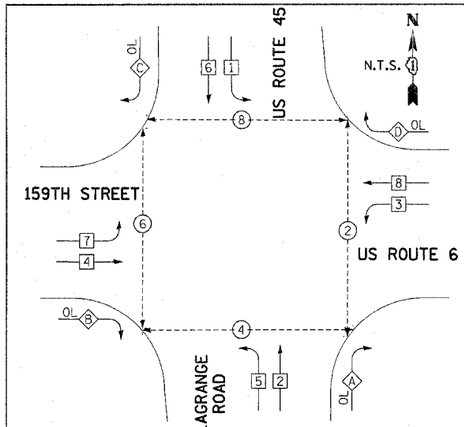
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
351	537 R-1	COOK	245	141
STA. _____	TO STA. _____			
FED. ROAD DIST. NO. _	ILLINOIS	FED. AID PROJECT		

CONTRACT # 62880



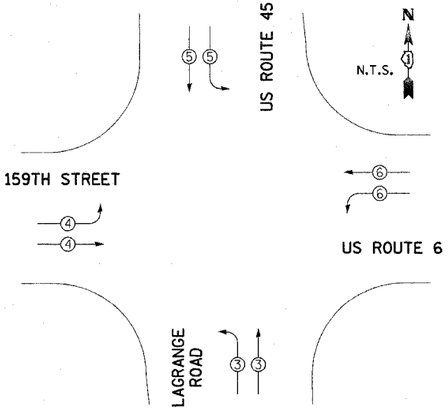
PHASE DESIGNATION DIAGRAM

PHASE DIAGRAM LEGEND

- DUAL ENTRY PHASE
- SINGLE ENTRY PHASE
- PEDESTRIAN PHASE
- * NUMBER REFERS TO ASSOCIATED PHASE
- OL RIGHT TURN OVERLAP:

OVERLAP LETTER	PERMISSIVE PHASE		PROTECTED PHASE
A	2	+	3
B	4	+	5
C	6	+	7
D	8	+	1

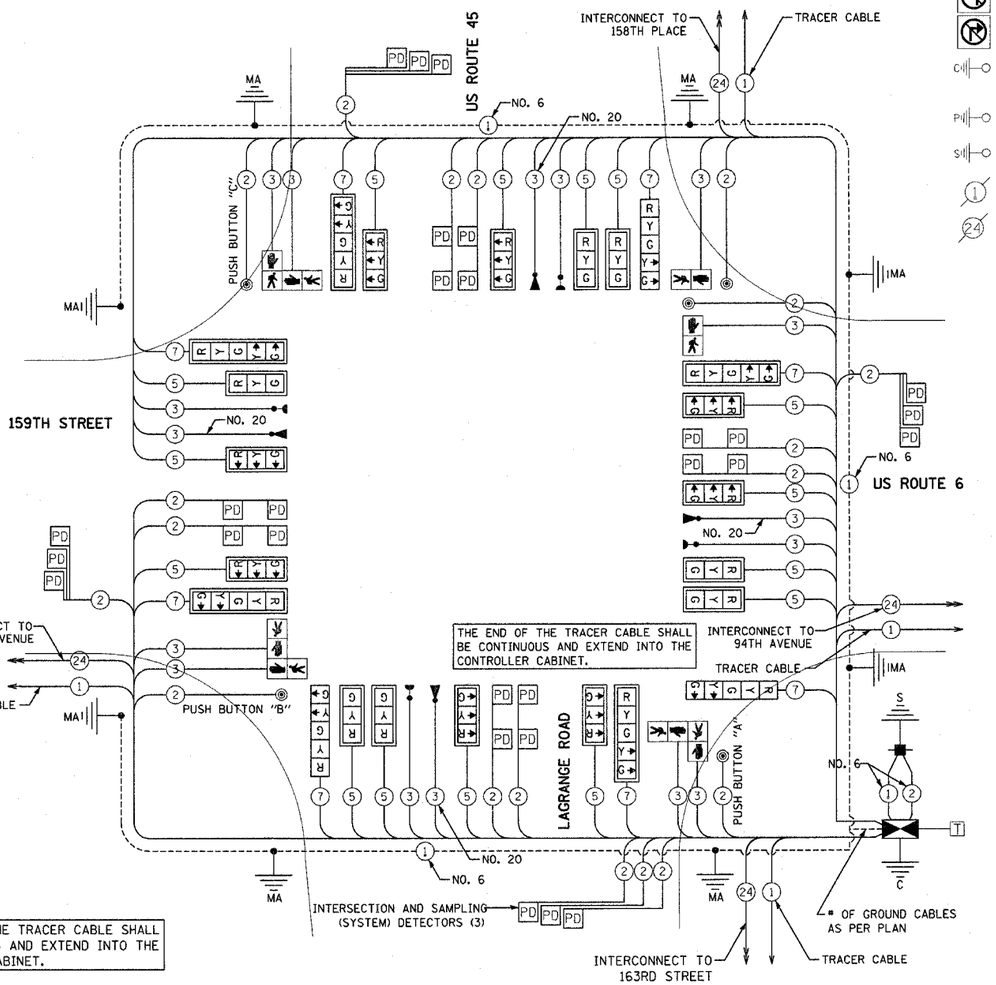
PROPOSED EMERGENCY VEHICLE PREEMPTORS				
EMERGENCY VEHICLE PREEMPTORS	3	4	5	6
MOVEMENT				



EMERGENCY VEHICLE PREEMPTION DIAGRAM

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

THE END OF THE TRACER CABLE SHALL BE CONTINUOUS AND EXTEND INTO THE CONTROLLER CABINET.



THE END OF THE TRACER CABLE SHALL BE CONTINUOUS AND EXTEND INTO THE CONTROLLER CABINET.

CABLE PLAN

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)
TYPE D-CONTROLLER	4 (1.2)	DOUBLE HANDHOLE	13 (4.0)	MAST ARM (L) POLE	20'+L=	(6m+L)=
30", TYPE E	15 (4.6)	SIGNAL POST	2 (1.0)	BRACKET MOUNTED	13	(4.0)
36", TYPE E	15 (4.6)	CONTROLLER CAB.	1 (0.5)	PED. PUSHBUTTON	4	(1.2)
		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	6	(1.8)

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE x INCAND.	LED	x % OPERATION	
SIGNAL (RED)	23	135	17	0.50	195.5
(YELLOW)	23	135	25	0.25	143.75
(GREEN)	23	135	15	0.25	86.25
ARROW	16	135	12	0.10	19.2
PED. SIGNAL	8	90	25	1.00	200.0
CONTROLLER	1	100	100	1.00	100.0
ILLUM. SIGN	0	84	35	0.05	0.0
FLASHER	0		25	0.50	0.0
ENERGY COST TO:				TOTAL =	744.7

ILLINOIS DEPARTMENT OF TRANSPORTATION

201 WEST CENTER COURT
SCHAUMBURG, ILLINOIS 60196-1096

ENERGY SUPPLY: CONTACT: NILES K. AKBAR
PHONE: (708) 235-2338
COMPANY: COMMONWEALTH EDISON

$FILE$
$DATE$
$TIME$

CABLE PLAN LEGEND

EXISTING	PROPOSED	
		SIGNAL FACE WITH BACKPLATE, "P" INDICATES PROGRAMMED HEAD
		RAILROAD CONTROL CABINET
		ILLUMINATED SIGN, FIBER OPTIC "NO LEFT TURN"
		ILLUMINATED SIGN, FIBER OPTIC "NO RIGHT TURN"
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 2-MM12F SM12F
1		NO. 14 1/C TRACER CABLE

EXISTING	PROPOSED	
G	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	T	TELEPHONE CONNECTION
		MAGNETIC DETECTOR
		EMERGENCY VEHICLE LIGHT DETECTOR
		CONFIRMATION BEACON
		PUSHBUTTON DETECTOR
		VEHICLE DETECTOR, INDUCTION LOOP
	PD	DENOTES PREFORMED DETECTOR LOOP
2	2	DENOTES NUMBER OF CONDUCTORS, ALL CABLE NO. 14 EXCEPT AS INDICATED. ALL LOOP DETECTOR CABLE TO BE SHIELDED.

SCHEDULE OF QUANTITIES

SIGN PANEL - TYPE 1	SQ FT	40
SIGN PANEL - TYPE 2	SQ FT	120
CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	937
CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	FOOT	61
CONDUIT IN TRENCH, 3" DIA., GALVANIZED STEEL	FOOT	53
CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL	FOOT	10
CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	447
CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	624
HANDHOLE	EACH	6
HEAVY-DUTY HANDHOLE	EACH	4
DOUBLE HANDHOLE	EACH	2
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	1056
FULL-ACTUATED CONTROLLER AND TYPE V CABINET, SPECIAL	EACH	1
TRANSCEIVER - FIBER OPTIC	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	1032
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	2920
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	3050
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	1159
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	3097
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	46
STEEL MAST ARM ASSEMBLY AND POLE, 22 FT.	EACH	2
STEEL MAST ARM ASSEMBLY AND POLE, 28 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 30 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 52 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 55 FT.	EACH	3
CONCRETE FOUNDATION, TYPE D	FOOT	4
CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	45
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	71
TRAFFIC SIGNAL BACKPLATE	EACH	20
INDUCTIVE LOOP DETECTOR	EACH	14
LIGHT DETECTOR	EACH	4
LIGHT DETECTOR AMPLIFIER	EACH	1
PEDESTRIAN PUSH-BUTTON	EACH	5
TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING HANDHOLE	EACH	12
REMOVE EXISTING CONCRETE FOUNDATION	EACH	9
ELECTRIC CABLE IN CONDUIT, GROUND, NO. 6 1C (GREEN)	FOOT	745
PREFORMED DETECTOR LOOP	FOOT	1244
SERVICE INSTALLATION - POLE MOUNTED	EACH	1
ELECTRIC CABLE IN CONDUIT NO. 20 3/C, TWISTED, SHIELDED	FOOT	1138
SIGNAL HEAD ,LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	15
SIGNAL HEAD ,LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	3
SIGNAL HEAD ,LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	5
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED	EACH	4
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED	EACH	2

PUSHBUTTON "A" SHALL PLACE A CALL IN PHASES 2 AND 4
PUSHBUTTON "B" SHALL PLACE A CALL IN PHASES 4 AND 6
PUSHBUTTON "C" SHALL PLACE A CALL IN PHASES 6 AND 8

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
US RTE 6 (159TH ST) AT US RTE 45 (LAGRANGE RD)

US 45 (LAGRANGE ROAD)
AND US 6 (159TH STREET)
CABLE PLAN

SCALE: N.T.S.
DATE: 7-07-06
DRAWN BY: MJT
DESIGNED BY: MJT
CHECKED BY: NKU

McDonough Associates Inc.
Engineers / Architects

TD-10

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