

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

* 14-1 = 13 TOTAL SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
64	82-9RA-L	ST. CLAIR	14	1
		ILLINOIS	CONTRACT NO. 76K03	

FOR INDEX OF SHEETS, SEE SHEET NO. 2

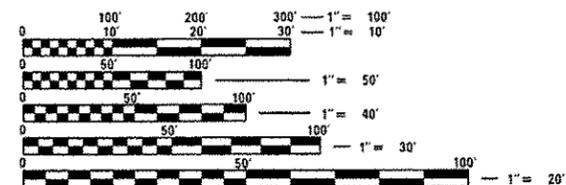
PROPOSED HIGHWAY PLANS

FAI ROUTE 64 (I-64)
SECTION 82-9RA-L
I-64 GATEWAY REST AREA
LIGHTING REPAIR
ST. CLAIR COUNTY

C-98-007-17

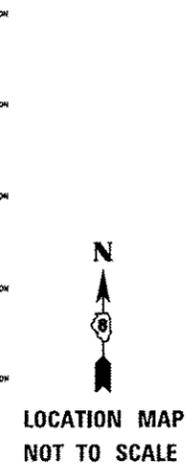
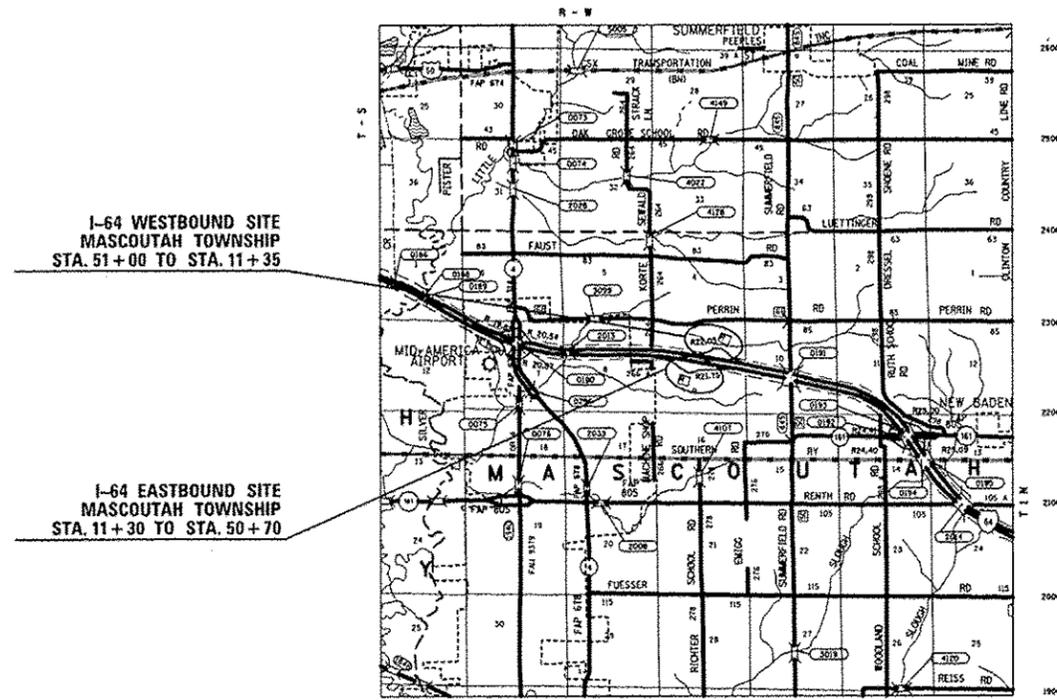
STANDARDS

000001-06	001006
280001-07	701101-05
701106-02	701456-04
821101-02	830001-03
836001-02	838001



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 ENGINEER: HERVE GELIN (618) 346-3179
PROJECT MANAGER: JEYCEA BOBO (618) 346-3190

CONTRACT NO. 76K03

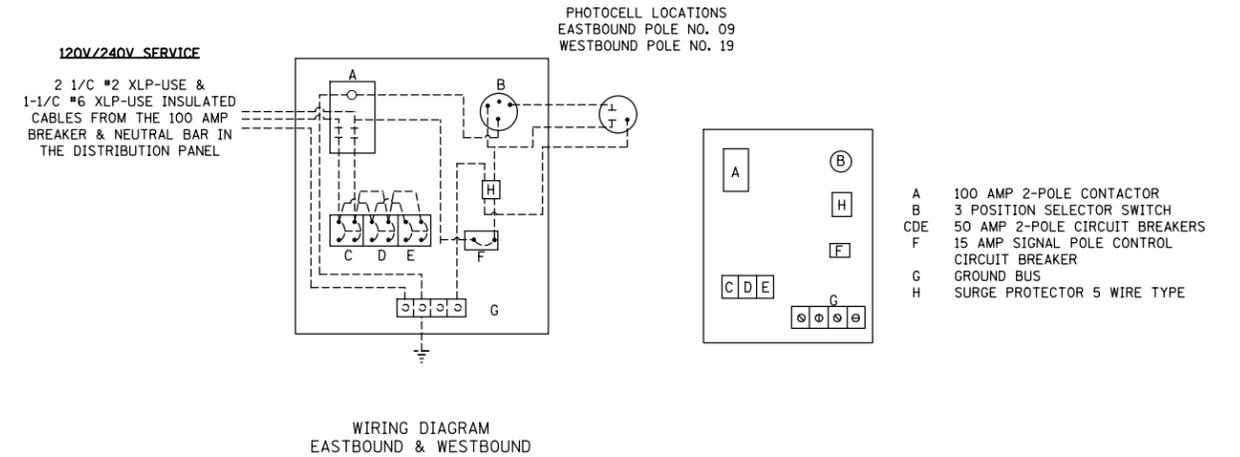
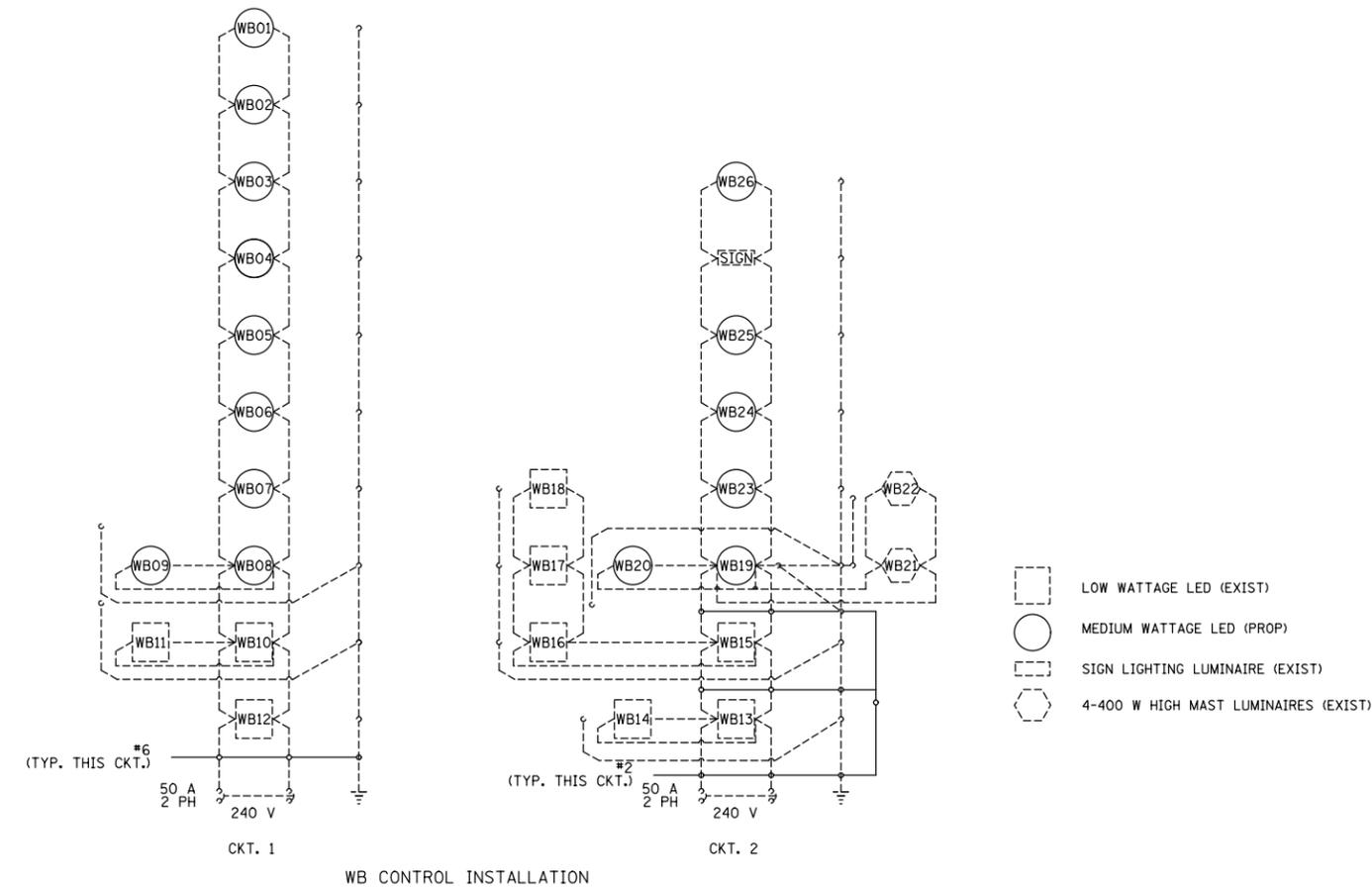
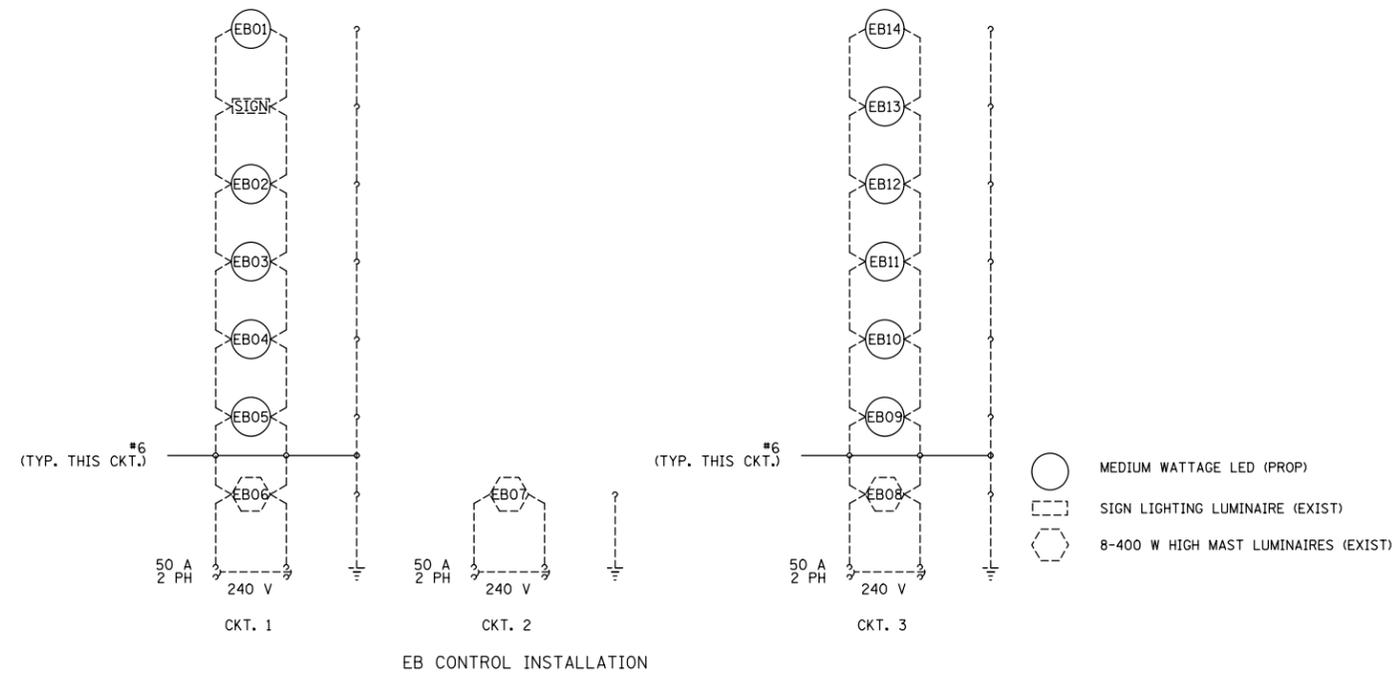
GROSS LENGTH = 7905 FT. = 1.4972 MILE
NET LENGTH = 7905 FT. = 1.4972 MILE

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBMITTED *Dec 1 20 16*
Jeffrey Z. K... REGIONAL ENGINEER
Jan 27 20 17
Maura M. Addis ENGINEER OF DESIGN AND ENVIRONMENT
Jan 27 20 17
[Signature] DIRECTOR OF PROGRAM DEVELOPMENT

PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS

THIS SHEET IS ADDED
FOR INFORMATION ONLY



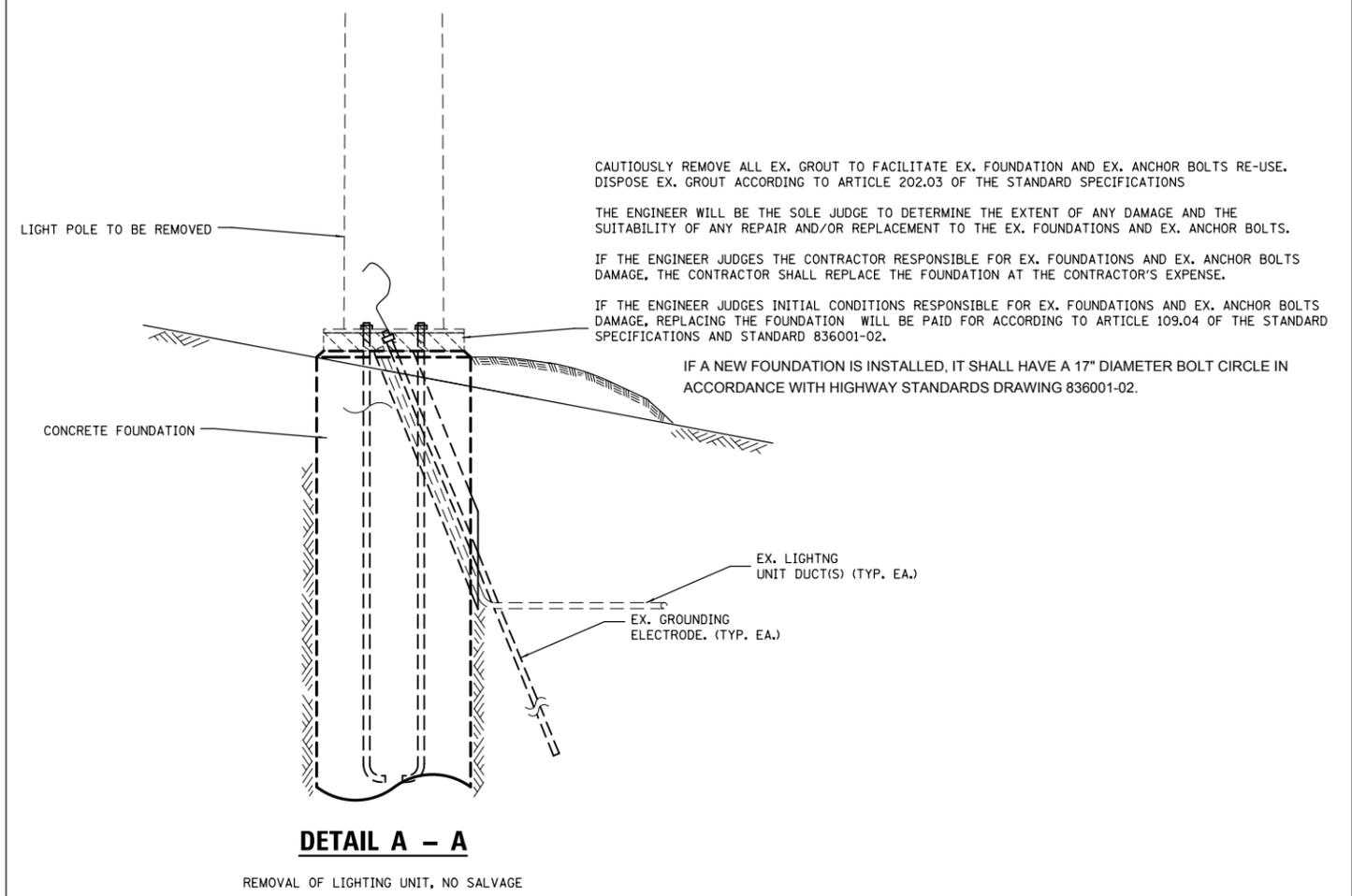
FILE NAME =	USER NAME = boboja	DESIGNED -	REVISED -
pw:\11\084EBIDINTEG.illinois.gov\PIWIDOT Documents\DOT Offices\District 8\Projects\D876K03\Drawings\EA0\Drawings\WB\WB03-sht-light.dwg		DRAWN -	REVISED -
Default	PLOT SCALE = 100.0000' / 1in.	CHECKED -	REVISED -
	PLOT DATE = 11/30/2016	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GATEWAY REST AREA LIGHTING & PHOTOCELL WIRING DIAGRAMS			
SCALE:	SHEET	OF SHEETS	STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
64	82-9RA-L	ST. CLAIR	14	4
CONTRACT NO. 76K03				
ILLINOIS FED. AID PROJECT				

LEGEND	
	EXISTING 80' M.H. HIGH MAST TOWER TO REMAIN
	EXISTING 45' M.H. LIGHTING UNIT TO BE REMOVED; EXISTING FOUNDATION TO REMAIN IN PLACE (PER DETAIL A-A)
	EXISTING 15' M.H. LIGHTING UNIT
	PROPOSED LIGHTING UNIT, ALUMINUM, 45FT M.H., 15FT M.A., MED WATTAGE HORIZONTAL MOUNT LED LUMINAIRE, 240V, W/ NEW 15" BOLT CIRCLE (B.C.) TRANSFORMER BASE (EXCEPT FOR WB08, WB09 AND WB20) ON EXISTING FOUNDATION
	EXISTING LIGHTING CONTROLLER
	EXISTING SIGN STRUCTURE
	PUSHED CONDUIT SIZED AS SHOWN
	EXISTING UNIT DUCT TO REMAIN IN PLACE; W/ 2-1/C NO. 6 XLP-USE IN 1" POLYETHYLENE DUCT & 1/C NO. 6 BARE COPPER DIRECT BURIED IN TRENCH
	EXISTING UNIT DUCT TO REMAIN IN PLACE; W/ 2-1/C NO. 2 XLP-USE IN 1" POLYETHYLENE DUCT & 1/C NO. 6 BARE COPPER DIRECT BURIED IN TRENCH
	EXISTING UNIT DUCT TO REMAIN IN PLACE; W/ 3/C NO. 10 XLP-USE IN 1" POLYETHYLENE DUCT DIRECT BURIED IN TRENCH



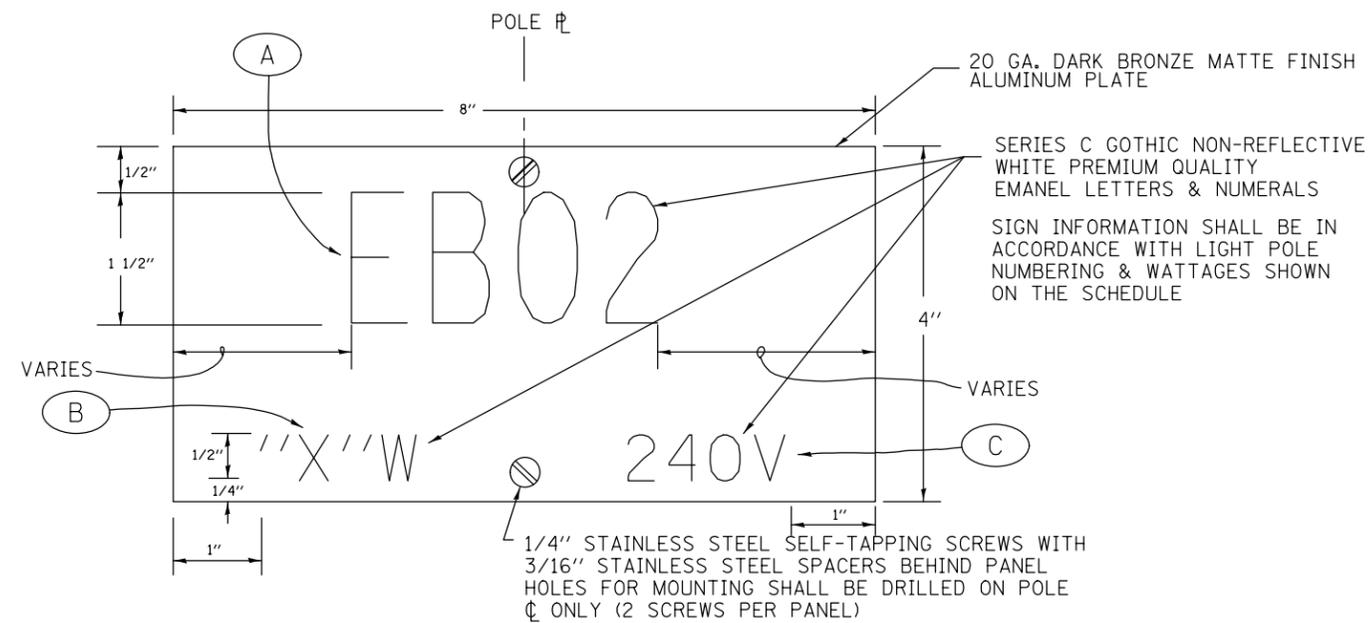
FILE NAME =	USER NAME = boboja	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	GATEWAY REST AREA LEGEND & LIGHTING UNIT DETAILS				F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
p:\11084EBIDINTEG.illinois.gov\PIWIDOT\Documents\IDOT Offices\District 8\Projects\0876\DRAWING\DATA\EA\Sheets\D876K03-sht-light.plt		CHECKED -	REVISED -		64	82-9RA-L	ST. CLAIR	14	5				
Default	PLOT SCALE = 100.0000' / 1in.	DATE -	REVISED -		CONTRACT NO. 76K03				ILLINOIS FED. AID PROJECT				
	PLOT DATE = 11/30/2016	DATE -	REVISED -		SCALE:	SHEET	OF	SHEETS	STA.	TO	STA.		

THIS SHEET IS ADDED
FOR INFORMATION ONLY

SCHEDULE OF LIGHT TOWER & LIGHT POLE
IDENTIFICATION SIGN PANELS

MESSAGE AREA		
(A)	(B)	(C)
EB 01 - EB 05	MED WATTAGE	240V
EB 09 - EB 14	MED WATTAGE	240V
WB 01 - WB 09	MED WATTAGE	240V
WB 10 - WB 18	70W	240V
WB 19 & WB 20	MED WATTAGE	240V
WB 23 - WB 26	MED WATTAGE	240V

POLE IDENTIFICATION SIGN PANEL DETAILS



TYPICAL POLE IDENTIFICATION SIGN PANEL
(NOT TO SCALE)

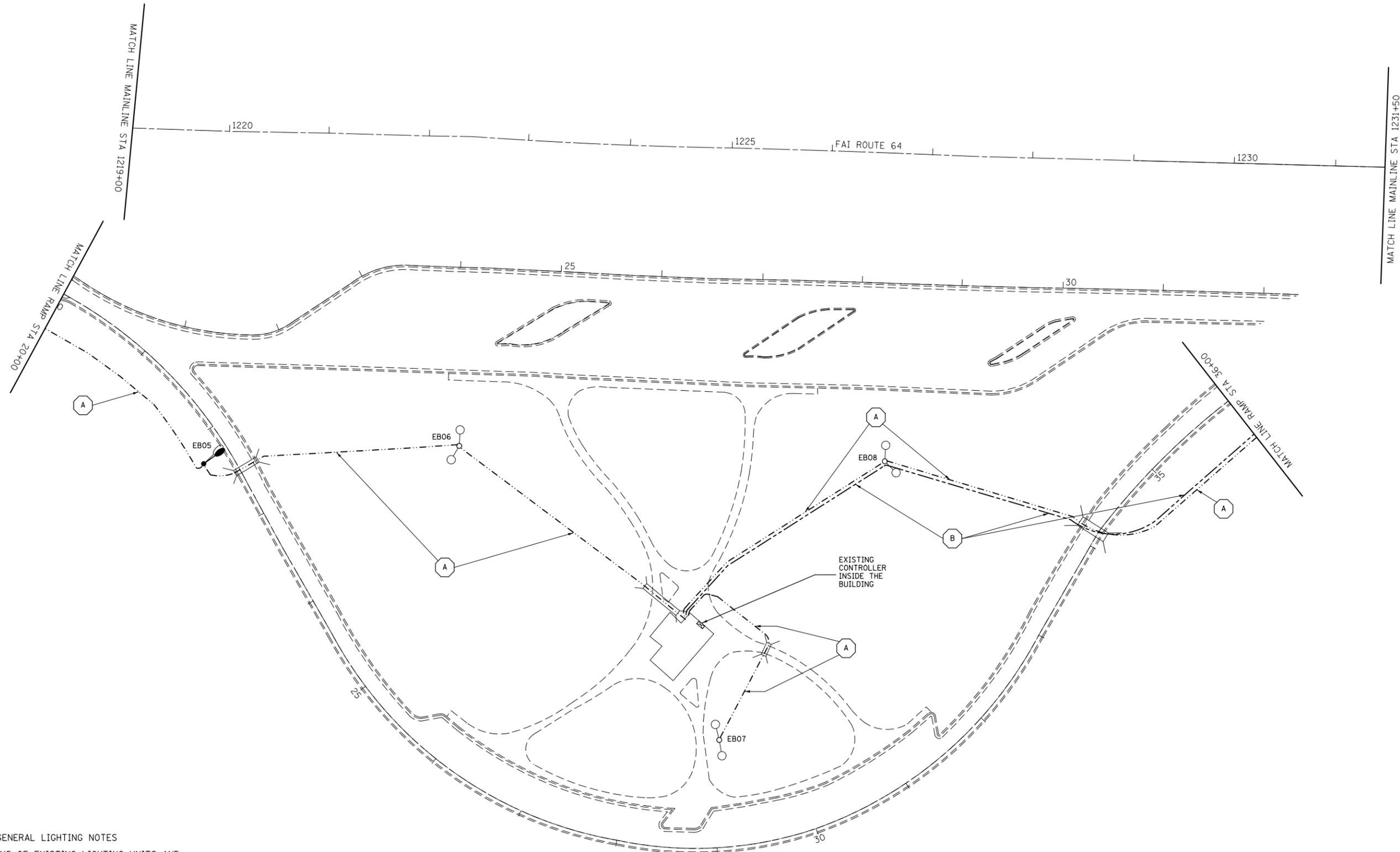
FILE NAME =	USER NAME = boboja	DESIGNED -	REVISED -
pw:\IL\084EBIDINTEG\Illinois.gov\PIWIDOT\Documents\DOT Offices\District 8\Projects\0875\DRAWING\DATA\EA\Sheets\D876K03-sht-light.p		DRAWN -	REVISED -
Default	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED -
	PLOT DATE = 11/30/2016	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GATEWAY REST AREA
POLE IDENTIFICATION SIGN PANEL DETAILS

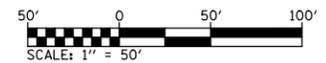
SCALE: SHEET OF SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
64	82-9RA-L	ST. CLAIR	14	6
				CONTRACT NO. 76K03
ILLINOIS FED. AID PROJECT				



GENERAL LIGHTING NOTES

1. THE LOCATIONS OF EXISTING LIGHTING UNITS AND DUCTS AS SHOWN ON THE PLANS ARE APPROXIMATE. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION IN THE FIELD PRIOR TO CONSTRUCTION.
2. SEE SHEET "LEGEND & LIGHTING UNIT DETAILS" FOR LIGHTING LEGEND.



FILE NAME =	USER NAME = boboja	DESIGNED -	REVISED -
pw:\IL\084EBIDINTEG\illinois.gov\PIDOT\Documents\IDOT Offices\District 8\Projects\0876\K&D\Drawings\EA\Drawings\0876K03-sht-light.dwg		DRAWN -	REVISED -
Default	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED -
	PLOT DATE = 11/30/2016	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

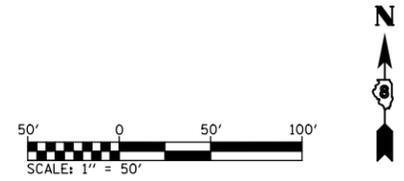
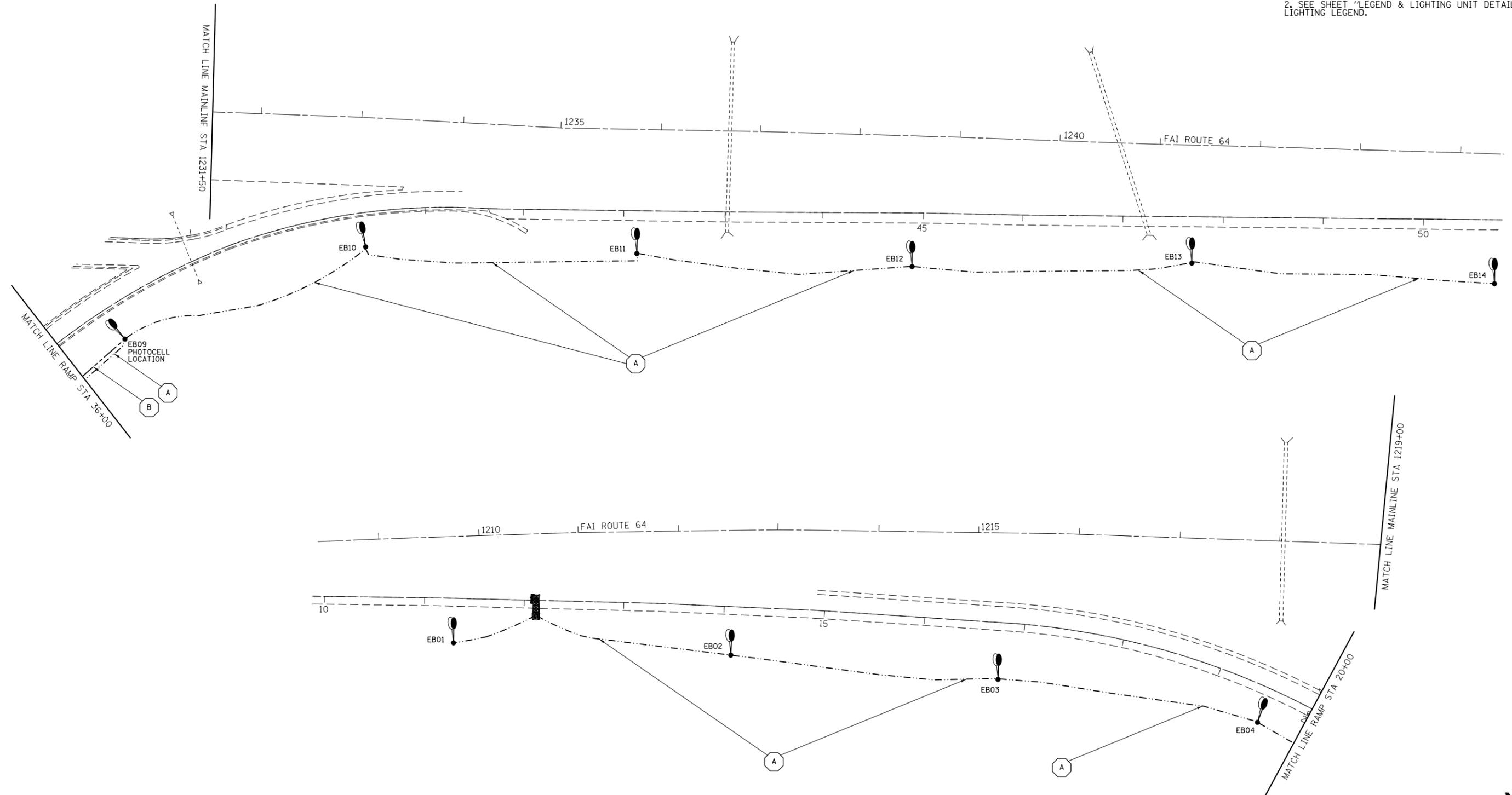
GATEWAY REST AREA
EB LIGHTING REPLACEMENT PLAN 1 OF 2

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
64	82-9RA-L	ST. CLAIR	14	7
CONTRACT NO. 76K03				
ILLINOIS FED. AID PROJECT				

GENERAL LIGHTING NOTES

1. THE LOCATIONS OF EXISTING LIGHTING UNITS AND DUCTS AS SHOWN ON THE PLANS ARE APPROXIMATE. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION IN THE FIELD PRIOR TO CONSTRUCTION.
2. SEE SHEET "LEGEND & LIGHTING UNIT DETAILS" FOR LIGHTING LEGEND.

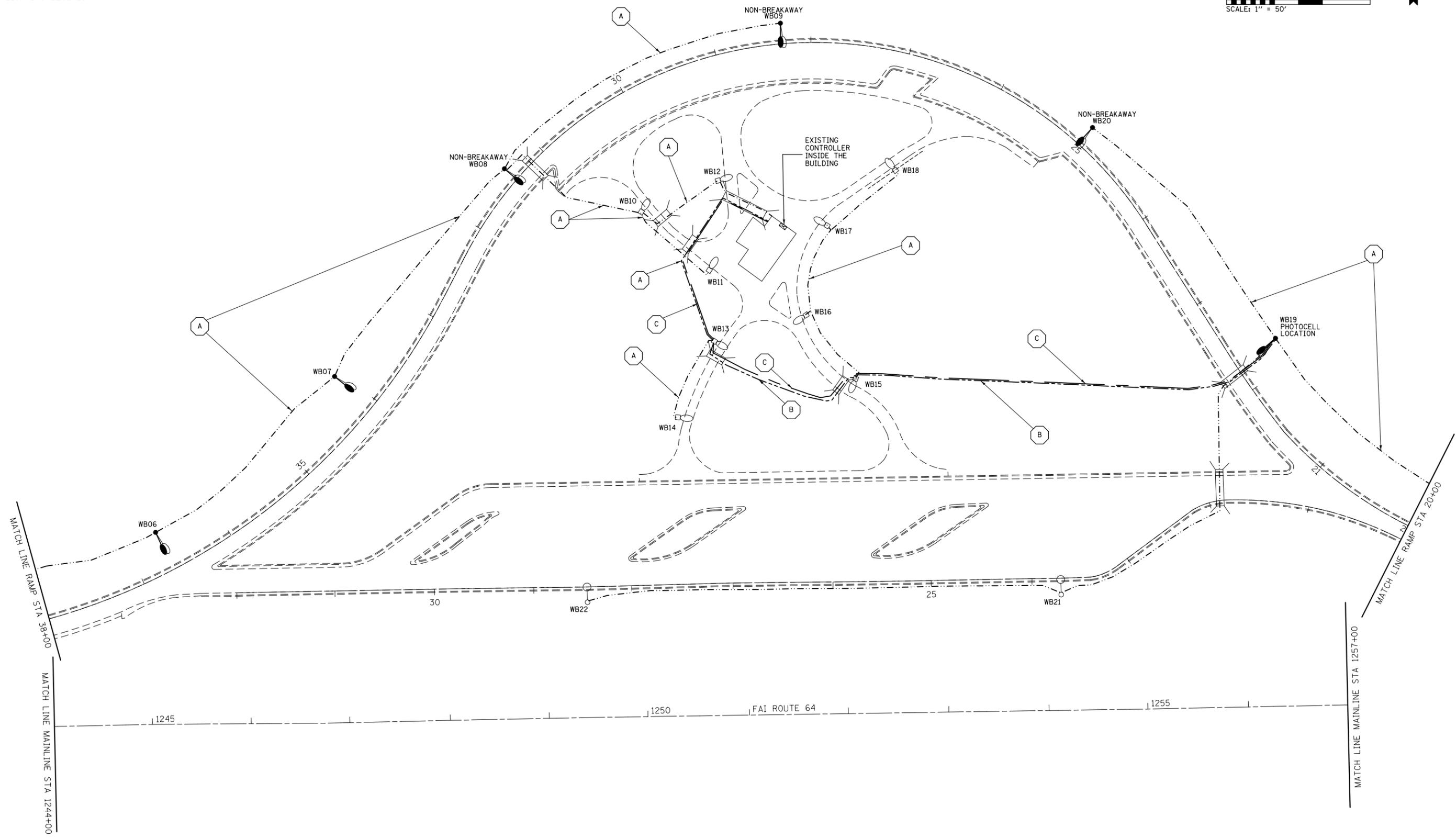


FILE NAME =	USER NAME = boboja	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	GATEWAY REST AREA EB LIGHTING REPLACEMENT PLAN 2 OF 2				F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
pw:\IL\084EBIDINTEG\Illinois.gov\PWIDOT\Documents\IDOT Offices\District 8\Projects\0876\KBR\Drawings\EA\Drawings\0876K03-sht-light.plt		DRAWN -	REVISED -		64	82-9RA-L	ST. CLAIR	14	8				
Default	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED -		CONTRACT NO. 76K03								
	PLOT DATE = 11/30/2016	DATE -	REVISED -		SCALE:	SHEET	OF	SHEETS	STA.	TO	STA.	ILLINOIS FED. AID PROJECT	

GENERAL LIGHTING NOTES

1. THE LOCATIONS OF EXISTING LIGHTING UNITS AND DUCTS AS SHOWN ON THE PLANS ARE APPROXIMATE. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION IN THE FIELD PRIOR TO CONSTRUCTION.

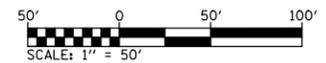
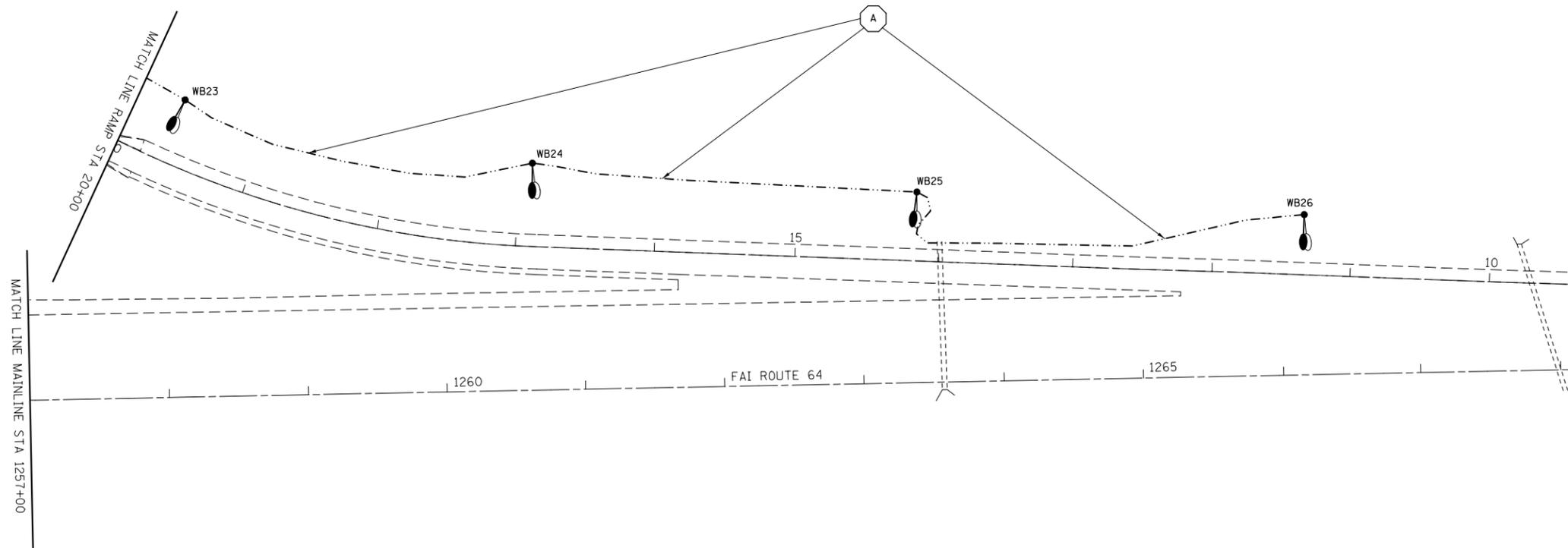
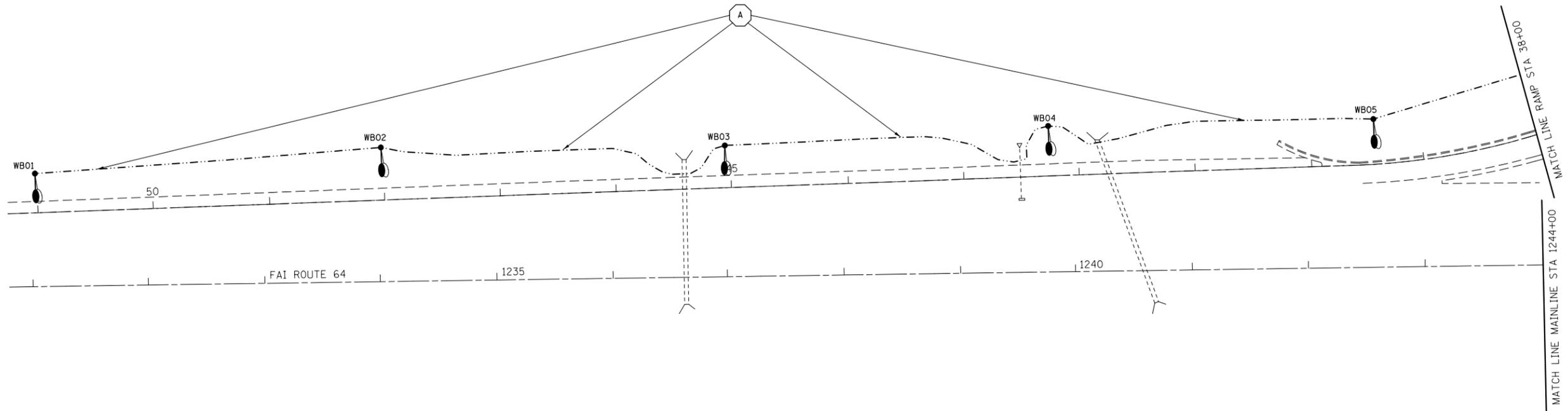
2. SEE SHEET "LEGEND & LIGHTING UNIT DETAILS" FOR LIGHTING LEGEND.



FILE NAME = p:\11\084EBIDINTEG.illinois.gov\PIWIDOT\Documents\IDOT Offices\District 8\Projects\0876\KBRAND\Drawings\EA0\Drawings\0876K03-sht-light.plt	USER NAME = boba	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	GATEWAY REST AREA WB LIGHTING REPLACEMENT PLAN 1 OF 2				F.A.I. RTE. = 64	SECTION = 82-9RA-L	COUNTY = ST. CLAIR	TOTAL SHEETS = 14	SHEET NO. = 9
	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED -		SCALE:	SHEET	OF	SHEETS	STA.	TO	STA.	CONTRACT NO. 76K03	
Default	PLOT DATE = 11/30/2016	DATE -	REVISED -		ILLINOIS FED. AID PROJECT								

GENERAL LIGHTING NOTES

1. THE LOCATIONS OF EXISTING LIGHTING UNITS AND DUCTS AS SHOWN ON THE PLANS ARE APPROXIMATE. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION IN THE FIELD PRIOR TO CONSTRUCTION.
2. SEE SHEET "LEGEND & LIGHTING UNIT DETAILS" FOR LIGHTING LEGEND.



FILE NAME =	USER NAME = boboja	DESIGNED -	REVISED -
pw:\IL\084EBID\INTEG\illinois.gov\PIWIDOT\Documents\IDOT Offices\District 8\Projects\0876\KBR\Drawings\EA\Drawings\0876\03-sht-light.plt		CHECKED -	REVISED -
Default	PLOT DATE = 11/30/2016	DATE -	REVISED -

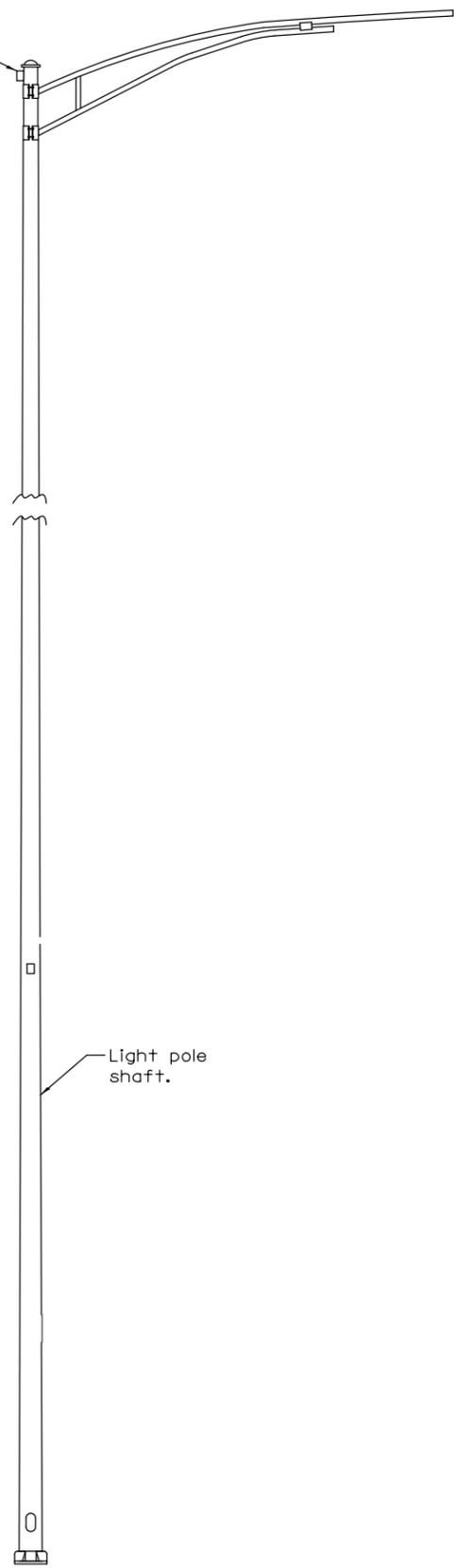
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GATEWAY REST AREA
WB LIGHTING REPLACEMENT PLAN 2 OF 2

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
64	82-9RA-L	ST. CLAIR	14	10
CONTRACT NO. 76K03				
ILLINOIS FED. AID PROJECT				

Proposed photocell location.
EB09 AND WB19



Light pole shaft.

**PHOTOCELL LOCATION ON
45 FT. M.H. LIGHT POLE**

GENERAL NOTES

Voids in light pole base shall be sealed to prevent rodent entry.

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

NOT TO SCALE

**LIGHT POLE 45 FT.
ALUMINUM
& PHOTOCELL DETAIL**

(Sheet 1 of 2)

FILE NAME =	USER NAME = boboja	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	GATEWAY REST AREA LIGHT POLE 45 FT. ALUMINUM & PHOTOCELL DETAIL 1 OF 2	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
p:\11\084EBIDINTEG.illinois.gov\PIDOT\Documents\DOT Offices\District 8\Projects\0876\DRAWING\DATA\EA0sheets\0876-sht-light.p	DRAWN	REVISION	REVISION			64	82-9RA-L	ST. CLAIR	14	12	
Default	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED -			CONTRACT NO. 76K03					
	PLOT DATE = 11/30/2016	DATE -	REVISED -			SCALE:	SHEET	OF	SHEETS	STA.	TO STA.

**STATE OF ILLINOIS
ILLINOIS DEPARTMENT OF TRANSPORTATION
LUMINAIRE PERFORMANCE TABLE – ROADWAY**

GIVEN CONDITIONS

ROADWAY DATA	Pavement Width (in one direction only)	18 ft.
	Pavement Width (in opposite direction)	N/A
	Number of Lanes (in one direction only)	N/A
	Number of Lanes (in opposite direction)	N/A
	Median width	N/A
	I.E.S. Surface Classification	R4
	Q-Zero Value	.07
LIGHT POLE DATA	Mounting Height	45 ft.
	Mast Arm Length	15 ft.
	Pole Set-Back From Edge of Pavement	50 ft.
LUMINAIRE DATA	Luminaire Type	LED
	Luminaire Lumens	20,000 – 29,999
	I.E.S. Vertical Distribution	
	I.E.S. Control Of Distribution	
	I.E.S. Lateral Distribution	Type II
	Lamp Lumen Depreciation Factor	0.90 min
	Dirt Depreciation Factor	0.80
	Equipment Factor	0.95
	Total Light Loss Factor	0.684 min
	LAYOUT DATA	Spacing
Configuration		Single-Sided
Luminaire Overhang over edge of pavement		-35 ft.

NOTE: Variations from the above specified I.E.S. distribution pattern may be requested and acceptance of variations will be subject to review by the Engineer based on how well the performance requirements are met.

PERFORMANCE REQUIREMENTS

NOTE: These performance requirements shall be the minimum acceptable standards of photometric performance for the luminaire, based on the given conditions listed above. TM-21 and LM-80 reports must be attached and must support the Lamp Lumen Depreciation Factor given above.

ILLUMINATION	Average Horizontal Illumination, E_{AVE}	0.6 fc
	Uniformity Ratio, E_{AVE}/E_{MIN}	4.0:1
	Max. Veiling Luminance Ratio, L_V/L_{AVE}	0.3