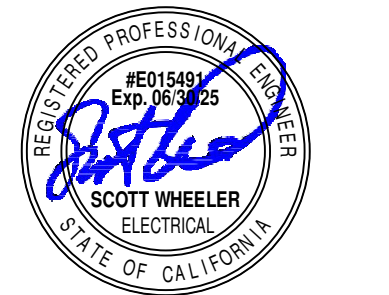


LUSD Morada Middle School Fire Alarm Upgrade
5001 E Eastview Dr, Stockton, CA 95212



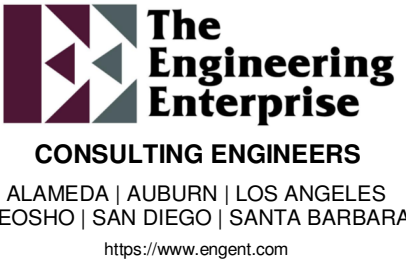
5001 E Eastview Dr, Stockton, CA 95212

REVISIONS		
1	ISA SUBMISSION	03/16/2025
#	DESCRIPTION	DATE

DESIGNER: Designer
SCALE: NTS
DATE: 2025.03.05
DSA APP. #: 02-123150
TITLE: COVERSHEET
DRAWING NO. G0.0

SYMBOLS LIST		ABBREVIATIONS	
CONVENTIONS	FIRE ALARM		
① NUMBERED NOTE, APPLIES TO ALL DRAWINGS. 1 NUMBERED SHEET NOTE, APPLIES TO DRAWING CONTAINING NOTES ONLY. EQ # EQUIPMENT IDENTIFICATION TAG: ITEM FURNISHED AND INSTALLED UNDER ANOTHER DIVISION AND WIRED UNDER THIS DIVISION. 1 E-801 DETAIL REFERENCE: DETAIL DESIGNATION SHEET NUMBER - 754 - UNDERGROUND CONDUIT DESIGNATION: CONDUIT SIZE IN INCHES CONDUIT SYSTEM DESIGNATION P: PRIMARY POWER S: SECONDARY POWER T: TELECOMMUNICATIONS QUANTITY OF CONDUITS	Ⓢ SMOKE DETECTOR INITIATING DEVICE, CEILING MOUNTED IN FLUSH OR SURFACE JUNCTION BOX. "C" DENOTES MULTI-CRITERIA CARBON MONOXIDE AND SMOKE DETECTOR. Ⓢ Ⓢ SMOKE DETECTOR INITIATING DEVICE, WALL MOUNTED IN FLUSH JUNCTION BOX, MAXIMUM 6" BELOW CEILING. Ⓢ Ⓢ SMOKE DETECTOR INITIATING DEVICE, MOUNTED TO STRUCTURE ABOVE SUSPENDED CEILING IN SURFACE JUNCTION BOX OR SUSPENDED IN JUNCTION BOX. Ⓢ Ⓢ SMOKE DETECTOR INITIATING DEVICE, DUCT-MOUNTED TYPE WITH SAMPLING TUBE. Ⓢ Ⓢ Ⓢ SMOKE DETECTOR INITIATING DEVICE, IN-DUCT MOUNTED TYPE. Ⓢ Ⓢ Ⓢ PROJECTED BEAM SMOKE DETECTOR INITIATING DEVICES TO INCLUDE TRANSMITTER, RECEIVER AND REMOTE INDICATOR STATION. WALL MOUNTED IN FLUSH JUNCTION BOX BELOW BEAM DETECTOR AT +42" AFF. BEAM DETECTORS ARE EITHER CEILING OR WALL MOUNTED 6" BELOW CEILING. Ⓢ Ⓢ Ⓢ HEAT DETECTOR INITIATING DEVICE, CEILING MOUNTED IN FLUSH OR SURFACE JUNCTION BOX. Ⓢ Ⓢ Ⓢ HEAT DETECTOR INITIATING DEVICE, WALL MOUNTED IN FLUSH JUNCTION BOX, MAXIMUM 6" BELOW CEILING. Ⓢ Ⓢ Ⓢ HEAT DETECTOR INITIATING DEVICE, MOUNTED TO STRUCTURE ABOVE SUSPENDED CEILING IN SURFACE JUNCTION BOX. Ⓢ Ⓢ Ⓢ MANUAL PULL STATION INITIATING DEVICE, WALL MOUNTED AT +48" UON. Ⓢ Ⓢ Ⓢ SPRINKLER SYSTEM WATER FLOW SWITCH, NIEC. SYMBOL DENOTES INTERFACE FOR MONITORING CONNECTION FROM FIRE ALARM SYSTEM. Ⓢ Ⓢ Ⓢ SPRINKLER SYSTEM TAMPER SWITCH, NIEC. SYMBOL DENOTES INTERFACE FOR MONITORING CONNECTION FROM FIRE ALARM SYSTEM. Ⓢ Ⓢ Ⓢ SPRINKLER SYSTEM POST INDICATING VALVE "PIV", NIEC. SYMBOL DENOTES INTERFACE FOR MONITORING CONNECTION FROM FIRE ALARM SYSTEM. INCLUDE A REMOTE MOUNTED ADDRESSABLE MONITORING MODULE AT PIV. Ⓢ Ⓢ Ⓢ REMOTE MOUNTED SINGLE INPUT, ADDRESSABLE, MONITORING MODULE FOR INITIATING CIRCUIT CONNECTION. Ⓢ Ⓢ Ⓢ REMOTE MOUNTED DUAL INPUT, ADDRESSABLE, MONITORING MODULE FOR INITIATING CIRCUIT CONNECTION. Ⓢ Ⓢ Ⓢ REMOTE MOUNTED PROGRAMMABLE CONTROL RELAY MODULE FOR ADDRESSABLE CONTROL. Ⓢ Ⓢ Ⓢ DIFFERENTIAL PRESSURE SWITCH, NIEC. SYMBOLS DENOTES INTERFACE FOR MONITORING CONNECTION FROM FIRE ALARM SYSTEM TO ANNUNCIATE FAN OPERATION, INCLUDE A REMOTE MOUNTED ADDRESSABLE MONITORING MODULE AT EACH LOCATION. Ⓢ Ⓢ Ⓢ END-OF-LINE RESISTOR. Ⓢ Ⓢ Ⓢ CURRENT TRANSFORMER FOR MONITORING AVAILABLE POWER. Ⓢ Ⓢ Ⓢ FIREMANS REMOTE ANNUNCIATOR PANEL FRAP, FLUSH WALL MOUNTED, +42" UON. Ⓢ Ⓢ Ⓢ MAGNETIC TYPE: DOOR HOLD OPEN RELEASE DEVICE, WALL MOUNTED, NIEC. SYMBOL DENOTES INTERFACE FOR POWER AND CONTROL CONNECTIONS FROM FIRE ALARM SYSTEM. Ⓢ Ⓢ Ⓢ DOOR HOLD OPEN/RELEASE DEVICE INTEGRATED IN DOOR HARDWARE CLOSURE EQUIPMENT, NIEC. SYMBOL DENOTES INTERFACE FOR POWER AND CONTROL CONNECTIONS FROM FIRE ALARM SYSTEM. Ⓢ Ⓢ Ⓢ AUDIBLE NOTIFICATION APPLIANCE, WALL MOUNTED, 6" BELOW CEILING OR +80" AFF, WHICHEVER IS LOWER. Ⓢ Ⓢ Ⓢ VISIBLE NOTIFICATION APPLIANCE, WALL MOUNTED, 6" BELOW CEILING OR +80" AFF, WHICHEVER IS LOWER. NUMBER ASSOCIATED WITH 'Ⓢ' REPRESENTS CANDELA RATING OF STROBE. Ⓢ Ⓢ Ⓢ AUDIBLE/VISIBLE NOTIFICATION APPLIANCE, WALL MOUNTED, 6" BELOW CEILING OR +80" AFF, WHICHEVER IS LOWER. NUMBER ASSOCIATED WITH 'Ⓢ' REPRESENTS CANDELA RATING OF STROBE. Ⓢ Ⓢ Ⓢ AUDIBLE NOTIFICATION APPLIANCE, CEILING MOUNTED IN FLUSH BACK BOX. Ⓢ Ⓢ Ⓢ VISIBLE NOTIFICATION APPLIANCE, CEILING MOUNTED IN FLUSH BACK BOX. NUMBER ASSOCIATED WITH 'Ⓢ' REPRESENTS CANDELA RATING OF STROBE. Ⓢ Ⓢ Ⓢ AUDIBLE/VISIBLE NOTIFICATION APPLIANCE, CEILING MOUNTED IN FLUSH BACK BOX. NUMBER ASSOCIATED WITH 'Ⓢ' REPRESENTS CANDELA RATING OF STROBE. Ⓢ Ⓢ Ⓢ MOTOR OPERATED FIRE/SMOKE DAMPER "FSD", NIEC. SYMBOL DENOTES FIRE ALARM INTERFACE WITH PROGRAMMABLE CONTROL RELAY FOR FSD CONTROL AND DUAL INPUT ADDRESSABLE MONITORING MODULE FOR POSITION MONITORING VIA END SWITCHES. Ⓢ Ⓢ Ⓢ FIRE ALARM BELL FOR SPRINKLER FLOW ANNUNCIATOR, NIEC, POWERED AND INSTALLED BY ELECTRICAL, WALL MOUNTED ON EXTERIOR OF BUILDING. Ⓢ Ⓢ Ⓢ THERMISTOR SENSOR DEVICE IN FSAE LOBBIES FOR TEMPERATURE MONITORING, WALL MOUNTED 6" BELOW CEILING. Ⓢ Ⓢ Ⓢ SMOKE ALARM FOR RESIDENTIAL DWELLING UNITS, NON-ADDRESSABLE, 120V DEVICE WITH BATTERY BACK-UP, CEILING MOUNTED IN FLUSH OR SURFACE JUNCTION BOX. Ⓢ Ⓢ Ⓢ SMOKE ALARM FOR RESIDENTIAL DWELLING UNITS, NON-ADDRESSABLE, 120V DEVICE WITH BATTERY BACK-UP, WALL MOUNTED MAXIMUM 6" BELOW CEILING IN FLUSH JUNCTION BOX. Ⓢ Ⓢ Ⓢ COMBINATION SMOKE AND CARBON MONOXIDE ALARM FOR RESIDENTIAL DWELLING UNITS, NON-ADDRESSABLE, 120V DEVICE WITH BATTERY BACK-UP, CEILING MOUNTED IN FLUSH OR SURFACE JUNCTION BOX. Ⓢ Ⓢ Ⓢ COMBINATION SMOKE AND CARBON MONOXIDE ALARM FOR RESIDENTIAL DWELLING UNITS, NON-ADDRESSABLE, 120V DEVICE WITH BATTERY BACK-UP, WALL MOUNTED MAXIMUM 6" BELOW CEILING IN FLUSH JUNCTION BOX. Ⓢ Ⓢ Ⓢ REMOTE 2-WAY COMMUNICATION STATION, WALL MOUNTED, +42" AFF. Ⓢ Ⓢ Ⓢ 2-WAY COMMUNICATION BASE STATION, WALL MOUNTED, +42" AFF.	APPLIANCES	
DO	DOUBLE OVEN	MW	MICROWAVE
DW	DISHWASHER	RF	REFRIGERATOR
ED	ELECTRIC DRYER	RH	RANGE HOOD
EO	ELECTRIC OVEN/RANGE	UR	UNDERCOUNTER REFRIGERATOR
GD	GARBAGE DISPOSER	WC	WINE COOLER
GR	GAS RANGE	WM	WASHING MACHINE

CONVENTIONS	FIRE ALARM
① NUMBERED NOTE, APPLIES TO ALL DRAWINGS. 1 NUMBERED SHEET NOTE, APPLIES TO DRAWING CONTAINING NOTES ONLY. EQ # EQUIPMENT IDENTIFICATION TAG: ITEM FURNISHED AND INSTALLED UNDER ANOTHER DIVISION AND WIRED UNDER THIS DIVISION. 1 E-801 DETAIL REFERENCE: DETAIL DESIGNATION SHEET NUMBER - 754 - UNDERGROUND CONDUIT DESIGNATION: CONDUIT SIZE IN INCHES CONDUIT SYSTEM DESIGNATION P: PRIMARY POWER S: SECONDARY POWER T: TELECOMMUNICATIONS QUANTITY OF CONDUITS	Ⓢ SMOKE DETECTOR INITIATING DEVICE, CEILING MOUNTED IN FLUSH OR SURFACE JUNCTION BOX. "C" DENOTES MULTI-CRITERIA CARBON MONOXIDE AND SMOKE DETECTOR. Ⓢ Ⓢ SMOKE DETECTOR INITIATING DEVICE, WALL MOUNTED IN FLUSH JUNCTION BOX, MAXIMUM 6" BELOW CEILING. Ⓢ Ⓢ SMOKE DETECTOR INITIATING DEVICE, MOUNTED TO STRUCTURE ABOVE SUSPENDED CEILING IN SURFACE JUNCTION BOX OR SUSPENDED IN JUNCTION BOX. Ⓢ Ⓢ SMOKE DETECTOR INITIATING DEVICE, DUCT-MOUNTED TYPE WITH SAMPLING TUBE. Ⓢ Ⓢ Ⓢ SMOKE DETECTOR INITIATING DEVICE, IN-DUCT MOUNTED TYPE. Ⓢ Ⓢ Ⓢ PROJECTED BEAM SMOKE DETECTOR INITIATING DEVICES TO INCLUDE TRANSMITTER, RECEIVER AND REMOTE INDICATOR STATION. WALL MOUNTED IN FLUSH JUNCTION BOX BELOW BEAM DETECTOR AT +42" AFF. BEAM DETECTORS ARE EITHER CEILING OR WALL MOUNTED 6" BELOW CEILING. Ⓢ Ⓢ Ⓢ HEAT DETECTOR INITIATING DEVICE, CEILING MOUNTED IN FLUSH OR SURFACE JUNCTION BOX. Ⓢ Ⓢ Ⓢ HEAT DETECTOR INITIATING DEVICE, WALL MOUNTED IN FLUSH JUNCTION BOX, MAXIMUM 6" BELOW CEILING. Ⓢ Ⓢ Ⓢ HEAT DETECTOR INITIATING DEVICE, MOUNTED TO STRUCTURE ABOVE SUSPENDED CEILING IN SURFACE JUNCTION BOX. Ⓢ Ⓢ Ⓢ MANUAL PULL STATION INITIATING DEVICE, WALL MOUNTED AT +48" UON. Ⓢ Ⓢ Ⓢ SPRINKLER SYSTEM WATER FLOW SWITCH, NIEC. SYMBOL DENOTES INTERFACE FOR MONITORING CONNECTION FROM FIRE ALARM SYSTEM. Ⓢ Ⓢ Ⓢ SPRINKLER SYSTEM TAMPER SWITCH, NIEC. SYMBOL DENOTES INTERFACE FOR MONITORING CONNECTION FROM FIRE ALARM SYSTEM. Ⓢ Ⓢ Ⓢ SPRINKLER SYSTEM POST INDICATING VALVE "PIV", NIEC. SYMBOL DENOTES INTERFACE FOR MONITORING CONNECTION FROM FIRE ALARM SYSTEM. INCLUDE A REMOTE MOUNTED ADDRESSABLE MONITORING MODULE AT PIV. Ⓢ Ⓢ Ⓢ REMOTE MOUNTED SINGLE INPUT, ADDRESSABLE, MONITORING MODULE FOR INITIATING CIRCUIT CONNECTION. Ⓢ Ⓢ Ⓢ REMOTE MOUNTED DUAL INPUT, ADDRESSABLE, MONITORING MODULE FOR INITIATING CIRCUIT CONNECTION. Ⓢ Ⓢ Ⓢ REMOTE MOUNTED PROGRAMMABLE CONTROL RELAY MODULE FOR ADDRESSABLE CONTROL. Ⓢ Ⓢ Ⓢ DIFFERENTIAL PRESSURE SWITCH, NIEC. SYMBOLS DENOTES INTERFACE FOR MONITORING CONNECTION FROM FIRE ALARM SYSTEM TO ANNUNCIATE FAN OPERATION, INCLUDE A REMOTE MOUNTED ADDRESSABLE MONITORING MODULE AT EACH LOCATION. Ⓢ Ⓢ Ⓢ END-OF-LINE RESISTOR. Ⓢ Ⓢ Ⓢ CURRENT TRANSFORMER FOR MONITORING AVAILABLE POWER. Ⓢ Ⓢ Ⓢ FIREMANS REMOTE ANNUNCIATOR PANEL FRAP, FLUSH WALL MOUNTED, +42" UON. Ⓢ Ⓢ Ⓢ MAGNETIC TYPE: DOOR HOLD OPEN RELEASE DEVICE, WALL MOUNTED, NIEC. SYMBOL DENOTES INTERFACE FOR POWER AND CONTROL CONNECTIONS FROM FIRE ALARM SYSTEM. Ⓢ Ⓢ Ⓢ DOOR HOLD OPEN/RELEASE DEVICE INTEGRATED IN DOOR HARDWARE CLOSURE EQUIPMENT, NIEC. SYMBOL DENOTES INTERFACE FOR POWER AND CONTROL CONNECTIONS FROM FIRE ALARM SYSTEM. Ⓢ Ⓢ Ⓢ AUDIBLE NOTIFICATION APPLIANCE, WALL MOUNTED, 6" BELOW CEILING OR +80" AFF, WHICHEVER IS LOWER. Ⓢ Ⓢ Ⓢ VISIBLE NOTIFICATION APPLIANCE, WALL MOUNTED, 6" BELOW CEILING OR +80" AFF, WHICHEVER IS LOWER. NUMBER ASSOCIATED WITH 'Ⓢ' REPRESENTS CANDELA RATING OF STROBE. Ⓢ Ⓢ Ⓢ AUDIBLE/VISIBLE NOTIFICATION APPLIANCE, WALL MOUNTED, 6" BELOW CEILING OR +80" AFF, WHICHEVER IS LOWER. NUMBER ASSOCIATED WITH 'Ⓢ' REPRESENTS CANDELA RATING OF STROBE. Ⓢ Ⓢ Ⓢ AUDIBLE NOTIFICATION APPLIANCE, CEILING MOUNTED IN FLUSH BACK BOX. Ⓢ Ⓢ Ⓢ VISIBLE NOTIFICATION APPLIANCE, CEILING MOUNTED IN FLUSH BACK BOX. NUMBER ASSOCIATED WITH 'Ⓢ' REPRESENTS CANDELA RATING OF STROBE. Ⓢ Ⓢ Ⓢ AUDIBLE/VISIBLE NOTIFICATION APPLIANCE, CEILING MOUNTED IN FLUSH BACK BOX. NUMBER ASSOCIATED WITH 'Ⓢ' REPRESENTS CANDELA RATING OF STROBE. Ⓢ Ⓢ Ⓢ MOTOR OPERATED FIRE/SMOKE DAMPER "FSD", NIEC. SYMBOL DENOTES FIRE ALARM INTERFACE WITH PROGRAMMABLE CONTROL RELAY FOR FSD CONTROL AND DUAL INPUT ADDRESSABLE MONITORING MODULE FOR POSITION MONITORING VIA END SWITCHES. Ⓢ Ⓢ Ⓢ FIRE ALARM BELL FOR SPRINKLER FLOW ANNUNCIATOR, NIEC, POWERED AND INSTALLED BY ELECTRICAL, WALL MOUNTED ON EXTERIOR OF BUILDING. Ⓢ Ⓢ Ⓢ THERMISTOR SENSOR DEVICE IN FSAE LOBBIES FOR TEMPERATURE MONITORING, WALL MOUNTED 6" BELOW CEILING. Ⓢ Ⓢ Ⓢ SMOKE ALARM FOR RESIDENTIAL DWELLING UNITS, NON-ADDRESSABLE, 120V DEVICE WITH BATTERY BACK-UP, CEILING MOUNTED IN FLUSH OR SURFACE JUNCTION BOX. Ⓢ Ⓢ Ⓢ SMOKE ALARM FOR RESIDENTIAL DWELLING UNITS, NON-ADDRESSABLE, 120V DEVICE WITH BATTERY BACK-UP, WALL MOUNTED MAXIMUM 6" BELOW CEILING IN FLUSH JUNCTION BOX. Ⓢ Ⓢ Ⓢ COMBINATION SMOKE AND CARBON MONOXIDE ALARM FOR RESIDENTIAL DWELLING UNITS, NON-ADDRESSABLE, 120V DEVICE WITH BATTERY BACK-UP, CEILING MOUNTED IN FLUSH OR SURFACE JUNCTION BOX. Ⓢ Ⓢ Ⓢ COMBINATION SMOKE AND CARBON MONOXIDE ALARM FOR RESIDENTIAL DWELLING UNITS, NON-ADDRESSABLE, 120V DEVICE WITH BATTERY BACK-UP, WALL MOUNTED MAXIMUM 6" BELOW CEILING IN FLUSH JUNCTION BOX. Ⓢ Ⓢ Ⓢ REMOTE 2-WAY COMMUNICATION STATION, WALL MOUNTED, +42" AFF. Ⓢ Ⓢ Ⓢ 2-WAY COMMUNICATION BASE STATION, WALL MOUNTED, +42" AFF.
LINESTYLES	
EXISTING TO REMAIN EXISTING TO BE REMOVED (R) OR RELOCATED (RR) NEW CONSTRUCTION FUTURE CONSTRUCTION	



LUSD Morada Middle School Fire Alarm Upgrade

5001 E Eastview Dr, Stockton, CA 95212

REVISIONS	
1	DSA SUBMISSION
2	DATE

DESIGNER:Designer

SCALE:

DATE:2025.03.05

DSA APP. #: 02-123150

TITLE:

SYMBOLS, NOTES AND ABBREVIATIONS

DRAWING NO.

FA0.1

FIRE ALARM SYSTEM MATRIX											
	MANUAL PULL STATION	SMOKE DETECTOR	HEAT DETECTOR	DUCT SMOKE DETECTOR	WATERGLOW SWITCH	TAMPER SWITCH	KITCHEN HOOD SUPPRESSION SYSTEM	OPENING HOOT CIRCUIT	GROUND FAULT	AC LOSS	BATTERY TROUBLE
ALARM AT FACP & REMOTE ANNUNCIATOR(S)	●	●	●	●	●	●					
SUPERVISORY AT FACP & REMOTE ANNUNCIATOR(S)				●		●					
TROUBLE AT FACP & REMOTE ANNUNCIATOR(S)							●	●	●	●	
REPORT EVENT TO OFFSITE SUPERVISING STATION	●	●	●	●	●	●	●	●	●	●	
SHUT DOWN ASSOCIATED AHU UNIT >2000 CFM			●								
ACTIVATE SMOKE FIRE DAMPERS			●								
ACTIVATE EVACUATION SIGNALS	●	●	●	●		●					
DEACTIVATE EVACUATION SIGNALS										●	●
SYSTEM NORMAL											

1 MOUNT DOOR HOLDER SMOKE DETECTOR MAXIMUM 3' FROM DOOR AND A MINIMUM OF 1' FROM DOOR.

2 ON SMOOTH CEILINGS, SPACING FOR SPOT-TYPE SMOKE DETECTORS SHALL BE IN ACCORDANCE WITH NFPA 17.4.2.3.1 THROUGH 17.4.2.3.4.

3 NFPA 72 17.5.1 IN SPACES SERVED BY AIR-HANDLING SYSTEMS, DETECTORS SHALL NOT BE LOCATED WHERE AIRFLOW PREVENTS OPERATION OF THE DETECTORS.

4 MOUNT SMOKE DETECTOR FOR FIRE SMOKE DAMPER (FSD) WITHIN 3' OF SUPPLY VENT.

5 DUCT SMOKE DETECTOR SHALL BE MOUNTED 6 TO 10 TIMES THE DIAMETER OF DUCT FROM BEND OR OBSTRUCTION.

6 DETECTORS INSTALLED IN CONCEALED LOCATIONS WHERE THE SPECIFIC DETECTOR ALARM OR SUPERVISORY SIGNAL IS INDICATED AT THE CONTROL UNIT (AND ON THE DRAWINGS WITH ITS SPECIFIC LOCATION AND FUNCTIONS) SHALL NOT BE REQUIRED TO BE PROVIDED WITH REMOTE ALARM INDICATORS AS SPECIFIED IN NFPA 17.4.7.

7 NFPA 72 17.4.2.4.2 FOR LEVEL CEILINGS, THE FOLLOWING SHALL APPLY:
1) FOR CEILINGS WITH BEAM DEPTHS OF LESS THAN 10 PERCENT OF THE CEILING HEIGHT (0.1 H), THE FOLLOWING SHALL APPLY: (A) SMOOTH CEILING SPACING SHALL BE PERMITTED.

8 NFPA 17.6.3.3.1.1 A CEILING SHALL BE TREATED AS A SMOOTH CEILING IF THE BEAMS PROJECT NO MORE THAN 4 IN. (100 MM) BELOW THE CEILING.

9 UNLESS OTHERWISE MODIFIED BY NFPA 17.6.3.2.2, NFPA 17.6.3.3.2, OR NFPA 17.6.3.7, SPOT-TYPE HEAT-SENSING FIRE DETECTORS SHALL BE LOCATED ON THE CEILING NOT LESS THAN 4 IN. (100 MM) FROM THE SIDEWALL OR ON THE SIDEWALLS BETWEEN 4 IN. AND 12 IN. (100 MM AND 300 MM) FROM THE CEILING.

10 NFPA 72 17.14.5 THE OPERABLE PART OF A MANUALLY ACTUATED ALARM-INITIATING DEVICE SHALL NOT BE LESS THAN 48" AFF AND NOT MORE THAN 48" AFF. NFPA 72 17.14.8.4 MANUAL FIRE ALARM BOXES SHALL BE LOCATED WITHIN 5' OF EACH EXIT DOORWAY ON EACH FLOOR.

11 NFPA 72 18.4.8.1 MOUNT EXTERIOR HORN AT 90° MINIMUM AND 100° MAXIMUM TO THE TOP OF THE DEVICE.

12 IF CEILING HEIGHTS ALLOW, AND UNLESS OTHERWISE PERMITTED BY NFPA 18.4.9.2 THROUGH NFPA 18.4.9.5, WALL-MOUNTED APPLIANCES SHALL HAVE THEIR TOPS ABOVE THE FINISHED FLOORS AT HEIGHTS OF NOT LESS THAN 90 IN. (2.29 M) AND BELOW THE FINISHED CEILINGS AT DISTANCES OF NOT LESS THAN 6 IN. (150 MM).

13 WALL-MOUNTED APPLIANCES SHALL BE MOUNTED SUCH THAT THE ENTIRE LENS IS NOT LESS THAN 80 IN. (2.03 M) AND NOT GREATER THAN 96 IN. (2.44 M) ABOVE THE FINISHED FLOOR OR AT THE MOUNTING HEIGHT SPECIFIED USING THE PERFORMANCE-BASED ALTERNATIVE OF NFPA 18.5.5.9.

14 NFPA 72 10.4.4 (3) MOUNT FIRE ALARM CONTROL PANELS AND ANNUNCIATORS AT A MAXIMUM OF 48" TO THE TOP OF THE CONTROL PANEL OR KEY BOARDS.

15 CEILING MOUNTED HORN / SPEAKER STROBE

16 MONITOR MODULE

17 RATE OF RISE HEAT DETECTOR, MOUNTED IN ABOVE CEILING / ATTIC SPACE.

18 APPROVED WIRE MANAGEMENT, I.E. J-HOOK OR D-RING.

19 ABOVE CEILING CIRCUITS ROUTING IN AN ACCESSIBLE ATTIC SPACE.

20 NON-ACCESSIBLE CEILINGS MUST USE EITHER EMT OR APPROVED WIREMOLD RACEWAY, AS SHOWN ON PLANS.

21 MULTI-CRITERIA PHOTOELECTRIC SMOKE / CO DETECTOR WITH SOUNDER BASE. MOUNT IN AREAS WHERE FOSSIL FUEL IS USED.

22 NFPA 72 17.5.3.1.4 WHERE CONCEALED ACCESSIBLE SPACES ABOVE SUSPENDED CEILINGS ARE USED AS A RETURN AIR PLENUM MEETING THE REQUIREMENTS OF NFPA 90A DETECTION SHALL BE PROVIDED IN ONE OF THE FOLLOWING MEANS:
1. SMOKE DETECTION SHALL BE PROVIDED IN ACCORDANCE WITH 17.5.2, OR
2. SMOKE DETECTION SHALL BE PROVIDED AT EACH CONNECTION FROM THE RETURN AIR PLENUM TO THE CENTRAL AIR-HANDLING SYSTEM.

23 NFPA 72 7.7.2.1 WITH EVERY NEW SYSTEM, A DOCUMENTATION CABINET SHALL BE INSTALLED AT THE SYSTEM CONTROL UNIT OR AT ANOTHER APPROVED LOCATION AT THE PROTECTED PREMISES.

24 NFPA 72 17.6.4.2.1 WHERE THE DETECTION OF SMOKE IN THE SUPPLY AIR SYSTEM IS REQUIRED BY OTHER NFPA STANDARDS, A DETECTOR(S) LISTED FOR THE AIR VELOCITY PRESENT SHALL BE INSTALLED IN THE SUPPLY AIR DUCT DOWNSTREAM OF BOTH THE FAN AND THE FILTERS.

25 SMOKE DETECTORS SHALL NOT BE CLOSER THAN 1' FROM SPRINKLERS.

26 NFPA 72 17.14.6 MANUAL FIRE ALARM BOXES SHALL BE LOCATED WITHIN 60" OF THE EXIT DOORWAY OPENING.

18

17

16

15

14

13

12

11

10

9

8

7

6

5

4

3

2

1

24

23

22

21

20

19

18

17

16

15

14

13

12

11

10

9

8

7

6

5

4

3

2

1

24

23

22

21

20

19

18

17

16

15

14

13

12

11

10

9

8

7

6

5

4

3

2

1

24

23

22

21

20

19

18

17

16

15

14

13

12

11

10

9

8

7

6

5

4

3

2

1

DUCT SMOKE DETECTOR

FIRE SMOKE DAMPER

24

23

22

21

20

19

18

17

16

15

14

13

12

11

10

9

8

7

6

5

4

3

2

1

24

23

22

21

20

19

18

17

16

15

14

13

12

11

10

9

8

7

6

5

4

3

2

1

24

23

22

21

20

19

18

17

16

15

14

13

12

11

10

9

8

7

6

5

4

3

2

1

24

23

22

21

20

19

18

17

16

15

14

13

12

11

10

9

8

7

6

5

4

3

2

1

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

DUCT SMOKE DETECTOR

FIRE SMOKE DAMPER

24

23

22

21

20

19

18

17

16

15

14

13

12

11

10

9

8

7

6

5

4

3

2

1

24

23

22

21

20

19

18

17

16

15

14

13

12

11

10

9

8

7

6

5

4

3

2

1

24

23

22

21

20

19

18

17

16

15

14

13

12

11

10

9

8

7

6

5

4

3

2

1

24

23

22

21

20

19

18

17

16

15

14

13

12

11

10

9

8

7

6

5

4

3

2

1

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

DUCT SMOKE DETECTOR

FIRE SMOKE DAMPER

24

23

22

21

20

19

18

17

16

15

14

13

12

11

10

9

8

7

6

5

4

3

2

1

24

23

22

21

20

19

18

17

16

15

14

13

12

11

10

9

8

7

6

5

4

3

2

1

24

23

22

21

20

19

18

17

16

15

14

13

12

11

10

9

8

7

6

5

4

3

2

1

24

23

22

21

20

19

18

17

16

15

14

13

12

11

10

9

8

7

6

5

4

3

2

1

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

DUCT SMOKE DETECTOR

FIRE SMOKE DAMPER

24

23

22

21

20

19

18

17

16

15

14

13

12

11

10

9

8

7

6

5

4

3

2

1

24

23

22

21

20

19

18

17

16

15

14

13

12

11

10

9

8

7

6

5

4

3

2

1

24

23

22

21

20

19

18

17

16

15

14

13

12

11

10

9

8

7

6

5

4

3

2

1

24

23

22

21

20

19

18

17

16

15

14

13

12

11

10

9

8

7

6

5

4

3

2

1

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

DUCT SMOKE DETECTOR

FIRE SMOKE DAMPER

24

23

22

21

20

19

18

17

16

15

14

13

12

11

10

9

8

7

6

5

4

3

2

1

24

23

22

21

20

19

18

17

16

15

14

13

12

11

10

9

8

7

6

5

4

3

2

1

24

23

22

21

20

19

18

17

16

15

14

13

12

11

10

9

8

7

6

5

4

3

2

1

24

23

22

21

20

19

18

17

16

15

14

13

12

11

10

9

8

7

6

5

4

3

2

1

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

DUCT SMOKE DETECTOR

FIRE SMOKE DAMPER

24

23

22

21

20

19

18

17

16

15

14

13

12

11

10

9

8

7

6

5

4

3

2

1

24

23

22

21

20

19

18

17

16

15

14

13

12

11

10

9

8

7

6

5

4

3

2

1

24

23

22

21

20

19

18

17

16

15

14

13

12

11

10

9

8

7

6

5

4

3

2

1

24

23

22

21

20

19

18

17

16

15

14

13

12

11

10

9

8

7

6

5

4

3

2

1

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

DUCT SMOKE DETECTOR

FIRE SMOKE DAMPER

24

23

22

21

20

19

18

17

16

15

14

13

12

11

10

9

8

7

6

5

4

3

2

1

24

23

22

21

20

19

18

17

16

15

14

13

12

11

10

9

8

7

6

5

4

3

2

1

24

23

22

21

20

19

18

17

16

15

14

13

12

11

10

9

8

7

6

5

4

3

2

1

24

23

22

21

20

19

18

17

16

15

14

13

12

11

10

9

8

7

6

5

4

3

2

1

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

LUSD Morada Middle School Fire Alarm Upgrade

5001 E Eastview Dr, Stockton, CA 95212

REVISIONS	
1	DSA SUBMISSION 02/05/2025
#	DESCRIPTION DATE

DESIGNER: Designer

SCALE: NTS

DATE: 2025.03.05

DSA APP. #: 02-123150

TITLE:

**FIRE ALARM
RISER DIAGRAM -
SLC**

DRAWING NO.

FA0.3

120VAC DEDICATED CIRCUIT
WITH RED LOCKING
BREAKER



1

FIRE ALARM RISER DIAGRAM - SLC

SCALE: NTS

LUSD Morada Middle School Fire Alarm Upgrade

5001 E Eastview Dr, Stockton, CA 95212

REVISIONS		
1	DSA SUBMISSION	02/26/2025
#	DESCRIPTION	DATE

DESIGNER: Designer

SCALE: NTS

DATE: 2025.03.05

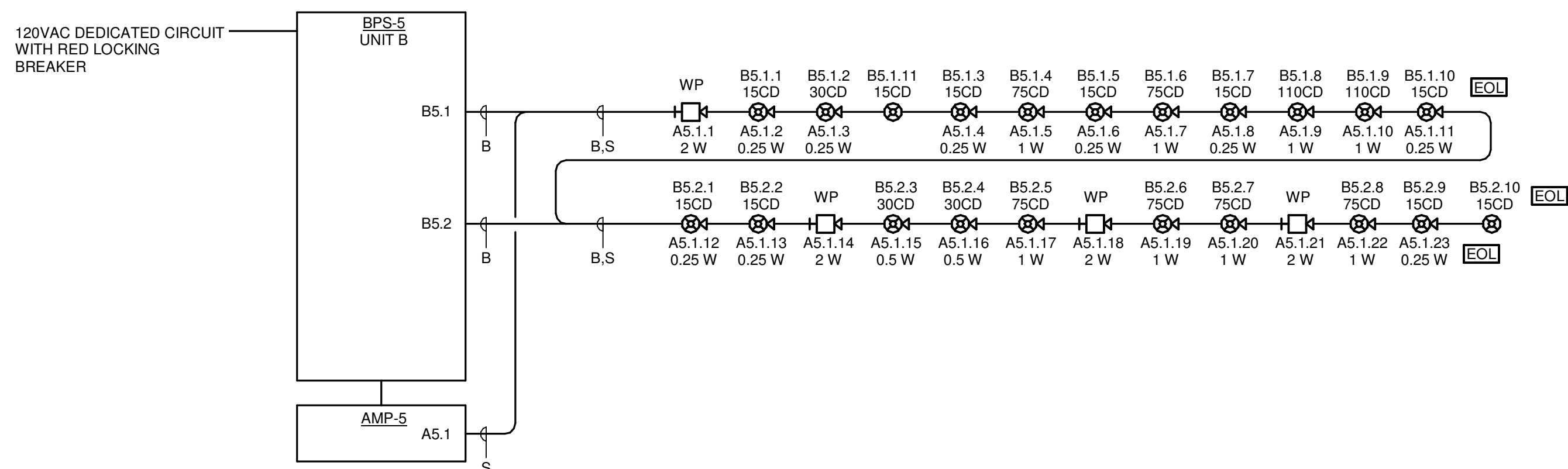
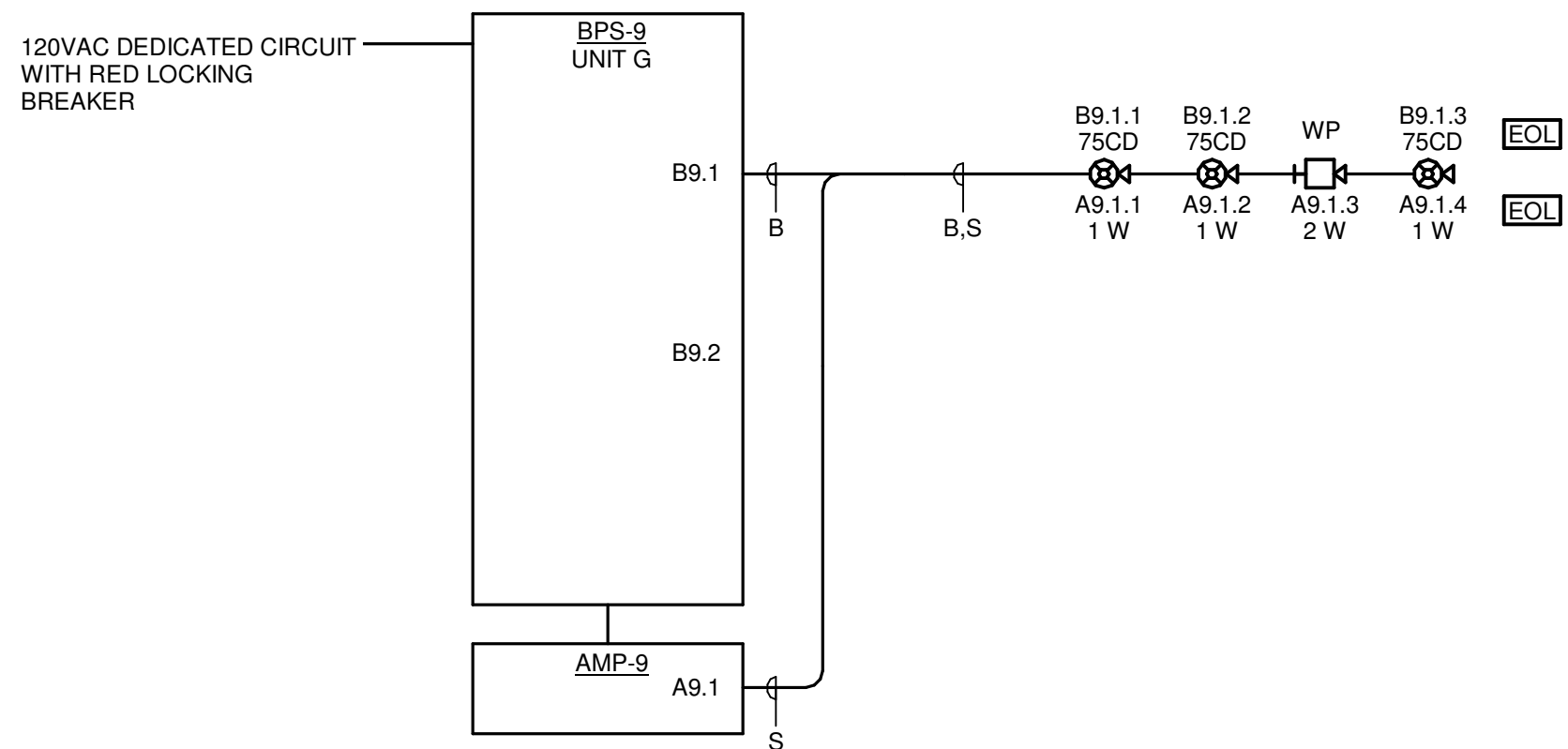
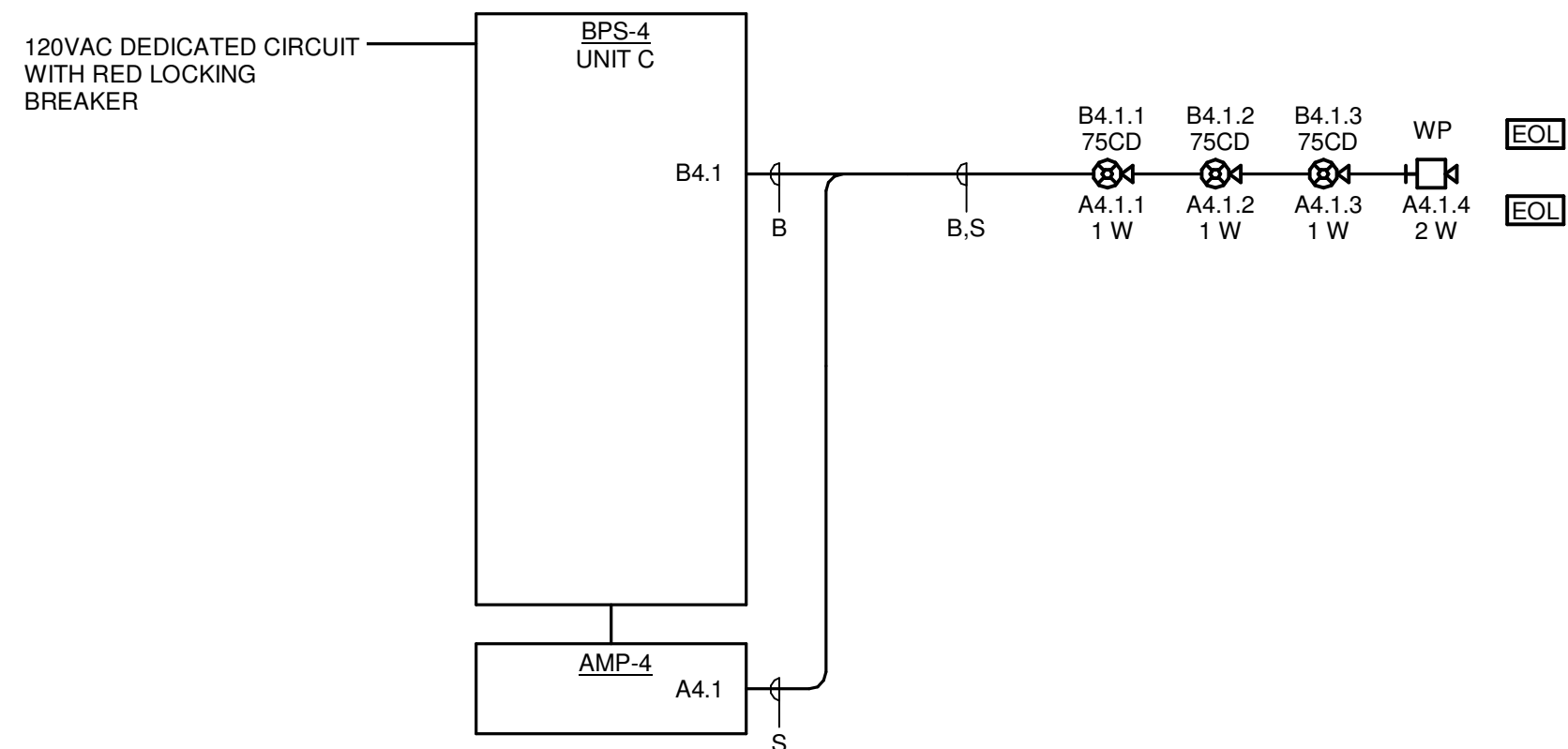
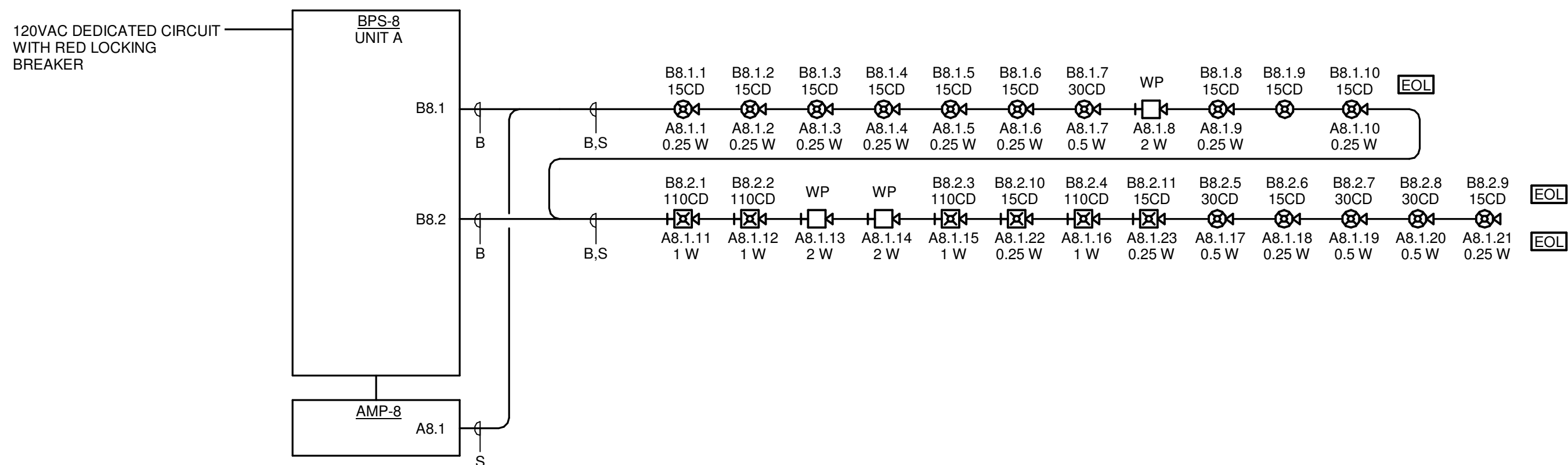
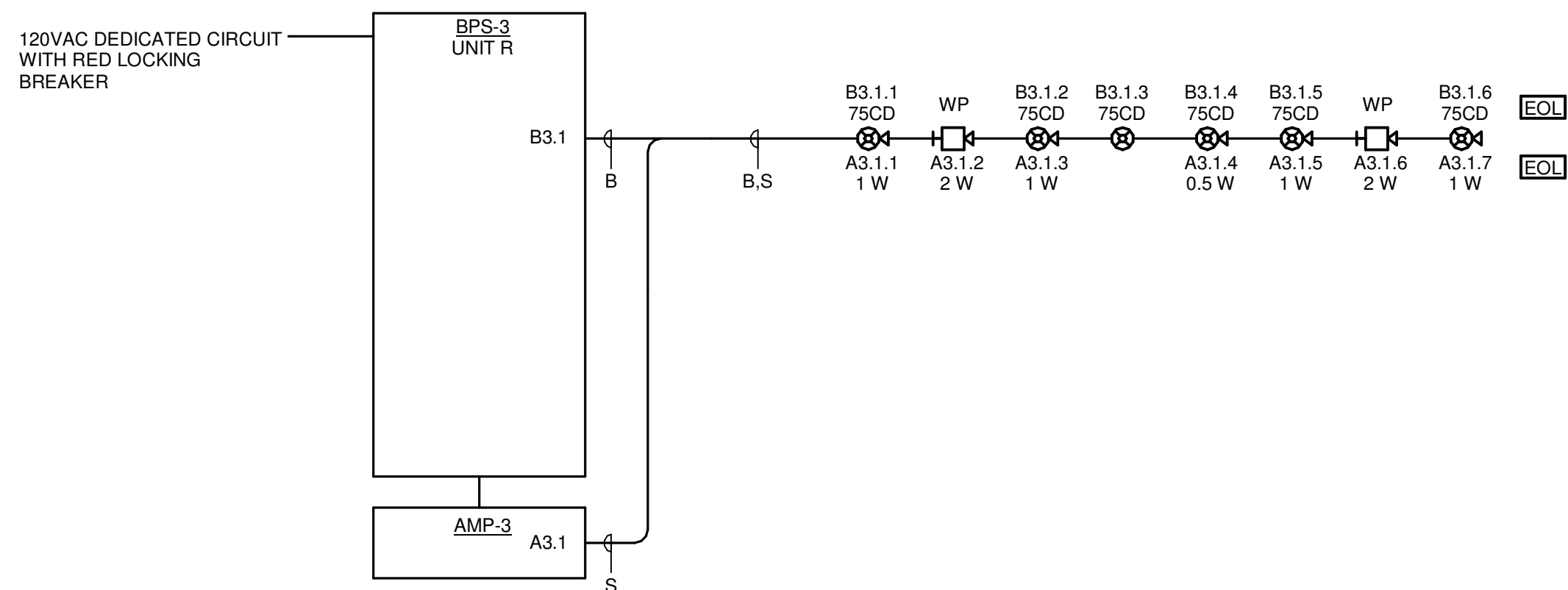
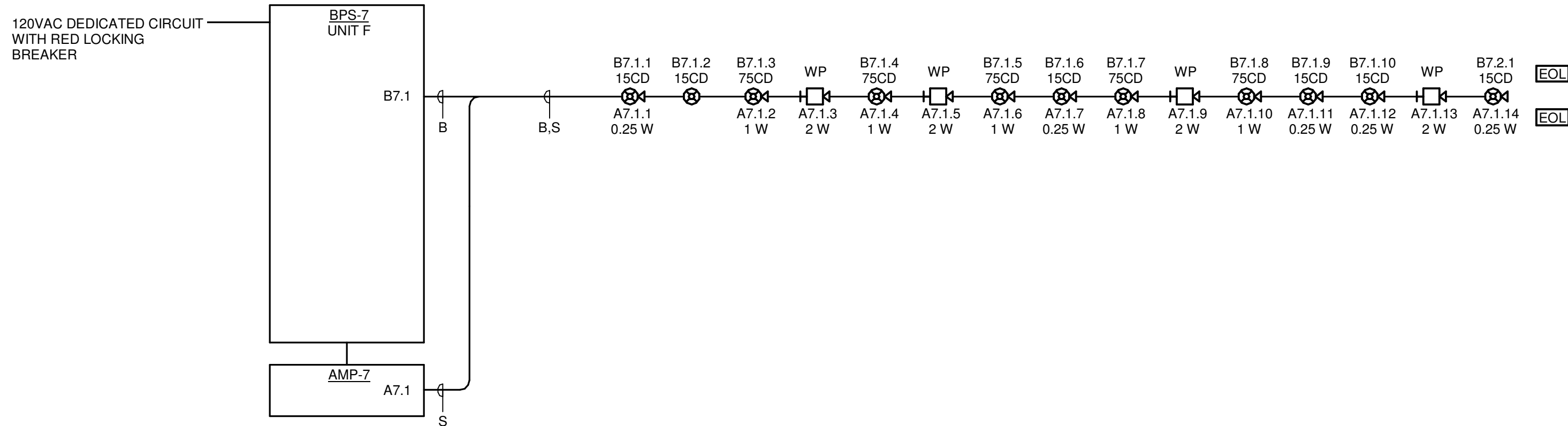
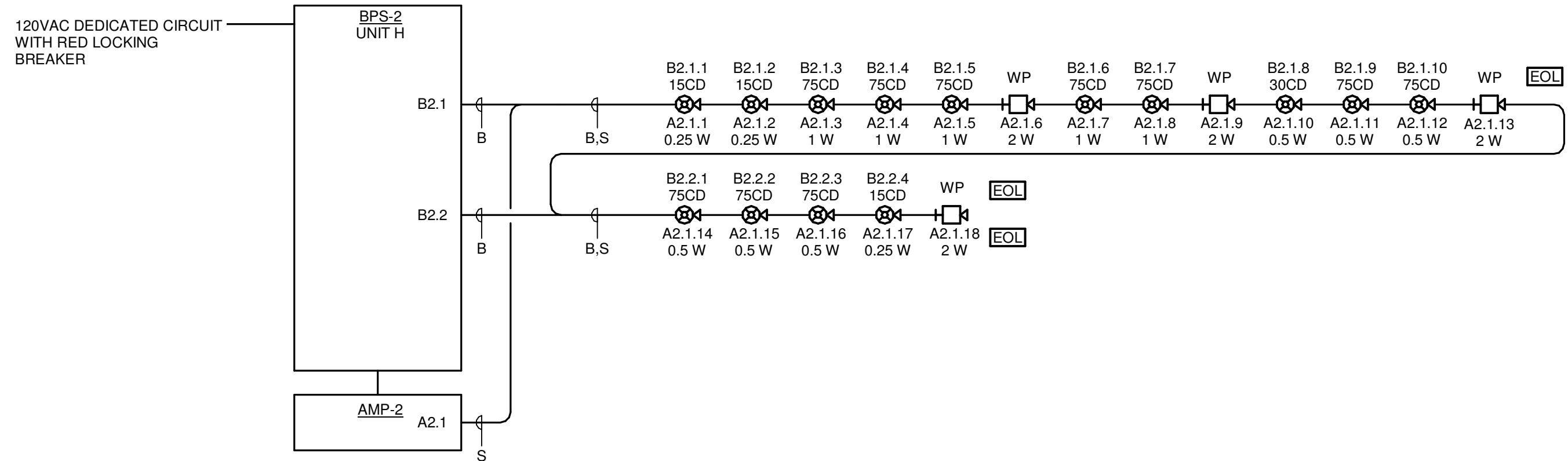
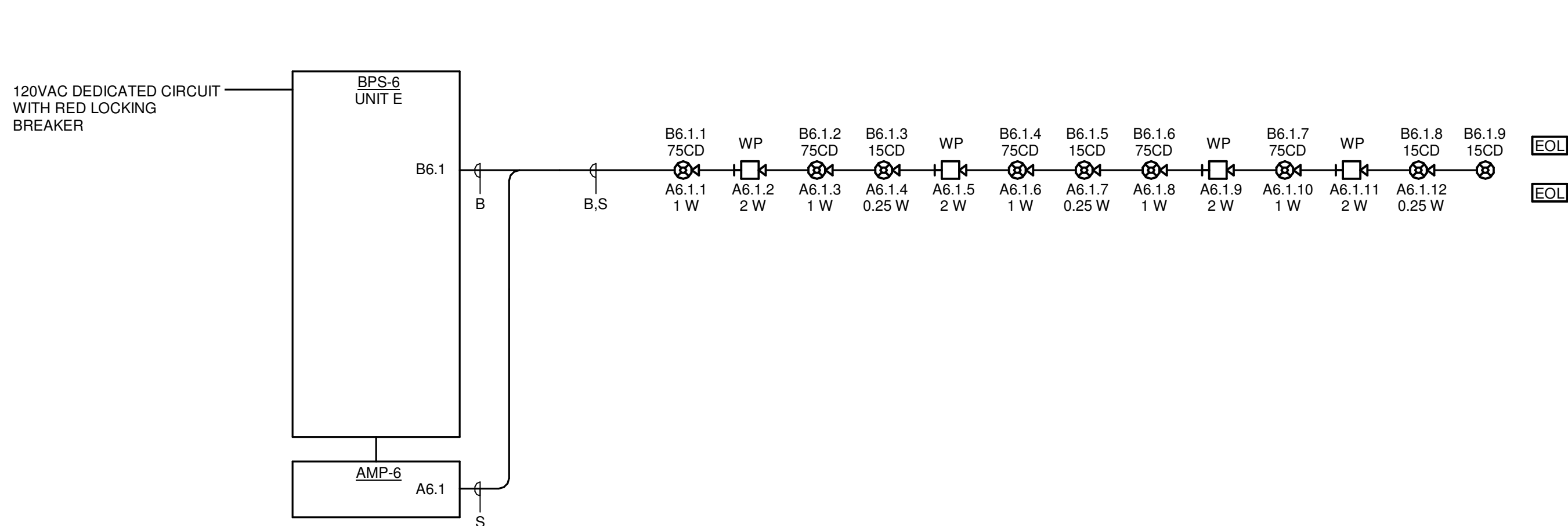
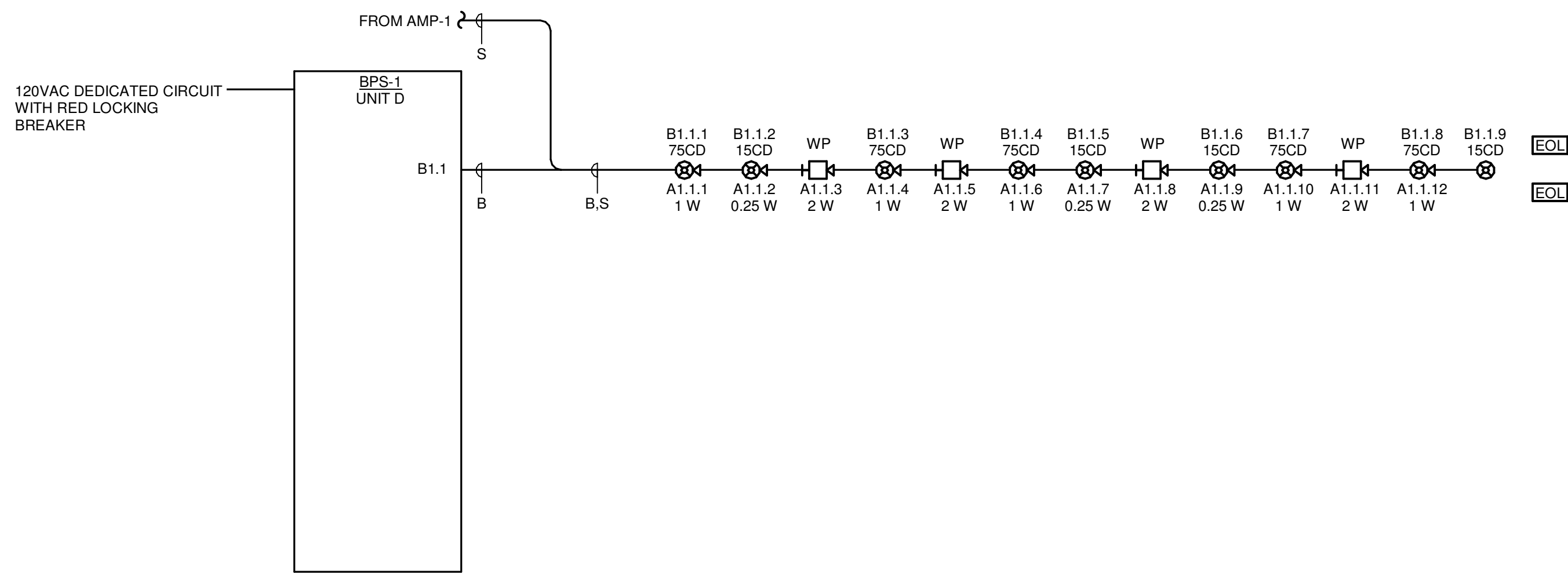
DSA APP. #: 02-123150

TITLE:

**FIRE ALARM
RISER DIAGRAM -
NAC**

DRAWING NO.

FA0.4



1

FIRE ALARM RISER DIAGRAM - NAC CIRCUITS

SCALE: NTS

[illegible]

AMP A1 CALCULATIONS												
Device Type		QTY	Standby Current (amps)				Alarm Current (amps)					
			Watts	Current Draw		Total	Qty	Current Draw		Total		
1. System												
AM-50		1	50	X	0.0860	=	0.0860	0	X	2.2060	=	2.2060
				X		=		0	X		=	0.0000
				X		=		0	X		=	0.0000
2. Speakers												
Total Speaker Watts @ 25Vrms			13.75						0.5500	=	0.5500	
Total Speaker Watts @ 70.7Vrms									0.0000	=	0.0000	
Total Standby Load						0.0860	Total Alarm Load			2.7560		
0												
Standby Load Current (Amps)							0.0860 Amps					
							X	24	=	2.064 AH		
Alarm Load Current (Amps)							2.7560 Amps					
							X	15	=	0.689 AH		
							Total Current Load			2.75 AH		
							*Multiply by the Derating Factor			=	x 1.25	
							Total Ampere Hours Required			3.44 AH		
Recommended Batteries:							7AH BATTERIES					

*Derating Factor required to compensate for the non-linear discharge characteristic of a battery.

AMP A2 CALCULATIONS											
		Standby Current (amps)					Alarm Current (amps)				
Device Type	QTY	Watts	Current Draw	Total		Qty	Current Draw	Total			
1. System											
AM-50	1	50	X	0.0860	=	0.0860	0	X	2.2060	=	2.2060
			X		=		0	X		=	0.0000
			X		=		0	X		=	0.0000
2. Speakers											
Total Speaker Watts @ 25Vrms		16.75						0.6700	=	0.6700	
Total Speaker Watts @ 70.7Vrms								0.0000	=	0.0000	
Total Standby Load					0.0860	Total Alarm Load					2.8760
0											
						Required Standby Time in Hours					
Standby Load Current (Amps)				0.0860 Amps		X		24		= 2.064 AH	
						Required Alarm Time in Hours					
Alarm Load Current (Amps)				2.8760 Amps		X		15		= 0.719 AH	
								Total Current Load		2.78 AH	
								*Multiply by the Derating Factor		= x 1.25	
								Total Ampere Hours Required		3.48 AH	
Recommended Batteries:								7AH BATTERIES			

*Derating Factor required to compensate for the non-linear discharge characteristic of a battery.

AMP A3 CALCULATIONS											
		Standby Current (amps)					Alarm Current (amps)				
Device Type	QTY	Watts	Current Draw			Total	Qty	Current Draw			Total
1. System											
AM-50	1	50	X	0.0860	=	0.0860	0	X	2.2060	=	2.2060
			X		=		0	X		=	0.0000
			X		=		0	X		=	0.0000
2. Speakers											
Total Speaker Watts @ 25Vrms		8.5						0.3400	=	0.3400	
Total Speaker Watts @ 70.7Vrms								0.0000	=	0.0000	
Total Standby Load						0.0860	Total Alarm Load		2.5460		
0											
						Required Standby Time in Hours					
Standby Load Current (Amps)						0.0860 Amps	X	24	=	2.064 AH	
						Required Alarm Time in Hours					
Alarm Load Current (Amps)						2.5460 Amps	X	15	=	0.837 AH	
								Total Current Load		2.901 AH	
								*Multiply by the Derating Factor		x 1.25	
								Total Ampere Hours Required		3.38 AH	
Recommended Batteries:								7AH BATTERIES			

*Derating Factor required to compensate for the non-linear discharge characteristic of a battery.

AMP A4 CALCULATIONS											
		Standby Current (amps)					Alarm Current (amps)				
Device Type	QTY	Watts	Current Draw			Total	Qty	Current Draw			Total
1. System											
AM-50	1	50	X	0.0860	=	0.0860	0	X	2.2060	=	2.2060
			X		=		0	X		=	0.0000
			X		=		0	X		=	0.0000
2. Speakers											
Total Speaker Watts @ 25Vrms	5							0.2000	=	0.2000	
Total Speaker Watts @ 70.7Vrms								0.0000	=	0.0000	
Total Standby Load						0.0860	Total Alarm Load				2.4060
						0					
Standby Load Current (Amps)						0.0860 Amps	Required Standby Time in Hours				
							X	24	=	2.064 AH	
Alarm Load Current (Amps)						2.4060 Amps	Required Alarm Time in Hours				
							X	15	=	0.602 AH	
							Total Current Load				2.67 AH
							*Multiply by the Derating Factor				=
							Total Ampere Hours Required				3.33 AH
Recommended Batteries:						7AH BATTERIES					

*Derating Factor required to compensate for the non-linear discharge characteristic of a battery.

AMP A5 CALCULATIONS												
Device Type		QTY	Standby Current (amps)				Alarm Current (amps)					
			Watts	Current Draw		Total	Qty	Current Draw		Total		
1. System												
AM-50		1	50	X	0.0860	=	0.0860	0	X	2.2060	=	2.2060
				X		=			X		=	0.0000
				X		=		0	X		=	0.0000
2. Speakers												
Total Speaker Watts @ 25Vrms			20.25						0.8100	=	0.8100	
Total Speaker Watts @ 70.7Vrms									0.0000	=	0.0000	
Total Standby Load						0.0860	Total Alarm Load			3.0160		
						0						
Standby Load Current (Amps)						0.0860 Amps	Required Standby Time in Hours					
							X	24	=	2.064 AH		
Alarm Load Current (Amps)						3.0160 Amps	Required Alarm Time in Hours					
							X	15	=	0.754 AH		
							Total Current Load			2.82 AH		
										x 1.25		
							*Multiply by the Derating Factor					
							Total Ampere Hours Required			3.52 AH		
Recommended Batteries:						7AH BATTERIES						

*Derating Factor required to compensate for the non-linear discharge characteristic of a battery.

AMP A6 CALCULATIONS												
Device Type		QTY	Standby Current (amps)				Alarm Current (amps)					
			Watts	Current Draw		Total	Qty	Current Draw		Total		
1. System												
AM-50		1	50	X	0.0860	=	0.0860	0	X	2.2060	=	2.2060
				X		=		0	X		=	0.0000
				X		=		0	X		=	0.0000
2. Speakers												
Total Speaker Watts @ 25Vrms			12.75							0.5100	=	0.5100
Total Speaker Watts @ 70.7Vrms										0.0000	=	0.0000
Total Standby Load						0.0860	Total Alarm Load				2.7160	
0												
Standby Load Current (Amps)						0.0860 Amps	Required Standby Time in Hours					
							X	24	=	2.064 AH		
Alarm Load Current (Amps)						2.7160 Amps	Required Alarm Time in Hours					
							X	15	=	0.679 AH		
							Total Current Load				2.74 AH	
							*Multiply by the Derating Factor				x 1.25	
							Total Ampere Hours Required				3.43 AH	
Recommended Batteries:								7AH BATTERIES				

*Derating Factor required to compensate for the non-linear discharge characteristic of a battery.

AMP A7 CALCULATIONS													
		Standby Current (amps)					Alarm Current (amps)						
Device Type	QTY	Watts	Current Draw	Total		Qty	Current Draw	Total					
1. System													
AM-50	1	50	X	0.0860	=	0.0860	0	X	2.2060	=	2.2060		
			X		=		0	X		=	0.0000		
			X		=		0	X		=	0.0000		
2. Speakers													
Total Speaker Watts @ 25Vrms		14					0.5600		=	0.5600			
Total Speaker Watts @ 70.7Vrms							0.0000		=	0.0000			
Total Standby Load					0.0860	Total Alarm Load			2.7660				
0													
Standby Load Current (Amps)						0.0860 Amps		Required Standby Time in Hours					
						X 24		= 2.064 AH					
								Required Alarm Time in Hours					
Alarm Load Current (Amps)						2.7660 Amps		X 15		= 0.692 AH			
						Total Current Load		2.76 AH					
						*Multiply by the Derating Factor		= x 1.25					
						Total Ampere Hours Required		3.44 AH					
Recommended Batteries:						7AH BATTERIES							

*Derating Factor required to compensate for the non-linear discharge characteristic of a battery.

AMP A8 CALCULATIONS												
Device Type		QTY	Standby Current (amps)				Alarm Current (amps)					
			Watts	Current Draw		Total	Qty	Current Draw		Total		
1. System												
AM-50		1	50	X	0.0860	=	0.0860	0	X	2.2060	=	2.2060
				X				0	X		=	0.0000
				X		=		0	X		=	0.0000
2. Speakers												
Total Speaker Watts @ 25Vrms			14.5							0.5800	=	0.5800
Total Speaker Watts @ 70.7Vrms										0.0000	=	0.0000
Total Standby Load						0.0860	Total Alarm Load				2.7860	
						0						
Standby Load Current (Amps)						0.0860 Amps	Required Standby Time in Hours					
							X	24	=	2.064 AH		
Alarm Load Current (Amps)						2.7860 Amps	Required Alarm Time in Hours					
							X	15	=	0.697 AH		
							Total Current Load				2.76 AH	
							*Multiply by the Derating Factor				=	x 1.25
							Total Ampere Hours Required				3.45 AH	
Recommended Batteries:						7AH BATTERIES						

*Derating Factor required to compensate for the non-linear discharge characteristic of a battery.

AMP A9 CALCULATIONS									
		Standby Current (amps)				Alarm Current (amps)			
Device Type	QTY	Watts	Current Draw	Total	Qty	Current Draw	Total		
1. System									
AM-50	1	50	X 0.0860	= 0.0860	0	X 2.2060	= 2.2060		
			X	=		X	=	0.0000	
			X	=		X	=	0.0000	
2. Speakers									
Total Speaker Watts @ 25Vrms	5					0.2000	=	0.2000	
Total Speaker Watts @ 70.7Vrms						0.0000	=	0.0000	
Total Standby Load				0.0860	Total Alarm Load			2.4060	
0									
					Required Standby Time in Hours				
Standby Load Current (Amps)				0.0860 Amps	X	24	=	2.064 AH	
					Required Alarm Time in Hours				
Alarm Load Current (Amps)				2.4060 Amps	X	15	=	0.602 AH	
Total Current Load							2.67 AH		
							*Multiply by the Derating Factor	=	x 1.25
Total Ampere Hours Required								3.33 AH	
Recommended Batteries:					7AH BATTERIES				

*Derating Factor required to compensate for the non-linear discharge characteristic of a battery.



5001 E Eastview Dr, Stockton, CA 95212

[illegible]**SCALE:**

DSA APP. #: 02-123150

TITLE:

FIRE ALARM BATTERY CALCULATIONS

DRAWING NO.

FA0.5

Fire Alarm Booster Calculations

Location: BUILDING 2

Signaling Line Circuit Loading		DEVICE		SUBTOTAL	
Qty	Device	Standby	Alarm	Standby	Alarm
1	HPF24S8	0.091000	0.145000	0.091000	0.145000
				Panel Load	0.091000 0.145000

Notification Circuit Loading							
DEVICE	CD	DRAW (EA)	B1.1	B1.2	B1.3	B1.4	TOTAL
SPEAKER STROBE	15	0.041	3				0.123
SPEAKER STROBE	30	0.063					
SPEAKER STROBE	75	0.112	5				0.560
SPEAKER STROBE	110	0.195					
STROBE	15	0.071	1				0.071
STROBE	30	0.074					
STROBE	75	0.153					
STROBE	110	0.195					
Notification Appliance Circuit Loading							
			0.754				0.754

Notification Circuit Voltage Drop					
CIRCUIT ID	TOTAL A	LENGTH FT.	AWG	%VD	VD
B1.1	0.754	225	12	3.21%	0.65
B1.2			12		
B1.3			12		
B1.4			12		

Battery Calculation

	Standby	Alarm
Totals Panel Current:	0.091	0.899
Hours in Standby:	24	
Standby Ah:	2.18	
Minutes in Alarm:		15
Alarm Ah:		0.22
Spare/Future Capacity - 25%:		0.60
Minimum Battery Capacity Required - Ah:		7.00

Provide next largest capacity battery

Panel Loading

Panel Capacity (Amps):	10.00
Panel Load (Amps):	0.99
	

ALL LOADS ARE EXPRESSED IN AMPS

Fire Alarm Booster Calculations

Location: BUILDING 6

Signaling Line Circuit Loading		DEVICE		SUBTOTAL	
Qty	Device	Standby	Alarm	Standby	Alarm
1	HPF24S8	0.091000	0.145000	0.091000	0.145000
				Panel Load	0.091000 0.145000

Notification Circuit Loading							
DEVICE	CD	DRAW (EA)	B4.1	B4.2	B4.3	B4.4	TOTAL
SPEAKER STROBE	15	0.041					
SPEAKER STROBE	30	0.063					
SPEAKER STROBE	75	0.112	3				0.336
SPEAKER STROBE	110	0.195					
STROBE	15	0.071					
STROBE	30	0.074					
STROBE	75	0.153					
STROBE	110	0.195					
Notification Appliance Circuit Loading							
			0.336				0.336

Notification Circuit Voltage Drop					
CIRCUIT ID	TOTAL A	LENGTH FT.	AWG	%VD	VD
B4.1	0.336	230	12	1.46%	0.30
B4.2			12		
B4.3			12		
B4.4			12		

Battery Calculation

	Standby	Alarm
Totals Panel Current:	0.091	0.481
Hours in Standby:	24	
Standby Ah:	2.18	
Minutes in Alarm:		15
Alarm Ah:		0.12
Spare/Future Capacity - 25%:		0.50
Minimum Battery Capacity Required - Ah:		7.00

Provide next largest capacity battery

Panel Loading

Panel Capacity (Amps):	10.00
Panel Load (Amps):	0.57
	

ALL LOADS ARE EXPRESSED IN AMPS

Fire Alarm Booster Calculations

Location: BUILDING 4

Signaling Line Circuit Loading		DEVICE		SUBTOTAL	
Qty	Device	Standby	Alarm	Standby	Alarm
1	HPF24S8	0.091000	0.145000	0.091000	0.145000
				Panel Load	0.091000 0.145000

Notification Circuit Loading							
DEVICE	CD	DRAW (EA)	B7.1	B7.2	B7.3	B7.4	TOTAL
SPEAKER STROBE	15	0.041	5				0.205
SPEAKER STROBE	30	0.063					
SPEAKER STROBE	75	0.112	5				0.560
SPEAKER STROBE	110	0.195					
STROBE	15	0.071	1				0.071
STROBE	30	0.074					
STROBE	75	0.153					
STROBE	110	0.195					
Notification Appliance Circuit Loading							
			0.836				0.836

Notification Circuit Voltage Drop					
CIRCUIT ID	TOTAL A	LENGTH FT.	AWG	%VD	VD
B7.1	0.836	230	12	3.84%	0.74
B7.2		235	12		
B7.3			12		
B7.4			12		

Battery Calculation

	Standby	Alarm
Totals Panel Current:	0.091	0.981
Hours in Standby:	24	
Standby Ah:	2.18	
Minutes in Alarm:		15
Alarm Ah:		0.23
Spare/Future Capacity - 25%:		0.61
Minimum Battery Capacity Required - Ah:		7.00

Provide next largest capacity battery

Panel Loading

Panel Capacity (Amps):	10.00
Panel Load (Amps):	1.07
	

ALL LOADS ARE EXPRESSED IN AMPS

Fire Alarm Booster Calculations

Location: BUILDING 1

Signaling Line Circuit Loading		DEVICE		SUBTOTAL	
Qty	Device	Standby	Alarm	Standby	Alarm
1	HPF24S8	0.091000	0.145000	0.091000	0.145000
				Panel Load	0.091000 0.145000

Notification Circuit Loading							
DEVICE	CD	DRAW (EA)	B2.1	B2.2	B2.3	B2.4	TOTAL
SPEAKER STROBE	15	0.041	2	1			0.123
SPEAKER STROBE	30	0.063	1				0.063
SPEAKER STROBE	75	0.112	7	3			1.120
SPEAKER STROBE	110	0.195					
STROBE	15	0.071					
STROBE	30	0.074					
STROBE	75	0.153					
STROBE	110	0.195					
Notification Appliance Circuit Loading							
			0.929	0.377			1.306

Notification Circuit Voltage Drop					
CIRCUIT ID	TOTAL A	LENGTH FT.	AWG	%VD	VD
B2.1	0.929	275	12	4.83%	0.99
B2.2	0.377	235	12	1.68%	0.34
B2.3			12		
B2.4			12		

Battery Calculation

	Standby	Alarm
Totals Panel Current:	0.091	1.451
Hours in Standby:	24	
Standby Ah:	2.18	
Minutes in Alarm:		15
Alarm Ah:		0.35
Spare/Future Capacity - 25%:		0.64
Minimum Battery Capacity Required - Ah:		7.00

Provide next largest capacity battery

Panel Loading

Panel Capacity (Amps):	10.00
Panel Load (Amps):	1.54
	

ALL LOADS ARE EXPRESSED IN AMPS

Fire Alarm Booster Calculations

Location: BUILDING 7

Signaling Line Circuit Loading		DEVICE		SUBTOTAL	
Qty	Device	Standby	Alarm	Standby	Alarm
1	HPF24S8	0.091000	0.145000	0.091000	0.145000
				Panel Load	0.091000 0.145000

Notification Circuit Loading							
DEVICE	CD	DRAW (EA)	B5.1	B5.2	B5.3	B5.4	TOTAL
SPEAKER STROBE	15	0.041	6	3			0.369
SPEAKER STROBE	30	0.063		2			0.126
SPEAKER STROBE	75	0.112	2	4			0.670
SPEAKER STROBE	110	0.195	2	1			0.585
STROBE	15	0.071					
STROBE	30	0.074					
STROBE	75	0.153					
STROBE	110	0.195					
Notification Appliance Circuit Loading							
			0.860	0.892			1.752

Notification Circuit Voltage Drop					
CIRCUIT ID	TOTAL A	LENGTH FT.	AWG	%VD	VD
B5.1	0.860	230	12	3.74%	0.76
B5.2	0.892	235	12	3.97%	0.81
B5.3			12		
B5.4			12		

Battery Calculation

	Standby	Alarm
Totals Panel Current:	0.091	1.897
Hours in Standby:	24	
Standby Ah:	2.18	
Minutes in Alarm:		15
Alarm Ah:		0.47
Spare/Future Capacity - 25%:		0.66
Minimum Battery Capacity Required - Ah:		7.00

Provide next largest capacity battery

Panel Loading

Panel Capacity (Amps):	10.00
Panel Load (Amps):	1.99
	

ALL LOADS ARE EXPRESSED IN AMPS

Fire Alarm Booster Calculations

Location: BUILDING 8

Signaling Line Circuit Loading		DEVICE		SUBTOTAL	
Qty	Device	Standby	Alarm	Standby	Alarm
1	HPF24S8	0.091000	0.145000	0.091000	0.145000
				Panel Load	0.091000 0.145000

Notification Circuit Loading							
DEVICE	CD	DRAW (EA)	B8.1	B8.2	B8.3	B8.4	TOTAL
SPEAKER STROBE	15	0.041	8	2			0.410
SPEAKER STROBE	30	0.063	1	3			0.252
SPEAKER STROBE	75	0.112					
SPEAKER STROBE	110	0.195					0.780
STROBE	15	0.071	1	4			0.071
STROBE	30	0.074					
STROBE	75	0.153					
STROBE	110	0.195					
Notification Appliance Circuit Loading							
			0.462	1.051			1.513

Notification Circuit Voltage Drop					
CIRCUIT ID	TOTAL A	LENGTH FT.	AWG	%VD	VD
B8.1	0.462	265	12	2.32%	0.47
B8.2	1.051	250	12	4.97%	1.01
B8.3			12		
B8.4			12		

Battery Calculation

	Standby	Alarm
Totals Panel Current:	0.091	1.658
Hours in Standby:	24	
Standby Ah:	2.18	
Minutes in Alarm:		15
Alarm Ah:		0.41
Spare/Future Capacity - 25%:		0.65
Minimum Battery Capacity Required - Ah:		7.00

Provide next largest capacity battery

Panel Loading

Panel Capacity (Amps):	10.00
Panel Load (Amps):	1.75
	

ALL LOADS ARE EXPRESSED IN AMPS

Fire Alarm Booster Calculations

Location: BUILDING 5

Signaling Line Circuit Loading		DEVICE		SUBTOTAL	
Qty	Device	Standby	Alarm	Standby	Alarm
1	HPF24S8	0.091000	0.145000	0.091000	0.145000
				Panel Load	0.091000 0.145000

Notification Circuit Loading							
DEVICE	CD	DRAW (EA)	B3.1	B3.2	B3.3	B3.4	TOTAL
SPEAKER STROBE	15	0.041					
SPEAKER STROBE	30	0.063	1				0.063
SPEAKER STROBE	75	0.112	4				0.448
SPEAKER STROBE	110	0.195					
STROBE	15	0.071					
STROBE	30	0.074	1				0.074
STROBE	75	0.153					
STROBE	110	0.195					
Notification Appliance Circuit Loading							
			0.585				0.585

Notification Circuit Voltage Drop					
CIRCUIT ID	TOTAL A	LENGTH FT.	AWG	%VD	VD
B3.1	0.585	315	12	3.49%	0.71
B3.2			12		
B3.3			12		
B3.4			12		

Battery Calculation

	Standby	Alarm
Totals Panel Current:	0.091	0.730
Hours in Standby:	24	
Standby Ah:	2.18	
Minutes in Alarm:		15
Alarm Ah:		0.18
Spare/Future Capacity - 25%:		0.59
Minimum Battery Capacity Required - Ah:		7.00

Provide next largest capacity battery

Panel Loading

Panel Capacity (Amps):	10.00
Panel Load (Amps):	0.82
	

ALL LOADS ARE EXPRESSED IN AMPS

Fire Alarm Booster Calculations

Location: BUILDING 3

Signaling Line Circuit Loading		DEVICE		SUBTOTAL	
Qty	Device	Standby	Alarm	Standby	Alarm
1	HPF24S8	0.091000	0.145000	0.091000	0.145000
				Panel Load	0.091000 0.145000

Notification Circuit Loading							
DEVICE	CD	DRAW (EA)	B6.1	B6.2	B6.3	B6.4	TOTAL
SPEAKER STROBE	15	0.041	3				0.123
SPEAKER STROBE	30	0.063					
SPEAKER STROBE	75	0.112	5				0.560
SPEAKER STROBE	110	0.195					
STROBE	15	0.071	1				0.071
STROBE	30	0.074					
STROBE	75	0.153					
STROBE	110	0.195					
Notification Appliance Circuit Loading							
			0.754				0.754

Notification Circuit Voltage Drop					
CIRCUIT ID	TOTAL A	LENGTH FT.	AWG	%VD	VD
B6.1	0.754	230	12	3.26%	0.67
B6.2		235	12		
B6.3			12		
B6.4			12		

Battery Calculation

	Standby	Alarm
Totals Panel Current:	0.091	0.899
Hours in Standby:	24	
Standby Ah:	2.18	
Minutes in Alarm:		15
Alarm Ah:		0.22
Spare/Future Capacity - 25%:		0.60
Minimum Battery Capacity Required - Ah:		7.00

Provide next largest capacity battery

Panel Loading

Panel Capacity (Amps):	10.00
Panel Load (Amps):	0.99
	

ALL LOADS ARE EXPRESSED IN AMPS

Fire Alarm Booster Calculations

Location: BUILDING 9

Signaling Line Circuit Loading		DEVICE		SUBTOTAL	
Qty	Device	Standby	Alarm	Standby	Alarm
1	HPF24S8	0.091000	0.145000	0.091000	0.145000
				Panel Load	0.091000 0.145000

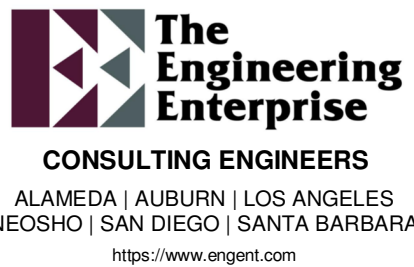
Notification Circuit Loading							
DEVICE	CD	DRAW (EA)	B9.1	B9.2	B9.3	B9.4	TOTAL
SPEAKER STROBE	15	0.041					
SPEAKER STROBE	30	0.063					
SPEAKER STROBE	75	0.112	3				0.336
SPEAKER STROBE	110	0.195					
STROBE	15	0.071					

GENERAL SHEET NOTES

- A. FIRE ALARM SYSTEM SHALL COMPLY WITH ALL REQUIREMENTS OF APPLICABLE CODES, STANDARDS AND STATE REGULATIONS.
- B. FIRE ALARM CIRCUITS AND ROUTING ARE SHOWN SCHEMATICALLY FOR CLARITY ILLUSTRATING THE WIRING CONFIGURATION NECESSARY FOR PROPER CIRCUIT SUPERVISION.
- C. WHERE APPLICABLE AND IS CODE COMPLIANT CONTRACTOR MAY UTILIZE EXISTING INFRASTRUCTURE FROM EXISTING DEVICES, AT THEIR OWN DISCRETION AND RISK WHERE RE-USE FACILITATES INSTALLATION OF NEW DEVICES, PROVIDING EXISTING INFRASTRUCTURE MEETS PROJECT REQUIREMENTS.
- D. CONTRACTOR SHALL COMPLETE ALL CUTTING AND PATCHING REQUIRED FOR THE INSTALLATION OF THE WORK. CUTTING AND PATCHING SHALL BE COMPLETED IN A NEAT AND WORKMAN LIKE MANNER. PATCHING MATERIALS SHALL MATCH MATERIALS TO THE GREATEST EXTENT POSSIBLE. PROVIDE TOUCH UP PAINT AS REQUIRED TO MATCH PAINT FINISH AND COLOR OF ADJACENT AREAS.
- E. ALL PENETRATIONS, THROUGH DESIGNATED FIRE RATED WALLS, CEILINGS AND FLOOR SLABS SHALL BE PROPERLY SEALED WITH AN APPROVED RATED FIRE STOPPING MATERIAL. ALL FIRE STOPPING MATERIAL SHALL BE SUPPLIED AND WORK PERFORMED AS PER PROJECT SPECIFICATIONS AND MANUFACTURERS INSTALLATION INSTRUCTIONS.
- F. ALL SPEAKER/SPEAKER STROBES SHALL HAVE A MINIMUM 0.75" CONDUIT PATHWAY. USE OF EXISTING 0.5" CONDUIT PATHWAY IS NOT ACCEPTABLE.
- G. ENSURE STROBE FLASH IS SYNCHRONIZED PER NFPA 72.
- H. DO NOT INSTALL FIRE ALARM DEVICES BACK-TO-BACK IN STUD WALLS.
- I. RE-USE ALL EXISTING PATHWAYS.

NUMBERED SHEET NOTES

- 1 EXISTING CONDUIT ON UNDERSIDE OF WALKWAY COVER.
- 2 EXISTING CONDUIT RUN IN ATTIC SPACE.



LUSD Morada Middle School Fire Alarm Upgrade

5001 E Eastview Dr, Stockton, CA 95212

REVISIONS

#	DESCRIPTION	DATE
1	DSA SUBMISSION	02/05/2025

DESIGNER: Designer

SCALE: 1" = 40'-0"

DATE: 2025.03.05

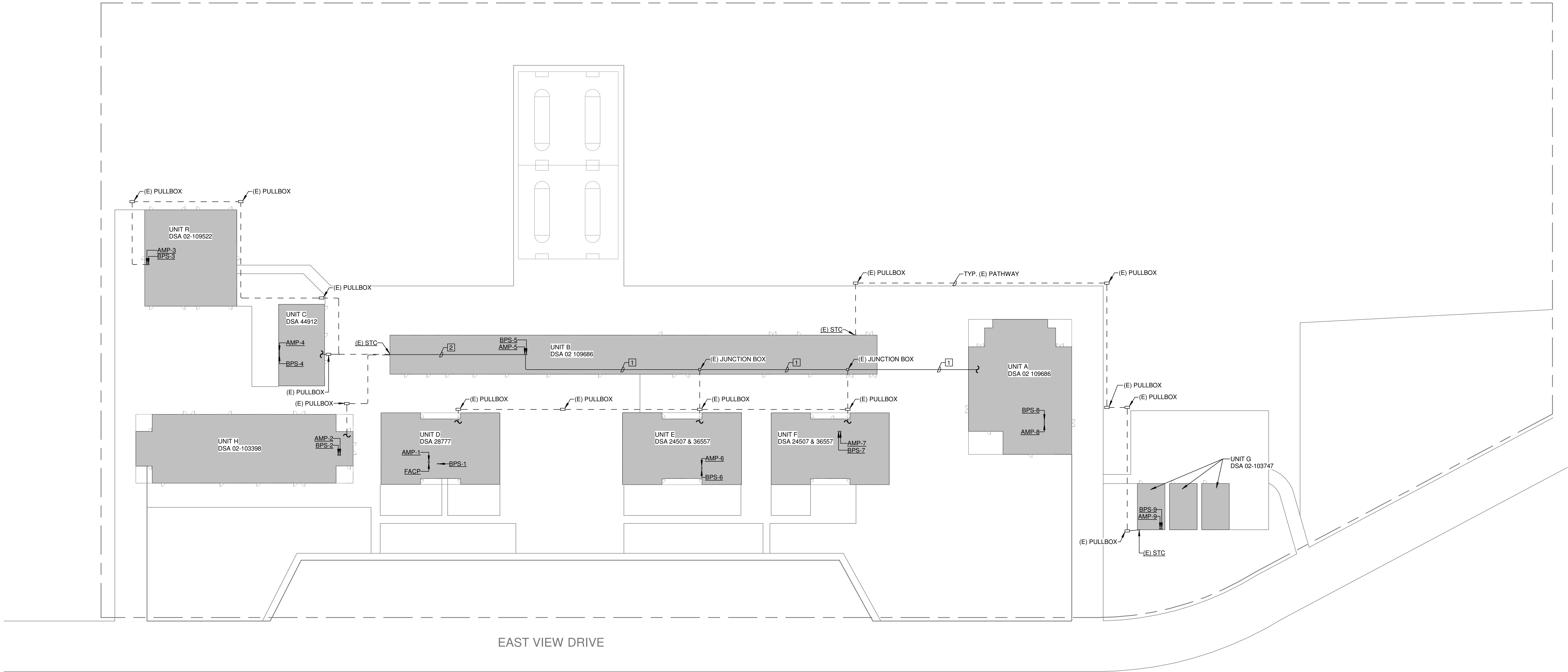
DSA APP. #: 02-123150

TITLE:

SITE PLAN

DRAWING NO.

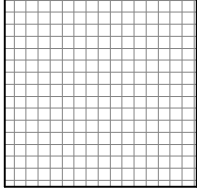
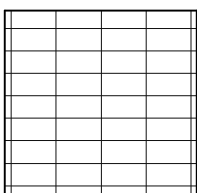
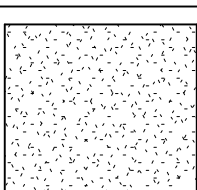
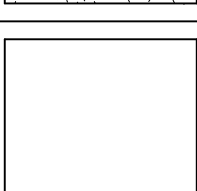
FA1.0

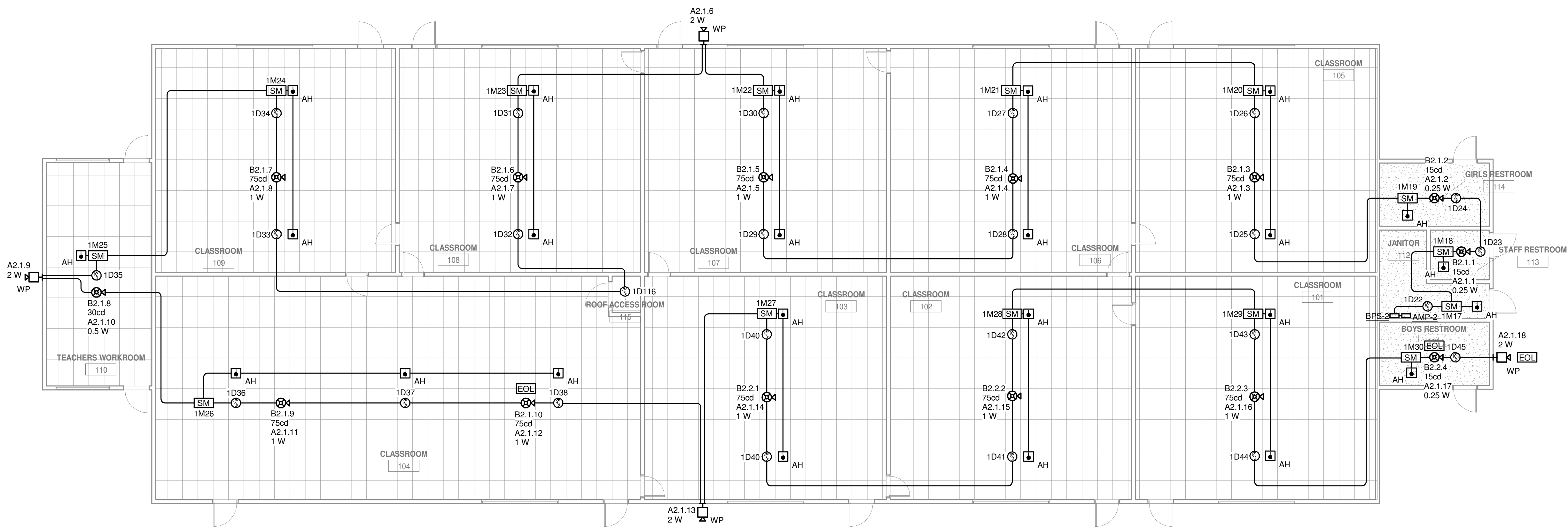


1 SITE PLAN
SCALE: 1" = 40'-0"

GENERAL SHEET NOTES

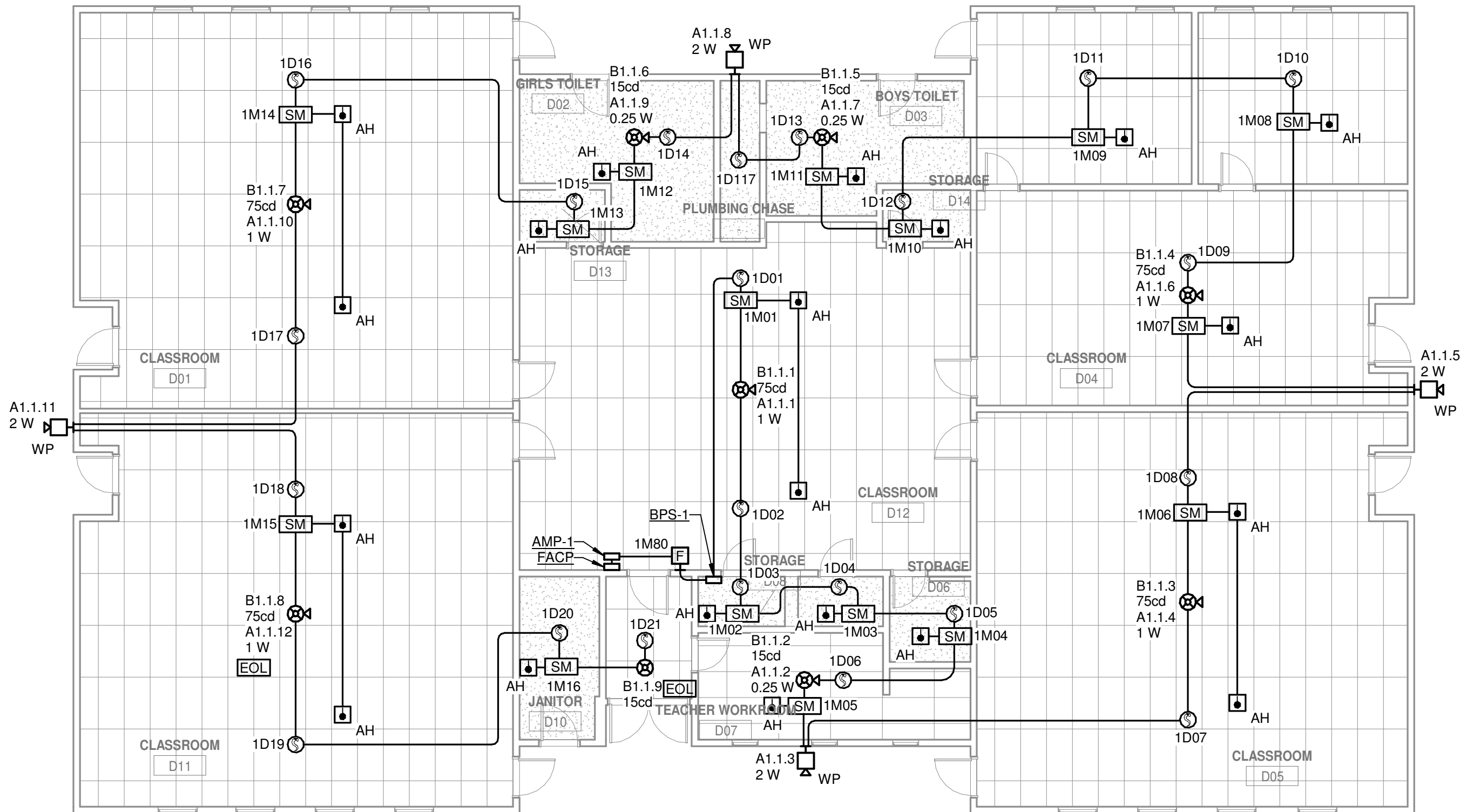
- A. FIRE ALARM SYSTEM SHALL COMPLY WITH ALL REQUIREMENTS OF APPLICABLE CODES, STANDARDS AND STATE REGULATIONS.
- B. FIRE ALARM CIRCUITS AND ROUTING ARE SHOWN SCHEMATICALLY FOR CLARITY ILLUSTRATING THE WIRING CONFIGURATION NECESSARY FOR PROPER CIRCUIT SUPERVISION.
- C. WHERE APPLICABLE AND IS CODE COMPLIANT CONTRACTOR MAY UTILIZE EXISTING INFRASTRUCTURE FROM EXISTING DEVICES, AT THEIR OWN DISCRETION AND RISK WHERE RE-USE FACILITATES INSTALLATION OF NEW DEVICES, PROVIDING EXISTING INFRASTRUCTURE MEETS PROJECT REQUIREMENTS.
- D. CONTRACTOR SHALL COMPLETE ALL CUTTING AND PATCHING REQUIRED FOR THE INSTALLATION OF THE WORK. CUTTING AND PATCHING SHALL BE COMPLETED IN A NEAT AND WORKMAN LIKE MANNER. PATCHING MATERIALS SHALL MATCH MATERIALS TO THE GREATEST EXTENT POSSIBLE. PROVIDE TOUCH UP PAINT AS REQUIRED TO MATCH PAINT FINISH AND COLOR OF ADJACENT AREAS.
- E. ALL PENETRATIONS, THROUGH DESIGNATED FIRE RATED WALLS, CEILINGS AND FLOOR SLABS SHALL BE PROPERLY SEALED WITH AN APPROVED RATED FIRE STOPPING MATERIAL. ALL FIRE STOPPING MATERIAL SHALL BE SUPPLIED AND WORK PERFORMED AS PER PROJECT SPECIFICATIONS AND MANUFACTURERS INSTALLATION INSTRUCTIONS.
- F. ALL SPEAKER/SPEAKER STROBES SHALL HAVE A MINIMUM 0.75" CONDUIT PATHWAY. USE OF EXISTING 0.5" CONDUIT PATHWAY IS NOT ACCEPTABLE.
- G. ENSURE STROBE FLASH IS SYNCHRONIZED PER NFPA 72.
- H. DO NOT INSTALL FIRE ALARM DEVICES BACK-TO-BACK IN STUD WALLS.
- I. RE-USE ALL EXISTING PATHWAYS.

CEILING LEGEND	
	ACOUSTIC DROP CEILING
	ACOUSTIC DROP CEILING
	HARD LID CEILING
	OPEN TO STRUCTURE



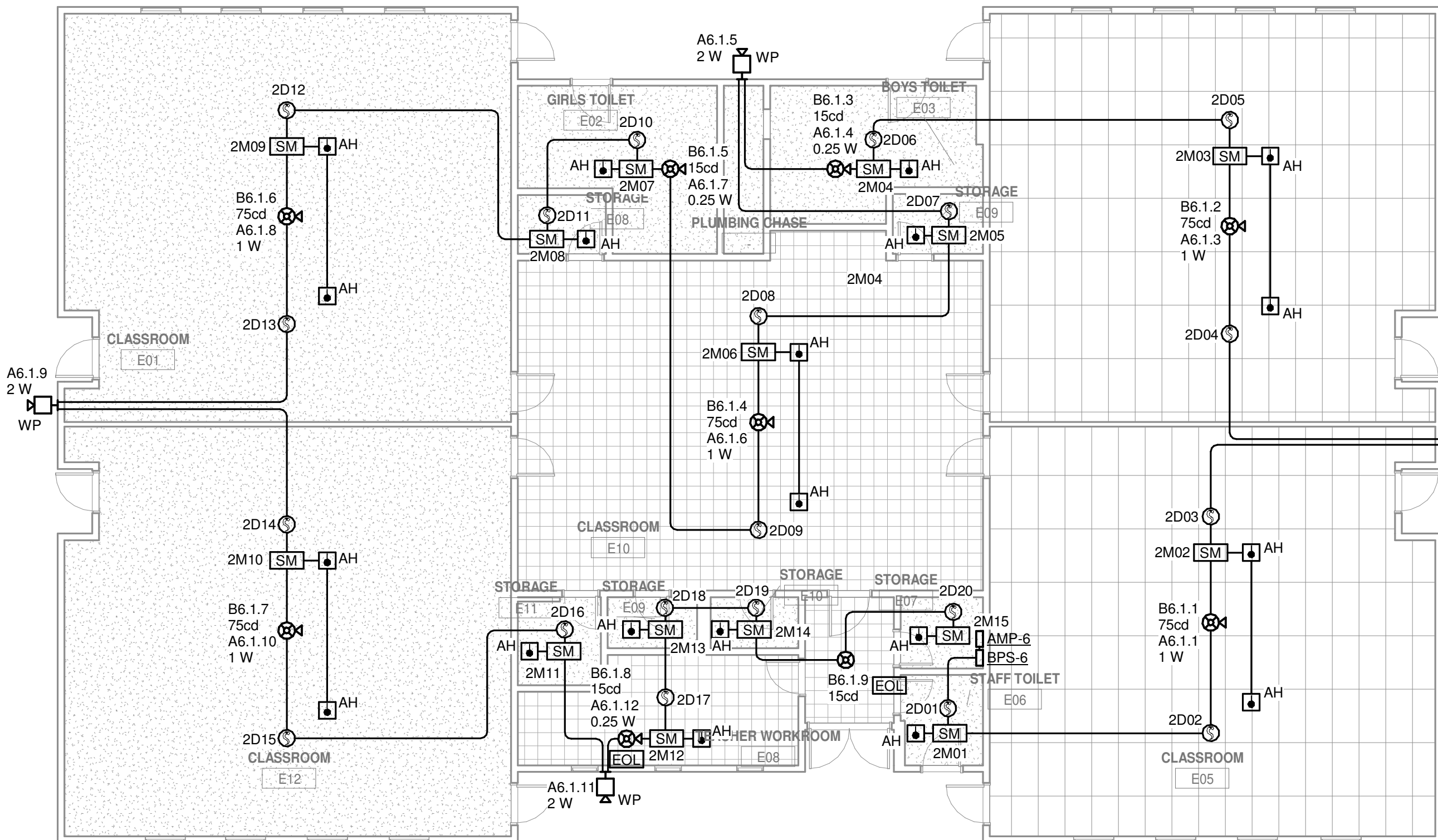
GENERAL SHEET NOTES

- A. FIRE ALARM SYSTEM SHALL COMPLY WITH ALL REQUIREMENTS OF APPLICABLE CODES, STANDARDS AND STATE REGULATIONS.
- B. FIRE ALARM CIRCUITS AND ROUTING ARE SHOWN SCHEMATICALLY FOR CLARITY ILLUSTRATING THE WIRING CONFIGURATION NECESSARY FOR PROPER CIRCUIT SUPERVISION.
- C. WHERE APPLICABLE AND IS CODE COMPLIANT CONTRACTOR MAY UTILIZE EXISTING INFRASTRUCTURE FROM EXISTING DEVICES, AT THEIR OWN DISCRETION AND RISK WHERE RE-USE FACILITATES INSTALLATION OF NEW DEVICES, PROVIDING EXISTING INFRASTRUCTURE MEETS PROJECT REQUIREMENTS.
- D. CONTRACTOR SHALL COMPLETE ALL CUTTING AND PATCHING REQUIRED FOR THE INSTALLATION OF THE WORK. CUTTING AND PATCHING SHALL BE COMPLETED IN A NEAT AND WORKMAN LIKE MANNER. PATCHING MATERIALS SHALL MATCH MATERIALS TO THE GREATEST EXTENT POSSIBLE. PROVIDE TOUCH UP PAINT AS REQUIRED TO MATCH PAINT FINISH AND COLOR OF ADJACENT AREAS.
- E. ALL PENETRATIONS, THROUGH DESIGNATED FIRE RATED WALLS, CEILINGS AND FLOOR SLABS SHALL BE PROPERLY SEALED WITH AN APPROVED RATED FIRE STOPPING MATERIAL. ALL FIRE STOPPING MATERIAL SHALL BE SUPPLIED AND WORK PERFORMED AS PER PROJECT SPECIFICATIONS AND MANUFACTURERS INSTALLATION INSTRUCTIONS.
- F. ALL SPEAKER/SPEAKER STROBES SHALL HAVE A MINIMUM 0.75" CONDUIT PATHWAY. USE OF EXISTING 0.5" CONDUIT PATHWAY IS NOT ACCEPTABLE.
- G. ENSURE STROBE FLASH IS SYNCHRONIZED PER NFPA 72.
- H. DO NOT INSTALL FIRE ALARM DEVICES BACK-TO-BACK IN STUD WALLS.
- I. RE-USE ALL EXISTING PATHWAYS.

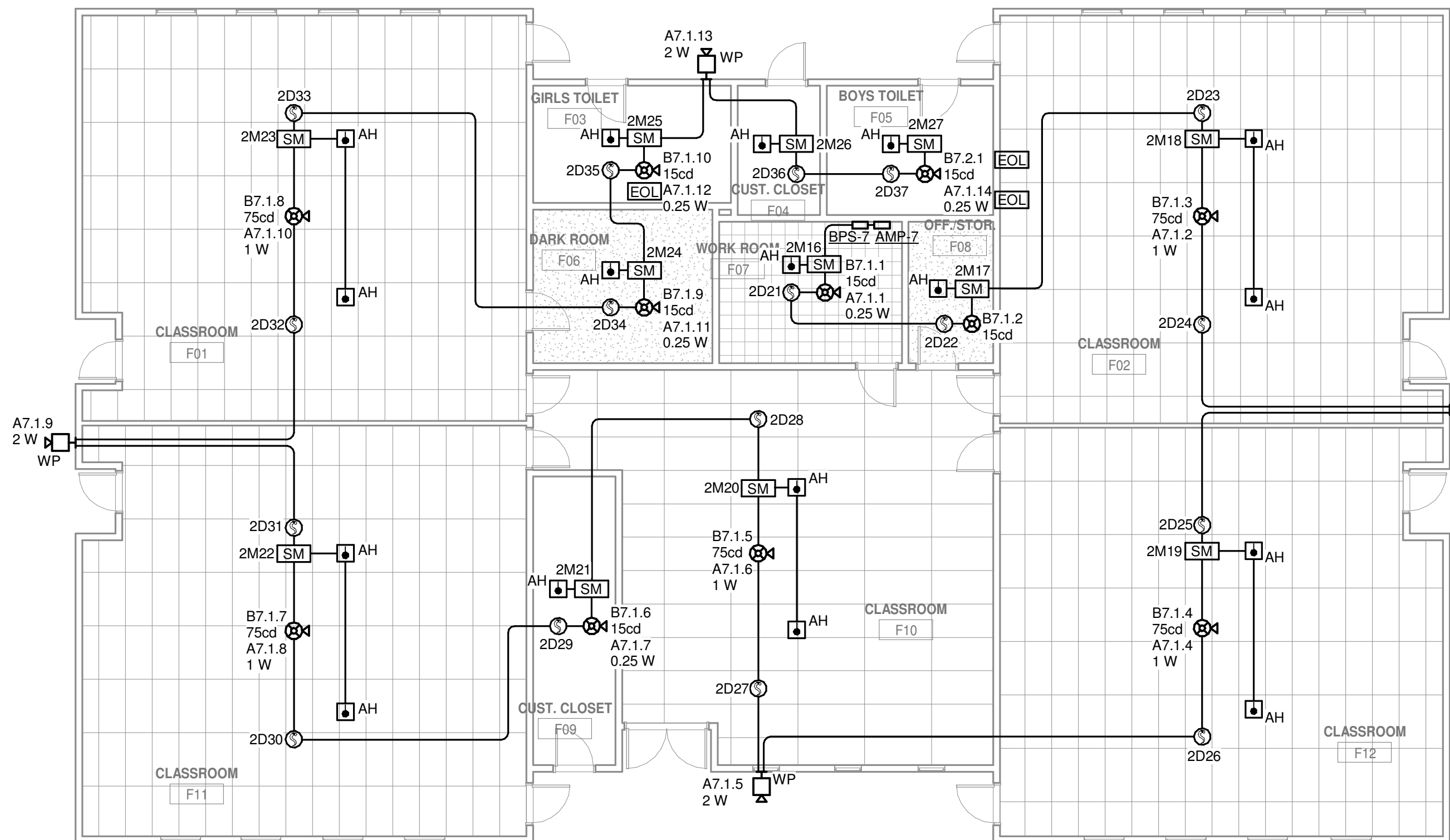


CEILING LEGEND	
	ACOUSTIC DROP CEILING
	ACOUSTIC DROP CEILING
	HARD LID CEILING
	OPEN TO STRUCTURE

1 FIRE ALARM PLANS - UNIT D
SCALE: 1/8" = 1'-0"



2 FIRE ALARM PLANS - UNIT E
SCALE: 1/8" = 1'-0"



3 FIRE ALARM PLANS - UNIT F
SCALE: 1/8" = 1'-0"

REVISIONS	
1	DSA SUBMISSION
2	DESCRIPTION

DESIGNER: Designer

SCALE: As indicated

DATE: 2025.03.05

DSA APP. #: 02-123150

TITLE:

FIRE ALARM PLAN
- BUILDING D-F

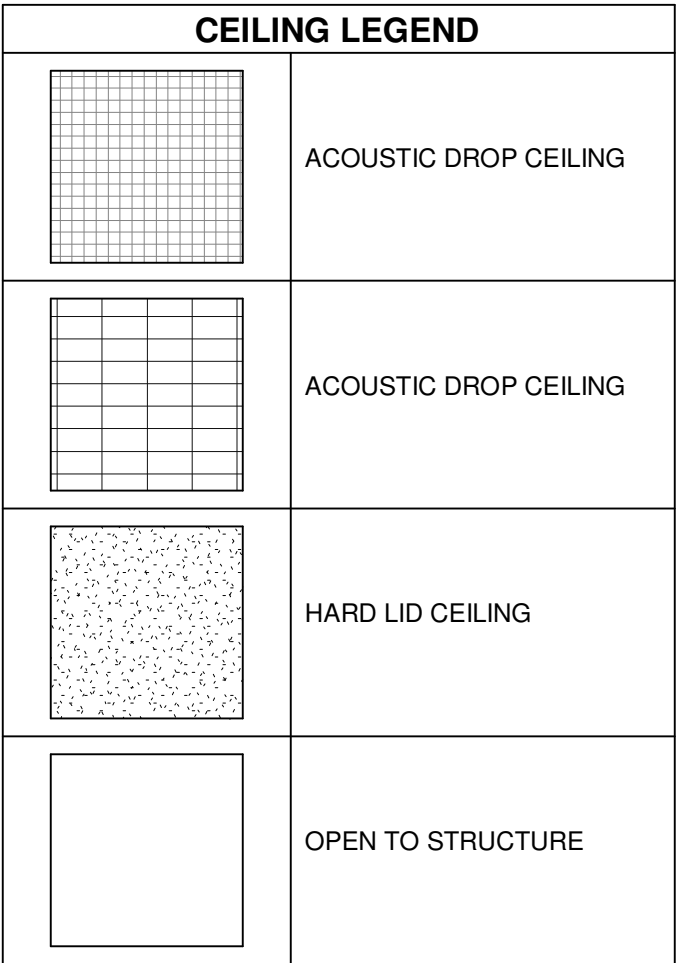
DRAWING NO.

FA2.2

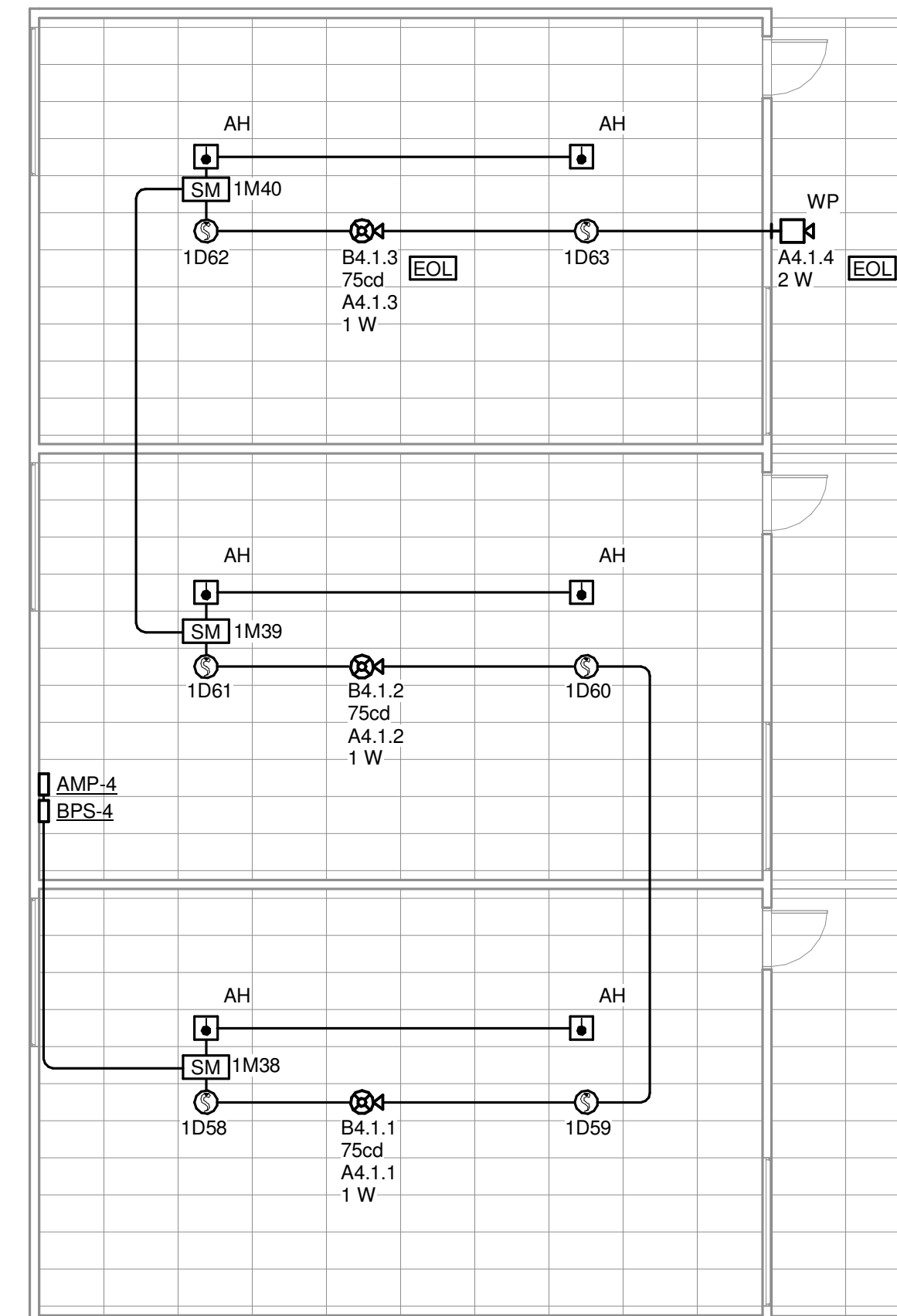
GENERAL SHEET NOTES

- A. FIRE ALARM SYSTEM SHALL COMPLY WITH ALL REQUIREMENTS OF APPLICABLE CODES, STANDARDS AND STATE REGULATIONS.
- B. FIRE ALARM CIRCUITS AND ROUTING ARE SHOWN SCHEMATICALLY FOR CLARITY ILLUSTRATING THE REQUIRED CONFIGURATION NECESSARY FOR PROPER CIRCUIT SUPERVISION.
- C. WHERE APPLICABLE AND IS CODE COMPLIANT CONTRACTOR MAY UTILIZE EXISTING INFRASTRUCTURE FROM EXISTING DEVICES, AT THEIR OWN DISCRETION AND RISK WHERE RE-USE FACILITATES INSTALLATION OF NEW DEVICES, PROVIDING EXISTING INFRASTRUCTURE MEETS PROJECT REQUIREMENTS.
- D. CONTRACTOR SHALL COMPLETE ALL CUTTING AND PATCHING REQUIRED FOR THE INSTALLATION OF THE WORK. CUTTING AND PATCHING SHALL BE COMPLETED IN A NEAT AND WORKMAN LIKE MANNER. PATCHING MATERIALS SHALL MATCH MATERIALS TO THE GREATEST EXTENT POSSIBLE. PROVIDE TOUCH UP PAINT AS REQUIRED TO MATCH PAINT FINISH AND COLOR OF ADJACENT AREAS.
- E. ALL PENETRATIONS, THROUGH DESIGNATED FIRE RATED WALLS, CEILINGS AND FLOOR SLABS SHALL BE PROPERLY SEALED WITH AN APPROVED RATED FIRE STOPPING MATERIAL. ALL FIRE STOPPING MATERIAL SHALL BE SUPPLIED AND WORK PERFORMED AS PER PROJECT SPECIFICATIONS AND MANUFACTURERS INSTALLATION INSTRUCTIONS.
- F. ALL SPEAKER/SPEAKER STROBES SHALL HAVE A MINIMUM 0.75" CONDUIT PATHWAY. USE OF EXISTING 0.5" CONDUIT PATHWAY IS NOT ACCEPTABLE.
- G. ENSURE STROBE FLASH IS SYNCHRONIZED PER NFPA 72.
- H. DO NOT INSTALL FIRE ALARM DEVICES BACK-TO-BACK IN STUD WALLS.
- I. RE-USE ALL EXISTING PATHWAYS.

- A. FIRE ALARM SYSTEM SHALL COMPLY WITH ALL REQUIREMENTS OF APPLICABLE CODES, STANDARDS AND STATE REGULATIONS.
- B. FIRE ALARM CIRCUITS AND ROUTING ARE SHOWN SCHEMATICALLY FOR CLARITY ILLUSTRATING THE WIRING CONFIGURATION NECESSARY FOR PROPER CIRCUIT SUPERVISION.
- C. WHERE APPLICABLE AND IN EXISTE COMPLIANT CONTRACTOR MAY UTILIZE EXISTING INFRASTRUCTURE FROM EXISTING DEVICES, AT THEIR OWN DISCRETION AND RISK WHERE RE-USE FACILITATES INSTALLATION OF NEW DEVICES, PROVIDING EXISTING INFRASTRUCTURE MEETS PROJECT REQUIREMENTS.
- D. CONTRACTOR SHALL COMPLETE ALL CUTTING AND PATCHING REQUIRED FOR THE INSTALLATION OF THE WORK, CUTTING AND PATCHING SHALL BE COMPLETED IN A NEAT AND WORKMAN LIKE MANNER, PATCHING MATERIALS SHALL MATCH MATERIALS TO THE GREATEST EXTENT POSSIBLE, PROVIDE TOUCH UP PAINT AS REQUIRED TO MATCH PAINT FINISH AND COLOR OF ADJACENT AREAS.
- E. ALL PENETRATIONS, THROUGH DESIGNATED FIRE RATED WALLS, CEILINGS AND FLOOR SLABS SHALL BE PROPERLY SEALED WITH AN APPROVED RATED FIRE STOPPING MATERIAL. ALL FIRE STOPPING MATERIAL SHALL BE APPLIED AND WORK PERFORMED AS PER PROJECT SPECIFICATIONS AND MANUFACTURERS INSTALLATION INSTRUCTIONS.
- F. ALL SPEAKER/SPEAKER STROBES SHALL HAVE A MINIMUM 0.75" CONDUIT PATHWAY. USE OF EXISTING 0.5" CONDUIT PATHWAY IS NOT ACCEPTABLE.
- G. ENSURE STROBE FLASH IS SYNCHRONIZED PER NFPA 72.
- H. DO NOT INSTALL FIRE ALARM DEVICES BACK-TO-BACK IN STUD WALLS.
- I. RE-USE ALL EXISTING PATHWAYS.



2 FIRE ALARM PLANS - UNIT C
SCALE: 1/8" = 1'-0"

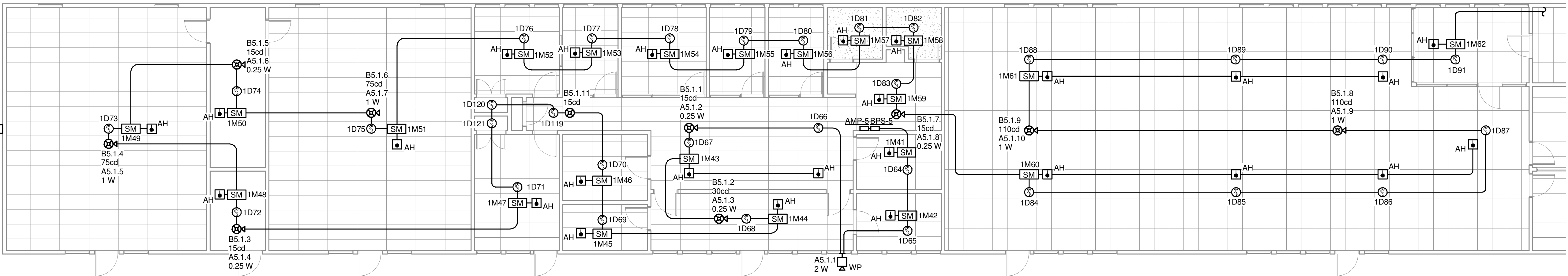


5001 E Eastview Dr, Stockton, CA 95212

DESIGNER: Designer
SCALE: As indicated
DATE: 2025.03.05
DSA APP. #: 02-123150
TITLE: FIRE ALARM PLAN - BUILDING R & C
DRAWING NO. FA2.3

GENERAL SHEET NOTES

- A. FIRE ALARM SYSTEM SHALL COMPLY WITH ALL REQUIREMENTS OF APPLICABLE CODES, STANDARDS AND STATE REGULATIONS.
- B. FIRE ALARM CIRCUITS AND ROUTING ARE SHOWN SCHEMATICALLY FOR CLARITY ILLUSTRATING THE WIRING CONFIGURATION NECESSARY FOR PROPER CIRCUIT SUPERVISION.
- C. WHERE APPLICABLE AND IS CODE COMPLIANT CONTRACTOR MAY UTILIZE EXISTING INFRASTRUCTURE FROM EXISTING DEVICES, AT THEIR OWN DISCRETION AND RISK WHERE RE-USE FACILITATES INSTALLATION OF NEW DEVICES, PROVIDING EXISTING INFRASTRUCTURE MEETS PROJECT REQUIREMENTS.
- D. CONTRACTOR SHALL COMPLETE ALL CUTTING AND PATCHING REQUIRED FOR THE INSTALLATION OF THE WORK. CUTTING AND PATCHING SHALL BE COMPLETED IN A NEAT AND WORKMAN LIKE MANNER. PATCHING MATERIALS SHALL MATCH MATERIALS TO THE GREATEST EXTENT POSSIBLE. PROVIDE TOUCH UP PAINT AS REQUIRED TO MATCH PAINT FINISH AND COLOR OF ADJACENT AREAS.
- E. ALL PENETRATIONS, THROUGH DESIGNATED FIRE RATED WALLS, CEILINGS AND FLOOR SLABS SHALL BE PROPERLY SEALED WITH AN APPROVED RATED FIRE STOPPING MATERIAL. ALL FIRE STOPPING MATERIAL SHALL BE SUPPLIED AND WORK PERFORMED AS PER PROJECT SPECIFICATIONS AND MANUFACTURERS INSTALLATION INSTRUCTIONS.
- F. ALL SPEAKER/SPEAKER STROBES SHALL HAVE A MINIMUM 0.75" CONDUIT PATHWAY. USE OF EXISTING 0.5" CONDUIT PATHWAY IS NOT ACCEPTABLE.
- G. ENSURE STROBE FLASH IS SYNCHRONIZED PER NFPA 72.
- H. DO NOT INSTALL FIRE ALARM DEVICES BACK-TO-BACK IN STUD WALLS.
- I. RE-USE ALL EXISTING PATHWAYS.

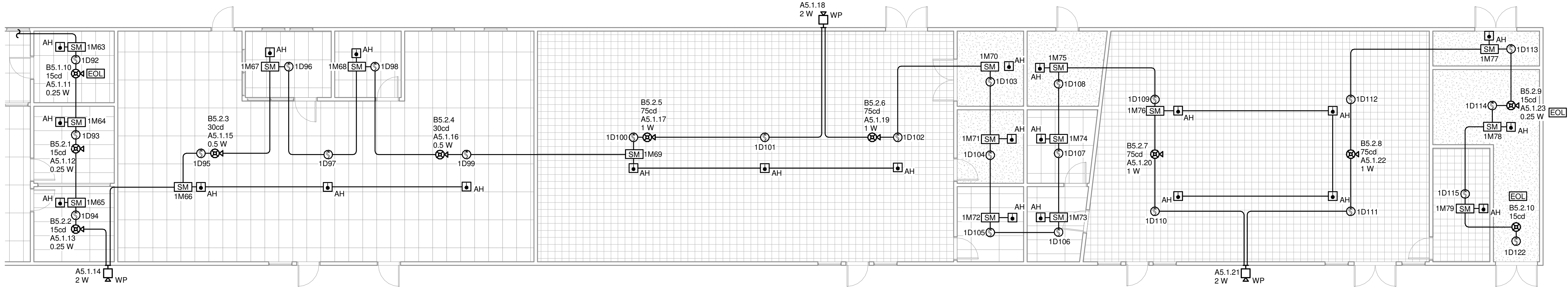


CEILING LEGEND	
	ACOUSTIC DROP CEILING
	ACOUSTIC DROP CEILING
	HARD LID CEILING
	OPEN TO STRUCTURE

1

FIRE ALARM PLANS - UNIT B1

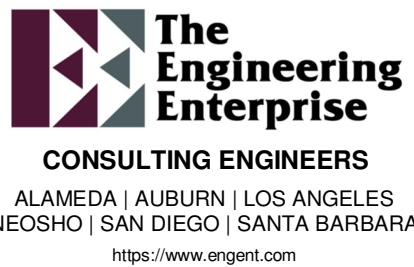
SCALE: 1/8" = 1'-0"



2

FIRE ALARM PLANS - UNIT B2

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



LUSD Morada Middle School Fire Alarm Upgrade

5001 E Eastview Dr, Stockton, CA 95212

REVISIONS

#	DESCRIPTION	DATE
1	DSA SUBMISSION	02/05/2025
2	DESCRIPTION	

DESIGNER: Designer

SCALE: As indicated

DATE: 2025.03.05

DSA APP. #: 02-123150

TITLE:

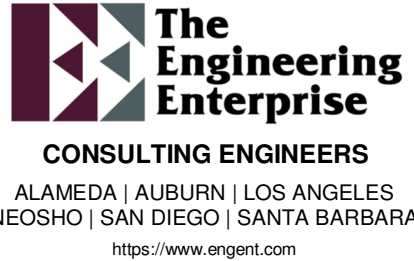
FIRE ALARM PLAN
- UNIT B

DRAWING NO.

FA2.4

GENERAL SHEET NOTES

- A. FIRE ALARM SYSTEM SHALL COMPLY WITH ALL REQUIREMENTS OF APPLICABLE CODES, STANDARDS AND STATE REGULATIONS.
- B. FIRE ALARM CIRCUITS AND ROUTING ARE SHOWN SCHEMATICALLY FOR CLARITY ILLUSTRATING THE WIRING CONFIGURATION NECESSARY FOR PROPER CIRCUIT SUPERVISION.
- C. WHERE APPLICABLE AND IS CODE COMPLIANT CONTRACTOR MAY UTILIZE EXISTING INFRASTRUCTURE FROM EXISTING DEVICES, AT THEIR OWN DISCRETION AND RISK WHERE RE-USE FACILITATES INSTALLATION OF NEW DEVICES, PROVIDING EXISTING INFRASTRUCTURE MEETS PROJECT REQUIREMENTS.
- D. CONTRACTOR SHALL COMPLETE ALL CUTTING AND PATCHING REQUIRED FOR THE INSTALLATION OF THE WORK. CUTTING AND PATCHING SHALL BE COMPLETED IN A NEAT AND WORKMAN LIKE MANNER. PATCHING MATERIALS SHALL MATCH MATERIALS TO THE GREATEST EXTENT POSSIBLE. PROVIDE TOUCH UP PAINT AS REQUIRED TO MATCH PAINT FINISH AND COLOR OF ADJACENT AREAS.
- E. ALL PENETRATIONS, THROUGH DESIGNATED FIRE RATED WALLS, CEILINGS AND FLOOR SLABS SHALL BE PROPERLY SEALED WITH AN APPROVED RATED FIRE STOPPING MATERIAL. ALL FIRE STOPPING MATERIAL SHALL BE SUPPLIED AND WORK PERFORMED AS PER PROJECT SPECIFICATIONS AND MANUFACTURERS INSTALLATION INSTRUCTIONS.
- F. ALL SPEAKER/SPEAKER STROBES SHALL HAVE A MINIMUM 0.75" CONDUIT PATHWAY. USE OF EXISTING 0.5" CONDUIT PATHWAY IS NOT ACCEPTABLE.
- G. ENSURE STROBE FLASH IS SYNCHRONIZED PER NFPA 72.
- H. DO NOT INSTALL FIRE ALARM DEVICES BACK-TO-BACK IN STUD WALLS.
- I. RE-USE ALL EXISTING PATHWAYS.



LUSD Morada Middle School Fire Alarm Upgrade

5001 E Eastview Dr, Stockton, CA 95212

REVISIONS	
1	DSA SUBMISSION
#	DESCRIPTION
	DATE

DESIGNER: Designer

SCALE: As indicated

DATE: 2025.03.05

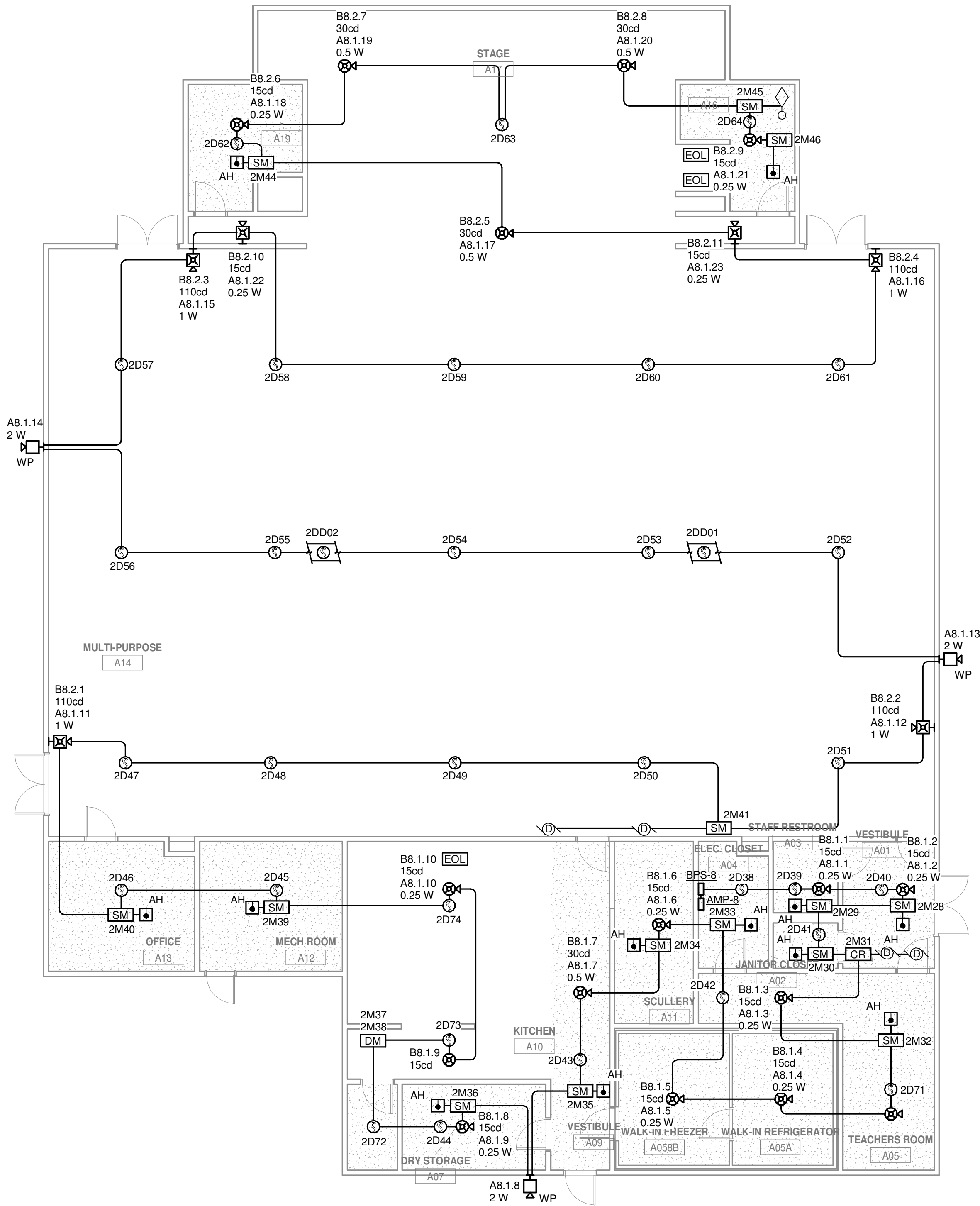
DSA APP. #: 02-123150

TITLE:

**FIRE ALARM PLAN
- UNIT A & G**

DRAWING NO.

FA2.5



1 FIRE ALARM PLANS - UNIT A

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

