08-03-2018 LETTING ITEM 068

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2016-017L	VARIOUS	88	1
	ILLINOIS	CONTRACT NO. 62C35		

TRAFFIC DATA	ADT 2017	SPEED POSTED
I-57 NORTH/ SOUTH	79500/54500	55/70
US30 WEST/ EAST	21000/33000	45/85
I-290	186600	55
Central Ave. NORTH/SOUTH	21200/23600	30/30
IL31 NORTH/SOUTH	31800/24000	55/55
US14	23200	40

SEE LOCATION MAPS ON SHEETS E-KP1 AND E-KP2. INDEX OF SHEETS AND IDOT HIGHWAY STANDARDS LIST ON SHEET E-KP2

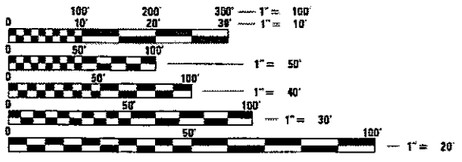
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED HIGHWAY PLANS

VARIOUS ROUTES
VARIOUS LOCATIONS
SECTION: 2016-017L
PROJECT: NHPP-PKJE(161)
REPLACE LIGHT TOWERS & FOUNDATIONS AT VARIOUS LOCATIONS ALONG I-57, US-14 AND I-290
COOK AND McHENRY COUNTIES

C-91-339-16

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.

C.U.A.N. CHICAGO UTILITY ALERT NETWORK 1-312-744-7000
J.U.L.I.E. JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION 1-800-892-0123 OR 811
MEADE ELECTRIC CO. DISTRICT ONE ELECTRICAL MAINTENANCE CONTRACTOR LOCATES IDOT ELECTRICAL EQUIPMENT AND UNDERGROUND CABLES 773-287-7672

DELTA ENGINEERING GROUP, LLC
111 W. JACKSON BLVD,. CHICAGO, IL 60604
MAIN 312-377-7700 FAX 312-427-6145

JACOBS 525 West Monroe Suite 1500 Chicago, IL 60661

PROJECT ENGINEER: TONY GODINHO (847)-705-4442
PROJECT MANAGER: MARK JENKINS (847)-705-4350

CONTRACT NO. 62C35

HAMJA S. MASTER
062-040209
LICENSED PROFESSIONAL ENGINEER
STATE OF ILLINOIS

3-23-2018

EXPIRES: 11-30-2019

WILLIAM J BARTOLUCCI
062.059414
LICENSED PROFESSIONAL ENGINEER
STATE OF ILLINOIS

3/23/17

EXPIRES: 11-30-2019

FINAL SUBMITTAL

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBMITTED 23 Mar. 20 18

REGIONAL ENGINEER

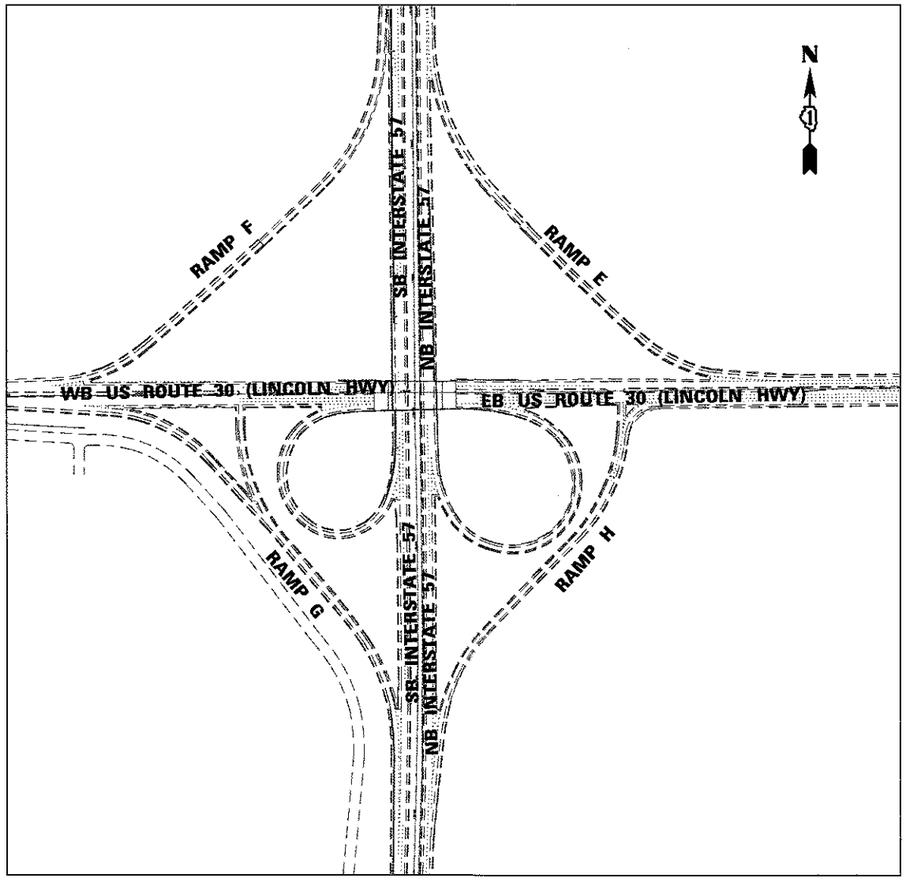
May 11 20 18

ENGINEER OF DESIGN AND ENVIRONMENT

May 11 20 18

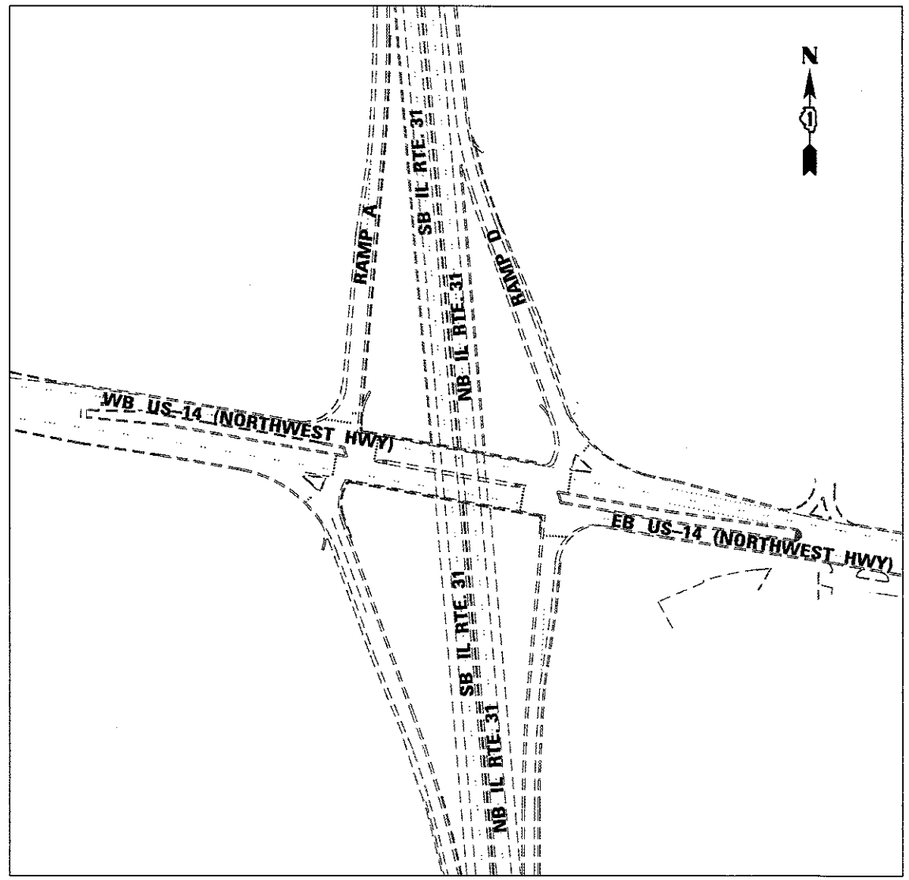
DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS



I–57 /US–30
SCALE: NONE

NEAR BY CITY OR VILLAGE: MATTESON
COUNTY: COOK
LOCATION - 1



US–14 /IL–31
SCALE: NONE

NEAR BY CITY OR VILLAGE: CRYSTAL LAKE
COUNTY: Mc HENRY
LOCATION - 2

E–KP1

DELTA ENGINEERING GROUP, LLC

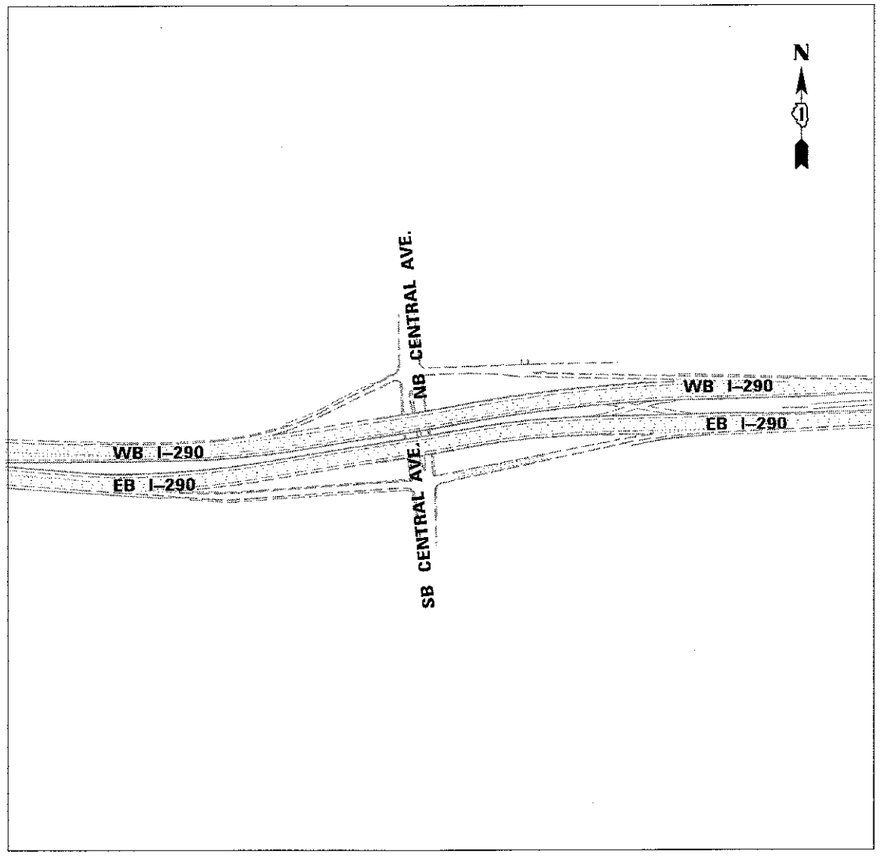
USER NAME = #USER#	DESIGNED - HM	REVISED -	
	DRAWN - GJ	REVISED -	
PLOT SCALE = #SCALE#	CHECKED - HS	REVISED -	
PLOT DATE = #DATE#	DATE - 03-21-2017	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

LOCATION MAP
SHEET 1 OF 2

SCALE: NONE | SHEET OF SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2016-017L	VARIOUS	88	2
		CONTRACT NO. 62C35		
	ILLINOIS FED. AID PROJECT			



I–290 /CENTRAL AVE.

SCALE: NONE

NEAR BY CITY OR VILLAGE: CHICAGO
COUNTY: COOK
LOCATION - 3

INDEX OF SHEETS

IDOT HIGHWAY STANDARDS

280001-07	TEMPORARY EROSION CONTROL SYSTEMS
630001-12	STEEL PLATE BEAM GUARDRAIL
701101-05	OFF-RD OPERATIONS, MULTILANE, 15' TO 24" FROM PAVEMENT EDGE
701106-02	OFF-RD OPERATIONS MULTILANE, MORE THAN 15' AWAY
701400-09	APPROACH TO LANE CLOSURE, FREEWAY/EXPRESSWAY
701401-11	LANE CLOSURE, FREEWAY/EXPRESSWAY
701411-09	LANE CLOSURE, MULTILANE, AT ENTRANCE OR EXIT RAMP, FOR SPEEDS >45 MPH
701426-09	LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPER., FOR SPEEDS >45 MPH
701428-01	TRAFFIC CONTROL SETUP AND REMOVAL FREEWAY/EXPRESSWAY
701446-09	TWO LANE CLOSURE, FREEWAY/EXPRESSWAY
701601-09	URBAN LANE CLOSURE, MULTILANE, 1W OR 2W WITH NONTRAVERSABLE MEDIAN
701701-10	URBAN LANE CLOSURE, MULTILANE INTERSECTION
701901-07	TRAFFIC CONTROL DEVICES
704001-08	TEMPORARY CONCRETE BARRIER
782006	GUARDRAIL AND BARRIER REFLECTOR MOUNTING DETAILS

E–KP2

DELTA ENGINEERING GROUP, LLC

USER NAME = #USER#	DESIGNED - HM	REVISED -	
	DRAWN - GJ	REVISED -	
PLOT SCALE = #SCALE#	CHECKED - HS	REVISED -	
PLOT DATE = #DATE#	DATE - 03-21-2017	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

LOCATION MAP
SHEET 2 OF 2

SCALE: NONE | SHEET OF SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2016-017L	COOK	88	3
		CONTRACT NO. 62C35		
	ILLINOIS FED. AID PROJECT			

Section: 2016-017L
Contract No.: 62C35
C-91-339-16

URBAN

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE: 90% FED 10% STATE ROADWAY 0005 COOK	80% FED 20% STATE ROADWAY 0005 McHENRY	90% FED 10% STATE HIGHWAY LIGHTING 0021 COOK	80% FED 20% STATE HIGHWAY LIGHTING 0021 McHENRY
20101000	TEMPORARY FENCE	FOOT	4830	4830			
20101200	TREE ROOT PRUNING	EACH	5	5			
20200100	EARTH EXCAVATION	CU YD	438	426	12		
20400800	FURNISHED EXCAVATION	CU YD	64	64			
21101615	TOPSOIL FURNISH AND PLACE, 4"	SQ YD	3979	3669	310		
25000210	SEEDING, CLASS 2A	ACRE	0.07	0.07			
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	6	6			
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	6	6			
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	6	6			
25100630	EROSION CONTROL BLANKET	SQ YD	3979	3669	310		
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	20	15	5		
28000400	PERIMETER EROSION BARRIER	FOOT	10277	9627	650		
28000500	INLET AND PIPE PROTECTION	EACH	3	2	1		
28001100	TEMPORARY EROSION CONTROL BLANKET	SQ YD	800	600	200		
31101400	SUBBASE GRANULAR MATERIAL, TYPE B 6"	SQ YD	72	36	36		
31102100	SUBBASE GRANULAR MATERIAL, TYPE C 4"	SQ YD	333	266	67		
42000060	WELDED WIRE REINFORCEMENT	SQ. YD.	74	38	36		
44001980	CONCRETE BARRIER REMOVAL	FOOT	200	200			
44004250	PAVED SHOULDER REMOVAL	SQ YD	67		67		
48203021	HOT-MIX ASPHALT SHOULDERS, 6"	SQ YD	333	266	67		
50200100	STRUCTURE EXCAVATION	CU. YD.	129	26	103		
50300225	CONCRETE STRUCTURE	CU. YD.	35	6	29		
50300300	PROTECTIVE COAT	SQ. YD.	90	36	54		
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	3557		3557		
* 63000001	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS	FOOT	200		200		

* — SPECIALTY ITEM

E-QTY1

DELTA ENGINEERING GROUP, LLC

USER NAME = *USER*	DESIGNED - HM	REVISED -
	DRAWN - GJ	REVISED -
PLOT SCALE = *SCALE*	CHECKED - HS	REVISED -
PLOT DATE = *DATE*	DATE - 03-21-2017	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES
SHEET 1 OF 3

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2016-017L	VARIOUS	88	4
		CONTRACT NO. 62C35		
	ILLINOIS FED. AID PROJECT			

Section: 2016-017L
Contract No.: 62C35
C-91-339-16

	CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE: 90% FED 10% STATE ROADWAY 0005 COOK	80% FED 20% STATE ROADWAY 0005 McHENRY	90% FED 10% STATE HIGHWAY LIGHTING 0021 COOK	80% FED 20% STATE HIGHWAY LIGHTING 0021 McHENRY
	63200310	GUARDRAIL REMOVAL	FOOT	200		200		
	63700255	CONCRETE BARRIER, DOUBLE FACE, 32 INCH HEIGHT	FOOT	250	250			
	63700900	CONCRETE BARRIER BASE	FOOT	250	250			
*	66900200	NON-SPECIAL WASTE DISPOSAL	CU YD	214	200	14		
*	66900450	SPECIAL WASTE PLANS AND REPORTS	LSUM	1	0.67	0.33		
*	66900530	SOIL DISPOSAL ANALYSIS	EACH	3	2	1		
	67000400	ENGINEER'S FIELD OFFICE, TYPE A	COL MO	8	7	1		
	67100100	MOBILIZATION	L SUM	1	0.9	0.1		
	70400100	TEMPORARY CONCRETE BARRIER	FOOT	675	175	500		
	70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	175	175			
	70600260	IMPACT ATTENUATOR, TEMPORARY (FULLY REDIRECTIVE,NARROW), TEST LEVEL 3	EACH	2		2		
	78200011	BARRIER WALL REFLECTORS, TYPE C	EACH	74	34	40		
	81028240	UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	1856			1726	130
	81100600	CONDUIT ATTACHED TO STRUCTURE, 2" DIA., GALVANIZED STEEL	FOOT	250			250	
	81300800	JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 18" X 12" X 6"	EACH	1			1	
	81603081	UNIT DUCT, 600V, 3-1C NO.2, 1/C NO.4 GROUND, (XLP-TYPE USE), 1 1/2" DIA. POLYETHYLENE	FOOT	17625			16175	1450
	82102400	LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, 400 WATT	EACH	11			11	
	82105700	LUMINAIRE, SODIUM VAPOR, HIGH MAST, HORIZONTAL MOUNT, 750 WATT	EACH	6				6
	82105800	LUMINAIRE, SODIUM VAPOR, HIGH MAST, HORIZONTAL MOUNT, 1000 WATT	EACH	6			6	
	83050825	LIGHT POLE, ALUMINUM, 47.5 FT. M.H., 15 FT. DAVIT ARM	EACH	11			11	
	83502500	LIGHT TOWER, 100 FT. MOUNTING HEIGHT, LUMINAIRE MT. - 8	EACH	4			2	2
	83600365	LIGHT POLE FOUNDATION, METAL, 15" BOLT CIRCLE, 10" X 8'	EACH	20			20	
	83700300	LIGHT TOWER FOUNDATION, 48" DIAMETER	FOOT	70			39	31
	83800205	BREAKAWAY DEVICE, TRANSFORMER BASE, 15 INCH BOLT CIRCLE	EACH	11			11	
	84200500	REMOVAL OF LIGHTING UNIT, SALVAGE	EACH	1			1	

* — SPECIALTY ITEM

E-QTY2

Section: 2016-017L
Contract No.: 62C35
C-91-339-16

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE: 90% FED 10% STATE ROADWAY 0005 COOK	80% FED 20% STATE ROADWAY 0005 McHENRY	90% FED 10% STATE HIGHWAY LIGHTING 0021 COOK	80% FED 20% STATE HIGHWAY LIGHTING 0021 McHENRY
84200804	REMOVAL OF POLE FOUNDATION	EACH	10			10	
84400105	RELOCATE EXISTING LIGHTING UNIT	EACH	9			9	
87300748	ELECTRIC CABLE IN CONDUIT, COMMUNICATION, NO. 19 100 PAIR	FOOT	1200			1200	
89502300	REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	1100			1100	
X0900024	TEMPORARY WETLAND CROSSING DEVICE	LSUM	1	1			
X1400190	REMOVAL OF HIGH MAST LUMINAIRES, SALVAGE	EACH	15			9	6
X1400191	MAINTAIN LIGHTING SYSTEM, LOCATION 1	CAL MO	12			12	
X1400192	MAINTAIN LIGHTING SYSTEM, LOCATION 2	CAL MO	12				12
X1400193	MAINTAIN LIGHTING SYSTEM, LOCATION 3	CAL MO	12			12	
X2501800	SEEDING, CLASS 4 (MODIFIED)	ACRE	0.75	0.69	0.06		
X7010216	TRAFFIC CONTROL AND PROTECTION, SPECIAL	LSUM	1	0.4	0.6		
X7011015	TRAFFIC CONTROL AND PROTECTION (EXPRESSWAYS)	LSUM	1	1			
X7040650	REMOVE TEMPORARY CONCRETE BARRIER	FOOT	150	150			
X8130115	DRILL EXISTING JUNCTION BOX	EACH	2			2	
X8130112	JUNCTION BOX TYPE J	EACH	2			2	
X8130125	REMOVE EXISTING JUNCTION BOX	EACH	9			9	
X8420502	REMOVAL OF LIGHT TOWER, NO SALVAGE	EACH	5			3	2
X8420510	REMOVAL OF TOWER FOUNDATION	EACH	14			12	2
X8951011	REMOVAL AERIAL CABLE	FOOT	5125			5125	
Z0013797	STABILIZED CONSTRUCTION ENTRANCE	SQ YD	88	88			
Z0033020	LUMINAIRE SAFETY CABLE ASSEMBLY	EACH	41			41	
Z0030850	TEMPORARY INFORMATION SIGNING	SQ FT	102.8	51.4	51.4		
X1400336	TEMPORARY CABLE INSTALLATION AND REMOVAL	FOOT	1200			1200	

23

* — SPECIALTY ITEM

E-QTY3

DELTA ENGINEERING GROUP, LLC

USER NAME = #USER#	DESIGNED - HM	REVISED -	
	DRAWN - GJ	REVISED -	
PLOT SCALE = #SCALE#	CHECKED - HS	REVISED -	
PLOT DATE = 3/23/2018	DATE - 03-21-2017	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES
SHEET 3 OF 3

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2016-017L	VARIOUS	88	6
		CONTRACT NO. 62C35		
	ILLINOIS FED. AID PROJECT			

62C35, Tower Replacement Grouped per Location

Tower Information

Item #	Lighting Controller "L" Number	Lighting Controller Designation	TOWER Structure No.	County	Nearby City or Village	Main Route	Cross St	Existing Latitude	Exisitng Longitude	PROPOSED HIGH MAST LUMINAIRE (QUANTITY-WATTAGE)	EXISITNG LUMINAIRE VOLTAGE	EXISTING High Mast Luminaires to be SALVAGED	EXISTING TOWERS TO BE REMOVED NO SALVAGE	EXISTING TOWERS THAT HAVE BEEN REMOVED	EXISTING Foundations to be Removed	EXISTING TOWER, HEIGHT (FEET)	PROPOSED TOWER, HEIGHT (FEET)	PROPOSED RECOMMENDED FOUNDATION Depth (FEET)	PROPOSED FOUNDATION DIAMETER (INCHES)
2	L0495	X	3XIJ6	Cook	Matteson	I-57	US 30 (Lincoln Hwy)	41.508566	-87.742884	-	240	-	-	X	X	-	-	-	-
3	L0495	X	2XGH4	Cook	Matteson	I-57	US 30 (Lincoln Hwy)	41.503076	-87.743075	-	240	-	-	X	X	-	-	-	-
4	L0495	X	2XAB2	Cook	Matteson	I-57	US 30 (Lincoln Hwy)	41.507403	-87.740697	-	240	-	-	X	X	-	-	-	-
5	L0495	X	4XGH2	Cook	Matteson	I-57	US 30 (Lincoln Hwy)	41.504073	-87.742039	-	240	-	-	X	X	-	-	-	-
6	L0495	X	2XIJ2	Cook	Matteson	I-57	US 30 (Lincoln Hwy)	41.506426	-87.738086	-	240	-	-	X	X	-	-	-	-
7	L0495	X	3XEF10	Cook	Matteson	I-57	US 30 (Lincoln Hwy)	41.506392	-87.745721	-	240	-	-	X	X	-	-	-	-
8	L0495	X	3XEF11	Cook	Matteson	I-57	US 30 (Lincoln Hwy)	41.505858	-87.747123	-	240	-	-	X	X	-	-	-	-
9	L0495	X	4XGH3	Cook	Matteson	I-57	US 30 (Lincoln Hwy)	41.502723	-87.741960	-	240	-	-	X	X	-	-	-	-
17	L0495	X	2XGH1	Cook	Matteson	I-57	US 30 (Lincoln Hwy)	41.504970	-87.740555	-	240	-	-	X	X	-	-	-	-
21	L0495	X	3XIJ5	Cook	Matteson	I-57	US 30 (Lincoln Hwy)	41.505670	-87.744417	-	240	3-750W	X	-	X	110	-	-	-
27	L1355	L	3LAB3	Cook	Chicago	I-290	Central Ave	41.871422	-87.760784	3-1000W	240	3-1000W	X	-	X	100	100	22.5	48
30	L1355	L	3LCD3	Cook	Chicago	I-290	Central Ave	41.870812	-87.768625	3-1000W	240	3-1000W	X	-	X	100	100	16.5	48
36	L2305	MA	3MACD1	McHenry	Crystal Lake	US 14 (NW Hwy)	IL 31	42.225899	-88.287773	3-750W	240	3-750W	X	-	X	100	100	15.5	48
37	L2305	MA	3MAEF2	McHenry	Crystal Lake	US 14 (NW Hwy)	IL 31	42.225388	-88.287065	3-750W	240	3-750W	X	-	X	100	100	15.5	48

E–TLC1

DELTA ENGINEERING GROUP, LLC

USER NAME = $USER$	DESIGNED - HM	REVISED -	
	DRAWN - GJ	REVISED -	
PLOT SCALE = $SCALE$	CHECKED - HS	REVISED -	
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOWER REPLACEMENT GROUPED PER LOCATION

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2016-017L	VARIOUS	88	7
		CONTRACT NO. 62C35		
	ILLINOIS FED. AID PROJECT			

MAINTENANCE OF TRAFFIC GENERAL NOTES

1. THE CONTRACTOR'S VEHICLES MUST ALWAYS MOVE WITH AND NOT AGAINST OR ACROSS THE FLOW OF TRAFFIC, AND THEY MUST ENTER OR LEAVE WORK AREAS IN A MANNER WHICH IS NOT HAZARDOUS TO TRAFFIC AND WILL NOT INTERFERE WITH NORMAL TRAFFIC. THE CONTRACTOR'S VEHICLES MUST NOT PARK OR STOP EXCEPT WITHIN DESIGNATED WORK AREAS. PERSONAL VEHICLES ARE NOT PERMITTED TO PARK WITHIN THE RIGHT-OF-WAY EXCEPT IN AREAS DESIGNATED BY THE COMMISSIONER.

2. THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND TRAFFIC CONTROL DEVICES SHALL BE FIELD FIT TO CONDITIONS AS DIRECTED BY THE ENGINEER.

3. ALL SIGNS THAT ARE TO BE IN PLACE MORE THAN 4 DAYS SHALL BE MOUNTED ON METAL POSTS WHEN POSSIBLE, 7 FEET FROM THE TOP OF PAVEMENT TO THE BOTTOM OF THE SIGN, AND DRIVEN A MINIMUM OF 3 FEET INTO THE GROUND. A DIGGER LOCATE SHALL BE PERFORMED PRIOR TO THE INSTALLATION OF THE POSTS. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.

4. EXISTING TRAFFIC CONTROL SIGNS AND DEVICES SHALL BE REMOVED OR RELOCATED BY THE CONTRACTOR AFTER THE TRAFFIC CONTROL REQUIREMENTS ARE MET OR AS AUTHORIZED BY THE ENGINEER; ANY SIGNS OR DEVICES LEFT IN PLACE ARE TO BE PROTECTED FROM DAMAGE AND MAINTAINED.

5. BORING PITS ARE TO BE PLACED AT LEAST 15' FROM THE TRAVELED WAY ON THE MAINLINE TO ELIMINATE THE NEED FOR TRAFFIC CONTROL AND PROTECTION PER IDOT HIGHWAY STANDARD 701106-02.

6. USE IDOT DISTRICT 1 STANDARD TC-17 FOR PARTIAL RAMP CLOSURES AND SHOULDER CLOSURES ON I-57 AND I-290 WHERE REQUIRED.

7. IF BORING PIT IS LOCATED WITHIN THE CLEAR ZONE BUT OUTSIDE OF CONSTRUCTION CLEAR ZONE, TRAFFIC CONTROL AND PROTECTION MUST REMAIN IN PLACE ADJACENT TO BORING PIT UNTIL EXCAVATED AREA IS FILLED.

8. TOWER ASSEMBLY LAYDOWN AREAS MUST BE APPROVED BY THE ENGINEER PRIOR TO USE. ADDITIONAL TRAFFIC CONTROL WILL NOT BE PROVIDED SOLELY FOR TOWER LAYDOWN AREAS.

9. THE CONTRACTOR SHALL CONTACT THE IDOT D1 ARTERIAL TRAFFIC CONTROL SUPERVISOR AT CORY.JUCIUS@ILLINOIS.GOV A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK.

THE FOLLOWING HIGHWAY STANDARDS ARE TO BE APPLIED TO EACH SITE:

I-57 AT US-30: TC-17, 701106-02, 701426-09, 701601-09

US-14 AT IL-31: TC-10, TC-17, TC-22, 701101-05, 701601-09, 701701-10, 704001-08, 782006

I-290 AT CENTRAL AVE: TC-08, TC-09, TC-17, TC-18, 701400-09, 701601-10, 701428-01, 701446-08, 704001-08, 782006-00

EROSION AND SEDIMENT CONTROL GENERAL NOTES

1. THE CONSTRUCTION LIMITS WILL BE STAKED AND APPROVED BY THE ENGINEER PRIOR TO COMMENCING CONSTRUCTION . THE CONSTRUCTION LIMITS MAY BE ADJUSTED BY THE ENGINEER TO PRESERVE TREES AND NO ADDITIONAL COMPENSATION WILL BE PAID TO THE CONTRACTOR FOR CHANGES IN CONSTRUCTION LIMITS.

2. THE CONTRACTOR SHALL INSTALL TEMPORARY EROSION CONTROL MEASURES PRIOR TO THE START OF CONSTRUCTION OPERATIONS WHICH WILL POTENTIALLY CREATE ERODIBLE CONDITIONS. PLACEMENT AND MAINTENANCE OF TEMPORARY EROSION CONTROL SYSTEMS WILL BE UTILIZED THROUGHOUT THE CONSTRUCTION LIMITS.

3. THE CONTRACTOR WILL ASSUME RESPONSIBILITY FOR MAINTENANCE OF ALL SOIL EROSION CONTROL DURING CONSTRUCTION.

4. TEMPORARY EROSION CONTROL MEASURES SHALL BE CONSTRUCTED AS SHOWN ON THE PLANS AND AS DIRECTED BY THE ENGINEER. THE WORK SHALL BE COMPLETED IN ACCORDANCE WITH SECTION 280 OF THE STANDARD SPECIFICATIONS AND CONTRACT SPECIAL PROVISIONS.

5. ALL EROSION CONTROL MEASURES WILL BE MAINTAINED IN ACCORDANCE WITH THE IDOT EROSION AND SEDIMENT CONTROL FIELD GUIDE FOR CONSTRUCTION INSPECTION AND IDOT'S BEST MANAGEMENT PRACTICES.

6. THE CONTRACTOR SHALL PERFORM ALL WORK AS DIRECTED BY THE ENGINEER AND AS SHOWN IN HIGHWAY STANDARD 280001.

7. THE EROSION CONTROL MEASURES SHOWN ARE A REPRESENTATION OF SUGGESTED MEASURES. DEVIATIONS FROM THIS PLAN ARE TO BE EXPECTED PENDING A JOBSITE INSPECTION BETWEEN THE CONTRACTOR AND THE DEPARTMENT.

8. TEMPORARY STOCKPILE LOCATIONS SHALL BE APPROVED BY THE ENGINEER AND WILL REQUIRE PERIMETER EROSION BARRIER AND TEMPORARY SEEDING WHICH ARE INCLUDED IN THE COST OF DIRECTIONAL BORE.

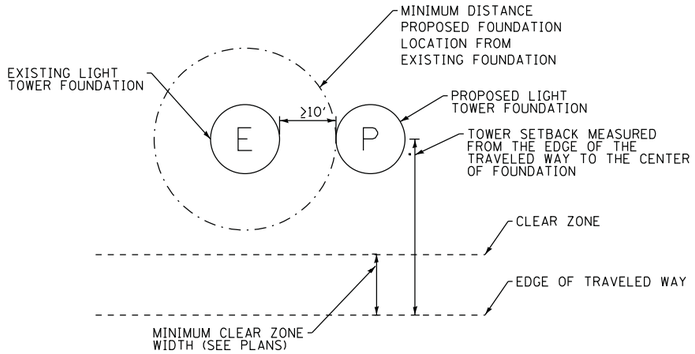
9. THE CONTRACTOR SHALL INSTALL AND MAINTAIN INLET AND PIPE PROTECTION AT ALL LOCATIONS SHOWN IN PLANS PRIOR TO THE START OF WORK. THE INLET AND PIPE PROTECTION SHALL BE MAINTAINED UNTIL NO LONGER REQUIRED OR AS DIRECTED BY THE ENGINEER.

10. DURING CONSTRUCTION OPERATIONS, WHEN ANY LOOSE MATERIAL IS DEPOSITED IN THE FLOW LINE OF DITCHES, GUTTERS OR DRAINAGE STRUCTURES SO THAT THE NATURAL FLOW OF WATER IS OBSTRUCTED, THE MATERIAL SHALL BE REMOVED AT THE CLOSE OF EACH WORKING DAY.

11. AT THE CONCLUSION OF CONSTRUCTION OPERATIONS, ALL DRAINAGE STRUCTURES SHALL BE FREE FROM DIRT AND DEBRIS. THIS WORK WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF INLET AND PIPE PROTECTION.

12. FOR PERMANENT EROSION CONTROL, THE CONTRACTOR SHALL PLACE TOPSOIL SO THAT IS HAS A BOND WITH THE EXISTING SURFACE TO WHICH IT IS APPLIED . IT SHALL BE DISKED, RAKED, OR OTHERWISE BROKEN UP IF NECCESSARY TO PROVIDE SUCH BOND.

LIGHT TOWER FOUNDATION ZONE OF INFLUENCE DETAIL



C-00-CivilGenNotes.dgn

C–00

JACOBS

USER NAME = malonasj	DESIGNED - SJM	REVISED -
	DRAWN - SJM	REVISED -
PLOT SCALE = 100.0000 ' / in.	CHECKED - WJB	REVISED -
PLOT DATE = 4/19/2018	DATE - 10-18-2017	REVISED -

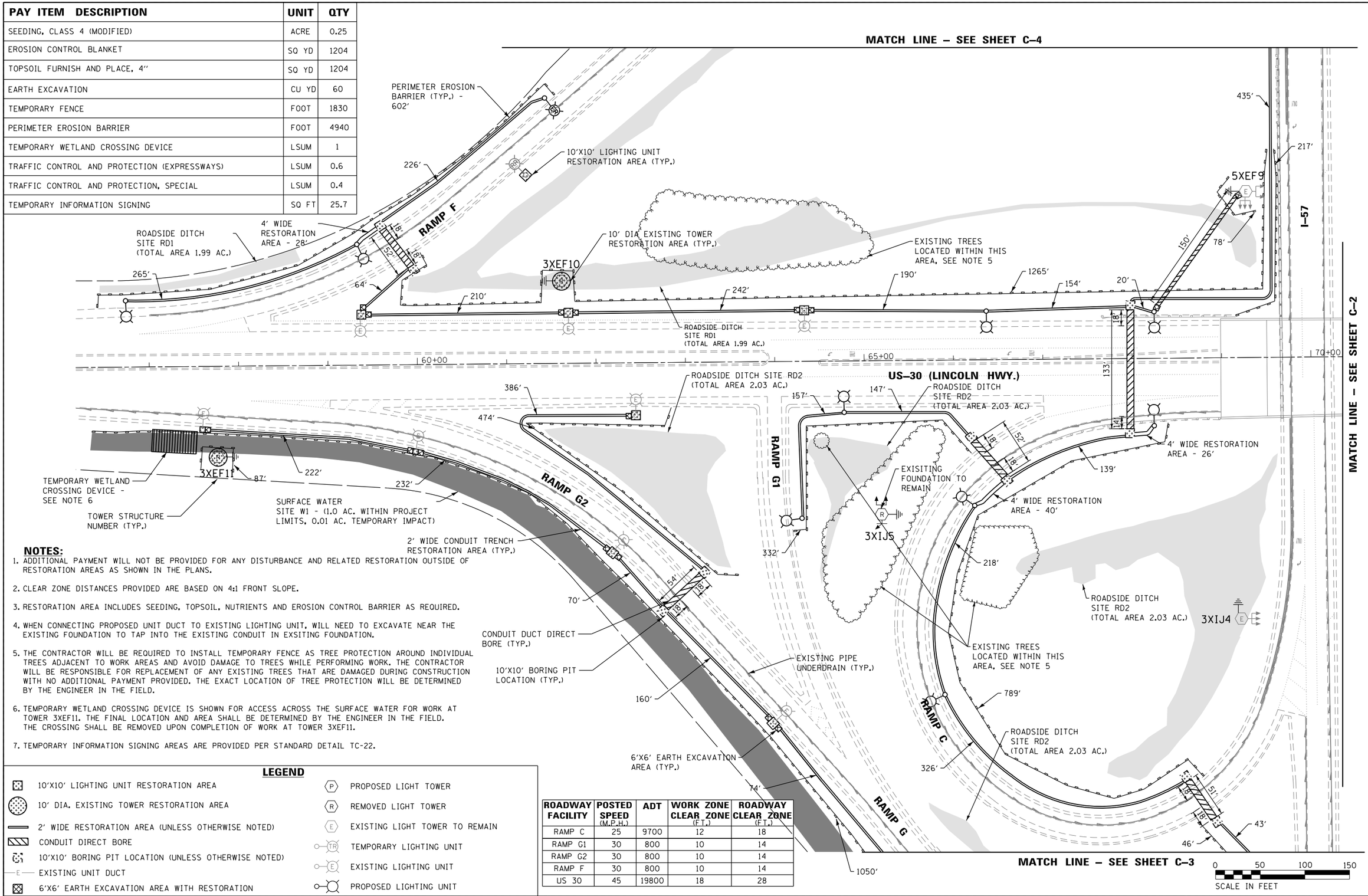
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CIVIL SITE PLAN
GENERAL NOTES

SCALE: N.T.S. | SHEET OF SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2016-017L		88	8
			CONTRACT NO. 62C35	
	ILLINOIS	FED. AID PROJECT		

PAY ITEM DESCRIPTION	UNIT	QTY
SEEDING, CLASS 4 (MODIFIED)	ACRE	0.25
EROSION CONTROL BLANKET	SQ YD	1204
TOPSOIL FURNISH AND PLACE, 4"	SQ YD	1204
EARTH EXCAVATION	CU YD	60
TEMPORARY FENCE	FOOT	1830
PERIMETER EROSION BARRIER	FOOT	4940
TEMPORARY WETLAND CROSSING DEVICE	LSUM	1
TRAFFIC CONTROL AND PROTECTION (EXPRESSWAYS)	LSUM	0.6
TRAFFIC CONTROL AND PROTECTION, SPECIAL	LSUM	0.4
TEMPORARY INFORMATION SIGNING	SQ FT	25.7



NOTES:

1. ADDITIONAL PAYMENT WILL NOT BE PROVIDED FOR ANY DISTURBANCE AND RELATED RESTORATION OUTSIDE OF RESTORATION AREAS AS SHOWN IN THE PLANS.
2. CLEAR ZONE DISTANCES PROVIDED ARE BASED ON 4:1 FRONT SLOPE.
3. RESTORATION AREA INCLUDES SEEDING, TOPSOIL, NUTRIENTS AND EROSION CONTROL BARRIER AS REQUIRED.
4. WHEN CONNECTING PROPOSED UNIT DUCT TO EXISTING LIGHTING UNIT, WILL NEED TO EXCAVATE NEAR THE EXISTING FOUNDATION TO TAP INTO THE EXISTING CONDUIT IN EXSITING FOUNDATION.
5. THE CONTRACTOR WILL BE REQUIRED TO INSTALL TEMPORARY FENCE AS TREE PROTECTION AROUND INDIVIDUAL TREES ADJACENT TO WORK AREAS AND AVOID DAMAGE TO TREES WHILE PERFORMING WORK. THE CONTRACTOR WILL BE RESPONSIBLE FOR REPLACEMENT OF ANY EXISTING TREES THAT ARE DAMAGED DURING CONSTRUCTION WITH NO ADDITIONAL PAYMENT PROVIDED. THE EXACT LOCATION OF TREE PROTECTION WILL BE DETERMINED BY THE ENGINEER IN THE FIELD.
6. TEMPORARY WETLAND CROSSING DEVICE IS SHOWN FOR ACCESS ACROSS THE SURFACE WATER FOR WORK AT TOWER 3XEF11. THE FINAL LOCATION AND AREA SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD. THE CROSSING SHALL BE REMOVED UPON COMPLETION OF WORK AT TOWER 3XEF11.
7. TEMPORARY INFORMATION SIGNING AREAS ARE PROVIDED PER STANDARD DETAIL TC-22.

LEGEND

- 10'X10' LIGHTING UNIT RESTORATION AREA
- 10' DIA. EXISTING TOWER RESTORATION AREA
- 2' WIDE RESTORATION AREA (UNLESS OTHERWISE NOTED)
- CONDUIT DIRECT BORE
- 10'X10' BORING PIT LOCATION (UNLESS OTHERWISE NOTED)
- E — EXISTING UNIT DUCT
- 6'X6' EARTH EXCAVATION AREA WITH RESTORATION
- (P) PROPOSED LIGHT TOWER
- (R) REMOVED LIGHT TOWER
- (E) EXISTING LIGHT TOWER TO REMAIN
- (TR) TEMPORARY LIGHTING UNIT
- (E) EXISTING LIGHTING UNIT
- PROPOSED LIGHTING UNIT

ROADWAY FACILITY	POSTED SPEED (M.P.H.)	ADT	WORK ZONE CLEAR ZONE (FT.)	ROADWAY CLEAR ZONE (FT.)
RAMP C	25	9700	12	18
RAMP G1	30	800	10	14
RAMP G2	30	800	10	14
RAMP F	30	800	10	14
US 30	45	19800	18	28

C–01

JACOBS

USER NAME = malanasj	DESIGNED - SJM	REVISED -
	DRAWN - SJM	REVISED -
PLOT SCALE = 100.0000 ' / in.	CHECKED - WJB	REVISED -
PLOT DATE = 3/22/2018	DATE - 10-18-2017	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CIVIL SITE PLAN
I–57 /US–30 – SHEET 1 OF 4

SCALE: 1"=50' | SHEET OF SHEETS | STA. 56+18 | TO STA. 70+36

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2016-017L	COOK	88	9
		CONTRACT NO. 62C35		
		ILLINOIS	FED. AID PROJECT	

C-01- I57@US30.dgn

MATCH LINE – SEE SHEET C–4

PAY ITEM	DESCRIPTION	UNIT	QTY
	SEEDING, CLASS 4 (MODIFIED)	ACRE	0.20
	EROSION CONTROL BLANKET	SQ YD	952
	TOPSOIL FURNISH AND PLACE, 4"	SQ YD	952
	EARTH EXCAVATION	CU YD	40
	TEMPORARY FENCE	FOOT	1500
	PERIMETER EROSION BARRIER	FOOT	1360
	TEMPORARY INFORMATION SIGNING	SQ FT	25.7

N

ELECTRIC UTILITY WIRES

EXISTING TREES LOCATED WITHIN THIS AREA, SEE NOTE 5

EXISTING TREES LOCATED WITHIN THIS AREA, SEE NOTE 5

I–57

ROADSIDE DITCH SITE RD2 (TOTAL AREA 2.03 AC.)

90′

134′

604′

18′x10′ BORING PIT LOCATION

RAMP E

51′

18′

99′

ROADSIDE DITCH SITE RD1 (TOTAL AREA 1.99 AC., 0.008 AC. TEMPORARY IMPACT AT THIS LOCATION)

219′

2XIJ2

10′ DIA EXISTING TOWER RESTORATION AREA (TYP.)

18′x10′ BORING PIT LOCATION

3XAB1

278′

4′ WIDE RESTORATION AREA - 28′

18′

127′

75+00

80+00

US–30 (LINCOLN HWY.)

MATCH LINE – SEE SHEET C–1

70+00

TOWER STRUCTURE NUMBER (TYP.)

2XIJ3

18′X10′ BORING PIT LOCATION

4′ WIDE RESTORATION AREA - 55′

384′

451′

2XIJ1

6′X6′ EARTH EXCAVATION AREA (TYP) SEE NOTE 4

RAMP D

ROADSIDE DITCH SITE RD2 (TOTAL AREA 2.03 AC.)

EXISTING PIPE UNDERDRAIN (TYP.)

213′

ROADSIDE DITCH SITE RD2 (TOTAL AREA 2.03 AC.)

10′X10′ BORING PIT LOCATION (TYP.)

53′

19′

131′

10′X10′ LIGHTING UNIT RESTORATION AREA (TYP.)

2XGH1

RAMP H

696′

18′X10′ BORING PIT LOCATION

EXISTING TREES LOCATED WITHIN THIS AREA, SEE NOTE 5

18′

18′

54′

65′

134′

4′ WIDE RESTORATION AREA - 42′

27′

60′

409′

ROADSIDE DITCH SITE RD2 (TOTAL AREA 2.03 AC.)

MATCH LINE – SEE SHEET C–3

ROADWAY FACILITY	POSTED SPEED (M.P.H.)	ADT	WORK ZONE CLEAR ZONE (FT.)	ROADWAY CLEAR ZONE (FT.)
RAMP D	25	1000	10	14
RAMP E	30	9000	12	18
RAMP H	30	2200	10	16
US 30	45	38100	18	28

LEGEND

- 10′X10′ LIGHTING UNIT RESTORATION AREA
- 10′ DIA. EXISTING TOWER RESTORATION AREA
- 2′ WIDE RESTORATION AREA (UNLESS OTHERWISE NOTED)
- CONDUIT DIRECT BORE
- 10′X10′ BORING PIT LOCATION (UNLESS OTHERWISE NOTED)
- E — EXISTING UNIT DUCT
- 6′X6′ EARTH EXCAVATION AREA WITH RESTORATION
- (P) PROPOSED LIGHT TOWER
- (R) REMOVED LIGHT TOWER
- (E) EXISTING LIGHT TOWER TO REMAIN
- (TR) TEMPORARY LIGHTING UNIT
- (E) EXISTING LIGHTING UNIT
- PROPOSED LIGHTING UNIT

NOTES:

1. ADDITIONAL PAYMENT WILL NOT BE PROVIDED FOR ANY DISTURBANCE AND RELATED RESTORATION OUTSIDE OF RESTORATION AREAS AS SHOWN IN THE PLANS.
2. CLEAR ZONE DISTANCES PROVIDED ARE BASED ON 4:1 FRONT SLOPE.
3. RESTORATION AREA INCLUDES SEEDING, TOPSOIL, NUTRIENTS AND EROSION CONTROL BARRIER AS REQUIRED.
4. WHEN CONNECTING PROPOSED UNIT DUCT TO EXISTING LIGHTING UNIT, WILL NEED TO EXCAVATE NEAR THE EXISTING FOUNDATION TO TAP INTO THE EXISTING CONDUIT IN EXSITING FOUNDATION.
5. THE CONTRACTOR WILL BE REQUIRED TO INSTALL TEMPORARY FENCE AS TREE PROTECTION AROUND INDIVIDUAL TREES ADJACENT TO WORK AREAS AND AVOID DAMAGE TO TREES WHILE PERFORMING WORK. THE CONTRACTOR WILL BE RESPONSIBLE FOR REPLACEMENT OF ANY EXISTING TREES THAT ARE DAMAGED DURING CONSTRUCTION WITH NO ADDITIONAL PAYMENT PROVIDED. THE EXACT LOCATION OF TREE PROTECTION WILL BE DETERMINED BY THE ENGINEER IN THE FIELD.
6. TEMPORARY INFORMATION SIGNING AREAS ARE PROVIDED PER STANDARD DETAIL TC-22.

0 50 100 150
SCALE IN FEET

C–02

C-02- 157US38.dgn

JACOBS

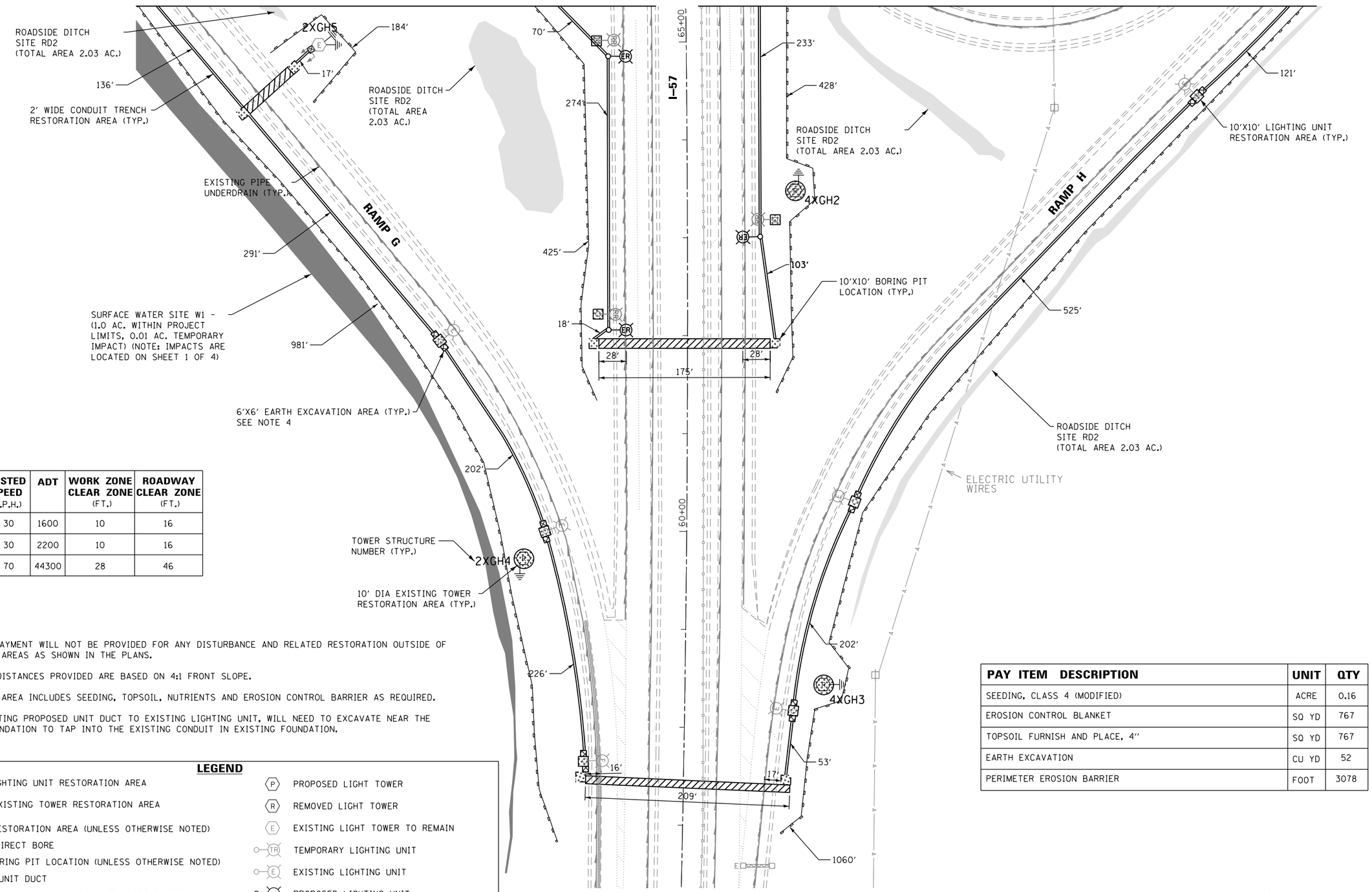
USER NAME = malanasj	DESIGNED - SJM	REVISED -
	DRAWN - SJM	REVISED -
PLOT SCALE = 100.0000 ' / in.	CHECKED - WJB	REVISED -
PLOT DATE = 3/22/2018	DATE - 10-18-2017	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CIVIL SITE PLAN
I–57 /US–30 – SHEET 2 OF 4

SCALE: 1"=50′ | SHEET OF SHEETS | STA. 70+36 TO STA. 84+53

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2016-017L	COOK	88	10
		CONTRACT NO. 62C35		
	ILLINOIS	FED. AID PROJECT		



ROADWAY FACILITY	POSTED SPEED (M.P.H.)	ADT	WORK ZONE CLEAR ZONE (FT.)	ROADWAY CLEAR ZONE (FT.)
RAMP G	30	1600	10	16
RAMP H	30	2200	10	16
I-57	70	44300	28	46

NOTES:

1. ADDITIONAL PAYMENT WILL NOT BE PROVIDED FOR ANY DISTURBANCE AND RELATED RESTORATION OUTSIDE OF RESTORATION AREAS AS SHOWN IN THE PLANS.
2. CLEAR ZONE DISTANCES PROVIDED ARE BASED ON 4:1 FRONT SLOPE.
3. RESTORATION AREA INCLUDES SEEDING, TOPSOIL, NUTRIENTS AND EROSION CONTROL BARRIER AS REQUIRED.
4. WHEN CONNECTING PROPOSED UNIT DUCT TO EXISTING LIGHTING UNIT, WILL NEED TO EXCAVATE NEAR THE EXSITING FOUNDATION TO TAP INTO THE EXISTING CONDUIT IN EXISTING FOUNDATION.

LEGEND

- 10′X10′ LIGHTING UNIT RESTORATION AREA
- 10′ DIA. EXISTING TOWER RESTORATION AREA
- 2′ WIDE RESTORATION AREA (UNLESS OTHERWISE NOTED)
- CONDUIT DIRECT BORE
- 10′X10′ BORING PIT LOCATION (UNLESS OTHERWISE NOTED)
- E — EXISTING UNIT DUCT
- 6′X6′ EARTH EXCAVATION AREA WITH RESTORATION
- (P) PROPOSED LIGHT TOWER
- (R) REMOVED LIGHT TOWER
- (E) EXISTING LIGHT TOWER TO REMAIN
- (TR) TEMPORARY LIGHTING UNIT
- (E) EXISTING LIGHTING UNIT
- PROPOSED LIGHTING UNIT

PAY ITEM DESCRIPTION	UNIT	QTY
SEEDING, CLASS 4 (MODIFIED)	ACRE	0.16
EROSION CONTROL BLANKET	SQ YD	767
TOPSOIL FURNISH AND PLACE, 4″	SQ YD	767
EARTH EXCAVATION	CU YD	52
PERIMETER EROSION BARRIER	FOOT	3078

0 50 100 150
SCALE IN FEET

C–03

C-03- 157eUS30.dgn

JACOBS

USER NAME = malanesj	DESIGNED - SJM	REVISED -
	DRAWN - SJM	REVISED -
PLOT SCALE = 100.0000 ′ / in.	CHECKED - WJB	REVISED -
PLOT DATE = 3/12/2018	DATE - 10-18-2017	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CIVIL SITE PLAN
I–57 /US–30 – SHEET 3 OF 4

SCALE: 1″=50′ | SHEET OF SHEETS | STA. 56+37 TO STA. 65+37

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2016-017L	COOK	88	11
		CONTRACT NO. 62C35		
	ILLINOIS FED. AID PROJECT			

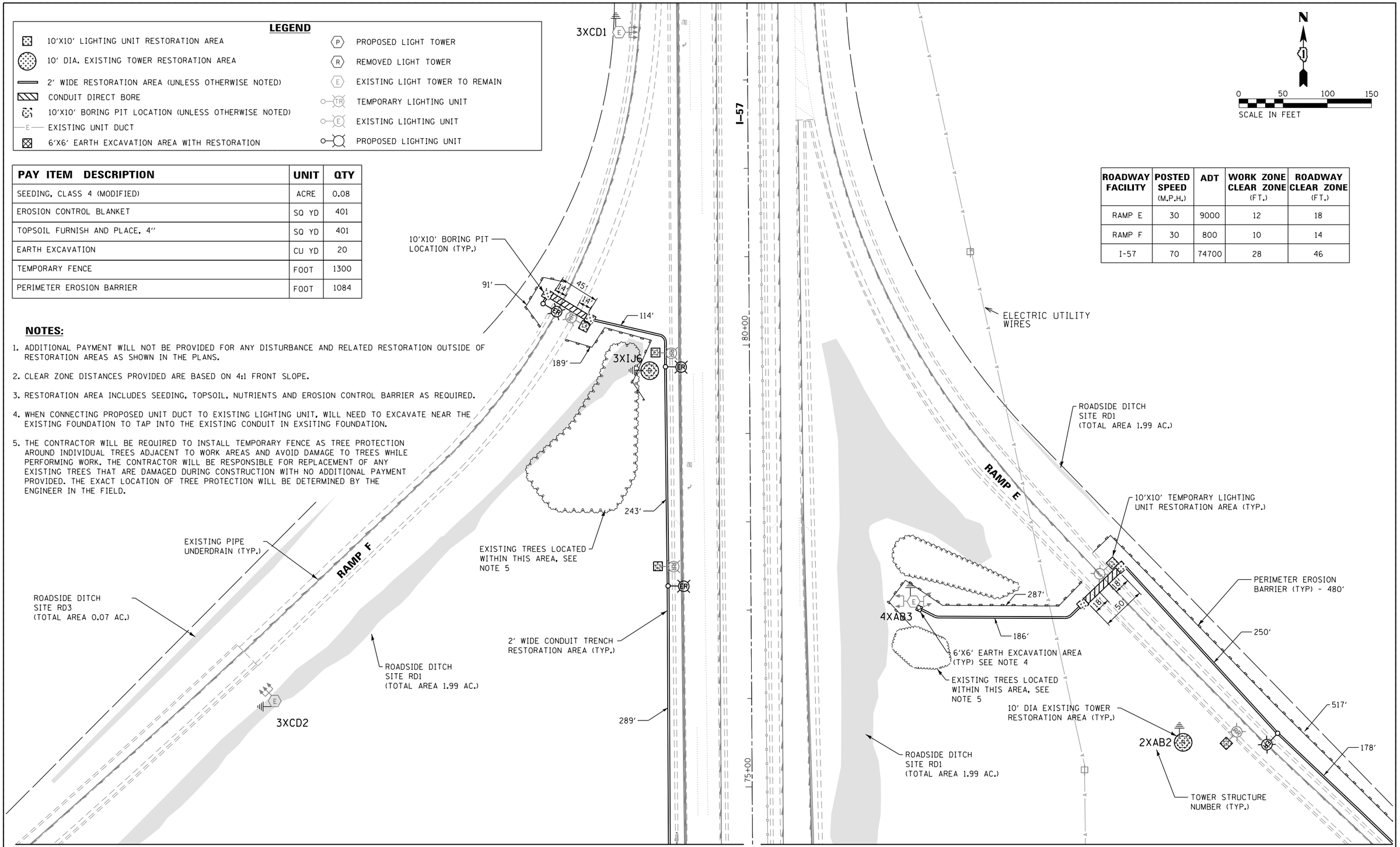
LEGEND

- 10'X10' LIGHTING UNIT RESTORATION AREA
- 10' DIA. EXISTING TOWER RESTORATION AREA
- 2' WIDE RESTORATION AREA (UNLESS OTHERWISE NOTED)
- CONDUIT DIRECT BORE
- 10'X10' BORING PIT LOCATION (UNLESS OTHERWISE NOTED)
- EXISTING UNIT DUCT
- 6'X6' EARTH EXCAVATION AREA WITH RESTORATION
- PROPOSED LIGHT TOWER
- REMOVED LIGHT TOWER
- EXISTING LIGHT TOWER TO REMAIN
- TEMPORARY LIGHTING UNIT
- EXISTING LIGHTING UNIT
- PROPOSED LIGHTING UNIT

PAY ITEM DESCRIPTION	UNIT	QTY
SEEDING, CLASS 4 (MODIFIED)	ACRE	0.08
EROSION CONTROL BLANKET	SQ YD	401
TOPSOIL FURNISH AND PLACE, 4"	SQ YD	401
EARTH EXCAVATION	CU YD	20
TEMPORARY FENCE	FOOT	1300
PERIMETER EROSION BARRIER	FOOT	1084

NOTES:

1. ADDITIONAL PAYMENT WILL NOT BE PROVIDED FOR ANY DISTURBANCE AND RELATED RESTORATION OUTSIDE OF RESTORATION AREAS AS SHOWN IN THE PLANS.
2. CLEAR ZONE DISTANCES PROVIDED ARE BASED ON 4:1 FRONT SLOPE.
3. RESTORATION AREA INCLUDES SEEDING, TOPSOIL, NUTRIENTS AND EROSION CONTROL BARRIER AS REQUIRED.
4. WHEN CONNECTING PROPOSED UNIT DUCT TO EXISTING LIGHTING UNIT, WILL NEED TO EXCAVATE NEAR THE EXISTING FOUNDATION TO TAP INTO THE EXISTING CONDUIT IN EXSITING FOUNDATION.
5. THE CONTRACTOR WILL BE REQUIRED TO INSTALL TEMPORARY FENCE AS TREE PROTECTION AROUND INDIVIDUAL TREES ADJACENT TO WORK AREAS AND AVOID DAMAGE TO TREES WHILE PERFORMING WORK. THE CONTRACTOR WILL BE RESPONSIBLE FOR REPLACEMENT OF ANY EXISTING TREES THAT ARE DAMAGED DURING CONSTRUCTION WITH NO ADDITIONAL PAYMENT PROVIDED. THE EXACT LOCATION OF TREE PROTECTION WILL BE DETERMINED BY THE ENGINEER IN THE FIELD.



ROADWAY FACILITY	POSTED SPEED (M.P.H.)	ADT	WORK ZONE CLEAR ZONE (FT.)	ROADWAY CLEAR ZONE (FT.)
RAMP E	30	9000	12	18
RAMP F	30	800	10	14
I-57	70	74700	28	46

MATCH LINE – SEE SHEET C–1

MATCH LINE – SEE SHEET C–2

JACOBS

USER NAME = malanasj	DESIGNED - SJM	REVISED -
	DRAWN - SJM	REVISED -
PLOT SCALE = 100.0000 ' / in.	CHECKED - WJB	REVISED -
PLOT DATE = 3/12/2018	DATE - 10-18-2017	REVISED -

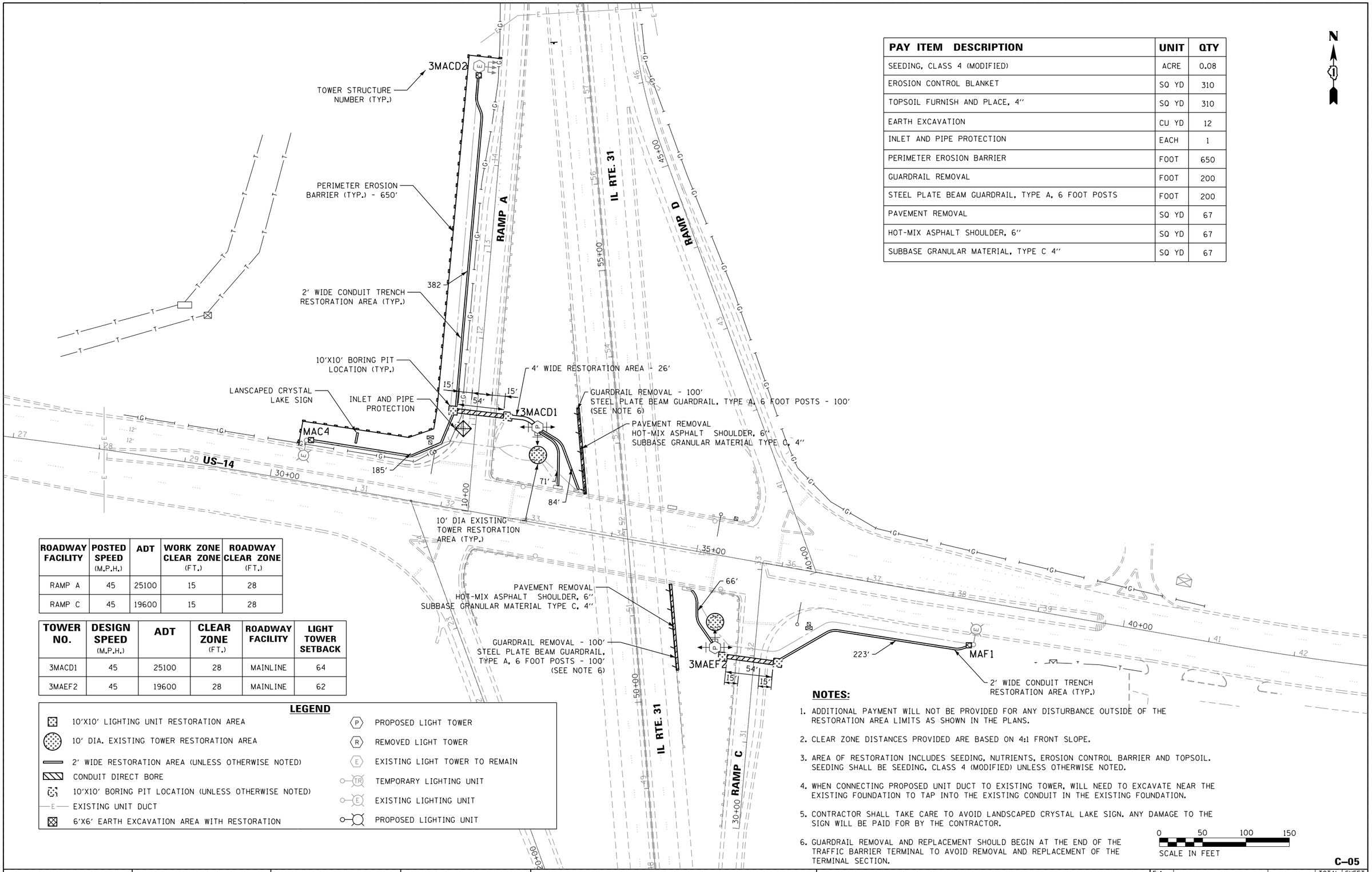
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CIVIL SITE PLAN
I–57 /US–30 – SHEET 4 OF 4

SCALE: 1"=50' | SHEET OF SHEETS | STA. 74+35 TO STA. 83+87

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2016-017L	COOK	88	12
		CONTRACT NO. 62C35		
	ILLINOIS FED. AID PROJECT			

C-04 - 157EUS30.dgn



PAY ITEM DESCRIPTION	UNIT	QTY
SEEDING, CLASS 4 (MODIFIED)	ACRE	0.08
EROSION CONTROL BLANKET	SQ YD	310
TOPSOIL FURNISH AND PLACE, 4"	SQ YD	310
EARTH EXCAVATION	CU YD	12
INLET AND PIPE PROTECTION	EACH	1
PERIMETER EROSION BARRIER	FOOT	650
GUARDRAIL REMOVAL	FOOT	200
STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS	FOOT	200
PAVEMENT REMOVAL	SQ YD	67
HOT-MIX ASPHALT SHOULDER, 6"	SQ YD	67
SUBBASE GRANULAR MATERIAL, TYPE C 4"	SQ YD	67

ROADWAY FACILITY	POSTED SPEED (M.P.H.)	ADT	WORK ZONE CLEAR ZONE (FT.)	ROADWAY CLEAR ZONE (FT.)
RAMP A	45	25100	15	28
RAMP C	45	19600	15	28

TOWER NO.	DESIGN SPEED (M.P.H.)	ADT	CLEAR ZONE (FT.)	ROADWAY FACILITY	LIGHT TOWER SETBACK
3MACD1	45	25100	28	MAINLINE	64
3MAEF2	45	19600	28	MAINLINE	62

LEGEND

- 10'X10' LIGHTING UNIT RESTORATION AREA
- 10' DIA. EXISTING TOWER RESTORATION AREA
- 2' WIDE RESTORATION AREA (UNLESS OTHERWISE NOTED)
- CONDUIT DIRECT BORE
- 10'X10' BORING PIT LOCATION (UNLESS OTHERWISE NOTED)
- E — EXISTING UNIT DUCT
- 6'X6' EARTH EXCAVATION AREA WITH RESTORATION
- (P) PROPOSED LIGHT TOWER
- (R) REMOVED LIGHT TOWER
- (E) EXISTING LIGHT TOWER TO REMAIN
- (TR) TEMPORARY LIGHTING UNIT
- (E) EXISTING LIGHTING UNIT
- PROPOSED LIGHTING UNIT

NOTES:

1. ADDITIONAL PAYMENT WILL NOT BE PROVIDED FOR ANY DISTURBANCE OUTSIDE OF THE RESTORATION AREA LIMITS AS SHOWN IN THE PLANS.
2. CLEAR ZONE DISTANCES PROVIDED ARE BASED ON 4:1 FRONT SLOPE.
3. AREA OF RESTORATION INCLUDES SEEDING, NUTRIENTS, EROSION CONTROL BARRIER AND TOPSOIL. SEEDING SHALL BE SEEDING, CLASS 4 (MODIFIED) UNLESS OTHERWISE NOTED.
4. WHEN CONNECTING PROPOSED UNIT DUCT TO EXISTING TOWER, WILL NEED TO EXCAVATE NEAR THE EXISTING FOUNDATION TO TAP INTO THE EXISTING CONDUIT IN THE EXISTING FOUNDATION.
5. CONTRACTOR SHALL TAKE CARE TO AVOID LANDSCAPED CRYSTAL LAKE SIGN. ANY DAMAGE TO THE SIGN WILL BE PAID FOR BY THE CONTRACTOR.
6. GUARDRAIL REMOVAL AND REPLACEMENT SHOULD BEGIN AT THE END OF THE TRAFFIC BARRIER TERMINAL TO AVOID REMOVAL AND REPLACEMENT OF THE TERMINAL SECTION.

0 50 100 150
SCALE IN FEET

C-05

C-05- US14elL31.dgn

JACOBS

USER NAME = melaneyj	DESIGNED - SJM	REVISED -
	DRAWN - SJM	REVISED -
PLOT SCALE = 100.0000 ' / in.	CHECKED - WJB	REVISED -
PLOT DATE = 3/12/2018	DATE - 10-18-2017	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CIVIL SITE PLAN
US-14 / IL 31 - SHEET 1 OF 1

SCALE: 1"=50' | SHEET OF SHEETS | STA. 398+45 TO STA. 412+62

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2016-017L	MCHENRY	88	13
		CONTRACT NO. 62C35		
	ILLINOIS FED. AID PROJECT			

PAY ITEM DESCRIPTION	UNIT	QTY
TEMPORARY CONCRETE BARRIER	FOOT	500
BARRIER WALL REFLECTORS, TYPE C	EACH	40
IMPACT ATTENUATOR, TEMPORARY (FULLY REDIRECTIVE, NARROW), TEST LEVEL 3	EACH	2
TRAFFIC CONTROL AND PROTECTION, SPECIAL	LSUM	0.6
TEMPORARY INFORMATION SIGNING	SQ FT	51.4

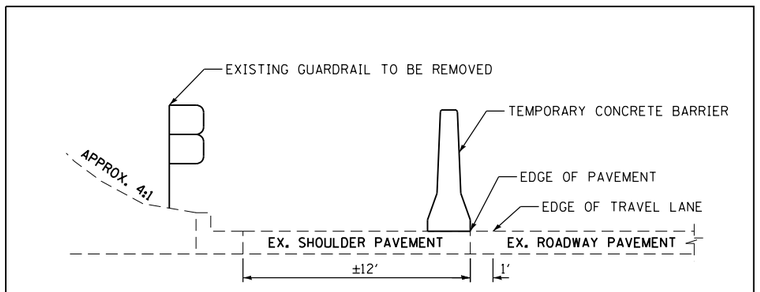
NOTE:

1. TEMPORARY INFORMATION SIGNING AREAS ARE PROVIDED PER STANDARD DETAIL TC-22.

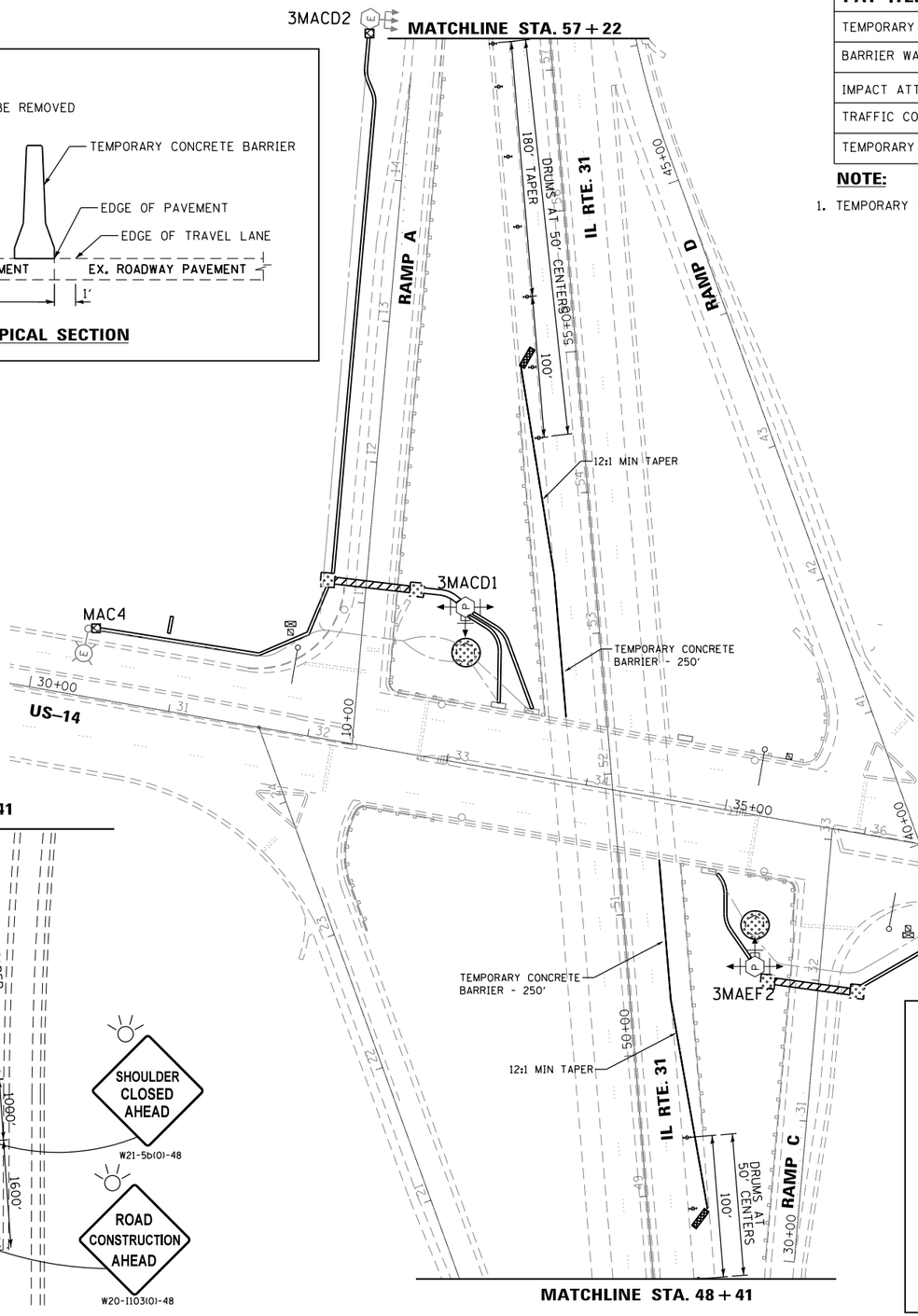
N

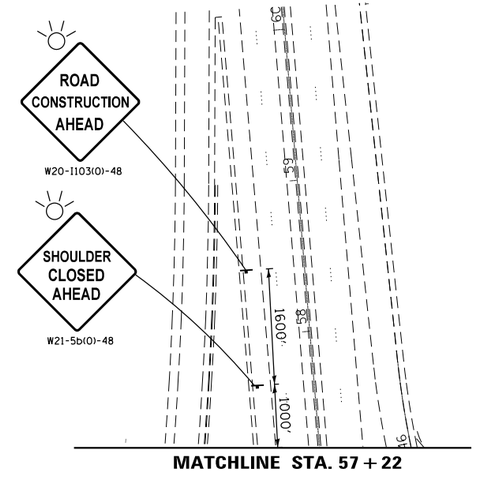
0 50 100 150

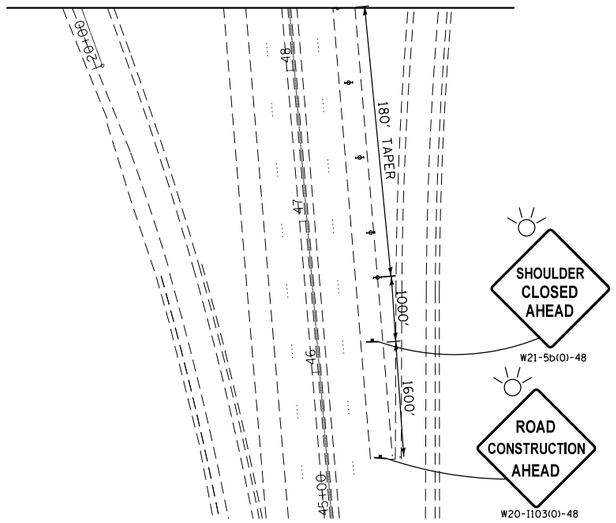
SCALE IN FEET

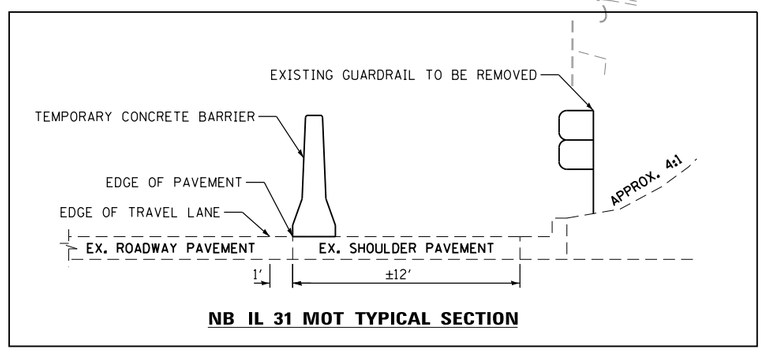


SB IL 31 MOT TYPICAL SECTION









NB IL 31 MOT TYPICAL SECTION

C–06

C-06- US14IL31 MOT.dgn

USER NAME = malonasj	DESIGNED - SJM	REVISED -	
	DRAWN - SJM	REVISED -	
PLOT SCALE = 100.0000 ' / in.	CHECKED - WJB	REVISED -	
PLOT DATE = 3/22/2018	DATE - 10-18-2017	REVISED -	

JACOBS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC PLAN
US–14 / IL 31 – SHEET 2 OF 2

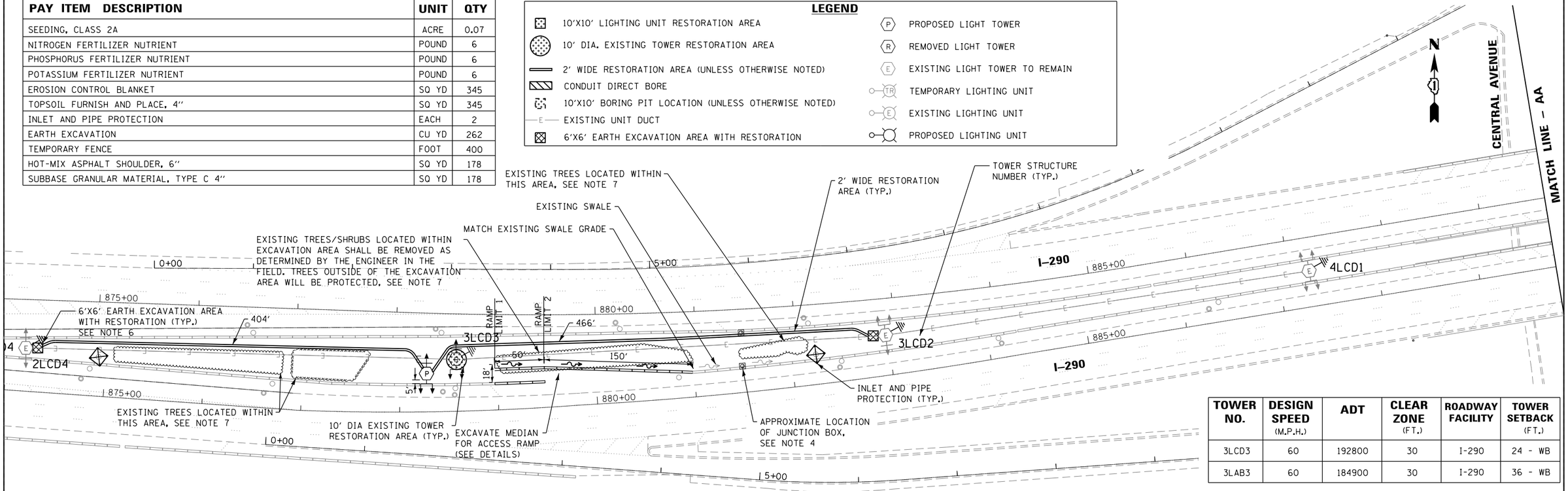
SCALE: 1"=50' | SHEET OF SHEETS | STA. 398+45 | TO STA. 412+62

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2016-017L	MCHENRY	88	14
		CONTRACT NO. 62C35		
	ILLINOIS	FED. AID PROJECT		

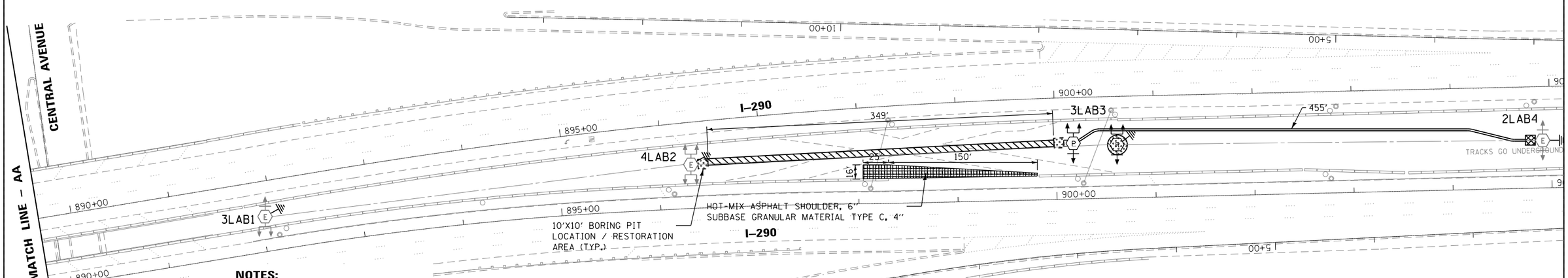
PAY ITEM DESCRIPTION	UNIT	QTY
SEEDING, CLASS 2A	ACRE	0.07
NITROGEN FERTILIZER NUTRIENT	POUND	6
PHOSPHORUS FERTILIZER NUTRIENT	POUND	6
POTASSIUM FERTILIZER NUTRIENT	POUND	6
EROSION CONTROL BLANKET	SQ YD	345
TOPSOIL FURNISH AND PLACE, 4"	SQ YD	345
INLET AND PIPE PROTECTION	EACH	2
EARTH EXCAVATION	CU YD	262
TEMPORARY FENCE	FOOT	400
HOT-MIX ASPHALT SHOULDER, 6"	SQ YD	178
SUBBASE GRANULAR MATERIAL, TYPE C 4"	SQ YD	178

LEGEND

- 10'X10' LIGHTING UNIT RESTORATION AREA
- 10' DIA. EXISTING TOWER RESTORATION AREA
- 2' WIDE RESTORATION AREA (UNLESS OTHERWISE NOTED)
- CONDUIT DIRECT BORE
- 10'X10' BORING PIT LOCATION (UNLESS OTHERWISE NOTED)
- EXISTING UNIT DUCT
- 6'X6' EARTH EXCAVATION AREA WITH RESTORATION
- PROPOSED LIGHT TOWER
- REMOVED LIGHT TOWER
- EXISTING LIGHT TOWER TO REMAIN
- TEMPORARY LIGHTING UNIT
- EXISTING LIGHTING UNIT
- PROPOSED LIGHTING UNIT



TOWER NO.	DESIGN SPEED (M.P.H.)	ADT	CLEAR ZONE (FT.)	ROADWAY FACILITY	TOWER SETBACK (FT.)
3LCD3	60	192800	30	I-290	24 - WB
3LAB3	60	184900	30	I-290	36 - WB



NOTES:

1. ADDITIONAL PAYMENT WILL NOT BE PROVIDED FOR ANY DISTURBANCE AND RELATED RESTORATION OUTSIDE OF RESTORATION AREAS AS SHOWN IN THE PLANS.
2. CLEAR ZONE DISTANCES PROVIDED ARE BASED ON 4:1 FRONT SLOPE.
3. RESTORATION AREAS INCLUDES SEEDING, TOPSOIL, NUTRIENTS AND EROSION CONTROL BARRIER AS REQUIRED.
4. TEMPORARY SURVEILLANCE WIRE TO BE ROUTED IN JUNCTION BOXES DURING CONSTRUCTION, SEE SURVEILLANCE PLANS FOR DETAILS.
5. ADDITIONAL JUNCTION BOX LOCATED WEST OF TOWER 2LCD4 ON RAMP TO AUSTIN AVE, SEE SURVEILLANCE PLANS FOR LOCATION.
6. WHEN CONNECTING PROPOSED UNIT DUCT TO EXISTING TOWER, WILL NEED TO EXCAVATE NEAR THE EXISTING FOUNDATION TO TAP INTO THE EXISTING CONDUIT IN THE EXISTING FOUNDATION.
7. THE CONTRACTOR WILL BE REQUIRED TO INSTALL TEMPORARY FENCE AS TREE PROTECTION AROUND INDIVIDUAL TREES ADJACENT TO WORK AREAS AND AVOID DAMAGE TO TREES WHILE PERFORMING WORK. THE CONTRACTOR WILL BE RESPONSIBLE FOR REPLACEMENT OF ANY EXISTING TREES THAT ARE DAMAGED DURING CONSTRUCTION WITH NO ADDITIONAL PAYMENT PROVIDED. THE EXACT LOCATION OF TREE PROTECTION WILL BE DETERMINED BY THE ENGINEER IN THE FIELD.
8. CONTRACTOR SHOULD TAKE PROPER MEASURE NOT TO DAMAGE SPRINKLER SYSTEM ON I-290 MEDIAN THE VALVES AND CONTROLS ARE TYPICALLY PLACED BY THE MEDIAN NORTH BARRIER WALL AND FLEXIBLE DRIP PIPES ARE SCATTERED IN THROUGHOUT THE MEDIAN. NOTIFY CDOT BEFORE START OF WORK.
9. ACCESS RAMP WILL BE AN AGGREGATE TEMPORARY CONSTRUCTION ENTRANCE DURING CONSTRUCTION. UPON COMPLETION OF THE WORK, THE AREA WILL BE PAVED WITH AN ASPHALT SHOULDER SECTION. THE FOLLOWING PAY ITEMS WILL BE USED: EARTH EXCAVATION, STABILIZED CONSTRUCTION ENTRANCE, FURNISHED EXCAVATION, SUBBASE GRANUALR MATERIAL, HOT-MIX ASPHALT SHOULDER, CONCRETE BARRIER & CONCRETE BARRIER BASE.

0 50 100 150
SCALE IN FEET

C–07

C-07- 12900CentralAve.dgn

JACOBS

USER NAME = malanasj	DESIGNED - SJM	REVISED -
	DRAWN - SJM	REVISED -
PLOT SCALE = 100.0000 ' / in.	CHECKED - WJB	REVISED -
PLOT DATE = 3/22/2018	DATE - 10-18-2017	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

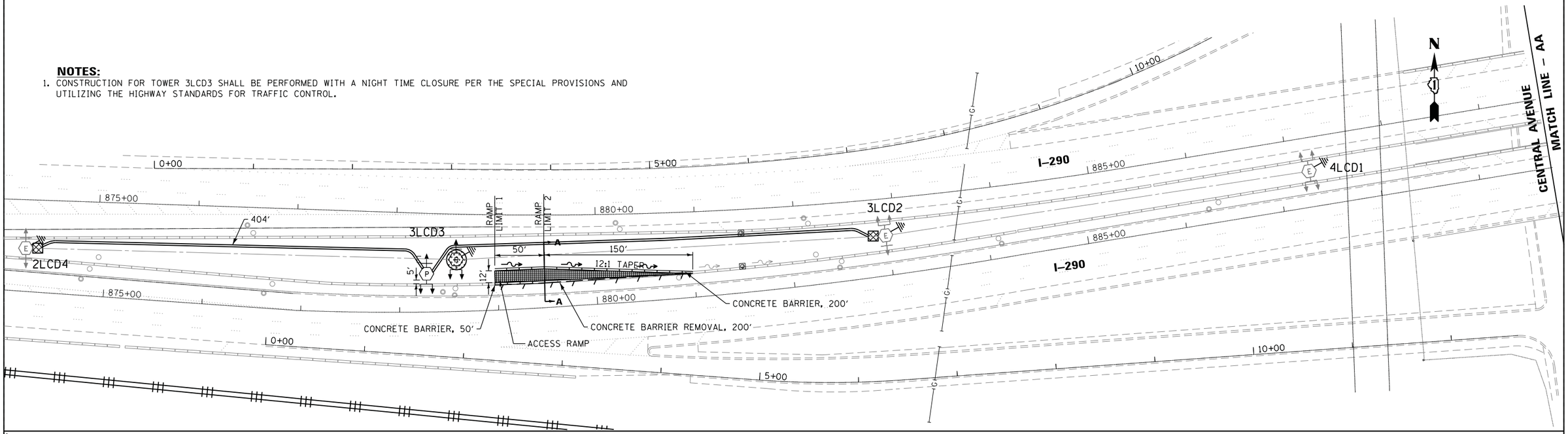
CIVIL SITE PLAN
I–290 / CENTRAL AVE. – SHEET 1 OF 3

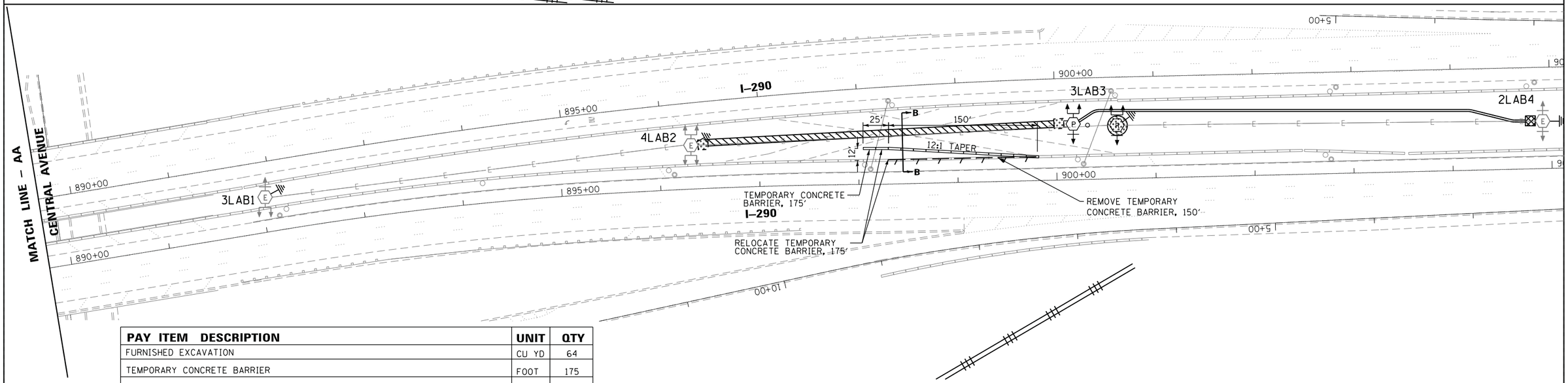
SCALE: 1"=50' | SHEET OF SHEETS | STA. 874+00 TO STA. 905+15

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2016-017L	COOK	88	15
		CONTRACT NO. 62C35		
	ILLINOIS FED. AID PROJECT			

NOTES:

1. CONSTRUCTION FOR TOWER 3LCD3 SHALL BE PERFORMED WITH A NIGHT TIME CLOSURE PER THE SPECIAL PROVISIONS AND UTILIZING THE HIGHWAY STANDARDS FOR TRAFFIC CONTROL.





PAY ITEM DESCRIPTION	UNIT	QTY
FURNISHED EXCAVATION	CU YD	64
TEMPORARY CONCRETE BARRIER	FOOT	175
REMOVE TEMPORARY CONRETE BARRIER	FOOT	150
CONCRETE BARRIER REMOVAL	FOOT	200
RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	175
BARRIER WALL REFLECTORS, TYPE C	EACH	34
CONCRETE BARRIER, DOUBLE FACE, 32 INCH	FOOT	250
CONCRETE BARRIER BASE	FOOT	250
STABILIZED CONSTRUCTION ENTRANCE	SQ YD	88
HOT-MIX ASPHALT SHOULDER, 6"	SQ YD	88
SUBBASE GRANULAR MATERIAL, TYPE C 4"	SQ YD	88
TRAFFIC CONTROL AND PROTECTION (EXPRESSWAYS)	LSUM	0.4

NOTES:

1. IF A LANE CLOSURE IS REQUIRED, CONSTRUCTION FOR TOWER 3LAB3 SHALL BE DONE WITH A NIGHT TIME CLOSURE PER THE SPECIAL PROVISIONS AND UTILIZING THE HIGHWAY STANDARDS FOR TRAFFIC CONTROL.

2. THE EXISTING TEMPORARY CONCRETE BARRIER FOR TOWER 3LAB3 SHALL BE REMOVED AND NEW F SHAPE TEMPORARY CONCRETE BARRIER SHALL BE INSTALLED AT A 12:1 TAPER BEFORE CONSTRUCTION BEGINS. AFTER CONSTRUCTION IS COMPLETED THE NEW F SHAPE TEMPORARY CONCRETE BARRIER SHALL BE RELOCATED BACK TO THE ORIGINAL LOCATION BY LAPPING THE FIRST AND LAST BARRIER AND PIN TO THE PAVEMENT. FOLLOW TC-17 FOR SHOULDER CLOSURE TO COMPLETE THIS WORK.

3. CONTRACTOR SHOULD TAKE PROPER MEASURE NOT TO DAMAGE THE IRRIGATION SYSTEM ON I-290 MEDIAN. THE VALVES AND CONTROLS ARE TYPICALLY PLACED BY THE MEDIAN NORTH BARRIER WALL AND FLEXIBLE DRIP PIPES ARE SCATTERED IN THROUGHOUT THE MEDIAN. NOTIFY CDOT BEFORE START OF WORK.

0 50 100 150
SCALE IN FEET

C–08

C-08- I290CentralAve MOT.dgn

JACOBS

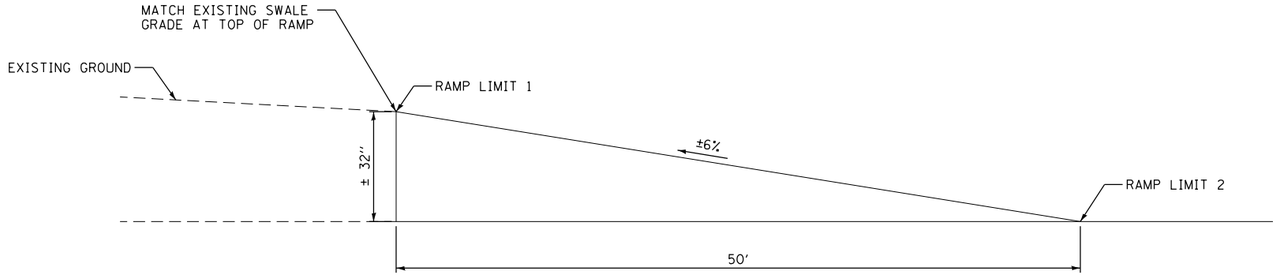
USER NAME = melaneyj	DESIGNED - SJM	REVISED -
	DRAWN - SJM	REVISED -
PLOT SCALE = 100.0000 ' / in.	CHECKED - WJB	REVISED -
PLOT DATE = 4/19/2018	DATE - 10-18-2017	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

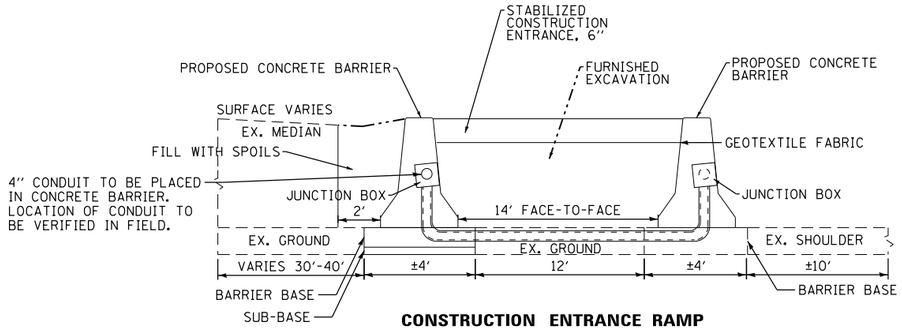
MAINTENANCE OF TRAFFIC PLAN
I–290 / CENTRAL AVE. – SHEET 2 OF 3

SCALE: 1"=50' | SHEET OF SHEETS | STA. 874+00 | TO STA. 905+15

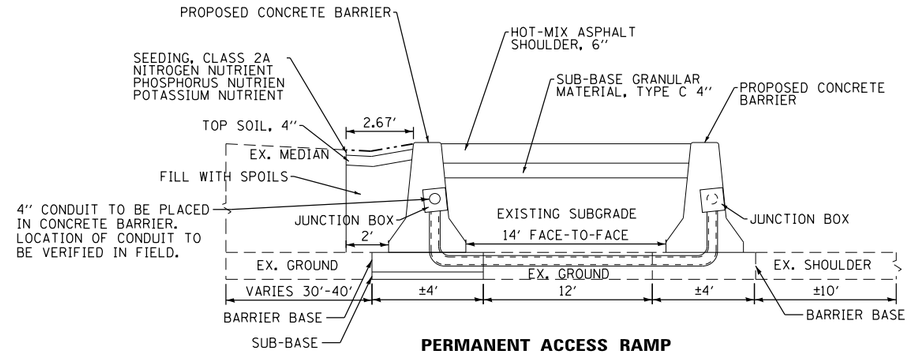
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2016-017L	COOK	88	16
		CONTRACT NO. 62C35		
	ILLINOIS FED. AID PROJECT			



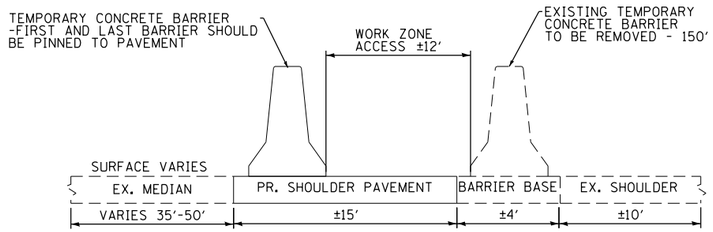
CONSTRUCTION ENTRANCE /ACCESS RAMP ELEVATION VIEW



CONSTRUCTION ENTRANCE RAMP
TYPICAL SECTION
A–A



PERMANENT ACCESS RAMP
TYPICAL SECTION
A–A



MOT TYPICAL SECTION
B–B

C-09- 1290@CentralAve MOT.dgn

JACOBS	USER NAME = malonasj	DESIGNED - SJM	REVISED -
		DRAWN - SJM	REVISED -
	PLOT SCALE = 100.0000 ' / in.	CHECKED - WJB	REVISED -
	PLOT DATE = 3/13/2018	DATE - 10-18-2017	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

RAMP ELEVATION AND TYPICAL SECTIONS
I–290 / CENTRAL AVE. – SHEET 3 OF 3

SCALE: | SHEET OF SHEETS | STA. 874+00 | TO STA. 905+15

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2016-017L	COOK	88	17
		CONTRACT NO. 62C35		
	ILLINOIS	FED. AID PROJECT		

GENERAL NOTES:

1. ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST CODES, STANDARDS, AND THE IDOT STANDARD SPECIFICATION FOR ROAD AND BRIDGE CONSTRUCTION ADOPTED ON APRIL' 2016, AND SUPPLEMENT SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS ADOPTED ON JAN 1, 2015.

2. THE CONTRACTOR MUST VERIFY ALL OF THE INFORMATION SHOWN ON THE CONTRACT PLANS WHICH COULD AFFECT HIS WORK UNDER THIS CONTRACT FOR OPERATION OF THE EXISTING ROADWAY LIGHTING SYSTEM.

3. NO MATERIAL OR EQUIPMENT SHALL BE DELIVERED TO THE JOB SITE WITHOUT PRIOR INSPECTION AND APPROVAL BY THE ENGINEER. ANY MATERIAL AND EQUIPMENT NOT APPROVED BY THE ENGINEER MUST BE REMOVED FROM JOB SITE AT THE CONTRACTOR S EXPENSE.

4. ALL UNDERGROUND UNIT DUCT SHALL BE 30 INCHES MINIMUM BELOW GRADE PER IDOT SECTION 810. UNIT DUCT MUST BE POSITIONED IN THE FIELD TO AVOID CONFLICT WITH UNDERDRAINS, AND UNDERGROUND UTILITIES.

5. ALL SPLICING MUST BE IN TOWER/ POLE BASES OR EXISTING JUNCTION BOXES ABOVE GRADE WITH WATERPROOF SEALANT AND HEAT SHRINKABLE PLASTIC CAPS. UNLESS NOTED OTHERWISE.

6. TEMPORARY SUPPORTS FOR EXISTING UTILITIES SHALL BE PROVIDED IF REQUIRED.

7. NO LIGHTING CIRCUIT OR PORTION THEREOF SHALL BE REMOVED FROM NIGHT TIME OPERATION OF EXISTING LIGHTING WITHOUT THE APPROVAL OF THE ENGINEER. ALL EXISTING LIGHTING SHALL OPERATE FROM DUSK TO DAWN DAILY FOR DURATION OF THE PROJECT TO MAINTAIN ILLUMINATION OF TRAVELED ROADWAYS.

8. EXISTING LIGHTING TOWER / TEMPORARY LIGHTING WILL REMAIN OPERATIONAL UNTIL PROPOSED LIGHTING TOWER OR LIGHT POLES STARTS FUNCTIONING.

9. SWITCHOVER OF CABLE CONNECTIONS TO PROPOSED LIGHTING TOWER OR LIGHT POLES FROM EXISTING LIGHTING TOWER / TEMPORARY LIGHTING POLES SHALL TAKE PLACE DURING DAY TIME.

10. PROPOSED LIGHTING TOWER IN CONFLICT WITH THE EXISTING DITCH LINES SHALL BE INSTALLED BEHIND THE DITCHES AS APPROVED BY THE ENGINEER. NO TOWER SHALL BE INSTALLED AT THE BOTTOM OF DRAINAGE DITCHES OR IN ESTABLISHED LANDSCAPING.

11. ALL EXCAVATION REQUIRED TO FACILITATE THE INSTALLATION OF PROPOSED LIGHT TOWER FOUNDATIONS AT SLOPED AREAS SHALL BE CONSIDERED INCIDENTAL TO THE TOWER FOUNDATIONS. NO SEPARATE PAYMENT WILL BE MADE.

12. COUNTERWEIGHTS ON UN-USED TENONS SHALL BE MOUNTED TO BALANCE THE LUMINAIRE AS ACCEPTABLE TO THE ENGINEER.

13. TOWER UNIT IDENTIFICATION LABEL SHALL BE PROVIDED AS PER ARTICLE 1069.06 TO THE PROPOSED TOWER TO MATCH WITH EXISTING ONE.

14. CONTRACTOR SHALL REVIEW THE SOIL BORING LOGS AND SOIL TEST REPORTS FOR EACH PROPOSED LIGHTING TOWER, BEFORE START OF FOUNDATION AUGURING. EACH HOLE FOR THE FOUNDATION SHALL BE INSPECTED BY THE ENGINEER PRIOR TO POURING CONCRETE FOUNDATION. THE SOIL BORING LOGS REPRESENT POINT INFORMATION. PRESENTATION OF THE INFORMATION IN NO WAY IMPLIES THAT SUB SURFACE CONDITIONS ARE THE SAME AT LOCATIONS OTHER THAN THE EXACT LOCATION OF BORING.

15. THE CONTRACTOR IS ADVISED THAT IN THE EVENT OF SNOW, HE SHALL BE RESPONSIBLE FOR THE IMMEDIATE REMOVAL OF ANY MAINTENANCE OF TRAFFIC PROTECTIVE DEVICE REQUIRED FOR THE TRAFFIC OPERATIONS THAT WOULD INTERFERE WITH SNOW REMOVAL OPERATION PREFORMED BY THE STATE IN ACCORDANCE WITH THE IDOT STANDARD SPECIFICATIONS.

16. PROPOSED TOWER FOUNDATIONS ARE SHOWN AS APPROXIMATE LOCATIONS. IT CAN BE ADJUSTED IN THE FIELD TO AVOID EXISTING UNDERGROUND CABLE & UTILITY CONFLICTS, PER APPROVAL BY ENGINEER.

17. THE PROPOSED TOWER FOUNDATION SHALL NOT BE PLACED CLOSER THAN 10 FT FROM EXISTING TOWER FOUNDATION. THE MINIMUM 10 FT SEPARATION IS MEASURED FROM EDGE OF PROPOSED FOUNDATION TO EDGE OF EXISTING FOUNDATION.

18. REMOVAL AND DISPOSAL OF SURPLUS, UNSTABLE, UNSUITABLE, AND ORGANIC MATERIALS SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 202 OF THE STANDARD SPECIFICATIONS.

19. THE CONTRACTOR SHALL TAKE CARE IN GRADING AND EXCAVATING NEAR TREES WHICH ARE NOT MARKED FOR REMOVAL SO AS NOT TO CAUSE INJURY TO THE ROOT SYSTEM OR TRUNKS. MAJOR ROOTS OF A TREE THAT IS TO REMAIN IN PLACE EXTENDING INTO THE EXCAVATION AREA SHALL BE SEVERED AT A POINT IMMEDIATELY OUTSIDE OF THE EXCAVATION AREA IN A MANNER THAT WILL CAUSE THE LEAST AMOUNT OF SYSTEMIC DAMAGE TO THE REMAINING TREE. ANY DAMAGE DONE TO EXISTING TREES BY THE CONTRACTOR SHALL BE REPAIRED BY THE CONTRACTOR AT THE CONTRACTOR'S OWN EXPENSE.

CONTACT NOTES:

1. CALL JULIE OR DIGGER FOR CABLE LOCATES, CALL IDOT EMC AT (708) 524-2145 FOR IDOT MAINTAINED CABLE LOCATES. THE PROPOSED TOWER FOUNDATIONS & PROPOSED UNIT DUCTS SHOULD ONLY BE INSTALLED AFTER THE LOCATES HAVE BEEN COMPLETED.

REMOVAL NOTES:

1. LOCATIONS OF EXISTING LIGHTING TOWERS SHOWN ON PLAN DRAWINGS ARE APPROXIMATE AND MUST BE VERIFIED IN THE FIELD BY THE CONTRACTOR.

2. PRIOR TO SUBMITTING A BID, THE CONTRACTOR SHALL REVIEW THE CONTRACT DRAWINGS AND ASCERTAIN EXISTING SITE CONDITIONS TO VERIFY THE EXTENT OF DEMOLITION. FAILURE TO DO SO SHALL NOT RELIEVE THE CONTRACTOR FROM RESPONSIBILITY FOR PERFORMING ALL REMOVAL REQUIRED IN THIS CONTRACT.

3. COMMENCEMENT OF WORK SHALL BE CONSTRUED AS EVIDENCE THAT A CAREFUL EXAMINATION OF THE PORTIONS OF EXISTING FOUNDATIONS AND UNIT DUCT FOR THIS WORK AND ACCESS TO WORK SPACES, HAS BEEN MADE AND THAT THE CONTRACTOR IS FAMILIAR WITH EXISTING CONDITIONS AND DIFFICULTIES THAT WILL AFFECT THE EXECUTION OF THE WORK. LATER CLAIMS SHALL NOT BE MADE FOR ADDITIONAL LABOR, EQUIPMENT OR MATERIALS REQUIRED BECAUSE OF DIFFICULTIES ENCOUNTED WHICH COULD HAVE BEEN FORSEEN DURING SUCH AN EXAMINATION.

4. ALL SALVAGE EXISTING EQUIPMENT INCLUDING, TEMPORARY WOOD POLES, LUMINAIRES, MAST ARMS SHALL BE RETURNED TO STATE STOCK. THE CONTRACTOR SHALL CALL EMC AT (708) 524-2145 FOR MORE DETAILS AND DELIVERY PLACE.

5. REMOVE EXISTING TOWER FOUNDATION, GROUND RODS, UNIT DUCT UP TO 10FT FROM THE CENTER OF FOUNDATION. THE VOID CAUSED BY THE REMOVAL OF THE TOWER FOUNDATION SHALL BE BACKFILLED WITH SUITABLE EXCAVATED MATERIAL APPROVED BY THE ENGINEER.

6. LOCATIONS SELECTED FOR COLLECTION OF DEBRIS AND/OR STORAGE OF EQUIPMENT SHALL BE AS APPROVED BY THE ENGINEER.

7. ALL EXISTING TOWERS TO BE REMOVED SHALL BE SCRAPPED AND DISPOSED OF IN A LEGAL MANNER.

8. REMOVAL OF TEMPORARY LIGHTING UNIT SHALL INCLUDE POLE, AERIAL CABLE, LUMINAIRE, MAST ARM AND ALL ASSOCIATED APPARATUS AND CONNECTIONS. ALL TEMPORARY LIGHT LUMINAIRES WILL BE INSPECTED BY THE ENGINEER BEFORE BEING BOXED IN NEW CONTAINERS AND DELIVERD TO STORAGE FACILITY OF IDOT DISTRICT 1.

9. TOWER CONCRETE FOUNDATION SHALL BE REMOVED TO AT LEAST 2 FT BELOW GRADE. REMOVE EXISTING WORK PAD WHERE APPLICABLE. THE COST OF THIS SHALL BE INCLUDED IN FOUNDATION REMOVAL UNLESS NOTED OTHERWISE.

10. VERIFY AND LOCATE UNDERGROUND CIRCUIT (UNIT DUCTS) ROUTING OF TOWERS UNDER REPLACEMENT AS PER SECTION 803. MARK THE ROUTING SO THAT DURING DIGGING OF TRENCH FOR PROPOSED UNIT DUCT THE EXISTING UNIT DUCT IS PROTECTED TO MAINTAIN THE LIGHTING SYSTEM IN OPERATION. IF THE PROPOSED TOWER FOUNDATION COMES ON EXISTING UNIT DUCT, RE-ROUTE THE UNIT DUCT TEMPORARY UNTIL PROPOSED TOWER STARTS FUNCTIONING.

SYMBOL LEGEND:

- (R) — REMOVE OF EXISTING LIGHTING TOWER AND FOUNDATION, EXISTING TOWER TO BE SCRAPPED. HIGH MAST LUMINAIRES TO BE SALVAGED.
- (E) — EXISTING LIGHTING TOWER TO REMAIN, EXISTING LUMINAIRES AS PER PLAN
- (P) — PROPOSED LIGHTING TOWER ON NEW FOUNDATION, PROPOSED LUMINAIRES, NUMBER OF LUMINAIRES AS PER PLAN, HANDHOLE ORIENTATION
- (R) — REMOVE TOWER FOUNDATION ONLY
- (TR) — REMOVE TEMPORARY LIGHTING UNIT COMPLETE WITH ALL ACCESSORIES, SALVAGE TO IDOT
- (E) — EXISTING LIGHTING UNIT TO REMAIN
- REMOVE EXISTING AERIAL CABLE AND MESSANGER WIRE
- EXISTING UNIT DUCT, SIZE AS PER PLANS
- UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.
- PROPOSED UNIT DUCT, SIZE AS PER PLANS
- EXISTING LIGHTING CONTROLLER
- GROUND ROD, 5/8" DIA x 10' LONG
- PROPOSED LIGHT POLE, ALUMINUM, 47.5 FT. M.H., 15 FT. DAVIT ARM METAL FOUNDATION, 10" X 8' LONG, BREAKAWAY DEVICE, TRANSFORMER BASE, 15 INCH BOLT CIRCLE, LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, 400 WATT, LUMINAIRE SAFETY CABLE ASSEMBLY
- (RR) — REMOVE AND RELOCATE EXISTING LIGHTING UNIT
- (ER) — RELOCATE EXISTING LIGHTING UNIT - NEW LOCATION

ABBREVIATIONS:

E	EXISTING TO REMAIN
E.O.P.	EDGE OF PAVEMENT
EMC	ELECTRICAL MAINTENANCE CONTRACT
FT	FEET OR FOOT
GND	GROUND
JB	JUNCTION BOX
MA	MAST ARM
NO.	NUMBER
N.T.S.	NOT TO SCALE
P	PROPOSED
PVC	POLYVINYL CHLORIDE
RGS	RIGID GALVANISED STEEL
R	REMOVE
STA.	STATION
U.N.O.	UNLESS NOTED OTHERWISE
HPS	HIGH PRESSURE SODIUM

E–L1

DELTA ENGINEERING GROUP, LLC

USER NAME = $USER$	DESIGNED - HM	REVISED -
	DRAWN - GJ	REVISED -
PLOT SCALE = $SCALE$	CHECKED - HS	REVISED -
PLOT DATE = $DATE$	DATE - 03-21-2017	REVISED -

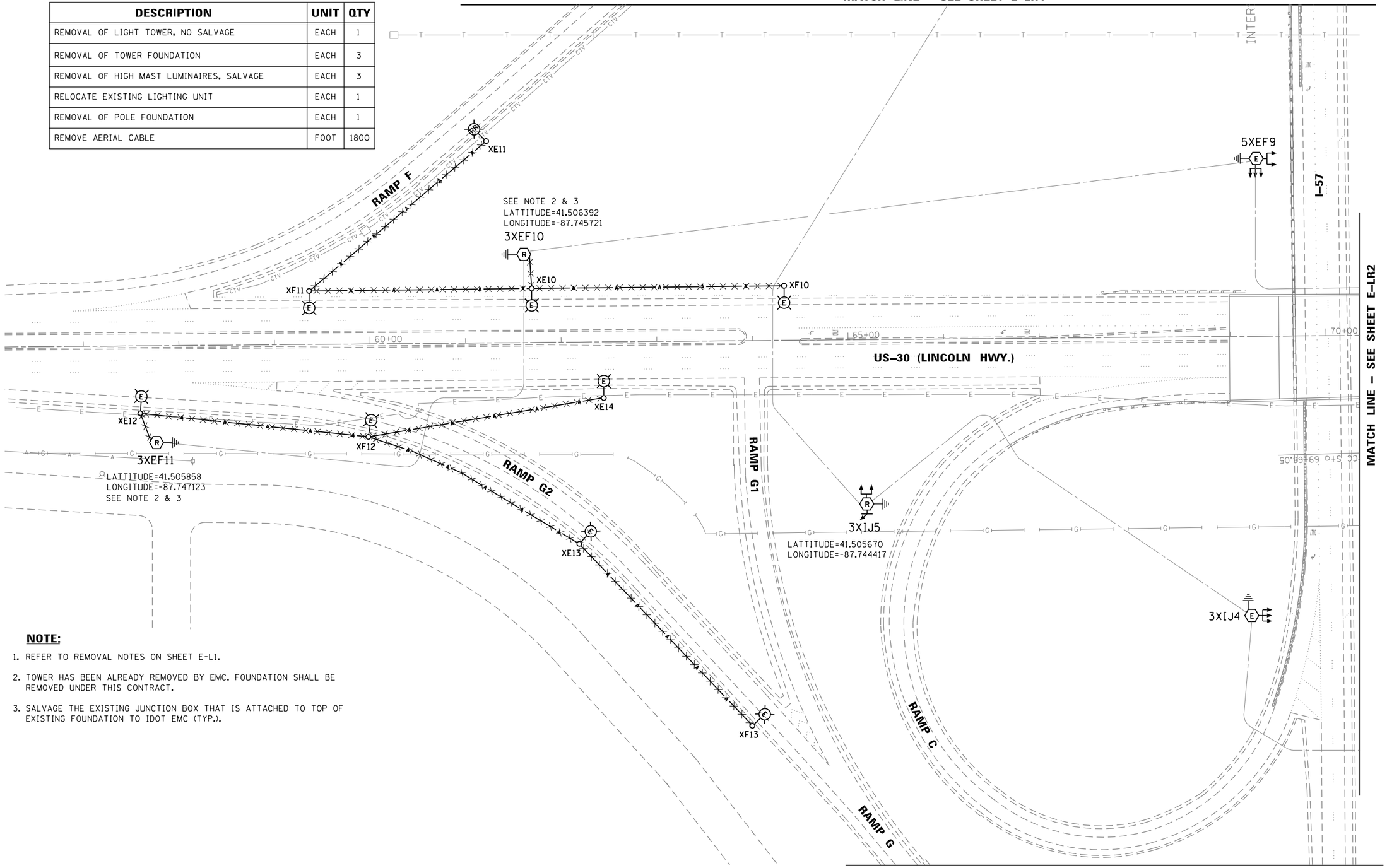
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SYMBOLS LEGEND, GENERAL NOTES AND REMOVAL NOTES

SCALE: NONE | SHEET 1 OF 1 SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2016-017L	VARIOUS	88	18
		CONTRACT NO. 62C35		
	ILLINOIS	FED. AID PROJECT		

DESCRIPTION	UNIT	QTY
REMOVAL OF LIGHT TOWER, NO SALVAGE	EACH	1
REMOVAL OF TOWER FOUNDATION	EACH	3
REMOVAL OF HIGH MAST LUMINAIRES, SALVAGE	EACH	3
RELOCATE EXISTING LIGHTING UNIT	EACH	1
REMOVAL OF POLE FOUNDATION	EACH	1
REMOVE AERIAL CABLE	FOOT	1800



NOTE:

1. REFER TO REMOVAL NOTES ON SHEET E-L1.
2. TOWER HAS BEEN ALREADY REMOVED BY EMC. FOUNDATION SHALL BE REMOVED UNDER THIS CONTRACT.
3. SALVAGE THE EXISTING JUNCTION BOX THAT IS ATTACHED TO TOP OF EXISTING FOUNDATION TO IDOT EMC (TYP.).

E–LR1

DELTA ENGINEERING GROUP, LLC

USER NAME = $USER$	DESIGNED - HM	REVISED -	
	DRAWN - GJ	REVISED -	
PLOT SCALE = $SCALE$	CHECKED - HS	REVISED -	
PLOT DATE = $DATE$	DATE - 03-21-2017	REVISED -	

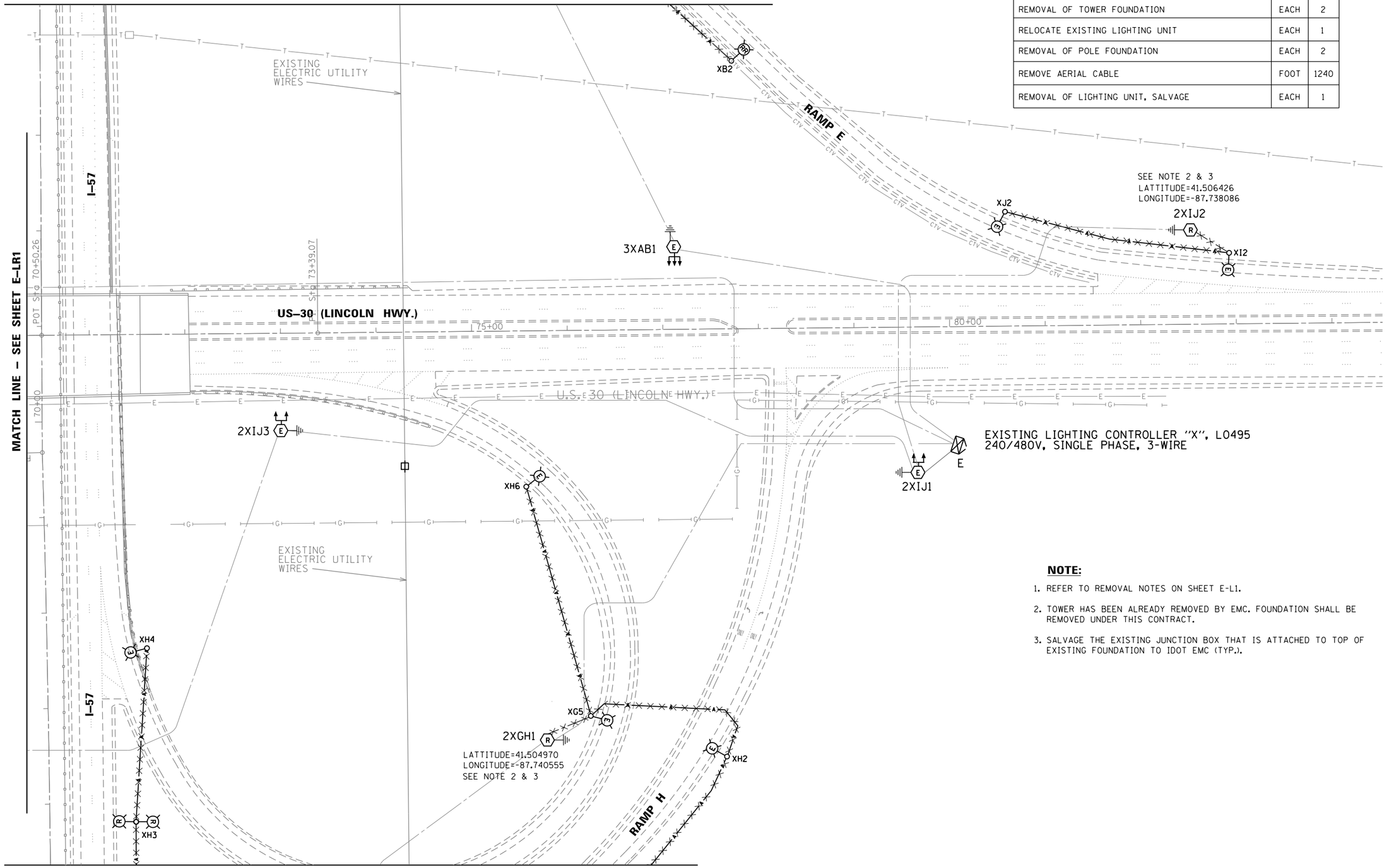
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

LIGHTING REMOVAL PLAN
I–57 /US–30 – SHEET 1 OF 4

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2016-017L	COOK	88	19
		CONTRACT NO. 62C35		
	ILLINOIS FED. AID PROJECT			

DESCRIPTION	UNIT	QTY
REMOVAL OF TOWER FOUNDATION	EACH	2
RELOCATE EXISTING LIGHTING UNIT	EACH	1
REMOVAL OF POLE FOUNDATION	EACH	2
REMOVE AERIAL CABLE	FOOT	1240
REMOVAL OF LIGHTING UNIT, SALVAGE	EACH	1



NOTE:

1. REFER TO REMOVAL NOTES ON SHEET E-L1.
2. TOWER HAS BEEN ALREADY REMOVED BY EMC. FOUNDATION SHALL BE REMOVED UNDER THIS CONTRACT.
3. SALVAGE THE EXISTING JUNCTION BOX THAT IS ATTACHED TO TOP OF EXISTING FOUNDATION TO IDOT EMC (TYP.).

E–LR2

DELTA ENGINEERING GROUP, LLC

USER NAME = $USER$	DESIGNED - HM	REVISED -	
	DRAWN - GJ	REVISED -	
PLOT SCALE = $SCALE$	CHECKED - HS	REVISED -	
PLOT DATE = $DATE$	DATE - 03-21-2017	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

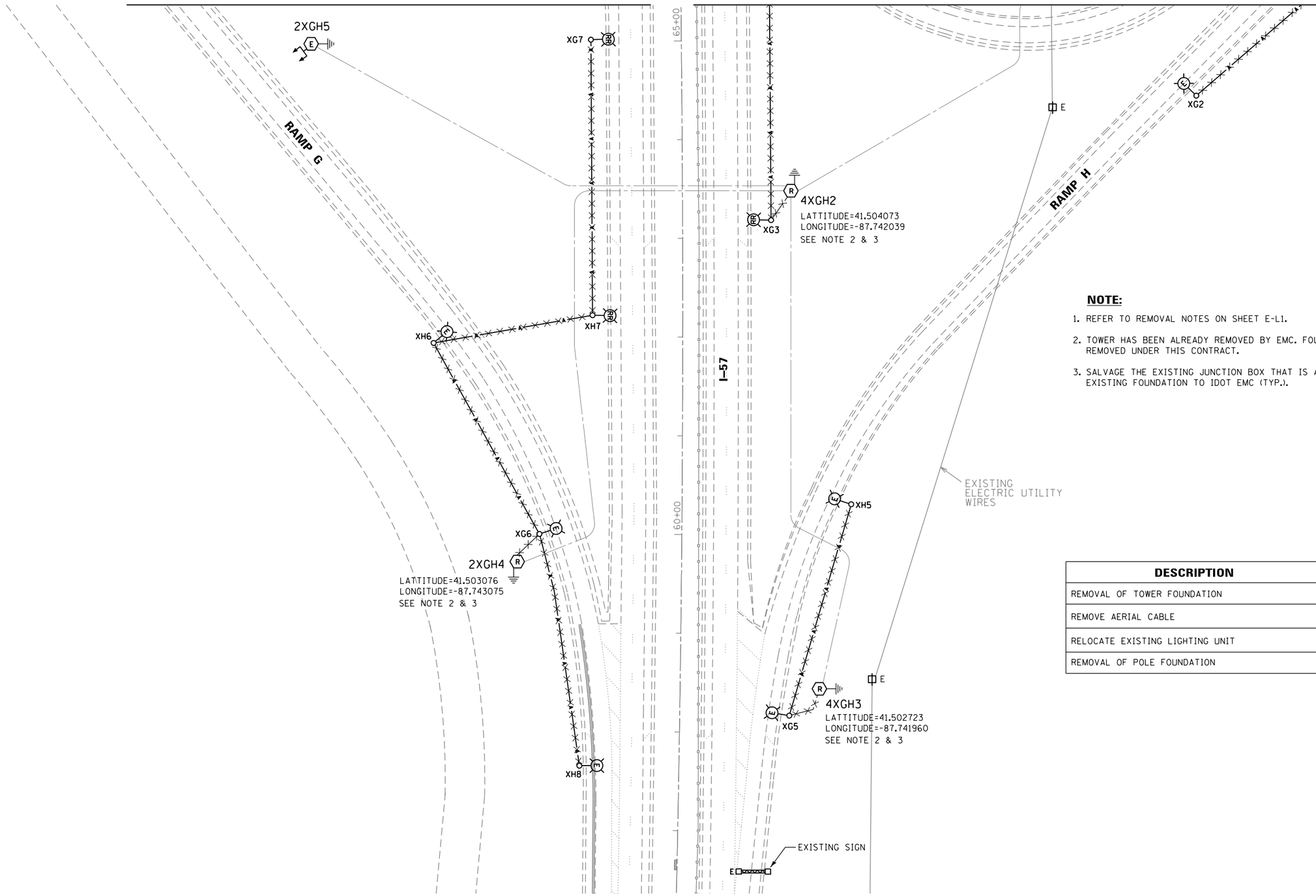
LIGHTING REMOVAL PLAN
I–57 /US–30 – SHEET 2 OF 4

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2016-017L	COOK	88	20
		CONTRACT NO. 62C35		
	ILLINOIS FED. AID PROJECT			

MATCH LINE – SEE SHEET E–LR1

MATCH LINE – SEE SHEET E–LR2



NOTE:

1. REFER TO REMOVAL NOTES ON SHEET E-L1.
2. TOWER HAS BEEN ALREADY REMOVED BY EMC. FOUNDATION SHALL BE REMOVED UNDER THIS CONTRACT.
3. SALVAGE THE EXISTING JUNCTION BOX THAT IS ATTACHED TO TOP OF EXISTING FOUNDATION TO IDOT EMC (TYP.).

DESCRIPTION	UNIT	QTY
REMOVAL OF TOWER FOUNDATION	EACH	3
REMOVE AERIAL CABLE	FOOT	1355
RELOCATE EXISTING LIGHTING UNIT	EACH	3
REMOVAL OF POLE FOUNDATION	EACH	3

E–LR3

DELTA ENGINEERING GROUP, LLC

USER NAME = $USER$	DESIGNED - HM	REVISED -	
	DRAWN - GJ	REVISED -	
PLOT SCALE = $SCALE$	CHECKED - HS	REVISED -	
PLOT DATE = $DATE$	DATE - 03-21-2017	REVISED -	

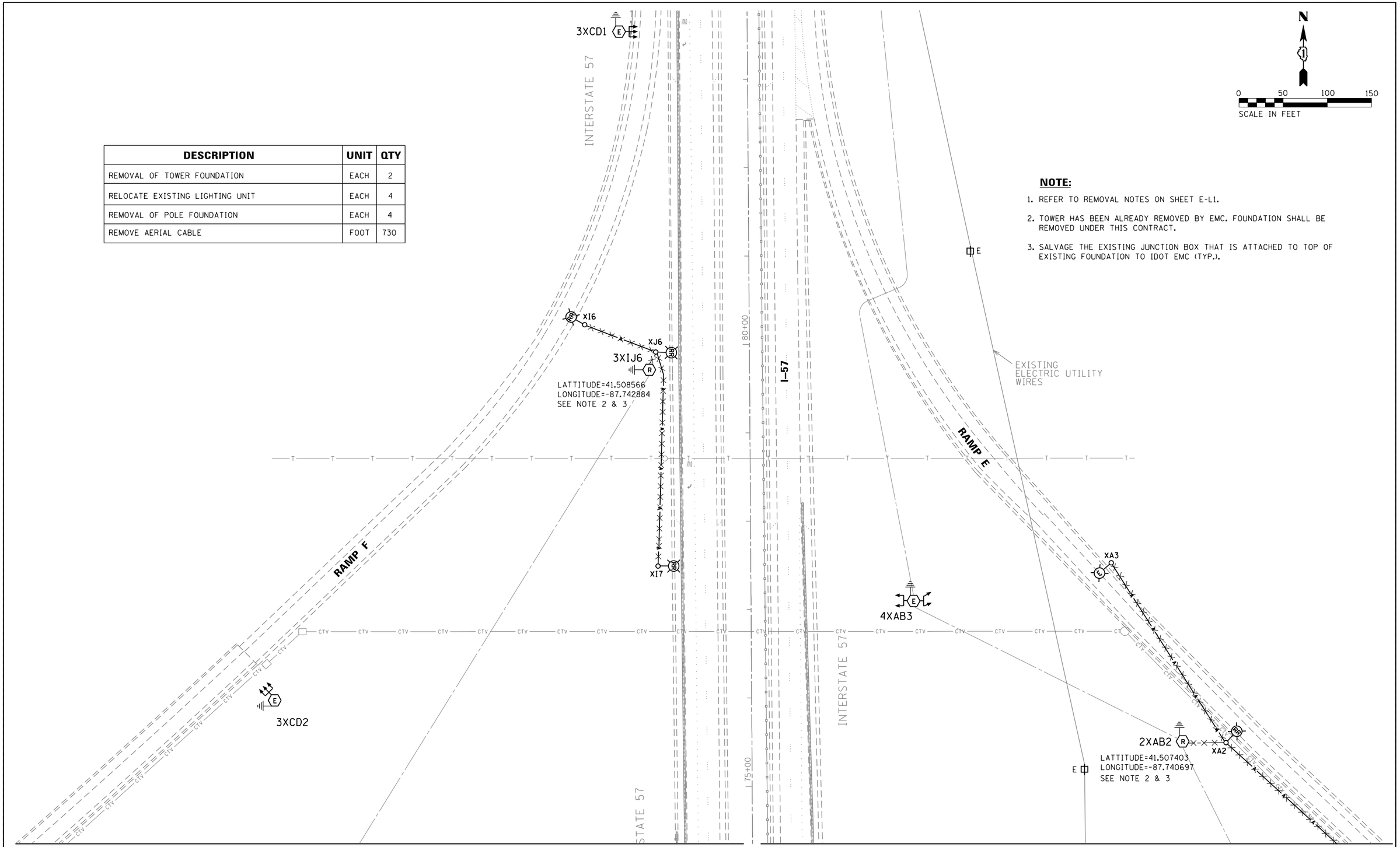
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

LIGHTING REMOVAL PLAN
I–57 /US–30 – SHEET 3 OF 4

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2016-017L	COOK	88	21
		CONTRACT NO. 62C35		
	ILLINOIS FED. AID PROJECT			

DESCRIPTION	UNIT	QTY
REMOVAL OF TOWER FOUNDATION	EACH	2
RELOCATE EXISTING LIGHTING UNIT	EACH	4
REMOVAL OF POLE FOUNDATION	EACH	4
REMOVE AERIAL CABLE	FOOT	730



NOTE:

1. REFER TO REMOVAL NOTES ON SHEET E-L1.
2. TOWER HAS BEEN ALREADY REMOVED BY EMC. FOUNDATION SHALL BE REMOVED UNDER THIS CONTRACT.
3. SALVAGE THE EXISTING JUNCTION BOX THAT IS ATTACHED TO TOP OF EXISTING FOUNDATION TO IDOT EMC (TYP.).

MATCH LINE – SEE SHEET E–LR1

MATCH LINE – SEE SHEET E–LR2

E–LR4

DELTA ENGINEERING GROUP, LLC

USER NAME = $USER$	DESIGNED - HM	REVISED -
	DRAWN - GJ	REVISED -
PLOT SCALE = $SCALE$	CHECKED - HS	REVISED -
PLOT DATE = $DATE$	DATE - 03-21-2017	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

LIGHTING REMOVAL PLAN
I–57 /US–30 – SHEET 4 OF 4

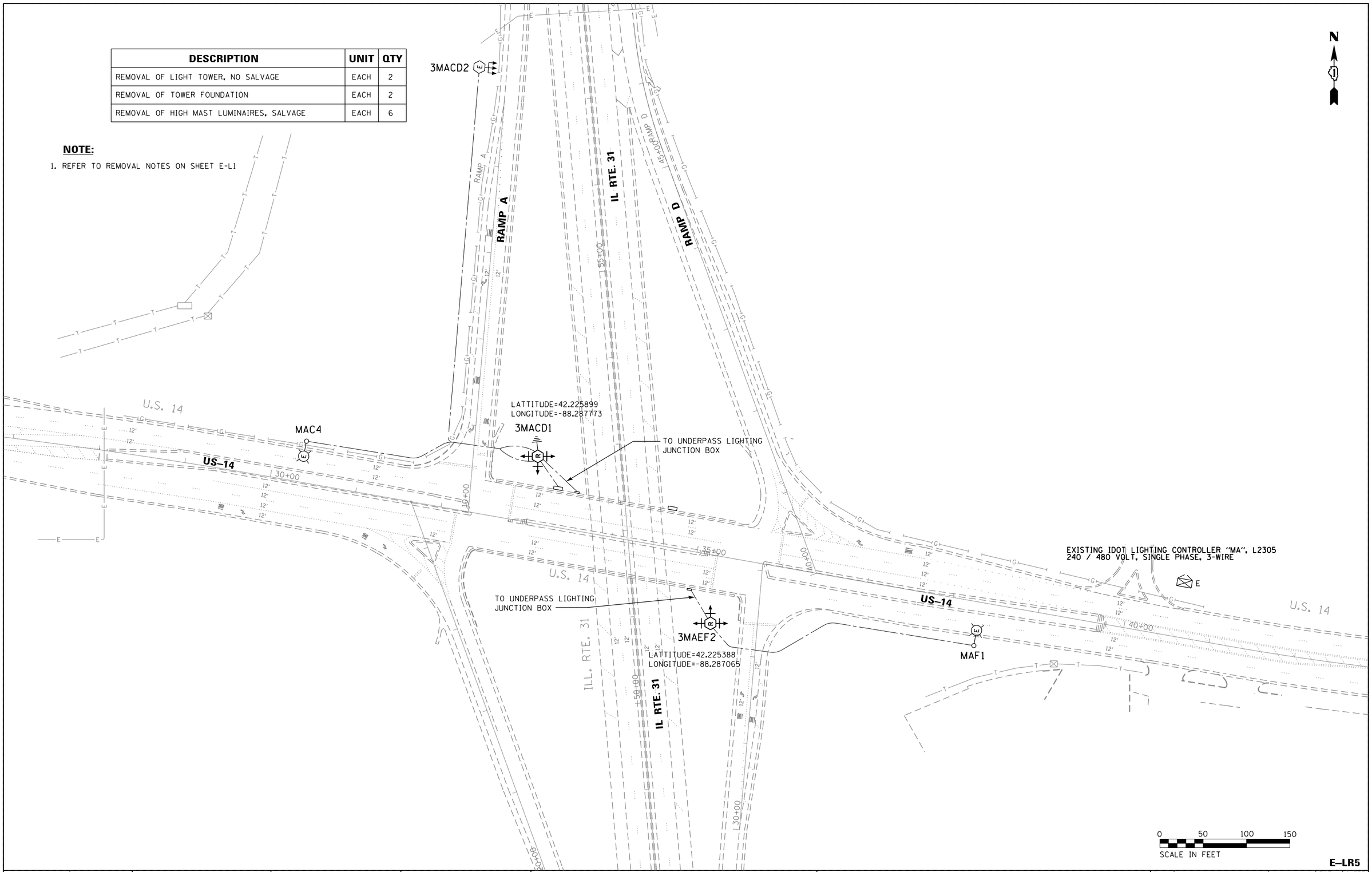
SCALE: | SHEET OF SHEETS | STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2016-017L	COOK	88	22
		CONTRACT NO. 62C35		
	ILLINOIS FED. AID PROJECT			

DESCRIPTION	UNIT	QTY
REMOVAL OF LIGHT TOWER, NO SALVAGE	EACH	2
REMOVAL OF TOWER FOUNDATION	EACH	2
REMOVAL OF HIGH MAST LUMINAIRES, SALVAGE	EACH	6

NOTE:

1. REFER TO REMOVAL NOTES ON SHEET E-L1



E–LR5

DELTA ENGINEERING GROUP, LLC	USER NAME = $USER$	DESIGNED - HM	REVISED -
		DRAWN - GJ	REVISED -
	PLOT SCALE = $SCALE$	CHECKED - HS	REVISED -
	PLOT DATE = $DATE$	DATE - 03-21-2017	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

LIGHTING REMOVAL PLAN
US–14 / IL 31 – SHEET 1 OF 1

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

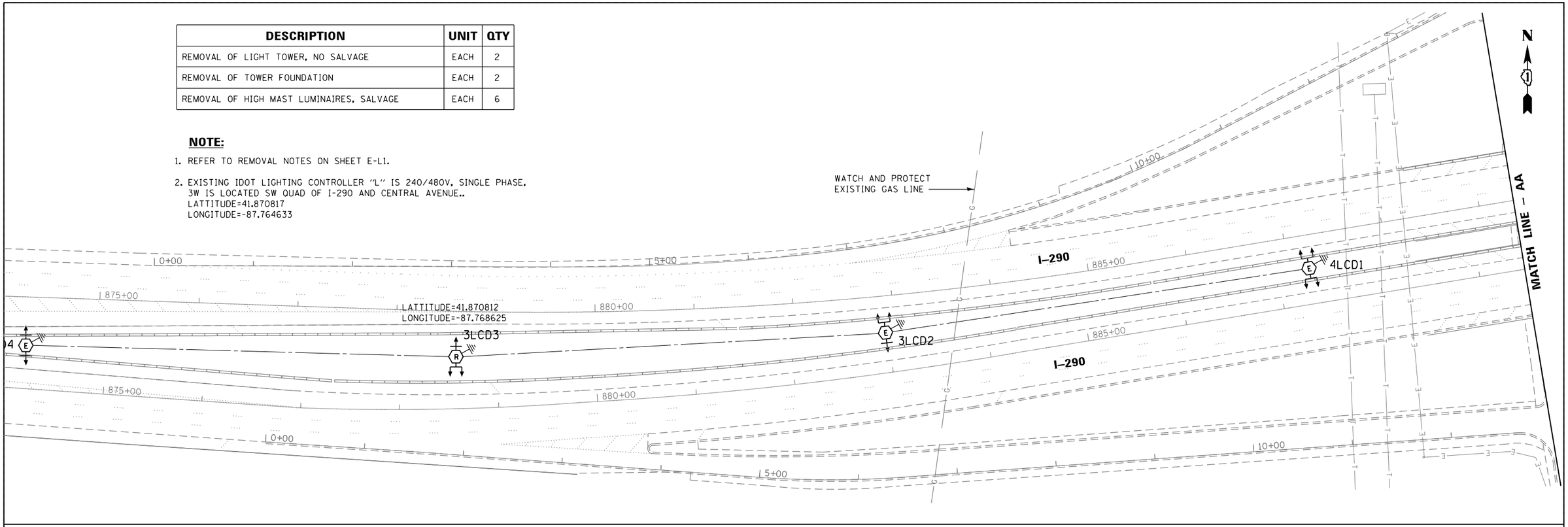
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2016-017L	Mc Henry	88	23
		CONTRACT NO. 62C35		
	ILLINOIS	FED. AID PROJECT		

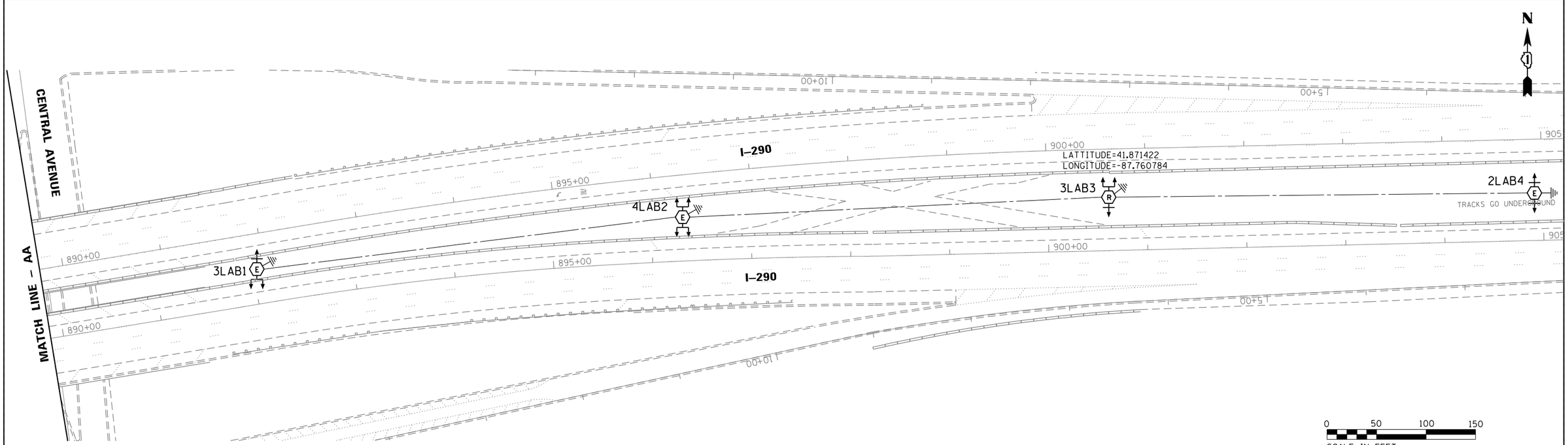
DESCRIPTION	UNIT	QTY
REMOVAL OF LIGHT TOWER, NO SALVAGE	EACH	2
REMOVAL OF TOWER FOUNDATION	EACH	2
REMOVAL OF HIGH MAST LUMINAIRES, SALVAGE	EACH	6

NOTE:

1. REFER TO REMOVAL NOTES ON SHEET E-L1.

2. EXISTING IDOT LIGHTING CONTROLLER "L" IS 240/480V, SINGLE PHASE, 3W IS LOCATED SW QUAD OF I-290 AND CENTRAL AVENUE..
   LATTITUDE=41.870817
   LONGITUDE=-87.764633





E–LR6

DELTA ENGINEERING GROUP, LLC

USER NAME = $USER$	DESIGNED - HM	REVISED -
	DRAWN - GJ	REVISED -
PLOT SCALE = $SCALE$	CHECKED - HS	REVISED -
PLOT DATE = $DATE$	DATE - 03-21-2017	REVISED -

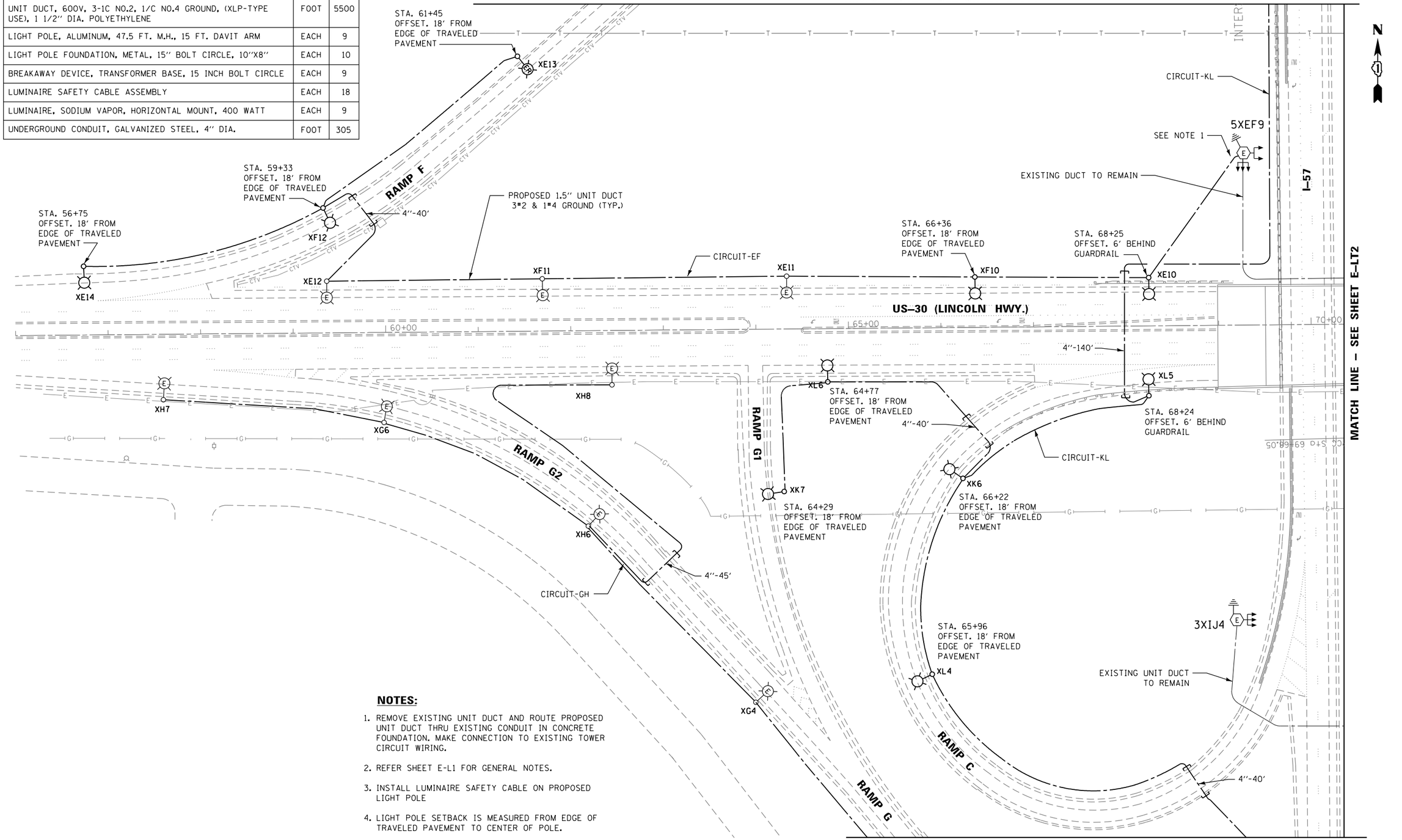
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

LIGHTING REMOVAL PLAN
I–290 / CENTRAL AVE. – SHEET 1 OF 1

SCALE: 1"=50' | SHEET 12 OF 14 SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2016-017L	COOK	88	24
		CONTRACT NO. 62C35		
	ILLINOIS FED. AID PROJECT			

DESCRIPTION	UNIT	QTY
UNIT DUCT, 600V, 3-1C NO.2, 1/C NO.4 GROUND, (XLP-TYPE USE), 1 1/2" DIA. POLYETHYLENE	FOOT	5500
LIGHT POLE, ALUMINUM, 47.5 FT. M.H., 15 FT. DAVIT ARM	EACH	9
LIGHT POLE FOUNDATION, METAL, 15" BOLT CIRCLE, 10"X8"	EACH	10
BREAKAWAY DEVICE, TRANSFORMER BASE, 15 INCH BOLT CIRCLE	EACH	9
LUMINAIRE SAFETY CABLE ASSEMBLY	EACH	18
LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, 400 WATT	EACH	9
UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	305



NOTES:

1. REMOVE EXISTING UNIT DUCT AND ROUTE PROPOSED UNIT DUCT THRU EXISTING CONDUIT IN CONCRETE FOUNDATION. MAKE CONNECTION TO EXISTING TOWER CIRCUIT WIRING.
2. REFER SHEET E-L1 FOR GENERAL NOTES.
3. INSTALL LUMINAIRE SAFETY CABLE ON PROPOSED LIGHT POLE
4. LIGHT POLE SETBACK IS MEASURED FROM EDGE OF TRAVELED PAVEMENT TO CENTER OF POLE.

E–LT1

DELTA ENGINEERING GROUP, LLC

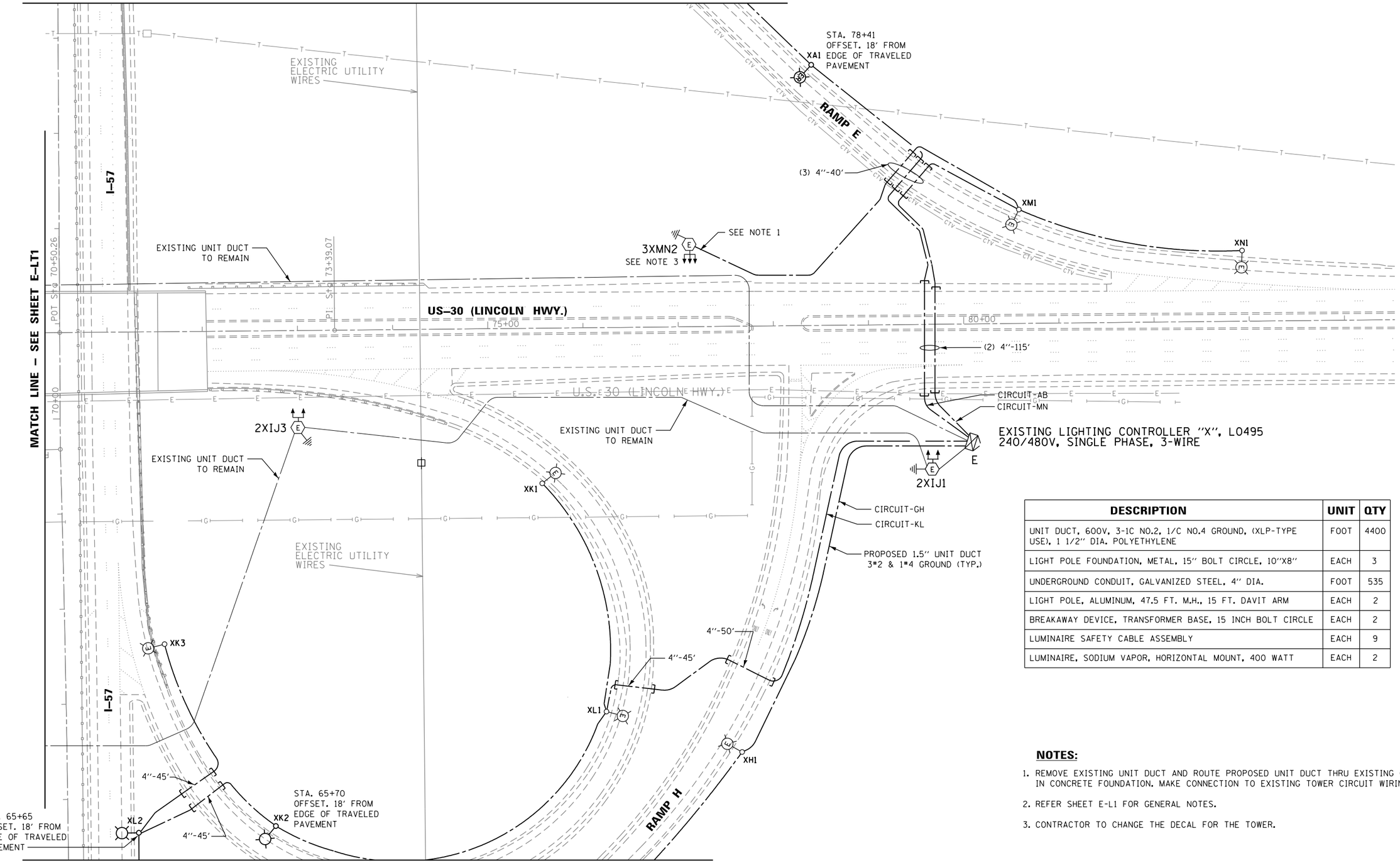
USER NAME = $USER$	DESIGNED - HM	REVISED -
	DRAWN - GJ	REVISED -
PLOT SCALE = $SCALE$	CHECKED - HS	REVISED -
PLOT DATE = $DATE$	DATE - 03-21-2017	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED LIGHTING PLAN
I–57 /US–30 – SHEET 1 OF 4

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2016-017L	COOK	88	25
		CONTRACT NO. 62C35		
	ILLINOIS FED. AID PROJECT			



DESCRIPTION	UNIT	QTY
UNIT DUCT, 600V, 3-1C NO.2, 1/C NO.4 GROUND, (XLP-TYPE USE), 1 1/2'' DIA. POLYETHYLENE	FOOT	4400
LIGHT POLE FOUNDATION, METAL, 15'' BOLT CIRCLE, 10''X8''	EACH	3
UNDERGROUND CONDUIT, GALVANIZED STEEL, 4'' DIA.	FOOT	535
LIGHT POLE, ALUMINUM, 47.5 FT. M.H., 15 FT. DAVIT ARM	EACH	2
BREAKAWAY DEVICE, TRANSFORMER BASE, 15 INCH BOLT CIRCLE	EACH	2
LUMINAIRE SAFETY CABLE ASSEMBLY	EACH	9
LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, 400 WATT	EACH	2

NOTES:

1. REMOVE EXISTING UNIT DUCT AND ROUTE PROPOSED UNIT DUCT THRU EXISTING CONDUIT IN CONCRETE FOUNDATION. MAKE CONNECTION TO EXISTING TOWER CIRCUIT WIRING.
2. REFER SHEET E-L1 FOR GENERAL NOTES.
3. CONTRACTOR TO CHANGE THE DECAL FOR THE TOWER.

E–LT2

DELTA ENGINEERING GROUP, LLC

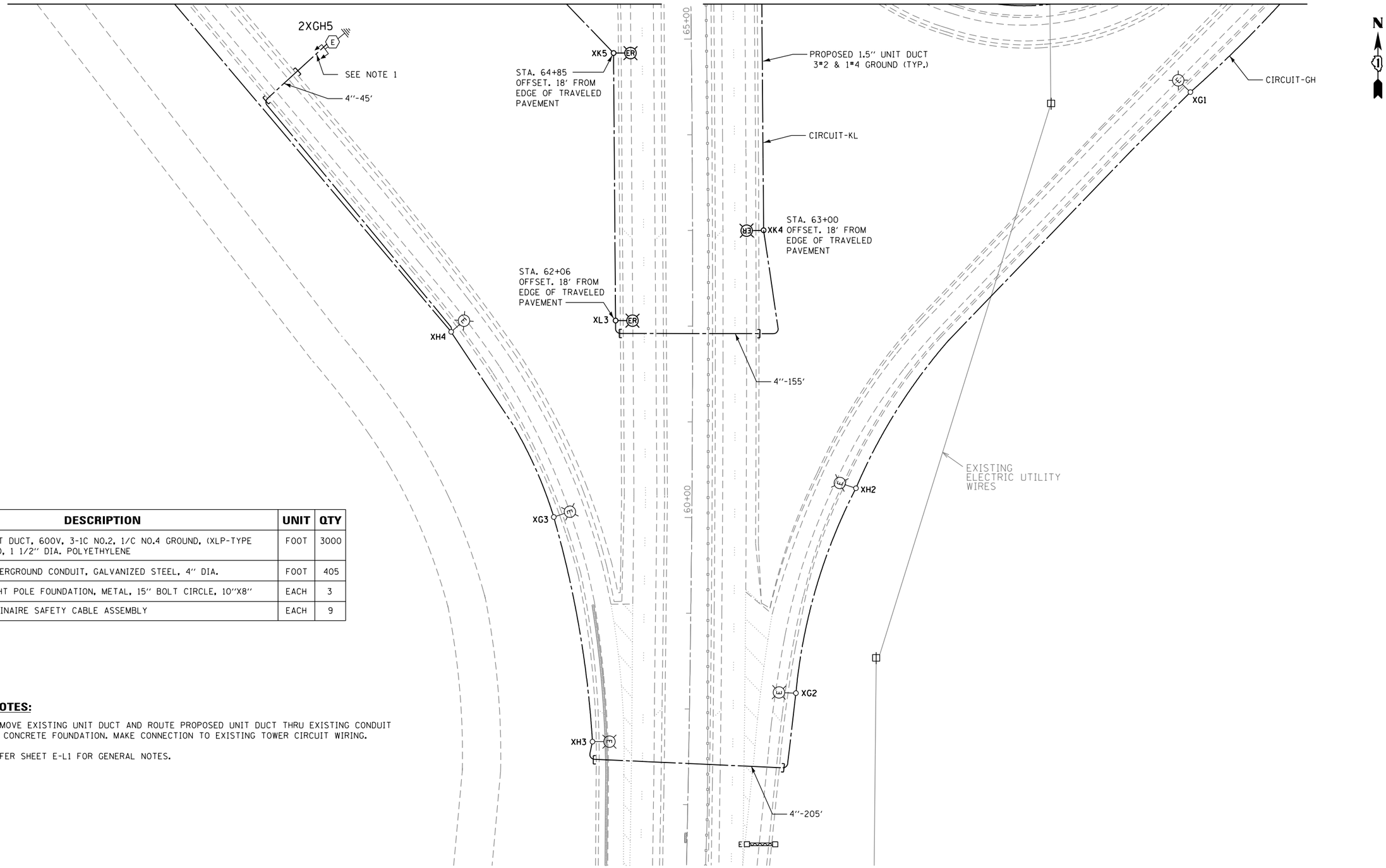
USER NAME = $USER$	DESIGNED - HM	REVISED -	
	DRAWN - GJ	REVISED -	
PLOT SCALE = $SCALE$	CHECKED - HS	REVISED -	
PLOT DATE = $DATE$	DATE - 03-21-2017	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED LIGHTING PLAN
I–57 /US–30 – SHEET 2 OF 4

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2016-017L	COOK	88	26
		CONTRACT NO. 62C35		
	ILLINOIS FED. AID PROJECT			



DESCRIPTION	UNIT	QTY
UNIT DUCT, 600V, 3-1C NO.2, 1/C NO.4 GROUND, (XLP-TYPE USE), 1 1/2" DIA. POLYETHYLENE	FOOT	3000
UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	405
LIGHT POLE FOUNDATION, METAL, 15" BOLT CIRCLE, 10"X8"	EACH	3
LUMINAIRE SAFETY CABLE ASSEMBLY	EACH	9

NOTES:

1. REMOVE EXISTING UNIT DUCT AND ROUTE PROPOSED UNIT DUCT THRU EXISTING CONDUIT IN CONCRETE FOUNDATION. MAKE CONNECTION TO EXISTING TOWER CIRCUIT WIRING.

2. REFER SHEET E-L1 FOR GENERAL NOTES.

E–LT3

DELTA ENGINEERING GROUP, LLC

USER NAME = $USER$	DESIGNED - HM	REVISED -	
	DRAWN - GJ	REVISED -	
PLOT SCALE = $SCALE$	CHECKED - HS	REVISED -	
PLOT DATE = $DATE$	DATE - 03-21-2017	REVISED -	

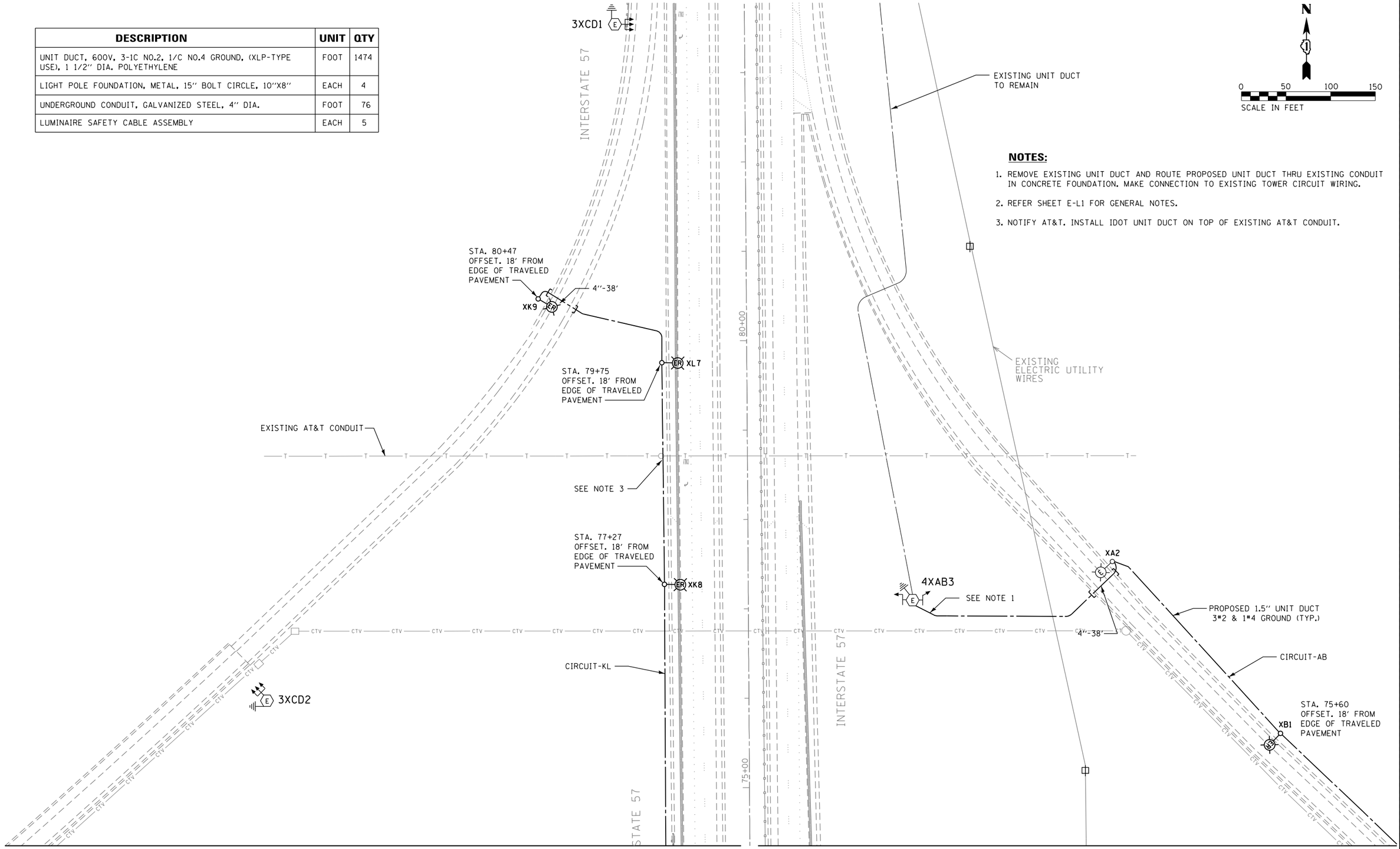
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED LIGHTING PLAN
I–57 /US–30 – SHEET 3 OF 4

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2016-017L	COOK	88	27
		CONTRACT NO. 62C35		
	ILLINOIS FED. AID PROJECT			

DESCRIPTION	UNIT	QTY
UNIT DUCT, 600V, 3-1C NO.2, 1/C NO.4 GROUND, (XLP-TYPE USE), 1 1/2" DIA. POLYETHYLENE	FOOT	1474
LIGHT POLE FOUNDATION, METAL, 15" BOLT CIRCLE, 10"X8"	EACH	4
UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	76
LUMINAIRE SAFETY CABLE ASSEMBLY	EACH	5



NOTES:

1. REMOVE EXISTING UNIT DUCT AND ROUTE PROPOSED UNIT DUCT THRU EXISTING CONDUIT IN CONCRETE FOUNDATION. MAKE CONNECTION TO EXISTING TOWER CIRCUIT WIRING.
2. REFER SHEET E-L1 FOR GENERAL NOTES.
3. NOTIFY AT&T. INSTALL IDOT UNIT DUCT ON TOP OF EXISTING AT&T CONDUIT.

MATCH LINE – SEE SHEET E–LT1

MATCH LINE – SEE SHEET E–LT2

E–LT4

DELTA ENGINEERING GROUP, LLC

USER NAME = $USER$	DESIGNED - HM	REVISED -	
	DRAWN - GJ	REVISED -	
PLOT SCALE = $SCALE$	CHECKED - HS	REVISED -	
PLOT DATE = $DATE$	DATE - 03-21-2017	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED LIGHTING PLAN
I–57 /US–30 – SHEET 4 OF 4

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2016-017L	COOK	88	28
		CONTRACT NO. 62C35		
	ILLINOIS FED. AID PROJECT			

DESCRIPTION	UNIT	QTY
LIGHT TOWER, 100 FT. MOUNTING HEIGHT, LUMINAIRE MT. - 8	EACH	2
UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	130
UNIT DUCT, 600V, 3-1C NO.2, 1/C NO.4 GROUND, (XLP-TYPE USE), 1 1/2" DIA. POLYETHYLENE	FOOT	1450
LIGHT TOWER FOUNDATION, 48" DIAMETER	FOOT	31
LUMINAIRE, SODIUM VAPOR, HIGH MAST, HORIZONTAL MOUNT, 750 WATT	EACH	6

NOTES:

1. REMOVE EXISTING UNIT DUCT AND ROUTE PROPOSED UNIT DUCT THRU EXISTING CONDUIT IN CONCRETE FOUNDATION. MAKE CONNECTION TO EXISTING TOWER CIRCUIT WIRING.
2. PROPOSED LIGHTING TOWER 100FT WITH 750W HPS, 240V LUMINAIRES ON 48" DIA CONCRETE FOUNDATION.
3. REFER SHEET E-11 FOR GENERAL NOTES.
4. FIELD VERIFY EXISTING JUNCTION BOX FOR EXISTING UNDERPASS LIGHTING. REMOVE EXISTING UNIT DUCT CONNECTION AND PROVIDE PROPOSED UNIT DUCT CONNECTION IN THE JUNCTION BOX FOR UNDERPASS LIGHTING.
5. MAINTAIN EXISTING UNIT DUCT AT THE JUNCTIN BOX AT COLUMN. PROVIDE PROPOSED UNIT DUCT FROM JUNCTION BOX UPTO PROPOSED TOWER 3MACD1, EXISTING TOWER 3MACD2 AND EXISTING LIGHT POLE MAC4.
6. REFER TO SHEET C-7 FOR PROPOSED TOWER CLEAR ZONE REQUIREMENTS. IN ANY CASE PROPOSED TOWER SHALL NOT BE INSTALLED INSIDE CLEAR ZONE.

N

3MACD2
SEE NOTE 1
RAMP A
IL RTE. 31
RAMP D
45+00
55+00
4"-45'
PROPOSED 1.5" UNIT DUCT
3#2 & 1#4 GROUND (TYP.)
SEE NOTE 2
FOUNDATION
DEPTH - 15.5 FT
3MACD1
PROPOSED UNIT DUCT
TO EXISTING UNDERPASS
LIGHTING JUNCTION BOX
SEE NOTE 4
EXISTING 4"C
EMBEDDED IN
STRUCTURE
NOTE 5
JB
MAC4
U.S. 14
US-14
30+00
35+00
40+00
50+00
NOTE 4
EXISTING IDOT LIGHTING CONTROLLER "MA", L2305
240 / 480 VOLT, SINGLE PHASE, 3-WIRE
MAF1
3MAEF2
SEE NOTE 2
FOUNDATION
DEPTH - 15.5 FT
4"-40'
ILL. RTE. 31

0 50 100 150
SCALE IN FEET

E-LT5

DELTA ENGINEERING GROUP, LLC

USER NAME = $USER$	DESIGNED - HM	REVISED -
	DRAWN - GJ	REVISED -
PLOT SCALE = $SCALE$	CHECKED - HS	REVISED -
PLOT DATE = $DATE$	DATE - 03-21-2017	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED LIGHTING PLAN
US-14 / IL 31 - SHEET 1 OF 1

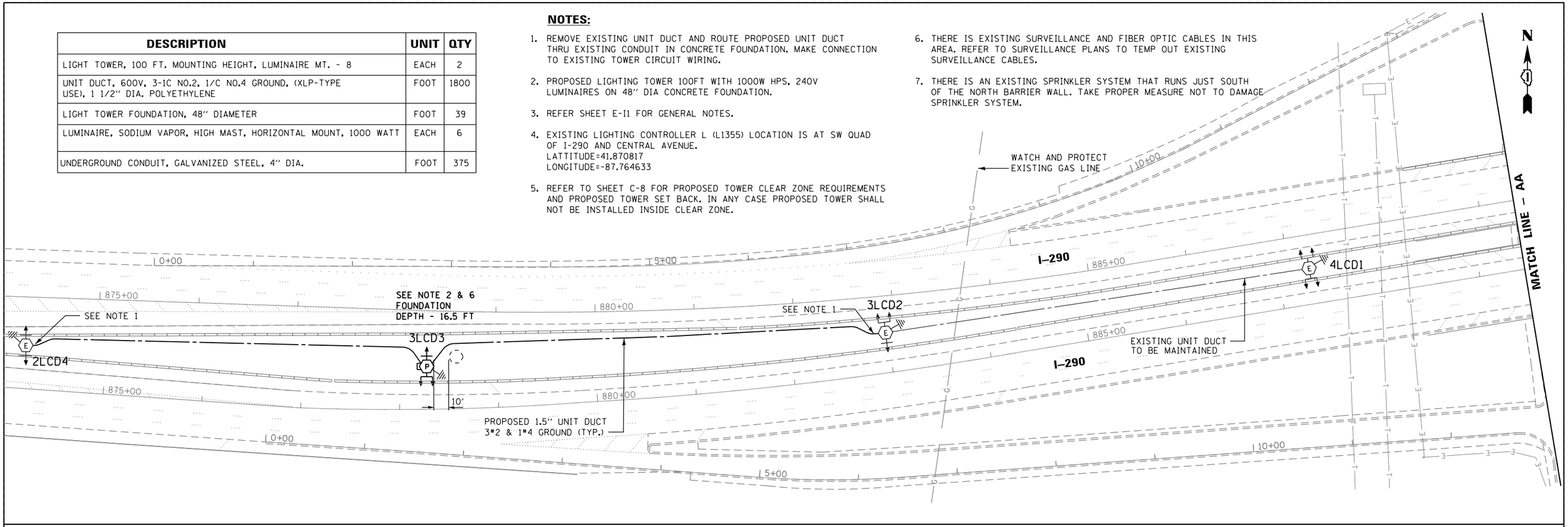
SCALE: | SHEET OF SHEETS | STA. | TO STA.

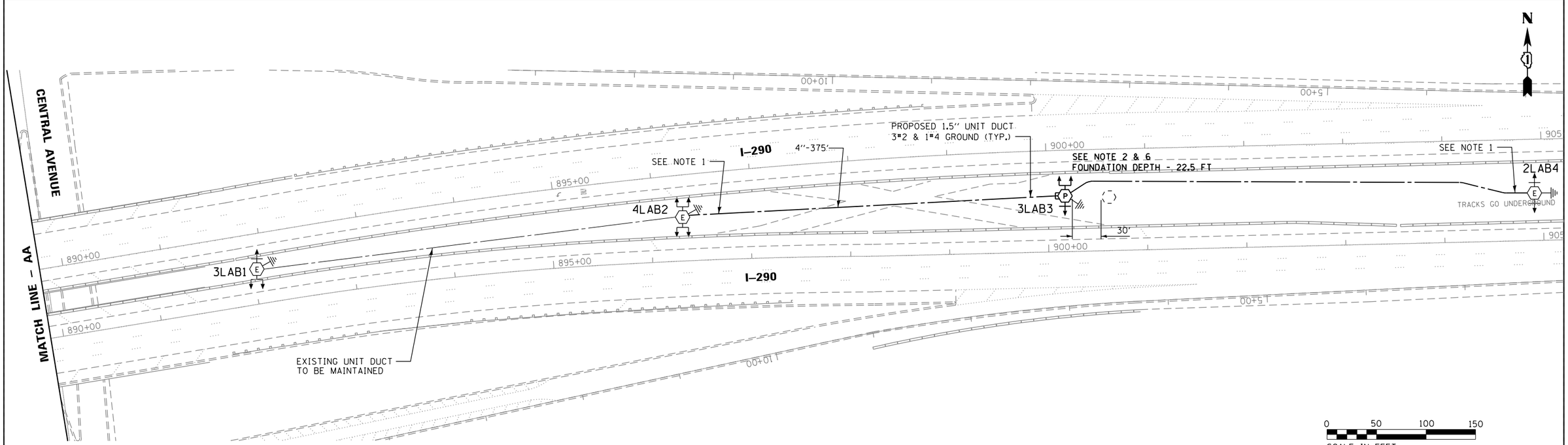
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2016-017L	Mc Henry	88	29
		CONTRACT NO. 62C35		
	ILLINOIS FED. AID PROJECT			

DESCRIPTION	UNIT	QTY
LIGHT TOWER, 100 FT. MOUNTING HEIGHT, LUMINAIRE MT. - 8	EACH	2
UNIT DUCT, 600V, 3-1C NO.2, 1/C NO.4 GROUND, (XLP-TYPE USE), 1 1/2" DIA. POLYETHYLENE	FOOT	1800
LIGHT TOWER FOUNDATION, 48" DIAMETER	FOOT	39
LUMINAIRE, SODIUM VAPOR, HIGH MAST, HORIZONTAL MOUNT, 1000 WATT	EACH	6
UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	375

NOTES:

1. REMOVE EXISTING UNIT DUCT AND ROUTE PROPOSED UNIT DUCT THRU EXISTING CONDUIT IN CONCRETE FOUNDATION. MAKE CONNECTION TO EXISTING TOWER CIRCUIT WIRING.
2. PROPOSED LIGHTING TOWER 100FT WITH 1000W HPS, 240V LUMINAIRES ON 48" DIA CONCRETE FOUNDATION.
3. REFER SHEET E-11 FOR GENERAL NOTES.
4. EXISTING LIGHTING CONTROLLER L (L1355) LOCATION IS AT SW QUAD OF I-290 AND CENTRAL AVENUE.
   LATTITUDE=41.870817
   LONGITUDE=-87.764633
5. REFER TO SHEET C-8 FOR PROPOSED TOWER CLEAR ZONE REQUIREMENTS AND PROPOSED TOWER SET BACK. IN ANY CASE PROPOSED TOWER SHALL NOT BE INSTALLED INSIDE CLEAR ZONE.
6. THERE IS EXISTING SURVEILLANCE AND FIBER OPTIC CABLES IN THIS AREA. REFER TO SURVEILLANCE PLANS TO TEMP OUT EXISTING SURVEILLANCE CABLES.
7. THERE IS AN EXISTING SPRINKLER SYSTEM THAT RUNS JUST SOUTH OF THE NORTH BARRIER WALL. TAKE PROPER MEASURE NOT TO DAMAGE SPRINKLER SYSTEM.





E–LT6

DELTA ENGINEERING GROUP, LLC

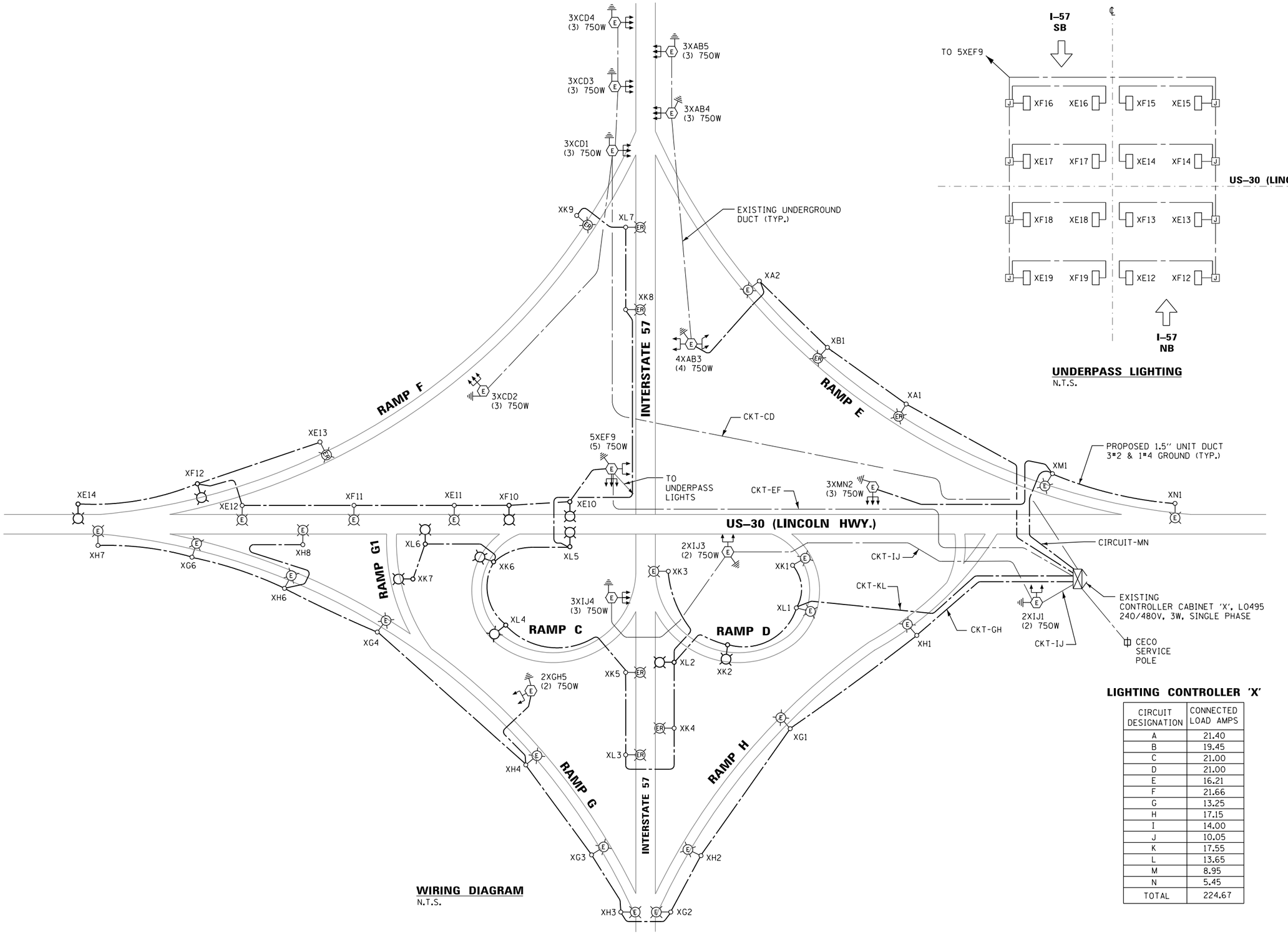
USER NAME = $USER$	DESIGNED - HM	REVISED -
	DRAWN - GJ	REVISED -
PLOT SCALE = $SCALE$	CHECKED - HS	REVISED -
PLOT DATE = $DATE$	DATE - 03-21-2017	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

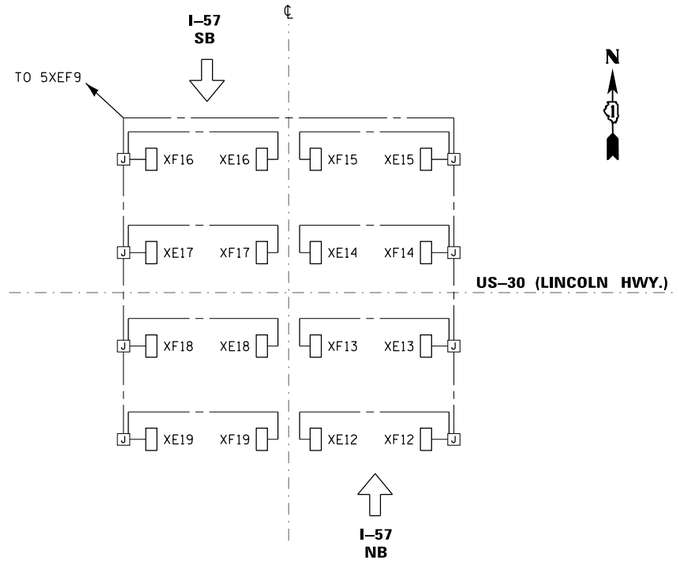
PROPOSED LIGHTING PLAN
I–290 / CENTRAL AVE. – SHEET 1 OF 1

SCALE: 1"=50' | SHEET 12 OF 14 SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2016-017L	COOK	88	30
		CONTRACT NO. 62C35		
	ILLINOIS	FED. AID PROJECT		



WIRING DIAGRAM
N.T.S.



UNDERPASS LIGHTING
N.T.S.

LIGHTING CONTROLLER 'X'

CIRCUIT DESIGNATION	CONNECTED LOAD AMPS
A	21.40
B	19.45
C	21.00
D	21.00
E	16.21
F	21.66
G	13.25
H	17.15
I	14.00
J	10.05
K	17.55
L	13.65
M	8.95
N	5.45
TOTAL	224.67

E–LT7

DELTA ENGINEERING GROUP, LLC

USER NAME = $USER$	DESIGNED - HM	REVISED -	
	DRAWN - GJ	REVISED -	
PLOT SCALE = $SCALE$	CHECKED - HS	REVISED -	
PLOT DATE = $DATE$	DATE - 03-21-2017	REVISED -	

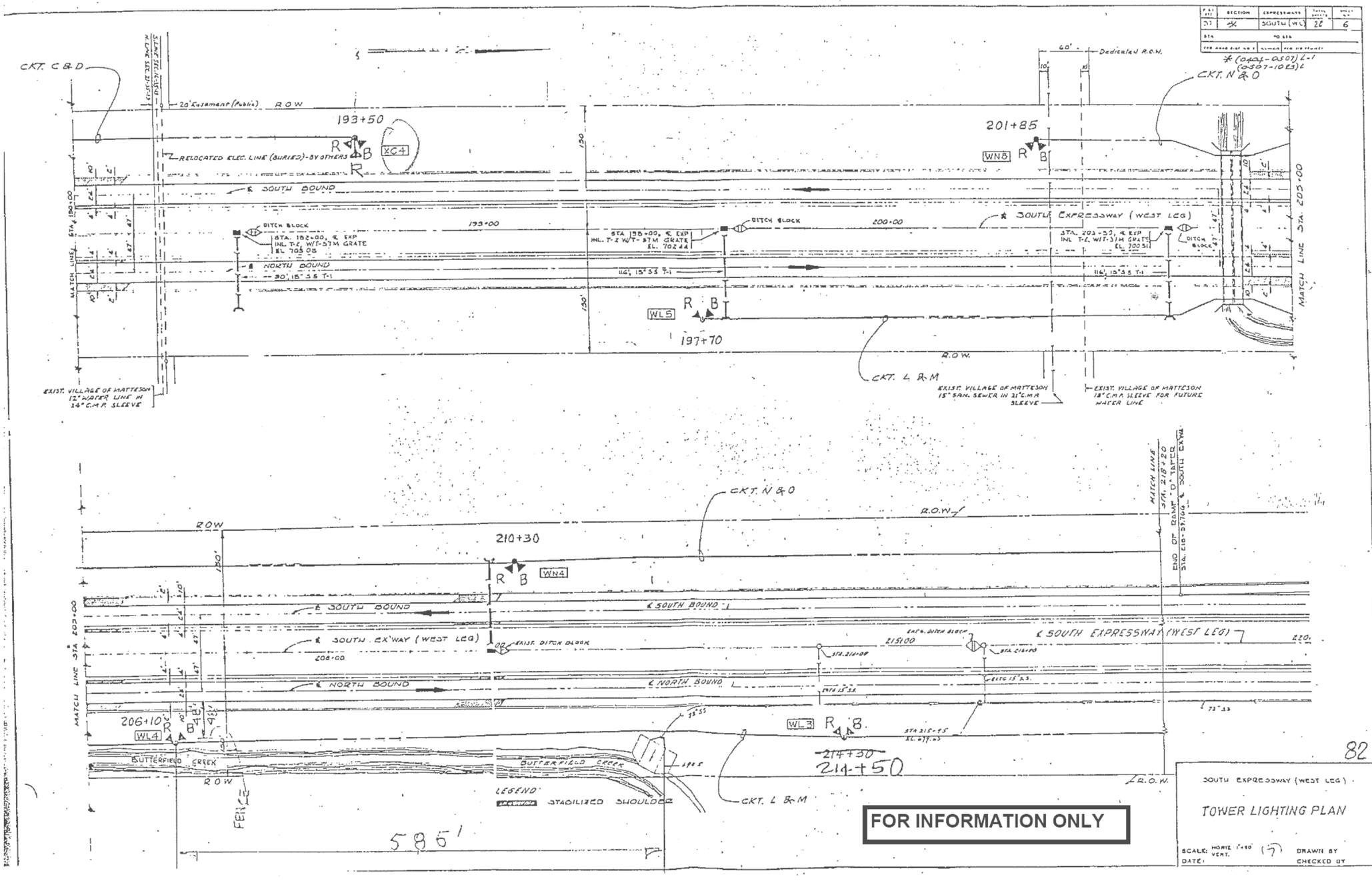
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SINGLE LINE DIAGRAM FOR EXISTING CONTROLLER 'X' AT US–30 (LINCOLN HWY) AND INTERSTATE 57

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

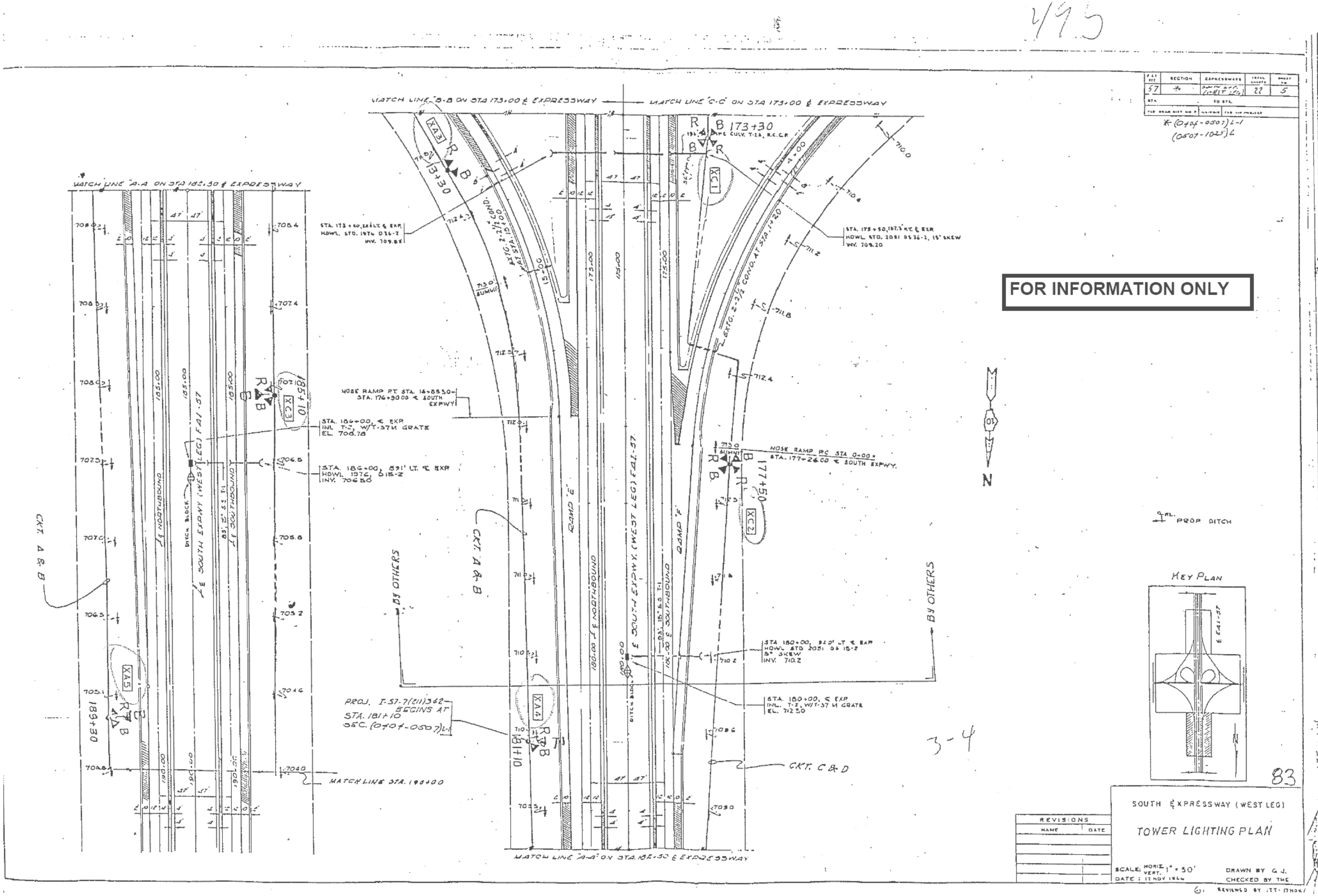
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2016-017L		88	31
		CONTRACT NO. 62C35		
	ILLINOIS FED. AID PROJECT			

492 - 495



DELTA ENGINEERING GROUP, LLC	USER NAME = $USER$	DESIGNED - HM	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	I-57 / US-30 INFORMATION ONLY SHEET
		DRAWN - GJ	REVISED -		
	PLOT SCALE = $SCALE$	CHECKED - HS	REVISED -		SCALE: SHEET OF SHEETS STA. TO STA.
	PLOT DATE = $DATE$	DATE - 03-21-2017	REVISED -		

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2016-017L		88	32
			CONTRACT NO. 62C35	
		ILLINOIS	FED. AID PROJECT	



DELTA ENGINEERING GROUP, LLC	USER NAME = $USER$	DESIGNED - HM	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	I-57 / US-30 INFORMATION ONLY SHEET
		DRAWN - GJ	REVISED -		
	PLOT SCALE = $SCALE$	CHECKED - HS	REVISED -		
	PLOT DATE = $DATE$	DATE - 03-21-2017	REVISED -		SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2016-017L		88	33
		CONTRACT NO. 62C35		
	ILLINOIS FED. AID PROJECT			

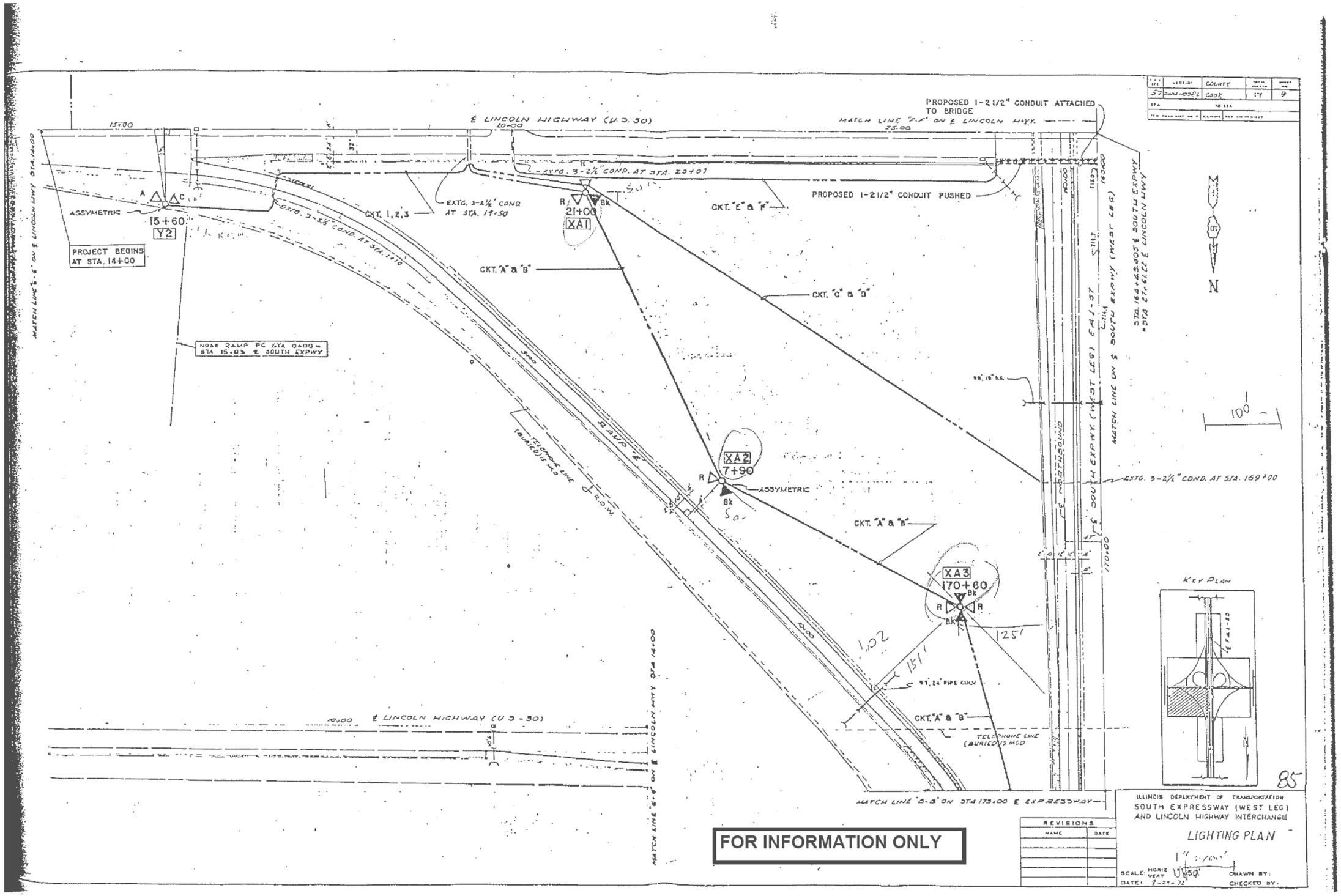
DELTA ENGINEERING GROUP, LLC	USER NAME = $USER$	DESIGNED - HM	REVISED -
		DRAWN - GJ	REVISED -
	PLOT SCALE = $SCALE$	CHECKED - HS	REVISED -
	PLOT DATE = $DATE$	DATE - 03-21-2017	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I–57 / US–30
INFORMATION ONLY SHEET

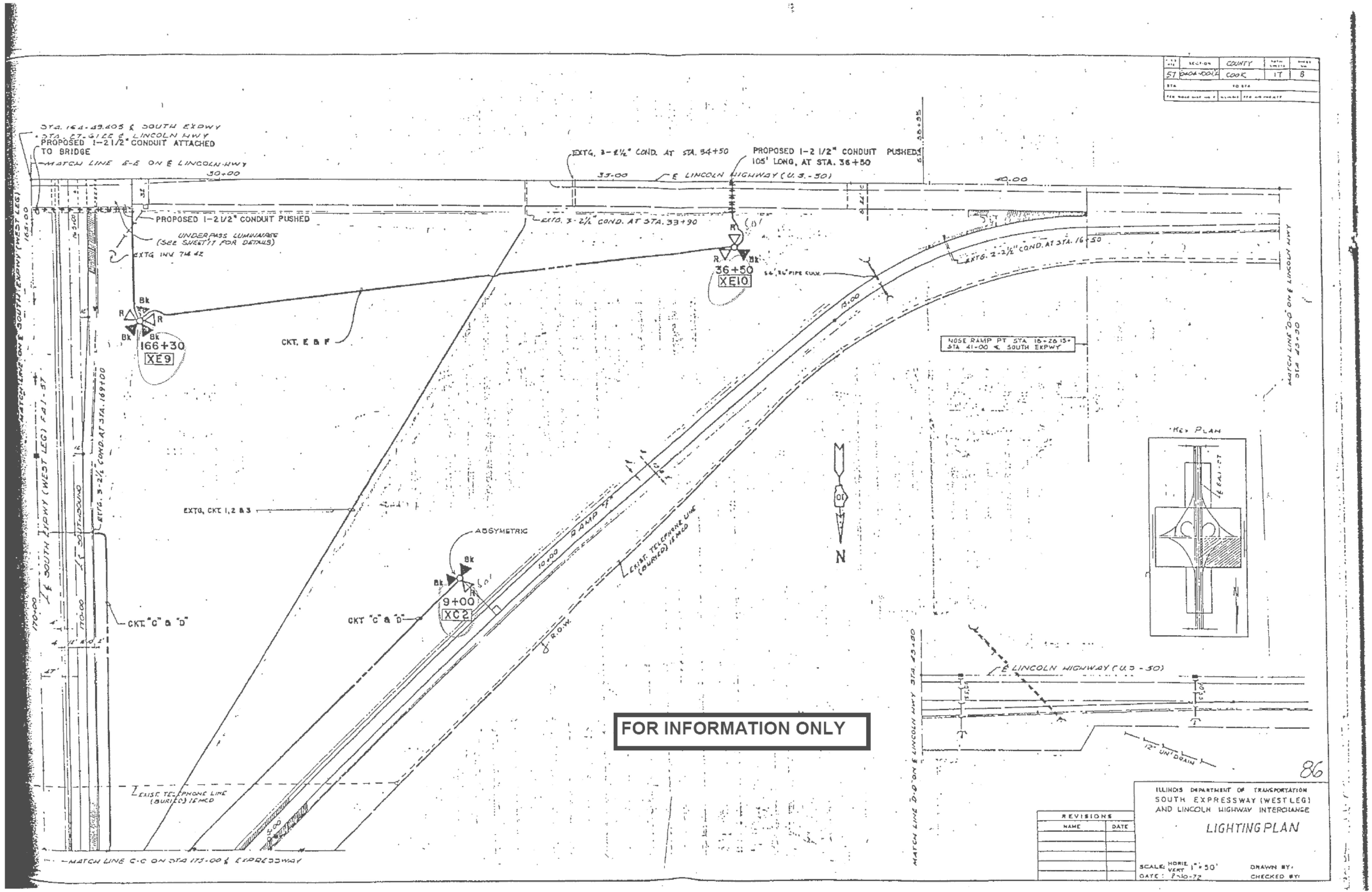
SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2016-017L		88	34
		CONTRACT NO. 62C35		
	ILLINOIS FED. AID PROJECT			



FOR INFORMATION ONLY

DELTA ENGINEERING GROUP, LLC	USER NAME = $USER$	DESIGNED - HM	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	I–57 / US–30 INFORMATION ONLY SHEET	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - GJ	REVISED -				2016-017L		88	35
	PLOT SCALE = $SCALE$	CHECKED - HS	REVISED -					CONTRACT NO. 62C35		
	PLOT DATE = $DATE$	DATE - 03-21-2017	REVISED -		SCALE: SHEET OF SHEETS STA. TO STA.		ILLINOIS FED. AID PROJECT			


PROPOSED 1-2 1/2" CONDUIT ATTACHED TO BRIDGE
PROPOSED 1-2 1/2" CONDUIT PUSHED
UNDERPASS LUMINAIRE (SEE SHEET 17 FOR DETAILS)
EXTG. 3-2 1/2" COND. AT STA. 34+50
PROPOSED 1-2 1/2" CONDUIT PUSHED 105' LONG, AT STA. 36+50
EXTG. 3-2 1/2" COND. AT STA. 33+90
E LINCOLN HIGHWAY (U.S.-30)
166+30
XE9
36+50
XE10
CKT. E & F
EXTG. CKT 1, 2 & 3
ASYMETRIC
9+00
XC2
CKT. "C" & "D"
NOSE RAMP PT STA 16+26.15 = STA 41-00 ℄ SOUTH EXPWY
KEY PLAN
N
E LINCOLN HIGHWAY (U.S-30)
FOR INFORMATION ONLY
86
ILLINOIS DEPARTMENT OF TRANSPORTATION
SOUTH EXPRESSWAY (WEST LEG) AND LINCOLN HIGHWAY INTERCHANGE
LIGHTING PLAN
REVISIONS
NAME
DATE
DRAWN BY:
CHECKED BY:

DELTA ENGINEERING GROUP, LLC	USER NAME = $USER$	DESIGNED - HM	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
		DRAWN - GJ	REVISED -	
	PLOT SCALE = $SCALE$	CHECKED - HS	REVISED -	
	PLOT DATE = $DATE$	DATE - 03-21-2017	REVISED -	

I–57 / US–30
INFORMATION ONLY SHEET

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2016-017L		88	36

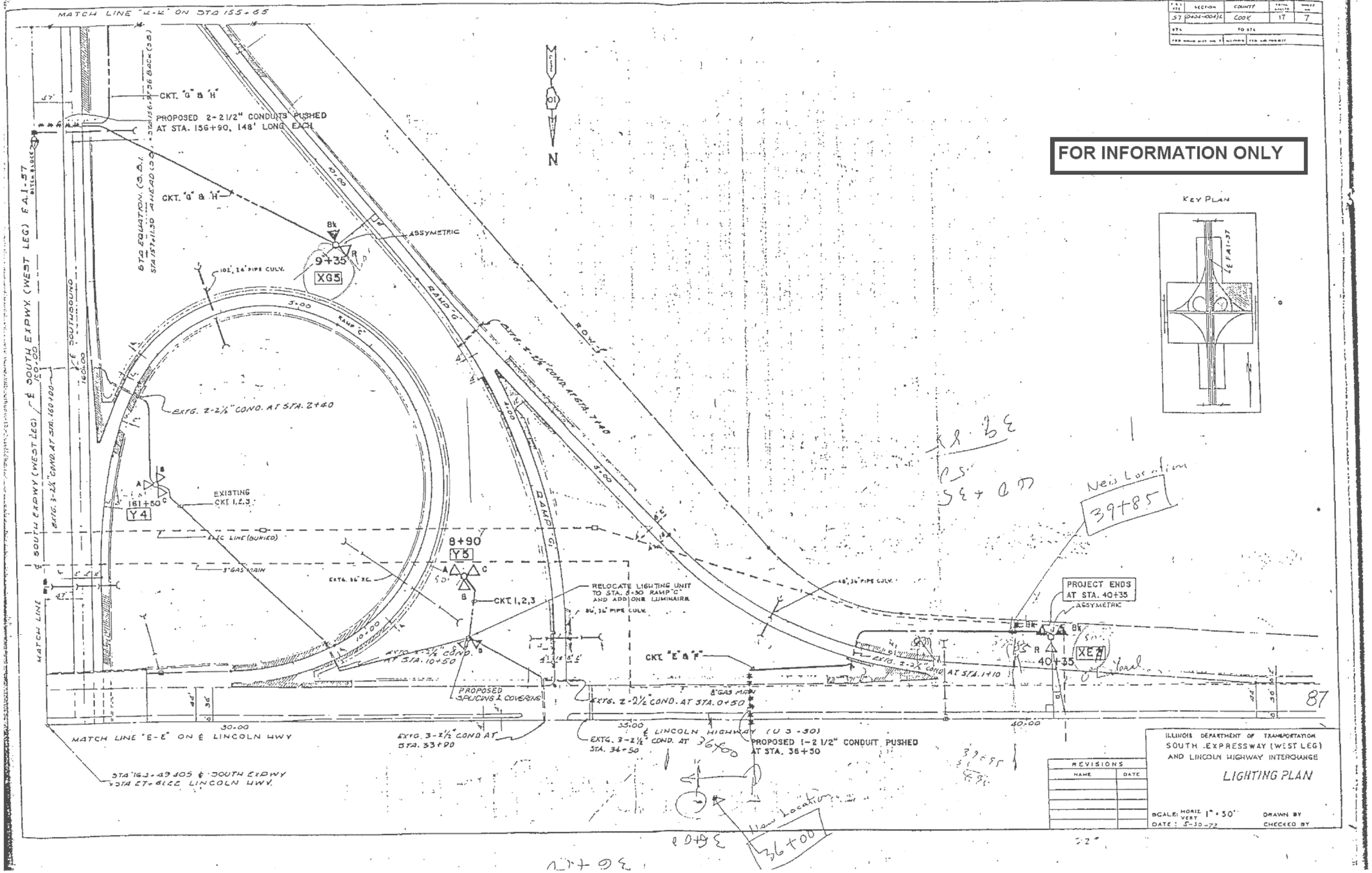
CONTRACT NO. 62C35

ILLINOIS FED. AID PROJECT

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
37	(2016-017L)	COOK	17	7
STA.	TO STA.			

FOR INFORMATION ONLY

KEY PLAN



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
SOUTH EXPRESSWAY (WEST LEG) AND LINCOLN HIGHWAY INTERCHANGE

LIGHTING PLAN

SCALE: HORIZ 1" = 50' VERT
DATE : 5-30-72
DRAWN BY
CHECKED BY

DELTA ENGINEERING GROUP, LLC

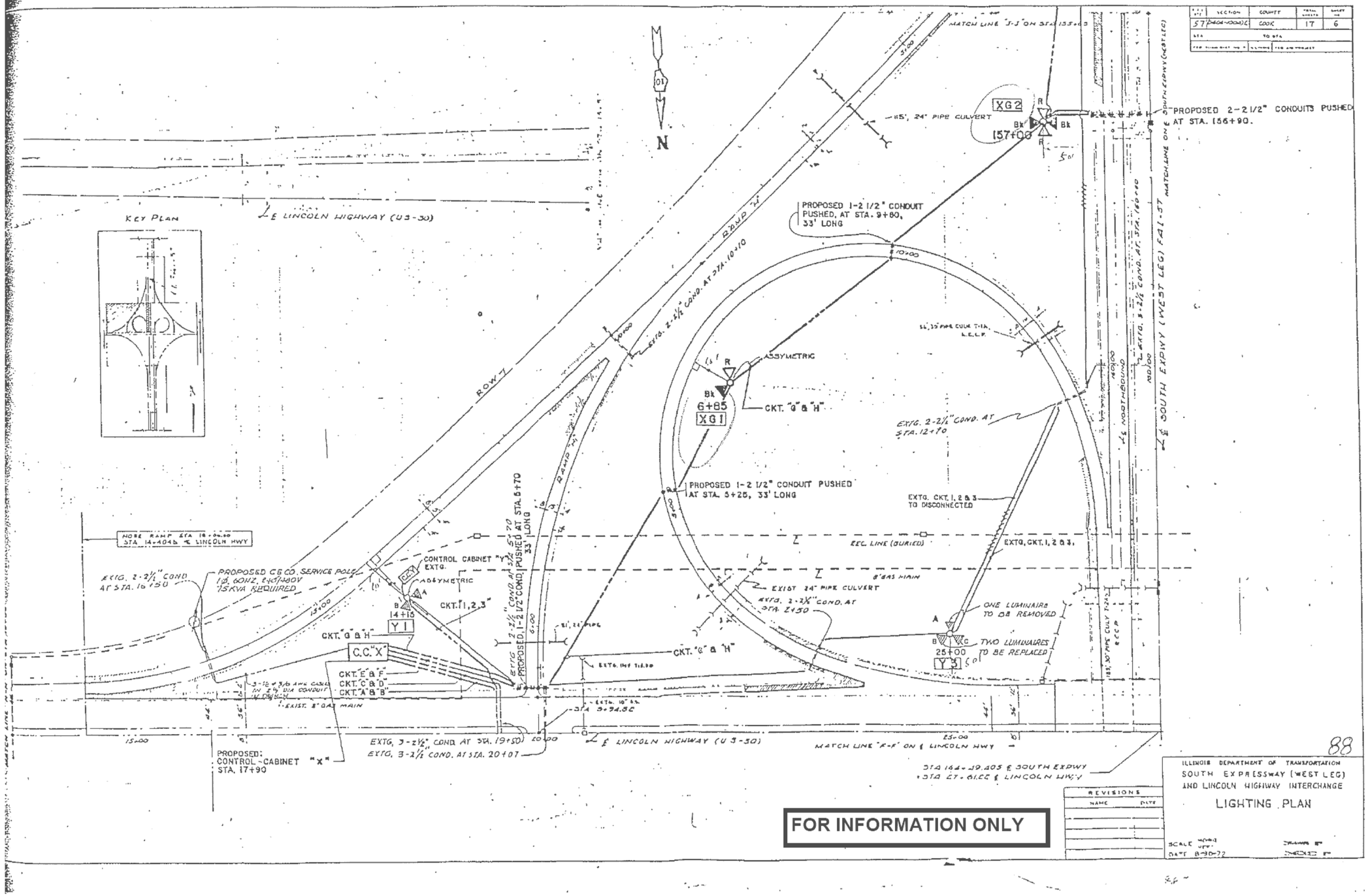
USER NAME = $USER$	DESIGNED - HM	REVISED -	
	DRAWN - GJ	REVISED -	
PLOT SCALE = $SCALE$	CHECKED - HS	REVISED -	
PLOT DATE = $DATE$	DATE - 03-21-2017	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I-57 / US-30
INFORMATION ONLY SHEET

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2016-017L		88	37
			CONTRACT NO. 62C35	
		ILLINOIS	FED. AID PROJECT	



F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	2016-017L	COOK	17	6
STA	TO STA			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

DELTA ENGINEERING GROUP, LLC

USER NAME = $USER$	DESIGNED - HM	REVISED -	
	DRAWN - GJ	REVISED -	
PLOT SCALE = $SCALE$	CHECKED - HS	REVISED -	
PLOT DATE = $DATE$	DATE - 03-21-2017	REVISED -	

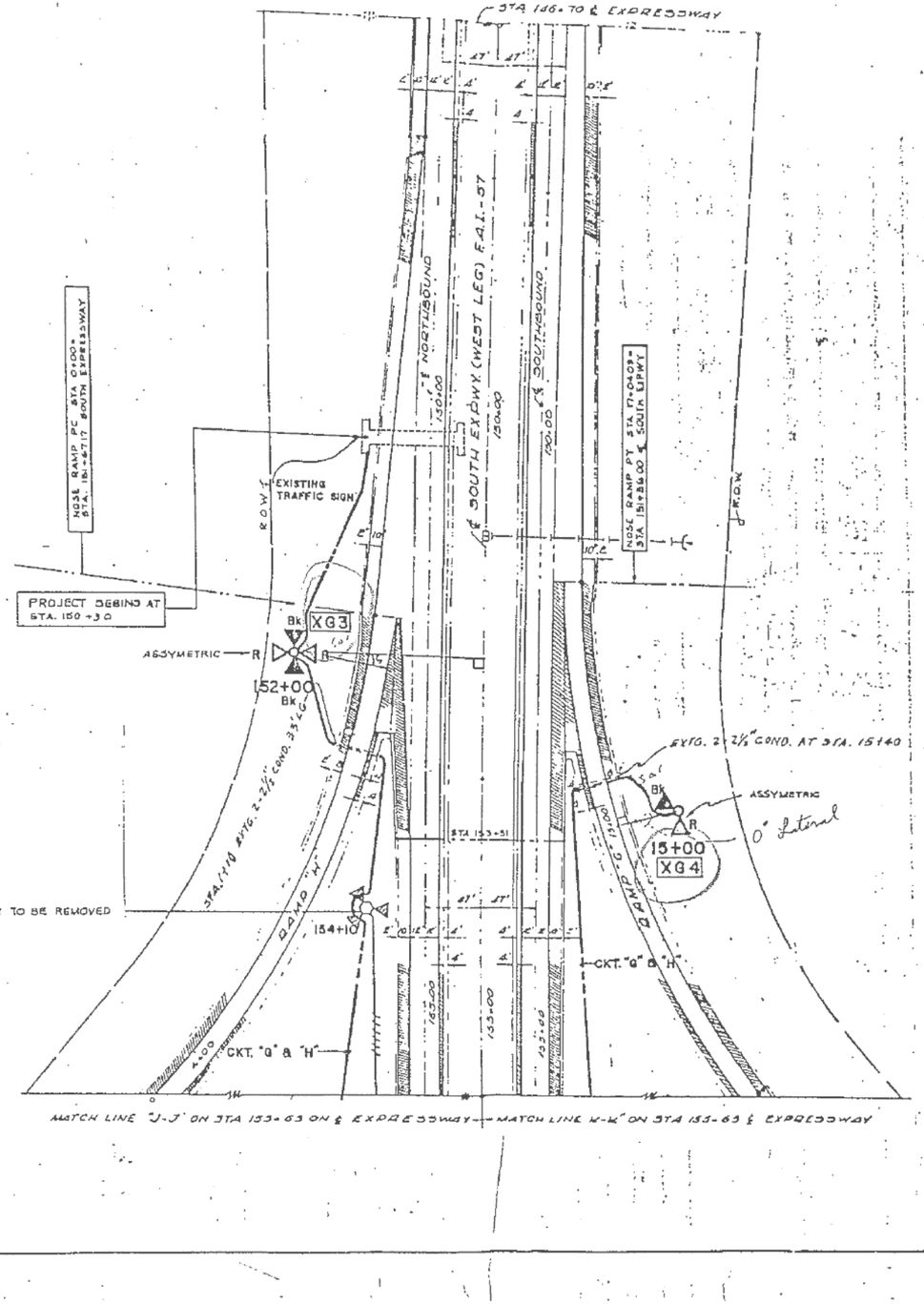
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I-57 / US-30
INFORMATION ONLY SHEET

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

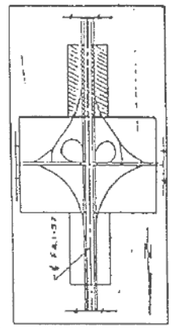
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2016-017L		88	38
			CONTRACT NO. 62C35	
	ILLINOIS	FED. AID PROJECT		

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	2016-017L	COOK	17	5
STA.		TO STA.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



FOR INFORMATION ONLY

KEY PLAN



89

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

SOUTH EXPRESSWAY (WEST LEG)
AND LINCOLN HIGHWAY INTERCHANGE

LIGHTING PLAN

SCALE: HORIZ. 1" = 50'
VERT.
DATE: 8-31-72

DRAWN BY

CHECKED BY:

DELTA ENGINEERING GROUP, LLC

USER NAME = $USER$	DESIGNED - HM	REVISED -	
	DRAWN - GJ	REVISED -	
PLOT SCALE = $SCALE$	CHECKED - HS	REVISED -	
PLOT DATE = $DATE$	DATE - 03-21-2017	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I-57 / US-30
INFORMATION ONLY SHEET

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

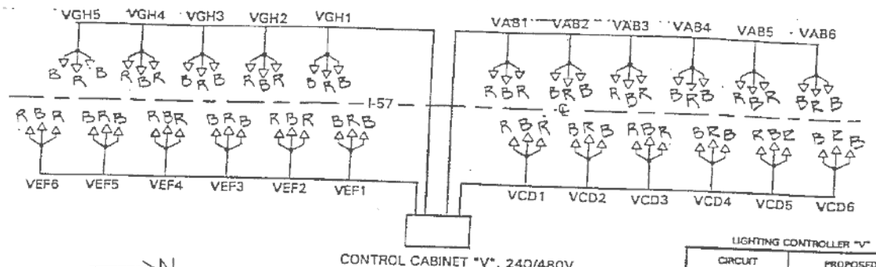
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2016-017L		88	39
			CONTRACT NO. 62C35	
		ILLINOIS	FED. AID PROJECT	

	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-57	-	COOK	8	6
STA.		TO STA.		

*(0709-1027K, 0507-1025 HBK & 0405-1023K)

L0495 P.C. "X"

INFORMATION ONLY



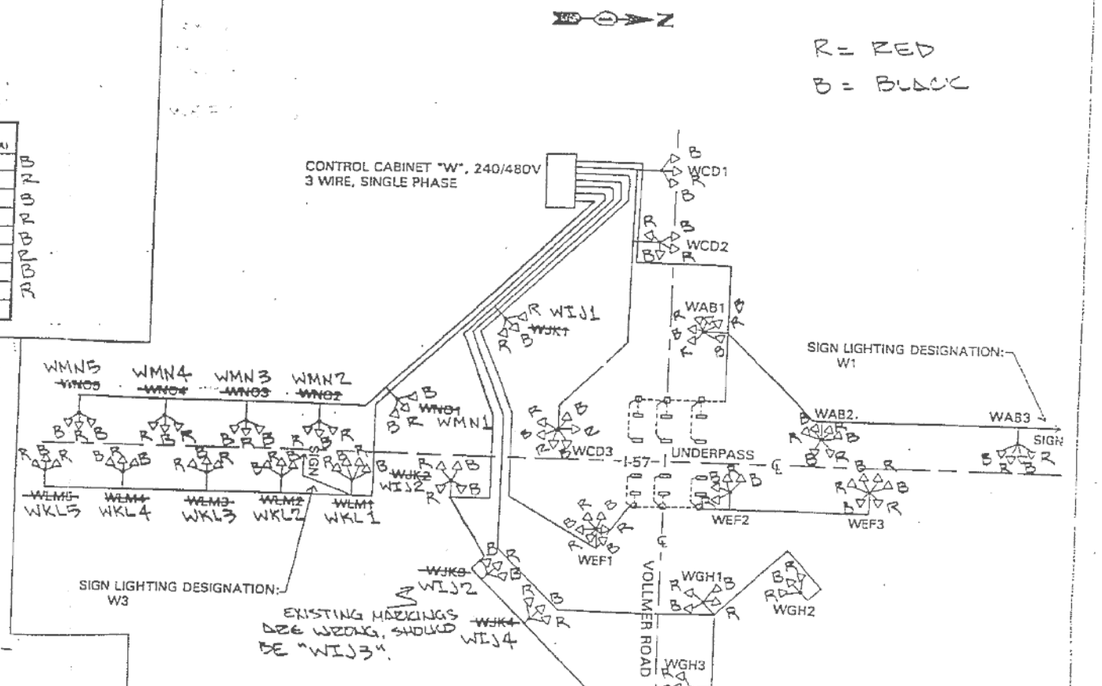
LIGHTING CONTROLLER "V"

CIRCUIT	PROPOSED CONNECTED LOAD (A)
A	31.5
B	31.5
C	31.5
D	31.5
E	31.5
F	31.5
G	28.0
H	24.5
TOTAL	241.5

BRBRBRBRBRBRBRBR

FOR INFORMATION ONLY

R = RED
B = BLACK



LIGHTING CONTROLLER "W"

CIRCUIT	PROPOSED CONNECTED LOAD (A)
A	29.6
B	29.5
C	24.5
D	21.0
E	29.5
F	29.5
G	17.5
H	17.5
I	28.0 ~~SPARE~~
J	28.0
K	28.0
L	28.0
M	28.0
N	24.5 ~~28.0~~
O	5½ ~~28.0~~
P	SPARE
TOTAL	353.0

BRBRBRBRBRBRBRBR

UNDERPASS LIGHTING DESIGNATION (SOUTHBOUND):

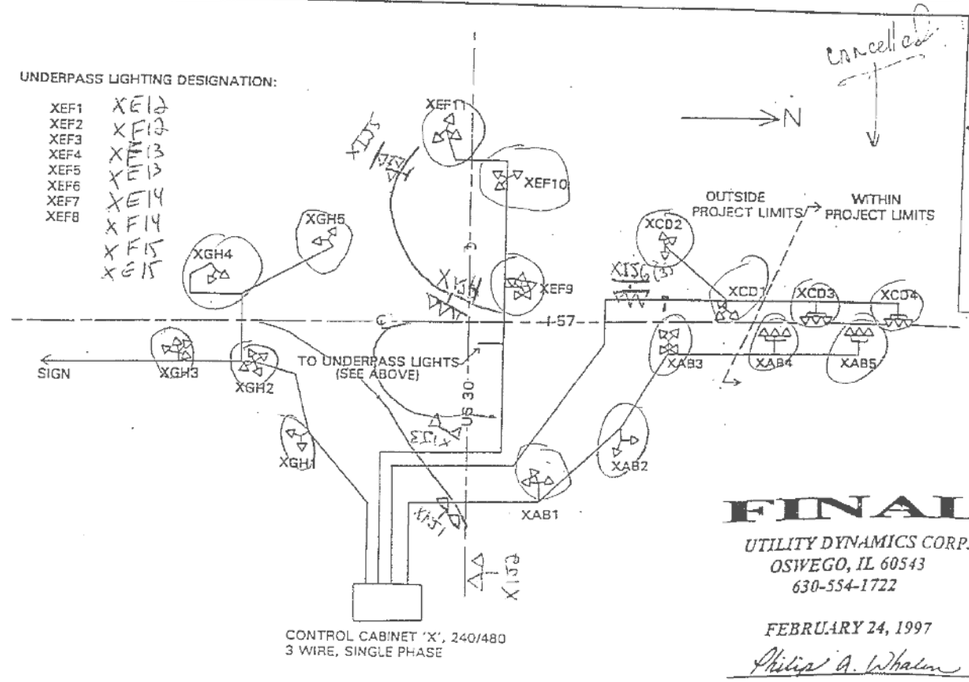
WA5	WB4	WA4
WB5	WA6	WB6

UNDERPASS LIGHTING DESIGNATION (NORTHBOUND):

WF5	WE6	WF6
WE5	WF4	WE4

UNDERPASS LIGHTING DESIGNATION:

XEF1	XE12
XEF2	XF12
XEF3	XE13
XEF4	XF13
XEF5	XE14
XEF6	XF14
XEF7	XF15
XEF8	XE15



FINAL

UTILITY DYNAMICS CORP.
OSWEGO, IL 60543
630-554-1722

FEBRUARY 24, 1997

Philip A. Whalen

RECORD DWGS

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

F.A.I. 57
I-57 (From I-80 to U.S. 30)
Light Tower Rehabilitation
Wiring Diagrams

SCALE VERT. HORIZ.
DATE 1-13-94
DRAWN BY JLCN
CHECKED BY PER

DELTA ENGINEERING GROUP, LLC

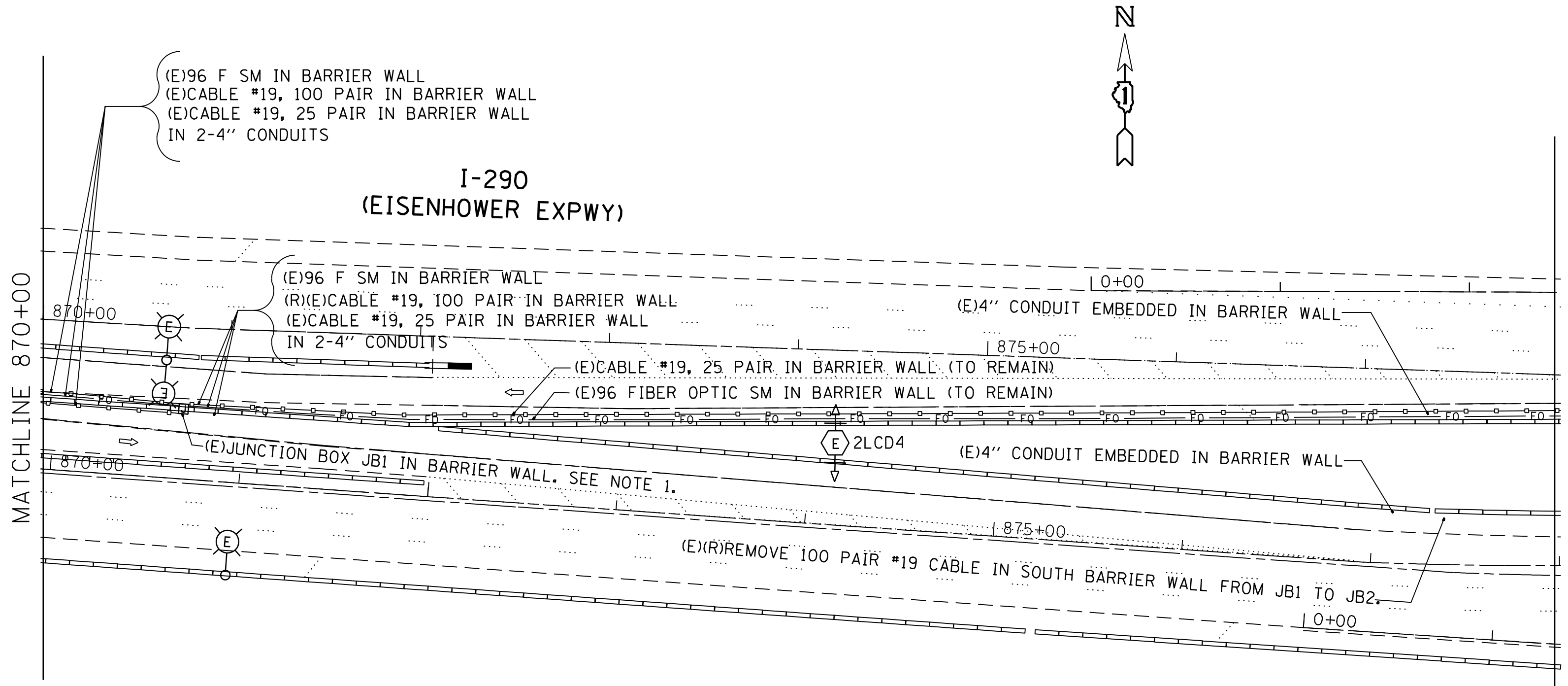
USER NAME = $USER$	DESIGNED - HM	REVISED -	
	DRAWN - GJ	REVISED -	
PLOT SCALE = $SCALE$	CHECKED - HS	REVISED -	
PLOT DATE = $DATE$	DATE - 03-21-2017	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I-57 / US-30
INFORMATION ONLY SHEET

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2016-017L		88	40
		CONTRACT NO. 62C35		
	ILLINOIS FED. AID PROJECT			



LEGEND

- EXISTING HIGH MAST LIGHTING TOWER
- EXISTING HIGH MAST LIGHTING TOWER TO BE REMOVED
- EXISTING JUNCTION BOX
- —FO— EXISTING FIBER OPTIC IN BARRIER WALL
- EXISTING CABLE IN BARRIER WALL
- (E) EXISTING
- (R) REMOVE
- (P) PROPOSED

NOTES:

1.- ALL THREE CABLES ENTER JB1. DISCONNECT THE EXISTING SPLICES FROM THE 100 PAIR CABLE COMING FROM THE SOUTH BARRIER WALL IN THIS JUNCTION BOX. THE CONTRACTOR SHOULD EXCERCISE CARE AND PROTECT FIBER OPTIC CABLE AND 25 PAIR CABLE FROM DAMAGE FROM NORTH BARRIER WALL.

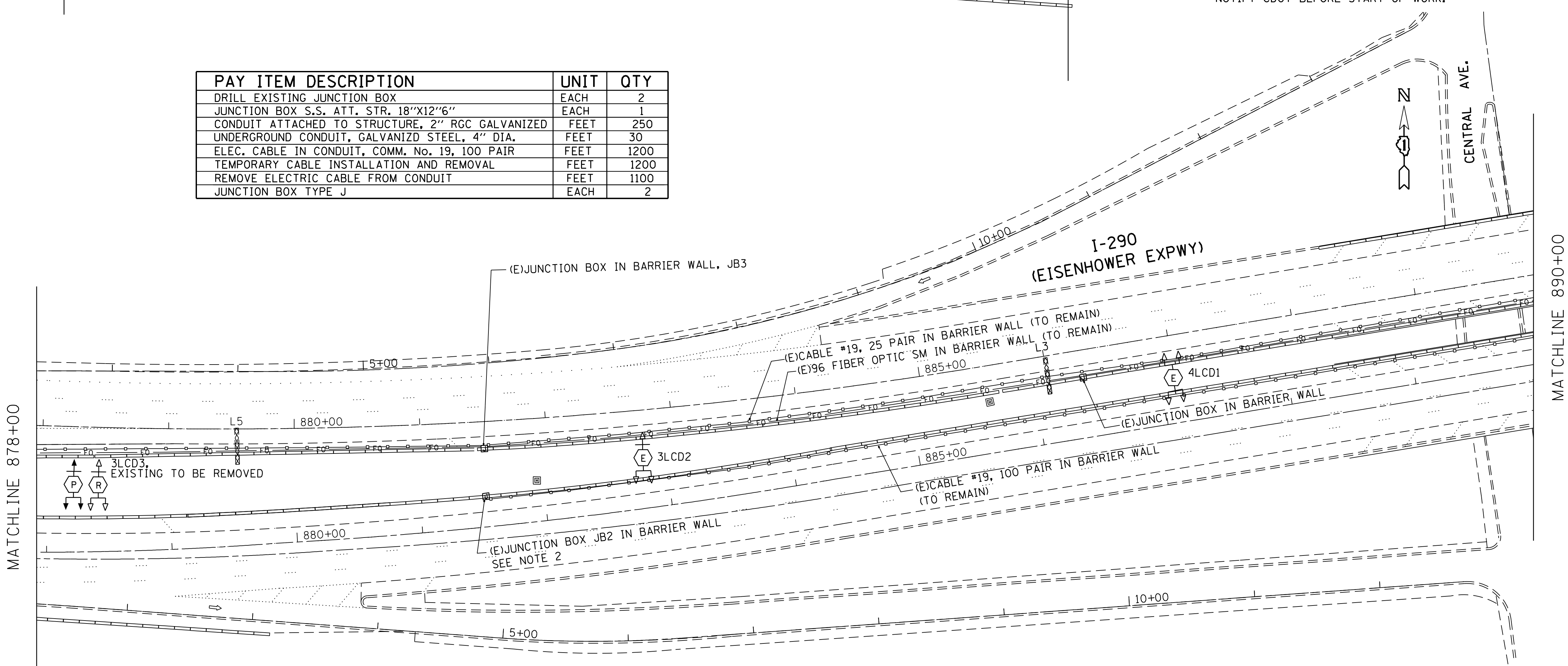
2.- DISCONNECT THE EXISTING SPLICES FROM THE 100 PAIR CABLE FROM SOUTH BARRIER WALL IN THIS JUNCTION BOX.

3.- CONTRACTOR MUST CALL IDOT, EMC OR ROY LAWSON AT (708)524-2145 FOR CABLE LOCATES AND BEFORE ANY DISCONNECTION OF ANY CABLES. EMC REPRESENTATIVE MUST BE PRESENT IN ALL STAGES OF CABLE SPLICE, CONNECTIONS AND DISCONNECTIONS.

4.- REFER TO CIVIL AND LIGHTING PLANS FOR REMOVAL OF BARRIER WALL, LIGHT TOWER AND TRAFFIC STAGING.

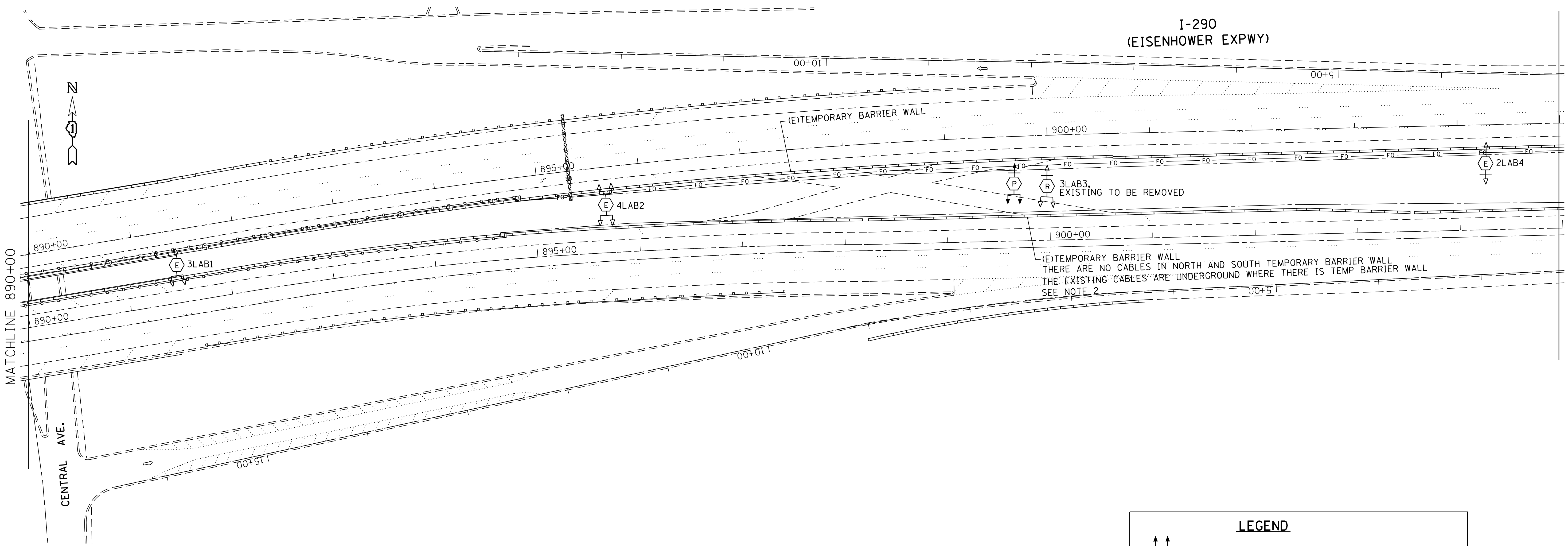
5.- CONTRACTOR SHOULD TAKE PROPER MEASURE NOT TO DAMAGE THE IRRIGATION SYSTEM ON I-290 MEDIAN. THE VALVES AND CONTROLS ARE TYPICALLY PLACED BY THE MEDIAN NORTH BARRIER WALL AND FLEXIBLE DRIP PIPES ARE SCATTERED THROUGHOUT THE MEDIAN. NOTIFY CDOT BEFORE START OF WORK.

PAY ITEM DESCRIPTION	UNIT	QTY
DRILL EXISTING JUNCTION BOX	EACH	2
JUNCTION BOX S.S. ATT. STR. 18"X12"6"	EACH	1
CONDUIT ATTACHED TO STRUCTURE, 2" RGC GALVANIZED	FEET	250
UNDERGROUND CONDUIT, GALVANIZD STEEL, 4" DIA.	FEET	30
ELEC. CABLE IN CONDUIT, COMM. No. 19, 100 PAIR	FEET	1200
TEMPORARY CABLE INSTALLATION AND REMOVAL	FEET	1200
REMOVE ELECTRIC CABLE FROM CONDUIT	FEET	1100
JUNCTION BOX TYPE J	EACH	2



SURV-01

FILE NAME =	USER NAME = mezag	DESIGNED - T.G., J.G.	REVISED - T.G., 03/18	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	I-290 AT CENTRAL EXISTING AND REMOVAL SURVEILLANCE PLANS	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
pw:\\IL084EBIDINTEG.illinois.gov:PWIDOT\Documents\IDOT Offices\District 1\Projects\Elect...		DRAWN - G.M.	REVISED -			VAR	2016-017L	COOK	88	41
	PLOT SCALE = 100.0000 ' / in.	CHECKED - T.G., J.G.	REVISED -			CONTRACT NO. 62C35				
Default	PLOT DATE = 3/22/2018	DATE - 08/01/2017	REVISED -		SCALE: SHEET OF SHEETS STA. TO STA.	ILLINOIS FED. AID PROJECT				



LEGEND

- (E) EXISTING HIGH MAST LIGHTING TOWER
- (R) EXISTING HIGH MAST LIGHTING TOWER TO BE REMOVED
- EXISTING JUNCTION BOX
- —FO— EXISTING FIBER OPTIC IN BARRIER WALL
- EXISTING CABLE IN BARRIER WALL
- (E) EXISTING
- (R) REMOVE
- (P) PROPOSED

NOTES:

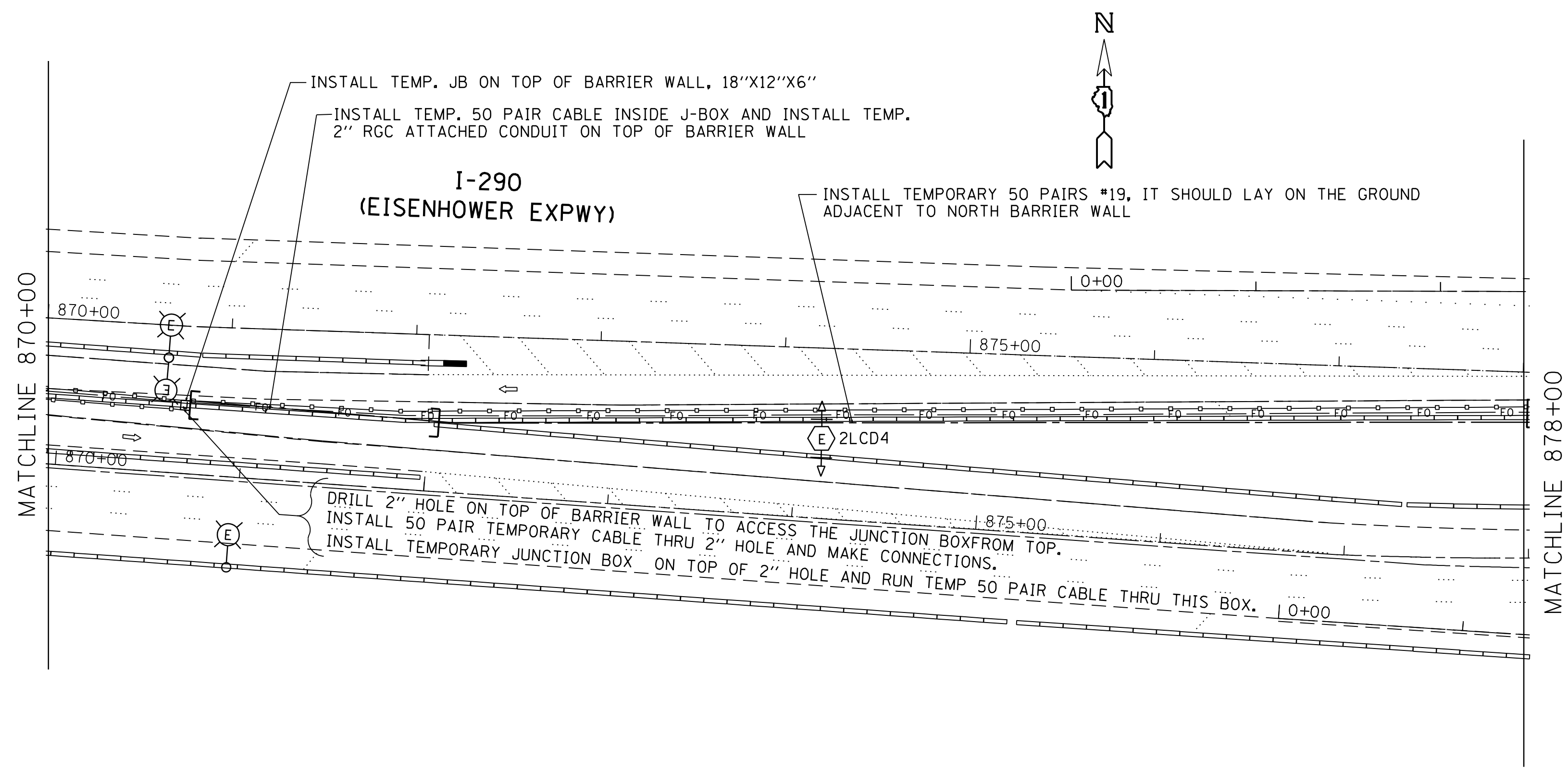
1.- LOCATION FOR SURVEILLANCE CABLES ARE UNDER GROUND FROM EAST OF JB4 AND EAST OF JB5 TO PERMANENT BARRIER WALL TO THE EAST.

2.- CONTRACTOR MUST CALL IDOT, EMC OR ROY LAWSON AT (708)524-2145 FOR CABLE LOCATES AND BEFORE ANY DISCONNECTION OF ANY CABLES.

3.- CONTRACTOR SHOULD TAKE PROPER MEASURE NOT TO DAMAGE THE IRRIGATION SYSTEM ON I-290 MEDIAN BY TOWER 4LAB2. THE VALVES AND CONTROLS ARE TYPICALLY PLACED BY THE MEDIAN NORTH BARRIER WALL AND FLEXIBLE DRIP PIPES ARE SCATTERED THROUGHOUT THE MEDIAN. NOTIFY CDOT BEFORE START OF WORK.

SURV-02

FILE NAME =	USER NAME = mezag	DESIGNED - T.G., J.G.	REVISED - T.G., 03/18	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	I-290 AT CENTRAL EXISTING AND REMOVAL SURVEILLANCE PLANS	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
pw:\\IL084EBIDINTEG.illinois.gov:PWIDOT\Documents\IDOT Offices\District 1\Projects\Elect...CADData\Electrical\2016\I-290 Central...dgn		DRAWN - S.M.	REVISED -			VAR	2016-017L	COOK	88	42
	PLOT SCALE = 100.0000 ' / in.	CHECKED - T.G., J.G.	REVISED -			CONTRACT NO. 62C35				
Default	PLOT DATE = 3/22/2018	DATE - 08/01/2017	REVISED -		SCALE: SHEET OF SHEETS STA. TO STA.	ILLINOIS FED. AID PROJECT				



LEGEND

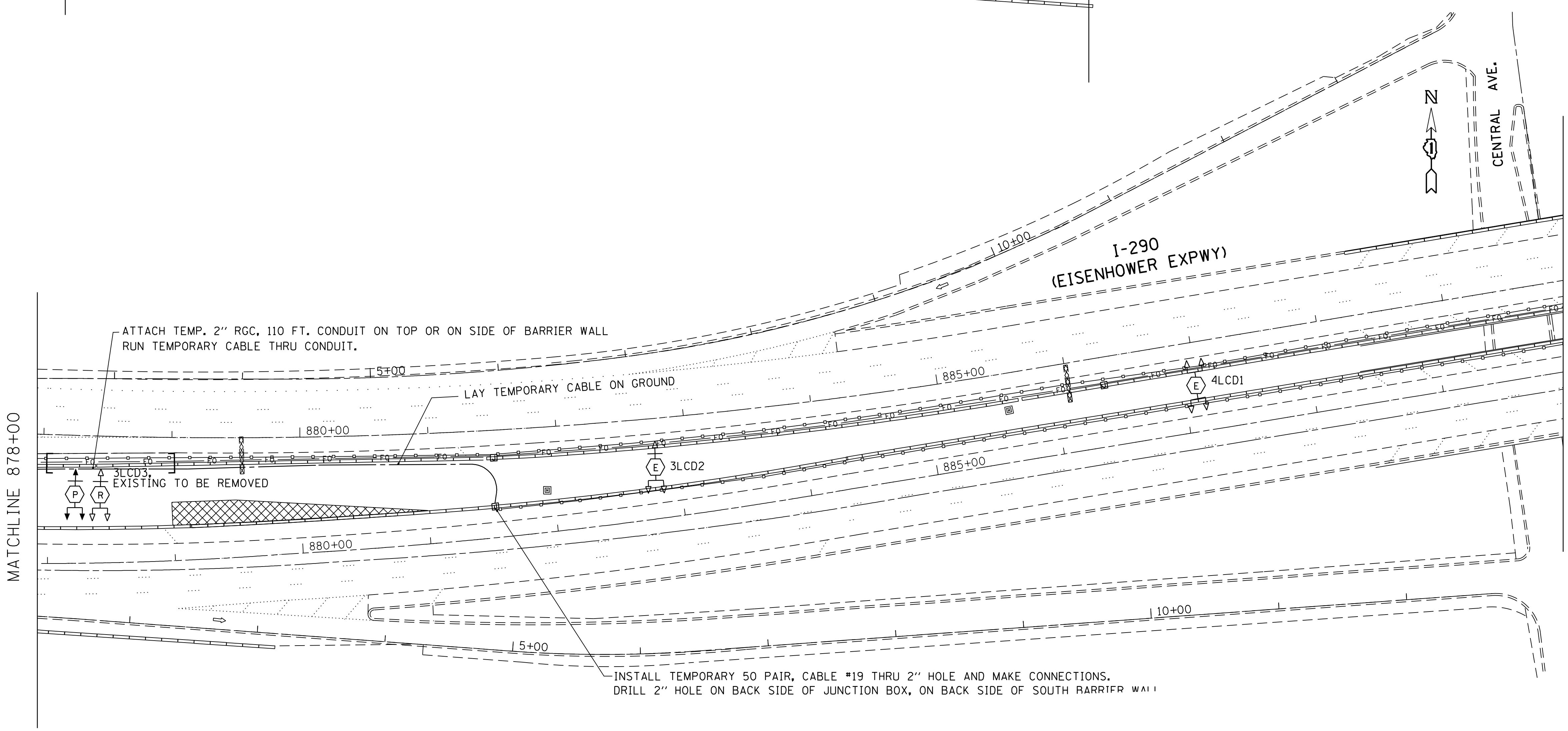
- (E) EXISTING HIGH MAST LIGHTING TOWER
- (R) EXISTING HIGH MAST LIGHTING TOWER TO BE REMOVED
- (P) PROPOSED HIGH MAST LIGHTING TOWER UNIT
- EXISTING JUNCTION BOX
- —FO— EXISTING FIBER OPTIC IN BARRIER WALL
- EXISTING CABLE IN BARRIER WALL
- TEMPORARY 50 PAIR, #19
- (E) EXISTING
- (R) REMOVE
- (P) PROPOSED
- [ ] 2" RGC ATTACHED ON TOP OF BARRIER WALL

NOTES:

1.- THE TEMPORARY ACCESS FOR THE TOWER TO BE REMOVED WILL COME FROM THE SOUTH SIDE. REFER TO THE CIVIL AND LIGHTING PLANS.

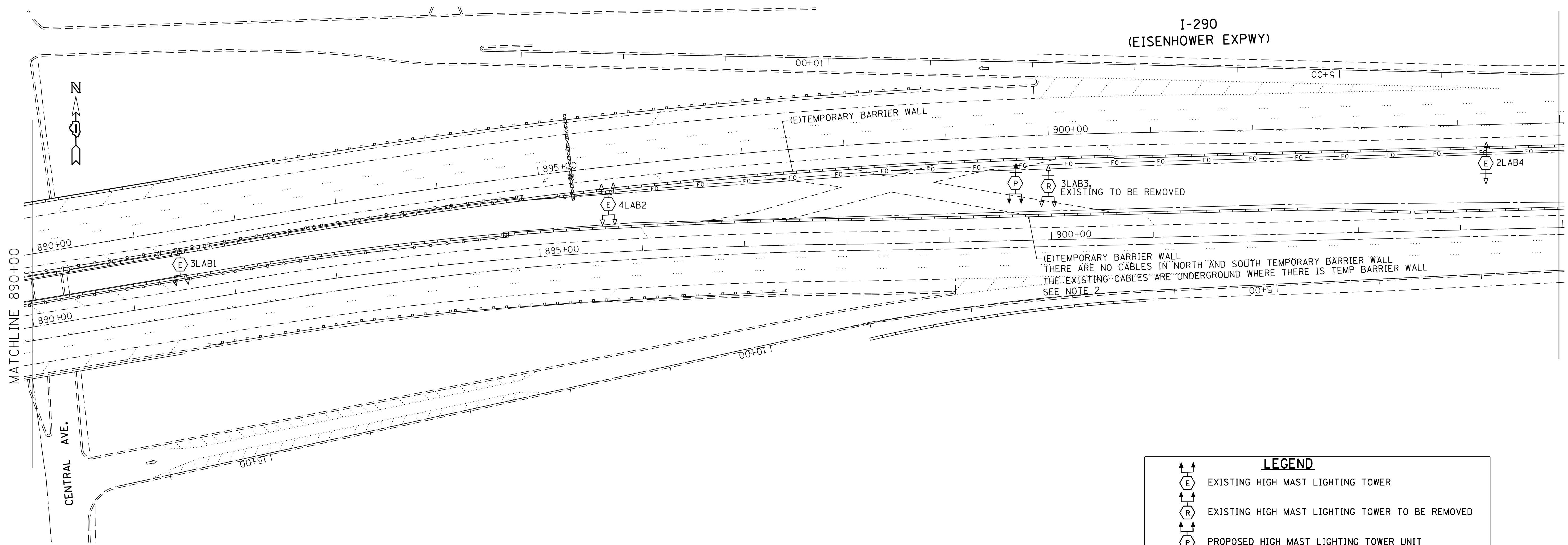
2.- AFTER THE PROPOSED ITEMS ARE INSTALLED, THE TEMPORARY CABLE, TEMP. JUNCTION BOX AND CONDUIT SHALL BE REMOVED AND KEPT BY THE CONTRACTOR. AFTER TEMPORARY JB AND CONDUIT REMOVAL, SEAL ALL BOLT PENETRATIONS WITH CONCRETE OR GROUT.

3.- CONTRACTOR SHOULD TAKE PROPER MEASURE NOT TO DAMAGE THE IRRIGATION SYSTEM ON I-290 MEDIAN. THE VALVES AND CONTROLS ARE TYPICALLY PLACED BY THE MEDIAN NORTH BARRIER WALL AND FLEXIBLE DRIP PIPES ARE SCATTERED THROUGHOUT THE MEDIAN. NOTIFY CDOT BEFORE START OF WORK.



SURV-03

FILE NAME = pw:\\IL084EBIDINTEG.illinois.gov:PWIDOT\Documents\IDOT Offices\District 1\Projects\Elect...	USER NAME = mezag	DESIGNED - T.G., J.G.	REVISED - T.G., 03/18	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	I-290 AT CENTRAL TEMPORARY SURVEILLANCE PLANS	F.A. RTE. VAR	SECTION 2016-017L	COUNTY COOK	TOTAL SHEETS 88	SHEET NO. 43
Default	PLOT SCALE = 100.0000 ' / in.	DRAWN - S.M.	REVISED -		SCALE: SHEET OF SHEETS STA. TO STA.	CONTRACT NO. 62C35				
	PLOT DATE = 3/23/2018	CHECKED - T.G., J.G.	REVISED -			ILLINOIS FED. AID PROJECT				
		DATE - 08/01/2017	REVISED -							



LEGEND

- (E) EXISTING HIGH MAST LIGHTING TOWER
- (R) EXISTING HIGH MAST LIGHTING TOWER TO BE REMOVED
- (P) PROPOSED HIGH MAST LIGHTING TOWER UNIT
- EXISTING JUNCTION BOX
- —FO— EXISTING FIBER OPTIC IN BARRIER WALL
- EXISTING CABLE IN BARRIER WALL
- TEMPORARY 50 PAIR, #19
- (E) EXISTING
- (R) REMOVE
- (P) PROPOSED
- [ ] 2" RGC ATTACHED ON TOP OF BARRIER WALL

NOTES:

1.- THE TEMPORARY ACCESS FOR THE TOWER TO BE REMOVED WILL COME FROM THE SOUTH SIDE. REFER TO THE CIVIL AND LIGHTING PLANS.

2.- UNDERGROUND CABLE AS SHOWN IS FOR INFORMATION ONLY. EXACT LOCATIONS WILL BE DETERMINED BY LOCATES. CALL IDOT EMC AT (708)524-2145 FOR LOCATES.

3.- CONTRACTOR SHOULD TAKE PROPER MEASURE NOT TO DAMAGE THE IRRIGATION SYSTEM ON I-290 MEDIAN BY TOWER 4LAB2. THE VALVES AND CONTROLS ARE TYPICALLY PLACED BY THE MEDIAN NORTH BARRIER WALL AND FLEXIBLE DRIP PIPES ARE SCATTERED THROUGHOUT THE MEDIAN. NOTIFY CDOT BEFORE START OF WORK.

SURV-04

FILE NAME =	USER NAME = mezag	DESIGNED - T.G., J.G.	REVISED - T.G., 03/18
pw:\\IL084EBIDINTEG.illinois.gov:PWIDOT\Documents\IDOT Offices\District 1\Projects\ElectricalCADData\Electrical\2016\I-290@Central-Lighting.dgn		DRAWN - G.M.	REVISED -
	PLOT SCALE = 100.0000 '/ in.	CHECKED - T.G., J.G.	REVISED -
Default	PLOT DATE = 3/23/2018	DATE - 08/01/2017	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

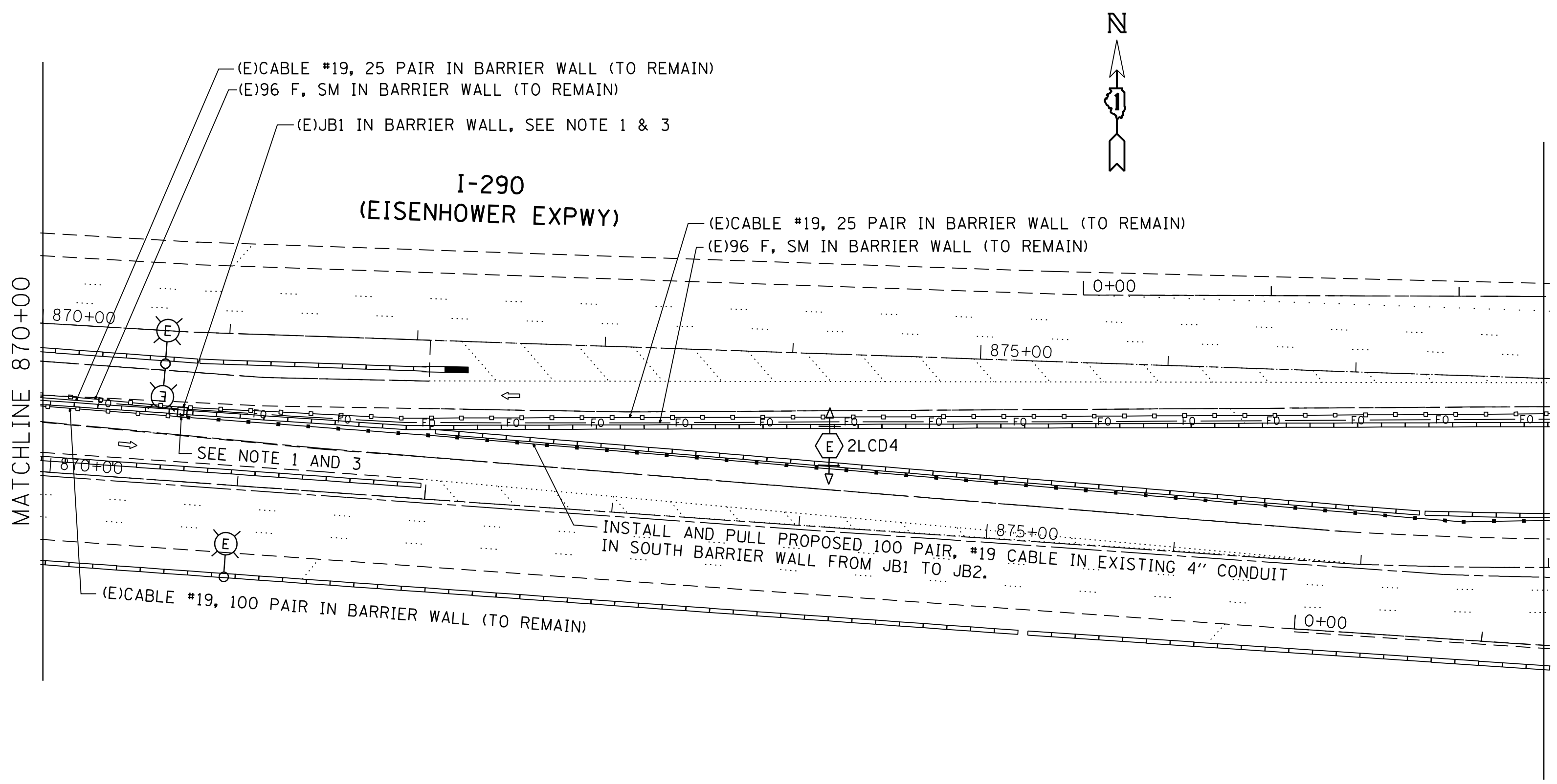
I-290 AT CENTRAL
TEMPORARY SURVEILLANCE PLANS

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2016-017L	COOK	88	44

CONTRACT NO. 62C35

ILLINOIS | FED. AID PROJECT

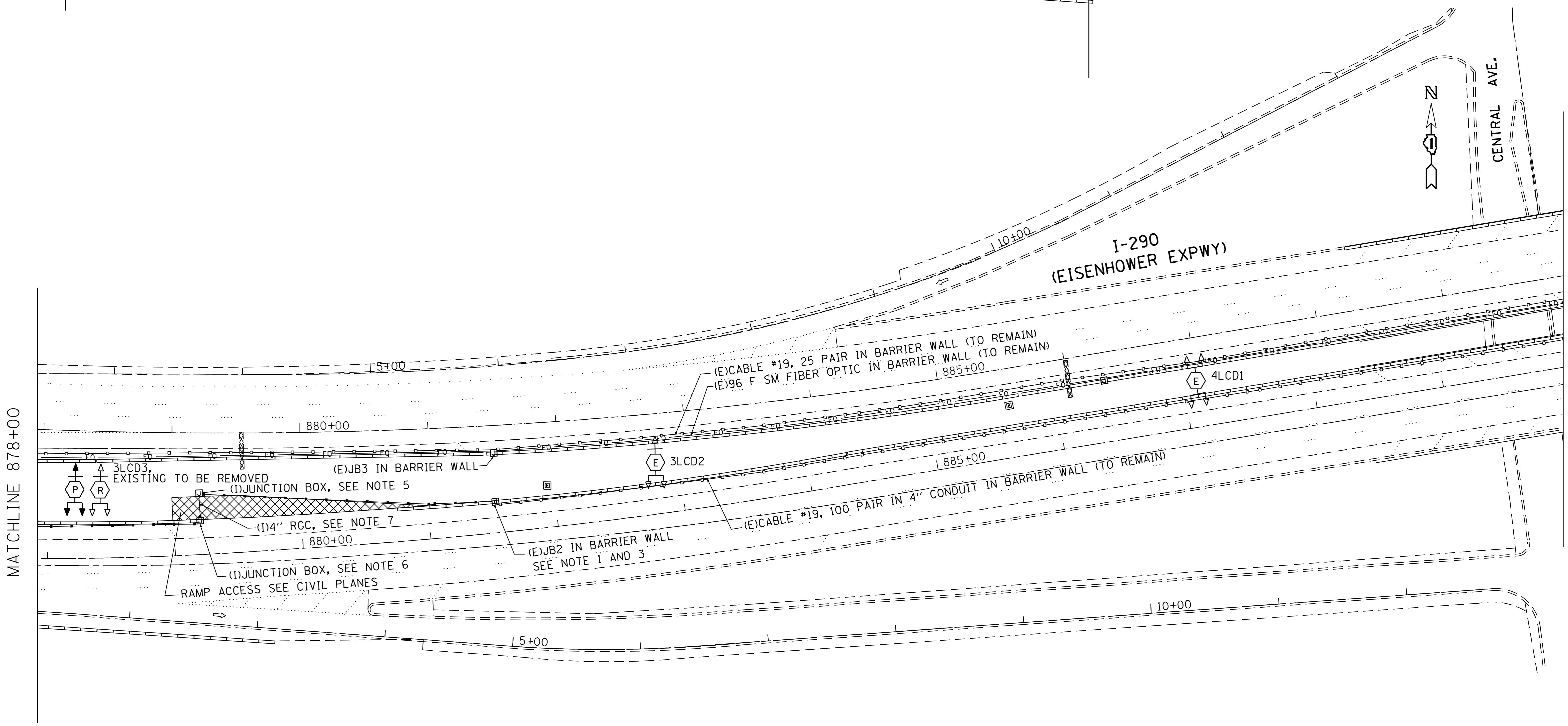


LEGEND

(E) EXISTING
(I) INSTALL
(E) EXISTING HIGH MAST LIGHTING TOWER
(R) EXISTING HIGH MAST LIGHTING TOWER TO BE REMOVED
(P) PROPOSED HIGH MAST LIGHTING TOWER UNIT
JUNCTION BOX
—FO— EXISTING FIBER OPTIC IN BARRIER WALL
EXISTING CABLE IN BARRIER WALL
PROPOSED CABLE IN BARRIER WALL

NOTES:

1.- SPLICE PROPOSED 100 PAIR, #19 CABLE TO EXISTING 100 PAIR, #19 CABLE IN THIS JUNCTION BOX.
2.- REFER TO LIGHTING PLANS FOR LOCATIONS OF PROPOSED HIGH MAST TOWERS.
3.- RESEAL 2" HOLE IN BARRIER WALL WITH GROUT.
5.- INSTALL JUNCTION BOX STAINLESS STEEL TYPE J (41"X12"X12") EMBEDDED IN CONCRETE BARRIER WALL. INSTALL 4" PVC SCH40 CONDUIT EMBEDDED IN BARRIER WALL.
6.- INSTALL JUNCTION BOX STAINLESS STEEL TYPE J (41"X12"X12") EMBEDDED IN CONCRETE BARRIER WALL. INTERCEPT EXISTING 4" CONDUIT.
7.- INSTALL 4" RGC, 30FT., FROM JUNCTION BOX TO JUNCTION BOX.
8.- CONTRACTOR SHOULD TAKE PROPER MEASURE NOT TO DAMAGE THE IRRIGATION SYSTEM ON I-290 MEDIAN. THE VALVES AND CONTROLS ARE TYPICALLY PLACED BY THE MEDIAN NORTH BARRIER WALL AND FLEXIBLE DRIP PIPES ARE SCATTERED THROUGHOUT THE MEDIAN. NOTIFY CDOT BEFORE START OF WORK.



SURV-05

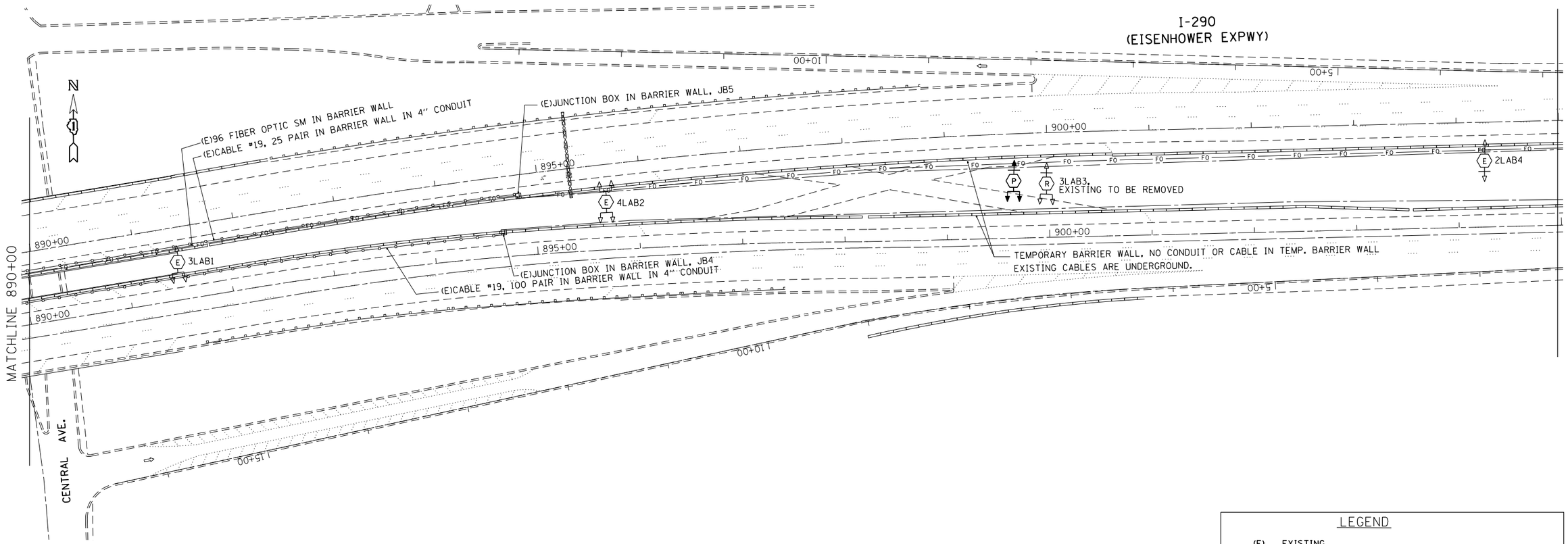
FILE NAME = pw:\\IL084EBIDINTEG.illinois.gov:PWIDOT\Documents\IDOT Offices\District 1\Projects\Electrical\CADData\Electrical\2016\I-290 Central\Design	USER NAME = mezag	DESIGNED - T.G., J.G.	REVISED - T.G., 03/18
		DRAWN - G.M.	REVISED -
	PLOT SCALE = 100.0000 ' / in.	CHECKED - T.G., J.G.	REVISED -
Default	PLOT DATE = 3/23/2018	DATE - 08/01/2017	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I-290 AT CENTRAL
PROPOSED SURVEILLANCE PLANS

SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2016-017L	COOK	88	45
		CONTRACT NO. 62C35		
		ILLINOIS FED. AID PROJECT		



NOTES:

1.- THERE IS NO PROPOSED SURVEILLANCE WORK DONE ON THIS SHEET.
CABLES ARE NOT AFFECTED SINCE THE CABLES ARE UNDERGROUND NEAR TOWER 3LAB3.
THERE ARE NO CONDUITS OR CABLES IN THE TEMPORARY BARRIER WALLS.

2.- REFER TO LIGHTING PLANS FOR LOCATIONS OF PROPOSED HIGH MAST TOWER.

3.- CONTRACTOR SHOULD TAKE PROPER MEASURE NOT TO DAMAGE THE IRRIGATION SYSTEM ON I-290 MEDIAN BY TOWER 4LAB2. THE VALVES AND CONTROLS ARE TYPICALLY PLACED BY THE MEDIAN NORTH BARRIER WALL AND FLEXIBLE DRIP PIPES ARE SCATTERED THROUGHOUT THE MEDIAN. NOTIFY CDOT BEFORE START OF WORK.

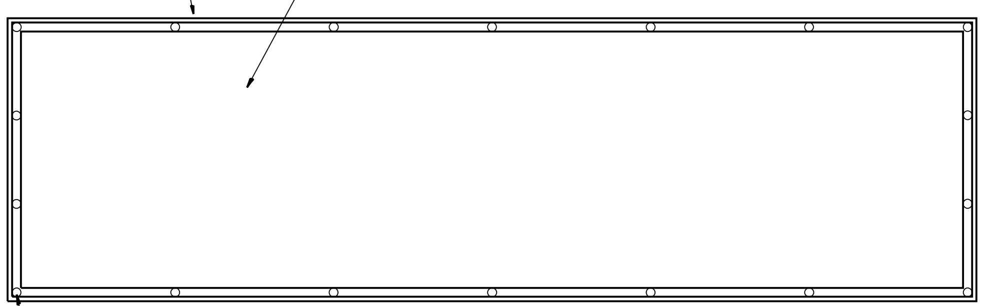
LEGEND

(E)	EXISTING
(I)	INSTALL
(E)	EXISTING HIGH MAST LIGHTING TOWER
(R)	EXISTING HIGH MAST LIGHTING TOWER TO BE REMOVED
(P)	PROPOSED HIGH MAST LIGHTING TOWER UNIT
	JUNCTION BOX
—FO—	EXISTING FIBER OPTIC IN BARRIER WALL
o—o—o	EXISTING CABLE IN BARRIER WALL

SURV-06

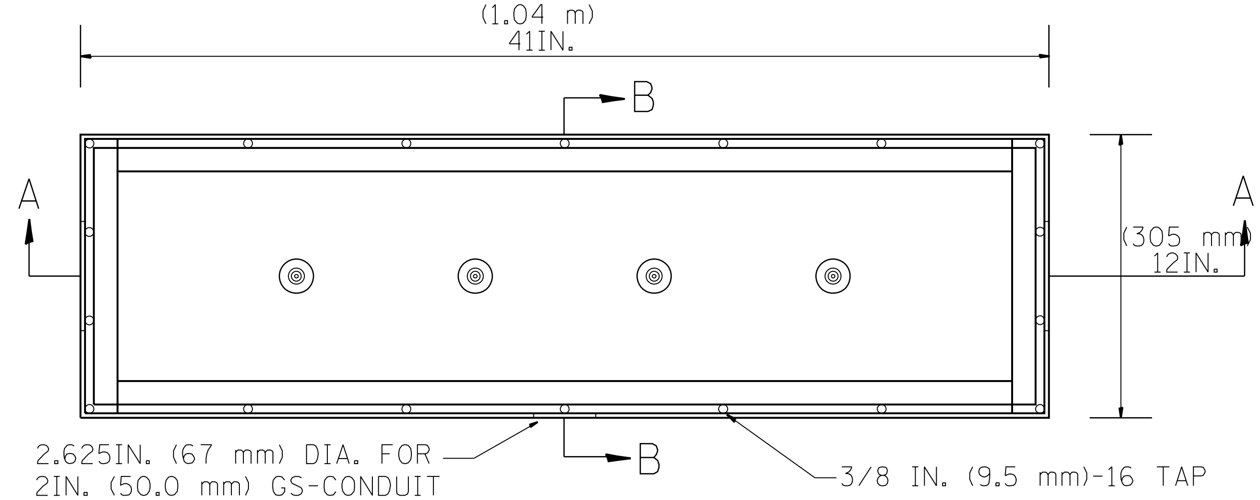
FILE NAME = pw:\\IL084EBIDINTEG.illinois.gov:PWIDOT\Documents\IDOT Offices\District 1\Projects\Electrical\ADDate\Electrical\2016\I-290atCentral_Design Default	USER NAME = mezag	DESIGNED - T.G., J.G.	REVISED - T.G., 03/18	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	I-290 AT CENTRAL PROPOSED SURVEILLANCE PLANS
		DRAWN - C.M.	REVISED -		
	PLOT SCALE = 100.0000 ' / in.	CHECKED - T.G., J.G.	REVISED -		SCALE: SHEET OF SHEETS STA. TO STA.
	PLOT DATE = 3/23/2018	DATE - 08/01/2017	REVISED -		

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2016-017L	COOK	88	46
		CONTRACT NO. 62C35		
	ILLINOIS	FED. AID PROJECT		



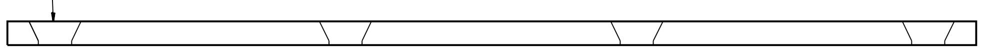
BACK VIEW

STAINLESS STEEL COVER WITH NEOPRENE GASKET



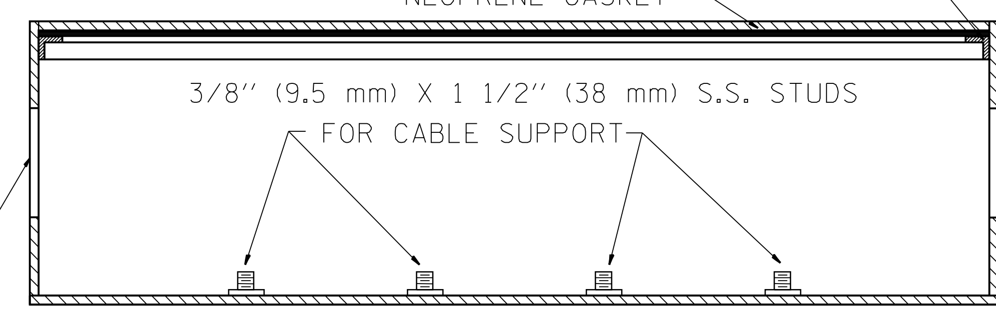
TOP VIEW

STAINLESS STEEL JUNCTION BOX TYPE ''J''

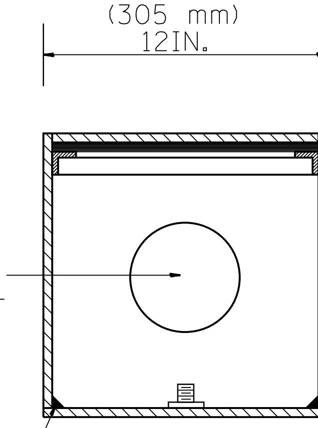


SIDE VIEW

STAINLESS STEEL COVER



SIDE VIEW SECTION A-A



SIDE VIEW SECTION B-B

NOTE:

JUNCTION BOX TO BE CONSTRUCTED OF
1/4 IN. (6.3 mm) TYPE 316 STAINLESS STEEL
ALL WELDS SHALL BE CONTINUOUS AND LEAKPROOF
ALL COVERS SHALL BE UNIVERSAL IN FIT.

BARRIER WALL SHALL BE GAPPED A MINIMUM OF 15FT. (4.57 m) FOR PROPER PLACEMENT OF JUNCTION BOX TYPE ''J'' AND FOR A SMOOTH TRANSITION OF 4IN. (100 mm) PVC SURVEILLANCE DUCT(S) FROM BARRIER WALL FOOTER INTO JUNCTION BOX.

SURV-07

FILE NAME =	USER NAME = mezag	DESIGNED - R.L.	REVISED - 06/94
pw:\\IL084EBIDINTEG.illinois.gov:PWIDOT\Documents\IDOT Offices\District 1\Projects\Traffic Systems Center\CADData\Electrical\Typicals\TSCTYP.dgn		DRAWN - C.M.	REVISED - 10/96
	PLOT SCALE = 100.0000 ' / in.	CHECKED - R.L.	REVISED -
Default	PLOT DATE = 8/1/2017	DATE - 06/22/94	REVISED -

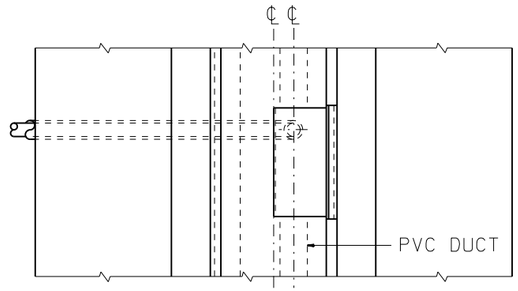
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
TRAFFIC SYSTEMS CENTER

CONCRETE
BARRIER WALL JUNCTION BOX
TYPE ''J''

SCALE: NONE | SHEET OF SHEETS | STA. TO STA.

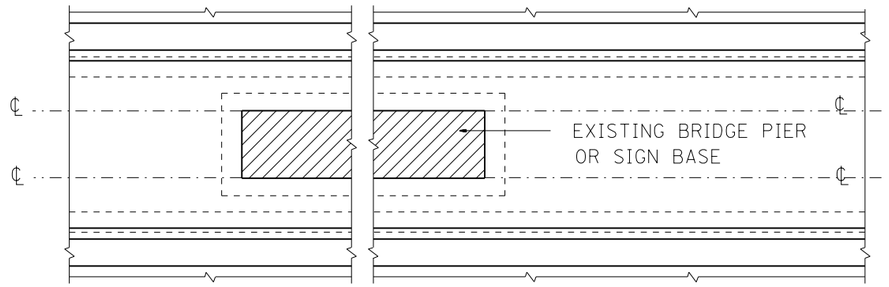
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2016-017L	COOK	88	47
		CONTRACT NO. 62C35		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

TRAFFIC SYSTEMS CENTER (TY-1TSC-663#1)

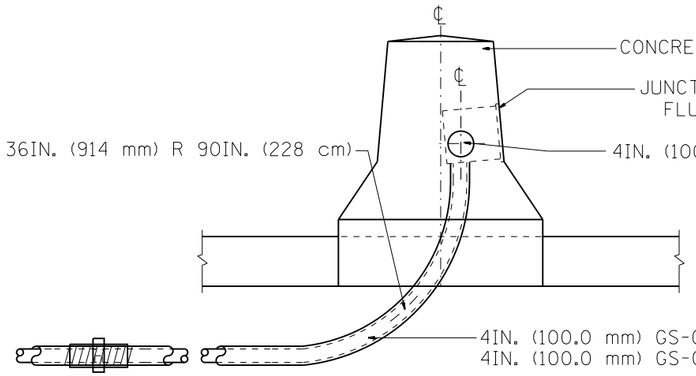


TOP VIEW

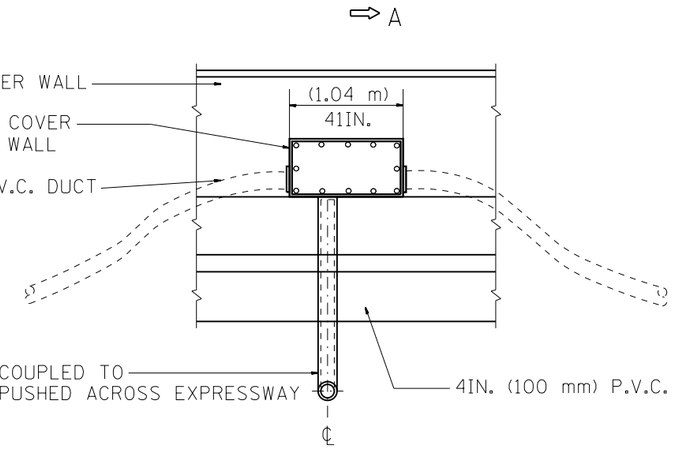
TYPE ''J'' JUNCTION BOX PLACEMENT
WITH 4IN. (100.0mm) GS-CONDUIT ACCESS



SECTION B-B



THREADED COUPLING

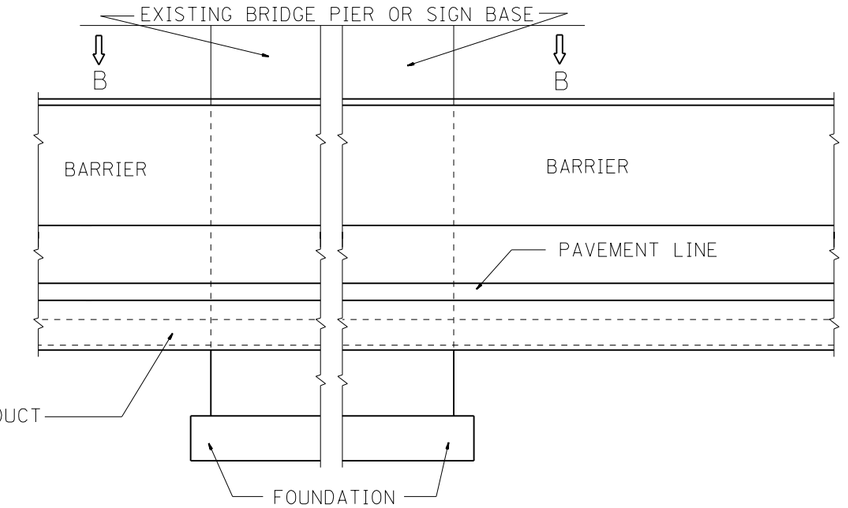


SECTION A-A

FRONT VIEW

TYPE ''J'' JUNCTION BOX PLACEMENT (SEE NOTE NO. 1)

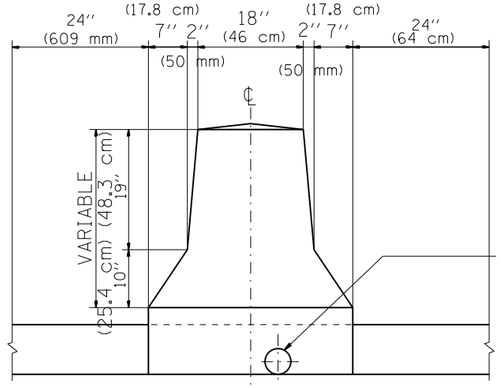
WITH 4IN. (100.0 mm) GS-CONDUIT ACCESS



FRONT VIEW

BARRIER WALL AT BRIDGE PIER

P.V.C. DUCT PLACEMENT



INTERCONNECT P.V.C. DUCT LOCATION

AT TYPICAL BARRIER CROSS SECTION

BARRIER WALL SHALL BE GAPPED A MINIMUM OF 15FT. (4.57 m) FOR PROPER PLACEMENT OF JUNCTION BOX TYPE ''J''
AND FOR A SMOOTH TRANSITION OF 4IN. (100 mm) PVC SURVEILLANCE DUCT(S) FROM BARRIER WALL FOOTER INTO JUNCTION BOX.

NOTE:

LOCATION OF PVC CONDUITS TO BE VERIFIED IN THE FIELD TO MATCH WITH EXISTING BARRIER WALL CONDUITS.

SURV-08

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		DRAWN - C.M.	REVISED - 10/96
	PLOT SCALE = 100.0000 '/ in.	CHECKED - R.L.	REVISED - 08/17
	PLOT DATE = 8/1/2017	DATE - 06/22/94	REVISED -

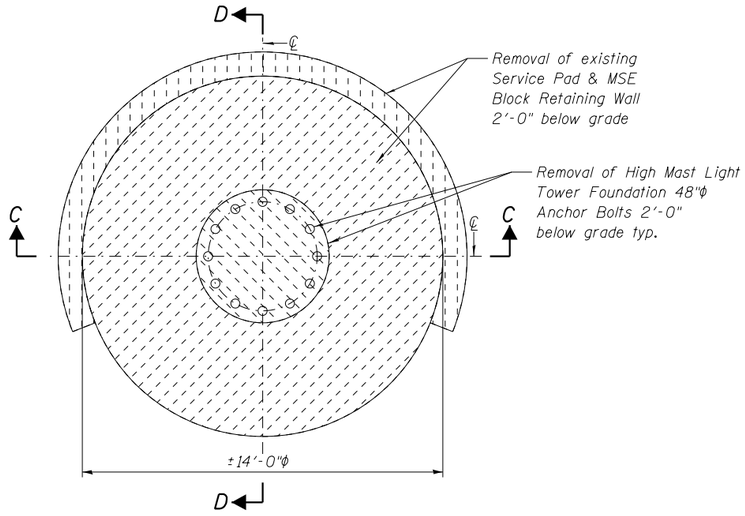
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
TRAFFIC SYSTEMS CENTER

TYPE ''J'' JUNCTION BOX & P.V.C. DUCT PLACEMENT

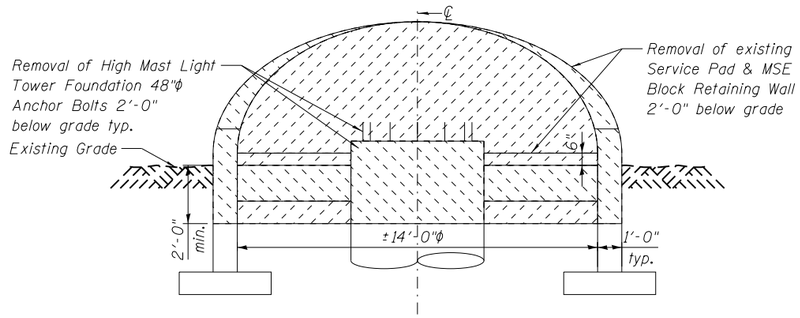
SCALE: NONE | SHEET OF SHEETS | STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2016-017L	COOK	88	48
		CONTRACT NO. 62C35		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

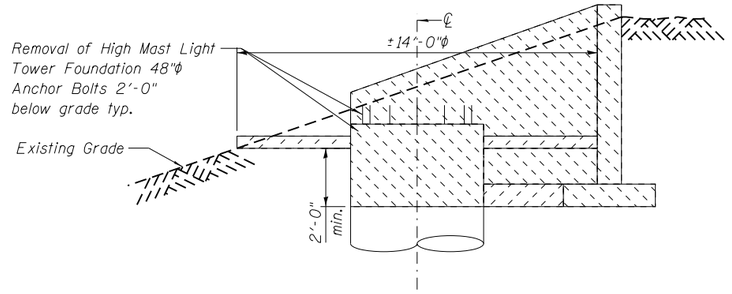
TRAFFIC SYSTEMS CENTER (TY-1TSC-663#2B)



LIGHT TOWER SERVICE PAD & RETAINING WALL REMOVAL PLAN



LIGHT TOWER, FOUNDATION REMOVAL SECTION C-C



LIGHT TOWER, FOUNDATION REMOVAL SECTION D-D

SERVICE PAD & RETAINING WALL REMOVAL LOCATION TABLE

Light Tower No.	Location Highway / Roadway
3MACD1	U.S. 14 / IL. 31
3MAEF2	U.S. 14 / IL. 31

DELTA ENGINEERING GROUP, LLC

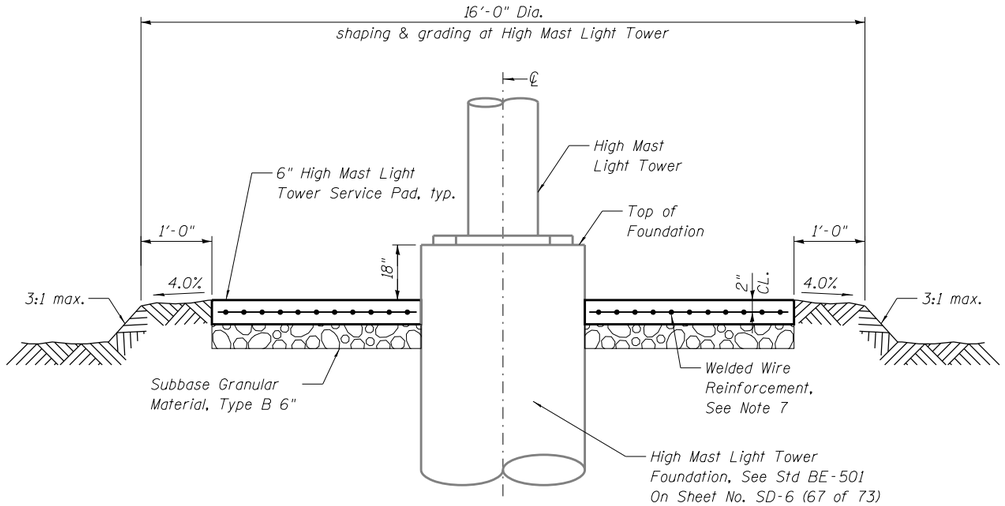
USER NAME = $USER$	DESIGNED - NS	REVISED -	
	DRAWN - AA	REVISED -	
PLOT SCALE = $SCALE$	CHECKED - SK	REVISED -	
PLOT DATE = $DATE$	DATE - 03-21-2017	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

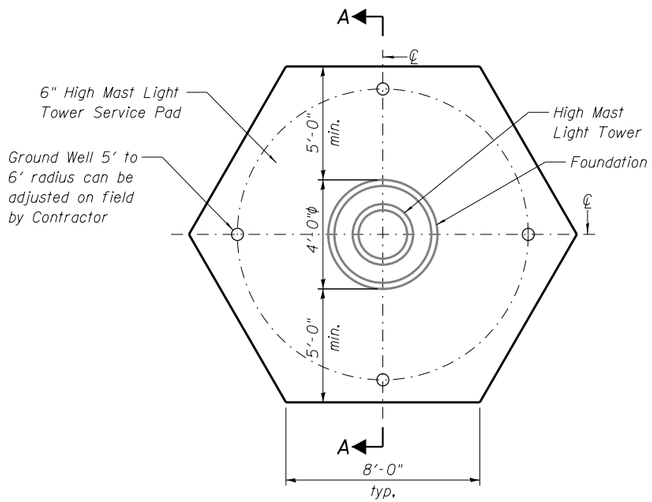
LIGHT TOWER SERVICE PAD, RETAINING WALL AND FOUNDATION REMOVAL DETAILS

SCALE: NONE | SHEET OF SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2016-017L		88	49
		CONTRACT NO. 62C35		
	ILLINOIS FED. AID PROJECT			



FILL GRADING DETAIL
SECTION A-A



LIGHT TOWER,
SERVICE PAD PLAN

NOTES:

1. For location of Light Pole Foundations, see Lighting Plans.
2. The Light Tower & Light Tower Foundation shall be paid for separately.
3. For Light Tower hand hole orientation, see Lighting Plans.
4. f'c for Concrete shall be 3,500 psi @ 28 days.
   fy for Welded Wire Reinforcement shall be 65,000 psi.
5. Min. 3,000 psf Soil Bearing Capacity is required below the foundation & pad.
6. Bill of Material quantity shown is for one Service Pad.
7. Welded Wire Reinforcement shall have minimum area of 0.31 in in each direction.

HIGH MAST LIGHT TOWER LOCATION

Light Tower No.	County	Location		Highway / Roadway	Pad Type	*Pad Elevation
		Station	Offset			
3LCD3	Cook	See note 1	See note 1	I-290 / Central	Light Tower Service Pad	**
3LAB3	Cook	See note 1	See note 1	I-290 / Central	Light Tower Service Pad	**

*Pad Elevations must be verified prior to Construction
**Pad Elevations match with top of existing pad

TOTAL BILL OF MATERIAL

ITEM	UNIT	Quantity
Welded Wire Reinforcement	Sq. Yd.	19
Stucture Excavation	Cu. Yd.	13
Concrete Stucture	Cu. Yd.	3
Protective Coat	Sq. Yd.	18
Subbase Granular Material, Type B 6"	Sq. Yd.	18

DELTA ENGINEERING GROUP, LLC

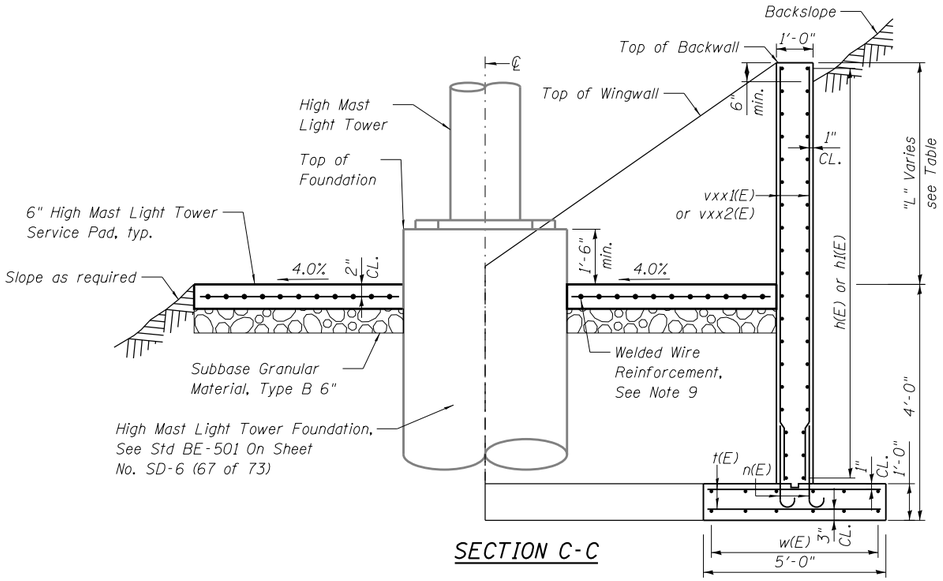
USER NAME = $USER$	DESIGNED - NS	REVISED -	
	DRAWN - AA	REVISED -	
PLOT SCALE = $SCALE$	CHECKED - SK	REVISED -	
PLOT DATE = $DATE$	DATE - 03-21-2017	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

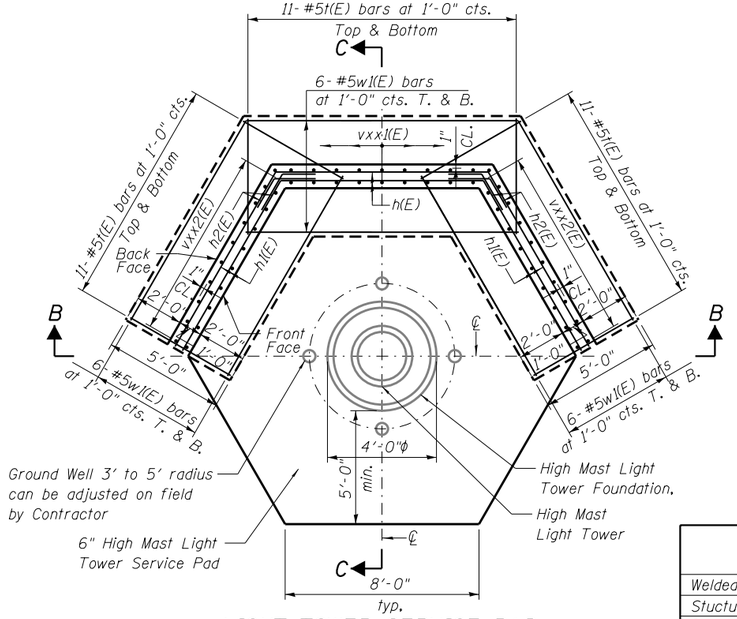
LIGHT TOWER SERVICE PAD DETAILS
(3LCD3 & 3LAB3)

SCALE: NONE | SHEET OF SHEETS | STA. TO STA.

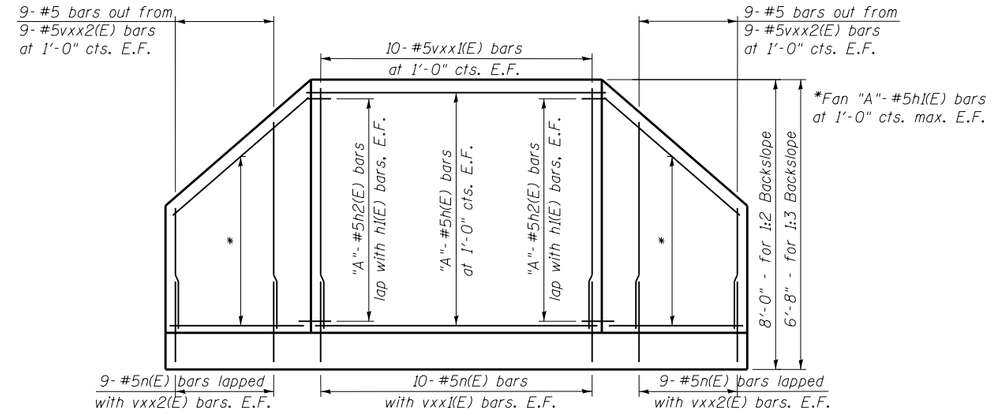
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2016-017L		88	50
		CONTRACT NO. 62C35		
	ILLINOIS FED. AID PROJECT			



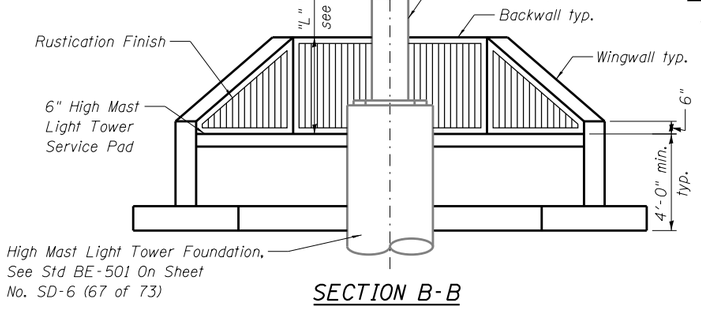
SECTION C-C



LIGHT TOWER SERVICE PAD PLAN

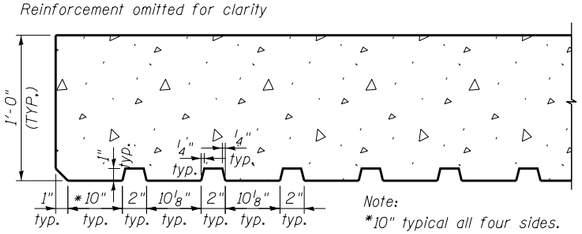


INSIDE ELEVATION OF WINGWALLS & BACKWALL

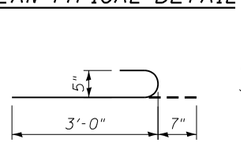


SECTION B-B

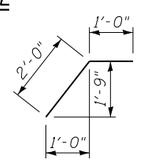
Reinforcement omitted for clarity



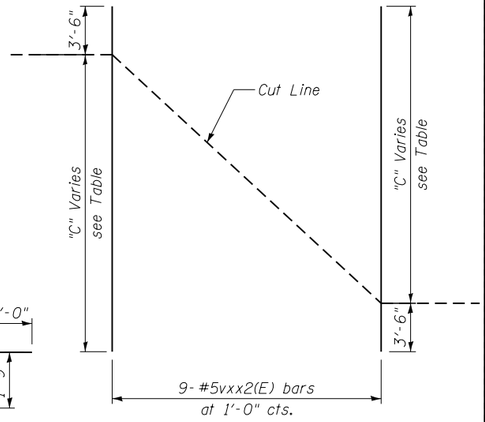
RUSTICATION PARTIAL PLAN TYPICAL DETAIL



BAR n(E)



BAR h2(E)



BARS vxx2(E) BAR CUTTING DIAGRAM

LEGEND:

E.F. = Each Face
F.F. = Front Face
B.F. = Back Face

MIN. BAR LAP:

#5 bars - 2'-0"

h1(E) BAR QUANTITY TABLE

Backslope	"A"
1:2	8
1:3	7

BILL OF MATERIAL QUANTITIES SHOWN FOR ONE WALL

Bar	No.	Size	Length	Shape
n(E)	56	#5	3'-7"	
t(E)	66	#5	4'-8"	
w(E)	12	#5	11'-1"	
w1(E)	24	#5	9'-4"	
For Backslope 1:2				
h(E)	16	#5	8'-11"	
h1(E)	32	#5	8'-2"	
h2(E)	32	#5	3'-0"	
v121(E)	20	#5	6'-8"	
v122(E)	18	#5	10'-0"	
For Backslope 1:3				
h(E)	14	#5	8'-11"	
h1(E)	28	#5	8'-2"	
h2(E)	28	#5	3'-0"	
v131(E)	20	#5	5'-4"	
v132(E)	18	#5	8'-10"	

TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL 3MACD1 1:2	TOTAL 3MAEF2 1:3
Welded Wire Reinforcement	Sq. Yd.	19	19
Stucture Excavation	Cu. Yd.	52	51
Concrete Stucture	Cu. Yd.	15	14
Reinforcement Bars, Epoxy Coated	Pound	1,839	1,718
*Rustication Finish	Sq. Ft.	18	18
Protective Coat	Sq. Yd.	27	27
Subbase Granular Material, Type B 6"	Sq. Yd.	18	18

*Quantity for Rustication Finish is for information only
Cost included in Concrete Structure pay item.

NOTES:

1. For location of Light Pole Foundations, see Lighting Plans.
2. The Light Tower & Light Tower Foundation shall be paid for separately.
3. For Light Tower hand hole orientation, see Lighting Plans.
4. Reinforcement Bars designated (E) shall be epoxy coated.
5. "x" designation in bars marks represent varying backslopes conditions
6. Cut vxx2(E) bars in field to fill front face of wingwalls and use remainder in the back face of the wingwalls.
7. Min. 3,000 psf Soil Bearing capacity is required below the foundation and pad.
8. f'c for concrete shall be 3,500 psi @ 28 days.
   fy for Welded Wire Reinforcement shall be 65,000 psi.
9. Welded Wire Reinforcement shall have minimum area of 0.31 in²/ft in each direction.

TABLE WALL STEM HEIGHT

Light Tower No.	Backslope	"L"
3MACD1	1:2	4'-0"
3MAEF2	1:3	2'-8"

TABLE BAR CUTTING DIAGRAM

Backslope	"C"
1:2	6'-6"
1:3	5'-4"

HIGH MAST LIGHT TOWER LOCATION

Light Tower No.	County	Location: Station	Location: Offset	Highway / Roadway	Pad Type	*Pad Elevation
3MACD1	McHenry	See note 1	See note 1	U.S. 14 / IL. 31	Light Tower Service Pad & Retaining Wall	**
3MAEF2	McHenry	See note 1	See note 1	U.S. 14 / IL. 31	Light Tower Service Pad & Retaining Wall	**

*Pad Elevations must be verified prior to Construction
**Pad Elevations match with top of existing pad

S-3

DELTA ENGINEERING GROUP, LLC

USER NAME = $USER$	DESIGNED - NS	REVISED -
	DRAWN - AA	REVISED -
PLOT SCALE = $SCALE$	CHECKED - SK	REVISED -
PLOT DATE = $DATE$	DATE - 03-21-2017	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

LIGHT TOWER SERVICE PAD AND RETAINING WALL DETAILS (3MACD1 & 3MAEF2)

SCALE: NONE | SHEET OF SHEETS | STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2016-017L		88	51
			CONTRACT NO. 62C35	
		ILLINOIS	FED. AID PROJECT	

ILLINOIS DEPARTMENT OF TRANSPORTATION — SOIL BORING LOG

Page 1 Of 1

Date 3/17/16

ROUTE — DESCRIPTION High Mast Light Towers — Logged By VM

SECTION — LOCATION Interstate I-290 & I-55, Cook County, IL (Var. Loc.) SW 1/4 SEC 16 TWP 39N RNG 13E PM 3rd

COUNTY Cook — STRUCTURE NO. 3LAB3 (Exist.) (Prop.)

Drilling Method AASHTO T 206-09 — Hammer Type Automatic Hammer

Boring No. B-1 — Station — Offset 30 Ft South — Ground Surface El. +616.54+/- M.S.L.

Surf. Wat. El. —
Groundwater Elev.:
When Drilling 608.54 M.S.L
at Completion 611.04 M.S.L.
After — Hrs —

ELEV. (M.S.L.)	DEPTH (ft.)	SPT N (blows)	UCS Qu (TSF)	MOIST. (%)	Description
615.6	1.0				11" PORTLAND CEMENT CONCRETE PAVEMENT
	2.0	5 6 6		5.8	FILL: SAND AND GRAVEL, Brown, Medium Dense, Dry (A-1-b)
612.0	3.0				
	4.0	4 6 3		7.3	
	5.0		0.75 P	19.0	FILL: CLAY, Dark Brown, Medium Stiff, Moist (A-6)
609.5	6.0				
	7.0	2 3 2	0.75 P	15.8 5.9	FILL: SAND AND GRAVEL, Brown, Trace Gravel, Loose, Dry (A-1-b) (Saturated below 8 feet depth.)
608.0	8.0				
	9.0	1 1 2	0.12 B	34.8	FILL: CLAY, Dark Gray, Very Soft, Wet (A-7-5)
605.5	10.0				
	11.0				
	12.0	1 1 1	0.18 B	18.1	FILL: CLAY, Brown and Gray, Very Soft, Moist (A-6)
603.0	13.0				
	14.0	4 6 7	2.92 B/S	17.0	CLAY, Gray, Very Stiff to Hard, Moist (A-6)
	15.0				
	16.0				
	17.0	3 5 6	4.00 S	16.9	
	18.0				
	19.0	4 8 8	4.42 S	19.9	
595.5	20.0				
	21.0				
	22.0	12 16 21		15.0	SILT, Gray, Dense to Very Dense, Moist (A-4)
	23.0				
	24.0	15 18 23		14.5	
576.5	25.0				End of Boring @ 40 Feet Note: Boring was drilled near Light Pole# 3LAB3 along I-290 near Central Avenue. Boring B-1 had to be offset approximately 30 feet South of original boring location due to rig inaccessibilty because of an existing concrete barrier. State Plane Coordinates of B-1 are Northing=1896222.354 & Easting=1140198.955.

ELEV. (M.S.L.)	DEPTH (ft.)	SPT N (blows)	UCS Qu (TSF)	MOIST. (%)
	26.0			
	27.0	14 16 17		11.8
	28.0			
	29.0	10 15 23		11.2
	30.0			
	31.0			
	32.0			
	33.0			
	34.0	19 23 28		10.3
	35.0			
	36.0			
	37.0			
	38.0			
	39.0	18 24 30		11.5
	40.0			
	41.0			
	42.0			
	43.0			
	44.0			
	45.0			
	46.0			
	47.0			
	48.0			
	49.0			
	50.0			

N=Standard Penetration Test-Blows per six inches to drive 2" O.D. Split Spoon Sampler 24" with 140lb hammer falling 30"
(QU)B=Bulge S=Shear P=Penetrometer Test
D-50 drill rig used.
4.25" Diameter Hollow Stem Augers used between Split Spoon Sample intervals unless noted otherwise.

SEECO Job No. 10612G-6

ILLINOIS DEPARTMENT OF TRANSPORTATION — SOIL BORING LOG

Page 1 Of 1

Date 3/17/16

ROUTE — DESCRIPTION High Mast Light Towers — Logged By VM

SECTION — LOCATION Interstate I-290 & I-55, Cook County, IL (Var. Loc.) SE 1/4 SEC 17 TWP 39N RNG 13E PM 3rd

COUNTY Cook — STRUCTURE NO. 3LCD3 (Exist.) (Prop.)

Drilling Method AASHTO T 206-09 — Hammer Type Automatic Hammer

Boring No. B-2 — Station — Offset 30 Ft South — Ground Surface El. +611.70+/- M.S.L.

Surf. Wat. El. —
Groundwater Elev.:
When Drilling Dry
at Completion Dry
After — Hrs —

ELEV. (M.S.L.)	DEPTH (ft.)	SPT N (blows)	UCS Qu (TSF)	MOIST. (%)	Description
610.9	1.0				9" PORTLAND CEMENT CONCRETE PAVEMENT
	2.0	5 9 14	2.44 B/S	31.6	FILL: CLAY, Black, Contains Pieces of Brick and Clay Pipe, Very Stiff, Moist (A-6)
608.2	3.0				
	4.0	6 7 10	2.92 B/S	21.7	FILL: CLAY, Black and Dark Brown, Very Stiff, Moist (A-6)
	5.0				
	6.0				
	7.0	5 4 5	1.50 P	24.5	
603.2	8.0				
	9.0	4 6 9	4.75 S	14.7	CLAY, Brown and Gray, Hard to Very Stiff to Stiff, Moist (A-6)
	10.0				
	11.0				
	12.0	6 8 9	4.81 S	15.7	
	13.0				
	14.0	5 6 10	3.25 B/S	13.4	
	15.0				
	16.0				
	17.0	5 8 8	3.88 B/S	18.2	
593.2	18.0				
	19.0	7 15 16		14.7	SILT, Gray, Dense to Very Dense to Very Dense, Moist (A-4)
	20.0				
	21.0				
	22.0	19 24 26		14.4	
	23.0				
	24.0	13 19 23		15.9	
571.7	25.0				End of Boring @ 40 Feet Note: Boring was drilled near Light Pole# 3LCD3 along I-290 near Central Avenue. Boring B-2 had to be offset approximately 30 feet South of original boring location due to rig inaccessibilty because of an existing concrete barrier. State Plane Coordinates of B-2 are Northing=1895992.324 & Easting=1138067.225.

ELEV. (M.S.L.)	DEPTH (ft.)	SPT N (blows)	UCS Qu (TSF)	MOIST. (%)
	26.0			
	27.0	15 21 25		14.2
	28.0			
	29.0	24 29 35		13.3
	30.0			
	31.0			
	32.0			
	33.0			
	34.0	25 31 37		13.4
	35.0			
	36.0			
	37.0			
	38.0			
	39.0	25 33 36		13.0
	40.0			
	41.0			
	42.0			
	43.0			
	44.0			
	45.0			
	46.0			
	47.0			
	48.0			
	49.0			
	50.0			

N=Standard Penetration Test-Blows per six inches to drive 2" O.D. Split Spoon Sampler 24" with 140lb hammer falling 30"
(QU)B=Bulge S=Shear P=Penetrometer Test
D-50 drill rig used.
4.25" Diameter Hollow Stem Augers used between Split Spoon Sample intervals unless noted otherwise.

SEECO Job No. 10612G-6

SBL-1

DELTA ENGINEERING GROUP, LLC

USER NAME = $USER$	DESIGNED - HM	REVISED -
	DRAWN - GJ	REVISED -
PLOT SCALE = $SCALE$	CHECKED - HS	REVISED -
PLOT DATE = $DATE$	DATE - 03-21-2017	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS

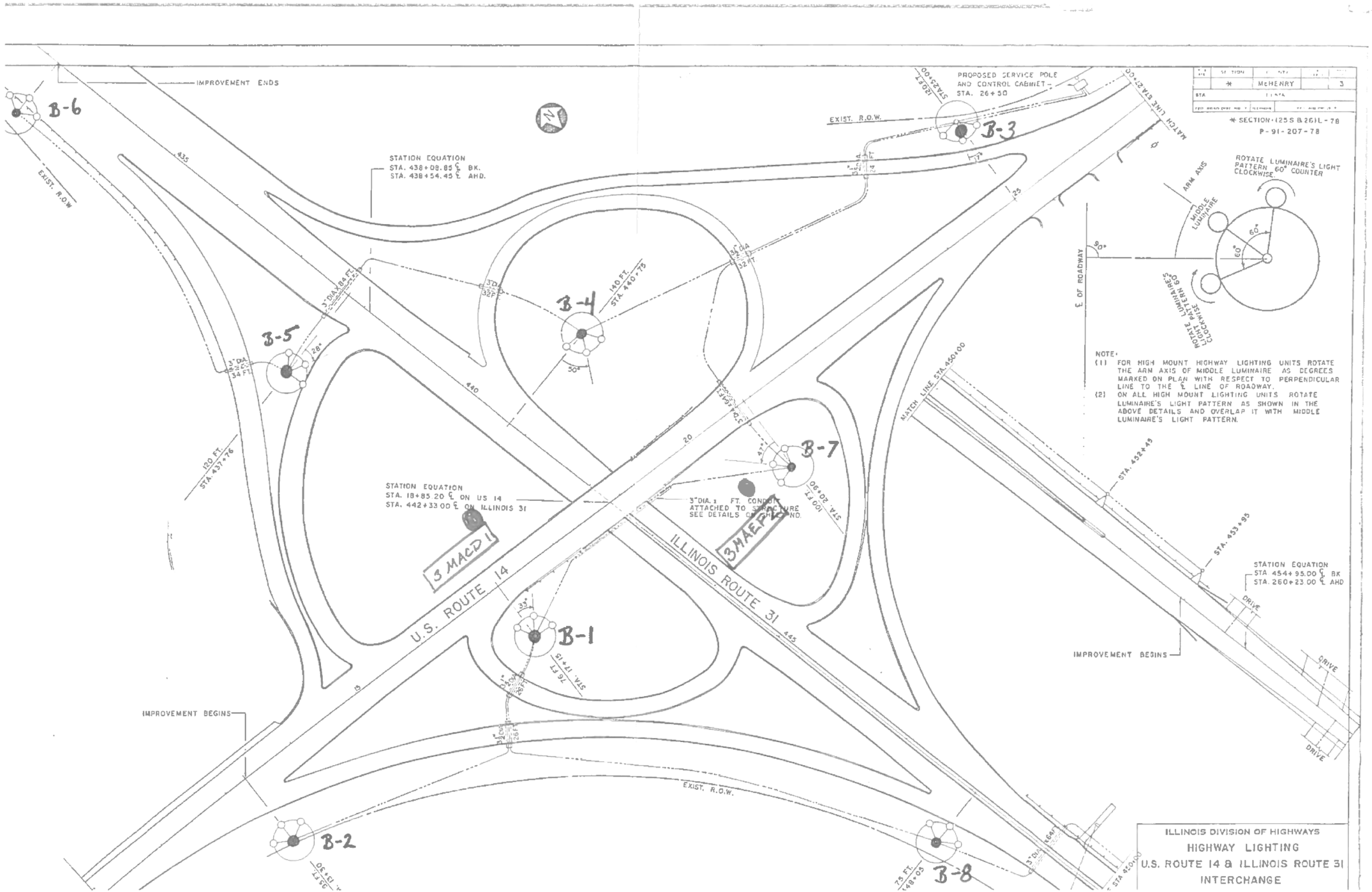
SCALE: NONE | SHEET 8 OF 9 SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2016-017L		88	52
		CONTRACT NO. 62C35		
	ILLINOIS FED. AID PROJECT			

BLANK SHEET

SBL–2

DELTA ENGINEERING GROUP, LLC	USER NAME = $USER$	DESIGNED - HM	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SOIL BORING LOGS	F.A. RTE. / SECTION 2016-017L / COUNTY / TOTAL SHEETS 88 / SHEET NO. 53
		DRAWN - GJ	REVISED -			CONTRACT NO. 62C35
	PLOT SCALE = $SCALE$	CHECKED - HS	REVISED -		SCALE: SHEET OF SHEETS STA. TO STA.	ILLINOIS FED. AID PROJECT
	PLOT DATE = $DATE$	DATE - 03-21-2017	REVISED -			



SBL-3

DELTA ENGINEERING GROUP, LLC	USER NAME = $USER$	DESIGNED - HM	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	US-14 /IL-31 SOIL BORING LOCATIONS	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - GJ	REVISED -				2016-017L		88	54
	PLOT SCALE = $SCALE$	CHECKED - HS	REVISED -						CONTRACT NO. 62C35	
	PLOT DATE = $DATE$	DATE - 03-21-2017	REVISED -		SCALE: SHEET OF SHEETS STA. TO STA.			ILLINOIS	FED. AID PROJECT	

Illinois Department of Transportation

Bridge Foundation Boring Log

P-91-207-78 Sh. 1 of 1 Sh.

PROJECT _____ BRIDGE High-Mast Lighting Date 10-31-78

ROUTE IL Rte. #31 & #14 Bored By D. GROW

SEC. (25S & 26) L-78 STA. _____ Checked By _____

COUNTY Mc Henry

Boring No. #1
Station 17+15
Offset 76' Rt ℄ #14(S)

Surface Water El. _____
Groundwater El. at Completion Dry
After 24 Hours Dry

Elevation	N	Qu t/s.f.	w (%)
Ground Surface 916.8	0			
MEDIUM, YELLOW-BROWN SANDY LOAM & GRAVEL				
	8			
	11			
	9			
911.8	-5			
	9			
DENSE, YELLOW-BROWN SANDY LOAM & GRAVEL	20			
	25		7	
	12			
	21			
	23		7	
906.3	-10			
	12			
MEDIUM, BROWN SAND (Medium Grained)	9			
	17			
904.3				
	25			
VERY DENSE, BROWN SANDY LOAM & GRAVEL	25			
	33		7	
901.8	-15			
	14			
DENSE, BROWN SAND & GRAVEL	18			
	18		6	
899.8				
VERY DENSE, BROWN SAND & GRAVEL - Some black limestone gravel.	33			
	33			
	32		4	
897.3	29			
	-20			
End of Boring				

Elevation	N	Qu t/s.f.	w (%)
-25			
-30			
-35			
-40			
-45			

*No boulders encountered, material was densely compacted drilling was hard.

N-Standard Penetration Test-Blows per foot to drive 2" O.D. Split Spoon Sampler 12" with 140 No. hammer falling 30".

Qu-Unconfined Compressive Strength - t/sf

w - Water Content - percentage of oven dry weight-%.

Type failure:
B - Bulge Failure
S - Shear Failure
E - Estimated Value
P - Penetrometer

Illinois Department of Transportation

Bridge Foundation Boring Log

P-91-207-78 Sh. 1 of 1 Sh.

PROJECT _____ BRIDGE High Mast Lighting Date 10-31-78

ROUTE IL Rte. 31 & Rte. 14 Bored By D. GROW

SEC. (25S-26) L-78 STA. _____ Checked By _____

COUNTY Mc Henry

Boring No. #2
Station 13+30
Offset 95' Rt ℄ Rte 14

Surface Water El. _____
Groundwater El. at Completion Dry
After 24 Hours Dry

Elevation	N	Qu t/s.f.	w (%)
Ground Surface 922.7	0			
LOOSE, BROWN SANDY LOAM & GRAVEL - with 18 inch boulders (Augered up 3 foot piece of 3/4" wire rope (Fill Material	3			
	3			
	3			
917.7	-5			
	3			
LOOSE, DARK BROWN SANDY LOAM	3			
	5		14	
915.7				
STIFF, BROWN SILTY CLAY LOAM	3			
	3	S(20%)		
	4	1.05	27	
	-10			
	3			
	4	S/B		
	5	1.12	27	
910.7				
MEDIUM, BROWN SILTY LOAM	2	B		
909.2	4	.70		
	10		26	
MEDIUM, Yellow-Brown SAND (Medium-grained - Very Clean)	-15			
	9			
	13			
	13		6	
	7			
	14			
	15		9	
	-20			
	8			
	14			
	14		5	

Elevation	N	Qu t/s.f.	w (%)
MEDIUM, Yellow-Brown SAND (Medium -grained - Very Clean)-Cont'd	5		
	10		
	12		13
-25			
	6		
	10		
896.2	13		7
End of Boring			
-30			
-35			
-40			
-45			

* Only first three feet had boulders in the sandy loam and gravel.

N-Standard Penetration Test-Blows per foot to drive 2" O.D. Split Spoon Sampler 12" with 140 No. hammer falling 30".

Qu-Unconfined Compressive Strength - t/sf

w - Water Content - percentage of oven dry weight-%.

Type failure:
B - Bulge Failure
S - Shear Failure
E - Estimated Value
P - Penetrometer

SBL-4

DELTA ENGINEERING GROUP, LLC

USER NAME = $USER$	DESIGNED - HM	REVISED -	
	DRAWN - GJ	REVISED -	
PLOT SCALE = $SCALE$	CHECKED - HS	REVISED -	
PLOT DATE = $DATE$	DATE - 03-21-2017	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

US–14 /IL–31 SOIL BORING LOGS

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2016-017L		88	55
			CONTRACT NO. 62C35	
	ILLINOIS FED. AID PROJECT			

Illinois Department of Transportation

Bridge Foundation Boring Log

Sh. 1 of 1 Sh.

P-91-207-78
PROJECT _____ BRIDGE High Mast Lighting Date 11-01-78

ROUTE IL Rte. 31 & Rte. 14 Bored By D. GROW

SEC. (25S-26) L-78 STA. _____ Checked By _____

COUNTY Mc Henry

Boring No. #3
Station 25 +00
Offset 115' Lt. ℄ IL 14

Surface Water El. _____
Groundwater El. at Completion Dry
After _____ Hours _____

Elevation	N	Qu t/s.f.	w (%)
Ground Surface 890.0	0			
DENSE, ORANGE SANDY LOAM & GRAVEL with 18" boulders 888.0				
MEDIUM, YELLOW-BROWN SAND -- Medium-grained (Very Clean)	4 5 9			
885.0	-5			
MEDIUM, BROWN SAND & GRAVEL	5 8 8			
	5 12 12			
	-10			
(High blow count due to large cobble.)	9 11 38			
	9 12 8			
	-15			
	10 12 15			
872.0	13			
DENSE, BROWN SAND & GRAVEL	20 25			
870.0	-20			
MEDIUM, BROWN SAND & GRAVEL	8 10 11			
868.5				
End of Boring				

* Same as Boring #2 except depth.

Elevation	N	Qu t/s.f.	w (%)
-25			
-30			
-35			
-40			
-45			

N-Standard Penetration Test-Blows per foot to drive 2" O.D. Split Spoon Sampler 12" with 140 No. hammer falling 30"

Qu-Unconfined Compressive Strength - t/sf

w - Water Content - percentage of oven dry weight-%.

Type failure:
B - Bulge Failure
S - Shear Failure
E - Estimated Value
P - Penetrometer

Illinois Department of Transportation

Bridge Foundation Boring Log

Sh. 1 of 1 Sh.

P-91-207-78
PROJECT _____ BRIDGE High Mast Lighting Date 11-14-78

ROUTE IL 31 & Rte. #14 Bored By D. GROW

SEC. (25S & 26) L-78 STA. _____ Checked By _____

COUNTY Mc Henry

Boring No. 4
Station 440+75
Offset 140' Lt. ℄ IL 31

Surface Water El. _____
Groundwater El. at Completion Dry
After _____ Hours _____

Elevation	N	Qu t/s.f.	w (%)
Ground Surface 893.8	0			
DENSE, BROWN SAND & GRAVEL with many 18" boulders located throughout -- especially in the upper 7 feet.				
	-5			
	10 17 19			
	21 28 36			
	-10			
	14 19 27			
	18			
880.3	27 100 2" Pen			
VERY DENSE, BROWN SANDY LOAM & GRAVEL. Some boulders 18" or less encountered in drilling	-15 17 100 6" Pen			
	27			
	32 46			
	-20			
	25 50			
872.3	110			
End of Boring				

* The first seven (7) feet was predominantly boulders with a sand to gravel matrix. Boulders were spasmodically encountered throughout the remaining depth of the boring.

Elevation	N	Qu t/s.f.	w (%)
-25			
-30			
-35			
-40			
-45			

N-Standard Penetration Test-Blows per foot to drive 2" O.D. Split Spoon Sampler 12" with 140 No. hammer falling 30".

Qu-Unconfined Compressive Strength - t/sf

w - Water Content - percentage of oven dry weight-%.

Type failure:
B - Bulge Failure
S - Shear Failure
E - Estimated Value
P - Penetrometer

SBL-5

DELTA ENGINEERING GROUP, LLC

USER NAME = $USER$	DESIGNED - HM	REVISED -	
	DRAWN - GJ	REVISED -	
PLOT SCALE = $SCALE$	CHECKED - HS	REVISED -	
PLOT DATE = $DATE$	DATE - 03-21-2017	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

US–14 /IL–31 SOIL BORING LOGS

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2016-017L		88	56
			CONTRACT NO. 62C35	
		ILLINOIS	FED. AID PROJECT	

Illinois Department of Transportation

Bridge Foundation Boring Log

P-91-207-78 Sh. 1 of 1 Sh.

PROJECT ~~BRIDGE~~ HIGH MAST LIGHTING Date 11-06-78

ROUTE ILL. 31 & Rte 14 Bored By D. GROW

SEC (25S & 26) L-78 STA. Checked By

COUNTY MC HENRY

Boring No. 5
Station 437 + 76
Offset 120' RT of C.L.

Surface Water El.
Groundwater El. at Completion DRY
After ____ Hours

	Elevation	N	Qu t/s.f.	w (%)
Ground Surface	905.0	0		
STIFF, DARK BROWN TO BROWN LOAM	902.0	6		
MEDIUM, BROWN SANDY LOAM AND GRAVEL WITH SOME COBBLES	898.5	14 16 59 16 10		
MEDIUM, ORANGE SAND AND GRAVEL	890.0	7 7 8 11 10 10 11 12 13 4		
MEDIUM, BROWN SAND MEDIUM GRAINED	887.5	9 13 12		
DENSE, BROWN SANDY LOAM TILL	884.5	15 22 12		
SAMPLER REFUSAL		*		
AUGER REFUSAL				

* It is felt that boulders were encountered @ elevation 884.5.

* 100 blows with zero penetration

Elevation	N	Qu t/s.f.	w (%)
-25			
-30			
-35			
-40			
-45			

N-Standard Penetration Test-
Blows per foot to drive 2"
O.D. Split Spoon Sampler 12" with
140 No. hammer falling 30".

Qu-Unconfined Compressive Strength - t/sf

w - Water Content - percentage of oven dry weight-%

Type failure:
B - Bulge Failure
S - Shear Failure
E - Estimated Value
P - Penetrometer

Illinois Department of Transportation

Bridge Foundation Boring Log

P-91-207-78 Sh. 1 of 1 Sh.

PROJECT ~~BRIDGE~~ HIGH MAST LIGHTING Date 11-06-78

ROUTE ILL. 31 & Rte 14 Bored By D. GROW

SEC (25S & 26) L-78 STA. Checked By

COUNTY MC HENRY

Boring No. 6
Station 433 + 18
Offset 80' RT. of C.L.

Surface Water El.
Groundwater El. at Completion DRY
After ____ Hours

	Elevation	N	Qu t/s.f.	w (%)
Ground Surface	911.4	0		
MEDIUM, BROWN SANDY LOAM AND GRAVEL WITH 18 INCH BOULDERS.		7 5 61 7 11 17		
NO SAMPLE TAKEN BECAUSE OF BOULDER	901.4	8		
DENSE, BROWN SAND AND GRAVEL	896.4	12 21 11 14 17 9 11 14		
MEDIUM, BROWN SAND AND GRAVEL	894.4			
STIFF, YELLOW BROWN SILTY LOAM	891.9	10 11 19		
DENSE, LIGHT BROWN SAND (VERY CLEAN)	889.4	20 23 25		

	Elevation	N	Qu t/s.f.	w (%)
DENSE, BROWN SAND AND GRAVEL	887.4	9 16 24		
END OF BORING				

* Boulders were spasmodically encountered above elevation 901.4.

Elevation	N	Qu t/s.f.	w (%)
-25			
-30			
-35			
-40			
-45			

N-Standard Penetration Test-
Blows per foot to drive 2"
O.D. Split Spoon Sampler 12" with
140 No. hammer falling 30".

Qu-Unconfined Compressive Strength - t/sf

w - Water Content - percentage of oven dry weight-%.

Type failure:
B - Bulge Failure
S - Shear Failure
E - Estimated Value
P - Penetrometer

SBL-6

DELTA ENGINEERING GROUP, LLC

USER NAME = $USER$	DESIGNED - HM	REVISED -
	DRAWN - GJ	REVISED -
PLOT SCALE = $SCALE$	CHECKED - HS	REVISED -
PLOT DATE = $DATE$	DATE - 03-21-2017	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

US-14 /IL-31 SOIL BORING LOGS

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2016-017L		88	57
		CONTRACT NO. 62C35		
	ILLINOIS FED. AID PROJECT			

Illinois Department of Transportation

18'-6" PREPARE FOR HAND DRILLING

Bridge Foundation Boring Log

Sh. 1 of 1 Sh.

I-01-207-78

PROJECT ____ BRIDGE High Mast Lighting Date 11-06-78

ROUTE ILL 31 & RTE 14 Bored By D. GROW

SEC. (25S-26) L-78 STA. ____ Checked By ____

COUNTY Mc HENRY

Boring No. 7
Station 20+ 90
Offset 100'rt Of C.L.

Surface Water El. ____
Groundwater El. at Completion DRY
After ____ Hours ____

Elevation	N	Qu t/s.f.	w (%)
Ground Surface 902.5	0			
MEDIUM, BROWN SANDY LOAM AND GRAVEL	4 5 5			
898.0	-5			
STIFF, REDDISH BROWN SANDY CLAY LOAM	3 6	B 1.75		16
895.5				
MEDIUM, BROWN SANDY LOAM AND GRAVEL	7 8 10			
	-10			
891.5	9 13 32			
DENSE, BROWN SANDY LOAM AND GRAVEL	11 19 16			
	-15			
885.5	16 18 16			
MEDIUM, LIGHT BROWN SAND. (VERY CLEAN)	7 6 7			
SAMPLER REFUSAL 882.0	-20	100		
AUGER REFUSAL - BOULDER				
END OF BORING				

* Same as Boring #5 except elevation.

Elevation	N	Qu t/s.f.	w (%)
-25			
-30			
-35			
-40			
-45			

N-Standard Penetration Test- Blows per foot to drive 2" O.D. Split Spoon Sampler 12" with 140 No. hammer falling 30".

Qu-Unconfined Compressive Strength - t/sf

w - Water Content - percentage of oven dry weight-%.

Type failure:
B - Bulge Failure
S - Shear Failure
E - Estimated Value
P - Penetrometer

Illinois Department of Transportation

Bridge Foundation Boring Log

Sh. 1 of 1 Sh.

P-01-207-78

PROJECT ____ BRIDGE HIGH MAST LIGHTING Date 11-09-78

ROUTE ILL 31 & Rte 14 Bored By D. GROW

SEC. (25S & 26) L- 78 STA. ____ Checked By ____

COUNTY MC HENRY

Boring No. 8
Station 448 + 05
Offset 75' RT of C.L. MEDIAN *

Surface Water El. ____
Groundwater El. at Completion DRY
After 72 Hours Dry

Elevation	N	Qu t/s.f.	w (%)
Ground Surface 903.4	0			
STIFF, BROWN SANDY CLAY LOAM & GRAVEL	4 6 6			
900.4				
MEDIUM, BROWN SANDY LOAM & GRAVEL 898.4	-5 11			
DENSE, BROWN SANDY LOAM AND GRAVEL WITH OCCASSIONAL BOULDERS UP TO 18 INCHES IN DIA.	15 19 12 15 15			
	-10			
WET	7 14 24 10 25 20			
	-15			
	7 30 32 6 9 10			
	-20			
881.9	11 12 10			
END OF BORING				

* Same as Boring #6 but between two elevations.

* BORING TAKEN AT TOP OF HILL

Elevation	N	Qu t/s.f.	w (%)
-25			
-30			
-35			
-40			
-45			

N-Standard Penetration Test- Blows per foot to drive 2" O.D. Split Spoon Sampler 12" with 140 No. hammer falling 30".

Qu-Unconfined Compressive Strength - t/sf

w - Water Content - percentage of oven dry weight-%.

Type failure:
B - Bulge Failure
S - Shear Failure
E - Estimated Value
P - Penetrometer

SBL-7

DELTA ENGINEERING GROUP, LLC

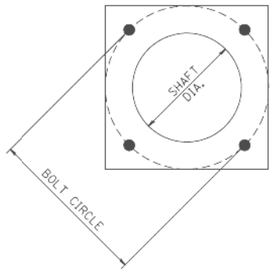
USER NAME = $USER$	DESIGNED - HM	REVISED -	
	DRAWN - GJ	REVISED -	
PLOT SCALE = $SCALE$	CHECKED - HS	REVISED -	
PLOT DATE = $DATE$	DATE - 03-21-2017	REVISED -	

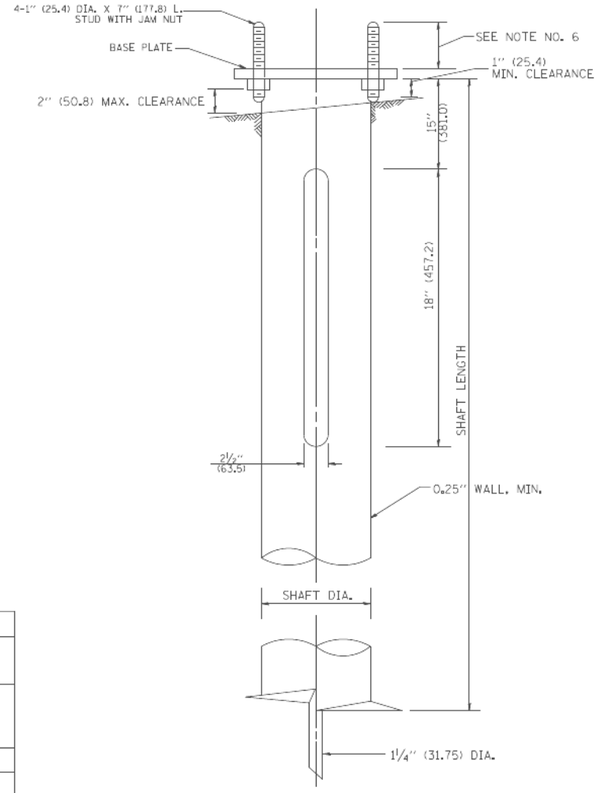
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

US–14 /IL–31 SOIL BORING LOGS

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2016-017L		88	58
			CONTRACT NO. 62C35	
	ILLINOIS	FED. AID PROJECT		





NOTES:

1. ALL DIMENSION IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.
2. ALL MATERIAL SHALL BE GALVINIZED ACCORDING TO AASHTO M111, UNLESS OTHERWISE SPECIFIED.
3. ALL WELDS SHALL BE CONTINUOUS AND NOT LESS THAN 1/4" (6.35 mm) FILLET WELDS. THE WELDED FOUNDATION SHALL BE CAPABLE OF WITHSTANDING 10,000 FT/LBS (13558.18 n.m) OF INSTALLATION TORQUE APPLIED ABOUT THE AXIS OF THE FOUNDATION.
4. THE HELIX FOUNDATION SHAFT SHALL BE INSTALLED VERTICAL AND THE BASE PLATE SHALL BE IN LEVEL. THE BREAKAWAY COUPLINGS AND HARDWARE SHALL NOT BE USED TO ALIGN THE POLE INSTALLATION.
5. THE CABLE TRENCH SHALL BE BACKFILLED AND FIRMLY COMPACTED BEFORE THE INSTALLATION OF THE LIGHT POLE.
6. THE CONTRACTOR SHALL COORDINATE EXTENSION OF ANCHOR BOLTS ABOVE TOP OF THE BASE PLATE WITH THE BREAKAWAY DEVICE MANUFACTURER'S REQUIREMENTS.
7. ANY VOIDS WITHIN THE METAL FOUNDATION SHALL BE FILLED WITH FINE AGGREGATE.
8. METAL FOUNDATIONS SHALL BE INSTALLED IN UNDISTURBED SOIL. PREDRILLING A PILOT HOLE AND/OR BACKFILLING AROUND THE FOUNDTION IS NOT ALLOWED.
9. THE METAL FOUNDATION SHALL NOT BE INSTALLED TO A TORQUE WHICH EXCEEDS THE MANUFACTURER'S MAXIMUM TORQUE RATING NOR SHALL IT BE INSTALLED TO AN INSTALLATION TORQUE VALUE OF LESS THAN 3,500 FT LB (4,750 KNM). METAL FOUNDATIONS THAT ARE NOT INSTALLED TO FULL INSTALLATION DEPTH OR DO NOT ACHIEVE THE MINIMUM INSTALLATION TORQUE SHALL BE REMOVED AND REPLACED WITH A CONCRETE FOUNDATION AT NO ADDITIONAL COST.
10. THE BASEPLATE SHALL BE PERPENDICULAR TO THE SHAFT AXIS (± 1°) AND THE HOLE CENTERLINE SHALL BE CONCENTRIC (± 0.188) TO THE SHAFT AXIS.
11. THE PILOT POINT AND SHAFT AXIS SHALL BE CONCENTRIC (± 0.125) AND IN LINE (± 2°).
12. THE BASEPLATE SHALL BE STAMPED WITH THE MANUFACTURERS NAME AND DATE OF MANUFACTURE.

HELIX FOUNDATION SIZE

POLE MOUNTING HEIGHT	BOLT CIRCLE	SHAFT DIAMETER	SHAFT LENGTH	BASEPLATE
30 FT.	11½"	8⅝"	6 FT.	12"x12"x1"
31 FT.-35 FT.	11½"	8⅝"	6 FT.	12"x12"x1"
36 FT.-40FT.	15"	8⅝"	6 FT.	15"x15"x1¼"
41 FT.-45 FT.	15"	8⅝"	6 FT.	15"x15"x1¼"
46 FT.-50 FT.	15"	10"	8 FT.	15"x15"x1¼"

METAL HELIX FOUNDATION MATERIALS

ITEM	MATERIAL REQUIREMENT
BASEPLATE	AASHTO M 270M, GRADE 36 (M270M, GRADE 250)
SHAFT	ASTM A 252, GRADE 2 (PHOSPHOROUS 0.04% MAXIMUM, SULFUR 0.05% MAXIMUM)
HELIX SCREW	AASHTO M 183 (ASTM A 635)
PILOT POINT	AASHTO M 270 (ASTM A 575)
ANCHOR RODS/STUDS	AASHTO M 314 (ASTM F 1554)
HEXAGON NUTS	AASHTO M 291M (ASTM A 563) GRADE DH, OR AASHTO M 292 (ASTM A 194) GRADE 2H
WASHERS	AASHTO M 293 (ASTM F 436)

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

LIGHT POLE FOUNDATION, METAL

SCALE: NONE | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	BE-305	CONTRACT NO.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

SD-1

DELTA ENGINEERING GROUP, LLC

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PLOT DATE = 3/19/2018	DATE - 03-21-2017	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IDOT STANDARD DETAIL

SCALE: NONE | SHEET OF SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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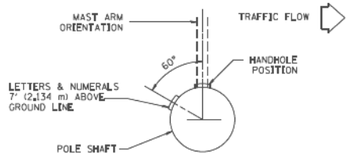
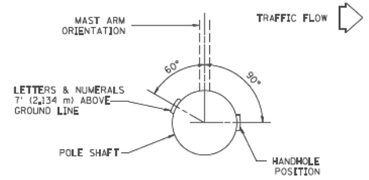
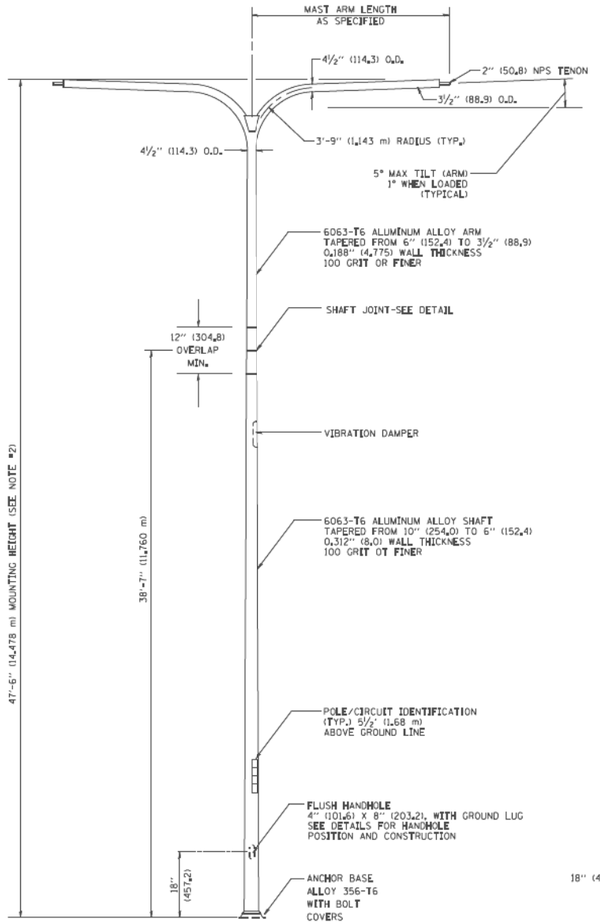
		CONTRACT NO. 62C35		
	ILLINOIS	FED. AID PROJECT		



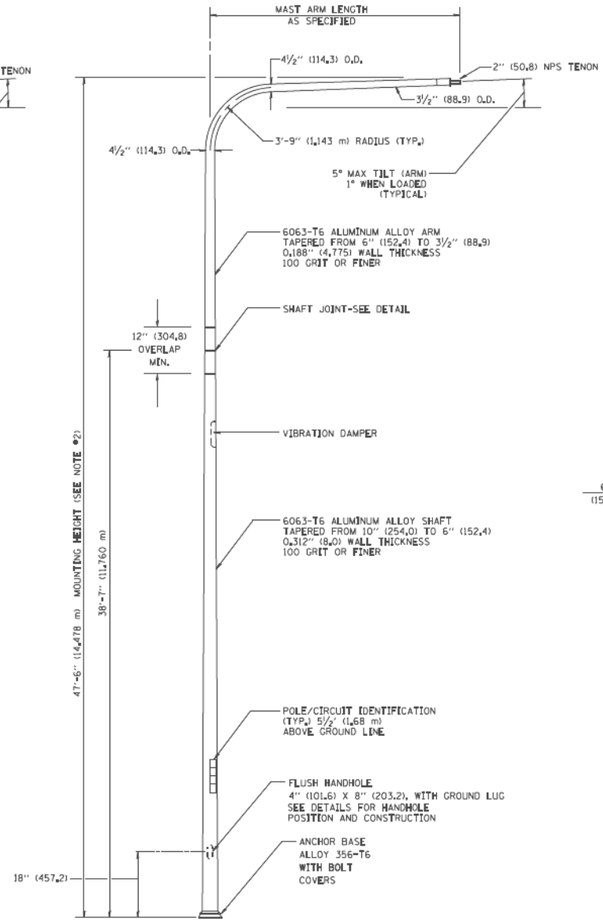
POSITION OF HANDHOLE AND POLE NUMBER FOR SINGLE MAST ARM POLES MOUNTED ON BRIDGE PARAPET OR BARRIER WALL



POSITION OF HANDHOLE AND POLE NUMBER FOR SINGLE MAST ARM POLES



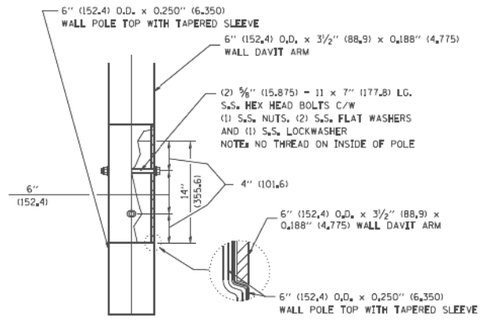
TWIN ARM POLE



SINGLE ARM POLE

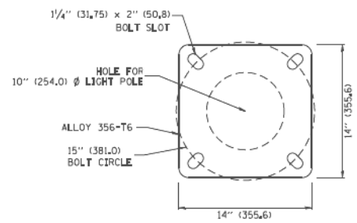
NOTES:

1. ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.
2. MOUNTING HEIGHT IS DEFINED AS THE DISTANCE FROM THE CENTERLINE OF THE TENON TO THE BOTTOM OF THE ANCHOR BASE.
3. TWO PIECE SHAFT WILL BE MATCHED MARKED AND INTERCHANGEABLE BETWEEN DIFFERENT UNITS. FIELD DRILLING OF THE HOLES WILL NOT BE ALLOWED.
4. THE LIGHT POLE WILL MEET AASHTO DESIGN CRITERIA AS SPECIFIED.
5. THE INSTALLING CONTRACTOR WILL PROVIDE A UL LISTED GROUNDING CONNECTOR, BURNDY K2C23, T&B SP4DL OR APPROVED EQUAL.
6. LIGHT POLES WILL NOT BE INSTALLED WITHOUT MAST ARMS AND LUMINAIRES.
7. LIGHT POLES WILL BE SET PLUMB ON THE FOUNDATION WITHOUT THE USE OF LEVELING NUTS, WASHERS OR SHIMS.
8. LIGHTING UNIT IDENTIFICATION NUMBERS SHALL BE INSTALLED BEFORE THE LIGHTING UNIT IS ENERGIZED.



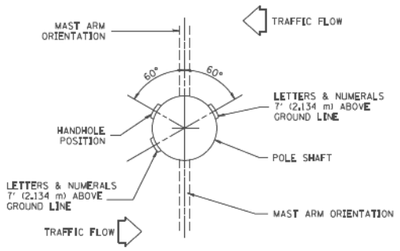
DAVIT ARM CONNECTION

[14" (355.6) OVERLAP SHOWN]

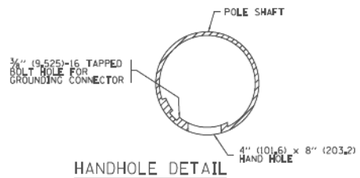


LIGHT POLE BASE PLATE DETAIL

(FOR POLE MOUNTED ON 15 INCH (381.0) BOLT CIRCLE FOUNDATION)



POSITION OF HANDHOLE AND POLE NUMBER FOR TWIN MAST ARM POLES



HANDHOLE DETAIL

(N.T.S.)

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DAVIT LIGHT POLE
47'-6" (14.478 m) MOUNTING HEIGHT

SCALE: NONE | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	BE-410	CONTRACT NO.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

SD-2

DELTA ENGINEERING GROUP, LLC

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PLOT DATE = $DATE$	DATE - 03-21-2017	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IDOT STANDARD DETAIL

SCALE: NONE | SHEET OF SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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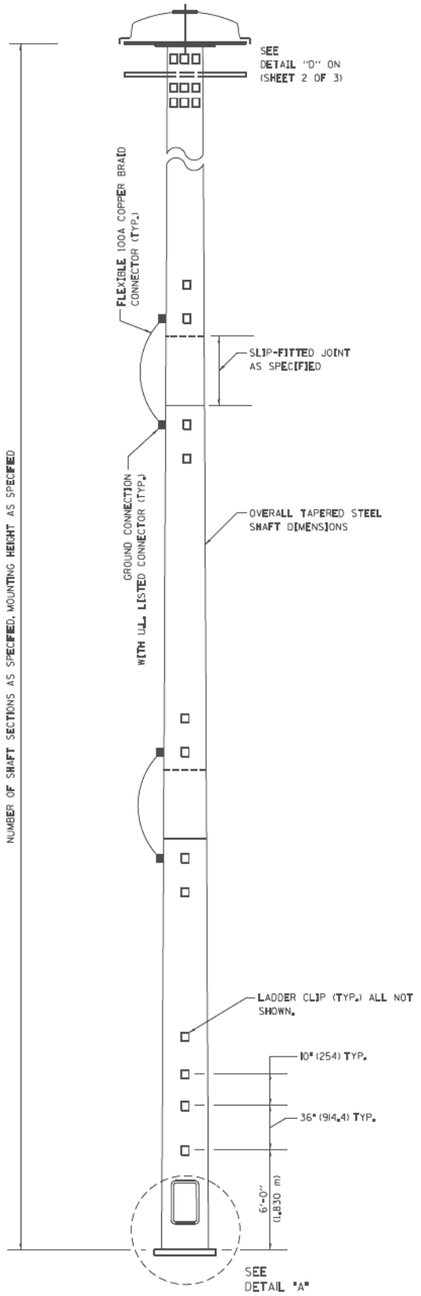
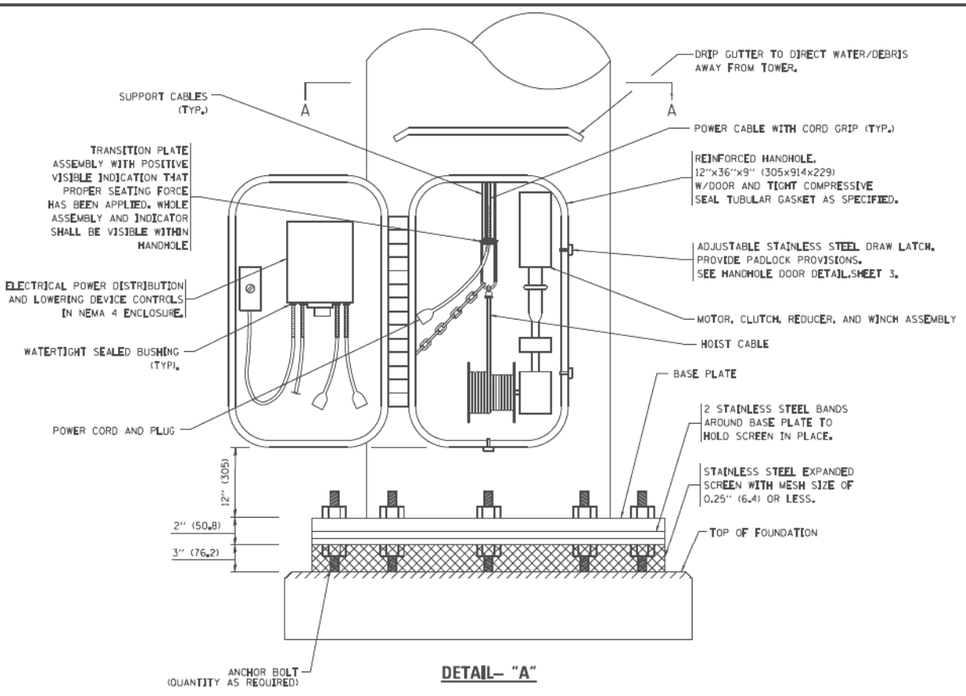
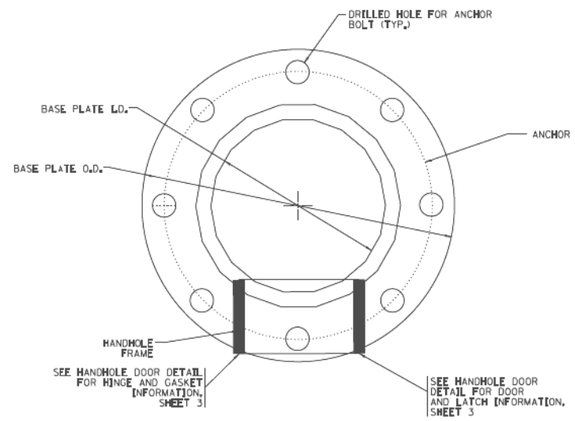
			CONTRACT NO. 62C35	
	ILLINOIS	FED. AID PROJECT		





DETAIL– "A"

3 CABLE LOWERING & SUPPORT
MECHANISM SHOWN.



SECTION – A–A

NOTES:

1. ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.
2. THE DESIGN SHALL BE BASED UPON AASHTO "LRFD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS" IN EFFECT ON THE DATE OF INVITATION FOR BIDS, HOWEVER THE WIDTH OF REINFORCED OPENING REQUIREMENT IN CHAPTER 5, SECTION 5.6.6.1 SHALL NOT APPLY. LIGHT TOWERS SHALL BE DESIGNED FOR ADT > 10,000, RISK CATEGORY TYPICAL, AND FATIGUE IMPORTANCE CATEGORY I.

   A MINIMUM TOTAL COMBINED LUMINAIRE WEIGHT OF 600 LB (272 KG) SHALL BE USED PLUS A COMBINED HOOD AREA AND LOWERING RING WEIGHT OF 400 LB (181 KG). THE ASSOCIATED TOTAL PROJECTED AREA SHALL BE 24 SQ FT (2.23 SQ M) AND 10 SQ FT (0.93 SQ.) RESPECTIVELY.
3. ALL TOWER SHAFT COMPONENTS, INCLUDING, BUT NOT LIMITED TO THE SHAFT SECTIONS, BASE PLATE, LADDER CLIPS, HANDHOLE DOOR, HANDHOLE REINFORCING, RAIN GUTTER, AND BASE PLATE, SHALL BE FABRICATED FROM HIGH-STRENGTH, LOW ALLOY, STEEL WITH A MINIMUM YIELD STRENGTH OF 50,000 PSI (345 K PA) ACCORDING TO AASHTO M 270 (ASTM A 572 GR50)
4. THE ELECTRIC MOTOR, MOTOR GEAR REDUCER, WINCH DRUM ASSEMBLY AND AUTOMATIC SHUTOFF SWITCH OF THE LOWERING DEVICE SHALL BE ACCESSIBLE FROM THE FRONT OF THE TOWER FOR EASY REMOVAL AND MAINTENANCE. ALL COMPONENTS SHALL BE REMOVABLE THROUGH THE HANDHOLE.
5. THE LIGHT TOWER SHAFT SHALL HAVE LADDER CLIPS. CLIPS SHALL BEGIN 6 FT. (1.8 m) ABOVE THE BASE PLATE WITH ALTERNATE 36 INCH (900) AND 10 INCH (250) SPACING THEREAFTER, FOR THE ENTIRE LENGTH. THE TOP 10 FT. (3 m) OF THE POLE SHAFT SHALL HAVE 3 SETS OF CLIPS. EACH SET OF CLIPS SHALL BE 120 DEGREES APART. CLIPS SHALL BE 0.25 X 2 INCHES (6 X 50) WELDED TO THE SHAFT TO PRODUCE A SLOT 0.625 INCHES (15.9) DEEP AND 1.625 INCHES (41.3) LONG. THE TOP INSIDE EDGE SHALL BE CHAMFERED.
6. A COPPER BONDING JUMPER SHALL BOND SLIP-FIT POLE SECTIONS TOGETHER WITH A FLAT COPPER MESH AND STAINLESS STEEL GROUND LUGS.
7. ALL TOWER SHAFT HARDWARE, SUCH AS GROUND LUGS, JUNCTION BOXES, HARDWARE FOR THE HANDHOLE DOOR, INCLUDING THE HANDLE/LATCH MECHANISM, HINGE AND DOOR STOP, SHALL BE STAINLESS STEEL. ALL CONDUIT AND CONDUIT FITTINGS SHALL BE PVC COATED GALVANIZED STEEL.
8. THE ENTIRE TOWER INCLUDING THE SHAFT, HANDHOLE, HANDHOLE DOOR, BASE PLATE AND ALL OTHER ELEMENTS WELDED TO THE SHAFT SHALL BE GALVANIZED IN ACCORDANCE WITH AASHTO M 111 (ASTM A 123). THE LUMINAIRE RING SHALL BE PRIMED AND PAINTED AS SPECIFIED OR BE STAINLESS STEEL
9. ALL MULTI-CONDUCTOR CABLES SHALL BE FITTED WITH A HEAT-SHRINK MULTI-LEG BOOT. THE BOOT SHALL MEET MILITARY SPECIFICATION MIL-I-81765/1.
10. THE LIGHT TOWER SHALL BE STRAIGHT AND CENTERED ON ITS LONGITUDINAL AXIS, UNDER NO-WIND CONDITIONS, SO WHEN EXAMINED WITH A TRANSIT FROM ANY DIRECTION, THE DEVIATION FROM THE NORMAL SHALL NOT EXCEED 1/8 IN. IN 3 FT (2 mm IN 1 m) WITHIN ANY 5 FT (1.5 m) OF HEIGHT, WITH TOTAL DEVIATION NOT TO EXCEED 3 IN. (75) FROM THE VERTICAL AXIS THROUGH THE CENTER OF THE POLE BASE.
11. PVC CONDUIT WILL NOT BE ALLOWED FOR ANY LIGHT TOWER COMPONENT.
12. COUNTER WEIGHTS TO BE INCLUDED AS A PART OF THE LIGHT TOWER PAY ITEM.

LIGHT TOWER DIMENSIONS

MOUNTING HEIGHT (FEET)	MAXIMUM NUMBER OF SECTIONS	MINIMUM NUMBER OF ANCHOR RODS	MINIMUM TOWER TOP DIAMETER (INCHES)	MINIMUM TOWER BOTTOM DIAMETER (INCHES)	MINIMUM ROD DIAMETER (INCHES)	MINIMUM ANCHOR ROD CIRCLE (INCHES)
100	3	8	7.5	24	1.5	30
110	3	8	7.5	24	1.5	30
120	3	8	7.5	26	1.75	36
130	4	8	7.5	28	1.75	36
140	4	8	7.5	28	1.75	36
150	4	8	7.5	30	2.25	38
160	4	8	7.5	32	2.25	38

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	PLOT DATE = 7/27/2016	DATE -	REVISED - R. TOMSONS 07-26-16

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

HIGH MAST LIGHT TOWER
100 FT TO 160 FT (30 m TO 49 m)

SCALE: | SHEET 1 OF 3 SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	BE-500	CONTRACT NO.		
	ILLINOIS FED. AID PROJECT			

SD-3

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		DRAWN - GJ	REVISED -
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	PLOT DATE = $DATE$	DATE - 03-21-2017	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IDOT STANDARD DETAIL

SCALE: NONE | SHEET OF SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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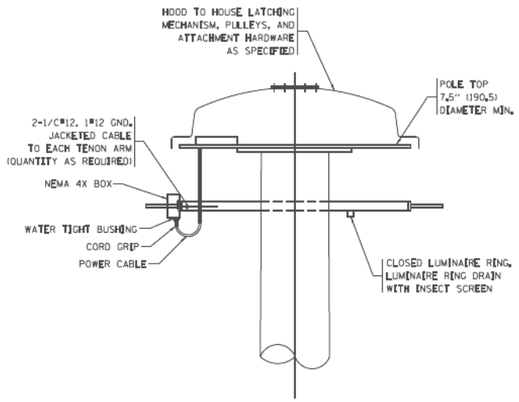
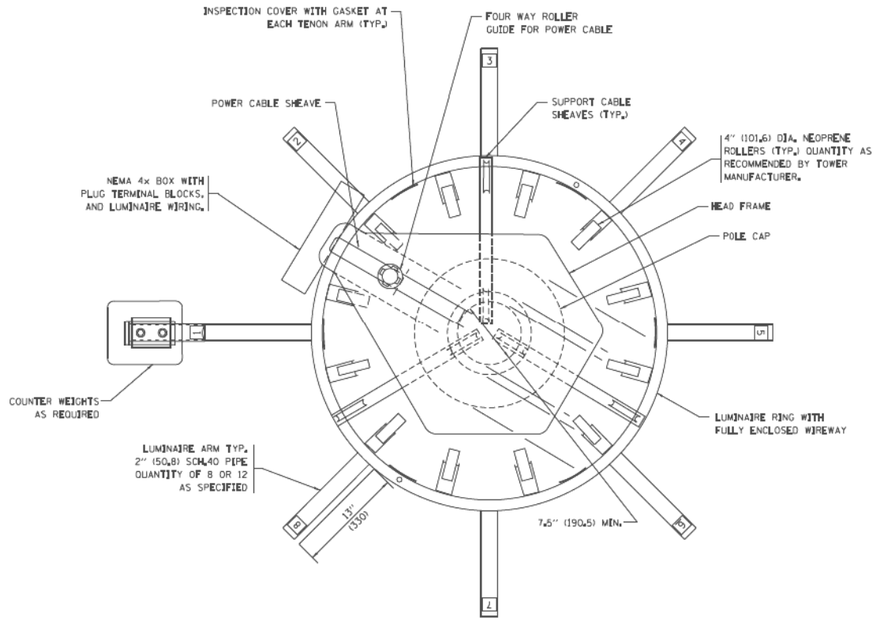
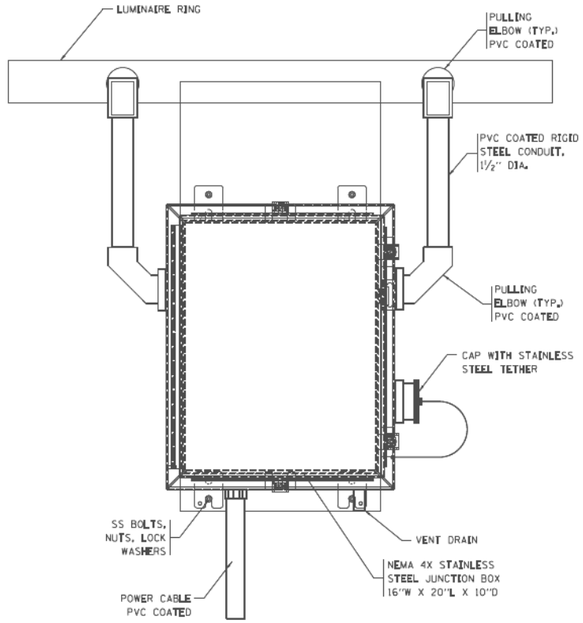
	CONTRACT NO. 62C35			
	ILLINOIS FED. AID PROJECT			



DETAIL-"D"





FRONT VIEW
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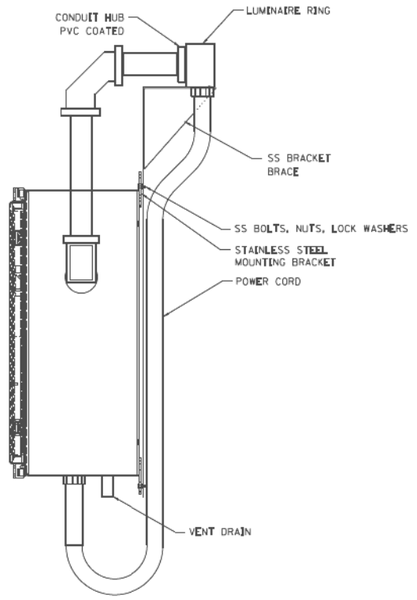

SIDE VIEW
N.T.S.

LUMINAIRE RING TERMINAL BOX

NOTES:

1. LUMINAIRE WIRES SHALL EXTEND 24 INCHES (609mm) LONGER THAN THE RESPECTIVE TENON ARM AND SHALL BE TRAINED BACK INTO THE ARM WHICH SHALL THEN BE CLOSED WITH A CAP AS SPECIFIED. ALL WIRES SHALL BE CAPPED WITH HEAT SHRINK INSULATING BOOTS. CRIMP CAPS ARE UNACCEPTABLE. ALL RING WIRES SHALL BE TAGGED WITH WIRE MARKERS AT BOTH ENDS THE TENON ARMS SHALL ALSO BE TAGGED CORRESPONDING TO THE WIRING CONTAINED WITHIN.
2. SPLICING WILL NOT BE ALLOWED WITHIN THE LUMINAIRE RING.
3. ALL TOWER SHAFT HARDWARE, SUCH AS GROUND LUGS, JUNCTION BOXES, HARDWARE FOR THE HANDHOLE DOOR, INCLUDING THE HANDLE/LATCH MECHANISM, HINGE AND DOOR STOP, SHALL BE STAINLESS STEEL. ALL CONDUIT AND CONDUIT FITTINGS SHALL BE PVC COATED GALVANIZED STEEL.
4. ALL MULTI-CONDUCTOR CABLES SHALL BE FITTED WITH A HEAT-SHRINK MULTI-LEG BOOT. THE BOOT SHALL MEET MILITARY SPECIFICATION MIL-I-81765/1.

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	PLOT DATE = 7/27/2016	DATE -	REVISED - R. TOMSONS 07-26-16

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

HIGH MAST LIGHT TOWER
100 FT TO 160 FT (30 m TO 49 m)

SCALE: | SHEET 2 OF 3 SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	BE-500	CONTRACT NO.		
	ILLINOIS FED. AID PROJECT			

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SD-4

DELTA ENGINEERING GROUP, LLC

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PLOT DATE = $DATE$	DATE - 03-21-2017	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IDOT STANDARD DETAIL

SCALE: NONE | SHEET OF SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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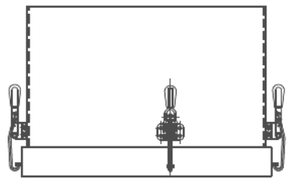
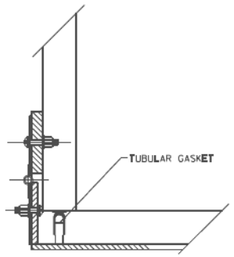
		CONTRACT NO. 62C35		
	ILLINOIS FED. AID PROJECT			



TOP VIEW



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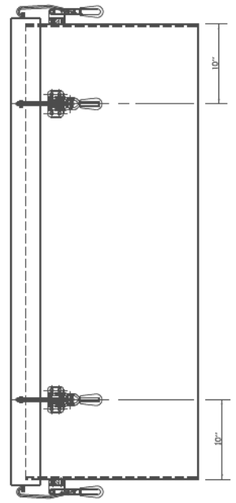
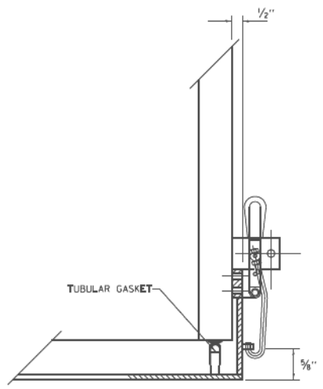
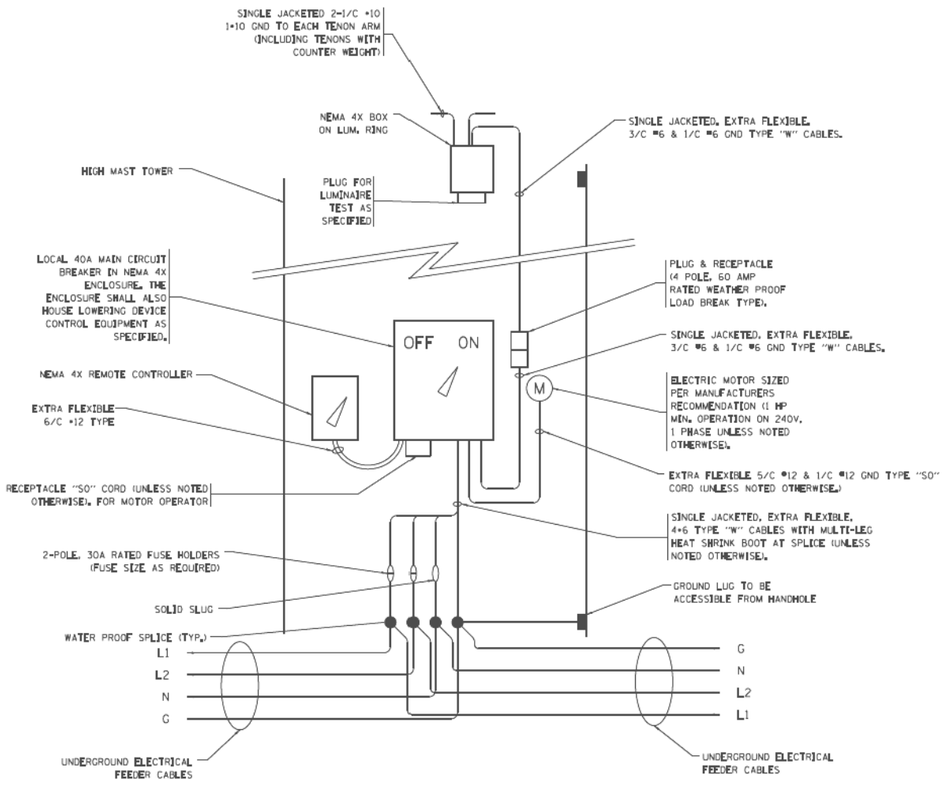


SIDE VIEW

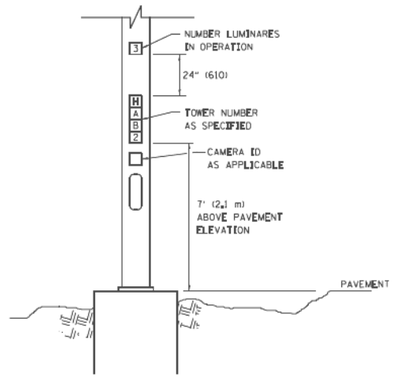


LATCH DETAIL

HANDHOLE DOOR DETAILS



HIGH MAST POLE WIRING DIAGRAM



LIGHT TOWER NUMBERING DETAIL

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		DATE -	REVISED - R. TOMSONS 07-26-16

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

HIGH MAST LIGHT TOWER
100 FT TO 160 FT (30 m TO 49 m)

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	BE-500	CONTRACT NO.		
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SD-5

DELTA ENGINEERING GROUP, LLC

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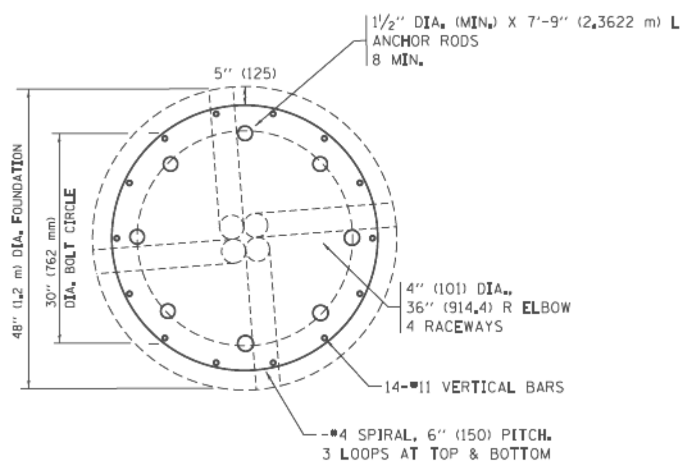
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IDOT STANDARD DETAIL

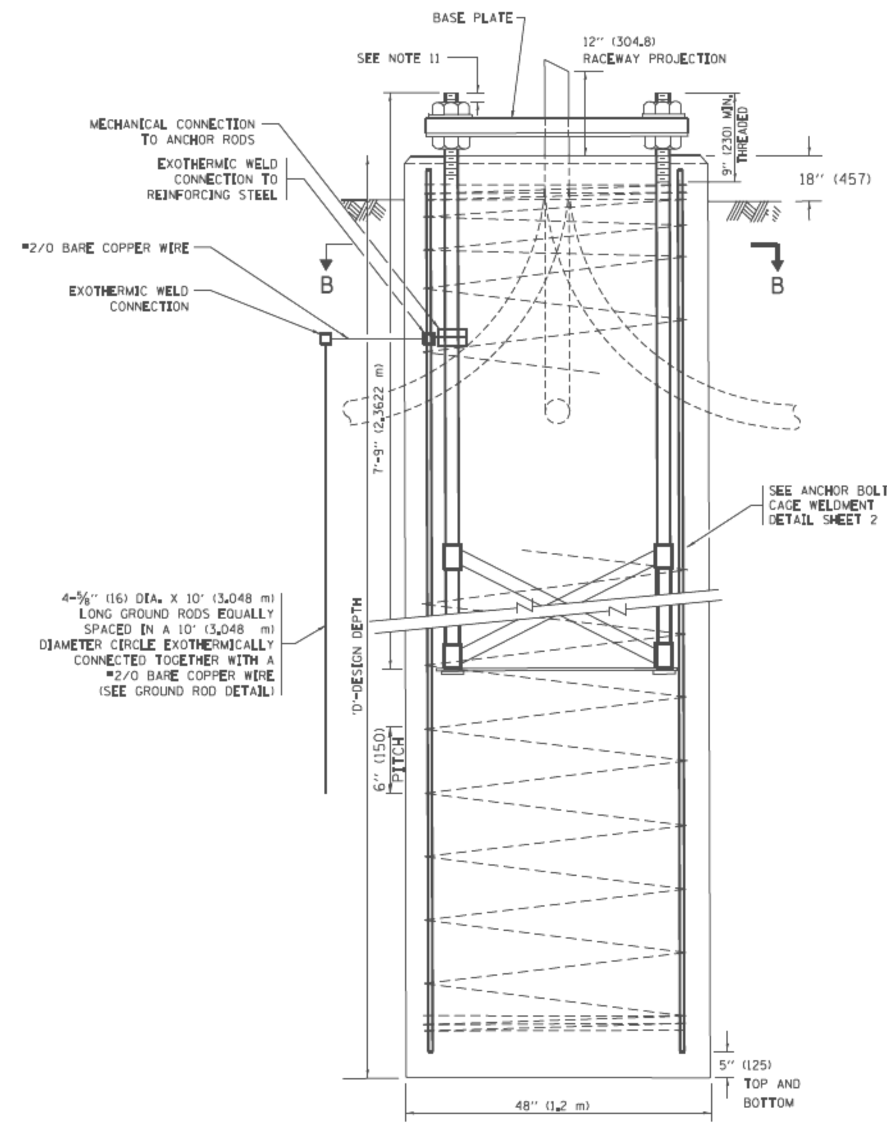
SCALE: NONE | SHEET OF SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2016-017L		88	63
		CONTRACT NO. 62C35		
	ILLINOIS FED. AID PROJECT			

SHAFT LENGTH (D) TABLE				
SOIL CONSISTENCY		AVERAGE STRENGTH	LIGHT TOWER MOUNTING HEIGHT	
		Qu In tsf (Qu In kPa)	100 FT. (30 m)	110 FT. (34 m)
COHESIVE	SOFT	<0.5 (<50)	22'-6" (6.9 m)	24'-0" (7.2 m)
	MEDIUM	0.5 TO 1 (50 TO 100)	18'-6" (6.9 m)	19'-0" (5.8 m)
	STIFF	1 TO 2 (100 TO 200)	15'-6" (4.7 m)	16'-0" (5.5 m)
	VERY STIFF	2 TO 4 (200 TO 400)	13'-6" (4.1 m)	14'-0" (4.2 m)
	HARD	>4 (>400)	12'-0" (3.6 m)	12'-6" (3.7 m)
GRANULAR		N in BLOWS/FT. (N in BLOWS/0.3m)		
	VERY LOOSE	<5 (<5)	18'-0" (5.4 m)	18'-6" (5.6 m)
	LOOSE	5 TO 10 (5 TO 10)	16'-6" (4.9 m)	17'-0" (5.1 m)
	MEDIUM	10 TO 25 (10 TO 25)	15'-6" (5.2 m)	16'-0" (5.9 m)
	DENSE	25 TO 50 (25 TO 50)	15'-0" (4.5 m)	15'-6" (4.6 m)
	VERY DENSE	>50 (>50)	14'-0" (4.2 m)	14'-6" (4.4 m)



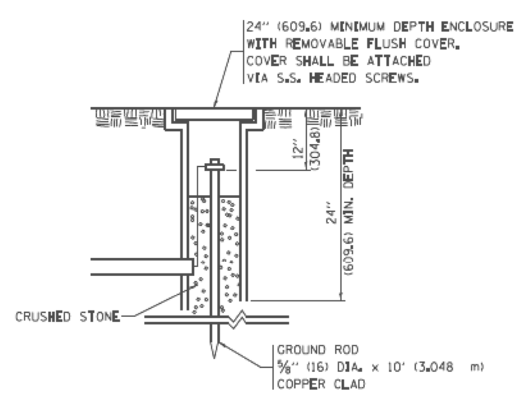
SECTION–B–B



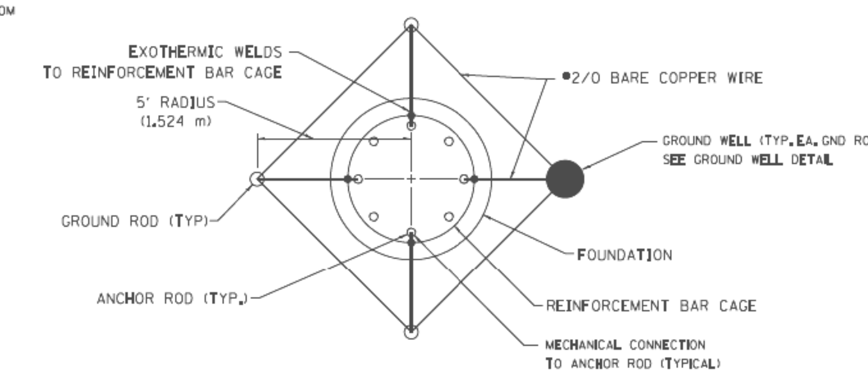
FOUNDATION ELEVATION

DESIGN NOTES

1. ALL DIMENSIONS IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN
2. THE ANCHOR RODS SHALL BE VERTICAL NO ADJUSTMENT SHALL BE ALLOWED AFTER THE FOUNDATION IS PLACED.
3. THE GAP BETWEEN THE FOUNDATION AND THE BASE PLATE SHALL BE ENCLOSED WITH A STAINLESS STEEL SCREEN FASTENED WITH A STAINLESS STEEL BAND.
4. THE TOP OF THE FOUNDATION TO 18" (450) BELOW GRADE SHALL BE FORMED.
5. SURFACE WATER WILL NOT BE PERMITTED TO ENTER THE HOLE AND ALL WATER WHICH MAY HAVE INFILTRATED INTO THE HOLE SHALL BE REMOVED BEFORE PLACING CONCRETE.
6. THE LIGHT TOWER SHALL NOT BE ERECTED UNTIL AFTER THE CONCRETE HAS BEEN CURED ACCORDING TO ARTICLE 1020.13.
7. ANCHOR RODS SHALL BE STRAIGHT AND SHALL BE ACCORDING TO ASTM F1554, GRADE 725 (GRADE 105) AND GALVANIZED ACCORDING TO ARTICLE 1006.9.
8. ANCHOR ROD INFORMATION SHALL BE SUBMITTED FOR APPROVAL AND SHALL BE FULLY COORDINATED FOR APPROVAL WITH TOWER MANUFACTURER REQUIREMENTS.
9. REINFORCEMENT BARS SHALL BE ACCORDING TO ARTICLE 1006.10
10. TWO ANCHOR RODS OPPOSITE EACH OTHER SHALL HAVE THE ANCHOR ROD THREADS PEENED AFTER NUTS ARE INSTALLED.
11. A MINIMUM OF THREE FULL THREADS SHALL REMAIN EXPOSED AFTER LIGHT TOWER IN INSTALLED.
12. ALL GROUNDING INDICATED IN THE PLANS SHALL BE INCLUDED IN THE COST OF THE LIGHT TOWER FOUNDATION AND SHALL NOT BE PAID FOR SEPARATELY.
13. CUT NUTS, OR JAM NUTS, ARE NOT ALLOWED
14. ANCHOR ROD QUANTITY, DIAMETER, AND LENGTH SHALL BE DETERMINED BY THE TOWER MANUFACTURER AND APPROVED BY THE ENGINEER. EACH FOUNDATION SHALL HAVE A MINIMUM OF 8 ANCHOR RODS.
15. COORDINATE THE ROD CIRCLE DIAMETER OF THE TOWER WITH THE DIAMETER OF THE ANCHOR ROD CAGE.
16. THE FOUNDATION SHALL BE POURED MONOLITHICALLY AND SHALL HAVE NO CONSTRUCTION JOINTS.



GROUND WELL DETAIL



GROUND ROD DETAIL

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pw:\\IL084EBIDINTEG.illinois.gov:PWIDOT\Documents\IDOT Offices\District 1\Projects\District\ADMIN\CADData\CADsheets\be501.dgn
Default

USER NAME = footemj | PLOT SCALE = 50.000 ' / in. | PLOT DATE = 7/27/2016

DESIGNED - | DRAWN - | CHECKED - | DATE -

REVISED - R. TOMSONS 09-02-10
REVISED - R. TOMSONS 02-27-13
REVISED - R. TOMSONS 04-29-16
REVISED - R. TOMSONS 07-27-16

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

HIGH MAST LIGHT TOWER
100 FT TO 110 FT (30 m TO 34 m) FOUNDATION DETAIL

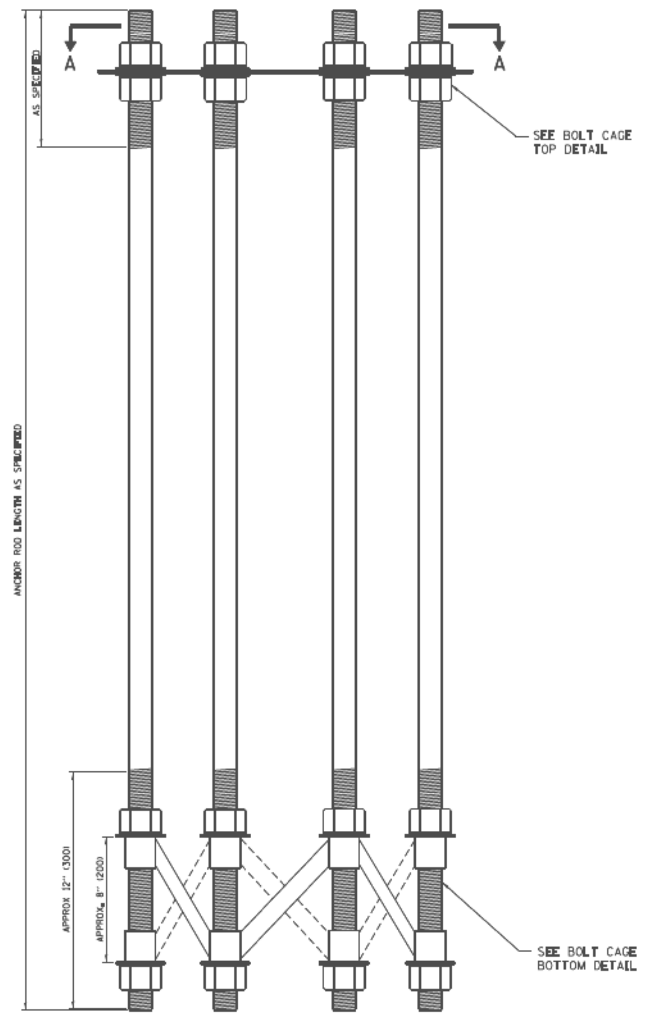
SCALE: | SHEET 1 OF 2 SHEETS | STA. | TO STA.

F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO.
BE-501 | CONTRACT NO.
ILLINOIS FED. AID PROJECT

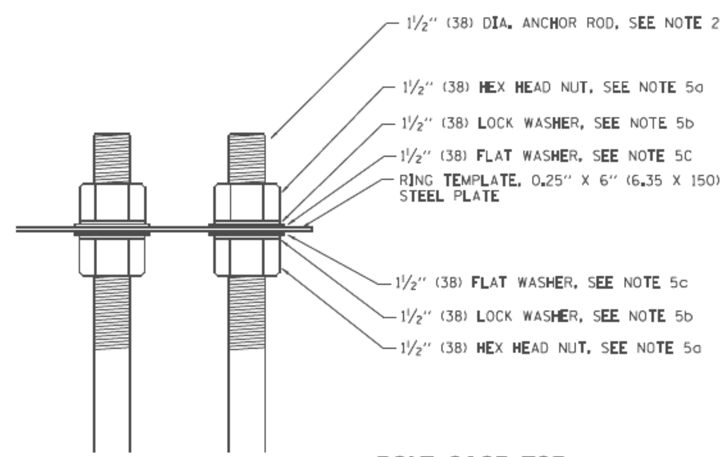
SD–6

DELTA ENGINEERING GROUP, LLC	USER NAME = $USER$	DESIGNED - HM	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	IDOT STANDARD DETAIL
		DRAWN - GJ	REVISED -		
	PLOT SCALE = $SCALE$	CHECKED - HS	REVISED -		
	PLOT DATE = $DATE$	DATE - 03-21-2017	REVISED -		SCALE: NONE SHEET OF SHEETS STA. TO STA.

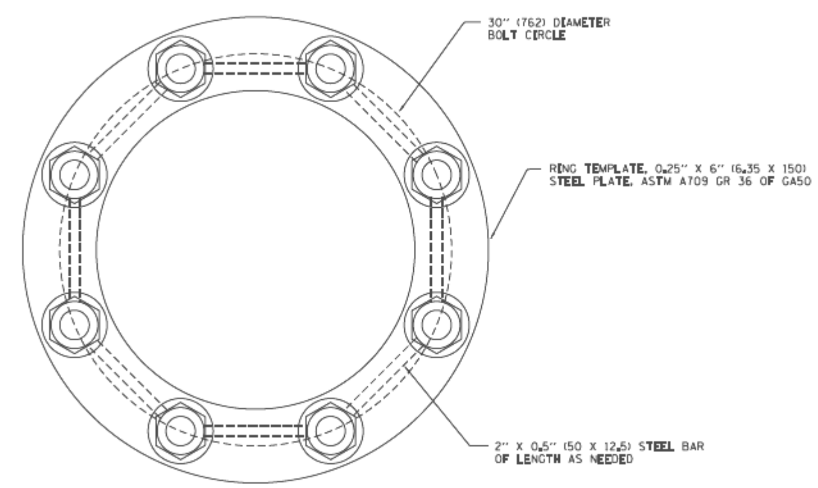
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2016-017L		88	64
		CONTRACT NO. 62C35		
		ILLINOIS FED. AID PROJECT		



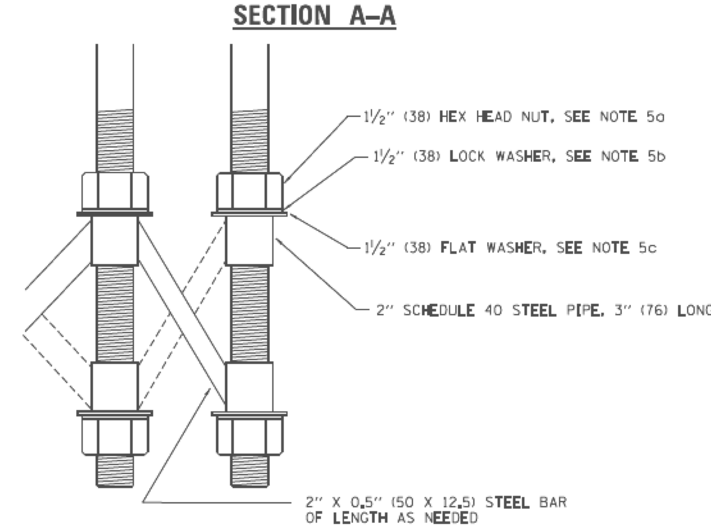
ANCHOR BOLT CAGE



BOLT CAGE TOP



SECTION A–A



BOLT CAGE BOTTOM

NOTES:

1. ALL DIMENSIONS IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN
2. ANCHOR RODS SHALL BE STRAIGHT AND SHALL BE ACCORDING TO ASTM F1554, GRADE 725 (GRADE 105) AND GALVANIZED ACCORDING TO ARTICLE 1006.09.
3. ANCHOR ROD INFORMATION SHALL BE SUBMITTED FOR APPROVAL AND SHALL BE FULLY COORDINATED WITH TOWER MANUFACTURERS REQUIREMENTS
4. CUT NUTS, OR JAM NUTS, ARE NOT ALLOWED
5. ANCHOR ROD CAGE HARDWARE SHALL BE IN ACCORDANCE WITH THE FOLLOWING:
   a) 1.5 (38) HEX HEAD NUTS
      AASHTO M291, GRADE C, C3, D ,DH OR DH3
      HOT DIPPED GALVANIZED AASHTO M 232
   b) 1.5 (38) HELICAL LOCK WASHERS
      ANSI/ASME B18.21.1
      I.D. 1.504 - 1.524
      O.D. 2.159 MAX.
      WIDTH 0.292 MIN.
      THICKNESS 0.375 MIN.
      HARDNESS 26-45 ROCKWELL C
      HOT DIPED GALVANIZED AASHTO M232
   c) 1.5 (38) FLAT WASHERS
      AASHTO M293
      O.D. 2.75
      I.D. 1.56
      THICKNESS 0.16 - 0.25
      HARDNESS 26-45 ROCKWELL C.
      HOT DIPED GALVANIZED AASHTO M232
6. THE SHAFT LENGTHS SHALL BE BASED ON SOIL BORINGS IN THE PLANS AND OR A DETERMINATION OF SOIL CONDITIONS BY THE ENGINEER.
7. ALL FOUNDATION REINFORCEMENT STEEL SHALL BE EPOXY COATED.
8. THE FOUNDATION SHALL BE POURED MONOLITHICALLY AND SHALL HAVE NO CONSTRUCTION JOINTS.
9. ANCHOR RODS AND ALL ASSOCIATED HARDWARE ARE SHOWN AS MINIMUMS. SIZING SHALL BE DETERMINED BY THE TOWER MANUFACTURER AND APPROVED BY THE ENGINEER. EACH FOUNDATION SHALL HAVE A MINIMUM OF 8 ANCHOR RODS.

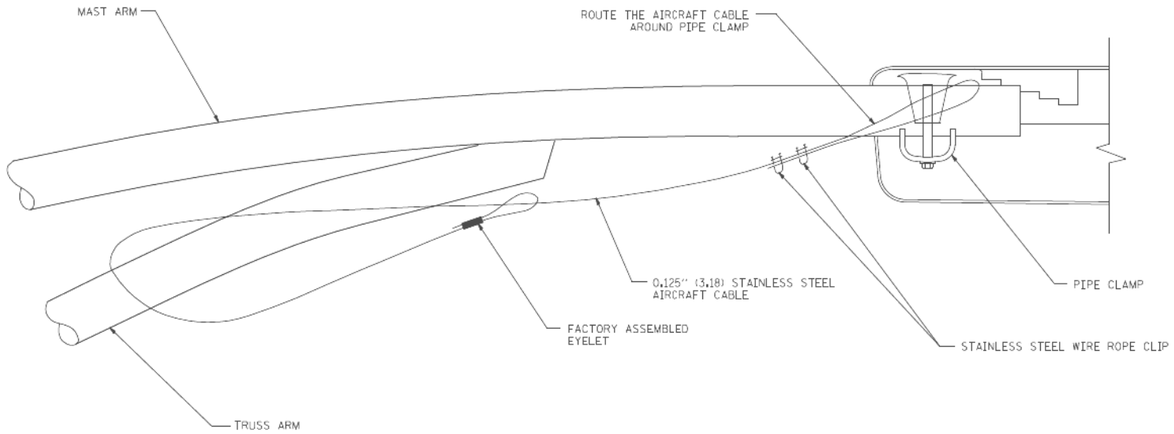
FILE NAME = pw:\\IL084EBIDINTEG.illinois.gov:PWIDOT\Documents\IDOT Offices\District 1\Projects\Dist...\CADData\CADsheets\be501.dgn	USER NAME = footemj	DESIGNED -	REVISED - R. TOMSONS 03-12-10	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	HIGH MAST LIGHT TOWER 100 FT TO 110 FT (30 m TO 34 m) FOUNDATION DETAIL
		DRAWN -	REVISED - R. TOMSONS 09-02-10		
	PLOT SCALE = 50.000 ' / in.	CHECKED -	REVISED - R. TOMSONS 02-27-13		
Default	PLOT DATE = 7/27/2016	DATE -	REVISED - R. TOMSONS 04-29-16		SCALE: SHEET 2 OF 2 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	BE-501	CONTRACT NO.		
	ILLINOIS FED. AID PROJECT			

SD-7

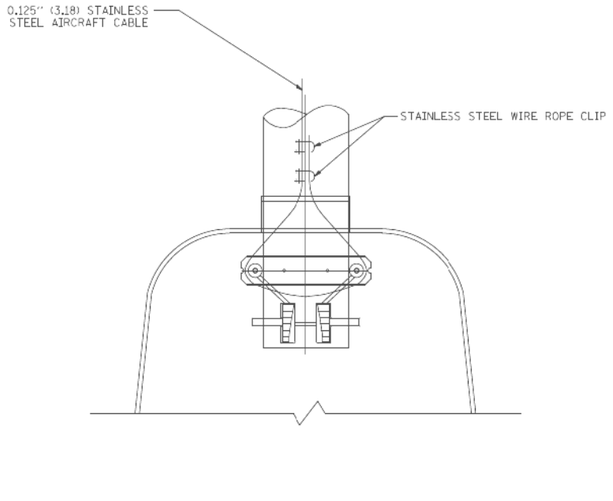
DELTA ENGINEERING GROUP, LLC	USER NAME = $USER$	DESIGNED - HM	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	IDOT STANDARD DETAIL
		DRAWN - GJ	REVISED -		
	PLOT SCALE = $SCALE$	CHECKED - HS	REVISED -		
	PLOT DATE = $DATE$	DATE - 03-21-2017	REVISED -		SCALE: NONE SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2016-017L		88	65
CONTRACT NO. 62C35				
ILLINOIS FED. AID PROJECT				



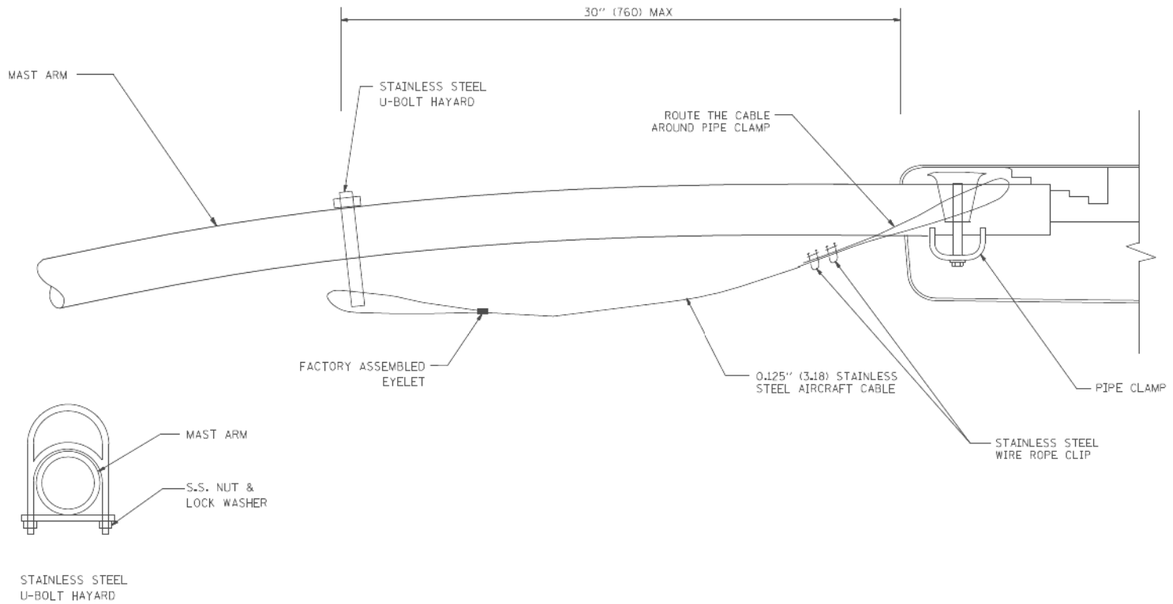
SIDE VIEW (TRUSS ARM)

N.T.S.



BOTTOM VIEW

N.T.S.



SIDE VIEW (SINGLE MEMBER OR DAVIT ARM)

N.T.S.

NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE SHOWN.
2. CONTRACTOR SHALL ADJUST THE WIRE CLIP TO ELIMINATE ANY SLACK FROM THE WIRE ROPE.
3. THE 0.125" (3.18) STAINLESS STEEL AIRCRAFT CABLE SHALL REMAIN VISIBLE FROM THE GROUND LEVEL.
4. THE BREAKING STRENGTH OF THE CABLE SHALL BE 1700 LBS. MIN.

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		DRAWN -	REVISED -
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	PLOT DATE = 1/4/2000	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

LUMINAIRE SAFETY CABLE ASSEMBLY

SCALE: NONE | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	BE-701	CONTRACT NO.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

SD-8

DELTA ENGINEERING GROUP, LLC

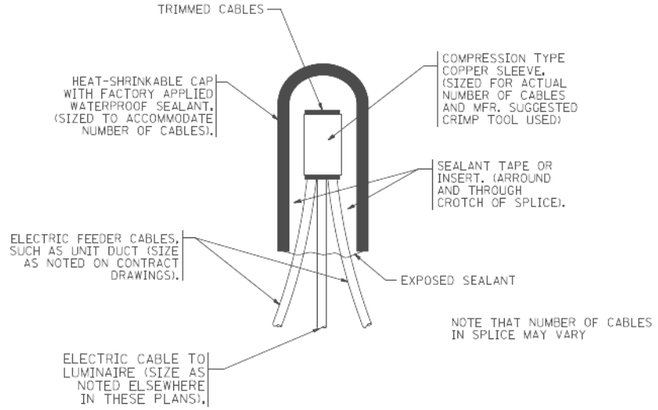
USER NAME = $USER$	DESIGNED - HM	REVISED -	
	DRAWN - GJ	REVISED -	
PLOT SCALE = $SCALE$	CHECKED - HS	REVISED -	
PLOT DATE = $DATE$	DATE - 03-21-2017	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IDOT STANDARD DETAIL

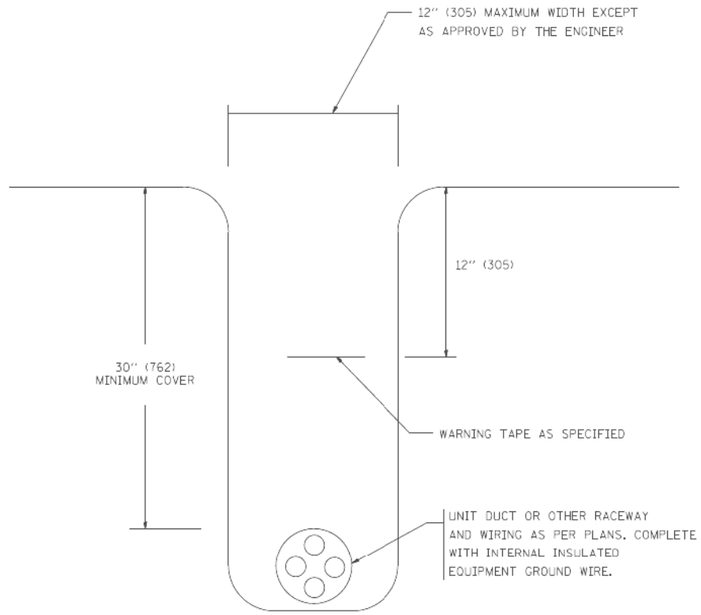
SCALE: NONE | SHEET OF SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2016-017L		88	66
		CONTRACT NO. 62C35		
	ILLINOIS	FED. AID PROJECT		



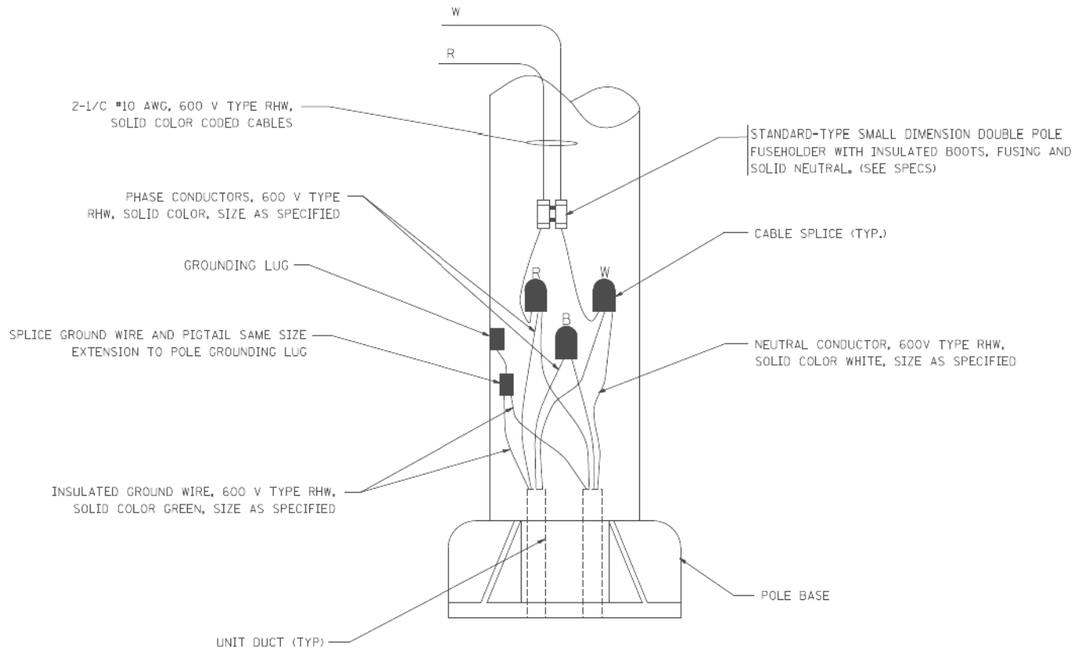
TYPICAL SPLICE DETAIL

N.T.S.



TYPICAL WIRING IN TRENCH DETAIL

N.T.S.



POLE WIRING DETAIL

N.T.S.

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SD-9

DELTA ENGINEERING GROUP, LLC	USER NAME = $USER$	DESIGNED - HM	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	IDOT STANDARD DETAIL	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - GJ	REVISED -				2016-017L		88	67
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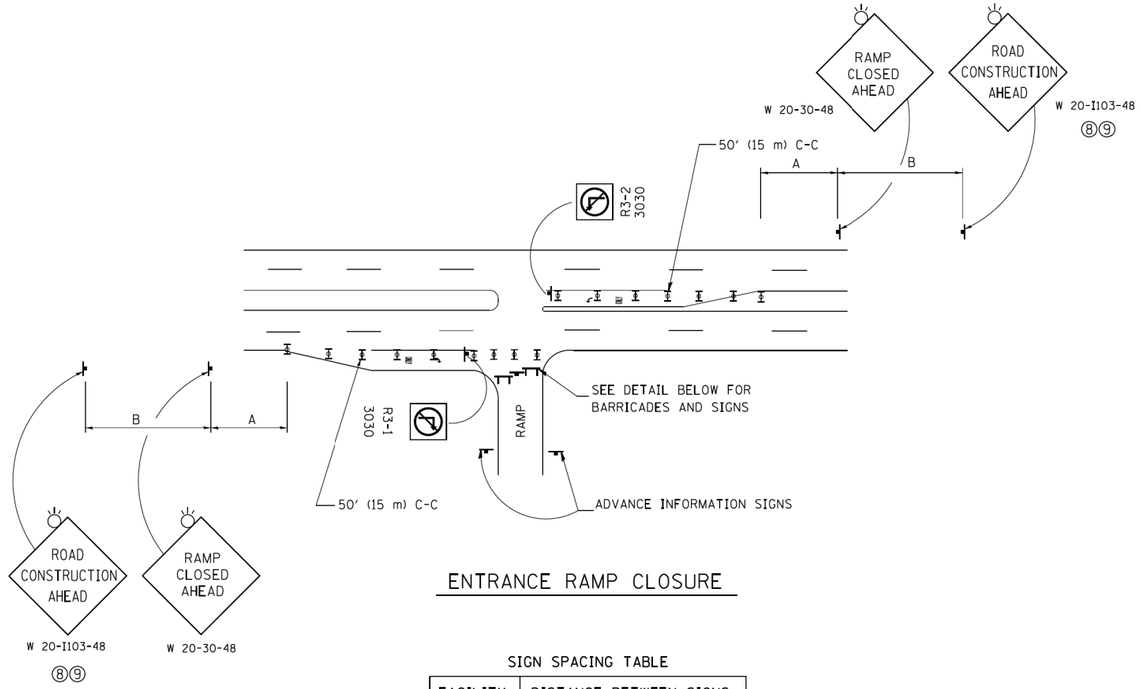
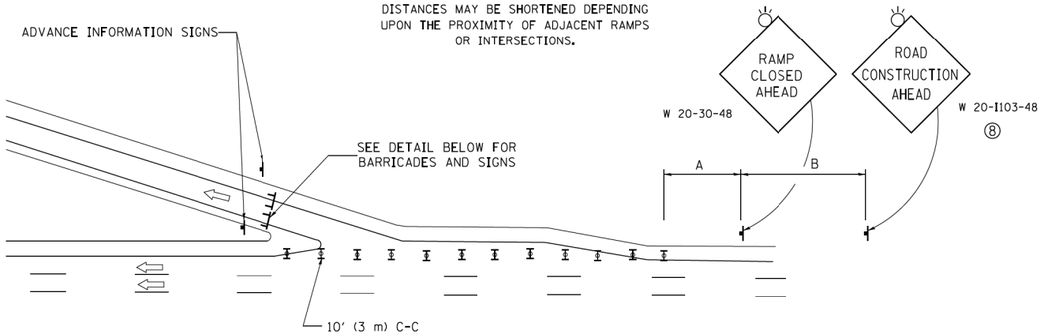


ENTRANCE RAMP CLOSURE

SIGN SPACING TABLE

FACILITY	DISTANCE BETWEEN SIGNS A	DISTANCE BETWEEN SIGNS B
EXPRESSWAY >24 HOURS	1000' (300 m)	1500' (450 m)
EXPRESSWAY ≤24 HOURS	500' (150 m)	500' (150 m)
ARTERIAL 55 MPH	500' (150 m)	500' (150 m)
ARTERIAL 50-45 MPH	350' (100 m)	350' (100 m)
ARTERIAL <45 MPH	200' (60 m)	200' (60 m)

DISTANCES MAY BE SHORTENED DEPENDING UPON THE PROXIMITY OF ADJACENT RAMPS OR INTERSECTIONS.

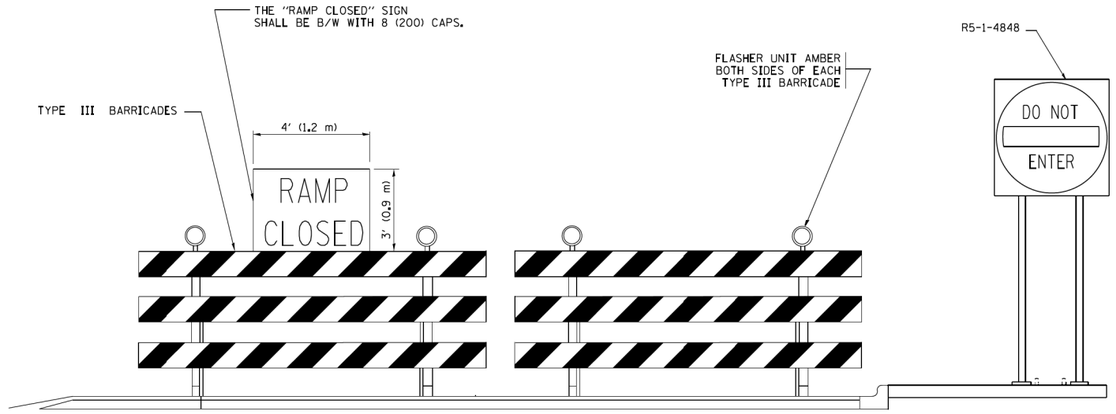


EXIT RAMP CLOSURE

SYMBOLS

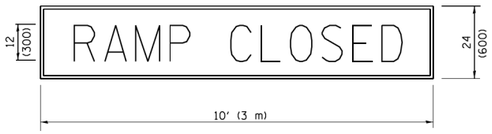
TYPE II BARRICADE OR DRUM WITH STEADY BURN MONO-DIRECTIONAL LIGHT

TYPE III BARRICADE WITH 2 FLASHING LIGHTS



DETAIL FOR REQUIRED BARRICADES & SIGNS

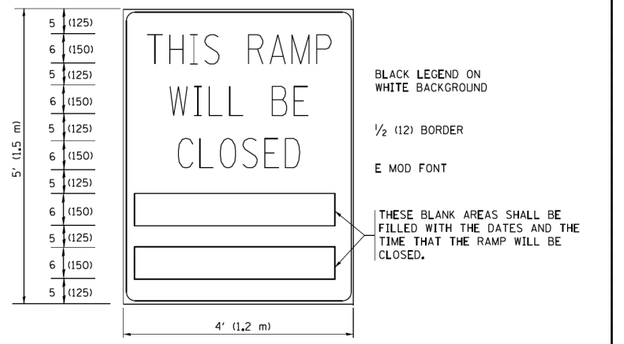
RAMP CLOSURE ADVANCE WARNING SIGN



BLACK LEGEND ON ORANGE BACKGROUND MOUNTED DIAGONALLY
E MOD FONT
1 (25) BORDER

THESE SIGNS ARE REQUIRED ON ALL THE EXIT GUIDE SIGNS FOR EXIT RAMPS THAT WILL BE CLOSED FOR MORE THAN FOUR (4) CONSECUTIVE DAYS.

RAMP CLOSURE ADVANCE INFORMATION SIGN



THESE SIGNS ARE REQUIRED ON BOTH SIDES OF THE RAMP, MINIMUM OF 1 WEEK IN ADVANCE OF THE CLOSURE.

THESE SIGNS SHALL BE FABRICATED AND PAID FOR ACCORDING TO THE TEMPORARY INFORMATION SIGNING SPECIAL PROVISION

GENERAL NOTES:

1. CONES MAY BE SUBSTITUTED FOR DRUMS OR TYPE II BARRICADES DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (700) HIGH.
2. STEADY BURN LIGHTS WILL NOT BE REQUIRED FOR DAY OPERATIONS.
3. A FLAGGER SHALL BE POSITIONED AT EACH CLOSED RAMP THAT IS OPEN TO CONSTRUCTION VEHICLES, PRECEEDED BY A W20-7 FLAGGER WARNING SIGN.
4. ALL ROUTE MARKERS AND TRAILBLAZER ASSEMBLIES WHICH DIRECT MOTORISTS TO A CLOSED ENTRANCE RAMP SHALL BE COVERED WHEN THE RAMP IS CLOSED FOR MORE THAN FOUR (4) DAYS.
5. THE SIGNING AND BARRICADING WHICH IS REQUIRED BY THIS DETAIL SHALL BE INCLUDED IN THE COST OF TRAFFIC CONTROL AND PROTECTION (EXPRESSWAYS).
6. AUTHORIZATION FROM THE DISTRICT'S BUREAU OF TRAFFIC IS REQUIRED FOR ALL RAMP CLOSURES.
7. THE RAMP CLOSURE ADVANCE INFORMATION SIGNS SHALL BE ERECTED IF THE CLOSURE TIME EXCEEDS TWENTY-FOUR (24) HOURS. ADDITIONAL ADVANCE WARNING SIGNS ON EXIT GUIDE SIGNING WILL BE REQUIRED FOR EXIT RAMP CLOSURES THAT EXCEED FOUR (4) DAYS IN LENGTH
8. ROAD CONSTRUCTION AHEAD SIGNS MAY BE OMITTED WHEN THIS DETAIL IS USED IN CONJUNCTION WITH OTHER TRAFFIC CONTROL THAT ALREADY INCLUDES A ROAD CONSTRUCTION AHEAD SIGN.
9. ARTERIAL ROAD CONSTRUCTION AHEAD SIGNS SHALL BE INSTALLED ON THE LEFT SIDE OF TRAFFIC IF THE MEDIAN IS MORE THAN 10 FT WIDE.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

CM-1

CM 1-District 1 Detail TC08.dgn

FILE NAME = c:\pw_work\pwidot\footemj\d0108315\tc08.dgn	USER NAME = footemj	DESIGNED - DWS	REVISED - JAF 02-06
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	PLOT SCALE = 50.000 ' / in.	CHECKED -	REVISED - SPB 12-09
	PLOT DATE = 7/8/2013	DATE - 02-83	REVISED - MD 06-13

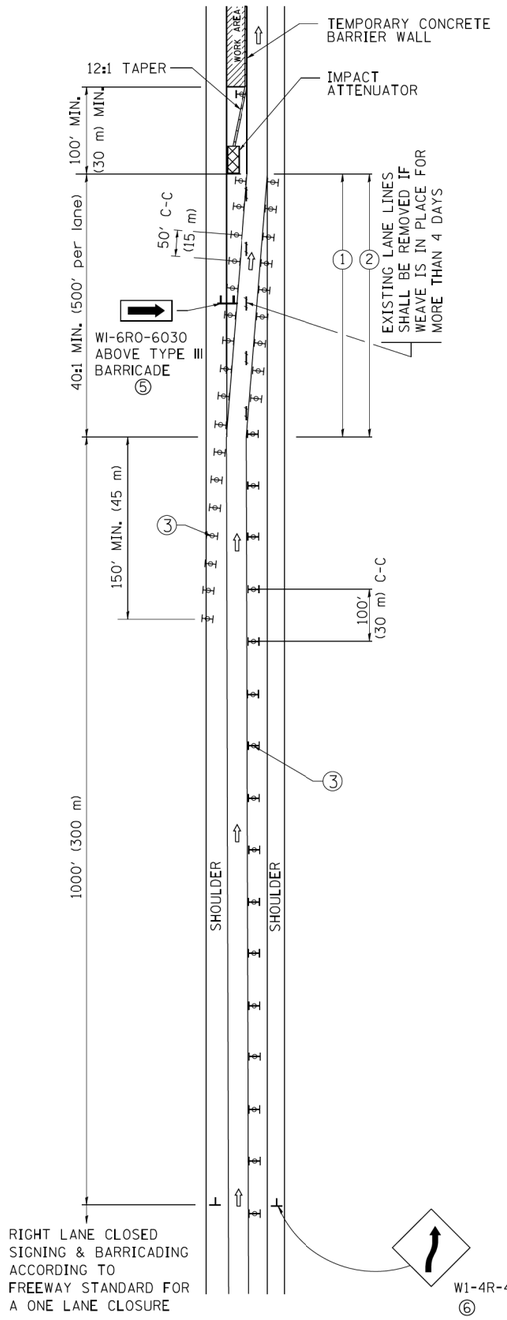
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ENTRANCE AND EXIT RAMP CLOSURE DETAILS

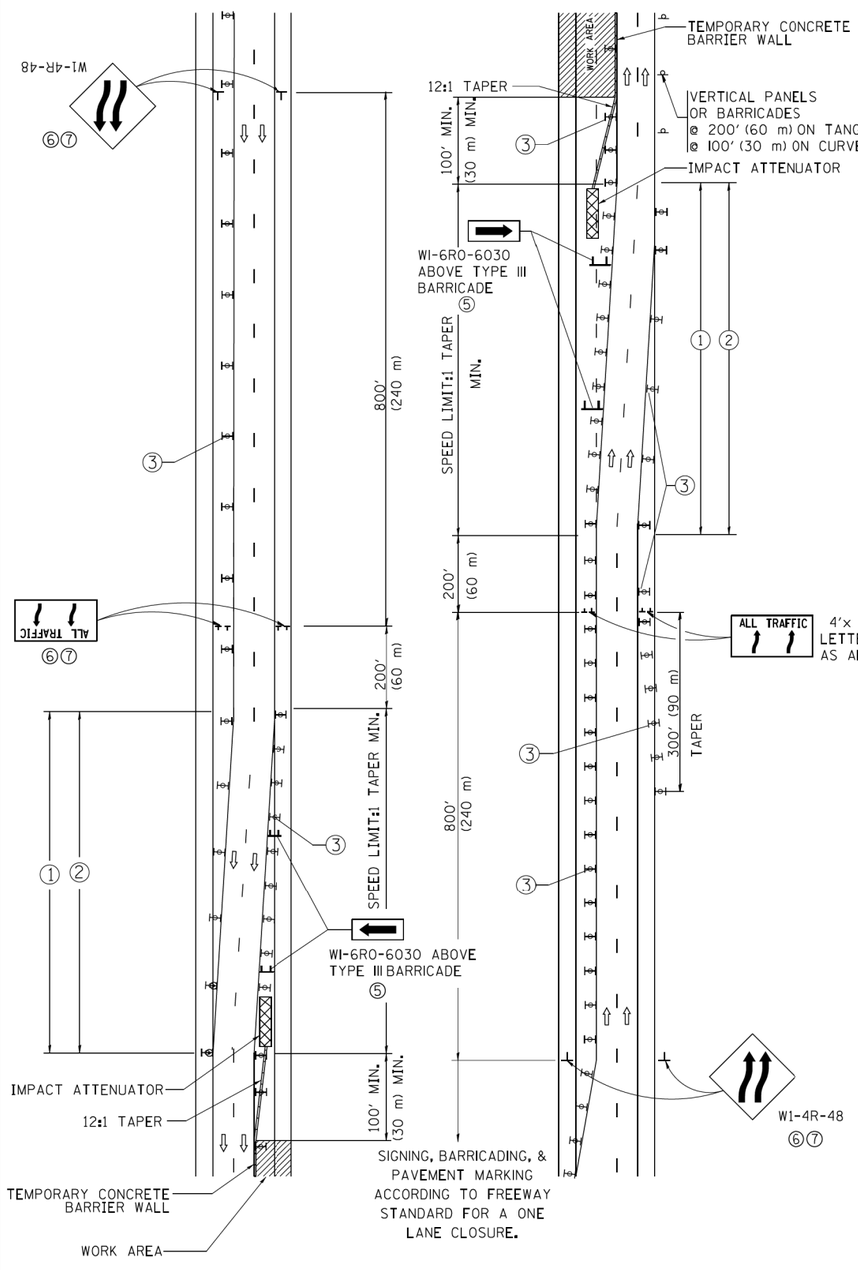
SCALE: NONE | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2016-017L		88	68
	TC-08		CONTRACT NO. 62C35	
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

SINGLE LANE WEAVE



MULTI-LANE WEAVE



GENERAL NOTES

① EXISTING CONFLICTING PAVEMENT MARKING LINES SHALL BE REMOVED. PAVEMENT MARKING REMOVAL SHALL NOT BE REQUIRED FOR SINGLE LANE WEAVES UNDER 4 DAYS IN DURATION.

② CONTINOUS REFLECTIVE TEMPORARY PAVEMENT MARKING TAPE SHALL BE PLACED THROUGHOUT THE TAPER AND FOR 300' (90 m) ALONG SIDE THE WORK AREA WHERE THE CLOSURE TIME IS GREATER THAN FOURTEEN DAYS. THE LEFT EDGE LINE SHALL BE YELLOW AND THE RIGHT EDGE LINE SHALL BE WHITE. FOR MULTI-LANE WEAVES LANE LINES SHALL BE 5 INCH, 10'-30' (3 m-9 m) SKIP DASH, WHITE.

③ PLASTIC DRUMS WITH STEADY BURN LIGHTS AT 50' (15 m) C-C SPACING IN TAPERS AND 100' (30 m) C-C SPACING IN TANGENTS.

④ ALL SIGNS SHALL BE POST MOUNTED IF THE CLOSURE TIME EXCEEDS FOUR DAYS.

⑤ TYPE III BARRICADES MAY BE OMMITTED FOR SINGLE-LANE WEAVES UNDER 24-HOURS IN DURATION. W1-6 SIGNS WILL STILL BE REQUIRED. IF THE WIDTH OF OFFSET IS LESS THAN 6' THEN THE TYPE III BARRICADE WITH ATTACHED ARROW SIGN PANEL CAN BE ELIMINATED IN THE TAPER AREAS.

⑥ WHEN THE LENGTH OF THE SHIFTED SEGMENT (DISTANCE BETWEEN WEAVE POINTS) IS LESS THAN 1500', DOUBLE REVERSE CURVE SIGNS (W24-1) SHOULD BE USED INSTEAD OF THE REVERSE CURVE (W1-4) SIGNS. ARROWS ON THE 4'X8' "ALL TRAFFIC" SIGNS SHALL BE THE SAME SHAPE.

⑦ THE NUMBER OF ARROWS ON THESE SIGNS SHALL MATCH THE NUMBER OF LANES OPEN TO TRAFFIC.

SYMBOLS

- DIRECTION OF TRAFFIC
- WORK AREA
- SIGN ON PORTABLE OR PERMANENT SUPPORT
- TYPE II BARRICADE OR DRUM WITH MONO-DIRECTIONAL STEADY BURNING LIGHT
- TEMPORARY CONCRETE BARRIER WALL
- IMPACT ATTENUATOR
- W24-1-48 ⑦

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

CM–2

CM 2-District 1 Detail TC09 .dgn

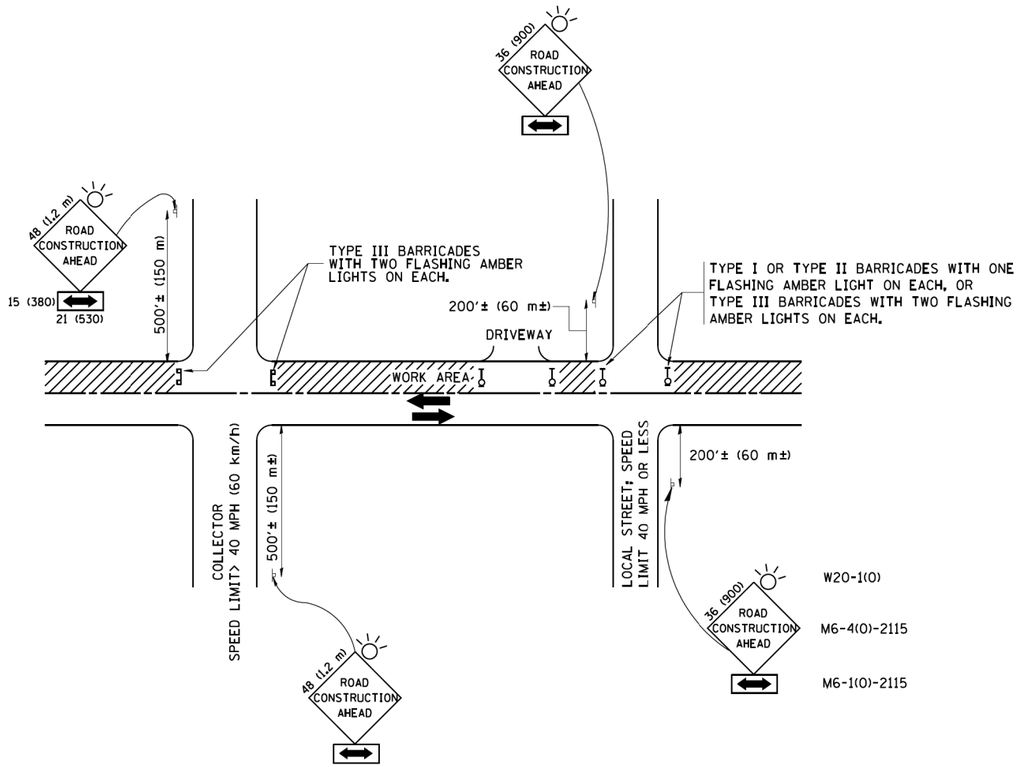
FILE NAME = c:\pw_work\pwidot\footemj\d0108315\tc09.dgn	USER NAME = footemj	DESIGNED - DWS	REVISED - JAF 02-06
		DRAWN -	REVISED - SPB 01-07
	PLOT SCALE = 50.000 ' / in.	CHECKED -	REVISED - SPB 12-09
	PLOT DATE = 7/1/2013	DATE - 02-87	REVISED - MD 06-13

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL DETAILS FOR FREEWAY SINGLE & MULTI-LANE WEAVE

SCALE: NONE | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2016-017L		88	69
	TC-09	CONTRACT NO. 62C35		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS

NOTES:

A. FOR NO LANE RESTRICTION ON THE SIDE ROAD OR DRIVEWAYS

1. SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:

   a) ONE **ROAD CONSTRUCTION AHEAD** SIGN 36 x 36 (900x900) WITH A FLASHER AND FLAG MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.

   b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.

2. SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:

   a) ONE **ROAD CONSTRUCTION AHEAD** SIGN 48 x 48 (1.2 m x 1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500' (150 m) IN ADVANCE OF THE MAIN ROUTE.

   b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.

3. WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).

B. FOR A LANE CLOSURE ON A SIDE ROAD OR DRIVEWAY:

USE APPLICABLE PORTIONS OF THE TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (STD. 701501, STD. 701606 OR THE APPROPRIATE STANDARD). THE SPACING OF SIGNS AND BARRICADES SHALL BE ADJUSTED FOR FIELD CONDITIONS AS DIRECTED BY THE ENGINEER. THE DIRECTIONAL ARROW SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE SIDE ROAD LANE CLOSURE.

C. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAY UNLESS OTHERWISE NOTED.

D. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCIDENTAL TO THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

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

CM 3-District 1 Detail TC10.dgn

FILE NAME = W:\diststd\22x34\tc10.dgn	USER NAME = gaglianobt	DESIGNED - LHA	REVISED - J. OBERLE 10-18-95
		DRAWN -	REVISED - A. HOUSEH 03-06-96
	PLOT SCALE = 50.000 ' / IN.	CHECKED -	REVISED - A. HOUSEH 10-15-96
	PLOT DATE = 1/4/2008	DATE - 06-89	REVISED -T. RAMMACHER 01-06-00

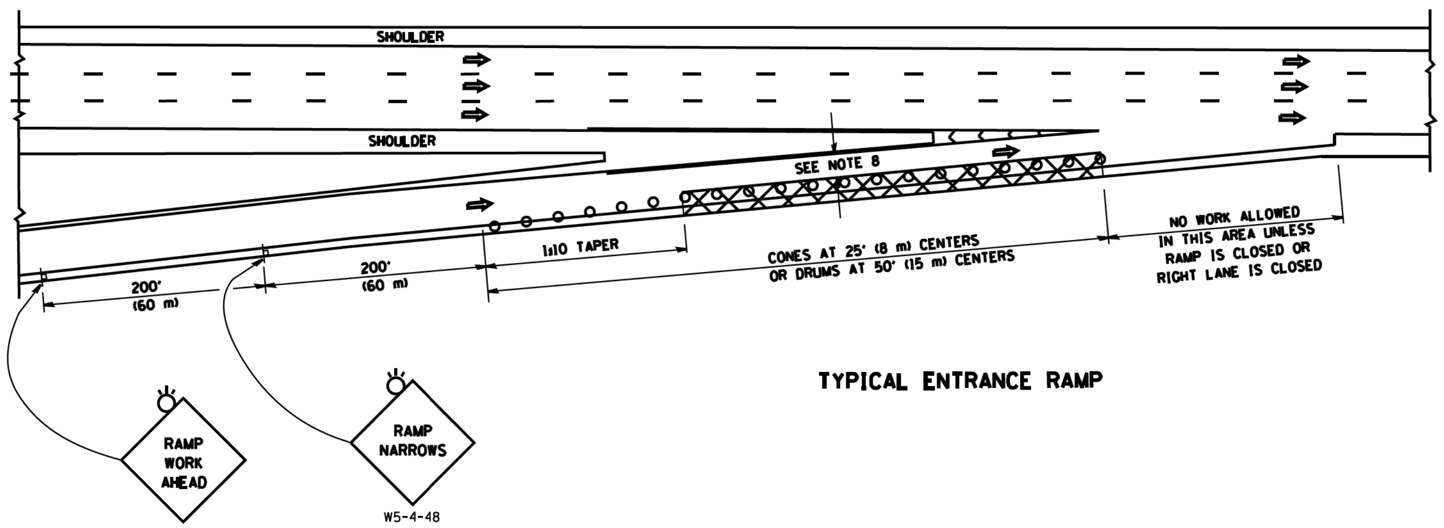
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS

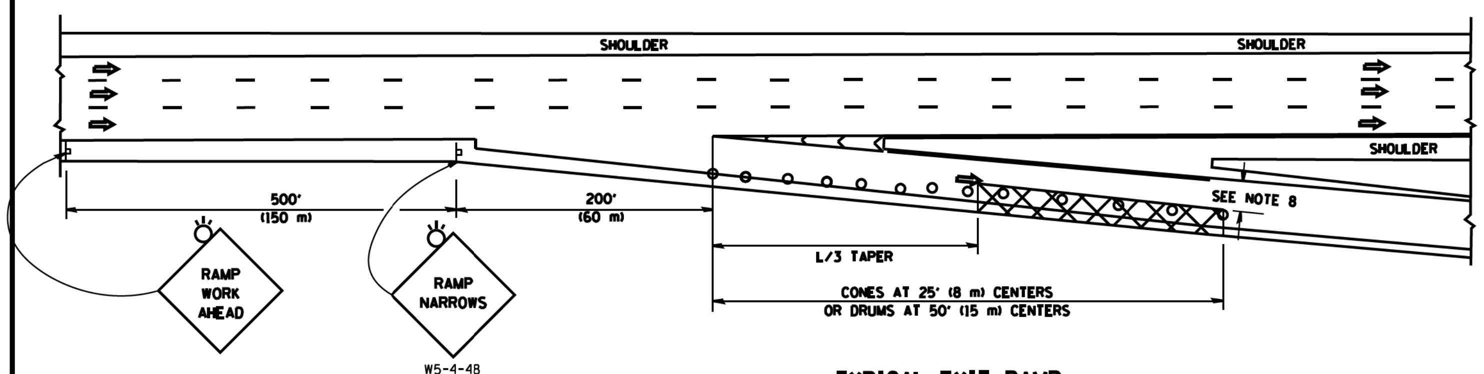
SCALE: NONE | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2016-017L		88	70
	TC-10		CONTRACT NO. 62C35	
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

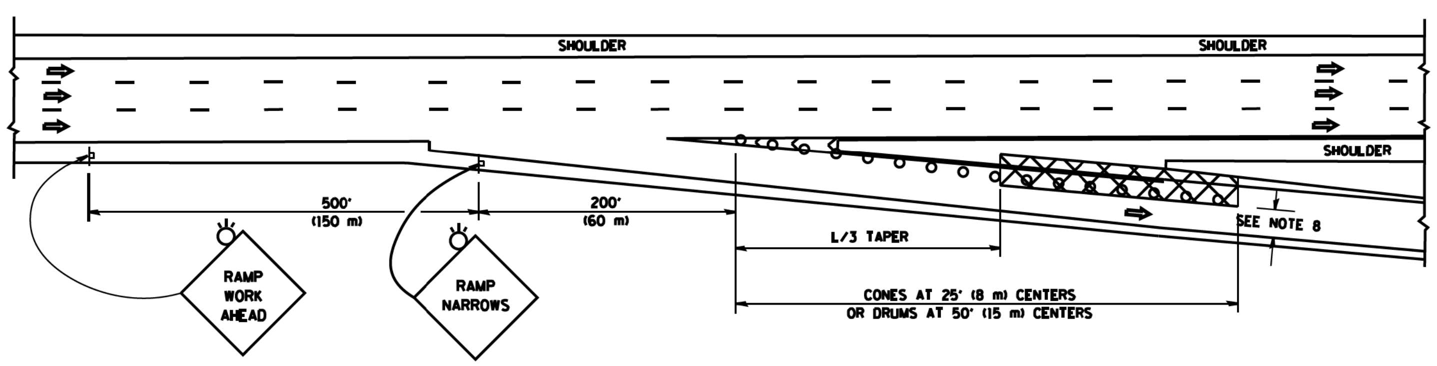
PARTIAL RAMP CLOSURE DETAILS



TYPICAL ENTRANCE RAMP

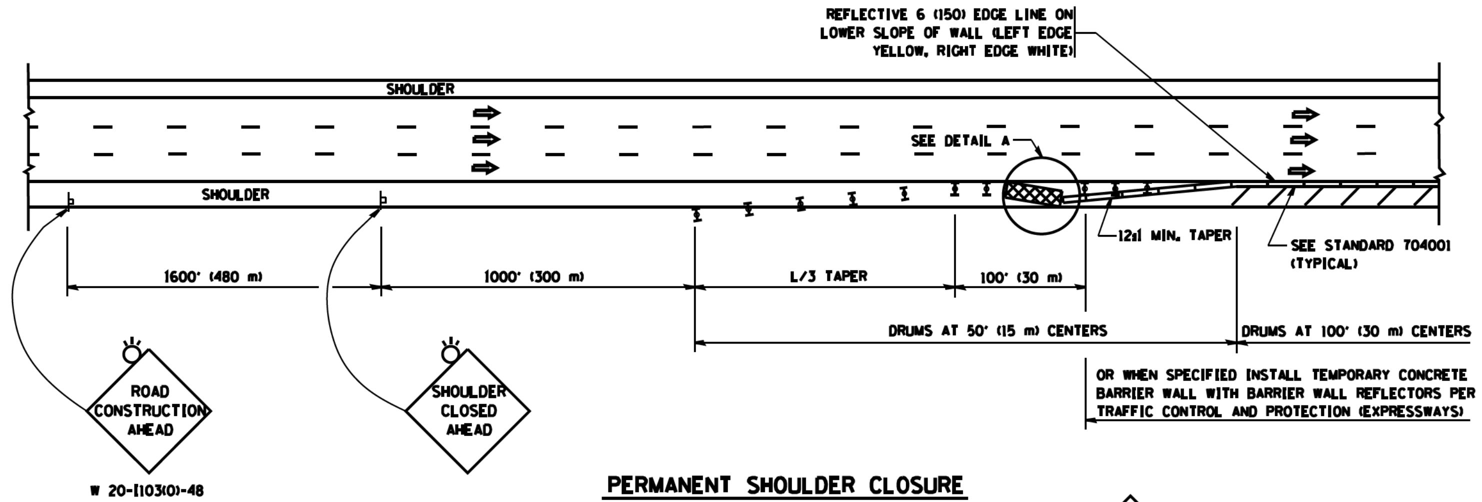


TYPICAL EXIT RAMP

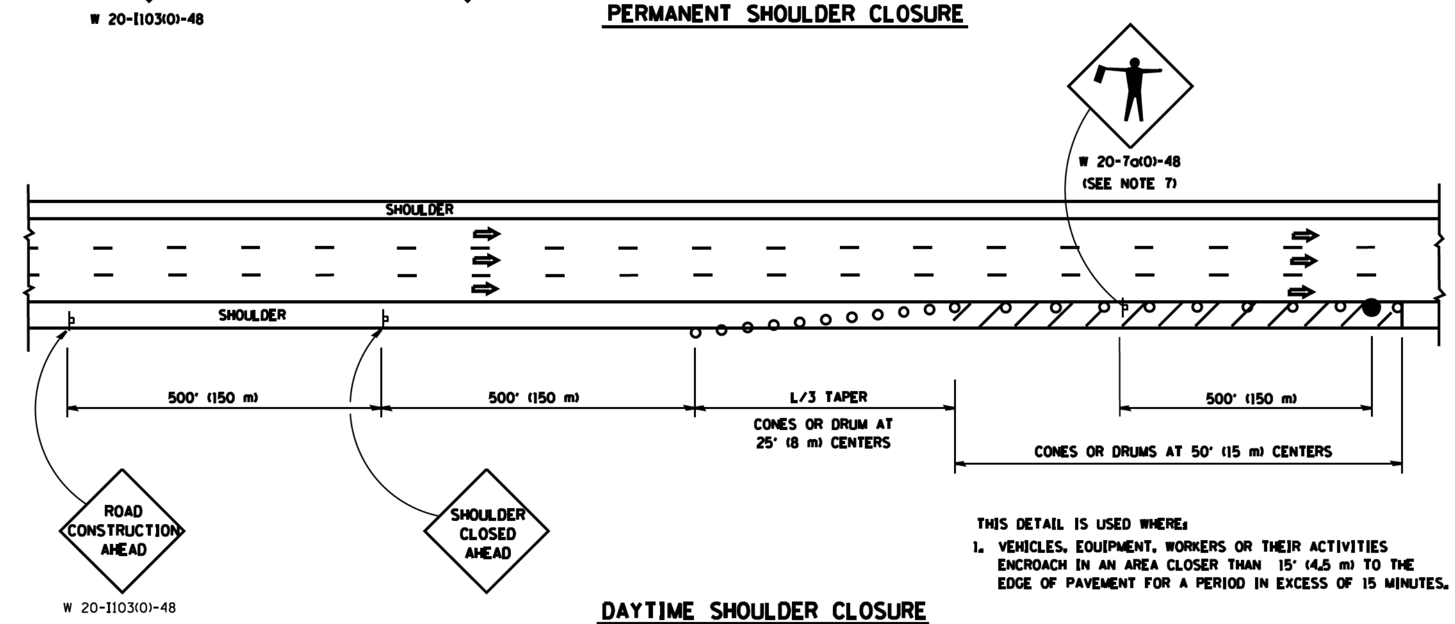


TYPICAL EXIT RAMP

SHOULDER CLOSURE DETAILS



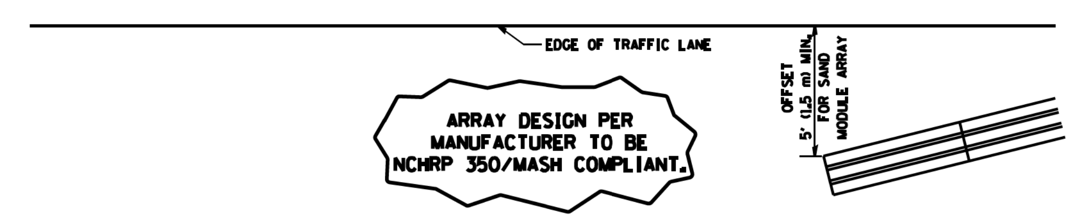
PERMANENT SHOULDER CLOSURE



THIS DETAIL IS USED WHERE:

1. VEHICLES, EQUIPMENT, WORKERS OR THEIR ACTIVITIES ENCROACH IN AN AREA CLOSER THAN 15' (4.5 m) TO THE EDGE OF PAVEMENT FOR A PERIOD IN EXCESS OF 15 MINUTES.

DAYTIME SHOULDER CLOSURE



DETAIL "A"
IMPACT ATTENUATOR, TEMPORARY
(SEE NOTE 5)

SYMBOLS

- ACTIVE WORK AREA
- SIGN ON PORTABLE OR PERMANENT SUPPORT
- FLAGGER WITH CONTROL SIGN
- TYPE II BARRICADE OR DRUM WITH STEADY BURN MONO-DIRECTIONAL LIGHT
- CONE, DRUM OR BARRICADE
- IMPACT ATTENUATOR OF TYPE AND TEST LEVEL SPECIFIED

GENERAL NOTES

1. THE "L" DISTANCE EQUALS:

SPEED LIMIT	FORMULAS METRIC	FORMULAS ENGLISH
45 mph (80 km/h) OR GREATER:	L=0.65(W)(S)	L=(W)(S)

W = WIDTH OF OFFSET IN FEET (METERS)
S = NORMAL POSTED SPEED MPH (KM/H)

2. PLASTIC DRUMS WITH HIGH PERFORMANCE REFLECTIVE SHEETING AND STEADY BURNING LIGHTS ARE REQUIRED FOR ALL NIGHTTIME CLOSURES.

3. ALL SIGNS SHALL BE POST MOUNTED IF THE CLOSURE TIME EXCEEDS FOUR DAYS.

4. FLASHING LIGHTS SHALL BE USED DURING THE HOURS OF DARKNESS AND SHALL BE INSTALLED ABOVE THE FIRST TWO SETS OF SIGNS.

5. THE IMPACT ATTENTUATOR, TEMPORARY IS NOT REQUIRED WHEN THE TEMPORARY CONCRETE BARRIER WALL IS PROTECTED BY OR IS TIED INTO THE EXISTING GUARDRAIL. IF OFFSET IS LESS THAN 5 FEET USE NARROW USE TYPE DEVICE TO MEET NCHRP350/MASH.

6. AUTHORIZATION FROM THE DISTRICT'S BUREAU OF TRAFFIC IS REQUIRED FOR ALL FREEWAY CLOSURES.

7. THE FLAGGER AND FLAGGER SIGN ARE REQUIRED AT THE ABOVE WORK SITES WHEN:
   a. FOUR OR MORE WORK VEHICLES ENTER THE TRAFFIC LANES IN A ONE HOUR PERIOD.
   b. THE WORK AVTIVITY REQUIRES FREQUENT ENCROACHMENT INTO THE LANE OPEN TO TRAFFIC.

   THE FLAGGER SHALL BE STATIONED APPROXIMATELY 100' (30 m) TO 200' (60 m) IN ADVANCE OF THE WORKERS.

8. 12' MIN. WIDTH TANGENT SECTION
   16' MIN. WIDTH CURVE SECTION.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

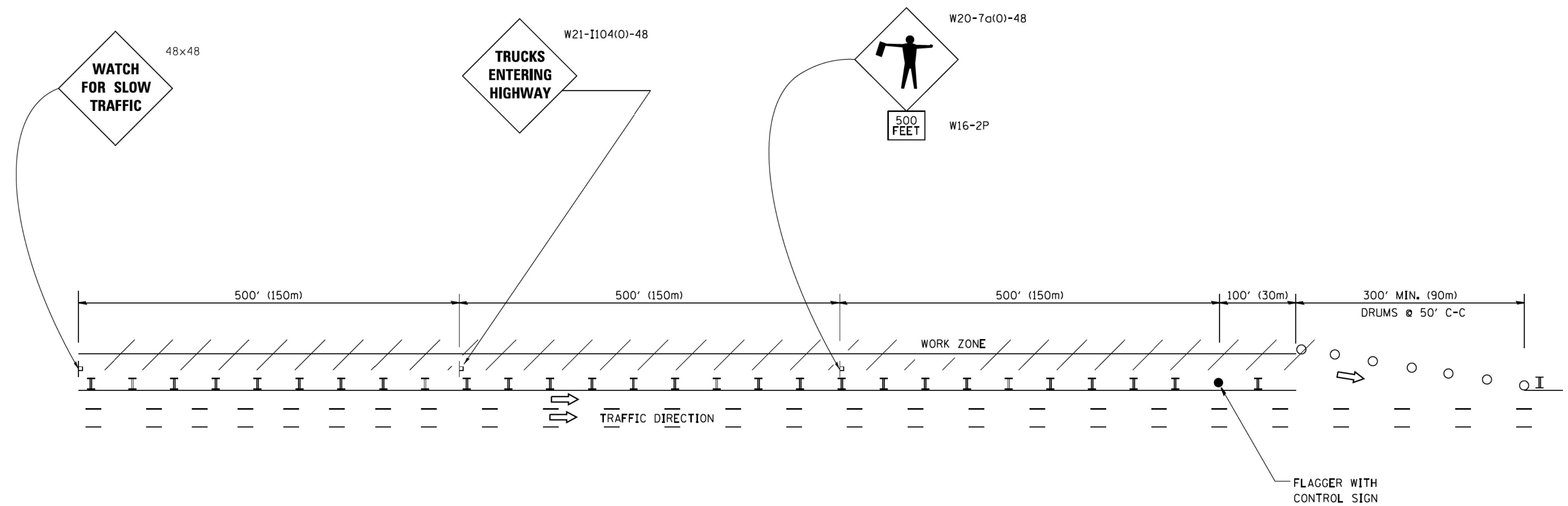
CM-4

CM 4-District 1 Detail TC17.dgn

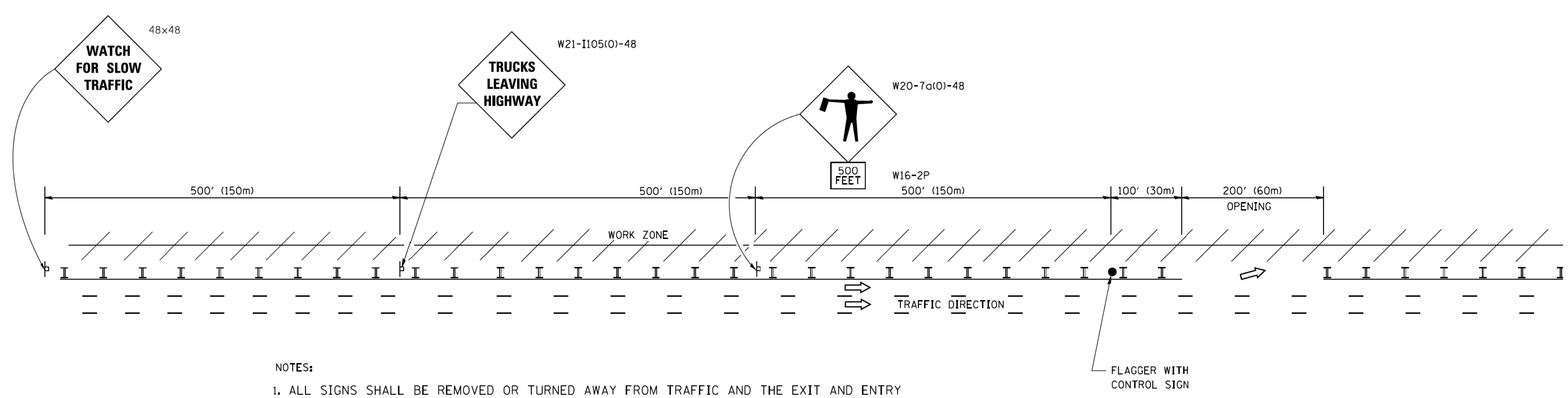
FILE NAME = c:\pw_work\pwidot\leysa\d0108315\tc17.dgn	USER NAME = leysa	DESIGNED -	REVISED - J.A.F. 12-06	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TRAFFIC CONTROL DETAILS FOR FREEWAY SHOULDER CLOSURES AND PARTIAL RAMP CLOSURES	F.A. RTE.: VAR.	SECTION: 2016-017L	COUNTY	TOTAL SHEETS: 88	SHEET NO.: 71
		DRAWN - D.W.S.	REVISED - S.P.B. 01-07			TC-17		CONTRACT NO. 62C35		
	PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED - S.P.B. 12-09		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.		
	PLOT DATE = 4/17/2014	DATE - 11-96	REVISED - M.D. 06-13			FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

SIGNING FOR FLAGGING OPERATIONS AT WORK ZONE OPENINGS

WORK ZONE EXIT OPENING



WORK ZONE ENTRY OPENING



NOTES:

1. ALL SIGNS SHALL BE REMOVED OR TURNED AWAY FROM TRAFFIC AND THE EXIT AND ENTRY OPENINGS SHALL BE CLOSED WHEN THE FLAGGING OPERATION CEASES. NON OPERATING EQUIPMENT SHALL COMPLY WITH ARTICLE 701.11
2. WORK ZONE OPENINGS SHALL BE A MINIMUM OF ONE HALF MILE APART AND A MINIMUM OF ONE QUARTER MILE FROM ALL ENTRANCE AND EXIT RAMPS.
3. EXITING THE WORK ZONE AT ANY PLACE OTHER THAN AT A WORK ZONE EXIT OPENING WILL BE PROHIBITED.
4. ALL VEHICLES SHALL ENTER THE WORK ZONE AT ENTRY OPENINGS, USING THEIR TURN SIGNALS TO WARN MOTORISTS
5. FLAGGERS SHALL NOT STOP TRAFFIC OR DIRECT TRAFFIC INTO AN ADJACENT LANE.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

CM-5

CM 5-District 1 Detail TC18.dgn

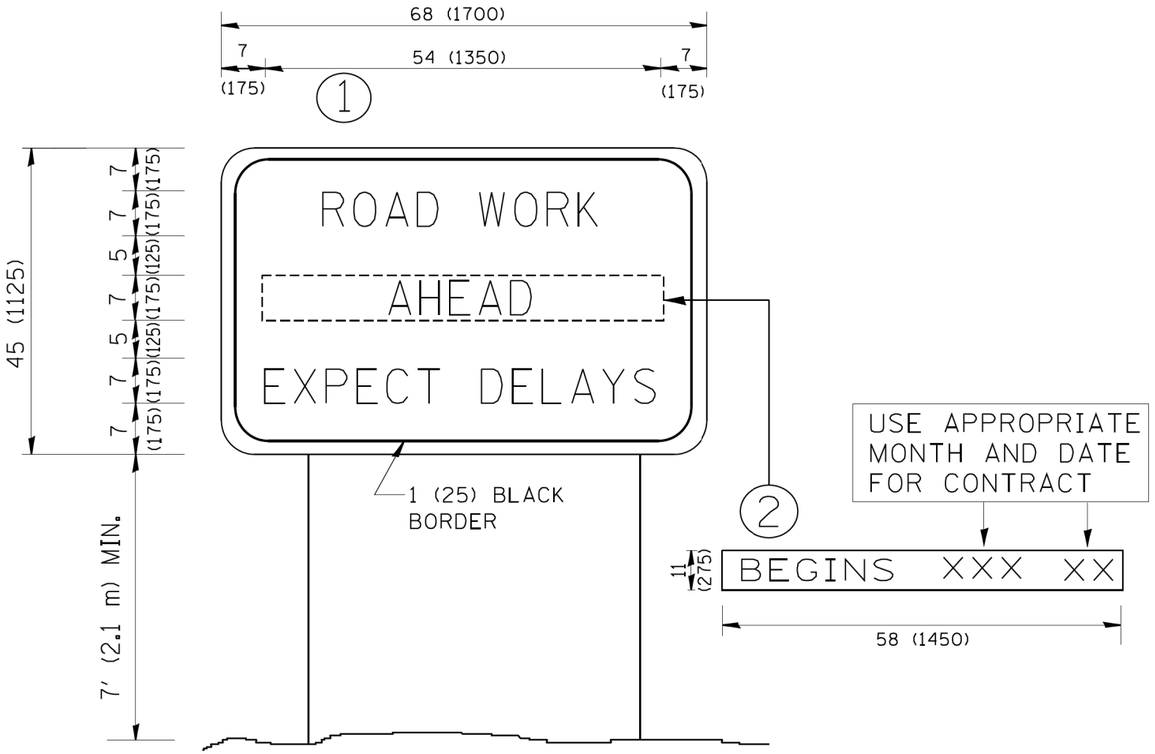
FILE NAME = c:\pw_work\pwidot\footemj\d0108315\tc18.dgn	USER NAME = footemj	DESIGNED -	REVISED - J.A.F. 02-06
		DRAWN -	REVISED - S.P.B. 01-07
	PLOT SCALE = 50.000 ' / in.	CHECKED -	REVISED - S.P.B. 12-09
	PLOT DATE = 7/8/2013	DATE -	REVISED - M.D. 06-13

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FREEWAY/EXPRESSWAY SIGNING FOR FLAGGING OPERATIONS AT WORK ZONE OPENINGS ON FREEWAYS/EXPRESSWAYS

SCALE: NONE | SHEET NO. 1 OF 1 SHEETS | STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2016-017L		88	72
	TC-18	CONTRACT NO. 62C35		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



NOTES:

1. USE BLACK LETTERING ON ORANGE BACKGROUND.
2. ERECT SIGNS IN ADVANCE OF THE LOCATION FOR THE ''ROAD CONSTRUCTION AHEAD'' SIGN AT LOCATIONS AS DIRECTED BY THE ENGINEER.
3. ERECT SIGN (1) WITH INSTALLED PANEL (2) ONE WEEK PRIOR TO THE START OF CONSTRUCTION.
4. REMOVE PANEL (2) SOON AFTER THE START OF CONSTRUCTION.
5. SEE SPECIAL PROVISION FOR ''TEMPORARY INFORMATION SIGNING'' FOR ADDITIONAL INFORMATION.
6. ONE SIGN ASSEMBLY EQUALS 25.70 SQ. FT. (2.3 SQ. M.)
7. SHALL BE PAID FOR AS TEMPORARY INFORMATION SIGNING.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

CM–6

CM 6-District 1 Detail TC22.dgn

FILE NAME = W:\diststd\22x34\tc22.dgn	USER NAME = gaglianobt	DESIGNED -	REVISED - R. MIRS 09-15-97
		DRAWN -	REVISED - R. MIRS 12-11-97
	PLOT SCALE = 50.000 ' / IN.	CHECKED -	REVISED - T. RAMMACHER 02-02-99
	PLOT DATE = 1/4/2008	DATE -	REVISED - C. JUCIUS 01-31-07

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ARTERIAL ROAD INFORMATION SIGN

SCALE: NONE | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA.

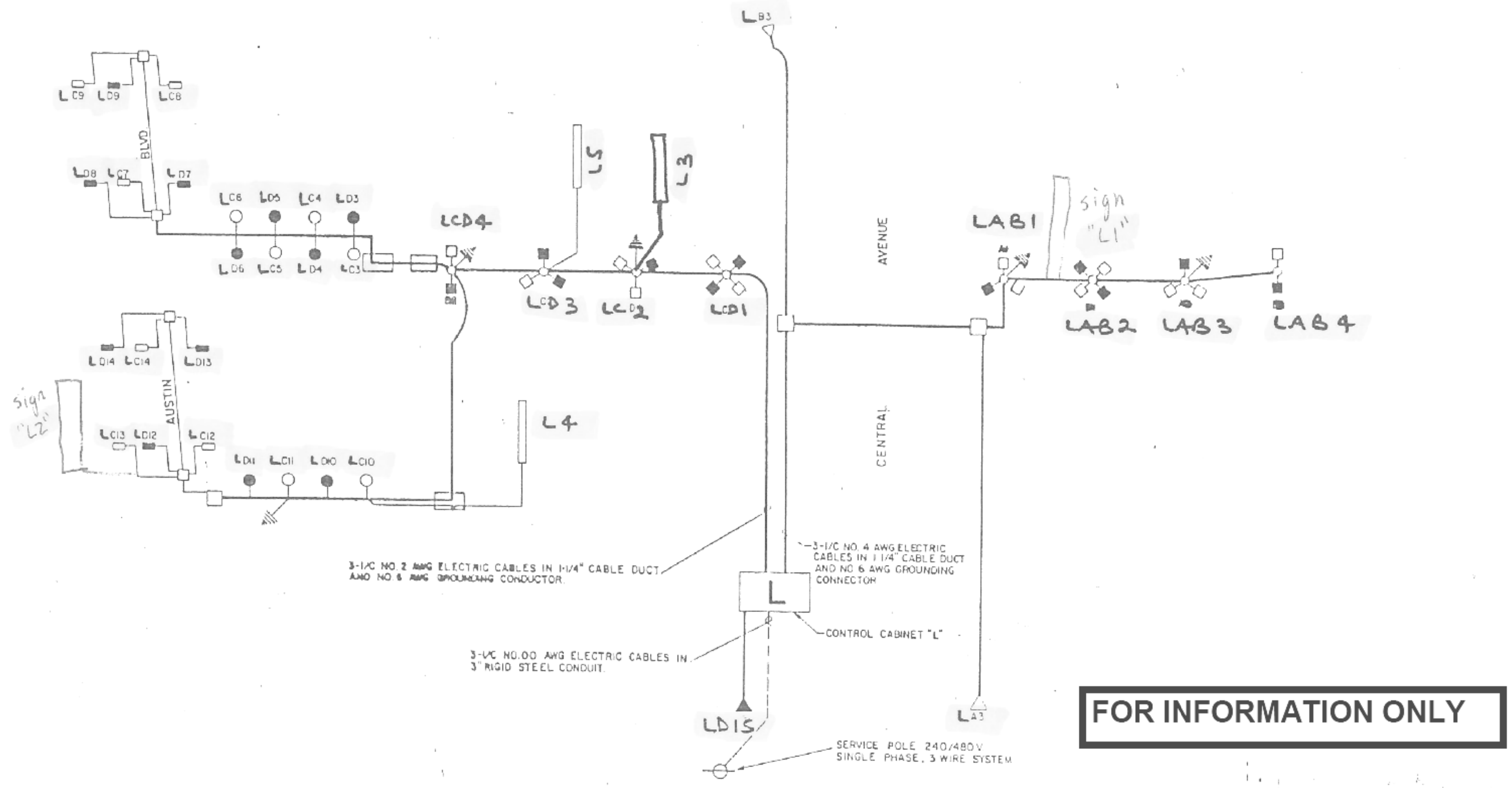
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2016-017L		88	73
	TC-22		CONTRACT NO. 62C35	
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

ROUTE NO	SEC	COUNTY	TOTAL SHEETS	SHEET NO
F.A.I. 290	*	COOK	246	160
STA	TO STA			
FED ROAD DIST NO 7	ILLINOIS	PROJECT IR-I-290-4		

* 2831-R(80)

SYMBOLS

Symbol	Description
Heavy line	3-1/C No. 4 AWG ELECTRIC CABLES IN 1 1/4" CABLE DUCT AND No. 6 AWG GROUNDING CONDUCTOR (OR AS NOTED OTHERWISE)
Light line	3-1/C No. 10 AWG ELECTRIC CABLES IN 1" CONDUIT
○	400 WHPS, M-C-III, LUMINAIRE ON RED CABLE
●	400 WHPS, M-C-III, LUMINAIRE ON BLACK CABLE
◁	200 WHPS, M-C-III, LUMINAIRE ON RED CABLE
◀	200 WHPS, M-C-III, LUMINAIRE ON BLACK CABLE
▭	55 WLPS, UNDERPASS LUMINAIRE ON RED CABLE
▬	55 WLPS, UNDERPASS LUMINAIRE ON BLACK CABLE
□ (small)	JUNCTION BOX FOR UNDERPASS LUMINAIRES 12" x 6" x 6"
□ (large)	JUNCTION BOX FOR UNDERGROUND DISTRIBUTION 18" x 18" x 10"
▭ (large)	PULL BOX IN BARRIER WALL 18" x 8" x 8"
▭ (long)	LIGHTED SIGN PANEL WITH 3-1/C No. 4 AWG ELECTRIC CABLES IN 1 1/4" CABLE DUCT AND NO. 6 AWG GROUNDING CONDUCTOR
⏚	GROUND ROD



FOR INFORMATION ONLY

L 1355

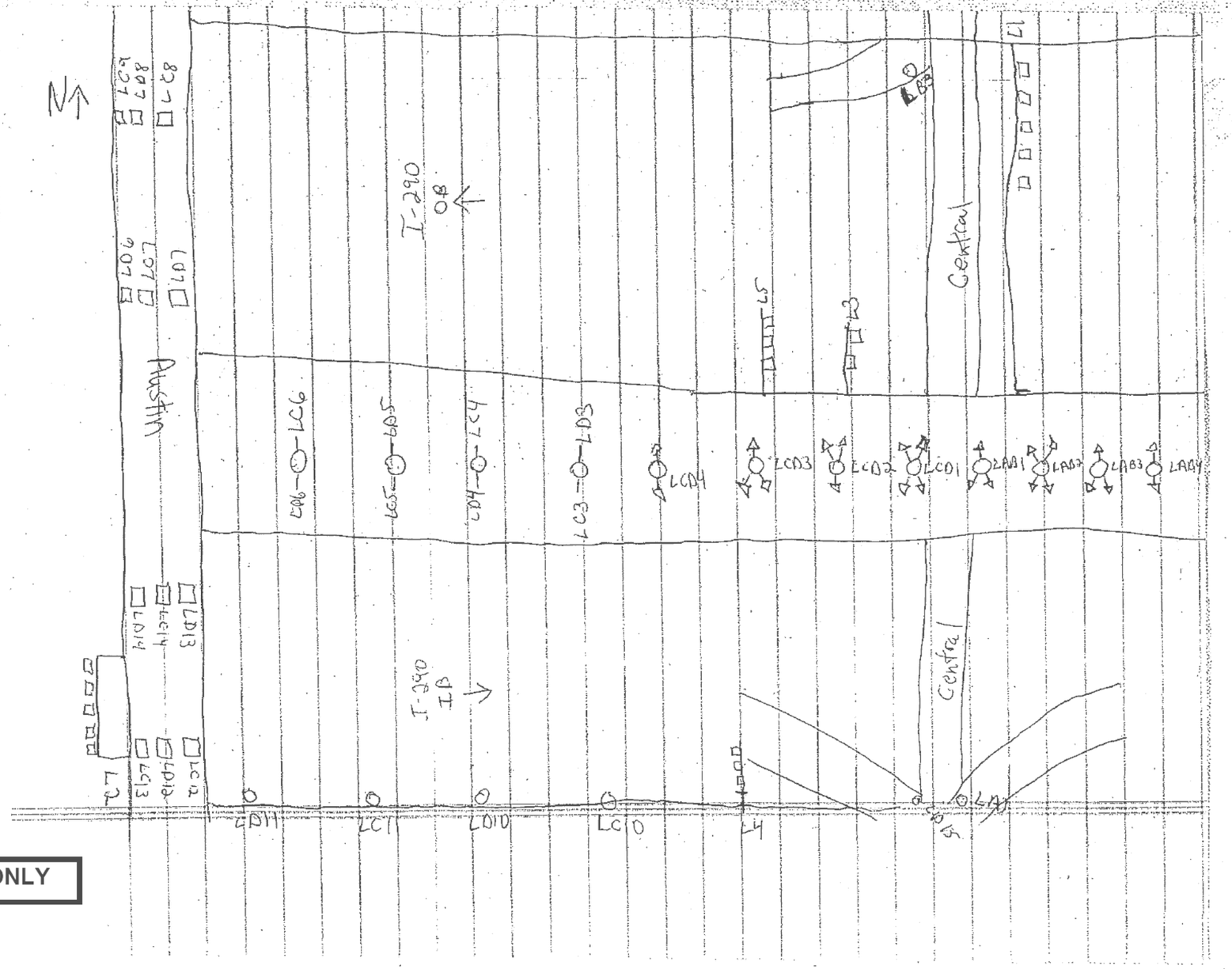
REVISIONS	
NAME	DATE
C.D.C.	10/83

ILLINOIS DEPARTMENT OF TRANSPORTATION
EISENHOWER EXPESSWAY
LIGHTING
WIRING DIAGRAM FOR CONTROL CABINET "L" AT CENTRAL AVE.

SCALE — DRAWN BY L.R.S.
DATE — CHECKED BY R.L.+

DELTA ENGINEERING GROUP, LLC				
USER NAME = $USER$	DESIGNED - HM	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	I-290 AT CENTRAL AVE. INFORMATION ONLY SHEET
	DRAWN - GJ	REVISED -		
PLOT SCALE = $SCALE$	CHECKED - HS	REVISED -		
PLOT DATE = $DATE$	DATE - 03-21-2017	REVISED -		SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2016-017L		88	74
CONTRACT NO. 62C35				
ILLINOIS FED. AID PROJECT				



FOR INFORMATION ONLY

DELTA ENGINEERING GROUP, LLC

USER NAME = $USER$	DESIGNED - HM	REVISED -	
	DRAWN - GJ	REVISED -	
PLOT SCALE = $SCALE$	CHECKED - HS	REVISED -	
PLOT DATE = $DATE$	DATE - 03-21-2017	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

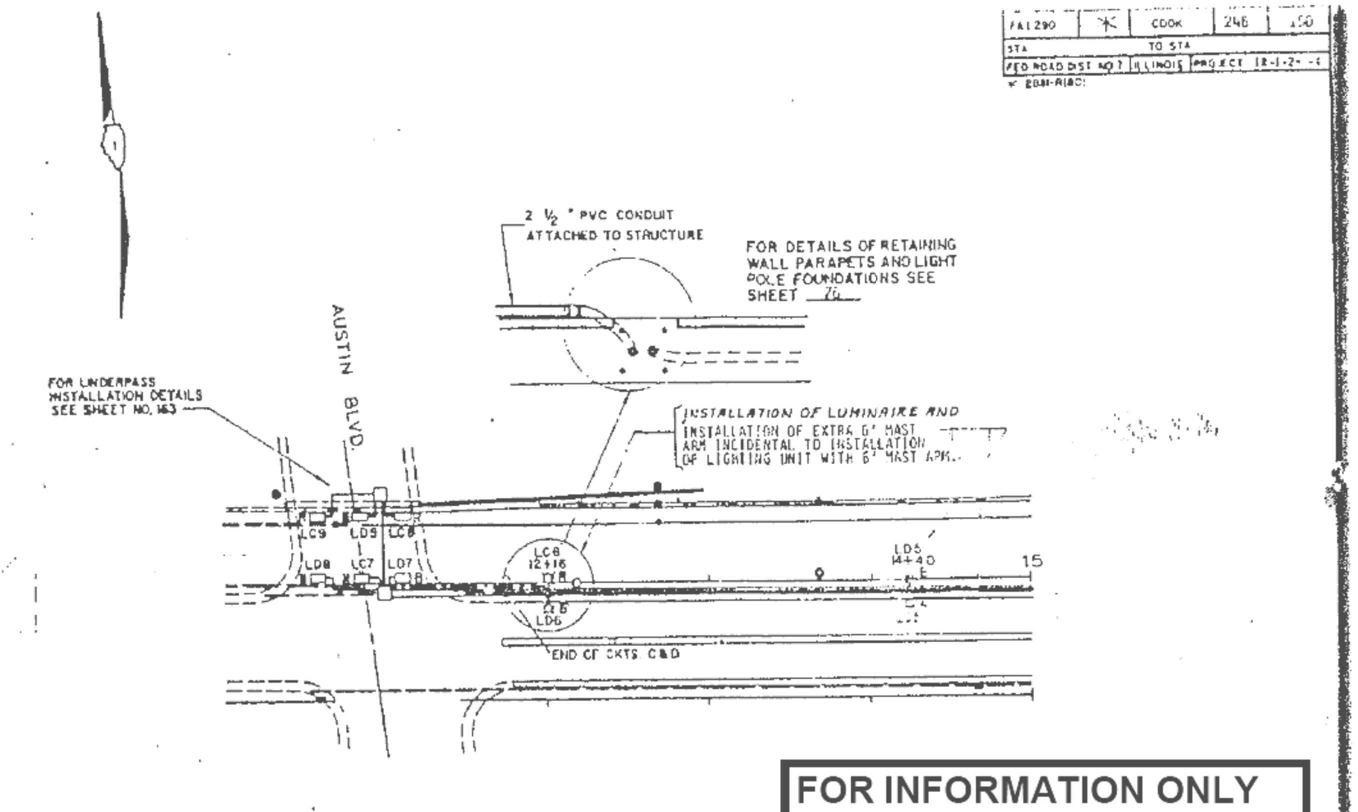
I–290 AT CENTRAL AVE.
INFORMATION ONLY SHEET

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

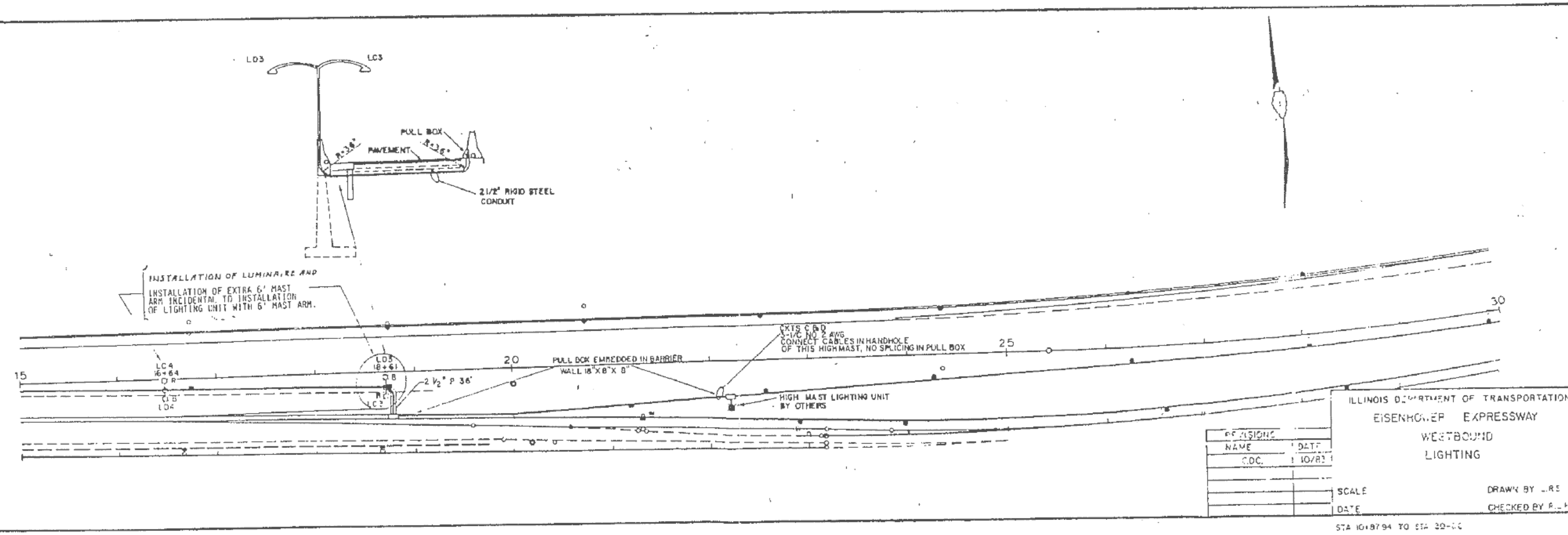
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2016-017L		88	75
			CONTRACT NO. 62C35	
	ILLINOIS FED. AID PROJECT			

LEGEND

- LIGHTING UNIT AND BARRIER WALL FOUNDATION: 47.5 FT. MOUNTING HEIGHT, 6 FT. MAST ARM, 400 WATT HIGH PRESSURE SODIUM, M-C-III, LUMINAIRE
- 4" PVC RACEWAY IN BARRIER WALL WITH 3-1/C TYPE XHHW ELECTRIC CABLES (SIZE AS NOTED ON THE PLANS) IN 1-1/4" CABLE DUCT AND NO. 6 AWG BARE GROUNDING CONDUCTOR
- LIGHTING UNIT AND BARRIER WALL FOUNDATION: 47.5 FT. MOUNTING HEIGHT, TWIN 6 FT. MAST ARMS, TWO 400 WATT HIGH PRESSURE SODIUM, M-C-III, LUMINAIRES
- 4" PVC RACEWAY IN BARRIER WALL WITH 3-1/C TYPE XHHW ELECTRIC CABLES (SIZE AS NOTED ON THE PLANS) IN 1-1/4" CABLE DUCT AND NO. 6 AWG BARE GROUNDING CONDUCTOR
- RELOCATED 42 FT. MOUNTING HEIGHT POLE SHAFT AND ARM, PROPOSED 200 WATT HIGH PRESSURE SODIUM, M-C-III LUMINAIRE, BREAKAWAY DEVICE AND FOUNDATION.
- LIGHTING UNIT AND FOUNDATION: 47.5 FT. MOUNTING HEIGHT, 15 FT. MAST ARM, 400 WATT HIGH PRESSURE SODIUM, M-C-III, LUMINAIRE: BREAKAWAY DEVICE
- JUNCTION BOX 18"x 8"x8" EMBEDDED IN BARRIER WALL
- UNDERPASS LUMINAIRE: 55 WATT, LOW PRESSURE SODIUM
- JUNCTION BOX 12" X 6" X 6" ATTACHED TO STRUCTURE
- JUNCTION BOX 18" X 18" X 10" ATTACHED TO STRUCTURE
- 1-1/4" DIA CABLE DUCT WITH 3-1/C TYPE XHHW ELECTRIC CABLES. (SIZE AS NOTED ON THE PLANS), AND NO. 6 AWG BARE GROUNDING CONDUCTOR IN TRENCH.
- 2 1/2" P 24' — RIGID STEEL CONDUIT, 2 1/2" DIA., PUSHED UNDER EXISTING ROADWAY
- 2 1/2" T 24' — RIGID STEEL CONDUIT, 2 1/2" DIA., IN TRENCH
- 2 1/2 PVC CONDUIT ATTACHED TO STRUCTURE
- KA10 — POLE NUMBERING DECAL: K - CONTROL CABINET DESIGNATION; A - CIRCUIT DESIGNATION; 10 - LUMINAIRE SEQUENCE
- R — LUMINAIRE CONNECTED TO RED PHASE WIRE
- B — LUMINAIRE CONNECTED TO BLACK PHASE WIRE
- FDN A — NO FOUNDATION SYMBOL SHOWN INDICATES FOUNDATION TYPE A
- FDN B — FOUNDATION TYPE B
- FDN C — FOUNDATION TYPE C

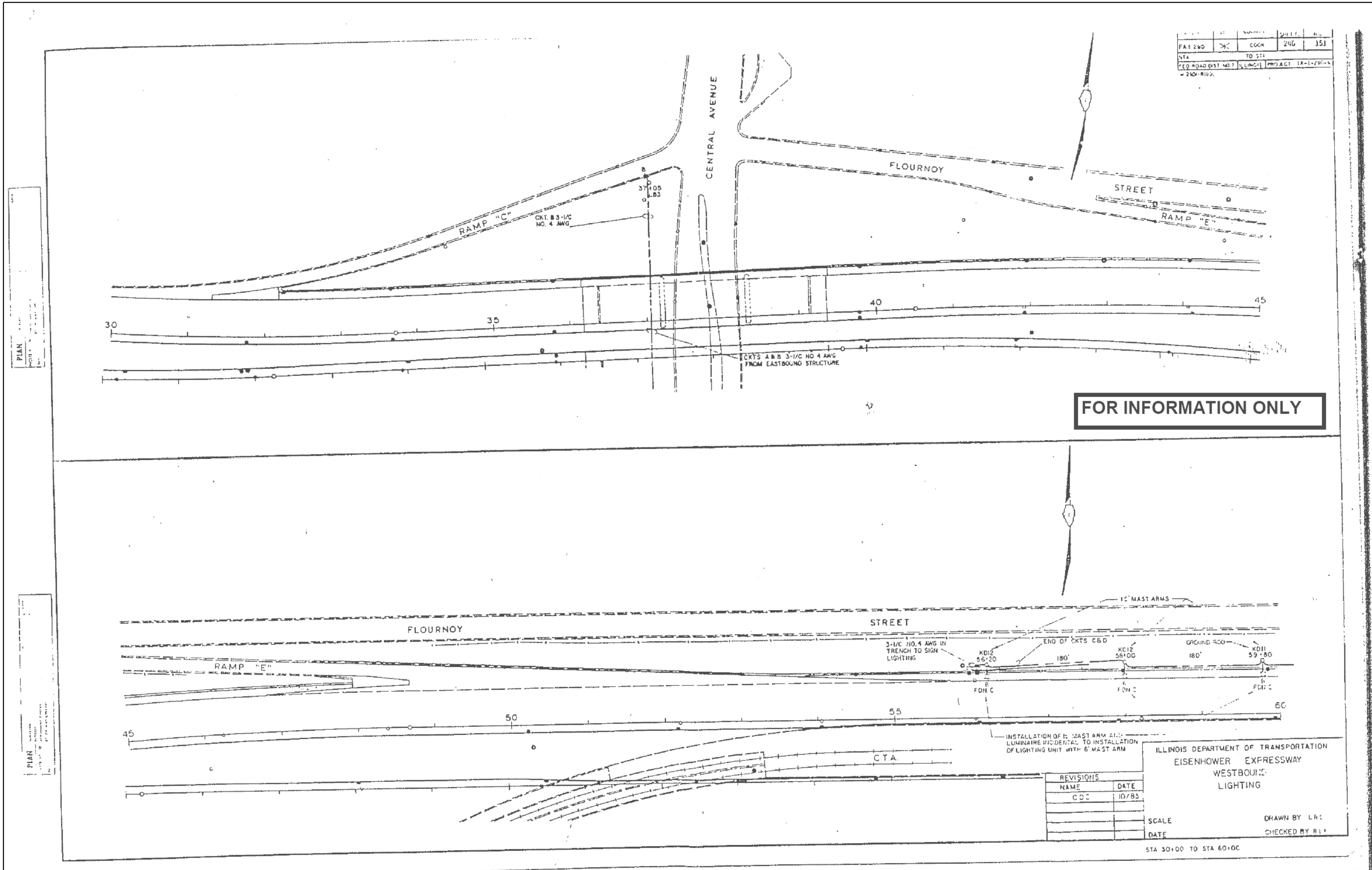


FOR INFORMATION ONLY



DELTA ENGINEERING GROUP, LLC	USER NAME = $USER$	DESIGNED - HM	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	I-290 AT CENTRAL AVE. INFORMATION ONLY SHEET
		DRAWN - GJ	REVISED -		
	PLOT SCALE = $SCALE$	CHECKED - HS	REVISED -		
	PLOT DATE = $DATE$	DATE - 03-21-2017	REVISED -		SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2016-017L		88	76
CONTRACT NO. 62C35				
ILLINOIS FED. AID PROJECT				



DELTA ENGINEERING GROUP, LLC

USER NAME = $USER$	DESIGNED - HM	REVISED -	
	DRAWN - GJ	REVISED -	
PLOT SCALE = $SCALE$	CHECKED - HS	REVISED -	
PLOT DATE = $DATE$	DATE - 03-21-2017	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I-290 AT CENTRAL AVE.
INFORMATION ONLY SHEET

SCALE: SHEET OF SHEETS STA. TO STA.

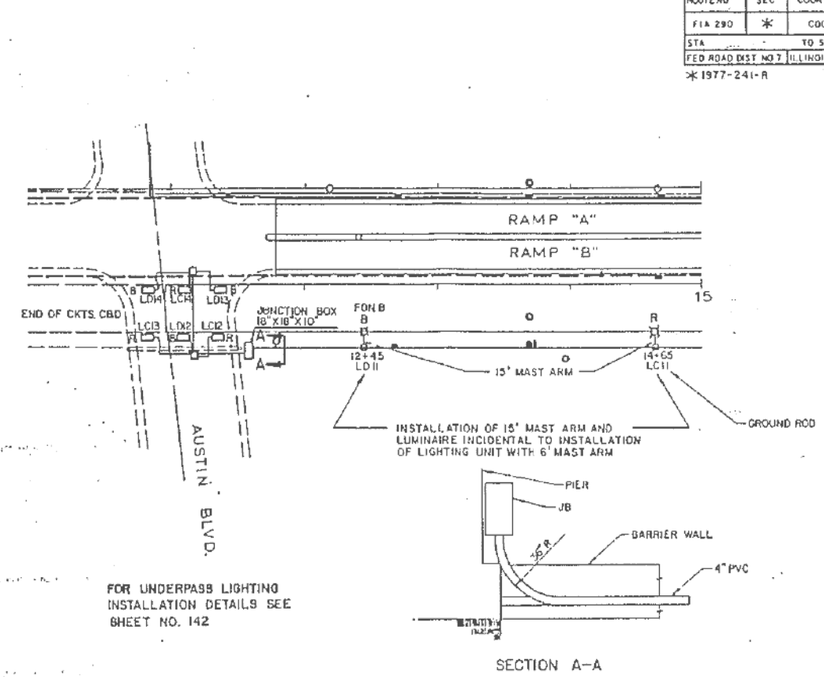
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2016-017L		88	77
		CONTRACT NO. 62C35		
		ILLINOIS FED. AID PROJECT		

ROUTE NO	SEC	COUNTY	TOTAL SHEETS	SHEET NO
FIA 290	*	COOK	221	129
STA -		TO STA		
FED ROAD DIST NO 7	ILLINOIS	PROJECT		

* 1977-241-A

LEGEND

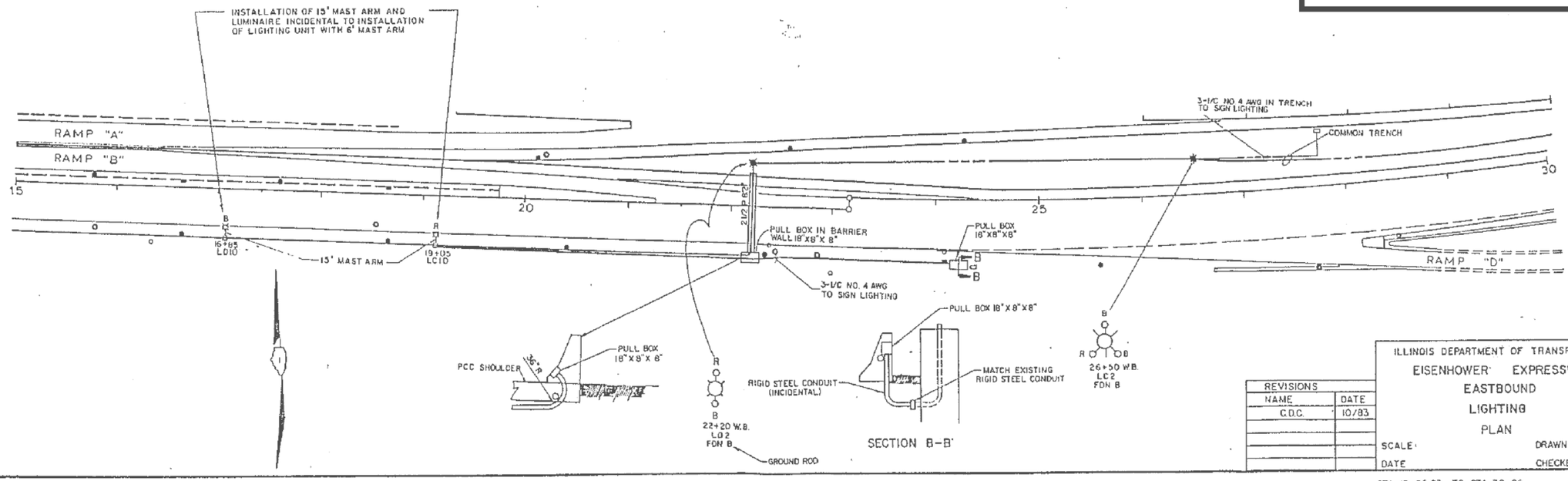
- HIGH MOUNT LIGHTING UNIT AND FOUNDATION: 100 FT. MOUNTING HEIGHT, 1,000 WATT HIGH PRESSURE SODIUM, M-C-III, LUMINAIRES, NUMBER OF LUMINAIRES AS NOTED IN THE PLANS
- LIGHTING UNIT AND BARRIER WALL FOUNDATION: 47.5 FT. MOUNTING HEIGHT, 6 FT. MAST ARM, 400 WATT HIGH PRESSURE SODIUM, M-C-III, LUMINAIRE
- 4" PVC RACEWAY IN BARRIER WALL WITH 3-1/C TYPE XHHW ELECTRIC CABLES (SIZE AS NOTED ON THE PLANS) IN 1-1/4" CABLE DUCT AND NO. 6 AWG BARE GROUNDING CONDUCTOR
- RELOCATED 42 FT. MOUNTING HEIGHT POLE SHAFT AND ARM, PROPOSED 200 WATT HIGH PRESSURE SODIUM, M-C-III LUMINAIRE, BREAKAWAY DEVICE AND FOUNDATION.
- LIGHTING UNIT AND FOUNDATION: 47.5 FT. MOUNTING HEIGHT, 15 FT. MAST ARM, 400 WATT HIGH PRESSURE SODIUM, M-C-III, LUMINAIRE, BREAKAWAY DEVICE
- 1,000 WATT HIGH PRESSURE SODIUM LUMINAIRE, M-C-III
- JUNCTION BOX 18"x 8"x8" ENCLOSED IN BARRIER WALL
- UNDERPASS LUMINAIRE: 55 WATT, LOW PRESSURE SODIUM
- JUNCTION BOX 12" X 6" X 6" ATTACHED TO STRUCTURE
- JUNCTION BOX 18" X 13" X 10" ATTACHED TO STRUCTURE
- 1-1/4" DIA CABLE DUCT WITH 3-1/C TYPE XHHW ELECTRIC CABLES. (SIZE AS NOTED ON THE PLANS), AND NO. 6 AWG BARE GROUNDING CONDUCTOR, IN TRENCH.
- 2 1/2" P 24' RIGID STEEL CONDUIT, 2 1/2" DIA., PUSHED UNDER EXISTING ROADWAY
- 2 1/2" I 24' RIGID STEEL CONDUIT, 2 1/2" DIA., IN TRENCH
- 2 1/2" PVC CONDUIT ATTACHED TO STRUCTURE
- K A I O POLE NUMBERING DECAL: K - CONTROL CABINET DESIGNATION; A - CIRCUIT DESIGNATION; 10 - LUMINAIRE SEQUENCE
- R LUMINAIRE CONNECTED TO RED PHASE WIRE
- B LUMINAIRE CONNECTED TO BLACK PHASE WIRE
- FDN A NO FOUNDATION SYMBOL SHOWN INDICATES FOUNDATION TYPE A
- FDN B FOUNDATION TYPE B
- FDN C FOUNDATION TYPE C



FOR UNDERPASS LIGHTING INSTALLATION DETAILS SEE SHEET NO. 142

SECTION A-A

FOR INFORMATION ONLY



SECTION B-B'

REVISIONS	
NAME	DATE
C.D.C.	10/83

ILLINOIS DEPARTMENT OF TRANSPORTATION
EISENHOWER EXPRESSWAY
EASTBOUND
LIGHTING
PLAN

SCALE: DRAWN BY L.R.S.
DATE CHECKED BY R.L.P.

STA 10+95.03 TO STA. 30+00

DELTA ENGINEERING GROUP, LLC

USER NAME = $USER$	DESIGNED - HM	REVISED -
	DRAWN - GJ	REVISED -
PLOT SCALE = $SCALE$	CHECKED - HS	REVISED -
PLOT DATE = $DATE$	DATE - 03-21-2017	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

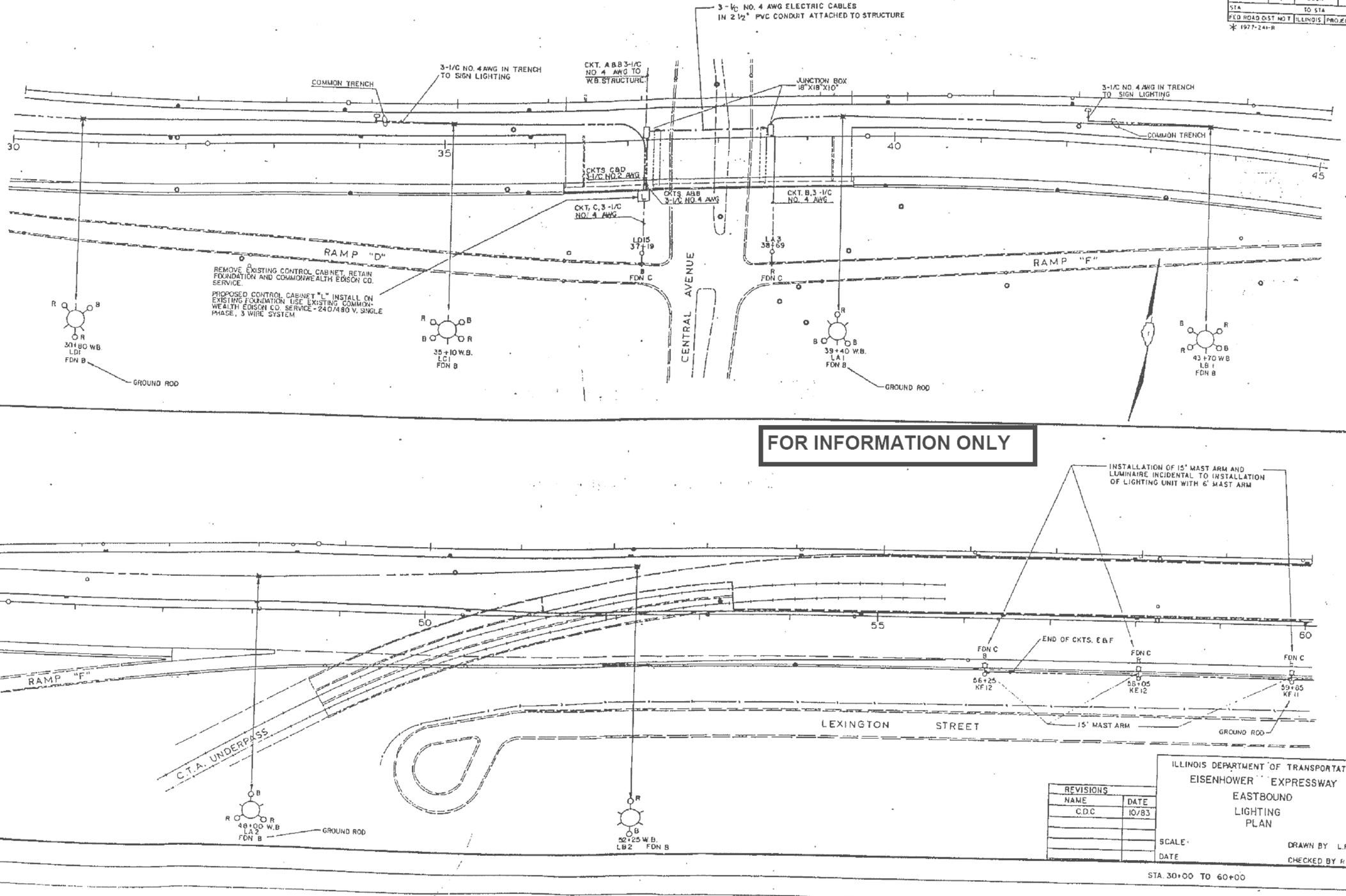
I-290 AT CENTRAL AVE.
INFORMATION ONLY SHEET

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2016-017L		88	78
			CONTRACT NO. 62C35	
		ILLINOIS	FED. AID PROJECT	

ROUTE NO	SEC	COUNTY	TOTAL SHEETS	SHEET NO
F.A.I 290	*	COOK	221	130
STA		TO STA		
FED ROAD DIST NO 7	ILLINOIS	PROJECT		

* 1977-241-R



FOR INFORMATION ONLY

REVISIONS	
NAME	DATE
C.D.C	10/83

ILLINOIS DEPARTMENT OF TRANSPORTATION
EISENHOWER EXPRESSWAY
EASTBOUND
LIGHTING
PLAN

SCALE:
DATE
DRAWN BY L.R.S
CHECKED BY R.L.P

STA. 30+00 TO 60+00

DELTA ENGINEERING GROUP, LLC

USER NAME = $USER$	DESIGNED - HM	REVISED -	
	DRAWN - GJ	REVISED -	
PLOT SCALE = $SCALE$	CHECKED - HS	REVISED -	
PLOT DATE = $DATE$	DATE - 03-21-2017	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I-290 AT CENTRAL AVE.
INFORMATION ONLY SHEET

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2016-017L		88	79
			CONTRACT NO. 62C35	
	ILLINOIS	FED. AID PROJECT		

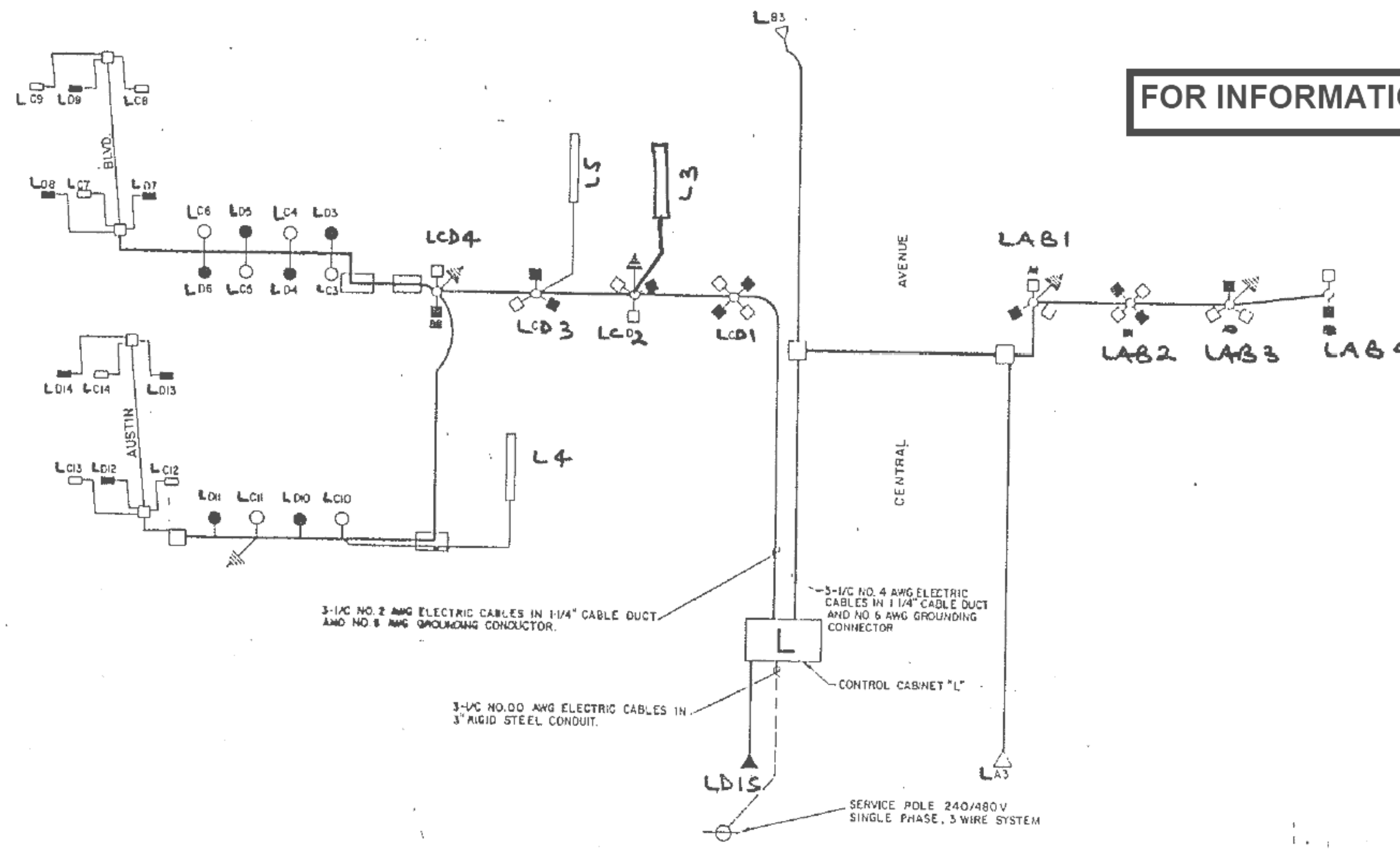
ROUTE NO	SEC	COUNTY	TOTAL SHEETS	SHEET NO
F A I 290	*	COOK	240	160
STA	TO STA			
FED ROAD DIST NO 7	ILLINOIS	PROJECT IR-1-290-4		

* 2831-R(80)

FOR INFORMATION ONLY

SYMBOLS

- 3-1/C No. 4 AWG ELECTRIC CABLES IN 1 1/4" CABLE DUCT AND No. 6 AWG GROUNDING CONDUCTOR (OR AS NOTED OTHERWISE)
- 3-1/C No. 10 AWG ELECTRIC CABLES IN 1" CONDUIT
- 400 WHPS, M-C-III, LUMINAIRE ON RED CABLE
- 400 WHPS, M-C-III, LUMINAIRE ON BLACK CABLE
- 200 WHPS, M-C-III, LUMINAIRE ON RED CABLE
- 200 WHPS, M-C-III, LUMINAIRE ON BLACK CABLE
- 55 WLPS, UNDERPASS LUMINAIRE ON RED CABLE
- 55 WLPS, UNDERPASS LUMINAIRE ON BLACK CABLE
- JUNCTION BOX FOR UNDERPASS LUMINAIRES 12" x 6" x 6"
- JUNCTION BOX FOR UNDERGROUND DISTRIBUTION 18" x 18" x 10"
- PULL BOX IN BARRIER WALL 18" x 8" x 8"
- LIGHTED SIGN PANEL WITH 3-1/C No. 4 AWG ELECTRIC CABLES IN 1 1/4" CABLE DUCT AND NO. 6 AWG GROUNDING CONDUCTOR
- GROUND ROD



L 1355

REVISIONS	
NAME	DATE
C.D.C.	10/83

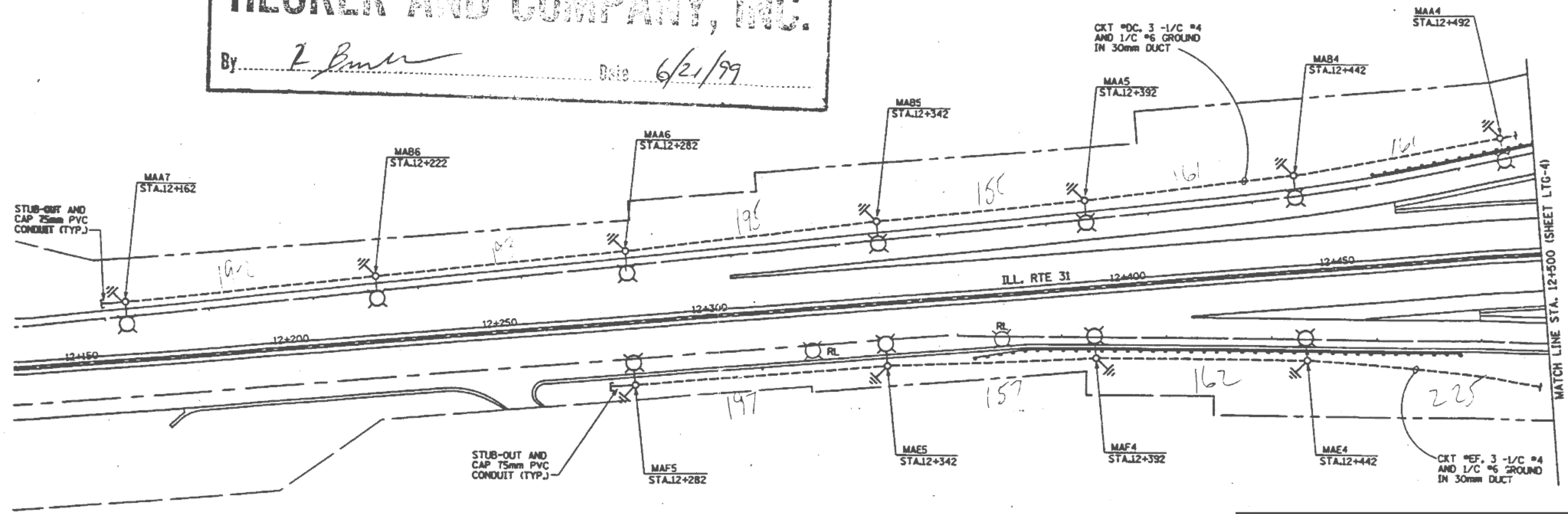
ILLINOIS DEPARTMENT OF TRANSPORTATION
EISENHOWER EXPESSWAY
LIGHTING
WIRING DIAGRAM FOR CONTROL CABINET "L" AT CENTRAL AVE.
SCALE · DRAWN BY LRS
DATE · CHECKED BY RLF

DELTA ENGINEERING GROUP, LLC	USER NAME = $USER$	DESIGNED - HM	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	I-290 AT CENTRAL AVE. INFORMATION ONLY SHEET	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - GJ	REVISED -				2016-017L		88	80
	PLOT SCALE = $SCALE$	CHECKED - HS	REVISED -			CONTRACT NO. 62C35				
	PLOT DATE = $DATE$	DATE - 03-21-2017	REVISED -		SCALE: SHEET OF SHEETS STA. TO STA.	ILLINOIS FED. AID PROJECT				

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	*	McHENRY	318	170
STA. 00+000		TO STA. 00+000		
FED. ROAD DIST. NO. 7		ILLINOIS FED. AID PROJECT		

* (2GHB & 112VBJR-1

RECORD DRAWINGS
HECKER AND COMPANY, INC.
By
Date 6/21/99



FOR INFORMATION ONLY

35.24
UD - 1798' + SLACK = 1833.24
T+B - 1778' - 548 m
Ground - 11

F:/PROJECTS/J08217/ final /217-E3.DGN

LTG-3

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
FAP ROUTE 336 (ILL. RTE. 31)

LIGHTING PLAN
IL. ROUTE 31

SCALE = 1:500
DATE: 10-23-97
DRAWN BY: NS
CHECKED BY: ADO

KAM ENGINEERING, INC.

DELTA ENGINEERING GROUP, LLC

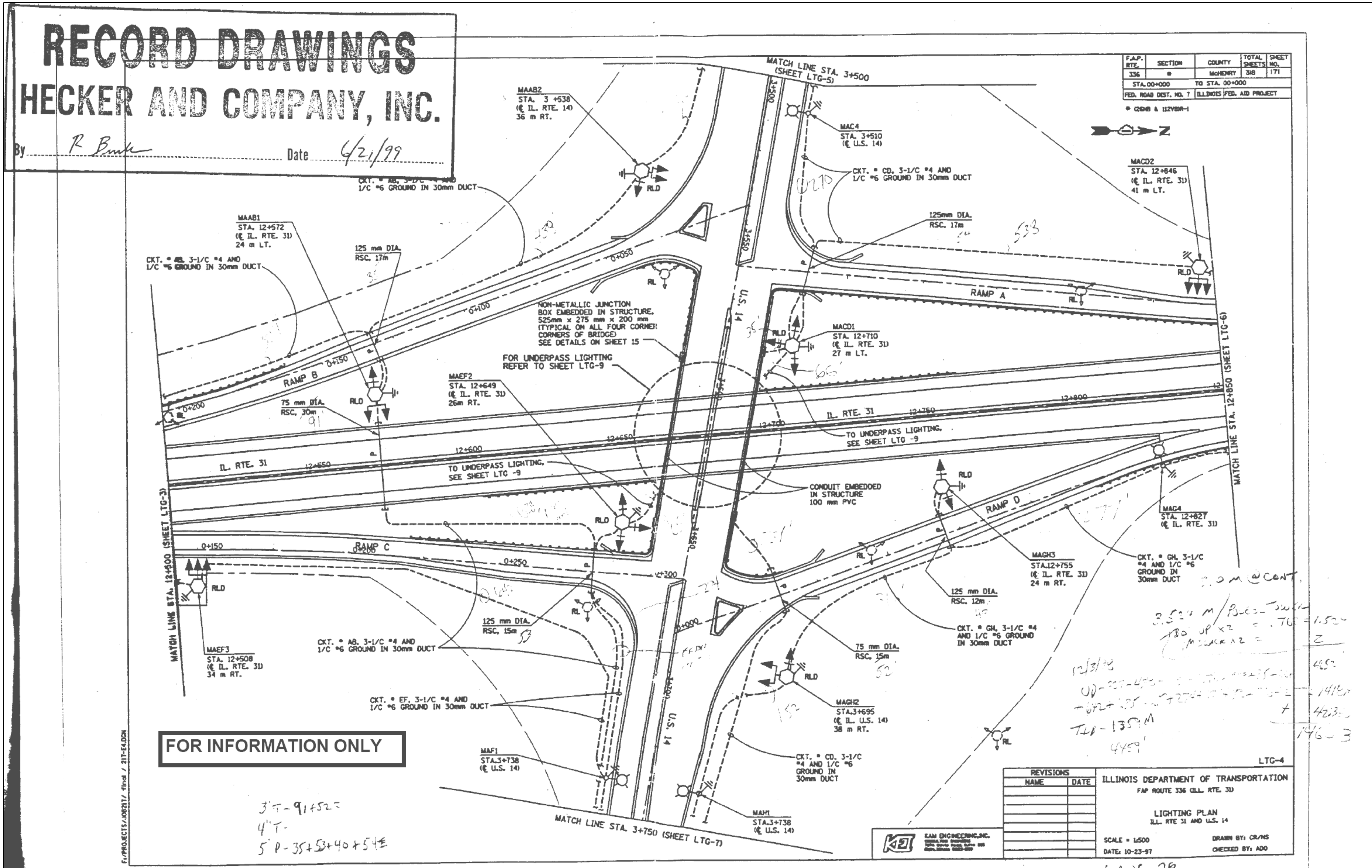
USER NAME = $USER$	DESIGNED - HM	REVISED -	
	DRAWN - GJ	REVISED -	
PLOT SCALE = $SCALE$	CHECKED - HS	REVISED -	
PLOT DATE = $DATE$	DATE - 03-21-2017	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

US14 AT IL31
INFORMATION ONLY SHEET

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2016-017L		88	81
CONTRACT NO. 62C35				
ILLINOIS FED. AID PROJECT				



F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	*	McHENRY	318	171

ILLINOIS DEPARTMENT OF TRANSPORTATION
FAP ROUTE 336 (ILL. RTE. 31)
LIGHTING PLAN
ILL. RTE 31 AND U.S. 14
SCALE = 1:500
DATE: 10-23-97
DRAWN BY: CR/NS
CHECKED BY: ADO
LTG-4
KAM ENGINEERING, INC.

USER NAME = $USER$	DESIGNED - HM	REVISED -	STATE OF ILLINOIS
	DRAWN - GJ	REVISED -	DEPARTMENT OF TRANSPORTATION
PLOT SCALE = $SCALE$	CHECKED - HS	REVISED -	
PLOT DATE = $DATE$	DATE - 03-21-2017	REVISED -	

DELTA ENGINEERING GROUP, LLC

US14 AT IL31
INFORMATION ONLY SHEET

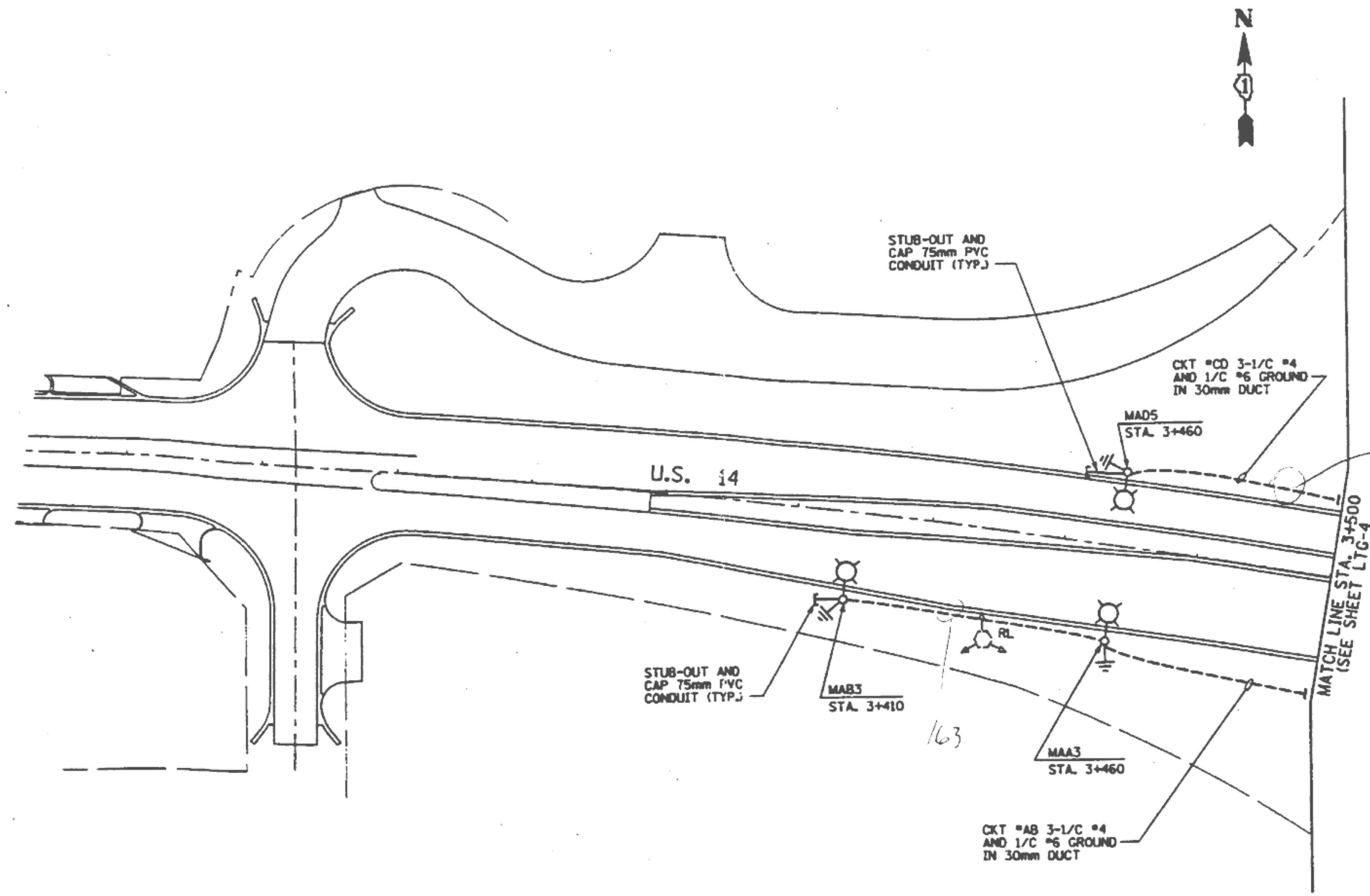
SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2016-017L		88	82

CONTRACT NO. 62C35
ILLINOIS FED. AID PROJECT

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	*	McHENRY	318	172
STA. 00+000	TO STA. 00+000			
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

* (26HB & 112VBDR-1



FOR INFORMATION ONLY

RECORD DRAWINGS
HECKER AND COMPANY, INC.

By R Burke Date 6/21/99

UD - 49.7 + SLACK 7.05 - 56.75
T&O - 49.7
G.RODS - 3

F:/PROJECTS/JOB217/ final / 217-ES.DGN

LTG-5

REVISIONS	
NAME	DATE

KAM ENGINEERING, INC.

ILLINOIS DEPARTMENT OF TRANSPORTATION
FAP ROUTE 336 (ILL. RTE. 31)

LIGHTING PLAN
U.S. 14

SCALE = 1:500
DATE: 10-23-97
DRAWN BY: NS
CHECKED BY: ADO

DELTA ENGINEERING GROUP, LLC

USER NAME = $USER$	DESIGNED - HM	REVISED -	
	DRAWN - GJ	REVISED -	
PLOT SCALE = $SCALE$	CHECKED - HS	REVISED -	
PLOT DATE = $DATE$	DATE - 03-21-2017	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

US14 AT IL31
INFORMATION ONLY SHEET

SCALE: SHEET OF SHEETS STA. TO STA.

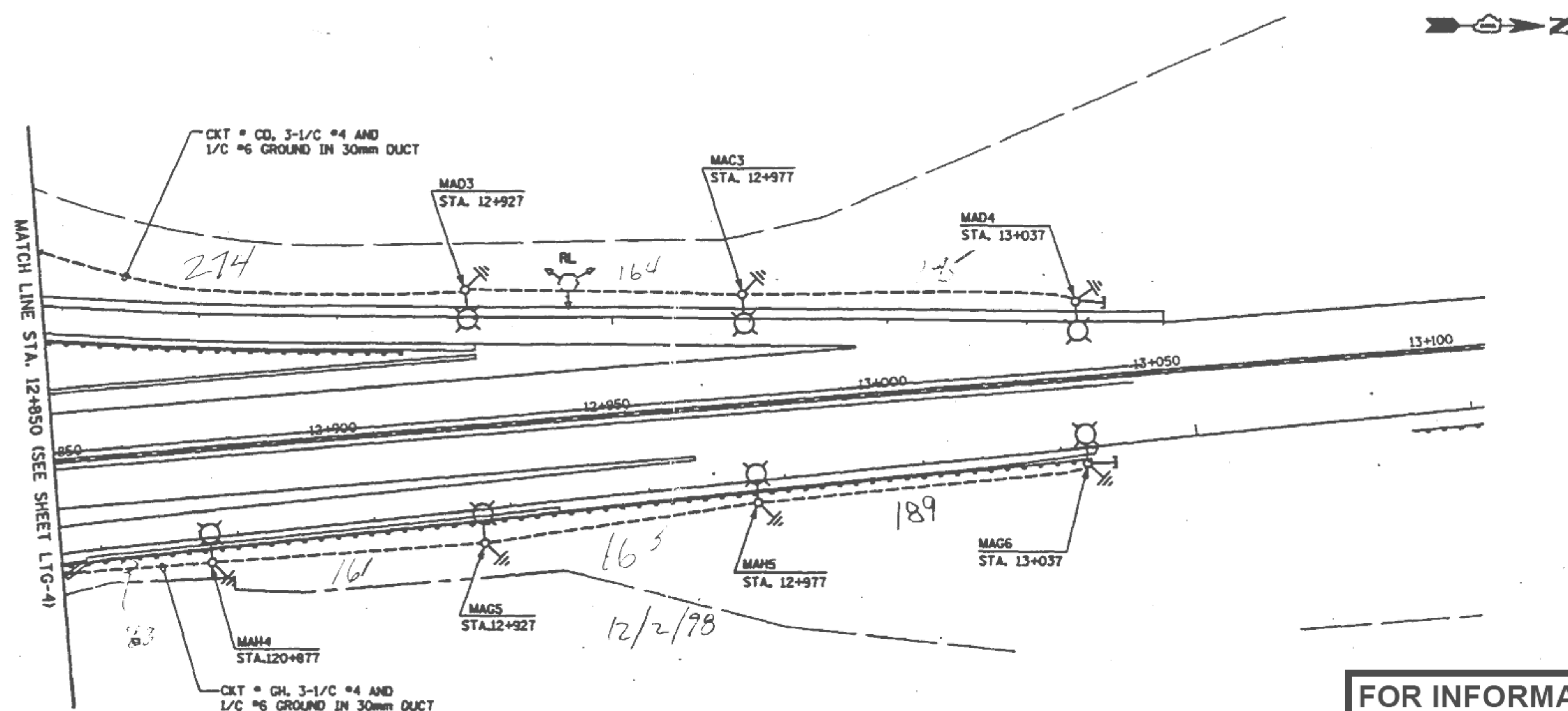
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2016-017L		88	83

CONTRACT NO. 62C35

ILLINOIS FED. AID PROJECT

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	*	McHENRY	318	173
STA. 00+000	TO STA. 00+000			
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

* (26HB & 112VBR-1



FOR INFORMATION ONLY

RECORD DRAWINGS
HECKER AND COMPANY, INC.

By R Bur Date 6/21/99

JD - 399 m + SLACK 21.2 = 420.2
THE - 399 -
6 RODS - 7

LTG-6

REVISIONS	
NAME	DATE

KAM ENGINEERING, INC.

ILLINOIS DEPARTMENT OF TRANSPORTATION
FAP ROUTE 336 (ILL. RTE. 31)

LIGHTING PLAN
ILL. RTE 31

SCALE = 1:500 DRAWN BY: MS
DATE: 10-23-97 CHECKED BY: ADO

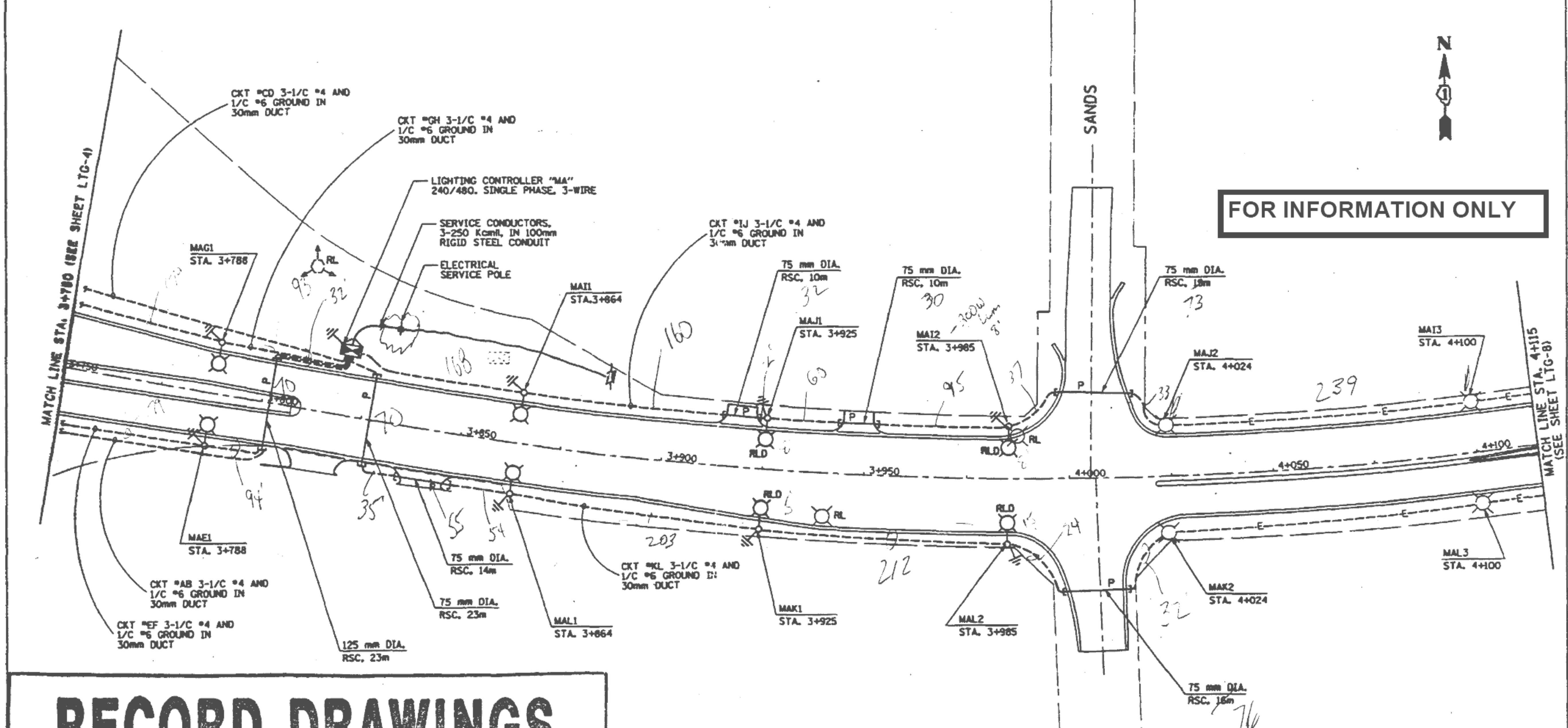
F:/PROJECTS/J08217/ ... / 217-E6.DGN

DELTA ENGINEERING GROUP, LLC	USER NAME = $USER$	DESIGNED - HM	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	US14 AT IL31 INFORMATION ONLY SHEET	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - GJ	REVISED -				2016-017L		88	84
	PLOT SCALE = $SCALE$	CHECKED - HS	REVISED -			CONTRACT NO. 62C35				
	PLOT DATE = $DATE$	DATE - 03-21-2017	REVISED -		SCALE: SHEET OF SHEETS STA. TO STA.	ILLINOIS FED. AID PROJECT				

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	*	McHENRY	318	174
STA. 00+000		TO STA. 00+000		
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT	

* (2GHB & 112VBDR-1

FOR INFORMATION ONLY



NOTE:
THE EXISTING LIGHTING UNITS TO REMAIN SHALL BE RE-LETTERED WITH THE NEW CIRCUIT IDENTIFICATION NUMBERS. THIS WORK SHALL BE INCIDENTAL TO THE CONTRACT.

RECORD DRAWINGS
HECKER AND COMPANY, INC.

By R Burk Date 6/21/99

3" T - 70+73+76+32+30+35 = 336

LTG-7

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
FAP ROUTE 336 (ILL. RTE. 31)

LIGHTING PLAN
U.S. 14

SCALE = 1:500
DATE: 10-23-97
DRAWN BY: NS
CHECKED BY: ADO

KAM ENGINEERING, INC.

F:/PROJECTS/JOB217/ final / 217-ET.DGN

DELTA ENGINEERING GROUP, LLC

USER NAME = $USER$	DESIGNED - HM	REVISED -
	DRAWN - GJ	REVISED -
PLOT SCALE = $SCALE$	CHECKED - HS	REVISED -
PLOT DATE = $DATE$	DATE - 03-21-2017	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

US14 AT IL31
INFORMATION ONLY SHEET

SCALE: SHEET OF SHEETS STA. TO STA.

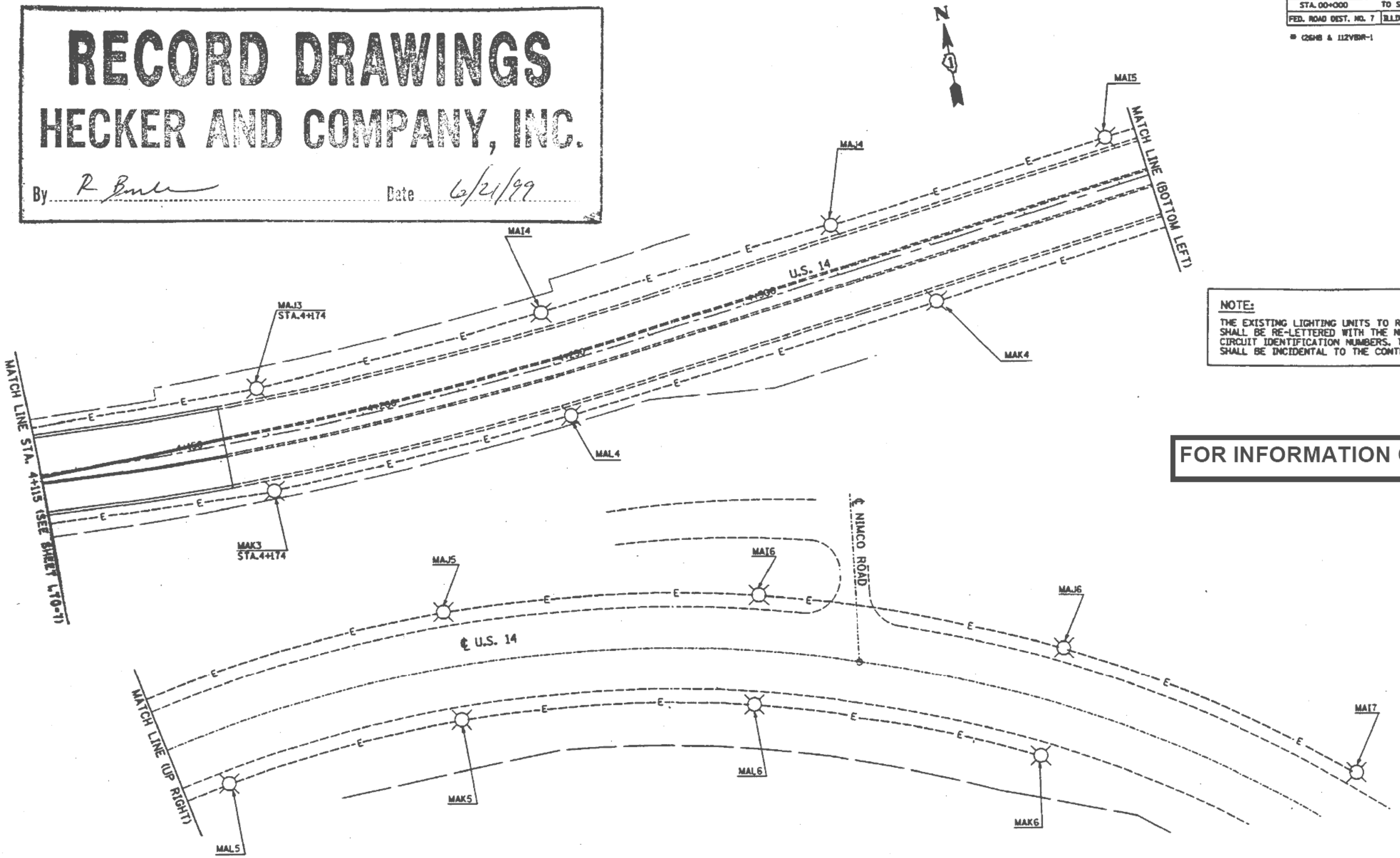
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2016-017L		88	85
		CONTRACT NO. 62C35		
		ILLINOIS FED. AID PROJECT		

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	*	McHENRY	318	175
STA. 00+000	TO STA. 00+000			
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

* (26HB & 112VBR-1

RECORD DRAWINGS
HECKER AND COMPANY, INC.

By R Bml Date 6/21/99



NOTE:
THE EXISTING LIGHTING UNITS TO REMAIN SHALL BE RE-LETTERED WITH THE NEW CIRCUIT IDENTIFICATION NUMBERS. THIS WORK SHALL BE INCIDENTAL TO THE CONTRACT.

FOR INFORMATION ONLY

LTG-8

REVISIONS	
NAME	DATE

KAM ENGINEERING, INC.

ILLINOIS DEPARTMENT OF TRANSPORTATION
FAP ROUTE 336 (ILL. RTE. 31)

LIGHTING PLAN
U.S. 14

SCALE = 1:500 DRAWN BY: HS
DATE: 10-23-97 CHECKED BY: ADO

F:/PROJECTS/J08217/ Plnd / 217-E8.DGN

DELTA ENGINEERING GROUP, LLC

USER NAME = $USER$	DESIGNED - HM	REVISED -
	DRAWN - GJ	REVISED -
PLOT SCALE = $SCALE$	CHECKED - HS	REVISED -
PLOT DATE = $DATE$	DATE - 03-21-2017	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

US14 AT IL31
INFORMATION ONLY SHEET

SCALE: SHEET OF SHEETS STA. TO STA.

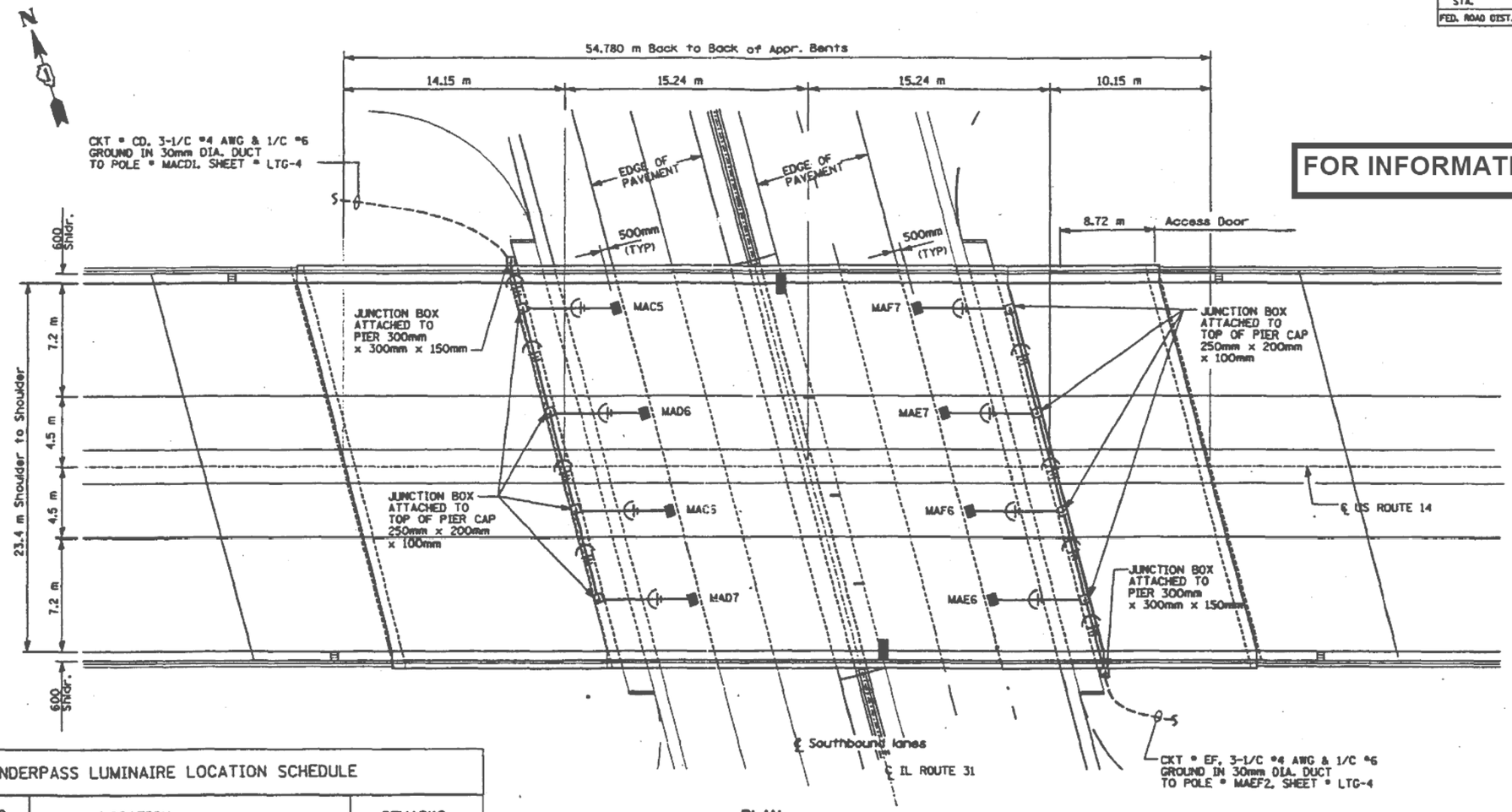
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2016-017L		88	86

CONTRACT NO. 62C35

ILLINOIS FED. AID PROJECT

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	C26HB&1112VXR-1	MCHENRY	318	176
STA.		TO STA.		
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT	

FOR INFORMATION ONLY



PLAN

UNDERPASS LUMINAIRE LOCATION SCHEDULE		
LUMINAIRE NO.	LOCATION	REMARKS
MAC5 & MAF7	CENTERED BETWEEN BEAMS 2 AND 3	
MAD6 & MAE7	CENTERED BETWEEN BEAMS 4 AND 5	
MAC6 & MAF6	CENTERED BETWEEN BEAMS 6 AND 7	
MAD7 & MAE6	BETWEEN COLUMNS 8 AND 9	

LEGEND:

- UNDERPASS LUMINAIRE, 55W LPS
- JUNCTION BOX (SIZE AS INDICATED ON PLANS)
- ELECTRIC CABLE IN CONDUIT, (EPR-TYPE RHW) NO. 10 AWG UNLESS OTHERWISE SPECIFIED, NUMBER OF CONDUCTORS AS INDICATED ON PLANS.
- CROSS-HATCHED LINES DENOTE NUMBER OF WIRES IN CONDUIT. ANY CIRCUIT WITHOUT FURTHER DESIGNATION IS A 3-WIRE CIRCUIT.
  - 25mm (1") RIGID STEEL CONDUIT
  - PHASE (S) AS NEEDED
  - NEUTRAL WHITE
  - GROUND GREEN

NOTE

1. FOR DETAILS SEE SHEETS LTG-17 & LTG-18

RECORD DRAWINGS
HECKER AND COMPANY, INC.
By ..... Date 6/21/99

LTG-9

REVISIONS NAME	DATE

KAM ENGINEERING, INC.

ILLINOIS DEPARTMENT OF TRANSPORTATION
FAP ROUTE 336 (ILL. RTE. 31)

UNDERPASS LIGHTING
IL. ROUTE 31 & US ROUTE 14

SCALE = 1:1.5 DRAWN BY: CR
DATE: 10-23-97 CHECKED BY: AOO

DELTA ENGINEERING GROUP, LLC

USER NAME = $USER$	DESIGNED - HM	REVISED -	
	DRAWN - GJ	REVISED -	
PLOT SCALE = $SCALE$	CHECKED - HS	REVISED -	
PLOT DATE = $DATE$	DATE - 03-21-2017	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

US14 AT IL31
INFORMATION ONLY SHEET

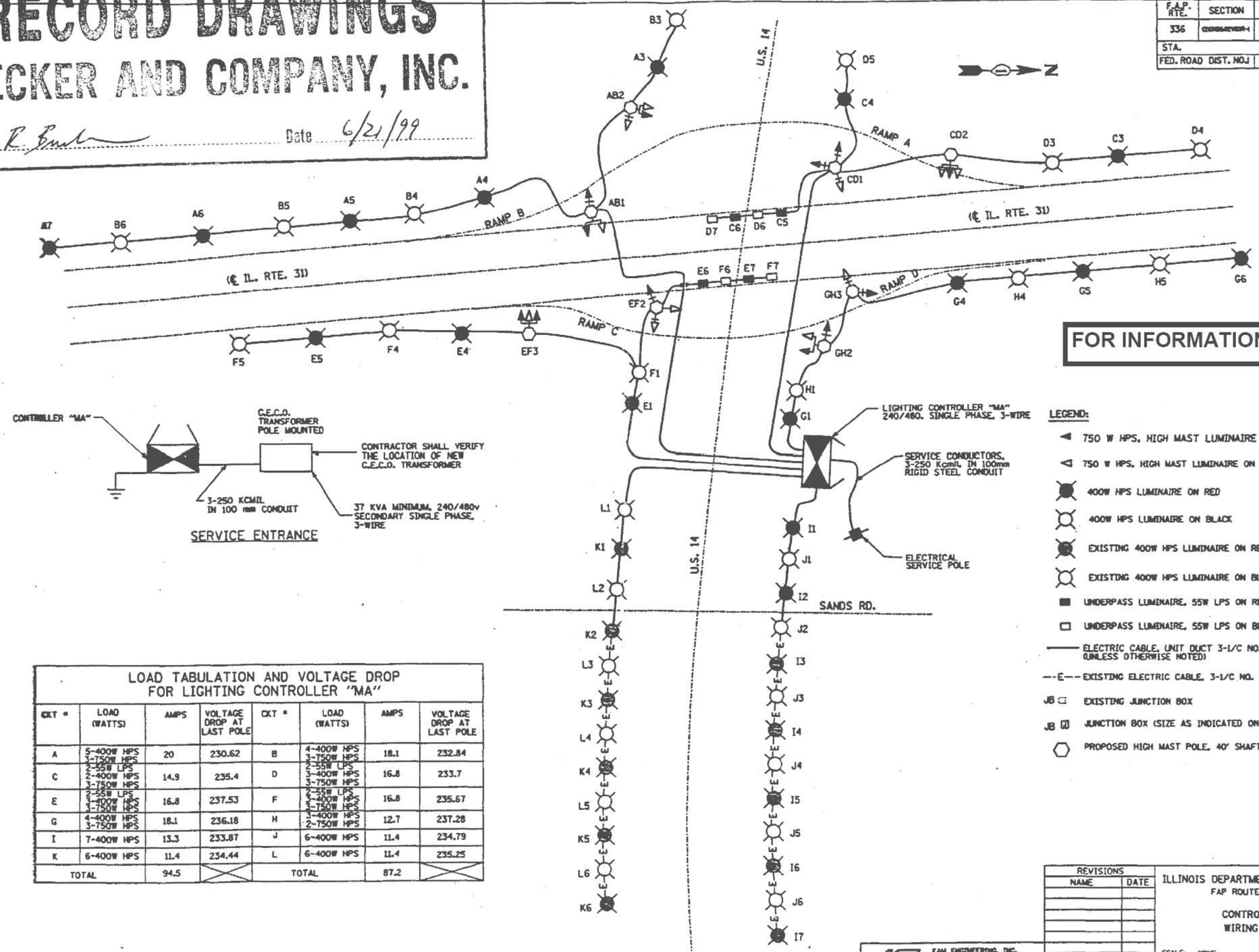
SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2016-017L		88	87
			CONTRACT NO. 62C35	
		ILLINOIS	FED. AID PROJECT	

RECORD DRAWINGS
HECKER AND COMPANY, INC.

By R. Brush Date 6/21/99

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	[illegible]	MC HENRY	318	177
STA.		TO STA.		
FED. ROAD DIST. NO.1		ILLINOIS	FED. AID PROJECT	



CONTROLLER "MA"

C.E.C.O. TRANSFORMER POLE MOUNTED

CONTRACTOR SHALL VERIFY THE LOCATION OF NEW C.E.C.O. TRANSFORMER

3-250 KCMIL IN 100 mm CONDUIT

37 KVA MINIMUM, 240/480v SECONDARY SINGLE PHASE, 3-WIRE

SERVICE ENTRANCE

FOR INFORMATION ONLY

LEGEND:

- 750 W HPS, HIGH MAST LUMINAIRE ON RED
- 750 W HPS, HIGH MAST LUMINAIRE ON BLACK
- 400W HPS LUMINAIRE ON RED
- 400W HPS LUMINAIRE ON BLACK
- EXISTING 400W HPS LUMINAIRE ON RED
- EXISTING 400W HPS LUMINAIRE ON BLACK
- UNDERPASS LUMINAIRE, 55W LPS ON RED
- UNDERPASS LUMINAIRE, 55W LPS ON BLACK
- ELECTRIC CABLE, UNIT DUCT 3-1/C NO. 4 AND 1/C NO. 6 GROUND (UNLESS OTHERWISE NOTED)
- -E- EXISTING ELECTRIC CABLE, 3-1/C NO. 4 AND 1/C NO. 6 GROUND
- JB EXISTING JUNCTION BOX
- JB JUNCTION BOX (SIZE AS INDICATED ON PLANS)
- PROPOSED HIGH MAST POLE, 40' SHAFT

LOAD TABULATION AND VOLTAGE DROP FOR LIGHTING CONTROLLER "MA"

CKT #	LOAD (WATTS)	AMPS	VOLTAGE DROP AT LAST POLE	CKT #	LOAD (WATTS)	AMPS	VOLTAGE DROP AT LAST POLE
A	5-400W HPS 1-750W HPS	20	230.62	B	4-400W HPS 3-750W HPS	18.1	232.84
C	2-55W LPS 2-400W HPS 3-750W HPS	14.9	235.4	D	2-55W LPS 3-400W HPS 3-750W HPS	16.8	233.7
E	2-55W LPS 3-400W HPS 3-750W HPS	16.8	237.53	F	2-55W LPS 3-400W HPS 3-750W HPS	16.8	235.67
G	4-400W HPS 3-750W HPS	18.1	236.18	H	3-400W HPS 2-750W HPS	12.7	237.28
I	7-400W HPS	13.3	233.87	J	6-400W HPS	11.4	234.79
K	6-400W HPS	11.4	234.44	L	6-400W HPS	11.4	235.25
TOTAL		94.5		TOTAL		87.2	

LTG-10

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
FAP ROUTE 336 (ILL.RTE.31)

CONTROLLER "MA" WIRING DIAGRAM

SCALE: NONE DRAWN BY CR
DATE: 10-23-97 CHECKED BY ADO

KAM ENGINEERING, INC.

F:/PROJECT/JOB*-217/FINAL/217-LTG9

DELTA ENGINEERING GROUP, LLC

USER NAME = $USER$	DESIGNED - HM	REVISED -	
	DRAWN - GJ	REVISED -	
PLOT SCALE = $SCALE$	CHECKED - HS	REVISED -	
PLOT DATE = $DATE$	DATE - 03-21-2017	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

US14 AT IL31
INFORMATION ONLY SHEET

SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	2016-017L		88	88
		CONTRACT NO. 62C35		
	ILLINOIS FED. AID PROJECT			