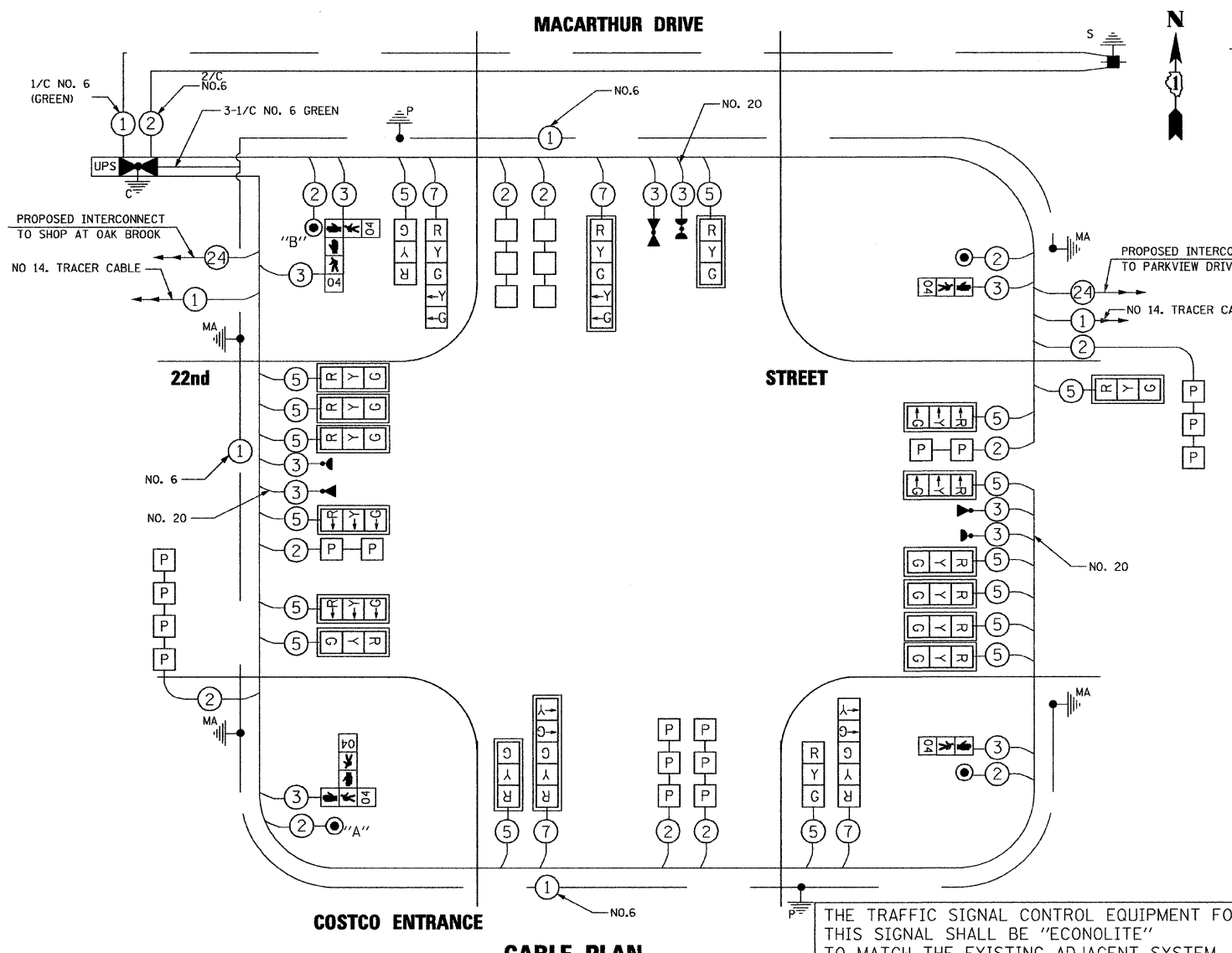
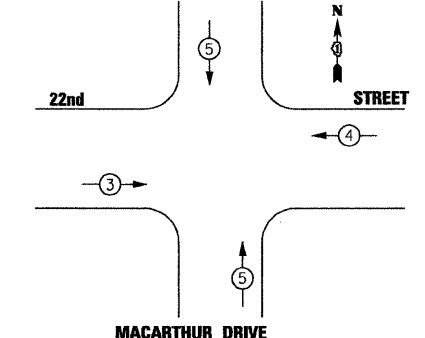


ITEM	UNIT	QUANTITY
SIGN PANEL - TYPE 1	SQ FT	32
CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	554
CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	FOOT	52
CONDUIT IN TRENCH, 3" DIA., GALVANIZED STEEL	FOOT	39
CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL	FOOT	53
CONDUIT IN TRENCH, 5" DIA., GALVANIZED STEEL	FOOT	10
CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	335
CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	478
HANDHOLE	EACH	5
HEAVY-DUTY HANDHOLE	EACH	4
DOUBLE HANDHOLE	EACH	2
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	708
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL TRANSCEIVER - FIBER OPTIC	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL, NO. 14 2C	FOOT	767
ELECTRIC CABLE IN CONDUIT, SIGNAL, NO. 14 3C	FOOT	1540
ELECTRIC CABLE IN CONDUIT, SIGNAL, NO. 14 5C	FOOT	4060
ELECTRIC CABLE IN CONDUIT, SIGNAL, NO. 14 7C	FOOT	941
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	6584
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	160
TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.	EACH	1
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 68 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 70 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE WITH DUAL MAST ARMS, 20 FT AND 46 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE WITH DUAL MAST ARMS, 32 FT. AND 60 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	8
CONCRETE FOUNDATION, TYPE C	FOOT	4
CONCRETE FOUNDATION, TYPE E 42-INCH DIAMETER	FOOT	60
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	15
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	1
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	1
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	2
SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED	EACH	1
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED	EACH	2
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED	EACH	2
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	17
INDUCTIVE LOOP DETECTOR	EACH	8
DETECTOR LOOP, TYPE 1	FOOT	230
LIGHT DETECTOR	EACH	3
LIGHT DETECTOR AMPLIFIER	EACH	1
PEDESTRIAN PUSH-BUTTON	EACH	4
PREFORMED DETECTOR LOOP	FOOT	770
SERVICE INSTALLATION - POLE MOUNTED	EACH	1
ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	FOOT	1097
ELECTRIC CABLE IN CONDUIT NO. 20 3/C, TWISTED, SHIELDED	FOOT	740
UNINTERRUPTIBLE POWER SUPPLY	EACH	1



CABLE PLAN LEGEND		
EXISTING	PROPOSED	
		8" (200mm) TRAFFIC SIGNAL SECTION
		12" (300mm) TRAFFIC SIGNAL SECTION
		12" (300mm) PEDESTRIAN SIGNAL SECTION
		12" (300mm) PEDESTRIAN SIGNAL SECTION WITH COUNTDOWN TIMER
		CONTROLLER CABINET
		SERVICE INSTALLATION
		VEHICLE DETECTOR, INDUCTION LOOP
		MAGNETIC DETECTOR
		EMERGENCY VEHICLE LIGHT DETECTOR
		CONFIRMATION BEACON
		PUSHBUTTON DETECTOR
		DENOTES NUMBER OF CONDUCTORS. ALL CABLE NO. 14 EXCEPT AS INDICATED. ALL LOOP DETECTOR CABLE TO BE SHIELDED.
		SIGNAL FACE WITH BACKPLATE "P" INDICATES PROGRAMMED HEAD.
		"E" RAILROAD CONTROL CABINET
		"E" ILLUMINATED SIGN, FIBER OPTIC "NO LEFT TURN"
		"E" ILLUMINATED SIGN, FIBER OPTIC "NO RIGHT TURN"
		H/C GROUND ROD AT HANDHOLE, DOUBLE HANDHOLE, OR CONTROLLER
		P GROUND ROD AT POST OR MAST ARM POLE
		S GROUND ROD AT ELECTRIC SERVICE INSTALLATION
		1 GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN)
		24 FIBER OPTIC CABLE IN CONDUIT NO. 62.5/125 2-MM12F & SM12F
		UPS UNINTERRUPTIBLE POWER SUPPLY (UPS)
		P PREFORMED LOOP DETECTION

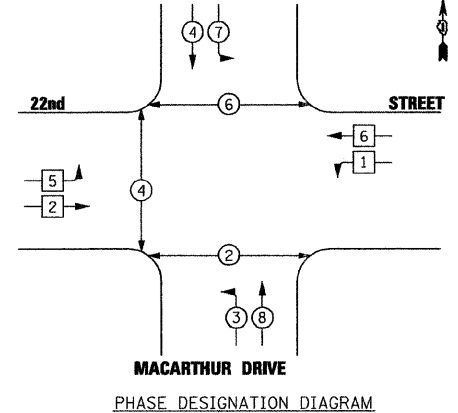
EMERGENCY VEHICLE PREEMPTION SEQUENCE



PROPOSED EMERGENCY VEHICLE PREEMPTORS			
EMERGENCY VEHICLE PREEMPTOR	3	4	5
MOVEMENT	→	←	↑↓

PUSH BUTTON NOTES:
 PUSH BUTTON "A" SHALL PLACE A CALL IN PHASE 2 AND 4
 PUSH BUTTON "B" SHALL PLACE A CALL IN PHASE 4 AND 6

PROPOSED CONTROLLER SEQUENCE



LEGEND	
	SINGLE ENTRY PHASE
	DUAL ENTRY PHASE
	OVERLAP
	PEDESTRIAN PHASE
	NUMBER REFERS TO ASSOCIATED PHASE

* 100% VILLAGE OF OAK BROOK COST

TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE INCAND.	L.E.D.	OPERATION	
SIGNAL (RED)	19	135	17	0.50	178.5
(YELLOW)	19	135	25	0.25	131.3
(GREEN)	19	135	15	0.25	78.8
ARROW	12	135	12	0.10	14.4
PED. SIGNAL	4	90	25	1.00	150
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84	25	0.05	
VIDEO VEH. SENSOR		15	15	1.00	
FLASHER				0.50	
TOTAL					652.9

ILLINOIS DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAY/DISTRICT 1
 201 CENTER CT/SCHAUMBURG, IL 60196-1096
 ENERGY SUPPLY - CONTACT: DEB RANKIN
 PHONE: 630-691-4379
 COMPANY: COMMONWEALTH EDISON

FOUNDATION (DEPTH)	(FEET) (m)	CABLE SLACK	(FEET) (m)	VERTICAL	(FEET) (m)
TYPE A - POST	4, (1.2)	HANDHOLE	6.5, (2.0)	ALL FOUNDATION	1.0, (2.0)
D - CONTROLLER	4, (1.2)	DOUBLE HANDHOLE	13, (4.0)	MAST ARM (L) POLE	20'-H-2 = (6m+L-0.6m)=
E - M. ARM POLE	()	SIGNAL POST	2, (1.0)	BRACKET MOUNTED	13, (4.0)
24" (600mm)	10, (3.0)	CONTROLLER CAB.	1, (0.5)	PED. PUSHBUTTON	4, (1.2)
30" (600mm)	15, (4.5)	FIBER OPTIC	13, (4.0)	ELECTRIC SERVICE	13.5, (4.1)
42" ()	15, (4.5)	ELECTRIC SERVICE	1, (0.5)	SERVICE TO GROUND	13, (4.1)
		GROUND CABLE	1, (0.5)	POST MOUNTED	6, (1.8)



DESIGNED - TVN	REVISED -
DRAWN - TVN	REVISED -
CHECKED - RPD	REVISED -
DATE - 04/01/2010	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

22nd STREET AT MACARTHUR DRIVE
 CABLE PLAN, PHASE DESIGNATION DIAGRAM,
 AND SCHEDULE OF QUANTITIES

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1453	55WRS	DUPAGE	362	209B
CONTRACT NO. 60D12				TS52