CONTRACT NO.

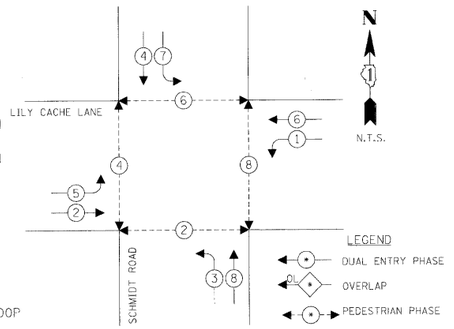
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1578	*	WILL	155	122
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

* 06-00046-00-PF

CABLE PLAN LEGEND

EXISTING	PROPOSED	
G	G	8" TRAFFIC SIGNAL SECTION
R	R	12" TRAFFIC SIGNAL SECTION
W	W	12" PEDESTRIAN SIGNAL SECTION
		12" PEDESTRIAN SIGNAL SECTION
		CONTROLLER CABINET
		SERVICE INSTALLATION
T	T	TELEPHONE INSTALLATION
		VEHICLE DETECTOR, INDUCTION LOOP
V	V	VIDEO DETECTION
		EMERGENCY VEHICLE LIGHT DFTECTOR
		CONFIRMATION BEACON
		PUSHBUTTON DETECTOR
(2)	(2)	DENOTES NUMBER OF CONDUCTORS. ALL CABLE NO. 14 EXCEPT AS INDICATED. ALL LOOP DETECTOR CABLE TO BE SHIELDED
(1)	(1)	GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN)
(C)	(C)	COAXIAL CABLE
(12)	(12)	FIBER OPTIC CABLE IN CONDUIT NO. 62.5/125 12F
R Y G ←Y ←G	R Y G ←Y ←G	SIGNAL FACE WITH BACKPLATE. "P" INDICATES PROGRAMMED HEAD
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
		LUMINAIRE, 250 WATT
IL	IL	ILLUMINATED STREET SIGN

CONTROLLER SEQUENCE

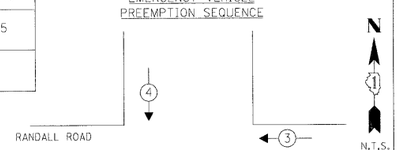


PHASE DESIGNATION DIAGRAM

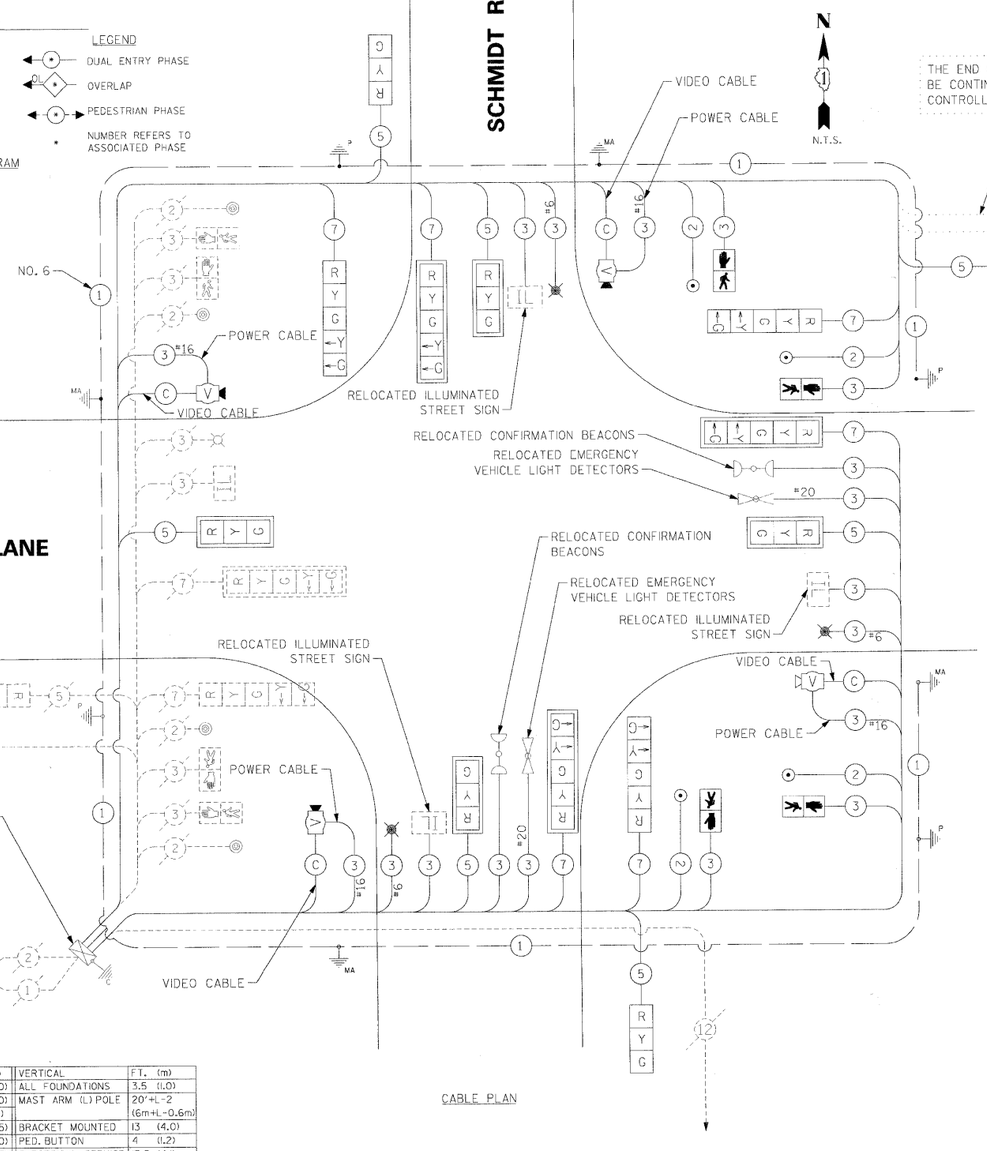
PROPOSED EMERGENCY VEHICLE PREEMPTORS			
EMERGENCY VEHICLE PREEMPTOR	3	4	5
MOVEMENT			

PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE

EMERGENCY VEHICLE PREEMPTION SEQUENCE



LILY CACHE LANE



CABLE PLAN

TRAFFIC SIGNAL BILL OF MATERIALS

	PAY ITEM NO.	ITEM	UNIT	TOTAL
	81000700	CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	FOOT	36
	81000800	CONDUIT IN TRENCH, 3" DIA., GALVANIZED STEEL	FOOT	47
	81018900	CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	80
	81400700	HANDHOLE, PORTLAND CEMENT CONCRETE	EACH	1
	81702415	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 3-1C NO. 6	FOOT	593
	81900200	TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	62
	82102250	LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, 250 WATT	EACH	3
	85000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
	87301215	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	747
	87301225	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1,845
	87301245	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1,310
	87301255	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	1,125
	87502900	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	3
	87702850	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 24 FT.	EACH	1
	87702910	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 36 FT.	EACH	1
	87702930	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 40 FT.	EACH	1
	87800100	CONCRETE FOUNDATION, TYPE A	FOOT	12
*	87800415	CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	45
	87900200	DRILL EXISTING HANDHOLE	EACH	3
	88040070	SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	3
	88040099	SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	4
	88040185	SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	3
	88040160	SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED	EACH	3
	88102820	PEDESTRIAN SIGNAL HEAD, POLYCARBONATE, LED 1-FACE, 2-SECTION BRACKET MOUNTED	EACH	4
	88200100	TRAFFIC SIGNAL BACKPLATE	EACH	7
	88800100	PEDESTRIAN PUSH-BUTTON	EACH	4
	89000100	TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
	89500300	RELOCATE EXISTING ILLUMINATED SIGN	EACH	3
*	89501400	RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT	EACH	4
	89502200	MODIFY EXISTING CONTROLLER	EACH	1
*	89502375	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
*	89502380	REMOVE EXISTING HANDHOLE	EACH	1
*	89502385	REMOVE EXISTING CONCRETE FOUNDATION	EACH	5
*	X8730027	ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	FOOT	519
	XX003552	VIDEO DETECTION SYSTEM	EACH	1
	XX003661	ELECTRIC CABLE IN CONDUIT, COAXIAL	FOOT	122
*	XX005660	ELECTRIC CABLE IN CONDUIT, NO. 20 3/C TWISTED SHIELD	FOOT	541

NOTES

1. CABLE AND CONDUIT TO REMAIN HAS NOT BEEN CALCULATED. CALCULATED AMOUNTS OF CABLE AND CONDUIT ARE FOR NEW AND RELOCATED TRAFFIC SIGNAL ITEMS. QUANTITIES ARE INCLUDED FOR REFERENCE ONLY AND MUST BE VERIFIED BY THE CONTRACTOR. EXISTING ITEMS ARE BASED ON THE BEST AVAILABLE INFORMATION. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THAT ANY ITEMS TO BE RE-USED OR RE-LOCATED EXIST AND ARE IN AN OPERABLE CONDITION.
2. SEE BELOW TABLE FOR PROPOSED ITEMS NEEDED FOR THE VIDEO DETECTION SYSTEM.

AUTOSCOPE VIDEO DETECTION SYSTEM BILL OF MATERIALS

ITEM	UNIT	QUANTITY
MACHINE VISION PROCESSOR	EACH	1
AUTOSCOPE IMAGE SENSOR	EACH	4
VIDEO ELECTRIC CABLE IN CONDUIT, NO. 16 3/C	FOOT	834
VIDEO BELDEN 8281 COAXIAL CABLE IN CONDUIT	FOOT	834

TYPE	NO. LAMPS	WATTAGE INCAND.	WATTAGE LED	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	16	135	17	0.50	136.0
(YELLOW)	16	135	25	0.25	100.0
(GREEN)	16	135	15	0.25	60.0
ARROW	12	135	12	0.10	14.4
PED. SIGNAL					
CONTROLLER	1	100	100	1.00	100.0
ILLUM. SIGN	4		88	0.50	176.0
VIDEO CAMERA	4	15		1.00	60.0
LUMINAIRE	4	250		0.50	500.0
FLASHER					
				TOTAL=	1,146.4

ENERGY COSTS TO:
VILLAGE OF BOLINGBROOK

ENERGY SUPPLY CONTACT:
PHONE:
COMPANY:

FOUNDATION (DEPTH)	FT. (m)	
TYPE A - POST	4	(1.2)
D - CONTROLLER	4	(1.2)
E - M. ARM POLE		
24" (600mm)	10	(3.0)
30" (750mm)	15	(4.6)
36" (900mm)	15	(4.6)

CABLE SLACK	FT. (m)	
HANDHOLE	6.5	(2.0)
DOUBLE HANDHOLE	13	(4.0)
SIGNAL POST	2	(1.0)
CONTROLLER CAB.	1	(0.5)
FIBER OPTIC	13	(4.0)
ELECTRIC SERVICE	1	(0.5)
GROUND CABLE	1	(0.5)

VERTICAL	FT. (m)
ALL FOUNDATIONS	3.5 (1.0)
MAST ARM (L) POLE	20'+L-2 (6m+L-0.6m)
BRACKET MOUNTED	13 (4.0)
PED. BUTTON	4 (1.2)
ELECTRICAL SERVICE	13.5 (4.1)
SERVICE TO GROUND	13.5 (4.1)
POST MOUNTED	6 (1.8)

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL CABLE PLAN

LILY CACHE LANE AT SCHMIDT ROAD

SCALE: N.T.S. DRAWN BY: NMR

DATE: 03/31/2009 CHECKED BY: DJL

#FILES#

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