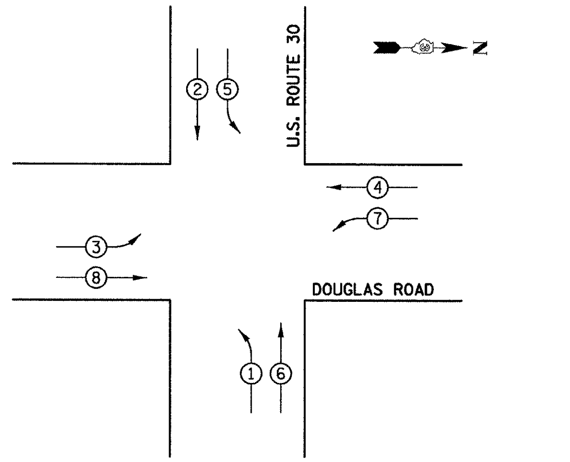
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2508	02-00039-00-PV	KENDALL	146	92
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

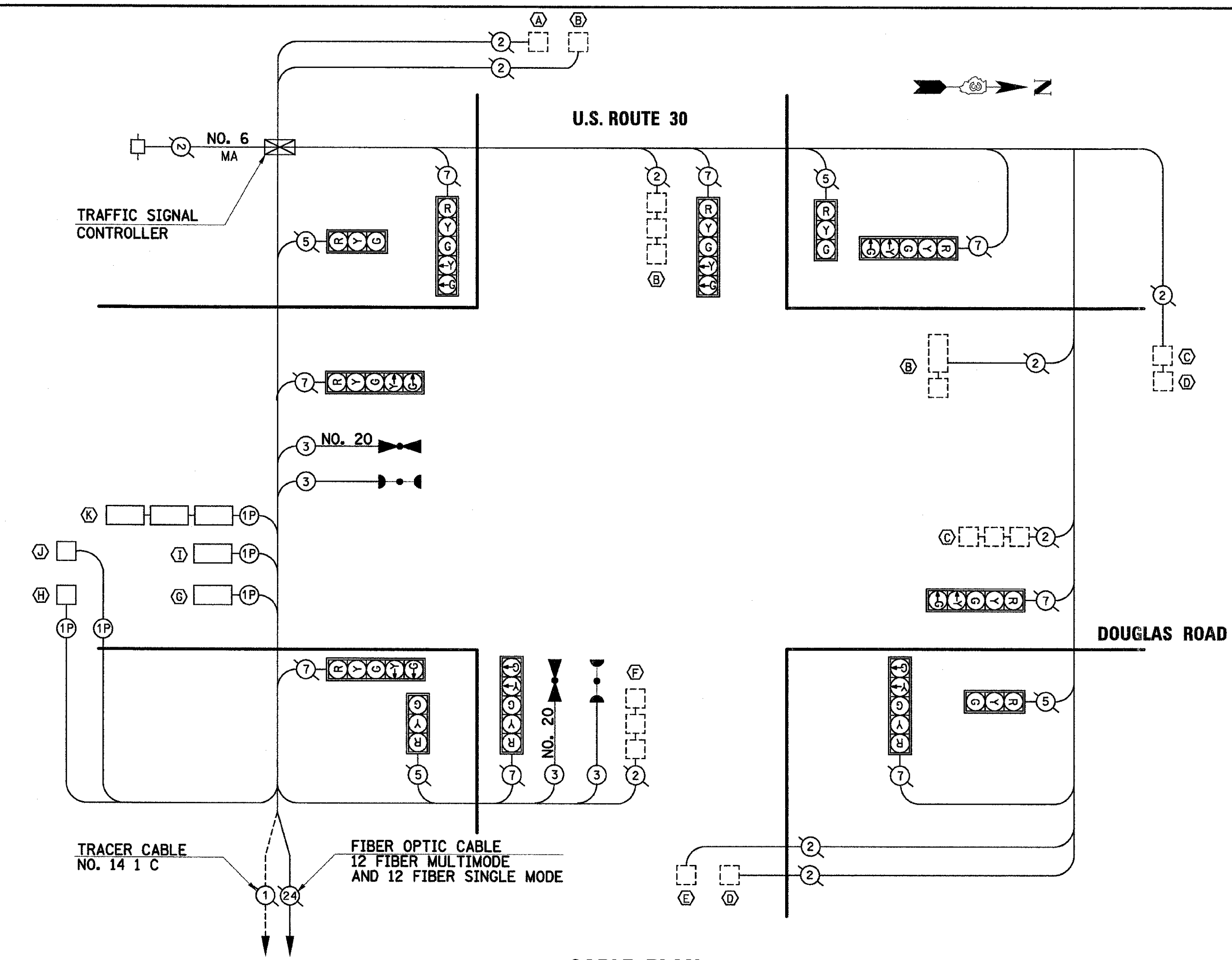
CONTROLLER SEQUENCE



LEGEND

- DUAL ENTRY PHASE
- SINGLE ENTRY PHASE
- PEDESTRIAN PHASE
- * NUMBER REFERRING TO ASSOCIATED PHASE

PHASE DESIGNATION DIAGRAM



CABLE PLAN

SCHEDULE OF QUANTITIES

87333

SIGN PANEL - TYPE 1	SQ FT	
SIGN PANEL - TYPE 2	SQ FT	
RELOCATE SIGN PANEL ASSEMBLY - TYPE B	EACH	
CONDUIT IN TRENCH, 1" DIA., GALVANIZED STEEL	FOOT	167
CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	326
CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	FOOT	
CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL	FOOT	22
CONDUIT PUSHED, 1" DIA., GALVANIZED STEEL	FOOT	
CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	
CONDUIT PUSHED, 2 1/2" DIA., GALVANIZED STEEL	FOOT	
CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	78
HANDHOLE	EACH	
DOUBLE HANDHOLE	EACH	
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	379
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	
UNINTERRUPTABLE POWER SUPPLY, EXTENDED	EACH	1
TRANSCEIVER - FIBER OPTIC	EACH	
ELECTRIC CABLE IN CONDUIT, SIGNAL, NO. 14 2C	FOOT	
ELECTRIC CABLE IN CONDUIT, SIGNAL, NO. 14 3C	FOOT	250
ELECTRIC CABLE IN CONDUIT, SIGNAL, NO. 14 5C	FOOT	
ELECTRIC CABLE IN CONDUIT, SIGNAL, NO. 14 7C	FOOT	
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	923
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C	FOOT	
TRAFFIC SIGNAL POST, GALVANIZED STEEL, 10 FT.	EACH	
TRAFFIC SIGNAL POST, GALVANIZED STEEL, 15 FT.	EACH	
TRAFFIC SIGNAL POST, GALVANIZED STEEL, 16 FT.	EACH	
STEEL MAST ARM ASSEMBLY AND POLE, 32 FT.	EACH	
STEEL MAST ARM ASSEMBLY AND POLE, 34 FT.	EACH	
STEEL MAST ARM ASSEMBLY AND POLE, 40 FT.	EACH	
STEEL MAST ARM ASSEMBLY AND POLE, 42 FT.	EACH	
STEEL MAST ARM ASSEMBLY AND POLE, 44 FT.	EACH	
STEEL MAST ARM ASSEMBLY AND POLE, 48 FT.	EACH	
STEEL MAST ARM ASSEMBLY AND POLE, 52 FT.	EACH	
STEEL MAST ARM ASSEMBLY AND POLE WITH DUAL MAST ARMS, 30 FT. AND 38 FT.	EACH	
STEEL MAST ARM ASSEMBLY AND POLE WITH DUAL MAST ARMS, 40 FT. AND 48 FT.	EACH	
CONCRETE FOUNDATION, TYPE A	FOOT	
CONCRETE FOUNDATION, TYPE C	FOOT	
CONCRETE FOUNDATION, TYPE E, 36-INCH DIAMETER	FOOT	
DRILL EXISTING HANDHOLE	EACH	2
SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	
SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	
SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	
SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED	EACH	
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, POST MOUNTED	EACH	
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED	EACH	
TRAFFIC SIGNAL BACKPLATE, LOUVERED, FORMED PLASTIC	EACH	
INDUCTIVE LOOP DETECTOR	EACH	5
DETECTOR LOOP, TYPE I	FOOT	528
LIGHT DETECTOR	EACH	2
LIGHT DETECTOR AMPLIFIER	EACH	1
PEDESTRIAN PUSH-BUTTON	EACH	
TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
MODIFY EXISTING CONTROLLER	EACH	1
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	400
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	
ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C	FOOT	
FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM12F	FOOT	
SERVICE INSTALLATION - GROUND MOUNTED	EACH	
ELECTRIC CABLE IN CONDUIT, GROUNDING, NO.6 1C	FOOT	
ELECTRIC CABLE IN CONDUIT, NO.20 3C, TWISTED, SHIELDED	FOOT	259
RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM	L SUM	1
REMOVE EXISTING HANDHOLE	EACH	1

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS				TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE	% OPERATION	
SIGNAL (RED)	12	135	0.50	810
(YELLOW)	12	135	0.25	405
(GREEN)	12	135	0.25	405
ARROW (NORMAL)	16	135	0.10	216
ILLUM. SIGN		90	1.00	
CONTROLLER	1	100	1.00	100
FLASHER			0.05	
			TOTAL =	1936

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

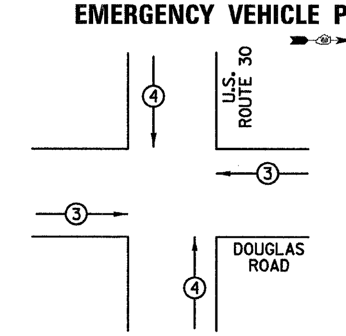
ENERGY SUPPLY CONTACT: JOE STACHO
PHONE: 630-424-5704
COMPANY: COMMONWEALTH EDISON

FOUNDATION (DEPTH)	(FT.)	CABLE SLACK	(FT.)	VERTICAL	(FT.)
TYPE A - POST	4	HANDHOLE	6.5	ALL FOUNDATIONS	3.5
D - CONTROLLER	4	DOUBLE HANDHOLE	13	MAST ARM (L) POLE	20'+L-2 =
E - M ARM POLE		SIGNAL POST	2	BRACKET MOUNTED	13
24"	10	CONTROLLER CAB.	1	PED. PUSHBUTTON	4
30"	15	FIBER OPTIC	13	ELECTRIC SERVICE	13.5
		ELECTRIC SERVICE	1	SERVICE TO GROUND	13.5
		GROUND CABLE	1	POST MOUNTED	6

CABLE DIAGRAM LEGEND

EXISTING	PROPOSED	
		CONTROLLER CABINET
		SERVICE INSTALLATION
		VEHICLE DETECTOR, INDUCTION LOOP
		LIGHT DETECTOR
		CONFIRMATION BEACON
2	2	DENOTES NUMBER OF CONDUCTORS. ALL CABLE NO. 14 EXCEPT AS INDICATED. ALL LOOP DETECTOR CABLE TO BE SHIELDED.
		LIGHTING UNIT
R	R	12" TRAFFIC SIGNAL SECTION
R Y G ←Y ←G "P"	R Y G ←Y ←G "P"	SIGNAL FACE WITH BACKPLATE. "P" INDICATES PROGRAMMED HEAD.
H/C	H/C	GROUND CABLE ROD AT HANDHOLE (H), DOUBLE HANDHOLE (H), OR CONTROLLER (C)
P/MA	P/MA	GROUND ROD AT POST (P) OR MAST ARM (MA)
S	S	GROUND ROD AT ELECTRIC SERVICE INSTALLATION
		12" (300mm) PEDESTRIAN SIGNAL SECTION
		PUSHBUTTON DETECTOR

EMERGENCY VEHICLE PRE-EMPTION SEQUENCE



PROPOSED EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	⇄	⇅

DOUGLAS ROAD AT US ROUTE 30 DETECTOR LOOP INDUCTANCE CHART

LOOP SYSTEM	PHASE	LABEL	NO. OF TURNS	INDUCTANCE (MICROHENRIES)	FREQUENCY (HERTZ)	J PIN STATUS
G	8	NB ESTBR	4	194	43834	OFF
H	8	NB EFAR	6	405	30344	ON
I	8	NB WSTBR	4	194	43834	OFF
J	8	NB WFAR	6	405	30344	ON
K	3	NBLT	4	353	32501	ON

NOTES

1. THE EMERGENCY VEHICLE PREEMPTION EQUIPMENT FOR THIS PROJECT SHALL BE "3M OPTICOM".
2. THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE" BRAND TO MATCH ADJACENT SIGNALS.

ILLINOIS DEPARTMENT OF TRANSPORTATION

F.A.U. 2508 – DOUGLAS ROAD (U.S. RTE 34 TO U.S. RTE 30)

CABLE PLAN U.S. ROUTE 30

SCALE: VERT. N.T.S. HORIZ.
DATE
DRAWN BY MJF
CHECKED BY CRF

PLAN — NOTE BOOK NO. — SURVEYED, PLOTTED, ALIGNMENT CHECKED, R.T. OF WAY CHECKED, CADD FILE NAME — BY — DATE

PROFILE — NOTE BOOK NO. — SURVEYED, PLOTTED, GRADES CHECKED, B.M. NOTED, STRUCTURE NOTATIONS CHKD — BY — DATE

2:52:32 AM
3/28/2007
y:\jobs\smith\2001\010742_douglas\cad\fin_dwg\742_sigl4_cab.dgn