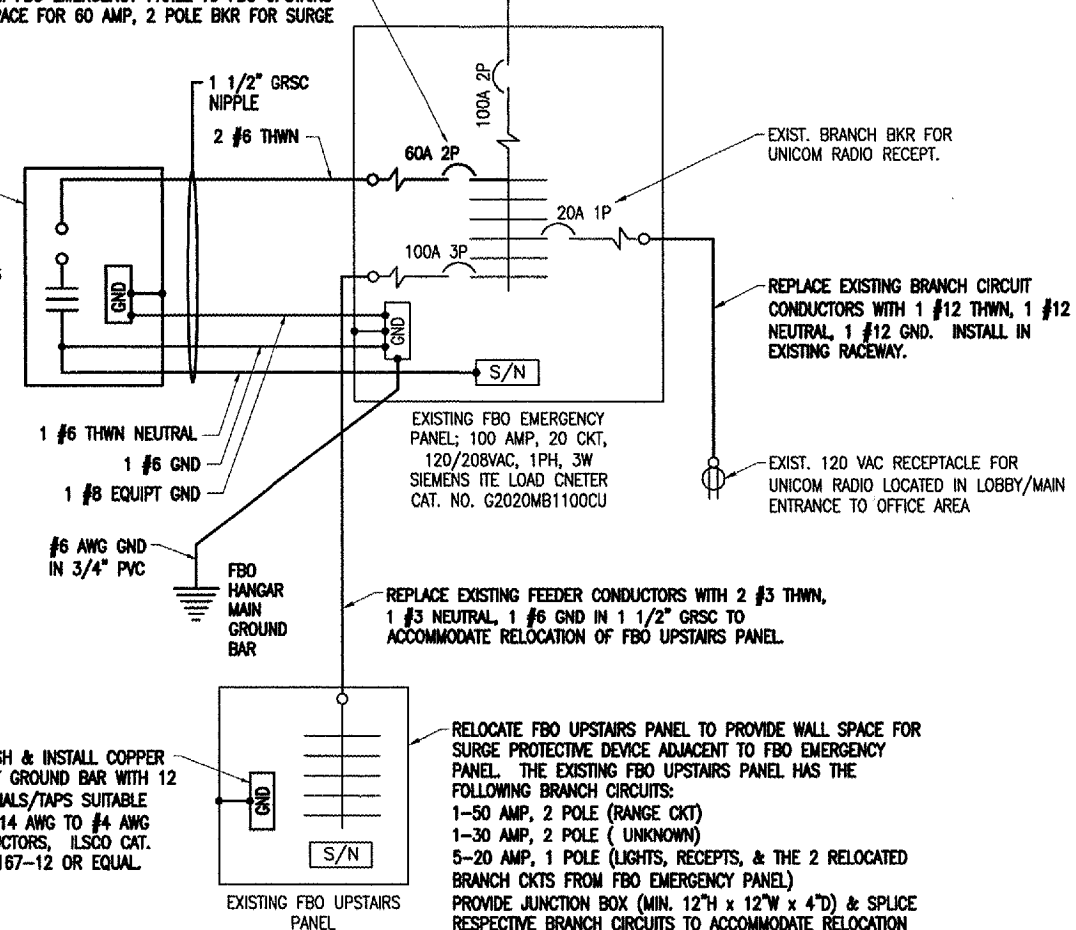
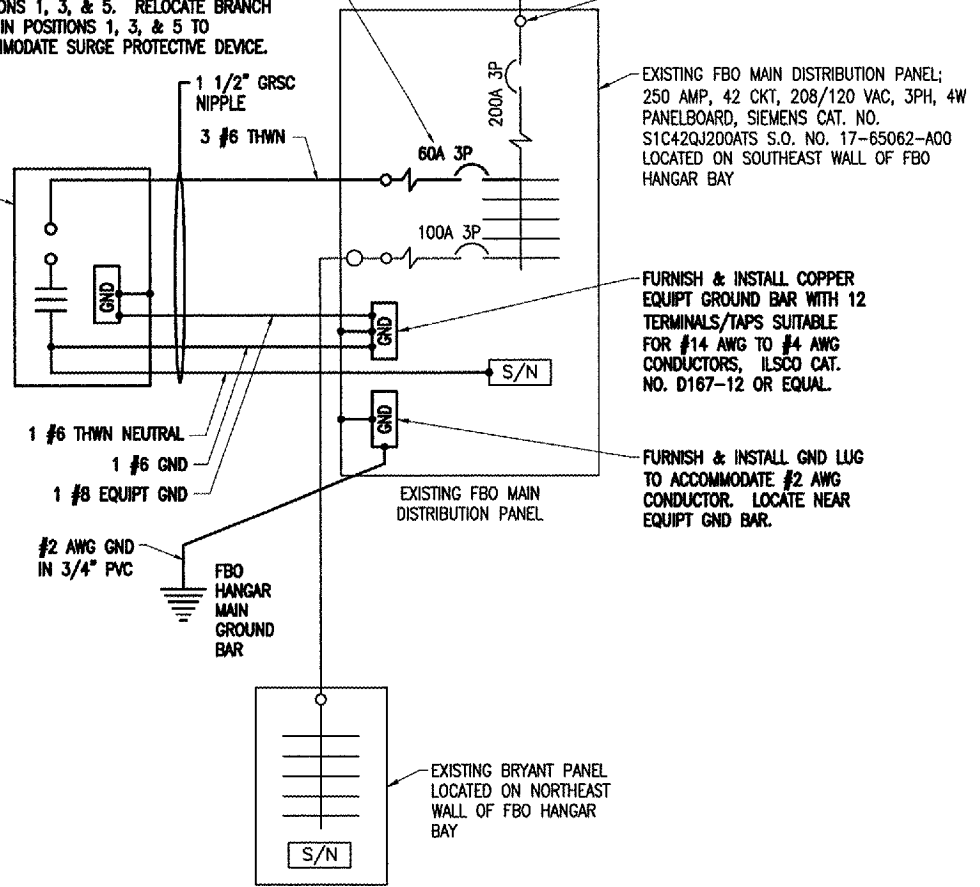


FURNISH & INSTALL A 60A, 3 POLE, BOLT-ON BREAKER WITH 10,000 AIC AT 240 VAC, SIEMENS CAT. NO. B360. INSTALL IN POSITIONS 1, 3, & 5. RELOCATE BRANCH BKRS IN POSITIONS 1, 3, & 5 TO ACCOMMODATE SURGE PROTECTIVE DEVICE.

FURNISH & INSTALL A 60A, 2 POLE, PLUG-ON BREAKER WITH 10,000 AIC AT 120/240 VAC THAT IS COMPATIBLE WITH THE SIEMENS LOAD CENTER. INSTALL IN POSITIONS 1 & 3. RELOCATE FEEDER BREAKER FOR FBO UPSTAIRS PANEL TO ACCOMMODATE SURGE PROTECTIVE DEVICE. RELOCATE 2-20 AMP, 1 POLE BRANCH CIRCUITS FROM FBO EMERGENCY PANEL TO FBO UPSTAIRS PANEL, TO PROVIDE SPACE FOR 60 AMP, 2 POLE BKR FOR SURGE PROTECTIVE DEVICE.

AC SURGE PROTECTOR/TVSS, SUITABLE 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 12 ENCLOSURE, LIGHTNING PROTECTION CORP. MODEL LPC 2030-8U-G, OR APPROVED EQUAL. AC POWER SURGE ARRESTER/TVSS SHALL BE UL 1449, 2ND EDITION LISTED. AC SURGE PROTECTOR/TVSS DEVICE SHALL BE INSTALLED ON THE LEFT HAND SIDE OF THE PANELBOARD. MAINTAIN LEADS AS SHORT & AS STRAIGHT AS POSSIBLE FROM THE PANELBOARD TO THE AC SURGE PROTECTOR/TVSS DEVICE TO CONFORM TO NEC 285.12 & MFR RECOMMENDATIONS. PROVIDE DUCT SEAL AT CONDUIT TERMINATIONS. ALSO SEE S.P. SPECS.

AC SURGE PROTECTOR/TVSS, SUITABLE FOR 120/240 VAC, 1 PH, 3W PLUS GROUND SYSTEM WITH SURGE CURRENT RATING OF 180 KA, 8 x 20 MICROSECOND WAVE PER MODE & STATUS INDICATION LIGHTS IN A NEMA 12 ENCLOSURE, LIGHTNING PROTECTION CORP. MODEL LPC 2020-5U-G, OR APPROVED EQUAL. AC POWER SURGE ARRESTER/TVSS SHALL BE UL 1449, 2ND EDITION LISTED. AC SURGE PROTECTOR/TVSS DEVICE SHALL BE INSTALLED ON THE LEFT HAND SIDE OF THE LOAD CENTER. MAINTAIN LEADS AS SHORT & AS STRAIGHT AS POSSIBLE FROM THE LOAD CENTER TO THE AC SURGE PROTECTOR/TVSS DEVICE TO CONFORM TO NEC 285.12 & MFR RECOMMENDATIONS. PROVIDE DUCT SEAL AT CONDUIT TERMINATIONS. ALSO SEE S.P. SPECS.



NEW ELECTRICAL ONE LINE DIAGRAM FOR FBO HANGAR

LEGEND PLATE SCHEDULE	
DEVICE	LABEL
FBO MAIN DIST. PANEL	FBO MAIN DIST. PANEL 208/120VAC, 3PH, 4W FED FROM SERVICE DISCONNECT AT VAULT
FBO MAIN DIST PANEL	NOTE THERE IS A SECOND FEEDER DISCONNECT TO THIS BUILDING LOCATED IN THE FBO EMERGENCY PANEL ON THE SOUTHWEST WALL OF THE HANGAR
FBO EMERGENCY PANEL	FBO EMERGENCY PANEL 120/208VAC, 1PH, 3W FED FROM PANEL B IN THE VAULT
FBO EMERGENCY PANEL	NOTE THERE IS A SECOND FEEDER DISCONNECT TO THIS BUILDING LOCATED IN THE FBO MAIN DIST. PANEL LOCATED AT THE SOUTH CORNER OF THE HANGAR
FBO UPSTAIRS PANEL	FBO UPSTAIRS PANEL 120/208VAC, 1PH, 3W FED FROM FBO EMERGENCY PANEL

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.

WORK SHOWN ON THIS SHEET IS FOR BID ALTERNATE NO. 1

NOTES

- ALL WORK AND/OR POWER OUTAGES SHALL BE COORDINATED WITH THE AIRPORT MANAGER AND THE RESIDENT ENGINEER.
- CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS & REPORT ANY VARIATIONS TO RESIDENT ENGINEER.
- 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.
- PER NEC 513 THE ENTIRE AREA OF THE HANGAR INCLUDING ANY ADJACENT AND COMMUNICATING AREAS NOT SUITABLY CUT OFF FROM THE HANGAR, SHALL BE CLASSIFIED AS A CLASS I, DIVISION 2 HAZARDOUS LOCATION UP TO A LEVEL 18 INCHES ABOVE THE FLOOR. AREAS IN THE VICINITY OF AIRCRAFT ARE ALSO CLASSIFIED AS HAZARDOUS AS DEFINED BY NEC 513. ALL ELECTRICAL INSTALLATIONS IN CLASSIFIED HAZARDOUS LOCATIONS SHALL BE AVOIDED UNLESS SPECIFICALLY APPROVED FOR SUCH LOCATIONS AND INSTALLED IN CONFORMANCE WITH NEC 500, 501, AND 513 AS WELL AS ANY OTHER APPLICABLE CODES AND REQUIREMENTS.
- ALL EQUIPMENT NOT LABELED AS EXISTING IS NEW.
- GRSC DENOTES GALVANIZED RIGID STEEL CONDUIT.
- WORK SHOWN ON THIS SHEET SHALL BE PAID FOR UNDER ITEM AS109200.
- FURNISH & INSTALL A WEATHERPROOF WARNING LABEL FOR EACH PANELBOARD & LOAD CENTER (NEW & EXISTING), LOCATED IN THE FBO HANGAR, 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 (190 OLD MILFORD RD., P.O. BOX 1174, MILFORD, PA 18337, PHONE: 1-877-748-0244) PART NO. H6010-9VWHBJ OR APPROVED EQUAL.

BY	REVISION	DATE
MT. VERNON, ILLINOIS ILL. PROJ.: MNV-3539 A.I.P. PROJ.: 3-17-0074-812		
HEL. PROJ. NO. 819-065WYD DRAWN: E-602.DWG SCALE: NONE DATE: 12/16/05	LAYOUT: KNL 11/30/05 DRAWN: MV 11/30/05 REVIEWED: CAH 12/14/05	
Hanson Professional Services Inc. 1625 South Sixth Street Springfield, Illinois 62703-2886 Offices Nationwide		
RUNWAY 15-33 P.F.C. OVERLAY NEW ELECTRICAL ONE LINE DIAGRAM FOR FBO HANGAR		
21 21 of 29 sheets (E-4)		