENETRATIONS, CUT AND PATCH WALLS/CEILINGS FOR CONDUIT ROUTING AS NECESSARY. PAINT/FINISH EXPOSED CONDUITS/BOXES TO MATCH BUILDING FINISH. COORDINATE WITH DISTRICT & ARCHITECT FOR EXACT REQUIREMENTS.
- B. ALL INDOOR SPEAKERS/HORNS SHALL BE 0.5 WATTS RATED MINIMUM. 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.



BUILDING KEY



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



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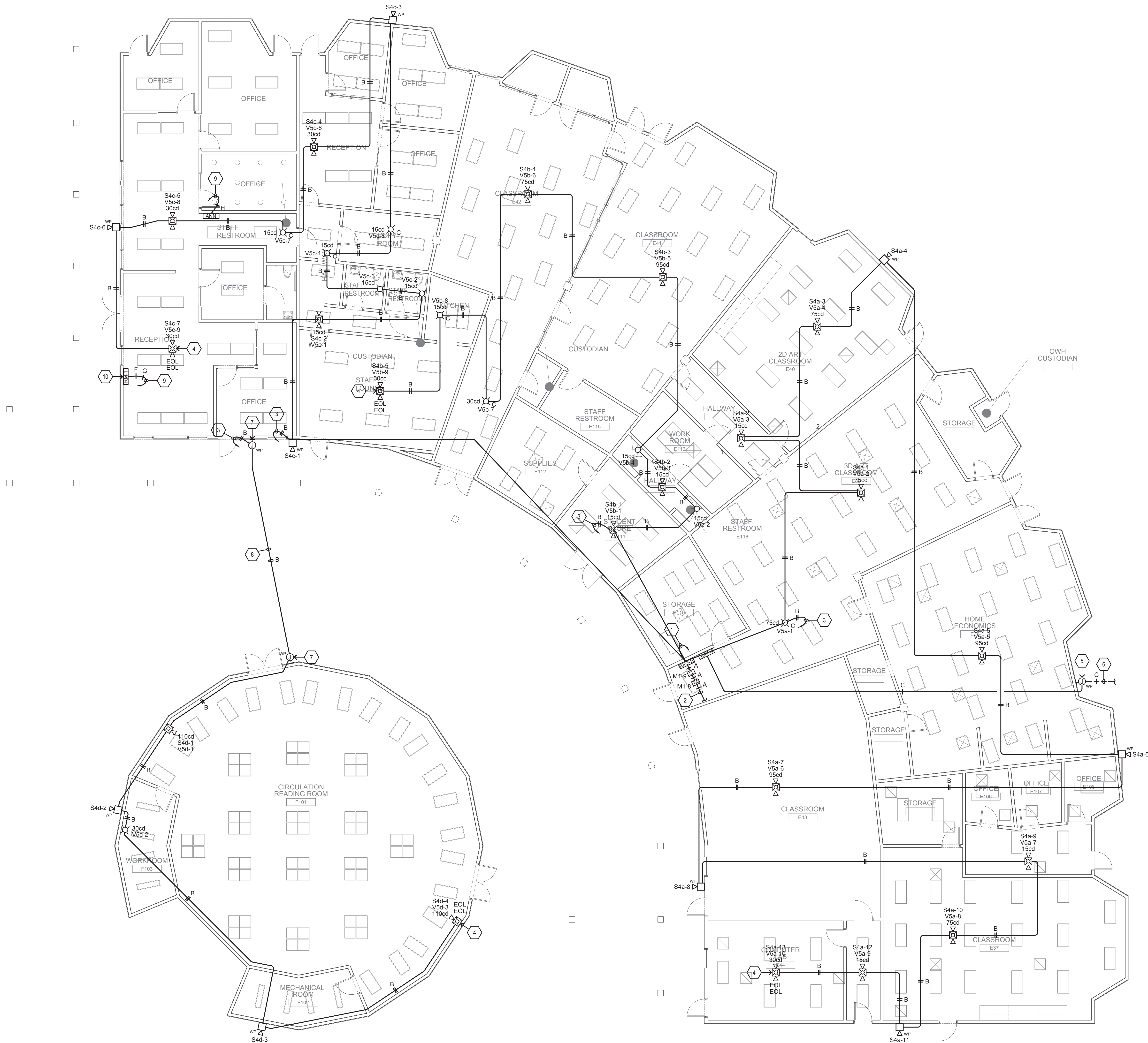
FIRE ALARM PLAN - BUILDING D

CAMPUS-WIDE FIRE ALARM REPLACEMENT
HARVEST PARK MIDDLE SCHOOL
4900 VALLEY AVE., PLEASANTON, CA 94566
PLEASANTON UNIFIED SCHOOL DISTRICT

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SHEET NOTES

1. CIRCUIT VIA 1/2" C. 2 #12 & 1 #12 GND TO PANEL "EB" LOCATED IN 3-D ART CLASSROOM E29; AT PANEL PROVIDE AND INSTALL 20 AMP, 1-POLE BREAKER WITH LOCK-ON DEVICE WITH RED MARKINGS LABELED "FIRE ALARMECS".
2. CONNECT TO NEAREST EXISTING INITIATION DEVICE PRESERVED DURING DEMOLITION WORK.
3. HOMERUN TO REMOTE POWER SUPPLY "RPS-E" AND DIGITAL AUDIO AMPLIFIER "AMP-4" LOCATED IN 3-D ART CLASSROOM E29.
4. PROVIDE AND INSTALL LAMICOID NAMEPLATE ON DEVICE READING "EOL".
5. PROVIDE AND INSTALL 18" X 6" DEEP NEMA 3R PULLCAN.
6. SEE SHEET E2.1 FOR CONTINUATION.
7. PROVIDE AND INSTALL 12" X 4" DEEP NEMA 3R PULLCAN.
8. PROVIDE AND INSTALL 1" C. FOR FIRE ALARM CABLES. ROUTE CONDUIT ABOVE EXISTING CANOPY BETWEEN BUILDINGS; PAINT/FINISH EXPOSED CONDUITS TO MATCH CANOPY FINISH.
9. HOMERUN TO FIRE ALARM CONTROL PANEL "FACP" LOCATED IN CUSTODIAN ROOM A116 AT BUILDING A.
10. LOCATE REMOTE MICROPHONE AT RECEPTION DESK; VERIFY EXACT LOCATION WITH DISTRICT AND ARCHITECT PRIOR TO ROUGH-IN.

GENERAL NOTES:

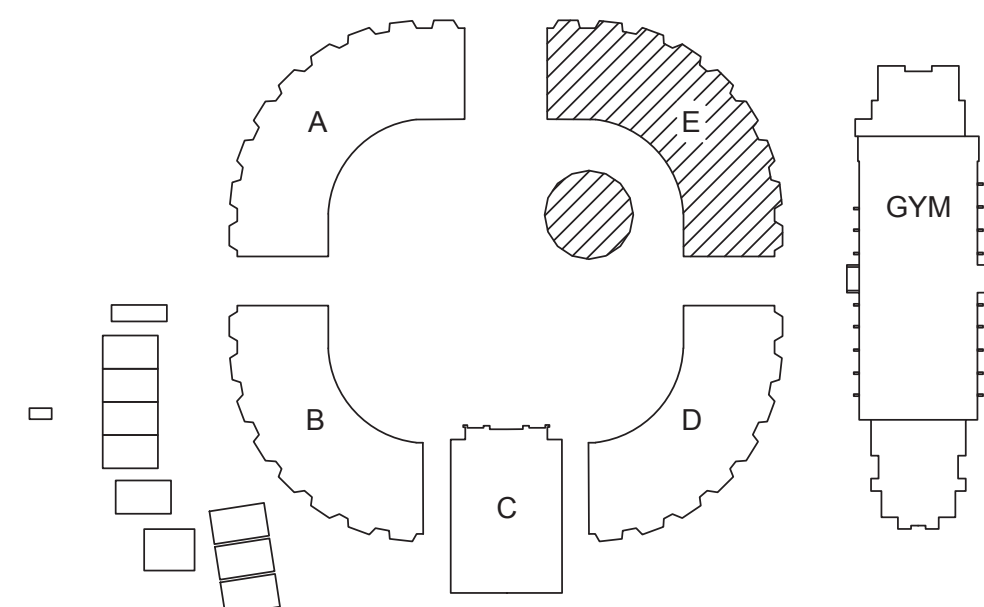
A. SEAL ALL EXTERIOR/INTERIOR BUILDING PENETRATIONS, CUT AND PATCH WALLS/CEILING FOR CONDUIT ROUTING AS NECESSARY. PAINT/FINISH EXPOSED CONDUITS/BOXES TO MATCH BUILDING FINISH. COORDINATE WITH DISTRICT & ARCHITECT FOR EXACT REQUIREMENTS.

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 F = DENOTES 24VDC POWER CIRCUIT FOR REMOTE MICROPHONE POWERED FROM DVC. PROVIDE (1) PAIR OF #14 AWG.
- TYPE G = DENOTES TROUBLE CONTACTS MONITORED BY FACP AND LOW LEVEL AUDIO INPUT FROM REMOTE MICROPHONE. PROVIDE (2) TWISTED UNSHIELDED PAIR #14 AWG.
- TYPE H = DENOTES 24VDC NON-RESETTABLE POWER CIRCUIT AND RDP BUS FOR REMOTE ANNUNCIATION. PROVIDE (2) TWISTED SHIELDED PAIR #14 AWG.

BUILDING KEY



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



FIRE ALARM PLAN - BUILDINGS E & F

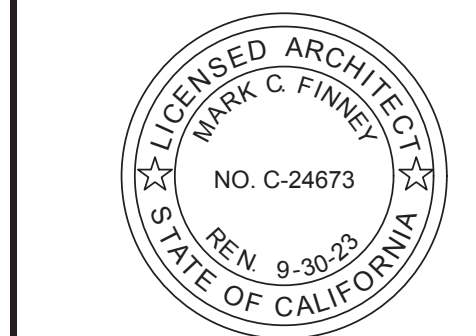
CAMPUS-WIDE FIRE ALARM REPLACEMENT
HARVEST PARK MIDDLE SCHOOL
4900 VALLEY AVE, PLEASANTON, CA 94566
PLEASANTON UNIFIED SCHOOL DISTRICT

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 SHEET NOTES

1. CIRCUIT VIA Y/C. 2 #12 & 1 #12 GND TO PANEL "GL1" LOCATED IN SCHOOL ELECTRICAL ROOM S12; AT PANEL PROVIDE AND INSTALL 20 AMP, 1-POLE BREAKER WITH LOCK-ON DEVICE WITH RED MARKINGS LABELED "FIRE ALARM/WECS".
2. HOMERUN TO REMOTE POWER SUPPLY "RPS-G" AND DIGITAL AUDIO AMPLIFIER "AMP-3" SCHOOL ELECTRICAL ROOM S12.
3. PROVIDE AND INSTALL LAMICOID NAMEPLATE ON DEVICE READING "EOL".
4. BEAM SMOKE DETECTOR TRANSMITTER. INSTALL WITH DIRECT LINE OF SIGHT OF REFLECTOR PLATE; FIELD VERIFY EXACT MOUNTING HEIGHT.
5. REFLECTOR PLATE. INSTALL WITH DIRECT LINE OF SIGHT OF TRANSMITTER; FIELD VERIFY EXACT MOUNTING HEIGHT.
6. 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.
7. HOMERUN TO REMOTE POWER SUPPLY "RPS-C" LOCATED IN STORAGE ROOM.
8. PROVIDE AND INSTALL CSFM LISTED WIREGUARD FOR ALL DEVICES IN MULTI-USE ROOM.
9. PROVIDE AND INSTALL 18" X 6" DEEP NEMA 3R PULLCAN.
10. SEE SHEET E2.1 FOR CONTINUATION.

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

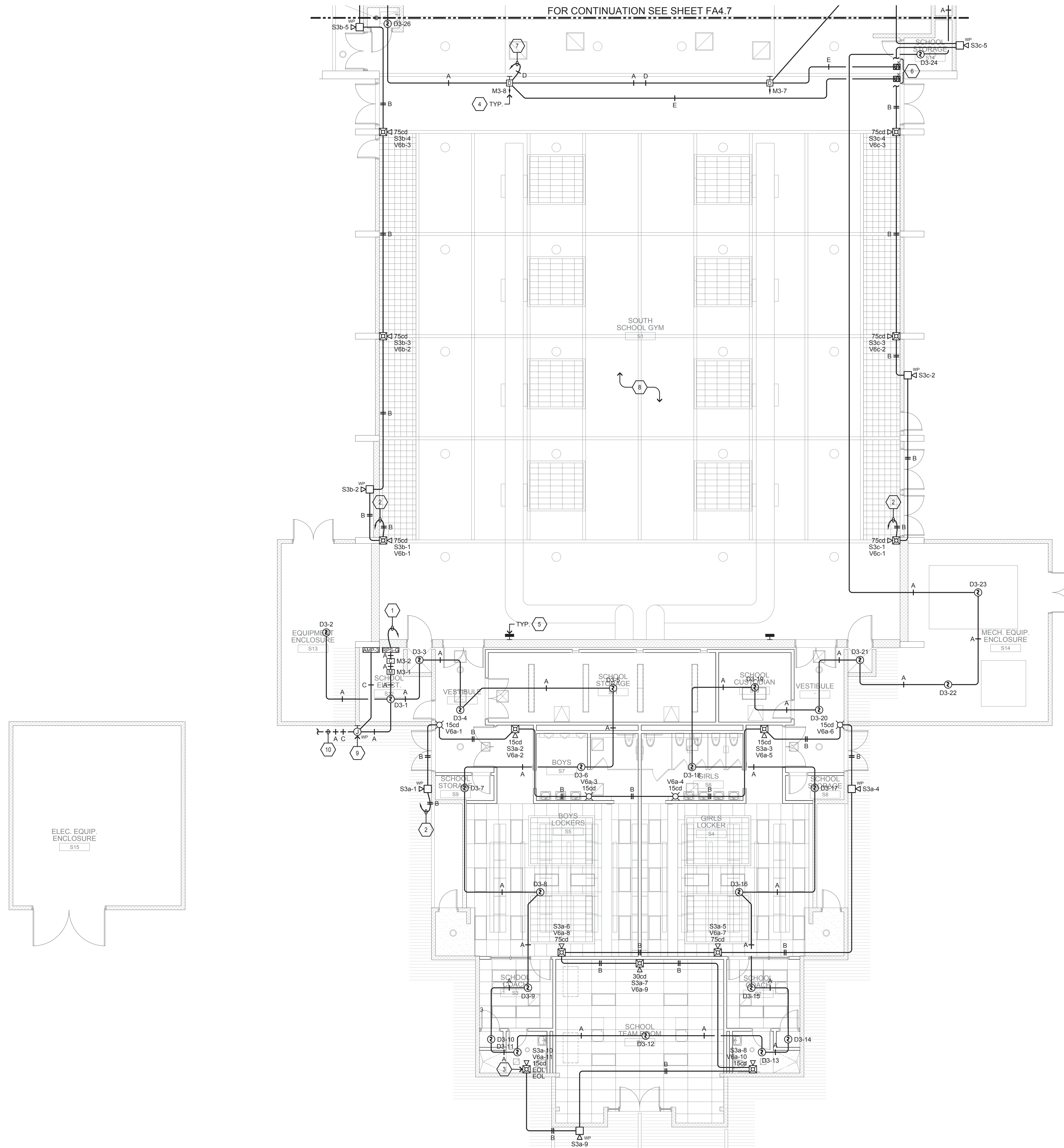
TYPE A = DENOTES INITIATING DETECTOR CIRCUITS (SMOKE DETECTOR, HEAT DETECTOR, ETC.) UNLESS OTHERWISE NOTED, PROVIDE (1) #14 TWISTED UNSHIELDED PAIR CROSSTHATCHES INDICATE THE NUMBER OF PAIRS.

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

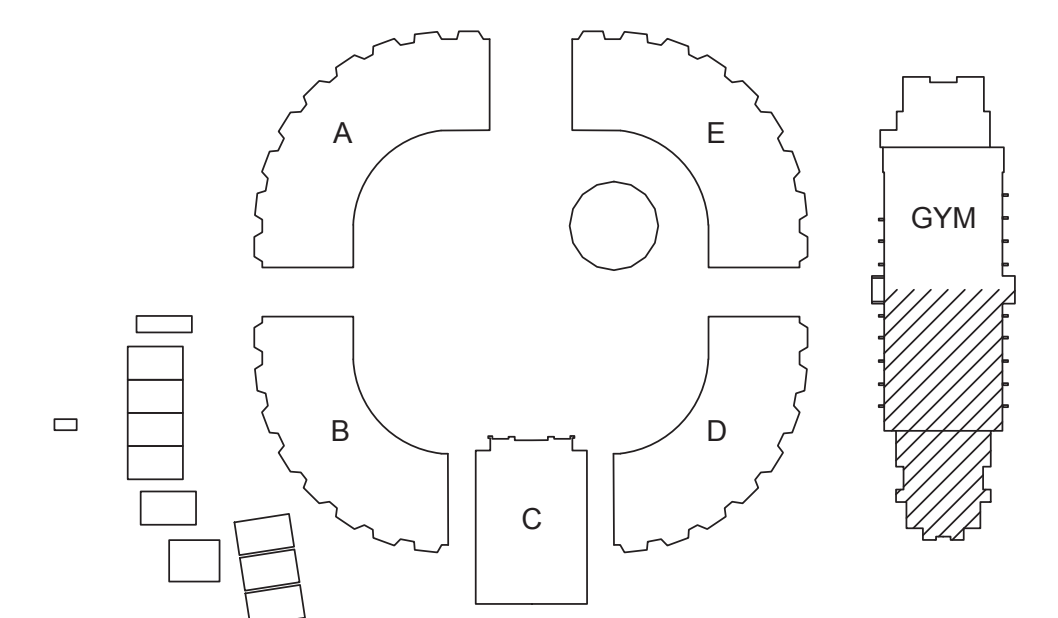
TYPE C = 6-STRAND 62.5 MICROMETER MULTIMODE FIBER OPTIC CABLE, SUITABLE FOR UNDERGROUND USE.

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



BUILDING KEY



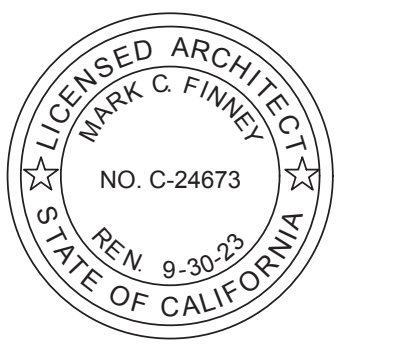
8' 0' 2' 4' 6' 8'

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



NORTH

(DSA STAMP AREA)



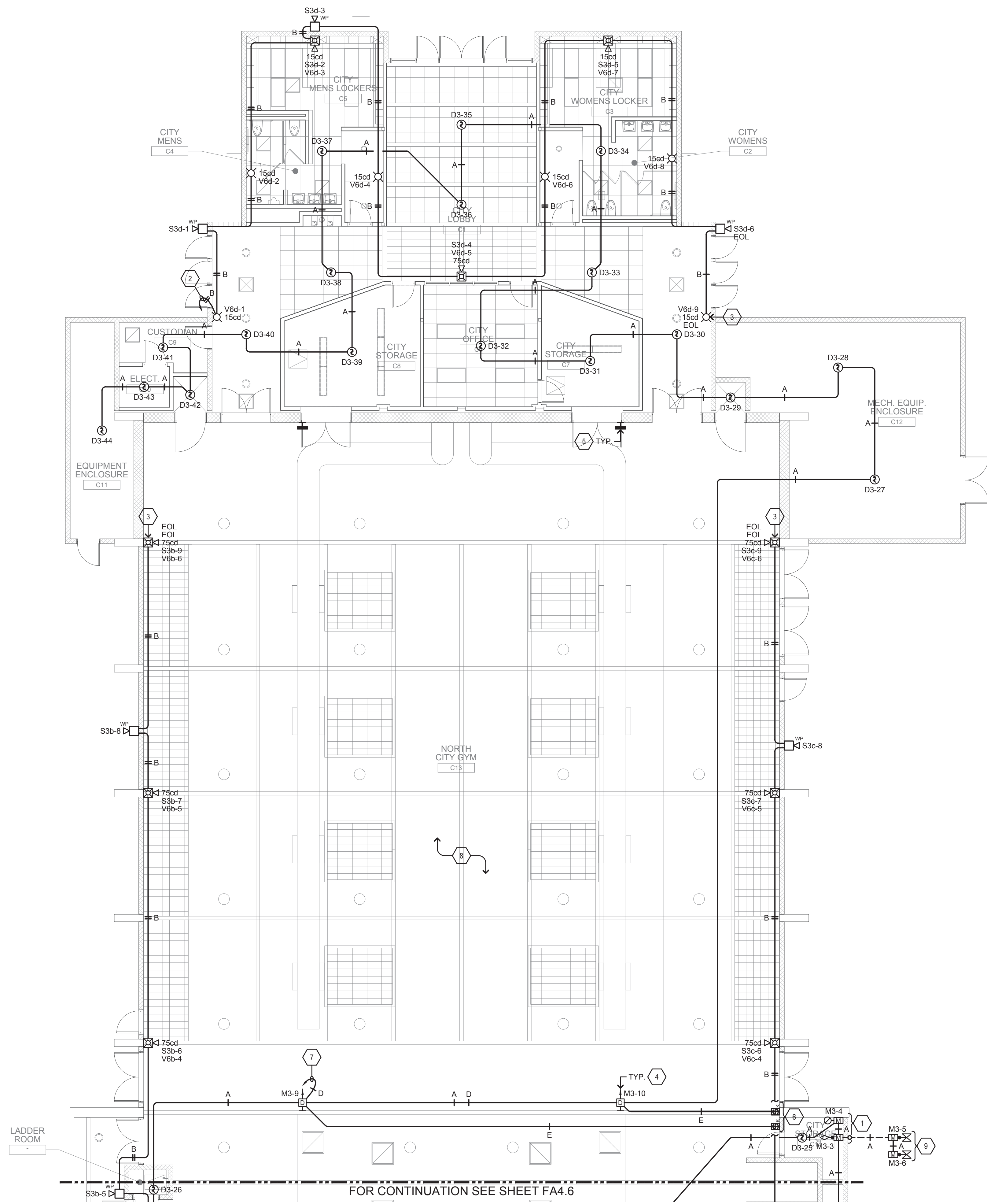
FIRE ALARM PLAN - GYM (AREA A)

CAMPUS-WIDE FIRE ALARM REPLACEMENT
HARVEST PARK MIDDLE SCHOOL
4900 VALLEY AVE., PLEASANTON, CA 94566
PLEASANTON UNIFIED SCHOOL DISTRICT

REVISIONS		
NO.	ITEM	DATE

DRAWN BY:	FS
CHECKED BY:	NA
SFA JOB NO:	DATE:
21084	12/01/2021

FA4.7



SHEET NOTES

1. LOCATE FOR TAMPER AND FLOW SWITCH.
2. HOMERUN TO REMOTE POWER SUPPLY 'RPS-G' AND DIGITAL AUDIO AMPLIFIER 'AMP-3' SCHOOL ELECTRICAL ROOM S12.
3. PROVIDE AND INSTALL LAMICOID NAMEPLATE ON DEVICE READING 'EOL'.
4. BEAM SMOKE DETECTOR TRANSMITTER, INSTALL WITH DIRECT LINE OF SIGHT OF REFLECTOR PLATE, FIELD VERIFY EXACT MOUNTING HEIGHT.
5. REFLECTOR PLATE, INSTALL WITH DIRECT LINE OF SIGHT OF TRANSMITTER, FIELD VERIFY EXACT MOUNTING HEIGHT.
6. 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.
7. HOMERUN TO REMOTE POWER SUPPLY 'RPS-C' LOCATED IN STORAGE ROOM.
8. PROVIDE AND INSTALL CSFM LISTED WIREGUARD FOR ALL DEVICES IN MULTI-USE ROOM.
9. PROVIDE AND INSTALL 1" C. TO PIV LOCATION; FIELD VERIFY EXACT LOCATION ON SITE.

GENERAL NOTES:

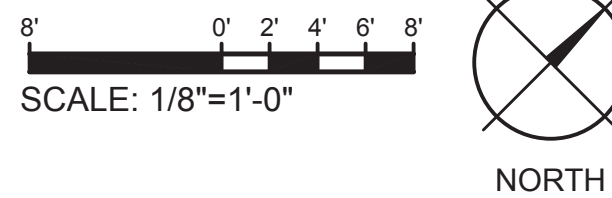
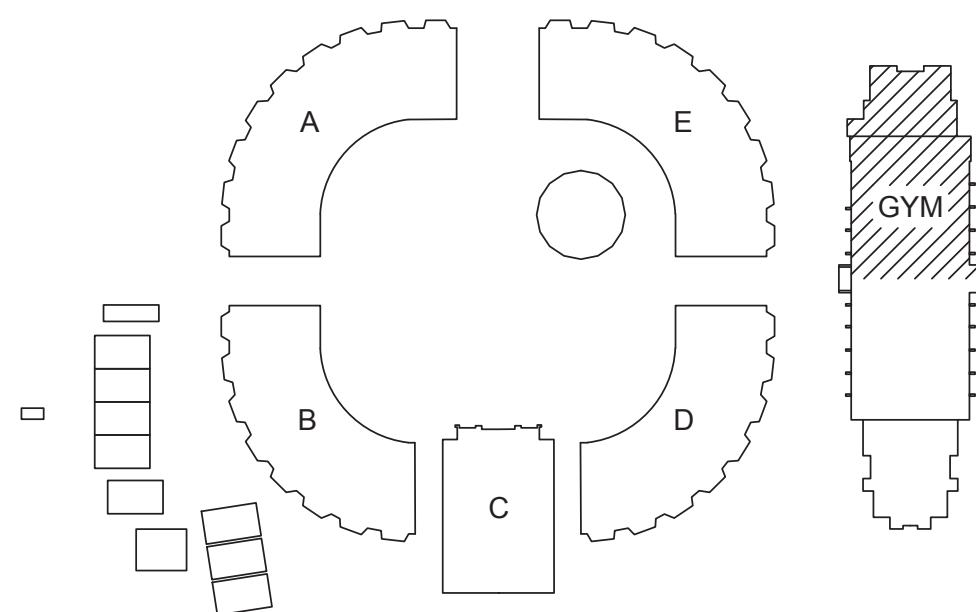
A. SEAL ALL EXTERIOR/INTERIOR BUILDING PENETRATIONS, CUT AND PATCH WALLS/CEILING FOR CONDUIT ROUTING AS NECESSARY. PAINT/FINISH EXPOSED CONDUITS/BOXES TO MATCH BUILDING FINISH. COORDINATE WITH DISTRICT & ARCHITECT FOR EXACT REQUIREMENTS.

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 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.

BUILDING KEY



(DSA STAMP AREA)



Project No. 21-445-00

60 Garden Court • Suite 210 • Monterey, CA 93940

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FIRE ALARM PLAN - GYM (AREA B)

CAMPUS-WIDE FIRE ALARM REPLACEMENT
HARVEST PARK MIDDLE SCHOOL
4900 VALLEY AVE, PLEASANTON, CA 94566
PLEASANTON UNIFIED SCHOOL DISTRICT

REVISIONS

NO. ITEM DATE

DRAWN BY: FS

CHECKED BY: NA

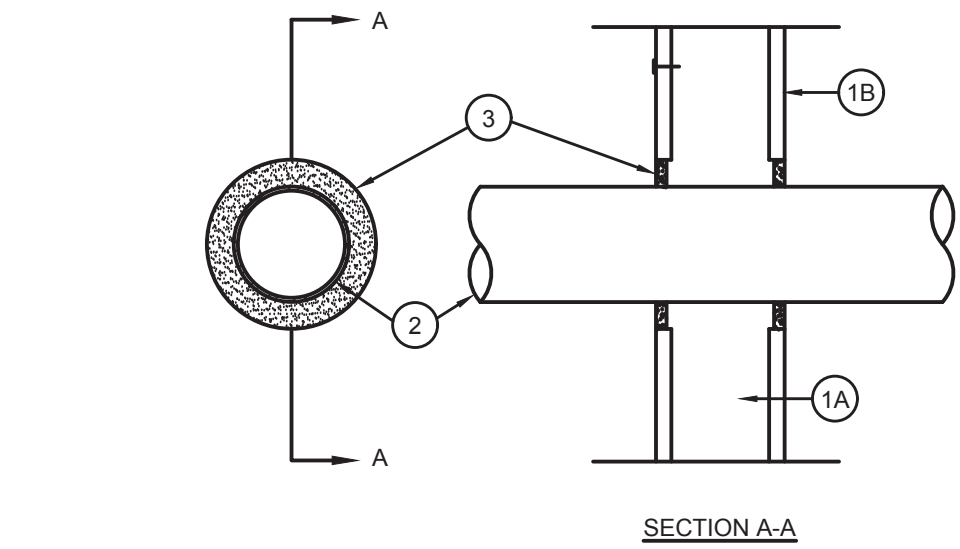
SFA JOB NO: DATE:

21084 12/01/2021

FA4.7

10 1-HR FIRE-RATED WALL PENETRATION

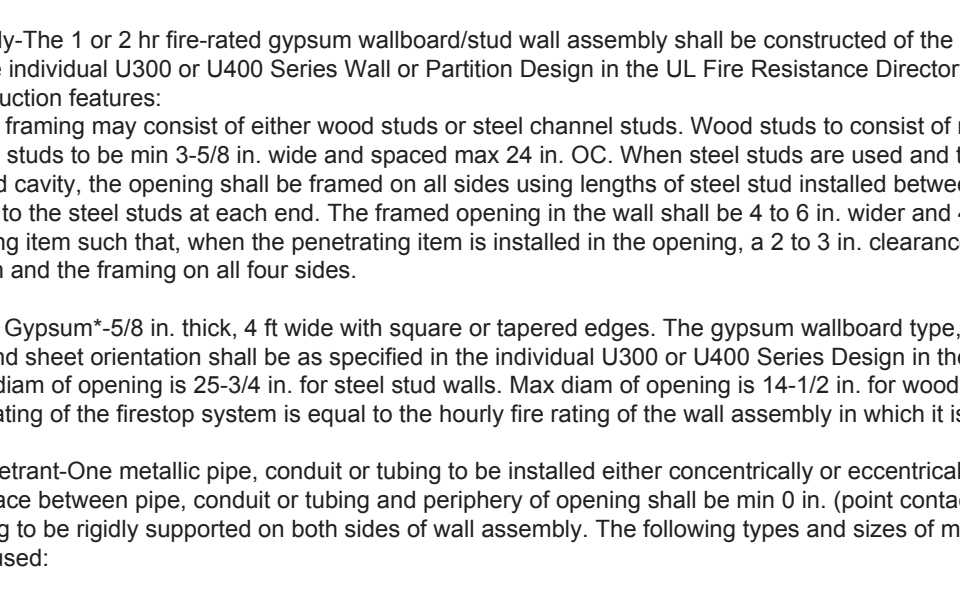
NO SCALE



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 3/8 in. wide and spaced max 24 in. OC.
- B. Wallboard Gypsum*-One Layer of nom (Q25W/A8)S in. thick gypsum wallboard as specified in the individual Wall and Partition Design. Max diam of opening is 4(Q23W/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 (Q1W/A4)S in. to a max (Q3W/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(Q1W/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

11 2-HR FIRE-RATED WALL PENETRATION

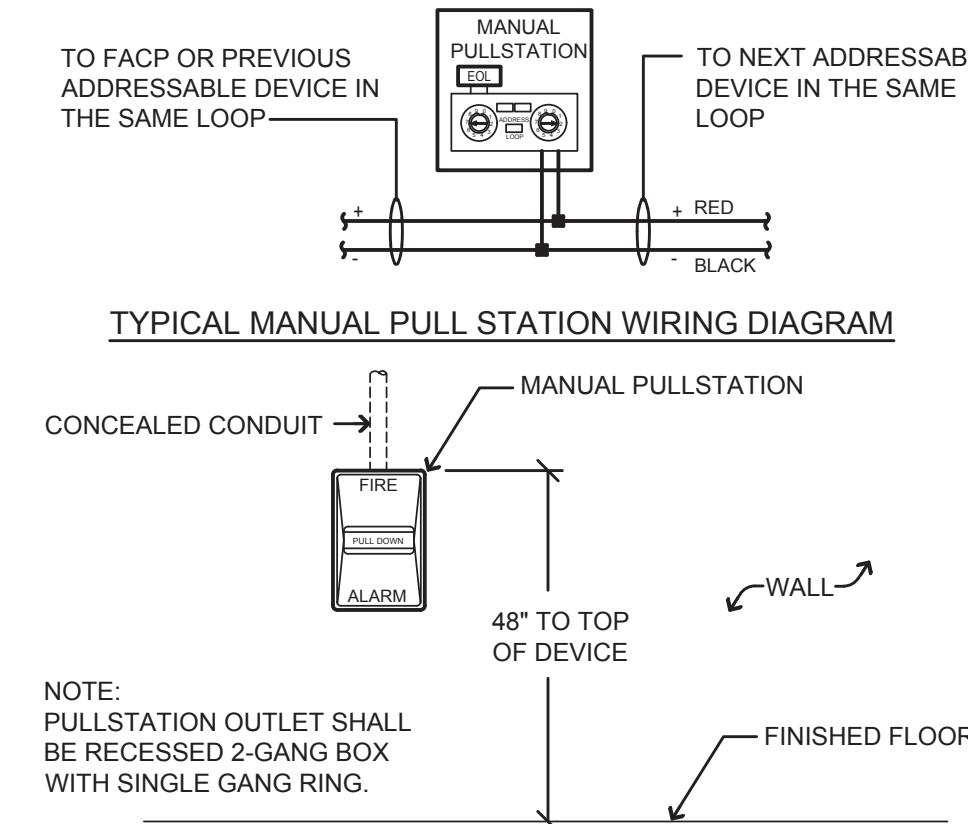
NO SCALE



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 3/8 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 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

6 PULL STATION MOUNTING DETAIL

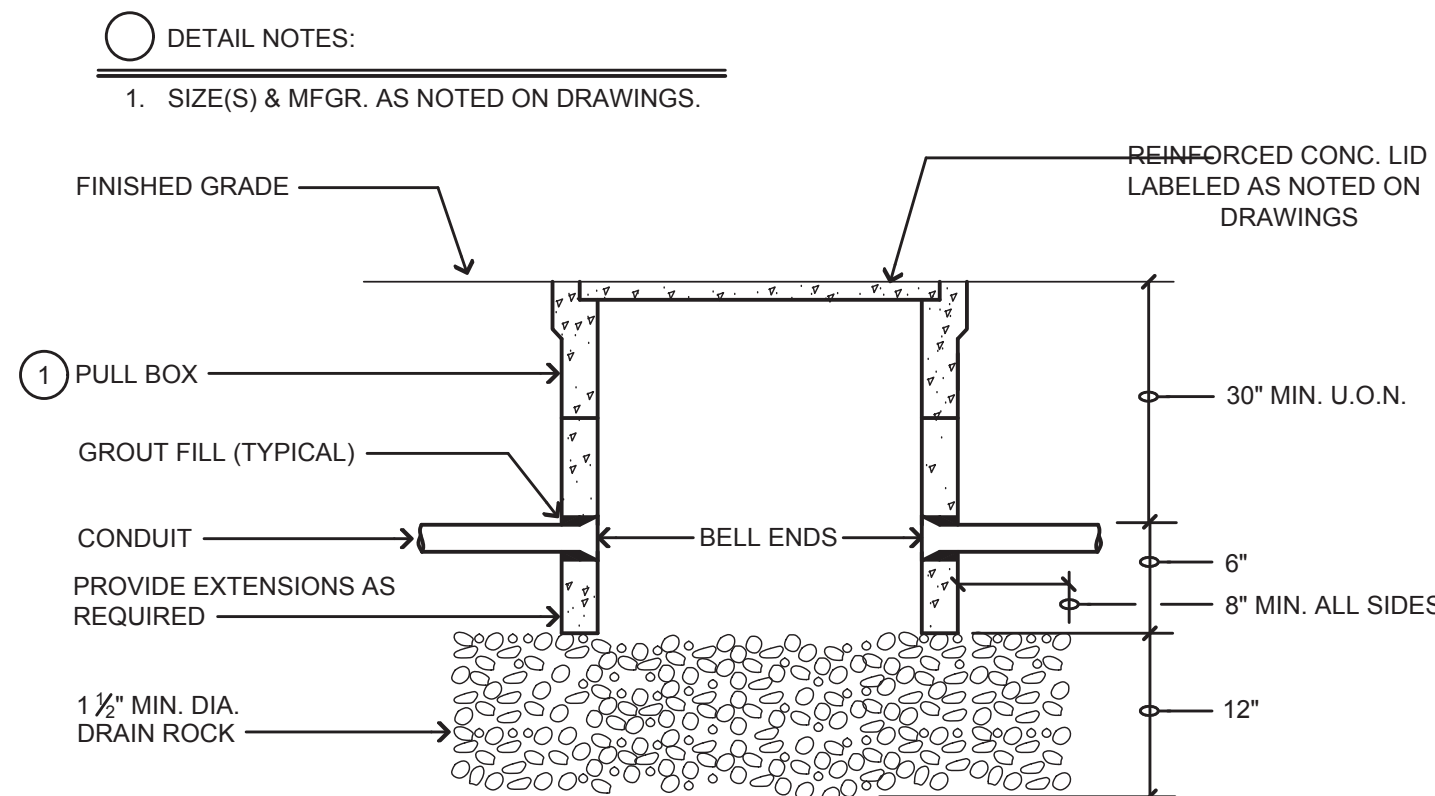
NO SCALE



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 RESED (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.

7 TYPICAL PULLBOX DETAIL

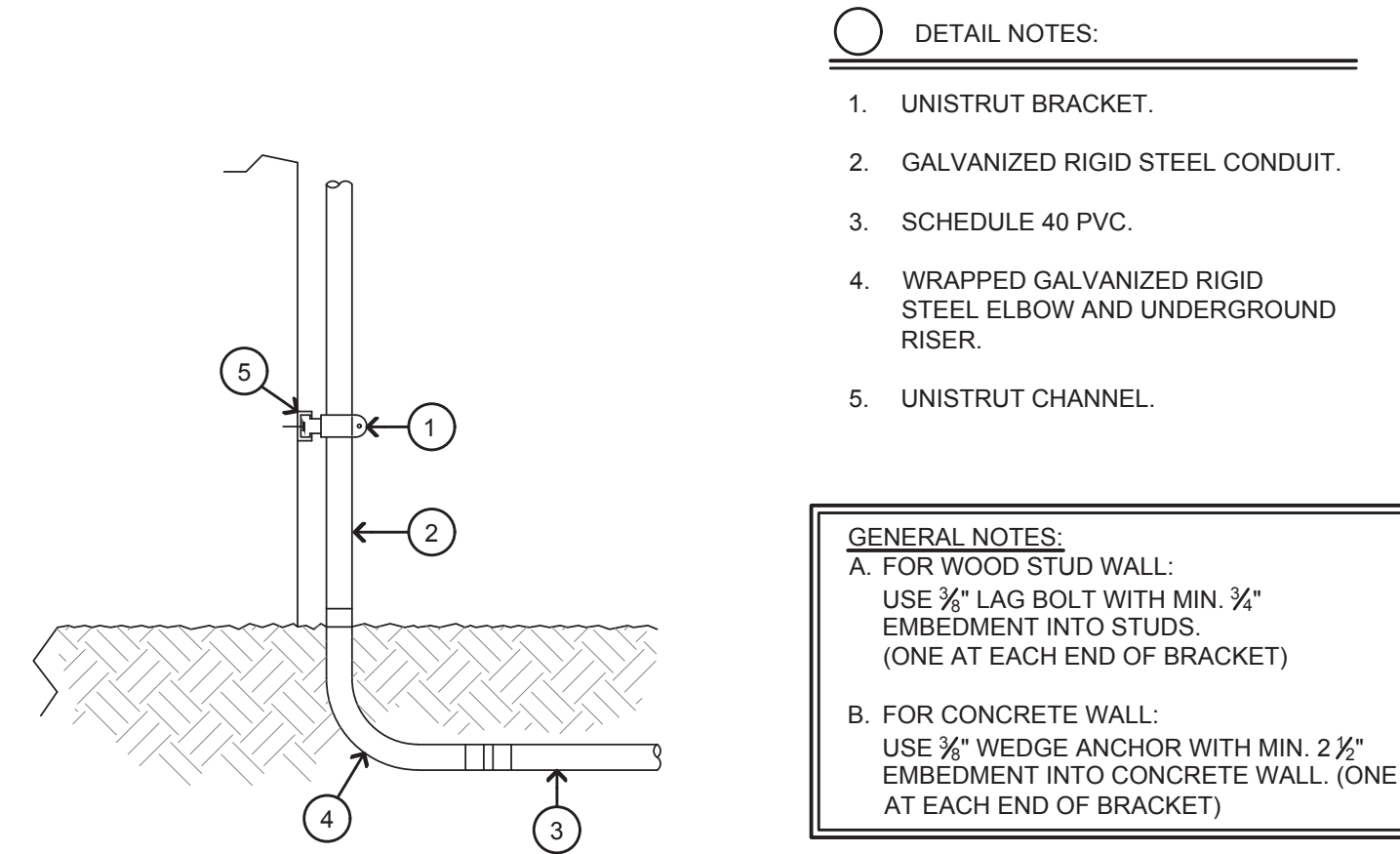
NO SCALE



1. SIZE(S) & MFG. AS NOTED ON DRAWINGS.
- FINISHED GRADE
- REINFORCED CONC. LID LABELED AS NOTED ON DRAWINGS
- 30" MIN. U.O.N.
- 8" MIN. ALL SIDES
- 12"
- 1 1/2" MIN. DIA. DRAIN ROCK
- CONDUIT
- PROVIDE EXTENSIONS AS REQUIRED
- BELL ENDS
- GROUT FILL (TYPICAL)
- PULL BOX

8 UNDERGROUND CONDUIT RISER DETAIL

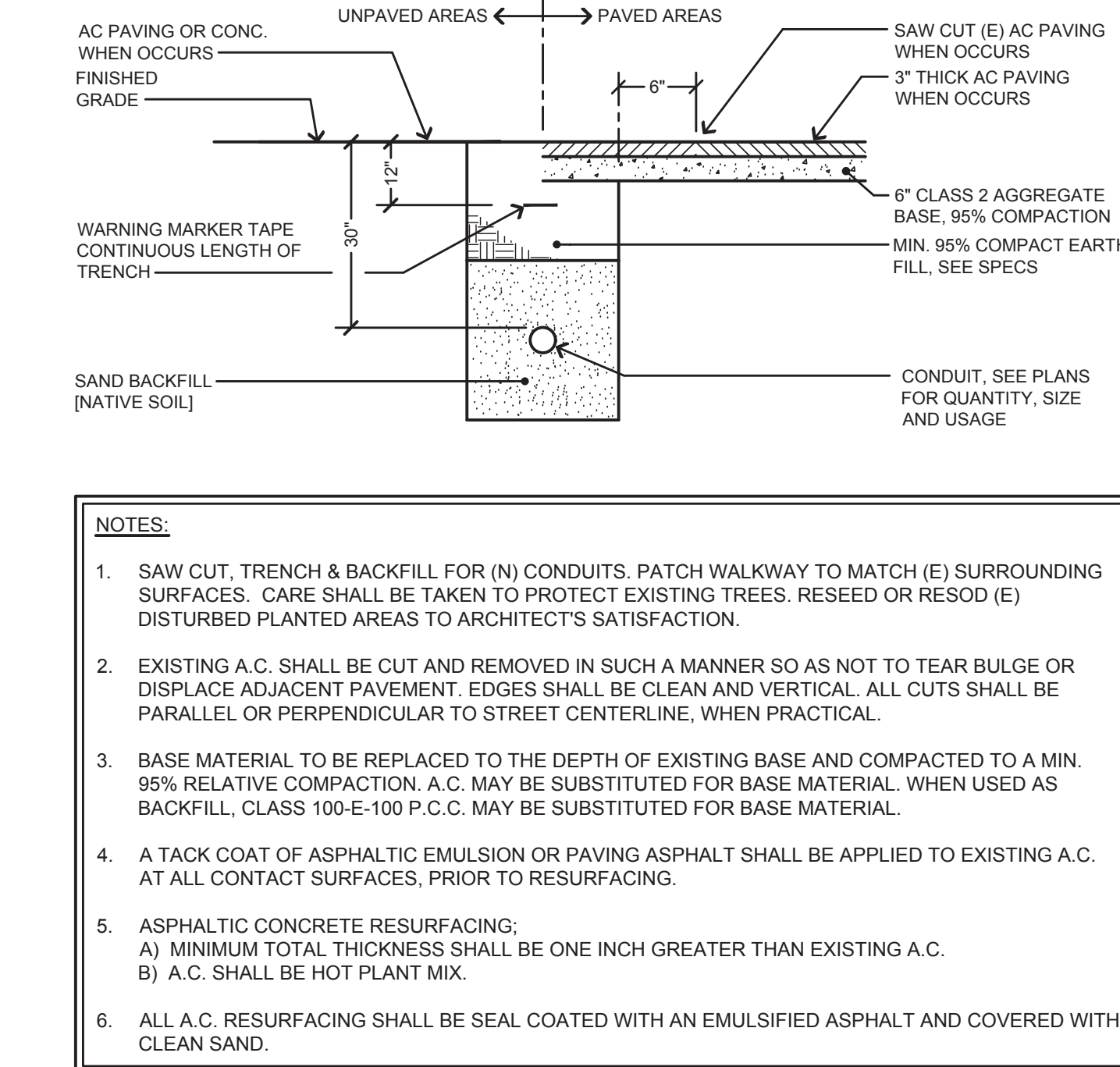
NO SCALE



- 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)

9 TYPICAL TRENCH SECTION

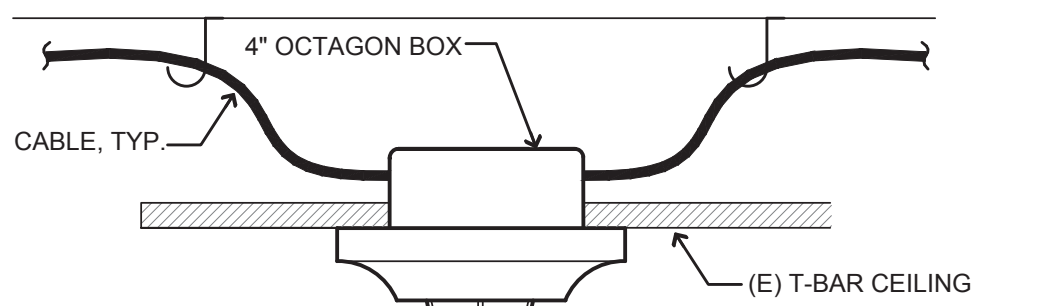
NO SCALE



- 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 RESED (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.

1 DETECTOR MOUNTING DETAIL

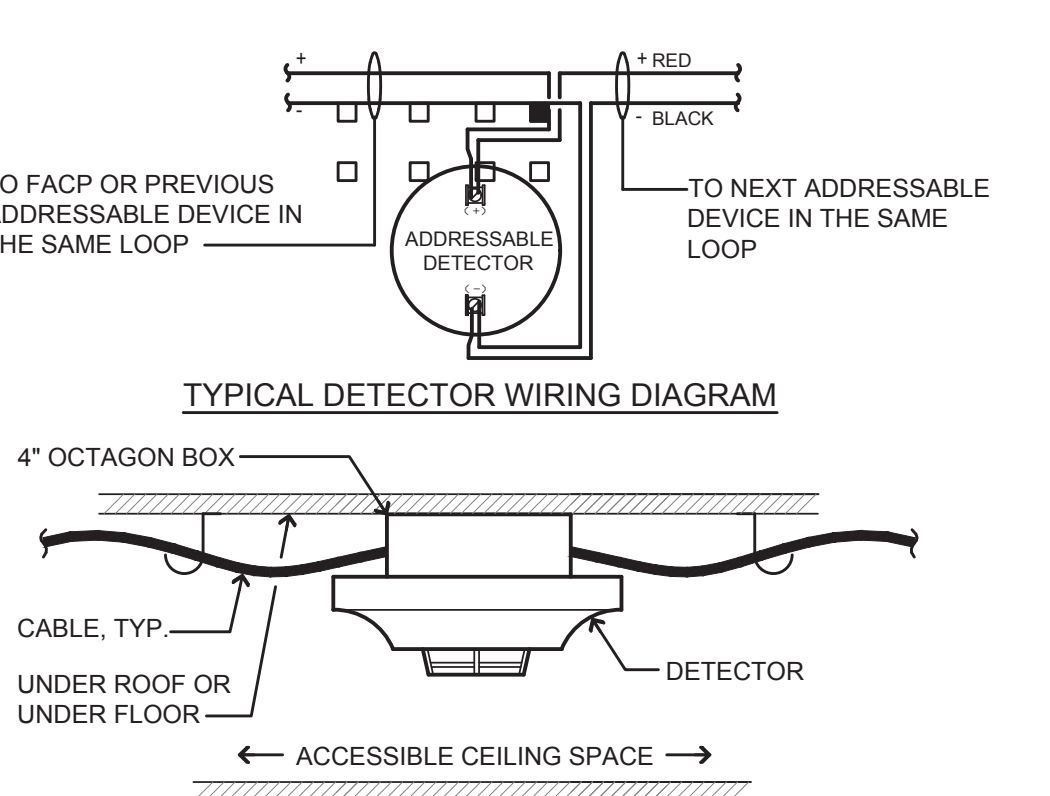
NO SCALE



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 RESED (E) DISTURBED PLANTED AREAS TO ARCHITECT'S SATISFACTION.
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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.
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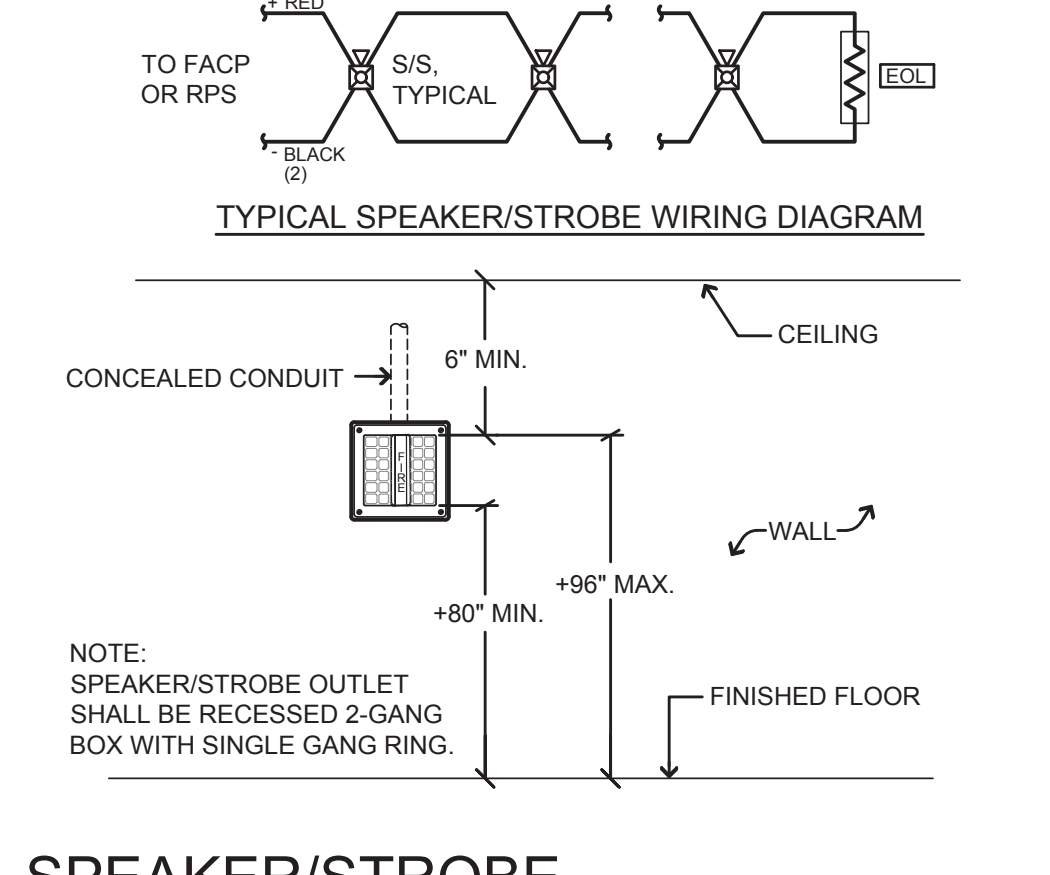
2 DETECTOR MOUNTING DETAIL

NO SCALE



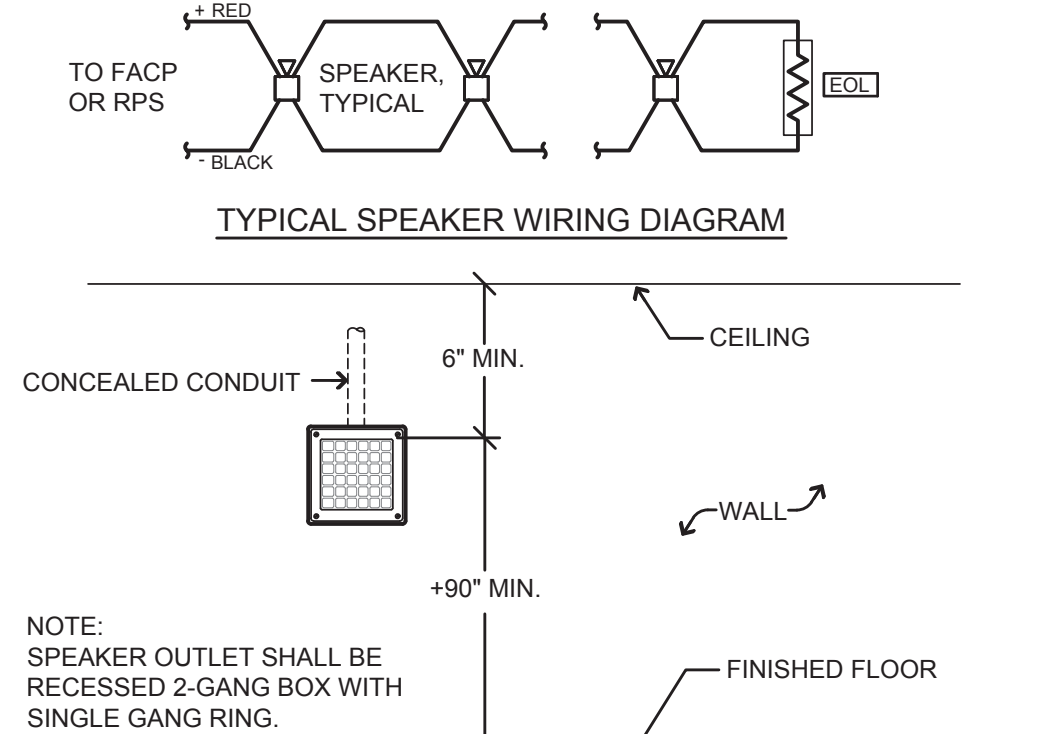
3 SPEAKER/STROBE INSTALLATION DETAIL

NO SCALE



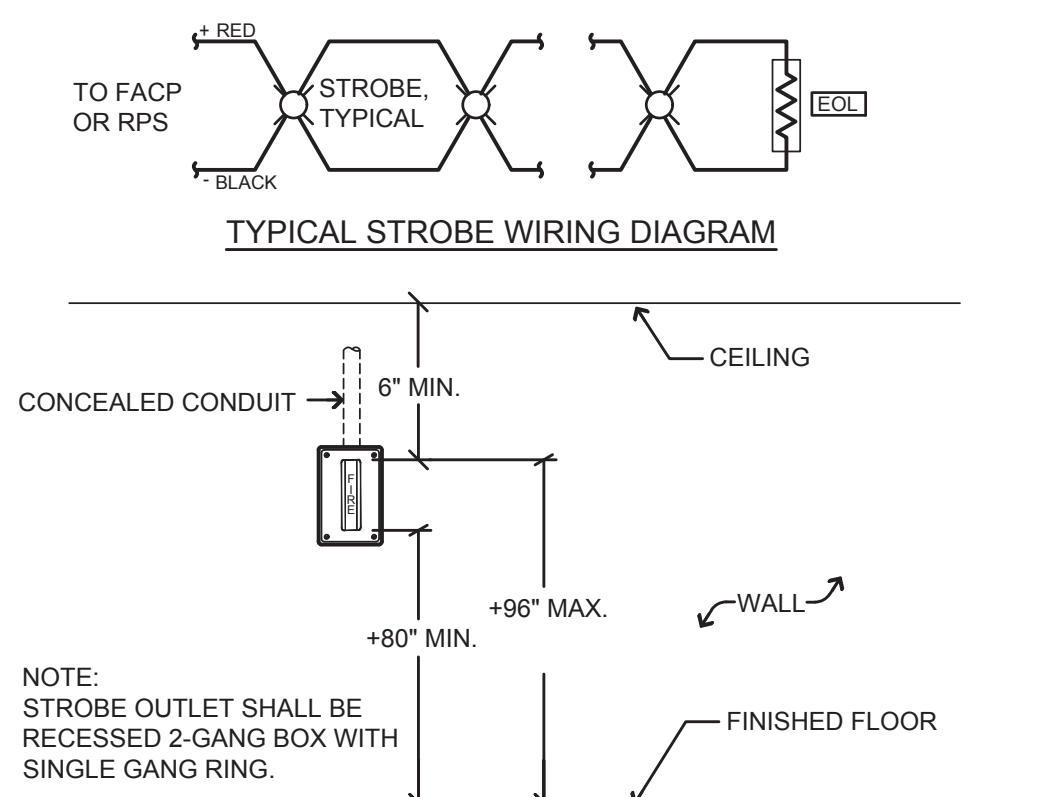
4 SPEAKER INSTALLATION DETAIL

NO SCALE



5 STROBE INSTALLATION DETAIL

NO SCALE



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SFA JOB NO: DATE:
21084 12/01/2021

FA5.1

FIRE ALARM DETAILS

CAMPUS-WIDE FIRE ALARM REPLACEMENT
HARVEST PARK MIDDLE SCHOOL
4900 VALLEY AVE, PLEASANTON, CA 94566
PLEASANTON UNIFIED SCHOOL DISTRICT

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No. C-24673
9-30-20

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