

| | | | | |
|-----------------------|----------------------------|--------|--------------|-----------|
| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 338 | (113 & 114)R-5 | WILL. | 525 | 381 |
| STA. | TO STA. | | | |
| FED. ROAD DIST. NO. 1 | ILLINOIS FED. AID PROJECT: | | | |
| CONTRACT # 62417 | | | | |

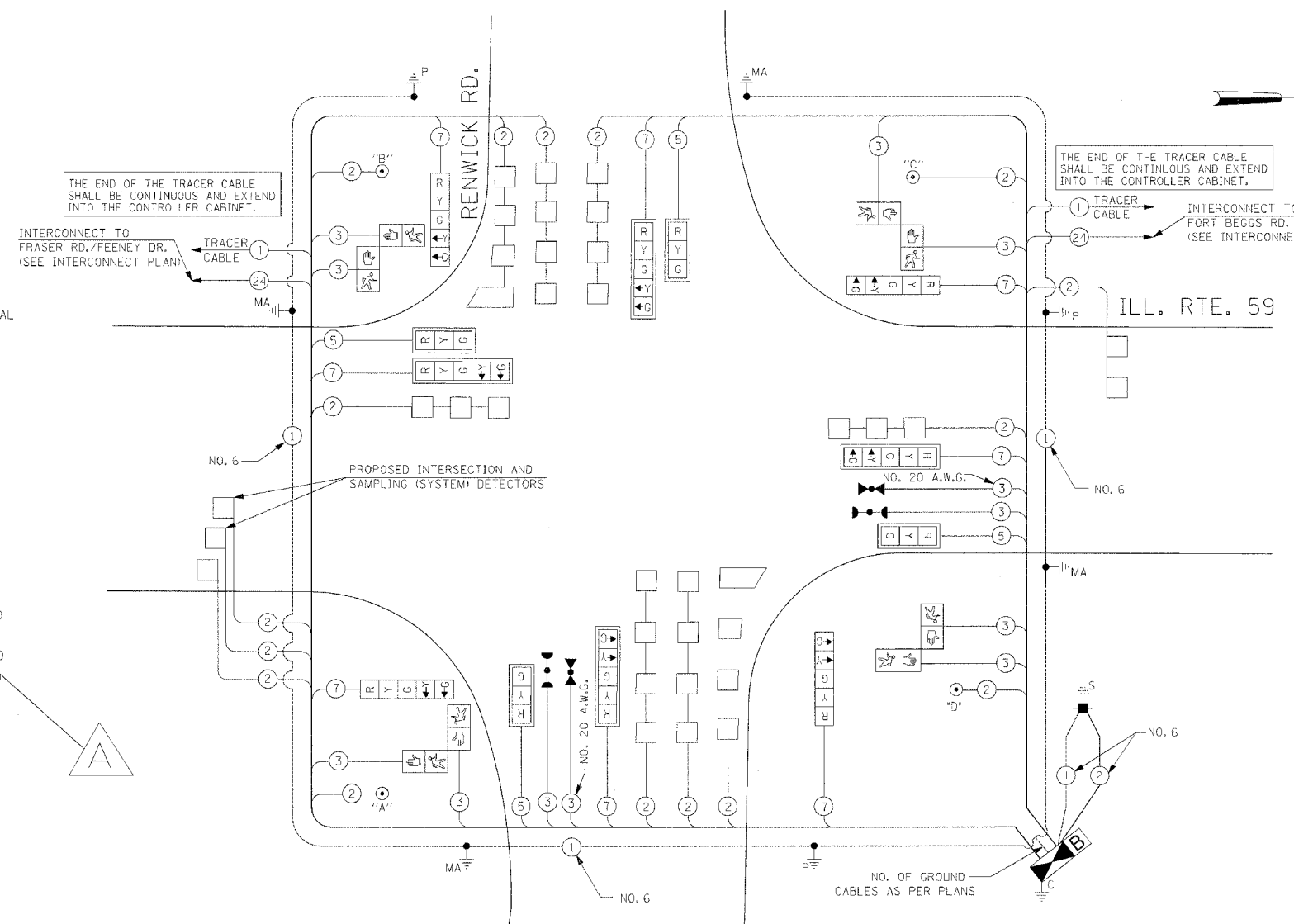
CABLE PLAN LEGEND

- | EXISTING | PROPOSED |
|----------|---|
| | 8" (200mm) TRAFFIC SIGNAL SECTION |
| | 12" (300mm) TRAFFIC SIGNAL SECTION |
| | 12" (300mm) PEDESTRIAN SIGNAL SECTION |
| | 12" (300mm) PEDESTRIAN SIGNAL SECTION |
| | CONTROLLER CABINET |
| | SERVICE INSTALLATION |
| | TELEPHONE INSTALLATION |
| | VEHICLE DETECTOR, INDUCTION LOOP |
| | MAGNETIC DETECTOR |
| | EMERGENCY VEHICLE LIGHT DETECTOR |
| | CONFIRMATION BEACON |
| | PUSH-BUTTON DETECTOR |
| | DENOTES NUMBER OF CONDUCTORS, ALL CABLE NO. 14 EXCEPT AS INDICATED. ALL LOOP DETECTOR CABLE TO BE SHIELDED. |
| | GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN) |
| | FIBER OPTIC CABLE IN CONDUIT NO. 62.5/125 2-MM12F & SM12F |
| | SIGNAL FACE WITH BACKPLATE. *P* INDICATES PROGRAMMED HEAD. |
| | RAILROAD CONTROL CABINET |
| | ILLUMINATED SIGN, FIBER OPTIC "NO LEFT TURN" |
| | ILLUMINATED SIGN, FIBER OPTIC "NO RIGHT TURN" |
| H/C | H/C GROUND ROD AT HANDHOLE, DOUBLE HANDHOLE, OR CONTROLLER |
| P | P GROUND ROD AT POST OR MAST ARM POLE |
| S | S GROUND ROD AT ELECTRIC SERVICE INSTALLATION |
| | LOCAL AND MASTER CONTROLLER |
| | MICROWAVE VEHICLE SENSOR |
| | UPS-BATTERY BACK-UP |

SCHEDULE OF QUANTITIES

| QUANTITY | UNIT | ITEM |
|----------|-------|---|
| 31.5 | SQ FT | SIGN PANEL - TYPE 1 |
| 488 | FOOT | CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL |
| 82 | FOOT | CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL |
| 34 | FOOT | CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL |
| 49 | FOOT | CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL |
| 324 | FOOT | CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL |
| 6 | EACH | HANDHOLE |
| 4 | EACH | HEAVY-DUTY HANDHOLE |
| 1 | EACH | DOUBLE HANDHOLE |
| 813 | FOOT | TRENCH AND BACKFILL FOR ELECTRICAL WORK |
| 1 | EACH | FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL |
| 1 | EACH | TRANSCIVER - FIBER OPTIC |
| 382 | FOOT | ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C |
| 770 | FOOT | ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C |
| 856 | FOOT | ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C |
| 1671 | FOOT | ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C |
| 2865 | FOOT | ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR |
| 42 | FOOT | ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C |
| 3 | EACH | TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT. |
| 2 | EACH | STEEL MAST ARM ASSEMBLY AND POLE, 30 FT. |
| 1 | EACH | STEEL MAST ARM ASSEMBLY AND POLE, 38 FT. |
| 1 | EACH | STEEL MAST ARM ASSEMBLY AND POLE, 52 FT. |
| 12 | FOOT | CONCRETE FOUNDATION, TYPE A |
| 4 | FOOT | CONCRETE FOUNDATION, TYPE C |
| 60 | FOOT | CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER |
| 4 | EACH | SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED |
| 4 | EACH | SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED |
| 4 | EACH | SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED |
| 4 | EACH | PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED |
| 8 | EACH | TRAFFIC SIGNAL BACKPLATE |
| 12 | EACH | INDUCTIVE LOOP DETECTOR |
| * 2 | EACH | LIGHT DETECTOR |
| * 1 | EACH | LIGHT DETECTOR AMPLIFIER |
| 3 | EACH | PEDESTRIAN PUSH-BUTTON |
| 1 | EACH | TEMPORARY TRAFFIC SIGNAL INSTALLATION |
| 1 | EACH | REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT |
| 10 | EACH | REMOVE EXISTING HANDHOLE |
| 9 | EACH | REMOVE EXISTING CONCRETE FOUNDATION |
| 1239 | FOOT | PREFORMED DETECTOR LOOP |
| 1 | EACH | TEMPORARY TRAFFIC SIGNAL TIMING |
| 1 | EACH | SERVICE INSTALLATION - POLE MOUNTED |
| 1 | EACH | UNINTERRUPTIBLE POWER SUPPLY |
| 799 | FOOT | ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C |
| * 313 | FOOT | ELECTRIC CABLE IN CONDUIT NO. 20 3/C, TWISTED, SHIELDED |

* 100% COST TO THE VILLAGE OF PLAINFIELD

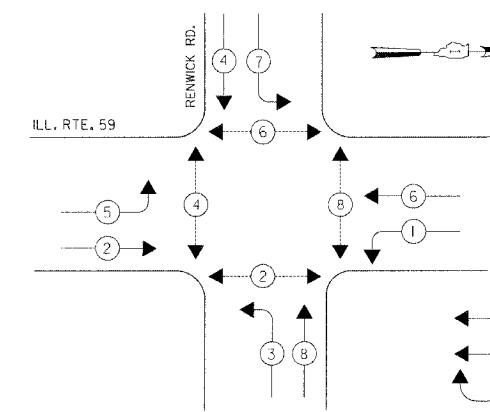


PUSH-BUTTON NOTE:
 PUSH-BUTTON "A" SHALL PLACE A CALL IN PHASES 2 AND 4
 PUSH-BUTTON "B" SHALL PLACE A CALL IN PHASES 4 AND 6
 PUSH-BUTTON "C" SHALL PLACE A CALL IN PHASES 6 AND 8
 PUSH-BUTTON "D" SHALL PLACE A CALL IN PHASES 2 AND 8

CABLE PLAN

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

CONTROLLER SEQUENCE

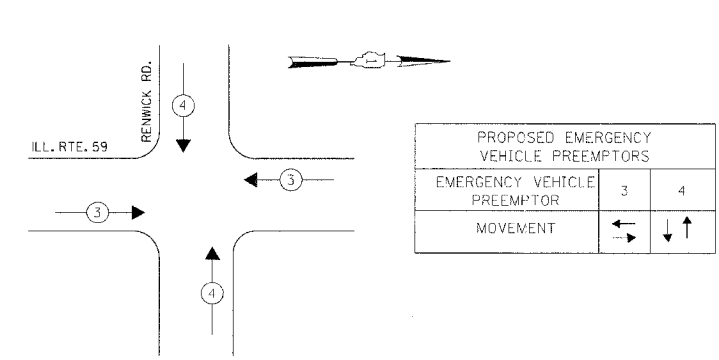


LEGEND

- DUAL ENTRY PHASE
- SINGLE ENTRY PHASE
- OVERLAP
- PEDESTRIAN PHASE
- * NUMBER REFERS TO ASSOCIATED PHASE

PHASE DESIGNATION DIAGRAM

EMERGENCY VEHICLE PREEMPTION SEQUENCE



| EMERGENCY VEHICLE PREEMPTOR | 3 | 4 |
|-----------------------------|---|---|
| MOVEMENT | ← | ↑ |

| I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS | | | | | TOTAL WATTAGE |
|--|----------|-----------------|-------------|------------|---------------|
| TYPE | NO LAMPS | INCAND. WATTAGE | LED WATTAGE | %OPERATION | |
| SIGNAL (RED) | 12 | 135 | 17 | 0.50 | 102.0 |
| (YELLOW) | 12 | 135 | 25 | 0.25 | 75.0 |
| (GREEN) | 12 | 135 | 15 | 0.25 | 45.0 |
| ARROW | 16 | 135 | 12 | 0.10 | 19.2 |
| PED. SIGNAL | 4 | 90 | 25 | 1.00 | 100.0 |
| CONTROLLER | 1 | 100 | 100 | 1.00 | 100.0 |
| ILLUM. SIGN | | | | 0.05 | |
| FLASHER | | | | 0.50 | |
| ENERGY COSTS TO: | | | | | TOTAL = 441.2 |

| FOUNDATION (DEPTH) | FT. (m) | CABLE SLACK | FT. (m) | VERTICAL | FT. (m) |
|--------------------|----------|------------------|-----------|-------------------|------------|
| TYPE A-POST | 4 (1.2) | HANDHOLE | 6.5 (2.0) | ALL FOUNDATIONS | 3.5 (1.0) |
| D-CONTROLLER | 4 (1.2) | DOUBLE HANDHOLE | 13 (4.0) | MAST ARM (L) POLE | 20'-4"-2" |
| E-M.ARM POLE | | SIGNAL POST | 2 (0.6) | (6mH-0.6m) = | |
| 24" (600mm) | 10 (3.0) | CONTROLLER CAB. | 1 (0.5) | BRACKET MOUNTED | 13 (4.0) |
| 30" (750mm) | 15 (4.6) | FIBER OPTIC | 13 (4.0) | PED. PUSHBUTTON | 4 (1.2) |
| | | ELECTRIC SERVICE | 1 (0.5) | ELECTRIC SERVICE | 13.5 (4.1) |
| | | GROUND CABLE | 1 (0.5) | SERVICE TO GROUND | 13.5 (4.1) |
| | | | | POST MOUNTED | 6 (1.8) |

GO GANDHI AND ASSOCIATES, INC.
 ENGINEERS AND PLANNERS
 6035 N. NORTHWEST HIGHWAY
 SUITE 306
 CHICAGO, ILLINOIS 60631 TEL. (773) 774-5990

| NAME | DATE |
|------------|---------|
| ADDENDUM A | 5/13/08 |

ILLINOIS DEPARTMENT OF TRANSPORTATION
 CABLE PLAN
 PHASE DESIGNATION DIAGRAM
 EMERGENCY VEHICLE PREEMPTION SEQUENCE
 AND SCHEDULE OF QUANTITIES
 ILLINOIS ROUTE 59 AT RENWICK ROAD
 SCALE: N.T.S.
 DATE: 03/18/2008
 DRAWN BY: BB, KP
 DESIGNED BY: PKG/RRM
 CHECKED BY: PKG/RRM