

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	(58-62)HL	MACON	31	1
ILLINOIS			CONTRACT NO. 74C97	

FOR INDEX OF SHEETS, SEE SHEET NO. 2

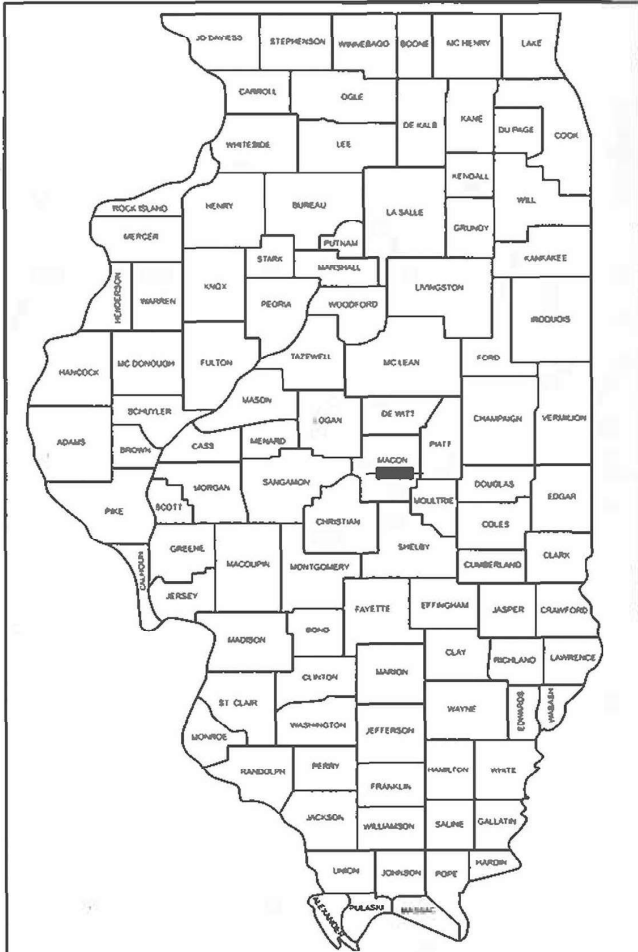
ADT = (I-72) 14,800 (2025)
(US 51) 5,900 (2025)
(US 36) 7,000 (2025)

PROPOSED
HIGHWAY PLANS

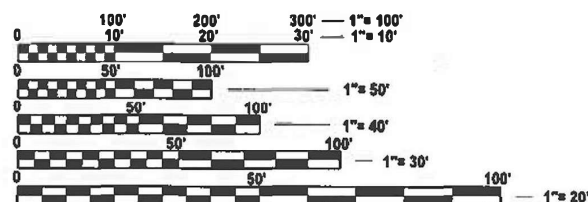
FAI (I-72), FAP 323 (US 36), FAP 322 (US 51)
SECTION (58-62)HL
PROJECT CR-D2UK(105)
HIGHWAY LIGHTING
MACON COUNTY

C-97-058-24

D-97-029-24

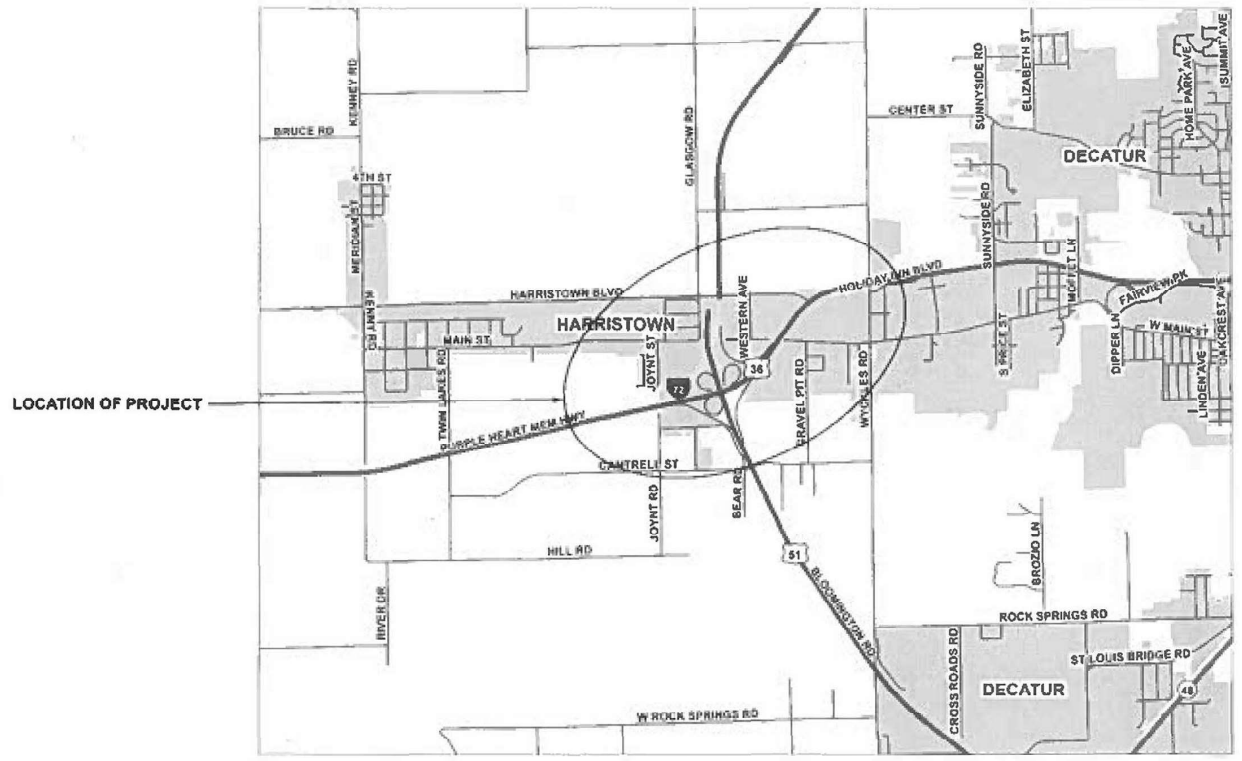


LOCATION OF SECTION INDICATED THUS: -



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 DEWAYNE SEACHRIST
PROJECT MANAGER ROBERT GREUEL

CONTRACT NO. 74C97

GROSS LENGTH = 33,528 FT. = 6.35 MILE
NET LENGTH = 33,528 FT. = 6.35 MILE

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION















SUBMITTED March 25, 2025
Lora Ransing
REGIONAL ENGINEER

May 9, 2025
Scott A. Etkin
ENGINEER OF DESIGN AND ENVIRONMENT

May 9, 2025
Harry
DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS

LIGHTING LEDGEND

	PROPOSED GROUND MOUNTED LIGHTING UNIT ALUMINIUM, 45' M.H., 15' M.A.,LED LUMINAIRE, 480V 15" B.C. ON 8 5/8" X 6' METAL FOUNDATION AND BREAKAWAY COUPLINGS WITH STAINLESS STEEL SCREEN
	PROPOSED ELECTRICAL SERVICE INSTALLATION, SINGLE PHASE, 3-WIRE, 480 VOLT, 200 AMP
	PROPOSED LIGHTING CONTROLLER, BASE MOUNTED, SINGLE PHASE, 3 -WIRE, 480 VOLT, 200 AMP
	PROPOSED UNDERPASS LED LUMINAIRE, 480V
	PROPOSED JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 12" X 12" X 6", UNLESS NOTED OTHERWISE
	PROPOSED UNIT DUCT, 600V, 2-1C NO.6, 1/C NO.8 GROUND, (XLP-TYPE USE), 1" DIA. POLYETHYLENE, UNLESS OTHERWISE NOTED
	PROPOSED UNDERGROUND CONDUIT CASING, CNC, 2" DIA.
	PROPOSED CABLE IN CONDUIT ATTACHED TO STRUCTURE, SIZE AS NOTED ON PLAN
	EXSITING ELECTRIC SERVICE TO BE REMOVED
	EXISTING LIGHTING CONTROLLER TO BE REMOVED
	EXISTING LIGHTING UNIT TO BE REMOVED
	EXISTING SIGN LUMINAIRE TO BE REMOVED (3 SHOWN)
	EXISTING UNDERPASS LUMINAIRE TO BE REMOVED
	EXISTING ELECTRIC CABLE IN CONDUIT TO BE REMOVED

HIGHWAY STANDARDS

000001-08	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNENS
001006	DECIMAL OF AN INCH AND FOOT
701001-02	OFF-ROAD OPERATIONS, 2L, 2W, MORE THAN 15' (4.5m) AWAY
701006-05	OFF-RD OPERATIONS. 2L, 2W, 15' (4.5m) TO 24" (600mm) FROM PAVEMENT EDGE
701101-05	OFF-ROAD OPERATIONS, MULTILANE, 15' (4.5m) TO 24" (600mm) FROM PAVEMENT
701106-02	OFF-ROAD OPERATIONS, MULTILANE, MORE THAN 15' (4.5m) AWAY
701201-05	LANE CLOSURE, 2L 2W, DAY ONLY, FOR SPEEDS ≥ 45 MPH
701400-12	APPROACH TO LANE CLOSURE, FREEWAY/EXPRESSWAY
701401-13	LANE CLOSURE, FREEWAY/EXPRESSWAY
701406-13	LANE CLOSURE, FREEWAY/EXPRESSWAY, DAY TIME OPERATIONS ONLY
701411-09	LANE CLOSURE, MULTILANE, AT ENTRANCE OR EXIT RAMP, FOR SPEEDS ≥ 45 MPH
701421-08	LANE CLOSURE, MULTILANE, DAY OPERATIONS ONLY, FOR SPEEDS ≥ 45 MPH TO 55
701456-05	PARTIAL EXIT RAMP CLOSURE, FREEWAY/EXPRESSWAY
701701-10	URBAN LANE CLOSURE, MULTILANE INTERSECTION
701901-10	TRAFFIC CONTROL DEVICES
812001-01	RACEWAYS EMBEDDED IN STRUCTURE
821006	UNDERPASS LIGHTING SUSPENDED
821101-03	LUMINAIRE WIRING IN POLE
825026-04	LIGHTING CONTROLLER, BASE MOUNTED, 480V
830001-03	LIGHT POLE ALUMINUM MAST ARM
836001-05	LIGHT POLE FOUNDATION
838001-01	BREAKAWAY DEVICES

GENERAL NOTES

ELECTRICAL WORK SHALL CONFORM TO NATIONAL, STATE, AND LOCAL CODES.

CONTRACTOR SHALL COORDINATE WITH AMEREN ILLINOIS 1-314-621-3222 FOR ELECTRIC SERVICE INSTALLATION. EXISTING ACCOUNT NUMBER FOR THE WEST CONTROLLER IS 68578-51533 AND FOR THE EAST CONTROLLER IS 43693-44812.

THE CONTRACTOR SHALL SET LIGHT POLES 18’ BEHIND EDGE OF PAVEMENT (WHITE LINE) OR AS DIRECTED BY ENGINEER.

A DEPTH OF FORTY-EIGHT INCHES (48”) OR GREATER FOR ALL UNDERGROUND UTILITIES SHALL BE MAINTAINED WITHIN ACCESS-CONTROLLED RIGHT OF WAY UNLESS CROSSING A WATERWAY WHERE THE MINIMUM ALLOWED DEPTH SHALL BE SIXTY INCHES (60”) BELOW THE FLOW LINE ELEVATION OF THE WATERWAY.

SEEDING WILL NOT BE PERMITTED AT ANY TIME WHEN THE GROUND IS FROZEN, WET, OR IN AN UNTILLABLE CONDITION. LOCATIONS TO BE SEEDED WILL BE DETERMINED BY THE ENGINEER.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY MOWING, BRUSH AND SHRUB REMOVAL AND SHALL DISPOSE OF ALL REMOVED ITEMS OFF THE JOB SITE. THE COST OF THIS WORK SHALL BE INCLUDED IN THE BID PRICE FOR THE REMOVAL OF LIGHTING UNIT, NO SALVAGE.

THE FINISHED EARTHWORK SHALL HAVE A VEGETATION SUSTAINING SOIL COVERING THE TOP FOUR INCHES (100 MILLIMETERS) IN AREAS TO BE SEEDED OR SODDED. THE VEGETATION SUSTAINING SOIL REQUIRED WILL NOT BE PAID FOR SEPARATELY BUT WILL BE INCLUDED IN THE BID PRICE FOR THE REMOVAL OF POLE FOUNDATION.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING EXISTING IDOT ELECTRICAL FACILITIES AT HIS/HER OWN EXPENSE IF REQUIRED. THE CONTRACTOR SHALL ALSO BE LIABLE FOR ANY DAMAGE TO IDOT FACILITIES RESULTING FROM INACCURATE LOCATING.

THE CONTACTOR SHALL CONTACT JULIE AT LEAST 48 HOURS PRIOR TO EXCAVATION TO DETERMINE WHICH UTILITIES ARE IN THE AREA.

SIGNS ATTACHED TO LIGHT POLES SHALL BE REMOVED, PRESERVED AND REINSTALLED. THE COST OF THIS WORK SHALL BE INCLUDED IN THE BID PRICE FOR REMOVAL OF LIGHTING UNIT, NO SALVAGE.

IN NO INSTANCE SHALL THE CONTACTOR INSTALL A LIGHT POLE AND/OR LIGHTING CONTROLLER WITHIN 5FT OF BACK OF GUARDRAIL POST.

ALL PROPOSED ROADWAY AND UNDERPASS LUMINAIRES SHALL BE ORIENTED TOWARD AND PERPENDICULAR TO THE ROADWAY. ALL ROADWAY LUMINAIRES SHALL BE INSTALLED AT 0 DEGREES HORIZONTAL TO GRADE. ALL UNDERPASS LUMINAIRES SHALL BE TILTED IN ACCORDANCE WITH THE LUMINAIRE PERFORMANCE TABLE.

INDEX OF SHEETS

1	COVER SHEET
2	LIGHTING LEDGEND, HIGHWAY STANDARDS, GENERAL NOTES, & INDEX OF SHEETS
3-4	SUMMARY OF QUANTITIES
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16-28	PROPOSED LIGHTING PLAN
29	UNDERPASS LIGHTING PLAN
30	I-72/US36/US51 INTERCHANGE WIRING DIAGRAMS
31	I-72/US36/US51 INTERCHANGE LUMINAIRE PERFORMANCE TABLES

REV - MS

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		DRAWN -	REVISED -			VAR	(56-62)HL	MACON	31	2
		CHECKED -	REVISED -			CONTRACT NO. 74C97				
	PLOT DATE = 3/25/2025	DATE -	REVISED -			ILLINOIS FED. AID PROJECT				
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				SAFETY
				0021
				NONE
67100100	MOBILIZATION	L SUM	1	1
70100310	TRAFFIC CONTROL AND PROTECTION, STANDARD 701421	L SUM	1	1
70100420	TRAFFIC CONTROL AND PROTECTION, STANDARD 701411	EACH	6	6
70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	L SUM	1	1
70100700	TRAFFIC CONTROL AND PROTECTION, STANDARD 701406	L SUM	1	1
70100800	TRAFFIC CONTROL AND PROTECTION, STANDARD 701401	L SUM	1	1
70100825	TRAFFIC CONTROL AND PROTECTION, STANDARD 701456	L SUM	1	1
70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1	1
80400100	ELECTRIC SERVICE INSTALLATION	EACH	2	2
81028750	UNDERGROUND CONDUIT, COILABLE NONMETALLIC CONDUIT, 2" DIA.	FOOT	1260	1260
81100454	CONDUIT ATTACHED TO STRUCTURE, 1" DIA., STAINLESS STEEL	FOOT	560	560
81104580	CONDUIT ATTACHED TO STRUCTURE, 2" DIA., STAINLESS STEEL	FOOT	35	35
81300220	JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 6" X 6" X 4"	EACH	16	16
81300530	JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 12" X 10" X 6"	EACH	4	4
81300550	JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 12" X 12" X 6"	EACH	4	4

				80% FED 20% STATE
				CONSTR. CODE
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	MACON
				SAFETY
				0021
				NONE
81603040	UNIT DUCT, 600V, 2-1C NO.6, 1/C NO.8 GROUND, (XLP-TYPE USE), 1" DIA. POLYETHYLENE	FOOT	46960	46960
81702110	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 10	FOOT	1755	1755
82110008	LUMINAIRE, LED, ROADWAY, OUTPUT DESIGNATION H	EACH	181	181
82110027	LUMINAIRE, LED, UNDERPASS, SUSPENDED, OUTPUT DESIGNATION E	EACH	8	8
82500380	LIGHTING CONTROLLER, BASE MOUNTED, 480VOLT, 200AMP	EACH	2	2
83009600	LIGHT POLE, ALUMINUM, 45 FT. M.H., 15 FT. MAST ARM	EACH	181	181
83600356	LIGHT POLE FOUNDATION, METAL, 15" BOLT CIRCLE, 8 5/8" X 6'	EACH	181	181
83800650	BREAKAWAY DEVICE, COUPLING WITH STAINLESS STEEL SCREEN	EACH	724	724
84200600	REMOVAL OF LIGHTING UNIT, NO SALVAGE	EACH	149	149
84200804	REMOVAL OF POLE FOUNDATION	EACH	148	148
84500110	REMOVAL OF LIGHTING CONTROLLER	EACH	2	2
84500120	REMOVAL OF ELECTRIC SERVICE INSTALLATION	EACH	2	2
84500130	REMOVAL OF LIGHTING CONTROLLER FOUNDATION	EACH	2	2
89502300	REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	51555	51555

REV - MS

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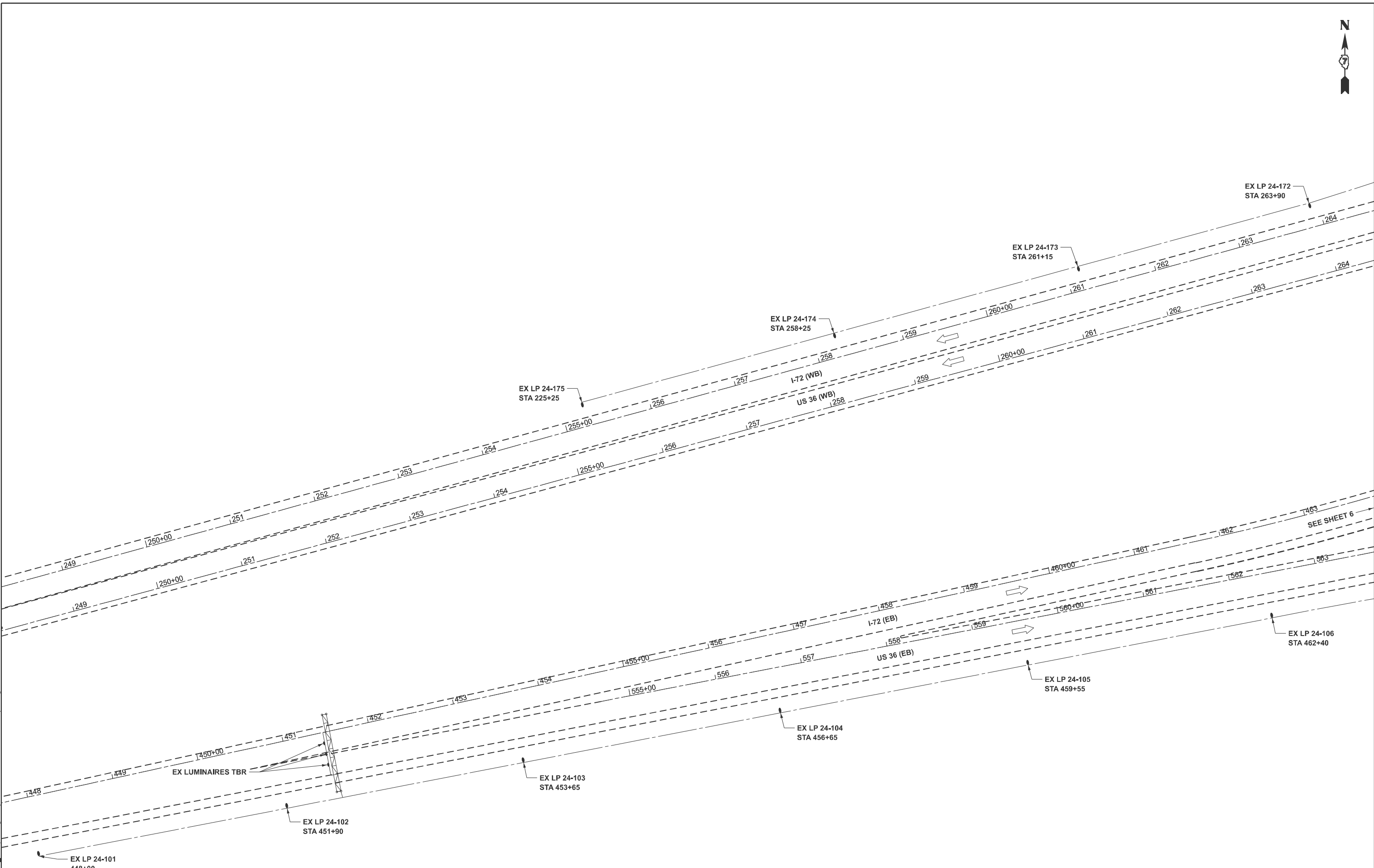
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES			
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		CONTRACT NO. 74C97		
		ILLINOIS	FED. AID PROJECT	

80% FED
20% STATE

				CONSTR. CODE
				MACON
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	SAFETY
				0021
				NONE
X2501000	SEEDING, CLASS 2 (SPECIAL)	ACRE	0.25	0.25
X8420111	REMOVAL OF UNDERPASS LIGHTING UNIT, NO SALVAGE	EACH	16	16
X8420506	REMOVAL OF EXISTING SIGN LIGHTING UNIT WITH NO SALVAGE	EACH	6	6
X8430100	REMOVE EXISTING CONDUIT ATTACHED TO STRUCTURE	FOOT	340	340
Z0033024	MAINTAIN EXISTING LIGHTING SYSTEM	L SUM	1	1



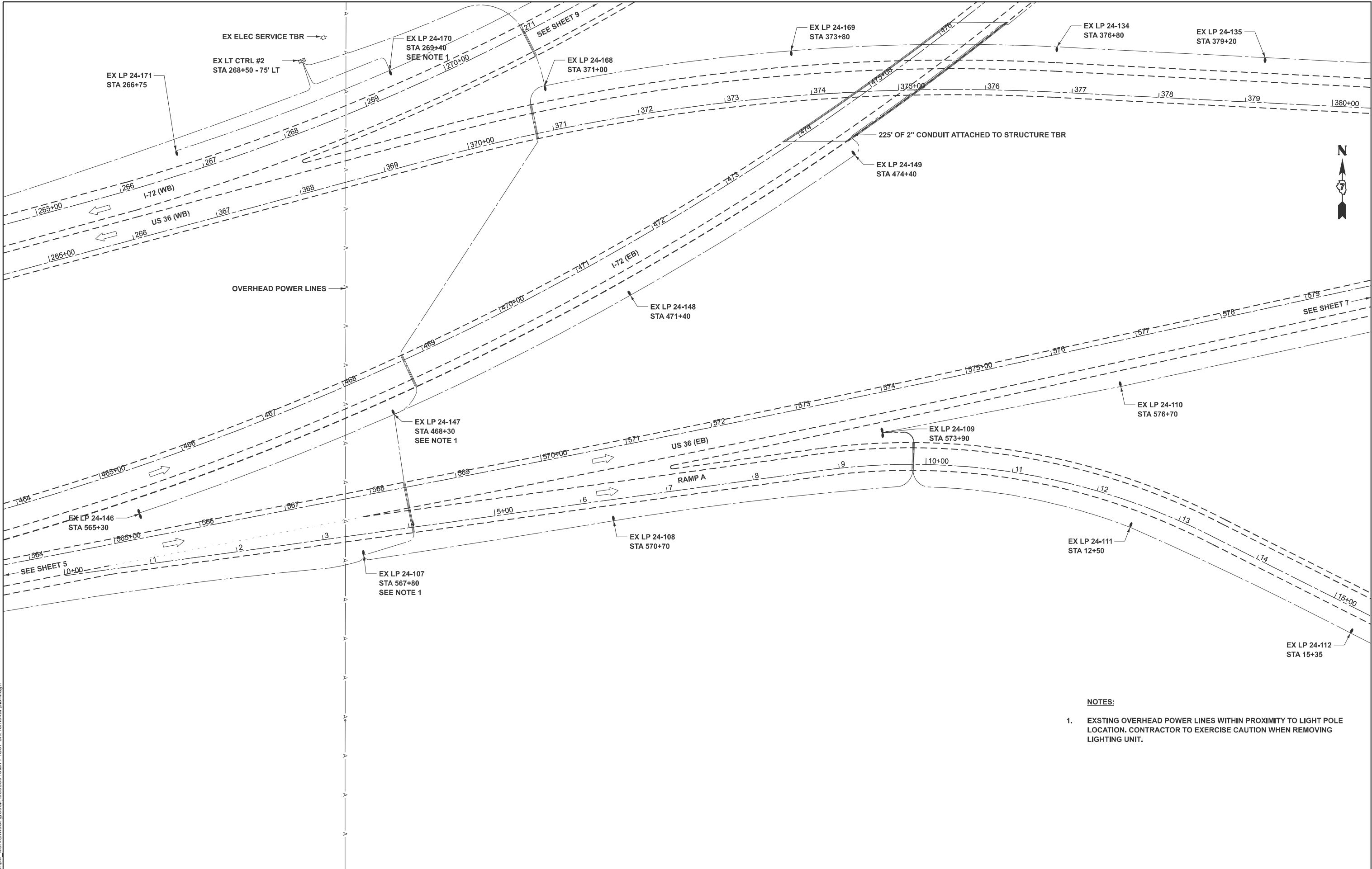
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

LIGHTING REMOVAL PLAN			
SCALE:	SHEET 1	OF 11 SHEETS	STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	(56-62)HL	MACON	31	5
CONTRACT NO. 74C97				
		ILLINOIS	FED. AID PROJECT	



- NOTES:**
- EXISTING OVERHEAD POWER LINES WITHIN PROXIMITY TO LIGHT POLE LOCATION. CONTRACTOR TO EXERCISE CAUTION WHEN REMOVING LIGHTING UNIT.

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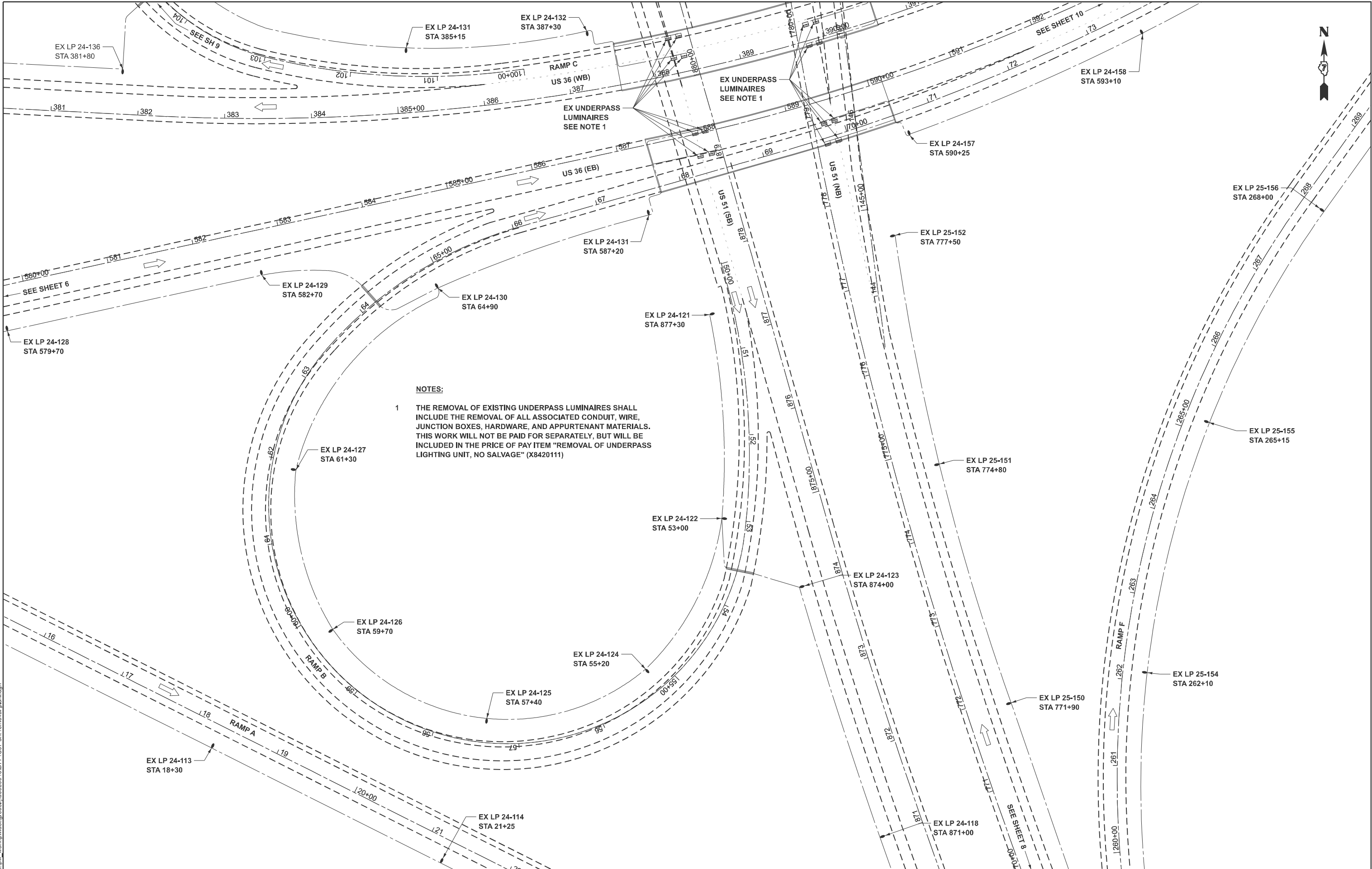
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

LIGHTING REMOVAL PLAN

SCALE: SHEET 2 OF 11 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	(56-62)HL	MACON	31	6
CONTRACT NO. 74C97				
ILLINOIS FED. AID PROJECT				



NOTES:

1 THE REMOVAL OF EXISTING UNDERPASS LUMINAIRES SHALL INCLUDE THE REMOVAL OF ALL ASSOCIATED CONDUIT, WIRE, JUNCTION BOXES, HARDWARE, AND APPURTENANT MATERIALS. THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT WILL BE INCLUDED IN THE PRICE OF PAY ITEM "REMOVAL OF UNDERPASS LIGHTING UNIT, NO SALVAGE" (X8420111)

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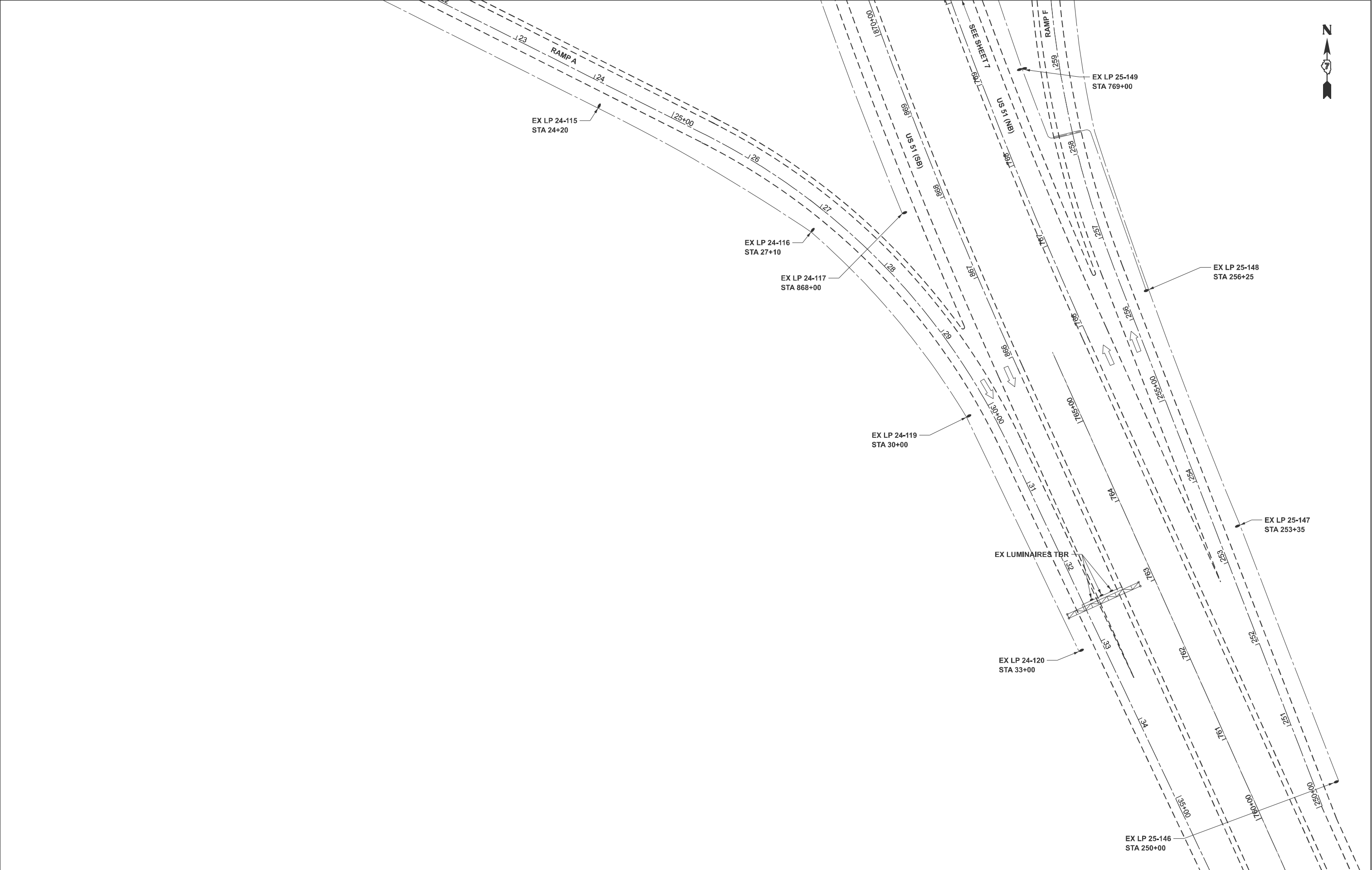
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		CHECKED -	REVISED -
	DATE -		REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

LIGHTING REMOVAL PLAN			
SCALE:	SHEET 3	OF 11 SHEETS	STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	(56-62)HL	MACON	31	7
CONTRACT NO. 74C97				
ILLINOIS FED. AID PROJECT				

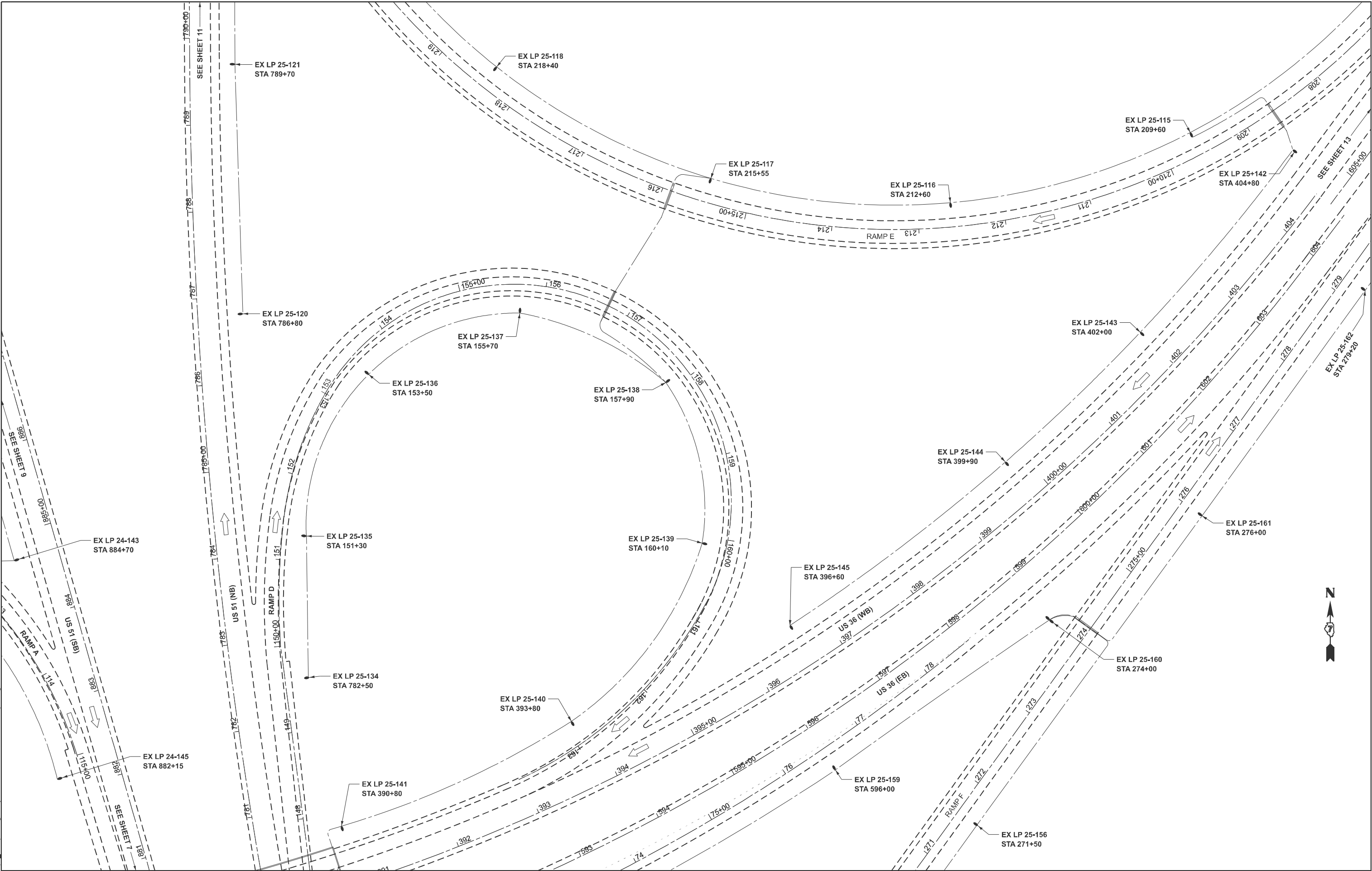
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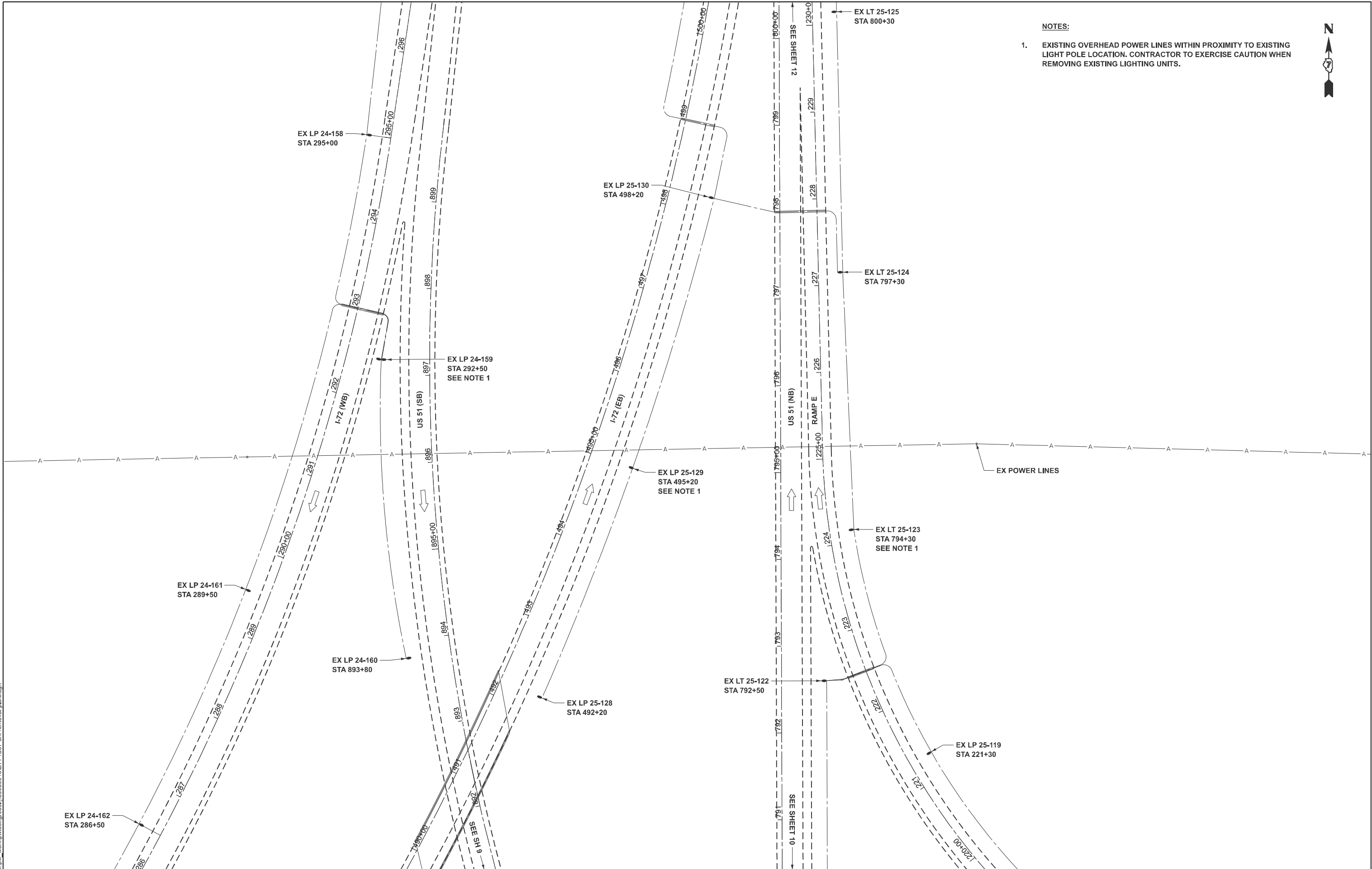
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

LIGHTING REMOVAL PLAN			
SCALE:	SHEET 6	OF 11 SHEETS	STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	(56-62)HL	MACON	31	10
CONTRACT NO. 74C97				
ILLINOIS FED. AID PROJECT				

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- NOTES:**
- EXISTING OVERHEAD POWER LINES WITHIN PROXIMITY TO EXISTING LIGHT POLE LOCATION. CONTRACTOR TO EXERCISE CAUTION WHEN REMOVING EXISTING LIGHTING UNITS.



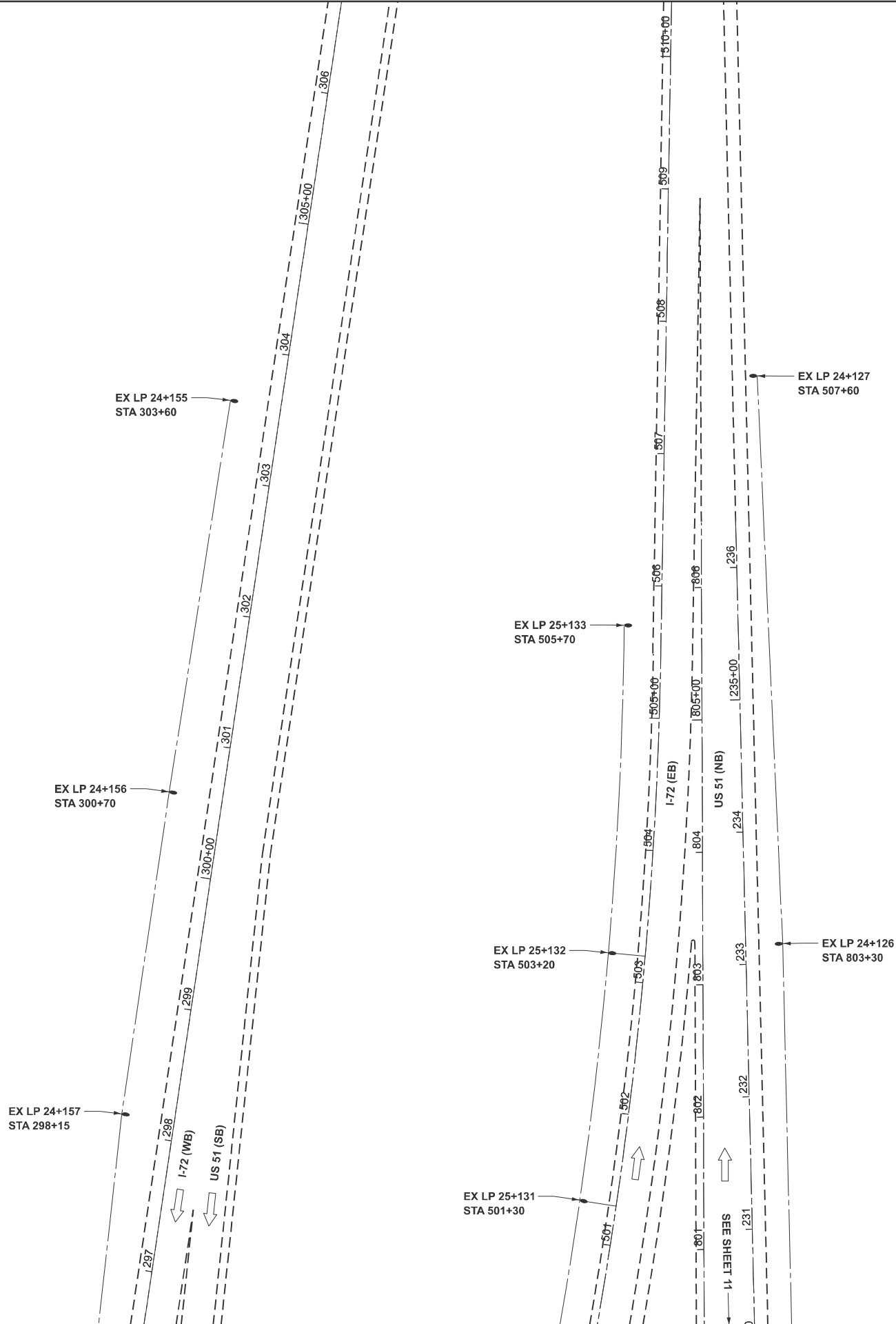
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PLOT DATE	= 3/25/2025	DATE	-	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

LIGHTING REMOVAL PLAN			
SCALE:	SHEET 7	OF 11 SHEETS	STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	(56-62)HL	MACON	31	11
CONTRACT NO. 74C97				
ILLINOIS FED. AID PROJECT				

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		DRAWN -	REVISED -
		CHECKED -	REVISED -
	PLOT DATE = 3/25/2025	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

LIGHTING REMOVAL PLAN

SCALE: SHEET 8 OF 11 SHEETS STA. TO STA.

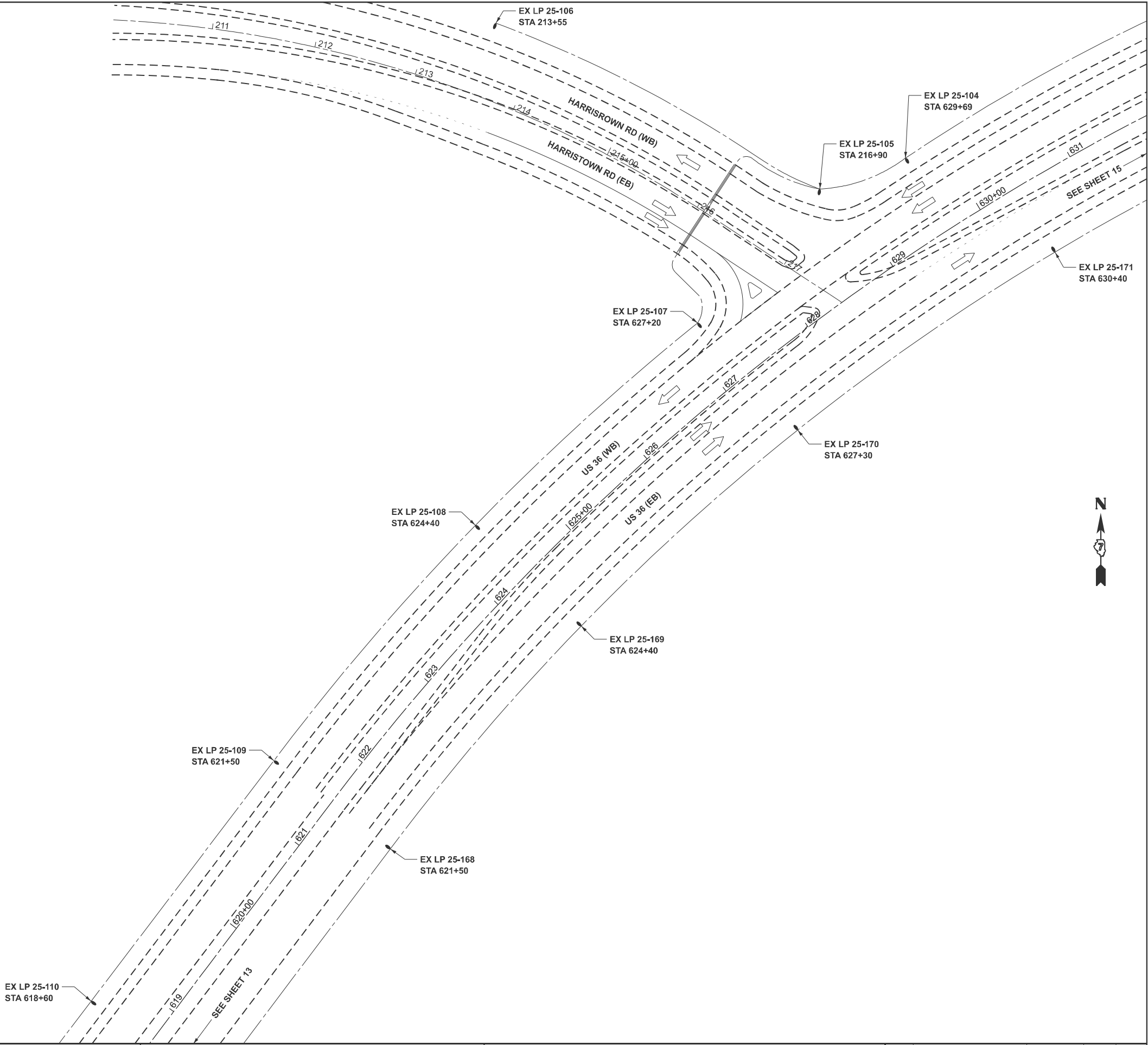
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VAR	(56-62)HL	MACON	31	12
CONTRACT NO. 74C97				
ILLINOIS FED. AID PROJECT				

1. EXISTING OVERHEAD POWER LINES WITHIN PROXIMITY TO EXISTING LIGHT POLE LOCATION. CONTRACTOR TO EXERCISE CAUTION WHEN REMOVING LIGHTING UNITS.

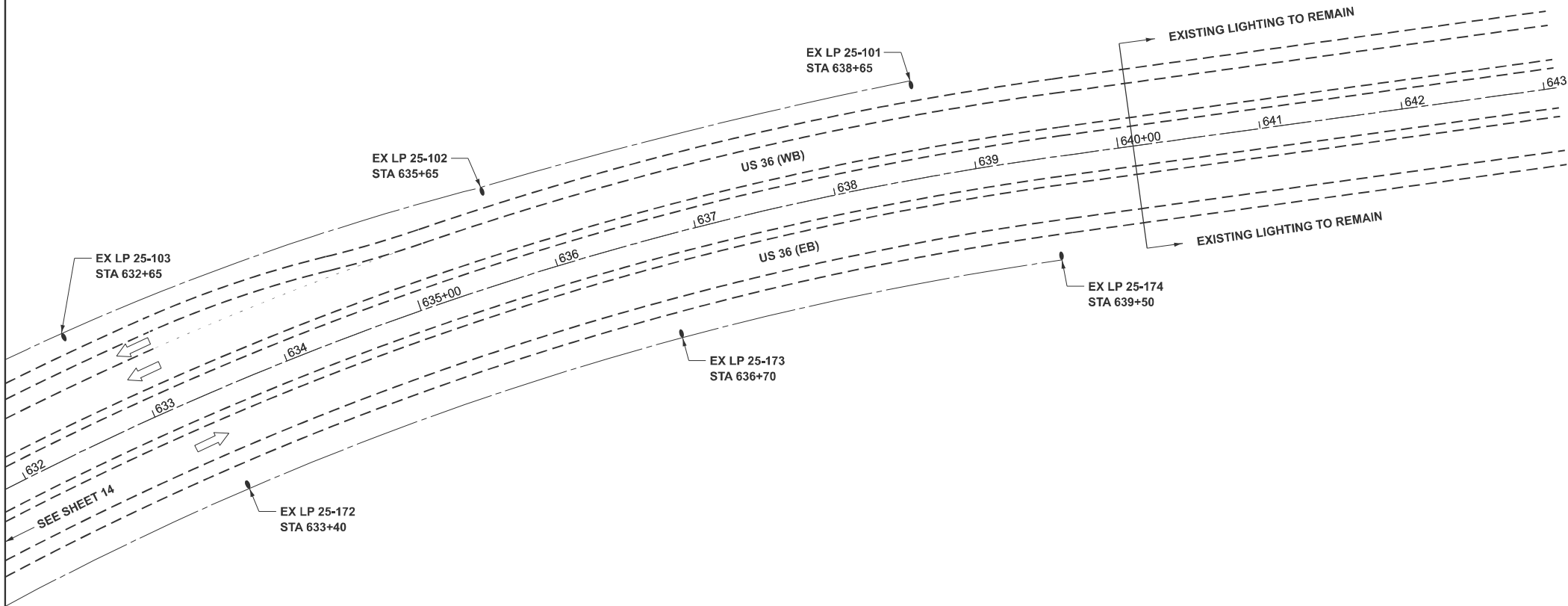


F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 74C97				
		ILLINOIS	FED. AID PROJECT	

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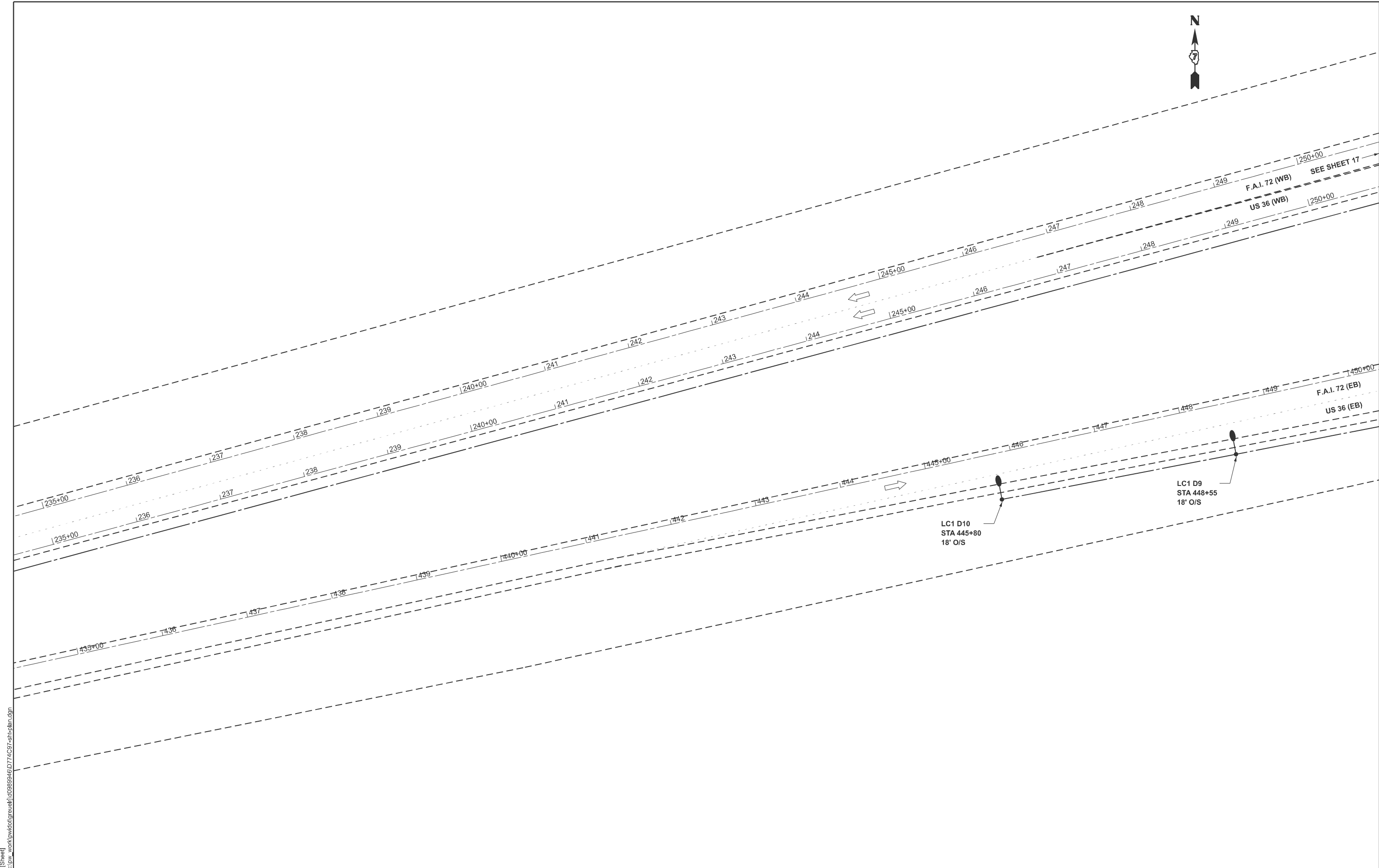
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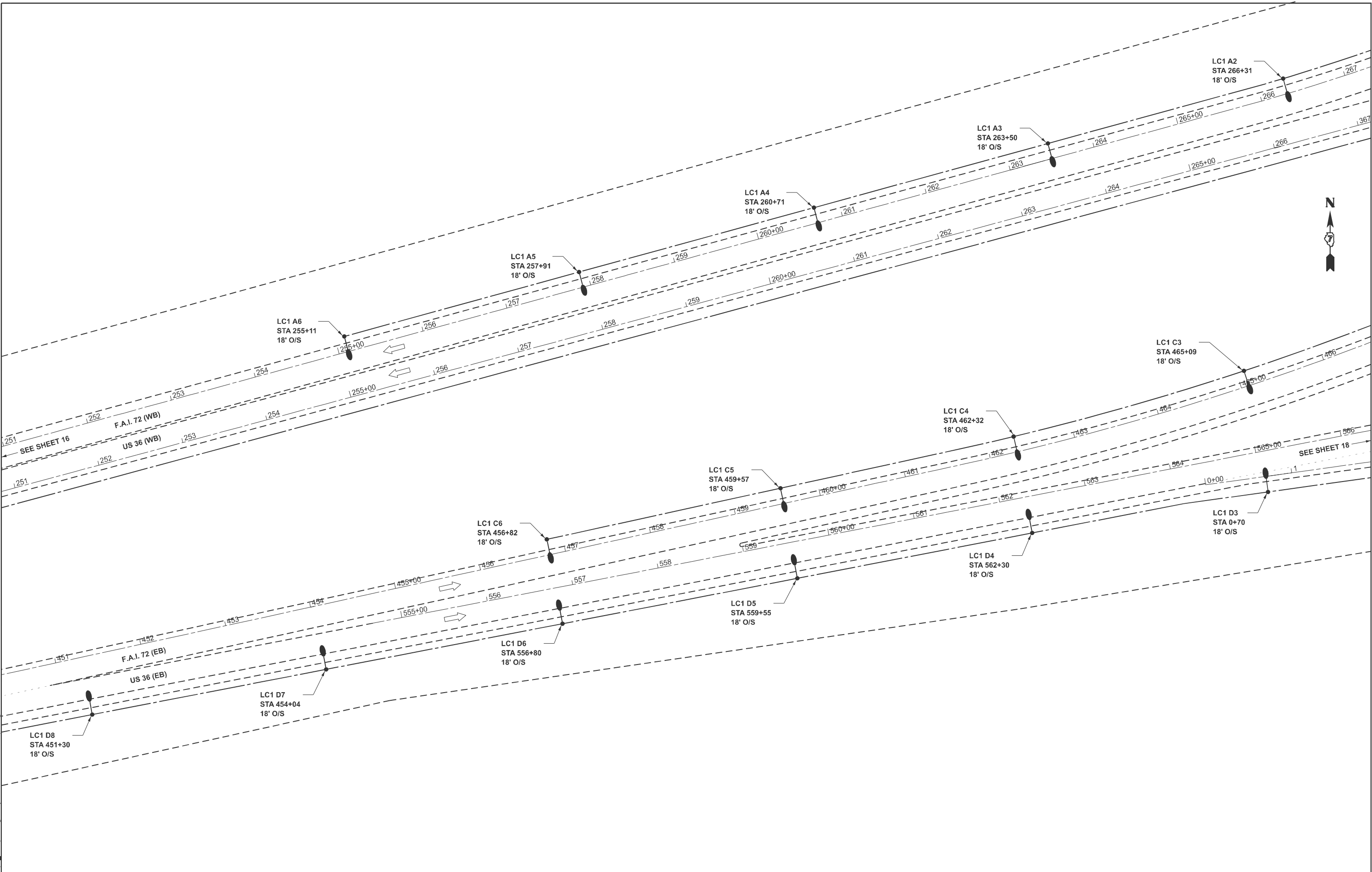
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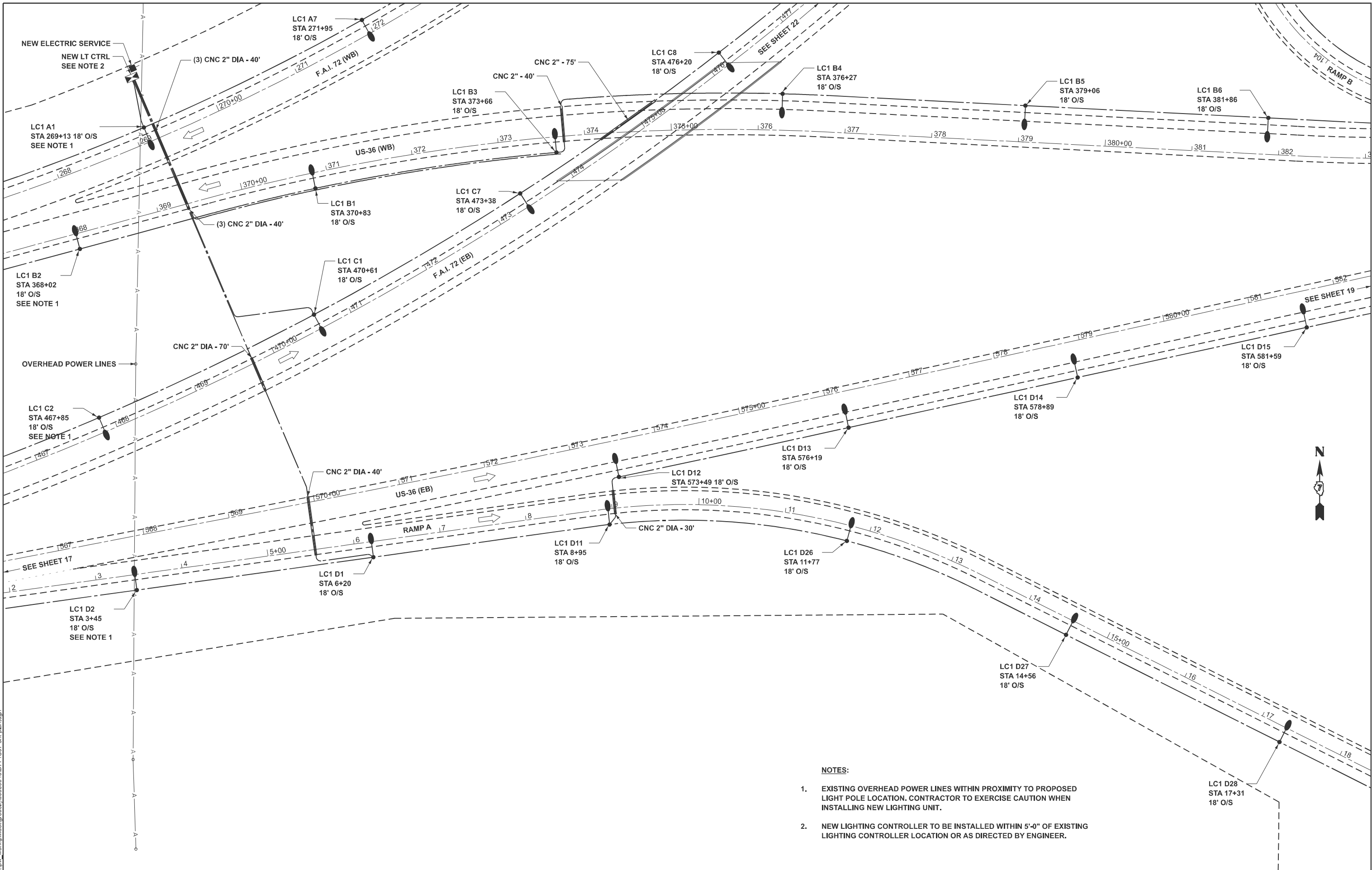
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		CHECKED -	REVISED -					CONTRACT NO. 74C97				
	PLOT DATE = 3/25/2025	DATE -	REVISED -		SCALE:	SHEET 1	OF 14 SHEETS	STA.	TO STA.	ILLINOIS FED. AID PROJECT		

MODEL: Plan-1 [Sheet]
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	USER NAME = robert.greuel		DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PROPOSED LIGHTING PLAN			F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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			CHECKED -	REVISED -					CONTRACT NO. 74C97				
	PLOT DATE = 3/20/2025		DATE -	REVISED -		SCALE:	SHEET 2	OF 14 SHEETS	STA.	TO STA.	ILLINOIS FED. AID PROJECT		

MODEL: Plan-2 [Sheet]
FILE NAME: c:\p\work\p\work\greuel\0989946\0774C97-shr-plan.dgn



NOTES:

- EXISTING OVERHEAD POWER LINES WITHIN PROXIMITY TO PROPOSED LIGHT POLE LOCATION. CONTRACTOR TO EXERCISE CAUTION WHEN INSTALLING NEW LIGHTING UNIT.
- NEW LIGHTING CONTROLLER TO BE INSTALLED WITHIN 5'-0" OF EXISTING LIGHTING CONTROLLER LOCATION OR AS DIRECTED BY ENGINEER.

USER NAME	= Robert.greuel	DESIGNED	-	REVISED	-
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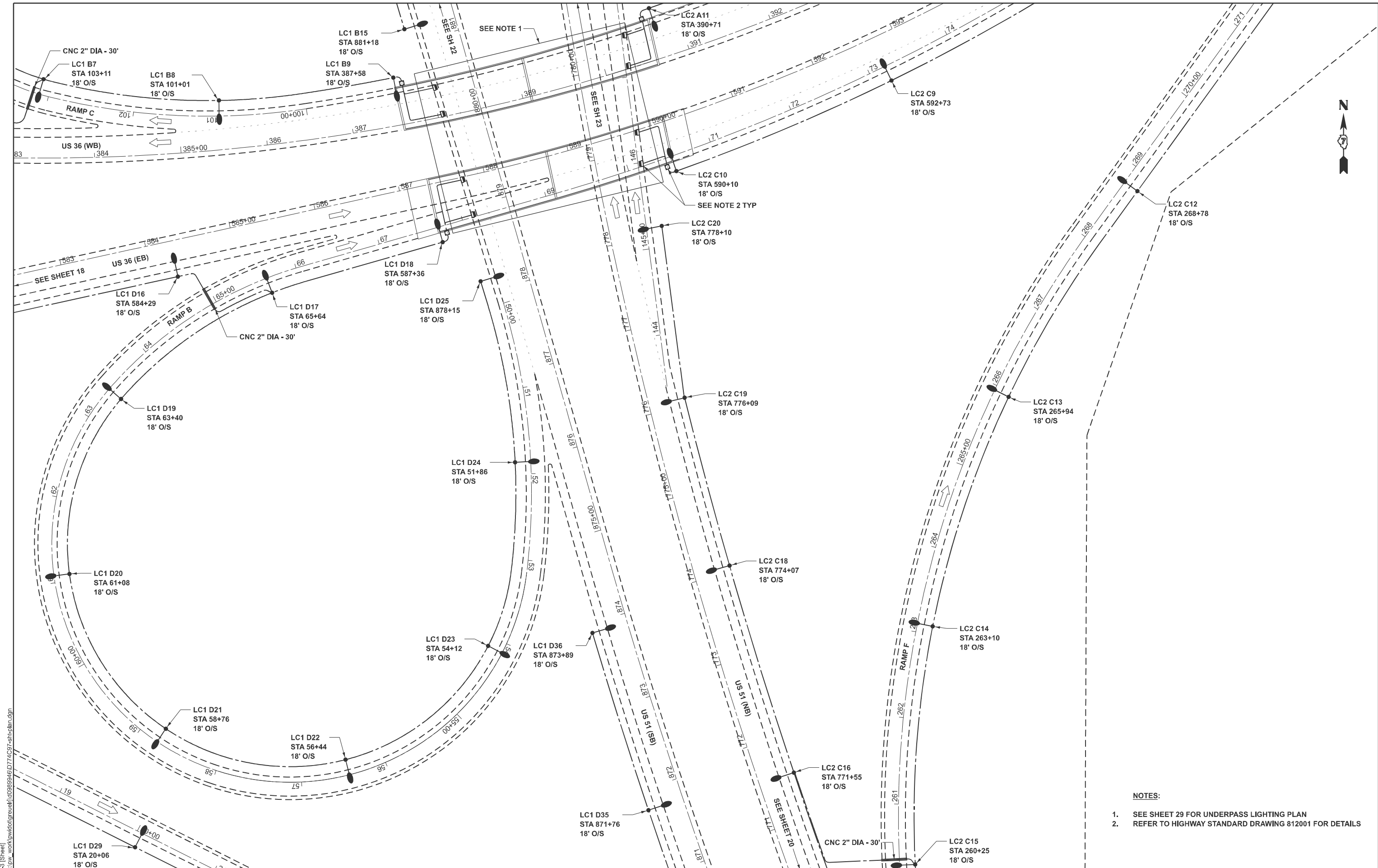
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED LIGHTING PLAN

SCALE: SHEET 3 OF 14 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	(56-62)HL	MACON	31	18
CONTRACT NO. 74C97				
ILLINOIS FED. AID PROJECT				

MODEL: Plan-3 [Sheet]
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- NOTES:**
- SEE SHEET 29 FOR UNDERPASS LIGHTING PLAN
 - REFER TO HIGHWAY STANDARD DRAWING 812001 FOR DETAILS

PLOT DATE = 3/25/2025	USER NAME = Robert.greuel	DESIGNED -	REVISED -
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		CHECKED -	REVISED -
	DATE -		REVISED -

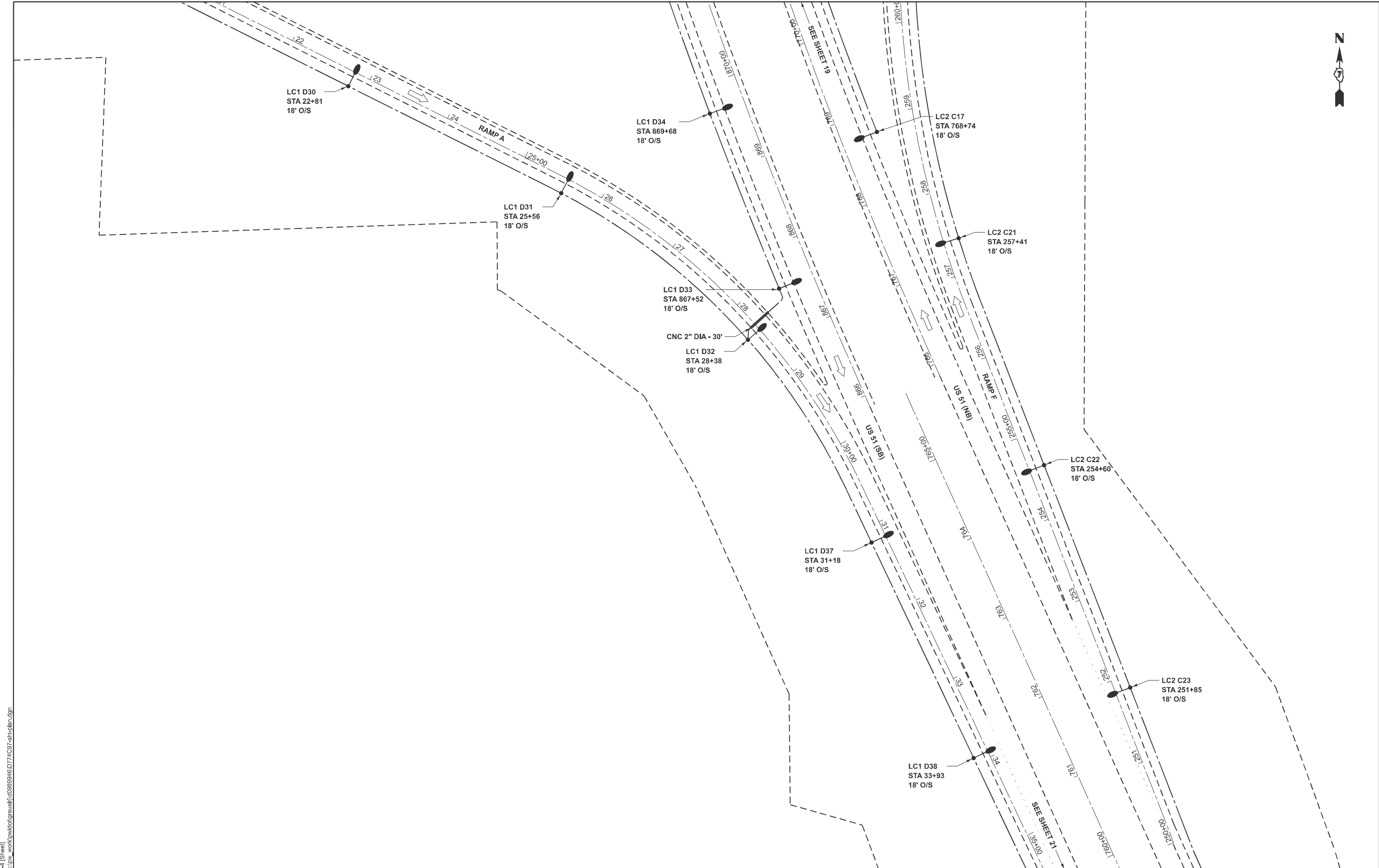
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

PROPOSED LIGHTING PLAN

SCALE: SHEET 4 OF 14 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	(56-62)HL	MACON	31	19
CONTRACT NO. 74C97				
ILLINOIS FED. AID PROJECT				

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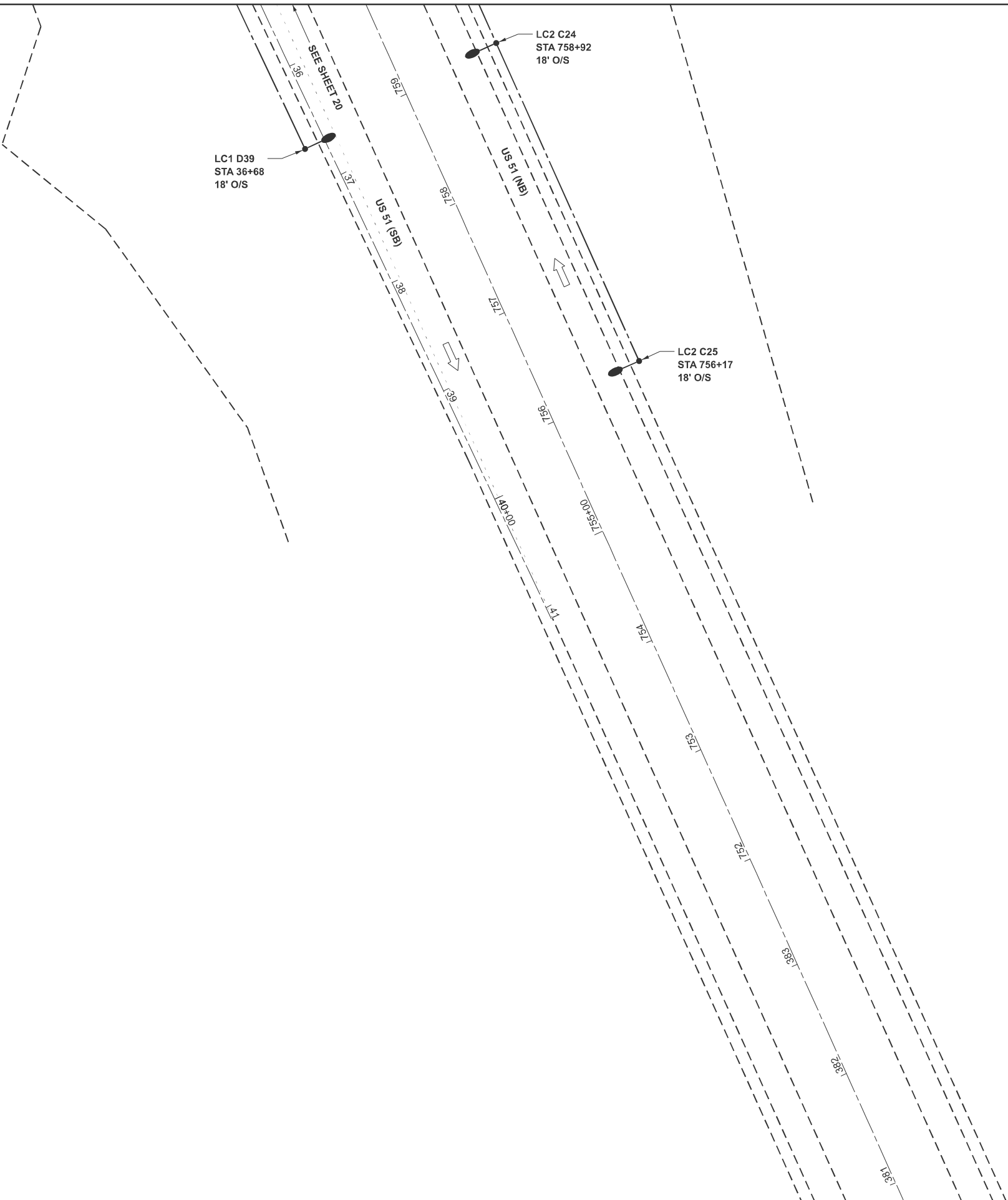


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	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 3/25/2025	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED LIGHTING PLAN			
SCALE:	SHEET 5	OF 14 SHEETS	STA. TO STA.

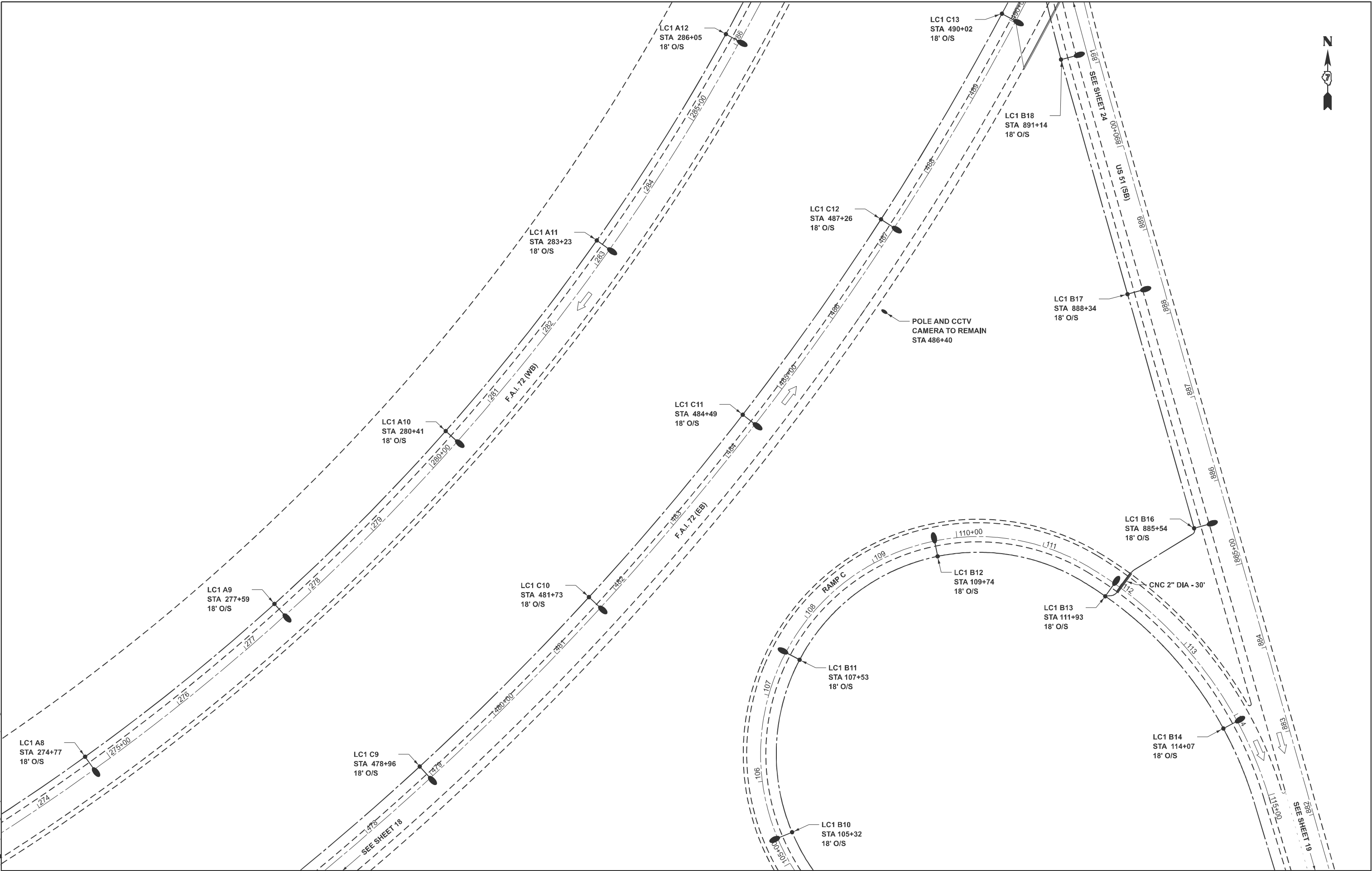
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VAR	(56-62)HL	MACON	31	20
CONTRACT NO. 74C97				
ILLINOIS FED. AID PROJECT				



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		CHECKED -	REVISED -					CONTRACT NO. 74C97				
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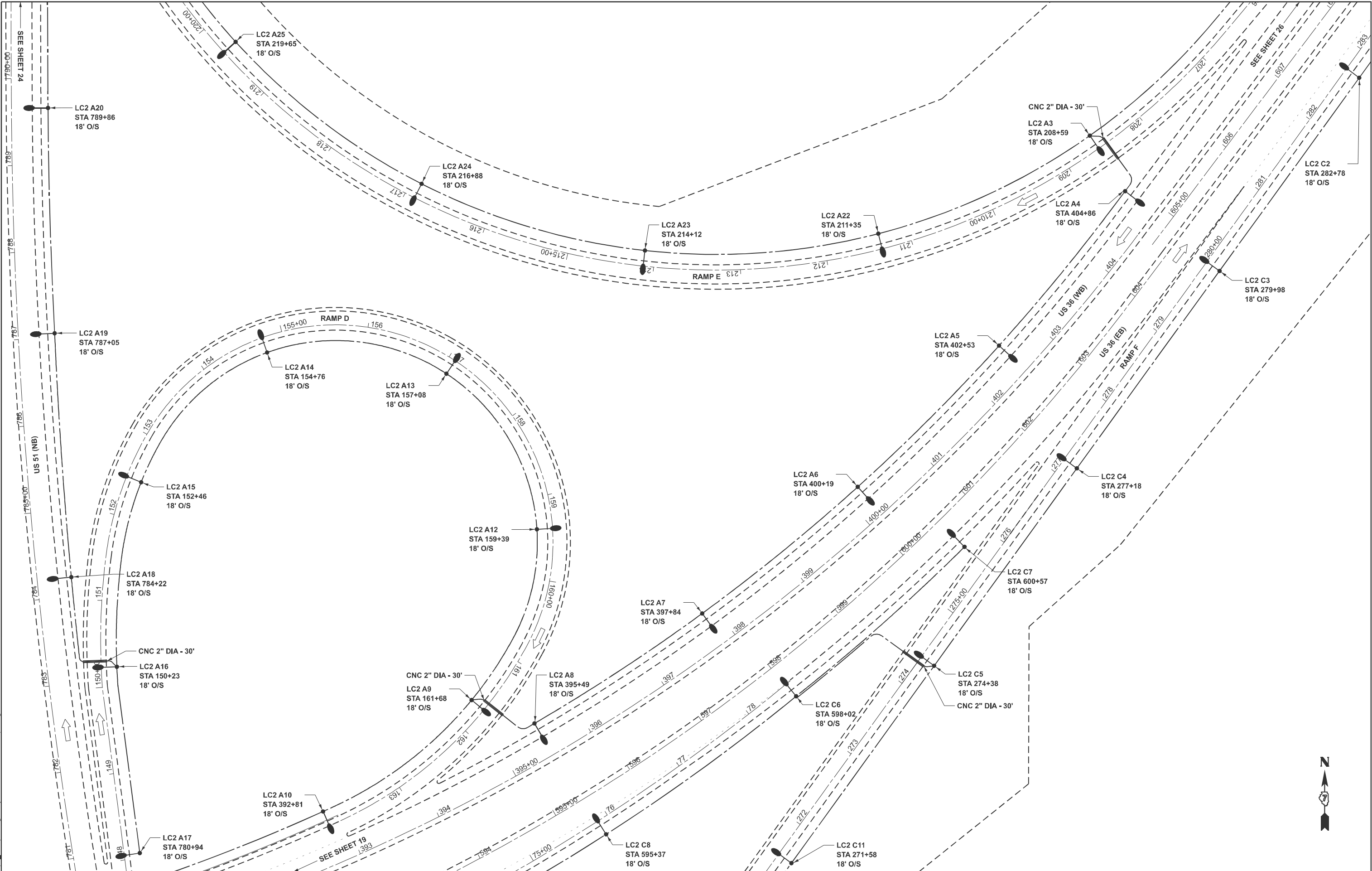
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		DRAWN -	REVISED -
		CHECKED -	REVISED -
		DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED LIGHTING PLAN			
SCALE:	SHEET 7 OF 14 SHEETS	STA.	TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	(56-62)HL	MACON	31	22
CONTRACT NO. 74C97				
ILLINOIS FED. AID PROJECT				

MODEL: Plan-7 [Sheet]
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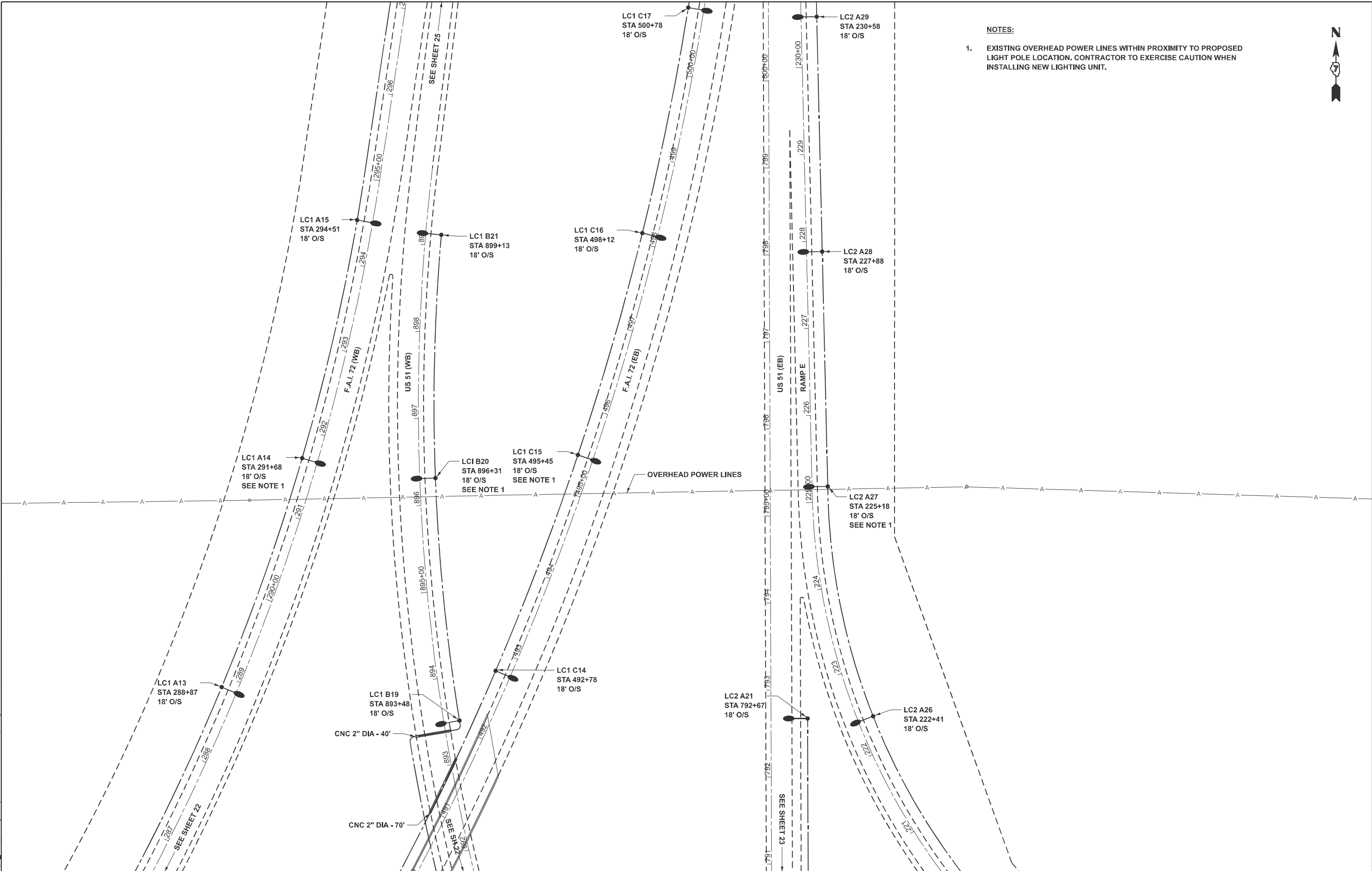
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	CHECKED -	REVISED -
PLOT DATE = 3/25/2025	DATE -	REVISED -

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

PROPOSED LIGHTING PLAN			
SCALE:	SHEET 8	OF 14 SHEETS	STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	(56-62)HL	MACON	31	23
CONTRACT NO. 74C97				
ILLINOIS FED. AID PROJECT				

MODEL: Plan-8 [Sheet]
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NOTES:

- EXISTING OVERHEAD POWER LINES WITHIN PROXIMITY TO PROPOSED LIGHT POLE LOCATION. CONTRACTOR TO EXERCISE CAUTION WHEN INSTALLING NEW LIGHTING UNIT.



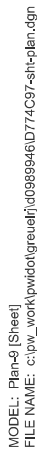
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		CHECKED -	REVISED -
	DATE -		REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED LIGHTING PLAN

SCALE: SHEET 9 OF 14 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	(56-62)HL	MACON	31	24
CONTRACT NO. 74C97				
ILLINOIS FED. AID PROJECT				



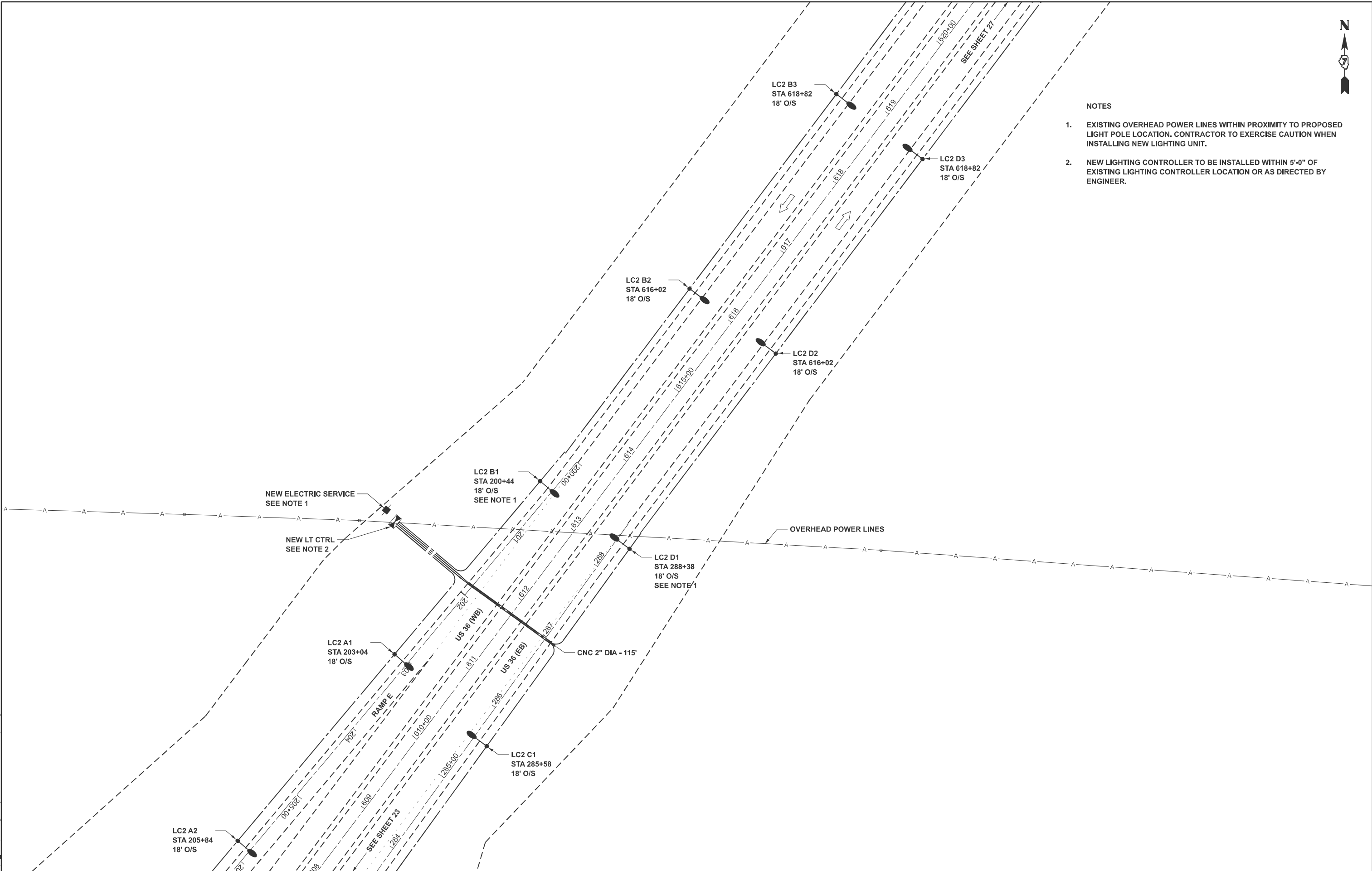
SCALE:	SHEET 10	OF 14	SHEETS	STA.	TO STA.
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ILLINOIS	FED. AID PROJECT
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NOTES

- EXISTING OVERHEAD POWER LINES WITHIN PROXIMITY TO PROPOSED LIGHT POLE LOCATION. CONTRACTOR TO EXERCISE CAUTION WHEN INSTALLING NEW LIGHTING UNIT.
- NEW LIGHTING CONTROLLER TO BE INSTALLED WITHIN 5'-0" OF EXISTING LIGHTING CONTROLLER LOCATION OR AS DIRECTED BY ENGINEER.



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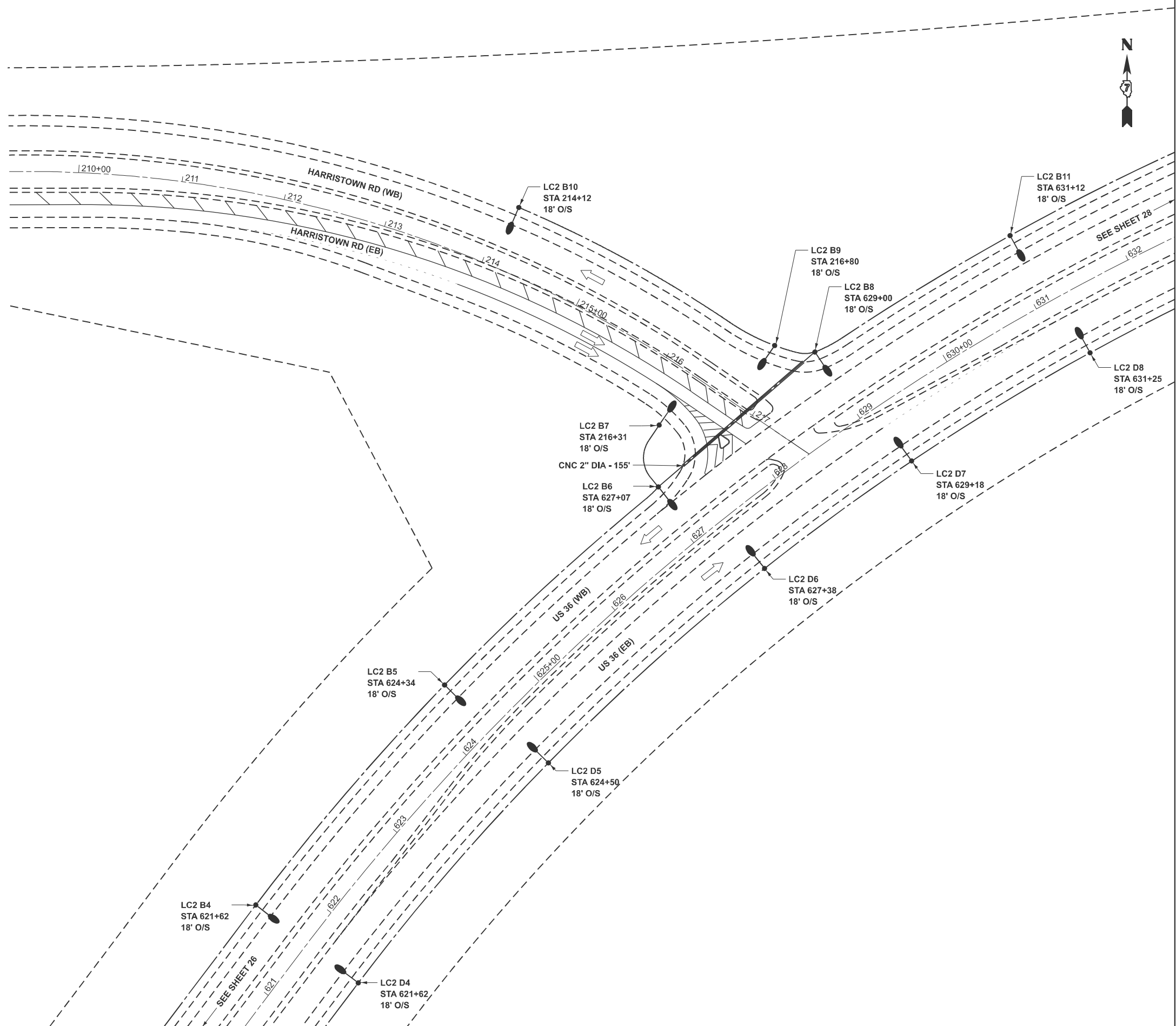
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PLOT DATE	= 3/25/2025	DATE	-	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED LIGHTING PLAN			
SCALE:	SHEET 11	OF 14	SHEETS
	STA.	TO STA.	

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	(56-62)HL	MACON	31	26
CONTRACT NO. 74C97				
ILLINOIS				FED. AID PROJECT

MODEL: Plan-11 [Sheet]
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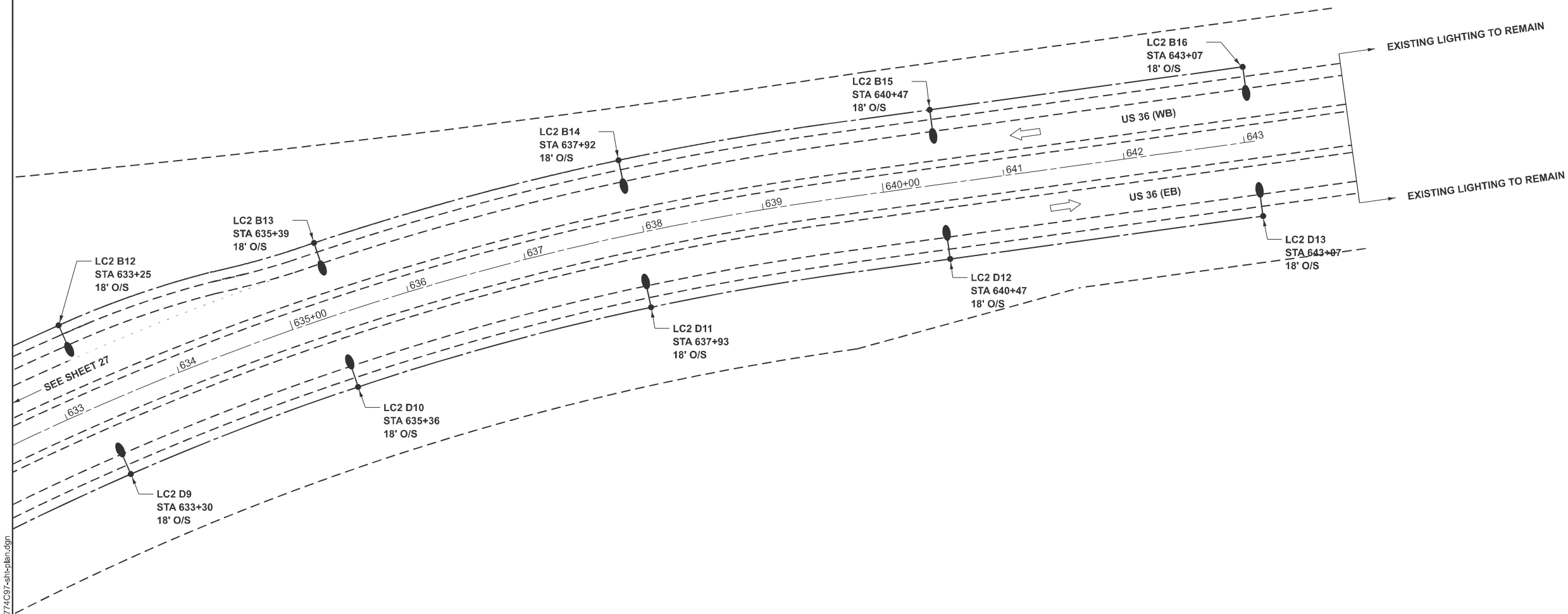
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PLOT DATE	= 3/25/2025	DATE	-	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED LIGHTING PLAN

SCALE: SHEET 12 OF 14 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	(56-62)HL	MACON	31	27
CONTRACT NO. 74C97				
ILLINOIS FED. AID PROJECT				



MODEL: Plan-12 [Sheet]
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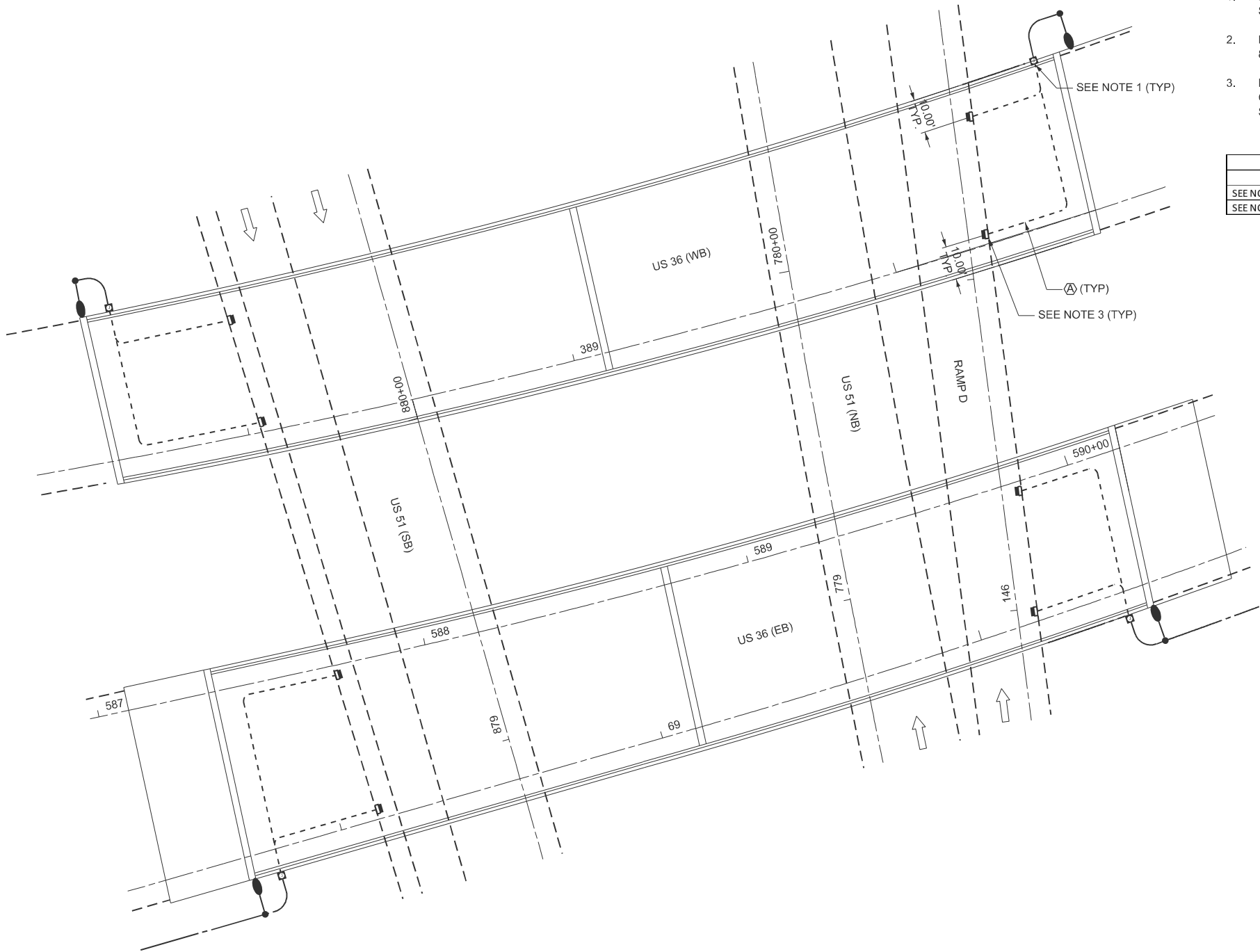
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	PLOT DATE = 3/25/2025	DATE -	REVISED -					ILLINOIS FED. AID PROJECT				



CABLE TAGS
Ⓐ ELECTIC CABLE IN COUDUIT, 600V (XLP-TYPE USE) 2-1C NO.10, 1/C NO.10 GROUND, IN CONDUIT ATTACHED TO STRUCTURE, 1" DIA., SS

- NOTES:**
1. PROVIDE IN-LINE FUSE IN ACCORDANCE WITH ARTICLE 1065.01 OF THE STANDARD SPECIFICATIONS.
 2. NOT SHOWN FOR CLARITY, REFER TO HIGHWAY STANDARD DRAWING 821006 FOR DETAILS.
 3. PROPOSED SUSPENDED MOUNTED UNDERPASS LUMINAIRES SHALL BE OFFSET SIX (6) FEET FROM EDGE OF PAVEMENT, REFER TO HIGHWAY STANDARD DRAWING 821006 FOR DETAILS.

SCHEDULE OF QUANTITIES FOR UNDERPASS JUNCTION BOXES				
	PAY ITEM	DESCRIPTION	UNIT	QUANTITY
SEE NOTE 2	81300220	JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 6" X 6" X 4"	EACH	16
SEE NOTE 2	81300530	JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 12" X 10" X 6"	EACH	4



MODEL: UNDERPASS LIGHTING PLAN [Sheet]
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PLOT DATE	= 3/20/2025	DATE	-	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

UNDERPASS LIGHTING PLAN

SCALE: SHEET 14 OF 14 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	(56-62)HL	MACON	31	29
CONTRACT NO. 74C97				
ILLINOIS FED. AID PROJECT				

LUMINAIRE PERFORMANCE TABLE
LUMINAIRE, LED, ROADWAY, OUTPUT DESIGNATION H

Project

Date	Contract Number	Section Number	County
02-19-2025	74C97	(56-62)HL	MACON
Marked Route Number		Municipality	
172-US36-US-51			

Roadway

Lane Width (See Note 4)	*of Lanes	Median Width	I.E.S Surface Classification	0-Zero Value
12 ft	2	N/A	R3	0.07

Structure

Mounting Height	Arm Length	Set Back (See Note 1)	Number of Luminares (Highmast & Sign Lighting Only)
45 ft	15 ft	15 ft	N/A

Luminaire

Description	I.E.S. Transverse Distribution	I.E.S. Lateral Distribution	
LUMINAIRE, LED, ROADWAY, DESIGNATION H	TYPE II	MEDIUM	
Total Light Loss Factor (LLF)	BUG Rating	Shields	Dimming Protocol
See Note 6	U = 0	NO	0-10V

Layout

Spacing (to Nearest 5 Ft) Configuration (Opposite, Staggered, 1 Sided, or Median)	
280 ft	ONE ROW, NEAR SIDE

Performance (See Notes 5 and 6)

Average Illuminance, E_{AVE} (fc)	Uniformity Ratio, E_{AVE}/E_{MIN}		
≥ 0.7	≤ 3.0:1		
Average Luminance, L_{AVE} (cd/m ²)	Uniformity Ratio, L_{AVE}/L_{MIN}	Uniformity Ratio, L_{MAX}/L_{MIN}	Veiling Luminance Ratio, L_V/L_{MIN}
≥ 0.8	≤ 3.0:1	≤ 5.0:1	≤ 0.3

Light Trespass

Distance to ROW (behind pole)	Max. Horizontal Illuminance at ROW, E_H	Max. Vertical Illuminance at ROW, E_V
N/A	N/A	N/A

Notes

- Set Back is from Edge of Pavement (white line).
- Lighting calculations shall be performed with all luminaires oriented toward and perpendicular to the roadway.
- Performance requirements shall be the minimum acceptable standards of photometric performance for the luminaire, based on the given conditions above.
- Lane width is the width of each individual lane, not to be confused with total roadway width.
- Compliance with performance criteria shall be held to one significant digit.
- Photometric calculations for roadways shall be performed with a total light loss factor of 0.7.
- Luminaire performance table is intended to define the luminaire and does not necessarily match any specific roadway geometry, mounting height, setback, or arm length.
- Nominal lumen output of 25,000.

LUMINAIRE PERFORMANCE TABLE
LUMINAIRE, LED, UNDERPASS, OUTPUT DESIGNATION E

Project

Date	Contract Number	Section Number	County
02-19-2025	74C97	(56-62)HL	MACON
Marked Route Number		Municipality	
US36-US-51			

Roadway

Lane Width (See Note 4)	*of Lanes	Median Width	I.E.S Surface Classification	0-Zero Value
12 ft	1	N/A	R3	0.07

Structure

Mounting Height	Arm Length	Set Back (See Note 1)	Number of Luminares (Highmast & Sign Lighting Only)
15 ft	N/A	15 ft	N/A

Luminaire

Description	I.E.S. Transverse Distribution	I.E.S. Lateral Distribution	
LUMINAIRE, LED, UNDERPASS, DESIGNATION E	TYPE II	SHORT	
Total Light Loss Factor (LLF)	BUG Rating	Shields	Dimming Protocol
See Note 6	U = 0	NO	0-10V

Layout

Spacing (to Nearest 5 Ft) Configuration (Opposite, Staggered, 1 Sided, or Median)	
50 ft	ONE ROW, NEAR SIDE

Performance (See Notes 5 and 6)

Average Illuminance, E_{AVE} (fc)	Uniformity Ratio, E_{AVE}/E_{MIN}		
• ≥ 1.0-2.0	≤ 3.0:1		
Average Luminance, L_{AVE} (cd/m ²)	Uniformity Ratio, L_{AVE}/L_{MIN}	Uniformity Ratio, L_{MAX}/L_{MIN}	Veiling Luminance Ratio, L_V/L_{MIN}
• ≥ 0.9 - 1.0	≤ 3.0:1	≤ 5.0:1	≤ 0.3

Light Trespass

Distance to ROW (behind pole)	Max. Horizontal Illuminance at ROW, E_H	Max. Vertical Illuminance at ROW, E_V
N/A	N/A	N/A

Notes

- Set Back is from Edge of Pavement (white line).
- Lighting calculations shall be performed with all luminaires oriented toward and perpendicular to the roadway.
- Performance requirements shall be the minimum acceptable standards of photometric performance for the luminaire, based on the given conditions above.
- Lane width is the width of each individual lane, not to be confused with total roadway width.
- Compliance with performance criteria shall be held to one significant digit.
- Photometric calculations for roadways shall be performed with a total light loss factor of 0.7.
- Luminaire performance table is intended to define the luminaire and does not necessarily match any specific roadway geometry, mounting height, setback, or arm length.
- The underpass luminaire shall be tilted, as necessary, to meet the performance requirements. The Contractor shall install the underpass luminaire at the designed tilt.

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PLOT DATE = 3/13/2025	DATE - 2/28/2025	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I-72 / US-36 / US-51 INTERCHANGE
LUMINAIRE PERFORMANCE TABLES

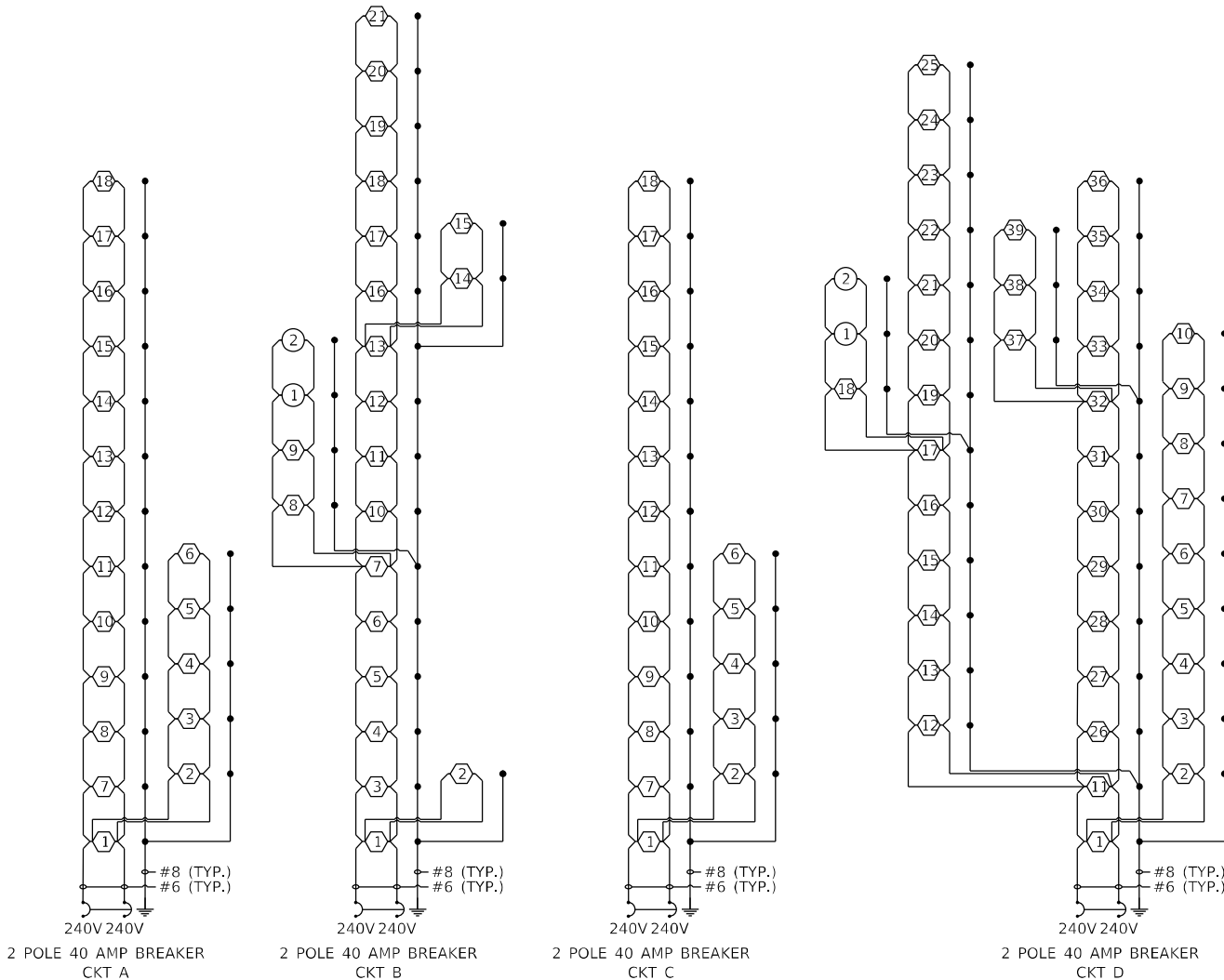
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F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 74C97				
ILLINOIS		FED. AID PROJECT		

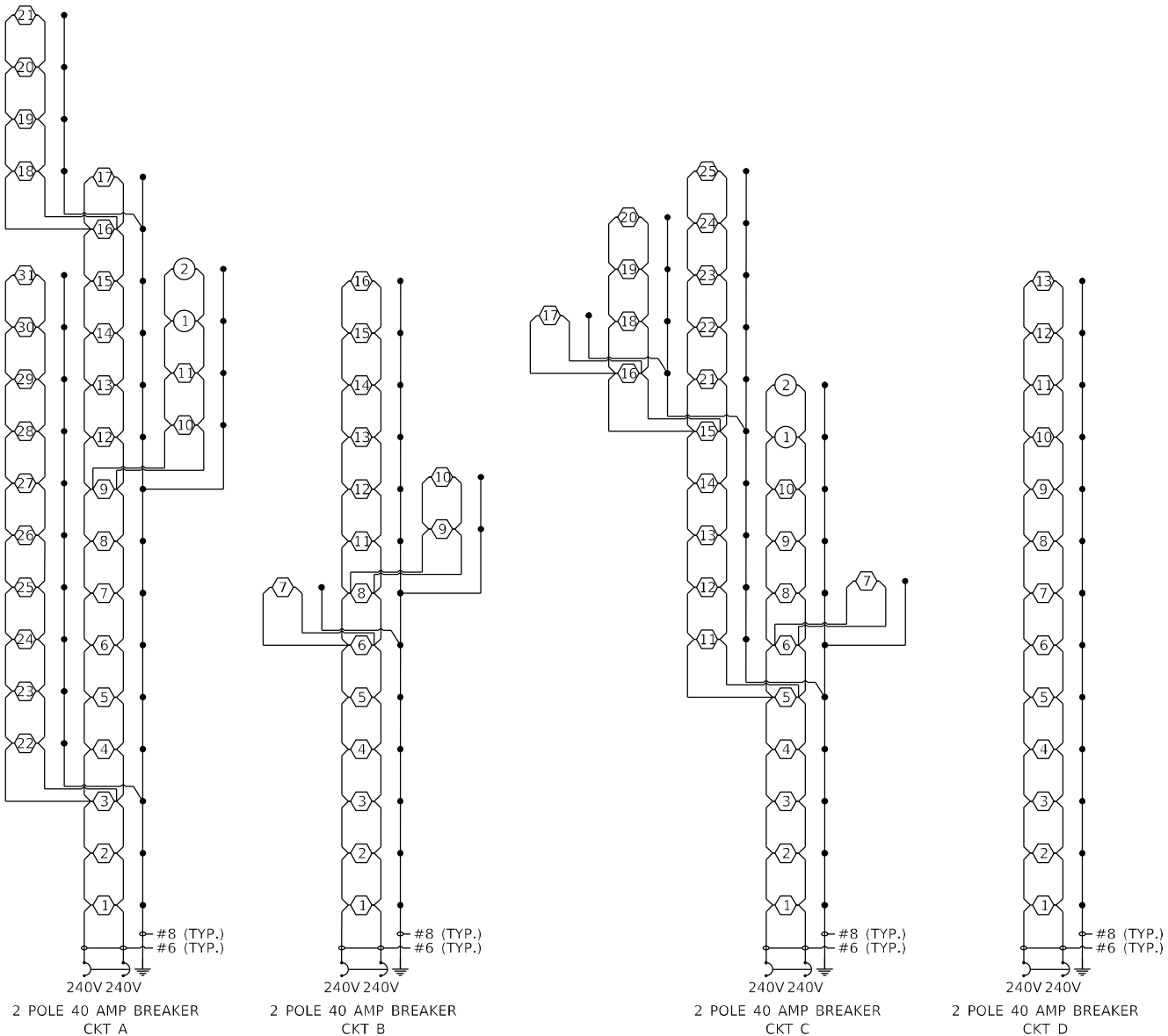
NOTES:

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.

- ⬡ PROPOSED ROADWAY LUMINAIRE, LED
- PROPOSED UNDERPASS LUMINAIRE, LED
- ⏏ GROUND ROD



I-72 / US-36 / US-51 INTERCHANGE
PROPOSED LIGHTING CONTROLLER, "LC1"
BASE MOUNTED, 480 VOLT, 200 AMP



I-72 / US-36 / US-51 INTERCHANGE
PROPOSED LIGHTING CONTROLLER, "LC2"
BASE MOUNTED, 480 VOLT, 200 AMP

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	PLOT DATE = 3/13/2025	DATE - 2/28/2025	REVISED -										
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