

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

\* FAI 74  
FAP 317  
FAU 6717

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	(90-14-2;17-1;18;35-1)L	TAZEWELL	25	1
		ILLINOIS	CONTRACT NO. 68G56	

INDEX OF SHEETS:  
SEE SHEET 2 FOR INDEX OF SHEETS

PROPOSED  
HIGHWAY PLANS

VARIOUS ROUTES  
SECTION (90-14-2;17-1;18;35-1)L

TAZEWELL COUNTY

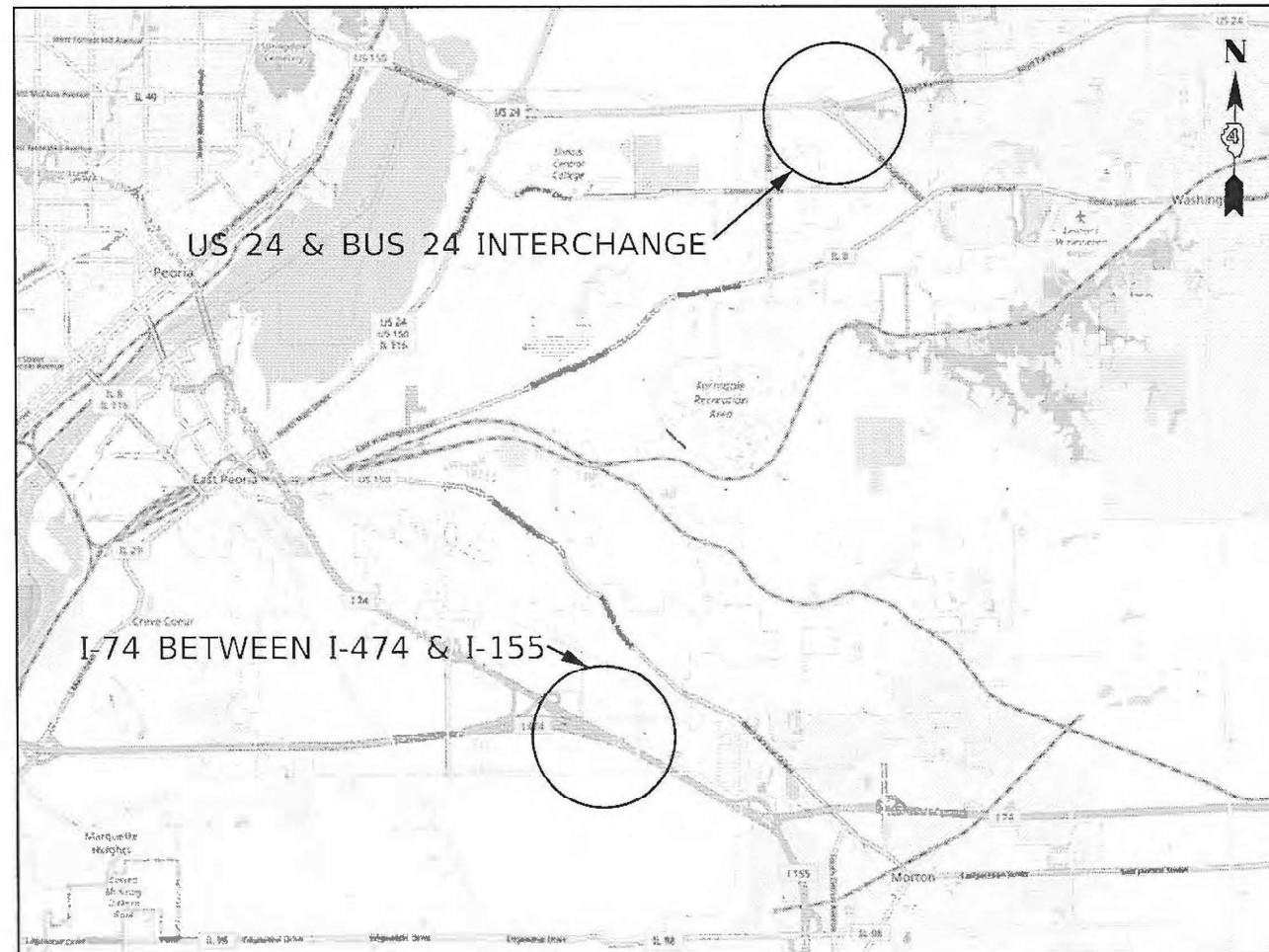
C-94-078-21

D-94-058-21



HIGHWAY STANDARDS:  
SEE SHEET 2 FOR A LIST OF  
APPLICABLE HIGHWAY STANDARDS

PROJECT DESCRIPTION:  
HIGHWAY LIGHTING IMPROVEMENTS ALONG  
WB I-74 BETWEEN I-474 & I-155 AND  
US 24/BUS 24 INTERCHANGE NEAR  
WASHINGTON.



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

PROJECT ENGINEER : TREVOR HANSON (309) 671-4474  
PROJECT MANAGER : ERIC HOWALD (309) 671-4481  
CATALOG NO. 036224-00D  
CONTRACT NO. 68G56

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SUBMITTED March 25 2021  
Ronald A. Hanson  
REGIONAL ENGINEER

May 7, 2021 Joe A. Etk  
ENGINEER OF DESIGN AND ENVIRONMENT

May 7, 2021 Jamal, Jr  
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, HIGHWAY STANDARDS, AND TRAFFIC CONTROL NOTES
3	CONSTRUCTION NOTES
4	SUMMARY OF QUANTITIES
5	SCHEDULE OF QUANTITIES
6 - 8	EXISTING LIGHTING PLANS & REMOVAL ITEMS - US 24 (BOYD PKWY.) & BUS 24 (MCCLUGAGE RD.) - TAZEWELL COUNTY
9	EXISTING CIRCUIT DIAGRAM - US 24 (BOYD PKWY.) & BUS 24 (MCCLUGAGE RD.) - TAZEWELL COUNTY
10	EXISTING LIGHTING PLANS - US 24 (BOYD PKWY.) & BUS 24 (MCCLUGAGE RD.) - TAZEWELL COUNTY
11 - 13	PROPOSED LIGHTING PLANS - US 24 (BOYD PKWY.) & BUS 24 (MCCLUGAGE RD.) - TAZEWELL COUNTY
14	PROPOSED CIRCUIT DIAGRAM - US 24 (BOYD PKWY.) & BUS 24 (MCCLUGAGE RD.) - TAZEWELL COUNTY
15	PROPOSED LIGHTING CONTROLLER DETAIL - US 24 (BOYD PKWY.) & BUS 24 (MCCLUGAGE RD.) - TAZEWELL COUNTY
16 - 17	EXISTING LIGHTING PLANS & REMOVAL ITEMS - I-74 BETWEEN I-474 & I-155 - TAZEWELL COUNTY
18	EXISTING CIRCUIT DIAGRAM - I-74 BETWEEN I-474 & I-155 - TAZEWELL COUNTY
19 - 20	EXISTING LIGHTING PLANS - I-74 BETWEEN I-474 & I-155 - TAZEWELL COUNTY
21 - 22	PROPOSED LIGHTING PLANS - I-74 BETWEEN I-474 & I-155 - TAZEWELL COUNTY
23	PROPOSED CIRCUIT DIAGRAM - I-74 BETWEEN I-474 & I-155 - TAZEWELL COUNTY
24	PROPOSED LIGHTING CONTROLLER DETAIL - I-74 BETWEEN I-474 & I-155 - TAZEWELL COUNTY
25	PROPOSED LUMINAIRE PERFORMANCE TABLES

HIGHWAY STANDARDS	
STANDARD	APPLICATION
000001-08	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
001006	DECIMAL OF AN INCH AND 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
701101-05	OFF-ROAD OPERATIONS, MULTILANE, 15' TO 24" FROM PAVEMENT EDGE
701106-02	OFF-ROAD OPERATIONS, MUTLILANE, MORE THAN 15' AWAY
701426-09	LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPER., FOR SPEEDS $\geq$ 45 MPH
701456-05	PARTIAL EXIT RAMP CLOSURE FREEWAY / EXPRESSWAY
701901-08	TRAFFIC CONTROL DEVICES
821101-02	LUMINAIRE WIRING IN POLE
830021-03	LIGHT POLE STEEL TENON TOP
838001-01	BREAKAWAY DEVICES

MODEL Path: S:\CEN\W\W\ORD\ESP\AN\Hanson\# 68G56 Contract Maintenance (2021 Lighting) (FINAL) 3-25-21.dgn

\* FAI 74  
FAP 317  
FAU 6717

USER NAME = hansonj	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>COMMITMENTS, INDEX OF SHEETS, HIGHWAY STANDARDS, AND TRAFFIC CONTROL NOTES</b>	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
PLOT SCALE = 99.4868 * / in.	DRAWN -	REVISED -			~	(90-14-2;17-1;18;35-1)L	TAZEWELL	25	2	
PLOT DATE = 3/25/2021	CHECKED -	REVISED -			CONTRACT NO. 68G56					
	DATE -	REVISED -			SCALE:	SHEET	OF	SHEETS	STA.	TO
					ILLINOIS FED. AID PROJECT					

**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 CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING EXISTING IDOT ELECTRICAL FACILITIES AT HIS/HER OWN EXPENSE IF REQUIRED. THE 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 CONTRACTOR SHALL PROVIDE ELECTRICAL CABLE SLACK IN ACCORDANCE WITH ARTICLE 873.03.
5. ELECTRICAL CABLE WILL BE MEASURED FOR PAYMENT IN ACCORDANCE WITH ARTICLE 817.04.
6. ALL SURPLUS MATERIALS SHALL BE DISPOSED OF IN ACCORDANCE WITH ARTICLE 202.03 OF THE STANDARD SPECIFICATIONS.
7. 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.
8. REMOVAL OF EXISTING ITEMS (LIGHT POLES, BREAKAWAY COUPLINGS, LUMINAIRES, WIRING, ETC.) WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE UNIT BID PRICES FOR THE PROPOSED ITEMS. THE CONTRACTOR SHALL DISPOSE OF ALL ITEMS OFF OF THE RIGHT OF WAY.
9. THE CONTRACTOR SHALL FURNISH AND INSTALL NEW FUSEHOLDERS, FUSES, SURGE ARRESTORS, AND WIRING FOR EACH LUMINAIRE IN ACCORDANCE WITH HIGHWAY STANDARD 821101-02. THE COST OF THIS WORK SHALL BE INCLUDED IN THE PRICE OF THE PROPOSED LUMINAIRES.
10. THE EXISTING LIGHTING SYSTEM SHALL REMAIN IN OPERATION DURING THE INSTALLATION OF THE PROPOSED ITEMS.
11. THE COST OF THE CONDUIT AND SERVICE CABLES, INCLUDING GROUNDING CABLE AND HARDWARE, FROM THE DISCONNECT TO THE LIGHTING CONTROLLER SHALL BE INCLUDED IN THE COST OF THE PROPOSED ELECTRIC SERVICE.
12. THE CONTRACTOR SHALL REMOVE THE HPS LAMPS FROM THE EXISTING FIXTURES PRIOR TO DISPOSAL. THE HPS LAMPS SHALL BE DISPOSED OF AT A CERTIFIED RECYCLING FACILITY. THE COST OF THIS WORK SHALL BE INCLUDED IN THE BID PRICE OF THE PROPOSED LUMINAIRES.
13. THE CONTRACTOR SHALL COVER ALL EXPOSED RODENT ENTRYWAYS GREATER THAN 0.25 INCHES AROUND COUPLINGS, ANCHOR BOLT SLOTS, ETC. TO PREVENT RODENT ENTRY. THIS WORK SHALL BE COMPLETED TO THE SATISFACTION OF THE ENGINEER. THE COST OF THIS WORK SHALL BE INCLUDED IN THE PAY ITEM "BREAKAWAY DEVICE, COUPLING WITH STAINLESS STEEL SCREEN."
14. THE CONTRACTOR SHALL FURNISH AND INSTALL NEW BREAKWAY COUPLINGS IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. THE CONTRACTOR SHALL FURNISH ALL HARDWARE AND OTHER ITEMS REQUIRED FOR INSTALLATION OF THE BREAKAWAY COUPLINGS. THE COST OF THIS WORK SHALL BE INCLUDED IN THE PAY ITEM "BREAKAWAY DEVICE, COUPLING WITH STAINLESS STEEL SCREEN."
15. ALL EXISTING UNIT-DUCT, ELECTRIC CABLING, AND LIGHT POLE FOUNDATIONS SHALL BE RE-USED WITH THE PROPOSED LIGHTING INSTALLATION.
16. THE CONTRACTOR SHALL FURNISH AND INSTALL NEW 2" PVC CONDUIT, ELECTRIC SERVICE CONDUCTORS AND GROUND WIRE BETWEEN THE PROPOSED LIGHTING CONTROLLER AND PROPOSED ELECTRIC SERVICE. THE COST OF THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE UNIT BID PRICE OF THE PROPOSED ELECTRICAL SERVICE.
17. GALVANIZED STEEL LIGHT POLES SHALL REMAIN PROPERTY OF THE DEPARTMENT. THE CONTRACTOR SHALL REMOVE ALL GALVANIZED STEEL LIGHT POLES AND DELIVER THEM TO THE IDOT MAINTENANCE FACILITY LOCATED AT 6505 W. US ROUTE 150, EDWARDS. THE CONTRACTOR SHALL NOTIFY TONY BRIDSON AT (309) 370-7522 A MINIMUM OF FORTY-EIGHT HOURS PRIOR TO DELIVERY. THE COST OF REMOVAL AND DELIVERY SHALL BE INCLUDED IN THE COST OF THE PROPOSED LIGHT POLES.

MODEL Path: S:\GEN\W\W\ORD\ESP\AN\barson\# 68G56 Contract Maintenance (2021 Lighting)\68G56 CH Lighting (FINAL) 3-25-21.dgn

\* FAI 74  
FAP 317  
FAU 6717

	USER NAME = hansonj	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>CONSTRUCTION NOTES</b>			F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN -	REVISED -									
	PLOT SCALE = 99.4868 * / in.	CHECKED -	REVISED -						(90-14-2;17-1;18;35-1)L	TAZEWELL	25	3
	PLOT DATE = 3/25/2021	DATE -	REVISED -			SCALE:	SHEET	OF	SHEETS	STA.	TO STA.	ILLINOIS
											CONTRACT NO. 68G56	

## SUMMARY OF QUANTITIES

TAZEWELL COUNTY  
 CONST. TYPE  
 CODE 0021  
  
 100% STATE  
 OVERHEAD LIGHTING  
 RURAL

CODE	ITEM DESCRIPTION	UNIT	TOTAL QTY.	
67100100	MOBILIZATION	L SUM	1.0	1.0
80400100	ELECTRIC SERVICE INSTALLATION	EACH	2.0	2.0
82110000	INDEPENDENT LUMINAIRE TESTING	L SUM	1.0	1.0
82110008	LUMINAIRE, LED, ROADWAY, OUTPUT DESIGNATION H	EACH	34.0	34.0
82500330	LIGHTING CONTROLLER, PEDESTAL MOUNTED, 240VOLT, 60AMP	EACH	2.0	2.0
83060830	LIGHT POLE, GALVANIZED STEEL, 45 FT. M.H., TENON MOUNT	EACH	34.0	34.0
83800650	BREAKAWAY DEVICE, COUPLING WITH STAINLESS STEEL SCREEN	EACH	136.0	136.0
X7010216	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	L SUM	1.0	1.0
X8210402	LUMINAIRE MOUNTING BRACKET - SPECIAL	EACH	34.0	34.0

MODEL: Defaul  
 FILE NAME: S:\CEN\HW\DD\DESIGN\AWHanson\# 68G56 Contract Maintenance (2021 Lighting)\68G56\_C01 Lighting (FINAL) 3-25-21.dgn

\* FAI 74  
 FAP 317  
 FAU 6717

USER NAME = hansonj PLOT SCALE = 99.4868 ' / in. PLOT DATE = 3/25/2021	DESIGNED - DRAWN - CHECKED - DATE -	REVISED - REVISED - REVISED + REVISED +	<b>STATE OF ILLINOIS                  DEPARTMENT OF TRANSPORTATION</b>	<b>SUMMARY OF QUANTITIES</b>	F.A. RTE. * (90-14-2;17-1;18;35-1)L COUNTY TAZEWELL ILLINOIS   FED. AID PROJECT	TOTAL SHEETS 25 SHEET NO. 4 CONTRACT NO. 68G56
SCALE:				SHEET OF SHEETS STA. TO STA.		

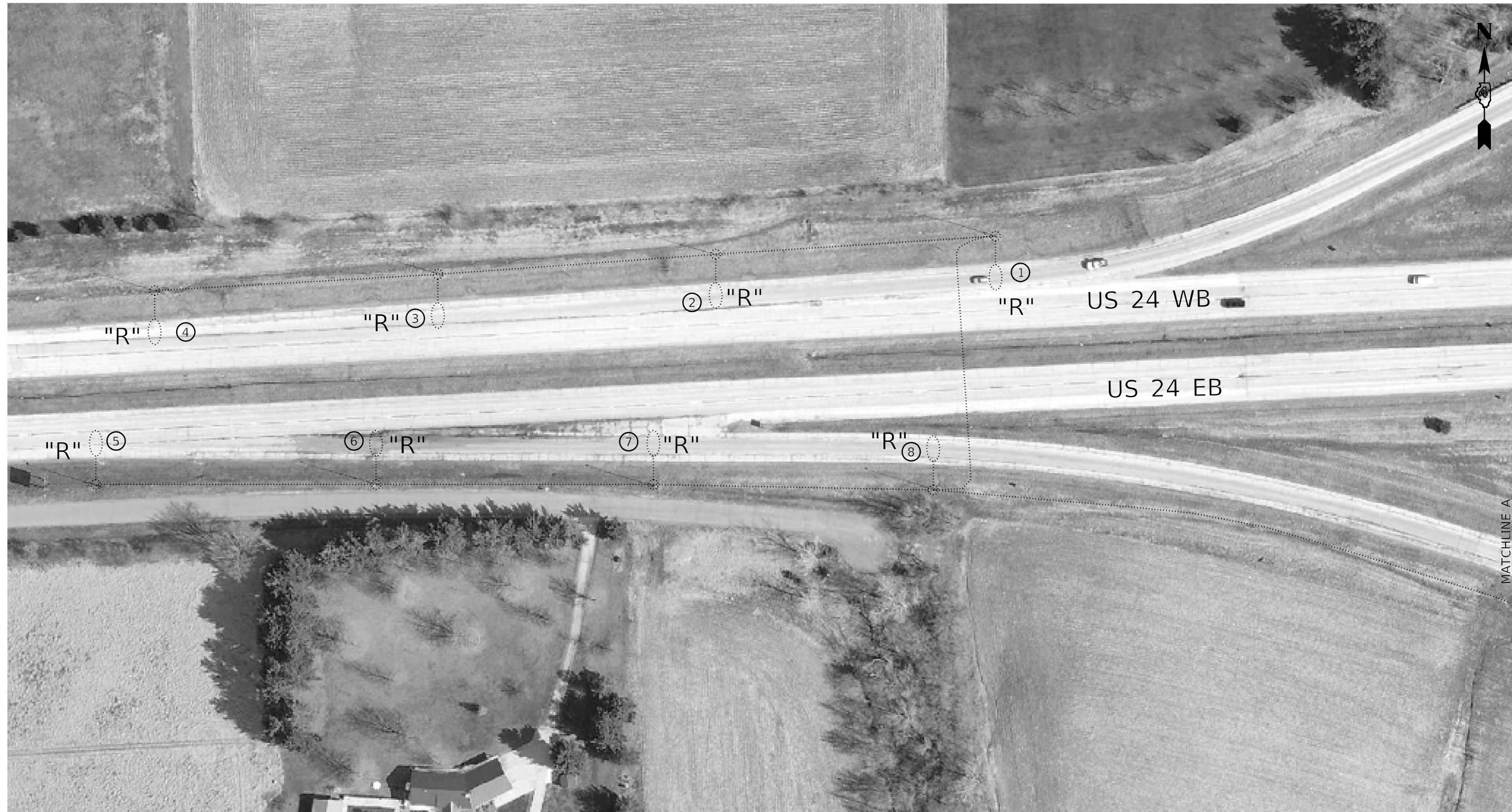
**SCHEDULE OF QUANTITIES**

ITEM DESCRIPTION	UNIT	TOTAL QTY.	TAZEWELL COUNTY	
			US 24 (BOYD PKWY.) & BUS 24 (MCCLUGAGE RD.)	I-74 WB BETWEEN I-474 & I-155
MOBILIZATION	L SUM	1.0	0.7	0.3
ELECTRIC SERVICE INSTALLATION	EACH	2.0	1.0	1.0
INDEPENDENT LUMINAIRE TESTING	L SUM	1.0	0.7	0.3
LUMINAIRE, LED, ROADWAY, OUTPUT DESIGNATION H	EACH	34.0	23.0	11.0
LIGHTING CONTROLLER, PEDESTAL MOUNTED, 240VOLT, 60AMP	EACH	2.0	1.0	1.0
LIGHT POLE, GALVANIZED STEEL, 45 FT. M.H., TENON MOUNT	EACH	34.0	23.0	11.0
BREAKAWAY DEVICE, COUPLING WITH STAINLESS STEEL SCREEN	EACH	136.0	92.0	44.0
TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	L SUM	1.0	0.7	0.3
LUMINAIRE MOUNTING BRACKET - SPECIAL	EACH	34.0	23.0	11.0

MODEL Path: \\S:\CEN\W\W\ORD\ESP\AN\Hanson\# 68G56 Contract Maintenance (2021 Lighting)\68G56 CH Lighting (FINAL) 3-25-21.dgn

\* FAI 74  
FAP 317  
FAU 6717

USER NAME = hansonj	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>SCHEDULE OF QUANTITIES</b>				F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
PLOT SCALE = 99.4868 * / in.	DRAWN -	REVISED -		SCALE:	SHEET	OF	SHEETS	STA.	TO STA.	(90-14-2;17-1;18;35-1)L	TAZEWELL	25	5
PLOT DATE = 3/25/2021	CHECKED -	REVISED -		CONTRACT NO. 68G56									
	DATE -	REVISED -		ILLINOIS FED. AID PROJECT									



THE FOLLOWING ITEMS SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR OFF OF THE RIGHT-OF-WAY. THE COST OF THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE UNIT BID PRICE OF THE PROPOSED ITEMS.

US 24 (BOYD PKWY.) & BUS 24 (MCCLUGAGE RD.)	
QTY.	ITEM
1.0	LIGHTING CONTROLLER CABINET (RE-USE EXISTING CONCRETE FOUNDATION)
1.0	ELECTRICAL SERVICE INSTALLATION
22.0	LIGHT POLE, WEATHERING STEEL, WITH HPS LUMINAIRE & BREAKAWAY COUPLINGS

LEGEND

	EXISTING 45' MH LIGHT POLE AND LIGHT POLE FOUNDATION
	EXISTING CONDUIT
	POLE NUMBER

"R" INDICATES REMOVAL ITEM

NOTE:  
1. ALL EXISTING UNIT-DUCT, ELECTRIC CABLING, AND LIGHT POLE FOUNDATIONS SHALL BE RE-USED WITH THE PROPOSED LIGHTING INSTALLATION.

\* FAP 317  
FAU 6717

NOT TO SCALE

MODEL PATH: S:\CEN\W\ORD\ESP\AN\barson\# 68G56 Contract Maintenance (2021) Lighting\68G56 CH Lighting (FINAL) 3-25-21.dgn

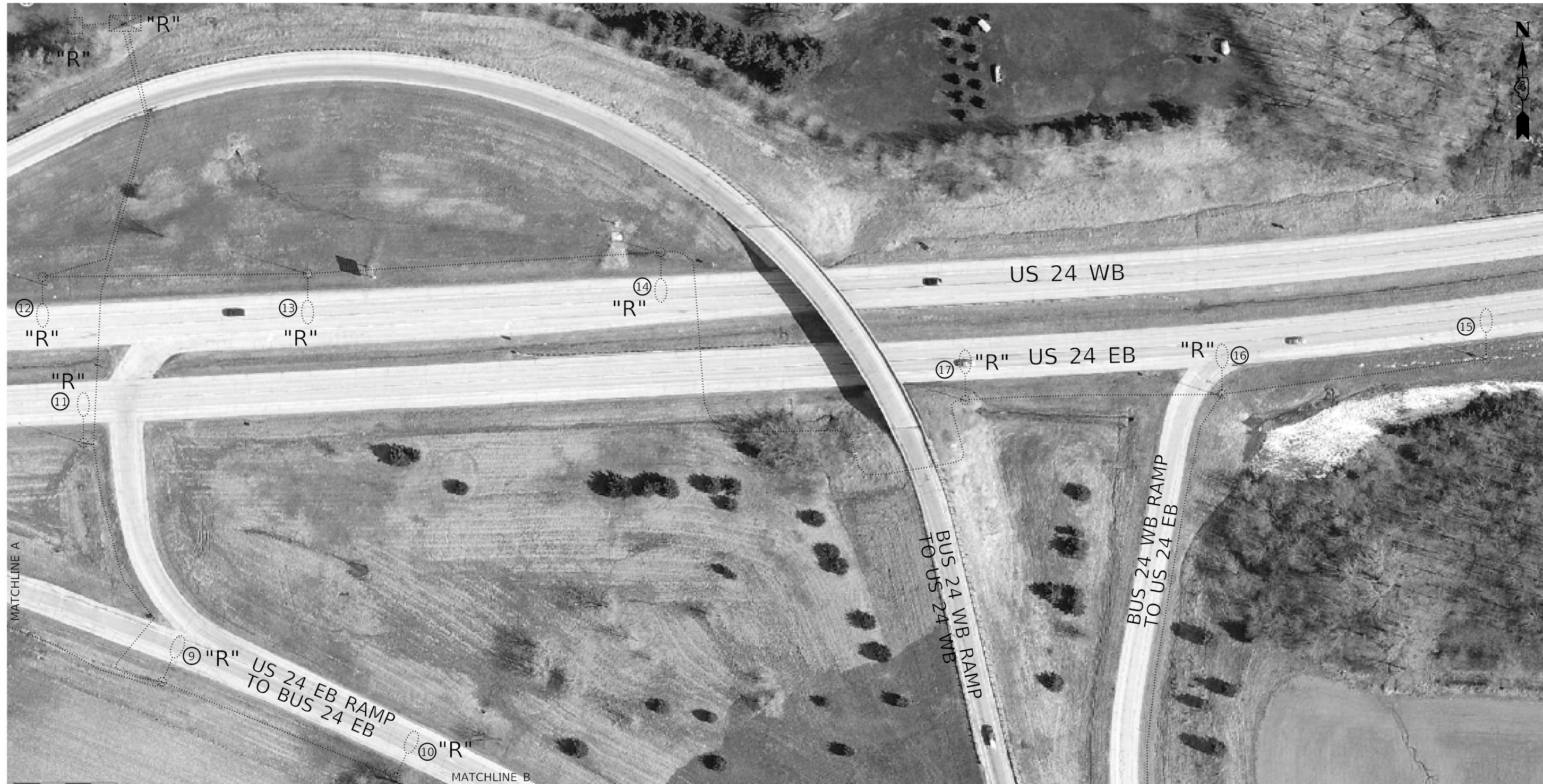
USER NAME = hansonj	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 99.4868 * / in.	CHECKED -	REVISED -
PLOT DATE = 3/25/2021	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**EXISTING LIGHTING PLANS & REMOVAL ITEMS  
US 24 (BOYD PKWY.) & BUS 24 (MCCLUGAGE RD.) – TAZEWELL COUNTY**

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
~	(90-14-2;17-1;18;35-1)L	TAZEWELL	25	6
ILLINOIS FED. AID PROJECT			CONTRACT NO. 68G56	



- NOTES:**
1. ALL EXISTING UNIT-DUCT, ELECTRICAL CABLING, AND LIGHT POLE FOUNDATIONS SHALL BE RE-USED WITH THE PROPOSED LIGHTING INSTALLATION.
  2. THE EXISTING LIGHTING CONTROLLER CONCRETE FOUNDATION SHALL BE RE-USED.

**LEGEND**

	EXISTING LIGHTING CONTROLLER AND CONCRETE FOUNDATION
	EXISTING ELECTRICAL SERVICE
	EXISTING 45'MH LIGHT POLE AND LIGHT POLE FOUNDATION
	EXISTING CONDUIT
	POLE NUMBER

"R" INDICATES REMOVAL ITEM

\* FAP 317  
FAU 6717

NOT TO SCALE

MODEL Path: \\s:\c\enr\w\w\rd\desp\an\barson\# 68G56 Contract Measure\chance (2021) Lighting\68G56 CH Lighting (FINAL) 3-25-21.dgn

USER NAME = hansonj	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 99.4868' / in.	CHECKED -	REVISED -
PLOT DATE = 3/25/2021	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**EXISTING LIGHTING PLANS & REMOVAL ITEMS (CONTINUED)  
US 24 (BOYD PKWY.) & BUS 24 (MCCLOGGAGE RD.) – TAZEWELL COUNTY**

SCALE:      SHEET      OF      SHEETS      STA.      TO      STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	(90-14-2;17-1;18;35-1)L	TAZEWELL	25	7
ILLINOIS			FED. AID PROJECT	

CONTRACT NO. 68G56



- NOTES:
1. ALL EXISTING UNIT-DUCT, ELECTRIC CABLING, AND LIGHT POLE FOUNDATIONS SHALL BE RE-USED WITH THE PROPOSED LIGHTING INSTALLATION.
  2. THE EXISTING SIGN LIGHTING LUMINAIRES SHALL BE RE-USED WITH THE PROPOSED LIGHTING INSTALLATION.

"R" INDICATES REMOVAL ITEM

LEGEND	
	EXISTING 45'MH LIGHT POLE AND FOUNDATION
	EXISTING SIGN TRUSS WITH EXISTING HPS SIGN LIGHTING LUMINAIRES
	EXISTING CONDUIT
	POLE NUMBER

MODEL PATH: S:\CEN\WV\ORD\DESIGN\AN\BARSON\# 68G56 Contract Maintenance (2021 Lighting)\68G56 CH Lighting (FINAL) 3-25-21.dgn  
 FILE NAME: S:\CEN\WV\ORD\DESIGN\AN\BARSON\# 68G56 Contract Maintenance (2021 Lighting)\68G56 CH Lighting (FINAL) 3-25-21.dgn

\* FAP 317  
FAU 6717

NOT TO SCALE

USER NAME = hansonj	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 99.4868 * / in.	CHECKED -	REVISED -
PLOT DATE = 3/25/2021	DATE -	REVISED -

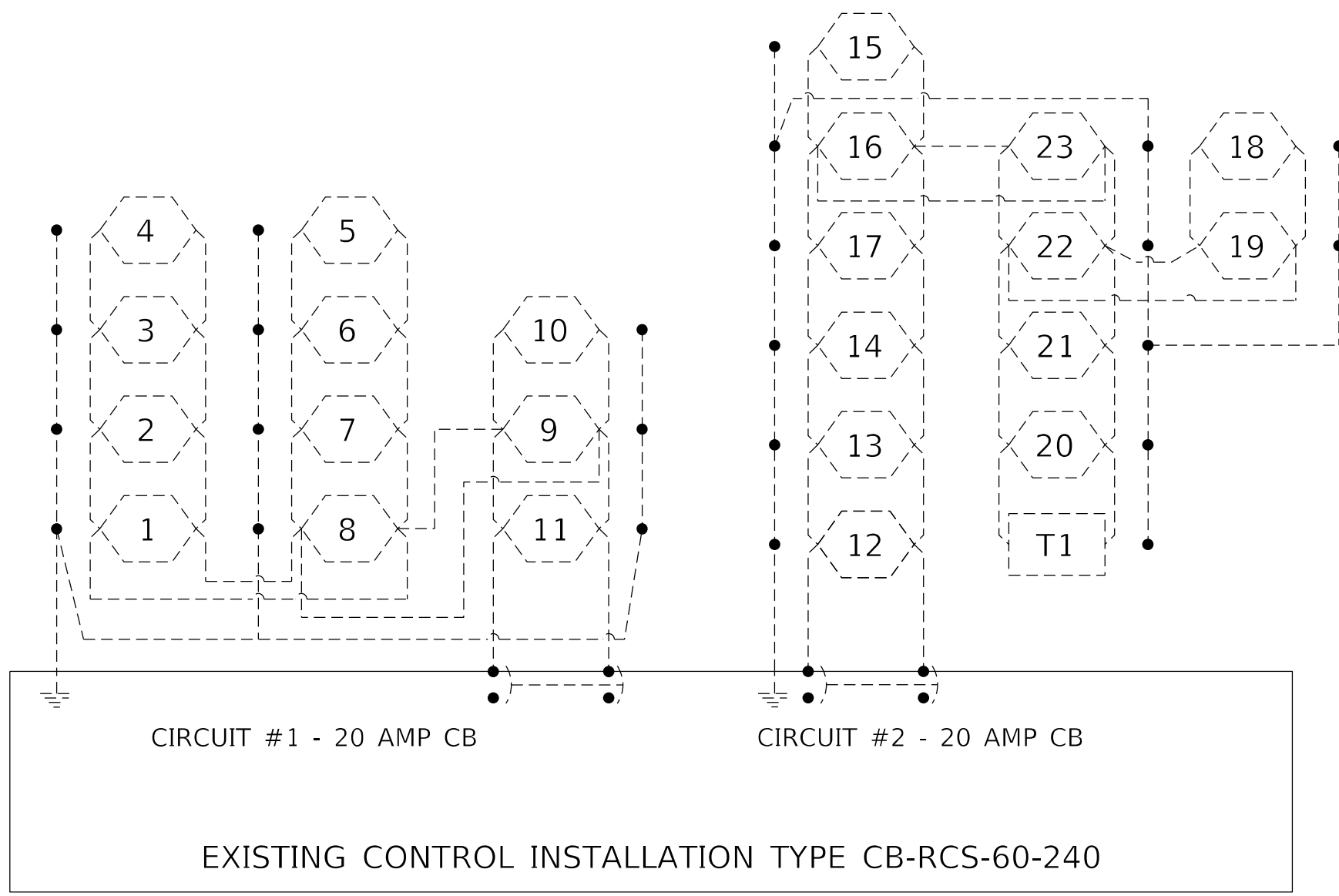
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**EXISTING LIGHTING PLANS & REMOVAL ITEMS (CONTINUED)  
US 24 (BOYD PKWY.) & BUS 24 (MCCLUGAGE RD.) – TAZEWELL COUNTY**

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
~	(90-14-2;17-1;18;35-1)L	TAZEWELL	25	8
ILLINOIS FED. AID PROJECT			CONTRACT NO. 68G56	





LEGEND

- EXISTING HPS LUMINAIRE (POLE NUMBER)
- EXISTING HPS SIGN LUMINAIRE (LOCATION)
- EXISTING ELECTRIC CABLING

\* FAP 317  
FAU 6717

NOT TO SCALE

MODEL Path: \\S:\CEN\W\W\ORD\ESP\AN\Barzon\# 68G56 Contract Maintenance (2021 Lighting)\68G56 CH Lighting (FINAL) 3-25-21.dgn

USER NAME = hansonj	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 99.4868 * / in.	CHECKED -	REVISED -
PLOT DATE = 3/25/2021	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**EXISTING CIRCUIT DIAGRAM  
US 24 (BOYD PKWY.) & BUS 24 (MCCLUGAGE RD.) - TAZEWELL COUNTY**

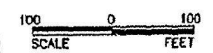
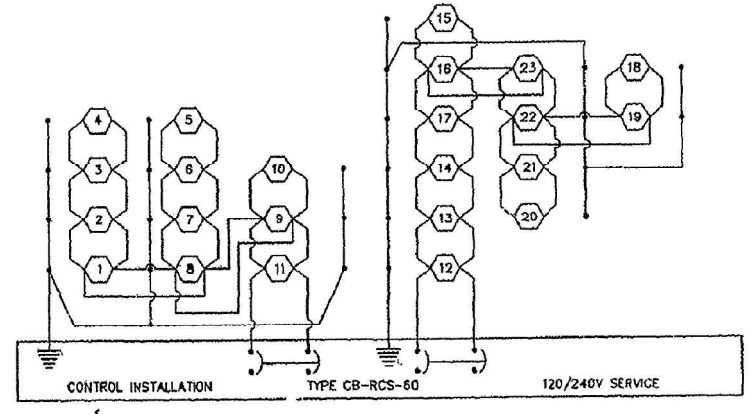
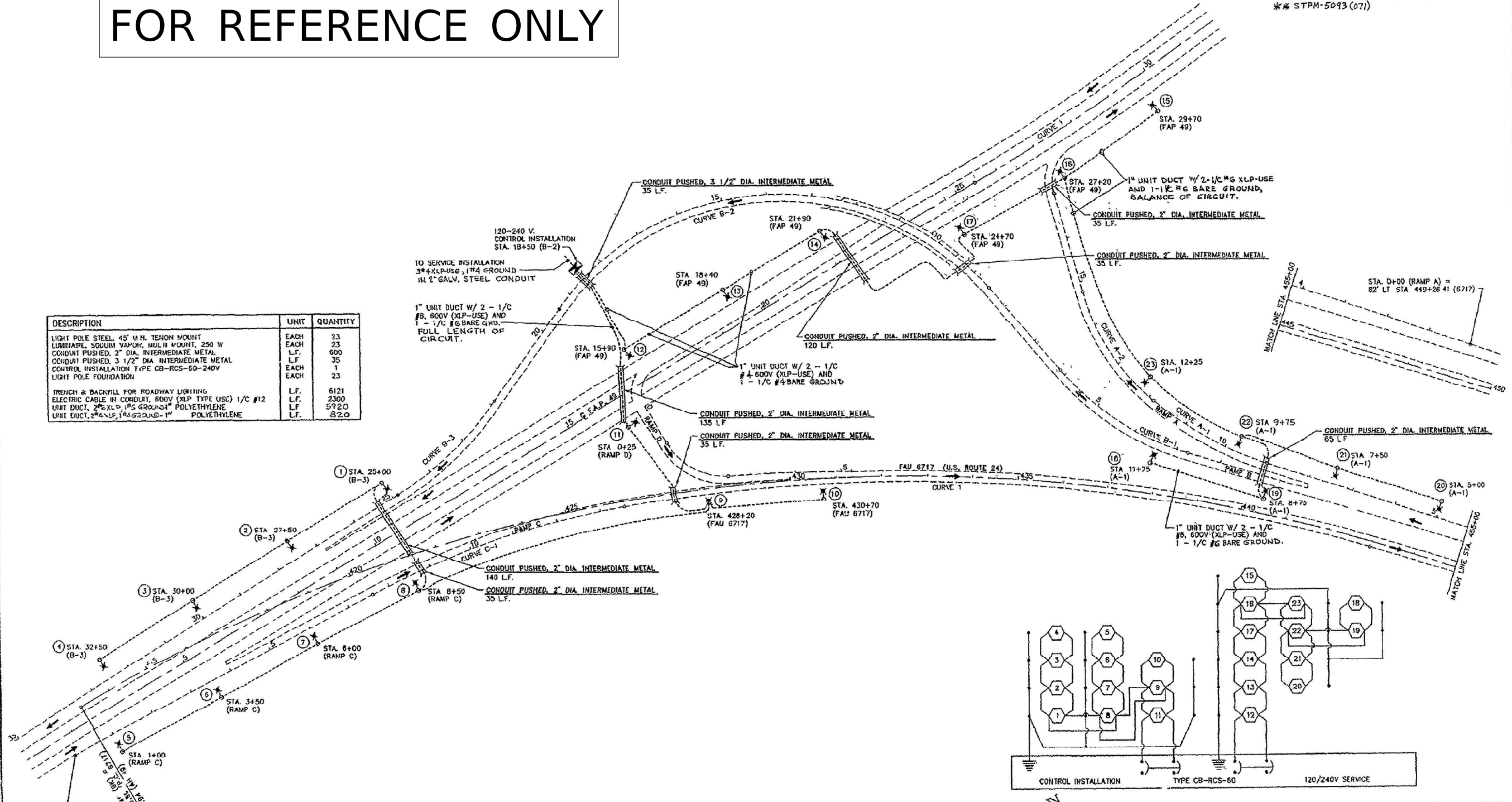
SCALE:                      SHEET                      OF                      SHEETS                      STA.                      TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	(90-14-2;17-1;18;35-1)L	TAZEWELL	25	9
CONTRACT NO. 68G56				
ILLINOIS		FED. AID PROJECT		

# FOR REFERENCE ONLY

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.U. 6717 F.A.U. 6713	*	TAZEWELL	157	758
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT	**	
* 35-1, 36-3, 36RS-4, 36RS-5, 36TS-3, 36HL-1				
** STPM-5093 (071)				

DESCRIPTION	UNIT	QUANTITY
LIGHT POLE STEEL 45' M.H. TENON MOUNT	EACH	23
LUMINAIRE, SODIUM VAPOR, MULTI MOUNT, 250 W	EACH	23
CONDUIT PUSHED, 2" DIA. INTERMEDIATE METAL	L.F.	600
CONDUIT PUSHED, 3 1/2" DIA. INTERMEDIATE METAL	L.F.	35
CONTROL INSTALLATION TYPE CB-RCS-60-240V	EACH	1
LIGHT POLE FOUNDATION	EACH	23
TRENCH & BACKFILL FOR ROADWAY LIGHTING	L.F.	6121
ELECTRIC CABLE IN CONDUIT, 600V (XLP TYPE USE) 1/C #12	L.F.	2300
UNIT DUCT, 2" XLP, 1/2" GROUND, 1" POLYETHYLENE	L.F.	5920
UNIT DUCT, 2" XLP, 1/2" GROUND, 1" POLYETHYLENE	L.F.	820



**INTERSECTION OF  
F.A.P. 49  
&  
F.A.U. 6717  
HIGHWAY LIGHTING**

MODEL: D:\p\h\...  
 FILE NAME: S:\CEN\W\W\ORD\ESP\AN\BARSON\68G56 Contract Maintenance (2021) Lighting\68G56 CH Lighting (FINAL) 3-25-21.dgn

USER NAME = hansonj	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 99.4868' / in.	CHECKED -	REVISED -
PLOT DATE = 3/25/2021	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**EXISTING LIGHTING PLANS  
US 24 (BOYD PKWY.) & BUS 24 (MCCLUGAGE RD.) - TAZEWELL COUNTY**

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	(90-14-2;17-1;18;35-1)L	TAZEWELL	25	10
CONTRACT NO. 68G56			ILLINOIS FED. AID PROJECT	

\* FAP 317, FAU 6717 NOT TO SCALE



**US 24 (BOYD PKWY.) & BUS 24 (MCCLUGAGE RD.)**

**BILL OF MATERIALS**

DESCRIPTION	UNIT	QTY.
LIGHT POLE, GALVANIZED STEEL, 45 FT. M.H., TENON MOUNT	EACH	8.0
BREAKAWAY DEVICE, COUPLING WITH STAINLESS STEEL SCREEN	EACH	32.0
LUMINAIRE, LED, ROADWAY, OUTPUT DESIGNATION H	EACH	8.0
LUMINAIRE MOUNTING BRACKET - SPECIAL	EACH	8.0

**LEGEND**

- PROP. LIGHT POLE, GALVANIZED STEEL, 45'MH., LED LUMINAIRE, ROADWAY, OUTPUT DESIGNATION H INSTALLED ON PROP. BREAKAWAY COUPLINGS ON EX. FOUNDATION
- EXISTING CONDUIT
- POLE NUMBER

**NOTE:**  
 1. ALL EXISTING UNIT-DUCT, ELECTRIC CABLING, AND LIGHT POLE FOUNDATIONS SHALL BE RE-USED WITH THE PROPOSED LIGHTING INSTALLATION.

\* FAP 317  
 FAU 6717

NOT TO SCALE

MODEL: Default  
 FILE NAME: S:\CEN\W\W\ORD\ESP\AN\barson\# 68G56 Contract Maintenance (2021) Lighting\68G56 CH Lighting (FINAL) 3-25-21.dgn

USER NAME = hansonj	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 99.4868' / in.	CHECKED -	REVISED -
PLOT DATE = 3/25/2021	DATE -	REVISED -

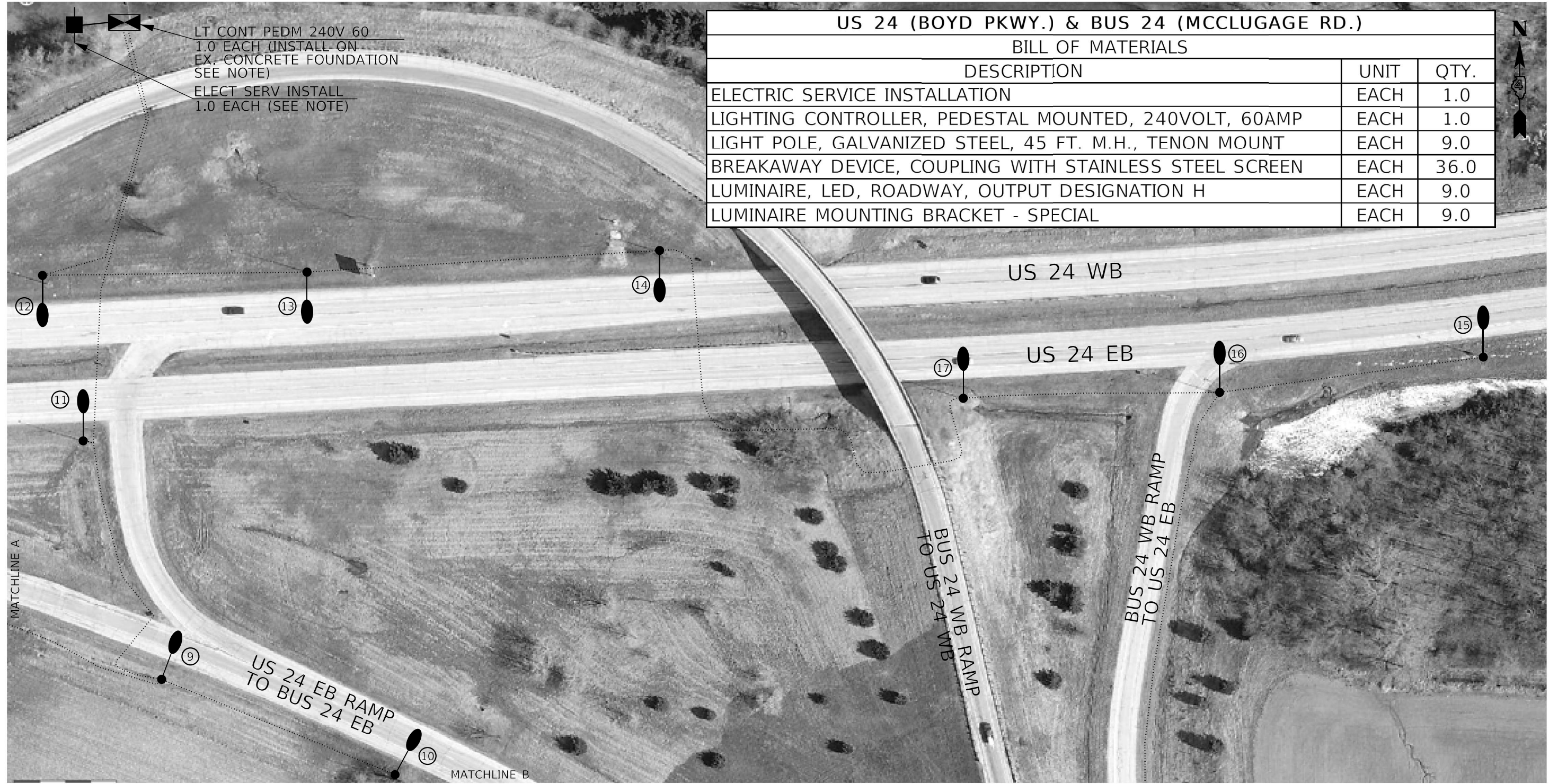
**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**PROPOSED LIGHTING PLANS  
 US 24 (BOYD PKWY.) & BUS 24 (MCCLUGAGE RD.) – TAZEWELL COUNTY**

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
~	(90-14-2;17-1;18;35-1)L	TAZEWELL	25	11
			CONTRACT NO. 68G56	
			ILLINOIS FED. AID PROJECT	

SCALE: SHEET OF SHEETS STA. TO STA.

US 24 (BOYD PKWY.) & BUS 24 (MCCLUGAGE RD.)		
BILL OF MATERIALS		
DESCRIPTION	UNIT	QTY.
ELECTRIC SERVICE INSTALLATION	EACH	1.0
LIGHTING CONTROLLER, PEDESTAL MOUNTED, 240VOLT, 60AMP	EACH	1.0
LIGHT POLE, GALVANIZED STEEL, 45 FT. M.H., TENON MOUNT	EACH	9.0
BREAKAWAY DEVICE, COUPLING WITH STAINLESS STEEL SCREEN	EACH	36.0
LUMINAIRE, LED, ROADWAY, OUTPUT DESIGNATION H	EACH	9.0
LUMINAIRE MOUNTING BRACKET - SPECIAL	EACH	9.0



LT CONT PEDM 240V 60  
1.0 EACH (INSTALL ON  
EX. CONCRETE FOUNDATION  
SEE NOTE)  
ELECT SERV INSTALL  
1.0 EACH (SEE NOTE)

LEGEND

	PROP. LIGHTING CONTROLLER, PEDESTAL MOUNTED, 240V, 60A INSTALLED ON EX. CONCRETE FOUNDATION
	PROP. ELECTRICAL SERVICE
	PROP. LIGHT POLE, GALVANIZED STEEL, 45'MH, LED LUMINAIRE, ROADWAY, OUTPUT DESIGNATION H INSTALLED ON PROP. BREAKAWAY COUPLINGS ON EX. FOUNDATION
	EXISTING CONDUIT
	POLE NUMBER

NOTES:

- ALL EXISTING UNIT-DUCT, ELECTRIC CABLING, AND LIGHT POLE FOUNDATIONS SHALL BE RE-USED WITH THE PROPOSED LIGHTING INSTALLATION.
- THE CONTRACTOR SHALL INSTALL THE PROPOSED LIGHTING CONTROLLER ON THE EXISTING CONCRETE FOUNDATION. THE CONTRACTOR SHALL FURNISH AND INSTALL ALL ITEMS REQUIRED FOR INSTALLATION INCLUDING, BUT NOT LIMITED TO, ANCHOR BOLTS, HARDWARE, ETC. THE COST OF THIS WORK SHALL BE INCLUDED IN THE COST OF THE PROPOSED LIGHTING CONTROLLER. THE CONTRACTOR SHALL FURNISH AND INSTALL NEW 2" PVC CONDUIT, ELECTRIC SERVICE CONDUCTORS AND GROUND WIRE BETWEEN THE PROPOSED LIGHTING CONTROLLER AND PROPOSED ELECTRICAL SERVICE. THE COST OF THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE UNIT BID PRICE OF THE PROPOSED ELECTRICAL SERVICE.

MODEL Path: \\s:\c\enr\w\k\rd\desp\an\barson\# 68G56 Contract Measure\change (2021) Lighting\68G56 CH Lighting (FINAL) 3-25-21.dgn

\* FAP 317  
FAU 6717  
NOT TO SCALE

USER NAME = hansonj	DESIGNED -	REVISED -
PLOT SCALE = 99.4868 * / in.	DRAWN -	REVISED -
PLOT DATE = 3/25/2021	CHECKED -	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

PROPOSED LIGHTING PLANS (CONTINUED)			
US 24 (BOYD PKWY.) & BUS 24 (MCCLUGAGE RD.) - TAZEWELL COUNTY			
SCALE:	SHEET	OF SHEETS	STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
~	(90-14-2;17-1;18;35-1)L	TAZEWELL	25	12
CONTRACT NO. 68G56				
ILLINOIS		FED. AID PROJECT		



US 24 (BOYD PKWY.) & BUS 24 (MCCLUGAGE RD.)		
BILL OF MATERIALS		
DESCRIPTION	UNIT	QTY.
LUMINAIRE, LED, ROADWAY, OUTPUT DESIGNATION H	EACH	6.0
LIGHT POLE, GALVANIZED STEEL, 45 FT. M.H., TENON MOUNT	EACH	6.0
BREAKAWAY DEVICE, COUPLING WITH STAINLESS STEEL SCREEN	EACH	24.0
LUMINAIRE MOUNTING BRACKET - SPECIAL	EACH	6.0

- NOTES:
- ALL EXISTING UNIT-DUCT, ELECTRIC CABLING, AND LIGHT POLE FOUNDATIONS SHALL BE RE-USED WITH THE PROPOSED LIGHTING INSTALLATION.
  - THE EXISTING SIGN LIGHTING LUMINAIRES SHALL BE RE-USED WITH THE PROPOSED LIGHTING INSTALLATION.

LEGEND

	PROP. LIGHT POLE, GALVANIZED STEEL, 45'MH, LED LUMINAIRE, ROADWAY, OUTPUT DESIGNATION H INSTALLED ON PROP. BREAKAWAY COUPLINGS ON EX. FOUNDATION
	EXISTING SIGN TRUSS WITH EXISTING HPS SIGN LIGHTING LUMINAIRES
	EXISTING CONDUIT
	POLE NUMBER

\* FAP 317  
FAU 6717

NOT TO SCALE

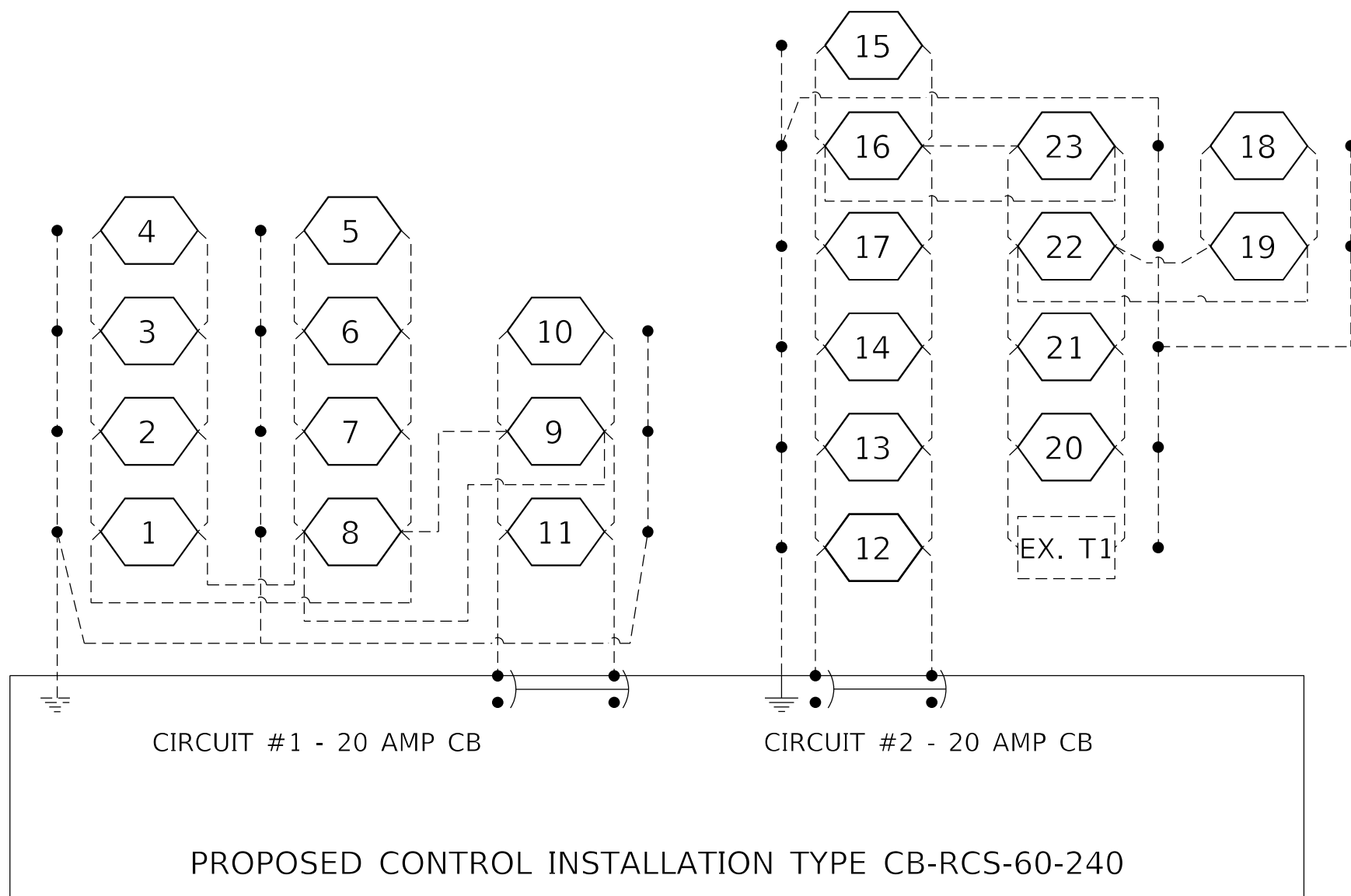
MODEL PATH: S:\CEN\W\W\ORD\ESP\AN\barson\# 68G56 Contract Maintenance (2021 Lighting)\68G56 CH Lighting (FINAL) 3-25-21.dgn

USER NAME = hansonj	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 99.4868 * / in.	CHECKED -	REVISED -
PLOT DATE = 3/25/2021	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

PROPOSED LIGHTING PLANS (CONTINUED)			
US 24 (BOYD PKWY.) & BUS 24 (MCCLUGAGE RD.) - TAZEWELL COUNTY			
SCALE:	SHEET	OF SHEETS	STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
~	(90-14-2;17-1;18;35-1)L	TAZEWELL	25	13
CONTRACT NO. 68G56				
ILLINOIS FED. AID PROJECT				



LEGEND

- PROPOSED LUMINAIRE, LED, ROADWAY, OUTPUT DESIGNATION H (POLE NUMBER)
- EXISTING HPS SIGN LUMINAIRE (LOCATION)
- EXISTING ELECTRIC CABLING

\* FAP 317  
FAU 6717

NOT TO SCALE

MODEL Path: \\S:\CEN\W\W\ORD\ESP\AN\Barson\# 68G56 Contract Maintenance (2021 Lighting)\68G56 CH Lighting (FINAL) 3-25-21.dgn

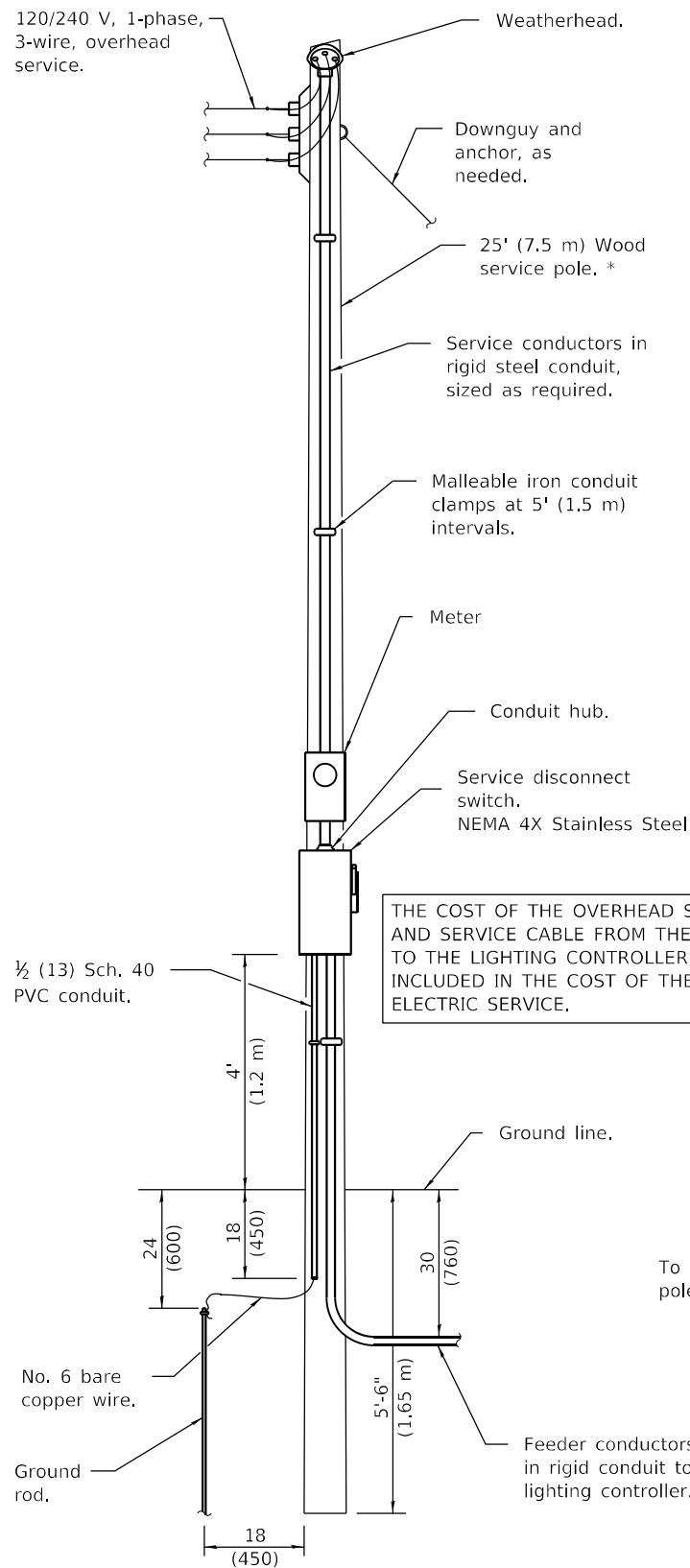
USER NAME = hansonj	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 99.4868 * / in.	CHECKED -	REVISED -
PLOT DATE = 3/25/2021	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**PROPOSED CIRCUIT DIAGRAM  
US 24 (BOYD PKWY.) & BUS 24 (MCCLUGAGE RD.) – TAZEWELL COUNTY**

SCALE:                      SHEET                      OF                      SHEETS                      STA.                      TO STA.

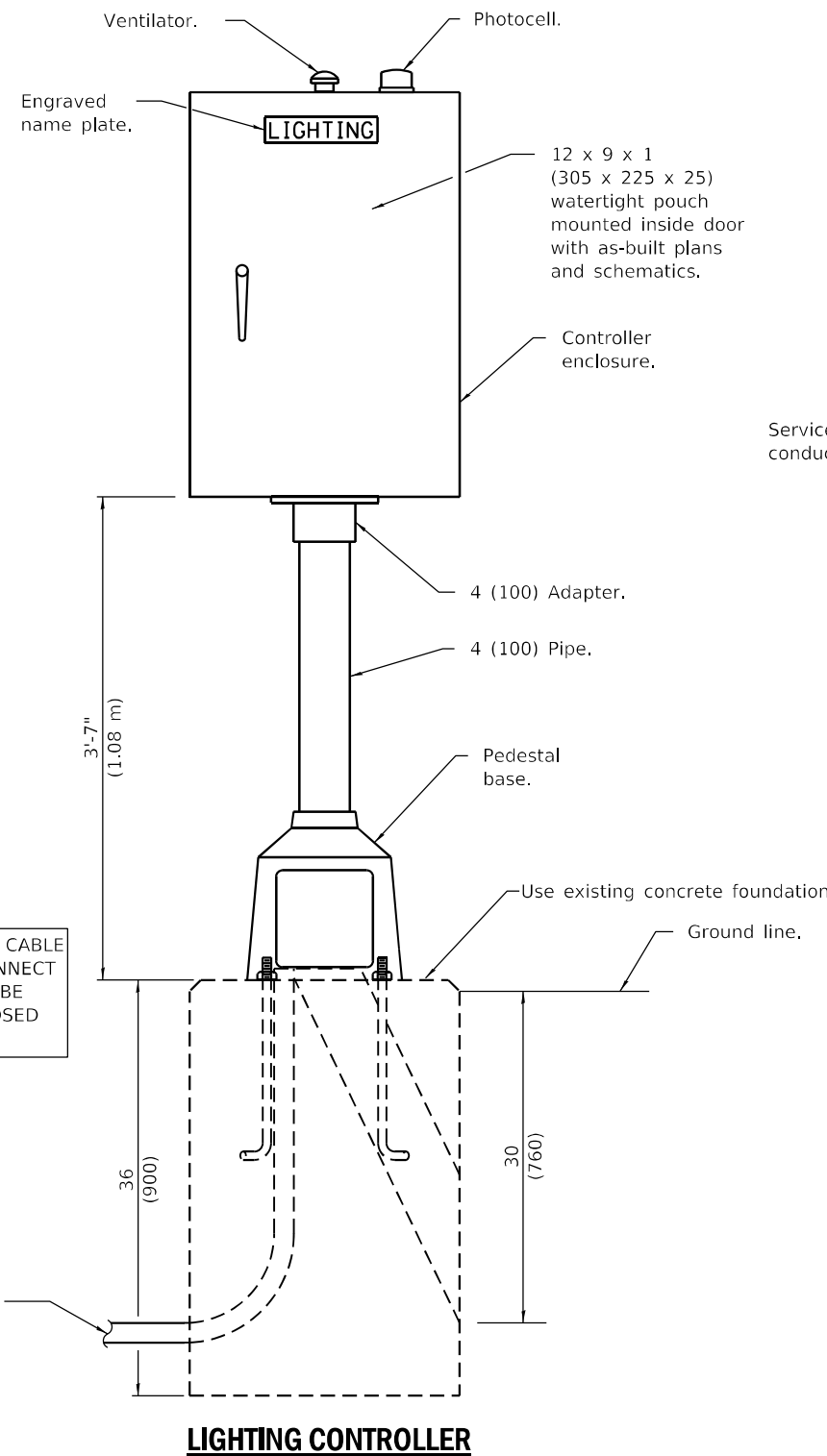
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
~	(90-14-2;17-1;18;35-1)L	TAZEWELL	25	14
			CONTRACT NO. 68G56	
		ILLINOIS	FED. AID PROJECT	



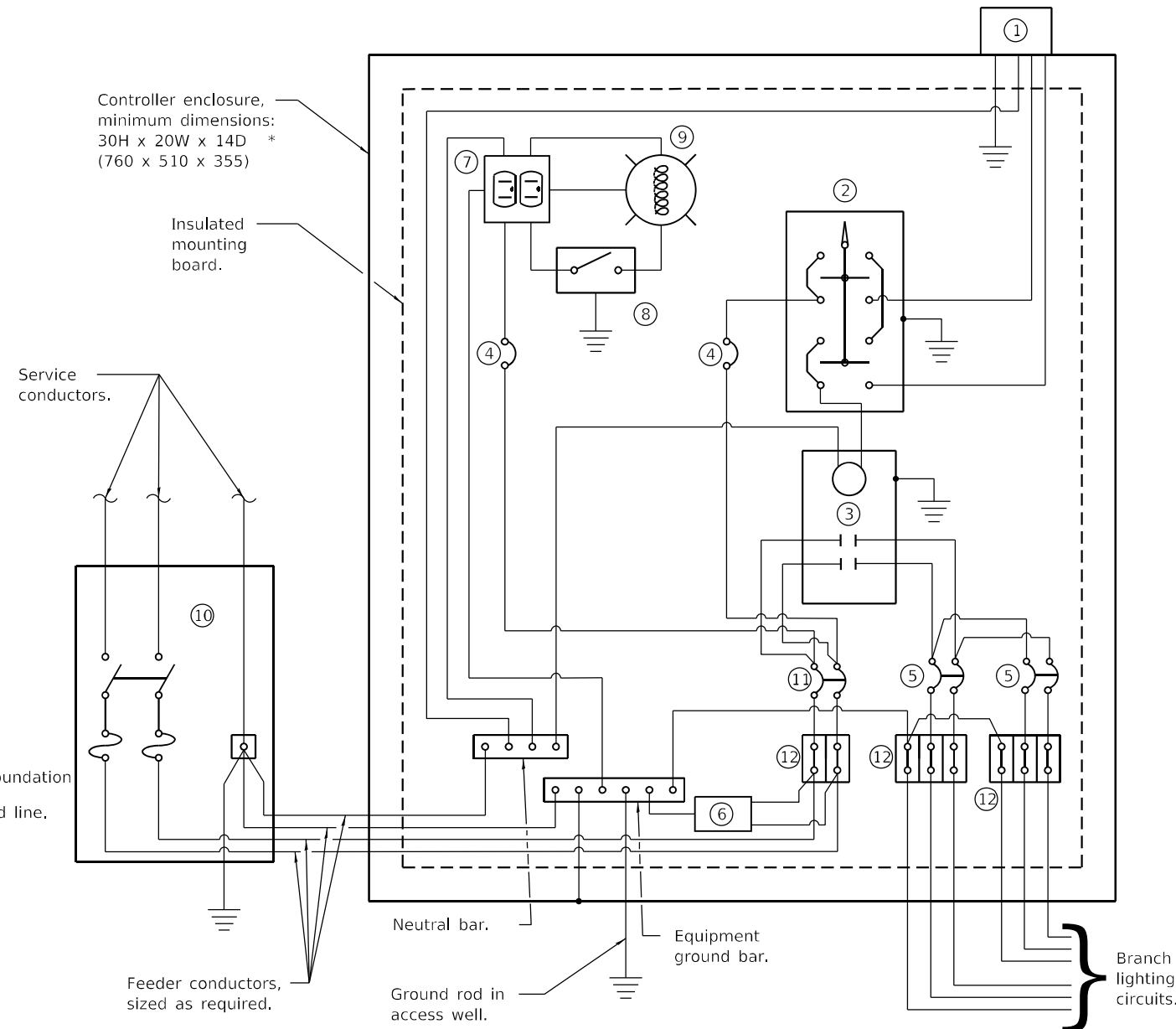
**ELECTRIC SERVICE INSTALLATION**

(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 SPARE).
- 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.

\* Size larger as needed.

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

MODEL Path: S:\GEN\WV\ORD\ESP\AN\barson\# 68056 Contract Maintenance (2021 Lighting)68056 CH Lighting (FINAL) 3-25-21.dgn

USER NAME = hansonj	DESIGNED -	REVISED -
PLOT SCALE = 99.4868 * / in.	DRAWN -	REVISED -
PLOT DATE = 3/25/2021	CHECKED -	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**PROPOSED LIGHTING CONTROLLER DETAIL  
US 24 (BOYD PKWY.) & BUS 24 (MCCLUGAGE RD.) – TAZEWELL COUNTY**

SCALE: SHEET OF SHEETS STA. TO STA.

\* FAP 317  
FAU 6717

NOT TO SCALE

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	(102-4)X3-16RA)L	WOODFORD	15	15
			CONTRACT NO. 68G22	
		ILLINOIS	FED. AID PROJECT	



THE FOLLOWING ITEMS SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR OFF OF THE RIGHT-OF-WAY. THE COST OF THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE UNIT BID PRICE OF THE PROPOSED ITEMS.

I-74 WB BETWEEN I-474 & I-155	
QTY.	ITEM
1.0	LIGHTING CONTROLLER CABINET
1.0	ELECTRICAL SERVICE INSTALLATION
10.0	LIGHT POLE WITH HPS LUMINAIRE & BREAKAWAY COUPLINGS

LEGEND

	EXISTING 45' MH LIGHT POLE AND FOUNDATION
	EXISTING SIGN TRUSS WITH EXISTING HPS SIGN LIGHTING LUMINAIRES
	EXISTING CONDUIT
	POLE NUMBER

NOTES:  
 1. ALL EXISTING UNIT-DUCT, ELECTRIC CABLING, AND LIGHT POLE FOUNDATIONS SHALL BE RE-USED WITH THE PROPOSED LIGHTING INSTALLATION.  
 2. SIGN TRUSS LIGHTING S2 IS SHOWN FOR REFERENCE ONLY AND SHALL REMAIN.

"R" INDICATES REMOVAL ITEM

MODEL Path:\p... FILE NAME: S:\CEN\W\W\ORD\ESP\AN\barason\# 68G56 Contract Maintenance (2021) Lighting\68G56 CH Lighting (FINAL) 3-25-21.dgn

NOT TO SCALE

USER NAME = hansonj	DESIGNED -	REVISED -
PLOT SCALE = 99.4868 * / in.	DRAWN -	REVISED -
PLOT DATE = 3/25/2021	CHECKED -	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

EXISTING LIGHTING PLANS & REMOVAL ITEMS			
I-74 BETWEEN I-474 & I-155 - TAZEWELL COUNTY			
SCALE:	SHEET	OF SHEETS	STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(90-14-2;17-1;18;35-1)L	TAZEWELL	25	16
CONTRACT NO. 68G56				
ILLINOIS FED. AID PROJECT				





**NOTES:**

1. ALL EXISTING UNIT-DUCT, ELECTRIC CABLING, AND LIGHT POLE FOUNDATIONS SHALL BE RE-USED WITH THE PROPOSED LIGHTING INSTALLATION.
2. SIGN TRUSS LIGHTING S1 IS SHOWN FOR REFERENCE ONLY AND SHALL REMAIN.
3. THE EXISTING LIGHTING CONTROLLER CONCRETE FOUNDATION SHALL BE RE-USED.

**LEGEND**

	EXISTING LIGHTING CONTROLLER AND CONCRETE FOUNDATION
	EXISTING ELECTRICAL SERVICE
	EXISTING 45'MH LIGHT POLE AND FOUNDATION
	EXISTING SIGN TRUSS WITH EXISTING HPS SIGN LIGHTING LUMINAIRES
	EXISTING CONDUIT
	POLE NUMBER

"R" INDICATES REMOVAL ITEM

MODEL Path: S:\CEN\W\W\ORD\ESP\AN\barson\# 68G56 Contract Maintenance (2021) Lighting\68G56 CH Lighting (FINAL) 3-25-21.dgn

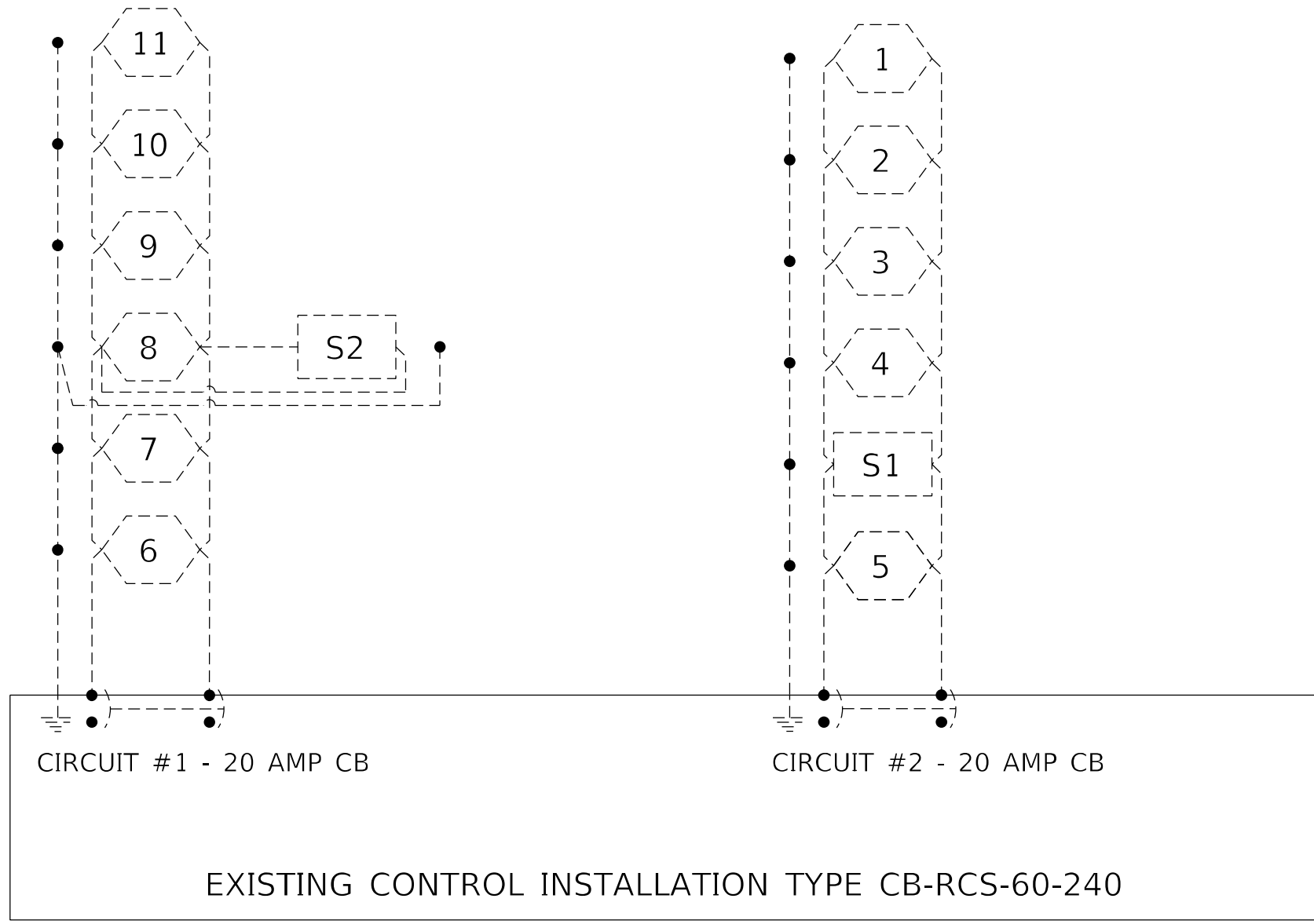
NOT TO SCALE

USER NAME = hansonj	DESIGNED -	REVISED -
PLOT SCALE = 99.4868 * / in.	DRAWN -	REVISED -
PLOT DATE = 3/25/2021	CHECKED -	REVISED -
	DATE -	REVISED -



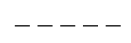
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

<b>EXISTING LIGHTING PLANS &amp; REMOVAL ITEMS (CONTINUED)</b>			
<b>I-74 BETWEEN I-474 &amp; I-155 - TAZEWELL COUNTY</b>			
SCALE:	SHEET	OF SHEETS	STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(90-14-2;17-1;18;35-1)L	TAZEWELL	25	17
CONTRACT NO. 68G56				
ILLINOIS FED. AID PROJECT				



LEGEND

-  EXISTING HPS LUMINAIRE (POLE NUMBER)
-  EXISTING HPS SIGN LUMINAIRE (LOCATION)
-  EXISTING ELECTRIC CABLING

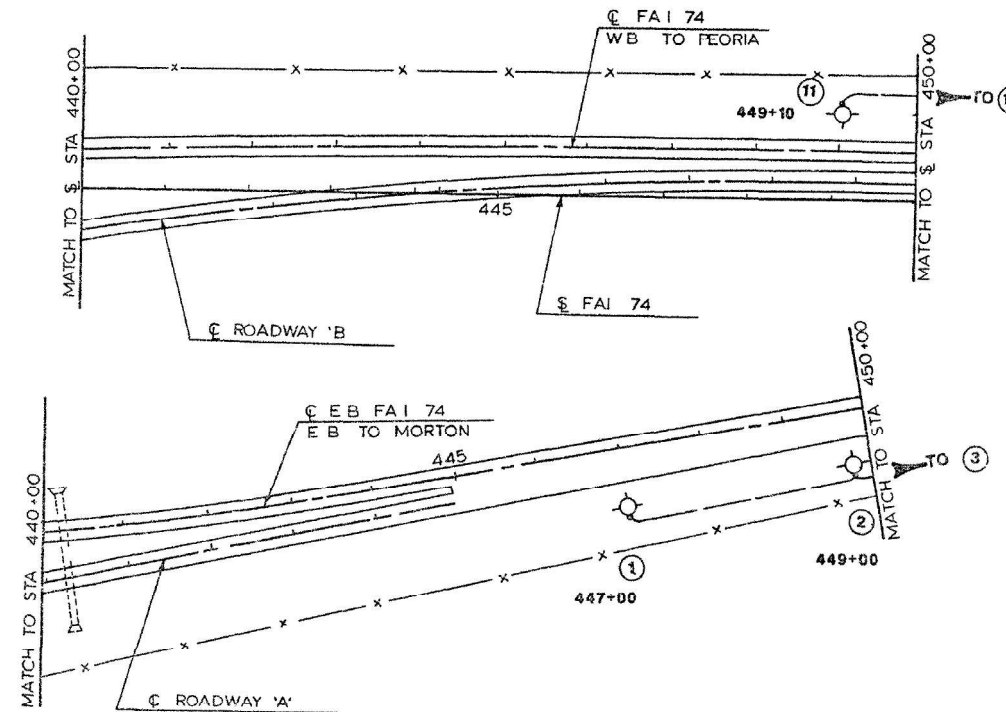
MODEL Path:\  
 FILE NAME: S:\CEN\W\W\ORD\ESP\AN\barzon\# 68G56 Contract Maintenance (2021 Lighting)\68G56 CH Lighting (FINAL) 3-25-21.dgn

NOT TO SCALE

USER NAME = hansonj PLOT SCALE = 99.4868 * / in. PLOT DATE = 3/25/2021	DESIGNED - DRAWN -	REVISED - REVISED -	<b>STATE OF ILLINOIS          DEPARTMENT OF TRANSPORTATION</b>	<b>EXISTING CIRCUIT DIAGRAM</b> <b>I-74 BETWEEN I-474 &amp; I-155 - TAZEWELL COUNTY</b>		F.A.I. RTE. 74	SECTION (90-14-2;17-1;18;35-1)L	COUNTY TAZEWELL	TOTAL SHEETS 25	SHEET NO. 18
	CHECKED - DATE -	REVISED - REVISED -		SCALE:	SHEET OF SHEETS	STA. TO STA.	ILLINOIS FED. AID PROJECT CONTRACT NO. 68G56			

ROUTE	SECTION	COUNTY	SHEET
FAI 74	(90-14)HL-2	TAZEWELL	TOTAL NO.
PROJ. 474	(90-7) HL		13 7
	STA. 440+00	TO STA. 450+00	

FOR REFERENCE ONLY



⊙ PROPOSED LIGHTS

F.A.I. 74  
&  
F.A.I. 474  
HIGHWAY LIGHTING  
E.B & W.B.

0 100' 200'

SCALE: 1"=100'

MODEL Path:\SUGEN\WORK\ORD\ESP\AN\barson\# 68G56 Contract Maintenance (2021 Lighting)\68G56 CH Lighting (FINAL) 3-25-21.dgn

USER NAME = hansonj	DESIGNED -	REVISED -
PLOT SCALE = 99.4868 * / in.	DRAWN -	REVISED -
PLOT DATE = 3/25/2021	CHECKED -	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

EXISTING LIGHTING PLANS  
I-74 BETWEEN I-474 & I-155 - TAZEWELL COUNTY

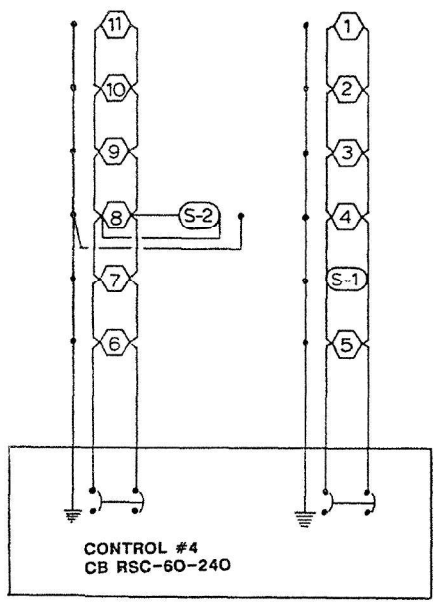
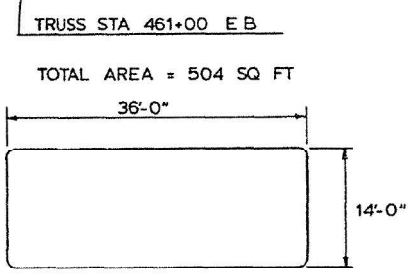
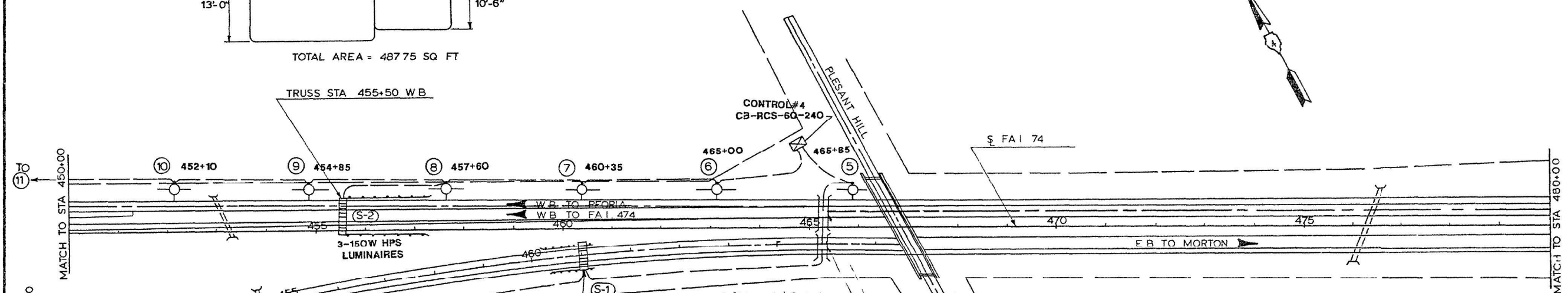
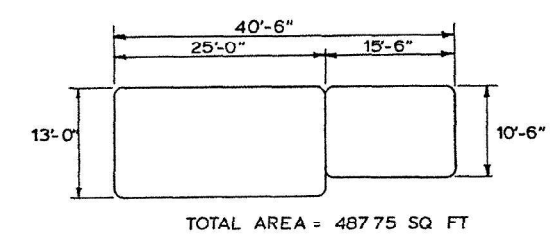
SCALE: SHEET OF SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(90-14-2;17-1;18;35-1)L	TAZEWELL	25	19
CONTRACT NO. 68G56				
ILLINOIS FED. AID PROJECT				

NOT TO SCALE

ROUTE	SECTION	COUNTY	SHEET TOTAL	SHEET NO.
FAI 74	(90-14)HL-2	TAZEWELL	13	8
FAI 474	(90-7) HL			
PROJ.	STA. 450+00	TOT. STA.	480+00	

FOR REFERENCE ONLY



⊙ PROPOSED LIGHTS

F.A.I 74  
HIGHWAY LIGHTING  
EB & W.B  
STA 450+00 TO STA 480+00

0' 100 200'  
SCALE : 1"=100'

MODEL Path: S:\CEN\W\W\ORD\ESP\AN\barson\# 68G56 Contract Maintenance (2021 Lighting)\68G56 CH Lighting (FINAL) 3-25-21.dgn

USER NAME = hansonj	DESIGNED -	REVISED -
PLOT SCALE = 99.4868 */ in.	DRAWN -	REVISED -
PLOT DATE = 3/25/2021	CHECKED -	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**EXISTING LIGHTING PLANS (CONTINUED)  
I-74 BETWEEN I-474 & I-155 - TAZEWELL COUNTY**

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(90-14-2;17-1;18;35-1)L	TAZEWELL	25	20
				CONTRACT NO. 68G56
ILLINOIS FED. AID PROJECT				

NOT TO SCALE



LEGEND	
	PROP. LIGHT POLE, GALVANIZED STEEL, 45'MH, LED LUMINAIRE, ROADWAY, OUTPUT DESIGNATION H INSTALLED ON PROP. BREAKAWAY COUPLINGS ON EX. FOUNDATION
	EXISTING SIGN TRUSS WITH EXISTING HPS SIGN LIGHTING LUMINAIRES
	EXISTING CONDUIT
	POLE NUMBER

NOTES:  
 1. ALL EXISTING UNIT-DUCT AND LIGHT POLE FOUNDATIONS SHALL BE RE-USED WITH THE PROPOSED LIGHTING INSTALLATION.  
 2. LIGHT POLE 4 IS SHOWN FOR REFERENCE ONLY AND SHALL REMAIN.

I-74 WB BETWEEN I-474 & I-155		
BILL OF MATERIALS		
DESCRIPTION	UNIT	QTY.
LUMINAIRE, LED, ROADWAY, OUTPUT DESIGNATION H	EACH	7.0
LIGHT POLE, GALVANIZED STEEL, 45 FT. M.H., TENON MOUNT	EACH	7.0
BREAKAWAY DEVICE, COUPLING WITH STAINLESS STEEL SCREEN	EACH	28.0
LUMINAIRE MOUNTING BRACKET - SPECIAL	EACH	7.0

MODEL: D:\p\h\...  
 FILE NAME: S:\CEN\W\W\ORD\ESP\AN\barson\# 68G56 Contract Maintenance (2021) Lighting\68G56 CH Lighting (FINAL) 3-25-21.dgn

NOT TO SCALE

USER NAME = hansonj PLOT SCALE = 99.4868 * / in. PLOT DATE = 3/25/2021	DESIGNED - DRAWN -	REVISED - REVISED -	<b>STATE OF ILLINOIS</b> <b>DEPARTMENT OF TRANSPORTATION</b>	<b>PROPOSED LIGHTING PLANS</b> <b>I-74 BETWEEN I-474 &amp; I-155 - TAZEWELL COUNTY</b>	F.A.I. RTE. 74	SECTION (90-14-2;17-1;18;35-1)L	COUNTY TAZEWELL	TOTAL SHEETS 25	SHEET NO. 21
	CHECKED - DATE -	REVISED - REVISED -			SCALE:	SHEET OF SHEETS STA. TO STA.	CONTRACT NO. 68G56 ILLINOIS FED. AID PROJECT		



LEGEND	
	PROP. LIGHTING CONTROLLER, PEDESTAL MOUNTED, 240V, 60A INSTALLED ON PROP. METAL FOUNDATION
	PROP. ELECTRICAL SERVICE
	PROP. LIGHT POLE, GALVANIZED STEEL, 45'MH, LED LUMINAIRE, ROADWAY, OUTPUT DESIGNATION H INSTALLED ON PROP. BREAKAWAY COUPLINGS ON EX. FOUNDATION
	EXISTING CONDUIT
	POLE NUMBER
	EXISTING SIGN TRUSS WITH EXISTING HPS SIGN LIGHTING LUMINAIRES

**I-74 WB BETWEEN I-474 & I-155**

**BILL OF MATERIALS**

DESCRIPTION	UNIT	QTY.
ELECTRIC SERVICE INSTALLATION	EACH	1.0
LUMINAIRE, LED, ROADWAY, OUTPUT DESIGNATION H	EACH	4.0
LIGHTING CONTROLLER, PEDESTAL MOUNTED, 240VOLT, 60AMP	EACH	1.0
LIGHT POLE, GALVANIZED STEEL, 45 FT. M.H., TENON MOUNT	EACH	4.0
BREAKAWAY DEVICE, COUPLING WITH STAINLESS STEEL SCREEN	EACH	16.0
LUMINAIRE MOUNTING BRACKET - SPECIAL	EACH	4.0

- NOTES:**
- ALL EXISTING UNIT-DUCT AND LIGHT POLE FOUNDATIONS SHALL BE RE-USED WITH THE PROPOSED LIGHTING INSTALLATION.
  - THE CONTRACTOR SHALL INSTALL THE PROPOSED LIGHTING CONTROLLER ON THE EXISTING CONCRETE FOUNDATION. THE CONTRACTOR SHALL FURNISH AND INSTALL ALL ITEMS REQUIRED FOR INSTALLATION INCLUDING BUT NOT LIMITED TO ANCHOR BOLTS, HARDWARE, ETC. THE COST OF THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE COST OF THE PROPOSED LIGHTING CONTROLLER.
  - THE CONTRACTOR SHALL FURNISH AND INSTALL NEW 2" PVC CONDUIT, 3/C NO. 6 ELECTRIC CABLE, AND NO.6 GROUNDING CONDUCTOR BETWEEN THE PROPOSED LIGHTING CONTROLLER AND PROPOSED ELECTRICAL SERVICE. THE COST OF THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE UNIT BID PRICE OF THE PROPOSED ELECTRICAL SERVICE.
  - SIGN TRUSS LIGHTING S1 IS SHOWN FOR REFERENCE ONLY AND SHALL REMAIN.

MODEL: Default  
 FILE NAME: S:\CEN\W\W000\DESIGN\AN\barozon\# 68G56 Contract Maintenance (2021) Lighting\68G56 CH Lighting (FINAL) 3-25-21.dgn

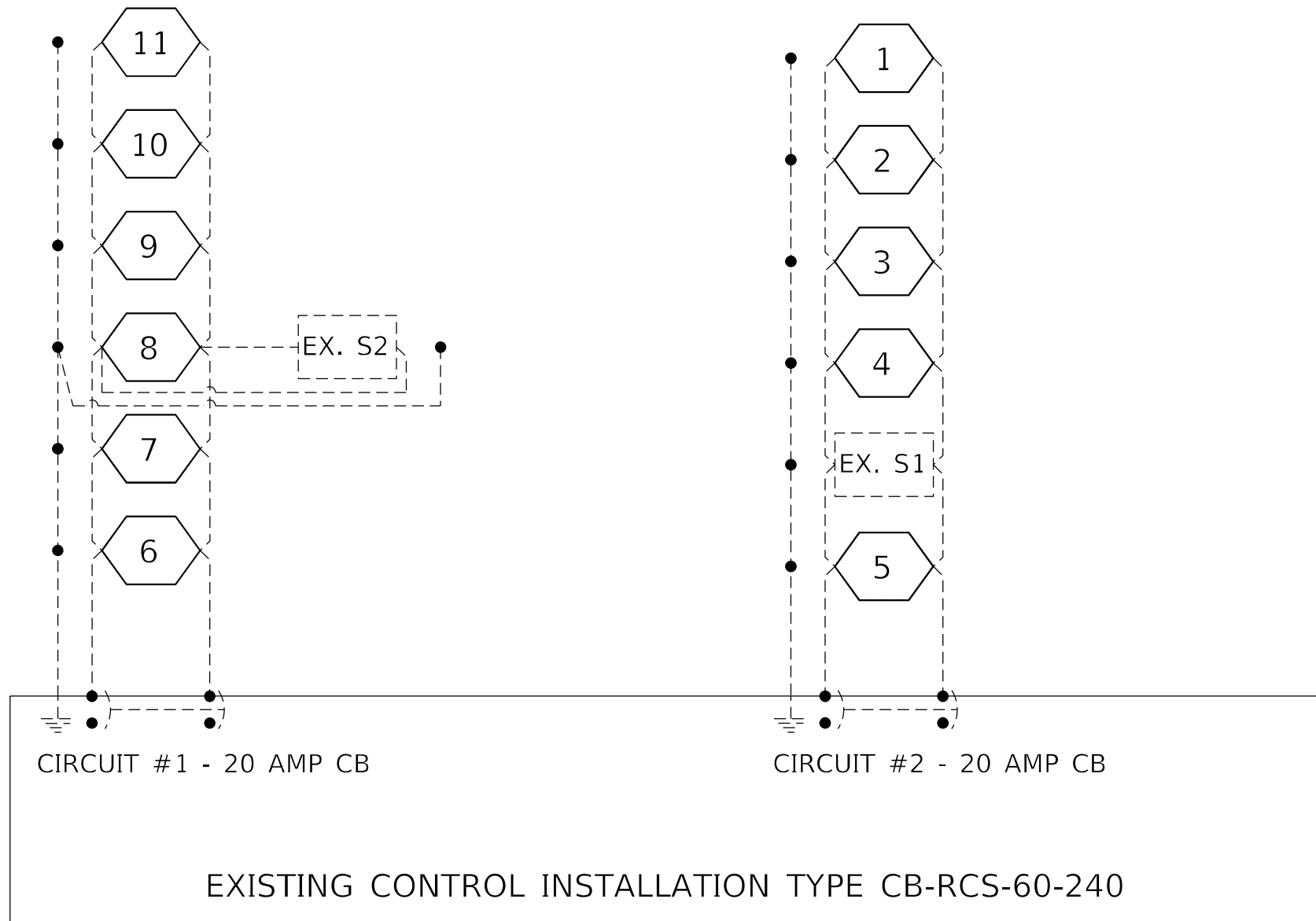
NOT TO SCALE

USER NAME = hansonj	DESIGNED -	REVISED -
PLOT SCALE = 99.4868 * / in.	DRAWN -	REVISED -
PLOT DATE = 3/25/2021	CHECKED -	REVISED -
	DATE -	REVISED -



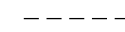
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

PROPOSED LIGHTING PLANS (CONTINUED)			
I-74 BETWEEN I-474 & I-155 - TAZEWELL COUNTY			
SCALE:	SHEET	OF SHEETS	STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(90-14-2;17-1;18;35-1)L	TAZEWELL	25	22
CONTRACT NO. 68G56				
ILLINOIS FED. AID PROJECT				



LEGEND

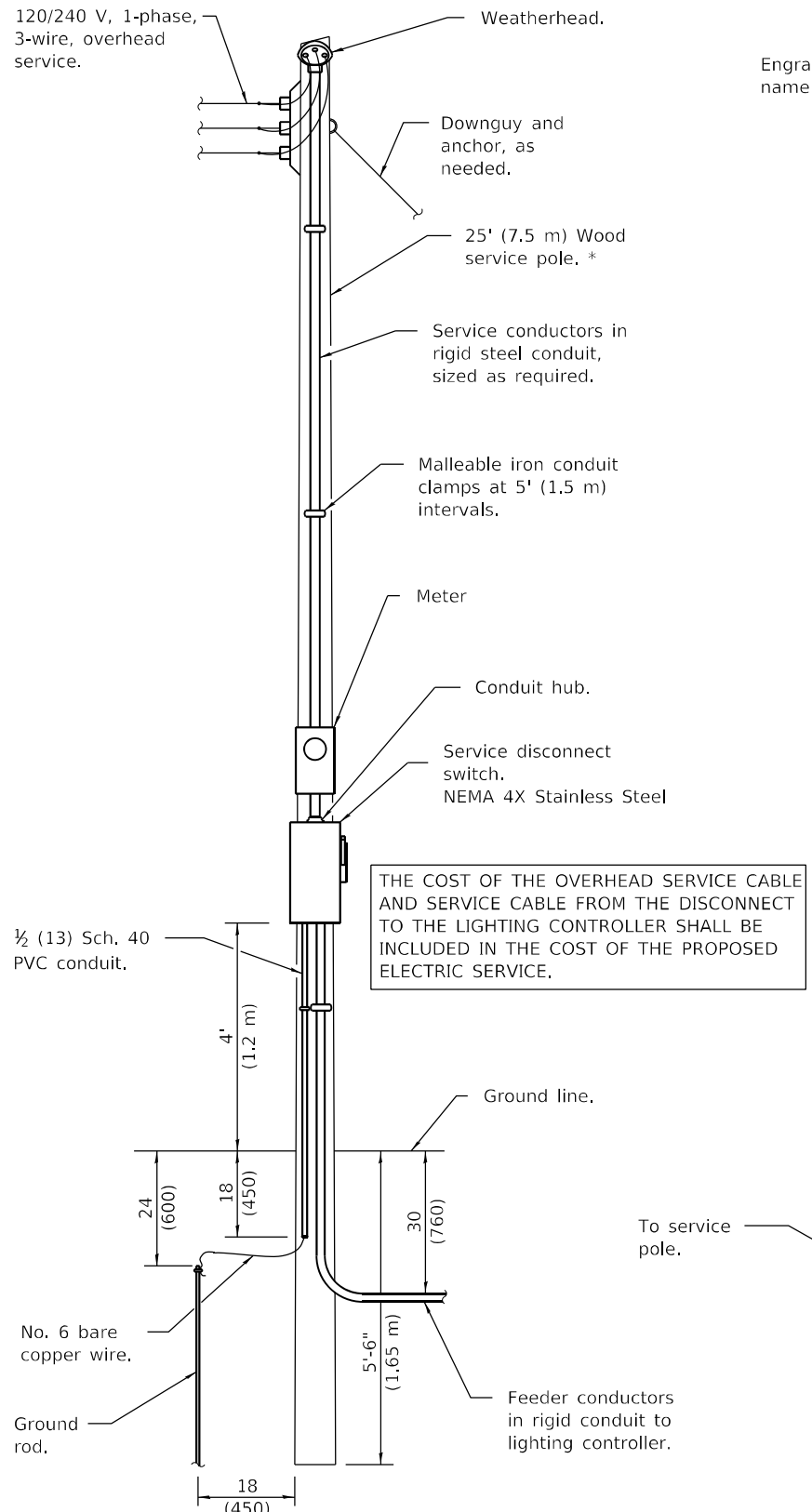
-  PROPOSED LUMINAIRE, LED, ROADWAY, OUTPUT DESIGNATION H (POLE NUMBER)
-  EXISTING HPS SIGN LUMINAIRE (LOCATION)
-  EXISTING ELECTRIC CABLING

MODEL Path: \\S:\CEN\W\W\ORD\ESP\AN\barzom\# 68G56 Contract Maintenance (2021 Lighting)\68G56 CH Lighting (FINAL) 3-25-21.dgn

NOT TO SCALE

USER NAME = hansonj PLOT SCALE = 99.4868 * / in. PLOT DATE = 3/25/2021	DESIGNED - DRAWN -	REVISED - REVISED -	<b>STATE OF ILLINOIS</b> <b>DEPARTMENT OF TRANSPORTATION</b>	<b>PROPOSED CIRCUIT DIAGRAM</b> <b>I-74 BETWEEN I-474 &amp; I-155 - TAZEWELL COUNTY</b>	F.A.I. RTE. 74 SECTION (90-14-2;17-1;18;35-1)L COUNTY TAZEWELL CONTRACT NO. 68G56	TOTAL SHEETS 25 SHEET NO. 23
	CHECKED - DATE -	REVISED - REVISED -			SCALE: SHEET OF SHEETS 23 TO STA.	ILLINOIS FED. AID PROJECT

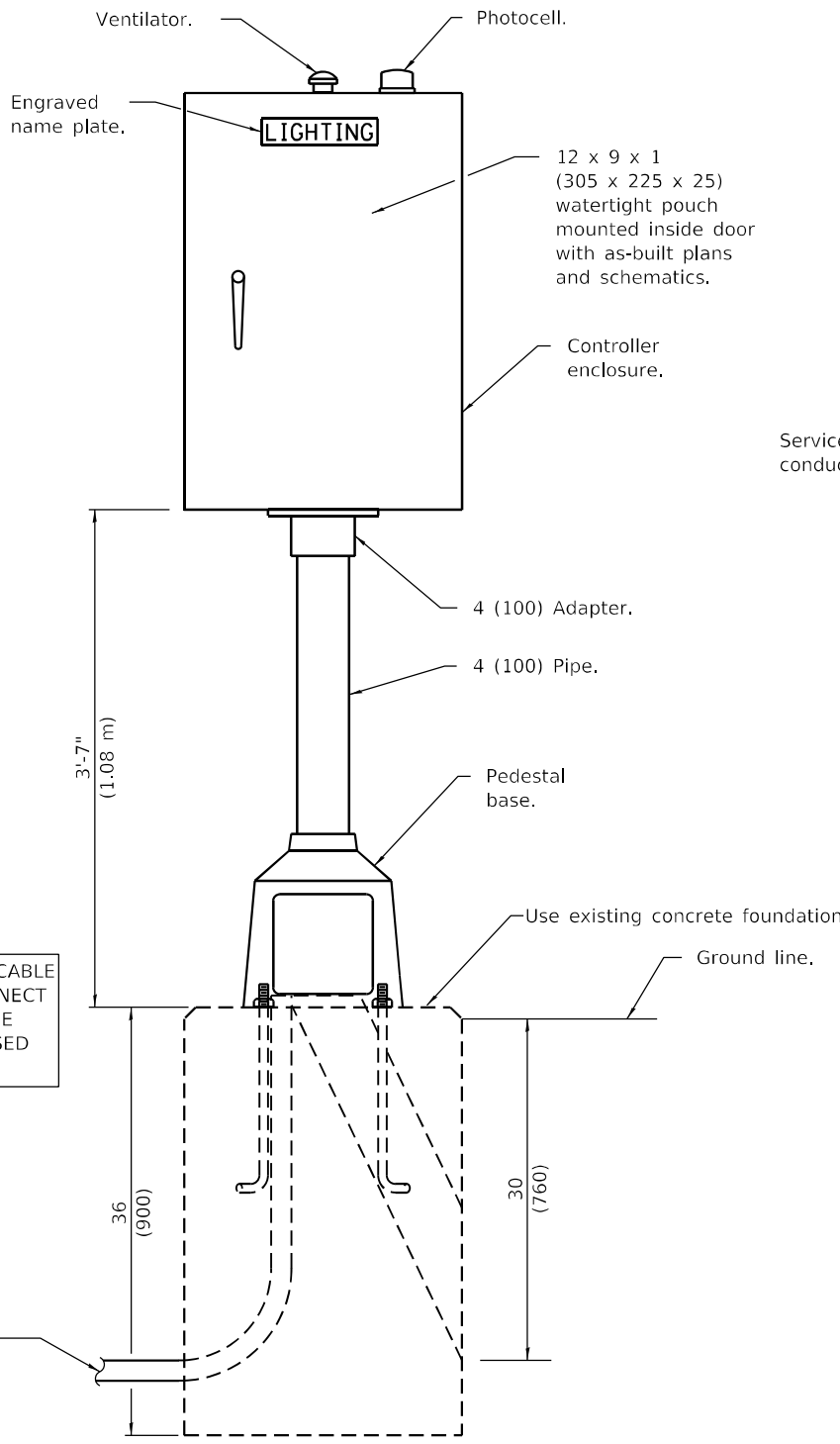
120/240 V, 1-phase, 3-wire, overhead service.



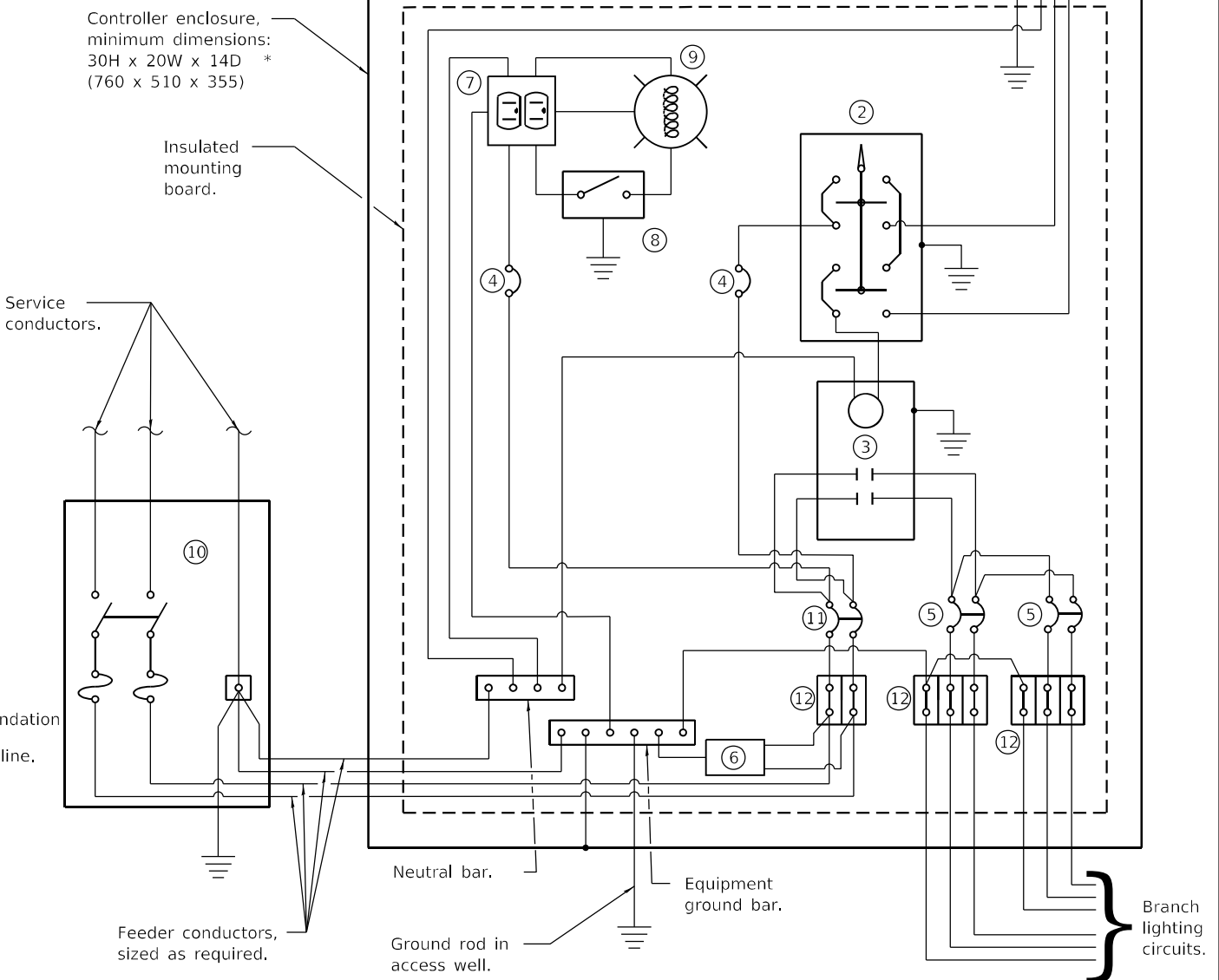
THE COST OF THE OVERHEAD SERVICE CABLE AND SERVICE CABLE FROM THE DISCONNECT TO THE LIGHTING CONTROLLER SHALL BE INCLUDED IN THE COST OF THE PROPOSED ELECTRIC SERVICE.

**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 SPARE).
  - 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.
- \* Size larger as needed.

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

NOT TO SCALE

MODEL Path: S:\CEN\WV\ORD\ESP\AN\barson\# 68G56 Contract Maintenance (2021 Lighting)\68G56 CH Lighting (FINAL) 3-25-21.dgn

USER NAME = hansonj	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 99.4868 */ in.	CHECKED -	REVISED -
PLOT DATE = 3/25/2021	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**PROPOSED LIGHTING CONTROLLER DETAIL  
I-74 BETWEEN I-474 & I-155 - TAZEWELL COUNTY**

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(90-14-2;17-1;18;35-1)L	TAZEWELL	25	24
CONTRACT NO. 68G56				
ILLINOIS FED. AID PROJECT				



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



Luminaire Performance Table



Project

Date: 03/23/21 Contract Number: 68G56 Section Number: (90-14-2;17-1;18;35-1)L County: Tazewell

Marked Route Number: FAP (317/6717) Municipality:

Roadway

Lane Width: 12 ft # of Lanes: 3 Median Width: n/a I.E.S. Surface Classification: R3 Q-Zero Value: 0.07

Structure

Mounting Height: 45 ft Arm Length: 1 ft Set-Back: 30 ft Number of Luminaires (Highmast & Sign Lighting Only): n/a

Luminaire

Description: Luminaire, LED, Roadway, Output Des. H I.E.S. Lateral Distribution: Type III I.E.S. Vertical Distribution: Medium  
 Total Light Loss Factor (LLF): 0.684 B-U-G Rating: U=0 Shields: n/a Dimming Protocol: 0-10V

Layout

Spacing (to Nearest 5 ft): 250 ft Configuration (Opposite, Staggered, 1 Sided, or Median): 1 Sided

Performance

Average Illuminance,  $E_{AVE}$  (fc): Uniformity Ratio,  $E_{AVE}/E_{MIN}$ :  
 Average Luminance,  $L_{AVE}$  (cd/m<sup>2</sup>): 0.6 Uniformity Ratio,  $L_{AVE}/L_{MIN}$ : 3.5 Uniformity Ratio,  $L_{MAX}/L_{MIN}$ : 6.0 Veiling Luminance Ratio,  $L_V/L_{AVE}$ : 0.30

Light Trespass

Distance to ROW (behind pole): n/a Max. Horizontal Illuminance at ROW,  $E_H$ : n/a Max. Vertical Illuminance at ROW,  $E_V$ : n/a

Notes

- Set-Back is from Edge of Pavement (white line) except for sign luminaires when it is vertical and horizontal distance from the sign to the luminaire.
- Lighting calculations shall be performed with all luminaires oriented toward and perpendicular to the roadway.
- Total Light Loss Factor (LLF) = the product of "Lumen Maintenance" (LLD) = 0.9, "Dirt Depreciation" (LDD) = 0.8, and "Equipment Factors" (EF) = 0.95.
- Performance requirements shall be the minimum acceptable standards of photometric performance for the luminaire, based on the given conditions listed above.

Printed 03/23/21

BDE 5630 (04/10/19)



Luminaire Performance Table



Project

Date: 03/23/21 Contract Number: 68G56 Section Number: (90-14-2;17-1;18;35-1)L County: Tazewell

Marked Route Number: FAI (I-74) Municipality:

Roadway

Lane Width: 12 ft # of Lanes: 3 Median Width: n/a I.E.S. Surface Classification: R3 Q-Zero Value: 0.07

Structure

Mounting Height: 45 ft Arm Length: 1 ft Set-Back: 34 ft Number of Luminaires (Highmast & Sign Lighting Only): n/a

Luminaire

Description: Luminaire, LED, Roadway, Output Des. H I.E.S. Lateral Distribution: Type III I.E.S. Vertical Distribution: Medium  
 Total Light Loss Factor (LLF): 0.684 B-U-G Rating: U=0 Shields: n/a Dimming Protocol: 0-10V

Layout

Spacing (to Nearest 5 ft): 275 ft Configuration (Opposite, Staggered, 1 Sided, or Median): 1 Sided

Performance

Average Illuminance,  $E_{AVE}$  (fc): Uniformity Ratio,  $E_{AVE}/E_{MIN}$ :  
 Average Luminance,  $L_{AVE}$  (cd/m<sup>2</sup>): 0.6 Uniformity Ratio,  $L_{AVE}/L_{MIN}$ : 3.5 Uniformity Ratio,  $L_{MAX}/L_{MIN}$ : 6.0 Veiling Luminance Ratio,  $L_V/L_{AVE}$ : 0.30

Light Trespass

Distance to ROW (behind pole): n/a Max. Horizontal Illuminance at ROW,  $E_H$ : n/a Max. Vertical Illuminance at ROW,  $E_V$ : n/a

Notes

- Set-Back is from Edge of Pavement (white line) except for sign luminaires when it is vertical and horizontal distance from the sign to the luminaire.
- Lighting calculations shall be performed with all luminaires oriented toward and perpendicular to the roadway.
- Total Light Loss Factor (LLF) = the product of "Lumen Maintenance" (LLD) = 0.9, "Dirt Depreciation" (LDD) = 0.8, and "Equipment Factors" (EF) = 0.95.
- Performance requirements shall be the minimum acceptable standards of photometric performance for the luminaire, based on the given conditions listed above.

Printed 03/23/21

BDE 5630 (04/10/19)

MODEL Path: \\S:\CEN\W\W\ORD\DESIGN\AN\barson\68G56 Contract Maintenance (2021) Lighting\68G56 CH Lighting (FINAL) 3-25-21.dgn

\* FAI 74, FAP 317, FAU 6717

NOT TO SCALE

USER NAME = hansonj	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 99.4868 * / in.	CHECKED -	REVISED -
PLOT DATE = 3/25/2021	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

PROPOSED LUMINAIRE PERFORMANCE TABLES

SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
~	(90-14-2;17-1;18;35-1)L	TAZEWELL	25	25
CONTRACT NO. 68G56				
ILLINOIS FED. AID PROJECT				