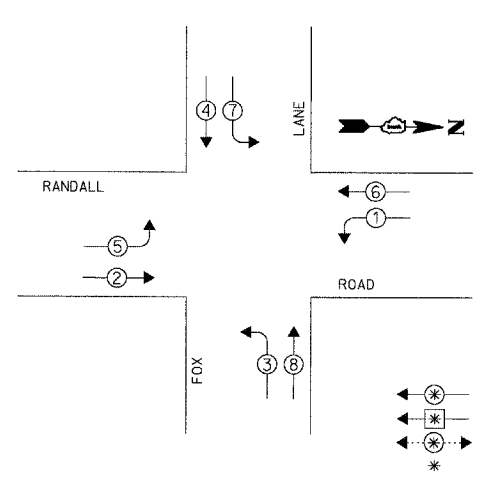


DATE: _____ BY: _____
 SURVEYED: _____ PLOTTED: _____ CHECKED: _____
 NOTED: _____ P.T. OF WAY CHECKED: _____
 NO. _____ CAD FILE NAME: _____
 PI. AN: _____
 NOTED: _____
 NO. _____
CHRISTOPHER B. BURKE ENGINEERING LTD.
 9575 West Higgins Road, Suite 600
 Rosemont, Illinois 60018
 (847) 823-0500
 DATE: _____ BY: _____
 SURVEYED: _____ PLOTTED: _____ CHECKED: _____
 NOTED: _____ P.T. OF WAY CHECKED: _____
 NO. _____ CAD FILE NAME: _____

CONTROLLER SEQUENCE



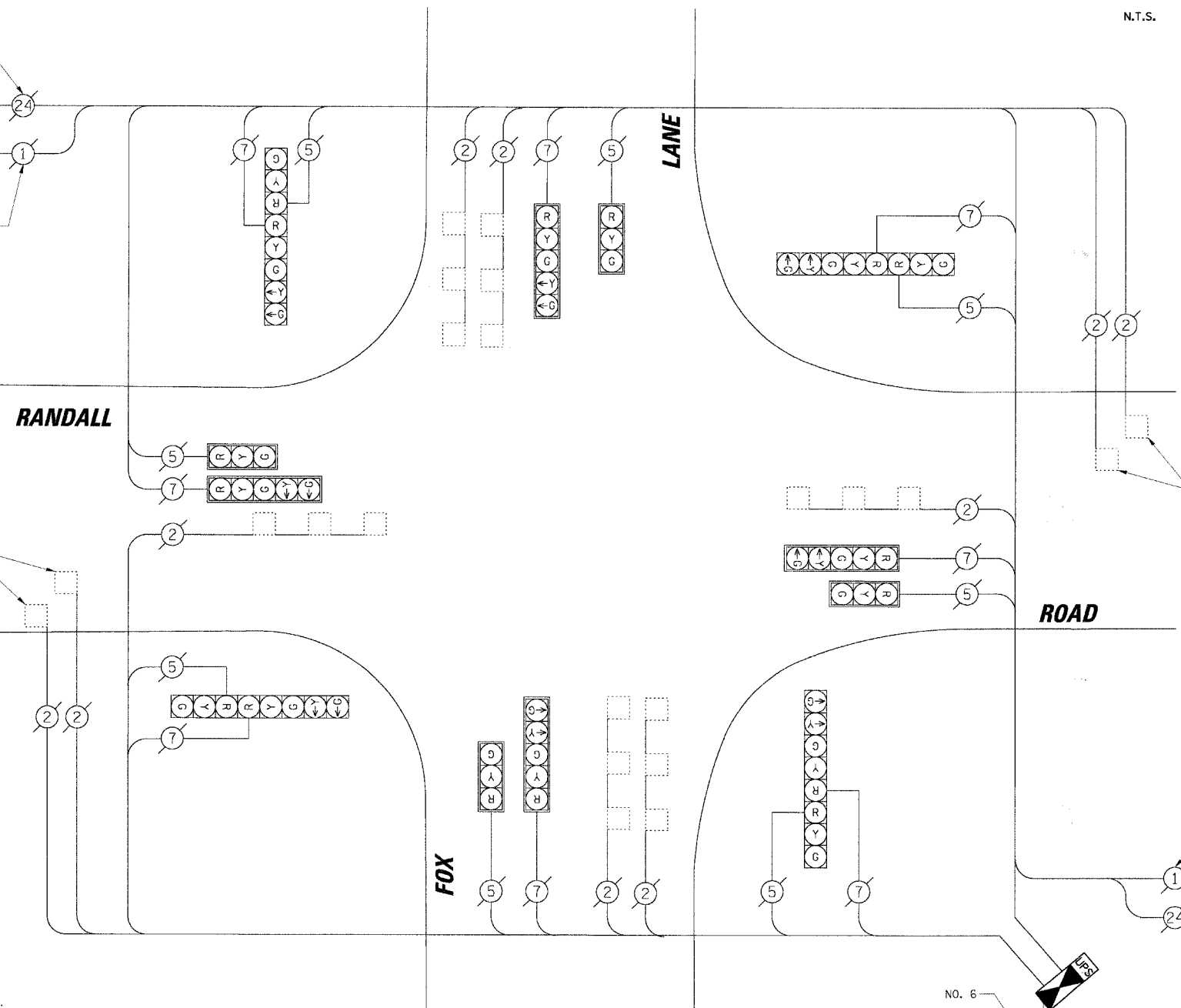
LEGEND
 * DUAL ENTRY PHASE
 * SINGLE ENTRY PHASE
 * PEDESTRIAN PHASE
 * NUMBER REFERS TO ASSOCIATED PHASE

PHASE DESIGNATION DIAGRAM

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
 - 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. 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"
 - GROUND ROD AT HANDHOLE (H), DOUBLE HANDHOLE (HD), OR CONTROLLER (C)
 - GROUND ROD AT POST (P) OR MAST ARM POLE (MA)
 - GROUND ROD AT ELECTRIC SERVICE INSTALLATION
 - UNINTERRUPTIBLE POWER SUPPLY
 - VENDOR SPECIFIC CABLE
 - DOME CAMERA (PAN/TILT/ZOOM)
 - VIDEO DETECTION CAMERA

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.



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	10
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
UNINTERRUPTIBLE POWER SUPPLY	EACH	1
ETHERNET KIT	EACH	1

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	2 (1.0)	SIGNAL POST	2 (1.0)		(6m+L-0.6m)=
24" (600mm)	10 (3.0)	CONTROLLER CAB.	1 (0.5)	BRACKET MOUNTED	13 (4.0)
30" (750mm)	15 (4.6)	FIBER OPTIC	13 (4.0)	PED. PUSHBUTTON	4 (1.2)
36" (900mm)	15 (4.6)	ELECTRIC SERVICE	1 (0.5)	ELECTRIC SERVICE	13.5 (4.1)
		GROUND CABLE	1 (0.5)	SERVICE TO GROUND	13.5 (4.1)
				POST MOUNTED	6 (1.8)

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

TYPE	NO. OF LAMPS	WATTAGE X INCAND.	LED	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	16		17	0.50	136.00
(YELLOW)	16		25	0.25	100.00
(GREEN)	16		15	0.25	60.00
ARROW	16		12	0.10	19.20
PED. SIGNAL	-		25	1.00	-
CONTROLLER	1		100	1.00	100.00
ILLUM. SIGN	-		25	0.05	-
VIDEO SYSTEM	-		150	1.00	-
FLASHER	-			0.50	-

ENERGY COSTS TO: TOTAL = 415.20
KANE COUNTY DIVISION OF TRANSPORTATION
 41W011 BURLINGTON ROAD
 ST. CHARLES, IL 60175
 ENERGY SUPPLY: CONTACT: MIKE WIDHALM
 PHONE: (847) 608-2376
 COMPANY: COMED

- CONSTRUCTION NOTES:**
- REMOVE EXISTING CABINET AND CONTROLLER. INSTALL NEW CONTROLLER AND TYPE IV CABINET ON EXISTING FOUNDATION.
 - INSTALL ETHERNET KIT.
 - INSTALL UPS UNIT IN SIDE MOUNTED CABINET ATTACHED TO TRAFFIC SIGNAL CABINET.

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

1 EACH CONTROLLER AND CABINET (COMPLETE)