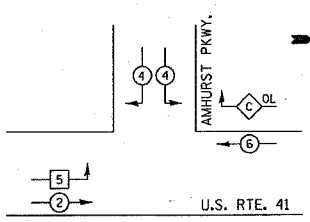


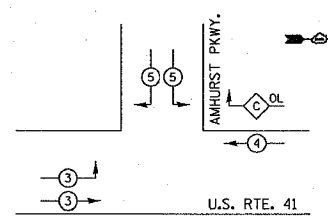
F.A.P. RTE. SHEETS	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
346	2005-058-TS	LAKE	23	8
STA.		TO STA.		
FED. ROAD DIST. NO.		BILLING		FED. AID PROJECT

CONTRACT# 60A47

CONTROLLER SEQUENCE



EMERGENCY VEHICLE PREEMPTION SEQUENCE



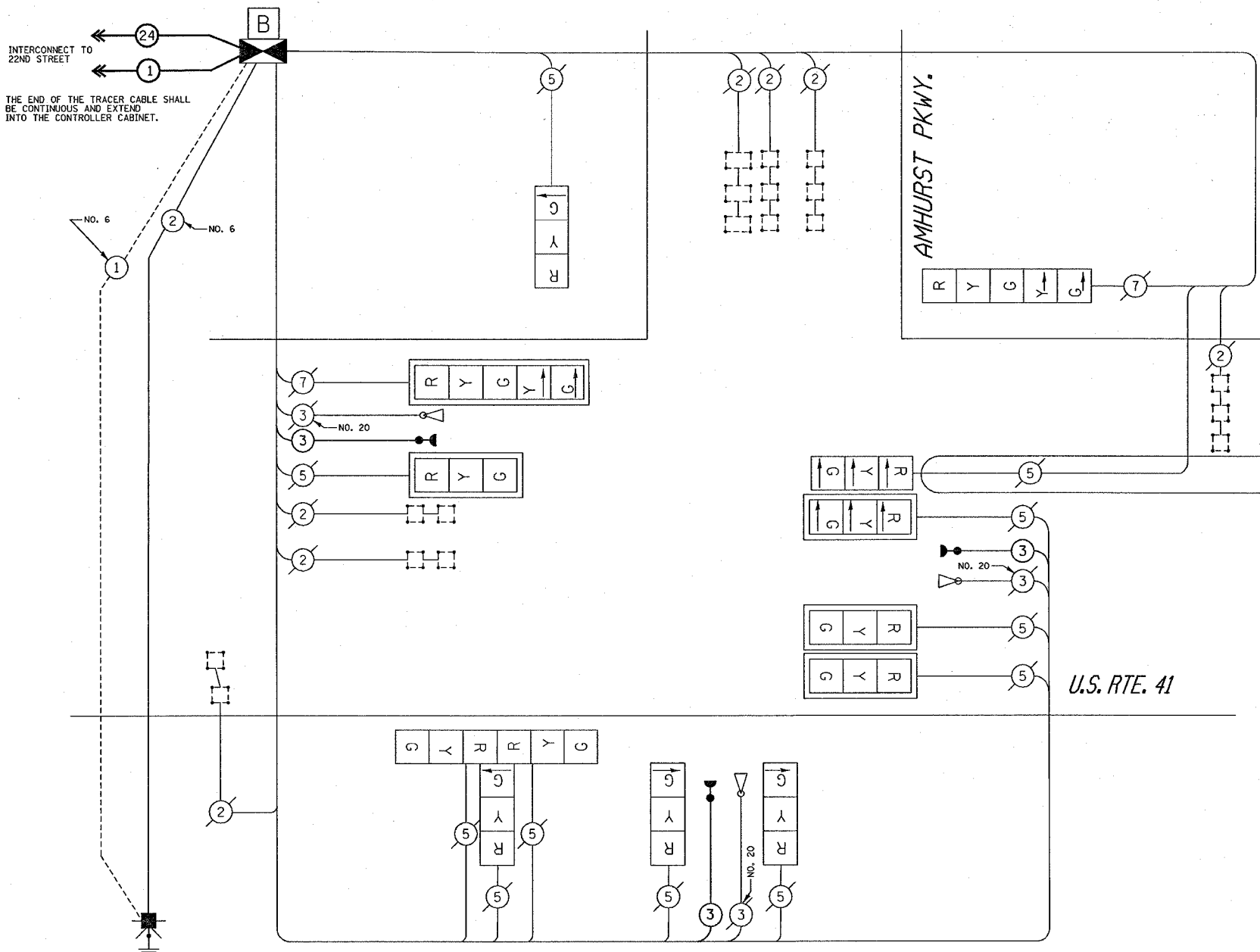
- LEGEND**
- [] SINGLE ENTRY PHASE
 - [OL] OVERLAP
 - [P] PEDESTRIAN PHASE
 - * NUMBER REFERS TO ASSOCIATED PHASE

PHASE DESIGNATION DIAGRAM

EMERGENCY VEHICLE PREEMPTION SEQUENCE			
PROPOSED EMERGENCY VEHICLE PREEMPTORS	3	4	5
EMERGENCY VEHICLE PREEMPTOR			
MOVEMENT	←	→	↑

SCHEDULE OF QUANTITIES

UNIT	QNTY.	PAY ITEM
L SUM	0.25	TRAFFIC CONTROL AND PROTECTION, STANDARD 701501
L SUM	0.25	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701
L SUM	0.25	TRAFFIC CONTROL AND PROTECTION, STANDARD 701801
EACH	1	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
EACH	1	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET (SPECIAL)
EACH	1	TRANSCEIVER - FIBER OPTIC
FOOT	198	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C
FOOT	198	ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C
EACH	5	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM
EACH	7	INDUCTIVE LOOP DETECTOR
FOOT	183	REMOVE ELECTRIC SERVICE CABLE FROM CONDUIT
EACH	1	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
EACH	4	SIGNAL HEAD, L.E.D., 1-FACE, 3-SECTION, MAST ARM MOUNTED
EACH	4	SIGNAL HEAD, L.E.D., 1-FACE, 3-SECTION, BRACKET MOUNTED
EACH	1	SIGNAL HEAD, L.E.D., 1-FACE, 5-SECTION, BRACKET MOUNTED
EACH	1	SIGNAL HEAD, L.E.D., 1-FACE, 5-SECTION, MAST ARM MOUNTED
EACH	1	SIGNAL HEAD, L.E.D., 3-FACE, 3-SECTION, BRACKET MOUNTED
EACH	1	SERVICE INSTALLATION, POLE MOUNT
EACH	1	UNINTERRUPTIBLE POWER SUPPLY
EACH	3	CONFIRMATION BEACON
FOOT	580	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3/C



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 |
| [C] | [C] | CONFIRMATION BEACON |
| [P] | [P] | PUSHBUTTON DETECTOR |
| [V] | [V] | VEHICLE DETECTOR, INDUCTION LOOP |
| [2] | [2] | 2 DENOTES NUMBER OF CONDUCTORS, ALL CABLE NO. 14 EXCEPT AS INDICATED. ALL LOOP DETECTOR CABLE TO BE SHIELDED. |
| [M] | [M] | MICROWAVE VEHICLE SENSOR |
| [R] | [R] | SIGNAL FACE WITH BACKPLATE, "P" INDICATES PROGRAMMED HEAD |
| [E] | [E] | RAILROAD CONTROL CABINET |
| [E] | [E] | ILLUMINATED SIGN, FIBER OPTIC "NO LEFT TURN" |
| [E] | [E] | ILLUMINATED SIGN, FIBER OPTIC "NO RIGHT TURN" |
| [H/C] | [H/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 |
| [B] | [B] | UNINTERRUPTIBLE POWER SUPPLY (UPS) |

CABLE PLAN

REMOVAL NOTES

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR, SHALL REMAIN PROPERTY OF THE STATE AND SHALL BE DELIVERED BY THE CONTRACTOR TO THE STATE'S TRAFFIC SIGNAL MAINTENANCE CONTRACTOR'S MAIN FACILITY AS PER THE TRAFFIC SIGNAL SPECIFICATIONS:

1 EACH, CONTROLLER & CABINET, COMPLETE

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE:

8 EACH, SIGNAL HEAD, 1-FACE 3-SECTION
 2 EACH, SIGNAL HEAD, 1-FACE 5-SECTION
 1 EACH, SIGNAL HEAD, 3-FACE 3-SECTION
 5 EACH, TRAFFIC SIGNAL BACKPLATE
 1 EACH, SERVICE INSTALLATION

NOTES

1. RELOCATION OF THE LIGHT DETECTOR AMPLIFIER(S) FROM THE OLD CONTROLLER CABINET TO THE NEW CABINET IS NECESSARY. THE COST OF THIS WORK SHALL BE INCLUDED TO THE COST OF THE NEW CONTROLLER AND CABINET.

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

I. D. O. T.				TOTAL
TRAFFIC SIGNAL INSTALLATION				WATTAGE
ELECTRICAL SERVICE REQUIREMENTS				
TYPE	NO. LAMPS	WATTAGE INCANDESCENT	% OPERATION	
SIGNAL (RED)	13	135	17	0.50
(YELLOW)	13	135	25	0.25
(GREEN)	13	135	15	0.25
ARROW	4	90	12	0.10
PED. SIGNAL		90	25	1.00
CONTROLLER	1		100	100.00
ILLUM. SIGN	84			0.05
FLASHER				0.50
TOTAL =				342.30

ENERGY COSTS TO:

ILLINOIS DEPARTMENT OF TRANSPORTATION
 201 WEST CENTER ST.
 SCHAUMBURG, ILLINOIS 60196-1096

ENERGY SUPPLY CONTACT: LARRY WOODLE
 PHONE: (815) 724-5674
 COMPANY: COM. EDISON

FOUNDATION (DEPTH)	FT. (m)	CABLE SLACK	FT. (m)	VERTICAL	FT. (m)
TYPE A - POST		HANDHOLE		ALL FOUNDATIONS	
D - CONTROLLER		DOUBLE HANDHOLE		MAST ARM (L) POLE	
E - M. ARM POLE		SIGNAL POST			
		CONTROLLER CAB.		BRACKET MOUNTED	
		FIBER OPTIC		PED. PUSHBUTTON	
		ELECTRIC SERVICE		ELECTRIC SERVICE	
		GROUND CABLE		SERVICE TO GROUND	
				POST MOUNTED	

MORRIS ENGINEERING, INC.

5100 S. LINCOLN AVE. (RTE. 53)
 LISLE, IL 60532-2119
 PHONE: 630-271-0770
 FAX: 630-271-0774

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, EVP SEQUENCE, PHASE DESIGNATION DIAGRAM

U.S. RTE. 41 & AMHURST PARKWAY

SCALE: NTS DRAWN BY: PRT
 DATE: 1/25/07 DESIGNED BY: RKF
 CHECKED BY: JJV