FOR INDEX OF SHEETS, SEE SHEET NO. 4

THE PROJECT IS LOCATED IN THE

SHOREWOOD, BOLINGBROOK AND

VILLAGES OF ROMEOVILLE, PLAINFIELD,

SN 099-0017 (STA 418+18 to 420+06) SN 099-0018 (STA 439+81 to 441+42)

SN 099-4615 (STA 460+99 to 461+77) SN 099-0022 (STA 541+07 to 542+25)

SN 099-0016 (STA 418+19 to 420+05)

SN 099-0019 (STA 439+82 to 441+43) SN 099-4616 (STA 460 + 99 to 461 + 77) SN 099-0023 (STA 541+07 to 542+25)

POSTED SPEED LIMIT = 65 MPH

CITY OF JOLIET AND THE

CRYSTAL LAWNS (CDP)

**BRIDGE LOCATIONS (NB)** 

**BRIDGE LOCATIONS (SB)** 

TRAFFIC DATA:

2019 ADT 113,400

CABLES: 773-287-7672

CONTRACT NO. 62N22

## STATE OF ILLINOIS

DEPARTMENT OF TRANSPORTATION

# **PROPOSED** HIGHWAY PLANS

F.A.I. ROUTE 55 (INTERSTATE 55) SOUTH OF I-80 TO SOUTH OF WEBER RD.

> **SECTION: 2020–253–BR&PP** PROJECT: NHPP-DHUM(590)

BRIDGE DECK OVERLAY, BRIDGE JOINT REPAIRS, SHOULDER RECONSTRUCTION AND PAVEMENT PATCHING **WILL COUNTY** 

LOCATION MAP

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

J.U.L.I.E. JOINT UTILITY LOCATION INFORMATION FOR EXCAVATORS 1-800-892-0123 OR 811 MEADE ELECTRIC CO. DISTRICT ONE ELECTRICAL MAINTENANCE CONTRACTOR LOCATES IDOT ELECTRICAL EQUIPMENT AND UNDERGROUND

PROJECT ENGINEER: Veselin Velichkov, PE phone (847-705-4432) PROJECT MANAGER: Fawad Aqueel, PE, PTOE phone (847-705-4247)

C-91-068-21 R 9 E R 10 E  $\{30\}$ 

**PROJECT BEGINS** STA. 16 + 68

TROY, PLAINFIELD, WHEATLAND, DuPAGE TOWNSHIPS GROSS LENGTH = 71,881 FT = 13.6 MI

NET LENFTH = 71,881 FT = 13.6 MI

**PROJECT ENDS** 

STA. 735 + 49

DATE SIGNED: 12-1-2020 EXPIRATION DATE: 11-30-2021

Petar

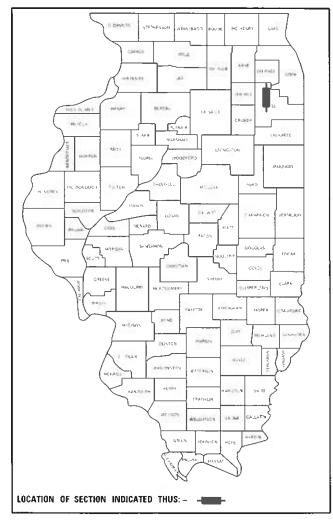
CONTRACT NO. 62N22

WILL 178 1

D-91-063-21

SECTION

2020-253-BR&PP



STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

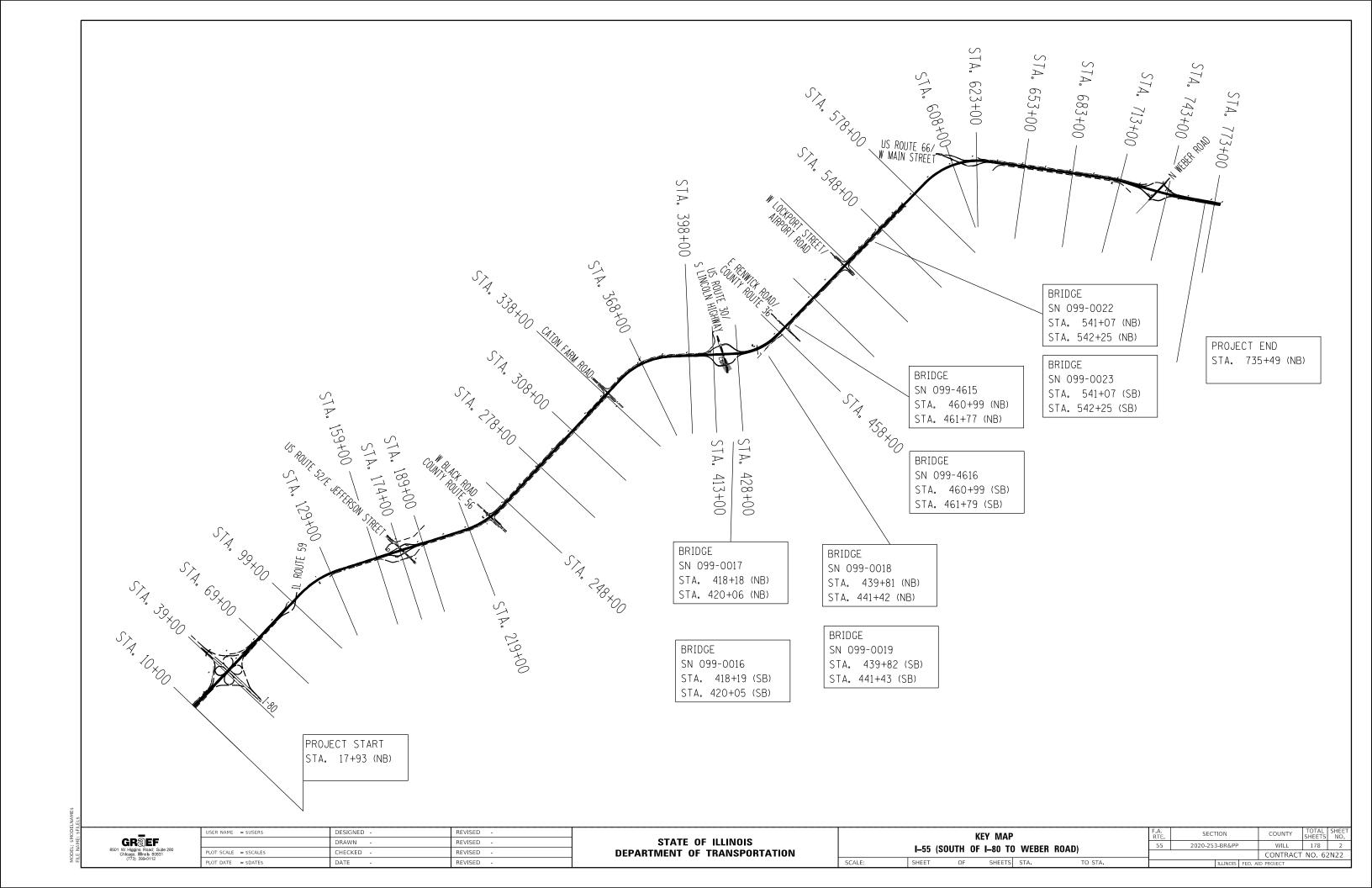
PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

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	Work Zone Openings on Freeways/Expressways (TC-18)	

### STATE STANDARDS

000001-08 STANDARD SYMBOLS ARREVIATIONS AND PATTERNS

001001-02 001006 280001-07	AREAS OF REINFORCEMENT BARS DECIMAL OF AN INCH AND OF A FOOT TEMPORARY EROSION CONTROL SYSTEMS
420001-09	PAVEMENT JOINTS
442201-03	CLASS C AND D PATCHES
482011-03	HMA SHOULDER STRIPS/ SHOULDER WITH RESURFACING OR WIDENING AND RESURFACING PROJECTS
642001-02	SHOULDER RUMBLE STRIPS, 16 IN.
701001-02	OFF-RD OPERATIONS, 2L, 2W, MORE THAN 15' (4.5 m) AWAY
701106-02	OFF-RD OPERATIONS, MULTILANE, MORE THAN 15' (4.5 m) AWAY
701201-05	LANE CLOSURE, 2L, 2W, DAY ONLY, FOR SPEEDS > 45 MPH
701400-10	APPROACH TO LANE CLOSURE, FREEWAY/EXPRESSWAY
701401-12	LANE CLOSURE, FREEWAY/EXPRESSWAY
701411-09	LANE CLOSURE, MULTILANE, AT ENTRANCE OR EXIT RAMP, FOR SPEEDS $\geq$ 45 MPH
701428-01	TRAFFIC CONTROL SETUP AND REMOVAL FREEWAY/EXPRESSWAY
701446-11	TWO LANE CLOSURE FREEWAY/EXPRESSWAY
701501-06	URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED
701901-08	TRAFFIC CONTROL DEVICES
704001-08	TEMPORARY CONCRETE BARRIER
780001-05	TYPICAL PAVEMENT MARKINGS (*ONLY USE FOR LANE DROP ARROW*)
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 1-800-892-0123 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE, AND GAS FACILITIES. (48 HOURS NOTIFICATION IS REQUIRED).
- 2. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES AND THE VILLAGES OF ROMEOVILLE, PLAINFIELD, CRYSTAL LAWNS, WILL COUNTY, AND SHOREWOOD.
- THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.
- 4. BUTT JOINTS WILL BE INSTALLED AT THE ENDS OF ALL RESURFACING (WHERE RESURFACING MEETS EXISTING PAVEMENT), IN ACCORDANCE WITH THE DISTRICT ONE "BUTT JOINT AND HMA TAPER DETAILS" (BD-32) AND DETAIL HEREIN.
- ALL DAMAGE TO EXISTING PAVEMENT MARKINGS OR RAISED REFLECTIVE PAVEMENT OUTSIDE THE REMOVAL LINE SHOWN ON THE PLANS SHALL BE PLACED AT NO ADDITIONAL COST TO THE DEPARTMENT
- 6. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING OF MATERIALS.
- 7. THE RESIDENT ENGINEER SHALL VERIFY THE LOCATIONS OF ALL EXISTING PAVEMENT MARKINGS, PAVEMENT PATCHING, OR DRAINAGE ADJUSTMENT PRIOR TO MILLING OR BESURFACING.
- 8. THE RESIDENT ENGINEER SHALL CONTACT THE EXPRESSWAY FIELD ENGINEER AT (847) 705-4153 TWO WEEKS PRIOR TO PLACEMENT OF PERMANENT PAVEMENT MARKINGS
- THE RESIDENT ENGINEER SHALL CONTACT THE EXPRESSWAY TRAFFIC CONTROL SUPERVISOR AT (847) 705-4155 A MINIMUM OF 72 HOURS PRIOR TO THE INSTALLATION OF ANY TEMPORARY TRAFFIC CONTROL DEVICES.
- ALL EXTRA EXCAVATED SOIL SHALL BE PLACED WITHIN IDOT RIGHT-OF-WAY, WITHIN PROJECT LIMITS.
- 11. MISCELLANEOUS PAY ITEMS HAVE BEEN INCLUDED FOR THE RESIDENT ENGINEER TO USE AT THEIR DISCRETION. ITEMS INCLUDE AGGREGATE WEDGE SHOULDER AND GRADING AND SHAPING OF SHOULDERS
- 12. IDOT FACILITIES ARE NOT LOCATED BY JULIE OR DIGGER. IDOT ELECTRICAL FACILITIES INCLUDING ROADWAY LIGHTING, FIBER OPTIC, ITS EQUIPMENT, TRAFFIC SIGNAL AND PUMP STATION FACILITIES ARE LOCATED BY THE DEPARTMENT'S ELECTRICAL MAINTENANCE CONTRACTOR. AS OF THE LETTING DATE, CONTACT THE MEADE ELECTRIC COMPANY AT 773-287-7672.
- 13. ALL STAGE CHANGES REQUIRING THE STOPPING AND/OR PACING OF TRAFFIC SHALL TAKE PLACE DURING THE ALLOWABLE HOURS FOR FULL EXPRESSWAY CLOSURES AND SHALL BE APPROVED BY THE DEPARTMENT. THE CONTRACTOR SHALL NOTIFY THE DISTRICT ONE EXPRESSWAY TRAFFIC CONTROL SUPERVISOR AT LEAST 3 WORKING DAYS (WEEKENDS AND HOLIDAYS DO NOT COUNT IN THIS 72 HOUR NOTIFICATION) IN ADVANCE OF ANY PROPOSED STAGE CHANGE.
- 14. A MAINTENANCE OF TRAFFIC CONTROL PLAN SHALL BE SUBMITTED TO THE DISTRICT ONE EXPRESSWAY TRAFFIC CONTROL SUPERVISOR, 14 DAYS IN ADVANCE OF ANY STAGE CHANGES OR FULL EXPRESSWAY CLOSURES. THE MAINTENANCE OF TRAFFIC PLAN SHALL INCLUDE, BUT NOT LIMITED TO: LANE AND RAMP CLOSURES, EXISTING GEOMETRICS, AND EQUIPMENT AND MATERIAL LOCATION.
- 15. THE CONTRACTOR SHALL REQUEST AND GAIN APPROVAL FROM THE ILLINOIS DEPARTMENT OF TRANSPORTATION'S EXPRESSWAY TRAFFIC OPERATIONS ENGINEER AT WWW.IDOTLCS.COM TWENTY -FOUR (24) HOURS IN ADVANCE OF ALL DAILY LANE, RAMP, AND SHOULDER CLOSURES AND 7 DAYS IN ADVANCE OF ALL PERMANENT AND WEEKEND CLOSURES ON ALL FREEWAYS AND/OR EXPRESSWAYS IN DISTRICT ONE. THIS ADVANCE NOTIFICATION IS CALCULATED BASED ON A WORK-WEEK OF MONDAY THROUGH FRIDAY AND SHALL NOT INCLUDE WEEKENDS OR HOLIDAYS.
- 16. LONGITUDINAL PARTIAL DEPTH REMOVAL, 2 INCH (X4405020) AND LONGTIDUNIAL PARTIAL DEPTH PATCHING (X4420900) SHALL BE 3 FOOT IN WIDTH. THIS SUPERCEDES THE RECURRING SPECIAL PROVISION'S STATED WIDTH.
- 17. PATCHING WORK TO TAKE PLACE OVERNIGHT AND LANE CLOSURES SHALL BE OPEN FOR DAY TIME TRAFFIC.
- 18. PAVING UP TO BRIDGES SN 099-0017, SN 099-0018, SN 099-4615, SN 099-0022, SN 099-0016, SN 099-0019, SN 099-4616, AND SN 099-0023 SHOULD FOLLOW THE APPROACH PAVEMENT HMA OVERLAY DETAIL FOR TAPERS AT THE BRIDGE APPROACH SLABS. ALL OTHER BRIDGE SEGMENTS SHALL BE OMITTED.
- 19. CLASS D, TYPE II AND TYPE III, 16 INCH PATCHING SHALL BE FULL DEPTH. VARIOUS AREAS HAVE EXISTING PCC BASE. CONTRACTOR TO REMOVE PCC OR HMA BASE AND INSTALL CLASS D PATCH AS DIRECTED THE RESIDENT ENGINEER.

THE FIRST OPERATION WILL BE THE FULL DEPTH CLASS D, BINDER COURSE PATCH. FOLLOWING THE BINDER INSTALLATION, THE CONTRACTOR SHALL MILL OFF 2" OF THE BINDER COURSE PATCH (PAID AS HMA SURFACE REMOVAL 2 INCH) AND INSTALL 2" OF SURFACE COURSE (PAID AS HMA SURFACE COURSE, MIX "D" IL-9.5, N70).

- 20. HOT-MIX ASPHALT SHALL NOT COVER ANY BRIDGE DRAIN.
- 21. THE PAY ITEM DRAINAGE STRUCTURES TO BE ADJUSTED HAS BEEN PROVIDED TO ADJUST THE DRAINGAGE STRUCTURES ALONG THE MEDIAN BARRIER WALL IN THE AREA OF THE HMA BUTT JOINT ADJACENT TO BRIDGE APPROACH SLAB. DRAINAGE STRUCTURES ARE TO BE ADJUSTED AFTER MILLING TO MILLED GRADE TO PREVENT PONDING WATER. ADDITIONAL QUANTITY HAS BEEN PROVIDED TO ADJUST THE DRAINAGE STRUCTURE TO THE PROPOSED BUTT JOINT GRADE.
- 22. INSTALL INLET FILTERS IN DRAINAGE STRUCTURES IN BUTT JOINT AREA ALONG MEDIAN BARRIER WALL ADJACENT TO BRIDGE APPROACH SLABS. REMOVE INLET FILTERS AFTER OVERLAY AND BUTT JOINT WORK IS COMPLETED.
- 23. MONODIRECTIONAL REFLECTORS, TYPE C, SHALL BE INSTALLED ON TEMPORARY BARRIER WALLS AND BRIDGE PARAPET WALLS AT EACH BRIDGE IN EACH STAGE. REFLECTORS SHALL BE INSTALLED PER STANDARDS 704001 AND 782006. REFLECTORS SHALL BE YELLOW ON THE LEFT SIDE OF TRAFFIC FLOW AND WHITE ON THE RIGHT. NORTHBOUND AND SOUTHBOUND.
- 24. ALL TEMPORARY PAVEMENT MARKINGS SHALL BE PAVEMENT MARKING TAPE, TYPE IV.

#### GRØEF 8501 W. Higgins Road; Suite 280 Chicago, Illinois 60631 (773) 399-0112

USER NAME = \$USER\$	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = \$SCALE\$	CHECKED -	REVISED -
PLOT DATE = \$DATE\$	DATE -	REVISED -

	RAL NOTES (SOUTH O			
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F.A. RTE	SEC <sup>-</sup>	ΓΙΟΝ		COUNTY	SHEETS	SHEET NO.
55	2020-25	3-BR&PP		WILL	178	3
				CONTRACT	NO. 62	2N22
		TLLINOIS	EED 1	VID DROJECT		

CODE NO	DUGGDIDIIAN	LINE	TOTAL	ROADWAY 0005	BRIDGE 0047	ROADWAY 0005							
CODE NO.	DESCRIPTION	UNIT	QUANTITY	90% FED	SN 099-0016 90% FED 10% STATE	SN 099-0019 90% FED 10% STATE	SN 099-4616 90% FED 10% STATE	SN 099-0023 90% FED 10% STATE	SN 099-0017 90% FED 10% STATE	SN 099-0018 90% FED 10% STATE	SN 099-4615 90% FED 10% STATE	SN 099-0022 90% FED 10% STATE	100% STATE
20200100	EARTH EXCAVATION	CU YD	2,803	2,803									
28000510	INLET FILTERS	EACH	12	12									
2442422													
31101200	SUBBASE GRANULAR MATERIAL, TYPE B 4"	SQ YD	14,417	14,417									
40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	32,407	21,157									11,250
40600400	MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS	TON	50	50									
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	8,991	8,991									
40604062	HOT-MIX ASPHALT, SURFACE COURSE, MIX "D", IL-9.5, N70	TON	3,437	595									2,842
40605026	POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE STONE MATRIX ASPHALT, 9.5, MIX "F", N80	TON	1,450	1,450									
44000157	HOT-MIX ASPHALT SURFACE REMOVAL, 2"	SQ YD	30,236	5,236									25,000
44004250	PAVED SHOULDER REMOVAL	SQ YD	14,417	14,417									
44201839	CLASS D PATCHES, TYPE II, 16 INCH	SQ YD	800										800
44201843	CLASS D PATCHES, TYPE III, 16 INCH	SQ YD	200										200
48102100	AGGREGATE WEDGE SHOULDER, TYPE B	TON	334	334									
48203037	HOT-MIX ASPHALT SHOULDERS, 10"	SQ YD	14,417	14,417									
+0200001	HOT MIX AST HALL SHOULDERS, TO	24 10	17,417	17,417									
50102400	CONCRETE REMOVAL	CU YD	102.7		16.2	19.3		14.8	16.1	20.3		16.0	
50157300	PROTECTIVE SHIELD	SQ YD	2,203		656	468			656	423			
50300255	CONCRETE SUPERSTRUCTURE	CU YD	111.4		17.9	20.8		16.8	17.4	20.3		18.2	

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PLOT DATE = \$DATE\$	DATE -	REVISED -

STATI	OF ILI	LINOIS
DEPARTMENT	OF TRA	NSPORTATION

	SUMMA	RY OF QU	ANTITIES	
<b>⊢</b> 55	(SOUTH	OF I-80 TC	WEBER	ROAD)
SHEET	O.F.	SHEETS	STA	TO STA

F.A. RTE	SECT	ION		COUNTY	TOTAL SHEETS	SHEET NO.
55	2020-253	B-BR&PP		WILL	178	4
				CONTRACT	NO. 62	2N22
		ILLINOIS	FED. A	ID PROJECT		

GODE NO	DUCGDIDITION	LINE	TOTAL	ROADWAY 0005	BRIDGE 0047	ROADWAY 0005							
CODE NO.	DESCRIPTION	UNIT	QUANTITY	90% FED	SN 099-0016 90% FED 10% STATE	SN 099-0019 90% FED 10% STATE	SN 099-4616 90% FED 10% STATE	SN 099-0023 90% FED 10% STATE	SN 099-0017 90% FED 10% STATE	SN 099-0018 90% FED 10% STATE	SN 099-4615 90% FED 10% STATE	SN 099-0022 90% FED 10% STATE	2 100% STATE E
50300260	BRIDGE DECK GROOVING	SQ YD	6,760		1,092	1,205	448	665	1,092	1,140	454	664	
50300300	PROTECTIVE COAT	SQ YD	8,639		1,457	1,497	539	811	1,457	1,525	539	814	
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	17,050		2,220	3,780		2,740	2,220	3,490		2,600	
50800515	BAR SPLICERS	EACH	156		24	28		26	24	28		26	
52000030	PREFORMED JOINT SEAL 2 1/2"	FOOT	733		249	221	78	185					
52000110	PREFORMED JOINT STRIP SEAL	FOOT	728		115	141		110	115	137		110	
58700300	CONCRETE SEALER	SQ FT	1,988		333	407		254	333	407		254	
59000200	EPOXY CRACK INJECTION	FOOT	28			20				8			
64200116	SHOULDER RUMBLE STRIPS, 16 INCH	FOOT	26,282	26,282									
01200110	CHOCKER ROWSELL STAILS, TO INCI	1001	20,202	20,202									
67100100	MOBILIZATION	L SUM	1	1									
70107025	CHANGEABLE MESSAGE SIGN	CAL DA	1,440	1,440									
70200100	NIGHTTIME WORK ZONE LIGHTING	L SUM	1	1									
70200100	NIGHTHME WORK ZONE LIGHTING	L SUM	1	1									
70300904	PAVEMENT MARKING TAPE, TYPE IV, 4"	FOOT	124,442	107,202									17,240
70300905	PAVEMENT MARKING TAPE, TYPE IV, 5"	FOOT	91,571	19,691									71,880
70300908	PAVEMENT MARKING TAPE, TYPE IV, 8"	FOOT	6,000	5,000									1,000
70400100	TEMPORARY CONCRETE BARRIER	FOOT	3,889	3,889									
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	3,723	3,723									

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PLOT SCALE = \$SCALE\$	CHECKED -	REVISED -
PLOT DATE = \$DATE\$	DATE -	REVISED -

F.A. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEE NO.	
55	2020-253-BR&PP		WILL	178	5
			CONTRACT	NO. 62	2N22
	ILLINOIS	FED. A	ID PROJECT		

SUMMARY OF QUANTITIES 114 ← 155 (SOUTH OF 11480 TO WEBER ROAD) SHEET OF SHEETS STA.

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1	DEL: S	DALAMA T
011	Σ	0 110

\* SPECIALTY ITEM

								REV-SEP
_	USER NAME = \$USER\$	DESIGNED -	REVISED -			SUMMARY OF QUANTITIES	F.A. SECTION	COUNTY TOTAL SHEET
<b>GRØEF</b> 8501 W. Higgins Road: Suite 280 Chicago. Illinois 60631 (773) 399-0112		DRAWN -	REVISED -	STATE OF ILLINOIS		1-55 (SOUTH OF 1-80 TO WEBER ROAD)	55 2020-253-BR&PP	WILL 178 6
8501 W. Higgins Road; Suite 280 Chicago, Illinois 60631	PLOT SCALE = \$SCALE\$	CHECKED -	REVISED -	DEPARTMENT OF TRANSPORTATION		HOO (SOUTH OF 1-00 TO AAEDEN WOAD)		CONTRACT NO. 62N22
(773) 389-0112	PLOT DATE = \$DATE\$	DATE -	REVISED -		SCALE:	SHEET OF SHEETS STA. TO STA.	ILLINOIS FED	. AID PROJECT

		DESCRIPTION		TOTAL QUANTITY	ROADWAY 0005	BRIDGE 0047	ROADWAY 0005							
	CODE NO.		UNIT		90% FED 10% STATE	SN 099-0016 90% FED 10% STATE	SN 099-0019 90% FED 10% STATE	SN 099-4616 90% FED 10% STATE	SN 099-0023 90% FED 10% STATE	SN 099-0017 90% FED 10% STATE	SN 099-0018 90% FED 10% STATE	SN 099-4615 90% FED 10% STATI	SN 5 099-0022 90% FED E10% STATE	100% STATE
	70600270	IMPACT ATTENUATORS, TEMPORARY (FULLY REDIRECTIVE, WIDE), TEST LEVEL 3	EACH	8	8									
-	70600330	IMPACT ATTENUATORS, RELOCATE (FULLY REDIRECTIVE), TEST LEVEL 3	EACH	8	8									
*	78004220	PREFORMED PLASTIC PAVEMENT MARKING, TYPE B - INLAID - LINE 5"	FOOT	1,019	1,019									
*	78009004	MODIFIED URETHANE PAVEMENT MARKING - LINE 4"	FOOT	96,002	78,762									17,240
*	78009005	MODIFIED URETHANE PAVEMENT MARKING - LINE 5"	FOOT	91,571	19,691									71,880
*	78009008	MODIFIED URETHANE PAVEMENT MARKING - LINE 8"	FOOT	6,000	5,000									1,000
*	78009012	MODIFIED URETHANE PAVEMENT MARKING - LINE 12"	FOOT	3,379	3,379									
*	78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	424	424									
*	78200011	BARRIER WALL REFLECTORS, TYPE C	EACH	608	608									
	78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	360	360									
	78300202	PAVEMENT MARKING REMOVAL - WATER BLASTING	SQ FT	41,171	41,171									
-	X0326766	CLEAN & RESEAL RELIEF JOINT	FOOT	959	959									
-	X1400337	WIRELESS IN PAVEMENT DETECTOR	EACH	5	5									
-	X2020110	GRADING AND SHAPING SHOULDERS	UNIT	11	11									
*	X2700027	PREFORMED PLASTIC PAVEMENT MARKING, TYPE D - LINE 8", CONTRAST	FOOT	1,019	1,019									
-	X4405020	LONGITUDINAL PARTIAL DEPTH REMOVAL, 2"	FOOT	43,100										43,100
-	X4420900	LONGITUDINAL PARTIAL DEPTH PATCHING	TON	1,609										1,609
L	DECLALEY													

MODEL: \$MODELNAME\$	

· SI ECIALITI														REV-	SEP
_	USER NAME = \$USER\$	DESIGNED -	REVISED -			9	SUMMAR	RY OF O	UANTITIES		F.A. RTF	SECTION	COUNTY	TOTAL	SHEET
GRAEF 8501 W. Higgins Road, Suite 280 Chicago, Illinois 60831 (773) 399-0112		DRAWN -	REVISED -	STATE OF ILLINOIS	I-55 (SOUTH OF I-80 TO WEBER ROAD)						55	2020-253-BR&PP	WILL	178	7
8501 W. Higgins Road; Suite 280 Chicago, Illinois 60631	PLOT SCALE = \$SCALE\$	CHECKED -	REVISED -	DEPARTMENT OF TRANSPORTATION SCALE		1-33 (SUUTH UF 1-80 TO WEBER KUAD)							CONTRAC	T NO. 62	N22
(773) 388-0112	PLOT DATE = \$DATE\$	DATE -	REVISED -			SHEET	OF	SHEET	STA.	TO STA.		ILLINOIS FED.	AID PROJECT		

			1					1				Τ	
				ROADWAY 0005	BRIDGE 0047	BRIDGE 0047	BRIDGE 0047	BRIDGE 0047	BRIDGE 0047	BRIDGE 0047	BRIDGE 0047	BRIDGE 0047	ROADWA 0005
CODE NO.	DESCRIPTION	UNIT	TOTAL QUANTITY	90% FED	SN 099-0016 90% FED 10% STATE	SN 099-0019 90% FED 10% STATE	SN 099-4616 90% FED 10% STATE	SN 099-0023 90% FED E10% STATE	SN 099-0017 90% FED 10% STATE	SN 099-0018 90% FED 10% STATE	SN 099-4615 90% FED E10% STATE	SN 099-0022 90% FED 10% STATE	2 100% STAT
X6700410	ENGINEER'S FIELD OFFICE, TYPE A (SPECIAL)	CAL MO	12	12							+	<del>                                     </del>	
X7011015	TRAFFIC CONTROL AND PROTECTION (EXPRESSWAYS)	L SUM	1	1									
X7013820	TRAFFIC CONTROL SURVEILLANCE, EXPRESSWAYS	CAL DA	180	180									
X7030005	TEMPORARY PAVEMENT MARKING REMOVAL	SQ FT	83,485	83,485									-
	IDMI ONANI I AVEMENI MARKING REMOVAL	5411	00,400	00,400							+		+
X7830076	GROOVING FOR RECESSED PAVEMENT MARKING 9"	FOOT	1,019	1,019									
X8570001	SMART TRAFFIC MONITORING SYSTEM	CAL DA	180	180									
X8730312	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 18 4/C. TWISTED, SHIELDED	FOOT	100	100									
X8850102	INDUCTION LOOP	FOOT	950	950								-	
Z0001800	APPROACH SLAB REPAIR (PARTIAL DEPTH)	SQ YD	18		1	6	1	1	4	2	2	1	
Z0006016	BRIDGE DECK LATEX CONCRETE OVERLAY, 2 3/4 INCHES	SQ YD	6,833		1,108	1,208	464	669	1,108	1,144	464	668	
Z0012130	BRIDGE DECK SCARIFICATION 3/4"	SQ YD	6,833		1,108	1,208	464	669	1,108	1,144	464	668	
Z0012754	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SQ FT	237		58.0	80.0		30.0	6.0	39.8	5.0	18.0	
Z0013798	CONSTRUCTION LAYOUT	L SUM	1	1									
Z0018400	DRAINAGE STRUCTURES TO BE ADJUSTED	EACH	24	24									
		3.1011											
H00000	THE PROPERTY AND STATE OF THE PROPERTY OF THE	a	20-	22-									
Z0030850	TEMPORARY INFORMATION SIGNING	SQ FT	206	206									+
Z0041895	POLYMER CONCRETE	CU FT	18				9				9		1

### \* SPECIALTY ITEM

FILE NAME: SFILEL\$

**GRØEF** 8501 W. Higgins Road; Suite 280 Chicago, Illinois 60631 (773) 399-0112

CODE NO.

Z0048665

X1300003 X1700115

Z0076600

Z0076604

USER NAME = \$USER\$	DESIGNED -	REVISED -
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PLOT SCALE = \$SCALE\$	CHECKED -	REVISED -
PLOT DATE = \$DATE\$	DATE -	REVISED -
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DESCRIPTION

RAILROAD PROTECTIVE LIABILITY INSURANCE

NOISE ABATEMENT WALL PANEL REMOVAL AND RE-ERECTION

CLEAN APPROACH SLAB DRAIN

TRAINEES - TRAINING PROGRAM GRADUATE

TRAINEES

## STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

	SUMMAR	Y OF QUA	ANTITIES	
I–55	(SOUTH O	F I–80 TO	WEBER	ROAD)
SHEET	OF	SHEETS	STA.	TO STA.

SCALE:

Ø 0042

90% FED 10% STATE	90% FED					
1						
				1		
						2
500						
500						

BRIDGE 0047 BRIDGE 0047 BRIDGE 0047 BRIDGE 0047 BRIDGE 0047

ROADWAY 0005 QUANTITY

TOTAL QUANTITY

1

2 **500** 

500

UNIT

L SUM

EACH

EACH

HOURS

HOURS

BRIDGE 0047 BRIDGE 0047 BRIDGE 0047 Geo Services Inc.
stechnical, Environmental & Civil Engineering
805 Amherst - Court - Soute 204
Noperville, Jilingis 60565
(630) 355-2838

## PAV

<b>EMENT</b>	CORE	
SUMMA	RY	

Page: <u>1 of 1</u>

Project:	IDOT PTB 193: Work Order #3:	GSI Job	No.:	19120 <del>-</del> E
Location:	I-55 NB inside Shoulder (South of I-80 to Weber Road)	Date:	3/	23/2020
County:	Cook	Cored B	y:	R1
Client:	GR <b>AEF</b>	Checked	By:	AJF

CORE NO.	THICKNESS (in.)	MATERIAL DESCRIPTION
. 101	()	Station: 92+78 Offset: 4.7' Right Total Thickness:14.0"
		Location: I-55 NB inside Shoulder
C1-1	1.75 1.75 3.0 3.5 4.0	ASPHALT—sightly porous, fine to medium coarse aggregate. (weathered @ surface, high AC% slag mix) ASPHALT—well consolidated, medium coarse aggregate. ASPHALT—sightly porous, poorly consolidated, medium coarse aggregate. ASPHALT—porous, very poorly consolidated, medium coarse aggregate. (poorly bonding @ base) ASPHALT—porous, poorly consolidated, medium coarse aggregate.
		Station: 295+05 Offset: 4.7' Right Total Thickness: 15.0"
		Location: I-55 NB inside Shoulder
C3-1	2.0 2.0 3.0 3.5 4.5	ASPHALT-porous, poorly consolidated, fine to medium coarse aggregate.  (weathered © surface, high AC% slag mix)  ASPHALT-porous, very poorly consolidated © base, medium coarse aggregate. (poorly bonding © base)  ASPHALT-porous, very poorly consolidated, medium coarse aggregate. (poorly bonding © base)  ASPHALT-slightly porous, medium coarse aggregate. (poorly bonding)  ASPHALT-slightly porous, medium coarse aggregate.
		Station: 497+26 Offset: 4.7' Right Total Thickness: 14.5"
		Location: I-55 NB inside Shoulder
C6-1	2.0 1.5 2.5 4.0 4.5	ASPHALT—sightly porous, fine to medium coarse aggregate. (weathered @ surface, high AC% slag mlx) ASPHALT—porous, very poorly consolidated, medium coarse aggregate. ASPHALT—slightly porous, medium coarse aggregate. (poorly bonding @ base) ASPHALT—slightly porous, poorly consolidated @ base, medium coarse aggregate. (poorly bonding) ASPHALT—porous, very poorly consolidated, medium coarse aggregate.
		Station: 624+92 Offset: 4.8' Right Total Thickness:18.5"
		Location: I-55 NB inside Shoulder
9-1	2.0 2.0 2.5 4.0 3.0 5.0	ASPHALT—sightly porous, fine to medium coarse aggregate. (weathered © surface, high AC% slag mix) ASPHALT—sightly porous, medium coarse aggregate. ASPHALT—porous, very poorly consolidated, medium coarse aggregate. ASPHALT—porous, fine to medium coarse aggregate. ASPHALT—porous, very poorly consolidated, medium coarse aggregate. ASPHALT—porous, very poorly consolidated, medium coarse aggregate.

GRØEF 3501 W. Higgins Road: Suite 280 Chicago. Illinois 60631 (773) 399-0112
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USER NAME = \$USER\$	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = \$SCALE\$	CHECKED -	REVISED -
PLOT DATE = \$DATE\$	DATE -	REVISED -

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

ROADWAY CORES					F.A. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
I-55 (SOUTH OF I-80 TO WEBER ROAD)						55	2020-253-BR&PP	WILL	178	9
	1-33 (4	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	1-00 10	WLDL	ii iioad)			CONTRAC	T NO. 6:	2N22
	SHEET	OF	SHEETS	STA.	TO STA.		ILLINOIS F	ED. AID PROJECT		

PAVEMENT CORE SUMMARY

CORE THICKNESS NO. (in.)

SCALE:

Geo Services, Inc.
Geotechnical, Environmental & Givil Engineering
805 Amherist Court Suite 204
Noperville, Jillingis 60555
(630) 355-2838 Project: IDOT PTB 193: Work Order #3: GSI Job No.: 19120-B Location: I-55 NB Lane 1 (South of I-80 to Weber Road) Date: 3/23/2020 County: Cook Cored By: Client: GRAEF Checked By: \_\_\_

MATERIAL DESCRIPTION

Page: <u>1 of 1</u>

		Station: 92+78 Offset: 14.0' Right Total Thickness: 14.5"
		Location: I-55 NB Laine 1
C1-2	2.0 2.0 1.0 2.5 3.0 4.0	ASPHALT—sightly porous, fine to medium coarse aggregate. (weathered © surface, high AC% slag mix) ASPHALT—well consolidated, medium coarse aggregate. ASPHALT—well consolidated, medium coarse aggregate. (levelling course) ASPHALT—porous, poorly consolidated, medium coarse aggregate. ASPHALT—sightly porous, poorly consolidated © top, medium coarse aggregate. ASPHALT—well consolidated, fine to medium coarse aggregate.
		Station: 295+05 Offset: 14.0' Right Total Thickness: 14.0"
		Location: I-55 NB Lame 1
C3 <b>-</b> 2	1.75 1.25 2.50 2.50 3.0 3.0	ASPHALT-sightly porous, fine to medium coarse aggregate. (weathered © surface, high AC% slag mix) ASPHALT-sightly porous, poorly consolidated © base, medium coarse aggregate. ASPHALT-sightly porous, medium coarse aggregate. ASPHALT-porous, very poorly consolidated, medium coarse aggregate. ASPHALT-porous, very poorly consolidated, medium coarse aggregate. ASPHALT-sightly porous, fine to medium coarse aggregate.
		Station: 497+26 Offset: 14.0' Right Total Thickness: 14.0"
		Location: I-55 NB Lame 1
C6-2	2.0 1.0 3.0 4.0 2.0 2.0	ASPHALT-sightly porous, fine to medium coarse aggregate. (weathered @ surface, high AC% slag mix) ASPHALT-sightly porous, fine to medium coarse aggregate. ASPHALT-sightly porous, medium coarse aggregate. ASPHALT-porous, very poorly consolidated, medium coarse aggregate. (poorly bonded @ base) ASPHALT-sightly porous, poorly consolidated, medium coarse aggregate. ASPHALT-sightly porous, medium coarse aggregate.
		Station: 624+92 Offset: 14.0' Right Total Thickness: 19.0"
		Location: I—55 NB Lame 1
C9 <b>-</b> 2	2.0 1.5 3.0 4.5 4.0 4.0	ASPHALT-sightly porous, fine to medium coarse aggregate. (weathered © surface, high AC% slag mix) ASPHALT-well consolidated, medium coarse aggregate. ASPHALT-well consolidated, medium coarse aggregate. ASPHALT-well consolidated, medium coarse aggregate. ASPHALT-sightly porous, medium coarse aggregate. ASPHALT-sightly porous, medium coarse aggregate. (poorly bonding © base) ASPHALT-porous, very poorly consolidated, fine to medium coarse aggregate. (detriorated.)

Geo Services, Inc.
Geotechnical, Environmental & Givi Engineering
805 Amherst - Court, State 204
Noperville, Jillingts | 60565
(630) 3551-2838

County: Cook

Client: GRAEF

## PAVEMENT CORE SUMMARY

Napetville   Illinois   60565 (630) 355+2838	SOMMANT		
Project: IDOT PTB 193: Work Order #3:	G:	SI Job	No.: <u>19120</u>
Location: I-55 NB Lane 3 (South of I-80 to Web	er Road) De	ate:	3/16/202

Page: <u>1 of 1</u>

Cored By:

Checked By:

CORE NO.	THICKNESS (in.)	MATERIAL DESCRIPTION
		Station: 198+06 Offset: 38.0' Right Total Thickness: 17.25"
		Location: I-55 NB Lame 3
C2-1	1.75 2.0 1.0 2.0 10.5	ASPHALT-sightly porous, fine to medium coarse aggregate. (weathered © surface, high AC% slag mix) ASPHALT-well consolidated, fine to medium coarse aggregate. ASPHALT-well consolidated, fine to medium coarse aggregate. (levelling course) ASPHALT-well consolidated, medium coarse aggregate. CONCRETE-well consolidated, air entrained, 1/4" wire mesh © -5.25" (horizontal Fracture © -9.0")
		Station: 383+28 Offset: 38.0' Right Total Thickness: 18.0"
		Location: I-55 NB Lame 3
C4—1	1.75 1.75 2.5 2.0 10.0	ASPHALT-sightly porous, fine to medium coarse aggregate. (weathered © surface, high AC% slag mix) ASPHALT-sightly porous, fine to medium coarse aggregate. ASPHALT-well consolidated, medium coarse aggregate. ASPHALT-well consolidated, medium coarse aggregate. CONCRETE-well consolidated, air entrained, 1/4" wire mesh © -2.5".
		Station: 456+88 Offset: 38.0' Right Total Thickness: 17.75"
		Location: I-55 NB Lame 3
C5—1	1.75 1.75 1.50 1.50 11.25	ASPHALT—sightly porous, fine to medium coarse aggregate. (weathered © surface, high AC% slag mix) ASPHALT—well consolidated, medium coarse aggregate. ASPHALT—well consolidated, medium coarse aggregate. ASPHALT—well consolidated, medium coarse aggregate. CONCRETE—well consolidated, air entrained, 1/4" wire mesh © —4.5".
		Station: 537+17 Offset: 38.4' Right Total Thickness:16.5"
		Location: I-55 NB Lame 3
C7-1	1.75 1.75 2.5 10.5	ASPMALT—sightly porous, fine to medium coarse aggregate. (weathered © surface, high AC% slag mix) ASPHALT—well consolidated, fine to medium coarse aggregate. ASPHALT—well consolidated, medium coarse aggregate. CONCRETE—well consolidated, air entrained, 1/4" wire mesh © =2.75".
		Station: 586+65 Offset: 38.0' Right Total Thickness:17.5"
		Location: 1–55 NB Laine 3
C8-1	2.0 1.0 1.0 3.0 10.5	ASPHALT—sightly porous, fine to medium coarse aggregate. (weathered © surface, high AC% slag mix) ASPHALT—well consolidated, fine to medium coarse aggregate. ASPHALT—well consolidated, fine to medium coarse aggregate. (levelling course) ASPHALT—well consolidated, medium coarse aggregate. CONCRETE—well consolidated, air entrained, 3/8" wire mesh © —4.25".
		Station: 656+10 Offset: 38.4' Right Total Thickness: 15.5"
C10-1		Location: I-55 NB Lame 3
	2.0 1.75 1.75 10.0	ASPMALT—sightly porous, fine to medium coarse aggregate. (weathered © surface, high AC% slag mix) ASPHALT—well consolidated, medium coarse aggregate. ASPHALT—well consolidated, medium coarse aggregate. CONCRETE—well consolidated, air entrained, 1/4" wire mesh © -3.25".

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Geotechnical, Environmental & Givil Engineering
805 Amherist - Court, Suite 204
Noperville, Jillingis 60565
(630) 355-2838

## PAVEMENT CORE SUMMARY

Page: 1 of 2

Project: <u>IDOT PTB 193: Work Order #3:</u> GSI Job No.: 19120-B Location: <u>I-55 NB outside Shoulder (South of I-80 to Weber Road)</u> Date: <u>3/17/2020</u> Cored By: AJP Client: GRAEF Checked By: \_\_\_

NO.	THICKNESS (in.)	MATERIAL DESCRIPTION				
	, ,	Station: 198+06 Offset: 45.0' Right Total Thickness: 9.5"				
		Location: I—55 NB outside Shoulder @ 3.0' from inside EOP				
C2-2	1.75 1.25 2.5 4.0 6.0 15.5 <del>+</del>	ASPHALT-sightly porous, fine to medium coarse aggregate. (weathered © surface) ASPHALT-sightly porous, fine to medium coarse aggregate. ASPHALT-sightly porous, medium coarse aggregate. ASPHALT-sightly porous, medium coarse aggregate. CRUSHED LIME STONE—Subbase (Apparent CA—06) CLAY—Subgrade				
		Station: 198+06 Offset: 53.0' Right Total Thickness: 10.0"				
		Location: I—55 NB outside Shoulder @ 1.0' from outside EOP				
C2-3	1.5 2.0 3.0 3.5 6.0 16.0+	ASPHALT—porous, very poorly consolidated, fine to medium coarse aggregate. (weathered @ surface)				
		Station: 383+28 Offset: 47.0" Right Total Thickness: 9.5"				
		Location: I—55 NB outside Shoulder @ 3.0' from inside EOP				
C4-2	2.0 1.5 2.5 3.5 9.5+	ASPHALT—slightly porous, fine to medium coarse aggregate. (weathered © surface) ASPHALT—slightly porous, fine to medium coarse aggregate. (poorly bonding © base) ASPHALT—well consolidated, medium coarse aggregate. ASPHALT—well consolidated, medium coarse aggregate. CLAY—Subgrade				
		Station: 383+28 Offset: 53.3' Right Total Thickness: 7.0"				
		Location: I—55 NB outside Shoulder @ 1.0' from outside EOP				
C4 <b>-</b> 3	2.5 2.5 2.0 7.0 <del>+</del>	ASPMALT—porous, very poorly consolidated, fine to medium coarse aggregate. (weathered © surface) (verticle fracture poorly bonding © base) ASPHALT—porous, very poorly consolidated, medium coarse aggregate.(deteriorated—poorly bonding © to ASPMALT—porous, very poorly consolidated © base, medium coarse aggregate.(deteriorated) CLAY—Subgrade				
		Station: 456+88 Offset: 47.0' Right Total Thickness: 6.5"				
		Location: I-55 NB outside Shoulder @ 3.0' from Inside EOP				
C5-2	2.0 4.5 8.0 14.5 <del>+</del>	ASPHALT—porous, very poorly consolidated, fine to medium coarse aggregate. (weathered © surface) ASPHALT—porous, very poorly consolidated, medium coarse aggregate. CRUSHED LIME STONE—Subbase (Apparent CA—06) CLAY—Subgrade				
		Station: 456+88 Offset: 63.2' Right Total Thickness: 8.5"				
		Location: I-55 NB outside Shoulder @ 1.0' from outside EOP				
C5-3	2.0 3.0 3.5 8.0 16.5+	ASPHALT—slightly porous poorly consolidated, fine to medium coarse aggregate. (weathered @ surface) ASPHALT—slightly porous poorly consolidated, fine to medium coarse aggregate. ASPHALT—slightly porous poorly consolidated, medium coarse aggregate. CRUSHED LIME STONE—Subbase (Apparent CA—06) CLAY—Subarade				

	AD 0 F F	
	GR@EF	
B501	W. Higgins Road; Suite 28	3
	Chicago, Illinois 60631	
	(773) 399-0112	

USER NAME = \$USER\$	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = \$SCALE\$	CHECKED -	REVISED -
PLOT DATE = \$DATE\$	DATE -	REVISED -

SCALE:

STATE OF ILLINOIS

					F.A. RTE.	SECT	ION		COUNTY	TOTAL SHEETS	SHEE NO.	
					55	2020-253	B-BR&PP		WILL	178	10	
I-33 (	(300111 0	1-00 10	VVLDLII	HOAD,						CONTRACT	T NO. 62	2N22
SHEET	OF	SHEETS	STA.	TO S	STA.			ILLINOIS	FED. AI	D PROJECT		

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805 Amberst Court, Suite 204
Naperville, Jilingle 60565
(630) 355-2838

## PAVEMENT CORE SUMMARY

Page: 2 of 2

CORE NO.	THICKNESS (in.)	MATERIAL DESCRIPTION
		Station: 656+10 Offset: 47.7' Right Total Thickness: 7.0"
		Location: I-55 NB outside Shoulder @ 3.0' from inside EOP
C10-2	2.0 2.0 3.0 6.0 13.0 <del>1</del>	ASPHALT-sightly porous poorly consolidated, fine to medium coarse aggregate. (weathered © surface) ASPHALT-porous very poorly consolidated, medium coarse aggregate. (diagonal crack) ASPHALT-sightly porous poorly consolidated, medium coarse aggregate. (diagonal crack) SAND & GRAVEL-Subbase CLAY-Subgrade
		Station: 656+10 Offset: 54.2' Right Total Thickness: 6.0"
		Location: I-55 NB outside Shoulder @ 1.0' from outside EOP
C10-3	2.0 1.5 2.5 6.0 12.0 <del>1</del>	ASPHALT-sightly porous poorly consolidated, fine to medium coarse aggregate. (weathered © surface) ASPHALT-well consolidated, medium coarse aggregate. ASPHALT-porous very poorly consolidated, medium coarse aggregate.(deteriorated) SAND & GRAVEL-Subbase CLAY-Subgrade
	ı	1

	GR@EF
	CINCIE
8501	W. Higgins Road; Suite 280
	Chicago, Illinois 60631
	(773) 399-0112

USER NAME = \$USER\$	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = \$SCALE\$	CHECKED -	REVISED -
PLOT DATE = \$DATE\$	DATE -	REVISED -

STATE	0F	ILLINOIS
DEPARTMENT (	OF 1	<b>TRANSPORTATION</b>

	ROAD	WAY CO	RES		F.A. RTE.	SECTION		COUNTY	TOTAL SHEETS	SHEET NO.
L-55 (	SOUTH OF	I_RN TN	WERE	ROAD)	55	2020-253-BR&P	)	WILL	178	11
	300111 01		VVLDLI	·				CONTRAC	T NO. 62	2N22
SHEET	OF	SHEETS	STA.	TO STA.		ILLINOIS	FED. A	ID PROJECT		

Geo Services Inc.

otechnical, Environmental & Civil Engineering
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Noperville, Jilingis 60565

(630) 355-2838

## РΑ

VEMENT	CORE	
SUMMAI	RY	

Page: <u>1 of 1</u>

Project:	IDOT PTB 193: Work Order #3:	GSI Job	No.:	<u>19120-B</u>
Location:	I_55 SB Lane 1 from South of I_80 to Weber Road	Date:	3	/23/2020
County:	Cook	Cored B	y:	RT
Client:	CRAFE	Checked	I Rv	Δ.IP

CORE NO.	THICKNESS (in.)	MATERIAL DESCRIPTION
		Station: 34+96 Offset: 14.3' Left Total Thickness: 23.0"
C11-1		Location: I-55 SB Lane 1
	2.0 1.5 3.5 4.0 4.75 3.25	ASPHALT—slightly porous, fine to medium coarse aggregate. (weathered © surface) high AC% slag mix) ASPHALT—slightly porous, medium coarse aggregate. ASPHALT—well consolidated. medium coarse aggregate. ASPHALT—well consolidated. medium coarse aggregate.
		Station: 244+14 Offset: 13.6' Left Total Thickness: 14.0"
		Location: I-55 SB Lane 1
C13-1	2.0 1.75 3.75 2.5 4.0	ASPHALT—slightly porous, fine to medium coarse aggregate. (weathered © surface) high AC% slag mix) ASPHALT—well consolidated, fine to medium coarse aggregate. ASPHALT—porous, very poorly consolidated. medium coarse aggregate. ASPHALT—slightly porous, poorly consolidated. medium coarse aggregate. ASPHALT—slightly porous, poorly consolidated. medium coarse aggregate.
		Station: 437+41 Offset: 14.2' Left Total Thickness: 14.0"
		Location: I-55 SB Lane 1
C15-1	1.75 1.25 1.0 2.50 2.0 1.5 4.0	ASPMALT—slightly porous, fine to medium coarse aggregate. (weathered © surface) high AC% slag mlx) ASPHALT—slightly porous, medium coarse aggregate. ASPHALT—well consolidated, fine to medium coarse aggregate. ASPHALT—well consolidated.
		Station: 667+04 Offset: 14.0' Left Total Thickness: 18.5"
		Location: I—55 SB Lane 1
C19-1	1.5 2.0 2.5 4.0 1.0 3.5	ASPHALT—slightly porous, fine to medium coarse aggregate. (weathered © surface) high AC% slag mix) ASPHALT—slightly porous, medium coarse aggregate. ASPHALT—slightly porous, medium coarse aggregate. ASPHALT—porous, poorly consolidated, fine to medium coarse aggregate. ASPHALT—porous, poorly consolidated. medium coarse aggregate. ASPHALT—porous, poorly consolidated © base, fine to medium coarse aggregate. (poorly bonding) ASPHALT—porous, poorly consolidated fine to coarse aggregate. (Detriorated)

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USER NAME = \$USER\$	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = \$SCALE\$	CHECKED -	REVISED -
PLOT DATE = \$DATE\$	DATE -	REVISED -

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

SCALE:

	PA	/EMENT	CORES		F.A. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
L-55 /9	SOUTH OF	: I_RN TN	WERER	ROAD)	55	2020-253-BR&PP	WILL	178	12
1-33 (4	300111 01	1-00 10	VVLDLII	HOAD,			CONTRACT	NO. 62	2N22
SHEET	OF	SHEETS	STA.	TO STA.		ILLINOIS FED. AT	ID PROJECT		

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(630) 355-2838

## PAVEMENT CORE SUMMARY

Page: <u>1 of 1</u>

Project: IDOT PTB 193: Work Order #3:	GSI Job No.: 19120-B
Location: <u>I-55 SB Lane 3 (South of I-80 to Weber Road)</u>	Date: <u>3/16/2020</u>
County: Cook	Cored By: RT
Client: GRAEF	Checked By: AJP

CORE NO.	THICKNESS (in.)	MATERIAL DESCRIPTION
		Station: 138+72 Offset: 38.0' Left Total Thickness: 19.0"
		Location: I-55 SB Lane 3
C12-1	1.75 1.50 1.25 1.50 2.0 11.0	ASPHALT—slightly porous, fine to medium coarse aggregate. (weathered @ surface) high AC% slag mix) ASPHALT—well consolidated, medium coarse aggregate. (levelling course) ASPHALT—well consolidated, fine to medium coarse aggregate. (levelling course) ASPHALT—slightly porous, poorly consolidated @ base. medium coarse aggregate. (poorly bonding) ASPHALT—well consolidated, medium coarse aggregate. CONCRETE—well consolidated—No Rebar
		Station: 344+98 Offset: 38.0' Left Total Thickness: 18.0"
		Location: I-55 SB Lane 3
C1 <b>4-</b> 1	2.0 3.0 1.0 2.25 9.75	ASPHALT—slightly porous, fine to medium coarse aggregate. (weathered @ surface, high AC% slag mix) ASPHALT—slightly porous, poorly consolidated, fine to medium coarse aggregate. ASPHALT—well consolidated, fine to medium coarse aggregate. (levelling course) ASPHALT—well consolidated, medium coarse aggregate. CONCRETE—well consolidated—air entrained, 1/4" Rebar @ 5.25" (horizontal fracture @ -8.5")
		Station: 479+91 Offset: 38.0' Left Total Thickness: 18.0"
C16-1		Location: I-55 SB Lane 3
	1.50 2.50 3.50 10.50	ASPHALT—slightly porous, fine to medium coarse aggregate. (weathered @ surface) high AC% slag mix) ASPHALT—slightly porous, poorly consolidated, medium coarse aggregate. ASPHALT—slightly porous, poorly consolidated, medium coarse aggregate. CONCRETE—well consolidated—air entrained, 1/4" wire mesh @ 3.75".
		Station: 551+17 Offset: 38.4' Left Total Thickness: 17.0"
C17-1		Location: I-55 SB Lane 3
	2.0 1.5 1.5 2.0 10.0	ASPHALT—slightly porous, fine to medium coarse aggregate. (weathered @ surface, high AC% slag mix) ASPHALT—well consolidated, medium coarse aggregate. ASPHALT—well consolidated, medium coarse aggregate. ASPHALT—well consolidated, medium coarse aggregate. CONCRETE—well consolidated—air entrained, 1/4" wire mesh @ 2.5".
		Station: 610+61 Offset: 42.1' Left Total Thickness: 18.75"
		Location: I-55 SB Lane 3
C18-1	1.75 1.75 1.0 4.0 10.25	ASPHALT—slightly porous, fine to medium coarse aggregate. (weathered © surface, high AC% slag mix) ASPHALT—well consolidated, fine to medium coarse aggregate.  ASPHALT—well consolidated, fine to medium coarse aggregate. (levelling course)  ASPHALT—well consolidated, medium coarse aggregate. (horizontal fracture © -3.0")  CONCRETE—well consolidated—air entrained, wire mesh © 3/8" (horizontal fracture © -2.5")
		Station: 686+06 Offset: 36.6' Left Total Thickness: 13.0"
		Location: I-55 SB Lane 3
C20-1	2.0 1.75 1.5 1.0 3.75	ASPHALT—slightly porous, fine to medium coarse aggregate. (weathered @ surface) high AC% slag mix) ASPHALT—well consolidated, fine to medium coarse aggregate. ASPHALT—well consolidated, medium coarse aggregate. ASPHALT—well consolidated, fine to medium coarse aggregate. (levelling course) ASPHALT—slightly porous, poorly consolidated, medium coarse aggregate. (horizontal fracture @ -1.0") ASPHALT—well consolidated, medium coarse aggregate.

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(630) 355-2838

## PAVEMENT CORE SUMMARY

Page: <u>1 of 2</u>

 Project:
 IDOT PTB 193: Work Order #3:
 GSI Job No.: 19120-B

 Location:
 I-55 SB Outside Shoulder from South of I-80 to Weber Road
 Date: 3/16/2020

 County:
 Cook
 Cored By: RT

 Client:
 GRAEF
 Checked By: AJP

CORE NO.	THICKNESS (in.)	MATERIAL DESCRIPTION		
		Station: 138+72 Offset: 47.0' Left Total Thickness: 10.0"		
		Location: I-55 SB Outside Shoulder @ 3.0' from Inside E.O.P.		
C12-2	1.75 1.0 3.0 2.5 1.75 6.0 16.0+	ASPHALT—slightly porous, fine to medium coarse aggregate. (weathered © surface) ASPHALT—slightly porous, poorly consolidated, medium coarse aggregate. ASPHALT—poorly consolidated, medium coarse aggregate. (diagonal crack) ASPHALT—very poorly consolidated © base, medium coarse aggregate. (verticle fracture—poorly bonding—deteriorated) ASPHALT—very poorly consolidated © base, medium coarse aggregate. (verticle fracture—poorly bonding—deteriorated) CRUSHED LIME STONE—Subbase (Apparent CA—06) CLAY—Subgrade		
		Station: 138+72 Offset: 52.9' Left Total Thickness: 6.5"		
		Location: I-55 SB Outside Shoulder @ 1.0' from outside E.O.P.		
C12-3	1.75 1.0 3.75 6.0 12.5+	ASPHALT—slightly porous, fine to medium coarse aggregate. (weathered © surface) ASPHALT—very poorly consolidated © base, medium coarse aggregate. (horizontal fracture) ASPHALT—very poorly consolidated, medium coarse aggregate. (dlagonal crack—poorly bonding—deteriorated) CRUSHED LIME STONE—Subbase (Apparent CA—06) CLAY—Subgrade		
		Station: 344+98 Offset: 47.0' Left Total Thickness: 11.0"		
		Location: I-55 SB Outside Shoulder @ 3.0' from Inside E.O.P.		
C14-2	2.0 2.0 1.5 2.5 3.0 6.0 17.0+	ASPHALT-slightly porous, fine to medium coarse aggregate. (weathered © surface) ASPHALT-slightly porous, poorly consolidated © base, medium coarse aggregate. ASPHALT-very poorly consolidated © base, medium coarse aggregate. (poorly bonding) ASPHALT-very poorly consolidated © top & base, medium coarse aggregate. (poorly bonding) ASPHALT-very poorly consolidated © top & base, medium coarse aggregate. (poorly bonding) CRUSHED LIME STONE—Subbase (Apparent CA—06) CLAY—Subgrade		
		Station: 344+98 Offset: 53.4' Left Total Thickness: 6.0"		
		Location: I—55 SB Outside Shoulder @ 1.0' from outside E.O.P.		
C14-3	1.5 1.0 3.5 6.0 12.0+	ASPHALT—slightly porous, poorly consolidated, fine to medium coarse aggregate.  (weathered © surface, verticle fracture)  ASPHALT—very poorly consolidated, medium coarse aggregate. (deteriorated, poorly bonding)  ASPHALT—very poorly consolidated, medium coarse aggregate. (deteriorated, poorly bonding)  CRUSHED LIME STONE—Subbase (Apparent CA—06)  CLAY—Subgrade		
		Station: 479+91 Offset: 48.7' Left Total Thickness: 10.0"		
		Location: I-55 SB Outside Shoulder @ 3.0' from Inside E.O.P.		
C16-2	1.5 1.5 1.5 2.0 3.5 6.0 16.0+	ASPHALT-very poorly consolidated, fine to medium coarse aggregate.  (verticle fracture-poorly bonding-deteriorated)  ASPHALT-very poorly consolidated, fine to medium coarse aggregate.  ASPHALT-slightly porous, poorly consolidated © base, medium coarse aggregate.  ASPHALT-very poorly consolidated, medium coarse aggregate. (deteriorated, poorly bonding)  ASPHALT-very poorly consolidated, medium coarse aggregate. (deteriorated, poorly bonding)  CRUSHED LIME STONE—Subbase (Apparent CA—06)  CLAY—Subgrade		

8501	GRØEF W. Higgins Road; Su

USER NAME = \$USER\$	DESIGNED -	REVISED -
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PLOT SCALE = \$SCALE\$	CHECKED -	REVISED -
PLOT DATE = \$DATE\$	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALE:

	PAVE	MENT CO	RES		F.A. RTE	SECTION
L_55	(SOUTH OF	: I_RN TN	WERER	ROAD)	55	2020-253-BR&PP
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SHEET	OF	SHEETS	STA	TO STA		THI INDIE   EED

Geo Services, Inc.
Geotechnical, Environmentol/& Givil Engineering
805 Amberst Court. Sulte 204
Naperville, Illinois 60565
(630) 355-2838

## PAVEMENT CORE SUMMARY

Page: 2 of 2

COUNTY TOTAL SHEET NO.

WILL 178 13

CONTRACT NO. 62N22

 Project:
 IDOT PTB 193:
 Work Order #3:
 GSI Job No.:
 19120—B

 Location:
 I=55 SB Outside
 Shoulder from South of I=80 to Weber Road
 Date:
 3/16/2020

 County:
 Cook
 Cored By:
 RT

 Client:
 GRAEF
 Checked By:
 AJP

CORE NO.	THICKNESS (in.)	MATERIAL D <b>E</b> SCRIP <b>TI</b> ON
		Station: 479+91 Offset: 53.3' Left Total Thickness: 7.5"
		Location: I—55 SB Outside Shoulder @ 1.0' from outside E.O.P.
C16-3	2.0 1.5 4.0 6.0 13.5 <del>1</del>	ASPHALT—slightly porous, poorly consolidated, fine to medium coarse aggregate.(weathered © surface) ASPHALT—slightly porous, poorly consolidated, medium coarse aggregate. ASPHALT—very poorly consolidated © base, medium coarse aggregate. CRUSHED LIME STONE—Subbase (Apparent CA—06) CLAY—Subgrade
		Station: 689+06 Offset: 48.1' Left Total Thickness: 11.25"
		Location: I-55 SB Outside Shoulder @ 3.0' from Inside E.O.P.
C20-2	1.5 1.5 3.0 2.5 2.75 6.0 17.25+	ASPHALT—slightly porous, poorly consolidated, fine to medium coarse aggregate. (weathered © surface) ASPHALT—well consolidated, fine to medium coarse aggregate. ASPHALT—very poorly consolidated © base, medium coarse aggregate. (deteriorated, poorly bonding) ASPHALT—very poorly consolidated, medium coarse aggregate. (deteriorated, poorly bonding) ASPHALT—slightly porous, poorly consolidated © base, medium coarse aggregate. CRUSHED LIME STONE—Subbase (Apparent CA—06) CLAY—Subgrade
		Station: 689+06 Offset: 54.0' Left Total Thickness: 12.0"
		Location: I-55 SB Outside Shoulder @ 1.0' from outside E.O.P.
C20-3	2.5 2.5 3.5 3.5 6.0 18.0+	ASPHALT—slightly porous, poorly consolidated, fine to medium coarse aggregate. (weathered @ surface) ASPHALT—very poorly consolidated, medium coarse aggregate. (deteriorated, poorly bonding) ASPHALT—very poorly consolidated, medium coarse aggregate. (deteriorated, poorly bonding) ASPHALT—very poorly consolidated, medium coarse aggregate. (deteriorated, poorly bonding) CRUSHED LIME STONE—Subbase (Apparent CA—06) CLAY—Subgrade

#### LEGEND

- 1) EXISTING HMA SURFACE COURSE
- 2 EXISTING P.C.C. BASE COURSE
- (3) EXISTING AGGREGATE SUBGRADE
- 4) EXISTING HMA BASE COURSE
- (5) EXISTING HMA SHOULDER, DEPTH VARIES (14" TO 18.5")
- (6) EXISTING PIPE UNDERDRAIN
- 7 EXISTING AGGREGATE SHOULDER
- (8) EXISTING CONC. BARRIER WALL DOUBLE FACE (2'-3' WIDE)
- 9 EXISTING HMA SHOULDER, DEPTH VARIES (6" TO 9.5" ON 6" & VAR. SUBBASE)
- (10) LONGITUDINAL PARTIAL DEPTH REMOVAL, 2"
- (11) PAVED SHOULDER REMOVAL
- (12) HMA SURFACE REMOVAL, 2"

#### NOTES

- LOCATIONS OF REMOVAL FOR PATCHING WILL BE DETERMINED IN THE FIELD BY THE RESIDENT ENGINEER. THIS IS NOT FOR THE ENTIRE LENGTH OF THE PROJECT.
- 2. THE LONGITUDINAL PARTIAL DEPTH REMOVAL AND LONGITUDINAL PARTIAL DEPTH PATCHING WIDTH SHALL BE 3 FT. THE LENGTH SHALL BE A MINIMUM OF 10 FT, AND THE DEPTH SHALL BE 2 INCHES.
- LEGEND ITEM 12 ABOVE (HMA SURFACE REMOVAL, 2") IS FOR RUMBLE STRIP REMOVAL DURING PRE-STAGE MOT. THE WIDTH SHALL BE 3 FT.

NB INSIDE SHOULDER RUMBLE STRIP REMOVAL LOCATIONS

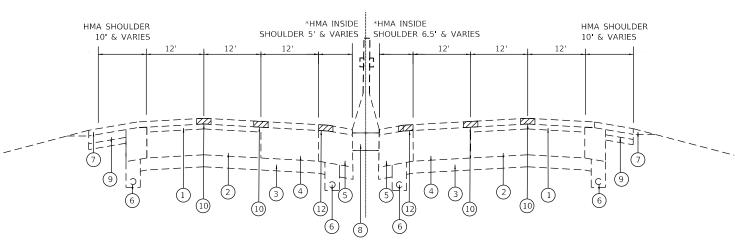
STA 412+73 TO STA 417+83 STA 420+46 TO STA 439+43 STA 441+76 TO STA 460+66 STA 462+16 TO STA 474+51 STA 535+55 TO STA 540+69 STA 542+63 TO STA 553+53

SB INSIDE SHOULDER RUMBLE STRIP REMOVAL LOCATIONS

STA 404+63 TO STA 417+79 STA 420+41 TO STA 439+47 STA 441+81 TO STA 460+61 STA 462+10 TO STA 474+15 STA 529+26 TO STA 540+71 STA 542+62 TO STA 553+81 S.B. I-55

€ OF I-55

N.B. I-55



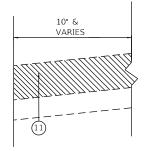
I-55
EXISTING TYPICAL CROSS SECTION APPROXIMATE LOCATION(S)

STA. 17+93 TO STA. 735+49 (NORTHBOUND) STA. 16+68 TO STA. 735+49 (SOUTHBOUND)

#### LOOKING NORTH

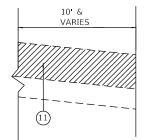
(INSIDE SHOULDER WIDTH NARROWS TO 4.5' NB STA 351+14 TO 388+34 AND NB STA 612+00 TO 621+87)

OUTSIDE SHOULDER RECONSTRUCTION



SB OUTSIDE SHOULDER RECONSTRUCTION LOCATIONS

STA 410+00 TO STA 417+68 STA 420+27 TO STA 435+60 (GORE AREA) STA 454+03 TO STA 460+47 STA 461+82 TO STA 469+97 STA 533+55 TO STA 540+71 STA 542+62 TO STA 549+31 OUTSIDE SHOULDER RECONSTRUCTION



NB OUTSIDE SHOULDER RECONSTRUCTION LOCATIONS

TSIDE SHOULDER RECONSTRUCTION

STA 411+50 TO STA 417+77

STA 420+44 TO STA 434+50

STA 437+50 TO STA 439+46

STA 452+30 TO STA 460+60

STA 462+12 TO STA 470+40

STA 534+43 TO STA 540+69

STA 542+63 TO STA 549+15

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PLOT DATE = \$DATE\$	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTION						
I-55	(SOUTH	OF I-80 TC	WEBER	ROAD)		
SHEET	OF	SHEETS	STA.	TO STA.		

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

 55
 2020-253-BR&PP
 WILL
 178
 14

 CONTRACT NO. 62 N22

#### LEGEND

- 1) EXISTING HMA SURFACE COURSE
- 2 EXISTING P.C.C. BASE COURSE
- 3 EXISTING AGGREGATE SUBGRADE
- 4) EXISTING HMA BASE COURSE
- (5) EXISTING HMA SHOULDER, DEPTH VARIES (14" TO 18.5")
- (6) EXISTING PIPE UNDERDRAIN
- (7) EXISTING AGGREGATE SHOULDER
- (8) EXISTING CONC. BARRIER WALL DOUBLE FACE (2'-3' WIDE)
- 9 EXISTING HMA SHOULDER, DEPTH VARIES (6" TO 9.5" ON 6" & VAR. SUBBASE)
- (10) LONGITUDINAL PARTIAL DEPTH REMOVAL, 2"
- (11) PAVED SHOULDER REMOVAL
- (12) HMA SURFACE REMOVAL, 2"
- (13) LONGITUDINAL JOINT PATCHING, 2"
- (14) PROPOSED SUBBASE GRANULAR MATERIAL TYPE B, 4"
- (15) PROPOSED HMA SHOULDERS, 10"
- (16) HMA SURFACE COURSE, MIX "D", IL-9.5, N70 (2")
- (17) SHOULDER RUMBLE STRIPS, 16"

#### NOTES:

- LOCATIONS OF REMOVAL FOR LONGITUDINAL JOINT PATCHING WILL BE DETERMINED IN THE FIELD BY THE RESIDENT ENGINEER. THIS IS NOT FOR THE ENTIRE LENGTH OF THE PROJECT.
- THE LONGITUDINAL PARTIAL DEPTH REMOVAL AND LONGITUDINAL PARTIAL DEPTH PATCHING WIDTH SHALL BE 3 FT. THE LENGTH SHALL BE A MINIMUM OF 10 FT, AND THE DEPTH SHALL BE 2 INCHES.
- 3. EXISTING PAVEMENT MARKING REMOVED DUE TO PATCHING, SHALL BE REPLACED WITH MODIFIED URETHANE PAVEMENT MARKING, TO MATCH EXISTING.
- 4. THE PROPOSED INSIDE SHOULDER SURFACE COURSE IS TO FILL IN THE REMOVED INSIDE SHOULDER RUMBLE STRIP IN A PRE-STAGE PRIOR TO SHIFTING TRAFFIC. TRAFFIC SHALL NOT TRAVEL OVER THE EXISTING RUMBLE STRIPS.
- 5. THE PROPOSED RUMBLE STRIPS SHALL NOT BE CONSTRUCTED UNTIL TRAFFIC IS SHIFTED OFF THE SHOULDER. TRAFFIC SHALL NOT TRAVEL OVER THE PROPOSED RUMBLE STRIPS.

## NB INSIDE HMA AND SHOULDER RUMBLE STRIP LOCATIONS

STA 412+73 TO STA 417+83 STA 420+46 TO STA 439+43 STA 441+76 TO STA 460+66 STA 462+16 TO STA 474+51 STA 535+55 TO STA 540+69 STA 542+63 TO STA 553+53

## SB INSIDE HMA AND SHOULDER RUMBLE STRIP LOCATIONS

STA 404+63 TO STA 417+79 STA 420+41 TO STA 439+47 STA 441+81 TO STA 460+61 STA 462+10 TO STA 474+15 STA 529+26 TO STA 540+71 STA 542+62 TO STA 553+81

N.B. I-55 S.B. I-55 € OF I-55 HMA INSIDE HMA INSIDE HMA SHOULDER HMA SHOULDER SHOULDER 5' & VARIES | SHOULDER 6.5' & VARIES 10' & VARIES 10' & VARIES MATCH MATCH MATCH MATCH MATCH MATCH MATCH EXISTING EXISTING **EXISTING** ि

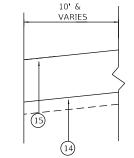
I-55

PROPOSED TYPICAL CROSS SECTION STA. 17+93 TO STA. 735+49 (NORTHBOUND) STA. 16+68 TO STA. 735+49 (SOUTHBOUND)

### LOOKING NORTH

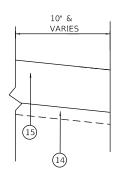
(INSIDE SHOULDER WIDTH NARROWS TO 4.5'
NB STA 351+14 TO 388+34 AND NB STA 612+00 TO 621+87)

PROPOSED TYPICAL SECTION - OUTSIDE SHOULDER RECONSTRUCTION



#### SB OUTSIDE SHOULDER RECONSTRUCTION LOCATIONS

STA 410+00 TO STA 417+68 STA 420+27 TO STA 435+60 (GORE AREA) STA 454+03 TO STA 460+47 STA 461+82 TO STA 469+97 STA 533+55 TO STA 540+71 STA 542+62 TO STA 549+31 PROPOSED TYPICAL SECTION - OUTSIDE SHOUDLER RECONSTRUCTION



NB OUTSIDE SHOULDER RECONSTRUCTION LOCATIONS

STA 411+50 TO STA 417+77 STA 420+44 TO STA 434+50 STA 437+50 TO STA 439+46 STA 452+30 TO STA 460+60 STA 462+12 TO STA 470+40 STA 534+43 TO STA 540+69 STA 542+63 TO STA 549+15

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PLOT SCALE = \$SCALE\$	CHECKED -	REVISED -
PLOT DATE = \$DATE\$	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTION						
I-55	(SOUTH	OF I-80 TO	WEBER	ROAD)		
SHEET	OF	SHEETS	STA.	TO STA.		

F.A. RTE	SECT	ION		COUNTY	TOTAL SHEETS	SHEET NO.
55	2020-253	-BR&PP		WILL	178	15
				CONTRACT	NO. 62	2N22
		TELINIOIS	EED /	VID BROJECT		

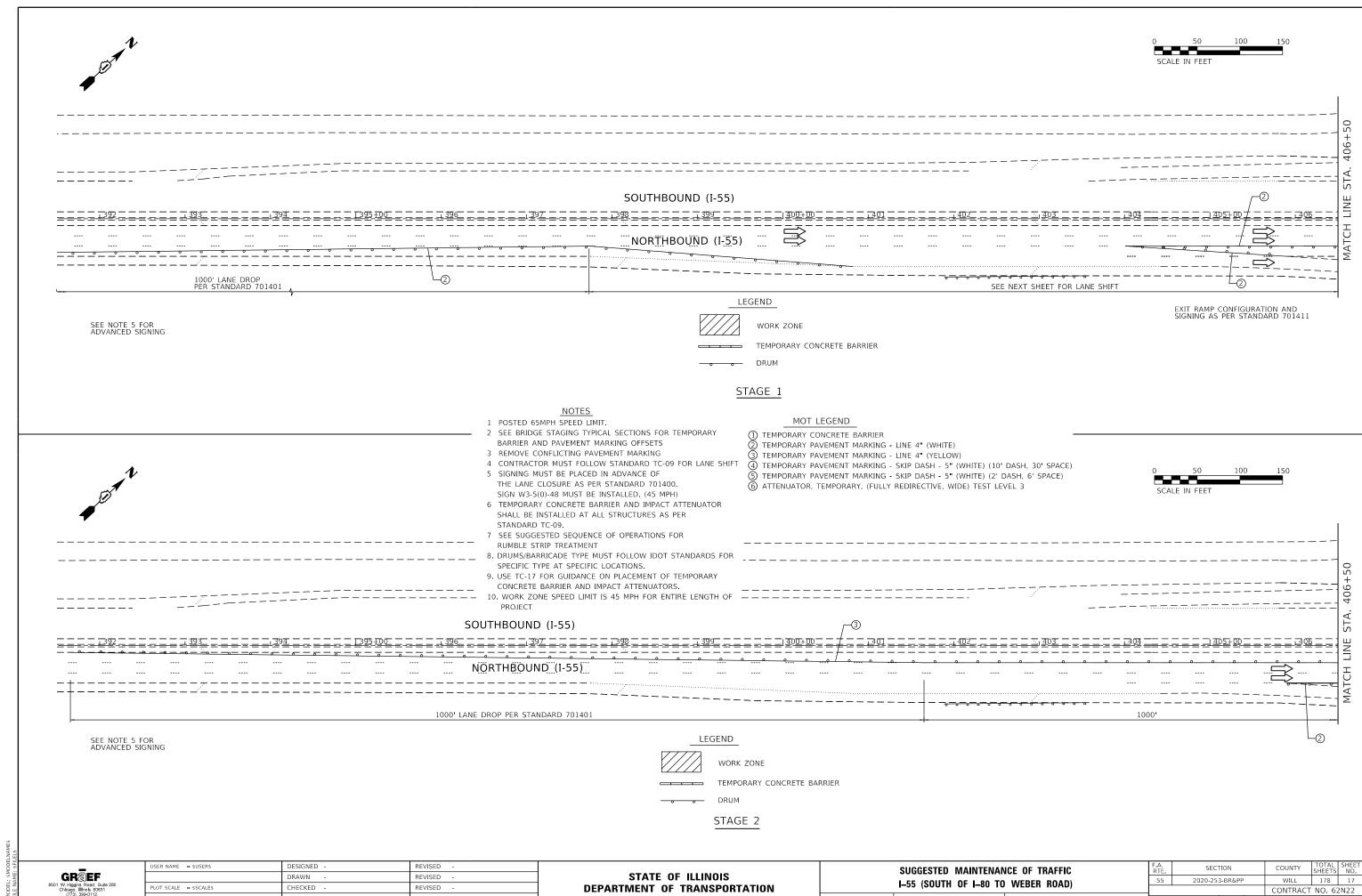
HOT-MIX ASPHALT MIXTURE REQUIREMENTS					
MIXTURE TYPE	QUALITY MANAGEMENT PROGRAM (QMP)				
HMA SHOULDER 10" (OUTSIDE SHOULDER)					
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", IL-9.5, N70 (2")	4.0% @ 70 Gyr.	QC/QA			
HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N70 (8")	4.0% @ 70 Gyr.	QC/QA			
CLASS D PATCHING					
HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N70 (16")	4.0% @ 70 Gyr.	QC/QA			
INTERMITTENT RESURFACING (LANE PATCHING)	,				
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", IL-9.5, N70 (2")	4.0% @ 70 Gyr.	QC/QA			
INSIDE SHOULDER (RUMBLE STRIP REMOVAL AND REPLACEMENT)					
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", IL-9.5, N70 (2")	4.0% @ 70 Gyr.	QC/QA			
LONGITUDINAL PARTIAL DEPTH PATCHES	•				
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", IL-9.5, N70 (2")	4.0% @ 70 Gyr.	QC/QA			
BRIDGE TAPER	,				
POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, STONE MATRIX ASPHALT, 9.5, MIX "F", N80 (2")	3.5% @ 80 Gyr.	QC/QA			
QMP DESIGNATION: QUALITY CONTROL / QUALITY ASSURANCE (QC/QA); QUALITY CONTROL FOR PERFORMANCE (QC	CP); PAY FOR PERFORMANCE	(PFP)			

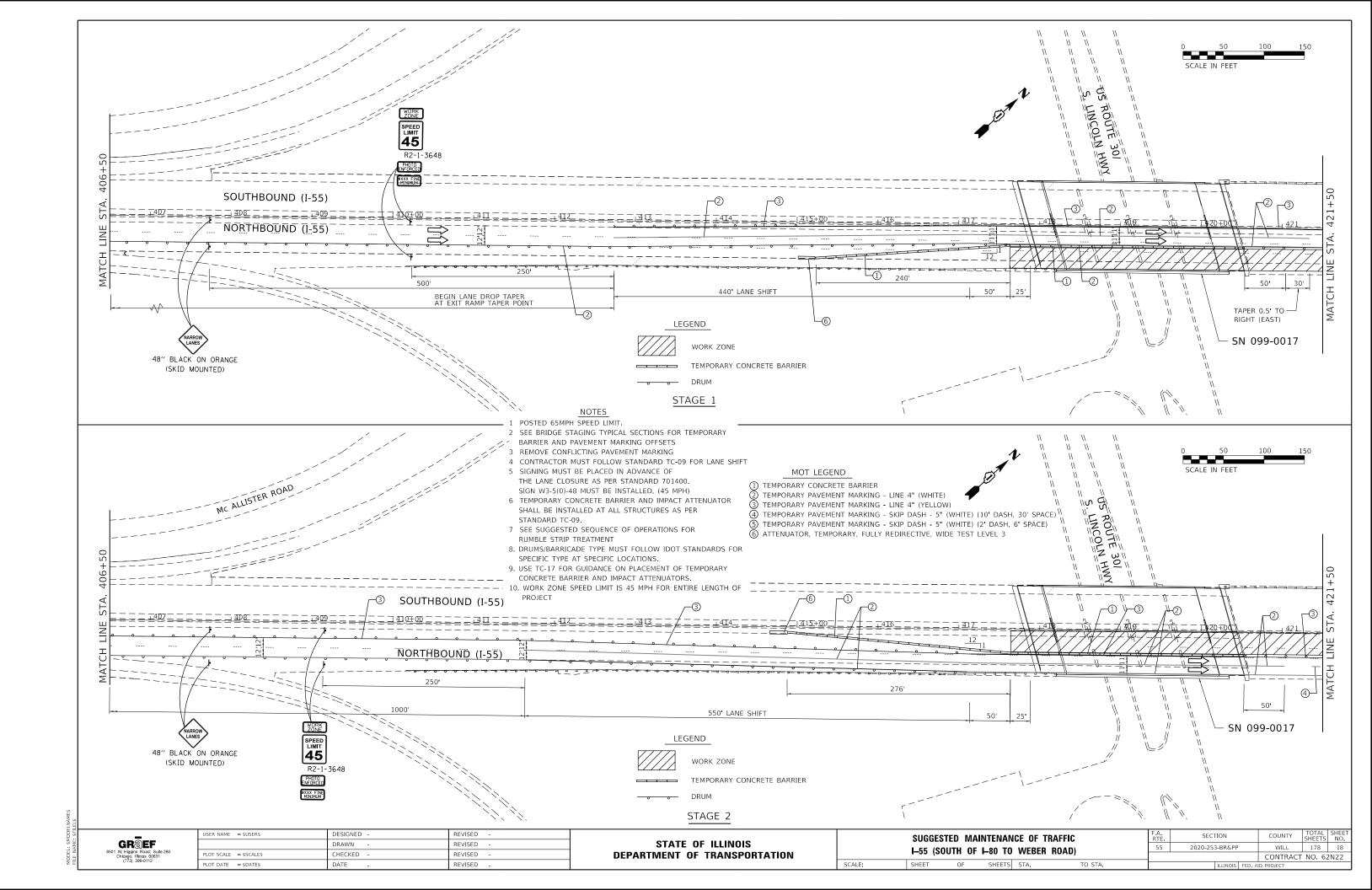
THE UNIT WEIGHT USED TO CALCULATE ALL HMA SURFACE MIXTURES IS 112 LBS/SQ YD/IN.
THE "AC TYPE" FOR POLYMERIZED HMA MIXES SHALL BE "SBS/SBR PG 76-22" AND FOR NON-POLYMERIZED HMA THE "AC TYPE" SHALL BE "PG
64-22" UNLESS MODIFIED BY SPECIAL PROVISIONS. FOR USE OF RECYCLED MATERIALS SEE SPECIAL PROVISIONS. QUALTIY MANAGEMENT
PROGRAM (QMP) IDENTIFIES THE PARTICULAR QUALITY CONTROL SPECIFICATION THAT APPLIES TO THE HMA MIXTURE.

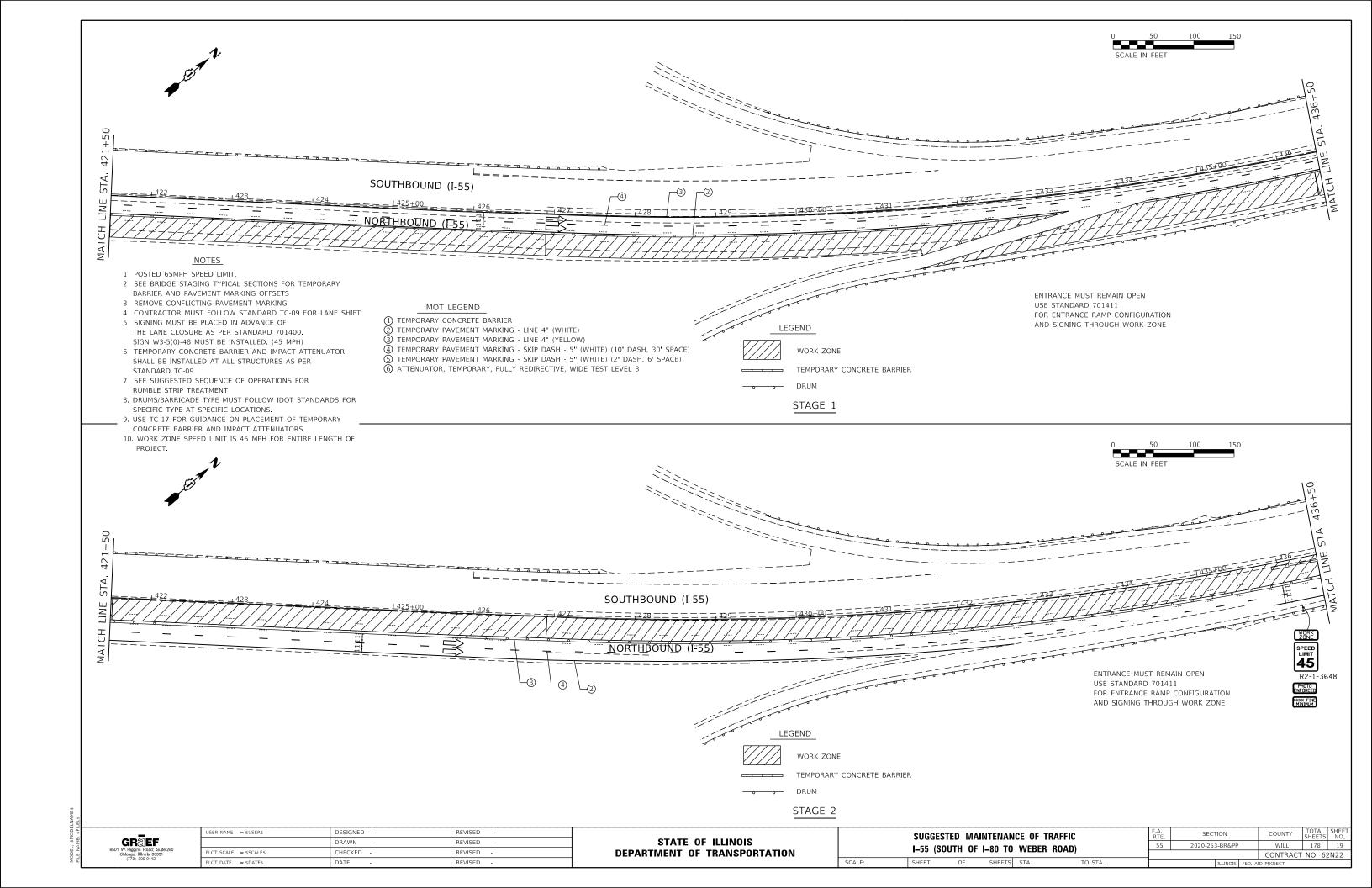
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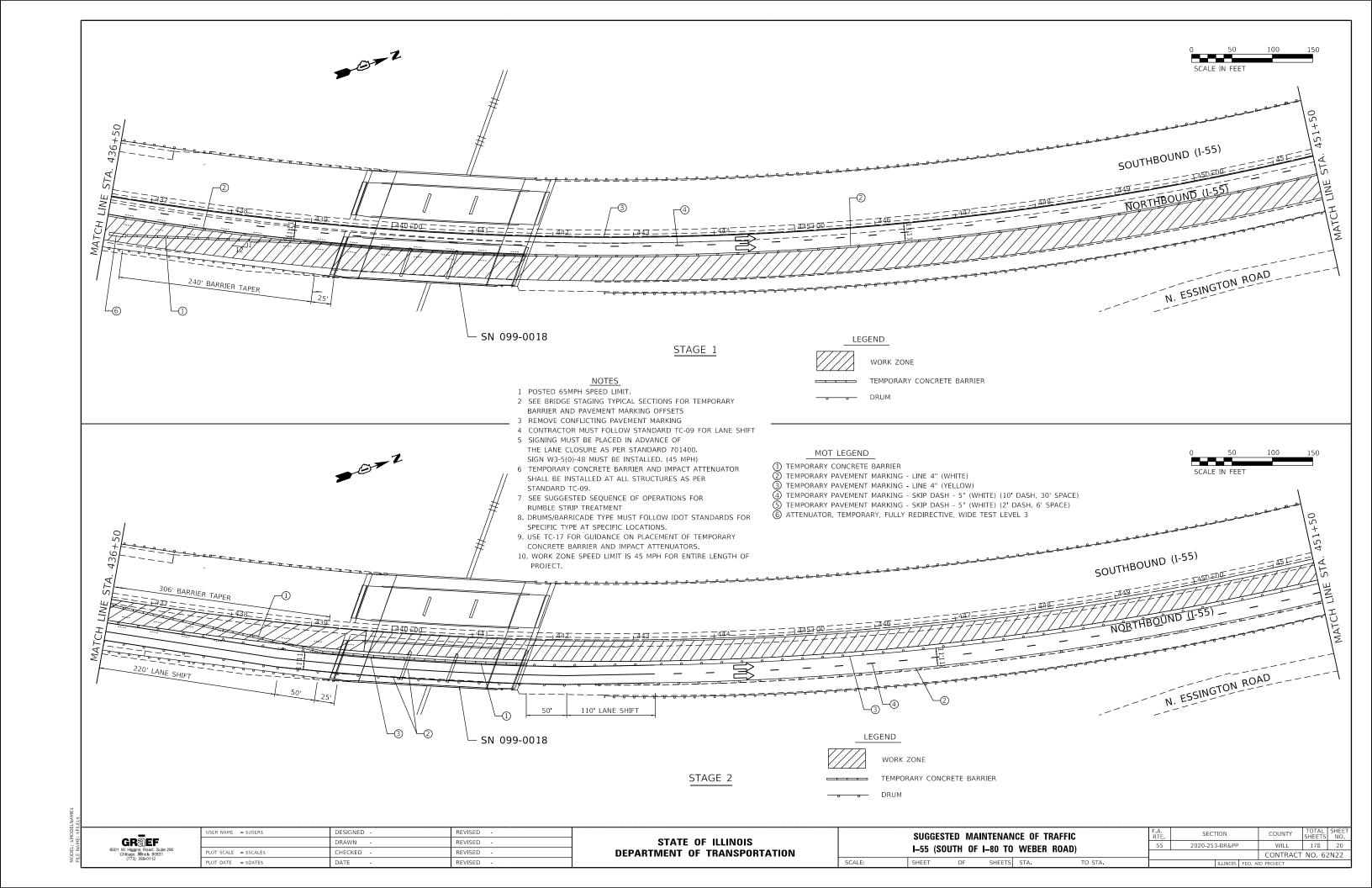
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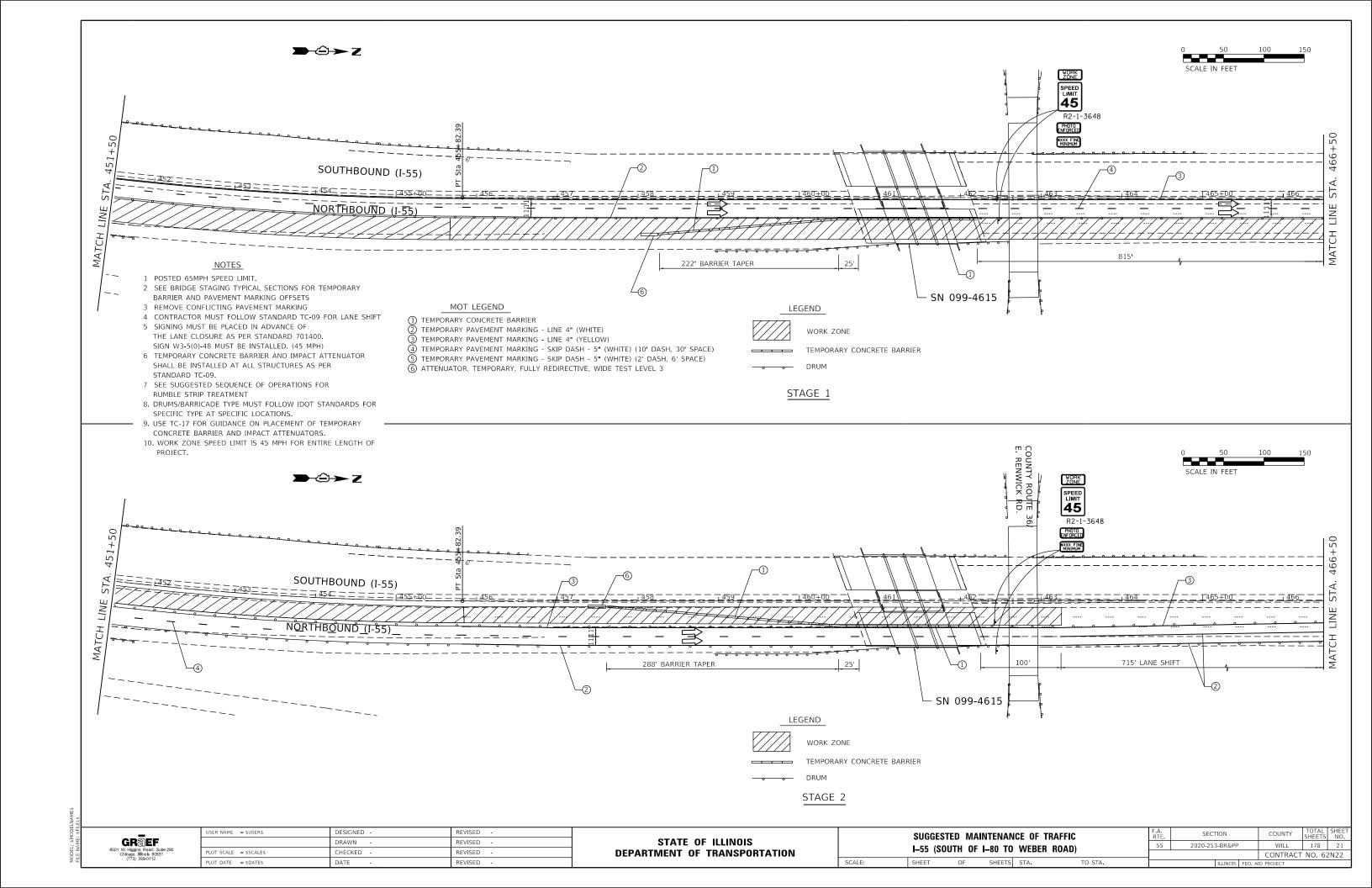
MIX TABLE				F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS		
I-55 (SOUTH OF I-80 TO WEBER ROAD)				ROAD)	55	2020-253-BR&PP	WILL	178	16
-33	(300111 0	1 1-00 10	WEDEN	ПОАБ			CONTRACT NO. 62N22		
SHEET	OF	SHEETS	STA.	TO STA.	ILLINOIS FED AID PROJECT				

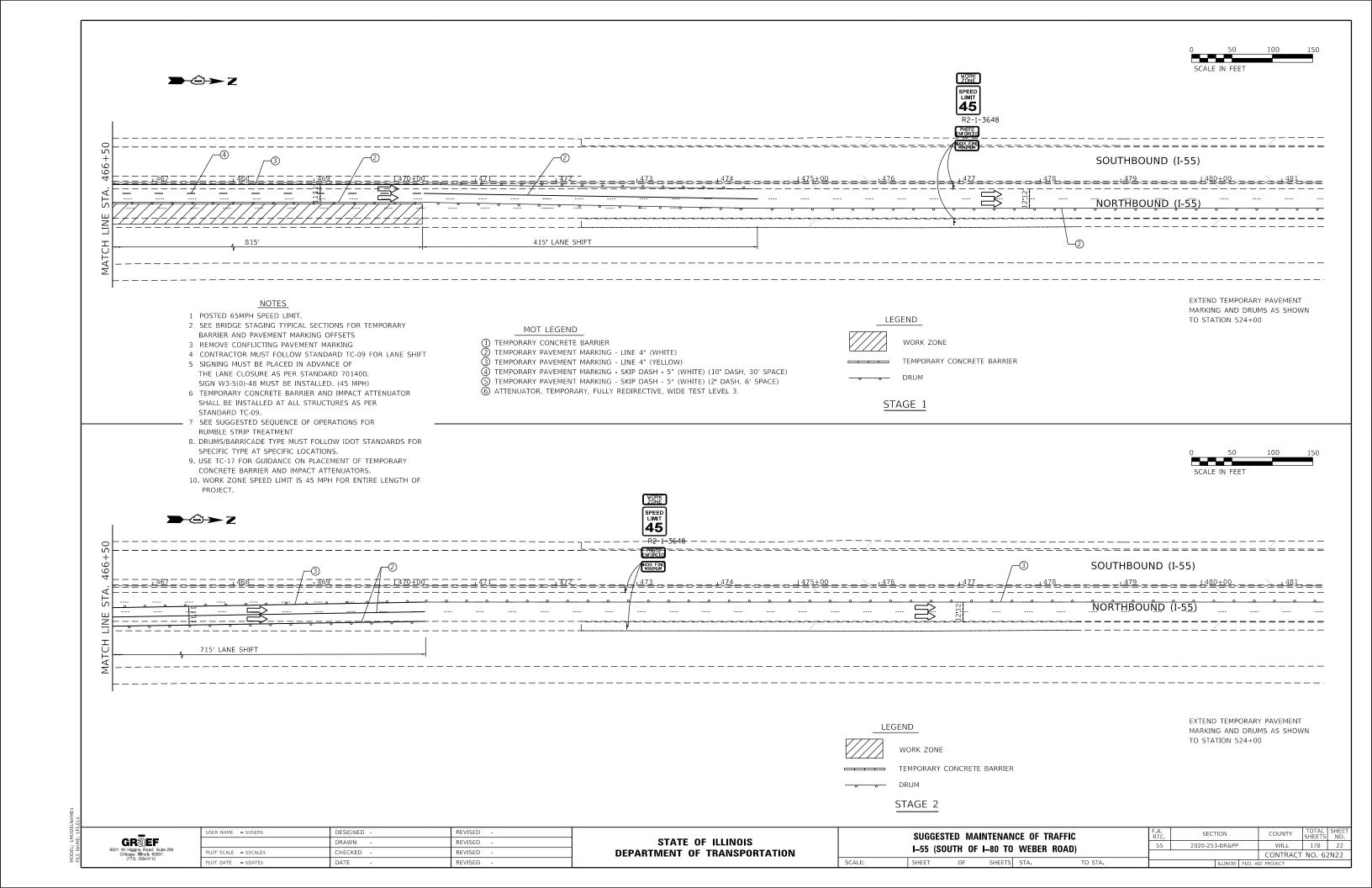


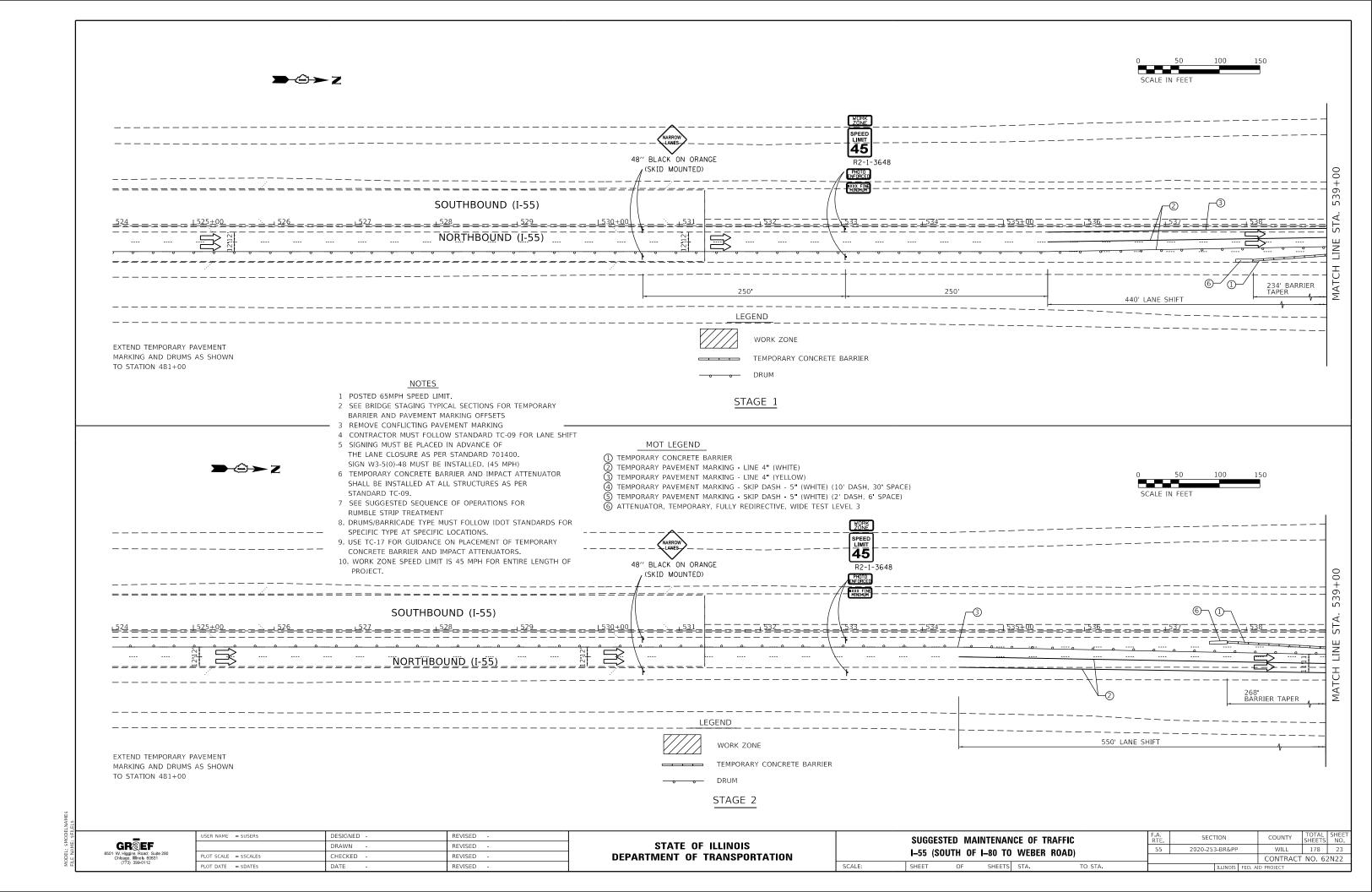


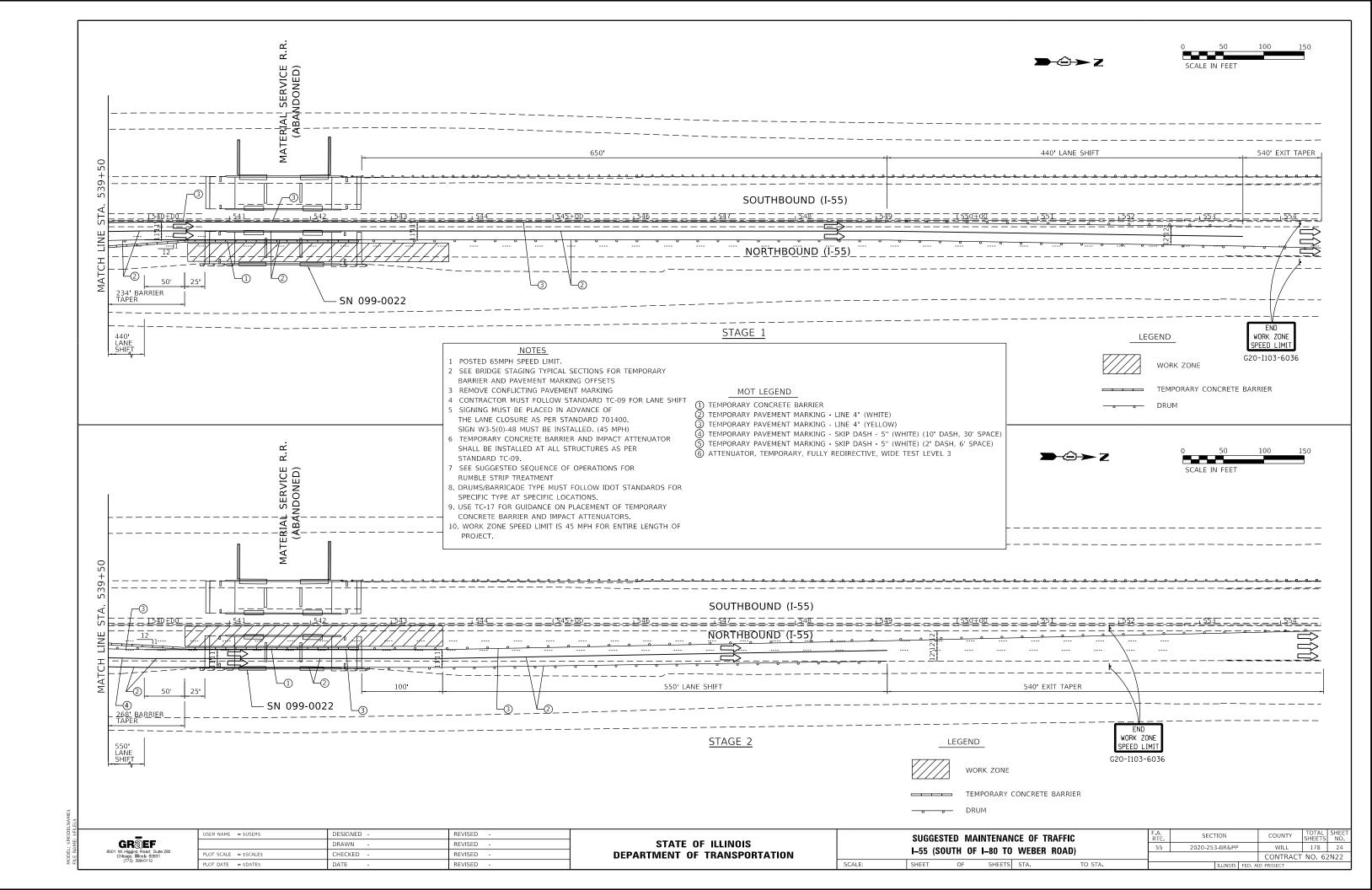


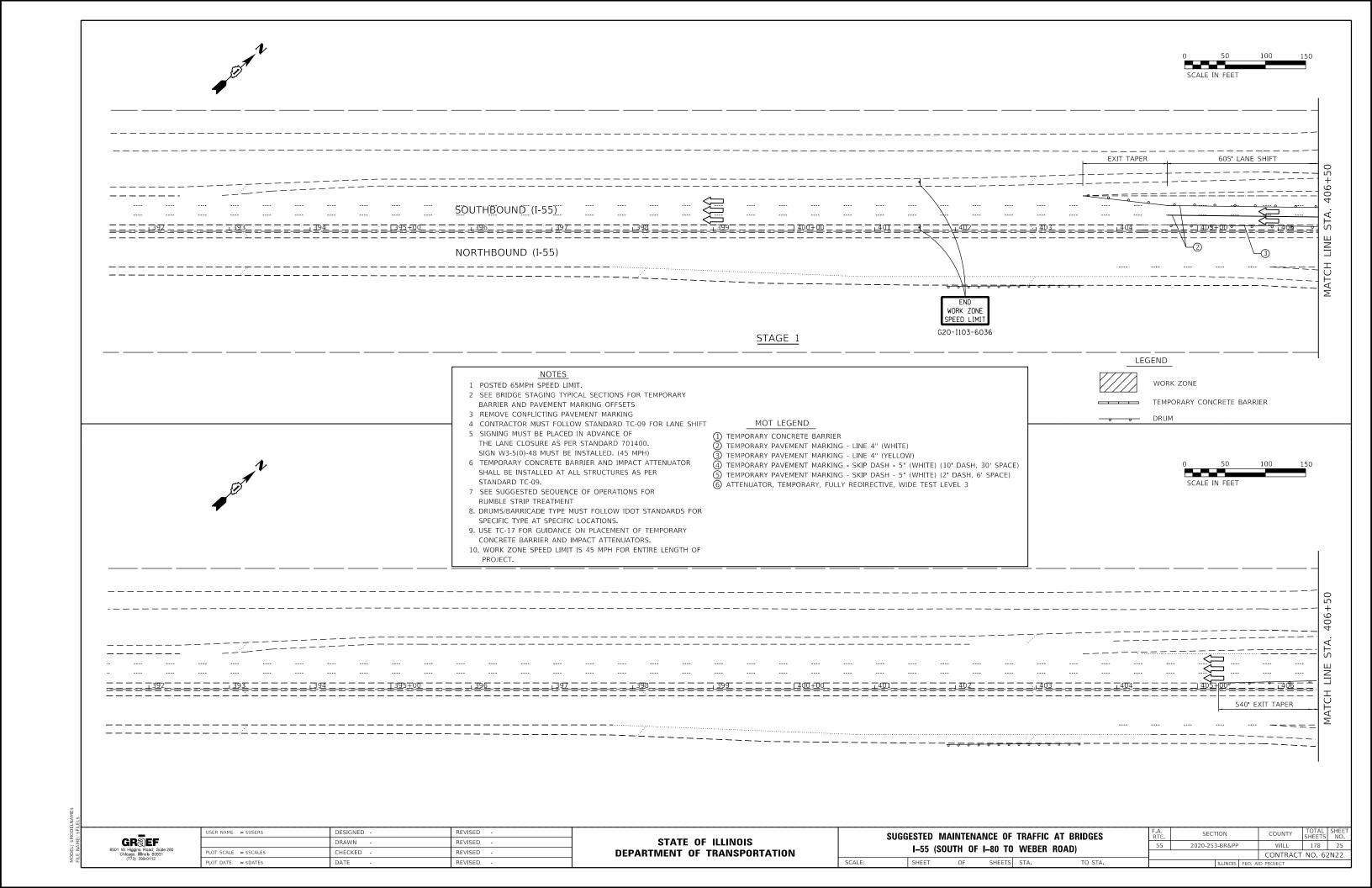


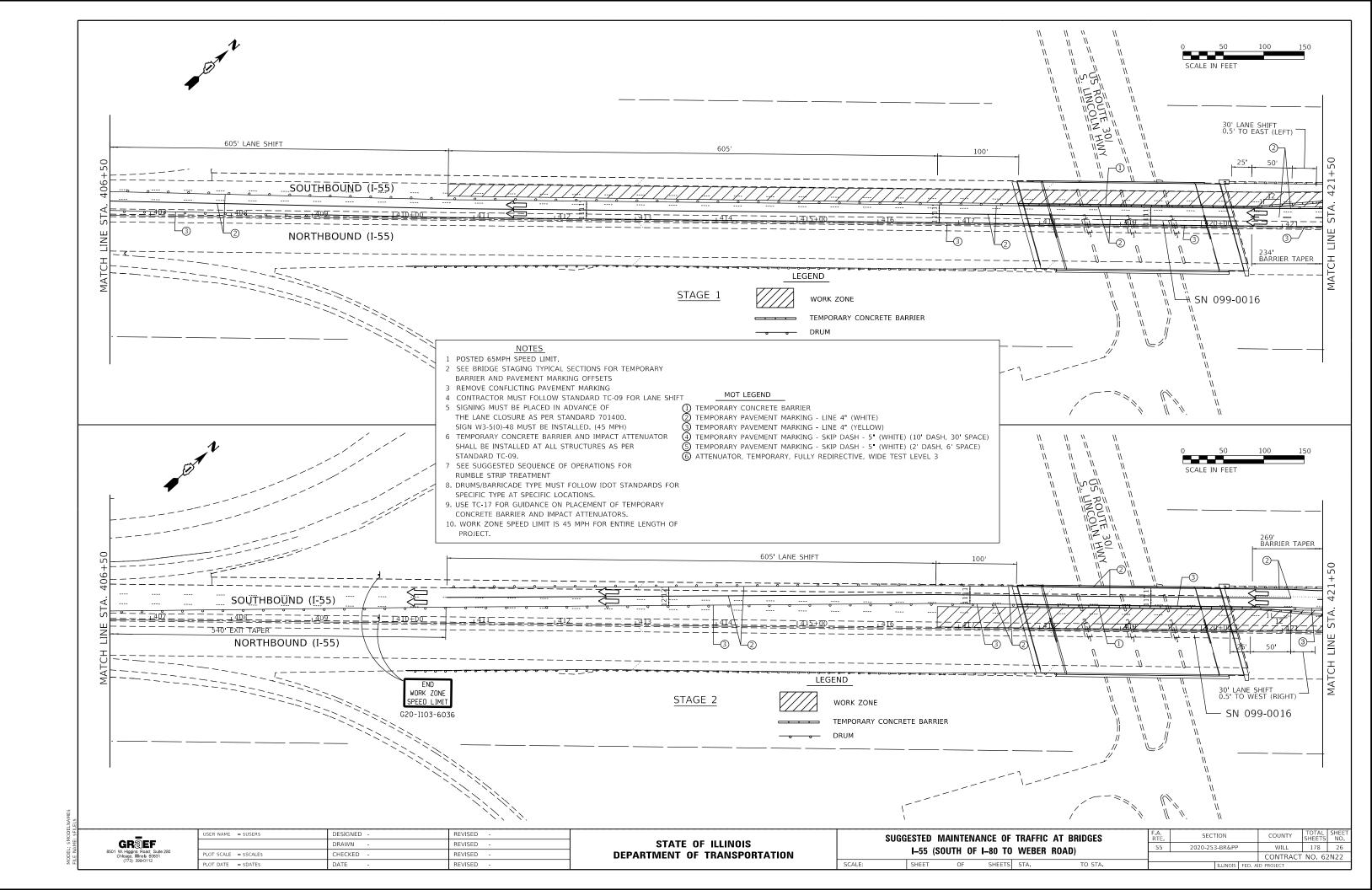


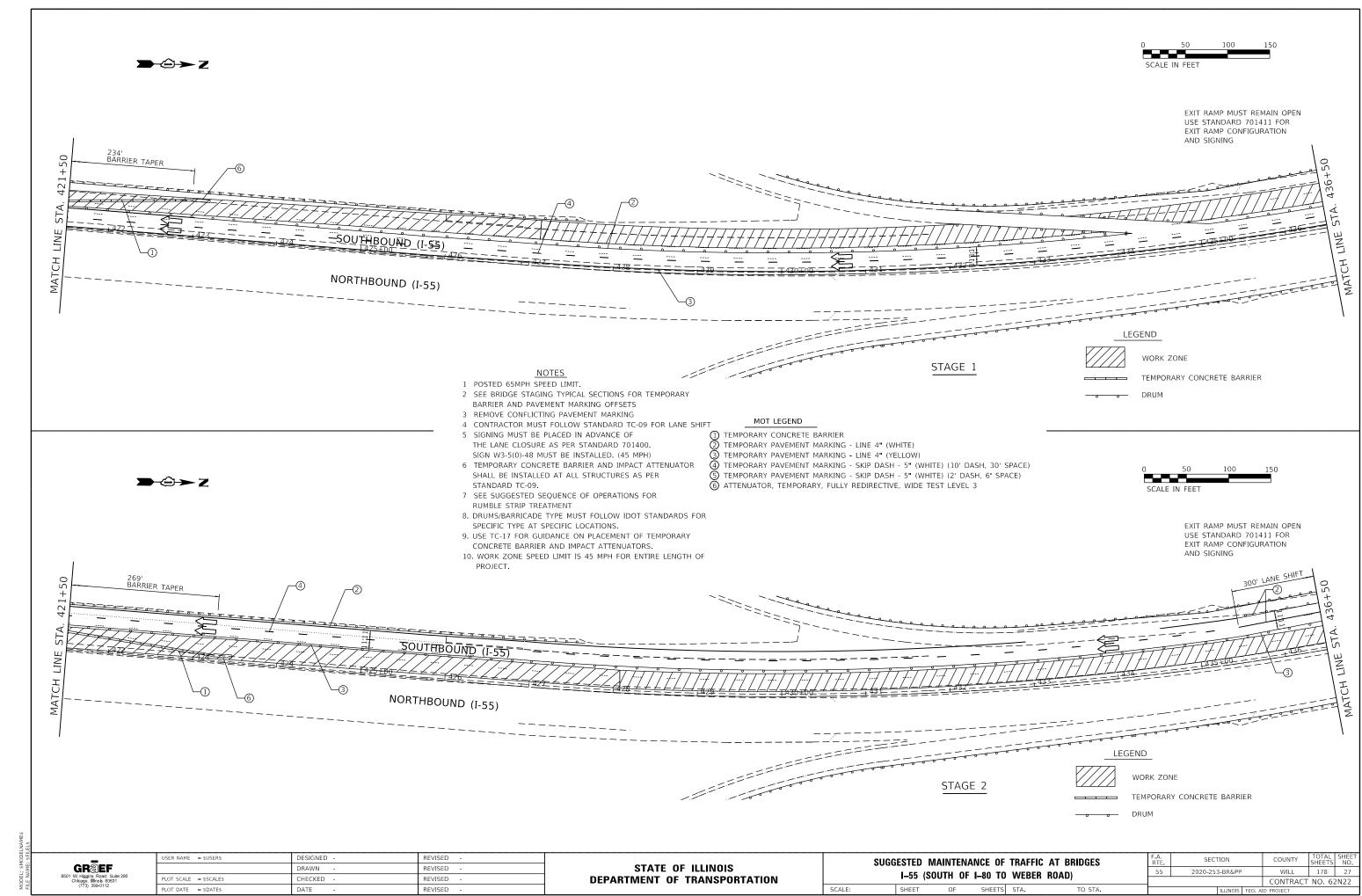


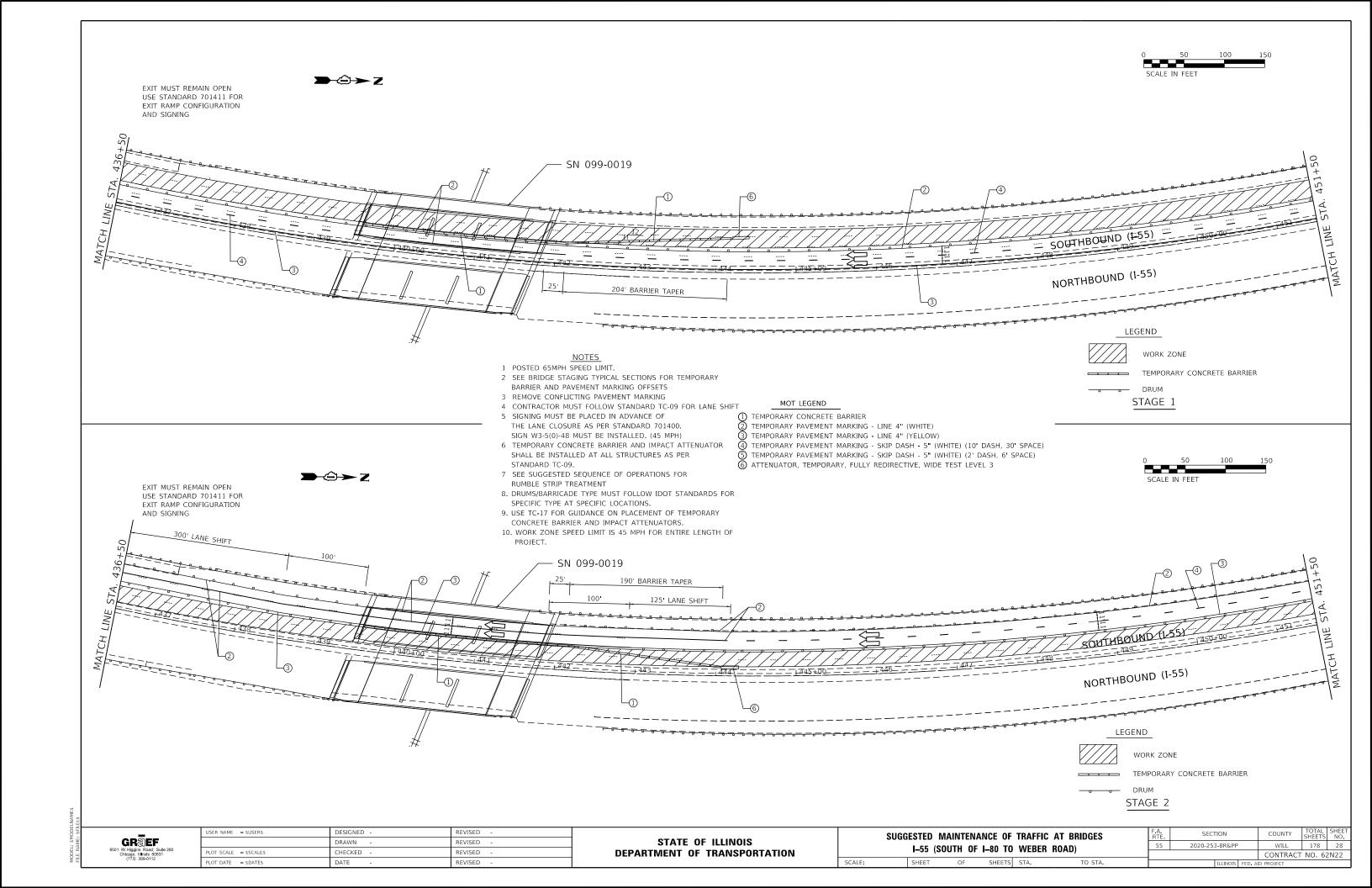


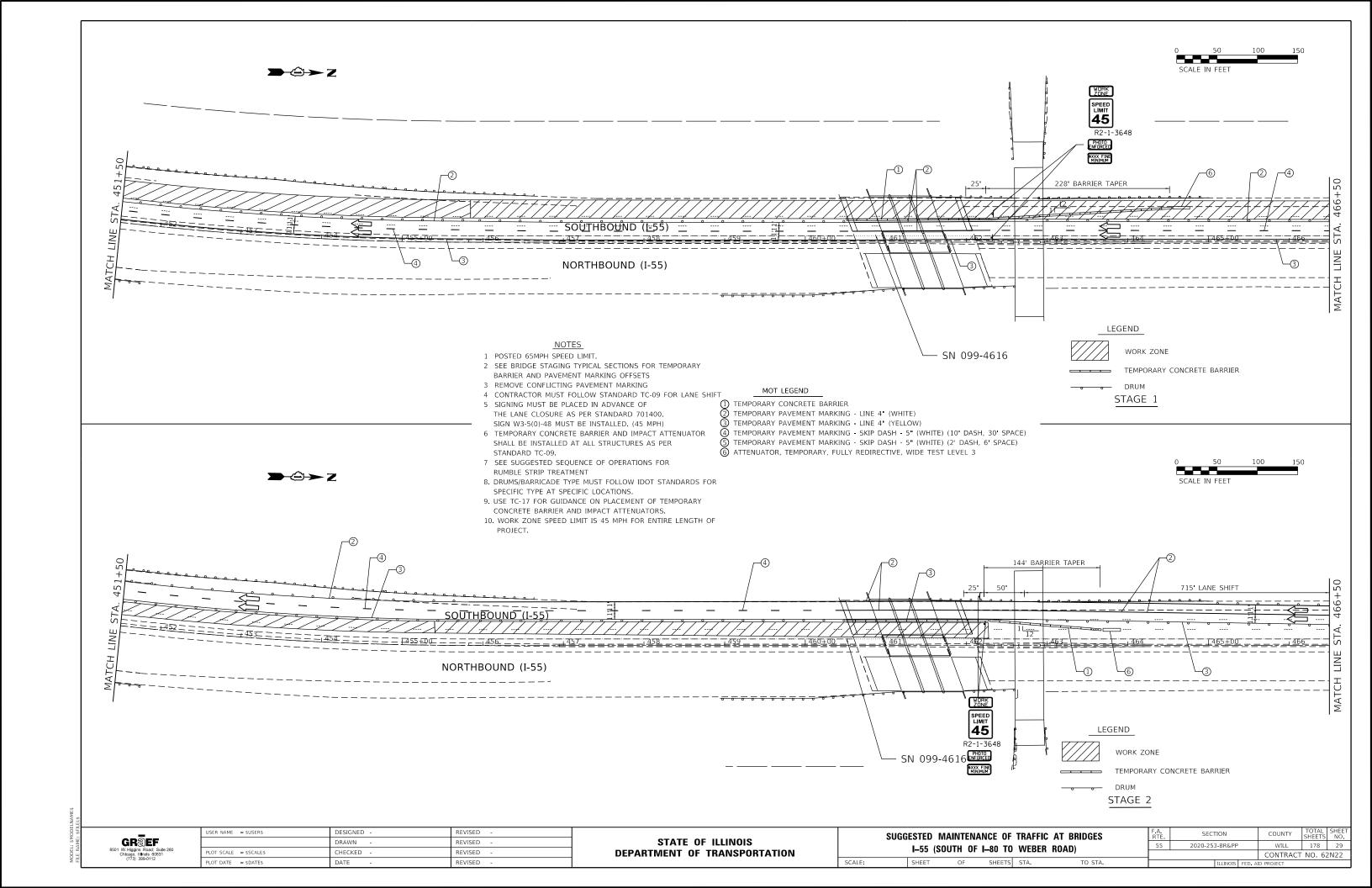


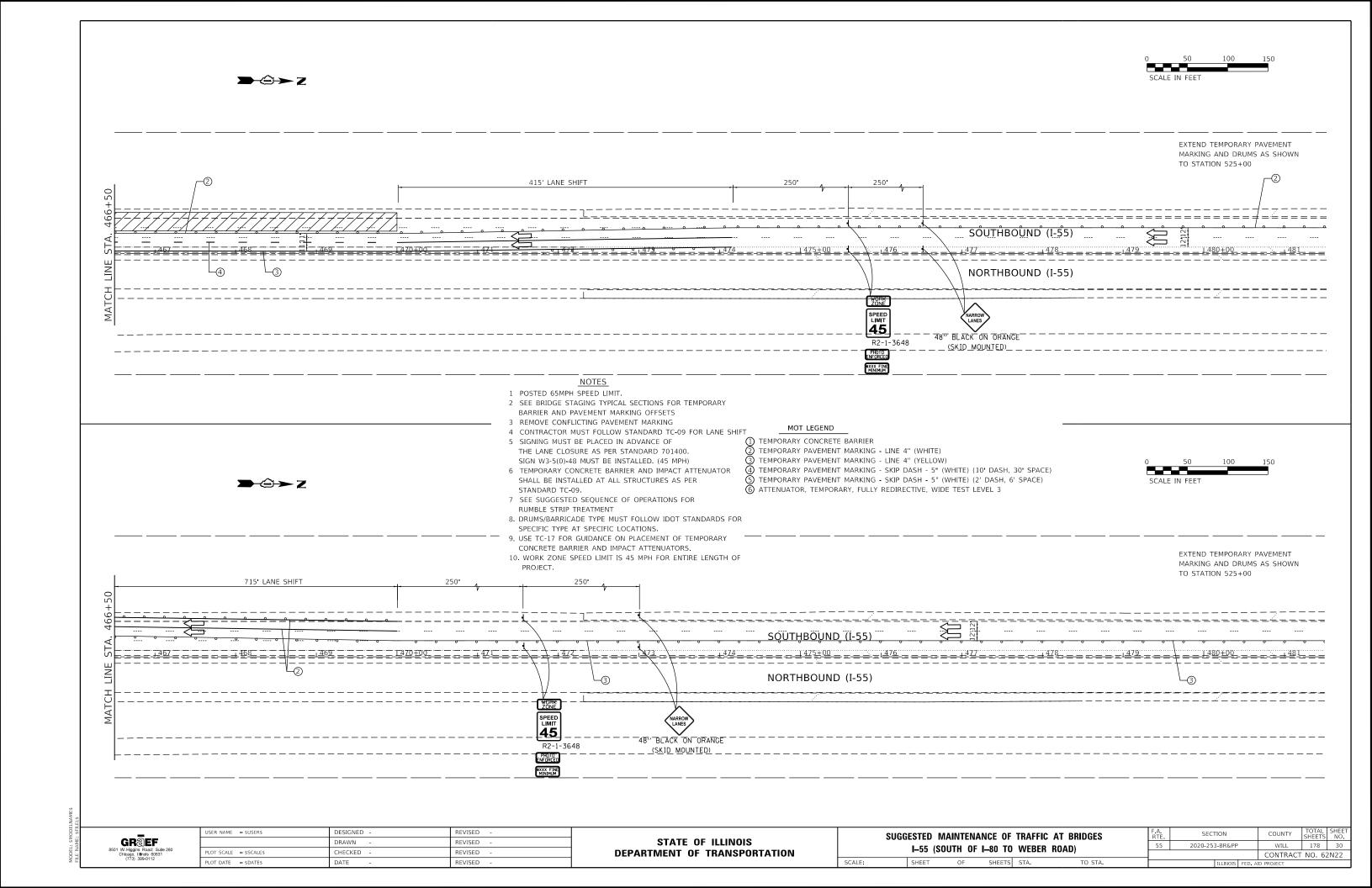


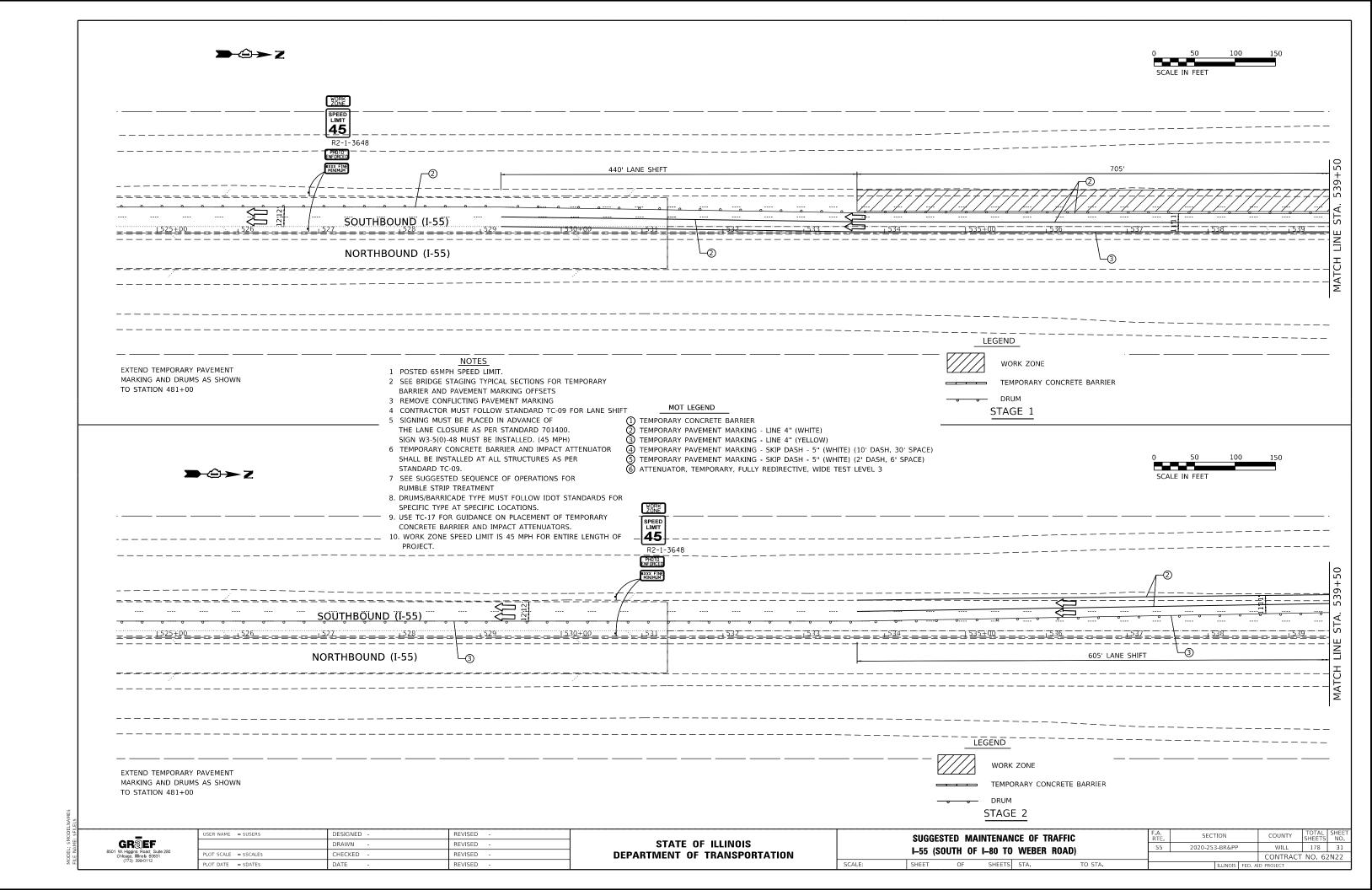


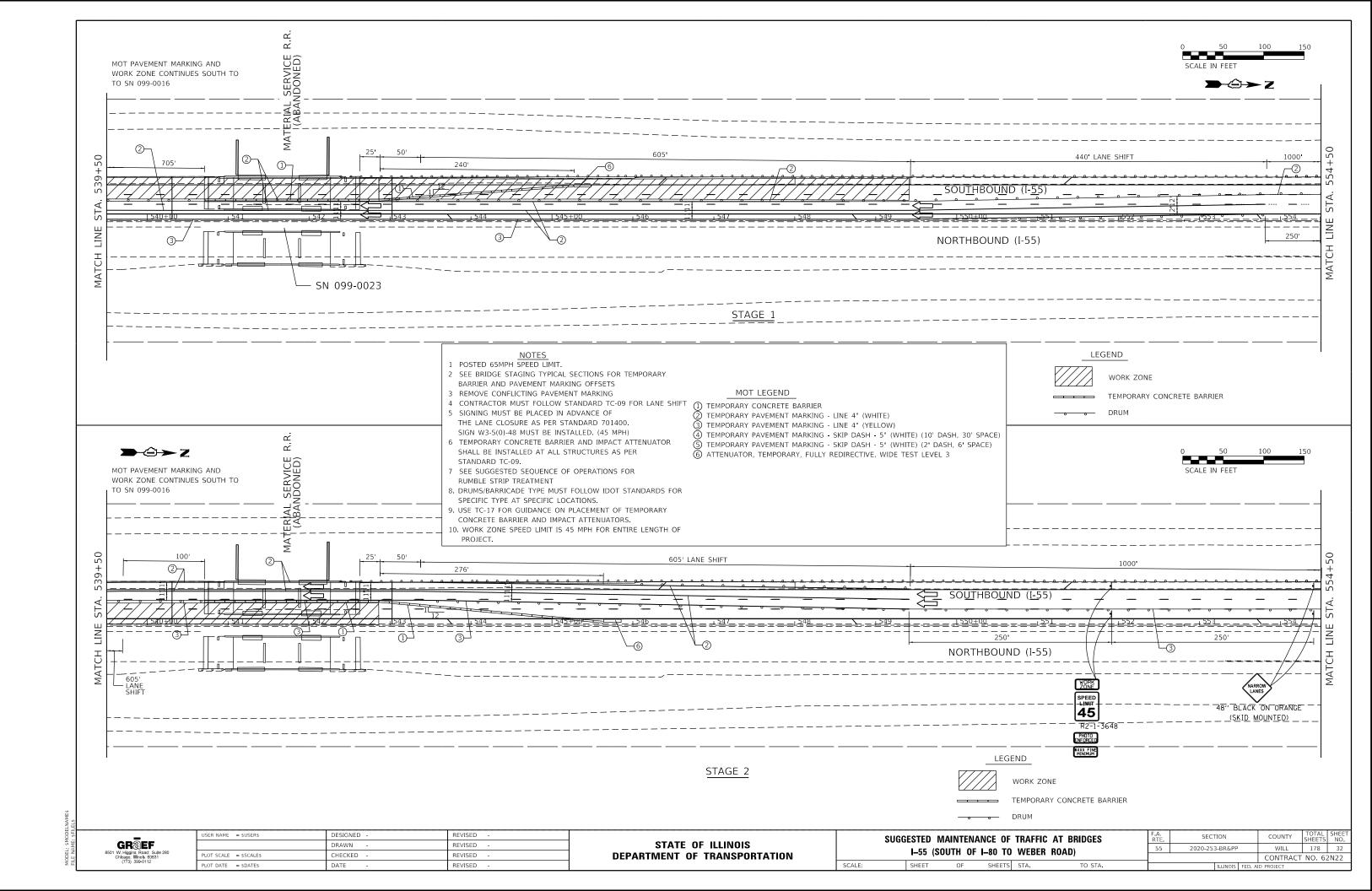


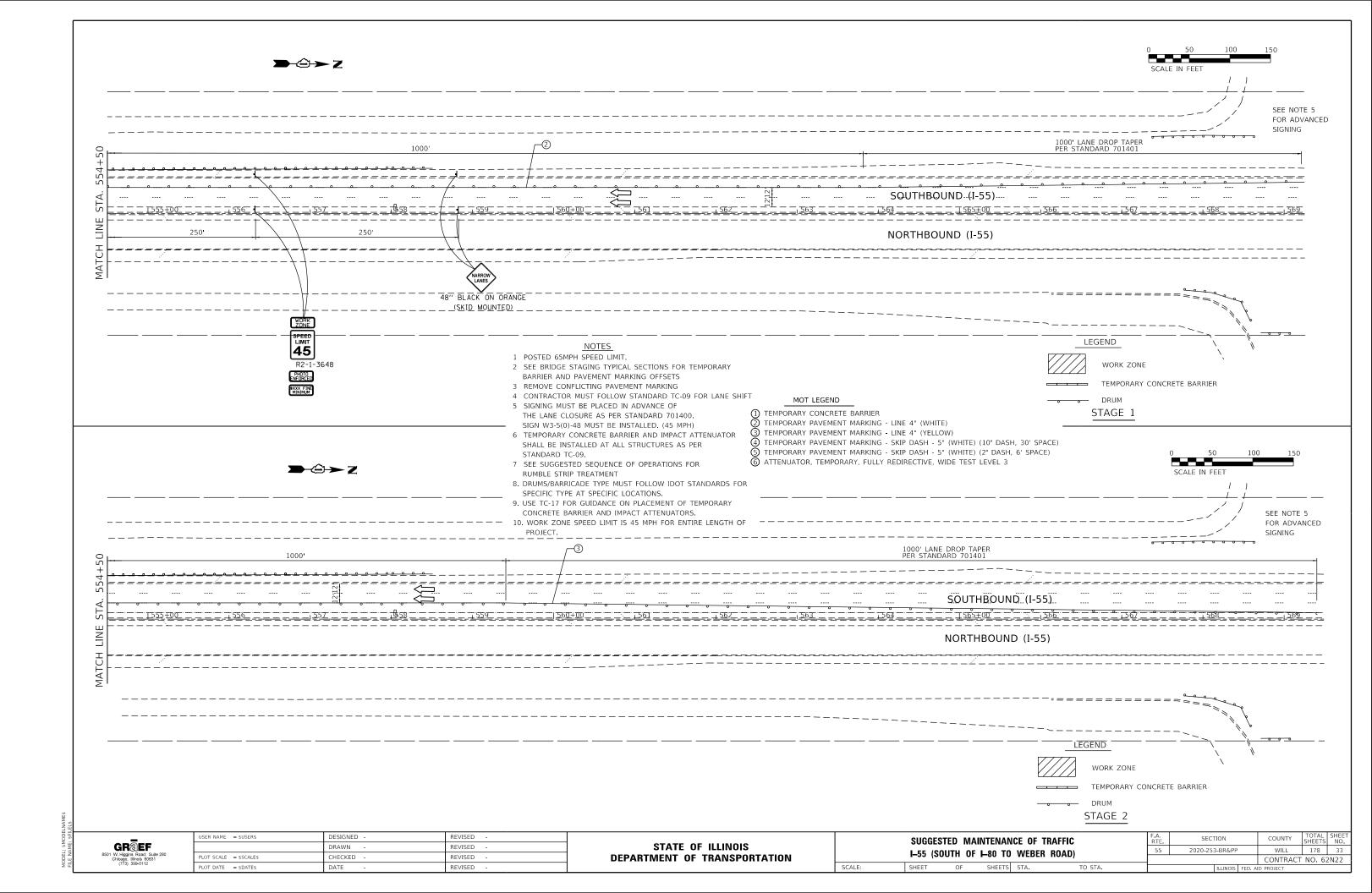


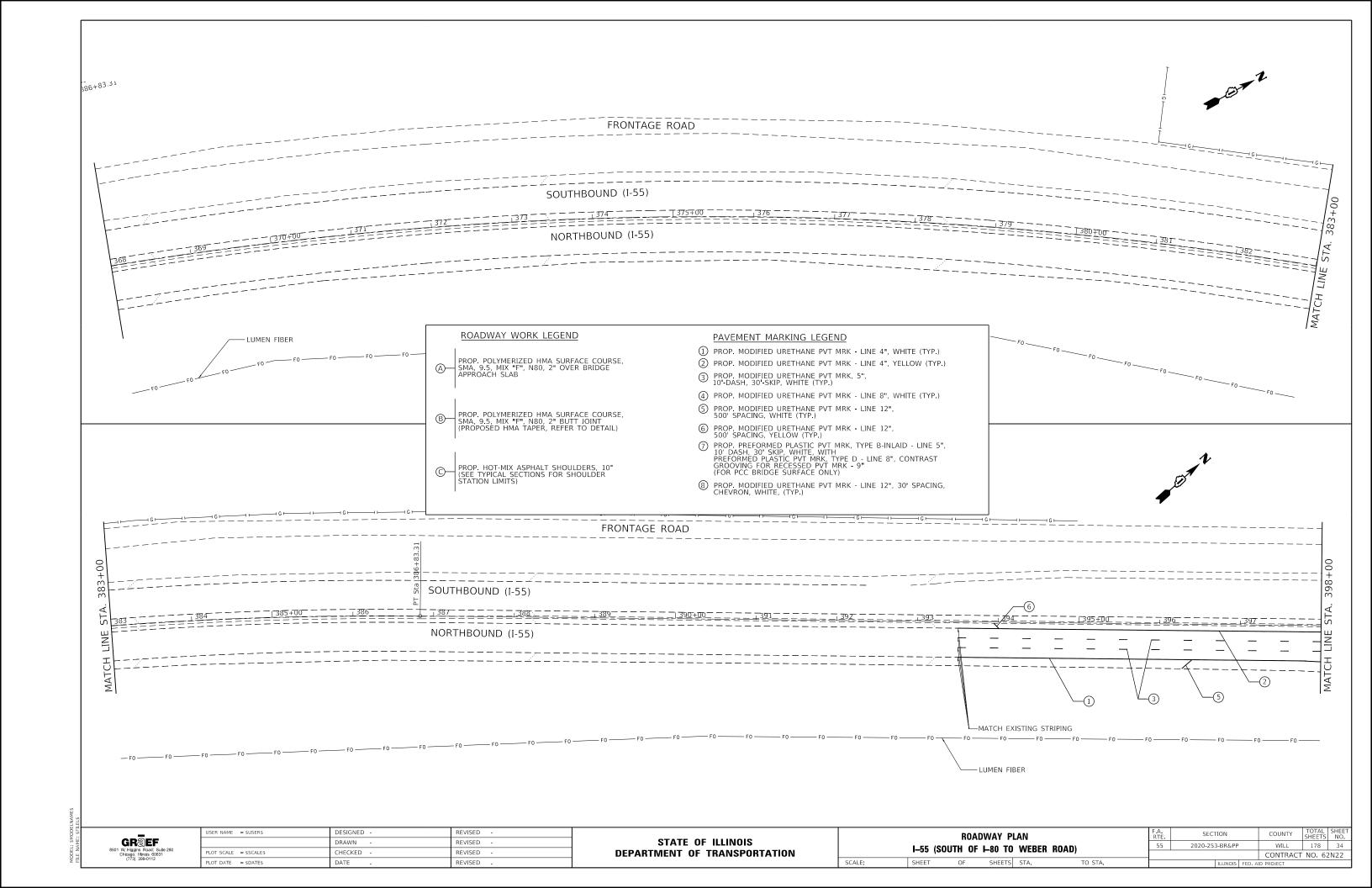


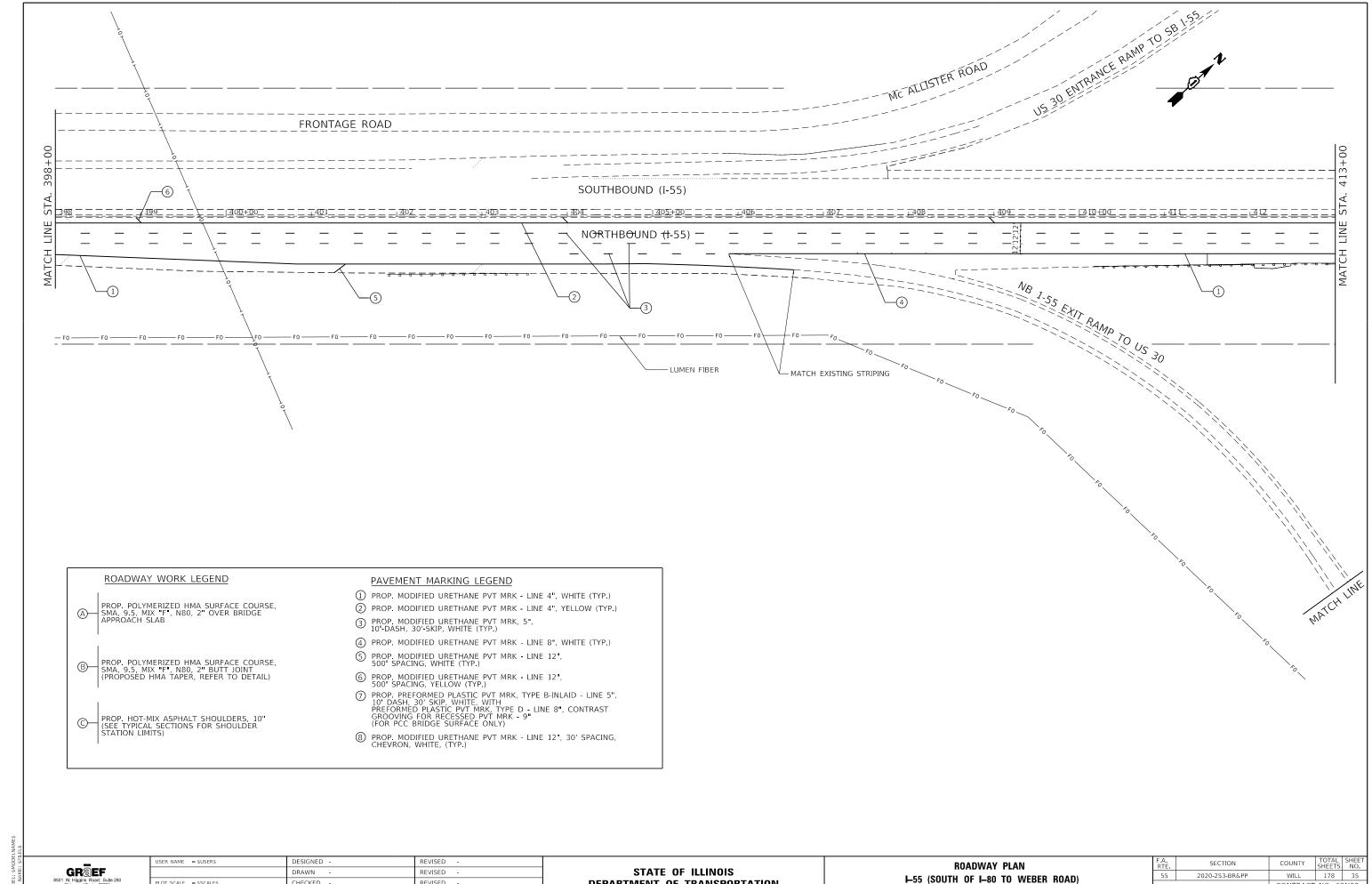










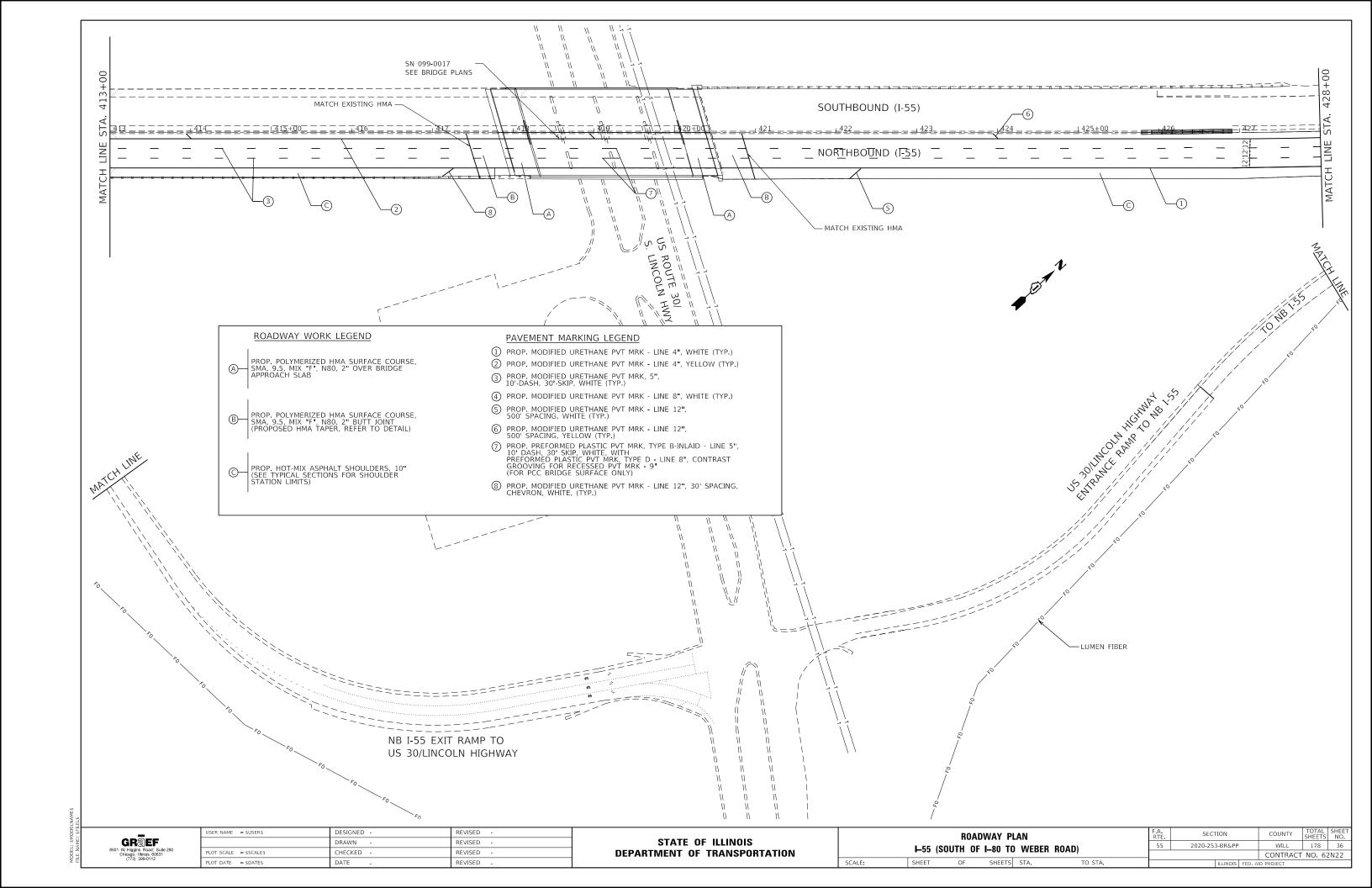


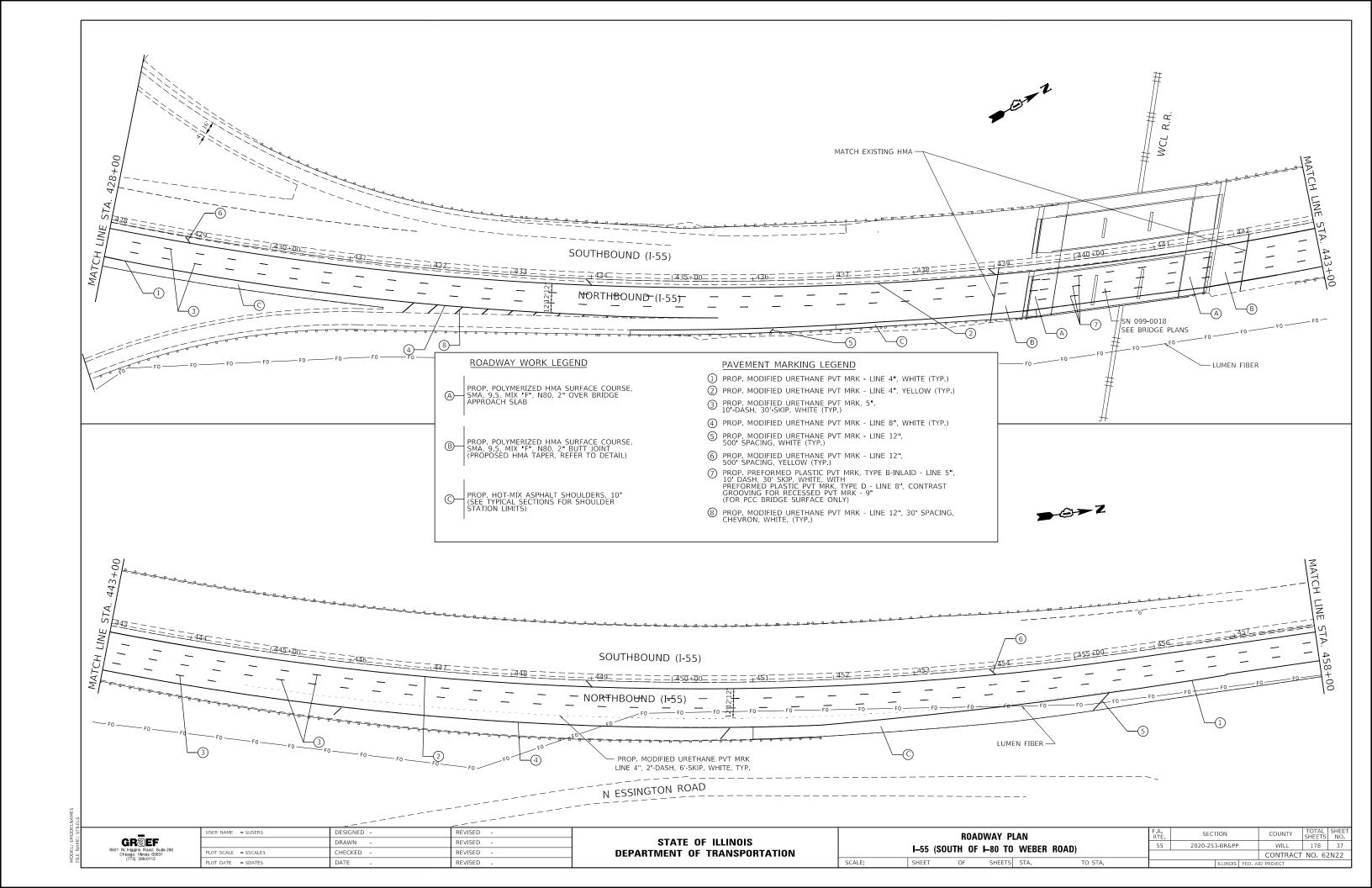
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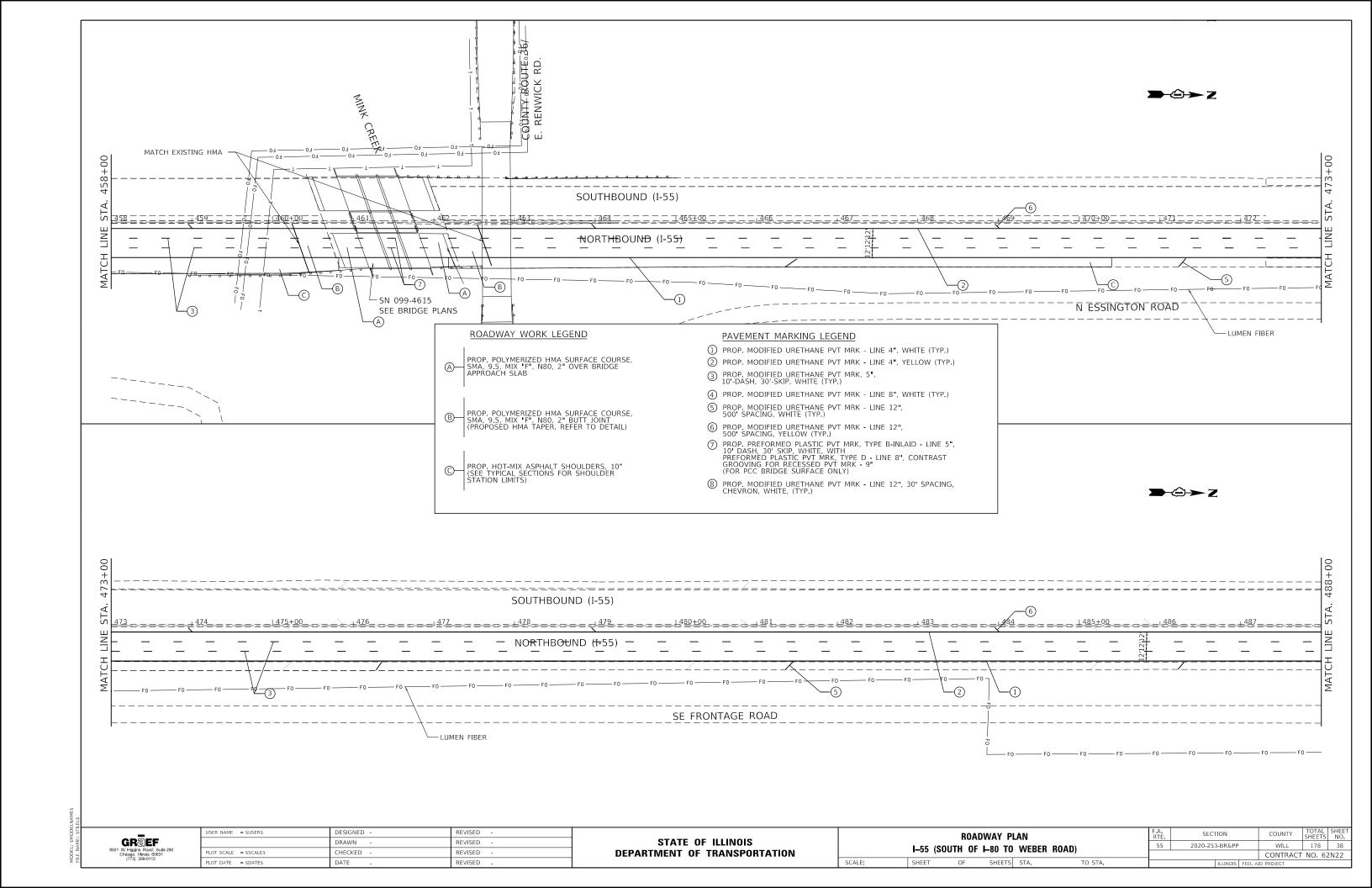
**DEPARTMENT OF TRANSPORTATION** 

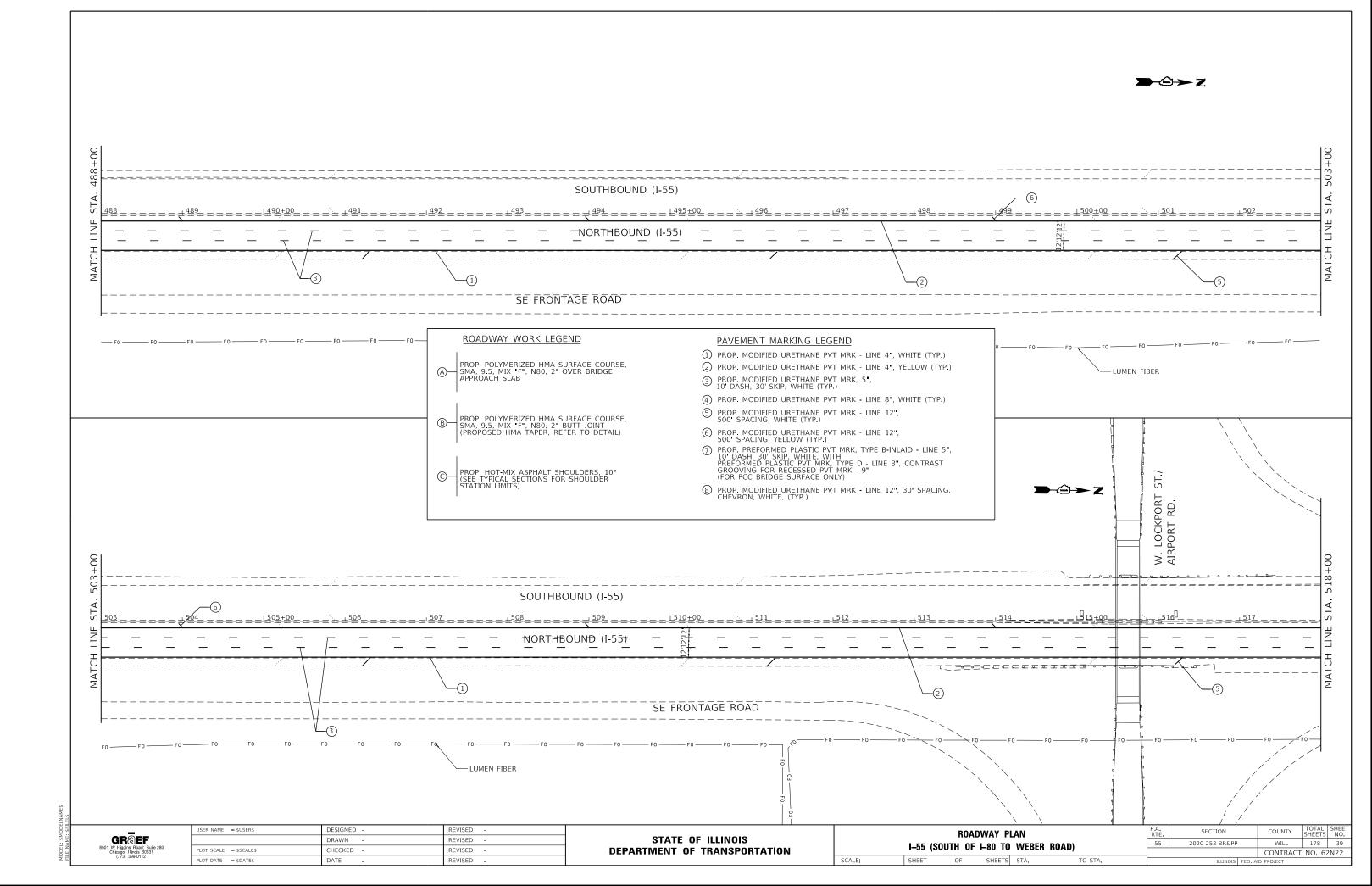
I-55 (SOUTH OF I-80 TO WEBER ROAD)

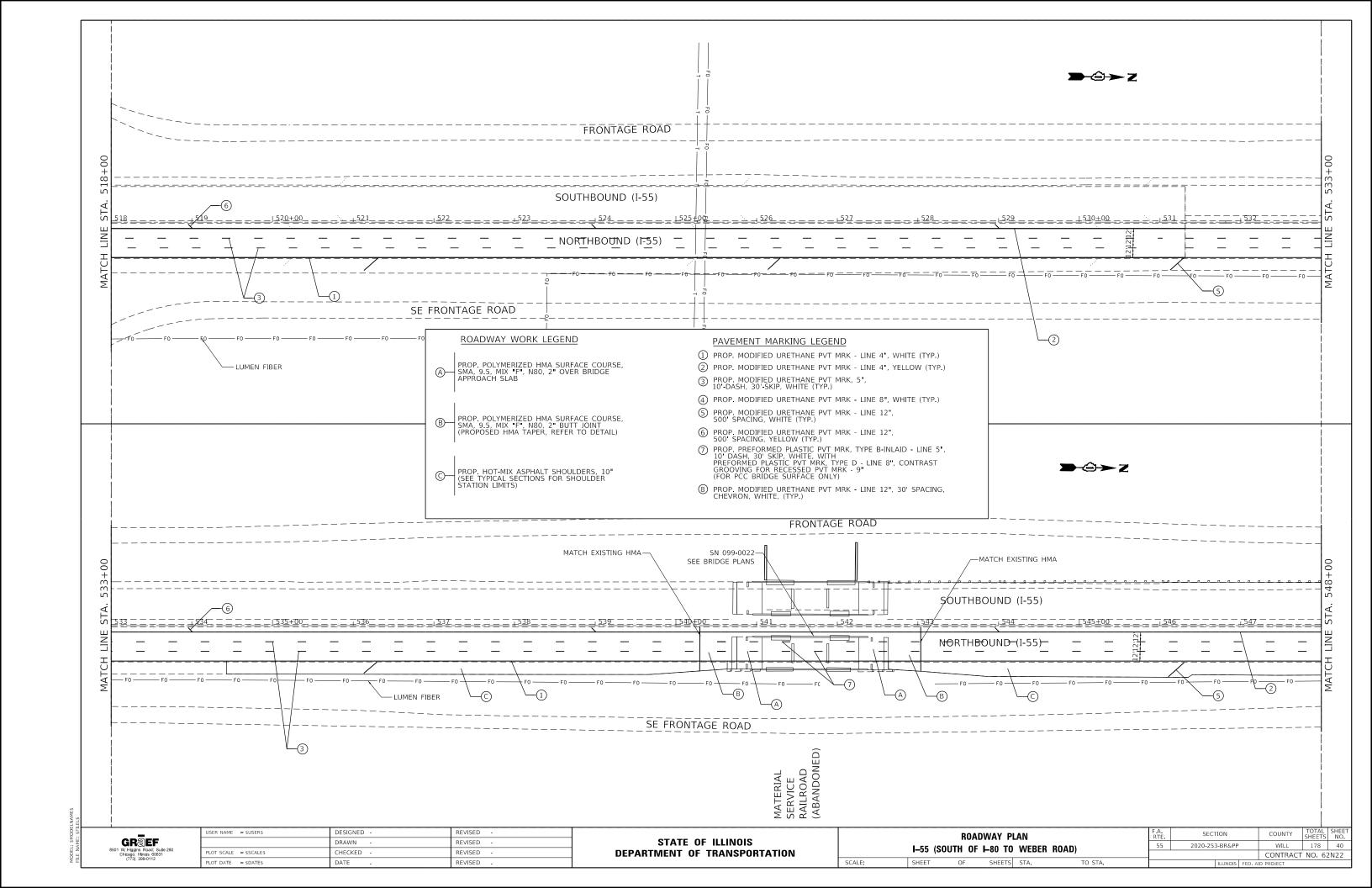
CONTRACT NO. 62N22

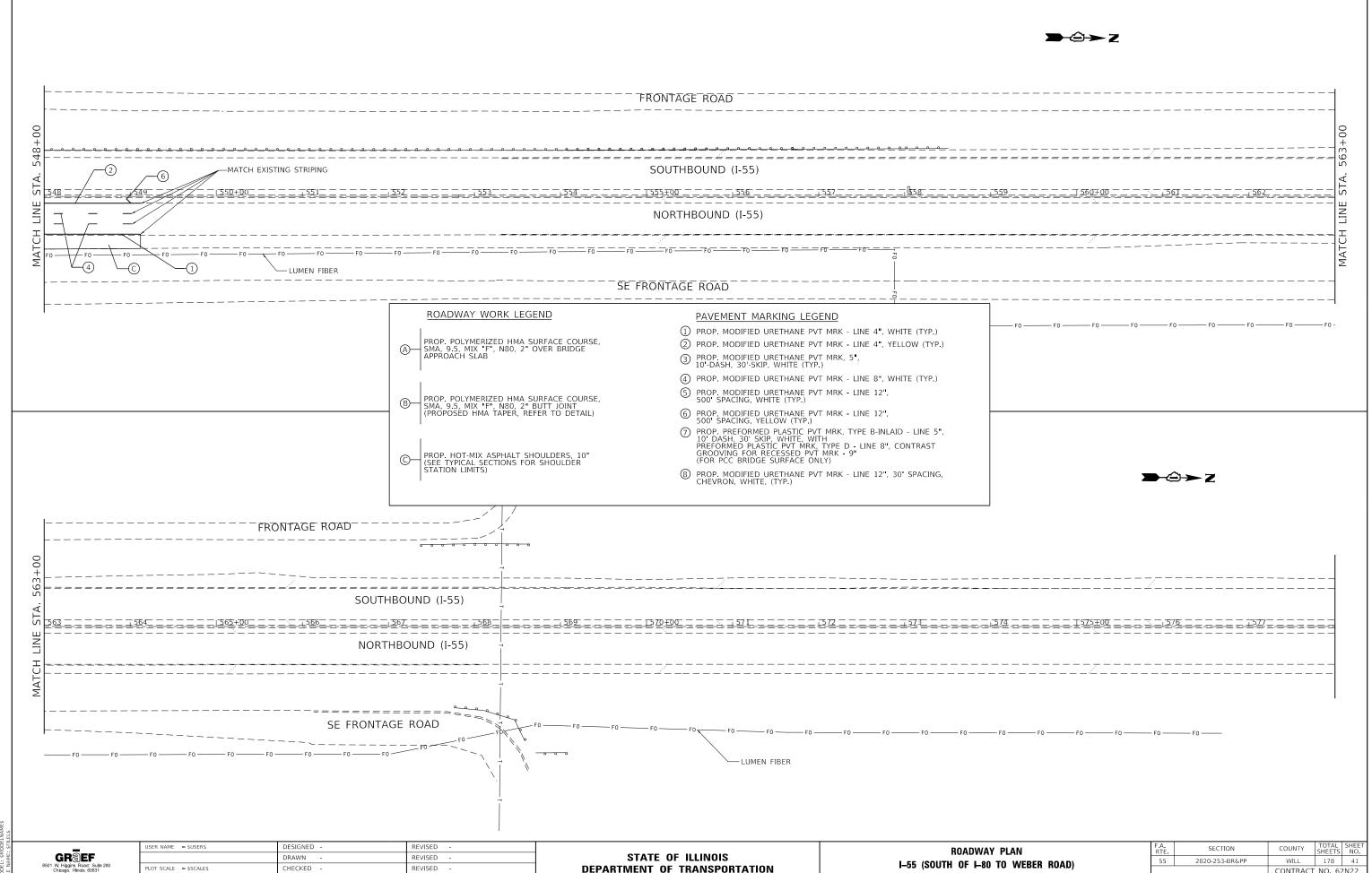








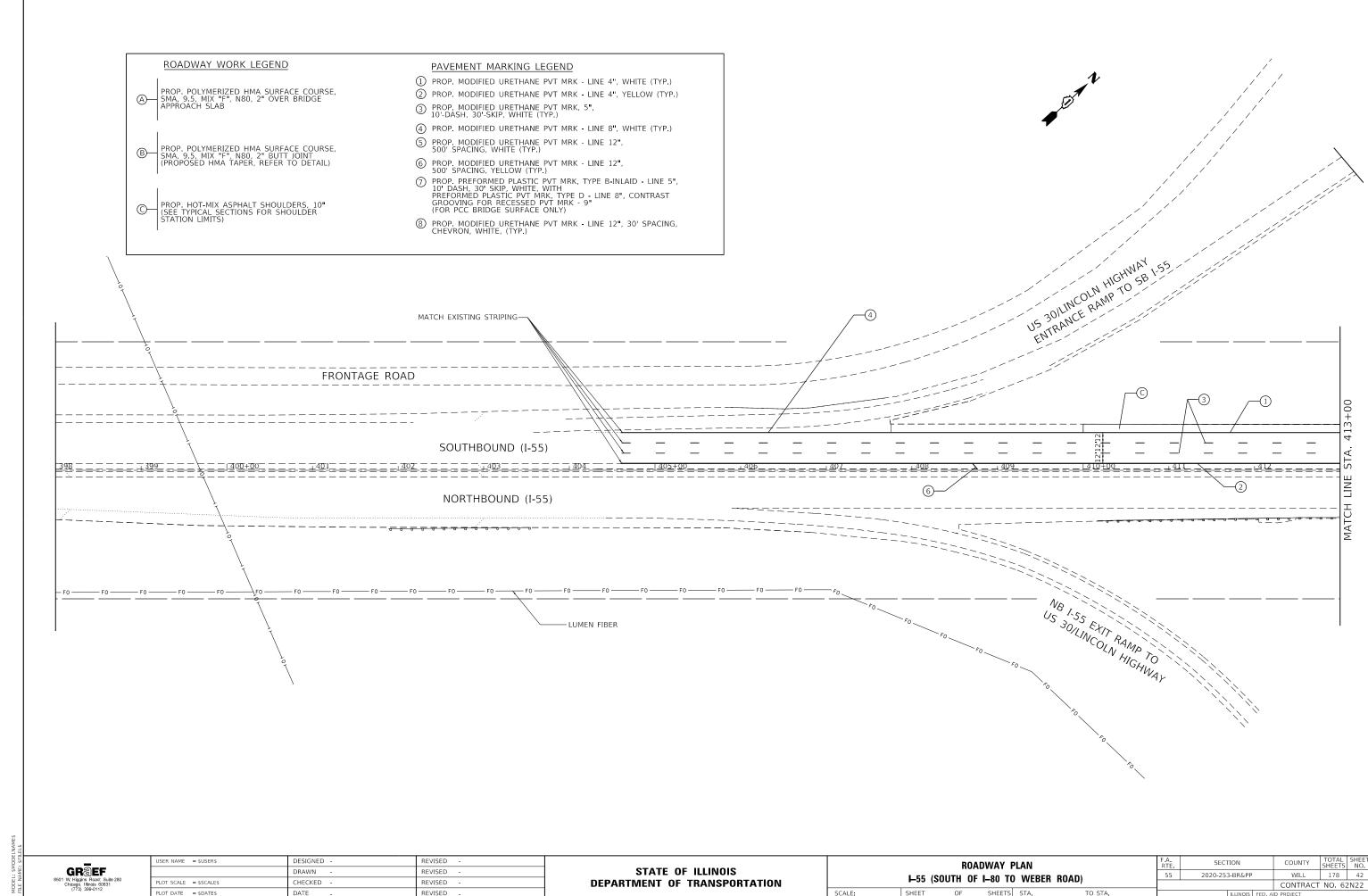




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**DEPARTMENT OF TRANSPORTATION** 

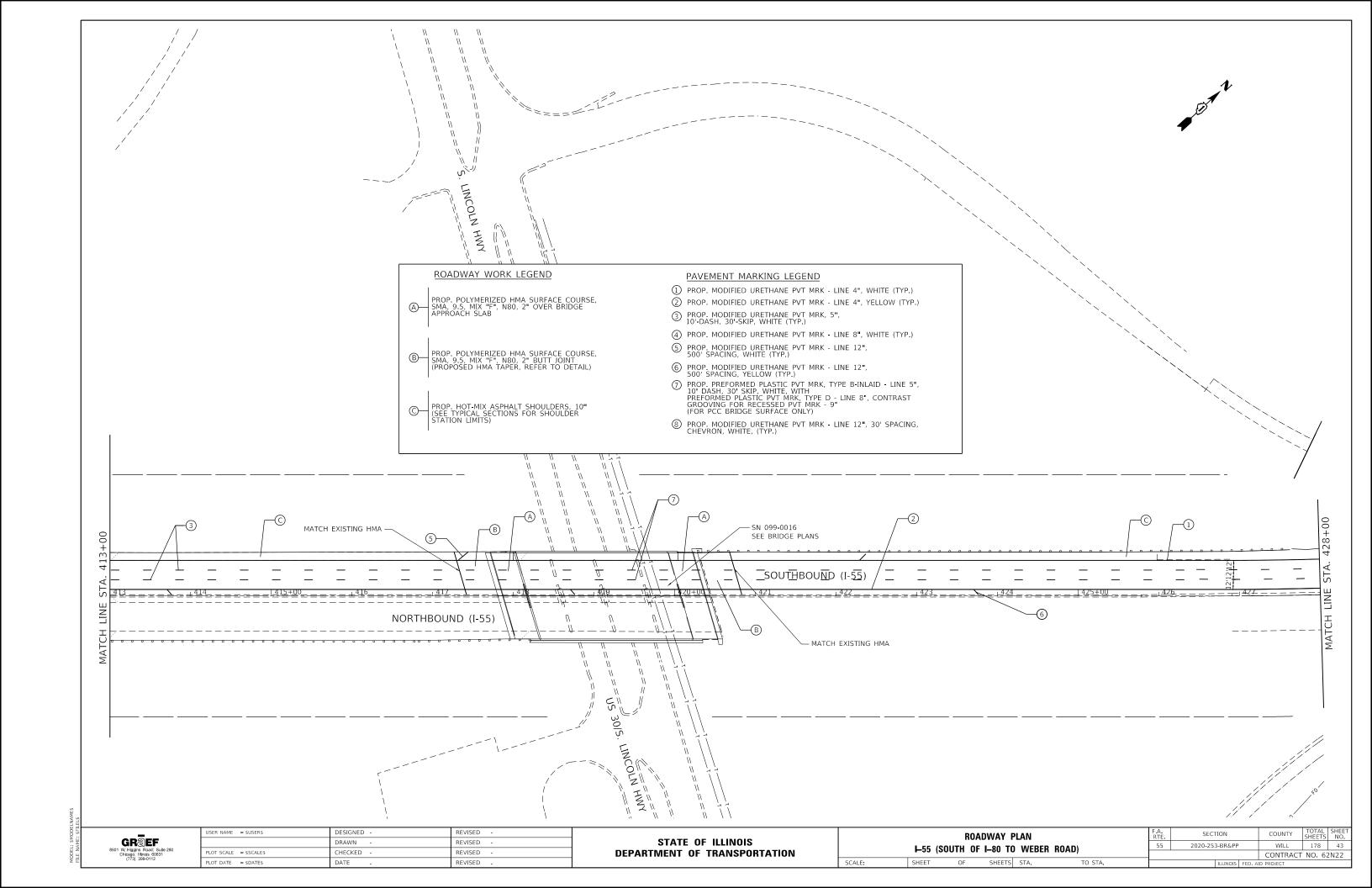
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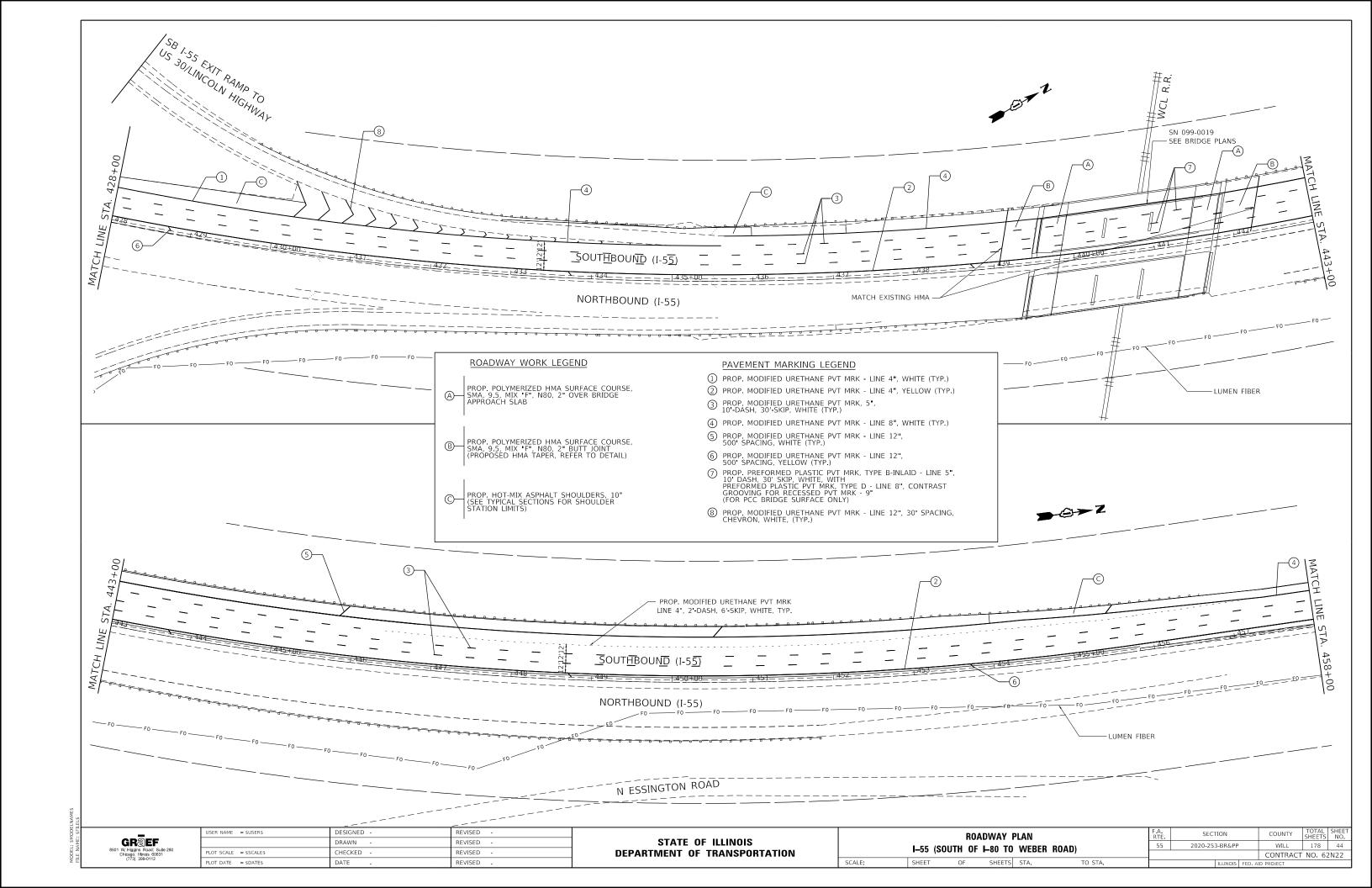


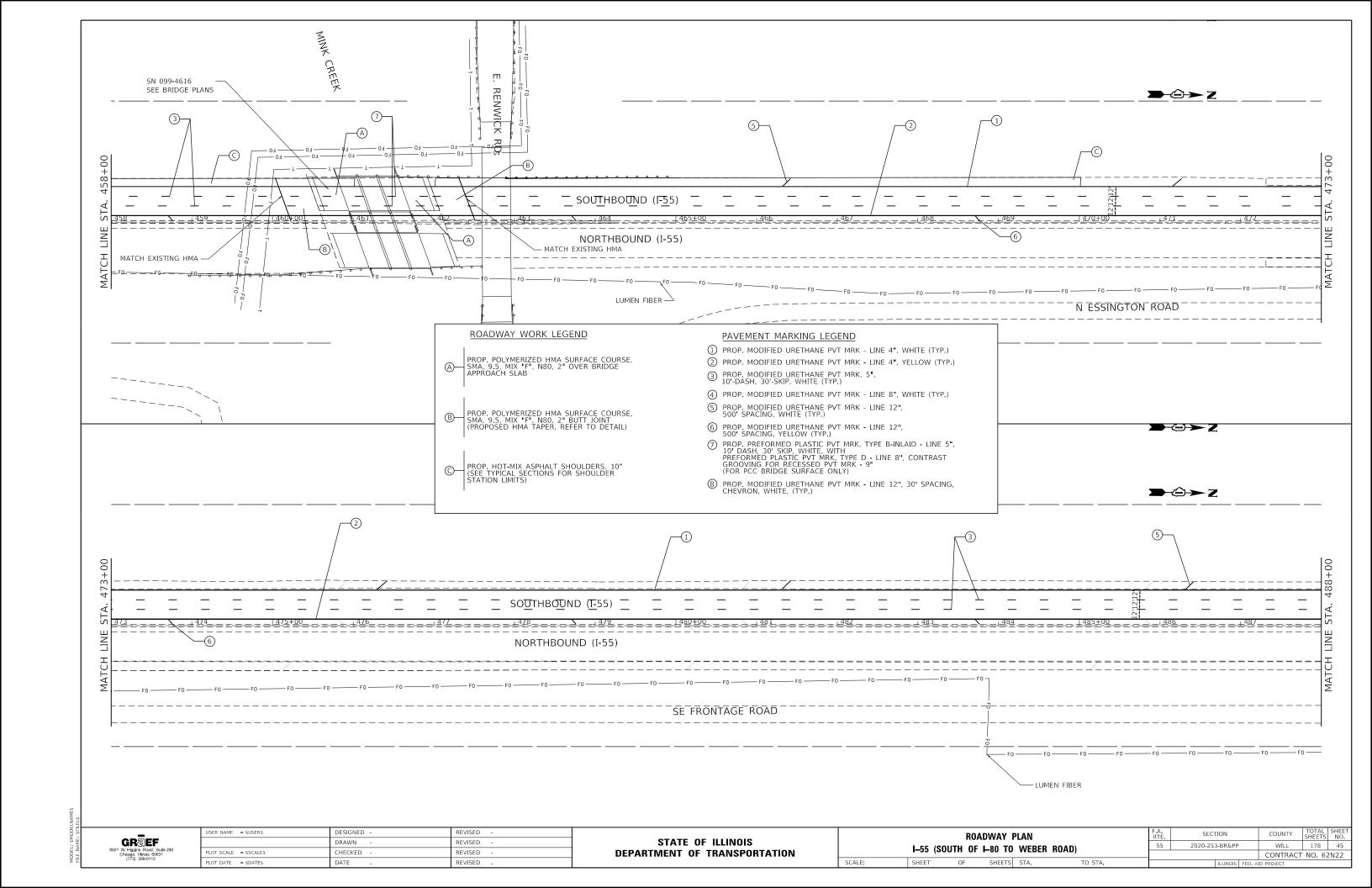
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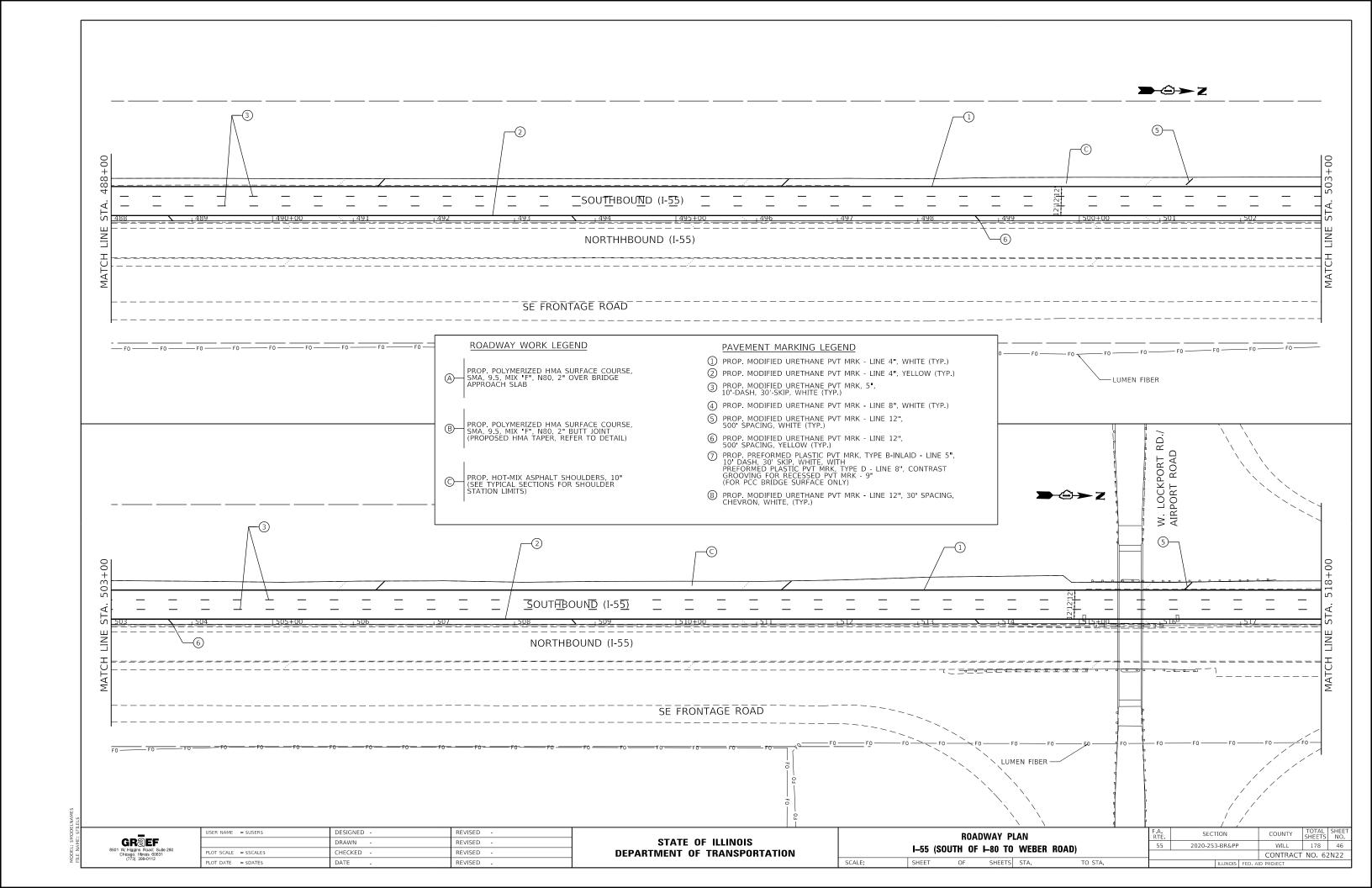
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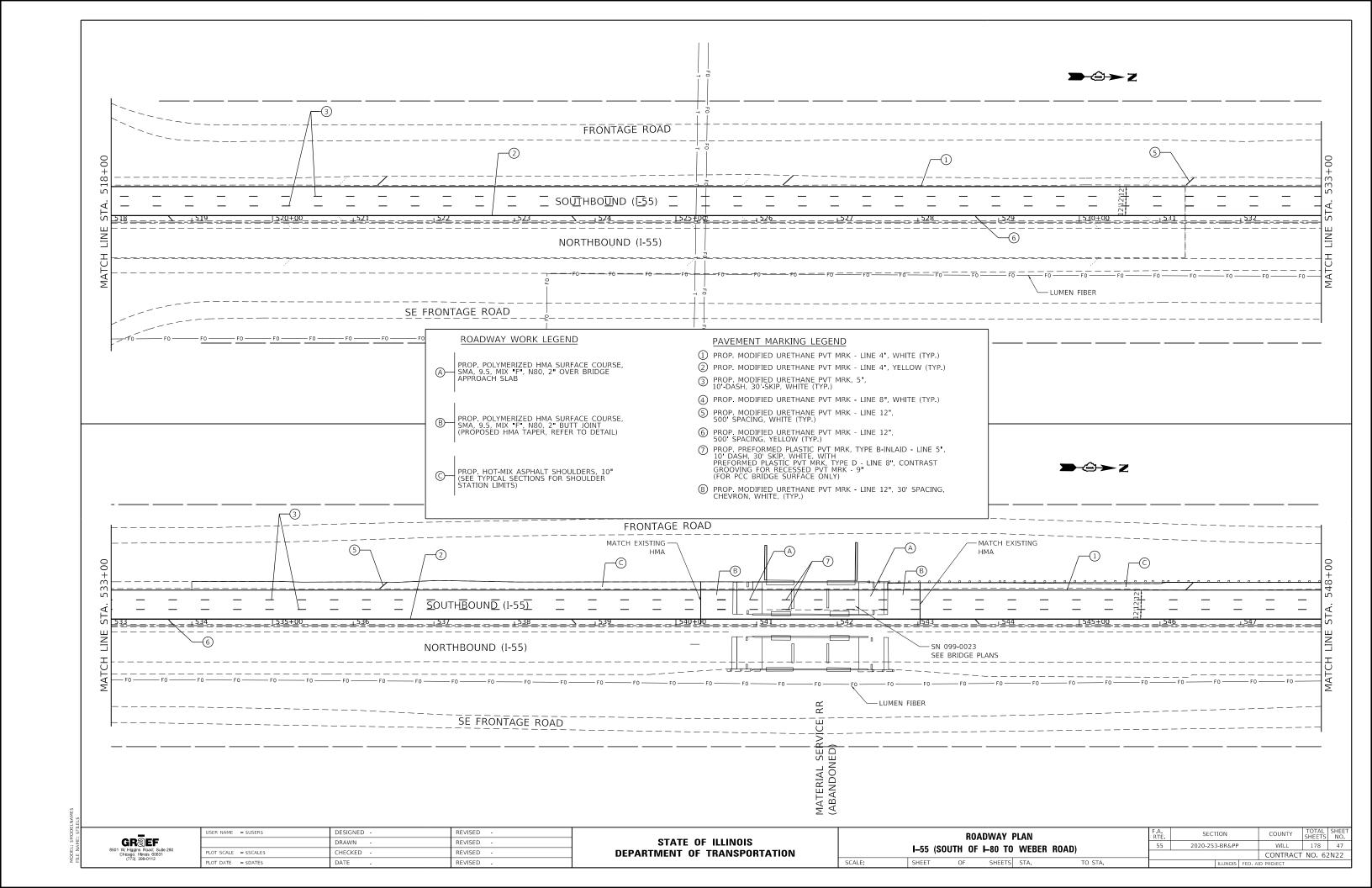
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GRÖEF

8501 W. Higgins Road; Suite 28

8501 W. Higgins Road; Suite 28

Chicago, Himos 60631

(773) 399-0112

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROADWAY PLAN 1-55 (SOUTH OF 1-80 TO WEBER ROAD) SHEET OF SHEETS STA. TO STA.		F.A. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.			
LSS (SOUTH OF LSO TO WERER ROAD		ROAD)	55	2020-253-BR&PP	WILL	178	48		
1-33 (300111 OI 1-00 TO WEDEN HOAD)			lioab)			CONTRACT	NO. 62	2N22	
SHEET	OF	SHEETS	STA.	TO STA.		ILLINOIS FEE	D. AID PROJECT		

GR@EF 8501 W. Higgins Road: S Chicago, Illnois 606 (773) 399-0112	LELS	
	FILE NAME: SFILEL	Chicago, Illinois 606

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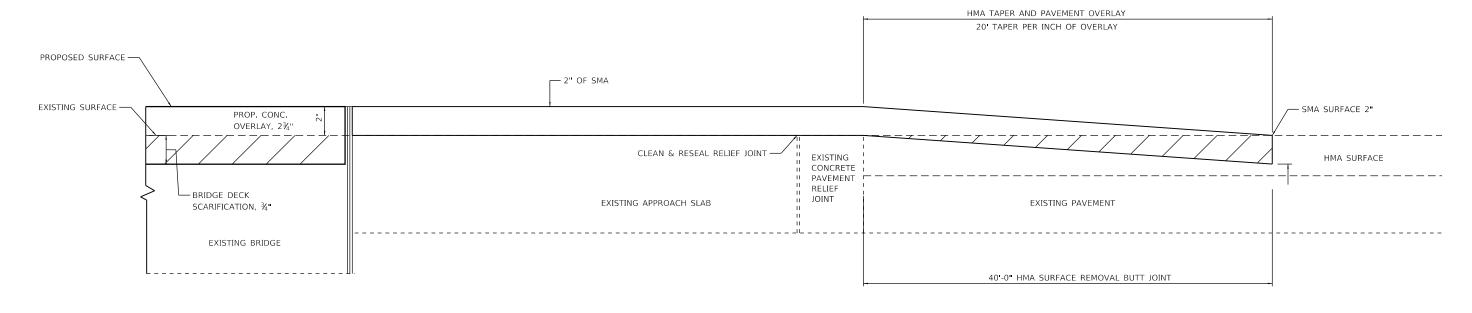
STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

**ROADWAY DETAILS** I-55 (SOUTH OF I-80 TO WEBER ROAD) OF SHEETS STA.

SECTION 2020-253-BR&PP

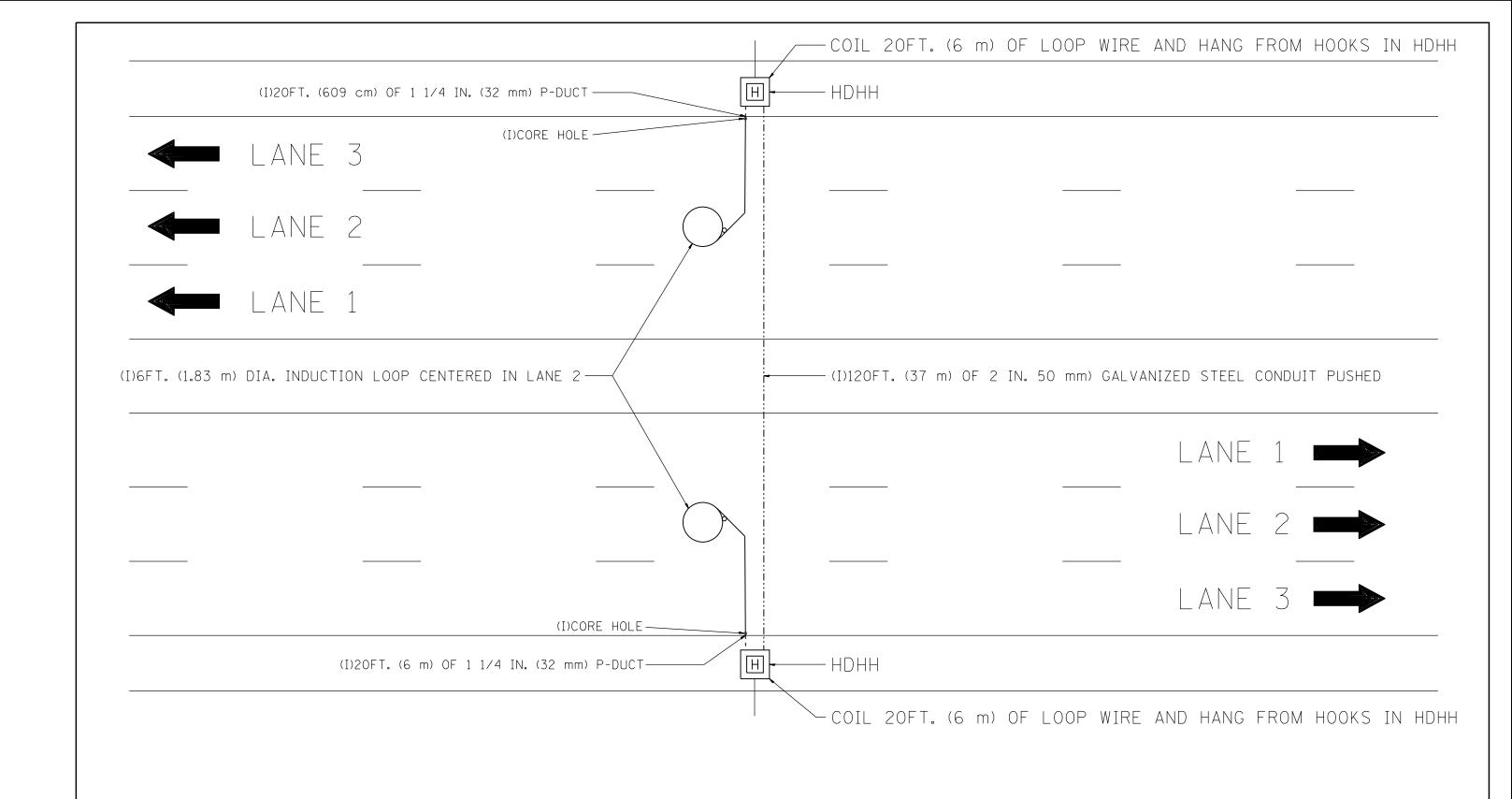
COUNTY TOTAL SHEETS NO.
WILL 178 49 CONTRACT NO. 62N22

# APPROACH PAVEMENT HMA OVERLAY DETAIL



NOTES:

1. SEE BUTT JOINT AND HMA TAPER DETAILS (BD32) FOR ADDITIONAL NOTES AND DETAILS.



NOTE:

THE COST OF LOOP WIRE IN HDHH IS INCIDENTAL TO THE INDUCTION LOOP. IT SHALL NOT BE MEASURE FOR PAYMENT.

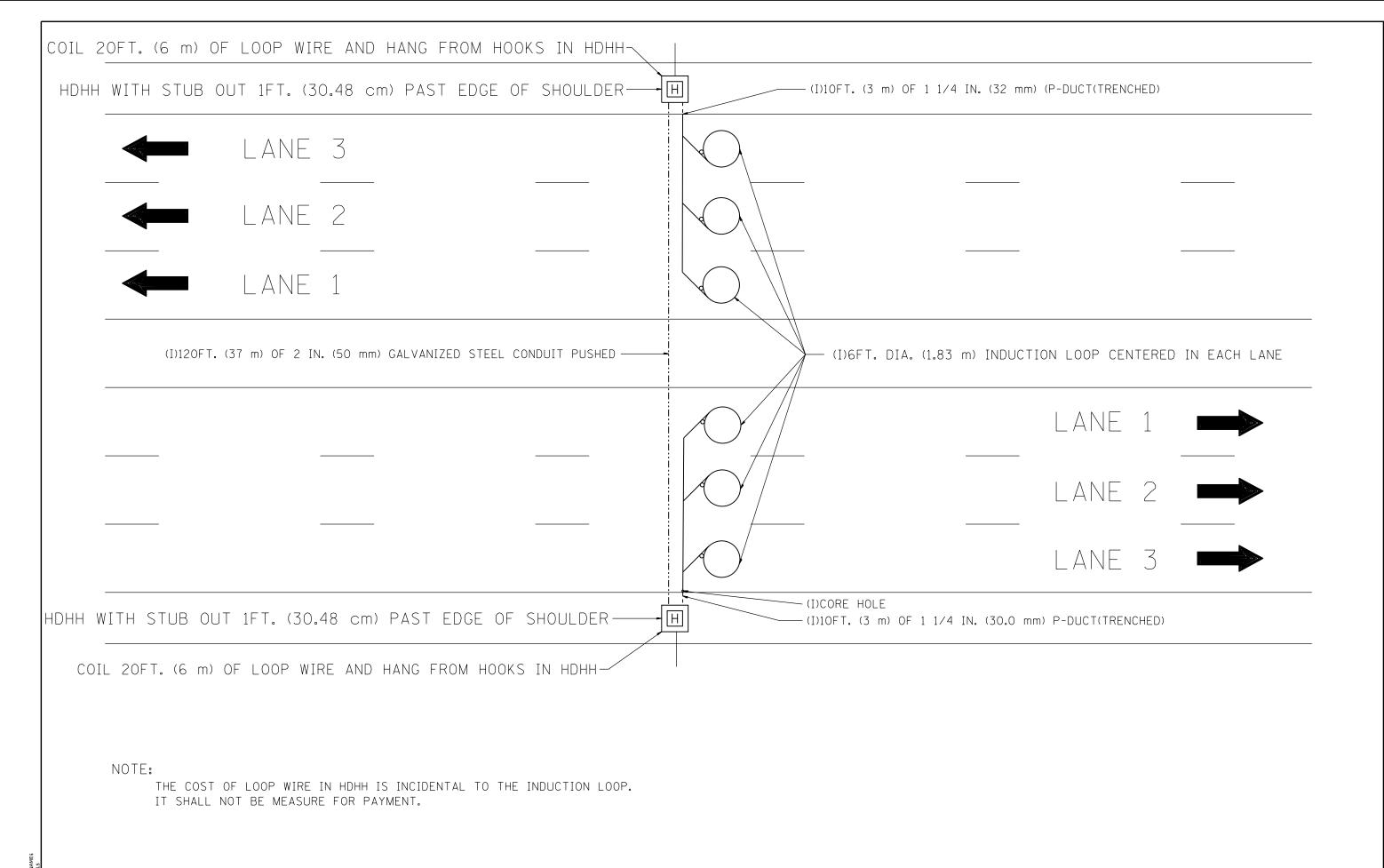
<b>GRØEF</b> 8501 W. Higgins Road; Suite 280 Chicago, Illinois 60631 (773) 399-0112

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	DRAWN -	G.M.	REVISED	-	
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PLOT DATE = \$DATE\$	DATE -	01-31-07	REVISED	-	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
TRAFFIC SYSTEMS CENTER

ONE LANE COUNT STATION

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



GROEF 8501 W. Higgins Road; Suite 280 Chlcago, IllInols 60631 (773) 399-0112
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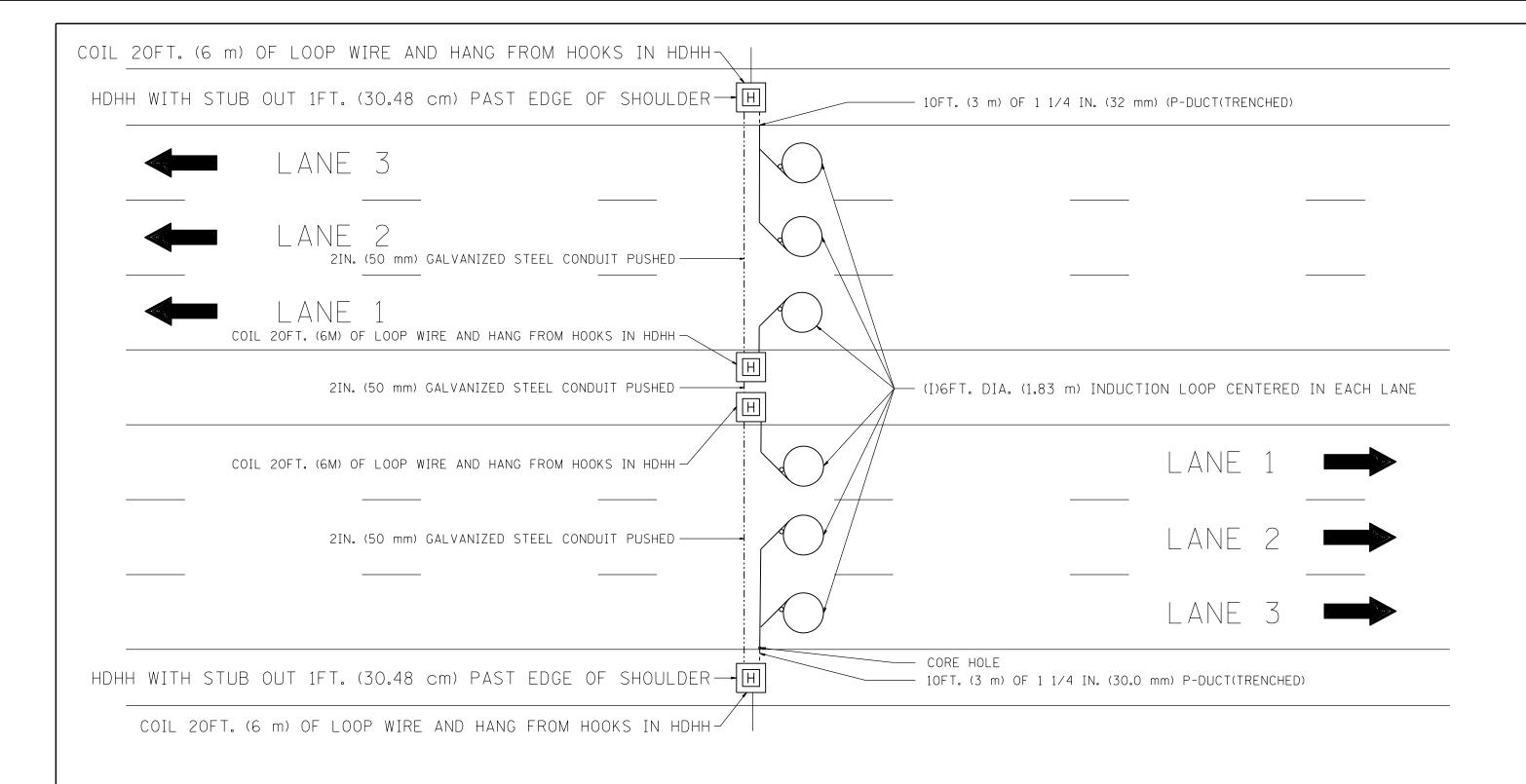
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
TRAFFIC SYSTEMS CENTER

3 LANE COUNT STATION

SCALE: NONE | SHEET OF SHEETS | STA. T



NOTF:

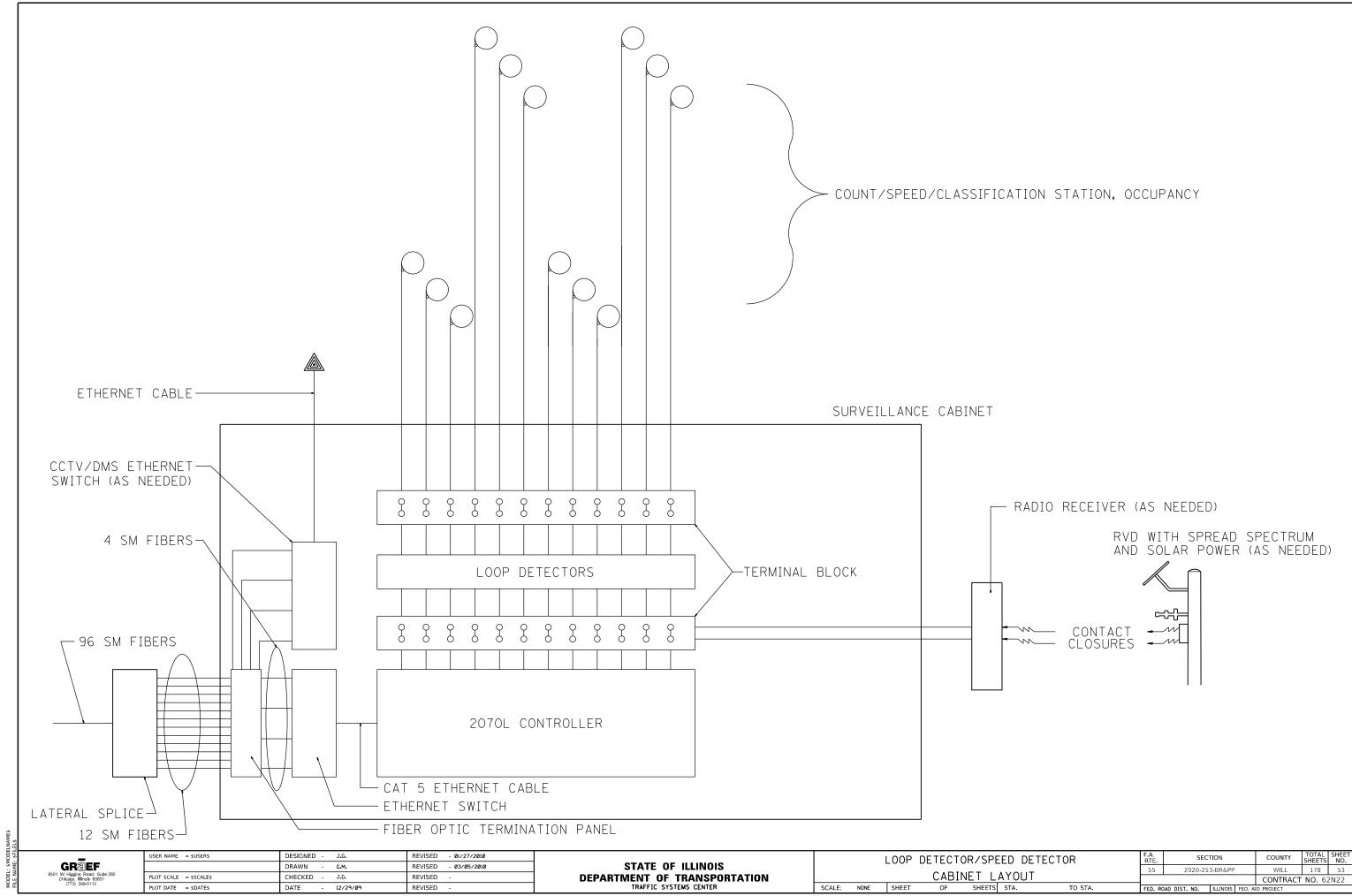
THE COST OF LOOP WIRE IN HDHH IS INCIDENTAL TO THE INDUCTION LOOP. IT SHALL NOT BE MEASURED FOR PAYMENT.

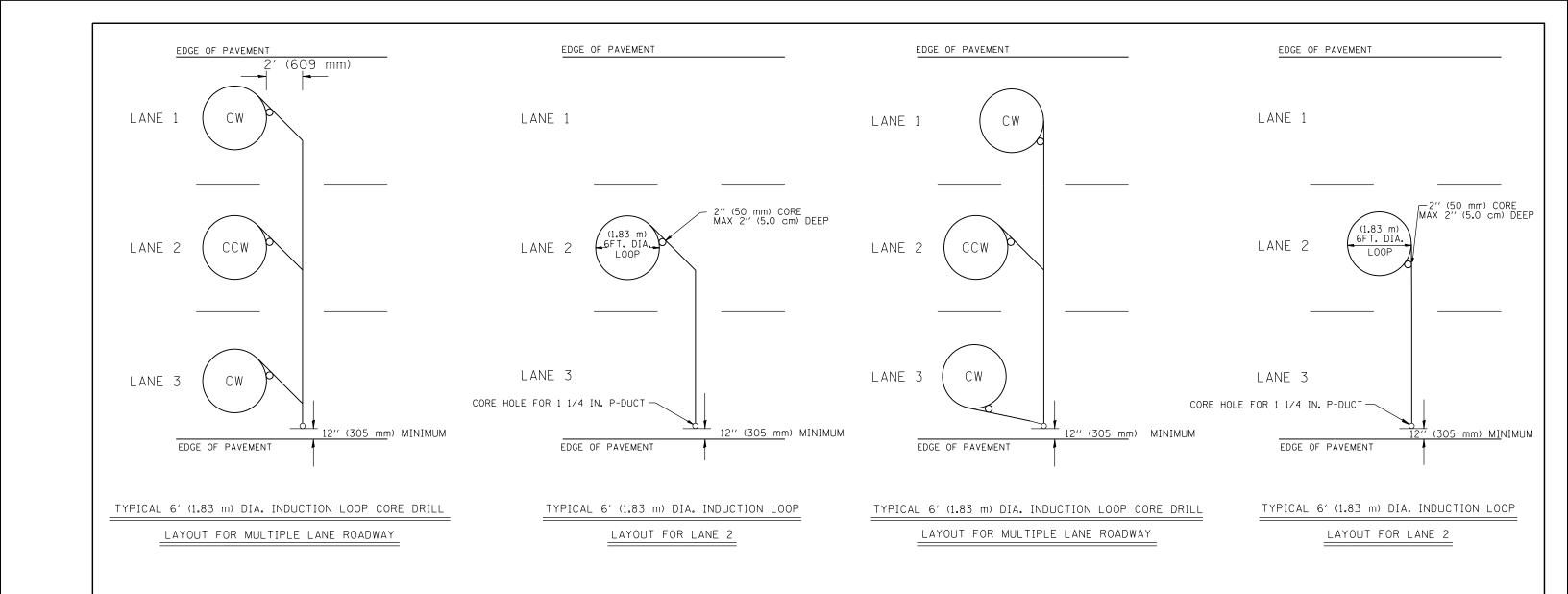
**GRØEF** 8501 W. Higgins Road: Suite 280 Chicago. Illinois 60631 (773) 399-0112

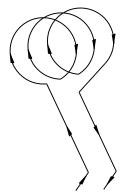
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
TRAFFIC SYSTEMS CENTER

3 LANE COUNT STATION
(DIFFERENT DIRECTIONS)

NONE SHEET OF SHEETS STA. TO STA





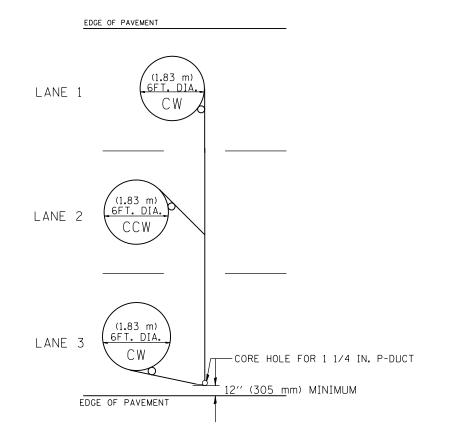


#### WIRING DETAILS

NOTES

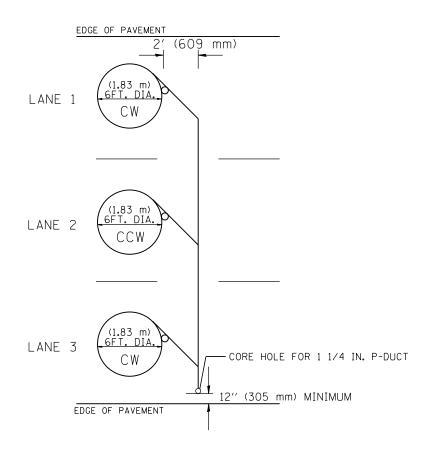
- 1. EACH LOOP SHALL BE SPLICED TO A 4-C NO.18 TWISTED SHIELDED LEAD IN WHEN 150' (45 m) OR MORE FROM CABINET.
- 2. LOOPS SHALL BE SPLICED IN HANDHOLES ONLY, OTHERWISE WRITTEN PERMISSION SHALL BE OBTAINED FROM TSC ENGINEER.
- 3. LOOPS SHALL NOT BE SPLICED IN SERIES.
- 4. EACH LOOP LEAD IN SHALL BE IDENTIFIED AND PERMANENTLY COLOR CODED IN THE COREHOLE, HANDHOLE & CABINETS THRU WHICH THEY ENTER OR PASS AND TAGGED WITH THE CORRECT NOMENCLATURES.

USER NAME = \$USER\$ DESIGNED - R.L. REVISED - 6/94 GR@EF G.M. STATE OF ILLINOIS REVISED - 9/96 DRAWN PLOT SCALE = \$SCALE\$ CHECKED -R.L. REVISED -R.L. 03/2011 **DEPARTMENT OF TRANSPORTATION** PLOT DATE = \$DATE\$ 6-22-94 TRAFFIC SYSTEMS CENTER DATE REVISED



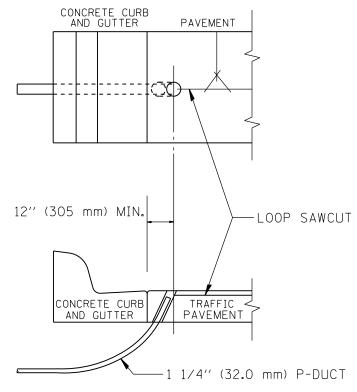
TYPICAL 6FT. (1.83 m) DIA. INDUCTION LOOP CORE DRILL

LAYOUT FOR MULTIPLE LANE ROADWAY



TYPICAL 6FT. (1.83 m) DIA. INDUCTION LOOP CORE DRILL

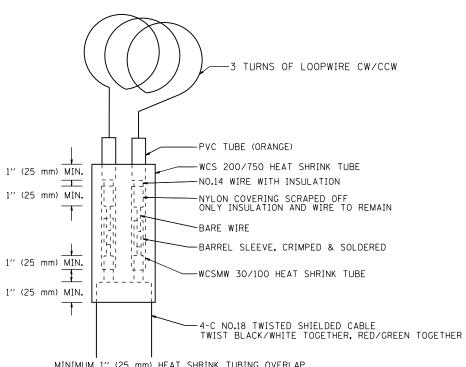
LAYOUT FOR MULTIPLE LANE ROADWAY



CURB AND GUTTER LOOP LEAD-IN
TRANSITION DETAIL

#### NOTES

- 1. EACH LOOP SHALL BE SPLICED TO A 4-C NO.18 TWISTED SHIELDED LEAD IN WHEN 150FT. (45 m) OR MORE FROM CABINET.
- 2. LOOPS SHALL BE SPLICED IN HANDHOLES ONLY, OTHERWISE WRITTEN PERMISSION SHALL BE OBTAINED FROM TSC ENGINEER.
- 3. LOOPS SHALL NOT BE SPLICED IN SERIES.
- 4. EACH LOOP LEAD IN SHALL BE IDENTIFIED AND PERMANENTLY COLOR CODED IN THE COREHOLE, HANDHOLE & CABINETS THRU WHICH THEY ENTER OR PASS AND TAGGED WITH THE CORRECT NOMENCLATURES.



MINIMUM 1" (25 mm) HEAT SHRINK TUBING OVERLAP ON WIRE, PVC & SHIELDED CABLE TO FORM WATER TIGHT SEAL

LOOP SPLICING REQUIREMENTS

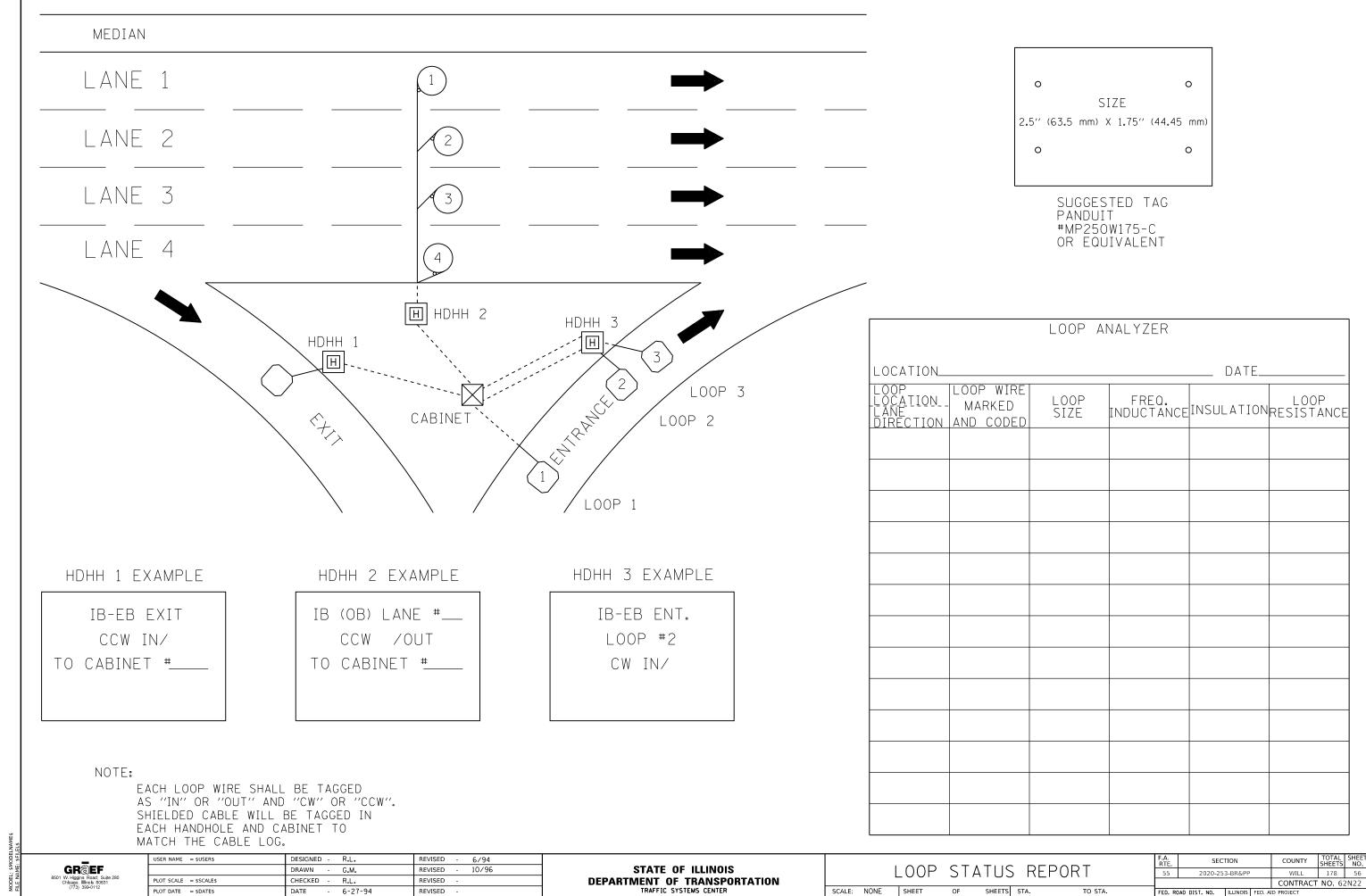
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
TRAFFIC SYSTEMS CENTER

				EXISTING INDUCTIO TYPICALS	N LOOP	
ALE.	NONE	CHEET	OF	CHEETS	CTA	TO STA

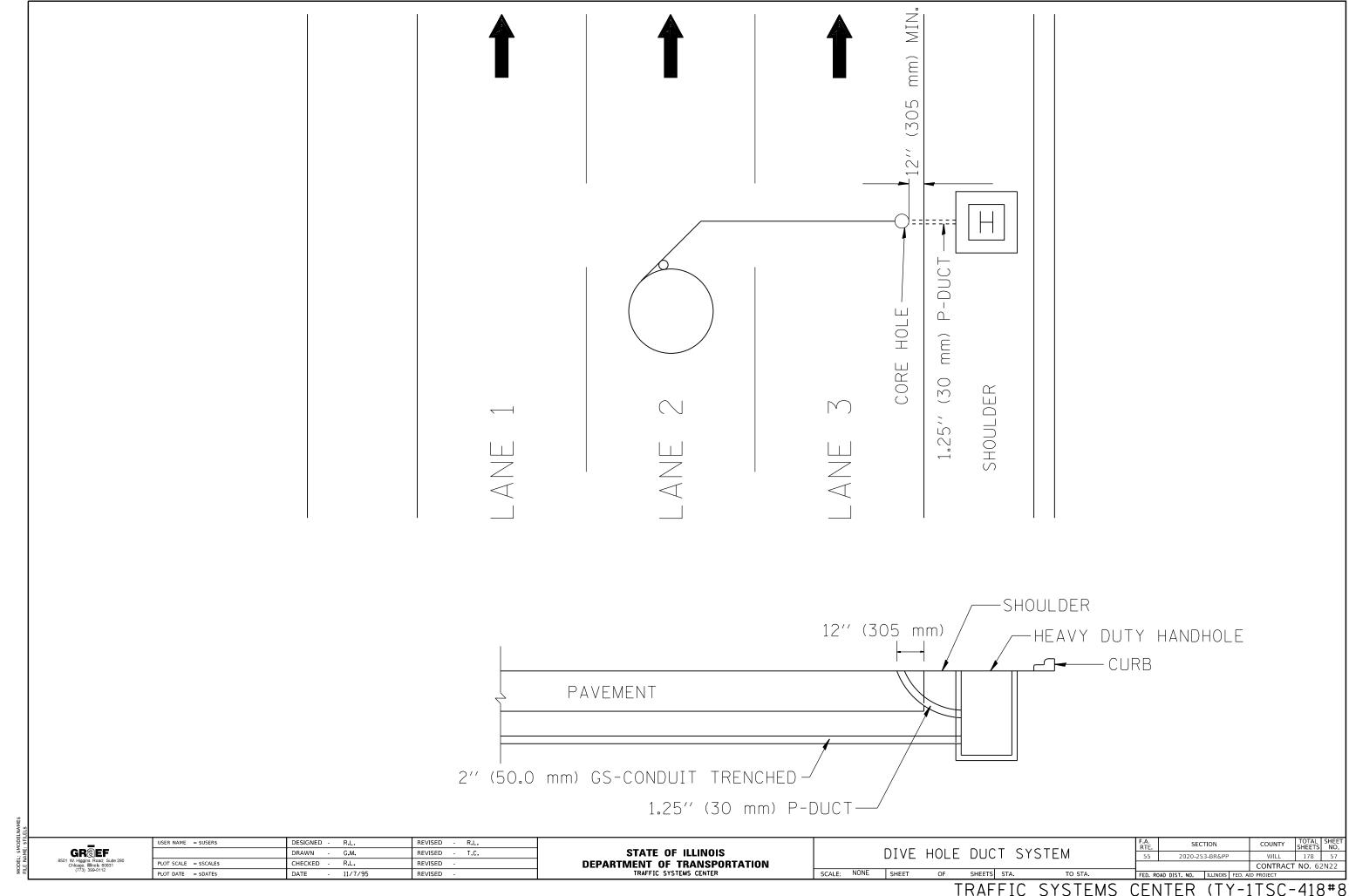
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55 2020-253-BR&PP				WILL	178	55
			CONTRACT	NO. 62	2N22	
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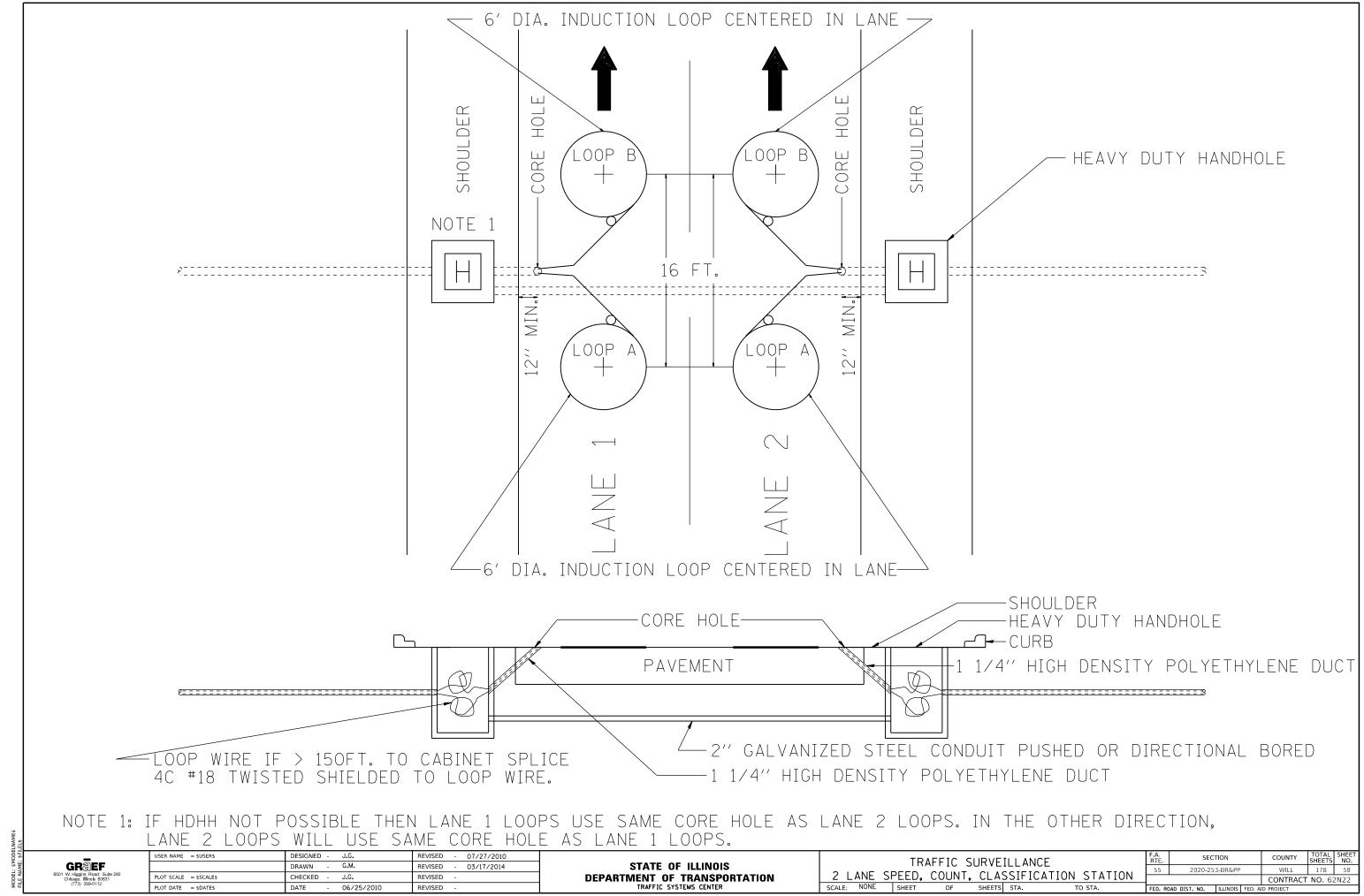


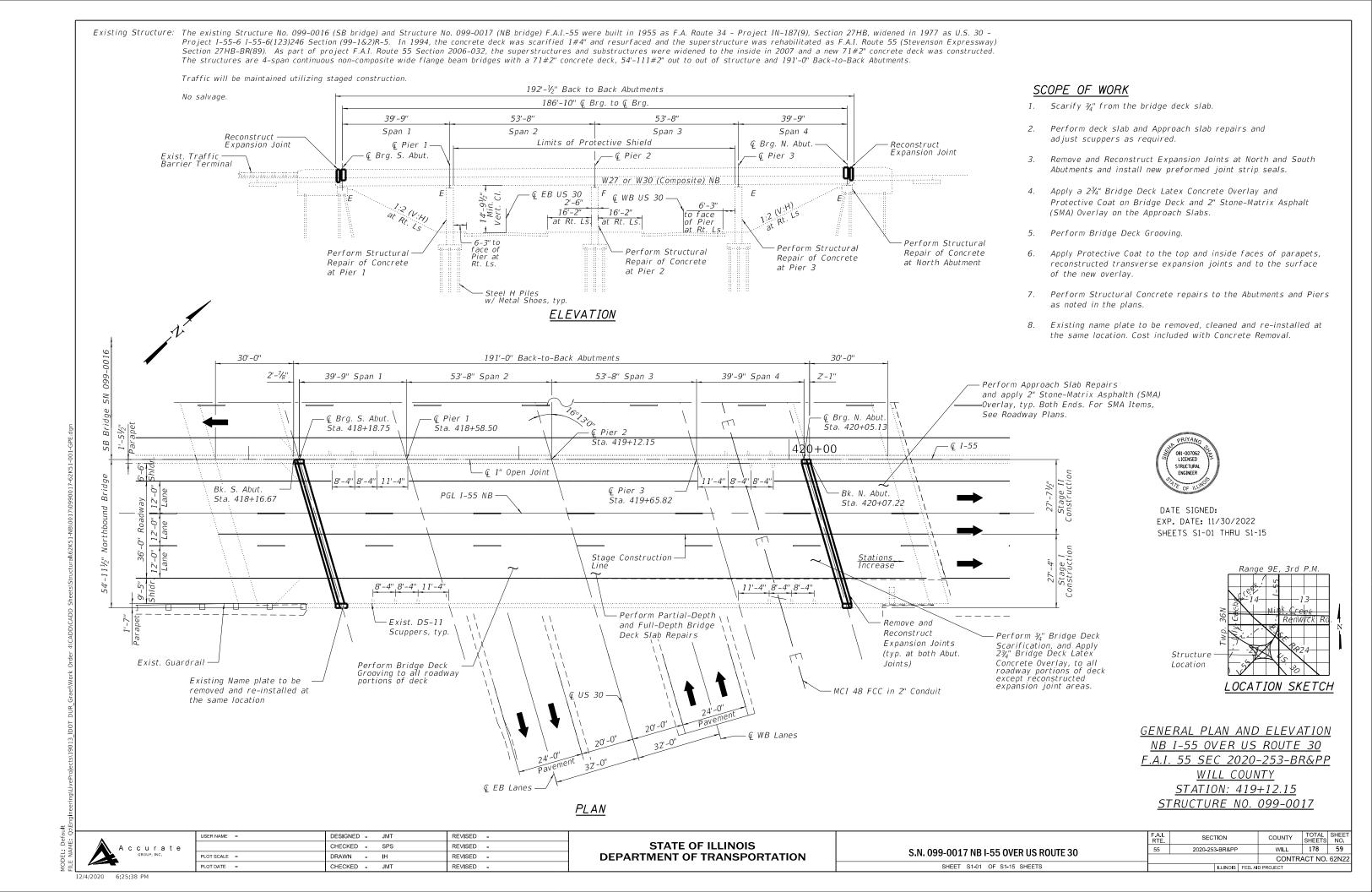
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DATE - 6-27-94

REVISED







#### GENERAL NOTES

- 1. Reinforcement bars designated (E) shall be epoxy coated.
- 2. Prior to pouring the new concrete deck for Expansion Joints Reconstruction and Deck slab repairs, 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 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.
- 3. 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 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.
- 4. Joint openings shall be adjusted according to Article 520.04 of the Standard Specification when the deck is poured at an ambient temperature other than 50° F.
- 5. Bars indicated thus, 3x2-#5, indicates 3 lines of #5 bars with 2 lengths of bar per line.
- 6. All exposed concrete edges shall have a ¾" chamfer, except where shown otherwise.
- 7. During repair operations, the Contractor shall locate and protect all utilities in the vicinity of the work including, but not limited to, fiber optic and/or electrical conduits, conduits under the bridge deck, under-deck lighting, traffic signals or signs attached to the structure. This work shall be performed to the satisfaction of the Engineer and will not be paid for separately, but shall be included with the contract. It shall be the Contractor's responsibility to restore and replace any damaged utilities or facilities to the satisfaction of the Engineer at no cost to the Department.
- 8. Expansion joints shall be fabricated to conform to the existing cross slopes of the bridge.
- 9. Protective Coat shall be applied to the top and inside face of parapets, reconstructed transverse Expansion Joints and to the surface of the new overlay.
- 10. Existing reinforcement extended into the removal area shall be cleaned, straightened and incorporated into the new construction. Any reinforcement bars that are damaged during concrete removal operations shall be replaced using an approved bar splicer or anchorage system. Cost included with Concrete Removal.
- 11. Debris shall be removed from the tops of pier caps and abutment caps. Quantities are estimated and actual locations will be determined in the field, at the time of construction, by the Engineer.
- 12. The Contractor is responsible to protect the existing conduit embedded in the parapet during concrete removal and construction. Any damage to the existing conduit shall be repaired by the Contractor at no additional cost to the Department.

#### INDEX OF SHEETS

51-01	General Plan and Elevation
S1-02	General Notes, Total Bill of Materials, & Index of Sheets
51-03-51-04	Construction Staging Details
51-05	Temporary Concrete Barrier for Stage Construction
S1-06	Bridge Deck Repairs
<i>S1-07</i>	Parapet Repairs
51-08	Expanion Joint Removal and Construction
51-09	Expanion Joint Details
S1-10	Preformed Joint Strip Seal
S1-11	Pier 1 Repairs
51-12	Pier 2 Repairs
S1-13	Pier 3 Repairs
51-14	North and South Abutment Repairs
S1-15	Bar Splicer Assembly and Mechanical Splicer Details

#### TOTAL BILL OF MATERIAL

· · · · · · · · · · · · · · · · · · ·			_	
ITEM	UNIT	SUPER	SUB	TOTAL
Concrete Removal	Cu Yd	16.1		16.1
Protective Shield	Sq Yd	656		656
Concrete Superstructure	Cu Yd	17.4		17.4
Bridge Deck Grooving	Sq Yd	1092		1092
Protective Coat	Sq Yd	1457		1457
Reinforcement Bars, Epoxy Coated	Pound	2220		2220
Bar Splicers	Each	24		24
Preformed Joint Strip Seal	Foot	115		115
Concrete Sealer	Sq Ft		333	333
Approach Slab Repair (Partial Depth)	Sq Yd	4		4
Bridge Deck Latex Concrete Overlay, 2¾"	Sq Yd	1108		1108
Bridge Deck Scarification ¾"	Sq Yd	1108		1108
Structural Repair of Concrete (Depth Equal to or less than 5")	Sq Ft	1.5	4.5	6
Clean Approach Slab Drain	Each	1		1

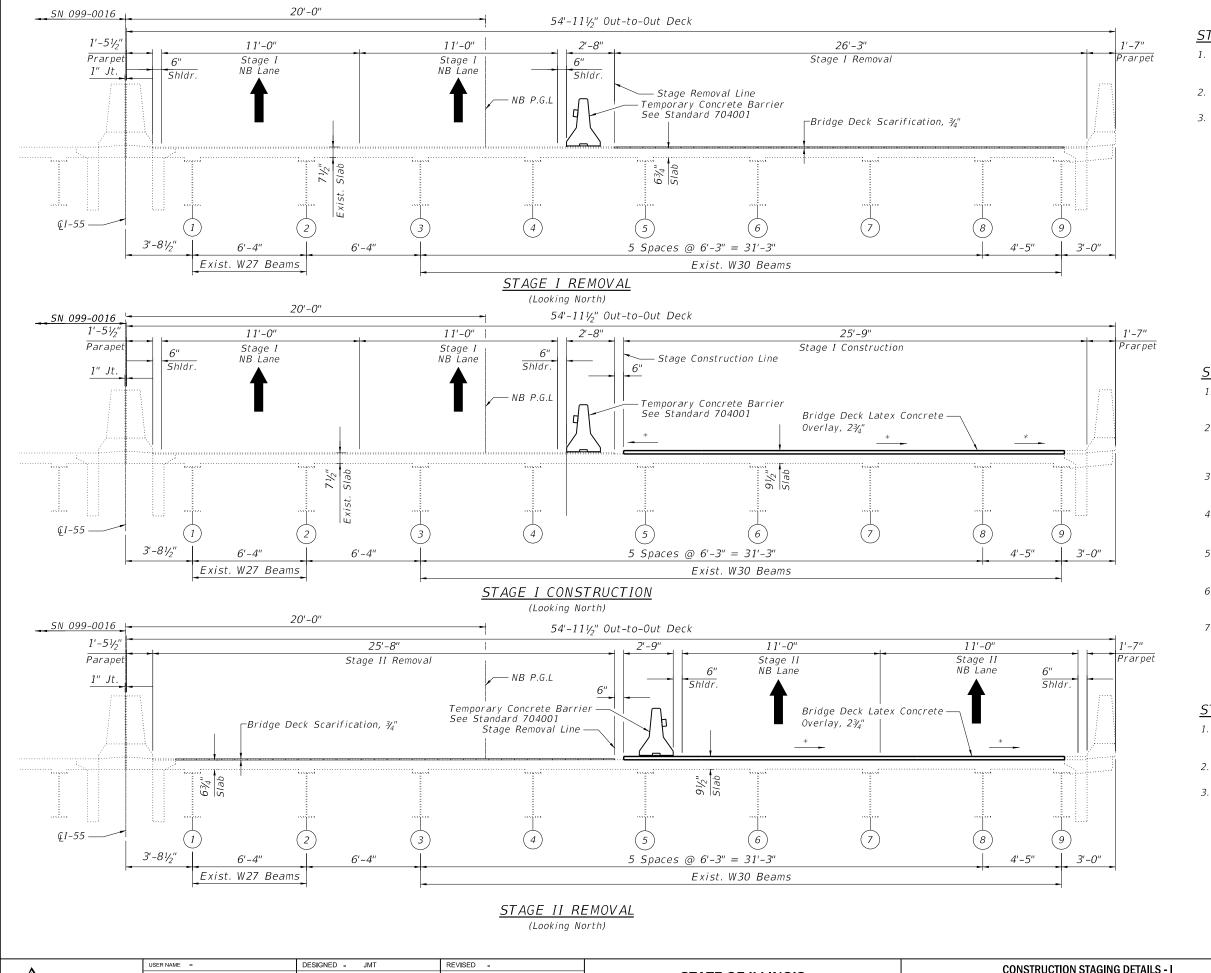
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES, TOTAL BILL OF MATERIALS, & INDEX OF SHEETS S.N. 099-0017 NB I-55 OVER US ROUTE 30

	F.A.I. RTE	SEC	TION		COUNTY	TOTAL SHEETS	SHE
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_					CONTRACT NO. 62		
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STAGE I REMOVAL

- 1. Install temporary concrete barrier as shown to locate traffic on the west side of the existing structure.
- Scarify ¾" from the top of deck slab.
- Remove portions of bridge deck/approach slab adjacent to abutment joints, as shown in the plans.

#### STAGE I CONSTRUCTION

- 1. Perform full-depth deck slab repairs, and approach slab repairs, at locations as shown in the plans.
- Install preformed joint strip seal at north and south abutments and replace associated reinforcement and concrete adjacent to the joint.
- 3. Perform structural repair of concrete for the abutments and piers.
- 4. Apply  $2\frac{3}{4}$ " bridge deck latex concrete overlay to bridge deck slab.
- Perform bridge deck grooving for the 2¾" bridge deck latex concrete overlay.
- 6. Apply 2" Stone-Matrix Asphalt (SMA) Overlay to approach slabs.
- 7. Apply protective coat to the top of reconstructed transverse joint areas, the surface of the new overlay and the top and inside faces of parapets.

#### STAGE II REMOVAL

- Install temporary concrete barrier as shown to locate traffic on the east side of the existing structure.
- 2. Scarify  $\frac{3}{4}$ " from the top of deck slab.
- Remove portions of bridge deck/approach slab adjacent to abutment joints, as shown in the plans.

\*Match existing deck surface profile

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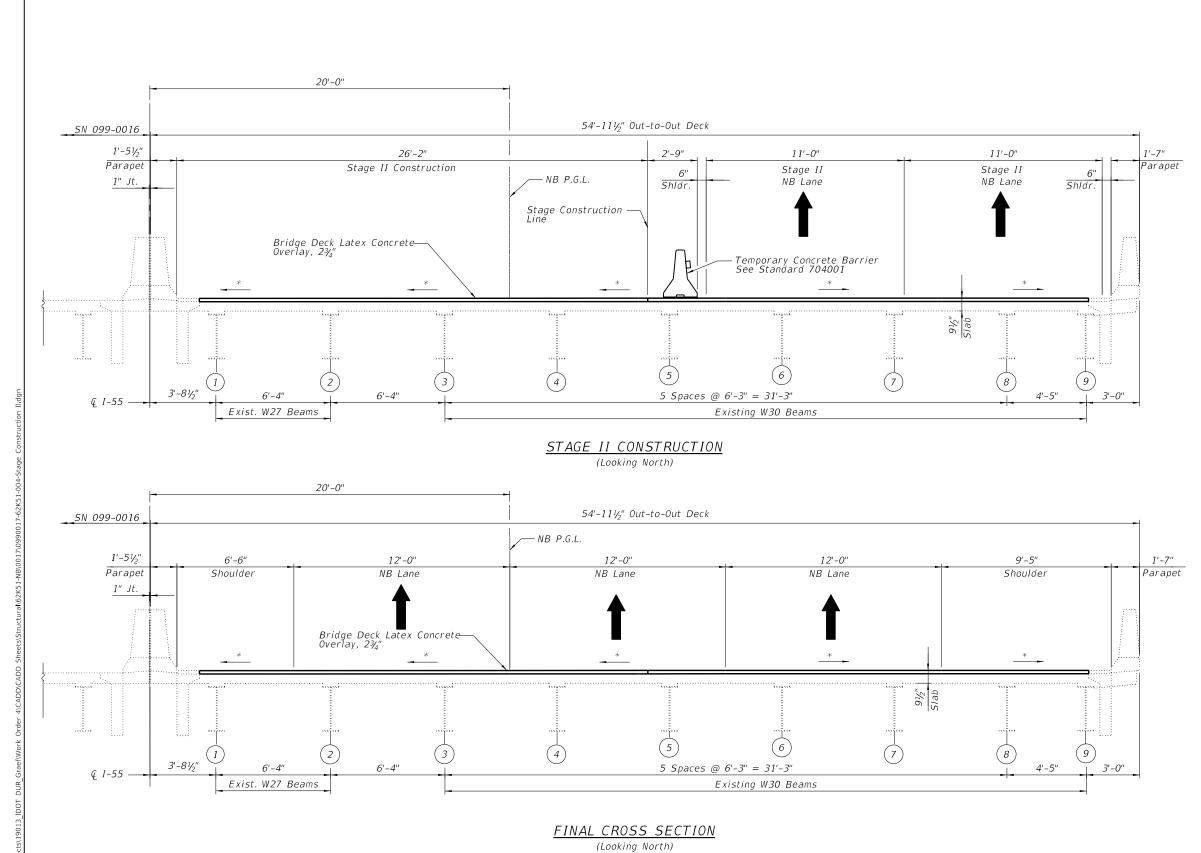
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CONSTRUCTION STAGING DETAILS - I S.N. 099-0017 NB I-55 OVER US ROUTE 30 SHEET S1-03 OF S1-15 SHEETS  
 F.A.I. RTE.
 SECTION
 COUNTY SHEETS NO.
 TOTAL SHEETS NO.

 55
 2020-253-BR&PP
 WILL
 178
 61

 CONTRACT NO. 62N22



# STAGE II CONSTRUCTION

- Perform full- and partial-depth deck slab repairs, and approach slab repairs, at locations as shown in the plans.
- Install preformed joint strip seal at north and south abutments and replace associated reinforcement and concrete adjacent to the joint.
- 3. Perform structural repair of concrete for the abutments and piers.
- 4. Apply 2¾" bridge deck latex concrete overlay to bridge deck slab.
- 5. Perform bridge deck grooving for the 2¾" bridge deck latex concrete overlay.
- 6. Apply 2" Stone-Matrix Asphalt (SMA) Overlay to approach slabs.
- 7. Apply protective coat to the top of reconstructed transverse joint areas, the surface of the new overlay and the top and inside faces of parapets.
- 8. Apply permanent pavement markings on top of deck and approach slabs.

A c c u r a t e

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CONSTRUCTION STAGING DETAILS - II
S.N. 099-0017 NB I-55 OVER US ROUTE 30

SHEET S1-04 OF S1-15 SHEETS

AI. SECTION COUNTY TOTAL SHEETS NO.

55 2020-253-BR&PP WILL 178 62

CONTRACT NO. 62N22

\*Match existing deck surface profile

to Detail I, II or III. No restraint is required when "A" is greater than 3'-1".

barrier shall be restrained to the new slab according

# See Standard 704001 min. min. Drill 3-11/4" Ø Holes in existing slab for 1" Ø restraining pins. Traffic side only. Cost of restraining pins are included with Temporary Concrete Barrier. No restraint $^{*}$ When hot-mix asphalt wearng surface is present, embedment

← Stage removal line

1'-101/5"

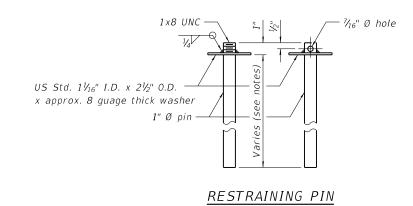
EXISTING SLAB

EXISTING DECK BEAM

shall be 3" plus the wearing surface depth.

← Stage removal line

1'-101/5"

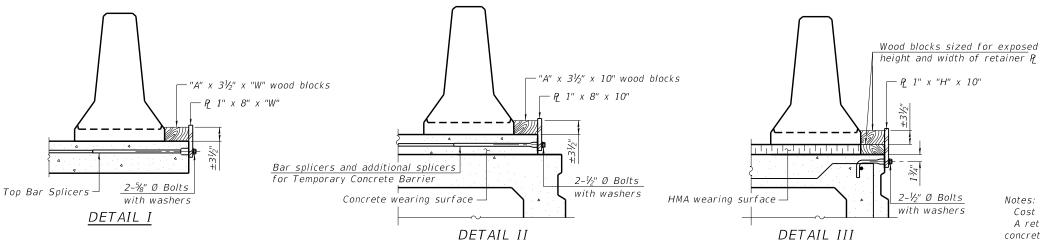


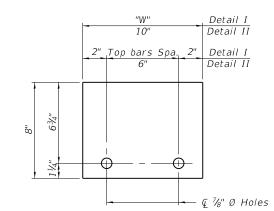
NEW SLAB OR NEW DECK BEAM

# SECTIONS THRU SLAB OR DECK BEAM

is required when "A" is greater than 3'-1".

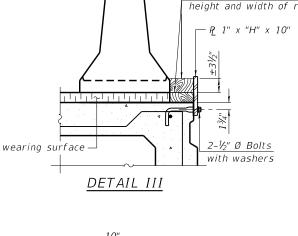
Temporary Concrete Barrier

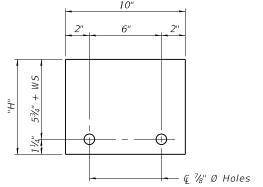




STEEL RETAINER P 1" x 8" x "W"

(Detail I and II)





STEEL RETAINER P 1" x "H" x 10" (Detail III)

#### BAR SPLICER FOR #4 BAR - DETAIL III

Cost of retainer assembly is included with Temporary Concrete Barrier. A retainer assembly shall be located at the approximate Q of each temporary

The retainer plate shall not be removed until the concrete on the adjacent stage is ready to be poured. For Detail III applications the retainer plate shall not be removed until just prior to placing the adjacent beam.

When the 'A' dimension is less than  $1\frac{1}{2}$ ", the wood block shall be omitted and the barrier shall be placed in direct contact with the steel retainer plate. For deck beam applications the minimum required 'A' distance is 6" to accommodate the shear key clamping device.

Detail I - Installation for a new bridge deck or bridge slab.

Detail II - Installation for a new deck beam with an initial concrete wearing surface. Additional bar splicers shall be provided at 6'-0" centers and paired with the bar splicers of the concrete wearing surface reinforcement to accommodate the installation of the retainer assemblies. The cost of the additional bar splicers is included with the concrete wearing surface.

Detail III - Installation for a new deck beam with no initial wearing surface or with an initial hot-mix asphalt (HMA) wearing surface present. The deck beam directly beneath the temporary concrete barrier shall be fabricated with bar splicer inserts in the side of the beam, as detailed, to accommodate the installation of the retainer assemblies. A pair of bar splicers, 6" apart, shall be placed at 6'-0" centers along the length of the beam. The cost of the bar splicers is included with the deck beam.

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8-11-2017

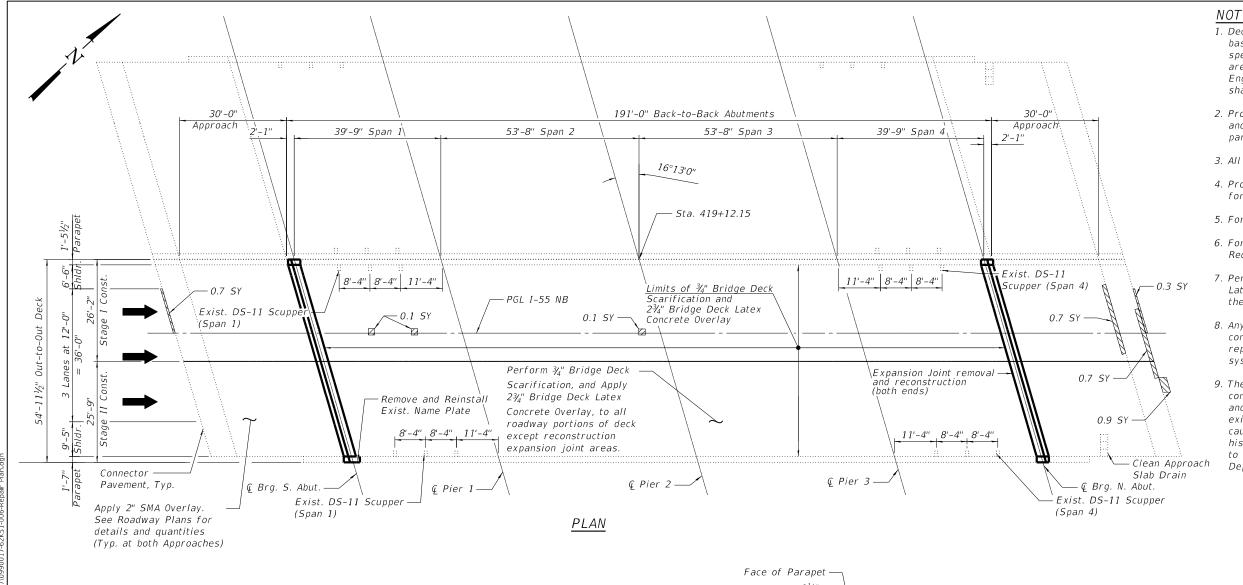


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**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**  TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION S.N. 099-0017 NB I-55 OVER US ROUTE 30 SHEET S1-05 OF S1-15 SHEETS

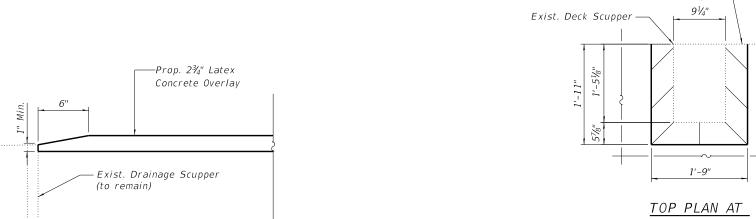
	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
	55	2020-253-BR&PP	WILL	178	63	
			CONTRACT NO. 62N22			
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#### NOTES:

- 1. Deck and approach slab repair areas are estimated based on visual inspection and will be paid for as specified in the Special Provision. Actual repair areas and locations shall be determined by the Engineer and shown on As-built plans. Engineer shall sound deck after deck scarification.
- 2. Protective Coat shall be applied to the bridge overlay and front and top faces of the new and existing parapets.
- 3. All dimensions are perpendicular to Q I-55 Bridge Deck
- 4. Protective Shield shall be placed over traffic lanes
- 5. For bridge deck final cross section, see Sheet S1-04.
- 6. For North and South Transverse Joint Removal and Reconstruction, see Sheets S1-08 and S1-09.
- 7. Perform Bridge Deck Grooving for the Bridge Deck Latex Concrete Overlay and the roadway portions of the Reconstructed Transverse Joints.
- 8. Any reinforcement bars that are damaged during concrete removal operations shall be repaired or replaced using an approved bar splicer or anchorage system. Cost included with Concrete Removal.
- 9. The Contractor shall exercise extreme caution during concrete removal to avoid damaging the steel beams and diaphragms to remain. Any damage to the existing steel beams and/or diaphragms to remain caused by the Contractor in the performance of his/her work shall be repaired by the Contractor, to the satisfaction of the Engineer at no cost to the



### LEGEND

Deck Slab Repair (Partial) \*

Approach Slab Repair (Full Depth)

Structural Repair of Concrete (Depth Equal to or Less Than 5")

SY Square Yards

#### BILL OF MATERIAL

ITEM UNIT QUANTITY							
UNIT	QUANTITY						
Sa. Yd.	1						
,	4						
Sq. Yd.	1457						
Sq. Yd.	1092						
Sa Yd	1108						
39. 14.	1100						
Sq. Yd.	1108						
Sq. Yd.	656						
Each	1						
	Sq. Yd. Sq. Yd. Sq. Yd. Sq. Yd.						

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DRAINAGE SCUPPER DETAIL

**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION** 

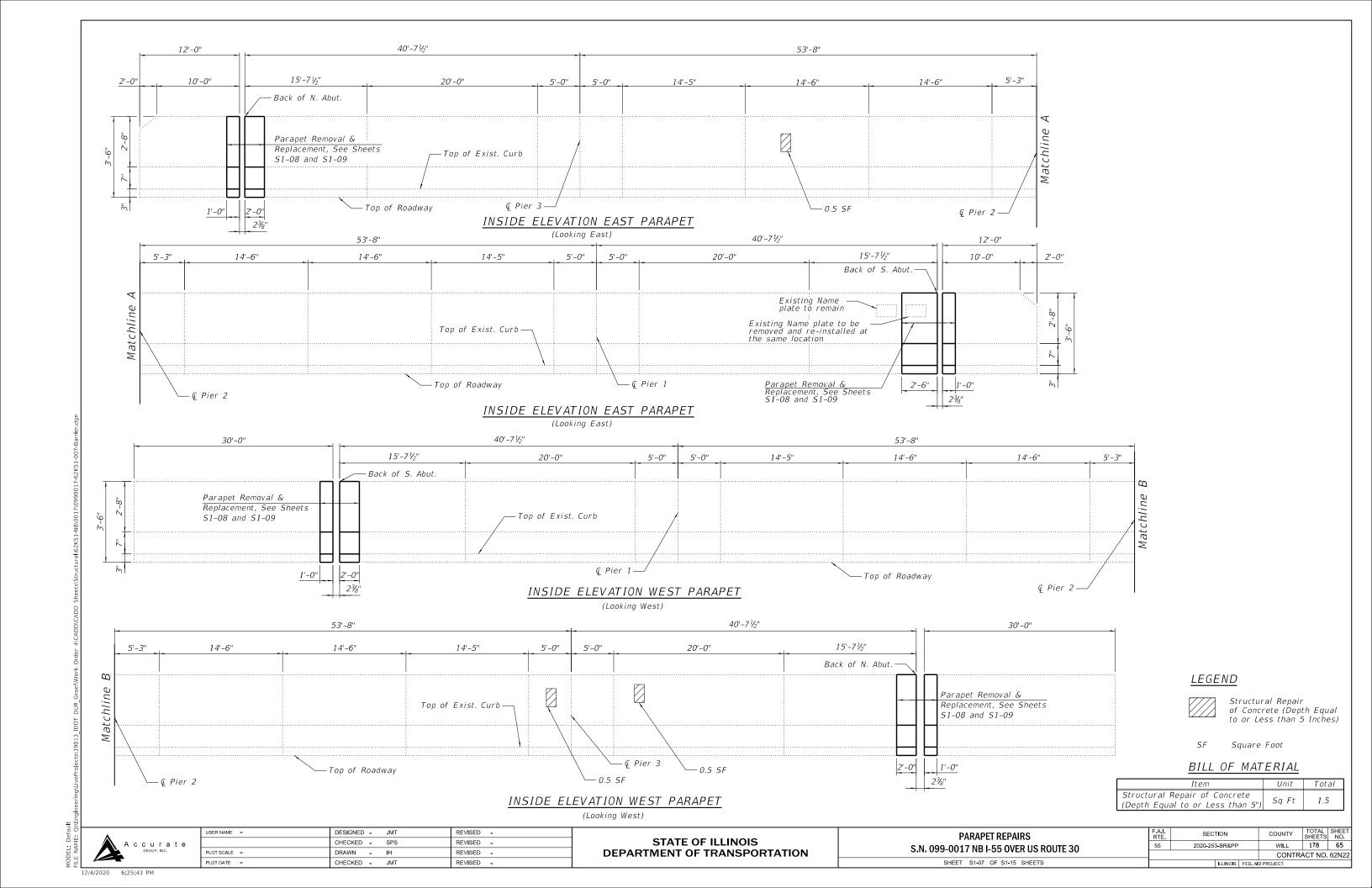
DRAINAGE SCUPPER

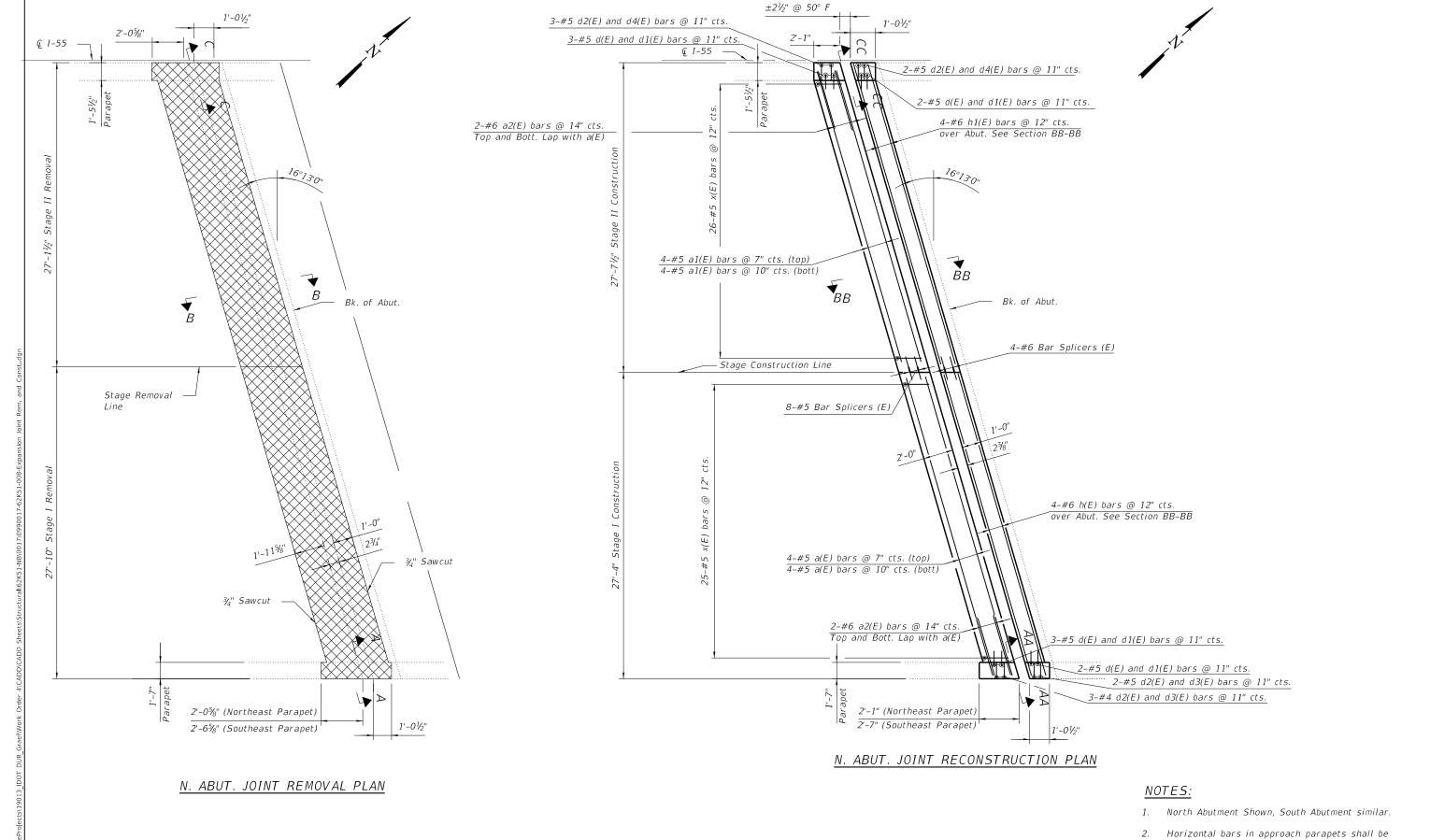
\*Areas of Deck Slab Repair (Partial)

are provided for information only and shall be included in the cost of Bridge Deck Latex Concrete Overlay, 23/4"

> **BRIDGE DECK REPAIRS** S.N. 099-0017 NB I-55 OVER US ROUTE 30 SHEET S1-06 OF S1-15 SHEETS

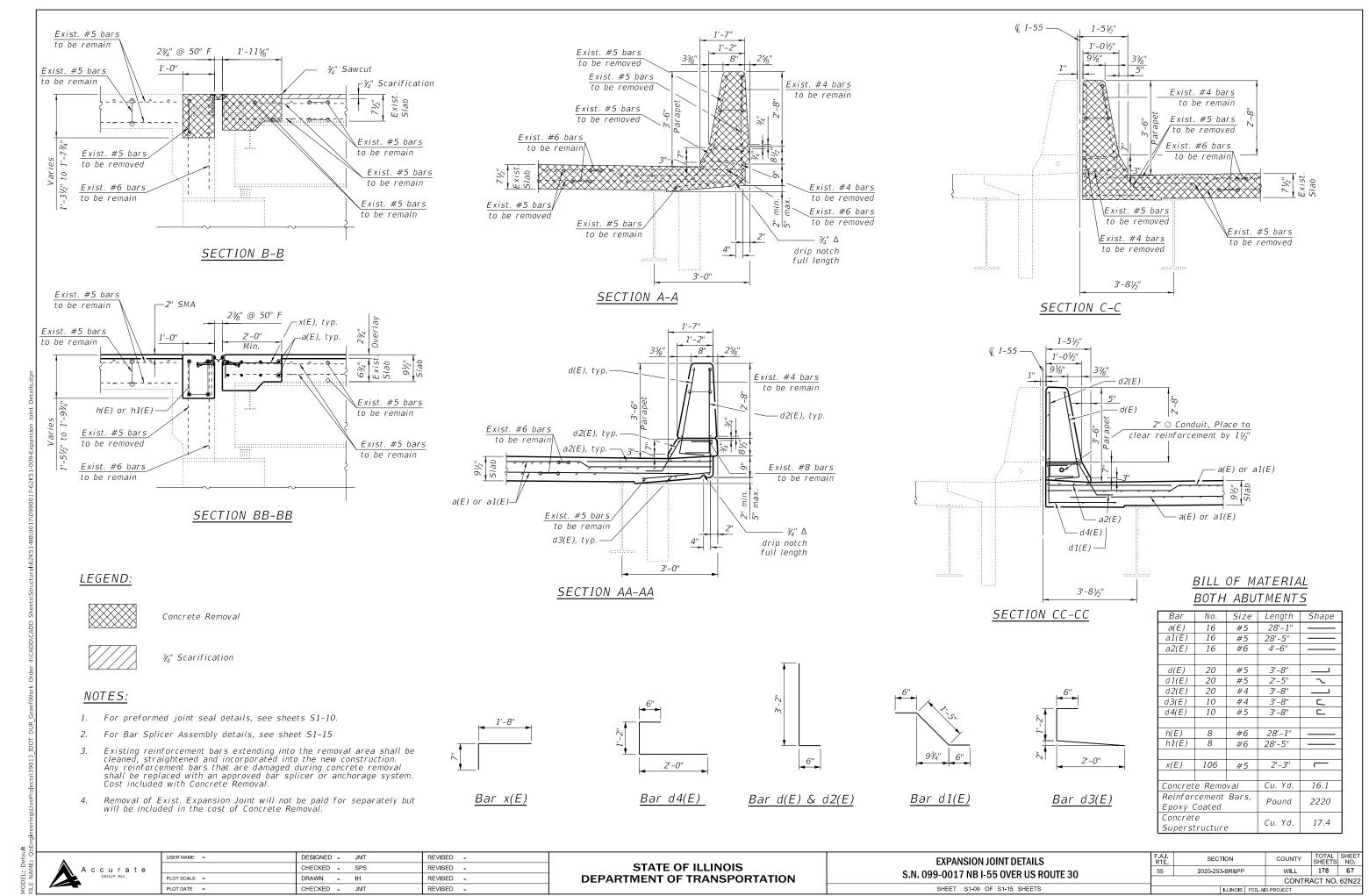
COUNTY TOTAL SHEET NO.
WILL 178 64 SECTION COUNTY 2020-253-BR&PP CONTRACT NO. 62N22



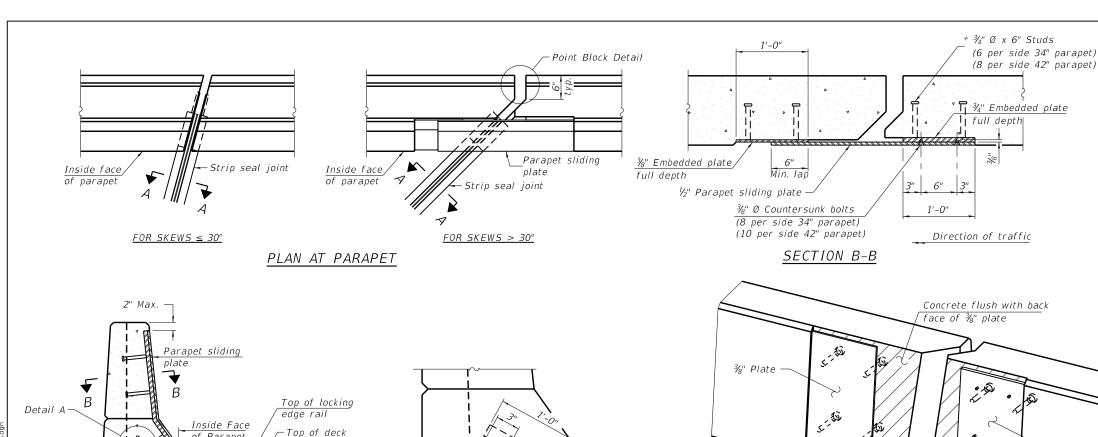


- . Horizontal bars in approach parapets shall be cleaned, straightened, and reused in new construction.
- 3. Hatched areas indicate Concrete Removal.

eta :: eta	<b>A</b>	USER NAME =	The state of the s		EXPANSION JOINT REMOVAL AND CONSTRUCTION		SECTION	COUNTY	SHEETS	NO.	
AMB.	Accurate		CHECKED - SPS	REVISED -	STATE OF ILLINOIS	S.N. 099-0017 NB I-55 OVER US ROUTE 30	55	2020-253-BR&PP	WILL	178	66
	GROUP, INC.	PLOT SCALE =	DRAWN - IH	REVISED -	DEPARTMENT OF TRANSPORTATION	3.N. 033-0017 ND 1-33 OVER 03 ROUTE 30			CONTR	ACT NO.	62N22
Ø H		PLOT DATE =	CHECKED - JMT	REVISED -		SHEET S1-08 OF S1-15 SHEETS		ILLINOIS FED.	AID PROJECT		



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# ELEVATION AT PARAPET

of Parapet

(Skews > 30° shown. Skews ≤ 30° similar except as shown in plan view.)

½" Ø x 6" Studs

# face of ¾" plate 1/10 3. D Concrete flush with back face of ¾" plate

#### TRIMETRIC VIEW (Showing embedded plates only)

Locking edge railat 50° F Top of concrete -Strip seal \*  $\frac{1}{8}$ " Ø x 6" studs @ 6" cts. (alternate angled/bent studs with horizontal studs)

#### for holding the proper joint opening based on the temperature during the deck pour. Place to miss studs. All rods shall be burned, or sawed off flush with the plates after concrete is set.

#### SHOWING WELDED RAIL JOINT

# LOCKING EDGE RAILS

<u>ROLLED</u>

(EXTRUDED) RAIL

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

WELDED RAIL

The strip seal shall be made continuous and shall have a minimum thickness of 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 4½" maximum depth provided the anchorage system is revised according to the manufacturer's recommendation.

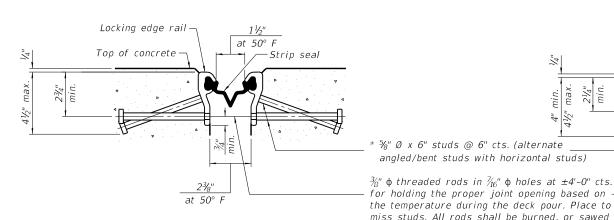
The manufacturer's recommended installation methods shall be followed.

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  $\frac{3}{6}$ " 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.

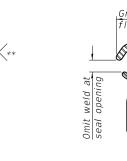


#### SHOWING ROLLED RAIL JOINT

# SECTION A-A

\* Granular or solid flux filled headed studs conforming to Article 1006.32 of the Std. Specs., automatically end welded.

DETAIL A



#### 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	115		

#### EJ-SS 8-11-17

<b>A</b>	USER NAME =	DESIGNED - JMT	REVISED -
Accurate		CHECKED - SPS	REVISED -
GROUP, INC.	PLOT SCALE =	DRAWN - IH	REVISED -
	PLOT DATE =	CHECKED - JMT	REVISED -

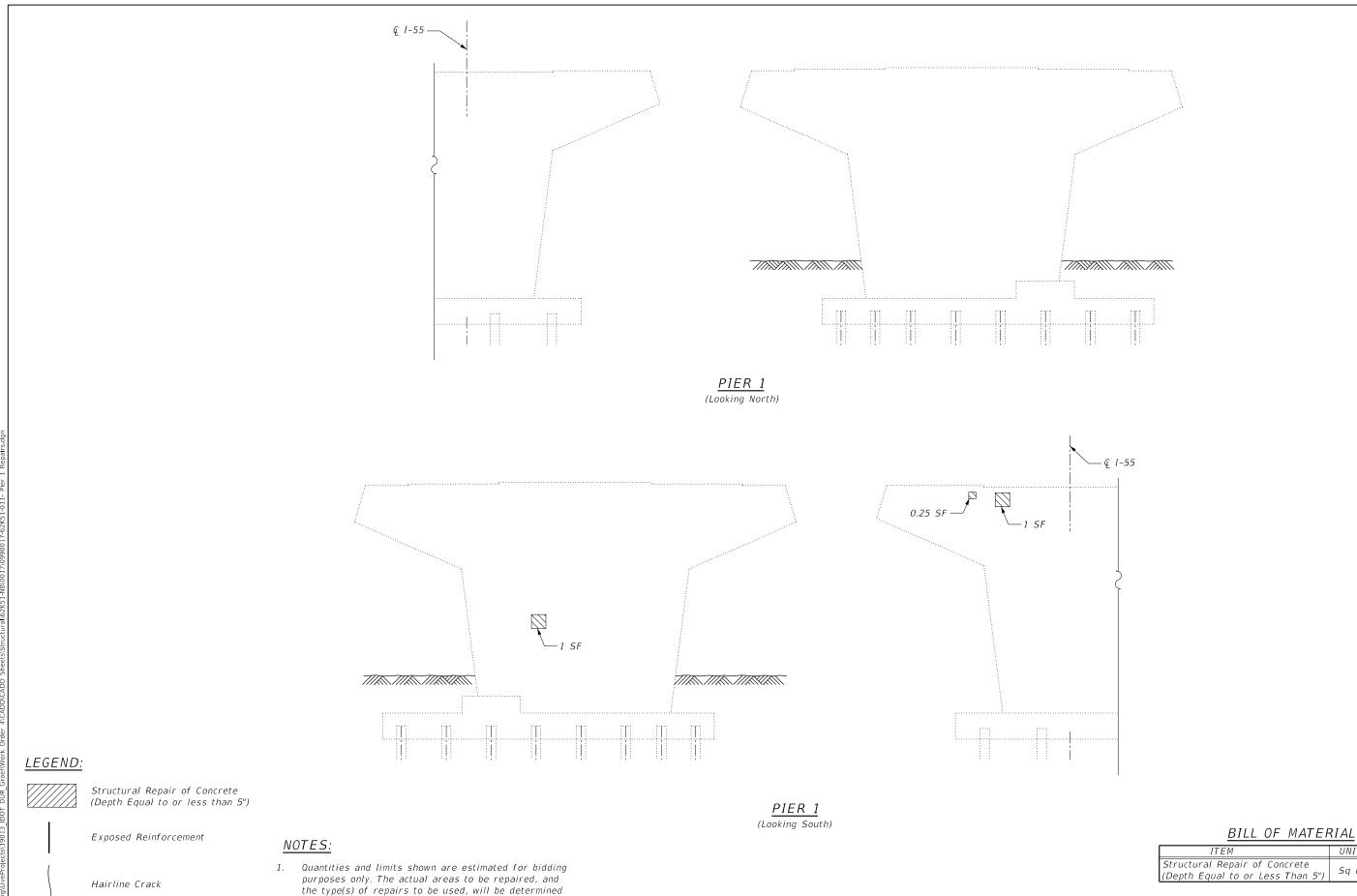
**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION** 

PREFORMED JOINT STRIP SEAL S.N. 099-0017 NB I-55 OVER US ROUTE 30

F.A.I. RTE				COUNTY	TOTAL SHEETS	SHEE NO.
55	2020-253-BR&PP			WILL	178	68
CONTRACT NO. 62						62N2
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SHEET S1-10 OF S1-15 SHEETS



Square Foot

DESIGNED - JMT USER NAME = REVISED -REVISED -CHECKED - SPS REVISED -CHECKED - JMT REVISED -

by the Engineer in the field at the time of construction.

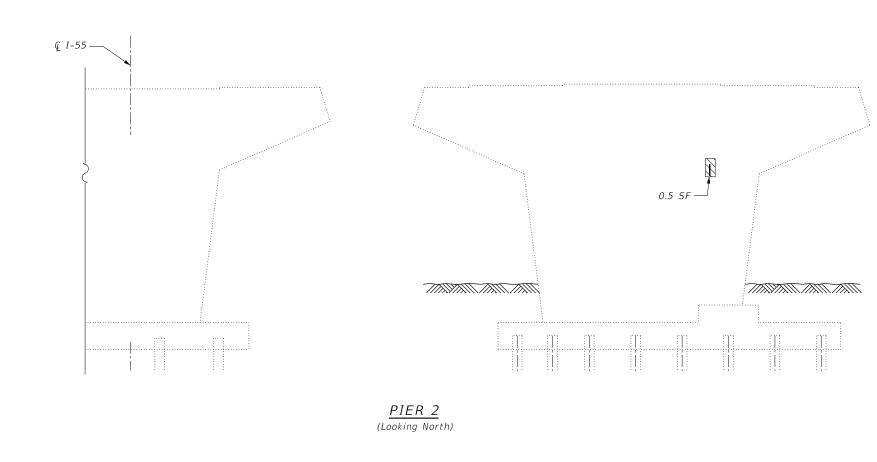
# STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

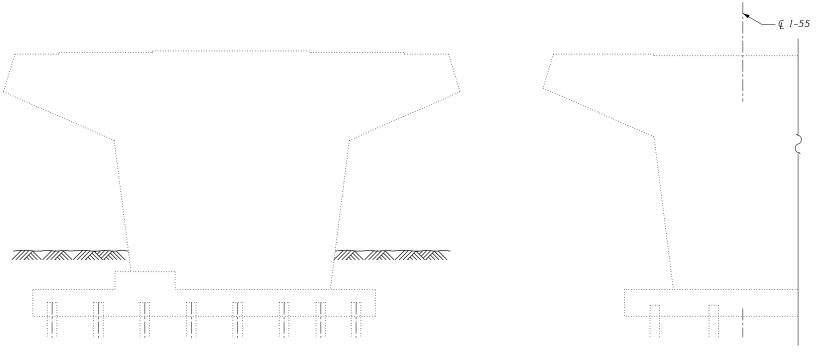
SECTION PIER 1 REPAIRS 2020-253-BR&PP S.N. 099-0017 NB I-55 OVER US ROUTE 30 SHEET S1-11 OF S1-15 SHEETS

COUNTY TOTAL SHEET NO.
WILL 178 69 COUNTY CONTRACT NO. 62N22

UNIT QUANTITY

Sq Ft





# LEGEND:

Structural Repair of Concrete (Depth Equal to or less than 5")

Exposed Reinforcement

Hairline Crack

Square Foot

# NOTES:

1. Quantities and limits shown are estimated for bidding purposes only. The actual areas to be repaired, and the type(s) of repairs to be used, will be determined by the Engineer in the field at the time of construction.

# PIER 2

(Looking South)

# BILL OF MATERIAL

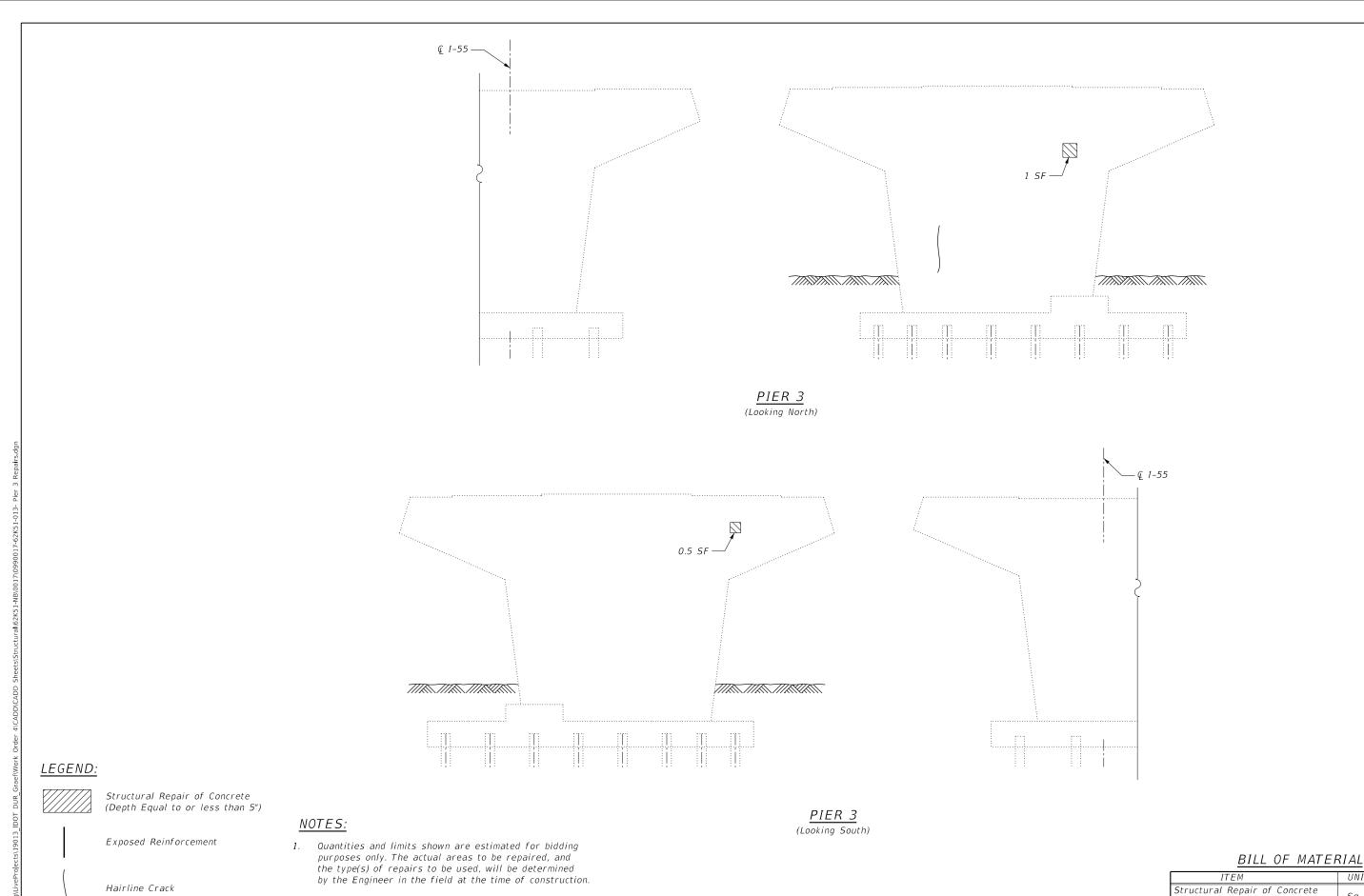
ITEM	UNIT	QUANTITY
Structural Repair of Concrete (Depth Equal to or Less Than 5")	Sq Ft	0.5

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STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

PIER 2 REPAIRS S.N. 099-0017 NB I-55 OVER US ROUTE 30 SHEET S1-12 OF S1-15 SHEETS

COUNTY TOTAL SHEET NO.
WILL 178 70 SECTION 2020-253-BR&PP CONTRACT NO. 62N22



MODEL: Default

Accurate GROUP, INC.

Square Foot

repaired concrete.

DE

2. Apply Concrete Sealer to new concrete surfaces of structurally

REVISED -

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REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER 3 REPAIRS
S.N. 099-0017 NB I-55 OVER US ROUTE 30

SHEET S1-13 OF S1-15 SHEETS

 
 F.A.I. RTE.
 SECTION
 COUNTY
 TOTAL SHEETS
 SHEET NO.

 55
 2020-253-BR&PP
 WILL
 178
 71

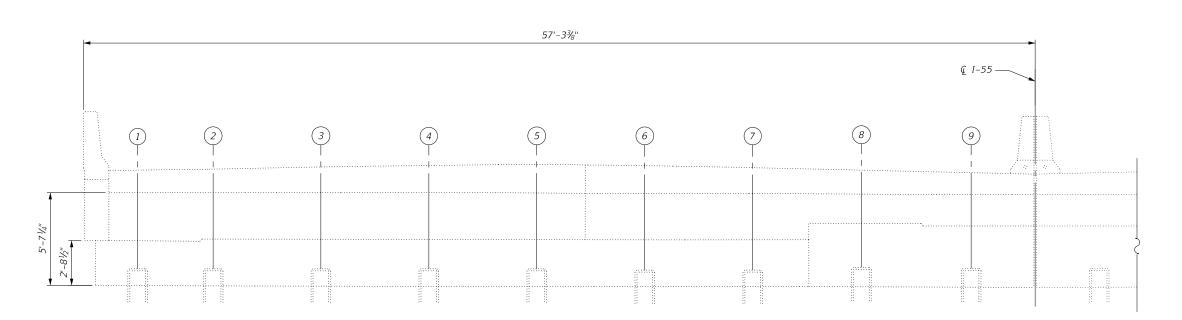
 CONTRACT NO. 62N22

(Depth Equal to or Less Than 5")

UNIT QUANTITY

Sq Ft

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<u>ELEVATION - SOUTH ABUTMENT</u>

(Looking South)

# <u>NOTE:</u>

- Quantities and limits shown are estimated for bidding purposes only. The actual areas to be repaired, and the type(s) of repairs to be used, will be determined by the Engineer in the field at the time of construction.
- 2. Apply Concrete Sealer to face of abutments.

# LEGEND:

SF Square Foot

# BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Structural Repair of Concrete (Depth Equal to or Less Than 5")	Sq Ft	0.25
Concrete Sealer	Sq Yd	333

Accurate group, Inc.

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

NORTH AND SOUTH ABUTMENT REPAIRS

S.N. 099-0017 NB I-55 OVER US ROUTE 30

SHEET S1-14 OF S1-15 SHEETS

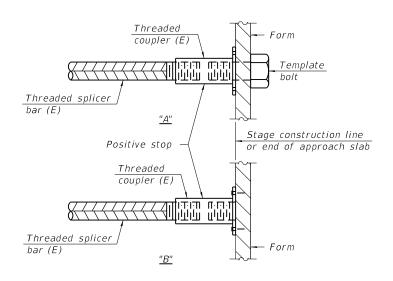
#### STANDARD BAR SPLICER ASSEMBLY PLAN

(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.

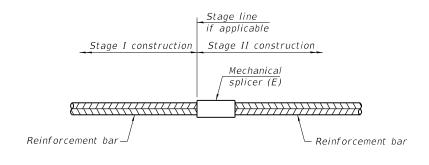
Location	Bar	No. assemblies	Minimum
Lucation	size	required	lap length
N. Abut.	#5	8	3'-6"
N. Abut.	#6	4	4'-0"
S. Abut.	#5	8	3'-6"
S. Abut.	#6	4	4'-0"



#### 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.



#### 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



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Existing Structure: F.A.I.-187(8), Will County. Both the superstructure and substructure were widened in 1977 as part of F.A.I. Route 55, Stevenson Expressway Rehabilitation, Section (99-1&2) R-5, Project I-IR-55-6 (125) 246, Will County. Also, additional rehabilitation work was performed in 1994 under contract for F.A.I. Route 55 (Stevenson Expressway) Section (26 & 27)RS, 27(B,VB)R; 27(B-1, B-3, HB, VB-1)BR (89), Station 1453+52.19, Project IM-NHI-55-6 (193) 252, Will County. The superstructures and substructures were widened to the inside in 2006 as part of F.A.I. Route 55 Sec. 2006-032 BY, Will County. Soft structures consist of R.C. deck supported on three-span continuous steel beams. The abutments are supported on concrete piles and/or HP steel piles. The piers are supported on timber piles and/or HP steel piles. The bridge length is 161'-0" bk. to bk. abutments. The northbound width varies from 65'-0½" to 65'-10¾" o. to o. of deck. Exist. Curve I-55\_EX\_18  $\Delta = 43^{\circ} 22' 01' (LT)$ T = 1,518.89The southbound deck width varies from 70'-111/2" to 70'-15%" o. to o. of deck. L = 2,891.35'E = 290.89'Traffic will be maintained utilzing staged construction.  $R = 3,820.00^{\circ}$ No salvage SE = 2.0%PC = 426+91.04PT = 455+82.39PI = 442+09.93Bk. S. Abut. --161'-0" Bk. to Bk. Abutments 156'-10" ♀ to ♀ Brg. 49'-5" 49'-5" 58'-0" Reconstruct Span 1 Span 2 Span 3 Reconstruct
Expansion Joint Expansion Joint Brg. S. Abut G Brg. N. Abut. Limits of Protective Shield Exist. Traffic Barrier Terminal, Typ. W27 or W33 (Non-Composite) NB Rt. LS 18'-0" Perform Structural a Rt. L's Perform Structural @ Rt. L's Repair of Concrete 18'-11¾" Repair of Concrete at North Abutment at South Abutment @ Rt. L's 12" Exist. Gravity Crib @ Track Retaining Wáli Access Rd. Perform Structural Repair of Concrete Perform Structural at Pier 1 Repair of Concrete - Steel H Piles (HP10X42) at Pier 2 Steel H Piles (HP10X42) — **ELEVATION** G Brg. N. Abut. Sta. 441+39.37 Bk. S. Abut. Pier 2 🗓 Brg. S. Abut. Sta. 439+81.73 Sta. 440+89.73 G. Pier 1 Sta. 439+82.52 —Exist. 6" ⊘ Floor Drains € I-55 SB Sta. 440+31/74 Sta. 441+41.97 (Typ. Span 3) 440 + 00Sta. 440+60.71 🕻 1" Open Jt. 12'-2" | Exist. DS-33 Scupper (Span 1) - Br. Ref. Line Tangent To € I-55 @ Sta. 440+60.71 49'-5" (Span 1) 58'-0" (Span 2) 49'-5" (Span 3) ── NB P.G.L. 30'-0" 30'-0" Stations . Perform ¾" Bridge Deck 16°41'25" -Scarification, and Apply houlder Varies -0" to 7'-2" tage Cosntruction -Skew (Typ.) 2¾" Bridge Deck Latex Concrete Overlay, to all roadway portions of deck except reconstruction expansion joint areas. S [0 Remove and Reconstruct Expansion Joints Pt. of Min. (Typ. at Both Vert. CI. Exist. Guardrail, Typ. Abut. Joints) Perform Bridge Deck Grooving to all roadway portions of deck. Perform Approach Slab Repairs and Apply 2" Stone-Mix Asphalt (SMA) Overlay, Typ. Both Ends. Perform Partial-Depth Överlay, Typ. Both Ends. For SMA Items, See Roadway Plans. 🕯 Structure Bridge Deck Slab Repairs € WCL RR Existing Name plate to be removed and re-installed at the same location. Retaining Wall PLAN STATE OF ILLINOIS

80'-6" 80'-6' 51'-6" 29'-0" | 29'-0" 51'-6" - Sta. 440+60.71  $-R = 3820.0^{\circ}$ - @ Pier 2 – Bk. N. Abut

- 16°41'25" Skew

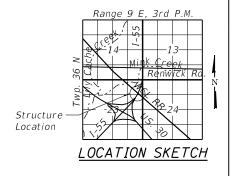
#### OFFSET SKETCH

#### SCOPE OF WORK

- Scarify 3/4" from the bridge deck slab.
- Perform deck slab and Approach slab repairs and adjust scuppers as required.
- Remove and Reconstruct Expansion Joints at North and South Abutments and install new preformed joint strip seals.
- Apply a 2¾" Bridge Deck Latex Concrete Overlay on Bridge Deck and 2" Stone-Matrix Asphalt (SMA) Overlay on the Approach Slabs.
- Perform Bridge Deck Grooving.
- Apply Protective Coat to the top and inside faces of parapets, reconstructed transverse expansion joints and to the surface
- Perform Structural Concrete repairs to the Abutments and Piers as noted in the plans.
- Existing name plate to be removed, cleaned and re-installed at the same location. Cost included with Concrete Removal.



DATE SIGNED: EXP. DATE: 11/30/2022 SHEETS S2-01 THRU S2-14



GENERAL PLAN AND ELEVATION NB I-55 OVER WCL RAILROAD F.A.I. 55 SEC 2020-253-BR&PP WILL COUNTY STATION: 440+60.71 STRUCTURE NO. 099-0018

USER NAME =	DESIGNED - JMT	REVISED -
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PLOT DATE =	CHECKED - JMT	REVISED -

**DEPARTMENT OF TRANSPORTATION** 

SECTION COUNTY WILL 178 74 2020-253-BR&PP S.N. 099-0018 NB I-55 OVER WCL RAILROAD CONTRACT NO. 62N22 SHEET S2-01 OF S2-14 SHEETS

#### GENERAL NOTES

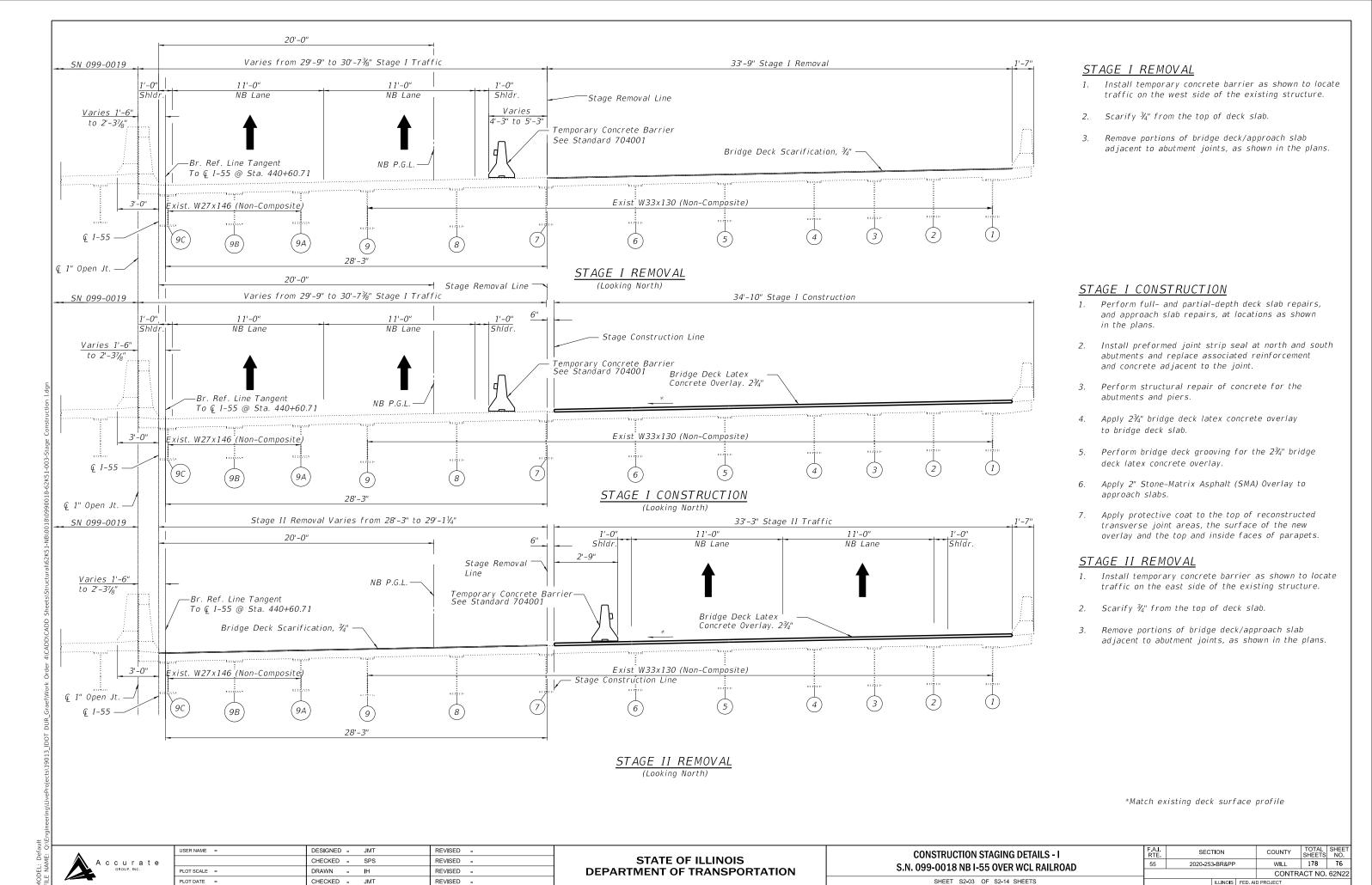
- 1. Reinforcement bars designated (E) shall be epoxy coated.
- 2. Prior to pouring the new concrete deck for Expansion Joints Reconstruction and Deck slab repairs, all heavy or loose rust, loose mill scale, and other loose or potentially detrimental foreign material shall be removed from the surfaces in contact with concrete. Tightly adhered paint 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.
- 3. 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 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.
- 4. Joint openings shall be adjusted according to Article 520.04 of the Standard Specification when the deck is poured at an ambient temperature other than 50° F.
- 5. Bars noted thus, 3x2-#5, indicates 3 lines of #5 bars with 2 lengths of bar per line.
- 6. All exposed concrete edges shall have a ¾" chamfer, except where shown otherwise
- 7. The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.
- B. During repair operations, the Contractor shall locate and protect all utilities in the vicinity of the work including, but not limited to, fiber optic and/or electrical conduits, conduits under the bridge deck, under-deck lighting, traffic signals or signs attached to the structure. This work shall be performed to the satisfaction of the Engineer and will not be paid for separately, but shall be included with the contract. It shall be the Contractor's responsibility to restore and replace any damaged utilities or facilities to the satisfaction of the Engineer at no cost to the Department.
- 9. Expansion joints shall be fabricated to conform to the existing cross slopes of the bridge.
- 10. Protective Coat shall be applied to the top and inside face of parapets, reconstructed transverse Expansion Joints and to the surface of the new overlay.
- 11. Existing reinforcement extended into the removal area shall be cleaned, straightened and incorporated into the new construction. Any reinforcement bars that are damaged during concrete removal operations shall be replaced using an approved bar splicer or anchorage system. Cost included with Concrete Removal.
- 12. The Contractor is responsible to protect the existing conduit embedded in the parapet during concrete removal and construction. Any damage to the existing conduit shall be repaired by the Contractor at no additional cost to the Department.

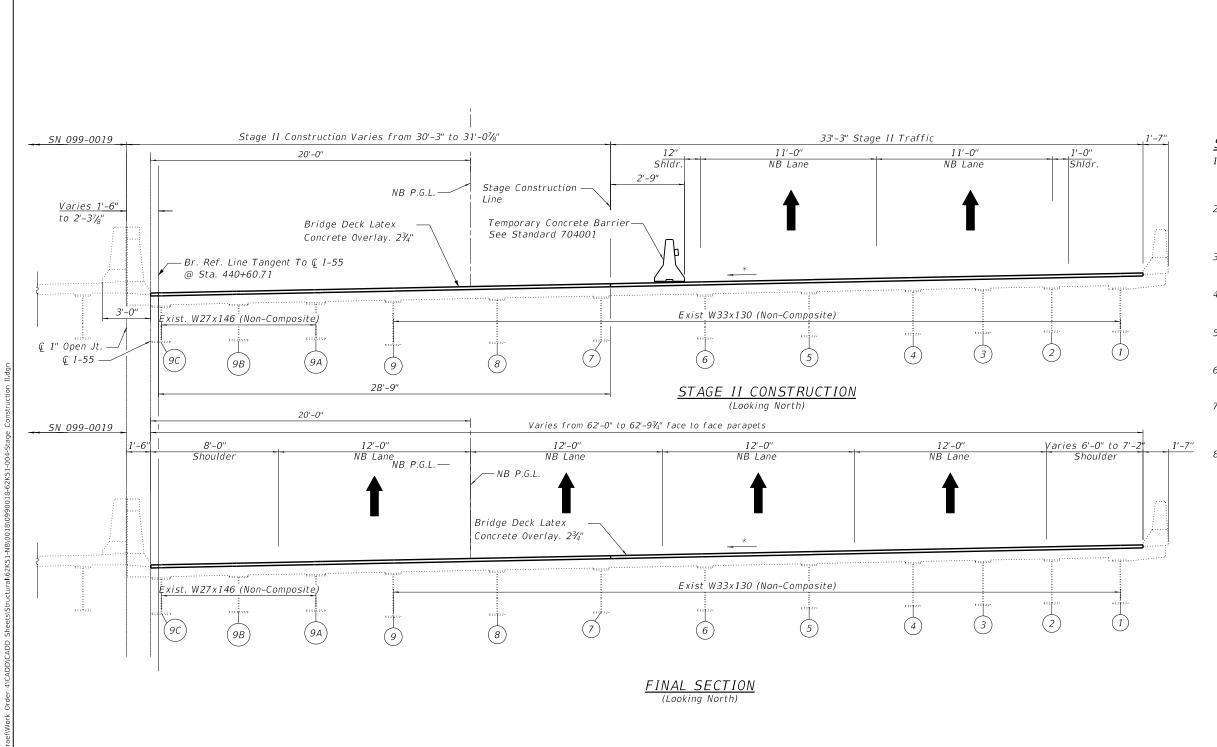
#### INDEX OF SHEETS

<i>S2-01</i> .	General Plan and Elevation
<i>52-02.</i>	General Notes, Total Bill of Materials, & Index of Sheets
<i>S2-03-S2-04.</i>	Construction Staging Details
<i>S2-05.</i>	Temporary Concrete Barrier for Stage Construction
<i>52-06.</i>	Bridge Deck Repairs
<i>S2-07</i>	Drainage Scuppers and Floor Drains Details
<i>52-08.</i>	Parapet Repairs
<i>52-09.</i>	Abut. Expansion Joint Removal and Construction
<i>52-10.</i>	Expansion Joint Details
<i>52-11.</i>	Preformed Joint Strip Seal
52-12.	Pier 1 and Pier 2 Repairs
<i>52-13.</i>	North and South Abutment Repairs
52-14.	Bar Splicer Assembly and Mechanical Splicer Details

#### TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Concrete Removal	Cu Yd	20.3		20.3
Protective Shield	Sq Yd	423		423
Concrete Superstructure	Cu Yd	20.3		20.3
Bridge Deck Grooving	Sq Yd	1140		1140
Protective Coat	Sq Yd	1525		1525
Reinforcement Bars, Epoxy Coated	Pound	3490		3490
Bar Splicers	Each	28		28
Preformed Joint Strip Seal	Foot	137		137
Concrete Sealer	Sq Ft		407	407
Epoxy Crack Injection	Foot		8	8
Approach Slab Repair (Partial Depth)	Sq Yd	2		2
Bridge Deck Latex Concrete Overlay, 2¾"	Sq Yd	1144		1144
Bridge Deck Scarification ¾"	Sq Yd	1144		1144
Structural Repair of Concrete (Depth Equal to or less than 5")	Sq Ft	9.3	30.5	39.8





#### STAGE II CONSTRUCTION

- Perform full- and partial-depth deck slab repairs, and approach slab repairs, at locations as shown in the plans.
- Install preformed joint strip seal at north and south abutments and replace associated reinforcement and concrete adjacent to the joint.
- 3. Perform structural repair of concrete for the abutments and piers.
- 4. Apply 2¾" bridge deck latex concrete overlay to bridge deck slab.
- 5. Perform bridge deck grooving for the 2¾" bridge deck latex concrete overlay.
- Apply 2" Stone-Matrix Asphalt (SMA) Overlay to approach slabs.
- 7. Apply protective coat to the top of reconstructed transverse joint areas, the surface of the new overlay and the top and inside faces of parapets.
- 8. Apply permanent pavement markings on top of deck and approach slabs.

\*Match existing deck surface profile

A c c u r a t e

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

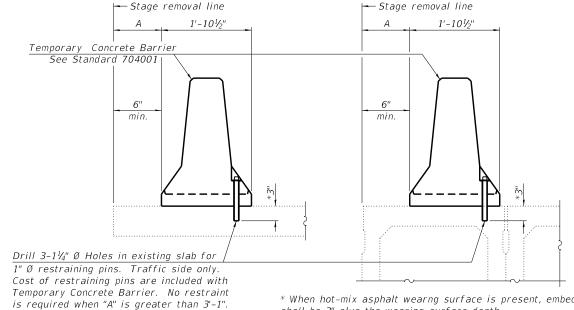
CONSTRUCTION STAGING DETAILS - II
S.N. 099-0018 NB I-55 OVER WCL RAILROAD

SHEET S2-04 OF S2-14 SHEETS

AI. SECTION COUNTY TOTAL SHEET NO. 55 2020-253-BR&PP WILL 178 77 CONTRACT NO. 62N22

– See Detail I, II or III When "A" is 3'-1" or less, the temporary concrete barrier shall be restrained to the new slab according to Detail I, II or III. No restraint is required when "A" is greater than 3'-1".

#### NEW SLAB OR NEW DECK BEAM



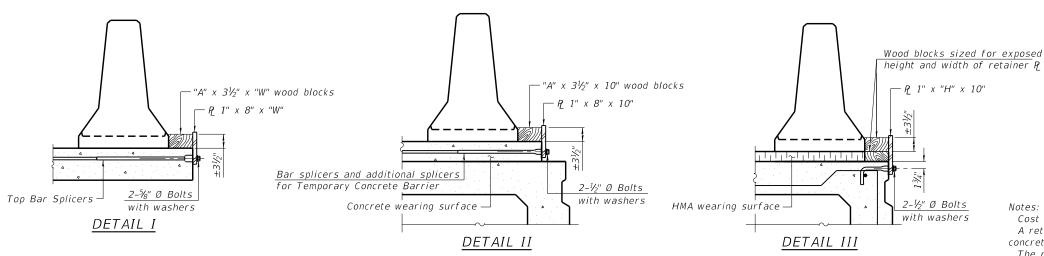
 $^{*}$  When hot-mix asphalt wearng surface is present, embedment shall be 3" plus the wearing surface depth.

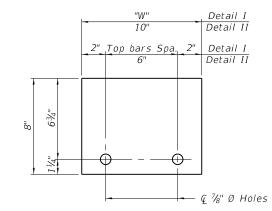
#### EXISTING DECK BEAM

# US Std. 11/16" I.D. x 21/2" O.D. x approx. 8 guage thick washer RESTRAINING PIN

#### SECTIONS THRU SLAB OR DECK BEAM

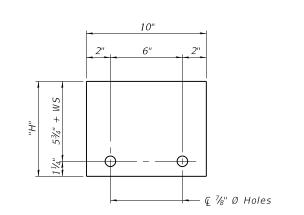
EXISTING SLAB



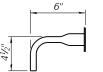


## STEEL RETAINER P 1" x 8" x "W"

(Detail I and II)



STEEL RETAINER P 1" x "H" x 10" (Detail III)



#### BAR SPLICER FOR #4 BAR - DETAIL III

Cost of retainer assembly is included with Temporary Concrete Barrier. A retainer assembly shall be located at the approximate Q of each temporary

The retainer plate shall not be removed until the concrete on the adjacent stage is ready to be poured. For Detail III applications the retainer plate shall not be removed until just prior to placing the adjacent beam.

When the 'A' dimension is less than  $1\frac{1}{2}$ ", the wood block shall be omitted and the barrier shall be placed in direct contact with the steel retainer plate. For deck beam applications the minimum required 'A' distance is 6" to accommodate the shear key clamping device.

- Detail I Installation for a new bridge deck or bridge slab.
- Detail II Installation for a new deck beam with an initial concrete wearing surface. Additional bar splicers shall be provided at 6'-0" centers and paired with the bar splicers of the concrete wearing surface reinforcement to accommodate the installation of the retainer assemblies. The cost of the additional bar splicers is included with the concrete wearing surface.
- Detail III Installation for a new deck beam with no initial wearing surface or with an initial hot-mix asphalt (HMA) wearing surface present. The deck beam directly beneath the temporary concrete barrier shall be fabricated with bar splicer inserts in the side of the beam, as detailed, to accommodate the installation of the retainer assemblies. A pair of bar splicers, 6" apart, shall be placed at 6'-0" centers along the length of the beam. The cost of the bar splicers is included with the deck beam.

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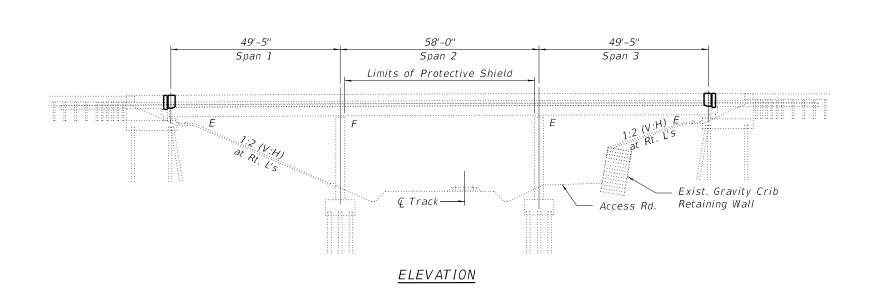


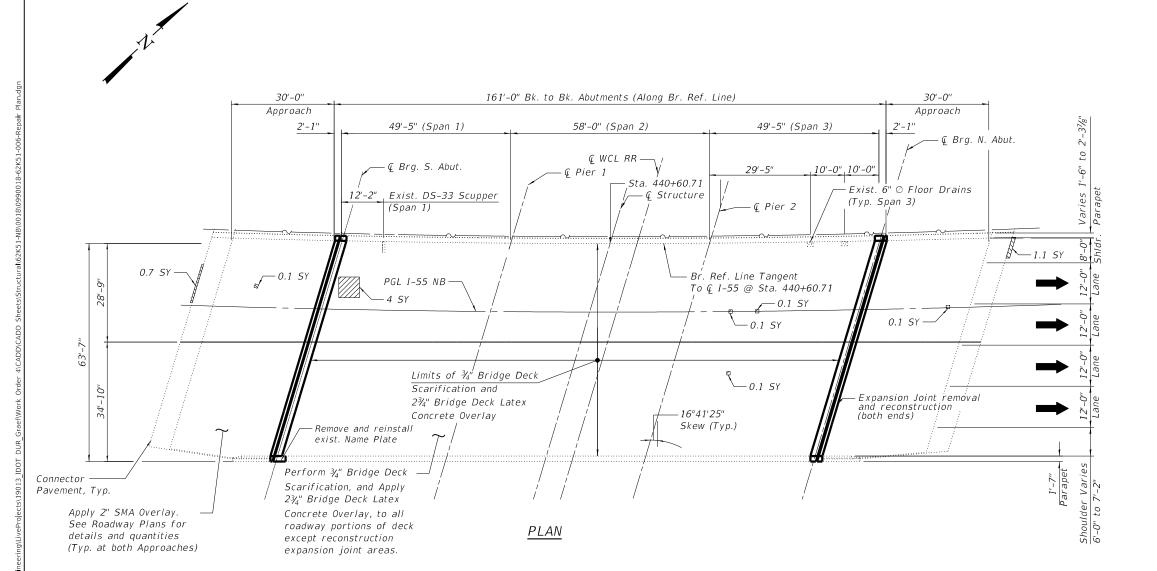
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PLOT DATE =	CHECKED -	JMT	REVISED -	

**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**  TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION SN 099-0018 NB I-55 OVER WCL RAILROAD SHEET S2-05 OF S2-14 SHEETS

F.A.I. RTE.	SECTION		COUNTY	TOTAL SHEETS	SHEET NO.
55	2020-253-BR&PP	WILL	178	78	
		CONTRA	ACT NO.	62N22	
	ILLINOIS	FFD. Al	D PROJECT		

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#### NOTES:

- 1. Deck and approach slab repair areas are estimated based on visual inspection and will be paid for as specified in the Special Provision. Actual repair areas and locations shall be determined by the Engineer and shown on As-built plans. Engineer shall sound deck after deck scarification.
- 2. Protective Coat shall be applied to the bridge overlay and front and top faces of the new and existing parapets.
- 3. All dimensions are perpendicular to & I-55 Bridge Deck.
- 4. Install Protective Shield over WCL Railroad.
- 5. For bridge deck final cross section, see Sheet S1-04.
- 6. For North and South Transverse Joint Removal and Reconstruction, see Sheets S1-09 and S1-10.
- 7. Perform Bridge Deck Grooving for the Bridge Deck Latex Concrete Overlay and the roadway portions of the Reconstructed Transverse Joints.
- 8. Any reinforcement bars that are damaged during concrete removal operations shall be repaired or replaced using an approved bar splicer or anchorage system. Cost included with Concrete Removal.
- 9. The Contractor shall exercise extreme caution during concrete removal to avoid damaging the steel beams and diaphragms to remain. Any damage to the existing steel beams and/or diaphragms to remain caused by the Contractor in the performance of his/her work shall be repaired by the Contractor, to the satisfaction of the Engineer at no cost to the
- 10. See Sheet S2-07 of S2-14 for Drainage Scupper and Floor Drain Details.

#### LEGEND:

Deck Slab Repair

(Partial)\*

Approach Slab Repair

(Full Depth)

SY Square Yards

\*Areas of Deck Slab Repair (Partial) are provided for information only and shall be included in the cost of Bridge Deck Latex Concrete Overlay, 23/4"

#### BILL OF MATERIAL

UNIT	QUANTITY
Sa Vd	2
	2
Sq. Yd.	1525
Sq. Yd.	1140
Sa Vd	1144
5q. 1a.	1144
Sq. Yd.	1144
Sq. Yd.	423
	Sq. Yd. Sq. Yd. Sq. Yd. Sq. Yd. Sq. Yd.

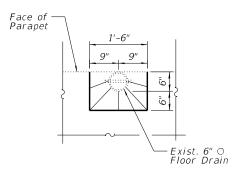
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**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION** 

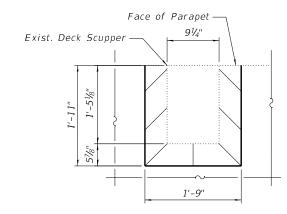
**BRIDGE DECK REPAIRS** S.N. 099-0018 NB I-55 OVER WCL RAILROAD SHEET S2-06 OF S2-14 SHEETS

COUNTY TOTAL SHEET NO.
WILL 178 79 SECTION COUNTY 2020-253-BR&PP CONTRACT NO. 62N22

FLOOR DRAIN/ DRAINAGE SCUPPER DETAIL

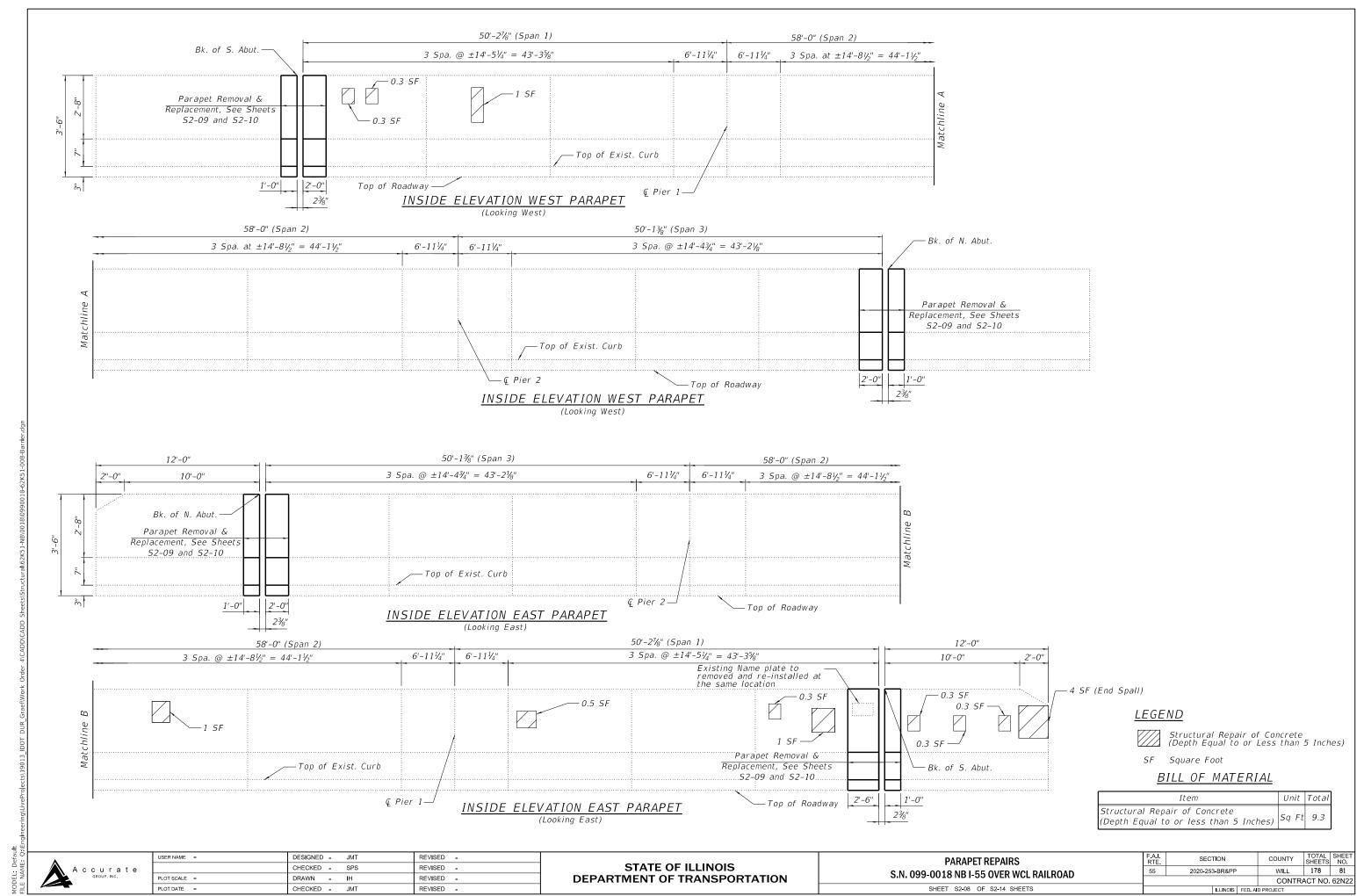


6" ∅ FLOOR DRAIN <u>TOP PLAN</u>

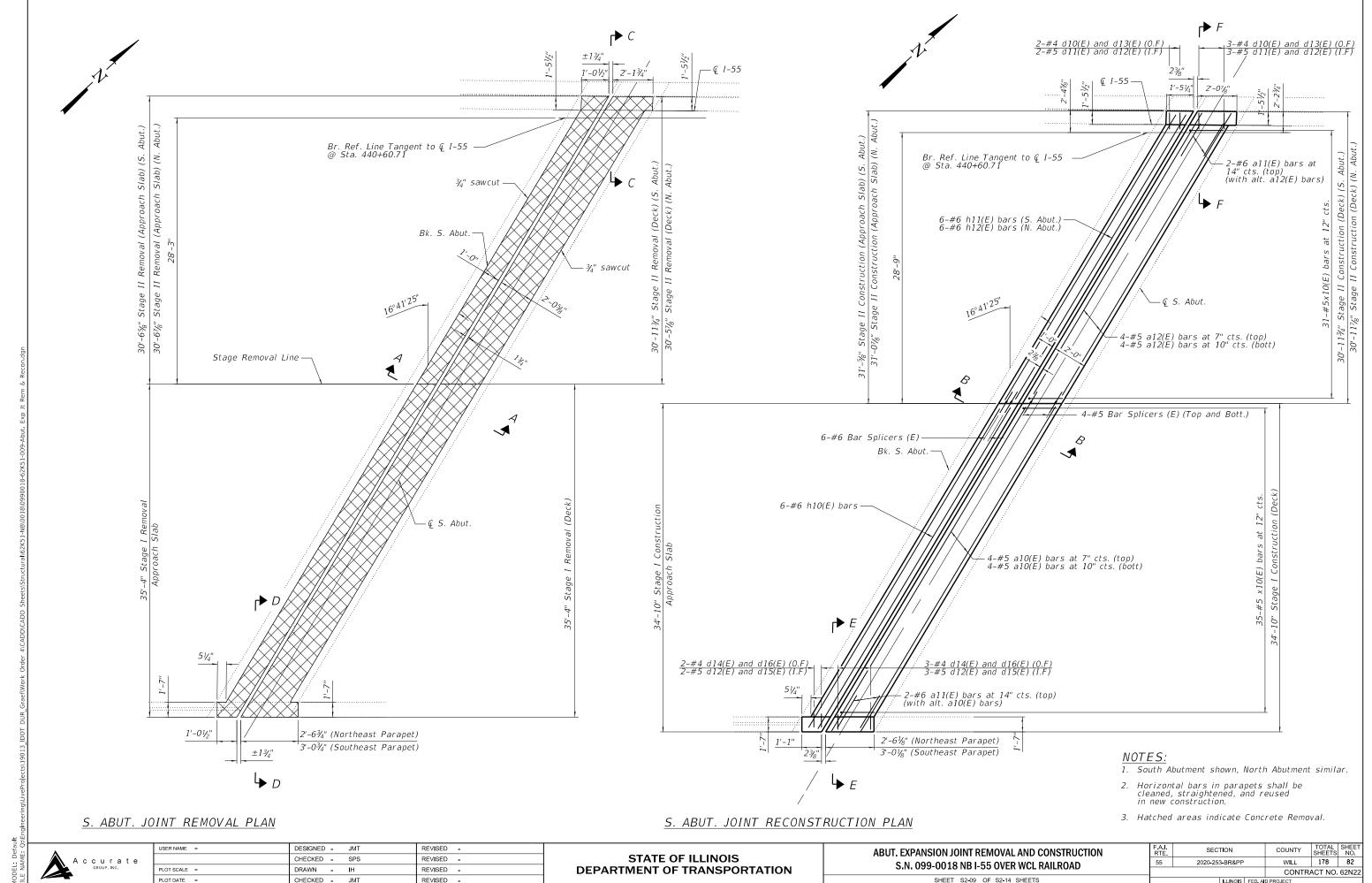


<u>TOP PLAN AT</u> DRAINAGE SCUPPER

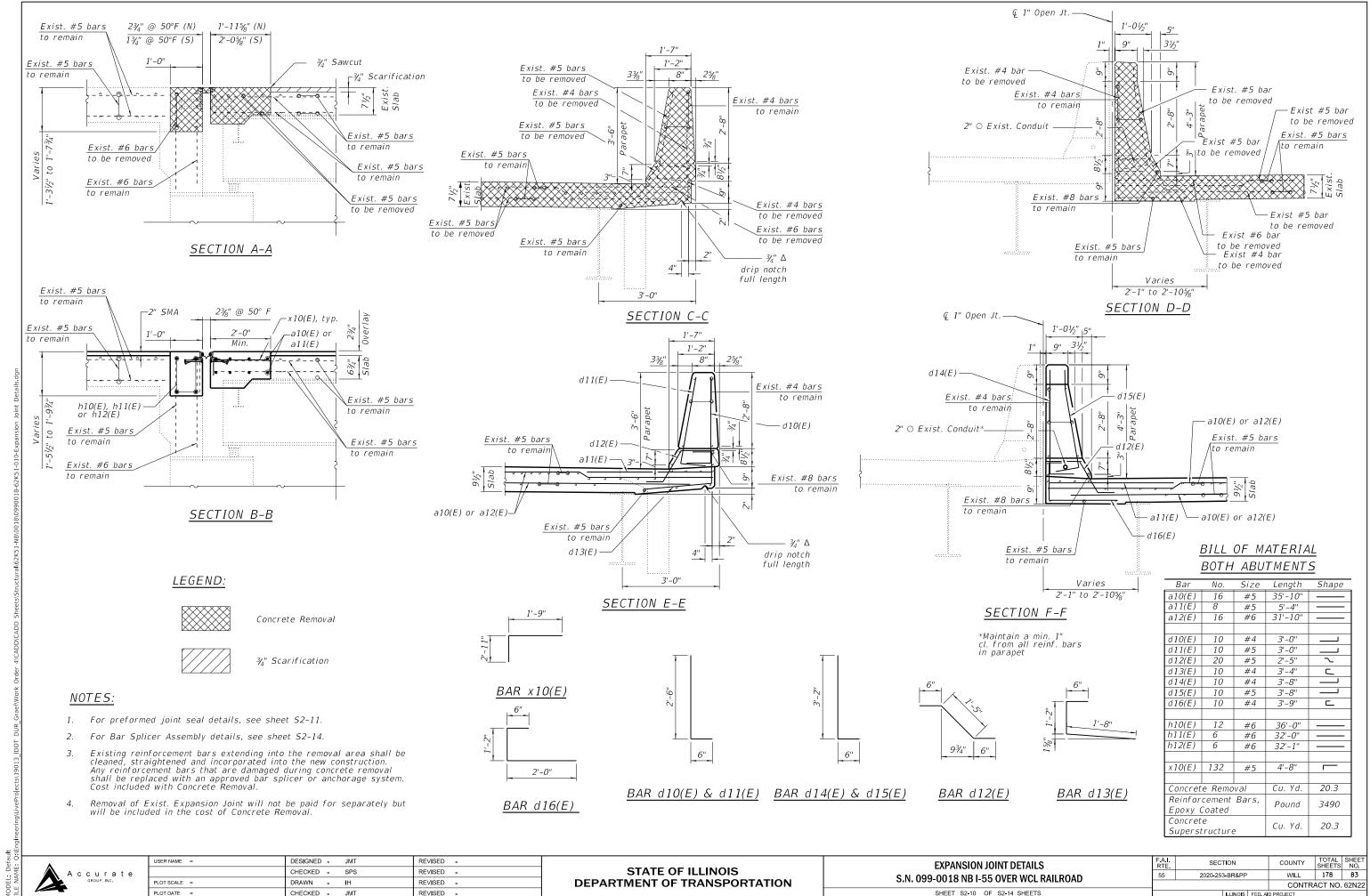
COUNTY TOTAL SHEET NO.
WILL 178 80



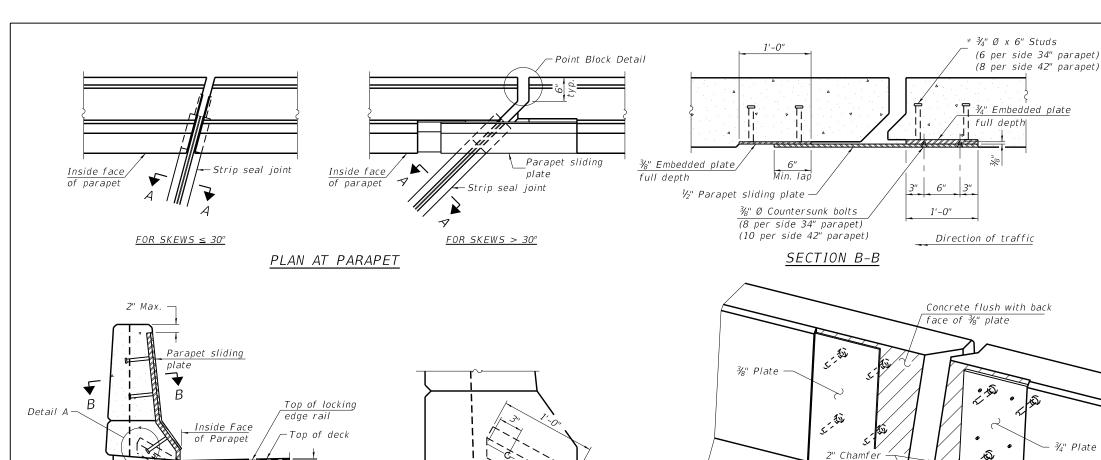
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#### ELEVATION AT PARAPET

(Skews > 30° shown. Skews ≤ 30° similar except as shown in plan view.)

# 1/10 Ø. € Concrete flush with back DETAIL A face of ¾" plate

#### TRIMETRIC VIEW (Showing embedded plates only)

# Locking edge railat 50° F Top of concrete Strip seal at 50° F

SHOWING ROLLED RAIL JOINT

# Locking edge rail-11/2" at 50° F Top of concrete -Strip seal \* $\frac{1}{8}$ " Ø x 6" studs @ 6" cts. (alternate angled/bent studs with horizontal studs)

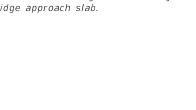
 $\frac{3}{6}$ "  $\phi$  threaded rods in  $\frac{7}{6}$ "  $\phi$  holes at  $\pm 4$ '-0" cts. for holding the proper joint opening based on the temperature during the deck pour. Place to miss studs. All rods shall be burned, or sawed off flush with the plates after concrete is set.

SECTION A-A \* Granular or solid flux filled headed studs conforming to Article 1006.32 of the Std. Specs., automatically end welded.

#### SHOWING WELDED RAIL JOINT

# <u>ROLLED</u> WELDED RAIL (EXTRUDED) RAIL

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



The strip seal shall be made continuous and shall have a minimum thickness of 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 4½" maximum depth provided the anchorage system is revised according to the manufacturer's recommendation.

The manufacturer's recommended installation methods shall be followed.

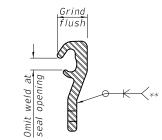
All steel components shall be galvanized after fabrication according to Article 520.03 of the Standard Specifications.

The Maximum space between locking edge rail segments shall be  $\frac{3}{6}$ " 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 RAILS



#### 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	137

EJ-SS 8-11-17



½" Ø x 6" Studs

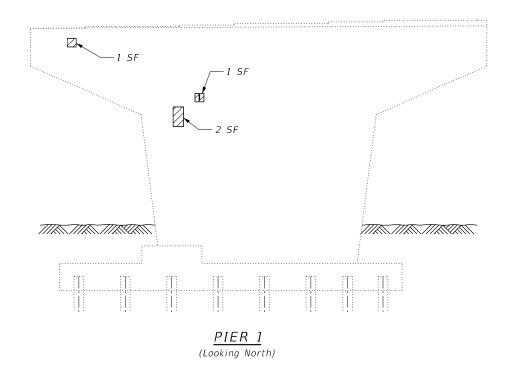
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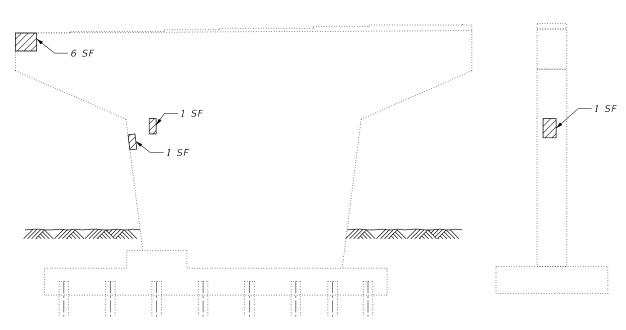
**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION** 

PREFORMED JOINT STRIP SEAL SN 099-0018 NB I-55 OVER WCL RAILROAD SHEET S2-11 OF S2-14 SHEETS

F.A.I. RTE			COUNTY	TOTAL SHEETS	SHE	
55	2020-253-BR&PP		WILL	178	84	
			CONTRA	ACT NO.	62N	
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<u>PIER 2</u> (Looking North)

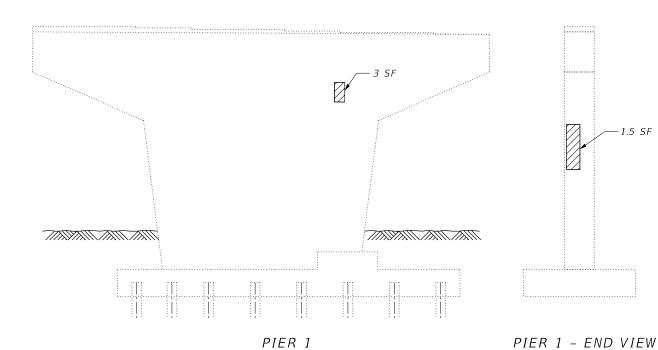
NOTES:

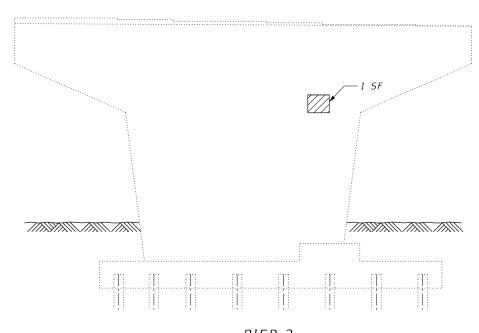
## <u>PIER 2 - END VIEW</u>

(Looking West)

#### Structural Repair of Concrete (Depth Equal to or less than 5")

- Quantities and limits shown are estimated for bidding purposes only. The actual areas to be repaired, and the type(s) of repairs to be used, will be determined by the Engineer in the field at the time of construction.
- Apply Concrete Sealer to new concrete surfaces of structurally repaired concrete.





(Looking South)

PIER 2 (Looking South)

#### BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Structural Repair of Concrete (Depth Equal to or Less Than 5")	Sq Ft	18.5



Exposed Reinforcement

Epoxy Crack Injection

Square Foot

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STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

PIER 1 AND PIER 2 REPAIRS
S.N. 099-0018 NB I-55 OVER WCL RAILROAD

SHEET S2-12 OF S2-14 SHEETS

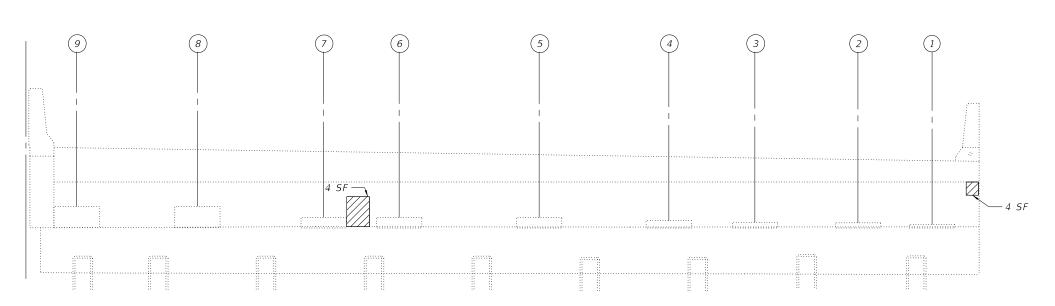
(Looking East)

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LEGEND:

DEL: Default E NAME: Q:\Engine

2020 1157150 BM



ELEVATION - SOUTH ABUTMENT (Looking South)

### <u>LEGEND:</u>

Structural Repair of Concrete
(Depth Equal to or less than 5")

Exposed Reinforcement

x' Epoxy Crack Injection

SF Square Foot

#### NOTES:

- Quantities and limits shown are estimated for bidding purposes only. The actual areas to be repaired, and the type(s) of repairs to be used, will be determined by the Engineer in the field at the time of construction.
- Apply Concrete Sealer to new concrete surfaces of structurally repaired concrete.

#### BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Structural Repair of Concrete (Depth Equal to or Less Than 5")	Sq Ft	12
Epoxy Crack Injection	Foot	8
Concrete Sealer	Sq Ft	407

A c	curate GROUP, INC.
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STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

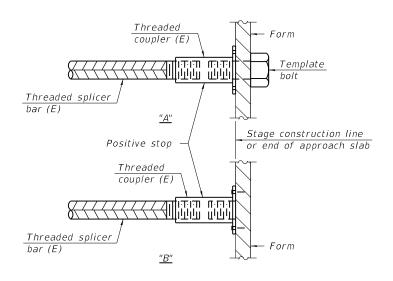
#### STANDARD BAR SPLICER ASSEMBLY PLAN

(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.

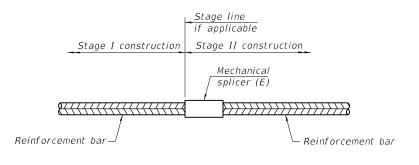
Location	Bar	No. assemblies	Minimum
Location	size	required	lap length
S. Abut. Deck	#5	8	3'-6"
S. Abut. Backwall	#6	6	4'-0"
N. Abut. Deck	#5	8	3'-6"
N. Abut. Backwall	#6	6	4'-0"



#### 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.



#### 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



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Existing Structure: Structure No. 0994615 was constructed in 1994 as part of F.A.I. Route 55, Section 27(B-1,B-3,HB,VB-1)BR89 and project F.A. IM-NHI-55-6-(193)252 and reconstructed/widened in 2007. The Structure has a length of 77'-8" (back-to-back of abutments) and an out-to-out deck width of 57'-7". The continuous slab superstructure consists of three equal span lengths of 25'-0". The reinforced concrete deck slab is 12" thick. The substructure consists of reinforced concrete piers and abutments on steel piles. Traffic is to be maintained utilizing stage construction. No Salvage. 77'-8" Bk. to Bk. Abut 25'-0" 25'-0" 25'-0" 1'-4' 1'-4" Span 1 Span 2 Span 3 -Stream Bed @ Rt. Q S. Abut. -€ Pier 1-N. Abut. 16'-0" Bottom Channel @ Rt. L's Exist. Steel H Piles, Typ. ELEVATION (Looking West) 20°0'0" Skew (Typ.) € 1" Open Jt.-© Pier 1 € Pier 2 Bk. N. Abut. € I-55 Sta. 461+25.95 Sta. 461+50.95 Sta. 461+77.29 461+00 462+00 N. Abut. Station Sta. 461+00.95 Sta. 461+75.95 Increase Apply a  $4'' \times 2^{1} /_{4}''$ PGL I-55 NB polymer concrete — Perform ¾" Bridge Deck Scarification block, Typ. and apply 2¾" Bridge Deck Latex Structure & Concrete Overlay. Mink Creek - Perform Bridge Deck Grooving Apply 2" Stone-Matrix -Asphalt (SMA) Overlay to both Approach Slabs Exist. Deck (See Roadway Plans) Drain, typ. Perform partial-depth approach slab repairs Exist. Traffic Barrier Terminal Exist. Stone Riprap Class A4 (Typ.) 1'-4" 25'-0" 25'-0" 25'-0" 1'-4" Span 1 Span 2 Span 3 30'-0" 77'-8" Bk. to Bk. Abutment 30'-0" PLAN

#### SCOPE OF WORK

- 1. Scarify ¾" from the bridge deck slab.
- 2. Perform Deck Slab Repairs and Approach Slab Repairs as required.
- 3. Apply a 4"x21/4" polymer concrete block, at both ends of deck
- 4. Apply a 2¾" Bridge Deck Latex Concrete Overlay to the bridge deck.
- 5. Apply 2" Stone-Matrix Asphalt (SMA) Overlay on the Approach Slabs, see Roadway plans.
- 6. Apply Protective Coat to the top and inside face of reconstructed parapets and top of Latex Overlay.
- 7. Perform Bridge Deck Grooving.
- 8. Clean all floor drains.

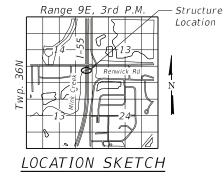


ianed Moussa A. Issa

Dr. Moussa A. Issa, S.E. II. Lic. No. 081-005738 Expires 11-30-2022

Date December 03, 2020

FOR SHEETS S3-01 THRU S3-08 (Total of 8 Sheets)



GENERAL PLAN AND ELEVATION

<u>I-55 OVER MINK CREEK</u>

F.A.I. ROUTE 55 - SEC. 2006-032 WILL COUNTY

STATION 630+07.11 S.N. 099-4615

HBM ENGINEERING GROUP, LLC

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

S.N. 099-4615 I-55 NB OVER MINK CREEK (0.8 MILES N OF US 30)

SHEET S3-01 OF S3-08 SHEETS

 
 F.A.I. RTE.
 SECTION
 COUNTY
 TOTAL SHEETS
 SHEETS NO.

 1-55
 2020-253-BR&PP
 WILL
 178
 88

 CONTRACT NO. 62N22

#### **GENERAL NOTES:**

- 1. 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 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.
- 2. Protective coat shall be applied to top and inside face of parapets and Latex Overlay.
- 3. All exposed concrete edges shall have a 3/4"x45° chamfer, except where shown otherwise.
- 4. The Contractor is responsible to protect the existing conduit embedded in the parapet during concrete removal and construction. Any damage to the existing conduit shall be repaired by the Contractor at no additional cost to the Department.

#### INDEX OF SHEETS

S3-01 General Plan & Elevation

S3-02 Structure Notes, Index of Sheets & Total Bill of Material

S3-03 Stage Construction (Sheet 1 of 2)

S3-04 Stage Construction (Sheet 2 of 2)

S3-05 Temporary Concrete Barrier For Stage Construction

S3-06 Bridge Deck Repairs S3-07 Approach Slab Repairs

S3-08 Parapet Repairs

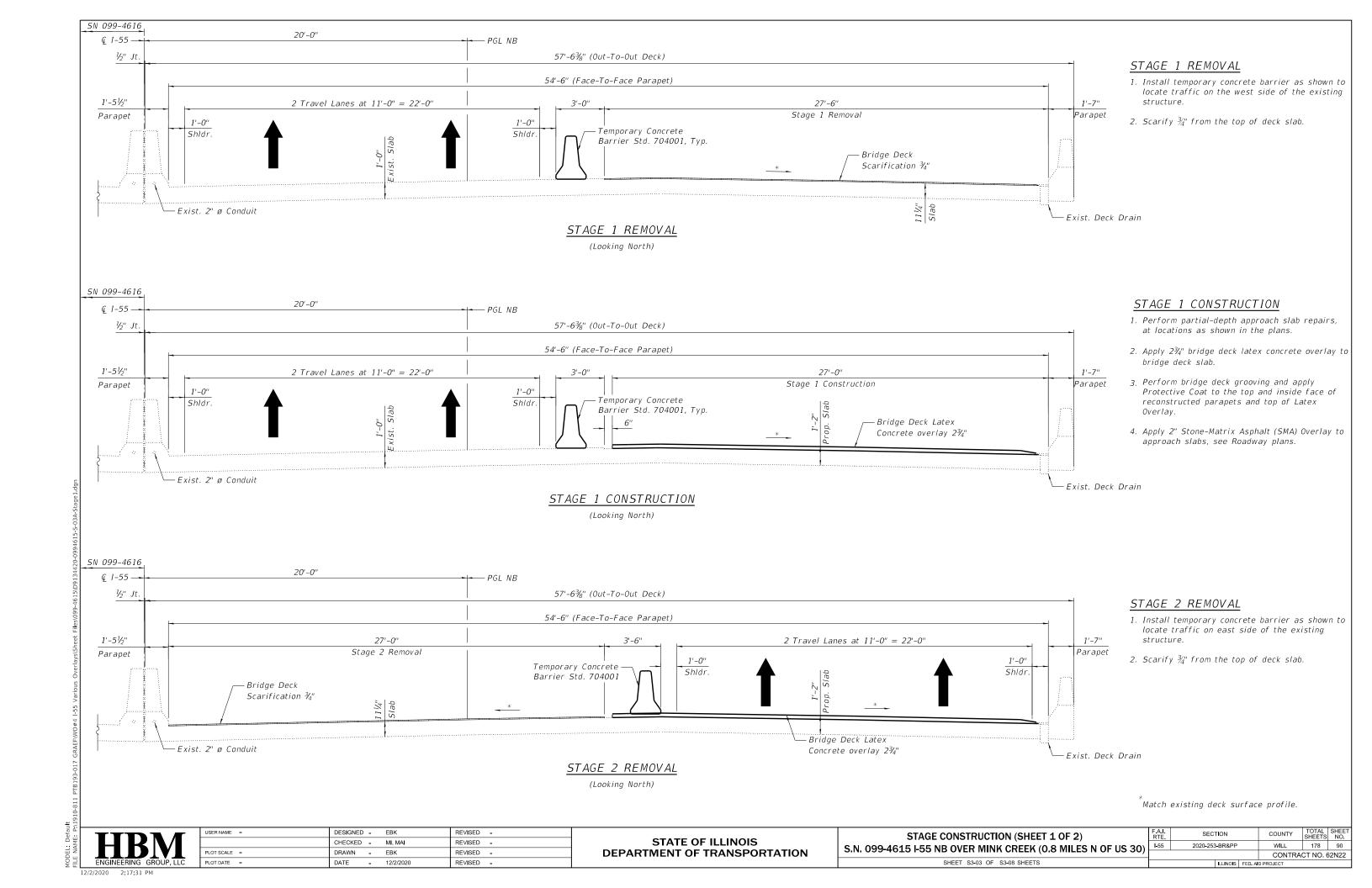
#### TOTAL BILL OF MATERIAL

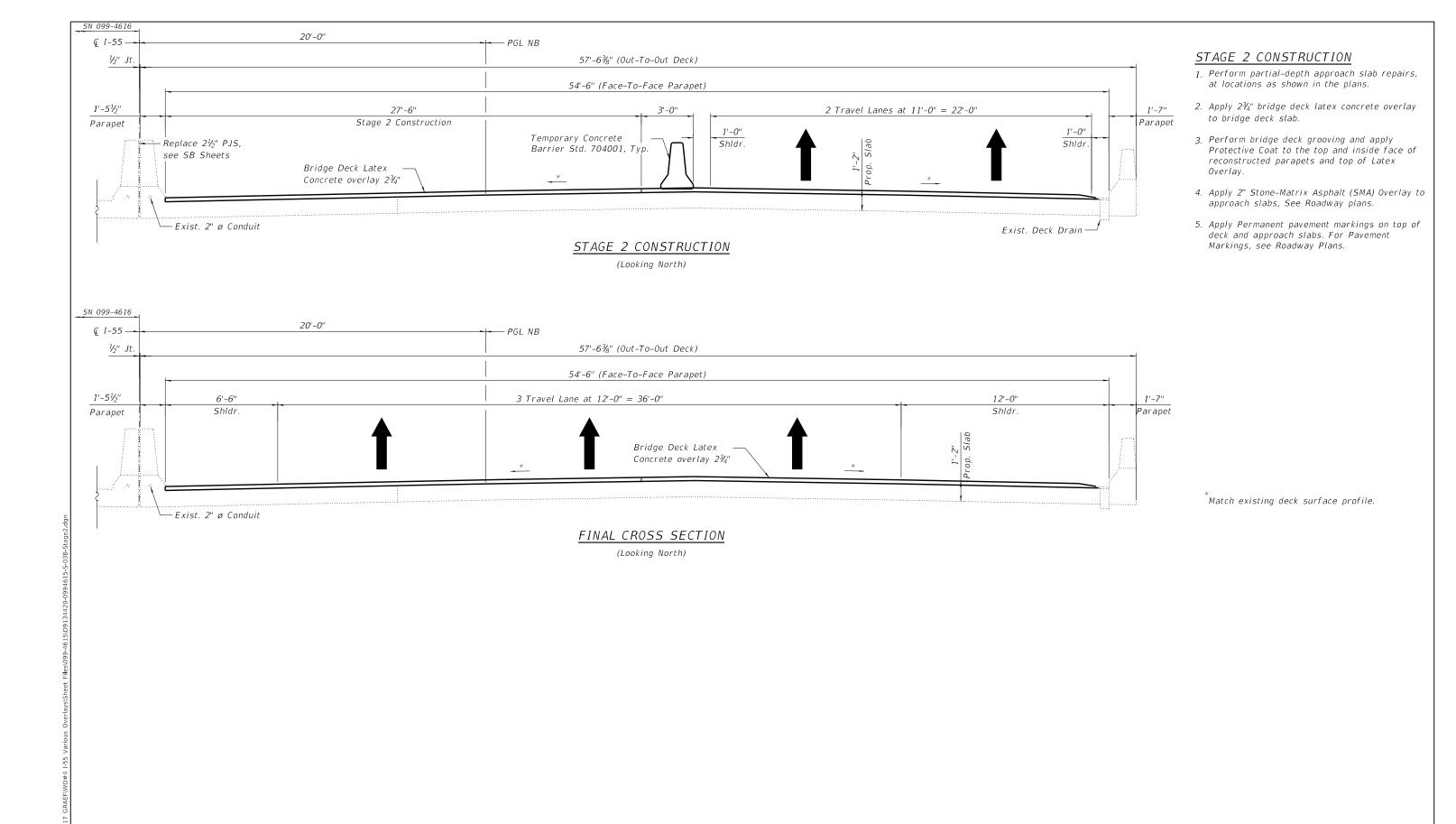
ITEM	UNIT	SUPER	SUB	TOTAL
Bridge Deck Grooving	SQ YD	454	0	454
Protective Coat	SQ YD	539	0	539
Approach Slab Repair (Partial Depth)	SQ YD	2	0	2
Bridge Deck Latex Concrete Overlay, 2 3/4 Inches	SQ YD	464	0	464
Bridge Deck Scarification 3/4"	SQ YD	464	0	464
Structural Repair Of Concrete (Depth Equal To Or Less Than 5 Inches)	SQ FT	5	0	5
Polymer Concrete	CU FT	9	0	9

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STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**  STRUCTURE NOTES, INDEX OF SHEETS & TOTAL BILL OF MATERIAL RTE. S.N. 099-4615 I-55 NB OVER MINK CREEK (0.8 MILES N OF US 30) SHEET S3-02 OF S3-08 SHEETS

SECTION COUNTY 2020-253-BR&PP WILL 178 89 CONTRACT NO. 62N22





HBM INGUINEERING GROUP, LLC

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

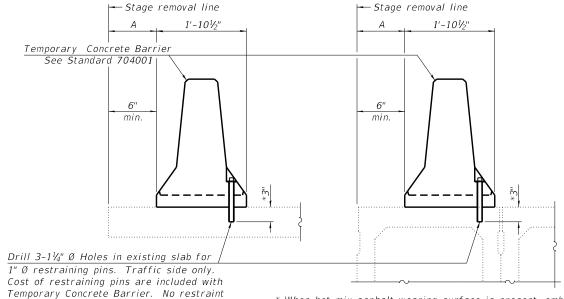
STAGE CONSTRUCTION (SHEET 2 OF 2)
S.N. 099-4615 I-55 NB OVER MINK CREEK (0.8 MILES N OF US 30)

SHEET S3-04 OF S3-08 SHEETS

— See Detail I, II or III When "A" is 3'-1" or less, the temporary concrete barrier shall be restrained to the new slab according to Detail I, II or III. No restraint is required when "A" is greater than 3'-1".

#### NEW SLAB OR NEW DECK BEAM

2-17-2017



\* When hot-mix asphalt wearing surface is present, embedment shall be 3" plus the wearing surface depth.

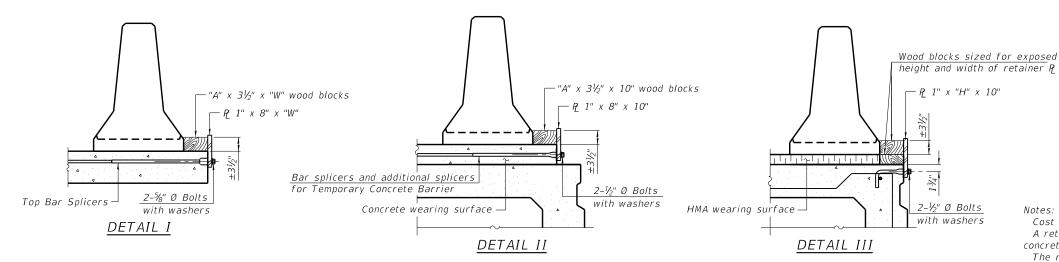
#### EXISTING DECK BEAM

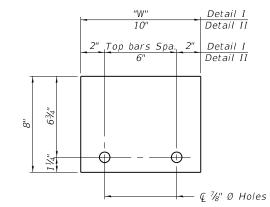
# 1x8 UNC US Std. 11/16" I.D. x 21/2" O.D. x approx. 8 guage thick washer RESTRAINING PIN

#### SECTIONS THRU SLAB OR DECK BEAM

is required when "A" is greater than 3'-1".

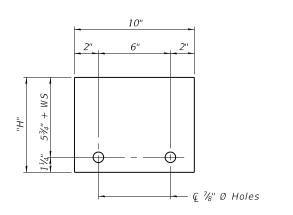
EXISTING SLAB



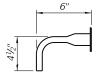


## STEEL RETAINER P 1" x 8" x "W"

(Detail I and II)



STEEL RETAINER P 1" x "H" x 10" (Detail III)



#### BAR SPLICER FOR #4 BAR - DETAIL III

Cost of retainer assembly is included with Temporary Concrete Barrier. A retainer assembly shall be located at the approximate ( of each temporary concrete barrier.

The retainer plate shall not be removed until the concrete on the adjacent stage is ready to be poured. For Detail III applications the retainer plate shall not be removed until just prior to placing the adjacent beam.

When the 'A' dimension is less than  $1\frac{1}{2}$ ", the wood block shall be omitted and the barrier shall be placed in direct contact with the steel retainer plate. For deck beam applications the minimum required 'A' distance is 6" to accommodate the shear key clamping device.

- Detail I Installation for a new bridge deck or bridge slab.
- Detail II Installation for a new deck beam with an initial concrete wearing surface. Additional bar splicers shall be provided at 6'-0" centers and paired with the bar splicers of the concrete wearing surface reinforcement to accommodate the installation of the retainer assemblies. The cost of the additional bar splicers is included with the concrete wearing surface.
- Detail III Installation for a new deck beam with no initial wearing surface or with an initial hot-mix asphalt (HMA) wearing surface present. The deck beam directly beneath the temporary concrete barrier shall be fabricated with bar splicer inserts in the side of the beam, as detailed, to accommodate the installation of the retainer assemblies. A pair of bar splicers, 6" apart, shall be placed at 6'-0" centers along the length of the beam. The cost of the bar splicers is included with the deck beam.

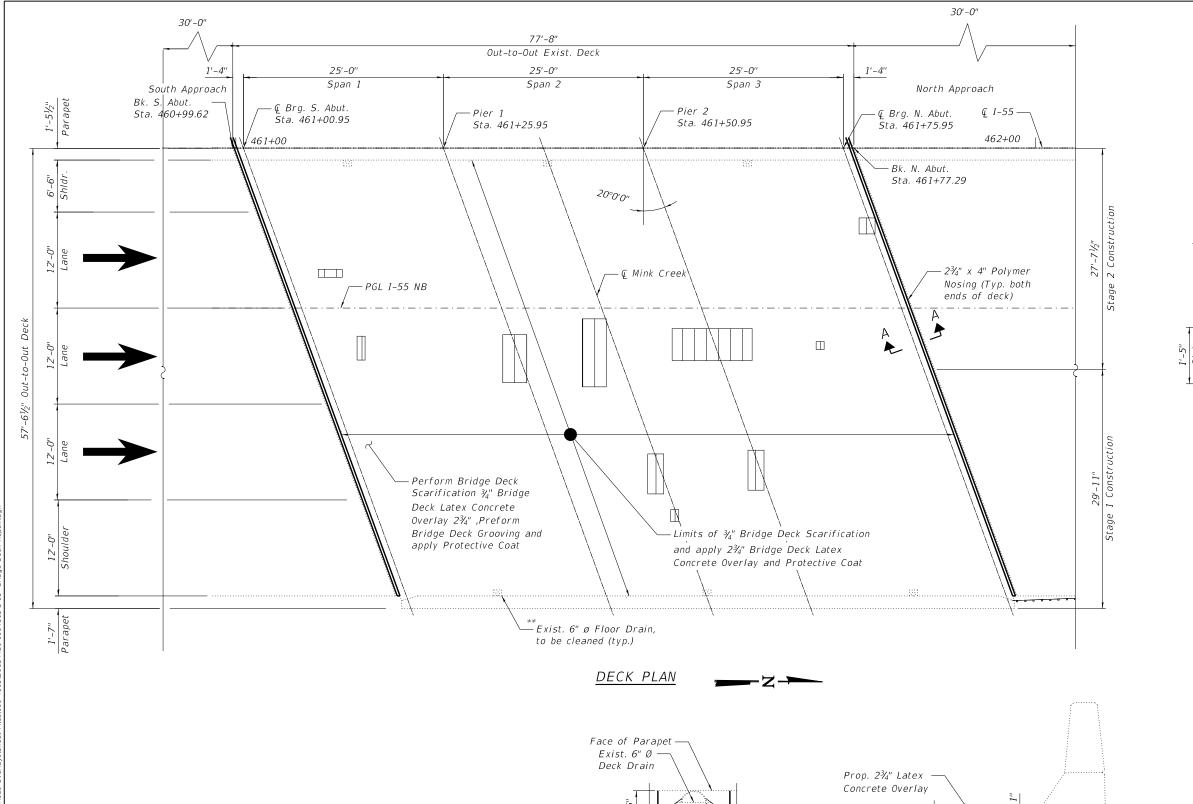
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**STATE OF ILLINOIS** 

TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION S.N. 099-4615 I-55 NB OVER MINK CREEK (0.8 MILES N OF US 30) SHEET S3-05 OF S3-08 SHEETS

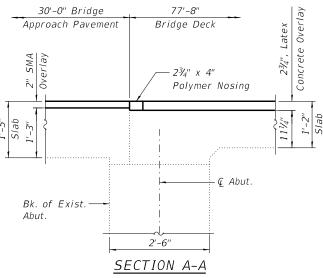
A.I. RTE.	SEC.	TION		COUNTY	TOTAL SHEETS	SHEET NO.
I-55	2020-253-BR&PP		WILL	178	92	
			CONTRA	CT NO. 6	52N22	
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**DEPARTMENT OF TRANSPORTATION** 



#### BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Bridge Deck Grooving	Sq. Yd.	454
Protective Coat	Sq. Yd.	539
Bridge Deck Latex Concrete	Sq. Yd.	464
Overlay, 2¾"		
Bridge Deck Scarification, ¾"	Sq. Yd.	464
Polymer Concrete	Cu. Ft.	9



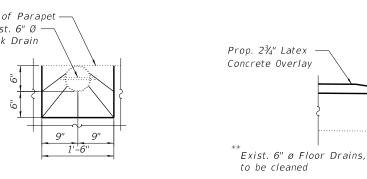
Areas of Deck Slab Repair (Partial) are provided for information only and shall be included in the cost of Bridge Deck Latex Concrete Overlay, 2¾"

#### LEGEND

\*Deck Slab Repair (Partial)

# NOTES:

- 1. Areas of deck repair shown are estimated. The Engineer shall show actual locations of deck repairs at the time of construction.
- 2. For bridge deck final cross section, see Sheet #STG62
- 3. Perform bridge deck grooving.
- 4. Cost of all labour and materials necessary to clean all existing floor drains is included in the cost for Bridge Deck Latex Concrete Overlay 2¾".



TOP PLAN

SECTION AT DECK DRAIN

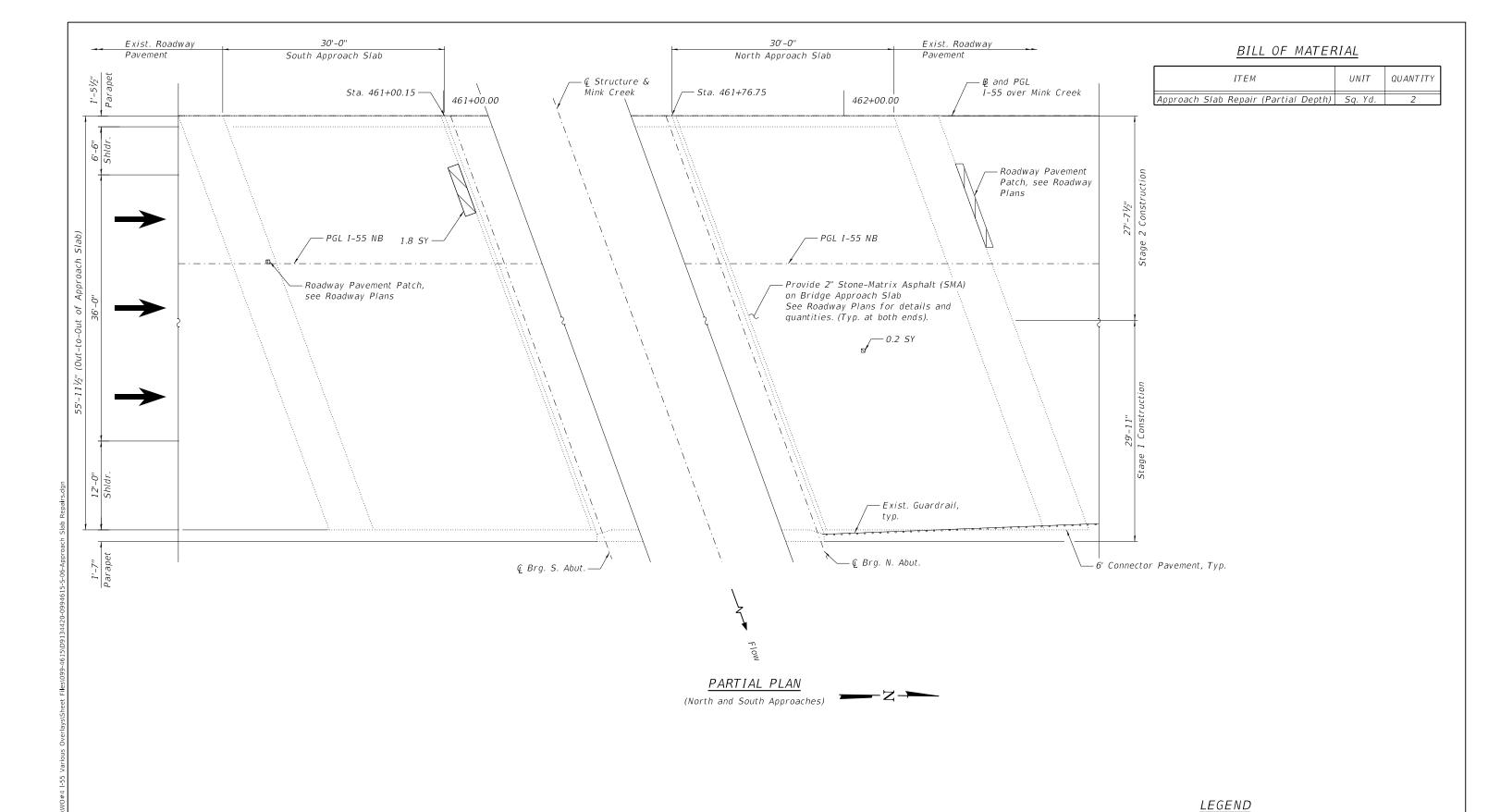
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STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

**BRIDGE DECK REPAIRS** S.N. 099-4615 I-55 NB OVER MINK CREEK (0.8 MILES N OF US 30) SHEET S3-06 OF S3-08 SHEETS

SECTION COUNTY WILL 2020-253-BR&PP 178 93 CONTRACT NO. 62N22

 $<sup>^{**}</sup>$ Cost included in the cost for Bridge Deck Latex Concrete Overlay 2¾".



NOTE:

1. Areas of Approach Slab Repair (Partial Depth) shown are estimated. The Engineer shall show actual location of repairs at the time of construction.

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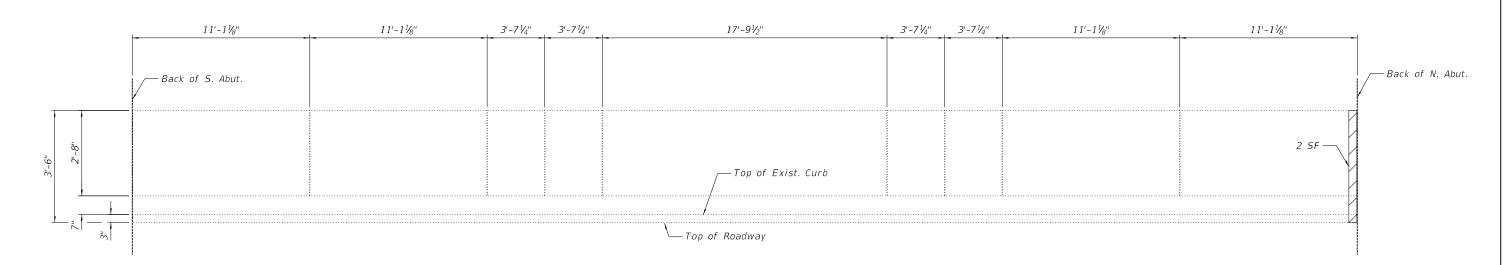
STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

APPROACH SLAB REPAIRS S.N. 099-4615 I-55 NB OVER MINK CREEK (0.8 MILES N OF US 30) SHEET S3-07 OF S3-08 SHEETS

SECTION COUNTY 2020-253-BR&PP WILL 178 94 CONTRACT NO. 62N22

Approach Slab Repair (Partial Depth)

#### INSIDE ELEVATION OF EAST PARAPET



## INSIDE ELEVATION OF WEST PARAPET

#### BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Structural Repair of Concrete (Depth Equal to or Less Than 5 Inches)	Sq. Ft.	5

#### <u>LEGEND</u>

Structural Repair of Concrete (Depth Equal to or Less than 5 inches)

SF Square Foot

HBM ENGINEERING GROUP, LLC

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PARAPET REPAIRS

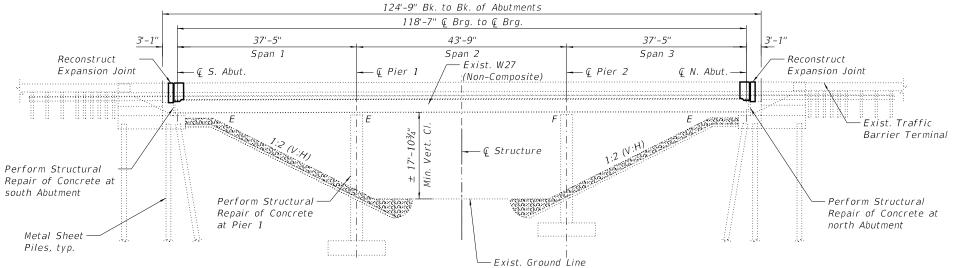
S.N. 099-4615 I-55 NB OVER MINK CREEK (0.8 MILES N OF US 30)

SHEET S3-08 OF S3-08 SHEETS

Existing Structure: Structure No. 099-0022 NB over Abandoned Railroad was originally constructed in 1956 as part of F.A. Route 34, Section 27-VB-1 and project FGI 187 (7) and reconstructed/widened in 2007. The structure has a length of 124'-9" (back-to-back of abutments) and an out-to-out deck width of 54'-11". The superstructure consists of three multi-beam spans of length 37'-5", 43'-9" and 37'-5" respectively. The reinforced concrete deck slab is 7½" thick. The substructure consists of reinforced concrete piers on footing and abutments on steel piles.

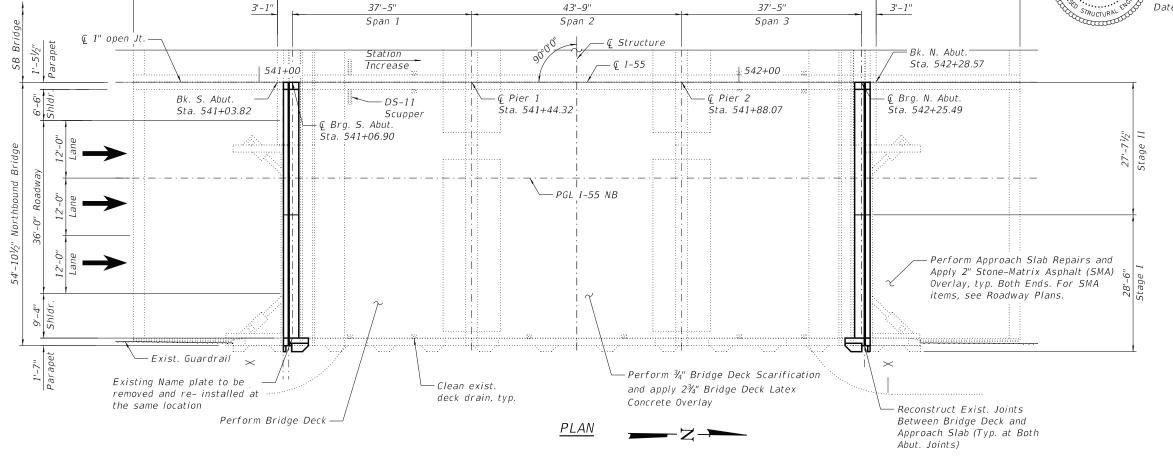
Traffic is to be maintained utilizing stage construction.

No Salvage.



ELEVATION

# (Looking West) (Nous A. Operation of the control of the c



Range 9E, 3rd P.M.

SCOPE OF WORK

Bridge Deck.

1. Scarify 3/4" from the Bridge Deck Slab.

Approach Slabs, see Roadway plans.

Parapets and top of Latex Overlay.

6. Perform Bridge Deck Grooving.

9. Clean all deck drains.

Concrete Removal.

2. Perform Deck Slab Repairs and Approach Slab Repairs and adjust existing drainage scupper as required.

3. Reconstruct Expansion Joints at the North and South

4. Apply 2¾" Bridge Deck Latex Concrete Overlay on

5. Apply 2" Stone-Matrix Asphalt (SMA) Overlay on the

7. Apply protective coat to the top of reconstructed

transverse joint areas and the top and inside faces of

8. Perform Structural Concrete Repairs to the North and

South Abutment and Pier 1 as noted on the Plans.

10. Existing name plate to be removed, cleaned and re-

installed at the same location. Cost included with

(Total of 18 Sheets)

Abutments and install new preformed joint strip seals.

GENERAL PLAN AND ELEVATION

I-55 NB OVER OVER MS RR (ABANDONED)

F.A.I. ROUTE 55 - SEC. 2006-032

<u>WILL COUNTY</u> <u>STATION 541+66.20</u> S.N. 099-0022

HBM :

REVISED -
REVISED -
REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

S.N. 099-0022 I-55 NB OVER MATERIAL SERVICE RR (ABANDONED)

SHEET S4-01 OF S4-18 SHEETS

D)	F.A.I. RTE	SECTION	SECTION			SHEET NO.
	I-55	2020-253-BR&PP	2020-253-BR&PP			96
				CONTRA	CT NO. 6	32N22
	ILLINOIS FED. AID			D PROJECT		

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#### GENERAL NOTES

- 1. Reinforcement bars designated (E) shall be epoxy coated.
- 2. Prior to pouring the new concrete deck for expansion joints reconstruction and deck slab repairs, 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 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.
- 3. 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 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.
- 4. 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.
- 5. Bars noted thus, 3x2-#5, indicates 3 lines of #5 bars with 2 lengths of bars per line.
- 6. All exposed concrete edges shall have a  $\frac{3}{4}$ "x45° chamfer, except where shown otherwise.
- The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.
- 8. Concrete Sealer shall be applied to the designated areas of the abutments.
- 9. The Contractor is responsible to protect the existing conduit embedded in the parapet during concrete removal and construction. Any damage to the existing conduit shall be repaired by the Contractor at no additional cost to the Department.
- 10. Protective Coat shall be applied to the top and inside face of parapets, reconstructed transverse Expansion Joints and to the surface of the new overlay.

#### INDEX OF SHEETS

S4-01 General Plan & Elevation

S4-02 Structure Notes, Index of Sheets & Total Bill of Material

S4-03 Stage Construction (Sheet 1 of 2)

S4-04 Stage Construction (Sheet 2 of 2)

S4-05 Temporary Concrete Barrier for Stage Construction

S4-06 Bridge Deck Repairs

S4-07 Approach Slab Repairs S4-08 Parapet Repairs

S4-09 S. Abut. Joint Removal and Reconstruction (Sheet 1 of 2)

S4-10 S. Abut. Joint Removal and Reconstruction (Sheet 2 of 2)

S4-11 N. Abut. Joint Removal and Reconstruction (Sheet 1 of 2) S4-12 N. Abut. Joint Removal and Reconstruction (Sheet 2 of 2)

S4-13 Preformed Joint Strip Seal

S4-14 Noise Wall Details

S4-15 South Abutment Repairs

S4-16 Pier 1 Repairs

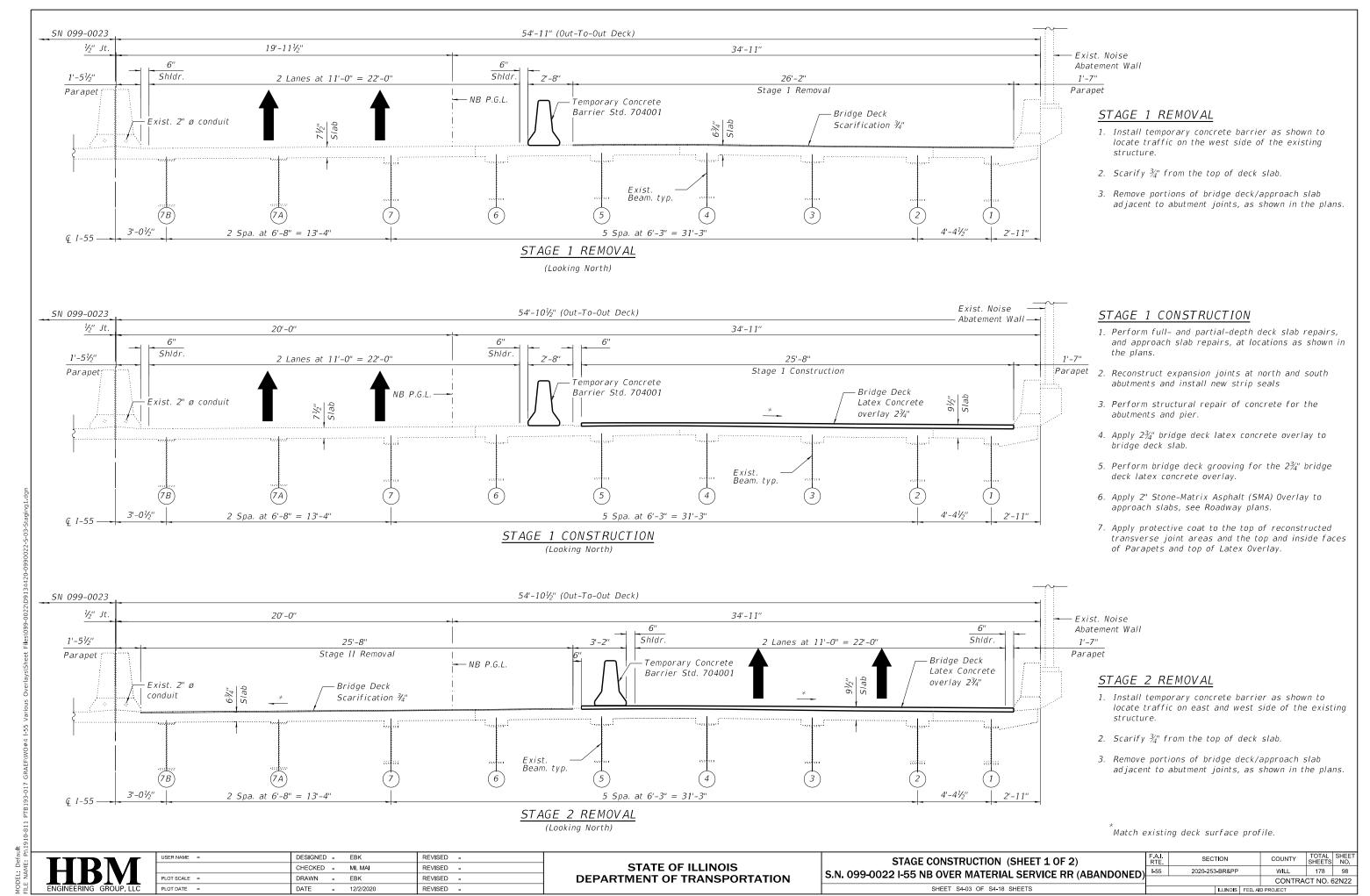
S4-17 North Abutment Repairs

S4-18 Bar Splicer Assembly Details

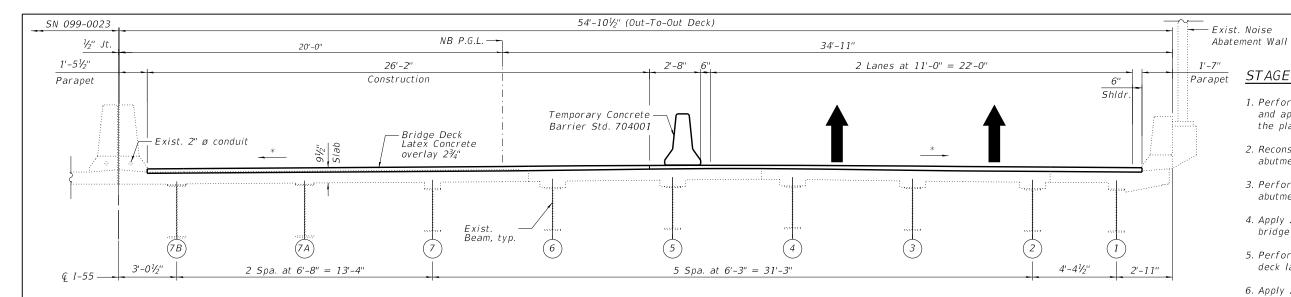
#### TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Concrete Removal	CU YD	16	0	16
Concrete Superstructure	CU YD	18.2	0.0	18.2
Bridge Deck Grooving	SQ YD	664	0	664
Protective Coat	SQ YD	814	0	814
Reinforcement Bars, Epoxy Coated	POUND	2,600	0	2,600
Bar Splicers	EACH	26	0	26
Preformed Joint Strip Seal	FOOT	110	0	110
Concrete Sealer	SQ FT	0	254	254
Approach Slab Repair (Partial Depth)	SQ YD	1	0	1
Bridge Deck Latex Concrete Overlay, 2 3/4 Inches	SQ YD	668	0	668
Bridge Deck Scarification 3/4"	SQ YD	668	0	668
Structural Repair Of Concrete (Depth Equal To Or Less Than 5 Inches)	SQ FT	4	14	18
Noise Abatement Wall Panel Removal And Re-Erection	EACH	2	0	2

P.\1910-811 PTB193-017 GRAEF\WO#4 I-55 Various Overlays\Sheet Files\099-0022\DS

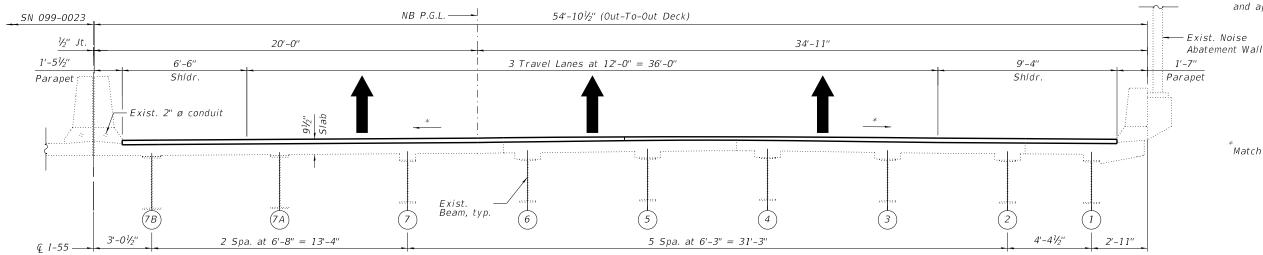


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#### STAGE 2 CONSTRUCTION

(Looking North)



STAGE 2 CONSTRUCTION

the plans.

abutments and pier.

bridge deck slab.

and approach slabs.

deck latex concrete overlay.

1. Perform full- and partial-depth deck slab repairs,

2. Reconstruct expansion joints at north and south abutments and install new strip seals

3. Perform structural repair of concrete for the

4. Apply  $2\frac{3}{4}$ " bridge deck latex concrete overlay to

5. Perform bridge deck grooving for the  $2\frac{3}{4}$ " bridge

6. Apply 2" Stone-Matrix Asphalt (SMA) Overlay to approach slabs, see Roadway plans.

7. Apply protective coat to the top of reconstructed

8. Apply permanent pavement markings on top of deck

of Parapets and top of Latex Overlay.

Match existing deck surface profile.

transverse joint areas and the top and inside faces

and approach slab repairs, at locations as shown in

#### FINAL CROSS-SECTION

(Looking North)

ENGINEERING GROUP LLC	

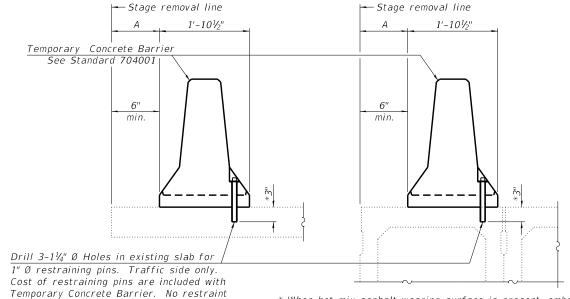
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PLOT SCALE =	DRAWN - EBK	REVISED -
PLOT DATE =	DATE - 12/2/2020	REVISED -

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barrier shall be restrained to the new slab according to Detail I, II or III. No restraint is required when "A" is greater than 3'-1".

#### NEW SLAB OR NEW DECK BEAM

2-17-2017



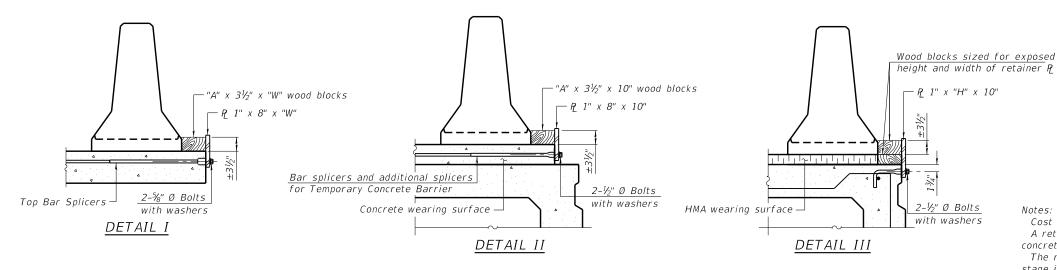
 $^{*}$  When hot-mix asphalt wearing surface is present, embedment shall be 3" plus the wearing surface depth.

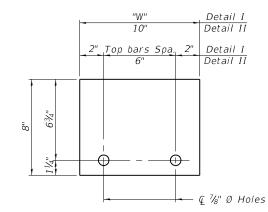
#### EXISTING DECK BEAM

#### SECTIONS THRU SLAB OR DECK BEAM

is required when "A" is greater than 3'-1".

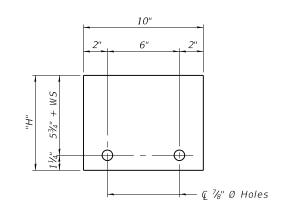
EXISTING SLAB



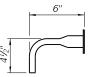


## STEEL RETAINER P 1" x 8" x "W"

(Detail I and II)



STEEL RETAINER P 1" x "H" x 10" (Detail III)



RESTRAINING PIN

#### BAR SPLICER FOR #4 BAR - DETAIL III

Cost of retainer assembly is included with Temporary Concrete Barrier. A retainer assembly shall be located at the approximate ( of each temporary

The retainer plate shall not be removed until the concrete on the adjacent stage is ready to be poured. For Detail III applications the retainer plate shall not be removed until just prior to placing the adjacent beam.

1x8 UNC

US Std. 11/16" I.D. x 21/2" O.D. x approx. 8 guage thick washer

When the 'A' dimension is less than  $1\frac{1}{2}$ ", the wood block shall be omitted and the barrier shall be placed in direct contact with the steel retainer plate. For deck beam applications the minimum required 'A' distance is 6" to accommodate the shear key clamping device.

- Detail I Installation for a new bridge deck or bridge slab.
- Detail II Installation for a new deck beam with an initial concrete wearing surface. Additional bar splicers shall be provided at 6'-0" centers and paired with the bar splicers of the concrete wearing surface reinforcement to accommodate the installation of the retainer assemblies. The cost of the additional bar splicers is included with the concrete wearing surface.
- Detail III Installation for a new deck beam with no initial wearing surface or with an initial hot-mix asphalt (HMA) wearing surface present. The deck beam directly beneath the temporary concrete barrier shall be fabricated with bar splicer inserts in the side of the beam, as detailed, to accommodate the installation of the retainer assemblies. A pair of bar splicers, 6" apart, shall be placed at 6'-0" centers along the length of the beam. The cost of the bar splicers is included with the deck beam.

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	CHECKED	-	MI, MAI	REVISED	-
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**STATE OF ILLINOIS** 

TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION S.N. 099-0022 I-55 NB OVER MATERIAL SERVICE RR (ABANDONED) SHEET S4-05 OF S4-18 SHEETS

A.I. RTE.	SEC.	TION		COUNTY	TOTAL SHEETS	SHEET NO.
I-55	2020-253-BR&PP			WILL	178	100
			CONTRA	CT NO. 6	32N22	
	ILLINOIS EED AID BROJECT					

**DEPARTMENT OF TRANSPORTATION**