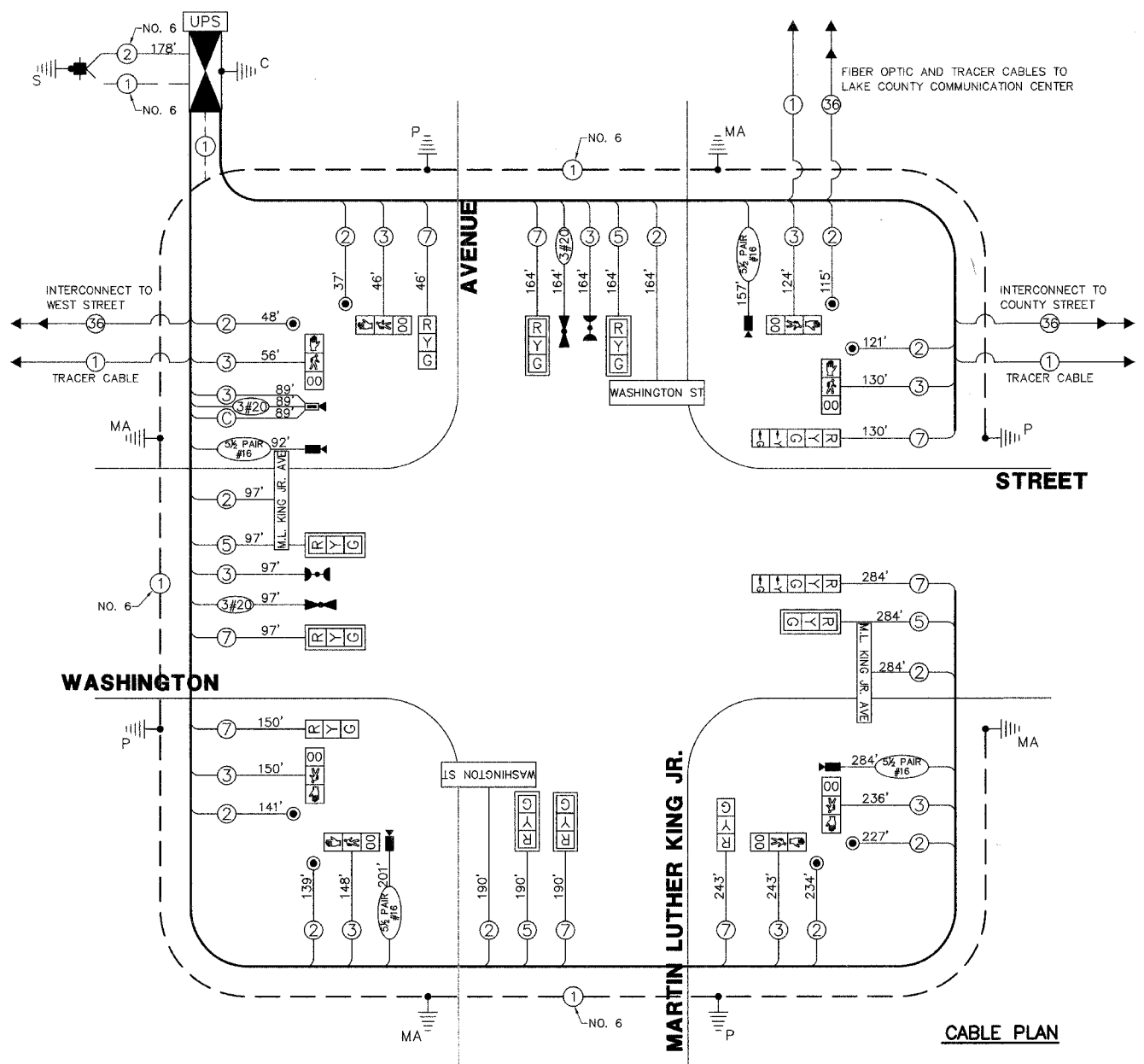


| F.A.U. R.T.E. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------------------|----------------|--------|--------------|-----------|
| 1223 | 04-00272-00-TL | LAKE | 72 | 39 |
| CABLE PLAN, PHASE DESIGNATION DIAGRAM | | | | |
| ILLINOIS | | | | |

SCHEDULE OF QUANTITIES

| QUANT. | UNIT | ITEM |
|------------------------------------|-------|---|
| ROADWAY IMPROVEMENTS | | |
| 1. | 2,250 | SQ.FT. PORTLAND CEMENT CONCRETE SIDEWALK, 5" |
| 2. | 96 | SQ.FT. DETECTABLE WARNING |
| 3. | 250 | FOOT COMBINATION CURB & GUTTER REMOVAL |
| 4. | 2,250 | SQ.FT. SIDEWALK REMOVAL |
| 5. | 3 | EACH FRAME AND LIDS, TYPE 1, OPEN LID |
| 6. | 250 | FOOT COMBINATION CURB & GUTTER, TYPE B6.12 |
| 7. | 450 | FOOT THERMOPLASTIC PAVEMENT MARKING-LINE 12" |
| 8. | 30 | FOOT THERMOPLASTIC PAVEMENT MARKING-LINE 24" |
| 9. | 300 | SQ.FT. PAVEMENT MARKING REMOVAL |
| TRAFFIC SIGNAL IMPROVEMENTS | | |
| 10. | 34 | FOOT CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL |
| 11. | 33 | FOOT CONDUIT IN TRENCH, 3" DIA., GALVANIZED STEEL |
| 12. | 10 | FOOT CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL |
| 13. | 197 | FOOT CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL |
| 14. | 249 | FOOT CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL |
| 15. | 3 | EACH HANDHOLE |
| 16. | 2 | EACH DOUBLE HANDHOLE |
| 17. | 22 | FOOT TRENCH AND BACKFILL FOR ELECTRICAL WORK |
| 18. | 1 | EACH FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, (SPECIAL) |
| 19. | 1 | EACH TRANSCEIVER - FIBER OPTIC |
| 20. | 1,897 | FOOT ELECTRIC CABLE IN CONDUIT, SIGNAL NO.14 2C |
| 21. | 1,389 | FOOT ELECTRIC CABLE IN CONDUIT, SIGNAL NO.14 3C |
| 22. | 735 | FOOT ELECTRIC CABLE IN CONDUIT, SIGNAL NO.14 5C |
| 23. | 1,304 | FOOT ELECTRIC CABLE IN CONDUIT, SIGNAL NO.14 7C |
| 24. | 178 | FOOT ELECTRIC CABLE IN CONDUIT, SERVICE, NO.6 2C |
| 25. | 1 | EACH STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 34 FT. (SPECIAL) |
| 26. | 2 | EACH STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 36 FT. (SPECIAL) |
| 27. | 1 | EACH STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 38 FT. (SPECIAL) |
| 28. | 16 | FOOT CONCRETE FOUNDATION, TYPE A |
| 29. | 4 | FOOT CONCRETE FOUNDATION, TYPE C |
| 30. | 60 | FOOT CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER |
| 31. | 1 | EACH DRILL EXISTING HANDHOLE |
| 32. | 8 | EACH TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINIUM |
| 33. | 2 | EACH LIGHT DETECTOR |
| 34. | 1 | EACH LIGHT DETECTOR AMPLIFIER |
| 35. | 8 | EACH PEDESTRIAN PUSH-BUTTON |
| 36. | 1 | EACH TEMPORARY TRAFFIC SIGNAL INSTALLATION |
| 37. | 1 | EACH REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT |
| 38. | 10 | EACH REMOVE EXISTING HANDHOLE |
| 39. | 5 | EACH REMOVE EXISTING CONCRETE FOUNDATION |
| 40. | 8 | EACH PEDESTRIAN SIGNAL HEAD, L.E.D., 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER |
| 41. | 4 | EACH L.E.D. INTERNALLY ILLUMINATED STREET NAME SIGN |
| 42. | 1 | EACH VIDEO DETECTION SYSTEM, (COMPLETE INTERSECTION) |
| 43. | 1 | EACH REMOTE-CONTROLLED VIDEO SYSTEM |
| 44. | 737 | FOOT ELECTRIC CABLE IN CONDUIT, COMMUNICATION NO. 16, 5 1/2 PAIR |
| 45. | 4 | EACH TRAFFIC SIGNAL POST, 16 FT. (SPECIAL) |
| 46. | 1 | EACH LAYER II (DATA LINK) SWITCH |
| 47. | 1 | EACH UNINTERRUPTIBLE POWER SUPPLY |
| 48. | 556 | FOOT ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C |
| 49. | 369 | FOOT ELECTRIC CABLE IN CONDUIT, NO. 20 3C, TWISTED, SHIELDED |
| 50. | 3 | EACH SIGNAL HEAD, L.E.D., 1-FACE, 3-SECTION, BRACKET MOUNTED |
| 51. | 7 | EACH SIGNAL HEAD, L.E.D., 1-FACE, 3-SECTION, MAST ARM MOUNTED |
| 52. | 1 | EACH SIGNAL HEAD, L.E.D., 1-FACE, 5-SECTION, BRACKET MOUNTED |
| 53. | 1 | EACH SIGNAL HEAD, L.E.D., 1-FACE, 5-SECTION, MAST ARM MOUNTED |
| 54. | 89 | FOOT ELECTRIC CABLE IN CONDUIT, COAXIAL |
| 55. | 1 | EACH SERVICE INSTALLATION, POLE MOUNT |



CABLE PLAN LEGEND

| EXISTING | PROPOSED | DESCRIPTION |
|----------|----------|---|
| [Symbol] | [Symbol] | 12" TRAFFIC SIGNAL SECTION |
| [Symbol] | [Symbol] | 12" PEDESTRIAN SIGNAL SECTION |
| [Symbol] | [Symbol] | CONTROLLER CABINET |
| [Symbol] | [Symbol] | SERVICE INSTALLATION |
| [Symbol] | [Symbol] | TELEPHONE INSTALLATION |
| [Symbol] | [Symbol] | VEHICLE DETECTOR, INDUCTION LOOP |
| [Symbol] | [Symbol] | EMERGENCY VEHICLE LIGHT DETECTOR |
| [Symbol] | [Symbol] | CONFIRMATION BEACON |
| [Symbol] | [Symbol] | PUSHBUTTON DETECTOR |
| [Symbol] | [Symbol] | 2 DENOTES NUMBER OF CONDUCTORS. ALL CABLE NO. 14 EXCEPT AS INDICATED. ALL LOOP DETECTOR CABLE TO BE SHIELDED. |
| [Symbol] | [Symbol] | 1 GROUND CABLE IN CONDUIT, NO.6 SOLID COPPER (GREEN) |
| [Symbol] | [Symbol] | 56 FIBER OPTIC CABLE IN CONDUIT NO. 62.5/125 MM12F SM24F |
| [Symbol] | [Symbol] | SIGNAL FACE WITH BACKPLATE. "P" INDICATES PROGRAMMED HEAD |
| [Symbol] | [Symbol] | RAILROAD CONTROL CABINET |
| [Symbol] | [Symbol] | ILLUMINATED SIGN "NO LEFT TURN" |
| [Symbol] | [Symbol] | ILLUMINATED SIGN "NO RIGHT TURN" |
| [Symbol] | [Symbol] | GROUND ROD AT HANDHOLE (H), DOUBLE HANDHOLE (H) OR CONTROLLER (C) |
| [Symbol] | [Symbol] | GROUND ROD AT POST (P) OR MAST ARM POLE (MA) |
| [Symbol] | [Symbol] | GROUND ROD AT ELECTRIC SERVICE INSTALLATION |
| [Symbol] | [Symbol] | BELDEN B281 COAXIAL CABLE |
| [Symbol] | [Symbol] | ISDN LINE |
| [Symbol] | [Symbol] | LUMINAIRE |
| [Symbol] | [Symbol] | VIDEO DETECTION CAMERA |
| [Symbol] | [Symbol] | PTZ CAMERA |
| [Symbol] | [Symbol] | VIDEO COMMUNICATIONS CABINET |
| [Symbol] | [Symbol] | L.E.D. STREET NAME SIGN |
| [Symbol] | [Symbol] | UNINTERRUPTIBLE POWER SUPPLY |

L.C.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS

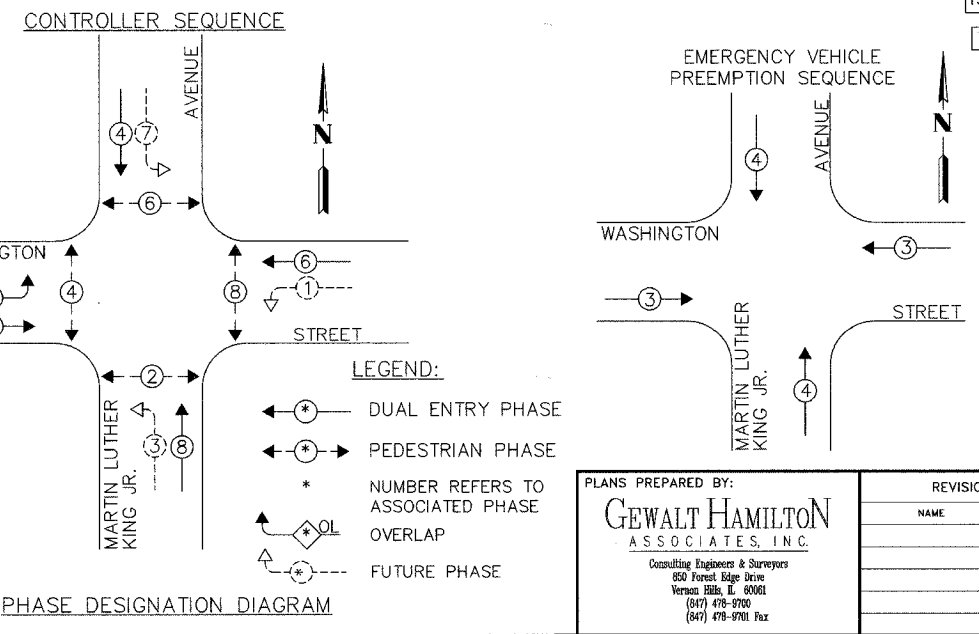
| TYPE | NO LAMPS | WATTAGE | % OPERATION | TOTAL WATTAGE |
|----------------------|----------|----------------|-------------|---------------|
| | | INCAND. L.E.D. | | |
| SIGNAL (RED) | 12 | 135 | 10 | 60.0 |
| SIGNAL (YELLOW) | 12 | 135 | 19 | 22.8 |
| SIGNAL (GREEN) | 12 | 135 | 11 | 52.8 |
| ARROW | 4 | 135 | 9 | 3.6 |
| PED.SIGNAL | 8 | 90 | 9 | 72.0 |
| CONTROLLER | 1 | - | 100 | 100.0 |
| LUMINAIRE | 4 | - | 250 | 500.0 |
| L.E.D. ST. NAME SIGN | 4 | - | 64 | 128.0 |
| VIDEO SYSTEM | 1 | - | 150 | 150.0 |
| BATTERY BACKUP | 1 | - | 25 | 25.0 |
| TOTAL = | | | | 1117.8 |

ENERGY COSTS - BILLED TO: CITY OF WAUKEGAN
 (ADDRESS) 100 N. M.L.K. JR. AVENUE
 (ADDRESS) WAUKEGAN, IL

ENERGY SUPPLY - CONTACT: MS. ALICE TAYLOR
 PHONE: (847) 816-5323
 COMPANY: COMED - LIBERTYVILLE

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "NTCIP" COMPLIANT.

| FOUNDATION (DEPTH) | (FT.) | CABLE SLACK | (FT.) | VERTICAL | (FT.) |
|---------------------|-------|------------------|-------|-------------------|----------|
| TYPE A - POST | 4 | HANDHOLE | 6.5 | ALL FOUNDATIONS | 3.5 |
| TYPE D - CONTROLLER | 4 | DOUBLE HANDHOLE | 13 | MAST ARM (L) POLE | 20'+L-2' |
| TYPE E - M.ARM POLE | 15 | SIGNAL POST | 2 | BRACKET MOUNTED | 13 |
| | | CONTROLLER CAB. | 1 | PED. PUSHBUTTON | 4 |
| | | FIBER OPTIC | 13 | ELECTRIC SERVICE | 13.5 |
| | | ELECTRIC SERVICE | 1 | SERVICE TO GROUND | 13.5 |
| | | GROUND CABLE | 1 | POST MOUNTED | 6 |



PLANS PREPARED BY:
GEWALT HAMILTON ASSOCIATES, INC.
 Consulting Engineers & Surveyors
 850 Forest Edge Drive
 Vernon Hills, IL 60061
 (817) 478-9760
 (817) 478-9700 Fax

REVISIONS

| NAME | DATE |
|------|------|
| | |
| | |
| | |

PROPOSED EMERGENCY VEHICLE PREEMPTORS

| EMERGENCY VEHICLE PREEMPTOR | 3 | 4 |
|-----------------------------|---|---|
| MOVEMENT | — | |

LAKE COUNTY DIVISION OF TRANSPORTATION
CABLE PLAN, PHASE DESIGNATION DIAGRAM AND SCHEDULE OF QUANTITIES
WASHINGTON STREET AND MARTIN LUTHER KING JR. AVENUE
 SCALE: NONE
 DATE: MAY 1, 2007
 DRAWN BY: ZCW
 DESIGNED BY: JRD
 CHECKED BY: BLS