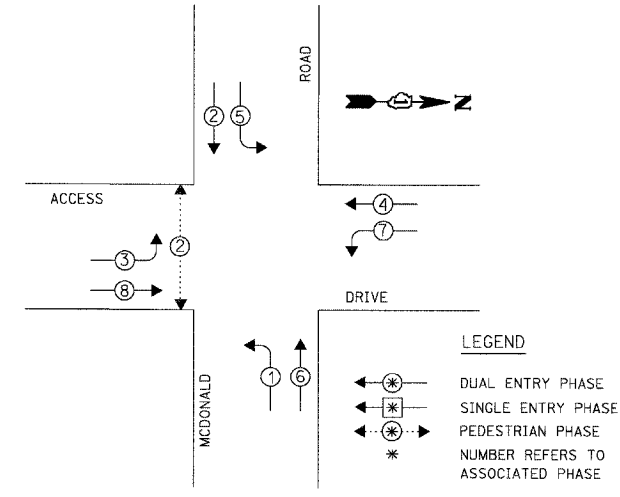


SURVEYED BY: DATE: _____
 PLOTTED BY: DATE: _____
 CHECKED BY: DATE: _____
 FILE NO.: _____
 PROJECT NO.: _____
 DRAWING NO.: _____
 SHEET NO.: _____

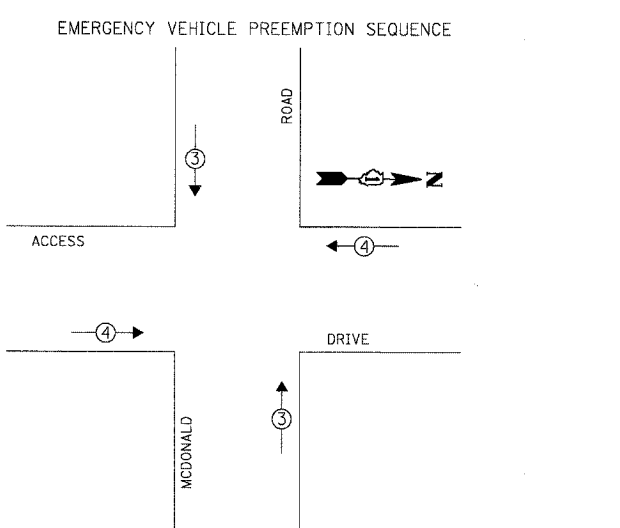
CHRISTOPHER B. BURKE ENGINEERING LTD.
 9575 West Higgins Road, Suite 600
 Rosemont, Illinois 60018
 (847) 823-0500

SURVEYED BY: DATE: _____
 PLOTTED BY: DATE: _____
 CHECKED BY: DATE: _____
 FILE NO.: _____
 PROJECT NO.: _____
 DRAWING NO.: _____
 SHEET NO.: _____

CONTROLLER SEQUENCE



PHASE DESIGNATION DIAGRAM



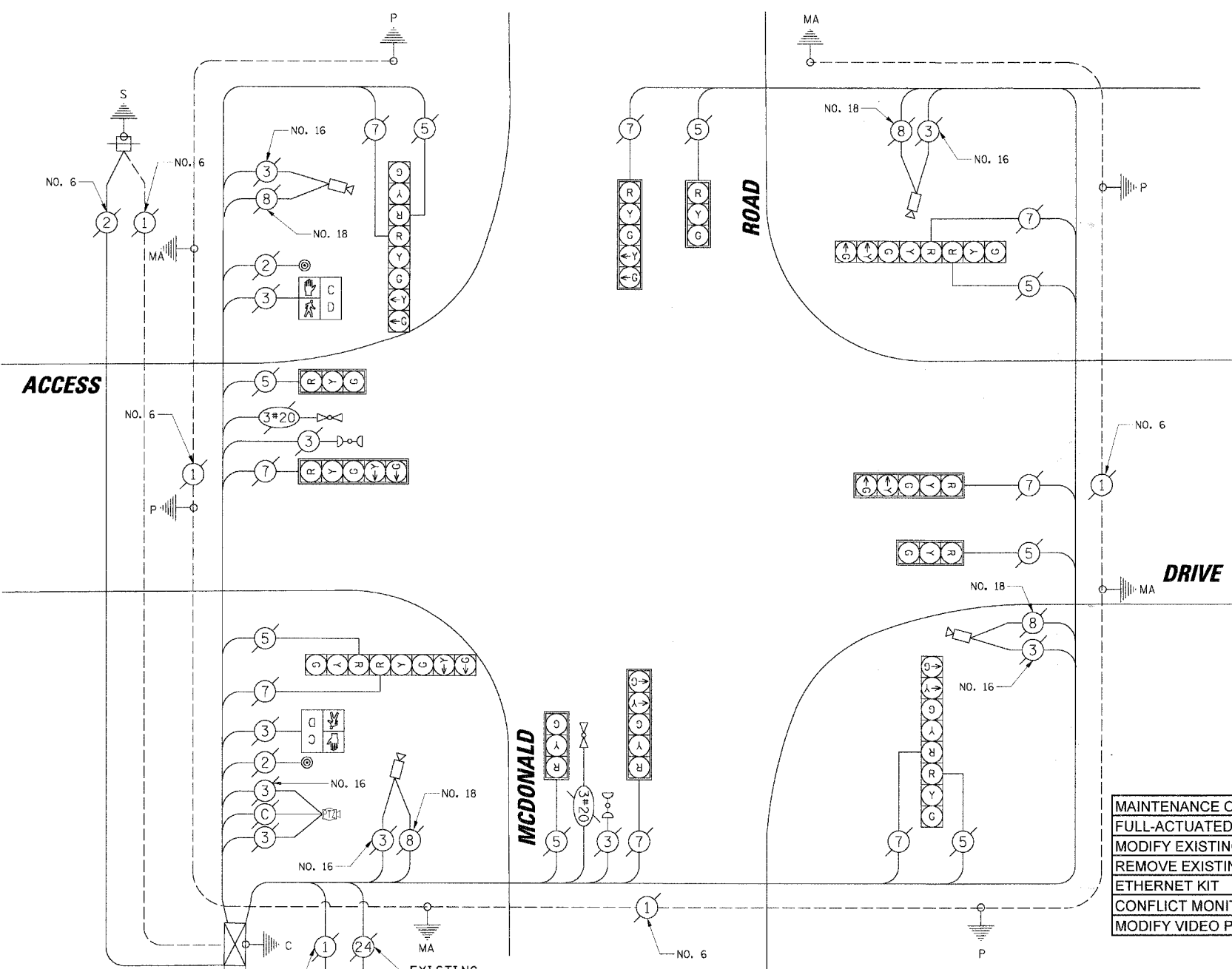
EXISTING EMERGENCY VEHICLE PREEMPTORS

EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	↓ ↑	← →

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

TYPE	NO. OF LAMPS	WATTAGE 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	2	25	1.00	50.00
CONTROLLER	1	100	1.00	100.00
ILLUM. SIGN	-	25	0.05	-
VIDEO SYSTEM	1	-	1.00	150.00
FLASHER	-	-	0.50	-
TOTAL =				615.20

ENERGY COSTS TO:
CITY OF SOUTH ELGIN
 735 MARTIN DRIVE
 SOUTH ELGIN, IL 60177
ENERGY SUPPLY: CONTACT: MIKE WIDHALM
 PHONE: (847) 608-2376
 COMPANY: COMED



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 SEED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

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)	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)

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

CABLE PLAN LEGEND

EXISTING	PROPOSED	DESCRIPTION
(Symbol)	(Symbol)	8" (200mm) TRAFFIC SIGNAL SECTION
(Symbol)	(Symbol)	12" (300mm) TRAFFIC SIGNAL SECTION
(Symbol)	(Symbol)	12" (300mm) PEDESTRIAN SIGNAL SECTION
(Symbol)	(Symbol)	12" (300mm) PEDESTRIAN SIGNAL SECTION
(Symbol)	(Symbol)	CONTROLLER CABINET
(Symbol)	(Symbol)	SERVICE INSTALLATION
(Symbol)	(Symbol)	TELEPHONE INSTALLATION
(Symbol)	(Symbol)	VEHICLE DETECTOR, INDUCTION LOOP
(Symbol)	(Symbol)	MAGNETIC DETECTOR
(Symbol)	(Symbol)	EMERGENCY VEHICLE LIGHT DETECTOR
(Symbol)	(Symbol)	CONFIRMATION BEACON
(Symbol)	(Symbol)	PUSHBUTTON DETECTOR
(Symbol)	(Symbol)	DENOTES NUMBER OF CONDUCTORS. ALL CABLE NO. 14 EXCEPT AS INDICATED. ALL LOOP DETECTOR CABLE TO BE SHIELDED.
(Symbol)	(Symbol)	GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN)
(Symbol)	(Symbol)	FIBER OPTIC CABLE IN CONDUIT NO. 62.5/125 2-MMI2F SM12F
(Symbol)	(Symbol)	FIBER OPTIC CABLE IN CONDUIT NO. 62.5/125 2-MMI2F SM24F
(Symbol)	(Symbol)	SIGNAL FACE WITH BACKPLATE. "P" INDICATES PROGRAMMED HEAD.
(Symbol)	(Symbol)	RAILROAD CONTROL CABINET
(Symbol)	(Symbol)	ILLUMINATED SIGN "NO LEFT TURN"
(Symbol)	(Symbol)	ILLUMINATED SIGN "NO RIGHT TURN"
(Symbol)	(Symbol)	GROUND ROD AT HANDHOLE (H), DOUBLE HANDHOLE (H), OR CONTROLLER (C)
(Symbol)	(Symbol)	GROUND ROD AT POST (P) OR MAST ARM POLE (MA)
(Symbol)	(Symbol)	GROUND ROD AT ELECTRIC SERVICE INSTALLATION
(Symbol)	(Symbol)	UNINTERRUPTIBLE POWER SUPPLY
(Symbol)	(Symbol)	VENDOR SPECIFIC CABLE
(Symbol)	(Symbol)	DOMED CAMERA (PAN/TILT/ZOOM)
(Symbol)	(Symbol)	VIDEO DETECTION CAMERA

SCHEDULE OF QUANTITIES

ITEM	UNIT	TOTAL
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL-ACTUATED CONTROLLER IN EXISTING CABINET, SPECIAL	EACH	1
MODIFY EXISTING CONTROLLER CABINET	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
ETHERNET KIT	EACH	1
CONFLICT MONITOR	EACH	1
MODIFY VIDEO PROCESSING UNIT	EACH	1

- CONSTRUCTION NOTES:**
- REPLACE EXISTING CONTROLLER AND CONFLICT MONITOR.
 - INSTALL ETHERNET KIT.
 - MODIFY VIDEO PROCESSING UNIT TO COMMUNICATE OVER ETHERNET.

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 CONFLICT MONITOR