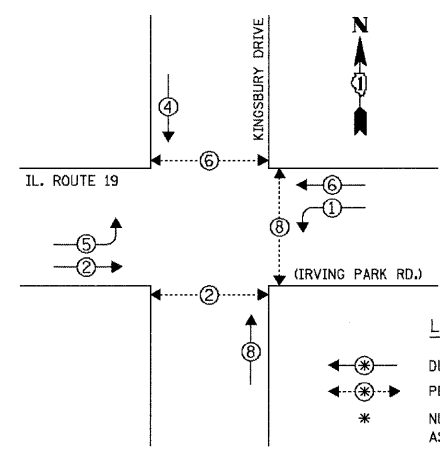


DATE: _____ BY: _____
 PROFILE SURVEYED _____
 NOTE BOOK _____
 I.D.O.T. FILE NO. _____
 ILL. ROAD DIST. NO. _____
 COUNTY _____
 PROJECT NO. _____
 DATE: _____ BY: _____
 PLAN _____
 NOTE BOOK _____
 I.D.O.T. FILE NO. _____
 ILL. ROAD DIST. NO. _____
 COUNTY _____
 PROJECT NO. _____

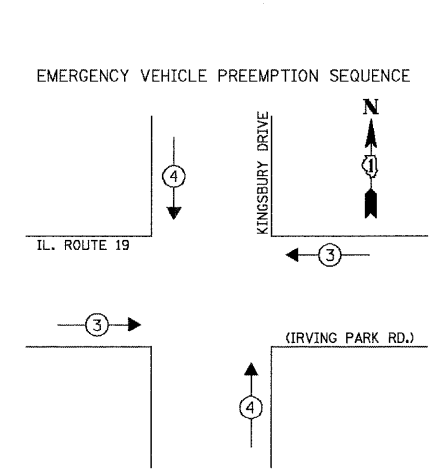
CHRISTOPHER B. BURKE ENGINEERING LTD.
 9575 West Higgins Road, Suite 600
 Rosemont, Illinois 60018
 (847) 823-0500

CONTROLLER SEQUENCE



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

PHASE DESIGNATION DIAGRAM



PROPOSED EMERGENCY VEHICLE PREEMPTORS

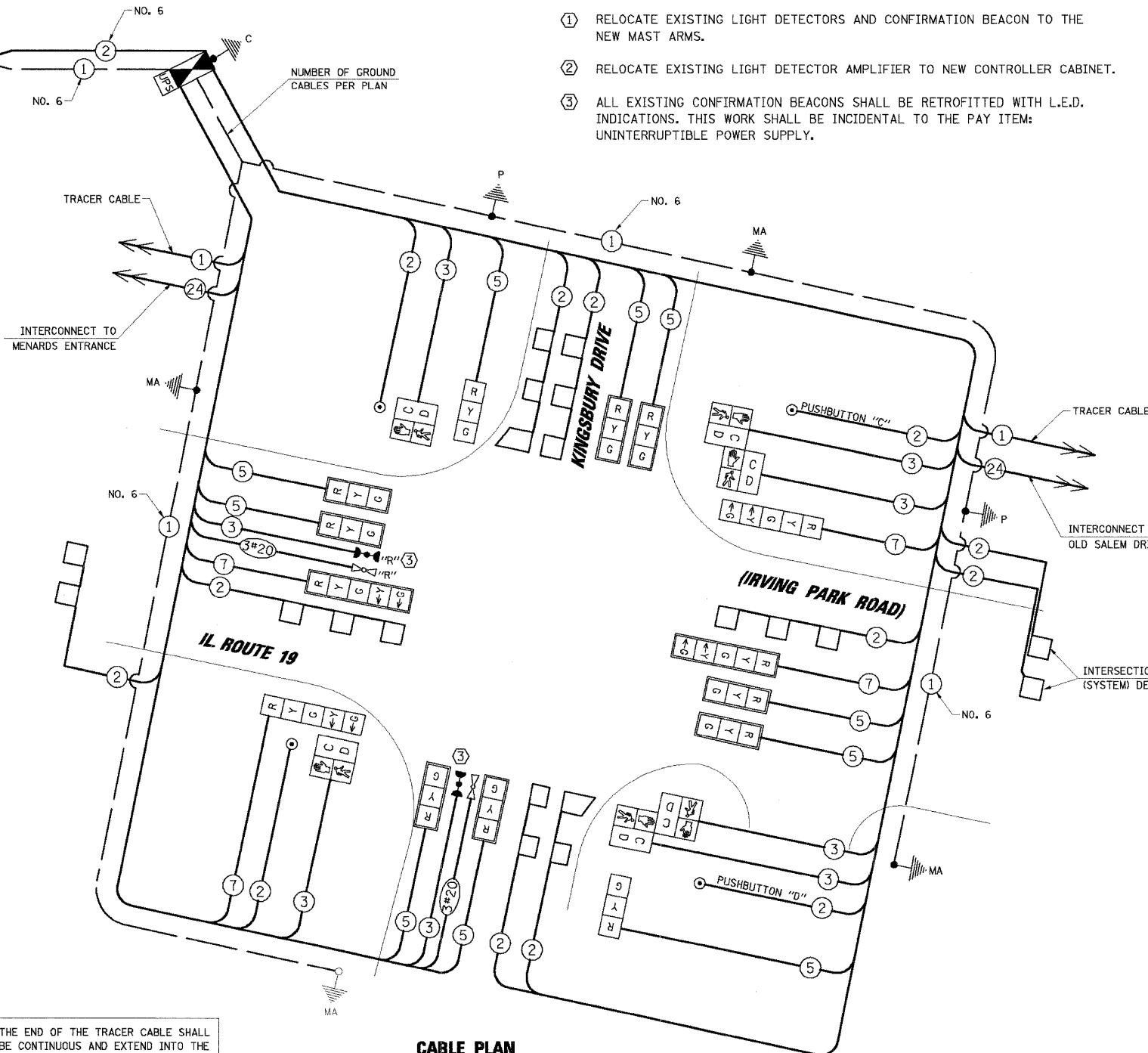
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	←→	↑↓

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

TYPE	NO. OF LAMPS	WATTAGE X INCAND. LED x % OPERATION	TOTAL WATTAGE
SIGNAL (RED)	14	17	0.50
(YELLOW)	14	25	0.25
(GREEN)	14	15	0.25
ARROW	8	12	0.10
PED. SIGNAL	6	25	1.00
CONTROLLER	1	100	1.00
ILLUM. SIGN	-	25	0.05
VIDEO SYSTEM	-	-	1.00
FLASHER	-	0.50	-
ENERGY COSTS TO:	TOTAL =	518.60	

ILLINOIS DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAY/DISTRICT 1
 201 WEST CENTER COURT/SCHAUMBURG, ILLINOIS 60196-1096
 ENERGY SUPPLY: CONTACT: MARTY RUBIN
 PHONE: (847) 608-2400
 COMPANY: COMED

FILE NAME =	USER NAME =	DESIGNED -	REVISED -
...Traffic\CAB.198Kingsbury.dgn	FPACIONE	ABR	-
		DRAWN -	REVISED -
		FPB / FCP	-
		CHECKED -	REVISED -
		MJT	-
		DATE -	REVISED -
			-



CABLE PLAN

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

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

NOTE:

PUSHBUTTON "C" SHALL PLACE A CALL IN PHASES 6 AND 8.
 PUSHBUTTON "D" SHALL PLACE A CALL IN PHASES 2 AND 8.

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"=
D - CONTROLLER	4 (1.2)	SIGNAL POST	2 (0.6)		(6m+L-0.6m)=
E - M. ARM POLE		CONTROLLER CAB.	1 (0.5)	BRACKET MOUNTED	13 (4.0)
30" (750mm)	15 (4.6)	FIBER OPTIC	13 (4.0)	PED. PUSHBUTTON	6 (1.8)
36" (900mm)	15 (4.6)	ELECTRIC SERVICE	1 (0.5)	ELECTRIC SERVICE	13.5 (4.1)
42" (1050mm)	25 (7.6)	GROUND CABLE	1 (0.5)	SERVICE TO GROUND	13.5 (4.1)
				POST MOUNTED	6 (1.8)

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 SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

CONSTRUCTION NOTES:

- RELOCATE EXISTING LIGHT DETECTORS AND CONFIRMATION BEACON TO THE NEW MAST ARMS.
- RELOCATE EXISTING LIGHT DETECTOR AMPLIFIER TO NEW CONTROLLER CABINET.
- ALL EXISTING CONFIRMATION BEACONS SHALL BE RETROFITTED WITH L.E.D. INDICATIONS. THIS WORK SHALL BE INCIDENTAL TO THE PAY ITEM: UNINTERRUPTIBLE POWER SUPPLY.



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-MMI2F SMI2F |
| | "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	613
DETECTABLE WARNINGS	SQ FT	81
SIDEWALK REPAIR	SQ FT	87
COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	84
SIGN PANEL - TYPE 1	SQ FT	16.5
SIGN PANEL - TYPE 2	SQ FT	15
THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	252
THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	365
POLYUREA PAVEMENT MARKING TYPE 1 - LINE 12"	FOOT	114
PAVEMENT MARKING REMOVAL	SQ FT	342
CONDUIT IN TRENCH 2" DIA. GALVANIZED STEEL	FOOT	65
CONDUIT IN TRENCH 2 1/2" DIA. GALVANIZED STEEL	FOOT	5
CONDUIT IN TRENCH 3" DIA. GALVANIZED STEEL	FOOT	0
CONDUIT IN TRENCH 4" DIA. GALVANIZED STEEL	FOOT	233
CONDUIT PUSHED, 2" DIA. GALVANIZED STEEL	FOOT	327
CONDUIT PUSHED, 4" DIA. GALVANIZED STEEL	EACH	3
HANDHOLE	EACH	2
HEAVY DUTY HANDHOLE	EACH	2
DOUBLE HANDHOLE	EACH	2
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	579
FULL ACTUATED CONTROLLER AND TYPE 'N' CABINET, SPECIAL	EACH	1
TRANSCEIVER - FIBER OPTIC	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 20	FOOT	127
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 30	FOOT	1206
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 50	FOOT	1631
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 70	FOOT	822
ELECTRIC CABLE IN CONDUIT, LEAD-IN NO. 14 1 PR	FOOT	1777
ELECTRIC CABLE IN CONDUIT, SERVICE NO. 6 2C	FOOT	114
TRAFFIC SIGNAL POST, GALVANIZED STEEL, 14 FT	EACH	1
TRAFFIC SIGNAL POST, GALVANIZED STEEL, 18 FT	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 20 FT	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 34 FT	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 36 FT	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	8
CONCRETE FOUNDATION, TYPE C	FOOT	4
CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	15
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	30
DRILL EXISTING HANDHOLE	EACH	2
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	2
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED	EACH	2
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	2
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	2
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	2
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	10
INDUCTIVE LOOP DETECTOR	EACH	9
DETECTOR LOOP, TYPE 1	FOOT	684
PEDESTRIAN PUSHBUTTON	EACH	4
TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
RELOCATE EXISTING TRAFFIC SIGNAL SYSTEM DETECTOR UNIT	EACH	1
RELOCATE EXISTING TRAFFIC SIGNAL SYSTEM PHASING UNIT	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	FOOT	361
REMOVE EXISTING HANDHOLE	EACH	6
REMOVE EXISTING CONCRETE FOUNDATION	EACH	7
TEMPORARY TRAFFIC SIGNAL TOWER	EACH	1
PARTY EXISTING POLE COMPLETE	EACH	1
SERVICE INSTALLATION - POLE MOUNTED	EACH	1
UNINTERRUPTIBLE POWER SUPPLY	EACH	1
ELECTRIC CABLE IN CONDUIT, GROUNDING NO. 6 1C	FOOT	674
ELECTRIC CABLE IN CONDUIT, NO. 20 3C, TWISTED, SHIELDED	FOOT	268
PARTY NEW MAST ARM AND POLE, UNDER 40 FEET	EACH	3
PARTY NEW TRAFFIC SIGNAL POST	EACH	2

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

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

SCALE: 1" = 20' SHEET NO. OF SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1321	2009-034 TS	COOK	45	18
CONTRACT NO. 60G39				
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		