LETTING DATE Dec 15, 2026

LIGHTING

NHSX-059-3(064)--3H-78

POTTAWATTAMIE COUNTY

INDEX OF SHEETS	
No.	DESCRIPTION
A Sheets	**Title Sheets**
A.1	Title Sheet
A.2	Location Map Sheet
C Sheets	**Quantities and General Information**
C.1 - 2	Estimated Project Quantities
C.3 - 4	General Notes & Tabulations
P Sheets	**Lighting Layout Sheets**
P.1 - 2	Lighting Demo Sheets
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P.5	Lighting Detail Sheets
P.6	As-Built Drawings (For Information Only)

IOWA DOT

PLANS OF PROPOSED IMPROVEMENT ON THE

PRIMARY ROAD SYSTEM

POTTAWATTAMIE COUNTY

LIGHTING

In Avoca, Interchange of I-80 and US 59

SCALES: As Noted

Refer to the Proposal Form for list of applicable specifications.

Value Engineering Saves. Refer to Article 1105.13 of the Specifications.

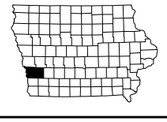
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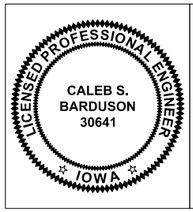
REVISIONS

TOTAL
12
PROJECT IDENTIFICATION NUMBER
24-78-059-010
PROJECT NUMBER
NHSX-059-3(064)--3H-78
R.O.W. PROJECT NUMBER

Scan the QR code or click the link below to leave plan quality feedback and help us improve future projects.

Design QR Feedback Link





I hereby certify that this engineering document was prepared by me or under my direct personal supervision and that I am a duly licensed Professional Engineer under the laws of the State of Iowa.

Caleb Barduson 10/05/2026

CALEB S. BARDUSON, P.E. DATE

License Number: 30641

My license renewal date is December 31, 2027.

Pages or sheets covered by this seal:

A.1-2, C.1-4, P.1-5

FILE NO.	ENGLISH	DESIGN TEAM HERMANN \ HR GREEN	POTTAWATTAMIE COUNTY	PROJECT NUMBER NHSX-059-3(064)--3H-78	SHEET NUMBER A.1	

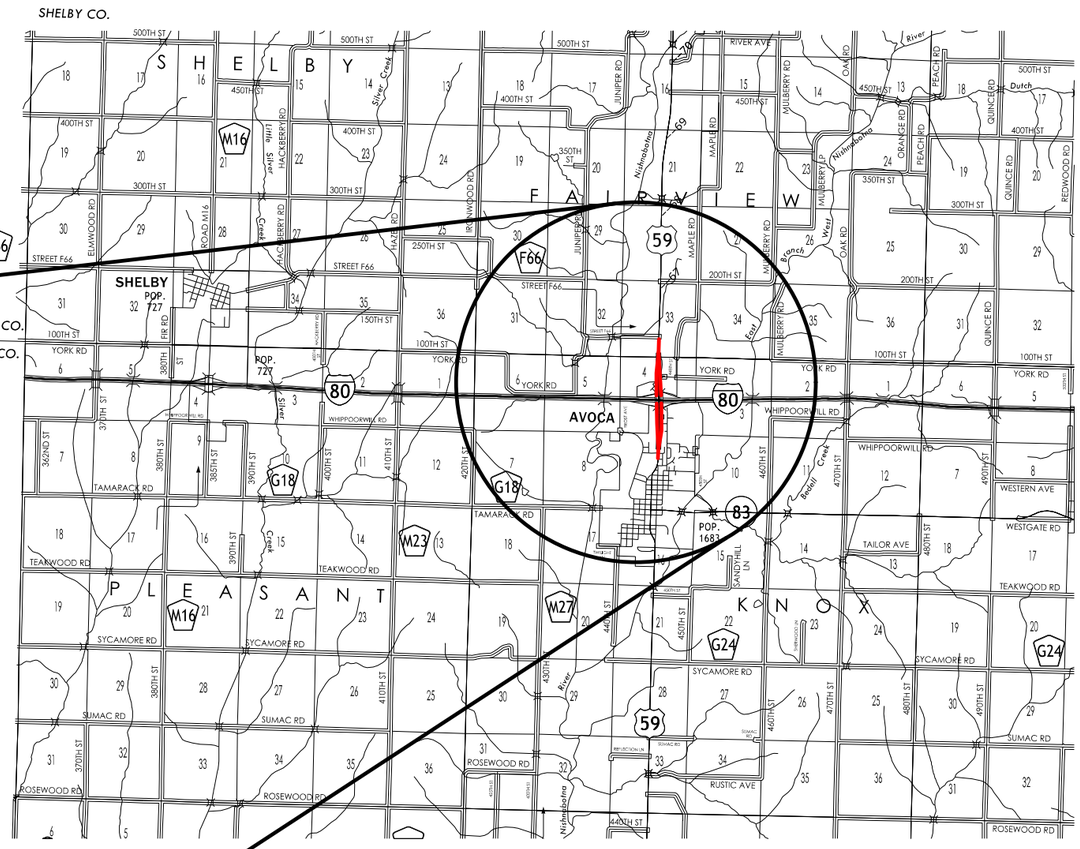
4:54:38 PM 10/2/2026 rtyrrel pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7805901024\TrafficAndSafety\TrafficEngineering\Avoca_Lighting Sheets\CADD Files\SHT_A01_78059064.dgn

END CONSTRUCTION
Ref 66.2 MP
STA. 551+53.00

BRIDGE OVER I-80(EXST)
FHWA/ASSET #43480 (US 59 SB)
FHWA/ASSET #43470 (US 59 NB)



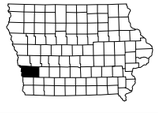
BEGIN CONSTRUCTION
Ref: 64.7 MP
STA. 471+35.75



T-78N

T-77N

R-40W R-39W R-38W



LOCATION MAP SCALE
0 1 2 3
Miles

FILE NO.	ENGLISH	DESIGN TEAM HERMANN \ HR GREEN	POTTAWATTAMIE COUNTY	PROJECT NUMBER NHSX-059-3(064)--3H-78	SHEET NUMBER A.2	

1:47:36 PM 10/5/2026 rtyrrel pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7805901024\TrafficAndSafety\TrafficEngineering\Avoca_Lighting Sheets\CADD Files\SHT_A01_78059064.dgn

ESTIMATED PROJECT QUANTITIES AND REFERENCE NOTES

Lighting Items : Roadway Items
Division 2 :

Item no.	Item Code	Item	Unit	Quantities			Estimate Reference Notes
				Estimated			
				Lighting Items	Division 2	Total	
1	2401-6745356	REMOVAL OF CONCRETE FOOTINGS OF LIGHT POLES	EACH	22		22	A. Refer to P Sheets for locations and details. B. This item includes the demolition and disposal of each light pole concrete footing per the plans. C. Method of Measurement: By count of each light pole concrete footing removed. D. Basis of Payment: The contractor will be paid the contract unit price for each light pole concrete footing removed. Payment is full compensation for furnishing all materials, equipment, and labor required to remove each light pole footing and any associated access handhole including waste disposal, backfill of the void, compaction to finished grade, and surface restoration. Protection, splicing, decommissioning, and removal of electric conductors and portions of conduit associated with the footing shall be incidental to the cost of the footing removal.
2	2401-6745765	REMOVAL OF LIGHT POLES	EACH	22		22	A. Refer to the P Sheets for locations and details. B. This item includes the protection and removal of the roadway light pole assembly for salvage to the owner. C. Method of Measurement: By count of each light pole structure removed. D. Basis of Payment: The contractor will be paid the contract unit price for each light pole structure removed. Payment is full compensation for furnishing all materials, equipment, and labor required to protect and remove each light pole assembly for salvage to the owner.
3	2523-0000100	LIGHTING POLES	EACH	22		22	A. Refer to the P Sheets for locations and details. B. Refer to Tab. 108-1 and Tab. 108-11A in the C Sheets. C. Provide and install each light pole assembly per Iowa DOT Standard Specifications and Standard Road Plans LI-101 and LI-201. D. Method of Measurement: By count of each light pole assembly installed. E. Basis of Payment: The contractor will be paid the contract unit price for each light pole assembly installed. Payment is full compensation for furnishing all materials, equipment, and labor required to install each light pole assembly including luminaire, pole, footing, grounding, and associated riser conductors in pole.
4	2523-0000200	ELECTRICAL CIRCUITS	LF	8,624		8,619	A. Refer to the P Sheets for locations and details. B. Refer to Tab. 108-2 and Tab. 108-12 in the C Sheets. C. Provide and install Electrical Circuits per Iowa DOT Standard Specifications and Standard Road Plan LI-141. D. Method of Measurement: By count of each lineal foot of electrical circuit installed. E. Basis of Payment: The contractor will be paid the contract unit price for each lineal foot of electrical circuit installed. Payment is full compensation for furnishing all materials, equipment, and labor required to install conduit, fittings, conductors, and splice connectors/terminations including excavation, backfill, and compaction.
5	2523-0000310	HANDHOLES AND JUNCTION BOXES	EACH	19		19	A. Refer to the P Sheets for locations and details. B. Provide and install Handholes/Junction Boxes per Iowa DOT Standard Specifications and Standard Road Plan LI-103.C. Handholes shall be Type I per Standard Road Plan LI-103 unless noted otherwise. C. Basis of Payment: The contractor will be paid the contract unit price for each handhole installed. Payment is full compensation for furnishing all materials, equipment, and labor required to install each handhole including excavation, backfill, compaction, ground rod, and bonding conductors.
6	2523-0000400	CONTROL CABINET	EACH	2		2	A. Refer to the P Sheets for location and details. B. Provide and install Pad-Mounted Control Cabinet per Iowa DOT Standard Specifications and Standard Road Plan LI-152. C. Refer to Standard Road Plan LI-151 and Standard Specifications. D. Method of Measurement and Basis of Payment per Standard Specifications.

Item no.	Item Code	Item	Unit	Quantities			Estimate Reference Notes
				Estimated			
				Lighting Items	Division 2	Total	
7	2526-8285040	CONSTRUCTION SURVEY, LOCATION SURVEY	LS	1		1	A. Refer to the P Sheets for locations and details. B. Refer to Tab. 108-1 and Tab. 108-11A in the C Sheets. C. Locate and stake each new pole assembly location. D. Basis of Payment: Payment is full compensation for furnishing all materials, equipment, and labor required to locate and stake each light pole assembly.
8	2526-9000000	GEOSPATIAL MAPPING OF SUB-SURFACE AND UNDERGROUND UTILITIES	LF	1		1	2526-9000000 GEOSPATIAL MAPPING OF SUB-SURFACE AND UNDERGROUND UTILITIES Refer to DS Geospatial Mapping of Sub-Surface and Underground Utilities.
9	2528-8445110	TRAFFIC CONTROL	LS	1		1	A. Includes all traffic control devices and equipment necessary to maintain traffic in accordance with the current Standard Specifications. Refer to Tab 108-23A for additional information.
10	2533-4980005	MOBILIZATION	LS	1		1	- -
11	2555-0000010	DELIVER AND STOCKPILE SALVAGED MATERIALS	LS		1	1	A. Refer to Tab. 110-13 in C Sheets. B. Method of Measurement: By lump sum. C. Basis of Payment: The contractor will be paid the contract lump sum price for transport and delivery of the identified materials/equipment to the designated stockpile location. This shall be considered full compensation for furnishing all labor, equipment, and materials required to coordinate delivery with contact person, load a materials/equipment at the project site, transport, and unload identified materials/equipment at the delivery site."
12	2599-9999005	('EACH' ITEM) REMOVAL OF LIGHTING CONTROL CABINET	EACH	2		2	A. Refer to the P Sheets for locations and details. B. This item includes complete removal of pole mounted lighting control cabinet. Salvage is to contractor for recycle / disposal. C. Method of Measurement: By count each of each pole/wooden support mounted lighting control cabinet removed. D. Basis of Payment: The contractor will be paid the contract unit price for each pole mounted lighting control cabinet removed. Payment includes furnishing all materials, equipment, and labor to remove the existing cabinet. Incidental to and included with the removal of the lighting control cabinet is waste disposal, backfill of the void, compaction to finished grade, surface restoration, and coordination with the utility.
13	2599-9999010	('LUMP SUM' ITEM) DEMOLITION OF ELECTRIC CIRCUITS	LS	1		1	A. Refer to the P Sheets for locations and details. B. This item includes the removal of unused existing handholes, cutting back of unused existing conduits and conductors, and removal of conductors from conduits as called out on P Sheets. Salvage of removed materials is to the contractor for recycling / disposal. C. Method of Measurement: By lump sum. D. Basis of Payment: The contractor will be paid the contract lump sum price for the removal of unused existing electrical circuits. Payment includes furnishing all materials, equipment, and labor to remove the electrical circuits. Incidental to and included with the removal of the electrical circuits is waste disposal, backfill of voids, compaction to finished grade, and surface restoration.

108-11A
08-01-08

HIGHWAY LIGHTING DATA

The Iowa DOT is performing interchange grade and pave work at the US 59/I-80 interchange in Avoca. This work will include updating the current lighting at the intersection to a more current design located in Pottawattamie County Iowa

The project generally consists of the following new work:
(22) New IADOT conventional lighting pole assemblies and associated circuitry, associated conduit, and wire.
(22) Existing lighting poles and foundations that will be removed and the pole bases demolished to 2'-0" below adjacent grade and backfill as required.
(22) Existing IADOT poles, arms will be salvage to owner.
(22) Existinng luminaires will be salvaged to owner.

The lighting portion of this project will have as a deliverable the following of Developmental Specification:
DEVELOPMENTAL SPECIFICATIONS FOR GEOSPATIAL MAPPING OF SUB-SURFACE AND UNDERGROUND UTILITIES' as well as all other referenced or associated specifications.

Electrical Service: No changes planned - replace existing pole mounted lighting cabinet with new pad mounted lighting cabinet in same location. Salvage of old existing lighting cabinet is to the contractor.

Utility Provider:

Mid-American Energy
Address: 361 S Elm St, Avoca, IA 51521, US
Phone: 712-343-6949

The intent is to remove the existing poles, install the new poles in locations shown.

Obtain One-Call services and verify the location of existing underground utilities and lighting circuits prior to proceeding with lighting/electrical installations.

Light Poles: All Light Poles shall be Steel poles with Transformer Base type, per Standard Road Plan LI-210, Standard Specifications, and sized/dimensioned per the Layout Plans.

Roadway Luminaires: Contractor shall be responsible for suppling and installing solid state light emitting diode (LED) cobrahead style luminaires as described for the new luminaire locations.

Acuity Lighting - Autobahn Model:
ATB0-P304-MVOLT-R2-P7-SH for Type II distribution.
ATB0-P304-MVOLT-R3-P7-SH for Type III distribution.

Signify Lumec - RoadFocus Model:
RFM-135W40LED-4K-G3-R2M-UNV-DMG-PH9-RCD7-GY3 for Type II distribution.
RFM-135W40LED-4K-G3-R3M-UNV-DMG-PH9-RCD7-GY3 for Type III distribution.

Cooper Lighting - Archeon Model:
ARCH-M-PA2-110-740-U-TR2-AP-10K-PR7-PSC for Type II distribution.
ARCH-M-PA2-110-740-U-TR3-AP-10K-PR7-PSC for Type III distribution.

No substitutes will be allowed. All luminaires shall be rated for and connected for operation at 240 Volts.

105-4
10-18-11

STANDARD ROAD PLANS

The following Standard Road Plans apply to construction work on this project.

Number	Date	Title
LI-101	10-21-14	Light Pole Location
LI-103	04-19-22	Conduit and Precast Handholes
LI-141	10-21-14	Electrical Installation (Roadway Ducts)
LI-142	04-21-15	Electrical Installation (Bases)
LI-152	10-21-14	Control Cabinet (Pad-Mounted)
LI-201	04-18-17	Light Pole Foundation
LI-210	10-21-14	Transformer Base (Cast Aluminum)
TC-1	10-15-19	Work Not Affecting Traffic (Two-Lane or Multi-Lane)
TC-402	04-18-23	Work Within 15 ft of Traveled Way

108-23A
08-01-08

TRAFFIC CONTROL PLAN

1. To the extent practicable, perform lighting installations in coordination with traffic control measures associated with Project : NHSX-059-3(056)--3H-78.
2. For lighting installations performed on roadways otherwise open to traffic, contractor shall maintain traffic on such roadways at all times.
3. Traffic control on this project shall be in accordance with the TC series of Standard Road Plans listed on Tab. 105-4.
All traffic control devices and equipment necessary to maintain traffic in accordance with the Manual of Uniform Traffic Control Devices (MUTCD) and the current Standard Specifications.

110-13
04-20-10

DELIVERY AND STOCKPILING

Item Description	Quantity	Units	Delivery Location	Contact Name & Number	Remarks
LED Luminaire	22	EACH	Avoca Garage	Aaron Wiegand	Avoca Maintanance
Light Pole Assembly (Pole + Arm)	22	EACH	1110 N Chestnut St,		
			Avoca, IA 51521	712-343-2655 (Work)	

232-3A
10-19-21

EROSION CONTROL (RURAL SEEDING)

Area to be seeded is estimated to be less than 1 acre. If the contractor determines the area exceeds 2 acres, notify the Engineer. Approved quantity in excess of 2 acres will be paid for as extra work according to Article 1109.03,B of the Standard Specifications.

Following the completion of work in a disturbed area and according to the seeding dates in Section 2601 of the Standard Specifications, place seed, fertilizer, and mulch on the disturbed area lying 8 feet adjacent to shoulder and median as follows:

Place seed and fertilize according to the requirements of Article 2601.03,C,3 and Section 4169 of the Standard Specifications.

Place mulch according to the requirements of Articles 2601.03,E,2,a and 4169.07,A of the Standard Specifications.

Preparing the seedbed, furnishing and applying seed, fertilizer, and mulch are all incidental to mobilization and will not be paid for separately.

UTILITY
Modified

UTILITY NOTES

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.

WASTE
Modified

WASTE

It shall be the contractor's responsibility to provide waste areas or disposal sites for excess materials (excavated material or broken concrete) which is not desirable to be incorporated into the work involved on this projects.

It shall be the contractor's responsibility to ensure that areas (including haul roads) selected for waste or disposal not impact 1) culturally sensitive sites or graves or 2) wetlands or "Waters of the U.S.", including streams or stream banks below the "ordinary high water mark", without an approved U.S. Army Corps of Engineers Section 404 Permit.

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.

111-01
04-17-12

COORDINATED OPERATIONS

Other work in progress during the same period of time will include the construction of the projects listed. Coordinate operations with those of other contractors working within the same area.

Project	Type of Work
: NHSX-059-3(056)--3H-78	Pave and Grade
	Work Code : 1014-PCC
	Pavement - Grade and Replace

108-12
10-21-14

WIRE, CABLE AND CONNECTORS

Circuit Number	Connectors								Phase Lines								Ground		Remarks
	Type	Quan. No.	Type	Quan. No.	Type	Quan. No.	Type	Quan. No.	Size A.W.G.	Quan. LF	Size A.W.G.	Quan. LF	Size A.W.G.	Quan. LF	Size A.W.G.	Quan. LF	Size A.W.G.	Quan. LF	
"LC-A"																			
A-0									#2	200							#4	100	Service line and neutral conductors, Ground electrode cond.
A-1			Y-1	2			Y-3	12					#6	2376			#6	1188	Circuit run conductors
A-1															#10	1200	#8	600	Light pole riser conductors, Ground conductor, [1]
A-2			Y-1	0									#6	6182			#6	3091	Circuit run conductors
A-2							Y-3	10							#10	1000	#8	500	Light pole riser conductors, Ground conductor, [1]
																			[1] Provide one 5A time delay fuse in each Y-1 connector.
"LC-B"																			
B-0									#2	140							#4	100	Service line and neutral conductors, Ground electrode cond.
B-1			Y-1	2									#6	2691			#6	1345	Circuit run conductors
B-1							Y-3	12							#10	1200	#8	600	Light pole riser conductors, Ground conductor, [1]
B-2			Y-1	0									#6	2820			#6	1410	
B-2							Y-3	10							#10	800	#8	400	[1] Provide one 5A time delay fuse in each Y-1 connector.
																			[1] Provide one 5A time delay fuse in each Y-1 connector.

108-2
08-01-08

ELECTRICAL DUCTS

Location	Conduit Type	Dia. IN	Length FT	Remarks
"LC-A"				
A-0	RGS	2.0	25.0	Electric Service
A-0	PLASTIC	2.0	75.0	Electric Service
A-1	RGS	2.0	10.0	Control Cabinet to HH1
A-1	PLASTIC	2.0	205.7	HH2 TO HH3
A-1	SCH 80 PVC	2.0	66.0	Road Crossing (HH3-HH4)
A-1	PLASTIC	2.0	181.5	HH4 TO A102
A-1, A-2	PLASTIC	2.0	110.0	HH2 TO A103
A-1, A-2	SCH 80 PVC	2.0	143.0	Road Crossing (A103-A104)
A-1, A-2	PLASTIC	2.0	143.0	A104 TO HH5
A-1	SCH 80 PVC	2.0	71.5	Road Crossing (HH5-HH6)
A-1	PLASTIC	2.0	224.4	HH6 TO A106
A-2	RGS	2.0	10.0	Control Cabinet to HH1
A-2	PLASTIC	2.0	2662.0	HH5 TO A205
spare	PLASTIC	2.0	10.0	[2] - Spare conduit from control cabinet
		Total:	**3937.1**	**from control cabinet** to HH-1
"LC-B"				
B-0	RGS	2.0	25.0	Electric Service
B-0	PLASTIC	2.0	75.0	Electric Service
B-1	RGS	2.0	10.0	Control Cabinet to HH10
B-1, B-2	PLASTIC	2.0	60.5	HH10 TO HH11
B-1	SCH 80 PVC	2.0	61.0	Road Crossing (HH11-HH12)
B-1	PLASTIC	2.0	69.3	HH12 TO B101
B-1	PLASTIC	2.0	286.0	HH11 TO HH13
B-1	SCH 80 PVC	2.0	148.5	Road Crossing (HH13-B104)
B-1	PLASTIC	2.0	220.0	B104 TO HH14
B-1	SCH 80 PVC	2.0	61.6	Road Crossing (HH14-HH15)
B-1	SCH 80 PVC	2.0	148.5	HH13 TO B104
B-1	PLASTIC	2.0	61.6	B104 TO HH14
B-1	PLASTIC	2.0	220.0	HH15 TO B106
B-2	RGS	2.0	10.0	Control Cabinet to HH10
B-2	PLASTIC	2.0	3219.7	HH11 TO B206
spare	PLASTIC	2.0	10.0	[2] - Spare conduit
		Total:	**4681.7**	**from control cabinet** to HH-10
		Total:	8618.8	

108-1
10-21-14

LIGHTING INSTALLATIONS

Location No.	Station	LI-101 Type	LI-101 A	LI-101 E FT	LI-201 Type	Remarks
A101	3652+71	1	6	6.0	A	
A102	516+90	1	6	6.0	A	
A103	519+29	1	6	6.0	A	
A104	519+28	1	6	6.0	A	
A105	517+58	1	6	6.0	A	
A106	516+12	1	6	6.0	A	
A201	5668+54	1	6	6.0	A	
A202	5671+06	1	6	6.0	A	
A203	5673+56	1	6	6.0	A	
A204	N:7054943/E:16610952	1	6	6.0	A	1
A205	N:7054952/E:16611203	1	6	6.0	A	1
B101	509+96	1	6	6.0	A	
B102	2653+12	1	6	6.0	A	
B103	508+44	1	6	6.0	A	
B104	507+20	1	6	6.0	A	
B105	4654+33	1	6	6.0	A	
B106	510+71	1	6	6.0	A	
B201	2633+49	1	6	6.0	A	
B202	N:7054730/E:16606445	1	6	6.0	A	1
B203	N:7054740/E:16606195	1	6	6.0	A	1
B204	N:7054740/E:16605945	1	6	6.0	A	1
B205	N:7054739/E:16605696	1	6	6.0	A	1

NOTE: 1) Stationing along I-80 is not provided with this project. Northing and Eastings giving in place of Stationing. Poles can also be spaced 250' apart starting at the last pole along the ramp alignment.

108-27
10-17-17

TEMPORARY FLOODLIGHTING LUMINAIRES

Possible Standard: LI-130

No.	Location Station	Offset	Number Lumin.	Remarks
1	TBD	15 ft	1	SEE BELOW NOTES
2	TBD	15 ft	2	SEE BELOW NOTES
3	TBD	15 ft	3	SEE BELOW NOTES
4	TBD	15 ft	3	SEE BELOW NOTES
5	TBD	15 ft	3	SEE BELOW NOTES
6	TBD	15 ft	3	SEE BELOW NOTES
				NOTES:
				Locate temporary flood
				lighting units as required.
				15-foot offset from edge
				of travel lane or behind
				barrier



KEY NOTES

1. PROTECT AND REMOVE LIGHT POLE ASSEMBLY, SALVAGE IS TO OWNER. DEMOLISH CONCRETE POLE FOUNDATION TO 2 FT. BELOW FINAL GRADE. DISPOSE OF WASTE MATERIALS. REFER TO C-SHEETS FOR ADDITIONAL INFORMATION AND DELIVERY LOCATION.

LIGHTING DEMO

FILE NO.	ENGLISH	DESIGN TEAM HERMANN \ HR GREEN	POTTAWATTAMIE COUNTY	PROJECT NUMBER NHSX-059-3(064)--3H-78	SHEET NUMBER P.1	

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KEY NOTES

1. PROTECT AND REMOVE LIGHT POLE ASSEMBLY, SALVAGE IS TO OWNER. DEMOLISH CONCRETE POLE FOUNDATION TO 2 FT. BELOW FINAL GRADE. DISPOSE OF WASTE MATERIALS. REFER TO C-SHEETS FOR ADDITIONAL INFORMATION AND DELIVERY LOCATION.

2. DE-ENERGIZED EXISTING CONTROL STATION AND REMOVE. SALVAGE OF EXISTING LIGHTING CONTROL CABINET IS TO THE CONTRACTOR. CUT AND REMOVE EXISTING CIRCUITS STARTING AT THE CONTROL STATION TO A MINIMUM DEPTH OF 2 FT BELOW GRADE. REMOVE EXISTING CONDUCTORS FROM CONDUIT. ABANDON UNDERGROUND CONDUIT IN PLACE. SALVAGE OF CONDUCTORS IS TO THE CONTRACTOR. DISPOSE OF WASTE MATERIALS. WOODEN POLE TO REMAIN.

LIGHTING DEMO

FILE NO.	ENGLISH	DESIGN TEAM HERMANN \ HR GREEN	POTTAWATTAMIE COUNTY	PROJECT NUMBER NHSX-059-3(064)--3H-78	SHEET NUMBER P.2	

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GENERAL NOTES

A. CONDUITS SHALL BE INSTALLED USING HORIZONTAL DIRECTIONAL BORING. OPEN-CUT TRENCHING MAY BE USED IF CONDITIONS ALLOW AND IS AT THE CONTRACTOR'S RISK.

B. ALL UNDERGROUND CONDUIT SHALL BE EITHER HDPE, TYPE SDR 13.5, OR SCHEDULE 40 PVC. USE SCHEDULE 80 PVC WHEN CROSSING ROADWAYS. ABOVE GROUND CONDUIT SHALL BE SCHEDULE 40 OR SCHEDULE 80 PVC AS REQUIRED BY THE UTILITY.

C. ALL UNDERGROUND CONDUIT SHALL BE PLACED 30" BELOW FINISHED GRADE OR SURFACE. ADJUSTMENTS MAY BE MADE TO AVOID EXISTING UNDERGROUND FACILITIES BUT SHALL BE NO LESS THAN 24".

D. ALL HANDHOLES SHALL BE "TYPE I" PER STANDARD ROAD PLAN LI-103, UNLESS NOTED OTHERWISE.

N

3650+00

3645+00

3640+00

US 59 RAMP C (RMP059C)

INTERSTATE 80

250' 250' 250' 250'

4 50-15-II-F-B205

4 50-15-II-F-B204

4 50-15-II-F-B203

4 50-15-II-F-B202

B-2

STA 2633+49 (RMP059B)

50-15-III-F-B201

HH19

B-2

HH18

US 59 RAMP B (RMP059B)

HH17

B-2

HH16

2635+00

2640+00

2645+00

2650+00

KEY NOTES (#)

4. STATIONING FOR I-80 IS NOT PROVIDED WITH THIS PROJECT. LIGHT POLES ALONG THE I-80 RAMP TAPER SHALL BE SPACED 250' APART STARTING AT THE LAST POLE ALONG THE RAMP ALIGNMENT.

0 100 FEET

LIGHTING LAYOUT

FILE NO.	ENGLISH	DESIGN TEAM HERMANN \ HR GREEN	POTTAWATTAMIE COUNTY	PROJECT NUMBER NHSX-059-3(064)--3H-78	SHEET NUMBER P.3	

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GENERAL NOTES

A. CONDUITS SHALL BE INSTALLED USING HORIZONTAL DIRECTIONAL BORING. OPEN-CUT TRENCHING MAY BE USED IF CONDITIONS ALLOW AND IS AT THE CONTRACTOR'S RISK.

B. ALL UNDERGROUND CONDUIT SHALL BE EITHER HDPE, TYPE SDR 13.5, OR SCHEDULE 40 PVC. USE SCHEDULE 80 PVC WHEN CROSSING ROADWAYS. ABOVE GROUND CONDUIT SHALL BE SCHEDULE 40 OR SCHEDULE 80 PVC AS REQUIRED BY THE UTILITY.

C. ALL UNDERGROUND CONDUIT SHALL BE PLACED 30" BELOW FINISHED GRADE OR SURFACE. ADJUSTMENTS MAY BE MADE TO AVOID EXISTING UNDERGROUND FACILITIES BUT SHALL BE NO LESS THAN 24".

D. ALL HANDHOLES SHALL BE "TYPE I" PER STANDARD ROAD PLAN LI-103, UNLESS NOTED OTHERWISE.

KEY NOTES (#)

1. INSTALL NEW PAD-MOUNTED LIGHTING CONTROL CABINET. FRONT TO FACE TOWARD ROADWAY.

2. INSTALL FOUR 2" CONDUITS FROM CONTROL CABINET TO HANDHOLE. ROUTE ONE LIGHTING CIRCUIT PER EACH CONDUIT.

3. HANDHOLE "TYPE II" PER STANDARD ROAD PLAN LI-103.

4. STATIONING FOR I-80 IS NOT PROVIDED WITH THIS PROJECT. LIGHT POLES ALONG THE I-80 RAMP TAPER SHALL BE SPACED 250' APART STARTING AT THE LAST POLE ALONG THE RAMP ALIGNMENT.

N

0 100 FEET

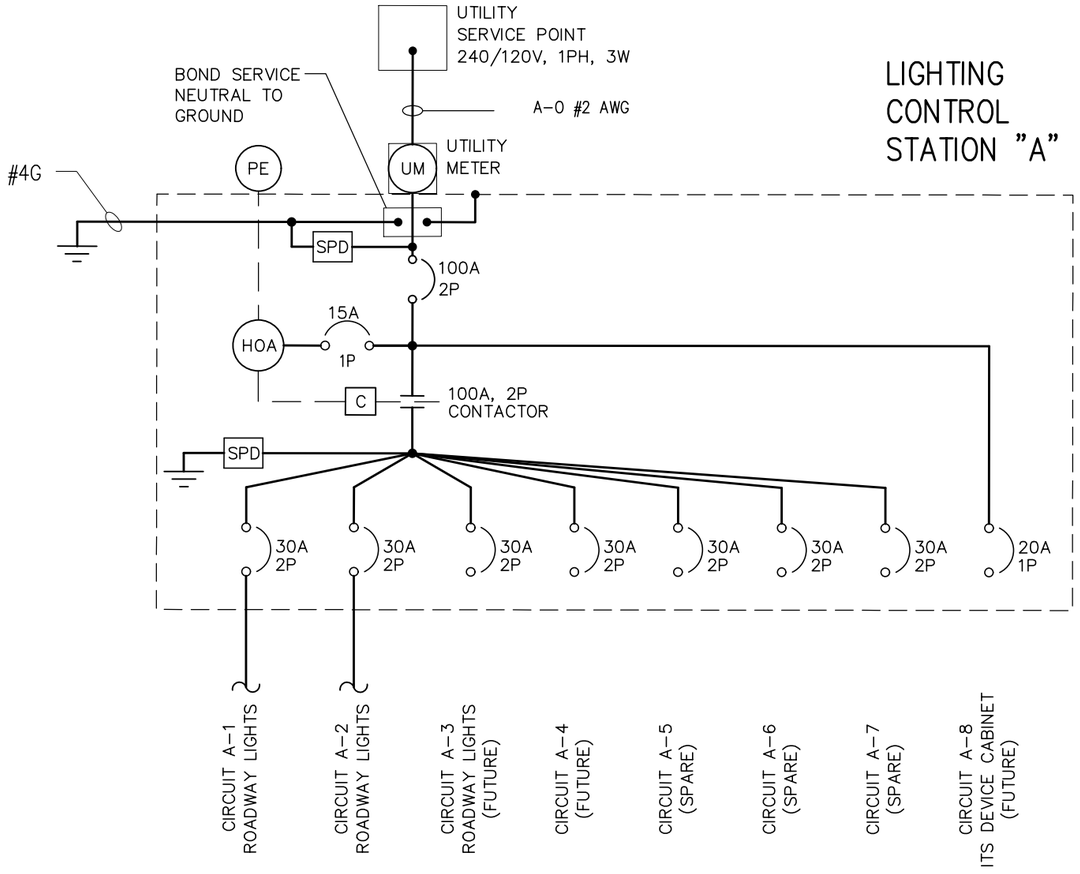
LIGHTING LAYOUT

FILE NO.	ENGLISH	DESIGN TEAM HERMANN \ HR GREEN	POTTAWATTAMIE COUNTY	PROJECT NUMBER NHSX-059-3(064)--3H-78	SHEET NUMBER P.4

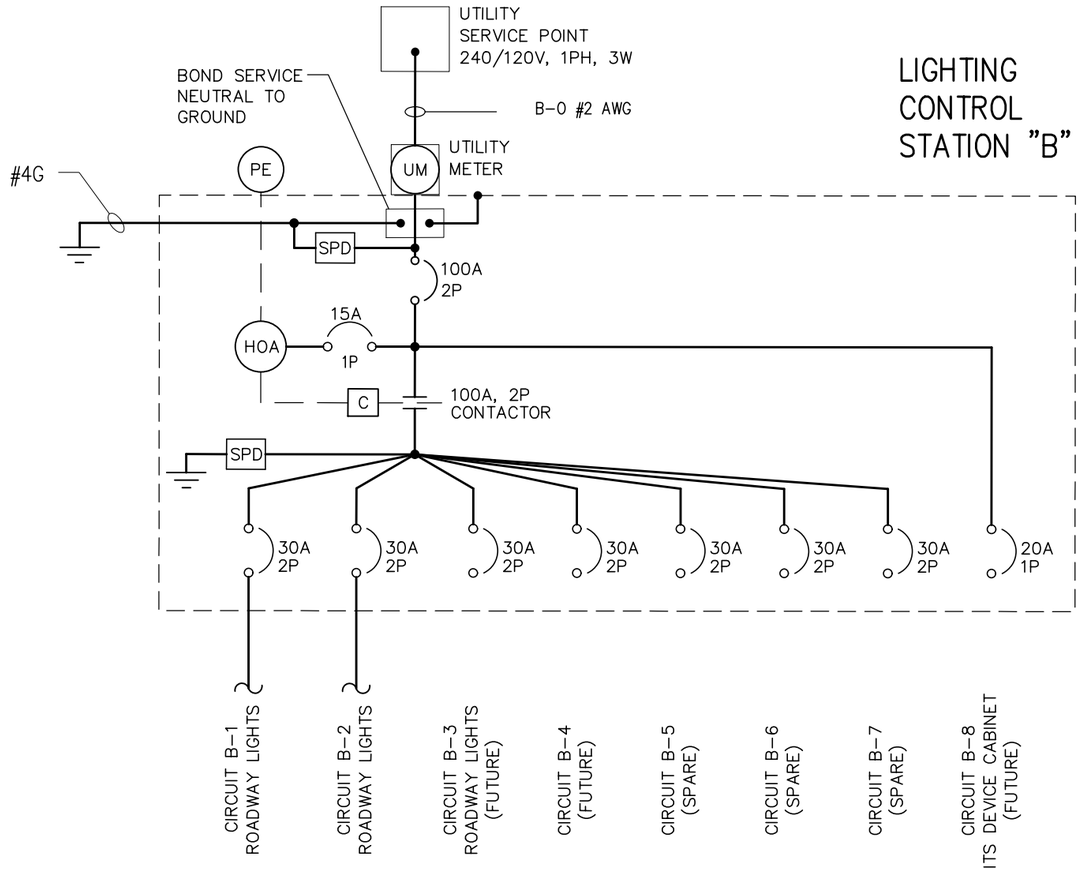
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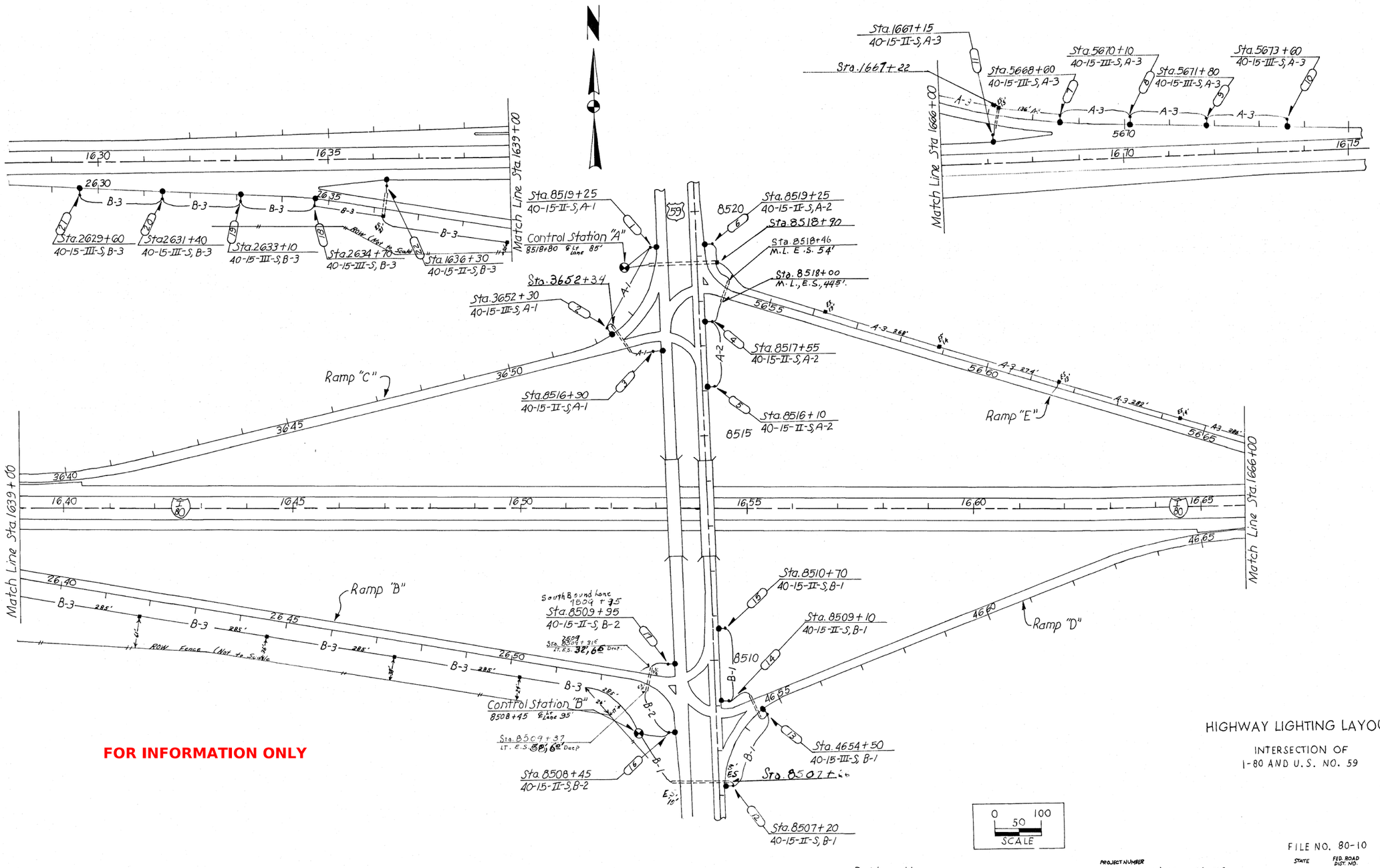
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LIGHTING CONTROL STATION "A"



LIGHTING CONTROL STATION "B"





FOR INFORMATION ONLY

HIGHWAY LIGHTING LAYOUT

INTERSECTION OF
I-80 AND U.S. NO. 59

0 50 100
SCALE

Pottawattamie COUNTY

PROJECT NUMBER I-80-1(110)42--01-78

FILE NO. 80-10

STATE	FED. ROAD DIST. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
IOWA	5		3	13

FILE NO.	ENGLISH	DESIGN TEAM HERMANN \ HR GREEN	POTTAWATTAMIE COUNTY	PROJECT NUMBER NHSX-059-3(064)--3H-78	SHEET NUMBER P.6

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