

04-23-2021 LETTING ITEM 047

INDEX OF SHEETS

SEE SHEET 2 FOR INDEX OF SHEETS

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

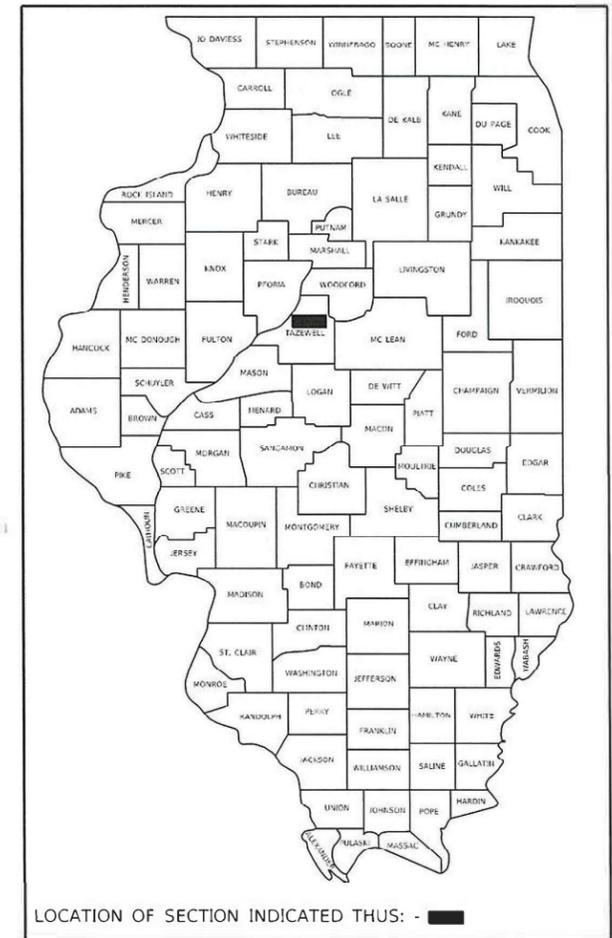
# PROPOSED HIGHWAY PLANS

FAP 683 (IL 9)  
SECTION 118-L  
TAZEWELL COUNTY  
PROJECT NUMBER: HSIP-1WQD(181)

C-94-040-21

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
IL 9 (FAP 683)	118-L	TAZEWELL	12	1
ILLINOIS CONTRACT NO. 68G23				

D-94-025-21

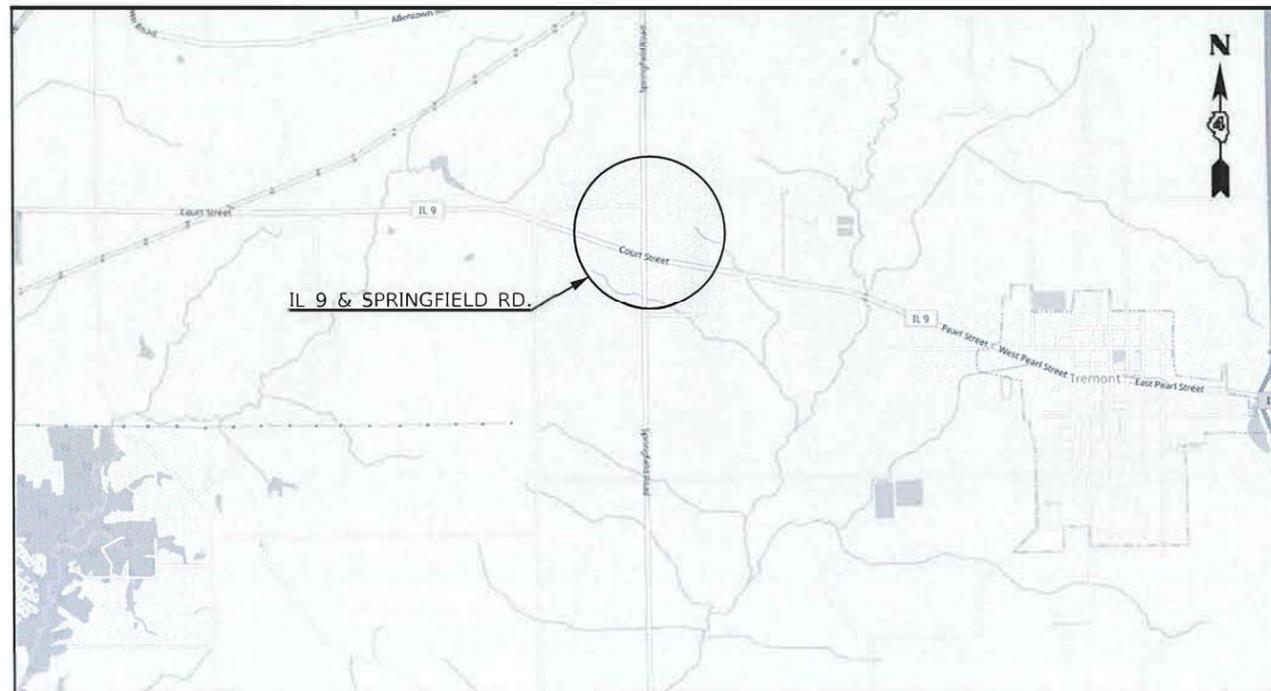


HIGHWAY STANDARDS

SEE SHEET 2 FOR A LIST OF APPLICABLE HIGHWAY STANDARDS

PROJECT DESCRIPTION

INSTALLATION OF OVERHEAD LIGHTING, FLASHING BEACONS, AND RUMBLE STRIPS AT IL 9 / SPRINGFIELD RD. INTERSECTION, WEST OF TREMONT.



J.U.L.I.E.  
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION  
1-800-892-0123  
OR 811

PROJECT ENGINEER: ERIC HOWALD (309) 671-4481  
PROJECT MANAGER: BEN TELLEFSON (309) 671-4477  
CATALOG NO. 36155-00D  
CONTRACT NO. 68G23

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SUBMITTED January 20, 2021  
Benjamin James  
REGION THREE ENGINEER

March 19, 2021  
Eric A. Elk  
ENGINEER OF DESIGN AND ENVIRONMENT

March 19, 2021  
James J. Quinn  
DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION 13

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

NO COMMITMENTS HAVE BEEN MADE IN CONJUNCTION WITH THIS PROJECT.

INDEX OF SHEETS	
SHEET	DESCRIPTION
1	COVER SHEET
2	COMMITMENTS, INDEX OF SHEETS, AND HIGHWAY STANDARDS
3	CONSTRUCTION NOTES
4	SUMMARY OF QUANTITIES
5	LIGHT POLE SCHEDULE
6	EXISTING LIGHTING REMOVAL ITEMS
7	PROPOSED FLASHER AND LIGHTING PLANS
8	FLASHING BEACON AND SIGN DETAILS
9	PROPOSED FLASHER AND OVERHEAD LIGHTING WIRING DIAGRAM
10	PROPOSED LED LUMINAIRE PERFORMANCE TABLE
11	PROPOSED LIGHTING CONTROLLER DETAIL
12	PROPOSED PAVEMENT MARKING AND RUMBLE STRIP INSTALLATION

HIGHWAY STANDARDS	
STANDARD	APPLICATION
000001-08	STANDARD SYMBOLS, ABBREVIATIONS, AND PATTERNS
001006	DECIMAL OF AN INCH AND OF A FOOT
701001-02	OFF-ROAD OPERATIONS, 2L, 2W, MORE THAN 15' AWAY
701006-05	OFF-ROAD OPERATIONS, 2L, 2W, 15' TO 24" FROM PAVEMENT EDGE
701201-05	LANE CLOSURE, 2L, 2W, DAY ONLY, FOR SPEEDS ≥ 45 MPH
701306-04	LANE CLOSURE, 2L, 2W, SLOW MOVING OPERATIONS DAY ONLY, FOR SPEEDS ≥ 45 MPH
701901-08	TRAFFIC CONTROL DEVICES
720001-01	SIGN PANEL MOUNTING DETAILS
720006-04	SIGN PANEL ERECTION DETAILS
780001-05	TYPICAL PAVEMENT MARKINGS
821101-02	LUMINAIRE WIRING IN POLE
825011-04	LIGHTING CONTROLLER PEDESTAL MOUNTED, 240V
830021-03	LIGHT POLE STEEL TENON TOP
838001-01	BREAKAWAY DEVICES
873001-02	TRAFFIC SIGNAL GROUNDING & BONDING
880001-01	SPAN WIRE MOUNTED SIGNALS AND FLASHING BEACON INSTALLATION

701011-04

701106-02

MODEL: D:\default  
FILE NAME: C:\common\GENTransfer - bureau\68G23 - Final Plans\68G23 - IL 9 & Springfield Rd (1-28-21).dgn

USER NAME = howald	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>COMMITMENTS, INDEX OF SHEETS, AND HIGHWAY STANDARDS IL 9 &amp; SPRINGFIELD RD. - TAZEWELL COUNTY</b>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
PLOT SCALE = 105.9368' / in.	DRAWN -	REVISED -			683	118-L	TAZEWELL	12	2
PLOT DATE = 3/11/2021	CHECKED -	REVISED -			CONTRACT NO. 68G23				
	DATE -	REVISED -			ILLINOIS FED. AID PROJECT				
SCALE:					SHEET	OF	SHEETS	STA.	TO STA.

**CONSTRUCTION NOTES**

1. THE LOCATION OF ALL UTILITIES AND PRIVATELY OWNED FACILITIES SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO THE INSTALLATION OF ANY COMPONENTS.
2. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING EXISTING IDOT ELECTRICAL FACILITIES AT HIS/HER OWN EXPENSE IF REQUIRED. THE GENERAL CONTRACTOR SHALL ALSO BE LIABLE FOR ANY DAMAGE TO IDOT FACILITIES RESULTING FROM INACCURATE LOCATING.
3. ELECTRICAL WORK SHALL CONFORM WITH NATIONAL, STATE, AND LOCAL CODES.
4. THE LOCATIONS FOR WOOD POLES AND SIGN POSTS ARE PROVIDED FOR REFERENCE ONLY. THE ENGINEER OF TRAFFIC SHALL BE NOTIFIED FOR LOCATION VERIFICATION BEFORE INSTALLATION.
5. ALL HIGHWAY LIGHTING STRUCTURES SHALL BE BONDED IN ACCORDANCE WITH NEC REQUIREMENTS. THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE BID PRICE FOR THE PROPOSED LIGHT POLES AND SHALL INCLUDE ALL LABOR, EQUIPMENT, AND MATERIALS (INCLUDING CLAMPS, HARDWARE, ELECTRICAL CABLE, AND ALL OTHER ITEMS REQUIRED TO BOND THE STRUCTURES.)
6. THE CONTRACTOR SHALL PROVIDE ELECTRICAL CABLE SLACK IN ACCORDANCE WITH ARTICLE 873.03.
7. ELECTRICAL CABLE WILL BE MEASURED FOR PAYMENT IN ACCORDANCE WITH ARTICLE 817.04.
8. ALL SURPLUS MATERIALS SHALL BE DISPOSED OF IN ACCORDANCE WITH ARTICLE 202.03 OF THE STANDARD SPECIFICATIONS.
9. THE CONTRACTOR SHALL VERIFY FIELD CONDITIONS PRIOR TO BIDDING. THERE WILL BE NO ADDITIONAL COMPENSATION PAID FOR CLAIMS THAT ARISE FROM A FAILURE TO FULLY INVESTIGATE EXISTING FIELD CONDITIONS.
10. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF THE EXISTING LIGHTING SYSTEM COMPONENTS (LIGHT POLES, LUMINAIRES, TRANSFORMER BASES, LIGHTING CONTROLLER, WIRING, ETC.) AS SHOWN IN THE PLANS. THIS WORK SHALL BE INCLUDED IN THE UNIT BID PRICE FOR "REMOVE EXISTING LIGHTING SYSTEM." THE CONTRACTOR SHALL INCLUDE THE SALVAGE PRICE OF THESE ITEMS IN THE BID PRICE.
11. THE CONTRACTOR SHALL FURNISH AND INSTALL NEW FUSEHOLDERS, FUSES, SURGE ARRESTORS, AND LUMINAIRE WIRING INSIDE THE POLE. THE COST OF THIS WORK SHALL BE INCLUDED IN THE BID PRICE OF THE PROPOSED LUMINAIRES.
12. THE EXISTING LIGHTING SYSTEM SHALL REMAIN IN OPERATION FOR THE DURATION OF THE PROJECT. THE CONTRACTOR SHALL STAGE THE PROJECT IN A MANNER THAT PREVENTS THE LIGHTING SYSTEM FROM BEING NONOPERATIONAL OVERNIGHT.
13. WOOD POLES SHALL BE INSTALLED A MINIMUM OF 26 FT. FROM IL 9 EDGE OF TRAVELED WAY AND 24 FT. FROM SPRINGFIELD RD. EDGE OF TRAVELED WAY.
14. WOOD POLES SHALL BE INSTALLED USING GUY WIRES IN ACCORDANCE WITH ARTICLE 1077.04 AND HIGHWAY STANDARD 880001-01. THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE BID PRICE FOR THE SPAN WIRE.
15. THE TRAFFIC SIGNAL SPAN WIRE AND SIGNAL HEAD SHALL BE ATTACHED TO THE WOOD POLES IN ACCORDANCE WITH HIGHWAY STANDARD 880001-01. ALL CABLES AND SIGNAL HEADS SHALL MAINTAIN AN 18 FT. CLEARANCE ABOVE THE HIGHEST POINT OF THE ROADWAY.
16. ALL SIGNAL HEADS SHALL HAVE 12" LENSES AND VISORS.
17. THE FLASHING BEACON INSTALLATIONS SHALL CONFORM TO ALL APPLICABLE MUTCD STANDARDS.
18. THE COST OF THE PROPOSED 1.0 FT LUMINAIRE ARM SHALL BE INCLUDED IN THE COST OF THE LUMINAIRE MOUNTING BRACKET - SPECIAL.
19. ONE CHANGEABLE MESSAGE SIGN (IDOT FURNISHED) SHALL BE INSTALLED IN EACH DIRECTION ON IL ROUTE 9 A MINIMUM OF 14 DAYS PRIOR TO INSTALLATION OF STOP SIGNS ON IL ROUTE 9 AND WILL REMAIN IN PLACE 14 DAYS FOLLOWING THE INSTALLATION OF THE STOP SIGNS. THE RESIDENT ENGINEER SHALL NOTIFY BILL HARRMANN AT (309) 370-7513 A MINIMUM OF SEVEN DAYS IN ADVANCE TO ARRANGE DELIVERY OF THE SIGNS TO THE JOB SITE.

MODEL: Default  
 FILE NAME: C:\common\GEN\Transfer - burawad\8623 - Final Plans\8623 - IL 9 Springfield Rd (122821).dgn

USER NAME = howaldt	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 105.9368' / in.	CHECKED -	REVISED -
PLOT DATE = 1/29/2021	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**CONSTRUCTION NOTES  
IL 9 & SPRINGFIELD RD. - TAZEWELL COUNTY**

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
683	118-L	TAZEWELL	12	3
CONTRACT NO.			68G23	
ILLINOIS		FED. AID PROJECT		

\* INDICATES  
SPECIALTY ITEM

SUMMARY OF QUANTITIES

TAZEWELL COUNTY  
CONST. TYPE  
CODE 0021  
90% FEDERAL  
10% STATE  
RURAL  
(SAFETY FUNDS)

CODE	ITEM DESCRIPTION	UNIT	TOTAL QTY.	
44003100	MEDIAN REMOVAL	SQ FT	8.0	8.0
67100100	MOBILIZATION	L SUM	1.0	1.0
* 72000100	SIGN PANEL, TYPE 1	SQ FT	60.4	60.4
73000100	WOOD SIGN SUPPORT	FOOT	124.0	124.0
* 78009000	MODIFIED URETHANE PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	78.0	78.0
* 78009004	MODIFIED URETHANE PAVEMENT MARKING - LINE 4"	FOOT	1200.0	1200.0
* 78009008	MODIFIED URETHANE PAVEMENT MARKING - LINE 8"	FOOT	782.0	782.0
* 78009012	MODIFIED URETHANE PAVEMENT MARKING - LINE 12"	FOOT	155.0	155.0
* 78009024	MODIFIED URETHANE PAVEMENT MARKING - LINE 24"	FOOT	159.0	159.0
82110008	LUMINAIRE, LED, ROADWAY, OUTPUT DESIGNATION H	EACH	14.0	14.0
82500330	LIGHTING CONTROLLER, PEDESTAL MOUNTED, 240VOLT, 60AMP	EACH	1.0	1.0
83060830	LIGHT POLE, GALVANIZED STEEL, 45 FT. M.H., TENON MOUNT	EACH	14.0	14.0
83800205	BREAKAWAY DEVICE, TRANSFORMER BASE, 15 INCH BOLT CIRCLE	EACH	14.0	14.0
87200400	SPAN WIRE	FOOT	220.0	220.0
87200500	TETHER WIRE	FOOT	220.0	220.0
87302245	ELECTRIC CABLE AERIAL SUSPENDED, SIGNAL, NO. 14 5C	FOOT	176.0	176.0
X0325541	REMOVE EXISTING LIGHTING SYSTEM	L SUM	1.0	1.0
X0326899	SOLAR -POWERED FLASHING BEACON ASSEMBLY (COMPLETE)	EACH	4.0	4.0
X0327643	TRAFFIC SIGNAL WOOD POLE, 40 FT, CLASS 5	EACH	2.0	2.0
X1400175	SOLAR-POWERED FLASHING BEACON ASSEMBLY (DUAL-ALTERNATING)	EACH	2.0	2.0
X7010216	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	L SUM	1.0	1.0
X8210402	LUMINAIRE MOUNTING BRACKET - SPECIAL	EACH	14.0	14.0
X8800081	SIGNAL HEAD, LED, 4-FACE, 1-SECTION, SPAN WIRE MOUNTED	EACH	1.0	1.0
* Z0055300	RUMBLE STRIP	EACH	6.0	6.0

MODEL: Default  
FILE NAME: C:\common\GEN\Transfer - Bureau\68G23 - Final Plans\68G23 - IL 9 & Springfield Rd (122521).dgn

USER NAME = howalter	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 105,9368 ' / in.	CHECKED -	REVISED -
PLOT DATE = 1/29/2021	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES  
IL 9 & SPRINGFIELD RD. - TAZEWELL COUNTY

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
683	118-L	TAZEWELL	12	4
CONTRACT NO.			68G23	
ILLINOIS FED. AID PROJECT				

**LIGHT POLE SCHEDULE**

POLE NO.	ROUTE	POLE TYPE	MOUNTING HEIGHT (FT.)	ARM LENGTH (FT.)	INSTALLATION DETAILS	LUMINAIRE MOUNTING BRACKET- SPECIAL QTY.	LUMINAIRE
1	SPRINGFIELD RD.	GALVANIZED STEEL, TENON MOUNT	45.0	1.0	INSTALL ON PROP. TRANSFORMER BASE ON EX. FOUNDATION	1.0	LUMINAIRE, LED, ROADWAY, OUTPUT DESIGNATION H
2	SPRINGFIELD RD.	GALVANIZED STEEL, TENON MOUNT	45.0	1.0	INSTALL ON PROP. TRANSFORMER BASE ON EX. FOUNDATION	1.0	LUMINAIRE, LED, ROADWAY, OUTPUT DESIGNATION H
3	SPRINGFIELD RD.	GALVANIZED STEEL, TENON MOUNT	45.0	1.0	INSTALL ON PROP. TRANSFORMER BASE ON EX. FOUNDATION	1.0	LUMINAIRE, LED, ROADWAY, OUTPUT DESIGNATION H
4	SPRINGFIELD RD.	GALVANIZED STEEL, TENON MOUNT	45.0	1.0	INSTALL ON PROP. TRANSFORMER BASE ON EX. FOUNDATION	1.0	LUMINAIRE, LED, ROADWAY, OUTPUT DESIGNATION H
5	IL 9	GALVANIZED STEEL, TENON MOUNT	45.0	1.0	INSTALL ON PROP. TRANSFORMER BASE ON EX. FOUNDATION	1.0	LUMINAIRE, LED, ROADWAY, OUTPUT DESIGNATION H
6	SPRINGFIELD RD.	GALVANIZED STEEL, TENON MOUNT	45.0	1.0	INSTALL ON PROP. TRANSFORMER BASE ON EX. FOUNDATION	1.0	LUMINAIRE, LED, ROADWAY, OUTPUT DESIGNATION H
7	IL 9	GALVANIZED STEEL, TENON MOUNT	45.0	1.0	INSTALL ON PROP. TRANSFORMER BASE ON EX. FOUNDATION	1.0	LUMINAIRE, LED, ROADWAY, OUTPUT DESIGNATION H
8	IL 9	GALVANIZED STEEL, TENON MOUNT	45.0	1.0	INSTALL ON PROP. TRANSFORMER BASE ON EX. FOUNDATION	1.0	LUMINAIRE, LED, ROADWAY, OUTPUT DESIGNATION H
9	IL 9	GALVANIZED STEEL, TENON MOUNT	45.0	1.0	INSTALL ON PROP. TRANSFORMER BASE ON EX. FOUNDATION	1.0	LUMINAIRE, LED, ROADWAY, OUTPUT DESIGNATION H
10	IL 9	GALVANIZED STEEL, TENON MOUNT	45.0	1.0	INSTALL ON PROP. TRANSFORMER BASE ON EX. FOUNDATION	1.0	LUMINAIRE, LED, ROADWAY, OUTPUT DESIGNATION H
11	IL 9	GALVANIZED STEEL, TENON MOUNT	45.0	1.0	INSTALL ON PROP. TRANSFORMER BASE ON EX. FOUNDATION	1.0	LUMINAIRE, LED, ROADWAY, OUTPUT DESIGNATION H
12	IL 9	GALVANIZED STEEL, TENON MOUNT	45.0	1.0	INSTALL ON PROP. TRANSFORMER BASE ON EX. FOUNDATION	1.0	LUMINAIRE, LED, ROADWAY, OUTPUT DESIGNATION H
13	SPRINGFIELD RD.	GALVANIZED STEEL, TENON MOUNT	45.0	1.0	INSTALL ON PROP. TRANSFORMER BASE ON EX. FOUNDATION	1.0	LUMINAIRE, LED, ROADWAY, OUTPUT DESIGNATION H
14	SPRINGFIELD RD.	GALVANIZED STEEL, TENON MOUNT	45.0	1.0	INSTALL ON PROP. TRANSFORMER BASE ON EX. FOUNDATION	1.0	LUMINAIRE, LED, ROADWAY, OUTPUT DESIGNATION H

MODEL: Default  
 FILE NAME: C:\common\GEN\Transfer - Bureau\68G23 - IL 9 & Springfield Rd (12B21).dgn

USER NAME = howaldier	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 105,9368' / in.	CHECKED -	REVISED -
PLOT DATE = 1/29/2021	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**LIGHT POLE SCHEDULE  
IL 9 & SPRINGFIELD RD. - TAZEWELL COUNTY**

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
683	118-L	TAZEWELL	12	5
CONTRACT NO.			68G23	
ILLINOIS FED. AID PROJECT				

**NOTES:**

1. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF THE EXISTING ALUMINUM LIGHT POLES, TRANSFORMER BASES, AND LUMINAIRES.
2. THE PROPOSED LIGHT POLES WILL BE INSTALLED ON THE EXISTING LIGHT POLE FOUNDATIONS.
3. THE EXISTING CIRCUIT WIRING WILL BE RE-USED FOR THE PROPOSED LIGHTING.
4. THE CONTRACTOR SHALL DISPOSE OF THE EXISTING HPS LAMPS AT A CERTIFIED DISPOSAL CENTER.



BILL OF MATERIALS		
DESCRIPTION	UNIT	QTY.
REMOVE EXISTING LIGHTING SYSTEM	L SUM	1.0

REMOVE EXISTING EXISTING LIGHTING SYSTEM - QTY. 1 LUMP SUM (INCLUDES ALL ITEMS LISTED BELOW)	
THE FOLLOWING ITEMS SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR OFF OF THE RIGHT-OF-WAY:	
QTY.	ITEM
1.0	LIGHTING CONTROLLER CABINET (PEDESTAL MOUNTED)
1.0	CONCRETE FOUNDATION (LIGHTING CONTROLLER)
14.0	LIGHT POLE, ALUMINUM, TRANSFORMER BASE, WITH DAVIT ARM
14.0	HPS LUMINAIRE

**LEGEND**

- ⊘ EX. STOP SIGN AND POST
- ⊙ EX. ELECTRICAL SERVICE
- ⊗ EX. WOOD POLE (SERVICE)
- ⊘ EX. STOP BAR
- EX. UNIT-DUCT
- ⊙ LIGHT POLE NUMBER
- ⊙ EX. LIGHT POLE AND LUMINAIRE ON EX. FOUNDATION
- ⊙ EX. LIGHTING CONTROLLER (PEDESTAL MOUNTED) FOUNDATION TO BE RE-USED

MODEL: Default  
 FILE NAME: G:\Common\GEN\Transfer - burdau\68G23 - Final Plans\68G23 - IL 9 & Springfield Rd (1225-21).dgn

NOT TO SCALE

USER NAME = howalter	DESIGNED -	REVISED -
DRAWN -	REVISIONS -	REVISED -
PLOT SCALE = 105,9368' / in.	CHECKED -	REVISED -
PLOT DATE = 3/11/2021	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

<b>EXISTING LIGHTING REMOVAL PLANS</b>			
<b>IL 9 &amp; SPRINGFIELD RD. - TAZEWELL COUNTY</b>			
SCALE:	SHEET	OF SHEETS	STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
683	118-L	TAZEWELL	12	6
CONTRACT NO. 68G23				
ILLINOIS FED. AID PROJECT				

SOLAR STOP AHEAD SIGN	
EACH GROUND MOUNT INSTALLATION INCLUDES:	
SIGN PANEL, TYPE 1	QTY. 9.0 SQ FT
WOOD SIN SUPPORT	QTY. 22.0 FT
SLR-PWR FB AS CMP DA	QTY. 1.0 EACH

SOLAR STOP SIGN	
EACH GROUND MOUNT INSTALLATION INCLUDES:	
SIGN PANEL, TYPE 1	QTY. 9.8 SQ FT
WOOD SIN SUPPORT	QTY. 20.0 FT
SOLAR-POWER FB INSTLN	QTY. 1.0 EACH

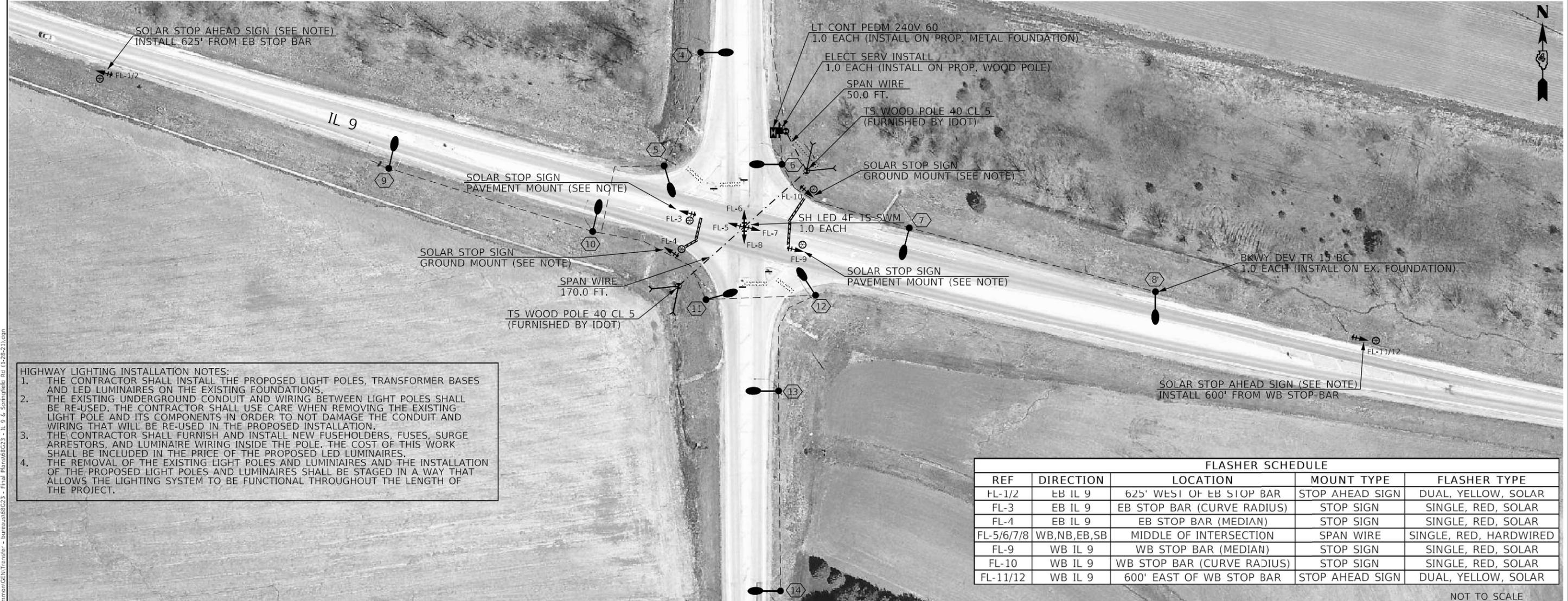
EACH PAVEMENT MOUNT INSTALLATION INCLUDES:	
SIGN PANEL, TYPE 1	QTY. 9.8 SQ FT
WOOD SIN SUPPORT	QTY. 20.0 FT
SOLAR-POWER FB INSTLN	QTY. 1.0 EACH
MEDIAN REMOVAL	QTY. 4.0 SQ FT

LEGEND	
	PROP. SIGN PANEL (R1-3P) INSTALLED ON EX. STOP SIGN AND POST
	PROP. ELECTRICAL SERVICE
	PROP. WOOD POLE (SERVICE)
	EX. STOP BAR
	EX. UNIT-DUCT
	PROP. WOOD POLE WITH GUY WIRES
	PROP. SIGN WITH SOLAR-POWERED FLASHING BEACON
	PROP. SIGNAL HEAD
	PROP. GALVANIZED STEEL LIGHT POLE AND LED LUMINAIRE (INSTALLED ON PROP. TRANSFORMER BASE ON EX. FOUNDATION)
	PROP. LIGHTING CONTROLLER 240V 60A, PEDESTAL MOUNTED (INSTALLED ON EX. FOUNDATION)
	PROP. STOP BAR
	PROP. SPAN WIRE
	LIGHT POLE NUMBER

**FLASHING BEACON INSTALLATION NOTES:**

1. THE CONTRACTOR SHALL PICK UP IDOT FURNISHED WOOD POLES FROM IDOT DISTRICT 4 PEORIA WEST MAINTENANCE FACILITY AT 6500 WEST US HWY. 150 EDWARDS, IL 61528 AND TRANSPORT THEM TO THE JOB SITE. THE COST OF THIS WORK SHALL BE INCLUDED IN THE BID PRICE FOR THE WOOD POLES.
2. WOOD POLES SHALL BE INSTALLED A MINIMUM OF 26 FT. FROM IL 9 EDGE OF TRAVELED WAY AND 24 FT. FROM SPRINGFIELD RD. EDGE OF TRAVELED WAY.
3. WOOD POLES SHALL BE INSTALLED USING GUY WIRES IN ACCORDANCE WITH ARTICLE 1077.04. THIS WORK SHALL BE INCLUDED IN THE BID PRICE FOR THE WOOD POLES.
4. THE TRAFFIC SIGNAL SPAN WIRE AND SIGNAL HEAD SHALL BE ATTACHED TO THE WOOD POLES IN A MANNER APPROVED BY THE ENGINEER. ALL CABLES AND SIGNAL HEADS SHALL MAINTAIN AN 18 FT. CLEARANCE ABOVE THE HIGHEST POINT OF THE ROADWAY.
5. ALL SIGNAL HEADS SHALL HAVE 12" LENSES.
6. THE FLASHING BEACON INSTALLATIONS SHALL CONFORM TO ALL APPLICABLE MUTCD STANDARDS.
7. THE CONTRACTOR SHALL INSTALL THE IDOT FURNISHED WOOD POLES AT THE LOCATIONS SHOWN IN THE PLANS. THE COST OF THIS WORK SHALL BE INCLUDED IN THE BID PRICE OF THE WOOD POLES.
8. THE RESIDENT ENGINEER SHALL CONTACT BILL HARRMANN AT 309-693-5176 TO DELIVER TWO IDOT FURNISHED CHANGEABLE MESSAGE SIGNS. THE SIGNS SHALL BE INSTALLED IN EACH DIRECTION ON IL ROUTE 9 A MINIMUM OF 14 DAYS PRIOR TO INSTALLATION OF STOP SIGNS ON IL ROUTE 9 AND WILL REMAIN IN PLACE 14 DAYS FOLLOWING THE INSTALLATION OF THE STOP SIGNS.

BILL OF MATERIALS		
DESCRIPTION	UNIT	QTY.
MEDIAN REMOVAL	SQ FT	4.0
CHANGEABLE MESSAGE SIGN	CAL DA	60.0
SIGN PANEL, TYPE 1	SQ FT	60.4
WOOD SIGN SUPPORT	FOOT	124.0
ELECTRIC SERVICE INSTALLATION	EACH	1.0
LUMINAIRE, LED, ROADWAY, OUTPUT DESIGNATION H	EACH	14.0
LIGHTING CONTROLLER, PEDESTAL MOUNTED, 240VOLT,	EACH	1.0
LIGHT POLE, GALVANIZED STEEL, 45 FT. M.H., TENON MOUNT	EACH	14.0
BREAKAWAY DEVICE, TRANSFORMER BASE, 15 INCH BOLT CIRCLE	EACH	14.0
SPAN WIRE	FOOT	220.0
ELECTRIC CABLE AERIAL SUSPENDED, SIGNAL, NO. 14 5C	FOOT	176.0
TRAFFIC SIGNAL WOOD POLE, 40 FT. CLASS 5	EACH	2.0
SOLAR-POWERED FLASHING BEACON ASSEMBLY (DUAL-ALTERNATING)	EACH	2.0
SOLAR-POWERED FLASHING BEACON INSTALLATION	EACH	4.0
SIGNAL HEAD, LED, 4-FACE, 1-SECTION, SPAN WIRE MOUNTED	EACH	1.0
LUMINAIRE MOUNTING BRACKET - SPECIAL	EACH	14.0



**HIGHWAY LIGHTING INSTALLATION NOTES:**

1. THE CONTRACTOR SHALL INSTALL THE PROPOSED LIGHT POLES, TRANSFORMER BASES AND LED LUMINAIRES ON THE EXISTING FOUNDATIONS.
2. THE EXISTING UNDERGROUND CONDUIT AND WIRING BETWEEN LIGHT POLES SHALL BE RE-USED. THE CONTRACTOR SHALL USE CARE WHEN REMOVING THE EXISTING LIGHT POLE AND ITS COMPONENTS IN ORDER TO NOT DAMAGE THE CONDUIT AND WIRING THAT WILL BE RE-USED IN THE PROPOSED INSTALLATION.
3. THE CONTRACTOR SHALL FURNISH AND INSTALL NEW FUSEHOLDERS, FUSES, SURGE ARRESTORS, AND LUMINAIRE WIRING INSIDE THE POLE. THE COST OF THIS WORK SHALL BE INCLUDED IN THE PRICE OF THE PROPOSED LED LUMINAIRES.
4. THE REMOVAL OF THE EXISTING LIGHT POLES AND LUMINAIRES AND THE INSTALLATION OF THE PROPOSED LIGHT POLES AND LUMINAIRES SHALL BE STAGED IN A WAY THAT ALLOWS THE LIGHTING SYSTEM TO BE FUNCTIONAL THROUGHOUT THE LENGTH OF THE PROJECT.

FLASHER SCHEDULE				
REF	DIRECTION	LOCATION	MOUNT TYPE	FLASHER TYPE
FL-1/2	EB IL 9	625' WEST OF EB STOP BAR	STOP AHEAD SIGN	DUAL, YELLOW, SOLAR
FL-3	EB IL 9	EB STOP BAR (CURVE RADIUS)	STOP SIGN	SINGLE, RED, SOLAR
FL-4	EB IL 9	EB STOP BAR (MEDIAN)	STOP SIGN	SINGLE, RED, SOLAR
FL-5/6/7/8	WB,NB,EB,SB	MIDDLE OF INTERSECTION	SPAN WIRE	SINGLE, RED, HARDWIRED
FL-9	WB IL 9	WB STOP BAR (MEDIAN)	STOP SIGN	SINGLE, RED, SOLAR
FL-10	WB IL 9	WB STOP BAR (CURVE RADIUS)	STOP SIGN	SINGLE, RED, SOLAR
FL-11/12	WB IL 9	600' EAST OF WB STOP BAR	STOP AHEAD SIGN	DUAL, YELLOW, SOLAR

NOT TO SCALE

MODEL: Default  
FILE NAME: G:\Common\GEN\Transfers - Bureau\68G23 - Final Plans\68G23 - IL 9 & Springfield Rd. (122821).dgn

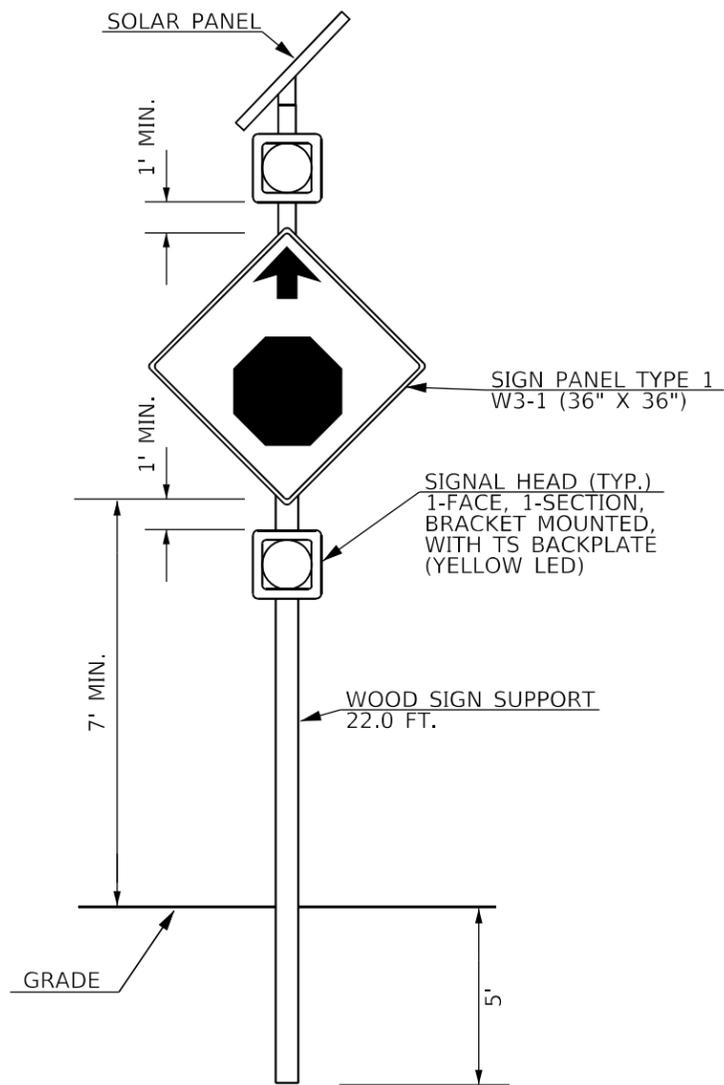
USER NAME = howalter	DESIGNED -	REVISED -
PLOT SCALE = 105.9368' / in.	DRAWN -	REVISED -
PLOT DATE = 1/29/2021	CHECKED -	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

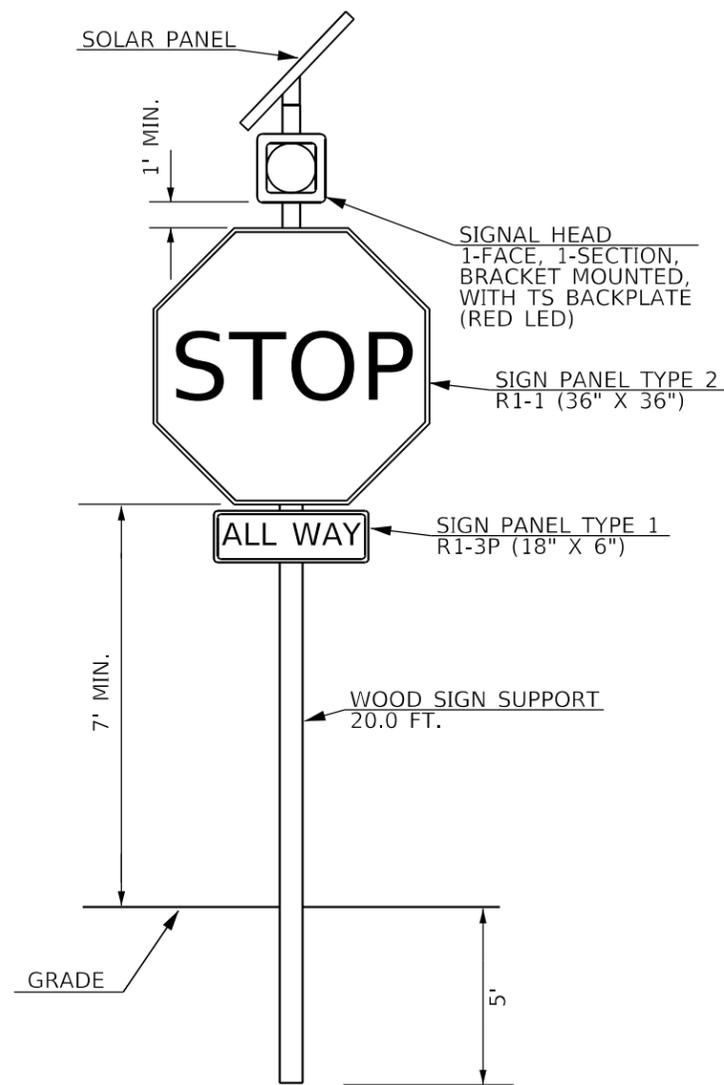
PROPOSED FLASHER AND LIGHTING PLANS  
IL 9 & SPRINGFIELD RD. - TAZEWELL COUNTY

SCALE: SHEET OF SHEETS STA. TO STA.

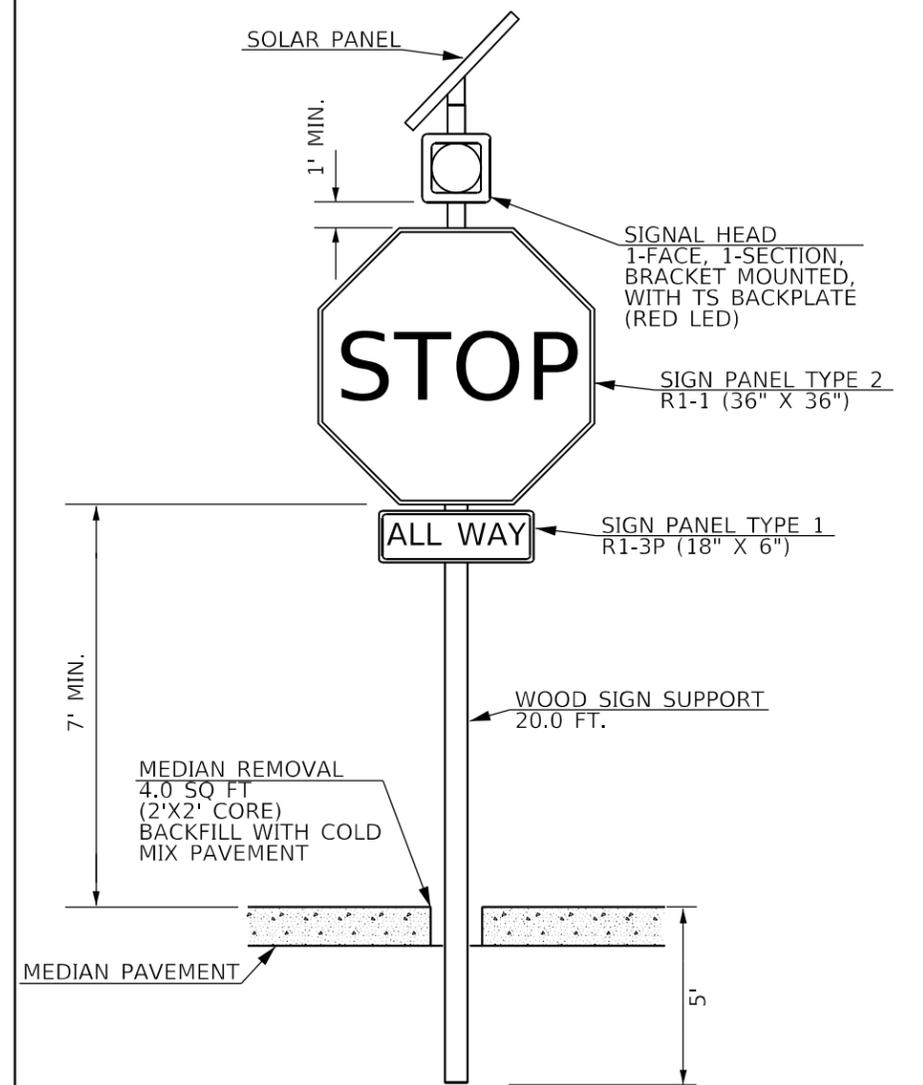
F.A.P. RTE. 683	SECTION 118-L	COUNTY TAZEWELL	TOTAL SHEETS 12	SHEET NO. 7
CONTRACT NO. 68G23				
ILLINOIS FED. AID PROJECT				



SOLAR STOP AHEAD SIGN



SOLAR STOP SIGN  
(GROUND MOUNTED)



SOLAR STOP SIGN  
(PAVEMENT MOUNTED)

- NOTES:
1. THE CONTRACTOR SHALL FURNISH AND INSTALL ALL REQUIRED COMPONENTS INCLUDING, BUT NOT LIMITED TO, SOLAR PANEL, CONTROL UNIT, BRACKETING, HARDWARE, ELECTRICAL COMPONENTS, WIRING, TWO FLASHING BEACON ASSEMBLIES (YELLOW LED) FOR OPERATION OF THE SOLAR-POWERED FLASHING BEACON ASSEMBLY (DUAL-ALTERNATING), THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE BID PRICE OF THE SOLAR-POWERED FLASHING BEACON ASSEMBLY (DUAL-ALTERNATING.)
  2. THE CONTRACTOR SHALL FURNISH AND INSTALL ALL REQUIRED COMPONENTS INCLUDING, BUT NOT LIMITED TO, SOLAR PANEL, CONTROL UNIT, BRACKETING, HARDWARE, ELECTRICAL COMPONENTS, WIRING, ONE FLASHING BEACON ASSEMBLY (RED LED) FOR OPERATION OF THE SOLAR-POWERED FLASHING BEACON INSTALLATION, THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE BID PRICE OF THE SOLAR-POWERED FLASHING BEACON INSTALLATION.
  3. AFTER THE SIGN POSTS HAVE BEEN INSTALLED, THE CONTRACTOR SHALL BACKFILL THE 2'X2' HOLE IN THE MEDIAN PAVEMENT WITH COLD MIX ASPHALT. THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE BID PRICE OF THE MEDIAN REMOVAL.

MODEL: Default  
FILE NAME: C:\Common\GEN\Transfer - Bureau\68G23 - Final Plans\68G23 - IL 6\_SolarSigns.dwg (1/28/21).dgn

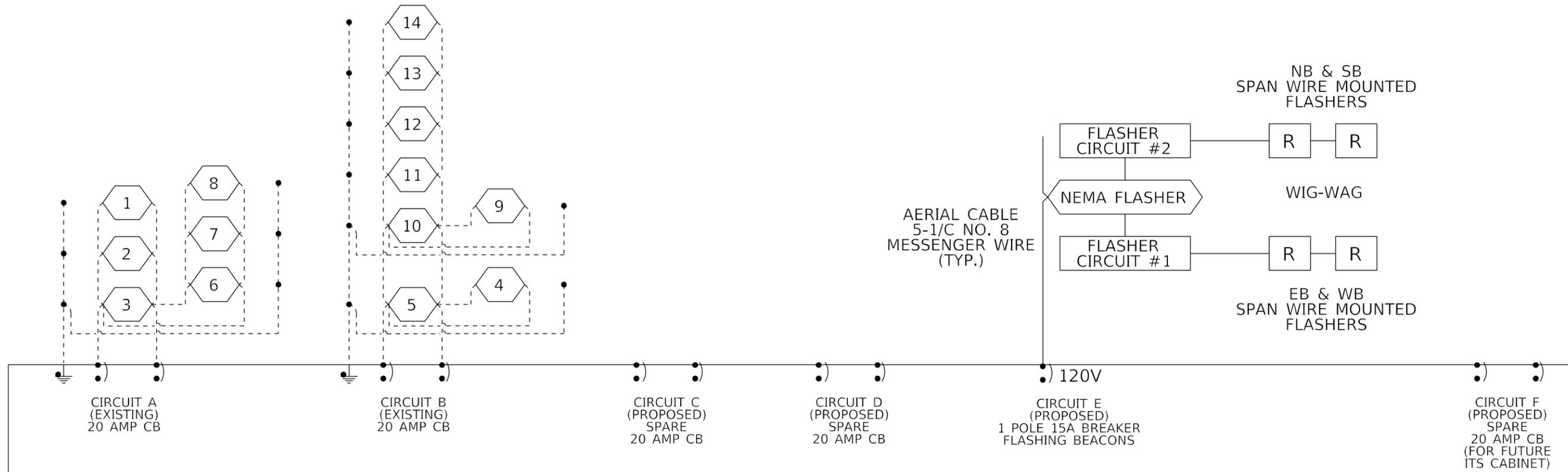
USER NAME = howaldier	DESIGNED -	REVISED -
PLOT SCALE = 105,9368' / in.	DRAWN -	REVISED -
PLOT DATE = 1/29/2021	CHECKED -	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

FLASHING BEACON AND SIGN DETAILS			
SCALE:	SHEET	OF SHEETS	STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
683	118-L	TAZEWELL	12	8
CONTRACT NO. 68G23				
ILLINOIS FED. AID PROJECT				

NOT TO SCALE



PROPOSED IL 9 & SPRINGFIELD RD. LIGHTING CONTROLLER WITH FLASHING BEACON CIRCUIT CONTROL INSTALLATION TYPE CB-RCS-60-480

- NOTES:**
1. THE CONTRACTOR SHALL FIELD VERIFY LIGHTING SYSTEM VOLTAGE, LUMINAIRE TYPE, AND FIELD CONDITIONS PRIOR TO CONSTRUCTION.
  2. THE PROPOSED LIGHTING CONTROLLER SHALL CONTAIN ONE NEMA FLASHER SOCKET, NEMA FLASHER, TERMINAL BLOCKS, AND ALL OTHER ITEMS REQUIRED FOR FLASHING BEACON OPERATION. THE COST OF THESE ITEMS SHALL BE INCLUDED IN THE COST OF THE LIGHTING CONTROLLER.
  3. THE CONTRACTOR SHALL FURNISH AND INSTALL A METAL SCREW-IN FOUNDATION, PEDESTAL POST, AND TRANSFORMER BASE. THE COST OF THESE ITEMS SHALL BE INCLUDED IN THE BID PRICE OF THE LIGHTING CONTROLLER.

**LEGEND**

- PROP. LED LUMINAIRE (INSTALLED ON PROP. LIGHT POLE)
- PROP. 1-SECT. SIGNAL HEAD, RED (PART OF SIGNAL HEAD, 4-FACE, 1-SECT. SPAN WIRE MOUNTED)
- PROP. AERIAL CABLE, SUSPENDED, SIGNAL NO. 14 5C
- EX. UNIT-DUCT AND GROUND

MODEL: Default  
FILE NAME: C:\Common\GEN\Transfer - Bureau\68G23 - Final Plans\68G23 - IL 9 & Springfield Rd (122521).dgn

USER NAME = howaldier	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 105,9368' / in.	CHECKED -	REVISED -
PLOT DATE = 1/29/2021	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**PROPOSED FLASHER AND OVERHEAD LIGHTING WIRING DIAGRAM**

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
683	118-L	TAZEWELL	12	9
CONTRACT NO. 68G23				
ILLINOIS FED. AID PROJECT				

**ILLINOIS DEPARTMENT OF TRANSPORTATION  
LUMINAIRE PERFORMANCE TABLE**  
LED replacement for 400W HPS Horizontal Mount luminaire

**GIVEN CONDITIONS**

<b>ROADWAY DATA</b>	Lane Width	12 ft
	Number of Lanes (in One direction Only)	4
	Median Width	0 ft
	I.E.S. Surface Classification	R3
	Q-Zero Value	.07
<b>LIGHT POLE DATA</b>	Mounting Height	45 ft
	Luminaire Overhang From Edge of Pavement (White Line)	0 ft
<b>LUMINAIRE DATA</b>	Luminaire Type	LED
	I.E.S. Vertical Distribution	Medium
	BUG Rating	U = 0
	I.E.S. Lateral Distribution	Type II or III
	Total Light Loss Factor	0.684
<b>LAYOUT DATA</b>	Spacing	240 ft
	Configuration	One Sided

**NOTES:**

- Total light loss factor is the product of "Lumen Depreciation" (LLD) = 0.90, "Dirt Depreciation" (LDF) = 0.80, and "Equipment factors" (EF) = 0.95.

**NOTES:**

- THE CONTRACTOR SHALL FURNISH AND INSTALL NEW LUMINAIRE WIRING, ARRESTORS, FUSES, AND FUSEHOLDERS. THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE BID PRICE OF THE PROPOSED LUMINAIRES.
- THE CONTRACTOR SHALL DISPOSE OF THE EXISTING HPS LAMPS AT AN APPROVED FACILITY, THE COST OF THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE BID PRICE OF THE PROPOSED LUMINAIRES.

**PERFORMANCE REQUIREMENTS**

**NOTE:** These performance requirements shall be the acceptable standards of photometric performance for the luminaire, based on the given conditions listed above.

<b>ILLUMINANCE</b>	Average Illuminance, $E_{AVE}$	0.9 fc to 1.4 fc
	Uniformity Ratio, $E_{AVE}/E_{MIN}$	$\leq 3.0:1$
<b>LUMINANCE</b>	Average Luminance, $L_{AVE}$	0.6 cd/m <sup>2</sup> to 0.9 cd/m <sup>2</sup>
	Uniformity Ratio, $L_{AVE}/L_{MIN}$	$\leq 3.5:1$
	Uniformity Ratio, $L_{MAX}/L_{MIN}$	$\leq 6.0:1$
	Max. Veiling Luminance Ratio, $L_v/L_{AVE}$	$\leq 0.3:1$

NOTE: PERFORMANCE VALUES MAY BE ROUNDED UP TO ONE SIGNIFICANT DIGIT.

MODEL Path: C:\Common\GEN\Transfer - Bureau\68G23 - Final Plans\68G23 - IL 6 6\_Suppl\Fed.Rd.122521.dgn

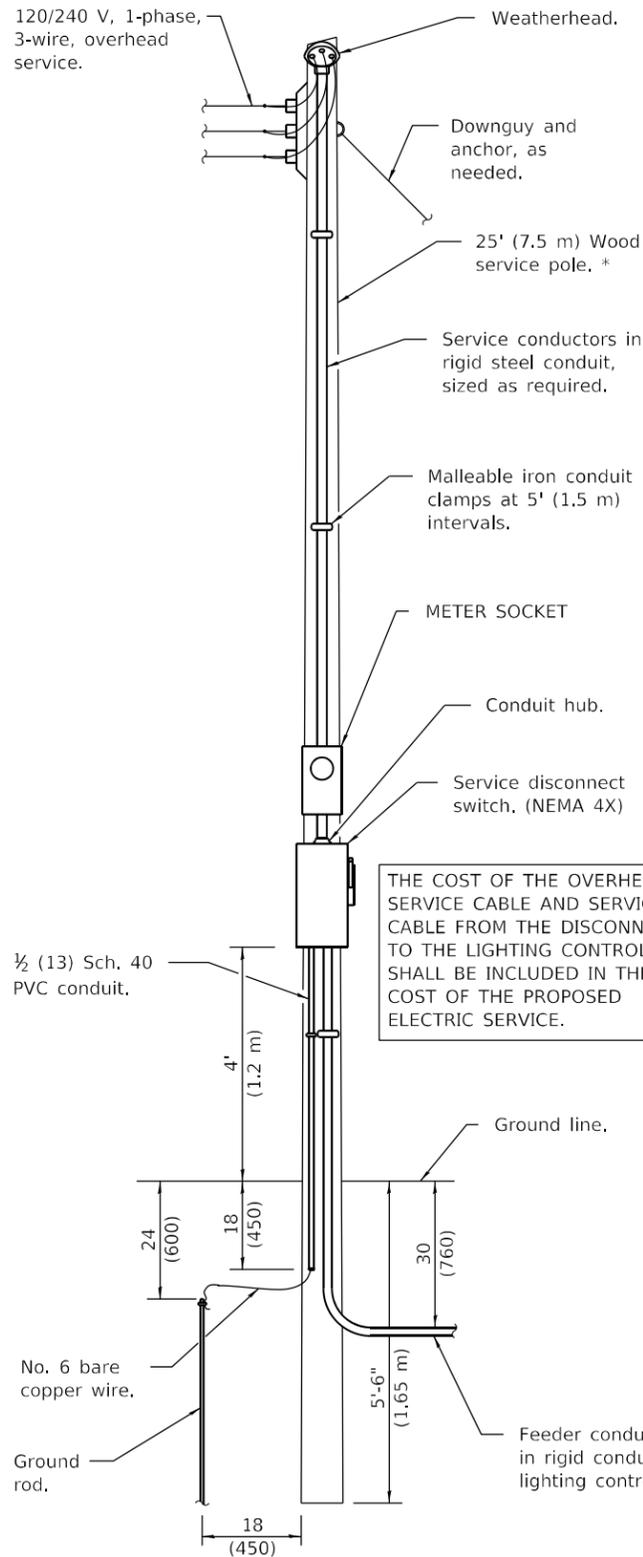
USER NAME = howaldt	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 105.9368 ' / in.	CHECKED -	REVISED -
PLOT DATE = 1/29/2021	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**PROPOSED LED LUMINAIRE PERFORMANCE TABLE**

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
683	118-L	TAZEWELL	12	10
CONTRACT NO. 68G23				
ILLINOIS FED. AID PROJECT				

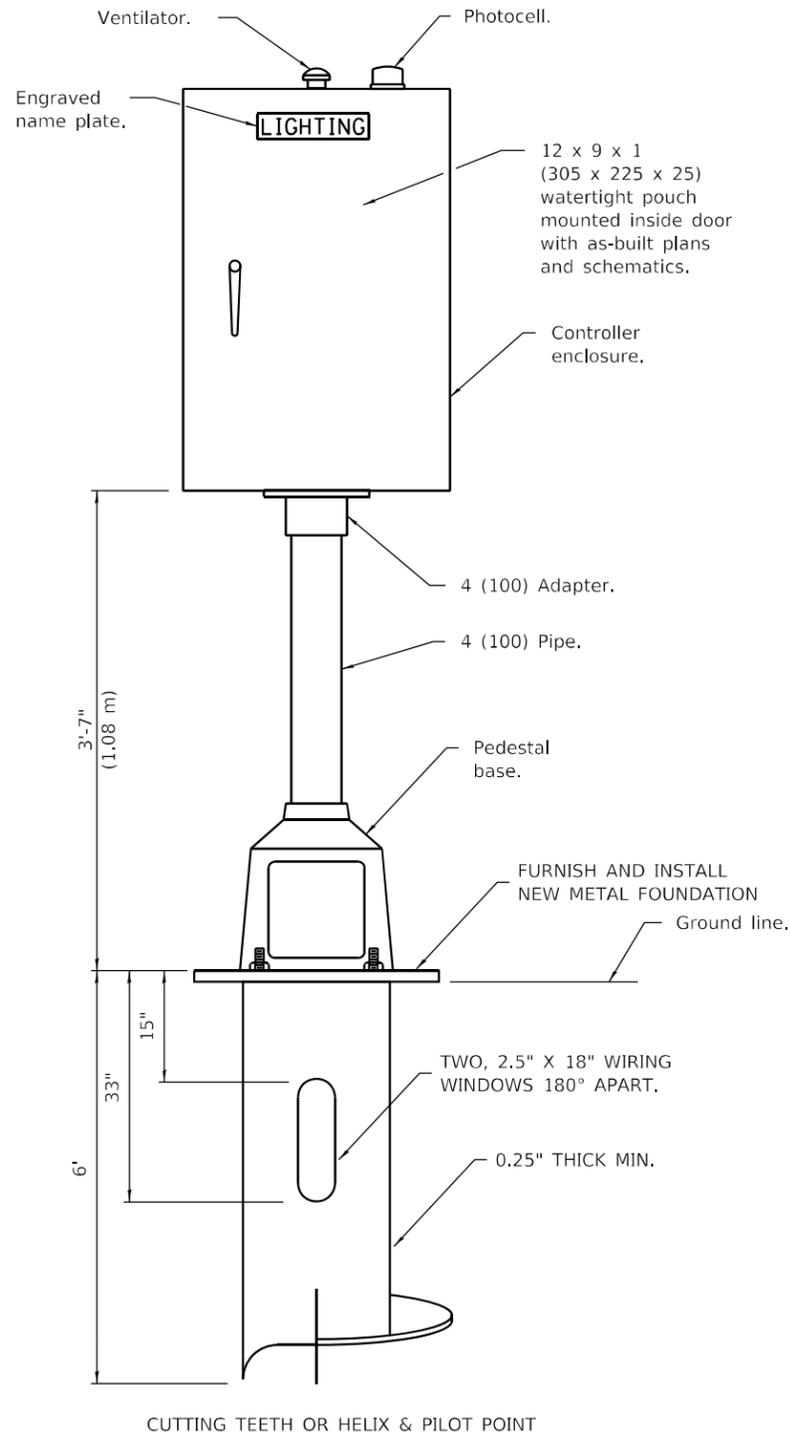


THE COST OF THE OVERHEAD SERVICE CABLE AND SERVICE CABLE FROM THE DISCONNECT TO THE LIGHTING CONTROLLER SHALL BE INCLUDED IN THE COST OF THE PROPOSED ELECTRIC SERVICE.

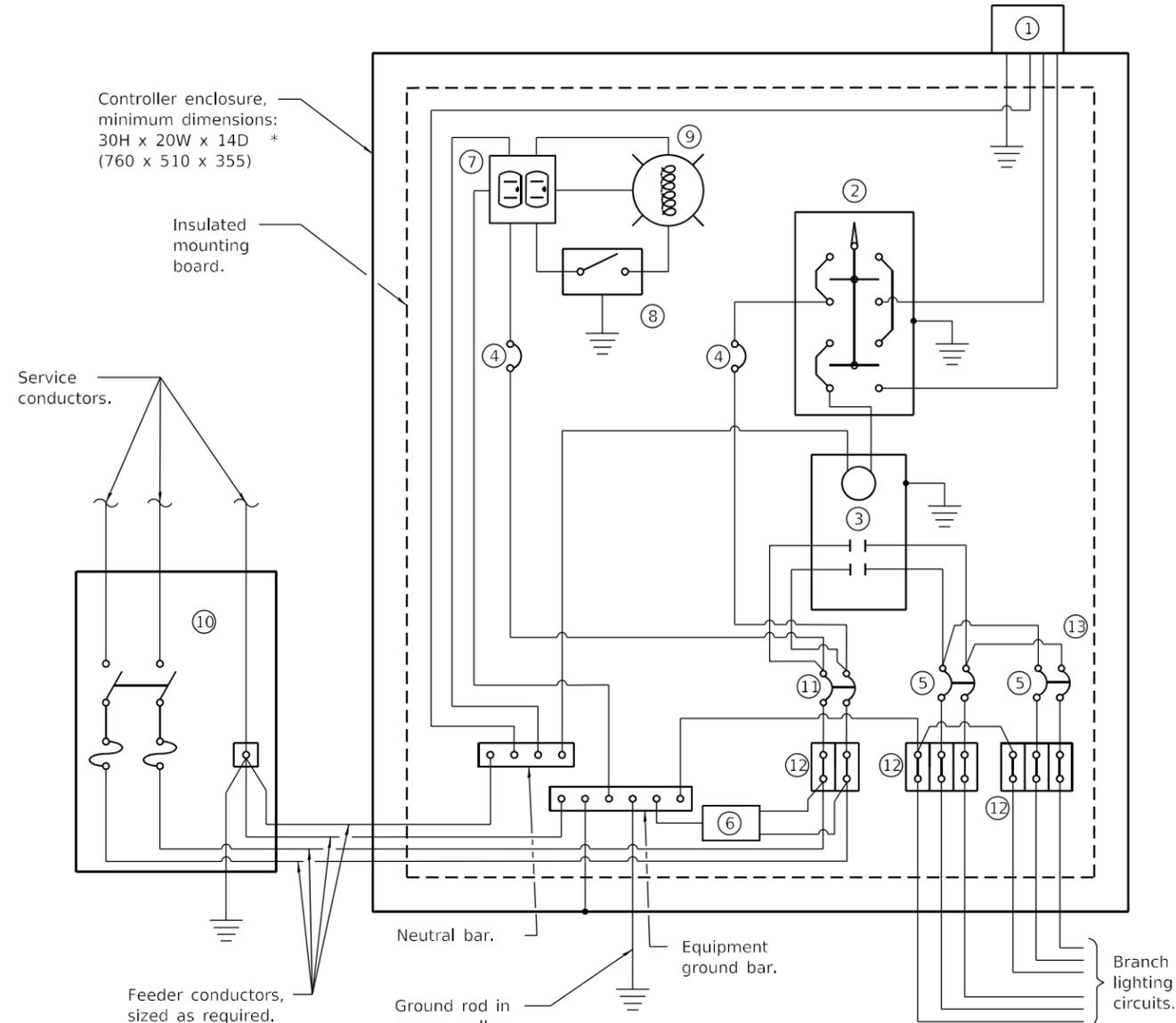
**ELECTRIC SERVICE INSTALLATION**

(Typical overhead service shown. Cut pole off for underground service and treat cut surface with preservative. Consult utility company standards for exact requirements.)

\* Size larger as needed.



**LIGHTING CONTROLLER**



**CONTROL SCHEMATIC**

- ① Photocell with integral surge arrester.
- ② HAND-OFF-AUTO selector switch.
- ③ 60 amp\*, electrically held contactor.
- ④ 15 amp, 1-pole circuit breaker.
- ⑤ 20 amp\*, 2-pole circuit breaker (QTY 2.0 PLUS 2 SPARES).
- ⑥ Surge arrester.
- ⑦ GFCI duplex receptacle.
- ⑧ Single-pole, single-throw switch.
- ⑨ LED light bulb, enclosed and gasketed with 800 lumen lamp.
- ⑩ Service disconnect switch - 2-pole, 3-wire, 60 amp\*, fused at 60 amp\*, solid neutral in NEMA 4X enclosure having lockable external handle.
- ⑪ 60 amp\*, 2-pole circuit breaker.
- ⑫ Terminal block sized for conductors as shown on plans.
- ⑬ 20A 1-POLE CIRCUIT BREAKER (QTY. 1 PLUS 1 SPARE)

\* Size larger as needed.

All dimensions are in inches (millimeters) unless otherwise shown.

NOT TO SCALE

MODEL: Default  
FILE NAME: C:\Common\GEN\Transier - burca\68G23 - IL 9 & Springfield Rd (122521).dgn

USER NAME = howaldier	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 105,9368' / in.	CHECKED -	REVISED -
PLOT DATE = 1/29/2021	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**PROPOSED LIGHTING CONTROLLER DETAIL  
IL 9 & SPRINGFIELD RD. - TAZEWELL COUNTY**

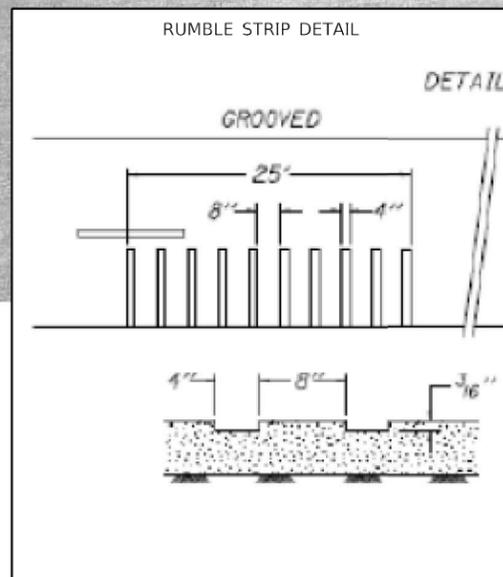
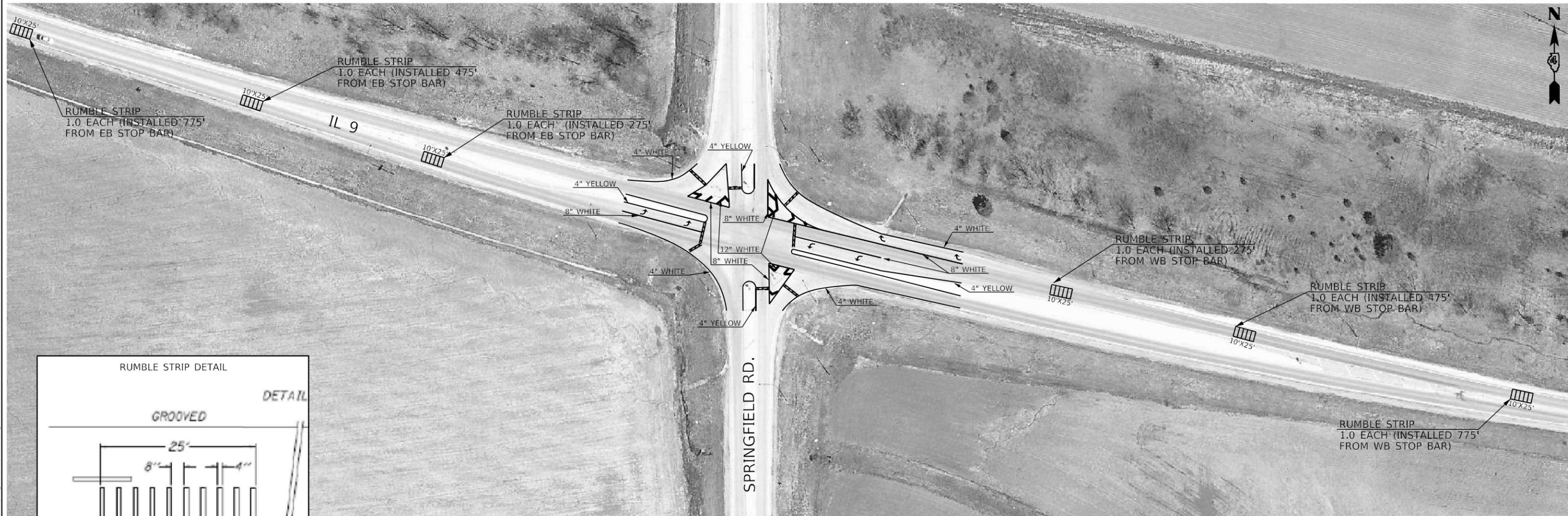
SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
683	118-L	TAZEWELL	12	11
CONTRACT NO. 68G23				
ILLINOIS FED. AID PROJECT				

PAVEMENT MARKING SCHEDULE						
PAY ITEM NO.	78009000	78009004		78009008	78009012	78009024
DESCRIPTION	MODIFIED URETHANE PAVEMENT MARKING - LETTERS AND SYMBOLS	MODIFIED URETHANE PAVEMENT MARKING - LINE 4"		MODIFIED URETHANE PAVEMENT MARKING - LINE 8"	MODIFIED URETHANE PAVEMENT MARKING - LINE 12"	MODIFIED URETHANE PAVEMENT MARKING - LINE 24"
COLOR	WHITE	YELLOW	WHITE	WHITE	WHITE	WHITE
UNIT	SQ FT	FOOT	FOOT	FOOT	FOOT	FOOT
IL 9 & SPRINGFIELD RD.	78.0	533.0	667.0	782.0	155.0	159.0

BILL OF MATERIALS		
DESCRIPTION	UNIT	QTY.
MODIFIED URETHANE PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	78.0
MODIFIED URETHANE PAVEMENT MARKING - LINE 4"	FOOT	1200.0
MODIFIED URETHANE PAVEMENT MARKING - LINE 8"	FOOT	782.0
MODIFIED URETHANE PAVEMENT MARKING - LINE 12"	FOOT	155.0
MODIFIED URETHANE PAVEMENT MARKING - LINE 24"	FOOT	159.0
RUMBLE STRIP	EACH	6.0

ALL STOP BARS ARE 24" WHITE



LEGEND	
	PROP. STOP BAR
	PROP. PAVEMENT MARKING 4"
	PROP. PAVEMENT MARKING 8"
	PROP. PAVEMENT MARKING 12"
	PROP. RUMBLE STRIP

NOT TO SCALE

MODEL: Default  
FILE NAME: C:\Common\GEN\Transfer - Bureau\68G23 - Final Plans\68G23 - IL 9 & Springfield Rd (122821).dgn

USER NAME = howalter	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 105,9368' / in.	CHECKED -	REVISED -
PLOT DATE = 1/29/2021	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

PROPOSED PAVEMENT MARKING AND RUMBLE STRIP INSTALLATION  
IL 9 & SPRINGFIELD RD. - TAZEWELL COUNTY

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
683	118-L	TAZEWELL	12	12
CONTRACT NO. 68G23				
ILLINOIS FED. AID PROJECT				