

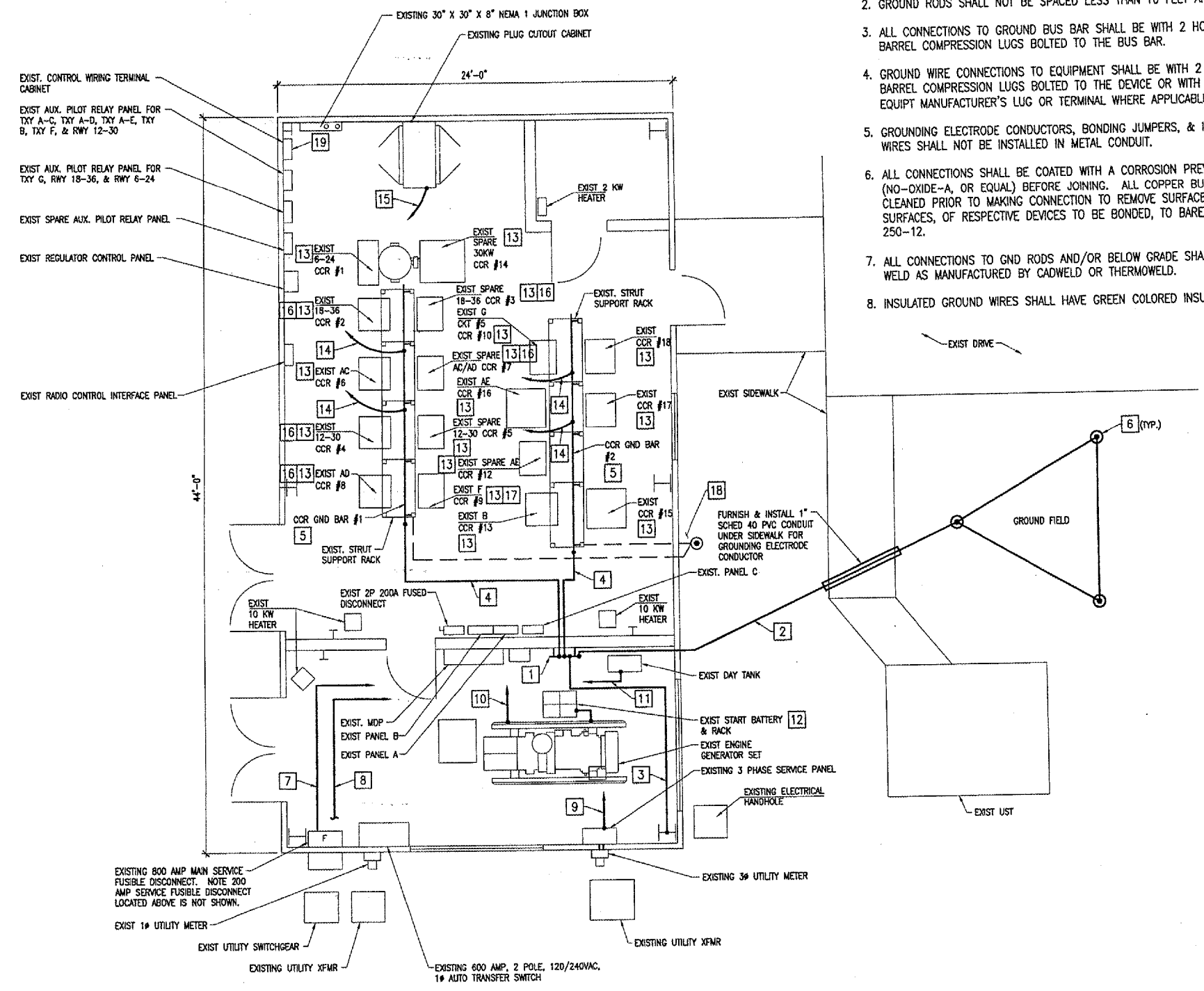
NOTES

1. SEE "VAULT GROUND RISER" AND "GROUNDING DETAILS" SHEETS FOR ADDITIONAL GROUNDING REQUIREMENTS & DETAILS.
2. GROUND RODS SHALL NOT BE SPACED LESS THAN 10 FEET APART.
3. ALL CONNECTIONS TO GROUND BUS BAR SHALL BE WITH 2 HOLE TONGUE LONG BARREL COMPRESSION LUGS BOLTED TO THE BUS BAR.
4. GROUND WIRE CONNECTIONS TO EQUIPMENT SHALL BE WITH 2 HOLE TONGUE LONG BARREL COMPRESSION LUGS BOLTED TO THE DEVICE OR WITH THE RESPECTIVE EQUIPT MANUFACTURER'S LUG OR TERMINAL WHERE APPLICABLE.
5. GROUNDING ELECTRODE CONDUCTORS, BONDING JUMPERS, & INDIVIDUAL GROUND WIRES SHALL NOT BE INSTALLED IN METAL CONDUIT.
6. ALL CONNECTIONS SHALL BE COATED WITH A CORROSION PREVENTATIVE COMPOUND (NO-OXIDE-A, OR EQUAL) BEFORE JOINING. ALL COPPER BUS BARS SHALL BE CLEANED PRIOR TO MAKING CONNECTION TO REMOVE SURFACE OXIDATION. CLEAN SURFACES, OF RESPECTIVE DEVICES TO BE BONDED, TO BARE MEAL, PER NEC 250-12.
7. ALL CONNECTIONS TO GND RODS AND/OR BELOW GRADE SHALL BE EXOTHERMIC WELD AS MANUFACTURED BY CADWELD OR THERMOWELD.
8. INSULATED GROUND WIRES SHALL HAVE GREEN COLORED INSULATION.

KEYED NOTES

- 1 MAIN GROUND BAR; 1/4" THICK BY 4" WIDE BY 18" LONG COPPER BUS BAR WITH WALL MOUNTING BRACKETS & INSULATORS, HARGER LIGHTNING PROTECTION INC. CAT. NO. GB114418N, OR APPROVED EQUAL. LOCATE 4' ABOVE FINISHED FLOOR.
- 2 #3/0 AWG BARE STRANDED COPPER GROUNDING ELECTRODE CONDUCTOR FROM MAIN GROUND BAR TO GROUND FIELD. PROVIDE 1" PVC SLEEVE AT BLDG EXIT. CONNECT TO GROUND BAR WITH 2-HOLE TONGUE LONG BARREL DOUBLE COMPRESSION CRIMP LUG & APPROPRIATE BOLTS, NUTS, & WASHERS. CONNECT TO GROUND FIELD WITH EXOTHERMIC WELD.
- 3 #3/0 AWG COPPER GROUNDING ELECTRODE CONDUCTOR FROM MAIN GROUND BAR TO BUILDING STEEL COLUMN. CONNECTIONS SHALL BE WITH 2-HOLE TONGUE LONG BARREL DOUBLE COMPRESSION CRIMP LUG BOLTED TO RESPECTIVE DEVICE.
- 4 #3/0 AWG COPPER IN 1" SCHED 40 PVC FROM MAIN GROUND BAR TO RESPECTIVE CCR GROUND BUS.
- 5 1/4" THICK BY 2" WIDE COPPER BUS BAR TO REPLACE EXISTING GROUND BUS. MOUNT TO EXISTING STRUT SUPPORT RACK. GROUND BUS BAR LENGTH SHALL SPAN SUPPORT RACK. INCLUDE MOUNTING HARDWARE.
- 6 3/4" x 10 FT. LONG UL LISTED COPPERCLAD GROUND ROD. CONNECT GROUND RODS WITH #3/0 BARE STRANDED COPPER TO FORM A GROUND FIELD. GROUND RODS SHALL NOT BE SPACED LESS THAN 10 FEET APART. ADJUST LOCATION TO AVOID INTERFERENCE WITH EXISTING SIDEWALKS OR PAVEMENT. CONNECTIONS TO GND RODS SHALL BE EXOTHERMIC WELD.
- 7 #3/0 AWG COPPER IN 1" SCHED 40 PVC FROM 800 AMP SERVICE DISCONNECT GROUND BUS TO MAIN GROUND BAR.
- 8 #2 AWG COPPER IN 1" SCHED 40 PVC FROM 200 AMP SERVICE DISCONNECT GROUND BUS TO MAIN GROUND BAR.
- 9 #2 AWG COPPER IN 1" SCHED 40 PVC FROM 200 AMP, 3 PHASE SERVICE PANEL GROUND BUS TO MAIN GROUND BAR.
- 10 #1/0 AWG COPPER FROM ENGINE GENERATOR FRAME TO MAIN GROUND BAR.
- 11 #6 AWG COPPER FROM DAY TANK TO MAIN GROUND BAR.
- 12 BOND BATTERY RACK FRAME TO ENGINE GENERATOR FRAME WITH #6 AWG COPPER BONDING JUMPER.
- 13 FOR EACH CONSTANT CURRENT REGULATOR DISCONNECT EXISTING #6 AWG COPPER BONDING JUMPER FROM EXISTING VAULT GROUND BUS AND RECONNECT TO NEW CCR GND BUS. SEE NOTE 3.
- 14 BOND HIGH VOLTAGE & LOW VOLTAGE WIREWAYS TO RESPECTIVE CCR GROUND BAR WITH #6 AWG COPPER BONDING JUMPER (WIREWAYS NOT SHOWN FOR CLARITY). SEE NOTES 3 & 4.
- 15 BOND CUTOUT ENCLOSURE TO RESPECTIVE CCR GROUND BAR WITH #6 AWG COPPER BONDING JUMPER. SEE NOTES 3 & 4.
- 16 EXISTING EQUIPT GROUND WIRE WITH 240 VAC FEEDER CIRCUIT FROM PANELBOARD TO CCR ORIGINATES FROM NEUTRAL BUS IN THE PANELBOARD. DISCONNECT EQUIPMENT GROUND WIRE FROM NEUTRAL BUS AND RE-TERMINATE ON EQUIPMENT GROUND BAR IN PANELBOARD. REMOVE WHITE TAPE & RE-IDENTIFY WITH GREEN TAPE AT ALL POINTS OF ACCESS.
- 17 REPLACE EXISTING #10 AWG BRANCH CIRCUIT CONDUCTORS WITH 2 #6 THWN, 1 #6 GND.
- 18 EXISTING GROUND RODS CONNECTED TO THE EXISTING CCR GROUND BARS SHALL BE DISCONNECTED & REMOVED.
- 19 EXISTING CONTROL WIRING FOR TAXIWAY G, CIRCUIT #5 THAT RUNS FROM THE CONTROL TOWER TO THE BAGGAGE ROOM IN THE TERMINAL BUILDING AND ON TO THE VAULT SHALL BE DISCONNECTED & RECONNECTED TO AVAILABLE SPARE CONDUCTORS INSTALLED PREVIOUSLY IN 2005. SEE SPECIAL PROVISION SPEC SECTION AR109200 FOR DETAILS.

ALL WORK SHOWN ON THIS SHEET SHALL BE PAID FOR UNDER ITEM AR109200 INSTALL ELECTRICAL EQUIPMENT PER LUMP SUM



ELECTRICAL VAULT GROUNDING PLAN
 SCALE 1/4"=1'-0"
 2 0 4 8 FEET

JUN 10, 2005 3:50 PM CCC
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BY	DATE	REVISION



DECATUR, ILLINOIS

IL PROJ.: DEC-3414 A.I.P. PROJ.: 3-17-0033-28

REV. PROJECT NO.	802-041XXD
FILE NAME	E-101.DWG
SCALE	1/4" = 1'-0"
DATE	XX/XX/XX
LAYOUT	KNL 04/22/05
DRAWN	MY 04/25/05
REVIEWED	CAH 06/07/05



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TAXIWAY G WIDENING
 PHASE II
 ELECTRICAL VAULT
 GROUNDING PLAN