

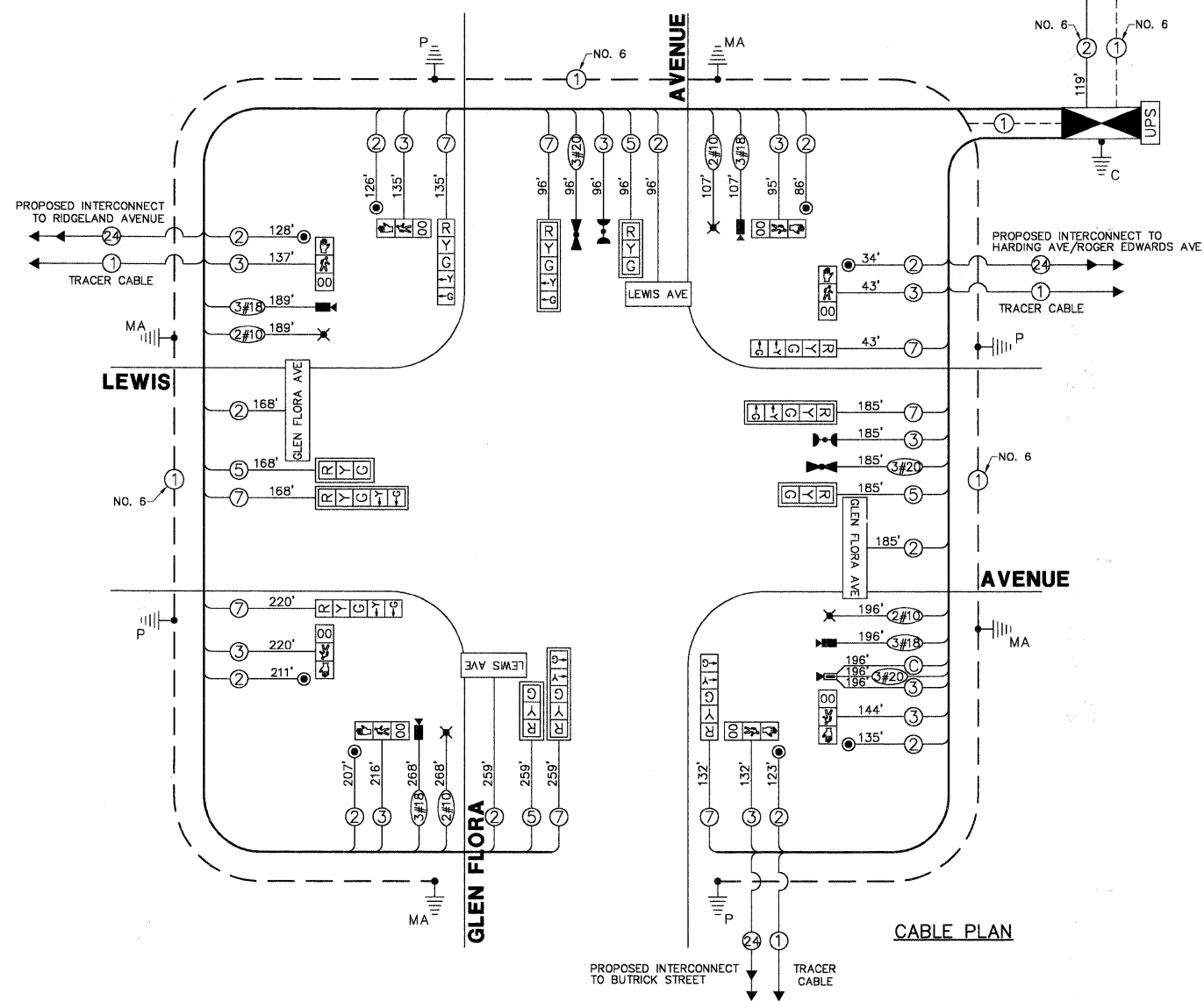
SCHEDULE OF QUANTITIES

LEWIS AVENUE AT GLEN FLORA AVENUE TRAFFIC SIGNAL MODERNIZATION

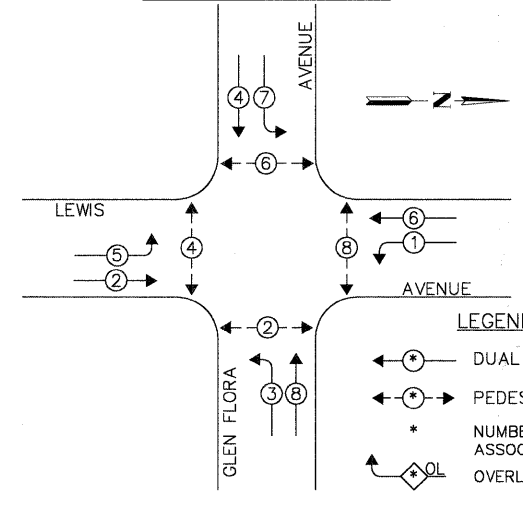
NO.	QUANT.	UNIT
1.	5	CU.YD. EARTH EXCAVATION
2.	15	SQ.YD. AGGREGATE BASE COURSE, TYPE B, 4"
3.	975	SQ.FT. PORTLAND CEMENT CONCRETE SIDEWALK, 5"
4.	96	SQ.FT. DETECTABLE WARNINGS
5.	165	FOOT COMBINATION CURB AND GUTTER REMOVAL
6.	775	SQ.FT. SIDEWALK REMOVAL
7.	3	EACH FRAMES AND LIDS TO BE ADJUSTED
8.	165	FOOT COMBINATION CONCRETE CURB AND GUTTER, TYPE B6.12
9.	420	FOOT THERMOPLASTIC PAVEMENT MARKING - LINE 12"
10.	120	FOOT THERMOPLASTIC PAVEMENT MARKING - LINE 24"
11.	465	SQ.FT. PAVEMENT MARKING REMOVAL
12.	97	FOOT CONDUIT IN TRENCH, 2" DIA, GALVANIZED STEEL
13.	31	FOOT CONDUIT IN TRENCH, 2-1/2" DIA, GALVANIZED STEEL
14.	48	FOOT CONDUIT IN TRENCH, 3-1/2" DIA, GALVANIZED STEEL
15.	10	FOOT CONDUIT IN TRENCH, 4" DIA, GALVANIZED STEEL
16.	157	FOOT CONDUIT PUSHED, 4" DIA, GALVANIZED STEEL
17.	73	FOOT CONDUIT PUSHED, 5" DIA, GALVANIZED STEEL
18.	2	EACH HANDHOLE
19.	2	EACH DOUBLE HANDHOLE
20.	760	FOOT ELECTRIC CABLE IN CONDUIT, 800 (EPR-TYPE RHW) 2-1/C NO. 10
21.	180	FOOT TRENCH AND BACKFILL FOR ELECTRICAL WORK
22.	4	EACH LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, PHOTO-CELL CONTROL 250 WATT
23.	1	EACH FULL-ACTUATED CONTROLLER AND TYPE IV CABINET (SPECIAL)
24.	1	EACH TRANSCEIVER - FIBER OPTIC
25.	1,758	FOOT ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C
26.	1,599	FOOT ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C
27.	708	FOOT ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C
28.	1,238	FOOT ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C
29.	119	FOOT ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C
30.	1	EACH STEEL COMBINATION MAST ARM ASSEMBLY AND POLE, 24 FT (SPECIAL)
31.	1	EACH STEEL COMBINATION MAST ARM ASSEMBLY AND POLE, 32 FT (SPECIAL)
32.	2	EACH STEEL COMBINATION MAST ARM ASSEMBLY AND POLE, 34 FT (SPECIAL)
33.	16	FOOT CONCRETE FOUNDATION, TYPE A
34.	4	FOOT CONCRETE FOUNDATION, TYPE C
35.	60	FOOT CONCRETE FOUNDATION, TYPE E, 36-INCH DIAMETER
36.	4	EACH SIGNAL HEAD, L.E.D., 1-FACE, 3-SECTION, MAST ARM MOUNTED
37.	4	EACH SIGNAL HEAD, L.E.D., 1-FACE, 5-SECTION, BRACKET MOUNTED
38.	4	EACH SIGNAL HEAD, L.E.D., 1-FACE, 5-SECTION, MAST ARM MOUNTED
39.	8	EACH PEDESTRIAN COUNTDOWN SIGNAL HEAD, L.E.D., 1-FACE, BRACKET MOUNTED
40.	8	EACH TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINIUM
41.	2	EACH LIGHT DETECTOR
42.	1	EACH LIGHT DETECTOR AMPLIFIER
43.	8	EACH PEDESTRIAN PUSH-BUTTON
44.	1	EACH TEMPORARY TRAFFIC SIGNAL INSTALLATION
45.	1	EACH REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
46.	1	EACH SERVICE INSTALLATION, POLE MOUNT
47.	499	FOOT ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C
48.	477	FOOT ELECTRIC CABLE IN CONDUIT, NO. 20 3C, TWISTED, GROUNDED
49.	196	FOOT ELECTRIC CABLE IN CONDUIT, COAXIAL
50.	760	FOOT ELECTRIC CABLE IN CONDUIT, COMMUNICATION NO. 18, 3C
51.	1	EACH VIDEO DETECTION SYSTEM (COMPLETE INTERSECTION)
52.	4	EACH L.E.D. INTERNALLY ILLUMINATED STREET NAME SIGN
53.	4	EACH TRAFFIC SIGNAL POST, 16 FT (SPECIAL)
54.	1	EACH REMOTE CONTROLLED VIDEO SYSTEM
55.	1	EACH UNINTERRUPTIBLE POWER SUPPLY
56.	1	EACH VIDEO ENCODER

CABLE PLAN LEGEND

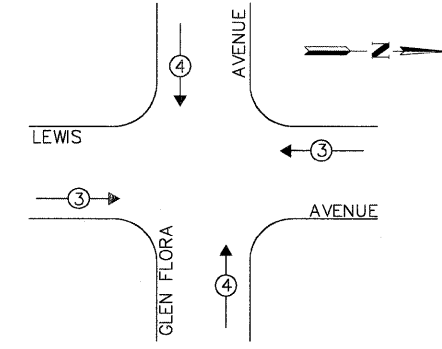
EXISTING	PROPOSED	DESCRIPTION
		12" TRAFFIC SIGNAL SECTION
		CONTROLLER CABINET
		TELEPHONE INSTALLATION
		EMERGENCY VEHICLE LIGHT DETECTOR
		PUSHBUTTON DETECTOR
		GROUND CABLE IN CONDUIT, NO. 6 SOLID COPPER (GREEN)
		SIGNAL FACE WITH BACKPLATE. "P" INDICATES PROGRAMMED HEAD
		ILLUMINATED SIGN "NO LEFT TURN"
		GROUND ROD AT HANDHOLE (H), DOUBLE HANDHOLE (H) OR CONTROLLER (C)
		GROUND ROD AT ELECTRIC SERVICE INSTALLATION
		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	←	↑

LEGEND:

- ← * → DUAL ENTRY PHASE
- ← * → PEDESTRIAN PHASE
- * NUMBER REFERS TO ASSOCIATED PHASE
- ← * OL OVERLAP

PHASE DESIGNATION DIAGRAM

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE 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)	12	135	10	0.50	60.0
SIGNAL (YELLOW)	12	135	19	0.40	22.8
SIGNAL (GREEN)	12	135	9	0.40	52.8
ARROW	16	135	9	1.00	4.4
PED.SIGNAL	8	90	9	1.00	72.0
CONTROLLER	4	-	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 =					1,250.0

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.	2	PED. PUSHBUTTON	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) 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 GLEN FLORA AVENUE

SCALE: NONE SHEET NO. 33 OF 86 SHEETS STA. TO STA.

F.A.P. RTE. 2730	SECTION 08-00259-00-TL	COUNTY LAKE	TOTAL SHEETS 86	SHEET NO. 33
CONTRACT # 63344			GHA #4135.800	
ILLINOIS FED. AID PROJECT				