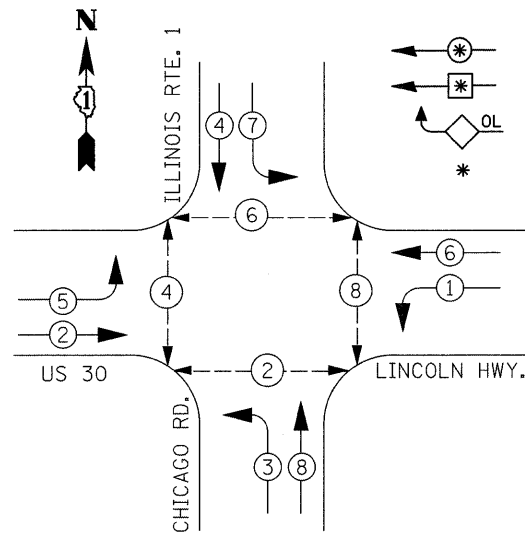
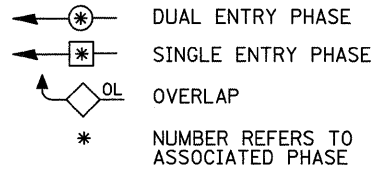


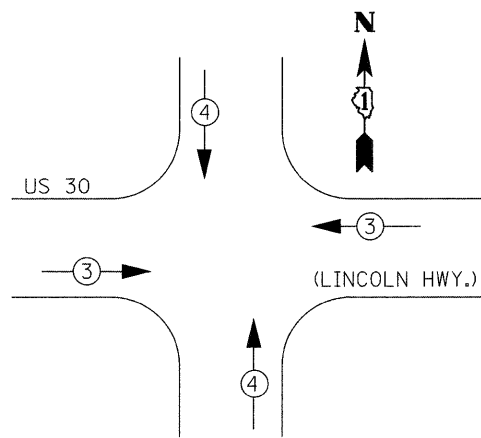
PROPOSED CONTROLLER SEQUENCE



LEGEND

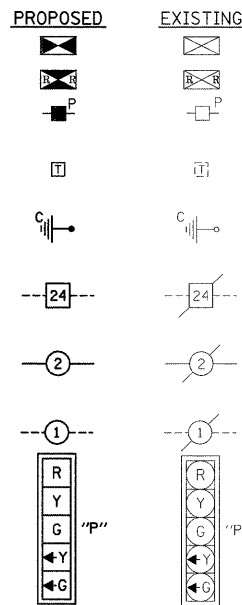


PHASE DESIGNATION DIAGRAM  
EMERGENCY VEHICLE PREEMPTION SEQUENCE



CABLE PLAN LEGEND

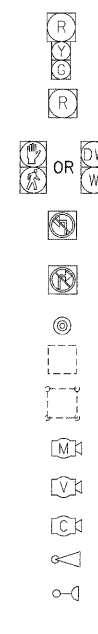
- CONTROLLER CABINET
- RAILROAD CONTROL CABINET
- SERVICE INSTALLATION, (P) POLE OR (G) GROUND MOUNT
- TELEPHONE CONNECTION
- GROUND ROD AT (C) CONTROLLER, (H) HANDHOLE, (P) POST, (M) MAST ARM, OR (S) SERVICE
- FIBER OPTIC CABLE IN CONDUIT, NUMBER OF FIBERS AS NOTED
- ELECTRIC CABLE IN CONDUIT, NO. 14, UNLESS OTHERWISE NOTED, NUMBER OF CONDUCTORS AS NOTED
- GROUND CABLE IN CONDUIT NO. 6 COPPER (GREEN)
- SIGNAL FACE WITH BACKPLATE. "P" INDICATES PROGRAMMED HEAD



CABLE PLAN

CABLE PLAN LEGEND

- 12" (300mm) RED WITH 8" (200mm) YELLOW AND GREEN TRAFFIC SIGNAL FACE
- 12" (300mm) TRAFFIC SIGNAL SECTION
- 12" (300mm) PEDESTRIAN SIGNAL SECTION
- ILLUMINATED SIGN "NO LEFT TURN"
- ILLUMINATED SIGN "NO RIGHT TURN"
- PUSHBUTTON DETECTOR
- DETECTOR LOOP
- PREFORMED DETECTOR LOOP
- MICROWAVE VEHICLE SENSOR
- VIDEO DETECTOR
- CLOSED CIRCUIT TV
- EMERGENCY VEHICLE SYSTEM DETECTOR
- CONFIRMATION BEACON
- UNINTERRUPTIBLE POWER SUPPLY



SCHEDULE OF QUANTITIES

ITEM	UNIT	TOTAL
PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	448
COMBINATION CURB AND GUTTER REMOVAL	FOOT	24
SIDEWALK REMOVAL	SQ FT	448
MEDIAN REMOVAL	SQ FT	300
CORRUGATED MEDIAN	SQ FT	220
DETECTABLE WARNINGS	SQ FT	448
SIGN PANEL-TYPE II	SQ FT	52.5
THERMOPLASTIC PAVEMENT MARKING LINE 12"	FOOT	696
THERMOPLASTIC PAVEMENT MARKING LINE 24"	FOOT	173
THERMOPLASTIC PAVEMENT MARKING REMOVAL	FOOT	302
THERMOPLASTIC PAVEMENT MARKING-LETTER AND SYMBOLS	FOOT	840
CONDUIT TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	32
CONDUIT TRENCH, 3" DIA., GALVANIZED STEEL	FOOT	16
CONDUIT TRENCH, 5" DIA., GALVANIZED STEEL	FOOT	10
CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	1306
CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	326
HANDHOLE	EACH	7
HEAVY-DUTY HANDHOLE	EACH	4
DOUBLE HANDHOLE	EACH	2
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	160
FULL-ACTUATED CONTROLLER AND TYPE V CABINET (SPECIAL)	EACH	1
MASTER CONTROLLER, SPECIAL	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	667
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1670
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1662
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	895
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	3083
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C	FOOT	234
ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	FOOT	770
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	2
STEEL MAST ARM ASSEMBLY AND POLE, 36 FT.	EACH	2
DUAL STEEL MAST ARMS ASSEMBLY AND POLE, 24 FT. & 42 FT.	EACH	1
DUAL STEEL MAST ARMS ASSEMBLY AND POLE, 22 FT. & 54 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	8
CONCRETE FOUNDATION, TYPE C	FOOT	4
CONCRETE FOUNDATION, TYPE E 30-INCH DIA.	FOOT	15
CONCRETE FOUNDATION, TYPE E 36-INCH DIA.	FOOT	30
CONCRETE FOUNDATION, TYPE E 42-INCH DIA.	FOOT	15
DRILL EXISTING HANDHOLE	FOOT	2
SIGNAL HEAD, L.E.D. 1-FACE, 3 SECTION, MAST ARM MOUNTED.	EACH	8
SIGNAL HEAD, L.E.D. 1-FACE, 5 SECTION, MAST ARM MOUNTED.	EACH	6
SIGNAL HEAD, L.E.D. 1-FACE, 5 SECTION, BRACKET MOUNTED.	EACH	2
PEDESTRIAN SIGNAL HEAD, L.E.D., 2-FACE, BRACKET MOUNTED. WITH COUNTDOWN TIMER	EACH	4
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	15
INDUCTIVE LOOP DETECTOR	EACH	10
DETECTOR LOOP TYPE I	FOOT	612
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	2177
PEDESTRIAN PUSH-BUTTON	EACH	4
TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING CONCRETE FOUNDATION	EACH	9
REMOVE EXISTING HANDHOLE	EACH	6
ELECTRIC CABLE IN CONDUIT, TRACER NO. 14 1C	FOOT	715
TEMPORARY TRAFFIC SIGNAL TIMINGS	EACH	1
SERVICE INSTALLATION, POLE MOUNT	EACH	1
TRANSCEIVER - FIBER OPTIC	EACH	1
UNINTERRUPTIBLE POWER SUPPLY	EACH	1
ELECTRIC CABLE IN CONDUIT NO. 20 3/C, TWISTED, SHIELDED	FOOT	325

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

NOTE:

- 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.
- PUSHBUTTON "D" SHALL PLACE A CALL IN PHASES 2 AND 8.

EMERGENCY VEHICLE PREEMPTOR		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	→	↑

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS				
TYPE	NO. LAMPS	WATTAGE (INCAND.)	WATTAGE (LED)	% OPERATION
SIGNAL (RED)	17	17	0.50	144.50
(YELLOW)	17	25	0.25	106.25
(GREEN)	17	15	0.25	63.75
ARROW	18	12	0.10	21.60
PED. SIGNAL	4	25	1.00	100.00
CONTROLLER	1	100	1.00	100.00
ILLUM. SIGN			0.05	

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'-H-2=
E - M. ARM POLE		SIGNAL POST	2 (1.0)	6m-H-0.6m=	
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)
36" (900mm)	15 (4.6)	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)

ENERGY COSTS TO: TOTAL = 536.10

ILLINOIS DEPARTMENT OF TRANSPORTATION

ENERGY SUPPLY CONTACT: 708-410-5069  
PHONE: 708-410-5069  
COMPANY: COM. EDISON

FILE NAME = USER NAME = nguyenam  
DESIGNED - STEVEN N./JOE E./BRENDA K. REVISD -  
DRAWN - STEVEN N./BRENDA K. REVISD -  
CHECKED - JOE E. REVISD -  
DATE - 3/15/09 REVISD -

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'-H-2=
E - M. ARM POLE		SIGNAL POST	2 (1.0)	6m-H-0.6m=	
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)
36" (900mm)	15 (4.6)	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)

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

PROPOSED CABLE PLAN  
ILLINOIS RTE. 30 (ILLINOIS HWY.) @ ILLINOIS RTE. 1 (CHICAGO RD.)

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
353/876	2009-033 TS	COOK	49	36

CONTRACT NO. 60G40

SCALE: SHEET NO. OF SHEETS STA. TO STA.

FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT