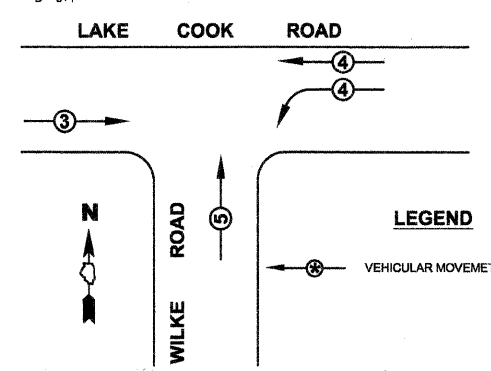
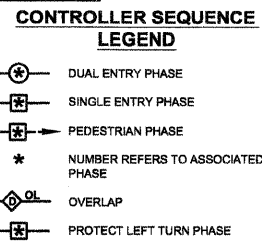
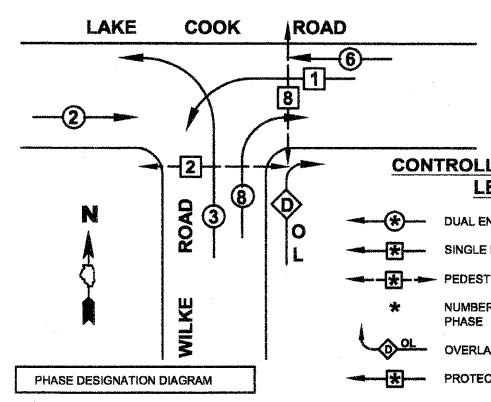


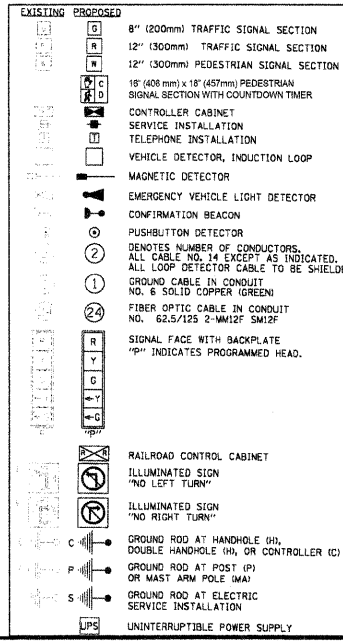
F.A.P. RTE.	SECTION	COUNTY	SHEET NO.
378	08-00187-00-BT	COOK	3
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT

**PROPOSED CONTROLLER SEQUENCE**  
REFERRING TO STANDARD 2393, THE VEHICULAR AND PEDESTRIAN PHASES USED ARE DESIGNATED BELOW



**PROPOSED EMERGENCY VEHICLE PREEMPTORS**

PROPOSED EMERGENCY VEHICLES PREEMPTORS	3	4	5
MOVEMENT	→	↘	↑



**I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS**

TYPE	NO. OF LAMPS	x INCAND.	LED	x % OPERATION	TOTAL WATTAGE
SIGNAL (RED)	11		17	0.50	93.50
(YELLOW)	11		25	0.25	68.75
(GREEN)	11		15	0.25	41.25
ARROW	8		12	0.10	9.60
PED. SIGNAL	4		25	1.00	100.00
CONTROLLER	1		100	1.00	100.00
ILLUM. SIGN	-		25	0.05	-
VIDEO SYSTEM	0	150	-	1.00	-
FLASHER					0.50
<b>TOTAL</b>					<b>413.10</b>

ENERGY COSTS TO: COOK COUNTY HIGHWAY DEPARTMENT  
69 W. WASHINGTON  
CHICAGO, ILLINOIS 60602

ENERGY SUPPLY: CONTACT: JUDITH SCHOMER  
PHONE: (847)870-2058  
COMPANY: COMED

FOUNDATION (DEPTH)	FT. (m)	CABLE SLACK	FT. (m)	VERTICAL	FT. (m)
TYPE A - POST	4 (1.2)	HANDHOLE	6.5 (2.0)	ALL FOUNDATIONS	3.5
C - CONTROLLER W/LPS	4 (1/2)	DOUBLE HANDHOLE	13 (4.0)	MAST ARM (L) POLE	20' + 1-2' = (6M+L -0.6M) =
D - CONTROLLER	4 (1/2)	SIGNAL POST	2 (1.0)	BRACKET MOUNTED	13 (4.0)
E - M. ARM POLE		CONTROLLER CAB.	1 (0.5)	PED. PUSHBUTTON	6 (1.8)
30" (750mm)	15 (4.6)	FIBER OPTIC	13 (4.0)	ELECTRIC SERVICE	13.5 (4.1)
35" (900 mm)	15 (4.6)	ELECTRIC SERVICE	1 (0.5)	SERVICE TO GROUND	13.5 (4.1)
42" (1050 mm)	25 (7.6)	GROUND CABLE	1 (0.5)	POST MOUNTED	6 (1.8)

**NOTE A:** THE EXISTING 5 SECTION SIGNAL HEAD SHALL BE RETROFITTED BY REMOVING THE BOTTOM 2 YELLOW AND GREEN ARROW SIGNAL SECTIONS

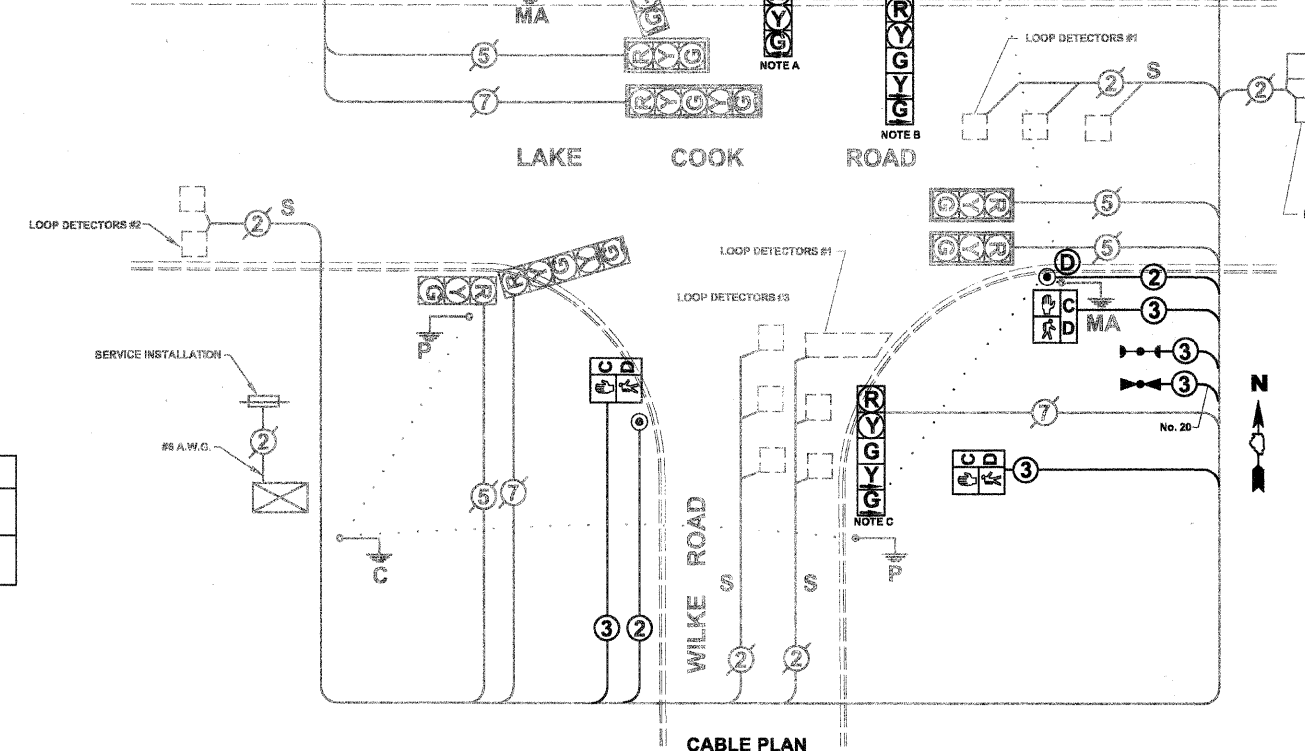
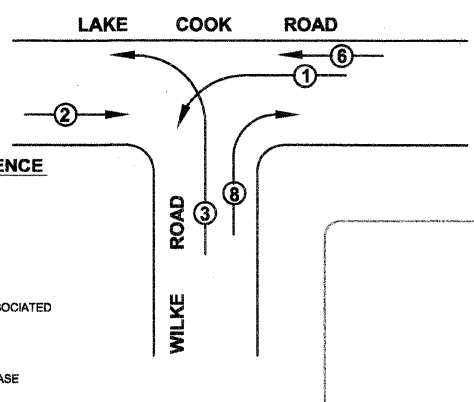
**NOTE B:** THE EXISTING 4 SECTION SIGNAL HEAD SHALL BE RETROFITTED TO ADD AN ADDITIONAL GREEN BALL SECTION BETWEEN THE YELLOW SIGNAL SECTIONS

**NOTE C:** THE EXISTING 4 SECTION SIGNAL HEAD SHALL BE RETROFITTED TO ADD AN ADDITIONAL GREEN BALL SECTION BETWEEN THE YELLOW SIGNAL SECTIONS

**NOTE D:** PUSHBUTTON "D" SHALL PLACE A CALL IN PHASES 2 AND 8

RESTORATION OF WORK AREA. RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

**EXISTING CONTROLLER SEQUENCE**



**SCHEDULE OF QUANTITIES**

CODE	QTY	UNIT	ITEM DESCRIPTION
20100110	60	UNIT	TREE REMOVAL (6 to 15 UNITS)
20200100	94	CY	EARTH EXCAVATION
20200410	140	CY	EARTH EXCAVATION (SPECIAL)
21101615	205	SQ YD	TOPSOIL FURNISH & PLACE 4"
25000910	0.1	ACRE	SEEDING, CLASS 1 (MODIFIED)
25200200	5	UNIT	SUPPLEMENTAL WATERING
35101500	150	CY	AGGREGATE BASE COURSE, TYPE B
40200200	65	CY	AGGREGATE SURFACE COURSE, TYPE A
42400200	800	SQ FT	PCC SIDEWALK 5'
42400800	48	SQ FT	DETECTABLE WARNINGS
44000600	225	SQ FT	PCC SIDEWALK REMOVAL
44001700	50	LF	COMBINATION CURB & GUTTER REMOVAL AND REPLACEMENT
54200637	18	FOOT	PIPE CULVERT, TYPE 1 ALUMINUM CULVERT PIPE 12"
54214077	2	EACH	ALUMINUM END SECTIONS - 12'
67100100	1	L SUM	MOBILIZATION
70102635	1	L SUM	TRAFFIC CONTROL AND PROTECTION STANDARD 701701
72000100	16.5	SQ FT	SIGN PANEL, TYPE 1
* 78000600	88	FOOT	THERMOPLASTIC PAVEMENT MARKING LINE - LINE 12"
* 78008230	750	FOOT	POLYUREA PAVEMENT MARKING, TYPE 1, 12" - LINE 6"
78300100	120	SQ FT	PAVEMENT MARKING REMOVAL
81000800	100	FOOT	CONDUIT IN TRENCH, 3" DIA GALVANIZED STEEL
81900200	100	FOOT	TRENCH AND BACKFILL FOR ELECTRICAL WORK
85000200	1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
87301215	1187	FOOT	ELECTRIC CABLE IN CONDUIT SIGNAL NO. 14 2C
87301225	708	FOOT	ELECTRIC CABLE IN CONDUIT SIGNAL NO. 14 3C
87502520	1	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL, 18 FT
87800100	3	EACH	DRILL EXISTING FOUNDATION
87900200	3	EACH	DRILL EXISTING HANDHOLE
88030080	3	EACH	SIGNAL HEAD, LED, 1 FACE, 4-SECTION BRACKET MOUNTED RETROFIT
88102717	2	EACH	PEDESTRIAN SIGNAL HEAD, LED, 1 FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
88102747	1	EACH	PEDESTRIAN SIGNAL HEAD, LED 2 FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
88600100	50	FOOT	DETECTOR LOOP, TYPE 1
88700200	2	EACH	LIGHT DETECTOR
88700300	1	EACH	LIGHT DETECTOR AMPLIFIER
88800100	3	EACH	PEDESTRIAN PUSH BUTTON
89502200	1	EACH	MODIFY EXISTING CONTROLLER
89502375	1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
X8730250	479	FOOT	ELECTRIC CABLE IN CONDUIT NO. 20 3/C TWISTED SHIELDED

\* SPECIALTY ITEMS

**REVISIONS**

NAME	DATE

VILLAGE OF ARLINGTON HEIGHTS  
**CABLE PLAN, PHASE DESIGNATION DIAGRAM, E.V.P. SEQUENCE OF OPERATIONS & SCHEDULE OF QUANTITIES**

DATE: 05/20/2009  
DESIGNED BY: T. PONSOT  
DRAWN BY: C. HOMUTH  
CHECKED BY: J. MASSARELLI P.E.

1" = 20' (HORIZ.)  
1" = 5' (VERT.)