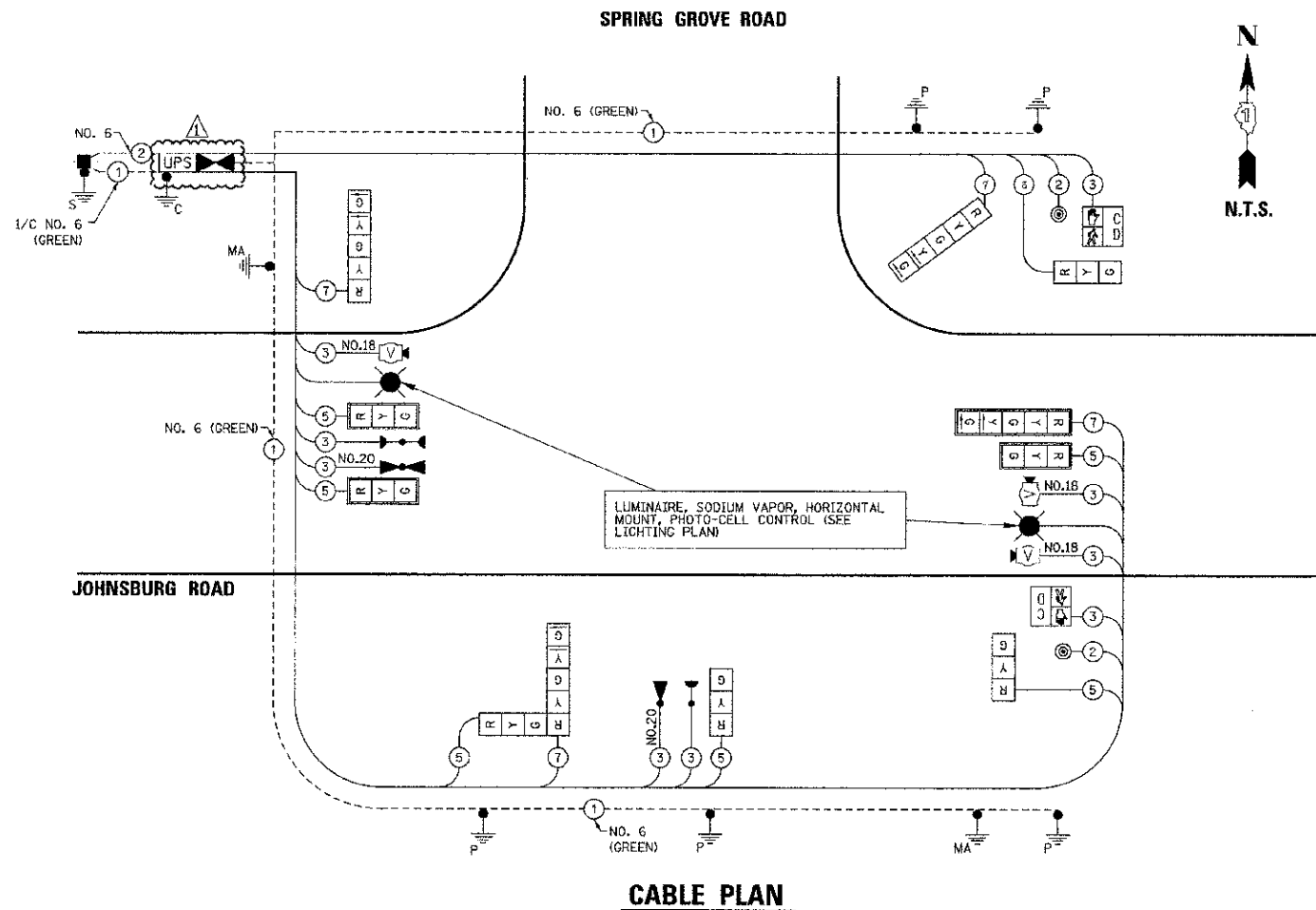


SCHEDULE OF QUANTITIES

ITEM	UNIT	TOTAL																																									
SIGN PANEL - TYPE 2	SQ FT	32.25																																									
SERVICE INSTALLATION - POLE MOUNTED	EACH	1																																									
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	15.0																																									
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2 1/2" DIA.	FOOT	113.0																																									
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	92.0																																									
UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	315.0																																									
HANDHOLE	EACH	2																																									
DOUBLE HANDHOLE	EACH	2																																									
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	419.5																																									
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	704.0																																									
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	937.5																																									
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	853.0																																									
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 18 3C	FOOT	582.5																																									
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C	FOOT	48.0																																									
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	1,085.5																																									
TRAFFIC SIGNAL POST, GALVANIZED STEEL 10 FT.	EACH	1																																									
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	3																																									
TRAFFIC SIGNAL POST, GALVANIZED STEEL 18 FT.	EACH	1																																									
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 26 FT.	EACH	1																																									
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 30 FT.	EACH	1																																									
CONCRETE FOUNDATION, TYPE A	FOOT	20.0																																									
CONCRETE FOUNDATION, TYPE C	FOOT	4.0																																									
CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	10.0																																									
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT </tr <tr> <td>SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED</td> <td>EACH</td> <td>3</td> </tr> <tr> <td>SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED</td> <td>EACH</td> <td>3</td> </tr> <tr> <td>SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED</td> <td>EACH</td> <td>2</td> </tr> <tr> <td>SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED</td> <td>EACH</td> <td>1</td> </tr> <tr> <td>SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED</td> <td>EACH</td> <td>1</td> </tr> <tr> <td>PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER</td> <td>EACH</td> <td>2</td> </tr> <tr> <td>TRAFFIC SIGNAL BACKPLATE, LOULVERED</td> <td>EACH</td> <td>4</td> </tr> <tr> <td>LIGHT DETECTOR</td> <td>EACH</td> <td>2</td> </tr> <tr> <td>LIGHT DETECTOR AMPLIFIER</td> <td>EACH</td> <td>1</td> </tr> <tr> <td>PEDESTRIAN PUSH-BUTTON</td> <td>EACH</td> <td>2</td> </tr> <tr> <td>EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C</td> <td>FOOT</td> <td>270.5</td> </tr> <tr> <td>FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL</td> <td>EACH</td> <td>1</td> </tr> <tr> <td>UNINTERRUPTABLE POWER SUPPLY, SPECIAL</td> <td>EACH</td> <td>1</td> </tr> <tr> <td>VIDEO DETECTION SYSTEM COMPLETE INTERSECTION</td> <td>L SUM</td> <td>0.50</td> </tr>	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	3	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	3	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	2	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	1	SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED	EACH	1	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	2	TRAFFIC SIGNAL BACKPLATE, LOULVERED	EACH	4	LIGHT DETECTOR	EACH	2	LIGHT DETECTOR AMPLIFIER	EACH	1	PEDESTRIAN PUSH-BUTTON	EACH	2	EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	270.5	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1	UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1	VIDEO DETECTION SYSTEM COMPLETE INTERSECTION	L SUM	0.50
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CABLE PLAN

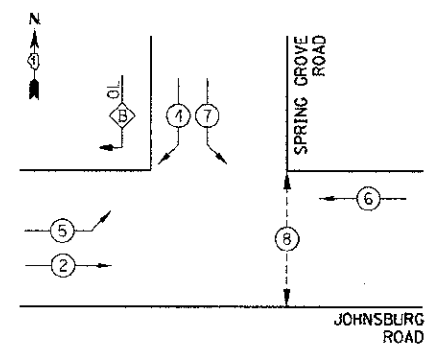
THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" AS REQUIRED BY THE MCHENRY COUNTY DIVISION OF TRANSPORTATION.

M.C.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					
TYPE	NO. LAMPS	WATTAGE		% OPERATION	TOTAL WATTAGE
		INCAND.	LED		
SIGNAL (RED)	11		17	0.50	93.50
(YELLOW)	11		25	0.25	68.75
(GREEN)	11		15	0.25	41.25
ARROW	8		12	0.10	9.50
PED. SIGNAL	2		25	1.00	50.00
CONTROLLER	1		100	1.00	100.00
UPS	1		25	1.00	25.00
VIDEO SYSTEM	1		15	1.00	15.00
TOTAL =					403.10

ENERGY COSTS TO: VILLAGE OF JOHNSBURG
1515 CHANNEL BEACH AVENUE
JOHNSBURG, IL 60051

ENERGY SUPPLY CONTACT: NORA FERNANDEZ
PHONE: 866-639-3532
COMPANY: COMMONWEALTH EDISON

CONTROLLER SEQUENCE

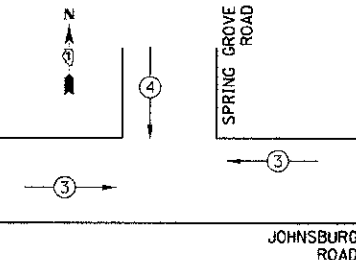


PHASE DESIGNATION DIAGRAM

OVERLAP PHASE	PERMISSIVE PHASE	PROTECTED PHASE
B	= 4	+ 5

CONTROLLER SEQUENCE LEGEND

- ← ⊙ → DUAL ENTRY PHASE
- ← ⊙ → SINGLE ENTRY PHASE
- ← ⊙ → OVERLAP
- * NUMBER REFERRING TO ASSOCIATED PHASE
- ← ⊙ → PEDESTRIAN PHASE



EMERGENCY VEHICLE PREEMPTION SEQUENCE

PROPOSED EMERGENCY VEHICLE PREEMPTORS	
PROPOSED EMERGENCY VEHICLE PREEMPTORS	3 4
MOVEMENT	→ ↓

2/22/2013

JOHNSBURG ROAD @ SPRING GROVE ROAD

COMPANY NAME: HRGreen
PROJECT CONTACT: HRGreen
CLIENT: MCHENRY COUNTY DIVISION OF TRANSPORTATION
DATE PLOTTED: 2/20/2013 3:04:49 PM
FILE NAME: 080522-13020-091.dgn
PLOT DRIVER: pdf_bw_no_device.ctb
PLOT TABLE: standard.ctb



USER NAME = whood	DESIGNED -	REVISED -
FILE NAME = 080522-13020-091.dgn	DRAWN -	REVISED -
PLOT SCALE = NTS	CHECKED -	REVISED -
PLOT DATE = 2/20/2013	DATE = 2/20/13	REVISED -

MCHENRY COUNTY DIVISION OF TRANSPORTATION

CABLE AND PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE
SCALE: NTS SHEET NO. 3 OF 4 SHEETS STA. TO STA.

F.A.I.D. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
168	05-00314-00-WR	MCHENRY	187	101
CONTRACT NO. 63515			ILLINOIS FED. AID PROJECT	