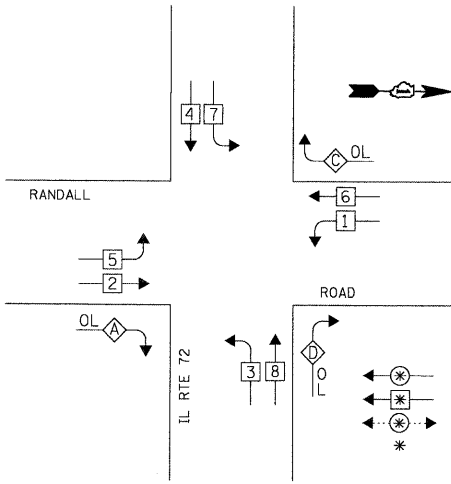


DATE: _____ BY: _____
 SURVEYED: _____ CHECKED: _____
 PLAN: _____ NOTE BOOK: _____
 NO. _____
CHRISTOPHER B. BURKE ENGINEERING LTD.
 3575 West Higgins Road, Suite 600
 Chicago, Illinois 60688
 (847) 823-0500
 PROFILE: _____
 SURVEYED: _____ CHECKED: _____
 GRADES: _____
 NO. _____
 DATE: _____

CONTROLLER SEQUENCE



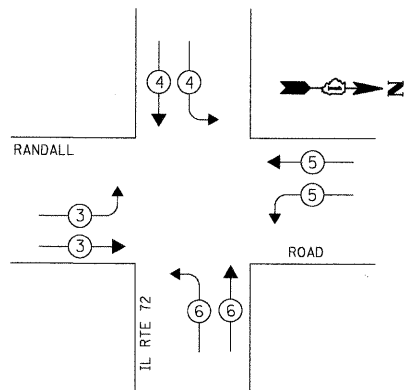
OVERLAP LETTER	PROTECTED PHASE	PERMISSIVE PHASE
A =	3 +	2
C =	7 +	6
D =	1 +	8

LEGEND

- ⊗ DUAL ENTRY PHASE
- ⊙ SINGLE ENTRY PHASE
- ⊕ PEDESTRIAN PHASE
- * NUMBER REFERS TO ASSOCIATED PHASE

PHASE DESIGNATION DIAGRAM

EMERGENCY VEHICLE PREEMPTION SEQUENCE



EXISTING EMERGENCY VEHICLE PREEMPTORS				
EMERGENCY VEHICLE PREEMPTOR	3	4	5	6
MOVEMENT	→	←	↔	↔

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE X INCAND.	LED X % OPERATION		
SIGNAL (RED)	20		17	0.50	170.00
(YELLOW)	20		25	0.25	125.00
(GREEN)	20		15	0.25	75.00
ARROW	12		12	0.10	14.40
PED. SIGNAL	-		25	1.00	-
CONTROLLER	1		100	1.00	100.00
ILLUM. SIGN	-		25	0.05	-
VIDEO SYSTEM	-		150	1.00	-
FLASHER	-		25	0.50	-

ENERGY COSTS TO: TOTAL = 484.40

ILLINOIS DEPARTMENT OF TRANSPORTATION

201 WEST CENTER COURT
 SCHAMBURG, IL 60196-1096

ENERGY SUPPLY: CONTACT: **MIKE WIDHALM**
 PHONE: (847) 608-2376
 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 (1.0)
D - CONTROLLER	4 (1.2)	DOUBLE HANDHOLE	13 (4.0)	MAST ARM (L) POLE	20'+L-2=
E - M. ARM POLE		SIGNAL POST	2 (1.0)	(6m+L-0.6m)=	
		24" (600mm)	10 (3.0)	CONTROLLER CAB.	1 (0.5)
		30" (750mm)	15 (4.6)	FIBER OPTIC	13 (4.0)
		36" (900mm)	15 (4.6)	ELECTRIC SERVICE	1 (0.5)
				GROUND CABLE	1 (0.5)
				ELECTRIC SERVICE	13.5 (4.1)
				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.

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

EXISTING	PROPOSED	CABLE PLAN LEGEND
⊗	⊙	8" (200mm) TRAFFIC SIGNAL SECTION
⊕	⊙	12" (300mm) TRAFFIC SIGNAL SECTION
⊕	⊙	12" (300mm) PEDESTRIAN SIGNAL SECTION
⊕	⊙	12" (300mm) PEDESTRIAN SIGNAL SECTION
⊕	⊙	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
⊕	⊙	FIBER OPTIC CABLE IN CONDUIT NO. 62.5/125 2-MM12F SM24F
⊕	⊙	SIGNAL FACE WITH BACKPLATE. "P" INDICATES PROGRAMMED HEAD.
⊕	⊙	RAILROAD CONTROL CABINET
⊕	⊙	ILLUMINATED SIGN "NO LEFT TURN"
⊕	⊙	ILLUMINATED SIGN "NO RIGHT TURN"
H/C	C	GROUND ROD AT HANDHOLE (H), DOUBLE HANDHOLE (H), OR CONTROLLER (C)
P	P	GROUND ROD AT POST (P) OR MAST ARM POLE (MA)
S	S	GROUND ROD AT ELECTRIC SERVICE INSTALLATION
UPS	UPS	UNINTERRUPTIBLE POWER SUPPLY
V	V	VENDOR SPECIFIC CABLE
⊕	⊙	DOME CAMERA (PAN/TILT/ZOOM)
⊕	⊙	VIDEO DETECTION CAMERA

SCHEDULE OF QUANTITIES

ITEM	UNIT	TOTAL
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1
INDUCTIVE LOOP DETECTOR	EACH	8
RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
RELOCATE EXISTING UPS BATTERY BACK-UP SYSTEM	EACH	1
ETHERNET KIT	EACH	1

CONSTRUCTION NOTES:

- ① REMOVE EXISTING CABINET AND CONTROLLER. INSTALL NEW CONTROLLER AND TYPE IV CABINET ON EXISTING FOUNDATION.
- ② INSTALL ETHERNET KIT.
- ③ RELOCATE EXISTING UPS UNIT AND UPS CABINET. SIDE MOUNT TO PROPOSED TRAFFIC SIGNAL CABINET.

FILE NAME =	USER NAME = MWILLIAM	DESIGNED =	REVISED =
N:\kane\county\078616\TraffSig\CAB_1172.dgn		DRAWN =	REVISED =
		CHECKED =	REVISED =
		DATE = 1/26/2008	REVISED =

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

CABLE PLAN
 RANDALL ROAD AT IL RTE 72

F.A.P. RTE. 336	SECTION 06-00346-00-TL	COUNTY KANE	TOTAL SHEETS 69	SHEET NO. 47
CONTRACT NO. 63011				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				