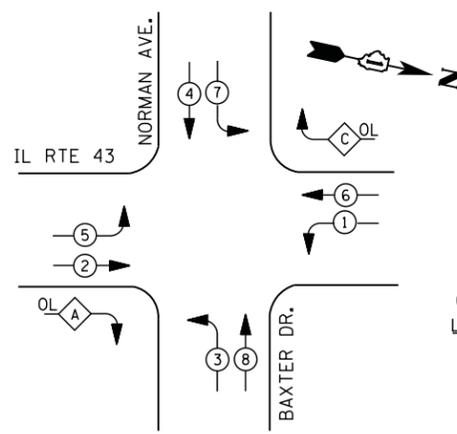
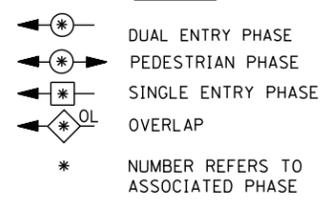


CONTROLLER SEQUENCE



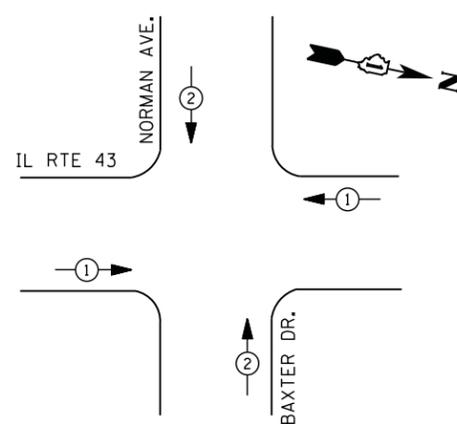
LEGEND



RIGHT TURN OVERLAP PHASE DESIGNATION

| OVERLAP LETTER | PERMISSIVE PHASE | PROTECTED PHASE | DISPLAY PHASE |
|----------------|------------------|-----------------|---------------|
| A = | 2 + | 3 - | 2 |
| C = | 6 + | 7 - | 6 |

PHASE DESIGNATION DIAGRAM



- ① REPLACE 14 FT. PAINTED POST. RE-USE EXISTING TYPE A CONCRETE FOUNDATION.
- ② REPLACE 15 FT. PAINTED POST. RE-USE EXISTING TYPE A CONCRETE FOUNDATION.
- ③ REPLACE 16 FT. PAINTED POST. RE-USE EXISTING TYPE A CONCRETE FOUNDATION.
- ④ REPLACE 18 FT. PAINTED POST. RE-USE EXISTING TYPE A CONCRETE FOUNDATION.

EMERGENCY VEHICLE PREEMPTION SEQUENCE

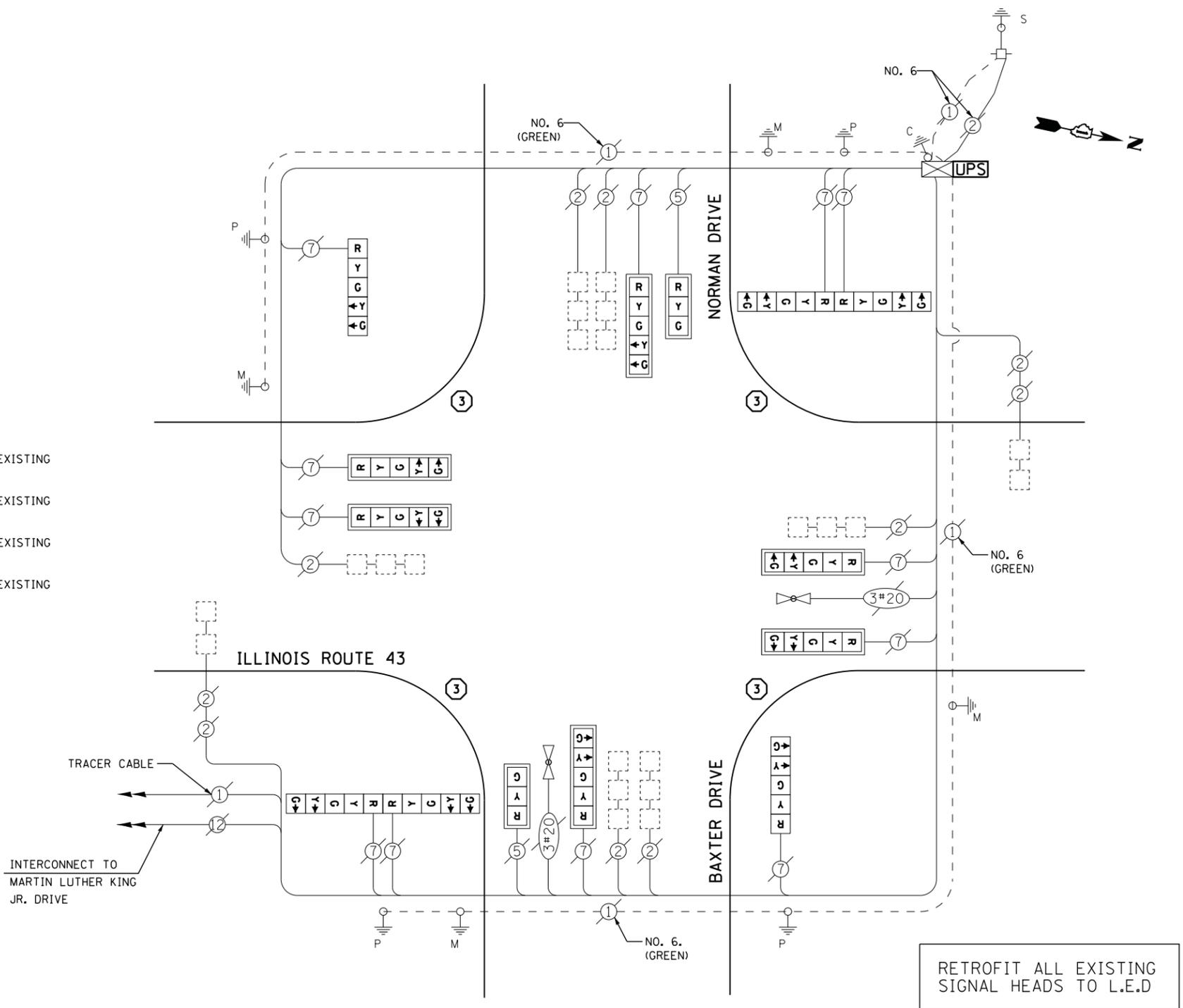
| EMERGENCY VEHICLE PREEMPTORS | | |
|------------------------------|-----|-----|
| EMERGENCY VEHICLE PREEMPTOR | 1 | 2 |
| MOVEMENT | ← → | ↑ ↓ |

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

| TYPE | NO. LAMPS | WATTAGE | | % OPERATIONS | TOTAL WATTAGE |
|----------------|-----------|---------|-----|--------------|---------------|
| | | INCAND. | LED | | |
| SIGNAL (RED) | 14 | 135 | 17 | 0.50 | 119 |
| (YELLOW) | 14 | 135 | 25 | 0.25 | 88 |
| (GREEN) | 14 | 135 | 15 | 0.25 | 53 |
| ARROW | 24 | 135 | 12 | 0.10 | 29 |
| PED. SIGNAL | -- | 90 | 25 | 1.00 | -- |
| CONTROLLER | 1 | 100 | 100 | 1.00 | 100 |
| ILLUM. SIGN | | 252 | 25 | 0.05 | -- |
| VIDEO SYSTEM | | 150 | - | 1.00 | -- |
| TOTAL = | | | | | 389 |

ENERGY COSTS- BILLED TO: CITY OF WAUKEGAN
 100 N. MARTIN LUTHER KING JR. AVE
 WAUKEGAN, IL 60085
 CONTACT TERRI BLECK
 PHONE 847-816-5239
 COMMONWEALTH EDISON

CABLE PLAN



RETROFIT ALL EXISTING SIGNAL HEADS TO L.E.D

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

SCHEDULE OF QUANTITIES

| QUANTITY | UNIT | ITEM |
|----------|------|---|
| 1 | EACH | MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION |
| 4 | EACH | TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT. |
| 6 | EACH | RELOCATE EXISTING SIGNAL HEAD |
| 1 | EACH | MODIFY EXISTING CONTROLLER CABINET |
| 1 | EACH | REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT |
| 1 | EACH | UNINTERRUPTABLE POWER SUPPLY, SPECIAL |
| 2 | EACH | SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED, RETROFIT |
| 6 | EACH | SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED, RETROFIT |
| 2 | EACH | SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED, RETROFIT |
| 2 | EACH | SIGNAL HEAD, LED, 2-FACE, 5-SECTION, BRACKET MOUNTED RETROFIT |

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 SIGNAL POST