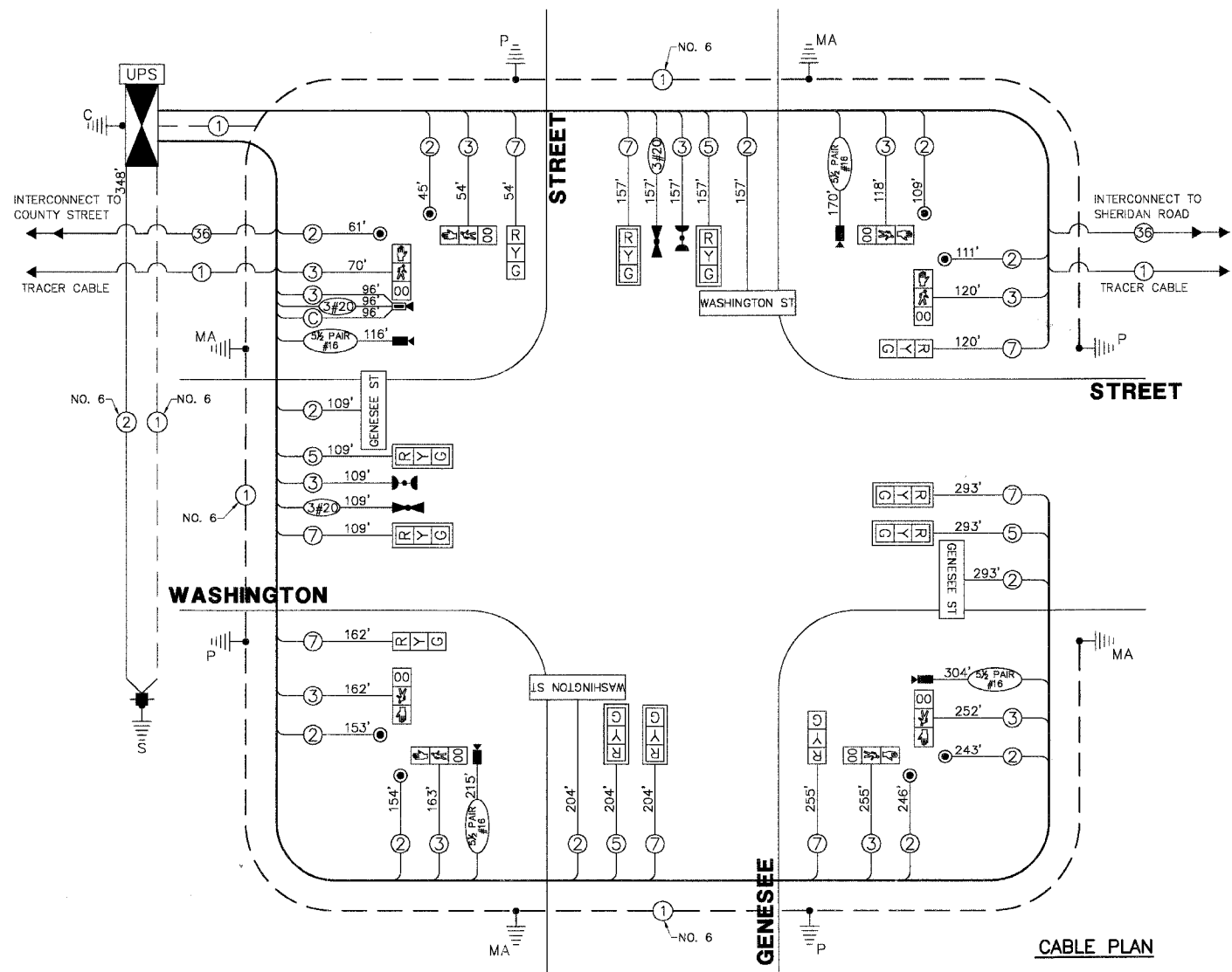


F.A.U. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1223	04-00272-00-TL	LAKE	72	47
CABLE PLAN, PHASE DESIGNATION DIAGRAM				
ILLINOIS				

SCHEDULE OF QUANTITIES

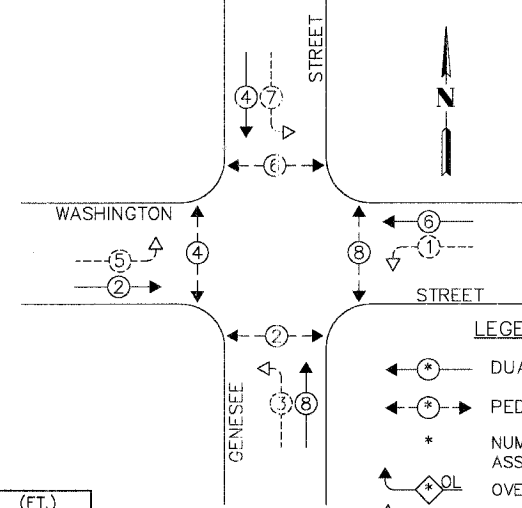
QUANT.	UNIT	ITEM
ROADWAY IMPROVEMENTS		
1.	3,050	SQ.FT. PORTLAND CEMENT CONCRETE SIDEWALK, 5"
2.	96	SQ.FT. DETECTABLE WARNING
3.	270	FOOT COMBINATION CURB & GUTTER REMOVAL
4.	3,050	SQ.FT. SIDEWALK REMOVAL
5.	2	EACH FRAME AND LIDS TO BE ADJUSTED
6.	6	EACH FRAME AND LIDS, TYPE 1, OPEN LID
7.	270	FOOT COMBINATION CURB & GUTTER, TYPE B6.12
8.	408	FOOT THERMOPLASTIC PAVEMENT MARKING-LINE 12"
9.	220	SQ.FT. PAVEMENT MARKING REMOVAL
TRAFFIC SIGNAL IMPROVEMENTS		
10.	45	FOOT CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL
11.	57	FOOT CONDUIT IN TRENCH, 3" DIA., GALVANIZED STEEL
12.	10	FOOT CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL
13.	336	FOOT CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL
14.	249	FOOT CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL
15.	3	EACH HANDHOLE
16.	2	EACH DOUBLE HANDHOLE
17.	107	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.	1,885	FOOT ELECTRIC CABLE IN CONDUIT, SIGNAL NO.14 2C
21.	1,556	FOOT ELECTRIC CABLE IN CONDUIT, SIGNAL NO.14 3C
22.	763	FOOT ELECTRIC CABLE IN CONDUIT, SIGNAL NO.14 5C
23.	1,354	FOOT ELECTRIC CABLE IN CONDUIT, SIGNAL NO.14 7C
24.	348	FOOT ELECTRIC CABLE IN CONDUIT, SERVICE, NO.6 2C
25.	1	EACH STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 30 FT. (SPECIAL)
26.	2	EACH STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 32 FT. (SPECIAL)
27.	1	EACH STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 34 FT. (SPECIAL)
28.	16	FOOT CONCRETE FOUNDATION, TYPE A
29.	4	FOOT CONCRETE FOUNDATION, TYPE C
30.	60	FOOT CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER
31.	8	EACH TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINIUM
32.	2	EACH LIGHT DETECTOR
33.	1	EACH LIGHT DETECTOR AMPLIFIER
34.	8	EACH PEDESTRIAN PUSH-BUTTON
35.	1	EACH TEMPORARY TRAFFIC SIGNAL INSTALLATION
36.	1	EACH REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
37.	9	EACH REMOVE EXISTING HANDHOLE
38.	5	EACH REMOVE EXISTING CONCRETE FOUNDATION
39.	8	EACH PEDESTRIAN SIGNAL HEAD, L.E.D., 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
40.	4	EACH L.E.D. INTERNALLY ILLUMINATED STREET NAME SIGN
41.	1	EACH VIDEO DETECTION SYSTEM, (COMPLETE INTERSECTION)
42.	1	EACH REMOTE-CONTROLLED VIDEO SYSTEM
43.	805	FOOT ELECTRIC CABLE IN CONDUIT, COMMUNICATION NO. 16, 5 1/2 PAIR
44.	4	EACH TRAFFIC SIGNAL POST, 16 FT. (SPECIAL)
45.	1	EACH LAYER II (DATA LINK) SWITCH
46.	1	EACH UNINTERRUPTIBLE POWER SUPPLY
47.	599	FOOT ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C
48.	362	FOOT ELECTRIC CABLE IN CONDUIT, NO. 20 3C, TWISTED, SHIELDED
49.	4	EACH SIGNAL HEAD, L.E.D., 1-FACE, 3-SECTION, BRACKET MOUNTED
50.	8	EACH SIGNAL HEAD, L.E.D., 1-FACE, 5-SECTION, MAST ARM MOUNTED
51.	96	FOOT ELECTRIC CABLE IN CONDUIT, COAXIAL
52.	1	EACH SERVICE INSTALLATION, POLE MOUNT



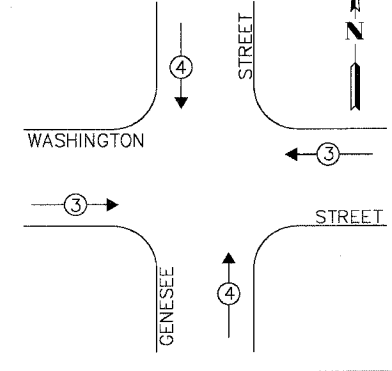
CABLE PLAN LEGEND

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



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		% 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		135	9	0.10	-
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 =					NO.6

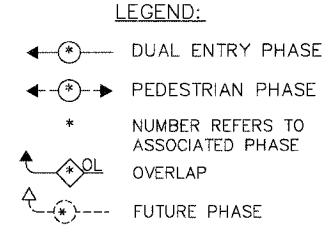
ENERGY COSTS - BILLED TO: CITY OF WAUKEGAN
 (ADDRESS) 100 N. M.L.K. JR. AVENUE
 (ADDRESS) WAUKEGAN, IL

ENERGY SUPPLY - CONTACT: MS. ALICE TAYLOR
 PHONE: (847) 816-5323
 COMPANY: COMED - LIBERTYVILLE

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'±-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	1	SERVICE TO GROUND	13.5
		GROUND CABLE	1	POST MOUNTED	6

PHASE DESIGNATION DIAGRAM



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

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