

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
311	(1-11R)	KENDALL	514	370
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS' FED. AID PROJECT		

ILLINOIS ROUTE 71 AT ORCHARD RD./MINKLER RD. ELECTRICAL LOAD CHART

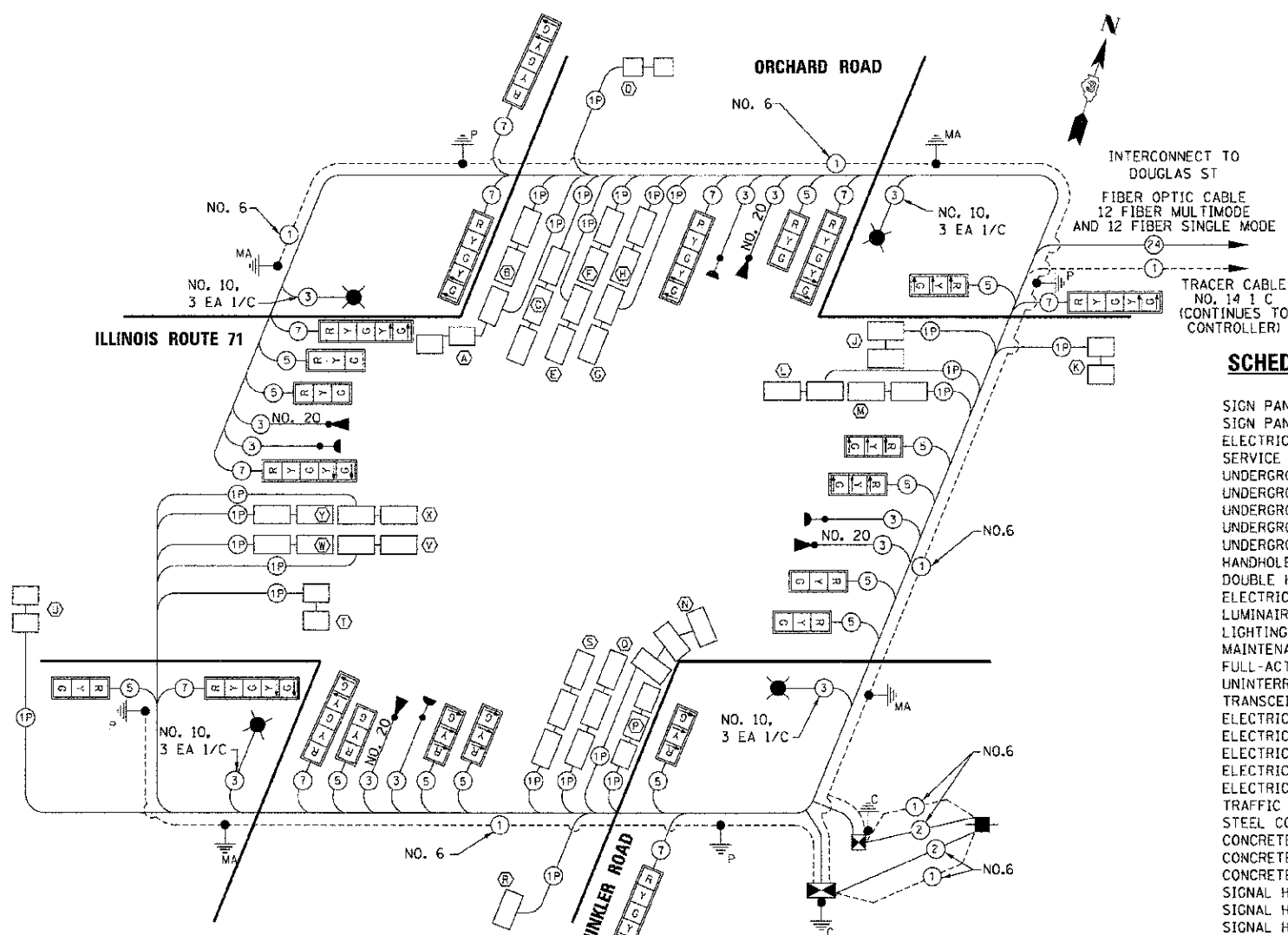
ILLINOIS ROUTE 71			
INDICATION	NUMBER	WATTAGE EACH	BURN TIME (%)
RED	9	10	40
YELLOW	9	22	5
GREEN	9	12	45
RED ARROW	3	10	75
YELLOW ARROW	7	10	5
GREEN ARROW	7	5	15

ORCHARD RD. / MINKLER RD.			
INDICATION	NUMBER	WATTAGE EACH	BURN TIME (%)
RED	8	10	60
YELLOW	8	22	5
GREEN	8	12	35
RED ARROW	3	10	70
YELLOW ARROW	9	10	5
GREEN ARROW	9	5	25

TRAFFIC SIGNAL CABINET			
ITEM	NUMBER	WATTAGE EACH	BURN TIME (%)
CONTROLLER	1	6	100
LOOP DETECTORS	23	4	100
UPS	1	50	100

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

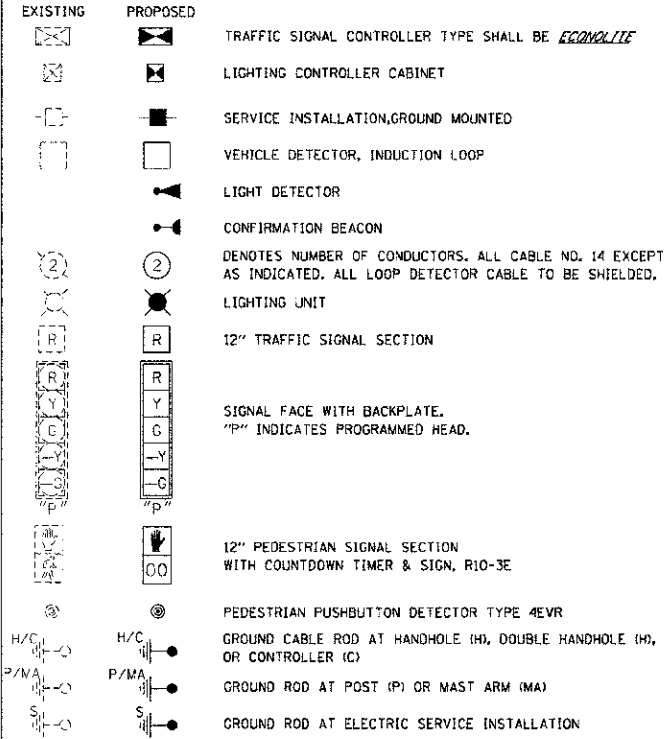
AGENCY RESPONSIBLE FOR ENERGY CHARGES: VILLAGE OF OSWEGO
 (NOTE: SEPERATE ENERGY BILLS FOR HIGHWAY LIGHTING AND TRAFFIC SIGNALS SHALL BE SUBMITTED TO THE VILLAGE OF OSWEGO)



SCHEDULE OF QUANTITIES

SIGN PANEL - TYPE 1	38
SIGN PANEL - TYPE 2	50
ELECTRIC SERVICE INSTALLATION	EACH 1
SERVICE INSTALLATION-GROUND MOUNTED	EACH 1
UNDERGROUND CONDUIT, PVC, 1" DIA.	FOOT 1,257
UNDERGROUND CONDUIT, PVC, 2" DIA.	FOOT 2,214
UNDERGROUND CONDUIT, PVC, 2 1/2" DIA.	FOOT 55
UNDERGROUND CONDUIT, PVC, 3" DIA.	FOOT 94
UNDERGROUND CONDUIT, PVC, 4" DIA.	FOOT 1,007
HANDHOLE, PORTLAND CEMENT CONCRETE	EACH 7
DOUBLE HANDHOLE, PORTLAND CEMENT CONCRETE	EACH 3
ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 10	FOOT 3,423
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 UNINTERRUPTIBLE POWER SUPPLY, EXTENDED	EACH 1
TRANSCEIVER - FIBER OPTIC	EACH 1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT 1,223
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT 3,211
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT 3,261
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT 8,094
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT 100
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH 4
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 70 FT.	EACH 4
CONCRETE FOUNDATION, TYPE A	FOOT 16
CONCRETE FOUNDATION, TYPE C	FOOT 8
CONCRETE FOUNDATION, TYPE E 42-INCH DIAMETER	FOOT 100
SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH 3
SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH 10
SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH 5
SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED	EACH 5
TRAFFIC SIGNAL BACKPLATE, LOUVERED, FORMED PLASTIC	EACH 23
INDUCTIVE LOOP DETECTOR	EACH 23
DETECTOR LOOP, TYPE I	FOOT 3,712
LIGHT DETECTOR	EACH 4
LIGHT DETECTOR AMPLIFIER	EACH 1
TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH 1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH 1
REMOVE EXISTING HANDHOLE	EACH 8
REMOVE EXISTING CONCRETE FOUNDATION	EACH 9
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT 973
ELECTRIC CABLE IN CONDUIT, NO. 20 3/C TWISTED SHIELD	FOOT 1,223
TEMPORARY LIGHTING SYSTEM	EACH 1

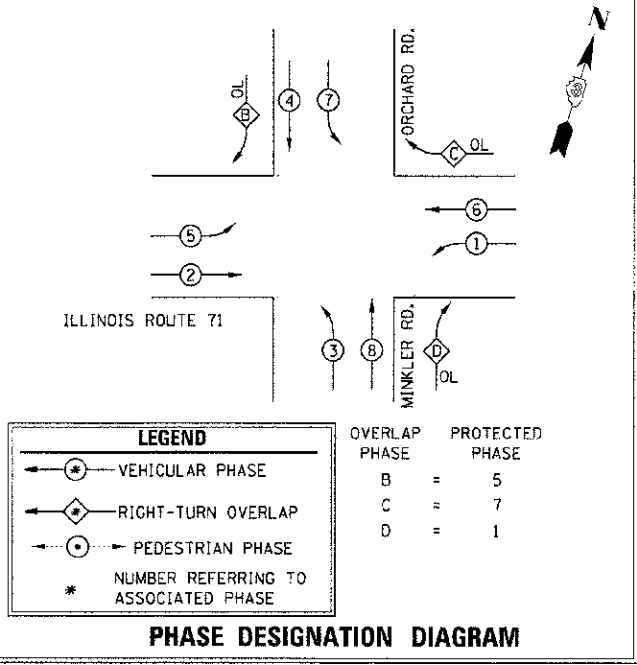
CABLE DIAGRAM LEGEND



ILLINOIS ROUTE 71 AT ORCHARD RD./MINKLER RD. DETECTOR LOOP INDUCTANCE CHART

LOOP SYSTEM	PHASE	LABEL	NO. OF TURNS	INDUCTANCE (MICROHENRIES)	FREQUENCY (HERTZ)	J PIN STATUS
A	B	SBRT FR	4	819	21,327	ON
B	B	SBRT BK	4	611	24,691	ON
C	4	SBTH	4	871	20,680	ON
D	4	SB FAR	6	693	23,184	ON
E	7	SBLT W FR	4	588	25,169	ON
F	7	SBLT W BK	4	588	25,169	ON
G	7	SBLT E FR	4	588	25,169	ON
H	7	SBLT E BK	4	588	25,169	ON
J	6	WB STBR	4	578	25,386	OFF
K	6	WB FAR	6	661	23,739	ON
L	1	WBLT FR	4	546	26,120	ON
M	1	WBLT BK	4	553	25,954	ON
N	D	NBRT FR	4	645	24,032	ON
P	D	NBRT BK	4	652	23,902	ON
Q	B	NBTH	4	802	21,551	ON
R	B	NB FAR	6	372	31,644	ON
S	3	NBLT	4	802	21,551	ON
T	2	EB STBR	4	568	25,609	OFF
U	2	EB FAR	6	652	23,902	ON
V	5	EBLT S FR	4	579	25,364	ON
W	5	EBLT S BK	4	579	25,364	ON
X	5	EBLT N FR	4	579	25,364	ON
Y	5	EBLT N BK	4	579	25,364	ON

CONTROLLER SEQUENCE



- 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.
 - THE CONTRACTOR SHALL CONTACT DAN DEVINE OF THE ILLINOIS DEPARTMENT OF TRANSPORTATION (815-434-8505) TO IN ADVANCE OF ORDERING TRAFFIC CONTROLLER AND CABINET TO DISCUSS THE POSSIBILITY OF ANTI-BACKUP MEASURES IN SITUATIONS WHERE THERE IS A PROTECTED LEFT TURN IN ONE DIRECTION AND A PERMITTED LEFT TURN IN THE OPPOSITE DIRECTION.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
TRAFFIC SIGNAL CABLE PLAN
IL RTE 71
ORCHARD RD./MINKLER RD.
 SCALE: N.T.S. DRAWN BY: NMR
 DATE: 7/9/2012 CHECKED BY: DJL

PLT DATE: 7/9/2012
 PLOT SCALE: 1"=200'-0"