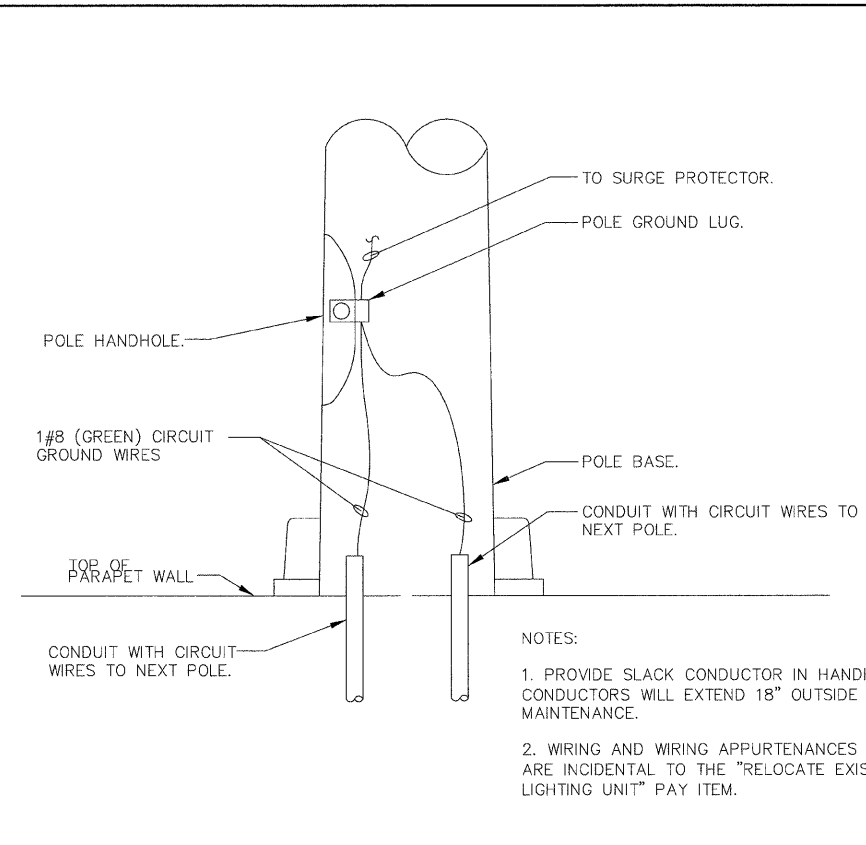


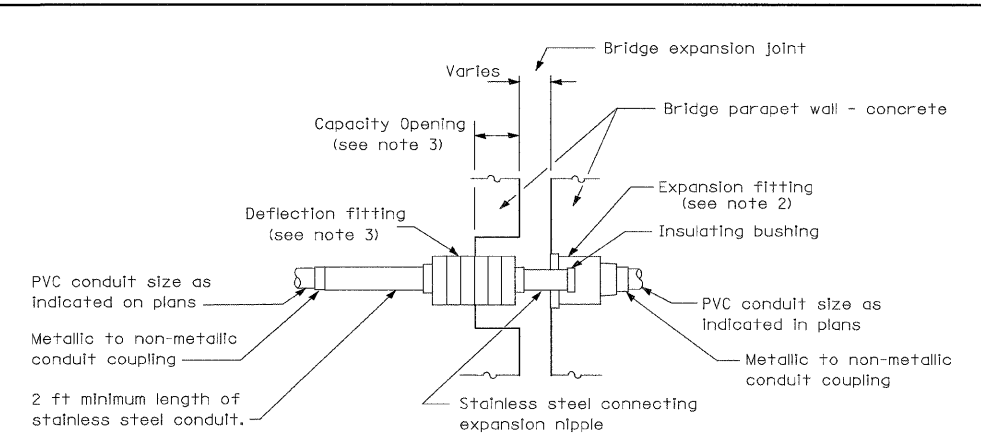
- NOTES:
1. PROVIDE SLACK CONDUCTOR IN HANDHOLES SO CONDUCTORS WILL EXTEND 18" OUTSIDE FOR MAINTENANCE.
 2. WIRING AND WIRING APPURTENANCES IN POLE ARE INCIDENTAL TO THE "RELOCATE EXISTING LIGHTING UNIT" PAY ITEM.

POLE WIRING DETAIL
NO SCALE



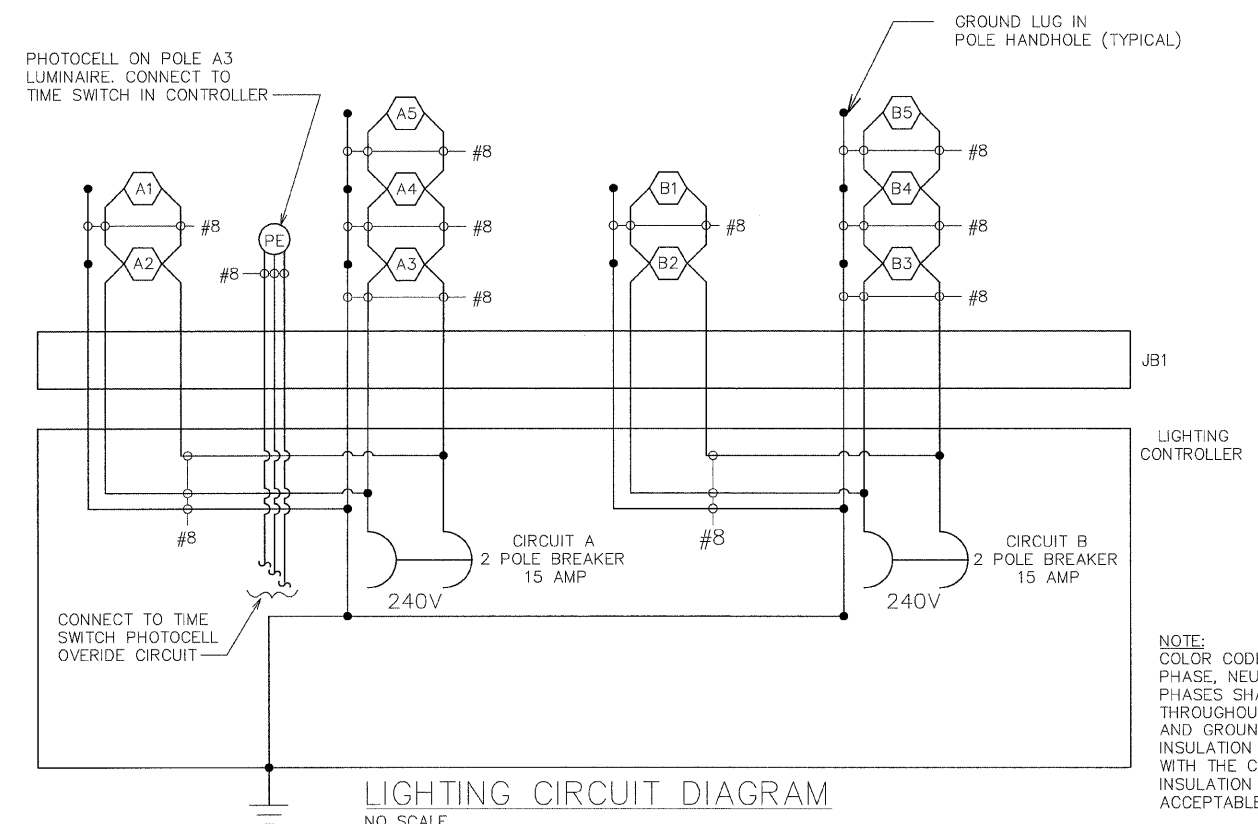
- NOTES:
1. PROVIDE SLACK CONDUCTOR IN HANDHOLES SO CONDUCTORS WILL EXTEND 18" OUTSIDE FOR MAINTENANCE.
 2. WIRING AND WIRING APPURTENANCES IN POLE ARE INCIDENTAL TO THE "RELOCATE EXISTING LIGHTING UNIT" PAY ITEM.

POLE GROUND WIRING DETAIL
NO SCALE



- GENERAL NOTES**
1. The Contractor shall install a conduit expansion/deflection coupling at the joints in the concrete parapet on the bridge capable of accepting the longitudinal movement. All metallic parts of the coupling shall be made of stainless steel or as approved by the Engineer. Any non-stainless metal shall be hot dip galvanized and coated to prevent reaction with the concrete. The cost of the coupling shall be part of and incidental to the conduit system.
 2. The barrel in the expansion fitting shall be fully embedded in the concrete on one side of the expansion joint. One half the length of the deflection fitting shall be embedded in the concrete on the other side of the coupling.
 3. A cavity opening 3" larger in diameter than the deflection fitting shall be provided in the concrete to ensure proper performance of the coupling.
 4. Careful attention to joint movement over a range of temperatures shall be coordinated with the selection and installation of the coupling to ensure the range of movement of the coupling is not exceeded at temperature extremes.
 5. All manufacturer's installation instructions shall be carefully followed to ensure optimum performance of the expansion/deflection coupling.
 6. The Contractor shall install couplings at all bridge expansion joints and shall be responsible to determine the proper number of couplings required.
 7. With the approval of the Engineer, the Contractor may substitute two (2) stainless steel junction boxes attached to the back of the wall and connected by a high grade of flexible non-metallic conduit for all expansion joints. This substitution shall be made at no cost to the Department.

CONDUIT EXPANSION/DEFLECTION COUPLING DETAIL



LIGHTING CIRCUIT DIAGRAM
NO SCALE

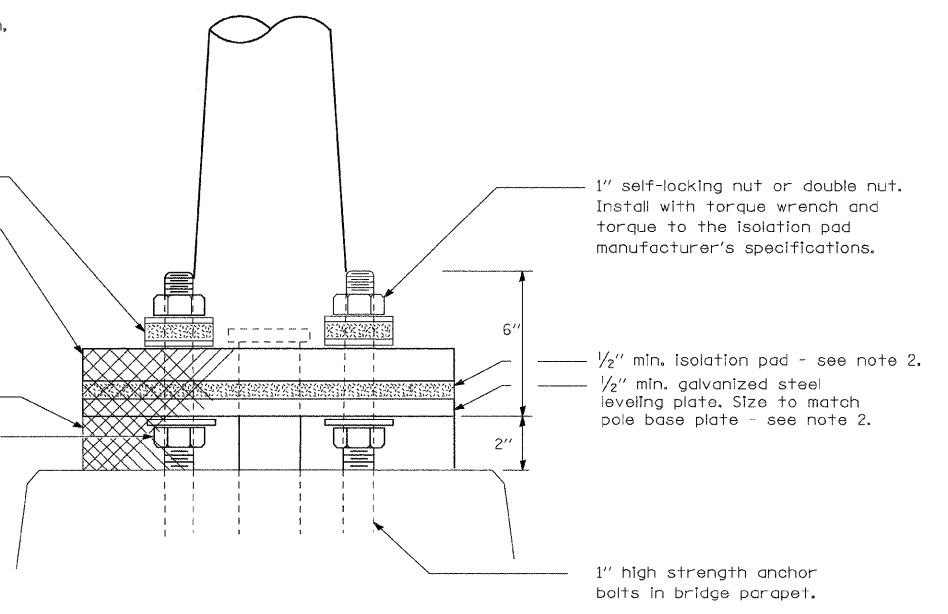
- GENERAL NOTES**
1. Locate poles over bridge piers where possible.
 2. The vibration isolation pad and leveling plate shall match the footprint of the pole base plate.
 3. Thickness of isolation pad and washers shall be according to the isolation pad manufacturer's recommendations based upon pole height and loading.
 4. Should the length of the exposed anchor bolts be too short on an existing bridge to mount the poles as shown, then the leveling plate shall be mounted directly on the concrete and leveled with stainless steel washers. Remove concrete as directed by the Engineer to fully thread the top nut.

2 1/2" O.D. x 1/4" galvanized steel flat washer either side of 2 1/2" O.D. x 1/2" isolation washer.

Stainless steel standard grade wire cloth, 6x6 (1/4") mesh or less with #16 gauge (0.062") diameter or heavier wire.

Attach with 1/2" stainless steel banding or tie back on itself with stainless steel wire ties. Finished installation must prevent rodent entry.

NOTE:
COLOR CODE ALL CONDUCTORS TO DESIGNATE PHASE, NEUTRAL AND GROUND CONDUCTORS. PHASES SHALL BE BLACK AND RED CONSISTENTLY THROUGHOUT PROJECT, NEUTRAL SHALL BE WHITE AND GROUND SHALL BE GREEN. CONDUCTOR INSULATION SHALL BE SOLID COLOR COMPLYING WITH THE CONDUCTOR COLOR CODE. BLACK INSULATION WITH COLORED TAPE IS NOT ACCEPTABLE AND WILL BE REJECTED.



POLE MOUNTED ON BRIDGE PARAPET DETAIL

FILE NAME = X:\CHIEF\2007\07\07\road\Plans\Lighting_05.dgn



USER NAME = msj	DESIGNED - JLF	REVISED -
PLOT SCALE = 1:8000 1" = 100'	DRAWN - JDK	REVISED -
PLOT DATE = 4/22/2010	CHECKED - DAR/TLO	REVISED -
	DATE - 04/21/2010	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CIRCUIT DIAGRAM AND POLE WIRING DETAILS

SCALE:	SHEET NO.	OF	SHEETS	STA.	TO	STA.
--------	-----------	----	--------	------	----	------

F.A.P. RTE. 710	SECTION (50Z-VB) BR	COUNTY MACON	TOTAL SHEETS 79	SHEET NO. 25
CONTRACT NO. 74215				
FED. ROAD DIST. NO. [ILLINOIS] FED. AID PROJECT				