

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	D4 ELECTRICAL 2022	PEORIA TAZEWELL	13*	1
		ILLINOIS	CONTRACT NO. 68G75	

* 13 + 1 = 14 TOTAL SHEETS

D-94-002-22

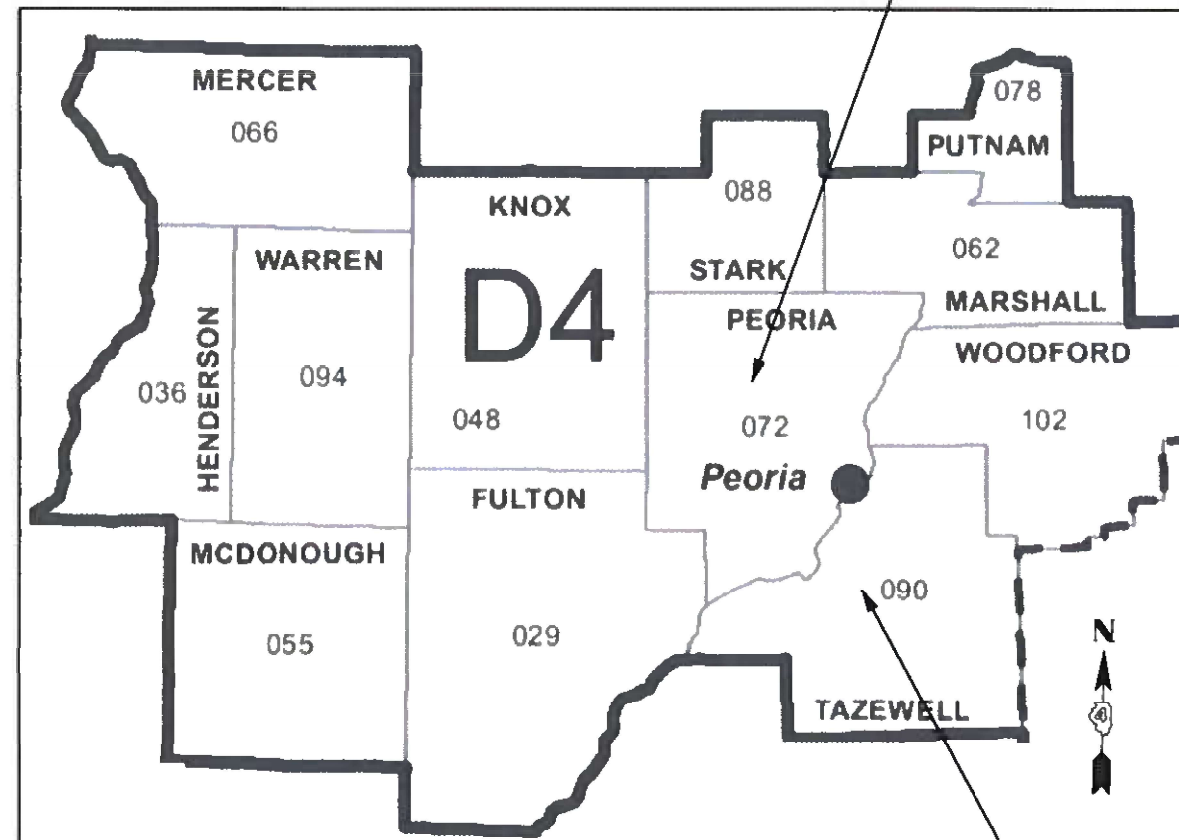
INDEX OF SHEETS:
SEE SHEET 2 FOR INDEX OF SHEETS

PROPOSED HIGHWAY PLANS

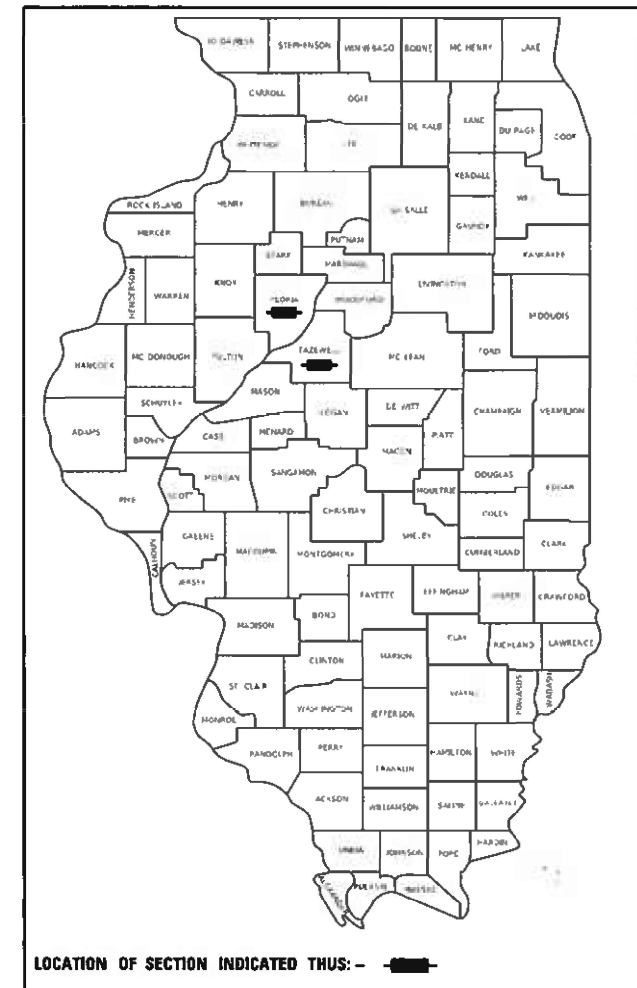
VARIOUS ROUTES
D4 ELECTRICAL 2022
PEORIA-TAZEWELL COUNTIES

C-94-002-22

PEORIA COUNTY
(CITY OF PEORIA)
(17 LOCATIONS)



TAZEWELL COUNTY
(CITY OF EAST PEORIA)
(7 LOCATIONS)



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

PROJECT DESCRIPTION:
INSTALLATION OF TRAFFIC SIGNAL
EQUIPMENT AT VARIOUS
LOCATIONS IN DISTRICT FOUR.

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

PROJECT ENGINEER : ERIC HOWALD (309) 671-4481
PROJECT MANAGER : BEN TELLEFSON (309) 671-4477
CATALOG NO. 036268-00D
CONTRACT NO. 68G75

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBMITTED Oct 29 2021
Kensie A Barnett RSD
REGIONAL ENGINEER

December 10 2021
[Signature]
ENGINEER OF DESIGN AND ENVIRONMENT

December 10 2021
[Signature]
DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS

NO COMMITMENTS HAVE BEEN MADE IN CONJUNCTION WITH THIS PROJECT.

INDEX OF SHEETS	
SHEET	DESCRIPTION
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12	BATTERY BACKUP SYSTEM CABINET WIRING DIAGRAM
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13A	LUMINAIRE REPLACEMENT TABLES REPLACE EXISTING HPS LIGHTING

HIGHWAY STANDARDS	
000001-08	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
001006	DECIMAL OF AN INCH & 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, MULTILANE, MORE THAN 15' AWAY
701601-09	URBAN LANE CLOSURE, MULTILANE, 1W OR 2W WITH NONTRAVERSABLE MEDIAN
701422-10	LANE CLOSURE, MULTILANE, FOR SPEEDS ≥ 45 MPH to 55 MPH
701426-09	LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPERATION, FOR SPEEDS ≥ 45 MPH
701427-05	LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPERATION, FOR SPEEDS ≤ 40 MPH
701701-10	URBAN LANE CLOSURE, MULTILANE INTERSECTION
701901-08	TRAFFIC CONTROL DEVICES
857001-01	STANDARD PHASE DESIGNATION DIAGRAMS AND PHASE SEQUENCES
873001-02	TRAFFIC SIGNAL GROUNDING AND BONDING
878001-11	CONCRETE FOUNDATION DETAILS

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PLOT SCALE = 42.9315' / in.	CHECKED -	REVISED +
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

COMMITMENTS, INDEX OF SHEETS, HIGHWAY STANDARDS,
AND CONSTRUCTION NOTES

SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	D4 ELECTRICAL 2022	PEORIA TAZEWELL	13	2
			CONTRACT NO. 68G75	
ILLINOIS FED. AID PROJECT				

CONSTRUCTION NOTES

1. THE CONTRACTOR SHALL UTILIZE THE EXISTING ELECTRICAL CABLING FOR THE LUMINAIRE,
2. THE LOCATION OF ALL UTILITIES AND PRIVATELY OWNED FACILITIES SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO THE INSTALLATION OF ANY COMPONENTS.
3. 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.
4. ELECTRICAL WORK SHALL CONFORM WITH NATIONAL, STATE, AND LOCAL CODES.
5. THE CONTRACTOR SHALL PROVIDE ELECTRICAL CABLE SLACK IN ACCORDANCE WITH ARTICLE 873.03.
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. ANY MAINTENANCE OF EXISTING ELECTRICAL FACILITIES WILL BE CONSIDERED EXTRA WORK IN ACCORDANCE WITH ARTICLE 109.04 OF THE STANDARD SPECIFICATIONS.
9. ELECTRICAL CABLE WILL BE MEASURED FOR PAYMENT IN ACCORDANCE WITH ARTICLE 873.04.
10. VIDEO DETECTION CAMERAS SHALL BE INSTALLED AT A MINIMUM MOUNTING HEIGHT OF 45 FT AND A MAXIMUM MOUNTING HEIGHT OF 47 FT.
11. THE EXISTING VIDEO DETECTION SYSTEMS SHALL REMAIN IN OPERATION UNTIL THE PROPOSED SYSTEMS ARE INSTALLED AND OPERATIONAL.
12. THE CONTRACTOR SHALL REMOVE THE EXISTING BATTERY BACKUP UNITS AND DELIVER THEM TO EITHER THE CITY OF PEORIA DRIES LANE MAINTENANCE FACILITY OR THE IDOT TRAFFIC BUILDING DEPENDING UPON THE LOCATION OF THE EXISTING BBS. THE CONTRACTOR SHALL RECYCLE ALL BATTERIES AT A CERTIFIED RECYCLING CENTER. THE COST OF THIS WORK SHALL BE INCLUDED IN THE COST OF THE PROPOSED BATTERY BACKUP SYSTEM.
13. THE DEPARTMENT WILL PROGRAM ALL VIDEO DETECTION SYSTEMS AFTER INSTALLATION.
14. THE CONTRACTOR SHALL FURNISH AND INSTALL NEW CAT 5 ETHERNET CABLE TO THE PROPOSED VIDEO DETECTION CAMERAS. THE COST OF THIS WORK SHALL BE PAID FOR SEPARATELY AS "CAT 5 ETHERNET CABLE".
15. THE CONTRACTOR SHALL INSTALL THE PROPOSED VIDEO DETECTION CAMERA BRACKET ON THE STRAIN POLE OF THE MAST ARM AS SPECIFIED ON THE PLAN SHEETS. THE CAMERA BRACKET SHALL BE SECURED TO THE STAIN POLE AT TWO LOCATIONS USING TWO SEPARATE ALUMINUM BRACKETS WITH STAINLESS STEEL BANDING. THE CONTRACTOR SHALL INSTALL SET SCREWS AND ADDITIONAL HARDWARE AS NEEDED TO ENSURE THAT THE CAMERA AND CAMERA BRACKET DOES NOT LOOSEN. THE COST OF THIS WORK SHALL BE INCLUDED IN THE COST OF THE PROPOSED VIDEO DETECTION SYSTEM.
16. THE CONTRACTOR SHALL FURNISH AND INSTALL ONE GRIDSMART GS-3 BELL CAMERA AT THE INTERSECTION OF IL 40 (KNOXVILLE) & US 150 (WAR MEMORIAL) PROVIDE ADDITIONAL VIEWS FOR DETECTION. THE CAMERA SHALL BE INSTALLED ON THE STRAIN POLE FOR THE NORTHBOUND IL 40 MAST ARM. THE COST OF THIS WORK SHALL BE INCLUDED IN THE PAY ITEM "CLOSED CIRCUIT TELEVISION CAMERA". REFER TO SPECIAL PROVISIONS FOR ADDITIONAL INFORMATION.
17. THE MICROWAVE DETECTION UNITS SHALL BE INSTALLED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.
18. THE CONTRACTOR SHALL FURNISH AND INSTALL THE MICROWAVE DETECTION UNITS INCLUDING BRACKETING, HARDWARE, WIRING, TRAFFIC SIGNAL MODIFICATIONS, EQUIPMENT, ETC. THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE BID PRICE FOR THE MICROWAVE DETECTION UNITS.
19. THE CONTRACTOR SHALL INSTALL THE PROPOSED ELECTRIC CABLE INSIDE THE EXISTING TRAFFIC SIGNAL HEADS, PEDESTRIAN SIGNAL HEADS, BLANK OUT SIGNS, AND LUMINAIRES. THE CONTRACTOR SHALL FURNISH ALL MATERIAL REQUIRED FOR CABLE INSTALLATION AND PROVIDE LABOR AS REQUIRED TO INSTALL THE PROPOSED ELECTRIC CABLE INSIDE THE EXISTING COMPONENTS. THE COST OF THIS WORK SHALL BE INCLUDED IN THE COST OF THE PROPOSED ELECTRIC CABLE PAY ITEMS.
20. THE CONTRACTOR SHALL RE-USE EXISTING FIELD WIRING AS SHOWN ON THE PLAN SHEETS. THE CONTRACTOR SHALL REMOVE THE FIELD WIRING FROM THE EXISTING CONTROLLER CABINET AND INSTALL IT INTO THE PROPOSED CONTROLLER CABINET. THE WIRE SHALL BE TERMINATED ON THE CABINET FIELD TERMINALS. THE COST OF THIS WORK SHALL BE INCLUDED IN THE COST OF THE PROPOSED ELECTRIC CABLE PAY ITEMS.
21. THE CONTRACTOR SHALL FURNISH AND INSTALL NEW 12 FIBER ENCLOSURES INSIDE EACH TRAFFIC SIGNAL CABINET AND TERMINATE 12 FIBERS FROM EACH CABLE END WITH ST CONNECTORS. THE COST OF THIS WORK SHALL BE INCLUDED IN THE COST OF THE PROPOSED FIBER OPTIC CABLE.

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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

CONSTRUCTION NOTES

SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	D4 ELECTRICAL 2022	PEORIA TAZEWELL	13	3
CONTRACT NO. 68G75				
ILLINOIS FED. AID PROJECT				

SUMMARY OF QUANTITIES

PAY ITEM CODE	ITEM DESCRIPTION	UNIT	TOTAL QTY.	PEORIA COUNTY		TAZEWELL COUNTY		
				CONST. TYPE CODE 0021 VARIOUS ROUTES 100% STATE 0% CITY CITY OF PEORIA URBAN	CONST. TYPE CODE 0021 VARIOUS ROUTES 100% STATE 0% CITY CITY OF EAST PEORIA URBAN	CONST. TYPE CODE 0021 VARIOUS ROUTES 93.3% STATE 6.7% CITY CITY OF EAST PEORIA URBAN	CONST. TYPE CODE 0021 VARIOUS ROUTES 90% STATE 10% CITY CITY OF EAST PEORIA URBAN	CONST. TYPE CODE 0021 VARIOUS ROUTES 90% STATE 10% CITY CITY OF PEKIN URBAN
67100100	MOBILIZATION	L SUM	1.0	0.7	0.10	0.05	0.10	0.05
81028370	UNDERGROUND CONDUIT, PVC, 3" DIA.	FOOT	12.0	12.0				
81702130	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 6	FOOT	612.0	612.0				
87301225	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	245.5	245.5				
87301245	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	809.0	809.0				
87301255	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	339.5	339.5				
87301900	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	332.0	332.0				
87800200	CONCRETE FOUNDATION, TYPE D	FOOT	3.5	3.5				
87900200	DRILL EXISTING HANDHOLE	EACH	2.0	2.0				
89502375	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1.0	1.0				
89502385	REMOVE EXISTING CONCRETE FOUNDATION	EACH	1.0	1.0				
X0322281	WIDE AREA VIDEO DETECTION SYSTEM COMPLETE	EACH	6.0	1.0		1.0	3.0	1.0
X0326812	CAT 5 ETHERNET CABLE	FOOT	1099.0	388.0		173.5	448.5	84.0
X0327216	CLOSED CIRCUIT TELEVISION CAMERA	EACH	1.0	1.0				
X1400434	DILEMMA ZONE DETECTION SYSTEM	EACH	6.0	6.0				
X7010216	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	L SUM	1.0	0.7	0.10	0.05	0.10	0.05
X8630104	CONTROLLER CABINET TYPE IV, SPECIAL	EACH	1.0	1.0				
X8710029	FIBER OPTIC CABLE 24 FIBERS, SINGLE MODE	FOOT	1404.0	1404.0				
Z0033068	TRAFFIC SIGNAL BATTERY BACKUP SYSTEM	EACH	16.0	14.0	2.0			

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PLOT DATE = 10/29/2021	CHECKED -	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	D4 ELECTRICAL 2022	PEORIA TAZEWELL	13	4
			CONTRACT NO. 68G75	
		ILLINOIS	FED. AID PROJECT	

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COUNTY	CITY	FUND CODE (DOT %/CITY %)	LOCATION	W A VID DET SYS COM (EACH)	CLOSED CIRCUIT TELEVISION CAMERA INSTALLATION (EACH)	CAT5 ETHERNET CABLE	TS BATT BACKUP SYSTEM (EACH)	DILEMMA ZONE DETECTION SYSTEM (EACH)	NOTES	
PEORIA	PEORIA	100/0	US 150 (WAR MEMORIAL DR.) & IL 40 (KNOXVILLE AVE.)	1.0	1.0	388.0	1.0		REMOVE EXISTING BBS CABINET AND COMPONENTS AND INSTALL PROPOSED BBS SYSTEM. INSTALL VIDEO DETECTION CAMERAS ON COMBINATION MAST ARMS FOR NB AND SB IL 40 (KNOXVILLE AVE.) FURNISH AND INSTALL CAT5 REPEATER FOR CAMERA LOCATED ON MAST ARM FOR NB IL 40.	
	PEORIA	100/0	UNIVERSITY ST. & I-74 EB RAMPS				1.0		REMOVE EXISTING BBS CABINET AND COMPONENTS AND INSTALL PROPOSED BBS SYSTEM.	
	PEORIA	100/0	UNIVERSITY ST. & I-74 WB RAMPS				1.0		REMOVE EXISTING BBS CABINET AND COMPONENTS AND INSTALL PROPOSED BBS SYSTEM.	
	PEORIA	100/0	STERLING AVE. & I-74 EB RAMPS				1.0		REMOVE EXISTING BBS CABINET AND COMPONENTS AND INSTALL PROPOSED BBS SYSTEM.	
	PEORIA	100/0	STERLING AVE. & I-74 WB RAMPS				1.0		REMOVE EXISTING BBS CABINET AND COMPONENTS AND INSTALL PROPOSED BBS SYSTEM.	
	PEORIA	100/0	IL 40 (KNOXVILLE AVE.) & PENNSYLVANIA/I-74 WB RAMPS				1.0		REMOVE EXISTING BBS CABINET AND COMPONENTS AND INSTALL PROPOSED BBS SYSTEM.	
	PEORIA	100/0	IL 40 (KNOXVILLE AVE.) & GLEN OAK				1.0		REMOVE EXISTING BBS CABINET AND COMPONENTS AND INSTALL PROPOSED BBS SYSTEM.	
	PEORIA	100/0	WASHINGTON ST. & I-74 WB RAMP				1.0		REMOVE EXISTING BBS CABINET AND COMPONENTS AND INSTALL PROPOSED BBS SYSTEM.	
	PEORIA	100/0	WASHINGTON ST. & I-74 EB RAMP				1.0		REMOVE EXISTING BBS CABINET AND COMPONENTS AND INSTALL PROPOSED BBS SYSTEM.	
	PEORIA	100/0	SPALDING AVE. & I-74 WB RAMP/GREENLEAF				1.0		REMOVE EXISTING BBS CABINET AND COMPONENTS AND INSTALL PROPOSED BBS SYSTEM.	
	PEORIA	100/0	GALE AVE. & I-74 EB RAMP				1.0		REMOVE EXISTING BBS CABINET AND COMPONENTS AND INSTALL PROPOSED BBS SYSTEM.	
	PEORIA	100/0	GALE AVE. & I 74 WB RAMP				1.0		REMOVE EXISTING BBS CABINET AND COMPONENTS AND INSTALL PROPOSED BBS SYSTEM.	
	PEORIA COUNTY		100/0	IL 29 & IL 6				1.0	2.0	REMOVE EXISTING BBS CABINET AND COMPONENTS AND INSTALL PROPOSED BBS SYSTEM. INSTALL DILEMMA ZONE DETECTION SENSORS ON BACK OF MAST ARMS FOR NB AND SB IL 29 TRAFFIC TO MAXIMIZE DETECTION RANGE.
	PEORIA COUNTY		100/0	IL 116 (AIRPORT RD.) & I-474 EB RAMP/DIRKSEN PARKWAY				1.0		REMOVE EXISTING BBS CABINET AND COMPONENTS AND INSTALL PROPOSED BBS SYSTEM.
	PEORIA COUNTY		100/0	US 24 & CAMERLON LN.					2.0	INSTALL DILEMMA ZONE DETECTION SENSORS ON BACK OF MAST ARMS FOR EB AND WB US 24 TRAFFIC TO MAXIMIZE DETECTION RANGE.
PEORIA COUNTY		100/0	US 24 & TERMINAL RD.					2.0	INSTALL DILEMMA ZONE DETECTION SENSORS ON BACK OF MAST ARMS FOR EB AND WB US 24 TRAFFIC TO MAXIMIZE DETECTION RANGE.	
TOTALS				1.0		388.0	14.0	6.0		

USER NAME = howaldier PLOT SCALE = 42.9315 * / in. PLOT DATE = 10/29/2021	DESIGNED - DRAWN - CHECKED - DATE -	REVISED - REVISED - REVISED - REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SCHEDULE OF QUANTITIES PEORIA COUNTY	F.A. RTE. VAR.	SECTION D4 ELECTRICAL 2022	COUNTY PEORIA TAZEWELL	TOTAL SHEETS 13	SHEET NO. 5	ILLINOIS FED. AID PROJECT CONTRACT NO. 68G75
SCALE:				SHEET	OF	SHEETS	STA.	TO STA.		

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COUNTY	CITY	FUND CODE (IDOT %/CITY %)	LOCATION	W A VID DET SYS COM (EACH)	CLOSED CIRCUIT TELEVISION CAMERA INSTALLATION (EACH)	CATS ETHERNET CABLE	TS BATT BACKUP SYSTEM (EACH)	DILEMMA ZONE DETECTION SYSTEM (EACH)	NOTES
TAZEWELL	EAST PEORIA	90/10	IL 29 (MAIN ST.) & WASHINGTON ST.	1.0		163.0			INSTALL VIDEO DETECTION CAMERA ON COMBINATION MAST ARM FOR SB VETERANS DR. INSTALL VIDEO DETECTION CAMERA ON COMBINATION MAST ARM FOR NB WASHINGTON ST.
	FAST PFORIA	93.3/6.7	IL 8 (WASHINGTON RD.) & DOLANS	1.0		178.5			INSTALL VIDEO DETECTION CAMERA ON COMBINATION MAST ARM FOR SB VETERANS DR. INSTALL VIDEO DETECTION CAMERA ON COMBINATION MAST ARM FOR WB IL 8 (WASHINGTON ST.)
	EAST PEORIA	90/10	IL 8 (WASHINGTON RD.) & CARVER/JAY	1.0		84.0			INSTALL VIDEO DETECTION CAMERA ON COMBINATION MAST ARM FOR SB VETERANS DR. INSTALL VIDEO DETECTION CAMERA ON COMBINATION MAST ARM FOR EB L 8 (WASHINGTON ST.)
	EAST PEORIA	90/10	IL 8 (WASHINGTON RD.) & ILLINI DR./FARMDALE RD.	1.0		201.5			INSTALL VIDEO DETECTION CAMERA ON COMBINATION MAST ARM FOR WB IL 8 (WASHINGTON ST.)
	EAST PEORIA	100/0	IL 116 (MAIN ST.) & I-74 EB RAMPS				1.0		REMOVE EXISTING BBS CABINET AND COMPONENTS AND INSTALL PROPOSED BBS SYSTEM.
	EAST PEORIA	100/0	IL 116 (MAIN ST.) & I-74 EB RAMPS				1.0		REMOVE EXISTING BBS CABINET AND COMPONENTS AND INSTALL PROPOSED BBS SYSTEM.
	PEKIN	90/10	IL 29 (VETERANS RD.) & MALL/COMMERCIAL	1.0		84.0			INSTALL VIDEO DETECTION CAMERA ON COMBINATION MAST ARM FOR SB VETERANS DR.
TOTALS				5.0		711.0	2.0	0.0	

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**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**SCHEDULE OF QUANTITIES
 TAZEWELL COUNTY**

SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	D4 ELECTRICAL 2022	PEORIA TAZEWELL	13	6
CONTRACT NO. 68G75			ILLINOIS FED. AID PROJECT	

INSTALL NEW SERVICE WIRE FROM THE SERVICE DISCONNECT TO THE PROPOSED CONTROLLER CABINET.

EX. FIBER OPTIC INTERCONNECT TO BRYAN ST.

THE CONTRACTOR SHALL FURNISH AND INSTALL NEW 12 FIBER ENCLOSURES INSIDE EACH TRAFFIC SIGNAL CABINET AND TERMINATE 12 FIBERS FROM EACH CABLE END WITH ST CONNECTORS. THE COST OF THIS WORK SHALL BE INCLUDED IN THE COST OF THE PROPOSED FIBER OPTIC CABLE.

REMOV EX CONC FDN
1.0 EACH

EX. FIBER INTERCONNECT AND ELECTRIC SERVICE CONDUITS

EX. 2" & 3" PVC - 105'

EX. 2" & 3" PVC - 60'

DRILL EX HANDHOLE
2.0 EACH

EX. 3" PVC - 92'

UTILIZE THE EXISTING CABLING FOR THIS QUADRANT. PULL BACK THE CABLING FROM THE EXISTING CONTROLLER CABINET AND TERMINATE ALL FIELD WIRING INSIDE THE PROPOSED TRAFFIC SIGNAL CABINET (THE COST OF THIS WORK SHALL BE INCLUDED IN THE COST OF THE PROPOSED ELECTRICAL CABLE.)

UNDRGRD C PVC 3
6.0 FT. (X2)

CONT CAB TYPE IV SPL
1.0 EACH

CONC FDN TY D
3.5 FT.

BILL OF MATERIALS

ITEM DESCRIPTION	UNIT	TOTAL QTY.
UNDERGROUND CONDUIT, PVC, 3" DIA.	FOOT	12.0
ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 6	FOOT	612.0
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	245.5
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	809.0
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	339.5
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	332.0
CONCRETE FOUNDATION, TYPE D	FOOT	3.5
DRILL EXISTING HANDHOLE	EACH	2.0
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1.0
REMOVE EXISTING CONCRETE FOUNDATION	EACH	1.0
CONTROLLER CABINET TYPE IV, SPECIAL	EACH	1.0
FIBER OPTIC CABLE 24 FIBERS, SINGLE MODE	FOOT	1404.0

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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**IL 29 (ADAMS) & SPALDING-74 RAMP G-3
PROPOSED TRAFFIC SIGNAL IMPROVEMENTS**

SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	D4 ELECTRICAL 2022	PEORIA TAZEWELL	13	7
			CONTRACT NO. 68G75	
ILLINOIS FED. AID PROJECT				

68196

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	*	PEORIA	1559	442
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
* (72-B)R-1, 72(9,9-1)R				

BILL OF MATERIALS

PAY ITEM	UNIT	QUANTITY
SERVICE INSTALLATION (SPECIAL)	EACH	1
CONCRETE HANDHOLE	EACH	2
CONCRETE DOUBLE HANDHOLE	EACH	2
LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, 400 WATT	EACH	2
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET	EACH	1
TRANSCEIVER - FIBER OPTIC	EACH	1
TRAFFIC SIGNAL BACKPLATE, LOUVERED	EACH	6
PEDESTRIAN PUSH-BUTTON	EACH	6
BATTERY BACKUP SYSTEM WITH CABINET	EACH	1
CONDUIT IN TRENCH, 50MM DIA., PVC	METER	80.0
CONDUIT IN TRENCH, 65MM DIA., PVC	METER	7.9
CONDUIT IN TRENCH, 75MM DIA., PVC	METER	5.3
CONDUIT IN TRENCH, 90MM DIA., PVC	METER	22.7
CONDUIT PUSHED, 50MM DIA., PVC	METER	35.0
CONDUIT PUSHED, 90MM DIA., PVC	METER	55.8
TRENCH AND BACKFILL FOR ELECTRICAL WORK	METER	98.2
ELECTRIC CABLE IN CONDUIT, 600V (XLP-USE), 1/2 NO. 4	METER	200.0
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	METER	100.0
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	METER	310.0
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	METER	65.0
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 12.19 METER	EACH	1
CONCRETE FOUNDATION, TYPE D	METER	1.1
CONCRETE FOUNDATION, TYPE E 750MM DIAMETER	METER	4.1
STFFI COMBINATION MAST ARM ASSEMBLY AND POLE, 16.76 METER	EACH	1
CONCRETE FOUNDATION, TYPE E 900MM DIAMETER	METER	4.6
VIDEO VEHICLE DETECTION, 2 CAMERAS	EACH	1
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	6
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED	EACH	2
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED	EACH	2

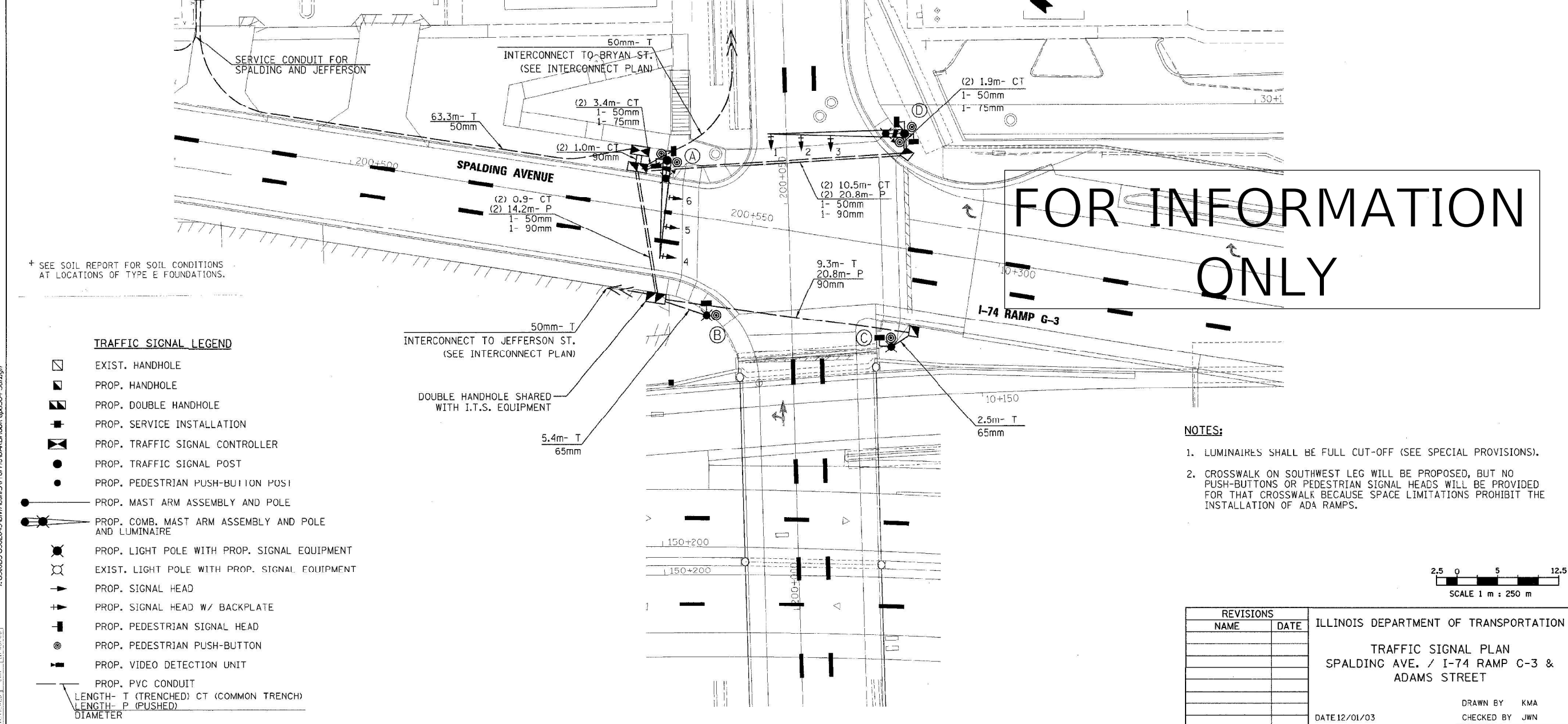
SCHEDULE OF POSTS AND MAST ARMS

STATIONING ROUTE: ADAMS STREET
LOCATION STATION / OFFSET

LOCATION STATION / OFFSET	DESCRIPTION
A 200+055.84; 14.68m LT	STEEL COMB. MAST ARM AND POLE, 12.19m
B 200+036.69; 10.39m LT	LIGHT POLE (SEE LIGHTING PLAN)
C 200+032.24; 12.10m RT	LIGHT POLE (SEE LIGHTING PLAN)
D 200+058.33; 14.48m RT	STEEL COMB. MAST ARM AND POLE, 16.76m

SCHEDULE OF SIGNAL HEAD QJANTITIES

ITEM	UNIT	QUANTITY	LOCATION
T.S.H., 1-F, 3-S, M.A.M.	EACH	6	A, D
P.S.H., 1-F, B.M.	EACH	2	B, C
P.S.H., 2-F, B.M.	EACH	2	A, D



† SEE SOIL REPORT FOR SOIL CONDITIONS AT LOCATIONS OF TYPE E FOUNDATIONS.

TRAFFIC SIGNAL LEGEND

- ◻ EXIST. HANDHOLE
- ◼ PROP. HANDHOLE
- ◼◼ PROP. DOUBLE HANDHOLE
- PROP. SERVICE INSTALLATION
- ▣ PROP. TRAFFIC SIGNAL CONTROLLER
- PROP. TRAFFIC SIGNAL POST
- PROP. PEDESTRIAN PUSH-BUTTON POST
- PROP. MAST ARM ASSEMBLY AND POLE
- PROP. COMB. MAST ARM ASSEMBLY AND POLE AND LUMINAIRE
- PROP. LIGHT POLE WITH PROP. SIGNAL EQUIPMENT
- EXIST. LIGHT POLE WITH PROP. SIGNAL EQUIPMENT
- ➔ PROP. SIGNAL HEAD
- ➔ PROP. SIGNAL HEAD W/ BACKPLATE
- ➔ PROP. PEDESTRIAN SIGNAL HEAD
- PROP. PEDESTRIAN PUSH-BUTTON
- ➔ PROP. VIDEO DETECTION UNIT
- PROP. PVC CONDUIT

LENGTH- T (TRENCHED) CT (COMMON TRENCH)
LENGTH- P (PUSHED)
DIAMETER

- NOTES:**
- LUMINAIRES SHALL BE FULL CUT-OFF (SEE SPECIAL PROVISIONS).
 - CROSSWALK ON SOUTHWEST LEG WILL BE PROPOSED, BUT NO PUSH-BUTTONS OR PEDESTRIAN SIGNAL HEADS WILL BE PROVIDED FOR THAT CROSSWALK BECAUSE SPACE LIMITATIONS PROHIBIT THE INSTALLATION OF ADA RAMPS.



REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION
NAME	DATE	
		TRAFFIC SIGNAL PLAN SPALDING AVE. / I-74 RAMP C-3 & ADAMS STREET
DATE 12/01/03		DRAWN BY KMA CHECKED BY JWN

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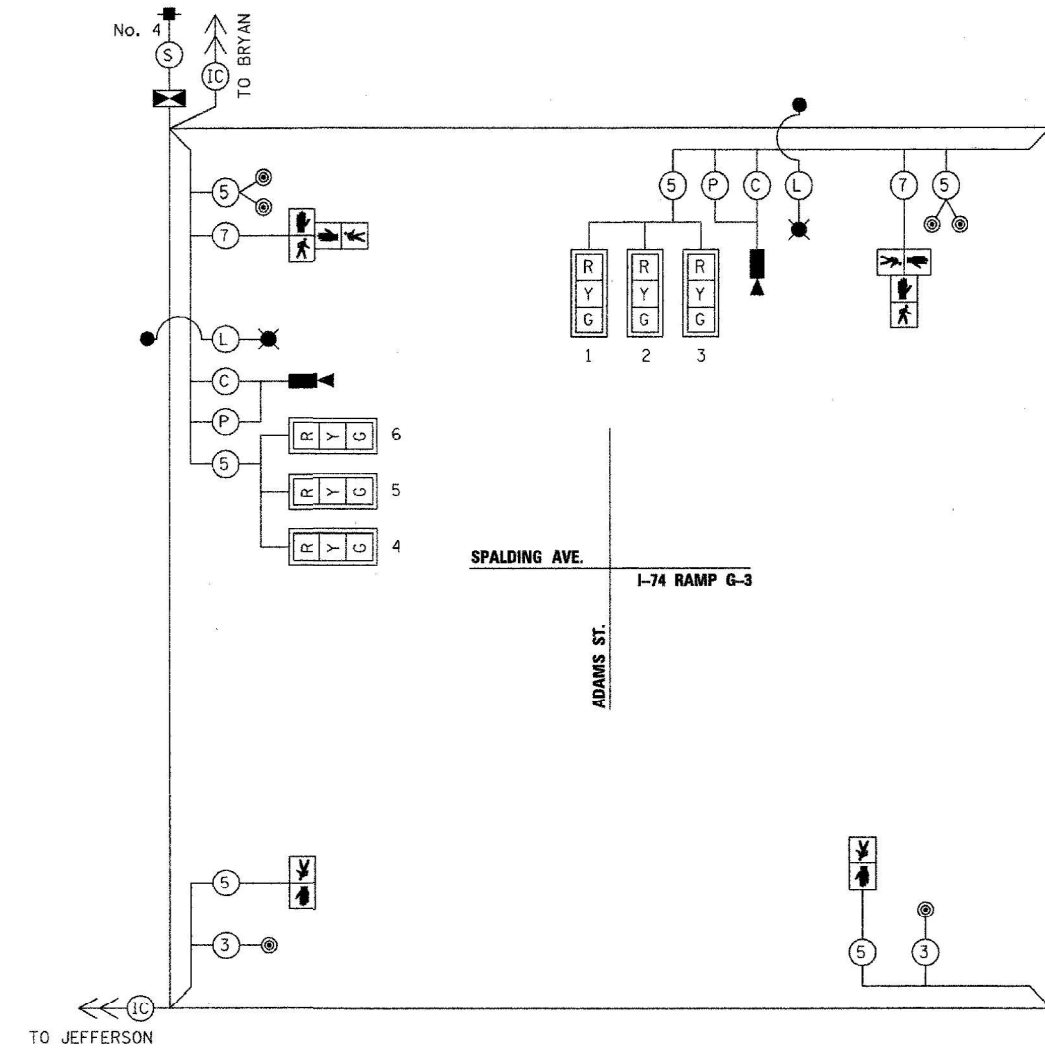
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

IL 29 (ADAMS) & SPALDING-I-74 RAMP G-3 EXISTING TRAFFIC SIGNAL PLANS	
SCALE:	SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	D4 ELECTRICAL 2022	PEORIA	13	8
CONTRACT NO. 68G75				
ILLINOIS FED. AID PROJECT				

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74		PEORIA	155	443
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
* (72-8R-1, 72(9,9-1)R				

68196



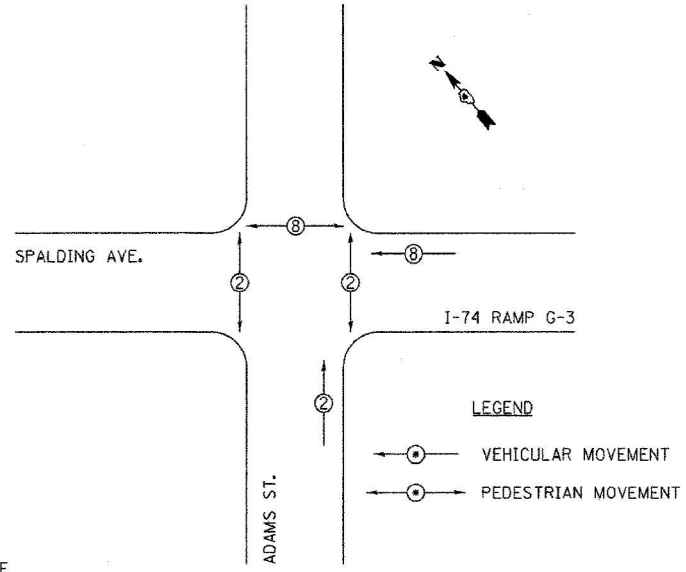
CABLE PLAN

TRAFFIC SIGNAL LEGEND

- PROP. SIGNAL HEAD
 - PROP. SIGNAL HEAD W/ BACKPLATE
 - PROP. PEDESTRIAN SIGNAL HEAD
 - PROP. PEDESTRIAN PUSH-BUTTON
 - PROP. TRAFFIC SIGNAL CONTROLLER
 - PROP. SERVICE INSTALLATION
 - PROP. ELECTRIC CABLE
 - PROP. CAMERA VIDEO SIGNAL CABLE**
 - PROP. CAMERA POWER CABLE**
 - PROP. INTERCONNECT CABLE, FIBER OPTIC
 - PROP. ELECTRIC CABLE, 3-1/C NO. 4 XLP/USE
 - PROP. ELECTRIC CABLE, 2-1/C NO. 10 XLP/USE***
 - PROP. LUMINAIRE
 - PROP. SPLICE
 - PROP. VIDEO DETECTION UNIT
- * DENOTES NUMBER OF CONDUCTORS. ALL CABLE NO. 14 EXCEPT AS INDICATED.
- ** DENOTES CABLE SHALL BE INCLUDED IN THE PAY ITEM, VIDEO VEHICLE DETECTION SYSTEM.
- *** DENOTES CABLE DOWN POLE SHALL BE INCLUDED IN THE PAY ITEM "LUMINAIRE" AS PER ARTICLE 821 IN THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.

NAME OF INTERSECTION **ADAMS ST. & SPALDING AVE.**
 CONTROLLER SPECIFIED **EAGLE TS2 TYPE 2 IN TYPE IV CABINET**

REFERRING TO STANDARD 857001, THE VEHICULAR AND PEDESTRIAN PHASES ARE DESIGNATED BELOW:



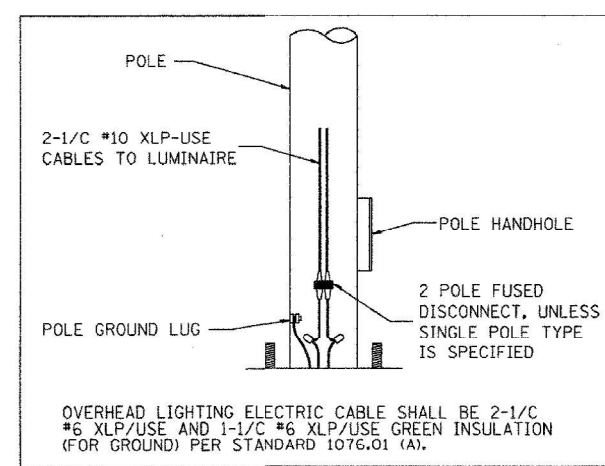
PHASE DESIGNATION DIAGRAM

PEDESTRIAN CROSSING SIGN DETAIL

DIMENSIONS: 305 (TYP.) x 230 (TYP.)
 LEGEND AND BORDER: NON-REFLECTORIZED BLACK
 BACKGROUND: NON-REFLECTORIZED WHITE

ONE SIGN SHALL BE PROVIDED FOR EACH PUSH-BUTTON. ORIENTATION OF DIRECTIONAL ARROWS TO BE DETERMINED BY PUSH-BUTTON LOCATION

ALL MOUNTING HARDWARE SHALL BE STAINLESS STEEL CONSTRUCTION. ALL MOUNTING BOLTS SHALL BE HEX HEAD. MATERIALS AND INSTALLATION OF THIS SIGN SHALL BE INCLUDED IN THE COST OF PEDESTRIAN PUSHBUTTON.



FOR INFORMATION ONLY

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION CABLE DIAGRAM SPALDING AVE. / I-74 RAMP G-3 & ADAMS STREET
NAME	DATE	
		DRAWN BY KMA CHECKED BY JWN DATE 12/01/03

TRAFFIC SIGNALS

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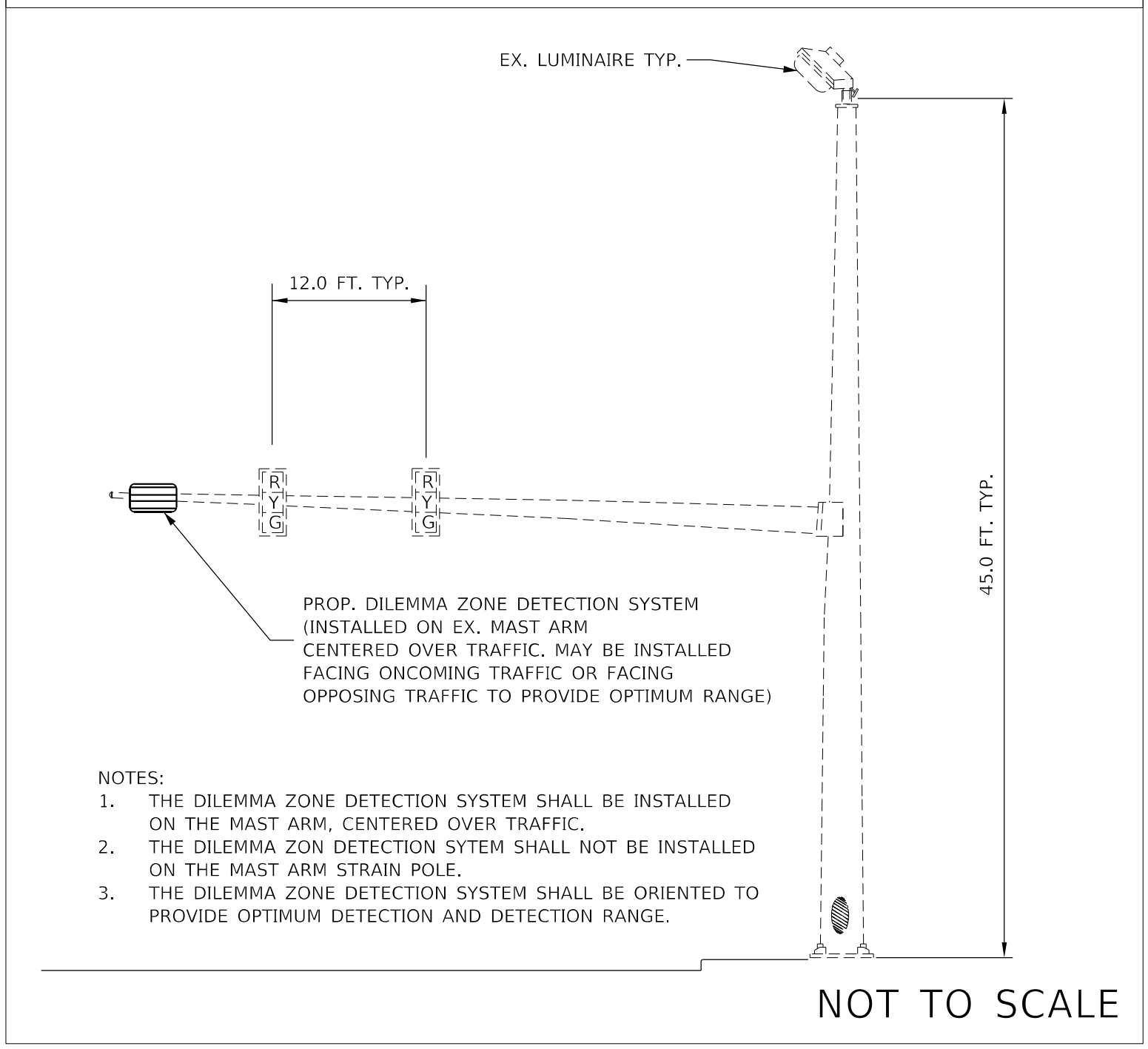
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**IL 29 (ADAMS) & SPALDING-I-74 RAMP G-3
EXISTING TRAFFIC SIGNAL PLANS**

SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	D4 ELECTRICAL 2022	PEORIA TAZEWELL	13	9
CONTRACT NO. 68G75				
ILLINOIS FED. AID PROJECT				

DILEMMA ZONE DETECTION SYSTEM INSTALLATION DETAIL (TYP.)



NOTES:

1. THE DILEMMA ZONE DETECTION SYSTEM SHALL BE INSTALLED ON THE MAST ARM, CENTERED OVER TRAFFIC.
2. THE DILEMMA ZONE DETECTION SYSTEM SHALL NOT BE INSTALLED ON THE MAST ARM STRAIN POLE.
3. THE DILEMMA ZONE DETECTION SYSTEM SHALL BE ORIENTED TO PROVIDE OPTIMUM DETECTION AND DETECTION RANGE.

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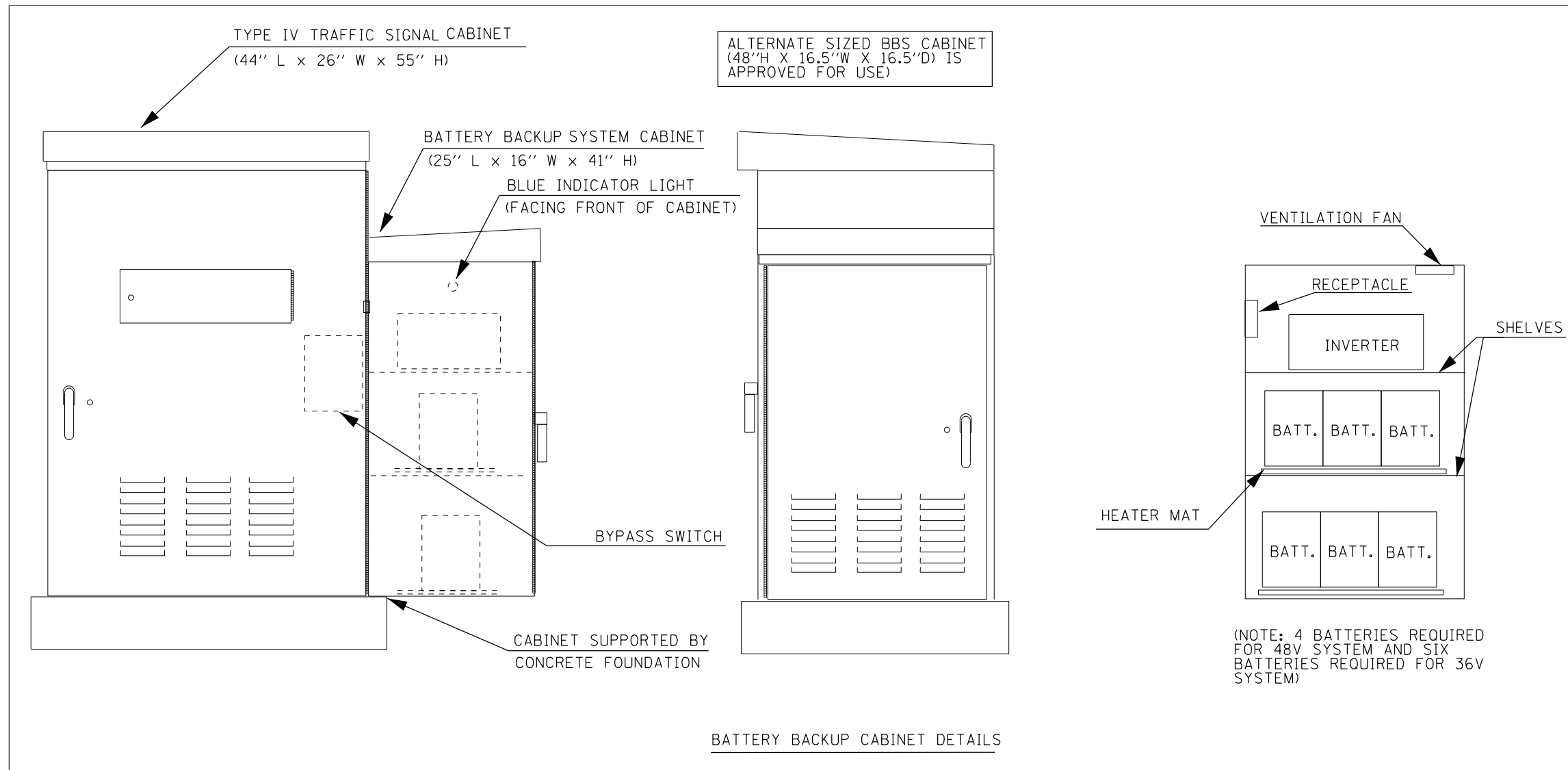
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	DRAWN -	REVISED -
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PLOT DATE = 10/29/2021	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

DILEMMA ZONE DETECTION SYSTEM INSTALLATION DETAIL

SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	D4 ELECTRICAL 2022	PEORIA TAZEWELL	13	10
ILLINOIS FED. AID PROJECT			CONTRACT NO. 68G75	



NOTES

1. THE BATTERY BACKUP SYSTEM CABINET SHALL BE A NEMA TYPE 3R CABINET WITH MINIMUM OUTSIDE DIMENSIONS OF 41" (H) X 25" (W) X 16" (D). THE CABINET SHALL BE EQUIPPED WITH A THREE POINT LATCHING MECHANISM, TWO SHELVES, THERMOSTATICALLY CONTROLLED VENTILATION FAN, AND A POWER RECEPTACLE. THE CABINET SHALL BE MOUNTED TO THE SIDE OF THE PROPOSED TYPE IV CABINET WITH THE BOTTOM OF THE CABINET SUPPORTED BY THE CONCRETE FOUNDATION.
2. ALL CABINET LIGHTS, HEATER STRIPS, VENTILATION FANS, AND SERVICE RECEPTACLES SHALL BE BYPASSED WHEN THE BATTERY BACKUP UNIT IS OPERATING IN BATTERY MODE.
3. THE BATTERY BACKUP UNITS CONTACTS SHALL BE WIRED TO PROVIDE LOCAL CONTROLLER ALARMS (AS AVAILABLE IN THE PROPOSED CABINETS).
4. THE BYPASS SWITCH SHALL BE AUTOMATIC AND SHALL BE INSTALLED IN THE BBS CABINET.
5. THE CABINET SHALL BE EQUIPPED WITH A DELUXE PLEATED AIR FILTER AND PLEXIGLASS SHIELDS FOR ALL TERMINALS CARRYING LINE VOLTAGE.

NOT TO SCALE

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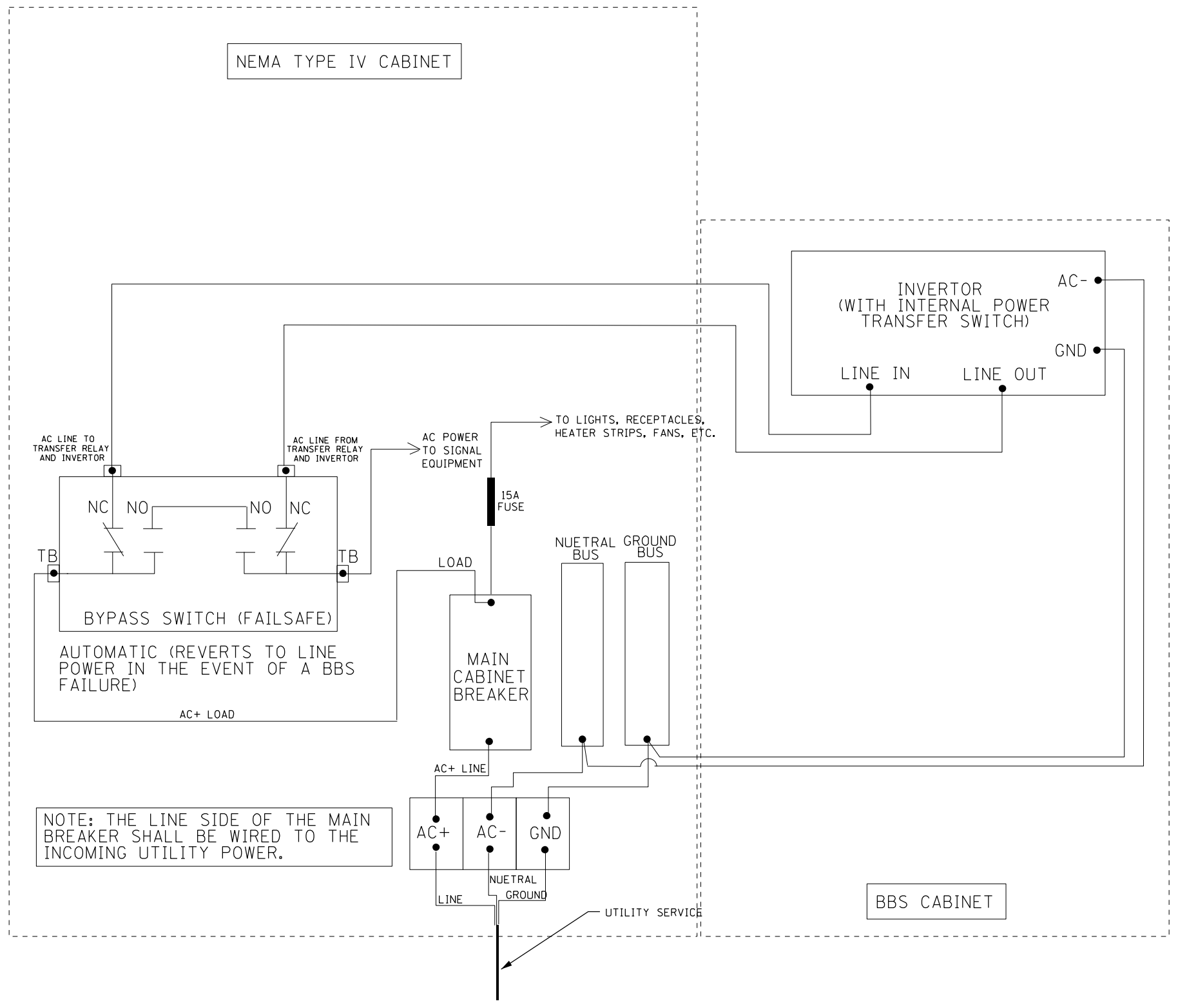
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

BATTERY BACKUP SYSTEM CABINET DETAIL

SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	D4 ELECTRICAL 2022	PEORIA TAZEWELL	13	11
CONTRACT NO. 68G75				
ILLINOIS FED. AID PROJECT				

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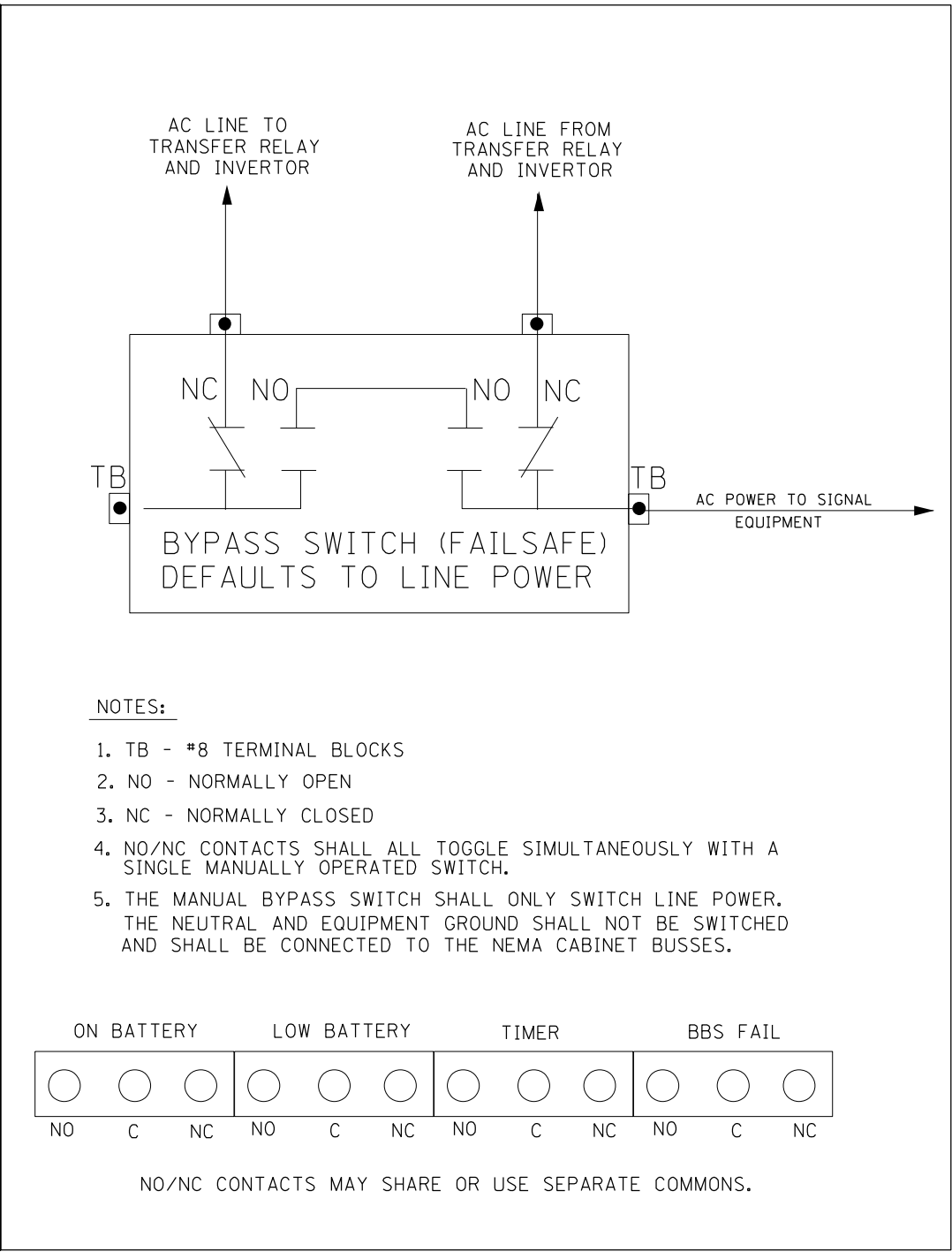
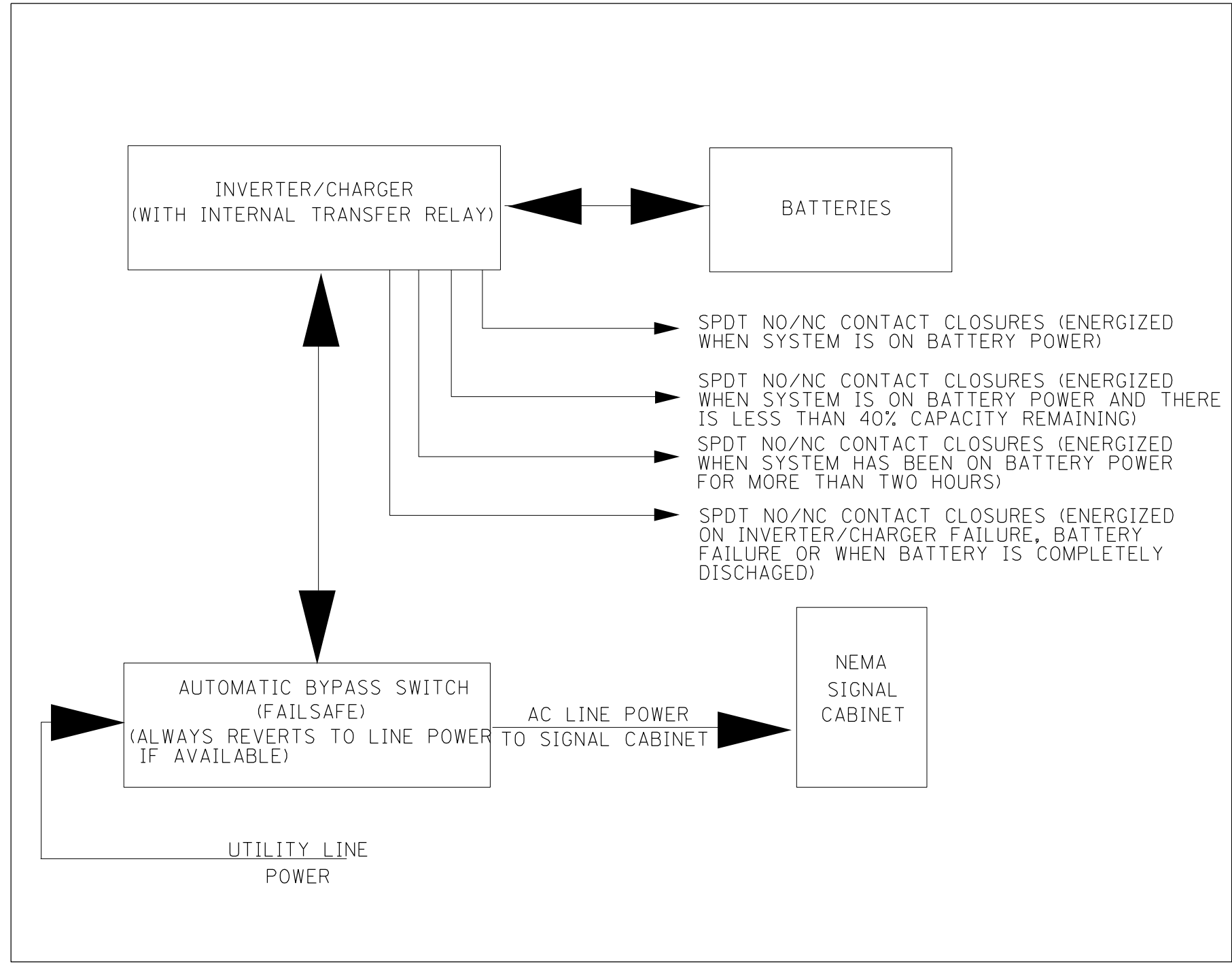
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

BATTERY BACKUP SYSTEM CABINET WIRING DIAGRAM

SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	D4 ELECTRICAL 2022	PEORIA TAZEWELL	13	12
CONTRACT NO. 68G75				
		ILLINOIS	FED. AID PROJECT	

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PLOT DATE = 10/29/2021	DATE -	REVISED -	

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

BATTERY BACKUP SYSTEM BLOCK AND BYPASS SWITCH DIAGRAMS			
SCALE:	SHEET	OF SHEETS	STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	D4 ELECTRICAL 2022	PEORIA	13	13
CONTRACT NO. 68G75				
ILLINOIS FED. AID PROJECT				

LUMINAIRE PERFORMANCE TABLE
LED REPACEMENT FOR 150W UNDERPASS HPS LUMINAIRE

Project
Date: 6/17/21 Contract Number: N/A Section Number: N/A County: VARIOUS
Marked Route Number: VARIOUS Municipality: VARIOUS

Roadway
Lane Width: 12 *of Lanes: 2 Median Width: N/A I.E.S Surface Classification: R3 0-Zero Value: 0.07

Structure
Mounting Height: 16 FT Arm Length: N/A Set Back: 20 FT Number of Luminares (Highmast & Sign Lighting Only): N/A

Luminaire
Description: LED, UNDERPASS, OUTPUT DESIGNATION E I.E.S. Lateral Distribution: TYPE III I.E.S. Vertical Distribution: MEDIUM
Total Light Loss Factor (LLF): 0.7 BUG Rating: U = 0 Shields: N/A Dimming Protocol: 0-10V

Layout
Spacing (to Nearest 5 Ft) Configuration (Opposite, Staggered, 1 Sided, or Median): 160 FT SINGLE SIDED

Performance
Average Illuminance, E_{AVE} (fc): 0.9 TO 1.4 Uniformity Ratio, E_{AVE}/E_{MIN}: LESS THAN OR EQUAL TO 3.0:1
Average Luminance, L_{AVE} (cd/m²): 0.6 TO 0.9 Uniformity Ratio, L_{AVE}/L_{MIN}: LESS THAN OR EQUAL TO 3.5:1 Uniformity Ratio, L_{MAX}/L_{MIN}: LESS THAN OR EQUAL TO 6.0:1 Veiling Luminance Ratio, L_v/L_{MIN}: LESS THAN OR EQUAL TO 0.3:1

Light Trespass
Distance to ROW (behind pole): N/A Max. Horizontal Illuminance at ROW, E: N/A Max. Vertical Illuminance at ROW, E: N/A

LUMINAIRE PERFORMANCE TABLE
LED REPACEMENT FOR 250W HORIZONTAL MOUNT HPS LUMINAIRE

Project
Date: 6/17/21 Contract Number: N/A Section Number: N/A County: VARIOUS
Marked Route Number: VARIOUS Municipality: VARIOUS

Roadway
Lane Width: 12 *of Lanes: 3 Median Width: N/A I.E.S Surface Classification: R3 0-Zero Value: 0.07

Structure
Mounting Height: 45 FT Arm Length: 15 FT Set Back: 15 FT Number of Luminares (Highmast & Sign Lighting Only): N/A

Luminaire
Description: LED, ROADWAY, OUTPUT DESIGNATION G I.E.S. Lateral Distribution: TYPE III I.E.S. Vertical Distribution: MEDIUM
Total Light Loss Factor (LLF): 0.7 BUG Rating: U = 0 Shields: N/A Dimming Protocol: 0-10V

Layout
Spacing (to Nearest 5 Ft) Configuration (Opposite, Staggered, 1 Sided, or Median): 160 FT SINGLE SIDED

Performance
Average Illuminance, E_{AVE} (fc): 0.9 TO 1.4 Uniformity Ratio, E_{AVE}/E_{MIN}: LESS THAN OR EQUAL TO 3.0:1
Average Luminance, L_{AVE} (cd/m²): 0.6 TO 0.9 Uniformity Ratio, L_{AVE}/L_{MIN}: LESS THAN OR EQUAL TO 3.5:1 Uniformity Ratio, L_{MAX}/L_{MIN}: LESS THAN OR EQUAL TO 6.0:1 Veiling Luminance Ratio, L_v/L_{MIN}: LESS THAN OR EQUAL TO 0.3:1

Light Trespass
Distance to ROW (behind pole): N/A Max. Horizontal Illuminance at ROW, E: N/A Max. Vertical Illuminance at ROW, E: N/A

LUMINAIRE PERFORMANCE TABLE
LED REPACEMENT FOR 400W HORIZONTAL MOUNT HPS LUMINAIRE

Project
Date: 6/17/21 Contract Number: N/A Section Number: N/A County: VARIOUS
Marked Route Number: VARIOUS Municipality: VARIOUS

Roadway
Lane Width: 12 *of Lanes: 4 Median Width: N/A I.E.S Surface Classification: R3 0-Zero Value: 0.07

Structure
Mounting Height: 45 FT Arm Length: 15 FT Set Back: 15 FT Number of Luminares (Highmast & Sign Lighting Only): N/A

Luminaire
Description: LED, ROADWAY, OUTPUT DESIGNATION H I.E.S. Lateral Distribution: TYPE III I.E.S. Vertical Distribution: MEDIUM
Total Light Loss Factor (LLF): 0.7 BUG Rating: U = 0 Shields: N/A Dimming Protocol: 0-10V

Layout
Spacing (to Nearest 5 Ft) Configuration (Opposite, Staggered, 1 Sided, or Median): 240 FT SINGLE SIDED

Performance
Average Illuminance, E_{AVE} (fc): 0.9 TO 1.4 Uniformity Ratio, E_{AVE}/E_{MIN}: LESS THAN OR EQUAL TO 3.0:1
Average Luminance, L_{AVE} (cd/m²): 0.6 TO 0.9 Uniformity Ratio, L_{AVE}/L_{MIN}: LESS THAN OR EQUAL TO 3.5:1 Uniformity Ratio, L_{MAX}/L_{MIN}: LESS THAN OR EQUAL TO 6.0:1 Veiling Luminance Ratio, L_v/L_{MIN}: LESS THAN OR EQUAL TO 0.3:1

Light Trespass
Distance to ROW (behind pole): N/A Max. Horizontal Illuminance at ROW, E: N/A Max. Vertical Illuminance at ROW, E: N/A

LUMINAIRE PERFORMANCE TABLE
LED REPACEMENT FOR 250W MULTI-MOUNT HPS LUMINAIRE

Project
Date: 6/17/21 Contract Number: N/A Section Number: N/A County: VARIOUS
Marked Route Number: VARIOUS Municipality: VARIOUS

Roadway
Lane Width: 12 *of Lanes: 3 Median Width: N/A I.E.S Surface Classification: R3 0-Zero Value: 0.07

Structure
Mounting Height: 45 FT Arm Length: 1 FT Set Back: 30 FT Number of Luminares (Highmast & Sign Lighting Only): N/A

Luminaire
Description: LED, ROADWAY, OUTPUT DESIGNATION H I.E.S. Lateral Distribution: TYPE III I.E.S. Vertical Distribution: MEDIUM
Total Light Loss Factor (LLF): 0.7 BUG Rating: U = 0 Shields: N/A Dimming Protocol: 0-10V

Layout
Spacing (to Nearest 5 Ft) Configuration (Opposite, Staggered, 1 Sided, or Median): 145 FT SINGLE SIDED

Performance
Average Illuminance, E_{AVE} (fc): 0.9 TO 1.4 Uniformity Ratio, E_{AVE}/E_{MIN}: LESS THAN OR EQUAL TO 3.0:1
Average Luminance, L_{AVE} (cd/m²): 0.6 TO 0.9 Uniformity Ratio, L_{AVE}/L_{MIN}: LESS THAN OR EQUAL TO 3.5:1 Uniformity Ratio, L_{MAX}/L_{MIN}: LESS THAN OR EQUAL TO 6.0:1 Veiling Luminance Ratio, L_v/L_{MIN}: LESS THAN OR EQUAL TO 0.3:1

Light Trespass
Distance to ROW (behind pole): N/A Max. Horizontal Illuminance at ROW, E: N/A Max. Vertical Illuminance at ROW, E: N/A

LUMINAIRE PERFORMANCE TABLE
LED REPACEMENT FOR 400W MULTI-MOUNT HPS LUMINAIRE

Project
Date: 6/17/21 Contract Number: N/A Section Number: N/A County: VARIOUS
Marked Route Number: VARIOUS Municipality: VARIOUS

Roadway
Lane Width: 12 *of Lanes: 3 Median Width: N/A I.E.S Surface Classification: R3 0-Zero Value: 0.07

Structure
Mounting Height: 45 FT Arm Length: 1 FT Set Back: 30 FT Number of Luminares (Highmast & Sign Lighting Only): N/A

Luminaire
Description: LED, ROADWAY, OUTPUT DESIGNATION H I.E.S. Lateral Distribution: TYPE III I.E.S. Vertical Distribution: MEDIUM
Total Light Loss Factor (LLF): 0.7 BUG Rating: U = 0 Shields: N/A Dimming Protocol: 0-10V

Layout
Spacing (to Nearest 5 Ft) Configuration (Opposite, Staggered, 1 Sided, or Median): 145 FT SINGLE SIDED

Performance
Average Illuminance, E_{AVE} (fc): 0.9 TO 1.4 Uniformity Ratio, E_{AVE}/E_{MIN}: LESS THAN OR EQUAL TO 3.0:1
Average Luminance, L_{AVE} (cd/m²): 0.6 TO 0.9 Uniformity Ratio, L_{AVE}/L_{MIN}: LESS THAN OR EQUAL TO 3.5:1 Uniformity Ratio, L_{MAX}/L_{MIN}: LESS THAN OR EQUAL TO 6.0:1 Veiling Luminance Ratio, L_v/L_{MIN}: LESS THAN OR EQUAL TO 0.3:1

Light Trespass
Distance to ROW (behind pole): N/A Max. Horizontal Illuminance at ROW, E: N/A Max. Vertical Illuminance at ROW, E: N/A

Notes

- Replacement tables shall only be used for luminaire replacement in individual lighting units and for smaller projects such as isolated intersections.
- Replacement tables only apply to one-for-one replacement, they do not apply where lighting units are being moved or added.
- 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 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.
- All LED luminaires shall be mounted horizontally. This includes luminaires that replace multi-mount luminaires that are mounted at a 45 degree angle.
- Performance requirements shall be the minimum acceptable standards of photometric performance for the luminaire, based on the given conditions above.
- Calculations shall be performed in one direction only.
- Compliance with performance criteria shall be held to one significant digit.
- Initial lumens of the proposed luminaire may be higher or lower than the values specified in the table given in Article 1067.06 of the BDE Special Provision for Luminaire, LED.

MODEL: Default
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	DATE - _____	REVISED - _____

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

LUMINAIRE REPLACEMENT TABLES
REPLACE EXISTING HPS LIGHTING

SCALE: NTS _____ SHEET 1 OF 1 SHEETS STA. _____ TO STA. _____

F.A. RTE. _____	SECTION _____	COUNTY _____	TOTAL SHEETS _____	SHEET NO. _____
CONTRACT NO. _____				
ILLINOIS FED. AID PROJECT _____				