04-24-2015 LETTING ITEM 036

STATE OF ILLINOIS

**DEPARTMENT OF TRANSPORTATION** 

**DIVISION OF HIGHWAYS** 

FOR INDEX OF SHEETS, SEE SHEET NO. 2

# PROPOSED HIGHWAY PLANS

VARIOUS LOCATIONS IN DISTRICT 1/CONTRACT #1
LIGHT EMITTING DIODE (LED) INSTALLATION

2014-090TS VARIOUS COUNTIES

C-91-179-15

#### **HIGHWAY STANDARDS**

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701006-05 OFF-ROAD OPERATIONS 2L, 2W, 15' (4,5 m) TO 24" (600 mm) FROM PAVEMENT EDGE

701101-04 OFF-ROAD OPERATIONS MULITLANE, 15' (4.5 m) TO 24" (600 mm) FROM PAVEMENT EDGE

701701-09 URBAN LANE CLOSURE MULTILANE INTERSECTION

701901-04 TRAFFIC CONTROL DEVICES

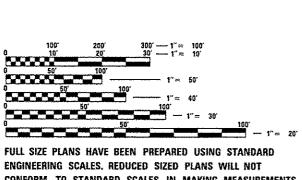
720001-01 SIGN PANEL MOUNTING DETAIL
720006-04 SIGN PANEL ERECTION DETAILS

857001-01 STANDARD PHASE DESIGNATION DIAGRAMS AND PHASE SEQUENCES

862001-01 UNITERRUPTABLE POWER SUPPLY (UPS)

880001-01 SPAN WIRE MOUNTED SIGNALS AND FLASHING BEACON INSTALLATION

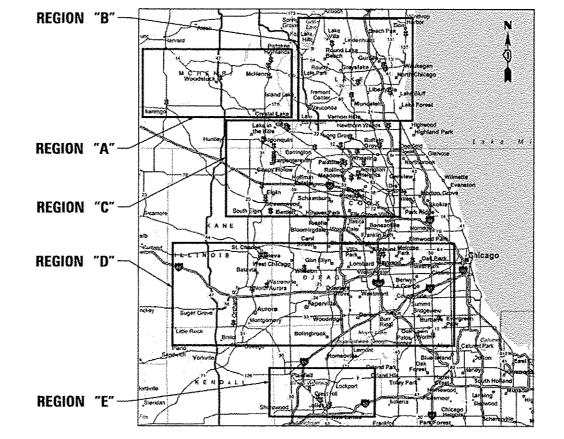
880006-01 TRAFFIC SIGNAL MOUNTING DETAILS



ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

J.U.L.I.E. JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION 1–800–892–0123 OR 811

PROJECT ENGINEER: LUKASZ POCIECHA PROJECT MANAGER: SUDUD MAHMOUD



LOCATION MAP SEE SHEET NO. 3 & 4

**ODL**Z

D-91-179-15

D-91-

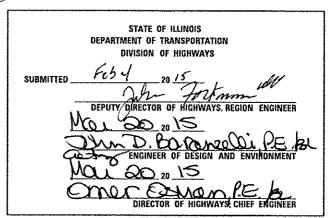
2014-090TS

VARIOUS 76 1
ILLINOIS CONTRACT NO. 62A42

Signed DANIEL WIKTORZAK, P.E. IL. Lic. No. 062-060950

REGISTERED PROFESSIONAL Expires 11-30-2015

OF Date 2/3/15



PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

CONTRACT NO. 62A42

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5-9 SUMMARY OF QUANTITIES

10-16 DISTRICT 1 STANDARD TRAFFIC SIGNAL DESIGN DETAILS

TRAFFIC SIGNAL PLANS:

|             |                | TRAFFIC SIGNAL PLANS:   |
|-------------|----------------|---|
| PAGE*       | TS*            | INTERSECTION NAME   |
| 17          | 7280           | IL RTE 62 (ALGONOUIN RD) AT IL RTE 31 (MAIN ST)                   |
| 18          | 11580          | IL RTE 62 (ALCONOUIN RO) AT HARRISON ST                           |
| 19          | 3100           | IL RTE 68 (DUNDEE RD) AT ARLINGTON HEIGHTS RD                     |
| 20          | 11485          | IL RTE 56 (BUTTERFIELD RD) AT KIRK RD/ FARNSWORTH AVE             |
| 21          | 12380          | IL RTE 22 AT I-94 EAST RAMPS                                      |
| 22          | 20350          | IL RTE 22 AT LAKESIDE DR  |
| 23-24       | 4695           | US RTE 14 (NORTHWEST HWY) AT EASTERN AVE                          |
| 25          | 4457           | IL RTE 25 AT WEST BARTLETT RD/MIDDLE ST                           |
| 26          | 7190           | IL RTE 137 (SHERIDAN RD) AT BEACH RD                              |
| 27          | 2693           | IL RTE 56 (BUTTERFIELD RD) AT DARMSTADT RD / ATWOOD AVE           |
| 28          | 5795           | ST. CHARLES RD AT TAFT AVE  |
| 29          | 5800           | ST. CHARLES RD AT WOLF RD   |
| 30          | 760            | IL RTE 25 /HAEGERS BEND RD AT IL RTE 62 (ALGONOUIN RD)            |
| 31          | 4310           | IL RTE 25 AT KING RD  |
| 32          | 4315           | IL RTE 25 AT BESINGER OR  |
| 33          | 4320           | IL RTE 25 AT HELM RD  |
| 34          | 4325           | IL RTE 25 AT ROBIN RD   |
| 35          | 4390           | IL RTE 25 AT LAKE MARIAN RD /HAZARD RD                            |
| 36          | 7275           | US RTE 14 AT FIRST ST   |
| 37          | 7430           | US RTE 30 AT CATON FARM RD / GAYLORD RD                           |
| 38-39       | 675            | IL RTE 31 (STATE ST) AT US RTE 20                                 |
| 40          | 4330           | IL RTE 31 (STATE ST) AT CHICAGO RAWHIDE ENTR                      |
| 41          | 22235          | ARLINGTON HEIGHTS RD AT BENNETT RD                                |
| 42          | 85             | IL RTE 43 (HARLEM AVE) AT I-290 RAMPS                             |
| 43-44       | 1236           | US RTE 14 AT ALGONOUIN RD   |
| 45-46       | 1237           | US RTE 14 AT LINCOLN AVE  |
| 47-48       | 1238           | US RTE 14 (NORTHWEST HWY) AT FOXMOOR RD                           |
| 49          | 755            | IL RTE 38 (STATE ST) AT IL RTE 25 (BENNET ST)                     |
| 50          | 845            | IL RTE 38 (EAST STATE ST) AT EAST SIDE DR                         |
| 51          | 10945          | IL RTE 38 (STATE ST) AT GLENGARY DR                               |
| 52          | 7507           | US RTE 30 (PLAINFILED RD) AT RAYNOR AVE /BLACK RD                 |
| 53          | 22500          | US RTE 6 / US RTE 30 (COLLINS AVE) AT JOLIET HIGH SCHOOL          |
| 54          | 22565          | US RTE 30 (PLAINFILED RD) AT INGALLS AVE                          |
| 55          | 6830           | IL RTE 43 AT FOSTER AVE   |
| 56          | 6949           | IL RTE 83 AT ENGLE OR   |
| 57          | 7095           | IL RTE 137 (BUCKLEY RD) AT BUTTERFIELD RD                         |
| 58          | FL 701         | IL RTE 53 AT ROBERT PARKER COFFIN RD                              |
| 59          | 21971          | IL RTE 23 (STATE ST) AT IL RTE 176 (TELEGRAPH ST)                 |
| 60<br>61-62 | 11897<br>11915 | IL RTE 31 (RICHMOND RD) AT BLAKE RD IL RTE 120 AT CRYSTAL LAKE RD |
| 63          | 727            | US RTE 30 AT GRIFFIN DR   |
| 64-65       | 6625           | US RTE 45 AT IL RTE 176   |
| 66          | 11483          | IL RTE 31 AT IL RTE 56 (STATE ST)                                 |
| 67          | 2505           | IL RTE 50 (CICERO AVE) AT 110TH ST                                |
| 68          | 410            | US RTE 12 (RAND RD) AT LAKE COOK RD                               |
| 69          | 1225           | US RTE 14 (NORTHWEST HWY) AT HICKS RD (SOUTH JCT)                 |
| 70          | 5615           | PALATINE RD AT ROHLWING RD  |
| 71          | 5395           | KIRCHOFF RD AT WILKE RD   |
| 72          | 5555           | WE DIE 45 AT DOOT CLINTON DO                                      |

US RTE 45 AT PORT CLINTON RD

IL RTE 43 (WAUKEGAN RD) AT PULASKI DR

IL RTE 38 (ROOSEVELT RD) AT WINFIELD RD

IL RTE 120 (BELVEDERE RD) AT GREENLEAF AVE NORTH RAMP

IL RTE 120 (BELVEDERE RD) AT GREENLEAF AVE SOUTH RAMP

#### **GENERAL NOTES:**

- BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "J.U.L.1.E." AT (800) 892-0123 OR 811 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE AND GAS UTILITIES. 48 HOUR NOTIFICATION IS REQUIRED.
- CONTRACTOR SHALL CONTACT THE TRAFFIC CONTROL SUPERVISOR AT (847) 705-4470, 72 HOURS IN ADVANCE OF BEGINNING WORK.
- 3. CONTRACTOR SHALL REPLACE ALL METAL MOUNTING BRACKETS AT ALL RETROFIT SIGNAL HEAD INTERSECTIONS WITH NEW POLYCARBONATE BRACKETS OR AS DIRECTED BY THE ENGINEER. THE COST OF THIS WORK SHALL BE INCLUDED IN THE CORRESPONDING SIGNAL HEAD, LED, RETROFIT PAY ITEM OF THE TYPE AND NUMBER OF SIGNAL HEADS, FACES, AND SECTIONS AS SPECIFIED IN THE PLANS.
- 4. CONTRACTOR SHALL RELOCATE ANY EXISTING SIGN PANELS, INCLUDING BLANK OUT SIGNS, FROM PAINTED POSTS THAT ARE INDICATED FOR REPLACEMENT TO A NEW POST AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER. THE COST OF REMOVAL, RELOCATION AND ANY NEW MOUNTING HARDWARE NECESSARY TO COMPLETE THIS WORK SHALL BE INCLUDED IN THE TRAFFIC SIGNAL POST, GALVANIZED STEEL PAY ITEM OF THE LENGTH AS SPECIFIED IN THE PLANS.
- 5. DUE TO THE PRESENCE OF A RED LIGHT RUNNING (RLR) CAMERA FOR THE BELOW LISTED LOCATIONS. CONTRACTOR SHALL NOTIFY THE VILLAGE AND RLR CAMERA COMPANY PRIOR TO THE START OF CONSTRUCTION. THE VILLAGE OR THE RLR CAMERA COMPANY SHALL MAKE THE CAMERA INOPERATIVE FOR THE TIME OF CONSTRUCTION. ANY RLR CAMERA EQUIPMENT THAT IS IN CONFLICT WITH THE PROPOSED CONSTRUCTION SHALL BE REMOVED BY ITS RESPECTIVE OWNERS PRIOR TO THE START OF CONSTRUCTION.

RLR CAMERA LOCATION:
7095 - IL RTE 137 AVE AT BUTTERFIELD RD

VILLAGE OF LIBERTYVILLE 200 W. COOK AVENUE LIBERTYVILLE, IL 60048 847-918-2100 GATSO USA, INC. 900 CUMMINGS CENTER, SUITE 321-U BEVERLY. MA 01915 978-922-7294

RLR CAMERA LOCATION: 6200 - IL RTE 38 (ROOSEVELT RD) AT WINFIELD RD

VILLACE OF WINFIELD 27 W. 465 JEWELL ROAD WINFIELD, IL 60190 630-933-7100 REDSPEED ILLINOIS 400 EISENHOWER LANE NORTH LOMBARD, IL 60148 630-317-5700

- 6. AT LOCATIONS ON THE PLANS WHERE TRAFFIC SIGNAL POST REMOVAL AND NEW TRAFFIC SIGNAL POST INSTALLATIONS ARE SPECIFIED, THE CONTRACTOR SHALL INSPECT THE EXISTING POST FOUNDATIONS. PRIOR TO REMOVING THE EXISTING TRAFFIC SIGNAL POST TO BE REPLACED THE CONTRACTOR SHALL VERIFY THAT THE PATTERN, SPACING, AND CONDITION OF THE EXISTING ANCHOR BOLT IS ACCEPTABLE FOR REUSE WITH A NEW POST. IF THE EXISTING ANCHOR BOLT CONDITION IS NOT ACCEPTABLE, THE CONTRACTOR SHALL REPLACE ANCHOR BOLT AS DIRECTED BY THE ENGINEER. ANCHOR BOLT REPLACEMENT WILL BE PAID FOR AS "REMOVE AND REPLACE ANCHOR BOLTS". "REMOVE AND REPLACE ANCHOR BOLTS". TREMOVE AND REPLACE ANCHOR BOLTS". TO BE UTILIZED AS APPROVED BY THE ENGINEER.
- 7. ANY ADDITIONAL CABLE LENGTHS NECESSARY FOR THE PROPER INSTALLATION OF AN UNINTERRUPTABLE POWER SUPPLY, GROUND MOUNTED DUE TO THE LARGER DISTANCE AWAY FROM THE CONTROLLER CABINET SHALL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE UNINTERRUPTABLE POWER SUPPLY, GROUND MOUNTED PAY ITEM.

- 8. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO ORDERING MATERIALS AND BEGINNING CONSTRUCTION. THIS SHALL INCLUDE LOCATING THE MAST ARM FOUNDATIONS AND VERIFYING THE MAST ARM LENGTHS.
- 9. THE EXACT LOCATION OF ALL UTILITES SHALL BE FIELD VERIFIED BY THE CONTRACTOR BEFORE ORDERING ANY MATERIALS AND STARTING ANY WORK. FOR LOCATIONS OF UTILITIES, LOCALLY OWNED EQUIPMENT, LEASED ENFORCEMENT CAMERA SYSTEM FACILITIES AND IDOT UNDERGROUND FACILITIES, CONTACT THE LOCAL COUNTIES, MUNICIPALITIES AND IDOT FOR LOCATES. THE CONTRACTOR SHALL CALL "JULIE" AT (800) 892-0123 OR 811, IN THE CITY OF CHICAGO CONTACT DIGGER AT (312) 744-7000 FOR FIELD LOCATIONS OF BURIED UTILITIES (48 HOURS NOTIFICATION REQUIRED).
- 10. IF THIS CONTRACT REQUIRES THE SERVICES OF AN ELECTRICAL CONTRACTOR, THE CONTRACTOR SHALL BE RESPONSIBLE AT HIS/HER OWN EXPENSE FOR LOCATING EXISTING IDOT ELECTRICAL FACILITIES PRIOR TO PERFORMING ANY WORK. IF THIS CONTRACT DOES NOT REQUIRE THE SERVICES OF AN ELECTRICAL CONTRACTOR, THE CONTRACTOR MAY REQUEST ONE FREE LOCATE FOR EXISTING IDOT ELECTRICAL FACILITIES FROM THE DISTRICT ONE ELECTRICAL MAINTENANCE CONTRACTOR PRIOR TO THE START OF ANY WORK. ADDITIONAL REQUESTS MAY BE AT THE EXPENSE OF THE CONTRACTOR. THE LOCATION OF UNDERGROUND TRAFFIC FACILITIES DOES NOT RELIEVE THE CONTRACTOR OF THEIR RESPONSIBILITY TO REPAIR ANY FACILITIES DAMAGED DURING CONSTRUCTION AT THEIR EXPENSE.
- 11. CONTRACTOR SHALL CHECK THE PROPOSED TRAFFIC SIGNAL EQUIPMENT LOCATIONS FOR OVERHEAD UTILITY CONFLICTS. THE CONTRACTOR SHALL COORDINATE ANY CONFLICTS WITH THE UTILITY COMPANIES AND THE RESIDENT ENGINEER BEFORE ORDERING MATERIALS.
- 12. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES, LOCAL GOVERNMENT ACENCIES AND IDOT.
- 13. PARTIAL PAYMENT AS DESCRIBED IN ARTICLE 109.07(b) OF THE STANDARD SPECIFICATIONS WILL NOT BE ALLOWED FOR ITEMS INCLUDED IN THIS CONTRACT.
- 14. A CONCRETE APRON SHALL NOT BE REQUIRED FOR NEW UPS INSTALLATIONS ADJACENT TO EXISTING IMPERVIOUS SURFACES THAT SATISFY THE NEED OF THE CONCRETE APRON. AS DIRECTED BY THE ENGINEER.
- 15. RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCLUDED IN THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIAN, SIDEWALKS, PAVEMENT ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.
- 16. THIS PROJECT HAS RECEIVED AN IN-HOUSE ENVIRONMENTAL SIGN-OFF. DUE TO THE RURAL SETTING ANY SOIL EXCAVATED SHALL REMAIN ON SITE. CONTRACTOR SHALL SPREAD THE SOIL AT THE SAME QUADRANT FROM WHICH IT WAS EXCAVATED, THE GRADING SHALL BE DONE SO THAT THE EXISTING DITCH PROFILES AND WATER FLOW PATTERNS ARE MAINTAINED. THIS WORK SHALL BE INCLUDED IN THE RELATED PAY ITEM SUCH AS FOUNDATION, HANDHOLE, GRADING AND SHAPING DITCHES, ETC. AND NO EXTRA COMPENSATION SHALL BE ALLOWED, FINAL GROUND SURFACE SHALL BE COVERED WITH TOPSOIL, SEED AND EROSION CONTROL BLANKET FOR WHICH NOMINALOUANTITIES HAS BEEN PROVIDED.

| <br>                        |          |   |      |         |   |   |
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALE:

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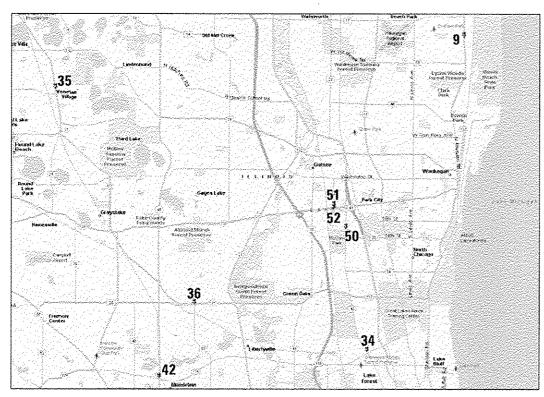
14904

14925

14930

6200

REGION "A"



REGION "B"

| LOCATION NO. | REGION | PAGE NO. | TS NO.      | LOCATION  | MUNICIPALITY         | COUNTY         |
|--------------|--------|----------|-------------|---|----------------------|----------------|
| 1.           | c      | 17       | 7280        | IL RTE 62 (ALGONOUIN RD) AT IL RTE 31 (MAIN ST) IL RTE 62 (ALGONOUIN RD) AT HARRISON ST IL RTE 68 (DUNDEE RD) AT ARLINGTON HEIGHTS RD   | AL GONQUI N          | MCHENRY        |
| 2.           | C      | 18       | 11580       | IL RTE 62 (ALGONOUIN RD) AT HARRISON ST   | AL GONOUI N          | MCHENRY        |
| 3.           | €      | 19       | 31 00       | IL RTE 68 (DUNDEE RD) AT ARLINGTON HEIGHTS RD   | ARLINGTON HTS        | COOK           |
| 4.           | Đ      | 20       | 11485       | IL RTE 56 (BUTTERFIELD RD) AT KIRK RD/ FARNSWORTH AVE   | AURORA               | KANE           |
| 5.           | C      | 21       | 12380       | IL RTE 22 AT 1-94 EAST RAMPS  | BANNOCKBURN          | LAKE           |
| 6.           | 3      | 22       | 20350       | IL RTE 22 AT LAKESIDE DR  | BANNOCKBURN          | LAKE           |
| 7.           | C      | 23       | 4695        | US RTE 14 (NORTHWEST HWY) AT EASTERN AVE  | BARRI NCTON          | COOK           |
| 8.           | С      | 25       | 4457        | IL RTE 25 AT WEST BARTLETT RD/MIDDLE ST   | BARTLETT             | KANE           |
| 9.           | 8      | 26       | 7190        | IL RTE 137 (SHERIDAN RD) AT BEACH RD  | BEACH PARK           | LAKE           |
| 10.          | D      | 27       | 2693        | IL RTE 56 (BUTTERFIELD RD) AT DARMSTADT RD / ATWOOD AVE   | BERKELEY             | COOK           |
| 11.          | D      | 28       | 5795        | ST. CHARLES RD AT TAFT AVE  | BERKELEY             | COOK           |
| 12.          | D      | 29       | 5800        | ST. CHARLES RD AT WOLF RD   | BERKELEY             | COOK           |
| 13.          | C      | 30       | 760         | 1L RTE 25 /HAEGERS BEND RD AT IL RTE 62 (ALGONOUIN RD)  | CARPENTERSVILLE      | KANE           |
| 14.          | C      | 31       | 4310        | IL RTE 25 AT KING RO  | CARPENTERSVILLE      | KANE           |
| 15.          | C      | 32       | 4315        | 11 RTE 25 AT BESINGER DR  | CARPENTERSVILLE      | KANE           |
| 16.          | €      | 33       | 4320        | IL RTE 25 AT HELM RD  | CARPENTERSVILLE      | KANE           |
| 17.          | C      | 34       | 4325        | IL RTE 25 AT ROBIN RD   | CARPENTERSVILLE      | KANE           |
| 18.          | C      | 35       | 4390        | IL RTE 25 AT LAKE MARIAN RD /HAZARD RD  | CARPENTERSVILLE      | KANE           |
| 19.          | €      | 36       | 7275        | US RTE 14 AT FIRST ST   | CARY                 | MCHENRY        |
| 20.          | Ε      | 37       | 7430        | US RTE 30 AT CATON FARM RD / GAYLORD RD   | CREST HILL           | WILL           |
| 21.          | C      | 38       | 675         | IL RTE 31 (STATE ST) AT US RTE 20   | ELGIN                | KANE           |
| 22.          | C      | 40       | 4330        | IL RTE 31 (STATE ST) AT CHICAGO RAWHIDE ENTR  | ELGIN                | KANE           |
| 23,          | Ç      | 41       | 22235       | ARLINGTON HEIGHTS RD AT BENNETT RD  | ELK GROVE            | COOK           |
| 24.          | D)     | 42       | 85          | IL RTE 43 (HARLEM AVE) AT I-290 RAMPS   | FOREST PARK          | COOK           |
| 25.          | C      | 43       | 1236        | US RTE 14 AT ALGONOUIN RD   | FOX RIVER GROVE      | MCHENRY        |
| 26.          | C      | 45       | 1237        | US RTE 14 AT LINCOLN AVE  | FOX RIVER GROVE      | MCHENRY        |
| 27.          | C      | 47       | 1238        | IL RTE 25 AT LAKE MARIAN RD /HAZARD RD US RTE 14 AT FIRST ST US RTE 30 AT CATON FARM RD / GAYLORD RD IL RTE 31 (STATE ST) AT US RTE 20 IL RTE 31 (STATE ST) AT CHICAGO RAWHIDE ENTR ARLINGTON HEIGHTS RD AT BENNETT RD IL RTE 43 (HARLEM AVE) AT I-290 RAMPS US RTE 14 AT ALGONOUIN RD US RTE 14 AT LINCOLN AVE US RTE 14 (NORTHWEST HWY) AT FOXMOOR RD IL RTE 38 (STATE ST) AT IL RTE 25 (BENNET ST) | FOX RIVER GROVE      | MCHENRY        |
| 28.          | D      | 49       | 755         | IL RTE 38 (STATE ST) AT IL RTE 25 (BENNET ST) IL RTE 38 (EAST STATE ST) AT EAST SIDE DR IL RTE 38 (STATE ST) AT GLENGARY DR   |                      | KANE           |
| 29.          | Đ      | 50       | 845         | IL RTE 38 (EAST STATE ST) AT EAST SIDE DR   | GENEVA               | KANE           |
| 30.          | Đ      | 51       | 10945       |   | GENEVA               | KANE           |
| 31.          | £      | 52       | 7507        | US RTE 30 (PLAINFILED RD) AT RAYNOR AVE /BLACK RD   | JOLIET               | WILL           |
| 32.          | E      | 53       | 22500       | US RTE 6 / US RTE 30 (COLLINS AVE) AT JOLIET HIGH SCHOOL  |                      | WILL           |
| 33.          | E      | 54       | 22565       | US RTE 30 (PLAINFILED RD) AT INGALLS AVE  | JOLIET               | WILL           |
| 34.          | 8      | 55       | 6830        | IL RTE 43 AT FOSTER AVE   | LAKE BLUFF           | LAKE           |
| 35.          | 8      | 56       | 6949        | IL RTE 83 AT ENGLE DR   | LAKE VILLA           | LAKE           |
| 36.          | В      | 57       | 7095        | IL RTE 137 (BUCKLEY RD) AT BUTTERFIELD RD   | LIBERTYVILLE         | LAKE           |
| 37.          | ε      | 58       | FL 701      | IL RTE 53 AT ROBERT PARKER COFFIN RD IL RTE 23 (STATE ST) AT IL RTE 176 (TELEGRAPH ST)  | LONG GROVE           | LAKE           |
| 38.<br>39.   | A<br>A | 59<br>60 | 21971       | IL RIE 23 (STATE ST) AT IL RIE 1/6 (TELEGRAPH ST)   | MARENGO              | MCHENRY        |
| 40.          | A      | 6U<br>61 | 11897       | IL RTE 31 (RICHMOND RD) AT BLAKE RD IL RTE 120 AT CRYSTAL LAKE RD US RTE 30 AT GRIFFIN DR US RTE 45 AT IL RTE 176 IL RTE 31 AT IL RTE 56 (STATE ST) IL RTE 50 (CICERO AVE) AT 110TH ST US RTE 12 (RAND RD) AT LAKE COOK RD  | MCHENRY              | MCHENRY        |
| 40.          | D      | 63<br>61 | 11915       | IL HIE IZU AI CHISIAL LAKE HU   | MCHENRY              | MCHENRY        |
| 42.          | 8      | 64       | 727<br>6625 | US RIE SU AI BRIFFIN UR   | MONTGOMERY           | KANE           |
| 43.          | D      | 66       | 11483       | TO DEC. AS AT ALL DEC. ACTIVE OF  | MUNDELEIN            | LAKE           |
| 44.          | D      | 67       | 2505        | 11 DIE EN COLORDO ANEL AT STOTULET  | NORTH AURORA         | KANE           |
| 45.          | C      | 68       | 410         | HE DIE 13 (DAND DD) AT LAKE COOK DO   | OAK LAWN             | COOK           |
| 46.          | C      | 69       | 1225        | US DIE 12 (DANG DU) A) CANE COUNTY AND CONTY AND  | PALATINE             | COOK           |
| 47.          | C      | 70       | 5615        | US RTE 14 (NORTHWEST HWY) AT HICKS RD (SOUTH JCT) PALATINE RD AT ROHLWING RD  | PALATI NE            | COOK           |
| 48.          | Ĉ      | 71       | 5395        |   | PALATI NE            | COOK           |
| 49.          | C      | 72       | 6598        | US RTE 45 AT PORT CLINTON RD  | ROLLING MEADOWS      | COOK           |
| 50.          | 8      | 73       | 14904       | IL RTE 43 (WAUKEGAN RD) AT PULASKI DR   | VERNON HILLS         | LAKE           |
| 51.          | 5<br>5 | 74       | 14925       | IL RTE 120 (BELVEDERE RD) AT GREENLEAF AVE NORTH RAMP   | WAUKEGAN             | LAKE           |
| 52.          | 8      | 75       | 14930       | IL RTE 120 (BELVEDERE RD) AT GREENLEAF AVE SOUTH RAMP   | WAUKEGAN<br>WAUKEGAN | LAKE           |
| 53.          | D      | 76       | 6200        | IL RTE 38 (ROOSEVELT RD) AT WINFIELD RO   | WINFIELD             | LAKE<br>DUPAGE |
|              |        | , ,      | 0200        | TE ATO DO CHANDELED HOS AT HEM TEED HO  | at in Yern           | DUFACE         |

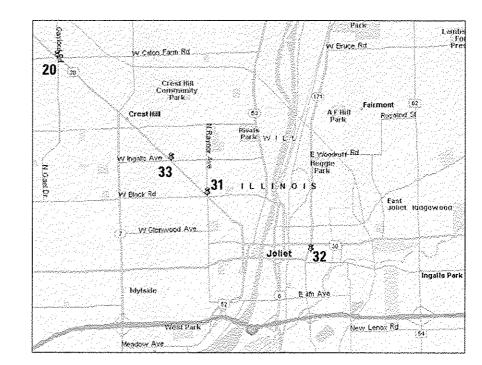
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

|        |       |           | LO | CATION MAP     | F.A.<br>RTE. | SECTION    | COUNTY    | TOTAL   | SHEET<br>NO.                            |       |
|--------|-------|-----------|----|----------------|--------------|------------|-----------|---------|---|-------|
|        |       |           |    | (SHEET 1 OF 2) |              | 2014-090TS | 3         | 76      | 3                                       |       |
|        | ~~~~~ |           |    |                |              |            |           | CONTRAC | T NO. 6                                 | 52A42 |
| SCALE: | NTS   | SHEET NO. | 0F | SHEETS STA.    | TO STA.      |            | JLL INOIS |         | *************************************** |       |

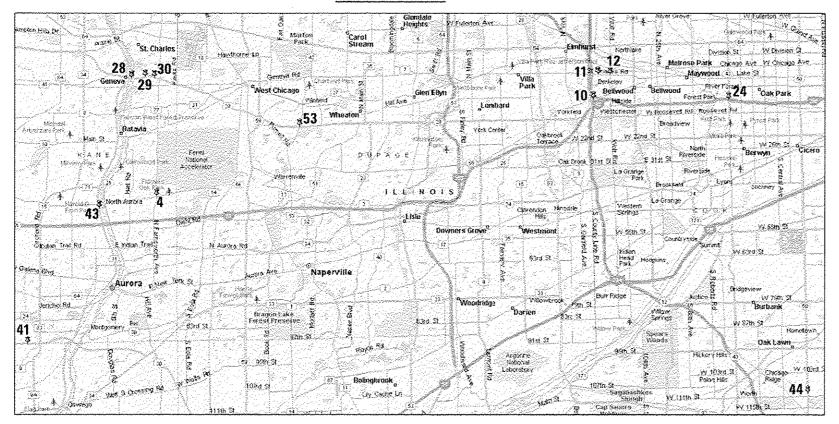
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# REGION "E"

# REGION "C"



REGION "D"

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|                             | ORAWN    | - | ec  | REVISED | - |
| PLOT SCALE = 20,0000 '/ in. | CHECKED  | - | JDH | REVISED | - |
| PLOT DATE = 2/2/2015        | DATE     | - |     | REVISED | - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

| LOCATION MAP                               | F.A.<br>RTE. | SECTION   | COUNTY | TOTAL<br>SHEETS | SHEET<br>NO. |   |
|--|--------------|-----------|--------|-----------------|--------------|---|
| (SHEET 2 OF 2)                             |              | 27090-105 |        | 76              | 4            | } |
|  |              |           |        | NO. E           | 2A42         |   |
| CALE: NTS SHEET NO. OF SHEETS STA. TO STA. |              | ILLINOIS  |        |                 |              | 1 |

| COLUMN TS. INTERSECTION    STATE   STA |   |
|--|---|
| 2 7280 IL RTE 62 (ALGONOUIN RD) AT IL RTE 31 (MAIN ST) 97.5% 2.5% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5   | ROUND LAKE BE LIBERTYVILLE LONG GROVE MARENGO MCHENRY MONTGOMERY NORTH AURORA OAK LAWN PALATINE ROLLING MEADO VERNON HILLS WAUKEGAN |
| 3 11580 IL RTE 62 (ALGONOUIN RD) AT HARRISON ST 95.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0%   |   |
| 1 3100 IL RTE 68 (DUNDEE RD) AT ARLINGTON HEIGHTS RD 100.0% 2.5% 2.5% 2.5% 2.5% 2.5% 2.5% 2.5% 2.5   |   |
| 4       11485       IL RTE 56 (BUTTERFIELD RD) AT KIRK RD/ FARNSWORTH AVE       95.0%       2.5%       2.5%       1         1       12380       IL RTE 22 AT 1-94 EAST RAMPS       100.0%       1       1         1       20350       IL RTE 22 AT LAKESIDE DR       100.0%       1       1         5       4695       US RTE 14 (NORTHWEST HWY) AT EASTERN AVE       95.0%       5.0%       5.0%       1  |   |
| 1       12380       IL RTE 22 AT I-94 EAST RAMPS       100.0%       <   |   |
| 1       20350       IL RTE 22 AT LAKESIDE DR       100.0%       5         5       4695       US RTE 14 (NORTHWEST HWY) AT EASTERN AVE       95.0%       5.0%       5.0%  |   |
| 5 4695 US RTE 14 (NORTHWEST HWY) AT EASTERN AVE 95.0% 5.0%   |   |
|  |   |
|  |   |
| 7 7190 IL RTE 137 (SHERIDAN RD) AT BEACH RD 97.5% 2.5%   |   |
| 8 2693 IL RTE 56 (BUTTERFIELD RD) AT DARMSTADT RD / ATWOOD AVE 95.0%   |   |
| 9 5795 ST. CHARLES RD AT TAFT AVE 97.5% 2.5%   |   |
| 1 5800 ST. CHARLES RD AT WOLF RD 100.0%  |   |
| 1 760 IL RTE 25 /HAEGERS BEND RD AT IL RTE 62 (ALGONOUIN RD) 100.0%  |   |
| 10 4310 IL RTE 25 AT KING RD 96.7% 3.3% 3.3%   |   |
| 10 4315 IL RTE 25 AT BESINGER DR 96.7%   |   |
| 10 4315 It RTE 25 AT BESINGER BY 36.7% 36.7% 36.7% 36.7% 36.7%   |   |
| 10 4325 IL RTE 25 AT ROBIN RD 96.7% 3.3%   |   |
| 11 4390 IL RTE 25 AT LAKE MARIAN RD /HAZARD RD 95.0% 5.0%  |   |
| 12 7275 US RTE 14 AT FIRST ST 95.0% 5.0%   |   |
| 13 7430 US RTE 30 AT CATON FARM RD / GAYLORD RD 96.7% 3.3%   |   |
| 1 675 IL RTE 31 (STATE ST) AT US RTE 20 100.0%   |   |
| 14 4330 IL RTE 31 (STATE ST) AT CHICAGO RAWHIDE ENTR 96.7% 3.3%  |   |
| 15 22235 ARLINGTON HEIGHTS RD AT BENNETT RD 97.5% 2.5%   |   |
| 1 85 IL RTE 43 (HARLEM AVE) AT 1-290 RAMPS 100.0%  |   |
| 16 1236 US RTE 14 AT ALGONOUIN RD 95.0%  |   |
| 16 1237 US RTE 14 AT LINCOLN AVE 95.0%   |   |
| 16 1238 US RTE 14 (NORTHWEST HWY) AT FOXMOOR RD 95.0%  |   |
| 1 755 IL RTE 38 (STATE ST) AT IL RTE 25 (BENNET ST) 100.0%   |   |
| 17 845 IL RTE 38 (EAST STATE ST) AT EAST SIDE DR 95.0%   |   |
| 17 10945 IL RTE 38 (STATE ST) AT CLENGARY DR 95.0% 5.0%  |   |
| 19 7507 US RTE 30 (PLAINFILED RD) AT RAYNOR AVE /BLACK RD 93.3% 6.7%   |   |
| 18 22500 US RTE 6 / US RTE 30 (COLLINS AVE) AT JOLIET HIGH SCHOOL 95.0%  |   |
| 18 22565 US RTE 30 (PLAINFILED RD) AT INGALLS AVE 95.0%  |   |
| 20 6830 IL RTE 43 AT FOSTER AVE 95.2% 1.6% 1.6%  |   |
|  | 2.5%  |
| 22 7095 IL RTE 137 (BUCKLEY RD) AT BUTTERFIELD RD 95.0% 2.5%   | 2.5%  |
| 23 FL 701 IL RTE 53 AT ROBERT PARKER COFFIN RO 96.7%   | 3.3%  |
| 24 21971 IL RTE 23 (STATE ST) AT IL RTE 176 (TELEGRAPH ST) 97.5%   | 2.5%  |
| 25 11897 IL RTE 31 (RICHMOND RD) AT BLAKE RD 95.0%   | 5.0%  |
| 25 11915 IL RTE 120 AT CRYSTAL LAKE RD 95.0%   | 5.0%  |
| 26 727 US RTE 30 AT GRIFFIN DR 95.0%   | 5.0%  |
| 1 6625 US RTE 45 AT IL RTE 176 100.0%  |   |
| 27 11483 IL RTE 31 AT IL RTE 56 (STATE ST) 97.5%   | 2.5%  |
| 28 2505 IL RTE 50 (CICERO AVE) AT 110TH ST 95.0%   | 5.0%  |
| 1 410 US RTE 12 (RAND RD) AT LAKE COOK RD 100.0%   |   |
| 1 1225 US RTE 14 (NORTHWEST HWY) AT HICKS RD (SOUTH JCT) 100.0%  |   |
| 29 5615 PALATINE RD AT ROHLWING RD 95.0%   | 5.0%  |
| 30 5395 KIRCHOFF RD AT WILKE RD 92.5%  | 7.5%  |
| 31 6598 US RTE 45 AT PORT CLINTON RD 95.0%   | 5.0%  |
| 32 14904 IL RTE 43 (WAUKEGAN RD) AT PULASKI DR 95.0% 2.5%  | 2.5%  |
| 33 14925 IL RTE 120 (BELVEDERE RD) AT GREENLEAF AVE NORTH RAMP 95.0% 5.0%  |   |
| 1 14930 IL RTE 120 (BELVEDERE RD) AT GREENLEAF AVE SOUTH RAMP 100.0%   |   |
| 34 6200 IL RTE 38 (ROOSEVELT RD) AT WINFIELD RD 95.0% 2.5%   | 2.5%  |
|  |   |

SUMMARY OF QUANTITIES HEADING LEGEND

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

A. SECTION COUNTY TOTAL SHEETS NO.
2014-090TS T6 5

CONTRACT NO. 62A42

|  |   |   |  | 1 2                                     | 3                                       | 4                                       | 5 6                                     | 7 8                                     | 3 9                                     | 10 1                                    | 1 12   | 13                                      | 14 15                                   | 16                | 17 18                                   | 19 2                  | 0 21 | 22 7                 | 23 24                                   | 25           | 26 27  | 7 28                                    | 29 30  | 31 3                                    | 2 33        | 34          |
|--|---|---|--|---|---|---|---|---|---|---|--|---|---|-------------------|---|-----------------------|------|----------------------|---|--------------|--------|---|--|---|-------------|-------------|
| CODE<br>NO.  | ITEM  | HNIT  | TOTAL<br>QUANTITY  | -                                       |   |   |   |   |   |   |  |   |   | TRAFF             | IC SI<br>0021                           | GNAL                  |      |                      |   |              |        |   |  |   |             |             |
| ,,,,,  | \$ 1 to 10  | GOTT  | VOAICTIT   |   |   |   | 1 [                                     |   |   | <del></del>                             |  | ,                                       |   |                   | IRBAN                                   | t .                   |      |                      |   | <del></del>  |        | <del></del>                             |  |   |             |             |
|  |   | # Defendance of the second of | newwenterst  | *************************************** |   |   | *************                           | ************                            |   |   | ***************************************  |   |   |                   | *************************************** |                       |      |                      | *************************************** |              |        |   | ***************************************  |   |             |             |
| 67000400   | ENGINEER'S FIELD OFFICE, TYPE A                       | CAL MO  | 6  | 6                                       |   |   | *************************************** | *************************************** |   |   | ***************************************  |   |   | Π                 |   |                       |      |                      |   |              |        |   |  |   |             |             |
|  |   | -   | West of the second seco | -                                       |   |   | - 1                                     |   | 1                                       |   | ***************************************  |   | 1                                       |                   | 1                                       | $\dagger \dagger$     | 1    | H                    |   | T            | +      | 11                                      |  |   | +++         |             |
| 67100100   | MOBILIZATION  | L SUM   | And the state of t | •                                       |   |   |   |   | -                                       |   |  |   | +                                       | $\vdash$          | -                                       | H                     | -    | H                    | -                                       | ++           |        | ++                                      | -  | $\vdash$                                | +           | _           |
| 0.100100   |   |   | ***************************************  | *                                       |   |   |   |   |   |   |  | $\vdash$                                | -                                       |                   | -                                       | $\vdash$              | -    | $\vdash \downarrow$  | +                                       | ++           |        | +-                                      | +  | $\vdash$                                | -           |             |
|  |   |   |  |   | -                                       |   |   | _                                       | -                                       |   |  |   |   |                   |   | <b> </b>              | -    |                      | _                                       | $\bot$       |        | +                                       |  | -                                       |             |             |
| 70102635   | TRAFFIC CONTROL AND PROTECTION, STANDARD 701701       | L SUM   | gast de la constitución de la co | 1                                       |   | *************************************** |   |   |   | -                                       |  |   |   |                   | _                                       |                       |      |                      |   |              |        | 11                                      |  |   |             | <u></u>     |
| and the same of th |   | -   |  |   |   | *************************************** |   |   |   | *************************************** |  |   | *************************************** |                   |   |                       |      |                      |   |              | -      |   | ***************************************  |   |             |             |
| 85000200   | MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION   | EACH  | 52   | 12 1                                    | 1                                       |   | 1 1                                     | 1 1                                     | 1 1                                     | 4                                       | 1 1  | 1                                       | 1 1                                     | 3                 | 2 2                                     | 1                     | 1 1  | 1                    | 1                                       | 2            | 1 1    | 1                                       | 1 1  | 1                                       | 1 1         | 1           |
|  |   | ***************************************   |  |   |   |   |   | 1                                       | +                                       |   | _  |   |   |                   | 1                                       |                       | 1    |                      |   |              |        |   |  |   |             |             |
| 85000500   | MAINTENANCE OF EXISTING FLASHING BEACON INSTALLATION  | EACH  | 1  |   |   |   | +                                       | -                                       | +                                       |   | <del>- </del>  |   |   | $\vdash \uparrow$ | +                                       |                       | +    | H                    | _                                       | $\mathbf{H}$ | -      |   |  |   |             |             |
|  |   |   |  |   | *******                                 |   | +                                       | *************************************** |   | -                                       | _  |   |   | H                 |   | $\lVert \cdot \rVert$ | ╂    | $\vdash \vdash$      | +                                       | ++           | +      |   | +  | $\vdash \vdash$                         | +           | <del></del> |
|  |   | -   |  | -                                       | -                                       | -                                       | - -                                     |   |   |   |  |   | -                                       |                   |   |                       |      | $oxed{oldsymbol{+}}$ | +                                       |              | +      |   | _  | $\vdash$                                |             |             |
| 85700200   | FULL-ACTUATED CONTROLLER AND TYPE IV CABINET          | EACH  | 3  |   | *************************************** |   |   | 1                                       |   |   |  |   |   |                   |   |                       |      | $\sqcup$             | 1                                       |              |        |   | 1  | <u> </u>                                |             |             |
| ***************************************  |   | Williamstraves  |  |   | *************************************** |   |   | *************************************** | *************************************** |   |  | *************************************** |   |                   |   |                       |      |                      |   |              |        | *************************************** |  |   |             |             |
| 86400100   | TRANSCEIVER - FIBER OPTIC                             | EACH  | 2  | 1                                       |   |   | *************************************** | *************************************** |   |   | ***  |   |   |                   |   |                       |      |                      |   |              |        |   |  |   |             |             |
|  |   |   |  |   |   |   |   | *************************************** |   |   |  |   |   |                   |   |                       |      |                      |   |              |        |   | 1  |   |             |             |
| 87502440   | TRAFFIC SIGNAL POST, GALVANIZED STEEL 10 FT.          | EACH  | 5  |   |   | $\dashv$                                | *************************************** | _                                       | +                                       |   |  |   | -                                       |                   | 2                                       |                       |      | 十                    | +                                       | $\mathbf{H}$ | $\top$ | $\dagger \dagger$                       | 2  | $\vdash \vdash$                         | ++          |             |
|  | *               |   |  |   |   |   |   |   | +                                       |   |  |   | -                                       | $\vdash \vdash$   | ┪-                                      | $\vdash$              | -    | $\vdash$             | -                                       | +            | -      | +                                       | -  | $\vdash \vdash$                         | -           |             |
|  |   |   |  |   | -                                       | -                                       |   |   | -                                       |   | ***************************************  | $\vdash$                                | _                                       |                   | -                                       |                       |      | $\vdash$             | +                                       | $\dashv$     |        | ++                                      |  | ┢┷┾                                     |             |             |
| 87502480   | TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.          | EACH  | 7  |   | 1-1                                     | _                                       |   | 1                                       |   | 3                                       |  |   | _                                       | -                 |   |                       | -    | $\sqcup$             | _                                       | 1            | _      | 44                                      | 1  | - 1                                     | 2           |             |
|  |   |   |  |   |   | ***                                     | *************************************** |   |   |   |  |   |   |                   |   |                       |      |                      |   |              |        |   |  |   |             |             |
| 87502500   | TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.          | EACH  | 21   | 1                                       |   | ***                                     |   |   |   | 2                                       | N9884448844A   | 5                                       |   |                   |   |                       |      |                      |   |              | 4      |   | 4  | 2                                       | 2           | 3           |
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| 87502520   | TRAFFIC SIGNAL POST, GALVANIZED STEEL 18 FT.          | EACH  | 2  |   |   |   | *************************************** | _                                       | +                                       |   | -  |   |   |                   |   |                       |      | 一十                   | +                                       | T            |        |   |  |   |             |             |
|  |   |   |  | $\vdash \vdash$                         |   |   |   | $\dashv$                                | +-                                      |   | -  |   | -                                       |                   | -                                       |                       | +-   | $\vdash$             | +                                       | H            | +      | -                                       |  | $\vdash$                                |             |             |
|  |   |   |  | -                                       | -                                       | -                                       | $\dashv$                                | $\dashv$                                | ╬                                       |   |  |   |   |                   | -                                       |                       |      | $\vdash$             | -                                       | +            | +      |   |  | $\vdash \vdash$                         | +-          |             |
| 88030012   | SIGNAL HEAD, LED. 1-FACE, 1-SECTION, BRACKET MOUNTED  | EACH  | 1  |   | ****                                    |   |   |   | 1                                       |   | 1  | <u> </u>                                |   |                   | -                                       |                       | -    | $\sqcup$             | 1                                       | 1            |        | -                                       |  | <u> </u>                                |             |             |
| :  |   |   |  |   | *************************************** |   |   |   |   |   |  |   |   |                   |   |                       |      |                      |   |              |        |   |  |   |             |             |
| 88030020   | SIGNAL HEAD, LED. 1-FACE, 3-SECTION, MAST-ARM MOUNTED | EACH  | 23   | 6                                       | **************                          | *************************************** |   | 2 3                                     | 3                                       |   | ***************************************  | 4                                       | 3                                       |                   | 4                                       |                       |      |                      |   |              |        |   | defentement entertement  | *************************************** |             |             |
|  |   |   |  |   | *************************************** |   |   |   |   |   | ***************************************  | $\prod$                                 |   |                   |   |                       |      |                      |   |              | $\top$ |   | * Company of the Comp |   |             | _           |
| 88030050   | SIGNAL HEAD, LED. 1-FACE, 3-SECTION, BRACKET MOUNTED  | EACH  | 14   | 6                                       |   | 1                                       |   | 2                                       | -                                       | +                                       | ***************************************  | H                                       | 2                                       |                   | 1                                       |                       |      | $\vdash$             | -                                       | H            | $\top$ | $\dagger \dagger$                       |  |   | <del></del> |             |
|  |   |   |  |   | *************************************** |   |   | *************************************** |   | -                                       | ***************************************  |   | -                                       |                   |   | $\vdash$              |      | $\dashv$             | +                                       | ++           | +      | ++                                      | ***************************************  | <del>     </del>                        |             |             |
|  |   |   |  |   |   |   |   |   |   |   |  |   |   |                   |   |                       |      |                      |   | Ш            |        | $\perp \perp$                           | -  |   |             |             |

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

(SHEET 2 OF 5)

SCALE: SHEET NO. OF SHEETS STA.

TO STA.

A. SECTION COUNTY TOTAL SHEET NO. 2014-090TS 76 6 CONTRACT NO. 62A42

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|---|--|------|----------|--|--|---|---|--|--|---------------------------------------|---|--|---|--------------|--|---|------|----------|------|------|--|----------------|----------------|---|-----|
| CODE<br>NO.                             | ITEM   | UNIT | TOTAL    |  |  |   |   |  | ·····  | · · · · · · · · · · · · · · · · · · · |   |  | T                                       | RAFFIC<br>OC | SIGI<br>021  | NAL                                     |      |          |      |      |  |                |                |   |     |
|   |  |      |          |  |  |   | *****                                   |  |  | П                                     | -                                       | _  | 1 1                                     | URI          | BAN  | <u> </u>                                |      | <u> </u> |      |      |  | $\overline{1}$ |                | $\overline{\Box}$                       | T   |
|   |  |      |          |  |  |   |   | _                                      |  |                                       | *************************************** |  |   |              |  | -                                       |      |          |      | -    | <del>                                     </del> | 44             | <del> </del> - | <del>  -</del>                          | 4   |
| 38030080                                | SIGNAL HEAD, LED, 1-FACE, 4-SECTION, MAST ARM MOUNTED                      | EACH | 1        |  |  |   | *************************************** | _                                      | 1  |                                       | *************************************** | Anna Para  |   |              |  |   |      |          | -    |      |  | 4-4            |                |   | 1   |
|   |  |      | <u> </u> |  |  |   | -                                       |  |  |                                       |   | -  |   |              |  |   |      |          |      |      | -  | -              | -              |   | 1   |
| 8030100                                 | SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED                       | EACH | 4        | Weterstand Management of the Control |  |   |   |  | 1  |                                       |   | •••••••••••••••••••••••••••••••••••••••                      |   |              |  | ***                                     |      |          |      |      | -  | 2              | -              |   | -   |
| 88030110                                | SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED                      | EACH | 18       | 4  |  | ******  |   |  | 2  |                                       |   | 6 1  | *************************************** | 2            |  |   |      |          |      |      |  | 1              | -              | 2                                       | -   |
| Anna Anna Anna Anna Anna Anna Anna Anna |  | ***  |          |  |  |   |   |  |  |                                       |   |  |   |              |  |   |      |          |      |      |  | 11             | 1              |   | +   |
| 88030210                                | SIGNAL HEAD, LED. 2-FACE, 3-SECTION, BRACKET MOUNTED                       | EACH | 6        | The state of the s |  |   |   | ì                                      | ***************************************  |                                       |   | ***************************************                      |   | 2            |  | *************************************** |      |          |      |      |  | 1              |                | 2                                       |     |
| 88030220                                | SIGNAL HEAD, LED. 2-FACE, 5-SECTION, BRACKET MOUNTED                       | EACH | 1        | - Control of the Cont |  | ***************************************   |   |  | ***  |                                       |   | Annana   |   |              |  |   |      |          |      |      |  |                | +              | *************************************** |     |
|   | STONAL READ, 2007 2 FACE, 3 SECTION, BRACKET WORTED                        |      |          | apparage and   |  | ***************************************   | ++                                      |  |  |                                       |   |  |   |              |  |   |      |          |      |      |  |                |                |   | -   |
| 88030230                                | SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-4 SECTION, BRACKET MOUNTED        | EACH | 3        | 2  |  |   |   |  | -  |                                       |   | 1  |   |              |  |   |      |          |      |      |  |                |                |   | -   |
|   |  |      |          |  |  |   |   |  | Average of the second of the s |                                       |   | _  |   | _            |  |   |      |          |      |      |  | 11             |                |   | -   |
| 38030240                                | SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED        | EACH | 11       | 4  |  |   |   | -                                      | Processing   |                                       |   |  |   | 2            |  | -                                       |      | _        |      |      |  | 3              | _              | 1                                       | -   |
| 88030250                                | SIGNAL HEAD, LED, 2-FACE, 1-4 SECTION, 1-5 SECTION, BRACKET MOUNTED        | EACH | 1        |  |  | Antiderrete best die Gest die Gest der |   |  | ***  |                                       |   |  |   |              |  |   |      |          |      |      |  |                | -              |   | -   |
|   |  |      |          |  |  |   |   |  |  |                                       |   |  |   |              |  |   |      |          |      |      |  |                |                |   | 1   |
| 88030310                                | SIGNAL HEAD, LED, 3-FACE, 3-SECTION, BRACKET MOUNTED                       | EACH | 1        |  |  |   |   | 1                                      |  |                                       |   |  |   |              |  | _                                       |      |          |      |      |  |                |                |   | 1   |
| 88030330                                | SIGNAL HEAD, LED. 3-FACE, 2-3 SECTION, 1-5 SECTION BRACKET MOUNTED         | EACH | 4.4      |  |  |   |   | -                                      | -  |                                       |   | _  |   |              |  |   |      |          |      |      |  |                | -              | 1                                       | +   |
|   | STORAL HEAD, ELEVIS 1 ACC, E S SECTION, I S SECTION DANGER, MONTES         |      |          |  | ***  |   |   | +                                      | -  |                                       |   | _  |   |              |  |   |      |          |      |      |  |                | -              |   | +   |
| 88055150                                | OPTICALLY PROGRAMMED SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED  | EACH | 13       |  | ***************************************  |   |   |  |  |                                       |   |  |   |              | ***************************************  | 9                                       |      |          |      |      |  |                | 4              |   | 1   |
|   |  |      |          |  |  |   |   | 1                                      |  |                                       |   |  |   | _            | AMPARAMAN AND  |   |      |          |      | -    |  |                |                |   | _   |
| 88055160                                | OPTICALLY PROGRAMMED SIGNAL HEAD, LED. 1-FACE. 3-SECTION, MAST ARM MOUNTED | EACH | 18       |  |  |   |   |  | 1  |                                       | *************************************** | And desirable work of the second                             |   |              | 2  | 15                                      |      |          |      |      |  |                |                | *************************************** | +   |
| 88055165                                | OPTICALLY PROGRAMMED SIGNAL HEAD, LED. 1-FACE, 4-SECTION, BRACKET MOUNTED  | EACH | 1        |  | nere Westerness of vivo  |   |   | -                                      | 1  |                                       |   |  |   |              | ***************************************  | *************************************** |      |          |      |      |  |                |                | -                                       | +   |
|   |  |      |          |  | - Annual Control of the Control of t |   |   |  |  |                                       |   |  |   |              | ***************************************  |   |      |          |      |      |  |                |                |   |     |
| 88055170                                | OPTICALLY PROGRAMMED SIGNAL HEAD, LED, 1-FACE, 4-SECTION, MAST ARM MOUNTED | EACH | 3        | 2  |  |   |   | ************************************** | brand statement and the statem |                                       | *************************************** | she be der she had a she |   |              | India to Area and Are |   |      |          |      |      |  |                |                |   | 4   |
|   |  | 1    |          |  |  | ***************************************   |   | ****                                   | ***************************************  |                                       | *************************************** | ***************************************                      |   | 1            | ***************************************  |   |      |          |      |      |  |                |                |   | -   |

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|-----------------------------|----------|---|-----|---------|---|---|
|                             | DRAWN    | - | CC  | REVISED | • |   |
| PLOT SCALE = 18.8888 '/ in. | CHECKED  | - | JOH | REVISED | • |   |
| PLOT DATE + 2/2/2015        | DATE     | - |     | REVISED | ~ | ĺ |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

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|       |           | 2014-0 |        |          |         |              |      |
| SCALE | SHEET NO. | OF     | SHEETS | STA.     | TO STA. | 1            | [3   |

CONSTRUCTION CODE

A. SECTION COUNTY TOTAL SHEET NO.
2014-090TS 76 7
CONTRACT NO. 62A42

|          |  |   |          | <u></u>                                 |  | <del></del> |   | <del></del>                             | <del></del> |   |   |   |   |   | ISTRU        |        |               |        | <del></del>                             |   | <del></del>               | <del></del>                             |          | <del></del> | <del></del>          |  | <del></del> | $\Box$        |
|----------|--|---|----------|---|--|-------------|---|---|-------------|---|---|---|---|---|--------------|--------|---------------|--------|---|---|---------------------------|---|----------|-------------|----------------------|--|-------------|---------------|
| CODE     |  | 1                                       | TOTAL    | W. C                                    | 2 3  | 4           | 5                                       | 6 7                                     | 8           | 9 1                                     | 0 11                                    | 12                                      | 13   14                                 |   | 16 1<br>RAFF |        |               |        | 1 22                                    | 2 23                                    | 24 2                      | 5 26                                    | 27       | 28 29       | 30                   | 31 3   | 2 33        | 34            |
| NO.      | ITEM   | UNIT                                    | QUANTITY | <u></u>                                 |  |             |   |   |             |   |   |   |   |   | (            | 0021   |               |        |   |   |                           |   |          |             |                      |  |             |               |
|          |  | <del> </del>                            |          |   | -  |             |   |   | T           | П                                       | T                                       | П                                       | T                                       | T                                       | T            | RBAN   | T             | T      | $\top$                                  | T                                       | П                         | <del></del>                             | TT       | T           |                      | П  |             | Н             |
| 00055100 | AOTION A PROCESSIANTE CIONA USAS ASSAS AS COSTION REACHET HOUNTES                                    | FACIL                                   | ļ        |   | _  | -           |   |   | -           | $\vdash$                                | -                                       | -                                       | _                                       | -                                       | $\dashv$     | +,     | H             | +      | -                                       | +                                       | $\vdash$                  | -                                       | +        | -           | +                    | $\vdash$   | +           | Н             |
| 88055190 | OPTICALLY PROGRAMMED SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED                            | EACH                                    | 2        |   | -  |             |   |   | -           |   |   |   | _                                       |   | -            | 2      | +-            | _      | +                                       | 4-                                      | -                         | +                                       | $\vdash$ |             | 1                    | <del>  -</del>                                   | +-          | $\vdash$      |
|          |  | <del> </del>                            |          |   | _  |             |   | -                                       | _           |   |   |   | _                                       | 4-4                                     | _            | _      | 11            | _      | _                                       | $\perp$                                 |                           | _                                       |          |             | -                    | $\vdash$   | -           |               |
| 88055200 | OPTICALLY PROGRAMMED SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED                           | EACH                                    | 6        | 4                                       |  |             |   |   |             |   |   |   |   |   |              | 2      |               |        | _                                       |   |                           |   |          |             |                      |  |             |               |
|          |  |   |          |   |  |             |   |   |             |   | *************************************** |   |   |   |              |        |               |        |   |   |                           |   |          |             |                      |  |             |               |
| 88060110 | COMBINATION SIGNAL HEAD, LED. 2-FACE, 1-3 SECTION OPTICALLY PROGRAMMED, 1-3 SECTION, BRACKET MOUNTED | EACH                                    | 2        | 2                                       |  |             |   | -                                       |             |   | *************************************** |   |   |   |              |        |               |        | *************************************** |   |                           |   |          |             |                      |  |             |               |
|          |  |   |          | *************************************** |  |             |   |   |             | *************************************** |   |   |   |   |              |        | П             | 1      |   |   |                           |   |          |             |                      | П  |             | П             |
| 88060120 | COMBINATION SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION OPTICALLY PROGRAMMED, 1-4 SECTION, BRACKET MOUNTED | EACH                                    | 2        | 2                                       | and the state of t |             |   |   |             | *                                       | *************************************** |   |   |   | 1            | $\top$ | T             | $\top$ |   |   |                           |   |          | 1           |                      |  |             | П             |
|          |  | -                                       |          | -                                       | derindra d'America   |             | $\vdash$                                | +                                       |             |   | *************************************** | H                                       | *************************************** |   |              | +      |               | +      | +                                       |   |                           | +                                       | $\prod$  | -           | +                    | $\blacksquare$                                   | +           | П             |
| 88060180 | COMBINATION SIGNAL HEAD, LED, 2-FACE, 1-5 SECTION OPTICALLY PROGRAMMED, 1-3 SECTION, BRACKET MOUNTED | EACH                                    | 6        |   | appending.   | 1           |   | +                                       |             |   |   |   | 6                                       |   |              | -      | $\frac{1}{1}$ | -      | -                                       | +                                       | $\vdash \vdash$           |   | H        |             | +-                   |  | +           | H             |
|          |  |   |          |   | -  | -           |   | +                                       | -           |   | +                                       | $\vdash \vdash$                         | -                                       |   | +            | +      |               | -      | _                                       | +                                       | $oldsymbol{oldsymbol{+}}$ | -                                       | H        |             |                      |  | +           | H             |
|          |  |   |          |   | ***************************************  | +           |   | -                                       |             |   |   |   |   |   | _            |        |               | -      | -                                       | +-                                      | $\vdash \downarrow$       |   | $\vdash$ |             | +-                   | <del>                                     </del> | _           | $\vdash$      |
| 88102717 | PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER                            | EACH                                    | 59       | 15                                      | -  | 2           |   | 2                                       | 4           |   | 3 4                                     |   |   | -                                       | 1            | -      | -             |        |   | 4                                       |                           | 4 4                                     | 8        | 6           | 1                    | 2  |             | $\sqcup$      |
|          |  |   |          |   |  |             |   | -                                       |             |   | _                                       |   |   | 4                                       |              | _      |               |        |   |   |                           |   | $\sqcup$ |             |                      |  |             |               |
| 88102747 | PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER                            | EACH                                    | 18       | 8                                       | **************************************   | 1           |   |   |             | 4                                       | 2                                       |   |   |   | ]            |        |               |        |   |   |                           |   |          | 1           |                      | 1  |             |               |
|          |  | *************************************** |          |   | verdentennamen   |             | 100000000000000000000000000000000000000 | *************************************** |             | -                                       |   | *************************************** |   |   |              |        |               |        |   |   |                           |   |          |             |                      |  |             |               |
| 88200210 | TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM   | EACH                                    | 73       | 16                                      | ***************************************  |             |   | 2                                       | 8           |   |   |   | .0 4                                    |   | 6            | 8      | 15            |        |   |   |                           |   |          | 2           | establish Westerland | 7  | 5           |               |
|          |  |   |          |   |  |             | *************************************** |   |             |   | 1                                       |   |   |   |              |        |               |        |   |   | П                         |   | $\prod$  |             |                      |  |             |               |
| 88500100 | INDUCTIVE LOOP DETECTOR  | EACH                                    | 36       | 11                                      | ***************************************  |             |   | 3                                       |             |   | +                                       | 8                                       | +                                       |   | $\top$       |        |               |        | 1                                       | 1                                       | 8                         | 1                                       | H        | 6           | 1                    |  | 1           | $\overline{}$ |
|          |  |   |          |   |  | 11          | *************************************** |   |             |   | -                                       | -                                       | +                                       |   |              |        |               |        | +                                       | +                                       | $\vdash$                  | +                                       | H        | $\dashv$    | -                    | -+   | +           | H             |
| 88800100 | PEDESTRIAN PUSH-BUTTON   | EACH                                    | 56       | 6                                       | -  | +-          |   | 2                                       |             |   | 0                                       |   | +                                       | 1-1                                     |              | -      |               | 6 7    | -                                       | +                                       | $\vdash$                  | 4 4                                     | 8        |             | -                    | $\vdash$   | +-          | $\vdash$      |
| 88800100 | FEESTRIAN FOOR-BUTTON  | CACH                                    | 36       | 6                                       | _  | +           |   | 1                                       | -           | -   -                                   | -                                       |   | -                                       |   |              |        |               | 0 6    | -                                       |   | oxdot                     | 1 -                                     | $\vdash$ |             | ***                  | $\vdash$   | -           | H             |
|          |  | -                                       |          |   |  | -           |   |   | -           |   | *************************************** |   |   | -                                       |              |        | -             |        |   | $\bot$                                  |                           |   |          |             | -                    |  | -           |               |
| 89100400 | ILLUMINATED SIGN, LED  | EACH                                    | 6        | 4                                       |  |             | 2                                       | _                                       |             |   |   |   |   |   | _            | -      |               | _      |   |   |                           |   |          |             |                      |  |             |               |
|          |  |   |          |   | _  |             |   |   |             | -                                       |   |   |   |   |              |        |               |        |   |   |                           |   |          |             |                      |  |             |               |
| 89500100 | RELOCATE EXISTING SIGNAL HEAD  | EACH                                    | 17       |   | 2  |             |   |   |             | *************************************** | 7                                       |   | -                                       | *************************************** |              |        |               |        |   |   |                           | *************************************** | 4        |             |                      |  |             | 4             |
|          |  | ***                                     |          |   |  |             |   |   |             | ***                                     |   |   | *************************************** | *************************************** |              |        |               |        |   |   | П                         | *************************************** |          |             |                      |  |             |               |
| 89500200 | RELOCATE EXISTING PEDESTRIAN SIGNAL HEAD   | EACH                                    | 3        |   | <u> </u>   |             |   | 1                                       |             | *************************************** |   |   | *************************************** |   | T            | 2      | I             | 7      | 1                                       |   | ΠT                        |   |          |             |                      |  |             |               |
|          |  | And Andrews Andrews                     |          |   | +  |             |   | $\dagger$                               |             |   |   |   | *************************************** |   | 1            | $\top$ |               | +      | +                                       | $\mathbf{H}$                            | $\Box$                    | +                                       | $\prod$  | 1           |                      |  |             |               |
| 89500400 | RELOCATE EXISTING PEDESTRIAN PUSH-BUTTON   | EACH                                    | 2        |   | +  |             |   | +                                       | +           |   | -                                       | $\vdash$                                |   | +                                       | -            | 2      |               | +      | +                                       | +                                       | $\vdash$                  | +                                       | H        | $\dashv$    | +-                   | +  | +           | П             |
|          |  | 5000                                    |          |   |  |             | -                                       | -                                       |             | -                                       | -                                       | H                                       | *************************************** |   |              | +      | H             | +      | -                                       | +                                       | $\vdash$                  | +                                       | 1        | +           | -                    | 1  | +           | H             |
|          |  |   |          |   |  |             |   |   |             |   |   |   | *************************************** |   |              |        |               |        |   | لــــــــــــــــــــــــــــــــــــــ |                           |   |          | Ш.          |                      |  |             | Ш             |

ajiiteniingis PTB 172-6 (DDI Vor Vor Signaliiite-822 Vortous LED41VbeingrichDNS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES
(SHEET 4 OF 5)
SHEET NO. OF SHEETS STA.

TO STA.

A. SECTION COUNTY TOTAL SHEETS NO. 2014-090TS 76 8

CONTRACT NO. 62A42

INOIS
NSPORTATION

SCALE: SHEET

= 13WW 3T

0.2289 FIB 172-6 1001 Vor Vor Stonels M4-622 Versions LED\*1/DesirenCAD/Sheet

| 1 | USER NAME * LUSERNAME.      | DESIGNED - | DW  | REVISED - |  |
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| ı |                             | ORAWN -    | CC  | RÉVISED - |  |
| 1 | PLO? SCALE = 18.2082 '/ 14. | CHECKED    | JDH | REVISED - |  |
|   | PLOT DATE = 2/2/2015        | DATE ~     |     | REVISED - |  |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALE:

| SUMMARY OF QUANTITIES            | F.A.<br>RTE, | SEC  |
|----------------------------------|--------------|------|
| (SHEET 5 OF 5)                   |              | 2014 |
| SHEET NO. OF SHEETS STA. TO STA. | 1            |      |

L SECTION COUNTY TOTAL SHEETS NO. 2014-090TS 76 9 CONTRACT NO. 62A42



ITEM

CONTROLLER CABINET

MASTER CONTROLLER

SERVICE INSTALLATION.

TELEPHONE CONNECTION

GUY WIRE

SIGNAL HEAD

FLASHER INSTALLATION

ILLUMINATED SIGN

"NO LEFT TURN"

ILLUMINATED SIGN

"NO RIGHT TURN"

DETECTOR LOOP, TYPE I

VIDEO DETECTION ZONE

PAN, TILT, ZOOM CAMERA

COMMUNICATIONS CABINET

#### TRAFFIC SIGNAL LEGEND REMOVAL EXISTING PROPOSED ITEM REMOVAL EXISTING PROPOSED ITEM REMOVAL EXISTING PROPOSED ELECTRIC CABLE IN CONDUIT, TRACER, R 3 $\times$ EMERGENCY VEHICLE LIGHT DETECTOR • $\boxtimes$ ightharpoonupNO. 14 1/C. UNLESS NOTED OTHERWISE Ro-0 R►∢R RAILROAD CONTROL CABINET CONFIRMATION BEACON 0-0 --COAXIAL CABLE ECC CC CC R HANDHOLE EMC MC R VENDOR CABLE FOR CAMERA Н Н HEAVY DUTY HANDHOLE MASTER MASTER CONTROLLER EMMC MMC R COPPER INTERCONNECT CABLE, EUPS UPS UPS $\Delta$ UNINTERRUPTABLE POWER SUPPLY DOUBLE HANDHOLE <del>-(6)-</del> NO. 18 3 PAIR TWISTED, SHIELDED R 0 JUNCTION BOX -D-R -0-FIBER OPTIC CABLE (P) POLE OR (G) GROUND MOUNT UNDERGROUND CONDUIT. NO. 62.5/125, MM12F GALVANIZED STEEL (UC) T P T FIBER OPTIC CABLE (P) POLE OR (G) GROUND MOUNT -(24F)-TEMPORARY SPAN WIRE, TETHER WIRE, NO. 62.5/125, MM12F SM12F STEEL MAST ARM ASSEMBLY AND POLE AND CABLE FIBER OPTIC CABLE ALUMINUM MAST ARM ASSEMBLY AND POLE COMMON TRENCH CT -(36F)-NO. 62.5/125, MM12F SM24F COILABLE NONMETALLIC CONDUIT (EMPTY) CNC STEEL COMBINATION MAST ARM 0-X-ASSEMBLY AND POLE WITH LUMINAIRE GROUND ROD AT (C) CONTROLLER, SYSTEM ITEM S (H) HANDHOLE, (P) FOST, (M) MAST ARM, STEEL COMBINATION MAST ARM OR (S) SERVICE IP INTERSECTION ITEM PTZb ASSEMBLY AND POLE WITH PTZ CAMERA CONTROLLER CABINET AND REMOVE ITEM 0 $\bowtie$ FOUNDATION TO BE REMOVED RELOCATE ITEM TEMPORARY WOOD POLE (CLASS 5 OR $\otimes$ • R BETTER) 45 FOOT (13.7m) MINIMUM STEEL MAST ARM POLE AND ABANDON ITEM FOUNDATION TO BE REMOVED (R) R 12" (300mm) TRAFFIC SIGNAL SECTION ALUMINUM MAST ARM POLE AND -FOUNDATION TO BE REMOVED (R) 12" (300mm) RED WITH 8" (200mm) YELLOW AND GREEN TRAFFIC SIGNAL FACE SIGNAL HEAD CONSTRUCTION STAGES STEEL COMBINATION MAST ARM ASSEMBLY (NUMBERS INDICATE THE CONSTRUCTION STAGE) AND POLE WITH LUMINAIRE AND FOUNDATION TO BE REMOVED SIGNAL HEAD WITH BACKPLATE +CR $+\triangleright$ + SIGNAL POST AND FOUNDATION G ◆Y ◆G RPF SIGNAL HEAD OPTICALLY PROGRAMMED —**►**"P" SIGNAL FACE TO BE REMOVED 0-0"F" →'F' INTERSECTION & SAMPLING (S DENOTES SOLAR POWER) IS IS (SYSTEM) DETECTOR R Y G ←Y ←G PEDESTRIAN SIGNAL HEAD -0 -[ 5 ] SAMPLING (SYSTEM) DETECTOR SIGNAL FACE WITH BACKPLATE. PEDESTRIAN PUSHBUTTON DETECTOR 0 "P" INDICATES PROGRAMMED HEAD LQ Q QUEUE DETECTOR ACCESSIBLE PEDESTRIAN PUSHBUTTON DETECTOR @ APS @APS APS "RB" INDICATES REFLECTIVE BACKPLATE PREFORMED QUEUE DETECTOR 9 1 3 12" (300mm) PEDESTRIAN SIGNAL HEAD PREFORMED INTERSECTION AND SAMPLING WALK/DON'T WALK SYMBOL (SYSTEM) DETECTOR 1 3 $\odot$ PS 12" (300mm) PEDESTRIAN SIGNAL HEAD PREFORMED SAMPLING (SYSTEM) DETECTOR INTERNATIONAL SYMBOL, OUTLINED 12" (300mm) PEDESTRIAN SIGNAL HEAD RAILROAD SYMBOLS INTERNATIONAL SYMBOL, SOLID PREFORMED DETECTOR LOOP PEDESTRIAN SIGNAL HEAD, INTERNATIONAL MICROWAVE VEHICLE SENSOR [M] M M SYMBOL, WITH COUNTDOWN TIMER EXISTING PROPOSED (V) V VIDEO DETECTION CAMERA ₽ P FAILROAD CONTROL CABINET R►≺R RADIO INTERCONNECT 111110 FAILROAD CANTILEYER MAST ARM XOX X X XOX X R ERR ERR RR RADIO REPEATER FLASHING SIGNAL $\times \circ \times$ YOY PTZ PTZ PTZ DENOTES NUMBER OF CONDUCTORS, ELECTRIC CABLE NO. 14, UNLESS NOTED OTHERWISE, CROSSING GATE X0X> XOX-ALL DETECTOR LOOP CABLE TO BE SHIELDED R(W) (W) (W) WIRELESS DETECTOR SENSOR CROSSBUCK 75 ><

---(1)---

WIRELESS ACCESS POINT USER NAME = \_USERNAME\_ DESIGNED -REVISED DW DRAWN CC REVISED CHECKED REVISED REVISED PLOT DATE = 2/2/2015 DATE

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

GROUND CABLE IN CONDUIT

NO. 6 SOLID COPPER (GREEN)

SECTION DISTRICT ONE - STANDARD TRAFFIC SIGNAL DESIGN DETAILS 2014-090TS SCALE: N.T.S. SHEET NO. 1 OF 7 SHEETS STA.

COUNTY

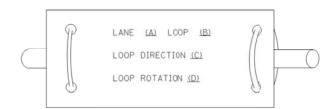
76 10

CONTRACT NO. 62A42

#### LOOP DETECTOR NOTES

- 1. EACH PAIR OF LOOP WIRES SHALL BE PLACED IN A SEPARATE EMPTY COILABLE NONMETALLIC CONDUIT FROM THE EDGE OF PAVEMENT TO THE HANDHOLE. SPACING BETWEEN THE HOLES DRILLED IN THE PAVEMENT SHALL NOT BE LESS THAN 6" (150 mm). EMPTY COILABLE NONMETALLIC CONDUIT SHALL BE INCLUDED IN THE COST OF THE LOOP WIRE.
- 2. THE NUMBER OF LOOP TURNS SHALL BE AS RECOMMENDED BY THE AMPLIFIER MANUFACTURER. ALL ADJACENT SIDES OF THE LOOPS SHALL BE INSTALLED IN SUCH A WAY THAT THE CURRENT FLOW IS IN THE SAME DIRECTION TO REINFORCE ITS MAGNETIC FIELDS FOR SMALL VEHICLE DETECTION.
- 3. EACH LOOP LEAD-IN SHALL BE IDENTIFIED AND PERMANENTLY TAGGED IN THE HANDHOLE. EACH LEAD-IN CABLE TAG SHALL INDICATE THE LOCATION OF THE LOOP, LOOP ROTATION (CLOCKWISE/COUNTERCLOCKWISE), LOOP LEAD-IN DIRECTION (IN CR OUT), LOOP CABLE NUMBER AND LOCATION IN CABINET, AND NUMBER OF TURNS IN THE DETECTOR LOOPS IN WATER PROOF INK AS INDICATED ON THE DISTRICT 1 STANDARD TRAFFIC SIGNAL DESIGN DETAIL. THE CONTRACTOR SHALL MARK LOOP LOCATIONS ON RECORD DRAWINGS AND PRESENT TO THE ENGINEER AFTER FINAL INSPECTION. LODPS SHALL BE WARKED BY LANE AND LOOP NUMBER. SEE DETAIL BELOW.
- 4. ALL LOOP CABLE SHALL BE FASTENED WITH PLASTIC TIE WRAP TO THE HANDHOLE HOOKS.
- 5. IN ASPHALT PAVEMENT, LOOPS SHOULD BE PLACED IN THE BINDER AND DIVEHOLES MARKED AT THE CURB WITH A SAW-CUT. THE SAW-CUT SHALL BE CUT IN ACCORDANCE WITH LOCAL AND E.P.A. DUST CONTROL REQUIREMENTS. DETECTOR LOOP(S) SHALL NOT BE INSTALLED IN WET CONDITIONS AND THE SAW-CUTS MUST BE FREE OF DEBRIS AND RESIDUE SUCH AS DUST AND WATER WHICH IS TO BE ACHIEVED BY THE USE OF COMPRESSED AIR, WIRE BRUSHING AND HEAT DRYING ACCORDING TO SEALANT MANUFACTURER REQUIREMENTS. THE DETECTOR WIRE SHALL BE HELD IN PLACE BY THE USE CF FORM WEDGES. WEDGES SHALL BE SPACED NO MORE THAN 18" (450 mm) APART.
- 6. LOOP SPLICES SHALL BE SOLDERED USING A SOLDERING IRON. BLOW TORCHES OR OTHER DEVICES WHICH OXIDIZE COPPER CABLE SHALL NOT BE ALLOWED FOR SOLDERING OPERATIONS. SEE DETAIL BELOW RIGHT.
- 7. PREFORMED DETECTOR LOOPS SHALL BE USED, AS SHOWN ON THE PLANS, WHERE NEW CONCRETE PAVEMENT IS PROPOSED. THE INSTALLATION OF PREFORMED LOOPS SHALL BE IN ACCORDANCE WITH THE DISTRICT 1 SPECIFICATIONS OR AS DIRECTED BY THE ENGINEER.

#### LOOP LEAD-IN CABLE TAG

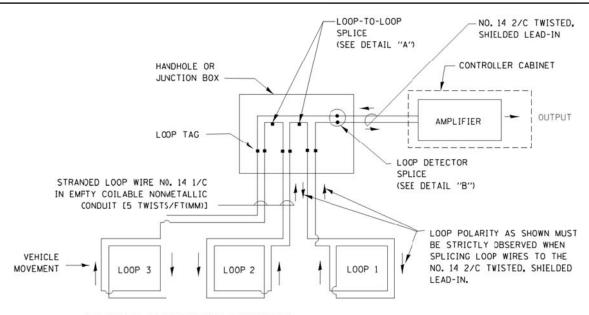


- A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- B. LOOP "1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".

DESIGNED

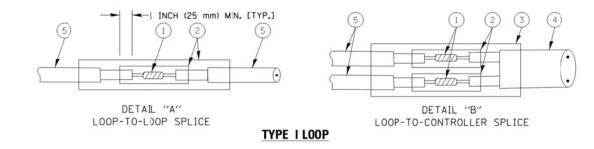
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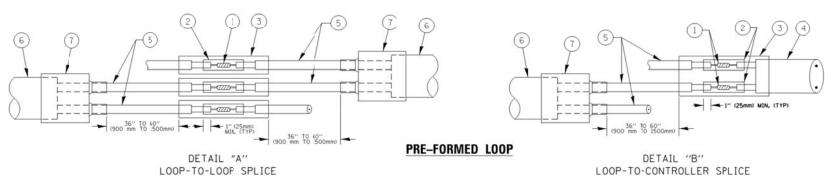
D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.



#### DETECTOR LOOP WIRING SCHEMATIC

- LOOPS SHALL BE SPLICED IN SERIES.
- SAW-CUTS SHALL BE A MINIMUM WIDTH OF 5/16" (8 mm).
- SAW-CUT DEPTHS SHALL BE 3" (75 mm). IF IN CONCRETE. THE SAW-CUT DEPTH SHALL BE TO THE TOP OF THE REINFORCEMENT.
- LOOP CORNERS SHALL BE DRILLED WITH A 2" (50 mm) DIAMETER CORE.





#### LOOP DETECTOR SPLICE

- WESTERN UNION SPLICE SOLDERED WITH ROSIN CORE FLUX. ALL EXPOSED SURFACES OF THE SOLDER SHALL BE SMOOTH. THE WESTERN UNION SPLICES SHALL BE STAGGERED.
- (2) WCSMW 30/100 HEAT SHRINK TUBE, MINIMUM LENGTH 3" (75 mm), UNDERWATER GRADE.
- (3) WCS 200/750 HEAT SHRINK TUBE, MINIMUM LENGHT 6" (150 mm), UNDERWATER GRADE.
- (4) NO. 14 2/C TWISTED, SHIELDED CABLE.

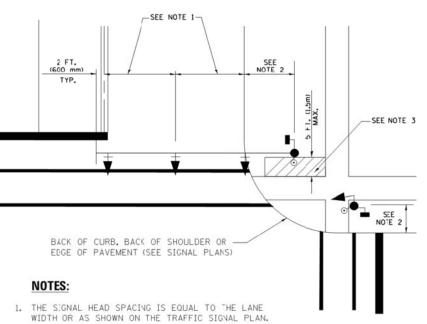
- 5 LOOP CONDUCTOR WITH FLEXIBLE PLASTIC TUBE.
- (6) PRE-FORMED LOOP
- XL POLYOLEFIN 2 CONDUCTOR
- BREAKOUT SEALS. TYCO CBR-2 OR APPROVED EQUAL

|                             | DE01011EB |   | 5   | 1         |   |
|-----------------------------|-----------|---|-----|-----------|---|
|                             | DRAWN     | - | CC  | REVISED - |   |
| PLOT SCALE = 20.0000 '/ in. | CHECKED   | - | JDH | REVISED - |   |
| PLOT DATE = 2/2/2015        | DATE      | - |     | REVISED - |   |
|                             |           |   |     |           | Τ |

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

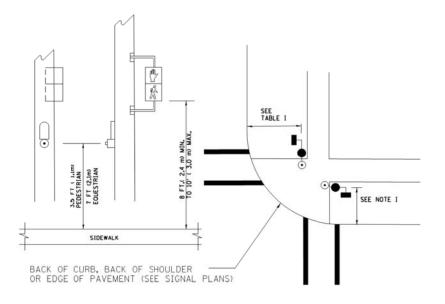
|               |             |            |       | SIGNAL DESIGN | DETAILS | F.A.<br>RTE. | SECTION  |
|---------------|-------------|------------|-------|---------------|---------|--------------|----------|
| DISTRICT      |             | 2014-090TS |       |               |         |              |          |
|               |             |            |       |               |         |              |          |
| SCALE: N.T.S. | SHEET NO. 2 | OF 7 S     | HEETS | STA. TO       | STA.    |              | ILLINOIS |

COUNTY 76 CONTRACT NO. 62A42



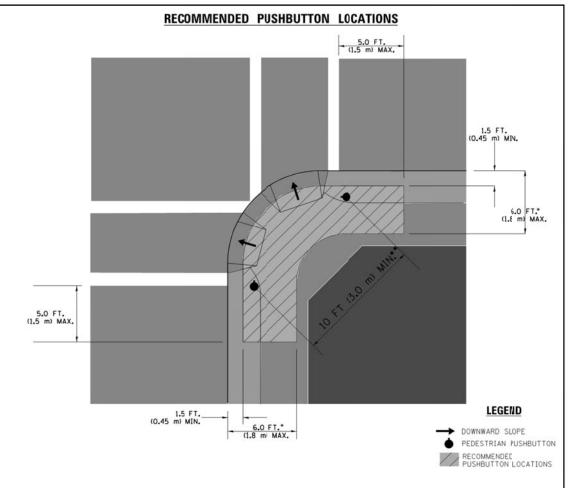
- 2. REFER TO THE TRAFFIC SIGNAL EQUIPMENT OFFSET TABLE.
- 3. PROVIDE A LEVEL ALL-WEATHER SURFACE CONCRETE SIDEWALK. ASPHALT BICYCLE PATH SURFACE OR MATCHING MATERIAL TO THE ADJACENT SURFACE) UP TO THE MAST ARM SHAFT OR
- 4. THE FACE OF THE PEDESTRIAN PUSHBUTTON SHALL BE PARALLEL TO THE CROSSWALK TO BE USED.
- 5. THE LOCATIONS AND INSTALLATION OF PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS SHALL MEET THE REQUIREMENTS OF THE MUTCD AND INFORMATION FOUND IN THE "AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES FOR BUILDINGS AND

#### PEDESTRIAN SIGNAL POST AND PEDESTRIAN PUSH BUTTON POST



#### NOTES:

- 1. REFER TO THE TRAFFIC SIGNAL EQUIPMENT OFFSET TABLE.
- 2. PROVIDE A LEVEL ALL-WEATHER SURFACE (CONCRETE SIDEWALK, ASPHALT BICYCLE PATH SURFACE OR MATCHING MATERIAL TO THE ADJACENT SURFACE) UP TO THE PEDESTRIAN SIGNAL POST OR THE PEDESTRIAN PUSH BUTTON POST.
- 3. THE FACE OF THE PEDESTRIAN PUSHBUTTON SHALL BE PARALLEL TO THE CROSSWALK TO BE USED.
- 4. THE LOCATIONS AND INSTALLATION OF PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS SHALL MEET THE REQUIREMENTS OF THE MUTCD AND INFORMATION FOUND IN THE "ANERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES."



- . WHERE THERE ARE CONSTRAINTS THAT MAKE IT IMPRACTICAL TO PLACE THE PEDESTRIAN PUSHBUTTON BETWEEN 1.5 FT (0.45 m) AND 6 FT ( 1.8 m) FROM THE EDGE OF THE CURB, SHOULDER, CR PAVEMENT, IT SHOULD NOT BE FURTHER THAN 10 FT (3 m) FROM THE EDGE OF CURB, SHOULDER, OR PAVEMENT.
- .. WHERE THERE ARE CONSTRAINTS ON A PARTICULAR CORNER THAT MAKE IT IMPRACTICAL TO PROVIDE THE 10 FT (3 m) SEPERATION BETWEEN THE TWO PEDESTRIAN PUSHBUTTONS. THE PUSHBUTTONS MAY BE PLACED CLOSER TOGETHER OR ON THE SAME POLE.

#### NOTES:

- 1. PEDESTRIAN SIGNAL HEADS SHALL BE MOUNTED WITH THE BOTTOM OF THE SIGNAL HOUSING INCLUDING BRACKETS NOT LESS THAN 8 FT (2.4 m) OR MORE THAN 10 FT (3 m) ABOVE SIDEWALK LEVEL, AND SHALL BE POSITIONED AND ADJUSTED TO PROVIDE MAXIMUM VISIBILITY AT THE BEGINNING OF THE CONTROLLED CROSSWALK.
- 2. THE BOTTOM OF THE SIGNAL HOUSING (INCLUDING BRACKETS) OF A VEHICULAR SIGNAL FACE THAT IS NOT LOCATED OVER A HIGHWAY SHALL BE AT LEAST 8 FT (2.4 m) BUT NOT MORE THAN 19 FT (5.8 m) ABOVE THE SIDEWALK OR, IF THERE IS NO SIDEWALK, ABOVE THE PAVEMENT GRADE AT THE CENTER OF THE ROADWAY.
- 3. THE BOTTOM OF THE SIGNAL HOUSING AND ANY RELATED ATTACHMENTS TO A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL BE ACCORDING TO CURRENT STATE STANDARDS 877001, 877002, 877006, 877011 AND 877012 WITH A MINIMUM OF 16 FT (5.0 m) AND A MAXIMUM OF 18 FT. (5.5 m) FROM THE HIGHEST POINT OF PAVEMENT.
- 4. THE BOTTOM OF THE TEMPORARY SPAN WIRE MOUNTED SIGNAL HOUSING AND ANY RELATED ATTACHMENTS TO A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL BE ACCORDING TO CURRENT STATE STANDARD 880001 WITH A MINIMUM OF 17 FT (5.18 m) FROM THE HIGHEST POINT OF PAVEMENT.
- 5. THE TOP OF THE SIGNAL HOUSING OF A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL NOT BE MORE THAN 25.6 FT (7.8 m) ABOVE THE PAVEMENT.

USER NAME = \_USERNAME.

PLOT DATE = 2/2/2015

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#### TRAFFIC SIGNAL EQUIPMENT OFFSET

| TRAFFIC SIGNAL EQUIPMENT              | COMBINATION CONCRETE CURB AND GUTTER (MINIMUM DISTANCE FROM BACK OF CURB TO CENTERLINE OF FOUNDATION) | SHOULDER/NON-CURBED AREA (MINIMUM<br>DISTANCE FROM EDGE OF PAVEMENT<br>TO CENTERLINE OF FOUNDATION) |
|---------------------------------------|---|---|
| TRAFFIC SIGNAL MAST ARM POLE          | 6 FT (1.8m)   | SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)  |
| TRAFFIC SIGNAL POST                   | 4 FT (1.2m)   | SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)  |
| PEDESTRIAN SIGNAL POST                | 4 FT (1.2m)   | SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)  |
| PEDESTRIAN PUSHBUTTON POST            | 4 FT (1.2m)   | SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)  |
| TEMPORARY WOOD POLE                   | 6 FT (1.8m)   | SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)  |
| CONTROLLER CABINET                    | 6 FT (1.8m) MINIMUM DISTANCE SEE NOTE 2   | SHOULDER WIDTH + 6 FT (1.8m), MINIMUM 16 FT (4.9m) SEE NOTE 3.                                      |
| SERVICE INSTALLATION,<br>GROUND MCUNT | 6 FT (1.8m) MINIMUM DISTANCE SEE NOTE 2   | SHOULDER WIDTH + 6 FT (1.8m), MINIMUM 16 FT (4.9m) SEE NOTE 3.                                      |

#### NOTES:

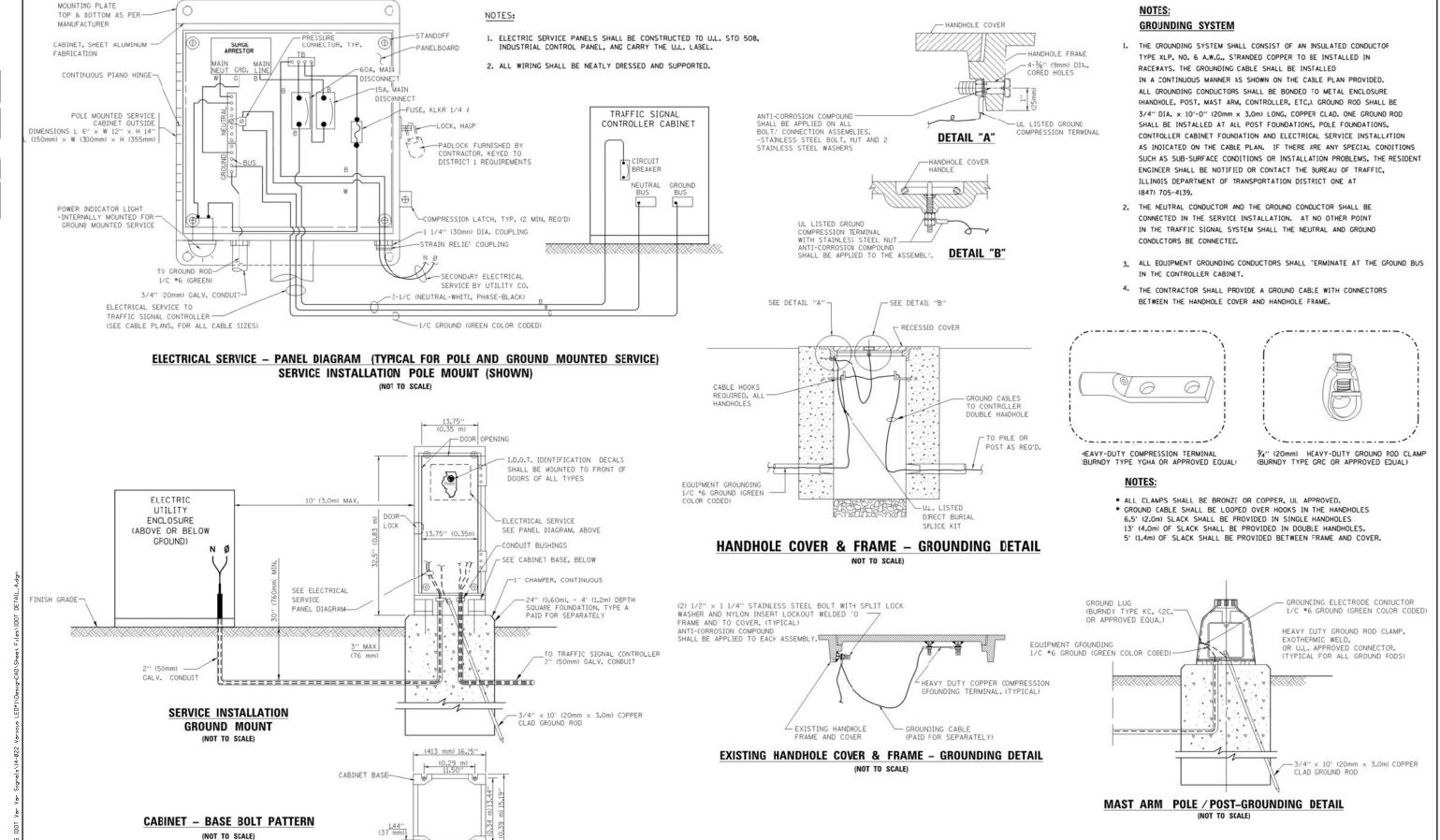
- 1. CONTACT THE "AREA TRAFFIC SIGNAL MAINTENANCE AND OPERATIONS ENGINEER" FOR ASSISTANCE IN LOCATING THE TRAFFIC SIGNAL EQUIPMENT WHEN THERE ARE CONFLICTS WITH DITCHES OR THE MINIMUM OFFSET DISTANCES CANNOT BE MET.
- 2. MINIMUM DISTANCE FROM THE BACK OF CURB TO THE ROADWAY SIDE OF THE FOUNDATION.
- 3. MINIMUM DISTANCE FROM THE EDGE OF PAVEMENT TOTHE ROADWAY SIDE OF THE FOUNDATION.
- 4. ANY CHANGES TO THE OFFSETS OF THE FOUNDATIONS, FROM THE MINIMUM DISTANCES LISTED IN THE "TRAFFIC SIGNAL EQUIPMENT OFFSET" CHART AND THE TRAFFIC SIGNAL INSTALLATION PLAN, COULD EFFECT THE PLACEMENT OF THE SIGNAL HEADS, PEDESTRIAN SIGNAL HEADS AND THE PEDESTRIAN PUSHBUTTONS. THE SIGNAL HEAD PLACEMENT ON THE MAST ARMS SHALL REMAIN AS PER THE TRAFFIC SIGNAL INSTALLATION PLAN AND THE "TRAFFIC SIGNAL MAST ARM AND SIGNAL POST" DETAIL ABOVE. THE PROFOSED MAST ARM LENGTHS MAY NEED TO BE REVISED TO MEET THE ABOVE REQUIREMENTS. THE PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS MUST MEET THE REQUIREMENTS UNCER THE DETAILS ON THIS SHEET.

| STATE      | 0F | : 11 |
|------------|----|------|
| DEPARTMENT | 0F | TR   |

| DISTRICT (    | ONE – STAND | ARD 1 | TRAFFIC | SIGNAL I | DESIGN | DETAILS |
|---------------|-------------|-------|---------|----------|--------|---------|
| SCALE: N.T.S. | SHEET NO. 3 | OF 7  | SHEETS  | STA.     | TO     | STA.    |

LLINOIS RANSPORTATION

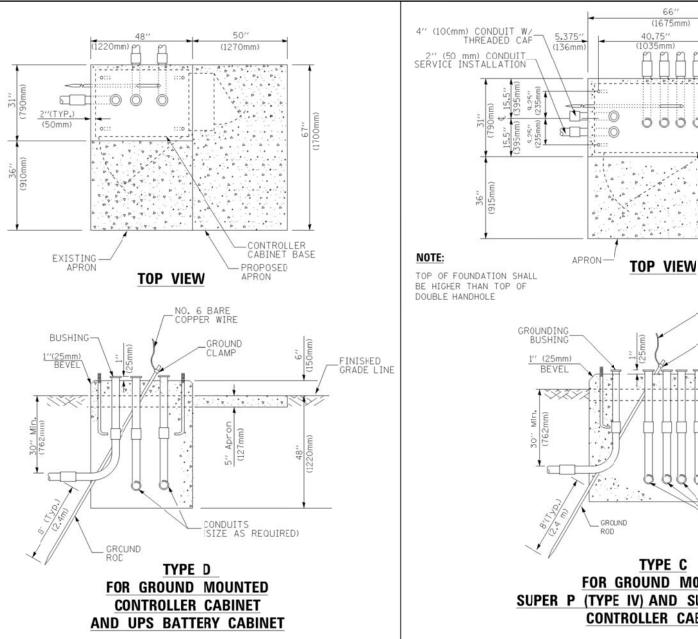
SECTION COUNTY 2014-090TS 76 12 CONTRACT NO. 62A42 ILLINOIS



TOTAL SHEET SHEETS NO. DESIGNED REVISED USER NAME = \_USERNAME. DW SECTION COUNTY STATE OF ILLINOIS DRAWN CC REVISED DISTRICT ONE - STANDARD TRAFFIC SIGNAL DESIGN DETAILS 2014-090TS 76 13 PLOT SCALE = 20.0000 '/ in. CHECKED REVISED **DEPARTMENT OF TRANSPORTATION** CONTRACT NO. 62A42 SCALE: N.T.S. SHEET NO. 4 OF 7 SHEETS STA. PLOT DATE = 2/2/2015 DATE REVISED

-ANCHOR BOLT LOCATIONS

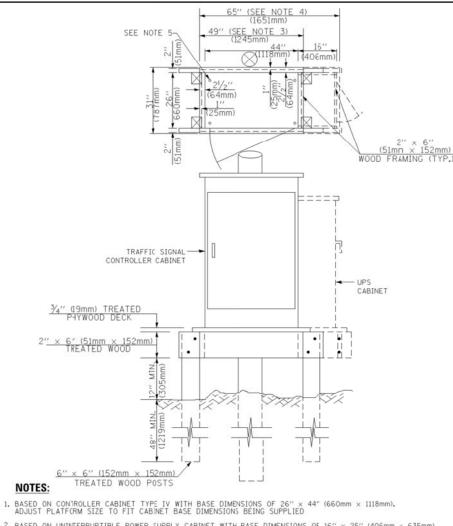




TYPE C FOR GROUND MOUNTED SUPER P (TYPE IV) AND SUPER R (TYPE V) **CONTROLLER CABINETS** 

add

0000



- BASED ON UNINTERRUPTIBLE POWER SUPPLY CABINET WITH BASE DIMENSIONS OF 16" x 25" (406mm x 635mm).
   ADJUST PLATFORM SIZE TO FIT CABINET BASE DIMENSIONS BEING SUPPLIED.
- 3. PLATFORM SIZE FOR CONTROLLER CABINET TYPE IV.
- 4. PLATFORM SIZE FOR CONTROLLER CASINET TYPE IV AND UNINTERRUPTIBLE POWER SUPPLY CABINET.
- 5. DRILLED HOLES THROUGH THE PLATFORM BASE TO MATCH THE CONTROLLER CABINET BOLT TEMPLATE. FASTEN THE CONTROLLER CABINET TO THE PLATFORM WITH CARRIAGE BOLTS, WASHERS AND NUTS.
- 6. FASTEN ALL SUPPORT WOOD FRAMING TO THE WOOD POSTS WITH 2 LAG SCREWS FOR EACH CONNECTION..

#### TEMPORARY SIGNAL CONTROLLER WOOD SUPPORT PLATFORM

| CABLE SLACK LENGTH                                | FEET | METER |
|---|------|-------|
| HANDHOLE  | 6.5  | 2.0   |
| DOUBLE HANDHOLE                                   | 13.0 | 4.0   |
| SIGNAL POST                                       | 2.0  | 0.6   |
| MAST ARM  | 2.0  | 0.6   |
| CONTROLLER CABINET                                | 1.5  | 0.5   |
| FIBER OPTIC AT CABINET                            | 13.0 | 4.0   |
| ELECTRIC SERVICE AT (CABINET OR SERVICE LOCATION) | 1.5  | 0.5   |
| GROUND CABLE (SIGNAL POST, MAST ARM, CABINET)     | 1.5  | 0.5   |
| GROUND CABLE (BETWEEN FRAME AND COVER)            | 5.0  | 1.6   |

CABLE SLACK

| VERTICAL CABLE LENGTH   | FEET   | METER |
|---|--------|-------|
| MAST ARM POLE ( MAST ARM MOUNTED SIGNAL HEAD) (L = MAST ARM LENGTH - DISTANCE TO SIGNAL HEAD FROM END OF ARM) | 20.0+L | 6.0+L |
| BRACKET MOUNTED (MAST ARM POLE OR SIGNAL POLE)  | 13.0   | 4.0   |
| PEDESTRIAN PUSH BUTTON  | 6.0    | 2.0   |
| SERVICE INSTALLATION POLE MOUNT TO SERVICE DROP   | 13.5   | 4.1   |
| SERVICE INSTALLATION POLE MOUNT TO GROUND   | 13.5   | 4.1   |
| SERVICE INSTALLATION GROUND MOUNT   | 6.0    | 2.0   |
| FOUNDATION (SIGNAL POST, MAST ARM POLE, CONTROLLER CABINET, SERVICE-GROUND MOUNT)                             | 3.0    | 1.0   |

#### VERTICAL CABLE LENGTH

|  |  | VEHILIONE |
|--|--|-----------|
|  |  |           |
|  |  |           |

| FOUNDATION  | DEPT4         |  |  |
|---|---------------|--|--|
| TYPE A - Signal Post                                      | 4'-0" (1.2m)  |  |  |
| TYPE C - CONTROLLER W/ UPS                                | 4'-0" (1.2m)  |  |  |
| TYPE D - CONTROLLER                                       | 4'-0" (1.2m)  |  |  |
| SERVICE INSTALLATION,<br>GROUND MOUNT,<br>TYPE A - SOUARE | 4'-0'' (1.2m) |  |  |

#### **DEPTH OF FOUNDATION**

| Wast Arm Length  | ① Foundation<br>Depth | Foundation<br>Diameter | Spiral<br>Diameter | Quantity of<br>Rebars | Size of<br>Rebars |
|--|-----------------------|------------------------|--------------------|-----------------------|-------------------|
| Less than 30' (9.1 m)  | 10'-0" (3.0 m)        | 30" (750mm)            | 24" (600mm)        | 8                     | 6(19)             |
| Greater than or equal to   | 13'-6" (4.1 m)        | 30" (750mm)            | 24" (600mm)        | 8                     | 6(19)             |
| 30' (9.1 m) and less than<br>40' (12.2 m)                              | 11'-0" (3.4 m)        | 36" (900mm)            | 30" (750mm)        | 12                    | 7(22)             |
| Greater than or equal to<br>40' (12.2 m) and less than<br>50' (15.2 m) | 13'-0" (4.0 m)        | 36" (900mm)            | 30" (750mm)        | 12                    | 7(22)             |
| Greater than or equal to<br>50 (15.2 m) and up to<br>55' (16.8 m)      | 15'-0" (4.6 m)        | 36" (900mm)            | 30" (750mm)        | 12                    | 7(22)             |
| Greater than or equal to 56' (16.8 m) and less than 65' (19.8 m)       | 21'-0" (6.4 m)        | 42" (1060mm)           | 36" (900mm)        | 16                    | 8(25)             |
| Greater than or equal to<br>65 (19.8 m) and up to<br>75' (22.9 m)      | 25'-0" (7.6 m)        | 42" (1060mm)           | 36" (900mm)        | 16                    | 8(25)             |

#### NOTES:

- 1. These foundation depths are for sites which have cohesive soils (clayey silt, sandy clay, etc.) along the length of the shaft, with an average Unconfined Compressive Strength (Ou) > 1.0 tsf (100 kpa). This strength shall be verified by boring data prior to construction or with testing by the Engineer during foundation drilling. The Bureau of Bridges & structures should be contacted for a revised
- 2. Combination mast arm assemblies under 55 feet (16.8 m) shall use 36" (900 mm) diameter foundations.
- 3. Combination mast arm assemblies under 56 feet (16.8 m) through 75 feet (22.9 m) shall use 42" (1060 mm) diameter foundations
- 4. For most arm assemblies with dual arms refer to state standard 878001..

#### DEPTH OF MAST ARM FOUNDATIONS, TYPE E

TS-5

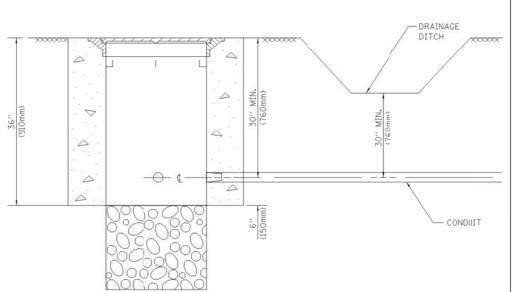
| USER NAME = _USERNAME_      | DESIGNED - | DW  | REVISED - | <u>'</u>                     |               |                         |                         | F.A.  | SECTION    | COUNTY   | TOTAL SHEET |
|-----------------------------|------------|-----|-----------|------------------------------|---------------|-------------------------|-------------------------|-------|------------|----------|-------------|
|                             | DRAWN -    | CC  | REVISED - | STATE OF ILLINOIS            | DISTRICT      | ONE - STANDARD TRAFFI   | C SIGNAL DESIGN DETAILS | IXIE. | 2014-090TS | ,        | 76 14       |
| PLOT SCALE = 20.0000 '/ in. | CHECKED -  | JDH | REVISED - | DEPARTMENT OF TRANSPORTATION |               |                         |                         |       |            | CONTRACT | NO. 62A42   |
| PLOT DATE = 2/2/2015        | DATE -     |     | REVISED - |                              | SCALE: N.T.S. | SHEET NO. 5 OF 7 SHEETS | STA. TO STA.            |       | ILLINOIS   |          |             |

(915mm)

-UPS BATTERY COMPARTMENT

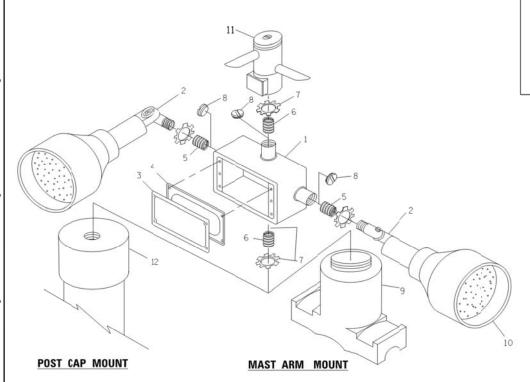
-4" (100 mm) CONDUITS TO DOUBLE HANDHOLE

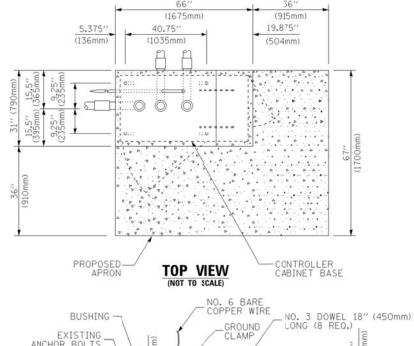
CONTROLLER CABINET BASE

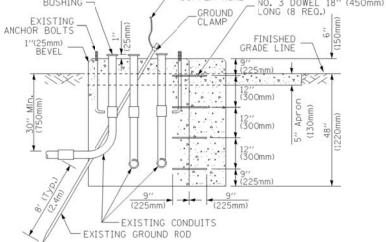


- 1. CONDUIT DEPTH SHALL BE A MINIMUM OF 30" (760mm) BELOW THE BOTTOM OF THE DRAINAGE DITCH OR ANY SLOPING CROUND
- 2. THE MINIMUM CONDUIT DEPTH APPLIES TO ALL CONDUIT PLACED UNDER ROADWAY PAVEMENT, MULTI-USE PATHS, SIDEWALKS AND SOIL SURFACES.
- 3. THE MINIMUM CONDUIT DEPTH APPLIES TO ALL HANDHOLES, HEAVY DUTY HANDHOLES AND DOUBLE HANDHOLES.

#### HANDHOLE WITH MINIMUM CONDUIT DEPTH NOT TO SCALE)







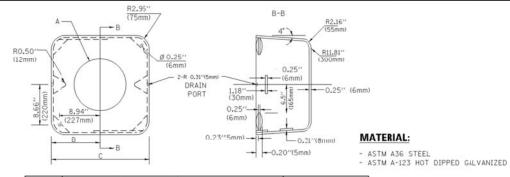
#### MODIFY EXISTING TYPE "D" FOUNDATION TO TYPE "C" FOUNDATION

(NOT TO SCALE)

| ITEM | NO.  | IDENTIFICATION                            |
|------|------|---|
| 1    | OU   | TLET BOX- GALV. 21 CU.IN. (0.000344 CU-M) |
| 2    | LA   | MP HOLDER AND COVER                       |
| 3    | OU   | TLET BOX COVER                            |
| 4    | RU   | BBER COVER GASKET                         |
| 5    | REI  | DUCING BUSHING                            |
| 6    | 3/4' | '(19 mm) CLOSE NIPPLE                     |
| 7    | 3/4' | '(19 mm) LOCKNUT                          |
| . 8  | 3/4' | '(19 mm) HOLE PLUG                        |
| 9    | SAI  | DDLE BRACKET - GALV.                      |
| 10   | 6    | WATT PAR 38 LED FLOOD LAMP                |
| 11   | DE.  | TECTOR UNIT                               |
| 12   | PO   | ST CAP [18 FT. (5.4 m) POST MIN.]         |

#### NOTES:

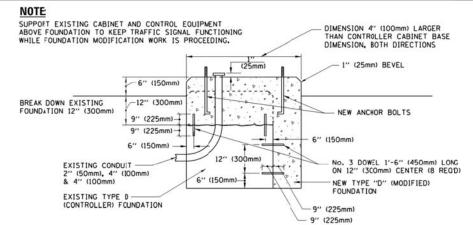
- 1. ALL ELECTRICAL ITEMS, EXCEPT ITEMS #2 AND #11 SHALL BE ALUMINUM OR
- 2. ITEM #1- OZ/GEDNEY FSX-1-50 OR EQUIVALENT ITEM #2- MULBERRY CON-O-SHADE LAMP SHIELD OR EQUIVALENT ITEM #9- "BAND-IT" SADDLE BRACKET OR EQUIVALENT
- 3. WHEN POST MOUNTING IS SPECIFIED, ITEM \*9 SHALL NOT BE REQUIRED. THE DETECTION UNIT SHALL BE MOUNTED DIRECTLY ON TOP OF THE CAP BY DRILLING AND TAPPING A 3/4 "(19 mm) HOLE WITH PIPE THREADS. THE POST CAP SHALL EITHER BE SCREWED TO THE TOP OF THE POST OR A MINIMUM OF 3 TIGHTENING SCREWS SHALL BE REQUIRED ON EACH CAP. EMERGENCY VEHICLE DETECTOR WITH CONFIRMATION BEACON MOUNTING DETAIL



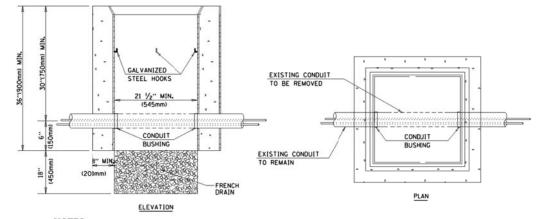
| Α      | В             | С            | HEIGHT                   | WEIGHT          |  |  |
|--------|---------------|--------------|--------------------------|-----------------|--|--|
| VARIES | 9.5"(241mm)   | 19"(483mm)   | 7" (178mm) - 12" (300mm) | 53 lbs (24kg)   |  |  |
| VARIES | 10.75"(273mm) | 21.5"(546mm) | 7" (178mm) - 12" (300mm) | 68 lbs (31 kg)  |  |  |
| VARIES | 13.0"(330mm)  | 26"(660mm)   | 7" (178mm) - 12" (300mm) | 81 lbs (37 kg)  |  |  |
| VARIES | 18.5"(470mm)  | 37"(940mm)   | 7" (178mm) - 12" (300mm) | 126 lbs (57 kg) |  |  |

#### SHROUD

- 1. DIMENSION "A" IS EQUAL TO THE DIAMETER OF THE MAST ARM POLE AT THE TOP OF THE SHROUD. THE SHROUD SHALL BE TIGHT TO THE MAST ARM POLE.
- 2. THE SUPPLIER SHALL /ERIFIED THE ABOVE DIMENSIONS BASED ON MAST ARM REQUIREMENTS.
- 3. THE HEIGHT OF THE SHROUD SHALL COVER THE ANCHOR BOLTS, NUTS AND MAST ARM FOLE BASE.



#### MODIFY EXISTING TYPE "D" FOUNDATION



- 1. HANDHOLE CONSTRUCTED PER STATE STANDARD 8:4001.
- 2. REMOVAL OF THE EXISTING CONDUIT FROM THE HANDHOLE AND THE INSTALLATION OF THE CONDUIT BUSHINGS SHALL BE INCLUDED WITH THE COST OF THE HANDHOLE.

#### HANDHOLE TO INTERCEPT EXISTING CONDUIT

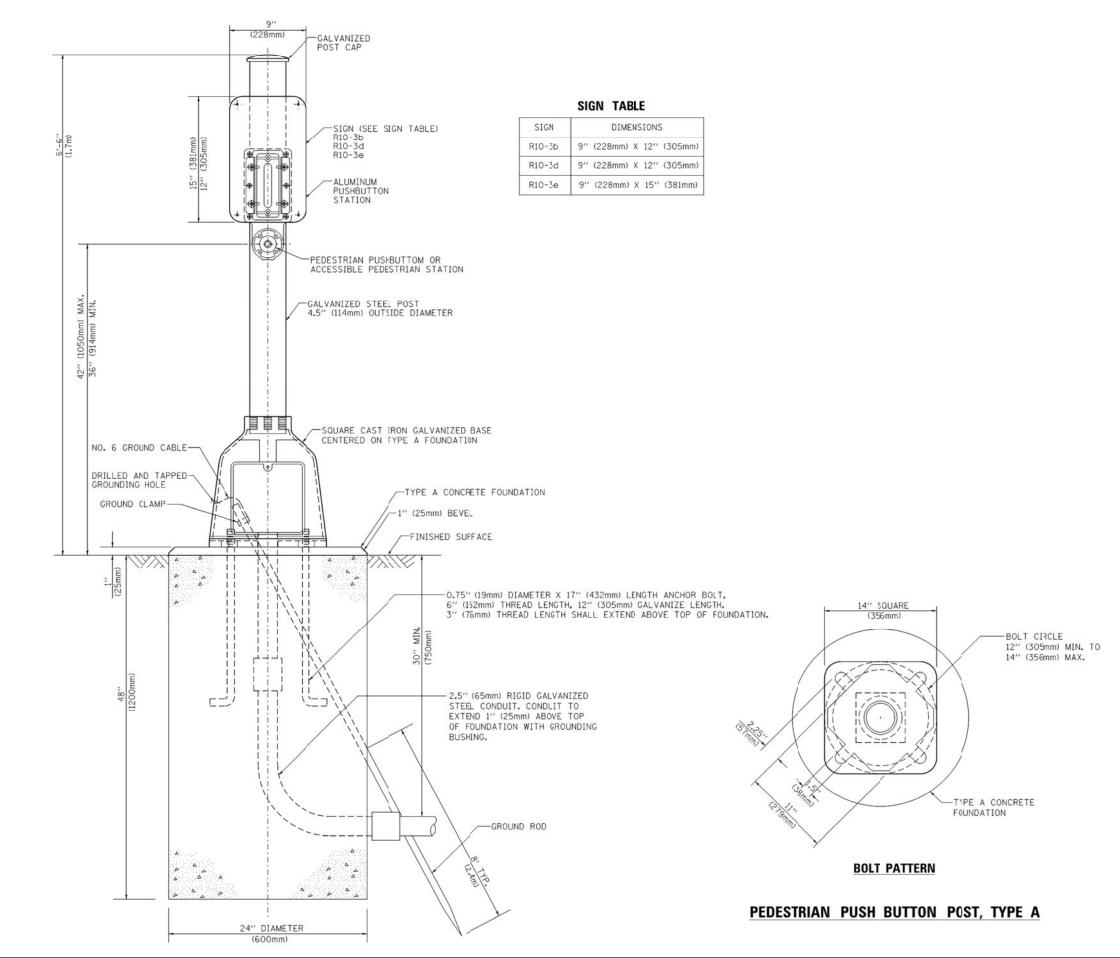
|       | TS- |
|-------|-----|
| TOTAL | SHE |

| USER NAME = _USERNAME_        | DESIGNED | - | DW  | REVISED - |
|-------------------------------|----------|---|-----|-----------|
|                               | DRAWN    | - | CC  | REVISED - |
| PLOT SCALE = 20.0000 ft / in. | CHECKED  | - | JDH | REVISED - |
| PLOT DATE = 2/2/2015          | DATE     | - |     | REVISED - |

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

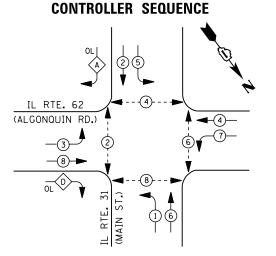
| DIST          | rric | CT ON | E – | ST | ANI | DA | RD TE  | RAFFIC | SIGNAL | DESIGN | DETAILS |
|---------------|------|-------|-----|----|-----|----|--------|--------|--------|--------|---------|
| SCALE: N.T.S. |      | SHEET | NO. | 6  | OF  | 7  | SHEETS | S STA. |        | TO STA |         |

|           |            |          |                 | 15-6         |
|-----------|------------|----------|-----------------|--------------|
| A.<br>TÉ. | SECTION    | COUNTY   | TOTAL<br>SHEETS | SHEET<br>NO. |
|           | 2014-090TS |          | 76              | 15           |
|           |            | CONTRACT | NO. 6           | 2A42         |
|           | ILL INOIS  |          |                 |              |



TOTAL SHEET NO. 76 16 USER NAME = \_USERNAME\_ DESIGNED REVISED DW SECTION COUNTY STATE OF ILLINOIS DISTRICT ONE - STANDARD TRAFFIC SIGNAL DESIGN DETAILS DRAWN CC REVISED 2014-090TS **DEPARTMENT OF TRANSPORTATION** PLOT SCALE = 20.0000 ft / in. CHECKED REVISED CONTRACT NO. 62A42 REVISED SCALE: N.T.S. SHEET NO. 7 OF 7 SHEETS STA. PLOT DATE = 2/2/2015 DATE





#### LEGEND

DUAL ENTRY PHASE PEDESTRIAN PHASE

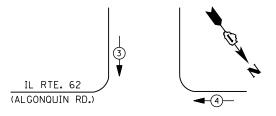
SINGLE ENTRY PHASE

OVERLAP

NUMBER REFERS TO ASSOCIATED PHASE

| RIGHT | TURN | OVERLAP | PHASE | DESIGNATION |  |
|-------|------|---------|-------|-------------|--|
| OVEF  | RLAP | PERMIS  | SIVE  | PROTECTED   |  |
| LETT  | ER   | PHASE   |       | PHASE       |  |
| Α     | =    | 2       | +     | 3           |  |
| -     |      | •       |       |             |  |

#### PHASE DESIGNATION DIAGRAM



REPLACE 10 FT. PAINTED POST. RE-USE EXISTING TYPE A CONCRETE FOUNDATION.

REPLACE 14 FT. PAINTED POST. RE-USE EXISTING TYPE A CONCRETE FOUNDATION.

REPLACE 15 FT. PAINTED POST. RE-USE EXISTING TYPE A CONCRETE FOUNDATION.

REPLACE 16 FT. PAINTED POST. RE-USE EXISTING TYPE A CONCRETE FOUNDATION.

REPLACE 18 FT. PAINTED POST. RE-USE EXISTING TYPE A CONCRETE FOUNDATION.

#### **EMERGENCY VEHICLE PREEMPTION SEQUENCE**

| EMERGENCY VE                | HICLE PREE | MPTORS   |
|-----------------------------|------------|----------|
| EMERGENCY VEHICLE PREEMPTOR | 3          | 4        |
| MOVEMENT                    | <b> </b>   | <b>←</b> |

| TRAFFIC SIGNAL INSTALLATION     |           |         |      |              |         |  |  |  |  |
|---------------------------------|-----------|---------|------|--------------|---------|--|--|--|--|
| ELECTRICAL SERVICE REQUIREMENTS |           |         |      |              |         |  |  |  |  |
| TYPE                            | NO. LAMPS | WAT     | TAGE | % OPERATIONS | TOTAL   |  |  |  |  |
|                                 |           | INCAND. | LED  |              | WATTAGE |  |  |  |  |
| SIGNAL (RED)                    | 15        | 1 35    | 1 7  | 0.50         | 128     |  |  |  |  |
| (YELLOW)                        | 15        | 1 35    | 25   | 0.25         | 94      |  |  |  |  |
| ( GREEN)                        | 15        | 1 35    | 15   | 0.25         | 57      |  |  |  |  |
| ARROW                           | 24        | 1 35    | 12   | 0.10         | 29      |  |  |  |  |
| PED. SIGNAL                     | 8         | 90      | 25   | 1.00         | 200     |  |  |  |  |
| CONTROLLER                      | 1         | 100     | 100  | 1.00         | 100     |  |  |  |  |
| ILLUM. SIGN                     |           | 252     | 25   | 0.05         |         |  |  |  |  |
| VIDEO SYSTEM                    |           | 150     | -    | 1.00         |         |  |  |  |  |
|                                 |           |         |      |              |         |  |  |  |  |
|                                 |           |         |      |              |         |  |  |  |  |
| FLASHER LED                     |           |         |      |              |         |  |  |  |  |
|                                 |           |         |      | TOTAL =      | 608     |  |  |  |  |

I. D. O. T.

ENERGY COSTS-

BILLED TO: IDOT DISTRICT 1

201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY -CONTACT MIKE LENOX

PLOT DATE = 2/2/2015

| <u>QUANTITY</u> | <u>UNIT</u> | ITEM  |
|-----------------|-------------|---|
| 1               | EACH        | MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION |
| 1               | EACH        | TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.        |
| 2               | EACH        | RELOCATE EXISTING SIGNAL HEAD                       |
| 1               | EACH        | REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT            |
| 1               | EACH        | REMOVE AND REPLACE ANCHOR BOLTS                     |
| 4               | EACH        | PEDESTRIAN PUSH-BUTTON, NON-LATCHING                |
|                 |             |   |

# REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT

PEDESTRIAN PUSH-BUTTON

| · ·     | S #7280<br>_GONQUI |                 |   |
|---------|--------------------|-----------------|---|
| SECTION | COUNTY             | TOTAL<br>SHEETS | S |
|         |                    | 7.0             | г |

EXISTING SAMPLING

(SYSTEM)

GREEN

GREEN

DETECTORS

| IL ROUTE    | 62 (ALGONO | QUIN RO  | AD) AT IL | . ROUTE 3 | 1 (MAIN  | STREE |
|-------------|------------|----------|-----------|-----------|----------|-------|
| SCHEDULE OF | QUANTITIE  | S, CABLE | PLAN, P   | HASE DES  | IGNATION | DIAG  |
| AN          | D EMERGEN  | ICY VEH  | ICLE PREI | EMPTION   | SEQUENC  | E     |
| 5041 F      | CHEET NO   | 0.5      | CHEETC    | 6.1.      | то.      |       |

|  |          | Δ          | ALGONQUI | N               |      |
|--|----------|------------|----------|-----------------|------|
| ROUTE 62 (ALGONQUIN ROAD) AT IL ROUTE 31 (MAIN STREET)   | I K I E. | SECTION    | COUNTY   | TOTAL<br>SHEETS |      |
| DULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRA | NIVI,    | 2014-090TS | McHENRY  | 76              | 17   |
| AND EMERGENCY VEHICLE PREEMPTION SEQUENCE                |          |            | CONTRACT | NO. 6           | 2A42 |
| SHEET NO. OF SHEETS STA. TO STA.                         |          | ILLINOIS   |          |                 |      |

-EXISTING SAMPLING (SYSTEM) DETECTORS

**SCHEDULE OF QUANTITIES** 

815-490-2869 COMMONWEALTH EDISON USER NAME = \_USERNAME\_

STATE OF ILLINOIS

DESIGNED DRAWN

REVISED CC REVISED CHECKED REVISED DATE REVISED

DW

**DEPARTMENT OF TRANSPORTATION** 

PUSH BUTTON "A" SHALL PLACE A CALL IN PHASES 2 AND 4
PUSH BUTTON "B" SHALL PLACE A CALL IN PHASES 4 AND 6
PUSH BUTTON "C" SHALL PLACE A CALL IN PHASES 6 AND 8
PUSH BUTTON "D" SHALL PLACE A CALL IN PHASES 2 AND 8

INTERCONNECT TO-HUNTINGTON DR.

IL RTE. 62

(ALGONQUIN RD.)

TRACER-CABLE

INTERCONNECT TO HARRISON ST.

PB "A'

(c) (x)

IL RTE.

**CABLE PLAN** 

-NO. 6

GREEN

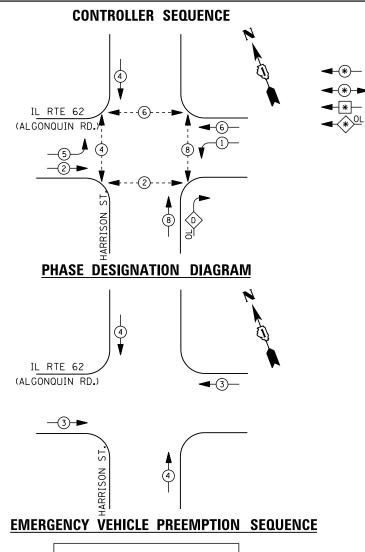
EXISTING SAMPLING (SYSTEM) DETECTORS

- NO. 6 GREEN

D-0-(1-

SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

4 EACH EACH SIGNAL POST



| EMERGENCY VE                | HICLE PREE | MPTORS   |
|-----------------------------|------------|----------|
| EMERGENCY VEHICLE PREEMPTOR | 3          | 4        |
| MOVEMENT                    | <b>+</b>   | <b> </b> |

|              | TRAFFIC S  | IGNAL I  | NSTALLA | TION         |         |
|--------------|------------|----------|---------|--------------|---------|
|              | ELECTRICAL | SERVI CE | REQUIR  | EMENTS       |         |
| TYPE         | NO. LAMPS  | WAT      | TAGE    | % OPERATIONS | TOTAL   |
|              |            | INCAND.  | LED     |              | WATTAGE |
| SIGNAL (RED) | 13         | 1 35     | 17      | 0.50         | 111     |
| (YELLOW)     | 13         | 1 35     | 25      | 0.25         | 82      |
| ( GREEN)     | 13         | 1 35     | 15      | 0.25         | 49      |
| ARROW        | 12         | 1 35     | 12      | 0.10         | 15      |
| PED. SIGNAL  | 8          | 90       | 25      | 1.00         | 200     |
| CONTROLLER   | 1          | 1 00     | 100     | 1.00         | 100     |
| ILLUM. SIGN  |            | 252      | 25      | 0.05         | 0       |
| VIDEO SYSTEM |            | 150      | 150     | 1.00         | 0       |
|              |            |          |         |              |         |
|              |            |          |         |              |         |
| FLASHER LED  |            |          |         |              |         |
|              |            |          |         | TOTAL =      | 557     |

I. D. O. T.

ENERGY COSTS-

BILLED TO: IDOT DISTRICT 1

201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY -

CONTACT MIKE LENOX
PHONE 815-490-2869

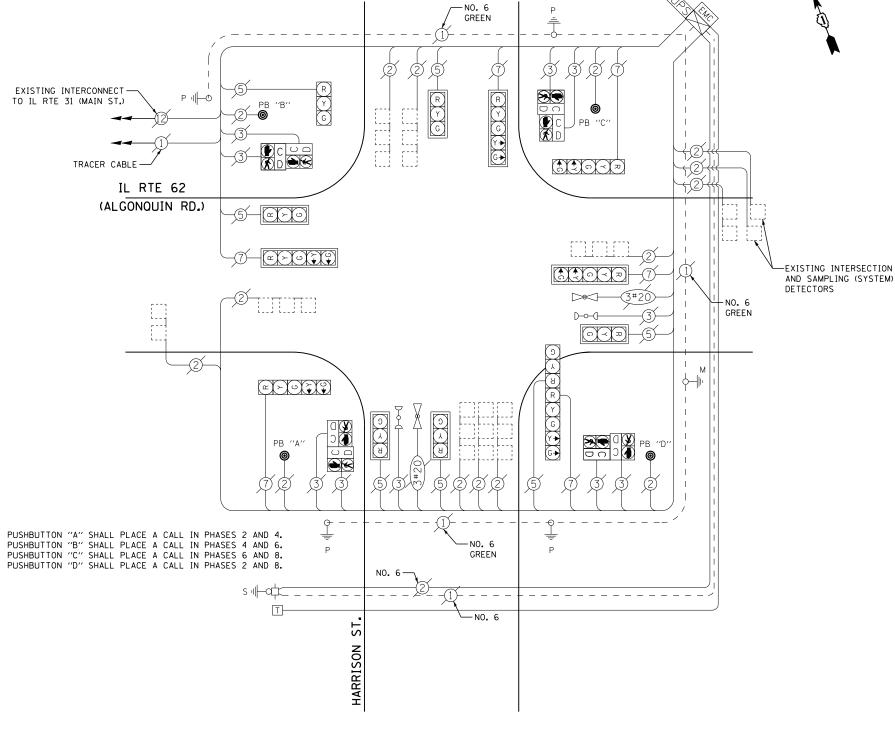
815-490-2869 COMMONWEALTH EDISON

#### LEGEND

DUAL ENTRY PHASE
PEDESTRIAN PHASE
SINGLE ENTRY PHASE
OVERLAP

NUMBER REFERS TO ASSOCIATED PHASE

# EX. TO



#### **CABLE PLAN**

#### **SCHEDULE OF QUANTITIES**

 QUANTITY
 UNIT
 ITEM

 1
 EACH
 MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION

 1
 EACH
 REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT

 4
 EACH
 PEDESTRIAN PUSH-BUTTON, NON-LATCHING

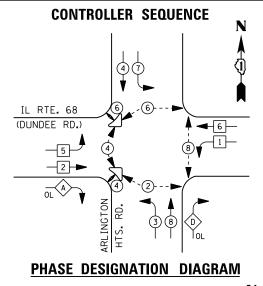
#### REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

4 EACH PEDESTRIAN PUSH-BUTTON

TS #11580 ALGONQUIN

| USER NAME = _USERNAME_     | DESIGNED - | DW  | REVISED - | STATE OF ILLINOIS            | IL ROUTE 62 (ALGONQUIN ROAD) AT HARRISON STREET |  |         |          | F.A.<br>RTE. | SECTION    | COUNTY  | TOTAL SHEET |         |             |
|----------------------------|------------|-----|-----------|------------------------------|---|--|---------|----------|--------------|------------|---------|-------------|---------|-------------|
|                            | DRAWN -    | CC  | REVISED - |                              |   | HEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, |         |          | ****         | 2014-090TS | McHENRY | 76 18       |         |             |
| PLOT SCALE = 20.000 '/ in. | CHECKED -  | JDH | REVISED - | DEPARTMENT OF TRANSPORTATION | AN  | ID EMERGE  | NCY VEH | ICLE PRI | EEMPTION     | SEQUENCE   |         |             | CONTRAC | T NO. 62A42 |
| PLOT DATE = 2/2/2015       | DATE -     |     | REVISED - |                              | SCALE: N.T.S.                                   | SHEET NO.  | OF      | SHEETS   | STA.         | TO STA.    |         | ILLINOIS    |         |             |



#### LEGEND

DUAL ENTRY PHASE

PEDESTRIAN PHASE SINGLE ENTRY PHASE

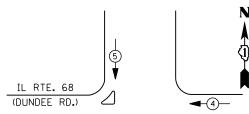
OVERLAP

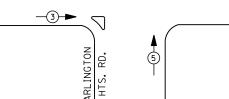
| NUMBER  | REFERS  | TO |
|---------|---------|----|
| ASSOCIA | TED PHA | SE |

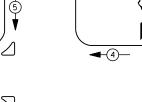
| RIGHT TURN | OVERLAP PHASE | DESIGNATION |
|------------|---------------|-------------|
| OVERLAP    | PERMISSIVE    | PROTECTED   |
| LETTER     | PHASE         | PHASE       |
|            |               |             |

#### GREEN TELEPHONE CONNECTION WITH W. EIDNER RD./ CROFTON LN. TRACER -CABLE **>** — TRACER CABLE FIBER OPTIC R>0 INTERCONNECT FIBER OPTIC

NO. 6 GREEN







## **EMERGENCY VEHICLE PREEMPTION SEQUENCE**

| EMERGENO                    | Y VEHICLE | PREEMPTOR | RS |
|-----------------------------|-----------|-----------|----|
| EMERGENCY VEHICLE PREEMPTOR | 3         | 4         | 5  |
| MOVEMENT                    | 1         | -         | 4  |

I. D. O. T.

|                                 | TRAFFIC S | I GNAL I | NSTALLA | TION    |         |         |  |              |       |
|---------------------------------|-----------|----------|---------|---------|---------|---------|--|--------------|-------|
| ELECTRICAL SERVICE REQUIREMENTS |           |          |         |         |         |         |  |              |       |
| TYPE                            | NO. LAMPS | WATTAGE  |         | WATTAGE |         | WATTAGE |  | % OPERATIONS | TOTAL |
|                                 |           | INCAND.  | LED     |         | WATTAGE |         |  |              |       |
| SIGNAL (RED)                    | 18        | 1 35     | 1 7     | 0.50    | 153     |         |  |              |       |
| (YELLOW)                        | 18        | 1 35     | 25      | 0.25    | 113     |         |  |              |       |
| ( GREEN)                        | 18        | 1 35     | 15      | 0.25    | 68      |         |  |              |       |
| ARROW                           | 16        | 1 35     | 12      | 0.10    | 20      |         |  |              |       |
| PED. SIGNAL                     | 12        | 90       | 25      | 1.00    | 300     |         |  |              |       |
| CONTROLLER                      | 1         | 100      | 100     | 1.00    | 100     |         |  |              |       |
| ILLUM. SIGN                     |           | 252      | 25      | 0.05    |         |         |  |              |       |
| VIDEO SYSTEM                    |           | 150      | -       | 1.00    |         |         |  |              |       |
|                                 |           |          |         |         |         |         |  |              |       |
|                                 |           |          |         |         |         |         |  |              |       |
| FLASHER LED                     |           |          |         |         |         |         |  |              |       |

ENERGY COSTS-

BILLED TO: IDOT DISTRICT 1 201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY -CONTACT DAVE SCHACHT 630-437-2129

COMMONWEALTH EDISON

REPLACE 10 FT. PAINTED POST. RE-USE EXISTING TYPE A CONCRETE FOUNDATION.

REPLACE 14 FT. PAINTED POST. RE-USE EXISTING TYPE A CONCRETE FOUNDATION.

REPLACE 15 FT. PAINTED POST. RE-USE EXISTING TYPE A CONCRETE FOUNDATION.

REPLACE 16 FT. PAINTED POST. RE-USE EXISTING TYPE A CONCRETE FOUNDATION.

TO RIDGE AVE.

IL RTE. 68

(DUNDEE RD.)

REPLACE 18 FT. PAINTED POST. RE-USE EXISTING

TYPE A CONCRETE FOUNDATION.

GREEN

**CABLE PLAN** 

## **SCHEDULE OF QUANTITIES**

REVISED

REVISED

REVISED

| <u>YT I TNAUC</u> | <u>UNIT</u> | <u>I TEM</u>  |      |    |
|-------------------|-------------|---|------|----|
| 1                 | EACH        | MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION                   |      |    |
| 1                 | EACH        | TRAFFIC SIGNAL POST, GALVANIZED STEEL 10 FT.                          |      |    |
| 4                 | EACH        | SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED                 |      |    |
| 2                 | EACH        | SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED                  |      |    |
| 1                 | EACH        | PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN T | IMER |    |
| 4                 | EACH        | TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM                          |      |    |
| 1                 | EACH        | REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT                              |      |    |
| 1                 | EACH        | REMOVE AND REPLACE ANCHOR BOLTS                                       |      |    |
| 1                 | EACH        | PEDESTRIAN PUSH-BUTTON, NON-LATCHING                                  |      |    |
|                   |             |   |      |    |
|                   | REVISED -   |   |      | II |

## REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

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THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

SIGNAL HEAD, 3 - SECTION EACH TRAFFIC SIGNAL BACKPLATE PEDESTRIAN SIGNAL HEAD EACH PEDESTRIAN PUSH-BUTTON EACH SIGNAL POST EACH

TS #3100 ARLINGTON HEIGHTS

INTERCONNECT TO WEIDNER RD./ CROFTON LN.

-NO. 6 GREEN

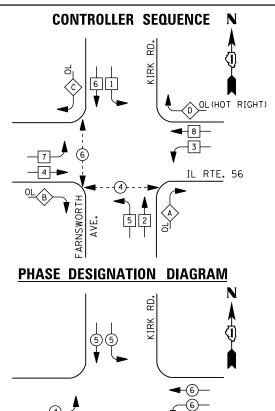
USER NAME = \_USERNAME\_ DESIGNED DW DRAWN CC CHECKED PLOT DATE = 2/2/2015 DATE

TOTAL =

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

ILLINOIS ROUTE 68 (DUNDEE ROAD) AT ARLINGTON HEIGHTS ROAD SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE SHEET NO. OF SHEETS STA.

COUNTY SECTION 2014-090TS COOK 76 19 CONTRACT NO. 62A42



# OVERLAP NUMBER REFERS TO ASSOCIATED PHASE RIGHT TURN OVERLAP PHASE DESIGNATION

LEGEND

DUAL ENTRY PHASE PEDESTRIAN PHASE

SINGLE ENTRY PHASE

| RIGHT | TURN | OVERLAP          | PHASE             | <u>DESIGNATIO</u> | Ν |
|-------|------|------------------|-------------------|-------------------|---|
| OVERL | AP   | PERMISSI         | [VE               | PROTECTED         |   |
| PHAS  | E    | PHASE            |                   | PHASE             |   |
| Α     | =    | 2                | +                 | 3                 |   |
| В     | =    | 4                | +                 | 5                 |   |
| С     | =    | 6                | +                 | 7                 |   |
| D     | =    | (HOT)<br>GREEN F | CONTII<br>RIGHT A |                   |   |
|       |      |                  |                   |                   |   |

#### EXISTING INTERSECTION -AND SAMPLING (SYSTEM) DETECTORS B. FIBER OPTIC INTERCONNECT -CONTINUOUS GREEN RIGHT-TURN ARROW IL RTE. 56 (BUTTERFIELD RD.) EXISTING INTERSECTION AND SAMPLING (SYSTEM) DETECTORS GREEN EXISTING INTERSECTION -AND SAMPLING (SYSTEM) GREEN DETECTORS м վ⊢ф R > 6 (\$ (\$) **≯.**♥ ပြ TRACER CABLE -INTERCONNECT TO CHURCH RD. AVE. GREEN GREEN PUSHBUTTON "B" SHALL PLACE A CALL IN PHASES 4 AND 6. FARNSWORTH FIBER OPTIC INTERCONNECT TO -EXISTING INTERSECTION AND SAMPLING -TRACER CABLE (SYSTEM) DETECTORS **CABLE PLAN**

#### **EMERGENCY VEHICLE PREEMPTION SEQUENCE**

IL RTE. 56

| EM                          | ERGENCY VI | EHICLE PRE | EMPTORS |   |
|-----------------------------|------------|------------|---------|---|
| EMERGENCY VEHICLE PREEMPTOR | 3          | 4          | 5       | 6 |
| MOVEMENT                    |            |            | <u></u> |   |

|    |              |            | I. D. O  | . T.    |              |         |
|----|--------------|------------|----------|---------|--------------|---------|
|    |              | TRAFFIC S  | I GNAL I | NSTALLA | TION         |         |
|    |              | ELECTRICAL | SERVI CE | REQUIR  | EMENTS       |         |
|    | TYPE         | NO. LAMPS  | WAT      | TAGE    | % OPERATIONS | TOTAL   |
|    |              |            | INCAND.  | LED     |              | WATTAGE |
|    | SIGNAL (RED) | 23         | 1 35     | 1 7     | 0.50         | 196     |
|    | ( YELLOW)    | 23         | 1 35     | 25      | 0.25         | 144     |
|    | ( GREEN)     | 23         | 1 35     | 15      | 0.25         | 87      |
|    | ARROW        | 12         | 1 35     | 12      | 0.10         | 15      |
|    | WB RT ARROW  | 2          | 1 35     | 12      | 1.00         | 24      |
|    | PED. SIGNAL  | 4          | 90       | 25      | 1.00         | 100     |
|    | CONTROLLER   | 1          | 100      | 100     | 1.00         | 100     |
|    | ILLUM. SIGN  |            | 252      | 25      | 0.05         |         |
|    | VIDEO SYSTEM |            | 150      | -       | 1.00         |         |
|    |              |            |          |         |              |         |
|    | FLASHER LED  |            |          |         |              |         |
| 'n |              |            |          |         | TOTAL =      | 666     |

BILLED TO: IDOT DISTRICT 1

CONTACT JOE STACHO

630-424-5704

PHONE

201 WEST CENTER COURT

SCHAUMBURG, IL 60196-1096

ENERGY COSTS-

ENERGY SUPPLY -

#### **SCHEDULE OF QUANTITIES**

| QUANTITY | <u>UNIT</u> | ITEM  |
|----------|-------------|---|
| 1        | EACH        | MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION                       |
| 2        | EACH        | PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER |
| 1        | EACH        | PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMEF |
| 1        | EACH        | REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT                                  |
| 3        | EACH        | PEDESTRIAN PUSH-BUTTON, NON-LATCHING                                      |
|          |             |   |

#### REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

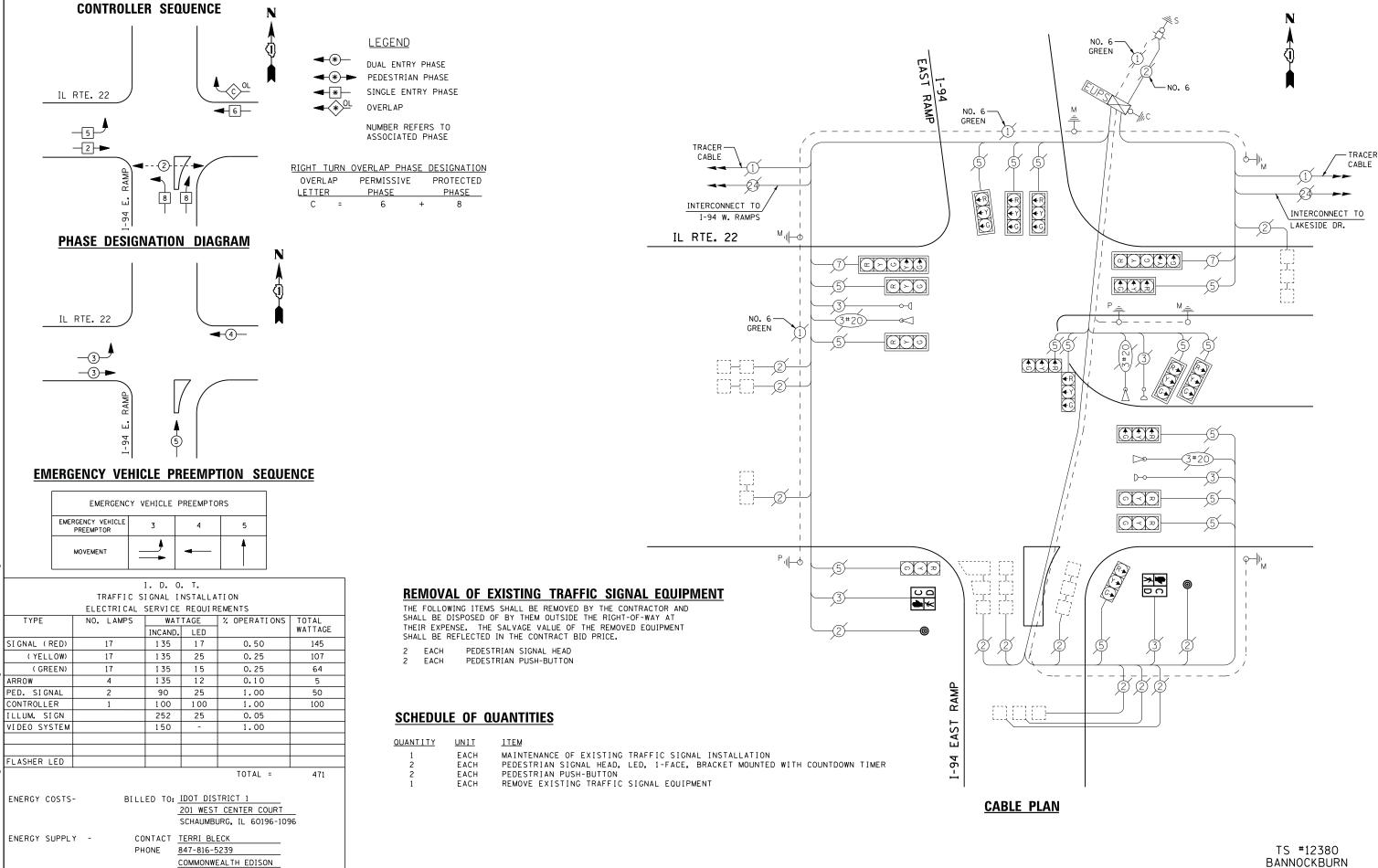
THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

PEDESTRIAN SIGNAL HEAD EACH PEDESTRIAN PUSH-BUTTON 3 EACH

TRACER CABLE

TS #11485 AURORA

| COMMONWEALTH EDISON         | 1          |     |           |                              |  | AURORA             |
|-----------------------------|------------|-----|-----------|------------------------------|--|--------------------|
| USER NAME = _USERNAME_      | DESIGNED - | DW  | REVISED - |                              | IL ROUTE 56 (BUTTERFIELD ROAD) AT KIRK ROAD /FARNSWORTH AVENUE FA: SECTION | COUNTY TOTAL SHEET |
|                             | DRAWN -    | CC  | REVISED - | STATE OF ILLINOIS            | SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, 2014-090TS  | KANE 76 20         |
| PLOT SCALE = 20.000 ' / in. | CHECKED -  | JDH | REVISED - | DEPARTMENT OF TRANSPORTATION | AND EMERGENCY VEHICLE PREEMPTION SEQUENCE                                  | CONTRACT NO. 62A42 |
| PLOT DATE = 2/2/2015        | DATE -     |     | REVISED - |                              | SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.   ILLINOIS                  |                    |



M:\proj\1481\2109 PTB 172-6 IDOT Ver '

FILE NAME =

USER NAME = \_USERNAME\_

PLOT DATE = 2/2/2015

DESIGNED

CHECKED

DRAWN

DATE

DW

CC

REVISED

REVISED

REVISED

REVISED

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION ILLINOIS ROUTE 22 AT I-94 EAST RAMPS
SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM,
AND EMERGENCY VEHICLE PREEMPTION SEQUENCE

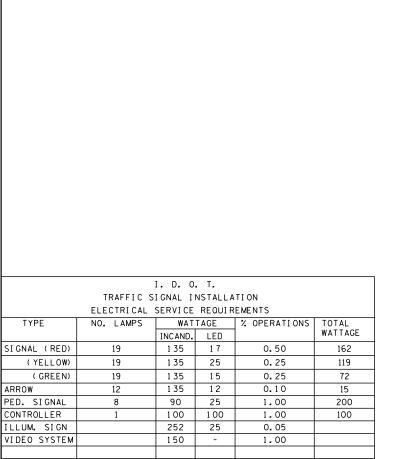
ALE: SHEET NO. OF SHEETS STA. TO STA.

E. SECTION COUNTY TOTAL SHEETS NO.

2014-090TS LAKE 76 21

CONTRACT NO. 62A42





BILLED TO: IDOT DISTRICT 1

CONTACT TERRI BLECK

PHONE

847-816-5239

TOTAL =

201 WEST CENTER COURT

COMMONWEALTH EDISON

SCHAUMBURG, IL 60196-1096

668

CONTROLLER SEQUENCE

4 7

PHASE DESIGNATION DIAGRAM

IL RTE. 22

FLASHER LED

ENERGY COSTS-

ENERGY SUPPLY -

LEGEND

OVERLAP

OVERLAP

LETTER

DUAL ENTRY PHASE

PEDESTRIAN PHASE SINGLE ENTRY PHASE

NUMBER REFERS TO

RIGHT TURN OVERLAP PHASE DESIGNATION

PROTECTED

PHASE

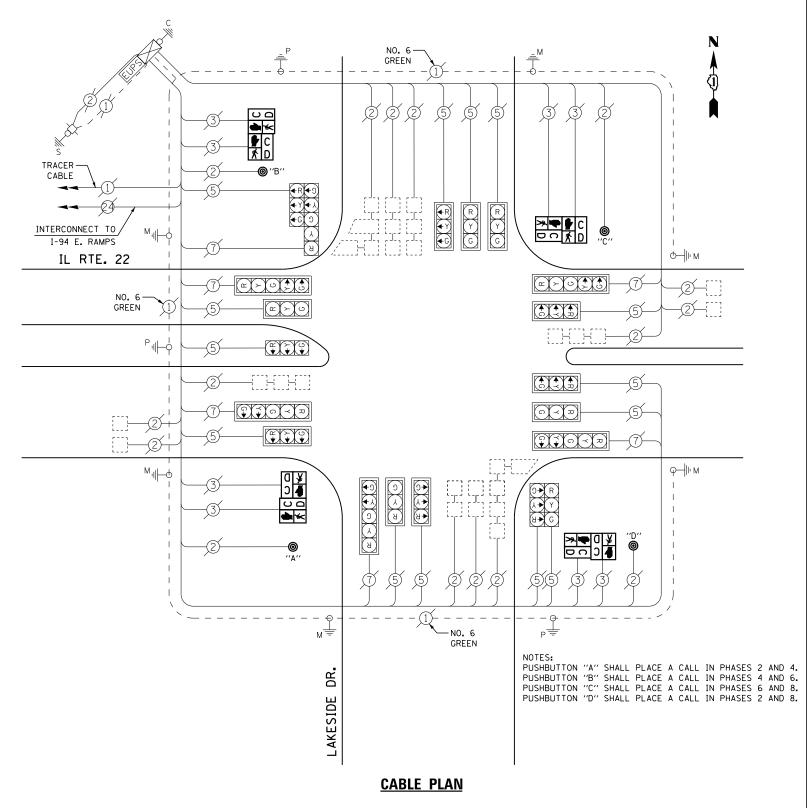
3

5

PERMISSIVE

PHASE

ASSOCIATED PHASE



#### **SCHEDULE OF QUANTITIES**

| <u>QUANTITY</u> | <u>UNIT</u> | <u>ITEM</u>   |
|-----------------|-------------|---|
| 1               | EACH        | MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION                       |
| 4               | EACH        | PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER |
| 1               | EACH        | REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT                                  |
| 4               | EACH        | PEDESTRIAN PUSH-BUTTON, NON-LATCHING                                      |
|                 |             |   |

## REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

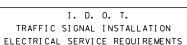
THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

PEDESTRIAN SIGNAL HEAD PEDESTRIAN PUSH-BUTTON 4 EACH

> TS #20350 BANNOCKBURN

| USER NAME = _USERNAME_       | DESIGNED - | DW  | REVISED - |                              |               | 210MILLI   | ROUTE   | 22 AT I | AKESIDE DI | RIVE                | F.A.<br>RTF | SECTION    | COUNTY  | TOTAL S  | SHEET<br>NO. |
|------------------------------|------------|-----|-----------|------------------------------|---------------|------------|---------|---------|------------|---------------------|-------------|------------|---------|----------|--------------|
|                              | DRAWN -    | CC  | REVISED - | STATE OF ILLINOIS            | SCHEDULE OF O | UANTITIES. |         |         |            | DESIGNATION DIAGRAM |             | 2014-090TS | LAKE    | 76       | 22           |
| PLOT SCALE = 20.0000 ' / in. | CHECKED -  | JDH | REVISED - | DEPARTMENT OF TRANSPORTATION | SCHEDULE OF U | UANTITIES, | CADLE I | LAN, AN | ID FRASE L | DESIGNATION DIAGNAM |             |            | CONTRAC | T NO. 67 | 2A42         |
| PLOT DATE = 2/2/2015         | DATE -     |     | REVISED - |                              | SCALE:        | SHEET NO.  | OF      | SHEETS  | STA.       | TO STA.             |             | ILLINOIS   |         |          |              |





|              | ELECTRICAL | SERVICE | RE OUT R | EMENIS       |         |
|--------------|------------|---------|----------|--------------|---------|
| TYPE         | NO. LAMPS  | WAT     | TAGE     | % OPERATIONS | TOTAL   |
|              |            | INCAND. | LED      |              | WATTAGE |
| SIGNAL (RED) | 19         | 1 35    | 1 7      | 0.50         | 162     |
| (YELLOW)     | 19         | 1 35    | 25       | 0.25         | 119     |
| ( GREEN)     | 23         | 1 35    | 15       | 0.25         | 87      |
| ARROW        | 0          | 1 35    | 12       | 0.10         | 0       |
| PED. SIGNAL  | 4          | 90      | 25       | 1.00         | 100     |
| CONTROLLER   | 1          | 100     | 100      | 1.00         | 100     |
| ILLUM. SIGN  | 2          | 252     | 25       | 0.05         | 3       |
| VIDEO SYSTEM | 1          | 150     | ı        | 1.00         | 150     |
|              |            |         |          |              |         |
|              |            |         |          |              |         |
| FLASHER LED  |            |         |          |              |         |

ENERGY COSTS-

BILLED TO: IDOT DISTRICT 1

201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096

TOTAL =

ENERGY SUPPLY -

CONTACT DAVE SCHACHT PHONE 630-437-2129

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3 EACH PEDESTRIAN PUSH-BUTTON ILLUMINATED SIGN

#### SCHEDULE OF QUANTITIES

| <u>QUANTITY</u> | <u>UNIT</u> | <u>I TEM</u>  |
|-----------------|-------------|---|
| 1               | EACH        | MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION |
| 2               | EACH        | ILLUMINATED SIGN, LED                               |
| 1               | EACH        | MODIFY EXISTING CONTROLLER CABINET                  |
| 1               | EACH        | REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT            |
| 3               | EACH        | PEDESTRIAN PUSH-BUTTON, NON-LATCHING                |

EASTERN RYG PUSH BUTTON "A" SHALL PLACE A CALL IN PHASES 2 AND 3. **CABLE PLAN** 

UNION PACIFIC RR

NO. 6-GREEN

(P)(O)

Ø

**3** 

**3** 

-LCDOT

PTZ

EXISTING UNINTERRUPTIBLE POWER SUPPLY TO BE RECONNECTED TO THE EXISTING CONTROLLER. THIS WORK SHALL BE INCLUDED IN THE PAY ITEM "MODIFY EXISTING CONTROLLER CABINET"

TS #4695

GREEN

| COMMONWEALTH EDISON          | <u> </u>   |     |           |                              |          |  |             | - BARR     | INGTON  | (SH. 1   | .)           |
|------------------------------|------------|-----|-----------|------------------------------|----------|--|-------------|------------|---------|----------|--------------|
| USER NAME = _USERNAME_       | DESIGNED - | DW  | REVISED - |                              | II S ROI | UTE 14 (NORTHWEST HIGHWAY) AT EASTERN AVENUE | F.A.<br>RTF | SECTION    | COUNTY  | TOTAL S  | SHEET<br>NO. |
|                              | DRAWN -    | CC  | REVISED - | STATE OF ILLINOIS            |          | ,      |             | 2014-090TS | соок    | 76       | 23           |
| PLOT SCALE = 20.0000 ' / in. | CHECKED -  | JDH | REVISED - | DEPARTMENT OF TRANSPORTATION |          | SCHEDULE OF QUANTITIES AND CABLE PLAN        |             |            | CONTRAC | T NO. 67 | 2A42         |
| PLOT DATE = 2/2/2015         | DATE -     |     | REVISED - |                              | SCALE:   | SHEET NO. OF SHEETS STA. TO STA.             |             | ILLINOIS   |         |          |              |
|                              |            |     |           |                              |          |  |             |            | •       |          |              |

GREEN

TRACER-CABLE

INTERCONNECT TO LAKE COOK RD.

U.S. RTE. 14 (NORTHWEST HWY.)

> NO. 6-GREEN

#### SEQUENCE OF OPERATION

| MOVEMENT N  |     |    |     | 1-              | •<br>• | - 5        |     |                | 1              | =              | <i>b</i>       |                  | 4              | - 5        |                 |                |                |                | 6-              | <u>→</u> 2  |                |                |                 |               | <b>†</b>       | 1             |                  |     |                | 1               |                      |     |   |
|---|-----|----|-----|-----------------|--------|------------|-----|----------------|----------------|----------------|----------------|------------------|----------------|------------|-----------------|----------------|----------------|----------------|-----------------|-------------|----------------|----------------|-----------------|---------------|----------------|---------------|------------------|-----|----------------|-----------------|----------------------|-----|---|
| PHASE   | T   |    |     |                 | 1+5    |            |     |                |                | 1+6            |                |                  | 1              | 2+5        |                 |                |                |                | 2               | +6          |                |                |                 |               |                | 3             |                  |     |                | 4               | - 54                 |     |   |
| INTERVAL  |     | 1  | 2A  | 28              | 3A     | 38         | 4A  | 48             | 5              | 6A             | 68             | 7                | 8              | 94         | 98              | 10             | 11             | 12A            | 128             | 13A         | 138            | 14A            | 148             | 15            | 16             | 17A           | 178              | 18  | 19A            | 198             | 190                  | 190 |   |
| CHANGE TO   | /   | 1  | 1   | +6              | 1      | +5         |     | 2+6            | /              | 2              | +6             | 9                | 9              | 2          | +6              | /              | /              | 1              | +5<br>3<br>4    | 1           | +6             | 2              | +5              | /             | /              | 1+5<br>1+6    | 2+5<br>2+6<br>4  | /   |                | 1               | +5<br>+6<br>+5<br>+6 |     |   |
| U.S. RTE. 14 (NORTHWEST HWY.) NEAR W/E  | 3 4 | R  | R   | R               | R      | R          | R   | R              | R              | R              | R              | G                | G              | G          | G               | G              | G              | Y              | R               | Y           | R              | G              | G               | R             | R              | R             | R                | P   | R              | R               | R                    | R   |   |
| U.S. RTE. 14 (NORTHWEST HWY.) W/E   | -6  | 9  | 4+  | <del>+</del> ₽- | 46     | -6         | 4 Y | <del>4 ∏</del> | <del>4 R</del> | <del>+ ∩</del> | <b>→</b> R     | <b>◆</b> G-      | +6             | <b>+</b> * | <del>4 ft</del> | <del>+ R</del> | <del>4 ∩</del> | <del>4 R</del> | <del>+ 17</del> | <b>◆</b> ⊕  | <del>4 R</del> | <del>4</del> ₽ | <del>4 R</del>  | <del>◆R</del> | <b>+</b> ∩     | <b>→</b> n    | <del>+</del> ₽-  | 40  | <del>4 ∩</del> | <del>4 ft</del> | <del>4 R</del> -     | 4   | 1 |
| U.S. RTE. 14 (NORTHWEST HWY.) NEAR E/B<br>RIGHT. FAR RIGHT AND MID MAST ARM SIGNALS | F   | R  | R   | R               | R      | R          | R   | R              | G              | G              | G              | R                | R              | R          | R               | G              | G              | Y              | R               | G           | G              | Y              | R               | R             | R              | R             | R                | F   | R              | R               | R                    | R   |   |
| U.S. RTE. 14 (NORTHWEST HWY.) END MAST ARM AND FAR LEFT SIGNALS                     | 40  | 9- | • 0 | <del>+0</del> - | 44     | <b>→</b> ∩ | 4×  | <b>→R</b> -    | 4-6-           | 44             | <del>4 ∩</del> | <del>• R</del> - | <del>◆ R</del> | <b>4</b> ₽ | <b>→</b> R      | <del>+R</del>  | <b>→</b> R     | <b>→</b> R-    | <del>4 ()</del> | <b>●</b> R- | <del>4 R</del> | <del>4 R</del> | <del>4 ft</del> | <b>◆R</b>     | <del>4 R</del> | <del>+∩</del> | <del>+ R</del> - | -+  | <del>+</del> ₽ | <del>4 R</del>  | <del>4</del> ₽       | 4   | - |
| EASTERN AVE. (SOUTH OF TRACKS) N/B  | F   | R  | R   | R               | R      | R          | R   | R              | R              | R              | R              | R                | R              | R          | R               | R              | R              | R              | R               | R           | R              | R              | R               | R             | R              | R             | R                | C   | Y              | R               | R                    | R   |   |
| EASTERN AVE. (NORTH OF TRACKS) N/E FAR RIGHT MAST ARM SIGNALS                       | F   | R  | R   | R               | R      | R          | R   | R              | R              | R              | R              | R                | R              | R          | R               | R              | R              | R              | R               | R           | R              | R              | R               | R             | R              | R             | R                | C   | G              | G               | Y                    | R   |   |
| EASTERN AVE. (NORTH OF TRACKS) N/E END MAST ARM AND FAR LEFT SIGNALS                | F   | R  | R   | R               | R      | R          | R   | R              | R              | R              | R              | R                | R              | R          | R               | R              | R              | R              | R               | R           | R              | R              | R               | R             | R              | R             | R                | - 6 | <b>→</b> G     | <b>46</b>       | Y                    | R   |   |
| EASTERN AVE. S/E<br>FAR RIGHT MAST ARM SIGNAL                                       | F   | R  | R   | R               | R      | R          | R   | R              | R              | R              | R              | R                | R              | R          | R               | R              | R              | R              | R               | R           | R              | R              | R               | G             | G              | Y             | R                | F   | R              | R               | R                    | R   |   |
| EASTERN AVE. S/E  | F   | R  | R   | R               | R      | R          | R   | R              | R              | R              | R              | R                | R              | R          | R               | R              | R              | R              | R               | R           | R              | R              | R               | -6            | <b>→</b> G     | Y             | R                | P   | R              | R               | R                    | R   | I |
| PEDESTRIAN SIGNALS CROSSING EASTERN<br>EVE. ON NORTH SIDE OF U.S. RTE. 14           | 1   | н  | н   | н               | н      | н          | н   | н              | н              | н              | н              | *P               | **FH           | н          | н               | •p             | **FH           | н              | н               | н           | н              | н              | н               | н             | Н              | н             | н                | k   | н              | н               | Н                    | н   |   |
| PEDESTRIAN SIGNALS CROSSING U.S.<br>RTE. 14 ON WEST SIDE OF EASTERN AVE.            | 1   | н  | н   | н               | н      | н          | Н   | н              | н              | н              | н              | Н                | н              | н          | н               | н              | н              | н              | н               | н           | н              | н              | н               | 'P            | **FH           | н             | н                | , k | н              | Н               | н                    | н   |   |

. TO APPEAR ONLY UPON PUBLISHED ACTUATION

TO STAND ONLY OF THE MATE AT THE COMPLETION
OF THE PEOSETRIAN INTERNAL CLEARANCE.

THIS TO THE PEOSETRIAN INTERNAL CLEARANCE.

THIS TO THE BI-DIRECTIONAL STRAIGHT THROUGH MOVEMENT
IF THE LEFT ARROW TIME IS NOT SUFFICIENT TO COMPLETE

FH = ILLUMENATED FLASHING MAND = FLASHING DON'T MALK
H = ILLUMENATED SOLID HIND = DON'T MALK
PHASES 2 AND 6 SHALL BE PLACED ON RECALL

IF THE LEFT ARROW TIME IS NOT SUFFICIENT TO COMPLETE

"FOR FLASHING."

"AND FLASHING."

"ARE INDICATED IN THE SEQUENCE OF OPERATION.

P = ILLUMENATED PERSON : WALK

PREEMPTOR PREEMPTOR PREEMPTOR PREEMPTOR NUMBER 3 NUMBER 4 NUMBER 5 NUMBER 6 NUMBER 2

| CHANGE FROM NORMAL SEQUENCE OF<br>OPERATION INTERVAL NUMBER                         |     | 1          |      | 5              |                | 7               | 1             | 10              |                | 15            |                 | 8              | -              | 1               |            |                |                  |            |     | . 0        |                  |                |                |                  |                           |
|---|-----|------------|------|----------------|----------------|-----------------|---------------|-----------------|----------------|---------------|-----------------|----------------|----------------|-----------------|------------|----------------|------------------|------------|-----|------------|------------------|----------------|----------------|------------------|---------------------------|
| CHANGE FROM EMERGENCY VEHICLE PREEMPTION<br>SEQUENCE OF OPERATION INTERVAL NUMBER   |     |            |      |                |                | 100             |               | a -             | はない            |               |                 |                |                | 2               |            | 3 .            |                  | 4          |     | 5          |                  | L              |                |                  | ,                         |
| RAILROAD PREEMPTION SEQUENCE OF OPERATION INTERVAL NUMBER                           | 14  | 18         | 10   | 10             | 1E             | 1F              | 10            | 1H              | ij             | 1K            | 1L              | IM             | 1N             | 19              | 10         | 1R             | 15               | 17         | 10  | 1٧         | 2                | 3              | 4              | 5                | CLEAR                     |
| CHANGE TO RAILROAD PREEMPTION<br>SEQUENCE OF OPERATION INTERVAL NUMBER              | 18  | 2          | 10   | 2              | 1F             | 2               | 1H            | 2               | 1K             | 2             | 1M              | 2              | 1P             | 2               | 1R         | 2              | 17               | 2          | 17  | 2          | 3                | 4              | 5              |                  | . TO<br>NORMAL<br>SEQUENC |
| U.S. RTE. 14 (NORTHWEST HWY.) NEAR W/E<br>RIGHT, FAR RIGHT AND MID MAST ARM SIGNALS | R   | R          | R    | R              | Y              | R               | Y             | R               | R              | R             | R               | R              | R              | R               | Y.         | R              | R                | R          | R   | R          | R                | R              | R              | G                | Δ                         |
|   | 4×  | <b>→</b> R | +-R- | <b>→</b> R     | **             | 4₽              | +11-          | <del>4</del> ₽  | <b>→</b> R-    | <del>+∩</del> | <del>4</del> П- | <del>4∏</del>  | <del>4</del> ₽ | 48              | 44         | <del>4 ∏</del> | <del>4 N</del>   | <b>→</b> R | *#  | <b>→</b> ⊕ | , <del>4 ∩</del> | <b>→</b> ft    | <del>4 ∏</del> | <del>→ R</del> - | Δ                         |
| U.S. RTE. 14 (NORTHWEST HWY.) NEAR RIGHT, FAR RIGHT AND MID MAST ARM SIGNALS        | R   | R          | Y    | R              | R              | R               | Y             | R               | R              | R             | R               | R              | Y              | R               | R          | R              | R                | R          | R   | R          | · R              | R              | R              | G                | Δ                         |
| U.S. RTE. 14 (NORTHWEST HWY.) E/B<br>END MAST ARM AND FAR LEFT SIGNALS              | +   | ◆R         | ++   | <del>→ R</del> | <del>4 ∏</del> | <del>4</del> ft | <del>+R</del> | <del>* ()</del> | <del>4 R</del> | <del>+R</del> | <del>◆R</del>   | <del>4 R</del> | <b>4</b> +     | <del>4   </del> | <b>→</b> R | ◆ R            | <del>+ ∩</del> - | <b>+</b> ₽ | **  | ◆R         | <del>◆ R</del>   | <del>4 R</del> | <b>→</b> R     | <del>→ R</del>   | Δ                         |
| EASTERN AVE. (SOUTH OF TRACKS) N/E  | R   | R          | R    | R              | R              | R               | R             | R               | R              | R             | Y               | R              | R              | R               | R          | R              | R                | R          | Y   | R          | R                | R              | R              | R                | Δ                         |
| EASTERN AVE. (NORTH OF TRACKS) N/E<br>FAR RIGHT MAST ARM SIGNALS                    | R   | R          | R    | R              | R              | R               | R             | R               | R              | R             | G               | C              | R              | R               | R          | R              | R                | R          | C   | C          | G                | Y              | R              | R                | Δ                         |
| EASTERN AVE. (NORTH OF TRACKS) N/E<br>END MAST ARM AND FAR LEFT SIGNALS             | R   | R          | R    | R              | R              | R               | R             | R               | R              | R             | G<br>+6         | 46             | R              | R               | R          | R.             | R                | R          | -C  | -G-        | G<br>→6-         | Y              | R              | R                | Δ                         |
| EASTERN AVE. S/E FAR RIGHT MAST ARM SIGNAL  | R   | R          | R    | R              | R              | R               | R             | R               | Y              | R             | R               | R              | R              | R               | R          | R              | Y                | R          | R   | R          | R                | R              | R              | R                | Δ                         |
| EASTERN AVE. END MAST ARM AND FAR LEFT SIGNALS                                      | R   | R          | R    | R              | R              | R               | R             | R               | Y              | R             | R               | R              | R              | R               | R          | R              | Y                | R          | R   | R          | R                | R              | R              | R                | Δ                         |
| PEDESTRIAN SIGNALS CROSSING EASTERN<br>AVE. ON NORTHSIDE OF U.S. RTE. 14            | н   | н          | н    | н              | FH             | н               | FH            | н               | н              | н             | н               | н              | н              | н               | н          | н              | н                | н          | В   | н          | н                | н              | н              | н                | Δ                         |
| PEDESTRIAN SIGNALS CROSSING U.S.<br>RTE. 14 ON WESTSIDE OF EASTERN AVE.             | н   | - 11       | -11  | -н             | н              | н-              | -н            | н               | -FH            | - н           | Н               | н              | -н             | -н-             | н          | н              | -н -             | -н -       | -н  | н          | —-н              | -H-            | -н -           | -н -             | Δ                         |
| U.S. RTE. 14 (NORTHWEST HWY.) E/B ILLUMINATED NO RIGHT TURN SIGNS                   | NRT | NRT        | NRT  | NRT            | NRT            | NRT             | NRT           | NRT             | NRT            | NRT           | NRT             | NRT            | NRT            | NRT             | NRT        | NRT            | NRT              | NRT        | NRT | NRT        | NRT              | NRT            | NRT            | NRT              | Δ                         |
|   |     |            |      |                |                |                 |               |                 |                |               |                 |                |                |                 |            |                |                  |            |     |            |                  |                |                | HOLD             |                           |

RAILROAD PREEMPTION SEQUENCE OF OPERATION

A RAILROAD PREEMPTION SEGENCE SHALL PROVIDE THE PROPER CLEARANCE INTERVAL TO RESUME THE NORMAL SEGURNEE OF OPERATION OF PROPER CLEARANCE INTERVAL TO DISPLAY AN EMERGENCY VEHICLE INTERVAL UF APPLICABLED AFTER RAILROAD PREEMPTION INTERVAL 5 IS TERMINATED.

NFT = "NO RIGHT TURN" OR

NLT = "NO LEFT TURN" OR

P = ILLUMINATED PERSON = "WALK"

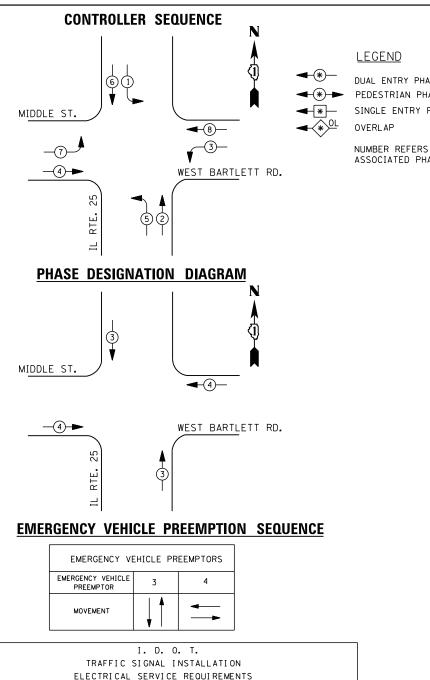
TH = ILLUMINATED FLASHING HAND = FLASHING DON'T WALK

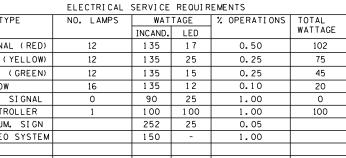
H = ILLUMINATED SOLID HAND = DON'T WALK

|  |      |   |    |               |                  | EME | RGE        | NCY Y      | VEHIC         | LE P           | REEM       | PTIO       | N SE       | QUEN          | CE O       | F OP        | ERAT | ION    |       |     |                   |                  |                |             |                |                |                |            |                |                |                 |                |                   | PREEMPTOR<br>NUMBER 3 | PREEMPTOR<br>NUMBER 4 | PREEMPTOR<br>NUMBER 5 | PREEMPTOR<br>NUMBER 6 |                                |
|--|------|---|----|---------------|------------------|-----|------------|------------|---------------|----------------|------------|------------|------------|---------------|------------|-------------|------|--------|-------|-----|-------------------|------------------|----------------|-------------|----------------|----------------|----------------|------------|----------------|----------------|-----------------|----------------|-------------------|-----------------------|-----------------------|-----------------------|-----------------------|--------------------------------|
| CHANGE FROM NORMAL SEQUENCE OF OPERATION INTERVAL NUMBER                     | T    | 1 |    | 1             | 1                |     | 1          | 5          |               | 5              |            | 7          |            | 7             |            | 10          |      |        |       | 10  |                   |                  | 10             |             |                | 15             |                | 15         |                | 1              | 18              |                | 18                |                       |                       |                       |                       | CLEAR TO<br>NORMAL<br>SEQUENCE |
| EMERGENCY VEHICLE PREEMPTION SEQUENCE OF OPERATION INTERVAL NUMBER           | 1    | A | 18 | 10            | 10               | ΙE  | 1F         | 16         | 1H            | 1,1            | 1K         | IL         | 1M         | IN            | 1P         | 10          | 18   | 13     | S 1   | T   | 10                | 17               | 1W             | 1X          | 14             | 1Z             | 1AA            | 183        | 100            | 1DD            | 1EE             | 1FF            | 1GG               | 2                     | 3                     | 4                     | 5                     |                                |
| CHANGE TO EMERGENCY VEHICLE PREEMPTION SEQUENCE OF OPERATION INTERVAL NUMBER | 1    | В | 2  | 10            | 3                | 1F  | 4 0        | 2          | 13            | 3, 4<br>DR 5   | 1L         | 1M         | 2. 4<br>OR | 5 3           | 10         | 18          | 2    | 17     | T 1   | ıu  | 3                 | 19               | -1X            | 4 OR<br>5   | 17             | 1AA            | 2. 3<br>OR 5   | 4          | 100            | 1EE            | 1FF             | 2. 3<br>OR 4   | 5                 |                       |                       |                       |                       | <b>\Q</b>                      |
| U.S. RTE. 14 NEAR RIGHT.<br>FAR RIGHT AND MID MAST ARM SIGNALS               | 3    | R | R  | R             | R                | R   | R          | R          | R             | R              | G          | Y          | R          | G             | G          | Y           | R    | 1      | G     | C   | G                 | G                | Y              | R           | R              | R              | R              | R          | R              | R              | R               | R              | R                 | R                     | G                     | R                     | R                     | <b>\Q</b>                      |
| U.S. RTE. 14 (NORTHWEST HWY.) W/B  | 4    | ¥ | n- | <del>+6</del> | <del>+ 6</del> - | -+- | <b>+</b> ₽ | →R-        | <del>◆R</del> | <del>• ∏</del> | 46         | 4          | <b>→R</b>  | <del>40</del> | ◆R         | <b>→</b> fi | -    | +   +1 | n- +1 | R   | A .               | <del>+   -</del> | <del>4</del> ₽ | +R-         | <del>+ ∩</del> | <del>→ R</del> | <del>+ ∏</del> | *          | <del>• ∩</del> | <b>→</b> (1)   | <del>◆ ft</del> | <del>4 ∩</del> | <b>◆</b> ₽        | <del>4 R</del>        | +6                    | <del>+</del> ₽        | <del>◆</del> R-       | <b>\Q</b>                      |
| U.S. RTE. 14 NEAR RIGHT. FAR RIGHT AND MID MAST ARM SIGNALS                  | 3    | R | R  | R             | R                | R   | R          | G          | Y             | R              | R          | R          | R          | R             | C          | G           | G    |        | G ,   | Υ.  | R                 | G                | Y              | R           | R              | R              | R              | R          | R              | R              | R               | R              | R                 | C                     | Я                     | R                     | R                     | 0                              |
| U.S. RTE. 14 (NORTHWEST HWY.) E/B<br>END MAST ARM AND FAR LEFT SIGNALS       | 3 -4 | g | 6- | 4+            | <del>4 R</del>   | **  | <b>→R</b>  | <b>→</b> 6 | 44            | <del>◆ R</del> | <b>→</b> R | <b>◆</b> R | <b>→</b> R | **            | <b>→</b> R | <b>→</b> P  | -    | + +6   | + +   | # - | • <del>-</del> R- | <del>◆∏</del>    | <b>₽</b>       | <b>+R</b> - | <del>4</del> # | ◆R-            | <b>→</b> R     | <b>→</b> ⊕ | <b>◆</b> Ĥ-    | <del>411</del> | <del>◆ R</del>  | <b>→</b> R     | <del>•   </del> - | <del>4-6</del> '      | <b>→</b> #            | <del>+ ∩</del>        | <del>◆</del> ·R       | 0                              |
| EASTERN AVE. (SOUTH OF TRACKS) N/B<br>ALL SIGNALS                            | 3    | R | R  | R             | R                | R   | R          | R          | R             | R              | R          | R          | R          | R             | R          | Я           | R    | R      | 2 1   | R   | R                 | R                | R              | R           | R              | R              | R              | A          | Y              | R              | R               | R              | G                 | R                     | Я                     | R                     | G                     | <b>\Q</b>                      |
| EASTERN AVE. (NORTH OF TRACKS) N/B<br>FAR RIGHT MAST ARM SIGNALS             | 3    | R | R  | R             | R                | R   | R          | R          | R             | R              | R          | R          | R          | R             | R          | R           | R    | R      | 1     | R   | R                 | R                | R              | R           | R              | R              | R              | R          | G              | G              | Y               | R              | G                 | R                     | F                     | R                     | G                     | <b>♦</b>                       |
| EASTERN AVE. (NORTH OF TRACKS) N/B<br>END MAST ARM AND FAR LEFT SIGNALS      | 3    | R | R  | R             | R                | R   | R          | R          | R             | R              | R          | R          | R          | R             | R          | R           | R    | R      | 2 1   | R   | R                 | R                | R              | R           | R              | R              | R              | В          | -6             | -6<br>-6       | Y               | R              | <del>-6</del>     | R                     | Я                     | R                     | -G                    | 0                              |
| EASTERN AVE. S/B<br>FAR RIGHT MAST ARM SIGNAL                                | 3    | R | R  | R             | R                | R   | R          | R          | R             | R              | R          | R          | R          | R             | R          | R           | R    | R      | 1 1   | R   | R                 | R                | R              | R           | G              | Y              | R              | C          | R              | R              | R               | R              | R                 | R                     | F                     | С                     | Я                     | <b>♦</b>                       |
| EASTERN AVE.<br>END MAST ARM AND FAR LEFT SIGNALS                            | 3    | R | R  | R             | R                | R   | R          | R          | R             | R              | R          | R          | R          | R             | R          | R           | R    | R      | 3 1   | R   | R                 | R                | R              | R           | <del>-6</del>  | Y              | R              | -G         | R              | R              | R               | R              | R                 | R                     | Я                     | -G                    | R                     | <b>\Q</b>                      |
| PEDESTRIAN SIGNALS CROSSING EASTERN<br>AVE. ON NORTHSIDE OF U.S. RTE. 14     | 1    | н | н  | н             | н                | н   | н          | н          | н             | н              | FH         | н          | тн         | FH            | FH         | н           | н    | F      | н     | н   | н                 | FH               | н              | н           | н              | н              | н              | н          | н              | н              | н               | н              | н                 | Н                     | н                     | н                     | н                     | 0                              |
| PEDESTRIAN SIGNALS CROSSING U.S.<br>RTE. 14 ON WESTSIDE OF EASTERN AVE.      | 1    | н | н  | н             | н                | н   | н          | н          | н             | н              | н          | н          | н          | н             | н          | н           | н    | ,      | 4     | н   | н                 | н                | н              | н           | FH             | н              | н              | FH         | н              | н              | н               | н              | н                 | н                     | н                     | н                     | н                     | <b>\Q</b>                      |

TS #4695 BARRINGTON (SH. 2)

| us | SER NAME = _USERNAME_      | DESIGNED -<br>DRAWN - | CC  | REVISED -<br>REVISED - | STATE OF ILLINOIS            |          |           |          |        |           | TERN AVENUE<br>UENCE OF OPERATION, | RTE. | SECTION 2014-090TS | COUNTY | TOTAL SHEET<br>SHEETS NO. |
|----|----------------------------|-----------------------|-----|------------------------|------------------------------|----------|-----------|----------|--------|-----------|------------------------------------|------|--------------------|--------|---------------------------|
| PL | LOT SCALE = 20.0000 '/ in. | CHECKED -             | JDH | REVISED -              | DEPARTMENT OF TRANSPORTATION | AND EMER | GENCY VEH | ICLE PRI | EEMTIO | N SEQUENC | E OF OPERATION                     |      | 2017 00070         |        | NO. 62A42                 |
| PL | LOT DATE = 2/2/2015        | DATE -                |     | REVISED -              |                              | SCALE:   | SHEET NO. | OF       | SHEETS | STA.      | TO STA.                            |      | ILLINOIS           | 1      |                           |





ENERGY COSTS-

FLASHER LED

BILLED TO: IDOT DISTRICT 1

201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096

TOTAL =

342

ENERGY SUPPLY -

CONTACT JOE STACHO 630-424-5704 PHONE

COMMONWEALTH EDISON

DUAL ENTRY PHASE PEDESTRIAN PHASE SINGLE ENTRY PHASE

NUMBER REFERS TO ASSOCIATED PHASE

|              | ELECTRICAL | SERVI CE | REQUI R | EMENTS       |         |
|--------------|------------|----------|---------|--------------|---------|
| TYPE         | NO. LAMPS  | WAT      | TAGE    | % OPERATIONS | TOTAL   |
|              |            | INCAND.  | LED     |              | WATTAGE |
| SIGNAL (RED) | 12         | 1 35     | 17      | 0.50         | 102     |
| (YELLOW)     | 12         | 1 35     | 25      | 0.25         | 75      |
| ( GREEN)     | 12         | 1 35     | 15      | 0.25         | 45      |
| ARROW        | 16         | 1 35     | 12      | 0.10         | 20      |
| PED. SIGNAL  | 0          | 90       | 25      | 1.00         | 0       |
| CONTROLLER   | 1          | 1 00     | 1 00    | 1.00         | 100     |
| ILLUM. SIGN  |            | 252      | 25      | 0.05         |         |
| VIDEO SYSTEM |            | 150      | -       | 1.00         |         |
|              |            |          | ·       |              |         |
|              |            |          |         |              | · ·     |

## **SCHEDULE OF QUANTITIES**

QUANTITY MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION MODIFY EXISTING CONTROLLER CABINET EACH EACH UNINTERRUPTABLE POWER SUPPLY, SPECIAL
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED, RETROFIT
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED, RETROFIT
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED, RETROFIT EACH EACH EACH

NO. 6-GREEN

**CABLE PLAN** 

× √ √ ×

A A O X 7

0 < N - 5

WEST BARTLETT RD.

RETROFIT ALL EXISTING SIGNAL HEADS TO L.E.D.

TS #4457 BARTI ETT

| COMMONWEALTH EDISON         | <u> </u>   |     |           |                              |  |              | DARIL  | .E I I       |
|-----------------------------|------------|-----|-----------|------------------------------|--|--------------|--------|--------------|
| USER NAME = _USERNAME_      | DESIGNED - | DW  | REVISED - |                              | IL ROUTE 25 AT WEST BARTLETT ROAD /MIDDLE STREET               | F.A. SECTION | COUNTY | TOTAL SHEET  |
|                             | DRAWN -    | CC  | REVISED - | STATE OF ILLINOIS            | SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, | 2014-090TS   | KANE   | 76 25        |
| PLOT SCALE = 20.000 ' / in. | CHECKED -  | JDH | REVISED - | DEPARTMENT OF TRANSPORTATION | AND EMERGENCY VEHICLE PREEMPTION SEQUENCE                      |              |        | CT NO. 62A42 |
| PLOT DATE = 2/2/2015        | DATE -     |     | REVISED - |                              | SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.                 | ILLINO       | IS     |              |

R Y G ←Y ←G

**x** ≻ ∪

7-4-07

RTE.

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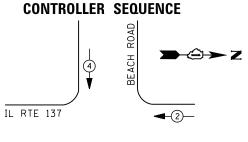
MIDDLE ST.

NO. 6-

R Y G ←Y ←G Y

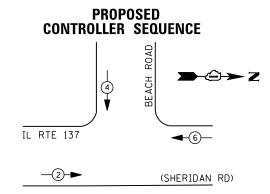
GREEN

**-**(2)**-**►



(SHERIDAN RD)

## PHASE DESIGNATION DIAGRAM



#### PHASE DESIGNATION DIAGRAM

| I. D. O. T.  |            |          |         |              |         |  |  |  |  |
|--------------|------------|----------|---------|--------------|---------|--|--|--|--|
|              | TRAFFIC S  | I GNAL I | NSTALLA | TION         |         |  |  |  |  |
|              | ELECTRICAL | SERVI CE | REQUI R | EMENTS       |         |  |  |  |  |
| TYPE         | NO. LAMPS  | WAT      | TAGE    | % OPERATIONS | TOTAL   |  |  |  |  |
|              |            | INCAND.  | LED     |              | WATTAGE |  |  |  |  |
| SIGNAL (RED) | 9          | 1 35     | 1 7     | 0.50         | 77      |  |  |  |  |
| (YELLOW)     | 9          | 1 35     | 25      | 0.25         | 57      |  |  |  |  |
| ( GREEN)     | 9          | 1 35     | 15      | 0.25         | 34      |  |  |  |  |
| ARROW        |            | 1 35     | 12      | 0.10         |         |  |  |  |  |
| PED. SIGNAL  | 2          | 90       | 25      | 1.00         | 50      |  |  |  |  |
| CONTROLLER   | 1          | 1 00     | 1 00    | 1.00         | 100     |  |  |  |  |
| ILLUM. SIGN  |            | 252      | 25      | 0.05         |         |  |  |  |  |
| VIDEO SYSTEM |            | 150      | ı       | 1.00         |         |  |  |  |  |
|              |            |          |         |              |         |  |  |  |  |
|              |            |          |         |              |         |  |  |  |  |
| FLASHER LED  |            |          |         |              |         |  |  |  |  |
|              |            |          |         | TOTAL =      | 318     |  |  |  |  |

BILLED TO: IDOT DISTRICT 1

CONTACT TERRI BLECK

847-816-5239

PHONE

201 WEST CENTER COURT

COMMONWEALTH EDISON

SCHAUMBURG, IL 60196-1096

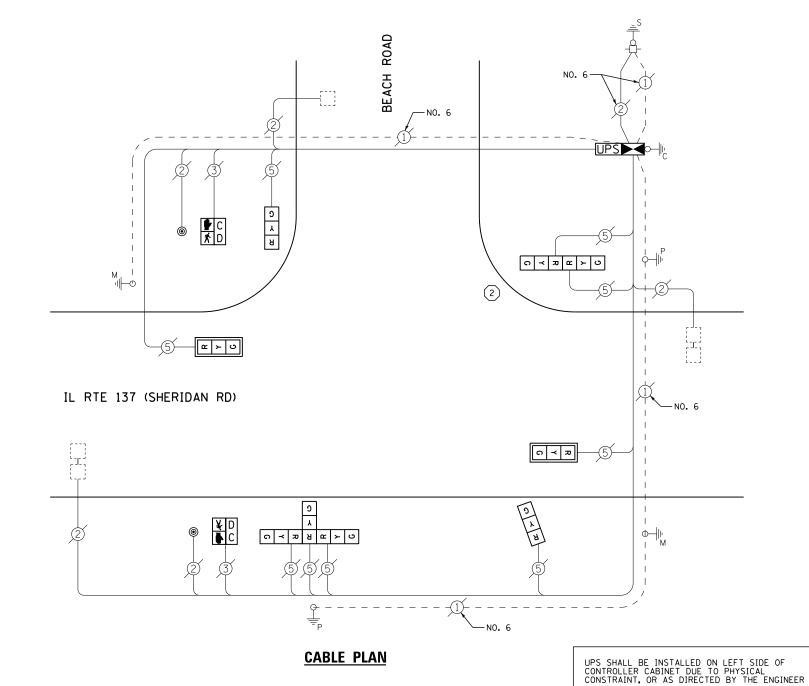
1 REPLACE 10 FT. PAINTED POST. RE-USE EXISTING TYPE A CONCRETE FOUNDATION.

REPLACE 14 FT. PAINTED POST. RE-USE EXISTING TYPE A CONCRETE FOUNDATION.

REPLACE 15 FT. PAINTED POST. RE-USE EXISTING TYPE A CONCRETE FOUNDATION.

REPLACE 16 FT. PAINTED POST. RE-USE EXISTING TYPE A CONCRETE FOUNDATION.

REPLACE 18 FT. PAINTED POST. RE-USE EXISTING TYPE A CONCRETE FOUNDATION.



#### SCHEDULE OF QUANTITIES

| <u>QUANTITY</u> | <u>UNIT</u> | <u>ITEM</u>   |
|-----------------|-------------|---|
| 1               | EACH        | MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION                       |
| 1               | EACH        | FULL-ACTUATED CONTROLLER AND TYPE IV CABINET                              |
| 1               | EACH        | TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.                              |
| 2               | EACH        | SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED                     |
| 2               | EACH        | SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED                      |
| 1               | EACH        | SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED                      |
| 1               | EACH        | SIGNAL HEAD, LED, 3-FACE, 3-SECTION, BRACKET MOUNTED                      |
| 2               | EACH        | PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER |
| 2               | EACH        | TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM                              |
| 3               | EACH        | INDUCTIVE LOOP DETECTOR   |
| 2               | EACH        | PEDESTRIAN PUSH-BUTTON  |
| 1               | EACH        | REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT                                  |
| 1               | EACH        | REMOVE AND REPLACE ANCHOR BOLTS   |
| 1               | EACH        | UNINTERRUPTABLE POWER SUPPLY, SPECIAL                                     |

#### REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

CONTROLLER AND CABINET (COMPLETE)

9 EACH SIGNAL HEAD, 3 - SECTION EACH PEDESTRIAN SIGNAL HEAD PEDESTRIAN PUSH-BUTTON EACH TRAFFIC SIGNAL BACKPLATE FACH EACH SIGNAL POST

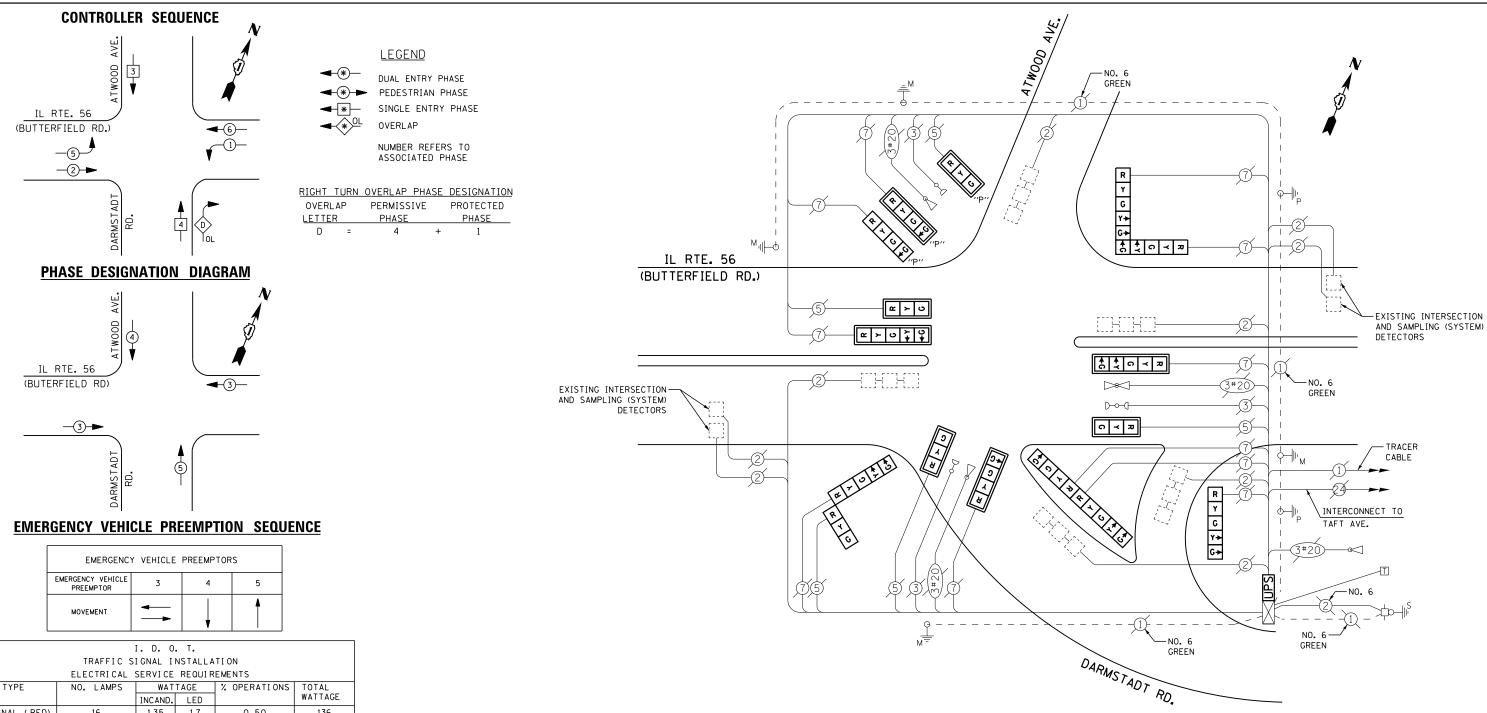
EACH

TS# 7190 BEACH PARK

|                             |            |     |           |                              |  |      |           | DEACH FARK         |
|-----------------------------|------------|-----|-----------|------------------------------|--|------|-----------|--------------------|
| USER NAME = _USERNAME_      | DESIGNED - | DW  | REVISED - |                              | IL ROUTE 137 (SHERIDAN RD) AT BEACH RD         | F.A. | SECTION   | COUNTY TOTAL SHEET |
|                             | DRAWN -    | CC  | REVISED - | STATE OF ILLINOIS            | SCHEDULE OF QUANTITIES, CABLE PLAN,            | 20   | 014-090TS | LAKE 76 26         |
| PLOT SCALE = 20.000 ' / in. | CHECKED -  | JDH | REVISED - | DEPARTMENT OF TRANSPORTATION | AND PHASE DESIGNATION DIAGRAM                  |      |           | CONTRACT NO. 62A42 |
| PLOT DATE = 2/2/2015        | DATE -     |     | REVISED - |                              | SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA. |      | ILLINOIS  |                    |

ENERGY COSTS-

ENERGY SUPPLY -



|              | TRAFFIC S  | I GNAL I | NSTALLA | TION         |         |
|--------------|------------|----------|---------|--------------|---------|
|              | ELECTRICAL | SERVI CE | REQUIR  | EMENTS       |         |
| TYPE         | NO. LAMPS  | WAT      | TAGE    | % OPERATIONS | TOTAL   |
|              |            | INCAND.  | LED     |              | WATTAGE |
| SIGNAL (RED) | 16         | 1 35     | 1 7     | 0.50         | 136     |
| (YELLOW)     | 16         | 1 35     | 25      | 0.25         | 100     |
| ( GREEN)     | 20         | 1 35     | 15      | 0.25         | 75      |
| ARROW        | 14         | 1 35     | 12      | 0.10         | 17      |
| PED. SIGNAL  |            | 90       | 25      | 1.00         |         |
| CONTROLLER   | 1          | 1 00     | 100     | 1.00         | 100     |
| ILLUM. SIGN  |            | 252      | 25      | 0.05         |         |
| VIDEO SYSTEM |            | 150      | -       | 1.00         |         |
|              |            |          |         |              |         |
|              |            |          |         |              |         |
| FLASHER LED  |            |          |         |              |         |
|              |            |          |         | TOTAL =      | 428     |

ENERGY COSTS-

BILLED TO: IDOT DISTRICT 1

201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY -

CONTACT JOE STACHO PHONE

630-424-5704 COMMONWEALTH EDISON

#### **SCHEDULE OF QUANTITIES**

#### QUANTITY <u>UNIT</u> MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED SIGNAL HEAD, LED, 1-FACE, 4-SECTION, MAST ARM MOUNTED SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED SIGNAL HEAD, LED, 2-FACE, 5-SECTION, BRACKET MOUNTED SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED SIGNAL HEAD, LED, 2-FACE, 1-4 SECTION, 1-5 SECTION, BRACKET MOUNTED EACH EACH EACH FACH EACH EACH EACH EACH OPTICALLY PROGRAMMED SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED OPTICALLY PROGRAMMED SIGNAL HEAD, LED, 1-FACE, 4-SECTION, BRACKET MOUNTED EACH EACH OPTICALLY PROGRAMMED SIGNAL HEAD, LED, 1-FACE, 4-SECTION, MAST ARM MOUNTED TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM MODIFY EXISTING CONTROLLER CABINET EACH REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT UNINTERRUPTABLE POWER SUPPLY, SPECIAL

#### **CABLE PLAN**

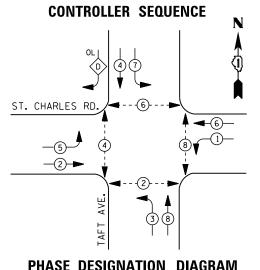
#### REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

SIGNAL HEAD, 3 - SECTION SIGNAL HEAD, 4 - SECTION EACH EACH SIGNAL HEAD, 5 - SECTION EACH EACH TRAFFIC SIGNAL BACKPLATE

> TS #2693 **BERKELEY**

| I IL NOULE 30 (DOTTENTIED NOAD) AT DANINGTADE NOAD / ATVOOD AVENUE   DECTION   COUNTY   | OTAL SHEET |
|---|------------|
|   | HEETS NO.  |
| DRAWN - CC REVISED - STATE OF ILLINOIS SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, 2014-090TS COOK               | 76 27      |
| PLOT SCALE = 20.0000 // In. CHECKED - JDH REVISED - DEPARTMENT OF TRANSPORTATION AND EMERGENCY VEHICLE PREEMPTION SEQUENCE CONTRACT | NO. 62A42  |
| PLOT DATE = 2/2/2015 DATE - REVISED - SCALE: SHEET NO. OF SHEETS STA. TO STA. ILLINOIS  |            |



#### LEGEND

DUAL ENTRY PHASE

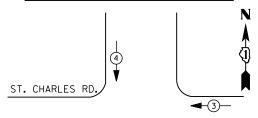
PEDESTRIAN PHASE SINGLE ENTRY PHASE

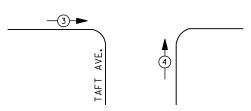
OVERLAP

NUMBER REFERS TO ASSOCIATED PHASE

| RIGHT TURN | OVERLAP | PHASE | DESIGNATION |
|------------|---------|-------|-------------|
| OVERLAP    | PERMIS  | SIVE  | PROTECTED   |
| LETTER     | PHASE   |       | PHASE       |
| D -        | 4       |       | _           |

#### PHASE DESIGNATION DIAGRAM





#### **EMERGENCY VEHICLE PREEMPTION SEQUENCE**

| EMERGENCY VEHICLE PREEMPTORS   |          |          |  |  |  |  |  |  |  |
|--------------------------------|----------|----------|--|--|--|--|--|--|--|
| EMERGENCY VEHICLE<br>PREEMPTOR | 3        | 4        |  |  |  |  |  |  |  |
| MOVEMENT                       | <b>←</b> | <b> </b> |  |  |  |  |  |  |  |

|              | TRAFFIC SIGNAL INSTALLATION |          |        |              |         |  |  |  |  |  |  |
|--------------|-----------------------------|----------|--------|--------------|---------|--|--|--|--|--|--|
|              | ELECTRI CAL                 | SERVI CE | REQUIR | EMENTS       |         |  |  |  |  |  |  |
| TYPE         | NO. LAMPS                   | WAT      | TAGE   | % OPERATIONS | TOTAL   |  |  |  |  |  |  |
|              |                             | INCAND.  | LED    |              | WATTAGE |  |  |  |  |  |  |
| SIGNAL (RED) | 13                          | 1 35     | 1 7    | 0.50         | 111     |  |  |  |  |  |  |
| (YELLOW)     | 13                          | 1 35     | 25     | 0.25         | 82      |  |  |  |  |  |  |
| ( GREEN)     | 13                          | 1 35     | 15     | 0.25         | 49      |  |  |  |  |  |  |
| ARROW        | 20                          | 1 35     | 12     | 0.10         | 24      |  |  |  |  |  |  |
| PED. SIGNAL  | 8                           | 90       | 25     | 1.00         | 200     |  |  |  |  |  |  |
| CONTROLLER   | 1                           | 1 00     | 100    | 1.00         | 100     |  |  |  |  |  |  |
| ILLUM. SIGN  |                             | 252      | 25     | 0.05         |         |  |  |  |  |  |  |
| VIDEO SYSTEM |                             | 150      | -      | 1.00         |         |  |  |  |  |  |  |
|              |                             |          |        |              |         |  |  |  |  |  |  |
|              |                             |          |        |              |         |  |  |  |  |  |  |
| FLASHER LED  |                             |          |        |              |         |  |  |  |  |  |  |
|              |                             |          |        | TOTAL =      | 566     |  |  |  |  |  |  |

I. D. O. T.

ENERGY COSTS-

BILLED TO: IDOT DISTRICT 1

201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY -CONTACT JOE STACHO PHONE

630-424-5704 COMMONWEALTH EDISON

#### SCHEDULE OF QUANTITIES

| <u>QUANTITY</u> | <u>UNIT</u> | <u>I TEM</u>  |
|-----------------|-------------|---|
| 1               | EACH        | MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION                       |
| 4               | EACH        | PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER |
| 1               | EACH        | MODIFY EXISTING CONTROLLER CABINET  |
| 1               | EACH        | REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT                                  |
| 1               | EACH        | UNINTERRUPTABLE POWER SUPPLY, SPECIAL                                     |
| 4               | EACH        | PEDESTRIAN PUSH-BUTTON, NON-LATCHING                                      |
|                 |             |   |

# REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

0 ¥ 3 ♣ D C

PUSHBUTTON "A" SHALL PLACE A CALL IN PHASES 2 & 4 PUSHBUTTON "B" SHALL PLACE A CALL IN PHASES 4 & 6 PUSHBUTTON "C" SHALL PLACE A CALL IN PHASES 6 & 8

PUSHBUTTON "D" SHALL PLACE A CALL IN PHASES 2 & 8

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

8 EACH PEDESTRIAN SIGNAL HEAD PEDESTRIAN PUSH-BUTTON 4 EACH

-NO. 6

GREEN

**CABLE PLAN** 

⊃ Q ♣ ≮ ₽ C ⊀ D

(c) (x)

GREEN

**UPS** 

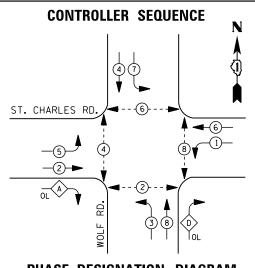
GREEN

TS #5795 BERKELEY

| USER NAME = _USERNAME_       | DESIGNED - | DW  | REVISED - |                              | ST. CHARLES ROAD AT TAFT AVENUE                             | F.A.     | SECTION    | COUNTY   | TOTAL SHEET |
|------------------------------|------------|-----|-----------|------------------------------|---|----------|------------|----------|-------------|
|                              | DRAWN -    | СС  | REVISED - |                              | SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGF | M,   ''' | 2014-090TS | соок     | 76 28       |
| PLOT SCALE = 20.0000 ' / in. | CHECKED -  | JDH | REVISED - | DEPARTMENT OF TRANSPORTATION | AND EMERGENCY VEHICLE PREEMPTION SEQUENCE                   |          |            | CONTRACT | NO. 62A42   |
| PLOT DATE = 2/2/2015         | DATE -     |     | REVISED - |                              | SCALE: SHEET NO. OF SHEETS STA. TO STA.                     |          | ILLINOIS   | ,        |             |

ST. CHARLES RD.

NO. 6-GREEN



#### LEGEND

DUAL ENTRY PHASE **→**(\*) → PEDESTRIAN PHASE

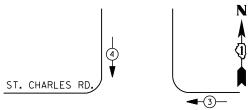
SINGLE ENTRY PHASE

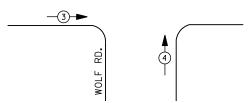
OVERLAP

NUMBER REFERS TO ASSOCIATED PHASE

| RIGHT | TURN | OVERLAP | PHASE | DESIGNATION |
|-------|------|---------|-------|-------------|
| OVEF  | RLAP | PERMIS  | SIVE  | PROTECTED   |
| LETT  | ER   | PHASE   |       | PHASE       |

#### PHASE DESIGNATION DIAGRAM





#### **EMERGENCY VEHICLE PREEMPTION SEQUENCE**

| EMERGENCY VE                | HICLE PREE | MPTORS   |
|-----------------------------|------------|----------|
| EMERGENCY VEHICLE PREEMPTOR | 3          | 4        |
| MOVEMENT                    | <b>←</b>   | <b> </b> |

| TRAFFIC SIGNAL INSTALLATION     |           |         |      |              |         |  |  |  |  |  |
|---------------------------------|-----------|---------|------|--------------|---------|--|--|--|--|--|
| ELECTRICAL SERVICE REQUIREMENTS |           |         |      |              |         |  |  |  |  |  |
| TYPE                            | NO. LAMPS | WAT     | TAGE | % OPERATIONS | TOTAL   |  |  |  |  |  |
|                                 |           | INCAND. | LED  |              | WATTAGE |  |  |  |  |  |
| SIGNAL (RED)                    | 14        | 1 35    | 1 7  | 0.50         | 119     |  |  |  |  |  |
| (YELLOW)                        | 14        | 1 35    | 25   | 0.25         | 88      |  |  |  |  |  |
| ( GREEN)                        | 14        | 1 35    | 15   | 0.25         | 53      |  |  |  |  |  |
| ARROW                           | 24        | 1 35    | 12   | 0.10         | 29      |  |  |  |  |  |
| PED. SIGNAL                     | 8         | 90      | 25   | 1.00         | 200     |  |  |  |  |  |
| CONTROLLER                      | 1         | 1 00    | 100  | 1.00         | 100     |  |  |  |  |  |
| ILLUM. SIGN                     |           | 252     | 25   | 0.05         |         |  |  |  |  |  |
| VIDEO SYSTEM                    |           | 150     | -    | 1.00         |         |  |  |  |  |  |
|                                 |           |         |      |              |         |  |  |  |  |  |
|                                 |           |         |      |              |         |  |  |  |  |  |
| FLASHER LED                     |           |         |      |              |         |  |  |  |  |  |
|                                 |           |         |      | TOTAL =      | 589     |  |  |  |  |  |

I. D. O. T.

ENERGY COSTS-

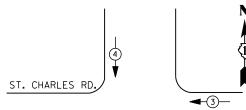
BILLED TO: IDOT DISTRICT 1

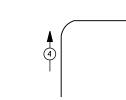
201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY -

CONTACT JOE STACHO

630-424-5704 COMMONWEALTH EDISON

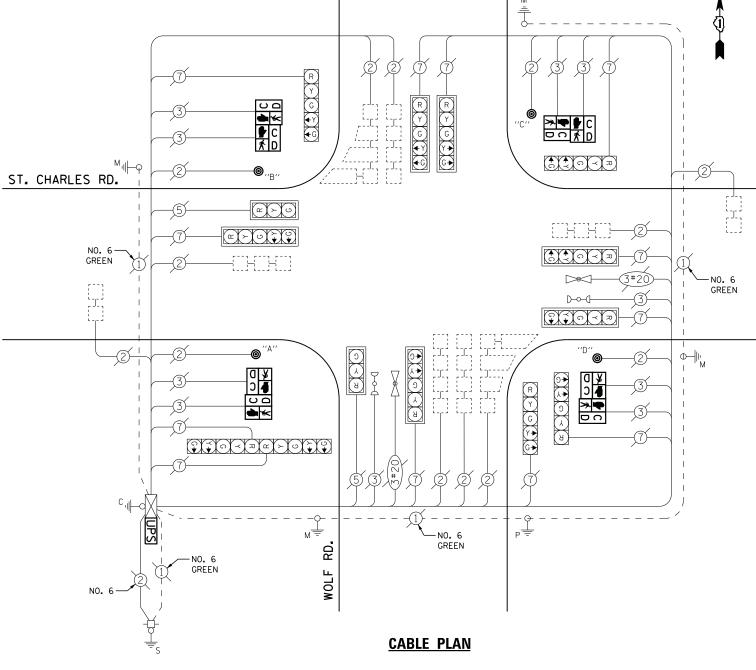




| EMERGENCY VE                | HICLE PREE | MPTORS     |
|-----------------------------|------------|------------|
| EMERGENCY VEHICLE PREEMPTOR | 3          | 4          |
| MOVEMENT                    | <b>+</b>   | <b>↓</b> ↑ |

#### SCHEDULE OF QUANTITIES

| <u>QUANTITY</u> | <u>UNIT</u> | <u>ITEM</u>   |
|-----------------|-------------|---|
| 1               | EACH        | MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION                       |
| 4               | EACH        | PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMEF |
| 1               | EACH        | MODIFY EXISTING CONTROLLER CABINET  |
| 1               | EACH        | REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT                                  |
| 1               | EACH        | UNINTERRUPTABLE POWER SUPPLY, SPECIAL                                     |
| 4               | EACH        | PEDESTRIAN PUSH-BUTTON, NON-LATCHING                                      |



PUSHBUTTON "A" SHALL PLACE A CALL IN PHASES 2 AND 4. PUSHBUTTON "B" SHALL PLACE A CALL IN PHASES 4 AND 6.
PUSHBUTTON "C" SHALL PLACE A CALL IN PHASES 6 AND 8. PUSHBUTTON "D" SHALL PLACE A CALL IN PHASES 2 AND 8.

#### REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

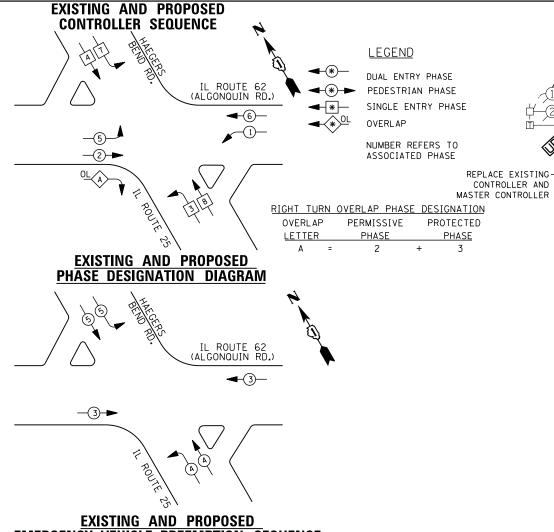
THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

8 EACH PEDESTRIAN SIGNAL HEAD
4 EACH PEDESTRIAN SIGNAL HEAD

EACH PEDESTRIAN PUSH-BUTTON

TS #5800

| COMMONWEALTH ED              | .5011      |     |           |                              |            |                    |            |         |                     |       |            | BEKKELE  | , Y         |
|------------------------------|------------|-----|-----------|------------------------------|------------|--------------------|------------|---------|---------------------|-------|------------|----------|-------------|
| USER NAME = _USERNAME_       | DESIGNED - | DW  | REVISED - |                              |            | ST. CHARLES        | ROAD AT    | WOLF    | ROAD                | F.A.  | SECTION    | COUNTY   | TOTAL SHEET |
|                              | DRAWN -    | CC  | REVISED - | STATE OF ILLINOIS            | SCHEDULE 0 | F QUANTITIES, CABL | .E PLAN, I | PHASE D | ESIGNATION DIAGRAM, | 11112 | 2014-090TS | соок     | 76 29       |
| PLOT SCALE = 20.0000 ' / in. | CHECKED -  | JDH | REVISED - | DEPARTMENT OF TRANSPORTATION | A          | ND EMERGENCY VEI   | HICLE PRI  | EMPTIO  | N SEQUENCE          |       |            |          | T NO. 62A42 |
| PLOT DATE = 2/2/2015         | DATE -     |     | REVISED - |                              | SCALE:     | SHEET NO. OF       | SHEETS     | STA.    | TO STA.             |       | ILLINOIS   | <u> </u> |             |



# EMERGENCY VEHICLE PREEMPTION SEQUENCE

| EMERGENO                    | CY VEHICLE | PREEMPTO | RS |
|-----------------------------|------------|----------|----|
| EMERGENCY VEHICLE PREEMPTOR | 3          | 4        | 5  |
| MOVEMENT                    | <b>←</b>   | 1        |    |

I. D. O. T.

TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS WATTAGE % OPERATIONS TOTAL WATTAGE INCAND. LED SIGNAL (RED) 153 1 35 17 0.50 18 (YELLOW) 1 35 25 0.25 113 18 (GREEN) 18 1 35 15 0.25 68 1 35 12 0.10 15 PED. SIGNAL 90 25 1.00 CONTROLLER 100 100 1.00 100 ILLUM. SIGN 252 25 0.05 VIDEO SYSTEM 1.00 150

> TOTAL = 449

ENERGY COSTS-

BILLED TO: IDOT DISTRICT 1

201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY -

CONTACT JOE STACHO PHONE 630-424-5704

COMMONWEALTH EDISON

**SCHEDULE OF QUANTITIES** 

QUANTITY <u>UNIT</u> EACH MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION TRANSCEIVER - FIBER OPTIC FACH EACH INDUCTIVE LOOP DETECTOR REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT EACH FULL-ACTUATED CONTROLLER AND TYPE V CABINET, SPECIAL EACH MASTER CONTROLLER (SPECIAL) EACH UNINTERRUPTABLE POWER SUPPLY, SPECIAL

CONTRACTOR SHALL RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT TO NEW CONTROLLER CABINET. THE COST OF THIS WORK SHALL BE INCLUDED IN THE FULL-ACTUATED CONTROLLER AND TYPE V CABINET, SPECIAL PAY ITEM.

GREEN

-NO. 6

NO. 6-

TRACER CABLE -

INTERCONNECT TO-COUNTY LINE RD.

GREEN

#### REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

TRAFFIC SIGNAL CONTROLLER AND CABINET (COMPLETE) EACH

EACH MASTER CONTROLLER

GREEN

**CABLE PLAN** 

**PF05** 

EACH UNINTERRUPTABLE POWER SUPPLY

> TS #760 CARPENTERSVILLE

> > COUNTY

KANE 76 30

CONTRACT NO. 62A42

EXISTING INTERSECTION

AND SAMPLING (SYSTEM) DETECTORS

IL ROUTE 62 (ALGONQUIN RD.)

THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS INTERSECTION SHALL BE "EAGLE" TO MATCH THE EXISTING ADJACENT SYSTEM

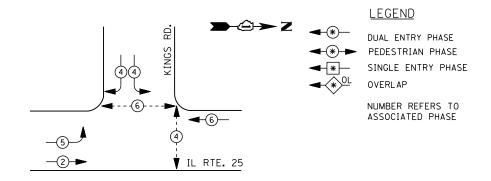
SECTION

2014-090TS

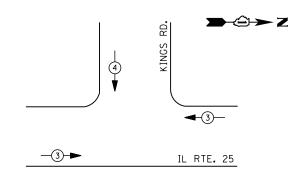
| USER NAME = _USERNAME_      | DESIGNED - | DW  | REVISED - |                              | IL ROUTE 25 /I | IAEGERS BE | ND RO  | AD AT I   | L ROUTE 62 (AL | GONQUIN ROAD) |
|-----------------------------|------------|-----|-----------|------------------------------|----------------|------------|--------|-----------|----------------|---------------|
|                             | DRAWN -    | CC  | REVISED - | STATE OF ILLINOIS            | SCHEDULE OF    | QUANTITIES | , CABL | E PLAN, F | PHASE DESIGNA  | TION DIAGRAM, |
| PLOT SCALE = 20.000 ' / in. | CHECKED -  | JDH | REVISED - | DEPARTMENT OF TRANSPORTATION | ANI            | ) EMERGEN  | CY VEH | IICLE PRE | EMPTION SEQU   | IENCE         |
| PLOT DATE = 2/2/2015        | DATE -     |     | REVISED - |                              | SCALE: N.T.S.  | SHEET NO.  | OF     | SHEETS    | STA.           | TO STA.       |

ARROW FLASHER LED

#### CONTROLLER SEQUENCE



#### PHASE DESIGNATION DIAGRAM



#### **EMERGENCY VEHICLE PREEMPTION SEQUENCE**

| EMERGENCY VE                | HICLE PREE | MPTORS   |
|-----------------------------|------------|----------|
| EMERGENCY VEHICLE PREEMPTOR | 3          | 4        |
| MOVEMENT                    | <b>←</b>   | <b>\</b> |

| I. D. O. T.                 |              |                                 |         |      |              |         |  |  |  |  |  |
|-----------------------------|--------------|---------------------------------|---------|------|--------------|---------|--|--|--|--|--|
| TRAFFIC SIGNAL INSTALLATION |              |                                 |         |      |              |         |  |  |  |  |  |
|                             |              | ELECTRICAL SERVICE REQUIREMENTS |         |      |              |         |  |  |  |  |  |
|                             | TYPE         | NO. LAMPS                       | WAT     | TAGE | % OPERATIONS | TOTAL   |  |  |  |  |  |
|                             |              |                                 | INCAND. | LED  |              | WATTAGE |  |  |  |  |  |
|                             | SIGNAL (RED) | 11                              | 1 35    | 1 7  | 0.50         | 94      |  |  |  |  |  |
|                             | ( YELLOW)    | 11                              | 1 35    | 25   | 0.25         | 69      |  |  |  |  |  |
|                             | ( GREEN)     | 11                              | 1 35    | 15   | 0.25         | 42      |  |  |  |  |  |
|                             | ARROW        | 4                               | 1 35    | 12   | 0.10         | 5       |  |  |  |  |  |
|                             | PED. SIGNAL  | 4                               | 90      | 25   | 1.00         | 100     |  |  |  |  |  |
|                             | CONTROLLER   | 1                               | 1 00    | 100  | 1.00         | 100     |  |  |  |  |  |
|                             | ILLUM. SIGN  |                                 | 252     | 25   | 0.05         |         |  |  |  |  |  |
|                             | VIDEO SYSTEM |                                 | 150     | -    | 1.00         |         |  |  |  |  |  |
|                             |              |                                 |         |      |              |         |  |  |  |  |  |
|                             |              |                                 |         |      |              |         |  |  |  |  |  |
|                             | FLASHER LED  |                                 |         |      |              |         |  |  |  |  |  |
| 1                           |              |                                 |         |      | TOTAL =      | 410     |  |  |  |  |  |

ENERGY COSTS-

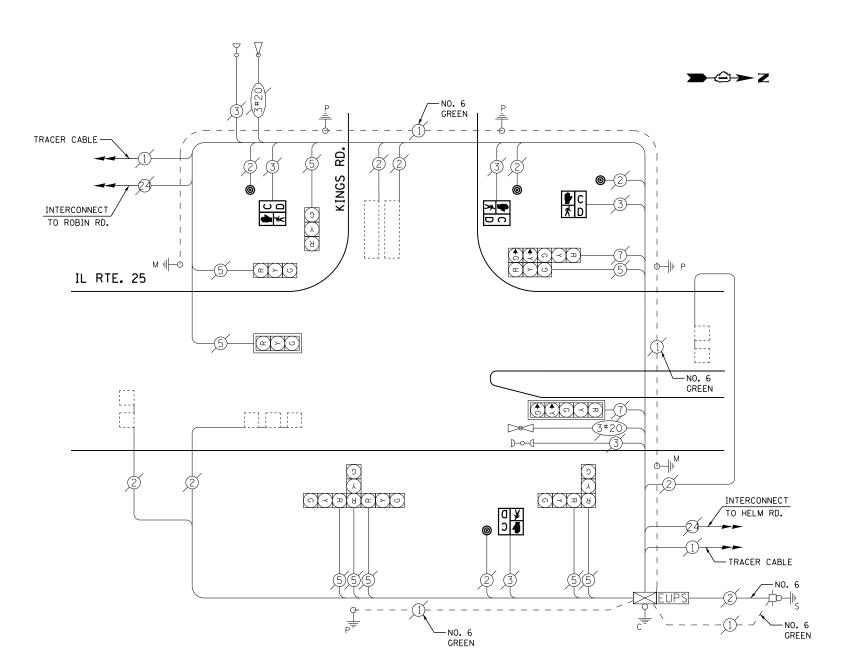
BILLED TO: IDOT DISTRICT 1

ENERGY SUPPLY -

CONTACT JOE STACHO

COMMONWEALTH EDISON

# 201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096 630-424-5704



#### **CABLE PLAN**

#### SCHEDULE OF QUANTITIES

| <u>QUANTITY</u> | <u>UNIT</u> | ITEM  |
|-----------------|-------------|---|
| 1               | EACH        | MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION                       |
| 4               | EACH        | PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER |
| 4               | EACH        | PEDESTRIAN PUSH-BUTTON  |
| 1               | EACH        | REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT                                  |

#### REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

4 EACH PEDESTRIAN SIGNAL HEAD

4 EACH PEDESTRIAN PUSH-BUTTON

TS #4310 CARPENTERSVILLE

| USER NAME = _USERNAME_      | DESIGNED - | DW  | REVISED - |                              |               |           |         |        | NGS ROA  |                    | F.A.<br>RTE. | SECTION    | COUNTY  | TOTAL<br>SHEETS | SHEET<br>NO. |
|-----------------------------|------------|-----|-----------|------------------------------|---------------|-----------|---------|--------|----------|--------------------|--------------|------------|---------|-----------------|--------------|
|                             | DRAWN -    | CC  | REVISED - | STATE OF ILLINOIS            |               |           | •       |        |          | SIGNATION DIAGRAM, |              | 2014-090TS | KANE    | 76              | 31           |
| PLOT SCALE = 20.000 ' / in. | CHECKED -  | JDH | REVISED - | DEPARTMENT OF TRANSPORTATION |               | D EMERGEN | ICY VEH |        | EEMPTION | SEQUENCE           | _            |            | CONTRAC | T NO. 6         | 2A42         |
| PLOT DATE = 2/2/2015        | DATE -     |     | REVISED - |                              | SCALE: N.T.S. | SHEET NO. | OF      | SHEETS | STA.     | TO STA.            |              | ILLINOIS   | •       |                 |              |



\_5\_\_\_\_

**-(2)-►** 

# **CONTROLLER SEQUENCE →**②→ Z 4)(4)

**4**-6)−

IL RTE. 25

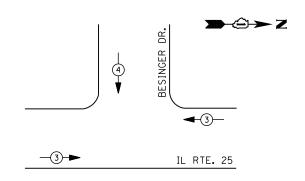
#### LEGEND

DUAL ENTRY PHASE PEDESTRIAN PHASE OVERLAP

SINGLE ENTRY PHASE

NUMBER REFERS TO ASSOCIATED PHASE

#### PHASE DESIGNATION DIAGRAM



#### **EMERGENCY VEHICLE PREEMPTION SEQUENCE**

| EMERGENCY VI                | EHICLE PR | EEMPTORS |
|-----------------------------|-----------|----------|
| EMERGENCY VEHICLE PREEMPTOR | 3         | 4        |
| MOVEMENT                    | -         |          |

| 1. D. O. 1.                 |                                 |         |      |              |         |  |  |
|-----------------------------|---------------------------------|---------|------|--------------|---------|--|--|
| TRAFFIC SIGNAL INSTALLATION |                                 |         |      |              |         |  |  |
|                             | ELECTRICAL SERVICE REQUIREMENTS |         |      |              |         |  |  |
| TYPE                        | NO. LAMPS                       | WAT     | TAGE | % OPERATIONS | TOTAL   |  |  |
|                             |                                 | INCAND. | LED  |              | WATTAGE |  |  |
| SIGNAL (RED)                | 8                               | 1 35    | 1 7  | 0.50         | 68      |  |  |
| (YELLOW)                    | 8                               | 1 35    | 25   | 0.25         | 50      |  |  |
| ( GREEN)                    | 8                               | 1 35    | 15   | 0.25         | 30      |  |  |
| ARROW                       | 4                               | 1 35    | 12   | 0.10         | 5       |  |  |
| PED. SIGNAL                 |                                 | 90      | 25   | 1.00         |         |  |  |
| CONTROLLER                  | 1                               | 1 00    | 100  | 1.00         | 100     |  |  |
| ILLUM. SIGN                 |                                 | 252     | 25   | 0.05         |         |  |  |
| VIDEO SYSTEM                |                                 | 150     | -    | 1.00         |         |  |  |
|                             |                                 |         |      |              |         |  |  |
|                             |                                 |         |      |              |         |  |  |
| FLASHER LED                 |                                 |         |      |              |         |  |  |
|                             |                                 |         |      | TOTAL =      | 253     |  |  |

ENERGY COSTS-

BILLED TO: IDOT DISTRICT 1

201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY -

CONTACT JOE STACHO 630-424-5704

COMMONWEALTH EDISON

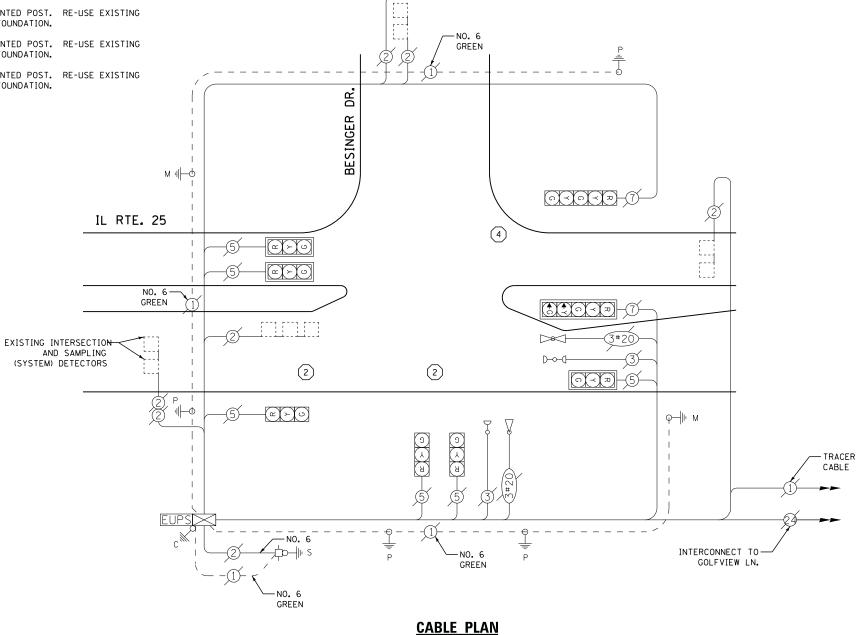
REPLACE 10 FT. PAINTED POST. RE-USE EXISTING TYPE A CONCRETE FOUNDATION.

REPLACE 14 FT. PAINTED POST. RE-USE EXISTING TYPE A CONCRETE FOUNDATION.

REPLACE 15 FT. PAINTED POST. RE-USE EXISTING TYPE A CONCRETE FOUNDATION.

REPLACE 16 FT. PAINTED POST. RE-USE EXISTING TYPE A CONCRETE FOUNDATION.

REPLACE 18 FT. PAINTED POST. RE-USE EXISTING TYPE A CONCRETE FOUNDATION.



#### **SCHEDULE OF QUANTITIES**

| <u>QUANTITY</u> | <u>UNIT</u> | <u>I TEM</u>  |
|-----------------|-------------|---|
| 1               | EACH        | MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION |
| 2               | EACH        | TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.        |
| 1               | EACH        | TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.        |
| 3               | EACH        | RELOCATE EXISTING SIGNAL HEAD                       |
| 1               | EACH        | REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT            |
| 2               | EACH        | REMOVE AND REPLACE ANCHOR BOLTS                     |
|                 |             |   |

#### REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

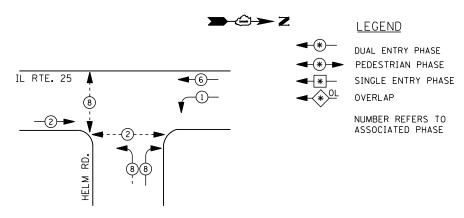
THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

3 EACH SIGNAL POST

TS #4315 CARPENTERSVILLE

| USER NAME = _USERNAME_      | DESIGNED - | DW  | REVISED - |                              |  | IL RO      | UTE 25  | AT BESI             | NGER DE | RIVE       | F.A. | SECTION  | COUNTY  | TOTAL S  | HEET |
|-----------------------------|------------|-----|-----------|------------------------------|--|------------|---------|---------------------|---------|------------|------|----------|---------|----------|------|
|                             | DRAWN -    | CC  | REVISED - | STATE OF ILLINOIS            | SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, |            |         | ESIGNATION DIAGRAM, | 11112   | 2014-090TS | KANE | 76       | 32      |          |      |
| PLOT SCALE = 20.000 ' / in. | CHECKED -  | JDH | REVISED - | DEPARTMENT OF TRANSPORTATION | AN   | ID EMERGEN | ICY VEH | ICLE PRE            | EEMPTIO | N SEQUENCE |      |          | CONTRAC | T NO. 62 | A42  |
| PLOT DATE = 2/2/2015        | DATE -     |     | REVISED - |                              | SCALE: N.T.S.  | SHEET NO.  | OF      | SHEETS              | STA.    | TO STA.    |      | ILLINOIS |         |          |      |
|                             |            |     |           |                              |  |            |         |                     |         |            |      |          |         |          |      |

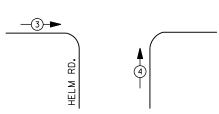
#### **CONTROLLER SEQUENCE**



#### PHASE DESIGNATION DIAGRAM







#### **EMERGENCY VEHICLE PREEMPTION SEQUENCE**

| EMERGENCY VE                | HICLE PREE | MPTORS |
|-----------------------------|------------|--------|
| EMERGENCY VEHICLE PREEMPTOR | 3          | 4      |
| MOVEMENT                    | <b>←</b>   | 1      |

|   |                                 |           | I. D. O | . T. |              |         |  |  |  |
|---|---------------------------------|-----------|---------|------|--------------|---------|--|--|--|
|   | TRAFFIC SIGNAL INSTALLATION     |           |         |      |              |         |  |  |  |
|   | ELECTRICAL SERVICE REQUIREMENTS |           |         |      |              |         |  |  |  |
|   | TYPE                            | NO. LAMPS | WAT     | TAGE | % OPERATIONS | TOTAL   |  |  |  |
|   |                                 |           | INCAND. | LED  |              | WATTAGE |  |  |  |
|   | SIGNAL (RED)                    | 11        | 1 35    | 1 7  | 0.50         | 94      |  |  |  |
|   | ( YELLOW)                       | 11        | 1 35    | 25   | 0.25         | 69      |  |  |  |
| , | ( GREEN)                        | 11        | 1 35    | 15   | 0.25         | 42      |  |  |  |
|   | ARROW                           | 4         | 1 35    | 12   | 0.10         | 5       |  |  |  |
|   | PED. SIGNAL                     | 4         | 90      | 25   | 1.00         | 100     |  |  |  |
|   | CONTROLLER                      | 1         | 1 00    | 100  | 1.00         | 100     |  |  |  |
|   | ILLUM. SIGN                     |           | 252     | 25   | 0.05         |         |  |  |  |
|   | VIDEO SYSTEM                    |           | 150     | -    | 1.00         |         |  |  |  |
|   |                                 |           |         |      |              |         |  |  |  |
|   |                                 |           |         |      |              |         |  |  |  |
|   | FLASHER LED                     |           |         |      |              |         |  |  |  |
| 1 |                                 |           |         |      | TOTAL =      | 410     |  |  |  |

ENERGY COSTS-

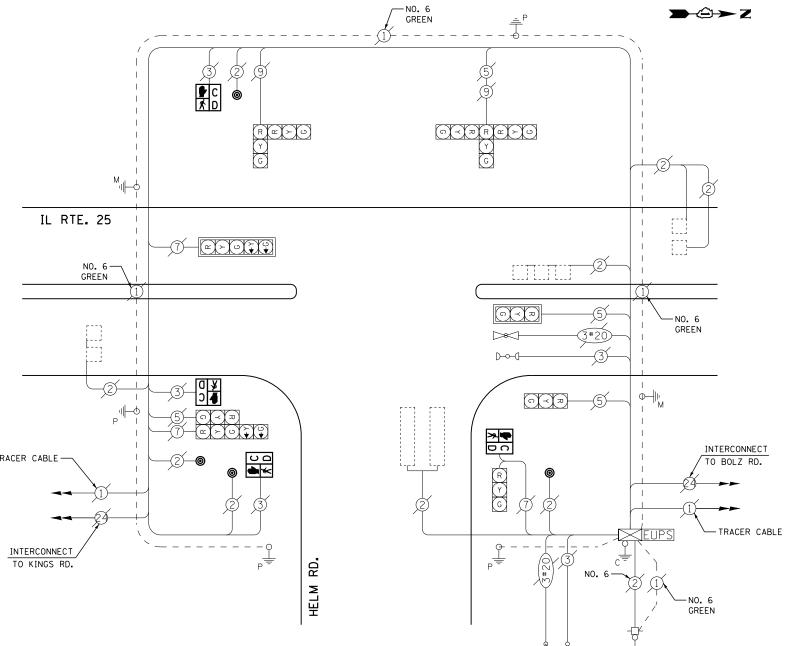
BILLED TO: IDOT DISTRICT 1

201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY -CONTACT JOE STACHO

630-424-5704 PHONE COMMONWEALTH EDISON

TRACER CABLE -INTERCONNECT



**CABLE PLAN** 

## **SCHEDULE OF QUANTITIES**

**QUANTITY** <u>UNIT</u> <u>ITEM</u> EACH MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER EACH EACH PEDESTRIAN PUSH-BUTTON REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT

#### REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

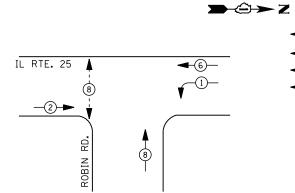
4 EACH PEDESTRIAN SIGNAL HEAD 4 EACH PEDESTRIAN PUSH-BUTTON

TS #4320 CARPENTERSVILLE

**→**②→ Z

| USER NAME = _USERNAME_      | DESIGNED - | DW  | REVISED - |                              | IL ROUTE 25 AT HELM ROAD                                       | F.A. SECTION | COUNTY TOTAL SHEET |
|-----------------------------|------------|-----|-----------|------------------------------|--|--------------|--------------------|
|                             | DRAWN -    | CC  | REVISED - | STATE OF ILLINOIS            | SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, | 2014-090TS   | KANE 76 33         |
| PLOT SCALE = 20.000 ' / in. | CHECKED -  | JDH | REVISED - | DEPARTMENT OF TRANSPORTATION | AND EMERGENCY VEHICLE PREEMPTION SEQUENCE                      | <u>'</u>     | CONTRACT NO. 62A42 |
| PLOT DATE = 2/2/2015        | DATE -     |     | REVISED - |                              | SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.                 | ILLINOIS     | 1                  |

#### **CONTROLLER SEQUENCE**



DUAL ENTRY PHASE **→**(\*) → PEDESTRIAN PHASE

SINGLE ENTRY PHASE OVERLAP

LEGEND

NUMBER REFERS TO

#### PHASE DESIGNATION DIAGRAM

IL RTE. 25

**-**(3)**→** 



**◄**(3)—

REPLACE 14 FT. PAINTED POST. RE-USE EXISTING

3 REPLACE 15 FT. PAINTED POST. RE-USE EXISTING

# ASSOCIATED PHASE REPLACE 10 FT. PAINTED POST. RE-USE EXISTING TYPE A CONCRETE FOUNDATION. TYPE A CONCRETE FOUNDATION. TYPE A CONCRETE FOUNDATION. REPLACE 16 FT. PAINTED POST. RE-USE EXISTING TYPE A CONCRETE FOUNDATION. REPLACE 18 FT. PAINTED POST. RE-USE EXISTING TYPE A CONCRETE FOUNDATION.

# **EMERGENCY VEHICLE PREEMPTION SEQUENCE**

| EMERGENCY VE                | HICLE PREE | MPTORS |
|-----------------------------|------------|--------|
| EMERGENCY VEHICLE PREEMPTOR | 3          | 4      |
| MOVEMENT                    | <b>←</b>   | 1      |

| I. D. O. T.                 |            |          |        |              |         |  |  |
|-----------------------------|------------|----------|--------|--------------|---------|--|--|
| TRAFFIC SIGNAL INSTALLATION |            |          |        |              |         |  |  |
|                             | ELECTRICAL | SERVI CE | REQUIR | EMENTS       |         |  |  |
| TYPE                        | NO. LAMPS  | WAT      | TAGE   | % OPERATIONS | TOTAL   |  |  |
|                             |            | INCAND.  | LED    |              | WATTAGE |  |  |
| SIGNAL (RED)                | 8          | 1 35     | 17     | 0.50         | 68      |  |  |
| (YELLOW)                    | 8          | 1 35     | 25     | 0.25         | 50      |  |  |
| ( GREEN)                    | 8          | 1 35     | 15     | 0.25         | 30      |  |  |
| ARROW                       | 4          | 1 35     | 12     | 0.10         | 5       |  |  |
| PED. SIGNAL                 | 2          | 90       | 25     | 1.00         | 50      |  |  |
| CONTROLLER                  | 1          | 1 00     | 100    | 1.00         | 100     |  |  |
| ILLUM. SIGN                 |            | 252      | 25     | 0.05         |         |  |  |
| VIDEO SYSTEM                |            | 150      | -      | 1.00         |         |  |  |
|                             |            |          |        |              |         |  |  |
|                             |            |          |        |              |         |  |  |
| FLASHER LED                 |            |          |        |              |         |  |  |
|                             |            |          |        |              |         |  |  |

TOTAL = 303

> BILLED TO: IDOT DISTRICT 1 201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096

CONTACT JOE STACHO 630-424-5704 PHONE COMMONWEALTH EDISON

# TRACER CABLE

| <u>SCHEDU</u> | LE OF Q     | UANTITIES   |
|---------------|-------------|---|
| QUANTITY      | <u>UNIT</u> | <u>I TEM</u>  |
| 1             | EACH        | MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION |
| 1             | EACH        | TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.        |
| 1             | EACH        | TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.        |
| 1             | EACH        | TRAFFIC SIGNAL POST, GALVANIZED STEEL 18 FT.        |
| 2             | EACH        | PEDESTRIAN PUSH-BUTTON                              |
| 4             | EACH        | RELOCATE EXISTING SIGNAL HEAD                       |
| 1             | EACH        | RELOCATE EXISTING PEDESTRIAN SIGNAL HEAD            |
| 1             | EACH        | REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT            |
| 2             | EACH        | REMOVE AND REPLACE ANCHOR BOLTS                     |

INTERCONNECT — TO HAZARD RD., LAKE MARIAN RD.

CONTRACTOR SHALL RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT TO A NEW SIGNAL POST, THE COST OF THIS WORK SHALL BE INCLUDED IN THE TRAFFIC SIGNAL POST, GALVANIZED STEEL 18 FT. PAY ITEM.

IL RTE. 25

# REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

GREEN

GREEN

2014-090TS

- INTERCONNECT TO KINGS RD.

TRACER CABLE

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

2 EACH PEDESTRIAN PUSH-BUTTON

3 EACH SIGNAL POST

−N0.6

GREEN

2

-NO. 6

GREEN

**CABLE PLAN** 

(5)

7-EDOTT

ROBIN

KANE 76 34

CONTRACT NO. 62A42

| USER NAME = _USERNAME_      | DESIGNED - | DW  | REVISED - | IL ROUTE 25 AT ROBIN ROAD  |               |            |       |           |               |         |  |  |  |
|-----------------------------|------------|-----|-----------|--|---------------|------------|-------|-----------|---------------|---------|--|--|--|
|                             | DRAWN -    | CC  | REVISED - | STATE OF ILLINOIS SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, |               |            |       |           |               |         |  |  |  |
| PLOT SCALE = 20.000 ' / in. | CHECKED -  | JDH | REVISED - | DEPARTMENT OF TRANSPORTATION   | ANI           | D EMERGENO | Y VEH | IICLE PRE | EEMPTION SEQU | JENCE   |  |  |  |
| PLOT DATE = 2/2/2015        | DATE -     |     | REVISED - |  | SCALE: N.T.S. | SHEET NO.  | OF    | SHEETS    | STA.          | TO STA. |  |  |  |

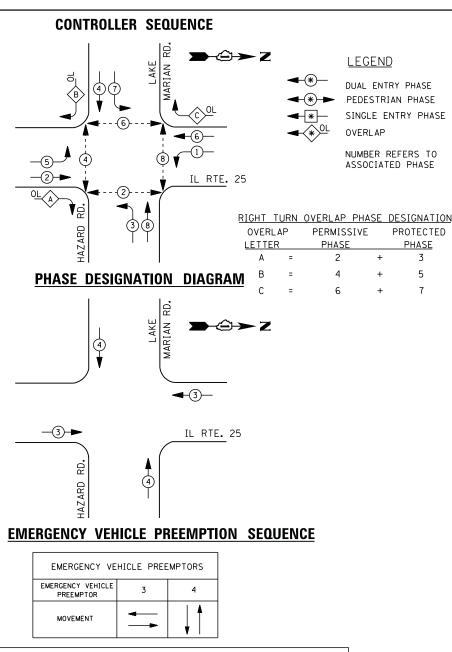
|  |  | - JWE     |
|--|--|-----------|
|  |  | FILE NAME |

| >   | 1.1020 0.0.2  |   |
|---|---------------|---|
| 322   |               |   |
| 14-6  |               |   |
| ۰ls   | FLASHER LED   |   |
| Sıgn  |               |   |
| Vor   |               |   |
| Vor   | ENERGY COSTS- |   |
| IDOT  |               |   |
| 1481\2109 PTB 172-6 IDOT Var Var Signals\14-022 V | ENERGY SUPPLY | _ |
| PTB   |               |   |
| 2109  |               |   |
| 2   |               |   |
| 148   | l             |   |

|         | CAR | . • | #43<br>TER | 325<br>SVILI    | .E |
|---------|-----|-----|------------|-----------------|----|
| SECTION |     | COL | JNTY       | TOTAL<br>SHEETS | SH |

VIDEO SYSTEM

FLASHER LED



| I. D. O. T.                     |           |         |              |       |         |  |  |  |  |  |  |
|---------------------------------|-----------|---------|--------------|-------|---------|--|--|--|--|--|--|
| TRAFFIC SIGNAL INSTALLATION     |           |         |              |       |         |  |  |  |  |  |  |
| ELECTRICAL SERVICE REQUIREMENTS |           |         |              |       |         |  |  |  |  |  |  |
| TYPE                            | NO. LAMPS | WAT     | % OPERATIONS | TOTAL |         |  |  |  |  |  |  |
|                                 |           | INCAND. |              |       | WATTAGE |  |  |  |  |  |  |
| SIGNAL (RED)                    | 17        | 1 35    | 1 7          | 0.50  | 145     |  |  |  |  |  |  |
| (YELLOW)                        | 17        | 1 35    | 25           | 0.25  | 107     |  |  |  |  |  |  |
| ( GREEN)                        | 17        | 1 35    | 15           | 0.25  | 64      |  |  |  |  |  |  |
| ARROW                           | 28        | 1 35    | 12           | 0.10  | 34      |  |  |  |  |  |  |
| PED. SIGNAL                     | 8         | 90      | 25           | 1.00  | 200     |  |  |  |  |  |  |
| CONTROLLER                      | 2         | 100     | 100          | 1.00  | 200     |  |  |  |  |  |  |
| ILLUM. SIGN                     |           | 252     | 25           | 0.05  |         |  |  |  |  |  |  |

TOTAL = BILLED TO: IDOT DISTRICT 1 ENERGY COSTS-201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096 ENERGY SUPPLY -

150

CONTACT JOE STACHO PHONE 630-424-5704

1.00

# DETECTORS GREEN MARIAN **№** C IL RTE. 25 EXISTING INTERSECTION AND SAMPLING (SYSTEM) DETECTORS GREEN EXISTING INTERSECTION -AND SAMPLING (SYSTEM) DETECTORS TRACER CABLE υ <u>α</u> - TRACER CABLE **→** □ C INTERCONNECT -INTERCONNECT TO GOLFVIEW LANE TO ROBIN RD. NO. 6 GREEN NO. 6-(GREEN) - TELEPHONE PUSHBUTTON "A" SHALL PLACE A CALL IN PHASES 2 AND 4. PUSHBUTTON "C" SHALL PLACE A CALL IN PHASES 6 AND 8. **CABLE PLAN**

#### **SCHEDULE OF QUANTITIES**

| QUANTITY | <u>UNIT</u> | <u>ITEM</u>   |
|----------|-------------|---|
| 1        | EACH        | MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION                       |
| 4        | EACH        | PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER |
| 2        | EACH        | PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER |
| 1        | EACH        | REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT                                  |
| 6        | EACH        | PEDESTRIAN PUSH-BUTTON, NON-LATCHING                                      |

#### REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

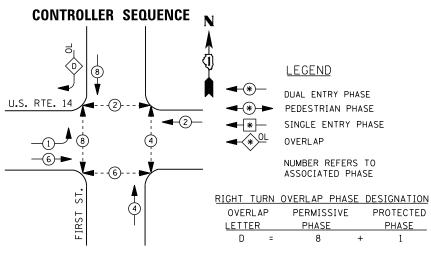
8 EACH PEDESTRIAN SIGNAL HEAD EACH PEDESTRIAN PUSH-BUTTON

> TS #4390 CARPENTERSVILLE

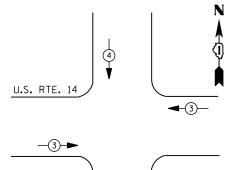
| COMMONWEALTH EDISON_                               |                              |  | CARF       | JENIEK2 VILLE      |
|--|------------------------------|--|------------|--------------------|
| USER NAME = _USERNAME_ DESIGNED - DW REVISED -     |                              | IL ROUTE 25 AT LAKE MARIAN ROAD /HAZARD ROAD                   | A. SECTION | COUNTY TOTAL SHEET |
| DRAWN - CC REVISED -                               | STATE OF ILLINOIS            | SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, | 2014-090TS | KANE 76 35         |
| PLOT SCALE = 20.000 '/ in. CHECKED - JDH REVISED - | DEPARTMENT OF TRANSPORTATION | AND EMERGENCY VEHICLE PREEMPTION SEQUENCE                      |            | CONTRACT NO. 62A42 |
| PLOT DATE = 2/2/2015 DATE - REVISED -              |                              | SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.                 | ILLINOIS   |                    |

EXISTING INTERSECTION -

AND SAMPLING (SYSTEM)



#### PHASE DESIGNATION DIAGRAM





#### **EMERGENCY VEHICLE PREEMPTION SEQUENCE**

| EMERGENCY VE                   | HICLE PRI | EEMPTORS |
|--------------------------------|-----------|----------|
| EMERGENCY VEHICLE<br>PREEMPTOR | 3         | 4        |
| MOVEMENT                       | <b>—</b>  | <b>+</b> |

| TRAFFIC SIGNAL INSTALLATION     |           |         |     |              |         |  |  |  |  |  |  |
|---------------------------------|-----------|---------|-----|--------------|---------|--|--|--|--|--|--|
| ELECTRICAL SERVICE REQUIREMENTS |           |         |     |              |         |  |  |  |  |  |  |
| TYPE                            | NO. LAMPS | WATTAGE |     | % OPERATIONS | TOTAL   |  |  |  |  |  |  |
|                                 |           | INCAND. | LED |              | WATTAGE |  |  |  |  |  |  |
| SIGNAL (RED)                    | 12        | 1 35    | 1 7 | 0.50         | 102     |  |  |  |  |  |  |
| (YELLOW)                        | 12        | 1 35    | 25  | 0.25         | 75      |  |  |  |  |  |  |
| ( GREEN)                        | 12        | 1 35    | 15  | 0.25         | 45      |  |  |  |  |  |  |
| ARROW                           | 8         | 1 35    | 12  | 0.10         | 10      |  |  |  |  |  |  |
| PED. SIGNAL                     | 8         | 90      | 25  | 1.00         | 200     |  |  |  |  |  |  |
| CONTROLLER                      | 1         | 1 00    | 100 | 1.00         | 100     |  |  |  |  |  |  |
| ILLUM. SIGN                     |           | 252     | 25  | 0.05         |         |  |  |  |  |  |  |
| VIDEO SYSTEM                    |           | 150     | 150 | 1.00         |         |  |  |  |  |  |  |
| LIGHTING                        |           |         | 250 | 1.00         |         |  |  |  |  |  |  |
|                                 |           |         |     |              |         |  |  |  |  |  |  |
| FLASHER LED                     |           |         |     |              |         |  |  |  |  |  |  |

I. D. O. T.

TOTAL = 532

ENERGY COSTS-

BILLED TO: IDOT DISTRICT 1 201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY -

CONTACT MIKE LENOX PHONE 815-490-2869

COMMONWEALTH EDISON

## REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

U.S. RTE. 14

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR, SHALL REMAIN THE PROPOERTY OF THE STATE AND SHALL BE DELIVERED BY THE CONTRACTOR TO THE STATE'S TRAFFIC SIGNAL MAINTENENCE CONTRACTOR'S FACILITY AS PER THE TRAFFIC SIGNAL SPECIFICATIONS.

EXISTING INTERSECTION-AND SAMPLING (SYSTEM)

DETECTORS

TRACER-CABLE

INTERCONNECT TO W. MAIN ST.

1 EACH TRAFFIC SIGNAL CONTROLLER AND CABINET (COMPLETE)

#### **CABLE PLAN**

ST

FIRST

GREEN

REPLACE EXISTING CONTROLLER AND-

-NO. 6

GREEN

RELOCATE MASTER CONTROLLER

**3** 

D---(J-

 $\mathfrak{D}$ 

#### SCHEDULE OF QUANTITIES

| <u>QUANTITY</u> | <u>UNIT</u> | <u>I TEM</u>   |
|-----------------|-------------|--|
| 1               | EACH        | MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION  |
| 1               | EACH        | TRANSCEIVER - FIBER OPTIC                            |
| 8               | EACH        | INDUCTIVE LOOP DETECTOR                              |
| 1               | EACH        | FULL-ACTUATED CONTROLLER AND TYPE V CABINET, SPECIAL |
| 1               | EACH        | UNINTERRUPTABLE POWER SUPPLY, SPECIAL                |
| 1               | EACH        | RELOCATE EXISTING MASTER CONTROLLER                  |

CONTRACTOR SHALL RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT TO NEW CONTROLLER CABINET. THE COST OF THIS WORK SHALL BE INCLUDED IN THE FULL-ACTUATED CONTROLLER AND TYPE V CABINET, SPECIAL PAY ITEM.

-NO. 6

GREEN

- TRACER

EXISTING INTERSECTION

AND SAMPLING (SYSTEM)

DETECTORS

CABLE

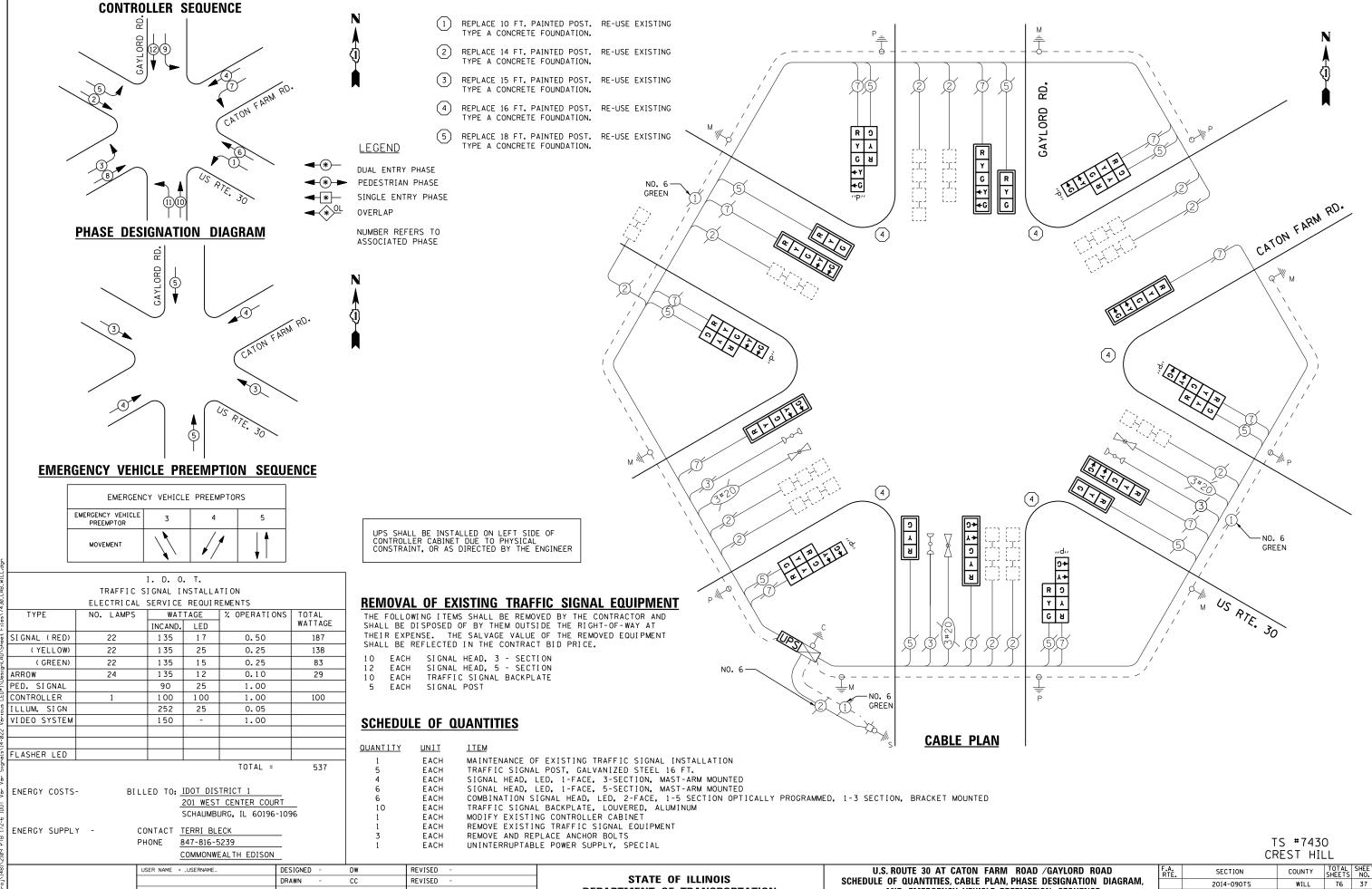
INTERCONNECT TO

E. MAIN ST.

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM

TS #7275 CARY

|                              |            |     |           |                              |                                |           |   |        |      |            |           |          | 0,        |             |          |
|------------------------------|------------|-----|-----------|------------------------------|--------------------------------|-----------|---|--------|------|------------|-----------|----------|-----------|-------------|----------|
| USER NAME = _USERNAME_       | DESIGNED - | DW  | REVISED - | STATE OF ILLINOIS SO         | U.S. ROUTE 14 AT FIRST STREET  |           |   |        |      |            | F.A.      | SECTION  | COUNTY TO | TAL SHEET   |          |
|                              | DRAWN -    | CC  | REVISED - |                              | SCHEDULE OF                    |           |   |        |      | 2014-090TS | McHENRY 7 | 76 36    |           |             |          |
| PLOT SCALE = 20.0000 ' / in. | CHECKED -  | JDH | REVISED - | DEPARTMENT OF TRANSPORTATION | DEPARTMENT OF TRANSPORTATION A |           | AND EMERGENCY VEHICLE PREEMPTION SEQUENCE |        |      |            |           |          |           | CONTRACT NO | O. 62A42 |
| PLOT DATE = 2/2/2015         | DATE -     |     | REVISED - |                              | SCALE:                         | SHEET NO. | OF  | SHEETS | STA. | TO STA.    |           | ILLINOIS |           |             |          |
|                              |            |     |           |                              |                                |           |   |        |      |            |           |          | *         |             |          |



**DEPARTMENT OF TRANSPORTATION** 

AND EMERGENCY VEHICLE PREEMPTION SEQUENCE

SHEET NO. OF SHEETS STA.

CONTRACT NO. 62A42

CHECKED

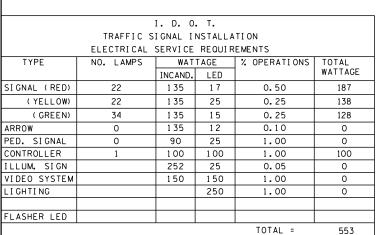
DATE

PLOT DATE = 2/2/2015

REVISED

REVISED





ENERGY COSTS-

BILLED TO: IDOT DISTRICT 1

201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY -CONTACT JOE STACHO

630-424-5704 COMMONWEALTH EDISON

USER NAME = \_USERNAME\_ DESIGNED REVISED DW DRAWN CC REVISED PLOT SCALE = 20.000 '/ in. CHECKED REVISED PLOT DATE = 2/2/2015 DATE REVISED

# ON

#### ILLINOIS ROUTE 31 (STATE STREET) AT U.S. ROUTE 20 SCHEDULE OF QUANTITIES AND CABLE PLAN SHEET NO. OF SHEETS STA.

**~** ≻ 5 5

\_5<u>~</u>5

CALLING DETECTORS

Y

ΨG

GREEN

C ≺ R & ≻ 5

**CABLE PLAN** 

COUNTY TOTAL SHEETS NO. KANE 76 38 SECTION 2014-090TS CONTRACT NO. 62A42

EXISTING INTERSECTION -AND SAMPLING (SYSTEM) DETECTORS

C ≺ ⊠ "P'

EXISTING INTERSECTION

AND SAMPLING

(SYSTEM) DETECTOR

¢ C ≺ R

**SCHEDULE OF QUANTITIES** 

TRACER CABLE

ILL. RTE. 31 (STATE ST.)

EXISTING INTERSECTION - AND SAMPLING (SYSTEM)

DETECTORS

EXISTING-INTERCONNECT

**+**0 0+

TO MIDDLE RD.

| <u>QUANTITY</u> | <u>UNIT</u> | <u>ITEM</u>   |
|-----------------|-------------|---|
| 1               | EACH        | MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION   |
| 2               | EACH        | SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED   |
| 2               | EACH        | SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-4 SECTION, BRACKET MOUNTED                                   |
| 2               | EACH        | OPTICALLY PROGRAMMED SIGNAL HEAD, LED, 1-FACE, 4-SECTION, MAST ARM MOUNTED                            |
| 2               | EACH        | COMBINATION SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION OPTICALLY PROGRAMMED, 1-3 SECTION, BRACKET MOUNTED  |
| 2               | EACH        | COMBINATION SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION OPTICALLY PROGRAMMED, 1-4 SECTION, BRACKET MOUNTED  |
| 2               | EACH        | COMBINATION SIGNAL HEAD, LED, 3- FACE, 1-4 SECTION OPTICALLY PROGRAMMED, 2-4 SECTION, BRACKET MOUNTED |
| 4               | EACH        | TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM  |
| 1               | EACH        | MODIFY EXISTING CONTROLLER CABINET  |
| 1               | EACH        | REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT  |
| 1               | EACH        | UNINTERRUPTABLE POWER SUPPLY. SPECIAL   |

U.S. RTE. 20 E.B. ON-RAMP

-EXISTING INTERSECTION AND SAMPLING (SYSTEM) DETECTOR

C ≺ R & ≻ 5 "P"

-CALLING DETECTORS

Ç ≺ ¬

В

<u></u> №. 6

GREEN

NO. 6

GREEN

-RAMP

RTE. OFF-R

U.S. E.B. (

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REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

FACH SIGNAL HEAD, 3 - SECTION EACH

SIGNAL HEAD, 4 - SECTION SIGNAL HEAD, 2 - FACE, 1-3 SECTION, 1-4 SECTION EACH

EACH TRAFFIC SIGNAL BACKPLATE EACH OPTICALLY PROGRAMMED SIGNAL HEAD, 3-SECTION OPTICALLY PROGRAMMED SIGNAL HEAD, 4-SECTION

> TS #675 ELGIN (SH. 1)

| STATI      | E OF | ILLINOIS |        |
|------------|------|----------|--------|
| DEPARTMENT | OF   | TRANSP0  | RTATIO |



|                          | MOVEMENT   |          | EB RAMPS | L        | RTE | 31 | US RTE 20 |          | =        | US RTE 20 | EB KAMPS | RTE | 31 | US RTE 20 |          |          | US RTE 20 | L        | RTE  | 31   | US RTE 20 |    | -        | EBRAMPS  |          | RIE |      | WBRAMPS | -     | FLAS |
|--------------------------|--|----------|----------|----------|-----|----|-----------|----------|----------|-----------|----------|-----|----|-----------|----------|----------|-----------|----------|------|------|-----------|----|----------|----------|----------|-----|------|---------|-------|------|
|                          | PHASE  |          |          | _        | 1   |    |           | _        |          |           | -        | 2   |    |           |          | -        |           |          | 3    | 1000 | 28.0      |    | -        | Market 1 | 20212    | 4   | 0.00 |         | Popul | н    |
|                          | INTERVAL   | 1        | 2A.      | 28       | 2C  | 2D | 3A        | 38       | 1        | 5A        | 5B       | 5C  | 50 | 8A        | 88       | 7        | BA        | 88       | BC . | 8D   | 9A        | 98 | 10       | 11A      | 11B      | 12A | 128  | 12C     | 120   |      |
|                          | CHANGE TO  | /        |          | 20       | R3  |    |           | 4        | /        |           | 10       | R4  |    | 3         |          | /        |           | 10       | 24   |      | - 2       | 2  | /        | 1        |          |     | 20   | R3      |       |      |
| yo .                     | IL31 NB NEAR AND FARRIGHT SIGNALS                | R        | R        | R        | R   | R  | R         | R        | 31<br>-G | Y         | R        | R   | R  | Y         | R        | R        | R         | R        | R    | R    | R         | R  | R        | R        | R        | R   | R    | R       | R     | R    |
| 5                        | IL 31 NB MAST ARM AND FAR LEFT SIGNALS           | R        | R        | R        | R   | R  | R         | R        | 31       | Y         | R        | R   | R  | Y         | R        | R        | R         | R        | R    | R    | R         | R  | R        | R        | R        | R   | R    | R       | R     | R    |
| EXIT AND ENTRANCE FORMED | US 20 EB EXIT RAMP NEAR AND FAR RIGHT<br>SIGNALS | R        | R        | R        | R   | R  | R         | R        | R        | R         | R        | R   | R  | R         | R        | loto     | Y         | R        | R    | R    | ٧         | R  | R        | R        | R        | R   | R    | R       | R     | R    |
| ENI                      | US 20 EB EXIT RAMP FAR LEFT SIGNAL               | R        | R        | R        | R   | R  | R         | R        | R        | R         | R        | R   | R  | R         | R        | G        | Y         | R        | R    | R    | Y         | R  | R        | R        | R        | R   | R    | R       | R     | R    |
| ANG                      | IL 31 SB NEAR AND FAR RIGHT SIGNALS              | GH       | Gł       | G        | Y   | R  | G         | GI       | R        | R         | R        | R   | R  | R         | R        | R        | R         | R        | R    | R    | R         | R  | G        | G        | G        | Gŧ  | G    | Y       | R     | R    |
| EXI                      | IL 31 SB MAST ARM AND FAR LEFT SIGNALS           | GI<br>-G | GI<br>-G | G!<br>-G | Y   | R  | GI<br>-G  | G1<br>+G | R        | R         | R        | R   | R  | R         | R        | R        | R         | R        | R    | R    | R         | R  | G1<br>-G | -G       | GI<br>-G | -G  | -G   | Y       | R     | R    |
| 0                        | IL 31 SB NEAR AND FAR RIGHT SIGNALS              | R        | R        | R        | R   | R  | R         | R        | R        | R         | R        | R   | R  | R         | R        | R        | R         | R        | R    | R    | R         | R  | GI<br>-G | Y        | R        | Y   | R    | R       | R     | R    |
| TANE                     | IL 31 SB MAST ARM AND FAR LEFT SIGNALS           | R        | R        | R        | R   | R  | R         | R        | R        | R         | R        | R   | R  | R         | R        | R        | R         | R        | R    | R    | R         | R  | Gİ       | Y        | R        | Y   | R    | R       | R     | R    |
| -                        | US 20 WE EXIT RAMP NEAR AND FAR RIGHT<br>SIGNALS | - G      | Y        | R        | R   | R  | Y         | R        | R        | R         | R        | R   | R  | R         | R        | R        | R         | R        | R    | R    | R         | R  | R        | R        | R        | R   | R    | R       | R     | R    |
| EN I                     | US 20 WB EXIT RAMP FAR LEFT SIGNAL               | G        | Y        | R        | R   | R  | Y         | R        | R        | R         | R        | R   | R  | R         | R        | R        | R         | R        | R    | R    | R         | R  | R        | R        | R        | R   | R    | R       | R     | R    |
| No.                      | IL 31 NB NEAR AND FAR RIGHT SIGNALS              | R        | R        | R        | R   | R  | R         | R        | at       | G         | Gf       | Y   | R  | Gİ        | G        | Gł       | G         | at       | Y    | R    | Gİ        | G  | R        | R        | R        | R   | R    | R       | R     | R    |
| EXIT AND ENTRANCE RAMPS  | IL 31 NB MAST ARM AND FAR LEFT SIGNALS           | R        | R        | R        | R   | R  | R         | R        | GI<br>+G | GI<br>-G  |          | Y   | R  | G!        | G1<br>-G | G1<br>-G | G!        | GI<br>-G | Y    | R    | G1<br>-G  | G† | R        | R        | R        | R   | R    | R       | R     | R    |

|       | CHANGE FROM NORMAL SEQUENCE OF OPERATION INTERVAL NUMBER                        | 1  |    |         | 1  |        |    | 1  |     |     | 4  |        | 4  |    | 4  |    |    | 7  |        | 1  | 7  | 7  | 1  | 0  |          |     | 10  |        | 10       | $\geq \leq$ | $\geq \leq$ | $\geq$ | $\geq$   | CLEAR TO<br>NORMAL |
|-------|---|----|----|---------|----|--------|----|----|-----|-----|----|--------|----|----|----|----|----|----|--------|----|----|----|----|----|----------|-----|-----|--------|----------|-------------|-------------|--------|----------|--------------------|
|       | EMERGENCY VEHICLE PREEMPTION<br>SEQUENCE OF OPERATION NUMBER                    | 1A | 18 | 10      | 1D | 1E     | 1F | 1G | 111 | 1,1 | 1K | 11.    | 1M | 1N | 1P | 10 | 1R | 15 | 17     | 10 | 1V | tW | 1X | 17 | 12       | 144 | 188 | 100    | 100      | 2           | 3           | 4      | 5        | SEQUENCE           |
|       | CHANGE TO EMERGENCY VEHICLE PREEMPTION<br>SEQUENCE OF OPERATION INTERVAL NUMBER | 2  | 10 | 10      | 1E | 3 OR 4 | 1G | 5  | 1,1 | 116 | 11 | 2 OR 5 | 3  | 1P | 4  | 1R | 15 | 17 | 2 OR 5 | 11 | 3  | 4  | tY | 2  | 1AA      | 188 | 1CC | 3 OR 4 | 5        | ><          | $\geq \leq$ | > <    | > <      | 0                  |
| . 10  | IL 31 NB NEAR AND FAR RIGHT SIGNALS   | R  | R  | R       | R  | R      | R  | R  | Y   | R   | R  | R      | -G | Y  | R  | R  | R  | R  | R      | R  | R  | R  | R  | R  | R        | R   | R   | R      | R        | R           | G!<br>G     | R      | R        | . 0                |
| TE 20 | IL 31 NB MAST ARM AND FAR LEFT SIGNALS  | R  | R  | R       | R  | R      | R  | R  | Y   | R   | R  | R      | Gf | Y  | R  | R  | R  | R  | R      | R  | R  | R  | R  | R  | R        | R   | R   | R      | R        | R           | G!          | R.     | R        | 0                  |
| ANCE  | US 20 EB EXIT RAMP NEAR AND FAR RIGHT<br>SIGNALS                                | R  | R  | R       | R  | R      | R  | R  | R   | R   | R  | R      | R  | R  | R  | Y  | R  | R  | R      | Y  | R  | 9  | R  | R  | R        | R   | R   | R      | R        | R           | R           | 6      | R        | 0                  |
| ATE   | US 20 EB EXIT RAMP FAR LEFT SIGNAL  | R  | R  | R       | R  | R      | R  | R  | R   | R   | R  | R      | R  | R  | R  | ٧  | R  | R  | R      | Y  | R  | G  | R  | R  | R        | R   | R   | R      | R        | R           | R           | 6      | R        | 0                  |
| AND   | IL 31 SB NEAR AND FAR RIGHT SIGNALS   | G  | GI | GI      | Y  | R      | Gł | G  | R   | R   | R  | R      | R  | R  | R  | R  | R  | R  | R      | R  | R  | R  | GI | Gi | Gł       | G   | Y   | R      | Gł       | G!          | R           | R      | G į      | 0                  |
| EXIT  | IL 31 SB MAST ARM AND FAR LEFT SIGNALS  | GI |    | GI<br>G |    | R      | G! |    |     | R   | R  | R      | R  | R  | R  | R  | R  | R  | R      | R  | R  | R  | G! |    | GI<br>-G | G!  |     | R      | Gt<br>-G | G!<br>-G    | R           | R      | G1<br>   | 0                  |
|       | II 31 SE NEAR AND FAR RIGHT SIGNALS   | R  | R  | R       | R  | R      | R  | R  | R   | R   | R  | R      | R  | R  | R  | R  | R  | R  | R      | R  | R  | R  | Y  | R  | Y        | R   | R   | R      | G†       | R           | R           | R      | G!<br>-G | 0                  |

RRRRRRGIGIY R GIGIGIGIY R GIGIGIR RRRRRR

EMERGENCY VEHICLE SEQUENCE SHALL PROVIDE THE PROPER CLEARANCE INTERVAL TO RESUME THE NORMAL SEQUENCE OF OPERATION OR PROPER CLEARANCE INTERVAL TO DISPLAY A DIFFERENT EMERGENCY INTERVAL AFTER EMERGENCY VEHICLE INTERVAL 2, 3, 4 OR 5 IS TERMINATED.

IL 31 SB MAST ARM AND FAR LEFT SIGNALS

US 20 WB EXIT RAMP NEAR AND FAR RIGHT

US 20 WB EXIT RAMP FAR LEFT SIGNAL

IL 31 NB NEAR AND FAR RIGHT SIGNALS

IL 31 NB MAST ARM AND FAR LEFT SIGNALS

SIGNALS

**EMERGENCY VEHICLE PREEMPTION SEQUENCE OF OPERATION** 

TS #675 ELGIN (SH. 2)

| USER NAME = _USERNAME_      | DESIGNED - | DW  | REVISED - |                              | ILLII         | VOIS ROUTI | E 31 | (STAT  | E STR  | EET) AT | U.S. ROUTE 20    | F.A.  | SECTION    | COUNTY  | TOTAL | SHEET |
|-----------------------------|------------|-----|-----------|------------------------------|---------------|------------|------|--------|--------|---------|------------------|-------|------------|---------|-------|-------|
|                             | DRAWN -    | CC  | REVISED - | STATE OF ILLINOIS            |               | SEQ        | UEN  | CE OF  | OPER/  | ATION A | AND              | 10123 | 2014-090TS | KANE    | 76    | 39    |
| PLOT SCALE = 20.000 ' / in. | CHECKED -  | JDH | REVISED - | DEPARTMENT OF TRANSPORTATION | EMERGE        | NCY VEHIC  | LE P | PREEMI | PTION  | SEQUEN  | ICE OF OPERATION |       |            | CONTRAC | T NO. | 62A42 |
| PLOT DATE = 2/2/2015        | DATE -     |     | REVISED - |                              | SCALE: N.T.S. | SHEET NO.  | (    | OF S   | SHEETS | STA.    | TO STA.          |       | ILLINOIS   |         |       |       |

PREEMPTOR PREEMPTOR PREEMPTOR PREEMPTOR NUMBER 3 NUMBER 4 NUMBER 5 NUMBER 6

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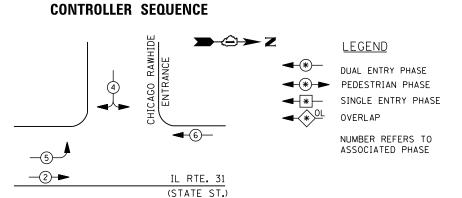
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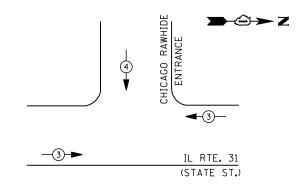
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#### PHASE DESIGNATION DIAGRAM



#### **EMERGENCY VEHICLE PREEMPTION SEQUENCE**

| EMERGENCY VE                | EHICLE PR | EEMPTORS |
|-----------------------------|-----------|----------|
| EMERGENCY VEHICLE PREEMPTOR | 3         | 4        |
| MOVEMENT                    | <b>†</b>  | <b>.</b> |

|              | I. D. O. T. |          |         |              |         |  |  |  |  |  |  |  |  |  |  |
|--------------|-------------|----------|---------|--------------|---------|--|--|--|--|--|--|--|--|--|--|
|              | TRAFFIC S   | I GNAL I | NSTALLA | TION         |         |  |  |  |  |  |  |  |  |  |  |
|              | ELECTRICAL  | SERVI CE | REQUIR  | EMENTS       |         |  |  |  |  |  |  |  |  |  |  |
| TYPE         | NO. LAMPS   | WAT      | TAGE    | % OPERATIONS | TOTAL   |  |  |  |  |  |  |  |  |  |  |
|              |             | INCAND.  | LED     |              | WATTAGE |  |  |  |  |  |  |  |  |  |  |
| SIGNAL (RED) | 9           | 1 35     | 1 7     | 0.50         | 77      |  |  |  |  |  |  |  |  |  |  |
| (YELLOW)     | 9           | 1 35     | 25      | 0.25         | 57      |  |  |  |  |  |  |  |  |  |  |
| ( GREEN)     | 10          | 1 35     | 15      | 0.25         | 38      |  |  |  |  |  |  |  |  |  |  |
| ARROW        | 4           | 1 35     | 12      | 0.10         | 5       |  |  |  |  |  |  |  |  |  |  |
| PED. SIGNAL  | 0           | 90       | 25      | 1.00         | 0       |  |  |  |  |  |  |  |  |  |  |
| CONTROLLER   | 1           | 100      | 100     | 1.00         | 100     |  |  |  |  |  |  |  |  |  |  |
| ILLUM. SIGN  |             | 252      | 25      | 0.05         |         |  |  |  |  |  |  |  |  |  |  |
| VIDEO SYSTEM |             | 150      | -       | 1.00         |         |  |  |  |  |  |  |  |  |  |  |
|              |             |          |         |              |         |  |  |  |  |  |  |  |  |  |  |
|              |             |          |         |              |         |  |  |  |  |  |  |  |  |  |  |
| FLASHER LED  |             |          |         |              |         |  |  |  |  |  |  |  |  |  |  |
|              |             |          |         | TOTAL =      | 277     |  |  |  |  |  |  |  |  |  |  |

ENERGY COSTS-

BILLED TO: IDOT DISTRICT 1

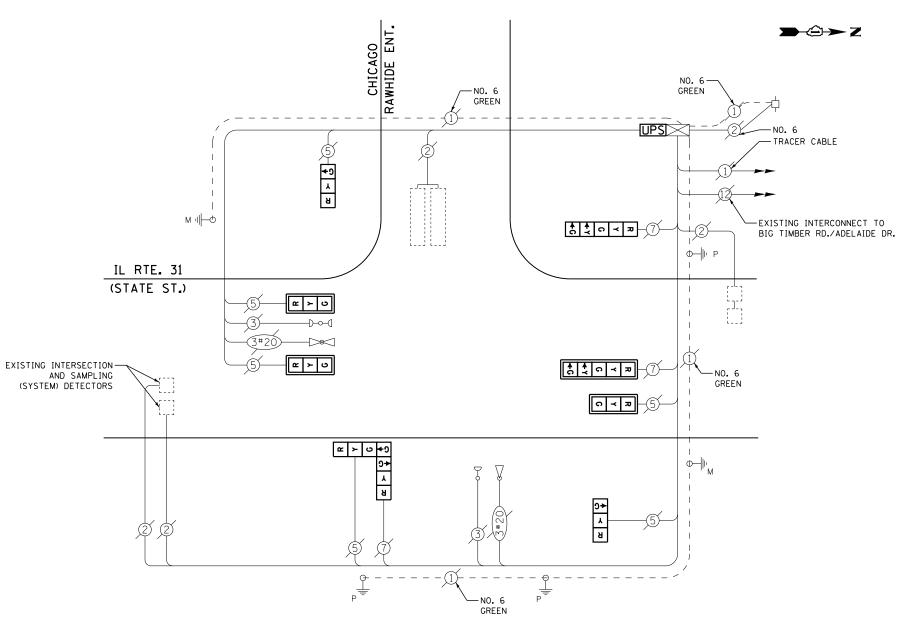
201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY -

CONTACT JOE STACHO PHONE

630-424-5704

SHEET NO. 40 62A42



#### **CABLE PLAN**

#### **SCHEDULE OF QUANTITIES**

| <u>QUANTITY</u> | <u>UNIT</u> | ITEM  |
|-----------------|-------------|---|
| 1               | EACH        | MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION                 |
| 3               | EACH        | SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED               |
| 2               | EACH        | SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED                |
| 1               | EACH        | SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED                |
| 1               | EACH        | SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED               |
| 1               | EACH        | SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-4 SECTION, BRACKET MOUNTED |
| 4               | EACH        | TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM                        |
| 1               | EACH        | MODIFY EXISTING CONTROLLER CABINET                                  |
| 1               | EACH        | REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT                            |
| 1               | EACH        | UNINTERRUPTABLE POWER SUPPLY, SPECIAL                               |

#### REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

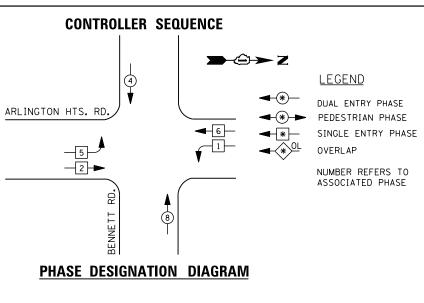
THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

5 EACH EACH 2

SIGNAL HEAD, 3 - SECTION SIGNAL HEAD, 5 - SECTION SIGNAL HEAD, 2 - FACE, 1-3 SECTION, 1-4 SECTION TRAFFIC SIGNAL BACKPLATE EACH

TS #4330

| COMMONWEALTH EDISO          | <u>N</u>   |     |           |                              |               |              |         |           |         |                      |       |            | ELGI    | .N              |      |
|-----------------------------|------------|-----|-----------|------------------------------|---------------|--------------|---------|-----------|---------|----------------------|-------|------------|---------|-----------------|------|
| USER NAME = _USERNAME_      | DESIGNED - | DW  | REVISED - |                              | ILLINOIS RO   | UTE 31 (STA  | TE STRE | EET) AT C | HICAGO  | RAWHIDE ENTRANCE     | F.A.  | SECTION    | COUNTY  | TOTAL<br>SHEETS | اک آ |
|                             | DRAWN -    | CC  | REVISED - | STATE OF ILLINOIS            | SCHEDULE OF Q | UANTITIES, C | ABLE PI | LAN, AND  | PHASE   | DESIGNATION DIAGRAM, | 14122 | 2014-090TS | KANE    | 76              | +    |
| PLOT SCALE = 20.000 ' / in. | CHECKED -  | JDH | REVISED - | DEPARTMENT OF TRANSPORTATION | AN            | D EMERGEN    | CY VEHI | ICLE PREE | EMPTION | SEQUENCE             |       |            | CONTRAC | T NO. F         | 62   |
| PLOT DATE = 2/2/2015        | DATE -     |     | REVISED - |                              | SCALE: N.T.S. | SHEET NO.    | OF      | SHEETS    | STA.    | TO STA.              |       | ILLINOIS   |         |                 |      |



# **→②**→ Z ARLINGTON HTS. RD. \_3\_ \_3-► (5)

# **EMERGENCY VEHICLE PREEMPTION SEQUENCE**

| EMERGENCY VE                | HICLE PRI | EEMPTORS |          |
|-----------------------------|-----------|----------|----------|
| EMERGENCY VEHICLE PREEMPTOR | 3         | 4        | 5        |
| MOVEMENT                    | =         |          | <b>1</b> |

|              | TRAFFIC S   | I GNAL I | NSTALLA | TION         |         |
|--------------|-------------|----------|---------|--------------|---------|
|              | ELECTRI CAL | SERVI CE | REQUIF  | REMENTS      |         |
| TYPE         | NO. LAMPS   | WAT      | TAGE    | % OPERATIONS | TOTAL   |
|              |             | INCAND.  | LED     |              | WATTAGE |
| SIGNAL (RED) | 18          | 1 35     | 1 7     | 0.50         | 153     |
| (YELLOW)     | 18          | 1 35     | 25      | 0.25         | 113     |
| ( GREEN)     | 18          | 1 35     | 15      | 0.25         | 68      |
| ARROW        | 0           | 1 35     | 12      | 0.10         | 0       |
| PED. SIGNAL  | 0           | 90       | 25      | 1.00         | 0       |
| CONTROLLER   | 1           | 100      | 100     | 1.00         | 100     |
| ILLUM. SIGN  |             | 252      | 25      | 0.05         |         |
| VIDEO SYSTEM |             | 150      | -       | 1.00         |         |
|              |             |          |         |              |         |
|              |             |          |         |              |         |
| FLASHER LED  |             |          |         |              |         |
|              |             |          |         | TOTAL =      | 434     |

ENERGY COSTS-

BILLED TO: IDOT DISTRICT 1

201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY -

CONTACT DAVE SCHACHT PHONE 630-437-2129 COMMONWEALTH EDISON

## SCHEDULE OF QUANTITIES

<u>QUANTITY</u> <u>UN I T</u> MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION MODIFY EXISTING CONTROLLER CABINET EACH EACH UNINTERRUPTABLE POWER SUPPLY, SPECIAL SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED, RETROFIT SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED, RETROFIT EACH 10 EACH

RETROFIT ALL EXISTING SIGNAL HEADS TO L.E.D.

TS #22235 ELK GROVE

| USER NAME = _USERNAME_       | DESIGNED - | DW  | REVISED - |                              |        | ARLINGTON H | HEIGHT | S ROAD   | AT BEN  | NETT ROAD            | F.A.<br>RTE. | SECTION    | COUNTY  | TOTAL   | SHEET |
|------------------------------|------------|-----|-----------|------------------------------|--------|-------------|--------|----------|---------|----------------------|--------------|------------|---------|---------|-------|
|                              | DRAWN -    | СС  | REVISED - | STATE OF ILLINOIS            |        |             | •      |          |         | DESIGNATION DIAGRAM, |              | 2014-090TS | СООК    | 76      | 41    |
| PLOT SCALE = 20.0000 ' / in. | CHECKED -  | JDH | REVISED - | DEPARTMENT OF TRANSPORTATION | A      | ND EMERGEN  | CY VE  | HICLE PR | EEMPTIO | N SEQUENCE           |              |            | CONTRAC | T NO. 6 | 62A42 |
| PLOT DATE = 2/2/2015         | DATE -     |     | REVISED - |                              | SCALE: | SHEET NO.   | OF     | SHEETS   | STA.    | TO STA.              |              | ILLINOIS   |         |         |       |

ARLINGTON HTS. RD. TRACER-CABLE INTERCONNECT TO IL RTE. 72 (HIGGINS RD.)

I. D. O. T.

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- TRACER CABLE

GREEN

INTERCONNECT TO

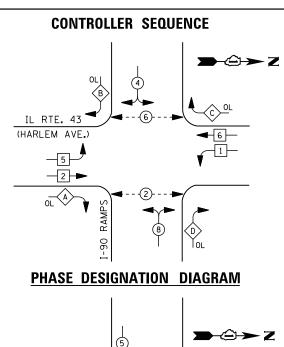
NORTHWEST POINT BLVD.

√\_N0. 6

-NO. 6 GREEN

GREEN

**CABLE PLAN** 



#### LEGEND

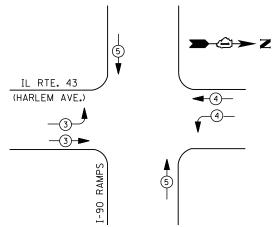
**★** DUAL ENTRY PHASE **→**(\*) → PEDESTRIAN PHASE

SINGLE ENTRY PHASE

OVERLAP

NUMBER REFERS TO ASSOCIATED PHASE

| RIGHT | TURN | OVERLAP | PHASE | DESIGNAT | <u>ION</u> |
|-------|------|---------|-------|----------|------------|
| OVEF  | RLAP | PERMIS: | SIVE  | PROTECT  | ED         |
| LETT  | ER   | PHASE   |       | PHASE    |            |
| Α     | =    | 2       | +     | 8        |            |
| В     | =    | 4       | +     | 5        |            |
| С     | =    | 6       | +     | 4        |            |



#### **EMERGENCY VEHICLE PREEMPTION SEQUENCE**

| EMERGENC <sup>*</sup>          | Y VEHICLE | PREEMPTOR | S        |
|--------------------------------|-----------|-----------|----------|
| EMERGENCY VEHICLE<br>PREEMPTOR | 3         | 4         | 5        |
| MOVEMENT                       | =         | -         | <b> </b> |

|              |                    | I. D. 0  | . Т.    |              |         |
|--------------|--------------------|----------|---------|--------------|---------|
|              | TRAFFIC S          | I GNAL I | NSTALLA | TION         |         |
|              | <b>ELECTRI CAL</b> | SERVI CE | REQUIR  | EMENTS       |         |
| TYPE         | NO. LAMPS          | WAT      | TAGE    | % OPERATIONS | TOTAL   |
|              |                    | INCAND.  | LED     |              | WATTAGE |
| SIGNAL (RED) | 20                 | 1 35     | 1 7     | 0.50         | 170     |
| (YELLOW)     | 20                 | 1 35     | 25      | 0.25         | 125     |
| ( GREEN)     | 20                 | 1 35     | 15      | 0.25         | 75      |
| ARROW        | 8                  | 1 35     | 12      | 0.10         | 10      |
| PED. SIGNAL  | 4                  | 90       | 25      | 1.00         | 100     |
| CONTROLLER   | 1                  | 100      | 100     | 1.00         | 100     |
| ILLUM. SIGN  |                    | 252      | 25      | 0.05         |         |
| VIDEO SYSTEM |                    | 150      | -       | 1.00         |         |
|              |                    |          |         |              |         |
|              |                    |          |         |              |         |
| FLASHER LED  |                    |          |         |              |         |
|              |                    |          |         | TOTAL =      | 580     |

#### BILLED TO: IDOT DISTRICT 1 ENERGY COSTS-

201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096 CONTACT JOE STACHO

630-424-5704 PHONE COMMONWEALTH EDISON

# SCHEDULE OF QUANTITIES

| <u>QUANTITY</u> | <u>UNIT</u> | <u>I TEM</u>  |
|-----------------|-------------|---|
| 1               | EACH        | MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION                       |
| 4               | EACH        | PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER |
| 4               | EACH        | PEDESTRIAN PUSH-BUTTON  |
| 1               | EACH        | MODIFY EXISTING CONTROLLER CABINET  |
| 1               | EACH        | REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT                                  |
| 1               | EACH        | UNINTERRUPTABLE POWER SUPPLY. SPECIAL                                     |

TRACER-

INTERCONNECT TO,

GARFIELD AVE./ HARRISON ST.

GREEN

IL RTE. 43 (HARLEM AVE.)

INTERSECTION -

AND SAMPLING (SYSTEM) **DETECTORS** 

ပြ

# **CABLE PLAN**

SAMPLING LOOPS

SAMPLING LOOPS

**≯**▼ □•)

-NO. 6 GREEN GREEN

#### REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

PEDESTRIAN SIGNAL HEAD PEDESTRIAN PUSH-BUTTON 4 EACH 4 EACH

TS #85 FOREST PARK

**→**②→ Z

- TRACER

INTERCONNECT TO

JACKSON BLVD.

-INTERSECTION AND SAMPLING

(SYSTEM) DETECTORS

GREEN

CABLE

| USER NAME = _USERNAME_       | DESIGNED - | DW  | REVISED - |                              | IL     | ROUTE 43 (HARLEM AVENUE) AT I-290 RAMPS              | F.A.<br>RTE. | SECTION    | COUNTY  | TOTAL SHEET |
|------------------------------|------------|-----|-----------|------------------------------|--------|--|--------------|------------|---------|-------------|
|                              | DRAWN -    | CC  | REVISED - | STATE OF ILLINOIS            |        | F QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, |              | 2014-090TS | СООК    | 76 42       |
| PLOT SCALE = 20.0000 ' / in. | CHECKED -  | JDH | REVISED - | DEPARTMENT OF TRANSPORTATION | AN     | ID EMERGENCY VEHICLE PREEMPTION SEQUENCE             |              |            | CONTRAC | T NO. 62A42 |
| PLOT DATE = 2/2/2015         | DATE -     |     | REVISED - |                              | SCALE: | SHEET NO. OF SHEETS STA. TO STA.                     |              | ILLINOIS   |         |             |
|                              |            |     |           |                              |        |  |              |            |         |             |

ENERGY SUPPLY -



I. D. O. T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS WATTAGE % OPERATIONS TOTAL WATTAGE INCAND. LED 128 SIGNAL (RED) 1 35 0.50 15 17 (YELLOW) 0.25 94 15 1 35 25 (GREEN) 19 1 35 15 0.25 72 ARROW 1 35 12 0.10 10 PED. SIGNAL 25 75 90 1.00 CONTROLLER 100 100 1.00 100 ILLUM. SIGN 252 25 0.05 5 VIDEO SYSTEM 150 1.00 FLASHER LED TOTAL =

BILLED TO: IDOT DISTRICT 1

CONTACT DAVE SCHACHT

630-437-2129

PHONE

201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096

COMMONWEALTH EDISON

ENERGY COSTS-

ENERGY SUPPLY -

**SCHEDULE OF QUANTITIES** 

<u>QUANTITY</u> <u>UNIT</u> MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT PEDESTRIAN PUSH-BUTTON, NON-LATCHING EACH EACH

## REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

**3**-

- TRACER

CABLE

NO. 6-

GREEN

PUSH BUTTON "B" SHALL PLACE A CALL IN PHASES 4 AND 6

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

3 EACH PEDESTRIAN PUSH-BUTTON

INTERCONNECT TO

FOXMOOR RD.

NO. 6-

**CABLE PLAN** 

GREEN

RTE

(5)

TS #1236 FOX RIVER GROVE (SH. 1)

GREEN

| USER NAME = _USERNAME_      | DESIGNED - | DW  | REVISED - |                              | 211                 | ROUTE    | 14 AT A  | CONOLL  | N ROAD     | F.A. | SECTION    | COUNTY  | TOTAL SHEE  | .₸       |
|-----------------------------|------------|-----|-----------|------------------------------|---------------------|----------|----------|---------|------------|------|------------|---------|-------------|----------|
|                             | DRAWN -    | CC  | REVISED - | STATE OF ILLINOIS            |                     |          |          |         |            | 1112 | 2014-090TS | McHENRY | 76 43       | <u>,</u> |
| PLOT SCALE = 20.000 ' / in. | CHECKED -  | JDH | REVISED - | DEPARTMENT OF TRANSPORTATION | 2CHEDI              | OLE OF C | UUANIIII | E2 AND  | CABLE PLAN |      |            |         | T NO. 62A42 | <u>.</u> |
| PLOT DATE = 2/2/2015        | DATE -     |     | REVISED - |                              | SCALE: N.T.S. SHEET | NO. C    | OF SHEE  | TS STA. | . TO STA.  |      | ILLINOIS   |         |             |          |

INTERCONNECT TO LINCOLN AVE.

**933**-5

GREEN

(A) -(5)

ALGONQUIN RD.

CABLE



# PROPOSED SEQUENCE OF OPERATIONS

| MOVEMENT 🔊  | 1-       | او     | ~        | 5        | 1 6      | PEOS    | *      | +      | _ <sup>2</sup> 5 | 6  | PE | DS, | - 2 |          | 1   |            |    |          | 1        | 1 3036   | 200 |     | SH    |
|---|----------|--------|----------|----------|----------|---------|--------|--------|------------------|----|----|-----|-----|----------|-----|------------|----|----------|----------|----------|-----|-----|-------|
| PHASE   |          | 1-     | -5       |          |          | 1+6     | -      | 2      | +5               |    | 2- | -6  |     |          | 3   |            |    |          | 4        | \$       |     |     | K     |
| INTERVAL  | 1        | 2      | 3        | A        | 5        | 6       | 7      | 8      | 9                | 10 | 11 | 12A | 128 | 13       | 14A | 14B        | 15 | 16       | 17A      | 178      | 17C | 170 | L     |
| CHANGE TO   | V        | 1+6    | 2+5      | 2+6      | /        | Ø       | 2+5    | 1      | 2+6              | 1  | 1  |     | 3   | 1        | 1+5 | 1+6<br>2+6 | 1  |          | 1        | +5       |     | +6  |       |
| U.S. 14 Eastbound Far Left and<br>Far Mount Mast Arm Signals                                      | R<br>+G  |        | R<br>•Y- | R<br>+Y- | G<br>+G- | G<br>+G | G<br>Y | R      | R                | G  | G  | Y   | R   | Я        | R   | R          | Я  | Я        | R        | R        | R   | R   | R     |
| U.S. 14 Eastbound<br>Mid Mount Mast Arm Signal  | R        | R      | R        | R        | G        | G       | G      | R      | R                | G  | G  | Y   | R   | R        | R   | Я          | A  | Я        | R        | R        | R   | Я   | R     |
| U.S. 14 Westbound Far Left and<br>Far Mount Mast Arm Signals                                      | H<br>-G- | A<br>Y | R<br>-G  | A<br>+Y- | R        | R       | A      | G<br>¢ | G<br>+Y-         | G  | G  | Y   | R   | R        | R   | R          | Я  | R        | R        | R        | Я   | R   | R     |
| U.S. 14 Westbound<br>Mid Mount Mast Arm Signal  | R        | R      | R        | R        | R        | R       | Я      | G      | G                | G  | G  | Y   | R   | R        | R   | R          | A  | R        | R        | R        | R   | R   | R     |
| Access Drive Southbound<br>Far Left And Far Right Signals   | R        | R      | R        | R        | R        | R       | R      | R      | R                | A  | R  | R   | R   | G<br>-G- | Y   | R          | Я  | R        | R        | R        | R   | R   | R     |
| Access Orive Southbound<br>Near Right Signal  | R        | R      | R        | R        | R        | R       | R      | R      | R                | R  | R  | R   | R   | G        | Y   | R          | А  | R        | R        | R        | R   | R   | R     |
| Algonquin Ave Northbound Signals<br>(South of Railroad Tracks)                                    | R        | R      | R        | R        | R        | R       | R      | A      | R                | R  | R  | R   | R   | R        | R   | R          | G  | G        | Y        | R        | R   | Я   | R     |
| Algonquin Ave Northbound Far Left<br>and End Mount Mast Arm Signals<br>(North of Railroad Tracks) | R        | R      | R        | R        | R        | A       | R      | R      | R                | R  | R  | R   | R   | R        | Я   | R          | -G | G<br>•G- | G<br>•G- | G<br>-G- | Y   | R   | R     |
| Algonquin Ave Northbound Mid<br>Mount Mast Arm Signal<br>(North of Railroad Tracks)               | R        | R      | R        | R        | R        | A       | R      | R      | R                | R  | R  | R   | R   | R        | R   | R          | G  | G        | G        | G        | Y   | R   | R     |
| Pedestrian Crossing Signals<br>for South Leg  | DW       | OW     | OW       | OW       | w        | FL      | OW     | OW     | DW               | w  | FL | DW  | OW  | DW       | DW  | DW         | DW | OW       | CMY      | OW       | OW  | DW  | · k   |
| Pedestrian Crossing Signals<br>for East Leg   | OW       | DW     | OW       | OW       | OW       | OW      | OW     | OW     | DW               | OW | OW | OW  | OW  | DW       | DAV | OW         | w  | FL       | ENV      | DW       | DW  | OW  | PAR K |

Ø THIS "WALK" OR FLASHING. "DON'T WALK" NTERVAL MAY FINISH TIMING IN THE BIDIRECTIONAL STRAIGHT THROUGH MOVEMENT IF THE LEFT ARROW TIME IS NOT SUFFICIENT TO COMPLETE "WALK" OR FLASHING. "DON'T WALK" INTERVALS.

- PHASES 2 AND 6 SHALL BE ON FECALL - PHASE 1 ON OMITS PHASE 5. - PHASE 5 ON OMITS PHASE 1.

### EMERGENCY VEHICLE PREEMPTION SEQUENCE OF OPERATIONS

| INTERVAL FROM NORMAL SEQUENCE   | 1        | 1        | 5        |          | 5  |     | 8        |    | 8   | 10 |          | 10 |     | 1   | 3   | 13      |          |          | 15       |    |     | 15       |     | EAGE     | NCY     | CLEAR     |
|---|----------|----------|----------|----------|----|-----|----------|----|-----|----|----------|----|-----|-----|-----|---------|----------|----------|----------|----|-----|----------|-----|----------|---------|-----------|
| EMERGENCY VEHICLE PREEMPTION INTERVAL   | IA       | 18       | 1C       | ID       | 18 | 1F  | 1G       | 1H | n   | ıκ | 1L       | IM | IN  | 1P  | 10  | ŧЯ      | 15       | 17       | IU       | 1V | 144 | ıх       |     | ITER     |         | SECUENC   |
| CHANGE TO   | 2,3,4    | 1C       | 2        | 1E       | 1F | 3.4 | 2        | IJ | 3.4 | 2  | IM       | IN | 3,4 | 10  | 2,3 | 4       | 1T       | 1U       | W        | 1W | 2,4 | 3        | 2   | 3        | 4       |           |
| U.S. 14 Eastbound Far Lelt and<br>Far Mount Mast Arm Signals                                      | R<br>-Y- | G<br>-C- | G<br>•Y- | G<br>G   | Y  | R   | R        | R  | R   | G  | G        | Y  | Я   | R   | R   | R       | R        | R        | R        | R  | Я   | R        | G   | R        | R       | •         |
| U.S. 14 Eastbound<br>Mid Mount Mast Arm Signal  | R        | G        | G        | G        | Y  | R   | R        | R  | R   | G  | G        | Y  | A   | R   | R   | R       | R        | R        | R        | R  | R   | R        | G   | R        | R       | •         |
| U.S. 14 Westbound Far Left and<br>Far Mount Mast Arm Signals                                      | R<br>•Y- |          | R        | R        | R  | R   | G<br>+Y- | Y  | R   | G  | G        | Y  | R   | R   | R   | В       | R        | R        | R        | R  | R   | R        | G   | R        | R       | •         |
| U.S. 14 Westbound<br>Mid Mount Mast Arm Signal  | R        | A        | R        | Я        | R  | R   | G        | Y  | R   | G  | G        | Y  | R   | R   | R   | R       | R        | R        | В        | R  | R   | R        | G   | R        | R       | •         |
| Access Drive Southbound<br>Far Left And Far Right Signals   | R        | R        | R        | R        | R  | R   | R        | R  | R   | A  | Я        | R  | R   | Y   | R   | G<br>-G | R        | R        | R        | R  | R   | R        | R   | R        | G<br>•G | *         |
| Access Drive Southbound<br>Near Right Signal  | R        | R        | R        | R        | R  | R   | R        | R  | R   | R  | R        | R  | R   | Y   | R   | G       | R        | R        | R        | R  | R   | R        | R   | R        | G       | <b>*</b>  |
| Algonquin Ave Northbound Signals<br>(South of Railroad Tracks)                                    | R        | R        | R        | R        | R  | R   | R        | R  | R   | R  | Я        | R  | R   | R   | R   | Я       | G        | Υ        | R        | R  | R   | G        | R   | G        | R       | •         |
| Algonquin Ave Northbound Far Left<br>and End Mount Mast Arm Signals<br>(North of Reilroad Tracks) | R        | R        | R        | R        | R  | R   | R        | R  | R   | R  | R        | R  | R   | R   | R   | R       | G<br>-G- | G<br>-G- | G<br>-G- | Y  | P   | G<br>•G- | R   | G<br>-G- | R       | <b>♦</b>  |
| Algonquin Ave Northbound Mid<br>Mount Nast Arm Signal<br>(North of Railroad Tracks)               | Я        | R        | R        | R        | R  | R   | R        | R  | R   | R  | А        | R  | R   | В   | R   | R       | G        | G        | G        | Y  | R   | G        | R   | G        | R       | <b>*</b>  |
| Pedestrian Crossing Signals<br>for South Leg  | DAY      | FL       | OW       | FL<br>OW | OW | OW  | DW       | DW | DW  | FL | FL<br>DW | DW | ON  | DAY | DW  | OW      | DW       | OW       | DIV      | DW | OW  | DM       | DAV | OW       | OW      | <b>\$</b> |
| Pedestrian Crossing Signals<br>for East Leg   | [#¥      | DW       | CW       | DW       | DW | OW  | OW       | OW | DW  | DW | DW       | DW | DW  | DW  | DW  | OW      | FL       | OW.      | DIV      | OW | OW  | FL<br>OW | DW  | ow       | OW      | •         |

EMBRIGENCY VEHICLE SEQUENCE SHALL PROVIDE THE PROPER CLEARANCE INTERNAL TO RESUME THE NORMAL SEQUENCE OF OPERATION OR PROPER CLEARANCE INTERNAL TO DISPLAY A DIFFERENT EMERGENCY VEHICLE INTERNAL AFTER EMERGENCY VEHICLE INTERNAL 2,3 OR 4 IS TERMINATED.

#### RAILROAD PREEMPTION SEQUENCE OF OPERATIONS

| INTERVAL FROM NORMAL SEQUENCE   | 1        | 1  | 5   | 1   | 3   |          | 10 | 1   | 3  | 1        | 5       |     | <  | 0       | <        |    | <  |         |     |    |    |    |    |                                      |
|---|----------|----|-----|-----|-----|----------|----|-----|----|----------|---------|-----|----|---------|----------|----|----|---------|-----|----|----|----|----|--------------------------------------|
| INTERWAL FROM EMERGENCY<br>VEHICLE PREEMPTION SEQUENCE  | X        | 5  | <   | 5   | <   | 5        | <  | 1   | <  | >        | <       |     | 2  |         | 3        | -  | 1  |         |     |    |    |    |    |                                      |
| RAILROAD PREEASTION INTERVAL  | 1A       | 18 | c   | 10  | 1E  | 1F       | 1G | IH  | IJ | 1K       | 11      | 1M  | 1N | 1P      | 10       | 1R | 15 | 2       | зА  | 38 | 4  | 5  | 6  | RESUME TO NORMAL<br>SEQUENCE PHASE 1 |
| CHANGE TO   | 2        | 1C | 2   | 1E  | 2   | 1G       | 2  | IJ  | 2  | 11_      | 2       | IN  | 2  | 10      | 2        | 15 | 2  | 34      | 38  | 4  | 5  | 6  |    | 09                                   |
| U.S. 14 Eastbound Far Left and<br>Far Nount Mast Arm Signals                                      | R<br>-Y- | Y  | R   | R   | R   | Y        | R  | R   | R  | R        | R       | Y   | R  | Я       | R        | R  | R  | A       | R   | A  | G  | Y  | R  | PREEMPTION SEQUENCE                  |
| U.S. 14 Eastbound<br>Mid Mount Mest Arm Signal  | R        | Y  | R   | R   | R   | Y        | R  | R   | A  | Я        | R       | Y   | R  | R       | R        | R  | R  | R       | R   | Я  | G  | Y  | R  |                                      |
| U.S. 14 Westbound Fer Left and<br>Far Nount Mast Arm Signals                                      | H<br>-Y- | R  | 3   | Y   | R   | Y        | R  | R   | R  | R        | Я       | Y   | A  | A       | R        | R  | R  | R       | R   | А  | G  | Y  | R  |                                      |
| U.S. 14 Westbound<br>Mid Mount Mast Arm Signat  | R        | R  | 2   | Y   | R   | Y        | R  | R   | Я  | R        | R       | Y   | R  | R       | R        | Я  | R  | R       | R   | F  | G  | Y  | R  |                                      |
| Access Drive Southbound<br>Far Left And Far Right Signals   | R        | R  | 3   | R   | R   | R        | R  | Y   | R  | R        | R       | R   | R  | R       | R        | Y  | R  | R       | R   | Я  | R  | R  | R  |                                      |
| Access Drive Southbound<br>Near Right Signal  | R        | R  | R   | R   | Я   | R        | Я  | Y   | R  | R        | R       | R   | R  | R       | R        | Y  | R  | R       | R   | Я  | R  | R  | R  |                                      |
| Algorquin Ave Northbourd Signals<br>(South of Railroad Tracks)                                    | R        | R  | 3   | Я   | R   | R        | А  | R   | R  | Y        | R       | R   | Я  | Y       | А        | R  | R  | R       | R   | A  | R  | R  | R  |                                      |
| Algorquin Ave Northbound Far Left<br>and End Mount Mast Arm Signals<br>(North of Bailroad Tracks) | R        | R  | 7   | R   | R   | R        | R  | R   | R  |          | G<br>•G | R   | H  | G<br>•G | G<br>-G- | R  | R  | G<br>•G | Y   | FI | R  | R  | R  |                                      |
| Algorquin Ave Northbound Mid<br>Mount Mast Arm Signal<br>(North of Ballroad Tracks)               | R        | R  | 7   | R   | R   | Я        | R  | R   | R  | G        | G       | R   | R  | G       | G        | R  | R  | G       | Y   | R  | R  | R  | R  |                                      |
| Pedestrian Crossing Signals<br>for South Leg  | CW       | FL | O.V | DW  | DW  | FL<br>OW | OW | DVA | DW | DW       | CW      | OW  | OW | OW      | DW       | DW | DW | OW      | OW  | OW | DW | DW | DW |                                      |
| Pedestrian Crossing Signals<br>for East Leg   | DW       | OW | OW  | DNV | DAY | DW       | DW | DW  | ow | FL<br>DW | CW      | CMY | OW | DN      | DW       | OW | DW | CNY     | ONY | OW | ow | OW | OW |                                      |
| U.S. 14 Eastbound<br>No Right Turn Signs  | ON       | ON | CN  | ON  | CN  | ON       | ON | ON  | ON | ON       | ON      | ON  | ON | ON      | ON       | ON | ON | ON      | ON  | ON | ON | ON | ON |                                      |
| U.S. 4 Wes bound<br>No Left Turr Signs  | ON       | ON | CN  | ON  | ON  | an       | ON | ON  | CN | GN       | ON      | ON  | ON | ON      | ON       | ON | ON | ON      | ON  | ON | ON | ON | CM |                                      |

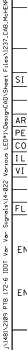
THE PALROAD PREEMPTION SEQUENCE OF OPERATION SHALL HAVE PRICETY OVER ALL OTHER SEQUENCES OF OPERATION.

THE EXISTING PEDESTRIAN CLEARANCE TIME HAS BEEN PROGRAMMED PER AN INTERIM LC.C. OFIDER WHICH MANDATED & SECONDS OF FLASHING TOORT WALK'T THROUGH THE GREEN INTERVAL. THE TRAFFEDRALIFIOAD SIGNAL REPORT PREPARED FOR THIS INTERSECTION RECOMMENDS PEDISTRIAN CLEARANCE TIME ONLY THROUGH THE FEDITIONS.

TS #1236 FOX RIVER GROVE (SH. 2)

COUNTY TOTAL SHEET NO.

McHENRY 76 44 US ROUTE 14 AT ALGONQUIN ROAD USER NAME = \_USERNAME\_ DESIGNED -DW REVISED SECTION STATE OF ILLINOIS SEQUENCE OF OPERATIONS, EMERGENCY VEHICLE PREEMPTION SEQUENCE DRAWN CC REVISED 2014-090TS **DEPARTMENT OF TRANSPORTATION** CHECKED REVISED OF OPERATIONS, AND RAILROAD PREEMPTION SEQUENCE OF OPERATIONS CONTRACT NO. 62A42 SCALE: N.T.S. SHEET NO. OF SHEETS STA. DATE REVISED PLOT DATE = 2/2/2015 TO STA.



I. D. O. T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS WATTAGE % OPERATIONS TOTAL WATTAGE INCAND. LED SIGNAL (RED) 1 35 17 0.50 128 15 (YELLOW) 0.25 94 15 1 35 25 (GREEN) 19 1 35 15 0.25 72 ARROW 1 35 12 0.10 10 150 PED. SIGNAL 25 90 1.00 CONTROLLER 100 100 1.00 100 ILLUM. SIGN 252 25 0.05 5 VIDEO SYSTEM 150 1.00 FLASHER LED

TOTAL = 559

ENERGY COSTS-

BILLED TO: IDOT DISTRICT 1

201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY -

CONTACT DAVE SCHACHT

630-437-2129 COMMONWEALTH EDISON

# REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

INTERSECTION AND SAMPLING (SYSTEM DETECTORS

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

5 EACH PEDESTRIAN PUSH-BUTTON

# **SCHEDULE OF QUANTITIES**

**QUANTITY** <u>UNIT</u> EACH MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT EACH

EACH PEDESTRIAN PUSH-BUTTON, NON-LATCHING **CABLE PLAN** 

-NO. 6 GREEN

RYG

NO. 6-

R > G G

GREEN

LINCOLN

RYG

90

<u>3</u>

**9** 

(a) (-) (z)

GREEN

TS #1237 FOX RIVER GROVE (SH. 1)

-NTERCONNECT TO

ALGONQUIN RD.

TRACER CABLE

GREEN

NOTE: PUSH BUTTON "B" SHALL PLACE A CALL

-NO. 6

GREEN

| USER NAME = _USERNAME_      | DESIGNED - | DW  | REVISED - |                              |               | IIS BUI    | ITE 1/ | AT LING | COLN AV | ENITE     | F.A.    | SECTION    | COUNTY  | TOTAL   | SHEET |
|-----------------------------|------------|-----|-----------|------------------------------|---------------|------------|--------|---------|---------|-----------|---------|------------|---------|---------|-------|
|                             | DRAWN -    | CC  | REVISED - | STATE OF ILLINOIS            |               |            |        |         |         |           | 1,,,,,, | 2014-090TS | McHENRY | 76      | 45    |
| PLOT SCALE = 20.000 ' / in. | CHECKED -  | JDH | REVISED - | DEPARTMENT OF TRANSPORTATION |               | SCHEDULE ( | JF QUA | MIIIIE2 | AND CA  | ABLE PLAN |         | 2011 00010 | CONTRAC | T NO. 6 | 2A42  |
| PLOT DATE = 2/2/2015        | DATE -     |     | REVISED - |                              | SCALE: N.T.S. | SHEET NO.  | OF     | SHEETS  | STA.    | TO STA.   |         | ILLINOIS   |         |         |       |

U.S. ROUTE 14



| MOVEMENT ®  | 1-      | بر       | ~        | - 5      | 1 6 | PEOS    | +        | +  | PEDS  | - 2 - 5  | 6  | PE        | os, | 2   |          | 3   |            |          |    | 1    | 4 1000  | 1   |      | SH   |
|---|---------|----------|----------|----------|-----|---------|----------|----|-------|----------|----|-----------|-----|-----|----------|-----|------------|----------|----|------|---------|-----|------|------|
| PHASE   |         | 1+       | -5       |          |     | 1+6     |          | -  | 2+5   |          |    | 2+        | 6   |     |          | 3   |            |          |    | 4    | 4       |     |      | Y Y  |
| INTERVAL  | 1       | 2        | 3        | 4        | 5   | 0       | T        | 0  | 4     | 10       | 11 | 12        | 13/ | 138 | 14       | 15A | 158        | 16       | 17 | ABI  | 189     | 180 | 180  | T.   |
| CHANGE TO   | 1       | 1+6      | 2+5      | 2+6      | /   | /ø      | 2+6      | /  | Ø     | 2+6      | 1  | 1         |     | 3   |          | 1+5 | 1+6<br>2+6 | /        | 1  |      | +5      | 24  | 2011 | 1    |
| U.S. 14 Eastbound Far Lett and<br>Far Mount Mast Arm Signals                                    | R<br>-G | H<br>-G- | A<br>-Y- | H<br>-Y- | 9   | G<br>-G | G<br>-Y- | Я  | R     | А        | G  | G         | Y   | Я   | R        | R   | R          | A        | Я  | R    | Я       | R   | R    | R    |
| U.S. 14 Eastbound<br>Mid Mount Mast Arm Signal  | R       | R        | R        | R        | G   | G       | G        | A  | Fi    | R        | G  | G         | Y   | R   | R        | R   | R          | A        | R  | R    | R       | R   | A    | R    |
| U.S. 14 Westbound Far Lelt and<br>Far Mount Mast Arm Signals                                    | R<br>-G | F<br>-Y- | R<br>•G- | R<br>-Y- | R   | R       | R        | 90 | G -G- | G<br>+Y- | G  | G         | Y   | R   | R        | R   | R          | R        | R  | B    | 8       | R   | A    | R    |
| U.S. 14 Westbound<br>Mid Mount Mast Arm Signal  | R       | R        | R        | R        | В   | R       | R        | G  | G     | G        | G  | G         | Y   | R   | R        | R   | R          | R        | R  | Я    | R       | R   | R    | R    |
| Lincoln Ave Southbound Far Left and End Mount Mast Arm Signals                                  | R       | R        | R        | R        | R   | R       | R        | R  | R     | R        | R  | A         | Я   | R   | G<br>-G- | Y   | R          | R        | R  | A    | R       | R   | R    | R    |
| Lincoln Ave Southbound<br>Mid Mount Mast arm Signal   | R       | R        | R        | A        | A   | Я       | R        | R  | Я     | Я        | R  | Я         | R   | R   | G        | Y   | R          | B        | R  | R    | R       | R   | R    | R    |
| Lincoln Ave Northbound Signals<br>(South of Railroad Tracks)                                    | R       | R        | R        | R        | R   | R       | R        | R  | 8     | A        | R  | Я         | R   | R   | R        | R   | R          | G        | G  | Y    | R       | R   | A    | R    |
| Lincoln Ave Northbound Far Lelt<br>and End Mount Mast Arm Signals<br>(North of Railroad Tracks) | R       | Я        | R        | R        | R   | R       | R        | R  | R     | Я        | R  | R         | R   | R   | R        | R   | R          | G<br>+G- | -G | G -G | G<br>-G | Y   | R    | R    |
| Lincoln Ave Northbound Mid<br>Mount Mast Arm Signal<br>(North of Railroad Tracks)               | R       | R        | R        | R        | R   | Я       | R        | R  | R     | A        | R  | R         | R   | R   | R        | R   | R          | G        | G  | G    | G       | Y   | R    | R    |
| Pedestrian Crossing Signals<br>for North Leg  | DW      | DW       | DW       | OW       | OW  | DW      | OW       | w  | FL    | OW       | w  | FL.<br>OW | DW  | OW  | OW       | OW  | DW         | DW       | DW | DW   | OW      | DW  | ŪΝ   | ARK  |
| Pedestrian Crossing Signals<br>for South Leg  | DW      | DW       | DW       | DW       | w   | FL      | OW       | DW | DW    | DW       | W  | FL        | DW  | DW  | UW       | OW  | CVA        | CW       |    |      |         | -   |      | X    |
| Pedestrian Crossing Signals<br>for East Leg   | DW      | ow       | OW       | UW       | OW  | DW      | DW       | CW | OW    | DW       | OW | OW        | DM  | DW  | OW       | OW  | DW         | w        | FL | OW   | DW      | DW  | DW   | An K |

Ø THIS "WALK" OR RASHING "DON'T WALK" INTERVAL MAY FINISH TIMING IN THE BIGIPECTIONAL STRAIGHT THROUGH MOVEMENT IF THE LEFT ARROW TIME IS NOT SUFFICIENT TO COMPLETE "WALK" OR RASHING "DON'T WALK" INTERVALS.

- PHASES 2 AND 6 SHALL BE ON RECALL - PHASE 1 ON OMTS PHASE 5 - PHASE 5 ON OMIS PHASE 1

# EMERGENCY VEHICLE PREEMPTION SEQUENCE OF OPERATIONS

| INTERVAL FROM NORMAL SEQUENCE   | 1        | 1       | 5        |     | 5  |     | 1   | 8        |          | 8   |     | 11  |    | 11 |     | 1  | 4   | 14       |          |          | 16      |    |     | 16      |    | ERGE    | NCY      | CLEAR     |
|---|----------|---------|----------|-----|----|-----|-----|----------|----------|-----|-----|-----|----|----|-----|----|-----|----------|----------|----------|---------|----|-----|---------|----|---------|----------|-----------|
| EMERGENCY VEHICLE<br>PREEMPTION INTERVAL  | tA       | 18      | 10       | 10  | 1E | 1F  | 1G  | 114      | IJ       | 116 | 11, | 184 | IN | 1P | 10  | 1R | 1\$ | 17       | IU       | īV       | 197     | ıχ | ΙΥ  | 12      |    | TER     |          | SEQUENCE  |
| CHANGE TO   | 2.3.     | 10      | 2        | 18  | 1F | 3.4 | IH. | 2        | tK.      | 11, | 3,4 | 2   | 1P | 10 | 3.4 | 15 | 2.3 | 4        | 14       | 199      | 1X      | 11 | 2,4 | 3       | 2  | 3       | 4        |           |
| U.S. 14 Eastbound Far Lell and<br>Far Mount Mast Arm Signals                                    | R<br>-Y  | G<br>-G | G<br>-Y- | G.C | Y  | A   | A   | R        | Я        | Я   | R   | G   | G  | Y  | A   | F  | R   | R        | R        | R        | A       | R  | R   | Я       | G  | R       | R        | •         |
| U.S. 14 Eastbound<br>Mid Mount Mast Arm Signal  | R        | G       | G        | G   | Y  | A   | R   | R        | А        | A   | R   | G   | G  | Y  | A   | F  | R   | R        | R        | R        | R       | A  | R   | Я       | G  | Я       | R        | \$        |
| U.S. 14 Westbound Far Lelt and<br>Far Mount Mast Arm Signals                                    | R<br>-Y- | R       | R        | R   | А  | R   | 9   | G<br>-Y- | G<br>+G- | Y   | R   | G   | G  | Y  | R   | F  | R   | R        | R        | R        | R       | А  | Я   | R       | G  | A       | R        | <b>*</b>  |
| U.S. 14 Westbound<br>Mid Mount Mast Arm Signal  | R        | R       | A        | A   | R  | R   | G   | G        | G        | Y   | R   | G   | G  | Y  | R   | F  | A   | R        | R        | R        | R       | A  | Я   | Я       | G  | Я       | R        | •         |
| Lincoln Ave Southbound Far Lelt<br>and End Mount Mast Arm Signets                               | R        | R       | R        | А   | R  | А   | R   | R        | Я        | A   | R   | Я   | A  | R  | R   | Y  | R   | G<br>-G- | R        | R        | R       | R  | В   | R       | R  | R       | G<br>-G- | <b>*</b>  |
| Lincoln Ave Southbound<br>Mid Mount Mast arm Signal   | R        | R       | R        | R   | R  | A   | R   | R        | Я        | А   | R   | R   | R  | R  | R   | Y  | R   | G        | Я        | R        | Я       | A  | A   | A       | R  | A       | G        | •         |
| Lincoln Ave Northbound Signals<br>(South of Railroad Tracks)                                    | R        | A       | R        | R   | R  | Я   | R   | Я        | R        | R   | R   | R   | R  | R  | R   | F  | R   | R        | G        | Y        | A       | A  | R   | G       | R  | G       | R        | •         |
| Lincoln Ave Northbound Far Left<br>and End Mount Mast Arm Signals<br>(North of Railroad Tracks) | R        | R       | R        | А   | R  | R   | R   | R        | R        | А   | R   | R   | R  | R  | R   | P  | R   | п        | G<br>•G- | G<br>-G- | G<br>+G | Y  | R   | G<br>-G | R  | G<br>-G | R        | <b>♦</b>  |
| Lincoln Ave Northbound Mid<br>Moun! Mast Arm Signal<br>(North of Railroad Tracks)               | R        | R       | R        | Я   | R  | А   | R   | R        | Я        | Я   | R   |     | R  | R  | R   | F  | R   | 1        | G        | G        | G       | Y  | R   | G       | R  | G       | R        | <b>\$</b> |
| Pedestrian Crossing Signals<br>for North Leg  | DW       | OW      | DW       | DW  | DW | OW  | FL  | OW       | FL       | OW  | OW  | FL  | FL | OW | OW  | OW | DIV | DVV      | OW       | ON       | OW      | DW | OH  | ON      | OW | DIV     | DW       | <b>*</b>  |
| Pedestrian Crossing Signals<br>for South Leg  | DW       | 1000    |          |     | _  | -   | -   | -        | OW       | _   | _   | -   | UW |    |     |    |     |          |          | -        |         | -  |     |         | DW | DIV     | DNY      | <b>\$</b> |
| Pedestrian Crossing Signals<br>for East Leg   | DW       | DW      | OW       | OW  | CW | OW  | DW  | DW       | OW       | ov  | OVY | DW  | OW | DW | DW  | OW | OW  | OW       | FL<br>DW | DW       | OW      | CW | DW  | FL      | DW | DW      | DW       | <b>\$</b> |

EMERGENCY VEHICLE SEQUENCE SHALL PROVIDE THE PROPER CLEARANCE INTERVAL TO RESUME THE NORMAL SEQUENCE OF OPETIATION OR PROPER CLEARANCE INTERVAL TO COPILAY A DIFFERENT EMERGENCY VEHICLE INTERVAL AFTER EMERGENCY VEHICLE INTERVAL 2,3 OR 4 IS TERMINATED.

#### RAILROAD PREEMPTION SEQUENCE OF OPERATIONS

| INTERVAL FROM NORMAL SEQUENCE   | 1         | 1   | 5   | . 1 | 3   |    | 11 | 1   | 4   | 1   | G        | 2   | $\leq$ | 2       | $\leq$  | 2   | $\leq$ |          |    |    |     |    |    | 3.7                                  |
|---|-----------|-----|-----|-----|-----|----|----|-----|-----|-----|----------|-----|--------|---------|---------|-----|--------|----------|----|----|-----|----|----|--------------------------------------|
| INTERVAL FROM EMERGENCY<br>VEHICLE PREEMPTION SEQUENCE  | X         | >   | <   | >   | <   |    | <  |     | <   |     | <        | 1   | 2      | -       | 3       | 4   |        |          |    |    |     |    | _  | 3                                    |
| HAUROAD PREEXIFTION INTERVAL  | 1A        | 18  | 10  | 10  | 1E  | 1º | 16 | 111 | IJ  | 1K  | 11       | 114 | IN     | 1P      | 10      | A   | 15     | 2        | 3/ | 38 | 4   | 5  | 6  | RESUME TO NORMAL<br>SEQUENCE PHASE 3 |
| CHANGE TO   | 2         | 10  | 2   | ΙE  | 2   | 1G | 2  | u   | 2   | IL  | 2        | 1N  | 5      | 10      | 2       | S   | 2      | 34       | 38 | 4  | 5   | 6  |    | OR "  EMERGENCY VEHICLE              |
| U.S. 14 Eastbound Far Lett and<br>Far Mount Mast Arm Signals                                    | FI<br>-Y- | Y   | R   | R   | R   | Y  | A  | R   | Я   | R   | R        | Y   | R      | R       | R       | Я   | R      | Я        | R  | Я  | G   | Y  | R  | PREEMPTION SEQUENCE                  |
| U.S. 14 Eastbound<br>Mid Mount Meet Arm Signal  | R         | Y   | A   | A   | Я   | Y  | A  | R   | 8   | R   | R        | Y   | A      | R       | A       | Я   | R      | R        | R  | R  | G   | Y  | A  |                                      |
| U.S. 14 Westbound Far Lell and<br>Far Mount Mass Arm Signals                                    | R<br>-Y-  | R   | R   | Y   | R   | Y  | R  | R   | A   | Я   | R        | Y   | R      | E       | Я       | я   | R      | R        | R  | A  | G   | Y  | R  |                                      |
| U.S. 14 Westbound<br>Mid Mount Mant Arm Signal  | R         | R   | R   | Y   | Я   | Y  | R  | R   | R   | R   | R        | Y   | R      | R       | R       | R   | R      | A        | R  | Я  | G   | Y  | R  |                                      |
| Lincoln Ave Southbound Far Left<br>and End Mount Mast Arm Signals                               | R         | R   | R   | Я   | R   | R  | R  | Y   | A   | R   | R        | A   | R      | A       | R       | Y   | R      | Я        | B  | R  | R   | R  | Я  |                                      |
| Lincoln Ave Southbound<br>kild Mount Mast arm Signal  | A         | n   | R   | п   | R   | A  | H  | Y   | A   | R   | R        | R   | R      | R       | R       | Y   | R      | R        | R  | H  | Я   | R  | A  |                                      |
| Lincoln Ave Northbound Signals<br>(South of Rollroad Tracks)                                    | R         | R   | R   | R   | R   | R  | R  | R   | A   | Y   | Я        | Я   | Я      | Y       | R       | R   | R      | R        | R  | R  | A   | R  | R  |                                      |
| Lincoln Ave Northbound Fir Left<br>and End Mount Mast Arm Signals<br>(North of Railroad Tracks) | R         | A   | R   | A   | R   | Я  | R  | A   | R   | 6   | G<br>-G- | R   | R      | G<br>-G | G<br>-G | R   | R      | G<br>-G- | Y  | R  | R   | R  | Я  |                                      |
| Lincoln Ave Northbound Mid<br>Mount Mast Arm Signal<br>(North of Railroad Tracks)               | Я         | R   | H   | R   | R   | R  | R  | A   | R   | G   | G        | R   | R      | G       | G       | R   | А      | G        | Y  | Я  | 93  | R  | R  |                                      |
| Pedesirian Crossing Signals<br>for North Leg  | CIV       | DAY | DW  | FL  | DIV | FL | DW | DAY | CAY | 0.7 | DIV      | DW  | UW     | DW      | CW      | EW  | CW     | DIV      | DW | OW | OW  | UV | DW |                                      |
| Pedestrian Crossing Signals<br>for South Leg  | CIV       | FL  | OW  | ow  | EW  | FL | DW | DIV | CIV | OVV | ENV      | CAA | DW     | Cix     | DVV     | DIV | CIV    | DIV      | OW | OW | CVV | OW | DW |                                      |
| Pedestrian Crossing Signals<br>for East Leg   | DW        | DW  | OW. | CAN | 0.7 | DW | DW | DW  | Ctv | FL  | DW       | UW  | DW     | OW      | OW      | DW  | OW     | DW       | OW | OW | CM  | UW | DW |                                      |
| U.S. 14 Eastbound<br>No Right Turn Signs  | CN        | ON  | ON  | ON  | ON  | ON | av | ON  | ON  | GN  | ON       | ON  | ON     | ON      | ON      | ON  | QV     | ON       | ON | CN | ON  | GN | ON |                                      |
| U.S. 14 Westbound<br>No Left Turn Signs   | ON        | ON  | ON  | ON  | ON  | ON | CN | CN  | CN  | ON  | ON       | ON  | ON     | ON      | ON      | ON  | ON     | ON       | ON | CN | ON  | ON | GN |                                      |

SHALL HAVE PRICIATY OVER ALL OTHER SEQUENCES OF OPERATION

THE EXISTANC PERSISTANCE CONDENT WAND, THE ASSESSMENT OF PROGRAMMENT OF THE PERSON OF PROGRAMMENT OF THE PERSON OF PROGRAMMENT OF THE PERSON OF PROGRAMMENT OF THE STEEL AND ON PERSON OF PERSON OF THE PERSON OF TH

TS #1237 FOX RIVER GROVE (SH. 2)

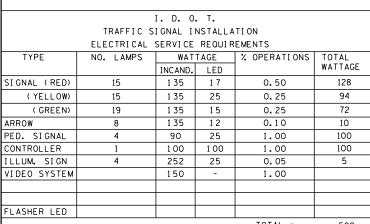
COUNTY TOTAL SHEET NO.

MCHENRY 76 46

CONTRACT NO. 62A42

| USER NAME = _USERNAME_      | DESIGNED - | DW  | REVISED - | OTATE OF HUMBIO              |                 |           |          |        | LN AVENUE     |            | F.A.<br>RTE. | SECTION    |
|-----------------------------|------------|-----|-----------|------------------------------|-----------------|-----------|----------|--------|---------------|------------|--------------|------------|
|                             | DRAWN -    | СС  | REVISED - |                              | SEQUENCE OF OPE |           |          |        |               |            |              | 2014-090TS |
| PLOT SCALE = 20.000 ' / in. | CHECKED -  | JDH | REVISED - | DEPARTMENT OF TRANSPORTATION | OPERATIONS, AI  | ND RAILRO | AD PREEN | MPTION | N SEQUENCE OF | OPERATIONS |              |            |
| PLOT DATE = 2/2/2015        | DATE -     |     | REVISED - |                              | SCALE: N.T.S. S | SHEET NO. | OF SHE   | EETS   | STA. TO       | STA.       |              | ILLINOIS   |
|                             |            |     |           |                              |                 |           |          |        |               |            |              |            |





TOTAL = 509

ENERGY COSTS-

BILLED TO: IDOT DISTRICT 1

201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY -

CONTACT DAVE SCHACHT

630-437-2129 COMMONWEALTH EDISON

# **SCHEDULE OF QUANTITIES**

EACH

5 EACH PEDESTRIAN PUSH-BUTTON

<u>QUANTITY</u> <u>UNIT</u> MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT PEDESTRIAN PUSH-BUTTON, NON-LATCHING EACH EACH

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND

SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

TRACER-CABLE

INTERCONNECT TO

U.S. RTE. 14 (NORTHWEST HWY.)

INTERSECTION AND SAMPLING (SYSTEM) DETECTORS

ALGONQUIN RD.

#### **CABLE PLAN**

FOXMOOR

(E)

SCALE:

GREEN

NO. 6-GREEN

RYG

-NO. 6 GREEN

TS #1238 FOX RIVER GROVE (SH. 1) COUNTY TOTAL SHEETS NO.

MCHENRY 76 47

CONTRACT NO. 62A42

- TRACER CABLE

> INTERSECTION AND SAMPLING (SYSTEM) DETECTORS

INTERCONNECT TO

IL RTE. 22

NO. 6-GREEN

> -NO. 6 GREEN

PUSH BUTTON "A" SHALL PLACE A CALL IN PHASES 2 AND 4

| USER NAME = _USERNAME_       | DESIGNED | - | DW  | REVISED - |   |
|------------------------------|----------|---|-----|-----------|---|
|                              | DRAWN    | - | CC  | REVISED - | 1 |
| PLOT SCALE = 20.0000 ' / in. | CHECKED  | - | JDH | REVISED - | 1 |
| PLOT DATE = 2/2/2015         | DATE     | - |     | REVISED - | 1 |

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

| U.S. RO | UTE 14 (NOR | THWE   | ST HIGHV | VAY) AT | FOXMOOR  | ROAD | F.A.<br>RTE. | SECTION    |  |
|---------|-------------|--------|----------|---------|----------|------|--------------|------------|--|
|         | SCHEDULE OF | . 0110 | NTITIES  | AND CA  | RIF PIAN |      |              | 2014-090TS |  |
|         | OUNEDOLL OF | 4071   |          |         | Т        |      |              |            |  |
|         | SHEET NO.   | OF     | SHEETS   | STA.    | TO       | STA. |              | ILLINOIS   |  |

#### SEQUENCE OF OPERATION

| MOVEMENT   | US.W   | ر ا | 5   | 123 | 100 | -   | ±1 (# |       | 2 5 | =  | 6    | 2   |     |     |     | G1 #13     |     | -    |     | 1   |            | <b>a</b> ru | F  |
|--|--------|-----|-----|-----|-----|-----|-------|-------|-----|----|------|-----|-----|-----|-----|------------|-----|------|-----|-----|------------|-------------|----|
| PHASE  |        | 1   | + 5 |     | 1 4 | 6   |       | 2 + 5 |     | -  | 2 +  | 6   |     |     | 3   |            |     |      | 4   |     |            | 1           | A  |
| INTERVAL   | 1      | 2   | 3   | 4   | 5   | 6   | 7     | 8     | 9   | 10 | 11   | 12A | 128 | 13  | 14A | 14B        | 15  | 16   | 17A | 17B | 17C        | 170         | 5  |
| CHANGE TO  | /      | 1+6 | 2+5 | 2+6 |     | 2+6 | 0/    | 0     | 2+6 |    |      | 3,  | 4   |     |     | 1+6<br>2+6 |     | *    |     |     | 1+6<br>2+6 |             | н  |
| FOXMOOR ROAD (SOUTH OF TRACKS) N/B   | R      | R   | R   | R   | R   | R   | R     | R     | R   | R  | R    | R   | R   | R   | R   | R          | G   | G    | Y   | R   | R          | R           | R  |
| FOXMOOR ROAD INORTH OF TRACKS: N/B END MAST ARM- AND FAR LEFT SIGNALS                          | R      | R   | R   | R   | R   | R   | R     | R     | R   | R  | R    | R   | R   | R   | R   | R          | G G | G.   | G G | GG  | Y          | R           | R  |
| FOXMOOR ROAD (NORTH OF TRACKS) N/B FAR RIGHT MAST ARM SIGNAL                                   | R      | R   | R   | R   | R   | R   | R     | R     | R   | R  | R    | R   | ·R  | R   | R   | R          | G   | G    | G   | G   | Y          | R           | R  |
| FOXMOOR ROAD S/B END MAST ARM AND FAR LEFT SIGNALS   | R      | R   | R   | R   | R   | R   | R     | R     | R   | R  | R    | R   | R   | G C | Y   | R          | R   | R    | R   | R   | R          | R           | R  |
| FOXMOOR ROAD S/B FAR RIGHT MAST ARM SIGNAL   | R      | R   | R   | R   | R   | R   | R     | R     | R   | R  | R    | R   | R   | C   | Y   | R          | R   | R    | R   | R   | R          | R           | R  |
| U.S. RTE.14 (NORTHWEST HWY.) W/B<br>END MAST ARM AND FAR LEFT SIGNALS                          | R<br>G | R   | R G | R   | R   | R   | G G   | GG    | G Y | G  | G    | Y   | R   | R   | R   | R          | R   | R    | R   | R   | R          | R           | R  |
| U.S. RTE.14 (NORTHWEST HWY.) W/B<br>FAR RIGHT MAST ARM SIGNAL                                  | R      | R   | R   | R   | R   | R   | G     | G     | G.  | Ç  | G    | Y   | R   | R   | R   | R          | R   | R    | R   | R   | R          | R           | R  |
| U.S. RTE.14 (NORTHWEST HWY.) E/B<br>END MAST ARM AND FAR LEFT SIGNALS                          | R G    | R   | R   | R   | G G | GY  | R     | R     | R   | G  | C    | Y   | R   | R   | R   | R          | R   | R    | R   | R   | R          | R           | R  |
| U.S. RTE.14 (NORTHWEST HWY.) E/B FAR RIGHT MAST ARM SIGNAL                                     | R      | R   | R   | R   | G   | G   | R     | R     | R   | G  | G    | Y   | R   | R   | R   | R          | R   | R    | R   | R   | R          | R           | R  |
| PEDESTRIAN SIGNALS CROSSING FOXMOOR ROAD<br>ON THE NORTH SIDE OF U.S. RTE. 14 (NORTHWEST HWY.) | н      | н   | н   | н   | н   | н   | •P    | ••FH  | н   | •P | ••FH | н   | н   | н   | н   | н          | н   | н    | Н   | н   | н          | н           | DA |
| PEDESTRIAN SIGNALS CROSSING U.S. RTE. 14 (NORTHWEST HWY.) ON THE EAST SIDE OF FOXMOOR ROAD     | н      | н   | н   | н   | н   | н   | н     | н     | н   | н  | н    | н   | н   | н   | н   | Н          | •P  | ••FH | н   | н   | Н          | н           | R  |

| ATION | ļ                                |  |   | e Langue  |   |  |   |   |  |   |     |     |     |     |  |     | PREEMPTOR<br>NUMBER 2   |     |   |   |  |
|-------|----------------------------------|--|---|---|---|--|---|---|--|---|-----|-----|-----|-----|--|-----|---|-----|---|---|--|
| 1     | 5                                |  | 7   |   | . 10  |  | 13  | 5   | 15   | 5   |     |     |     |     |  |     |   |     |   |   |  |
|       |                                  |  |   |   |   |  |   |   |  |   | 2   |     | 3   |     | 4  |     |   |     |   |   |  |
| 1A    | 18                               | 10   | 10  | 1E  | 1F  | 16   | 1H  | IJ  | 1K   | 11.   | 1М  | 1N  | 1P  | 10  | 1R   | 15  | 2   | 3   | 4   | 5   | TO<br>NORMAL   |
| 2     | 10                               | 2  | 1E  | 2   | 16  | 2  | 1J  | 2   | 1L   | 2   | 1N  | 2   | 10  | 2   | 15   | 2   | 3   | 4   | 5   |   | SEQUENCE   |
| R     | R                                | R  | R   | R   | R   | R  | R   | R   | Y  | R   | R   | R   | R   | R   | Y  | R   | R   | R   | R   | R   | Δ  |
| R     | R                                | R  | R   | R   | R   | R  | R   | R   | - c  | -<br>G  | R   | R   | R   | R   | <b>G</b> G   |     | →G  | Y   | R   | R   | Δ  |
| R     | R                                | R  | R   | R   | R   | R  | R   | R   | G  | G   | R   | R   | R   | R   | G  | G   | G   | Y   | R   | R   | Δ  |
| R     | R                                | R  | R   | R   | R   | R  | Y   | R   | R.   | R   | R   | R   | Y   | R   | R  | R   | R   | R   | R   | R   | Δ  |
| R     | R                                | R  | R   | R   | R   | R  | Y   | R   | R  | R   | R   | R   | Y   | R   | R  | R   | R   | R   | R   | R   | Δ  |
| RY    | R                                | R  | Y   | R   | Y   | R  | R   | R   | R  | R   | Y   | R   | R   | R   | R  | R   | R   | R   | R   | G   | Δ  |
| R     | R                                | R  | Y   | R   | Y   | R  | R   | R   | R  | R   | Y   | R   | R   | R   | R  | R   | R   | R   | R   | C   | Δ  |
| RY    | Y                                | R  | R   | R   | Y   | R  | R   | R   | R  | R   | Y   | R   | R   | R   | R  | R   | R   | R   | R   | G   | Δ  |
| R     | Y                                | R  | R   | R   | Y   | R  | R   | R   | R  | R   | Y   | R   | R   | R   | R  | R   | R   | R   | R   | G   | Δ  |
| н     | н                                | н  | FH  | н   | FH  | н  | Н   | Н   | н  | н   | н   | н   | н   | н   | н  | Н   | н   | н   | H   | н   | Δ  |
| н     | н                                | н  | н   | н   | н   | н  | н   | н   | FH   | н   | н   | Н   | н   | Н   | н  | H   | н   | н   | Н   | н   | Δ  |
| NRT   | NRT                              | NRT  | NRT   | NRT   | NRT   | NRT  | NRT   | NRT   | NRT  | NRT   | NRT | NRT | NRT | NRT | NRT  | NRT | NRT   | NRT | NRT   | NRT   | Δ  |
| NLT   | NLT                              | NLT  | NLT   | NLT   | NLT   | NLT  | NLT   | NLT   | NLT  | NLT   | NLT | NLT | NLT | NLT | NLT  | NLT | NLT   | NLT | NLT   | NLT   | Δ  |
|       | 1 IA 2 R R R R R R Y R R H H NRT | 1A 1B 2 1C R R R R R R R R R R R R R R R R R R R | 1 5  1A 1B 1C  2 1C 2  R R R  R R  R R R  R | 1 5 7  1A 1B 1C 1D  2 1C 2 1E  R R R R  R R  R R R  R | 1 5 7  1A 1B 1C 1D 1E  2 1C 2 1E 2  R R R R R R R  R R R R R R  R R R R R  R R R R R  R R R R R  R R R R R  R R R R R  R R R R R  R R R R R  R R R R R  R R R  R R R R  R R R  R R R  R R R  R R R  R R R R  R R R  R R R  R R R  R R R  R R R  R R R  R R R  R R R  R R R  R R R  R R R  R R  R R R  R | 1 5 7 10  1A 1B 1C 1D 1E 1F  2 1C 2 1E 2 1G  R R R R R R R  R R R R R R  R R R R R | 1 5 7 10  1A 1B 1C 1D 1E 1F 1G  2 1C 2 1E 2 1G 2  R R R R R R R R R R  R R R R R R R R R  R R R R R R R R R  R R R R R R R R R  R R R R R R R R R  R R R R R R R R R R  R R R R R R R R R R  R R R R R R R R R R  R R R R R R R R R R  R R R R R R R R R R  R R R R R R R R R R  R R R R R R R R R R  R R R R R R R R R R R  R R R R R R R R R R R  R R R R R R R R R R R  R R R R R R R R R R R  R R R R R R R R R R R  R R R R R R R R R R R R  R R R R R R R R R R R  R R R R R R R R R R R  R R R R R R R R R R R  R R R R R R R R R R R  R R R R R R R R R R R  R R R R R R R R R R R  R R R R R R R R R R R  R R R R R R R R R R R  R R R R R R R R R R R  R R R R R R R R R R R  R R R R R R R R R R R R  R R R R R R R R R R R R  R R R R R R R R R R R R R R  R R R R R R R R R R R R R  R R R R R R R R R R R R R R  R R R R R R R R R R R R R R R  R R R R R R R R R R R R R R R R R R  R | 1 5 7 10 12  1A 1B 1C 1D 1E 1F 1G 1H  2 1C 2 1E 2 1G 2 1J  R R R R R R R R R R  R R R R R R R R | 1 5 7 10 13  1A 1B 1C 1D 1E 1F 1G 1H IJ  2 1C 2 1E 2 1G 2 1J 2  R R R R R R R R R R R  R R R R R R R | 1 5 7 10 13 15  1A 1B 1C 1D 1E 1F 1G 1H 1J 1K  2 1C 2 1E 2 1G 2 1J 2 1L  R R R R R R R R R R R R P  R R R R R R | 1   | 1   | 1   | 1   | 1 5 7 10 13 15  2 3  1A 1B 1C 1D 1E 1F 1G 1H 1J 1K 1L 1M 1N 1P 10  2 1C 2 1E 2 1G 2 1J 2 1L 2 1N 2 1Q 2  R R R R R R R R R R R R R R R R R R | 1   | 1 5 7 10 13 15  2 3 4  1A 1B 1C 1D 1E 1F 1G 1H 1J 1K 1L 1M 1N 1P 10 1R 1S  2 1C 2 1E 2 1G 2 1J 2 1L 2 1N 2 1Q 2 1S 2  R R R R R R R R R R R R R R R R R R | 1   | 1 S 7 10 13 15  2 3 4  1A 1B 1C 1D 1E 1F 1G 1H IJ 1K 1L 1M 1N 1P 10 1R 1S 2 3  2 1C 2 1E 2 1G 2 1J 2 1L 2 1N 2 10 2 1S 2 3 4  R R R R R R R R R R R R R R R R R R | 1 5 7 10 13 15  2 3 4  1A 1B 1C 1D 1E 1F 1G 1H 1J 1K 1L 1M 1N 1P 10 1R 1S 2 3 4  2 1C 2 1E 2 1G 2 1J 2 1L 2 1N 2 10 2 1S 2 3 4 5  R R R R R R R R R R R R R R R R R R | NAMBER 3 NAMBER 4 NAMBER 5 NAMBER 2  1 5 7 10 13 15  2 3 4  1A 18 1C 10 1E 1F 1G 1H 1J 1K 1L 1M 1N 1P 10 1R 1S 2 3 4 5  2 1C 2 1E 2 1G 2 1J 2 1L 2 1N 2 1Q 2 1S 2 3 4 5  R R R R R R R R R R R R R R R R R R |

- \* TO APPEAR ONLY UPON PUSHBUTTON ACTIVATION
- \*\* FLASHING TO IS TO TERMINATE AT THE COMPLETION OF THE PEDESTRIAN INTERVAL CLEARANCE.
- + THIS TO OR FLASHING TINTERVAL MAY FINISH TIMING IN THE BIDIRECTIONAL STRAIGHT THROUGH MOVEMENT IF THE LEFT ARROW TIME IS NOT SUFFICIENT TO COMPLETE TO OR FLASHING TINTERVALS. THE AND FLASHING TIMINGS TO BE SET ONLY ON PHASES WHERE "AND FLASHING "" ARE INDICATED IN THE SEQUENCE OF OPERATION.
  - P = ILLUMINATED PERSON = WALK
  - FH = ILLUMINATED FLASHING HAND = FLASHING DON'T WALK
  - H = ILLUMINATED SOLID HAND = DON'T WALK

PHASE 2+6 SHALL BE PLACED ON RECALL

NRT = "NO RIGHT TURN" OR

NLT = "NO LEFT TURN" OR

#### EMERGENCY VEHICLE PREEMPTION SEQUENCE OF OPERATION

|   |     |                 |    |    | -       |    |    |    |    |         |    |    |    |         |    |         |    |    |    |    |    |         |    | I Change 1 | INGMIDENT 1 | 11011101111 |                       |
|---|-----|-----------------|----|----|---------|----|----|----|----|---------|----|----|----|---------|----|---------|----|----|----|----|----|---------|----|------------|-------------|-------------|-----------------------|
| CHANGE FROM NORMAL SEQUENCE OF OPERATION INTERVAL NUMBER                                    |     | 1               | 5  |    | 5       | 10 | 7  |    | 7  |         | 10 |    | 10 |         | 1  | 3       | 15 |    |    | 15 |    |         | 15 | prist.     |             |             | CLEAR<br>TO<br>NORMAL |
| EMERGENCY VEHICLE PREEMPTION SEQUENCE<br>OF OPERATION INTERVAL NUMBER                       |     | 1A              | 18 | 10 | 10      | 1E | 1F | 16 | 1H | 1J      | 1K | 1L | 1M | 1N      | 1P | 10      | 18 | 15 | 17 | 10 | 17 | 1₩      | 1X | 2          | 3           | 4           | SEQUENC               |
| CHANGE TO EMERGENCY VEHICLE PREEMPTION SEQUENCE OF OPERATION INTERVAL NUMBER                |     | 2, 3<br>OR<br>4 | 2  | 10 | OR<br>4 | 1F | 2  | 1H | IJ | OR<br>4 | 2  | 1M | 1N | OR<br>4 | 10 | OR<br>4 | 3  | 17 | 10 | 1٧ | 1₩ | OR<br>3 | 4  |            |             |             | <b>◊</b>              |
| FOXMOOR ROAD (SOUTH OF TRACKS) ALL SIGNALS  | N/B | R               | R  | R  | R       | R  | R  | R  | R  | R       | R  | R  | R  | R       | R  | R       | R  | G  | Y  | R  | R  | R       | G  | R          | R           | G           | <b>♦</b>              |
| FOXMOOR ROAD (NORTH OF TRACKS) END MAST ARM AND FAR LEFT SIGNALS                            | N/B | R               | R  | R  | R       | R  | R  | R  | R  | R       | R  | R  | R  | R       | R  | R       | R  | GG | GG | GG | Y  | R       | G  | R          | R           | -G<br>G     | 0                     |
| FOXNOOR ROAD (NORTH OF TRACKS) FAR RIGHT MAST ARM SIGNAL                                    | N/B | R               | R  | R  | R       | R  | R  | R  | R  | R       | R  | R  | R  | R       | R  | R       | R  | G  | G  | G  | Y  | R       | G  | R          | R           | G           | 0                     |
|   | S/B | R               | R  | R  | R       | R  | R  | R  | R  | R       | R  | R  | R  | R       | Y  | R       | GG | R  | R  | R  | R  | R       | R  | R          | →G          | R           | <b>♦</b>              |
| FOXMOOR ROAD<br>FAR RIGHT MAST ARM SIGNAL   | S/B | R               | R  | R  | R       | R  | R  | R  | R  | R       | R  | R  | R  | R       | Y  | R       | G  | R  | R  | R  | R  | R       | R  | R          | G           | R           | 0                     |
| U.S. RTE. 14 (NORTHWEST HWY.) END MAST ARM AND FAR LEFT SIGNALS                             | W/B | R               | R  | R  | R       | G  | GY | G  | Y  | R       | G  | G  | Y  | R       | R  | R       | R  | R  | R  | R  | R  | R       | R  | G          | R           | R           | 0                     |
| U.S. RTE. 14 (NORTHWEST HWY.) FAR RIGHT MAST ARM SIGNAL                                     | W/B | R               | R  | R  | R       | G  | G  | G  | Y  | R       | C  | G  | Y  | R       | R  | R       | R  | R  | R  | R  | R  | R       | R  | G          | R           | R           | 0                     |
| U.S. RTE. 14 (NORTHWEST HWY.)<br>END MAST ARM AND FAR LEFT SIGNALS                          | E/B | RY              | GY | Y  | R       | R  | R  | R  | R  | R       | G  | G  | Y  | R       | R  | R       | R  | R  | R  | R  | R  | R       | R  | G          | R           | R           | 0                     |
| U.S. RTE. 14 CHORTHWEST HWY.) FAR RIGHT MAST ARM SIGNAL                                     | E/B | R               | G  | Y  | R       | R  | R  | R  | R  | R       | G  | G  | Y  | R       | R  | R       | R  | R  | R  | R  | R  | R       | R  | G          | R           | R           | •                     |
| PEDESTRIAN SIGNALS CROSSING FOXMOOR ROAD<br>ON THE NORTH SIDE OF U.S. RTE 14 (NORTHWEST HWY | r)  | н               | н  | н  | н       | FH | н  | FH | н  | н       | FH | FH | н  | н       | н  | Н       | H  | н  | Н  | н  | н  | н       | н  | Н          | н           | н           | <b>\</b>              |
| PEDESTRIAN SIGNALS CROSSING U.S. RTE. 14 (NORTHWITH HWY) ON THE EAST SIDE OF FOXMOOR ROAD   | EST | н               | н  | н  | н       | н  | н  | н  | н  | н       | н  | н  | н  | н       | н  | н       | н  | FH | н  | н  | н  | н       | FH | н          | н           | н           | <b>♦</b>              |

P = ILLUMINATED PERSON = WALK

FH = ILLUMINATED FLASHING HAND = FLASHING DON'T WALK

PREEMPTOR PREEMPTOR PREEMPTOR NUMBER 3 NUMBER 4 NUMBER 5

H = ILLUMINATED SOLID HAND = DON'T WALK

A RAILROAD PREEMPTION SEQUENCE SHALL PROVIDE THE PROPER CLEARANCE INTERVAL TO RESUME THE NORMAL SEQUENCE OF OPERATION OR PROPER CLEARANCE INTERVAL TO DISPLAY AN EMERGENCY VEHICLE INTERVAL (IF APPLICABLE) AFTER RAILROAD PREEMPTION INTERVAL 5 IS TERMINATED.

TS #1238

| USER NAME = _USERNAME_      | DESIGNED - | DW  | REAIZED - |                 |
|-----------------------------|------------|-----|-----------|-----------------|
|                             | DRAWN -    | CC  | REVISED - | STATE OF I      |
| PLOT SCALE = 20.0000 '/ in. | CHECKED -  | JDH | REVISED - | DEPARTMENT OF T |
| PLOT DATE = 2/2/2015        | DATE -     |     | REVISED - |                 |

| FUX    | KIV   | ΕK | GROVE   | (2H"            | ۷)          |
|--------|-------|----|---------|-----------------|-------------|
| SECT   | ION   |    | COUNTY  | TOTAL<br>SHEETS | SHEE<br>NO. |
| 2014-0 | O9OTS |    | McHENRY | 76              | 48          |
|        |       |    | CONTRAC | NO. 6           | 2A42        |
|        |       |    |         |                 |             |

CONTROLLER

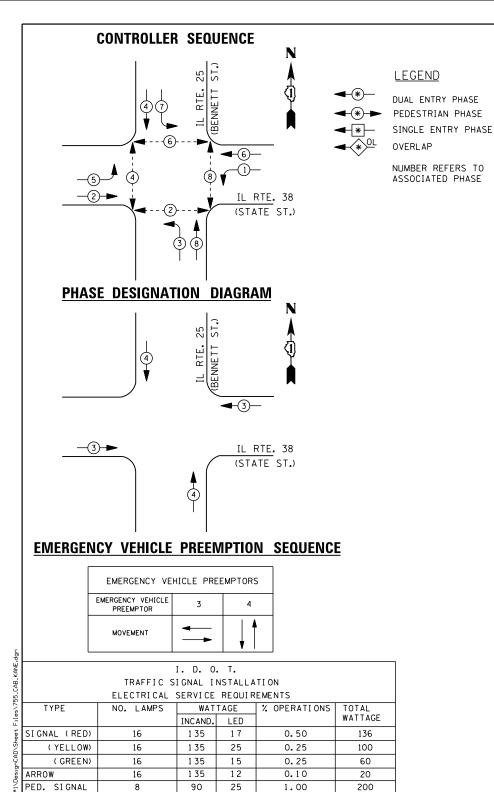
ILLUM. SIGN

VIDEO SYSTEM

FLASHER LED

ENERGY COSTS-

ENERGY SUPPLY -



100

252

150

100

25

BILLED TO: IDOT DISTRICT 1

CONTACT JOE STACHO

630-424-5704

PHONE

1.00

0.05

1.00

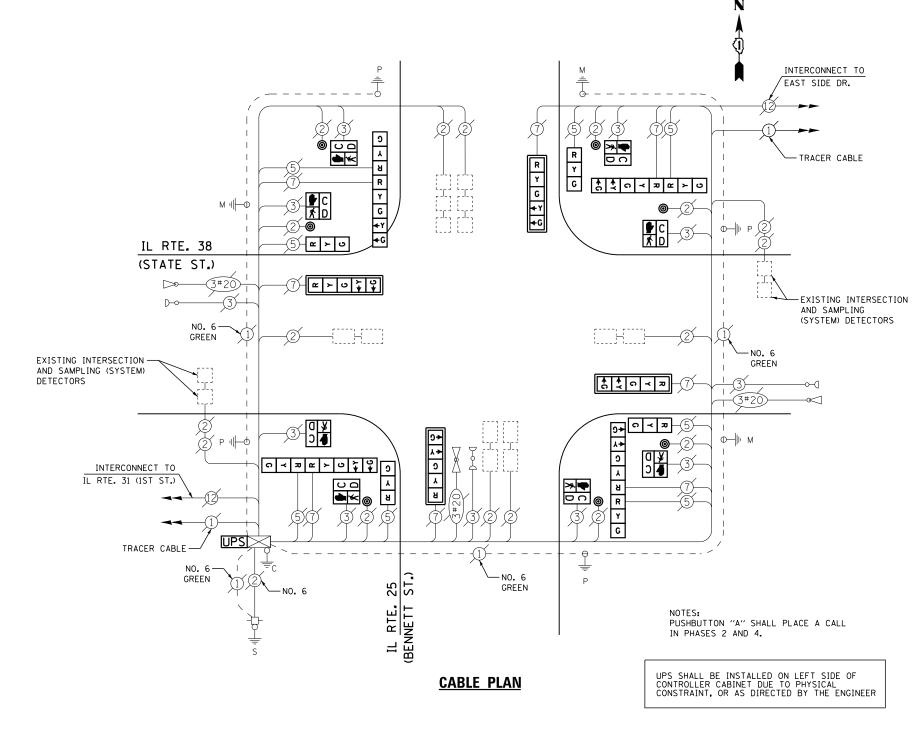
TOTAL =

201 WEST CENTER COURT

SCHAUMBURG, IL 60196-1096

100

616



#### **SCHEDULE OF QUANTITIES**

| <u>OUANTITY</u> | <u>UNIT</u> | ITEM  |
|-----------------|-------------|---|
| 1               | EACH        | MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION                       |
| 4               | EACH        | SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED                      |
| 4               | EACH        | SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED                     |
| 4               | EACH        | SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED       |
| 8               | EACH        | PEDESTRIAN SIGNAL HEAD, LED. 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER |
| 4               | EACH        | TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM                              |
| 1               | EACH        | MODIFY EXISTING CONTROLLER CABINET  |
| 1               | EACH        | REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT                                  |
| 1               | EACH        | UNINTERRUPTABLE POWER SUPPLY. SPECIAL                                     |
| 7               | EACH        | PEDESTRIAN PUSH-BUTTON, NON-LATCHING                                      |
|                 |             |   |

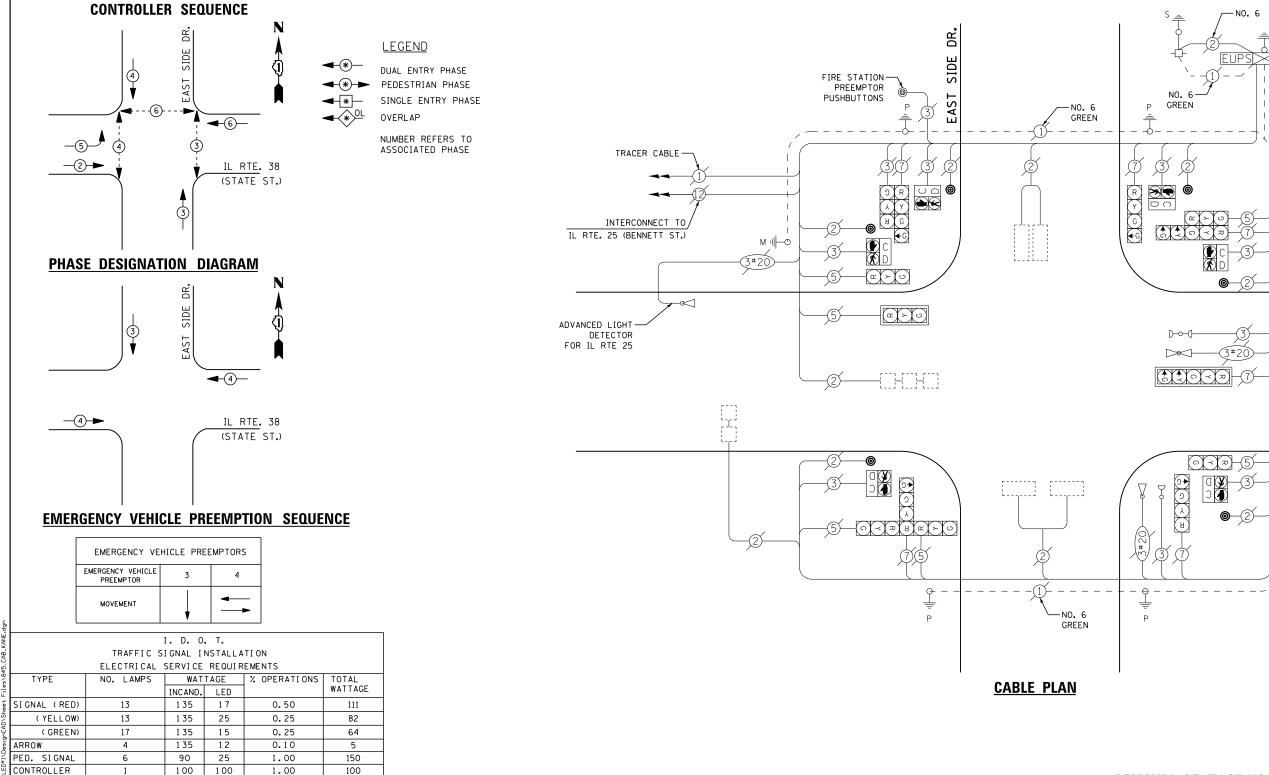
#### REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

- SIGNAL HEAD, 3 SECTION
- EACH
- SIGNAL HEAD, 5 SECTION SIGNAL HEAD, 2 FACE, 1-3 SECTION, 1-5 SECTION
- EACH TRAFFIC SIGNAL BACKPLATE
- PEDESTRIAN PUSH-BUTTON EACH PEDESTRIAN SIGNAL HEAD

TS #755 GENEVA

| COMMONWEALTH EDISON         | <u> </u>   |     |           |                              |                 |             |              |       |                        |        |     |          | GEINEV  | A       |       |
|-----------------------------|------------|-----|-----------|------------------------------|-----------------|-------------|--------------|-------|------------------------|--------|-----|----------|---------|---------|-------|
| USER NAME = _USERNAME_      | DESIGNED - | DW  | REVISED - |                              | IL ROUTE 38     | 8 (STATE ST | TREET) AT IL | L ROL | UTE 25 (BENNETT STREET | Γ) F.A | SEC | TION     | COUNTY  | TOTAL   | SHEET |
|                             | DRAWN -    | CC  | REVISED - | STATE OF ILLINOIS            | SCHEDULE OF O   | QUANTITIES, | CABLE PLAI   | N, PH | IASE DESIGNATION DIAG  | RAM, 🗀 |     | -090TS   | KANE    | 76      | 49    |
| PLOT SCALE = 20.000 ' / in. | CHECKED -  | JDH | REVISED - | DEPARTMENT OF TRANSPORTATION | AND             | EMERGENC    | Y VEHICLE F  | PREE  | MPTION SEQUENCE        |        |     |          | CONTRAC | T NO. 6 | 2A42  |
| PLOT DATE = 2/2/2015        | DATE -     |     | REVISED - |                              | SCALE: N.T.S. S | SHEET NO.   | OF SHEET     | TS S  | STA. TO STA.           |        |     | ILLINOIS |         |         |       |



## SCHEDULE OF QUANTITIES

QUANTITY <u>UNIT</u> MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION EACH

EACH PEDESTRIAN PUSH-BUTTON EACH REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT

#### REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

IL RTE. 38 (STATE ST.)

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

6 EACH PEDESTRIAN PUSH-BUTTON

TS #845 GENEVA

INTERCONNECT TO

TRACER CABLE

GLENGARRY DR.

|                            | _          |     |           |                              |  |      |            |         |         |       |
|----------------------------|------------|-----|-----------|------------------------------|--|------|------------|---------|---------|-------|
| USER NAME = _USERNAME_     | DESIGNED - | DW  | REVISED - |                              | ILLINOIS ROUTE 38 (STATE STREET) AT EAST SIDE DRIVE            | F.A. | SECTION    | COUNTY  | TOTAL   | SHEET |
|                            | DRAWN -    | CC  | REVISED - | STATE OF ILLINOIS            | SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, | 12   | 2014-090TS | KANE    | 76      | 50    |
| PLOT SCALE = 20.000 '/ in. | CHECKED -  | JDH | REVISED - | DEPARTMENT OF TRANSPORTATION | AND EMERGENCY VEHICLE PREEMPTION SEQUENCE                      |      |            | CONTRAC | T NO. F | 2A42  |
| PLOT DATE = 2/2/2015       | DATE -     |     | REVISED - |                              | SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.                 |      | ILLINOIS   |         |         |       |
|                            |            |     |           |                              |  |      |            | •       |         | •     |

ILLUM. SIGN VIDEO SYSTEM FLASHER LED ENERGY COSTS-ENERGY SUPPLY -

252

150

25

BILLED TO: IDOT DISTRICT 1

CONTACT JOE STACHO

PHONE

630-424-5704

0.05

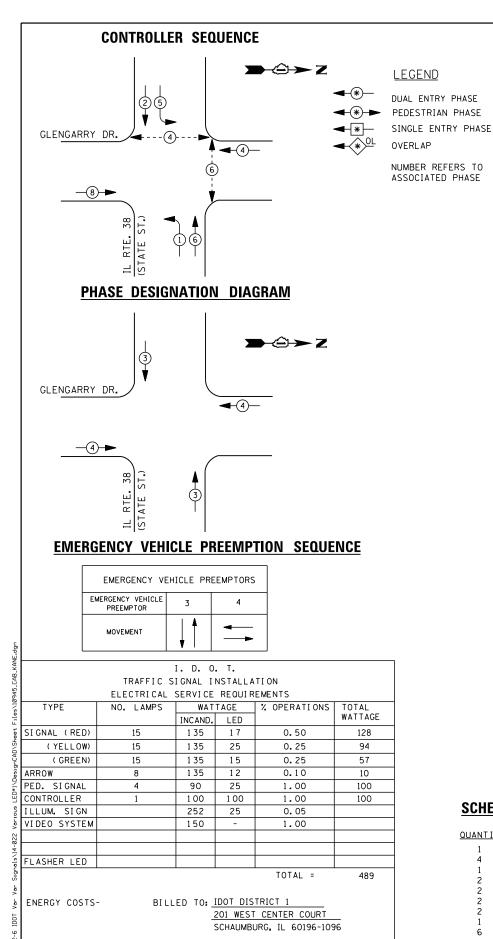
1.00

TOTAL =

201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096

COMMONWEALTH EDISON

512



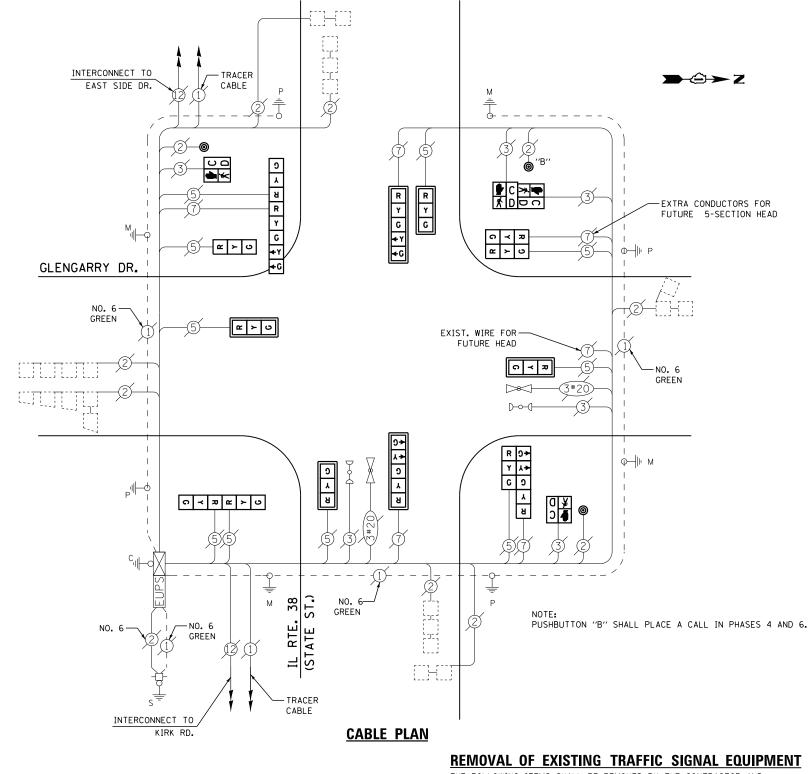
CONTACT JOE STACHO

630-424-5704

COMMONWEALTH EDISON

PHONE

ENERGY SUPPLY -



#### **SCHEDULE OF QUANTITIES**

| <u>QUANTITY</u> | <u>UNIT</u> | <u>ITEM</u>   |
|-----------------|-------------|---|
| 1               | EACH        | MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION                       |
| 4               | EACH        | SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED                     |
| 1               | EACH        | SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED                      |
| 2               | EACH        | SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED                     |
| 2               | EACH        | SIGNAL HEAD, LED. 2-FACE. 3-SECTION. BRACKET MOUNTED                      |
| 2               | EACH        | SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED       |
| 2               | EACH        | PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER |
| 1               | EACH        | PEDESTRIAN SIGNAL HEAD. LED. 2-FACE. BRACKET MOUNTED WITH COUNTDOWN TIMER |
| 6               | EACH        | TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM                              |
| 1               | EACH        | REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT                                  |
| 3               | EACH        | PEDESTRIAN PUSH-BUTTON, NON-LATCHING                                      |
|                 |             |   |

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

| 5 | EACH | SIGNAL | HEAD, | 3 | - | SECTION |
|---|------|--------|-------|---|---|---------|
| 2 | EACH | SIGNAL | HEAD. | 5 | - | SECTION |

2 EACH SIGNAL HEAD, 2-FACE, 3 - SECTION

EACH SIGNAL HEAD, 2-FACE, 1 - 3 SECTION, 1 - 5 SECTION

2 EACH SIGNAL HEAD, 2-FACE, 1 - 3 6 EACH TRAFFIC SIGNAL BACKPLATE

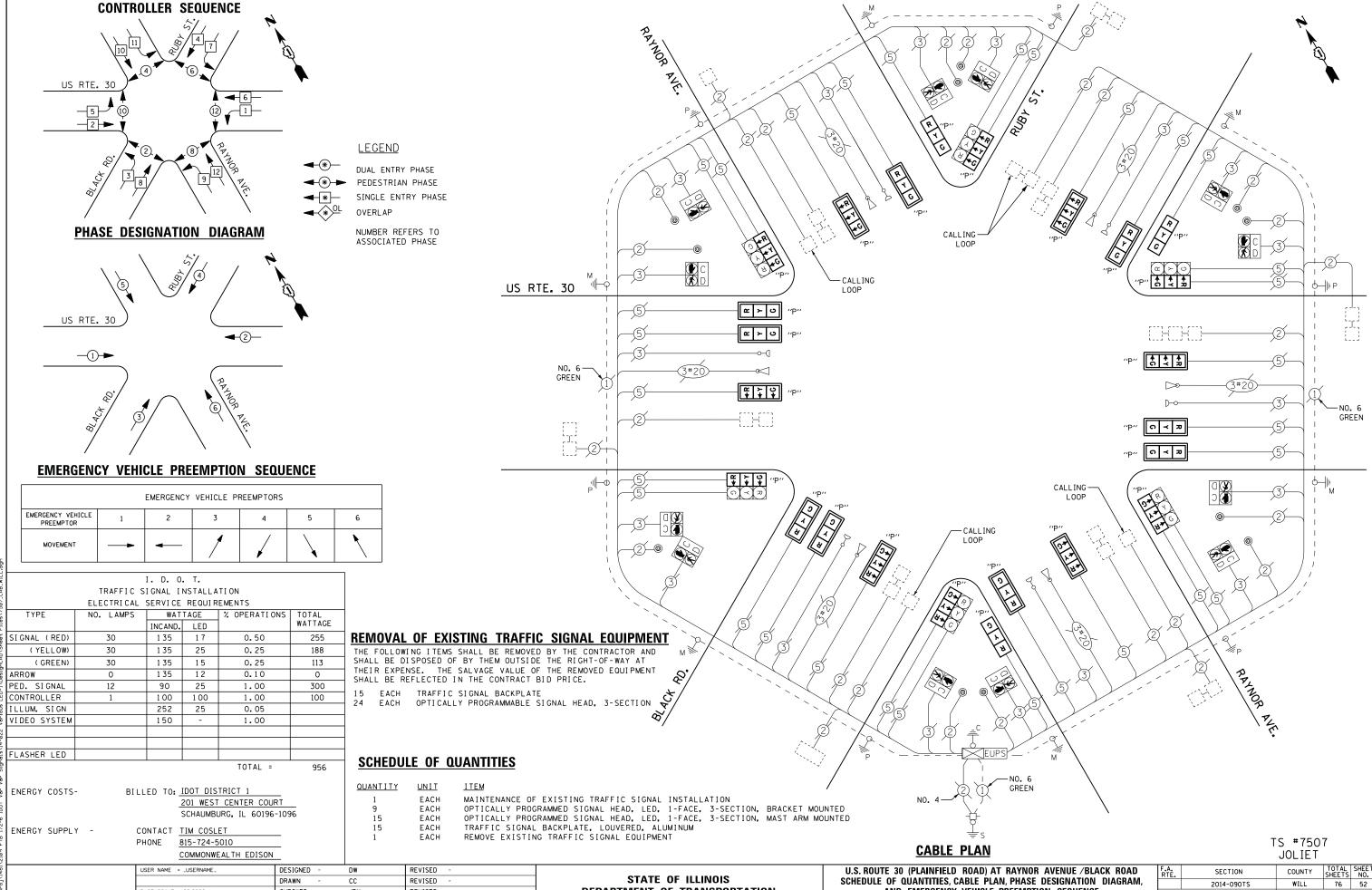
EACH PEDESTRIAN SIGNAL HEAD
EACH PEDESTRIAN PUSH-BUTTON

TS #10945 GENEVA

| USER NAME = _USERNAME_     | DESIGNED - | DW  | REVISED - |  |
|----------------------------|------------|-----|-----------|--|
|                            | DRAWN -    | CC  | REVISED - |  |
| PLOT SCALE = 20.000 '/ in. | CHECKED -  | JDH | REVISED - |  |
| PLOT DATE = 2/2/2015       | DATE -     |     | REVISED - |  |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

| IL ROUTE 38 (STATE STREET) AT GLENGARRY DRIVE                  | F.A.<br>RTE. | SECTION    | COUNTY   | TOTAL<br>SHEETS | SHEET<br>NO. |
|--|--------------|------------|----------|-----------------|--------------|
| SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, |              | 2014-090TS | KANE     | 76              | 51           |
| AND EMERGENCY VEHICLE PREEMPTION SEQUENCE                      |              |            | CONTRACT | NO. 6           | 2A42         |
| SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.                 |              | ILLINOIS   |          |                 |              |



**DEPARTMENT OF TRANSPORTATION** 

AND EMERGENCY VEHICLE PREEMPTION SEQUENCE

SHEET NO. OF SHEETS STA.

CONTRACT NO. 62A42

CHECKED

DATE

PLOT DATE = 2/2/2015

REVISED

REVISED

# **CONTROLLER SEQUENCE**

**-2** →

US RTE. 6 - US RTE. 30 (COLLINS AVE.) **(6)**—

**→**②→ Z

LEGEND

**★** DUAL ENTRY PHASE PEDESTRIAN PHASE \* SINGLE ENTRY PHASE OVERLAP

> NUMBER REFERS TO ASSOCIATED PHASE

REPLACE 14 FT. PAINTED POST. RE-USE EXISTING

TYPE A CONCRETE FOUNDATION.

1 REPLACE 10 FT. PAINTED POST. RE-USE EXISTING

REPLACE 15 FT. PAINTED POST. RE-USE EXISTING TYPE A CONCRETE FOUNDATION.

REPLACE 16 FT. PAINTED POST. RE-USE EXISTING TYPE A CONCRETE FOUNDATION.

TYPE A CONCRETE FOUNDATION.

REPLACE 18 FT. PAINTED POST. RE-USE EXISTING 2" UNDERGROUND CONDUIT,—
TYPE A CONCRETE FOUNDATION. GALVANIZED STEEL TYPE A CONCRETE FOUNDATION.

**→**②→ Z UPS-U.S. RTE. 6 - U.S. RTE. 30 (1) (COLLINS AVE.) \_\_NO. 6 GREEN (1)  $\bigcirc$ 

#### **CABLE PLAN**

THE UPS SHALL BE INSTALLED NEXT TO THE EXISTING CONTROLLER CABINET USING HELICAL GROUND ANCHORS DUE TO THE PHYSICAL CONTRAINTS OR AS DIRECTED BY THE ENGINEER, ALL WORK INCLUDING DRILL EXISTING HANDHOLE, CONDUIT, AND ELECTRICAL CABLE NEEDED TO PROPERLY INSTALL THE UPS SHALL BE INCLUDED IN THE PAY ITEM UNINTERRUPTIBLE POWER SUPPLY, GROUND MOUNTED.

PHASE DESIGNATION DIAGRAM

|              | ELECTRICAL | SERVI CE | REQUIR | EMENTS       |         |
|--------------|------------|----------|--------|--------------|---------|
| TYPE         | NO. LAMPS  | WAT      | TAGE   | % OPERATIONS | TOTAL   |
|              |            | INCAND.  | LED    |              | WATTAGE |
| SIGNAL (RED) | 4          | 1 35     | 1 7    | 0.50         | 34      |
| ( YELLOW)    | 4          | 1 35     | 25     | 0.25         | 25      |
| ( GREEN)     | 4          | 1 35     | 15     | 0.25         | 15      |
| ARROW        | 0          | 1 35     | 12     | 0.10         | 0       |
| PED. SIGNAL  | 2          | 90       | 25     | 1.00         | 50      |
| CONTROLLER   | 1          | 100      | 100    | 1.00         | 100     |
| ILLUM. SIGN  |            | 252      | 25     | 0.05         |         |
| VIDEO SYSTEM |            | 150      | -      | 1.00         |         |

I. D. O. T. TRAFFIC SIGNAL INSTALLATION

TOTAL = 224

BILLED TO: IDOT DISTRICT 1 201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY -CONTACT TIM COSLET

FLASHER LED

ENERGY COSTS-

PHONE 815-724-5010 COMMONWEALTH EDISON

### SCHEDULE OF QUANTITIES

| <u>QUANTITY</u> | <u>UNIT</u> | ITEM  |
|-----------------|-------------|---|
| 1               | EACH        | MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION |
| 2               | EACH        | TRAFFIC SIGNAL POST, GALVANIZED STEEL 10 FT.        |
| 2               | EACH        | RELOCATE EXISTING PEDESTRIAN SIGNAL HEAD            |
| 2               | EACH        | RELOCATE EXISTING PEDESTRIAN PUSH-BUTTON            |
| 1               | EACH        | MODIFY EXISTING CONTROLLER CABINET                  |
| 1               | EACH        | REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT            |
| 1               | EACH        | REMOVE AND REPLACE ANCHOR BOLTS                     |
| 1               | EACH        | UNINTERRUPTABLE POWER SUPPLY, GROUND MOUNTED        |
|                 |             |   |

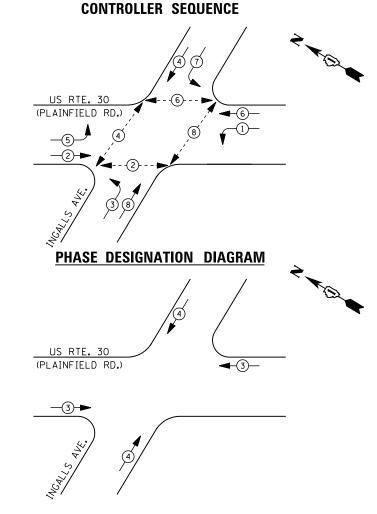
#### REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

2 EACH SIGNAL POST

TS #22500 JOLIET

| USER NAME = _USERNAME_       | DESIGNED - | DW  | REVISED - |                              | U.S. ROUTE 6 | L IIS BOIITI | : 30 /( | COLLINS | AVENUE)  | AT JOLIET HIGH SCHOOL | F.A.<br>RTF. | SECTION    | COUNTY  | TOTAL SHEET |
|------------------------------|------------|-----|-----------|------------------------------|--------------|--------------|---------|---------|----------|-----------------------|--------------|------------|---------|-------------|
|                              | DRAWN -    | CC  | REVISED - | STATE OF ILLINOIS            |              |              |         |         |          | E DESIGNATION DIAGRAM |              | 2014-090TS | WILL    | 76 53       |
| PLOT SCALE = 20.0000 ' / in. | CHECKED -  | JDH | REVISED - | DEPARTMENT OF TRANSPORTATION | SCHEDULE OF  | UUANTITIES,  | ADLE    | PLAN, A | IND PRAS | E DESIGNATION DIAGRAM | <u>'</u>     |            | CONTRAC | T NO. 62A42 |
| PLOT DATE = 2/2/2015         | DATE -     |     | REVISED - |                              | SCALE:       | SHEET NO.    | OF      | SHEETS  | STA.     | TO STA.               |              | ILLINOIS   | 1       |             |



#### **EMERGENCY VEHICLE PREEMPTION SEQUENCE**

| EMERGENCY VEI               | HICLE PRE | EMPTORS |
|-----------------------------|-----------|---------|
| EMERGENCY VEHICLE PREEMPTOR | 3         | 4       |
| MOVEMENT                    | 1         | 11      |

|              |            | I. D. O. |         |              |         |
|--------------|------------|----------|---------|--------------|---------|
|              | TRAFFIC S  | I GNAL I | NSTALLA | TION         |         |
|              | ELECTRICAL | SERVI CE | REQUIR  | EMENTS       |         |
| TYPE         | NO. LAMPS  | WAT      | TAGE    | % OPERATIONS | TOTAL   |
|              |            | INCAND.  | LED     |              | WATTAGE |
| SIGNAL (RED) | 16         | 1 35     | 1 7     | 0.50         | 136     |
| (YELLOW)     | 16         | 1 35     | 25      | 0.25         | 100     |
| ( GREEN)     | 16         | 1 35     | 15      | 0.25         | 60      |
| ARROW        | 16         | 1 35     | 12      | 0.10         | 20      |
| PED. SIGNAL  | 8          | 90       | 25      | 1.00         | 200     |
| CONTROLLER   | 1          | 1 00     | 100     | 1.00         | 100     |
| ILLUM. SIGN  |            | 252      | 25      | 0.05         |         |
| VIDEO SYSTEM |            | 150      | -       | 1.00         |         |
|              |            |          |         |              |         |
|              |            |          |         |              |         |
| FLASHER LED  |            |          |         |              |         |
|              |            |          |         | TOTAL =      | 616     |

BILLED TO: IDOT DISTRICT 1

CONTACT TIM COSLET

815-724-5010

PHONE

201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096

COMMONWEALTH EDISON

ENERGY COSTS-

ENERGY SUPPLY -

GREEN U.S. RTE. 30 (PLAINFIELD RD.) CALLING -LOOP **☞ ≻ ○ ♀ ♀** — CALLING LOOP INCALS AVE.

NOTE:
PUSHBUTTON "A" SHALL PLACE A CALL IN PHASES 2 AND 4.
PUSHBUTTON "B" SHALL PLACE A CALL IN PHASES 4 AND 6.

**CABLE PLAN** 

#### SCHEDULE OF QUANTITIES

| <u>QUANTITY</u> | <u>UNIT</u> | <u>ITEM</u>  |
|-----------------|-------------|--|
| 1               | EACH        | MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION                        |
| 2               | EACH        | OPTICALLY PROGRAMMED SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED |
| 2               | EACH        | OPTICALLY PROGRAMMED SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED  |
| 2               | EACH        | OPTICALLY PROGRAMMED SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED |
| 8               | EACH        | TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM                               |
| 1               | EACH        | REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT                                   |

#### REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

- EACH OPTICALLY PROGRAMMED SIGNAL HEAD, 3 SECTION EACH OPTICALLY PROGRAMMED SIGNAL HEAD, 5 SECTION EACH TRAFFIC SIGNAL BACKPLATE

TS #22565 JOLIET

| USER NAME = _USERNAME_      | DESIGNED - | DW  | REVISED - |                              | U.S.   | ROUTE 30 (PLA | AINFIELD ROAD) A | T INGALLS AVENUE        | F.A. | SECTION    | COUNTY  | TOTAL SHEET<br>SHEETS NO. |
|-----------------------------|------------|-----|-----------|------------------------------|--------|---------------|------------------|-------------------------|------|------------|---------|---------------------------|
|                             | DRAWN -    | СС  | REVISED - | STATE OF ILLINOIS            |        |               |                  | SE DESIGNATION DIAGRAM, |      | 2014-090TS | WILL    | 76 54                     |
| PLOT SCALE = 20.0000 '/ in. | CHECKED -  | JDH | REVISED - | DEPARTMENT OF TRANSPORTATION | AN     | ID EMERGENCY  | Y VEHICLE PREEN  | PTION SEQUENCE          |      |            | CONTRAC | T NO. 62A42               |
| PLOT DATE = 2/2/2015        | DATE -     |     | REVISED - |                              | SCALE: | SHEET NO.     | OF SHEETS ST     | A. TO STA.              |      | ILLINOIS   |         |                           |

| MOVEMENT N  |   | 1     | 75  |     | 6     | 1   | -    | 1    |     | 6 1 | !          |     |     |    | 4_         |     |                      | F   |
|---|---|-------|-----|-----|-------|-----|------|------|-----|-----|------------|-----|-----|----|------------|-----|----------------------|-----|
| PHASE   |   | 1 + 5 |     |     | 1 + 6 |     | 1 12 | 2 +  | 5   |     | 2 + 6      |     |     |    | 4 + 8      |     |                      |     |
| INTERVAL  | 1 | 2     | 3   | 4   | 5     | 6   | 7    | 8    | 9   | 10  | 11         | 12A | 128 | 13 | 14         | 15A | 15B                  | A   |
| CHANGE TO   |   | 1+6   | 2+5 | 2+6 |       | 2+6 | 9/   | 9    | 2+6 |     | /          | 4   | +8  | /  | /          | 1-  | +5<br>+6<br>+5<br>+6 | Н   |
| IL 43 (WAUKEGAN ROAD) N/B<br>NEAR AND FAR RIGHT SIGNALS                           | R | R     | R   | R   | R     | R   | G    | G    | G   | G   | G          | Y   | R   | R  | R          | R   | R                    | R   |
| IL 43 (WAUKEGAN ROAD) N/B<br>FAR LEFT AND END MAST ARM SIGNALS                    | R | R     | R   | R   | R     | R   | G    | G    | GY  | G   | G          | Y   | R   | R  | R          | R   | R                    | R   |
| IL 43 (WAUKEGAN ROAD) S/B<br>NEAR AND FAR RIGHT SIGNALS                           | R | R     | R   | R   | G     | G   | R    | R    | R   | G   | G          | Y   | R   | R  | R          | R   | R                    | R   |
| IL 43 (WAUKEGAN ROAD) S/B<br>FAR LEFT AND END MAST ARM SIGNALS                    | R | R     | R   | R   | G     | G   | R    | R    | R   | G   | G          | Y   | R   | R  | R          | R   | R                    | R   |
| FOSTER AVENUE E/B ALL SIGNALS   | R | R     | R   | R   | R     | R   | R    | R    | R   | R   | R          | R   | R   | G  | G          | Y   | R                    | R   |
| FOSTER AVENUE W/B ALL SIGNALS   | R | R     | R   | R   | R     | R   | R    | R    | R   | R   | R          | R   | R   | G  | G          | Y   | R                    | R   |
| PEDESTRIAN SIGNALS CROSSING IL 43 ON TH<br>NORTH AND SOUTH SIDES OF FOSTER AVENUE |   | DW    | DW  | DW  | DW    | DW  | DW   | DW   | DW  | DW  | DW         | DW  | DW  | *W | **FL<br>DW | DW  | DW                   | D   |
| PEDESTRIAN SIGNALS CROSSING FOSTER AVEN<br>ON THE EAST SIDE OF IL 43 (WAUKEGAN RO |   | DW    | DW  | DW  | DW    | DW  | *W   | ••FL | DW  | •w  | **FL<br>DW | DW  | DW  | DW | DW         | DW  | DW                   | ARK |

- TO APPEAR ONLY UPON PUSHBUTTON ACTIVATION

- 9 THIS "WALK" OR FLASHING "DON'T WALK" INTERVAL MAY FINISH TIMING THE BIDIRECTIONAL STRAIGHT "HROUGH MOVEMENT IF THE LEFT ARROW TIME IS NOT SUFFICIENT TO COMPLETE "WALK" OR FLASHING "DON'T WALK" INTERVALS

FL = FLASHING "DON'T WALK"

DW = "DON'T WALK"

PHASE 2+6 SHALL BE PLACED ON RECALL

|          | E11ED0E11014 |         |            |          |    |           |
|----------|--------------|---------|------------|----------|----|-----------|
| PROPOSED | EMERGENCY    | VEHICLE | PREEMPTION | SEQUENCE | OF | OPERATION |

|  |              |    |    |    |    |                |    |     |    |    |    |    |    |    |    |    |    | NUMBER 3  | NUMBER 4 |              |
|--|--------------|----|----|----|----|----------------|----|-----|----|----|----|----|----|----|----|----|----|-----------|----------|--------------|
| CHANGE FROM NORMAL SEQUENCE OF OPERATION INTERVAL NUMBER                           | 1            | 5  |    | 5  |    | 7              |    | 7   |    | 10 |    | 10 |    |    | 13 |    | 13 |           |          | CLEAR        |
| EMERGENCY VEHICLE PREEMPTION SEQUENCE OF   | T 1A         | 18 | 10 | 10 | 1E | 1F             | 1G | 111 | 1J | 1K | 11 | 1М | 1N | 1P | 10 | 1R | 15 | 2         | 3        | TO<br>NORMAL |
| CHANGE EMERGENCY VEHICLE PREEMPTION SEQUENCE OF OPERATION INTERVAL NUMBER          | 2<br>08<br>3 | 2  | 10 | 3  | 1F | 2              | 1H | 1J  | 3  | 2  | 1M | 1N | 3  | 10 | 1R | 2  | 3  | do tracti |          | SEQUENCE     |
| IL 43 (WAUKEGAN ROAD) N/B<br>NEAR AND FAR RIGHT SIGNALS                            | R            | R  | R  | R  | -G | G <sub>Y</sub> | G  | Y   | R  | G  | G  | Y  | R  | R  | R  | R  | R  | G         | R        | Δ            |
| IL 43 (WAUKEGAN ROAD) N/B<br>FAR LEFT AND END MAST ARM SIGNALS                     | R            | R  | R  | R  | G  | G              | G  | Y   | R  | G  | G  | Y  | R  | R  | R  | R  | R  | G         | R        | Δ            |
| IL 43 (WAUKEGAN ROAD) S/B<br>NEAR AND FAR RIGHT SIGNALS                            | R            | G  | Y  | R  | R  | R              | R  | R   | R  | G  | G  | Y  | R  | R  | R  | R  | R  | G         | R        | Δ            |
| IL 43 (WAUKEGAN ROAD) S/B<br>FAR LEFT AND END MAST ARM SIGNALS                     | R            | G  | Y  | R  | R  | R              | R  | R   | R  | G  | G  | Y  | R  | R  | R  | R  | R  | G         | R        | Δ            |
| FOSTER AVENUE E/B ALL SIGNALS  | R            | R  | R  | R  | R  | R              | R  | R   | R  | R  | R  | R  | R  | G  | Y  | R  | G  | R         | G        | Δ            |
| FOSTER AVENUE W/B ALL SIGNALS 4,   | R            | R  | R  | R  | R  | R              | R  | R   | R  | R  | R  | R  | R  | G  | Y  | R  | G  | R         | G        | Δ            |
| PEDESTRIAN SIGNALS CROSSING IL 43 ON THE<br>NORTH AND SOUTH SIDES OF FOSTER AVENUE | DW           | DW | DW | DW | DW | DW             | DW | DW  | DW | DW | DW | DW | DW | FL | DW | DW | FL | DW        | DW       | Δ            |
| PEDESTRIAN SCHALS CROSSING FOSTER AVENU  | E DW         | DW | DW | DW | FL | DW             | FL | DW  | DW | FL | FL | DW | DW | DW | DW | DW | DW | DW        | DW       | Δ            |

 $\triangle$  EMERGENCY VEHICLE SEQUENCE SHALL PROMDETHE PROPER CLEARANCE INTERVAL TO RESUME THE NORMAL SEQUENCE OF OPERATOR OF PROPER CLEARANCE INTERVAL TO DISPLAY A DIFFERENT EMERGENCY VIEWAL AFTER CMERGENCY VEHICLE INTERVAL 2 OR 3 IS TERMINATED.

#### I. D. O. T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS

| TYPE         | NO. LAMPS | LAMPS WATTAGE 2 |     |       | TOTAL   |
|--------------|-----------|-----------------|-----|-------|---------|
|              |           | INCAND.         | LED |       | WATTAGE |
| SIGNAL (RED) | 14        | 1 35            | 1 7 | 0.50  | 119     |
| (YELLOW)     | 14        | 1 35            | 25  | 0.25  | 88      |
| ( GREEN)     | 14        | 1 35            | 15  | 0.25  | 53      |
| ARROW        | 8         | 1 35            | 12  | 0.10  | 10      |
| PED. SIGNAL  | 6         | 90              | 25  | 1.00  | 150     |
| CONTROLLER   | 1         | 100             | 100 | 1.00  | 100     |
| ILLUM. SIGN  | 0         | 252             | 25  | 0.05  | 0       |
| VIDEO SYSTEM | 0         | 150             | 150 | 1.00  | 0       |
|              | 0         |                 | 250 | 1. 00 | 0       |
|              |           |                 |     |       |         |
| FLASHER LED  |           |                 |     |       |         |

TOTAL = 520

ENERGY COSTS-

BILLED TO: IDOT DISTRICT 1

201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY -

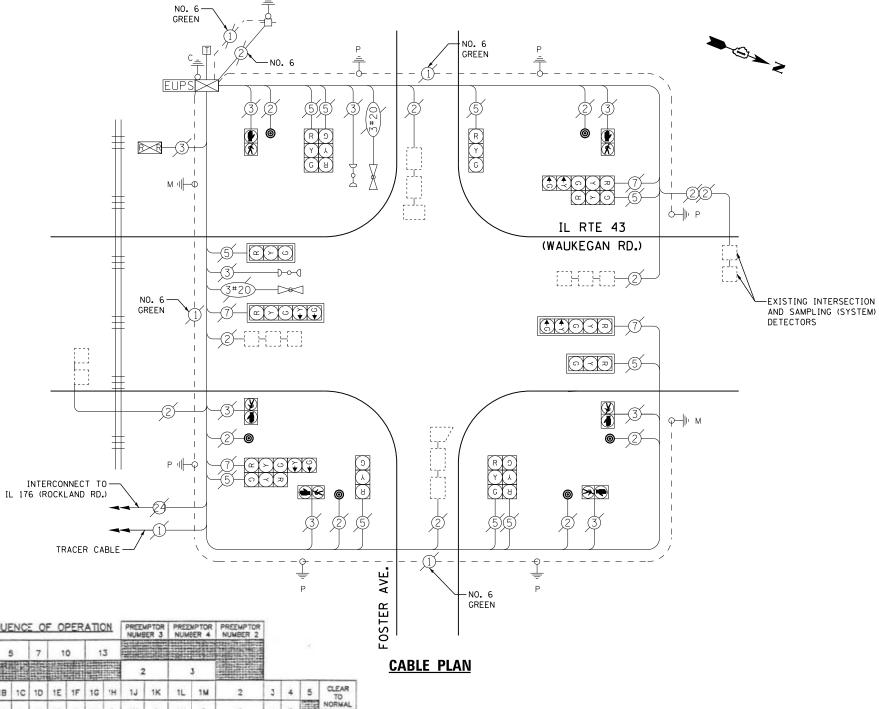
CONTACT TERRI BLECK PHONE

847-816-5239

PRIEMPTOR PREEMPTOR

#### PROPOSED RAILROAD PREEMPTION SEQUENCE OF OPERATION CHANGE FROM NORMAL SEQUENCE OF OPERATION INTERVAL NUMBER CHANGE FROM EMERGENCY VEHICLE PREEMPTION SEQUENCE OF OPERATION INTERVAL NUMBER RAILROAD PREEMPTION SEQUENCE OF OPERATION INTERVAL NUMBER 3 4 5 CLEAR 1A 1B 1C 1D 1E 1F 1G 1H 1J 1K 2 4 5 NORMAL SEQUENCE CHANGE RAILROAD PREEMPTION SECUENCE OF OPERATION IN ERVAL NUMBER 2 1C 2 2 1F 2 1H 2 1K 2 IL 43 (WAUKEGAN ROAD) NEAR AND FAR RIGHT SIGNALS RRRGGGRRG G YRRA G IL 43 (WAUKEGAN ROAD) N/B FAR LEFT AND END MAST ARM SIGNALS RRRGGGRRG G YRRA IL 43 (WAUKEGAN ROAD) NEAR AND FAR RIGHT SIGNALS RRRA IL 43 (WAUKEGAN ROAD) S/B FAR LEFT AND END WAST ARM SIGNALS RRR FOSTER AVENUE RRRRRRYRR RRGA W/B RRG DW DW DW A DW DW DW A DW

A RAILROAD PREEMPTION SEQUENCE SHALL PROVIDE THE PROPER CLEARANCE INTERVAL TO RESUME THE NORMAL SEQUENCE OF OPERATION OR PROPER CLEARANCE INTERVAL TO DISPLAY AN EMERGENCY VEHICLE INTERVAL 5 IS TERMINATED.



#### REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

6 EACH PEDESTRIAN PUSH-BUTTON

#### **SCHEDULE OF QUANTITIES**

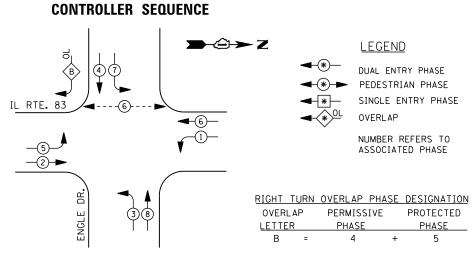
| <u>QUANTITY</u> | <u>UNIT</u> | ITEM  |
|-----------------|-------------|---|
| 1               | EACH        | MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION |
| 6               | EΔCH        | PEDESTRIAN PUSH-BUTTON                              |

REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT

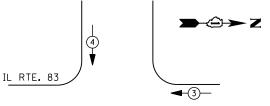
TS #6830 I AKE BILIFF

| COMMONWEAL IH EDISON        | <u> </u>   |     |           | es Alaba Salt Systema System Brett Jan 1939 y History |   |                 |              | LANL   | ווטבכ      |              |
|-----------------------------|------------|-----|-----------|---|---|-----------------|--------------|--------|------------|--------------|
| USER NAME = _USERNAME_      | DESIGNED - | DW  | REVISED - |   | IL ROUTE 43 (WAUKEGAN RD) AT FOSTER AVENUE                        |                 | F.A. SECTION | COUNT  | Y TOTAL    | SHEET<br>NO. |
|                             | DRAWN -    | CC  | REVISED - | STATE OF ILLINOIS                                     | SCHEDULE OF QUANTITIES, CABLE PLAN, SEQUENCE OF OPERATIONS, EMERG | ENCY VEHICLE    | 2014-090T    | S LAKE | 76         | 55           |
| PLOT SCALE = 20.000 ' / in. | CHECKED -  | JDH | REVISED - | DEPARTMENT OF TRANSPORTATION                          | PREEMPTION SEQUENCE OF OPERATION, AND RAILROAD PREEMPTION SEQUEN  | CE OF OPERATION | 2011 0001    |        | RACT NO. 6 | 2A42         |
| PLOT DATE = 2/2/2015        | DATE -     |     | REVISED - |   | SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO                         | STA.            | ILLIN        | ois    |            |              |

HOLD



#### PHASE DESIGNATION DIAGRAM



| Files/6949_UAB_       |                                 | TRAFFIC S | I GNAL I | NSTALLA | TION         |         |  |  |  |  |  |
|-----------------------|---------------------------------|-----------|----------|---------|--------------|---------|--|--|--|--|--|
| 1.<br>4.              | ELECTRICAL SERVICE REQUIREMENTS |           |          |         |              |         |  |  |  |  |  |
| 9\8                   | TYPE                            | NO. LAMPS | WAT      | TAGE    | % OPERATIONS | TOTAL   |  |  |  |  |  |
| 1                     |                                 |           | INCAND.  | LED     |              | WATTAGE |  |  |  |  |  |
| eet                   | SIGNAL (RED)                    | 15        | 1 35     | 1 7     | 0.50         | 128     |  |  |  |  |  |
| LEU#I\UesignUAU\Sheet | (YELLOW)                        | 15        | 1 35     | 25      | 0.25         | 94      |  |  |  |  |  |
| an CA                 | ( GREEN)                        | 15        | 1 35     | 15      | 0.25         | 57      |  |  |  |  |  |
| lesi                  | ARROW                           | 20        | 1 35     | 12      | 0.10         | 24      |  |  |  |  |  |
| =                     | PED. SIGNAL                     | 2         | 90       | 25      | 1.00         | 50      |  |  |  |  |  |
|                       | CONTROLLER                      | 1         | 100      | 100     | 1.00         | 100     |  |  |  |  |  |
| Various               | ILLUM. SIGN                     |           | 252      | 25      | 0.05         |         |  |  |  |  |  |
| 9                     | VIDEO SYSTEM                    |           | 150      | -       | 1.00         |         |  |  |  |  |  |
| 4-022                 |                                 |           |          |         |              |         |  |  |  |  |  |
| 14                    |                                 |           |          |         |              |         |  |  |  |  |  |
| S To                  | FLASHER LED                     |           |          |         |              |         |  |  |  |  |  |
| Signals               |                                 |           |          |         | TOTAL =      | 453     |  |  |  |  |  |

ENERGY COSTS-

BILLED TO: IDOT DISTRICT 1 201 WEST CENTER COURT

ENERGY SUPPLY -

CONTACT TERRI BLECK PHONE 847-816-5239

SCHAUMBURG, IL 60196-1096

COMMONWEALTH EDISON

# SCHEDULE OF QUANTITIES

| QUANTITY | <u>UN11</u> | <u>l l EM</u>   |
|----------|-------------|---|
| 1        | EACH        | MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION                       |
| 2        | EACH        | PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER |
| 2        | EACH        | PEDESTRIAN PUSH-BUTTON  |
| 1        | EACH        | REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT                                  |
|          |             |   |
|          |             |   |

IL RTE. 83

INTERCONNECT TO MONAVILLE RD.

> TRACER-CABLE

Ŗ.

ENGLE

**CABLE PLAN** 

EXISTING INTERSECTION — AND SAMPLING (SYSTEM) DETECTORS

# REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

3-1/C-NO 6. (GREEN)

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

2 EACH PEDESTRIAN SIGNAL HEAD 2 EACH PEDESTRIAN PUSH-BUTTON

GREEN

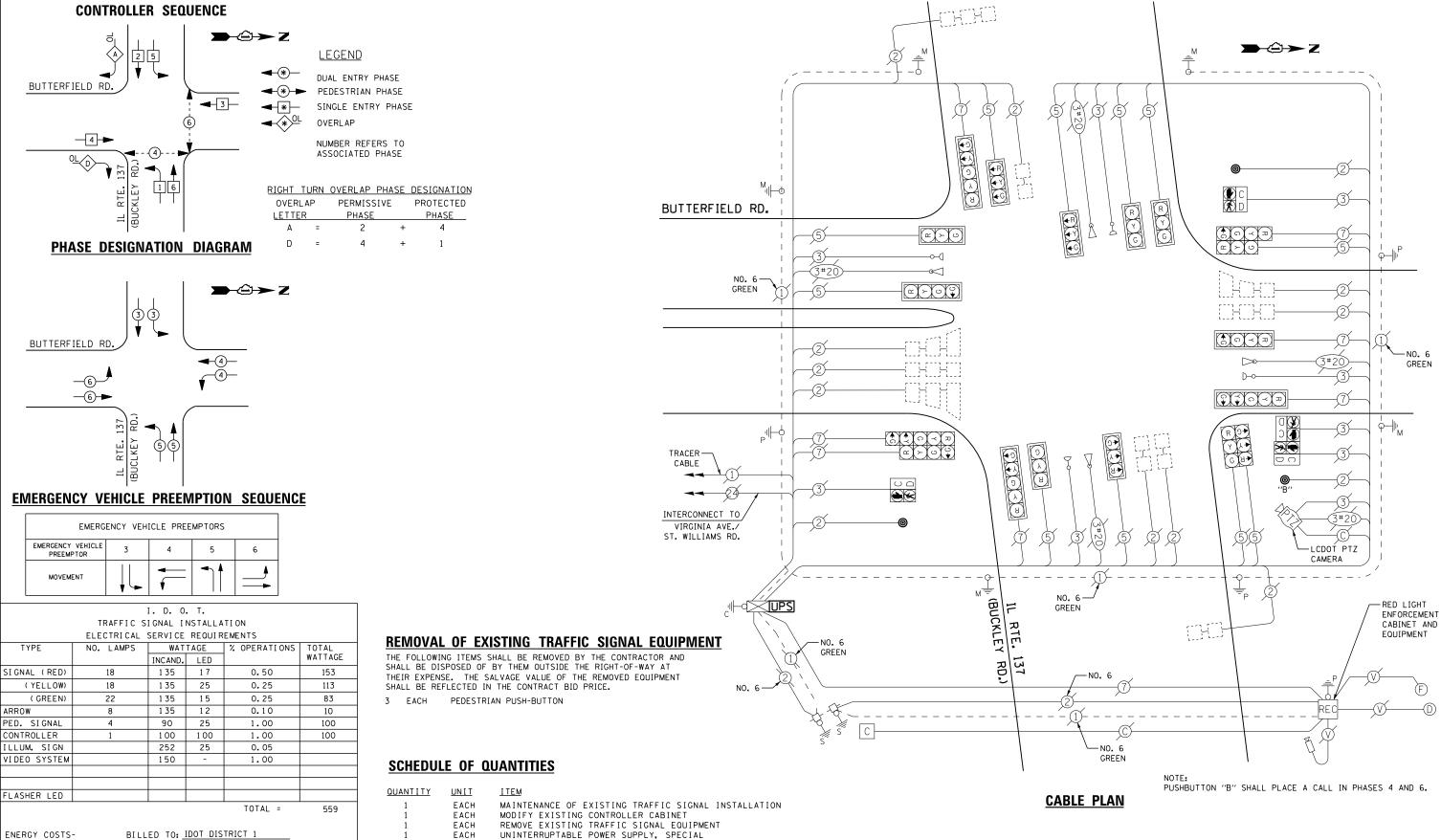
CAMERA

TS #6949 LAKE VILLA

EXISTING INTERSECTION AND SAMPLING
(SYSTEM) DETECTORS

| 001111101111111111111111111111111111111 |            |     |           |                              |  |             |            |         |             |
|---|------------|-----|-----------|------------------------------|--|-------------|------------|---------|-------------|
| USER NAME = _USERNAME_                  | DESIGNED - | DW  | REVISED - |                              | IL ROUTE 83 AT ENGLE DRIVE                                     | F.A.<br>RTF | SECTION    | COUNTY  | TOTAL SHEET |
|   | DRAWN -    | CC  | REVISED - | STATE OF ILLINOIS            | SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, |             | 2014-090TS | LAKE    | 76 56       |
| PLOT SCALE = 20.000 '/ in.              | CHECKED -  | JDH | REVISED - | DEPARTMENT OF TRANSPORTATION | AND EMERGENCY VEHICLE PREEMPTION SEQUENCE                      |             |            | CONTRAC | T NO. 62A42 |
| PLOT DATE = 2/2/2015                    | DATE -     |     | REVISED - |                              | SCALE: N.T.S.   SHEET NO. OF SHEETS   STA. TO STA.             |             | ILLINOIS   |         |             |

IL\_RTE. 83 **EMERGENCY VEHICLE PREEMPTION SEQUENCE** EMERGENCY VEHICLE PREEMPTORS EMERGENCY VEHICLE 4 MOVEMENT I. D. O. T.



ENERGY SUPPLY -

201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096

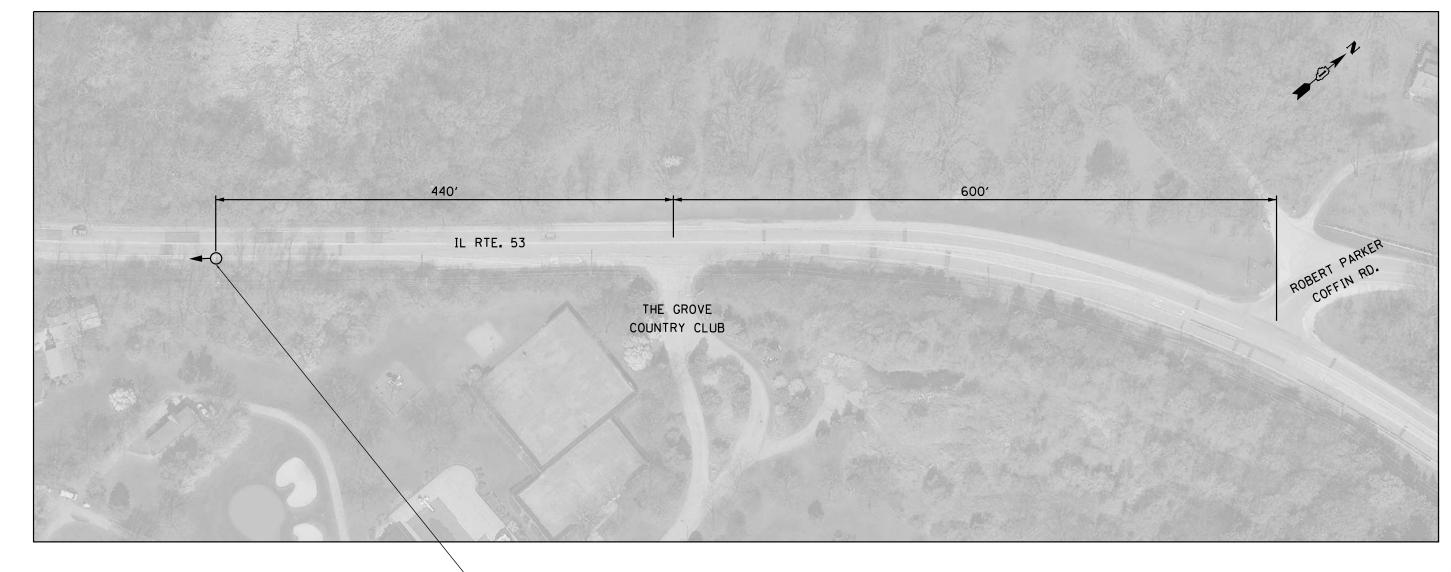
CONTACT TERRI BLECK PHONE 847-816-5239 COMMONWEALTH EDISON

EACH UNINTERRUPTABLE POWER SUPPLY, SPECIAL EACH

PEDESTRIAN PUSH-BUTTON, NON-LATCHING

TS #7095 LIBERTYVILLE

|                              |            |     |           |                              |  |              |            | D       |             |
|------------------------------|------------|-----|-----------|------------------------------|--|--------------|------------|---------|-------------|
| USER NAME = _USERNAME_       | DESIGNED - | DW  | REVISED - |                              | IL ROUTE 137 (BUCKLEY ROAD) AT BUTTERFIELD ROAD                | F.A.<br>RTE. | SECTION    | COUNTY  | TOTAL SHEET |
|                              | DRAWN -    | CC  | REVISED - | STATE OF ILLINOIS            | SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, | 10.12.       | 2014-090TS | LAKE    | 76 57       |
| PLOT SCALE = 20.0000 ' / in. | CHECKED -  | JDH | REVISED - | DEPARTMENT OF TRANSPORTATION | AND EMERGENCY VEHICLE PREEMPTION SEQUENCE                      |              |            | CONTRAC | T NO. 62A42 |
| PLOT DATE = 2/2/2015         | DATE -     |     | REVISED - |                              | SCALE: SHEET NO. OF SHEETS STA. TO STA.                        |              | ILL INOIS  |         |             |



|             | Ι.   | D.  | 0. | Т.           |
|-------------|------|-----|----|--------------|
| TRAFFIC     | SIG  | NAL | ΙN | ISTALLATI ON |
| ELECTRI CAL | . SE | RVI | CE | REQUIREMENTS |

|              | ELECTRICAL | SERVICE | REQUIR | EMENIS       |         |
|--------------|------------|---------|--------|--------------|---------|
| TYPE         | NO. LAMPS  | WAT     | TAGE   | % OPERATIONS | TOTAL   |
|              |            | INCAND. | LED    |              | WATTAGE |
| SIGNAL (RED) |            | 1 35    | 1 7    | 0.50         |         |
| (YELLOW)     |            | 1 35    | 25     | 0.25         |         |
| ( GREEN)     |            | 1 35    | 15     | 0.25         |         |
| ARROW        |            | 1 35    | 12     | 0.10         |         |
| PED. SIGNAL  |            | 90      | 25     | 1.00         |         |
| CONTROLLER   |            | 100     | 100    | 1.00         |         |
| ILLUM. SIGN  |            | 252     | 25     | 0.05         |         |
| VIDEO SYSTEM |            | 150     | -      | 1.00         |         |
|              |            |         |        |              |         |
|              |            |         |        |              |         |
| FLASHER LED  | 1          |         | 25     | 0.50         | 13      |
|              |            |         |        | TOTAL =      | 13      |

ENERGY COSTS-

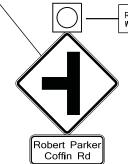
BILLED TO: IDOT DISTRICT 1

201 WEST CENTER COURT
SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY -

CONTACT TERRI BLECK
PHONE 847-816-5239

COMMONWEALTH EDISON



REMOVE AND REPLACE EXISTING FLASHER WITH NEW LED FLASHER

#### REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

1 EACH SIGNAL HEAD, 1 - SECTION

#### SCHEDULE OF QUANTITIES

| <u>QUANTITY</u> | <u>UNIT</u> | ITEM   |
|-----------------|-------------|--|
| 1               | EACH        | MAINTENANCE OF EXISTING FLASHING BEACON INSTALLATION |
| 1               | EACH        | SIGNAL HEAD, LED, 1-FACE, 1-SECTION, BRACKET MOUNTED |
| 1               | EACH        | REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT             |

TS #FL 701 LONG GROVE

| USER NAME = _USERNAME_       | DESIGNED - | DW  | REVISED - |                              |  | II DOLLTE ES AT | DUBED  | T DAD | KED CUEEN         | N DUVD  | F.A.       | SECTION  | COUNTY   | TOTAL SH | IEET NO |
|------------------------------|------------|-----|-----------|------------------------------|--|-----------------|--------|-------|-------------------|---------|------------|----------|----------|----------|---------|
|                              | DRAWN -    | CC  | REVISED - | STATE OF ILLINOIS            | IL ROUTE 53 AT ROBERT PARKER COFFIN ROAD FLASHING BEACON |                 |        |       | STATE OF ILLINOIS |         | 2014-090TS | McHENRY  | 76 5     | 58       |         |
| PLOT SCALE = 152.3332 '/ in. | CHECKED -  | JDH | REVISED - | DEPARTMENT OF TRANSPORTATION |  | гі              | LASHIN | U DEA | CUN               |         |            |          | CONTRACT | NO. 62A  | 42      |
| PLOT DATE = 2/2/2015         | DATE -     |     | REVISED - |                              | SCALE:   | SHEET NO. (     | OF SH  | HEETS | STA.              | TO STA. |            | ILLINOIS |          |          |         |

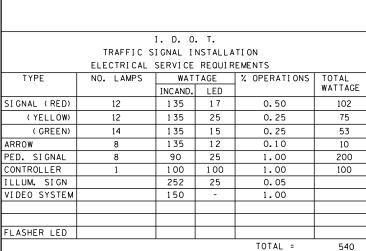


IL RTE. 23

(STATE ST.)

<del>(5)</del>-

**-**②**-**►



**EXISTING AND PROPOSED CONTROLLER SEQUENCE** 

PHASE DESIGNATION DIAGRAM

**→**②→ Z

ENERGY COSTS-

BILLED TO: IDOT DISTRICT 1

201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY -

CONTACT MIKE LENOX PHONE 815-490-2869

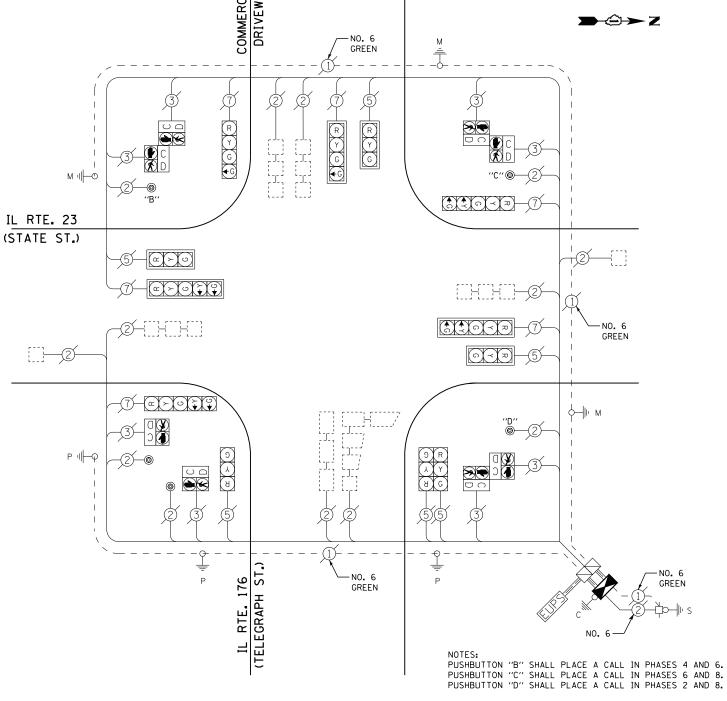
COMMONWEALTH EDISON

#### **LEGEND**

DUAL ENTRY PHASE PEDESTRIAN PHASE SINGLE ENTRY PHASE

OVERLAP

NUMBER REFERS TO ASSOCIATED PHASE



#### **CABLE PLAN**

#### SCHEDULE OF QUANTITIES

QUANTITY <u>UNIT</u> EACH MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION EACH FULL-ACTUATED CONTROLLER AND TYPE IV CABINET EACH INDUCTIVE LOOP DETECTOR EACH REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT

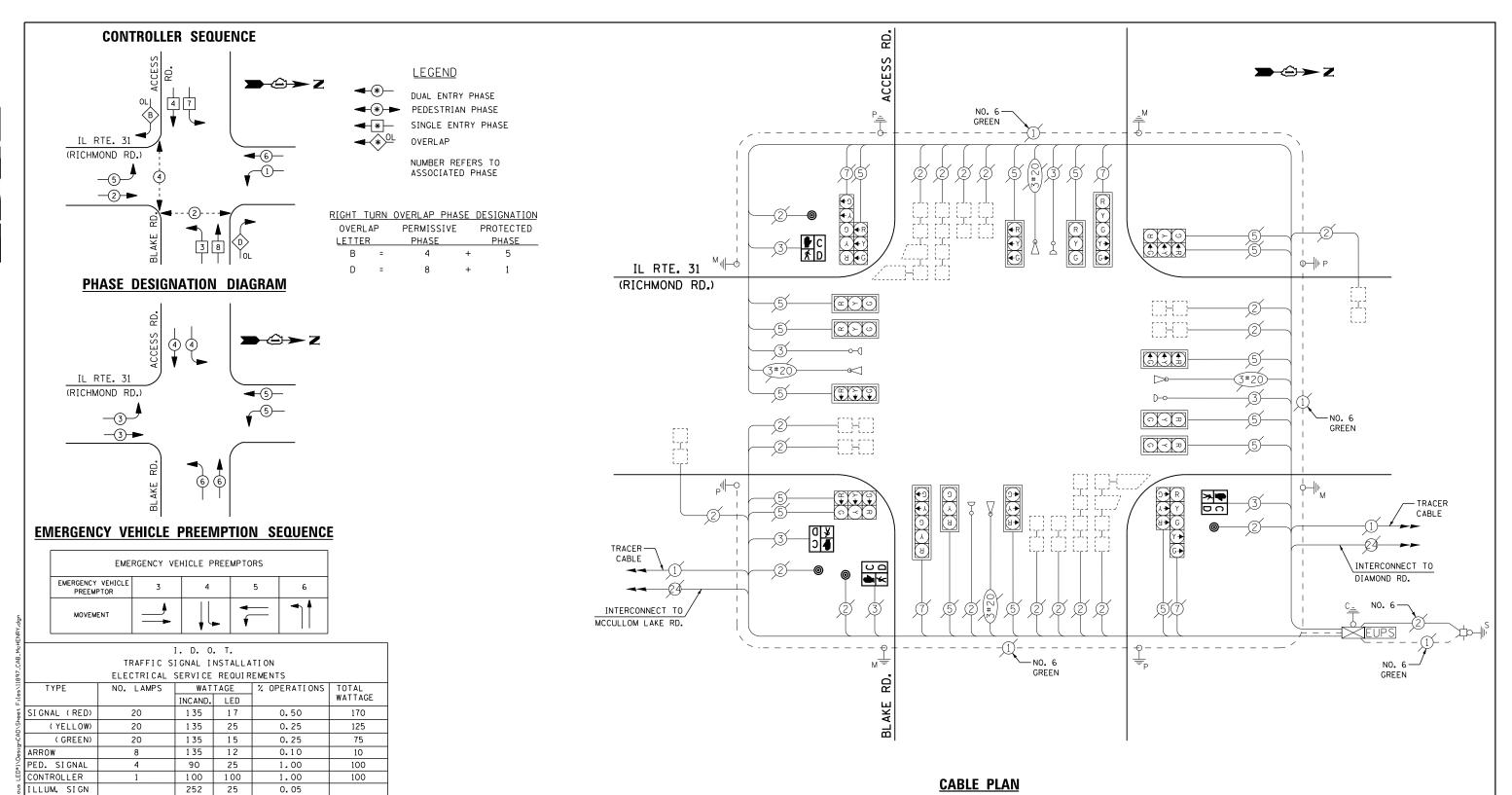
#### REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

1 EACH CONTROLLER AND CABINET (COMPLETE)

TS #21971 MARENGO

| USER NAME = _USERNAME_     | DESIGNED - | DW  | REVISED - |                              | II BOUTE 2    | 3 (STATE STI  | REET) A | AT IL RO | IITE 176 | (TELEGRAPH STREET)    | F.A.  | SECTION    | COUNTY  | TOTAL SHEET |
|----------------------------|------------|-----|-----------|------------------------------|---------------|---------------|---------|----------|----------|-----------------------|-------|------------|---------|-------------|
|                            | DRAWN -    | CC  | REVISED - | STATE OF ILLINOIS            | COUEDINE OF O | - ,           | , -     |          |          | (,                    | 1112. | 2014-090TS | McHENRY | 76 59       |
| PLOT SCALE = 20.000 '/ in. | CHECKED -  | JDH | REVISED - | DEPARTMENT OF TRANSPORTATION | SCHEDULE OF Q | UANTITIES, CA | ABLE 1  | LAN, AN  | ID PHAS  | E DESIGNATION DIAGRAM |       |            | CONTRAC | T NO. 62A42 |
| PLOT DATE = 2/2/2015       | DATE -     |     | REVISED - |                              | SCALE: N.T.S. | SHEET NO.     | OF      | SHEETS   | STA.     | TO STA.               |       | ILLINOIS   |         |             |



# **SCHEDULE OF QUANTITIES**

1.00

TOTAL =

201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096 580

150

BILLED TO: IDOT DISTRICT 1

CONTACT MIKE LENOX

815-490-2869

PHONE

| <u>QUANTITY</u> | <u>UNIT</u> | ITEM  |
|-----------------|-------------|---|
| 1               | EACH        | MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION                       |
| 4               | EACH        | PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER |
| 4               | EACH        | PEDESTRIAN PUSH-BUTTON  |
| 1               | EACH        | REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT                                  |

#### REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

4 EACH PEDESTRIAN SIGNAL HEAD

PEDESTRIAN PUSH-BUTTON EACH

TS #11897

| COMMONWEALTH EDISON          |            |     |           |                              |             |            |          |          |           |                    |       |            | MCHENRY            |
|------------------------------|------------|-----|-----------|------------------------------|-------------|------------|----------|----------|-----------|--------------------|-------|------------|--------------------|
| USER NAME = _USERNAME_       | DESIGNED - | DW  | REVISED - |                              | IL          | ROUTE 31 ( | (RICHMO  | ND ROA   | AD) AT BL | AKE ROAD           | F.A.  | SECTION    | COUNTY TOTAL SHEET |
|                              | DRAWN -    | CC  | REVISED - | STATE OF ILLINOIS            | SCHEDULE OF | QUANTITIES | S, CABLE | PLAN, F  | PHASE DE  | SIGNATION DIAGRAM, | 11123 | 2014-090TS | McHENRY 76 60      |
| PLOT SCALE = 20.0000 ' / in. | CHECKED -  | JDH | REVISED - | DEPARTMENT OF TRANSPORTATION | AN          | ) EMERGEN  | CY VEH   | ICLE PRE | EEMPTION  | SEQUENCE           |       |            | CONTRACT NO. 62A42 |
| PLOT DATE = 2/2/2015         | DATE -     |     | REVISED - |                              | SCALE:      | SHEET NO.  | OF       | SHEETS   | STA.      | TO STA.            |       | ILLINOIS   |                    |

VIDEO SYSTEM FLASHER LED ENERGY COSTS-

ENERGY SUPPLY -



I. D. O. T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS WATTAGE % OPERATIONS TOTAL WATTAGE INCAND. LED SIGNAL (RED) 1 35 0.50 111 13 17 (YELLOW) 0.25 82 13 1 35 25 (GREEN) 13 1 35 15 0.25 49 ARROW 1 35 12 0.10 10 PED. SIGNAL 100 90 25 1.00 CONTROLLER 100 100 1.00 100 ILLUM. SIGN 252 25 0.05 5 VIDEO SYSTEM 150 1.00 FLASHER LED TOTAL = 457

ENERGY COSTS-

BILLED TO: IDOT DISTRICT 1 201 WEST CENTER COURT

SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY -CONTACT MIKE LENOX PHONE 815-490-2869

COMMONWEALTH EDISON

# **SCHEDULE OF QUANTITIES**

QUANTITY <u>UNIT</u> EACH MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION EACH REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT PEDESTRIAN PUSH-BUTTON, NON-LATCHING

TRACER-CABLE

INTERCONNECT TO OAK DR.

IL RTE. 120

#### **CABLE PLAN**

-NO. 6

GREEN

DRIVEWAY

GREEN

Dog

#### REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

3 EACH PEDESTRIAN PUSH-BUTTON

NOTE: PUSH BUTTON "D" SHALL PLACE A CALL IN PHASES 2 AND 8

GREEN

TS #11915 McHENRY (SH. 1)

- TRACER CABLE

INTERCONNECT TO IL RTE. 31

| USER NAME = _USERNAME_       | DESIGNED - | DW  | REVISED - |                              |                                       | II BUILTE | 120 AT | CBVCT  | AL LAKE RO | ۸n      | F.A. | SECTION  | COUNTY   | TOTAL   | SHEET |
|------------------------------|------------|-----|-----------|------------------------------|---------------------------------------|-----------|--------|--------|------------|---------|------|----------|----------|---------|-------|
|                              | DRAWN -    | CC  | REVISED - | STATE OF ILLINOIS            |                                       |           |        | ****** | 2014-090TS | McHENRY | 76   | 61       |          |         |       |
| PLOT SCALE = 20.0000 ' / in. | CHECKED -  | JDH | REVISED - | DEPARTMENT OF TRANSPORTATION | SCHEDULE OF QUANTITIES AND CABLE PLAN |           |        |        |            |         |      |          | CONTRACT | T NO. 6 | 2A42  |
| PLOT DATE = 2/2/2015         | DATE -     |     | REVISED - |                              | SCALE:                                | SHEET NO. | OF     | SHEETS | STA.       | TO STA. |      | ILLINOIS |          |         |       |
|                              |            |     |           |                              |                                       |           |        |        |            |         |      |          |          | •       | •     |

OF THE PEDESTRIAN INTERVAL CLEARANCE

PEDESTRUM CROSSING E-W CRYSTAL LAKE ROAD ON SOUTH SIDE OF ILLUNCIS ROUTE 120

PEDESTRIAN CROSSING N-S ILLONOIS ROUTE 170 ON EAST SIDE OF CRYSTAL LAKE ROAD

TALLENOIS ROUPE 120
FAR LEFT AND END MOUNT MAST ARM STORALS

ELLINOIS ROUTE 120 END MOUNT MAST ARM AND EAR LEFT SIGNALS CRYSTAL LAKE ROAD MEAN ROOM AND FAR RIGHT WAST ARM STONALS CRYSTAL LAKE ROAD END MOUNT MAST ARM AND FAR LEFT SIGNALS

FAR RIGHT MAST ARM STOWN. BLLEMOIS POUTE 120 FAR RICHT MAST ARM SIGNAL

OPTIVEWAY SIGNALS

P = TIDENATED PERSON - WALK

MOVEMENT

PHASE

DITERVAL

CHANCE TO

THE ILLUMINATED HEAVISHING HAMD I FLATOURY DON'T WALK

\* = ITTUMINATED BOLID HAND - DON'T WALK

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE OF OPERATION

4---(2---**>** 

H P FH H

4 54 5B 6

7 8A 8B 1+5

2+6

1+6

|  |     |   |    |    |    |    |    |    |     |    |     |    | PREEMPTOR | PREEMPTOR |             |
|--|-----|---|----|----|----|----|----|----|-----|----|-----|----|-----------|-----------|-------------|
| CHANCE FROM HORIMAL SECURINGS OF OPERATION INTERVAL MEMBER                     | 1   | 1 | 11 | 1  | 3  | T  | 3  |    | Г   | 6  | П   | 6  |           |           | CLEAR       |
| EMERCENCY VEHICLE PRETAMPTION SEQUENCE OF OPERATION INTERVAL MUMBER            | 12  |   | LU | 10 | 1D | 1E | 1F | 10 | 101 | iJ | IX. | 11 | 2         | 3         | 10<br>MORAL |
| CHUNGE TO EMERGENCY VEHICLE PRSEMPTION<br>SEQUENCE OF OPERATION INTERVAL MAKES | 2   | 1 | ic | 3  | 2  | 1F | 10 | 3  | 14  | 1K | 2   | 1  |           |           | SED.ENC     |
| ILLLINGS ROUTE 120 E/<br>FAR LEFT AND END MOUNT MAST ARM SIGNALS               | 8 8 | T | R  | R  | G  | G  | Y  | R  | 11  | Я  | R   | R  | G         | а         | ٥           |
| ELLENOIS ROUTE 120 E/<br>FAR RIGHT WAST ARM SEDAM.                             | 8 R | T | n  | A  | G  | G  | 1  | н  | Я   | R  | R   | R  | c         | R         | 0           |
| RULLIMOUS ROUTE 120 W/FAR RICHT MAST ARM STONAL                                | 8 G | T | Y  | R  | c  | 5  | 4  | Ř  | R   | R  | R   | А  | G         | H         | 0           |
| ELLINOIS ROUTE 120 PVI<br>FND MOUNT MAST ARM AND FAR LEFT SIGNALS              | G.  | 1 | -  | R  | G  | G  | Υ  | R  | R   | R  | R   | R  | G         | R         | 0           |
| ORYSTAL LAKE ROAD MAI<br>MEAR REDIT AND FAR RIGHT WAST ARM SIGNALS             | R   |   |    | R  | R  | R  | R  | R  | G   | Y  | H   | G  | R         | c         | 0           |
| CRYSTAL LAKE ROAD N/S<br>END MOURT MAST ARM AND FAM LEFT SICHALS               | Я   | 1 |    | A  | Я  | R  | я  |    | G   | +  | н   | G  | R         | 5         | 0           |
| DRIVEWAY SIGNALS 5/6   | R   |   |    | R  | R  | R  | R  | 3  | 6   | Y  | R   | G  | R         | G         | 0           |
| PEDESTRIAN CHOSSING E-W<br>CRYSTAL LARF ROAD ON SOUTH SIDE OF ILL RIFE 120     | H   |   | 1  | н. | FH | FH | н  | н  | н   | Ħ  | и   | н  | #         | н         | 0           |
| PEDESTRUM CROSSING W-S ILL RTE (20)<br>ON EAST SIDE OF CRYSTAL LAKE ROAD       | н   | - |    | 11 | #  | н  | *  | N  | FH  | н  | н   | FH | H         | н         | 0           |

EXISTING RAILHOAD SEQUENCE OF OFFRATION

|  |       |            |      |      |     |     | 1000 | NUMBER 3 |      | MANBER 4 | PRESUPTOR |      |      |              |                     |
|--|-------|------------|------|------|-----|-----|------|----------|------|----------|-----------|------|------|--------------|---------------------|
| CHANCE FROM HOMBAL SEQUENCE OF OPERATION INTERVAL HUMBER   | il se | 1          |      | 3    | T   | 6   |      | Maria    | OVER |          | Uesa.     |      |      |              |                     |
| CHANGE FROM EMERGENCY VEHICLE<br>PREDIPTION SECRENCE OF OPERATION INTERVAL HUM   | RER.  |            |      | T    |     |     | Г    | 2        |      | 1        | 1         | ı    |      |              |                     |
| RUZ ROAD PREMPTION SECURICE OF OPERATION INTERNAL NUMBER   |       | IA         | 16   | 10   | 10  | IE  | It   | 16       | 100  | IJ       | 2         | 3    | 4    | 5            | QEM                 |
| CHANCE TO HAD POOD PREEMPTION SECURACE OF OPERATION INTERVAL MARKET  |       | 2          | 10   | 2    | ĮΕ  | Z   | IC   | 2        | 1,1  | 2        | 3         | 4    | 5    |              | HOPSIAL<br>SEGLENCE |
| ELLIMOTS ROUTE 170<br>FAR LEFT AND END MOUNT MAST APM SIGNALS  | €./5  | R          | 4    | R    | Ħ   | R   | Y    | 18       | R    | R        | R         | R    | R    | н            | Δ                   |
| DILLEMOIS MOUTE 120<br>FAR RIGHT MAST ARM STONAL   | EA    | Я          | ¥    | R    | R   | n   | +    | R        | R    | R        | R         | R    | P    | B            | Δ                   |
| ELLINOIS POUTE 120<br>FAR RICHI WAST ARW SIGNAL  | 17.   | 6          | 5    | 6    | R   | R   | 6    | G        | R    | H        | G         | 4    | A    | R            | Δ                   |
| BLUTHOUS HOUTE 120<br>END MOUNT MAST ARM AND FAR LETT SICHALS  | 1/3   | 5          | G    | 6    | F   | R   | 6    | 6        | Ħ    | R        | 6         | 4    | 8    | R            | Δ                   |
| TRYSTAL LAKE ROAD<br>MEAR RICHT ANDFAR RIGHT WAST ARM STOWNS   | H/8   | distance ( | R    | R    | Y   | В   | R    | R        | Y    | R        | R         | n    | R    | 6            | Δ                   |
| CRYSTAL LAKE ROAD<br>END MOUNT WAST ARM AND FAR LEFT SIDMUS  | ME    | Я          | R    | a    | *   | R   | R    | ī        | 7    | R        | Ħ         | R    | R    | 0            | Δ                   |
| DRIVEWAY SIGNALS   | 5/1   | R          | R    | R    | 7.  | R   | Я    | A        | Y    | R        | 8         | R    | R    | 6            | Δ                   |
| PEDESTRIAN CROSSING E-W<br>CRYSTAL LAKE ROAD ON SONTH SIDE OF BLL REE 120  |       | н          | FH   | н    | н   | н   | H    | н        | н    | 4        | н         | "    | н    | н            | Δ                   |
| PEDESTRIAN CROSSING N-S EL RIE 120<br>ON EAST SIDE OF CRISTAL LAME RIMO  |       | н          | н    | н    | FH  | 14  | н    | н        | н    | н        | н         | н    | н    | 14           | Δ                   |
| INTERNALLY ILLIAMINATED<br>NO RIGHT TURN SIGN, CRYSTAL LANS ROAD   | M/B   | NRT        | MRT  | NET  | MET | MRT | MH:  | NRT      | NF 1 | NRT      | NAT       | MRT  | NAT  | MRT          | Δ                   |
| INTERNALLY DIUMINATED<br>NO LEFT TURN SIGN, GRIVEWAY   | 5/8   | MLT        | NL T | M, T | M.T | NLT | NLT  | NL T     | M. T | N. 1     | NL+       | 14.7 | N. T | N. T         | Δ                   |
| Province Inches (Inches Inches |       |            | ,    |      |     |     |      |          |      | 1000     |           |      |      | 14<br>0<br>L |                     |

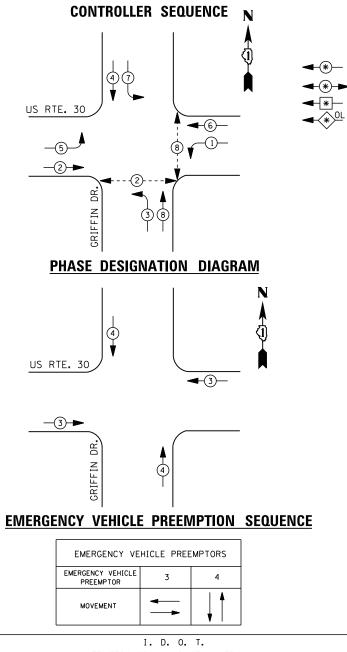
NRT - NU RECAT TURN MUT NO LEFT THEN

A PAILPOAD PREEMPTION SEQUENCE WHALL PROVIDE THE PROPER STREAMER WITHHALL TO PESSAGE THE MORMAL SCOURNES OF DEFRATION OR PROPER ELEARANCE INTERVAL TO DISPLAY AN EMERGENIT VEHICLE DITERVAL IT APPLICABLE AFTER RALIBUAD PREEMPTION INTERVAL 5 IS TERMINATED

O EMERGORICH VEHICLE REGIENCE SHALL PROVIDE THE PROPER CLEARANCE INTERVAL TO RESIDE THE NORMAL SECURICE OF OPERATION OF PROPER CLEARANCE INTERVAL TO DISPLAY A OFFICER EMERGENCY VEHICLE INTERNAL AFTER EMERGENCY MEMICLE INTERNAL 2, 1, 4, OR 5 18 TERMINATED

TS #11915 McHENRY (SH. 2)

| USER NAME = _USERNAME_       | DESIGNED - | DW  | REVISED - |                              |          | IL ROUTE 120 AT CRYST    | TAL LAKE ROAD       | F.A.<br>RTE. | SECTION    | COUNTY   | TOTAL SHEET |
|------------------------------|------------|-----|-----------|------------------------------|----------|--------------------------|---------------------|--------------|------------|----------|-------------|
|                              | DRAWN -    | CC  | REVISED - | STATE OF ILLINOIS            | SEQUENC  | E OF OPERATION, RAILROAD | SEQUENCE OF OPERAT  | 10N,         | 2014-090TS | McHENRY  | 76 62       |
| PLOT SCALE = 20.0000 ' / in. | CHECKED -  | JDH | REVISED - | DEPARTMENT OF TRANSPORTATION | AND EMER | GENCY VEHICLE PREEMPTION | ON SEQUENCE OF OPER | ATION        |            | CONTRACT | T NO. 62A42 |
| PLOT DATE = 2/2/2015         | DATE -     |     | REVISED - |                              | SCALE:   | SHEET NO. OF SHEETS      | STA. TO STA         |              | ILLINOIS   |          |             |



| TRAFFIC SIGNAL INSTALLATION |            |          |        |              |         |  |  |  |  |  |  |  |  |
|-----------------------------|------------|----------|--------|--------------|---------|--|--|--|--|--|--|--|--|
|                             | ELECTRICAL | SERVI CE | REQUIR | EMENTS       |         |  |  |  |  |  |  |  |  |
| TYPE                        | NO. LAMPS  | WAT      | TAGE   | % OPERATIONS | TOTAL   |  |  |  |  |  |  |  |  |
|                             |            | INCAND.  | LED    |              | WATTAGE |  |  |  |  |  |  |  |  |
| SIGNAL (RED)                | 12         | 1 35     | 1 7    | 0.50         | 102     |  |  |  |  |  |  |  |  |
| (YELLOW)                    | 12         | 1 35     | 25     | 0.25         | 75      |  |  |  |  |  |  |  |  |
| ( GREEN)                    | 12         | 1 35     | 15     | 0.25         | 45      |  |  |  |  |  |  |  |  |
| ARROW                       | 16         | 1 35     | 12     | 0.10         | 20      |  |  |  |  |  |  |  |  |
| PED. SIGNAL                 | 4          | 90       | 25     | 1.00         | 100     |  |  |  |  |  |  |  |  |
| CONTROLLER                  | 1          | 100      | 100    | 1.00         | 100     |  |  |  |  |  |  |  |  |
| ILLUM. SIGN                 |            | 252      | 25     | 0.05         |         |  |  |  |  |  |  |  |  |
| VIDEO SYSTEM                |            | 150      | -      | 1.00         |         |  |  |  |  |  |  |  |  |
|                             |            |          |        |              |         |  |  |  |  |  |  |  |  |
|                             |            |          |        |              |         |  |  |  |  |  |  |  |  |
| FLASHER LED                 |            |          |        |              |         |  |  |  |  |  |  |  |  |
|                             |            |          |        | TOTAL =      | 442     |  |  |  |  |  |  |  |  |

ENERGY COSTS-

BILLED TO: IDOT DISTRICT 1

201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY -

CONTACT JOE STACHO PHONE 630-424-5704

COMMONWEALTH EDISON

#### LEGEND

DUAL ENTRY PHASE PEDESTRIAN PHASE

SINGLE ENTRY PHASE OVERLAP

NUMBER REFERS TO ASSOCIATED PHASE

| <b>SCHEDULE</b> | 0F | QUANTITIES |
|-----------------|----|------------|

| <u>QUANTITY</u> | <u>UNIT</u> | <u>ITEM</u>   |
|-----------------|-------------|---|
| 1               | EACH        | MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION                       |
| 4               | EACH        | PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER |
| 4               | EACH        | PEDESTRIAN PUSH-BUTTON  |
| 1               | EACH        | MODIFY EXISTING CONTROLLER CABINET  |
| 1               | EACH        | REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT                                  |
| 1               | EACH        | UNINTERRUPTABLE POWER SUPPLY, SPECIAL                                     |
|                 |             |   |

EXISTING INTERSECTION— AND SAMPLING (SYSTEM) DETECTORS

# **CABLE PLAN**

GREEN

-NO. 6

GREEN

RYG

<del>-</del>5

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### REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

4 EACH PEDESTRIAN SIGNAL HEAD

4 EACH PEDESTRIAN PUSH-BUTTON

TS #727 MONTGOMERY

EXISTING INTERSECTION AND SAMPLING
(SYSTEM) DETECTORS

|                 | OMMORNEALTH EDISOR | <u>'</u>   |     |           |                              |               |             |         |          |         |                      |             |            |        |          |       |  |
|-----------------|--------------------|------------|-----|-----------|------------------------------|---------------|-------------|---------|----------|---------|----------------------|-------------|------------|--------|----------|-------|--|
| USER NAME = _U  | .USERNAME_         | DESIGNED - | DW  | REVISED - |                              |               | U.S.        | ROUTE   | 30 AT G  | RIFFIN  | DRIVE                | F.A.<br>RTF | SECTION    | COUNTY | TOTAL    | SHEET |  |
|                 |                    | DRAWN -    | CC  | REVISED - | STATE OF ILLINOIS            | SCHEDULE      | OF QUANTITI | ES, CAB | LE PLAN  | , PHASE | DESIGNATION DIAGRAM, |             | 2014-090TS | KANE   | 76       | 63    |  |
| PLOT SCALE = 20 | 20.000 ′/ in.      | CHECKED -  | JDH | REVISED - | DEPARTMENT OF TRANSPORTATION |               | AND EMERGE  | NCY VE  | HICLE PI | REEMPT  | ION SEQUENCE         |             |            | CONTRA | CT NO. 6 | 62A42 |  |
| PLOT DATE = 2/  | 2/2/2015           | DATE -     |     | REVISED - |                              | SCALE: N.T.S. | SHEET NO.   | OF      | SHEETS   | STA.    | TO STA.              |             | ILLINOIS   |        |          |       |  |

**UPS** 

-7<del>-</del>220<del>-</del>7

⊃ <u>0</u>

DR.

м⊪ф

US RTE. 30

GREEN



I. D. O. T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS VICE REQUIREMENTS

WATTAGE % OPERATIONS TOTAL WATTAGE INCAND. LED SIGNAL (RED) 119 14 1 35 17 0.50 (YELLOW) 14 1 35 25 0.25 88 (GREEN) 14 1 35 15 0.25 53 ARROW 24 1 35 12 0.10 29 PED. SIGNAL 90 25 1.00 200 CONTROLLER 100 100 1.00 100 ILLUM. SIGN 252 25 0.05 VIDEO SYSTEM 1.00 150 FLASHER LED TOTAL = 589

ENERGY COSTS-

BILLED TO: IDOT DISTRICT 1

201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY - CONTACT TERRI BLECK
PHONE 847-816-5239

847-816-5239 COMMONWEALTH EDISON

# SCHEDULE OF QUANTITIES

 QUANTITY
 UNIT
 ITEM

 1
 EACH
 MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION

 1
 EACH
 REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT

 7
 EACH
 PEDESTRIAN PUSH-BUTTON, NON-LATCHING

# REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

CENTRAL RAILROAD

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

7 EACH PEDESTRIAN PUSH-BUTTON

-EXISTING INTERSECTION
AND SAMPLING (SYSTEM)

(\*)

**(\*)(\*)(\*)(\*)** 

EXISTING INTERSECTION

AND SAMPLING (SYSTEM) DETECTOR

5-

DETECTOR

-NO. 6 GREEN

> TS #6625 MUNDELEIN (SH. 1)

-TRACER CABLE

INTERCONNECT

TO DUNBAR RD.

EXISTING INTERSECTION

AND SAMPLING (SYSTEM) DETECTORS

NOTE: PUSHBUTTON "A" SHALL PLACE A CALL IN PHASES 2 AND 4.

| USER NAME = _USERNAME_     | DESIGNED - | DW  | REVISED - |                              |               | 11 9 11    | BUILL | TE 45 AT | r 11 1 | BUILTE 1 | 76       | F.A.  | SECTION    | COUNTY  | TOTAL   | SHEET |
|----------------------------|------------|-----|-----------|------------------------------|---------------|------------|-------|----------|--------|----------|----------|-------|------------|---------|---------|-------|
|                            | DRAWN -    | CC  | REVISED - | STATE OF ILLINOIS            |               | SCHEDULE ( |       |          |        |          |          | 11112 | 2014-090TS | LAKE    | 76      | 64    |
| PLOT SCALE = 20.000 '/ in. | CHECKED -  | JDH | REVISED - | DEPARTMENT OF TRANSPORTATION |               | 2CHEDOLE   | UF U  | TOWNIIII | E9 A   | IND CAB  | SLE PLAN |       |            | CONTRAC | T NO. 6 | 62A42 |
| PLOT DATE = 2/2/2015       | DATE -     |     | REVISED - |                              | SCALE: N.T.S. | SHEET NO.  | 0     | OF SHEE  | ETS    | STA.     | TO STA.  |       | ILLINOIS   | 1       |         |       |

WISCONSIN

— EXIST. TELEPHONE

SERVICE

O G X**+**Y ₩**+**G

> NO. 6-GREEN

**CABLE PLAN** 

RTE.

LCDOT PTZ-CAMERA

NO. 6

GREEN

INTERCONNECT

TRACER -

U.S. RTE. 45

NO. 6 GREEN

TO HAWLEY ST.

EXISTING INTERSECTION — AND SAMPLING (SYSTEM) DETECTORS

LL RTE. 176 YELLOW FLASHER EAST OF TRACE PHASES 2+6 SHALL BE PLACED ON FECALL

- TO APPEAR ONLY UPON PUSHBUTTON ACTUATION
  FLASHING TO TERMINATE AT THE COMPLETION OF THE PEDESTRIAN INTERVAL CLEAPANCE.

THIS MO OP FLASHING "INTERVAL MAY FINISH TIMING IN THE BIDIRECTIONAL STRAIGHT THROUGH MOVEMENT IF THE LEFT APPOW TIME IS NOT SUFFICIENT TO COMPLETE "OR FLASHING" INTERVALS. AND FLASHING TIMINGS TO BE SET ONLY ON PHASES WHERE AND FLASHING ARE INDICATED IN THE SEQUENCE OF OPERATION.

F = ILLUMINATED PERSON = WALK

FH : ILLUMINATED FLASHING HAND = FLASHING DON'T WALK

H = ILLUMINATED SOLID HAND = DON'T WALK

D = DAPK

FL = FLASHING YELLOW BEACON

#### EMERGENCY VEHICLE PREEMPTION SEQUENCE OF OPERATION

| CHANGE FROM NORMAL SEQUENCE OF  | _   | _  |    | _   | w   | _  |                  | _    | _    | _  | -   |      |      | _   | _          |    |     | _   | _  | _   | _    | _   | _     | _    | _    | _   | -   | SCARGE I | STREET, | ₽   |
|---|-----|----|----|-----|-----|----|------------------|------|------|----|-----|------|------|-----|------------|----|-----|-----|----|-----|------|-----|-------|------|------|-----|-----|----------|---------|-----|
| OPERATION INTERVAL NUMBER   | 1   |    | 5  | L   | 5   |    | 8                |      | В    |    | 23  |      | 11   | - 1 | 4          | 19 |     | 1   | 9  |     | 23   | 1   | 23    |      | 27   |     | 27  |          |         | 715 |
| EMERGENCY VEHICLE PREEMPTION SEQUENCE<br>OF OPERATION INTERVAL NUMBER           | 1A  | 18 | 10 | 10  | E I | F  | 10 1             | н 1, | 1 18 | 14 | * M | 174  | iP t | 0 1 | R 15       | 17 | 111 | ı v | 14 | 1×  | ir i | Z i | A 1 B | B10  | 2:00 | 1EE | ;FF | 2        | 3       | 120 |
| CHANGE TO EMERCENCY VENICLE PREEMPTION<br>SEQUENCE OF OPERATION INTERVAL NUMBER | DR  | 10 | 2  | 1 E | IF. | 3  | H 2              | 11   | 11   | 3  | N   | 10   | 10   | 3 0 | 2<br>)R 11 | tu | 2   | 1W  | 3  | 14  | 12   | 2 1 | 38 3  | 100  | 1EE  | ż   | 3   |          |         |     |
| U.S. RTE. 45<br>LAST MAST ARM & FAR LEFT SIGNALS                                | Ry  | R  | R  | R   | R   | 2  | G G              | 0    | Y    | 9  | 0   | G    | Y 1  | R   | R R        | P  | R   | 0.  | F  | O.  | R    | R   | PP    | Я    | R    | H   | R   | G        | P       | ı   |
| J.S. RTE, 45<br>FAR RIGHT SIGNAL  | R   | R  | R  | R   | R   | R  | G <sub>G</sub> G | 9    | g Y  | 8  | 1.5 | G    | Y    | 2   | RR         | R  | р   | R   | я  | R   | 2    | R   | 2 8   | В    | P    | R   | P   | G        | P       | Г   |
| AST MAST ARM & FAR LEFT SIGNALS   | Ry  | 0, | Gy | G   | Y   | R  | RR               |      |      | *  | ō   | G    | Y    | R   | RR         | p  | P   | D   | F  | P   | p    | Я   | P P   | R    | R    | R   | R   | G        | H       | Г   |
| U.S. RTE. 45<br>AR RIGHT SIGNAL   | P   | 5  | G  | G   | Y   | 9  | R P              | R    | R    | P  | 5   | G    | Y    | R.  | RP         | p  | P   | 2   | р  | P   | В    | R   | P 8   | B    | 2    | Ħ   | R   | G        | R       |     |
| LL RTE. 176<br>ND MAST ARM & FAR LEFT SIGNALS                                   | 8   | P  | P  | R   | 8   | 2  | R P              | 12   | P    | P  | .00 | 8    | RF   |     | y B        | R  | P   | F   | я  | SG. | Y    |     | 2 0   | y .G | Y    | R   | 0   | 8        | G       | Г   |
| LL RTE. 176 AR RIGHT & NEAR RIGHT SIGNALS                                       | R   | 8  | В  | R   | R   | 3  | gr yr            | G.   | R.   | 2  | R   | R    | RF   |     | RR         | Я  | R   | R   | 2  | G   | 4    | P   | 5 0   | G    | Y.   | R   | G   | P        | G       | Г   |
| ND MAST ARM & FAR LEFT SIGNALS  | 8 8 | R  | R  | R   | P F | 1  | H A              | R    | P    | 9  | 8   | R    | RR   |     | y 9        | Y  | P   | 90  | 5  | R   | R    | 2   | P     | 5    | Y    | R   | 0   | B        | G       |     |
| LL RTE, 176 AP RIGHT & NEAR RIGHT SIGNALS                                       | R   | g. | P  | gR. | P   | R  | P P              | R    | P    | 2  | 0.  | B    | P 1  | 9   | R G        | Y  | R   | ő   | 0  | P   | p I  | P   | P 8   | 0    | E    | R   | 0   | P        | 6.      |     |
| EDESTRIAN SIGNALS X-ING U.S. RTE. 45<br>N N. SIDE OF ILL RTE 176.               | н   | н  | н  | н   | н   | н  | н                | Н    | H    | ×  | ч   | н    | H .  | +   | H F        | +  | н   | FH  | н  | н   | н    | н   | ч н   | FH   | н    | н   | FH  | A        | Н       | Ī   |
| EDESTRIAN SIGNALS X-ING U.S. RTE. 45<br>N S. SIDE OF ILL RTE 176.               | н   | н  | н  | н   | н   | н  | н                | 11   | Н    | н  | н   | н    | H 1  | 4   | н          | н  | 11  | н   | н  | FH  | н    | н   | н     | FH   | 8    | н   | EH  | н        |         | Γ   |
| EDESTRIAN SIGNALS X-ING ILL. RTE. 176<br>N.W. SIDE OF U.S. RTE. 45              | н   | FH | н  | FH  | н   | н  | н                | H    | н    | #  | FH  | FH   | н    | 4   | н +        | Н  | Н   | 14  | н  | н   | н    | н   | н н   | н    | н    | н   | н   | н        | н       |     |
| EDESTRIAN SIGNALS X-ING ILL. RTE. 17#<br>N E. SIDE OF U.S. RTE. 45              | н   | н  | Н  | н:  | н   | н  | FH H             | F    | нн   | 4  | FH  | FH   | н    | н   | н          | н  | Н   | H   | н  | н   | н    | н   |       | н    | н    | н   | н   | н        | н       |     |
| LL. RTE, 176 YELLOW FLASHER EAST OF TRACES                                      | E.L | FL | FL | FL  | FL  | FL | FL FL            | FL   | FL   | FL | FL  | FL F | LF   | L   | LE         | FL | FL  | 87  | 7. | FL  | FL F |     | L FL  | FL   | FL   | FL. | FL  | FL       | FL      |     |

P - TILLUMINATES PERSON + WALK

FH = ILLUMINATES FLASHING HAND = FLASHING DON: \* WALK

H + ILLUMINATES SOLIO HAND = DON 1 MALE

D + DARK

FL + FLASHER VEILOW BEACON

# RAILROAD PREEMPTION SEQUENCE OF OPERATION

|   |    |          |    |     |     |    |     |     |     |     |     |     |     | PREEN | e tos | PEE<br>UNS | SET A | HAREWATOR |     |     |     |          |
|---|----|----------|----|-----|-----|----|-----|-----|-----|-----|-----|-----|-----|-------|-------|------------|-------|-----------|-----|-----|-----|----------|
| CHANCE FROM NORMAL SEQUENCE OF<br>OPERATION INTERVAL NUMBER                       | 1  |          | 5  |     | 3   | 1  | 1   | 14  | 19  | 2   | 3   | 2   | 7   | 海路    | 糖     | 霧          |       |           |     |     |     |          |
| CHANGE FROM EMERGENCY VEHICLE PREEMPTION<br>SEQUENCE OF OPERATION INTERVAL NUMBER | 養  |          |    | 100 |     | 高級 |     | 1   | 翻   | 製   |     | 8   |     | 2     |       |            | 3     | - LP      |     |     |     |          |
| RAILROAD PREEMPTION SEQUENCE<br>OF OPERATION INTERVAL NUMBER                      | 14 |          |    | 10  | 1 E | 1F | 1.0 | ΙH  | 11  | 1 K | 1 L | 1 M | 1 N | ΙP    | 10    | !R         | 15    | 2         | 3   | 4   | 5   | CLEAR.   |
| CHANCE TO RAILROAD PREEMPTION<br>SECUENCE OF OPERATION INTERVAL NUMBER            | 2  | 10       | 2  | 1E  | 2   | 10 | 2   | 2   | 2   | 1 L | 2   | 1 N | 2   | 10    | 2     | 15         | 17    | 3         | 4   | 5   | が開発 | SEGUENCE |
| U.S. RTE, 45<br>END MAST ARM & FAR LEFT SIGNALS                                   | Ry | R        | R  | Y   | R   | Y  | R   | R   | R   | R   | R   | R   | P   | Y     | R     | 9          | 8     | R         | R   | R   | G   | Δ        |
| U.S. RTE. 45 N/B<br>FAR PIGHT SIGNAL  | R  | R        | R  | Υ   | R   | Υ  | R   | R   | R   | R   | R   | R   | Ŕ   | Y     | R     | OF.        | R     | P         | œ   | R   | G   | Δ        |
| U.S. RTE. 45<br>END MAST ARM & FAR LEFT SIGNALS                                   | Ry | Y        | R  | R   | R   | Y  | R   | R   | R   | R   | R   | R   | R   | Y     | P     | R          | R     | P         | R   | R   | G   | Δ        |
| U.S. RTE. 45<br>FAR PICHT SIGNAL  | R  | Y        | R  | R   | R   | Y  | R   | R   | R   | R   | R   | R   | R   | Y     | R     | R          | P     | R         | R   | R   | C   | Δ        |
| ILL RTE. 176 E/B<br>END MAST ARM & FAR LEFT SIGNALS                               | R  | R        | R  | R   | R   | R  | R   | Ry  | R   | Y   | R   | Y   | R   | R     | R     | Y          | R     | R         | R   | R   | R   | Δ        |
| ILL RTE, 176 E/B<br>FAR PIGHT & NEAR RIGHT SIGNALS                                | Y. | R        | R  | P   | R   | R  | R   | Ω   | R   | Y   | R   | Y   | P   | R     | R     | Y          | R     | R         | R   | R   | R   | Δ        |
| ILL RTE. 176 W/B<br>END MAST ARM & FAR LEFT SIGNALS                               | R  | R        | R  | R   | R   | R  | R   | 0,0 | GG. | R   | R   | G   | G   | R     | R     | G          | G     | 60        | Y   | R   | R   | Δ        |
| ILL RTE. 176 W/B<br>FAR PIGHT & NEAR RIGHT SIGNALS                                | P  | <u>P</u> | P  | R   | R   | R  | P   | 0   | G   | R   | R   | G   | G   | R     | B     | 5          | G     | C         | Y   | R   | R   | Δ        |
| PEDESTRIAN SIGNALS X-ING U.S. RTE. 45<br>ON N. SIDE OF ILL RTE 176.               | н  | н        | н  | н   | Н   | Н  | н   | +   | FH  | н   | н   | FH  | н   | н     | Н     | н          | н     | Н         | н   | Н   | н   | Δ        |
| PEDESTRIAN SIGNALS X-ING U.S. RTE. 45<br>DN S. SIDE OF ILL RTE 176.               | Н  | н        | Н  | Н   | Н   | н  | н   | н   | H   | FH  | н   | FH  | н   | н     | н     | н          | н     | Н         | Н   | H   | Н   | Δ        |
| PEDESTRIAN SIGNALS X-ING ILL. RTE. 176<br>ON W. SIDE OF U.S. RTE. 45              | н  | FH       | Н  | н   | Н   | FH | н   | н   | Н   | Н   | н   | н   | Н   | н     | н     | н          | Н     | н         | H   | I   | н   | Δ        |
| PEDESTRIAN SIGNALS X-ING ILL. RTE. 176<br>ON E. SIDE OF U.S. PTE. 45              | н  | н        | н  | FH  | н   | FH | Н   | ×   | н   | н   | н   | н   | н   | н     | н     | н          | н     | н         | н   | Н   | н   | Δ        |
| ILL. PTE. 176 YELLOW FLASHER EAST OF TRACKS                                       | FL | FL       | FL | FL  | FL  | FL | FLY | FL  | FL  | FL  | FL  | FL  | FL  | FL    | FL.   | ·L         |       | FL<br>Y   | FLY | FLY | FLY | Δ        |

FL = FLASHING YELLOW BEACON

P = ILLUMINATED PERSON = WALK

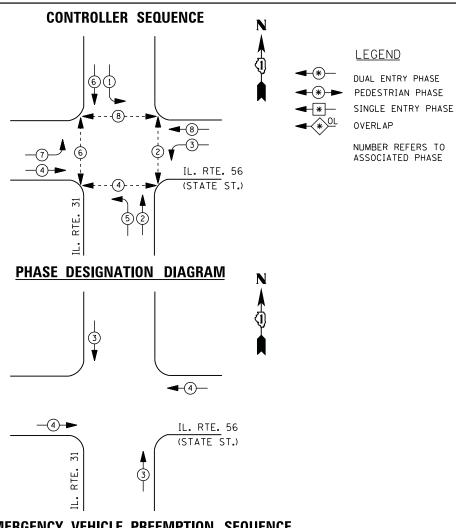
FH : ILLUMINATED FLASHING HAND : FLASHING DON'T WALK

H # 1LLUMINATED SOLID HAND : DON'T WALK

A FAILFOAD PPEEMPTION SEQUENCE SHALL PROVIDE THE PROFER CLEARANCE INTERVAL TO RESUME THE NORMAL SEQUENCE OF OPERATION OF PROPER CLEARANCE INTERVAL TO DISPLAY AN EMERGIC! VEHICLE INTERVAL 11F APPLICABLE! AFTER RAILFOAD INTERVAL 5 IS TERMINATED.

TS #6625 MUNDELEIN (SH. 2)

| USER NAME = _USERNAME_      | DESIGNED - | DW  | REVISED - |                              | U.S. ROUTE 45 AT IL ROUTE 176                                | F.A. SEC | TION COUNT | Y TOTAL SHEETS NO. |
|-----------------------------|------------|-----|-----------|------------------------------|--|----------|------------|--------------------|
|                             | DRAWN -    | CC  | REVISED - | STATE OF ILLINOIS            | SEQUENCE OF OPERATION, EMERGENCY VEHICLE PREEMPTION SEQUENCE | 2014-    | O90TS LAKE | 76 65              |
| PLOT SCALE = 20.000 ' / in. | CHECKED -  | JDH | REVISED - | DEPARTMENT OF TRANSPORTATION | OF OPERATION, AND RAILROAD PREEMPTION SEQUENCE OF OPERATION  |          | CONTR      | RACT NO. 62A42     |
| PLOT DATE = 2/2/2015        | DATE -     |     | REVISED - |                              | SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.               |          | ILLINOIS   |                    |



## **EMERGENCY VEHICLE PREEMPTION SEQUENCE**

| EMERGENCY VE                | HICLE PREE | MPTORS      |
|-----------------------------|------------|-------------|
| EMERGENCY VEHICLE PREEMPTOR | 3          | 4           |
| MOVEMENT                    | <b> </b>   | <del></del> |

|              | TRAFFIC SIGNAL INSTALLATION |          |        |              |         |  |  |  |  |  |  |  |
|--------------|-----------------------------|----------|--------|--------------|---------|--|--|--|--|--|--|--|
|              | ELECTRICAL                  | SERVI CE | REQUIR | EMENTS       |         |  |  |  |  |  |  |  |
| TYPE         | NO. LAMPS                   | WAT      | TAGE   | % OPERATIONS | TOTAL   |  |  |  |  |  |  |  |
|              |                             | INCAND.  | LED    |              | WATTAGE |  |  |  |  |  |  |  |
| SIGNAL (RED) | 12                          | 1 35     | 1 7    | 0.50         | 102     |  |  |  |  |  |  |  |
| (YELLOW)     | 12                          | 1 35     | 25     | 0.25         | 75      |  |  |  |  |  |  |  |
| ( GREEN)     | 12                          | 1 35     | 15     | 0.25         | 45      |  |  |  |  |  |  |  |
| ARROW        | 16                          | 1 35     | 12     | 0.10         | 20      |  |  |  |  |  |  |  |
| PED. SIGNAL  | 8                           | 90       | 25     | 1.00         | 200     |  |  |  |  |  |  |  |
| CONTROLLER   | 1                           | 100      | 100    | 1.00         | 100     |  |  |  |  |  |  |  |
| ILLUM. SIGN  |                             | 252      | 25     | 0.05         |         |  |  |  |  |  |  |  |
| VIDEO SYSTEM |                             | 150      | -      | 1.00         |         |  |  |  |  |  |  |  |
|              |                             |          |        |              |         |  |  |  |  |  |  |  |
|              |                             |          |        |              |         |  |  |  |  |  |  |  |
| FLASHER LED  |                             |          |        |              |         |  |  |  |  |  |  |  |
|              |                             |          |        | TOTAL =      | 542     |  |  |  |  |  |  |  |

I. D. O. T.

ENERGY COSTS-

BILLED TO: IDOT DISTRICT 1

201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY -

CONTACT JOE STACHO 630-424-5704

COMMONWEALTH EDISON

USER NAME = \_USERNAME\_ DESIGNED REVISED DW DRAWN CC REVISED CHECKED REVISED DATE REVISED PLOT DATE = 2/2/2015

IL ROUTE 31 AT IL ROUTE 56 (STATE STREET) SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE SHEET NO. OF SHEETS STA.

SECTION 2014-090TS

UPS SHALL BE INSTALLED ON LEFT SIDE OF CONTROLLER CABINET DUE TO PHYSICAL CONSTRAINT, OR AS DIRECTED BY THE ENGINEER

-NO. 6 GREEN

INTERCONNECT TO AIRPORT RD.

TRACER CABLE

# SCHEDULE OF QUANTITIES

| SUILDO   | LL UI       | QUANTITIES  |
|----------|-------------|---|
| QUANTITY | <u>UNIT</u> | <u>ITEM</u>   |
| 1        | EACH        | MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION                       |
| 4        | EACH        | TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.                              |
| 8        | EACH        | PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER |
| 8        | EACH        | PEDESTRIAN PUSH-BUTTON  |
| 4        | EACH        | RELOCATE EXISTING SIGNAL HEAD   |
| 1        | EACH        | MODIFY EXISTING CONTROLLER CABINET  |
| 1        | EACH        | REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT                                  |
| 2        | EACH        | REMOVE AND REPLACE ANCHOR BOLTS   |
| 1        | EACH        | UNINTERRUPTABLE POWER SUPPLY, SPECIAL                                     |

REPLACE 10 FT. PAINTED POST. RE-USE EXISTING

REPLACE 14 FT. PAINTED POST. RE-USE EXISTING

REPLACE 15 FT. PAINTED POST. RE-USE EXISTING

REPLACE 16 FT. PAINTED POST. RE-USE EXISTING

REPLACE 18 FT. PAINTED POST. RE-USE EXISTING TYPE A CONCRETE FOUNDATION.

O C

(2)**-©** 

IL RTE. 56 (STATE ST.)

GREEN

**∲** C **%** D

(m) > \( \sigma \)

RTE.

HENDORTH

TYPE A CONCRETE FOUNDATION.

TYPE A CONCRETE FOUNDATION.

TYPE A CONCRETE FOUNDATION.

TYPE A CONCRETE FOUNDATION.

EXISTING INTERSECTION

(SYSTEM) DETECTORS

AND SAMPLING

# REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

PEDESTRIAN SIGNAL HEAD EACH PEDESTRIAN PUSH-BUTTON

-EXISTING INTERSECTION

AND SAMPLING (SYSTEM)

NO. 6

GREEN

(R)

NO. 6-

(GREEN)

**≯** •

DETECTORS

EACH SIGNAL POST

**CABLE PLAN** 

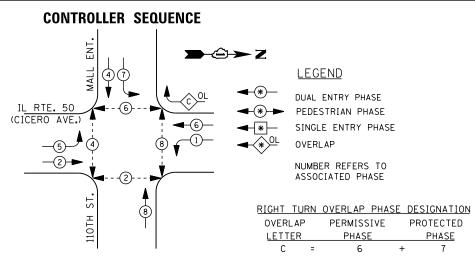
TS #11483 NORTH AURORA COUNTY

KANE 76 66

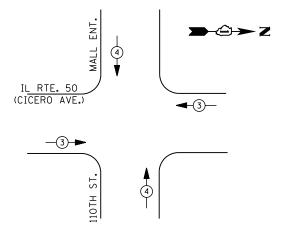
CONTRACT NO. 62A42

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 





#### PHASE DESIGNATION DIAGRAM



#### **EMERGENCY VEHICLE PREEMPTION SEQUENCE**

| EMERGENCY VE                | HICLE PRI | EEMPTORS |
|-----------------------------|-----------|----------|
| EMERGENCY VEHICLE PREEMPTOR | 3         | 4        |
| MOVEMENT                    | <b>+</b>  | <b>1</b> |

|    |              |            | I. D. O  | . T.    |              |         |
|----|--------------|------------|----------|---------|--------------|---------|
| į  |              | TRAFFIC S  | I GNAL I | NSTALLA | TION         |         |
|    |              | ELECTRICAL | SERVI CE | REQUIR  | EMENTS       |         |
| j  | TYPE         | NO. LAMPS  | WAT      | TAGE    | % OPERATIONS | TOTAL   |
|    |              |            | INCAND.  | LED     |              | WATTAGE |
|    | SIGNAL (RED) | 17         | 1 35     | 1 7     | 0.50         | 145     |
| 5  | (YELLOW)     | 17         | 1 35     | 25      | 0.25         | 107     |
|    | ( GREEN)     | 17         | 1 35     | 15      | 0.25         | 64      |
|    | ARROW        | 16         | 1 35     | 12      | 0.10         | 20      |
| :  | PED. SIGNAL  | 8          | 90       | 25      | 1.00         | 200     |
| i  | CONTROLLER   | 1          | 100      | 100     | 1.00         | 100     |
| 3  | ILLUM. SIGN  |            | 252      | 25      | 0.05         |         |
|    | VIDEO SYSTEM |            | 150      | -       | 1.00         |         |
| 1  |              |            |          |         |              |         |
|    |              |            |          |         |              |         |
| 1  | FLASHER LED  |            |          |         |              |         |
| 'n |              |            |          |         | TOTAL =      | 636     |

ENERGY COSTS-

BILLED TO: IDOT DISTRICT 1

: IDOT DISTRICT 1
201 WEST CENTER COURT
SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY -

CONTACT ILYAS MOHIUDDIN
PHONE 708-235-2692

708-235-2692 COMMONWEALTH EDISON

#### **SCHEDULE OF QUANTITIES**

 QUANTITY
 UNIT
 ITEM

 1
 EACH
 MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION

 8
 EACH
 PEDESTRIAN PUSH-BUTTON

 1
 EACH
 REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT

# **(a)** 107TH ST. IL RTE. 50 (CICERO AVE.) GREEN -|> -NO. 6 -NO. 6 GREEN GREEN 110TH **CABLE PLAN**

MALL

-NO. 6

GREEN

**→**②→ Z

- TRACER

INTERCONNECT TO

CABLE

#### REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

8 EACH PEDESTRIAN PUSH-BUTTON

TS #2505 OAK LAWN

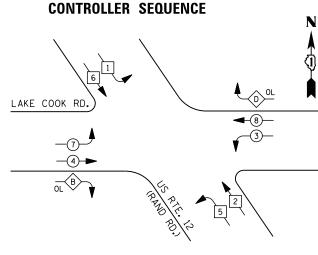
| U  | SER NAME = _USERNAME_      | DESIGNED - | DW  | REVISED - |                              | IL ROUTE 50 (CICERO AVENUE) AT 110TH STREET F.A. SECTION COUNTY TOTAL STREET        | HEET |
|----|----------------------------|------------|-----|-----------|------------------------------|---|------|
|    |                            | DRAWN -    | CC  | REVISED - | STATE OF ILLINOIS            | SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, 2014-090TS COOK 76 0 | 67   |
| P  | LOT SCALE = 20.0000 '/ in. | CHECKED -  | JDH | REVISED - | DEPARTMENT OF TRANSPORTATION | AND EMERGENCY VEHICLE PREEMPTION SEQUENCE CONTRACT NO. 62A                          | A42  |
| PI | LOT DATE = 2/2/2015        | DATE -     |     | REVISED - |                              | SCALE: SHEET NO. OF SHEETS STA. TO STA.   ILLINOIS                                  |      |

TRACER-

CABLE

INTERCONNECT TO

111TH ST.



#### PHASE DESIGNATION DIAGRAM

<u>LEGEND</u>

DUAL ENTRY PHASE

PEDESTRIAN PHASE SINGLE ENTRY PHASE

OVERLAP

NUMBER REFERS TO ASSOCIATED PHASE

| RIGHT | TURN | OVERLAP | PHASE | DESIGNATION | ļ |
|-------|------|---------|-------|-------------|---|
| OVEF  | RLAP | PERMIS  | SIVE  | PROTECTED   |   |
| LETT  | ER   | PHASE   |       | PHASE       |   |
| В     | =    | 4       | +     | 5           |   |
| _     | _    | 0       |       |             |   |

| I. D. O. T.  |            |          |         |              |         |  |  |  |  |  |  |
|--------------|------------|----------|---------|--------------|---------|--|--|--|--|--|--|
|              | TRAFFIC S  | I GNAL I | NSTALLA | TION         |         |  |  |  |  |  |  |
|              | ELECTRICAL | SERVI CE | REQUIR  | EMENTS       |         |  |  |  |  |  |  |
| TYPE         | NO. LAMPS  | WAT      | TAGE    | % OPERATIONS | TOTAL   |  |  |  |  |  |  |
|              |            | INCAND.  | LED     |              | WATTAGE |  |  |  |  |  |  |
| SIGNAL (RED) | 14         | 1 35     | 1 7     | 0.50         | 119     |  |  |  |  |  |  |
| (YELLOW)     | 14         | 1 35     | 25      | 0.25         | 88      |  |  |  |  |  |  |
| ( GREEN)     | 14         | 1 35     | 15      | 0.25         | 53      |  |  |  |  |  |  |
| ARROW        | 28         | 1 35     | 12      | 0.10         | 34      |  |  |  |  |  |  |
| PED. SIGNAL  |            | 90       | 25      | 1.00         |         |  |  |  |  |  |  |
| CONTROLLER   | 1          | 1 00     | 100     | 1.00         | 100     |  |  |  |  |  |  |
| ILLUM. SIGN  |            | 252      | 25      | 0.05         |         |  |  |  |  |  |  |
| VIDEO SYSTEM |            | 150      | ı       | 1.00         |         |  |  |  |  |  |  |
|              |            |          |         |              |         |  |  |  |  |  |  |
|              | _          |          |         |              |         |  |  |  |  |  |  |
| FLASHER LED  |            |          |         |              |         |  |  |  |  |  |  |

TOTAL =

ENERGY COSTS-

BILLED TO: IDOT DISTRICT 1

201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY -

CONTACT DAVE SCHACHT

630-437-2129 COMMONWEALTH EDISON

USER NAME = \_USERNAME\_ DESIGNED REVISED DW DRAWN CC REVISED PLOT SCALE = 20.0000 '/ in. CHECKED REVISED PLOT DATE = 2/2/2015 DATE REVISED

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

U.S. ROUTE 12 (RAND ROAD) AT LAKE COOK ROAD SCHEDULE OF QUANTITIES, CABLE PLAN AND PHASE DESIGNATION DIAGRAM SHEET NO. OF SHEETS STA.

- TRACER CABLE

> PALATINE SECTION COUNTY 2014-090TS

REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

OPTICALLY PROGRAMMED SIGNAL HEAD, 3 - SECTION

TRAFFIC SIGNAL BACKPLATE 4 EACH

## SCHEDULE OF QUANTITIES

| JANT I TY | <u>UNIT</u> | <u>ITEM</u>  |
|-----------|-------------|--|
| 1         | EACH        | MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION                        |
| 4         | EACH        | OPTICALLY PROGRAMMED SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED |
| 4         | EACH        | TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM                               |
| 1         | EACH        | MODIFY EXISTING CONTROLLER CABINET   |
| 1         | EACH        | REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT                                   |
| 1         | EACH        | UNINTERRUPTIBLE POWER SUPPLY, GROUND MOUNTED                               |

GREEN

- TRACER CABLE

~ > o \ \ \

INTERCONNECT TO PLUM GROVE RD.

LAKE COOK RD.

TRACER CABLE

INTERCONNECT TO PLUM GROVE RD./DEE LN.

EXISTING INTERSECTION -AND SAMPLING (SYSTEM)

DETECTOR

GREEN

THE UPS SHALL BE INSTALLED NEXT TO THE EXISTING CONTROLLER CABINET USING HELICAL GROUND ANCHORS DUE TO THE PHYSICAL CONTRAINTS OR AS DIRECTED BY THE ENGINEER, ALL WORK INCLUDING DRILL EXISTING HANDHOLE, CONDUIT, AND ELECTRICAL CABLE NEEDED TO PROPERLY INSTALL THE UPS SHALL BE INCLUDED IN THE PAY ITEM UNINTERRUPTIBLE POWER SUPPLY, GROUND MOUNTED.

**↑ ↑** ○ ≺ ≈

**↑ ↑ 0** ≺ **2** 

NO. 6 GREEN LCDOT

PTZ

INTERCONNECT TO HICKS RD.

**CABLE PLAN** 

COUNTY TOTAL SHEETS NO. COOK 76 68 CONTRACT NO. 62A42

TS #410

-EXISTING

(SYSTEM)

DETECTOR

GREEN

INTERSECTION

AND SAMPLING

| NOVEMENT  |     | -2<br>-5 |   |    | 4— 2<br>6—→ |    |         |        | 14 |          |    |          |         | 7  | E. | 1       |         |          |     | , |
|---|-----|----------|---|----|-------------|----|---------|--------|----|----------|----|----------|---------|----|----|---------|---------|----------|-----|---|
| PHASE   | 2 - | + 5      |   | :  | 2 + 6       | 5  |         |        | 3  |          |    |          |         |    | 4  |         |         |          |     | 1 |
| INTERVAL  | 1   | 2        | 3 | 44 | 48          | 5A | 58      | 6      | 7A | 78       | 8  | 94       | 98      | 90 | 9D | 1 QA    | 108     | 100      | 100 | 5 |
| CHANGE TO   | /   | 2+6      | / |    | 3           |    | 4       | /      | 2  | +5<br>+6 | 1  |          | 2-      | +5 |    |         | 2       | +6       |     | , |
| U.S. ROUTE 14 (NORTHWEST HMY.) E/B<br>FAR LEFT AND END MAST ARM SIGNALS   | R   | R        | G | Y  | R           | Y  | R       | R      | R  | R        | R  | R        | R       | R  | R  | F       | R       | R        | R   | F |
| U.S. ROUTE 14 (NORTHWEST HWY.) E/B<br>NEAR RIGHT AND FAR RIGHT SIGNALS    | R   | R        | G | Y  | R           | Y  | R<br>G≠ | R      | R  | R        | G+ | R        | R<br>G→ | R  | R  | R<br>G≠ | R<br>G+ | R<br>G + | R   | F |
| U.S. ROUTE 14 INORTHWEST HWY.) W/BI<br>FAR RIGHT AND END MAST ARM SIGNALS | G   | G        | G | Y  | R           | Y  | R       | R      | R  | R        | 8  | R        | R       | R  | R  | R       | R       | R        | R   | F |
| U.S. ROUTE 14 DIORTHWEST HWY.) W/B  | G   | G        | G | Y  | R           | Y  | R       | R      | R  | R        | B  | R        | R       | R  | R  | Я       | R       | R        | R   | R |
| HICKS ROAD ISOUTH OF TRACKS) N/B  | R   | R        | R | R  | R           | R  | R       | R      | R  | R        | G  | Y        | R       | R  | R  | Y       | R       | R        | R   | R |
| HICKS ROAD BIORTH OF TRACKS) N/B  | R   | R        | R | R  | R           | R  | R       | R      | R  | R        | G  | G<br>- G | G       | Y  | R  | G       | G<br>+G | ۲        | R   | R |
| PARKING LOT ENTRANCE S/B  | R   | R        | R | R  | R           | R  | R       | G<br>G | Y  | R        | R  | R        | R       | R  | R  | R       | R       | R        | R   | R |

#### EMERGENCY VEHICLE PREEMPTION SEQUENCE OF OPERATION

SEQUENCE OF OPERATION

|   |    |    | 111022  |    | 8500 | 2100     |     |      |    |         |         |     |          |    |          |         |    |    |   | NUMBER 4 | MARKER 5 |                    |
|---|----|----|---------|----|------|----------|-----|------|----|---------|---------|-----|----------|----|----------|---------|----|----|---|----------|----------|--------------------|
| CHANCE FROM NORMAL SEQUENCE OF OPERATION INTERVAL NUMBER                        | 1  |    | 1       | 3  |      | 3        |     | 6    | 6  |         | - 1     | 3   |          | 8  |          |         | 8  |    |   |          |          | CLEAR              |
| EMETIGENCY VEHICLE PREEMPTION SEQUENCE<br>OF OPERATION INTERVAL NUMBER          | 14 | 18 | 10      | 10 | 18   | 1F       | 16  | 111  | 13 | 1K      | 1L      | 1M  | 1N       | 1P | 10       | 1R      | 15 | 17 | 2 | 3        | 4        | NORMAL<br>SEQUENCE |
| CHANGE 10 EMERGENCY VEHICLE PREEMPTION<br>SEQUENCY OF OPERATION INTERVAL MANBER | 2  | 10 | OR<br>4 | 2  | 1F   | OR<br>OR | 111 | OR 3 | 4  | 1L      | 114     | 1N  | 2        | 3  | IR       | 15      | 17 | 4  |   |          |          | 0                  |
| U.S. ROUTE 14 NORTHWEST HWY.) E/B<br>FAR LEFT AND END MAST ARM SIGNALS          | R  | R  | R       | G  | Y    | R        | R   | R    | R  | R       | R       | R   | R        | R  | R        | R       | R  | R  | G | R        | R        | 0                  |
| U.S. ROUTE 14 NORTHWEST HWY.J E/B<br>NEAR RIGHT AND FAR RIGHT SIGNALS           | R  | R  | R       | G  | 1    | R        | R   | R    | R  | R<br>G► | R<br>G+ | R + | R<br>G = | R  | R        | R<br>G+ | R  | R  | G | R        | R        | 0                  |
| U.S. ROUTE 14 MORTHWEST HEY, M/B<br>FAR RIGHT AND END MAST ARM SIGNALS          | GY | Y  | R       | G  | Y    | R        | R   | R    | R  | 8       | R       | R   | R        | R  | R        | R       | R. | R  | G | R        | R        | 0                  |
| U.S. ROUTE 14 INDRITHWEST HWY.) W/B   | G  | Y  | R       | G  | Y    | R        | R   | R    | R  | 8       | R       | R   | R        | R  | R        | R       | R  | R  | G | R        | R        | 0                  |
| HICKS RIAD (SOUTH OF TRACKS) N/B<br>MAST APM SIGNALS                            | R  | R  | R       | R  | Я    | R        | R   | R    | R  | r       | R       | R   | R        | G  | Y        | R       | R  | R  | R | G        | R        | 0                  |
| HICKS FOAD INDRITH OF TRACKS) N/B   | R  | R  | R       | R  | A    | R        | R   | В    | R  | G<br>G  | G C     | Y   | R        | G  | G<br>+ G | G       | Y  | R  | R | - G      | R        | 0                  |
| PARKING LOT ENTRANCE - S/B<br>ALL SIGNALS                                       | R  | R  | R       | R  | R    | R        | Y   | R    | G  | R       | R       | R   | R        | R  | R        | R       | R  | R  | R | R        | G<br>G   | ٥                  |

MERGENCY VEHICLE SFOUENCE SHALL PROVIDE THE PROPER CLEARANCE INTERVAL TO RESUME THE NORMAL SEQUENCE OF OPERATION OR PROPER CLEARANCE INTERVAL TO DISPLAY A DIFFERENT EMERGENCY INTERVAL AFTER EMERGENCY VEHICLE INTERVAL 2, 3 OR 4 IS TERMINATED.

#### I. D. O. T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS

| ELECTRICAL SERVICE REGOLATION |           |         |      |              |         |  |  |  |  |  |  |  |
|-------------------------------|-----------|---------|------|--------------|---------|--|--|--|--|--|--|--|
| TYPE                          | NO. LAMPS | WAT     | TAGE | % OPERATIONS | TOTAL   |  |  |  |  |  |  |  |
|                               |           | INCAND. | LED  |              | WATTAGE |  |  |  |  |  |  |  |
| SIGNAL (RED)                  | 15        | 1 35    | 1 7  | 0.50         | 128     |  |  |  |  |  |  |  |
| (YELLOW)                      | 15        | 1 35    | 25   | 0.25         | 94      |  |  |  |  |  |  |  |
| ( GREEN)                      | 20        | 1 35    | 15   | 0.25         | 75      |  |  |  |  |  |  |  |
| ARROW                         | 16        | 1 35    | 12   | 0.10         | 20      |  |  |  |  |  |  |  |
| PED. SIGNAL                   |           | 90      | 25   | 1.00         |         |  |  |  |  |  |  |  |
| CONTROLLER                    | 1         | 100     | 100  | 1.00         | 100     |  |  |  |  |  |  |  |
| ILLUM. SIGN                   | 4         | 252     | 25   | 0.05         | 5       |  |  |  |  |  |  |  |
| VIDEO SYSTEM                  |           | 150     | -    | 1.00         |         |  |  |  |  |  |  |  |
|                               |           |         |      |              |         |  |  |  |  |  |  |  |
|                               |           |         |      |              |         |  |  |  |  |  |  |  |
| FLASHER LED                   |           |         |      |              |         |  |  |  |  |  |  |  |

TOTAL =

ENERGY COSTS-

BILLED TO: IDOT DISTRICT 1

201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY -

CONTACT DAVE SCHACHT

630-437-2129 COMMONWEALTH EDISON

|  |     |       |     |     |     |     |     |     | NUMBER | ER 3 | NUM | EH 4     | NUME | ER 5 | MUNBER 2 | 1   |     |      |         |
|--|-----|-------|-----|-----|-----|-----|-----|-----|--------|------|-----|----------|------|------|----------|-----|-----|------|---------|
| CHANGE FROM NORMAL SEQUENCE OF OPERATION INTERVAL MUMBER                       | 1   | 1 3 6 |     |     | 6   |     | В   |     |        |      |     |          |      |      |          |     |     |      |         |
| CHANGE FROM EMERGENCY VBIICLE PREEMPTION SEQUENCE OF OPERATION INTERVAL NUMBER |     |       |     |     |     |     |     |     |        | 2    |     | 3        |      | 4    |          |     |     |      |         |
| RAILROAD PREEMPTION SEQUENCE OF OPERATION INTERVAL MUMBER                      | 1.4 | 18    | 10  | 10  | 1E  | 1F  | 16  | 1H  | 13     | 1K   | 1L  | 1M       | 18   | 1P   | 2        | 3   | 4   | 5    | CLEAR   |
| CHANGE TO RAILROAD PREEMTION<br>SEQUENCE OF OPERATION INTERVAL NUMBER          | 18  | 2     | 10  | 2   | 1F  | 2   | 114 | 2   | 1K     | 2    | 114 | 2        | 19   | 2    | 3 .      | 4   | 5   |      | SEQUENC |
| U.S. ROUTE 14 (NORTHWEST HYL) E/8 FAR LEFT AND END MAST ARM SIGNALS            | R   | R     | Y   | R   | R   | R   | 8   | R   | Y      | R    | R   | R        | R    | R    | R        | R   | R   | G    | Δ       |
| U.S. ROUTE 14 CHORTHWEST HYY.) E/B<br>NEAR RIGHT AND FAR RIGHT SIGNALS         | R   | R     | Y   | R   | R   | R   | R   | R   | Y      | R    | R   | R        | R    | R    | R        | R   | R   | G    | Δ       |
| U.S. ROUTE 14 INORTHWEST HIY.) W/B<br>FAR RIGHT AND END MAST ARK SIGNALS       | Y   | R     | Y   | R   | R   | R   | R   | R   | Y      | R    | R   | R        | R    | R    | R        | R   | R   | G    | Δ       |
| U.S. ROUTE 14 CHORTHWEST HIY.) W/B<br>FAR RIGHT SIGNAL                         | Y   | R     | Y   | R   | R   | R   | R   | R   | Y      | R    | R   | R        | R    | R    | R        | R   | R   | G    | Δ       |
| HICKS ROAD (SOUTH OF TRACKS N/B<br>MAST ARM SIGNALS                            | R   | R     | R   | R   | R   | R   | Y   | R   | R      | R    | Y   | R        | R    | R    | R        | R   | R   | R    | Δ       |
| HICKS ROAD OWNTH OF TRACKS N/B<br>ALL SIGNALS                                  | R   | R     | R   | R   | R   | R   | G   | GG  | R      | R    | G   | G<br>+ G | R    | R    | G        | Y   | R   | R    | Δ       |
| PARKING LOT ENTRANCE S/8 ALL SIGNALS   | R   | R     | R   | R   | Y   | R   | R   | R   | R      | R    | R   | R        | Y    | R    | R        | R   | Я   | R    | Δ       |
| INTERNALLY ILLUMINATED<br>NO RIGHT TURN SIGNS                                  | NRT | NRT   | NAT | NAT | NRT | NRT | NRT | NRT | NRT    | NRT  | NRT | NRT      | NRT  | NRT  | NRT      | NRT | NRT | NRT  | Δ       |
| INTERNALLY ILLUMINATED NO LEFT TURN SIGNS                                      | NLT | NLT.  | NLT | NLT | NLT | NLT | NLT | NLT | NLT    | NLT  | NLT | NLT      | NLT  | NLT  | NLT      | NLT | NLT | NLT  | Δ       |
|  |     |       |     |     |     |     |     |     |        |      |     |          |      |      |          |     |     | HOLD |         |

NRT = "NO RIGHT TURN" OR

PHASE 2+6 SHALL BE PLACED ON RECALL

A RAILROAD PREEMPTION SEQUENCE SHALL PROVIDE THE PROPER CLEARANCE INTERVAL TO RESUME THE NORMAL SEQUENCE OF GREATION OR PROPER CLEARANCE INTERVAL TO DISPLAY AN EMERGENCY VEHICLE INTERVAL (IF APPLICABLE) AFTER RAILROAD PREEMFTION INTERVAL 5 IS TERMINATED.

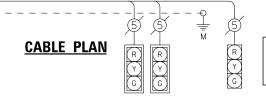
PREEMPTOR PREEMPTOR PREEMPTOR

TRACER CABLE -

INTERCONNECT TO-PALATINE RD.

RAILROAD PREEMPTION SEQUENCE OF OPERATION

NLT = "NO LEFT TURN" DR



-NO. 6

GREEN

(a)(a)(a)

US RTE. 14 (NORTHWEST HWY.)

PARKING LOT

-5-EDO

NO. 6 -GREEN

EXISTING UNINTERRUPTIBLE POWER SUPPLY TO BE RECONNECTED TO THE EXISTING CONTROLLER. THIS WORK WILL BE INCLUDED IN THE PAY ITEM "MODIFY EXISTING CONTROLLER CABINET"

#### REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

4 EACH ILLUMINATED SIGN, FIBER OPTIC

#### **SCHEDULE OF QUANTITIES**

SOUTH HICKS RD.

NO. 6-GREEN

| <u>QUANTITY</u> | <u>UNIT</u> | <u>I TEM</u> |    |          |         |        |              |
|-----------------|-------------|--------------|----|----------|---------|--------|--------------|
| 1               | EACH        | MAINTENANCE  | OF | EXISTING | TRAFFIC | SIGNAL | INSTALLATION |
| 4               | FΔCH        | TITIMINATED  | SI | GN. LED  |         |        |              |

MODIFY EXISTING CONTROLLER CABINET EACH REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT

TS #1225 PALATINE

- TRACER CABLE

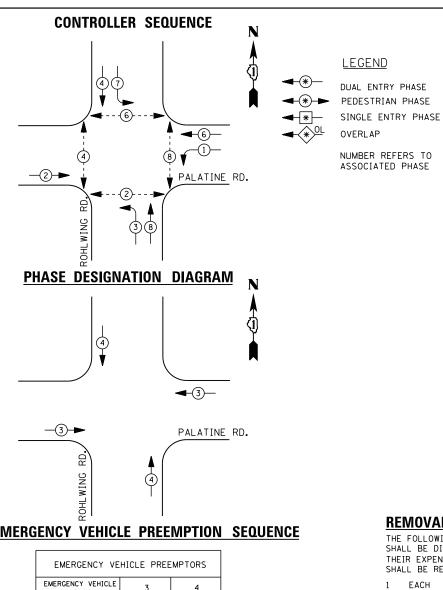
INTERCONNECT TO ROHLWING RD.

USER NAME = \_USERNAME\_ DESIGNED REVISED DW DRAWN CC REVISED CHECKED REVISED REVISED PLOT DATE = 2/2/2015 DATE

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

U.S. ROUTE 14 (NORTHWEST HIGHWAY) AT HICKS ROAD (SOUTH JCT.) SCHEDULE OF QUANTITIES, CABLE PLAN, SEQUENCE OF OPERATION, EMERGENCY COUNTY TOTAL SHEETS NO.

COOK 76 69 SECTION COUNTY VEHICLE PREEMPTION SEQUENCE OF OPERATION, AND RAILROAD PREEMPTION 2014-090TS SEQUENCE OF OPERATION CONTRACT NO. 62A42 SCALE: N.T.S. SHEET NO. OF SHEETS STA.



# **EMERGENCY VEHICLE PREEMPTION SEQUENCE**

| EMERGENCY VE                | HICLE PREE | MPTORS     |  |  |
|-----------------------------|------------|------------|--|--|
| EMERGENCY VEHICLE PREEMPTOR | 3          | 4          |  |  |
| MOVEMENT                    | <b>+</b>   | <b>↓</b> ↑ |  |  |

I. D. O. T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS

| TYPE         | NO. LAMPS | WAT     | TAGE | % OPERATIONS | TOTAL   |
|--------------|-----------|---------|------|--------------|---------|
|              |           | INCAND. | LED  |              | WATTAGE |
| SIGNAL (RED) | 12        | 1 35    | 1 7  | 0.50         | 102     |
| (YELLOW)     | 12        | 1 35    | 25   | 0.25         | 75      |
| ( GREEN)     | 12        | 1 35    | 15   | 0.25         | 45      |
| ARROW        | 12        | 1 35    | 12   | 0.10         | 15      |
| PED. SIGNAL  | 8         | 90      | 25   | 1.00         | 200     |
| CONTROLLER   | 1         | 100     | 100  | 1.00         | 100     |
| ILLUM. SIGN  |           | 252     | 25   | 0.05         |         |
| VIDEO SYSTEM |           | 150     | -    | 1.00         |         |
|              |           |         |      |              |         |
|              |           |         |      |              |         |
| FLASHER LED  |           |         |      |              |         |

ENERGY COSTS-

BILLED TO: IDOT DISTRICT 1

201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096

TOTAL =

ENERGY SUPPLY -

CONTACT DAVE SCHACHT 630-437-2129

COMMONWEALTH EDISON

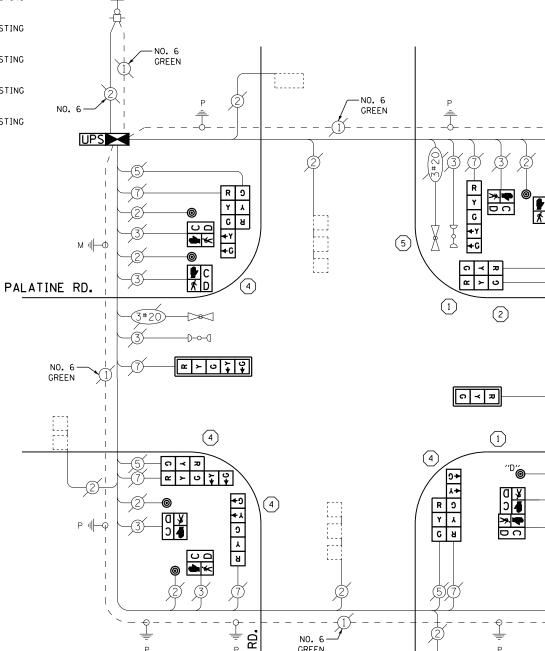
REPLACE 10 FT. PAINTED POST. RE-USE EXISTING TYPE A CONCRETE FOUNDATION.

> REPLACE 14 FT. PAINTED POST. RE-USE EXISTING TYPE A CONCRETE FOUNDATION.

> REPLACE 15 FT. PAINTED POST. RE-USE EXISTING TYPE A CONCRETE FOUNDATION.

REPLACE 16 FT. PAINTED POST. RE-USE EXISTING TYPE A CONCRETE FOUNDATION.

REPLACE 18 FT. PAINTED POST. RE-USE EXISTING TYPE A CONCRETE FOUNDATION.



# REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

EACH SIGNAL HEAD, 3 - SECTION EACH SIGNAL HEAD, 5 - SECTION EACH SIGNAL HEAD, 2 - FACE, 3 SECTION EACH SIGNAL HEAD, 2 - FACE, 1-3 SECTION, 1-5 SECTION TRAFFIC SIGNAL BACKPLATE EACH PEDESTRIAN SIGNAL HEAD PEDESTRIAN PUSH-BUTTON EACH SIGNAL POST EACH CONTROLLER AND CABINET (COMPLETE) EACH

#### SCHEDULE OF QUANTITIES

| <u>QUANTITY</u> | <u>UNIT</u> | <u>ITEM</u>   |
|-----------------|-------------|---|
| 1               | EACH        | MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION                       |
| 1               | EACH        | FULL-ACTUATED CONTROLLER AND TYPE IV CABINET                              |
| 2               | EACH        | TRAFFIC SIGNAL POST, GALVANIZED STEEL 10 FT.                              |
| 1               | EACH        | TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.                              |
| 4               | EACH        | TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.                              |
| 1               | EACH        | TRAFFIC SIGNAL POST, GALVANIZED STEEL 18 FT.                              |
| 1               | EACH        | SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED                     |
| 2               | EACH        | SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED                      |
| 1               | EACH        | SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED                     |
| 1               | EACH        | SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED                      |
| 3               | EACH        | SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED       |
| 6               | EACH        | PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER |
| 1               | EACH        | PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER |
| 2               | EACH        | TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM                              |
| 6               | EACH        | INDUCTIVE LOOP DETECTOR   |
| 1               | EACH        | REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT                                  |
| 4               | EACH        | REMOVE AND REPLACE ANCHOR BOLTS   |
| 1               | EACH        | UNINTERRUPTABLE POWER SUPPLY, SPECIAL                                     |
| 7               | EACH        | PEDESTRIAN PUSH-BUTTON, NON-LATCHING                                      |

**CABLE PLAN** 

GREEN

ROHLWING

CONTRACTOR SHALL RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT TO A NEW SIGNAL POST. THE COST OF THIS WORK SHALL BE INCLUDED IN THE TRAFFIC SIGNAL POST, GALVANIZED STEEL 18 FT. PAY ITEM.

CONTRACTOR SHALL RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT TO NEW CONTROLLER CABINET. THE COST OF THIS WORK SHALL BE INCLUDED IN THE FULL ACTUATED CONTROLLER AND TYPE IV CABINET PAY ITEM.

TS #5615 PALATINE

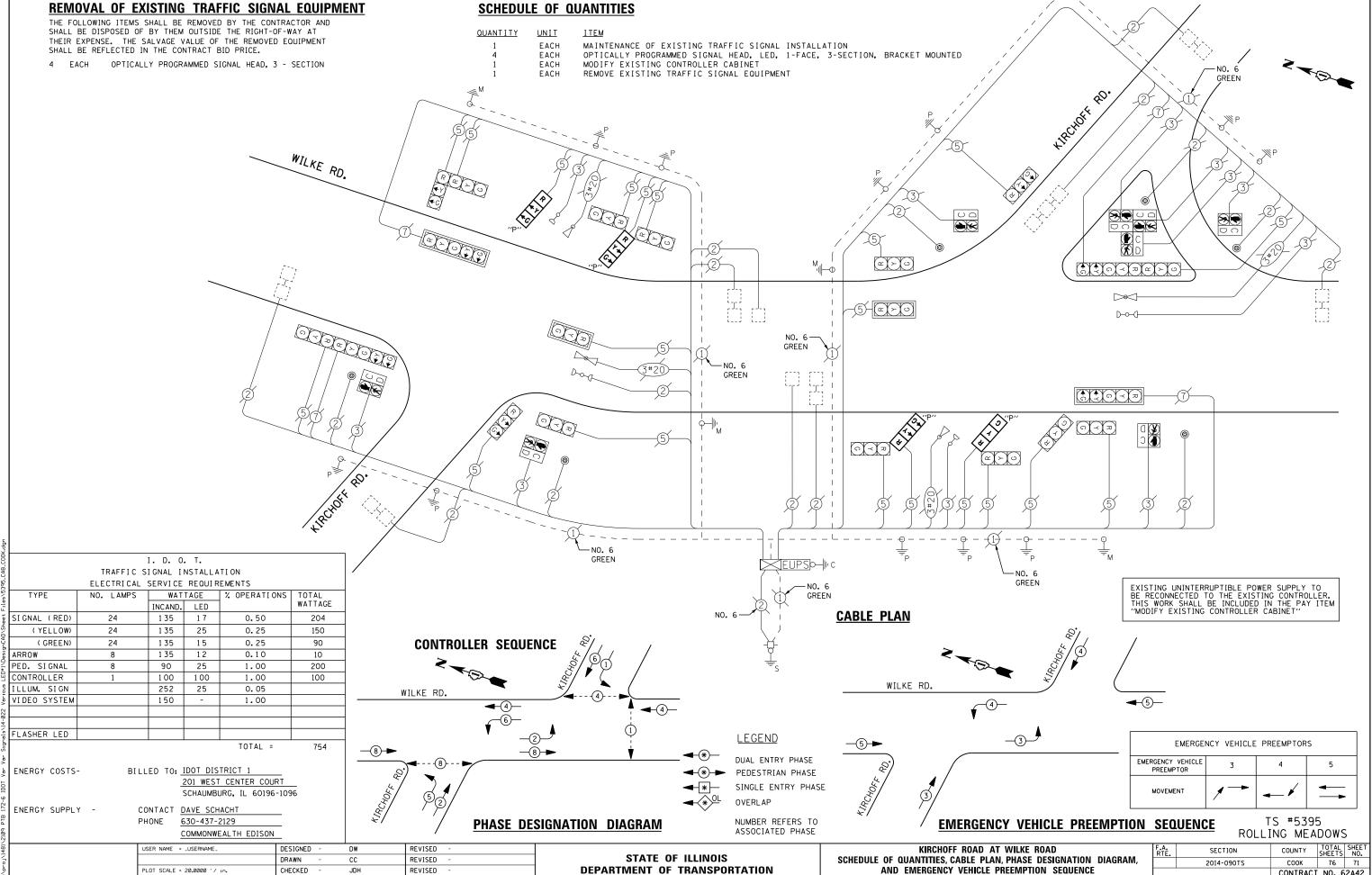
PUSH BUTTON "D" SHALL PLACE A CALL IN PHASES 2 AND 8

| USER NAME = _USERNAME_      | DESIGNED | - | DW  | REVISED - |
|-----------------------------|----------|---|-----|-----------|
|                             | DRAWN    | - | CC  | REVISED - |
| PLOT SCALE = 20.000 ' / in. | CHECKED  | - | JDH | REVISED - |
| PLOT DATE = 2/2/2015        | DATE     | - |     | REVISED - |

537

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

| PALATINE ROAD AT ROHLWING ROAD                                 | F.A.<br>RTE. | SECTION    | COUNTY   | TOTAL<br>SHEETS | SHEET<br>NO. |
|--|--------------|------------|----------|-----------------|--------------|
| SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, |              | 2014-090TS | СООК     | 76              | 70           |
| AND EMERGENCY VEHICLE PREEMPTION SEQUENCE                      |              |            | CONTRACT | NO. 6           | 2A42         |
| SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.                 |              | ILLINOIS   |          |                 |              |



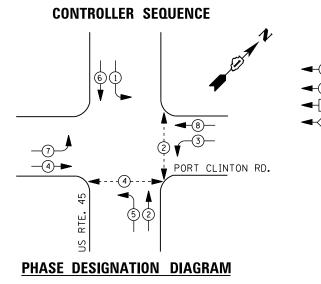
REVISED

CONTRACT NO. 62A42

SHEET NO. OF SHEETS STA.

PLOT DATE = 2/2/2015

DATE

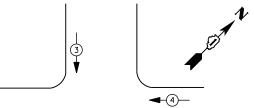


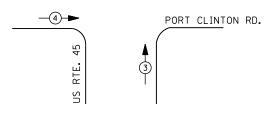
#### LEGEND

DUAL ENTRY PHASE PEDESTRIAN PHASE SINGLE ENTRY PHASE

OVERLAP

NUMBER REFERS TO ASSOCIATED PHASE





#### **EMERGENCY VEHICLE PREEMPTION SEQUENCE**

| EMERGENCY VE                | HICLE PREE | MPTORS   |  |  |
|-----------------------------|------------|----------|--|--|
| EMERGENCY VEHICLE PREEMPTOR | 3          | 4        |  |  |
| MOVEMENT                    | 1          | <b>+</b> |  |  |

|              | TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS |         |      |              |         |  |  |  |  |
|--------------|---|---------|------|--------------|---------|--|--|--|--|
| TYPE         | NO. LAMPS   |         | TAGE | % OPERATIONS | TOTAL   |  |  |  |  |
|              |   | INCAND. | LED  |              | WATTAGE |  |  |  |  |
| SIGNAL (RED) | 12  | 1 35    | 1 7  | 0.50         | 102     |  |  |  |  |
| (YELLOW)     | 12  | 1 35    | 25   | 0.25         | 75      |  |  |  |  |
| ( GREEN)     | 12  | 1 35    | 15   | 0.25         | 45      |  |  |  |  |
| ARROW        | 16  | 1 35    | 12   | 0.10         | 20      |  |  |  |  |
| PED. SIGNAL  | 4   | 90      | 25   | 1.00         | 100     |  |  |  |  |
| CONTROLLER   | 1   | 1 00    | 100  | 1.00         | 100     |  |  |  |  |
| ILLUM. SIGN  |   | 252     | 25   | 0.05         |         |  |  |  |  |
| VIDEO SYSTEM |   | 150     | -    | 1.00         |         |  |  |  |  |
|              |   |         |      |              |         |  |  |  |  |
|              |   |         |      |              |         |  |  |  |  |
| FLASHER LED  |   |         |      |              |         |  |  |  |  |
|              |   |         |      | TOTAL =      | 442     |  |  |  |  |

I. D. O. T.

ENERGY COSTS-

BILLED TO: IDOT DISTRICT 1

201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY -

CONTACT TERRI BLECK PHONE 847-816-5239

COMMONWEALTH EDISON

#### SCHEDULE OF QUANTITIES

| <u>QUANTITY</u> | <u>UNIT</u> | <u>ITEM</u>  |
|-----------------|-------------|--|
| 1               | EACH        | MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION                      |
| 2               | EACH        | PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIME |
| 1               | EACH        | PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIME |
| 1               | EACH        | REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT                                 |
| 3               | EACH        | PEDESTRIAN PUSH-BUTTON, NON-LATCHING                                     |

# -EXISTING INTERSECTION AND SAMPLING (SYSTEM) DETECTOR NO. 6 GREEN (GREEN) RYG PORT CLINTON RD. GREEN NO. 6 GREEN м⊪Ы — TRACER CABLE 45 INTERCONNECT TO MILWAUKEE AVE. PUSHBUTTON "A" SHALL PLACE A CALL IN PHASES 2 AND 4. RTE. NS EXISTING INTERSECTION AND SAMPLING (SYSTEM) DETECTOR

#### **CABLE PLAN**

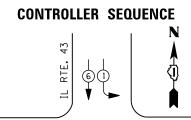
### REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

4 EACH PEDESTRIAN SIGNAL HEAD 3 EACH PEDESTRIAN PUSH-BUTTON

TS #6598 **VERNON HILLS** 

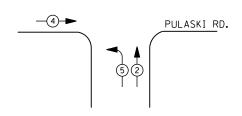
| USER NAME = _USERNAME_      | DESIGNED - | DW  | REVISED - |                              | US ROUTE 45 AT PORT CLINTON ROAD                               | F.A. S | ECTION COUNTY | TOTAL SHEET   |
|-----------------------------|------------|-----|-----------|------------------------------|--|--------|---------------|---------------|
|                             | DRAWN -    | CC  | REVISED - | STATE OF ILLINOIS            | SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, | 20     | 14-090TS LAKE | 76 72         |
| PLOT SCALE = 20.000 ' / in. | CHECKED -  | JDH | REVISED - | DEPARTMENT OF TRANSPORTATION | AND EMERGENCY VEHICLE PREEMPTION SEQUENCE                      |        | CONTRA        | ACT NO. 62A42 |
| PLOT DATE = 2/2/2015        | DATE -     |     | REVISED - |                              | SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.                 |        | ILLINOIS      |               |



**LEGEND** OVERLAP

DUAL ENTRY PHASE PEDESTRIAN PHASE SINGLE ENTRY PHASE

NUMBER REFERS TO ASSOCIATED PHASE



PHASE DESIGNATION DIAGRAM

**■**8

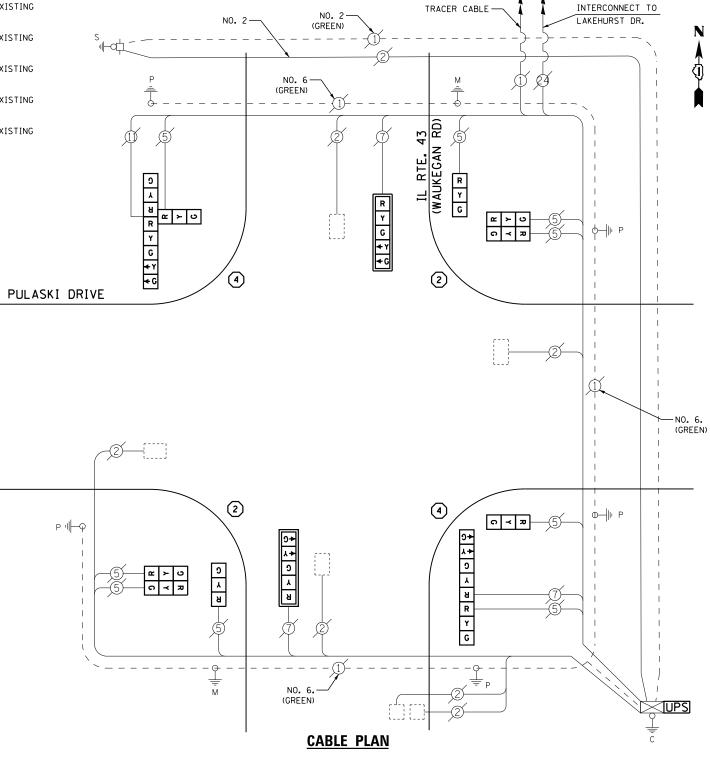
REPLACE 10 FT. PAINTED POST. RE-USE EXISTING TYPE A CONCRETE FOUNDATION.

REPLACE 14 FT. PAINTED POST. RE-USE EXISTING TYPE A CONCRETE FOUNDATION.

REPLACE 15 FT. PAINTED POST. RE-USE EXISTING TYPE A CONCRETE FOUNDATION.

REPLACE 16 FT. PAINTED POST. RE-USE EXISTING TYPE A CONCRETE FOUNDATION.

REPLACE 18 FT. PAINTED POST. RE-USE EXISTING TYPE A CONCRETE FOUNDATION.



#### ELECTRICAL SERVICE REQUIREMENTS WATTAGE % OPERATIONS TOTAL WATTAGE INCAND. LED SIGNAL (RED) 17 119 14 1 35 0.50 25 0.25 (YELLOW) 1 35 88 14 (GREEN) 1 35 15 0.25 53 14 1 35 0.10 10 25 1.00

I. D. O. T. TRAFFIC SIGNAL INSTALLATION

PED. SIGNAL CONTROLLER 100 1 00 1.00 100 25 ILLUM. SIGN 252 0.05 VIDEO SYSTEM 1.00 150

FLASHER LED

ENERGY COSTS-

ENERGY SUPPLY -

BILLED TO: IDOT DISTRICT 1 201 WEST CENTER COURT

SCHAUMBURG, IL 60196-1096

CONTACT TERRI BLECK 847-816-5239 PHONE

COMMONWEALTH EDISON

TOTAL =

370

#### SCHEDULE OF QUANTITIES

| <u>QUANTITY</u> | <u>UNIT</u> | <u>ITEM</u>   |
|-----------------|-------------|---|
| 1               | EACH        | MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION                 |
| 2               | EACH        | TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.                        |
| 2               | EACH        | TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.                        |
| 3               | EACH        | SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED                |
| 2               | EACH        | SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED               |
| 2               | EACH        | SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED                |
| 1               | EACH        | SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED |
| 1               | EACH        | SIGNAL HEAD, LED, 3-FACE, 2-3 SECTION, 1-5 SECTION BRACKET MOUNTED  |
| 2               | EACH        | TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM                        |
| 1               | EACH        | MODIFY EXISTING CONTROLLER CABINET                                  |
| 1               | EACH        | REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT                            |
| 2               | EACH        | REMOVE AND REPLACE ANCHOR BOLTS                                     |
| 1               | EACH        | UNINTERRUPTABLE POWER SUPPLY, SPECIAL                               |

#### REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

| JIIAL | D 1  | REFERENCE IN THE CONTRACT BID TRICE.              |
|-------|------|---|
| 3     | EACH | SIGNAL HEAD, 3 - SECTION                          |
| 2     | EACH | SIGNAL HEAD, 5 - SECTION                          |
| 2     | EACH | SIGNAL HEAD, 2 - FACE, 3 - SECTION                |
| 1     | EACH | SIGNAL HEAD, 2 - FACE, 1-3 - SECTION, 1-5 SECTION |
| 1     | EACH | SIGNAL HEAD, 3 - FACE, 2-3 - SECTION, 1-5 SECTION |
| 2     | EACH | TRAFFIC SIGNAL BACKPLATE                          |
| 4     | EACH | SIGNAL POST                                       |

TS# 14904 WALIKEGAN

| USER NAME = _USERNAME_     | DESIGNED - | DW  | REVISED - | STATE OF HUMBIS              |               |           |      |        |             | JLASKI DRIVE | F.A.<br>RTE. | SECTION    | COUNTY  | TOTAL | SHEET<br>S NO. |
|----------------------------|------------|-----|-----------|------------------------------|---------------|-----------|------|--------|-------------|--------------|--------------|------------|---------|-------|----------------|
|                            | DRAWN -    | CC  | REVISED - | STATE OF ILLINOIS            |               |           |      |        | ITIES, CABL |              |              | 2014-090TS | LAKE    | 76    | 73             |
| PLOT SCALE = 20.000 '/ in. | CHECKED -  | JDH | REVISED - | DEPARTMENT OF TRANSPORTATION |               |           | PHAS |        | ATION DIA   |              |              |            | CONTRAC | T NO. | 62A42          |
| PLOT DATE = 2/2/2015       | DATE -     |     | REVISED - |                              | SCALE: N.T.S. | SHEET NO. | OF   | SHEETS | STA.        | TO STA.      |              | ILLINOIS   |         |       |                |

# LEGEND

DUAL ENTRY PHASE PEDESTRIAN PHASE

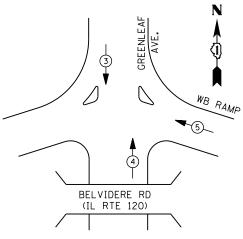
SINGLE ENTRY PHASE

NUMBER REFERS TO ASSOCIATED PHASE

RIGHT TURN OVERLAP PHASE DESIGNATION OVERLAP PERMISSIVE PROTECTED LETTER PHASE

6

#### PHASE DESIGNATION DIAGRAM



#### EMERGENCY VEHICLE PREEMPTION SEQUENCE

| EMERGENCY VEHICLE PREEMPTORS |   |          |   |  |  |  |  |  |
|------------------------------|---|----------|---|--|--|--|--|--|
| EMERGENCY VEHICLE PREEMPTOR  | 3 | 4        | 5 |  |  |  |  |  |
| MOVEMENT                     | • | <b>†</b> | - |  |  |  |  |  |

|             | I.  | D.  | 0.   | T.           |
|-------------|-----|-----|------|--------------|
| TRAFFIC     | SIG | NAL | INS  | STALLATION   |
| ELECTRI CAL | SE  | RVI | CE F | REQUIREMENTS |

| ELECTRICAL SERVICE REGULATION |              |           |         |      |              |         |  |
|-------------------------------|--------------|-----------|---------|------|--------------|---------|--|
|                               | TYPE         | NO. LAMPS | WAT     | TAGE | % OPERATIONS | TOTAL   |  |
|                               |              |           | INCAND. | LED  |              | WATTAGE |  |
|                               | SIGNAL (RED) | 13        | 1 35    | 1 7  | 0.50         | 111     |  |
|                               | (YELLOW)     | 13        | 1 35    | 25   | 0.25         | 82      |  |
|                               | ( GREEN)     | 14        | 1 35    | 15   | 0.25         | 53      |  |
|                               | ARROW        | 4         | 1 35    | 12   | 0.10         | 5       |  |
|                               | PED. SIGNAL  | 10        | 90      | 25   | 1.00         | 250     |  |
| i                             | CONTROLLER   | 1         | 100     | 100  | 1.00         | 100     |  |
|                               | ILLUM. SIGN  |           | 252     | 25   | 0.05         |         |  |
|                               | VIDEO SYSTEM |           | 150     | -    | 1.00         |         |  |
|                               |              |           |         |      |              |         |  |
|                               |              |           |         |      |              |         |  |
|                               | FLASHER LED  |           |         |      |              |         |  |
|                               |              |           |         |      |              |         |  |

ENERGY COSTS-

BILLED TO: IDOT DISTRICT 1

201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY -CONTACT TERRI BLECK PHONE 847-816-5239

COMMONWEALTH EDISON

TOTAL =

|                                       |                              | CREENLE AF AVENUE | <b>7</b>                                 |
|---------------------------------------|------------------------------|-------------------|--|
| NO. 6 GREEN                           |                              |                   | 3 3 3 3 4 1 NO. 6 GREEN                  |
| IL RTE. 120  (BELVIDERE RD.)  WB RAMP | 3#20<br>3#20<br>3#20<br>3#20 |                   | R 2 12 1 2 1 1 2 1 1 2 1 1 2 1 1 1 1 1 1 |
| No. 6                                 |                              | NO. 6 GREEN       |  |

#### **CABLE PLAN**

-EXISTING INTERSECTION AND SAMPLING

(SYSTEM) DETECTORS

#### SCHEDULE OF QUANTITIES

<u>QUANTITY</u> <u>UNIT</u>

EACH MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION

TRACER CABLE

MODIFY EXISTING CONTROLLER CABINET

UNINTERRUPTABLE POWER SUPPLY, SPECIAL

TS# 14925 WAUKEGAN

IL RTE. 120 (BELVIDERE RD.) WB RAMP

USER NAME = \_USERNAME\_ DESIGNED DW REVISED DRAWN CC REVISED CHECKED REVISED PLOT DATE = 2/2/2015 DATE REVISED

601

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

INTERCONNECT TO

IL 120 EB RAMPS

COUNTY TOTAL SHEET NO.

LAKE 76 74 IL ROUTE 120 (BELVIDERE ROAD) AT GREENLEAF AVENUE NORTH RAMP SECTION SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, 2014-090TS AND EMERGENCY VEHICLE PREEMPTION SEQUENCE CONTRACT NO. 62A42 SCALE: N.T.S. SHEET NO. OF SHEETS STA.

#### **LEGEND**

DUAL ENTRY PHASE PEDESTRIAN PHASE

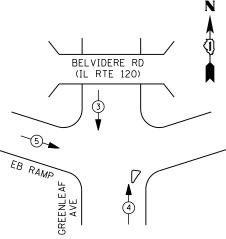
SINGLE ENTRY PHASE

NUMBER REFERS TO ASSOCIATED PHASE

| RIGHT | TURN | OVERLAP | PHASE | DESIGNATION |
|-------|------|---------|-------|-------------|
| OVER  | _AP  | PERMISS | IVE   | PROTECTED   |
|       |      | D       | _     | DULGE       |

2

# PHASE DESIGNATION DIAGRAM



## **EMERGENCY VEHICLE PREEMPTION SEQUENCE**

| EMERGENCY VEHICLE PREEMPTORS |          |   |   |  |  |  |  |  |
|------------------------------|----------|---|---|--|--|--|--|--|
| EMERGENCY VEHICLE PREEMPTOR  | 3        | 4 | 5 |  |  |  |  |  |
| MOVEMENT                     | <b>\</b> | † |   |  |  |  |  |  |

|            | I. D.   | 0.   | Т.           |
|------------|---------|------|--------------|
| TRAFFIC    | SI GNAL | INS  | STALLATION   |
| ELECTRICAL | SERVI   | CE F | REQUIREMENTS |

| -    |              | ELECTRICAL SERVICE REGUITEMENTS |         |     |              |         |  |  |
|------|--------------|---------------------------------|---------|-----|--------------|---------|--|--|
|      | TYPE         | NO. LAMPS                       | WATTAGE |     | % OPERATIONS | TOTAL   |  |  |
| =    |              |                                 | INCAND. | LED |              | WATTAGE |  |  |
| 990  | SIGNAL (RED) | 13                              | 1 35    | 1 7 | 0.50         | 111     |  |  |
| 5    | (YELLOW)     | 13                              | 1 35    | 25  | 0.25         | 82      |  |  |
| 2    | ( GREEN)     | 14                              | 1 35    | 15  | 0.25         | 53      |  |  |
| isar | ARROW        | 4                               | 1 35    | 12  | 0.10         | 5       |  |  |
|      | PED. SIGNAL  | 4                               | 90      | 25  | 1.00         | 100     |  |  |
| 1    | CONTROLLER   | 1                               | 100     | 100 | 1.00         | 100     |  |  |
| 200  | ILLUM. SIGN  |                                 | 252     | 25  | 0.05         |         |  |  |
| 5    | VIDEO SYSTEM |                                 | 150     | ı   | 1.00         |         |  |  |
| 220  |              |                                 |         |     |              |         |  |  |
|      |              |                                 |         |     |              |         |  |  |
| 5    | FLASHER LED  |                                 |         |     |              |         |  |  |

ENERGY COSTS-

201 WEST CENTER COURT

ENERGY SUPPLY -CONTACT TERRI BLECK

COMMONWEALTH EDISON

# **SCHEDULE OF QUANTITIES**

<u>QUANTITY</u> <u>UNIT</u> <u>ITEM</u> MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION MODIFY EXISTING CONTROLLER CABINET UNINTERRUPTABLE POWER SUPPLY, SPECIAL EACH EACH

TRACER CABLE -

TS# 14930 WAUKEGAN

IL 120 (BELVIDERE RD.)
EB RAMP

| USER NAME = _USERNAME_      | DESIGNED -<br>DRAWN - | CC  | REVISED -<br>REVISED - | STATE OF ILLINOIS            | IL ROUTE 120<br>Schedule of | • |
|-----------------------------|-----------------------|-----|------------------------|------------------------------|-----------------------------|---|
| PLOT SCALE = 20.000 ' / in. | CHECKED -             | JDH | REVISED -              | DEPARTMENT OF TRANSPORTATION | AND                         | i |
| PLOT DATE = 2/2/2015        | DATE -                |     | REVISED -              |                              | SCALE: N.T.S.               | 3 |

| SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, |           |    |        |              | F.A.<br>RTE. | SECTION<br>2014-090TS | COUNTY<br>LAKE | TOTAL<br>SHEETS<br>76 | SHEET<br>NO.<br>75 |  |
|--|-----------|----|--------|--------------|--------------|-----------------------|----------------|-----------------------|--------------------|--|
| AND EMERGENCY VEHICLE PREEMPTION SEQUENCE                      |           |    |        |              |              | CONTRACT              | NO. 6          | 2A42                  |                    |  |
| LE: N.T.S.   | SHEET NO. | OF | SHEETS | STA. TO STA. |              |                       | ILLINOIS       |                       |                    |  |
|  |           |    |        |              |              |                       |                |                       |                    |  |

GREENLEAF AVENUE TRACER CABLE -R Y •G IL 120 (BELVIDERE RD.) EB RAMP \_\_N0. 6

> INTERCONNECT TO LAKEHURST RD.

INTERCONNECT TO WB BELVIDERE RD

**CABLE PLAN** 

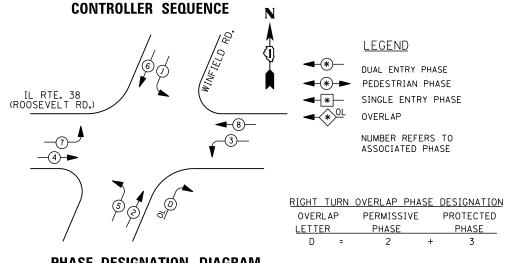
TOTAL =

451

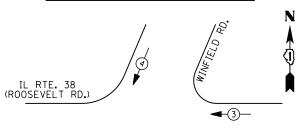
BILLED TO: IDOT DISTRICT 1

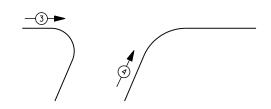
SCHAUMBURG, IL 60196-1096

847-816-5239



#### PHASE DESIGNATION DIAGRAM





#### **EMERGENCY VEHICLE PREEMPTION SEQUENCE**

| EMERGENCY VE                   | HICLE PRE | EMPTORS    |  |
|--------------------------------|-----------|------------|--|
| EMERGENCY VEHICLE<br>PREEMPTOR | 3         | 4          |  |
| MOVEMENT                       | <b>←</b>  | <b>↓</b> ↑ |  |

I. D. O. T.

| TRAFFIC SIGNAL INSTALLATION     |           |         |     |              |         |  |  |
|---------------------------------|-----------|---------|-----|--------------|---------|--|--|
| ELECTRICAL SERVICE REQUIREMENTS |           |         |     |              |         |  |  |
| TYPE                            | NO. LAMPS | WATTAGE |     | % OPERATIONS | TOTAL   |  |  |
|                                 |           | INCAND. | LED |              | WATTAGE |  |  |
| SIGNAL (RED)                    | 13        | 1 35    | 17  | 0.50         | 111     |  |  |
| (YELLOW)                        | 13        | 1 35    | 25  | 0.25         | 82      |  |  |
| ( GREEN)                        | 13        | 1 35    | 15  | 0.25         | 49      |  |  |
| ARROW                           | 20        | 1 35    | 12  | 0.10         | 24      |  |  |
| PED. SIGNAL                     | 0         | 90      | 25  | 1.00         | 0       |  |  |
| CONTROLLER                      | 1         | 1 00    | 100 | 1.00         | 100     |  |  |
| ILLUM. SIGN                     | 0         | 252     | 25  | 0.05         | 0       |  |  |
| VIDEO SYSTEM                    | 0         | 150     | 150 | 1.00         | 0       |  |  |
| LIGHTING                        | 0         |         | 250 | 1. 00        | 0       |  |  |
|                                 |           |         |     |              |         |  |  |
| FLASHER LED                     |           |         |     |              |         |  |  |
|                                 |           |         |     | TOTAL =      | 366     |  |  |

ENERGY COSTS-

BILLED TO: IDOT DISTRICT 1

201 WEST CENTER COURT SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY -

CONTACT JOE STACHO

630-424-5704 COMMONWEALTH EDISON REPLACE 10 FT. PAINTED POST. RE-USE EXISTING TYPE A CONCRETE FOUNDATION.

TYPE A CONCRETE FOUNDATION.

TYPE A CONCRETE FOUNDATION.

TYPE A CONCRETE FOUNDATION.

RED LIGHT ENFORCEMENT -CABINET AND EQUIPMENT

REPLACE 14 FT. PAINTED POST. RE-USE EXISTING

REPLACE 15 FT. PAINTED POST. RE-USE EXISTING

REPLACE 16 FT. PAINTED POST. RE-USE EXISTING

REPLACE 18 FT. PAINTED POST. RE-USE EXISTING TYPE A CONCRETE FOUNDATION.

**ENT OF TRANSPORTATION** 

IL ROUTE 38 (ROOSEVELT ROAD) AT WINFIELD ROAD SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE

WINFIELD

TS #6200

SCHEDULE OF QUANTITIES

QUANTITY <u>UNIT</u> MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION EACH TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT. FACH RELOCATE EXISTING SIGNAL HEAD EACH MODIFY EXISTING CONTROLLER CABINET EACH REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT EACH REMOVE AND REPLACE ANCHOR BOLTS EACH UNINTERRUPTABLE POWER SUPPLY, SPECIAL

**CABLE PLAN** 

GREEN

- O- EXPORT

# REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

SERVICE POLE

GROUND MOUNT

(\*)(\*)(\*)(\*)(\*)

RED LIGHT ENFORCEMENT

SERVICE INSTALLATION

METER-

GREEN

**UPS** 

GREEN

IL RTE. 38

(ROOSEVELT RD.)

NO. 6

4

3 EACH SIGNAL POST

| SER NAME = _USERNAME_      | DESIGNED - | DW  | REVISED - |                        |
|----------------------------|------------|-----|-----------|------------------------|
|                            | DRAWN -    | CC  | REVISED - | STATE OF ILLINOIS      |
| LOT SCALE = 20.0000 '/ in. | CHECKED -  | JDH | REVISED - | DEPARTMENT OF TRANSPOR |
| I OT DATE = 2/2/2015       | DATE -     |     | PEVISED - |                        |

COUNTY TOTAL SHEET NO.

DU PAGE 76 76 SECTION 2014-090TS CONTRACT NO. 62A42 SHEET NO. OF SHEETS STA.