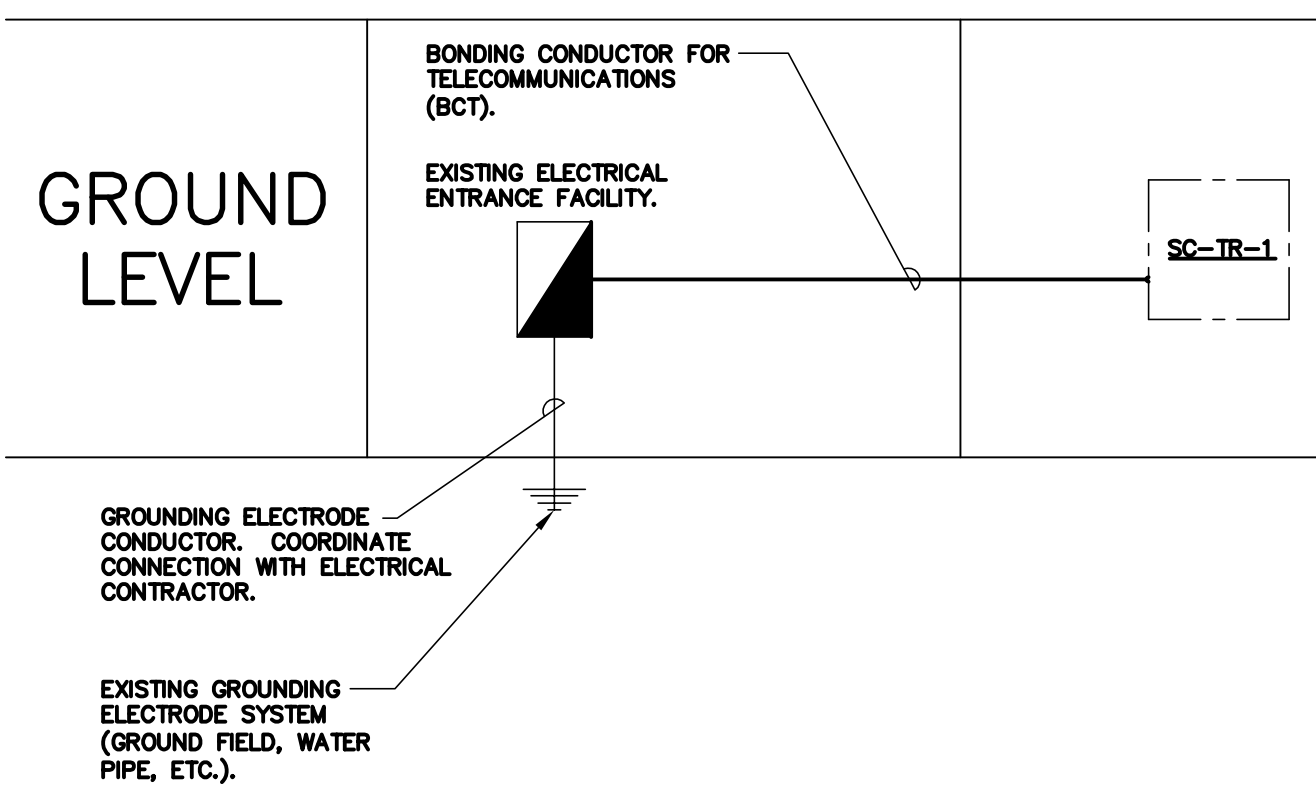


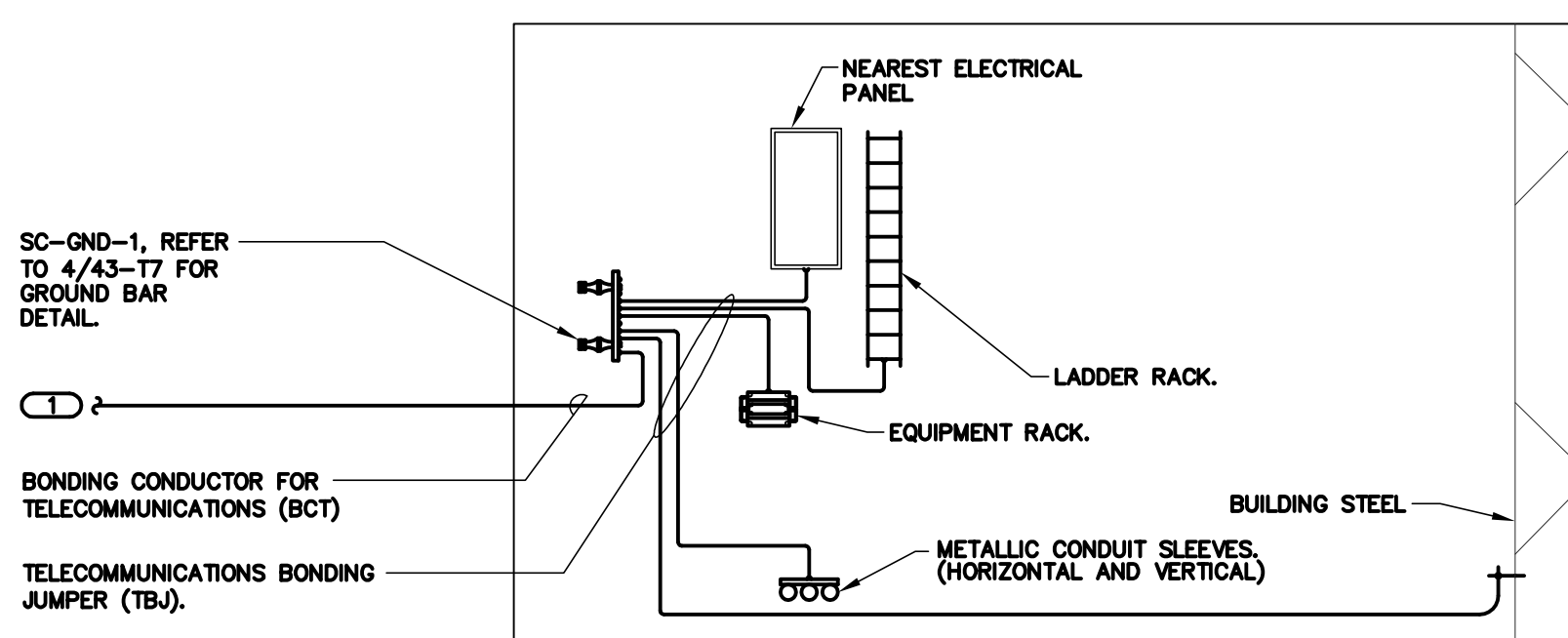
1 VOICE/DATA RISER DIAGRAM

- NO SCALE
- NOTES:
1. THIS RISER IS DIAGRAMMATIC AND MAY NOT SHOW ACTUAL ROUTING OR QUANTITIES OF MATERIALS SHOWN. THIS RISER IS SHOWN FOR CLARIFICATION OF CONNECTION LOCATIONS AND CABLE TYPE. ALL INFORMATION OUTLETS ARE TYPICAL OF THE OUTLETS IN THE AREA SHOWN. SEE PLANS FOR MORE SPECIFIC ROUTING INFORMATION. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.
- KEYNOTES:
- 1 23 GAUGE, 4-PAIR, BLUE CATEGORY 6, UNSHELD TWISTED PAIR INDOOR/OUTDOOR RATED CABLE, REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.
 - 2 REFER TO PLANS FOR QUANTITY OF CABLES AND JACKS TO BE INSTALLED AT EACH INFORMATION OUTLET.
 - 3 CONTRACTOR PROVIDED AND INSTALLED PATCH CORDS.
 - 4 12 STRAND ARMORED SINGLE-MODE INDOOR/OUTDOOR RATED CABLE.
 - 5 12 STRAND ARMORED 50 MICRON LASER ENHANCED MULTIMODE INDOOR/OUTDOOR RATED CABLE.
 - 6 100-PAIR CATEGORY 3 INDOOR/OUTDOOR COPPER CABLE.
 - 7 12 STRAND 50 MICRON LASER ENHANCED MULTI MODE FIBER.



2 GROUNDING RISER DIAGRAM

- NO SCALE
- NOTES:
1. ALL CONDUCTORS IN THE TELECOMMUNICATIONS GROUNDING SYSTEM SHALL BE MINIMUM SIZE OF #6 AWG COPPER CONDUCTORS (GREEN) UNLESS DISTANCE IS GREATER THAN 12 FEET, THEN SEE GROUNDING CONDUCTOR SIZING SCHEDULE ON 43-TB FOR SIZING CRITERIA.
 2. GROUNDING CONDUCTORS AND BONDING JUMPERS SHALL BE CONNECTED BY EXOTHERMIC WELDING, LISTED PRESSURE CONNECTORS, LISTED CLAMPS OR OTHER LISTED MEANS. SOLDER IS NOT AN ACCEPTABLE MEANS OF CONNECTION.
 3. REFER TO 3/43-T7 FOR TELECOM ROOM GROUNDING DETAIL.

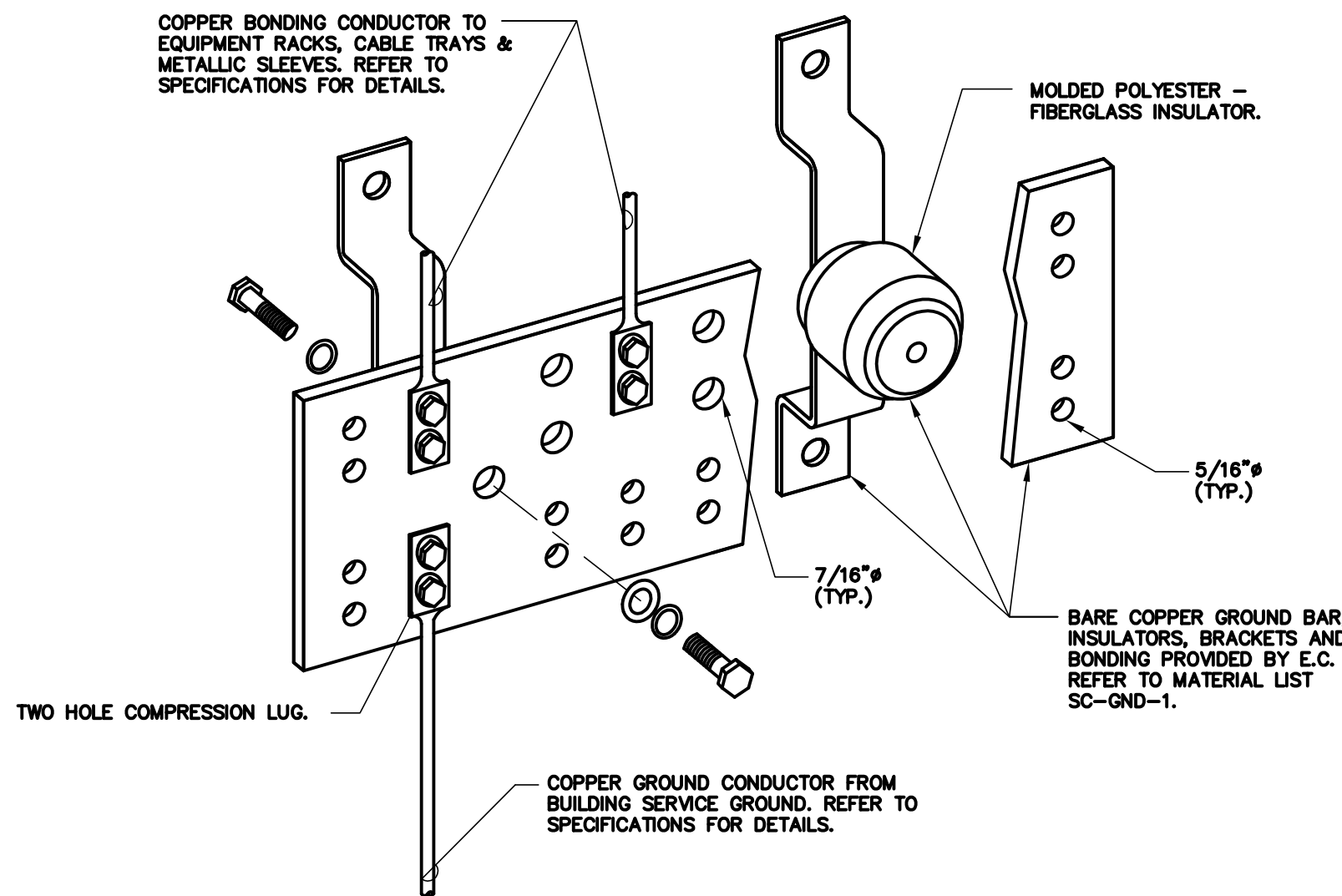


3 TELECOM ROOM GROUNDING DETAIL

- NO SCALE
- NOTES:
1. ALL CONDUCTORS IN THE TELECOMMUNICATIONS GROUNDING SYSTEM SHALL BE #6 AWG COPPER CONDUCTORS (GREEN) UNLESS DISTANCE IS GREATER THAN 12 FEET, THEN SEE GROUNDING CONDUCTOR SIZING SCHEDULE ON 43-TB.
 2. SHEET METAL SCREWS SHALL NOT BE USED TO CONNECT TELECOMMUNICATIONS BONDING JUMPERS TO EQUIPMENT. ALL CONNECTIONS SHALL UTILIZE LISTED HARDWARE.
 3. BONDING TO PAINT TREATED SURFACES SHALL UTILIZE PAINT PIERCING LUGS.
 4. GROUNDING DETAIL IS DIAGRAMMATIC, REFER TO ENLARGED PLANS FOR QUANTITIES AND LOCATION OF EQUIPMENT.

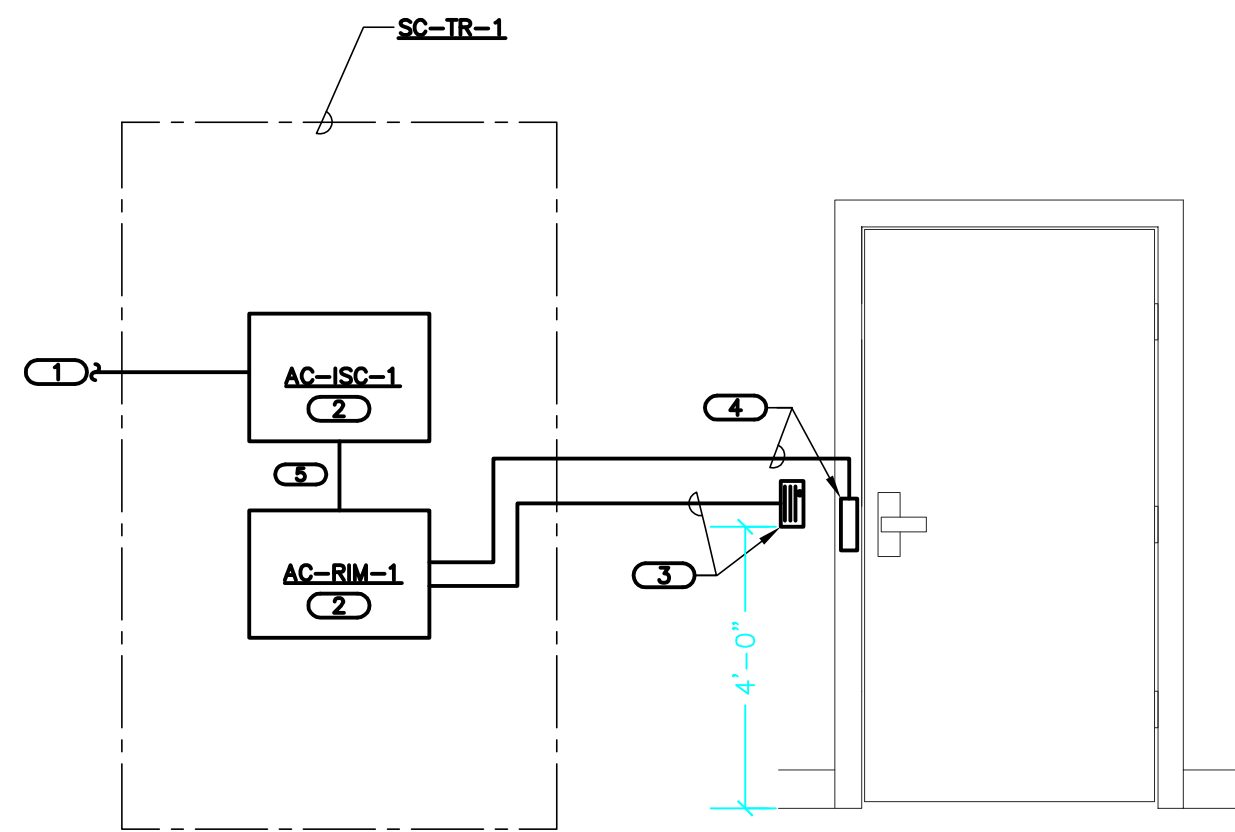
KEYNOTES:

- 1 TO ELECTRICAL ENTRANCE FACILITY. REFER TO 2/43-T7 FOR GROUNDING RISER DIAGRAM.



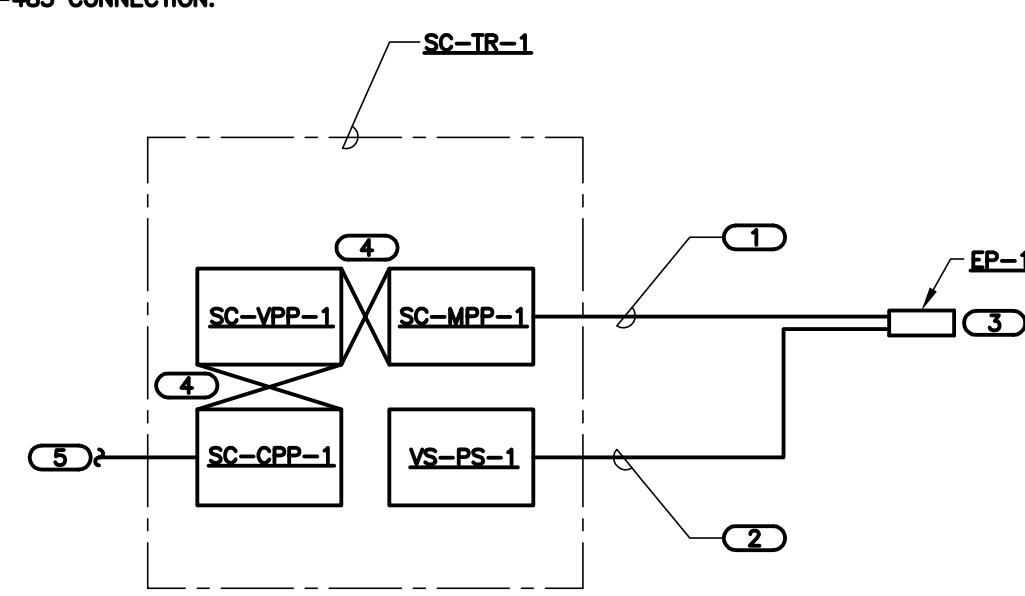
4 GROUND BAR DETAIL

- NO SCALE
- NOTES:
1. REFER TO MATERIAL LIST SC-GND-1 FOR WIDTH REQUIREMENTS.
 2. REFER TO 3/43-T7 FOR ROOM GROUNDING DETAIL.



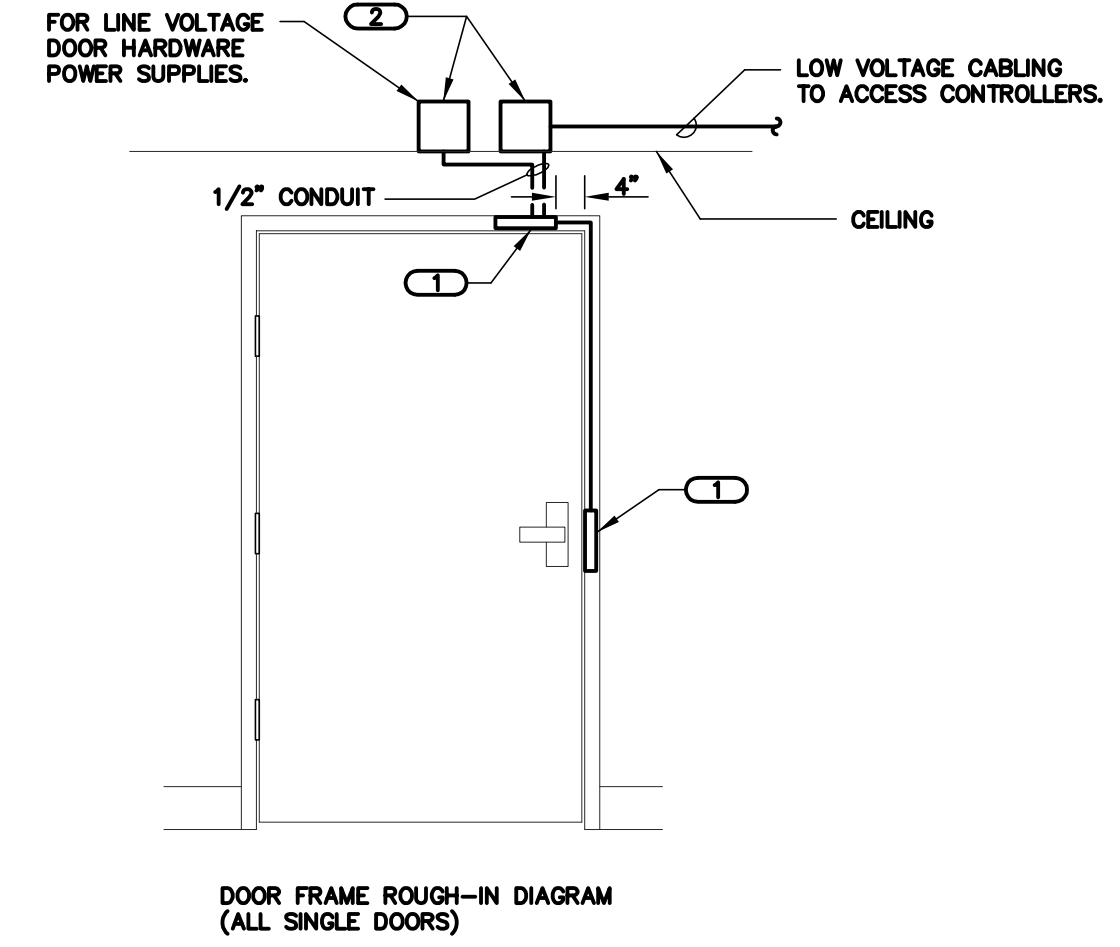
6 ACCESS CONTROL RISER DIAGRAM

- NO SCALE
- NOTES:
1. DOOR # DESIGNATES THE UNIQUE DOOR NUMBER AT EACH DOOR LOCATION.
 2. REFER TO ACCESS CONTROL SCHEDULE ON 43-TB FOR INDIVIDUAL DOOR REQUIREMENTS.
 3. THIS RISER IS DIAGRAMMATIC AND NOT INTENDED TO SHOW ACTUAL ROUTING OR QUANTITIES OF MATERIALS SHOWN. THIS RISER IS SHOWN FOR CLARIFICATION OF CONNECTION LOCATIONS AND CABLE TYPE. THIS RISER WILL NOT REPLICATE ALL DOOR CONFIGURATIONS. SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
 4. ALL DOOR AND DOOR HARDWARE IS PROVIDED AND INSTALLED BY OTHERS. ALL CONDUIT, CABLING AND TERMINATIONS FOR DOOR AND DOOR HARDWARE SHALL BE PROVIDED AND INSTALLED BY TRADE CONTRACTOR.
- KEYNOTES:
- 1 CONNECTION TO EXISTING ACCESS CONTROL NETWORK LOCATED IN BUILDING 1.
 - 2 ELECTRONIC ACCESS CONTROL PANEL. REFER TO ACCESS CONTROL SCHEDULE FOR ADDITIONAL INFORMATION. CONTRACTOR SHALL PROVIDE AND INSTALL CARD READER, REQUEST TO EXIT (UNLESS INTEGRAL TO DOOR HARDWARE), DOOR CONTACT, CONNECTION TO DOOR HARDWARE, CABLE, AND POWER SUPPLIES NOT SPECIFICALLY CALLED OUT UNDER THE DOOR HARDWARE SPECIFICATION. MOUNT ACCORDING TO MANUFACTURER'S SPECIFICATIONS. PANELS SHALL BE LOCATED IN TECHNOLOGY ROOM SC-TR-1.
 - 3 ELECTRIC DOOR HARDWARE. CONTRACTOR SHALL PROVIDE 18AWG 2-CONDUCTOR PLENUM RATED NON-SHELD WIRING AND TERMINATIONS FROM DOOR HARDWARE POWER SUPPLY TO SECURITY CONTROLLER. CONTRACTOR SHALL ALSO PROVIDE AND INSTALL LOW VOLTAGE CABLING FROM DOOR HARDWARE POWER SUPPLY TO ELECTRONIC DOOR HARDWARE.
 - 4 CARD READER. REFER TO DRAWINGS FOR EXACT LOCATIONS. CONTRACTOR SHALL PROVIDE 22AWG 2-CONDUCTOR PLENUM RATED SHIELDED WIRING AND TERMINATIONS FROM CARD READER TO SECURITY CONTROLLER. MOUNT AT 4'-0" AFF.
 - 5 RS-485 CONNECTION.



8 EMERGENCY PHONE RISER DIAGRAM

- NO SCALE
- NOTES:
1. THIS RISER IS DIAGRAMMATIC AND NOT INTENDED TO SHOW ACTUAL ROUTING OR QUANTITIES OF MATERIALS SHOWN. THIS RISER IS SHOWN FOR CLARIFICATION OF CONNECTION LOCATIONS AND CABLE TYPE. THIS RISER WILL NOT REPLICATE ALL DOOR CONFIGURATIONS. SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
 2. CONTRACTOR SHALL COORDINATE WITH OWNER ON DIALING REQUIREMENTS FOR BOTH EMERGENCY AND INFORMATION FUNCTIONS OF THE EMERGENCY PHONE.
- KEYNOTES:
- 1 23-GAUGE 4-PAIR CATEGORY 6 INDOOR/OUTDOOR RATED UNSHELD TWISTED PAIR CABLE, REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.
 - 2 16-GAUGE 2 CONDUCTOR INDOOR/OUTDOOR RATED POWER CABLING. CONTRACTOR SHALL VERIFY CABLING DISTANCE AND LOAD AT CAMERA AND DETERMINE APPROPRIATE SIZE OF CABLING BASED ON CABLING DISTANCE AND MANUFACTURER'S SUGGESTED VOLTAGE DROP.
 - 3 EMERGENCY PHONE, TYPICAL OF ALL EMERGENCY PHONES ON PLANS. REFER TO PLANS FOR LOCATIONS AND QUANTITY.
 - 4 VOICE CROSS-CONNECT BY CONTRACTOR. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.
 - 5 BACKBONE COPPER TO EXISTING HOSPITAL. REFER TO 1/43-T7 FOR ADDITIONAL INFORMATION. CONTRACTOR SHALL PROVIDE ALL REQUIRED VOICE CROSS-CONNECTS FOR A COMPLETE TURN-KEY SYSTEM INSTALLATION.



5 DOOR ROUGH-IN AND WIRING DIAGRAMS

- NO SCALE
- NOTES:
1. DETAILS ABOVE MAY NOT BE REPRESENTATIVE OF SPECIFIC DOOR SWING DIRECTION. MIRROR DETAIL AS REQUIRED.
 2. CONFIGURATIONS SHOWN ARE DIAGRAMMATIC, INTENDED TO DESCRIBE THE SECURITY REQUIREMENTS OF THE DOORS. THEY ARE NOT INTENDED TO ACCURATELY REPRESENT DOOR SIZE, DOOR FUNCTIONALITY OR DOOR HARDWARE. REFER TO ARCHITECTURAL DOOR HARDWARE GROUPS AND SPECIFICATION FOR COMPLETE INFORMATION.
 3. ALL DOOR POSITION SWITCHES SHALL BE RECESSED, CONCEALED TYPE UNLESS OTHERWISE NOTED.
 4. ALL CABLING IN WALLS AND WHEN EXPOSED ON VERTICAL SURFACES, (I.E., THE OVERHEAD DOOR FRAME) SHALL BE ROUTED IN MINIMUM 1/2" EMT CONDUIT. EXPOSED CABLING TRAVELING HORIZONTALLY ALONG THE CEILING DECK OR ABOVE A LAY-IN CEILING MAY BE PLENUM RATED EXPOSED CABLING.
 5. ELECTRIC HINGE MONITORS ARE NOT ACCEPTABLE REPLACEMENTS FOR THE CONCEALED DOOR POSITION SWITCHES.
 6. REFER TO FLOOR PLANS FOR CARD READER LOCATIONS.
- KEYNOTES:
- 1 PROVIDE A JUNCTION BOX IN THE DOOR FRAME WHERE SHOWN ON THE DETAIL. ROUGH-IN SHALL BE PROVIDED WHETHER THE CURRENT SECURITY SCHEME UTILIZES THEM OR NOT. CONNECT THE JUNCTION BOXES IN THE VERTICAL SECTIONS OF THE DOOR FRAME TO THE BOX IN THE HEADER WITH 3/4" FLEXIBLE CONDUIT.
 - 2 MOUNT 2 DOUBLE GANG BACKBOXES WITH BLANK COVER PLATES ABOVE THE CEILING INSIDE SECURE ROOM. MAINTAIN ACCESS TO JUNCTION BOX WHERE CEILING IS A GYPSUM BOARD CEILING. LOCATE BOXES ABOVE NEAREST LAY-IN CEILING AND EXTEND CONDUITS TO THIS LOCATION.

TYPICAL FLOOR

GROUND FLOOR

PARKING GARAGE (BUILDING 42)

MAIN BUILDING SECURITY ROOM

7 CCTV VIDEO RISER DIAGRAM

- NO SCALE
- NOTES:
1. THIS RISER IS DIAGRAMMATIC AND MAY NOT SHOW ACTUAL ROUTING OR QUANTITIES OF MATERIALS SHOWN. THIS RISER IS SHOWN FOR CLARIFICATION OF CONNECTION LOCATIONS AND CABLE TYPE. THIS RISER WILL NOT REPLICATE ALL CONFIGURATIONS. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
 2. THESE RISERS MAY SHOW DUPLICATE EQUIPMENT WHICH MAY BE COMBINED WITH OTHER SYSTEMS.
 3. REFER TO INDIVIDUAL CAMERA SCHEDULE AND INDIVIDUAL CAMERA TYPE SCHEDULE ON 43-TB FOR ADDITIONAL INFORMATION.
- KEYNOTES:
- 1 23-GAUGE 4-PAIR CATEGORY 6 INDOOR/OUTDOOR RATED UNSHELD TWISTED PAIR CABLE, REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.
 - 2 16-GAUGE 2 CONDUCTOR INDOOR/OUTDOOR RATED POWER CABLING. CONTRACTOR SHALL VERIFY CABLING DISTANCE AND LOAD AT CAMERA AND DETERMINE APPROPRIATE SIZE OF CABLING BASED ON CABLING DISTANCE AND MANUFACTURER'S SUGGESTED VOLTAGE DROP.
 - 3 CCTV CAMERA. REFER TO CAMERA SCHEDULE FOR ADDITIONAL INFORMATION. CONTRACTOR SHALL PROVIDE AND INSTALL LENS, MOUNT, ENCLOSURE, CAMERA, AND CABLE.
 - 4 PROVIDE ENC-R445 VIDEO TRANSCIVER (NVT 218A-PVO OR APPROVED EQUAL)
 - 5 VGA CABLE BY CONTRACTOR.
 - 6 PATCH CORD PROVIDED AND INSTALLED BY CONTRACTOR. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.
 - 7 CONTRACTOR MAY COMBINE POWER SUPPLIES WITH EMERGENCY PHONE SYSTEM. REFER TO 8/43-T7 FOR ADDITIONAL INFORMATION.
 - 8 REFER TO VOICE/DATA RISER DIAGRAM 1/43-T7 FOR ADDITIONAL INFORMATION.
 - 9 CONTRACTOR SHALL PROVIDE INSTALL AND PROGRAM ALL REQUIRED LOOPING INPUT/OUTPUT CARDS REQUIRED FOR THE ANALOG MATRIX SWITCH.
 - 10 PROVIDE CONNECTOR FOR ALL ACTIVE EQUIPMENT AS REQUIRED TO THE UPS.
 - 11 FIBER TRANSCEIVER/RECEIVER SHALL BE USED TO EXTEND PTZ CAMERA CONTROL BACK TO MAIN SECURITY ROOM IN HOSPITAL.

FINAL CONSTRUCTION DOCUMENTS	06/10/11
100% REVIEW SUBMISSION (NOT FOR CONSTRUCTION)	04/11/11
75% REVIEW SUBMISSION (NOT FOR CONSTRUCTION) - COST ESTIMATE	02/03/11
75% REVIEW SUBMISSION (NOT FOR CONSTRUCTION) - COST ESTIMATE	01/19/11
35% REVIEW SUBMISSION (NOT FOR CONSTRUCTION)	11/22/10
REVISIONS	03/11

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Drawing Title

DETAILS AND RISERS - TECHNOLOGY

Approved: Project Director

Iowa City VA Healthcare System
Department of Veterans Affairs Medical Center

Project Title

400 CAR PARKING GARAGE

Location
IOWA CITY, IA

Date
06/10/2011

Checked
PETMCG

Drawn
RICHEN

Project Number

636-402

Building Number

43

Drawing Number

43-T7

Dwg. 151 of 152

Office of
Construction
and Facilities
Management

Department of
Veterans Affairs