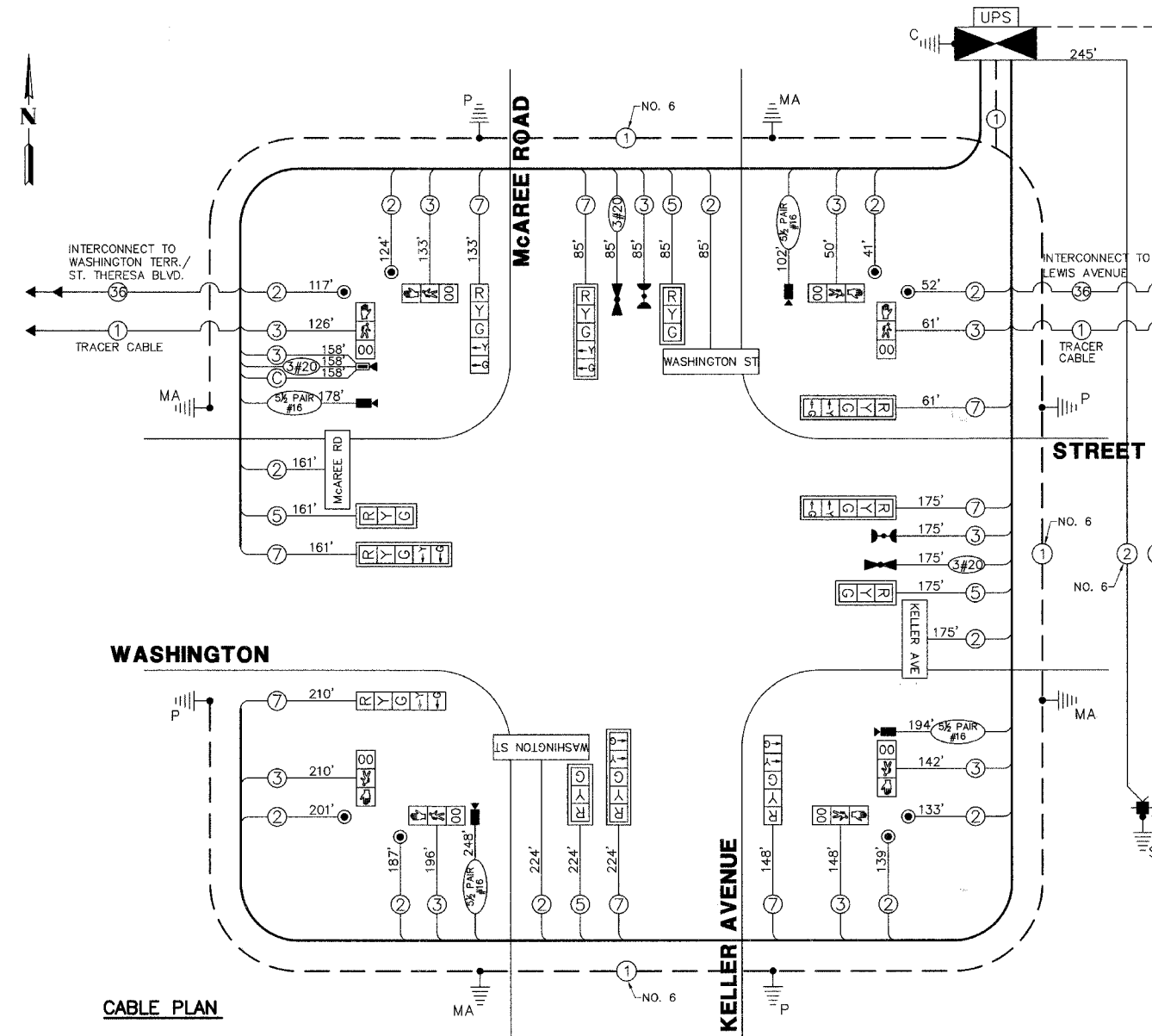


F.A.U. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1223	04-00272-00-TL	LAKE	72	16
CABLE PLAN, PHASE DESIGNATION DIAGRAM				
ILLINOIS				

SCHEDULE OF QUANTITIES

QUANT.	UNIT	ITEM
ROADWAY IMPROVEMENTS		
1.	1,135 SQ.FT.	PORTLAND CEMENT CONCRETE SIDEWALK, 5"
2.	96 SQ.FT.	DETECTABLE WARNING
3.	20 SQ.YD.	DRIVEWAY PAVEMENT REMOVAL
4.	195 FOOT	COMBINATION CURB & GUTTER REMOVAL
5.	1,025 SQ.FT.	SIDEWALK REMOVAL
6.	3 EACH	FRAMES AND LIDS TO BE ADJUSTED
7.	4 EACH	FRAME AND LIDS, TYPE 1, OPEN LID
8.	140 FOOT	COMBINATION CURB & GUTTER, TYPE B6.12
9.	55 FOOT	COMBINATION CURB & GUTTER, TYPE B6.24
10.	210 SQ.FT.	THERMOPLASTIC PAVEMENT MARKING-LETTERS AND SYMBOLS
11.	372 FOOT	THERMOPLASTIC PAVEMENT MARKING-LINE 12"
12.	100 FOOT	THERMOPLASTIC PAVEMENT MARKING-LINE 24"
13.	450 SQ.FT.	PAVEMENT MARKING REMOVAL
TRAFFIC SIGNAL IMPROVEMENTS		
14.	105 FOOT	CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL
15.	62 FOOT	CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL
16.	27 FOOT	CONDUIT IN TRENCH, 3" DIA., GALVANIZED STEEL
17.	10 FOOT	CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL
18.	105 FOOT	CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL
19.	212 FOOT	CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL
20.	2 EACH	HANDHOLE
21.	2 EACH	DOUBLE HANDHOLE
22.	209 FOOT	TRENCH AND BACKFILL FOR ELECTRICAL WORK
23.	1 EACH	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, (SPECIAL)
24.	1 EACH	TRANSCEIVER - FIBER OPTIC
25.	1,639 FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO.14 2C
26.	1,484 FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO.14 3C
27.	645 FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO.14 5C
28.	1,197 FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO.14 7C
29.	245 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 26 FT. (SPECIAL)
32.	2 EACH	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 28 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.	8 EACH	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINIUM
37.	2 EACH	LIGHT DETECTOR
38.	1 EACH	LIGHT DETECTOR AMPLIFIER
39.	8 EACH	PEDESTRIAN PUSH-BUTTON
40.	1 EACH	TEMPORARY TRAFFIC SIGNAL INSTALLATION
41.	1 EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
42.	7 EACH	REMOVE EXISTING HANDHOLE
43.	9 EACH	REMOVE EXISTING CONCRETE FOUNDATION
44.	8 EACH	PEDESTRIAN SIGNAL HEAD, L.E.D., 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
45.	4 EACH	L.E.D. INTERNALLY ILLUMINATED STREET NAME SIGN
46.	1 EACH	VIDEO DETECTION SYSTEM, (COMPLETE INTERSECTION)
47.	1 EACH	REMOTE-CONTROLLED VIDEO SYSTEM
48.	772 FOOT	ELECTRIC CABLE IN CONDUIT, COMMUNICATION NO. 16, 5 1/2 PAIR
49.	4 EACH	TRAFFIC SIGNAL POST, 16 FT. (SPECIAL)
50.	1 EACH	LAYER II (DATA LINK) SWITCH
51.	1 EACH	UNINTERRUPTABLE POWER SUPPLY
52.	582 FOOT	ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C
53.	418 FOOT	ELECTRIC CABLE IN CONDUIT, NO. 20 3C, TWISTED, SHIELDED
54.	4 EACH	SIGNAL HEAD, L.E.D., 1-FACE, 3-SECTION, MAST ARM MOUNTED
55.	4 EACH	SIGNAL HEAD, L.E.D., 1-FACE, 5-SECTION, BRACKET MOUNTED
56.	4 EACH	SIGNAL HEAD, L.E.D., 1-FACE, 5-SECTION, MAST ARM MOUNTED
57.	158 FOOT	ELECTRIC CABLE IN CONDUIT, COAXIAL
58.	1 EACH	SERVICE INSTALLATION, POLE MOUNT



CABLE PLAN LEGEND

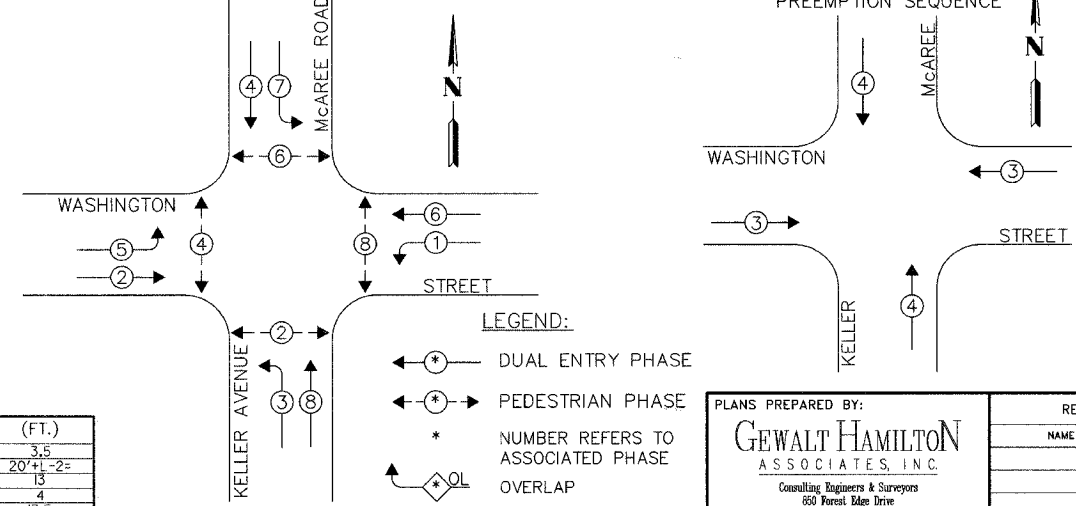
EXISTING	PROPOSED	DESCRIPTION
[Symbol]	[Symbol]	12" TRAFFIC SIGNAL SECTION
[Symbol]	[Symbol]	12" PEDESTRIAN SIGNAL SECTION
[Symbol]	[Symbol]	CONTROLLER CABINET
[Symbol]	[Symbol]	SERVICE INSTALLATION
[Symbol]	[Symbol]	TELEPHONE INSTALLATION
[Symbol]	[Symbol]	VEHICLE DETECTOR, INDUCTION LOOP
[Symbol]	[Symbol]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

WASHINGTON

CABLE PLAN

CONTROLLER SEQUENCE

EMERGENCY VEHICLE PREEMPTION SEQUENCE



PHASE DESIGNATION DIAGRAM

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

L.C.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO LAMPS	WATTAGE	% OPERATION		
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	16	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	64	0.50		128.0
VIDEO SYSTEM	1	150	1.00		150.0
BATTERY BACKUP	1	25	1.00		25.0
TOTAL =					1125.0

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.	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

PLANS PREPARED BY:
GEWALT HAMILTON ASSOCIATES, INC.
 Consulting Engineers & Surveyors
 800 Forest Edge 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 McCARREE ROAD / KELLER AVENUE
 SCALE: NONE
 DATE: MAY 1, 2007
 DRAWN BY: ZCW
 DESIGNED BY: JRD
 CHECKED BY: BLS