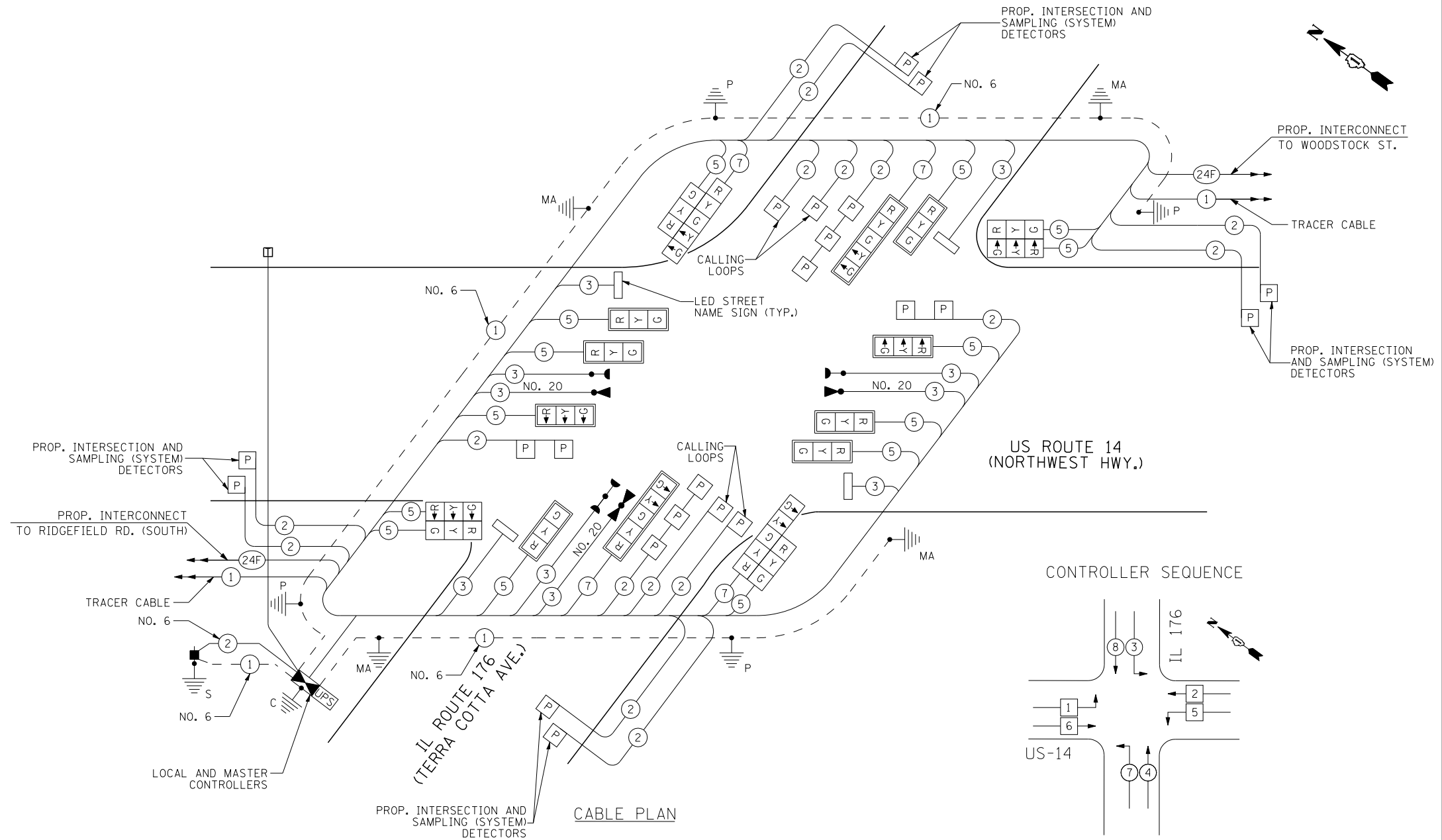
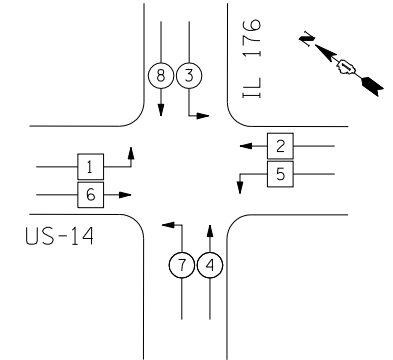


SCHEDULE OF QUANTITIES

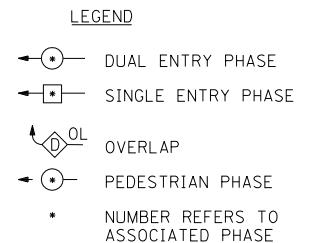
| ITEM | UNIT | QTY |
|---|------|------|
| * LED INTERNALLY ILLUMINATED STREET NAME SIGN | EA | 4 |
| SIGN PANEL - TYPE 1 | SF | 30 |
| UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA. | FT | 1660 |
| UNDERGROUND CONDUIT, GALVANIZED STEEL, 2 1/2" DIA. | FT | 45 |
| UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA. | FT | 140 |
| UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA. | FT | 680 |
| HANDHOLE | EA | 7 |
| HEAVY-DUTY HANDHOLE | EA | 4 |
| DOUBLE HANDHOLE | EA | 2 |
| FULL-ACTUATED CONTROLLER AND TYPE V CABINET, SPECIAL | EA | 1 |
| TRANSCEIVER - FIBER OPTIC | EA | 1 |
| ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C | FT | 752 |
| ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C | FT | 2609 |
| ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C | FT | 2318 |
| ELECTRIC CABLE IN CONDUIT, LEAD-IN NO. 14 1 PAIR | FT | 4963 |
| ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2/C | FT | 39 |
| TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT. | EA | 2 |
| TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT. | EA | 2 |
| STEEL COMBINATION MAST ARM ASSEMBLY AND POLE, 42 FT. | EA | 1 |
| STEEL COMBINATION MAST ARM ASSEMBLY AND POLE, 46 FT. | EA | 1 |
| STEEL COMBINATION MAST ARM ASSEMBLY AND POLE, 48 FT. | EA | 1 |
| STEEL COMBINATION MAST ARM ASSEMBLY AND POLE, 52 FT. | EA | 1 |
| CONCRETE FOUNDATION, TYPE A | FT | 16 |
| CONCRETE FOUNDATION, TYPE C | FT | 4 |
| CONCRETE FOUNDATION, TYPE E 36 INCH DIAMETER | FT | 54 |
| SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED | EA | 8 |
| SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED | EA | 2 |
| SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED | EA | 2 |
| SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED | EA | 2 |
| TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINIUM | EA | 10 |
| INDUCTIVE LOOP DETECTOR | EA | 16 |
| * LIGHT DETECTOR | EA | 3 |
| * LIGHT DETECTOR AMPLIFIER | EA | 1 |
| * TEMPORARY TRAFFIC SIGNAL INSTALLATION | EA | 1 |
| REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT | EA | 1 |
| REMOVE EXISTING HANDHOLE | EA | 10 |
| REMOVE EXISTING CONCRETE FOUNDATION | EA | 6 |
| PREFORMED DETECTOR LOOP | FT | 769 |
| TEMPORARY TRAFFIC SIGNAL TIMING | EA | 1 |
| SERVICE INSTALLATION - POLE MOUNTED | EA | 1 |
| MASTER CONTROLLER (SPECIAL) | EA | 1 |
| UNINTERRUPTIBLE POWER SUPPLY SPECIAL | EA | 1 |
| ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C | FT | 924 |
| * ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 20 3/C, TWISTED, SHIELDED | FT | 752 |
| * 100% LOCAL AGENCY COST | | |



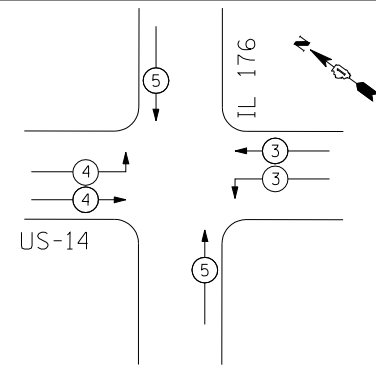
CONTROLLER SEQUENCE



PHASE DESIGNATION DIAGRAM



EMERGENCY VEHICLE PREEMPTION SEQUENCE



| PROPOSED EMERGENCY VEHICLE PREEMPTORS | | | |
|---------------------------------------|---|---|----|
| EMERGENCY VEHICLE PREEMPTOR | 3 | 4 | 5 |
| MOVEMENT | ← | → | ↑↓ |

NOTE: THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

NOTE: THE EMERGENCY PREEMPTION EQUIPMENT FOR THIS PROJECT SHALL BE "OPTICOM" BRAND TO MATCH THE EXISTING CITY SYSTEM.

THE END OF THE TRACER CABLE SHALL BE CONTINUOUS AND EXTEND INTO THE CONTROLLER CABINET.

RESTORATION OF WORK AREA: RESTORATION OF THE TRAFFIC WORK AREA SHALL BE INCLUDED IN THE COST OF THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH, AND BACKFILL ETC. AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, 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 SEED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

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

| TYPE | NO. OF LAMPS | WATTAGE | | % OPERATIONS | TOTAL WATTAGE |
|----------------|--------------|---------|------|--------------|---------------|
| | | INCAND. | LED | | |
| SIGNAL (RED) | 18 | 135 | 17 | 0.50 | 153.00 |
| (YELLOW) | 18 | 135 | 25 | 0.25 | 112.50 |
| (GREEN) | 18 | 135 | 15 | 0.25 | 67.50 |
| ARROW | 8 | 135 | 12 | 0.10 | 9.6 |
| PED. SIGNAL | -- | 90 | 25 | 1.00 | ----- |
| CONTROLLER | 1 | 100 | 100 | 1.00 | 100.00 |
| FLASHER | -- | 25 | 0.50 | ----- | ----- |
| LED SIGN (6'+) | 4 | 120 | 0.50 | ----- | 240.00 |

ENERGY COSTS TO: TOTAL = 682.6

ILLINOIS DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS/DISTRICT 1
SCHAUMBURG, ILLINOIS 60196

ENERGY SUPPLY: CONTACT: MIKE WIDHALM
PHONE: (815) 263-5624
COMPANY: COMED

EJM ENGINEERING, INC.
411 South Wells Street Suite 1000
Chicago, Illinois 60607

| | | | |
|--|----------------------|----------------------|-------------------|
| FILE NAME = ...\\0162517-SHT-TS03B.dgn | USER NAME = rswanson | DESIGNED - GR | REVISED - |
| | | DRAWN - GR | REVISED - |
| | | PLOT SCALE = 20:1 | CHECKED - RS |
| | | PLOT DATE = 6/6/2014 | DATE - 10/15/2013 |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM,
AND EMERGENCY VEHICLE PREEMPTION SEQUENCE
US RTE. 14 AND IL RTE. 176

SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

| | | | | |
|---|---------|---------|--------------------|-----------|
| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 305 | 27R-3 | MCHENRY | 431 | 303 |
| FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT | | | CONTRACT NO. 62517 | |