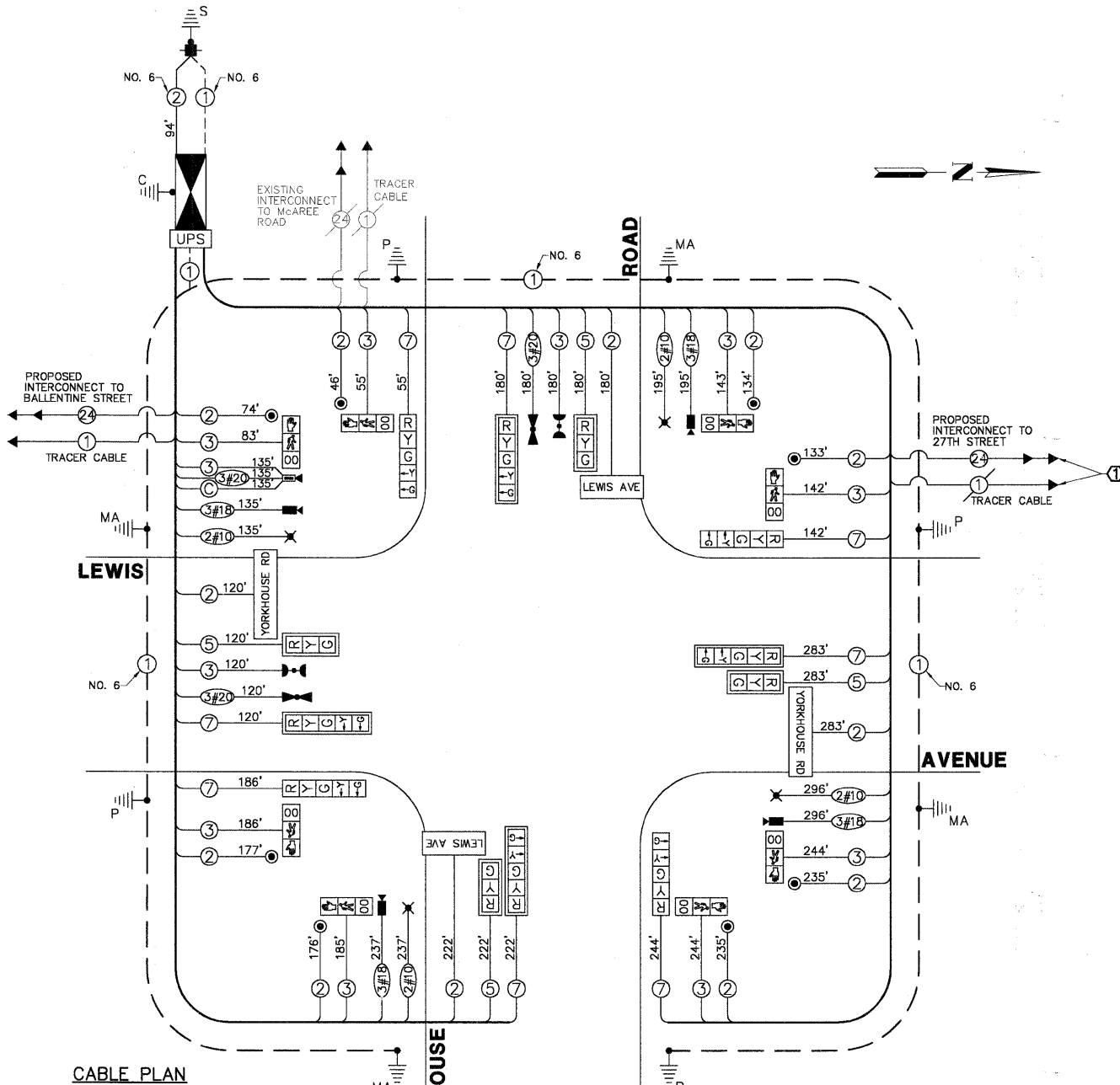


SCHEDULE OF QUANTITIES

LEWIS AVENUE AT YORK HOUSE ROAD TRAFFIC SIGNAL MODERNIZATION

NO.	QUANT.	UNIT
1.	20	CU. YD. EARTH EXCAVATION
2.	55	SQ. YD. AGGREGATE BASE COURSE, TYPE B, 4"
3.	1,150	SQ. FT. PORTLAND CEMENT CONCRETE SIDEWALK, 5"
4.	96	SQ. FT. DETECTABLE WARNINGS
5.	200	FOOT COMBINATION CURB AND GUTTER REMOVAL
6.	650	SQ. FT. SIDEWALK REMOVAL
7.	3	EACH FRAMES AND LIDS TO BE ADJUSTED
8.	200	FOOT COMBINATION CONCRETE CURB AND GUTTER, TYPE B8.12
9.	364	SQ. FT. THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS
10.	500	FOOT THERMOPLASTIC PAVEMENT MARKING - LINE 12"
11.	130	FOOT THERMOPLASTIC PAVEMENT MARKING - LINE 24"
12.	450	SQ. FT. PAVEMENT MARKING REMOVAL
13.	63	FOOT CONDUIT IN TRENCH, 2-1/2" DIA., GALVANIZED STEEL
14.	90	FOOT CONDUIT IN TRENCH, 3-1/2" DIA., GALVANIZED STEEL
15.	219	FOOT CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL
16.	75	FOOT CONDUIT PUSHED, 5" DIA., GALVANIZED STEEL
17.	2	EACH HANDHOLE
18.	2	EACH DOUBLE HANDHOLE
19.	863	FOOT ELECTRIC CABLE IN CONDUIT, 600 (EPR-TYPE RHW) 2-1/C NO. 10
20.	139	FOOT TRENCH AND BACKFILL FOR ELECTRICAL WORK
21.	4	EACH LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, PHOTO-CELL CONTROL 250 WATT
22.	1	EACH FULL-ACTUATED CONTROLLER AND TYPE IV CABINET (SPECIAL)
23.	1	EACH TRANSCIVER - FIBER OPTIC
24.	2,015	FOOT ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C
25.	1,717	FOOT ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C
26.	805	FOOT ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C
27.	1,432	FOOT ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C
28.	94	FOOT ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C
29.	3	EACH STEEL COMBINATION MAST ARM ASSEMBLY AND POLE, 30 FT (SPECIAL)
30.	1	EACH STEEL COMBINATION MAST ARM ASSEMBLY AND POLE, 32 FT (SPECIAL)
31.	16	FOOT CONCRETE FOUNDATION, TYPE A
32.	4	FOOT CONCRETE FOUNDATION, TYPE C
33.	60	FOOT CONCRETE FOUNDATION, TYPE E, 36-INCH DIAMETER
34.	4	EACH SIGNAL HEAD, L.E.D., 1-FACE, 3-SECTION, MAST ARM MOUNTED
35.	4	EACH SIGNAL HEAD, L.E.D., 1-FACE, 5-SECTION, BRACKET MOUNTED
36.	4	EACH SIGNAL HEAD, L.E.D., 1-FACE, 5-SECTION, MAST ARM MOUNTED
37.	8	EACH PEDESTRIAN COUNTDOWN SIGNAL HEAD, L.E.D., 1-FACE, BRACKET MOUNTED
38.	8	EACH TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINIUM
39.	2	EACH LIGHT DETECTOR
40.	1	EACH LIGHT DETECTOR AMPLIFIER
41.	8	EACH PEDESTRIAN PUSH-BUTTON
42.	1	EACH TEMPORARY TRAFFIC SIGNAL INSTALLATION
43.	244	FOOT REMOVE ELECTRIC CABLE FROM CONDUIT
44.	1	EACH REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
45.	7	EACH REMOVE EXISTING HANDHOLE
46.	8	EACH REMOVE EXISTING CONCRETE FOUNDATION
47.	1	EACH SERVICE INSTALLATION, POLE MOUNT
48.	613	FOOT ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C
49.	435	FOOT ELECTRIC CABLE IN CONDUIT, NO. 20 3C, TWISTED, GROUNDED
50.	135	FOOT ELECTRIC CABLE IN CONDUIT, COAXIAL
51.	863	FOOT ELECTRIC CABLE IN CONDUIT, COMMUNICATION NO. 18, 3C
52.	1	EACH VIDEO DETECTION SYSTEM (COMPLETE INTERSECTION)
53.	4	EACH L.E.D. INTERNALLY ILLUMINATED STREET NAME SIGN
54.	4	EACH TRAFFIC SIGNAL POST, 16 FT (SPECIAL)
55.	1	EACH REMOTE-CONTROLLED VIDEO SYSTEM
56.	1	EACH UNINTERRUPTIBLE POWER SUPPLY
57.	1	EACH VIDEO ENCODER



CABLE PLAN LEGEND

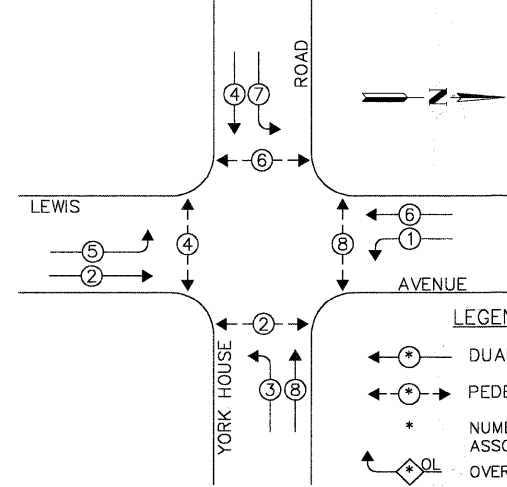
EXISTING	PROPOSED	DESCRIPTION
[Symbol]	[Symbol]	12" TRAFFIC SIGNAL SECTION
[Symbol]	[Symbol]	12" PEDESTRIAN SIGNAL SECTION WITH COUNTDOWN TIMER
[Symbol]	[Symbol]	CONTROLLER CABINET
[Symbol]	[Symbol]	SERVICE INSTALLATION
[Symbol]	[Symbol]	TELEPHONE INSTALLATION
[Symbol]	[Symbol]	VEHICLE DETECTOR, INDUCTION LOOP
[Symbol]	[Symbol]	EMERGENCY VEHICLE LIGHT DETECTOR
[Symbol]	[Symbol]	CONFIRMATION BEACON
[Symbol]	[Symbol]	PUSHBUTTON DETECTOR
[Symbol]	[Symbol]	DENOTES NUMBER OF CONDUCTORS. ALL CABLE NO. 14 EXCEPT AS INDICATED. ALL LOOP DETECTOR CABLE TO BE SHIELDED.
[Symbol]	[Symbol]	GROUND CABLE IN CONDUIT, NO.6 SOLID COPPER (GREEN)
[Symbol]	[Symbol]	FIBER OPTIC CABLE IN CONDUIT, 24 SINGLEMODE
[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 1694A RG-6/4 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

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

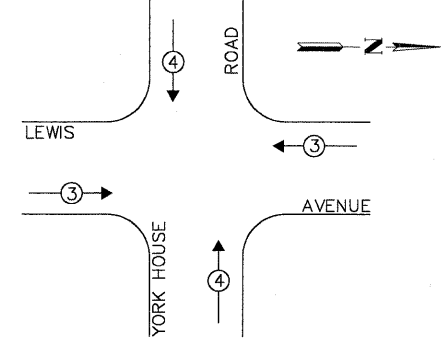
CONSTRUCTION NOTES:

- 1 THE CONTRACTOR SHALL INSTALL NEW FIBER OPTIC CABLE IN CONDUIT, 24 SINGLEMODE FROM YORK HOUSE ROAD TO 27TH STREET IN THE EXISTING INTERCONNECT CONDUIT. SEE INTERCONNECT SCHEMATIC, SHEET 69 FOR ADDITIONAL INFORMATION AND WORK TO BE PERFORMED.

CONTROLLER SEQUENCE



EMERGENCY VEHICLE PREEMPTION SEQUENCE



PROPOSED EMERGENCY VEHICLE PREEMPTORS

EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	[Symbol]	[Symbol]

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

TYPE	NO LAMPS	WATTAGE INCAND.	L.E.D.	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	12	135	10	0.50	60.8
SIGNAL (YELLOW)	12	135	19	0.10	22.8
SIGNAL (GREEN)	12	135	11	0.40	52.8
ARROW	6	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	-	6.4	0.50	128.0
VIDEO SYSTEM	1	-	150	1.00	150.0
BATTERY BACKUP	1	-	25	1.00	25.0
TOTAL =					1,255.0

FOUNDATION (DEPTH) (FT.)	(FT.)	CABLE SLACK (FT.)	(FT.)	VERTICAL (FT.)	(FT.)
TYPE A - POST	4	HANDHOLE	6.5	ALL FOUNDATIONS	3.5
TYPE D - CONTROLLER	4	DOUBLE HANDHOLE	15	MAST ARM (L) POLE	20'+L-2=
TYPE E - M.ARM POLE	15	SIGNAL POST	2	BRACKET MOUNTED	15
		CONTROLLER CAB.	1	PED. PUSHBUTTON	4
		FIBER OPTIC	13	ELECTRIC SERVICE	3.5
		ELECTRIC SERVICE	1	SERVICE TO GROUND	3.5
		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 YORK HOUSE ROAD
 SCALE: NONE SHEET NO. 56 OF 86 SHEETS STA. TO STA.

F.A.P. RTE. 2730	SECTION 08-00259-00-TL	COUNTY LAKE	TOTAL SHEETS 86	SHEET NO. 56
CONTRACT # 63344			ILLINOIS FED. AID PROJECT	

GHA #4135.800