FOR INDEX OF SHEETS, SEE SHEET NO. 2

DEPARTMENT OF TRANSPORTATION

* 54 + 3 = 57 TOTAL SHEETS

D-91-104-19



IMPROVEMENT LOCATED IN THE VILLAGE OF

ADT 31,000 (2017)

LEMONT

POSTED SPEED LIMIT

45 MPH

PROPOSED HIGHWAY PLANS

FAP ROUTE 344: IL 83 (KINGERY HIGHWAY)
AT SANITARY AND SHIP CANAL (INCL I&M CANAL) **SECTION 2018-139-BR** PROJECT NHPP-ZTC3(414) **BRIDGE REPAIR COOK COUNTY**

> C-91-30B-19 R 11 E R 12 E



LEMONT TOWNSHIP

GROSS LENGTH = 1130,229 FT, = 0,214 MILE NET LENGTH = 1130.229 FT. = 0.214 MILE

PROJECT ENGINEER: ALAIN MIDY (847) 221-3056 PROJECT MANAGER: FAWAD AQUEEL (847) 705-4247

CONTRACT NO. 62H71

LOCATION OF SECTION INDICATED THUS: - -STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

> PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

> > REV. 3/3/20

TRAFFIC DATA

IMPROVEMENT LOCATION SN 016-0425

FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES, REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES, IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

0

JOINT UTILITY LOCATION INFORMATION FOR EXCAVATORS 1-800-892-8123 OR 811

INDEX OF SHEETS

1	TITLE SHEET
2	INDEX OF SHEETS, STATE STANDARDS, AND GENERAL NOTES
3 - 4	SUMMARY OF QUANTITIES
5 - 6	TRAFFIC CONTROL TYPICAL SECTIONS
7 - 10	TRAFFIC CONTROL AND PROTECTION - STAGE 1
11 - 14	TRAFFIC CONTROL AND PROTECTION - STAGE 2
15	DETOUR SIGNING DETAILS
16 - 19	PAVEMENT MARKING PLANS
20 - 48	BRIDGE REPAIR PLANS
48	TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS (TC-10)
50	DISTRICT ONE TYPICAL PAVEMENT MARKINGS (TC-13)
51	TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC) (TC-14)
52	SHORT TERM PAVEMENT MARKING LETTERS AND SYMBOLS (TC-16)
53	DETOUR SIGNING FOR CLOSING STATE HIGHWAYS (TC-21)
54	ARTERIAL ROAD INFORMATION SIGN (TC-22)

STATE STANDARDS

701101 - 05	OFF-RD OPERATIONS, MULTILANE, 15' (4.5 m) TO 24" (600mm) FROM PAVEMENT EDGE
701106-02	OFF-RD OPERATIONS. MULTILANE, MORE THAN 15' (4.5 m) AWAY
701421 - 08	LANE CLOSURE, MULTILANE, DAY OPERATIONS ONLY, FOR SPEEDS > 45 MPH TO 55 MPH
701422-10	LANE CLOSURE, MULTILANE, FOR SPEEDS > 45 MPH TO 55 MPH
701423-10	LANE CLOSURE, MULTILANE, WITH BARRIER, FOR SPEEDS > 45 MPH TO 55 MPH
701426-09	LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPER., FOR SPEEDS > 45 MPH
701601-09	URBAN LANE CLOSURE, MULTILANE, 1W OR 2W WITH NONTAVERSABLE MEDIAN
701606-10	URBAN SINGLE LANE CLOSURE, MULTILANE, 2W WITH MOUNTABLE MEDIAN
701611-01	URBAN HALF ROAD CLOSURE, MULTILANE, 2W WITH MOUNTABLE MEDIAN
701701-10	URBAN LANE CLOSURE, MULTILANE INTERSECTION
701801-06	SIDEWALK, CORNER OR CROSSWALK CLOSURE
701901-08	TRAFFIC CONTROL DEVICES
704001-08	TEMPORARY CONCRETE BARRIER
720001-01	SIGN PANEL MOUNTING DETAILS
720006-04	SIGN PANEL ERECTION DETAILS
720011-01	METAL POSTS FOR SIGNS, MARKERS & DELINEATORS
782006-01	GUARDRAIL AND BARRIER WALL REFLECTOR MOUNTING DETAILS

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 UTILITIES. 48 HOUR NOTIFICATION IS REQUIRED

THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES, AND THE VILLAGES OF LEMONT, WILLOW SPRINGS, AND BURR RIDGE.

THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.

BEFORE BEGINNING ANY WORK, THE CONTRACTOR SHALL RETAIN AND RECORD FOR FUTURE REFERENCE, ALL EXISTING PAVEMENT MARKING LINES (AND RAISED REFLECTIVE PAVEMENT MARKERS) IN ORDER THAT THESE LOCATIONS CAN BE RE-ESTABLISHED FOR STRIPING. EXACT LOCATIONS OF ALL PAVEMENT MARKINGS SHALL BE AS DIRECTED BY THE ENGINEER.

IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING OF MATERIALS.

THE CONTRACTOR SHALL CONTACT THE DISTRICT ONE TRAFFIC CONTROL SUPERVISOR VIA EMAIL AT KALPANA.KANNAN-HOSADURGA@ILLINOIS.GOV A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK.

THE ENGINEER SHALL CONTACT PATRICE HARRIS, AREA TRAFFIC FIELD TECHNICIAN, AT PATRICE.HARRIS@ILLINOIS.GOV A MINIMUM OF TWO (2) WEEKS PRIOR TO THE PLACEMENT OF PERMANENT

THESE PLANS HAVE BEEN PREPARED FROM NOTES RECEIVED FROM THE BUREAU OF MAINTENANCE.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE NOTIFICATION OF ALL EMERGENCY SERVICES, SCHOOL DISTRICTS, I.D.O.T.'S COMMUNICATIONS CENTER, SPRINGFIELD TRUCK PERMIT SECTION AND OTHER AGENCIES AFFECTED BY THE CLOSURE, THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR POSTING SIGNS THAT WILL INDICATE THE DATES THE CLOSURE WILL BE IN PLACE.

DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS.

CONCRETE SUPERSTRUCTURE SHALL HAVE A SEVEN DAY MINIMUM CURE.

THE CONTRACTOR SHALL OBTAIN COAST GUARD APPROVAL FOR ANY WORK THAT MAY INTERFERE WITH NAVIGATIONAL OPERATIONS OF THE NAVIGABLE WATERS. A WORK PLAN SHALL BE PREPARED BY THE CONTRACTOR, REVIEWED AND APPROVED BY THE ENGINEER AND BE SUBMITTED BY THE ENGINEER TO THE COAST GUARD AT THE ADDRESS LISTED BELOW FOR APPROVAL.

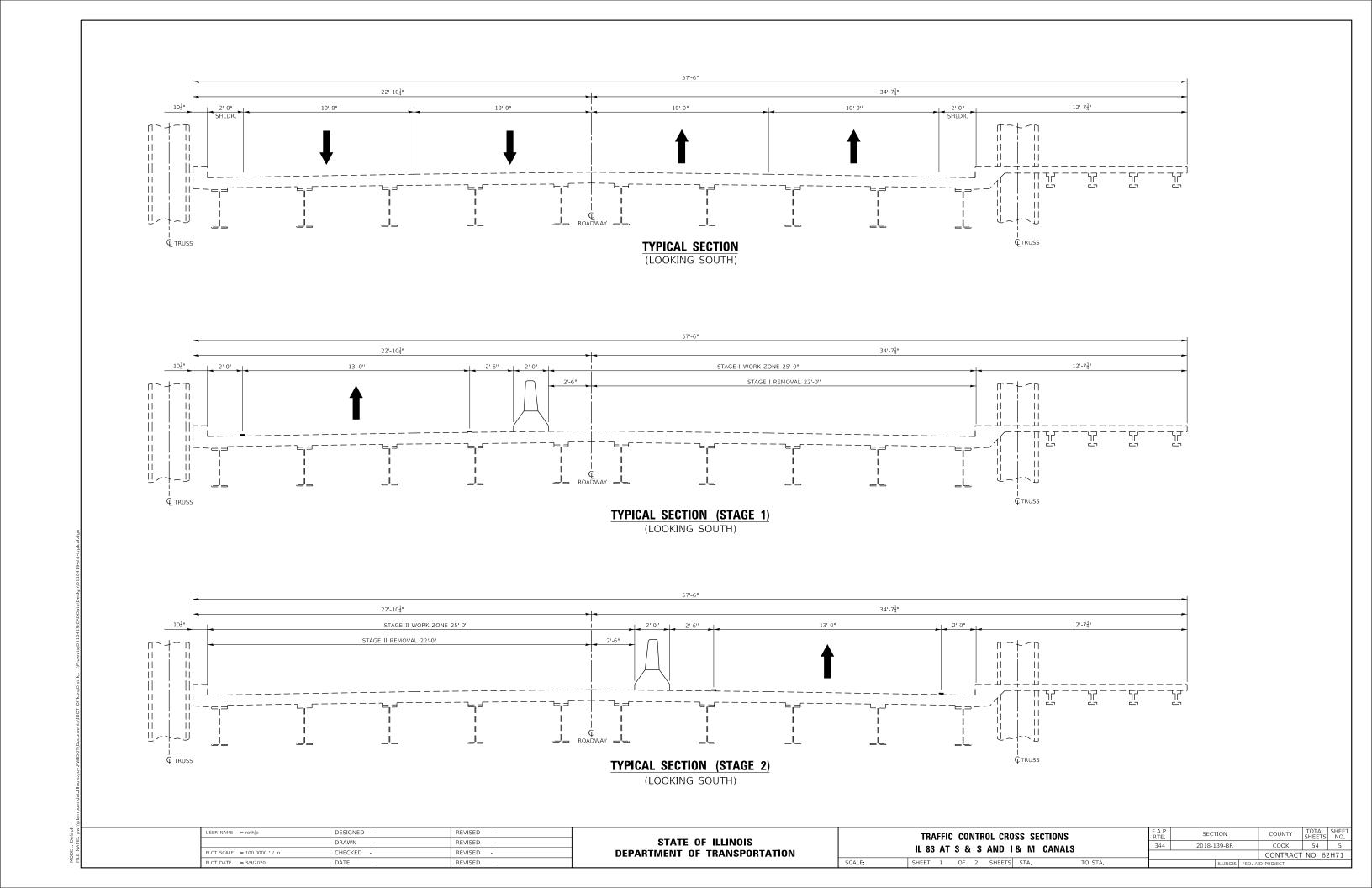
BRIDGE ADMINISTRATOR US COAST GUARD NINTH COAST GUARD DISTRICT 1240 E. NINTH ST CLEVELAND, OH 44199-2060

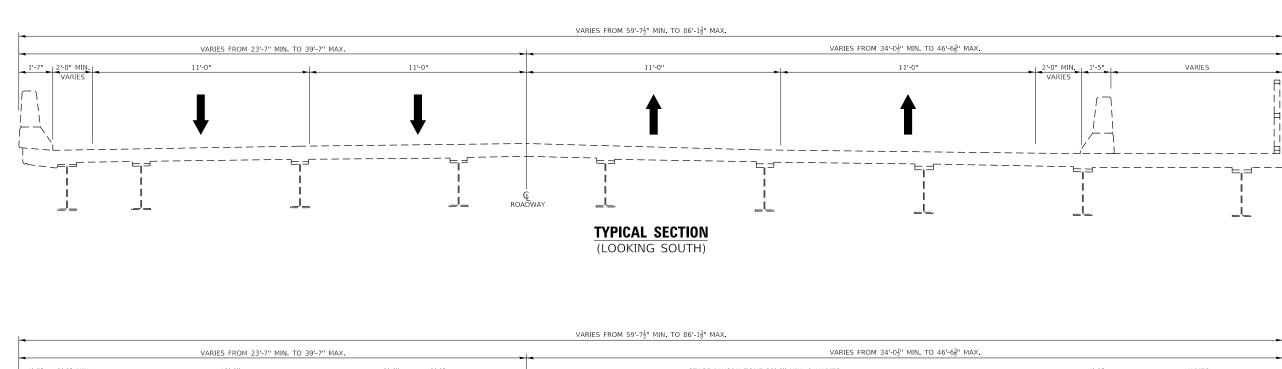
EXISTING PAVEMENT MARKINGS SHALL BE TEMPORARILY COVERED PRIOR TO APPLICATION OF THE DECK SURFACE TREATMENT, TO PREVENT THE MATERIAL FROM BEING APPLIED TO THE MARKINGS AND TO PROTECT THE REFLECTIVE PROPERTIES OF THE MARKINGS. THE TEMPORARY COVERING MATERIAL USED SHALL BE SUCH THAT IT WILL NOT AFFECT THE MARKINGS REFLECTIVITY WHEN REMOVED AFTER APPLICATION OF THE DECK SURFACE TREATMENT AND PRIOR TO OPENING TO TRAFFIC. COST INCLUDED WITH CONCRETE SEALER.

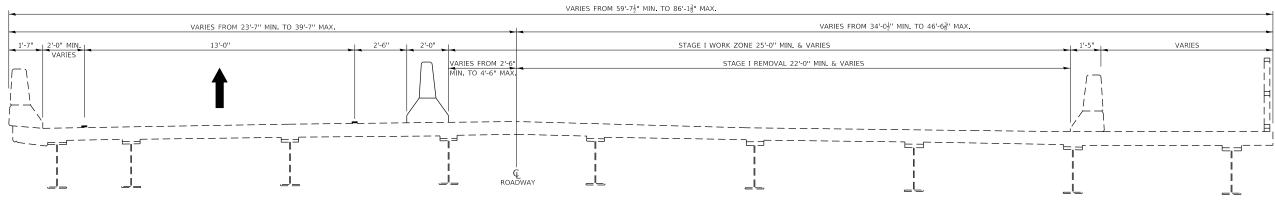
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PLOT DATE = 3/9/2020	DATE -	REVISED -

	SUMMARY OF QUA	NTITIES			CONSTRUCTIO	ON TYPE C	ODE			SIIMMAF	RY OF QUANTITIES				CONSTRUCTIO	N TYPE C	ODE	
CODE NO	ITEM	UNI	URBAN TOTAL QUANTITIE	80% FED 20% STATE 0013					CODE NO	-5	ITEM	UNIT	TOTAL QUANTITIES	80% FED 20% STATE 0013				
50102400	CONCRETE REMOVAL	CU Y	D 39.8	39.8					70600350	IMPACT ATTEN	UATORS, RELOCATE (NON-	EACH	2	2				
										REDIRECTIVE	, TEST LEVEL 3							
50300255	CONCRETE SUPERSTRUCTURE	CU Y	D 38.4	38.4														
								*	78009000	MODIFIED URE	THANE PAVEMENT MARKING -	SO FT	155	155				
50800205	REINFORCEMENT BARS, EPOXY	COATED POUN	D 7750	7750						LETTERS AND	SYMBOLS							
							1										1	
50800515	BAR SPLICERS	EACH	106	106				*	78009004	MODIFIED URE	THANE PAVEMENT MARKING -	FOOT	11747	11747				
										LINE 4"								
52000110	PREFORMED JOINT STRIP SEAL	F001	339	339														
								*	78009006	MODIFIED URE	THANE PAVEMENT MARKING -	FOOT	739	739				
52000600	FABRIC REINFORCED ELASTOME	RIC TROUGH FOOT	59	59						LINE 6"								<u> </u>
67000400	ENGINEER'S FIELD OFFICE, T	YPE A CAL N	10 6	6				*	78009008	MODIFIED URE	THANE PAVEMENT MARKING -	FOOT	359	359				
										LINE 8"								
67100100	MOBILIZATION	L SU	M 1	1														
								*	78009012	MODIFIED URE	THANE PAVEMENT MARKING -	FOOT	168	168				
70107025	CHANGEABLE MESSAGE SIGN	CAL [90 A	90						LINE 12"			1					
70300900	PAVEMENT MARKING TAPE, TYP	E IV - SO F	T 117	117				*	78009024		THANE PAVEMENT MARKING -	FOOT	108	108				
	LETTERS AND SYMBOLS									LINE 24"								
70300904	PAVEMENT MARKING TAPE, TYP	E IV 4" F00	13545	13545				*	78200011	BARRIER WALL	REFLECTORS, TYPE C	EACH	55	55				
70300906	PAVEMENT MARKING TAPE, TYP	E IV 6" F00	508	508					78300200	RAISED REFLE	CTIVE PAVEMENT MARKER	EACH	86	86				
										REMOVAL								
70400100	TEMPORARY CONCRETE BARRIER	F001	1387.5	1387.5														
									x0322559	BOLT REPLACE	MENT	EACH	1400	1400				
70400200	RELOCATE TEMPORARY CONCRET	E BARRIER FOOT	1387.5	1387.5														
									X0327980		KING REMOVAL - WATER	SO FT	4910	4910				
70600250	IMPACT ATTENUATORS, TEMPOR		2	2						BLASTING								
FILE NAME =	REDIRECTIVE), TEST LEVEL 3	DESIGNED -		REVISED											IF.A.P.		- 1 т	I AT I SLI
	s.gov:PWIDOT\Documents\IDOT Offices\District \Projects\DiiO4!			REVISED				ATE OF II			IL 83 AT S &	S AND 1& N Y OF QUANT			F.A.P. SECTI 344 2018-13		COUNTY SE	OTAL SHI IEETS N
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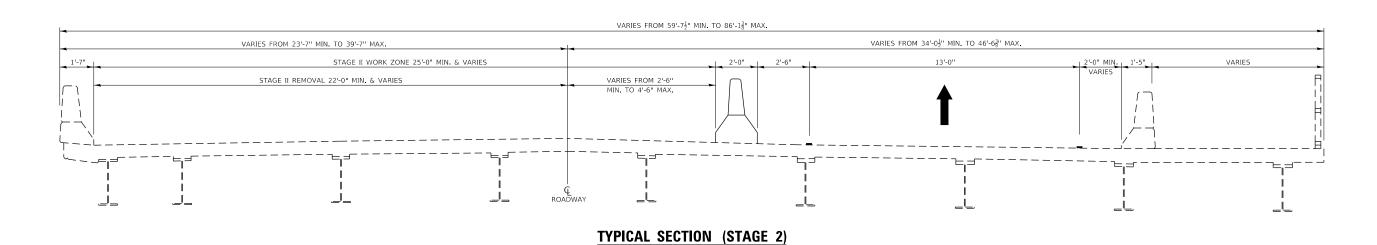
	SUMMARY OF QUANTITIES				CONSTRUCTION	ON TYPE (CODE	-		SUMM	ARY OF QUANTITIES			CO	NSTRUCTION TYPE C	ODE	
CODE NO	ITEM	UNIT	URBAN TOTAL QUANTITIES	80% FED 20% STATE 0013					CODE NO		ITEM	UNIT	TOTAL 80% FED 20% STATE 0013				
X0900046	PREFORMED JOINT SEAL, 1"	FOOT	26	26													
x5870015	BRIDGE DECK CONCRETE SEALER	SO FT	3125	3125													
X7010216	TRAFFIC CONTROL AND PROTECTION.	L SUM	1	1													
	(SPECIAL)																
x7030005	TEMPORARY PAVEMENT MARKING REMOVAL	SO FT	4769	4769													
Z0001905	STRUCTURAL STEEL REPAIR	POUND	7180	7180													
Z0012102	CONCRETE BRIDGE DECK SCARIFICATION 3/8 INCH	SO YD	6027	6027													
Z0012193	BRIDGE DECK THIN POLYMER OVERLAY 3/8"	SO YD	6027	6027													
Z0012754	STRUCTURAL REPAIR OF CONCRETE (DEPTH	SO FT	7060	7060													
	EQUAL TO OR LESS THAN 5 INCHES)																
Z0012755	STRUCTURAL REPAIR OF CONCRETE (DEPTH	SO FT	65	65													
	GREATER THAN 5 INCHES)																
Z0030850	TEMPORARY INFORMATION SIGNING	SO FT	54. 6	54. 6													
Z0073200	TEMPORARY SHORING AND CRIBBING	EACH	18	18													
Z0073510	TEMPORARY TRAFFIC SIGNAL TIMING	EACH	5	5													
x0900090	GROUTED FIBERGLASS REINFORCED PLASTIC ENCASED REPAIR	FOOT	122	122													
Z0076600	TRAINEES	HOUR	500	500													
Z0076604	TRAINEES TRAINING PROGRAM GRADUATE	HOUR	500	500												RE\	
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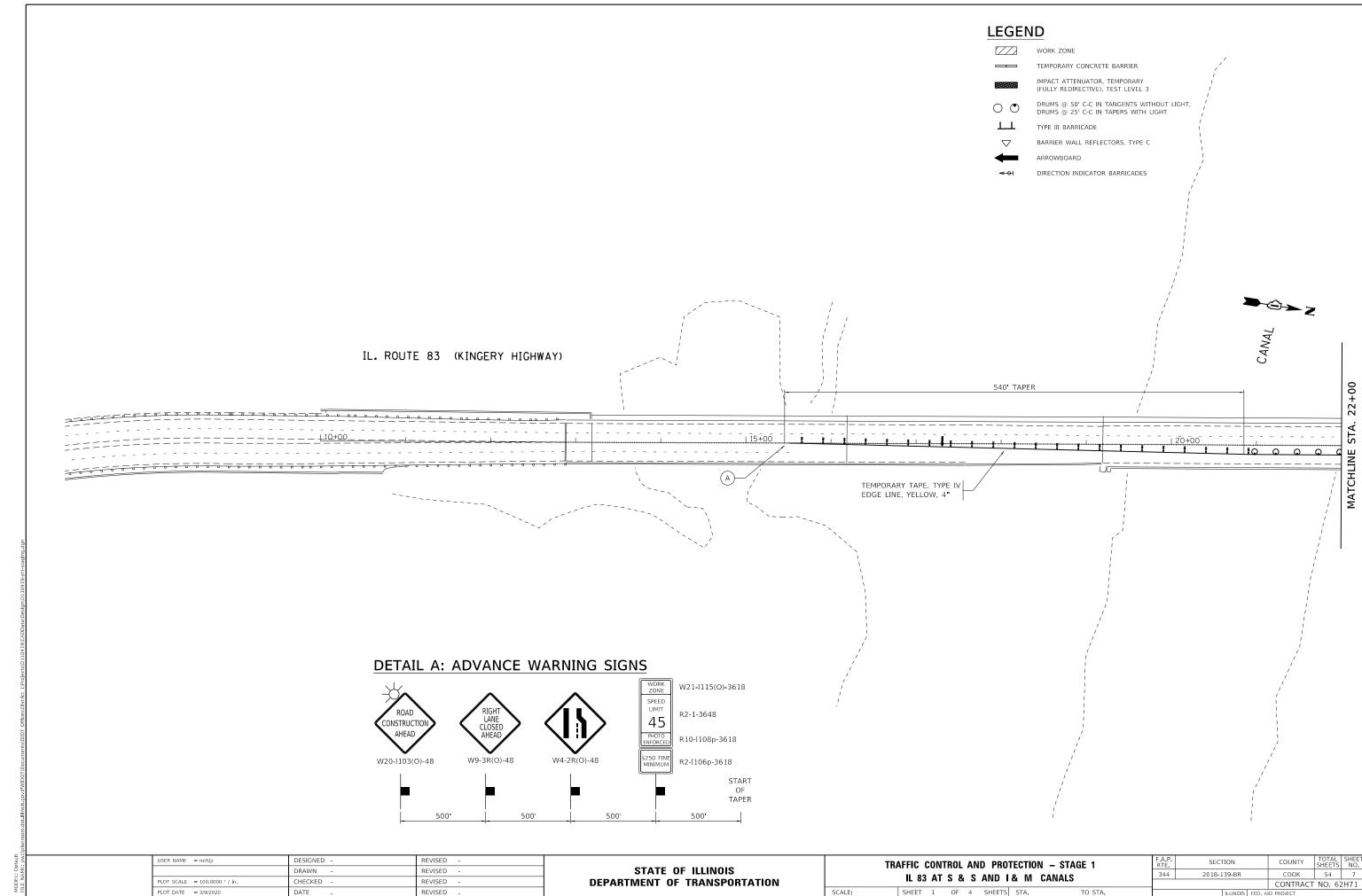


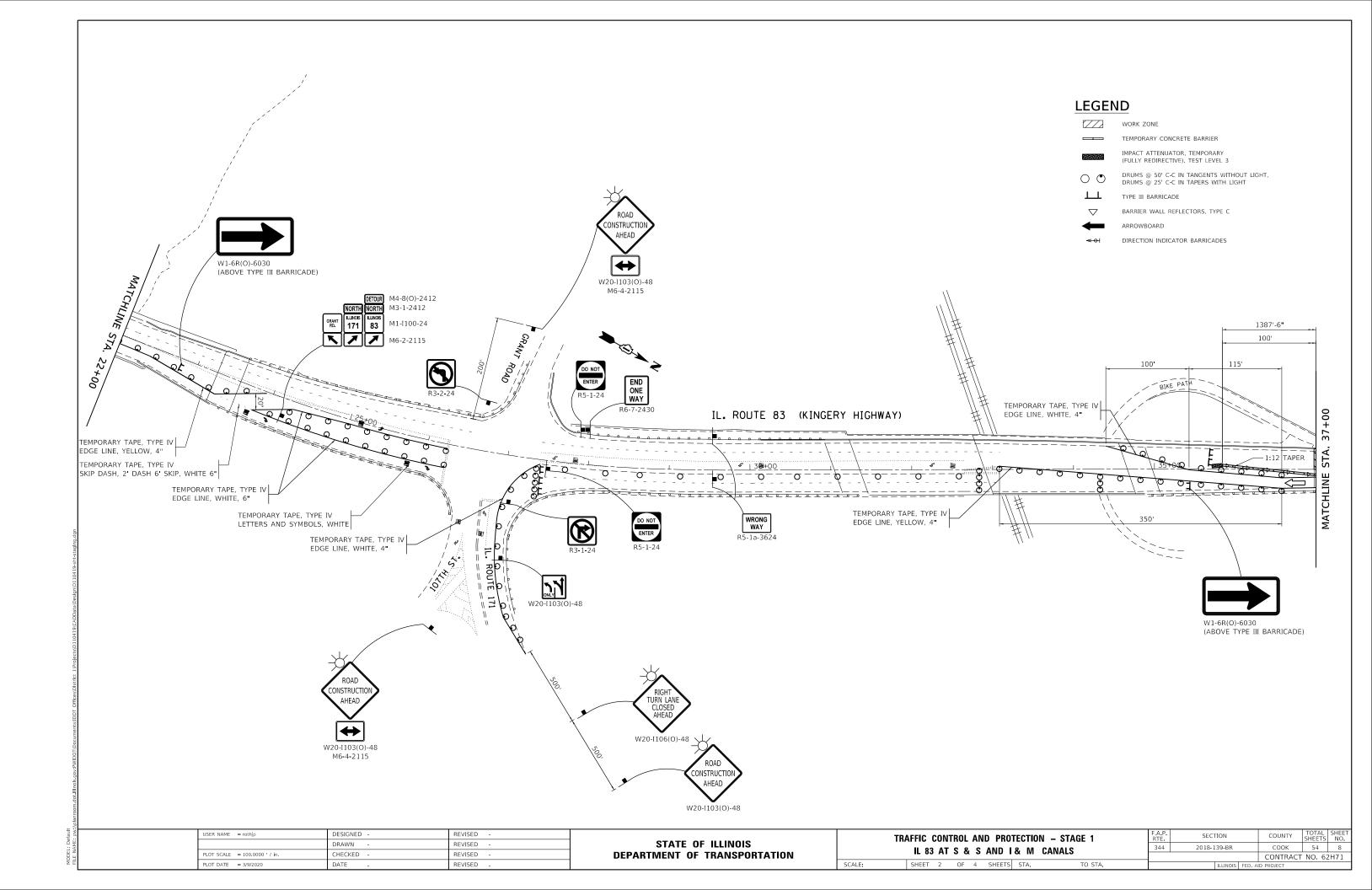
TYPICAL SECTION (STAGE 1) (LOOKING SOUTH)

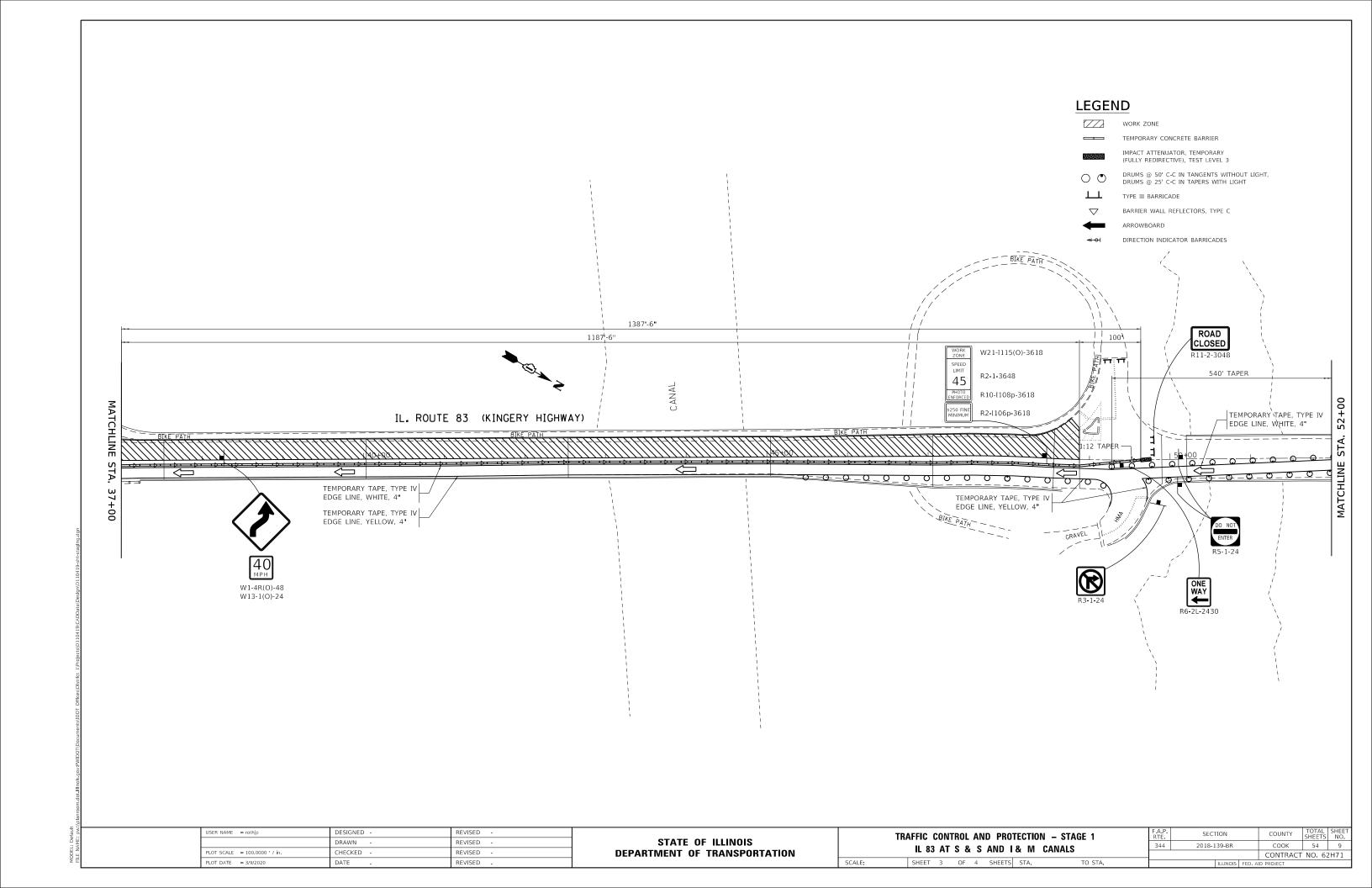


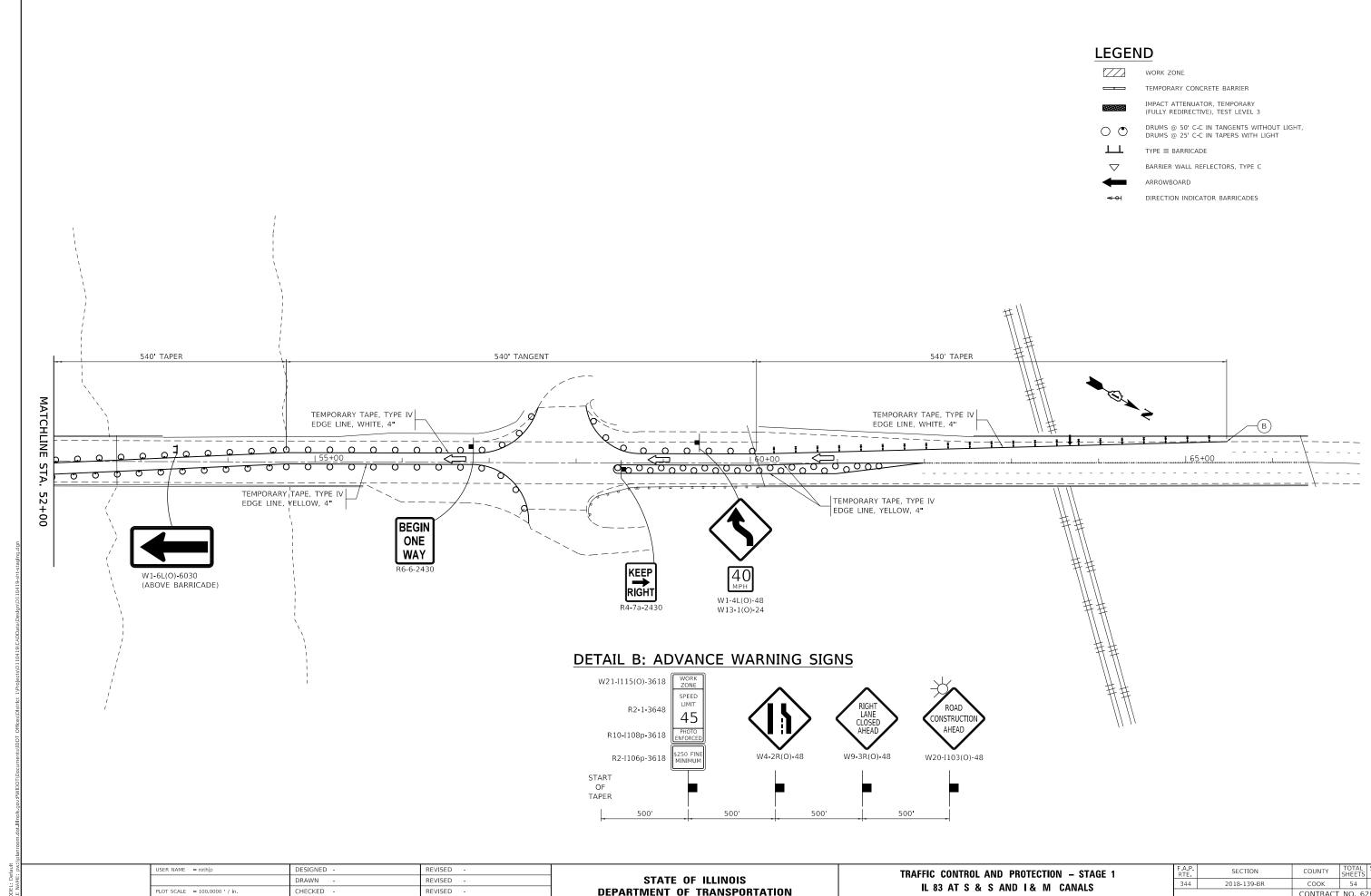
(LOOKING SOUTH)

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PLOT DATE = 3/9/2020

DATE

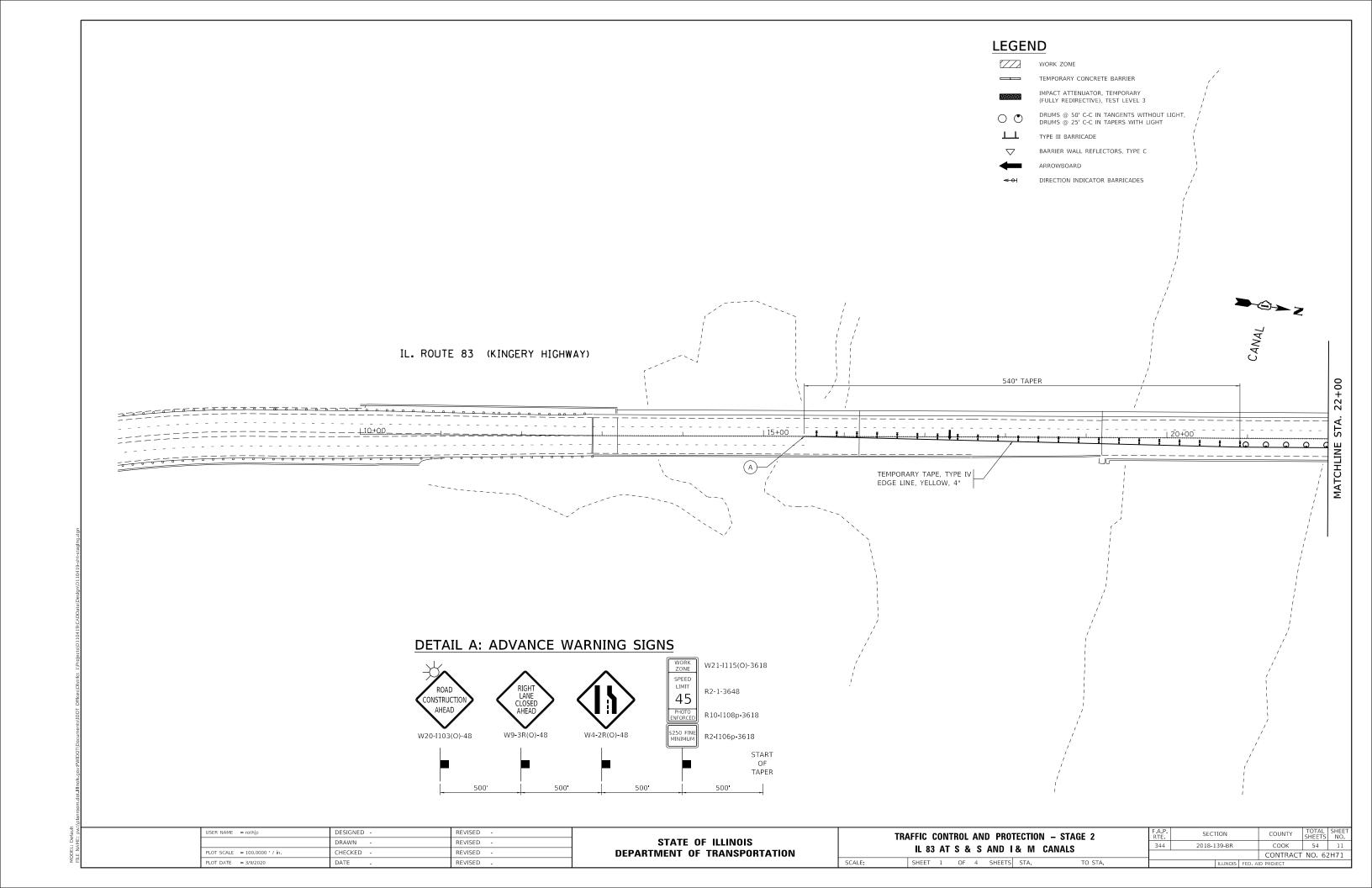
DEPARTMENT OF TRANSPORTATION

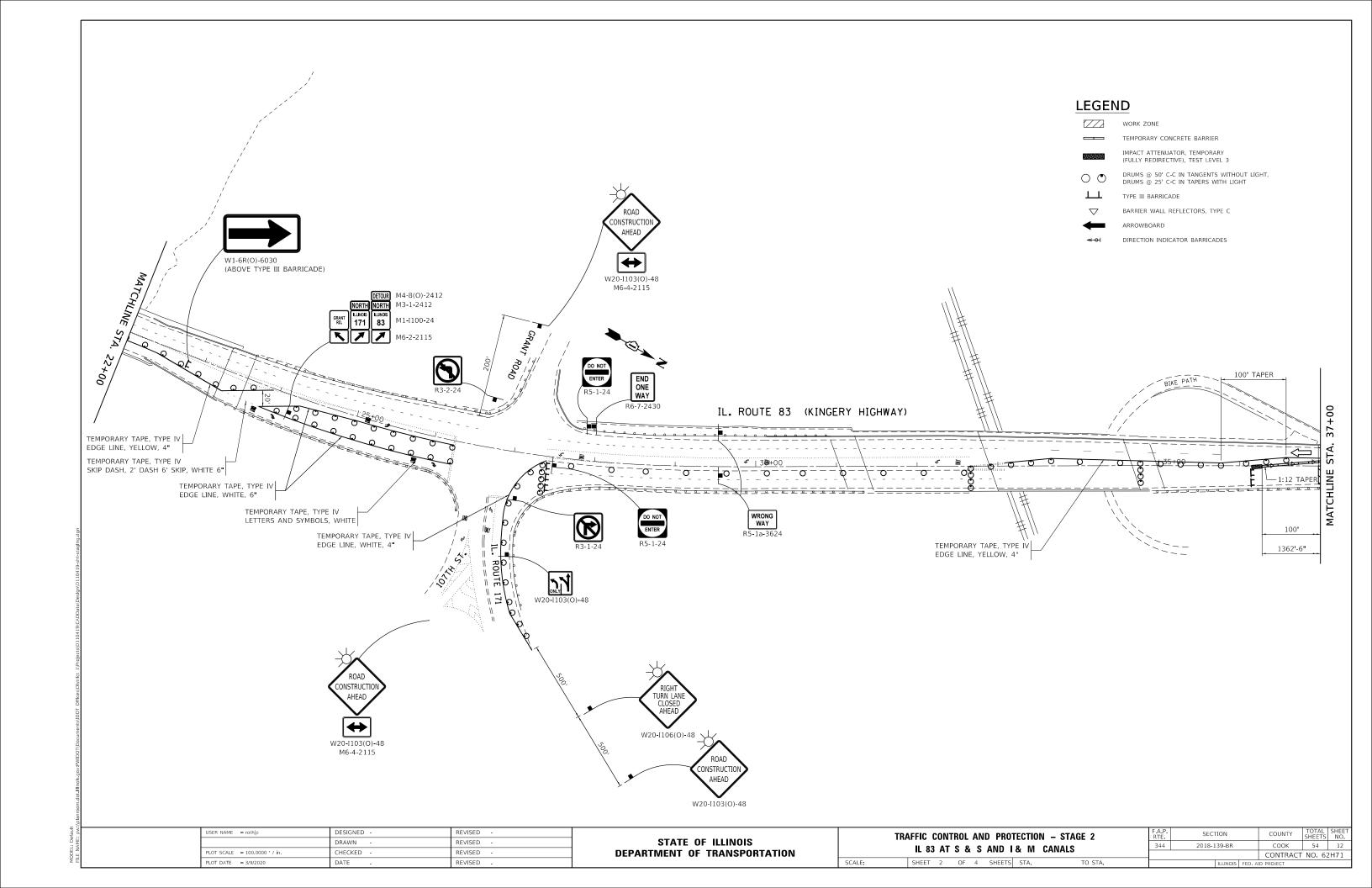
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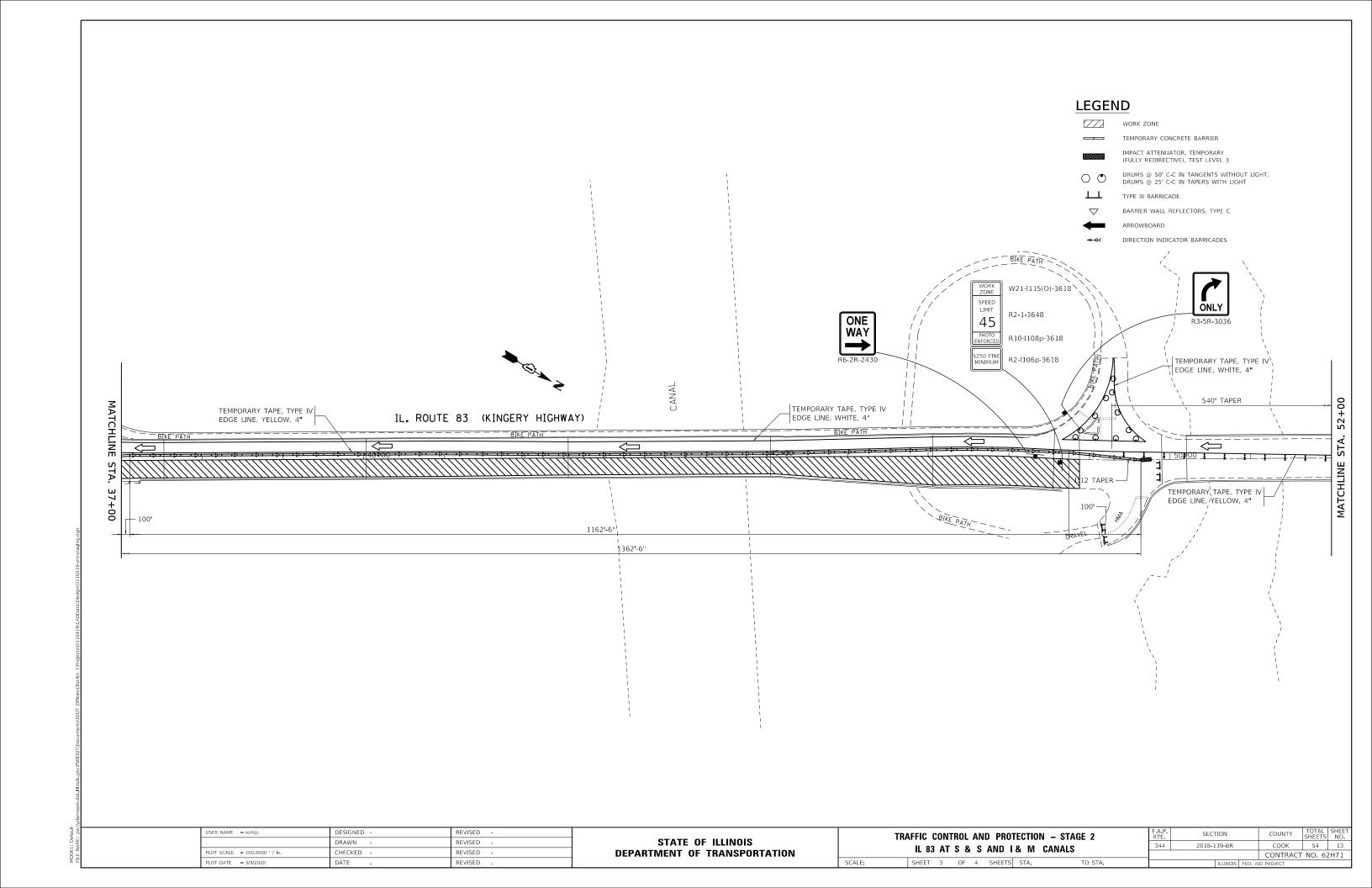
SHEET 4 OF 4 SHEETS STA.

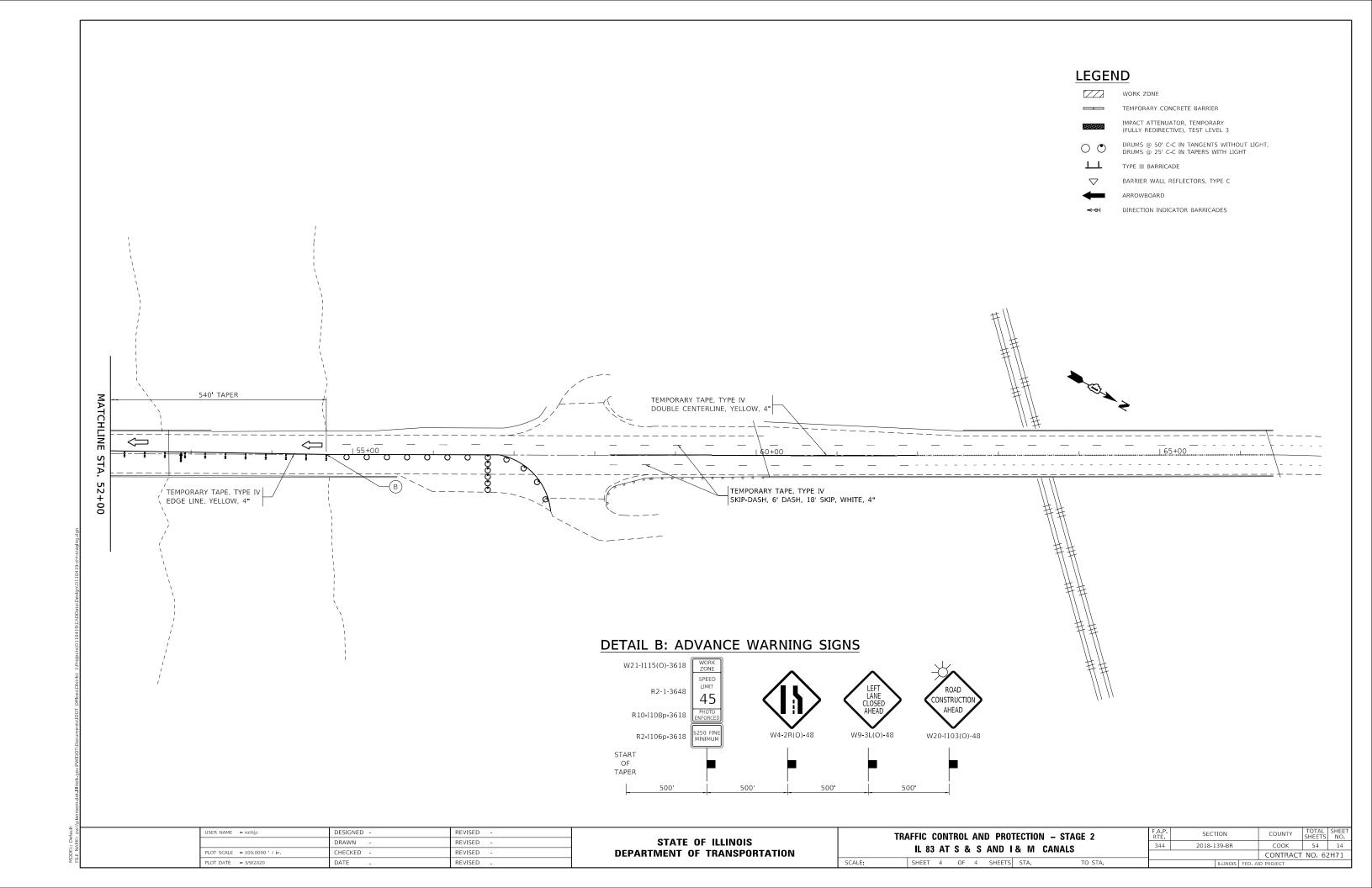
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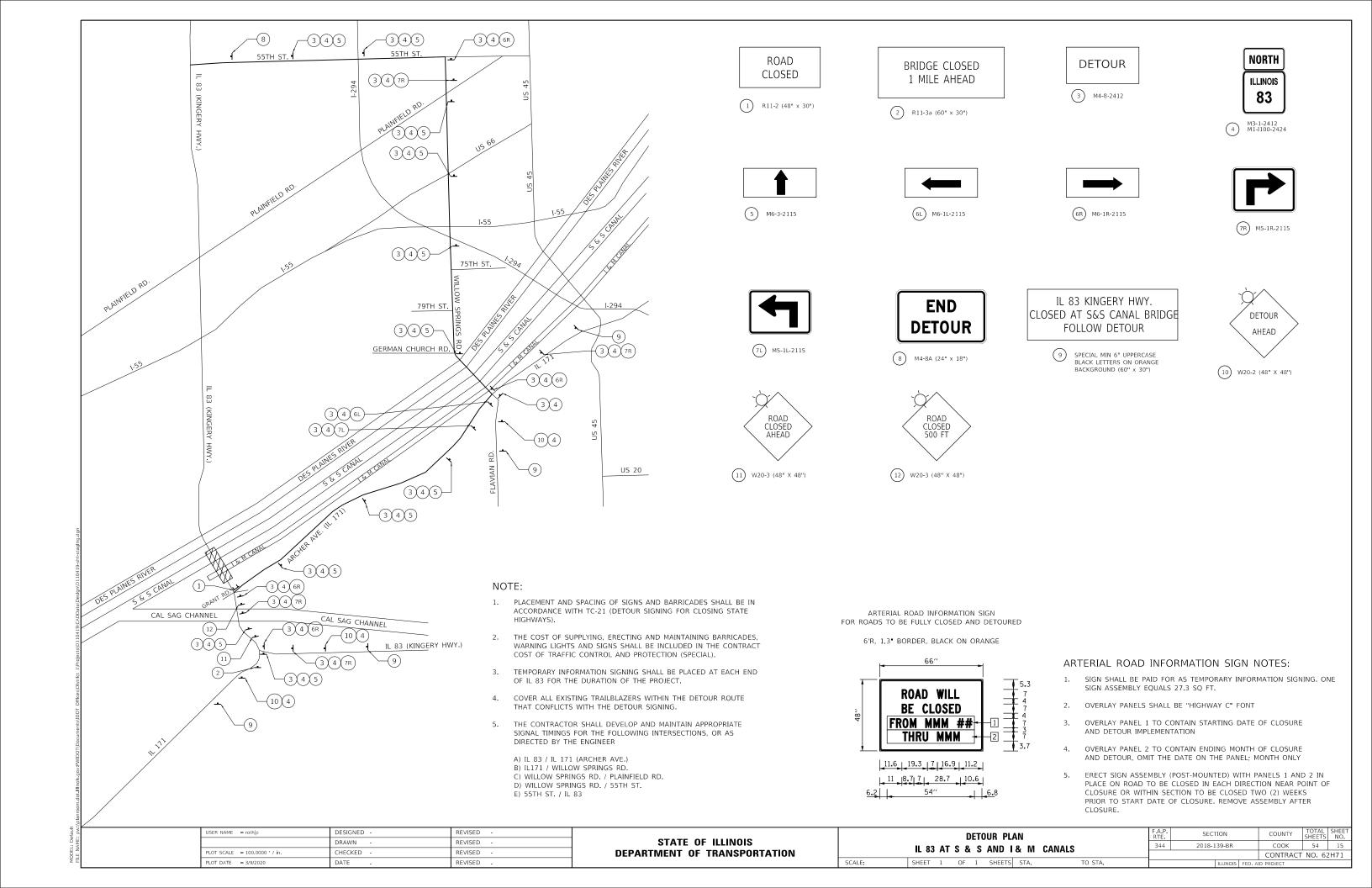
COOK 54 10 CONTRACT NO. 62H71

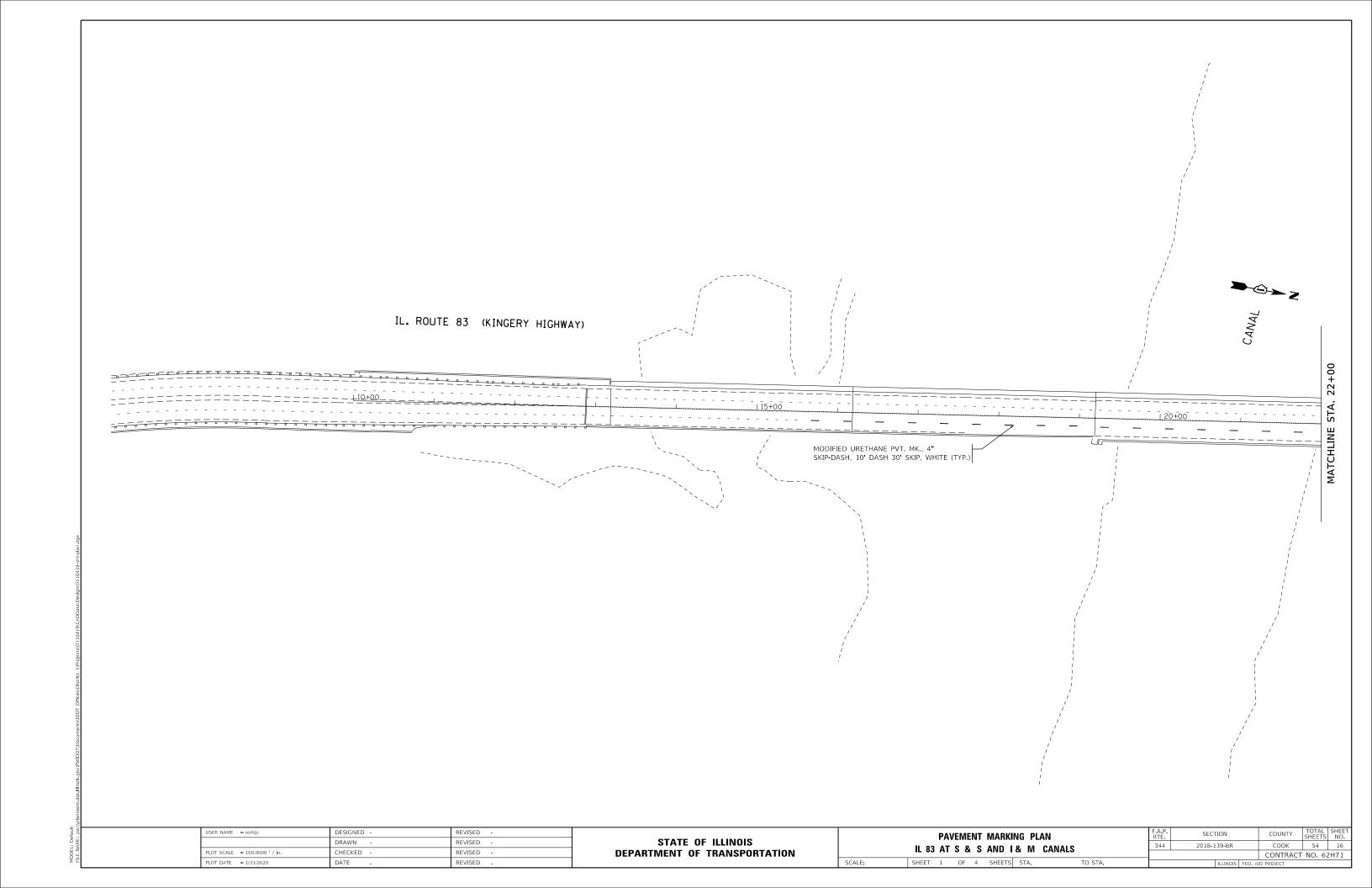


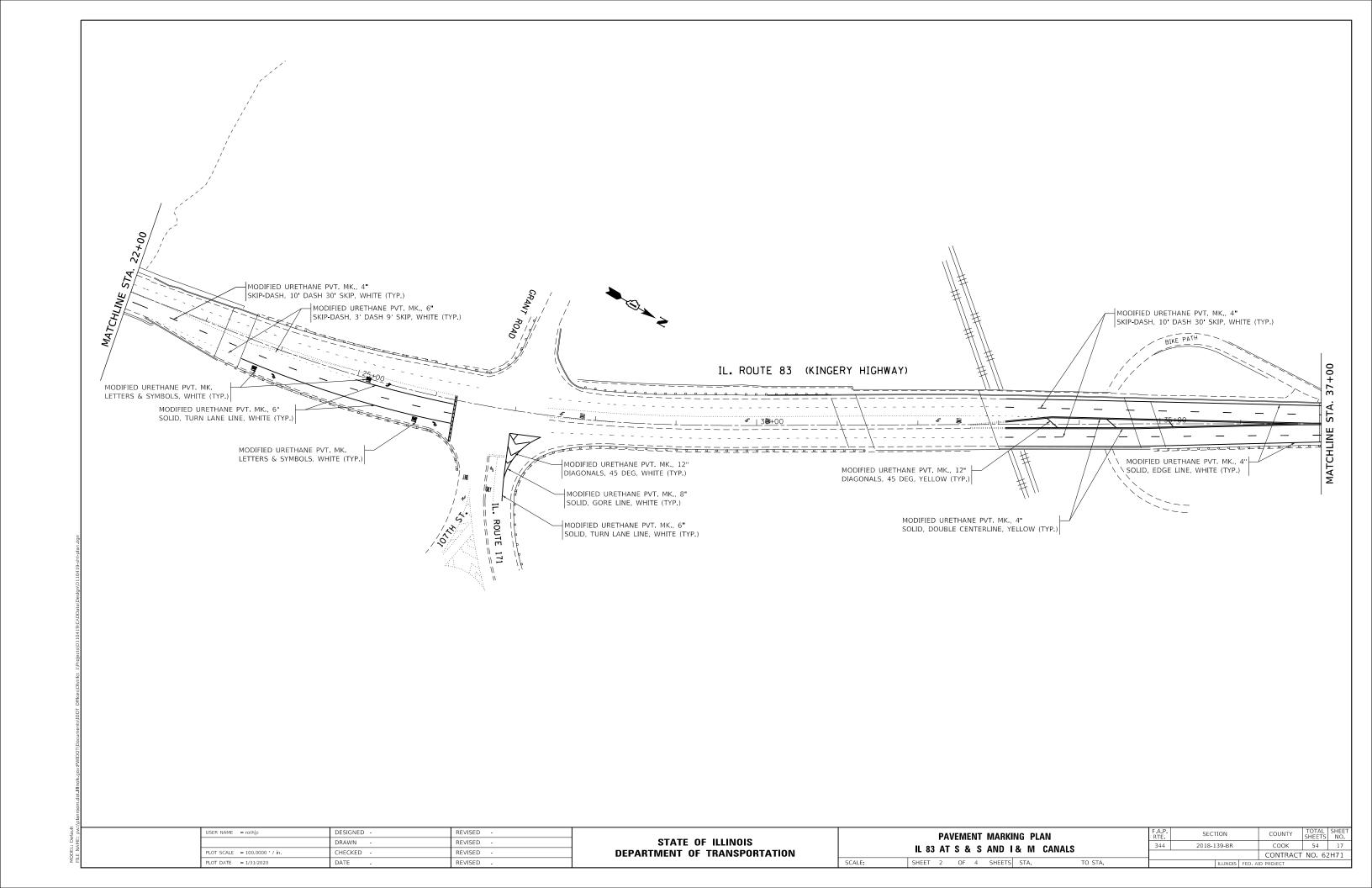


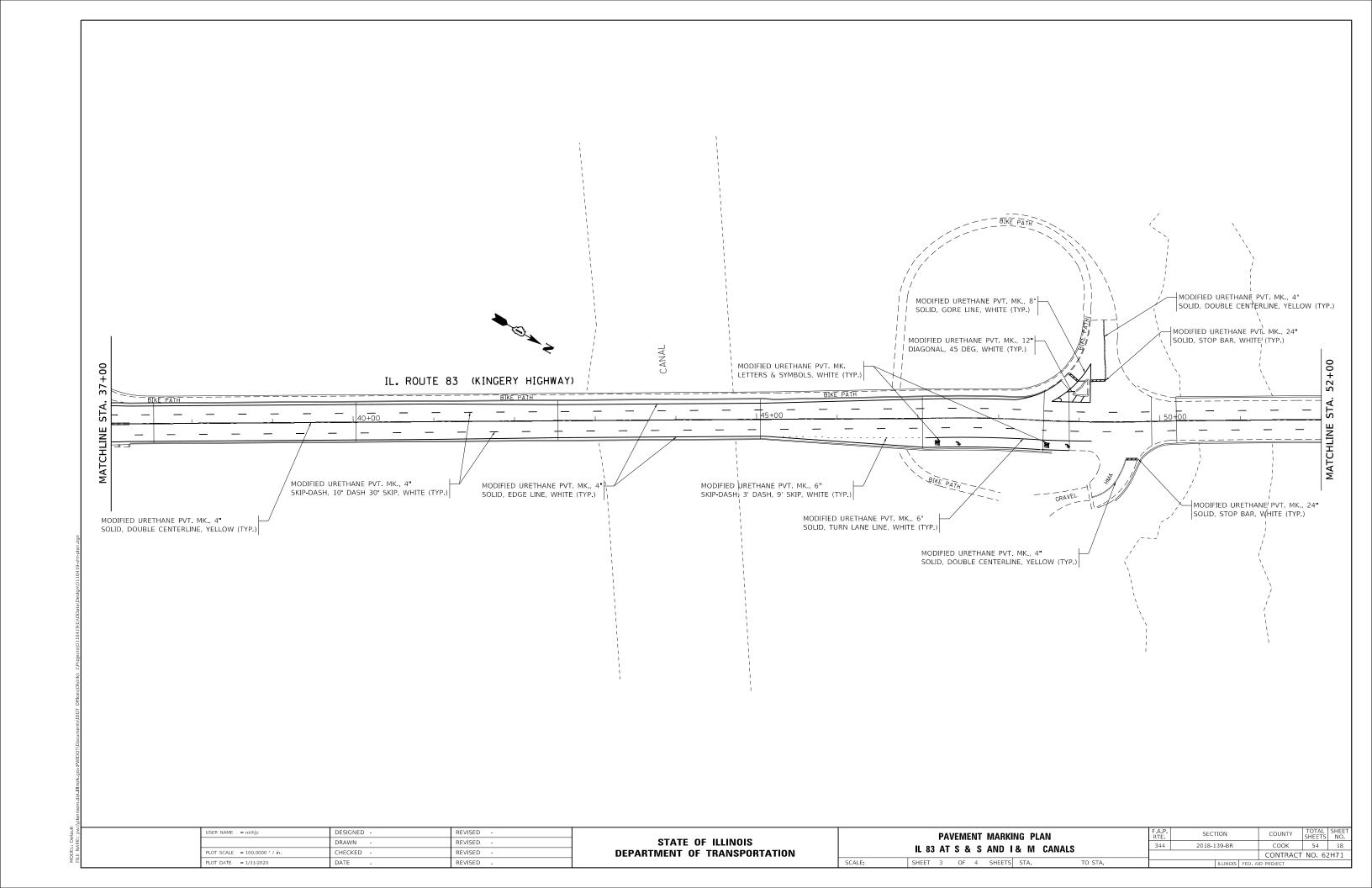


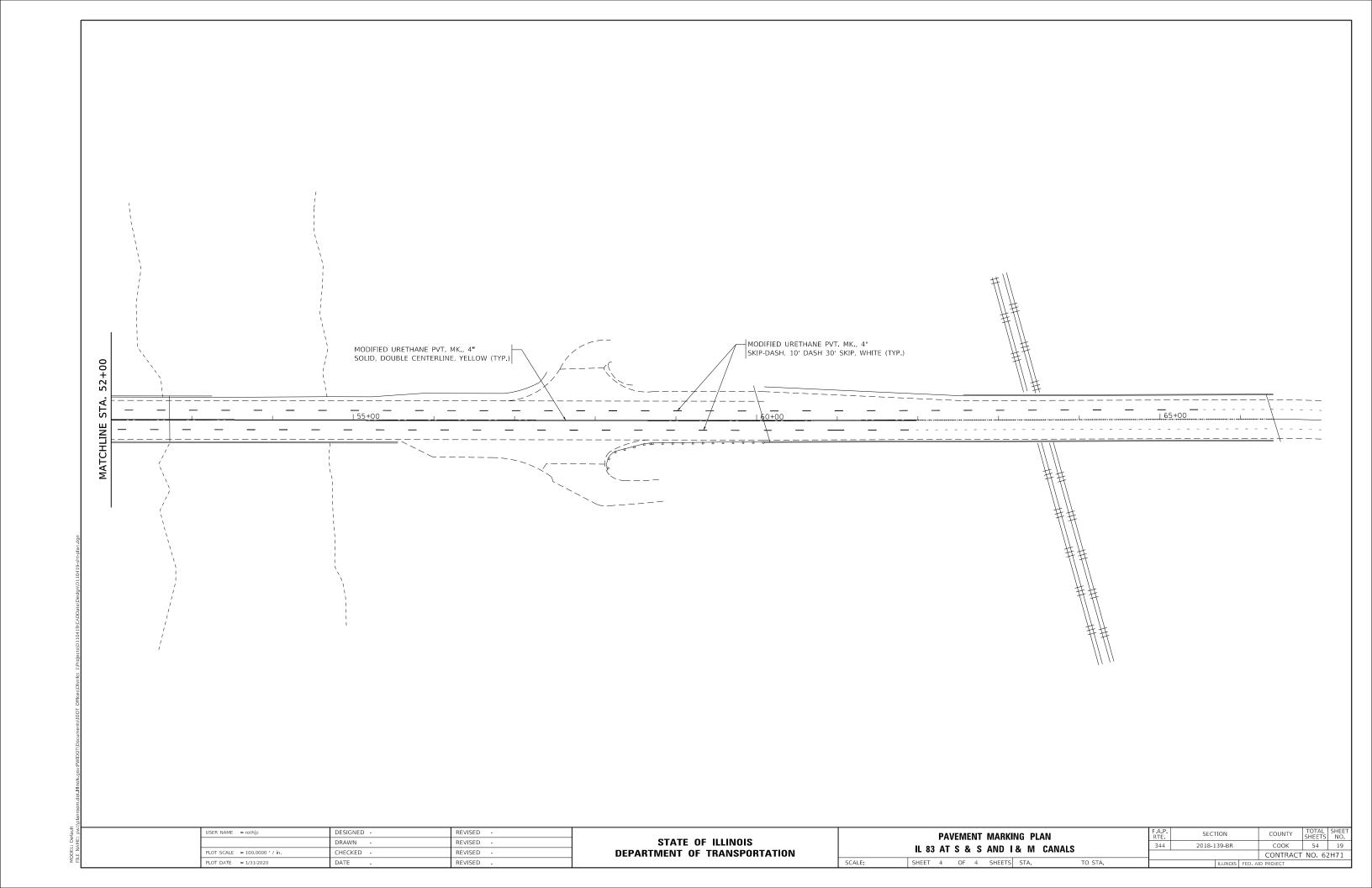


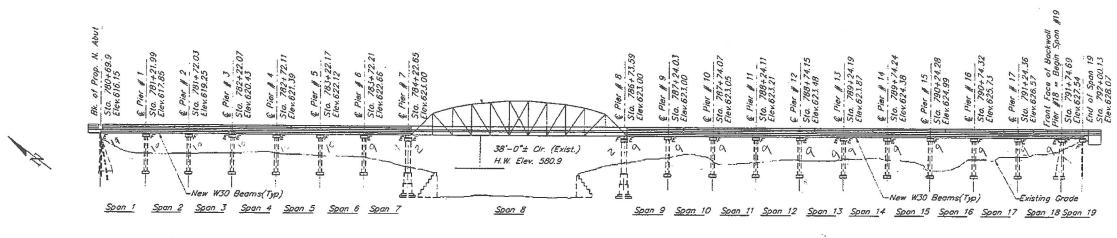




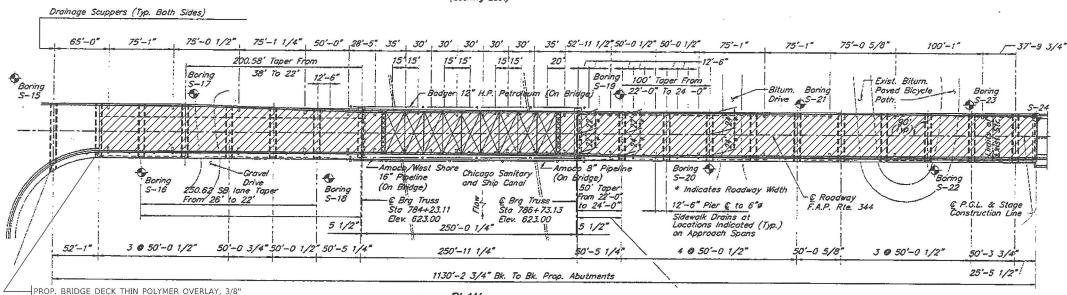








ELEVATION (Looking East)



INTERIOR BEAM REACTION TABLE

PROP. CONCRETE BRIDGE DECK SCARIFICATION, 3/8"

		PIER 9	PIER 11	PIER 13	PIER 17
R DL	(k)	82.1	71.4	29.3	82.1
R LL	(k)	40.9	39.7	36.2	40.9
Imp	(k)	11.6	11.3	10.4	11.6
R (Total)	(k)	134.6	122.4	75.9	134.6

GENERAL NOTES:

PLAN

- PRIOR TO THE POURING OF NEW CONCRETE, 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 CONRETE. TIGHTLY ADHERED PAINT 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.
- 2. PLAN DIMENSIONS AND DETAIL RELATIVE TO EXISTING PLANS ARE SUBJECT TO NOMINAL CONSTRUCTION VARIABLES. THE CONTRACTOR SHALL FIELD VERIFY EXISTING DIMENSIONS AND DETAILS AFFECTING NEW CONSTRUCTION AND MAKE NECESSARY APPROVED ADJUSTMENTS PRIOR TO CONSTRUCTION OR 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 AT THE UNIT PRICE BID FOR THE WORK.
- . CONCRETE SEALER TO BE APPLIED ON TOP OF SIDEWALKS AND TOP AND FRONT FACE OF PARAPETS
- REPAIR AREAS ARE ESTIMATED. THE ENGINEER SHALL DETERMINE ACTUAL REPAIR LOCATIONS AND RECORD THEM ON THE AS-BUILT PLANS.
- 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

TOTAL BILL OF MATERIALS

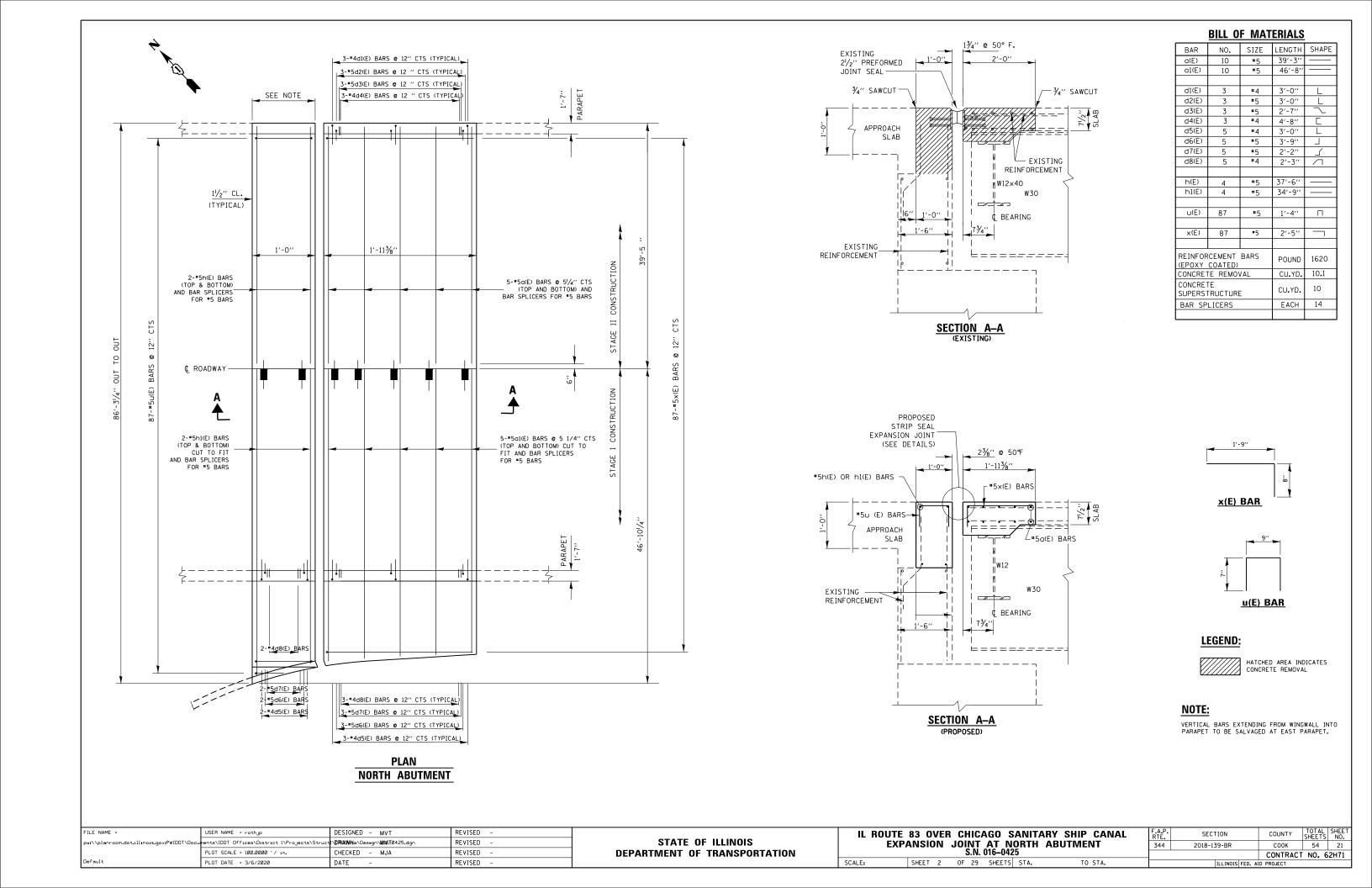
ITEM:	UNITS	QTY.
STRUCTURAL REPAIR OF CONCRETE (DEPTH ≤ 5")	SQ. FT.	7060
STRUCTURAL REPAIR OF CONCRETE (DEPTH > 5")	SQ. FT.	65
REINFORCEMENT BARS (EPOXY COATED)	POUND	7750
CONCRETE REMOVAL	CU. YD.	39.8
CONCRETE SUPERSTRUCTURE	CU. YD.	38.4
BAR SPLICERS	EACH	106
FABRIC REINFORCED ELASTOMERIC TROUGH	FOOT	59
PREFORMED JOINT STRIP SEAL	FOOT	339
BRIDGE DECK CONCRETE SEALER	SQ.YD.	3125
PREFORMED JOINT SEAL, 1"	FOOT	26
TEMPORARY SHORING AND CRIBBING	EACH	18
BRIDGE DECK THIN POLYMER OVERLAY, 3/8"	SQ. YD.	6027
CONCRETE BRIDGE DECK SCARIFICATION, 3/8"	SQ. YD.	6027
GROUTED FRP ENCASED REPAIR	FOOT	122

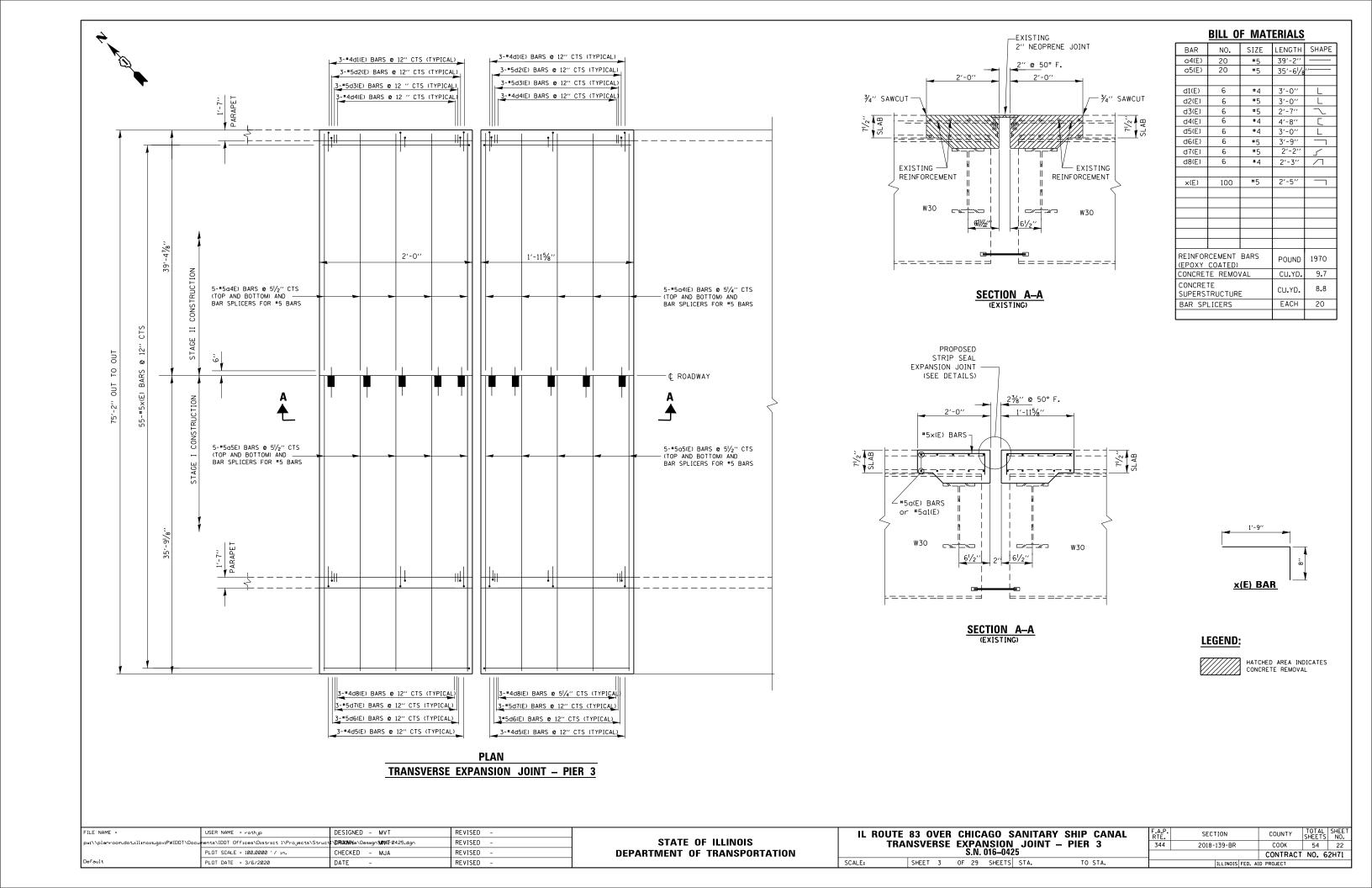
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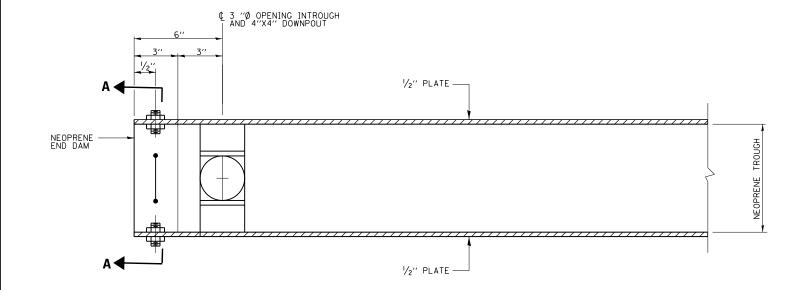
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

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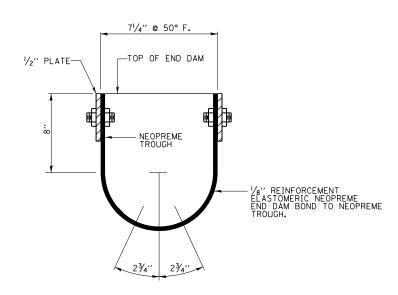
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SECTION AT DOWNSPOUT
REPLACE NEOPRENE TROUGH



SECTION A-A

NOTES:

- CLEAN AND APPLY BRIDGE DECK CONCRETE SEALER TO PIER CAP.

-COST OF REMOVAL OF EXISTING TROUGH IS INCLUDED IN THE COST OF FABRIC REINFORCEMENT ELASTOMERIC TROUGH

BILL OF MATERIALS PIER 7

11611 /		
ITEM	UNIT	QUANTITY
FABRIC REINFORCEMENT ELASTOMERIC TROUGH	F00T	59
BRIDGE DECK CONCRETE SEALER	SQ.FT.	1517

 USER NAME
 = rothip
 DESIGNED
 - MVT
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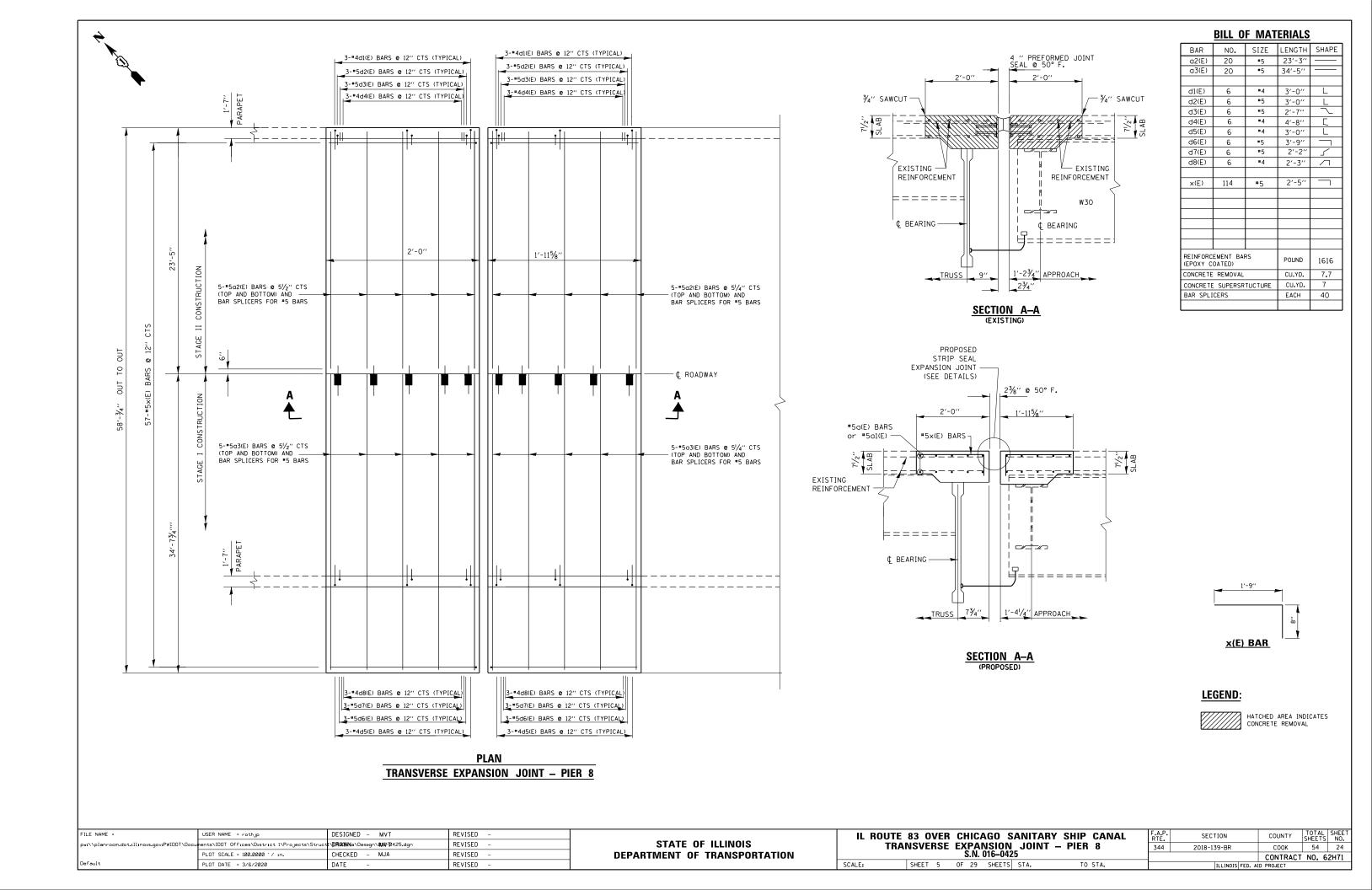
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 - MVT
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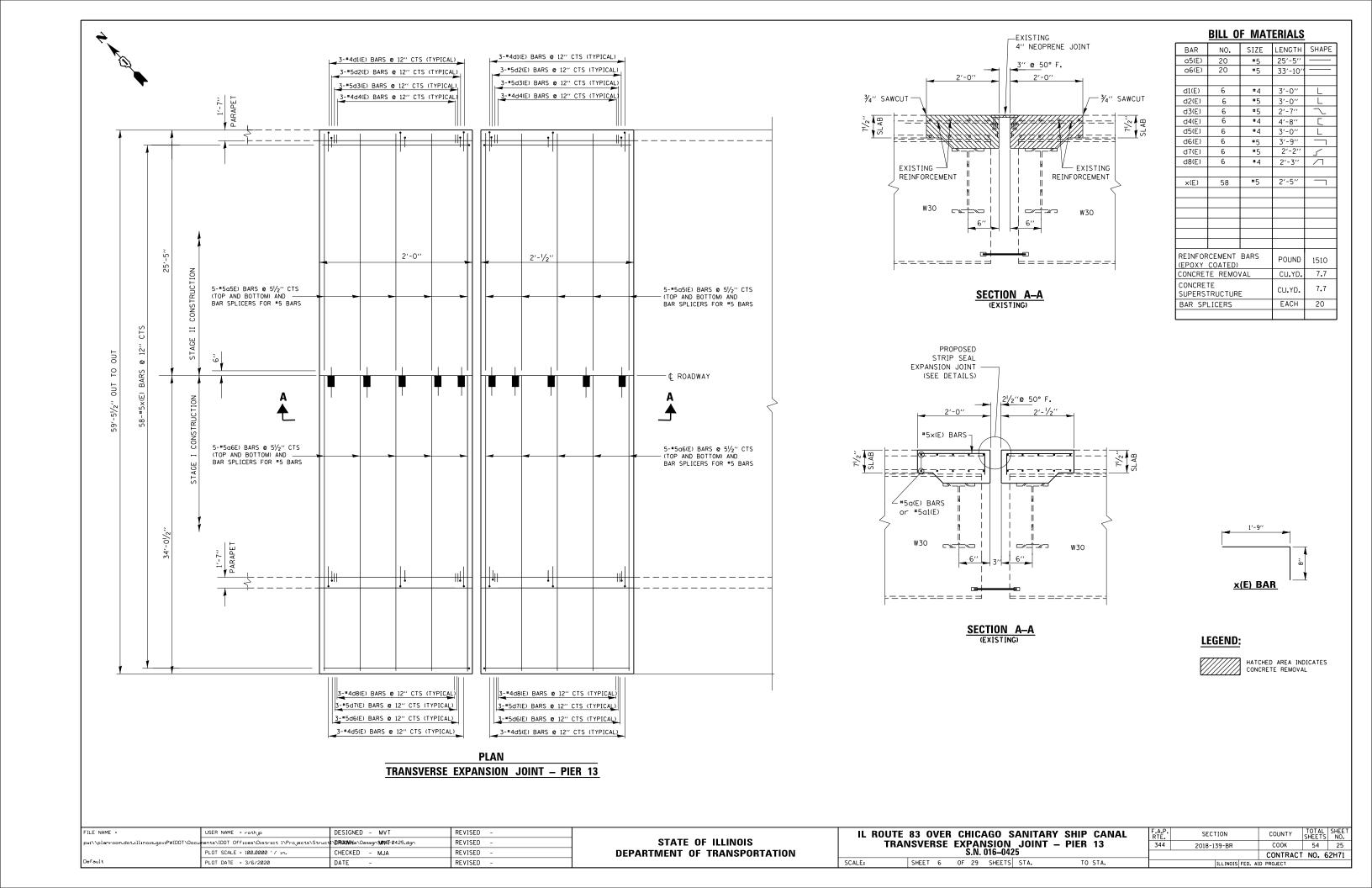
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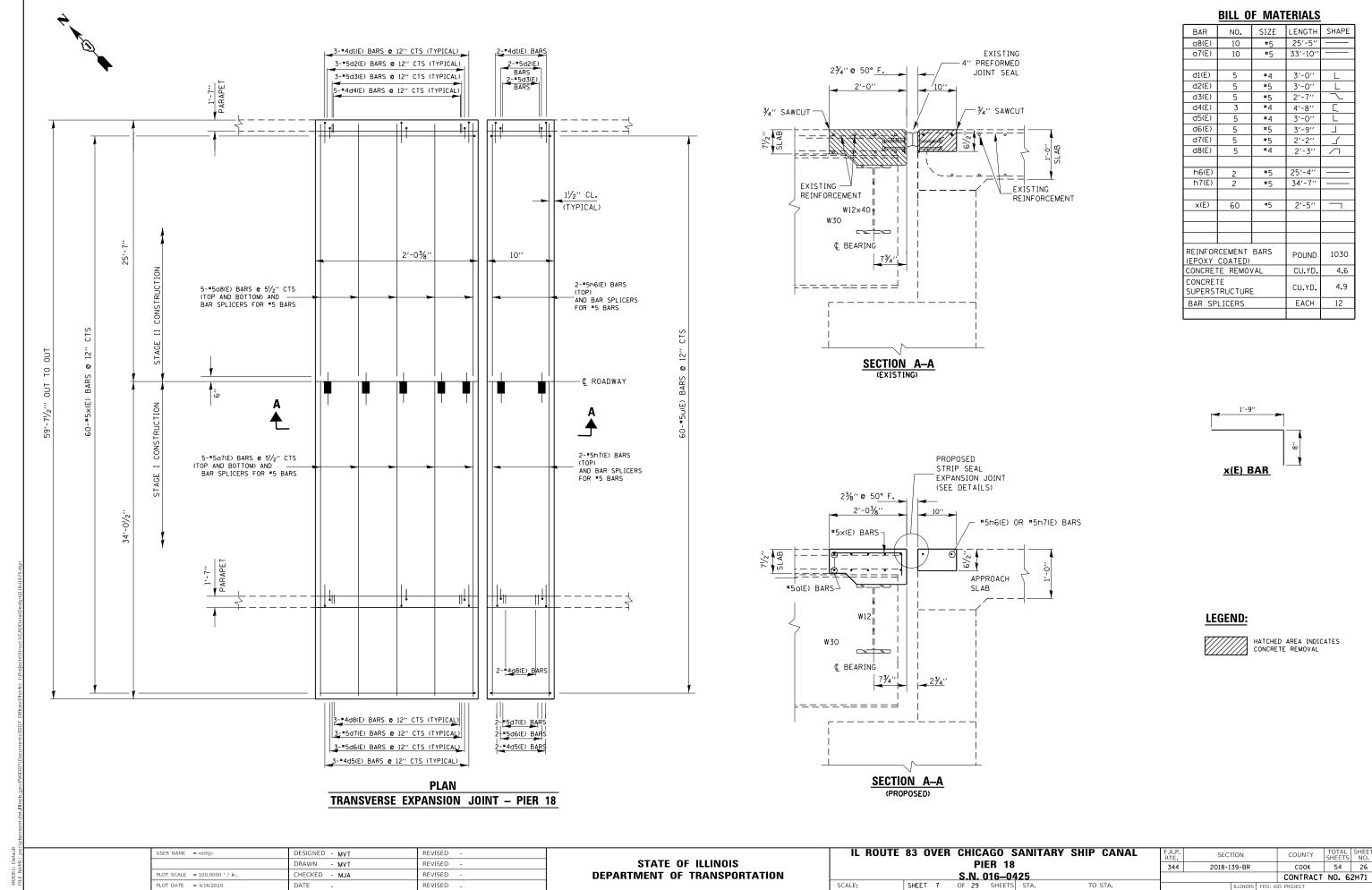
 PLOT DATE
 = 1/31/2020
 DATE
 REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

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DEPARTMENT OF TRANSPORTATION

SCALE:

SHEET 7

CONTRACT NO. 62H71

TO STA.

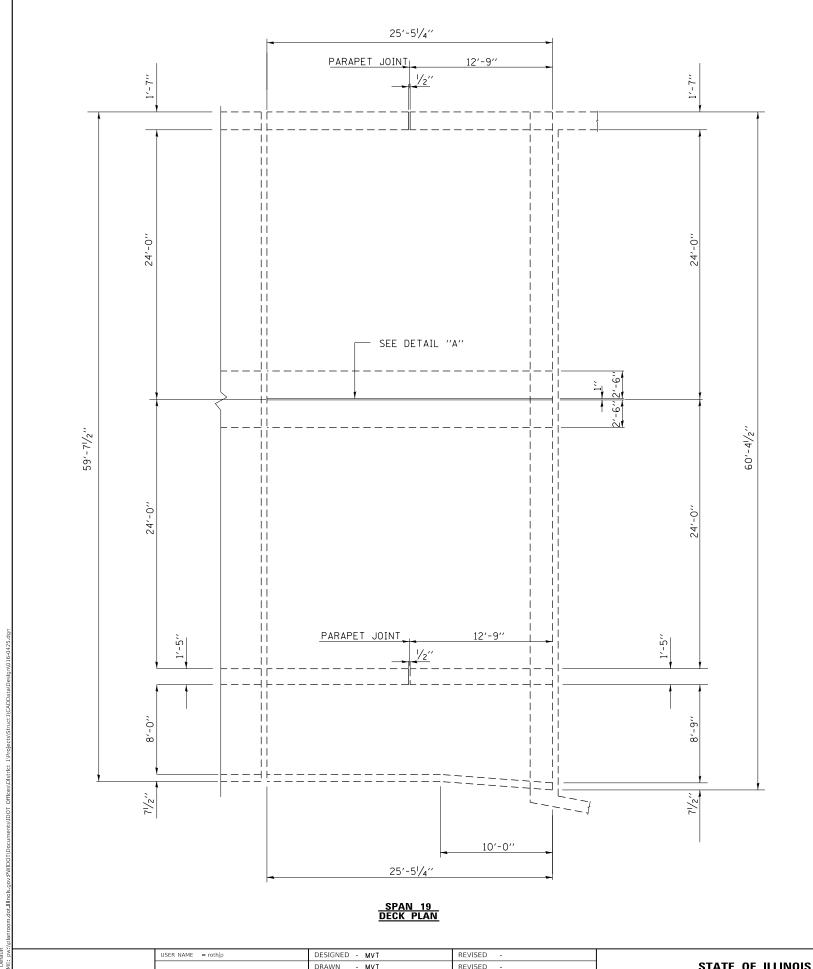
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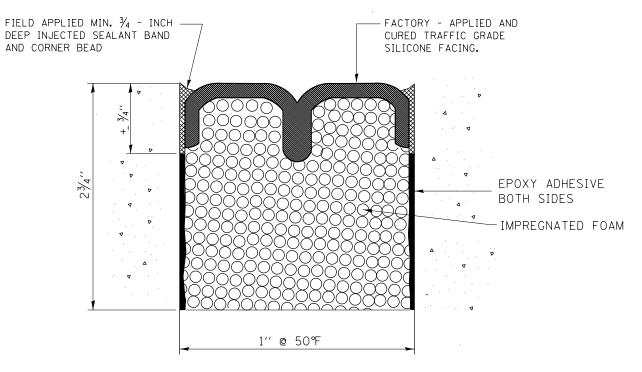
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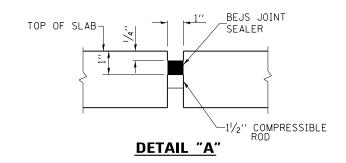
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PREFORMED JOINT SEAL AT JOINT



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 PRIOR TO CONSTRUCTION OR 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.

REPAIR AREAS OF SPALLED OR DETERIORATED CONCRETE ADJACENT TO EXPANSION JOINT. JOINT SEALS SHALL BE PREFORMED PRE-COMPRESSED, SILICONE COATED SELF EXPANSION SEALANT SYSTEM.

BILL OF MATERIALS

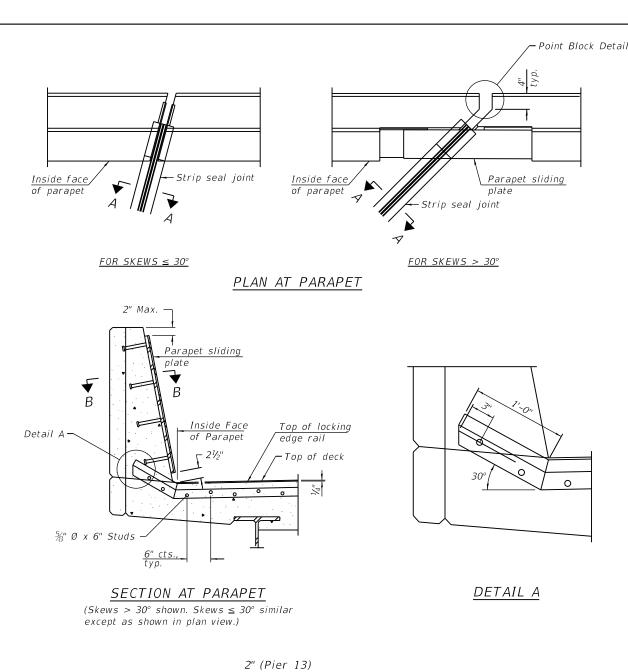
ITEM	UNIT	QUANTITY
PREFORMED JOINT SEAL 1"	F00T	26

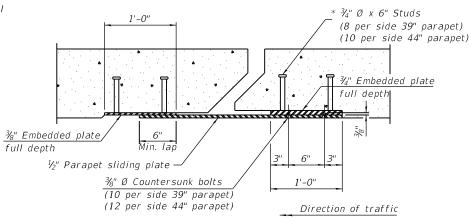
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	DRAWN - MVT	REVISED -
PLOT SCALE = 100.0000 ' / in.	CHECKED - MJA	REVISED -
PLOT DATE = 3/6/2020	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

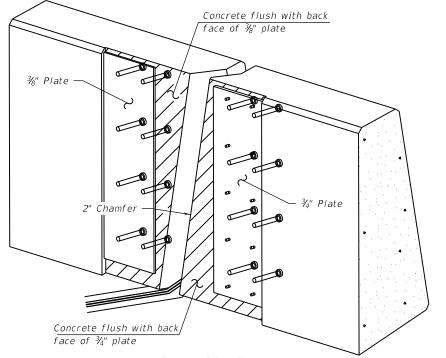
					SANITARY XPANSION	SHIP CANAL JOINT	
S.N. 016-0425							
SCALE:	SHEET	. 8	OF 29	SHEETS	STA.	TO STA.	

RTE. SECTION COUNTY SHEETS NO			CONTRACT	NO. 6	2H71
	344	2018-139-BR	соок	54	27
	F.A.P. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEE





SECTION B-B



Notes:

The strip seal shall be made continuous and shall have 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 $4\frac{1}{2}$ " 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.

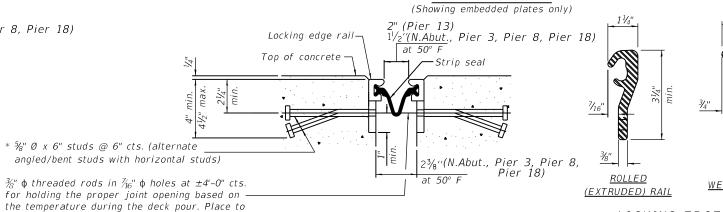
The top surface of sidewalk sliding plates shall have a raised pattern according to ASTM A786.

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

39" constant slope barrier shown, 44" constant slope barrier 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.

TRIMETRIC VIEW

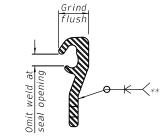


SHOWING WELDED RAIL JOINT

WELDED RAIL

LOCKING EDGE RAILS

** Back gouge not required if complete joint penetration is verified by mock-up.



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	339

SECTION A-A

miss studs. All rods shall be burned, or sawed

off flush with the plates after concrete is set

* Granular or solid flux filled headed studs conforming to Article 1006.32 of the Std.

EJ-SS-S 1-1-2020

Locking edge rail —

Top of concrete

(N.Abut., Pier 3, Pier 8, Pier 18) 23/8

USER NAME = rothjp	DESIGNED - MVT	REVISED -
	DRAWN - MVT	REVISED -
PLOT SCALE = 100.0000 ' / in.	CHECKED - MJA	REVISED -
PLOT DATE = 3/9/2020	DATE -	REVISED -

 $1^{1/2}$ " (N.Abut., Pier 3, Pier 8, Pier 18)

at 50° F

SHOWING ROLLED RAIL JOINT

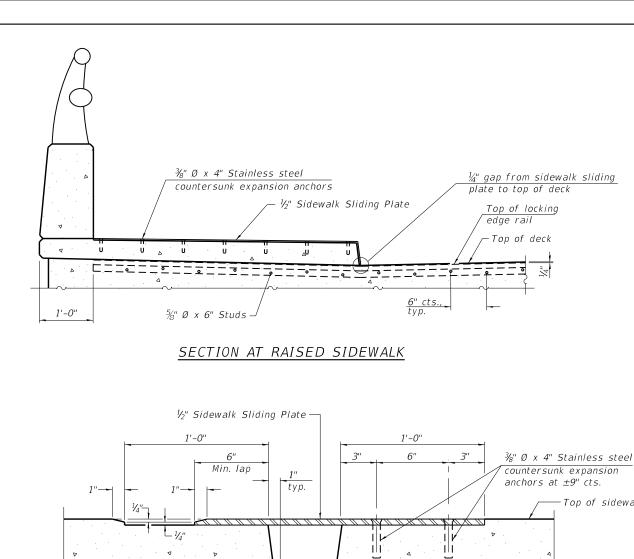
-Strip seal

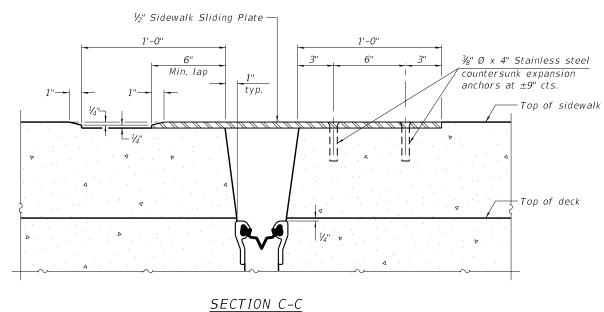
STATE OF ILLINOIS

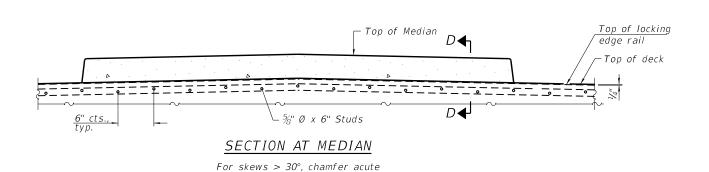
			JOINT S			RY SHIP CANAL EWALK
SCALE:	SHEET	9	OF 22	SHEETS	STA.	TO STA.

F.A.P. RTE	SECT	COUNTY	TOTAL SHEETS	SHEET NO.		
344	2018-1	соок	54	28		
			CONTRACT	NO. 62	2H71	
		ILLINOIS	FED. A	ID PROJECT		

DEPARTMENT OF TRANSPORTATION







EJ-SS-S 1-1-2020 JSER NAME = rothjp DESIGNED -REVISED

corners 2" similar to sidewalk.

DRAWN

DATE

CHECKED

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** PREFORMED JOINT STRIP SEAL - SIDEWALK **STRUCTURE NO. 016-0425**

COUNTY TOTAL SHEET NO.

COOK 54 28a SECTION 2018-139-BR CONTRACT NO. 62H71

1" typ. — Top of median -Top of deck TRIMETRIC VIEW

PLAN AT RAISED SIDEWALK

SECTION D-D

(at Rt. ∠'s)

SCALE:

(FOR SKEWS ≤ 30°)

(Sheet 2 of 3)

PLOT DATE = 3/6/2020

REVISED

REVISED

REVISED

SHEET 9a OF 29 SHEETS STA.

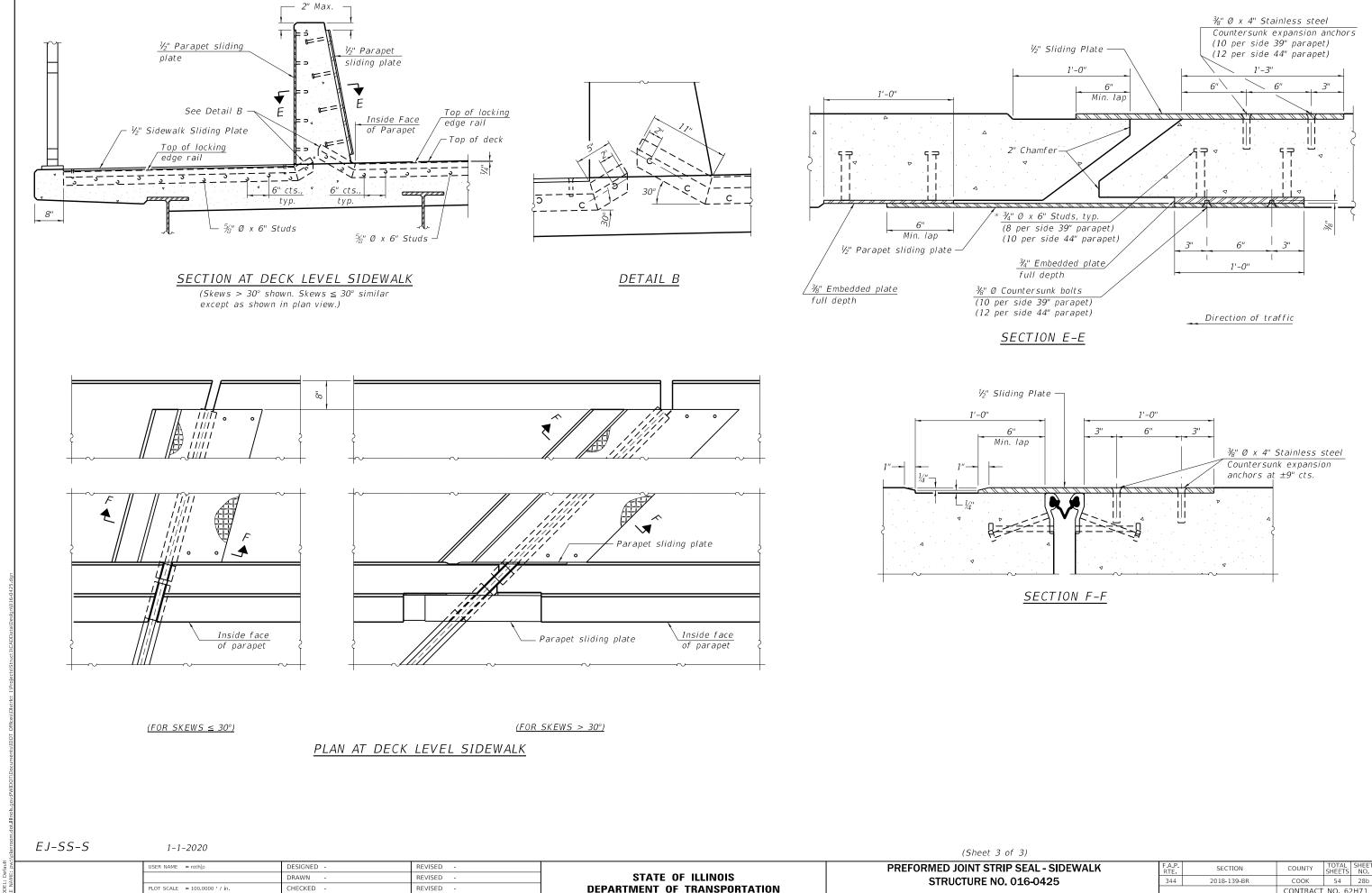
-2" Chamfer

 $\frac{1}{2}$ " Sidewalk Sliding Plate

(FOR SKEWS > 30°)

Raised pattern optional on

vertical face



SCALE:

SHEET 9b OF 29 SHEETS STA.

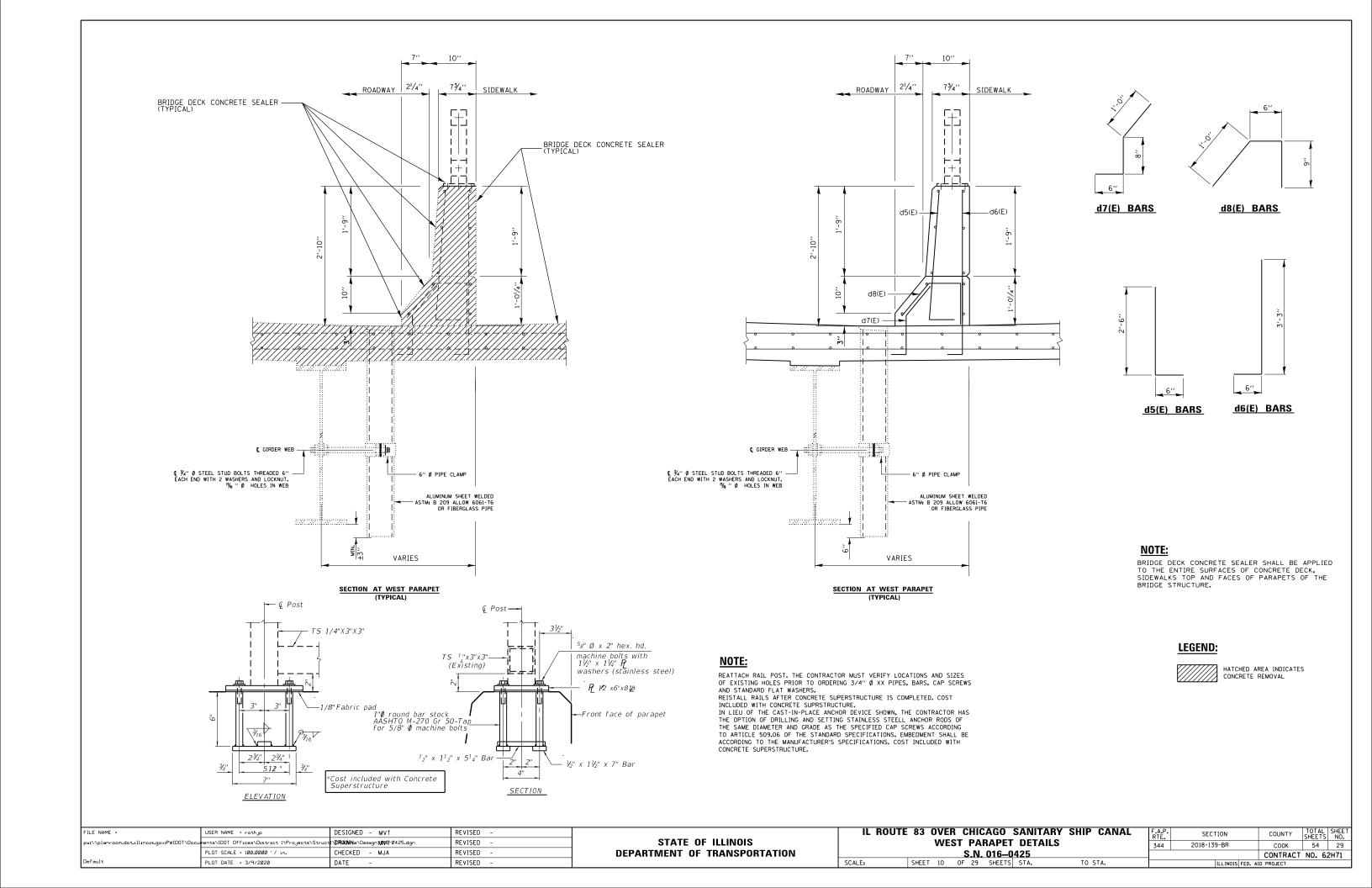
TO STA.

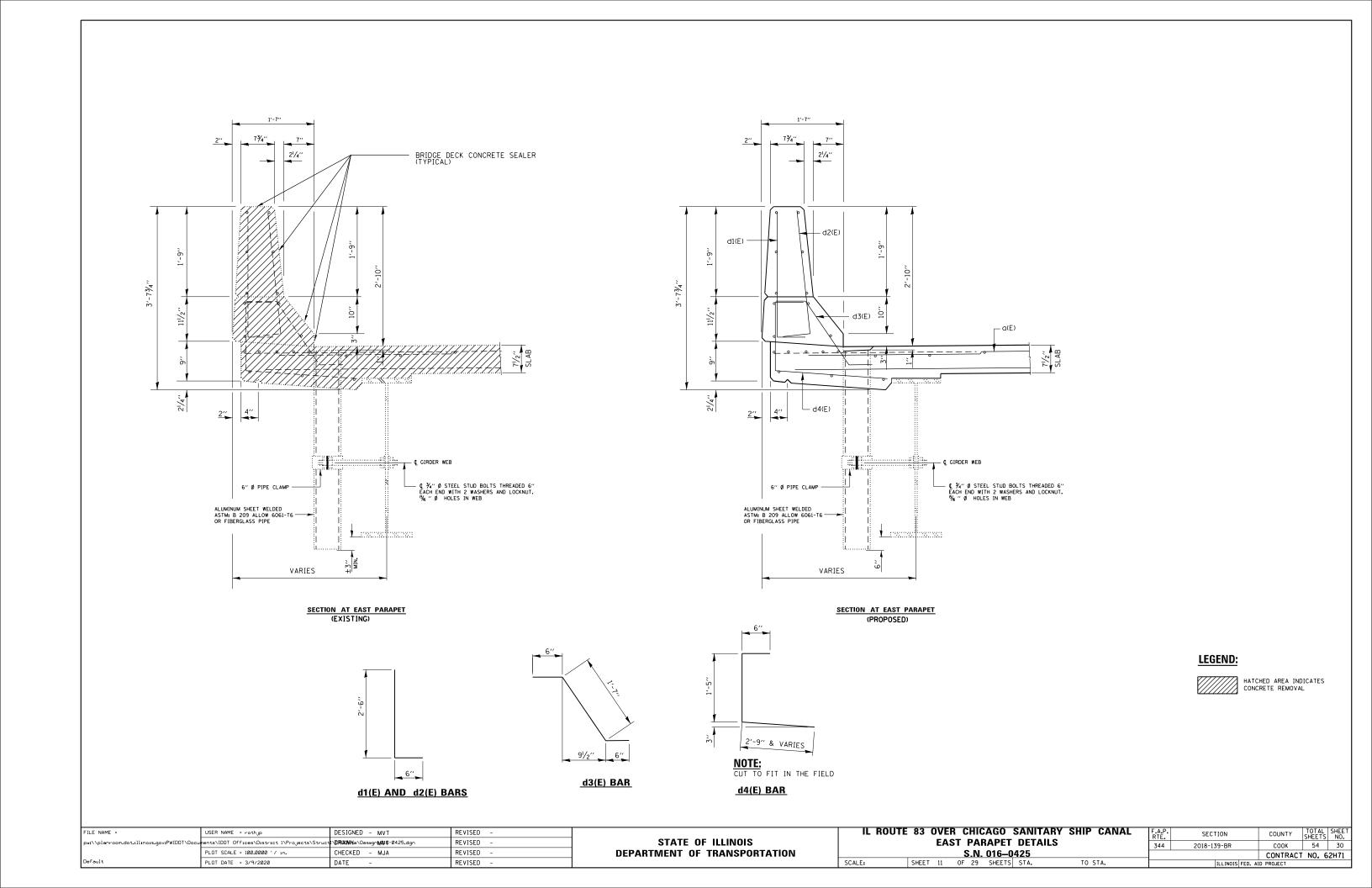
REVISED

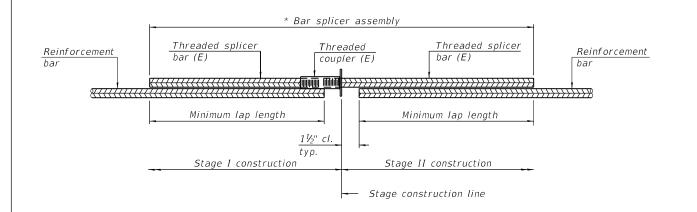
CONTRACT NO. 62H71

PLOT DATE = 3/6/2020

DATE







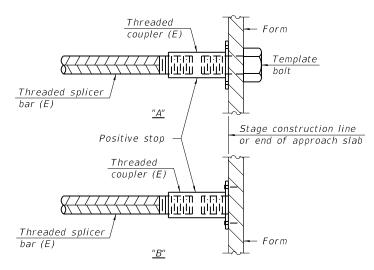
STANDARD BAR SPLICER ASSEMBLY PLAN

(All components shall be provided from one supplier)

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.

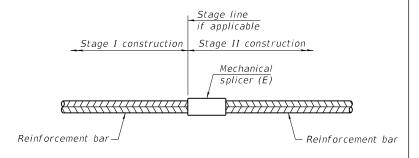
Location	Bar size	No. assemblies required	Minimum Iap length
N.Abut. and Pier 18	#5	28	3′-6′′
Piers 3,8,13	#5	80	3′-6′′



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.



STANDARD MECHANICAL SPLICER

Location	Bar size	No. assemblies required

Notes:

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.

BSD-1

1-1-2020

FILE NAME = USER NAME = rothjp		DESIGNED _ MVT	REVISED _
pw://planroom.dot.illinois.gov:PWIDOT/Docu	nents\IDOT Offices\District 1\Projects\Struct	I \DRADM\a\ a\Design\ Q\M \d/Q425.dgn	REVISED _
	PLOT SCALE = 100.0000 ' / in.	CHECKED MJA	REVISED _
	PLOT DATE = 3/6/2020	DATE	REVISED _

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

IL ROUTE 83 OVER CHICAGO SANITARY SHIP CANAL	F.A.P. RTE.	s
BAR SPLICER ASSEMBLY	344	201
S.N. 016–0425		
SCALE: SHEET 12 OF 29 SHEETS STA. TO STA.		

SECTION COUNTY COOK 54 31 018-139-BR CONTRACT NO. 62H71 ILLINOIS FED. AID PROJECT



SCALE:

CONTRACT NO. 62H71

TO STA.

PLOT SCALE = 100.0000 / in.

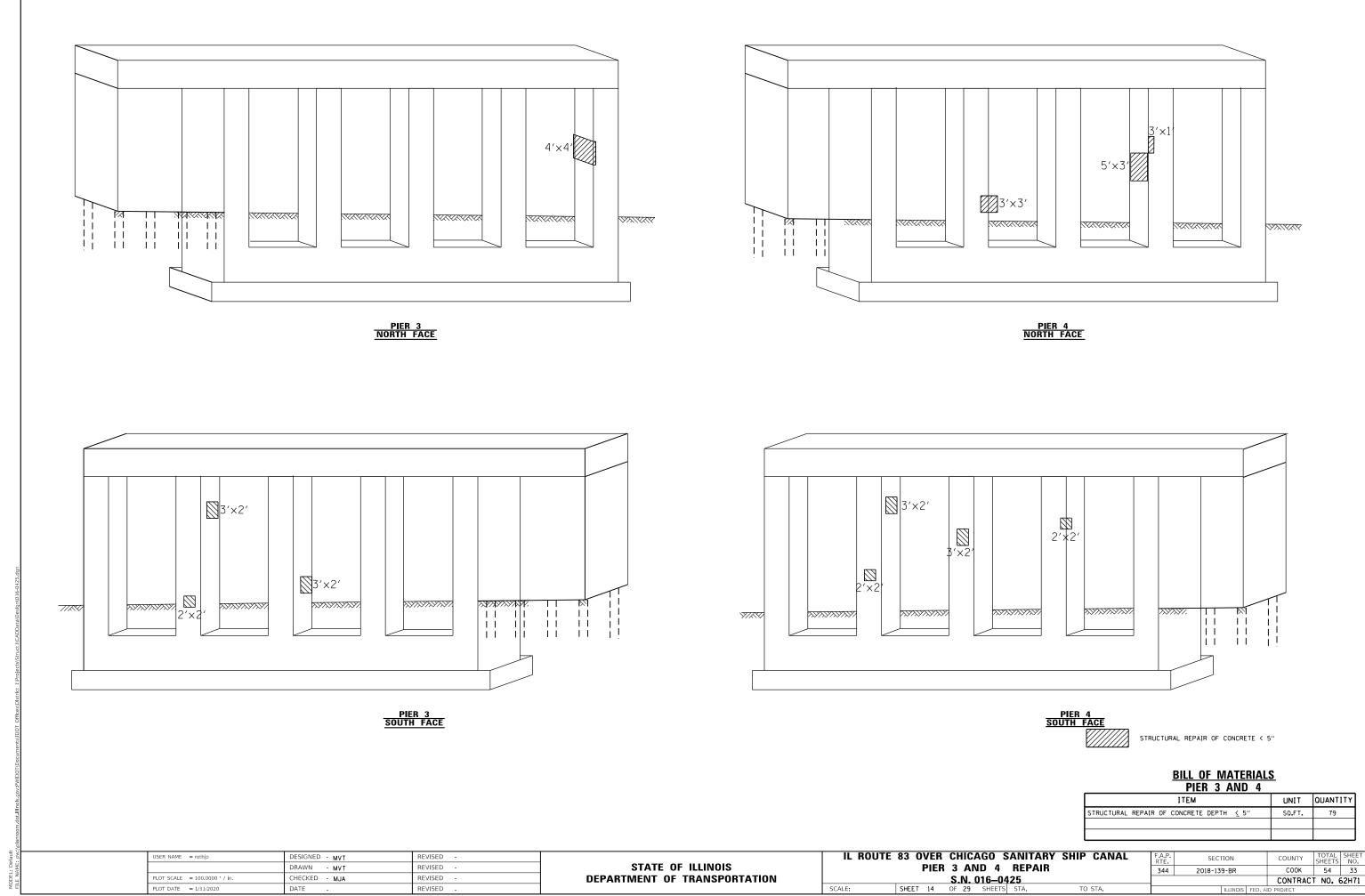
PLOT DATE = 1/31/2020

CHECKED - MJA

DATE

REVISED

REVISED



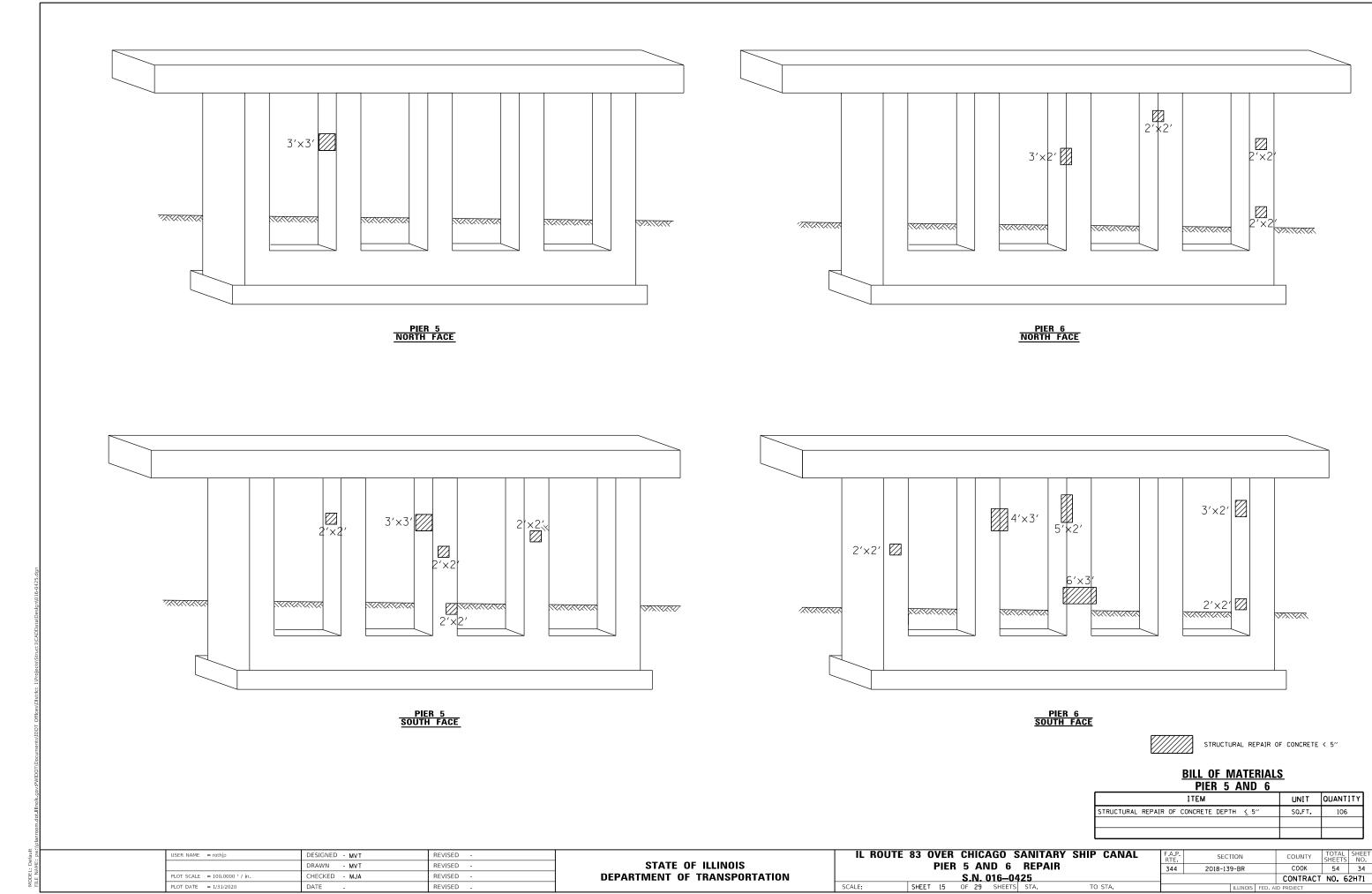
SCALE:

TO STA.

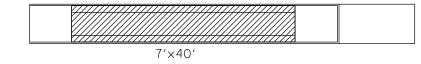
PLOT DATE = 1/31/2020

DATE

REVISED

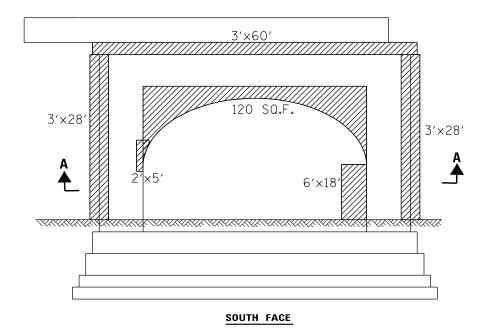


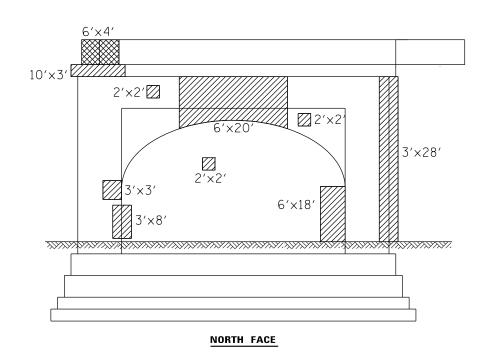


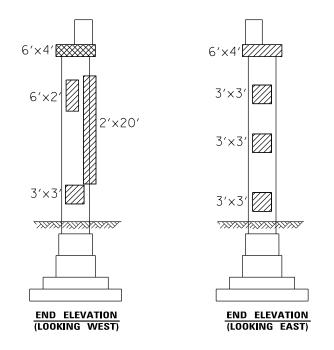


SECTION A-A











STRUCTURAL REPAIR OF CONCRETE > 5"



STRUCTURAL REPAIR OF CONCRETE < 5"

BILL OF MATERIALS PIER 7

ITEM	UNIT	OUANTITY	
TRUCTURAL REPAIR OF CONCRETE DEPTH ≤ 5"	SO.FT.	1271	
TRUCTURAL REPAIR OF CONCRETE DEPTH > 5"	SO.FT.	48	ı
·			

USER NAME = rothjp	DESIGNED - MVT	REVISED -	
	DRAWN - MVT	REVISED -	
PLOT SCALE = 100.0000 ' / in.	CHECKED - MJA	REVISED -	
PLOT DATE = 1/31/2020	DATE -	REVISED -	

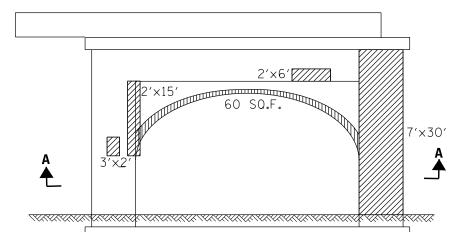




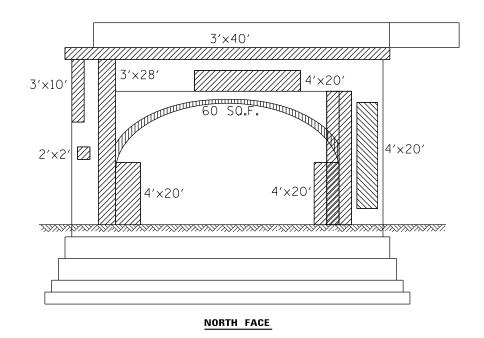
7'×40'

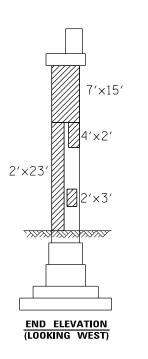
SECTION A-A

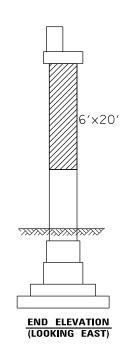
TOP PLAN



SOUTH FACE







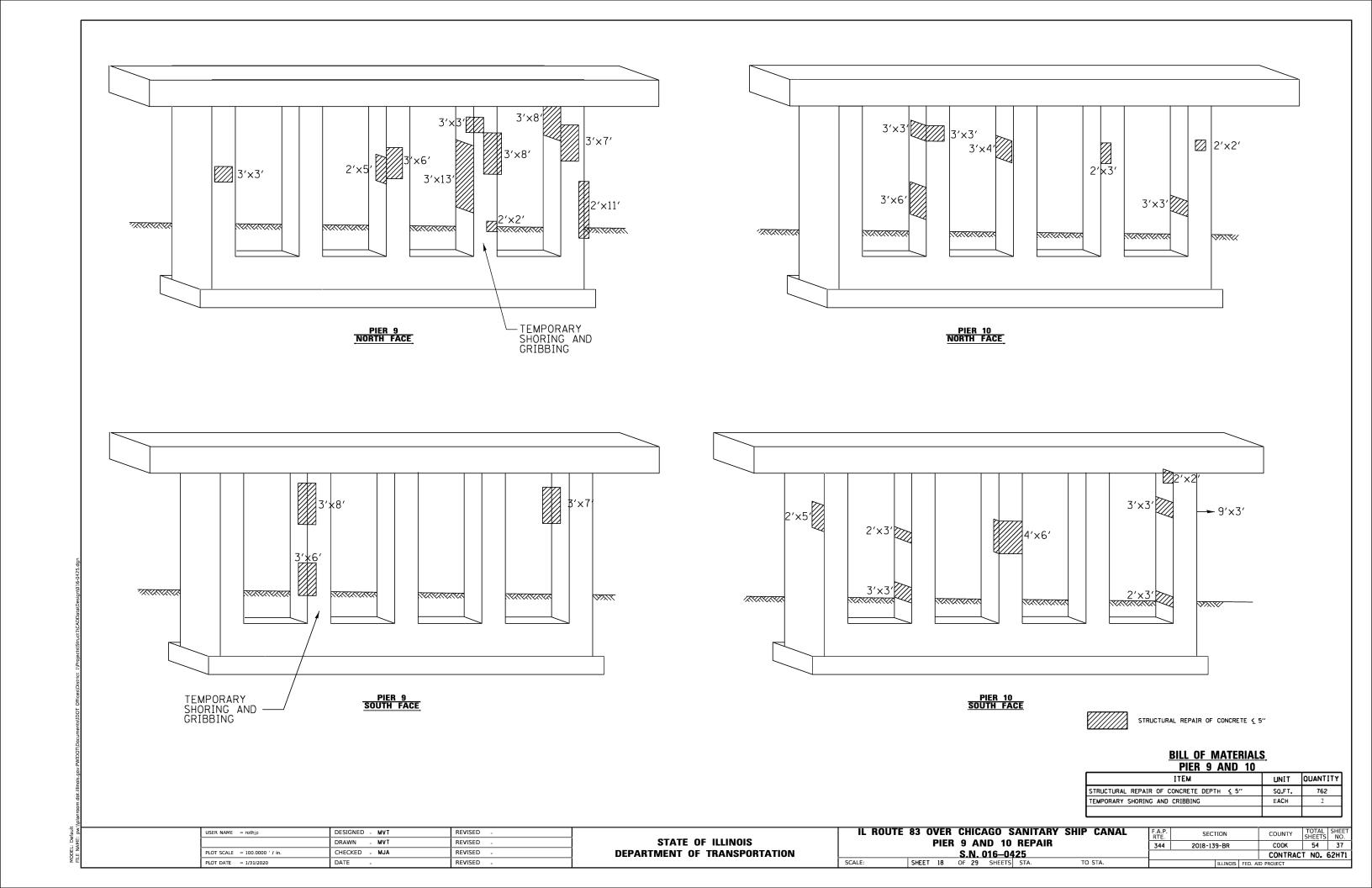
STRUCTURAL REPAIR OF CONCRETE < 5"

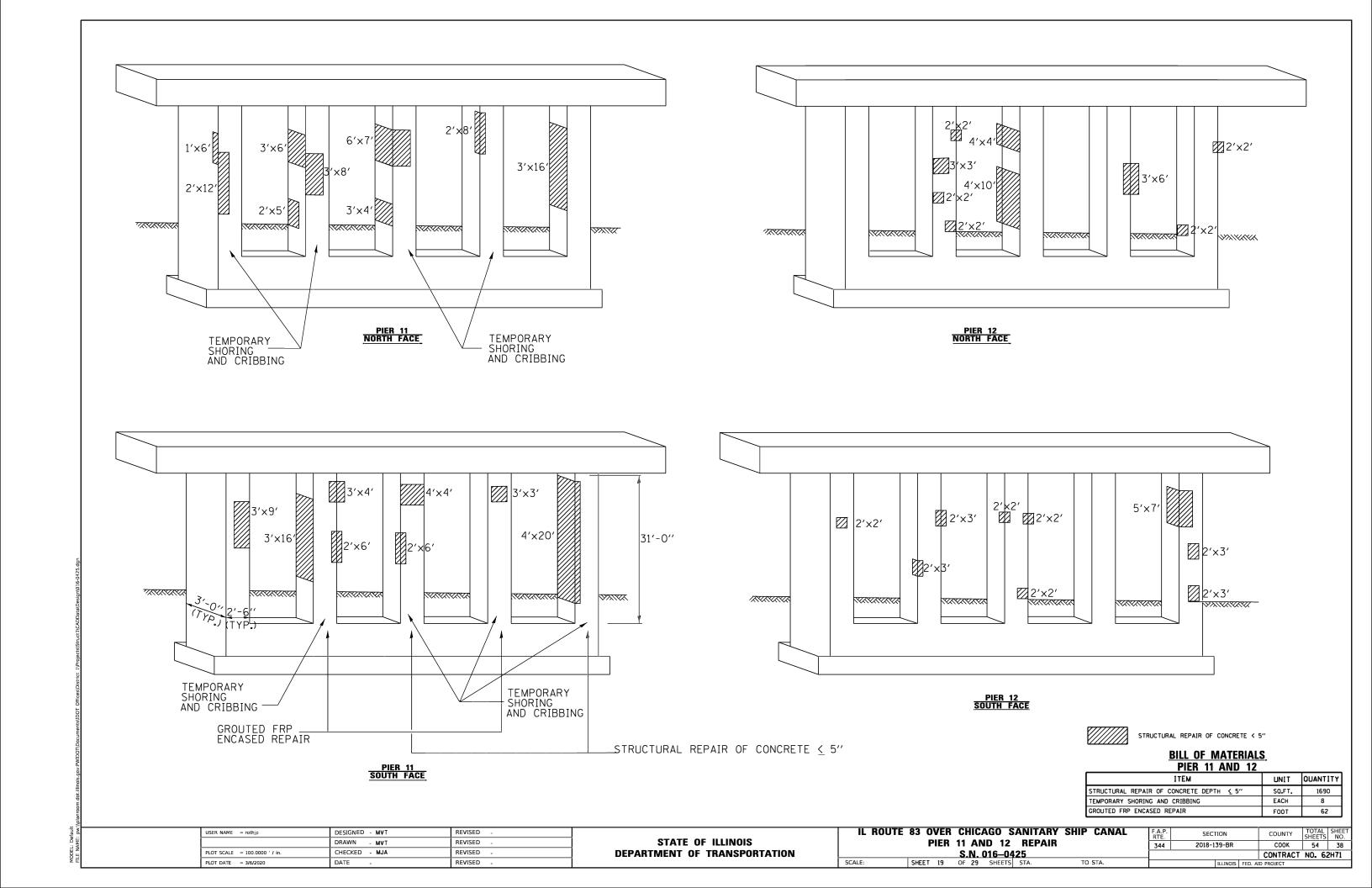
BILL OF MATERIALS PIER 8

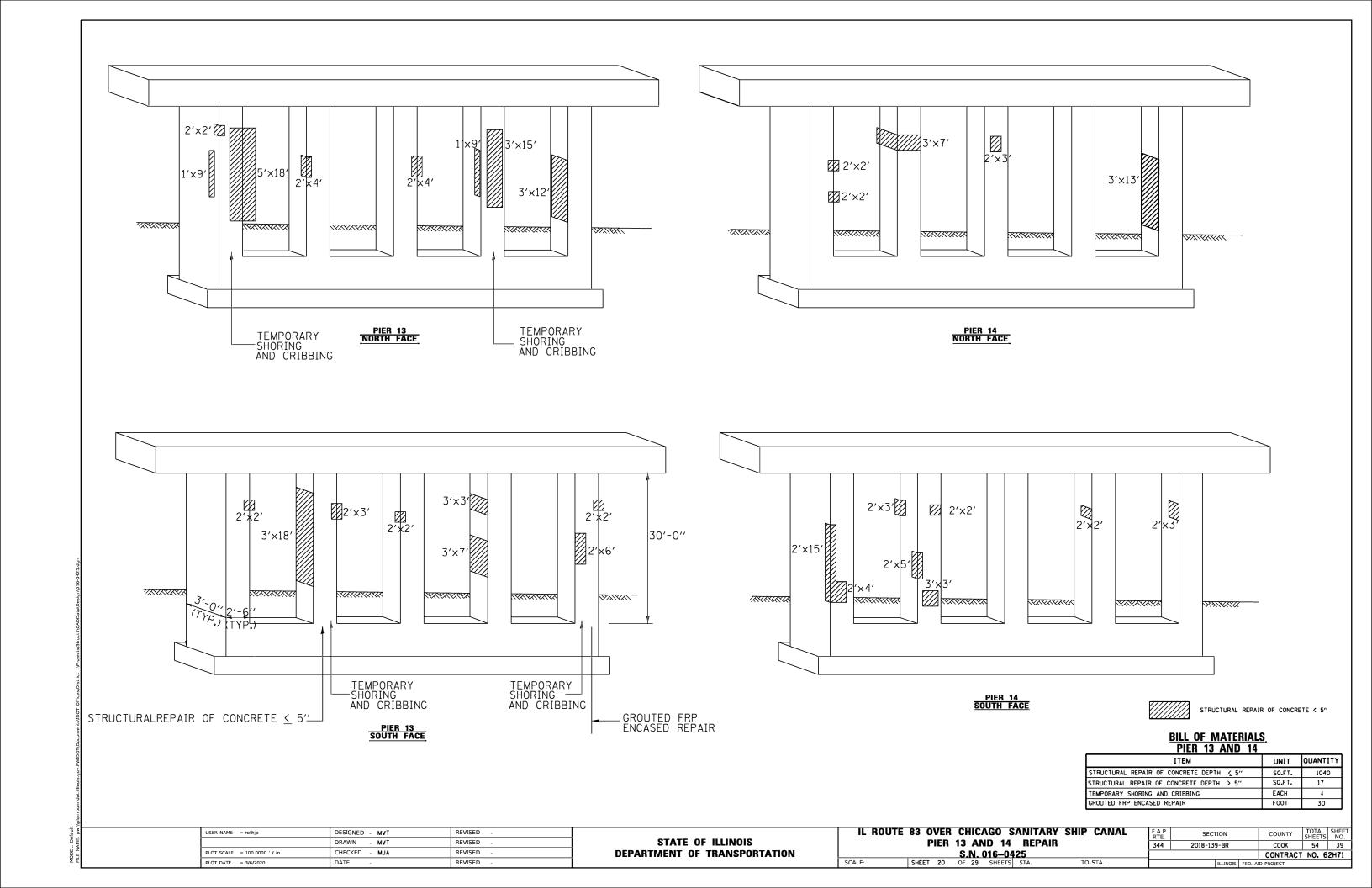
ITEM	UNIT	QUANTITY
STRUCTURAL REPAIR OF CONCRETE DEPTH < 5"	SO.FT.	1391

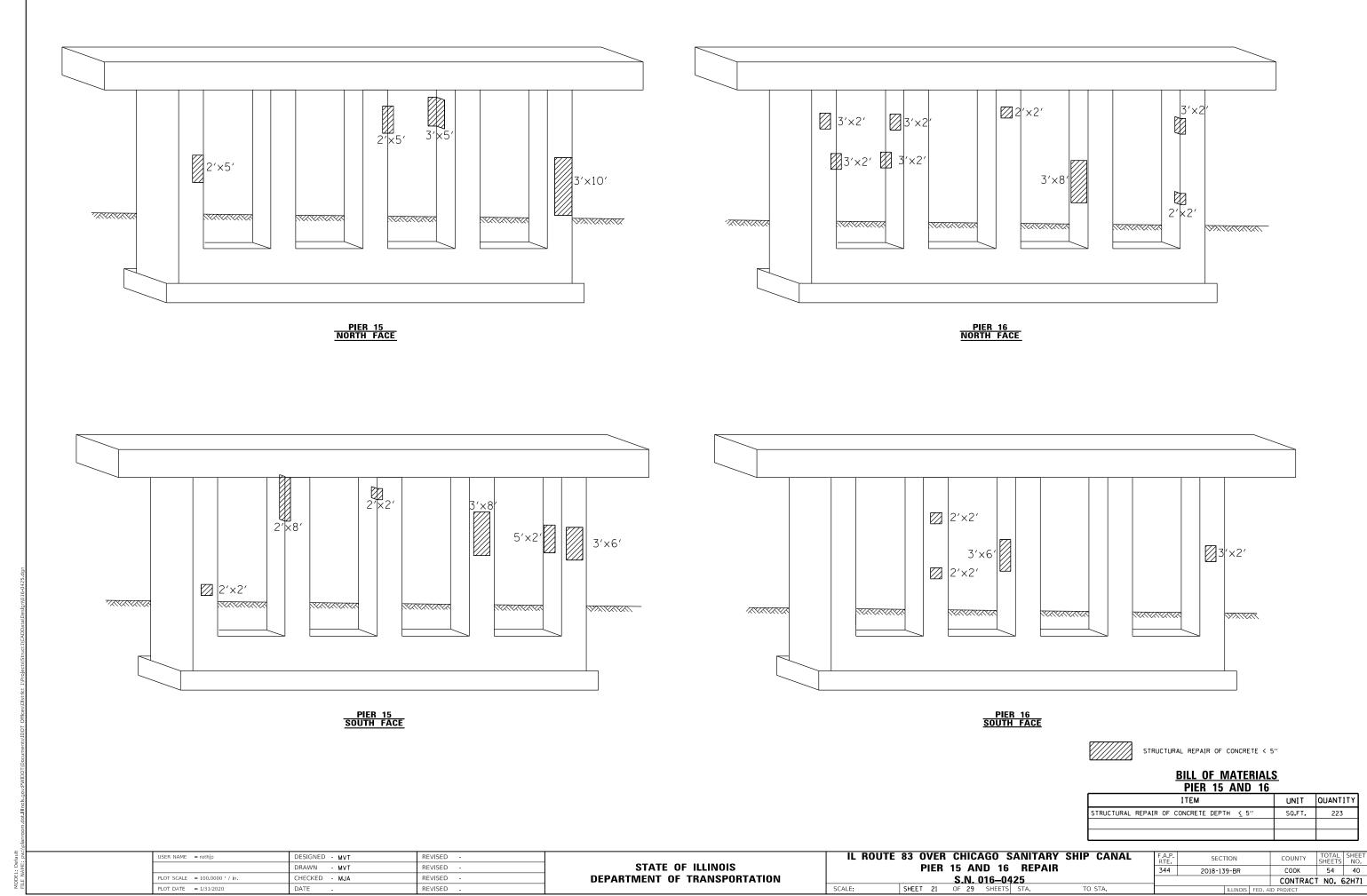
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	DRAWN - MVT	REVISED -
PLOT SCALE = 100.0000 ' / in.	CHECKED - MJA	REVISED -
PLOT DATE = 1/31/2020	DATE -	REVISED -

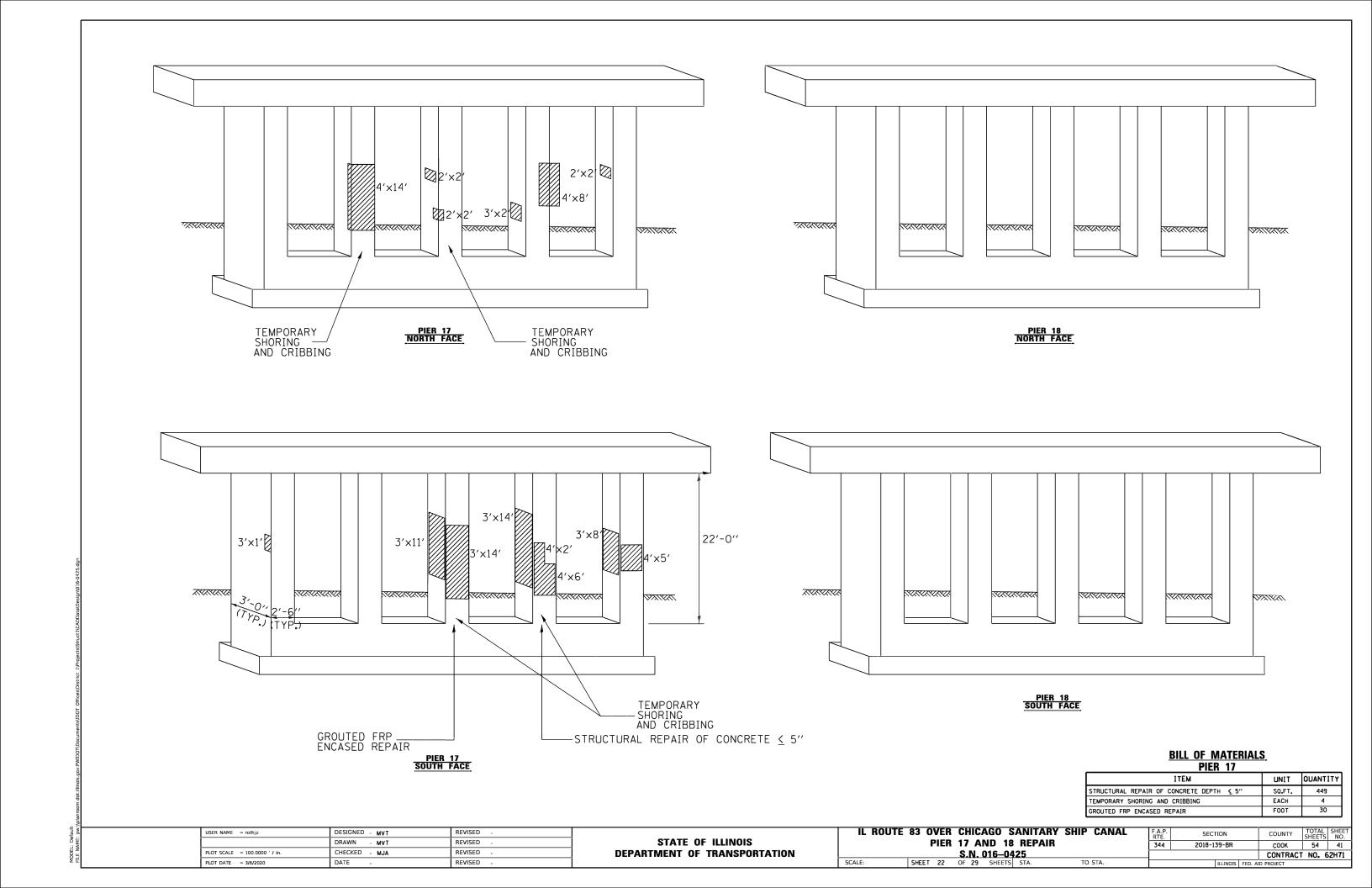
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION





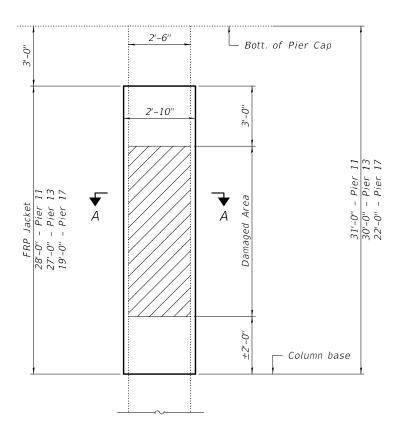




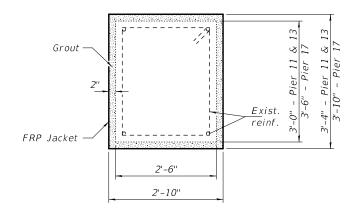




PIER 11 - LOOKING NORTH
(Pier 13 & 17 similar)



TYPICAL PILE REPAIR



SECTION A-A

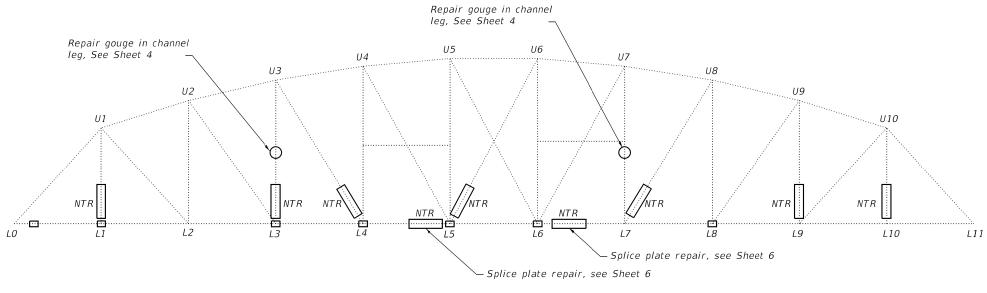
BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Grouted FRP Encased Repair	Foot	110

DESIGNED - VHV	EXAMINED	I most A A MA	DATE - MARCH 20, 2020		PIER REPAIR DETAIL	F.A.P.	SECTION	COUNTY	TOTAL	SHEET
CHECKED - ATH] —	ENGINEER OF STRUCTURAL SERVICES		STATE OF ILLINOIS		344	2018-139-BR	соок	54	41A
DRAWN - daburdell	PASSED	d. Carl Proper	REVISED -	DEPARTMENT OF TRANSPORTATION	SN 016-0425			CONTRACT	NO 621	171
CHECKED - VHV ATH		ENGINEER OF BRIDGES AND STRUCTURES	REVISED -		SHEET NO. 22A OF 29 SHEETS		ILLINOIS FED. A	ID PROJECT		

EXISTING BRIDGE DESCRIPTION

This 19-span bridge, constructed in 1934 and rehabilitated in 1959, consists of a Parker through-truss main span over the Chicago Sanitary and Ship Canal, seventeen steel multi-beam approach spans, and one concrete slab approach span at the south end. The bridge carries two lanes of vehicular traffic in each direction with bike lanes along the west truss. The steel superstructure is supported by reinforced concrete piers and abutments.



Structure
No. 016-0425

Range 11E, 3rd P.M.

Structure
No. 016-0425

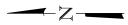
LOCATION SKETCH

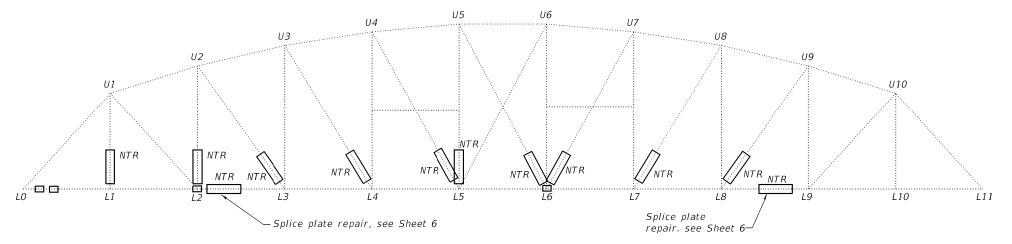
Truss member repair, see Sheets 4, 5, and 6.

☐ Batten plate replacement, see Sheet 7.

O Gouge repair, see Sheet 4

WEST ELEVATION OF WEST TRUSS





WEST ELEVATION OF EAST TRUSS



IL. Lic. No. 081-00610 Expires 11-30-2020

Date: 02-25-2020 For Sheet No.'s 1 thru 7 of 7

USER NAME = TCS	DESIGNED - ARB	REVISED -	07475 05 111 11010	TRUSS ELEVATION	RTE. SECTION	COUNTY SHEETS NO.
	CHECKED - DC	REVISED -	STATE OF ILLINOIS	STRUCTURE NO. 016-0425	344 2018-139-BR	COOK 54 42
PLOT SCALE = Not to Scale	DRAWN - TCS	REVISED -	DEPARTMENT OF TRANSPORTATION		•	CONTRACT NO. 62H71
PLOT DATE = 2/25/2020	CHECKED - DC/ARB	REVISED -		SHEET NO. 1 OF 7 SHEETS	ILLINOIS	ED. AID PROJECT

Structural Steel Repair Notes

- 1. Plan dimensions and details relative to the existing structure have been taken from existing plans and are subject to nominal construction variations. It shall be the Contractor's responsibility to field verify such dimensions and details and make necessary approved adjustments prior to construction or ordering materials. Such variation shall not be cause for additional compensation for a change in the scope of work; however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.
- Contractor shall not scale dimensions from these plans for construction purposes. Any scales shown are for information only.
- 3. Repairs shown are based on the information available at the time of plan preparation and are for bidding purposes only. Actual areas to be repaired shall be determined by the Engineer in the field at the time of construction.
- 4. All new structural steel shall be AASHTO M-270 Grade 36, unless noted otherwise.
- 5. To match the existing rivet diameter, all new bolts shall be 7/8 inch diameter AASHTO M164 Type 1 bolts with AASHTO M291 Grade DH nuts and AASHTO M293 hardened washers, unless noted otherwise. All bolts shall be installed in standard holes (bolt diameter plus 1/16 inch) whether the hole is new or existing. All bolts shall be pretensioned to the minimum installation tension specified in Section 505.04 of the Standard Specifications.
- 6. No field welding is permitted.
- 7. Repairs to truss diagonal members (Sheet 4 and Sheet 5), truss vertical members (Sheet 6), and the lateral bracing repairs (Sheet 7) shall be performed when live load is restricted from the two lanes nearest to the truss being repaired.
- 8. For the truss member repair details shown on Sheet 4, Sheet 5, and Sheet 6, only one repair plate (one angle leg repair plate or one channel web repair plate) shall be installed at a time in order to limit the number of rivets removed from the gusset plate. The installation of other repair plates shall not commence until the installation of the previous repair plate is complete and the bolts are pretensioned.
- 9. Minor adjustments to the spacing of new bolts may be necessary to match existing dimensions or conditions, and will be permitted if pre-approved by the Engineer. Adjustments to the bolt spacing will only be permitted if necessary to match existing conditions, and will not be permitted to reduce the repair plate length. In no case shall the bolt spacing be less than 3 inches or greater than 5-1/2 inches. Minimum edge distance, measured from the center of the bolt hole to the edge of the plate, shall be 1-1/2 inches, unless noted otherwise on the drawings.
- 10.Installation of steel repairs may require compact equipment, such as magnetic drills, in order to fit within the depth of the truss verticals and diagonals.
- 11. When removing and replacing existing deteriorated rivets with bolts, no more than 3 rivets shall be removed from the truss bottom chord before filling the existing holes with new high-strength bolts, installed to a minimum of snug tight. Pretensioning the new bolts to the minimum installation tension may be performed after all new bolts have been installed.
- 12.Hardened washers shall be installed beneath the head of each bolt if the head will be turned to tension the bolt.
- 13.Cost of removal and re-installation of all members necessary to complete the work detailed on the plans and as specified in the Special Provisions shall be included with Structural Steel Repair.
- 14. The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.
- 15.Existing structural steel that will be in contact with new structural steel shall be cleaned and painted prior to erection as required by the Special Provision, "Cleaning and Painting Contact Surface Areas of Existing Steel Structures."
- 16.All new steel shall be shop painted with inorganic zinc rich primer per AASHTO M300, Type 1. Cost included with "Structural Steel Repair". All faying surfaces of bolted connections shall meet the requirements for a class A surface as defined by AASHTO.
- 17.Cleaning and painting of all structural steel repairs shall meet the requirements for Primary Connections as specified in the special provision for "Cleaning and Painting Contact Surface Areas of Existing Steel Structures." Color of the top coat shall match the color of the existing truss members or lower floor framing, as applicable.

18. The Contractor shall obtain Coast Guard approval for any work that may interfere with navigational operations of the navigable waters. A work plan shall be prepared by the Contractor, reviewed and approved by the Engineer, and submitted by the Engineer to the Coast Guard at the address listed below for approval:

Bridge Administrator U.S. Coast Guard Ninth Coast Guard District 1240 E. Ninth St. Cleveland, OH 44199–2060

19. The Contractor shall take the necessary precautions to insure that no debris will endanger or interfere with any activities beneath the bridge according to Article 107.09 of the Standard Specifications and shall prevent any debris from falling in the river. This work will not be paid for separately, but shall be included in the Contract unit price for the appropriate pay item involved and no additional compensation will be allowed.

BILL OF MATERIAL

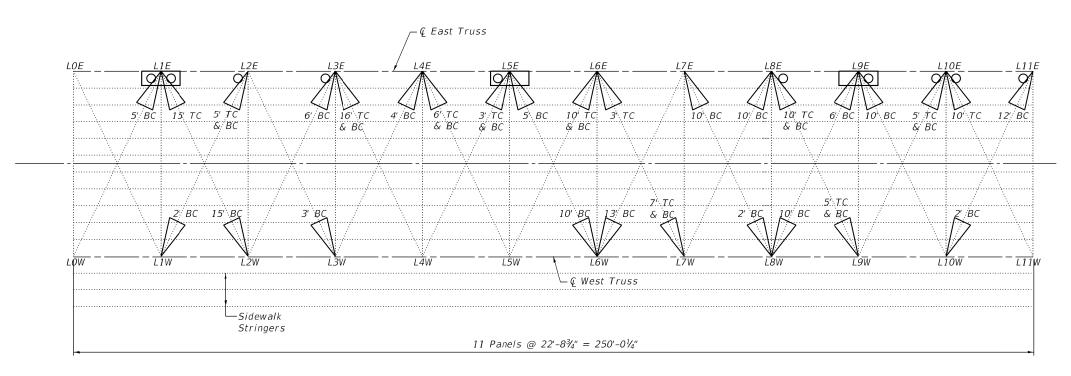
ITEM	UNIT	QUANTITY
Structural Steel Repair	Pound	7,180
Bolt Replacement	Each	1,400

USER NAME - IUS	DESIGNED		AKD	REVISED -
	CHECKED	-	DC	REVISED -
PLOT SCALE = Not to Scale	DRAWN	-	TCS	REVISED -
PLOT DATE = 11/27/2018	CHECKED	-	DC/ARB	REVISED -

ADD

DEVISED

DESTONED



FRAMING PLAN

LEGEND:

Top lateral gusset replacement, see Sheet 7

Bottom lateral gusset replacement, see Sheet 7

3° TC

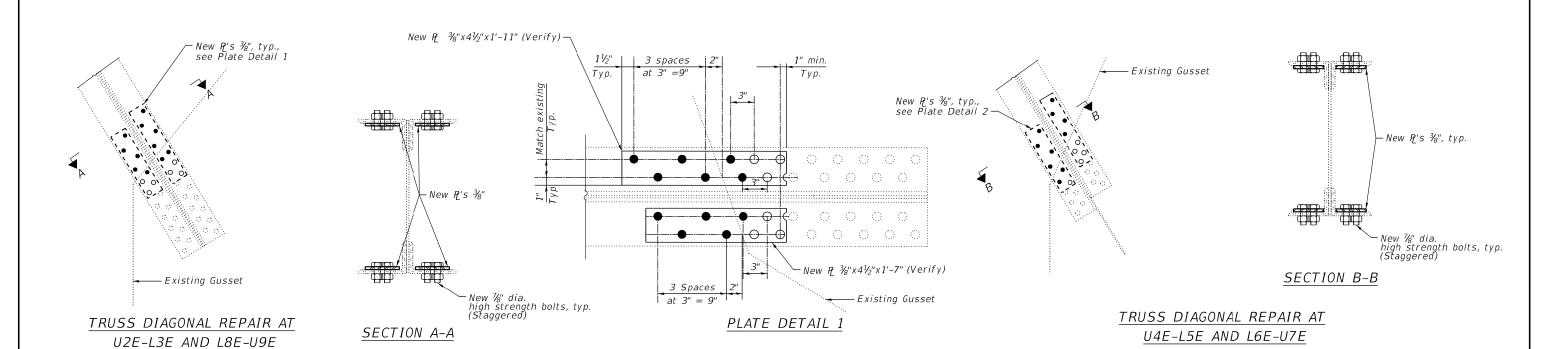
3' TC Length of repair, TC = Top Chord, BC = Bottom Chord

Lateral brace member repair, see Sheet 7

USER NAME = TCS	DESIGNED	-	ARB	REVISED -	
	CHECKED	-	DC	REVISED -	
PLOT SCALE = Not to Scale	DRAWN	-	TCS	REVISED -	
PLOT DATE = 11/27/2018	CHECKED	-	DC/ARB	REVISED -	

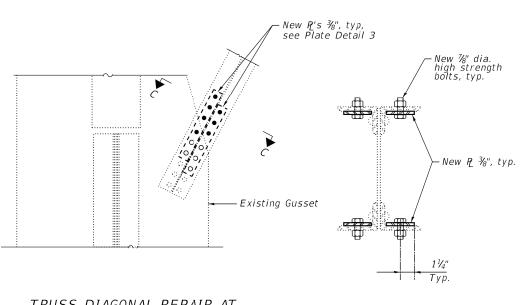
STATE 0	F ILLINOIS
DEPARTMENT OF	TRANSPORTATION

LOWER CHORD FRAMING PLAN STRUCTURE NO. 016-0425	F.A.P. RTE.	SECTION	COUNTY	TOTAL
	344	2018-139-BR	соок	54
			CONTRACT	NO.
CHEET NO 7 OF 7 CHEETS				



LEGEND:

- o Remove Existing Rivet and Replace with H.S. Bolt, Match Drill New Plate to Existing Rivet Holes
- New H.S. Bolt in Existing Member and Repair Plate
- Existing Rivets to Remain



TRUSS DIAGONAL REPAIR AT
L5W-U6W AND U5E-L6E

SECTION C-C

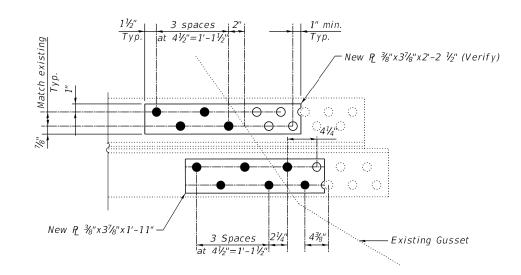


PLATE DETAIL 2

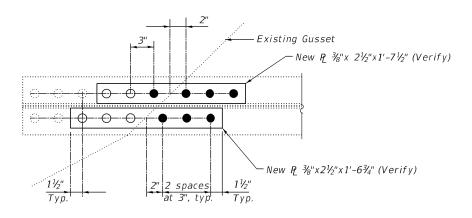
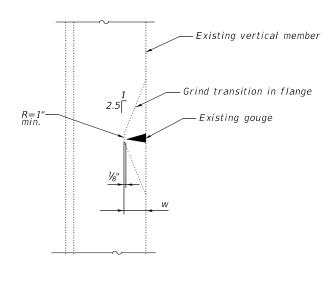


PLATE DETAIL 3



GOUGE REPAIR DETAIL

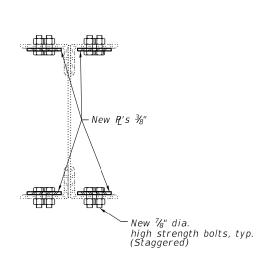
Gouge repairs at L7M-U7W and L3W-U3W cost shall be incidental to Structural Steel Repairs. Perform magnetic particle testing to verify gouge has been removed. Notify Engineer if width of the grinding (w) repair exceeds 3/4". Flame cutting shall not be permitted.

BILL OF MATERIALS

	Item	Unit	Quantity	
Str	uctural Steel Repair	Pound	410	

USER NAME = TCS	DESIGNED - ARB	REVISED -		MEMBER REPAIRS	RTE.	SECTION	COUNTY	SHEETS NO
	CHECKED - DC	REVISED -	STATE OF ILLINOIS	STRUCTURE NO. 016-0425	344	2018-139-BR	соок	54 45
PLOT SCALE = Not to Scale	DRAWN - TCS	REVISED -	DEPARTMENT OF TRANSPORTATION	OTHOUTONE NO. 010 0425			CONTRACT	NO. 62H71
PLOT DATE = 11/27/2018	CHECKED - DC/ARB	REVISED -		SHEET NO. 4 OF 7 SHEETS	ILLINOIS FED. AID PROJECT			

TRUSS DIAGONAL REPAIR AT
U3W-L4W, U3E-L4E, L7W-U8W,
L7E-U8E



SECTION A-A

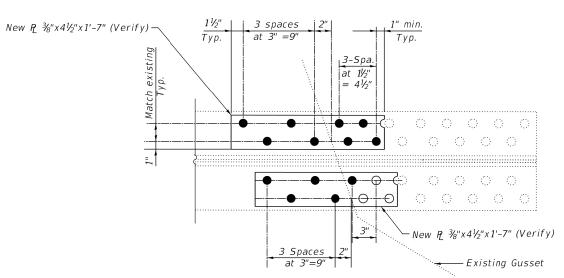


PLATE DETAIL 4

LEGEND:

- o Remove Existing Rivet and Replace with H.S. Bolt, Match Drill New Plate to Existing Rivet Holes
- New H.S. Bolt in Existing Member and Repair Plate
- Existing Rivets to Remain

GOUGE REPAIR DETAIL

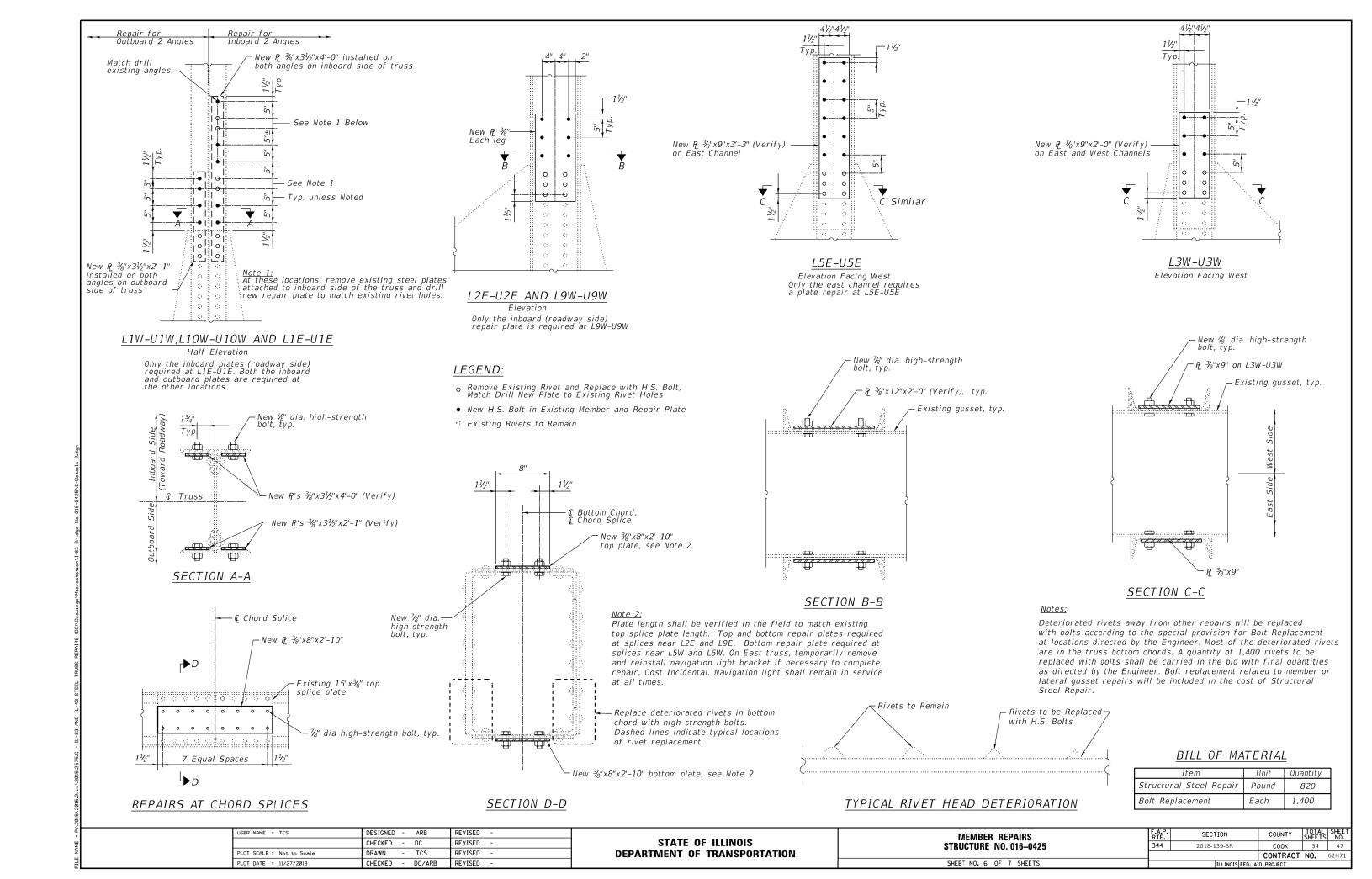
Goode NETAIN DETAIL

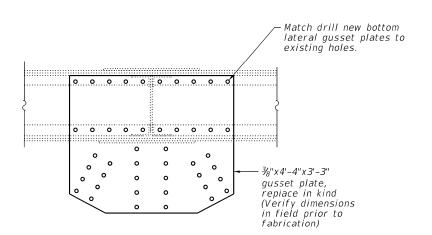
Gouge repairs at LTW-UJW and L3W-UJW
cost shall be incidental to Structural Steel Repairs.
Perform magnetic particle testing to verify gouge
has been removed. Notify Engineer if width of the
grinding (w) repair exceeds ¾". Flame cutting
shall not be permitted.

BILL OF MATERIALS

Item	Unit	Quantity
Structural Steel Repair	Pound	290

USER NAME = TCS	DESIGNED - ARB	REVISED -		MEMBER REPAIRS	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET
	CHECKED - DC	REVISED -	STATE OF ILLINOIS	STRUCTURE NO. 016-0425	344	2018-139-BR	соок	54	46
PLOT SCALE = Not to Scale	DRAWN - TCS	REVISED -	DEPARTMENT OF TRANSPORTATION	Official fields of Es	'		CONTRACT NO.		62H71
PLOT DATE = 11/27/2018	CHECKED - DC/ARB	REVISED -		SHEET NO. 5 OF 7 SHEETS		ILLINOIS FED. A	ID PROJECT		

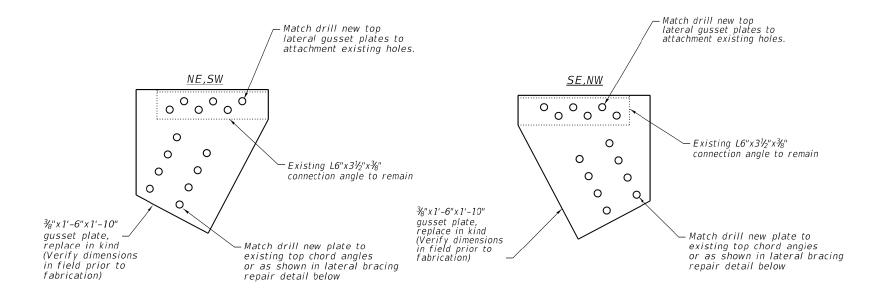




<u>Note:</u>

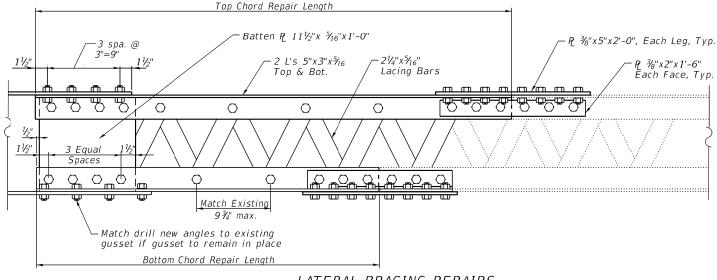
Contractor to provide temporary support for existing lateral members during gusset replacement.

BOTTOM LATERAL GUSSET REPLACEMENT AT PANEL POINTS L1E, L5E AND L9E



TOP LATERAL GUSSET REPLACEMENT (NORTH SIDE) AT PANEL POINTS L1E, L2E, L3E, L5E, L10E AND L11E

TOP LATERAL GUSSET REPLACEMENT (SOUTH SIDE) AT PANEL POINTS L1E, L8E, L9E AND L10E



LATERAL BRACING REPAIRS

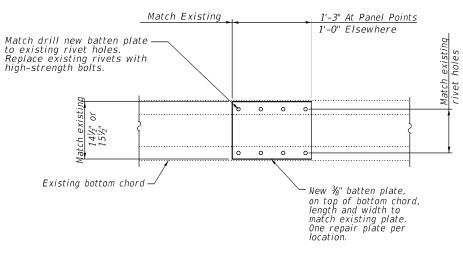
<u>Notes:</u>

Not all lateral brace angles will require replacement at a given location. Repair locations and lengths are shown on Sheet 3. A repair location may consist of top chord angles, bottom chord angles, or both. Vertical splice plates will be used on both sides of a chord repair. Additional locations may be added at the discretion of the Engineer.

New lacing bars and batten plates shall be provided in the repair length if both the top and bottom chord angles are replaced. Existing lacing bars may be re-used if approved by the Engineer.

The Contractor shall provide temporary support for the existing lateral bracing members during the replacement of members and gusset plates, cost incidental to Structural Steel Repairs.

USER NAME = TCS



BATTEN PLATE REPLACEMENT

BILL OF MATERIAL

Item	Unit	Quantity
Structural Steel Repair	Pound	5,660

	CHECKED - DC	REVISED -	STATE OF I
PLOT SCALE = Not to Scale	DRAWN - TCS	REVISED -	DEPARTMENT OF TI
PLOT DATE = 11/27/2018	CHECKED - DC/ARB	REVISED -	

REVISED

DESIGNED - ARB

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

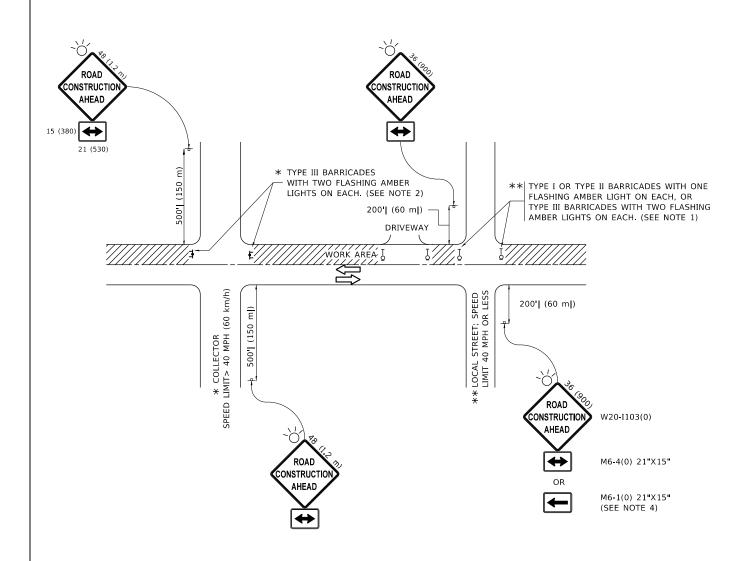
BRACING AND BATTEN PLATE REPAIR
STRUCTURE NO. 016-0425

SHEET NO. 7 OF 7 SHEETS

 F.A.P. RTE.
 SECTION
 COUNTY SHEETS
 NO.
 SHEETS
 NO.

 344
 2018-139-BR
 COOK
 54
 48

 CONTRACT
 NO.
 62H71



NOTES:

- 1. SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
- a) ONE "ROAD CONSTRUCTION AHEAD" SIGN 36 x 36 (900x900) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.
- b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.
- 2. SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
- a) ONE "ROAD CONSTRUCTION AHEAD" SIGN 48 x 48 (1.2 m x 1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500' (150 m) IN ADVANCE OF THE MAIN ROUTE.
- THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY
 b) BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION
 OF THE CLOSED PORTION.
- 3. 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
- WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE
 4. SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL
 BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).

SCALE: NONE

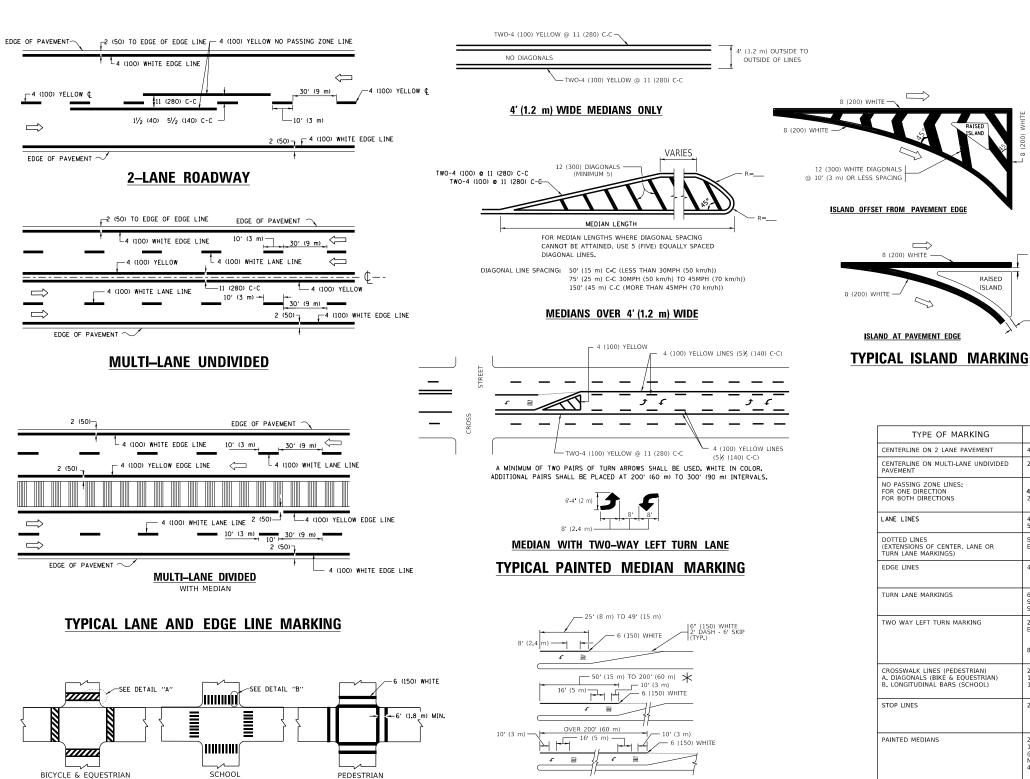
- 5. WHEN WORK IS BEING PERFORMED ON A SIDE ROAD OR DRIVEWAY, FOLLOW THE APPLICABLE STANDARD(S). THE DIRECTIONAL ARROW (M6-1 OR M6-4) SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE TRAFFIC CONTROL SET-UP.
- 6. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAYS UNLESS OTHERWISE SPECIFIED IN THE PLANS OR BY THE ENGINEER
- 7. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCLUDED IN THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

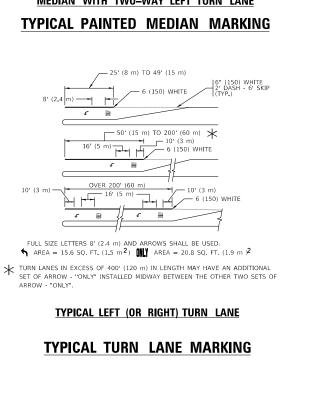
All dimensions are in inches (millimeters) unless otherwise shown.

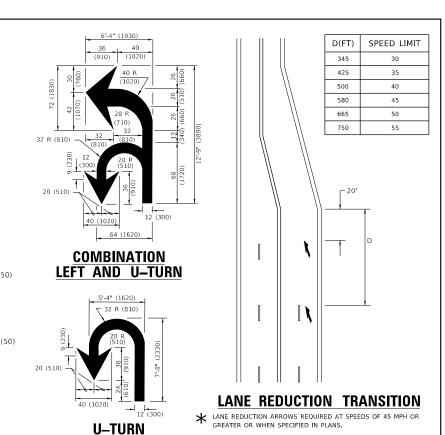
USER NAME = rothjp	DESIGNED - L.H.A.	REVISED - A. HOUSEH 10-15-96
	DRAWN -	REVISED - T. RAMMACHER 01-06-00
PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED - A. SCHUETZE 07-01-13
PLOT DATE = 1/31/2020	DATE - 06-89	REVISED _ A. SCHUETZE 09-15-16

STATE	OF ILLINOIS	
DEPARTMENT O	F TRANSPOI	RTATION

	TRAFF	F.A.P. RTE.	SE						
	IDE ROADS, INTERSECTIONS, AND DRIVEWAYS							344	201
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	SHEET	1	OF	1	SHEETS	STA.	TO STA.		







TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES: FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100) 2 @ 4 (100)	SOLID SOLID	YELLOW YELLOW	5½ (140) C-C FROM SKIP-DASH CENTERLINE 11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	4 (100) 5 (125) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	2' (600) LINE WITH 6' (1.8 m) SPACE
EDGE LINES	4 (100)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MEDIANS IN YELLOW
TURN LANE MARKINGS	6 (150) LINE; FULL SIZE LETTERS & SYMBOLS (8' (2.4m))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 @ 4 (100) EACH DIRECTION 8' (2.4m) LEFT 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
CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL)	2 @ 6 (150) 12 (300) @ 45° 12 (300) @ 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (600) APART 2' (600) APART 5EE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT, OTHERWISE, FLACE AT DESIRED STOPPING POINT. PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 @ 4 (100) WITH 12 (300) DIAGONALS @ 45° NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS	SOLID	YELLOW: TWO WAY TRAFFIC WHITE: ONE WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
GORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS @ 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))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES; "RR" IS 6' (1.8 m) LETTERS; 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"=3.6 SQ. FT. (0.33 m PEACH "X"=54.0 SQ. FT. (5.0 m P
SHOULDER DIAGONALS (REQUIRED FOR SHOULDERS > 8')	12 (300) @ 45°	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 (OVER 45MPH (70 km/h))
U TURN ARROW	SEE DETAIL	SOLID	WHITE	16.3 SF
2 ARROW COMBINATION LEFT AND U TURN	SEE DETAIL	SOLID	WHITE	30.4 SF

FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND STATE STANDARD 780001.

8 (200) WHITE -

ISLAND AT PAVEMENT EDGE

RAISED

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

USER NAME = rothjp	DESIGNED - EVERS	REVISED	-	C. JUCIUS 09-09-09
	DRAWN -	REVISED	-	C. JUCIUS 07-01-13
PLOT SCALE = 100.0000 / in.	CHECKED -	REVISED	-	C. JUCIUS 12-21-15
PLOT DATE = 1/31/2020	DATE - 03-19-90	REVISED	-	C. JUCIUS 04-12-16

2' (600)

DETAIL "B"

12 (300) WHITE

-6 (150) WHITE

TYPICAL CROSSWALK MARKING

 $m{\star}$ MARKINGS SHALL BE INSTALLED PARALLEL TO THE CENTERLINE OF THE ROAD WHICH IT CROSSES

DETAIL "A"

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

DISTRICT ONE						F.A.P. SECTION			COUNTY	TOTAL SHEETS				
TYPICAL PAVEMENT MARKINGS				344	2018-139-BR			соок	54	50				
TITICAL FAVLIVILIVI IVIANKIIVOS					TC-13				CONTRACT NO. 62H71					
SHEET	1	OF	2	SHEETS	STA.	TO STA.				ILLINOIS	FED. A	ID PROJECT		

TURN BAY ENTRANCE AT START OF LANE CLOSURE TAPER

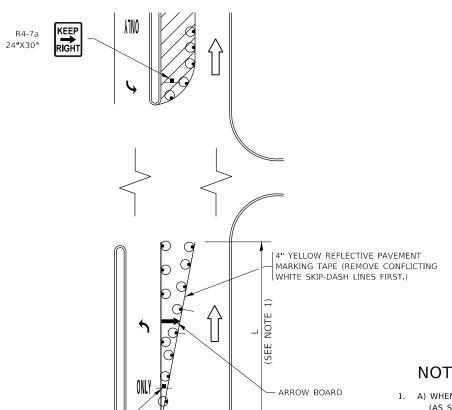


FIGURE 1

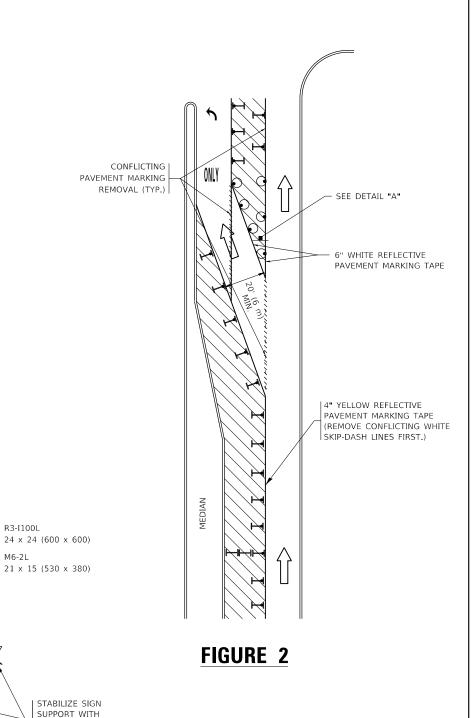
SEE DETAIL "A"

LEGEND WORK AREA LANE OPEN TO TRAFFIC ARROW BOARD TYPE I OR II BARRICADE OR DRUM WITH STEADY BURN LIGHT DRUM WITH STEADY BURN LIGHT SIGN ASSEMBLY TYPE I OR II CHECK BARRICADE WITH FLASHING LIGHT

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-I100R 24 x 24 (600 x 600) AND M6-2R 21 x 15 (530 x 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 PREOUIREMENTS.
- 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.

TURN BAY ENTRANCE WITHIN A LANE CLOSURE



DETAIL A

SANDBAGS AS

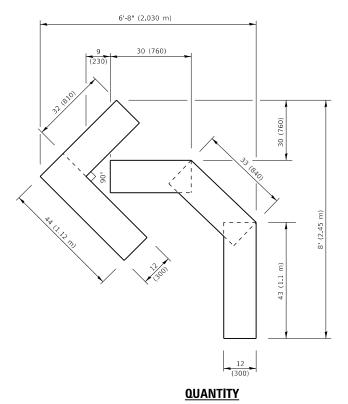
TURN

All dimensions are in inches (millimeters) unless otherwise shown

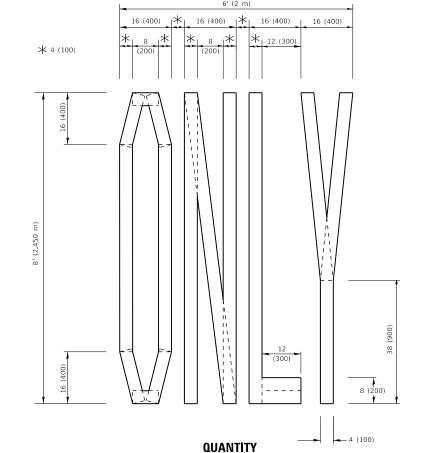
USER NAME = rotnjp	DESIGNED	- 1.	RAMMACHER 09-08-94	KEVISED	-	R. BORO 09-14-09
	DRAWN	-	A. HOUSEH 11-07-95	REVISED	- A.	SCHUETZE 07-01-13
PLOT SCALE = 100.0000 / in.	CHECKED	-	A. HOUSEH 10-12-96	REVISED	- A.	SCHUETZE 09-15-16
PLOT DATE = 1/31/2020	DATE	- T.	RAMMACHER 01-06-00	REVISED	-	

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

TRAFI	FIC CONTROL AND PROTECTION AT TURN BAYS	F.A. RTE		COUNTY	TOTAL SHEETS	SHEET NO.	
	(TO REMAIN OPEN TO TRAFFIC)	34	344 2018-139-BR		соок	54	51
	(10 HEMAIN OFEN TO HIATTIC)		TC-14		CONTRACT	NO.	62H71
SCALE: NONE	SHEET 1 OF 1 SHEETS STA. TO STA.		ILLINOIS	FED. A	ID PROJECT		



4 (100) LINE = 45.5 ft. (13.9 m) 15.2 sq. ft. (1.41 sq. m)



4 (100) LINE = 64.1 ft. (19.5 m)

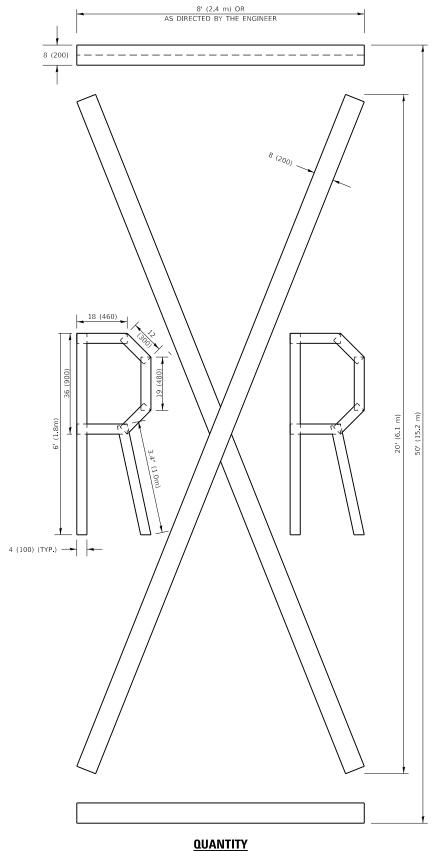
1'-8" (500) 30 (800)

QUANTITY

4 (100) LINE = 82.5 ft. (25.1 m) 27.5 sq. ft. (2.53 sq. m)

NOTE:

ALL QUANTITIES OF PLACEMENT ARE REPRESENTED IN LINEAR FEET OF 4" LINES TO MATCH THE 4" TEMPORARY TAPE PAY ITEM AND REPRESENTS THE TOTAL QUANTITY OF 4" TAPE REQUIRED.



4 (100) LINE = 225.9 ft. (68.9 m) 75.3 sq. ft. (6.99 sq. m)

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

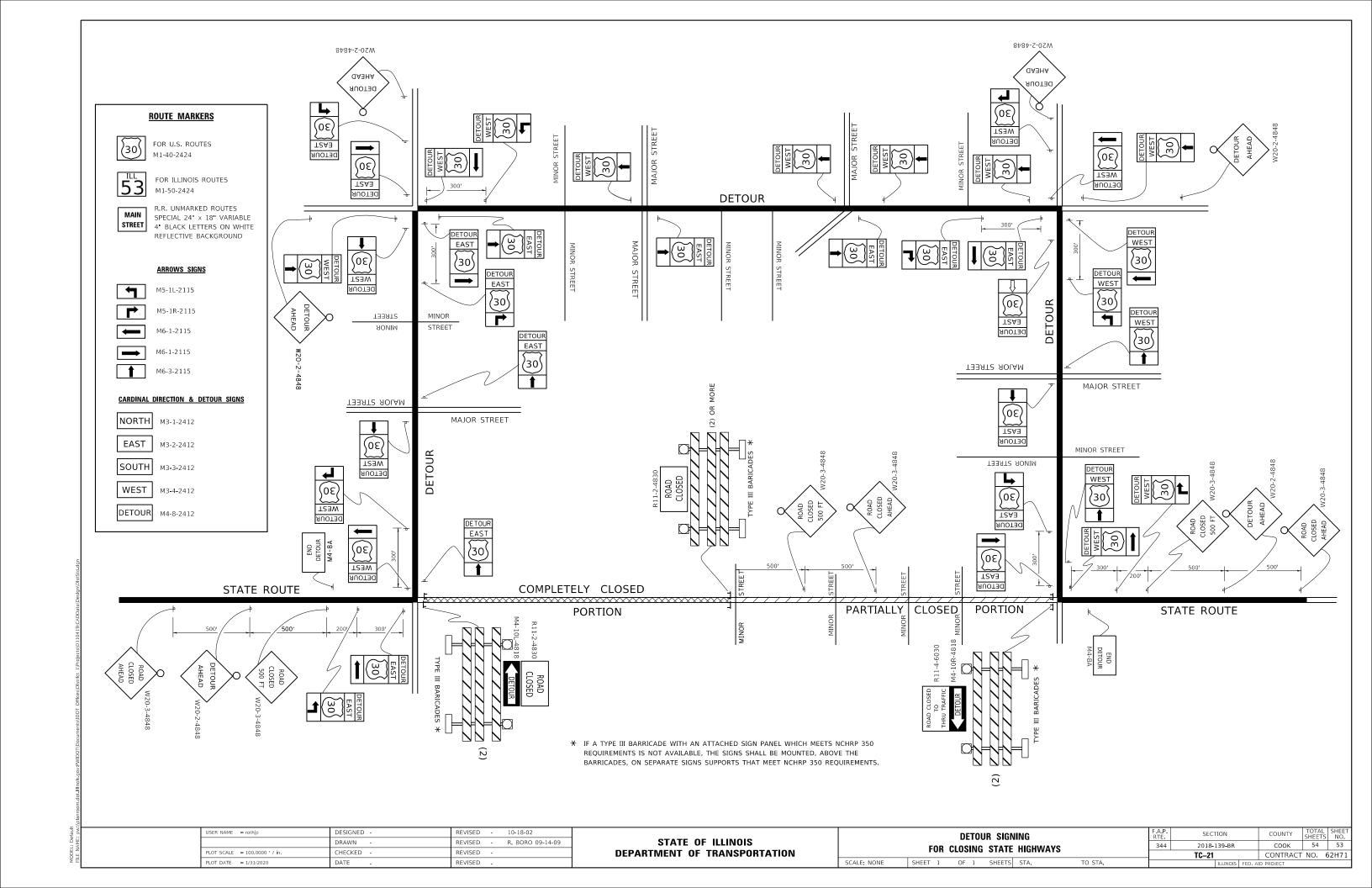
USER NAME = rothjp	DESIGNED -		REVISED	- T. RAMMACHER 03-02-98
	DRAWN -		REVISED	- E. GOMEZ 08-28-00
PLOT SCALE = 100.0010 ' / In.	CHECKED -		REVISED	- E. GOMEZ 08-28-00
PLOT DATE = 1/31/2020	DATE -	09-18-94	REVISED	- A. SCHUETZE 09-15-16

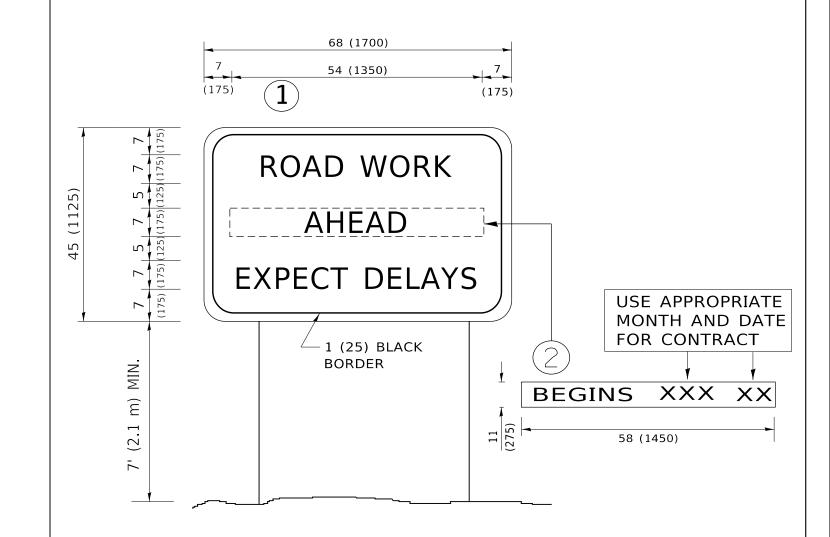
21.4 sq. ft. (1.99 sq. m)

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

SHORT TE	RM	PAVI	EMENT	М	ARKING	LETTERS	AND	SYMBOLS	
SCALE: NONE	SHEET	1	OF :	1	SHEETS	STA.		TO STA.	

	TC-16		CONTRACT	NO. 6	52H7
344	2018-	139 - BR	соок	54	52
RTE	SECT	ION	COUNTY	TOTAL SHEETS	SHEE





NOTES:

- 1. USE BLACK LETTERING ON ORANGE BACKGROUND.
- 2. ERECT SIGNS IN ADVANCE OF THE LOCATION FOR THE "ROAD CONSTRUCTION AHEAD" SIGN AT LOCATIONS AS DIRECTED BY THE ENGINEER.
- 3. ERECT SIGN 1 WITH INSTALLED PANEL 2 ONE WEEK PRIOR TO THE START OF CONSTRUCTION.
- 4. REMOVE PANEL 2 SOON AFTER THE START OF CONSTRUCTION.
- 5. SEE SPECIAL PROVISION FOR "TEMPORARY INFORMATION SIGNING" FOR ADDITIONAL INFORMATION.

SHEET 1

6. ONE SIGN ASSEMBLY EQUALS 25.70 SQ. FT. (2.3 SQ. M.)

SCALE: NONE

7. SHALL BE PAID FOR AS TEMPORARY INFORMATION SIGNING.

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

USER NAME = rothjp	DESIGNED -	REVISED	- R. MIRS 09-15-97
	DRAWN -	REVISED	- R. MIRS 12-11-97
PLOT SCALE = 100.0000 / in.	CHECKED -	REVISED	-T. RAMMACHER 02-02-99
PLOT DATE = 1/31/2020	DATE -	REVISED	- C. JUCIUS 01-31-07

ARTERIAL ROAD INFORMATION SIGN		F.A.P. RTE	SEC.	ΓΙΟΝ		COUNTY	TOTAL SHEETS	SHE	
		344	2018-	139 - BR		соок	54	5	
INI OHIVIAH	JOIN SIGIN			TC-22			CONTRACT	NO.	62H
OF 1 SH	EETS STA.	TO STA.			ILLINOIS	FED. A	ID PROJECT		