



AC SURGE PROTECTOR/TVSS, SUITABLE FOR SERVICE ENTRANCE FOR 208/120 VAC, 3 PH, 4W PLUS GROUND SYSTEM WITH SURGE CURRENT RATING OF 240 KA, 8 x 20 MICROSECOND WAVE PER MODE & STATUS INDICATION LIGHTS IN A NEMA 4 STAINLESS STEEL ENCLOSURE, LIGHTNING PROTECTION CORP. MODEL LPC 2030-8U-G, OR APPROVED EQUAL. INCLUDE FUSING PER MFR RECOMMENDATIONS. AC POWER SURGE ARRESTER/TVSS SHALL BE UL 1449, 2ND EDITION LISTED. AC SURGE PROTECTOR/TVSS DEVICE SHALL BE INSTALLED ON THE RIGHT HAND SIDE OF THE SERVICE DISCONNECT. MAINTAIN LEADS AS SHORT & AS STRAIGHT AS POSSIBLE FROM THE SERVICE DISCONNECT TO THE AC SURGE PROTECTOR/TVSS DEVICE, TO CONFORM TO NEC 285.12 & MFR RECOMMENDATIONS. ADJUST LOCATION TO AVOID INTERFERENCE WITH SERVICE DISCONNECT HANDLE. PROVIDE DUCT SEAL AT CONDUIT TERMINATIONS.

FURNISH & INSTALL COPPER EQUIPMENT GND BAR, SQUARE D CAT. NO. 8010302652, OR APPROVED EQUAL. (NOTE: THIS IS THE COPPER EQUIVALENT TO THE SQUARE D CAT. NO. PK15GTA WHICH IS AN ALUMINUM GND BAR.)

- NOTES
1. ALL WORK AND/OR POWER OUTAGES SHALL BE COORDINATED WITH THE AIRPORT MANAGER AND THE RESIDENT ENGINEER.
 2. CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS & REPORT ANY VARIATIONS TO RESIDENT ENGINEER.
 3. ALL ELECTRICAL EQUIPMENT SHALL BE INSTALLED IN CONFORMANCE WITH NFPA 70 (NEC MOST CURRENT ISSUE IN FORCE), THE RESPECTIVE EQUIPMENT MANUFACTURER'S DIRECTIONS AND ALL OTHER APPLICABLE LOCAL CODES, LAWS, ORDINANCES AND REQUIREMENTS IN FORCE. ANY INSTALLATIONS WHICH VOID THE U.L. LISTING, ETL LISTING, (OR OTHER THIRD PARTY LISTING) AND/OR THE MANUFACTURER'S WARRANTY OF A DEVICE SHALL NOT BE PERMITTED.
 4. FURNISH & INSTALL SURGE ARRESTER AT THE INPUT POWER TERMINALS OF THE L-821 PANEL. SURGE ARRESTER SHALL BE SUITABLE FOR 120VAC, 1PH, 2 WIRE PLUS GROUND SYSTEM WITH SURGE CURRENT RATING OF 60KA (MIN.), 8x20 MICROSECOND WAVE WITH STATUS INDICATION LIGHTS, LIGHTNING PROTECTION CORP. MODEL LPC 10262-7, OR APPROVED EQUAL. INSTALL IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS & RECOMMENDATIONS.
 5. FURNISH & INSTALL A 28VDC SURGE ARRESTER ON THE LOAD SIDE CONNECTIONS OF EACH 24VDC POWER SUPPLY (3 TOTAL) IN THE L-821 PANEL. 28VDC SURGE ARRESTER SHALL HAVE 20KA, 8x20 MICROSECOND WAVE PEAK SURGE RATING, & ENERGY DISSIPATION RATING OF 300 JOULES (MIN.). SURGE ARRESTER SHALL BE LIGHTNING PROTECTION CORP. MODEL LPC 11895-028 OR APPROVED EQUAL. INSTALL IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS & RECOMMENDATIONS. CONTRACTOR SHALL FIELD VERIFY QUANTITY & VOLTAGE OF DC POWER SUPPLIES IN L-821 PANEL, AND CONFIRM SELECTED SURGE ARRESTER IS SUITABLE FOR THE APPLICATION.
 6. ALL EQUIPMENT NOT LABELED AS EXISTING IS NEW.
 7. GRSC DENOTES GALVANIZED RIGID STEEL CONDUIT.
 8. WORK SHOWN ON THIS SHEET SHALL BE PAID UNDER ITEM AT109200.
 9. FURNISH & INSTALL A WEATHERPROOF WARNING LABEL FOR EACH SERVICE DISCONNECT & PANELBOARD B, LOCATED AT THE TERMINAL BUILDING, TO WARN PERSONS OF POTENTIAL ELECTRIC ARC FLASH HAZARDS, PER THE REQUIREMENTS OF NEC 110.16 "FLASH PROTECTION". LABELS SHALL BE HAZARD COMMUNICATION SYSTEMS, LLC (119 OLD MILFORD RD., P.O. BOX 1174, MILFORD, PA. 18337, PHONE: 1-877-748-0244) PART NO. H6010-9VWHBJ OR APPROVED EQUAL.

ELECTRICAL ONE LINE DIAGRAM FOR TERMINAL BUILDING (OFFICE AREA)

WORK SHOWN ON THIS SHEET IS FOR BID ALTERNATE NO. 2

LEGEND PLATE SCHEDULE	
DEVICE	LABEL
TERMINAL BUILDING SERVICE DISCONNECT	TERMINAL BLDG SERVICE DISCONNECT 208/120VAC, 3PH, 4W
KITCHEN SERVICE DISCONNECT	KITCHEN SERVICE DISCONNECT 208/120VAC, 3PH, 4W
SUITE 131 SERVICE DISCONNECT	SUITE 131 SERVICE DISCONNECT
AIRLINE OFFICE SERVICE DISCONNECT	AIRLINE OFFICE SERVICE DISCONNECT
EMERGENCY PANEL IN ELECTRICAL ROOM OF TERMINAL BUILDING	EMERGENCY PANEL 120/208VAC, 1PH, 3W FED FROM PANEL B LOCATED IN THE VAULT
EACH SERVICE DISCONNECT (4 LEGEND PLATES)	NOTE THERE ARE 3 ADDITIONAL SERVICE DISCONNECTS LOCATED ADJACENT TO THIS DISCONNECT. THERE IS ALSO AN ADDITIONAL FEEDER CIRCUIT TO THIS BUILDING LOCATED AT THE EMERGENCY PANEL IN THE ELECTRICAL ROOM
EMERGENCY PANEL IN ELECTRICAL ROOM OF TERMINAL BUILDING	NOTE THERE ARE 4 ADDITIONAL SERVICE DISCONNECTS FOR THE TERMINAL BUILDING LOCATED ON THE NORTH EXTERIOR WALL.

LEGEND PLATES SHALL BE WEATHERPROOF ENGRAVED PLASTIC OR PHENOLIC MATERIAL, 1/4" HIGH BLOCK LETTERS ON A WHITE BACKGROUND, SECURE WITH WEATHERPROOF ADHESIVE AND/OR MACHINE SCREWS.

BY	
REVISION	
DATE	
MT. VERNON, ILLINOIS A.I.P. PROJ.: J-17-0074-B12 IL. PROJ.: MW-3539	
I&L Project No. 819-06RW00 File Name: E-612.DWG Scale: NONE Date: 12/16/05	LAYOUT: KNL 11/30/05 DRAWN: MW 11/30/05 REVIEWED: CAH 12/14/05
Hanson Professional Services Inc. 1925 South Sixth Street Springfield, Illinois 62703-2888 Offices Nationwide	
RUNWAY 15-33 P.F.C. OVERLAY	ELECTRICAL ONE LINE DIAGRAM FOR TERMINAL BUILDING
24	
24 of 29 sheets (E-7)	

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