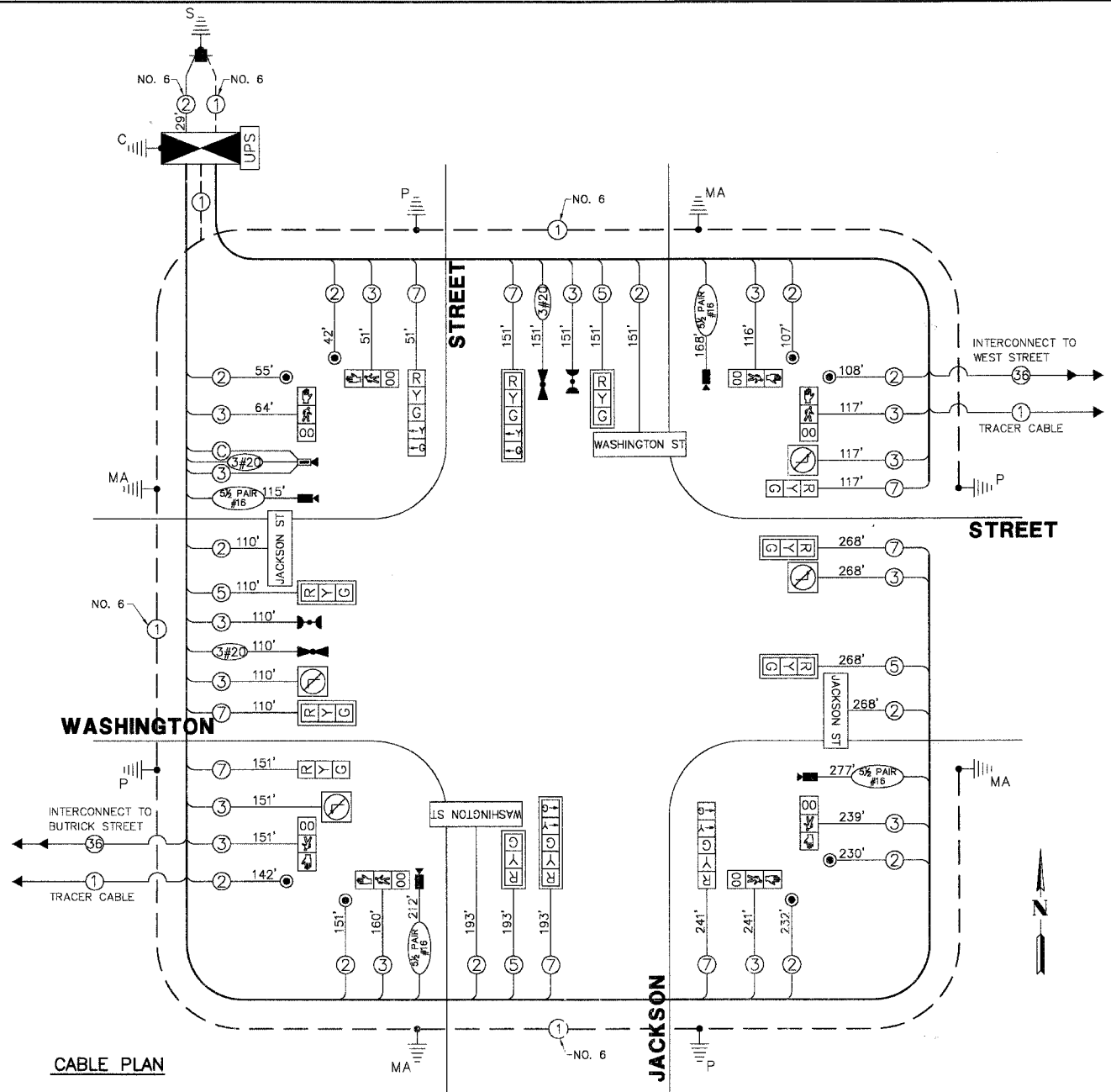


F.A.U. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1223	04-00272-00-TL	LAKE	72	31
CABLE PLAN, PHASE DESIGNATION DIAGRAM				
ILLINOIS				

SCHEDULE OF QUANTITIES

QUANT.	UNIT	ITEM
ROADWAY IMPROVEMENTS		
1.	2,260	SQ.FT. PORTLAND CEMENT CONCRETE SIDEWALK, 5"
2.	96	SQ.FT. DETECTABLE WARNING
3.	280	FOOT COMBINATION CURB & GUTTER REMOVAL
4.	2,260	SQ.FT. SIDEWALK REMOVAL
5.	2	EACH FRAME AND LIDS, TYPE 1, OPEN LID
6.	280	FOOT COMBINATION CURB & GUTTER, TYPE B6.12
7.	372	FOOT THERMOPLASTIC PAVEMENT MARKING-LINE 12"
8.	100	FOOT THERMOPLASTIC PAVEMENT MARKING-LINE 24"
9.	250	SQ.FT. PAVEMENT MARKING REMOVAL
TRAFFIC SIGNAL IMPROVEMENTS		
10.	11	FOOT CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL
11.	45	FOOT CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL
12.	47	FOOT CONDUIT IN TRENCH, 3" DIA., GALVANIZED STEEL
13.	10	FOOT CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL
14.	223	FOOT CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL
15.	2	EACH HANDHOLE
16.	2	EACH DOUBLE HANDHOLE
17.	124	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.	1,789	FOOT ELECTRIC CABLE IN CONDUIT, SIGNAL NO.14 2C
21.	2,140	FOOT ELECTRIC CABLE IN CONDUIT, SIGNAL NO.14 3C
22.	722	FOOT ELECTRIC CABLE IN CONDUIT, SIGNAL NO.14 5C
23.	1,282	FOOT ELECTRIC CABLE IN CONDUIT, SIGNAL NO.14 7C
24.	29	FOOT ELECTRIC CABLE IN CONDUIT, SERVICE, NO.6 2C
25.	2	EACH STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 28 FT. (SPECIAL)
26.	1	EACH STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 30 FT. (SPECIAL)
27.	1	EACH STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 36 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.	4	EACH ILLUMINATED SIGN, L.E.D.
37.	1	EACH REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
38.	11	EACH REMOVE EXISTING HANDHOLE
39.	9	EACH REMOVE EXISTING CONCRETE FOUNDATION
40.	8	EACH PEDESTRIAN SIGNAL HEAD, L.E.D., 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
41.	4	EACH L.E.D. INTERNALLY ILLUMINATED STREET NAME SIGN
42.	1	EACH VIDEO DETECTION SYSTEM, (COMPLETE INTERSECTION)
43.	1	EACH REMOTE-CONTROLLED VIDEO SYSTEM
44.	772	FOOT ELECTRIC CABLE IN CONDUIT, COMMUNICATION NO. 16, 5 1/2 PAIR
45.	2	EACH TRAFFIC SIGNAL POST, 16 FT. (SPECIAL)
46.	2	EACH TRAFFIC SIGNAL POST, 18 FT. (SPECIAL)
47.	1	EACH LAYER II (DATA LINK) SWITCH
48.	1	EACH UNINTERRUPTIBLE POWER SUPPLY
49.	382	FOOT ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C
50.	356	FOOT ELECTRIC CABLE IN CONDUIT, NO. 20 3C, TWISTED, SHIELDED
51.	2	EACH SIGNAL HEAD, L.E.D., 1-FACE, 3-SECTION, BRACKET MOUNTED
52.	6	EACH SIGNAL HEAD, L.E.D., 1-FACE, 3-SECTION, MAST ARM MOUNTED
53.	2	EACH SIGNAL HEAD, L.E.D., 1-FACE, 5-SECTION, BRACKET MOUNTED
54.	2	EACH SIGNAL HEAD, L.E.D., 1-FACE, 5-SECTION, MAST ARM MOUNTED
55.	95	FOOT ELECTRIC CABLE IN CONDUIT, COAXIAL
56.	1	EACH SERVICE INSTALLATION, POLE MOUNT

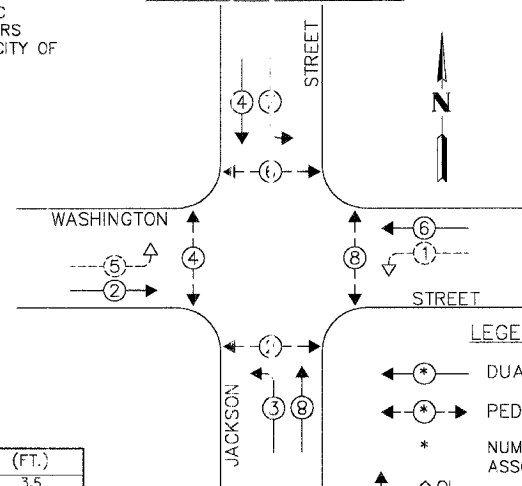


CABLE PLAN LEGEND

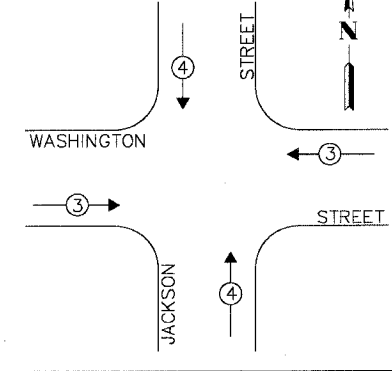
EXISTING	PROPOSED	DESCRIPTION
[Symbol]	[Symbol]	12" TRAFFIC SIGNAL SECTION
[Symbol]	[Symbol]	12" PEDESTRIAN SIGNAL SECTION
[Symbol]	[Symbol]	CONTROLLER CABINET
[Symbol]	[Symbol]	SERVICE INSTALLATION
[Symbol]	[Symbol]	TELEPHONE INSTALLATION
[Symbol]	[Symbol]	VEHICLE DETECTOR, INDUCTION LOOP
[Symbol]	[Symbol]	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

NOTE:
LEFT TURN RESTRICTIONS FOR EASTBOUND AND WESTBOUND TRAFFIC ON SCHOOL DAYS BETWEEN THE HOURS OF 2:00 PM AND 4:00 PM AS PER CITY OF WAUKEGAN ORDINANCE.

CONTROLLER SEQUENCE



EMERGENCY VEHICLE PREEMPTION SEQUENCE



PROPOSED EMERGENCY VEHICLE PREEMPTORS

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

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

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	8	135	9	0.10	7.2
PEO.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
ILLUMINATED SIGN	4	-	84	0.10	33.6
TOTAL =					1151.4

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	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

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

LAKE COUNTY DIVISION OF TRANSPORTATION
CABLE PLAN, PHASE DESIGNATION DIAGRAM AND SCHEDULE OF QUANTITIES

WASHINGTON STREET AND JACKSON STREET

SCALE: NONE
DATE: MAY 1, 2007

DRAWN BY: ZCW
DESIGNED BY: JRD
CHECKED BY: BLS