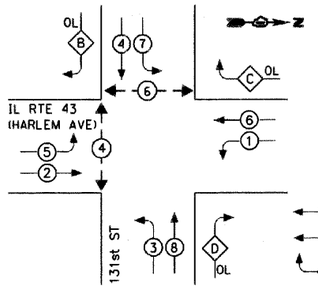
PHASE DESIGNATION DIAGRAM



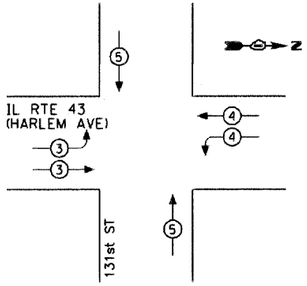
CONTROLLER SEQUENCE

LEGEND

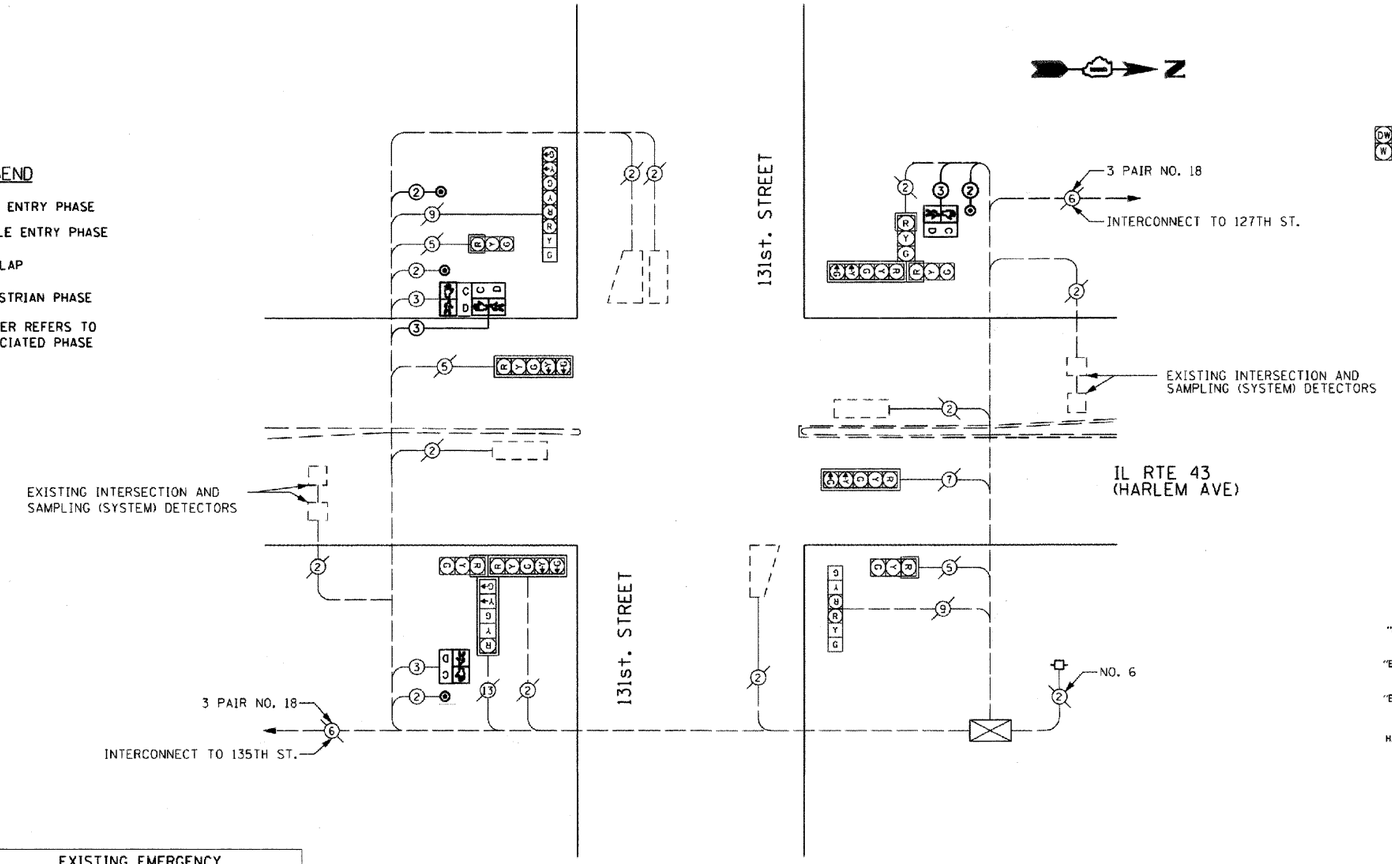
- DUAL ENTRY PHASE
- SINGLE ENTRY PHASE
- OVERLAP
- PEDESTRIAN PHASE
- NUMBER REFERS TO ASSOCIATED PHASE

OVERLAP LETTER		PERMISSIVE PHASE		PROTECTED PHASE
B	=	4	+	5
C	=	6	+	7
D	=	8	+	1

EMERGENCY VEHICLE PREEMPTION SEQUENCE



EXISTING EMERGENCY VEHICLE PREEMPTORS			
EMERGENCY VEHICLE PREEMPTOR	3	4	5
MOVEMENT			



PROPOSED CABLE PLAN

CABLE PLAN LEGEND

EXISTING	PROPOSED	
	C	8" (200mm) TRAFFIC SIGNAL SECTION
R	R	12" (300mm) TRAFFIC SIGNAL SECTION
W	W	12" (300mm) PEDESTRIAN SIGNAL SECTION
DW OR W	DW OR W C D	12" (300mm) PEDESTRIAN SIGNAL SECTION
		CONTROLLER CABINET
B	B	UNINTERRUPTABLE POWER SUPPLY (UPS)
		SERVICE INSTALLATION
T	T	TELEPHONE CONNECTION
		VEHICLE DETECTOR, INDUCTION LOOP
		MAGNETIC DETECTOR
		EMERGENCY VEHICLE LIGHT DETECTOR
		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)
24	24	FIBER OPTIC CABLE IN CONDUIT NO. 62.5/125 MM12F SM12F
R Y G "P"	R Y G "P"	SIGNAL FACE WITH BACKPLATE. "P" INDICATES PROGRAMMED HEAD.
"E"		RAILROAD CONTROL CABINET
"E"		ILLUMINATED SIGN "NO LEFT TURN"
"E"		ILLUMINATED SIGN "NO RIGHT TURN"
H/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
		VIDEO VEHICLE SENSOR

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. LAMPS	WATTAGE INCAND.	WATTAGE LED	%OPERATION	TOTAL WATTAGE
SIGNAL (RED)	14		17	0.50	119.0
(YELLOW)	14		25	0.25	87.5
(GREEN)	14		15	0.25	52.5
ARROW	12		12	0.10	14.4
PED. SIGNAL	6		25	1.00	150.0
CONTROLLER	1		100	1.00	100.0
ILLUM. SIGN				0.05	
FLASHER				0.50	
				TOTAL =	523.4

ENERGY COSTS TO:
ILLINOIS DEPARTMENT OF TRANSPORTATION
201 WEST CENTER COURT
SCHAUMBURG, ILLINOIS 60196-1096

ENERGY SUPPLY CONTACT: Ms. DOLORES KREMNITZER
PHONE: (815) 724-5241
COMPANY: COMED-EDISON

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= (6m+L -0.6m)=
E - M. ARM POLE		SIGNAL POST	2 (1.0)		
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)

SCHEDULE OF QUANTITIES

QTY	UNIT	ITEM DESCRIPTION
360	SQ. FT.	THERMOPLASTIC PAVEMENT MARKING-LETTERS AND SYMBOLS
388	FOOT	THERMOPLASTIC PAVEMENT MARKING-LINE 6"
105	FOOT	THERMOPLASTIC PAVEMENT MARKING-LINE 12"
119	FOOT	THERMOPLASTIC PAVEMENT MARKING-LINE 24"
320	SQ. FT.	THERMOPLASTIC PAVEMENT MARKING REMOVAL
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
860	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C
850	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C
1	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL, 10 FT.
2	EACH	PEDESTRIAN SIGNAL HEAD, L.E.D., 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
1	EACH	PEDESTRIAN SIGNAL HEAD, L.E.D., 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
4	EACH	PEDESTRIAN PUSH-BUTTON
1	EACH	MODIFY EXISTING CONTROLLER

PLOT DATE = Dec 24 2009
FILENAME = H:\05-HH\3080-PLANS-ENG\REV-1\dwg\09-HH-3002 09-12-24.dwg

FILE NAME = $FILE$	USER NAME = $USER$	DESIGNED - MTM	REVISED -
		DRAWN - JJS	REVISED -
	PLOT SCALE = $SCALE$	CHECKED - DHF	REVISED -
	PLOT DATE = $DATE$	DATE - OCTOBER 2009	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN AND PHASE DESIGNATION DIAGRAM, IL. 43 (HARLEM AVE.) AND 131st. STREET

SCALE: 1"=20' | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
348	09-00044-00-SW	COOK	29	16
		CONTRACT NO. 63413		
		ILLINOIS FED. AID PROJECT		