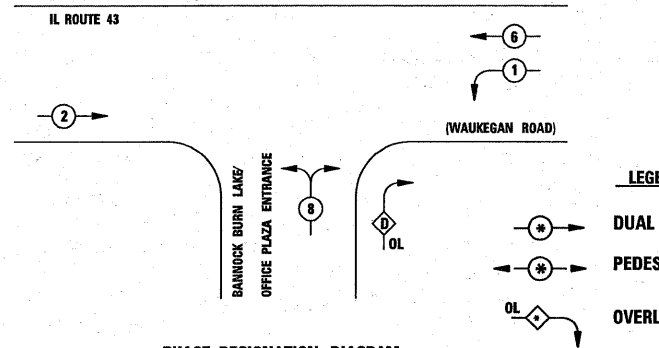


CONTROLLER SEQUENCE



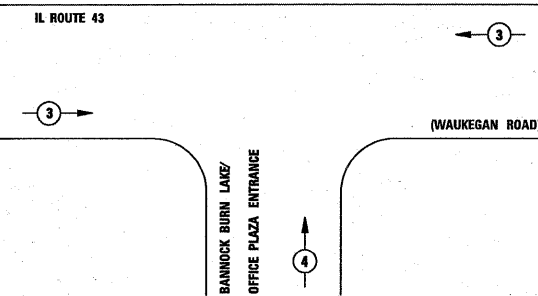
PHASE DESIGNATION DIAGRAM

DUAL ENTRY - ALL LEGS PROTECTED / PERMITTED LEFT TURN PHASING

RIGHT TURN OVERLAP PHASE DESIGNATION

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
D	8	1

EMERGENCY VEHICLE PREEMPTION SEQUENCE



PROPOSED EMERGENCY VEHICLE PREEMPTOR		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	← →	← →

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND.	LED	*OPERATION	
SIGNAL (RED)	10	135	17	0.50	85.00
(YELLOW)	10	135	25	0.25	62.50
(GREEN)	10	135	15	0.25	37.50
ARROW	4	135	12	0.10	4.80
PED. SIGNAL	90	90	25	1.00	
CONTROLLER	1	100	100	1.00	100.00
ILLUM. SIGN		84		0.05	
FLASHER				0.50	

ENERGY COSTS TO: ILLINOIS DEPARTMENT OF TRANSPORTATION
 201 WEST CENTER COURT
 SCHAUMBURG, ILLINOIS 60196-1096
 ENERGY SUPPLY CONTACT: PHONE: 847/816-5248
 COMPANY: COMED

FILE NAME =	USER NAME = nguyensm	DESIGNED - SN	REVISED -
ca:\projects\traffic\1060010\143deer\12.dgn		DRAWN - SN	REVISED -
	PLOT SCALE = 20,0000' / IN.	CHECKED - DAD	REVISED -
	PLOT DATE = 1/23/2008	DATE - 1/15/2008	REVISED -

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	0.25
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL TRANSCEIVER - FIBER OPTIC	EACH	1
*ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	230
*ELECTRIC CABLE IN CONDUIT NO. 20 3C, TWISTED, SHIELDED	FOOT	230
ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	FOOT	10
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C	FOOT	10
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	3
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED	EACH	1
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	3
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	1
SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED	EACH	1
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	4
TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.	EACH	2
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	1
TRAFFIC SIGNAL POST, GALVANIZED STEEL 18 FT.	EACH	1
INDUCTIVE LOOP DETECTOR	EACH	5
DRILL EXISTING HANDHOLE	EACH	2

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 - FOUNDATION	4 (1.2)	DOUBLE HANDHOLE	13 (4.0)	MAST ARM (L) POLE	20' + L - 2 = (6m+L-0.6m)=
C - M. ARM POLE		SIGNAL POST	2 (1.0)	BRACKET MOUNTED	13 (4.0)
24" (600mm)	10 (3.0)	CONTROLLER CAB.	1 (0.5)	PED. PUSHBUTTON	4 (1.2)
30" (750mm)	15 (4.6)	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)

CONSTRUCTION NOTES:
 REMOVE EXISTING CONTROLLER AND CABINET. INSTALL NEW CONTROLLER AND TYPE IV CABINET. SPECIAL, RE-USE EXISTING FOUNDATION. RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT TO NEW CONTROLLER CABINET. RELOCATION OF THE EXISTING EMERGENCY PRIORITY SYSTEM SHALL BE INCLUDED IN THE NEW CONTROLLER UNIT PRICE.

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
SERVICE INSTALLATION, GROUND MOUNT	EACH	1
* LIGHT DETECTOR	EACH	2
* LIGHT DETECTOR AMPLIFIER	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
OPTIMIZE TRAFFIC SIGNAL SYSTEM	EACH	1

* 100% COST WILL BE PAY BY DEERFIELD-BANNOCKBURN CENTRAL FIRE PROTECTION

CABLE PLAN LEGEND

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

CABLE PLAN LEGEND

	PROPOSED	EXISTING
12" (300mm) RED WITH 8" (200mm) YELLOW AND GREEN TRAFFIC SIGNAL FACE	[Symbol]	[Symbol]
12" (300mm) TRAFFIC SIGNAL SECTION	[Symbol]	[Symbol]
12" (300mm) PEDESTRIAN SIGNAL SECTION	[Symbol]	[Symbol]
ILLUMINATED SIGN "NO LEFT TURN"	[Symbol]	[Symbol]
ILLUMINATED SIGN "NO RIGHT TURN"	[Symbol]	[Symbol]
PUSHBUTTON DETECTOR	[Symbol]	[Symbol]
DETECTOR LOOP	[Symbol]	[Symbol]
PERFORMED DETECTOR LOOP	[Symbol]	[Symbol]
MICROWAVE VEHICLE SENSOR	[Symbol]	[Symbol]
VIDEO DETECTOR	[Symbol]	[Symbol]
CLOSED CIRCUIT TV	[Symbol]	[Symbol]
EMERGENCY VEHICLE SYSTEM DETECTOR	[Symbol]	[Symbol]
CONFIRMATION BEACON	[Symbol]	[Symbol]
UN-INTERRUPTABLE POWER SUPPLY (UPS)	[Symbol]	[Symbol]

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

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE SEQUENCE AND SCHEDULE OF QUANTITIES
 IL 43 (WAUKEGAN RD.) @ BANNOCKBURN OFFICE PLAZA ENTRANCE RD.
 SCALE: SHEET NO. OF SHEETS STA. TO STA.

F.A.U. RTE. 2706	SECTION 2006-020 TS	COUNTY LAKE	TOTAL SHEETS 29	SHEET NO. 19
C-91-351-06			CONTRACT NO. 60B48	
FED. ROAD DIST. NO. 1 [ILLINOIS] FED. AID PROJECT				