STATE OF ILLINOIS 04-27-2018 LETTING ITEM 154 **DEPARTMENT OF TRANSPORTATION** PROPOSED FOR INDEX OF SHEETS, SEE SHEET NO. 2 **HIGHWAY PLANS** THE IMPROVEMENT IS LOCATED IN THE VILLAGE OF LIBERTYVILLE. F.A.P. ROUTE 344 - US 45 (LAKE ST.) AT IL 137 (BUCKLEY RD.) SECTION: 46–1SB–1–BR **BRIDGE JOINT REPAIR; BRIDGE DECK REPAIRS TRAFFIC DATA** LAKE COUNTY IL 137 (BUCKLEY RD.) ADT (2015) = 11,700 POSTED SPEED LIMIT = C-91-284-17 R 10 E R 11 E ROUND WASHINGTON ST. WASHINGTON GAGES LAKE CENTER PETERSON RD ADLER DR. I WINCHESTER IBERT LOCATION OF RD. IMPROVEMENT: SN 049-0170 ****VILLE CENT 0 SCALES, REDUCED SIZED PLANS WILL NOT 176 CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED. MUNDE-LEIN-HAWLEY RD J.U.L.I.E. JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION 1-800-892-0123 HOLLI-OR 811 FREMONT & LIBERTYVILLE TOWNSHIPS 0 PROJECT ENGINEER J. ALAIN MIDY (847) 221-3056 GROSS & NET LENGTH = 280.0 FT. = 0.053 MILES

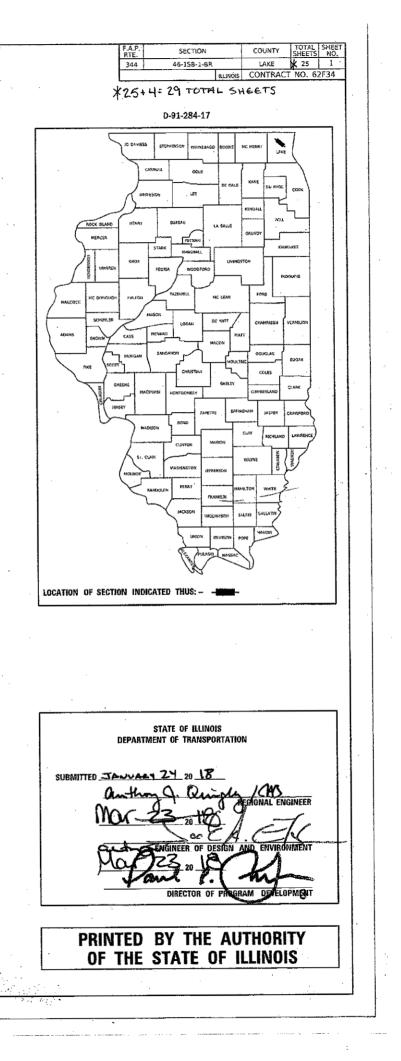
CONTRACT NO. 62F34

2.....

PROJECT MANAGER FAWAD AQUEEL (847) 705-4247

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INDEX OF SHEETS

HIGHWAY STANDARDS

SHEET NO.	DESCRIPTION	STANDARD NO.	DESCRIPTION	(800) 892-0123 OR 811 F UTILITIES. 48 HOUR NO
1	COVER SHEET	701006-05	OFF-ROAD OPERATIONS, MULTILANE, > 15' AWAY	THE CONTRACTOR SHALL AND THE VILLAGE OF LIE
2	INDEX OF SHEETS, STANDARDS, AND GENERAL NOTES	701301-04	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS	PLAN DIMENSIONS AND D
3-4	SUMMARY OF QUANTITIES	701306-04	LANE CLOSURE, 2L, 2W, SLOW MOVING OPERATIONS DAY ONLY, FOR SPEEDS > 45 MPH	CONSTRUCTION VARIATION AND DETAILS AFFECTING
5-12	BRIDGE PLANS (SN 049-0170)	701311-03	LANE CLOSURE, 2L, 2W MOVING OPERATIONS-DAY ONLY	PRIOR TO CONSTRUCTION CAUSE FOR ADDITIONAL
13	DETOUR PLAN	701502-08	URBAN LANE CLOSURE, 2L, 2W, WITH BIDIRECTIONAL LEFT TURN LANE	THE CONTRACTOR WILL B PRICE BID FOR THE WOR
14-18	STAGING PLANS	701701-10	URBAN LANE CLOSURE, MULTILANE INTERSECTION	THE CONTRACTOR WILL N
19	FINAL PAVEMENT MARKING PLANS	701901-07	TRAFFIC CONTROL DEVICES	PROPERTY WITHOUT WRIT
20	MAXIMUM WIDTH SIGN DETAIL	704001-08	TEMPORARY CONCRETE BARRIER	ALL DAMAGE TO EXISTIN OUTSIDE THE REMOVAL L COST TO THE DEPARTMEN
20A-20D 21	TRAFFIC SIGNAL PLANS TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS (TC-10)			THE CONTRACTOR SHALL A MINIMUM OF 72 HOURS
22	RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT) (TC-11)			THE RESIDENT ENGINEER VIA EMAIL AT WALTER.CZ PRIOR TO THE PLACEMEN
23	DISTRICT ONE TYPICAL PAVEMENT MARKINGS (TC-13)			THESE PLANS HAVE BEEN
24	TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC) (TC-14)			THE CONTRACTOR SHALL DURING THE CONSTRUCTION
25	ARTERIAL ROAD INFORMATION SIGN (TC-22)			DO NOT SCALE PLANS FO

c/NLO8																
e a	USER NAME = pyrzanowskirb	DESIGNED -	REVISED -	1		1	INDEV					F.A.	SECTION	COUNTY	TOTAL	SHEET
.¥		DRAWN -	REVISED -		STATE OF ILLINOIS		INDEX			STANDAR	IDS	RTE.			SHEETS	NO.
89	PLOT SCALE == 100.0000 ' / in.	CHECKED -	REVISED -		DEPARTMENT OF TRANSPORTATION			AND GE	eneral n	OTES		344	46-15B-1-BR	LAKE	25	2
žΞ	PLOT DATE = 2/8/2018	DATE -	REVISED			SCALE:	SHEET	OF	SHEETS	STA.	TO STA.			CONTRAC	CT NO. 62F	734
												1				

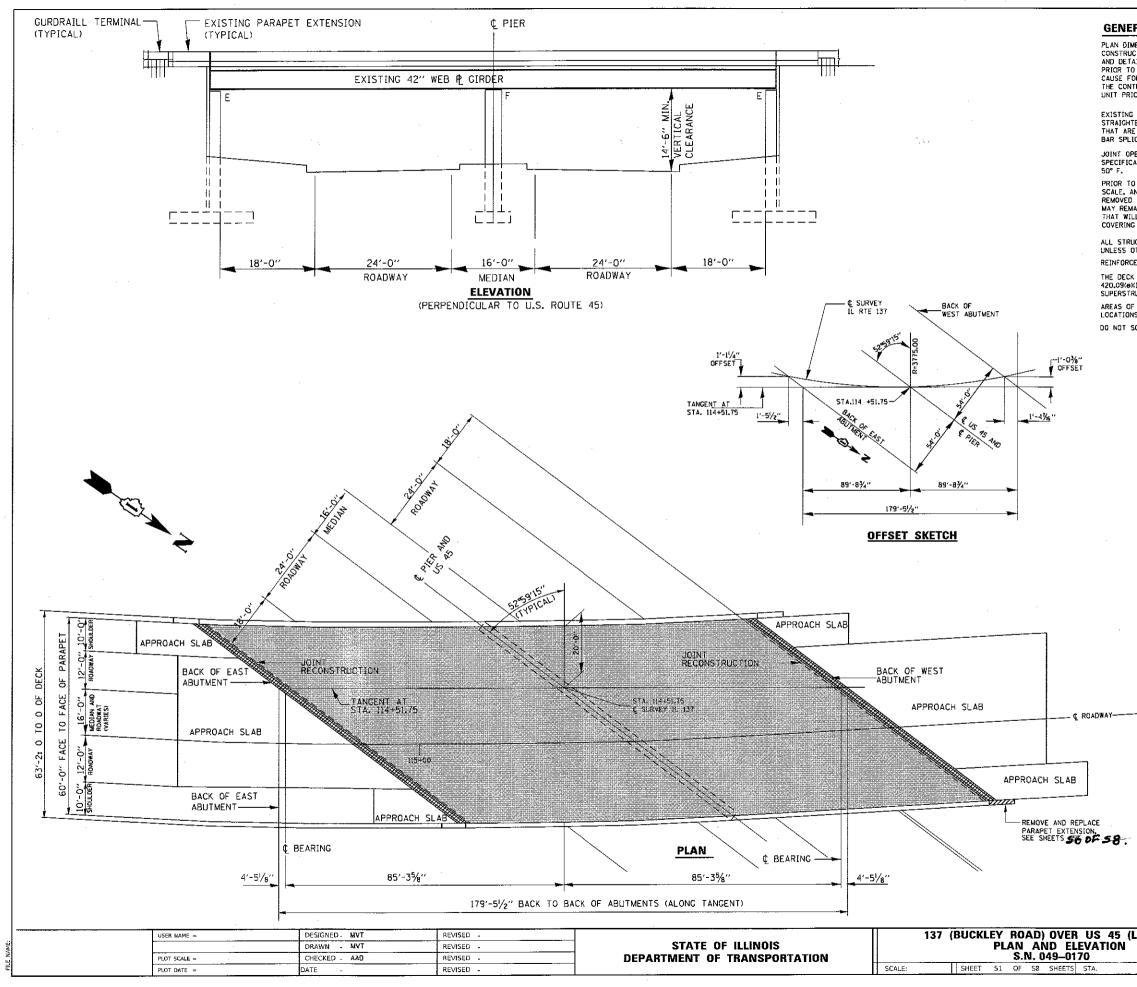
GENERAL NOTES

- BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL J.U.L.I.E. AT (800) 892-0123 OR 811 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE AND GAS NOTIFICATION IS REQUIRED.
 - ALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES, LIBERTYVILLE.
 - D DETAILS RELATIVE TO EXISTING PLANS ARE SUBJECT TO NOMINAL TIONS. THE CONTRACTOR SHALL FIELD VERIFY EXISTING DIMENSIONS ING NEW CONSTRUCTION AND MAKE NECESSARY APPROVED ADJUSTMENTS TION OR ORDERING OF MATERIALS, SUCH VARIATIONS SHALL NOT BE VAL COMPENSATION FOR A CHANGE IN SCOPE OF THE WORK, HOWEVER, LL BE PAID FOR THE QUANTITY ACTUALLY FURNISHED BASED AT THE UNIT WORK.
 - NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE WRITTEN PERMISSION FROM THE DEPARTMENT.
 - TING PAVEMENT MARKINGS OR RAISED REFLECTIVE PAVEMENT MARKERS MENT,
 - LL CONTACT THE DISTRICT ONE TRAFFIC CONTROL SUPERVISOR AT (847)705-4470 URS IN ADVANCE OF BEGINNING WORK.
 - EER SHALL CONTACT WALTER CZARNY, IDOT'S AREA TRAFFIC FIELD ENGINEER R.CZARNY@ILLINOIS.GOV A MINIMUM OF TWO (2) WEEKS MENT OF PERMANENT PAVEMENT MARKINGS.
 - EEN PREPARED FROM NOTES RECEIVED FROM THE BUREAU OF MAINTENANCE.
 - ALL BE REQUIRED TO PROVIDE ACCESS TO ABUTTING PROPERTY AT ALL TIMES ICTION OF THIS PROJECT.
 - FOR CONSTRUCTION DIMENSIONS.

recialty	Items	

	SUMMARY OF QUANTITIES				CONS	TRUCTION TYPE	LUDE	Ì	ł	CIRALITY	OF QUANTITIES				COL	NSTRUCTION	TYPE CODE	
1			URBAN						L	SUMMARY	UF QUANTITIES		URBAN		1			
CODE NO	ITEM	UNIT	TOTAL QUANTITIES	0047			**************************************		CODE NO		ITEM	UNIT	TOTAL QUANTITIES	00 47				
50102400	CONCRETE REMOVAL	CU YD	26	26				×	78000400	THERMOPLASTIC	PAVEMENT MARKING - LINE 6"	FOOT	294	294				
50300255		CU YD	26	26				k	78000600	THERMOPLASTIC	PAVEMENT MARKING - LINE 12"	FOOT	114	114				-
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	4004	4004				*	78000650	THERMOPLASTIC	PAVEMENT MARKING - LINE 24"	FOOT	23	23				
50800515	BAR SPLICERS	EACH	24	24														
			27	29				*	78008210		VENT MARKING TYPE I - LINE 4"	FOOT	745	745				
52000110	PREFORMED JOINT STRIP SEAL	FOOT	204	204				*	78008230	POLYUREA PAVE	ÆNT MARKING TYPE I – LINE 6"	FOOT	44	44				
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	3	3					78100200		SED REFLECTIVE PAVEMENT	EACH	20	20				
										MARKER	- 						<u></u>	
67100100	MOBILIZATION	L SUM	1	1				*	78200011	BARRIER WALL F	REFLECTORS, TYPE C	EACH	8	8				
70300904	PAVEMENT MARKING TAPE, TYPE IV 4"	FOOT	7199	7199					78300200	RAISED REFLECT	IVE PAVEMENT MARKER REMOVAL	EACH	20	20				
70300908	PAVEMENT MARKING TAPE, TYPE IV 8"	FOOT	221	221				*	85000200	MAINTENANCE OF	EXISTING TRAFFIC SIGNAL	EACH	1	1				
						-												
70300912	PAVEMENT MARKING TAPE, TYPE IV 12"	FOOT	78	78				*	89502200	MODIFY EXISTIN	IG CONTROLLER	EACH	1	1				
70300924	PAVEMENT MARKING TAPE, TYPE IV 24"	FOOT	35	35				*	89502380	REMOVE EXISTIN	IG, HANDHOLE	EACH	1	1				
70400100	TEMPORARY CONCRETE BARRIER	FOOT	312.5	312. 5					X0327980	PAVEMENT MARK	NG REMOVAL - WATER	SO FT	1937	1937				
																		\pm
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	300	300				*	X1400156	ADAR VEHICLE APPROACH, FAR	DETECTION SYSTEM, SINGLE BACK	EACH	1	1				
70600250	IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE), TEST [°] LEVEL 3	EACH	2	2					X5870015	BRIDGE DECK CC	NCRETE SEALER	SQ FT	1445	1445				
70600350	IMPACT ATTENUATORS, RELOCATE (NON-REDIRECTIVE), TEST LEVEL 3	EACH	2	2					X7010216	TRAFF1C CONTRO (SPECIAL)	AND PROTECTION,	L SUM	1	1		40 000 milità de la constante d		
78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4	" F00T	4075	4070														
ILE NAME =	USER NAME = przonowstirb	DESIGNED -	4079	4079 REVISED					x7030005	ILMPUKARY PAVE	MENT MARKING REMOVAL	SQ FT	2934	2934	F.A	SECTION	COUNTY	TOT
	PLOT SCALE = 100,0000 1/ In	CHECKED - DATE -		REVISED - REVISED - REVISED -			ST DEPARTME	ATE OF IL		TION	SUMMARY	OF QUANT		STA.	344	46-358-1-BF	LAKE CONTRAC	25

			100% STATE			NETRUCTO		005		1 1		····			- <u>r</u>		CTOUCTION	TYPE COD		
	SUMMARY OF QUANTITIES	_	URBAN			NSTRUCTIO	N IYPE C				SUMMARY (OF QUANTITIES					STRUCTION	TYPE CODI	<u>-</u>	
CODE NO	ÎTEM	UNIT	TOTAL QUANTITIES	0047						CODE NO		ITEM	UNIT	TOTAL QUANTITIES						
Z0001700	APPROACH SLAB REPAIR (FULL DEPTH)	SO YD	21	21						~										
	CONCRETE BRIDGE DECK SCARIFICATION 3/8																			
Z0012102	INCH	SO YD	1130	1130																
Z0012193	BRIDGE DECK THIN POLYMER OVERLAY 3/8"	SO YD	1130	1130								· · ·								
						-														
Z0030850	TEMPORARY INFORMATION SIGNING	SO FT	102.8	102.8								-								
20073510	TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1	1		 														
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GENERAL NOTES:

PLAN DIMENSIONS AND DETAILS RELATIVE TO EXISTING PLANS ARE SUBJECT TO NOMINAL CONSTRUCTION VARIATIONS. THE CONTRACTOR SHALL FIELD VERIFY EXISTING DIMENSIONS AND DETAILS AFFECTING NEW CONSTRUCTION AND MAKE NECESSARY APPROVED ADJUSTMENT AND BETAILS ADDITION OF ORDERING OF MATERIALS SUCH VARIATIONS SHALL NOT BE CAUSE FOR ADDITIONAL COMPENSATION FOR A CHANGE IN SCOPE OF THE WORK, HOWEVER, THE CONTRACTOR WILL BE PAID FOR THE QUANTITY ACTUALLY FURNISHED BASED AT THE UNIT PRICE BID FOR THE WORK.

EXISTING REINFORCEMENT BARS EXTENDING INTO THE REMOVAL AREA SHALL BE CLEANED. STRAIGHTENED AND INCORPORATED INTO THE NEW CONSTRUCTION, ANY REINFORCEMENT BARS THAT ARE DAMAGED DURING CONCRETE REMOVAL SHALL BE REPLACED WITH AN APPROVED BAR SPLICER OR ANCHORAGE SYSTEM, COST INCLUDED WITH CONCRETE REMOVAL.

JOINT OPENINGS SHALL BE ADJUSTED ACCORDING TO ARTICLE 520.04 OF THE STANDARD SPECIFICATIONS. WHEN THE DECK IS POURED AT AN AMBIENT TEMPERATURE OTHER THAN 50° F.

PRIOR TO POURING THE NEW CONCRETE DECK, ALL HEAVY OR LOOSE RUST, LOOSE MILL SCALE, AND OTHER LOOSE OR POTENTIALLY DETRIMENTAL FOREIGN MATERIAL SHALL BE REMOVED FROM THE SURFACES IN CONTACT WITH CONCRETE. TIGHTLY ADHERED PAINT REMOVED FROM THE SUMFACES IN CONTACT FILL CONCRETE. INGUET ADDREAD FAIL MAY REMAIN UNLESS OTHERWISE NOTED. REMOVAL SHALL BE ACCOMPLISHED BY METHODS THAT WILL NOT DAMAGE THE STEEL AND THE COST WILL BE INCLUDED IN THE PAY ITEM COVERING REMOVAL OF THE EXISTING CONCRETE.

ALL STRUCTURAL STEEL SHALL CONFORM TO AASHTO CLASSIFICATION M-270 Gr. 36. UNLESS OTHERWISE NOTED.

REINFORCEMENT BARS DESIGNATED (E) SHALL BE EPOXY COATED ...

THE DECK SURFACE SHALL HAVE ITS FINAL FINISH TINED ACCORDING TO ARTICLE 420.09(ex)) OF THE STANDARD SPECIFICATIONS. COST INCLUDED WITH CONCRETE SUPERSTRUCTURES.

AREAS OF DECK REPAIRS SHOWN ARE ESTIMATED. THE ENGINEER SHALL SHOW ACTUAL LOCATIONS OF DECK REPAIRS ON AS-BUILT PLANS. DO NOT SCALE DIMENSIONS.





PREFORMED JOINT STRIP SEAL

CONCRETE BRIDGE DECK SCARIFICATION $\frac{3}{6}$ " BRIDGE DECK THIN POLYMER OVERLAY 3%"

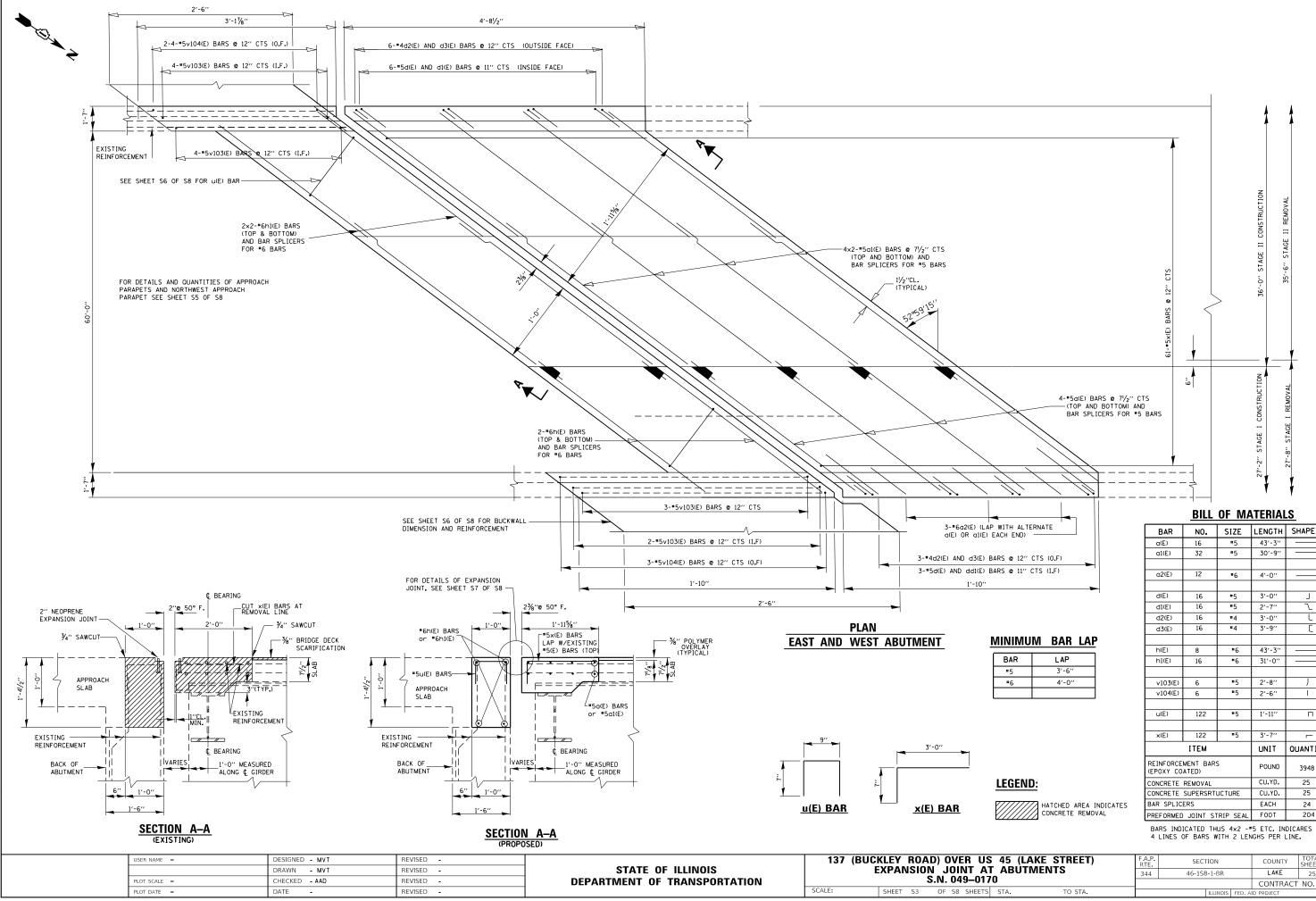
TOTAL BILL OF MATERIALS

ITEM	UNIT	QUANTITY
REINFORCEMENT BARS (EPOXY COATED)	POUND	4004
CONCRETE SUPERSTRUCTURE	CU. YD.	26
CONCRETE REMOVAL	CU. YD.	26
BAR SPLICERS	EACH	24
APPROACH SLAB REPAIR (FULL DEPTH)	SQ. YD.	21
PREFORMED JOINT STRIP SEAL	FOOT	204
CONCRETE BRIDGE DECK SCARIFICATION 34"	SQ. YD.	1130
BRIDGE DECK THIN POLYMER OVERLAY 3/"	\$Q. YD.	1130
BRIDGE DECK CONCRETE SEALER	50. FT.	1445

BILL OF MATERIALS

ITEM	UNIT	QUANTITY
PREFORMED JOINT STRIP SEAL	FOOT	204

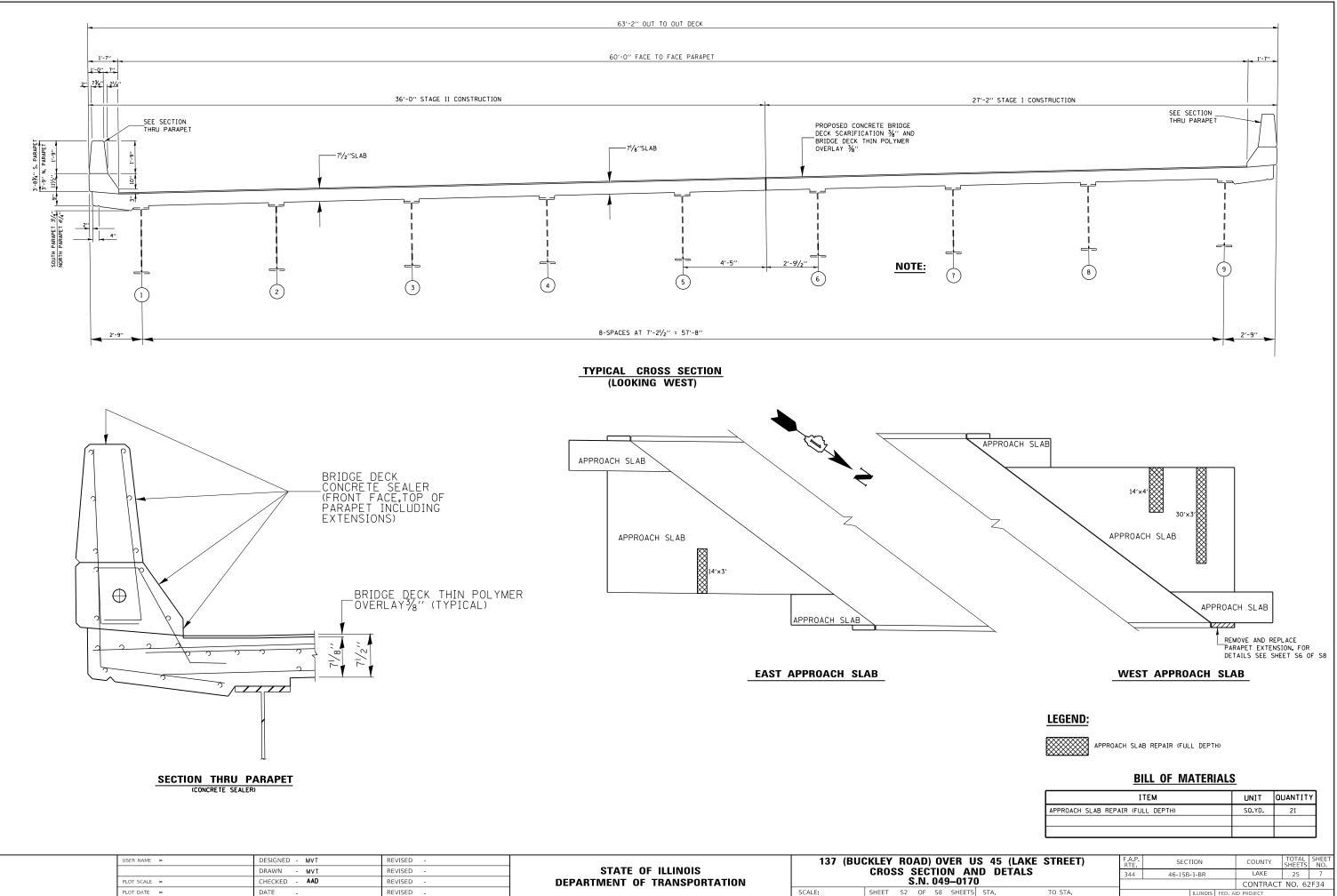
		5 (LAKE STREET)	F.A.P. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	EVATIO	N	344	46-158-1-BR	LAKE	25	5
l	70				CONTRAC	T NO. 62	2F34
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BAR	LAP
# 5	3'-6''
* 6	4'-0''

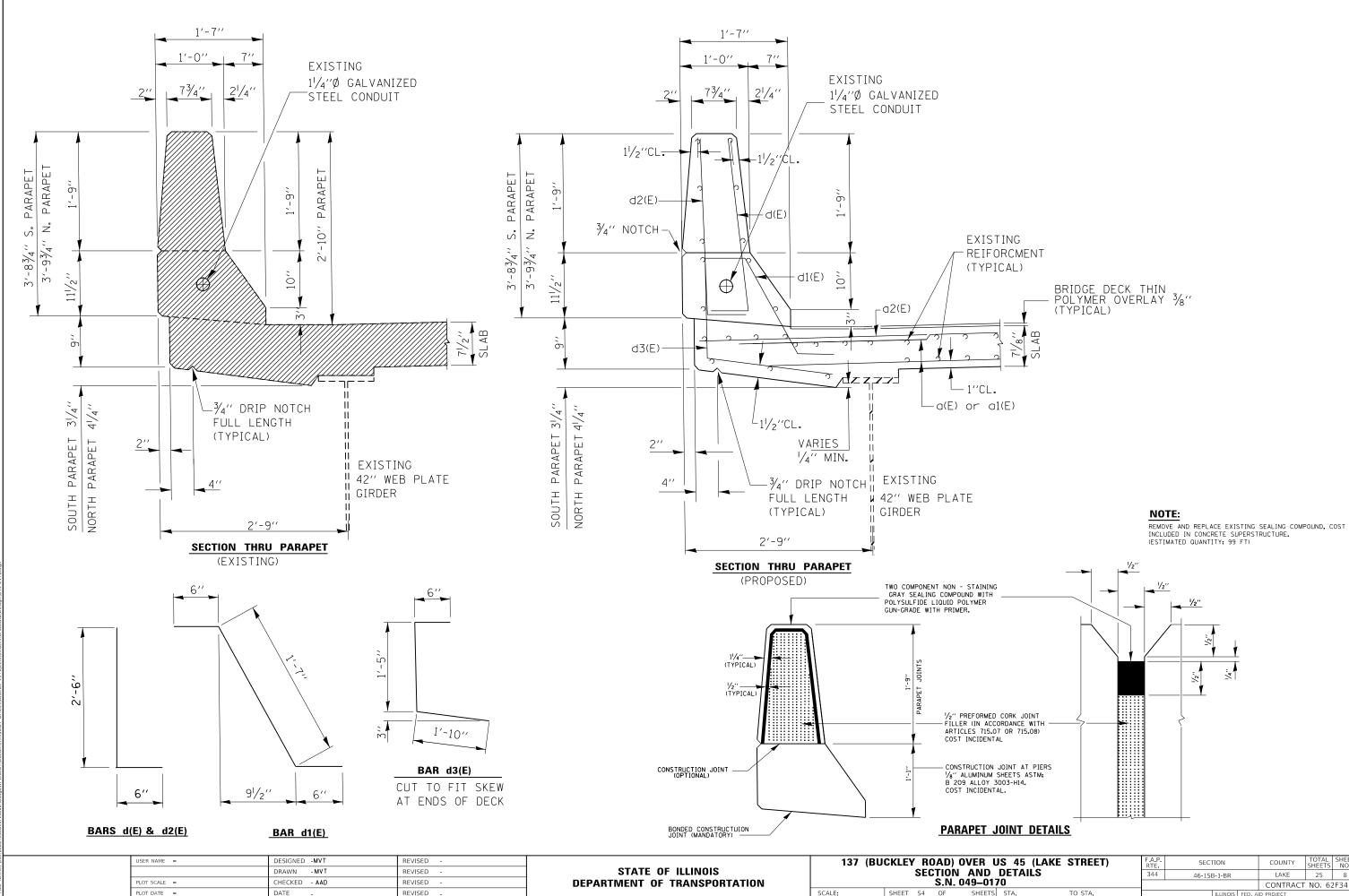
	DILL			
BAR	NO.	SIZE	LENGTH	SHAPE
a(E)	16	# 5	43'-3''	
a1(E)	32	*5	30'-9''	
a2(E)	12	*6	4'-0''	
d(E)	16	# 5	3'-0''	
d1(E)	16	*5	2'-7''	7
d2(E)	16	#4	3'-0''	L
d3(E)	16	# 4	3'-9''	Ľ
h(E)	8	* 6	43'-3''	
h1(E)	16	*6	31'-0''	
v103(E)	6	* 5	2'-8''	J
v104(E)	6	*5	2'-6''	Ι
u(E)	122	*5	1'-11''	
×(E)	122	* 5	3'-7''	-
	ITEM		UNIT	QUANTITY
REINFORCE (EPOXY CO		POUND	3948	
CONCRETE	REMOVAL	CU.YD.	25	
CONCRETE	SUPERSRT	CU.YD.	25	
BAR SPLIC	ERS	EACH	24	
PREFORMED	JOINT ST	TRIP SEAL	FOOT	204

S 45 (LAKE STREET)	F.A.P. RTE	SECT	SECTION			TOTAL SHEETS	SHEET NO.	
AT ABUTMENTS	344	46-1SE	3-1-BR		LAKE	25	6	
70					CONTRACT NO. 62F34			
S STA. TO STA.			ILLINOIS	FED. AI	ID PROJECT			

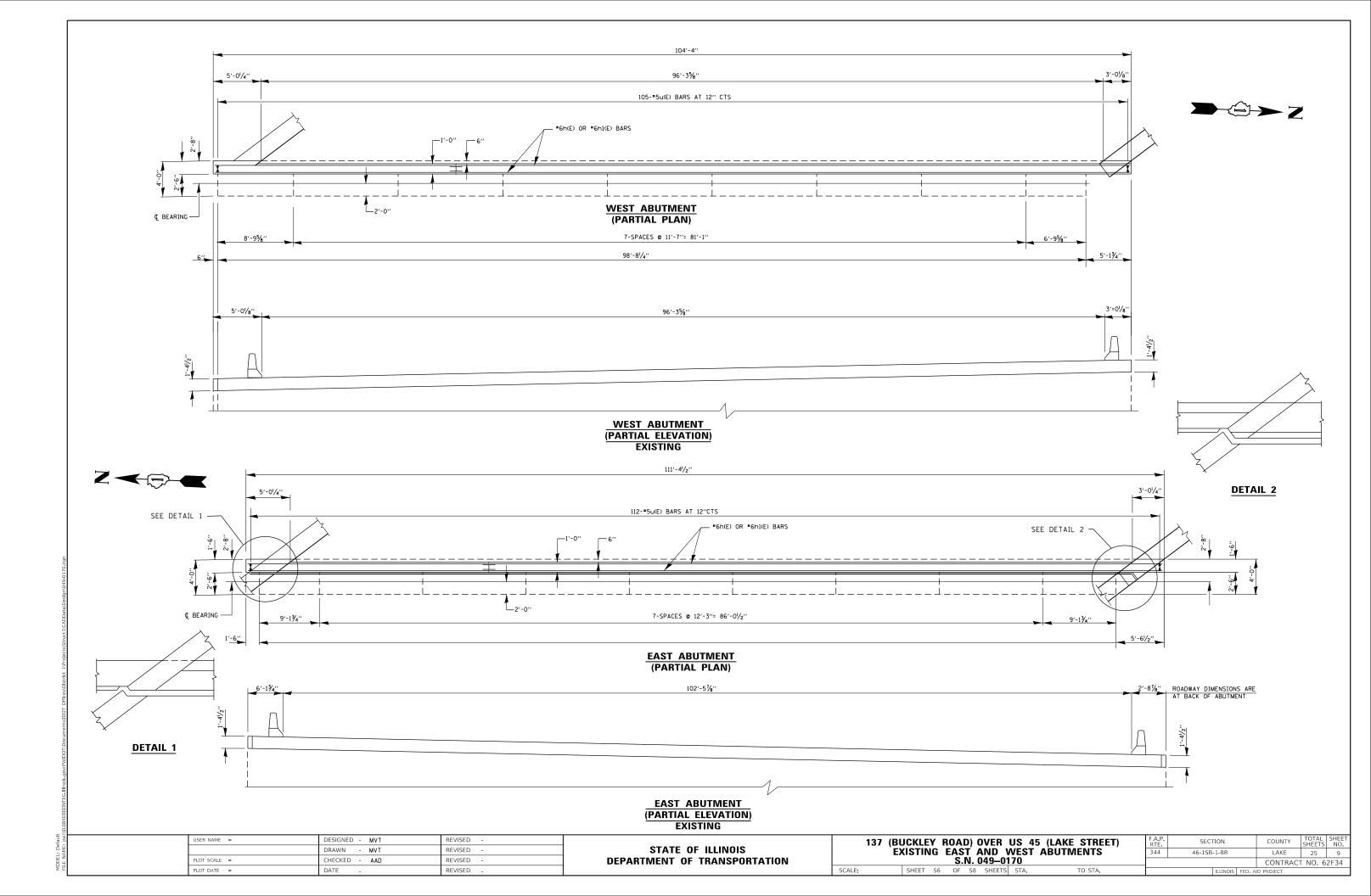


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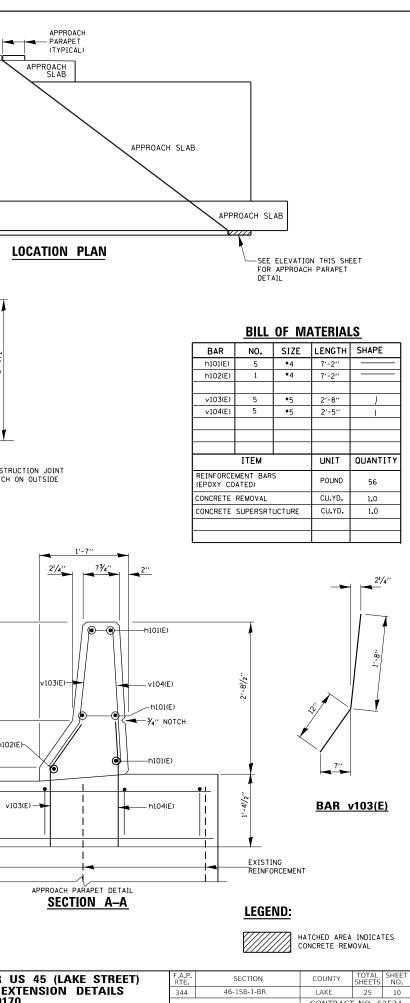
USER NAME =	DESIGNED - MVT DRAWN - MVT	REVISED - REVISED -	STATE OF ILLINOIS	137 (BUC	CKLEY ROAD) OVER CROSS SECTION
PLOT SCALE =	CHECKED - AAD	REVISED -	DEPARTMENT OF TRANSPORTATION		S.N. 049–01
PLOT DATE =	DATE -	REVISED -		SCALE:	SHEET S2 OF S8 SHE



	IS 45 (LAKE	STREET)	F.A.P. RTE	SECT	ION		COUNTY	TOTAL SHEETS	SHEET NO.
DETAILS			344	46-1SE	3-1-BR		LAKE	25	8
17	70						CONTRACT	NO. 62	2F34
S	STA.	TO STA.			ILLINOIS	FED. A	ID PROJECT		

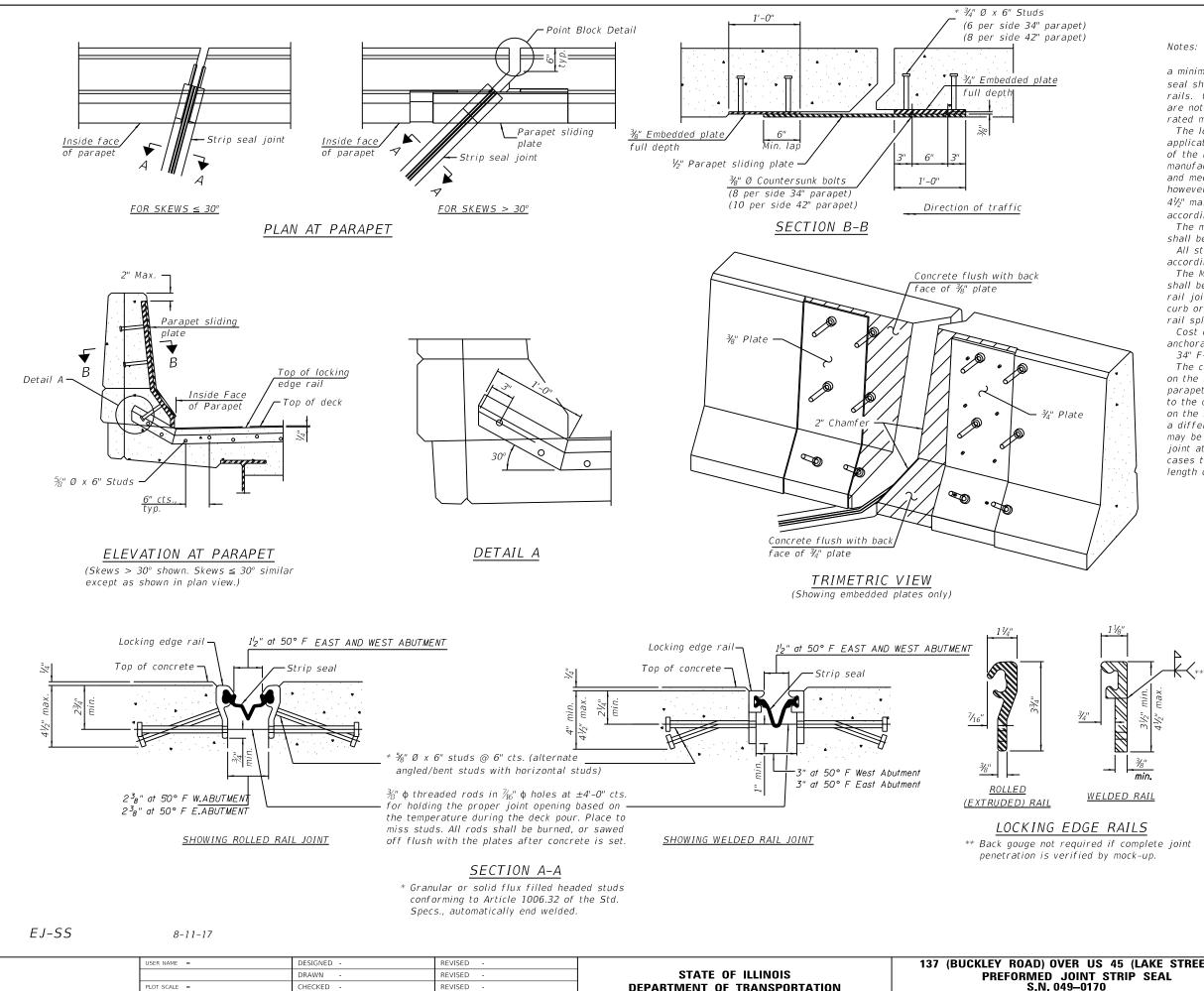


BRIDCE DECK PARAPET C C 4-#5v103(E) BARS 0 12" CTS (I.F.) 4-#5v104(E) BARS 0 12" CTS (O.F.)	EXTENT OF REMOVAL FOR NE, SE, AND SW PARAPET EXTENSION, SEE SHEET S3 OF S8 FOR INFORMATION. 5-==5v103(E) BARS © 12" CTS (INSIDE FACE) 5-==5v104(E) BARS © 12" CTS (OUTSIDE FACE) A	LINE FOR AND SW EXTENSION BEND IN FIELD	APPROACH SLAB	T'-6" TYPICAL) ACH SLAB APPROACH SLAB
	^{%6}	2'-6''		$\frac{2^{2^{5^{\prime}}}}{4^{\prime}-9^{\prime\prime}}$ BAR h102 (E)
USER NAME = PLOT SCALE = PLOT DATE =	DESIGNED - MVT DRAWIN - MVT CHECKED - AAD DATE - -	REVISED - REVISED - REVISED - REVISED - REVISED -	STATE OF ILLINO DEPARTMENT OF TRANSP	



S.N. 049–0170
 CONTRACT NO. 62F34

 SHEET S5 OF S8 SHEETS
 STA.
 ILLINOIS
 FED. AID PROJECT



PLOT DATE =

DATE

REVISED

DEPARTMENT OF TRANSPORTATION S.N. 049-01 SCALE: SHEET 7 OF 8 SHEET

a minimum thickness of $\frac{1}{4}$ ". The configuration of the strip seal shall match the configuration of the locking edge rails. Open or "webbed" strip seal gland configurations are not permitted. The gland shall be sized for a maximum rated movement of 4 inches.

The locking edge rails depicted are configured for typical applications and are conceptual only. The actual configuration of the locking edge rails and matching strip seal may vary from manufacturer to manufacturer provided they fit the application and meet the minimum anchorage shown. Flanged edge rails, however, will not be allowed. Locking edge rails may exceed the 4¹/₂" maximum depth provided the anchorage system is revised according to the manufacturer's recommendation.

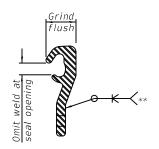
The manufacturer's recommended installation methods shall be followed.

All steel components shall be galvanized after fabrication according to Article 520.03 of the Standard Specifications.

The Maximum space between locking edge rail segments shall be $\frac{3}{16}$ " and sealed with a suitable sealant; however, any rail joint within 10' measured perpendicular to the face of the curb or parapet shall be welded as shown in the locking edge rail splice detail.

Cost of parapet sliding plates, embedded plates, and anchorage studs included with Preformed Joint Strip Seal.

34" F-shape barrier shown, 42" F-shape similar as noted. The concrete opening below the strip seal will vary based on the locking edge rail chosen by the Contractor. Deck and parapet lengths shown elsewhere in the plans are dimensioned to the concrete opening, not the joint opening, and are based on the rolled locking edge rail. If the Contractor elects to use a different locking edge rail, dimensional adjustments may be required. One exception to this would be the strip seal joint at the end of the precast bridge approach slab. For these cases the pavement connector length shall be adjusted, not the length of the bridge approach slab.



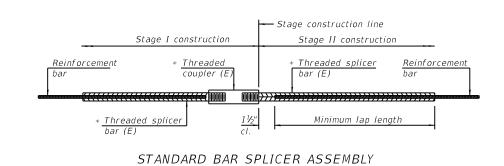
LOCKING EDGE RAIL SPLICE

The inside of the locking edge rail groove shall be free of weld residue. Rolled rail shown, welded rail similar.

BILL OF MATERIAL

Item	Unit	Total
Preformed Joint Strip Seal	Foot	204

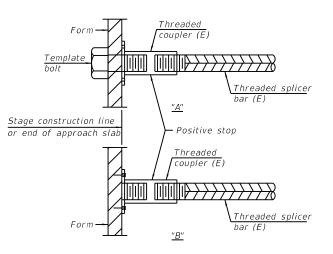
	•	AKE STREET)	F.A.P. RTE	SECT	ΠΟΝ		COUNTY	TOTAL SHEETS	SHEET NO.
-	STRIP	SEAL	344	46-1S	B-1-BR		LAKE	25	11
17	0						CONTRACT	F NO. 63	2F34
٢S	STA.	TO STA.			ILLINOIS	FED. A	ID PROJECT		



Threaded splicer bar length = min. lap length + $1\frac{1}{2}$ " + thread length

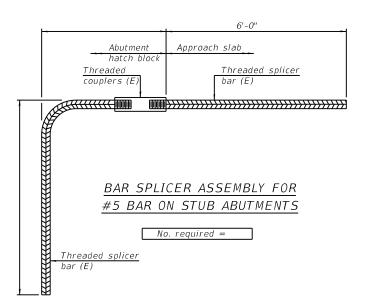
* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Minimum Iap length
East Abutment	#5	8	3′-6″
East Abutment	#6	4	4'-0"
West Abutment	#5	8	3′-6″
West Abutment	#6	4	4'-0"



INSTALLATION AND SETTING METHODS

"A" : Set bar splicer assembly by means of a template bolt.
 "B" : Set bar splicer assembly by nailing to wood forms or cementing to steel forms.
 (E) : Indicates epoxy coating.

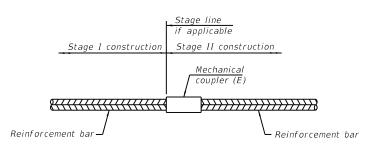


BSD-1

2-17-2017

USER NAME =	DESIGNED -	REVISED -		137	(BUCKLEY ROAD)	OVER US	S 45 (L	AKE STREET)	F.A.P.	SECTION	COUNTY	TOTAL SHEET
	DRAWN -	REVISED -	STATE OF ILLINOIS	BA	AR SPLICER ASSEMBLY A			LICER DETAILS	344	46-1SB-1-BR	LAKE	25 12
PLOT SCALE =	CHECKED -	REVISED -	DEPARTMENT OF TRANSPORTATION			049-017					CONTRAC	T NO. 62F34
PLOT DATE =	DATE -	REVISED -		SCALE:	SHEET S8 OF S	S8 SHEETS	STA.	TO STA.		ILLINOIS F	D. AID PROJECT	

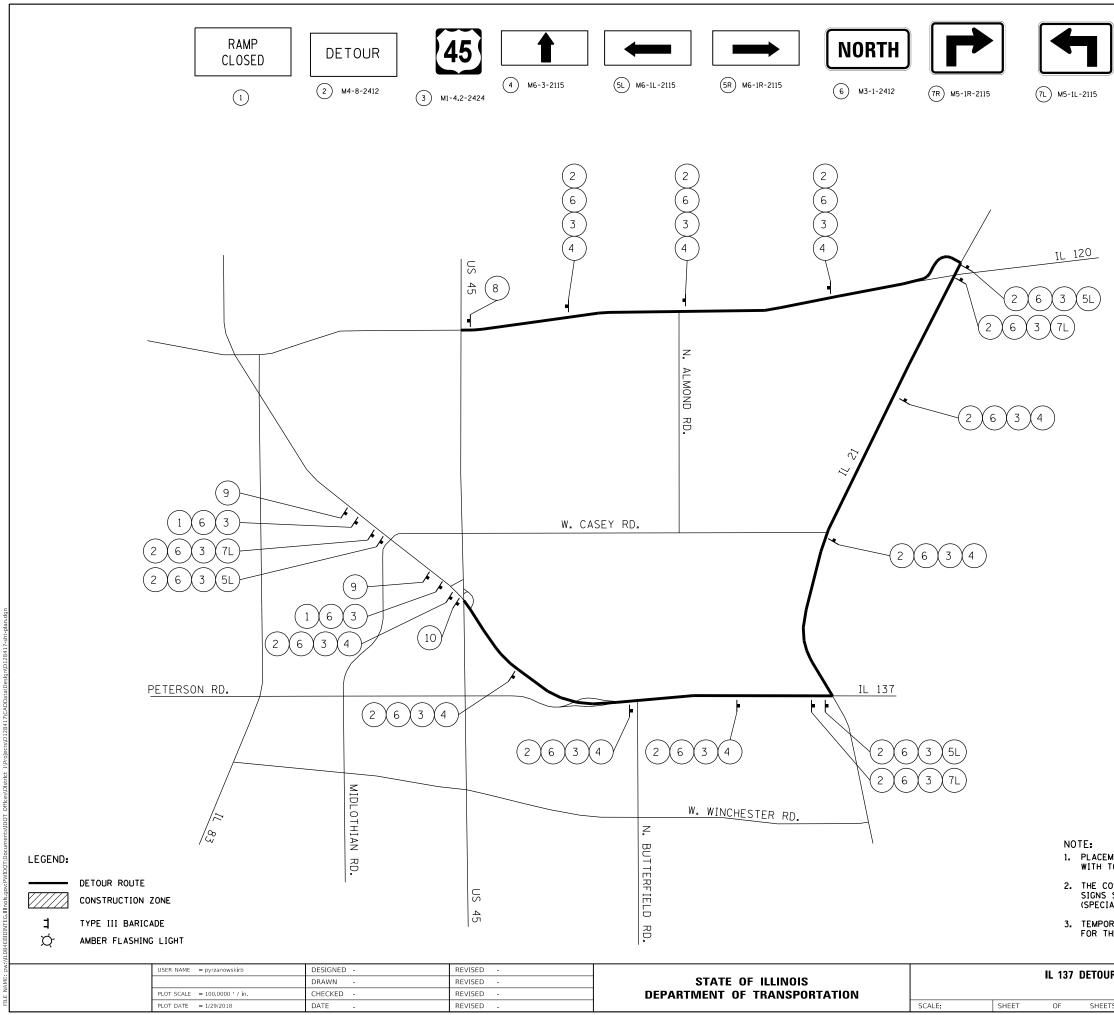
Splicer bars shall be deformed with threaded ends and have a minimum 60 ksi yield strength. All reinforcement shall be lapped and tied to the splicer bars. Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars. See Section 508 of the Standard Specifications. See approved list of bar splicer assemblies and mechanical splicers for alternatives.

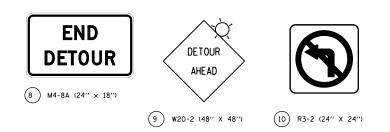


STANDARD MECHANICAL SPLICER

Location	Bar size	No. assemblies required

NOTES



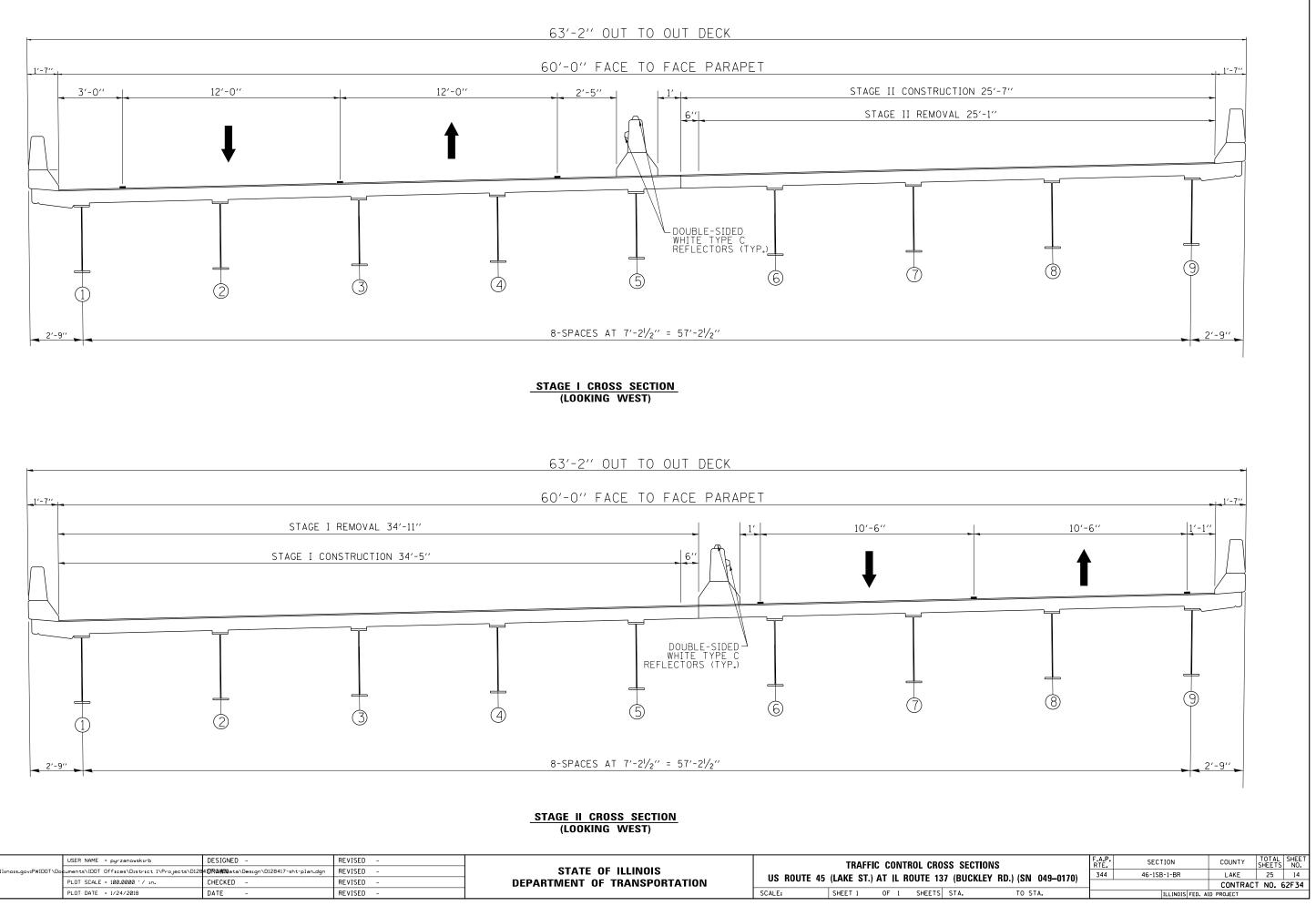


1. PLACEMENT AND SPACING OF SIGNS AND BARRICADES SHALL BE IN ACCORDANCE WITH TC-21 (DETOUR SIGNING FOR CLOSING STATE HIGHWAYS).

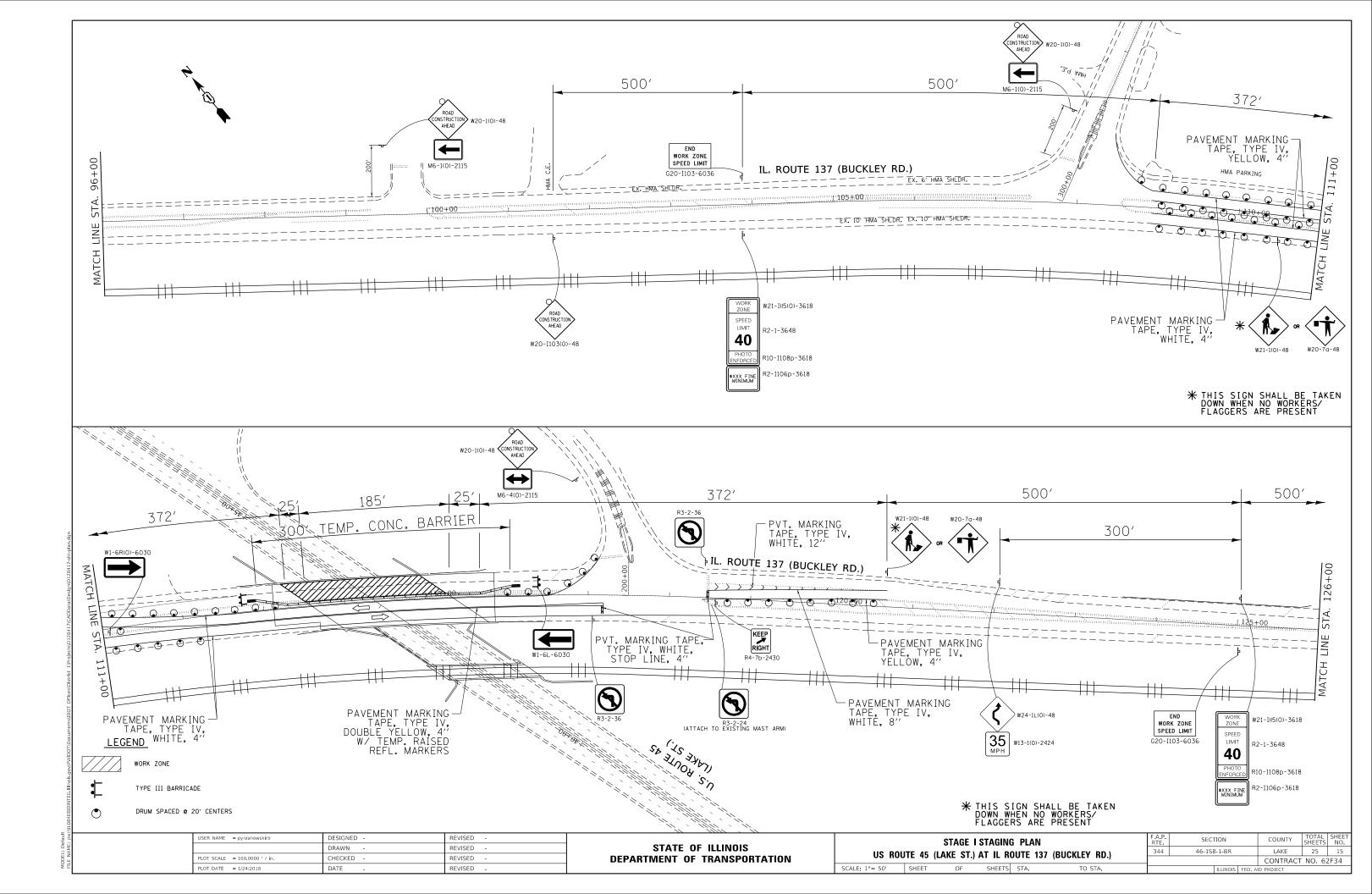
 THE COST OF SUPPLYING, ERECTING AND MAINTAINING BARRICADES, WARNING LIGHTS AND SIGNS SHALL BE INCLUDED IN THE CONTRACT COST OF TRAFFIC CONTROL AND PROTECTION (SPECIAL).

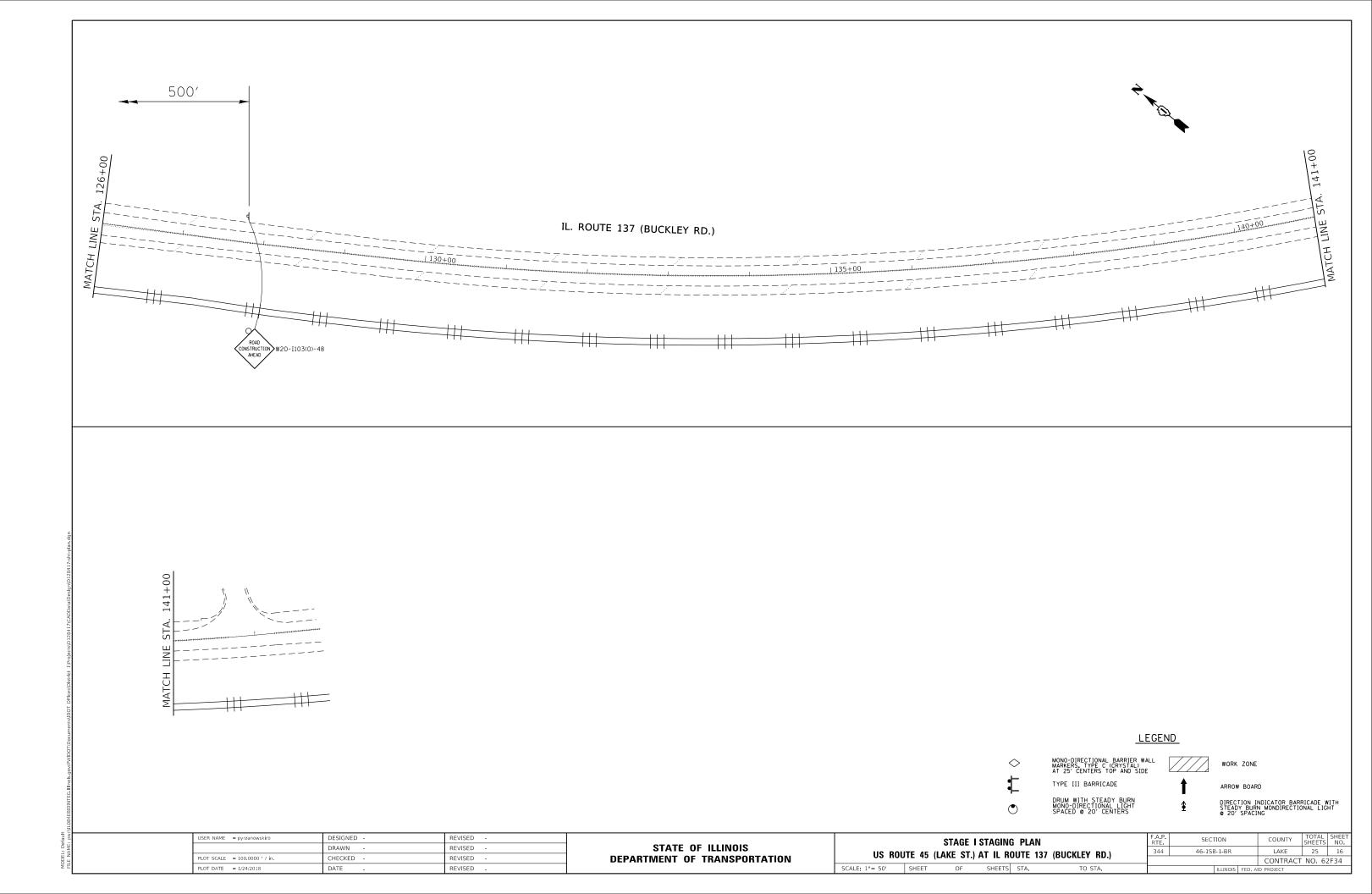
3. TEMPORARY INFORMATION SIGNING SHALL BE PLACED AT THE EAST AND WEST END OF IL 137 FOR THE DURATION OF THE PROJECT.

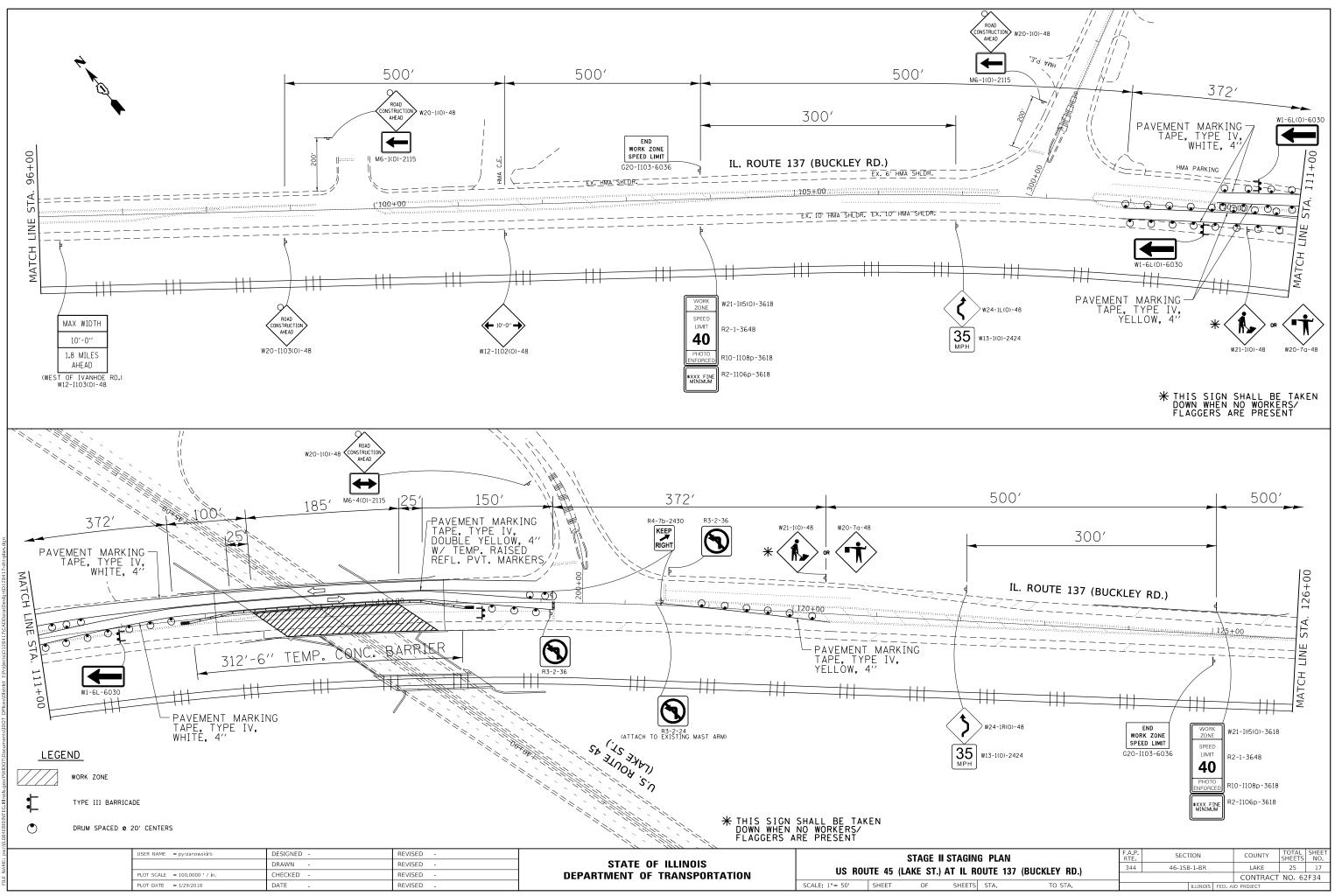
JR	PLAN		F.A.P. RTE	SECT	TION		COUNTY	TOTAL SHEETS	SHEET NO.
			344	46-1SE	LAKE	25	13		
							CONTRACT	NO. 62	2F34
ΤS	STA.	TO STA.			ILLINOIS	FED. A	ID PROJECT		

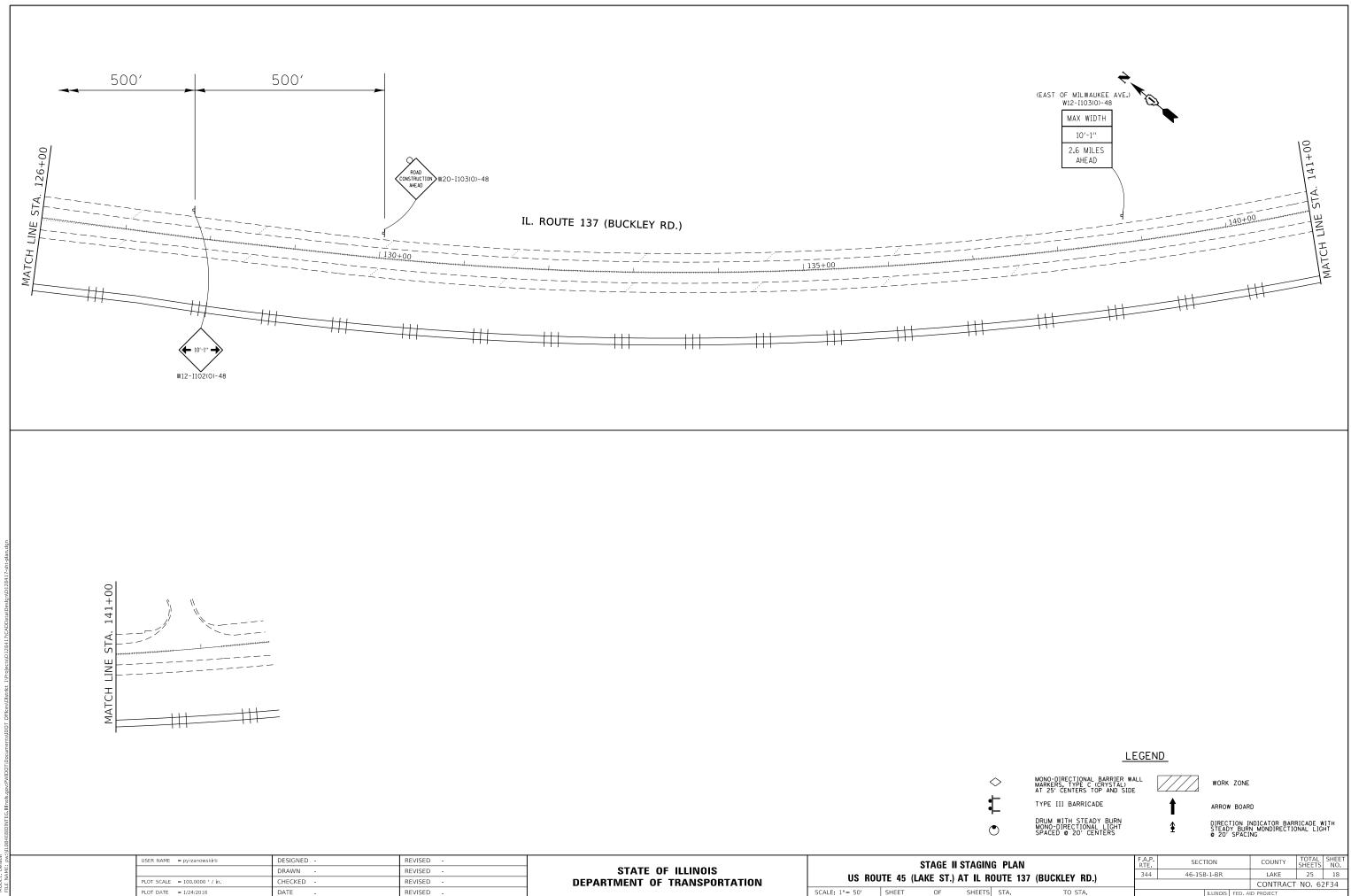


- [FILE NAME =	USER NAME = pyrzanowskirb	DESIGNED -	REVISED -			TRAFFIC	C CONTR		nee
	pw:\\IL084EBIDINTEG.1llinois.gov:PWIDOT\Do	cuments\IDOT_Offices\District_1\Projects\D128	417R0AMD)ata\Design\D128417-sht-plan.dgn	REVISED -	STATE OF ILLINOIS					
		PLOT SCALE = 100.0000 '/ in.	CHECKED -	REVISED -	DEPARTMENT OF TRANSPORTATION	US ROUTE 45	(LAKE SI.)	ATTERU	JUIE 1.	31
	Default	PLOT DATE = 1/24/2018	DATE -	REVISED -		SCALE:	SHEET 1	0F 1	SHEETS	,

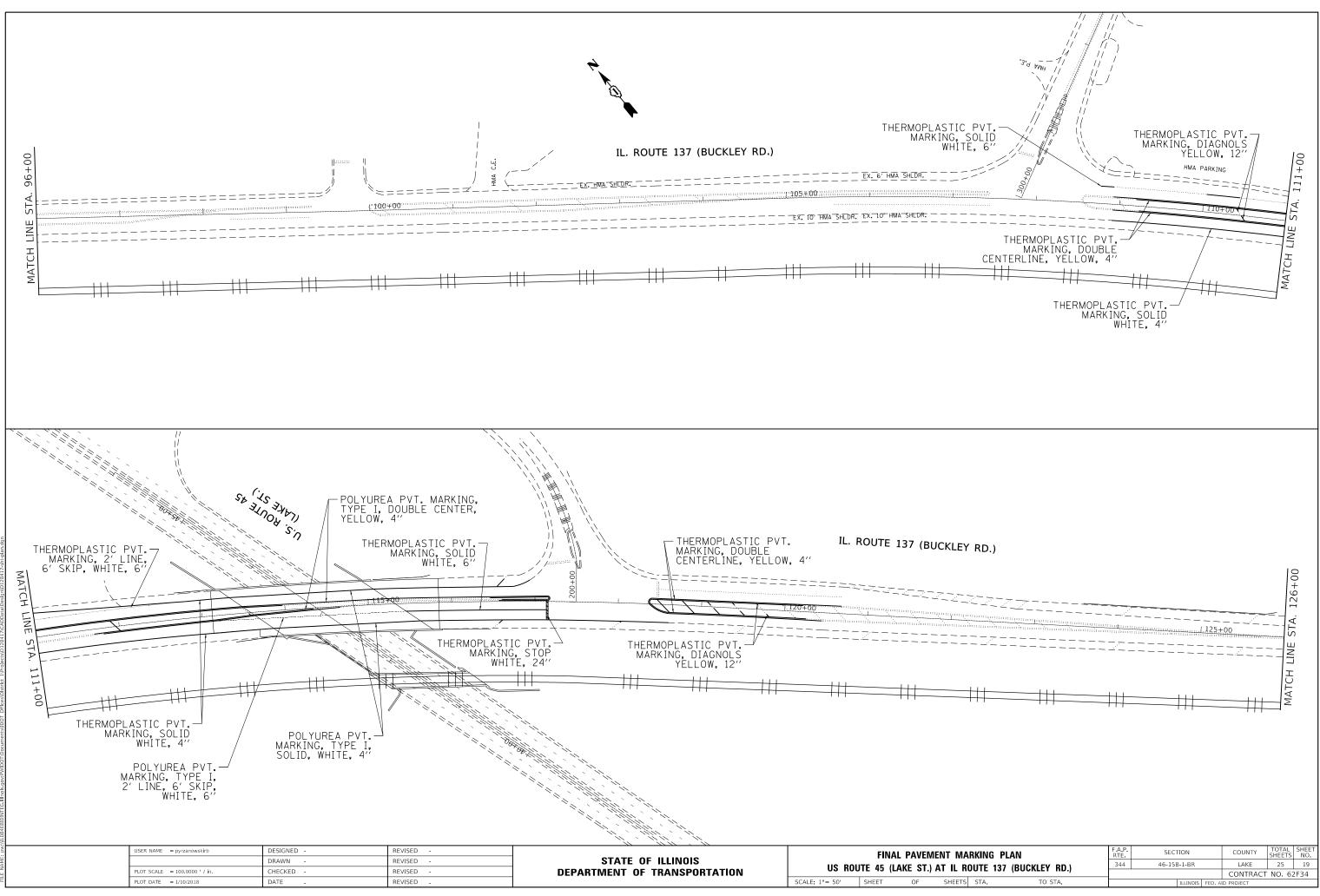


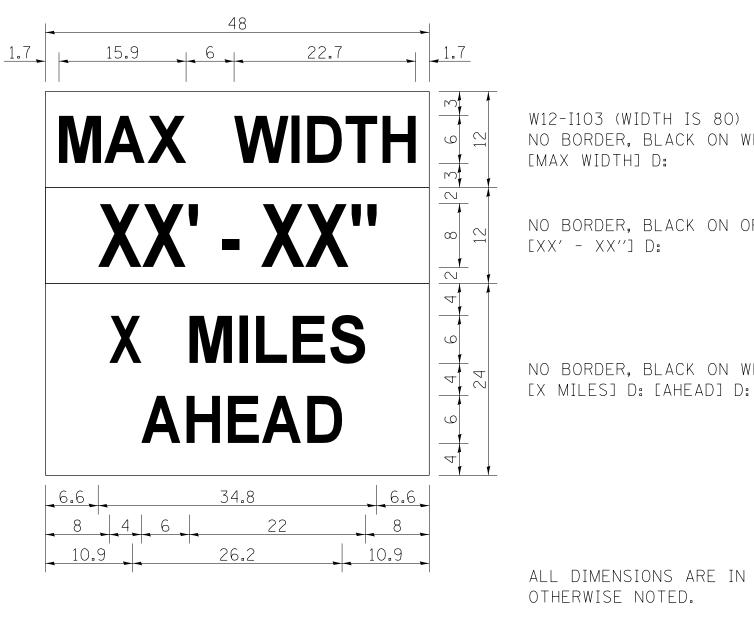






TO STA.





W12-I103

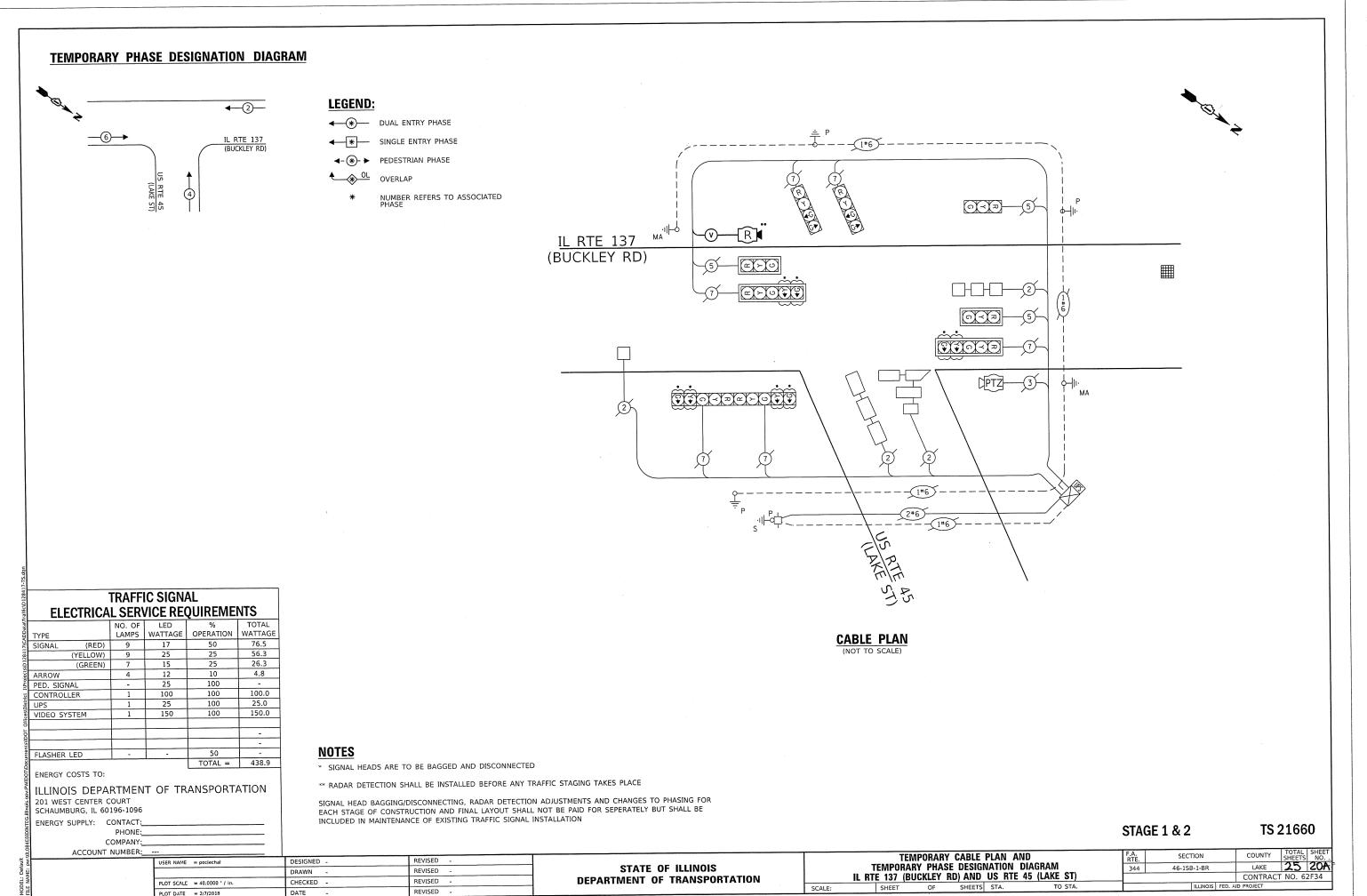
USER NAME = pyrzanowskirb	DESIGNED -	REVISED -							F.A.P. BTE	SECTION	COUNTY	TOTAL	SHEET
	DRAWN -	REVISED -	STATE OF ILLINOIS						344	46-1SB-1-BR	LAKE	25	20
PLOT SCALE = 100.0000 / in.	CHECKED -	REVISED -	DEPARTMENT OF TRANSPORTATION		MA/	KIMUM	WIDTH SIGN DETAIL				CONTRACT		F34
PLOT DATE = 1/10/2018	DATE -	REVISED -		SCALE:	SHEET	OF	SHEETS STA.	TO STA.		ILLINOIS FE	D. AID PROJECT		

NO BORDER, BLACK ON WHITE:

NO BORDER, BLACK ON ORANGE:

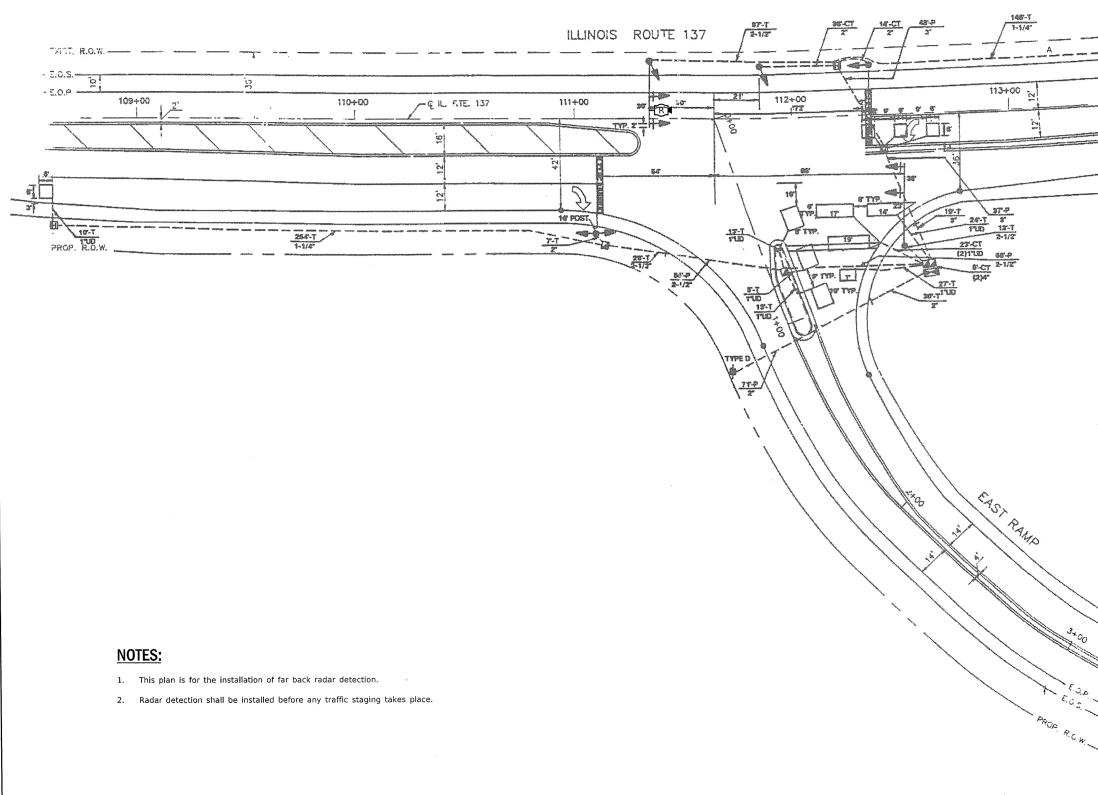
NO BORDER, BLACK ON WHITE:

ALL DIMENSIONS ARE IN INCHES UNLESS



PLOT DATE = 2/7/2018

DATE

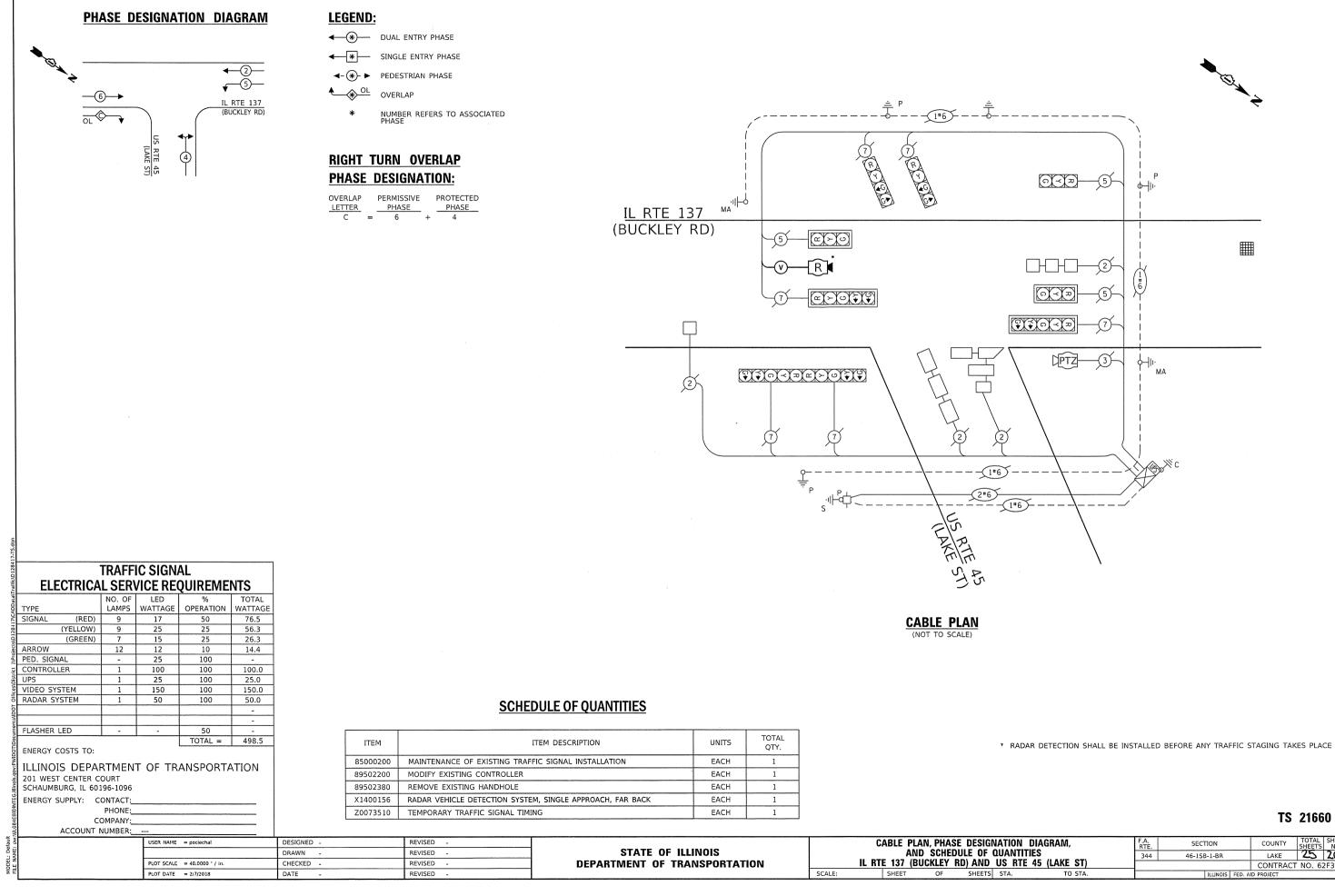


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	DRAWN -	REVISED -	STATE OF ILLINOIS	ирт) AND	
PLOT SCALE = 40.0000 ' / in.	CHECKED -	REVISED -	DEPARTMENT OF TRANSPORTATION	IL NI	E 137 (BUC		JI AND	03
PLOT DATE = 2/7/2018	DATE -	REVISED -		SCALE:	SHEET	OF	SHEETS	STA.

BACK OF EAST ABUT -115 UN FT. GALWINZED STEEL CONDUIT EMBEDDED IN STRUCTURE 1-1/4" 1-1/2 EXPANSION FITTING A 5+00 DETECTOR LOOP, TYPE I 114+00 TS 21660
 COUNTY
 TOTAL SHEETS
 SHEET NO.

 LAKE
 2.5
 208

 CONTRACT
 NO.
 62F34
 F.A. RTE. 344 SECTION ZATION PLAN 46-1SB-1-BR JS RTE 45 (LAKE ST) TO STA. STA. ILLINOIS FED. AID PROJECT

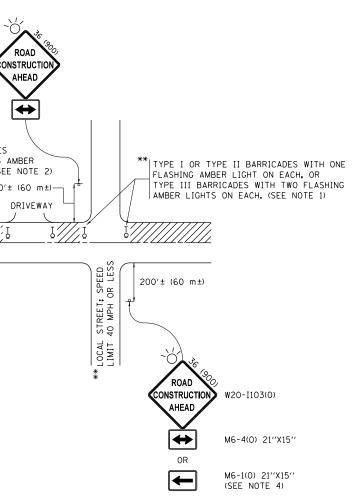


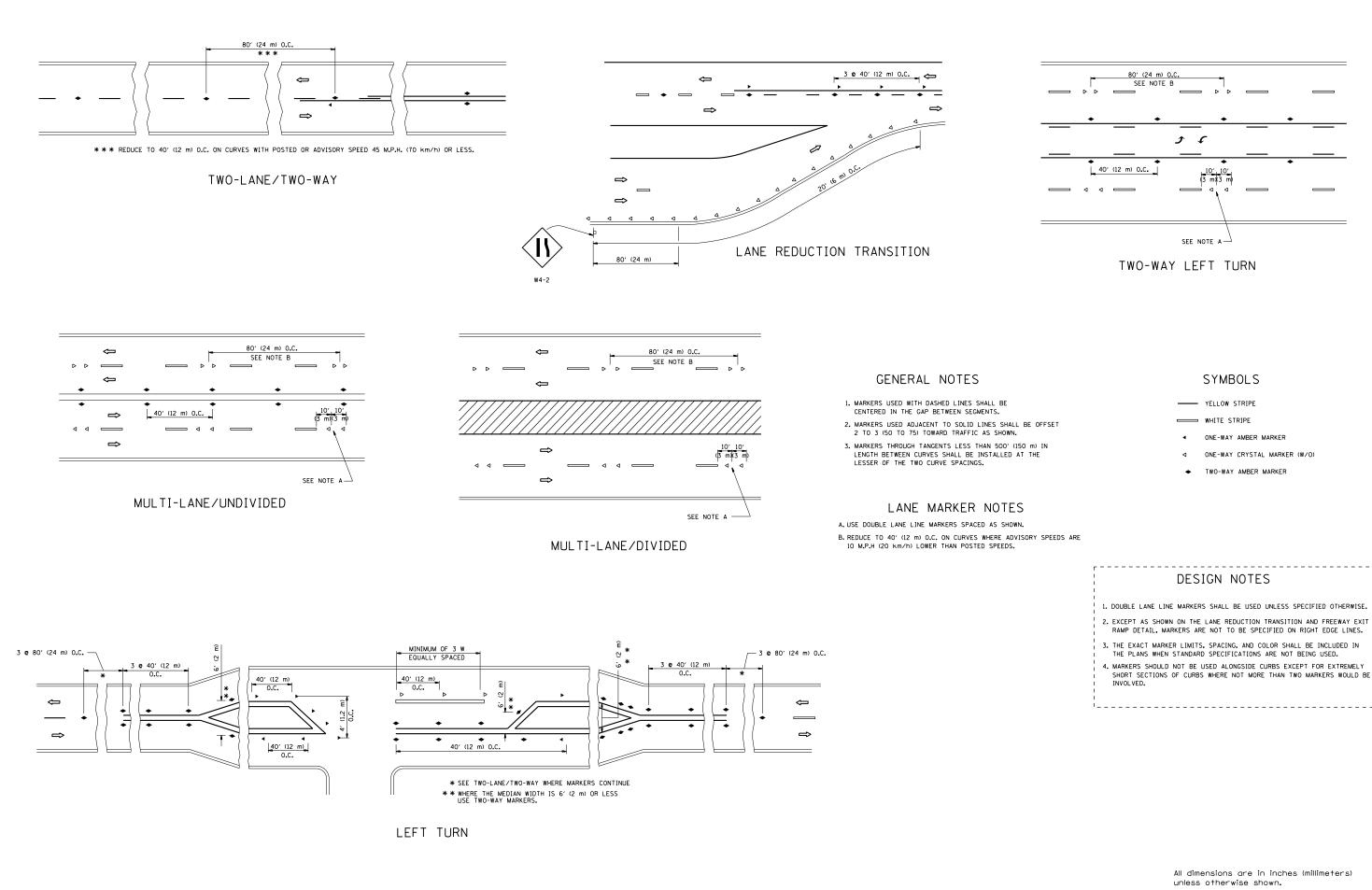
TS 21660

NATION DIA		F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
QUANTITIES		344	46-1SB-1-BR	LAKE	25	200
US RTE 45	(LAKE ST)			CONTRACT	NO. 62	2F34
STA.	TO STA.		ILLINOIS FED. A	ID PROJECT		

					DOODOCED	ITEM	EXISTING	PROPOSED
M		PROPOSED	ITEM HANDHOLE	EXISTING	PROPOSED	ITEM SIGNAL HEAD		
NTROLLER CABINET	\boxtimes		-SQUARE -ROUND			-(P) PROGRAMMABLE SIGNAL HEAD		
DMMUNICATION CABINET	ECC	22	HEAVY DUTY HANDHOLE					G G AY AG AG AG
MASTER CONTROLLER	EMC	MC	-SQUARE -ROUND	H ®	E ®		P	P
MASTER MASTER CONTROLLER	EMMC	ММС	DOUBLE HANDHOLE			SIGNAL HEAD WITH BACKPLATE	R R R	RRR
UNINTERRUPTABLE POWER SUPPLY	\$	¥	JUNCTION BOX		0	-(P) PROGRAMMABLE SIGNAL HEAD -(RB) RETROREFLECTIVE BACKPLATE		Y Y Y G G G
SERVICE INSTALLATION	- C - ^P	- B -	RAILROAD CANTILEVER MAST ARM	X OZ X	X eI I X			C C C C C C C C C C C C C C C C C C C
-(P) POLE MOUNTED SERVICE INSTALLATION			RAILROAD FLASHING SIGNAL	XoX	X+X		P RB	P RB
-(G) GROUND MOUNTED -(GM) GROUND MOUNTED METERED	⊠ ^c ⊠ ^{cm}		RAILROAD CROSSING GATE	X0X>	X•>>	PEDESTRIAN SIGNAL HEAD	A	
TELEPHONE CONNECTION	ET	Т	RAILROAD CROSSBUCK	Ϋ́	¥	AT RAILROAD INTERSECTIONS		<u>*</u>
STEEL MAST ARM ASSEMBLY AND POLE	0	•	RAILROAD CONTROLLER CABINET		₽ -R	PEDESTRIAN SIGNAL HEAD WITH COUNTDOWN TIMER	C C C	₽ C ★ D
ALUMINUM MAST ARM ASSEMBLY AND POLE	0		UNDERGROUND CONDUIT (UC), GALVANIZED STEEL			ILLUMINATED SIGN	5	•
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE	07⊄—	•*	TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE			"NO LEFT TURN"/"NO RIGHT TURN"		
SIGNAL POST	0	• • BM	SYSTEM ITEM	S	SP	NUMBER OF CONDUCTORS, ELECTRIC CABLE NO. 14, UNLESS NOTED OTHERWISE.		(5)
-(BM) BARREL MOUNTED - TEMPORARY			INTERSECTION ITEM	Ι	IP	ALL DETECTOR LOOP CABLE TO BE SHIELDED GROUND CABLE IN CONDUIT,	,	_
WOOD POLE	⊗ ≻	€ ≻	REMOVE ITEM		R	NO. 6 SOLID COPPER (GREEN)		
GUY WIRE SIGNAL HEAD	Д Д	→	RELOCATE ITEM ABANDON ITEM		RL	ELECTRIC CABLE IN CONDUIT, TRACER NO. 14 1/C		
SIGNAL HEAD WITH BACKPLATE	+1>	+►	CONTROLLER CABINET AND		RCF	COAXIAL CABLE	— <u>c</u>	— <u>c</u> —
SIGNAL HEAD OPTICALLY PROGRAMMED	> +> P	- > ^P + > ^P	FOUNDATION TO BE REMOVED			VENDOR CABLE		(V)
FLASHER INSTALLATION	ord f ord fs	← F ← FS	MAST ARM POLE AND FOUNDATION TO BE REMOVED		RMF	COPPER INTERCONNECT CABLE,		-
-(FS) SOLAR POWERED		F FS	SIGNAL POST AND FOUNDATION TO BE REMOVED		RPF	NO. 18, 3 PAIR TWISTED, SHIELDED	6#18	6#18
PEDESTRIAN SIGNAL HEAD	-0	-1	DETECTOR LOOP, TYPE I			FIBER OPTIC CABLE -NO. 62.5/125, MM12F	12F	(12F)
PEDESTRIAN PUSH BUTTON -(APS) ACCESSIBLE PEDESTRIAN PUSH BUTTON	@ @ APS	© @ APS	PREFORMED DETECTOR LOOP		P P	-NO. 62.5/125, MM12F SM12F -NO. 62.5/125, MM12F SM24F	24F	
-(APS) ACCESSIBLE PEDESIRIAN PUSH BUITON	R	R	SAMPLING (SYSTEM) DETECTOR	[s] (s)	s s		36F	
VIDEO DETECTION CAMERA			INTERSECTION AND SAMPLING		15 (5)			
	•		(SYSTEM) DETECTOR QUEUE AND SAMPLING			GROUND ROD -(C) CONTROLLER	<u>.</u> C _M _P _S → → → → →	≟ ^C ^M ^P ^S
RADAR/VIDEO DETECTION ZONE			(SYSTEM) DETECTOR		as as	-(M) MAST ARM -(P) POST		• • •
PAN, TILT, ZOOM (PTZ) CAMERA	र्दान	PTZ	WIRELESS DETECTOR SENSOR	®	<u>®</u>	-(S) SERVICE		
EMERGENCY VEHICLE LIGHT DETECTOR	\square	•	WIRELESS ACCESS POINT					
CONFIMATION BEACON	0()	₽- •						
WIRELESS INTERCONNECT	<u>∽+t </u>	•++ 						
WIRELESS INTERCONNECT RADIO REPEATER	ERR	RR						

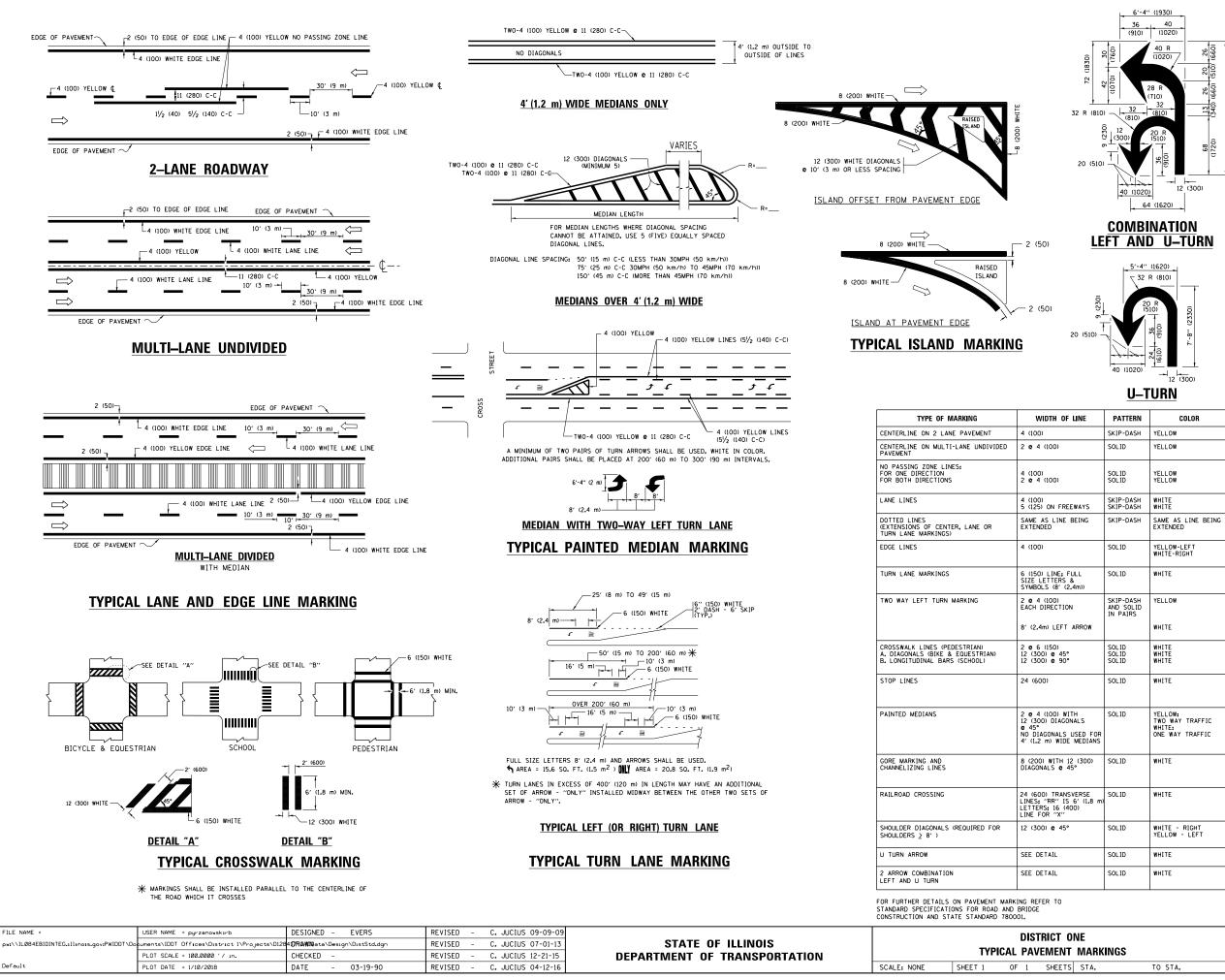
			ROAD (NO	Q 0
		NOTES:		
		SHOWN ON THE DRAWING A a) ONE "ROAD CONSTRL MOUNTED ON IT APP b) THE CLOSED PORTIO BLOCKING WITH TYPI THE CROSS SECTION 2. SIDE ROAD WITH A SPEED AS SHOWN ON THE DRAWIN a) ONE "ROAD CONSTRL FLASHER MOUNTED C OF THE MAIN ROUTE b) THE CLOSED PORTIO BLOCKING WITH TYPI OF THE CLOSED PORTIO SLOCKING WITH TYPI OF THE CLOSED PORTIO SPACING DURING DAY OPER IN HEIGHT. 4. WHEN THE SIDE ROAD LIES SIGNING AND THE WORK ZO	ND AS DIRECTED BY THE ENGINEER: JCTION AHEAD" SIGN 36 × 36 (900×900) WITH A FLASHER ROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE. N OF THE MAIN ROUTE SHALL BE PROTECTED BY UN E I, TYPE II OR TYPE III BARRICADES, 1/3 OF OF THE CLOSED PORTION. LIMIT GREATER THAN 40 MPH (60 km/h) IG AND AS DIRECTED BY THE ENGINEER: JCTION AHEAD" SIGN 48 × 48 (1.2 m × 1.2 m) WITH A N IT APPROXIMATELY 500' (150 m) IN ADVANCE N OF THE MAIN ROUTE SHALL BE PROTECTED BY III BARRICADES, 1/2 OF THE CROSS SECTION	HEN WORK IS BEING PERFORMED ON A SIDE ROAD OR DRIVEWAY, DULOW THE APPLICABLE STANDARD(S). THE DIRECTIONAL RROW (MG-1 OR MG-4) SHALL BE COVERED OR REMOVED WHEN DO LONGER CONSISTENT WITH THE TRAFFIC CONTROL SET-UP. DVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAYS NUESS OTHERWISE SPECIFIED IN THE PLANS OR BY THE NGINEER. HE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, ITERSECTIONS, AND DRIVEWAYS SHALL BE INCLUDED IN THE DOST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.
				All dimensions are in inches (millimeters) unless otherwise shown.
pw:\\IL084EBIDINTEG.111no1s.gov:PWIDDT\Documents\IDDT Offices\District 1\Projects\D1284DRW	ECKED - REVISED - A. SCHUETZE 07-01-13	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO S	F.A.P. RTE. SECTION COUNTY TOTAL SHEET SHEET NO. 344 46-ISB-1-BR LAKE 25 21 TC-10 CONTRACT NO. 62F34 STA. ILLINOIS FED. AID PROJECT

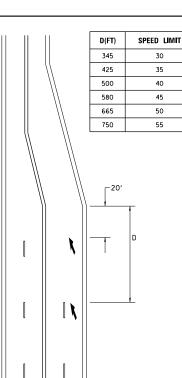




FILE NAME =	USER NAME = pyrzanowskirb	DESIGNED -	REVISED - T. RAMMACHER 09-19-94				F.A.P. RTF.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
pw:\\IL084EBIDINTEG.1llinois.gov:PWIDOT\Doc	uments\IDOT Offices\District 1\Projects\D128	4 DRGAMD ata\Design\DistStd.dgn	REVISED - T. RAMMACHER 03-12-99	STATE OF ILLINOIS	BAIAFB		344	46-1SB-1-BR	LAKE	25	22
	PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED -T. RAMMACHER 01-06-00	DEPARTMENT OF TRANSPORTATION	RAISED	REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)		TC-11	CONTRACT		2F 34
	PLOT DATE = 1/10/2018	DATE -	REVISED - C. JUCIUS 09-09-09		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS STA. TO STA.	FED. ROAD	DIST. NO. 1 ILLINOIS FED. A			

4. MARKERS SHOULD NOT BE USED ALONGSIDE CURBS EXCEPT FOR EXTREMELY SHORT SECTIONS OF CURBS WHERE NOT MORE THAN TWO MARKERS WOULD BE INVOLVED.





LANE REDUCTION TRANSITION

lane reduction arrows required at speeds of 45 MPH or greater or when specified in plans.

F LINE	PATTERN	COLOR	SPACING /REMARKS
	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
	SOLID	YELLOW	11 (280) C-C
	SOL ID SOL ID	YELLOW YELLOW	5½ (140) C-C FROM SKIP-DASH CENTERLINE 11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
EEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE
BEING	SKIP-DASH	SAME AS LINE BEING EXTENDED	2' (600) LINE WITH 6' (1.8 m) SPACE
	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MEDIANS IN YELLOW
FULL & 2.4m))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
ON ARROW	SKIP-DASH AND SOLID IN PAIRS	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5½ (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
•	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (600) APART 2' (600) APART SEE TYPICAL CROSSWALK MARKING DETAILS.
	SOLID	WHITE	PLACE 4' (1,2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT, OTHERWISE, PLACE AT DESIRED STOPPING POINT, PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
ITH DNALS USED FOR E MEDIANS	SOLID	YELLOW: TWO WAY TRAFFIC WHITE: ONE WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
12 (300) 45°	SOLID	WHITE	DIAGONALS: 15' (4,5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h)) 30' (9 m) C-C (OVER 45MPH (70 km/h))
SVERSE 5 6' (1.8 m) 400)	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"=3.6 SO. FT. (0.33 m ²) EACH "X"=54.0 SO. FT. (5.0 m ²)
•	SOLID	WHITE - RIGHT YELLOW - LEFT	50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C (30 MPH (50 km/h) TO 45MPH (70 km/h)) 150' (45 m) C-C (0VER 45MPH (70 km/h))
	SOLID	WHITE	16.3 SF
	SOLID	WHITE	30.4 SF

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

ONE IT MARKINGS			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
			344	46-1SB-1-BR	LAKE	25	23	
			TC-13	CONTRAC	T NO. 6	2F 34		
٢S	STA.	TO STA.	ILLINOIS FED. AID PROJECT					

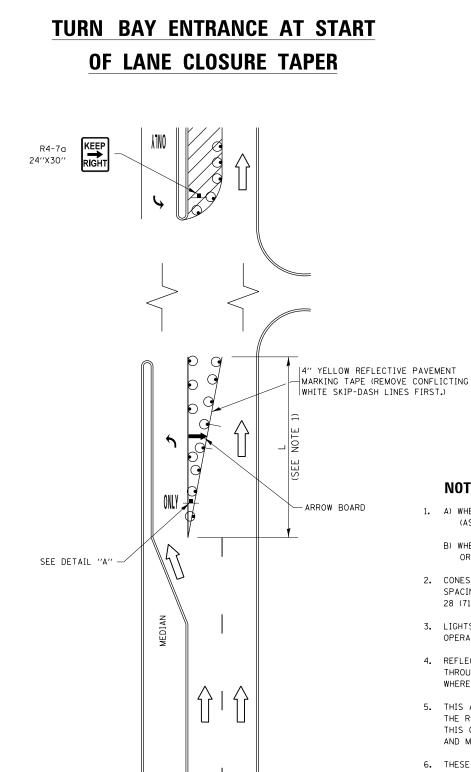
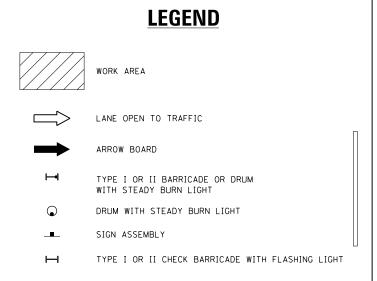
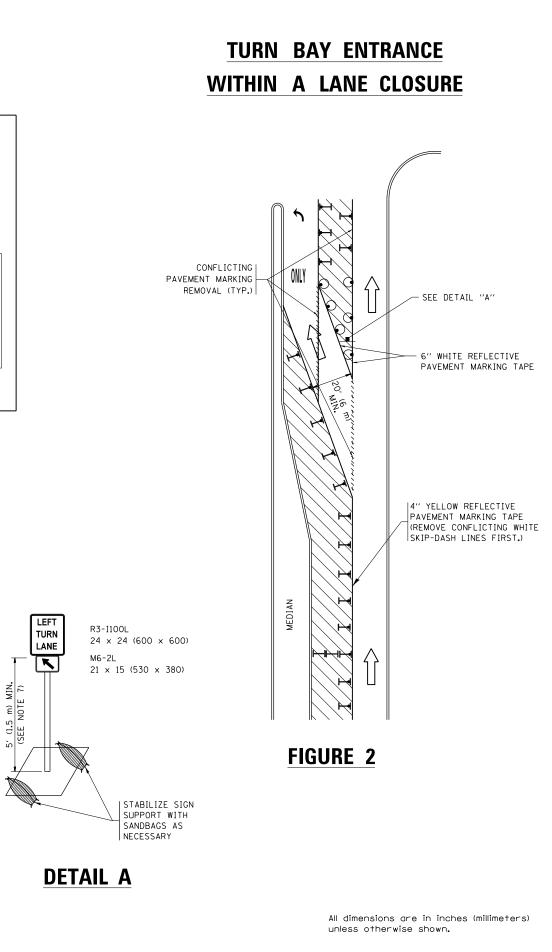


FIGURE 1

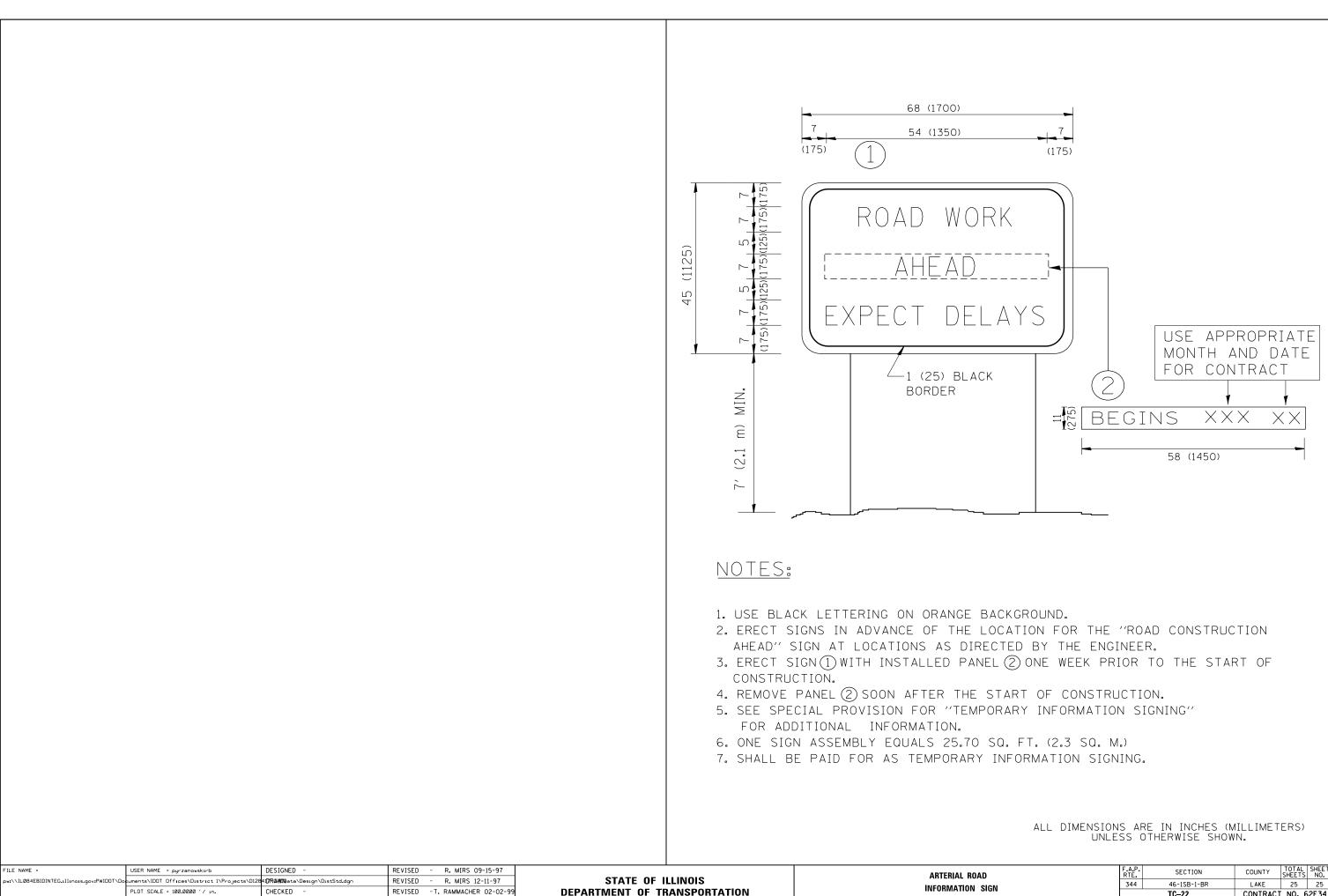


NOTES:

- 1. A) WHEN "L" IS < THE STORAGE LENGTH OF THE TURN LANE (AS SHOWN IN FIG. 1), USE FIGURE 1.
 - B) WHEN "L" IS > THE STORAGE LENGTH OF THE TURN LANE OR THE TURN LANE IS WITHIN THE LANE CLOSURE, USE FIGURE 2.
- 2. CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (710) IN HEIGHT.
- 3. LIGHTS WILL NOT BE REQUIRED ON BARRICADES OR DRUMS FOR DAY OPERATIONS. ALL LIGHTS SHALL BE MONODIRECTIONAL.
- 4. REFLECTIVE TEMPORARY PAVEMENT MARKINGS SHALL BE PLACED THROUGHOUT THE BARRICADED AREAS OF EACH TURN BAY AS SHOWN WHERE THE CLOSURE TIME IS GREATER THAN FOURTEEN (14) DAYS.
- 5. THIS APPLICATION ALSO APPLIES WHEN WORK IS BEING PERFORMED IN THE RIGHT LANE(S) AND THE RIGHT TURN BAY IS TO REMAIN OPEN. UNDER THIS CONDITION, "RIGHT TURN LANE" R3-1100R 24 x 24 (600 x 600) AND M6-2R 21 × 15 (530 × 380) SHALL BE USED.
- 6. THESE CONTROLS SHALL SUPPLEMENT MAINLINE TRAFFIC CONTROL FOR LANE CLOSURES.
- 7. THE SIGNS SHALL BE MOUNTED ABOVE THE BARRICADES/DRUMS ON SEPARATE SIGN SUPPORTS THAT MEET NCHRP 350 OR MASH PREQUIREMENTS.
- 8. TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC) SHALL BE INCLUDED IN THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.



FILE NAME =	USER NAME = pyrzanowskirb	REVISED -T. RAMMACHER 09-08-94	REVISED - R. BORO 09-14-09		TRAFFIC CONTROL AND PROTECTION AT TURN BAYS	F.A.P.	SECTION	COUNTY TOTAL SHEET
pw://ILØ84EBIDINTEG.111no1s.gov:PWIDOT	Documents\IDOT_Offices\District_1\Projec	ts\D12841REW46ED:a\Design\WusHOUSEH 11-07-95	REVISED - A. SCHUETZE 07-01-13	STATE OF ILLINOIS	(TO REMAIN OPEN TO TRAFFIC)		46-1SB-1-BR	LAKE 25 24
	PLOT SCALE = 100.0000 ' / in.	REVISED - A. HOUSEH 10-12-96	REVISED - A. SCHUETZE 09-15-16	DEPARTMENT OF TRANSPORTATION			TC-14	CONTRACT NO. 62F34
Default	PLOT DATE = 1/10/2018	REVISED - T. RAMMACHER 01-06-00	REVISED -		SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.		ILLINOIS FED. A	ND PROJECT



REVISED - C. JUCIUS 01-31-07

PLOT DATE = 1/10/2018

DATE

SCALE: NONE SHEET NO. 1 OF 1 SHEETS

ROAD Sign			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
			344	46-1SB-1-BR	LAKE	25	25	
				TC-22	CONTRACT	NO. 6	2F 34	
	STA.	TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT					