04-27-12 LETTING ITEM 046

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	1
FED. ROAD DIST. NO.	ILLINOIS	CONTRACT NO. 78056		

D-99-027-08

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

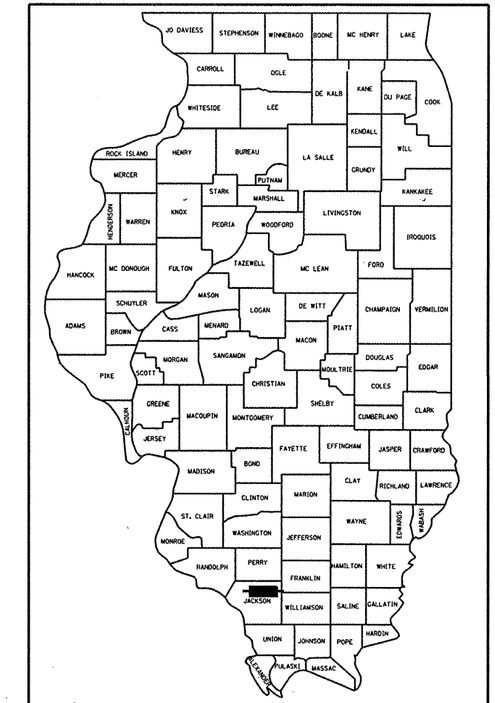
PROPOSED
HIGHWAY PLANS

FAP ROUTE 331 (IL 13)
SECTION (12-1)B-1
PROJECT ACNHF-0331(060)
JACKSON COUNTY

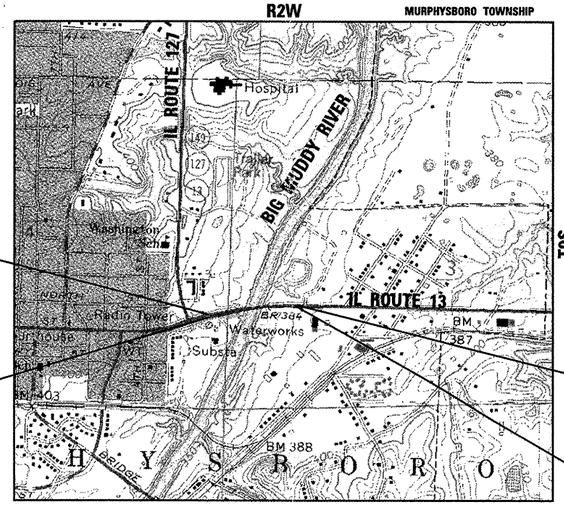
C - 99 - 040 - 08

STRUCTURE REPLACEMENT OVER BIG MUDDY RIVER

FOR INDEX OF SHEETS SEE SHEET NO. 2



LOCATION OF SECTION INDICATED THUS:- ▬



END PROJECT
STA. 347+90.00 (WB)

END PROJECT
STA. 347+67.50 (EB)

BEGIN PROJECT
STA. 334+70.00 (WB)

BEGIN PROJECT
STA. 334+70.00 (EB)

SECTION (12-1)B-1 INCLUDES TWO 5-SPAN CURVED STEEL GIRDERS WITH CONCRETE DECKS, AND STUB ABUTMENTS CARRYING IL ROUTE 13 OVER THE BIG MUDDY RIVER
PROPOSED S.N. 039-0075 EB STRUCTURE
BACK OF ABUTMENT STA. 338+67.12 AND STA. 343+33.08
PROPOSED S.N. 039-0076 WB STRUCTURE
BACK OF ABUTMENT STA. 338+41.25 AND STA. 343+07.16
SPANS 77'-0", 97'-0", 110'-0", 97'-0", 77'-0"

MICROFILMED _____
REEL NUMBER _____
AWARDED _____
RESIDENT ENGINEER _____
AS BUILT CHANGES WERE MADE
ON THE FOLLOWING SHEETS _____

100' 200' 300' — 1"= 100'
0 10' 20' 30' — 1"= 10'
0 50' 100' — 1"= 50'
0 50' 100' — 1"= 40'
0 50' 100' — 1"= 30'
0 50' 100' — 1"= 20'

FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

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

PROJECT MANAGER : DAVID PICHE
(618) 549-2171

CONTRACT NO. 78056

FUNCTIONAL CLASSIFICATION

RURAL MINOR ARTERIAL - F.A.P. 331 (IL RTE. 13)
ADT 19,180 (2008)
PV = 92.6%
SU = 5.0%
MU = 2.4%
DESIGN SPEED = 40 MPH
POSTED SPEED = 40 MPH

DESIGN DESIGNATION

1023(14) ARTERIAL 1.19 (FD-5) (TEMPORARY)

LOCATION MAP

0 FT 1000 FT 2000 FT 3000 FT
1" = 1000 FT

EASTBOUND ALIGNMENT
SECTION (12-1)B-1 GROSS LENGTH = 1300.00' = 0.247 MILES
NET LENGTH OF ROADWORK = 834.67' = 0.159 MILES
NET LENGTH OF BRIDGE = 465.33' = 0.088 MILES

WESTBOUND ALIGNMENT
SECTION (12-1)B-1 GROSS LENGTH = 1320.00' = 0.251 MILES
NET LENGTH OF ROADWORK = 854.67' = 0.162 MILES
NET LENGTH OF BRIDGE = 465.33' = 0.088 MILES

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED Feb 1 20 12
Omer Osman
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER
March 23 20 12
John D. Baranzelli, P.E. for
actng ENGINEER OF DESIGN AND ENVIRONMENT
March 23 20 12
William R. Pfeiffer for
actng DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

MICHAEL D. BUSCH
062-055295
LICENSED PROFESSIONAL ENGINEER
OF
ILLINOIS

EXPIRES 11/30/13

Michael D. Busch 1/25/12
MICHAEL D. BUSCH DATE

COVERS ALL SHEETS EXCEPT:
LIGHTING PLANS SHT 44-50 BY OTHERS
BRIDGE PLANS SHT 60-165 SEE FOR SEAL

OATES ASSOCIATES
Engineering + Architecture

28018.001

PLOT DATE = 1/25/2012
FILE NAME = M:\28018\Microstation\0Phase II\D978056-sht-cover.dgn
PLOT SCALE = 100.0000 ' / IN.
USER NAME = default

LIGHTING GENERAL NOTES

1.) ALL PROPOSED LIGHTING UNITS SHALL BE LABELED ACCORDING TO THE STANDARD SPECIFICATIONS, WITH POLE NUMBERS ATTACHED WITH STAINLESS STEEL BANDING. LIGHTING UNIT NUMBERING SHALL BE AS DIRECTED BY THE ENGINEER.

2.) CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE ELECTRICAL WORK WITH OTHER TRADES.

3.) THE CONTRACTOR IS RESPONSIBLE FOR UNCOVERING OR HAND DIGGING AROUND UTILITIES AS NECESSARY. THE COST OF THIS WORK IS TO BE INCLUDED WITH THE "UNIT DUCT, 600V, 2-1C NO.4, 1/C NO.6 GROUND, (XLP-TYPE USE), 1" DIA POLYETHYLENE" PAY ITEM.

4.) ALL PROPOSED LIGHT POLES TO BE INSTALLED AT A MINIMUM OF 15 FEET BEHIND THE EDGE OF PAVEMENT. NO POLES TO BE INSTALLED IN THE FLOWLINE OF DITCH. POLE SETBACK TO BE INCREASED IF NECESSARY AS DIRECTED BY THE ENGINEER.

5.) NO LIGHTING CIRCUIT OR PORTION THEREOF SHALL BE REMOVED FROM NIGHTTIME OPERATION WITHOUT APPROVAL OF THE ENGINEER.

6.) THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE LIGHTING SYSTEM UNTIL IDOT HAS TAKEN ACCEPTANCE OF THE SYSTEM. ALL EXISTING CIRCUITS AND CABLES TO THE LIGHT POLES SHALL BE MAINTAINED AS NEEDED AND THIS WORK SHALL BE INCIDENTAL TO THE CONTRACT.

7.) ALL ATTACHED CONDUIT, JUNCTION BOXES, CONDUIT HANGERS, SUPPORTS AND APPURTENANCES SHALL BE REMOVED FROM THE BRIDGE. REMOVED MATERIALS SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF ACCORDING TO ARTICLE 202.03. THE COST OF THIS WORK SHALL BE INCLUDED IN THE BRIDGE REMOVAL, AND NO ADDITIONAL PAYMENT WILL BE ALLOWED.

8.) ALL EXISTING LIGHTING UNITS, EXCEPT 7G AND B15 AS SHOWN ON THE PLANS, SHALL REMAIN FULLY OPERATIONAL DURING STAGE 1 CONSTRUCTION. ALL LIGHTING UNITS ON CIRCUIT 1-2 SHALL BE INSTALLED AND MADE FULLY OPERATIONAL PRIOR TO STAGE 2 CONSTRUCTION.

9.) THE CONTRACTOR SHALL TAKE INSULATION RESISTANCE MEASUREMENTS OF ALL EXISTING CIRCUITS BEFORE ANY MODIFICATIONS ARE MADE AND PROVIDE THE WRITTEN RESULTS TO THE ENGINEER. EXISTING CIRCUITS IN THE LIGHTING CONTROLLERS LOCATED AT STA. 327+70 AND STA. 349+00 NOT TESTED AND PROPERLY DOCUMENTED SHALL BE SUBJECT TO THE INSULATION REQUIREMENTS OF ARTICLE 801.13 AT THE CONTRACTOR'S EXPENSE.

10.) THE CONTRACTOR SHALL TAKE INSULATION RESISTANCE MEASUREMENTS OF THE EXISTING PORTION OF THE CIRCUIT FED FROM THE EXISTING CONTROLLER AT STA. 349+00 PRIOR TO CONNECTING THE NEW FACILITIES TO THIS CIRCUIT. WRITTEN RESULTS SHALL BE PROVIDED TO THE ENGINEER.

11.) AFTER THE PROPOSED CIRCUITS ARE FULLY INSTALLED THE CONTRACTOR SHALL TAKE INSULATION RESISTANCE MEASUREMENTS ACCORDING TO ARTICLE 801.13 AND PROVIDE THE WRITTEN RESULTS TO THE ENGINEER. IF THE TEST RESULTS DO NOT COMPLY WITH ARTICLE 801.13, THE CONTRACTOR SHALL THEN TEST ONLY THE PORTIONS OF THE CIRCUIT WHICH ARE NEW. ANY WORK NECESSARY TO BRING THE CIRCUITS INTO COMPLIANCE SHALL BE AT THE CONTRACTOR'S OWN EXPENSE AND NO ADDITIONAL PAYMENT WILL BE ALLOWED.

12.) THE CONTRACTOR SHALL PLACE A COPY OF REVISED AS-BUILT PLANS INSIDE THE EXISTING LIGHTING CONTROLLERS LOCATED AT STA. 327+70 AND STA. 349+00.

13.) THE LOCATIONS OF ALL EXISTING LIGHTING FACILITIES SHOWN ON THE PLANS ARE APPROXIMATE. THE CONTRACTOR SHALL VERIFY EXISTING FIELD CONDITIONS.

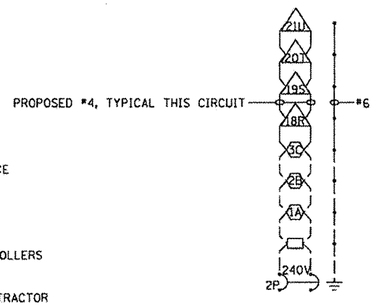
14.) PROPOSED LIGHT POLE FOUNDATION SHALL BE installed plumb and flush with the existing grade and shall meet the height requirements of Article 836.03 of the Standard Specifications. After unit duct is installed, foundations shall be filled with fine aggregate according to Article 836.03. Washers used to install the pole shall be large enough to fully cover the slotted holes in the pole base plate.

15.) Underground conduit, Coilable Nonmetallic Conduit, 2 1/2" Dia. shall be Schedule 80 as noted in the plans.

LIGHTING PLAN QUANTITIES

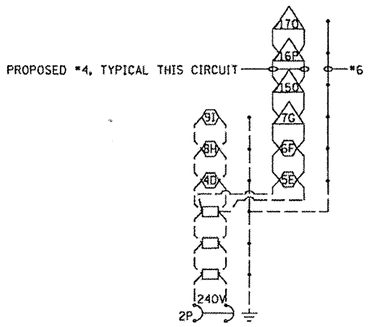
81200230	CONDUIT EMBEDDED IN STRUCTURE, 2" DIA., PVC	FOOT	1,025
81300530	JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 12" X 10" X 6"	EACH	4
81300610	JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 14" X 12" X 6"	EACH	1
81603030	UNIT DUCT, 600V, 2-1C NO.4, 1/C NO.6 GROUND, (XLP-TYPE USE), 1" DIA. POLYETHYLENE	FOOT	1,102
81702130	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 6	FOOT	1,025
81702140	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 4	FOOT	2,050
82102250	LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, 250 WATT	EACH	8
83002200	LIGHT POLE, ALUMINUM, 40 FT. M.H., 6 FT. DAVIT ARM	EACH	6
83003600	LIGHT POLE, ALUMINUM, 45 FT. M.H., 15 FT. DAVIT ARM	EACH	2
83500355	LIGHT POLE FOUNDATION, METAL, 15" BOLT CIRCLE, 8" X 6'	EACH	2
87800650	BREAKAWAY DEVICE, COUPLING WITH STAINLESS STEEL SCREEN	EACH	8
84200600	REMOVAL OF LIGHTING UNIT, NO SALVAGE	EACH	5
84200804	REMOVAL OF POLE FOUNDATION	EACH	3

Underground Conduit, Coilable Nonmetallic Conduit, 2 1/2" Dia. Foot 182



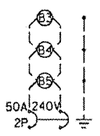
PROPOSED #4, TYPICAL THIS CIRCUIT

LIGHTING CKT 1-1
EXISTING LIGHTING CONTROLLER
LOCATED AT IL 13 AND IL 127

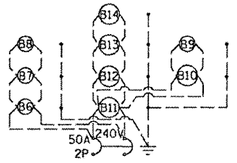


PROPOSED #4, TYPICAL THIS CIRCUIT

LIGHTING CKT 1-2
EXISTING LIGHTING CONTROLLER
LOCATED AT IL 13 AND IL 127



LIGHTING CKT 2-1
EXISTING LIGHTING CONTROLLER
NORTH SIDE OF IL 13, EAST OF THE BRIDGE



LIGHTING CKT 2-2
EXISTING LIGHTING CONTROLLER
NORTH SIDE OF IL 13, EAST OF THE BRIDGE

NOTES:

1.) ALL NECESSARY REVISIONS TO THE WIRING SHOWN ON THIS SHEET SHALL BE MADE AT NO ADDITIONAL COST TO THE DEPARTMENT AND TO THE SATISFACTION OF THE ENGINEER.

2.) EXISTING POLE NUMBERS ARE BASED ON THE AS-BUILT PLANS.

3.) CONTRACTOR SHALL VERIFY THE RATING OF ALL BRANCH CIRCUIT BREAKERS IN THE EXISTING CONTROLLER LOCATED AT STA. 349+00. LARGER BREAKERS SHALL BE FURNISHED AND INSTALLED IF NEEDED ACCORDING TO NEC REQUIREMENTS. THIS WORK SHALL BE PAID FOR ACCORDING TO ARTICLE 109.04.

LIGHTING CIRCUIT LEGEND

- EXISTING ELECTRIC CABLE
- EXISTING HANDHOLE
- EXISTING 250W HPS LUMINAIRE
- EXISTING 700W MV LUMINAIRE
- PROPOSED 250W HPS LUMINAIRE

LIGHTING CIRCUITS

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		DRAWN -	REVISED -
	PLOT SCALE = 100.0000 ' / IN.	CHECKED -	REVISED -
	PLOT DATE = 1/25/2012	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

LIGHTING PLANS
GENERAL NOTES, QUANTITIES, AND CIRCUIT DIAGRAMS

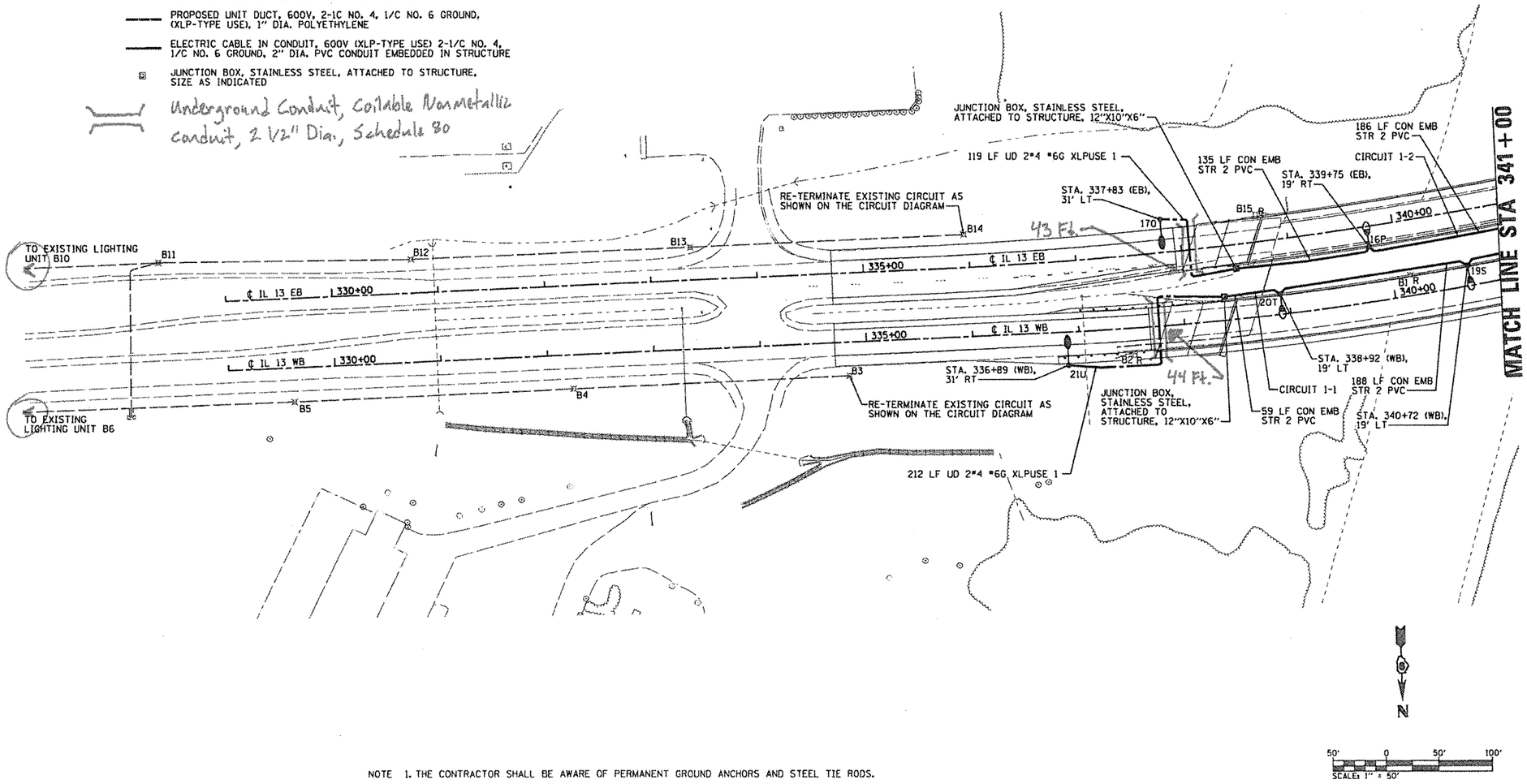
SCALE: | SHEET NO. 1 OF 7 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	44
		CONTRACT NO. 78056		
	ILLINOIS	FED. AID PROJECT		

LIGHTING LEGEND

- EXISTING LIGHTING CONTROLLER
- EXISTING HANDHOLE
- EXISTING LIGHTING UNIT TO REMAIN
- EXISTING UNIT DUCT
- EXISTING LIGHTING UNIT TO BE REMOVED, NO SALVAGE
- LIGHT POLE, ALUMINUM, 45 FT M.H., 15 FT DAVIT ARM WITH 250 W HPS LUMINAIRE, METAL FOUNDATION
- LIGHT POLE, ALUMINUM, 40 FT M.H., 6 FT DAVIT ARM WITH 250 W HPS LUMINAIRE, MOUNTED TO BRIDGE PARAPET WALL
- PROPOSED UNIT DUCT, 600V, 2-1C NO. 4, 1/C NO. 6 GROUND, (XLP-TYPE USE), 1" DIA. POLYETHYLENE
- ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 2-1/C NO. 4, 1/C NO. 6 GROUND, 2" DIA. PVC CONDUIT EMBEDDED IN STRUCTURE
- JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, SIZE AS INDICATED

Underground Conduit, Coilable Nonmetallic conduit, 2 1/2" Dia., Schedule 80



NOTE 1. THE CONTRACTOR SHALL BE AWARE OF PERMANENT GROUND ANCHORS AND STEEL TIE RODS. NO ADDITIONAL COMPENSATION SHALL BE PROVIDED DUE TO CONFLICTS.

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		DRAWN -	REVISED -
	PLOT SCALE = 100.0000 ' / IN.	CHECKED -	REVISED -
	PLOT DATE = 1/25/2012	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

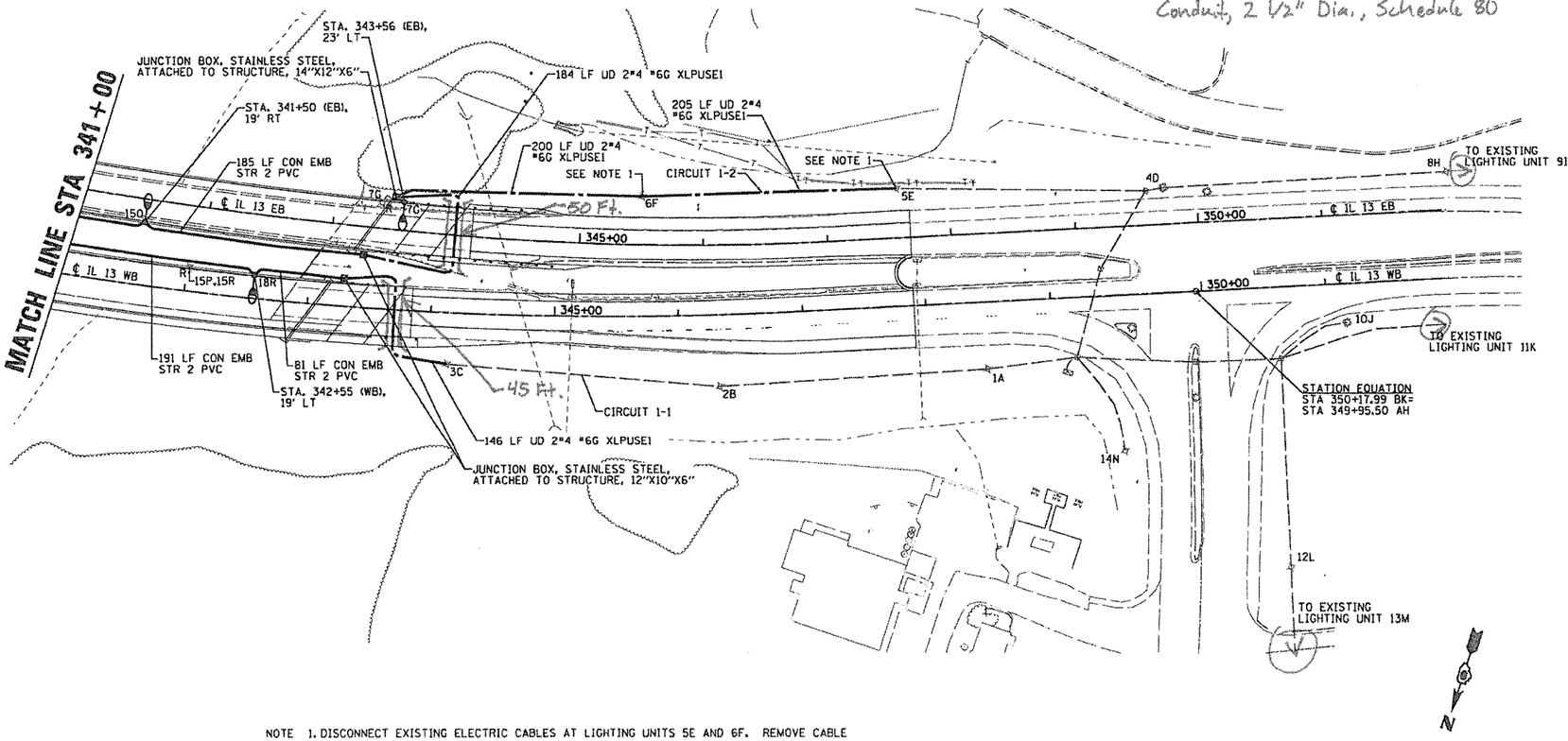
LIGHTING PLANS
LAYOUT

SCALE: 1"=50' | SHEET NO. 2 OF 7 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	45
		CONTRACT NO. 78056		
		ILLINOIS FED. AID PROJECT		

LIGHTING LEGEND

- EXISTING LIGHTING CONTROLLER
- EXISTING HANDHOLE
- EXISTING LIGHTING UNIT TO REMAIN
- EXISTING UNIT DUCT
- EXISTING LIGHTING UNIT TO BE REMOVED, NO SALVAGE
- LIGHT POLE, ALUMINUM, 45 FT M.H., 15 FT DAVIT ARM WITH 250 W HPS LUMINAIRE, METAL FOUNDATION
- LIGHT POLE, ALUMINUM, 40 FT M.H., 6 FT DAVIT ARM WITH 250 W HPS LUMINAIRE, MOUNTED TO BRIDGE PARAPET WALL
- PROPOSED UNIT DUCT, 600V, 2-1C NO. 4, 1/C NO. 6 GROUND, (XLP-TYPE USE), 1" DIA. POLYETHYLENE
- ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 2-1/C NO. 4, 1/C NO. 6 GROUND, 2" DIA. PVC CONDUIT EMBEDDED IN STRUCTURE
- JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, SIZE AS INDICATED
- Underground Conduit, Coilable Nonmetallic Conduit, 2 1/2" Dia., Schedule 80



NOTE 1. DISCONNECT EXISTING ELECTRIC CABLES AT LIGHTING UNITS 5E AND 6F. REMOVE CABLE AND DUCT TO A DEPTH OF 1 FT BELOW THE GROUND LEVEL AND BACKFILL THE VOID. ABANDON UNDERGROUND ELECTRIC CABLES AND DUCT. THE COST OF THIS WORK SHALL BE INCLUDED IN THE UNIT DUCT PAY ITEM.

NOTE 2. THE CONTRACTOR SHALL BE AWARE OF PERMANENT GROUND ANCHORS AND STEEL TIE RODS. NO ADDITIONAL COMPENSATION SHALL BE PROVIDED DUE TO CONFLICTS.

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		DRAWN -	REVISED -
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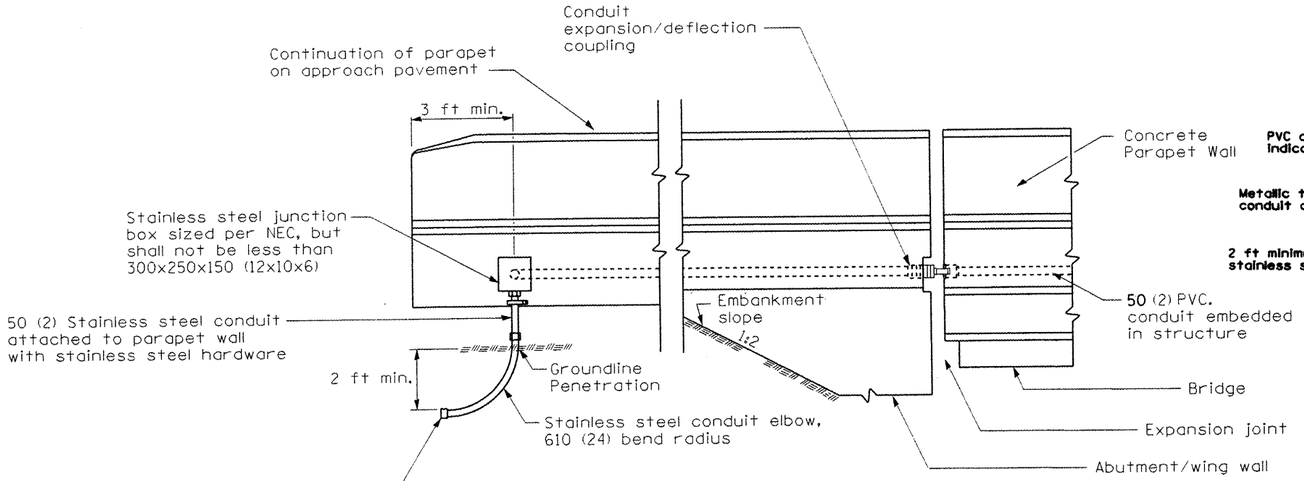
	PLOT DATE = 1/25/2012	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

LIGHTING PLANS
LAYOUT

SCALE: 1"=50' | SHEET NO. 3 OF 7 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	46
		CONTRACT NO. 78056		
		ILLINOIS FED. AID PROJECT		



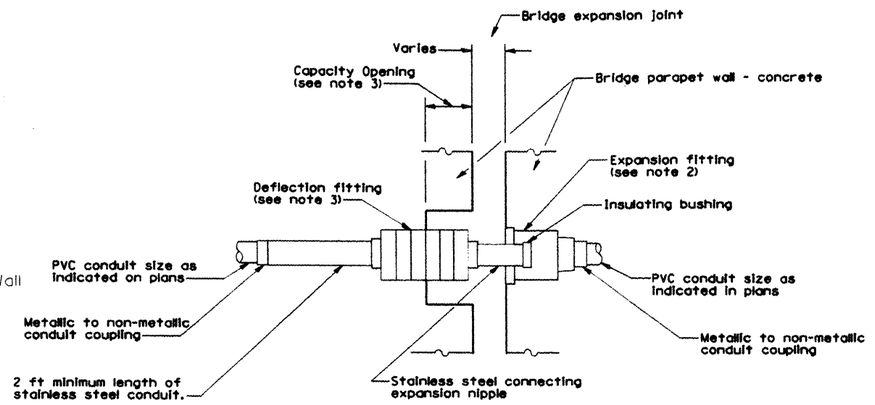
CONDUIT DETAIL
(Open Abutment)

GENERAL NOTES

Stainless steel conduit, couplings, and elbows shall be according to Section 810 of the Standard Specifications, as applicable, shall be Type 304 or Type 316, and shall be manufactured according to UL Standard 6A and ANSI Standard C 80.1.

Conduit fittings shall be the threaded type, shall be Type 304 or Type 316 stainless steel, and shall be manufactured according to UL Standard 514B.

All stainless steel and liquid tight flexible non-metallic conduit, including all fittings, bushings, couplings, and elbows shall be included in the cost of the "Junction Box, Stainless Steel, Attached to Structure, 12" X 10" X 6" " pay item.



CONDUIT EXPANSION / DEFLECTION COUPLING DETAIL

GENERAL NOTES

1.) The Contractor shall install a conduit expansion/deflection coupling at the joints in the concrete parapet on the bridge capable of accepting the longitudinal movement. All mettalic parts of the coupling shall be made of stainless steel or as approved by the Engineer. Any non-stainless metal shall be hot dip galvanized and coated to prevent reaction with the concrete. The cost of the coupling shall be part of and incidental to the conduit system.

2.) The barrel in the expansion fitting shall be fully embedded in the concrete on one side of the expansion joint. One half the length of the deflection fitting shall be embedded in the concrete on the other side of the coupling.

3.) A cavity opening 3" larger in diameter than the deflection fitting shall be provided in the concrete to ensure proper performance of the coupling.

4.) Careful attention to joint movement over a range of temperatures shall be coordinated with the selection and installation of the coupling to ensure the range of movement of the coupling is not exceeded at temperature extremes.

5.) All manufacturer's installation instructions shall be carefully followed to ensure optimum performance of the expansion/deflection coupling.

6.) The Contractor shall install couplings at all bridge expansion joints and shall be responsible to determine the proper number of couplings required.

7.) With the approval of the Engineer, the Contractor may substitute two (2) stainless steel junction boxes attached to the back of the wall and connected by a high grade of flexible non-metallic conduit for all expansion joints. This substitution shall be made at no cost to the Department.

CONDUIT COUPLING EXPANSION /DEFLECTION

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

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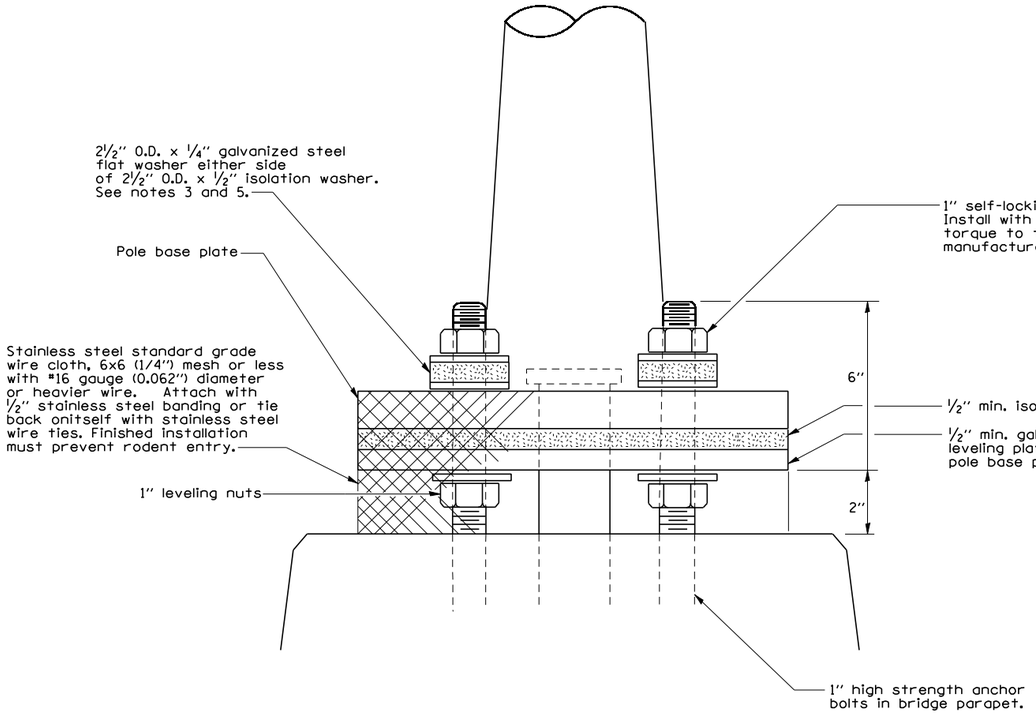
		DRAWN -	REVISED -
	PLOT SCALE = 100.0000 / IN.	CHECKED -	REVISED -
	PLOT DATE = 1/25/2012	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

LIGHTING PLANS
DETAILS

SCALE: | SHEET NO. 4 OF 7 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	47
		CONTRACT NO. 78056		
	ILLINOIS FED. AID PROJECT			



POLE MOUNTED ON BRIDGE PARAPET DETAIL

GENERAL NOTES

1.) Locate poles as shown on lighting plans layout sheets.

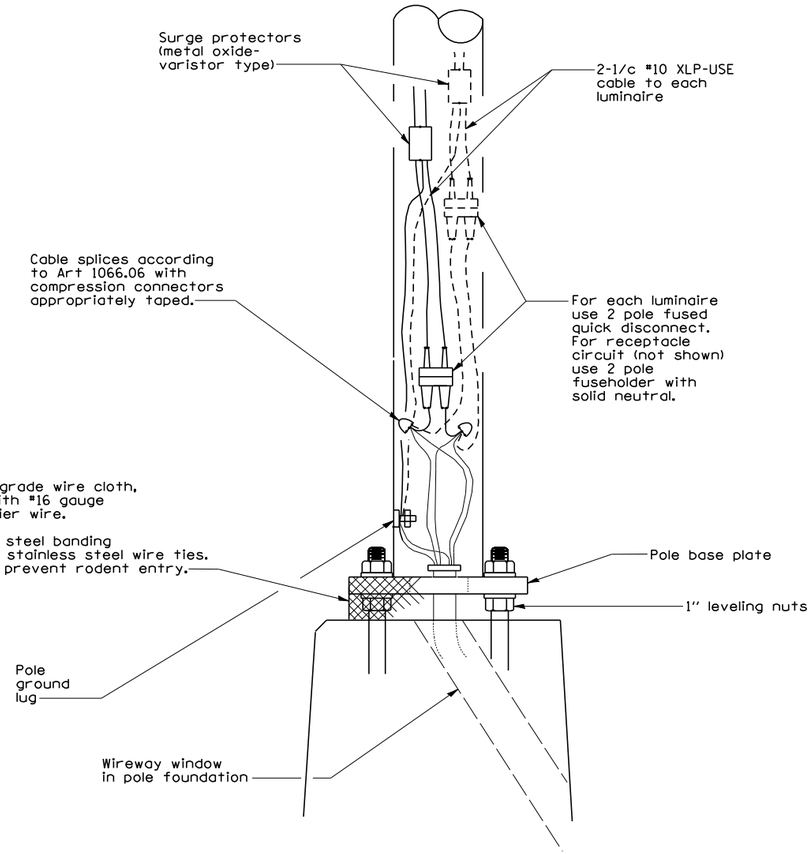
2.) The vibration isolation pad and leveling plate shall match the footprint of the pole base plate.

3.) Thickness of isolation pad and washers shall be according to the isolation pad manufacturer's recommendations based upon pole height and loading.

4.) Should the length of the exposed anchor bolts be too short on an existing bridge to mount the poles as shown, then the leveling plate shall be mounted directly on the concrete and leveled with stainless steel washers. Remove concrete as directed by the Engineer to fully thread the top nut.

5.) The diameter of the flat washer on either side of the isolation washer shall be at least the same as the diameter of the isolation washer.

POLE MOUNTED ON BRIDGE PARAPET



WIRING DETAIL

NOT TO SCALE

GENERAL NOTES

1.) All taped splices shall use 2 layers of electrical tape over 3 layers of rubber tape as required by the Standard Specifications. Coat the finished taped splice with bonding compound.

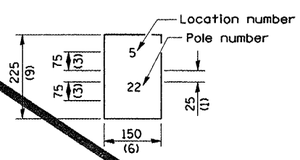
2.) All cable splices shall be taped unless another method has been specifically approved by the Engineer.

3.) For example purposes the pole is shown on an anchor base. If the pole is required to be set on a breakaway base, consult the Standard Specifications.

POLE HANDHOLE WIRING

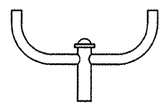
All dimensions are in millimeters (inches) unless otherwise shown.

FILE NAME = mi\28018\microstation\0phase1\D978056-sht-light.dgn	USER NAME = default	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	LIGHTING PLANS DETAILS			F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN -	REVISED -					331	(12-1)B-1	JACKSON	200	48
	PLOT SCALE = 100.0000 ' / IN.	CHECKED -	REVISED -							CONTRACT NO. 78056		
	PLOT DATE = 1/25/2012	DATE -	REVISED -		SCALE:	SHEET NO. 5 OF 7 SHEETS	STA. TO STA.			ILLINOIS FED. AID PROJECT		

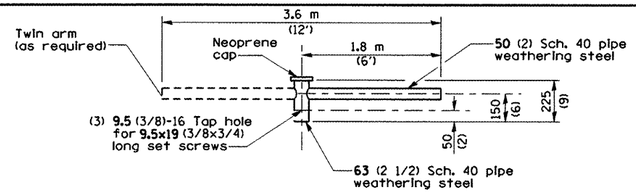


The contractor shall furnish and install a light pole identification of each new light pole, as shown above, incidental to the respective light pole pay item. The numerals shall be 75 (3) series "D", black, screened on silver-white type B pressure sensitive reflective sheeting conforming to the requirements of section 1063.01 of the Standard Specifications for Traffic Control Items. The numerals shall conform to the FHWA "Standard Alphabets for Highway Signs".

The light pole identification shall be applied to sign base material as specified in section 1069.06 of the Standard Specifications, approximately 180 (7) above the adjacent pavement grade visible to approaching traffic in accordance with Highway Standard 720001.

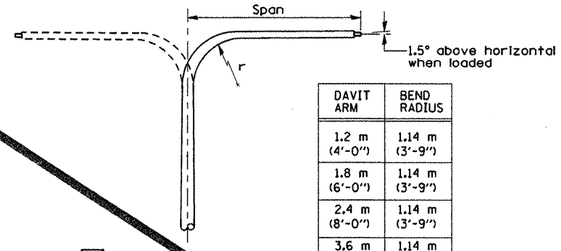


☐ TWIN TENON



☐ TENON MOUNT BRACKET ARM

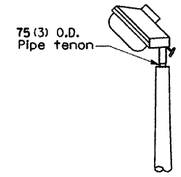
NOTE: Single or twin arm assembly shall be tilted 3° above horizontal.



DAVIT ARM	BEND RADIUS
1.2 m (4'-0")	1.14 m (3'-9")
1.8 m (6'-0")	1.14 m (3'-9")
2.4 m (8'-0")	1.14 m (3'-9")
3.6 m (12'-0")	1.14 m (3'-9")

☒ DAVIT ARM

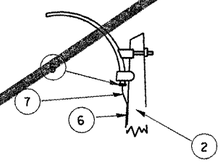
☐ DAVIT ARM-TWIN



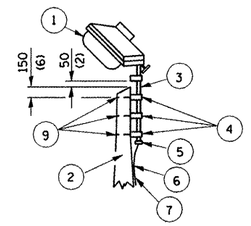
☐ TENON

☐ SHORT BRACKET

☐ SHORT BRACKET - TWIN

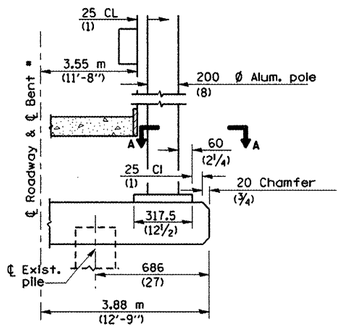


☐ MAST ARM

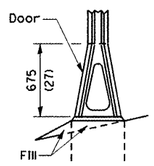


☐ TENON

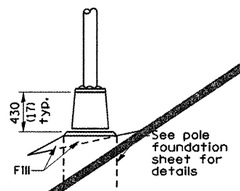
1. Luminaire
2. Wood pole, class 3 or better
3. 63 (2 1/2) Galv. steel conduit
4. Single offset pole band
5. Conduit bushing
6. Cable clamps on 600 (24) centers
7. 2/c #12 Type use cable
8. 25 (1) Galv. steel conduit in length 3.0 m (10')
9. (16 5/8) Ø hot dipped galvanized bolt with flat washer & locknut (3 req'd)
10. Conduit clamps on 900 (36) centers
11. Unit duct
12. Threaded reducer
13. "C" Conduiet, threaded
14. 40 (1 1/2) Galv. steel conduit for 1 unit duct or 75 (3) galv. steel conduit for 2 or 3 unit ducts.



BENT # (Looking)

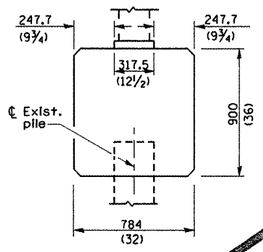


☐ STAINLESS STEEL FLAIR BASE

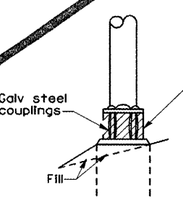


☐ TRANSFORMER BASE

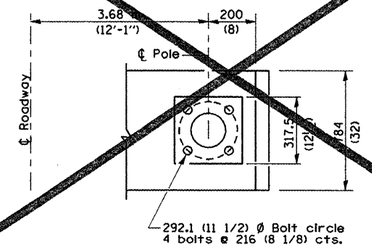
☒ FRANGIBLE



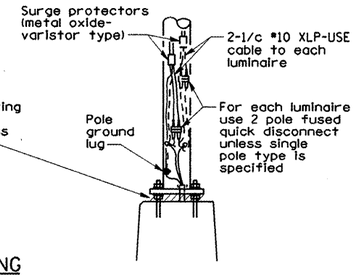
☐ BRIDGE PIER MOUNT



☒ BREAKAWAY COUPLING



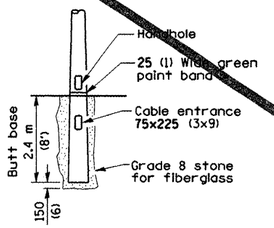
SECTION A-A



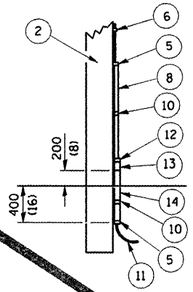
☐ ANCHOR

☒ METAL OR ☐ CONCRETE

Details for underground distribution if required



☐ BUTT BASE



☐ POLE, WOOD

POLE LENGTH	DEPTH IN GROUND
19.8 m (65')	3.6 m (12')
18.0 m (60')	3.0 m (10')
16.8 m (55')	2.7 m (9')
16.0 m (50')	2.4 m (8')
13.7 m (45')	2.1 m (7')
12.0 m (40')	2.0 m (6.5')
10.7 m (35')	1.8 m (6')
9.0 m (30')	1.7 m (5.5')

POLE STANDARDS

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

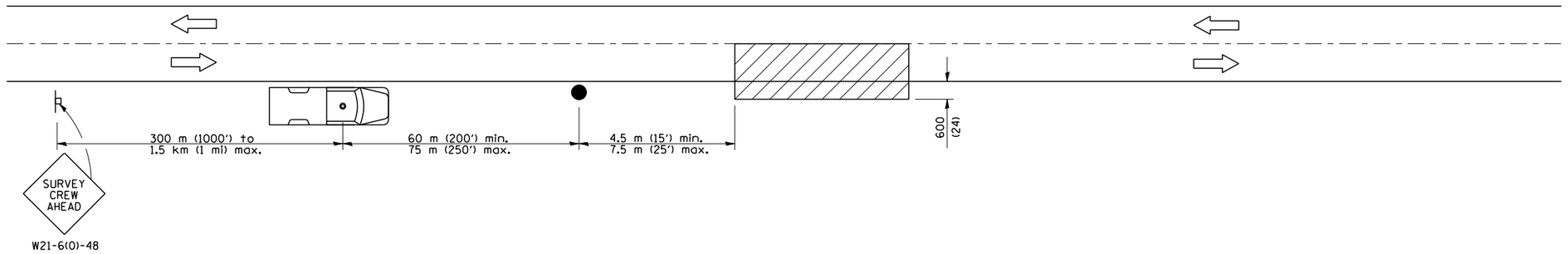
FILE NAME = m:\28018\microstation\@phase1\D978056-sht-light.dgn	USER NAME = default	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 100.0000 ' / IN.	CHECKED -	REVISED -
	PLOT DATE = 1/25/2012	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

LIGHTING PLANS
DETAILS

SCALE: | SHEET NO. 6 OF 7 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	49
		CONTRACT NO. 78056		
	ILLINOIS FED. AID PROJECT			



SYMBOLS

Work area

Sign on portable or permanent support

Truck with flashing amber light and dual emergency flashers

Flagger with traffic control sign

TYPICAL APPLICATIONS

Utility operations

DETAIL FOR NIGHTTIME LIGHTING INSPECTION

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

FILE NAME = m:\28018\microstation\0phase11\D978056-snt-light.dgn	USER NAME = default	DESIGNED -	REVISED -
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	PLOT DATE = 1/25/2012	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

LIGHTING PLANS
DETAILS

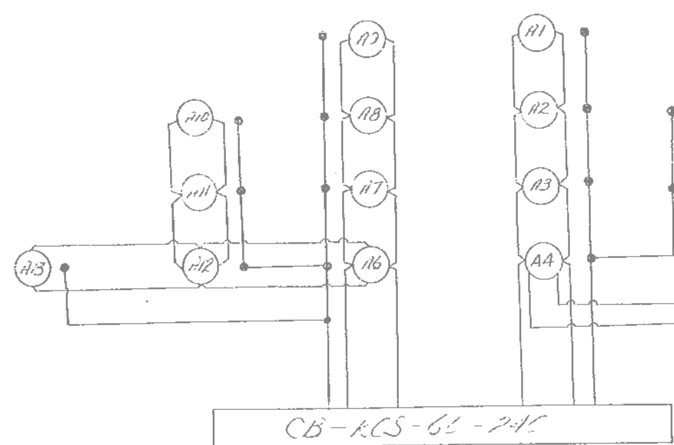
SCALE: | SHEET NO. 7 OF 7 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1)B-1	JACKSON	200	50
		CONTRACT NO. 78056		
	ILLINOIS FED. AID PROJECT			

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 14	12-2	JACKSON	204	81

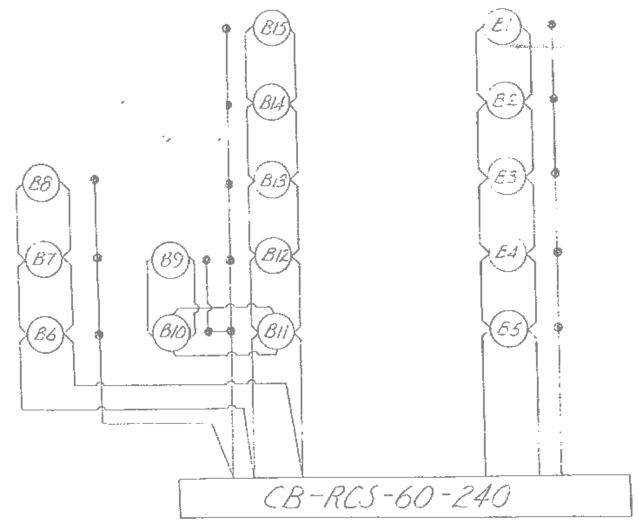
FED. ROAD DIST. NO. 7 ILLINOIS PROJECT

WIRING DIAGRAM



CONTROLLER A
(RT STA 349+46±)

WIRING DIAGRAM



CONTROLLER B
(RT. STA. 327+70±)

SCHEDULE OF CONDUIT
(ILLUMINATION)

STATION	GALV. STEEL CONDUIT IN TRENCH, 2" LIN. FT.	GALV. STEEL CONDUIT ATTACHED TO STRUCTURE, 2" LIN. FT.
8+60 (E. WILLIAMS ST.)	77	
11+35 (E. WILLIAMS ST.)	71	
NORTH LANES - F.A. 14		
327+70	44	
LT. 327+70	52	
RT 333+33	74	
LT. 333+33	77	
RT. 338+55 TO LT. 340+15		178
LT. 342+00 TO RT. 342+67		175
355+23	70	
LT. 355+30	6	
LT. 356+20	28	
LT. 357A+00	48	
LT. 3[illegible] (F.A. RTE 101)	37	
[illegible]	43	
TOTALS	635	353

POLE LOCATION

POLE NO.	PATTERN	STATION	MAST ARM	SETBACK *
A1	III	LT. 357+50 (F.A. 14)	8'	14'
A2	III	LT 355+40 (F.A. 14)	8'	14'
A3	III	RT 353+30 (F.A. 14)	8'	20'
A4	III	LT 321+60 (F.A. 101)	8'	20'
A5	III	LT. 323+50 (F.A. 101)	8'	20'
A6	III	RT 349+40 (F.A. 14)	8'	20'
A7	III	RT. 347+00 (F.A. 14)	8'	20'
A8	III	RT 344+45 (F.A. 14)	8'	20'
A9	II & III	LT. 342+00 (F.A. 14)	4'	ON PARAPET
A10	III	LT 343+45 (F.A. 14)	8'	10'
A11	III	LT. 346+15 (F.A. 14)	8'	14'
A12	III	LT. 348+85 (F.A. 14)	8'	14'
A13	III	LT 351+10 (F.A. 14)	8'	14'
A14	III	LT. 326+30 (F.A. 101)	8'	20'

POLE LOCATION

POLE NO.	PATTERN	STATION	MAST ARM	SETBACK *
B1	II & III	LT. 340+15 (F.A. 14)	4'	ON PARAPET
B2	III	RT. 337+50 (F.A. 14)	8'	14'
B3	III	RT 334+80 (F.A. 14)	8'	20'
B4	III	RT. 332+20 (F.A. 14)	8'	20'
B5	III	RT 329+60 (F.A. 14)	8'	20'
B6	III	RT. 327+20 (F.A. 14)	8'	20'
B7	III	RT. 324+75 (F.A. 14)	8'	20'
B8	III	RT 322+15 (F.A. 14)	8'	20'
B9	III	LT. 323+25 (F.A. 14)	8'	20'
B10	III	LT. 325+90 (F.A. 14)	8'	20'
B11	III	LT. 328+30 (F.A. 14)	8'	20'
B12	III	LT. 330+75 (F.A. 14)	8'	20'
B13	III	LT. 333+35 (F.A. 14)	8'	20'
B14	III	LT. 335+95 (F.A. 14)	8'	20'
B15	III	LT. 338+70 (F.A. 14)	8'	14'

* DISTANCE FROM EDGE PAVEMENT TO CENTER OF POLE FOUNDATION

(SEE SHT. NO. 91.)

F.A. RTE. 14 SEC. 12-2 JACKSON CO. (ILLUMINATION)

ROUTE NO.	SEC	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 14	12-2	JACKSON	204	83

15" P-CULV.

GENERAL TELEPHONE CO. BURIED TELEPHONE CABLE

℄ EXIST. R.O.W. LINE

E. WILLIAMS STREET

B9

EDGE OF STAB SHLDR.

EDGE OF STAB. SHLDR.

42'

320 321 322 323 324 10 325

℄ PROPOSED NORTH LANES F.A. RTE. 14

77'-P 2"

B7

B8

EQ. STA. 324+28.47 N. LANES = STA. 10+00 WILLIAMS ST.

℄ EXIST. R.O.W. LINE

24" P-CULV.

18" P-CULV.

SCALE

20' 0' 10' 20'

PLAN LEGEND
(ILLUMINATION & TRAFFIC SIGNALS)

- INDICATES PROPOSED GALVANIZED STEEL CONDUIT. UPPER NUMERAL INDICATES LENGTH. "T" INDICATES PROPOSED G.S. CONDUIT IN TRENCH. "P" INDICATES PROPOSED G.S. CONDUIT PUSHED. LOWER NUMERAL INDICATES SIZE OF CONDUIT. (3'-T 3")
- INDICATES PROPOSED TRAFFIC SIGNAL CABLE IN CONDUIT.
- INDICATES PROPOSED TRAFFIC SIGNAL AND LIGHTING CABLES IN SAME CONDUIT.
- INDICATES PROPOSED LIGHTING CONTROLLER.
- INDICATES PROPOSED TRAFFIC SIGNAL CONTROLLER
- INDICATES PROPOSED TRAFFIC SIGNAL FACE AND POST
- INDICATES PROPOSED TRAFFIC SIGNAL FACE WITH BAFFLE PLATE
- INDICATES PROPOSED MAST ARM ASSEMBLY AND POLE.
- INDICATES PROPOSED WOOD POLE AND SERVICE INSTALLATION, SPECIAL
- INDICATES EXISTING 400 WATT MERCURY VAPOR LUMINAIRE ON 30' M.H. ALUM. POLE TO BE REMOVED.
- (4) INDICATES EXISTING PAVED DITCH TYPE 4
- INDICATES PROPOSED 700 WATT MERCURY VAPOR LUMINAIRE, 6 FT. MAST ARM ON 46' M.H. METAL POLE.
- INDICATES PROPOSED 700 WATT MERCURY VAPOR LUMINAIRES, 4 FT. TWIN MAST ARMS ON 46' M.H. METAL POLE.
- INDICATES PROPOSED ELECTRIC CABLE, UNIT DUCT, 2-600 V. XLP NO. 6; 1 INCH POLYETHYLENE AND 1-1/C NO. 6 BARE COPPER CONTINUOUS GROUND.
- INDICATES PROPOSED HANDHOLE

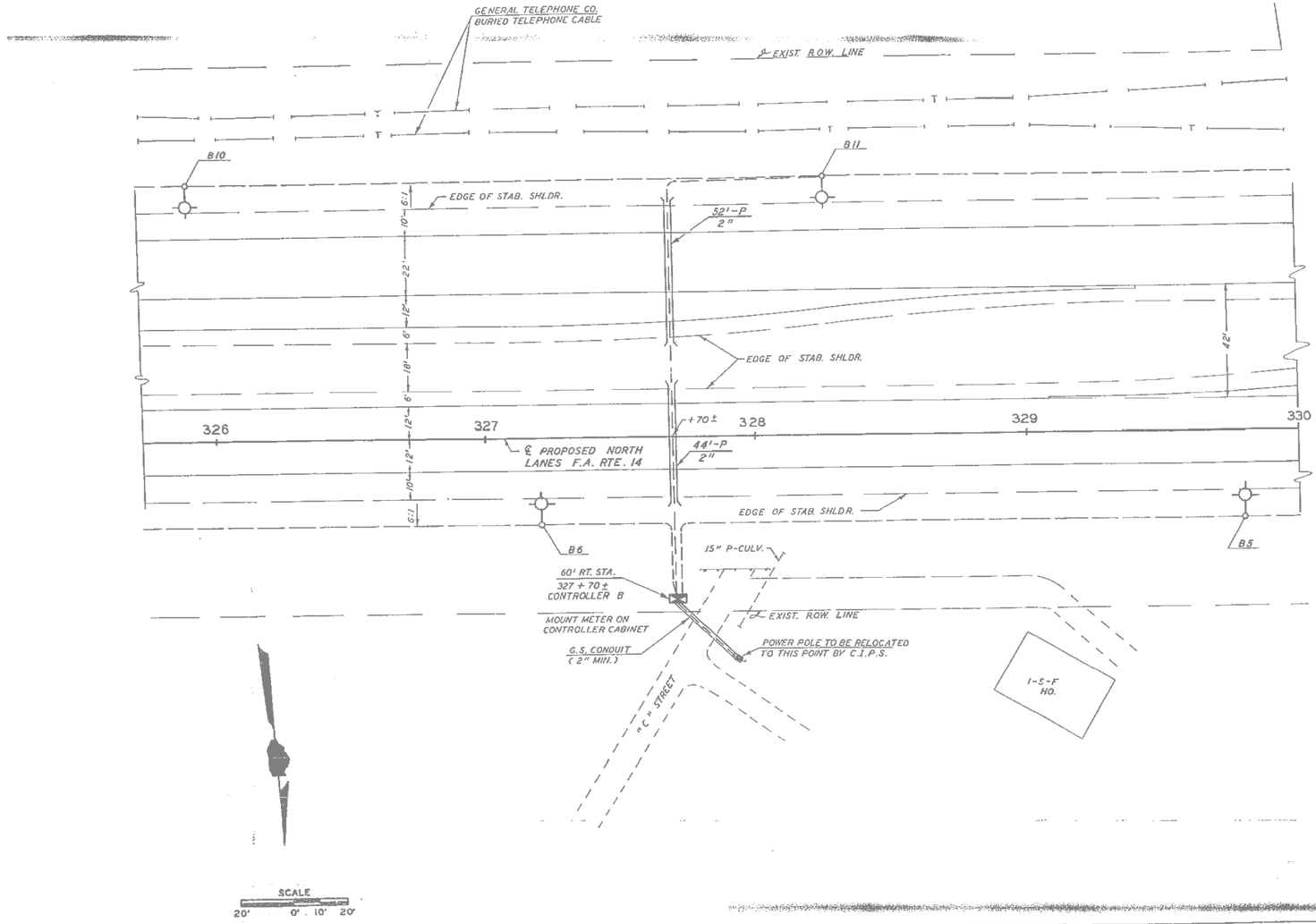
F.A. RTE. 14 SECTION 12-2 JACKSON COUNTY (ILLUMINATION) STA. 320+00 TO 325+73

0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24

FILE NAME = D978056-sht-ex-light.dgn	USER NAME = default	DESIGNED -	REVISED -	**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**	**EXISTING LIGHTING PLANS (FOR INFORMATION ONLY)**
		DRAWN -	REVISED -		
	PLOT SCALE = 40.0000 ' / IN.	CHECKED -	REVISED -		
	PLOT DATE = 1/25/2012	DATE -	REVISED -		SCALE: SHEET NO. 2 OF 9 SHEETS STA. TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1) B-1	JACKSON	200	52
		CONTRACT NO. 78056		
	ILLINOIS FED. AID PROJECT			

F.A.P. RTE.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 14	12-2	JACKSON	204	84

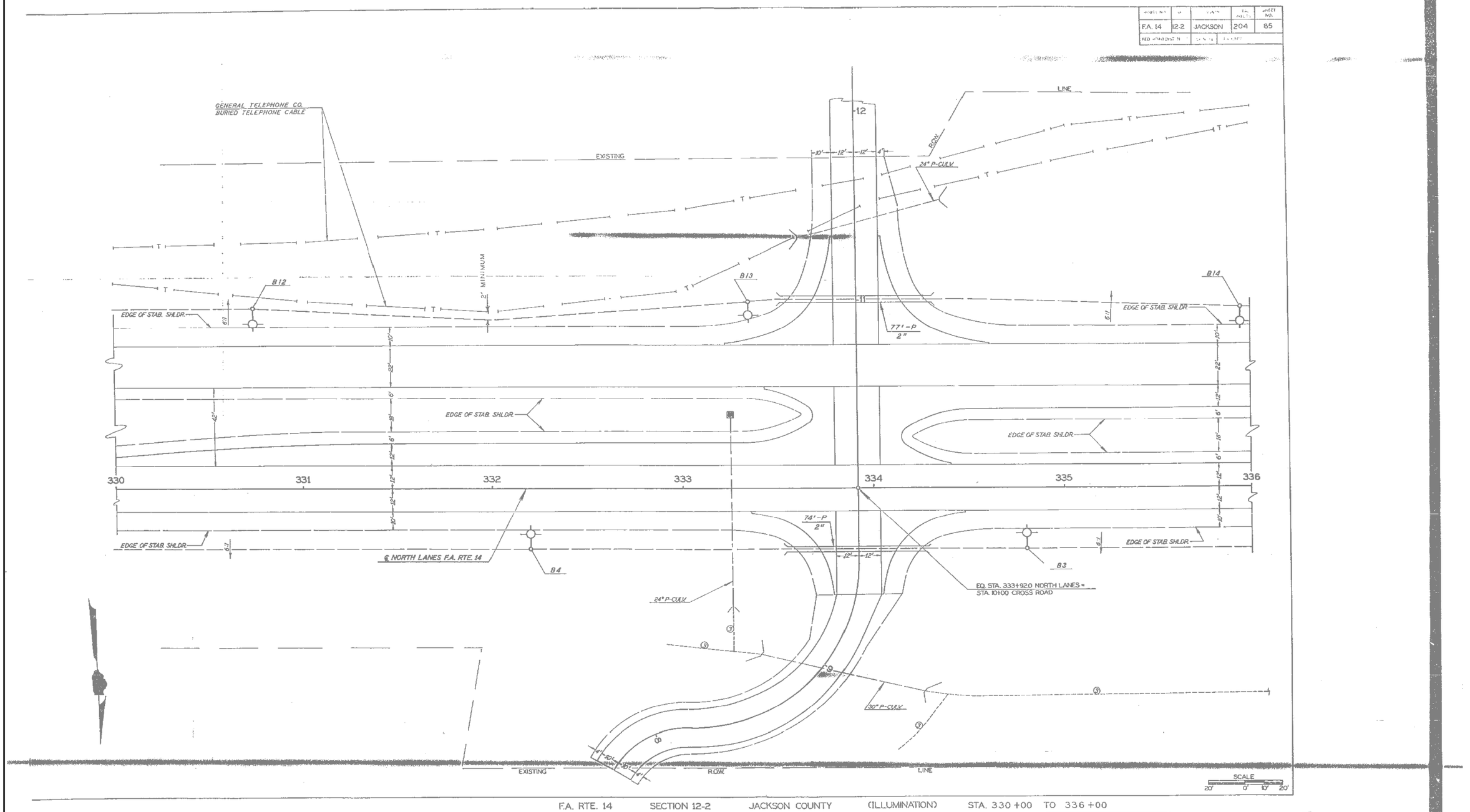


F.A. RTE. 14 SEC. 12-2 JACKSON CO. (ILLUMINATION) STA. 325+73 TO 330+00

FILE NAME = D978056-sht-ex-light.dgn	USER NAME = default	DESIGNED -	REVISED -	**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**	**EXISTING LIGHTING PLANS (FOR INFORMATION ONLY)**
		DRAWN -	REVISED -		
	PLOT SCALE = 40.0000 ' / IN.	CHECKED -	REVISED -		SCALE: SHEET NO. 3 OF 9 SHEETS STA. TO STA.
	PLOT DATE = 1/25/2012	DATE -	REVISED -		

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1) B-1	JACKSON	200	53
		CONTRACT NO. 78056		
	ILLINOIS FED. AID PROJECT			

FED. ROAD DIST. NO.	STATE	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 14	12-2	JACKSON	204	85
FED. AID PROJECT NO.	CONTRACT NO.	PARCEL		



F.A. RTE. 14 SECTION 12-2 JACKSON COUNTY (ILLUMINATION) STA. 330+00 TO 336+00

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		DRAWN -	REVISED -
	PLOT SCALE = 40.0000 ' / IN.	CHECKED -	REVISED -
	PLOT DATE = 1/25/2012	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING LIGHTING PLANS
(FOR INFORMATION ONLY)

SCALE: | SHEET NO. 4 OF 9 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1) B-1	JACKSON	200	54
		CONTRACT NO. 78056		
	ILLINOIS FED. AID PROJECT			

POLITE NO.	SEC	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 14	12-2	JACKSON	204	86
(ILLUMINATION)				

B15

BK. TO BK. ABUTS. 417'-0" (S. LANES)
OPEN ABUT. -3 SPAN 84" ℄ GIRDER
2 @ 126'-0" ; 1 @ 160'-2"

RIVER

MUDDY

B1
SEE NOTE

CONDUIT ATTACHED TO STRUCTURE,
2" DIA. G.S. 178 LIN. FT. EST.

337 338 339 340 341 342

℄ NORTH LANES - F.A. RTE. 14

B2

2 1/2 G.S. CONDUIT
(BY BRIDGE CONTRACTOR)

24"P-CULV.

BK. TO BK. OF ABUT. STA. 338+63.14 TO STA. 342+79.33 (N. LANES)
OPEN ABUT. -3 SPAN 78" ℄ GIRDER 2@ 125'-3" ; 1@ 159'-11"

B16

NOTE: USE 4 1/C NO. 12 CABLES FROM POLE
, HANDHOLE TO TWIN MAST ARM LUMINAIRES.

30"S.S.

22" SANITARY SEWER

A10

A11

CONDUIT ATTACHED TO STRUCTURE,
DIA. G.S. 125 LIN. FT. EST.

A9
SEE NOTE

15"P-CULV.

VAR.

15" S.S.

342 343 344 345 346 347 348

℄ NORTH LANES - F.A. RTE. 14

2 1/2 G.S. CONDUIT
(BY BRIDGE CONTRACTOR)

A8

30"P-CULV.

15"S.S.

A7

12"S.S.

SCALE
20' 0' 10' 20'

F.A. RTE. 14 SEC. 12-2 JACKSON COUNTY (ILLUMINATION) STA. 336+00 TO 348+00

0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	

FILE NAME = D978056-sht-ex-light.dgn	USER NAME = default	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 40.0000 ' / IN.	CHECKED -	REVISED -
	PLOT DATE = 1/25/2012	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING LIGHTING PLANS
(FOR INFORMATION ONLY)

SCALE: | SHEET NO. 5 OF 9 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1) B-1	JACKSON	200	55
		CONTRACT NO. 78056		
	ILLINOIS FED. AID PROJECT			

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
42	(13-1)R	JACKSON	164	83A
STA.		TO STA.		
ILL. Hwy Dist. No.	ILLINOIS	FED. AID PROJECT		

LEGEND

- Steel Light Pole , 45' With Multi-mount 250 Watt Sodium Vapor Luminaire
- (71) Number Indicates Position of Pole in Wiring Diagram, See Sheet 86. Letter Denotes Position of Luminaire
- or — Proposed Advanced Detector Loop With Core-Drilled Corners
- 1-1/4" PVC, 205' T. (or A.) — Proposed PVC Conduit: No. Above Line is Size of Conduit, No. Below Line is Length of Trench or Auger

N

1"=20'

SCALE IN FEET 20 0 20 40

2 #10 XLP , 1 #10 Bare Ground in 3 /4" Polyethylene Unit Duct

P.C. STA. 344+60.06 MATCH+EXISTING

Sta. 344+15 , Rt. 30' (E.P.)

See Note 2

342

343

344

(END CIRCUIT)

(5B)

(5C)

See Note 1

(5A)

P.I. STA. 345+67.62

P.T. STA. 346+75.06

Sta. 346+30 , Rt. 30' (E.P.)

(2B)

345

2 #10 XLP , 1 #10 Bare Ground in 3 /4" Polyethylene Unit Duct

2 Detector Loops Located 206' From Thru Lane Stop Bar

346

24'

15'

Splice Point

1-1/4" PVC 165' T.

347

5'x5' (Typ.)

(7G)

Sta. 343+50 , Lt. 30' (E.P.)

2 #10 XLP , 1 #10 Bare Ground in 3 /4" Polyethylene Unit Duct

348

10' Bit. Shldr.

30'

24'

MATCH LINE STA. 348+20 (SEE SHEET 83)

(6F)

Sta. 345+65 , Lt. 30' (E.P.)

(5E)

Sta. 347+80 , Lt. 30' (E.P.)

2 #10 XLP , 1 #10 Bare Ground in 3 /4" Polyethylene Unit Duct

See Sht. No. 97A For Luminaire Mounting Heights

NOTES

1. Existing Pole and Luminaires to Remain on This Contract. Pull Existing Cable to Junction Box on North Side of Bridge and Install New Lighting Cable and Ground in Existing Galvanized Steel Conduit. Use The 4-1/C #12 Cables in Pole to Rewire Luminaires.
2. Existing Junction Box and 2 1 /2" Galvanized Steel Conduit to Remain and be Reused as Indicated Above. DRILL EXISTING JUNCTION BOX - 1 Each at this Location.

ILL. 13 & 127 &149 AND WALNUT STREET TRAFFIC SIGNALS & LIGHTING - PLAN SHEET

C B A 0 A B C D

TAMERAN

FILE NAME = D978056-sht-ex-light.dgn	USER NAME = default	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 40.0000 ' / IN.	CHECKED -	REVISED -
	PLOT DATE = 1/25/2012	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING LIGHTING PLANS (FOR INFORMATION ONLY)

SCALE: | SHEET NO. 6 OF 9 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1) B-1	JACKSON	200	56
		CONTRACT NO. 78056		
	ILLINOIS	FED. AID PROJECT		

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
42	(13-1)R	JACKSON	164	838

STA. TO STA.

FED. HIGHWAY DIST. NO. ILLINOIS FED. AID PROJECT

See Sht. No. 97A For Luminaire Mounting Heights

FOR NOTES SEE SHEET NO. 83

LEGEND

- Steel Light Pole , 45' With Multi-mount 250 Watt Sodium Vapor Luminaire
- U — Unit Duct
- (71) Number Indicates Position of Pole In Wiring Diagram, See Sheet 86. Letter Denotes Position of Luminaire
- or — Proposed Advanced Detector Loop With Core-Drilled Corners
- Proposed PVC Conduit: No. Above Line Is Size of Conduit, No. Below Line Is Length of Trench or Auger (1-1/4" PVC, 205' T. (or A.))

N

1"=20' SCALE IN FEET 20 0 20 40

2 #10 XLP , 1 #10 Bare Ground In 3 /4" Polyethylene Unit Duct

2 Detector Loops Located 195' From Left Turn Lane Stop Bar

P.C. STA. 352+93.46

MATCH LINE STA. 352+00 (SEE SHEET 93)

Sta. 353+87 , Rt. 30'(E.P.J (End Circuit)

Prop. Conc. Median Surf.

℄ Prop. W.B. Lanes WALNUT ST.

Prop. Conc. C&G TY B6.24 (SP)

10' Blt. Shldr.

Transit Line

354

355

Prop. Conc. C&G TY B6.12

5'x5' (Typ.)

1½" PVC 175' T.

2 #10 XLP , 1 #10 Bare Ground In 3 /4" Polyethylene Unit Duct

Sta. 352+09 , Lt.30' (E.P.J

Splice Point

2 Detector Loops Located 206' From Thru Lane Stop Bar

1¼" PVC 15' T.

1¼" PVC 200' T.

P.I. STA. 354+89.74

P.T. STA. 356+77.34 BK
STA. 356+95.50 AH

2 Detector Loops Located 412' From Thru lane Stop Bar

2 #10 XLP , 1 #10 Bare Ground In 3 /4" Polyethylene Unit Duct

Splice Point

Sta. 354+23 , Lt. 16' (E.P.) (End Circuit)

ILL. 13 & 127 &149 AND WALNUT STREET TRAFFIC SIGNALS & LIGHTING PLAN SHEET

C B A 0 A B C D

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		DRAWN -	REVISED -				
	PLOT SCALE = 40.0000 ' / IN.	CHECKED -	REVISED -				
	PLOT DATE = 1/25/2012	DATE -	REVISED -		SCALE:	SHEET NO. 7 OF 9 SHEETS	STA. TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1) B-1	JACKSON	200	57
		CONTRACT NO. 78056		
	ILLINOIS FED. AID PROJECT			

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
42	(13-1)R	JACKSON	164	84
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJ.	

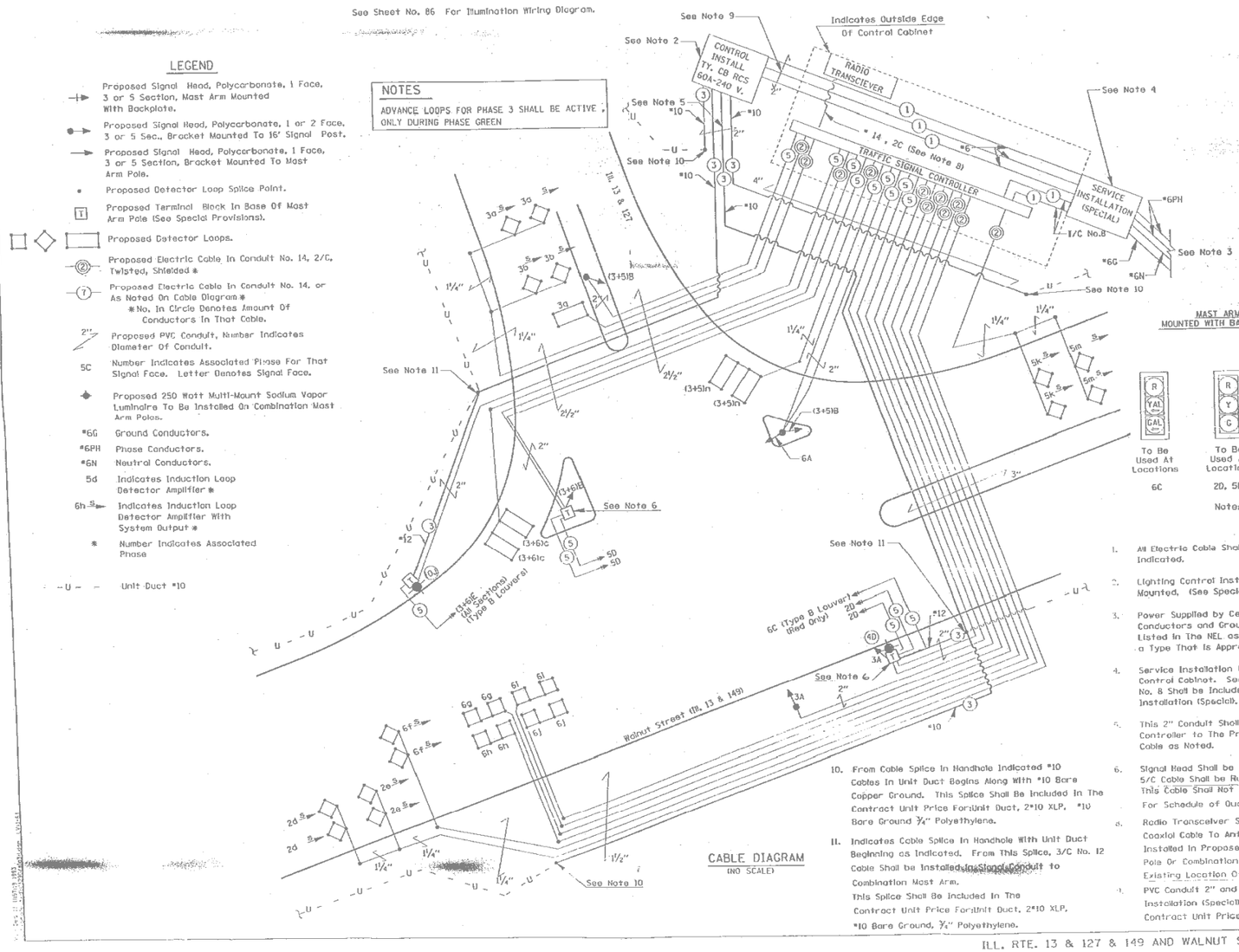
See Sheet No. 86 For Illumination Wiring Diagram.

LEGEND

- Proposed Signal Head, Polycarbonate, 1 Face, 3 or 5 Section, Mast Arm Mounted With Backplate.
- Proposed Signal Head, Polycarbonate, 1 or 2 Face, 3 or 5 Sec., Bracket Mounted To 16' Signal Post.
- Proposed Signal Head, Polycarbonate, 1 Face, 3 or 5 Section, Bracket Mounted To Mast Arm Pole.
- Proposed Detector Loop Splice Point.
- Proposed Terminal Block In Base Of Mast Arm Pole (See Special Provisions).
- Proposed Detector Loops.
- (2) Proposed Electric Cable In Conduit No. 14, 2/C, Twisted, Shielded *
- (7) Proposed Electric Cable In Conduit No. 14, or As Noted On Cable Diagram * *No. In Circle Denotes Amount Of Conductors In That Cable.
- 2" Proposed PVC Conduit, Number Indicates Diameter Of Conduit.
- 5C Number Indicates Associated Phase For That Signal Face. Letter Denotes Signal Face.
- Proposed 250 Watt Multi-Mount Sodium Vapor Luminaire To Be Installed On Combination Mast Arm Poles.
- *6G Ground Conductors.
- *6PH Phase Conductors.
- *6N Neutral Conductors.
- 5d Indicates Induction Loop Detector Amplifier *
- 6h S Indicates Induction Loop Detector Amplifier With System Output *
- * Number Indicates Associated Phase
- --U-- Unit Duct *10

NOTES

ADVANCE LOOPS FOR PHASE 3 SHALL BE ACTIVE ONLY DURING PHASE GREEN



CABLE DIAGRAM
(NO SCALE)

10. From Cable Splice In Handhole Indicated *10 Cables In Unit Duct Begins Along With *10 Bare Copper Ground. This Splice Shall Be Included In The Contract Unit Price For Unit Duct, 2*10 XLP, *10 Bare Ground ¾" Polyethylene.

11. Indicates Cable Splice In Handhole With Unit Duct Beginning as Indicated. From This Splice, 3/C No. 12 Cable Shall be Installed In Signal Conduit to Combination Mast Arm. This Splice Shall Be Included In The Contract Unit Price For Unit Duct, 2*10 XLP, *10 Bare Ground, ¾" Polyethylene.

TRAFFIC SIGNAL FACES

MAST ARM MOUNTED WITH BACKPLATE			BRACKET MOUNTED	
To Be Used At Locations	To Be Used At Locations	To Be Used At Locations	To Be Used At Locations	To Be Used At Locations
6C	2D, 5D	(3+61E	3A, 6A	(3+51B (3+61B

Note: All Signal Lenses Shall Be 12"

NOTES

1. All Electric Cable Shall be A.W.G. No. 14 Unless Otherwise Indicated.
2. Lighting Control Installation, Type CB RSC Shall be Pedestal Mounted, (See Special Provisions.)
3. Power Supplied by Central Illinois Public Service Company. Phase Conductors and Ground Shall be Copper, Marked -Type Use- and be Listed In The NEL as Suitable For Direct Burial. Use Type RUH or a Type That Is Approved by C.I.P.S.
4. Service Installation (Special) to be Mounted on Traffic Signal Control Cabinet. See Detail Sheet No. 97. Cable Denoted as I/C No. 8 Shall be Included In the Contract Unit Price for Service Installation (Special).
5. This 2" Conduit Shall be Installed Directly From The Lighting Controller to The Proposed Handhole in The Northeast Quadrant With Cable as Noted.
6. Signal Head Shall be Bracket Mounted to Mast Arm Pole. A Separate 5/C Cable Shall be Run From The Controller to This Signal Head. This Cable Shall Not Go Through The Mast Arm Terminal Block. For Schedule of Quantities See Sheet No.15
7. Radio Transceiver Shall Be Installed Inside Traffic Controller Cabinet. Coaxial Cable To Antenna Shall Be a Maximum Length Of 100' and Shall be Installed In Proposed Conduit System to Light Pole Or Combination Mast Arm Pole Designated In Plans. Existing Location Of Master Controller - 5th and Walnut St.
8. PVC Conduit 2" and *6 I/C Cables to be Installed From Service Installation (Special) To Lighting Controller Shall be Included In The Contract Unit Price Each For Control Installation , TY CB RCS 60-240

ILL. RTE. 13 & 127 & 149 AND WALNUT STREET CABLE DIAGRAM : SIGNAL FACES

C B A 0 A B C

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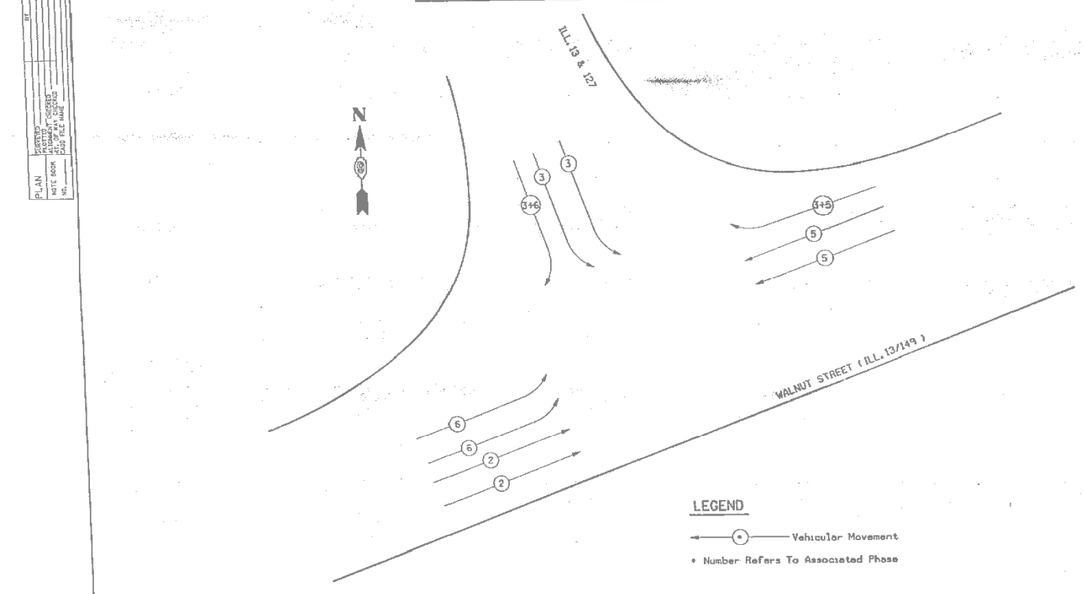
		DRAWN -	REVISED -			331	(12-1) B-1	JACKSON	200	58
	PLOT SCALE = 40.0000 ' / IN.	CHECKED -	REVISED -						CONTRACT NO. 78056	
	PLOT DATE = 1/25/2012	DATE -	REVISED -		SCALE: SHEET NO. 8 OF 9 SHEETS STA. TO STA.			ILLINOIS	FED. AID PROJECT	

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
42	(13-1R	JACKSON	164	83
STA.		TO STA.		

PHASE DESIGNATION DIAGRAM



LEGEND

Vehicular Movement

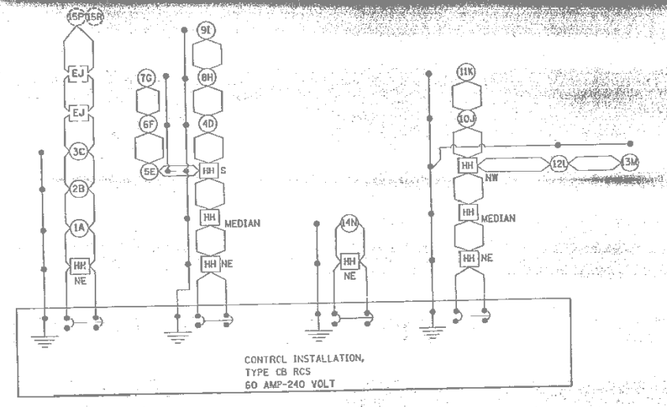
* Number Refers To Associated Phase

NAME OF INTERSECTION: Walnut Street and Ill. 13 & 127 & 149

CONTROLLER SPECIFIED: Full Actuated Controller, Standard Sequence IV, 8 Phases In Type IV Cabinet.

REFERRING TO STANDARD 2393-1, THE VEHICULAR AND PEDESTRIAN PHASES USED ARE DESIGNATED ON DIAGRAM.

WIRING DIAGRAM FOR LIGHTING



NOTES

1. For Size and Type of Cable Used For Lighting Installation, See Cable Diagram, Sht. No. 84.
2. Power to Control Installation Shall be as Shown on Detail Sht. No. 84 .
3. Electrical Service Required For Lighting and Signal Installation Shall be A 60 AMP-240 Volt Service.

LEGEND FOR WIRING DIAGRAM

- HH / NE — Indicates Proposed Handhole With Lighting Cable Splice. Letters Below Indicates Quadrant Location of Handhole.
- 1A — Number Indicates Position of Proposed Pole In Wiring Diagram. Letter Indicates Luminare on That Pole.
- Indicates Continuous Ground From Control Installation.
- (NE) — Indicates Existing Pole and Luminaire to Remain.
- [E J] — Existing Junction Box be Re-Used.
- Indicates Proposed Ground at Structure.

ILL. RTE. 13 & 127 & 149 AND WALNUT STREET-PHASE DESIGNATION AND WIRING DIAGRAM FOR LIGHTING

C B A 0 A B C D

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	PLOT SCALE = 40.0000 ' / IN.	CHECKED -	REVISED -
	PLOT DATE = 1/25/2012	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING LIGHTING PLANS (FOR INFORMATION ONLY)

SCALE: | SHEET NO. 9 OF 9 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
331	(12-1) B-1	JACKSON	200	59
		CONTRACT NO. 78056		
		ILLINOIS FED. AID PROJECT		