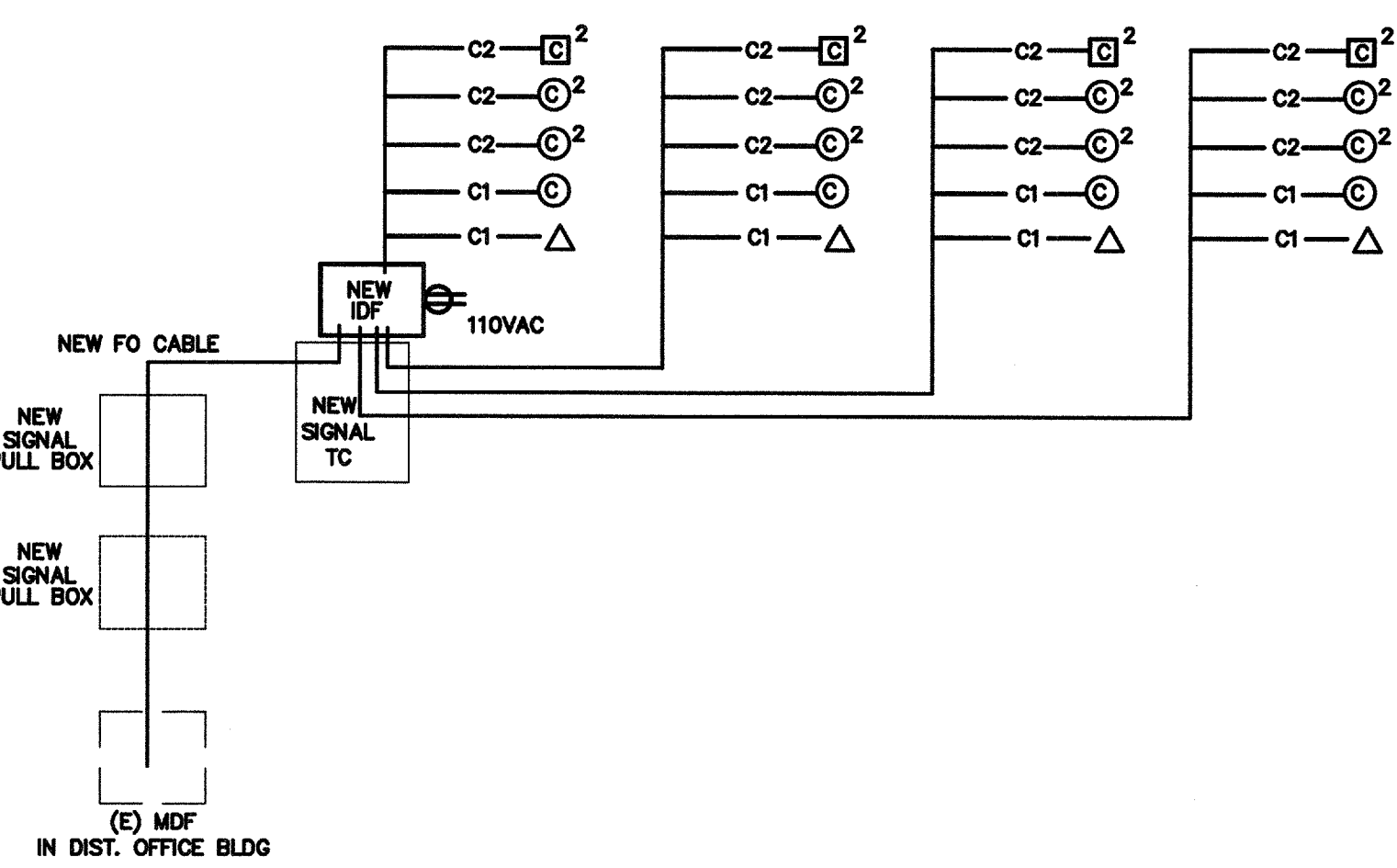


1" = 40'-0"
 1" = 30'-0"
 1" = 20'-0"
 1" = 1'-0"
 1/8" = 1'-0"
 1/4" = 1'-0"



FIBER OPTIC CABLE
 THREE MULTIMODE PAIRS (SIX STRANDS) AND THREE SINGLE-MODE PAIRS (SIX STRANDS)
 OPTICAL CABLE COMPANY # DX 12/0850-6W35B/1UC-6SYMC-YMD/900-OPNR OF EQUAL
 CATSE CABLE

CABLE TESTING
 ALL FIBER OPTIC CABLE MUST BE TESTED TO SUPPORT 1000BASE-FX FULL DUPLEX STANDARDS.
 ALL CAT SE CABLE MUST BE TESTED TO SUPPORT 100BASE-TX.
 TEST RESULTS ARE TO BE PROVIDED TO SCHOOL TECHNOLOGICAL SERVICES FOR REVIEW AND APPROVAL.

IDE SWITCH EQUIPMENT

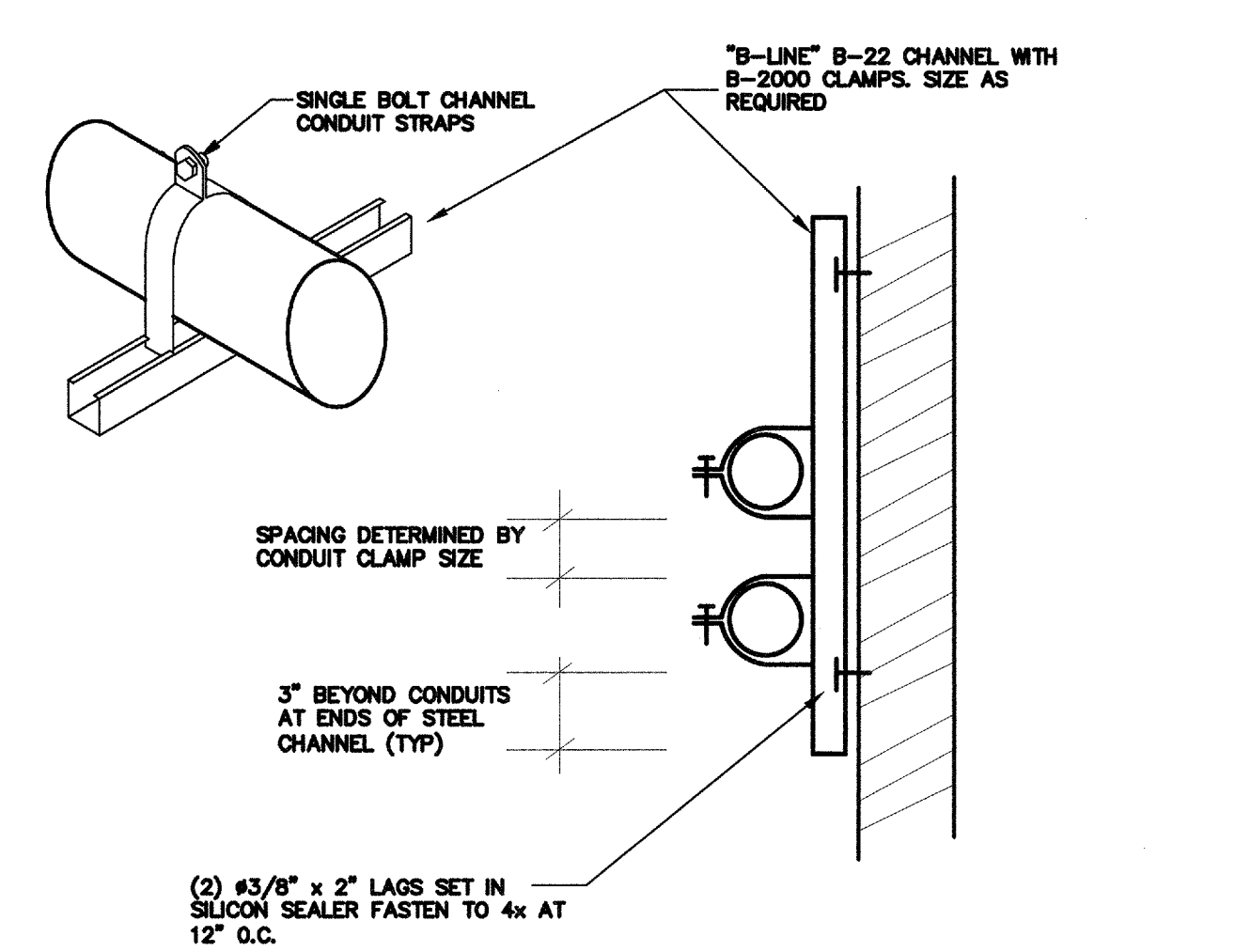
| | |
|-------------|--|
| F/O | CISCO WS-C2950C-24 W/ WS-C5484 GBIC |
| TP | CISCO WS-C2950-24 |
| CABINETS | SOUTH WESTERN DATA PRODUCT SWE 4000-180DBLK OR EQUAL |
| JACKS | ALLEN TEL AT35-18 OR EQUAL |
| FACEPLATE | ALLEN TEL AT30-2-09 OR EQUAL |
| PATCH PANEL | ALLEN TEL ATPNL-24 OR EQUAL |

LABELING IDENTIFICATION
 ALL INSTALLED EQUIPMENT, CABLES, TERMINATIONS, ETC. WILL BE PERMANENTLY AND UNIQUELY MARKED. CABLES WILL BE MARKED USING A CONVENTION THAT WILL IDENTIFY ITS ORIGIN AND DESTINATION. LAN TERMINATIONS WILL SIMILARLY BE MARKED TO UNIQUELY IDENTIFY THEM WHILE PROVIDING THE SOURCE AND DESTINATION OF CABLE. IDENTIFICATIONS MUST BE SUCH THAT THEY WILL NOT RUB OFF, FALL OFF, OR EASILY BREAK AWAY.

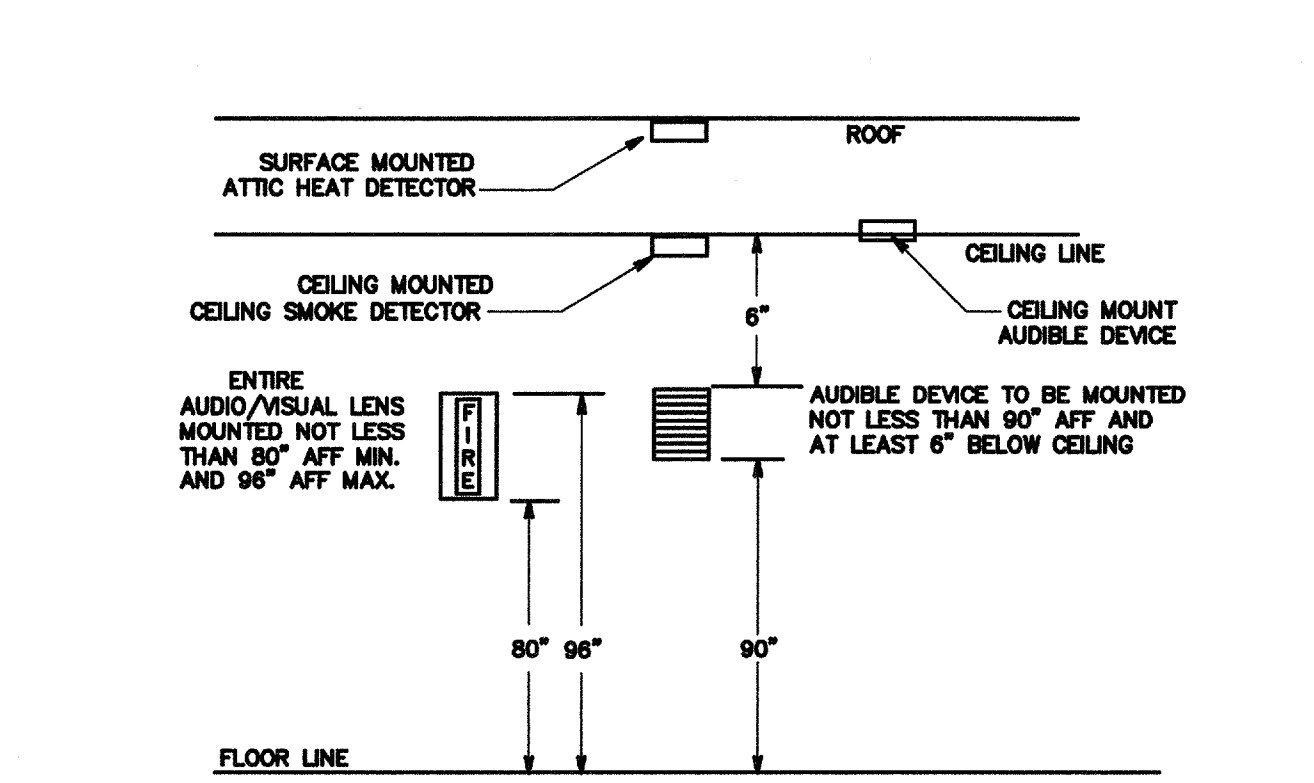
DATA COMMUNICATION SYSTEM NOTES

- CONTRACTOR TO PROVIDE ALL EQUIPMENT, PATCH CABLE AND ACCESSORY FOR A FULLY FUNCTIONAL SYSTEM.
- NEW DATA JACK WIRING CONFIGURATION MUST BE MATCHED EXISTING SYSTEM. FIELD VERIFY PRIOR TO INSTALLATION.
- ADMINISTRATIVE NODE TO BE RED IN COLOR WITH THE INSTRUCTIONAL NODE TO BE BLUE IN COLOR. NODE LOCATION MUST BE 12" WITHIN POWER RECEPTACLE AND FIELD VERIFY EXACT LOCATION WITH OWNER PROJECT COORDINATOR OR TECHNOLOGICAL SERVICES PERSONNEL PRIOR TO INSTALLATION.
- ALL EQUIPMENT DOCUMENTATION AND WARRANTY INFORMATION WILL BE PROVIDED TO OWNER TECHNOLOGICAL SERVICES. WARRANTY CARDS WILL BE PROVIDED TO VUSD TECHNOLOGICAL SERVICES FOR FILING WITH MANUFACTURERS UPON COMPLETION OF INSTALLATION.

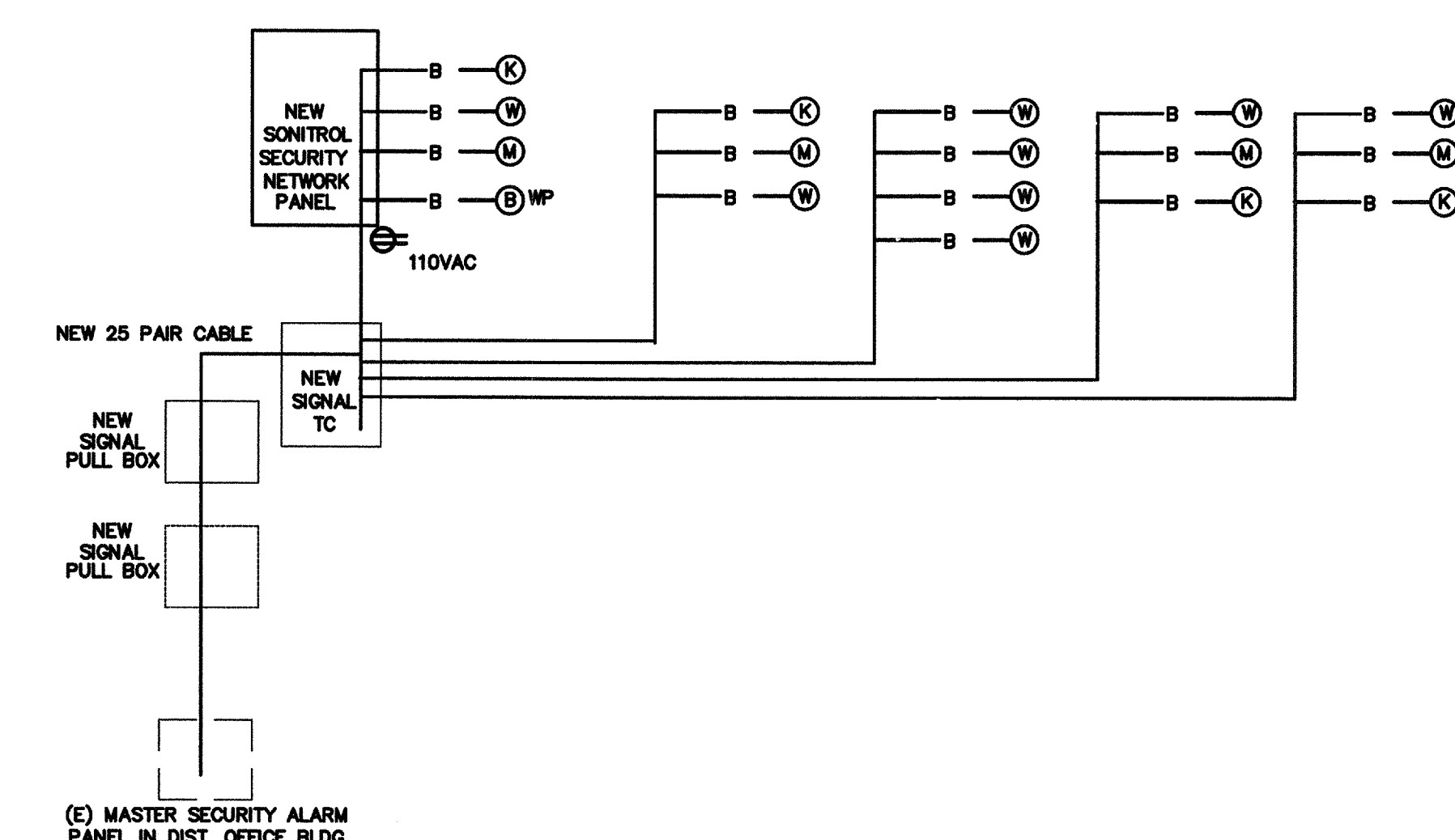
7 DATA COMMUNICATION SYSTEM RISER DIAGRAM N.T.S.



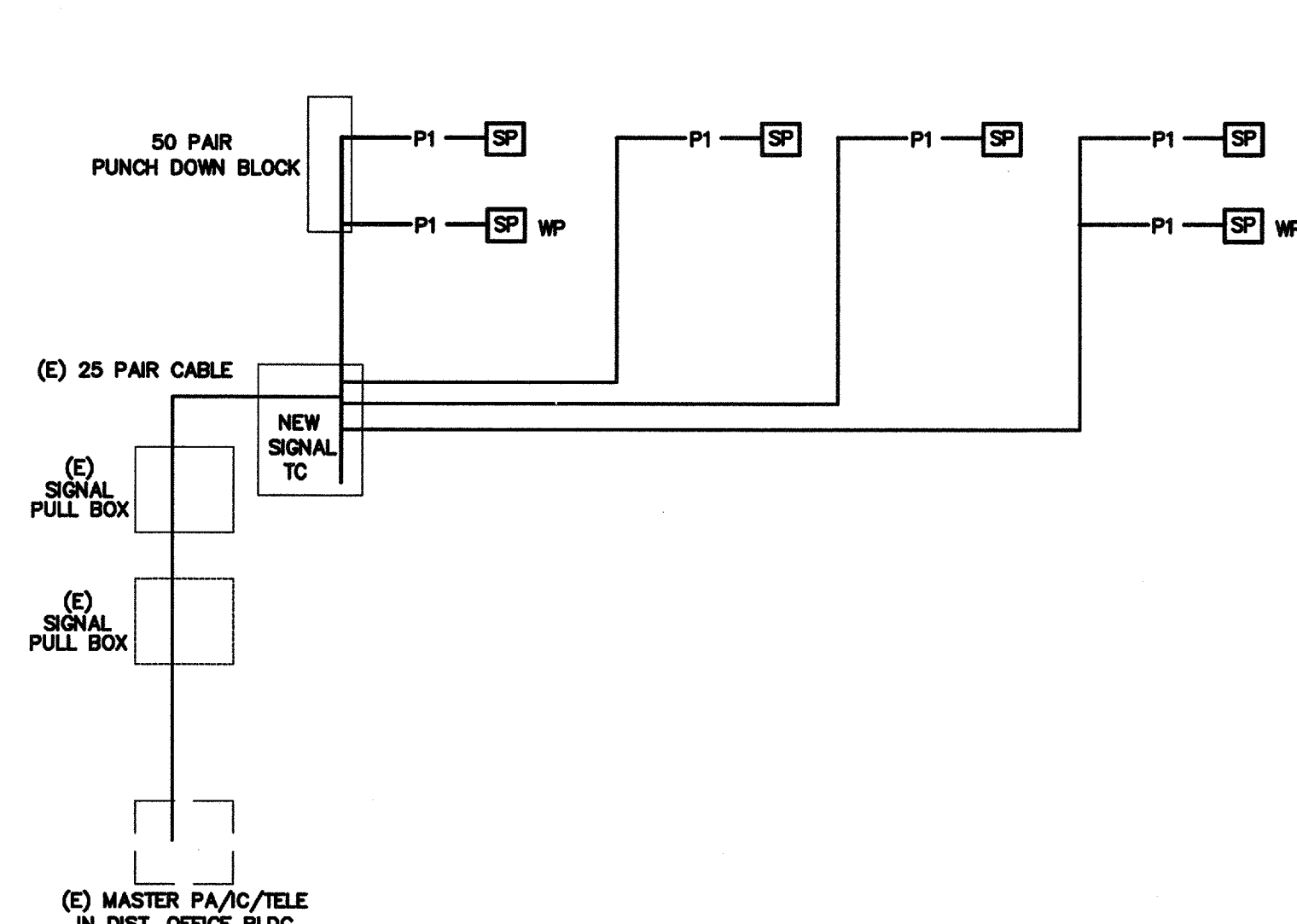
6 CONDUIT SUPPORT DETAIL N.T.S.



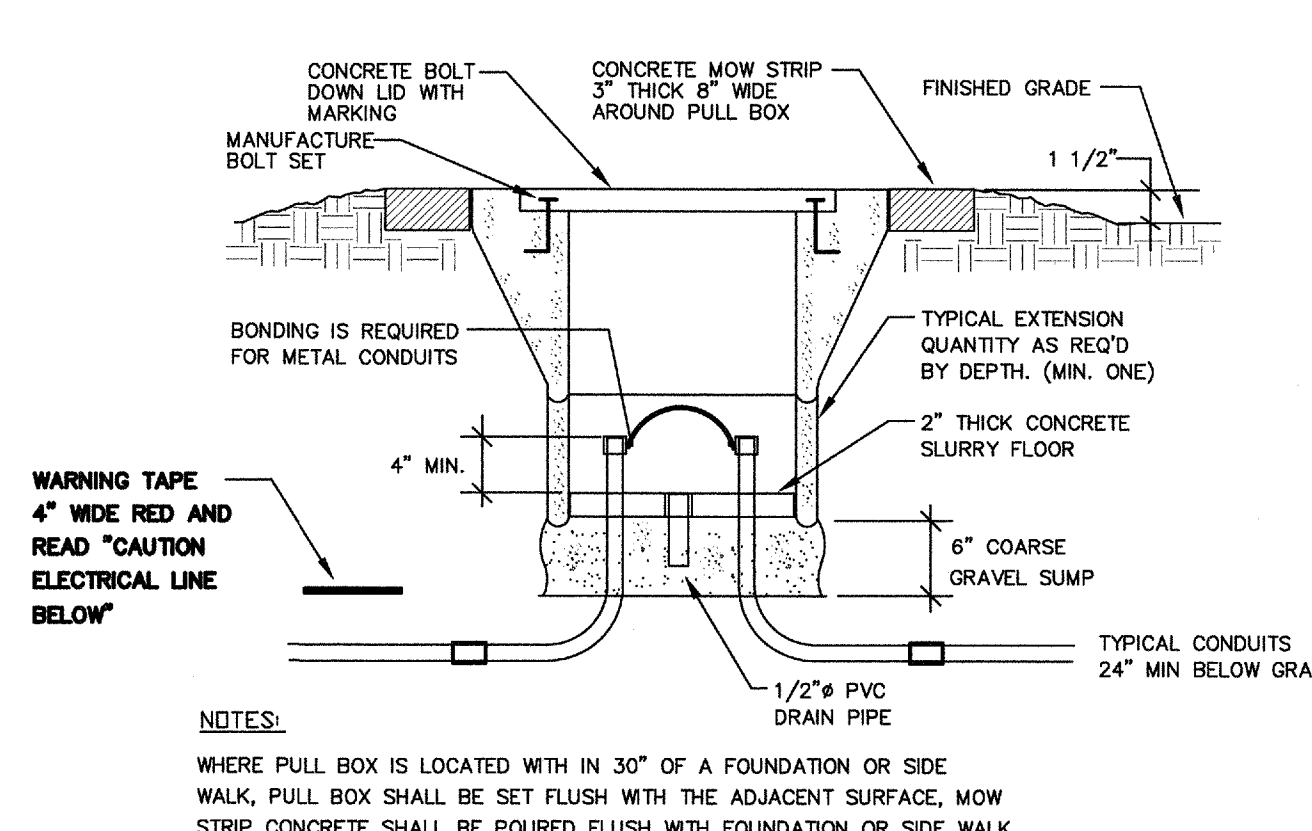
8 TYPICAL FIRE ALARM DEVICES MTD DETAIL N.T.S.



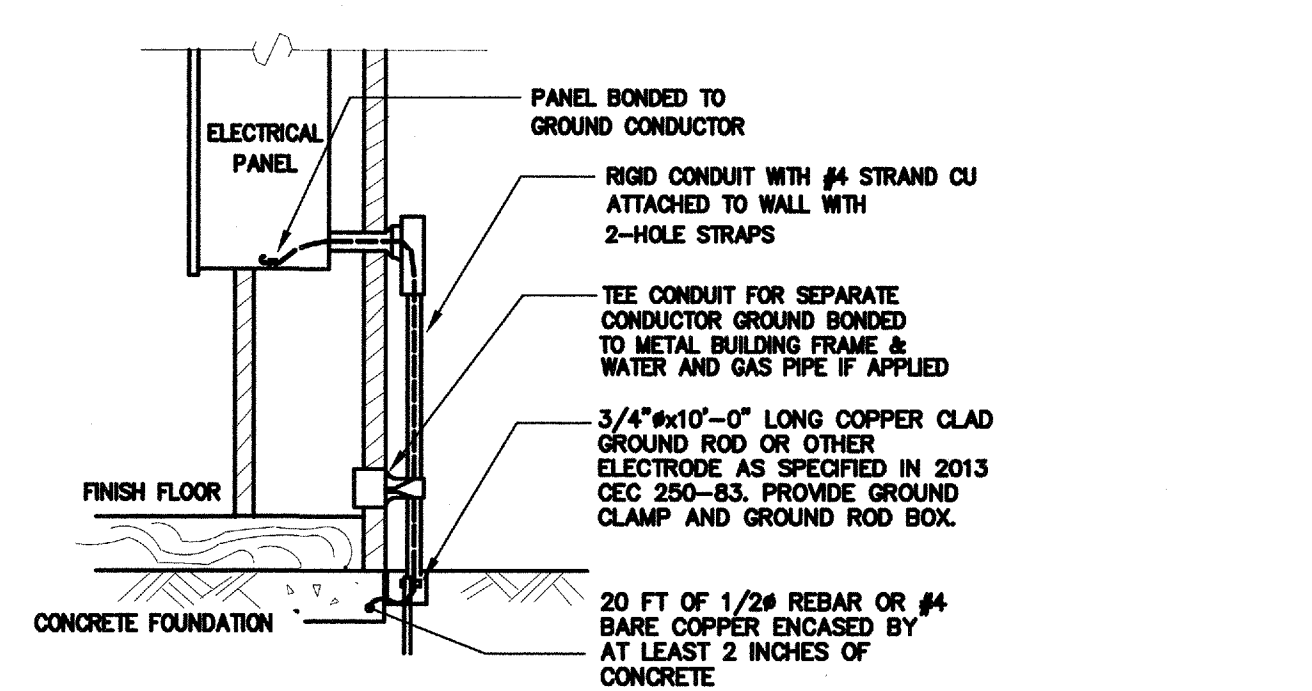
5 SECURITY ALARM SYSTEM RISER DIAGRAM N.T.S.



2 PA/IC/TELE SYSTEM RISER DIAGRAM N.T.S.



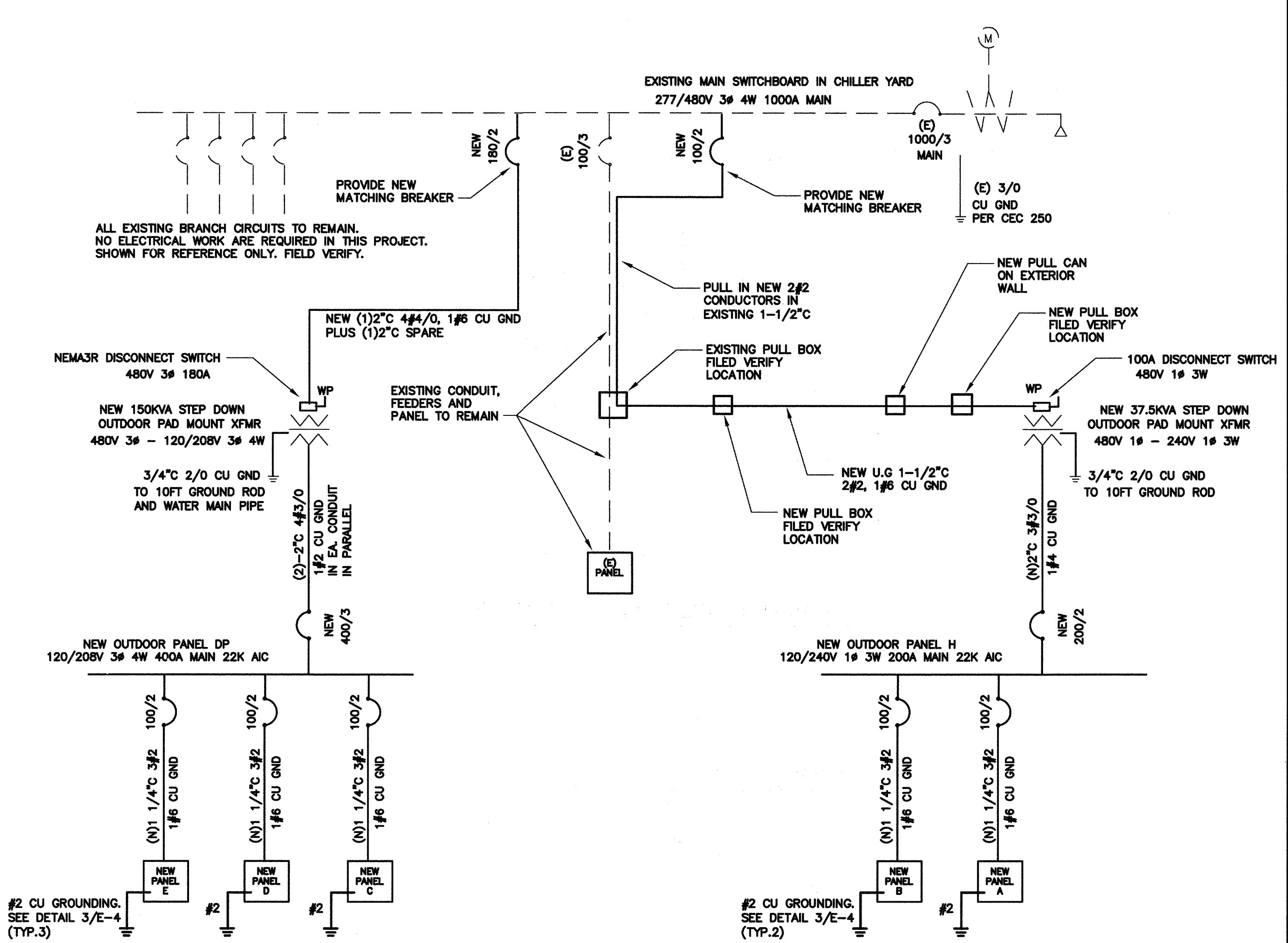
4 PULL BOX AT OPEN YARD DETAIL N.T.S.



NOTES:

- SIZE OF CONDUCTORS SHALL COMPLY WITH 2013 CEC TABLE 250-66.
- BOND SEPARATE CONDUCTORS FROM GROUND ROD TO ELECTRICAL PANEL AND TO METAL BUILDING FRAME PER 2013 CEC 250-50. IN ADDITION TO THE DETAIL SHOWN ABOVE BOND THE ELECTRICAL GROUND TO METAL WATER PIPE EMBEDDED AT LEAST 10 FT. IN SOIL IF AVAILABLE (CEC 250-50, 250-62).
- ALL MADE OF METAL FRAME BUILDINGS SHALL BE ELECTRICALLY BONDED TOGETHER, BOND TO HAND RAIL AND WATER PIPE IF APPLIED. (BOLTING ONLY IS NOT ACCEPTABLE BONDING).
- CHECK RESISTANCE TO GROUND. IF RESISTANCE EXCEED 25 OHMS, INSTALL ADDITIONAL GROUND RODS WITH CONDUCTORS AS SHOWN SEPARATED AT LEAST 6'-0" UNTIL RESISTANCE IS REDUCED TO 25 OHMS OR LESS (2013 CEC 250-84).
- FIELD INSPECTOR SHALL WITNESS GROUNDING TEST.

3 GROUNDING DETAIL N.T.S.



1 SINGLE LINE DIAGRAM N.T.S.

NOTES:

- PROVIDE NEW MATCHING BREAKERS, FEEDERS AND PANELS PER PLANS.
- ALL NEW CONDUCTOR SHALL BE 75°C THWN-2 COPPER IN CONDUIT. (AMPACITY FOR CONDUCTOR SELECTION MUST BE DETERMINED/DERATED BY THE ALLOWED TERMINATION RATINGS MARKED/APPROVED ON EACH DEVICES, MOTOR, APPLIANCE, XFMR O.C.P.C. PANEL, ETC. CONDUCTORS INSTALLED IN U/G OR WET LOCATIONS SHALL BE MARKER 'W'. PER 2013 CEC 110-14(C)(1)).
- ALL WIRING OVER 100 VOLT SHALL BE INSTALLED IN RACEWAY CONDUIT, EMT ABOVE GRADE, PVC SCH. 40 BELOW GRAD AND STEEL CONDUIT ON EXPOSE SURFACE BELOW 8' AFF. FOR PHYSICAL PROTECTION.
- STEEL BACK BOX SHALL BE PROVIDED FOR ALL NEW ELECTRICAL DEVICES SUCH AS SWITCH, OUTLET AND CONDUCTOR SPLICE.
- ELECTRICAL CONTRACTOR IS RESPONSIBLE TO VERIFY THE EXISTING SWITCHBOARD AND PANELS ARE INSTALL PER ONE LINE DIAGRAM PRIOR TO WORKING, AND REPORT TO ENGINEERS IF ANY DISCREPANCY ARE FOUND.

CONSULTING ENGINEERS
John Chong Engineering
 JOHN S. CHONG
 E 14419
 Exp. 8/30/2018
 ELECTRICAL
 2017 E. DECATUR AVE. FRESNO CA 93710
 (559) 915-2266 • FAX 551-3461
 jchong@ceee.com

Ownership of Documents
 This document, the ideas and designs incorporated herein, as an instrument of Professional Service is the property of Integrated Designs by SOMAM, Inc. and is not to be used, in whole or in part for any other project without written authorization. © COPYRIGHT 2013

Integrated designs by SOMAM, Inc.
 ARCHITECTURE - INTERIOR DESIGN - CONSTRUCTION MANAGEMENT
 6011 N. Fresno, Suite 130 - Fresno, California 93710
 Phone (559) 435-0887 Fax (559) 435-0887 E-Mail: design@somam.com
 www.integrateddesigns.com

| Revision | Description | Rev. Date |
|----------|-------------|-----------|
| | | |
| | | |
| | | |

DETAILS AND SYSTEM DIAGRAMS
 WASHINGTON MIDDLE SCHOOL
 4 RELOCATABLE CLASSROOMS AND 1 TOILET BLDG
 BAKERSFIELD CITY SCHOOL DISTRICT
 1101 NOBLE AVE., BAKERSFIELD, CA 93305

Issue Date: 11/13/14
 Date: 08/05/15
 Designer: J CHONG
 DR: J CHONG
 PC: CAM

Agency Approval Stamp:
 FILE #15-6
 IDENTIFICATION STAMP
 DIV. OF THE STATE ARCHITECT
 OFFICE OF REGULATION SERVICES
 03-117025
 AC: JLS
 SS: ke
 DATE: 12/31/2016
 TRACKING # DSA TRACKING NO

Job No.: 5127
 Sheet No.: E-4
 Release: