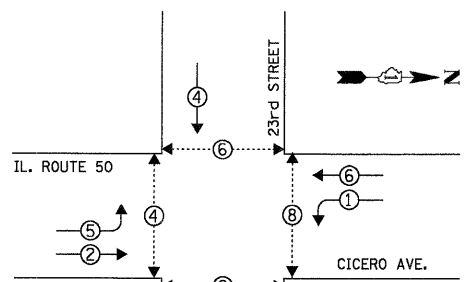


DATE: _____ BY: _____
 PLAN NO. _____
 DATE: _____ BY: _____
 PROFILE SURVEYED _____
 GRADES CHECKED _____
 NOTE BOOK _____
 NO. _____

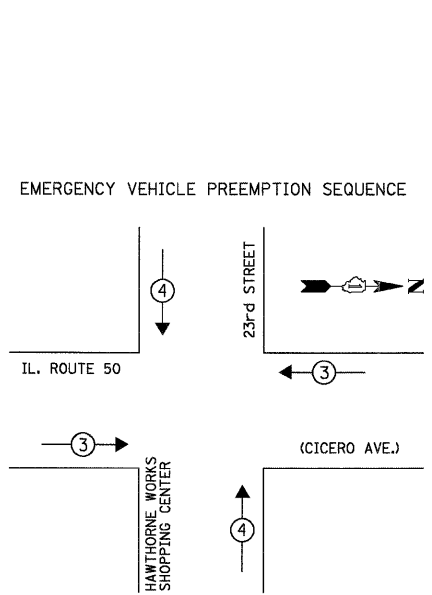
CHRISTOPHER B. BURKE ENGINEERING LTD.
 3575 West Higgins Road, Suite 600
 Chicago, Illinois 60618
 (847) 823-0500

CONTROLLER SEQUENCE



LEGEND
 * DUAL ENTRY PHASE
 * PEDESTRIAN PHASE
 * NUMBER REFERS TO ASSOCIATED PHASE

PHASE DESIGNATION DIAGRAM



PROPOSED EMERGENCY VEHICLE PREEMPTORS

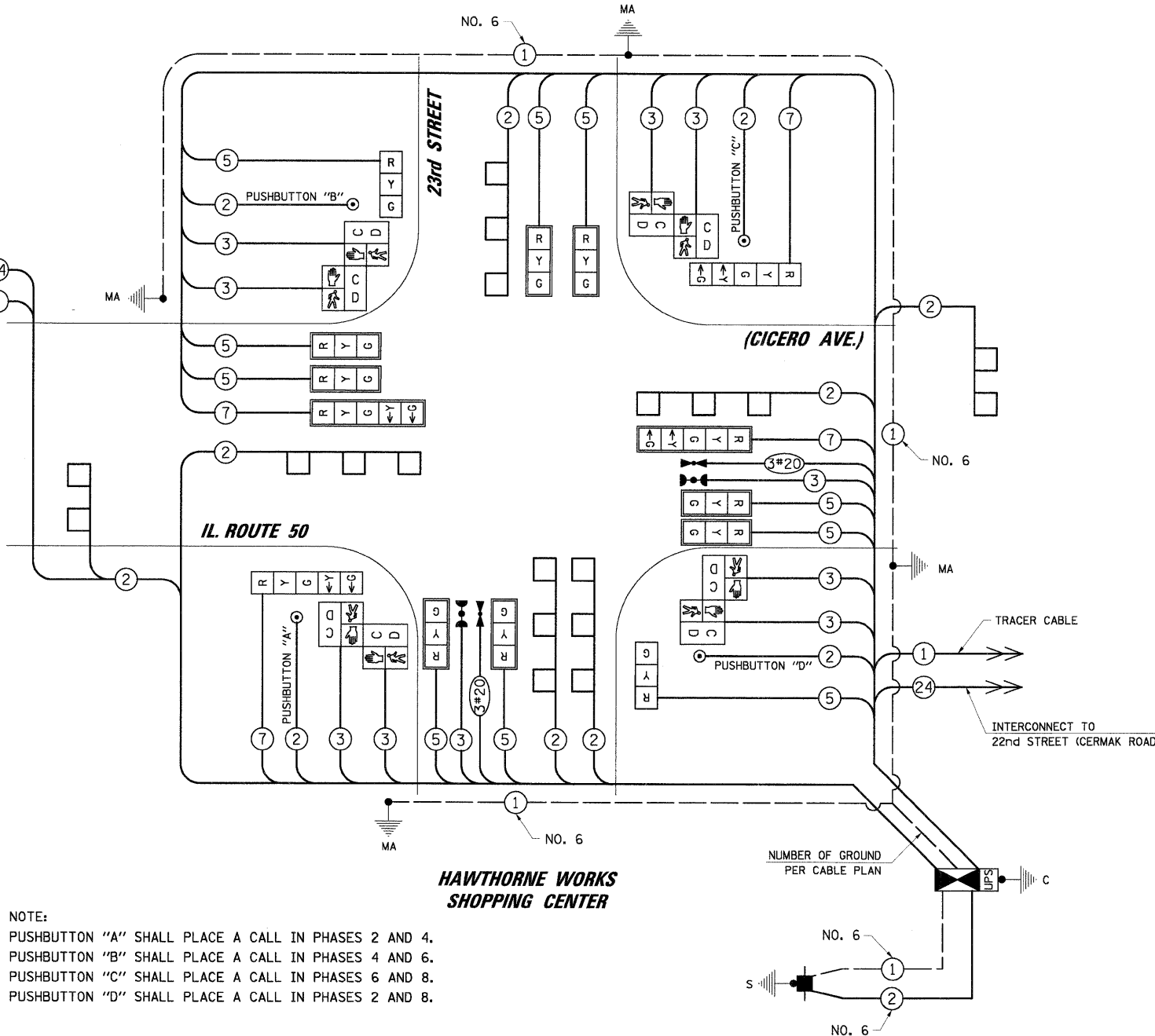
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	← →	↑ ↓

CABLE PLAN LEGEND

- | | |
|--|--|
| | 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 |
| | TELEPHONE 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. |
| | GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN) |
| | FIBER OPTIC CABLE IN CONDUIT NO. 62.5/125 2-MM12F SM12F |
| | SIGNAL FACE WITH BACKPLATE "P" INDICATES PROGRAMMED HEAD. |
| | RAILROAD CONTROL CABINET |
| | ILLUMINATED SIGN "NO LEFT TURN" |
| | ILLUMINATED SIGN "NO RIGHT TURN" |
| | GROUND ROD AT HANDHOLE (H), DOUBLE HANDHOLE (H), OR CONTROLLER (C) |
| | GROUND ROD AT POST (P) OR MAST ARM POLE (MA) |
| | GROUND ROD AT ELECTRIC SERVICE INSTALLATION |
| | UNINTERRUPTIBLE POWER SUPPLY |

SCHEDULE OF QUANTITIES

ITEM	UNIT	TOTAL
PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	1398
DETECTABLE WARNINGS	SQ FT	108
SIDEWALK REMOVAL	SQ FT	1391
COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	132
SIGN PANEL - TYPE 1	SQ FT	12
SIGN PANEL - TYPE 2	SQ FT	25
THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	70
THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	486
THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	103
PAVEMENT MARKING REMOVAL	SQ FT	182
CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	32
CONDUIT IN TRENCH, 3" DIA., GALVANIZED STEEL	FOOT	47
CONDUIT IN TRENCH, 5" DIA., GALVANIZED STEEL	FOOT	10
CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	534
CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	257
HANDHOLE	EACH	4
HEAVY-DUTY HANDHOLE	EACH	3
DOUBLE HANDHOLE	EACH	1
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	193
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1
TRANSCEIVER - FIBER OPTIC	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	562
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1464
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1674
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	677
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PR	FOOT	1347
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C	FOOT	35
STEEL MAST ARM ASSEMBLY AND POLE, 32 FT.	EACH	2
STEEL MAST ARM ASSEMBLY AND POLE, 34 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 42 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	4
CONCRETE FOUNDATION, TYPE C	FOOT	4
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	60
DRILL EXISTING HANDHOLE	EACH	3
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	8
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED	EACH	2
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	4
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	10
INDUCTIVE LOOP DETECTOR	EACH	7
DETECTOR LOOP, TYPE I	FOOT	593
LIGHT DETECTOR	EACH	2
LIGHT DETECTOR AMPLIFIER	EACH	1
PEDESTRIAN PUSH-BUTTON	EACH	4
TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING HANDHOLE	EACH	10
REMOVE EXISTING CONCRETE FOUNDATION	EACH	9
TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1
SERVICE INSTALLATION - GROUND MOUNTED	EACH	1
UNINTERRUPTIBLE POWER SUPPLY	EACH	1
ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	FOOT	457
ELECTRIC CABLE IN CONDUIT, NO. 20 3C, TWISTED, SHIELDED	FOOT	309



NOTE:
 PUSHBUTTON "A" SHALL PLACE A CALL IN PHASES 2 AND 4.
 PUSHBUTTON "B" SHALL PLACE A CALL IN PHASES 4 AND 6.
 PUSHBUTTON "C" SHALL PLACE A CALL IN PHASES 6 AND 8.
 PUSHBUTTON "D" SHALL PLACE A CALL IN PHASES 2 AND 8.

NOTE:
 THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

THE END OF THE TRACER CABLE SHALL BE CONTINUOUS AND EXTEND INTO THE CONTROLLER CABINET.

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

TYPE	NO. OF LAMPS	WATTAGE X INCAND.	LED	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	14	17	0.50	119.00	
(YELLOW)	14	25	0.25	87.50	
(GREEN)	14	15	0.25	52.50	
ARROW	8	12	0.10	9.60	
PED. SIGNAL	8	25	1.00	200.00	
CONTROLLER	1	100	1.00	100.00	
ILLUM. SIGN	-	25	0.05	-	
VIDEO SYSTEM	-	150	1.00	-	
FLASHER	-	-	0.50	-	
ENERGY COSTS TO:	TOTAL =	568.60			

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 (1.0)
C - CONTROLLER W/ UPS	4 (1.2)	DOUBLE HANDHOLE	13 (4.0)	MAST ARM (L) POLE	20'+H-2'=(6m+H-0.6m)=
D - CONTROLLER	4 (1.2)	SIGNAL POST	2 (1.0)		
E - M. ARM POLE		CONTROLLER CAB.	1 (0.5)	BRACKET MOUNTED	13 (4.0)
	30" (750mm)	FIBER OPTIC	13 (4.0)	PED. PUSHBUTTON	6 (1.8)
	36" (900mm)	ELECTRIC SERVICE	1 (0.5)	ELECTRIC SERVICE	13.5 (4.1)
	42" (1050mm)	GROUND CABLE	1 (0.5)	SERVICE TO GROUND	13.5 (4.1)
				POST MOUNTED	6 (1.8)

ILLINOIS DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAY/DISTRICT 1
 201 WEST CENTER COURT/SCHAUMBURG, ILLINOIS 60196-1096
 ENERGY SUPPLY: CONTACT: STEVE FITZGERALD
 PHONE: (708) 235-2327
 COMPANY: COMED

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
350	2008-080-1	COOK	76	25
				CONTRACT NO. 60F82
SCALE: N.T.S.	SHEET NO. OF SHEETS	STA. TO STA.	FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT