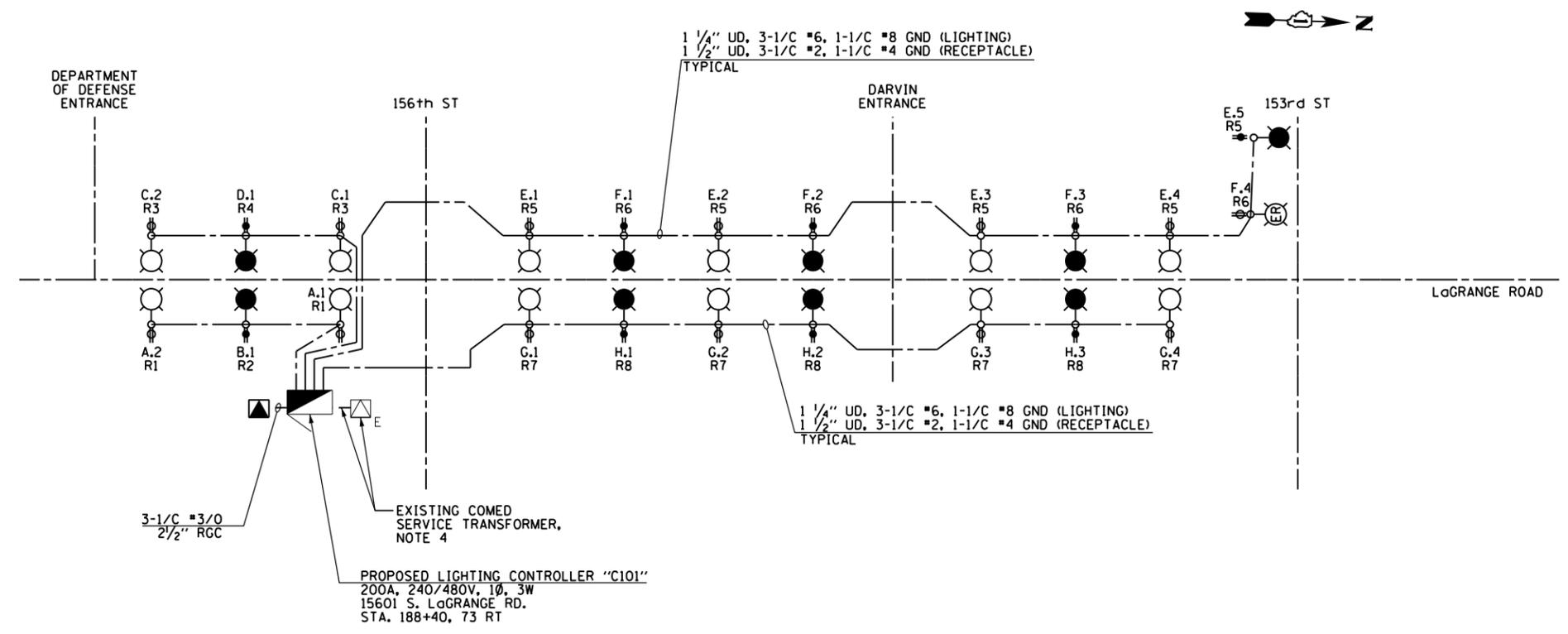


LEGEND:

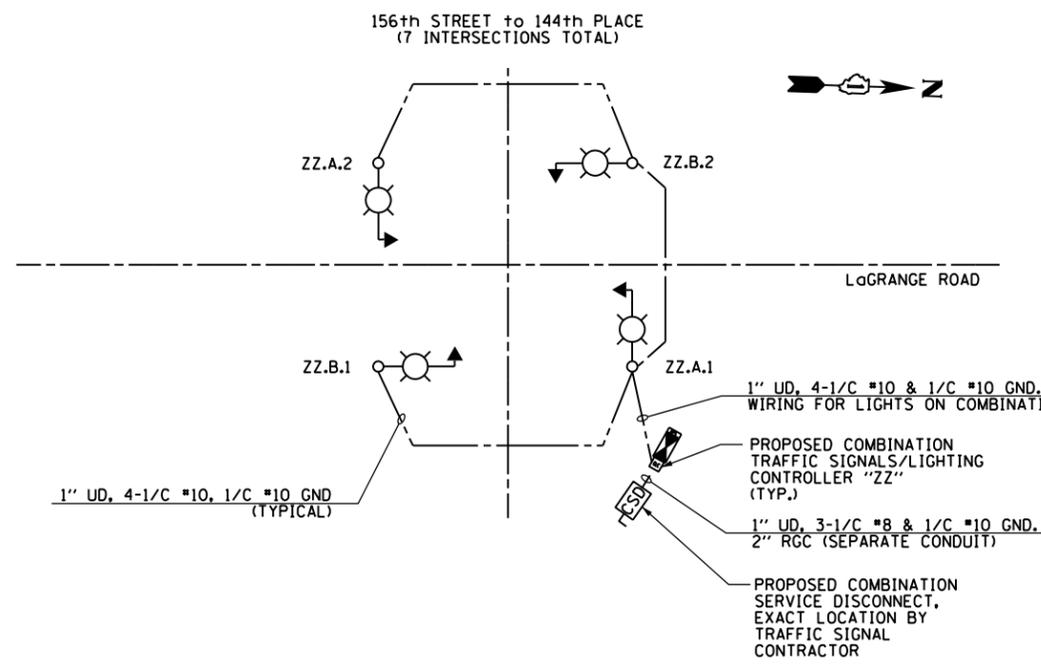
- PROPOSED LIGHTING UNIT: 400W, 240V PHASE TO NEUTRAL, HPS LUMINAIRE WITH TYPE MC-III DISTRIBUTION, 45'-2" ALUMINUM POLE SHAFT ON 24" DIAMETER CONCRETE FOUNDATION, 47'-6" MOUNTING HEIGHT, 12'-0" MAST ARM, WITH 5A FUSES AND T-BASE (RED PHASE- OPEN SYMBOL, BLACK PHASE-SHADED SYMBOL)
- PROPOSED 120V, 20A, GFCI RECEPTACLE ON PROPOSED LIGHTING UNIT (ORANGE PHASE- OPEN SYMBOL, BROWN PHASE-SHADED SYMBOL)
- EXISTING LIGHTING POLE RELOCATED WITH NEW 250 HPS AND GFCI RECEPTACLE, 5A FUSES (LIGHTING UNIT ON RED PHASE- OPEN SYMBOL, BLACK PHASE-SHADED SYMBOL)
- PROPOSED ROADWAY LIGHTING CONTROLLER 200A, 240/480V, 1Ø, 3W, SPECIAL SINGLE DOOR, BASE MOUNTED
- EXISTING COMED PAD-MOUNTED TRANSFORMER FOR UTILITY SERVICE CONNECTION
- PROPOSED COMED PAD-MOUNTED TRANSFORMER FOR UTILITY SERVICE CONNECTION
- PROPOSED CONDUIT AND CABLE AS INDICATED TO SECONDARY SIDE OF UTILITY SERVICE CONNECTION
- PROPOSED UNIT DUCT: SIZE AND QUANTITY OF CONDUCTORS AS INDICATED

NOTES:

1. SEE DRAWING E-1 FOR ELECTRICAL ABBREVIATIONS. SEE DRAWING E-2 FOR ELECTRICAL GENERAL NOTES.
2. COLOR CODING OF CONDUCTORS FOR 240/480V, 1Ø, 3W LIGHTING SYSTEM IS AS FOLLOWS:
 "A" PHASE - RED
 "B" PHASE - BLACK
 NEUTRAL - WHITE
 GROUND - GREEN
3. COLOR CODING OF CONDUCTORS FOR 120/240V, 1Ø, 3W RECEPTACLE SYSTEM IS AS FOLLOWS:
 "A" PHASE - ORANGE
 "B" PHASE - BROWN
 NEUTRAL - GRAY
 GROUND - GREEN
4. CONTRACTOR TO CONNECT PROPOSED ROADWAY LIGHTING CONTROLLER "C101" TO THE EXISTING COMED SERVICE TRANSFORMER AT DISCRETION OF COMED AND THE ENGINEER. FURNISH AND INSTALL NEW CABLE IN CONDUIT BETWEEN COMED TRANSFORMER AND CONTROLLER AS SHOWN. REFER TO NOTE 2 ON DRAWING E-17 FOR FURTHER INFORMATION.



LIGHTING CONTROLLER "C101" WIRING DIAGRAM
N.T.S.



TYPICAL COMBINATION LIGHTING CONTROLLER WIRING DIAGRAM
TYPICAL FOR ALL INTERSECTIONS
N.T.S.

- PROPOSED COMBINATION POLE LIGHTING UNIT: 400W, 2.0A AT 240V PHASE TO PHASE, HPS LUMINAIRE WITH TYPE MC-III DISTRIBUTION
- PROPOSED COMBINATION LIGHTING CONTROLLER ATTACHED TO SIDE OF TRAFFIC SIGNAL CABINET 120/240V, 1Ø, 3W
- COMBINATION SERVICE DISCONNECT CABINET GROUND OR POLE MOUNTED, SEE TRAFFIC SIGNAL PLANS FOR LOCATION AT EACH INTERSECTION

COMBINATION TRAFFIC/LIGHTING CONTROLLER ROADWAY LIGHTING PANEL LOAD TABLE (TYPICAL FOR ALL INTERSECTIONS IN THIS CONTRACT)

| CIRCUIT | AMPS | | WATTS | | |
|--------------|------------|------------|--------------|------------|------------|
| | AMPS | WATTS | AMPS | WATTS | |
| A | 4 | 960 | B | 4 | 960 |
| C | -- | -- | D | -- | -- |
| TOTAL | 4.0 | 960 | TOTAL | 4.0 | 960 |

LOAD TABULATION IS BASED ON THE FOLLOWING:
400W HPS LUMINAIRE: 2.0A AT 240V

LIGHTING CONTROLLER "C101" ROADWAY LIGHTING PANEL LOAD TABLE

| CIRCUIT | RED PHASE | | BLACK PHASE | | |
|--------------|--------------|-------------|--------------|-------------|-------------|
| | AMPS | WATTS | AMPS | WATTS | |
| A | 4 | 960 | B | 2 | 480 |
| C | 4 | 960 | D | 2 | 480 |
| E | 9.1 | 1920 | F | 9.1 | 1920 |
| G | 8 | 1920 | H | 8 | 1920 |
| I | -- | -- | J | -- | -- |
| K | -- | -- | L | -- | -- |
| M | -- | -- | N | -- | -- |
| O | -- | -- | P | -- | -- |
| Q | -- | -- | R | -- | -- |
| S | -- | -- | T | -- | -- |
| U | -- | -- | V | -- | -- |
| W | 9.75 | 2340 | X | 7.5 | 1980 |
| TOTAL | 34.85 | 8364 | TOTAL | 28.6 | 6864 |

LOAD TABULATION IS BASED ON THE FOLLOWING:
400W HPS LUMINAIRE: 2.0A AT 240V
250W HPS LUMINAIRE: 1.1A AT 240V

LIGHTING CONTROLLER "C101" RECEPTACLE PANEL LOAD TABLE

| CIRCUIT | ORANGE PHASE | | BROWN PHASE | | |
|--------------|--------------|-------------|--------------|-------------|-------------|
| | AMPS | WATTS | AMPS | WATTS | |
| R1 | 3 | 360 | R2 | 1.5 | 180 |
| R3 | 3 | 360 | R4 | 1.5 | 180 |
| R5 | 7.5 | 900 | R6 | 7.5 | 900 |
| R7 | 6 | 720 | R8 | 6 | 720 |
| R9 | -- | -- | R10 | -- | -- |
| R11 | -- | -- | R12 | -- | -- |
| R13 | -- | -- | R14 | -- | -- |
| R15 | -- | -- | R16 | -- | -- |
| R17 | -- | -- | R18 | -- | -- |
| TOTAL | 19.5 | 2340 | TOTAL | 16.5 | 1980 |

LOAD TABULATION IS BASED ON THE FOLLOWING:
180W RECEPTACLE: 1.5A AT 120V
• FOR FUTURE MEDIAN RECEPTACLE LOADS

100 S. WACKER DR.
 15TH FLOOR
 CHICAGO, IL 60606
 TEL (312) 939-1000
 FAX (312) 939-4998
URS

| | | | |
|--|---------------------------------|-------------------|-----------|
| FILE NAME = D160M61-SHT-E39.dgn | USER NAME = michal_bartusiewicz | DESIGNED - DAD | REVISED - |
| SHT_PLAN | PLOT SCALE = 2.000000' / in. | DRAWN - DAD | REVISED - |
| DT60M61-SHT-E39.dgn 3/15/2013 2:27:26 PM | PLOT DATE = 3/15/2013 | CHECKED - DAD | REVISED - |
| | | DATE - 03/13/2013 | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

US 45 (LaGRANGE ROAD)
LIGHTING CONTROLLER "C101" WIRING DIAGRAM

SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.

| | | | | |
|---------------------------|----------------|-------------|--------------------|---------------|
| F.A.P. RTE. 330 | SECTION 103R-4 | COUNTY COOK | TOTAL SHEETS 877 | SHEET NO. 450 |
| E-39 | | | CONTRACT NO. 60M61 | |
| ILLINOIS FED. AID PROJECT | | | | |