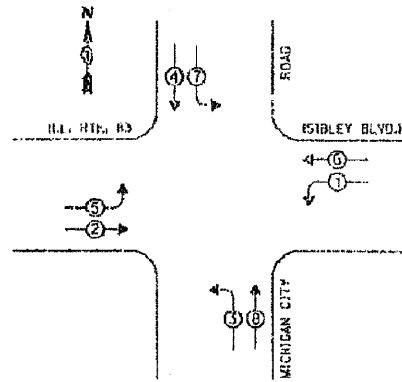


**CONTROLLER SEQUENCE**

REFERRING TO STANDARD 2393, THE VEHICULAR AND PEDESTRIAN PHASES USED ARE DESIGNATED BELOW.



**LEGEND**

- ① → → → → DUAL ENTRY PHASE
- ① → → → → PEDESTRIAN PHASE
- \* NUMBER REFERS TO ASSOCIATED PHASE

**PHASE DESIGNATION DIAGRAM**

DUAL ENTRY - ALL LEGS  
PROTECTED/PERMITTED LEFT TURN PHASING

**CONSTRUCTION NOTES:**

- 1 SIGNAL CHANGE INDICATIONS WILL BE RECEIVED THROUGH INDUCTANCE COILS ATTACHED TO SIGNAL CABLES IN THE EXISTING CABINET. NO DIRECT CONNECTIONS OR SPLICES ARE ALLOWED.
- 2 ALL SIGNAL HEADS TO BE REPLACED WITH L.E.D. (ALL SIGNAL IMPROVEMENTS MUST BE COMPLETED WITHIN 6 MONTHS OF THE START OF RED LIGHT CAMERA OPERATIONS.)
- 3 IDOT CONDUIT CAN ONLY BE USED TO FACILITATE THE ACQUISITION OF THE CHANGE INDICATION THROUGH THE USE OF INDUCTANCE COILS.
- 4 THE COMMUNICATION ANTENNA WILL BE MOUNTED TO THE RED LIGHT RUNNING CAMERA HOUSING. IT WILL BE USED FOR BOTH DETECTION AND ENFORCEMENT COMMUNICATION REQUIREMENTS.

TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS						TOTAL WATTAGE
TYPE	NO. OF LAMP'S	WATTAGE	PER HOUR	% OPERATION		
SIGNAL (RED)	14	17	0.50		119.00	
(YELLOW)	14	25	0.25		81.00	
(GREEN)	14	15	0.25		52.00	
ARRON	16	12	0.10		19.20	
PED. SIGNAL		25	1.00			
CONTROLLER	1	100	1.00		100.00	
ILLUM. SIGN		25	0.05			
FLASHER			0.50			
ENERGY COSTS TO:					TOTAL = 314.20	

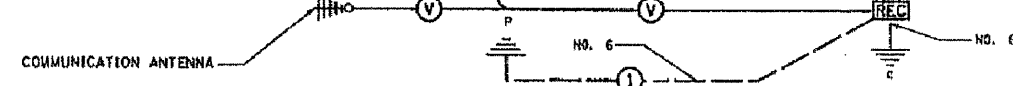
ILLINOIS DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAY/DISTRICT 1  
201 WEST CENTER COURT/SCHAUMBURG, ILLINOIS 60196-1096  
ENERGY SUPPLY CONTACT: TONY ESCALANTE  
PHONE 1-708-232-2328  
COMPANY: SOU.SD

*Professional Seal*  
**X NOT LED**

THE END OF THE TRACER CABLE SHALL BE TIED TO A CABLE HOOP IN THE DOUBLE HANDHOLE CLOSEST TO THE CONTROLLER FOUNDATION.

TRACER CABLE

**SERVICE INSTALLATION - POLE MOUNT**



ITEM	QTY	TOTAL	Bibby at Michigan City Rd. Eastbound		Bibby at Michigan City Rd. Westbound	
			Quantity	Value	Quantity	Value
TRAFFIC CONTROL AND PROTECTION, COMPLETE	1	1				
PORTLAND CEMENT CONCRETE SIGNALS, 8"	800	800	800			
SIGNAL KIT (TRIM)	800	800	800			
CONDUIT IN TRENCH, 3" DIA. GALVANIZED STEEL	20	20	20			
CONDUIT PULLED, 3" DIA. GALVANIZED STEEL	388	388	388		287	
CONDUIT IN TRENCH, 3" DIA. GALVANIZED STEEL	20	20	20			
CONDUIT PULLED, 3" DIA. GALVANIZED STEEL	193	193	193		8	
TRENCH AND BACKFILL FOR ELECTRICAL WORK	10	10	10		8	
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	1	1				
ELECTRIC CABINET IN CONDUIT, SERVICE NO. 8 24	200	200	200		201	
ELECTRIC CABINET IN CONDUIT, SERVICE NO. 8 12	288	288	288		210	
CONCRETE FOUNDATION TYPE	2	2	2		2	
CONCRETE FOUNDATION 20' SQUARE	2	2	2		2	
EXISTING HANDHOLE	1	1				
HANDHOLE	1	1				
HEAVY DUTY HANDHOLE	1	1				
WIRELESS MAGNETIC DETECTOR	1	1				
RED LIGHT PHOTO ENFORCEMENT SIGN, 30" X 42"	1	1				
INSTALLATION OF PRIVATE SERVICE DISCONNECT	1	1				
INSTALLATION OF VENDOR SUPPLY EQUIPMENT	1	1				
SIGNAL HEAD, L.E.D., 1-PAGE SECTION, MAST ARM MOUNTED	2	2				
SIGNAL HEAD, L.E.D., 3-PAGE SECTION, 1-3 SECTION, BRACKET MOUNTED	2	2				
OPTICALLY PROGRAMMED SIGNAL HEAD, L.E.D., 1-PAGE SECTION, MAST ARM MOUNTED	2	2				
OPTICALLY PROGRAMMED SIGNAL HEAD, L.E.D., 3-PAGE SECTION, 1-3 SECTION, BRACKET MOUNTED	2	2				
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	4	4				

(ALL ITEMS TO BE INSTALLED AT TIME OF RED CAMERA INSTALLATION UNLESS OTHERWISE NOTED)  
\*ITEMS TO BE INSTALLED NO LATER THAN 6 MONTHS AFTER RED CAMERA ACTIVATION

**CABLE PLAN LEGEND**

- EXISTING: [Symbol] 8" (200 mm) TRAFFIC SIGNAL SECTION
- EXISTING: [Symbol] 12" (300 mm) TRAFFIC SIGNAL SECTION
- EXISTING: [Symbol] 12" (300 mm) PEDESTRIAN SIGNAL SECTION
- EXISTING: [Symbol] 12" (300 mm) PEDESTRIAN SIGNAL SECTION
- PROPOSED: [Symbol] CONTROLLER CABINET
- PROPOSED: [Symbol] SERVICE INSTALLATION
- PROPOSED: [Symbol] VEHICLE DETECTOR, INDUCTANCE LOOP
- PROPOSED: [Symbol] MAGNETIC DETECTOR
- PROPOSED: [Symbol] EMERGENCY VEHICLE LIGHT DETECTOR
- PROPOSED: [Symbol] CONFIRMATION BEACON
- PROPOSED: [Symbol] PUSHBUTTON DETECTOR
- PROPOSED: [Symbol] DENOTES NUMBER OF CONDUCTORS. ALL CABLE NO. 14 EXCEPT AS INDICATED. ALL LOOP DETECTOR CABLE TO BE SHIELDED.
- PROPOSED: [Symbol] SIGNAL FACE WITH BACKPLATE. "P" INDICATES PROGRAMMED HEAD.
- PROPOSED: [Symbol] NO. 62.5/125 12F FIBER OPTIC CABLE
- PROPOSED: [Symbol] GROUND ROD AT RED LIGHT ENFORCEMENT CABINET
- PROPOSED: [Symbol] GROUND ROD AT SERVICE INSTALLATION
- PROPOSED: [Symbol] GROUND ROD AT CAMERA POST
- PROPOSED: [Symbol] COMMUNICATION ANTENNA

- RED LIGHT INSTALLATION LEGEND**
- [Symbol] RED LIGHT ENFORCEMENT CABINET
  - [Symbol] RED LIGHT ENFORCEMENT CAMERA
  - [Symbol] WIRELESS MAGNETIC DETECTOR
  - [Symbol] VENDOR SPECIFIC CABLE

\* THIS PLAN IS FOR THE PURPOSE OF INSTALLING EMERGENCY VEHICLE PREEMPTION EQUIPMENT AS SHOWN PER PLAN INDICATED IN THE SCHEDULE OF QUANTITIES. ALL OTHER EQUIPMENT SHOWN SHALL BE DISREGARDED.