

BY	REVISION	DATE

Kewanee Municipal Airport
Kewanee, Henry County, Illinois

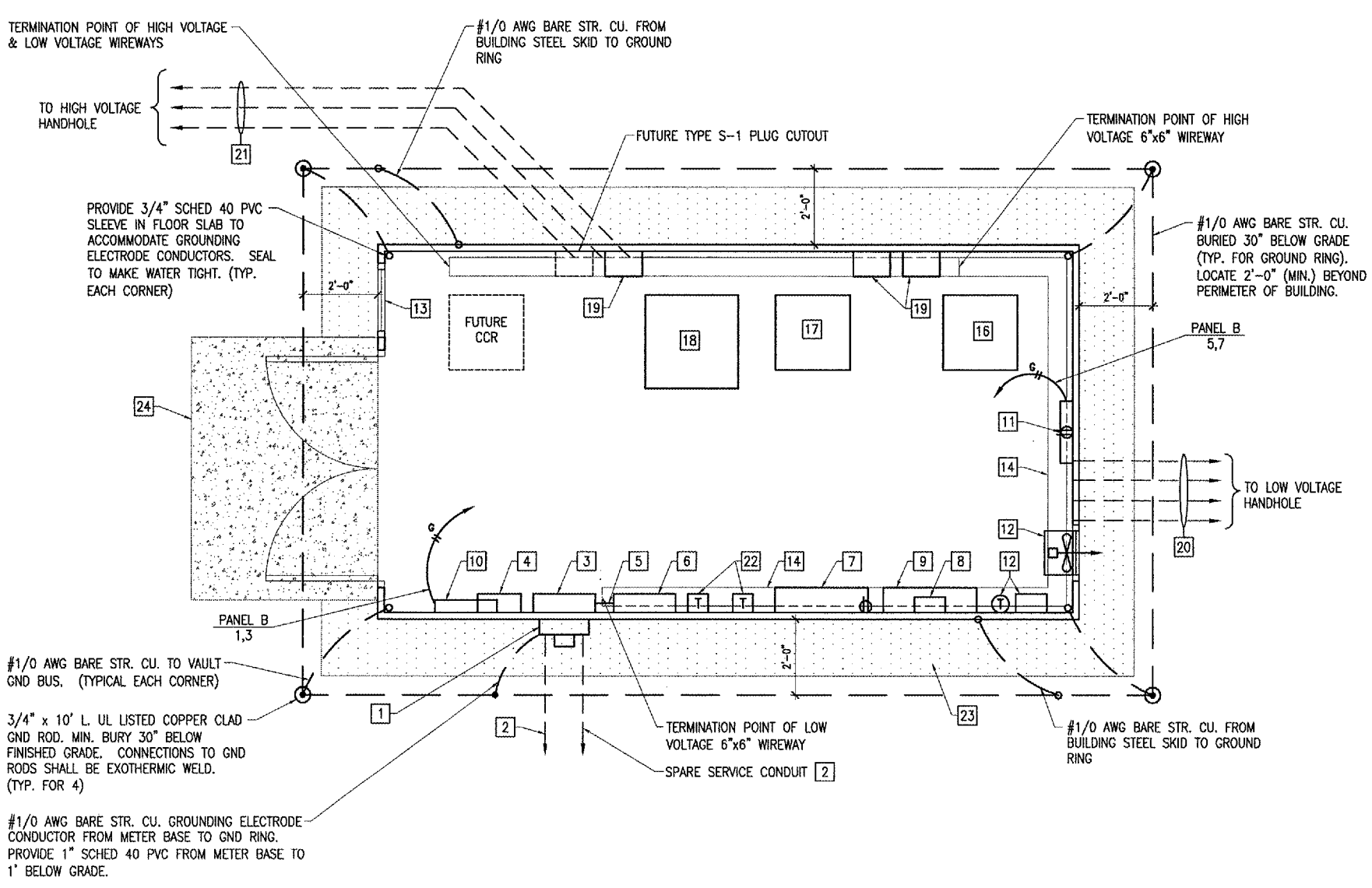
A.I.P. PROJ.: 3-17-0058-B12
 I.L. PROJ.: EZI-3586

ME Project No. B10-06/LTD	
Engineer EP-101/DWG	
Scale 1/2"=1'-0"	
Date 04/28/06	
LAYOUT KNL 04/13/06	
DRAWN MW 04/19/06	
REVIEWED LDP 01/17/06	



CONSTRUCT VAULT

PROPOSED AIRPORT ELECTRICAL VAULT EQUIPMENT PLAN



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

- KEYED NOTES**
- 1 ELECTRIC UTILITY METER WITH SUPPORT HARDWARE PER SERVING ELECTRIC UTILITY COMPANY REQUIREMENTS.
 - 2 UTILITY SERVICE CONDUCTORS (BY UTILITY) IN 4" GRSC (BY CONTRACTOR) FROM UTILITY TRANSFORMER TO METER BASE. INCLUDE SPARE 4" GRSC PER UTILITY CO. REQUIREMENTS. CONTRACTOR SHALL FURNISH & INSTALL SERVICE CONDUCTORS & CONDUIT FROM METER BASE TO SERVICE PANEL. SEE "NEW VAULT ELECTRICAL ONE LINE DIAGRAM".
 - 3 SERVICE PANEL A, SEE PANEL A SCHEDULE.
 - 4 AC SURGE PROTECTOR/TVSS, SEE "NEW VAULT ELECTRICAL ONE LINE DIAGRAM."
 - 5 2 #1/0 THWN, 1 #1/0 THWN NEUTRAL, 1 #4 GND IN 2" GRSC FROM SERVICE PANEL A TO PANEL B.
 - 6 PANEL B, SEE PANEL B SCHEDULE.
 - 7 LIGHTING CONTACTOR PANEL. SEE AIRFIELD LIGHTING WIRING SCHEMATIC AND LIGHTING CONTACTOR PANEL DETAIL.
 - 8 L-854 RADIO CONTROL UNIT. EXTEND RADIO ANTENNA CABLE AND MOUNT ANTENNA ON THE ROOF FOR PROPER OPERATION.
 - 9 RADIO RELAY INTERFACE PANEL WITH PHOTOCELL BYPASS SWITCH FOR RUNWAY 1-19 CCR, TAXIWAY CCR, AND RUNWAY 18-36 CCR. SEE AIRFIELD LIGHTING WIRING SCHEMATIC FOR WIRING REQUIREMENTS. MOUNT PHOTOCELL ON ROOF. FIELD VERIFY LOCATION FOR PROPER CONTROL AND OPERATION.
 - 10 ELECTRIC WALL HEATER EH-1, 3000 WATT, 240 VAC, 1 PHASE, SUITABLE FOR SURFACE MOUNTING WITH INTEGRAL THERMOSTAT, Q-MARK MODEL CWH3407, OR APPROVED EQUAL. BOTTOM OF HEATER SHALL BE 3" ABOVE THE UPPER ELECTRICAL WIREWAY.
 - 11 ELECTRIC WALL HEATER EH-2, 2000 WATT, 240 VAC, 1 PHASE, SUITABLE FOR SURFACE MOUNTING WITH INTEGRAL THERMOSTAT, Q-MARK MODEL CWH3404, OR APPROVED EQUAL. BOTTOM OF HEATER SHALL BE 3" ABOVE THE UPPER ELECTRICAL WIREWAY.
 - 12 EXHAUST FAN EF-1, 2000 CFM AT .25" STATIC PRESSURE WITH 1/2 HP, 120 VAC MOTOR, COOK MODEL 20S10D, OR APPROVED EQUAL. INCLUDE WALL HOUSING WITH GUARD, GRAVITY BACK DRAFT DAMPER, ALUMINUM WEATHER-HOOD PAINTED TO MATCH BUILDING EXTERIOR, STAINLESS STEEL INSECT SCREEN, AND FRACTIONAL HP ELECTRICAL DISCONNECT. INSTALL FAN AS HIGH AS POSSIBLE. PROVIDE 120 VAC THERMOSTAT WITH CONTACTOR AND AUTO-OFF-MANUAL CONTROL SWITCH AT 48" AFF. MOUNT THERMOSTAT ON 2" THICK INSULATED BASE. SEE EXHAUST FAN CONTROL SCHEMATIC FOR WIRING REQUIREMENTS.
 - 13 INTAKE LOUVER L-1, 24" WIDE BY 48" HIGH INTAKE LOUVER WITH STAINLESS STEEL INSECT SCREEN, 120 VAC MOTORIZED DAMPER WITH LIMIT SWITCH, KYNAR FINISH MATCHING BUILDING EXTERIOR, RUSKIN MODEL ELF375DX, OR APPROVED EQUAL. SEE EXHAUST FAN CONTROL SCHEMATIC FOR WIRING REQUIREMENTS.
 - 14 6" BY 6" LOW VOLTAGE WIREWAY. LABEL "LOW VOLTAGE" EVERY 4 FEET. INSTALL ABOVE HIGH VOLTAGE WIREWAY.
 - 15 6" BY 6" HIGH VOLTAGE WIREWAY. LABEL "HIGH VOLTAGE" EVERY 4 FEET. INSTALL BELOW LOW VOLTAGE WIREWAY.
 - 16 RUNWAY 1-19 CONSTANT CURRENT REGULATOR. SEE GENERAL NOTE 1.
 - 17 RUNWAY 9-27 CONSTANT CURRENT REGULATOR. SEE GENERAL NOTE 1.
 - 18 TAXIWAY CONSTANT CURRENT REGULATOR. SEE GENERAL NOTE 1.
 - 19 SERIES PLUG CUTOUT TYPE S-1 WITH ENCLOSURE. SEE GENERAL NOTES 1 AND 2.
 - 20 4-4" GRSC FROM LOW VOLTAGE WIREWAY TO LOW VOLTAGE HANDHOLE.
 - 21 3-4" GRSC FROM HIGH VOLTAGE WIREWAY TO HIGH VOLTAGE HANDHOLE.
 - 22 BOOST TRANSFORMERS. SEE ELEVATION VIEW.
 - 23 VEGETATION BARRIER CONSISTING OF A MIN. 3" PEA GRAVEL SURFACE OVER FILTER OR LANDSCAPING FABRIC. PROPOSED SURFACE TREATMENT WILL COVER ENTIRE AREA BENEATH VAULT STRUCTURE AS WELL AS 18" AROUND THE PERIMETER OF THE BUILDING EDGE. THE STONE AND FABRIC AS WELL AS ANY EQUIPMENT AND LABOR REQUIRED TO COMPLETE THIS TASK WILL BE CONSIDERED INCIDENTAL TO THE INSTALLATION OF THE PROPOSED ELECTRICAL VAULT AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
 - 24 ENTRANCE PAD CONSTRUCTED OF 6" CONCRETE SLAB W/6X6-W5XW5 WELDED WIRE FABRIC ON A COMPACTED SUBGRADE. MINIMUM DIMENSIONS OF PAD WILL BE 7'Wx5'Dx6"H, SLOPED AT A MIN. OF 0.5"/FT AWAY FROM THE VAULT ENTRANCE. PCC USED TO CONSTRUCT THE PAD WILL CONFORM TO ITEM 610. ALL MATERIALS, LABOR AND EQUIPMENT USED TO CONSTRUCT THE PAD INCLUDING ANY GRADING REQUIRED WILL BE CONSIDERED INCIDENTAL TO THE CONSTRUCTION OF THE PROPOSED ELECTRICAL VAULT AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

- GENERAL NOTES**
1. SEE "NEW VAULT ELECTRICAL ONE LINE DIAGRAM" FOR LOW VOLTAGE INPUT POWER WIRING REQUIREMENTS TO CCR'S (CONSTANT CURRENT REGULATORS). SEE "HIGH VOLTAGE WIRING SCHEMATIC" FOR CCR OUTPUT WIRING REQUIREMENTS. SEE "AIRFIELD LIGHTING WIRING SCHEMATIC" FOR CCR CONTROL WIRING REQUIREMENTS. PROVIDE 5 FEET MINIMUM CLEAR WORKING SPACE IN FRONT OF EACH CCR AND EACH SERIES PLUG CUTOUT.
 2. CONSTANT CURRENT REGULATORS AND THEIR RESPECTIVE SERIES PLUG CUTOUTS SHALL BE CLEARLY LABELED TO IDENTIFY THE RESPECTIVE REGULATOR DESIGNATION, RUNWAY OR TAXIWAY SERVED, POWER SOURCE OR CIRCUIT, AND VOLTAGE SYSTEM.
 3. SEE ELEVATION VIEWS FOR ADDITIONAL INFORMATION ON PROPOSED EQUIPMENT LAYOUTS.
 4. COORDINATE CONDUIT & SLEEVE ENTRANCES THROUGH FLOOR SLAB AND WALLS.