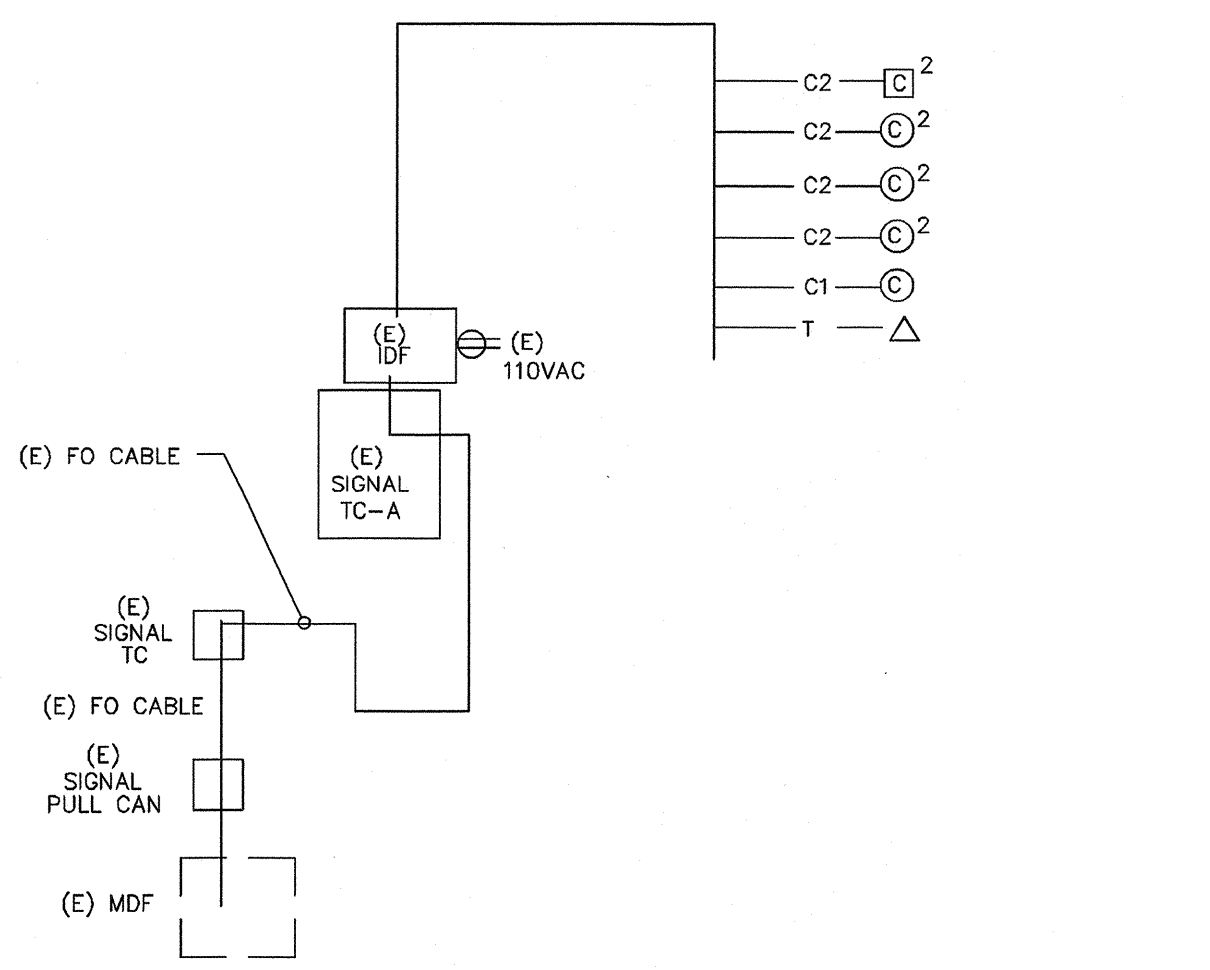


1" = 40'-0"
 1" = 30'-0"
 1" = 20'-0"
 1" = 1'-0"
 1/8" = 1'-0"
 1/4" = 1'-0"



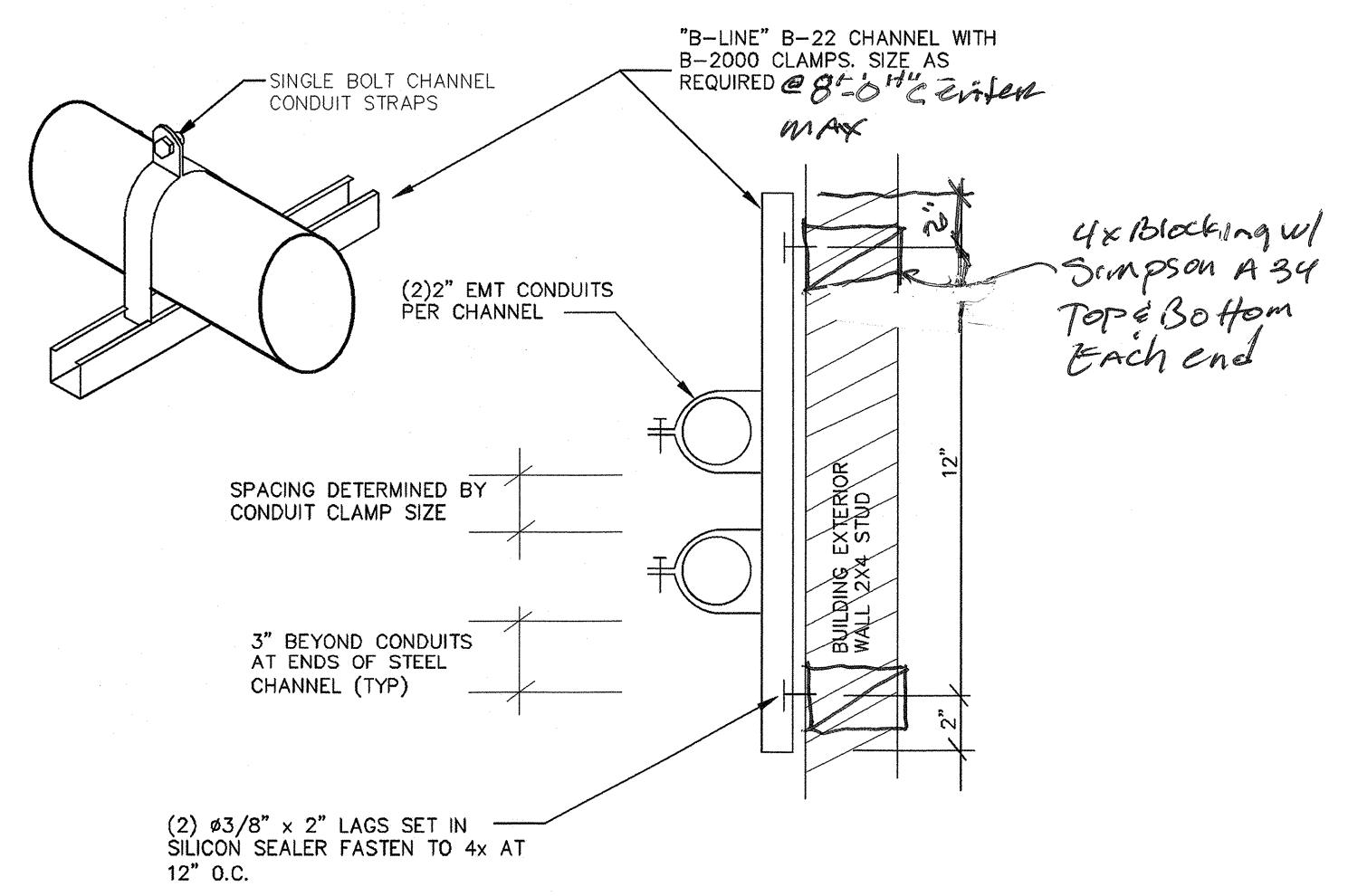
FIBER OPTIC CABLE
 THREE MULTIMODE PAIRS (SIX STRANDS) AND THREE SINGLE-MODE PAIRS (SIX STRANDS)
 OPTICAL CABLE COMPANY # DX 12/0650-6W35B/1UC-6SYMC-YMD/900-OPNR OF EQUAL
PLATE CABLE
 SEN4P24-BL-BER-PV OR EQUAL
CABLE TESTING
 ALL FIBER OPTIC CABLE MUST BE TESTED TO SUPPORT 1000BASE-FX FULL DUPLEX STANDARDS.
 ALL CAT 5E CABLE MUST BE TESTED TO SUPPORT 100BASE-TX.
 TEST RESULTS ARE TO BE PROVIDED TO OWNER FOR REVIEW AND APPROVAL.

IDF SWITCH EQUIPMENT
 F/O CISCO WS-C2950G-24 W/ WS-C5484 GBIC
 TP CISCO WS-C2950-24
 CABINETS SOUTH WESTERN DATA PRODUCT SWE 4000-18UBDLK OR EQUAL
 JACKS ALLEN TEL AT55-16 OR EQUAL
 FACEPLATE ALLEN TEL AT30-2-09 OR EQUAL
 PATCH PANEL ALLEN TEL ATPNL-24 OR EQUAL

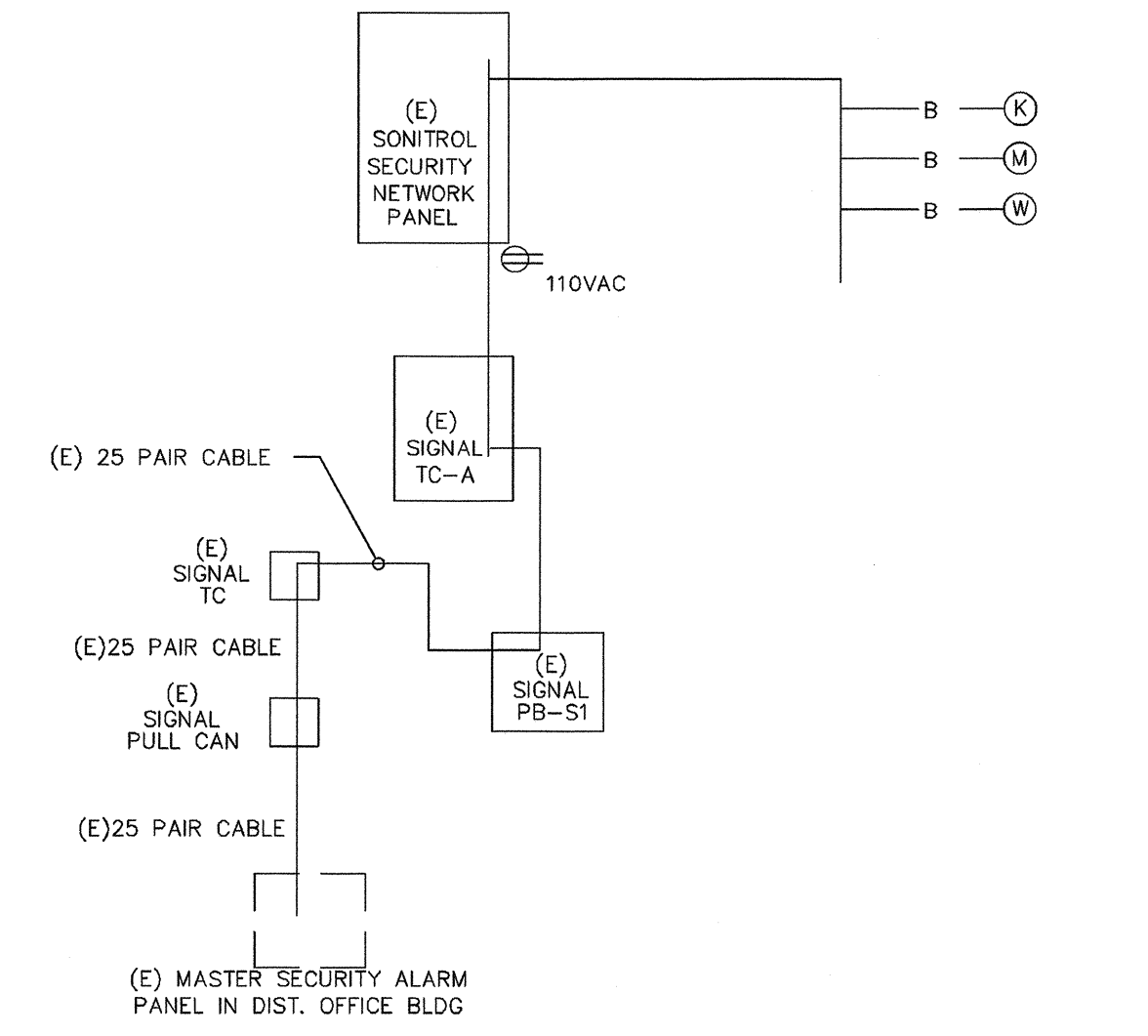
LABELING IDENTIFICATION
 ALL INSTALLED EQUIPMENT, CABLES, TERMINATIONS, ETC. WILL BE PERMANENTLY AND UNIQUELY MARKED. CABLES WILL BE MARKED USING A CONVENTION THAT WILL IDENTIFY ITS ORIGIN AND DESTINATION. LAN TERMINATIONS WILL SIMILARLY BE MARKED TO UNIQUELY IDENTIFY THEM WHILE PROVIDING THE SOURCE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

DATA COMMUNICATION SYSTEM NOTES
 1. CONTRACTOR TO PROVIDE ALL EQUIPMENT, PATCH CABLE AND ACCESSORY FOR A FULLY FUNCTIONAL SYSTEM.
 2. NEW DATA JACK WIRING CONFIGURATION MUST BE MATCHED EXISTING SYSTEM. FIELD VERIFY PRIOR TO INSTALLATION.
 3. 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.
 4. ALL EQUIPMENT DOCUMENTATION AND WARRANTY INFORMATION WILL BE PROVIDED TO OWNER.

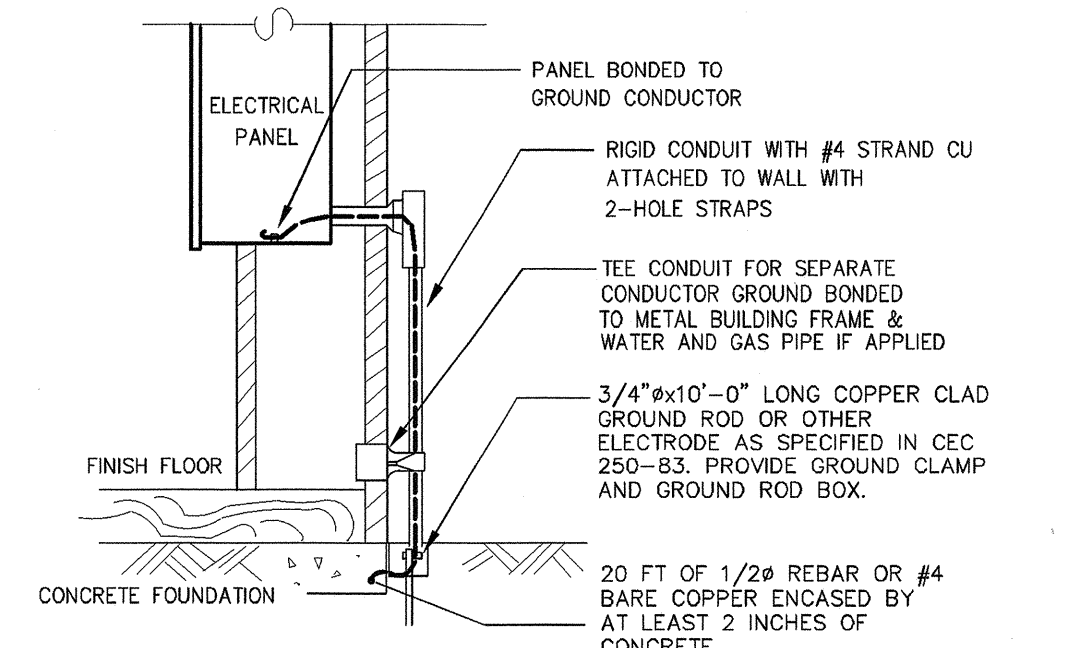
7 DATA COMMUNICATION SYSTEM RISER DIAGRAM N.T.S.



6 CONDUIT SUPPORT DETAIL N.T.S.

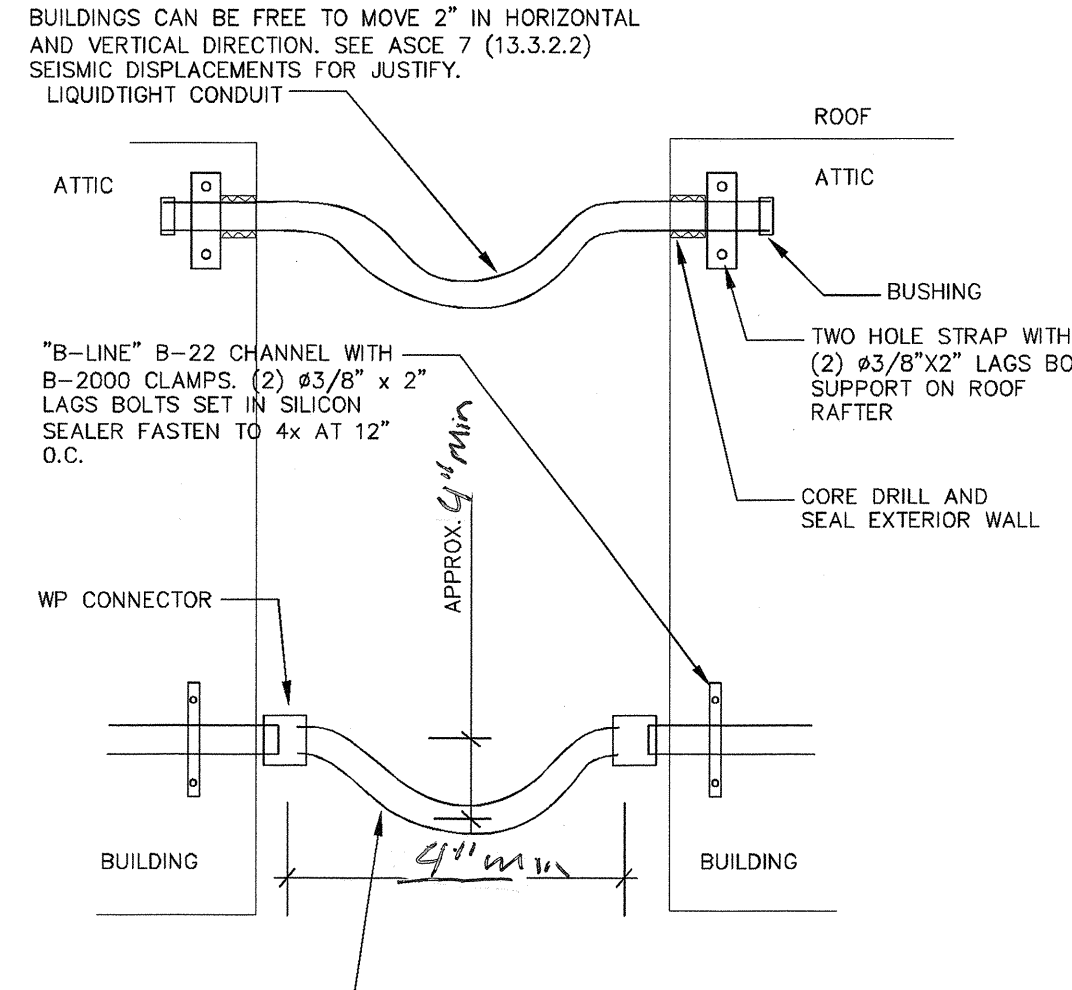


5 SECURITY ALARM SYSTEM RISER DIAGRAM N.T.S.

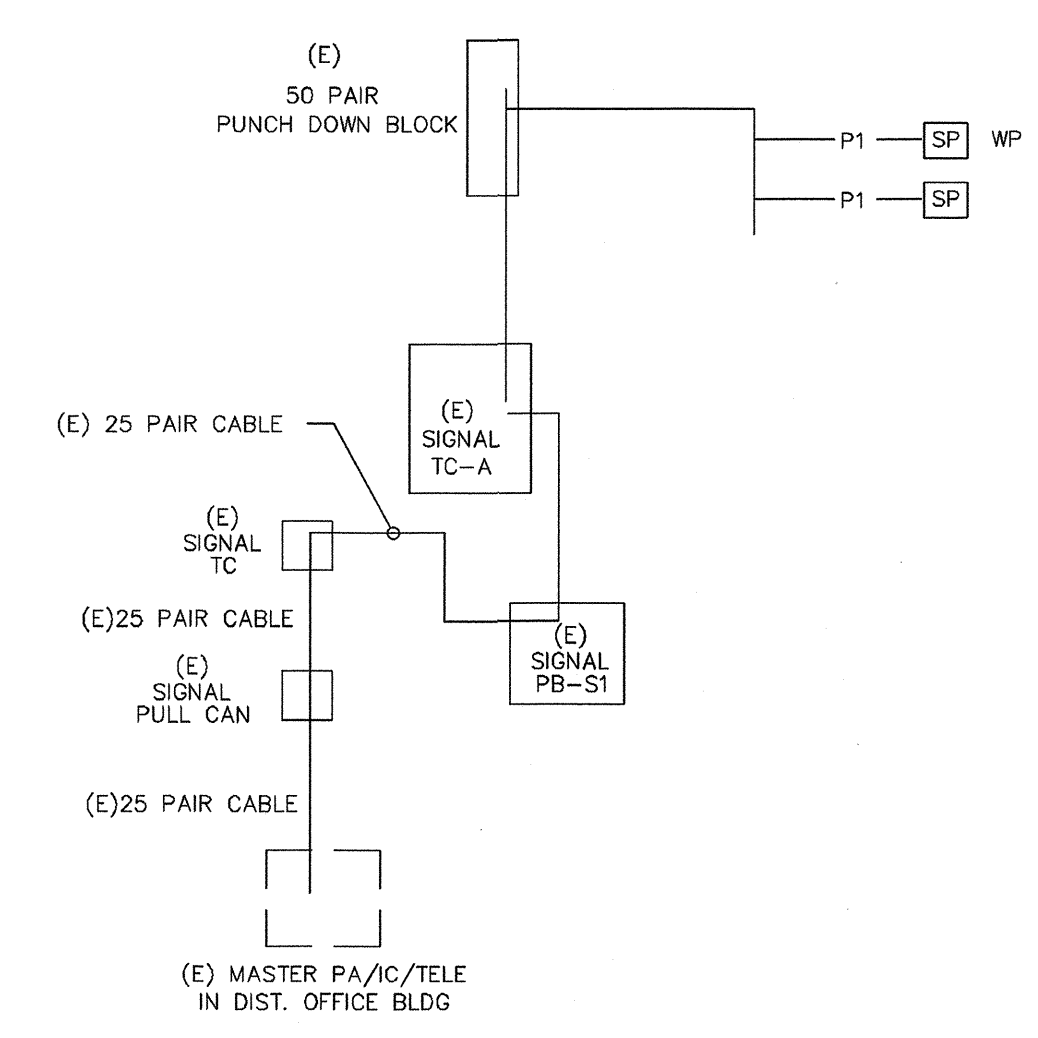


NOTES:
 1. SIZE OF CONDUCTORS SHALL COMPLY WITH CEC TABLE 250-66.
 2. BOND SEPARATE CONDUCTORS FROM GROUND ROD TO ELECTRICAL PANEL AND TO METAL BUILDING FRAME PER CEC 250-50. IN ADDITION TO THE DETAIL SHOWN ABOVE BOND THE ELECTRICAL GROUND TO METAL WATER PIPE EMBEDDED AT LEAST 10 FT. IN SOIL IF AVAILABLE (CEC 250-50, 250-82).
 3. 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).
 4. CHECK RESISTANCE TO GROUND. IF RESISTANCE EXCEEDS 25 OHMS, INSTALL ADDITIONAL GROUND RODS WITH CONDUCTORS AS SHOWN SEPARATED AT LEAST 6'-0" UNTIL RESISTANCE IS REDUCED TO 25 OHMS OR LESS (CEC 250-84). FIELD INSPECTOR SHALL WITNESS GROUNDING TEST.
 5. FIELD INSPECTOR SHALL WITNESS GROUNDING TEST.

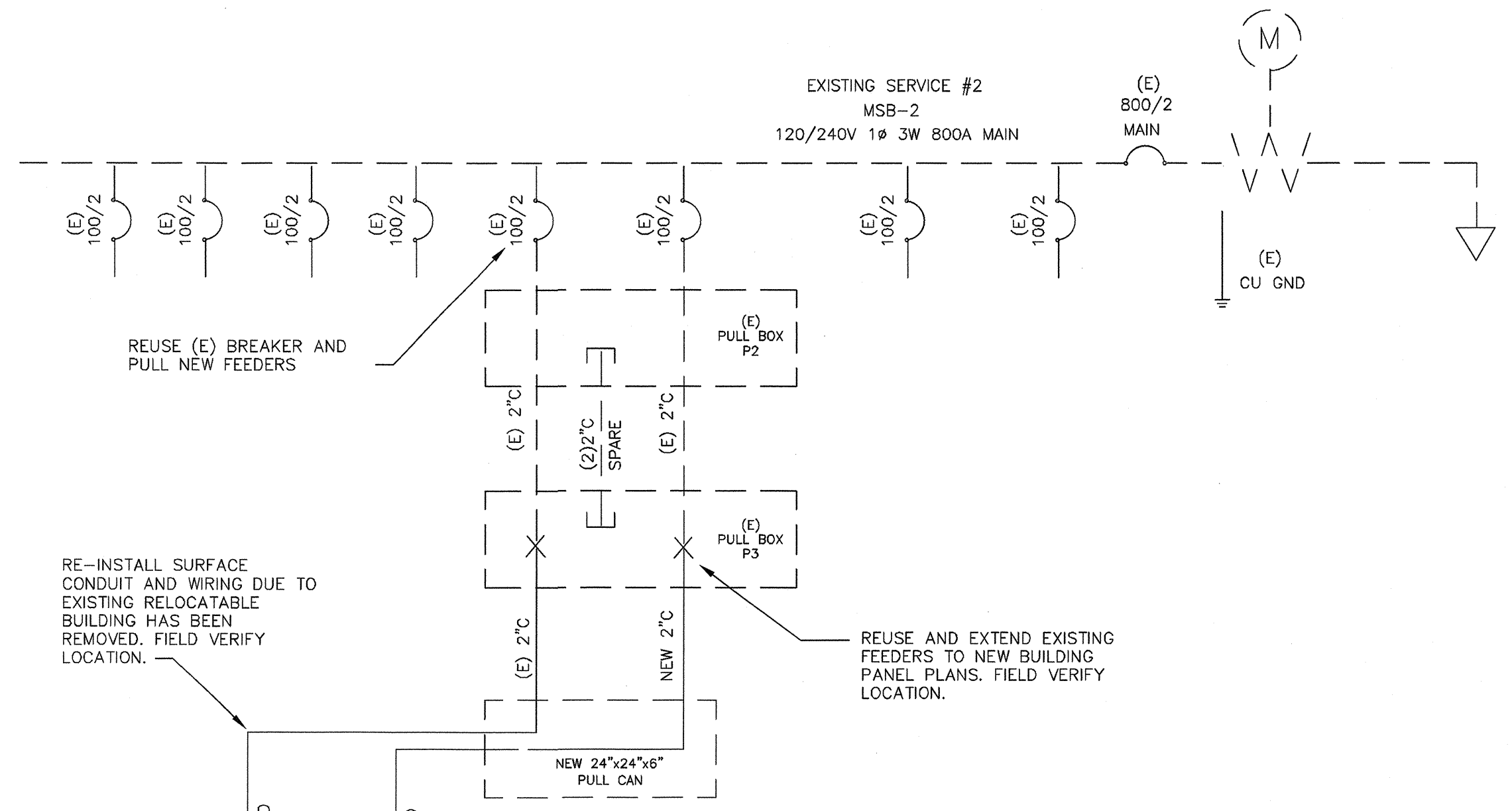
4 GROUNDING DETAIL N.T.S.



3 FLEX CONDUIT SUPPORT DETAIL N.T.S.



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



NOTES:
 1. 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 2016 CEC 110-14(C)(1).)
 2. ALL WIRING OVER 100 VOLT SHALL BE INSTALLED IN RACEWAY CONDUIT, EMT ABOVE GRADE, PVC SCH. 40 BELOW GRADE AND STEEL CONDUIT ON EXPOSE SURFACE BELOW 8' AFF. FOR PHYSICAL PROTECTION.
 3. MC CABLE WITH SEPARATE GROUND CONDUCTOR CAN BE USED IN CEILING AND CONCEAL IN WALL.
 4. STEEL BACK BOX SHALL BE PROVIDE FOR ALL NEW ELECTRICAL DEVICES SUCH AS SWITCH, OUTLET AND CONDUCTOR SPLICE.
 5. 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.

1 SINGLE LINE DIAGRAM N.T.S.

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 2017

integrated designs by SOMAM, Inc.
 ARCHITECTURE · ENGINEERING · INTERIOR DESIGN · CONSTRUCTION MANAGEMENT
 8011 N. Fresno, Suite 130 - Fresno, California 93710
 Phone (569) 436-0881 Fax (569) 436-0887 E-Mail: design@somam.com
 www.integrateddesigns.com

Revision:	Revision Description:	Rev. Date:	Rev. Date:

DETAILS AND SYSTEM DIAGRAMS

Project Name & Address:
PIONEER ELEMENTARY 1 RELOCATABLE CLASSROOM
 BAKERSFIELD CITY SCHOOL DISTRICT
 4404 PIONEER DR., BAKERSFIELD, CA

Issue Date: 00/00/17
 Date: 00/00/17
 Designer: J CHONG
 DR: J CHONG
 PC: J CHONG

Agency Approval Stamp:
 FILE #:
 IDENTIFICATION STAMP
 DIV. OF THE STATE ARCHITECT
 OFFICE OF REGULATION SERVICES
 03-118271
 AC: JLS/SS
 DATE: 1/4/18
 TRACKING #: DSA TRACKING NO.

Stamp(s):

Job No.: **5289**

Sheet No.: **E-4**

Release:

CONSULTING ENGINEERS
JOHN CHONG ENGINEERING
 JOHN S. CHONG
 E 14419
 Exp. 6/30/2018
 ELECTRICAL
 STATE OF CALIFORNIA
 1803 N HELM AVE #103 FRESNO CA 93717
 (569) 215-2266 - FAX 297-9401
 jchenginer@aol.com