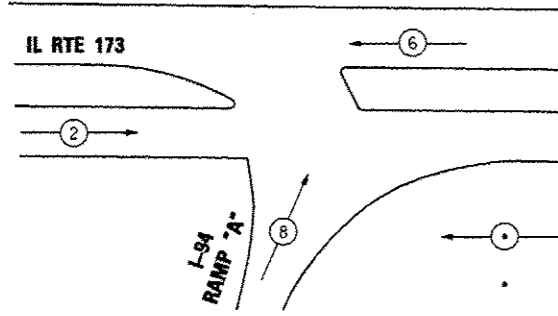
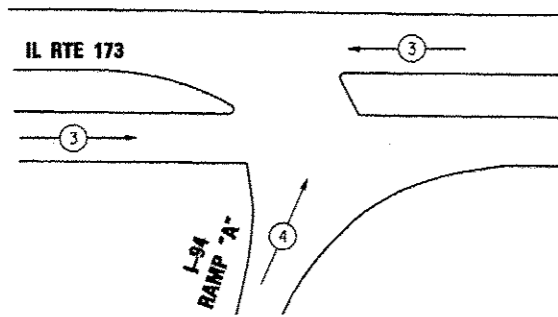


CONTROLLER SEQUENCE



PHASE DESIGNATION DIAGRAM

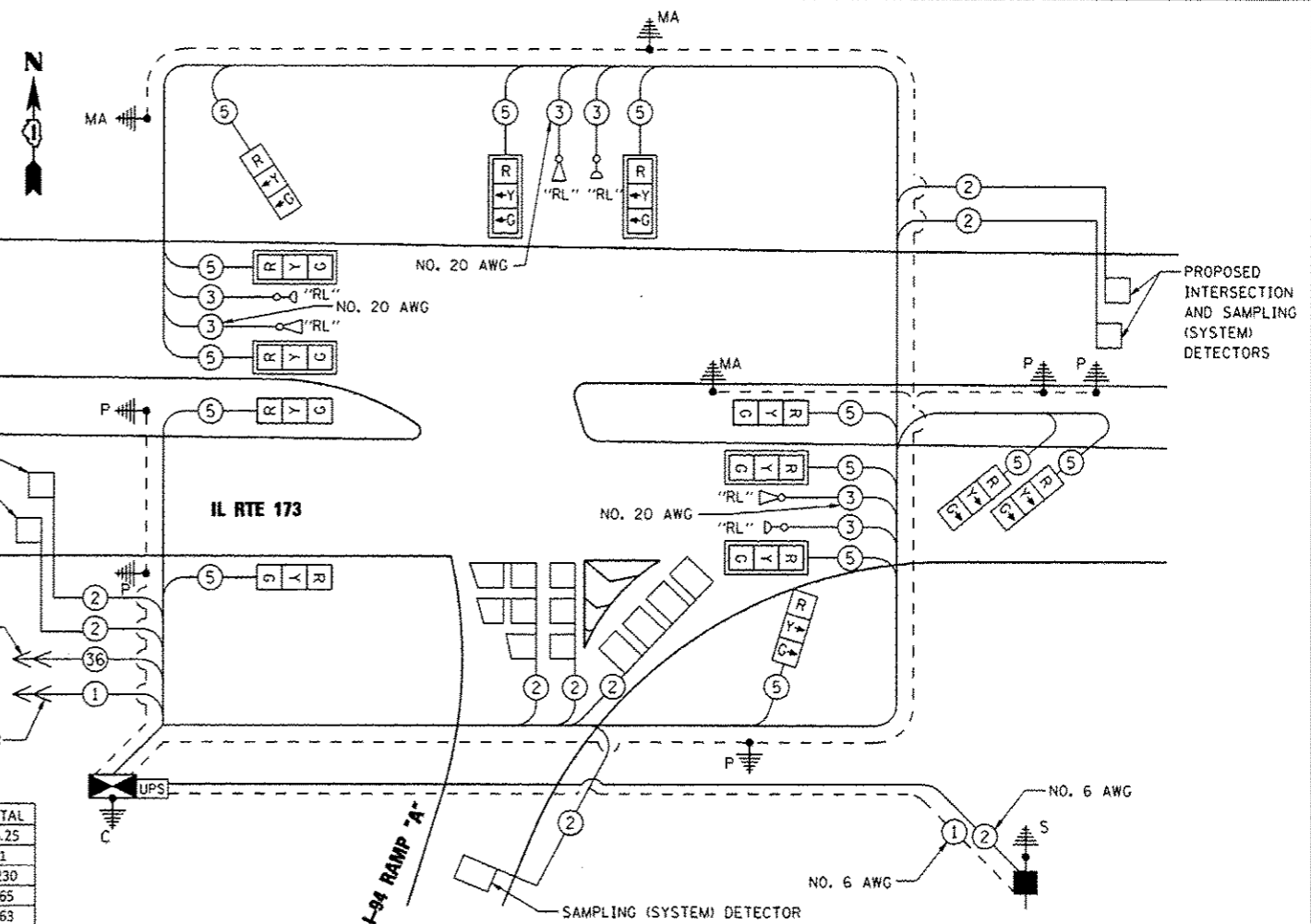
EMERGENCY VEHICLE PREEMPTION SEQUENCE



PROPOSED EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	←	↑

LEGEND

- DUAL ENTRY PHASE
- NUMBER REFERS TO ASSOCIATED PHASE



CABLE PLAN

SCHEDULE OF QUANTITIES

CODE NUMBER	ITEM	UNIT	TOTAL
72000200	SIGN PANEL - TYPE 2	SQ FT	16.25
80500020	SERVICE INSTALLATION - POLE MOUNTED	EACH	1
81028200	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	1230
81028210	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2 1/2" DIA.	FOOT	165
81028220	UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	163
81028240	UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	498
81400100	HANDHOLE	EACH	2
81400200	HEAVY-DUTY HANDHOLE	EACH	4
81400300	DOUBLE HANDHOLE	EACH	3
86400100	TRANSCIVER - FIBER OPTIC	EACH	1
87301225	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1164
87301245	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	3950
87301305	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	2579
87301805	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	142
87301900	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1 C	FOOT	1071
87502480	TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.	EACH	5
87700140	STEEL MAST ARM ASSEMBLY AND POLE, 20 FT.	EACH	1
87700230	STEEL MAST ARM ASSEMBLY AND POLE, 38 FT.	EACH	1
87702940	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 42 FT.	EACH	1
87800100	CONCRETE FOUNDATION, TYPE A	FOOT	20
87800150	CONCRETE FOUNDATION, TYPE C	FOOT	4
87800400	CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	10
87800415	CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	24
88030020	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	6
88030050	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	7
88200210	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	6
88500100	INDUCTIVE LOOP DETECTOR	EACH	8
88600700	PREFORMED DETECTOR LOOP	FOOT	771
89000100	TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
89502375	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
X0324085	EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	1164
85700200	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET	EACH	1
X8620200	UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1
X8950115	RELOCATE LIGHT DETECTOR	EACH	3
X8950120	RELOCATE LIGHT DETECTOR AMPLIFIER	EACH	1
Z0073510	TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1
	RELOCATE VIDEO VEHICLE DETECTION SYSTEM	EACH	1

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.

NOTES:  
1. EMERGENCY VEHICLE PREEMPTION EQUIPMENT SHALL BE REMOVED FROM EXISTING SIGNAL INSTALLATION, STORED BY THE CONTRACTOR FOR THE DURATION OF CONSTRUCTION, AND INSTALLED ON PROPOSED TRAFFIC SIGNAL INSTALLATION PRIOR TO ITS ACTIVATION.

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

TYPE	NO. OF LAMPS	WATTAGE		% OPERATIONS	TOTAL WATTAGE
		INCAND.	LED		
SIGNAL (RED)	12	135	17	0.50	102
(YELLOW)	12	135	25	0.25	75
(GREEN)	12	135	15	0.25	45
ARROW	-	135	12	0.10	-
PED. SIGNAL	-	90	25	1.00	-
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN	-	-	25	0.50	-

ENERGY COSTS TO: TOTAL = 322.0

ILLINOIS DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS/DISTRICT 1  
201 WEST CENTER COURT/SCHAUMBURG, IL 60196

ENERGY SUPPLY CONTACT: DOROTHY PROSEN  
PHONE: (847) 816-5323  
COMPANY: COM ED

**EJM ENGINEERING, INC.**  
411 South Wells Street Suite 1000  
Chicago, Illinois 60607

FILE NAME *	USER NAME = gral	DESIGNED - GR	REVISED 7/17/12 BKS
		DRAWN - GR	REVISED -
	PLOT SCALE = none	CHECKED - BKS	REVISED -
	PLOT DATE = 7/16/2012	DATE = 06/19/2012	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN,  
AND PHASE DESIGNATION DIAGRAM  
IL RTE 173 AT I-94 RAMP "A"  
SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A.I. RTE. 94	SECTION 49-1-R-1	COUNTY LAKE	TOTAL SHEETS 677	SHEET NO. 354
CONTRACT NO. 60L77				ILLINOIS FED. AID PROJECT