

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

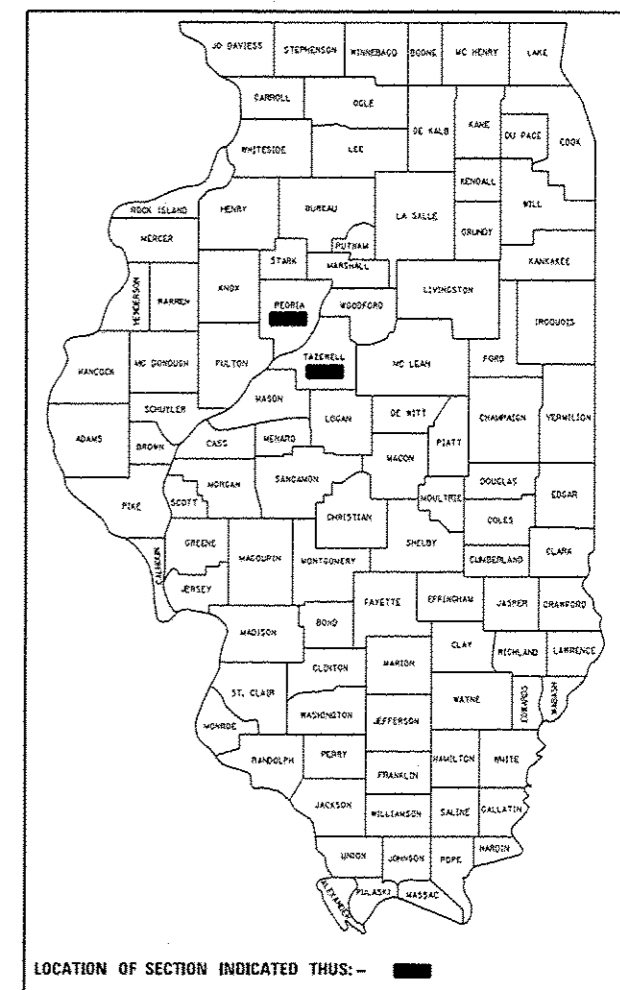
**PROPOSED
HIGHWAY PLANS**

FAI 74 (I-74)
FAP 317 (US 150)
SECTION 72[(7,9)I-4;8-I-6];10-I
PEORIA-TAZEWELL COUNTIES

C-94-087-14

FAI/FAP RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74/317	72[(7,9)I-4;8-I-6];10-I	PEORIA-TAZEWELL	11	1
		ILLINOIS	CONTRACT NO. 68B88	

D-94-030-14



1. COVER SHEET
2. CONSTRUCTION NOTES
3. SUMMARY OF QUANTITIES
- 4.-5. I-74 & STERLING AVENUE LOCATION DETAILS
- 6.-7. I-74 & US 150 (WAR DR.) LOCATION DETAILS
8. I-74 & RIVERFRONT DR. LOCATION DETAIL
9. TYPICAL FOUNDATION REMOVAL AND REPLACEMENT DETAIL
10. LIGHT TOWER FOUNDATION DETAIL
11. LIGHT TOWER ANCHOR BOLT DETAIL

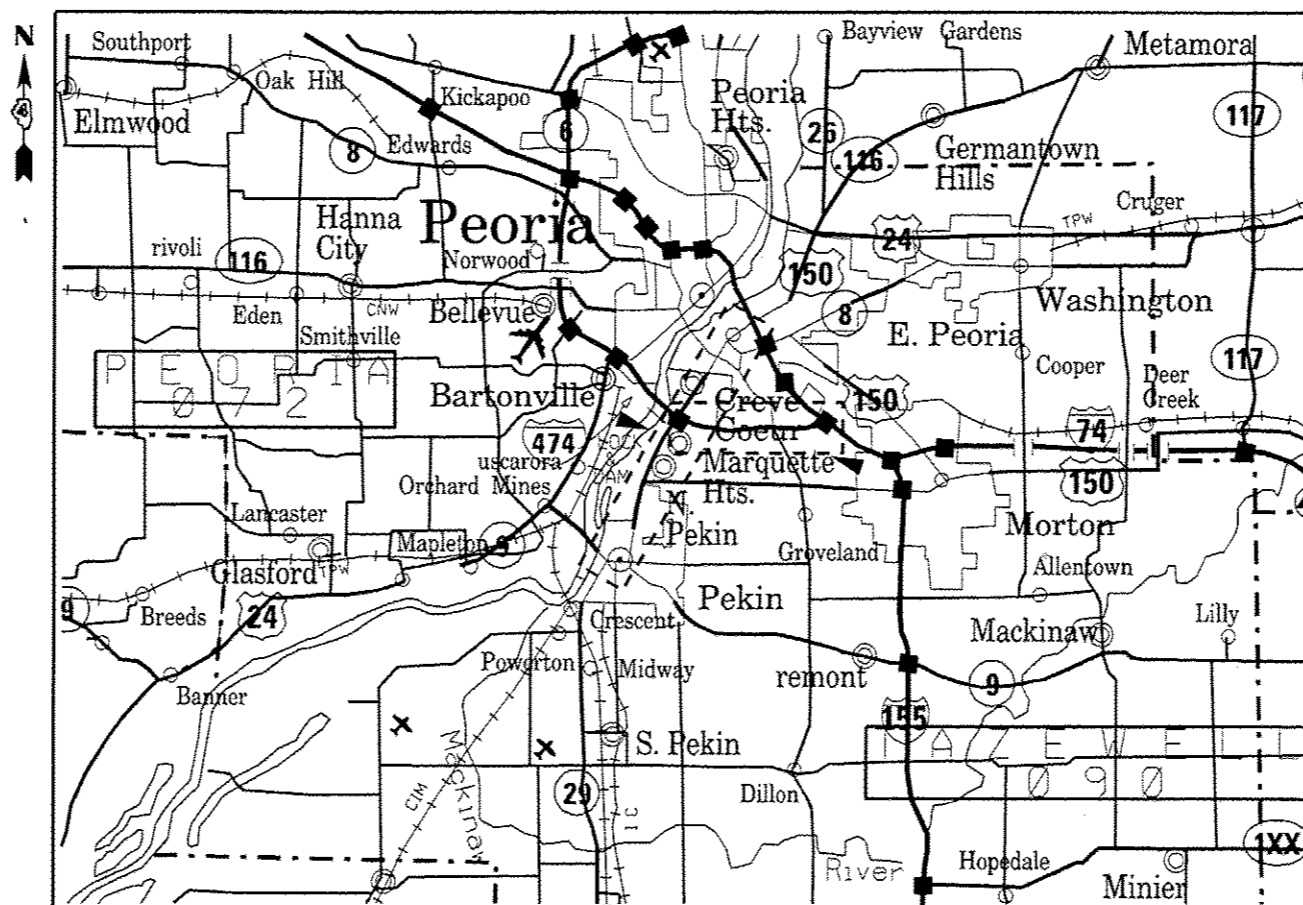
HIGHWAY STANDARDS

REFER TO SHEET NUMBER 2 FOR
LIST OF HIGHWAY STANDARDS

PROJECT DESCRIPTION

REPAIR AND REPLACEMENT OF HIGH MAST LIGHT
TOWER FOUNDATIONS, INSTALLATION OF ELECTRICAL
CABLING AND JUNCTION BOXES, AND INSTALLATION
OF EXISTING LIGHT TOWERS IN PEORIA AND
TAZEWELL COUNTIES

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



STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED April 11, 2014
Henrik A. Stenroos
DEPUTY DIRECTOR OF HIGHWAYS, REGIONAL ENGINEER

May 9, 2014
John D. Baranzoli, PE, P.E.
ENGINEER OF DESIGN AND ENVIRONMENT

May 9, 2014
Omer Osman, PE, P.E.
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

PROJECT ENGINEER: ERIC HOWALD (309) 671-4481
PROJECT MANAGER: RANDY LANINGA (309) 671-4477
CATALOG NO. 35121-00D
CONTRACT NO. 68B88

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OF THE STATE OF ILLINOIS**

CONSTRUCTION NOTES

1. ANY MAINTENANCE OF EXISTING LIGHTING WILL BE CONSIDERED EXTRA WORK IN ACCORDANCE WITH ARTICLE 109.04 OF THE STANDARD SPECIFICATIONS.
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. ELECTRICAL CABLE WILL BE MEASURED FOR PAYMENT IN ACCORDANCE WITH ARTICLE 873.04.
7. ALL SURPLUS MATERIALS SHALL BE DISPOSED OF IN ACCORDANCE WITH ARTICLE 202.03 OF THE STANDARD SPECIFICATIONS.
8. THE EXISTING LIGHT POLES HAVE BEEN REMOVED (AS ONE PIECE) AND ARE STORED ON SITE AT EACH LOCATION. THE CONTRACTOR SHALL PERFORM ALL WORK OPERATIONS IN A MANNER TO PREVENT DAMAGE TO THE LIGHT TOWERS AND LUMINAIRE RINGS.
9. THE CONTRACTOR SHALL FURNISH AND INSTALL TEMPORARY WIRING AT EACH LOCATION AS REQUIRED TO MAINTAIN OPERATION OF THE LIGHTING CIRCUIT DURING CONSTRUCTION.

TRAFFIC CONTROL NOTES

1. TRAFFIC SHALL BE MAINTAINED ON THE ASSOCIATED ROADWAYS AT ALL TIMES DURING CONSTRUCTION.
2. AT THE US 150 (WAR MEMORIAL DRIVE) LOCATION, THE CONTRACTOR SHALL SCHEDULE THE HIGH MAST TOWER INSTALLATION DURING A SATURDAY MORNING BETWEEN THE HOURS OF 6AM TO 12PM.
3. AT ALL OTHER LOCATIONS, THE CONTRACTOR SHALL SCHEDULE THE HIGH MAST TOWER INSTALLATIONS ON MONDAY THROUGH FRIDAY BETWEEN THE HOURS OF 8:30AM AND 3:30PM. IN THE EVENT THAT THE CONTRACTOR ELECTS TO SCHEDULE INSTALLATION OF THESE LIGHT TOWERS DURING NON-PEAK HOURS OR WEEKENDS, THE CONTRACTOR SHALL INCLUDE ALL COSTS ASSOCIATED WITH WORKING DURING THESE TIME PERIODS IN THE BID PRICE FOR "LIGHT TOWER, INSTALL ONLY". THERE WILL BE NO ADDITIONAL COMPENSATION FOR SHIFT DIFFERENTIALS AND PREMIUM TIME HOURS.
4. THE CONTRACTOR SHALL NOTIFY THE ENGINEER FORTY-EIGHT (48) HOURS BEFORE THE TIME OF A PLANNED CLOSURE.

HIGHWAY STANDARDS

701001-02
 701006-05
 701101-04
 701106-02
 701301-04
 701400-07
 701406-08
 701411-08
 701428
 701456-03
 701601-09
 701901-03
 701451-02

COMMITMENTS: THERE ARE NO
 COMMITMENTS MADE IN CONJUNCTION
 WITH THIS PROJECT.

LEGEND

- EX. HIGH MAST LIGHT TOWER
- EX. LIGHT POLE
- ◀▶ EX. LIGHTING CONTROLLER

LIGHT TOWER DESIGNATION

6 EFG
 L-04

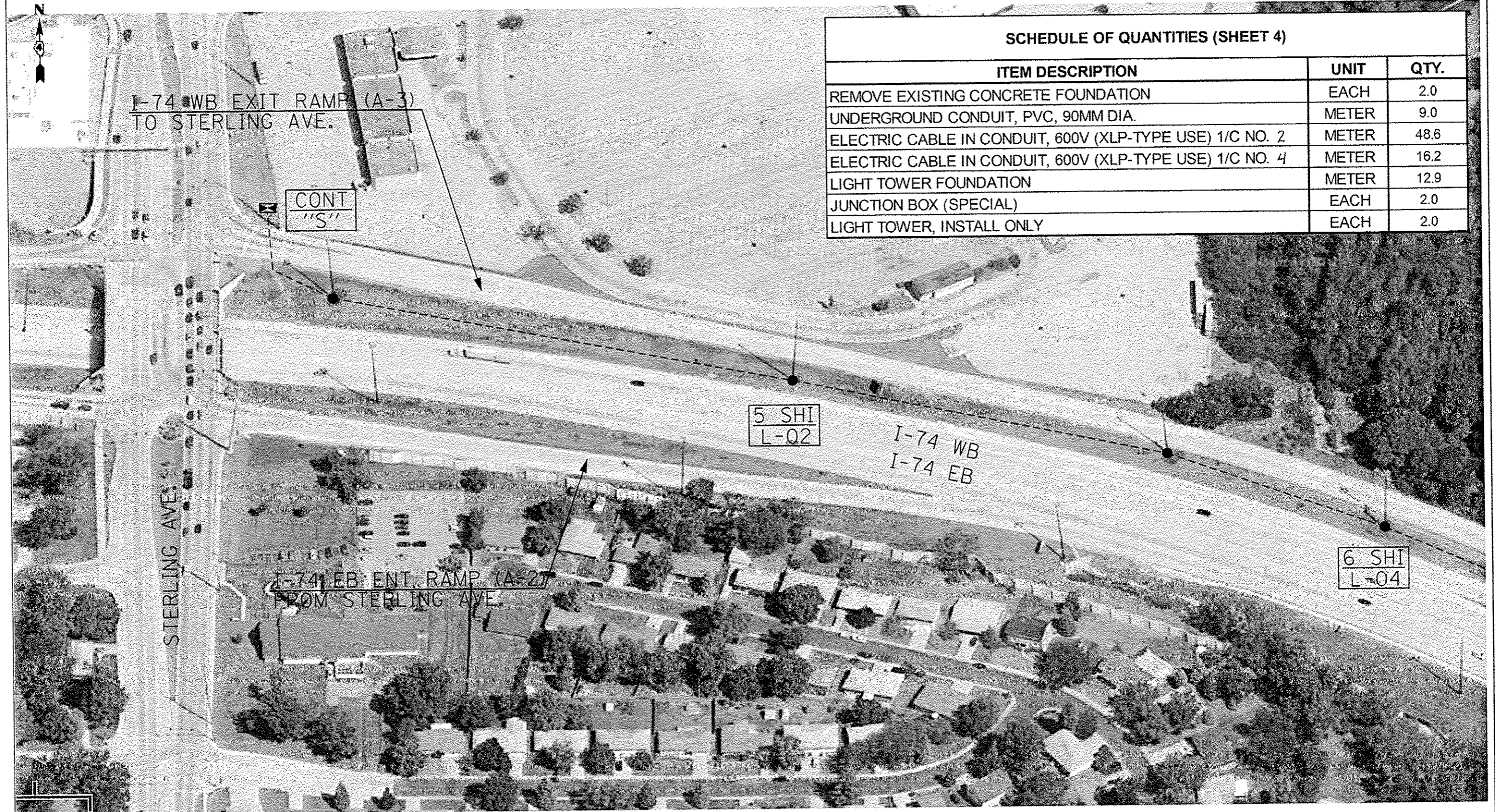
- 6 - DENOTES NUMBER OF LUMINAIRES ON TOWER
- E - DENOTES LIGHTING CONTROLLER
- FG - DENOTES LIGHTING CIRCUIT
- L-04 - DENOTES LIGHT ON CIRCUIT DIAGRAM

FILE NAME * 68888 - High Mast Lighting Repair (Final) *19-14).dgn	USER NAME * kwhbr	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	COMMITMENTS AND CONSTRUCTION NOTES	FAI/FAP RTE.	SECTION	COUNTY	TOTAL SHEET SHEETS NO.	
PLOT SCALE * 1/4" = 1'-0"	CHECKED -	REVISED -	74/150			72(17.91)-4-8-1-6-10-1	PEORIA-TAZEWELL	11	2	
PLOT DATE * 4/18/2014	DATE -	REVISED -	CONTRACT NO. 68888			ILLINOIS FED. AID PROJECT				
SCALE: _____		STA. _____ TO STA. _____								

SUMMARY OF QUANTITIES

SUMMARY OF QUANTITIES				PEORIA COUNTY	TAZEWELL COUNTY
				CONST. TYPE CODE 0021 100% STATE CONTRACT MAINTENANCE URBAN	CONST. TYPE CODE 0021 100% STATE CONTRACT MAINTENANCE URBAN
CODE NUMBER	ITEM DESCRIPTION	UNIT	TOTAL QTY.		
			URBAN		
67100100	MOBILIZATION	L SUM	1.0	0.75	0.25
89502385	REMOVE EXISTING CONCRETE FOUNDATION	EACH	4.0	3.0	1.0
M8101374	UNDERGROUND CONDUIT, PVC, 90MM DIA.	METER	18.0	13.5	4.5
M8170050	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 4	METER	32.4	24.3	8.1
M8170060	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 2	METER	97.2	72.9	24.3
M8370100	LIGHT TOWER FOUNDATION	METER	32.0	22.6	9.4
X7010216	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	L SUM	1.0	0.75	0.25
X8130110	JUNCTION BOX (SPECIAL)	EACH	4.0	3.0	1.0
X8350100	LIGHT TOWER, INSTALL ONLY	EACH	4.0	3.0	1.0

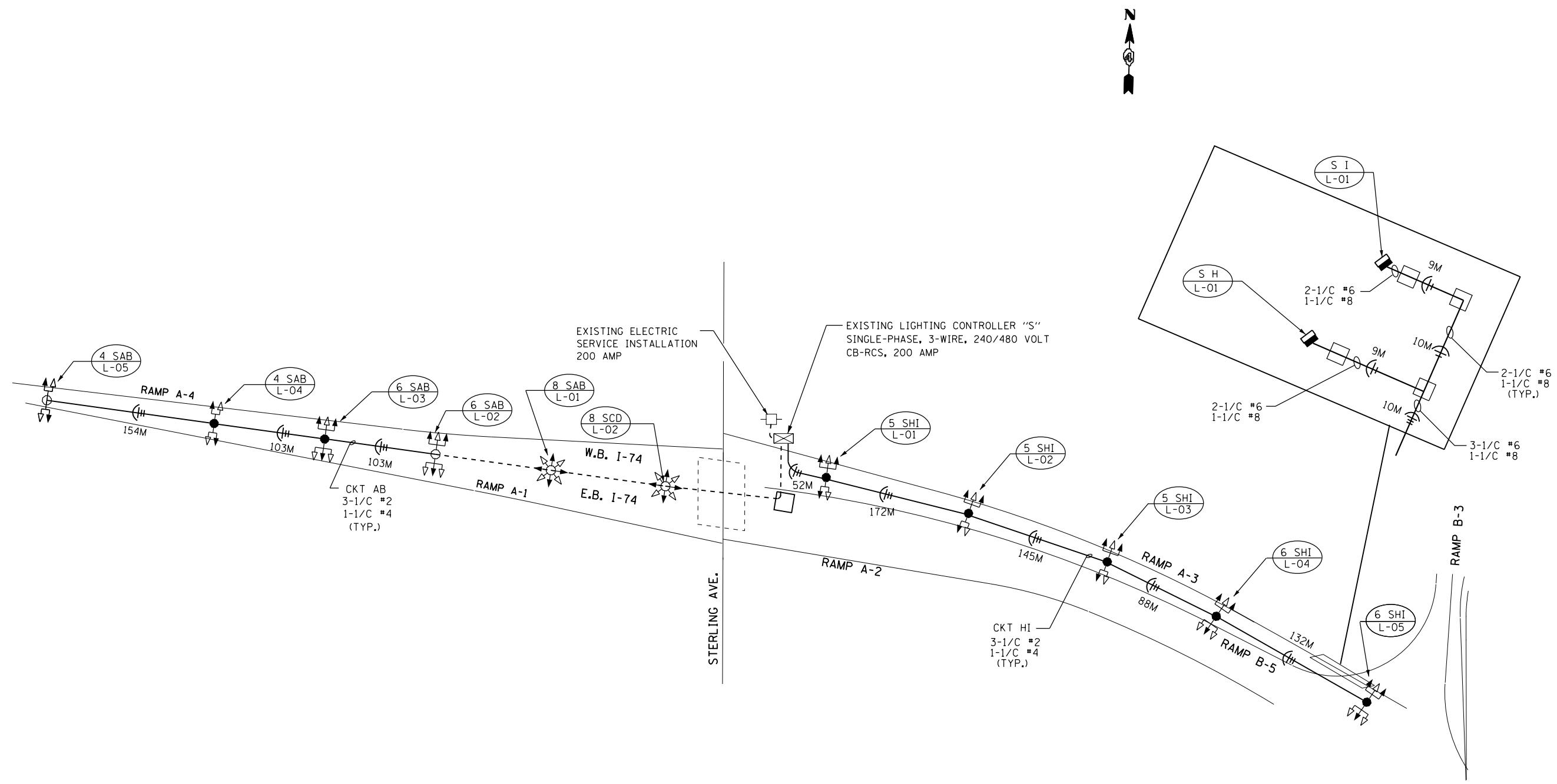
9



SCHEDULE OF QUANTITIES (SHEET 4)		
ITEM DESCRIPTION	UNIT	QTY.
REMOVE EXISTING CONCRETE FOUNDATION	EACH	2.0
UNDERGROUND CONDUIT, PVC, 90MM DIA.	METER	9.0
ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 2	METER	48.6
ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 4	METER	16.2
LIGHT TOWER FOUNDATION	METER	12.9
JUNCTION BOX (SPECIAL)	EACH	2.0
LIGHT TOWER, INSTALL ONLY	EACH	2.0

REVISED

FILE NAME *	USER NAME = kwrshr	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	LIGHT TOWER FOUNDATION REPLACEMENT I-74 & STERLING AVENUE WB EXIT RAMP A-3	FAL/FAP RTE.	SECTION	COUNTY	TOTAL SHEET SHEETS NO.	
68888 - High Mast Lighting Repair (Final) 4-19-141.dgn		DRAWN -	REVISED -			74/150	72(17,911-418-1-6)10-1	PEORIA-TAZEWELL	11	4
PLOT SCALE = 1/4" = 1' / in.		CHECKED -	REVISED -			CONTRACT NO. 68B88				
PLOT DATE = 4/18/2014		DATE -	REVISED -			ILLINOIS FED. AID PROJECT				



FOR INFORMATION ONLY

FILE NAME =	USER NAME = keathbr	DESIGNED -	REVISED -
68B88 - High Mast Lighting Repair (Final	1-19-14).dgn	DRAWN -	REVISED -
	PLOT SCALE = 164.7568' / in.	CHECKED -	REVISED -
	PLOT DATE = 4/18/2014	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING WIRING DIAGRAM
I-74 & STERLING AVENUE

SCALE: _____ STA. _____ TO STA. _____

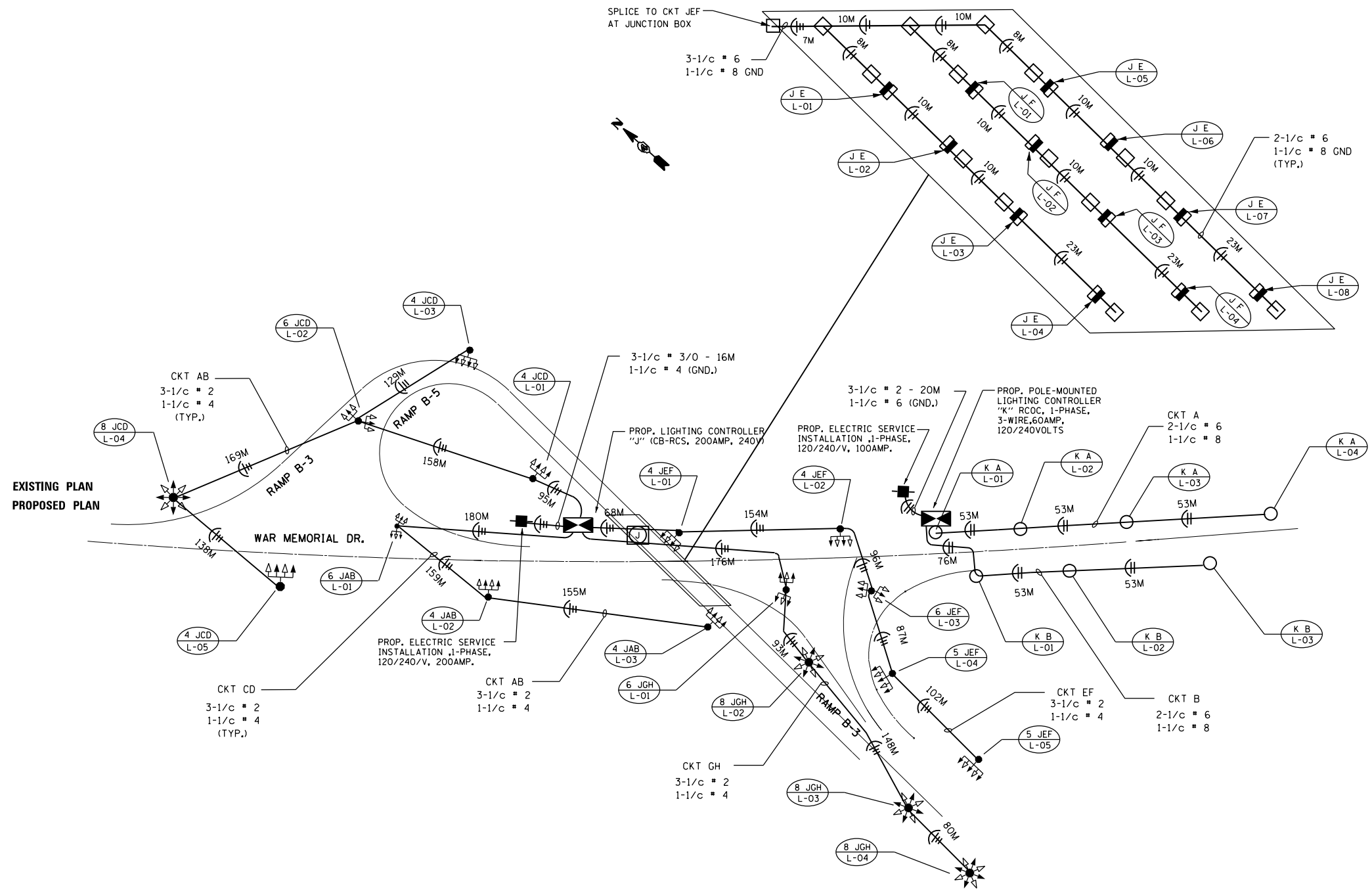
FAI/FAP RFE.	SECTION	COUNTY	TOTAL SHEET SHEETS	NO.
74/150	72[(7,9)I-4&I-6]10-I	PEORIA-TAZEWELL	11	5
			CONTRACT NO. 68B88	
ILLINOIS FED. AID PROJECT				



SCHEDULE OF QUANTITIES (SHEET 6)		
ITEM DESCRIPTION	UNIT	QTY.
REMOVE EXISTING CONCRETE FOUNDATION	EACH	1.0
UNDERGROUND CONDUIT, PVC, 90MM DIA.	METER	4.5
ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 2	METER	24.3
ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 4	METER	8.1
LIGHT TOWER FOUNDATION	METER	9.7
JUNCTION BOX (SPECIAL)	EACH	1.0
LIGHT TOWER, INSTALL ONLY	EACH	1.0

REVISED

FILE NAME * 68888 - High Mast Lighting Repair (Final)	USER NAME * kashbr 4-19-14) .dgn	DESIGNED - _____ DRAWN - _____	REVISED - _____ REVISED - _____	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	WIRING DIAGRAM I-74 & STERLING AVENUE	FBI/FAP RTE. 74/150	SECTION 72(7.9)1-4;8-1-6;10-1	COUNTY PEORIA-TAZEWELL	TOTAL SHEET SHEETS NO. 11 6	
	PLOT SCALE * 1/4" = 1' / 1/8" = 1'	CHECKED - _____	REVISED - _____			SCALE: _____	STA. _____ TO STA. _____	CONTRACT NO. 68888		
	PLOT DATE * 4/18/2014	DATE - _____	REVISED - _____			ILLINOIS FED. AID PROJECT				

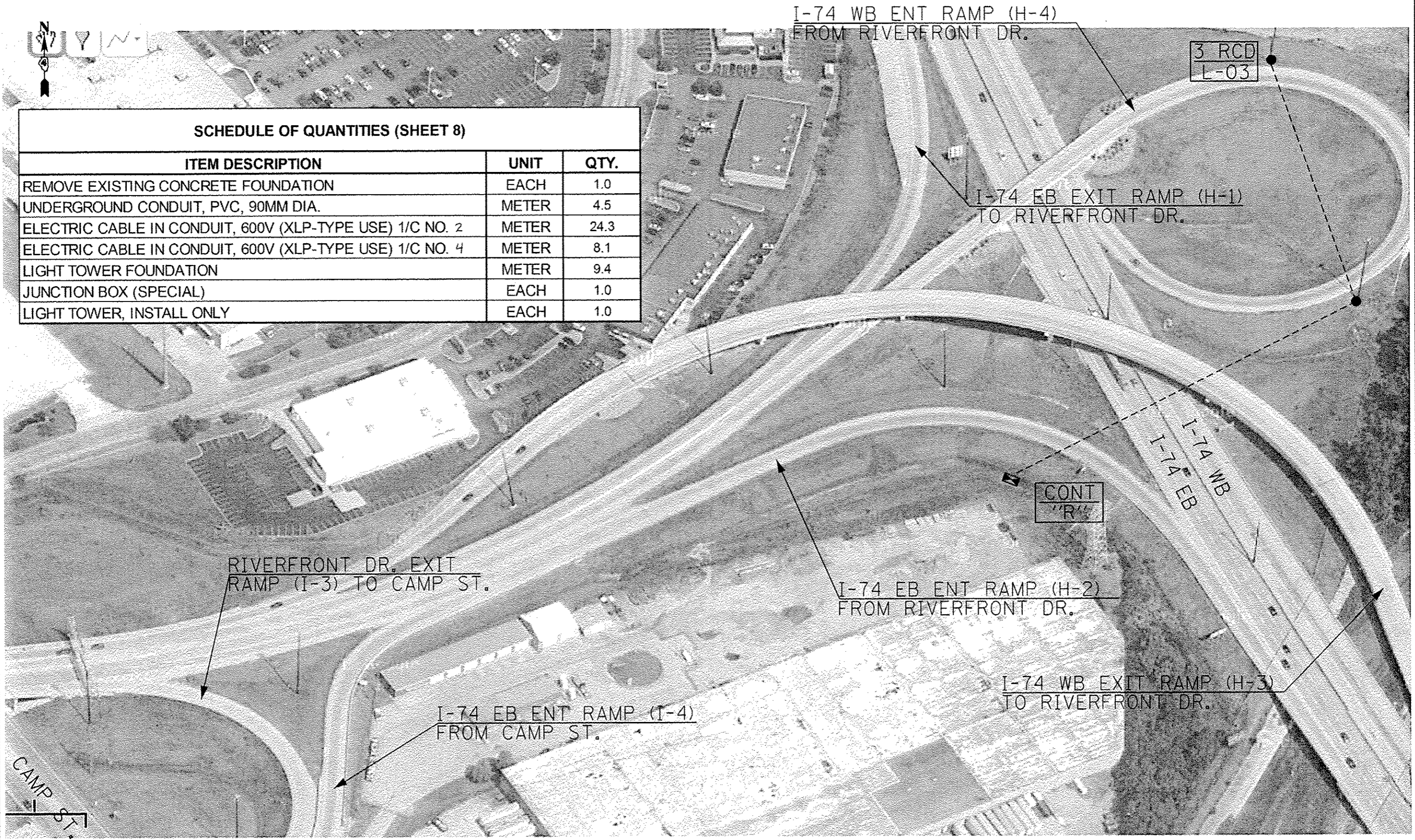


FOR INFORMATION ONLY

FILE NAME = 68B88 - High Mast Lighting Repair (Final)	USER NAME = aubreys	DESIGNED - _____	REVISED - _____	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EXISTING WIRING DIAGRAM I-74 & US 150 (WAR MEMORIAL)	FAI/FAP RTE. 74/150	SECTION 72(17,9)1-4;8-1-6;10-1	COUNTY PEORIA-TAZEWELL	TOTAL SHEET SHEETS NO. 11 7	
	PLOT SCALE = 1/4" = 1'-0"	DRAWN - _____	REVISED - _____			SCALE: _____	STA. _____ TO STA. _____	CONTRACT NO. 68B88		
	PLOT DATE = 4/18/2014	CHECKED - _____	REVISED - _____			ILLINOIS FED. AID PROJECT				
		DATE - _____	REVISED - _____							

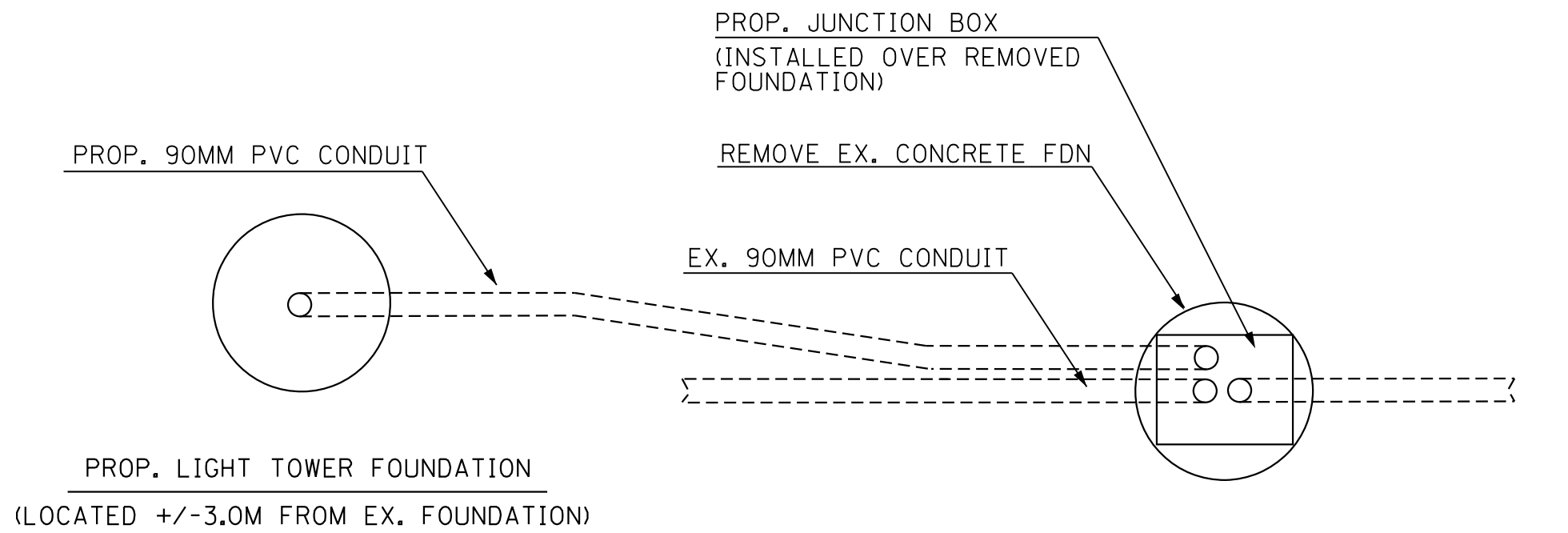


SCHEDULE OF QUANTITIES (SHEET 8)		
ITEM DESCRIPTION	UNIT	QTY.
REMOVE EXISTING CONCRETE FOUNDATION	EACH	1.0
UNDERGROUND CONDUIT, PVC, 90MM DIA.	METER	4.5
ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 2	METER	24.3
ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 4	METER	8.1
LIGHT TOWER FOUNDATION	METER	9.4
JUNCTION BOX (SPECIAL)	EACH	1.0
LIGHT TOWER, INSTALL ONLY	EACH	1.0



REVISED

FILE NAME = 68888 - High Mast Lighting Repair (Final)	USER NAME = aubrayg	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	LIGHT TOWER FOUNDATION REPLACEMENT I-74 WB ENTRANCE RAMP H-4 (FROM RIVERFRONT DRIVE)	FAI/FAP RTE. 74/150	SECTION T2(17,911-4;8-1-6)10-1	COUNTY PEORIA-TAZEWELL	TOTAL SHEET SHEETS NO. 11 8	
	PLOT SCALE = 1/4" = 100'	DRAWN -	REVISED -			SCALE: _____	STA. _____ TO STA. _____	ILLINOIS FED. AID PROJECT		
	PLOT DATE = 4/18/2014	CHECKED -	REVISED -							
		DATE -	REVISED -							



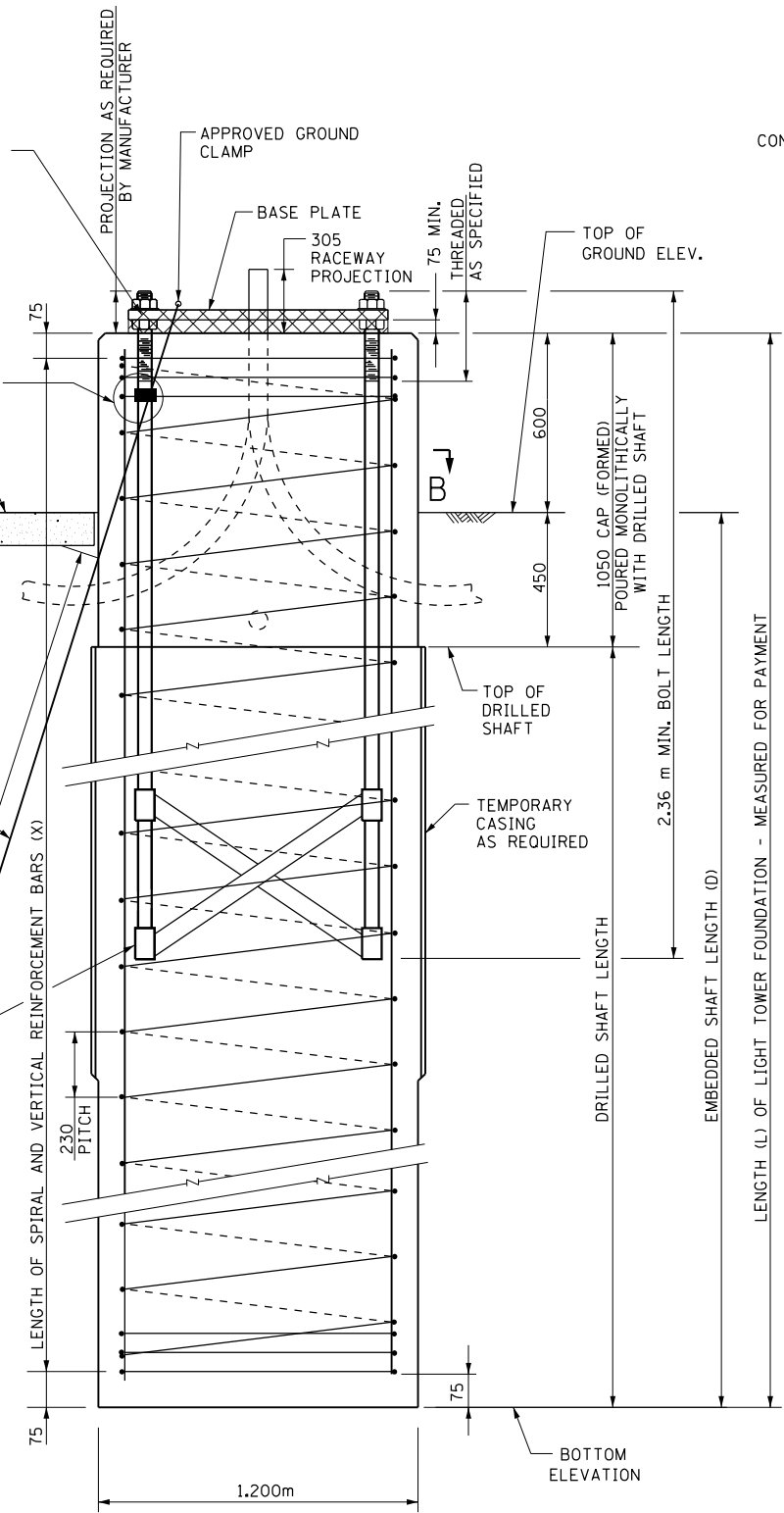
- 3 FT. PARTIAL REMOVAL DEPTH
- ALL CONDUITS TO BE ORIENTED AT 90 DEGREES UP INSIDE JUNCTION BOX
- SPLICE PROPOSED WIRING INTO EX. LIGHTING CIRCUIT INSIDE JUNCTION BOX

STAINLESS STEEL STANDARD GRADE WIRE CLOTH, 125 WIDE, 6 MAXIMUM OPENING WITH A MINIMUM WIRE DIAMETER OF AWG NO. 18, WITH A 50 LAP. SECURE TO BASE PLATE AFTER ERECTION WITH 19 WIDE STAINLESS STEEL BANDING

MECHANICAL CONNECTION TO ANCHOR RODS & REINFORCING STEEL (TYP.)

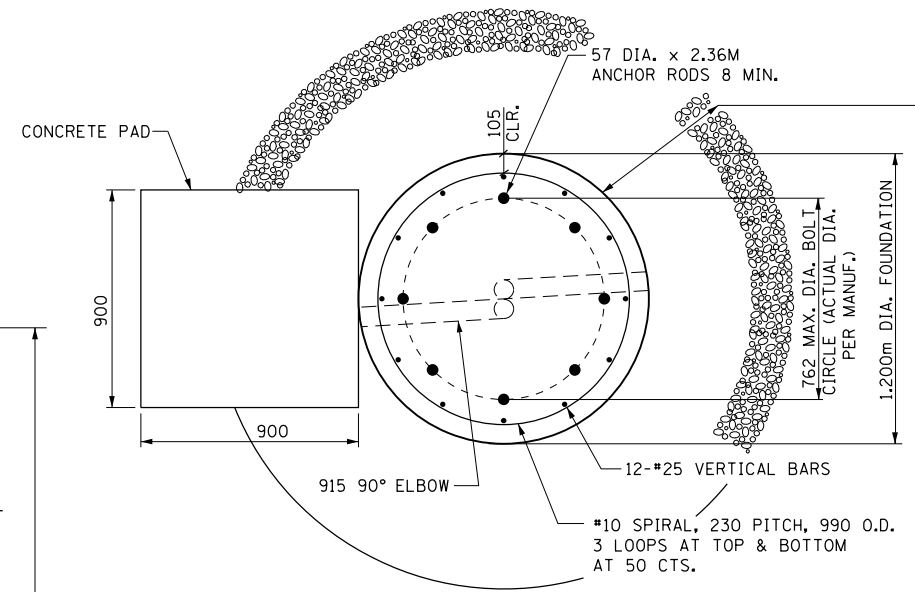
16mm GROUND ROD (TYP.)
3 GROUND RODS PER FOUNDATION

SEE ANCHOR BOLT CAGE WELDMENT DETAIL SHEET 52



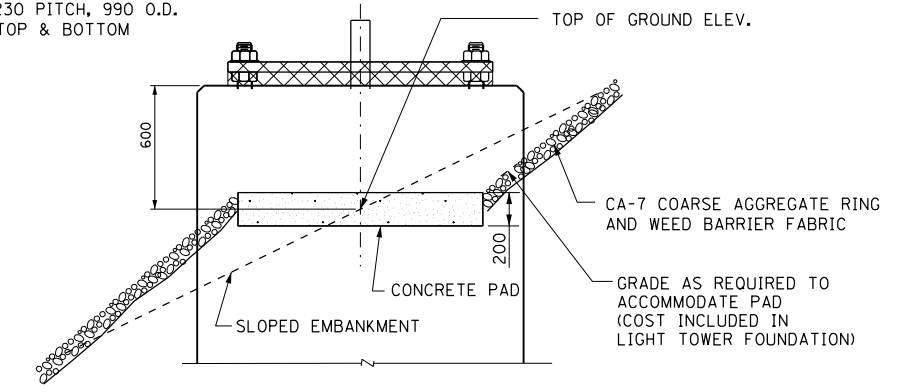
NOTE: NUTS SHALL BE TIGHTENED AGAINST THE BASE PLATE WITH 271 Nm MINIMUM TORQUE.

FOUNDATION ELEVATION



SECTION B-B

600 WIDE X 100 DEEP CA-7 COARSE AGGREGATE RING AND WEED BARRIER FABRIC. COST INCLUDED IN LIGHT TOWER FOUNDATION.



FOUNDATION ELEVATION SLOPED CONDITION

HIGH MAST TOWER LOCATION				THEORETICAL TOP OF GROUND ELEV.	EMBEDDED SHAFT LENGTH (D) (METERS)	TOWER FDN. LENGTH (L) (METERS)	BORING LOG	LENGTH (X) OF REINF. (METERS)
POLE ID	STATION	OFFSET	BASE LINE					
4 JEF L-02	40+266.0	23L	WAR MEM.	194.247	4.9	5.5	HMSB 120	5.350
5 SHI L-02	143+067.5	27L	I-74 E.B.	194.930	6.8	7.4	HMSB 7	7.250
6 SHI L-04	143+290.0	32L	I-74 E.B.	195.776	9.1	9.7	RWA 3N-6	9.550
3 RCD L-03	10+540.82	12.5L	RAMP H4	147.500	8.8	9.4	HMS8-73	9.250

NOTES:

THE COST OF THE GROUND RODS AND GROUND ROD CLAMPS SHALL BE INCLUDED IN THE LIGHT TOWER FOUNDATION PAY ITEM. THREE GROUND RODS ARE REQUIRED AT EACH LOCATION.

FILE NAME = 68B88 - High Mast Lighting Repair (Final)	USER NAME = aubreys	DESIGNED -	REVISED -
	1-19-14.dgn	DRAWN -	REVISED -
	PLOT SCALE = 164.7568' / in.	CHECKED -	REVISED -
	PLOT DATE = 4/18/2014	DATE -	REVISED -

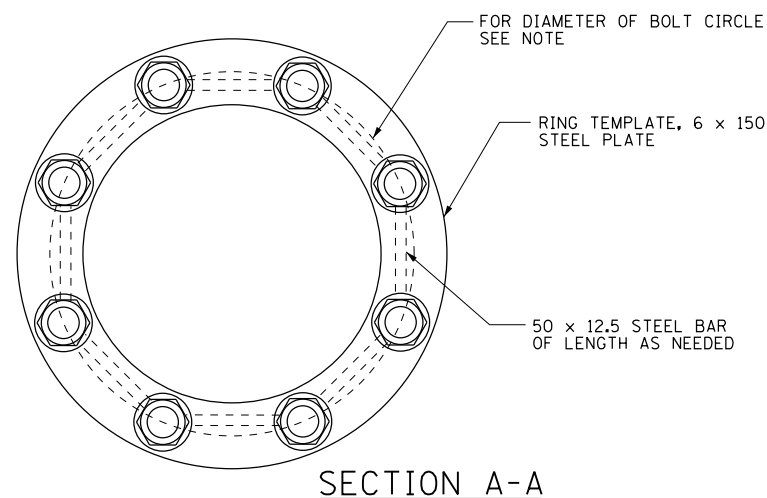
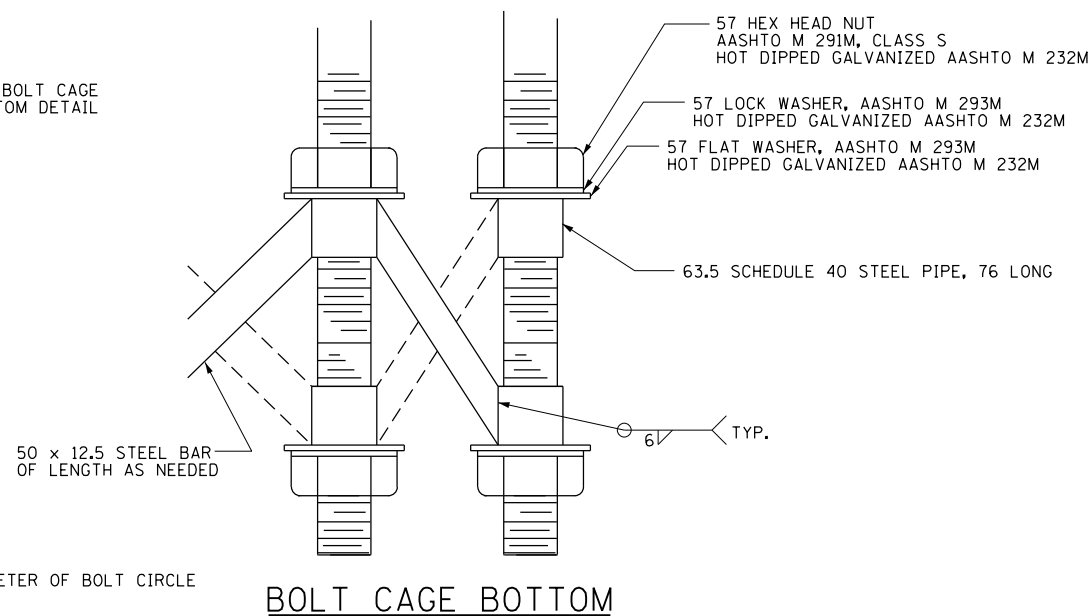
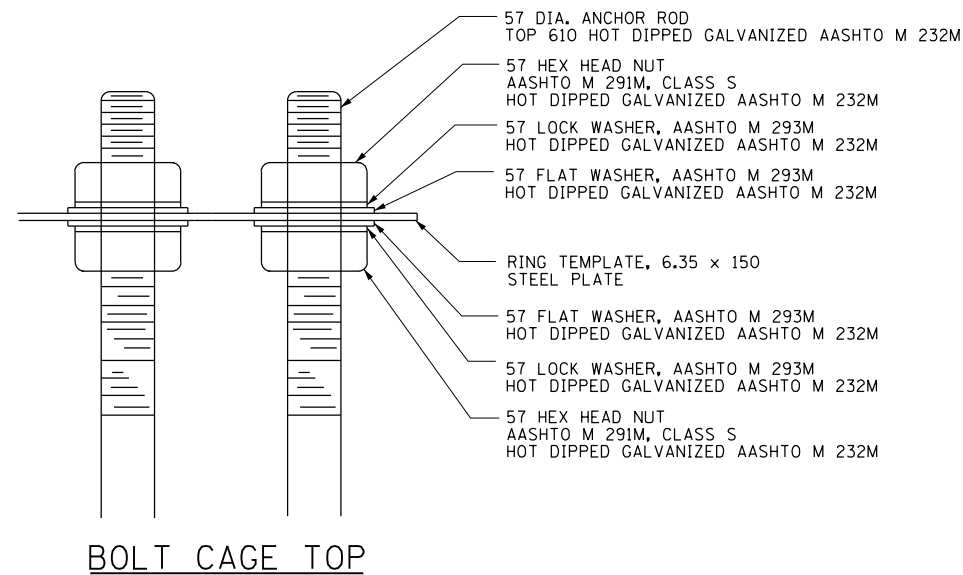
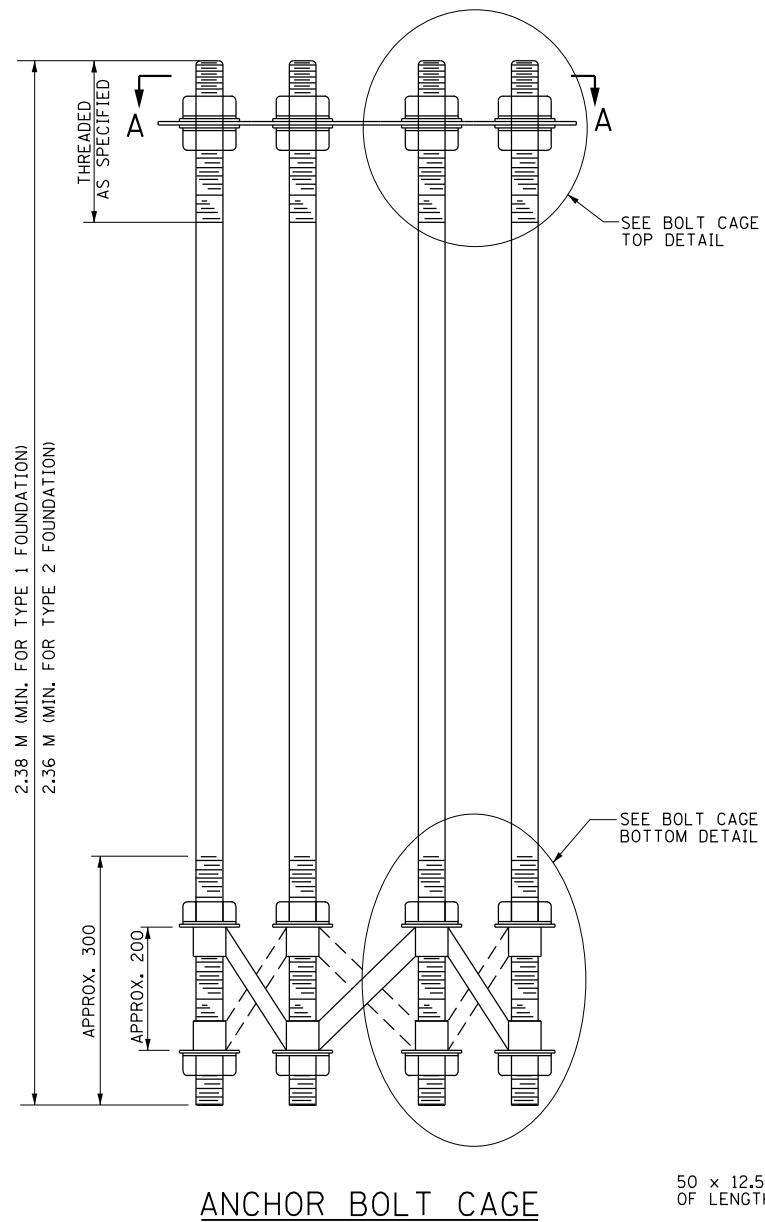
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**LIGHT TOWER FOUNDATION DETAIL
(TYPE 2 IN-FIELD)**

SCALE: _____ STA. _____ TO STA. _____

FBI/FAP RTE.	SECTION	COUNTY	TOTAL SHEET NO.
74/150	72((7,9)1-4)8-1-6)10-1	PEORIA-TAZEWell	11 10
CONTRACT NO. 68B88			
ILLINOIS FED. AID PROJECT			

FOUNDATION NOTES



NOTE: CONTRACTOR SHALL VERIFY AND FULLY COORDINATE THE PROPOSED FOUNDATION'S ANCHOR BOLT SIZE, LENGTH, AND CIRCLE DIAMETER WITH THE HIGH MAST TOWER MANUFACTURER'S ANCHOR BOLT CIRCLE.

FILE NAME = 68B88 - High Mast Lighting Repair (Final)	USER NAME = aubreys	DESIGNED -	REVISED -
1-19-14.dgn		DRAWN -	REVISED -
PLOT SCALE = 1/4" = 1'-0"		CHECKED -	REVISED -
PLOT DATE = 4/18/2014		DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

LIGHT TOWER FOUNDATION NOTES
AND ANCHOR BOLT DETAILS

SCALE: _____ STA. _____ TO STA. _____

F&I/F&P RTE.	SECTION	COUNTY	TOTAL SHEET SHEETS	NO.
74/150	72(17,91)-48-I-6	PEORIA-TAZEWELL	11	11
ILLINOIS FED. AID PROJECT			CONTRACT NO. 68B88	