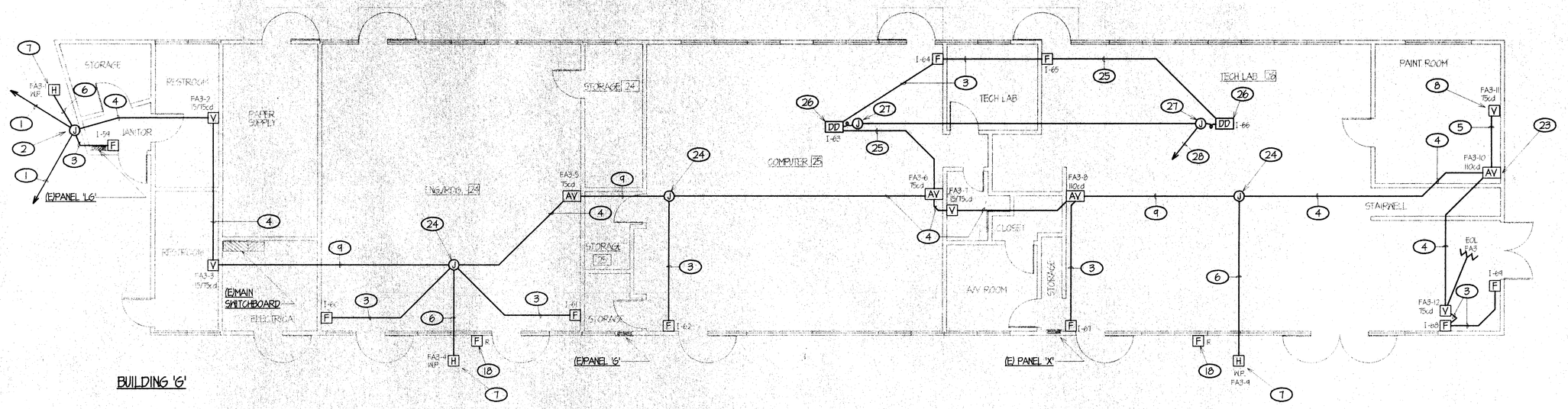
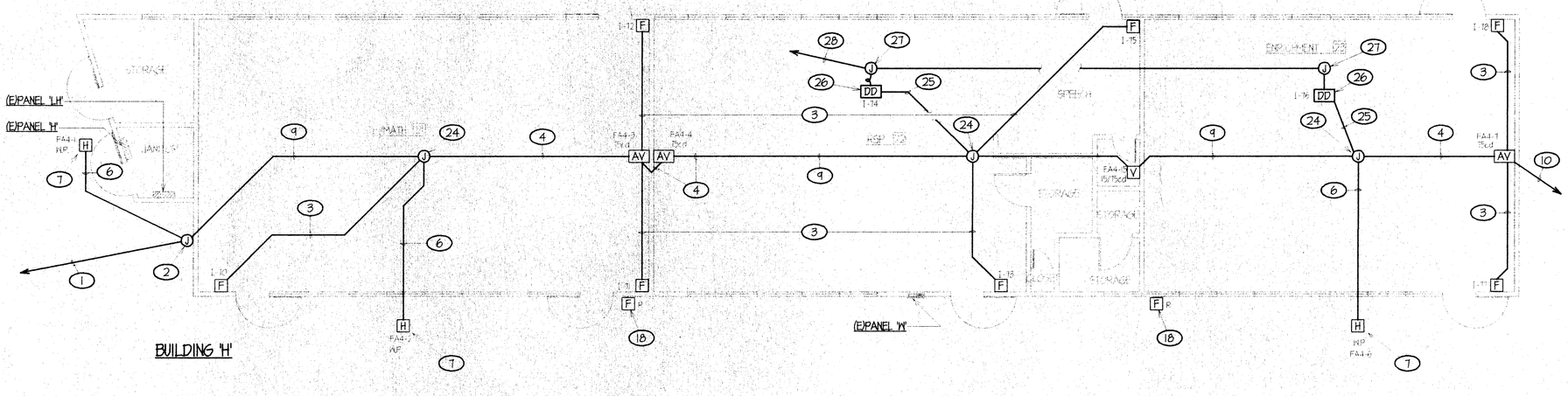
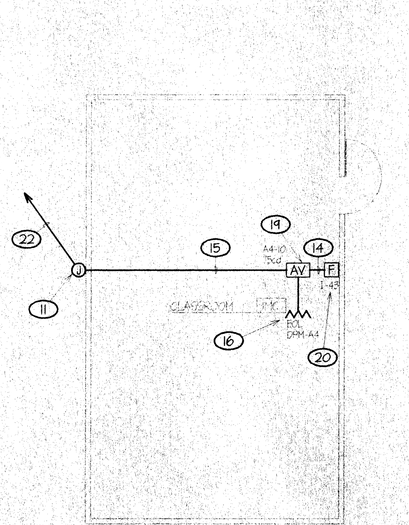


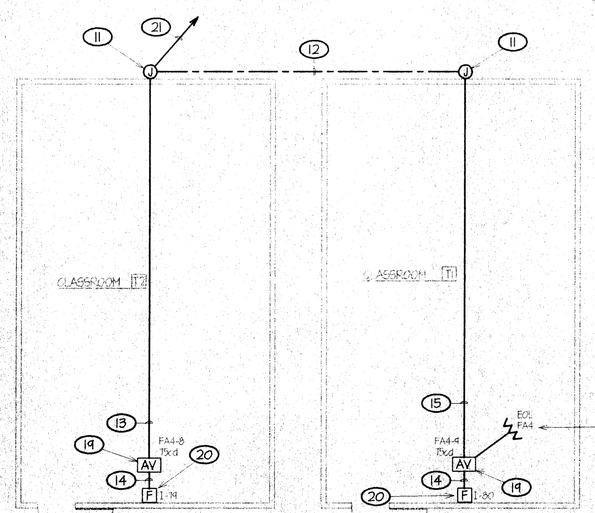
BUILDING 'G'



BUILDING 'H'



BUILDING 'R1'



BUILDING 'R2'

BUILDING 'R3'

FIRE ALARM SYSTEM PLAN - UNITS 'G', 'H', 'R1', 'R2', 'R3' (24)

1/8" = 1'-0"

FIRE ALARM SYSTEM PLAN NOTES

1. REFER TO SITE FIRE ALARM SYSTEM PLAN FOR FEEDER CONTINUATION AND COORDINATION/REFERENCE.
2. M.P., 6" x 6" x 4" NEMA 3R SCREW COVER ENCLOSURE. REFER TO SITE FIRE ALARM SYSTEM PLAN FOR COORDINATION/REFERENCE.
3. 1/2"C. ONE 'F' CABLE (INITIATION) IN ACCESSIBLE ATTIC SPACE, CONVERT TO SURFACE METAL RACEWAY (MIREMOLD V100 SERIES OR EQUAL) WHEN EXITING CEILING IN ACCESSIBLE ATTIC SPACE AT EACH FIRE ALARM INITIATION DEVICE. THEN RUN SURFACE METAL RACEWAY ONE 'F' CABLE (INITIATION) TO FIRE ALARM INITIATION DEVICE. REFER TO 4/E-5 FOR COORDINATION/REFERENCE.
4. 1/2"C. 2 #12 CU THHN (ANNUNCIATION), ONE 'F' CABLE (INITIATION) IN ACCESSIBLE ATTIC SPACE, CONVERT TO SURFACE METAL RACEWAY (MIREMOLD V100 SERIES OR EQUAL) ABOVE CEILING IN ACCESSIBLE ATTIC SPACE AT EACH FIRE ALARM ANNUNCIATION DEVICE, THEN RUN SURFACE METAL RACEWAY 4 #12 CU THHN (ANNUNCIATION) TO FIRE ALARM DEVICE. REFER TO 4/E-5 FOR COORDINATION/REFERENCE.
5. 1/2"C. 4 #12 CU THHN (ANNUNCIATION), ONE 'F' CABLE (INITIATION) IN ACCESSIBLE ATTIC SPACE, CONVERT TO SURFACE METAL RACEWAY (MIREMOLD V100 SERIES OR EQUAL) ABOVE CEILING IN ACCESSIBLE ATTIC SPACE AT EACH FIRE ALARM ANNUNCIATION DEVICE, THEN RUN SURFACE METAL RACEWAY 4 #12 CU THHN (ANNUNCIATION) TO FIRE ALARM DEVICE. REFER TO 4/E-5 FOR COORDINATION/REFERENCE.
6. 1/2"C. 4 #12 CU THHN (ANNUNCIATION) CONCEALED IN ATTIC AND EXTERIOR SOFFIT STRUCTURE AS REQUIRED.
7. EXTERIOR M.P. AUDIBLE DEVICE MOUNTED IN SOFFIT OF CORRIDOR.
8. ANNUNCIATION DEVICE 'A2-10' LOCATED IN PAINT ROOM ON FIRST FLOOR.
9. 1/2"C. 2 #12 CU THHN (ANNUNCIATION), ONE 'F' CABLE (INITIATION) IN ACCESSIBLE ATTIC SPACE.
10. RUN FIRE ALARM CONDUCTORS TO RELOCATABLE BUILDING PER SITE FIRE ALARM PLAN, SHEET E-1. REFER TO BUILDING 'R2' FIRE ALARM SYSTEM PLAN, THIS SHEET FOR CIRCUIT CONTINUATION.
11. EXISTING JUNCTION BOX AT REAR OF RELOCATABLE FOR EXTENSION OF FIRE ALARM CIRCUITS TO REMAIN.
12. PULL IN 2 #12 CU THHN (ANNUNCIATION) IN EXISTING CONDUIT.
13. REUSE EXISTING FIRE ALARM CONDUIT AND PULL IN 4 #12 CU THHN (ANNUNCIATION), ONE 'F' CABLE (INITIATION) TO EXISTING RELOCATABLE BACK BOX AND CONNECT 4 #12 TO NEW FLUSH MOUNTED AUDIBLE DEVICE AS SHOWN.
14. REUSE EXISTING FIRE ALARM CONDUIT AND CONTINUE ONE 'F' CABLE (INITIATION) IN EXISTING CONDUIT TO EXISTING RELOCATABLE BACK BOX AND CONNECT 'F' CABLE TO NEW FLUSH MOUNTED INITIATION DEVICE
15. REUSE EXISTING FIRE ALARM CONDUIT AND PULL IN 2 #12 CU THHN (ANNUNCIATION), ONE 'F' CABLE (INITIATION) TO EXISTING RELOCATABLE BACK BOX AND CONNECT 2 #12 TO NEW FLUSH MOUNTED AUDIBLE DEVICE AS SHOWN.
16. END OF LINE RESISTOR FOR ANNUNCIATION CIRCUIT 'DPH-A4'.
17. END OF LINE RESISTOR FOR ANNUNCIATION CIRCUIT 'FA4'.
18. EXISTING DEVICE, DENOTED WITH SUBSCRIPT 'R', TO BE REMOVED FROM WALL THAT IS TO REMAIN. PULL OUT WIRING MADE IDLE BY DEVICE REMOVAL COMPLETE TO EXISTING FIRE ALARM CONTROL PANEL. PROVIDE AND INSTALL APPROPRIATE BLANK COVER PLATE TO EXISTING FLUSH BACK BOX THAT IS TO BE ABANDONED IN PLACE. REMOVE ANY EMPTY, EXPOSED JUNCTION BOX(ES) AND/OR CONDUIT COMPLETE. PAINT COVER PLATE TO MATCH EXISTING SURFACE. CONTRACTOR SHALL FIELD VERIFY.
19. MOUNT FIRE ALARM ANNUNCIATION DEVICE FLUSH IN EXISTING BACK BOX LOCATED INSIDE RELOCATABLE BUILDING.
20. MOUNT FIRE ALARM INITIATION DEVICE FLUSH IN EXISTING BACK BOX LOCATED INSIDE RELOCATABLE BUILDING.
21. RUN FIRE ALARM CONDUCTORS TO PERMANENT CLASSROOM BUILDING 'H' PER SITE FIRE ALARM PLAN, SHEET E-1. REFER TO BUILDING 'H' FIRE ALARM SYSTEM PLAN, THIS SHEET FOR CIRCUIT CONTINUATION.
22. RUN FIRE ALARM CONDUCTORS TO PERMANENT CLASSROOM BUILDING 'E' PER SITE FIRE ALARM PLAN, SHEET E-1. REFER TO BUILDING 'E' FIRE ALARM SYSTEM PLAN, SHEET E-3 FOR CIRCUIT CONTINUATION.
23. ANNUNCIATION DEVICE 'A2-4' LOCATED IN MEZZANINE ABOVE FIRST FLOOR.
24. 4S JUNCTION BOX MOUNTED IN ACCESSIBLE ATTIC SPACE.
25. 1/2"C. ONE 'F' CABLE (INITIATION) IN ACCESSIBLE ATTIC SPACE.
26. PROVIDE DUCT DETECTOR PER SPECIFICATIONS AND CONNECT TO FIRE ALARM INITIATION CIRCUIT AS SHOWN. INSTALL NEW DETECTOR TO EXISTING HVAC UNIT DUCTING PER MANUFACTURER'S WRITTEN INSTRUCTIONS AND INTERCONNECT TO POWER CIRCUIT FOR AUTOMATIC SHUT OFF OF HVAC UNIT FAN PER 6/E-5. TYPICAL WHERE OCCURS.
27. MOUNT JUNCTION BOX IN ATTIC SPACE BELOW EXISTING HVAC UNIT, PROVIDE 1/2" FLEXIBLE METALLIC CONDUIT, SPLICE 2 #12 CU THHN + 1 #12 CU GROUND TO MAIN CIRCUIT CONDUCTORS AND CONNECT POWER FOR DUCT DETECTOR 120V AUXILIARY RELAY USED IN AUTOMATIC HVAC SHUT DOWN PER 6/E-5. TYPICAL WHERE SHOWN.
28. CONNECT TO SPARE 20/1 CIRCUIT BREAKER AT NEAREST EXISTING 120V PANEL. IF NO SPARE BREAKER IS AVAILABLE, PROVIDE NEW 20/1 CIRCUIT BREAKER AND INSTALL INTO EXISTING PANEL. MATCH EXISTING MANUFACTURER AND I.C. RATINGS. CONTRACTOR SHALL FIELD VERIFY.
29. PER BAKERSFIELD CITY SCHOOL DISTRICT DIRECTIONS: ALL CONDUIT RUN ON TOP OF COVERED WALKWAY AND IN ACCESSIBLE ATTIC SHALL BE OF TYPE EMT. ALL FIRE ALARM DEVICES LOCATED INSIDE OF BUILDING SHALL BE SURFACE MOUNTED. ALL INTERIOR RUNS INSIDE BUILDING THAT ARE EXPOSED, ALONG WALL OR FROM DEVICE TO CEILING, SHALL UTILIZE A SURFACE METAL RACEWAY SYSTEM (MIREMOLD V100 SERIES, OR EQUAL). SURFACE METAL RACEWAY SHALL BE CONVERTED TO EMT CONDUIT AND CONDUCTORS ABOVE CEILING, IN ACCESSIBLE ATTIC SPACE. REFER TO 4/E-5 FOR COORDINATION/REFERENCE. NO SURFACE CONDUIT INSIDE BUILDINGS WILL BE ALLOWED.

FIRE ALARM APPROVAL

THE FIRE ALARM SYSTEM DESIGN IS A COMPLETE PLAN SUBMITTAL PER DSA-ORS POLICY. THE CONTRACTOR SHALL INSTALL THE MANUAL, ADDRESSABLE FIRE PROTECTION SYSTEM AS SHOWN AND AS HEREIN SPECIFIED. IF ANY SUBSTITUTION OF FIRE ALARM EQUIPMENT IS TO BE REQUESTED, SUCH REQUEST SHALL BE MADE A MINIMUM OF TEN BUSINESS DAYS PRIOR TO PROJECT BID DATE. THE CONTRACTOR SUBMITTAL SHALL INCLUDE ALL MANUFACTURER'S CATALOG EQUIPMENT SPECIFICATION SHEETS, THE CSFM LISTING SHEETS FOR INDIVIDUAL COMPONENTS COMPRISING THE SUBSTITUTED FIRE ALARM SYSTEM, BATTERY LOAD CALCULATIONS AND VOLTAGE DROP CALCULATIONS FOR EACH SIGNALLING CIRCUIT. SHOULD THE SUBSTITUTED SYSTEM BE APPROVED AND INSTALLED, THE CONTRACTOR SHALL PROVIDE ONE SET OF REPRODUCIBLE, CAD GENERATED, DSA-ORS APPROVED AND STAMPED 'AS-CONSTRUCTED' DRAWINGS TO THE ENGINEER UPON COMPLETION OF THE SYSTEM INSTALLATION.

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Vincent H. Waters, P.E. #E014875

REGISTERED PROFESSIONAL ENGINEER — VINCENT H. WATERS — No. E 14875 — Exp. 6/30/03 — ELECTRICAL — STATE OF CALIFORNIA

IDENTIFICATION STAMP
DIV OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
APPL. #03-106456
FILE 15-6
AC ✓ FLS IN SS
DATE 12/17/02

Project:

BAKERSFIELD CITY SCHOOL DISTRICT

WASHINGTON JUNIOR HIGH SCHOOL

FIRE ALARM SYSTEM REPLACEMENT

Bakersfield, California

CAD INDEMNIFICATION CLAUSE

THE COMPUTER GENERATED CAD DRAWING FILES PREPARED BY THE ELECTRICAL ENGINEER FOR THIS PROJECT ARE INSTRUMENTS OF THE ELECTRICAL ENGINEER'S SERVICE SOLELY IN CONNECTION WITH THIS PROJECT. DURING THE COURSE OF IMPLEMENTATION OF THIS PROJECT AND ONLY WITH THE PRIOR WRITTEN CONSENT OF THE ELECTRICAL ENGINEER, OTHERS MAY BE PERMITTED TO VIEW THE CAD DRAWING FILES FOR THE PURPOSE OF INFORMATION AND/OR REFERENCE ONLY. THESE CAD DRAWING FILES SHALL NOT BE USED ON ANY PROJECT OTHER THAN THIS PROJECT, FOR ANY UNAUTHORIZED ADDITIONS TO THIS PROJECT, OR FOR COMPLETION OF THIS PROJECT BY OTHERS. ANY INTENTIONAL REVISIONS, ADDITIONS OR DELETIONS MADE TO THESE CAD DRAWING FILES SHALL BE MADE AT THE FULL RISK OF THE PERSON(S) WHO SHALL KNOWINGLY MAKE SUCH REVISIONS, ADDITIONS OR DELETIONS, AND SUCH PERSON(S) SHALL HOLD HARMLESS AND INDEMNIFY THE ELECTRICAL ENGINEER OF ANY AND ALL RESPONSIBILITIES AND/OR LIABILITIES ATTENDANT TO SUCH REVISIONS, ADDITIONS OR DELETIONS.

DRAWN BY:	DAJ/LLD
CHECKED BY:	RTS
APPROVED BY:	VHH
PROJECT NUMBER:	2002-21A
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DATE:	01/09/02

SHEET TITLE:
FIRE ALARM SYSTEM PLAN - UNITS 'G', 'H', 'I', 'J', 'K'

SHEET
E-4
OF 6 SHEETS

K:\JOBS\02\2002-21\2002-21A\2002-21A-E4.DWG DAJ 01/29/02