

CONSTRUCTION NOTES:

- ① REPLACE EXISTING CONTROLLER AND MALFUNCTION MANAGEMENT UNIT.
- ② ALL EXISTING CONFIRMATION BEACONS SHALL BE RETROFITTED WITH L.E.D. INDICATIONS. THIS WORK SHALL BE INCLUDED IN THE COST FOR THE PAY ITEM: UNINTERRUPTIBLE POWER SUPPLY.
- ③ REPLACE EXISTING FIBER OPTIC INTERCONNECT CENTER PANEL.
- ④ REPLACE EXISTING UNINTERRUPTIBLE POWER SUPPLY. NEW CABINET TO BE POWDER COATED BROWN TO MATCH EXISTING TRAFFIC SIGNAL CABINET. THIS WORK SHALL BE INCLUDED IN THE COST FOR THE PAY ITEM: REPLACE EXISTING UNINTERRUPTIBLE POWER SUPPLY.
- ⑤ INSTALL PTZ CAMERA ON THE COMBINATION MAST ARM AND POLE IN THE NORTHWEST CORNER.
- ⑥ INSTALL NEW 50"x67" PAD FOR UNINTERRUPTIBLE POWER SUPPLY.

SCHEDULE OF QUANTITIES

| ITEM | UNIT | TOTAL |
|---|-------|-------|
| PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH | SQ FT | 24 |
| MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION | EACH | 1 |
| FULL-ACTUATED CONTROLLER IN EXISTING CABINET, SPECIAL | EACH | 1 |
| REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT | EACH | 1 |
| MEDIA CONVERTER | EACH | 1 |
| UNINTERRUPTIBLE POWER SUPPLY | EACH | 1 |
| TERMINATE FIBER IN CABINET | EACH | 6 |
| MODIFY VIDEO PROCESSING UNIT | EACH | 1 |
| FIBER OPTIC INTERCONNECT CENTER | EACH | 1 |
| SPLICE FIBER IN CABINET | EACH | 6 |
| OUTDOOR RATED NETWORK CABLE | FOOT | 78 |
| UPS BATTERY BACK-UP CABINET | EACH | 1 |
| VIDEO TRAFFIC MONITORING SYSTEM WITH PTZ CAMERA | EACH | 1 |
| VIDEO ENCODER, VIDEO DETECTION SYSTEM | EACH | 1 |
| MALFUNCTION MANAGEMENT UNIT | EACH | 1 |
| ETHERNET MANAGED SWITCH, TYPE 1 | EACH | 1 |

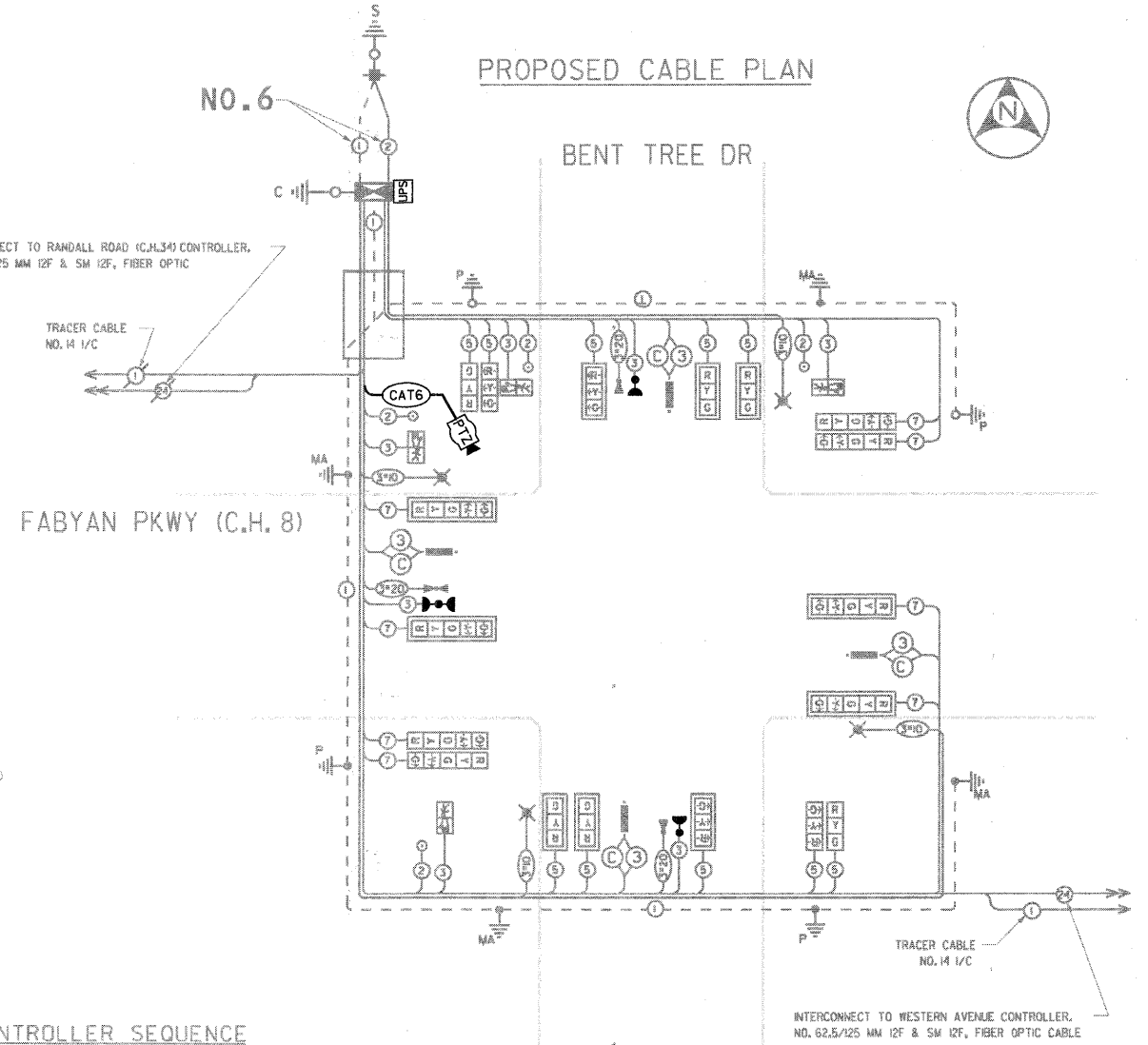
NOTE: ALL L.E.D. PRODUCTS SHALL BE DIALIGHT BRAND.

NOTE: ALL TRAFFIC SIGNAL POSTS, POLES, MAST ARM ASSEMBLY, CONTROLLER CABINET, SHROUDS, LIGHTING MAST ARMS AND LUMINAIRES SHALL BE POWDER COATED "DARK BRONZE."

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

CABLE PLAN LEGEND

- | | |
|--|---|
| | 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 CONNECTION |
| | MAGNETIC DETECTOR |
| | EMERGENCY VEHICLE LIGHT DETECTOR |
| | CONFIRMATION BEACON |
| | PUSHBUTTON DETECTOR |
| | VEHICLE DETECTOR, INDUCTION LOOP |
| | DENOTES NUMBER OF CONDUCTORS. ALL CABLE NO. 14 EXCEPT AS INDICATED. ALL LOOP DETECTOR CABLE TO BE SHIELDED. |
| | 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' |
| | GROUND ROD AT HANDHOLE (H), DOUBLE HANDHOLE (H) OR CONTROLLER (C) |
| | GROUND ROD AT POST (P) OR MAST ARM POLE (MA) |
| | GROUND ROD AT ELECTRIC SERVICE INSTALLATION |
| | GROUND CABLE IN CONDUIT, NO. 6 SOLID COPPER (GREEN) |
| | NO. 62.5/125 MM 12F & 5M 12F, FIBER OPTIC CABLE |
| | NO. COAXIAL CABLE |
| | VIDEO DETECTION CAMERA |
| | LUMINAIRE, SODIUM VAPOR, HORIZ. MOUNT |
| | PHOTO CELL CONT., 318 W, 120 V BALLAST |
- NOTE: ALL NEW GROUND RODS SHALL BE 3/4" X 18'-0" LONG COPPER CLAD. THE COST SHALL BE INCIDENTAL TO THE COST OF INSTALLATION.

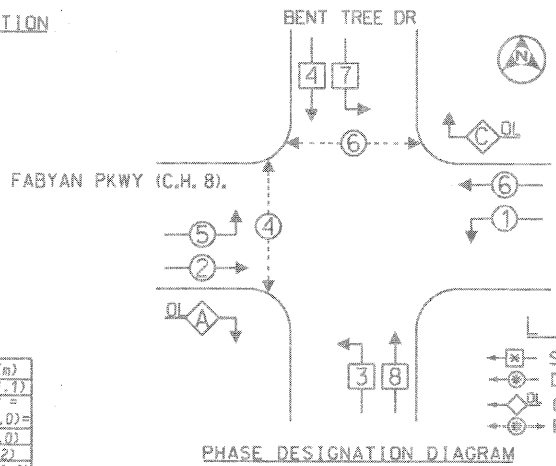


PROPOSED RIGHT TURN OVERLAP PHASE DESIGNATION

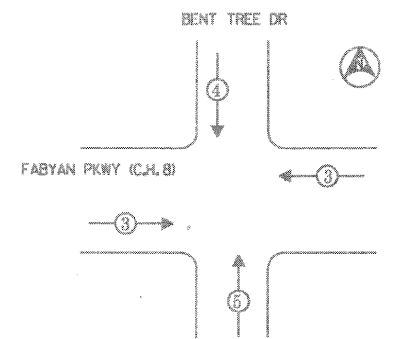
| OVERLAP LETTER | PROTECTED PHASE |
|----------------|-----------------|
| A | = 3 |
| C | = 7 |

RESTORATION OF WORK AREA. RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO 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, MEDIAN, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOVED LAWN 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.

| 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 (1.1) |
| D - CONTROLLER | 4 (1.2) | DOUBLE HANDHOLE | 13 (4.0) | MAST ARM (L) POLE | 20'+L-2' = |
| E - M ARM POLE | | SIGNAL POST | 2 (1.0) | (6.1+L-1.0) = | |
| 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) |



PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE



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

| I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS | | | | TOTAL WATTAGE |
|--|-----------|---------|--------------|---------------|
| TYPE | NO. LAMPS | WATTAGE | % OPERATIONS | |
| SIGNAL (RED) | 14 | 135 | 0.50 | 119 |
| (YELLOW) | 14 | 135 | 0.25 | 87.5 |
| (GREEN) | 14 | 135 | 0.25 | 87.5 |
| ARROW | 28 | 135 | 0.10 | 33.6 |
| PED. SIGNAL | 4 | 90 | 1.00 | 100 |
| CONTROLLER | 1 | 100 | 1.00 | 100 |
| ILLUM. SIGN | 84 | 84 | 0.05 | |
| LUMINAIRE | 4 | 310 | 0.50 | 620 |
| FLASHER | | | 0.50 | |
| TOTAL = | | | | 1113 |

ENERGY COSTS - BILLED TO: CITY OF GENEVA (ADDRESS)

ENERGY SUPPLY - CONTACT: MS. JENNIFER HILKEMAN (630) 232-1503 COMPANY: CITY OF GENEVA



METRO TRANSPORTATION GROUP, INC.
 TRAFFIC ENGINEERING, TRANSPORTATION PLANNING AND SIGNAL SYSTEMS/DESIGN
 1300 GREENBROOK, HANOVER PARK, IL 60133 PH# 630 213-1000

| REVISIONS | | |
|-----------|------|-------------|
| NO. | DATE | DESCRIPTION |
| | | |
| | | |

CABLE PLAN, PHASE DESIGNATION DIAGRAM AND SCHEDULE OF QUANTITIES

FABYAN PKWY (C.H. 8) @ BENT TREE DR
 BATAVIA, ILLINOIS

| | |
|-----------------------|--------------|
| FILE NAME: 08_cp.dgn | SHEET NO.: 8 |
| DATE: AUG 27, 2002 | OF 15 |
| PROJECT NO.: H0112-17 | |

PROFILE SURVEYED, PLOTTED, CHECKED, RECORDED, BY: DATE: PLAN SURVEYED, PLOTTED, CHECKED, RECORDED, BY: DATE:

CHRISTOPHER B. BURKE ENGINEERING LTD.
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