



CONTROL BLOCK DIAGRAM FOR AIRFIELD LIGHTING

KEYED NOTES:

- 1 COORDINATE LOCATION OF NEW L-821 CONTROL PANEL WITH FAA AIR TRAFFIC CONTROL TOWER PERSONNEL. SEE "L-821 CONTROL PANEL DETAILS" SHEET, FOR PANEL LAYOUT & REQUIREMENTS.
- 2 CONTROL WIRING FROM L-821 PANEL TO TERMINAL PANEL AT NEW AIR TRAFFIC CONTROL TOWER SHALL BE 2 SETS OF 37/C #12 AWG, 600 VOLT TYPE TC CONTROL CABLE. PROVIDE CABLE SUPPORTS AND SLEEVES THROUGH WALL & FLOOR PENETRATIONS. TERMINAL PANEL AT ATCT SHALL BE LOCATED WITHIN 50' OF THE POINT OF CABLE ENTRY INTO THE BUILDING. 50 PAIR CABLE SHALL TRANSITION TO 2 SETS OF 37/C #14 AWG 600 VOLT TYPE TC CONTROL CABLE AT ATCT TERMINAL PANEL. SEE SPECIAL PROVISION SPECS.
- 3 FURNISH AND INSTALL 50-PAIR #19 AWG COMMUNICATION CABLE DIRECT BURY FROM THE VAULT TO THE NEW ATCT. CABLE SHALL COMPLY WITH ANSI/ICEA S-84-608-2002 AND RUS 7 CFR 1755.390 (PE-39). CABLE SHALL BE 50-PAIR, #19 AWG SOLID ANNEALED COPPER TELEPHONE COMMUNICATIONS CABLE, GOPHER RESISTANT, JELLY FILLED TO RESIST MOISTURE ENTRY AND TO INHIBIT CORROSION, SUITABLE FOR DIRECT BURIAL (BY PLOWING METHOD OR TRENCHING METHOD), AND FOR USE IN DUCT, SUPERIOR ESSEX GOPIC-F SERIES, PART NUMBER 04-034-27, OR APPROVED EQUAL. PROVIDE A TERMINAL BLOCK ENCLOSURE AT EACH LOCATION TO TERMINATE THE CONTROL WIRING CONDUCTORS. TERMINAL BLOCKS SHALL BE RATED 600 VOLT, 30 AMP, SUITABLE FOR THE RESPECTIVE WIRE SIZES, SQUARE D CLASS 9080, TYPE GK6 OR APPROVED EQUAL, HOUSED IN A NEMA 12 ENCLOSURE WITH HINGED COVER SIZED AS REQUIRED FOR THE CABLE AND TERMINATIONS. TERMINALS SHALL BE LABELED AND NUMBERED 1 THROUGH 100. PROVIDE GALVANIZED RIGID STEEL CONDUIT WHERE CABLE EMERGES FROM GRADE.
- 4 CONTROL WIRING FROM TERMINAL PANEL AT VAULT TO PILOT RELAY PANELS SHALL BE #12 AWG THWN COPPER IN WIREWAY & GRSC. DO NOT USE INSULATION COLORS THAT ARE WHITE OR GREEN FOR CONTROL WIRING. WHITE INSULATED CONDUCTORS SHALL BE FOR NEUTRAL CONDUCTORS. GREEN INSULATED CONDUCTORS SHALL BE FOR GROUND WIRES.
- 5 NEW PILOT RELAY PANEL 48 VDC FURNISHED BY AIRPORT, INSTALLED BY CONTRACTOR. SEE "PILOT RELAY PANEL 48 VDC" SHEET FOR DETAILS.
- 6 CONTROL WIRING FROM RESPECTIVE PILOT RELAY PANEL TO EACH RESPECTIVE CCR SHALL BE 4 #12 THWN, 1 #12 NEUTRAL, 1 #12 GND IN LOW VOLTAGE WIREWAY AND GRSC. PROVIDE LTFMC AT FINAL CONNECTIONS TO CCR'S. EXISTING CONTROL WIRING CONDUITS TO CCR'S MAY BE INTERCEPTED AND REUSED. SEE "LIGHTING CONTACTOR PANEL DETAIL" FOR WIRING REQUIREMENTS BETWEEN RESPECTIVE PILOT RELAY PANEL AND LIGHTING CONTACTORS.

DATE	REVISION	BY

**SAINT LOUIS DOWNTOWN AIRPORT**  
 A Division of Bi-State Development Agency  
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ATCT INTERFACE TO VAULT  
 CONTROL BLOCK DIAGRAM FOR AIRFIELD LIGHTING