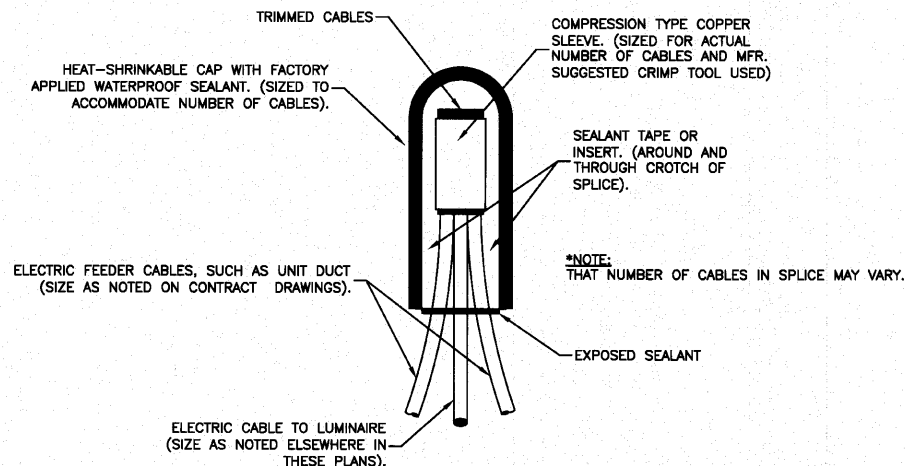


EXISTING CONTROLLER WIRING DIAGRAM  
CONTROLLER NO. 3



SPlicing ELECTRIC Cables  
BASIC MATERIALS AND METHODS

EXISTING CONTROLLER WIRING DIAGRAM LEGEND

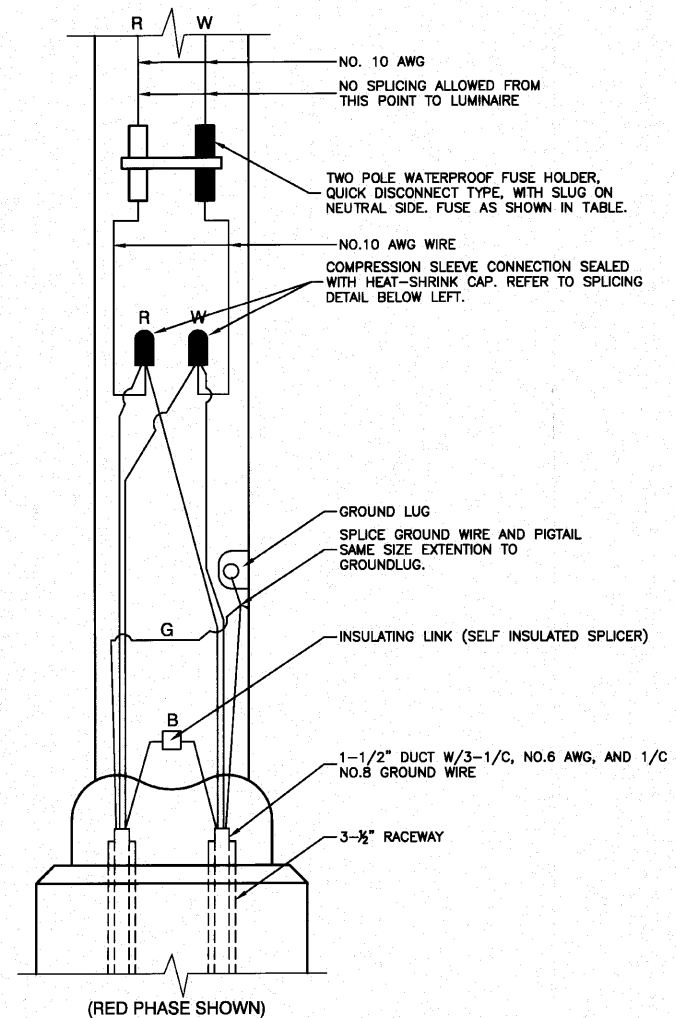
- ① 100 AMP, 2 POLE, 240 VOLT LIGHTING CONTACTOR
- ② 100 AMP, 2 POLE, 240 VOLT MAIN CURCUIT BREAKER
- ③ PHOTOELECTRIC CONTROL MOUNTED TO TOP OF NEAREST LIGHT POLE
- ④ HAND-OFF-AUTO SELECTOR SWITCH
- ⑤ NEUTRAL GROUND BUS
- ⑥ 25 AMP, 1 POLE, 240 VOLT BRANCH CIRCUIT BREAKER
- ⑦ 2-1/C, NO. 10 AWG, 600V INSTALLED IN 1" DUCT TO NEAREST POLE
- ⑧ 3-1/C, NO. 6 AWG, 600V IN 1-1/4" DUCT
- ⑨ 3-1/C, NO. 1/0, 600V SERVICE WIRE IN 2" GALVANIZED STEEL CONDUIT FOR 240/480, 1 $\phi$ , 3 WIRS, 60HZ SERVICE
- ⑩ IN LINE FUSEHOLDERS WITH 10 AMP FUSES
- ⑪ NO. 8 BARE GROUND WIRE
- ⑫ 15 AMP BRANCH CIRCUIT BREAKER
- ⑬ 10 AMP, SPDT, 120 VOLT RELAY
- Ⓐ CIRCUIT
- ⑭ GROUNDED THREE WIRE, 120 VOLT DUPLEX OUTLET
- ⑮ SWITCH AND CABINET LIGHT
- ⑯ VOLTAGE TRANSFORMER

LIGHTING GENERAL NOTES

1. ALL WORK TO CONFORM TO THE MOST RECENT NATIONAL ELECTRICAL CODE AND ANY APPLICABLE LOCAL CODES.
2. CONTRACTOR TO VERIFY LOCATION OF ALL UNDERGROUND UTILITIES BEFORE TRENCHING OR AUGERING.
3. BEFORE INSTALLING STANDARDS NEAR OVERHEAD FACILITIES CALL C.E. Co. FOR APPROVAL OF LOCATION.
4. FOR LOCATION OF EXISTING UNDERGROUND ELECTRICAL CABLE CALL C.E. Co.
5. CONTRACTOR SHALL TAKE ALL NECESSARY MEASURES TO RESTORE ANY SPECIALIZED LANDSCAPING, (i.e. DECORATIVE ROCKS, SHRUBS, PLANTS, ECT.) OR SHALL REPLACE IT, THE COST OF WHICH SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.
6. CARE IS TO BE TAKEN AS NOT TO DAMAGE ANY OF THE EXISTING TRAFFIC SIGNAL CONDUIT, MAGNETIC DETECTORS AND EQUIPMENT. IF ANY OF THE TRAFFIC SIGNAL CONDUIT AND/OR EQUIPMENT IS DAMAGED, THE CONTRACTOR SHALL REPAIR AND/OR REPLACE THE CONDUIT AND/OR EQUIPMENT AT NO COST TO THE CITY OR STATE.
7. THE CONTRACTOR SHALL MAKE SPECIAL NOTE OF THE REQUIREMENT FOR BURIED WARNING TAPE, SPECIFIED AS PART OF "TRENCH AND BACK FILL FOR ELECTRICAL WORK". THE INSTALLATION OF THE TAPE SHALL BE INSPECTED AND APPROVED BY THE RESIDENT ENGINEER PRIOR TO BACKFILLING OR DURING PLOWING OPERATIONS, AS APPLICABLE.
8. THE CONTRACTOR WILL BE RESPONSIBLE FOR THE ESTABLISHMENT OF FINISHED GRADE. THE RESIDENT ENGINEER MAY ASSIST THE CONTRACTOR, AS APPLICABLE, BUT THE RESPONSIBILITY FOR COORDINATING THE FINISHED GRADE ELEVATION WITH THE TOP OF THE FOUNDATION HEIGHTS AND THE LIGHT SHALL REMAIN WITH THE CONTRACTOR.
9. NO POLES SHALL BE ERECTED UNTIL THE RESPECTIVE FOUNDATIONS HAVE CURED, AS APPROVED BY THE ENGINEER.
10. THE CONTRACTOR SHALL MAKE SPECIAL NOTE OF THE REQUIREMENTS FOR WIRE MARKERS AND SHALL TAG ALL WIRE ACCORDINGLY.
11. EQUIPMENT GROUND CONDUCTORS SHALL BE SPliced AND BONDED AT EACH LIGHT POLE OR OTHER PIECE OF EQUIPMENT.
12. UNDERGROUND SPlices OF LIGHTING CONDUCTORS WILL NOT BE ALLOWED EXCEPT AT LIGHT POLE BASE.
13. CONDUITS AND UNIT DUCTS MUST BE POSITIONED IN THE FIELD TO AVOID CONFLICT WITH TREE, BUSHES, DRAINS AND OTHER UTILITIES.

NOMINAL WATTAGE	FUSE SIZE
250	3.5 AMP
400	6.0 AMP

LUMINAIRE FUSE SIZE TABLE



POLE HANDHOLE WIRING DIAGRAM  
(TYPICAL FOR SINGLE LUMINAIRE INSTALLATION)

NOTE:  
ALLOW 36" LOOP OF CABLES TO INSURE SUFFICIENT SLACK FOR WITHDRAWAL OF THE CONNECTORS OUTSIDE OF THE POLE HANDHOLE.



FILE NAME = 0650B-LGHT-02 - P03

USER NAME =	DESIGNED -- WPD	REVISED --
	CHECKED -- WPD	REVISED --
PLOT SCALE = 1=1'	DRAWN -- AG	REVISED --
PLOT DATE = 10-14-10	CHECKED -- AG	REVISED --

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

175TH STREET AT HARLEM AVENUE  
INTERSECTION IMPROVEMENTS  
STREET LIGHTING DETAILS

SCALE: NA SHEET NO. 30 OF 60 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
348	06-00104-00-CH	COOK	60	30
CONTRACT NO. 63453				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT#HSIP-8003 (851)				