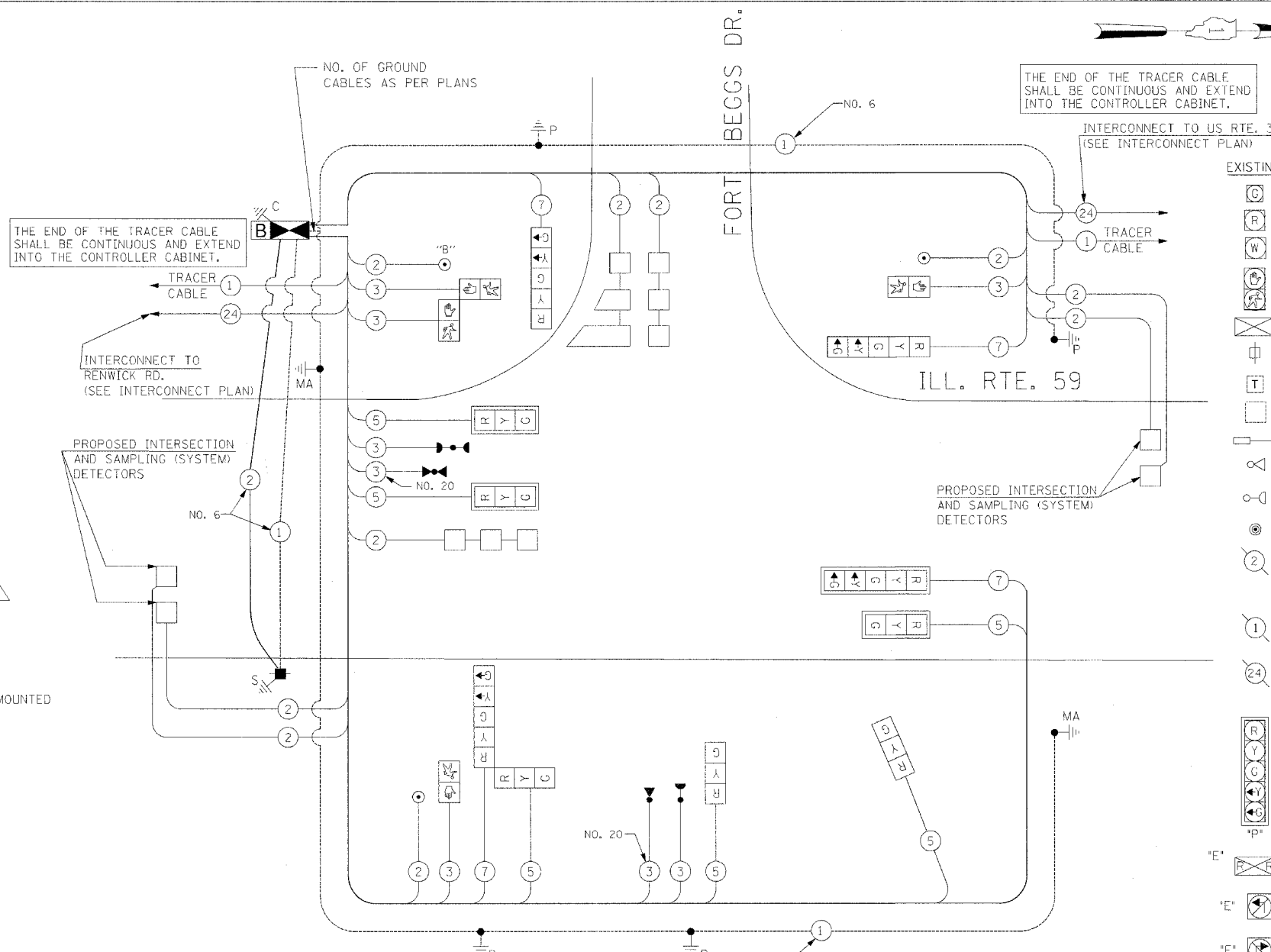


F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
338	(113 & 114R-5)	WILL.	525	383
STA.	TO STA.			
FED. ROAD DIST. NO. 1	ILLINOIS FED. AID PROJECT:			
CONTRACT # 62417				

SCHEDULE OF QUANTITIES

QUANTITY	UNIT	ITEM
25.5	SO FT	SIGN PANEL - TYPE 1
605	FOOT	CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL
208	FOOT	CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL
16	FOOT	CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL
78	FOOT	CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL
180	FOOT	CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL
4	EACH	HANDHOLE
1	EACH	HEAVY-DUTY HANDHOLE
1	EACH	DOUBLE HANDHOLE
724	FOOT	TRENCH AND BACKFILL FOR ELECTRICAL WORK
1	EACH	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL
1	EACH	TRANSCEIVER - FIBER OPTIC
326	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C
675	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C
988	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C
636	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C
1619	FOOT	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR
229	FOOT	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C
3	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.
1	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, 32 FT.
16	FOOT	CONCRETE FOUNDATION, TYPE A
4	FOOT	CONCRETE FOUNDATION, TYPE C
30	FOOT	CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER
15	FOOT	CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER
3	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED
2	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED
2	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED
1	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED
1	EACH	SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED
2	EACH	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED
1	EACH	PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED
4	EACH	TRAFFIC SIGNAL BACKPLATE
7	EACH	INDUCTIVE LOOP DETECTOR
* 2	EACH	LIGHT DETECTOR
* 1	EACH	LIGHT DETECTOR AMPLIFIER
3	EACH	PEDESTRIAN PUSH-BUTTON
1	EACH	TEMPORARY TRAFFIC SIGNAL INSTALLATION
1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
5	EACH	REMOVE EXISTING HANDHOLE
3	EACH	REMOVE EXISTING CONCRETE FOUNDATION
457	FOOT	PREFORMED DETECTOR LOOP
1	EACH	TEMPORARY TRAFFIC SIGNAL TIMING
1	EACH	SERVICE INSTALLATION - POLE MOUNTED
1	EACH	UNINTERRUPTIBLE POWER SUPPLY
746	FOOT	ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C
* 270	FOOT	ELECTRIC CABLE IN CONDUIT NO. 20 3/C, TWISTED, SHIELDED

\* 100% COST TO VILLAGE OF PLAINFIELD



CABLE PLAN LEGEND

EXISTING	PROPOSED	DESCRIPTION
⊙	⊙	8" (200mm) TRAFFIC SIGNAL SECTION
⊙	⊙	12" (300mm) TRAFFIC SIGNAL SECTION
⊙	⊙	12" (300mm) PEDESTRIAN SIGNAL SECTION
⊙	⊙	12" (300mm) PEDESTRIAN SIGNAL SECTION
⊙	⊙	CONTROLLER CABINET
⊙	⊙	SERVICE INSTALLATION
⊙	⊙	TELEPHONE INSTALLATION
⊙	⊙	VEHICLE DETECTOR, INDUCTION LOOP
⊙	⊙	MAGNETIC DETECTOR
⊙	⊙	EMERGENCY VEHICLE LIGHT DETECTOR
⊙	⊙	CONFIRMATION BEACON
⊙	⊙	PUSH-BUTTON DETECTOR
⊙	⊙	2 DENOTES NUMBER OF CONDUCTORS, ALL CABLE NO. 14 EXCEPT AS INDICATED. ALL LOOP DETECTOR CABLE TO BE SHIELDED.
⊙	⊙	1 GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN)
⊙	⊙	24 FIBER OPTIC CABLE IN CONDUIT NO. 62.5/125 2-MM2F & SM2F
⊙	⊙	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	⊙	GROUND ROD AT HANDHOLE, DOUBLE HANDHOLE, OR CONTROLLER
P	⊙	GROUND ROD AT POST OR MAST ARM POLE
S	⊙	GROUND ROD AT ELECTRIC SERVICE INSTALLATION
⊙	⊙	LOCAL AND MASTER CONTROLLER
⊙	⊙	MICROWAVE VEHICLE SENSOR
⊙	⊙	UPS-BATTERY BACK-UP

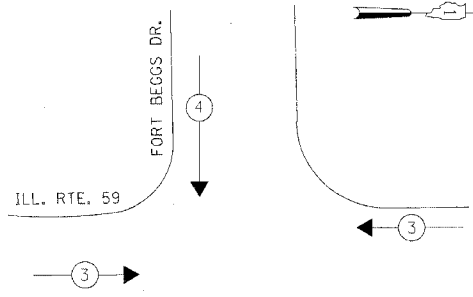
PUSH-BUTTON NOTE:  
PUSH-BUTTON "B" SHALL PLACE A CALL IN PHASES 4 AND 6

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO LAMPS	WATTAGE	OPERATION		
		INCAND.	LED		
SIGNAL (RED)	10	135	17	0.50	85.0
(YELLOW)	10	135	25	0.25	62.5
(GREEN)	10	135	15	0.25	37.5
ARROW	8	135	12	0.10	9.6
PED. SIGNAL	4	90	25	1.00	100.0
CONTROLLER	1	100	100	1.00	100.0
ILLUM. SIGN				0.05	
FLASHER				0.50	
ENERGY COSTS TO:					TOTAL = 394.6

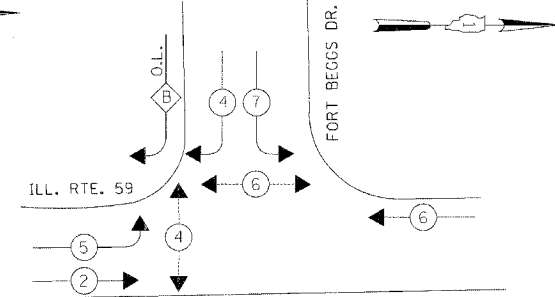
PROPOSED EMERGENCY VEHICLE PREEMPTION		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	←→	↕

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'
E-M.ARM POLE		SIGNAL POST	2 (1.0)	BRACKET MOUNTED	(6m+L-0.6m)=
24" (600mm)	10 (3.0)	CONTROLLER CAB.	1 (0.5)	PED. PUSHBUTTON	4 (1.2)
30" (750mm)	15 (4.6)	FIBER OPTIC	13 (4.0)	ELECTRIC SERVICE	13.5 (4.1)
		ELECTRIC SERVICE	1 (0.5)	SERVICE TO GROUND	13.5 (4.1)
		GROUND CABLE	1 (0.5)	POST MOUNTED	5 (1.8)

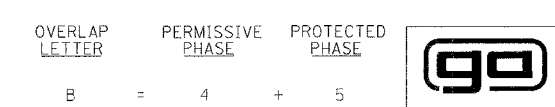
EMERGENCY VEHICLE PREEMPTION SEQUENCE



CONTROLLER SEQUENCE



PHASE DESIGNATION DIAGRAM



THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

LEGEND

← *	DUAL ENTRY PHASE
← *	SINGLE ENTRY PHASE
← O.L.	OVERLAP
← *	PEDESTRIAN PHASE
*	NUMBER REFERS TO ASSOCIATED PHASE

ILLINOIS DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES ILLINOIS ROUTE 59 AT FORT BEGGS DRIVE

REVISIONS	
NAME	DATE
ADDENDUM A	5/13/08

SCALE: N.T.S. DATE: 03/18/2008  
DRAWN BY: BB/KP  
DESIGNED BY: PKG/RRM  
CHECKED BY: PKG/RRM