

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEET SHEETS	NO.
511	(1-11R)	KENDALL	514	383
STA. TO STA.				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

### ILLINOIS ROUTE 71 AT WASHINGTON ST./PLAINFIELD RD. ELECTRICAL LOAD CHART

ILLINOIS ROUTE 71			
INDICATION	NUMBER	WATTAGE EACH	BURN TIME (%)
RED	7	10	50
YELLOW	7	22	5
GREEN	7	12	40
RED ARROW	5	10	80
YELLOW ARROW	7	10	5
GREEN ARROW	7	5	15
PED. SIGNAL	12	25	100

WASHINGTON ST. / PLAINFIELD RD.			
INDICATION	NUMBER	WATTAGE EACH	BURN TIME (%)
RED	7	10	75
YELLOW	7	22	5
GREEN	7	12	20
RED ARROW	5	10	80
YELLOW ARROW	7	10	5
GREEN ARROW	7	5	20

TRAFFIC SIGNAL CABINET			
ITEM	NUMBER	WATTAGE EACH	BURN TIME (%)
CONTROLLER	1	6	100
LOOP DETECTORS	24	4	100
UPS	1	50	100

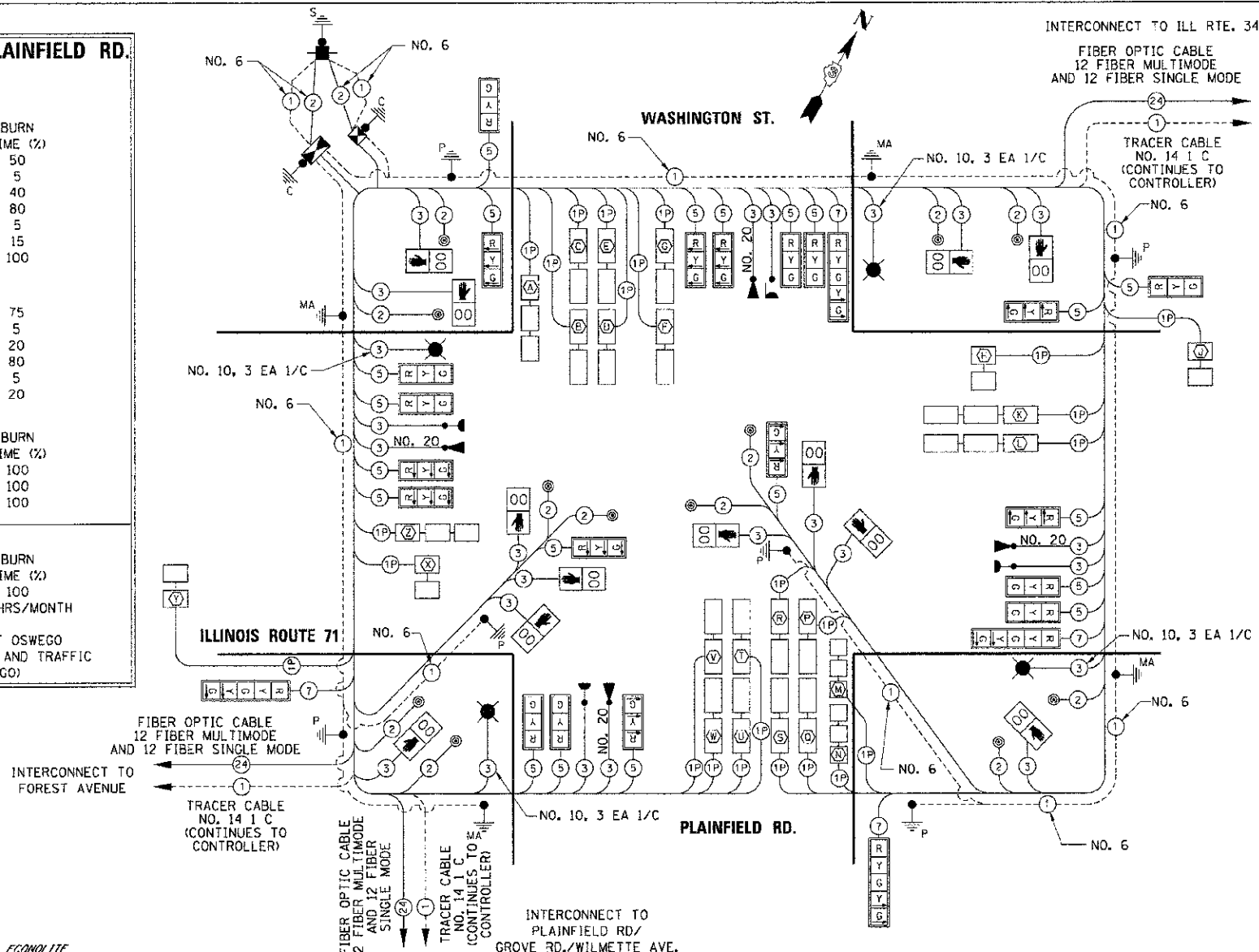
  

HIGHWAY LIGHTING			
ITEM	NUMBER	WATTAGE EACH	BURN TIME (%)
CONTROLLER	1	6	100
LUMINAIRE	4	400	360 HRS/MONTH

AGENCY RESPONSIBLE FOR ENERGY CHARGES: VILLAGE OF OSWEGO  
(NOTE: SEPARATE ENERGY BILLS FOR HIGHWAY LIGHTING AND TRAFFIC SIGNALS SHALL BE SUBMITTED TO THE VILLAGE OF OSWEGO)

### SCHEDULE OF QUANTITIES

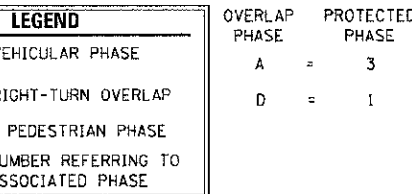
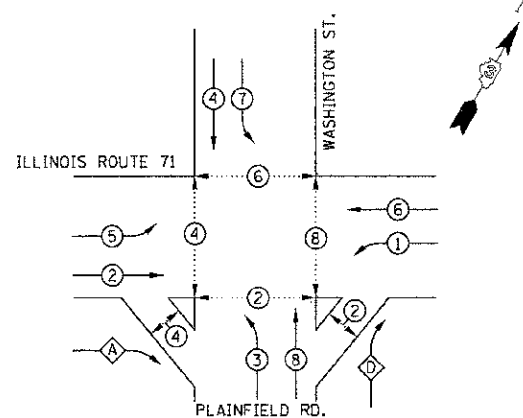
SIGN PANEL - TYPE 1	SO FT	38
SIGN PANEL - TYPE 2	SO FT	60
ELECTRIC SERVICE INSTALLATION	EACH	1
SERVICE INSTALLATION-GROUND MOUNTED	EACH	1
UNDERGROUND CONDUIT, PVC, 1" DIA.	FOOT	1318
UNDERGROUND CONDUIT, PVC, 2" DIA.	FOOT	1120
UNDERGROUND CONDUIT, PVC, 2 1/2" DIA.	FOOT	100
UNDERGROUND CONDUIT, PVC, 3" DIA.	FOOT	71
UNDERGROUND CONDUIT, PVC, 4" DIA.	FOOT	995
HANDHOLE, PORTLAND CEMENT CONCRETE	EACH	10
DOUBLE HANDHOLE, PORTLAND CEMENT CONCRETE	EACH	1
ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/4 NO. 10	FOOT	2,993
LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, 400 WATT	EACH	4
LIGHTING CONTROLLER, PEDESTAL MOUNTED, 240 VOLT, 60 AMP	EACH	1
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1
UNINTERRUPTIBLE POWER SUPPLY, EXTENDED	EACH	1
TRANSCEIVER - FIBER OPTIC	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	2,757
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	3,859
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	4,430
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	1,151
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	6,420
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	100
TRAFFIC SIGNAL POST, GALVANIZED STEEL 10 FT.	EACH	1
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	6
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 52 FT.	EACH	1
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 64 FT.	EACH	1
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 66 FT.	EACH	1
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 75 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	28
CONCRETE FOUNDATION, TYPE C	FOOT	8
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	17
CONCRETE FOUNDATION, TYPE E 42-INCH DIAMETER	FOOT	71
SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	6
SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	14
SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED	EACH	2
PEDESTRIAN SIGNAL HEAD, LED 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	12
TRAFFIC SIGNAL BACKPLATE, LOUVERED, FORMED PLASTIC	EACH	24
INDUCTIVE LOOP DETECTOR	EACH	24
DETECTOR LOOP, TYPE I	FOOT	3,802
LIGHT DETECTOR	EACH	4
LIGHT DETECTOR AMPLIFIER	EACH	1
PEDESTRIAN PUSH-BUTTON	EACH	12
TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING HANDHOLE	EACH	4
REMOVE EXISTING CONCRETE FOUNDATION	EACH	6
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	987
ELECTRIC CABLE IN CONDUIT, NO. 20 3/C TWISTED SHIELD	FOOT	978



### CABLE DIAGRAM LEGEND

EXISTING	PROPOSED	DESCRIPTION
[Symbol]	[Symbol]	TRAFFIC SIGNAL CONTROLLER TYPE SHALL BE <i>ECONOLITE</i>
[Symbol]	[Symbol]	LIGHTING CONTROLLER CABINET
[Symbol]	[Symbol]	SERVICE INSTALLATION, GROUND MOUNTED
[Symbol]	[Symbol]	VEHICLE DETECTOR, INDUCTION LOOP
[Symbol]	[Symbol]	LIGHT DETECTOR
[Symbol]	[Symbol]	CONFIRMATION BEACON
[Symbol]	[Symbol]	DENOTES NUMBER OF CONDUCTORS, ALL CABLE NO. 14 EXCEPT AS INDICATED. ALL LOOP DETECTOR CABLE TO BE SHIELDED.
[Symbol]	[Symbol]	LIGHTING UNIT
[Symbol]	[Symbol]	12" TRAFFIC SIGNAL SECTION
[Symbol]	[Symbol]	SIGNAL FACE WITH BACKPLATE. "P" INDICATES PROGRAMMED HEAD.
[Symbol]	[Symbol]	12" PEDESTRIAN SIGNAL SECTION WITH COUNTDOWN TIMER & SIGN R10-3E
[Symbol]	[Symbol]	PEDESTRIAN PUSHBUTTON DETECTOR TYPE 4EVR
[Symbol]	[Symbol]	GROUND CABLE ROD AT HANDHOLE (H), DOUBLE HANDHOLE (HD), OR CONTROLLER (C)
[Symbol]	[Symbol]	GROUND ROD AT POST (P) OR MAST ARM (MA)
[Symbol]	[Symbol]	GROUND ROD AT ELECTRIC SERVICE INSTALLATION

### CONTROLLER SEQUENCE



### ILLINOIS ROUTE 71 AT WASHINGTON ST./PLAINFIELD RD. DETECTOR LOOP INDUCTANCE CHART

LOOP SYSTEM	PHASE	LABEL	NO. OF TURNS	INDUCTANCE (MICROHENRIES)	FREQUENCY (HERTZ)	J PIN STATUS
A	4	SB THRT	4	641	24.106	ON
B	4	SB TH W FR	4	529	26.536	ON
C	4	SB TH W BK	4	537	26.338	ON
D	4	SB TH E FR	4	529	26.536	ON
E	4	SB TH E BK	4	537	26.338	ON
F	7	SB LT FR	4	530	26.511	ON
G	7	SB LT BK	4	539	26.289	ON
H	6	WB STBR	4	562	25.745	OFF
J	6	WB FAR	6	611	24.691	ON
K	1	WB LT N	4	834	21.134	ON
L	1	WB LT S	4	834	21.134	ON
M	D	NB RT FR	4	805	21.511	ON
N	D	NB RT BK	4	810	21.445	ON
P	8	NB TH E FR	4	602	24.875	ON
Q	8	NB TH E BK	4	606	24.793	ON
R	8	NB TH W FR	4	602	24.875	ON
S	8	NB TH W BK	4	606	24.793	ON
T	3	NB LT E FR	4	585	25.234	ON
U	3	NB LT E BK	4	585	25.234	ON
V	3	NB LT W FR	4	585	25.234	ON
W	3	NB LT W BK	4	585	25.234	ON
X	2	EB STBR	4	581	25.321	OFF
Y	2	EB FAR	6	626	24.394	ON
Z	5	EB LT	4	809	21.458	ON

NOTES:

- A SELF ADHERING PHASING DIAGRAM SHALL BE PLACED INSIDE THE CABINET DOOR.
- FIBER OPTIC CABLE NEEDS DIRECTION AND ASSIGNMENT NUMBER ON EACH FIBER CABLE.
- LIGHTING CABLES SHALL BE RUN IN CONDUIT THAT IS SEPARATE FROM THE TRAFFIC SIGNAL CONDUIT.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

### TRAFFIC SIGNAL CABLE PLAN IL RTE 71 WASHINGTON ST. / PLAINFIELD RD.

SCALE: N.T.S.  
DATE: 7/9/2012

DRAWN BY: NMR  
CHECKED BY: D.J.L.