

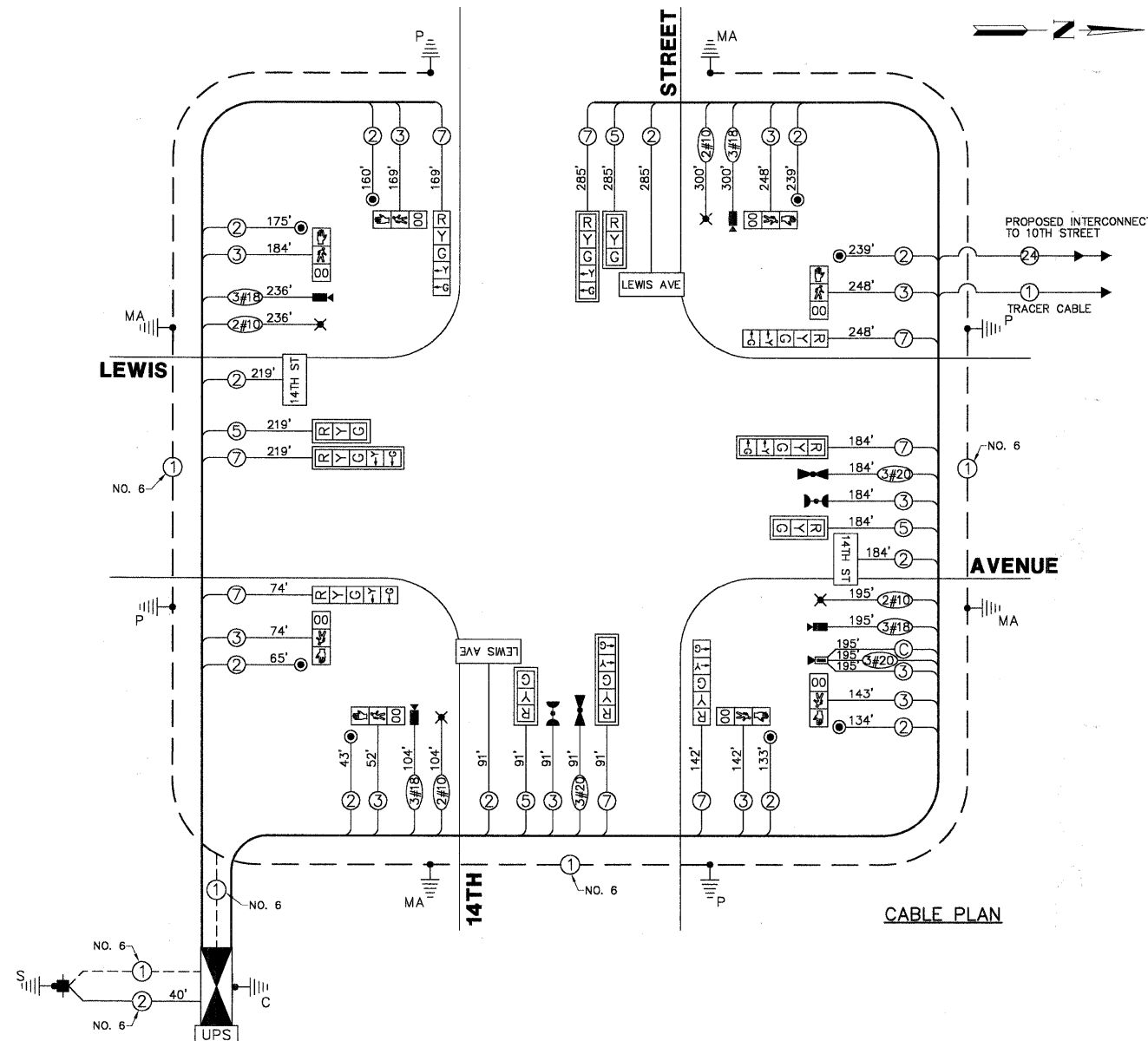
SCHEDULE OF QUANTITIES

LEWIS AVENUE AT 14TH STREET TRAFFIC SIGNAL MODERNIZATION

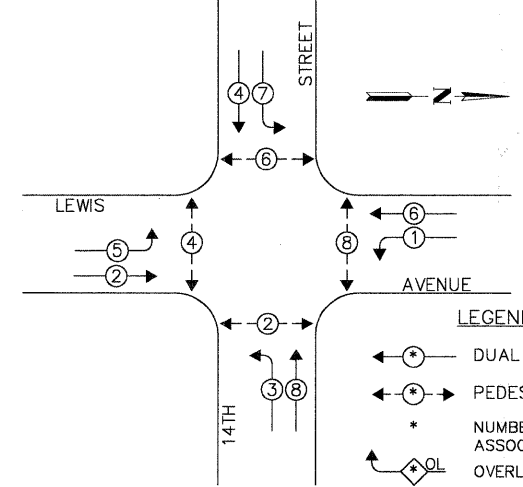
| NO. | QUANT. | UNIT |
|-----|--------|---|
| 1. | 20 | CU.YD. EARTH EXCAVATION |
| 2. | 75 | SQ.YD. AGGREGATE BASE COURSE, TYPE B, 4" |
| 3. | 1,245 | SQ.FT. PORTLAND CEMENT CONCRETE SIDEWALK, 5" |
| 4. | 96 | SQ.FT. DETECTABLE WARNINGS |
| 5. | 200 | FOOT COMBINATION CURB AND GUTTER REMOVAL |
| 6. | 625 | SQ.FT. SIDEWALK REMOVAL |
| 7. | 2 | EACH FRAMES AND LIDS TO BE ADJUSTED |
| 8. | 20 | FOOT COMBINATION CONCRETE CURB AND GUTTER, TYPE B6.12 |
| 9. | 180 | FOOT COMBINATION CONCRETE CURB AND GUTTER, TYPE B6.24 |
| 10. | 505 | FOOT THERMOPLASTIC PAVEMENT MARKING - LINE 12" |
| 11. | 150 | FOOT THERMOPLASTIC PAVEMENT MARKING - LINE 24" |
| 12. | 300 | SQ.FT. PAVEMENT MARKING REMOVAL |
| 13. | 18 | FOOT CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL |
| 14. | 58 | FOOT CONDUIT IN TRENCH, 2-1/2" DIA., GALVANIZED STEEL |
| 15. | 52 | FOOT CONDUIT IN TRENCH, 3-1/2" DIA., GALVANIZED STEEL |
| 16. | 10 | FOOT CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL |
| 17. | 212 | FOOT CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL |
| 18. | 83 | FOOT CONDUIT PUSHED, 5" DIA., GALVANIZED STEEL |
| 19. | 2 | EACH HANDHOLE |
| 20. | 2 | EACH DOUBLE HANDHOLE |
| 21. | 835 | FOOT ELECTRIC CABLE IN CONDUIT, 600 (EPR-TYPE RHW) 2-1/C NO. 10 |
| 22. | 120 | FOOT TRENCH AND BACKFILL FOR ELECTRICAL WORK |
| 23. | 4 | EACH LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, PHOTO-CELL CONTROL 250 WATT |
| 24. | 1 | EACH FULL-ACTUATED CONTROLLER AND TYPE IV CABINET (SPECIAL) |
| 25. | 1 | EACH TRANSCEIVER - FIBER OPTIC |
| 26. | 1,967 | FOOT ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C |
| 27. | 1,730 | FOOT ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C |
| 28. | 779 | FOOT ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C |
| 29. | 1,412 | FOOT ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C |
| 30. | 40 | FOOT ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C |
| 31. | 1 | EACH STEEL COMBINATION MAST ARM ASSEMBLY AND POLE, 28 FT (SPECIAL) |
| 32. | 1 | EACH STEEL COMBINATION MAST ARM ASSEMBLY AND POLE, 30 FT (SPECIAL) |
| 33. | 1 | EACH STEEL COMBINATION MAST ARM ASSEMBLY AND POLE, 32 FT (SPECIAL) |
| 34. | 1 | EACH STEEL COMBINATION MAST ARM ASSEMBLY AND POLE, 34 FT (SPECIAL) |
| 35. | 16 | FOOT CONCRETE FOUNDATION, TYPE A |
| 36. | 4 | FOOT CONCRETE FOUNDATION, TYPE C |
| 37. | 60 | FOOT CONCRETE FOUNDATION, TYPE E, 36-INCH DIAMETER |
| 38. | 4 | EACH SIGNAL HEAD, L.E.D., 1-FACE, 3-SECTION, MAST ARM MOUNTED |
| 39. | 4 | EACH SIGNAL HEAD, L.E.D., 1-FACE, 5-SECTION, BRACKET MOUNTED |
| 40. | 4 | EACH SIGNAL HEAD, L.E.D., 1-FACE, 5-SECTION, MAST ARM MOUNTED |
| 41. | 8 | EACH PEDESTRIAN COUNTDOWN SIGNAL HEAD, L.E.D., 1-FACE, BRACKET MOUNTED |
| 42. | 8 | EACH TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINIUM |
| 43. | 2 | EACH LIGHT DETECTOR |
| 44. | 1 | EACH LIGHT DETECTOR AMPLIFIER |
| 45. | 8 | EACH PEDESTRIAN PUSH-BUTTON |
| 46. | 1 | EACH TEMPORARY TRAFFIC SIGNAL INSTALLATION |
| 47. | 1 | EACH REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT |
| 48. | 8 | EACH REMOVE EXISTING HANDHOLE |
| 49. | 9 | EACH REMOVE EXISTING CONCRETE FOUNDATION |
| 50. | 1 | EACH SERVICE INSTALLATION, POLE MOUNT |
| 51. | 517 | FOOT ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C |
| 52. | 470 | FOOT ELECTRIC CABLE IN CONDUIT, NO. 20 3C, TWISTED, GROUNDED |
| 53. | 195 | FOOT ELECTRIC CABLE IN CONDUIT, COAXIAL |
| 54. | 835 | FOOT ELECTRIC CABLE IN CONDUIT, COMMUNICATION NO. 18, 3C |
| 55. | 1 | EACH VIDEO DETECTION SYSTEM (COMPLETE INTERSECTION) |
| 56. | 4 | EACH L.E.D. INTERNALLY ILLUMINATED STREET NAME SIGN |
| 57. | 4 | EACH TRAFFIC SIGNAL POST, 16 FT (SPECIAL) |
| 58. | 1 | EACH REMOTE-CONTROLLED VIDEO SYSTEM |
| 59. | 1 | EACH UNINTERRUPTIBLE POWER SUPPLY |
| 60. | 1 | EACH VIDEO ENCODER |

CABLE PLAN LEGEND

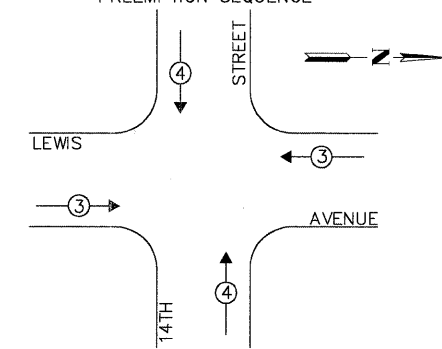
| EXISTING | PROPOSED | DESCRIPTION |
|----------|----------|--|
| | | 12" TRAFFIC SIGNAL SECTION 12" PEDESTRIAN SIGNAL SECTION WITH COUNTDOWN TIMER |
| | | CONTROLLER CABINET SERVICE INSTALLATION |
| | | TELEPHONE INSTALLATION VEHICLE DETECTOR, INDUCTION LOOP |
| | | EMERGENCY VEHICLE LIGHT DETECTOR CONFIRMATION BEACON |
| | | PUSHBUTTON DETECTOR GROUND CABLE IN CONDUIT, NO. 6 SOLID COPPER (GREEN) |
| | | FIBER OPTIC CABLE IN CONDUIT, 24 SINGLEMODE SIGNAL FACE WITH BACKPLATE. "P" INDICATES PROGRAMMED HEAD |
| | | RAILROAD CONTROL CABINET ILLUMINATED SIGN "NO LEFT TURN" |
| | | ILLUMINATED SIGN "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 |
| | | BELDEN 1694A RG-6/4 COAXIAL CABLE ISDN LINE |
| | | LUMINAIRE VIDEO DETECTION CAMERA |
| | | PTZ CAMERA VIDEO COMMUNICATIONS CABINET |
| | | L.E.D. STREET NAME SIGN UNINTERRUPTIBLE POWER SUPPLY |



CONTROLLER SEQUENCE



EMERGENCY VEHICLE PREEMPTION SEQUENCE



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

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE 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'+1'-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 13.5 | SERVICE TO GROUND 13.5 |
| | GROUND CABLE 1 | POST MOUNTED 6 |

| L.C.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS | | | | | TOTAL WATTAGE |
|--|----------|------------------------|-------------|------|---------------|
| TYPE | NO LAMPS | WATTAGE INCAND. L.E.D. | % OPERATION | | |
| SIGNAL (RED) | 12 | 135 | 10 | 0.50 | 60.0 |
| SIGNAL (YELLOW) | 12 | 135 | 19 | 0.10 | 22.8 |
| SIGNAL (GREEN) | 12 | 135 | 11 | 0.40 | 52.8 |
| ARROW | 16 | 135 | 9 | 0.10 | 14.4 |
| PED.SIGNAL | 8 | 90 | 9 | 1.00 | 72.0 |
| CONTROLLER | 1 | - | 100 | 1.00 | 100.0 |
| LUMINAIRE | 4 | - | 250 | 0.50 | 500.0 |
| L.E.D. ST. NAME SIGN | 4 | - | 64 | 0.50 | 128.0 |
| VIDEO SYSTEM | 1 | - | 150 | 1.00 | 150.0 |
| BATTERY BACKUP | 1 | - | 25 | 1.00 | 25.0 |
| TOTAL = | | | | | 1,125.0 |

ENERGY COSTS - BILLED TO: CITY OF WAUKEGAN (ADDRESS) 100 N. M.L.K. JR. AVENUE (ADDRESS) WAUKEGAN, IL
ENERGY SUPPLY - CONTACT: NEW BUSINESS PHONE: (886) 639-3552 COMPANY: COM-ED, LIBERTYVILLE

| | | | |
|------------------------------|-----------------|-----------------|----------------------------|
| FILE NAME = 4135.315-TR1.dwg | USER NAME = GHA | DESIGNED - JRD | REVISED - 9/15/09 (LCDOT) |
| | | DRAWN - ZCW | REVISED - 9/25/09 (IDOT) |
| | | CHECKED - DPB | REVISED - 10/19/09 (LCDOT) |
| | | DATE - 10/19/09 | REVISED - |



CABLE PLAN, PHASE DESIGNATION DIAGRAM AND SCHEDULE OF QUANTITIES
LEWIS AVENUE AT 14TH STREET
SCALE: NONE SHEET NO. 7 OF 86 SHEETS STA. TO STA.

| | | | | |
|---------------------------|------------------------|-------------|-----------------|----------------|
| F.A.P. RTE. 2730 | SECTION 08-00259-00-TL | COUNTY LAKE | TOTAL SHEETS 86 | SHEET NO. 7 |
| CONTRACT # 63344 | | | | GH A #4135.800 |
| ILLINOIS FED. AID PROJECT | | | | |