



NOTE:
SEE SITE PLAN, E0
FOR LOCATION OF
GENERATOR

NOTES THIS SHEET

- 1 THE PRIMARY CONDUCTOR USED IN THE RING GROUND SYSTEM SHALL CONSIST OF A #2 AWG BARE SOLID TINNED COPPER WIRE. THIS CONDUCTOR WILL RING THE ENTIRE FACILITY AT A DEPTH OF AT LEAST 18" BELOW GRADE, OR BELOW FROST LEVEL, WHICHEVER IS DEEPER. FURTHERMORE, THE CONDUCTOR WILL BE PLACED APPROXIMATELY 2' FROM THE EXTERIOR WALL OF THE FACILITY. THIS RING SHALL BE CONNECTED BY AT LEAST 2 CONDUCTORS TO THE MGB. THESE CONNECTIONS WILL SERVE AS THE PRINCIPLE GROUND POINTS. THE EXTERIOR RING GROUND SHALL BE ALSO BONDED TO THE TOWER LEGS, IF A TOWER IS PRESENT, AND OTHER METALLIC OBJECT ON THE PROPERTY (FUEL TANKS, EGS'S).
- 2 THE EXTERIOR GROUND SYSTEM SHALL CONTAIN ELECTRODES IN THE FORM OF DRIVEN RODS. THE EXTERIOR RING SHALL BE CONNECTED TO THE TOP OF 5/8" DIAMETER COPPER CLAD STEEL RODS OF 8' LENGTH, SPACED 16' APART. THE GROUND RODS SHALL BE DRIVEN TO THE RING WIRE DEPTH, I.E. THE LENGTH OF THE ROD PLUS THE DEPTH AT WHICH THE RING IS BURIED. ALL OUTDOOR CONNECTIONS BETWEEN THE GROUND CONDUCTORS AND THE RING CONDUCTOR SHALL BE MADE WITH AN EXOTHERMIC WELD.
- 3 CADWELD #3/0 TO SERVICE GROUND AND #2 SOLID BARE TINNED COPPER TO UFER GROUND.
- 4 H-TAP 750 DROP TO COGB. MOUNT 750 KCML HORIZONTAL GROUND EQUALIZER TO J-HOOKS ON LOWEST LEVEL OF LADDER RACK BETWEEN COGB-2 AND COGB-3. ATTACH TO WALL AT 8'-0" BETWEEN MGB AND COGB-2.
- 5 CADWELD #2 SOLID BARE TINNED COPPER FROM GROUND RING TO GROUND BUS AT OCEF.
- 6 CADWELD #2 SOLID BARE TINNED COPPER FROM GROUND RING TO COLUMN AND REBAR IN COLUMN FOOTING AS REQUIRED BY OREGON STRUCTURAL SPECIALTY CODE.
- 7 EXTEND #2 SOLID, BARE, TINNED COPPER TO DIESEL TANK, GENERATOR ENCLOSURE, GENERATOR, AND CHILLER.
- 8 INSTALL NEW 1/4" x 4" x 24" COGB UNDER EXISTING HEADEND ACCESS FLOOR. SIMILAR TO DETAIL 2/E4.
- 9 CONNECT EXISTING UNDERFLOOR FRAME WORK GROUND BAR TO NEW UNDERFLOOR COGB WITH NEW #2/0 CONDUCTOR. REMOVE EXISTING GROUND CONNECTION AND SUPPORTS AND REATTACH TO FLOOR WITH TWO GLASTIC CAT. No. 1872-3E INSULATORS. SUBMIT SMOP TO AITBI FOR ALL WORK.
- 10 PROVIDE LABOR AND MATERIALS TO CONNECT AND EXTEND EXISTING SERVICE UFER GROUND TO MGB.

GENERAL NOTES

- A. PROVIDE TWO INCH PVC PIPE OR OTHER NON-METALLIC SLEEVES THAT DO NOT FORM A METALLIC RING ABOUT THE CONDUCTOR.
- B. USE FIBERGLASS UNISTRUT TO SUPPORT PVC CONDUIT AND/OR GREEN CO GROUND CONDUCTOR THAT DO NOT FORM A METALLIC RING ABOUT THE CONDUCTOR.
- C. INSTALL PERMANENT BRASS "DO NOT DISCONNECT" TAG AT EVERY CO GROUND CONDUCTOR TERMINATION.
- D. MINIMUM BENDING RADIUS FOR ALL GROUND CONDUCTORS 8".

LEGEND

- X 5/8" x 8" COPPERWELD GROUND ROD
- G #2 SOLID, BARE, TINNED COPPER
- CADWELD CONNECTION
- CO GROUND BAR - SEE DETAIL 2/E4.

1 E21 FLOOR PLAN - GROUNDING
SCALE: 1/8" = 1'-0"

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Project
BROADBAND FACILITY EXPANSION PHASE 2 and 3
Troutdale Oregon



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REVISIONS:

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