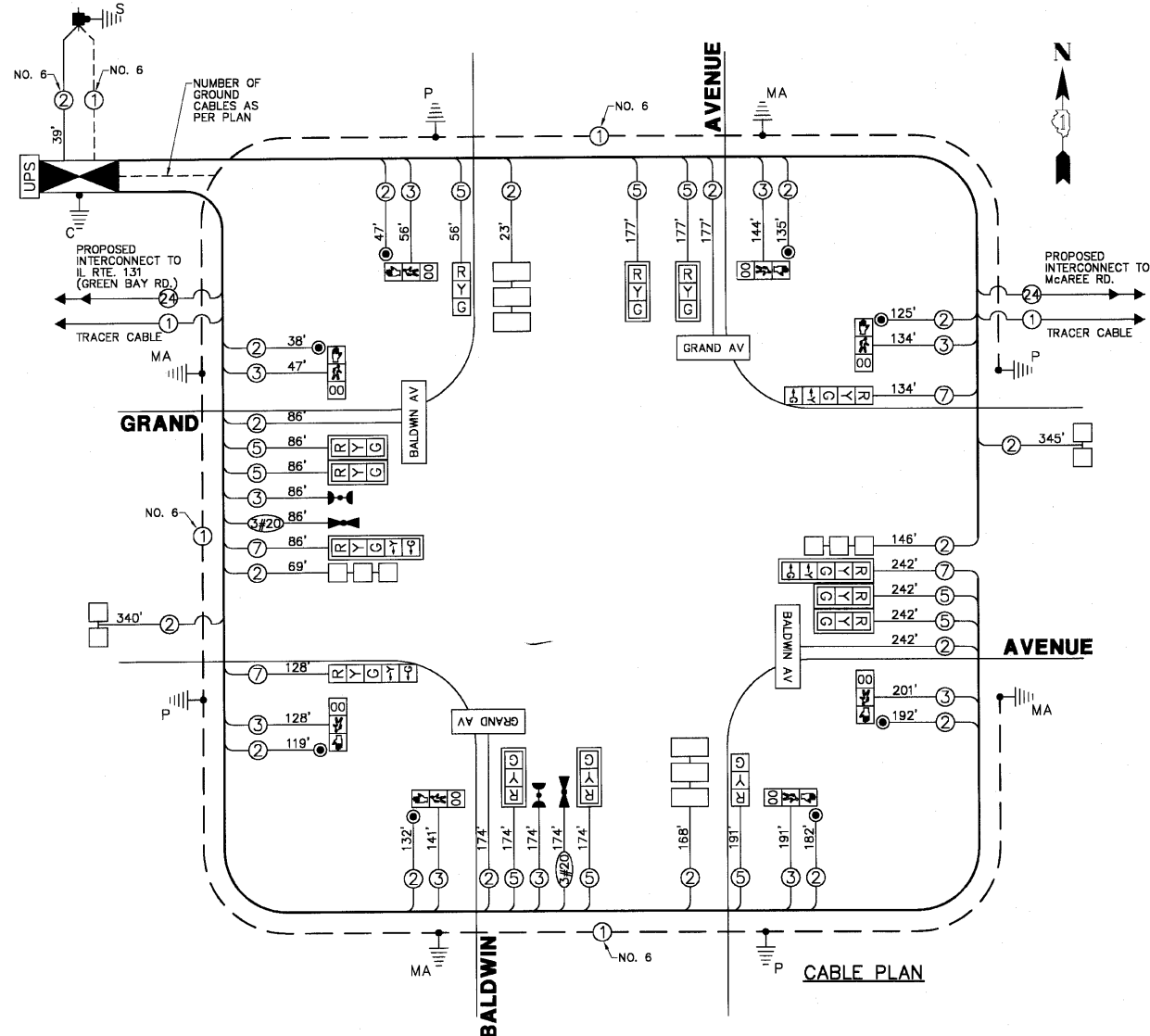
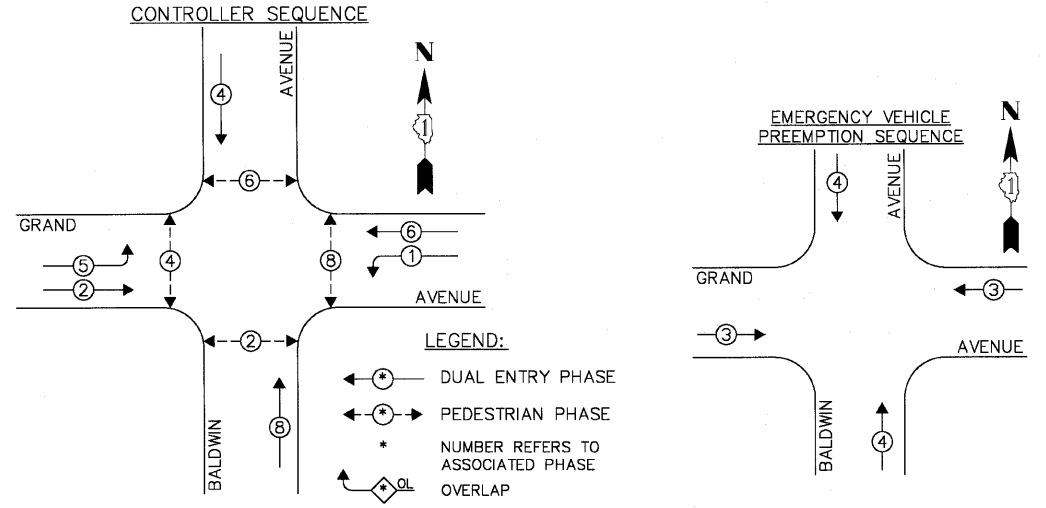


SCHEDULE OF QUANTITIES
GRAND AVENUE AT BALDWIN AVENUE TRAFFIC SIGNAL MODERNIZATION

| NO. | QUANT. | UNIT | DESCRIPTION |
|-----|--------|-------|---|
| 1. | 12 | CU YD | EARTH EXCAVATION |
| 2. | 40 | SQ YD | AGGREGATE BASE COURSE, TYPE B 4" |
| 3. | 1,300 | SQ FT | PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH |
| 4. | 130 | SQ FT | DETECTABLE WARNINGS |
| 5. | 155 | FOOT | COMBINATION CURB AND GUTTER REMOVAL |
| 6. | 925 | SQ FT | SIDEWALK REMOVAL |
| 7. | 155 | FOOT | COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12 |
| 8. | 73 | SQ FT | THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS |
| 9. | 1,740 | FOOT | THERMOPLASTIC PAVEMENT MARKING - LINE 4" |
| 10. | 580 | FOOT | THERMOPLASTIC PAVEMENT MARKING - LINE 6" |
| 11. | 210 | FOOT | THERMOPLASTIC PAVEMENT MARKING - LINE 12" |
| 12. | 75 | FOOT | THERMOPLASTIC PAVEMENT MARKING - LINE 24" |
| 13. | 550 | SQ FT | PAVEMENT MARKING REMOVAL |
| 14. | 290 | FOOT | CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL |
| 15. | 37 | FOOT | CONDUIT IN TRENCH, 2-1/2" DIA., GALVANIZED STEEL |
| 16. | 61 | FOOT | CONDUIT IN TRENCH, 3" DIA., GALVANIZED STEEL |
| 17. | 25 | FOOT | CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL |
| 18. | 277 | FOOT | CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL |
| 19. | 276 | FOOT | CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL |
| 20. | 4 | EACH | HANDHOLE |
| 21. | 2 | EACH | HEAVY-DUTY HANDHOLE |
| 22. | 2 | EACH | DOUBLE HANDHOLE |
| 23. | 373 | FOOT | TRENCH AND BACKFILL FOR ELECTRICAL WORK |
| 24. | 1 | EACH | FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL |
| 25. | 1,649 | FOOT | ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C |
| 26. | 1,302 | FOOT | ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C |
| 27. | 1,605 | FOOT | ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C |
| 28. | 590 | FOOT | ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C |
| 29. | 1,091 | FOOT | ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR |
| 30. | 39 | FOOT | ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C |
| 31. | 2 | EACH | STEEL MAST ARM ASSEMBLY AND POLE 26 FT. (SPECIAL) |
| 32. | 1 | EACH | STEEL MAST ARM ASSEMBLY AND POLE 32 FT. (SPECIAL) |
| 33. | 1 | EACH | STEEL MAST ARM ASSEMBLY AND POLE 34 FT. (SPECIAL) |
| 34. | 16 | FOOT | CONCRETE FOUNDATION, TYPE A |
| 35. | 4 | FOOT | CONCRETE FOUNDATION, TYPE C |
| 36. | 30 | FOOT | CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER |
| 37. | 30 | FOOT | CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER |
| 38. | 8 | EACH | SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED |
| 39. | 2 | EACH | SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED |
| 40. | 2 | EACH | SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED |
| 41. | 2 | EACH | SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED |
| 42. | 8 | EACH | PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER |
| 43. | 10 | EACH | TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINIUM |
| 44. | 6 | EACH | INDUCTIVE LOOP DETECTOR |
| 45. | 560 | FOOT | DETECTOR LOOP, TYPE 1 |
| 46. | 2 | EACH | LIGHT DETECTOR |
| 47. | 1 | EACH | LIGHT DETECTOR AMPLIFIER |
| 48. | 8 | EACH | PEDESTRIAN PUSH-BUTTON |
| 49. | 1 | EACH | TEMPORARY TRAFFIC SIGNAL INSTALLATION |
| 50. | 1 | EACH | REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT |
| 51. | 6 | EACH | REMOVE EXISTING HANDHOLE |
| 52. | 9 | EACH | REMOVE EXISTING CONCRETE FOUNDATION |
| 53. | 1 | EACH | MEDIA CONVERTER |
| 54. | 1 | EACH | TEMPORARY TRAFFIC SIGNAL TIMINGS |
| 55. | 1 | EACH | SERVICE INSTALLATION POLE MOUNT |
| 56. | 1 | EACH | UNINTERRUPTIBLE POWER SUPPLY |
| 57. | 417 | FOOT | ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C |
| 58. | 260 | FOOT | ELECTRIC CABLE IN CONDUIT NO. 20 3/C, TWISTED, SHIELDED |
| 59. | 2 | EACH | TRAFFIC SIGNAL POST, 14 FOOT (SPECIAL) |
| 60. | 2 | EACH | TRAFFIC SIGNAL POST, 16 FOOT (SPECIAL) |
| 61. | 4 | EACH | LED INTERNALLY ILLUMINATED STREET NAME SIGN |



PHASE DESIGNATION DIAGRAM



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

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

| L.C.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS | | | | TOTAL WATTAGE |
|--|----------|------------------------|-------------|---------------|
| TYPE | NO LAMPS | WATTAGE INCAND. L.E.D. | % OPERATION | |
| SIGNAL (RED) | 14 | 135 | 10 | 70.0 |
| SIGNAL (YELLOW) | 14 | 135 | 19 | 26.6 |
| SIGNAL (GREEN) | 14 | 135 | 11 | 61.6 |
| ARROW | 8 | 135 | 9 | 7.2 |
| PED. SIGNAL | 8 | 90 | 9 | 72.0 |
| CONTROLLER | 1 | - | 100 | 100.0 |
| LUMINAIRE | - | - | 250 | 0.50 |
| L.E.D. ST. NAME SIGN | 4 | - | 64 | 128.0 |
| VIDEO SYSTEM | - | - | 150 | 1.00 |
| BATTERY BACKUP | 1 | - | 25 | 25.0 |
| TOTAL = | | | | 490.4 |

| 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'-1'-2" |
| TYPE E - MAST POLE | 15 | SIGNAL POST | 2 | BRACKET MOUNTED | 13 |
| | | CONTROLLER CAB. | 1 | PEDESTRIAN MOUNTED | 4 |
| | | FIBER OPTIC | 13 | ELECTRIC SERVICE | 13.5 |
| | | ELECTRIC SERVICE | 1 | SERVICE TO GROUND | 13.5 |
| | | GROUND CABLE | 1 | POST MOUNTED | 6 |

ENERGY COSTS - BILLED TO: CITY OF WAUKEGAN
(ADDRESS) 700 N. M.L.K. JR. AVENUE
(ADDRESS) WAUKEGAN, IL
ENERGY SUPPLY - CONTACT: GERRY GRANDBERRY
PHONE: (847) 816-5463
COMPANY: COM-ED, LIBERTYVILLE

FILE NAME = 4136.800-TR2.dwg
USER NAME = GHA
DESIGNED - JRD
DRAWN - ZCW
CHECKED - DPB
PLOT SCALE = 1" = .0833"
PLOT DATE = 3/10/10

REVISED -
REVISED -
REVISED -
DATE - 3/10/10



CABLE PLAN, PHASE DESIGNATION DIAGRAM AND SCHEDULE OF QUANTITIES GRAND AVENUE AT BALDWIN AVENUE

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

| F.A.P. R.T.E. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|----------------|--------|--------------|-----------|
| 541 | 08-00279-00-TL | LAKE | 64 | 16 |
| CONTRACT #: 63436 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

GHA #4136.800