

114 + 40

MATCH LINE SEE A



PR SHADE TREE

MOWSTAKE W/SIGN

PLANTS

SODDING, SALT TOLERANT

SEEDING CLASS 4

SEEDING CLASS 4 & 5A

SEEDING CLASS 4 (MODIFIED) WOODLAND SEEDING CLASS 5 (SPECIAL) WOODLAND

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A A d	С	u r	а	t	е	
	GR	OUP, IN	c.			P
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	PLOT SCALE = 100.0000 ' / in.	CHECKED	-	TGM	REVISED -	
	PLOT DATE = 8/5/2021	DATE	-	07/30/2021	REVISED -	
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STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

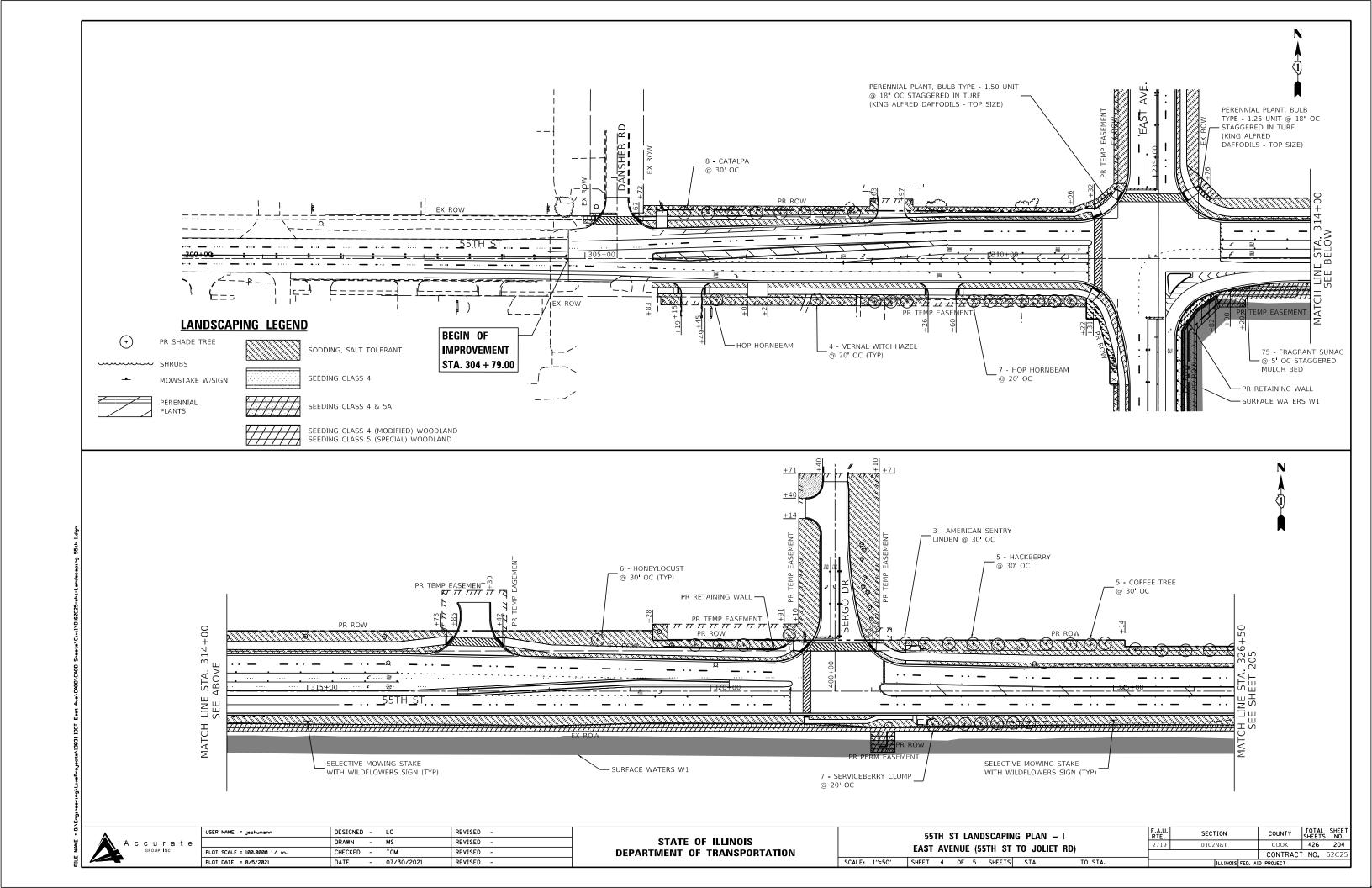
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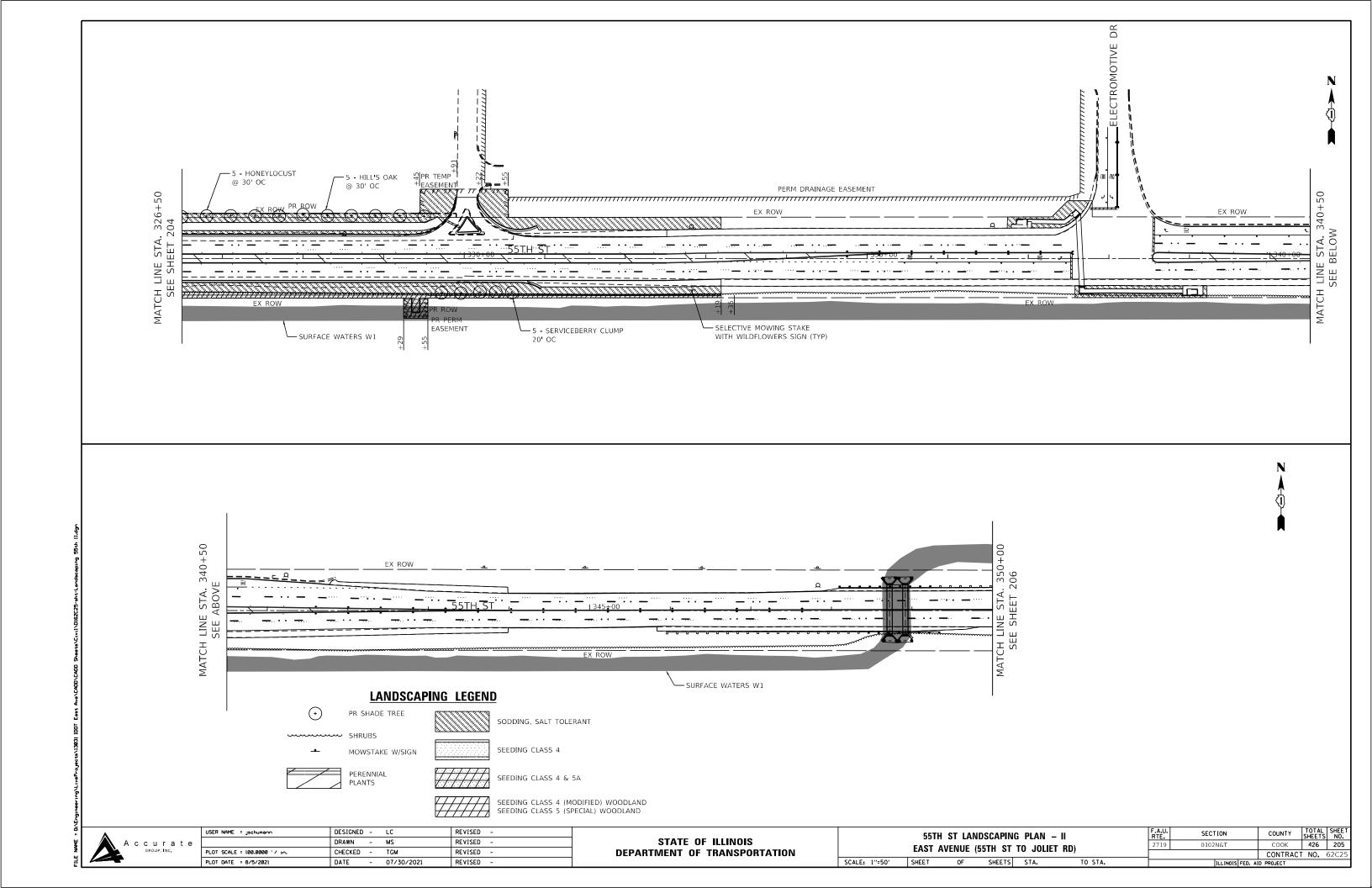
IMPROVEMENT STA. 115 + 20

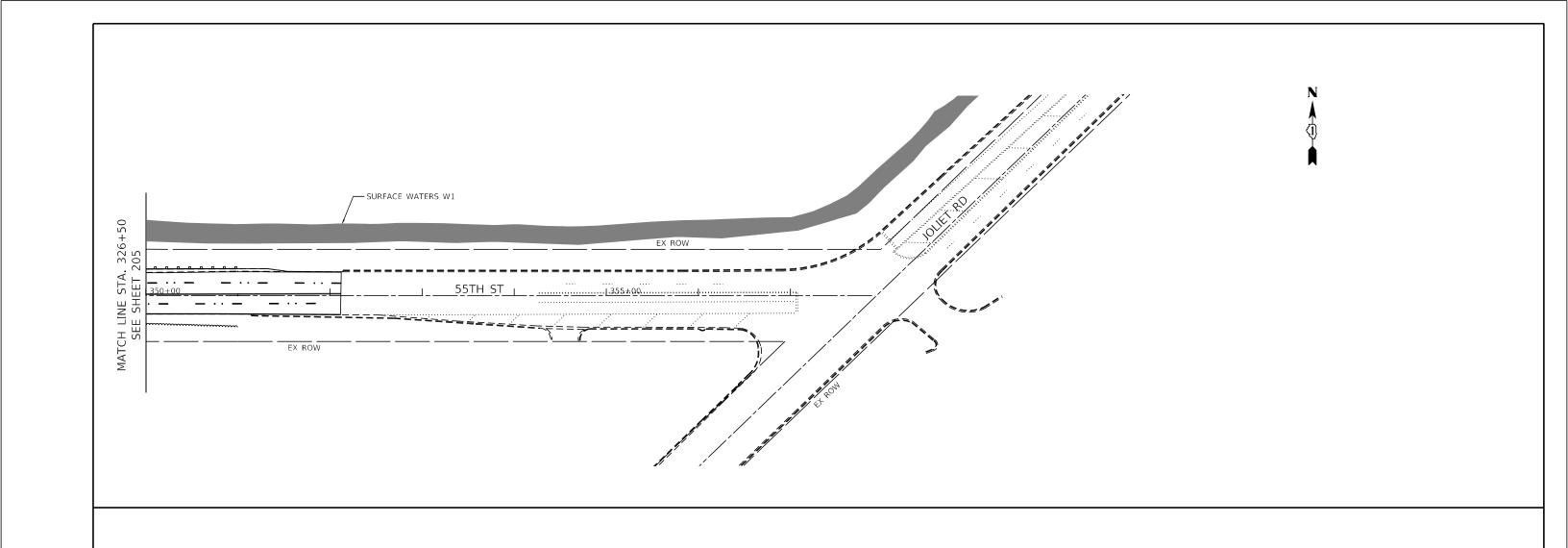
JOLII	ET RD	LANSCA	PING PLA	N	F.A.U. RTE.	SECTI
EAST AVI	FNIIF /	бетн ст	וווחו חד	FT RN\	2719	0102N
LASI AVI	LIVOL (	33111 31	10 JULI	LI 110 <i>1</i>		
CUEET 2	ΛF E	CHEETC	I CTA	TO CTA		Ta.

COUNTY TOTAL SHEETS NO.

COOK 426 203 CONTRACT NO. 62C2 SCALE: 1"=50" SHEET 3 OF 5 SHEETS STA.









PR SHADE TREE

SODDING, SALT TOLERANT

SHRUBS

MOWSTAKE W/SIGN

SEEDING CLASS 4

PERENNIAL PLANTS

SEEDING CLASS 4 & 5A

SEEDING CLASS 4 (MODIFIED) WOODLAND SEEDING CLASS 5 (SPECIAL) WOODLAND

A A	С	С	u	r	а	t	е
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USER NAME = jschumann	DESIGNED	-	LC	REVISED -	
	DRAWN	-	MS	REVISED -	
PLOT SCALE = 100.0000 ' / in.	CHECKED	-	TGM	REVISED -	
PLOT DATE = 8/5/2021	DATE	-	07/30/2021	REVISED -	

STATE OF ILLINOIS	
DEPARTMENT OF TRANSPORTATION	

55TH ST LANDSCAPING PLAN – III	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
EAST AVENUE (55TH ST TO JOLIET RD)	2719	0102N&T	COOK	426	206
EAST AVENUE (SSTIT ST TO SOLIET ND)			CONTRACT	NO.	62C25
SCALE: 1"=50" SHEET OF SHEETS STA. TO STA.		ILLINOIS FED. AI	D PROJECT		

ALL PERENNIAL PLANTS SHALL BE INTERMIXED AND STAGGERED

\*\*PRAIRIE (ORNAMENTAL) PLANTS REQUIRE BED PREPARATION PRIOR TO INSTALLATION

\* MAY BE INSTALLED DORMANT PRIOR TO TURGRASS SOD INSTALLATION

4	С	С	u	r	а	t	е	
		GF	OUP	, IN	c.			

USER NAME = jschumann	DESIGNED	-	LC	REVISED -
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PLOT DATE = 8/5/2021	DATE	-	07/30/2021	REVISED -
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SCALE:

	SCHEDULE	OF PERI	ENNIALS		F.A.U. RTE.	SECTION	COUNTY	TOTAL	SHEET NO.
FAST	AVENUE (	STH ST	TO JOLIE	r RN\	2719	0102N&T	COOK	426	207
	AVEIVOL (		IO JOLIL	<u> </u>			CONTRAC	T NO.	62C25
SHEET	OF	SHEETS	STA.	TO STA.		ILLINOIS FED. A	AID PROJECT		

# TRAFFIC SIGNAL LEGEND

(NOT TO SCALE)

			20	(NOT TO SCALE)		*		
ITEM	EXISTING	PROPOSED	<u>Ітем</u>	EXISTING	PROPOSED	<u>ITEM</u>	EXISTING	PROPOSED
CONTROLLER CABINET	$\boxtimes$	×	HANDHOLE -SQUARE			SIGNAL HEAD -(P) PROGRAMMABLE SIGNAL HEAD	<b>Q Q</b>	RR
COMMUNICATION CABINET	ECC	СС	-ROUND				(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	Y
MASTER CONTROLLER	ЕМС	мс	HEAVY DUTY HANDHOLE -SQUARE -ROUND	⊞ 😉	⊞ 10			4G 4G
MASTER MASTER CONTROLLER	EMMC	ммс	DOUBLE HANDHOLE			SIGNAL HEAD WITH BACKPLATE	r r	RRR
UNINTERRUPTABLE POWER SUPPLY	<b>9</b>	<b>3</b>	JUNCTION BOX		•	-(P) PROGRAMMABLE SIGNAL HEAD -(RB) RETROREFLECTIVE BACKPLATE		Y G G G
SERVICE INSTALLATION -(P) POLE MOUNTED	-D-P	-■-P	RAILROAD CANTILEVER MAST ARM	$X \circ \overline{X} - \overline{X} X$	I <del>ci I</del> I	Vinita subtract of the control of th		Y G G G G G G G G G G G G G G G G G G G
SERVICE INSTALLATION			RAILROAD FLASHING SIGNAL	X <del>O</del> X	I+I		P RB	P RB
-(G) GROUND MOUNTED -(GM) GROUND MOUNTED METERED	$\boxtimes^G \boxtimes^{GM}$	<b>⊠</b> <sup>G</sup> <b>⊠</b> <sup>GM</sup>	RAILROAD CROSSING GATE	X <del>OX</del> >	X-X-	PEDESTRIAN SIGNAL HEAD	<b>()</b>	<b>₽</b>
TELEPHONE CONNECTION	ET	T	RAILROAD CROSSBUCK	₩	<b>*</b>	AT RAILROAD INTERSECTIONS		
STEEL MAST ARM ASSEMBLY AND POLE	0	•	RAILROAD CONTROLLER CABINET		<b>≯</b> ∢	PEDESTRIAN SIGNAL HEAD WITH COUNTDOWN TIMER	<b>(€)</b> C ( <b>5</b> ) D	<b>₽</b> C <b>★</b> D
ALUMINUM MAST ARM ASSEMBLY AND POLE	0		UNDERGROUND CONDUIT (UC), GALVANIZED STEEL	<u> </u>	\$1 <u></u>	ILLUMINATED SIGN		50 50 50 40 50 50 50 50 50 50
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE	o₩—	• <del>×</del>	TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE	3 <del></del> 8	() <del></del>	"NO LEFT TURN"/"NO RIGHT TURN"		
SIGNAL POST -(BM) BARREL MOUNTED - TEMPORARY	0	• • BM	SYSTEM ITEM	s	SP	NUMBER OF CONDUCTORS, ELECTRIC CABLE NO. 14, UNLESS NOTED OTHERWISE.	<u> </u>	_5_
WOOD POLE	8	θ	INTERSECTION ITEM	1	IP	ALL DETECTOR LOOP CABLE TO BE SHIELDED  GROUND CABLE IN CONDUIT,		2400
GUY WIRE	>-	>-	REMOVE ITEM RELOCATE ITEM		R RL	NO. 6 SOLID COPPER (GREEN)	1#6	— <u>(1*6)</u> —
SIGNAL HEAD	>	-	ABANDON ITEM		A	ELECTRIC CABLE IN CONDUIT, TRACER NO. 14 1/C	<del>_</del>	_1_
SIGNAL HEAD WITH BACKPLATE	+->	<del>d</del> ►	CONTROLLER CABINET AND		RCF	COAXIAL CABLE	<u> </u>	—©—
SIGNAL HEAD OPTICALLY PROGRAMMED	-> <sup>p</sup> +> <sup>p</sup>	→ P + → P	FOUNDATION TO BE REMOVED  MAST ARM POLE AND			VENDOR CABLE	<b>-</b> Ø−	<b>-</b> ♥-
FLASHER INSTALLATION -(FS) SOLAR POWERED	o⊳	•→ <sup>F</sup> •→ <sup>FS</sup>	FOUNDATION TO BE REMOVED		RMF	COPPER INTERCONNECT CABLE,	ž.	7 (19 <u>20)</u> 2 573
	B→F B→FS	■► FS	SIGNAL POST AND FOUNDATION TO BE REMOVED		RPF	NO. 18, 3 PAIR TWISTED, SHIELDED		6#18
PEDESTRIAN SIGNAL HEAD	-0	-	DETECTOR LOOP, TYPE I			FIBER OPTIC CABLE -NO. 62,5/125, MM12F -NO. 62,5/125, MM12F SM12F		—(12F)—
PEDESTRIAN PUSH BUTTON -(APS) ACCESSIBLE PEDESTRIAN PUSH BUTTON			PREFORMED DETECTOR LOOP	P P	P P	-NO. 62.5/125, MM12F SM24F		
RADAR DETECTION SENSOR	R	R■	SAMPLING (SYSTEM) DETECTOR	s s	s s			—36F)—
VIDEO DETECTION CAMERA		<b>□</b>	INTERSECTION AND SAMPLING (SYSTEM) DETECTOR	IS (IS)	IS (S)	145500000000000000000000000000000000000		
RADAR/VIDEO DETECTION ZONE	<b>III</b>	<b>III</b>	QUEUE AND SAMPLING (SYSTEM) DETECTOR	qs @3	os os	GROUND ROD -(C) CONTROLLER -(M) MAST ARM	\$\frac{1}{5}\frac{1}{5	$\stackrel{=}{\hat{T}}^{C} \stackrel{=}{\hat{T}}^{M} \stackrel{=}{\hat{T}}^{P} \stackrel{=}{\hat{T}}^{S}$
PAN, TILT, ZOOM (PTZ) CAMERA	PTZ	PTZ	WIRELESS DETECTOR SENSOR	<b>®</b>	<b>®</b>	-(P) POST -(S) SERVICE		
EMERGENCY VEHICLE LIGHT DETECTOR	₩	<b>4</b>	WIRELESS ACCESS POINT					
CONFIMATION BEACON	0-O	н						
WIRELESS INTERCONNECT	<del>∞1   </del>	•- <del></del>						
WIRELESS INTERCONNECT RADIO REPEATER	ERR	RR						

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE

STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SHEET 1 OF 7 SHEETS STA.

USER NAME = footemj

PLOT DATE = 3/4/2019

DESIGNED - IP

DRAWN - IP

CHECKED - LP
DATE - 9/29/2016

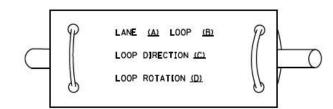
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REVISED -

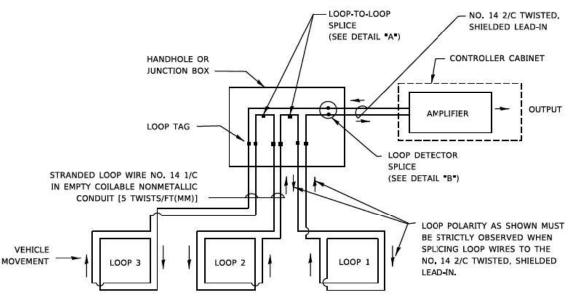
REVISED -

- 2. THE NUMBER OF LOOP TURNS SHALL BE AS RECOMMENDED BY THE AMPLIFIER MANUFACTURER ALL ADJACENT SIDES OF THE LOOPS SHALL BE INSTALLED IN SUCH A WAY THAT THE CURRENT FLOW IS IN THE SAME DIRECTION TO REINFORCE ITS MAGNETIC FIELDS FOR SMALL VEHICLE DETECTION.
- 3. EACH LOOP LEAD-IN SHALL BE IDENTIFIED AND PERMANENTLY TAGGED IN THE HANDHOLE. EACH LEAD-IN CABLE TAG SHALL INDICATE THE LOCATION OF THE LOOP, LOOP ROTATION (CLOCKWISE/COUNTERCLOCKWISE), LOOP LEAD-IN DIRECTION (IN OR OUT), LOOP CABLE NUMBER AND LOCATION IN CABINET, AND NUMBER OF TURNS IN THE DETECTOR LOOPS IN WATER PROOF INK AS INDICATED ON THE DISTRICT 1 STANDARD TRAFFIC SIGNAL DESIGN DETAIL, THE CONTRACTOR SHALL MARK LOOP LOCATIONS ON RECORD DRAWINGS AND PRESENT TO THE ENGINEER AFTER FINAL INSPECTION. LOOPS SHALL BE MARKED BY LANE AND LOOP NUMBER. SEE DETAIL BELOW.
- 4. ALL LOOP CABLE SHALL BE FASTENED WITH PLASTIC TIE WRAP TO THE HANDHOLE HOOKS.
- 5. IN ASPHALT PAVEMENT, LOOPS SHOULD BE PLACED IN THE BINDER AND DIVEHOLES MARKED AT THE CURB WITH A SAW-CUT. THE SAW-CUT SHALL BE CUT IN ACCORDANCE WITH LOCAL AND E.P.A. DUST CONTROL REQUIREMENTS. DETECTOR LOOP(S) SHALL NOT BE INSTALLED IN WET CONDITIONS AND THE SAW-CUTS MUST BE FREE OF DEBRIS AND RESIDUE SUCH AS DUST AND WATER WHICH IS TO BE ACHIEVED BY THE USE OF COMPRESSED AIR, WIRE BRUSHING AND HEAT DRYING ACCORDING TO SEALANT MANUFACTURER REQUIREMENTS. THE DETECTOR WIRE SHALL BE HELD IN PLACE BY THE USE OF FORM WEDGES. WEDGES SHALL BE SPACED NO MORE THAN 18" (450 mm) APART.
- 6. LOOP SPLICES SHALL BE SOLDERED USING A SOLDERING IRON. BLOW TORCHES OR OTHER DEVICES WHICH OXIDIZE COPPER CABLE SHALL NOT BE ALLOWED FOR SOLDERING OPERATIONS. SEE DETAIL BELOW RIGHT.
- 7. PREFORMED DETECTOR LOOPS SHALL BE USED, AS SHOWN ON THE PLANS, WHERE NEW CONCRETE PAVEMENT IS PROPOSED. THE INSTALLATION OF PREFORMED LOOPS SHALL BE IN ACCORDANCE WITH THE DISTRICT 1 SPECIFICATIONS OR AS DIRECTED BY THE ENGINEER.

## LOOP LEAD-IN CABLE TAG

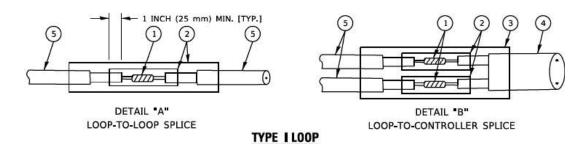


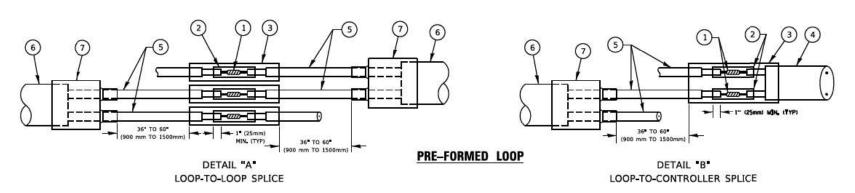
- A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- B. LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.



# DETECTOR LOOP WIRING SCHEMATIC

- LOOPS SHALL BE SPLICED IN SERIES. SAW-CUTS SHALL BE A MINIMUM WIDTH OF 5/16" (8 mm).
- SAW-CUT DEPTHS SHALL BE 3" (75 mm), IF IN CONCRETE,
- THE SAW-CUT DEPTH SHALL BE TO THE TOP OF THE REINFORCEMENT.
- LOOP CORNERS SHALL BE DRILLED WITH A 2 (50 mm) DIAMETER CORE.





# LOOP DETECTOR SPLICE

- (1) WESTERN UNION SPLICE SOLDERED WITH ROSIN CORE FLUX. ALL EXPOSED SURFACES OF THE SOLDER SHALL BE SMOOTH. THE WESTERN UNION SPLICES SHALL BE STAGGERED.
- (2) WCSMW 30/100 HEAT SHRINK TUBE, MINIMUM LENGTH 3 (75 mm), UNDERWATER GRADE.
- (3) WCS 200/750 HEAT SHRINK TUBE, MINIMUM LENGHT 6" (150 mm), UNDERWATER GRADE.
- (4) NO. 14 2/C TWISTED, SHIELDED CABLE.

- 5 LOOP CONDUCTOR WITH FLEXIBLE PLASTIC TUBE. PRE-FORMED LOOP
- (6) XL POLYOLEFIN 2 CONDUCTOR
- (7) BREAKOUT SEALS. TYCO CBR-2 OR APPROVED EQUAL

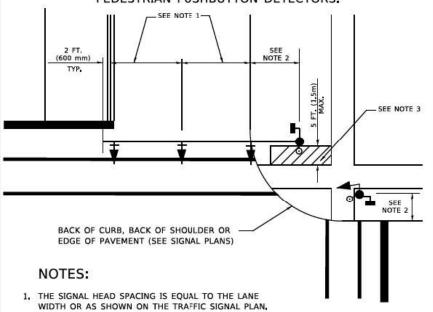
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PLOT SCALE = 50,0000 * / In.	CHECKED -	REVISED -
PLOT DATE - 3/4/2019	DATE -	REVISED -

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

	DISTRICT ONE							
	STANDARD	TRAFFIC	SIGNAL DESIG	N DETAILS				
SCALE: NONE	SHEET 2	OF 7	SHEETS STA.	TO STA.				

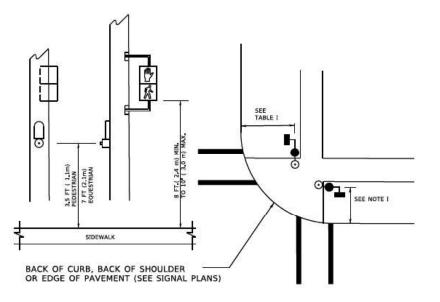
426 209 DIDZNAT CONTRACT NO. 62C2

NO. SHT PEDESTRIAN PUSHBUTTON DETECTORS.



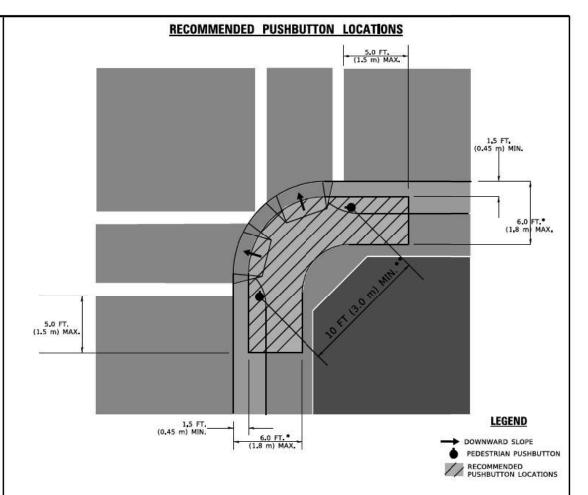
- 2. REFER TO THE TRAFFIC SIGNAL EQUIPMENT OFFSET TABLE.
- PROVIDE A LEVEL ALL-WEATHER SURFACE (CONCRETE SIDEWALK, ASPHALT BICYCLE PATH SURFACE OR MATCHING MATERIAL TO THE ADJACENT SURFACE) UP TO THE MAST ARM SHAFT OR THE SIGNAL POST.
- THE FACE OF THE PEDESTRIAN PUSHBUTTON SHALL BE PARALLEL TO THE CROSSWALK TO BE USED.
- THE LOCATIONS AND INSTALLATION OF PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS SHALL MEET THE REQUIREMENTS OF THE MUTCD AND INFORMATION FOUND IN THE "AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES."

# PEDESTRIAN SIGNAL POST AND PEDESTRIAN PUSH BUTTON POST



# NOTES:

- 1. REFER TO THE TRAFFIC SIGNAL EQUIPMENT OFFSET TABLE.
- PROVIDE A LEVEL ALL-WEATHER SURFACE (CONCRETE SIDEWALK, ASPHALT BICYCLE PATH SURFACE OR MATCHING MATERIAL TO THE ADJACENT SURFACE) UP TO THE PEDESTRIAN SIGNAL POST OR THE PEDESTRIAN PUSH BUTTON POST.
- THE FACE OF THE PEDESTRIAN PUSHBUTTON SHALL BE PARALLEL TO THE CROSSWALK TO BE USED.
- 4. THE LOCATIONS AND INSTALLATION OF PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS SHALL MEET THE REQUIREMENTS OF THE MUTCD AND INFORMATION FOUND IN THE "AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES FOR



- \* WHERE THERE ARE CONSTRAINTS THAT MAKE IT IMPRACTICAL TO PLACE THE PEDESTRIAN PUSHBUTTON BETWEEN 1.5 FT (0.45 m) AND 6 FT ( 1.8 m) FROM THE EDGE OF THE CURB, SHOULDER, OR PAVEMENT, IT SHOULD NOT BE FURTHER THAN 10 FT (3 m) FROM THE EDGE OF CURB, SHOULDER, OR PAVEMENT,
- \*\* WHERE THERE ARE CONSTRAINTS ON A PARTICULAR CORNER THAT MAKE IT IMPRACTICAL TO PROVIDE THE 10 FT (3 m) SEPERATION BETWEEN THE TWO PEDESTRIAN FUSHBUTTONS, THE PUSHBUTTONS MAY BE PLACED CLOSER TOGETHER OR ON THE SAME POLE.

# NOTES:

- PEDESTRIAN SIGNAL HEADS SHALL BE MOUNTED WITH THE BOTTOM OF THE SIGNAL HOUSING INCLUDING BRACKETS NOT LESS THAN 8 FT (2.4 m) OR MORE THAN 10 FT (3 m) ABOVE SIDEWALK LEVEL, AND SHALL BE POSITIONED AND ADJUSTED TO PROVIDE MAXIMUM VISIBILITY AT THE BEGINNING OF THE CONTROLLED CROSSWALK.
- THE BOTTOM OF THE SIGNAL HOUSING (INCLUDING BRACKETS) OF A VEHICULAR SIGNAL FACE THAT IS NOT LOCATED OVER A HIGHWAY SHALL BE AT LEAST 8 FT (2.4 m) BUT NOT MORE THAN 19 FT (5.8 m) ABOVE THE SIDEWALK OR, IF THERE IS NO SIDEWALK, ABOVE THE PAVEMENT GRADE AT THE CENTER OF THE ROADWAY.
- 3. THE BOTTOM OF THE SIGNAL HOUSING AND ANY RELATED ATTACHMENTS TO A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL BE ACCORDING TO CURRENT STATE STANDARDS 877001, 877002, 877006, 877011 AND 877012 WITH A MINIMUM OF 16 FT (5.0 m) AND A MAXIMUM OF 18 FT. (5.5 m) FROM THE HIGHEST POINT OF PAVEMENT.
- 4. THE BOTTOM OF THE TEMPORARY SPAN WIRE MOUNTED SIGNAL HOUSING AND ANY RELATED ATTACHMENTS TO A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL BE ACCORDING TO CURRENT STATE STANDARD 880001 WITH A MINIMUM OF 17 FT (5.18 m) FROM THE HIGHEST POINT OF PAVEMENT.
- THE TOP OF THE SIGNAL HOUSING OF A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL NOT BE MORE THAN 25.6 FT (7.8 m) ABOVE THE PAVEMENT.

# TRAFFIC SIGNAL EQUIPMENT OFFSET

TRAFFIC SIGNAL EQUIPMENT	COMBINATION CONCRETE CURB AND GUTTER (MINIMUM DISTANCE FROM BACK OF CURB TO CENTERLINE OF FOUNDATION)	SHOULDER/NON-CURBED AREA (MINIMUM DISTANCE FROM EDGE OF PAVEMENT TO CENTERLINE OF FOUNDATION)					
TRAFFIC SIGNAL MAST ARM POLE	6 FT (1.8m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)					
TRAFFIC SIGNAL POST	4 FT (1,2m)	SHOULDER WIDTH + 2 FT (0,6m), MINIMUM 10 FT (3,0m)					
PEDESTRIAN SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)					
PEDESTRIAN PUSHBUTTON POST	4 FT (1.2m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)					
TEMPORARY WOOD POLE	6 FT (1.8m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)					
CONTROLLER CABINET	6 FT (1,8m) MINIMUM DISTANCE SEE NOTE 2	SHOULDER WIDTH + 6 FT (1.8m), MINIMUM 16 FT (4.9m) SEE NOTE 3.					
SERVICE INSTALLATION, GROUND MOUNT	6 FT (1.8m) MINIMUM DISTANCE SEE NOTE 2	SHOULDER WIDTH + 6 FT (1.8m), MINIMUM 16 FT (4.9m) SEE NOTE 3.					

# NOTES:

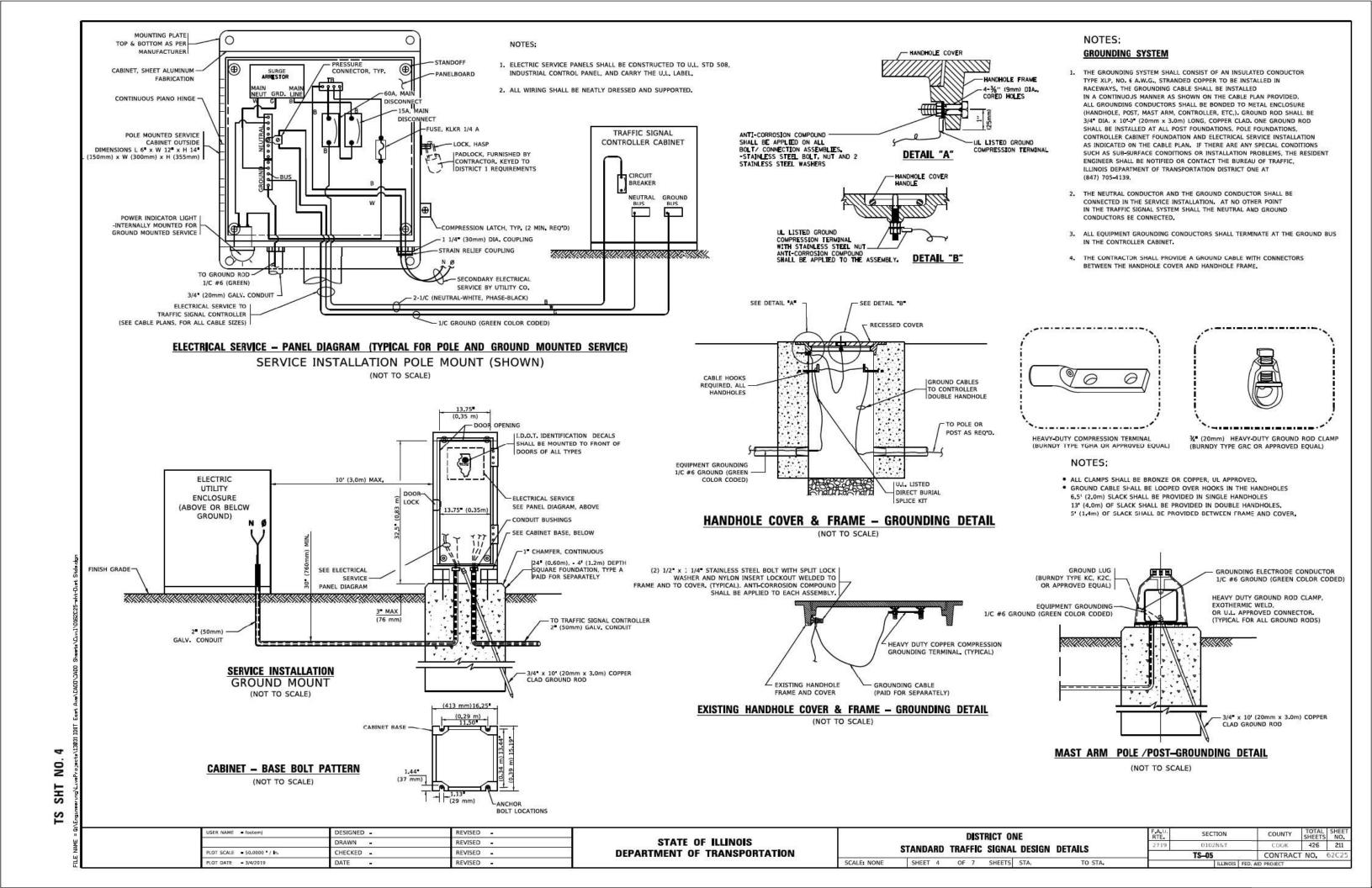
- CONTACT THE "AREA TRAFFIC SIGNAL MAINTENANCE AND OPERATIONS ENGINEER" FOR ASSISTANCE IN LOCATING THE TRAFFIC SIGNAL EQUIPMENT WHEN THERE ARE CONFLICTS WITH DITCHES OR THE MINIMUM OFFSET DISTANCES CANNOT BE MET.
- 2. MINIMUM DISTANCE FROM THE BACK OF CURB TO THE ROADWAY SIDE OF THE FOUNDATION.
- 3. MINIMUM DISTANCE FROM THE EDGE OF PAVEMENT TOTHE ROADWAY SIDE OF THE FOUNDATION.
- 4. ANY CHANGES TO THE OFFSETS OF THE FOUNDATIONS, FROM THE MINIMUM DISTANCES LISTED IN THE "TRAFFIC SIGNAL EQUIPMENT OFFSET" CHART AND THE TRAFFIC SIGNAL INSTALLATION PLAN, COULD EFFECT THE PLACEMENT OF THE SIGNAL HEADS, PEDESTRIAN SIGNAL HEADS AND THE PEDESTRIAN PUSHBUTTONS. THE SIGNAL HEAD PLACEMENT ON THE MAST ARMS SHALL REMAIN AS PER THE TRAFFIC SIGNAL INSTALLATION PLAN AND THE "TRAFFIC SIGNAL MAST ARM AND SIGNAL POST" DETAIL ABOVE. THE PROPOSED MAST ARM LENGTHS MAY NEED TO BE REVISED TO MEET THE ABOVE REQUIREMENTS. THE PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS MUST MEET THE REQUIREMENTS UNDER THE DETAILS ON THIS SHEET.

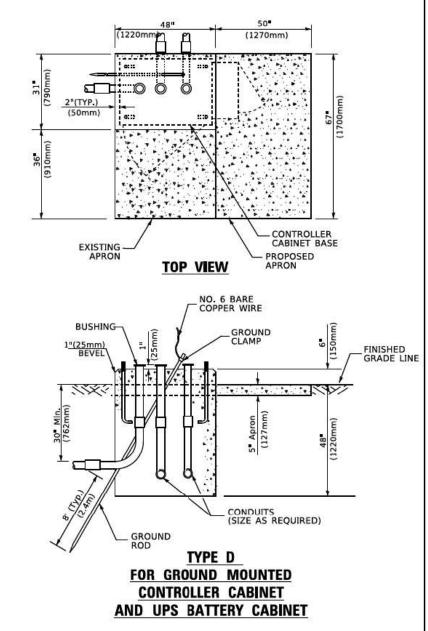
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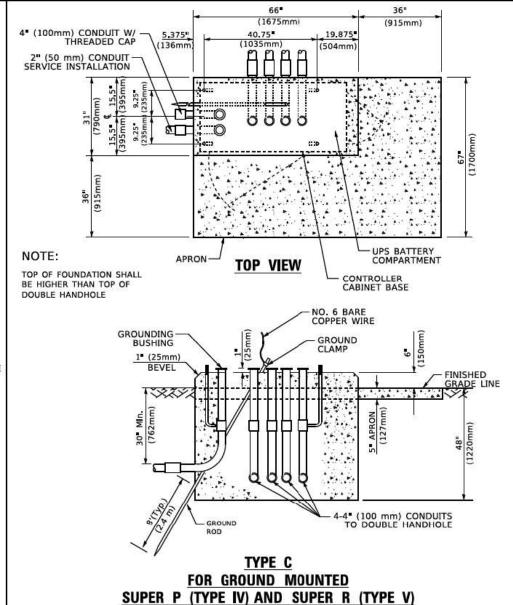
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PLOT SCALE = 50,0000 * / In.	CHECKED -	REVISED -
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

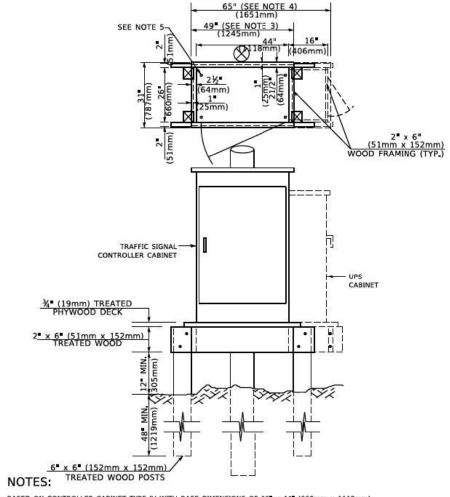
	36-11-29				
DISTRICT ONE	F.A.U. RTE	SECTION	COUNTY	TOTAL	SHEET NO.
STANDARD TRAFFIC SIGNAL DESIGN DETAILS	2719	DIDZNAT	COOK	426	210
STANDARD TRAFFIC SIGNAL DESIGN DETAILS		TS-05	CONTRAC	T NO.	62C25
SHEET 3 OF 7 SHEETS STA. TO STA.		BLINOIS F	ED. AID PROJECT		







CONTROLLER CABINETS



- BASED ON CONTROLLER CARINET TYPE IV WITH BASE DIMENSIONS OF 26" x 44" (660mm x 1118mm).
  ADJUST PLATFORM SIZE TO FIT CABINET BASE DIMENSIONS BEING SUPPLIED
- BASED ON UNINTERRUPTIBLE POWER SUPPLY CARINET WITH BASE DIMENSIONS OF 16" x 25" (406mm x 635mm).
   ADJUST PLATFORM SIZE TO FIT CABINET BASE DIMENSIONS BEING SUPPLIED.
- 3. PLATFORM SIZE FOR CONTROLLER CABINET TYPE IV.
- 4. PLATFORM SIZE FOR CONTROLLER CABINET TYPE IV AND UNINTERRUPTIBLE POWER SUPPLY CABINET.
- 5. DRILLED HOLES THROUGH THE PLATFORM BASE TO MATCH THE CONTROLLER CABINET BOLT TEMPLATE. FASTEN THE CONTROLLER CABINET TO THE PLATFORM WITH CARRIAGE BOLTS, WASHERS AND NUTS.
- 6. FASTEN ALL SUPPORT WOOD FRAMING TO THE WOOD POSTS WITH 2 LAG SCREWS FOR EACH CONNECTION..

# TEMPORARY SIGNAL CONTROLLER WOOD SUPPORT PLATFORM

CABLE SLACK LENGTH	FEET	METER
HANDHOLE	6.5	2.0
DOUBLE HANDHOLE	13.0	4.0
SIGNAL POST	2.0	0.6
MAST ARM	2.0	0.6
CONTROLLER CABINET	1,5	0,5
FIBER OPTIC AT CABINET	13.0	4.0
ELECTRIC SERVICE AT (CABINET OR SERVICE LOCATION)	1.5	0.5
GROUND CABLE (SIGNAL POST, MAST ARM, CABINET)	1.5	0.5
GROUND CABLE (BETWEEN FRAME AND COVER)	5.0	1.6

CABLE SLACK

VERTICAL CABLE LENGTH	FEET	METER
MAST ARM POLE ( MAST ARM MOUNTED SIGNAL HEAD)		
(L = MAST ARM LENGTH - DISTANCE TO SIGNAL HEAD FROM END OF ARM)	20.0+L	6.0+L
BRACKET MOUNTED (MAST ARM POLE OR SIGNAL POLE)	13.0	4.0
PEDESTRIAN PUSH BUTTON	6.0	2.0
SERVICE INSTALLATION POLE MOUNT TO SERVICE DROP	13.5	4.1
SERVICE INSTALLATION POLE MOUNT TO GROUND	13.5	4.1
SERVICE INSTALLATION GROUND MOUNT	6.0	2.0
FOUNDATION (SIGNAL POST, MAST ARM POLE, CONTROLLER CABINET, SERVICE-GROUND MOUNT)	3.0	1.0

٧	ERTICA	L CABLE	LENGTH

FOUNDATION	DEPTH
TYPE A - Signal Post	4'-0" (1.2m)
TYPE C - CONTROLLER W/ UPS	4'-0" (1.2m)
TYPE D - CONTROLLER	4'-0" (1.2m)
SERVICE INSTALLATION, GROUND MOUNT, TYPE A - SQUARE	4'-0" (1.2m)

# **DEPTH OF FOUNDATION**

Mast Arm Length	① Foundation Depth	Foundation Diameter	Spiral Diameter	Quantity of Rebars	Size of Rebars
Less than 30' (9.1 m)	10'-0" (3.0 m)	30" (750mm)	24" (600mm)	8	6(19)
Greater than or equal to	13'-6" (4.1 m)	30" (750mm)	24" (600mm)	8	6(19)
30' (9.1 m) and less than 40' (12.2 m)	11'-0" (3.4 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 40' (12.2 m) and less than 50' (15.2 m)	13'-0" (4 <sub>•</sub> 0 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 50' (15.2 m) and up to 55' (16.8 m)	15'-0" (4,6 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 56' (16.8 m) and less than 65' (19.8 m)	21'-0" (6.4 m)	42" (1060mm)	36" (900mm)	16	8(25)
Greater than or equal to 65' (19.8 m) and up to 75' (22.9 m)	25'-0" (7.6 m)	42" (1060mm)	36" (900mm)	16	8(25)

# NOTES:

- These foundation depths are for sites which have cohesive soils (clayer sit, sandy clay, etc.) along the length of the shaft, with an average Unconfined Compressive Strength (Qu) > 1.0 tsf (100 kpa). This strength shall be verified by boring data prior to construction or with testing by the Engineer during foundation drilling. The Bureau of Bridges & structures should be contacted for a revised design if other conditions are encountered.
- 2, Combination most arm assemblies under 55 feet (16.8 m) shall use 36" (900 mm) diameter foundations,
- Combination most arm assemblies under 56 feet (16.8 m) through 75 feet (22.9 m) shall use 42" (1060 mm) diameter foundations
- 4. For most orm assemblies with dual arms refer to state standard 878001...

# DEPTH OF MAST ARM FOUNDATIONS, TYPE E

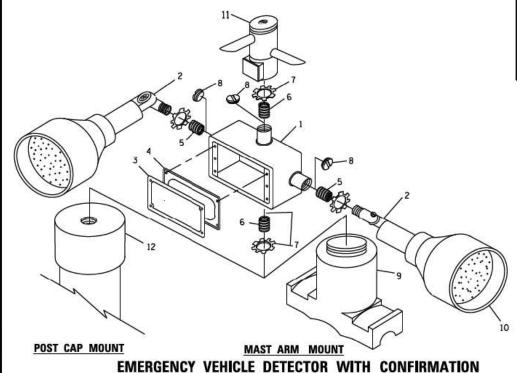
USER NAME = footemj	DESIGNED -	REVISED -	•				nie	RICT OF	ME		F.A.U.	SECTION	COUNTY	TOTAL	SHEET
	DRAWN -	REVISED -	STATE OF ILLINOIS		STANDARD TRAFFIC SIGNAL DESIGN DETAILS		77. 77. 77. 77. 77. 77. 77. 77. 77. 77.			2719	DIDZNAT	COOK	426	212	
PLOT SCALE = 50,0000 * / In.	CHECKED -	REVISED -	DEPARTMENT OF TRANSPORTATIO	N		STANDARD	IKAFFIC	SIGNAL	L DESIGN	DETAILS		TS-05	CONTRAC	T NO. 6	62C25
PLOT DATE - 3/4/2019	DATE -	REVISED -		585	SCALE: NONE	SHEET 5	OF 7	SHEETS	STA.	TO STA.		ILLINOIS FED. A	ID PROJECT		1

- 1. CONDUIT DEPTH SHALL BE A MINIMUM OF 30 (760mm) BELOW THE BOTTOM OF THE DRAINAGE DITCH OR ANY SLOPING GROUND
- 2. THE MINIMUM CONDUIT DEPTH APPLIES TO ALL CONDUIT PLACED UNDER ROADWAY PAVEMENT, MULTI-USE PATHS, SIDEWALKS AND SOIL SURFACES.
- 3. THE MINIMUM CONDUIT DEPTH APPLIES TO ALL HANDHOLES, HEAVY DUTY HANDHOLES AND DOUBLE HANDHOLES.

USER NAME = footemj

PLOT SCALE = 50,0000 \* / In.

# HANDHOLE WITH MINIMUM CONDUIT DEPTH (NOT TO SCALE)



BEACON MOUNTING DETAIL

DESIGNED -

DRAWN -

CHECKED -

DATE

REVISED -

REVISED -

REVISED -

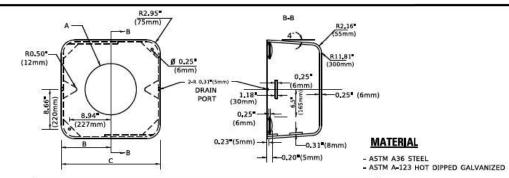
REVISED -

(915mm) (1675mm) 40.75 19.875" (1035mm) 0:: a 1 i .... CONTROLLER CABINET BASE PROPOSED-TOP VIEW APRON -NO. 3 DOWEL 18 (450mm NO. 6 BARE COPPER WIRE LONG (8 REQ.) GROUND EXISTING-ANCHOR BOLTS GRADE LINE (300mm) (225mm) -EXISTING CONDUITS EXISTING GROUND ROD MODIFY EXISTING TYPE "D" FOUNDATION

# TO TYPE "C" FOUNDATION (NOT TO SCALE) IDENTIFICATION 1 OUTLET BOX- GALV, 21 CU.IN, (0,000344 CU-M) 2 LAMP HOLDER AND COVER 3 OUTLET BOX COVER RUBBER COVER GASKE 5 REDUCING BUSHING 6 ¾ (19 mm) CLOSE NIPPLI ¾ (19 mm) LOCKNUT 9 SADDLE BRACKET - GAI 10 6 WATT PAR 38 LED FLOOD LAMP 1 DETECTOR UNIT 2 POST CAP [18 FT. (5.4 m) POST MIN.

# NOTES:

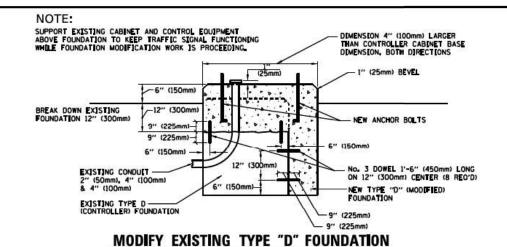
- 1. ALL ELECTRICAL ITEMS, EXCEPT ITEMS #2 AND #11 SHALL BE ALUMINUM OR
- 2. ITEM #1- OZ/GEDNEY FSX-1-50 OR EQUIVALENT ITEM #2- MULBERRY CON-O-SHADE LAMP SHIELD OR EQUIVALENT ITEM #9 BAND-IT SADDLE BRACKET OR EQUIVALENT
- 3. WHEN POST MOUNTING IS SPECIFIED, ITEM #9 SHALL NOT BE REQUIRED. THE DETECTION UNIT SHALL BE MOUNTED DIRECTLY ON TOP OF THE CAP BY DRILLING AND TAPPING A 3/4 "(19 mm) HOLE WITH PIPE THREADS. THE POST CAP SHALL EITHER BE SCREWED TO THE TOP OF THE POST OR A MINIMUM OF 3 TIGHTENING SCREWS SHALL BE REQUIRED ON EACH CAP.

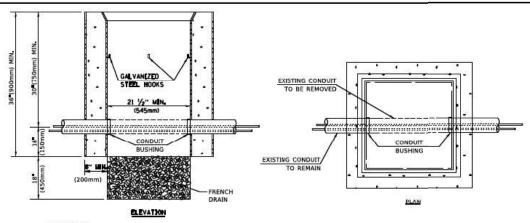


Α	В	С	HEIGHT	WEIGHT
VARIES	9.5*(241mm)	19*(483mm)	7" (178mm) - 12" (300mm)	53 lbs (24kg)
VARIES	10.75*(273mm)	21.5"(546mm)	7" (178mm) - 12" (300mm)	68 lbs (31 kg)
VARIES	13.0 (330mm)	26"(660mm)	7" (178mm) - 12" (300mm)	81 lbs (37 kg)
VARIES	18.5 (470mm)	37*(940mm)	7" (178mm) - 12" (300mm)	126 lbs (57 kg)

# SHROUD

- DIMENSION "A" IS EQUAL TO THE DIAMETER OF THE MAST ARM POLE AT THE TOP OF THE SHROUD. THE SHROUD SHALL BE TIGHT TO THE MAST ARM POLE.
- 2. THE SUPPLIER SHALL VERIFIED THE ABOVE DIMENSIONS BASED ON MAST ARM REQUIREMENTS.
- 3, THE HEIGHT OF THE SHROUD SHALL COVER THE ANCHOR BOLTS, NUTS AND MAST ARM POLE BASE,





- 1. HANDHOLE CONSTRUCTED PER STATE STANDARD 814001.
- 2. REMOVAL OF THE EXISTING CONDUIT FROM THE HANDHOLE AND THE INSTALLATION OF THE CONDUIT BUSHINGS SHALL BE INCLUDED WITH THE COST OF THE HANDHOLE.

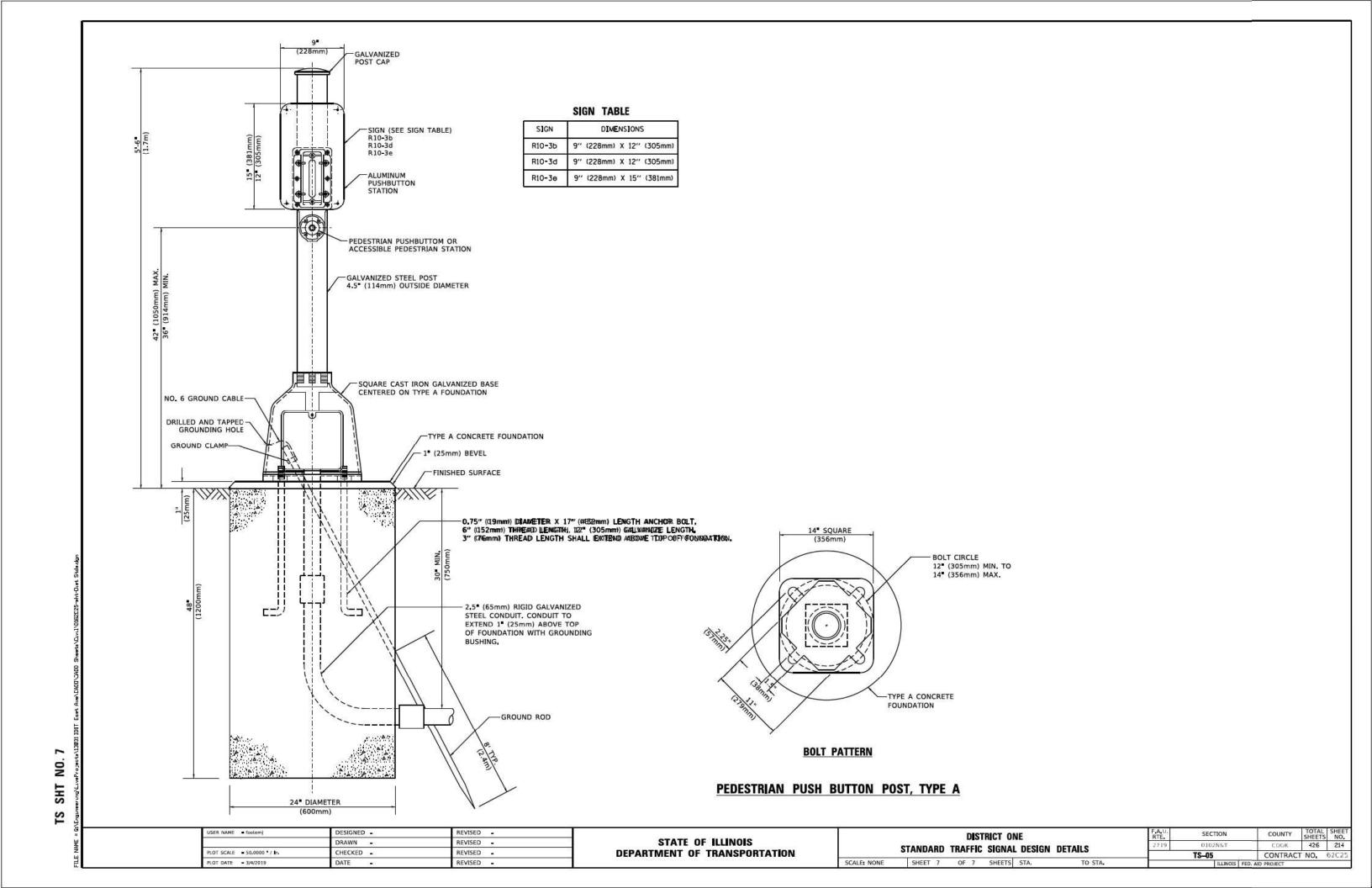
# HANDHOLE TO INTERCEPT EXISTING CONDUIT

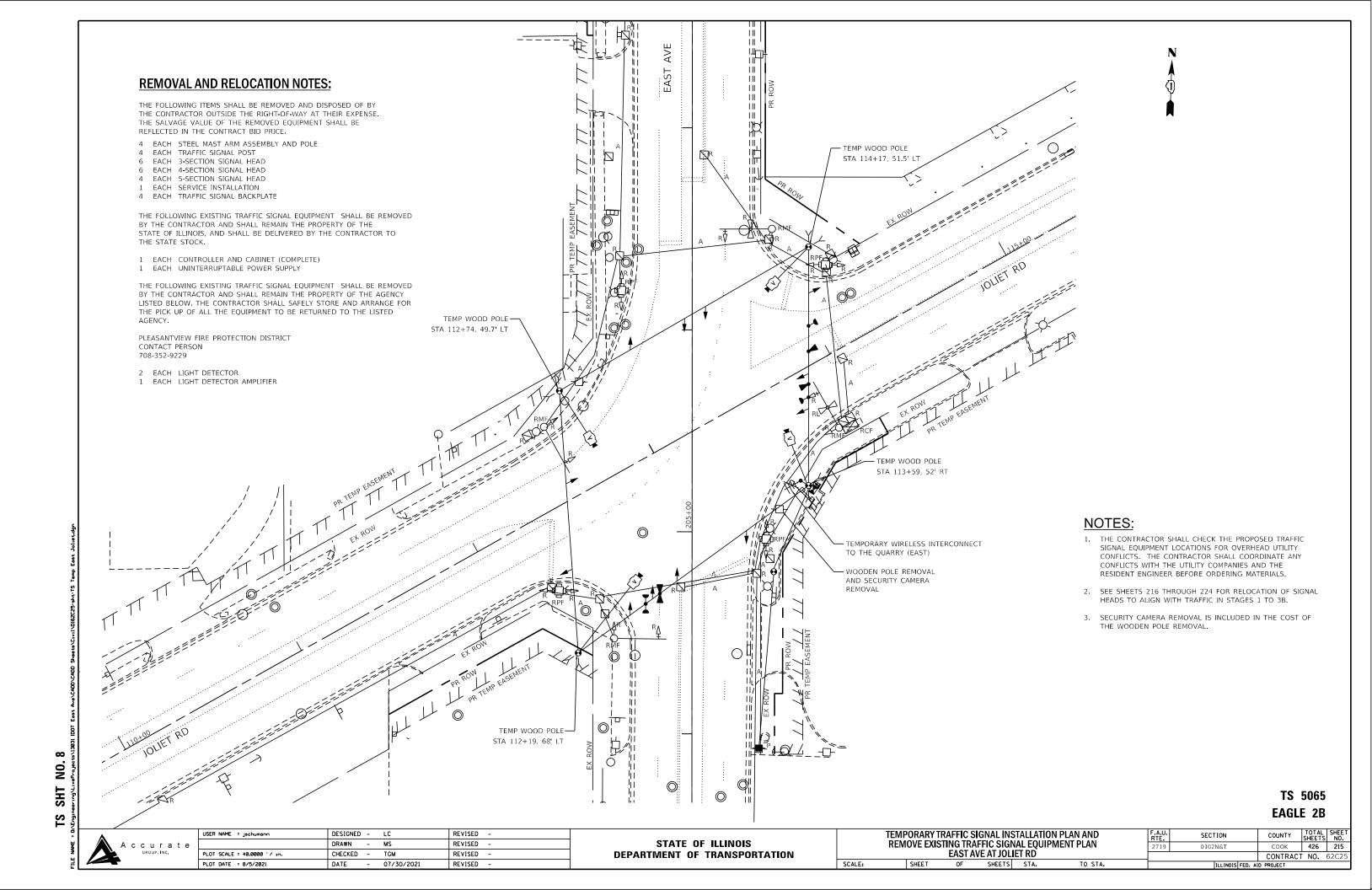
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

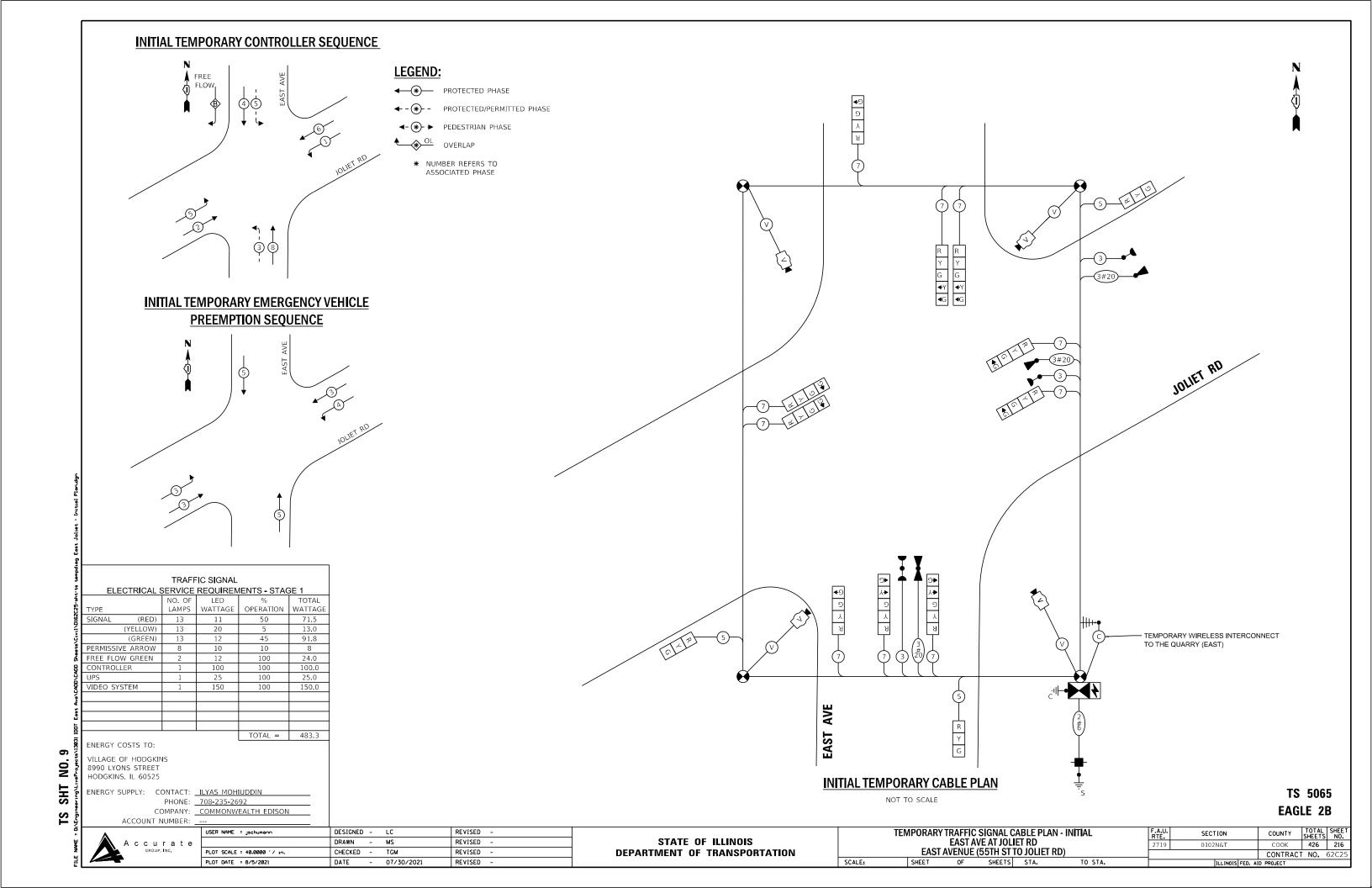
DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS SHEET 6 OF 7 SHEETS STA.

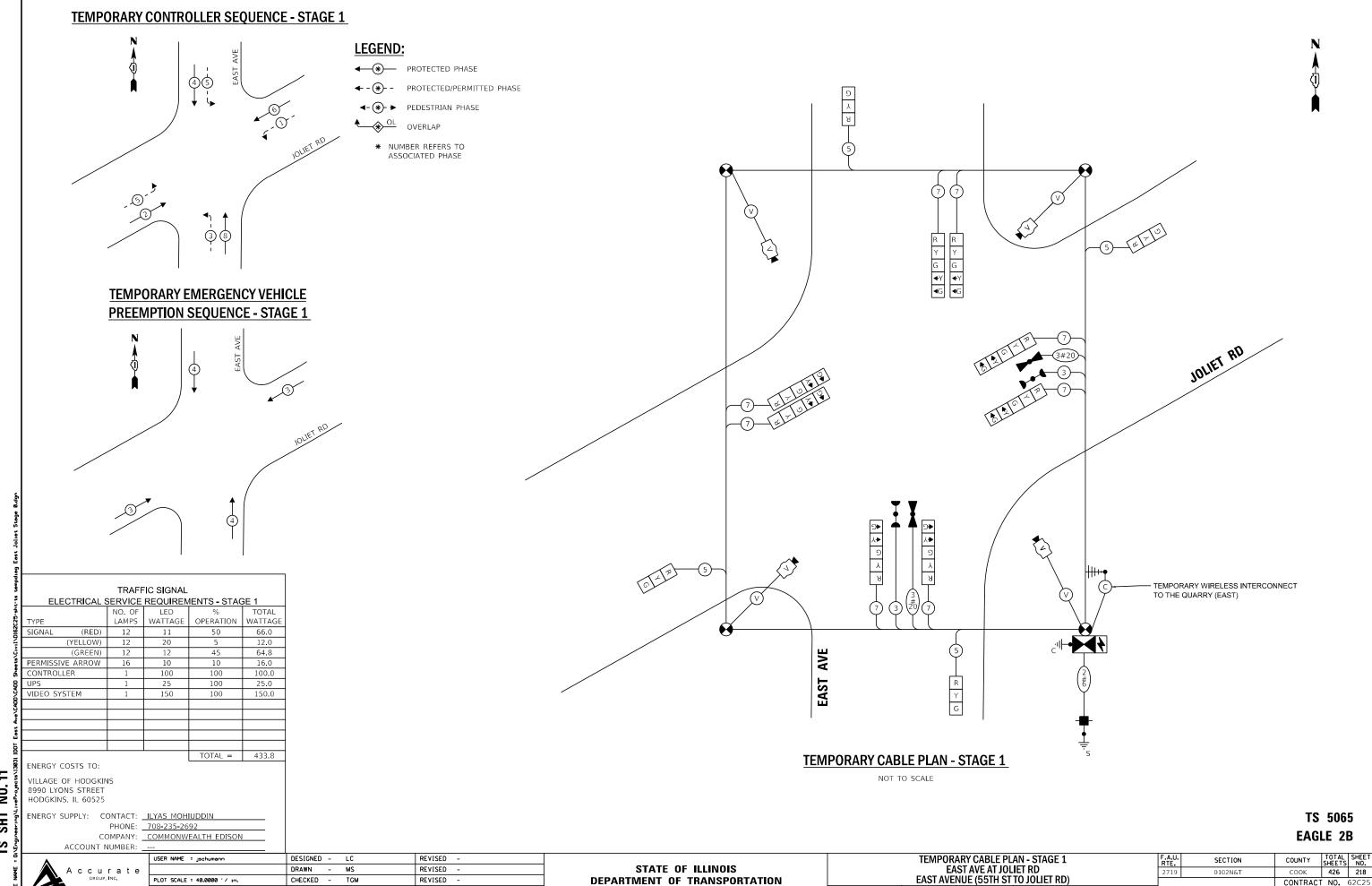
COUNTY 426 213 CONTRACT NO. 62C2

S. SHT









**DEPARTMENT OF TRANSPORTATION** 

SCALE:

SHEET

SHEETS STA.

0102N&T

CONTRACT NO. 62C25

SHT

PLOT SCALE = 40.0000 ' / in.

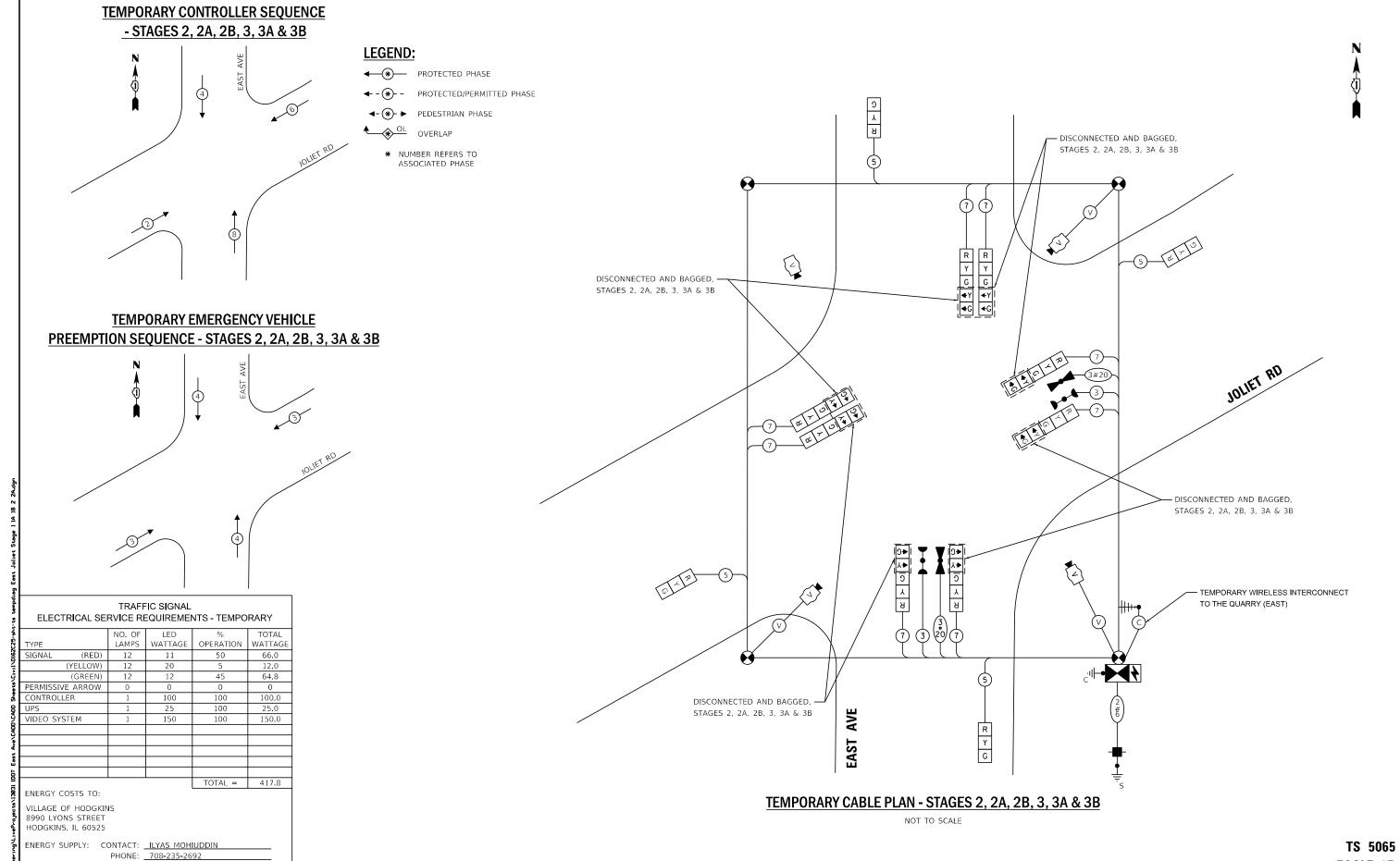
PLOT DATE = 8/5/2021

CHECKED - TGM

- 07/30/2021

DATE

REVISED -



**IS SHEET NO. 17** 

COMPANY: COMMONWEALTH EDISON

USER NAME = jschumann

PLOT DATE = 8/5/2021

PLOT SCALE = 40.0000 ' / 10.

DESIGNED - LC

DRAWN - MS

CHECKED - TGM

- 07/30/2021

DATE

REVISED -

REVISED -

REVISED -

REVISED -

ACCOUNT NUMBER:

TEMPORARY CABLE PLAN - STAGES 2, 2A, 2B, 3, 3A & 3B

STATE OF ILLINOIS

DEPARTMENT OF TRANSPORTATION

SCALE: SHEET OF SHEETS STA. TO STA.

TEMPORARY CABLE PLAN - STAGES 2, 2A, 2B, 3, 3A & 3B

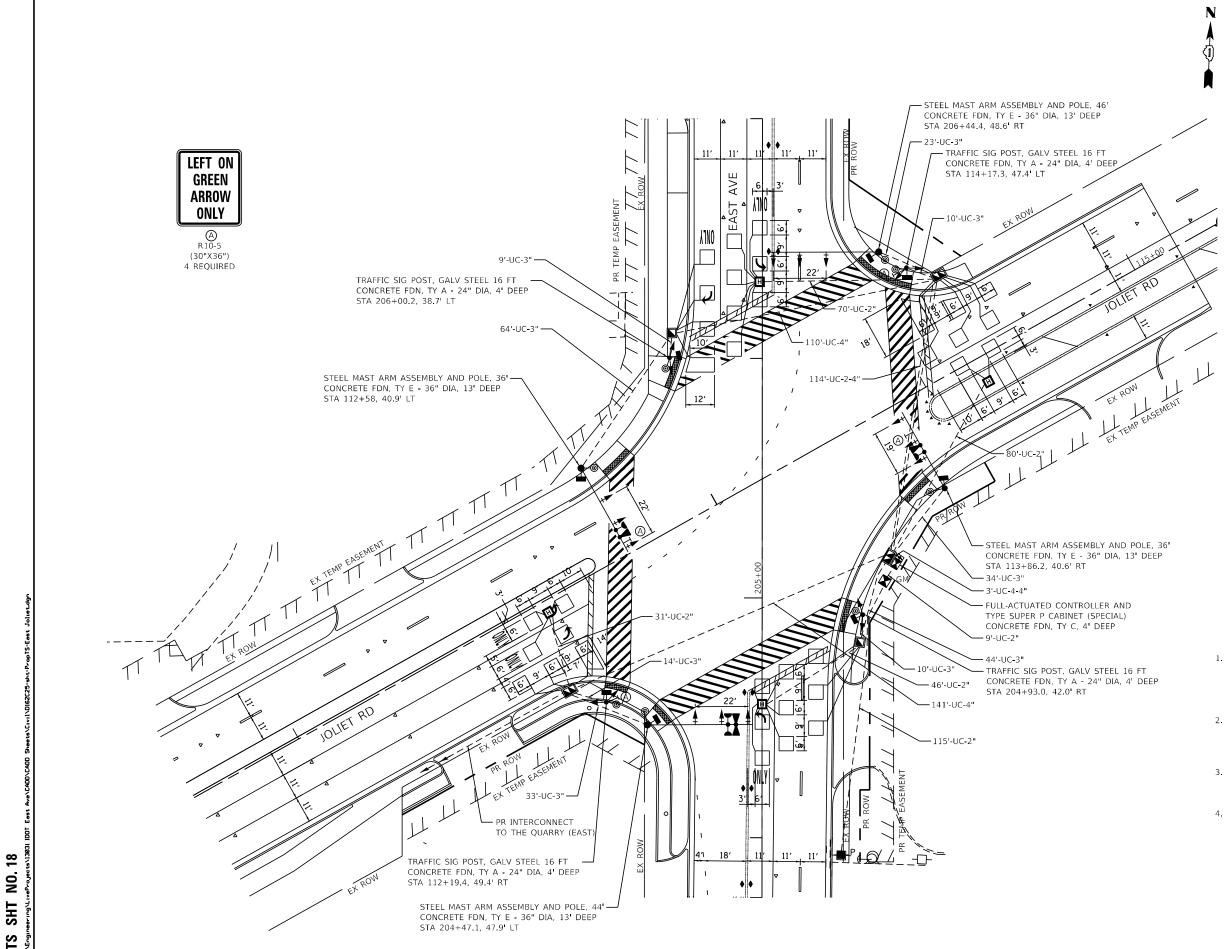
F.A.U. RECTION COUNTY SHEETS NO.

2719 0102N&T CON 426 224

CONTROL NO. 62C25

| ILLINOIS | FED. ALIO PROJECT

EAGLE 2B



# **NOTES:**

- THE CONTRACTOR SHALL CHECK THE PROPOSED TRAFFIC SIGNAL EQUIPMENT LOCATIONS FOR OVERHEAD UTILITY CONFLICTS. THE CONTRACTOR SHALL COORDINATE ANY CONFLICTS WITH THE UTILITY COMPANIES AND THE RESIDENT ENGINEER BEFORE ORDERING MATERIALS.
- 2. EACH DETECTOR LOOP SHALL HAVE ITS OWN 1" COILABLE NON-METALLIC CONDUIT BETWEEN THE EDGE OF PAVEMENT AND THE ADJACENT HANDHOLE AS SHOWN ON THE PLANS AND AS STATED IN THE TRAFFIC SIGNAL SPECIFICATIONS.
- 3. THE CONTRACTOR SHALL CONTACT THE PLEASANTVIEW FIRE PROTECTION DISTRICT AT 708-352-9229 TO VERIFY THE BRAND OF EMERGENCY VEHICLE PREEMPTION EQUIPMENT REQUIRED.
- 4. ALL STATION AND OFFSET CALLOUTS FOR NEW EQUIPMENT ARE APPROXIMATE.

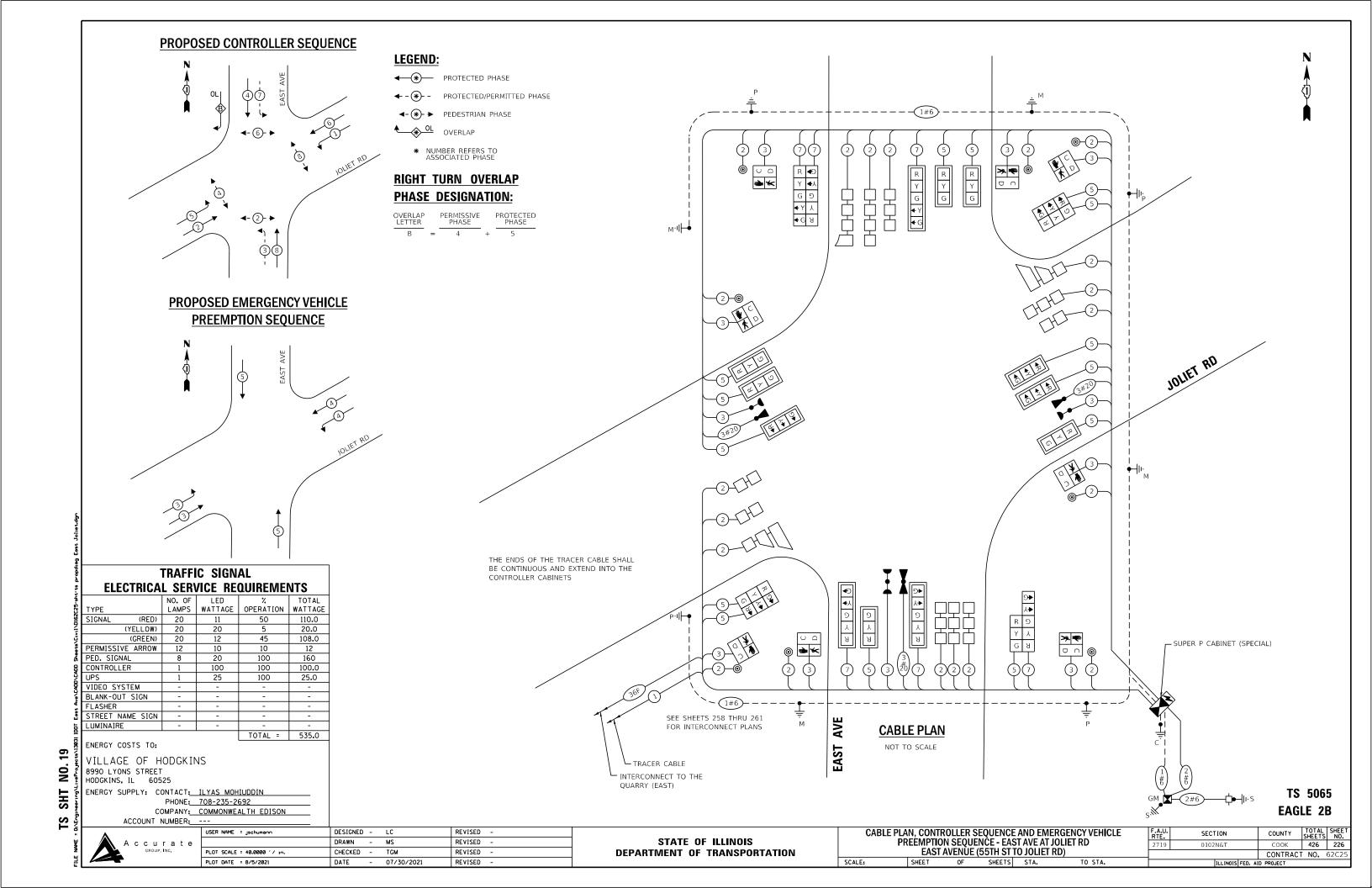
TS 5065 EAGLE 2B

Accurate GROUP, INC.

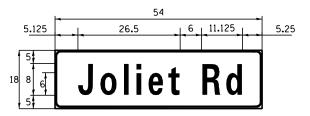
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

SCALE:

TRAFFIC SIGNAL INSTALLATION PLAN
EAST AVE AT JOLIET RD
EAST AVENUE (55TH ST TO JOLIET RD)
SHEET OF SHEETS STA. TO STA.



DESIGN	AREA	SIGN PANEL	SHEETING	QTY.
SERIES	(SQ FT)	TYPE	TYPE	REQUIRED
D	6	1	ZZ	2



DESIGN	AREA	SIGN PANEL	SHEETING	OTY.
SERIES	(SQ FT)	TYPE	TYPE	REQUIRED
D	6.75	1	ZZ	2

# SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNIT	TOTAL QTY
SIGN PANEL - TYPE 1	SQ FT	55.5
UNDERGROUND CONDUIT, GALVANIZED STEEL 2" DIA.	FOOT	352
UNDERGROUND CONDUIT, GALVANIZED STEEL 3" DIA.	FOOT	241
UNDERGROUND CONDUIT, GALVANIZED STEEL 4" DIA.	FOOT	491
HANDHOLE	EACH	2
HEAVY-DUTY HANDHOLE	EACH	4
DOUBLE HANDHOLE	EACH	3
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	1549
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	2354
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	3011
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	1448
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PR	FOOT	2106
ELECTRIC CABLE IN CONDUIT, SERVICE NO. 6 2C	FOOT	158
ELECTRIC CABLE IN CONDUIT, EQUIP. GROUNDING CONDUCTOR, NO. 6 1C	FOOT	815
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FOOT	EACH	4
STEEL MAST ARM ASSEMBLY AND POLE, 36 FOOT	EACH	2
STEEL MAST ARM ASSEMBLY AND POLE, 44 FOOT	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 46 FOOT	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	16
CONCRETE FOUNDATION, TYPE C	FOOT	4
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	52
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	9
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	5
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	3
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED	EACH	3
PED. SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED W/COUNTDOWN TIMER	EACH	8
TRAFFIC SIGNAL BACKPLATE, LOUVERED, FORMED PLASTIC	EACH	12
INDUCTIVE LOOP DETECTOR	EACH	12
DETECTOR LOOP, TYPE I	FOOT	1137
LIGHT DETECTOR	EACH	3
LIGHT DETECTOR AMPLIFIER	EACH	1
PEDESTRIAN PUSH BUTTON	EACH	8
TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING HANDHOLE	EACH	13
REMOVE EXISTING DOUBLE HANDHOLE	EACH	1
REMOVE EXISTING CONCRETE FOUNDATION	EACH	9
EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	752
FULL-ACTUATED CONTROLLER AND TYPE SUPER P CABINET (SPECIAL)	EACH	1
SERVICE INSTALLATION, GROUND MOUNTED, METERED	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1
TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1

\* 100% COST TO THE PLEASANTVIEW FIRE PROTECTION DISTRICT

SCALE:

SHT NO. 20

LS

USER NAME = jschumann	DESIGNED	-	LC	REVISED -
	DRAWN	-	MS	REVISED -
PLOT SCALE = 40.0000 '/ in.	CHECKED	-	TGM	REVISED -
PLOT DATE = 8/5/2021	DATE	-	07/30/2021	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MAST ARM MOUNTED STREET NAME SIGNS AND								
	SCHEDULE OF QUANTITIES - EAST AVE AT JOLIET RD							
301								
EAST AVENUE (55TH ST TO JOLIET RD)								
	SHEET	OF	SHEETS	STA.	TO STA.			

EAGLE 2B COUNTY SHEETS NO.

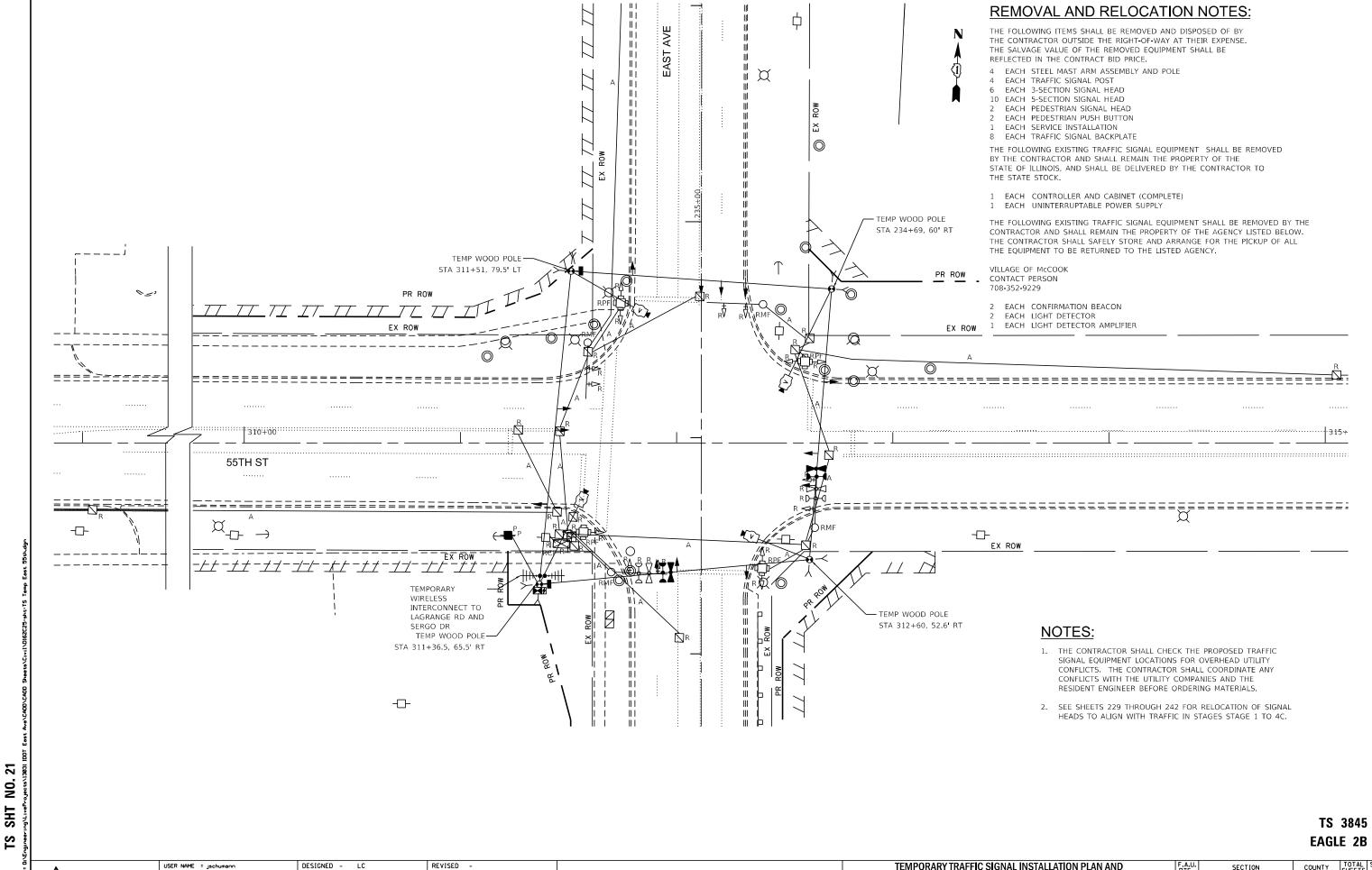
COOK 426 227

CONTRACT NO. 62C25

AID PROJECT

TS 5065

MAST ARM MODIVIED STREET NAME SIGNS AND					F.A.U. RTE.	SECTION	
SCHEDULE OF QUANTITIES - EAST AVE AT JOLIET RD  EAST AVENUE (55TH ST TO JOLIET RD)					2719	0102N&T	
	EAST A	VENUE	(551H SI	<u>10 JOLIEI</u>	RD)		
	SHEET	ΩF	CHEETS	STA	TO STA		lu unote co

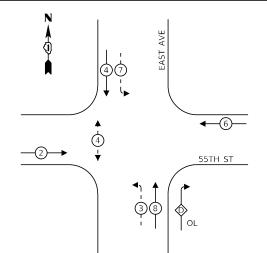


Journal Journal of the Control of th	02010.120				
	DRAWN -	MS	REVISED -	STATE OF ILLINOIS	
PLOT SCALE = 40.0000 ' / in.	CHECKED -	TGM	REVISED -	DEPARTMENT OF TRANSPORTATION	
PLOT DATE = 8/5/2021	DATE -	07/30/2021	REVISED -		SCALE:

 	TING TRA		VAL EQUIP	PMENT PLAN
CHEET	ΛE	CHEETC	CTA	TO CTA

F.A.U. RTE.	SECTION		SHEETS	SH
2719	0102N&T	COOK	426	2
		CONTRACT	NO.	620
	ILL INOIS FED. AL	D PROJECT		

# INITIAL TEMPORARY CONTROLLER SEQUENCE



# LEGEND:

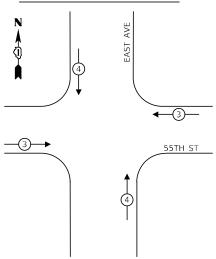
**◆** PROTECTED PHASE ← - (\*)- - PROTECTED/PERMITTED PHASE

**◄- \*- >** PEDESTRIAN PHASE

OL OVERLAP

\* NUMBER REFERS TO ASSOCIATED PHASE

# **INITIAL TEMPORARY EMERGENCY VEHICLE** PREEMPTION SEQUENCE



TRAFFIC SIGNAL							
<b>ELECTRICAL SERVICE REQUIREMENTS</b>							
_	NO OF	LED	0/_	TOT			

יחוסקרקי	TYPE	LAMPS	WATTAGE	OPERATION	WATTAGE
	SIGNAL (RED)	12	11	50	66.0
	(YELLOW)	10	20	5	12.0
1	(GREEN)	10	12	45	64.8
3	PERMISSIVE ARROW	20	10	10	20
	PED. SIGNAL	2	20	100	40.0
1	CONTROLLER	1	100	100	100.0
9	UPS	1	25	100	25.0
	VIDEO SYSTEM	1	150	100	150.0
•					
3					
:				TOTAL =	477.8

ENERGY COSTS TO:

VILLAGE OF COUNTRYSIDE 5550 EAST AVENUE COUNTRYSIDE, IL 60525

ENERGY SUPPLY: CONTACT: <u>ILYAS MOHIUDDIN</u> PHONE: <u>708-235-2692</u> COMPANY: COMMONWEALTH EDISON

ACCOUNT NUMBER:

# G G G → 55TH ST EAST AVE

# INITIAL TEMPORARY TRAFFIC SIGNAL CABLE PLAN

SCALE:

NOT TO SCALE

TS 3845 EAGLE 2B

USER NAME = jschumann DESIGNED - LC REVISED -DRAWN - MS REVISED -PLOT SCALE = 40.0000 ' / in. CHECKED - TGM REVISED -PLOT DATE = 8/5/2021 DATE - 07/30/2021 REVISED -

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

TEMPORARY TRAFFIC SIGNAL CABLE PLAN - INITIAL EAST AVE AT 55TH ST EAST AVENUE (55TH ST TO JOLIET RD) SECTION 0102N&T SHEET SHEETS STA.

SCALE:

PLOT SCALE = 40.0000 '/ in.

PLOT DATE = 8/5/2021

CHECKED - TGM

- 07/30/2021

REVISED -

# **LEGEND:**

**◆** PROTECTED PHASE

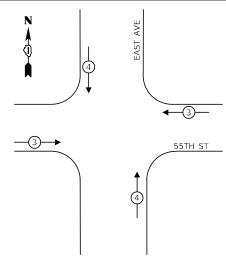
← - (\*)- - PROTECTED/PERMITTED PHASE

**◄- \*- >** PEDESTRIAN PHASE

OL OVERLAP

\* NUMBER REFERS TO ASSOCIATED PHASE

# **TEMPORARY EMERGENCY VEHICLE** PREEMPTION SEQUENCE - STAGE 1



TRAFFIC SIGNAL						
<b>ELECTRICA</b>	L SER\	/ICE RE	QUIREMEI	NTS		
	NO OF	LED	0/	TOT		

_		1		, , ,	10111
3	TYPE	LAMPS	WATTAGE	OPERATION	WATTAG
ĕ	SIGNAL (RED)	12	11	50	66.0
Sheets/Livil/UIbZL	(YELLOW)	10	20	5	12.0
ڔٙ	(GREEN)	10	12	45	64.8
8	PERMISSIVE ARROW		10	10	16.0
Š	PED. SIGNAL	2	20	100	40.0
₹	CONTROLLER	1	100	100	100.0
Avellauullauu	UPS	1	25	100	25.0
Ę	VIDEO SYSTEM	1	150	100	150.0
Ş					
_					
Lost					
3					
=	1			TOTAL =	473.8

ENERGY COSTS TO:

VILLAGE OF COUNTRYSIDE 5550 EAST AVENUE COUNTRYSIDE, IL 60525

ENERGY SUPPLY: CONTACT: <u>ILYAS MOHIUDDIN</u> PHONE: <u>708-235-2692</u> COMPANY: COMMONWEALTH EDISON

ACCOUNT NUMBER:

USER NAME = jschumann	DESIGNED	-	LC	REVISED -
	DRAWN	-	LC	REVISED -
PLOT SCALE = 40.0000 ' / in.	CHECKED	-	TM	REVISED -
PLOT DATE = 8/5/2021	DATE	-	07/30/2021	REVISED -

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**  TEMPORARY TRAFFIC SIGNAL CABLE PLAN - STAGE 1 **EAST AVENUE (55TH ST TO JOLIET RD)** SHEET OF SHEETS STA.

COUNTY TOTAL SHEET NO.

COOK 426 231 SECTION 0102N&T CONTRACT NO. 62C25

R Y G ◆Y ◆G G ◆Y ◆G - DISCONNECTED & BAGGED DISCONNECTED & BAGGED -(5)—(a) > (b) G ≺ ¬ 5 55TH ST O+ C V V U TEMPORARY WIRELESS -INTERCONNECT TO LAGRANGE ROAD AND EAST AVE SERGO DRIVE

# TEMPORARY TRAFFIC SIGNAL CABLE PLAN - STAGE 1

SCALE:

NOT TO SCALE

# SHEET NO. 24

IS



SHT NO. 25

USER NAME = jschumann DESIGNED - LC REVISED -REVISED -DRAWN - MS PLOT SCALE = 40.0000 '/ in. CHECKED - TGM REVISED -PLOT DATE = 8/5/2021 - 07/30/2021 REVISED -

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

TEMPORARY TRAFFIC SIGNAL PLAN - STAGES 2 & 2A
EAST AVE AT 55TH ST
EAST AVENUE (55TH ST TO JOLIET RD)
SHEET OF SHEETS STA. TO S SCALE:

SECTION 0102N&T

or Hillmore	Т	EMPORAR		IC SIGNAL		TAGE 2B	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F TRANSPORTATION  EAST AVE AT 55TH ST  EAST AVENUE (55TH ST TO JOLIET RD)				DD)	2719	0102N&T	COOK	426	233		
					/			CONTRAC	T NO.	62C25	
	SCALE:	SHEET	OF	SHEETS	STA.	TO STA.		ILLINOIS FED. A	D PROJECT		

PR ROW 1 1 310+00 55TH ST EX ROW TEMPORARY WIRELESS -INTERCONNECT TO LAGRANGE ROAD AND SERGO DRIVE

DESIGNED - LC REVISED -DRAWN - MS REVISED -CHECKED - TGM

DATE - 07/30/2021 REVISED -PLOT DATE = 8/5/2021 REVISED -

STATE OF **DEPARTMENT OF** 

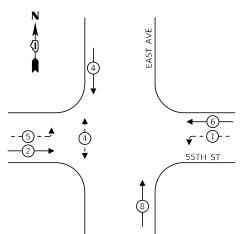
TS 3845 EAGLE 2B

SCALE:

PLOT DATE = 8/5/2021

- 07/30/2021

# TEMPORARY CONTROLLER SEQUENCE - STAGES 2, 2A, 2B & 3 **LEGEND:**



# **◆** PROTECTED PHASE

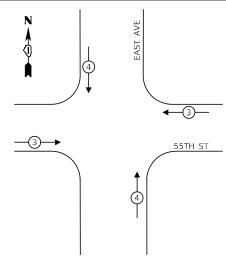
← - (\*)- - PROTECTED/PERMITTED PHASE

**◄- \*- >** PEDESTRIAN PHASE

OL OVERLAP

\* NUMBER REFERS TO ASSOCIATED PHASE

# **TEMPORARY EMERGENCY VEHICLE** PREEMPTION SEQUENCE - STAGES 2, 2A, 2B & 3



# TRAFFIC SIGNAL **ELECTRICAL SERVICE REQUIREMENTS** NO. OF LED % TOTAL

TYPE	LAMPS	WATTAGE	OPERATION	WATTAGE
SIGNAL (RED)	12	11	50	66.0
(YELLOW)	12	20	5	12.0
(GREEN)	12	12	45	64.8
PERMISSIVE ARROW	16	10	10	16.0
PED. SIGNAL	2	20	100	40.0
CONTROLLER	1	100	100	100.0
UPS	1	25	100	25.0
VIDEO SYSTEM	1	150	100	150.0
			TOTAL =	473.8
	SIGNAL (RED) (YELLOW) (GREEN) PERMISSIVE ARROW PED. SIGNAL CONTROLLER UPS	SIGNAL         (RED)         12           (YELLOW)         12           (GREEN)         12           PERMISSIVE ARROW         16           PED. SIGNAL         2           CONTROLLER         1           UPS         1	SIGNAL         (RED)         12         11           (YELLOW)         12         20           (GREEN)         12         12           PERMISSIVE ARROW         16         10           PED. SIGNAL         2         20           CONTROLLER         1         100           UPS         1         25	SIGNAL         (RED)         12         11         50           (YELLOW)         12         20         5           (GREEN)         12         12         45           PERMISSIVE ARROW         16         10         10           PED. SIGNAL         2         20         100           CONTROLLER         1         100         100           UPS         1         25         100           VIDEO SYSTEM         1         150         100

ENERGY COSTS TO:

VILLAGE OF COUNTRYSIDE 5550 EAST AVENUE

COUNTRYSIDE, IL 60525

ENERGY SUPPLY: CONTACT: <u>ILYAS MOHIUDDIN</u> PHONE: <u>708-235-2692</u> COMPANY: COMMONWEALTH EDISON ACCOUNT NUMBER:

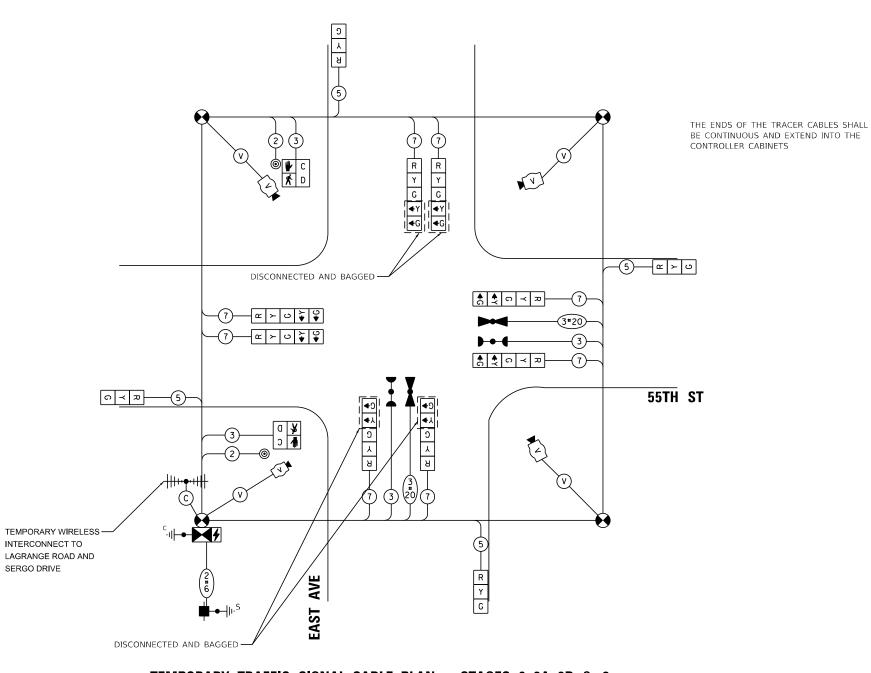
USER NAME = jschumann	DESIGNED	-	LC	REVISED -
	DRAWN	-	MS	REVISED -
PLOT SCALE = 40.0000 ' / in.	CHECKED	-	TGM	REVISED -
PLOT DATE = 8/5/2021	DATE	-	07/30/2021	REVISED -

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

TEMPORARY TRAFFIC SIGNAL CABLE PLAN - STAGES 2, 2A, 2B & 3 EAST AVE AT 55TH ST EAST AVENUE (55TH ST TO JOLIET RD) SCALE: SHEET SHEETS STA.

COUNTY TOTAL SHEETS NO.

COOK 426 235 SECTION 0102N&T CONTRACT NO. 62C25



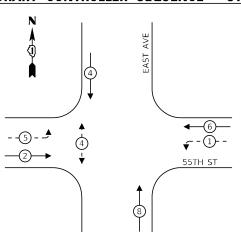
TEMPORARY TRAFFIC SIGNAL CABLE PLAN - STAGES 2, 2A, 2B & 3

NOT TO SCALE

TS 3845 EAGLE 28



#### TEMPORARY CONTROLLER SEQUENCE - STAGES 3A & 3B



#### **LEGEND**:

**◆** PROTECTED PHASE

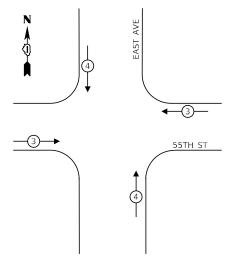
← - (\*)- - PROTECTED/PERMITTED PHASE

√- \*- PEDESTRIAN PHASE

OL OVERLAP

\* NUMBER REFERS TO ASSOCIATED PHASE

#### **TEMPORARY EMERGENCY VEHICLE** PREEMPTION SEQUENCE - STAGES 3A & 3B



TRAFFIC SIGNAL							
ELECTRICAL SERVICE REQUIREMENTS							
	NO. OF	LED	%	TOTAL			

	NO. OI	LLD	/0	IOIAL
TYPE	LAMPS	WATTAGE	OPERATION	WATTAGE
SIGNAL (RED)	12	11	50	66.0
(YELLOW)	12	20	5	12.0
(GREEN)	12	12	45	64.8
PERMISSIVE ARROW	16	10	10	16.0
PED. SIGNAL	2	20	100	40.0
CONTROLLER	1	100	100	100.0
UPS	1	25	100	25.0
VIDEO SYSTEM	1	150	100	150.0
·			TOTAL =	473.8

ENERGY COSTS TO:

VILLAGE OF COUNTRYSIDE 5550 EAST AVENUE COUNTRYSIDE, IL 60525

ENERGY SUPPLY: CONTACT: <u>ILYAS MOHIUDDIN</u> PHONE: <u>708-235-2692</u> COMPANY: COMMONWEALTH EDISON ACCOUNT NUMBER:

# THE ENDS OF THE TRACER CABLES SHALL BE CONTINUOUS AND EXTEND INTO THE CONTROLLER CABINETS (5) (a) > (b) DISCONNECTED AND BAGGED DISCONNECTED AND BAGGED -**↑** ↑ ○ ≺ ¬ 55TH ST TEMPORARY WIRELESS -INTERCONNECT TO LAGRANGE ROAD AND SERGO DRIVE DISCONNECTED AND BAGGED

#### TEMPORARY TRAFFIC SIGNAL CABLE PLAN - STAGES 3A & 3B

SCALE:

NOT TO SCALE

TS 3845 EAGLE 28



USER NAME = jschumann	DESIGNED	-	LC	KENIZED -
	DRAWN	-	MS	REVISED -
PLOT SCALE = 40.0000 ' / in.	CHECKED	-	TGM	REVISED -
PLOT DATE = 8/5/2021	DATE	-	07/30/2021	REVISED -

STATE OF	ILLINOIS
DEPARTMENT OF	TRANSPORTATION

TEMPO	RARY TRAF				TAGE 3A & 3B	F.A.U. RTE.	SECTION	COUNTY	TOT
EAST AVE AT 55TH ST					2719	0102N&T	COOK	42	
EAST AVENUE (55TH ST TO JOLIET RD)						CONTRAC	T NC		
	SHEET	OF	SHEETS	STA.	TO STA.		ILLINOIS FED. AI	D PROJECT	

SCALE:

PLOT DATE = 8/5/2021

REVISED -

#### TEMPORARY CONTROLLER SEQUENCE - STAGES 4, 4A & 4B

# **4 6 1 55TH ST**

#### **LEGEND:**

**◆** PROTECTED PHASE

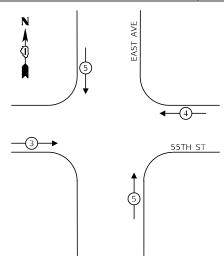
← - (\*)- - PROTECTED/PERMITTED PHASE

**◄- \*- >** PEDESTRIAN PHASE

OL OVERLAP

\* NUMBER REFERS TO ASSOCIATED PHASE

#### **TEMPORARY EMERGENCY VEHICLE** PREEMPTION SEQUENCE - STAGES 4, 4A & 4B



TRAFFIC SIGNAL								
ELECTRICAL SERVICE REQUIREMENTS								
	NO. OF	LED	%	TOTAL				

TYPE	LAMPS	WATTAGE	OPERATION	WATTAGE
SIGNAL (RED)	12	11	50	66.0
(YELLOW)	12	20	5	12.0
(GREEN)	12	12	45	64.8
PERMISSIVE ARROW	16	10	10	16.0
PED. SIGNAL	2	20	100	40.0
CONTROLLER	1	100	100	100.0
UPS	1	25	100	25.0
VIDEO SYSTEM	1	150	100	150.0
			TOTAL =	473.8

ENERGY COSTS TO:

VILLAGE OF COUNTRYSIDE 5550 EAST AVENUE

COUNTRYSIDE, IL 60525

ENERGY SUPPLY: CONTACT: <u>ILYAS MOHIUDDIN</u> PHONE: <u>708-235-2692</u> COMPANY: COMMONWEALTH EDISON

ACCOUNT NUMBER:

USER NAME = jschumann DESIGNED - LC REVISED DRAWN - MS REVISED -PLOT SCALE = 40.0000 ' / 10. CHECKED - TGM REVISED -PLOT DATE = 8/5/2021 DATE - 07/30/2021 REVISED -

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

DISCONNECTED AND BAGGED -

INTERCONNECT TO

SERGO DRIVE

TEMPORARY TRAFFIC SIGNAL CABLE PLAN - STAGES 4, 4A & 4B EAST AVE AT 55TH ST EAST AVENUE (55TH ST TO JOLIET RD) SCALE: SHEET SHEETS STA.

COUNTY TOTAL SHEET NO. CONTRACT NO. 62C25

SECTION

0102N&T

THE ENDS OF THE TRACER CABLES SHALL BE CONTINUOUS AND EXTEND INTO THE CONTROLLER CABINETS (5) (a) > (b) DISCONNECTED AND BAGGED **♠** 0 ≺ ₽ **♠** ೧ ≺ ಸ-- (x > ∪ <del>V</del> o ≺ ¬ 5 55TH ST 0<del>+</del> 1 0 1 1 1 1 TEMPORARY WIRELESS -LAGRANGE ROAD AND

#### TEMPORARY TRAFFIC SIGNAL CABLE PLAN - STAGES 4, 4A & 4B

NOT TO SCALE

# <u>8</u> SHEET

PLOT DATE = 8/5/2021

REVISED -

#### TEMPORARY CONTROLLER SEQUENCE - STAGE 4C

# 55TH ST.

**◆** PROTECTED PHASE

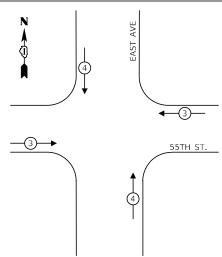
← - (\*)- - PROTECTED/PERMITTED PHASE

√- \*- PEDESTRIAN PHASE

OL OVERLAP

\* NUMBER REFERS TO ASSOCIATED PHASE

#### **TEMPORARY EMERGENCY VEHICLE** PREEMPTION SEQUENCE - STAGE 4C



TRAFFIC SIGNAL							
ELECTRICAL SERVICE REQUIREMENTS							
	NO. OF	LED	%	TOTAL			

יחופקרקם.	TYPE	LAMPS	WATTAGE	OPERATION	WATTAGE
ě	SIGNAL (RED)	12	11	50	66.0
	(YELLOW)	12	20	5	12.0
2	(GREEN)	12	12	45	64.8
8	PERMISSIVE ARROW	16	10	10	16.0
Š	PED. SIGNAL	2	20	100	40.0
	CONTROLLER	1	100	100	100.0
٤	UPS	1	25	100	25.0
į	VIDEO SYSTEM	1	150	100	150
ě					
3					
3					
≓ 5				TOTAL =	473.8

ENERGY COSTS TO:

VILLAGE OF COUNTRYSIDE 5550 EAST AVENUE COUNTRYSIDE, IL 60525

ENERGY SUPPLY: CONTACT: <u>ILYAS MOHIUDDIN</u> PHONE: <u>708-235-2692</u> COMPANY: COMMONWEALTH EDISON ACCOUNT NUMBER:

# THE ENDS OF THE TRACER CABLES SHALL BE CONTINUOUS AND EXTEND INTO THE CONTROLLER CABINETS **↑ ↑** C ≺ R — - x > 0 ¥ ¥ - & > O \ \ \ \ ♠ ♠ ∩ ≺ ¬¬ ດ ≺ ¤ 55TH ST TEMPORARY WIRELESS INTERCONNECT TO LAGRANGE ROAD AND SERGO DRIVE DISCONNECTED AND BAGGED —

#### TEMPORARY TRAFFIC SIGNAL CABLE PLAN - STAGE 4C

SCALE:

NOT TO SCALE

USER NAME = jschumann	DESIGNED	-	LC	REVISED -
	DRAWN	-	MS	REVISED -
PLOT SCALE = 40.0000 ' / 10.	CHECKED	-	TGM	REVISED -
PLOT DATE = 8/5/2021	DATE	-	07/30/2021	REVISED -

STATE OF ILLINOIS					
DEPARTMENT OF TRANSPORTATION					

EMPORARY TRAFFIC SIGNAL CA	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS				
EAST AVE AT 55	2719	0102N&T	COOK	426	242			
EAST AVENUE (55TH ST			CONTRACT	NO.	62C25			
SHEET OF SHEETS	STA.	TO STA.		ILLINOIS FED. AID PROJECT				

- DISCONNECTED AND BAGGED

TS 3845 EAGLE 28 11′ || 11′ || 11′ || 11′ || 11′ || 11′

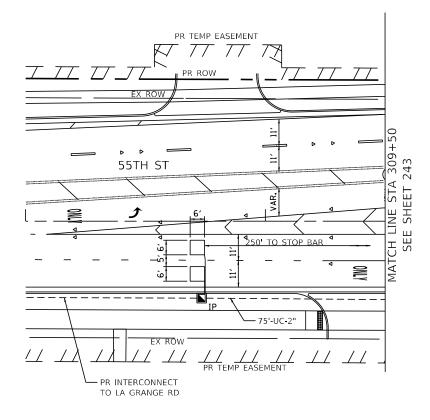
NO. 36 SHEET LS

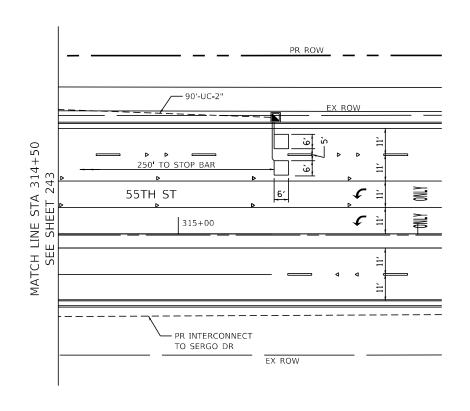
TS 3845 EAGLE 2B

NOTES:

1. THE CONTRACTOR SHALL CHECK THE PROPOSED TRAFFIC SIGNAL EQUIPMENT LOCATIONS FOR OVERHEAD UTILITY CONFLICTS. THE

CONTRACTOR SHALL COORDINATE ANY CONFLICTS WITH THE





#### NOTES:

SCALE:

- 1. THE CONTRACTOR SHALL CHECK THE PROPOSED TRAFFIC SIGNAL EQUIPMENT LOCATIONS FOR OVERHEAD UTILITY CONFLICTS. THE CONTRACTOR SHALL COORDINATE ANY CONFLICTS WITH THE UTILITY COMPANIES AND THE RESIDENT ENGINEER BEFORE ORDERING MATERIALS.
- 2. EACH DETECTOR LOOP SHALL HAVE ITS OWN 1" COILABLE NON-METALLIC CONDUIT BETWEEN THE EDGE OF PAVEMENT AND THE ADJACENT HANDHOLE AS SHOWN ON THE PLANS AND AS STATED IN THE TRAFFIC SIGNAL SPECIFICATIONS.
- THE CONTRACTOR SHALL CONTACT THE McCOOK FIRE DEPARTMENT AT 708-447-9030 TO VERIFY THE BRAND OF EMERGENCY VEHICLE PREEMPTION EQUIPMENT REQUIRED.
- 4. ALL STATION AND OFFSET CALLOUTS FOR NEW EQUIPMENT ARE APPROXIMATE.

TS 3845 EAGLE 2B



USER NAME = jschumann	DESIGNED	-	LC	REVISED -	
	DRAWN	-	MS	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED	-	TGM	REVISED -	
PLOT DATE = 8/5/2021	DATE	-	07/30/2021	REVISED -	

	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHE
	2719	0102N&T	COOK	426	24
_			CONTRACT	NO.	62C
		ILLINOIS FED. A	ID PROJECT		

SHEEL NO. 3/

East Ave\CADD\CADD Sheets\Civil\D162C25

TS SHEET NO. 37

#### TRAFFIC SIGNAL **ELECTRICAL SERVICE REQUIREMENTS**

	i .	NO. 01	LED	/0	IOTAL
3	TYPE	LAMPS	WATTAGE	OPERATION	WATTAGE
1	SIGNAL (RED)	19	11	50	104.5
-	(YELLOW)	19	20	5	19
į	(GREEN)	21	12	45	113.4
3	PERMISSIVE ARROW	12	10	10	12
,	PED. SIGNAL	4	20	100	80
3	CONTROLLER	1	100	100	100
	UPS	1	25	100	25
į					
Š					
ē					
1				TOTAL =	453.9

ENERGY COSTS TO:

38

N N

SHEET

VILLAGE OF COUNTRYSIDE

5550 EAST AVENUE COUNTRYSIDE, IL 60525

ENERGY SUPPLY: CONTACT: <u>ILYAS MOHIUDDIN</u>

USER NAME = jschumann DESIGNED - LC REVISED DRAWN - MS REVISED -PLOT SCALE = 40.0000 ' / 10. CHECKED - TGM REVISED -PLOT DATE = 8/5/2021 - 07/30/2021 REVISED

INTERCONNECT TO LA GRANGE ROAD

SUPER P CABINET (SPECIAL)

TRACER CABLE -

CABLE PLAN, CONTROLLER SEQUENCE AND EMERGENCY VEHICLE PREEMPTION SEQUENCE - EAST AVE AT 55TH ST EAST AVENUE (55TH ST TO JOLIET RD) SHEETS STA.

COUNTY TOTAL SHEETS NO.

COOK 426 245 SECTION 0102N&T CONTRACT NO. 62C2

INTERCONNECT TO SERGO DRIVE

THE ENDS OF THE TRACER CABLES SHALL BE CONTINUOUS AND EXTEND INTO THE

TRACER CABLE

CONTROLLER CABINETS

**LEGEND:** 

**◆** PROTECTED PHASE

← - (\*)- - PROTECTED/PERMITTED PHASE

**◄- \*-** ► PEDESTRIAN PHASE

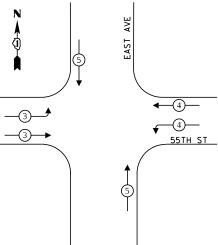
◆ OL OVERLAP

\* NUMBER REFERS TO ASSOCIATED PHASE

#### **RIGHT TURN OVERLAP** PHASE DESIGNATION:

OVERLAP PERMISSIVE PROTECTED 

# PROPOSED EMERGENCY VEHICLE



2	TYPE	LAMPS	WATTAGE	OPERATION	WATTAGE
ets\Civil\D162C2	SIGNAL (RED)	19	11	50	104.5
4	(YELLOW)	19	20	5	19
اؤ	(GREEN)	21	12	45	113.4
\$	PERMISSIVE ARROW	12	10	10	12
š	PED. SIGNAL	4	20	100	80
9	CONTROLLER	1	100	100	100
Ave\CADD\CADD	UPS	1	25	100	25
8					
3					
Ees					
힏					

PHONE: <u>708-235-2692</u> COMPANY: COMMONWEALTH EDISON R Y G **←**Y **←**G R Y G G **≯** € R Y G 55TH ST Ç ¥ 0 ≺ ¤

**CABLE PLAN** 

NOT TO SCALE

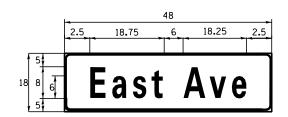
AVE

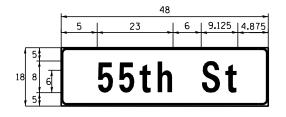
TS 3845 EAGLE 2B



STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

#### SIGN PANEL - TYPE 1





DESIGN	AREA	SIGN PANEL	SHEETING	QTY.
SERIES	(SO FT)	TYPE	TYPE	REQUIRED
D	6	1	ZZ	2

DESIGN	AREA	SIGN PANEL	SHEETING	QTY.
SERIES	(SQ FT)	TYPE	TYPE	REQUIRED
D	6	1	ZZ	

#### SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNIT	TOTA QTY
SIGN PANEL - TYPE 1	SQ FT	54
UNDERGROUND CONDUIT, GALVANIZED STEEL 2" DIA.	FOOT	705
UNDERGROUND CONDUIT, GALVANIZED STEEL 3" DIA.	FOOT	124
UNDERGROUND CONDUIT, GALVANIZED STEEL 4" DIA.	FOOT	48
HANDHOLE	EACH	5
HEAVY-DUTY HANDHOLE	EACH	2
DOUBLE HANDHOLE	EACH	2
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	74
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	13
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	25
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	15
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PR	FOOT	23
ELECTRIC CABLE IN CONDUIT, SERVICE NO. 6 2C	FOOT	63
ELECTRIC CABLE IN CONDUIT, EQUIP. GROUNDING CONDUCTOR, NO. 6 1C	FOOT	63
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FOOT	EACH	3
STEEL MAST ARM ASSEMBLY AND POLE, 32 FOOT	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 36 FOOT	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 50 FOOT	EACH	2
CONCRETE FOUNDATION, TYPE A	FOOT	12
CONCRETE FOUNDATION, TYPE C	FOOT	4
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	52
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	8
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	4
SIGNAL HEAD, LED, 1-FACE, 4-SECTION, BRACKET MOUNTED	EACH	1
SIGNAL HEAD, LED, 1-FACE, 4-SECTION, MAST ARM MOUNTED	EACH	1
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	3
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED	EACH	3
PED. SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED W/COUNTDOWN TIMER	EACH	4
TRAFFIC SIGNAL BACKPLATE, LOUVERED, FORMED PLASTIC	EACH	12
INDUCTIVE LOOP DETECTOR	EACH	8
DETECTOR LOOP, TYPE I	FOOT	36
LIGHT DETECTOR	EACH	3
LIGHT DETECTOR AMPLIFIER	EACH	1
PEDESTRIAN PUSH BUTTON	EACH	4
TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING HANDHOLE	EACH	14
REMOVE EXISTING THANDHOLE	EACH	1
REMOVE EXISTING CONCRETE FOUNDATION	EACH	9
EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	53
FULL-ACTUATED CONTROLLER AND TYPE SUPER P CABINET (SPECIAL)	EACH	1
SERVICE INSTALLATION, GROUND MOUNTED, METERED	EACH	1
RADAR VEHICLE DETECTION SYSTEM, SINGLE APPROACH, STOP BAR	EACH	2
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1
OWNING TABLE FOWEN SUFFET, SPECIAL	LEACH	1 4

\* 100% COST TO THE VILLAGE OF McCOOK

SCALE:

TS SHEET NO. 39

USER NAME = jschumann	DESIGNED	-	LC	REVISED -
	DRAWN	-	MS	REVISED -
PLOT SCALE = 40.0000 ' / in.	CHECKED	-	TGM	REVISED -
PLOT DATE = 8/5/2021	DATE	-	07/30/2021	REVISED -

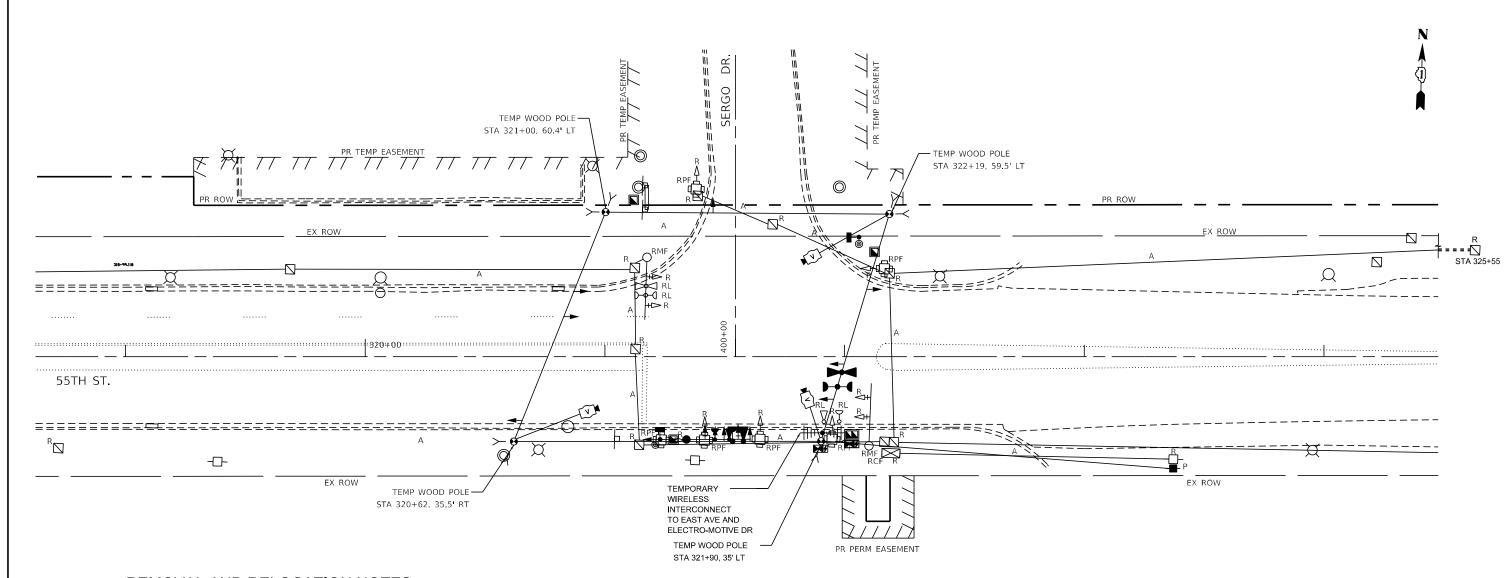
STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**  MAST ARM MOUNTED STREET NAME SIGNS AND SCHEDULE OF QUANTITES - EAST AVE AT 55TH ST EAST AVENUE (55TH STTO JOLIET RD)

SHEET OF SHEETS STA. TO STANDARD STAND

EAGLE 2B

TS 3845

SECTION 0102N&T



#### **REMOVAL AND RELOCATION NOTES:**

THE FOLLOWING ITEMS SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

- 2 EACH STEEL MAST ARM ASSEMBLY AND POLE
- 6 EACH TRAFFIC SIGNAL POST
- 8 EACH 3-SECTION SIGNAL HEAD
- 2 EACH 5-SECTION SIGNAL HEAD
- 1 EACH SERVICE INSTALLATION 4 EACH TRAFFIC SIGNAL BACKPLATE
- THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR AND SHALL REMAIN THE PROPERTY OF THE STATE OF ILLINOIS, AND SHALL BE DELIVERED BY THE CONTRACTOR TO
- 1 EACH CONTROLLER AND CABINET (COMPLETE)
- 1 EACH UNINTERRUPTABLE POWER SUPPLY

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR, SAFELY STORED AND RELOCATED TO THE PROPOSED MAST ARMS AND TRAFFIC SIGNAL CONTROLLER:

2 EACH LIGHT DETECTOR

THE STATE STOCK.

- 3 EACH CONFIRMATION BEACON
- 1 EACH LIGHT DETECTOR AMPLIFIER

#### NOTES:

SCALE:

- 1. THE CONTRACTOR SHALL CHECK THE PROPOSED TRAFFIC SIGNAL EQUIPMENT LOCATIONS FOR OVERHEAD UTILITY CONFLICTS. THE CONTRACTOR SHALL COORDINATE ANY CONFLICTS WITH THE UTILITY COMPANIES AND THE RESIDENT ENGINEER BEFORE ORDERING MATERIALS.
- 2. SEE SHEETS 248 THROUGH 256 FOR RELOCATION OF SIGNAL HEADS TO ALIGN WITH TRAFFIC IN STAGE 1 TO STAGE 4.

TS 11086 EAGLE 2B

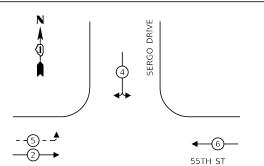


USER NAME = jschumann	DESIGNED	-	LC	REVISED -
	DRAWN	-	MS	REVISED -
PLOT SCALE = 40.0000 ' / in.	CHECKED	-	TGM	REVISED -
PLOT DATE = 8/5/2021	DATE	-	07/30/2021	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

 	TING TRA		VAL EQUIP	N PLAN AND MENT PLAN
SHEET	ΩF	SHEETS	STA	TO STA

F.A.U. RTE.	SECTION	COUNTY	SHEETS	SHI			
2719	0102N&T	соок	426	2.			
		CONTRACT	NO.	620			
ILLINOIS EED AID PROJECT							



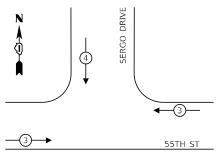
#### **LEGEND**:

**◆ \*** PROTECTED PHASE

← - (\*)- - PROTECTED/PERMITTED PHASE

\* NUMBER REFERS TO ASSOCIATED PHASE

# INITIAL TEMPORARY EMERGENCY VEHICLE PREEMPTION SEQUENCE



TRAFFIC SIGNAL								
ELECTRICAL SERVICE REQUIREMENTS								
	NO. OF	LED	%	TOTAL				
PE	LAMPS	WATTAGE	OPERATION	WATTAGE				
GNAL (RED)	10	11	50	55				
(YELLOW)	10	20	5	10				
(GREEN)	10	12	45	54				
RMISSIVE ARROW	4	10	10	4				
NTROLLER	1	100	100	100				
S	1	25	100	25				
DEO SYSTEM	1	150	100	150				
•								
•								

VILLAGE OF McCOOK 5000 GLENCOE AVENUE McCOOK, IL 60525 ENERGY SUPPLY: CONTACT: <u>ILYAS MOHIUDDIN</u>

Y SUPPLY: CONTACT: ILYAS MOHIUDDIN
PHONE: 708-235-2692
COMPANY: COMMONWEALTH EDISON
ACCOUNT NUMBER: ---

TOTAL = 398

# S W N O S W N

SERGO DR

C**→** 

#### **INITIAL TEMPORARY CABLE PLAN**

NOT TO SCALE

SCALE:

TS 11086 EAGLE 2B

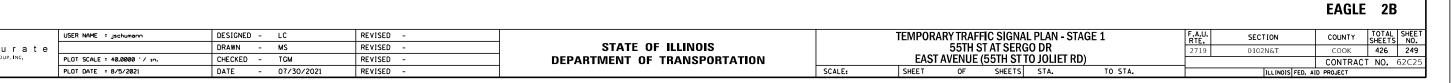


ENERGY COSTS TO:

USER NAME = jschumann	DESIGNED	-	LC	REVISED -
	DRAWN	-	MS	REVISED -
PLOT SCALE = 40.0000 '/ in.	CHECKED	-	TGM	REVISED -
PLOT DATE = 8/5/2021	DATE	-	07/30/2021	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEM	IPORARY T				N - IN <b>ITI</b> AL	F.A.U. RTE.	
	FAOTA		TAT SERG		DD)	2719	
	EAST A	VENUE (	<u>55TH ST T</u>	O JOLIEI	KD)		
	CHEET	0.5	CHECTE	CTA	TO CTA		



TS 11086

PR TEMP EASEMENT 亙` 320+00  $\circ$ 0 EX ROW TEMPORARY WIRELESS
INTERCONNECT TO
LAGRANGE RD AND SERGO DR PR PERM EASEMENT

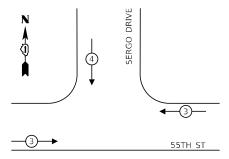
#### **LEGEND:**

**◆** PROTECTED PHASE

← - (\*)- - PROTECTED/PERMITTED PHASE

\* NUMBER REFERS TO ASSOCIATED PHASE

# TEMPORARY EMERGENCY VEHICLE PREEMPTION SEQUENCE - STAGE 1



	TRAFFIC SIGNAL										
ELECTRICA	AL SERV	/ICE RE	QUIREMEI	NTS							
	NO. OF	LED	%	TOTAL							
YPE	LAMPS	WATTAGE	OPERATION	WATTAGE							
GNAL (RED)	10	11	50	55							
(YELLOW)	10	20	5	10							
(GREEN)	10	12	45	54							
RMISSIVE ARROW	4	10	10	4							
ONTROLLER	1	100	100	100							
PS	1	25	100	25							
IDEO SYSTEM	1	150	100	150							

TOTAL = 398

ENERGY COSTS TO:

VILLAGE OF McCOOK
5000 GLENCOE AVENUE
McCOOK, IL 60525

ENERGY SUPPLY: CONTACT: ILYAS MOHIUDDIN
PHONE: 708-235-2692
COMPANY: COMMONWEALTH EDISON

SERGO DR β γ • (5) (5)—(x) > (0) **♠** ♠ ດ ≺ ఌ— (5)—(c) > (c) **♠** ♠ ⋒ ≺ ਸ਼ □ ✓ □ □ □ □ 55TH ST TEMPORARY WIRELESS א א פ• \ \ \ \ \ INTERCONNECT TO EAST AVE AND ELECTRO-MOTIVE DRIVE <del>|||-----|||</del> (5)

#### TEMPORARY CABLE PLAN - STAGE 1

SCALE:

NOT TO SCALE

TS 11086 EAGLE 2B



ACCOUNT NUMBER:

USER NAME = jschumann	DESIGNED	-	LC	REVISED -
	DRAWN	-	MS	REVISED -
PLOT SCALE = 40.0000 ' / in.	CHECKED	-	TGM	REVISED -
PLOT DATE = 8/5/2021	DATE	-	07/30/2021	REVISED -

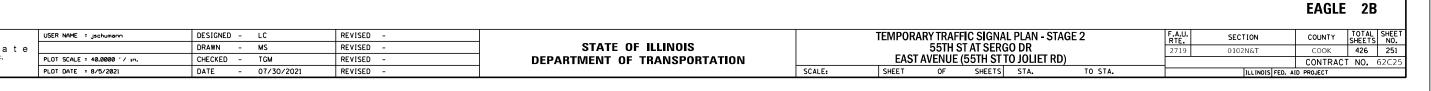
STATE	OF ILLINOIS	
DEPARTMENT	OF TRANSPORTATION	

TEM	TEMPORARY TRAFFIC SIGNAL CABLE PLAN - STAGE 1 55TH ST AT SERGO DR			F.A.U. RTE.	SECTION	COUNTY	TOTAL	SHE		
					<b>DD</b> )	2719	0102N&T	соок	426	25
	EAST A	AVENUE	(55TH ST	10 JOLIEI	RD)			CONTRAC	T NO.	62C2
	SHEET	OF	SHEETS	STA.	TO STA.		ILLINOIS FED. A	ID PROJECT		

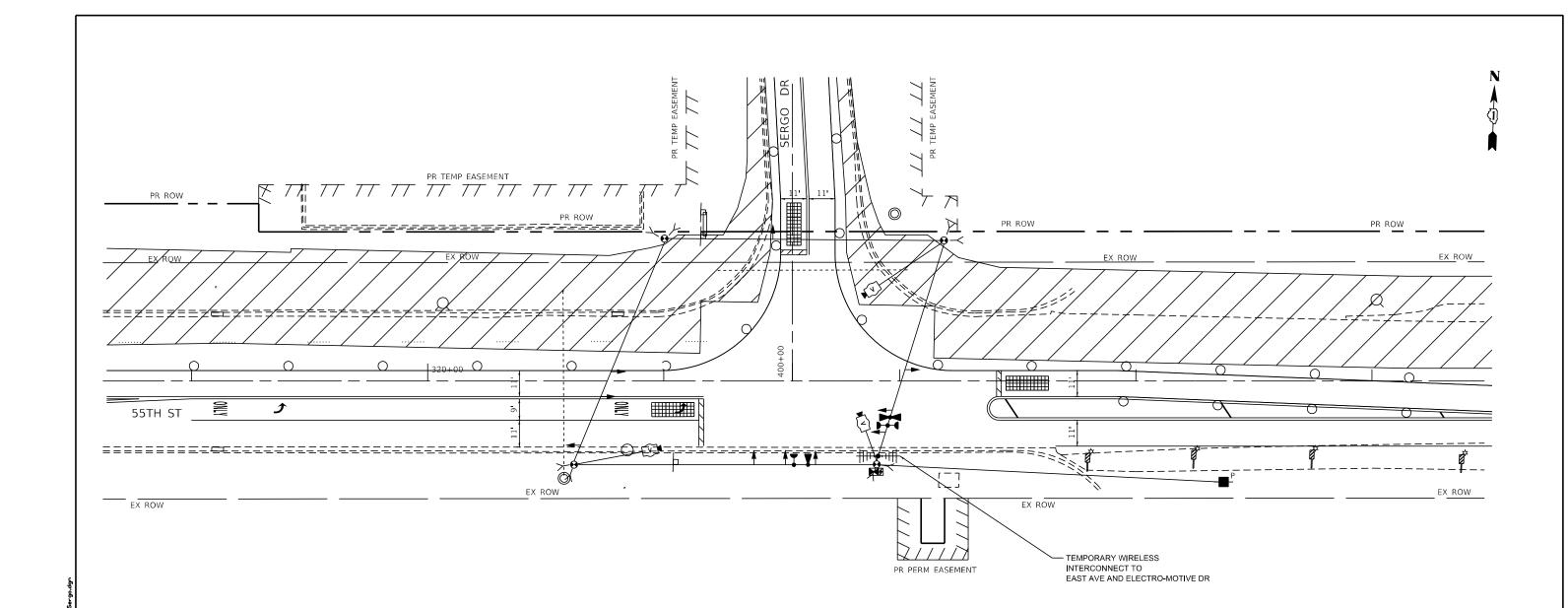
9 0

SHEET

TS



TS 11086



A C C II T

#### **LEGEND:**

**◆** PROTECTED PHASE

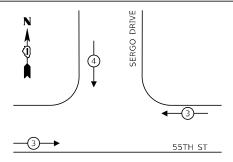
← - (\*)- - PROTECTED/PERMITTED PHASE

**◄- \*-** ► PEDESTRIAN PHASE

OL OVERLAP

\* NUMBER REFERS TO ASSOCIATED PHASE

#### TEMPORARY EMERGENCY VEHICLE PREEMPTION SEQUENCE - STAGE 2



TRAFFIC SIGNAL									
ELECTRICA	L SER\	ICE RE	QUIREME	NTS					
	NO. OF	LED	%	TOTA					

"		I NO. OF	LED	90	IOTAL
3	TYPE	LAMPS	WATTAGE	OPERATION	WATTAGE
-C2729IO	SIGNAL (RED)	10	11	50	55
	(YELLOW)	10	20	5	10
2	(GREEN)	10	12	45	54
9	PERMISSIVE ARROW	4	10	10	4
Š	CONTROLLER	1	100	100	100
	UPS	1	25	100	25
	VIDEO SYSTEM	1	150	100	150
, P					
_					
503					
3					
=				TOTAL =	398

ENERGY COSTS TO:

VILLAGE OF McCOOK 5000 GLENCOE AVENUE

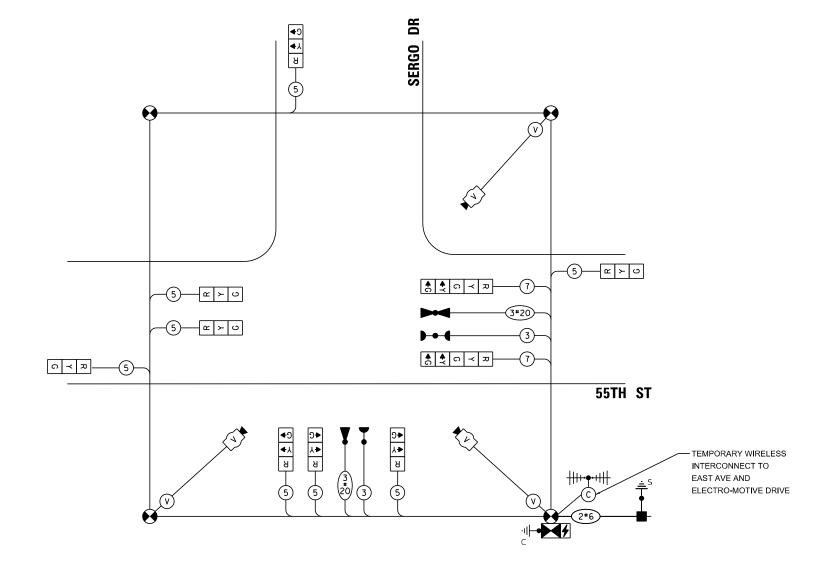
McCOOK, IL 60525

ENERGY SUPPLY: CONTACT: <u>ILYAS MOHIUDDIN</u> PHONE: <u>708-235-2692</u> COMPANY: COMMONWEALTH EDISON ACCOUNT NUMBER:

#### USER NAME = jschumann DESIGNED - LC REVISED -DRAWN - MS REVISED -PLOT SCALE = 40.0000 ' / in. CHECKED - TGM REVISED -PLOT DATE = 8/5/2021 DATE - 07/30/2021 REVISED -

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**  TEMPORARY TRAFFIC SIGNAL CABLE PLAN - STAGE 2 55TH ST AT SERGO DR EAST AVENUE (55TH ST TO JOLIET RD) SHEET

EAGLE 2B



#### TEMPORARY TRAFFIC SIGNAL CABLE PLAN - STAGE 2

NOT TO SCALE

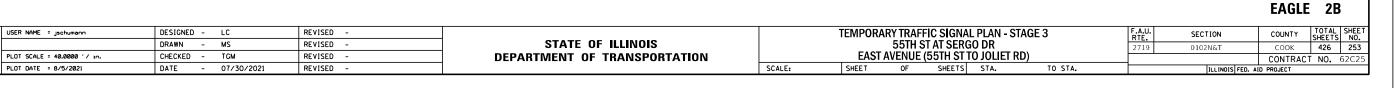
N 0 N

SHEET

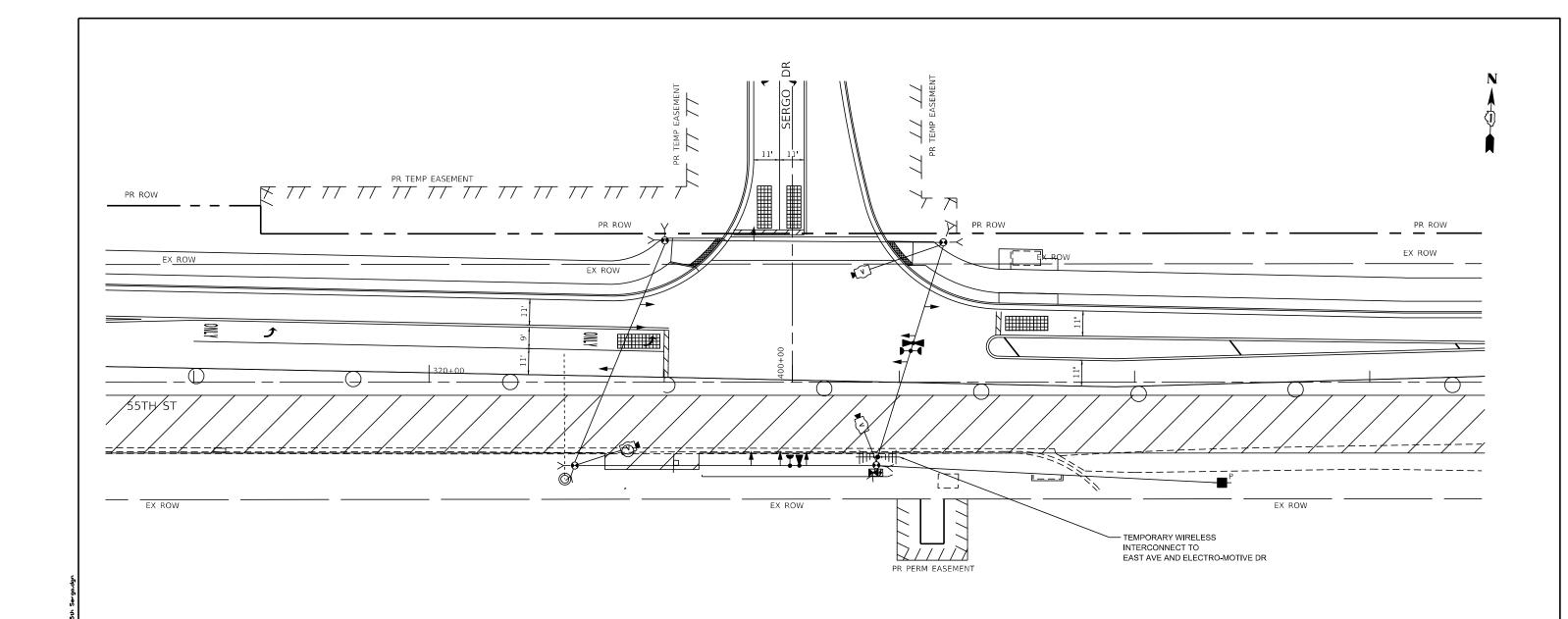
SCALE:

SHEETS STA.

SECTION 0102N&T



TS 11086



#### **LEGEND**:

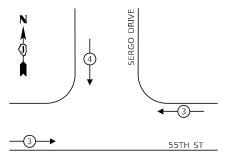
**◆** PROTECTED PHASE

← - (\*)- - PROTECTED/PERMITTED PHASE **◄- \***→ PEDESTRIAN PHASE

OL OVERLAP

\* NUMBER REFERS TO ASSOCIATED PHASE

#### TEMPORARY EMERGENCY VEHICLE PREEMPTION SEQUENCE - STAGE 3



ELECTRICA	L SERV	/ICE RE	QUIREMEI	NTS
	NO. OF	LED	%	TOTAL
TYPE	LAMPS	WATTAGE	OPERATION	WATTAG
SIGNAL (RED)	10	11	50	55.0
(YELLOW)	10	20	5	10.0
(GREEN)	10	12	45	54.0
PERMISSIVE ARROW	4	10	10	4.0
CONTROLLER	1	100	100	100
UPS	1	25	100	25
VIDEO SYSTEM	1	150	100	150

TRAFFIC SIGNAL

TOTAL = ENERGY COSTS TO:

VILLAGE OF McCOOK 5000 GLENCOE AVENUE McCOOK, IL 60525

ENERGY SUPPLY: CONTACT: <u>ILYAS MOHIUDDIN</u>

PHONE: 708-235-2692 COMPANY: COMMONWEALTH EDISON ACCOUNT NUMBER:

## SERGO DR β γ**♦** ♠ ♠ n ≺ ಸ— (5)—(E)—(5)— ♠ ♠ o ≺ ਸ਼ C↑ ₹ ₹ 5 55TH ST β γ**>** א א א **4**√ TEMPORARY WIRELESS INTERCONNECT TO EAST AVE AND (5) ELECTRO-MOTIVE DRIVE

#### TEMPORARY TRAFFIC SIGNAL CABLE PLAN - STAGE 3

NOT TO SCALE

SCALE:

TS 11086 EAGLE 2B

A A	С	С	u	r	а	t	e
		GF	ROUF	, IN	c.		

USER NAME = jschumann	DESIGNED	-	LC	REVISED -
	DRAWN	-	MS	REVISED -
PLOT SCALE = 40.0000 '/ in.	CHECKED	-	TGM	REVISED -
PLOT DATE = 8/5/2021	DATE	-	07/30/2021	REVISED -
,				

TEM	TEMPORARY TRAFFIC SIGNAL CABLE PLAN - STAGE 3 55TH ST AT SERGO DR EAST AVENUE (55TH ST TO JOLIET RD)						SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
							2719 0102N&T		426	254
	EAST.	AVENUE	(551H ST	O JOLIEI I			CONTRACT	NO.	62C25	
	SHEET OF SHEETS STA. TO STA.						ILLINOIS FED. AID PROJECT			

<u>8</u> SHT

LS

EAGLE 2B

TS 11086

	PR ROW  PR ROW	N A
	EX ROW EX ROW	EX ROW
		<del></del>
	55TH ST	
	EX ROW  TEMPORARY WIRELESS INTERCONNECT TO EAST AVE AND ELECTRO-MOTIVE DRIVE	EX ROW
p Stage 348 55th Sergo.de		

REVISED -USER NAME = jschumann DESIGNED - LC DRAWN - MS REVISED -PLOT SCALE = 40.0000 ' / 10.
PLOT DATE = 8/5/2021 CHECKED - TGM

DATE - 07/30/2021 REVISED -REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALE:

TEMPORARY TRAFFIC SIGNAL PLAN - STAGE 4
55TH ST AT SERGO DR
EAST AVENUE (55TH ST TO JOLIET RD)

SHEET OF SHEETS STA. TO TO STA.

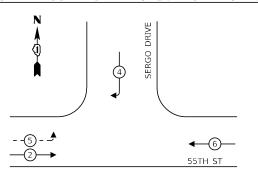
 
 CCTION
 COUNTY
 TOTAL SHEETS NO.
 SHEET NO.

 02N&T
 COOK
 426
 255

 CONTRACT NO.
 62C25

 ILLINOIS FED. AID PROJECT
 SECTION 0102N&T

#### TEMPORARY CONTROLLER SEQUENCE - STAGE 4



#### **LEGEND:**

**◆** PROTECTED PHASE

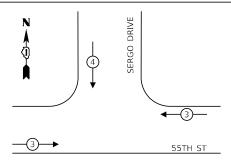
← - (\*)- - PROTECTED/PERMITTED PHASE

**◄- \*- >** PEDESTRIAN PHASE

OVERLAP OVERLAP

\* NUMBER REFERS TO ASSOCIATED PHASE

#### TEMPORARY EMERGENCY VEHICLE PREEMPTION SEQUENCE - STAGE 4



TRAFFIC SIGNAL						
<b>ELECTRICA</b>	L SER\	/ICE RE	QUIREMEI	NTS		
	NO. OF	LED	%	TOT		

,		I NO. OF	LED	%	TOTAL
	TYPE	LAMPS	WATTAGE	OPERATION	WATTAGE
יטוסגר	SIGNAL (RED)	8	11	50	44.0
	(YELLOW)	8	20	5	8.0
,	(GREEN)	8	12	45	43.2
5000	PERMISSIVE ARROW	0	10	10	0.0
Š	CONTROLLER	1	100	100	100
	UPS	1	25	100	25
	VIDEO SYSTEM	1	150	100	150
į					
ě					
_					
503					
3					
=				TOTAL =	370.2

ENERGY COSTS TO:

VILLAGE OF McCOOK 5000 GLENCOE AVENUE

McCOOK, IL 60525 ENERGY SUPPLY: CONTACT: <u>ILYAS MOHIUDDIN</u>

PHONE: <u>708-235-2692</u> COMPANY: COMMONWEALTH EDISON

ACCOUNT NUMBER:

USER NAME = jschumann DESIGNED - LC REVISED -DRAWN - MS REVISED -PLOT SCALE = 40.0000 ' / in. CHECKED - TGM REVISED -PLOT DATE = 8/5/2021 DATE - 07/30/2021 REVISED -

## STATE OF ILLINOIS

TEMPORARY TRAFFIC SIGNAL CABLE PLAN - STAGE 4 55TH ST AT SERGO DR EAST AVENUE (55TH ST TO JOLIET RD) SHEET SHEETS STA.

COUNTY TOTAL SHEET NO.

COOK 426 256 SECTION 0102N&T CONTRACT NO. 62C25

SERGO DR R ∀**≯** (5) - TEMPORARY SIGNAL HEAD DISCONNECTED AND BAGGED [n] ≺ [ℤ]——[5]— 55TH ST TEMPORARY WIRELESS (s) **\$**€ В Ч**≯** INTERCONNECT TO EAST AVE AND ELECTRO-MOTIVE DRIVE  $\begin{pmatrix} 3 \\ 20 \\ 3 \end{pmatrix}$ <del>||||•••|||</del> TEMPORARY SIGNAL HEAD -DISCONNECTED AND BAGGED

#### TEMPORARY TRAFFIC SIGNAL CABLE PLAN - STAGE 4

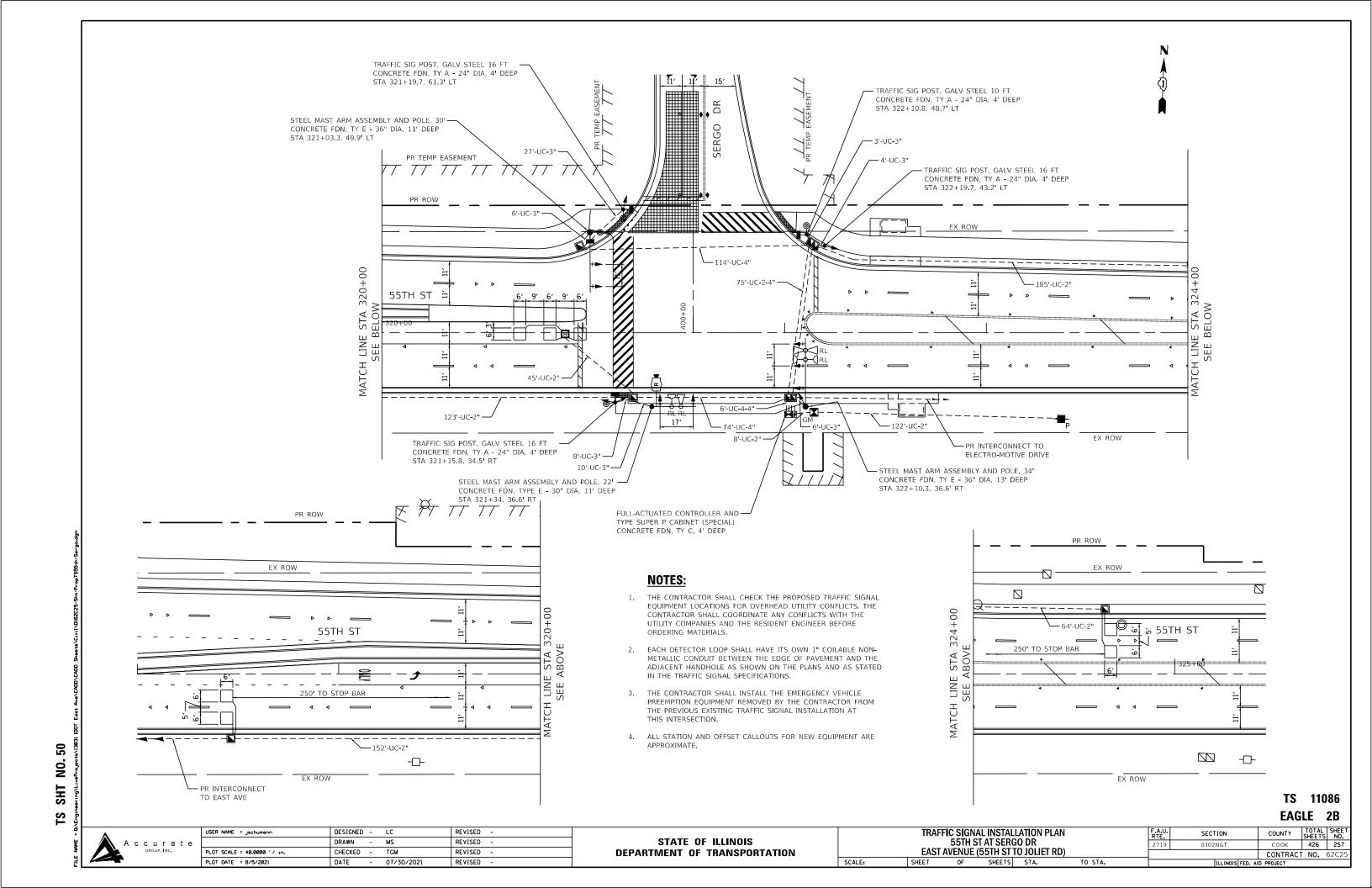
SCALE:

NOT TO SCALE

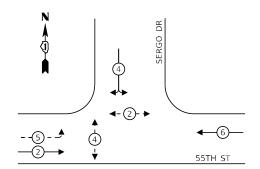
TS 11086 EAGLE 2B



**DEPARTMENT OF TRANSPORTATION** 



#### PROPOSED CONTROLLER SEQUENCE



#### **LEGEND**:

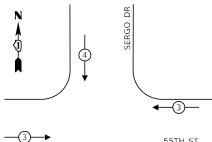
**◆** PROTECTED PHASE

← - (\*)- - PROTECTED/PERMITTED PHASE

**◄- \*- >** PEDESTRIAN PHASE

\* NUMBER REFERS TO ASSOCIATED PHASE

# PROPOSED EMERGENCY VEHICLE



## PREEMPTION SEQUENCE

<u>3</u> →	55TH ST

#### TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS NO. OF LED % TOTAL

Ľ		140.01	LLD	/0	IOIAL
2	TYPE	LAMPS	WATTAGE	OPERATION	WATTAG
29	SIGNAL (RED)	13	11	50	71.5
Ę	(YELLOW)	13	20	5	13
ؤ	(GREEN)	13	12	45	70.2
Sheets/Civil/D162C25-	PERMISSIVE ARROW	4	10	10	4
ń	PED. SIGNAL	4	20	100	80
9	CONTROLLER	1	100	100	100
Ave\CADD\CADD	UPS	1	25	100	25
Ĕ					
Ş					
Ę					
Ē					
=				TOTAL =	363.7

ENERGY COSTS TO:

VILLAGE OF McCOOK

5000 GLENCOE AVE McCOOK, IL 60525

ENERGY SUPPLY: CONTACT: <u>ILYAS MOHIUDDIN</u> PHONE: <u>708-235-2692</u>

ACCOUNT NUMBER:

COMPANY: COMMONWEALTH EDISON

USER NAME = jschumann	DESIGNED	-	LC	REVISED -
	DRAWN	-	MS	REVISED -
PLOT SCALE = 40.0000 ' / in.	CHECKED	-	TGM	REVISED -
PLOT DATE = 8/5/2021	DATE	-	07/30/2021	REVISED -

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**  CABLE PLAN, CONTROLLER SEQUENCE AND EMERGENCY VEHICLE PREEMPTION SEQUENCE - 55TH ST AT SERGO DR EAST AVENUE (55TH ST TO JOLIET RD)

E: SHEET OF SHEETS STA. TO STA.

 
 ECTION
 COUNTY
 TOTAL SHEETS NO.

 102N&T
 COOK
 426
 258

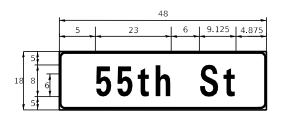
 CONTRACT NO. 62C25

 ILLINOIS FED. AID PROJECT
 SECTION 0102N&T

	. р	SERGO DR			
,	<del>-</del>		) 	``,	
	② ③ ⑦* ◎ ∪ □ ② ▲ ★ ↓			•   II·	
M·1 -	2		\$ \$ 0 < 2 − 7		INTERSECTION AND (SYSTEM) DETECTORS
	5	RL D	$\sim$	2	
	2-0-0	rl D-	0-1 3		
INTERCONNECT TO EAST AVE	5	RL RL	Э Д В	55TH ST  INTERCONNECT  36F	TO ELECTRO-MOTIVE DR
TRACER CABLE PILL	3 0 ¥ 2 ® V	$\downarrow \qquad \downarrow \qquad \downarrow \qquad \downarrow \qquad \downarrow$		TRACER CABLE	
THE ENDS OF THE TRACER CABLES SHALL BE CONTINUOUS AND EXTEND INTO THE CONTROLLER CABINETS	1*6	<del>-</del>			
	* 7 CONDUCTOR CABLE FUTURE CONSIDERATI			<u> </u>	PER P CABINET (SPECIAL)
		CABLE PLAN  NOT TO SCALE		2 1 6 S 1 G M	

TS 11086 EAGLE 2B

DESIGN	AREA	SIGN PANEL	SHEETING	QTY.
SERIES	(SQ FT)	TYPE	TYPE	REQUIRED
D	6	1	ZZ	2



DESIGN	AREA (SO FT)	SIGN PANEL	SHEETING TYPE	QTY.
SERIES D	(SQ F1) 6	1	ZZ	REQUIRED 1

#### SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNIT	TOTAL QTY
SIGN PANEL - TYPE 1	SQ FT	18
UNDERGROUND CONDUIT, GALVANIZED STEEL 2" DIA.	FOOT	701
UNDERGROUND CONDUIT, GALVANIZED STEEL 3" DIA.	FOOT	64
UNDERGROUND CONDUIT, GALVANIZED STEEL 4" DIA.	FOOT	350
HANDHOLE	EACH	4
HEAVY-DUTY HANDHOLE	EACH	1
DOUBLE HANDHOLE	EACH	2
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	756
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1006
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1284
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	627
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PR	FOOT	1646
ELECTRIC CABLE IN CONDUIT, SERVICE NO. 6 2C	FOOT	166
ELECTRIC CABLE IN CONDUIT, EQUIP. GROUNDING CONDUCTOR, NO. 6 1C	FOOT	487
TRAFFIC SIGNAL POST, GALVANIZED STEEL 10 FOOT	EACH	1
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FOOT	EACH	3
STEEL MAST ARM ASSEMBLY AND POLE, 22 FOOT	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 30 FOOT	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 34 FOOT	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	16
CONCRETE FOUNDATION, TYPE C	FOOT	4
CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	11
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	24
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	6
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	5
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	1
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED	EACH	1
PED. SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED W/COUNTDOWN TIMER	EACH	4
TRAFFIC SIGNAL BACKPLATE, LOUVERED, FORMED PLASTIC	EACH	7
INDUCTIVE LOOP DETECTOR	EACH	5
DETECTOR LOOP, TYPE I	FOOT	227
PEDESTRIAN PUSH BUTTON	EACH	4
TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT	EACH	2
RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING HANDHOLE	EACH	8
REMOVE EXISTING DOUBLE HANDHOLE	EACH	1
REMOVE EXISTING CONCRETE FOUNDATION	EACH	9
EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	230
FULL-ACTUATED CONTROLLER AND TYPE SUPER P CABINET (SPECIAL)	EACH	1
SERVICE INSTALLATION, GROUND MOUNTED, METERED	EACH	1
RADAR VEHICLE DETECTION SYSTEM, SINGLE APPROACH, STOP BAR	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1
TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1

\* 100% COST TO THE VILLAGE OF McCOOK

TS 11086 EAGLE 2B

USER NAME = jschumann DESIGNED - LC REVISED -DRAWN - MS REVISED -PLOT SCALE = 40.0000 ' / in. REVISED -PLOT DATE = 8/5/2021 REVISED -

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**  MAST ARM MOUNTED STREET NAME SIGNS AND SCHEDULE OF QUANTITIES - 55TH ST AT SERGO DR EAST AVENUE (55TH ST TO JOLIET RD)

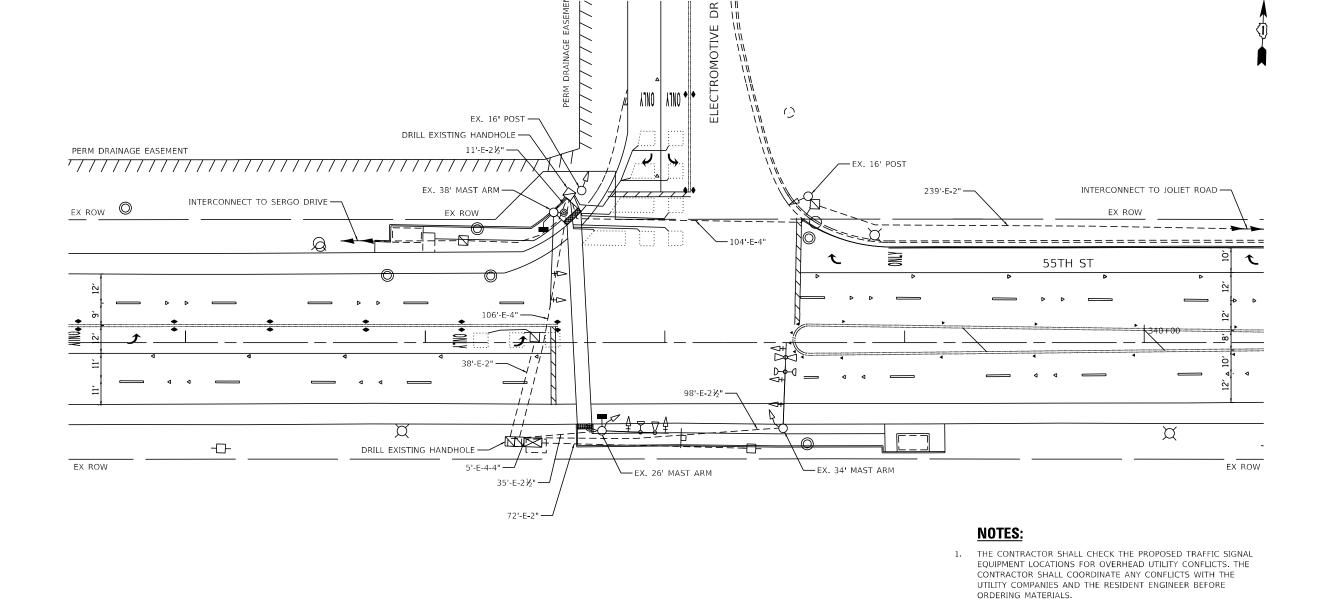
SHEET OF SHEETS STA. TO ST

 
 CTION
 COUNTY SHEETS NO.

 02N&T
 COOK
 426
 259

 CONTRACT
 NO.
 62C25

 Illinois Fed. AID
 PROJECT
 NO.
 62C25
 SECTION 0102N&T



...\_\_

2. ALL STATION AND OFFSET CALLOUTS FOR NEW EQUIPMENT ARE APPROXIMATE.

THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE" TO MATCH THE EXISTING SYSTEM.

TS 11080 EAGLE 2B

US						
	е	t	а	r	u	2
PL	GROUP, INC.					
PL						

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

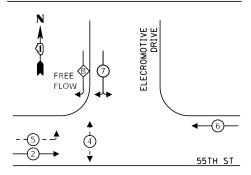
TRAFFIC SIGNAL INSTALLATION PLAN
55TH ST AT ELECTROMOTIVE DR
EAST AVENUE (55TH ST TO JOLIET RD)
SHEET OF SHEETS STA.

A.U. SECTION COUNTY TOTAL SHEETS NO. 719 0102N&T COOK 426 260

CONTRACT NO. 62C25

| ILLINOIS|FED. AID PROJECT

#### PROPOSED CONTROLLER SEQUENCE



#### **LEGEND:**

**◆** PROTECTED PHASE

← - (\*)- - PROTECTED/PERMITTED PHASE

√- (\*)- PEDESTRIAN PHASE

OL OVERLAP

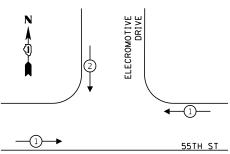
\* NUMBER REFERS TO ASSOCIATED PHASE

#### **RIGHT TURN OVERLAP** PHASE DESIGNATION:

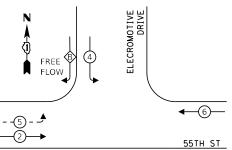
OVERLAP PERMISSIVE PROTECTED LETTER PHASE PHASE

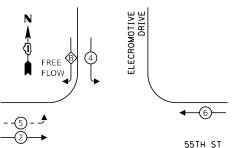
B = 7 + 5

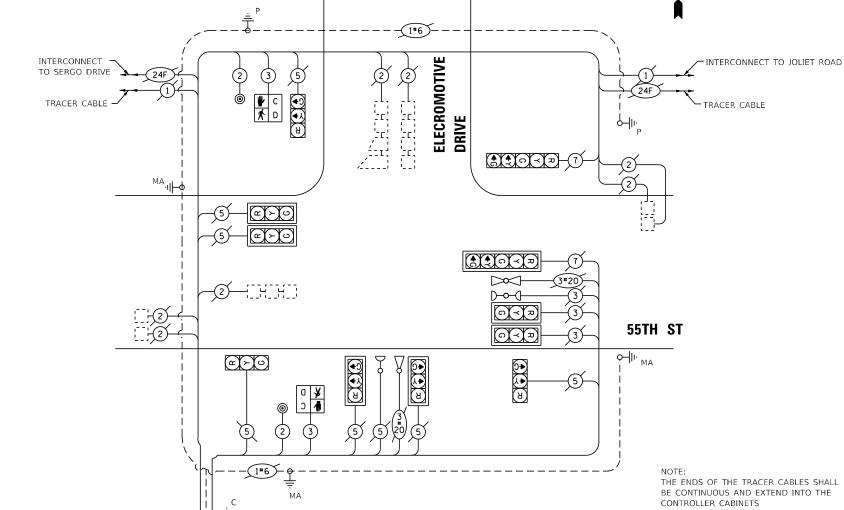
#### **EXISTING EMERGENCY VEHICLE** PREEMPTION SEQUENCE



#### **EXISTING CONTROLLER SEQUENCE**







SCHEDULE OF QUANTITIES

UNIT

FOOT

FOOT

EACH

EACH

EACH

EACH

EACH

230

240

1

ITEM DESCRIPTION

PED. SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED W/COUNTDOWN TIMER

ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C

ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C

MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION

PEDESTRIAN PUSH BUTTON

MODIFY EXISTING CONTROLLER

MODIFY EXISTING CONTROLLER CABINET

RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM LEVEL 1

#### TRAFFIC SIGNAL **ELECTRICAL SERVICE REQUIREMENTS** NO. OF LED % TOTAL

TYPE	LAMPS	WATTAGE	OPERATION	WATTAGE
SIGNAL (RED)	11	11	50	61
(YELLOW)	7	20	5	7
(GREEN)	7	12	45	38
PERMISSIVE ARROW	12	10	10	12
PED. SIGNAL	2	20	100	40
CONTROLLER	1	100	100	100
UPS	1	25	100	25
			TOTAL =	283
	SIGNAL (RED) (YELLOW) (GREEN) PERMISSIVE ARROW PED. SIGNAL CONTROLLER	SIGNAL         (RED)         11           (YELLOW)         7           (GREEN)         7           PERMISSIVE ARROW         12           PED. SIGNAL         2           CONTROLLER         1	SIGNAL         (RED)         11         11           (YELLOW)         7         20           (GREEN)         7         12           PERMISSIVE ARROW         12         10           PED. SIGNAL         2         20           CONTROLLER         1         100	SIGNAL         (RED)         11         11         50           (YELLOW)         7         20         5           (GREEN)         7         12         45           PERMISSIVE ARROW         12         10         10           PED. SIGNAL         2         20         100           CONTROLLER         1         100         100           UPS         1         25         100

ENERGY COSTS TO: ELECTRO-MOTIVE 9301 W 55TH ST

MCCOOK, IL 60525 ENERGY SUPPLY: CONTACT: <u>ILYAS MOHIUDDIN</u>

PHONE: <u>708-235-2692</u> COMPANY: COMMONWEALTH EDISON ACCOUNT NUMBER:

**CABLE PLAN** NOT TO SCALE

> TS 11080 **EAGLE 2B**

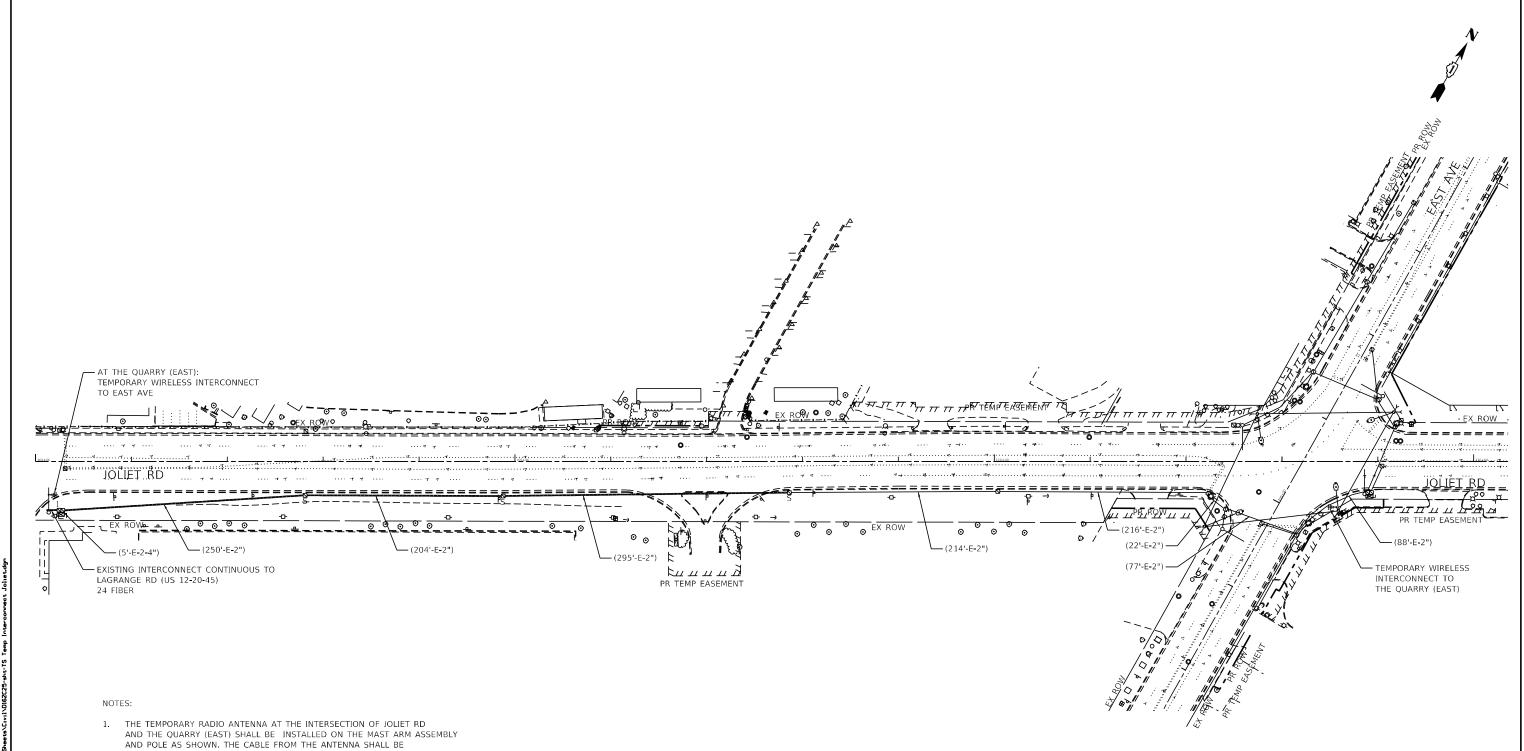
USER NAME = jschumann	DESIGNED	-	JJD	REVISED	-
	DRAWN	-	JJD	REVISED	-
PLOT SCALE = 40.0000 '/ in.	CHECKED	-	JMT	REVISED	-
PLOT DATE = 8/5/2021	DATE	-	07/30/2021	REVISED	-
,					

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

CABLE PLAN,	5	LLER SEQU 5TH ST AT E T AVENUE (	ELECTRO	MOTIVE DI	· <del>-</del>	F. R
SCALE:	SHEET	OF	SHEETS	STA.	TO STA.	7

COUNTY TOTAL SHEET NO. SECTION 0102N&T CONTRACT NO. 62C2





1. THE TEMPORARY RADIO ANTENNA AT THE INTERSECTION OF JOLIET RD AND THE QUARRY (EAST) SHALL BE INSTALLED ON THE MAST ARM ASSEMBLY AND POLE AS SHOWN. THE CABLE FROM THE ANTENNA SHALL BE INSTALLED IN THE EXISTING CONDUITS BETWEEN THE ANTENNA AND THE EXISTING CONTROLLER. THE ANTENNA AND ALL ASSOCIATED CABLES SHALL BE REMOVED UPON COMPLETION OF THE PROPOSED FIBER OPTIC INTERCONNECT SYSTEM. ANY HOLES IN THE MAST ARM SHALL BE PLUGGED. ALL OF THIS WORK IS INCLUDED AS PART OF THE TEMPORARY TRAFFIC SIGNAL INSTALLATION.

EAGLE 2B

A A	С	С	u	r	а	t	е
		GF	ROUF	, IN	c.		

USER NAME = jschumann	DESIGNED	-	LC	REVISED -
	DRAWN	-	MS	REVISED -
PLOT SCALE = 100.0000 ' / 10.	CHECKED	-	TGM	REVISED -
PLOT DATE = 8/5/2021	DATE	-	07/30/2021	REVISED -
				,

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

SCALE:

TEMPORARY TRAFFIC SIGNAL INTERCONNECT PLAN - I							
	EAST	AVENUE	(55TH ST	TO JOLIE	T RD)		
	SHEET	ΛF	SHEETS	STA	TO STA		

RTE.	SECTION	COUNTY	SHEETS	NO.
2719	0102N&T	COOK	426	262
		CONTRACT	NO.	62C2
	THE TWO IS SEEN AS	ID DOO IECT		

TS SHT NO. 59

Accurate

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED TRAFFIC SIGNAL INTERCONNECT PLAN - I

EAST AVENUE (55TH ST TO JOLIET RD)

SHEET OF SHEETS STA. TO STA.

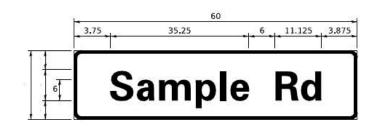
OF SHEETS STA.

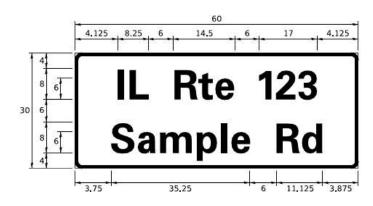
PLOT DATE = 8/5/2021

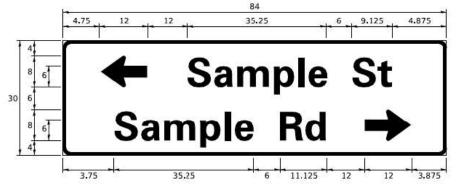
- 07/30/2021

REVISED -

#### SIGN PANEL - TYPE 1 OR TYPE 2







DESIGN	(SQ FT)	SIGN PANEL	SHEET ING	OTY.
SERIES		TYPE	TYPE	REQUIRED
D OR C		1 OR 2	ZZ	. *

# COMMON STREET NAME ABBREVIATIONS AND WIDTHS

NAME	ADDDEWATION	WIDTH	(INCH)
NAME	ABBREVATION	SERIES "C"	SERIES "D"
AVENUE	Ave	15.000	18, 250
BOULEVARD	Blvd	17. 125	20,000
CIRCLE	Clr	11.125	13.000
COURT	Ct	8. 250	9.625
DRIVE	Dr	8. 625	10.125
HIGHWAY	Hwy	18.375	22.000
ILLIN01S	IL	7. 000	8. 250
LANE	Ln	9, 125	10, 750
PARKWAY	Pkwy	23. 375	27. 375
PLACE	PI	7. 125	7. 750
ROAD	Rd	9. 625	11.125
ROUTE	Rte	12.625	14.500
STREET	St	8.000	9. 125
TERRACE	Ter	12,625	14.625
TRAIL	Tr	7, 750	9, 125
UNITED STATES	US	10.375	12.250

#### **GENERAL NOTES**

- 1. WHERE MAST ARM MOUNTED STREET NAME SIGNS ARE SPECIFIED, THE MAST ARM ASSEMBLY AND POLES SHALL BE DESIGNED TO SUPPORT THE LOADINGS CALLED FOR ON STANDARDS 877001, 877002, 877006, 877011 AND 877012, AS APPLICABLE, PLUS TWO (2) SIGN PANELS 2'-6" x 8'-0" MOUNTED AS SHOWN. THE DESIGN SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CURRENT STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS" AS PUBLISHED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS FOR 80 M.P.H. WIND VELOCITY.
- ALL SIGNS SHALL CONSIST OF A WHITE LEGEND AND BORDER (TYPE ZZ SHEETING) ON A GREEN BACKGROUND (TYPE ZZ SHEETING)
- 3. THE SIGN LENGTH SHALL BE IN 6-INCH INCREMENTS, BUT THE OVERALL LENGTH SHALL NOT EXCEED 8-0". ALL BORDERS IF POSSIBLE, BUT MAY BE REDUCED TO 5" WHEN SPACING IS CRITICAL. A MINIMUM OF 2-1/2" SHALL BE INCLUDED BETWEEN THE WORD AND THE RIGHT AND LEFT EDGES OF THE SIGN.
- 4. A PREFERRED METHOD FOR THE SIGN DESIGN IS TO USE SERIES "D" LETTER ON A ONE-LINE SIGN 18" IN HEIGHT AND A MAXIMUM OF 8"-0" IN WIDTH. IF SERIES "D" DOES NOT FIT ON A 8"-0" SIGN, THEN SERIES "C" SHOULD BE TRIED. IF SERIES "C" DOES NOT FIT ON A 8"-0" SIGN, A 30" HIGH TWO-LINE SIGN CAN BE USED. THE CROSSROAD DESIGNATION AS TO STREET, AVENUE, ETC. SHOULD BE SPELLED OUT ON THE SECOND LINE, IF THE ABBREVIATION CANNOT FIT ON THE FIRST LINE.
- LED ILLUMINATED STREET NAME SIGNS CAN BE USED IN PLACE OF REGULAR SIGN PANELS BUT ANY SPECIAL WORDING AND SYMBOLOGY MUST BE APPROVED BY THE DEPARTMENT. GENERAL DESIGN REQUIREMENT AS LISTED ABOVE (COLOR, FONT, SIZE, ETC.) MUST BE FOLLOWED.
- 6. SIGNFIX ALUMINUM CHANNEL FRAMING SYSTEM SHALL BE USED FOR ALL SIGNS ATTACHED TO SIGNAL POLES AND POSTS.

LOCAL SUPPLIERS: PARTS LISTING:

 J.O. HERBERT COMPANY, INC MIDLOTHIAN, VA

- WESTERN REMAC, INC.

WOODRIDGE, IL

SIGN CHANNEL SIGN SCREWS

BRACKETS

PART #HPN053 (MED. CHANNEL) 1/4" x 14 x 1" H.W.H. #3 SELF TAPPING WITH NEOPRENE WASHER

PART #HPN034 (UNIVERSAL)

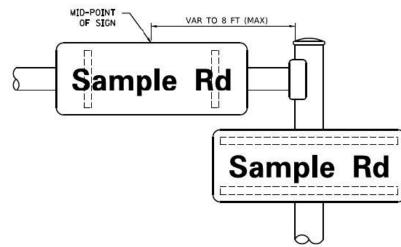
CHANNEL CLAMPS WITH STAINLESS STEEL STRAPPING

SCALE:

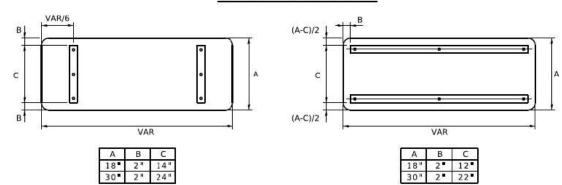
OTHER BRANDS OF MOUNTING HARDWARE ARE ACCEPTABLE, BASED UPON THE DEPARTMENT'S APPROVAL AND COMPATIBILITY WITH THE CHANNEL/BRACKET OF THE ABOVE PRODUCT.

#### MOUNTING LOCATION

ARM OR POLE MOUNTED



#### SUPPORTING CHANNELS



#### STANDARD ALPHABETS SPACING CHART

(8") UPPER CASE AND (6") LOWER CASE

	FHWA SEF	RIES "C"		FHWA SERIES "D"				
CHARACTER	LEFT SPACING (INCH)	WIDTH (INCH)	RIGHT SPACING (INCH)	CHARACTER	LEFT SPACING (INCH)	WIDTH (INCH)	RIGHT SPACING (INCH)	
A	0. 240	5. 122	C. 240	Α	0. 240	6.804	0. 240	
В	0.880	4.482	C. 480	В	0.960	5, 446	0.400	
С	0. 720	4.482	C. 720	C	0.800	5, 446	0, 800	
D	0.880	4.482	C. 720	D	0.960	5. 446	0.800	
_ E	0.880	4.082	0.480	E	0.960	4, 962	0.400	
F	0.880	4. 082	C. 240	F	0.960	4, 962	0. 240	
G	0. 720	4. 482	C. 720	G	0.800	5, 446	0.800	
H	0.880	4. 482	C. 880	H I	0.960	5, 446	0.960	
J	0.880	1. 120	C. 880	J	0.960	1. 280 5. 122	0.960	
K	0. 880	4. 482	C. 480	ĸ	0. 960	5. 604	0.400	
L	0.880	4.082	C. 240	L	0. 960	4. 962	0. 240	
M	0.880	5. 284	C. 880	М	0. 960	6. 244	0.960	
N	0.880	4.482	C. 880	N	0.960	5, 446	0.960	
0	0, 720	4. 722	C. 720	0	0, 800	5, 684	0.800	
Р	0, 880	4.482	C. 720	Р	0.960	5, 446	0, 240	
٥	0. 720	4.722	C. 720	Q	0.800	5. 684	0.800	
R	0.880	4.482	C. 480	R	0.960	5. 446	0.400	
S	0.480	4. 482	C. 480	5	0.400	5, 446	0.400	
T	0. 240	4.082	C. 240	Т	0. 240	4. 962	0.240	
U	0,880	4. 482	C. 880	U	0.960	5, 446	0.960	
V	0. 240	4.962	C. 240	V	0. 240	6. 084	0. 240	
X	0. 240	6.084 4.722	C. 240	×	0. 240	7. 124 5. 446	0. 240	
Ŷ	0. 240	5. 122	C. 240	Ŷ	0. 240	6. 884	0. 240	
Z	0. 480	4. 482	C. 480	Z	0.400	5. 446	0.400	
0	0. 320	3.842	0.640	a	0. 400	4, 562	0. 720	
ь	0, 720	4.082	C. 480	b	0.800	4, 802	0, 480	
С	0.480	4.002	C. 240	¢	0.480	4. 722	0. 240	
d	0.480	4.082	C. 720	d	0.480	4. 802	0.800	
е	0.480	4.082	C. 320	e	0.480	4. 722	0.320	
f	0. 320	2. 480	C. 160	f	0. 320	2, 882	0.160	
g	0.480	4.082	C. 720	g	0.480	4. 802	0.800	
h I	0, 720	4. 082	C. 640	h	0.800	4, 722	0, 720	
i	0.720	1. 120 2. 320	C. 720		0.800	1. 280 2. 642	0.800	
k	0.720	4. 322	C. 160	k	0.800	5, 122	0.160	
-i	0. 720	1. 120	C. 720		0.800	1.280	0. 800	
m	0. 720	6.724	C. 640	m	0.800	7, 926	0.720	
n	0, 720	4.082	C. 640	n	0, 800	4, 722	0.720	
0	0.480	4.082	C. 480	0	0.480	4, 882	0.480	
P	0. 720	4.082	C. 480	р	0.800	4. 802	0.480	
q	0.480	4. 082	C. 720	q	0.480	4. 802	0.800	
٦	0. 720	2.642	C. 160	r	0.800	3. 042	0.160	
s	0. 320	3. 362	C. 240	5	0. 320	3, 762	0. 240	
t	0,080	2.882	C. 080	t	0.080	3, 202	0.080	
U	0.640	4.082	C. 720	u	0.720	4. 722	0.800	
V	0.160	4.722	C. 160	V	0.160	5. 684	0.160	
×	0.160 0.000	7. 524 5. 202	C. 160 C. 000	w x	0.160	9. 046 6. 244	0.160	
30.77 95	0.160	4. 962	C. 160	y	0.160	6.004	0.160	
y z	0, 240	3. 362	C. 240	z	0. 240	4, 002	0. 240	
1	0. 720	1.680	C. 880	1	0. 800	2.000	0. 960	
2	0. 480	4. 482	C. 480	2	0. 800	5. 446	0.800	
3	0.480	4.482	C. 480	3	1.440	5. 446	0.800	
4	0. 240	4.962	C. 720	4	0.160	6. 004	0.960	
5	0.480	4.482	C. 480	5	0.800	5, 446	0.800	
6	0. 720	4.482	C. 720	6	0.800	5, 446	0.800	
7	0. 240	4.482	C. 720	7	0.560	5, 446	0,560	
8	0.480	4.482	C. 480	8	0.800	5. 446	0.800	
9	0.480	4.482	C. 480	9	0.800	5. 446	0.800	
0	0. 720	4. 722	C. 720	0	0.800	5. 684	0.800	
• • • • • • • • • • • • • • • • • • •	0. 240	2.802	C. 240	(##)	0. 240	2. 802	0. 240	

USER NAME = footemj	DESIGNED - LP/	P/IP REVISED - LP 07/01/2015	Š
	DRAWN - LP	P REVISED -	
PLOT SCALE = 50,0000 * / In.	CHECKED - IP	REVISED -	
PLOT DATE - 3/4/2019	DATE - 10	0/01/2014 REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

NO. 64

SHT

PLOT DATE = 3/4/2019

DATE -

REVISED -

AND THE INSTALLATION OF THE CONDUIT BUSHING SHALL BE INCIDENTAL TO THE HANDHOLE. - EXISTING CONDUIT TO REMAIN BUSHING \_\_\_\_\_\_ PLAN

# HANDHOLE TO INTERCEPT EXISTING CONDUIT

COUNTY TOTAL SHEET NO. SECTION DIDZNAT DEPARTMENT OF TRANSPORTATION TS-03 CONTRACT NO. 62C25 SCALE: SHEET OF SHEETS STA.

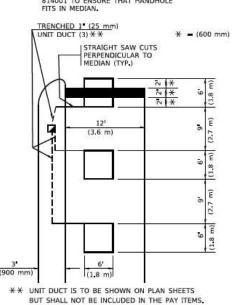
# LOOPS NEXT TO SHOULDERS PROVIDE A PAVEMENT REPLACEMENT NOTE WHICH SHOULD EQUAL 3' (900 mm) X WIDTH OF PAVED SHOULDER. NON-PAVED SHOULDER 5. (1.5 m) (1.8 m) (1.5 m) 11" (25 mm) UNIT DUCT-TRENCHED (3.0 m) TO E/P \*\* \* = (600 mm) \* \* UNIT DUCT IS TO BE SHOWN ON PLAN SHEETS

BUT SHALL NOT BE INCLUDED IN THE PAY ITEMS.

#### LEFT TURN LANES WITH MEDIANS VOLUME DENSITY ("FAR OUT" DETECTION) ON SAME APPROACH

(PROTECTED / PERMITTED LEFT TURN PHASING) HANDHOLE LOCATION MAY

VARY DEPENDING ON GEOMETRICS AND DESIGN OF TRAFFIC SIGNALS. HEAVY-DUTY HANDHOLES TO BE USED WHEN THE MEDIAN IS MOUNTABLE, REFER TO STANDARD 814001 TO ENSURE THAT HANDHOLE



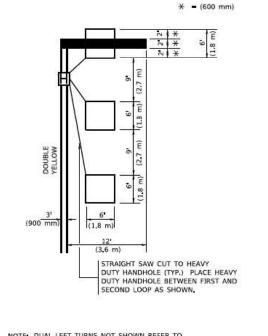
NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO

PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

#### LEFT TURN LANES WITHOUT MEDIANS

VOLUME DENSITY ("FAR OUT" DETECTION) ON SAME APPROACH

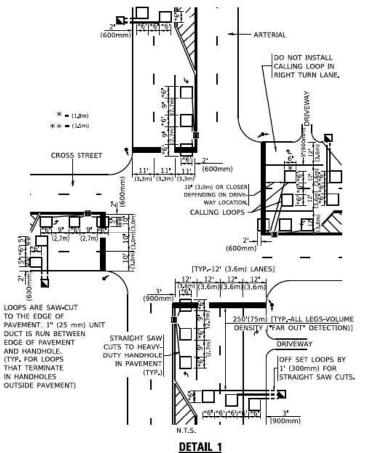
(PROTECTED / PERMITTED LEFT TURN PHASING)

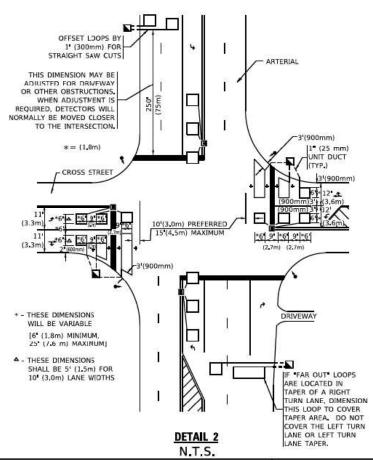


NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

SCALE: NONE

#### ARTERIAL-VOLUME DENSITY ("FAR OUT" DETECTION) ARTERIAL-VOLUME DENSITY ("FAR OUT" DETECTION) CROSS STREET-NON VOLUME DENSITY ("FAR OUT" DETECTION) CROSS STREET-NON VOLUME DENSITY ("UPTIGHT" PRESENCE DETECTION)





NOTES:

#### VEHICLES LOOP DETECTORS

- \* ALL LEAD IN CABLE SHALL BE TWO CONDUCTOR NO. 14 TWISTED,
- \* EACH DETECTOR LOOP SHALL HAVE ITS OWN SAW CUT FROM THE LOOP TO THE EDGE OF PAVEMENT OR TO A HANDHOLE IN THE
- \* EACH DETECTOR LOOP SHALL HAVE ITS OWN ONE INCH (25 mm) UNIT DUCT BETWEEN THE EDGE OF PAVEMENT AND THE FIRST HANDHOLE OR JUNCTION BOX, EACH UNIT DUCT RUN SHALL BE SHOWN ON THE PLANS BY THE DESIGNER, BUT SHALL NOT BE PAID FOR SEPARATLY. THIS ITEM IS INCIDENTAL TO THE PAY ITEM FOR DETECTOR LOOPS.
- \* ONE DIMENSION OF ALL DETECTOR LOOPS SHALL BE SIX FEET
- \* EACH LANE OF NON-LOCKING, PRESENCE DETECTION AND EACH LANE OF A DOUBLE LEFT TURN LANE REQUIRES A SEPARATE INDUCTIVE LOOP DETECTOR AND LEAD IN CABLE.
- \* WHEN NON-LOCKING, PRESENCE DETECTION IS USED, MORE THAN ONE LOOP PER LANE IS REQUIRED BEHIND THE STOP BAR (i.e. 1-1/2, 1-3/4, 2).
- \* WHEN SYSTEM LOOPS ARE REQUIRED ON AN APPROACH OF AN INTERSECTION, THE LOOPS USED FOR VOLUME DENSITY AND INTERSECTION TIMING SHALL ALSO BE USED AS SYSTEM DETECTORS. EACH ONE OF THESE TYPE OF LOOPS REQUIRES A SEPARATE TWO CONDUCTOR NO. 14 TWISTED SHIELDED CABLE AND A SEPARATE INDUCTIVE LOOP DETECTOR WHEN NEW CONTROLLERS ARE UTILIZED. THE DESIGNER SHALL LABEL THESE TYPES OF LOOPS AS "INTERSECTION AND SAMPLING (SYSTEM) DETECTORS\* ON THE SIGNAL LAYOUT, THE INTERCONNECT PLAN AND THE SYSTEM CABLE PLAN. WHEN AN EXISTING CONTROLLER IS UTILIZED FOR THIS TYPE OF DETECTION, THE PAY ITEM "INDUCTIVE LOOP DETECTOR WITH SYSTEM OUTPUT" SHOULD BE USED.

#### PLACEMENT OF DETECTORS

THE FOLLOWING FIGURES REPRESENT THE MOST COMMON DETECTOR LOOP LOCATIONS AND SIZES. ADJUSTMENTS WILL BE NECESSARY FOR SPECIFIC GEOMETRIC CONSIDERATIONS.

LOCATIONS AND DEMENSIONS OF DETECTOR LOOPS ARE REQUIRED ON ALL SIGNAL LAYOUT PLAN SHEETS.

"FAR OUT" DETECTION REFERS TO LOCKING, PRESENCE TYPE DETECTION LOCATED IN THRU LANES, RIGHT TURN LANES, AND RIGHT TURN LANE TAPER AREAS (IF APPLICABLE), USUALLY 250' (75 m) IN ADVANCE OF STOP BARS, "UPTIGHT" DETECTION REFERS TO NON-LOCKING PRESENCE TYPE DETECTION LOCATED IN ALL LANES AND 10'-15' (3.0 m-4.5 m) BEHIND THE CROSSING STREET'S EDGE OF PAVEMENT EXTENDED.

ALL DETAILS AND NOTES SHOWN ARE FROM THE I,D,O,T, DISTRICT 1 TRAFFIC SIGNAL DESIGN GUIDELINES DATED JANUARY 1995

THIS DRAWING HAS BEEN PREPARED TO ASSIST THE RESIDENT ENGINEER FOR ALL ROADWAY RESURFACING OR S.M.A.R.T. PROJECTS WHERE THE DIMENSIONS ARE NOT SHOWN ON THE PLANS AND THE FINAL LOCATIONS FOR CROSSWALKS OR STOP BARS ARE NOT DETERMINED.

N.T.S. DESIGNED -USER NAME = footemj REVISED -DRAWN -REVISED -CHECKED R.K.F. REVISED -REVISED -PLOT DATE - 3/4/2019 DATE

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DISTRICT 1 - DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING OF 1 SHEETS STA. TO STA.

SECTION COUNTY 426 272 DIDZNAT CDDK CONTRACT NO. 62C2 TS-07

#### LIGHTING NOTES:

- THE CONTRACTOR SHALL VERIFY ALL OF THE INFORMATION SHOWN IN THE CONTRACT DRAWINGS WHICH AFFECT THE WORK UNDER THIS CONTRACT.
- 2. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ASCERTAIN EXISTING FIELD CONDITIONS BEFORE BIDDING ON THE PROJECT
- 3. ALL NEW CONDUITS, UNIT DUCTS, DIRECT BURIAL CABLES. AND APPURTENANCES ARE INDICATED DIAGRAMMATICALLY ON THE DRAWINGS. THE ACTUAL LOCATIONS IN THE FIELD SHALL MEET THE APPROVAL OF THE ENGINEER.
- 4. THE ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE IDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND ASSOCIATED SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS (LATEST EDITION).
- 5. ALL LUMINAIRES SHALL BE ORIENTED WITH THE OPTICS PERPENDICULAR TO THE ROADWAY UNLESS OTHERWISE INDICATED OR DIRECTED BY THE ENGINEER. THIS WORK SHALL BE CONSIDERED INCLUDED IN THE APPLICABLE PAY ITEMS. SEPARATE PAYMENT WILL NOT BE MADE.
- 6. CONDUIT DUCTS SHALL BE INSTALLED AT A MINIMUM 30" DEPTH BELOW GRADE AND POSITIONED IN THE FIELD TO AVOID CONFLICT WITH ROADWAY UNDERDRAINS AND OTHER EXISTING AND PROPOSED UTILITIES. THE CONTRACTOR SHALL INCREASE DEPTH OF UNIT DUCT AND CONDUIT AS REQUIRED AT NO ADDITIONAL COST. THE CONTRACTOR SHALL COORDINATE RACEWAY DEPTH WITH THE ELECTRICAL DETAILS AND THE ENGINEER.
- 7. WHERE THE CONTRACTOR'S EXCAVATION MEETS AN OBSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE ENGINEER FOR DIRECTION IN WRITING PRIOR TO EXCAVATION. IF DAMAGE OCCURS, THE CONTRACTOR SHALL RESTORE THE DAMAGE TO EXISTING SYSTEMS OR UTILITIES AND REMOVE EXISTING OBSTRUCTIONS AND FOUNDATIONS TO THE SATISFACTION OF THE ENGINEER. THIS WORK SHALL BE CONSIDERED INCLUDED IN THE COST OF THE APPROPRIATE PAY ITEM.
- 8. ALL THE FOUNDATIONS SHALL INCLUDE A GROUND ROD PER STANDARD DETAIL BE-300 AND STANDARD SPECIFICATION SECTION 806. GROUND ROD SHALL BE INCLUDED IN THE COST OF THE POLE FOUNDATION PAY ITEM.
- 9. POLE SETBACKS SHALL NOT BE LESS THAN 3 FEET FROM FACE OF CURB (FOC) TO CENTER OF POLE.
- 10. PROPOSED CIRCUITS ARE #6 CONDUCTORS WITH #8 GROUND OR 4" CONDUCTORS WITH #6 GROUND OPERATING AT 240/480 VOLTS, SINGLE PHASE.

### LIGHTING SEQUENCE MOT STAGES

### STAGE 1:

1. NO LIGHTING WORK.

### STAGE 2:

- 1. REMOVE EXISTING POLES, FOUNDATIONS AND WIRING IN WORK ZONES.
- 2. KEEP EXISTING LIGHTING OPPOSITE WORK ZONES IN SERVICE FOR TEMPORARY LIGHTING OF ROADWAY OPEN TO TRAFFIC.
- 3. INSTALL NEW LIGHTING AND WIRING IN WORK ZONES.
- EXISTING LIGHTING SHALL REMAIN IN OPERATION AT THE JOLIET ROAD AND W. 55TH STREET INTERSECTION UNTIL THE PROPOSED LIGHTING AT THE INTERSECTION IS IN OPERATION.

### STAGE 3:

- 1. REMOVE EXISTING POLES, FOUNDATIONS AND WIRING IN WORK ZONES.
- NEW LIGHTING INSTALLED DURING STAGE 1 SHALL BE IN SERVICE FOR LIGHTING LANES OPEN TO TRAFFIC. PROVIDE TEMPORARY WIRING WHERE REQUIRED FOR THE NEW LIGHTING.
- 3. INSTALL NEW LIGHTING AND WIRING IN WORK ZONES.
- 4. EXISTING LIGHTING SHALL REMAIN IN OPERATION AT THE JOLIET ROAD AND W. 55TH STREET INTERSECTION UNTIL THE PROPOSED LIGHTING AT THE INTERSECTION IS IN OPERATION.

### STAGE 4:

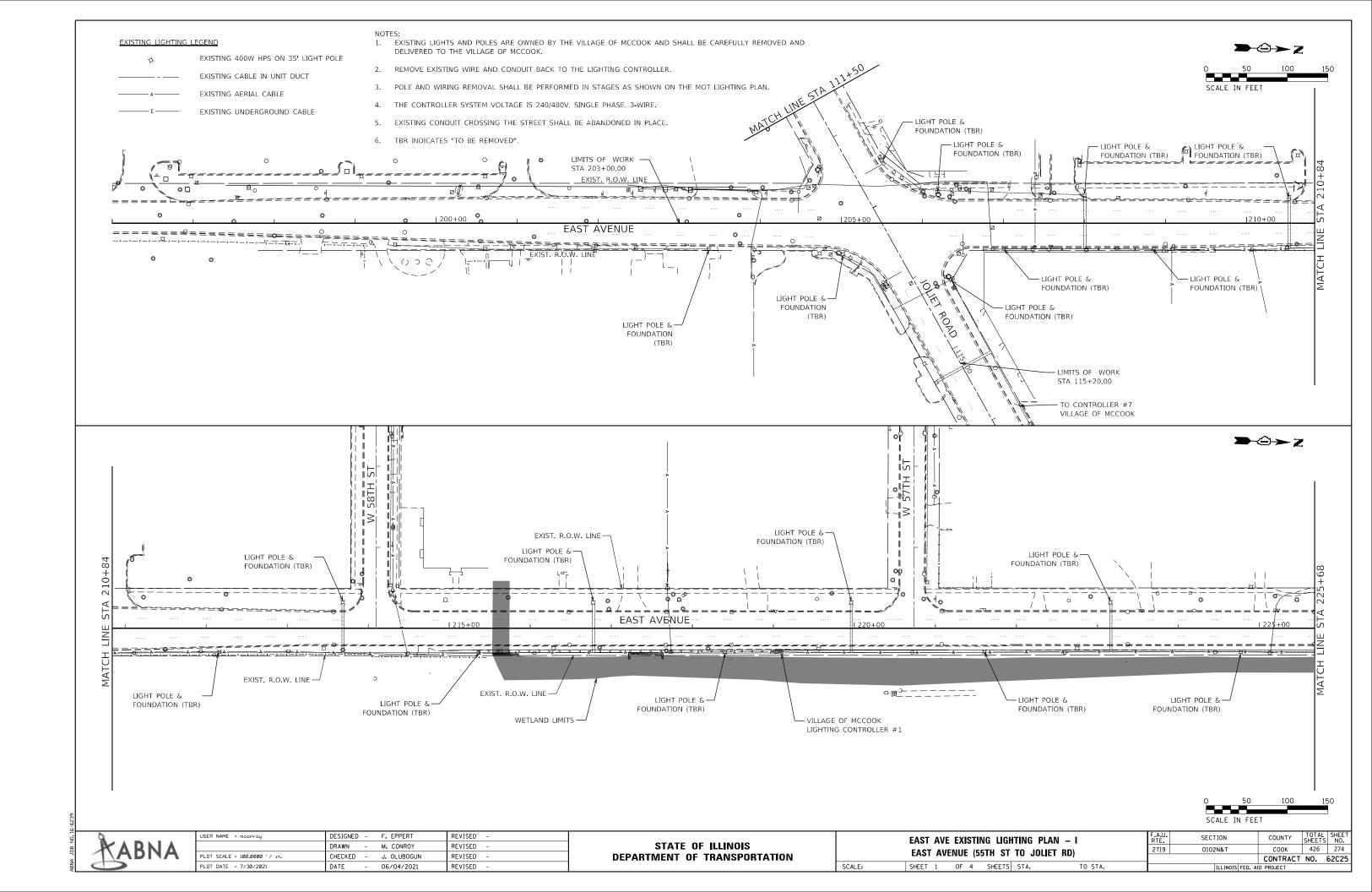
1. NO LIGHTING WORK.

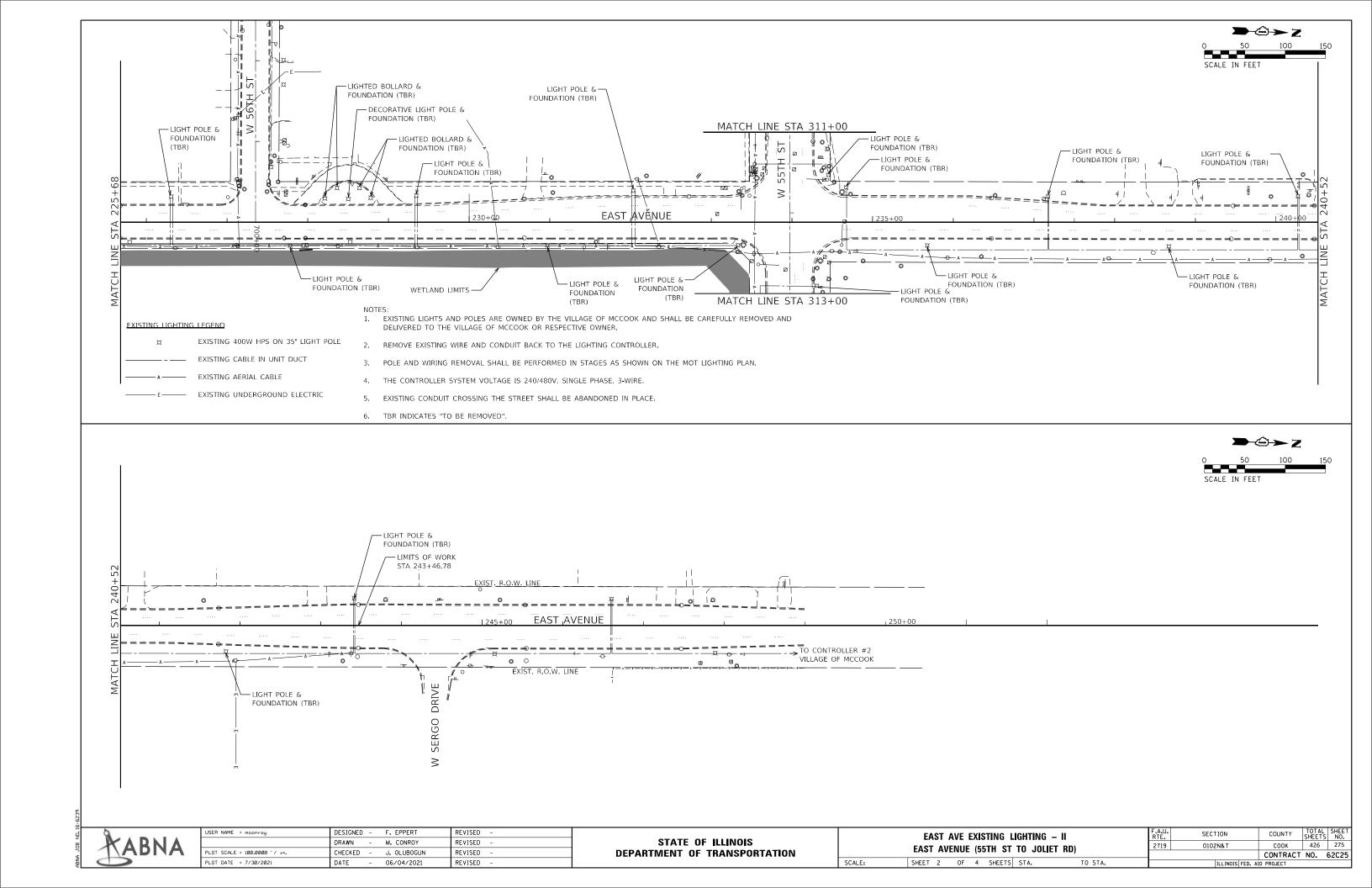
AA	BNA

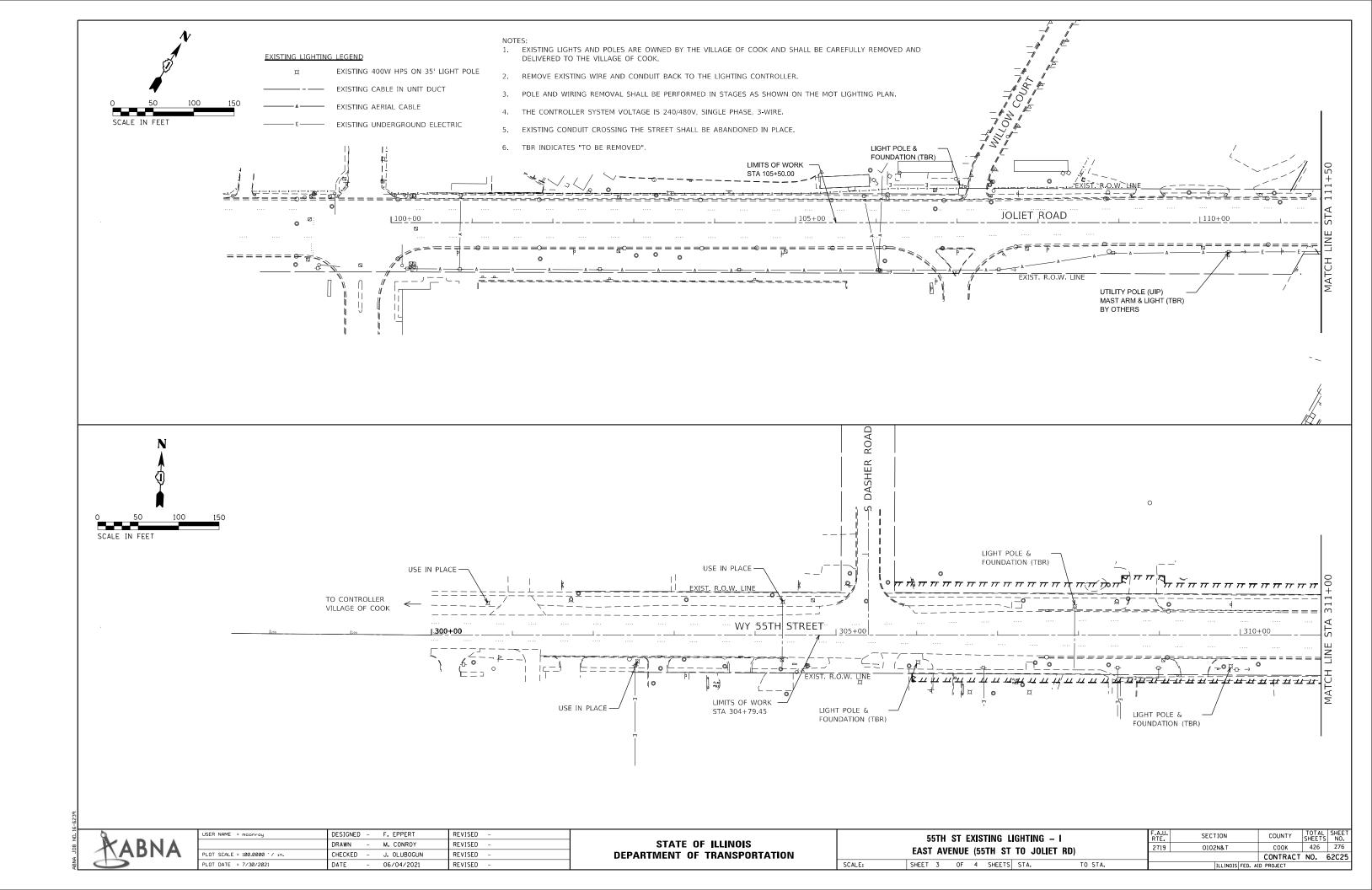
USER NAME = mconroy	DESIGNED	-	F. EPPERT	REVISED -
	DRAWN	-	M. CONROY	REVISED -
PLOT SCALE = 100.0000 ' / in.	CHECKED	-	J. OLUBOGUN	REVISED -
PLOT DATE = 7/30/2021	DATE	-	06/04/2021	REVISED -

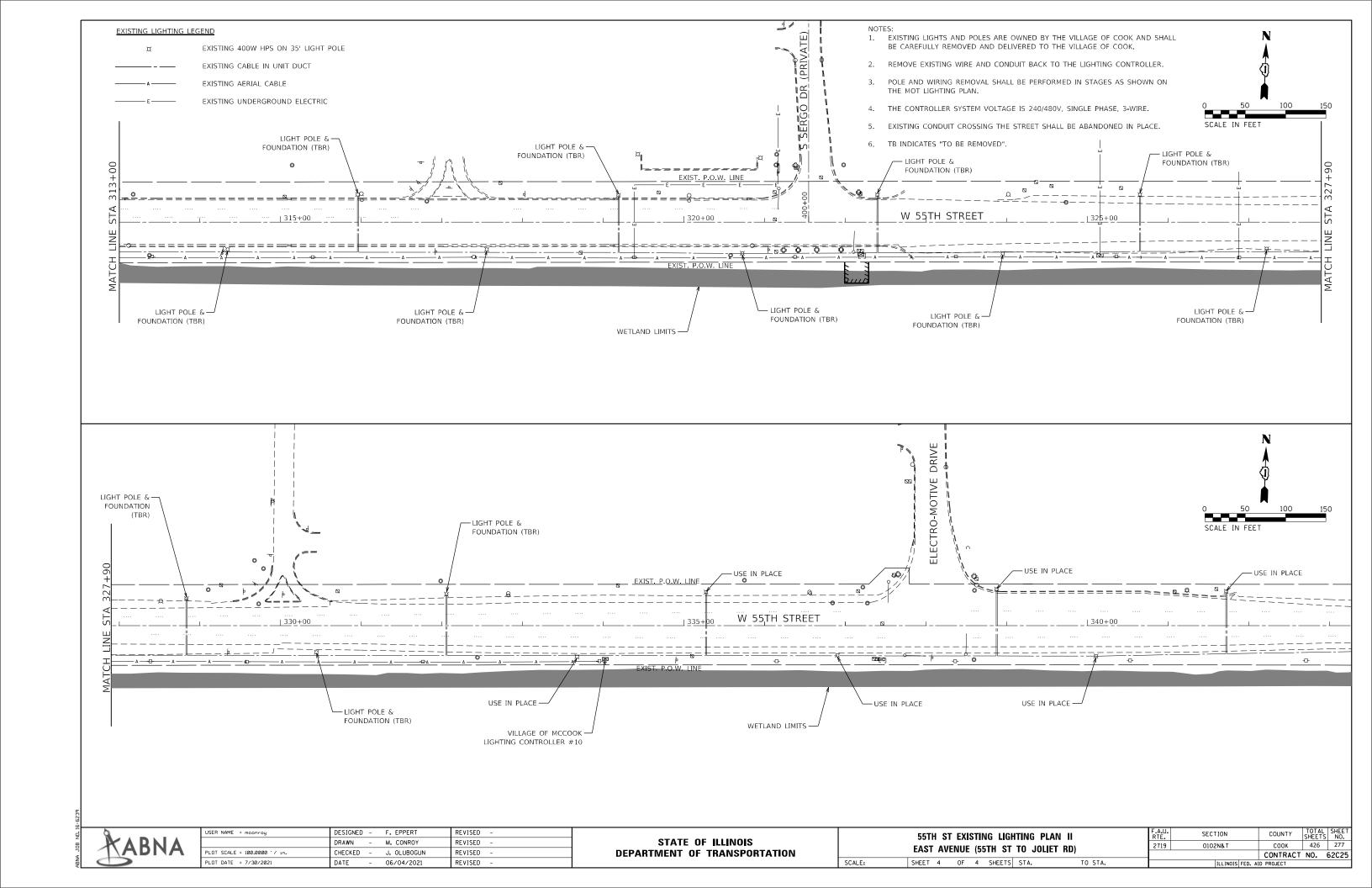
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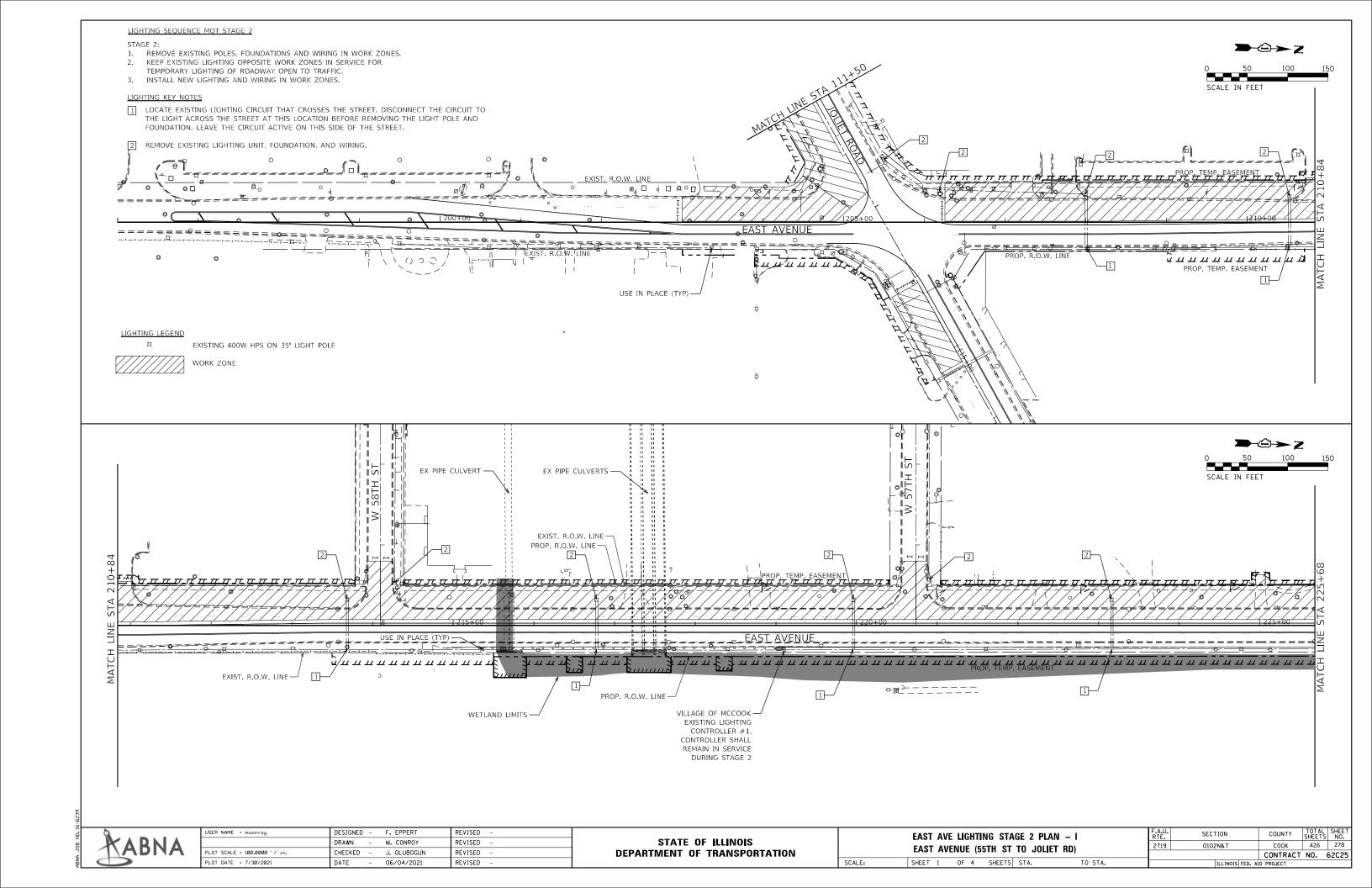
LIGHTING GENERAL NOTES	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
EAST AVENUE (55TH ST TO JOLIET RD)	2719	0102N&T	соок	426	273
EAST AVENUE (33111 31 10 30EJET 11D)			CONTRACT	NO.	62C25
SHEET 1 OF 1 SHEETS STA. TO STA.		TILLINOIS FED. A	ID PROJECT		

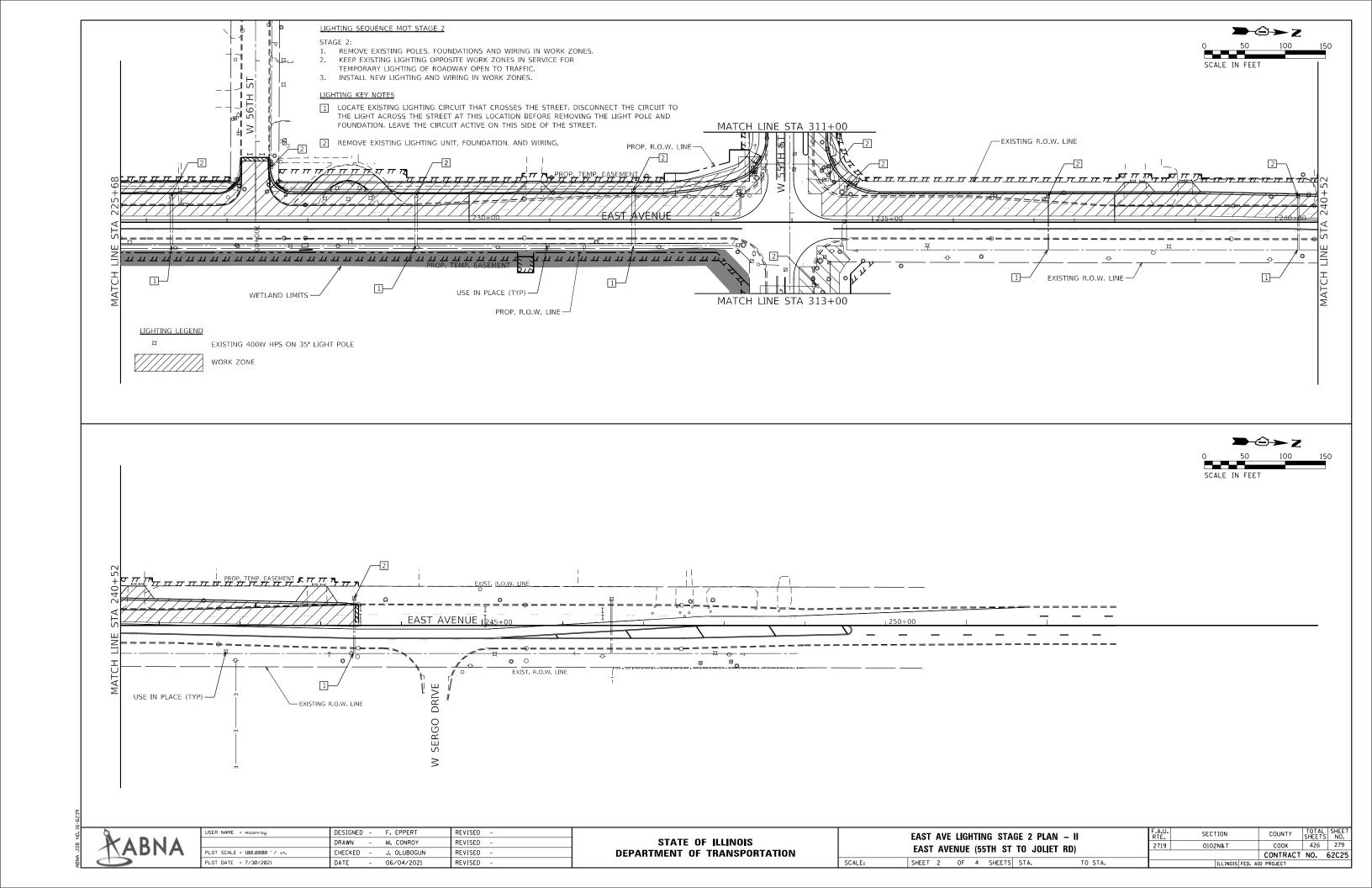


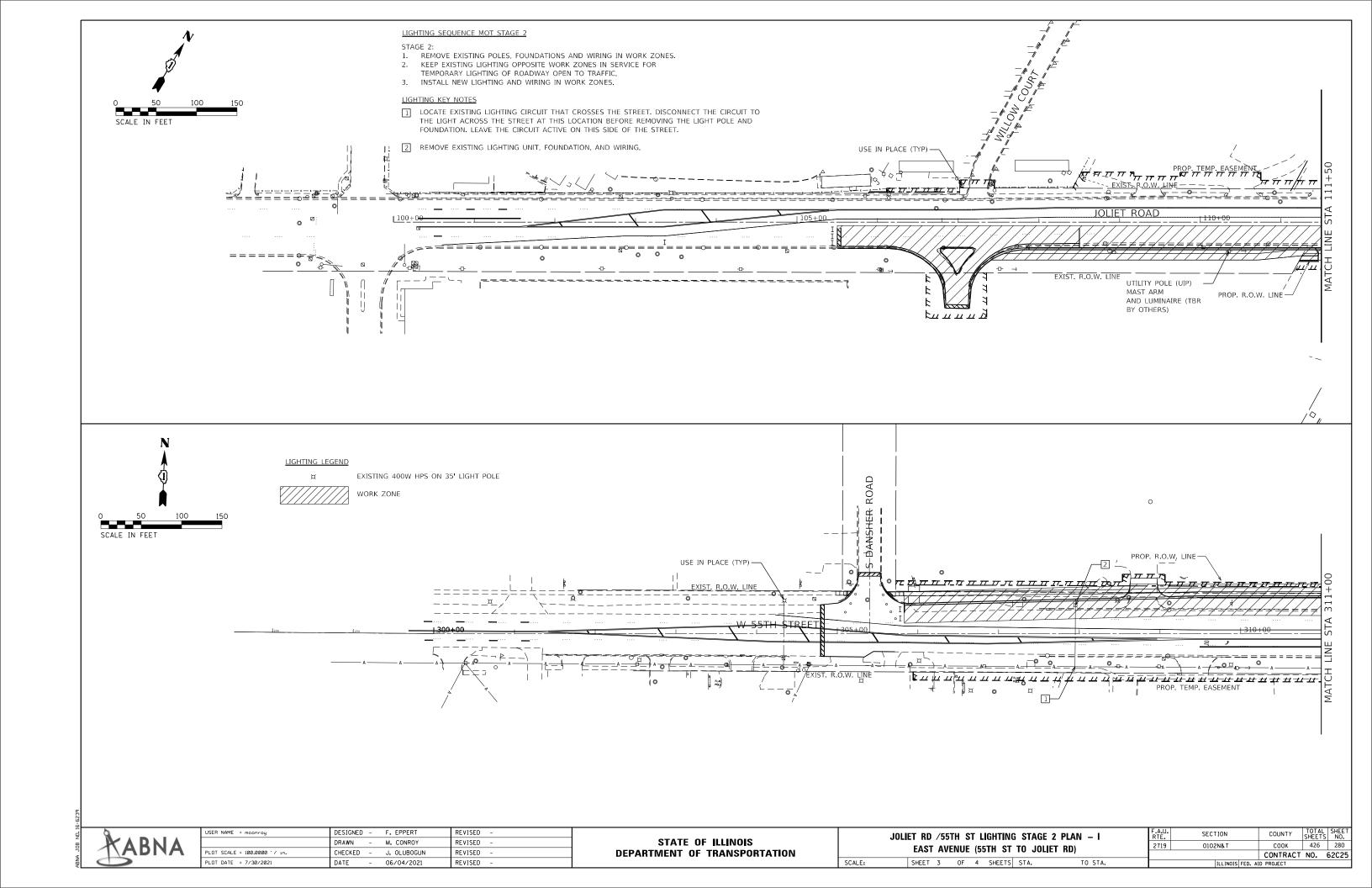


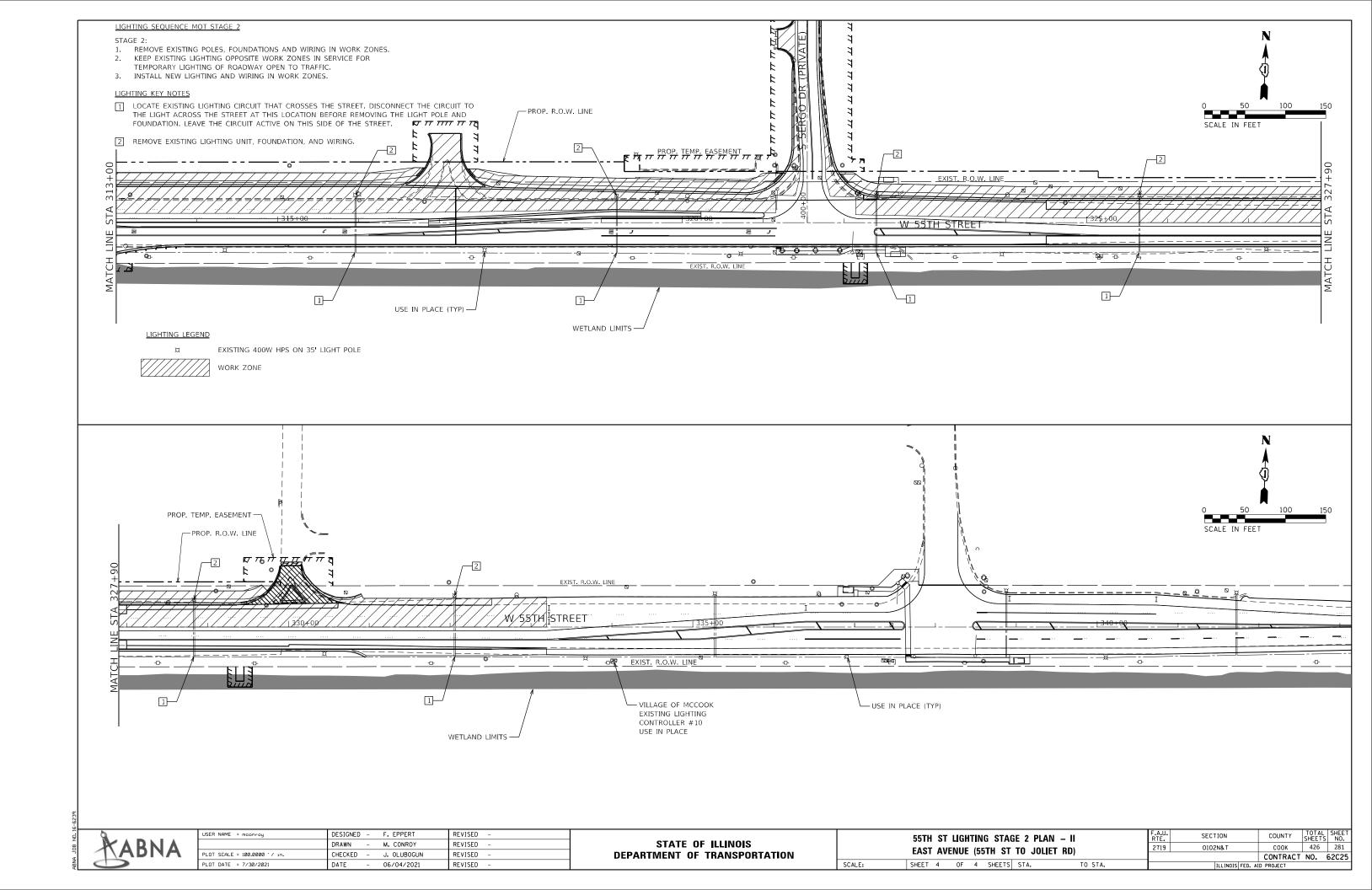


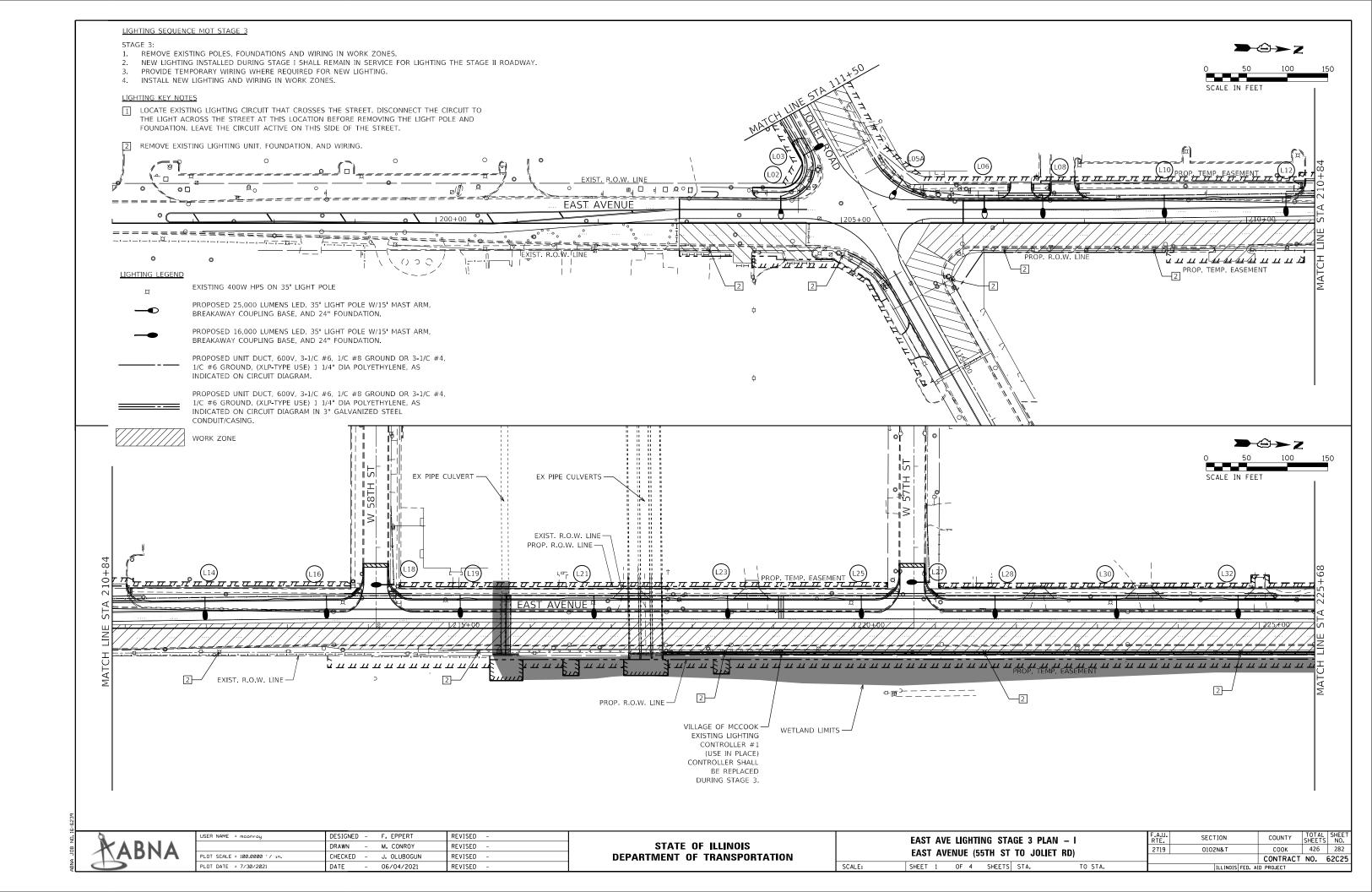


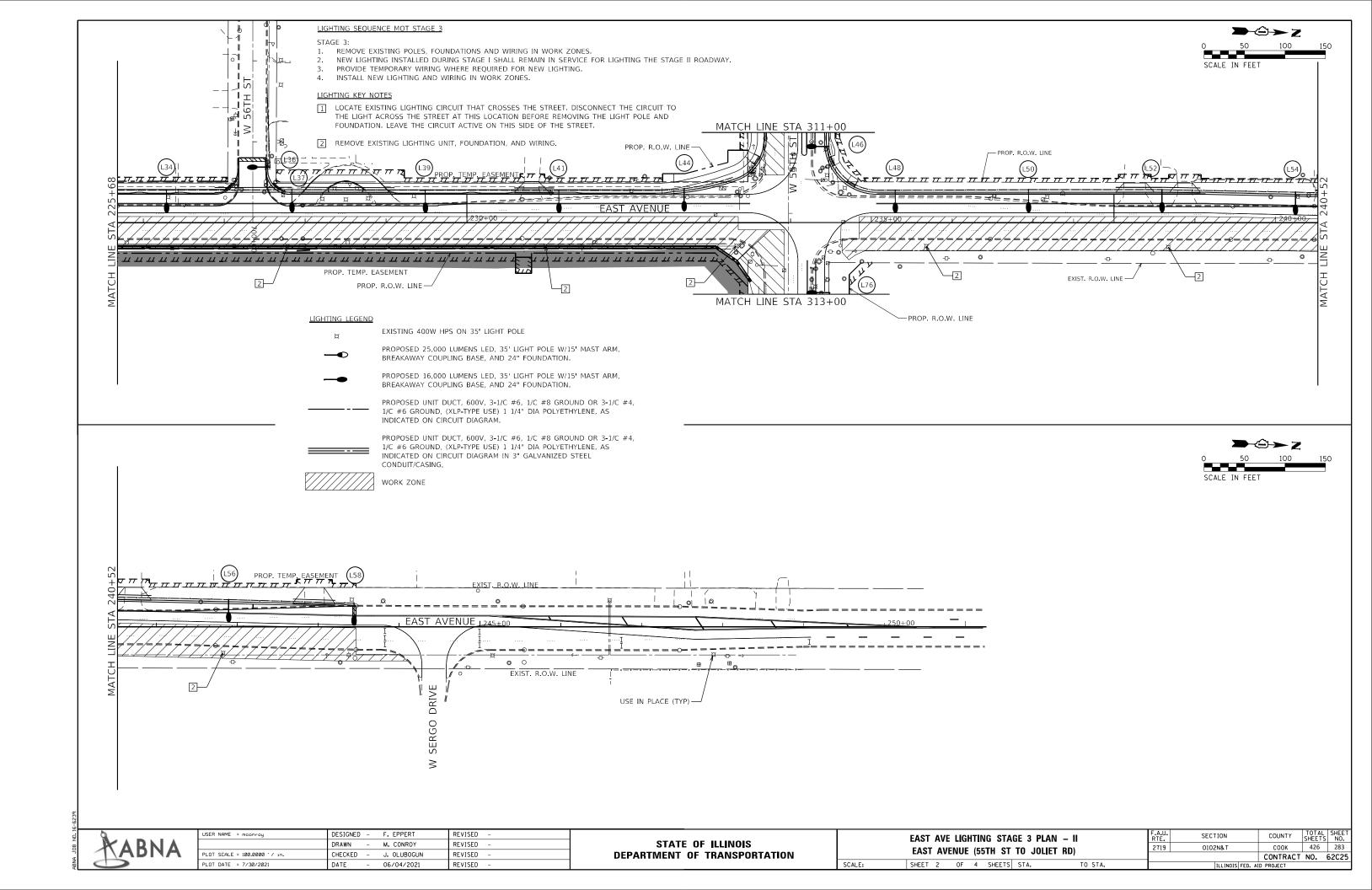


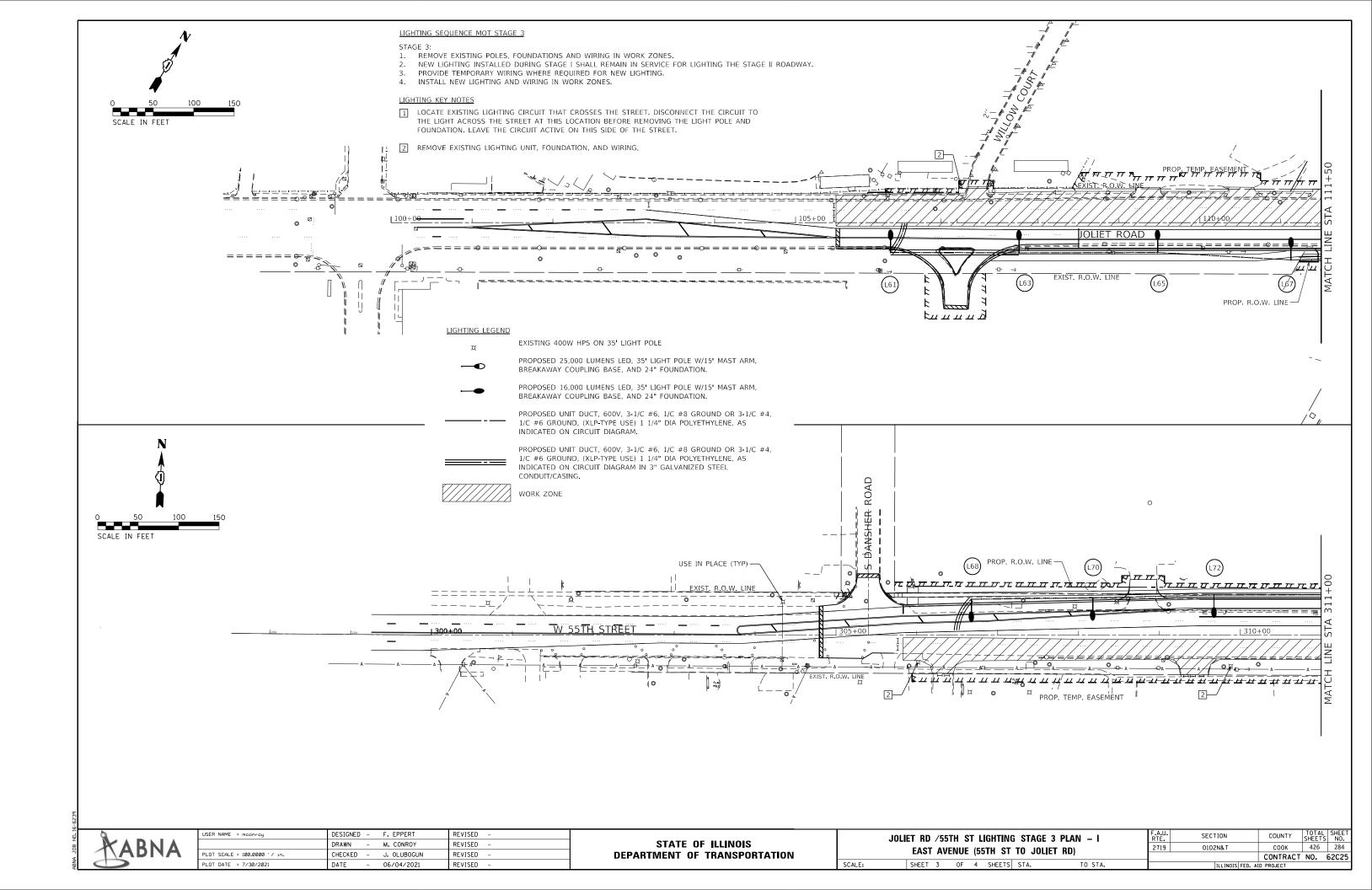


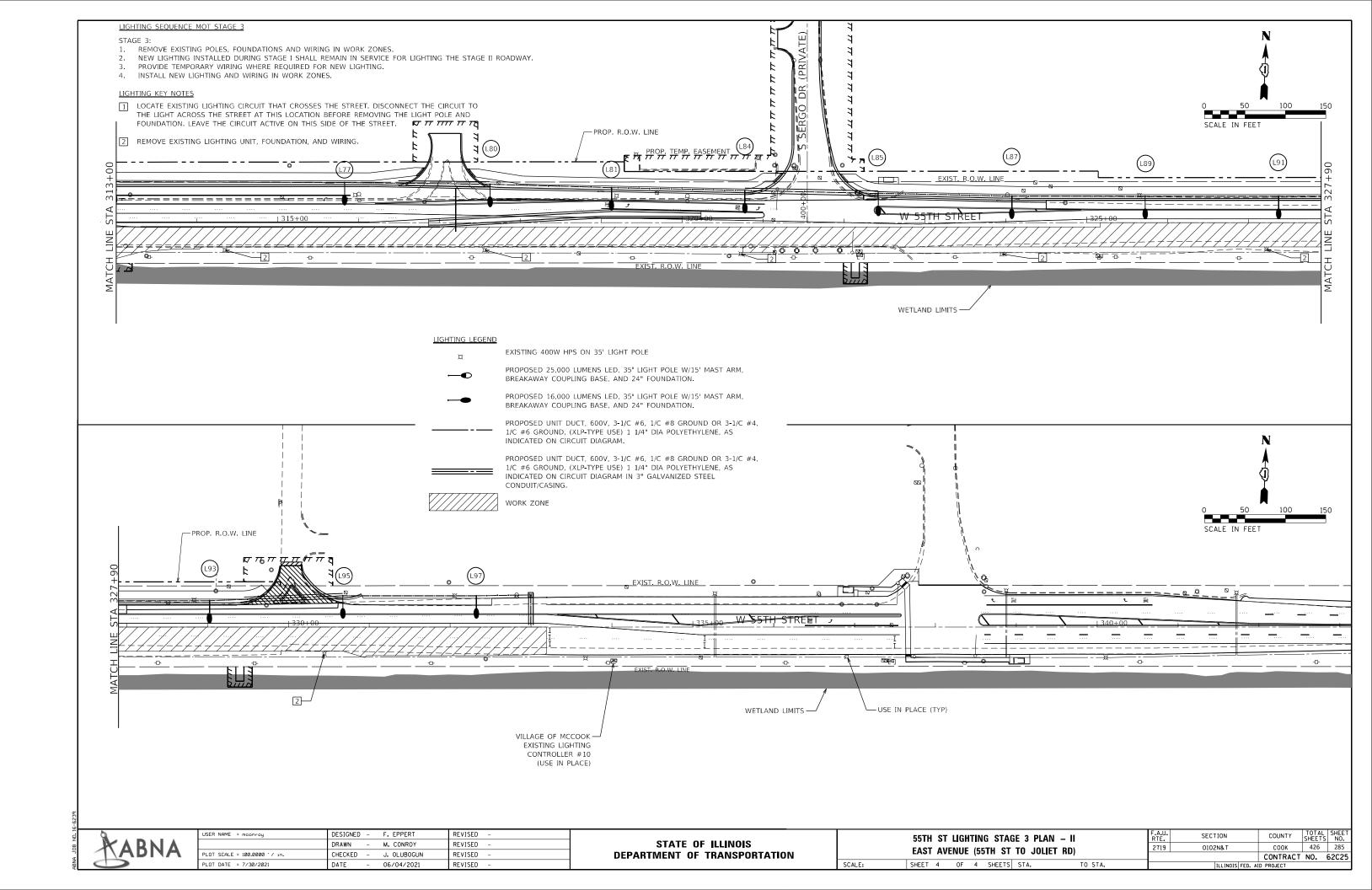


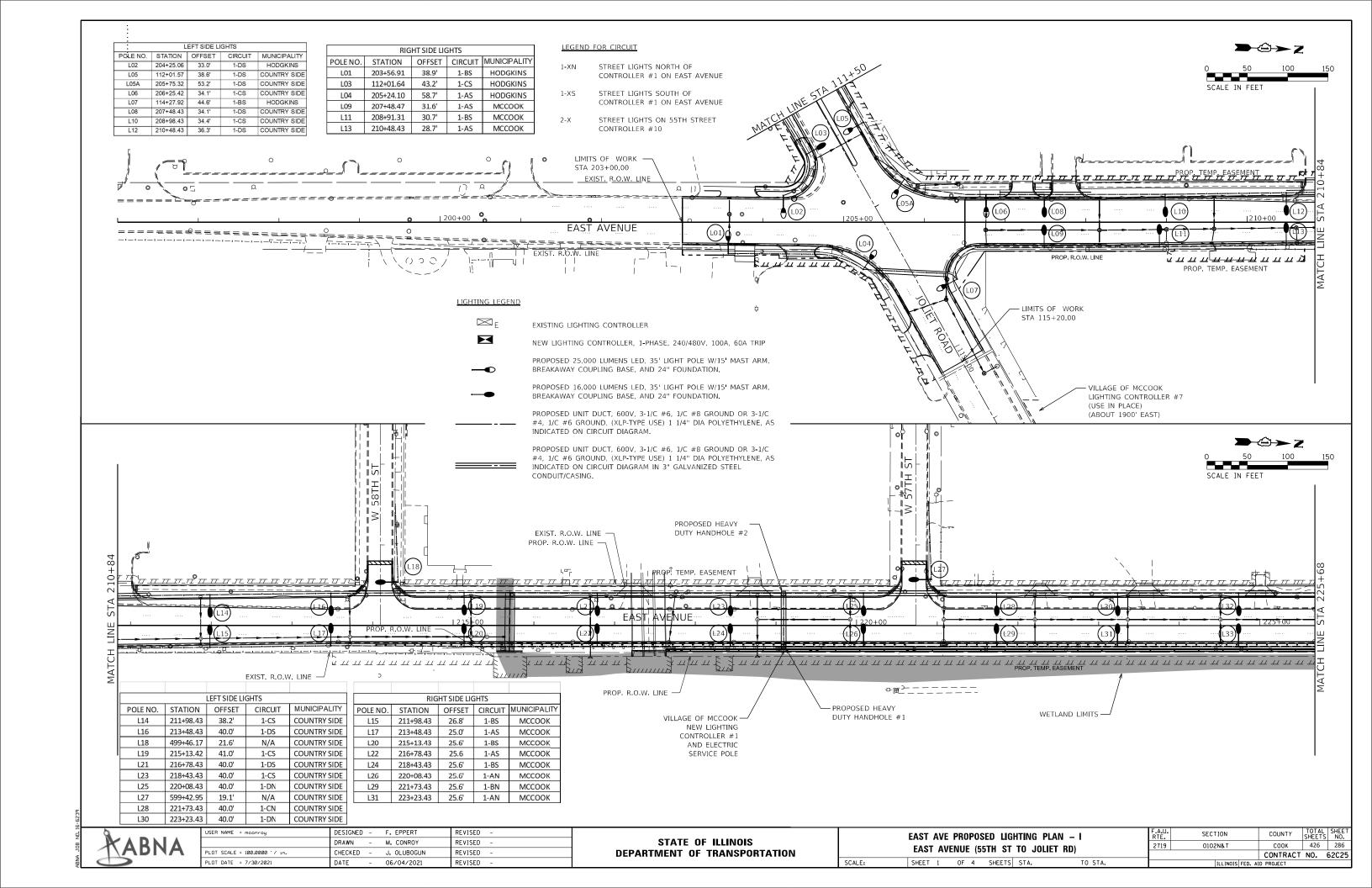


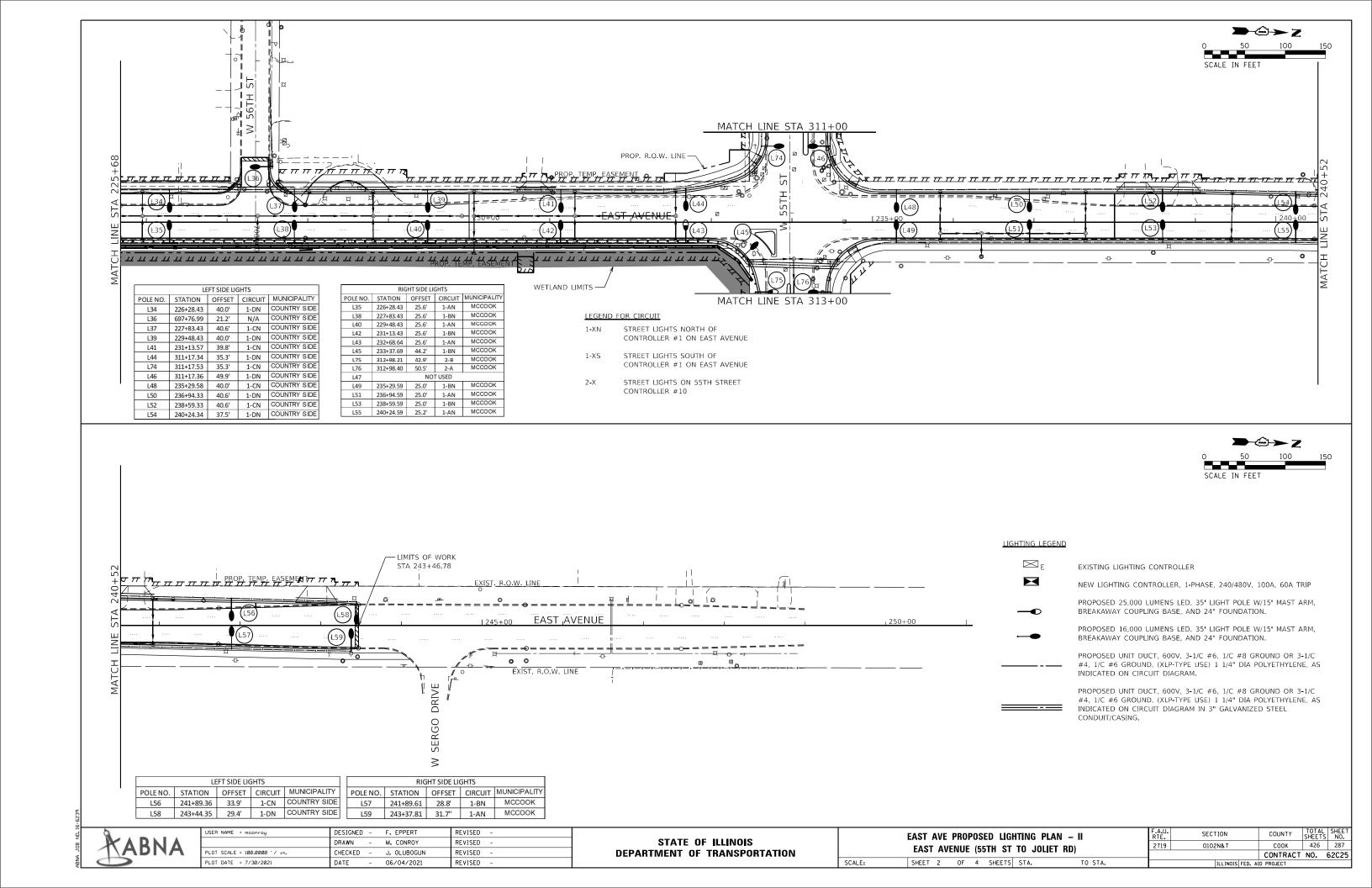


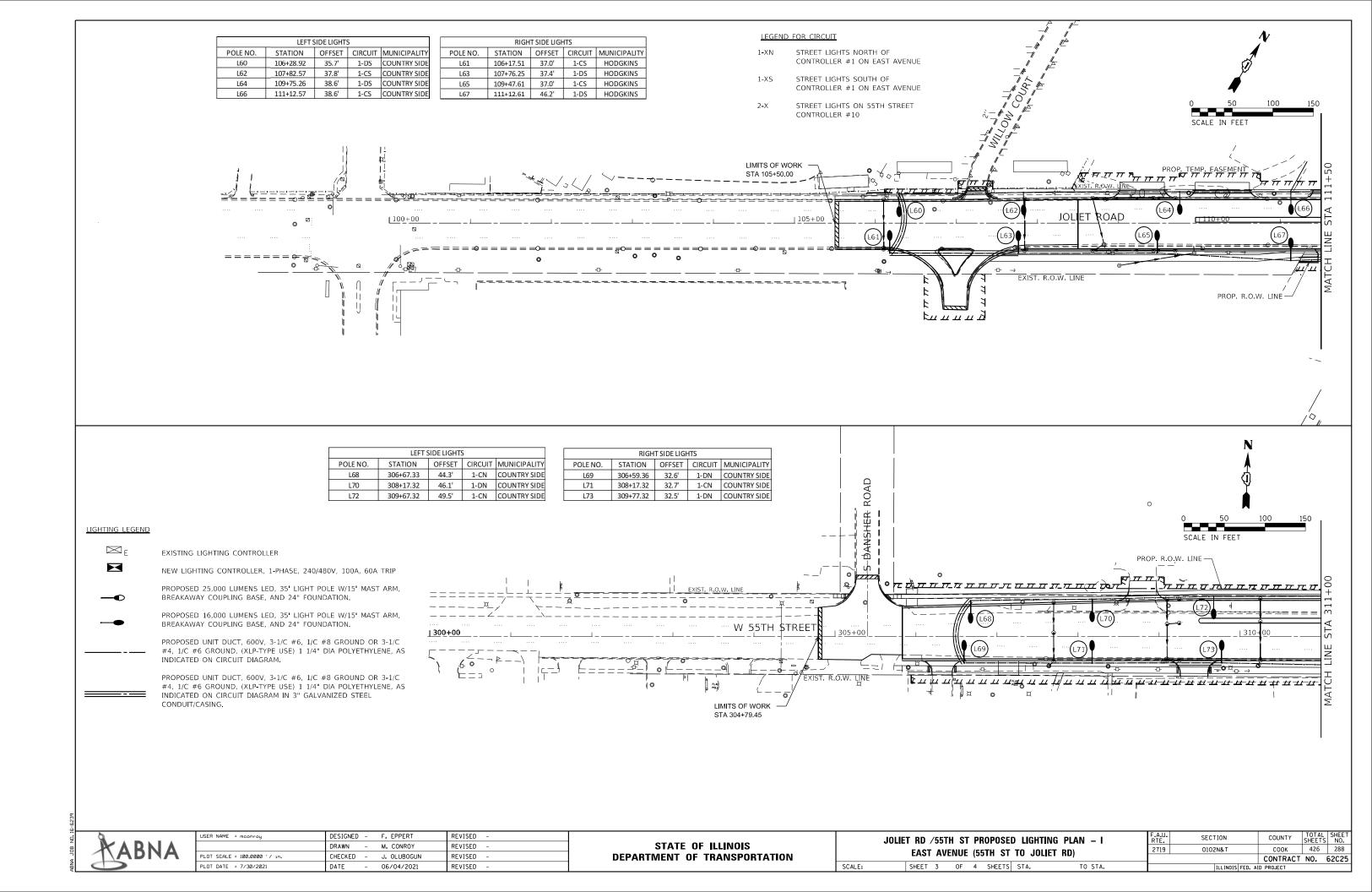


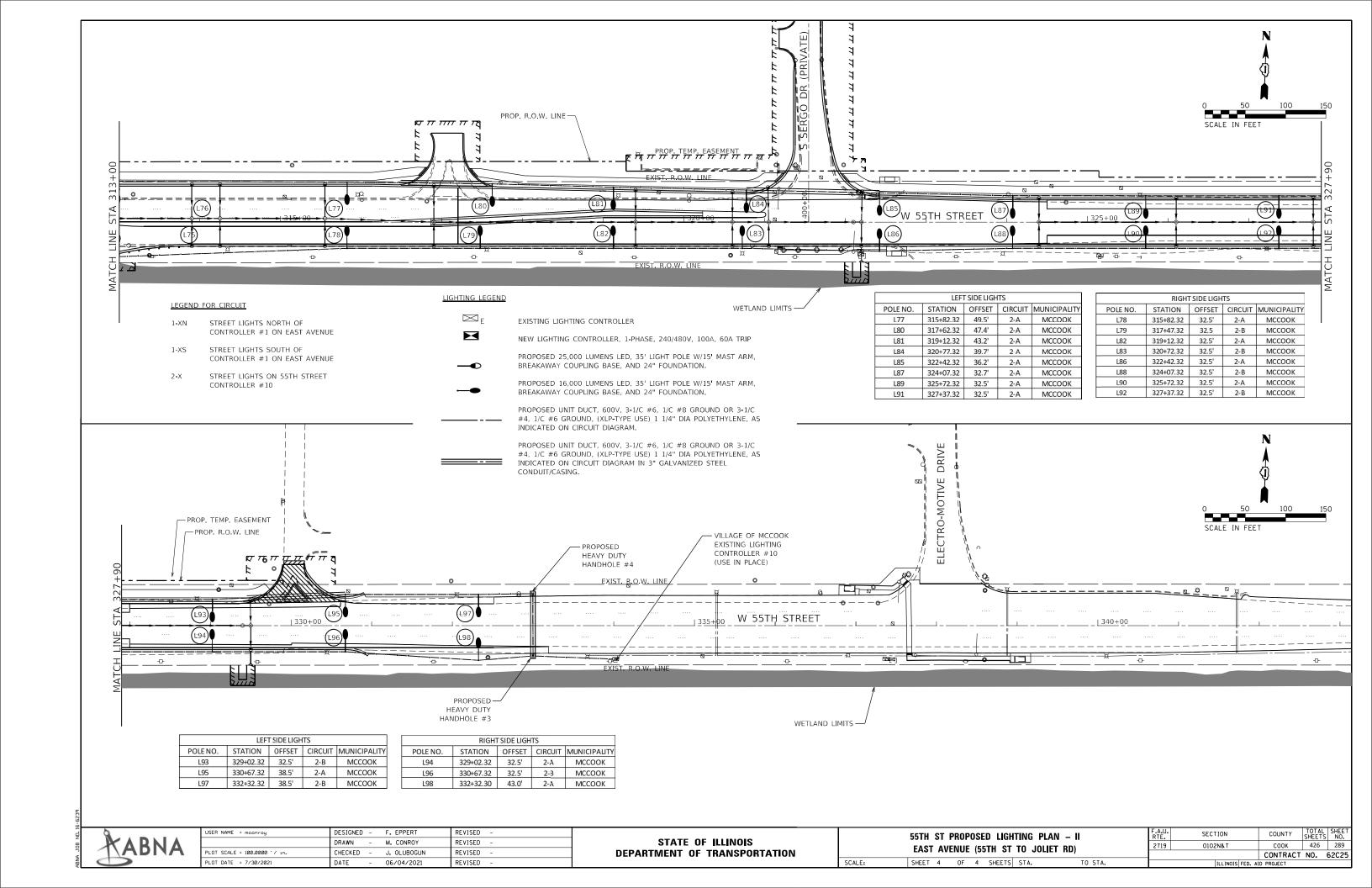


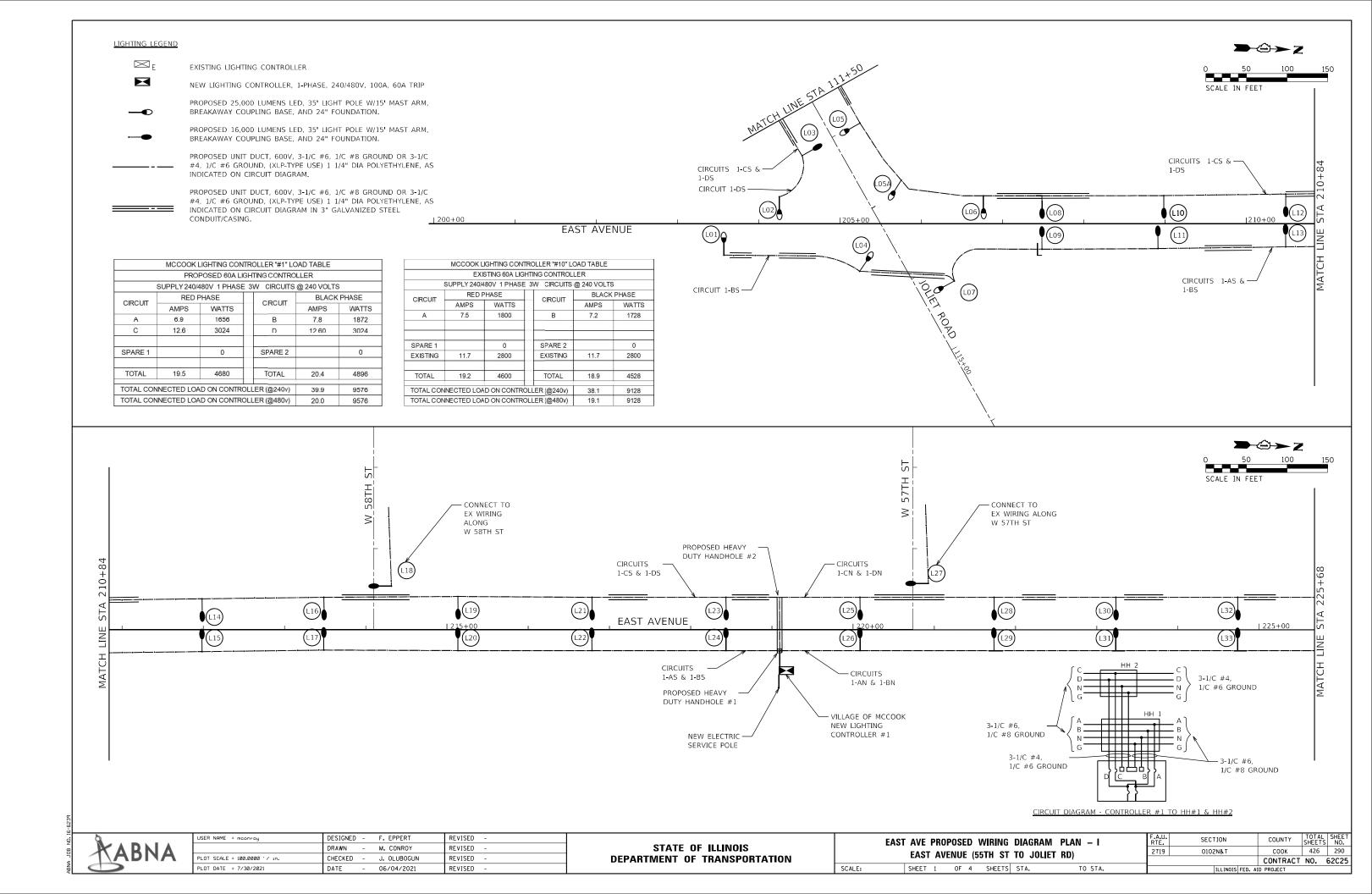


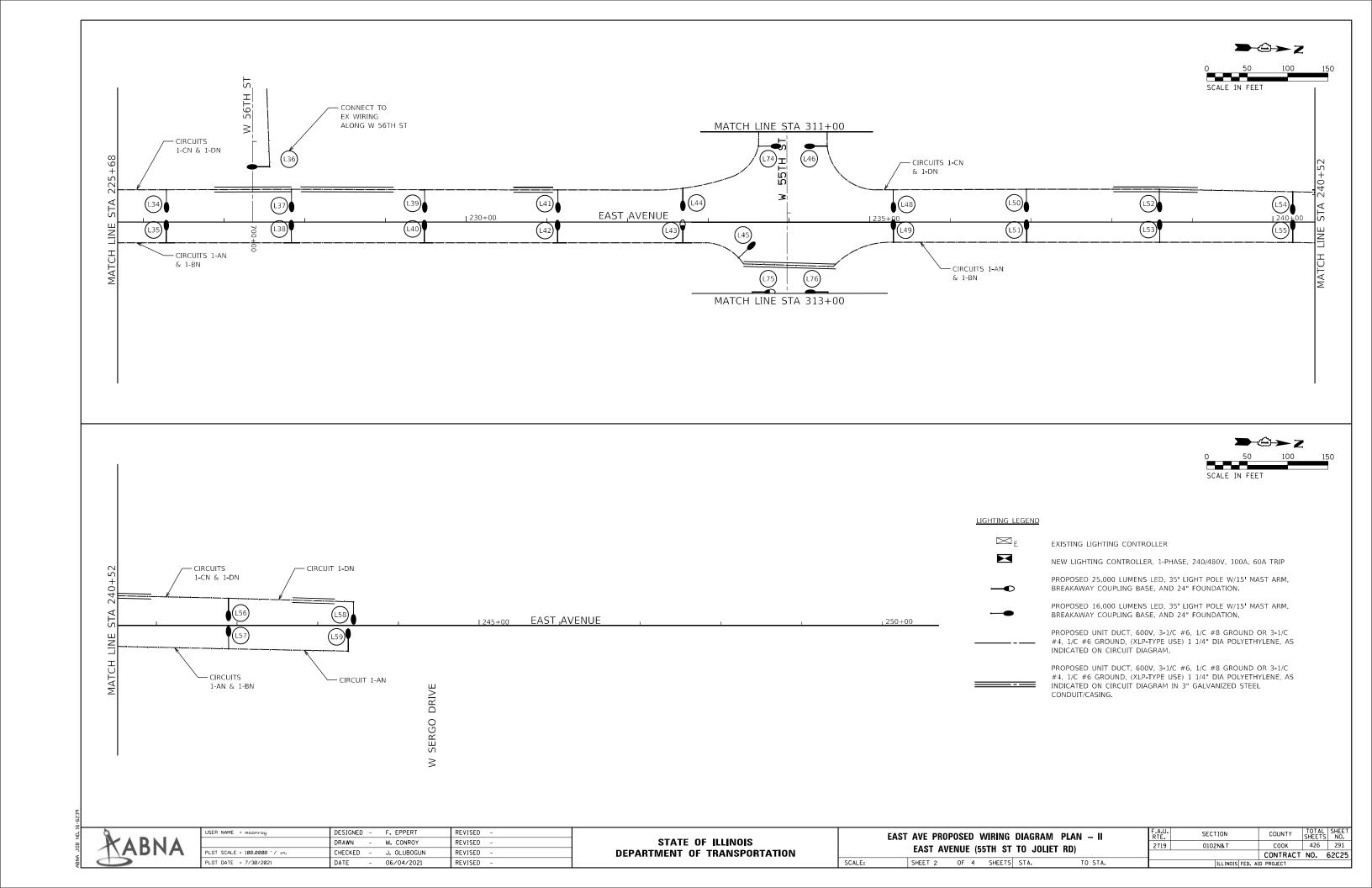


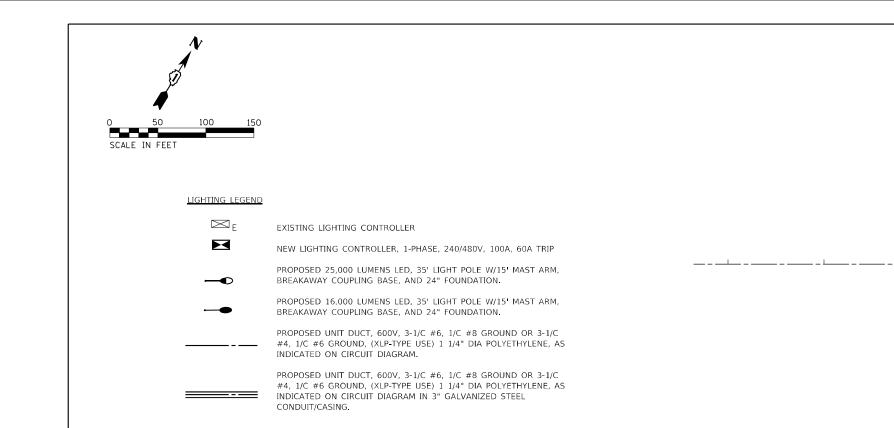














105+00

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USER NAME = mconroy	DESIGNED	-	F. EPPERT	REVISED -	
	DRAWN	-	M. CONROY	REVISED -	
PLOT SCALE = 100.0000 ' / in.	CHECKED	-	J. OLUBOGUN	REVISED -	
PLOT DATE = 7/30/2021	DATE	-	06/04/2021	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

JOLIET RD /55TH ST PROPOSED WIRING DIAGRAM PLAN – I EAST AVENUE (55TH ST TO JOLIET RD)								
	EAST	AVE	NUE	(55	TH ST	TO J	JOLIET RD)	
SCALE:	SHEET	3	OF	4	SHEETS	STA.		TO STA.

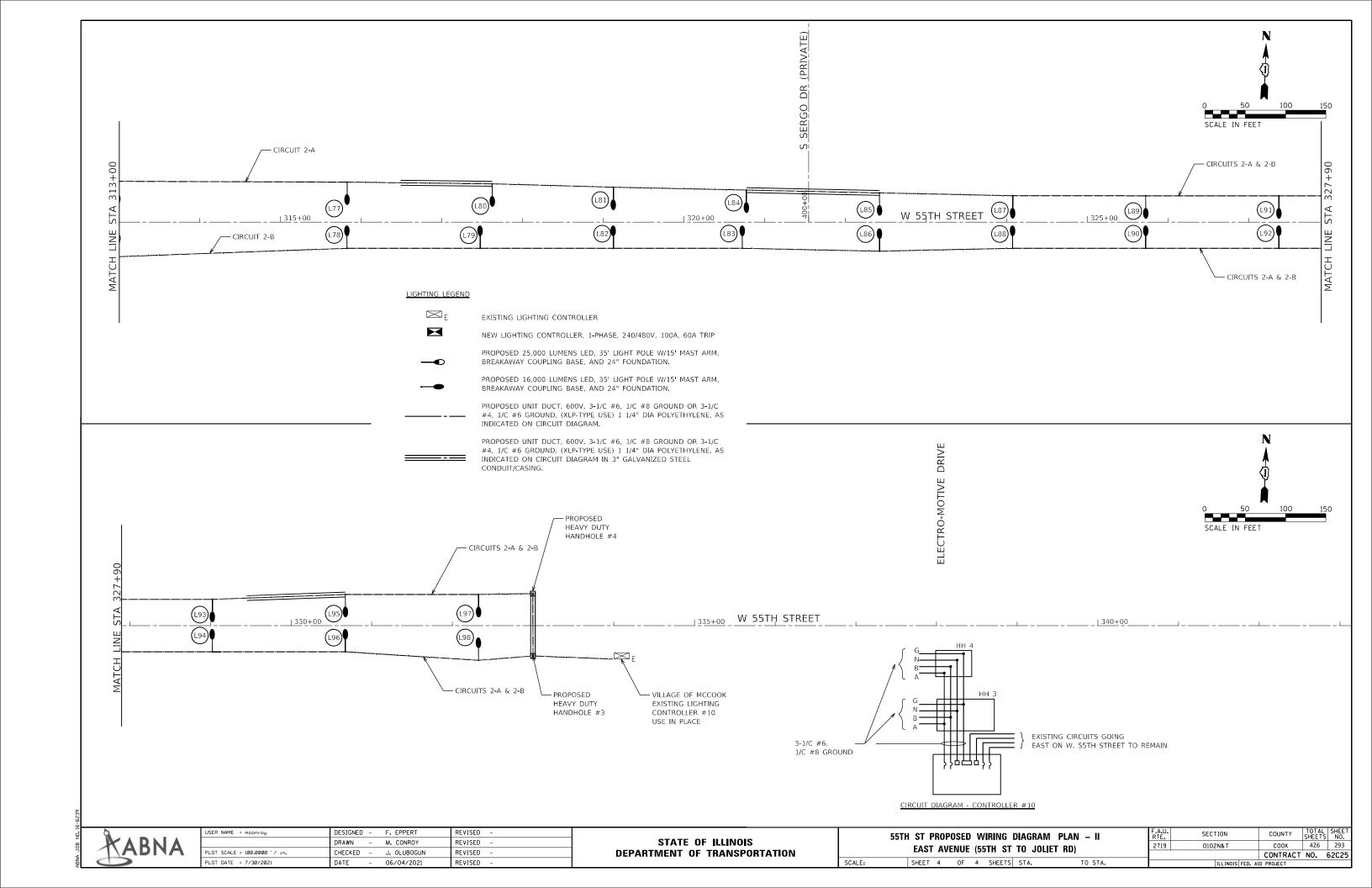
2719 0102N&T COOK 426		ILLINOIS	FED. Al	D PROJECT		
RIE. SHEETS				CONTRACT	NO.	62C2
RTE.   SECTION   COUNTY   SHEETS	2719	0102N&T		соок	426	292
	F.A.U. RTE.	SECTION		COUNTY	TOTAL SHEETS	SHEE NO.

CIRCUITS 1-CS -& 1-DS

110+00

JOLIET ROAD

L63



	COMIN	IAIRE PERFORMANCE (	Ziiii Allooiti		_1,0_0110	110
Date:		October 4, 2019				
Designe	er:	Frank Eppert				
roject:		16-6239 IDOT East Avenue	Reconstruction			
						ue at 55th Street
	IES Roadway	y Classification:	Major/Major		Illu	minance
	Land Use/pe	destrian conflict:		EAVE	EAVE/EMIN	
			ed Levels	1.80	3.00	
			Contract Specifi	ed Levels		
	Manufacturer	AEL		EAVE	EAVE/EMIN	
	Curve No.		Distribution			
		EDE10_XXXXX_R3_4K_5K ai BLEDE10_XXXXX_R3_4K_5K		dium	1.84	2.88
	Manufacturer	Philips			E <sub>AVE</sub>	E <sub>AVE</sub> /E <sub>MIN</sub>
	Curve No.		Distribution		1.00	2.45
		35W80LED4K-G2-R3S and 160W96LED4K-G2_R3S	Type IV S	hort	1.86	2.45
		DESIGN	PARAMETERS			
Con	nbined LLF	0.70		Mounting	Height	35 FT.
Lan	np Lumens	16,249 & 25,519 AEL; 16,93	34 & 20,321 Philips	Mast Arr	n	15 FT.
Lan	e Width W	11 FT.				

	LUMIT	NAIRE PERFORMANCE CO	WIFARISUN F	OK IN I I	RSECTIO	<u> </u>
Date:		October 4, 2019				
Design	er:	Frank Eppert				
Project	:	16-6239 IDOT East Avenue Re	construction			
					East Avenu	e at Joliet Road
	IES Roadwa	Classification:	Major/Major		Illur	ninance
		destrian conflict:		EAVE	EAVE/EMIN	
		II	S Recommende	ed Levels		3.00
			Contract Specific	ed Levels		
	Manufacturer	AEL			E <sub>AVE</sub>	E <sub>AVE</sub> /E <sub>MIN</sub>
	Curve No.		Distribution			
		EDE10_XXXXX_R3_4K_5K and BLEDE10_XXXXX_R3_4K_5K	Туре III Мес	dium	2.04	3.00
	Manufacturer	Philips	I.		E <sub>AVE</sub>	E <sub>AVE</sub> /E <sub>MN</sub>
	Curve No.		Distribution		1.80	3.00
		35W80LED4K-G2-R3S and 160W96LED4K-G2_R3S	Type IV SI	nort	1.60	3.00
		DESIGN P				
Cor	mbined LLF	0.70		Mounting	ı Heiaht	35 FT.
Lai	mp Lumens	16,249 & 25,519 AEL; 16,934	& 20,321 Philips	Mast Arr		15 FT.
1 00	ne Width W	11 FT.				

	LUMINAIR	E PERFORM	MANCE	COMPARISON	FORS	TRAIGHT	ROADS	EGMEN	<u>ITS</u>	
Date:	September 13	. 2019								
Designer:	Frank Eppert									
Project:	16-6239 IDOT	East Avenue Re	econstruc	tion						
						Joliet	Road		Sidew	alk Area
IES Roadway	/ Classification:		Major				nance		Illum	inance
	destrian conflict:		-	Pedestrian	L <sub>AVE</sub>	LAVE/LMIN	L <sub>MAX</sub> /L <sub>MIN</sub>	L <sub>V</sub> /L <sub>AVE</sub>	E <sub>AVE</sub>	E <sub>AVE</sub> /E <sub>MIN</sub>
		l,	ES Reco	mmended Levels		3.00	5.00	0.30	0.10	4.00
			Contract	Specified Levels						
				DESIGN COMPA	RISONS					
Manufacturer	AEL				L <sub>AVE</sub>	L <sub>AVE</sub> /L <sub>MIN</sub>	L <sub>MAX</sub> /L <sub>MIN</sub>	L <sub>V</sub> /L <sub>AVE</sub>	E <sub>AVE</sub>	E <sub>AVE</sub> /E <sub>MIN</sub>
Curve No.			Distribu	tion	1.05	2.02	3.13	0.17		
ATB2_40B	SLEDE 10_XXXX	X_R3_4K_5K	Ту	pe III Medium						
Manufacturer	Philips				L <sub>AVE</sub>	L <sub>AVE</sub> /L <sub>MIN</sub>	$L_{MAX}\!/L_{MIN}$	L <sub>V</sub> /L <sub>AVE</sub>	E <sub>AVE</sub>	E <sub>AVE</sub> /E <sub>Min</sub>
Curve No.			Distribu	tion	1.00	1.82	2.47	0.20		
RFL-	135W80LED4K-	G2-R3S	Т	ype IV Short	200.0					
				ESIGN PARAM	/FTERS					
				22010111711011		•			T	
		0.70				Spacing			165 FT.	
Combined LL	.F	0.70	16,249 AEL; 16,934 Philips			Light Pole Set Back SB <sub>IP</sub>			3 Ft.	
			6,934 Ph	ilips		Light Pole	Sel Dack	ODLP	OIL.	
Lamp Lumen	S		6,934 Ph	ilips		Mounting		ODIP	35 FT.	
Lamp Lumen Roadway Wid	s dth W <sub>R</sub>	16,249 AEL; 1	6,934 Ph	ilips				овр	- A 20	
Combined LL Lamp Lumen Roadway Wid Number of La Lane Width V	s dth W <sub>R</sub> unes	16,249 AEL; 1 55 FT.	6,934 Ph	ilips		Mounting Mast Arm			35 FT.	

		0010									
Date:	September 13	, 2019									
Designer:	Frank Eppert										
Project:	16-6239 IDOT	East Avenue R	econstruc	tion						1	
							55th	Street		Sidow	alk Area
IES Roadway	Classification:		Major	Maior			Lumi	Illuminance			
	estrian conflict:		Medium	Pedestrian		L <sub>AVE</sub>	L <sub>AVE</sub> /L <sub>MIN</sub>	L <sub>MAX</sub> /L <sub>MIN</sub>	L <sub>V</sub> /L <sub>AVE</sub>	E <sub>AVE</sub>	E <sub>AVE</sub> /E <sub>MIN</sub>
			IES Reco	mmended L		0.90	3.00	5.00	0.30	0.10	4.00
			Contrac	Specified L	evels					1	
				DESIGN CO	OMPA	RISONS				•	
Manufacturer AEL							L <sub>AVE</sub> /L <sub>MIN</sub>	L <sub>MAX</sub> /L <sub>MIN</sub>	L <sub>V</sub> /L <sub>AVE</sub>	E <sub>AVE</sub>	E <sub>AVE</sub> /E <sub>MIN</sub>
Cuno No	curve No. Distribution						2.27	3.65	0.23		
PERCENTION SHOUTH	EDE10 XXXX	X R3 4K 5K		pe III Medium	1	1.09	2.21	3.00	0.23		
Manufacturer F		<u> </u>		po m mountain		L <sub>AVE</sub>	L <sub>AVE</sub> /L <sub>MIN</sub>	L <sub>MAX</sub> /L <sub>MIN</sub>	L <sub>V</sub> /L <sub>AVE</sub>	E <sub>AVE</sub>	E <sub>AVE</sub> /E <sub>MIN</sub>
Curve No.			Distribu	tion		1.01	1.98	2.82	0.19		
	35W80LED4K-	G2-R3S		ype IV Short		1.01	1.90	2.02	0.19		
				DESIGN PA	ARAN	IETERS	<u> </u>				
Combined LLF	=	0.70					Spacing			160 FT.	
Lamp Lumens		16,249 AEL;	16,934 Pf	ilips				Set Back	SB <sub>LP</sub>	3 Ft.	
Roadway Widt	th W <sub>R</sub>	55 FT.					Mounting	Height		35 FT.	
Number of Lan	ies	5					Mast Arm			15 FT.	
Lane Width W		11 FT.					Sidewalk	Set Back S	B <sub>SW</sub>	10 FT.	
Layout		STRAIGHT					Sidewalk	Width Wsw		5 FT.	

LUMINAIRE PERFORMANCE COMPARISON FOR STRAIGHT ROAD SEGMENTS

	LUMINAIR	RE PERFORM	MANCE	COMPARISO	NFORS	TRAIGHT	ROAD S	SEGMEN	<u>ITS</u>	
Date:	October 4, 201	19								
Designer:	Frank Eppert									
Project:	16-6239 IDO1	East Avenue Re	econstruct	on						
						East A	Avenue		Sidew	alk Area
IES Roadway	Classification:		Major			Lumi	nance		Illum	inance
Land Use/pede	estrian conflict:		Medium	Pedestrian	L <sub>AVE</sub>	L <sub>AVE</sub> /L <sub>MIN</sub>	L <sub>MAX</sub> /L <sub>MIN</sub>	L <sub>V</sub> /L <sub>AVE</sub>	E <sub>AVE</sub>	E <sub>AVE</sub> /E <sub>M</sub>
		1	ES Recoi	nmended Level		3.00	5.00	0.30	0.10	4.00
		1	Contract	Specified Level	s					
				DESIGN COMP.	ARISONS					
Manufacturer A	KEL				L <sub>AVE</sub>	L <sub>AVE</sub> /L <sub>MIN</sub>	L <sub>MAX</sub> /L <sub>MIN</sub>	L <sub>V</sub> /L <sub>AVE</sub>	E <sub>AVE</sub>	E <sub>AVE</sub> /E <sub>MI</sub>
Curve No			Distribut	ion	1.05	2.02	3.38	0.27		
ATB2 40BL	EDE10 XXXX	X R3 4K 5K	Typ	oe III Medium				0.27		
Manufacturer P	Philips				L <sub>AVE</sub>	L <sub>AVE</sub> /L <sub>MIN</sub>	L <sub>MAX</sub> /L <sub>MIN</sub>	L <sub>V</sub> /L <sub>AVE</sub>	E <sub>AVE</sub>	E <sub>AVE</sub> /E <sub>MI</sub>
Curve No.			Distribut	ion	0.95	1.73	2 69	0.20		
RFL-1	35W80LED4K-	G2-R3S	Ty	pe IV Short						
			D	ESIGN PARA	METERS	3				
Combined LLF	=	0.70				Spacing			165 FT.	
Lamp Lumens		16,249 AEL; 16,934 Philips					Set Back	SB <sub>LP</sub>	3 Ft.	
Roadway Widt	Roadway Width W <sub>R</sub> 55 FT.					Mounting	Height		35 FT.	
Number of Lan	nes	5				MastArm			15 FT.	
Lane Width W <sub>L</sub>		11 FT.				Sidewalk	Set Back S	SB <sub>SW</sub>	10 FT.	
Layout		STRAIGHT				Sidewalk	Width W <sub>SW</sub>	,	5 FT.	

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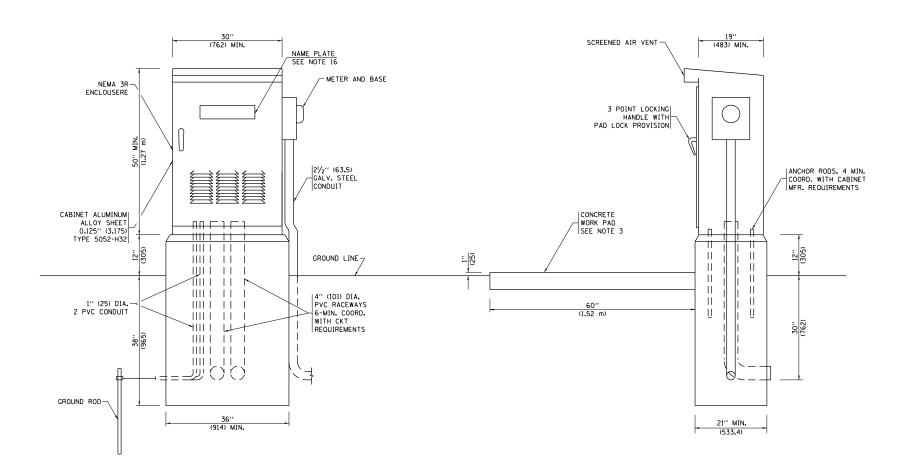
USER NAME = mconroy	DESIGNED	-	F. EPPERT	REVISED -
	DRAWN	-	M. CONROY	REVISED -
PLOT SCALE = 100.0000 '/ in.	CHECKED	-	J. OLUBOGUN	REVISED -
PLOT DATE = 7/30/2021	DATE	-	06/04/2021	REVISED -

STATE O	F ILLINOIS
<b>DEPARTMENT OF</b>	TRANSPORTATION

SCALE:

LUMINAIRE PERFORMANCE TABLES	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
EAST AVENUE (55TH ST TO JOLIET RD)	2719	0102N&T	COOK	426	294
LAST AVENUE (SSTIT ST TO COLIET HD)			CONTRACT	NO.	62C25
SHEET 1 OF 1 SHEETS STA. TO STA.	ILLINOIS FED. AID PROJECT				

### CIRCUIT BREAKER - MAIN BREAKER $\oplus$ (POWER) 0 $|\mathbb{A}|$ TWO POSITION TOGGLE SWITCH TOGGLE SWITCH MOMENTARY CONTACT TYPE SPDT 20 A. I E 240V AC AND TOGGLE SWITCH 20A, 240V, TYPE SPDT J 1/4" (6.35) MINIMUM (C) NON-ASBESTOS INORGANIC NONCONDUCTING MATERIAL AUXILIARY -MOUNTING PANEL. CONTROL RELAY (IF NECESSARY) ABCDFFG -CABINET ENCLOSURE (K) (M) 3-1/C SERVICE ENTRANCE CABLE FROM ELECTRIC BONDING JUMPER -UTILITY METER BOX =6 AWG. 600V 240/480 VOLT, 1Ø,3 GROUND ROD 58" (15.875) WIRES, 60 CYCLES. DIA. $\times$ 10' (3.048 m) LONG - GROUNDING CONDUCTOR #2 AWG.



PANEL WIRING DIAGRAM

### PANEL EQUIPMENT

		BILL OF MATERIAL
ITEM	QUANTITY	DESCRIPTION
A	1	MAIN CIRCUIT BREAKER, 2 POLE, 600 VOLT 100 AMP. FRAME, 60 AMP. NON-INTERCHANGEABLE TRIP INTERRUPTING RATING NEMA-22000 AMP. AT 480 VOLT.
В	1	REMOTE CONTROL SWITCH, ELECTRICALLY OPERATED, MECHANICALLY HELD, 2 POLE, SINGLE THROW, 100 AMP., 600 VOLTS CONTROL CIRCUIT 240 VOLT.
С	8	CIRCUIT BREAKERS, 1 POLE, 100AMP. FRAME, 50 AMP. NON-INTERCHANGEABLE TRIP INTERRUPTING RATING NEMA-10,000 AMP. AT 240 V.
D	2	CONTROL CIRCUIT-CIRCUIT BREAKER. 1 POLE, 240 V., 100 AMP. FRAME, 15 AMP. NON-INTERCHANGEABLE TRIP INTERRUPTING RATING NEMA-5000 AMP. AT 240 V.
E	1	ASTRONOMIC MICROPROCESSOR-BASED 2-CHANNEL CONTROLLER [TIME SWITCH].
F	1	20 A., 120 V. FUSE.
G	1	1.5 KVA, SINGLE PHASE, ENCAPSULATED TRANSFORMER 240 X 480 / 120 X 240 VOLT, 60 Hz.
Н	1	SPST 20A SWITCH ON DOOR, TO TURN LIGHT ON WHEN DOOR IS OPEN,
I	1	INCANDESCENT LIGHTING FIXTURE ENCLOSED AND GASKETED WITH 60 WATT, 120 V. LAMP.
J	1	20 A., 120 V., DUPLEX RECEPTACLE, GFCI.
К	1	COPPER GROUND BUS $\frac{1}{4}$ " (6.35) X 1" (25.4) X 12" (304.8 mm) LONG MOUNTED ON PANEL WITH LUGS AND 4 SPARE LUGS
L	1	TOGGLE SWITCHES MOUNTED IN 4" (101.6) X 4" (101.6 mm) BOX.
М	1	COPPER GROUND BUS $\frac{1}{4}$ " (6.35) X 1" (25.4) X 12" (304.8 mm) LONG MOUNTED ON PANEL WITH LUGS AND SPARE LUGS

### NOTES:

- 1. ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.
- 2. FOUNDATION SIZE SHALL BE COORDINATED WITH CABINET SIZE AND MFR.
- 3. IN FRONT OF CONTROL CABINET DOOR, REMOVE VEGETATION AND 2" (50.8 mm) TOP SOIL, LEVEL THE 12. ALL WIRING WITHIN THE CABINET SHALL BE AREA AND ON TOP, PLACE LENGTH WISE PARALLEL TO CONTROL CABINET, A CONCRETE PAD  $36^{\prime\prime}$  (914.4 mm)  $\times$  60 $^{\prime\prime}$  (18.288 m)  $\times$  4 $^{\prime\prime}$  (101 mm) MIN. SIZE. THE COST OF LABOR AND MATERIALS ARE INCLUDED IN THE COST OF THE CONTROLLER.
- 4. DOOR SHALL BE CONSTRUCTED FROM SAME TYPE OF MATERIAL AND THICKNESS AS CABINET.
- 5. DOOR SHALL BE EQUIPPED WITH THREE POINT LATCHING MECHANISM WITH NYLON ROLLERS AT TOP THE BOTTOM.
- 6. DOOR HINGE SHALL BE A HEAVY GAUGE CONTINUOUS HINGE WITH A 1/4" (6.35 mm) DIA. STAINLESS STEEL HINGE PIN.
- 7. ALL EXTERNAL HARDWARE SHALL BE STAINLESS STEEL.
- 8. CONTROL WIRING TO BE #12 AWG, 600V, TYPE "SIS" GRAY SWITCH BOARD WIRE, STRANDED
- 9. METER BOX SHALL BE MOUNTED ON THE SIDE OF CONTROL CABINET, NEAR TO THE SERVICE POLE.

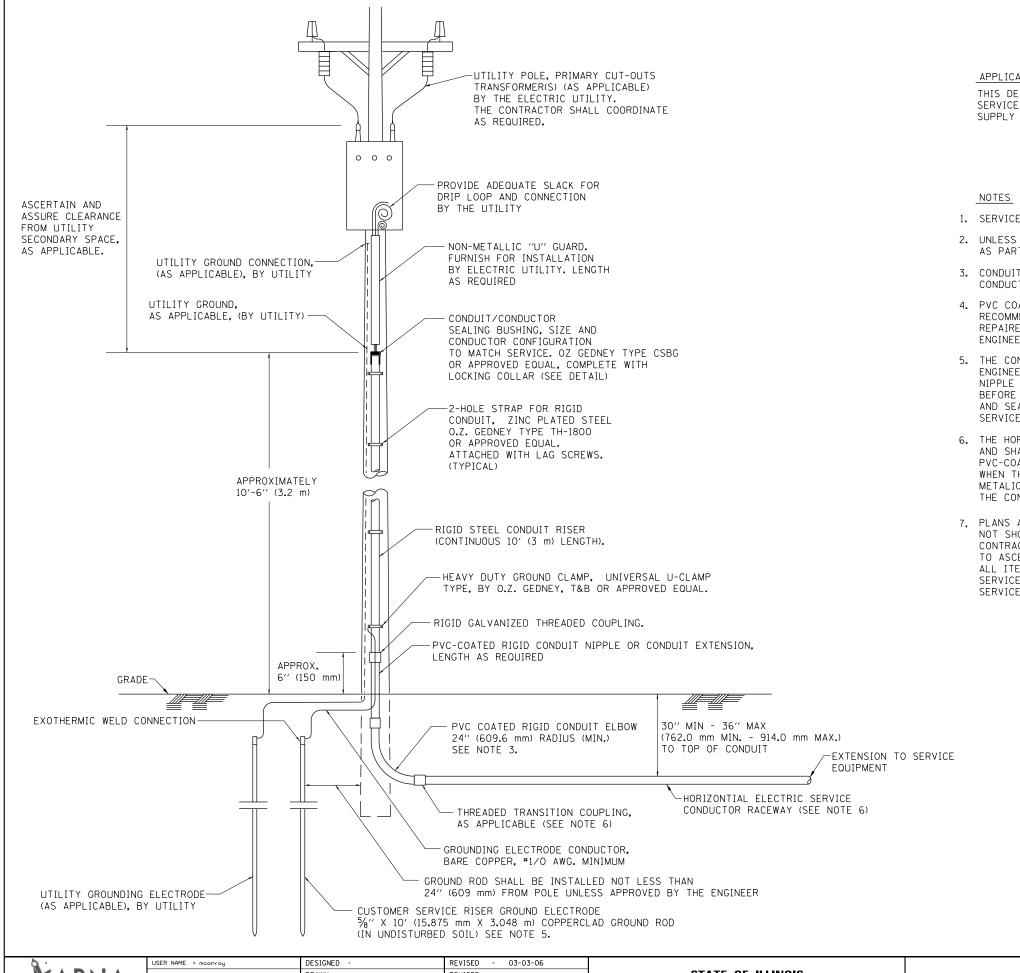
- 10. CABINETS SHALL BE PRIMED AND PAINTED AS SPECIFIED.
- 11. THE HEADS OF CONNECTORS SCREWS SHALL BE PAINTED WHITE FOR NEUTRAL BAR CONNECTION AND GREEN FOR GROUND BAR CONNECTORS.
- COLOR CODED AS INDICATED. R = RED BL = BLUE Y = YELLOW
- 13. PROVIDE SEALING GROMMETS FOR ALL OPEN WIRING EXTENDED FROM DEVICES IN BOXES OR CABINETS WITHIN THE CONTROL CABINET.
- 14. ALL WIRING SHALL BE NEATLY DRESSED AND
- 15. THE CONTROLLER SHALL BE CONSTRUCTED TO U.L. STD. 508 AND BEAR THE U.L. LABEL "ENCLOSED INDUSTRIAL CONTROL PANEL".
- 16. 12" (304.8) X 16" (406.4 mm) STAINLESS STEEL EXTERIOR NAMEPLATE SHALL BE ENGRAVED TO "VILLAGE OF McCOOK" UNLESS OTHERWISE SPECIFIED.

MODIFIED BE-215

USER NAME = mconroy	DESIGNED -	REVISED	-	08-20-04
	DRAWN -	REVISED	-	
PLOT SCALE = 99.9998 '/ in.	CHECKED -	REVISED	-	
PLOT DATE = 7/30/2021	DATE	REVISED	-	

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

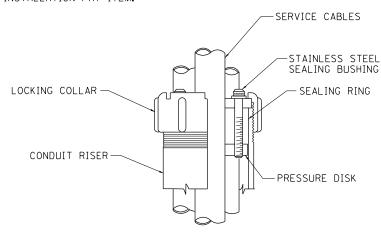
LIGHTING CONTROLLER			F.A RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
	SINGLE DOOR			2719	0102N&T	COOK	426	295
SHATE DOOL					BE-215	CONTRACT	NO. 6	2C25
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	FED. RO	AD DIST, NO. 1 ILLINOIS FED. A	D PROJECT		



### APPLICATION

THIS DETAIL APPLIES FOR LOW VOLTAGE ELECTRIC SERVICE (660 V OR LESS) FROM AN OVERHEAD UTILITY SUPPLY TO SEPERATLY-MOUNTED SERVICE EQUIPMENT.

- 1. SERVICE VOLTAGE SHALL BE AS INDICATED ELSEWHERE IN THE DRAWINGS.
- 2. UNLESS OTHERWISE INDICATED, ITEMS AND WORK SHALL BE INCLUDED AND PAID AS PART OF THE ELECTRIC UTILITY SERVICE INSTALLATION PAY ITEM.
- 3. CONDUIT AND CONNECTOR DIAMETER SHALL MATCH THE DIAMETER OF THE SERVICE CONDUCTOR RACEWAY AS INDICATED ON THE PLANS.
- 4. PVC COATED RACEWAYS AND ACCESSORIES SHALL BE CAREFULLY INSTALLED WITH MFR RECOMMENDED TOOLS AND PROCEDURES TO AVOID DAMAGE. ANY DAMAGE SHALL BE REPAIRED WITH COMPATIBLE PVC TOUCH-UP MATERIAL TO THE SATISFACTION OF THE ENGINEER OR THE DAMAGED MATERIAL SHALL BE REPLACED AT NO ADDITIONAL COST.
- 5. THE CONTRACTOR SHALL OBTAIN INSPECTION AND APPROVAL BY THE ENGINEER OF SERVICE RISER GROUND ELECTRODE, RISER ELBOW, NIPPLE AND CONNECTION TO SERVICE CONDUCTOR RACEWAY EXTENSION BEFORE BACKFILL AND SHALL ALSO OBTAIN INSPECTION OF SERVICE RISER AND SEALING BUSHING BEFORE UTILITY "U" GUARD INSTALLATION AND SERVICE CONNECTION.
- 6. THE HORIZONTAL ELECTRIC SERVICE CONDUCTOR RACEWAY SHALL BE AS INDICATED AND SHALL BE MEASURED SEPARATELY FOR PAYMENT. WHEN THE RACEWAY IS PVC-COATED RIGID GALVANIZED STEEL, THE COUPLING SHALL BE THE SAME. WHEN THE RACEWAY IS PVC CONDUIT (IN CONCRETE), THE COUPLING SHALL BE A METALIC TO NON METALIC ADAPTER. WHEN THE RACEWAY IS ENCASED IN CONCRETE, THE CONCRETE SHALL EXTEND TO COVER THE COUPLING.
- 7. PLANS AND DETAILS INDICATE THE GENERAL NATURE AND REQUIREMENTS. THEY DO NOT SHOW EVERY ACCESSORY AND ATTACHMENT, AND THEY DO NOT RELIEVE THE CONTRACTOR OF THE REQUIREMENTS OF THE SPECIFICATIONS AND SPECIAL PROVISIONS TO ASCERTAIN UTILITY REQUIREMENTS AND TO COORDINATE ACCORDINGLY, FURNISHING ALL ITEMS AND WORK NOT PROVIDED BY THE UTILITY, BUT NECESSARY FOR A COMPLETE SERVICE INSTALLATION IS REQUIRED AND SHALL BE INCLUDED IN THE ELECTRIC UTILITY SERVICE INSTALLATION PAY ITEM.



SEALING BUSHING DETAIL

USER NAME = mconroy	DESIGNED -	REVISED - 03-03-06
	DRAWN -	REVISED -
PLOT SCALE = 100.0000 '/ in.	CHECKED - MEA	REVISED -
PLOT DATE = 7/30/2021	DATE -	REVISED -

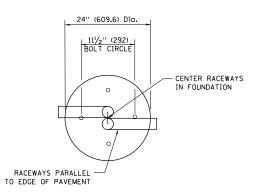
STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

SCALE: NONE

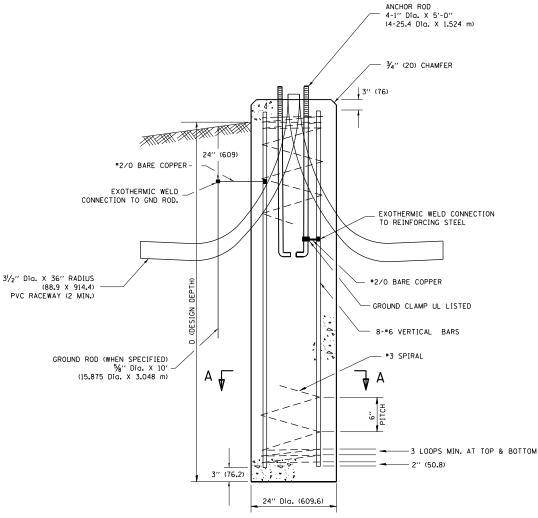
	ELECTRIC SERVICE INSTALLATION		F.A RTE.	SECTION	COUNTY	TOTAL SHEETS	SHE		
AERIAL, REMOTE DISCONNECT			2719	0102N&T	COOK	426	29		
			BE-220	CONTRACT NO. 62C2					
	SHEET NO. 1 OF 1	SHEETS	STA.	TO STA.	FED ROA	D DIST NO 1 THE INDIS FED AT	D PROJECT		

# LIGHT POLE FOUNDATION DEPTH TABLE 30 FT. (9.144 m) TO 35 FT. (10.668 m) MOUNTING HEIGHT

1 13.177 1117 10 33	1 12 1102000 1	1410014111140 11
COLL CONDITIONS	DESIGN DEPTH "	D" OF FOUNDATION
SOIL CONDITIONS	SINGLE ARM POLE	TWIN ARM POLE
SOFT CLAY	11'-0''	12'-8''
Ou = 0.375 TON/SO. FT.	(3.35 m)	(3.85 m)
MEDIUM CLAY	9′-0′′	14'-10''
Qu = 0.75 TON/S0.FT	(2.74 m)	(4.52 m)
STIFF CLAY	7′-6′′	8'-7''
Ou = 1.50 TON/SO. FT.	(2 <b>.</b> 29 m)	(2.61 m)
LOOSE SAND	9'-6''	10'-7"
Ø = 34°	(2.90 m)	(3.22 m)
MEDIUM SAND	9'-0''	9'-10"
Ø = 37.5°	(2.74 m)	(2.99 m)
DENSE SAND	8'-3''	9'-7''
Ø = 40°	(2.51 m)	(2.91 m)



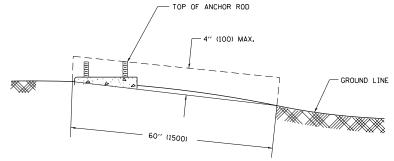
### TOP VIEW



### NOTES

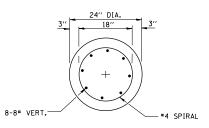
- 1. ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.
- 2. THE ANCHOR RODS AND RACEWAYS SHALL BE PROPERLY SECURED IN PLACE BEFORE THE CONCRETE IN PLACED.
- 3. THE FOUNDATION SHALL NOT PROTRUDE MORE THAN 4 IN. (100 mm) ABOVE THE FINISHED GRADE WITHIN A 60 IN. (1.5 m) CHORD ACROSS THE FOUNDATION, WITH ANCHOR RODS INCLUDED, IN ACCORDANCE WITH AASHTO GUIDELINES. IF THE FOUNDATION HEIGHT, INCLUDING ANCHOR RODS, EXTENDS BEYOND THESE SPECIFIED LIMITS, THE FOUNDATION SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE. SEE FOUNDATION EXTENSION DETAIL.
- 4. THE HOLE FOR THE FOUNDATION SHALL BE MADE BY DRILLING WITH AN AUGER, OF THE SAME DIAMETER AS THE FOUNDATION, IF SOIL CONDITIONS REQUIRE THE USE OF A LINER TO FORM THE HOLE, THE LINER SHALL BE WITHDRAWN AS THE CONCRETE IS DEPOSITED.
- 5. THE TOP OF THE FOUNDATION SHALL BE CONSTRUCTED LEVEL. A LINER OR FORM SHALL BE USED TO PRODUCE A UNIFORM SMOOTH SIDE TO THE TOP OF THE FOUNDATION. FOUNDATION TOP SHALL BE CHAMFERED ¾-IN. (20 mm).
- THE CONCRETE SHALL BE CLASS SI. CONCRETE SHALL CURE ACCORDING TO ARTICLE 1020.13 BEFORE LIGHT POLES ARE INSTALLED.
- 7. THE ANCHOR ROD SHALL BE A HOOK ROD TYPE. COLD BENDING OF THE ANCHOR ROD WILL NOT BE ALLOWED. THE RADIUS OF THE HOOK BEND SHALL NOT BE LESS THAN 4 TIMES THE NOMINAL DIAMETER OF THE ANCHOR ROD. A TACK WELDED ANCHOR ROD MAY BE SUBSTITUTED WITH THE APPROVAL OF THE ENGINEER.
- 8. THE ANCHOR RODS SHALL BE ACCORDING TO ASTM F1554 GRADE 725 (GRADE 105), NUTS SHALL BE HEXAGON NUTS ACCORDING TO ASTM A 194 2H OR ASTM A 563 DH, AND WASHERS SHALL BE ACCORDING TO ASTM F 436.
- 9. ANCHOR RODS, NUTS AND WASHERS SHALL BE COMPLETELY GALVANIZED BY EITHER THE HOT-DIPPED PROCESS CONFORMING WITH AASHTO M 232, THE MECHANICAL PLATING METHOD CONFORMING TO AASHTO M 298, CLASS 50 WITH A MAXIMUM COATING THICKNESS OF 150 UM(6 MILS) OR THE ELECTROLYTIC PROCESS ACCORDING TO ASTM F 1136.
- 10. THE ANCHOR RODS SHALL BE THREADED A MINIMUM OF 6 INCHES (150 mm) WITH A MINIMUM OF 3 INCHES (75 mm) OF THREADED ANCHOR ROD EMBEDDED IN THE FOUNDATION.
- 11. ANCHOR RODS SHALL PROJECT 2¾" (69.9 mm) ABOVE THE TOP OF THE FOUNDATION. IF BREAKAWAY COUPLINGS ARE SPECIFIED, THE CONTRACTOR SHALL CAREFULLY COORDINATE THE ANCHOR ROD PROJECTION WITH THE INSTALLATION REQUIREMENTS OF THE BREAKAWAY COUPLINGS.
- 12. THE CONTRACTOR SHALL USE A #3 SPIRAL AT 6" (152.4 mm) PITCH OR MAY SUBSTITUTE #3 TIES AT 12" (304.8 mm) O.C. WITH THE APPROVAL OF THE ENGINEER.
- 13. THE CABLE TRENCHES AND FOUNDATION SHALL BE BACK FILLED AND COMPACTED AS SPECIFIED BEFORE THE LIGHT POLE IS ERECTED.
- 14. THE RACEWAYS SHALL PROJECT 1" (25.4 mm) ABOVE THE TOP OF THE FOUNDATION.

# FOUNDATION DETAIL



FOUNDATION EXTENSION DETAIL

ANCHOR BOLT DETAIL



SECTION A-A

ABNA

6" (152.4)

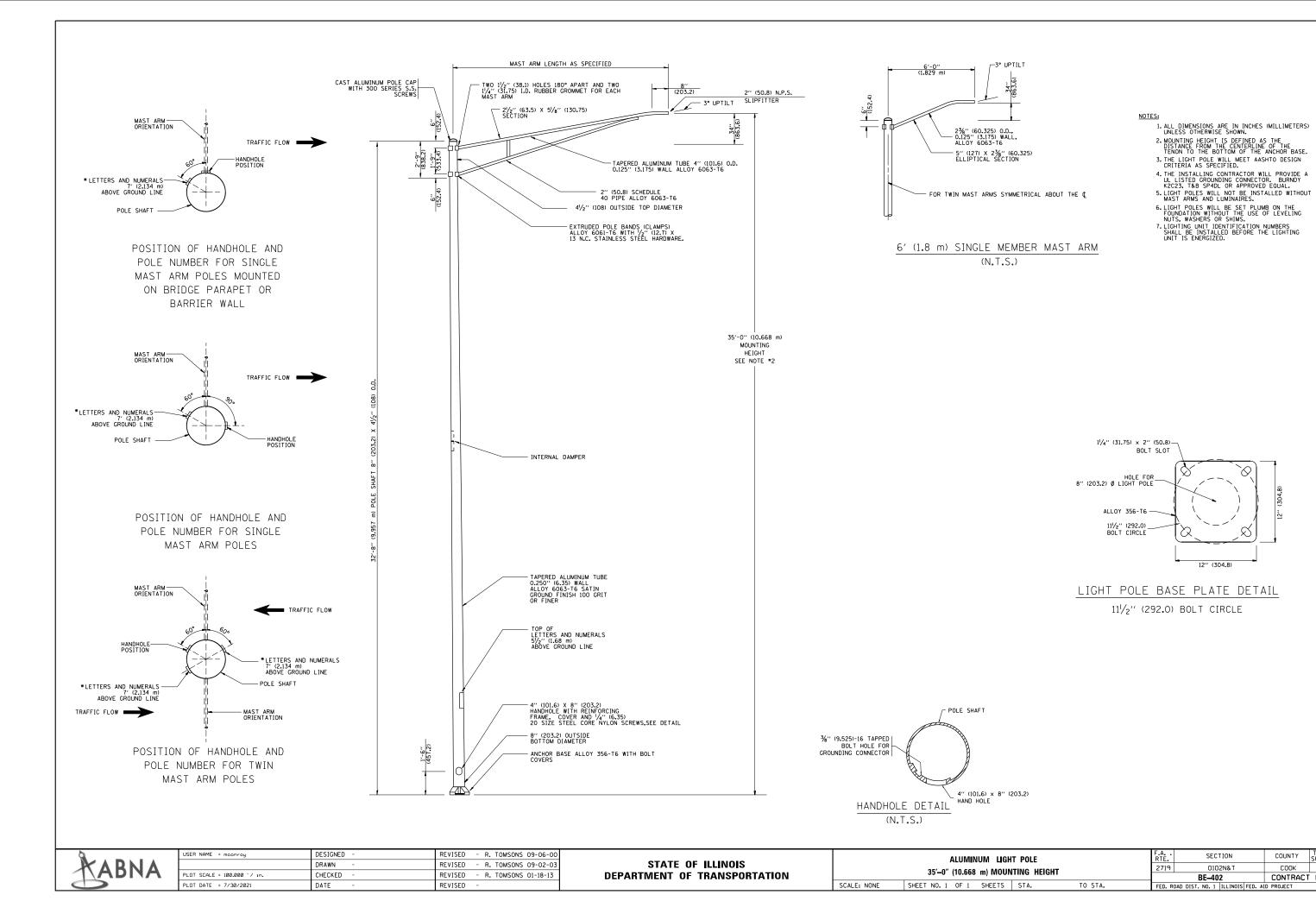
THREADED

%″ T. X 4″ DIA. WASHER, TACK WELDED

	USER NAME = mconroy	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 99.9998 '/ in.	CHECKED -	REVISED -
	PLOT DATE = 7/30/2021	DATE -	REVISED -
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

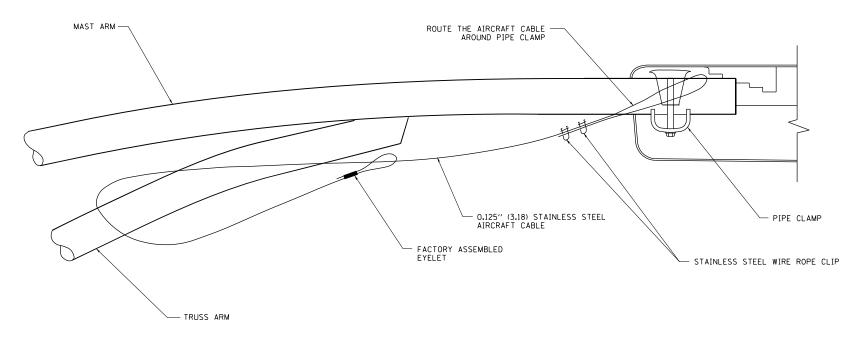
LIGHT POLE FOUNDATION 30' (9.144 m) TO 35' (10.668 m) M.H. 11 1/2" (292 mm) BOLT CIRCLE			F.A RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
						426	297	
,	30 (3.144 III) 10 33 (10.006 III) W.A. 11 1/2 (232 IIIIII) BOLT GINGLE				BE-300	CONTRACT	NO. 6	2C25
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	FED. R	OAD DIST. NO. 1   ILLINOIS FED. A	ID PROJECT		



COUNTY

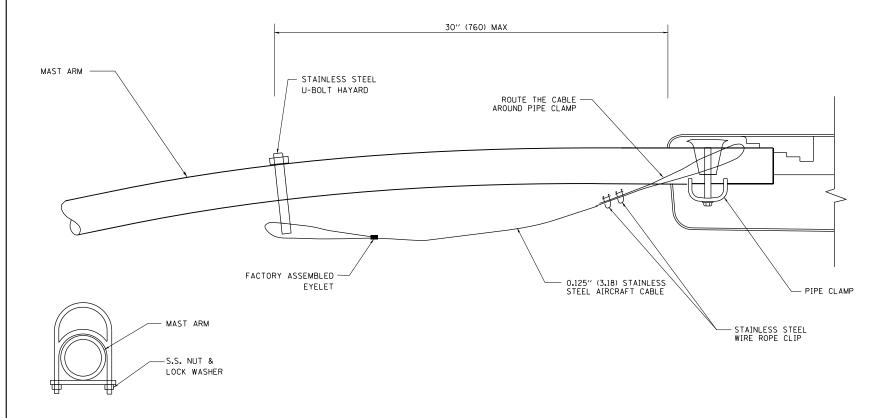
COOK 426 298

CONTRACT NO. 62C25



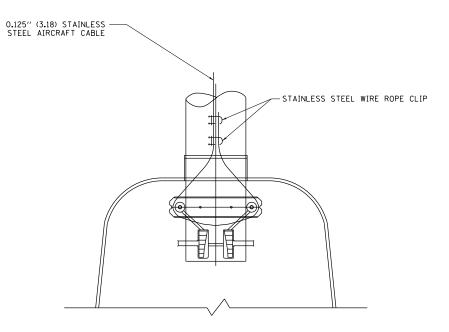
# SIDE VIEW (TRUSS ARM)

N.T.S.



## SIDE VIEW (SINGLE MEMBER OR DAVIT ARM)

N.T.S.



## BOTTOM VIEW

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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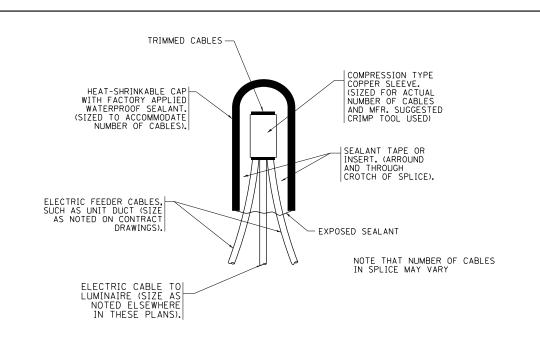
STAINLESS STEEL U-BOLT HAYARD

USER NAME = mconroy	DESIGNED -	REVISED - 08-08-03
	DRAWN -	REVISED -
PLOT SCALE = 100.000 '/ in.	CHECKED -	REVISED -
PLOT DATE = 7/30/2021	DATE -	REVISED -

STATE OF ILLINOIS						
DEPARTMENT OF TRANSPORTATION						

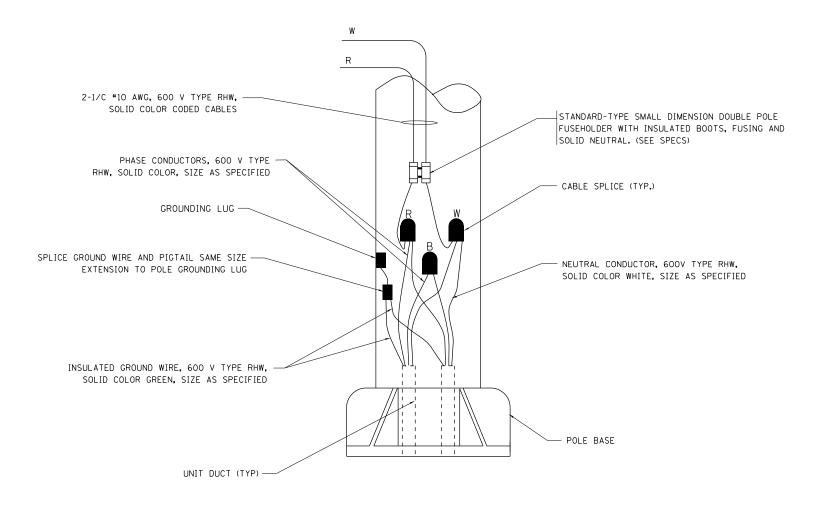
SCALE: NONE

					RTE.	SECTION	COUNTY	SHEETS	NO.
					2719	Ø1Ø2N&T	COOK	426	299
					BE-701 CONTRACT NO. 62C25				
	SHEET NO. 1 OF 1	SHEETS	STA.	TO STA.	FED. ROAD DIST. NO. 1   ILLINOIS FED. AID PROJECT				



## TYPICAL SPLICE DETAIL

N.T.S.



TYPICAL WIRING IN TRENCH DETAIL
N.T.S.

30" (762) MINIMUM COVER 12" (305) MAXIMUM WIDTH EXCEPT AS APPROVED BY THE ENGINEER

12" (305)

WARNING TAPE AS SPECIFIED

UNIT DUCT OR OTHER RACEWAY
AND WIRING AS PER PLANS. COMPLETE

WITH INTERNAL INSULATED EQUIPMENT GROUND WIRE.

# POLE WIRING DETAIL

N.T.S.



	USER NAME = mconroy	DESIGNED -	REVISED - 08-08-03
		DRAWN -	REVISED -
	PLOT SCALE = 100.000 '/ in.	CHECKED -	REVISED -
	PLOT DATE = 7/30/2021	DATE -	REVISED -
7			

STATE OF ILLINOIS						
DEPARTMENT	0F	TRANSPORTATION				

	MISC. ELECTRICAL DETAILS SHEET A			RTE.	SECTION	COUNTY	SHEETS	NO.	
				2719	0102N&T	COOK	426	300	
	SHLLI M				BE-702		CONTRACT NO. 62C25		2C25
	SCALE: NONE	SHEET NO. 1 OF 1	SHEETS	STA.	TO STA.	FED. ROAD DIST. NO. 1   ILLINOIS FED. AID PROJECT			