F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	*	WILL	608	319
STA.		TO STA.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

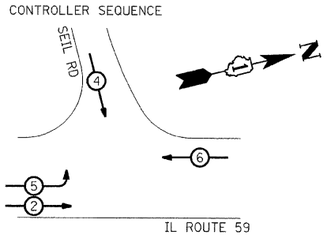
* (26, 26HB-1&114) R-2 CONTRACT NO. 60363

CABLE PLAN LEGEND

EXISTING	PROPOSED	
	G	8" (200mm) TRAFFIC SIGNAL SECTION
R	R	12" (300mm) TRAFFIC SIGNAL SECTION
W	W	12" (300mm) PEDESTRIAN SIGNAL SECTION
		12" (300mm) PEDESTRIAN SIGNAL SECTION
		CONTROLLER CABINET
		SERVICE INSTALLATION
	T	TELEPHONE CONNECTION
		MAGNETIC DETECTOR
		EMERGENCY VEHICLE LIGHT DETECTOR
		CONFIRMATION BEACON
		PUSHBUTTON DETECTOR
		VEHICLE DETECTOR, INDUCTION LOOP
2	2	DENOTES NUMBER OF CONDUCTORS, ALL CABLE NO. 14 EXCEPT AS INDICATED. ALL LOOP DETECTOR CABLE TO BE SHIELDED.
		VIDEO VEHICLE DETECTOR
	P	PREFORMED DETECTOR LOOP
	B	BATTERY BACKUP SYSTEM

EXISTING	PROPOSED	
R Y G Y G "P"	R Y G Y G "P"	SIGNAL FACE WITH BACKPLATE, "P" INDICATES PROGRAMMED HEAD
"E"		RAILROAD CONTROL CABINET
"E"		ILLUMINATED SIGN, FIBER OPTIC "NO LEFT TURN"
"E"		ILLUMINATED SIGN, FIBER OPTIC "NO RIGHT TURN"
H/C	C	GROUND ROD AT HANDHOLE (H), DOUBLE HANDHOLE (H), OR CONTROLLER (C).
P	P	GROUND ROD AT POST (P), OR MAST ARM POLE (MA).
S	S	GROUND ROD AT ELECTRIC SERVICE INSTALLATION
1	1	GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN)
24	24	FIBER OPTIC CABLE IN CONDUIT NO. 62.5/125 MM12F SM12F
		400 W HPS LUMINAIRE
	UPS	UNINTERRUPTIBLE POWER SUPPLY

CONTROLLER SEQUENCE



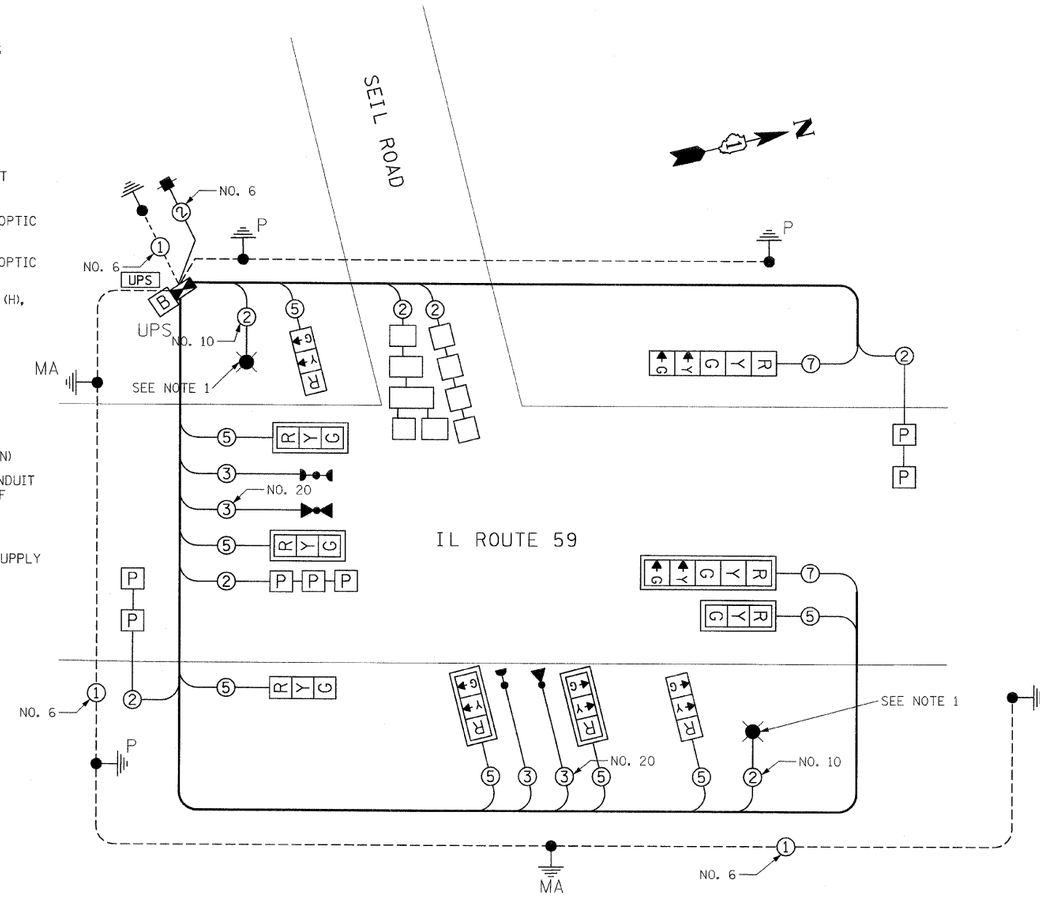
LEGEND

DUAL ENTRY PHASE

PEDESTRIAN PHASE

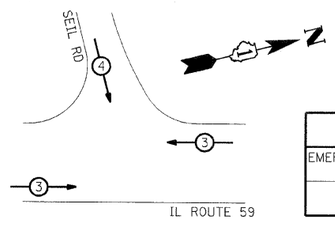
* NUMBER REFERS TO ASSOCIATED PHASE

PHASE DESIGNATION DIAGRAM



CABLE PLAN

(NOT TO SCALE)



PROPOSED EMERGENCY VEHICLE PREEMPTION		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	← →	↓

EMERGENCY VEHICLE PREEMPTION SEQUENCE

SCHEDULE OF QUANTITIES

	ITEM	UNITS	QUANTITY
	SIGN PANEL - TYPE 1	SQ FT	10.5
	CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	615
	CONDUIT IN TRENCH, 2½" DIA., GALVANIZED STEEL	FOOT	64
	CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL	FOOT	33
	CONDUIT IN TRENCH, 3" DIA., GALVANIZED STEEL	FOOT	129
	CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	211
	HANDHOLE	EACH	6
	HEAVY-DUTY HANDHOLE	EACH	1
	DOUBLE HANDHOLE	EACH	1
	TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	726
	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET	EACH	1
	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	313
	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1354
	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	406
	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	1156
	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	273
	TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.	EACH	2
	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	1
	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE, 24 FT.	EACH	1
	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE, 32 FT.	EACH	1
	STEEL MAST ARM ASSEMBLY AND POLE, 34 FT.	EACH	1
	CONCRETE FOUNDATION, TYPE A	FOOT	12
	CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	45
	CONCRETE FOUNDATION TYPE C	FOOT	4
	PREFORMED DETECTOR LOOP	FOOT	210
	TRAFFIC SIGNAL BATTERY BACKUP SYSTEM	EACH	1
	TRAFFIC SIGNAL BACKPLATE	EACH	6
	INDUCTIVE LOOP DETECTOR	EACH	5
*	DETECTOR LOOP, TYPE I	FOOT	219
*	LIGHT DETECTOR	EACH	2
	LIGHT DETECTOR AMPLIFIER	EACH	1
	TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
	SERVICE INSTALLATION - POLE MOUNTED	EACH	1
*	ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	FOOT	786
	ELECTRIC CABLE IN CONDUIT NO. 20 3/C, TWISTED, SHIELDED	FOOT	313
	SIGNAL HEAD ,LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	5
	SIGNAL HEAD ,LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	3
	SIGNAL HEAD ,LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	1
	SIGNAL HEAD ,LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	1
	ELECTRIC CABLE IN CONDUIT, LTG, 2/C NO. 10	FOOT	415
	UNINTERRUPTABLE POWER SUPPLY	EACH	1
*	PAINT NEW MAST ARM AND POLE, UNDER 12.19 METER (40 FT)	EACH	1
*	PAINT NEW COMBINATION MAST ARM AND POLE, UNDER 40 FT	EACH	2
*	PAINT NEW SIGNAL POST	EACH	3

* - 100% COST TO THE VILLAGE OF SHOREWOOD

THE FOLLOWING ITEMS SHALL BE PAINTED WITH BLACK POWDER TYPE FINISH ACCORDING TO THE SPECIAL PROVISION FOR TRAFFIC SIGNAL PAINTING

1 TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT. (2 EACH)
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE, 24 FT.
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE, 32 FT.
STEEL MAST ARM ASSEMBLY AND POLE, 34 FT.

NOTE 1: FOR LIGHTING PLANS AND CONTROLLER LOCATION, SEE PLANS 320 THRU 346

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND.	WATTAGE LED	* %OPERATION	
SIGNAL (RED)	10		17	0.50	85.00
(YELLOW)	10		25	0.25	62.50
(GREEN)	10		15	0.25	37.50
ARROW	4		12	0.10	4.80
CONTROLLER	1		100	1.00	100.00
				TOTAL =	289.80

ENERGY COSTS TO:
ILLINOIS DEPARTMENT OF TRANSPORTATION
201 WEST CENTER COURT
SCHAUMBURG, ILLINOIS 60196-1096
ENERGY SUPPLY CONTACT: MR. RANDY BALES
PHONE: (1) 815-724-5355
COMPANY: COM. 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 - M. 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)
		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)

REVISIONS		
	NAME	DATE
1	JB	07/11/08

ILLINOIS DEPARTMENT OF TRANSPORTATION
FAI 55 AT FAP 338 ILLINOIS ROUTE 59
SECTION: (26, 26HB-1&114) R-2

CABLE PLAN, PHASE DESIGNATION DIAGRAM & SCHEDULE OF QUANTITIES

SCALE: NONE
DATE: 03/14/08

DRAWN BY: TMH
DESIGNED BY: RKF
CHECKED BY: RKF

TENG

TENG & ASSOCIATES, INC.
ENGINEERS/ARCHITECTS/PLANNERS
205 N. MICHIGAN AVE. CHICAGO, IL 60601
TELEPHONE: 312/856-0020

~LAPEOORIUR.DGN, ~RDWOOR0HA.DGN, ~ALTDOULS.DGN, ~PVMOORWR.DGN, ~PVMOORSW.DGN, ~TTBOORWN.DGN, ~EXHOOWPH.DGN, ~RDWOOR00.DGN, ~DRAOORPO.DGN, ~UTLOOR0P.DGN, ~SUROOR9V.DGN, ~YPOOORCP.DGN, ~SUROOR0L.DGN, ~SUROORLD.DGN, ~EXHOOWPC.DGN
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