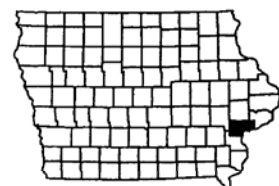


MUSCATINE COUNTY

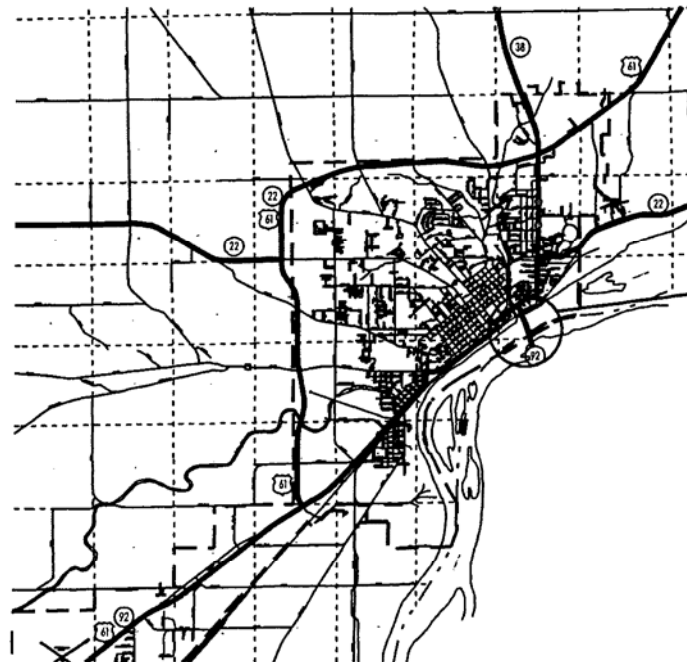
LIGHTING

BRFN-092-9(118)--39-70

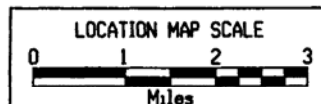
LETTING DATE
4/18/06



T-76N



PROJECT LOCATION



DESIGN TEAM

JORGENSEN/JENSEN/SCI

MUSCATINE COUNTY

PROJECT NO. BRFN-092-9(118)--39-70 SHEET NO. A.01

STANDARD ROAD PLANS					
The following Standard Road Plans shall be considered applicable to construction work on this project.					
NUMBER	DATE	NUMBER	DATE	NUMBER	DATE
RS-2	10-27-98	RM-31	09-21-99	RM-35	09-21-99
RS-3	12-03-96	RM-33	10-03-00	RM-37	04-27-99
RS-62	01-12-99	RM-34A	10-19-04	RM-38	04-27-99
RS-5E	04-20-04	RM-34B	09-21-99	RM-40	09-21-99



Iowa Department of Transportation

Highway Division

PLANS OF PROPOSED IMPROVEMENTS ON THE

INTERSTATE ROAD SYSTEM MUSCATINE COUNTY

LIGHTING

IA-92 Mississippi River Bridge
In Muscatine

SCALES: As Noted

The Iowa Department of Transportation Standard Specifications for Highway and Bridge Construction, series of 2001, plus current Supplemental Specifications and Special Provisions shall apply to construction work on this project.

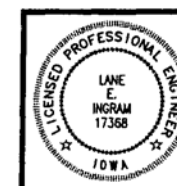
Value Engineering Saves. Refer to Article 1105.15 of Specifications

NO MILEAGE SUMMARY

TOTAL 9
PROJECT NUMBER BRFN-092-9(118)--39-70
R.O.W. PROJECT NUMBER
PROJECT IDENTIFICATION NUMBER 03-70-092-010

INDEX OF SHEETS	
NO.	DESCRIPTION
A.01	TITLE SHEET
C.01-02	GENERAL NOTES AND ESTIMATE OF QUANTITIES
P.01-03	HIGHWAY LIGHTING LAYOUT
P.04-06	HIGHWAY LIGHTING DETAILS

REVISIONS



I hereby certify that this plan was prepared under my supervision and that engineering decisions with regard to the design were made by me or by other duly licensed Professional Engineers under the laws of the State of Iowa.

Signature: Lane E. Ingram Date: 30 DEC 2005

Printed or Typed Name: Lane E. Ingram

My license renewal date is December 31, 20 06.

Pages or sheets covered by this seal: A.01, C.01-02, AND P.01-06

HIGHWAY LIGHTING DATA 108-11 08-20-05 ELECTRICAL SERVICE: MUSCATINE POWER AND WATER WILL PROVIDE SECONDARY SERVICE (120/240 VOLTS SINGLE PHASE) TO THE CONTROL STATION LOCATED ON THE PLAN. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO MAKE THE NECESSARY CONTACTS WITH THE UTILITY COMPANY WITH REGARD TO THE ELECTRICAL SERVICE. CONTACT IS: MUSCATINE POWER AND WATER, MR. STEVE SHOPPA, PHONE: (563) 262-3324. ROADWAY LUMINAIRES LED STREETLIGHT LUMINAIRE, 240 VOLT, ANSI/IES GRARE CONTROL RATINGS SHALL BE "FULL CUTOFF" WITH FLAT GLASS LENS. LED COLOR SHALL BE NEAR 589NM, TO SIMULATE LOW PRESSURE SODIUM LIGHT.		ESTIMATE REFERENCE INFORMATION 100-4 10-29-02 Data listed below is for informational purpose only and shall not constitute a basis for any extra work orders. <table><tr><th>ITEM NO.</th><th>ITEM CODE</th><th>DESCRIPTION</th></tr><tr><td>1</td><td>2401-6745356</td><td>REMOVE CONCRETE FOOTING TO 1 FOOT BELOW FINISHED GRADE. ALL REMOVED MATERIALS SHALL BE DISPOSED OF PER STD NOTE 213-1. 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03-28-95232-3 EROSION CONTROL: Following completion of work on this project seeding, fertilizing, and mulching of all disturbed areas shall be done as directed by the Engineer. SEEDING: 3 lbs. of Fescue, Kentucky 31 or Fawn per 1000 sq. ft. FERTILIZER: 17 lbs. of 13-13-13 (or equivalent) chemically combined fertilizer per 1000 sq. ft. MULCH: 70 lbs. of dry cereal straw per 1000 sq. ft. All mulch to be consol- idated into the soil with the mulch stabilizer. The preparation of the seedbed, furnishing and application of seed, fertilizer, and mulch to all disturbed areas on this project shall be considered incidental to work on this project and no extra com- pensation will be allowed.		10-29-02213-1 It shall be the contractor's responsibility to provide waste areas or disposal sites for excess material (excavated material or broken concrete) which is not desirable to be incorporated into the work involved on this project. These areas shall not impact wetlands or "Waters Of The U.S." No payment for overhaul will be allowed for material hauled to these sites. No material shall be placed within the right-of-way, unless specifically stated in the plans.		04-03-01203-2 During construction of this project, the contractor will be required to coordinate his operations with those of other contractors working within the same area. Other work in progress during the same period of the time will include construction of the follow- ing projects: <table><tr><td>Project</td><td>Type of Work</td></tr><tr><td>BRFN-092-9(115)--39-70</td><td>BRIDGE WASHING</td></tr><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table>		Project	Type of Work	BRFN-092-9(115)--39-70	BRIDGE WASHING					10-23-93201-1 Lighting Contractor shall check for locations of utilities, drainage structures or other facilities in the construction area. Any damage to such facilities due to the contractor's carelessness shall be corrected at the contractor's expense.																					
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DESIGN TEAM JORGENSEN/JENSEN/SCI		STATE OF IOWA FHWA REGION 7		FISCAL YEAR MUSCATINE		COUNTY PROJECT NUMBER BRFN-092-9(118)--39-70		SHEET NUMBER C.01																											

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GENERAL NOTES AND ESTIMATE OF QUANTITIES

SHEET 1

IA-92 MISSISSIPPI RIVER BRIDGE IN MUSCATINE

ITEM NO.	ITEM CODE	ITEM	UNIT	TOTAL	AS BUILT QUAN.
1	2401-6745356	RMVL OF CONC FOOTING OF LIGHT POLE	EACH	1	
2	2401-6750001	RMVL	LS	1	
3	2523-0000200	ELECTRICAL CIRCUITS	LF	4185	
4	2523-0000310	HANDHOLES AND JUNCTION BOXES	EACH	29	
5	2523-0000400	CONTROL CABINET	EACH	2	
6	2523-6765009	RMV & REINSTALL LIGHT POLE & LUMINAIRE	EACH	1	
7	2528-8445110	TRAFFIC CONTROL	LS	1	
8	2528-8445112	FLAGGERS	DAY		
9	2533-4980005	MOBILIZATION	LS	1	
10	2599-9999005	NEW LED ROADWAY LUMINAIRES	EACH	27	
11	2599-9999010	NEW NAVIGATION LIGHT SYSTEM	LS	1	

108-2
08-20-85

[illegible]

108-1
2-11-00

[illegible]

108-12
2-11-00

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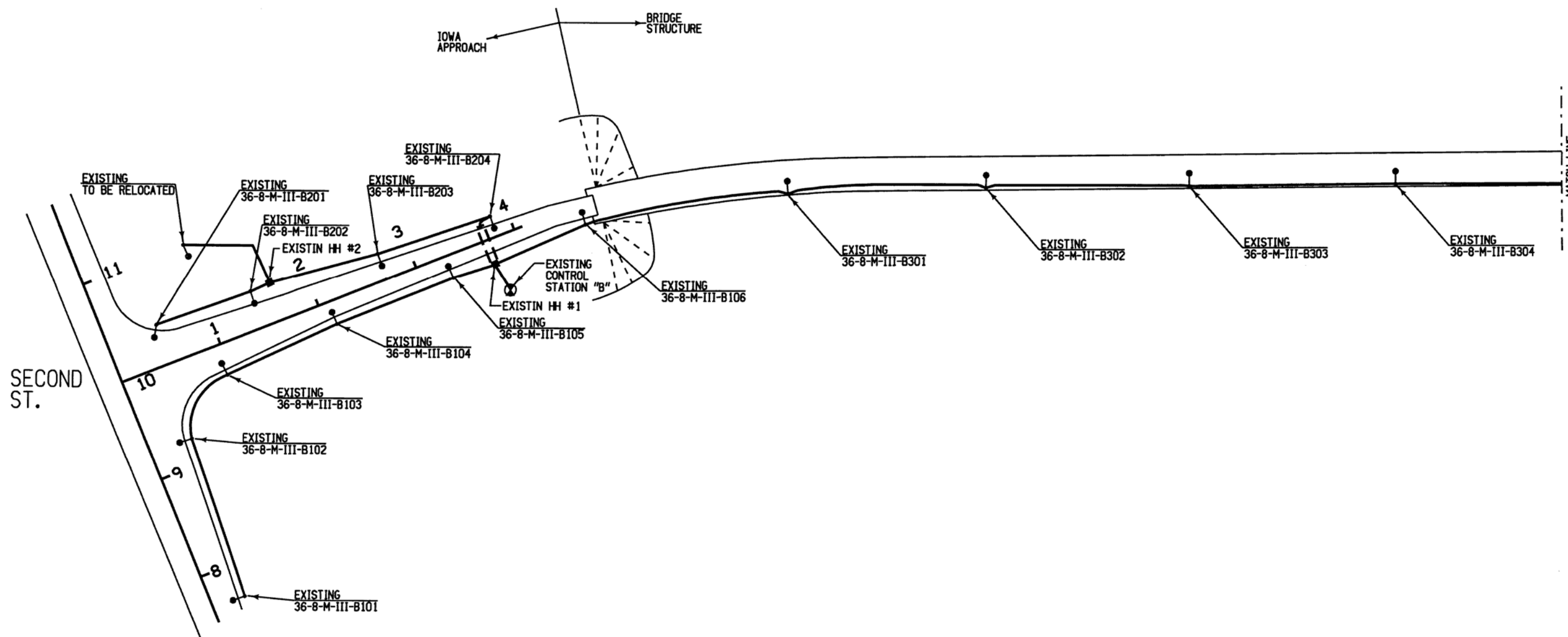
Data listed below is for informational purpose only and shall not constitute a basis for any extra work orders.

ITEM NO.	DESCRIPTION OF REMOVAL ITEMS	COMMENTS
1	CONTROL POWER TRANSFORMER AND WIRING NOT REQUIRED FOR 240VOLT OPERATION FROM 2 CONTROL STATIONS.	
2	ALL WIRING, CONDUIT, AND EQUIPMENT ASSOCIATED WITH THE EXISTING NAVIGATION LIGHT SYSTEM, INCLUDING STEPDOWN TRANSFORMER AND TWO CENTER CHANEL MARKER LIGHTS AND FOUR SIDE CHANEL MARKER LIGHTS.	
3	24 EXISTING HPS LUMINAIRE, POLE WIRING, AND EXISTING CONNECTORS IN THE BASE.	
4	7 TRUSSMOUNTED HPS LUMINAIRE, WIRING, CONDUIT AND EXISTING CONNECTORS.	
5	ALL EXISTING CABLE AND CONNECTORS CURRENTLY INSTALLED IN HANDHOLES AND JUNCTION BOXES WHICH ARE TO BE REUSED.	

108-23A
10-29-02

1. Through traffic will be maintained on the project at all times.
2. Traffic control on this project shall be found in accordance with the RS series of Standard Road Plans found in Tab. 105-4 on the Title Sheet and/or appropriate Detail Sheets included in the plans. For additional complementary information, refer to Part VI of the Manual on Uniform Traffic Control Devices and the current Standard Specifications.
3. The contractor shall coordinate traffic control with other projects in the area.
4. All traffic control devices shall be furnished, erected, maintained, and removed by the contractor.
5. Where possible, all post mounted signs shall be placed at least 2 feet beyond the curb or edge of shoulder.
6. The location for storage of equipment by the contractor during non-working hours shall be as approved by the engineer in charge of construction.
7. The engineer may require modifications to the pavement marking details shown. Conflicting permanent edge lines, center lines, or lane lines shall be removed. As applicable, permanent edge lines, center lines, and lane lines shall be placed before the roadway is returned to normal traffic. The current Standard Specifications and supplemental specifications shall apply.
8. Proposed sign spacing may be modified as approved by the engineer to meet existing field conditions or to prevent obstruction of the motorist's view of permanent signing.
9. Permanent signing that conveys a message contrary to the message of the temporary signing and not applicable to the working conditions shall be covered by the contractor when directed by the engineer.
10. Proposed changes in the traffic control plan shall be reviewed with the Office of Construction before changes are made.

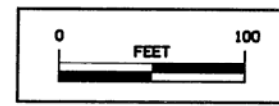
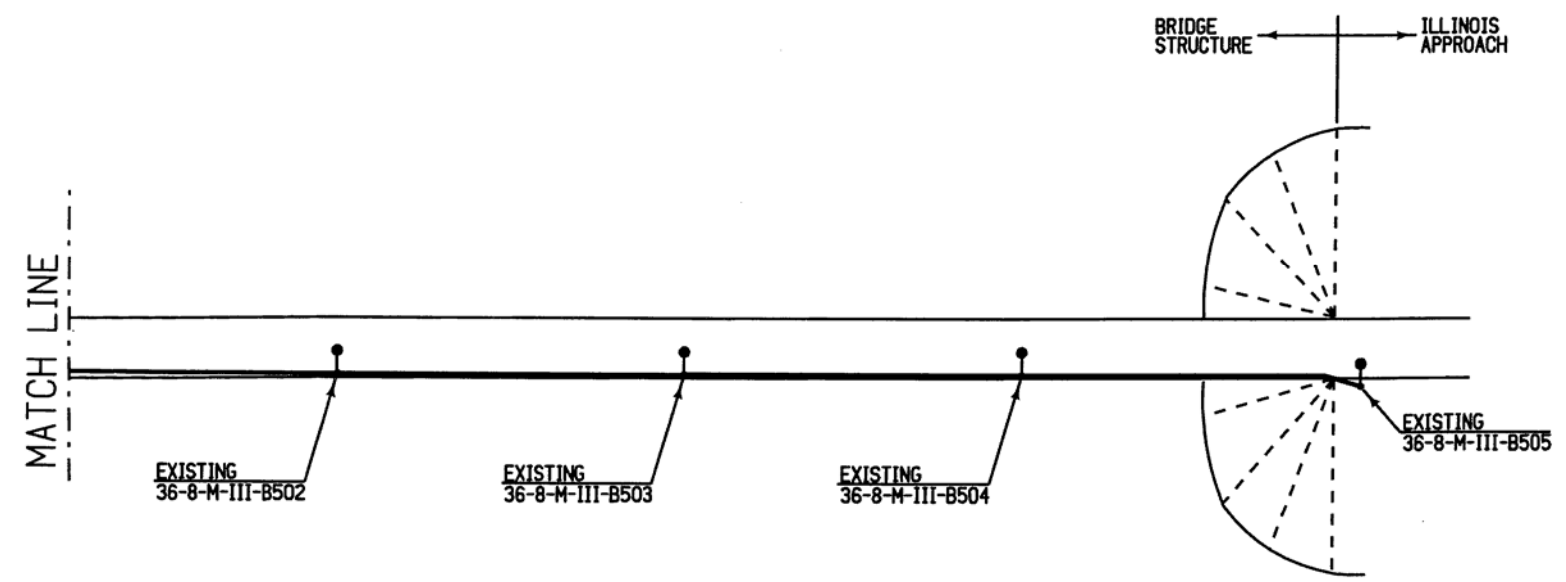
GENERAL NOTES AND
ESTIMATE OF QUANTITIES
SHEET 2
IA-92 MISSISSIPPI RIVER BRIDGE
IN MUSCATINE



HIGHWAY LIGHTING LAYOUT
IA-92 MISSISSIPPI RIVER BRIDGE
IN MUSCATINE

DESIGN TEAM	JORGENSEN/JENSEN/SCI	STATE OF IOWA	FHWA REGION 7	FISCAL YEAR	MUSCATINE	COUNTY	PROJECT NUMBER	BRFN-092-9(118)--39-70	SHEET NUMBER	P.01
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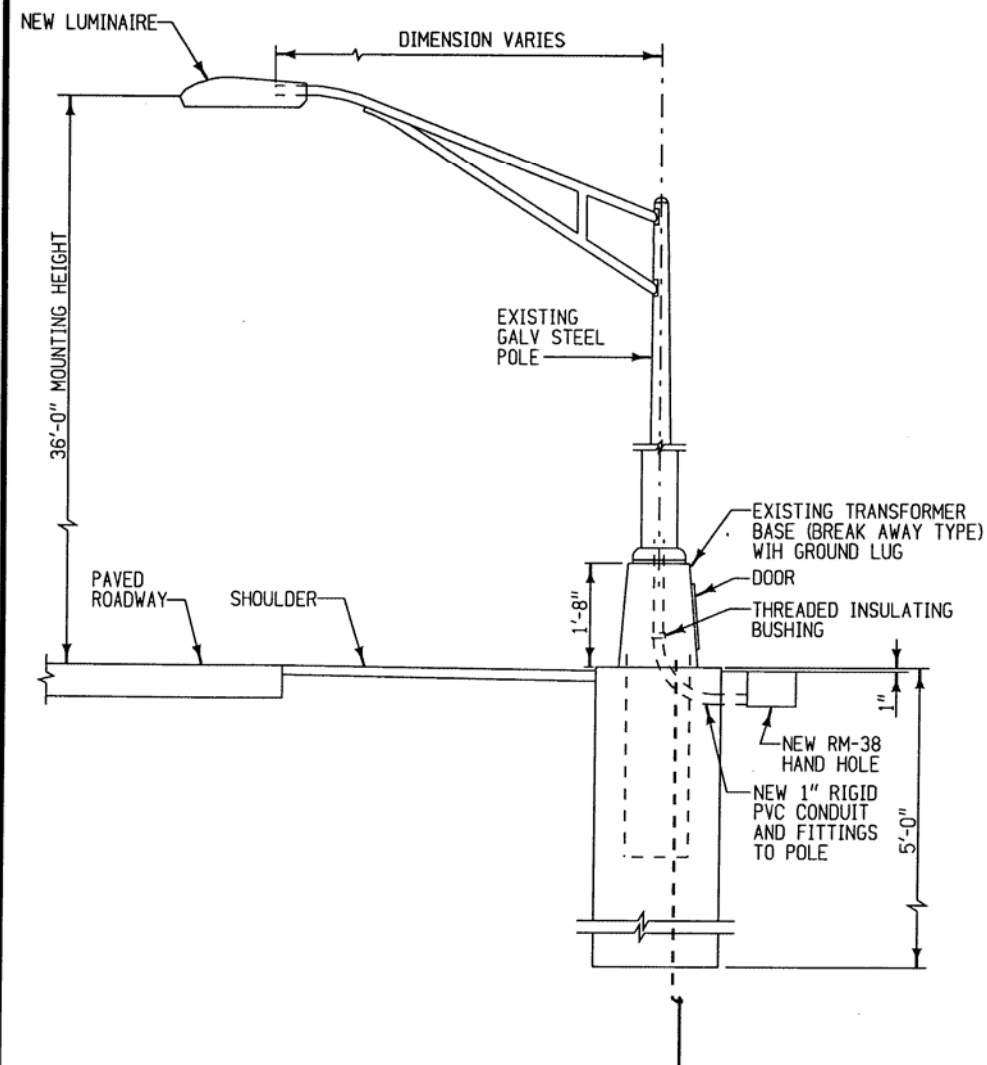
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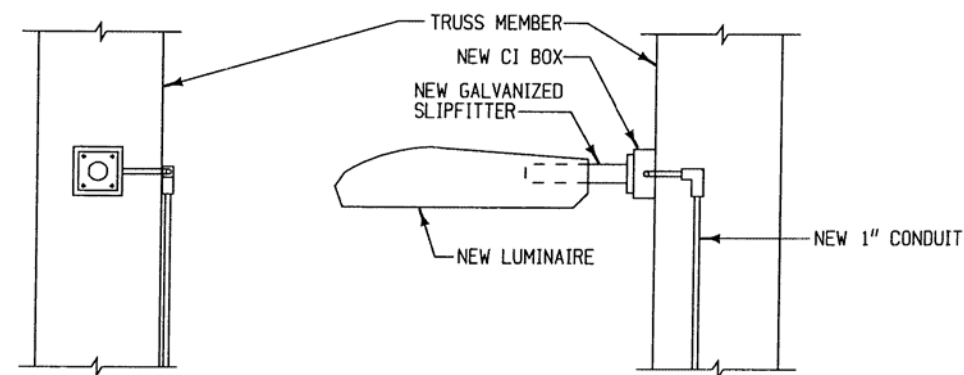
HIGHWAY LIGHTING LAYOUT
1A-92 MISSISSIPPI RIVER BRIDGE
IN MUSCATINE

DESIGN TEAM	JORGENSEN/JENSEN/SCI	STATE OF IOWA	FHWA REGION 7	FISCAL YEAR	MUSCATINE	COUNTY	PROJECT NUMBER	BRFN-092-9(118)--39-70	SHEET NUMBER	P.03
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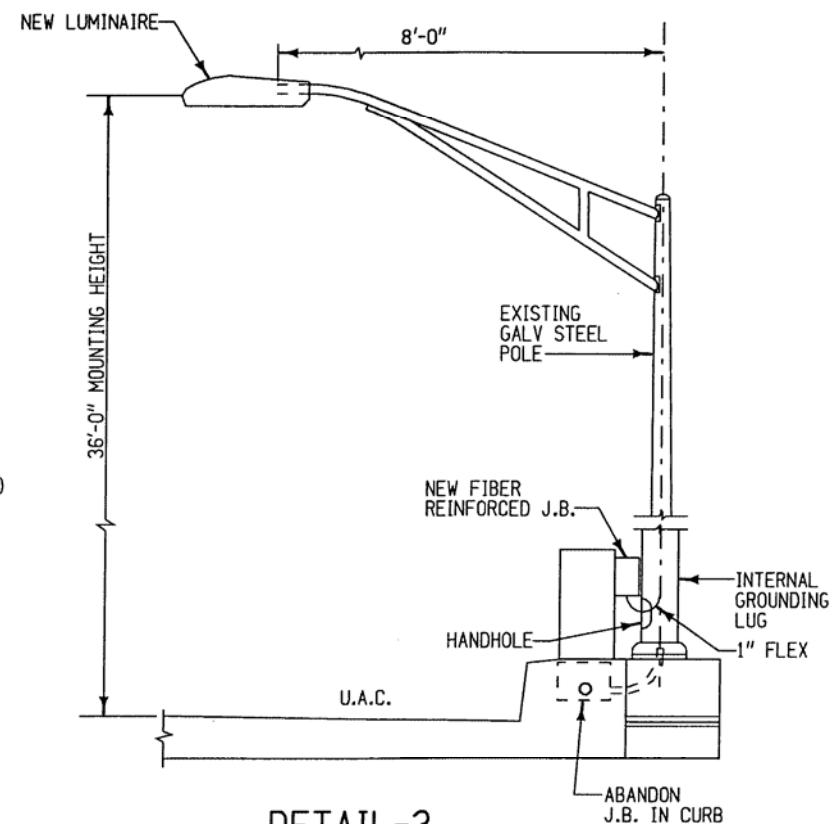
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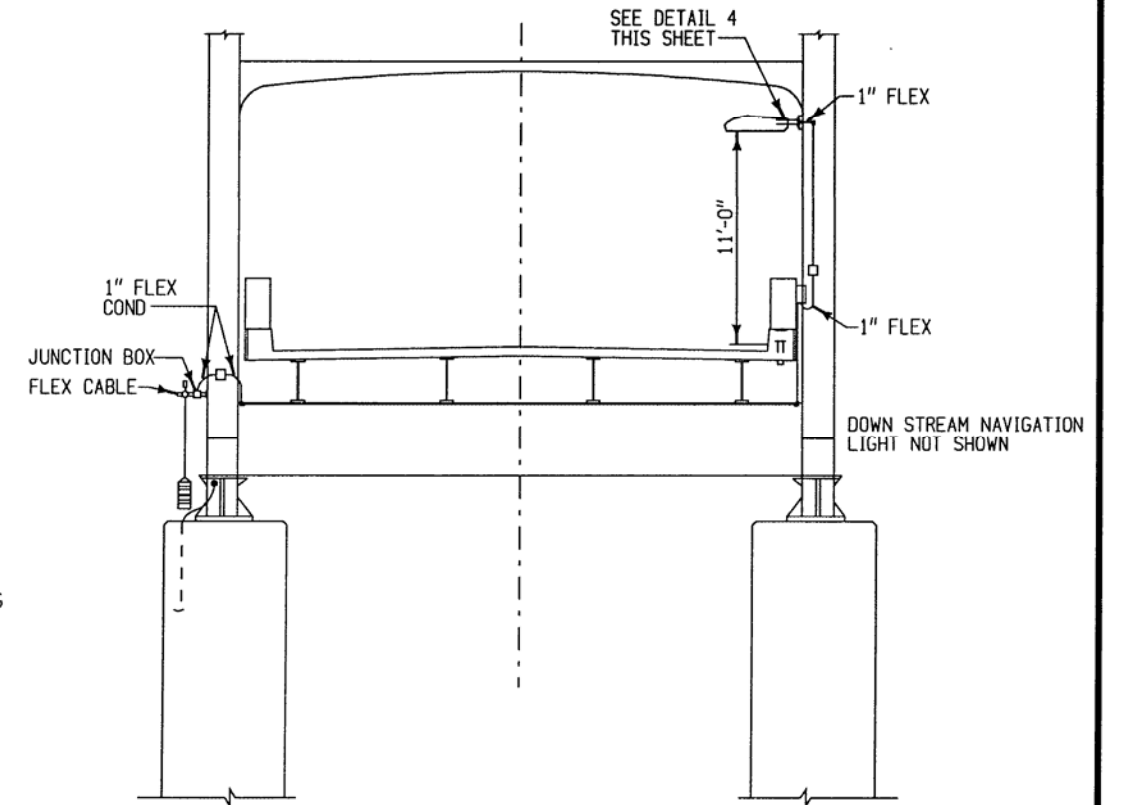
DETAIL-2
LIGHT STANDARD ON CONCRETE FOUNDATION



DETAIL-1
LUMINAIRE ON TRUSS



DETAIL-3
LIGHT STANDARD ON BRIDGE STRUCTURE

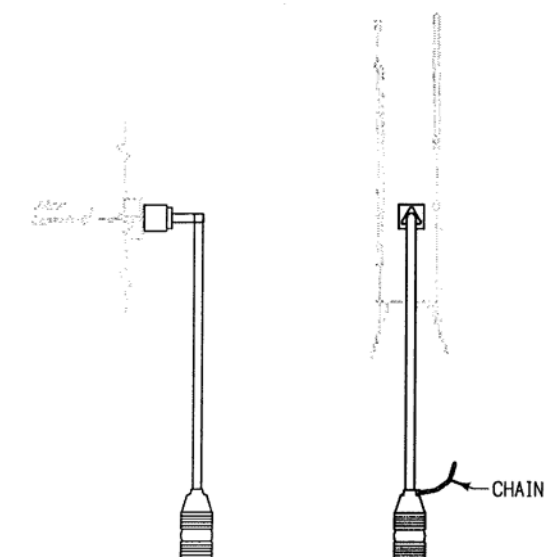
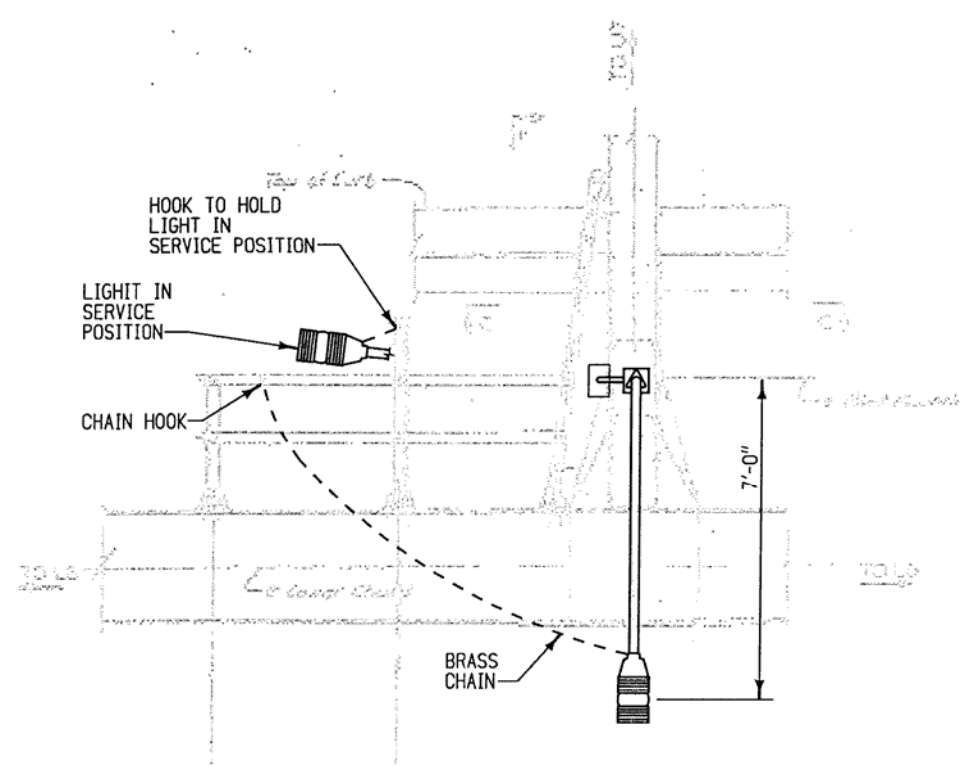
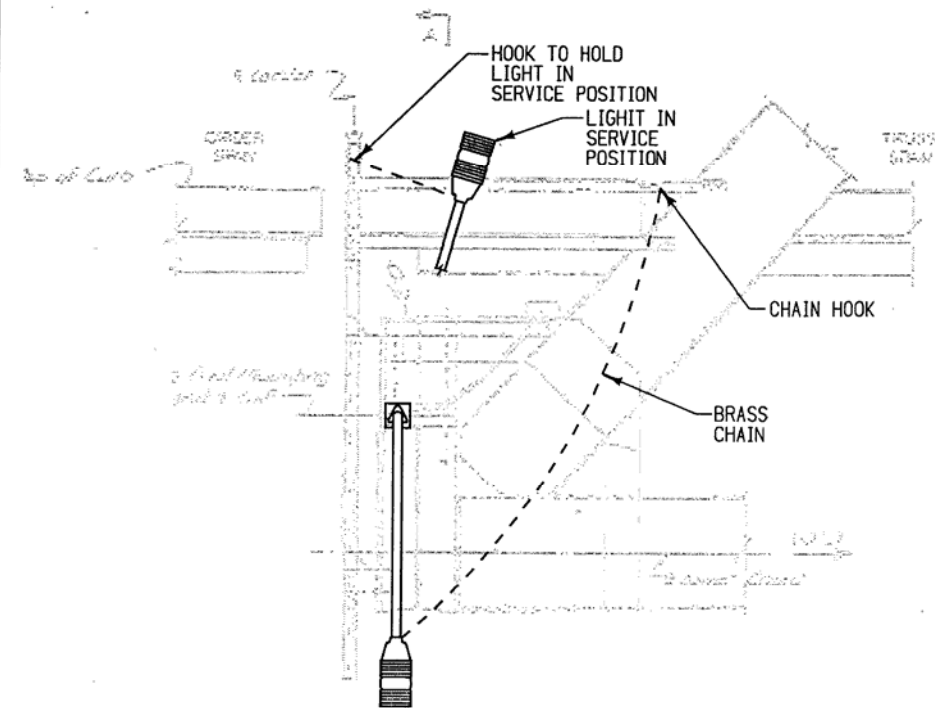


SECTION A-A
TRUSS SPAN



DETAIL-4
NEW CONTROL SYSTEM

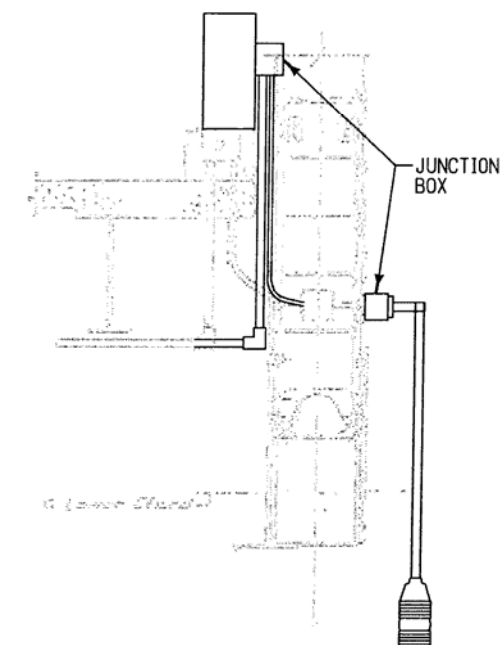
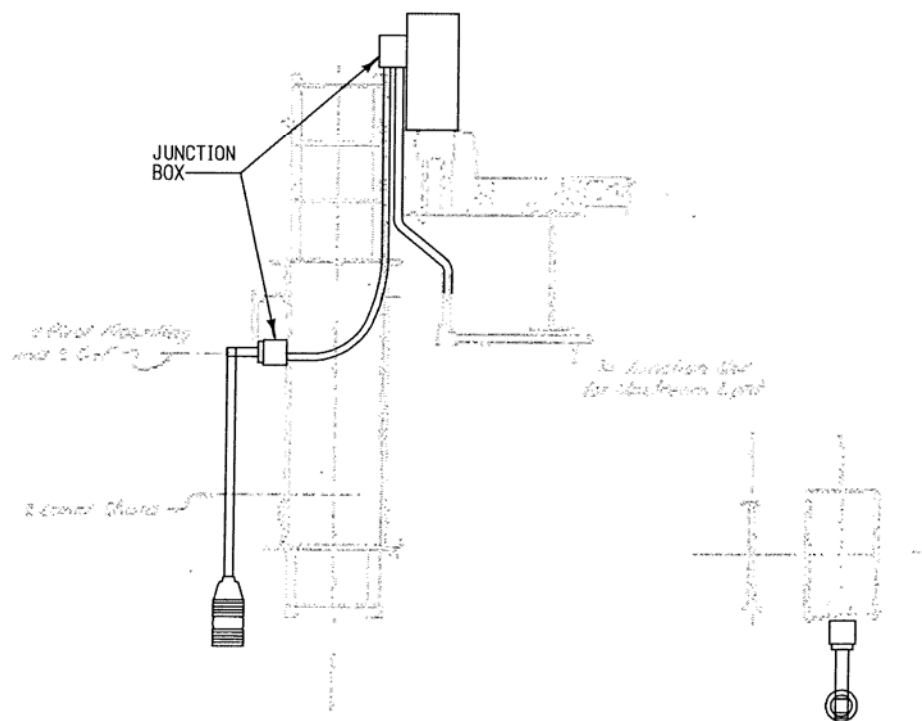
HIGHWAY LIGHTING DETAILS
SHEET 1
1A-92 MISSISSIPPI RIVER BRIDGE
IN MUSCATINE



CHANNEL NARROW LIGHT PLATFORM
NEAR PANEL POINT 17
Note: Location of platform near panel point 17.

WIDE CHANNEL LIGHT PLATFORM
NEAR PANEL POINT 17
Note: Location of platform near panel point 17.

TYPICAL SECTION, NAVIGATION LIGHT TYPE
(SEE SPECIFICATIONS)
(SEE SPECIFICATIONS)



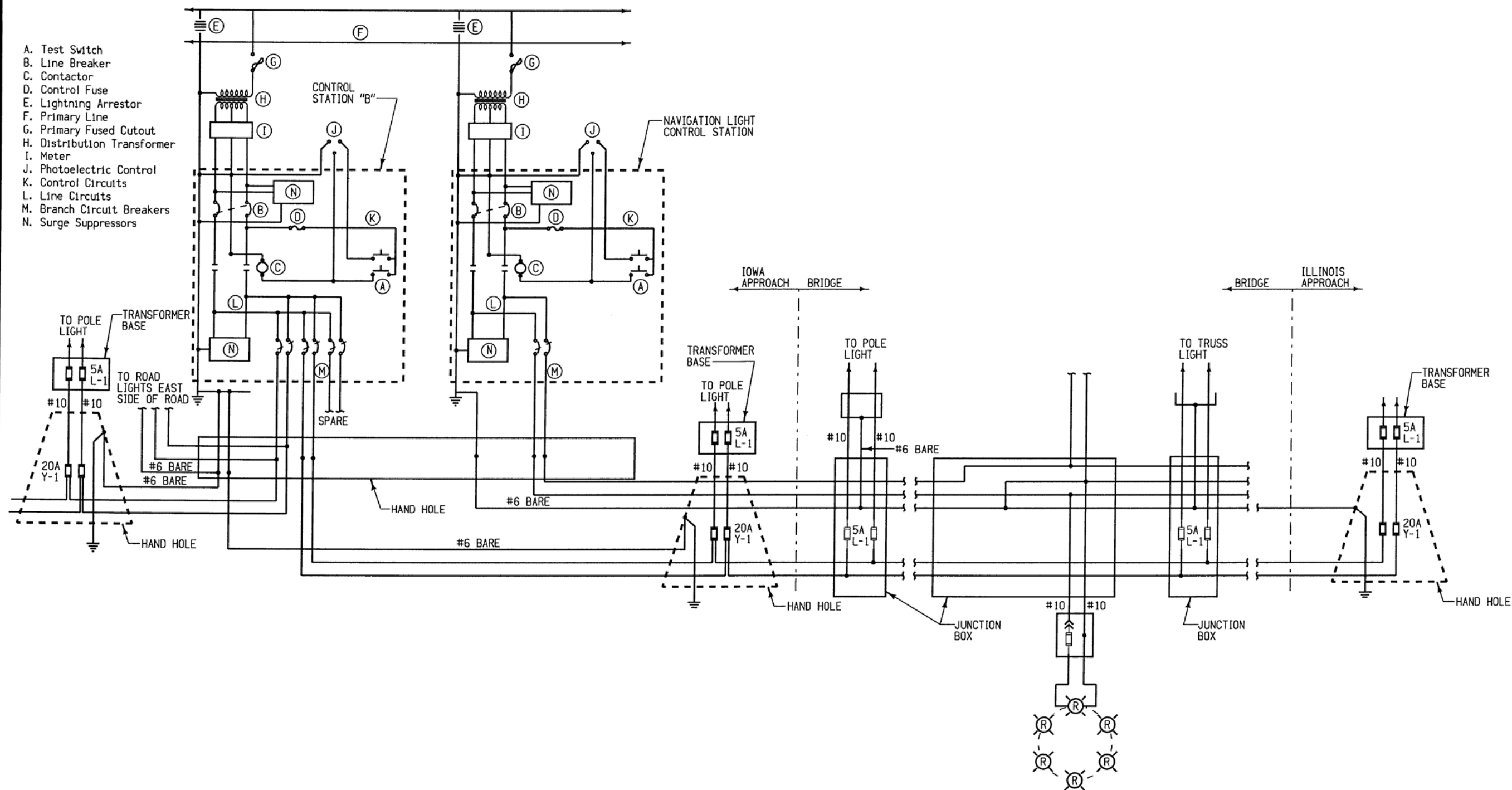
SECTION 17-17
Note: Location of platform near panel point 17.

SECTION 17-17
Note: Location of platform near panel point 17.

NOTE:
IRRELEVANT DATA ON THIS SHEET IS NOT
TO BE CONSIDERED A PART OF THIS CONTRACT.

HIGHWAY LIGHTING DETAILS
SHEET 2
1A-92 MISSISSIPPI RIVER BRIDGE
IN MUSCATINE

- A. Test Switch
- B. Line Breaker
- C. Contactor
- D. Control Fuse
- E. Lightning Arrestor
- F. Primary Line
- G. Primary Fused Cutout
- H. Distribution Transformer
- I. Meter
- J. Photoelectric Control
- K. Control Circuits
- L. Line Circuits
- M. Branch Circuit Breakers
- N. Surge Suppressors



HIGHWAY LIGHTING DETAILS
 SHEET 3
 IA-92 MISSISSIPPI RIVER BRIDGE
 IN MUSCATINE