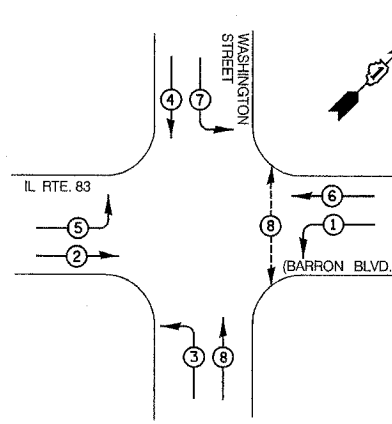


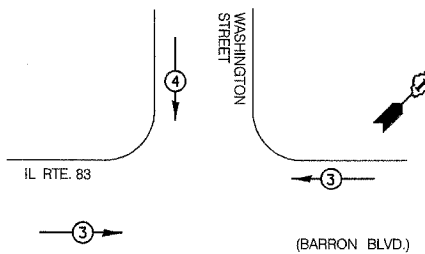
CONTROLLER SEQUENCE



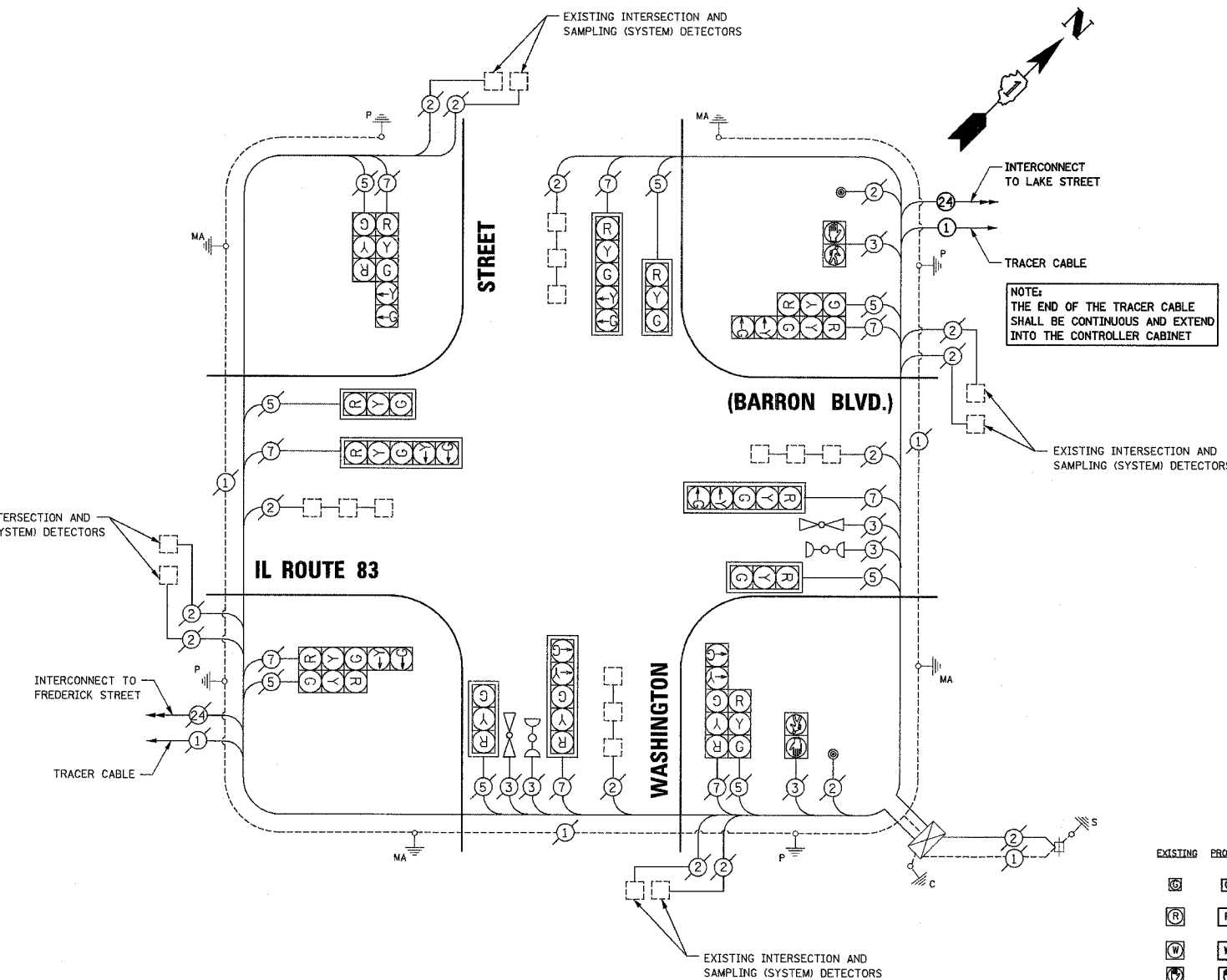
- LEGEND**
- ⊕ DUAL ENTRY PHASE
 - ⊖ SINGLE ENTRY PHASE
 - OL OVERLAP
 - ⊙ PEDESTRIAN PHASE
 - * NUMBER REFERS TO ASSOCIATED PHASE

PHASE DESIGNATION DIAGRAM

EMERGENCY VEHICLE PREEMPTION SEQUENCE



EXISTING EMERGENCY VEHICLE PREEMPTORS			
EMERGENCY VEHICLE PREEMPTOR	3	4	
MOVEMENT	→	↑	



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

CABLE PLAN LEGEND

- | EXISTING | PROPOSED | DESCRIPTION | EXISTING | PROPOSED | DESCRIPTION |
|----------|----------|---|----------|----------|--|
| ⊕ | ⊕ | 8" (200mm) TRAFFIC SIGNAL SECTION | ⊕ | ⊕ | GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN) |
| ⊖ | ⊖ | 12" (300mm) TRAFFIC SIGNAL SECTION | ⊖ | ⊖ | FIBER OPTIC CABLE IN CONDUIT NO. 62.5/125 MM12F SM12F |
| ⊙ | ⊙ | 12" (300mm) PEDESTRIAN SIGNAL SECTION | ⊙ | ⊙ | SIGNAL FACE WITH BACKPLATE, "P" INDICATES PROGRAMMED HEAD |
| ⊙ | ⊙ | 12" (300mm) PEDESTRIAN SIGNAL SECTION | ⊙ | ⊙ | RAILROAD CONTROL CABINET |
| ⊕ | ⊕ | CONTROLLER CABINET | ⊕ | ⊕ | ILLUMINATED SIGN "NO LEFT TURN" |
| ⊕ | ⊕ | SERVICE INSTALLATION | ⊕ | ⊕ | ILLUMINATED SIGN "NO RIGHT TURN" |
| ⊕ | ⊕ | TELEPHONE CONNECTION | H/C | H/C | GROUND ROD AT HANDHOLE (H), DOUBLE HANDHOLE (H), OR CONTROLLER (C) |
| ⊕ | ⊕ | VEHICLE DETECTOR, INDUCTION LOOP | ⊕ | ⊕ | GROUND ROD AT POST (P), OR MAST ARM POLE (MA) |
| ⊕ | ⊕ | MAGNETIC DETECTOR | ⊕ | ⊕ | GROUND ROD AT ELECTRIC SERVICE INSTALLATION |
| ⊕ | ⊕ | EMERGENCY VEHICLE LIGHT DETECTOR | ⊕ | ⊕ | MICROWAVE VEHICLE SENSOR |
| ⊕ | ⊕ | CONFIRMATION BEACON | | | |
| ⊕ | ⊕ | PUSHBUTTON DETECTOR | | | |
| ⊕ | ⊕ | DENOTES NUMBER OF CONDUCTORS, ALL CABLE NO. 14 EXCEPT AS INDICATED. ALL LOOP DETECTOR CABLE TO BE SHIELDED. | | | |

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND.	WATTAGE LED	X % OPERATION	
SIGNAL (RED)	16	135	17	0.50	136.0
(YELLOW)	16	135	25	0.25	100.0
(GREEN)	16	135	15	0.25	60.0
ARROW	16	135	12	0.10	19.2
PED. SIGNAL	2	90	25	1.00	50.0
CONTROLLER	1	100	100	1.00	100.0
TOTAL =					465.2

SCHEDULE OF QUANTITIES

ENGINEER'S FIELD OFFICE. TYPE A MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION

ITEM	UNIT	QUANTITY
CAL MD	EACH	0.5
		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 - FOUNDATION	4 (1.2)	DOUBLE HANDHOLE	13 (4.0)	MAST ARM (L) POLE	20' + L - 2' = (6m+L-0.6m)=
C - M. ARM POLE		SIGNAL POST	2 (0.6)	BRACKET MOUNTED	13 (4.0)
24" (600mm)	10 (3.0)	CONTROLLER CAB.	1 (0.5)	ELECTRIC SERVICE	13.5 (4.1)
30" (750mm)	15 (4.6)	FIBER OPTIC	13 (4.0)	SERVICE TO GROUND	13.5 (4.1)
		ELECTRIC SERVICE	1 (0.5)	POST MOUNTED	6 (1.8)
		GROUND CABLE	1 (0.5)		

STON ENGINEERING
TOP SERVICE CORPORATION
CIVIL ENGINEERS

19 S. BOTHWELL STREET
PALATINE, ILLINOIS 60067
VOICE: 847-776-7200 FAX: 847-776-7239

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
CABLE PLAN, PHASE DESIGNATION DIAGRAM,
EMERGENCY VEHICLE PREEMPTION SEQUENCE
AND SCHEDULE OF QUANTITIES
IL ROUTE 83 AT
WASHINGTON STREET
GRAYSLAKE, ILLINOIS

SCALE: N.T.S.
DATE: 5-26-06

DRAWN BY: CWC
DESIGNED BY: VO
CHECKED BY: TJM