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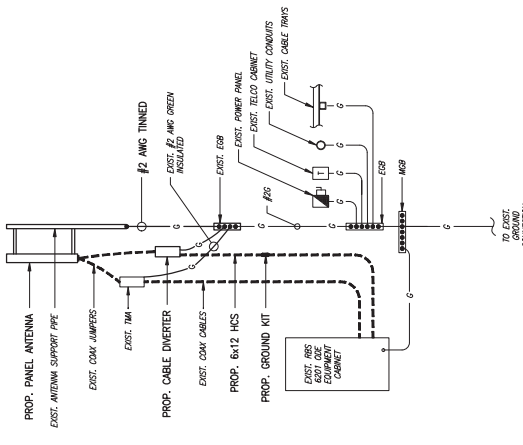
CHECKED BY: JMT
 APPROVED BY: JMT

REV.	DATE	DESCRIPTION	BY
5	10/17/17	CONSTRUCTION PERIOD	CJC
4	09/29/17	CONSTRUCTION PERIOD	CJC
3	09/27/17	CONSTRUCTION PERIOD	CJC
2	09/27/17	CONSTRUCTION PERIOD	CJC
1	04/29/17	ISSUED FOR PERMITS	JMT

SITE NUMBER:
 4DN2285D
 SITE NAME:
 ME285/HOLT HALL
 SITE ADDRESS:
 784 CONGRESS STREET
 PORTLAND, ME 04102

SHEET TITLE
 ELECTRIC & GROUNDING DETAILS

SHEET NUMBER
 E-1



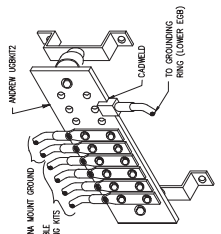
GROUNDING RISER DIAGRAM
 SCALE: NOT TO SCALE

- ELECTRICAL AND GROUNDING NOTES**
- ALL ELECTRICAL WORK SHALL CONFORM TO THE REQUIREMENTS OF THE NATIONAL ELECTRICAL CODE (NEC) AS WELL AS APPLICABLE STATE AND LOCAL CODES.
 - ALL ELECTRICAL ITEMS SHALL BE U/L APPROVED OR LISTED AND PROVIDED PER SPECIFICATION REQUIREMENTS.
 - THE ELECTRICAL WORK INCLUDES ALL LABOR AND MATERIAL DESCRIBED BY DRAWINGS AND SPECIFICATION INCLUDING INCIDENTAL WORK TO BE COMPLETED BY THE CONTRACTOR.
 - GENERAL CONTRACTORS SHALL PAY FEES FOR PERMITS, AND IS RESPONSIBLE FOR OBTAINING SAME PERMITS AND COORDINATION OF INSPECTIONS.
 - ELECTRICAL AND TELLER WORK OUTSIDE A BUILDING OR EXPOSED TO WEATHER SHALL BE IN WATER TIGHT GALVANIZED RIGID STEEL CONDUIT OR SCHEDULE 40 PVC (AS PERMITTED BY CODES) AND WHERE REQUIRED IN LOADS THAT EXCEED WORK OR MANUFACTURER'S CONDITIONS.
 - BARED CONDUIT SHALL BE SCHEDULE 40 PVC.
 - ELECTRICAL WIRING SHALL BE COPPER WITH TYPE THHN, THHW, OR THHXL.
 - RAW ELECTRICAL CONDUIT OR CABLE BETWEEN ELECTRICAL UTILITY EXHAUSTION POINT AND PROJECT OWNER CELL SITE PVC AS INDICATED SHALL BE INSTALLED IN CONDUIT OR CABLE BETWEEN TELEPHONE UTILITY EXHAUSTION POINT AND PROJECT OWNER CELL SITE TELLER CABINET AND BARS AS INDICATED ON THIS DRAWING PROVIDE FULL LENGTH FALL ROPE IN INSTALLED TELLER CONDUIT. PROVIDE ORANGE CONDUIT MARKER BETWEEN BARS AND PROJECT OWNER CELL SITE PVC AND BETWEEN BARS AND PROJECT OWNER CELL SITE TELLER CONDUIT. CABINET ARE UNDERGROUND USE PVC SCHEDULE 40 CONDUIT. ABOVE THE GROUND PORTION OF THESE CONDUITS SHALL BE PVC CONDUIT.
 - ALL EQUIPMENT LOCATED OUTSIDE SHALL HAVE NEMA 3R ENCLOSURE.
 - PVC SUPPLIED BY PROJECT OWNER.
 - GROUNDING SHALL COMPLY WITH NEC ART. 250. ADDITIONALLY, GROUNDING, BONDING AND LIGHTNING PROTECTION SHALL BE DONE IN ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION INSTRUCTIONS.
 - GROUND COAXIAL CABLE SHIELDS MINIMUM AT BOTH ENDS USING MANUFACTURER'S COAX CABLE GROUNDING KITS SUPPLIED BY PROJECT OWNER.
 - USE 1/2" MINIMUM BARE COPPER WIRE FOR BELOW GROUND GROUNDING AS INDICATED ON THE DRAWING (UNLESS OTHERWISE SPECIFIED AND IF ALL GROUND CONNECTIONS TO BE BUNDLED HYPODERMIC COMPRESSION TYPE CONNECTORS OR CABLED EXOTHERMIC WELD. DO NOT ALLOW BARE COPPER WIRE TO BE IN CONTACT WITH GALVANIZED STEEL.
 - ALL GROUND CONNECTIONS TO BE BUNDLED HYPODERMIC COMPRESSION TYPE CONNECTORS OR CABLED EXOTHERMIC WELD. GROUNDING SHALL BE DONE IN ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION INSTRUCTIONS.
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 - CONNECTIONS TO GROUND BARS SHALL BE MADE WITH TWO HOLE COMPRESSION TYPE COPPER LUGS. APPLY COKE IMBITING COMPOUND TO ALL LOCATIONS.
 - APPLY COKE IMBITING COMPOUND TO ALL COMPRESSION TYPE GROUND CONNECTIONS.
 - CONDUCTORS SHALL TEST COMPLETED GROUND SYSTEM AND RECORD RESULTS FOR PROJECT CLOSE-OUT DOCUMENTATION. 5 OHMS OR MORE SHALL BE ACCEPTABLE.
 - CONDUCTORS SHALL CONDUCT ANTENNA COAX AND UVA RETURN-LOSS AND DERANGE-TO-Fault MEASUREMENTS (SWR TESTS) AND RECORD RESULTS FOR PROJECT CLOSE-OUT.

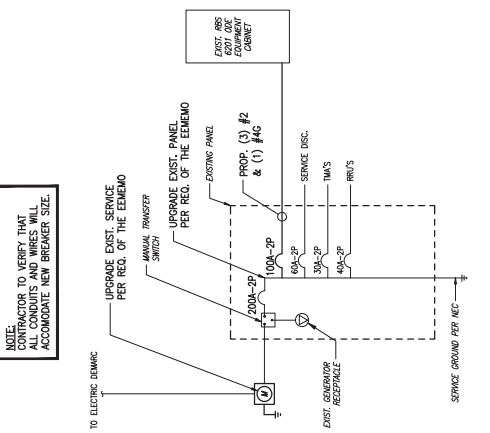


EXIST 60A-2P CIRCUIT BREAKER FOR EXIST. RES. 620T EQUIPMENT CABINET (UPGRADE TO 100A-2P)

PVC DETAIL
 SCALE: NOT TO SCALE

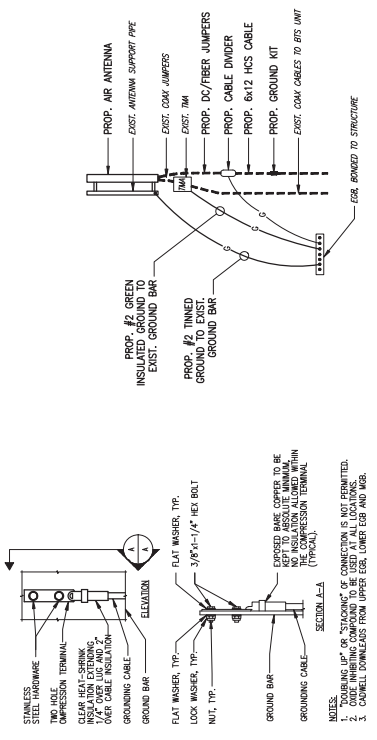


GROUND BAR (EGB)
 SCALE: NOT TO SCALE

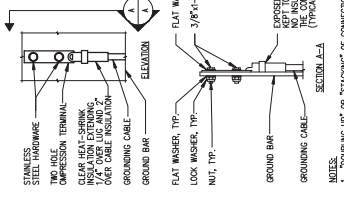


ONE LINE DIAGRAM
 SCALE: NOT TO SCALE

NOTE: CONTRACTOR TO VERIFY THAT ALL CONDUITS AND WIRING WILL ACCOMMODATE NEW BREAKER SIZE.



HYBRID CABLE CONNECTION AND GROUNDING DETAIL
 SCALE: NOT TO SCALE



TYPICAL GROUND BAR CONNECTIONS DETAIL
 SCALE: NOT TO SCALE

- NOTES:
- MINIMUM USE OF "STITCHES" OF CONNECTIONS IS NOT PERMITTED.
 - COKE IMBITING COMPOUND TO BE USED AT ALL LOCATIONS.
 - CABLED DOWNLOADS FROM UPPER EGB, LOWER EGB AND MBR.