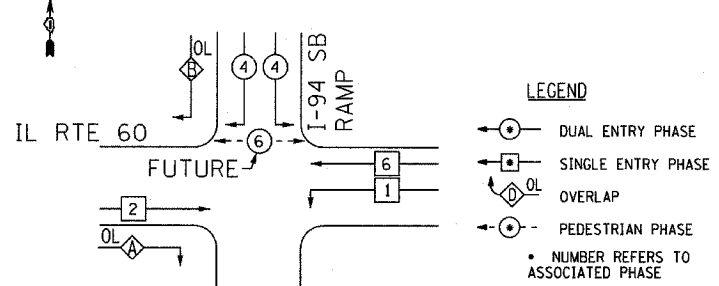


F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
335	119R-2	LAKE	439	193
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

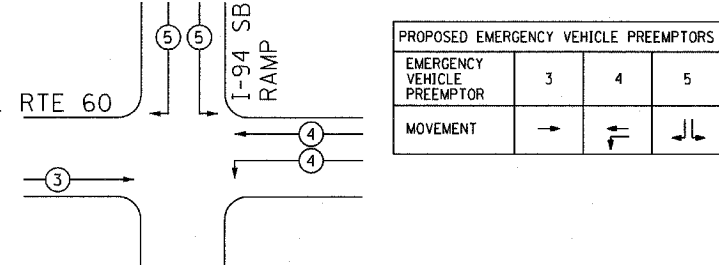
PHASE DESIGNATION DIAGRAM



RIGHT TURN OVERLAP PHASE DESIGNATION

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
A	= 2	+ 4
B	= 4	+ 1

EMERGENCY VEHICLE PREEMPTION SEQUENCE

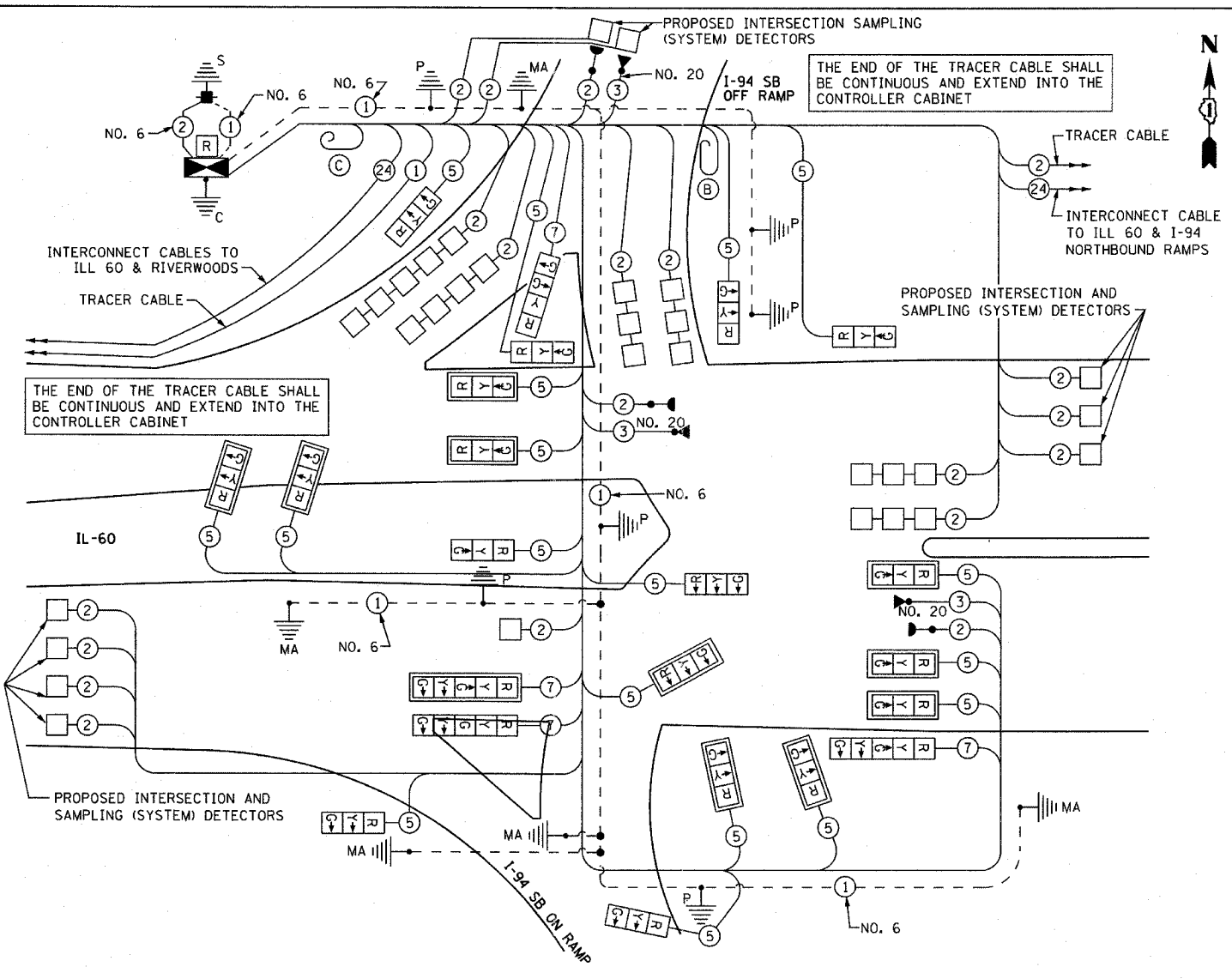


REVISED TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS ILL RTE. 60 & I-94 SOUTHBOUND RAMPS

TYPE	NO. OF LAMPS	WATTAGE		% OPERATIONS	TOTAL WATTAGE
		INCAND.	LED		
SIGNAL (RED)	21		17	0.50	178.50
(YELLOW)	21		25	0.25	131.25
(GREEN)	22		15	0.25	82.50
ARROW	6		12	0.10	7.20
PED. SIGNAL	0		25	1.00	0
CONTROLLER	1		100	1.00	100.00
LUMINAIRES	0	310		0.50	0
FLASHER	0				0
TOTAL =					499.45

EXISTING SERVICE LOCATION (REVISED)
 ENERGY COSTS TO:
ILLINOIS DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS, DISTRICT 1
 201 WEST CENTER COURT, SCHAUMBURG, ILLINOIS 60196-1096
 ENERGY SUPPLY: CONTACT: JOHN PRIBICH
 PHONE: 630-437-2212
 COMPANY: COMMONWEALTH EDISON

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 = (6m+L-0.6m)
E - MAST ARM POLE		SIGNAL POST	2 (1.0)		
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)



CABLE PLAN LEGEND

EXISTING	PROPOSED	DESCRIPTION
(G)	(G)	8" (200mm) TRAFFIC SIGNAL SECTION
(R)	(R)	12" (300mm) TRAFFIC SIGNAL SECTION
(W)	(W)	12" (300mm) PEDESTRIAN SIGNAL SECTION
(P)	(P)	12" (300mm) PEDESTRIAN SIGNAL SECTION
(C)	(C)	CONTROLLER CABINET
(S)	(S)	SERVICE INSTALLATION
(T)	(T)	TELEPHONE CONNECTION
(M)	(M)	MAGNETIC DETECTOR
(E)	(E)	EMERGENCY VEHICLE LIGHT DETECTOR
(B)	(B)	CONFIRMATION BEACON
(D)	(D)	PUSHBUTTON DETECTOR
(V)	(V)	VEHICLE DETECTOR, INDUCTION LOOP
(2)	(2)	DENOTES NUMBER OF CONDUCTORS. ALL CABLE NO. 14 EXCEPT AS INDICATED. ALL LOOP DETECTOR CABLE TO BE SHIELDED.
(R)	(R)	8" (200mm) TRAFFIC SIGNAL SECTION
(R)	(R)	12" (300mm) TRAFFIC SIGNAL SECTION
(R)	(R)	12" (300mm) PEDESTRIAN SIGNAL SECTION
(R)	(R)	12" (300mm) PEDESTRIAN SIGNAL SECTION
(R)	(R)	RAILROAD CONTROL CABINET
(R)	(R)	ILLUMINATED SIGN, FIBER OPTIC "NO LEFT TURN"
(R)	(R)	ILLUMINATED SIGN, FIBER OPTIC "NO RIGHT TURN"
(R)	(R)	GROUND ROD AT HANDHOLE, DOUBLE HANDHOLE, OR CONTROLLER
(R)	(R)	GROUND ROD AT POST OR MAST ARM POLE
(R)	(R)	GROUND ROD AT ELECTRIC SERVICE INSTALLATION
(R)	(R)	GROUND CABLE IN CONDUIT, NO.6 SOLID COPPER (GREEN)
(R)	(R)	FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125 2-MM12F & SM12F
(R)	(R)	UNINTERRUPTIBLE POWER SUPPLY (MOUNT ON BACK OF CONTROL CABINET)

UNIT	ITEM	I-94 SB RAMP
SQ FT	SIGN PANEL - TYPE 1	10
EACH	SERVICE INSTALLATION, GROUND MOUNT	1
FOOT	CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	896
FOOT	CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	489
FOOT	CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL	10
FOOT	CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	109
FOOT	CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	468
EACH	HANDHOLE	8
EACH	HEAVY-DUTY HANDHOLE	1
EACH	DOUBLE HANDHOLE	2
FOOT	TRENCH AND BACKFILL FOR ELECTRICAL WORK	1538
EACH	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET (SPECIAL)	1
EACH	TRANSCIVER - FIBER OPTIC	1
FOOT	ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1/C	1083
FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2/C	757
FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5/C	5180
FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7/C	1073
FOOT	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	5097
FOOT	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C	79
FOOT	ELECTRIC CABLE IN CONDUIT, NO. 20 3/C, TWISTED SHIELDED	757
EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL, 14 FT.	6
EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL, 18 FT.	1
EACH	STEEL MAST ARM ASSEMBLY AND POLE, 22 FT.	1
EACH	STEEL MAST ARM ASSEMBLY AND POLE, 42 FT.	1
EACH	STEEL MAST ARM ASSEMBLY AND POLE, 48 FT.	1
EACH	STEEL MAST ARM ASSEMBLY AND POLE WITH DUAL MAST ARMS, 48 FT & 55 FT	1
FOOT	CONCRETE FOUNDATION, TYPE A	32
FOOT	CONCRETE FOUNDATION, TYPE C	4
FOOT	CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	10
FOOT	CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	45
EACH	SIGNAL HEAD, L.E.D., 1-FACE, 3-SECTION, MAST ARM MOUNTED	10
EACH	SIGNAL HEAD, L.E.D., 1-FACE, 3-SECTION, BRACKET MOUNTED	8
EACH	SIGNAL HEAD, L.E.D., 1-FACE, 4-SECTION, BRACKET MOUNTED	1
EACH	SIGNAL HEAD, L.E.D., 1-FACE, 5-SECTION, BRACKET MOUNTED	2
EACH	SIGNAL HEAD, L.E.D., 1-FACE, 5-SECTION, MAST ARM MOUNTED	1
EACH	TRAFFIC SIGNAL BACKPLATE, LOUVERED	11
EACH	INDUCTIVE LOOP DETECTOR	16
EACH	LIGHT DETECTOR	3
EACH	LIGHT DETECTOR AMPLIFIER	2
FOOT	DETECTOR LOOP, TYPE III	1409
EACH	TEMPORARY TRAFFIC SIGNAL INSTALLATION	1
EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	1
EACH	REMOVE EXISTING HANDHOLE	11
EACH	REMOVE EXISTING CONCRETE FOUNDATION	10
EACH	UNINTERRUPTIBLE POWER SUPPLY	1
EACH	TEMPORARY TRAFFIC SIGNAL TIMINGS	1

- (B) FURNISH AND INSTALL ONE NO. 14 2/C AND ONE NO. 14 3/C CABLE BETWEEN THE CONTROLLER AND HANDHOLE IN THE NORTHEAST QUADRANT. COIL, LABEL AND STORE ADDITIONAL 30' FOR FUTURE PED SIGNAL AND PED PUSHBUTTON FOR FUTURE BIKEPATH. CABLES INCLUDED IN PAY ITEM QUANTITY. DO NOT CONNECT CABLES IN CONTROLLER CABINET.
- (C) FURNISH AND INSTALL ONE NO. 14 2/C AND ONE NO. 14 3/C CABLE BETWEEN THE CONTROLLER AND DOUBLE HANDHOLE IN THE NW QUADRANT. COIL, LABEL AND STORE AN ADDITIONAL 30' IN HANDHOLE FOR FUTURE PED SIGNAL AND PED PUSHBUTTON FOR FUTURE BIKEPATH. CABLES INCLUDED IN PAY ITEM QUANTITY. DO NOT CONNECT CABLES IN CONTROLLER CABINET.

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION SCHEDULE OF QUANTITIES, CABLE PLAN, AND PHASE DESIGNATION DIAGRAM ILL ROUTE 60 & I-94 SOUTHBOUND RAMPS
NAME	DATE	

S.N. DESIGNED BY: JM
 SCALE: NONE DRAWN BY: PK
 DATE: MAY 8, 2007 CHECKED BY: GR

EJM ENGINEERING, INC.
 411 South Wells Street Suite 800
 Chicago, Illinois 60607