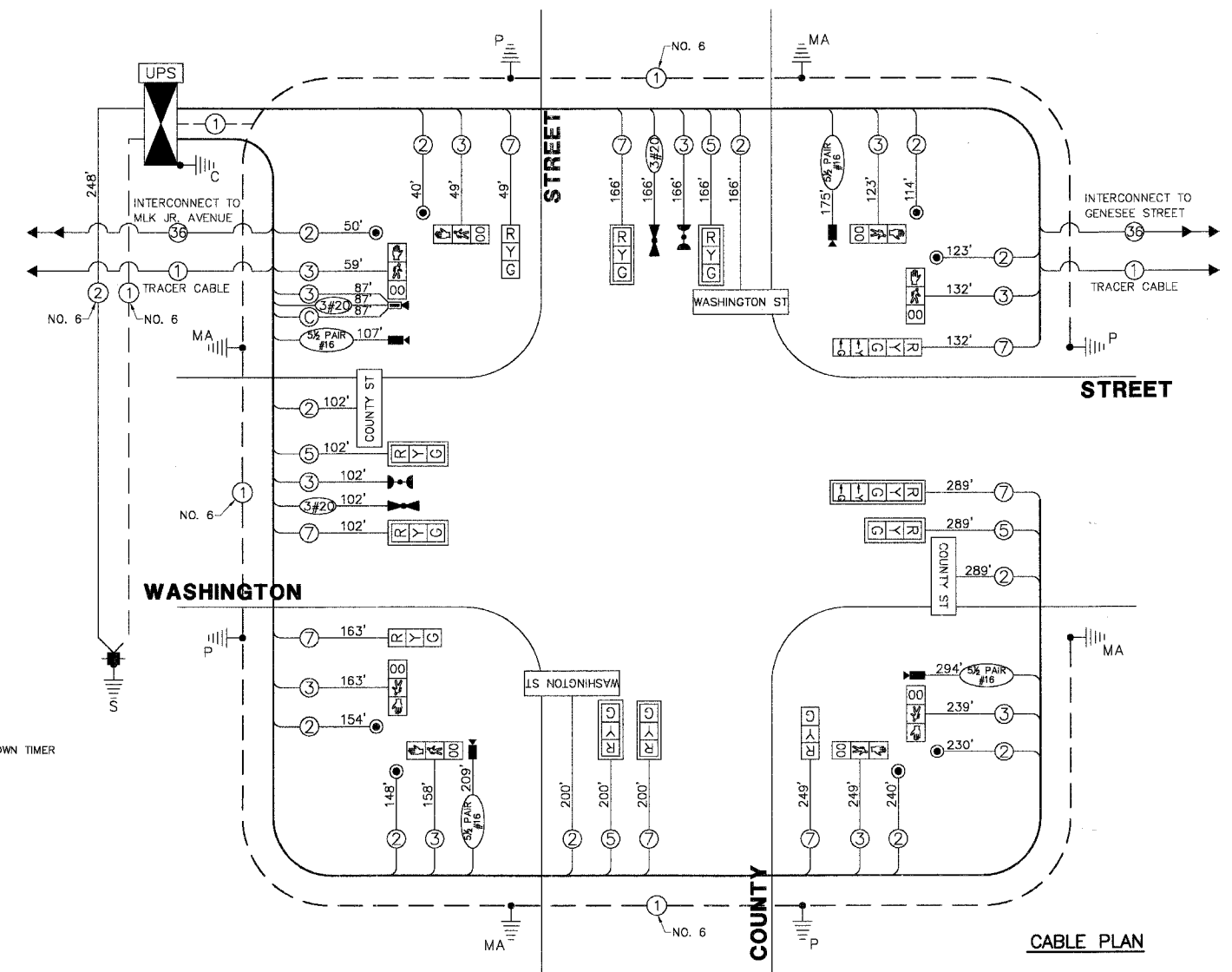


F.A.U. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1223	04-00272-00-TL	LAKE	72	43
CABLE PLAN, PHASE DESIGNATION DIAGRAM				
ILLINOIS				

SCHEDULE OF QUANTITIES

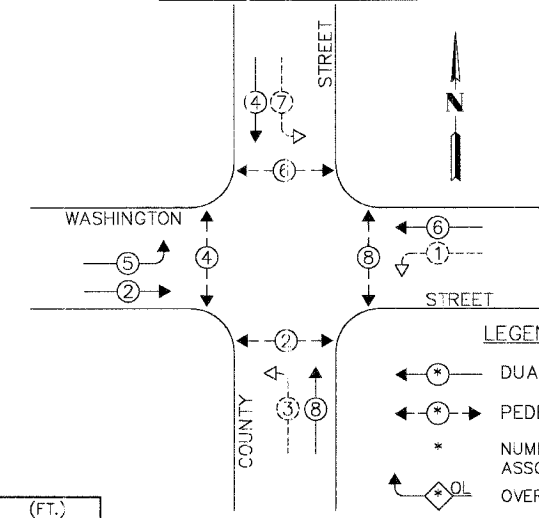
QUANT.	UNIT	ITEM
ROADWAY IMPROVEMENTS		
1.	2,500	SQ.FT. PORTLAND CEMENT CONCRETE SIDEWALK, 5"
2.	96	SQ.FT. DETECTABLE WARNING
3.	275	FOOT COMBINATION CURB & GUTTER REMOVAL
4.	2,500	SQ.FT. SIDEWALK REMOVAL
5.	5	EACH FRAMES AND LIDS TO BE ADJUSTED
6.	1	EACH FRAME AND LIDS, TYPE 1, OPEN LID
7.	275	FOOT COMBINATION CURB & GUTTER, TYPE B6.12
8.	456	FOOT THERMOPLASTIC PAVEMENT MARKING-LINE 12"
9.	250	SQ.FT. PAVEMENT MARKING REMOVAL
TRAFFIC SIGNAL IMPROVEMENTS		
10.	43	FOOT CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL
11.	44	FOOT CONDUIT IN TRENCH, 3" DIA., GALVANIZED STEEL
12.	10	FOOT CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL
13.	230	FOOT CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL
14.	253	FOOT CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL
15.	2	EACH HANDHOLE
16.	2	EACH DOUBLE HANDHOLE
17.	82	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.	1,856	FOOT ELECTRIC CABLE IN CONDUIT, SIGNAL NO.14 2C
21.	1,526	FOOT ELECTRIC CABLE IN CONDUIT, SIGNAL NO.14 3C
22.	757	FOOT ELECTRIC CABLE IN CONDUIT, SIGNAL NO.14 5C
23.	1,350	FOOT ELECTRIC CABLE IN CONDUIT, SIGNAL NO.14 7C
24.	248	FOOT ELECTRIC CABLE IN CONDUIT, SERVICE, NO.6 2C
25.	4	EACH STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 36 FT. (SPECIAL)
26.	16	FOOT CONCRETE FOUNDATION, TYPE A
27.	4	FOOT CONCRETE FOUNDATION, TYPE C
28.	60	FOOT CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER
29.	8	EACH TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINIUM
30.	2	EACH LIGHT DETECTOR
31.	1	EACH LIGHT DETECTOR AMPLIFIER
32.	8	EACH PEDESTRIAN PUSH-BUTTON
33.	1	EACH TEMPORARY TRAFFIC SIGNAL INSTALLATION
34.	1	EACH REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
35.	8	EACH REMOVE EXISTING HANDHOLE
36.	5	EACH REMOVE EXISTING CONCRETE FOUNDATION
37.	8	EACH PEDESTRIAN SIGNAL HEAD, L.E.D., 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
38.	4	EACH L.E.D. INTERNALLY ILLUMINATED STREET NAME SIGN
39.	1	EACH VIDEO DETECTION SYSTEM, (COMPLETE INTERSECTION)
40.	1	EACH REMOTE-CONTROLLED VIDEO SYSTEM
41.	785	FOOT ELECTRIC CABLE IN CONDUIT, COMMUNICATION NO. 16, 5 1/2 PAIR
42.	4	EACH TRAFFIC SIGNAL POST, 16 FT. (SPECIAL)
43.	36	EACH TERMINATE FIBER IN CABINET
44.	1	EACH UNINTERRUPTIBLE POWER SUPPLY
45.	600	FOOT ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C
46.	355	FOOT ELECTRIC CABLE IN CONDUIT, NO. 20 3C, TWISTED, SHIELDED
47.	3	EACH SIGNAL HEAD, L.E.D., 1-FACE, 3-SECTION, BRACKET MOUNTED
48.	7	EACH SIGNAL HEAD, L.E.D., 1-FACE, 3-SECTION, MAST ARM MOUNTED
49.	1	EACH SIGNAL HEAD, L.E.D., 1-FACE, 5-SECTION, BRACKET MOUNTED
50.	1	EACH SIGNAL HEAD, L.E.D., 1-FACE, 5-SECTION, MAST ARM MOUNTED
51.	87	FOOT ELECTRIC CABLE IN CONDUIT, COAXIAL
52.	1	EACH SERVICE INSTALLATION, POLE MOUNT



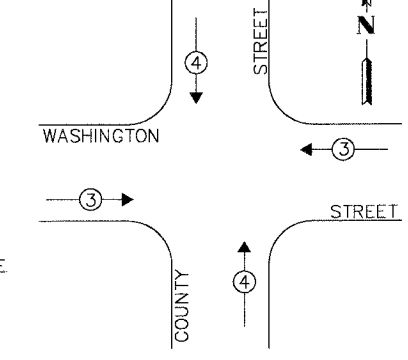
CABLE PLAN LEGEND

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]	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 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 8281 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

CONTROLLER SEQUENCE



EMERGENCY VEHICLE PREEMPTION SEQUENCE



LEGEND:

[Symbol]	DUAL ENTRY PHASE
[Symbol]	PEDESTRIAN PHASE
[Symbol]	NUMBER REFERS TO ASSOCIATED PHASE
[Symbol]	OVERLAP
[Symbol]	FUTURE PHASE

PHASE DESIGNATION DIAGRAM

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	0.50	60.0
SIGNAL (YELLOW)	12	135	19	0.10	22.8
SIGNAL (GREEN)	12	135	11	0.40	52.8
ARROW	4	135	9	0.10	3.6
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	125.0
VIDEO SYSTEM	1	-	150	1.00	150.0
BATTERY BACKUP	1	-	25	1.00	25.0
TOTAL =					117.8

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 15
	CONTROL 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

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

PLANS PREPARED BY:
GEWALT HAMILTON ASSOCIATES, INC.
 Consulting Engineers & Surveyors
 850 Forest Ridge Drive
 Vernon Hills, IL 60061
 (847) 478-9700
 (847) 478-9701 Fax

REVISIONS

NAME	DATE

PROPOSED EMERGENCY VEHICLE PREEMPTORS

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

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