

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
39	(201-2HB)BDR	WINNEBAGO	30	1
		ILLINOIS	CONTRACT NO. 64R14	

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
**PROPOSED  
HIGHWAY PLANS**

ROUTE FAI 39 (I-39/US 51)  
SECTION (201-2HB)BDR  
BRIDGE REHABILITATION  
WINNEBAGO COUNTY, IL  
PROJECT: NHPP-7SCB(044)

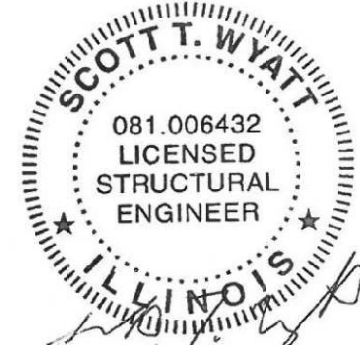
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D-92-058-21

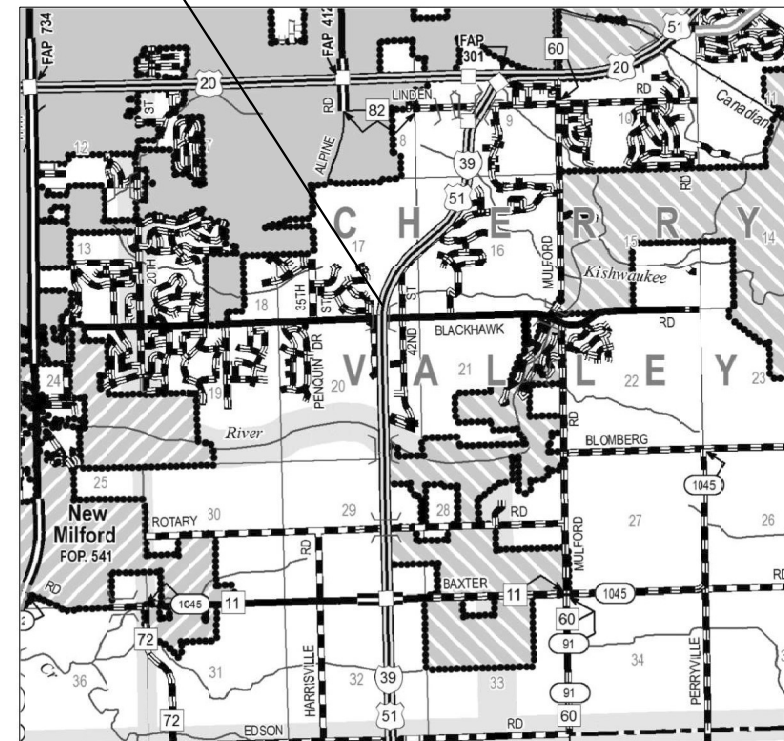


LOCATION OF SECTION INDICATED THIS: - [black rectangle] -



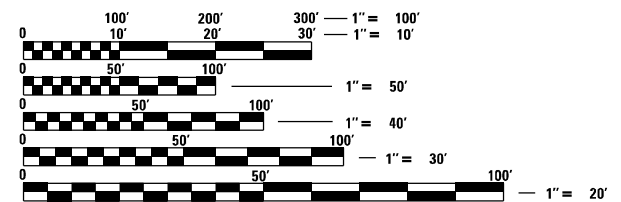
1-21-22  
EXP 11-30-22

**EXISTING STRUCTURES**  
SN 101-0142 AND 101-0143 A SPAN  
SPAN STEEL AND CONCRETE GIRDER  
SUPERSTRUCTURE WITH CLOSED  
ABUTMENTS AND WALL PIERS  
BACK TO BACK LENGTH = 146'-0"  
OUT TO OUT WIDTH = 42'



**LOCATION MAP**

GROSS LENGTH = 146.00 FT. = 0.050 MILE  
NET LENGTH = 146.00 FT. = 0.050 MILE



FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD  
ENGINEERING SCALES. REDUCED SIZE 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 EXCAVATION  
1-800-892-0123  
OR 811

PROJECT ENGINEER SCOTT WYATT, PE, SE  
PROJECT MANAGER MAHMOUD ETEMADI, PE

CONTRACT NO. 64R14

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SUBMITTED January 26, 20 22  
*David Alford*  
REGIONAL ENGINEER

March 25, 20 22  
*[Signature]*  
ENGINEER OF DESIGN AND ENVIRONMENT

March 23, 20 22  
*Stephen M. Smith*  
DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

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OF THE STATE OF ILLINOIS**

## DISTRICT TWO STANDARDS

- 41.4 TYPICAL PAVEMENT MARKINGS
- 44.1 PAINTING DETAILS
- 34.1 WORK ZONE SIGN DETAILS

## STATE HIGHWAY STANDARDS

- 000001-08 STANDARDS SYMBOLS, ABBREVIATIONS AND PATTERNS
- 001006 DECIMALS OF AN INCH AND OF A FOOT
- 635001-02 DELINEATORS
- 642001-03 SHOULDER RUMBLE STRIPS, 16 IN.
- 643001-02 SAND MODULE IMPACT ATTENUATORS
- 701101-05 OFF-ROAD OPERATIONS, MULTILANE, 15' (4.5 M) TO 24" (600 MM) FROM PAVEMENT EDGE
- 701106-02 OFF-ROAD OPERATIONS, MULTILANE, MORE THAN 15' (4.5 M) AWAY
- 701400-11 APPROACH TO LANE CLOSURE, FREEWAY/EXPRESSWAY
- 701401-13 LANE CLOSURE, FREEWAY/EXPRESSWAY
- 701402-12 LANE CLOSURE, FREEWAY/EXPRESSWAY, WITH BARRIER
- 701406-13 LANE CLOSURE, FREEWAY/EXPRESSWAY, DAY OPERATIONS ONLY
- 701426-09 LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPER. FOR SPEEDS > 45 MPH
- 701428-01 TRAFFIC CONTROL, SETUP AND REMOVAL, FREEWAY/EXPRESSWAY
- 701901-08 TRAFFIC CONTROL DEVICES
- 704001-08 TEMPORARY CONCRETE BARRIER
- 720001-01 SIGN PANEL MOUNTING DETAILS
- 720006-04 SIGN PANEL ERECTION DETAILS
- 720011-01 METAL POSTS FOR SIGNS, MARKERS AND DELINEATORS
- 725001-01 OBJECT AND TERMINAL MARKERS
- 728001-01 TELESCOPING STEEL SIGN SUPPORT
- 781001-04 TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKINGS
- 782006-01 GUARDRAIL AND BARRIER WALL REFLECTOR MOUNTING DETAILS

## MAINTENANCE OF TRAFFIC GENERAL NOTES

1. THE MAINTENANCE OF TRAFFIC CONTROL (MOT) PLANS SHALL SERVE AS A GUIDE FOR SAFE DIVERSION OF TRAFFIC DURING EXECUTION OF THIS CONTRACT. HOWEVER, THE CONTRACTOR MAY MODIFY THE MOT PLANS TO MEET CONSTRUCTION NEEDS, BUT NOT AT THE EXPENSE OF PUBLIC SAFETY OR CONVENIENCE. ANY CHANGES TO THE MOT PLANS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.
2. THE ENGINEER SHALL BE INFORMED 48 HOURS IN ADVANCE OF ANY PROPOSED CHANGE TO THE MOT PLANS.
3. ALL EXISTING PAVEMENT MARKINGS IN CONFLICT WITH THE MAINTENANCE OF TRAFFIC STRIPING SHALL BE BLACKED OUT OR REMOVED TO THE LIMITS SHOWN IN THE PLANS.
4. ALL TEMPORARY PAVEMENT MARKING WHICH CONFLICTS WITH THE NEXT STAGE OR FINAL STRIPING SHALL BE BLACKED OUT OR REMOVED TO THE LIMITS SPECIFIED IN THE PLANS AND IN THE SCHEDULES OF PAVEMENT MARKING.
5. ALL TRAFFIC CONTROL DEVICES USED FOR THE MAINTENANCE OF TRAFFIC, AS DETAILED IN THE PLANS OR HIGHWAY STANDARD, SHALL BE REFLECTORIZED PRIOR TO INSTALLATION AND CLEANED AS SPECIFIED IN THE MAINTENANCE OF TRAFFIC SPECIAL PROVISIONS OR AS DIRECTED BY THE ENGINEER.
6. ALL TRAFFIC CONTROL DEVICES LOCATIONS AND SPACING SHALL BE ACCORDING TO THE HIGHWAY STANDARDS UNLESS OTHERWISE SHOWN IN THE PLANS. ALL VERTICAL PANELS SHALL BE SPACED AT 40' INTERVALS WHERE SHOWN IN THE PLANS.
7. ALL DRUMS, VERTICAL PANELS AND BARRICADES ADJACENT TO THE EDGE OF TRAVELED WAY SHALL BE AS REQUIRED IN THE TRAFFIC CONTROL STANDARDS.
8. ALL EXISTING SIGNS WITHIN MAINTENANCE OF TRAFFIC LIMITS WHICH ARE OBSCURED BY OR INTERFERE WITH CONSTRUCTION OPERATIONS AND MAINTENANCE OF TRAFFIC, SHALL BE COVERED OR REMOVED BY THE CONTRACTOR UNLESS SPECIFIED IN THE PLANS OR WHEN DIRECTED BY THE ENGINEER. THIS WORK SHALL BE IN ACCORDANCE WITH ARTICLE 107.25 OF THE IDOT STANDARD SPECIFICATIONS.
9. A FULL DEPTH SAWCUT WILL BE REQUIRED BETWEEN PAVEMENT, CURB AND/OR GUTTER TO REMAIN AND PAVEMENT, CURB AND/OR GUTTER TO BE REMOVED PRIOR TO BEGINNING OF REMOVAL WORK. COST TO BE INCLUDED WITH APPLICABLE REMOVAL ITEMS.
10. EXISTING SHOULDER RUMBLE STRIPS THAT ARE IN CONFLICT WITH SHIFTED TRAFFIC CONTROL LANES SHALL BE REMOVED AND REPLACED TO THE LIMITS SPECIFIED IN THE PLANS AND SCHEDULES.
11. AS AN ADDITIONAL SOURCE OF INFORMATION IF NEEDED, ORIGINAL CONSTRUCTION SECTION NUMBER FOR STRUCTURE NUMBERS 101-0142 & 101-0143 IS 201-2HB.
12. THE CONTRACTOR SHALL CONTACT THE IDOT DISTRICT 2 ENGINEER AT (815)284-2271 A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK.

## SUGGESTED MAINTENANCE OF TRAFFIC SEQUENCING

### STAGE 1

INSTALL REAL-TIME TRAFFIC CONTROL SYSTEM AND TEMPORARY RUMBLE STRIPS AT LOCATIONS DIRECTED BY THE ENGINEER.

INSTALL ALL OF STAGE 1 CONSTRUCTION TRAFFIC CONTROL SIGNS, DRUMS, BARRICADES, TEMPORARY CONCRETE BARRIER AND TEMPORARY PAVEMENT MARKINGS AS DETAILED IN THE STAGE 1 PLANS AND APPROPRIATE STANDARD DRAWINGS.

MERGE ALL NORTHBOUND TRAFFIC TO THE EXISTING / TEMPORARY OUTSIDE LANE SOUTH OF THE BLACKHAWK ROAD BRIDGES. MERGE ALL SOUTHBOUND TRAFFIC TO THE EXISTING / TEMPORARY OUTSIDE LANE NORTH OF THE BLACKHAWK ROAD BRIDGES.

COORDINATE WORK TO BE COMPLETED IN THIS STAGE WITH DETAILS IN THE BRIDGE PLANS.

THE CONTRACTOR SHALL MAKE EVERY EFFORT DURING CONSTRUCTION TO PROTECT THE SCUPPERS AND APPROACH DRAINS WITH STEEL PLATES OR APPROVED EQUALS. SEE STEEL PLATE DETAIL BELOW. THIS WORK SHALL BE INCIDENTAL AND INCLUDED AS PART OF "TRAFFIC CONTROL AND PROTECTION STANDARD 701042".

### STAGE 2

CHANGE THE CONSTRUCTION TRAFFIC CONTROL SIGNS, DRUMS, BARRICADES, TEMPORARY CONCRETE BARRIER AND TEMPORARY PAVEMENT MARKINGS AS DETAILED IN THE STAGE 2 PLANS AND APPROPRIATE STANDARD DRAWINGS.

MERGE ALL NORTHBOUND TRAFFIC TO THE EXISTING / TEMPORARY INSIDE LANE SOUTH OF THE BLACKHAWK ROAD BRIDGES. MERGE ALL SOUTHBOUND TRAFFIC TO THE INSIDE EXISTING / TEMPORARY LANE NORTH OF THE BLACKHAWK ROAD BRIDGES.

REMOVE ALL CONFLICTING TRAFFIC CONTROL ITEMS FROM STAGE 1 SETUP.

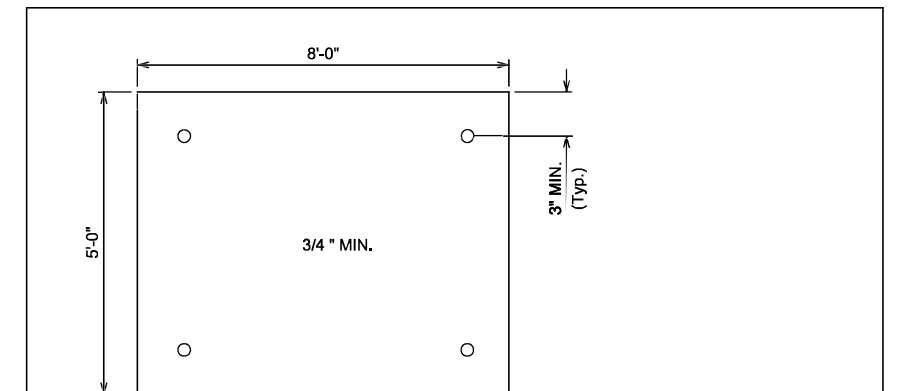
COORDINATE WORK TO BE COMPLETED IN THIS STAGE WITH DETAILS IN THE BRIDGE PLANS.

### POST STAGE

REMOVE ALL CONSTRUCTION TRAFFIC CONTROL AND TEMPORARY CONSTRUCTION ITEMS.

REMOVE ANY REMAINING EXISTING AND TEMPORARY PAVEMENT MARKINGS WITHIN THE PERMANENT PAVEMENT MARKING LIMITS.

INSTALL PERMANENT PAVEMENT MARKINGS.



**STEEL PLATE DETAIL**  
NTS

#### NOTES:

1. DURING MOT STAGE 1, THE APPROACH DRAINS AND BRIDGE SCUPPERS AT THE SE CORNERS SHALL BE PROTECTED WITH 3/8" (MIN) STEEL PLATES ANCHORED INTO THE PAVEMENT OR BRIDGE DECK.
2. THE EDGES OF THE STEEL PLATE SHALL BE TAPERED A MINIMUM OF 1' WITH HMA TO ELIMINATE THE BUMP.

MODEL: D:\chf\ FILE NAME: \\pfc\comdata\bridge\210351 (IDOT IVD #0) \SN 101-0142 and 1143 Blackhawk Rd02 Design\SN 101-0142 & 0143 02 Notes.dgn



USER NAME = scottw	DESIGNED - MW	REVISED -
	DRAWN - RG	REVISED -
PLOT SCALE = 2.0000' / in.	CHECKED - JB	REVISED -
PLOT DATE = 1/21/2022	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**I-39 OVER BLACKHAWK RD STAGING PLANS  
GENERAL NOTES /CONSTRUCTION SEQUENCE**

SCALE: NONE SHEET OF SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
39	(201-2HB)BDR	WINNEBAGO	30	2
ILLINOIS FED. AID PROJECT			CONTRACT NO. 64R14	

90% FED  
10% STATE  
URBAN 0047

90% FED  
10% STATE  
URBAN 0047

CODE NO.	ITEM	UNIT	TOTAL QUANTITY
50102400	CONCRETE REMOVAL	CU YD	10
50104000	BRIDGE RAIL REMOVAL	FOOT	584
50157300	PROTECTIVE SHIELD	SQ YD	375
50300255	CONCRETE SUPERSTRUCTURE	CU YD	10
50300300	PROTECTIVE COAT	SQ YD	1249
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	1574
50800515	BARS SPLICERS	EACH	24
52000110	PREFORMED JOINT STRIP SEAL	FOOT	168
64200116	SHOULDER RUMBLE STRIPS, 16 INCH	FOOT	2,962
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	2
67100100	MOBILIZATION	L SUM	1
70100205	TRAFFIC CONTROL AND PROTECTION, STANDARD 701401	EACH	2
70100207	TRAFFIC CONTROL AND PROTECTION, STANDARD 701402	EACH	2
70107006	PAVEMENT MARKING BLACKOUT TAPE, 6"	FOOT	4,940
70107025	CHANGEABLE MESSAGE SIGN	CAL DA	120
70300150	SHORT TERM PAVEMENT MARKING REMOVAL	FOOT	6,494
70307120	TEMPORARY PAVEMENT MARKING - LINE 4" - TYPE IV TAPE	FOOT	14,509

CODE NO.	ITEM	UNIT	TOTAL QUANTITY
70400100	TEMPORARY CONCRETE BARRIER	FOOT	1013
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	963
70600250	IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE), TEST LEVEL 3	EACH	2
70600350	IMPACT ATTENUATORS, RELOCATE (NON-REDIRECTIVE), TEST LEVEL 3	EACH	2
* 78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	650
* 78100300	REPLACEMENT REFLECTOR	EACH	71
* 78200011	BARRIER WALL REFLECTORS, TYPE C	EACH	28
X0325201	SHOULDER RUMBLE STRIP REMOVAL	SQ YD	988
X0325748	ACRYLIC COATING	SQ YD	454
X0326649	LINEAR DELINEATOR PANELS, 6 INCH	EACH	16
X0327640	REAL-TIME TRAFFIC CONTROL CENTRAL BASE UNIT	CAL MO	2
X0327641	REAL-TIME TRAFFIC CONTROL SENSOR UNIT	CAL MO	16
X2700001	TEMPORARY RUMBLE STRIPS (SPECIAL)	EACH	6
X5030250	BRIDGE DECK GROOVING (LONGITUDINAL)	SQ YD	779
X7830050	RAISED REFLECTIVE PAVEMENT MARKER, REFLECTOR REMOVAL	EACH	71

\*= SPECIALTY ITEM

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FILE NAME: \\kpf\com\ids\bridge\2100351 (DOT: WO #5)SN 101-0142 and 0143 Blackhawk Rd\02\_Design\SN 101-0142 & 0143 03\_Summary of Quantities.dgn



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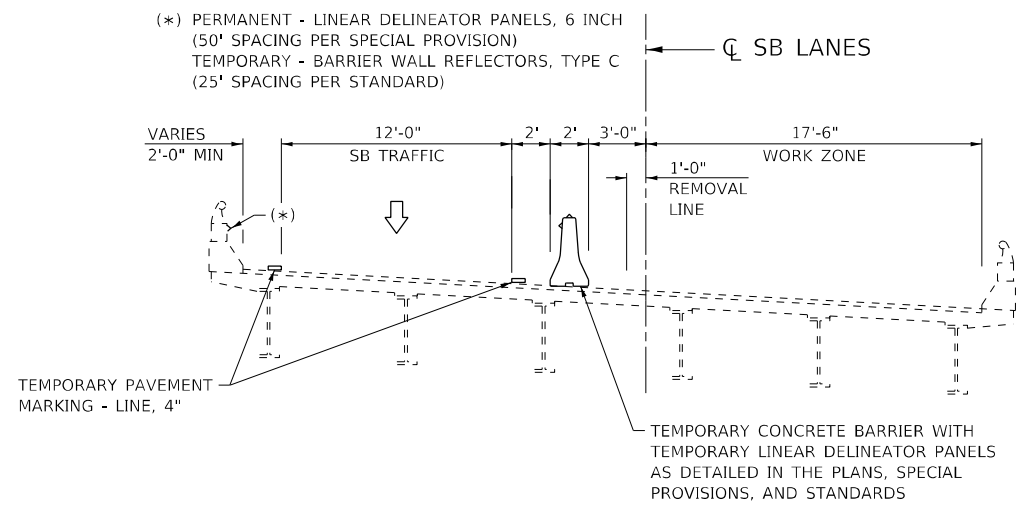
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SN 101-0142 & 0143 FAI 39 OVER BLACKHAWK ROAD  
SUMMARY OF QUANTITIES

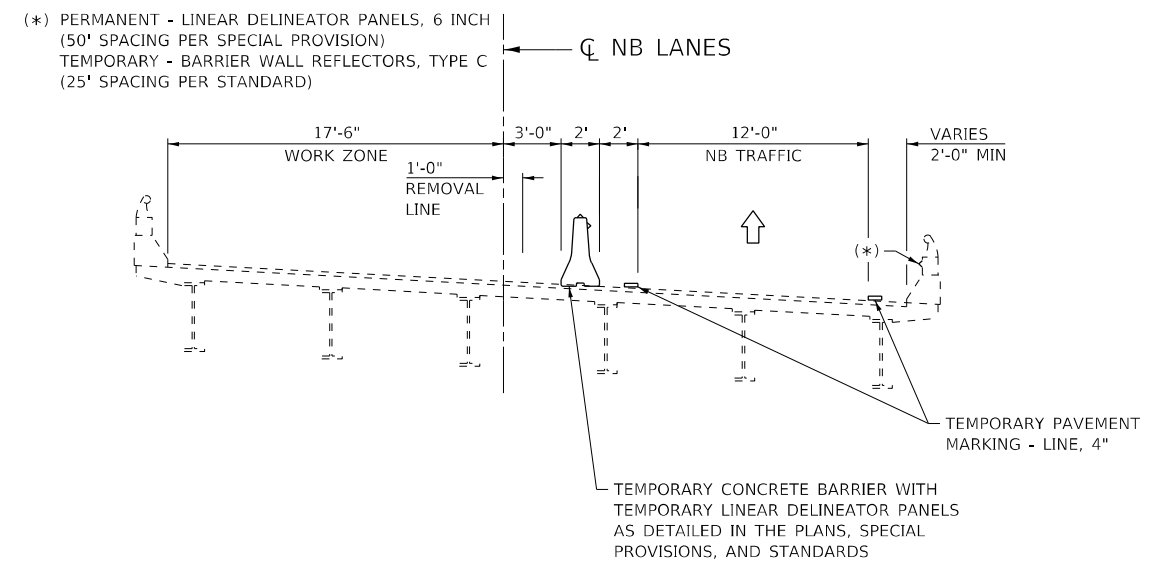
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CONTRACT NO. 64R14				
(ILLINOIS) FED. AID PROJECT 75CB311				



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**STAGE 1 - TYPICAL SECTION**  
 SN 101 0142 / 101 0143  
 (LOOKING NORTH)



STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

**I-39 OVER BLACKHAWK RD TRAFFIC CONTROL - STAGE 1**  
**TYPICAL SECTIONS**

SCALE: NONE SHEET 1 OF 3 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
39	(201-2HB)BDR	WINNEBAGO	19	4
CONTRACT NO. 64R14				
ILLINOIS FED. AID PROJECT				

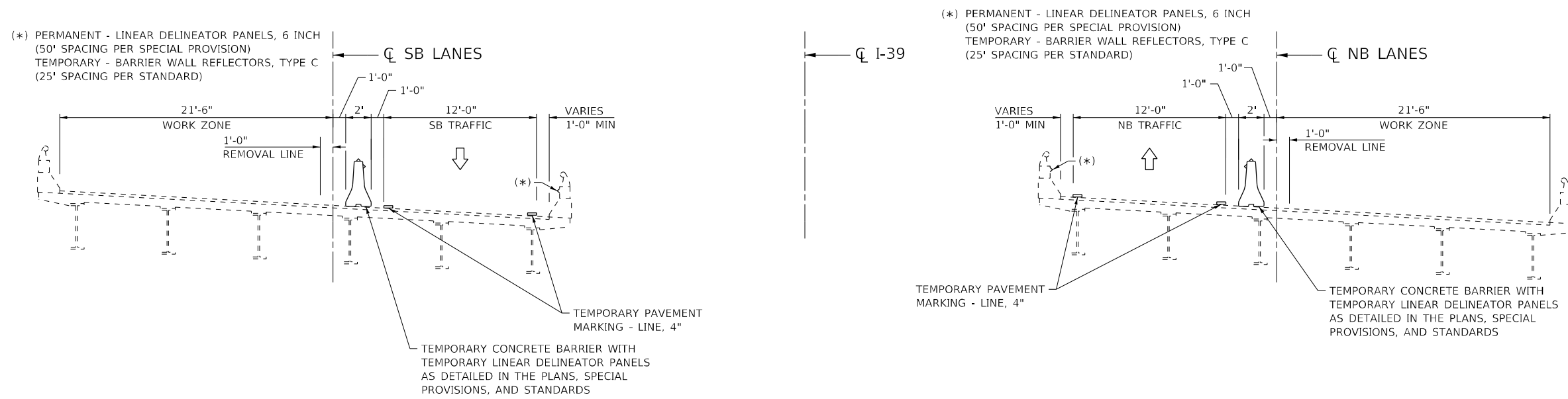


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DRAWN - RG	REVISIONS -	
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PLOT DATE = 1/10/2022	DATE -	REVISIONS -





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**STAGE 2 - TYPICAL SECTION**

SN 101 0142 / 101 0143  
(LOOKING NORTH)



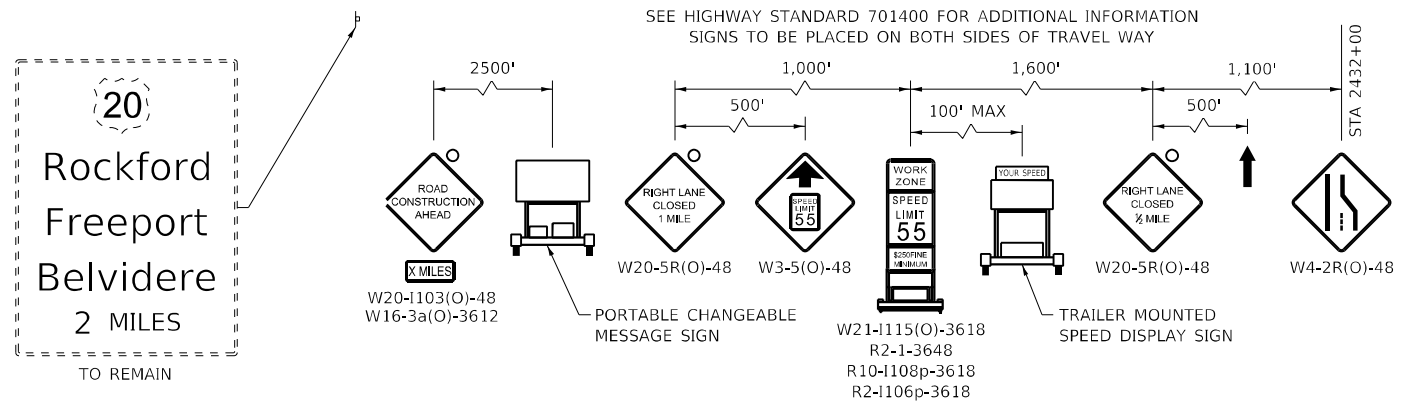
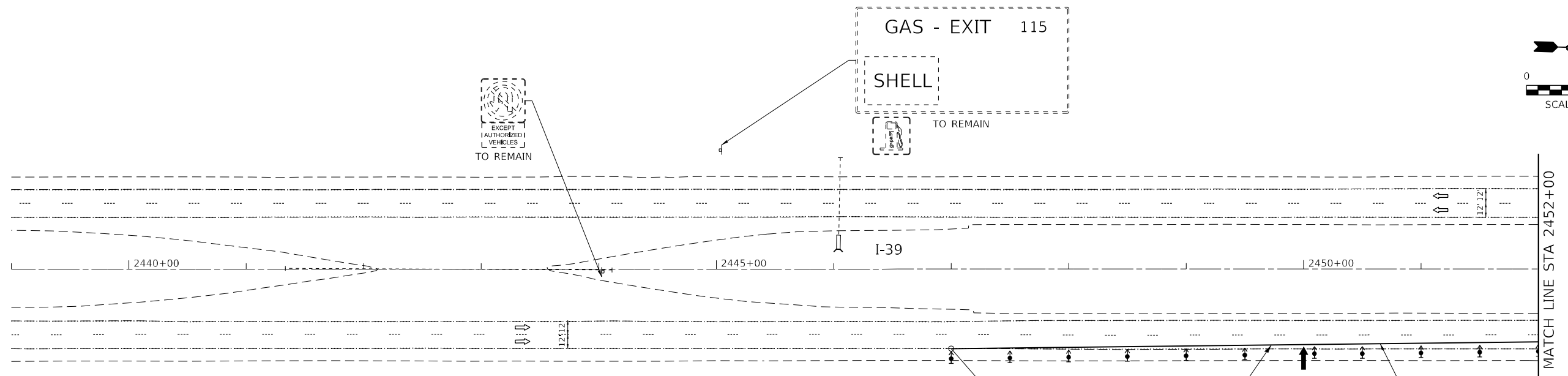
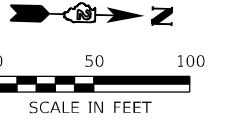
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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

<b>I-39 OVER BLACKHAWK RD TRAFFIC CONTROL - STAGE 2</b>	
<b>TYPICAL SECTIONS</b>	
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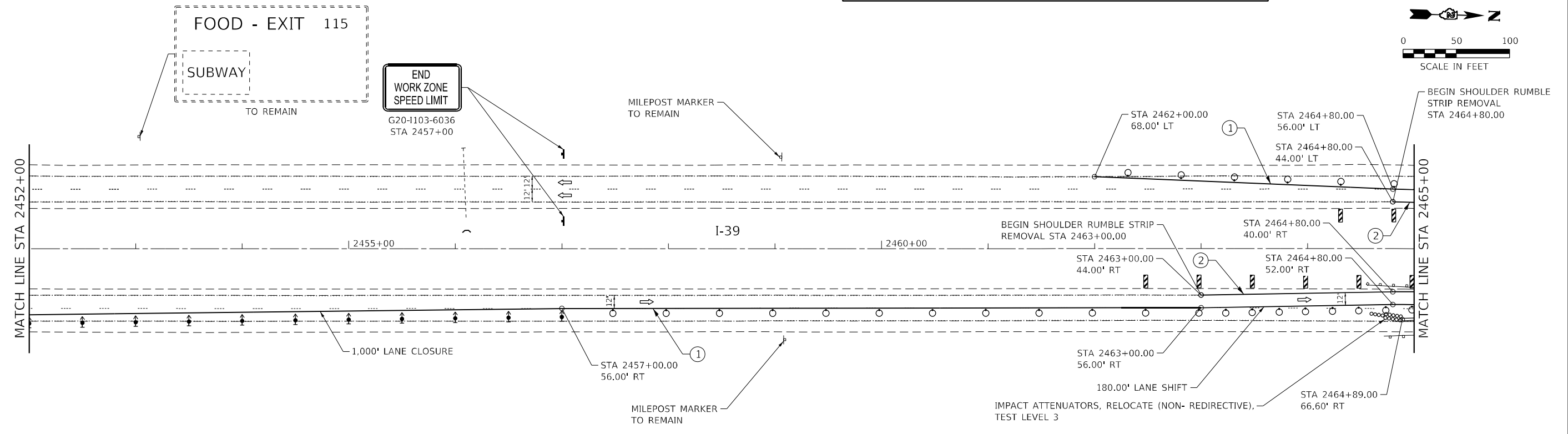
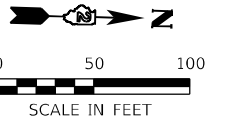
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39	(201-2HB)BDR	WINNEBAGO	19	7
CONTRACT NO. 64R14				
ILLINOIS FED. AID PROJECT				





**LEGEND**

- WORK AREA
- TRAFFIC SIGN
- VERTICAL PANEL WITH STEADY BURN LIGHT
- TYPE III BARRICADE
- TYPE II BARRICADE OR DRUM WITH STEADY BURN LIGHT
- TYPE II DIRECTIONAL BARRICADE WITH STEADY BURN LIGHT
- DIRECTION OF TRAFFIC
- ARROW BOARD
- TEMPORARY PAVEMENT MARKING - LINE 4" - TYPE IV TAPE (SOLID WHITE)
- TEMPORARY PAVEMENT MARKING - LINE 4" - TYPE IV TAPE (SOLID YELLOW)



MODEL: D:\p1\11\11070 - PTB - 197-18 D2 - KPEE - Various Phase II Bridge Rehab\Work Order 5\CADD\Bldg\kpk\CADD Streets\02-64R\4-14-18-Stationing\_2-04.dgn  
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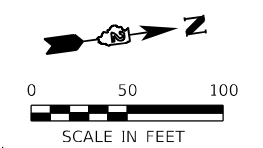
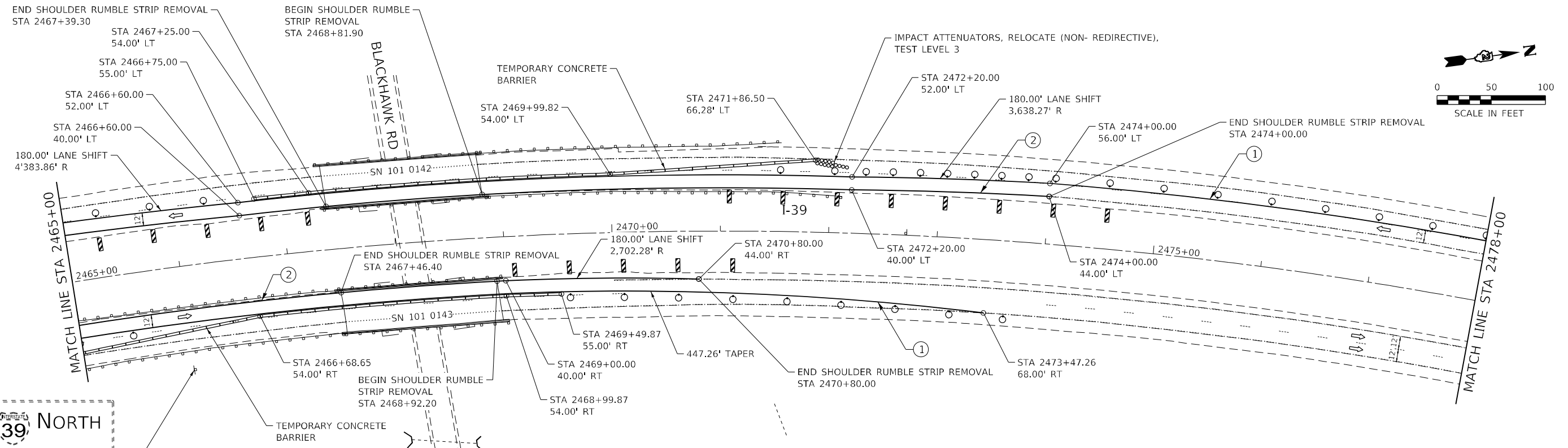
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PLOT DATE = 1/10/2022	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**I-39 OVER BLACKHAWK RD TRAFFIC CONTROL - STAGE 2  
PLAN SHEET**

SCALE: 1" = 50'    SHEET 2 OF 3 SHEETS    STA. 2439+00.00 TO STA. 2465+00.00

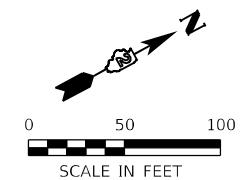
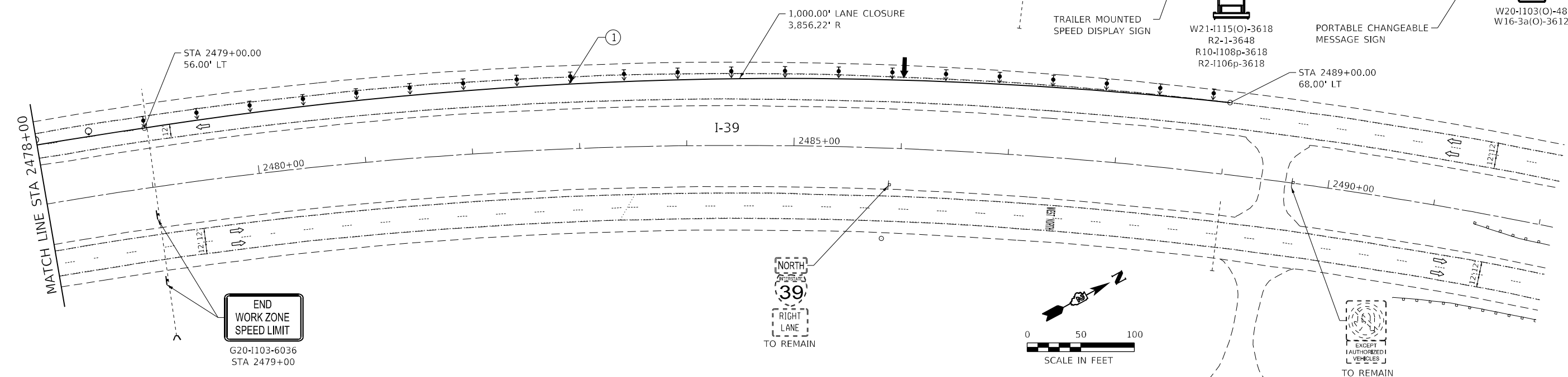
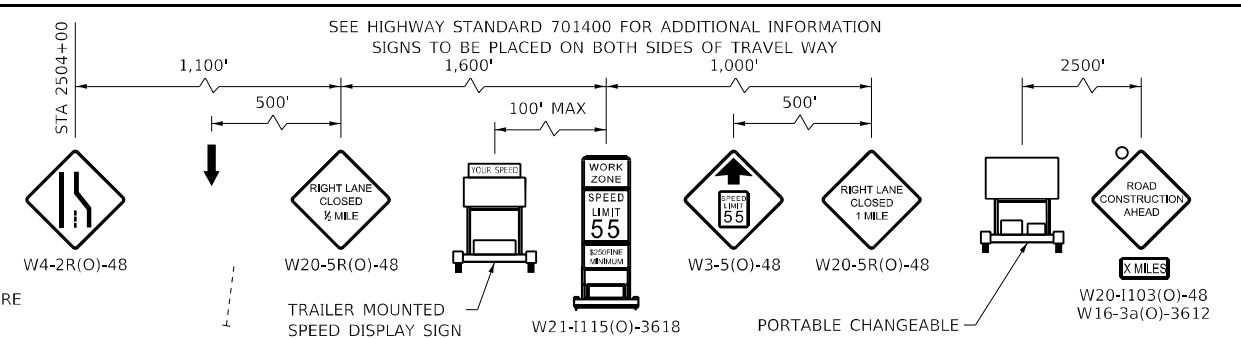
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
39	(201-2HB)BDR	WINNEBAGO	19	8
CONTRACT NO. 64R14				
ILLINOIS FED. AID PROJECT				



I-39 NORTH TO I-90 TO Wisconsin Chicago
   
 1 1/2 MILES TO REMAIN

**LEGEND**

- WORK AREA
- TRAFFIC SIGN
- VERTICAL PANEL WITH STEADY BURN LIGHT
- TYPE III BARRICADE
- TYPE II BARRICADE OR DRUM WITH STEADY BURN LIGHT
- TYPE II DIRECTIONAL BARRICADE WITH STEADY BURN LIGHT
- DIRECTION OF TRAFFIC
- ARROW BOARD
- TEMPORARY PAVEMENT MARKING - LINE 4" - TYPE IV TAPE (SOLID WHITE)
- TEMPORARY PAVEMENT MARKING - LINE 4" - TYPE IV TAPE (SOLID YELLOW)



EXCEPT AUTHORIZED VEHICLES TO REMAIN

MODEL: Default  
 FILE NAME: S:\2020\01\070 - PTB 197-18 02 - KRF - Varibus Phase II Bridge Rehab\Work Order 5\CADD\Blackhawk\CADD Space\02-64R\4cht-Stationing\_2-05.dgn








USER NAME = FNelson	DESIGNED - MW	REVISED -
DRAWN - RG	REVISOR -	
PLOT SCALE = 100,0000' / in.	CHECKED - JB	REVISED -
PLOT DATE = 1/10/2022	DATE -	REVISED -

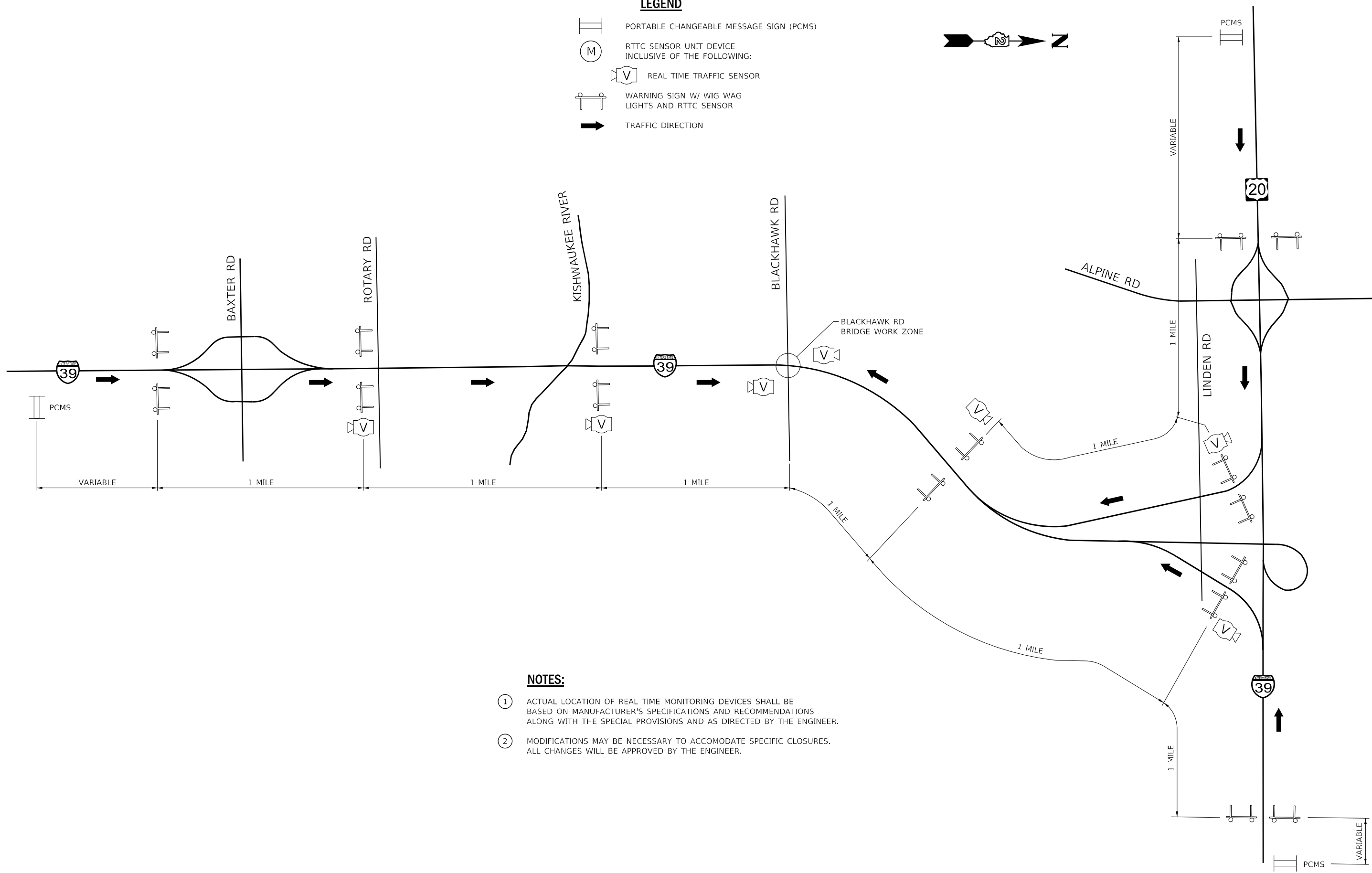
**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**I-39 OVER BLACKHAWK RD TRAFFIC CONTROL - STAGE 2**  
**PLAN SHEET**  
 SCALE: 1" = 50' SHEET 3 OF 3 SHEETS STA. 2465+00.00 TO STA. 2492+00.00

F.A.I. RTE. 39	SECTION (201-2HB)BDR	COUNTY WINNEBAGO	TOTAL SHEETS 19	SHEET NO. 9
CONTRACT NO. 64R14			ILLINOIS FED. AID PROJECT	

**LEGEND**

-  PORTABLE CHANGEABLE MESSAGE SIGN (PCMS)
-  RTTC SENSOR UNIT DEVICE INCLUSIVE OF THE FOLLOWING:
-  REAL TIME TRAFFIC SENSOR
-  WARNING SIGN W/ WIG WAG LIGHTS AND RTTC SENSOR
-  TRAFFIC DIRECTION



**NOTES:**

- ① ACTUAL LOCATION OF REAL TIME MONITORING DEVICES SHALL BE BASED ON MANUFACTURER'S SPECIFICATIONS AND RECOMMENDATIONS ALONG WITH THE SPECIAL PROVISIONS AND AS DIRECTED BY THE ENGINEER.
- ② MODIFICATIONS MAY BE NECESSARY TO ACCOMMODATE SPECIFIC CLOSURES. ALL CHANGES WILL BE APPROVED BY THE ENGINEER.

MODEL: D:\p1\11\11-07-2022\01\070 - PTB - 197-18 D2 - KPEF - Various Phase II Bridge Rehab\Work\_Order\_5\ICADD\Blackhawk\CADD\_Specs\ID2-64R\4-11-22\11-07-2022.dgn  
 FILE NAME: S:\2022\01\070 - PTB - 197-18 D2 - KPEF - Various Phase II Bridge Rehab\Work\_Order\_5\ICADD\Blackhawk\CADD\_Specs\ID2-64R\4-11-22\11-07-2022.dgn



USER NAME = FNelson	DESIGNED -	REVISED -
PLOT SCALE = 2400,0000 ' / in.	DRAWN -	REVISED -
PLOT DATE = 1/10/2022	CHECKED -	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

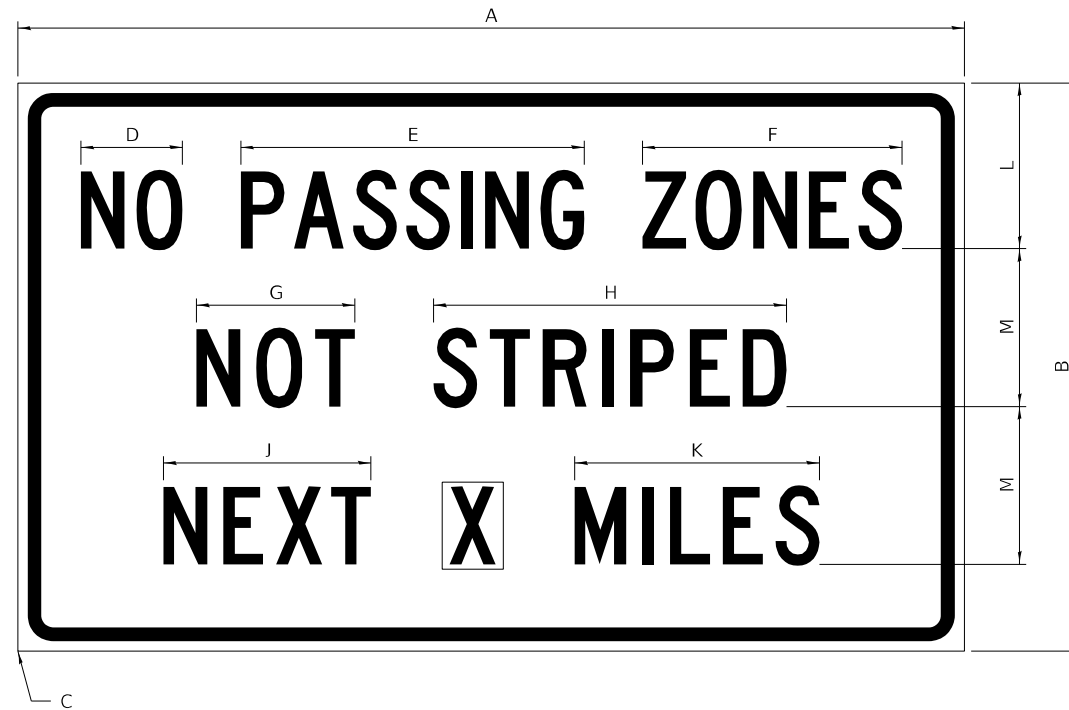
**REAL TIME TRAFFIC CONTROL SETUP**

SCALE: NONE    SHEET    OF    SHEETS    STA.    TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
39	(201-2HB)BDR	WINNEBAGO	19	10
CONTRACT NO. 64R14				
ILLINOIS FED. AID PROJECT				

# WORK ZONE SIGN DETAILS 34.1

**ILLINOIS STANDARD G20-I100**



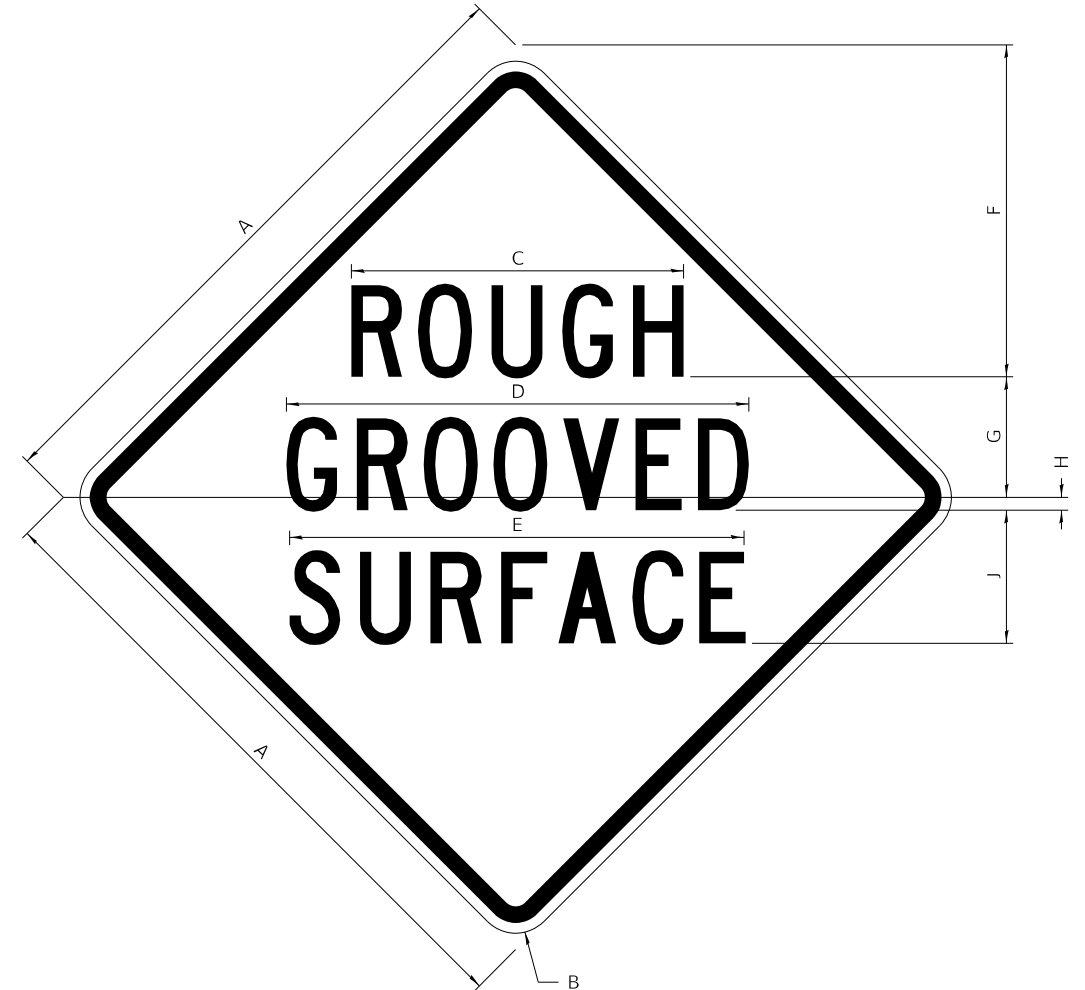
COLOR    LEGEND AND BORDER    BLACK    NON-REFLECTORIZED  
 BACKGROUND    ORANGE    REFLECTORIZED

SIGN SIZE	DIMENSIONS											
	A	B	C	D	E	F	G	H	J	K	L	M
60 x 36	60.00	36.00	2.25	6.4	21.80	16.40	10.00	22.40	13.20	15.50	10.50	10.00

SIGN SIZE	SERIES BY LINE			MARGIN	BORDER
	1	2	3		
60 x 36	5C	5C	5C	0.625	0.875

Sign not to scale

**ILLINOIS STANDARD W8-I107**



COLOR    LEGEND AND BORDER    BLACK    NON-REFLECTORIZED  
 BACKGROUND    ORANGE    REFLECTORIZED

SIGN SIZE	DIMENSIONS								
	A	B	C	D	E	F	G	H	J
48 x 48	48.00	3.00	25.00	34.80	34.20	24.94	9.00	1.00	10.00

SIGN SIZE	SERIES BY LINE			MARGIN	BORDER
	1	2	3		
48 x 48	7C	7C	7C	1.250	0.750

Sign not to scale

**GENERAL NOTES**

All work to furnish and install these signs shall be included in the cost of the specified traffic control standards and shall not be paid separately.

All Illinois Standard signs shall conform to the latest edition of the "Illinois Standard Highway Signs Book" in effect on the date of invitation for bids.

Signs shall meet the applicable portions of Sections 701 and 720 of the Standard Specifications.

All dimensions are in inches unless otherwise noted.

MODEL: D:\p\h\...  
 FILE NAME: S:\2020\01\070 - PTB 197-18 D2 - KRF - Various Phase II Bridge Rehab\Work Order 5\ICADD\Bldg\hwy\CADD Specs\ID2-64R14-14-18-D2-Standard.dgn



USER NAME = FNeison	DESIGNED -	REVISED - 3-02-16
PLOT SCALE = 2,000' / in.	DRAWN -	REVISED -
PLOT DATE = 1/10/2022	CHECKED -	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

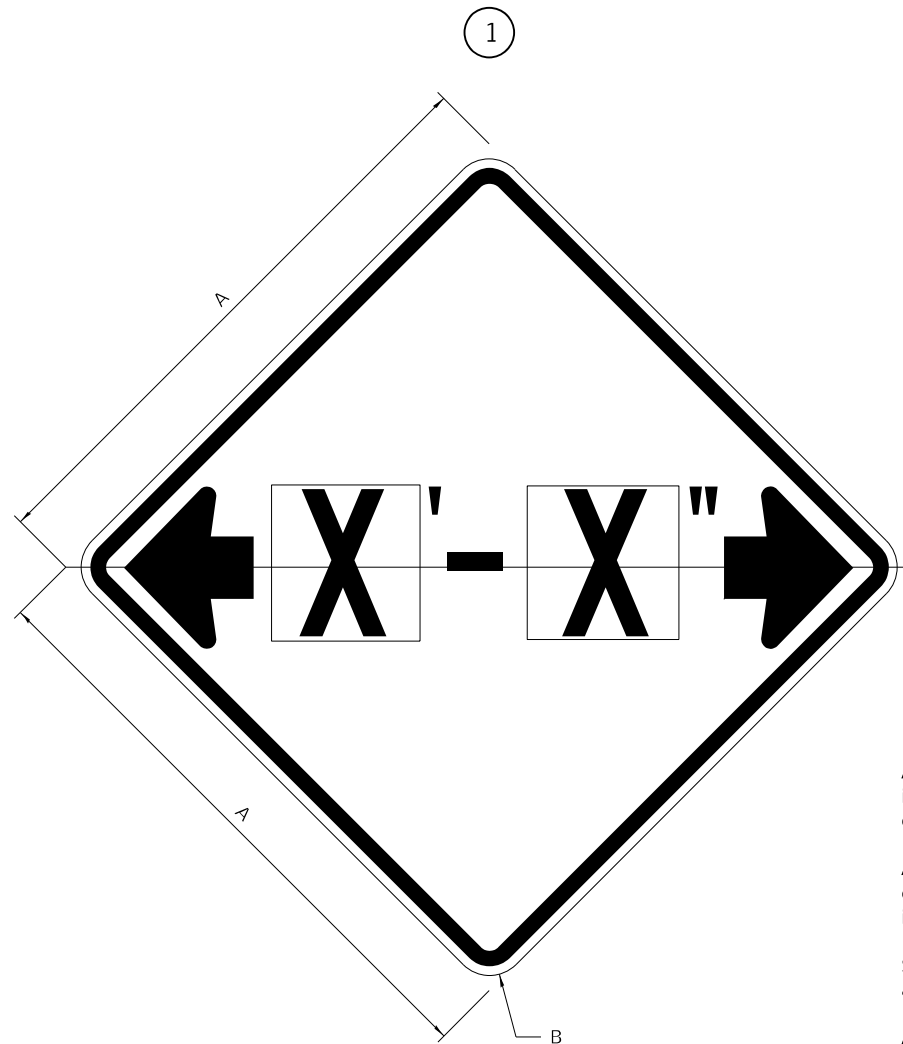
**REGION 2 / DISTRICT 2 STANDARD**

SCALE: NONE    SHEET 1 OF 8 SHEETS    STA.    TO STA.

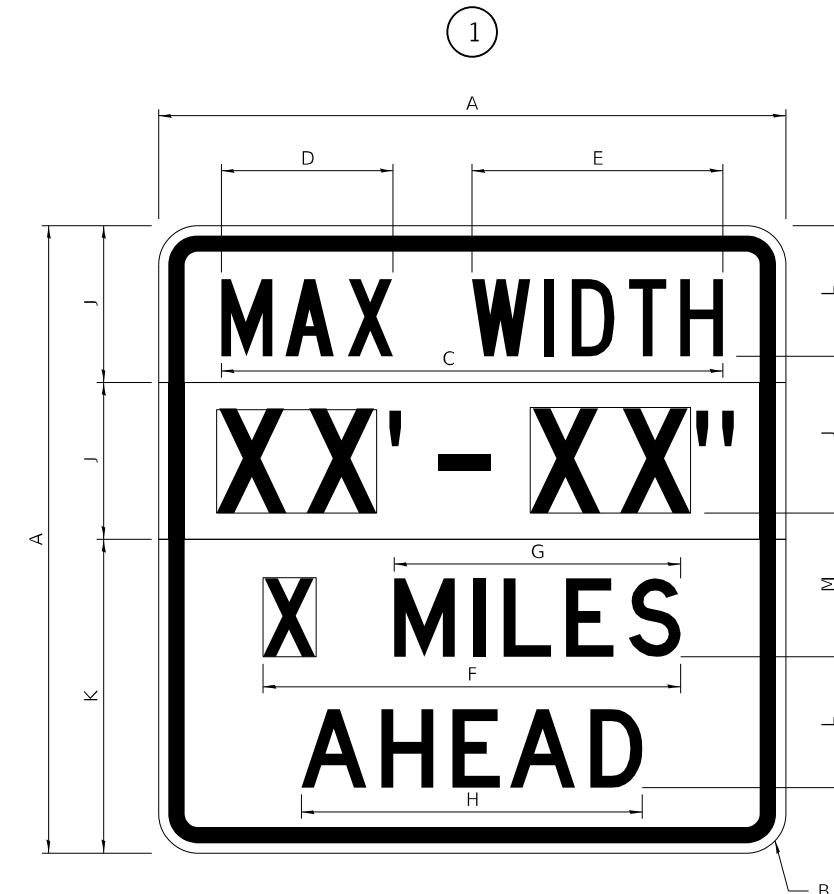
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
39	(201-2HB)BDR	WINNEBAGO	19	11
			CONTRACT NO. 64R14	
ILLINOIS FED. AID PROJECT				

# WORK ZONE SIGN DETAILS 34.1

## ILLINOIS STANDARD W12-I102



## ILLINOIS STANDARD W12-I103



### GENERAL NOTES

All work to furnish and install these signs shall be included in the cost of the specified traffic control standards and shall not be paid separately.

All Illinois Standard signs shall conform to the latest edition of the "Illinois Standard Highway Signs Book" in effect on the date of invitation for bids.

Signs shall meet the applicable portions of Sections 701 and 720 of the Standard Specifications.

All dimensions are in inches unless otherwise noted.

COLOR LEGEND AND BORDER BACKGROUND BLACK FL ORANGE NON-REFLECTORIZED REFLECTORIZED

SIGN SIZE	DIMENSIONS	
	A	B
48 x 48	48.00	3.00

① Illinois Standard signs W12-I102 and W12-I103 shall be used as described in the special provisions.

SIGN SIZE	SERIES BY LINE	MARGIN	BORDER
	1		
48 x 48	12C	0.750	1.250

Sign not to scale

COLOR LEGEND AND BORDER BACKGROUND BLACK WHITE FL ORANGE NON-REFLECTORIZED REFLECTORIZED REFLECTORIZED

SIGN SIZE	DIMENSIONS											
	A	B	C	D	E	F	G	H	J	K	L	M
48 x 48	48.00	3.00	38.40	13.20	19.20	32.00	22.00	26.20	12.00	24.00	10.00	11.00

SIGN SIZE	SERIES BY LINE				MARGIN	BORDER
	1	2	3	4		
48 x 48	6C	8D	6D	6D	0.750	1.250

Sign not to scale

XX'-XX" WIDTH AND X MILES ARE VARIABLE TOP AND BOTTOM OF BACKGROUND WHITE

MODEL Path: \\... 3/2/2022 08:07:00 - PFB 197-18 D2 - KIFF - Various Phase II Bridge Rehab Work Order 5\CADD\Bldg\kwa\CADD Specs\02-64R14-ht-D2-Standard.dgn



USER NAME = FNelson	DESIGNED -	REVISED - 3-02-16
PLOT SCALE = 2,000' / in.	DRAWN -	REVISED -
PLOT DATE = 1/10/2022	CHECKED -	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

REGION 2 / DISTRICT 2 STANDARD

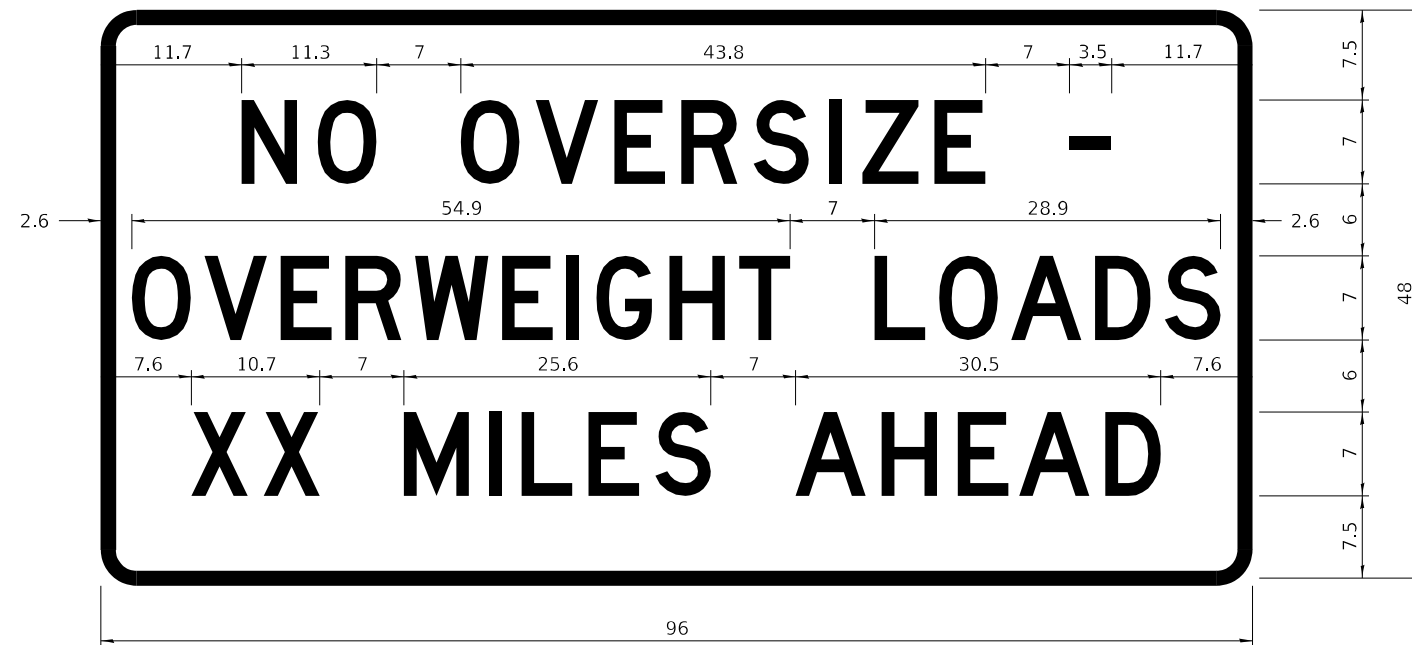
SCALE: NONE SHEET 2 OF 8 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
39	(201-2HB)BDR	WINNEBAGO	19	12
CONTRACT NO. 64R14				
ILLINOIS FED. AID PROJECT				

# WORK ZONE SIGN DETAILS 34.1

## ROAD CLOSED TO OVERSIZED LOADS

## STOP LINE SIGN FOR TEMPORARY SIGNALS



COLOR	LEGEND AND BORDER BACKGROUND	BLACK ORANGE	NON-REFLECTORIZED REFLECTORIZED

COLOR	LEGEND AND BORDER BACKGROUND	BLACK WHITE	NON-REFLECTORIZED REFLECTORIZED

Permit Loads - Loads Over 13 Feet; 3.0" Radius, 1.3" Border;  
 [NO OVERSIZE -] D; [OVERWEIGHT LOADS] D 85% spacing; [XX MILES AHEAD] D;  
 Table of letter and object lefts.

SIGN SIZE	SERIES BY LINE		
	1	2	3
24 x 24	4C	4C	4C

N	O	O	V	E	R	S	I	Z	E	-
11.7	18.1	30.0	36.2	42.8	48.4	54.4	60.7	63.5	69.5	80.8

O	V	E	R	W	E	I	G	H	T	L	O	A	D	S
2.6	8.6	15.0	20.4	26.2	33.4	38.8	41.3	47.4	53.2	64.5	69.9	75.9	82.9	88.7

X	X	M	I	L	E	S	A	H	E	A	D
7.6	13.6	25.3	32.3	35.1	40.6	46.2	57.9	65.1	71.4	76.6	83.7

Sign not to scale

Sign not to scale

### GENERAL NOTES

All work to furnish and install these signs shall be included in the cost of the specified traffic control standards and shall not be paid separately.

All Illinois Standard signs shall conform to the latest edition of the "Illinois Standard Highway Signs Book" in effect on the date of invitation for bids.

Signs shall meet the applicable portions of Sections 701 and 720 of the Standard Specifications.

All dimensions are in inches unless otherwise noted.

MODEL Path: S:\2020\2020\01\070 - PTB 197-18 D2 - KRF - Various Phase II Bridge Rehab\Work Order 5\ICADD\Bldg\kml\CADD Specs\02-64R\4-4ht-D2\_Standard.dgn



USER NAME = FNeison	DESIGNED -	REVISED - 3-02-16
	DRAWN -	REVISED -
PLOT SCALE = 2,0000' / in.	CHECKED -	REVISED -
PLOT DATE = 1/10/2022	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

REGION 2 / DISTRICT 2 STANDARD

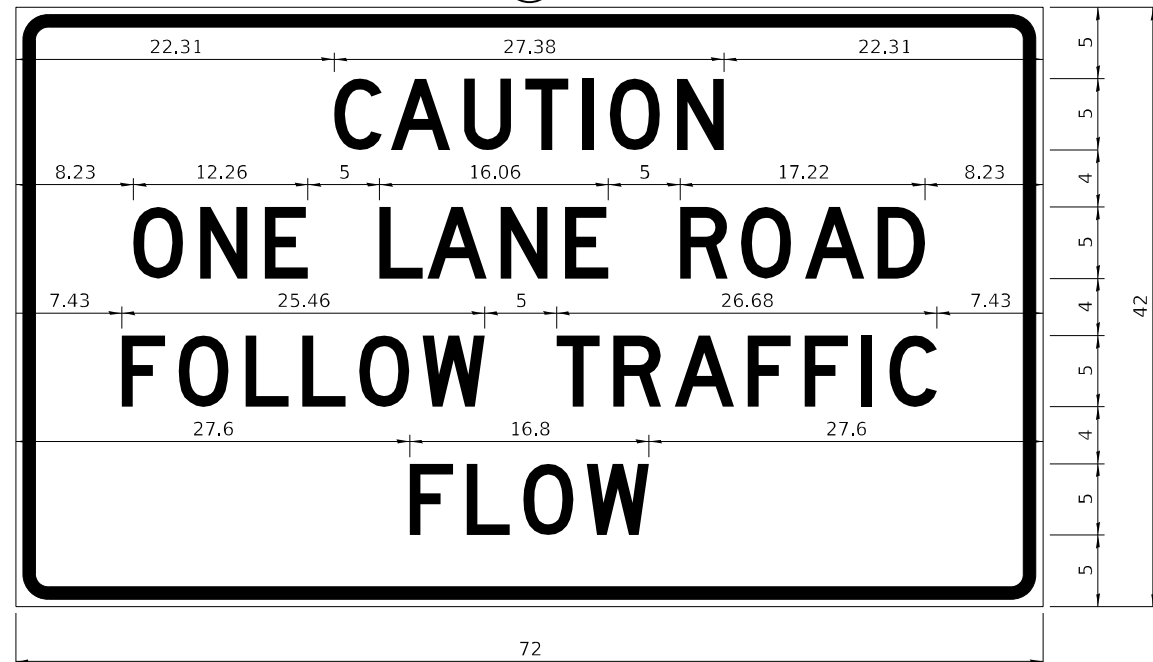
SCALE: NONE SHEET 3 OF 8 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
39	(201-2HB)BDR	WINNEBAGO	19	13
CONTRACT NO. 64R14				
ILLINOIS FED. AID PROJECT				

**ENTRANCE SIGN FOR USE  
WITH TEMPORARY SIGNALS**

**WORK ZONE SIGN DETAILS 34.1**

2



COLOR LEGEND AND BORDER BACKGROUND BLACK ORANGE NON-REFLECTORIZED REFLECTORIZED

2.25" Radius, 0.88" Border, 0.50" Indent;  
[CAUTION] D; [ONE LANE ROAD] D;  
[FOLLOW TRAFFIC] D; [FLOW] D

2 This sign shall be installed at entrances located between the temporary signals as shown in the staging plans.

**Table Of Widths And Spaces**

22.31	C	0.62	A	0.94	U	0.94	T	0.94	I	1.17	O	1.17	N	3.36	22.31
-------	---	------	---	------	---	------	---	------	---	------	---	------	---	------	-------

8.23	O	1.17	N	1.18	E
------	---	------	---	------	---

5.00	L	0.31	A	0.94	N	1.17	E
------	---	------	---	------	---	------	---

5.00	R	0.93	O	0.94	A	0.93	D	8.23
------	---	------	---	------	---	------	---	------

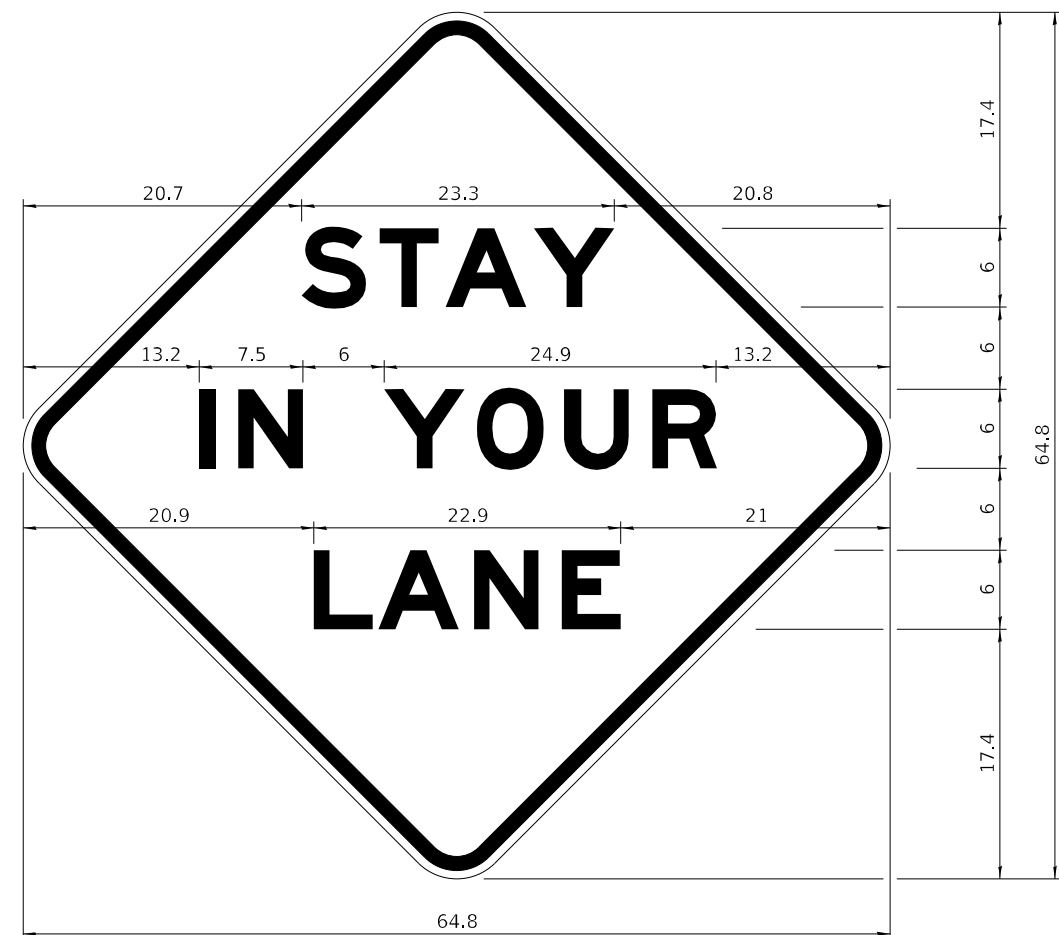
7.43	F	0.94	O	1.17	L	0.94	L	0.94	O	3.51	0.94	W	4.37
------	---	------	---	------	---	------	---	------	---	------	------	---	------

5.00	T	0.94	R	0.94	A	0.93	F	0.94	F	0.94	I	1.18	C	7.43
------	---	------	---	------	---	------	---	------	---	------	---	------	---	------

27.60	F	0.94	L	0.94	O	0.93	W	27.60
-------	---	------	---	------	---	------	---	-------

Sign not to scale

**STAY IN YOUR LANE**



COLOR LEGEND AND BORDER BACKGROUND BLACK ORANGE NON-REFLECTORIZED REFLECTORIZED

48.0" across sides 3.8" Radius, 1.0" Border, 0.6" Indent;  
"STAY" E Mod; "IN YOUR" E Mod; "LANE" E Mod;

**Table of Letter and Object Lefts**

S	T	A	Y
20.7	26.8	31.6	38.0

I	N	Y	O	U	R
13.2	15.9	26.7	33.9	40.5	46.8

L	A	N	E
20.9	25.8	33.1	39.4

Sign not to scale

**GENERAL NOTES**

All work to furnish and install these signs shall be included in the cost of the specified traffic control standards and shall not be paid separately.

All Illinois Standard signs shall conform to the latest edition of the "Illinois Standard Highway Signs Book" in effect on the date of invitation for bids.

Signs shall meet the applicable portions of Sections 701 and 720 of the Standard Specifications.

All dimensions are in inches unless otherwise noted.

MODEL Path: S:\2020\01\070 - PFB 197-18 D2 - KFF - Various Phase II Bridge Rehab\Work Order 5\CADD\Bldg\kwa\CADD Specs\02-64R 14-ht-02-Standard.dgn



USER NAME = FNeison	DESIGNED -	REVISED - 3-02-16
PLOT SCALE = 2,000' / in.	DRAWN -	REVISED -
PLOT DATE = 1/10/2022	CHECKED -	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

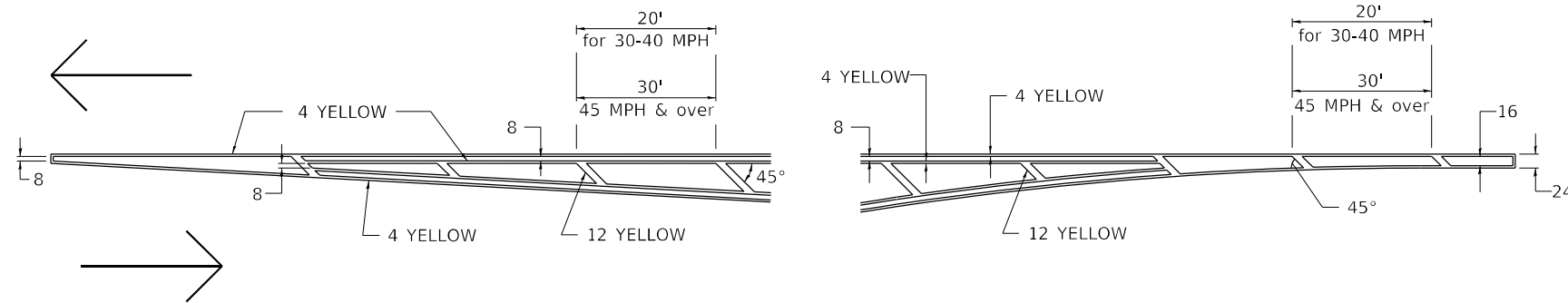
**REGION 2 / DISTRICT 2 STANDARD**

SCALE: NONE SHEET 4 OF 8 SHEETS STA. TO STA.

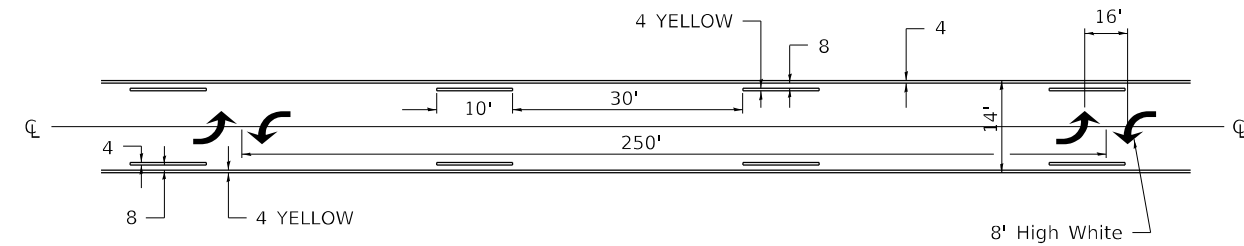
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
39	(201-2HB)BDR	WINNEBAGO	19	14
			CONTRACT NO. 64R14	
ILLINOIS FED. AID PROJECT				

# TYPICAL PAVEMENT MARKINGS 41.1

## TYPICAL PAVEMENT MARKING FOR FLUSH MEDIAN AT LEFT TURN LANE

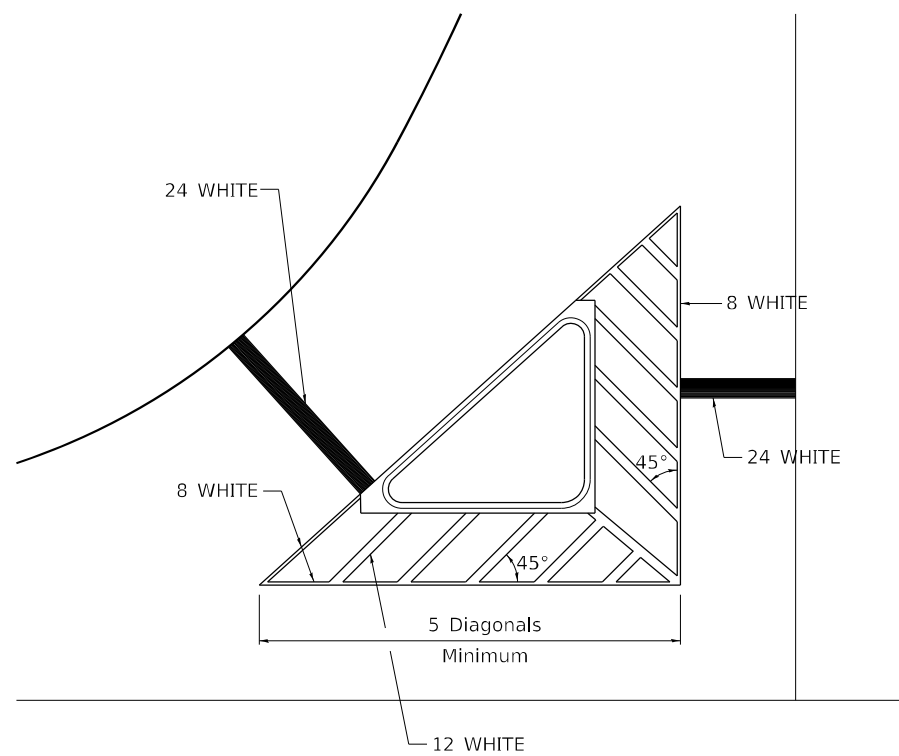


## MEDIAN PAVEMENT MARKING



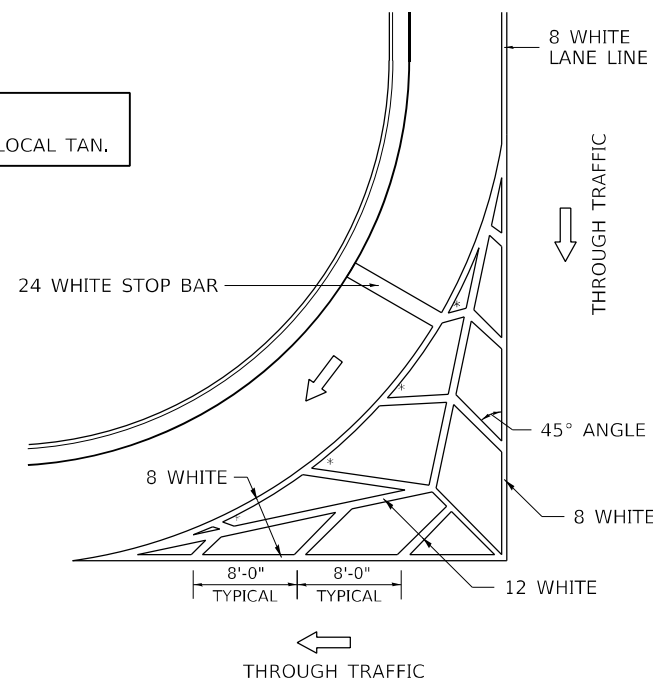
\*\* ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

## TYPICAL ISLAND OFFSET SHOULDER WIDTH



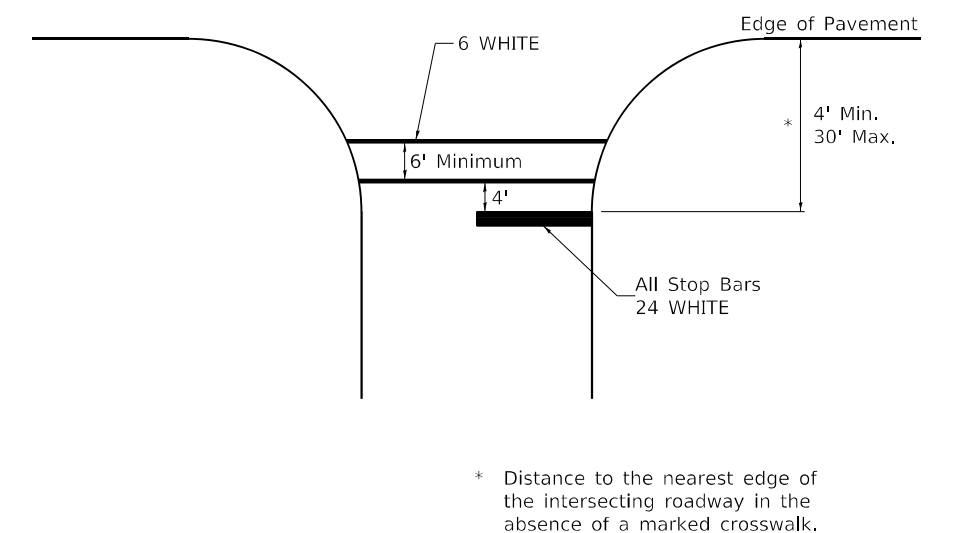
## TYPICAL MARKING FOR PAINTED ISLANDS

NOTE:  
\* 45° TO LOCAL TAN.



## STANDARD CROSSWALK MARKING

See Schedules for Locations



MODEL: D:\p\h\p\ FILE NAME: S:\2020\2020\070 - PTB 197-18 D2 - KRF - Various Phase II Bridge Rehab\Work Order 5\CAD\Bldg\h\h\CADD\Bldg\h\h\CADD Specs\02-64R\4-14-14-D2\_Standards.dgn



USER NAME = FNeison	DESIGNED -	REVISED - 6-27-14
PLOT SCALE = 2,000' / in.	DRAWN -	REVISED - 3-05-12
PLOT DATE = 1/10/2022	CHECKED -	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

REGION 2 / DISTRICT 2 STANDARD

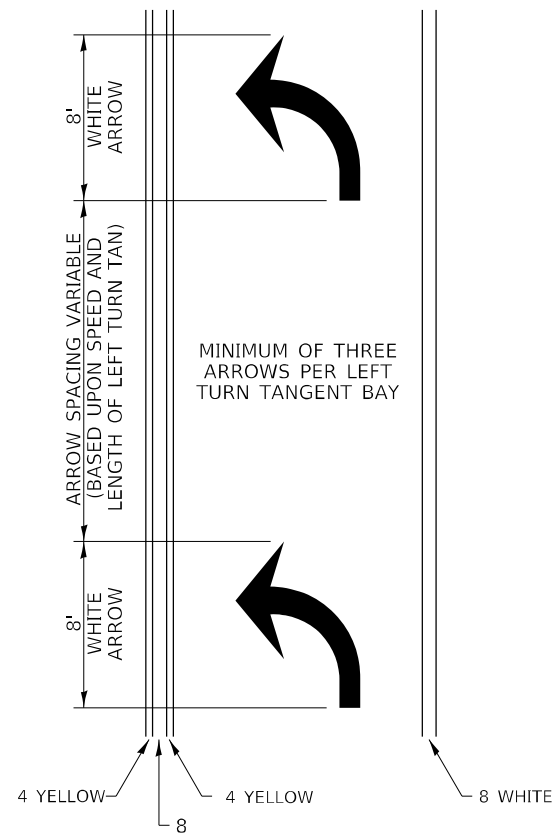
SCALE: NONE SHEET 5 OF 8 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
39	(201-2HB)BDR	WINNEBAGO	19	15
CONTRACT NO. 64R14				
ILLINOIS FED. AID PROJECT				



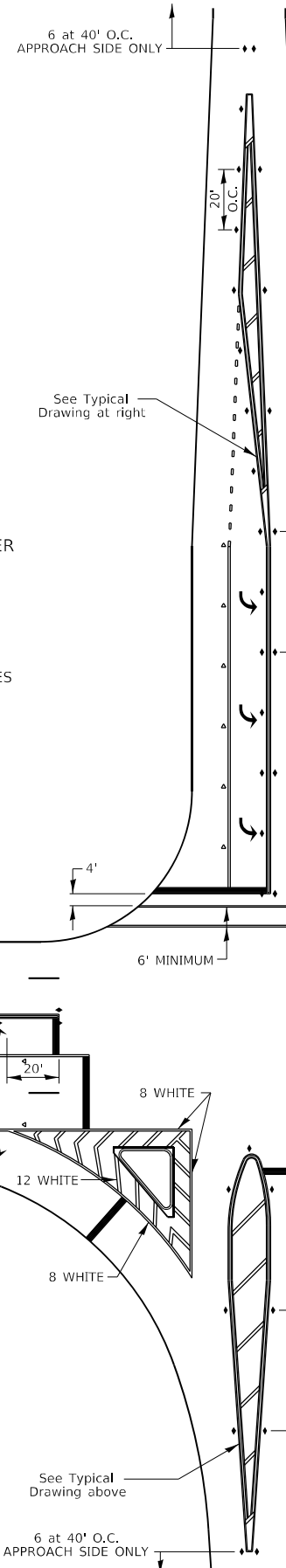
# TYPICAL PAVEMENT MARKINGS 41.1

## ARROW LAYOUT

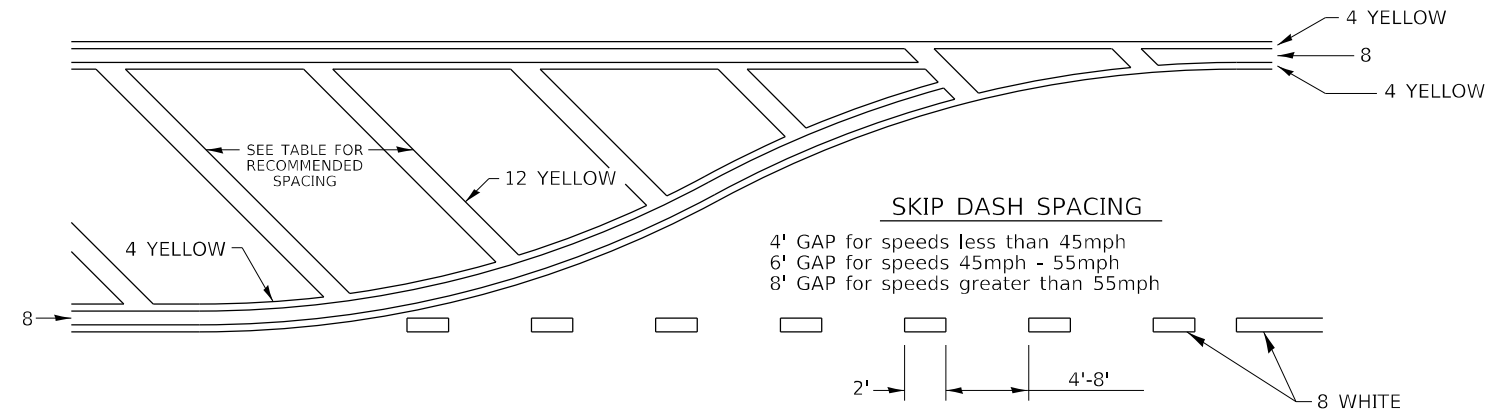


- ◀ ONE-WAY AMBER MARKER
- ◁ ONE-WAY CRYSTAL MARKER
- ◆ TWO-WAY AMBER MARKER

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.



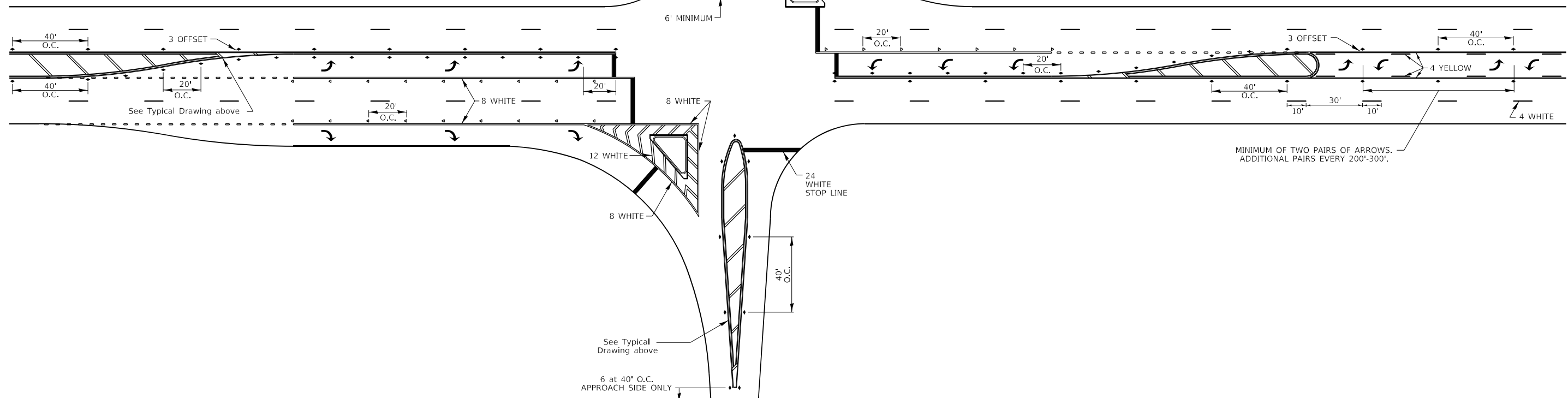
## TYPICAL PAVEMENT MARKING FOR FLUSH MEDIAN



### RECOMMENDED SPACING BETWEEN DIAGONALS (IN FEET)

Speed Limit Range	Continuous Median Area	Intersection Channelization	Objects (Islands)
less than 30MPH	50'	15'	10'
30-40MPH	75'	20'	15'
45MPH & over	75'	30'	20'

NOTE: if the spacing recommended in the Table does not permit at least five diagonal lines in the area being marked, the spacing from the next lowest speed range should be used. The recommended spacing is measured parallel to the pavement center line.



MODEL Path.dwg  
FILE NAME: S:\2020\2020\070 - PTB - 197-18 D2 - KRF - Various Phase II Bridge Rehab\Work Order 5\CAD\Bldg\krc\CADD 5\Revised\2020\070 - PTB - 197-18 D2 - KRF - Various Phase II Bridge Rehab\Work Order 5\CAD\Bldg\krc\CADD 5\Revised\2020\070 - PTB - 197-18 D2 - KRF - Various Phase II Bridge Rehab.dgn



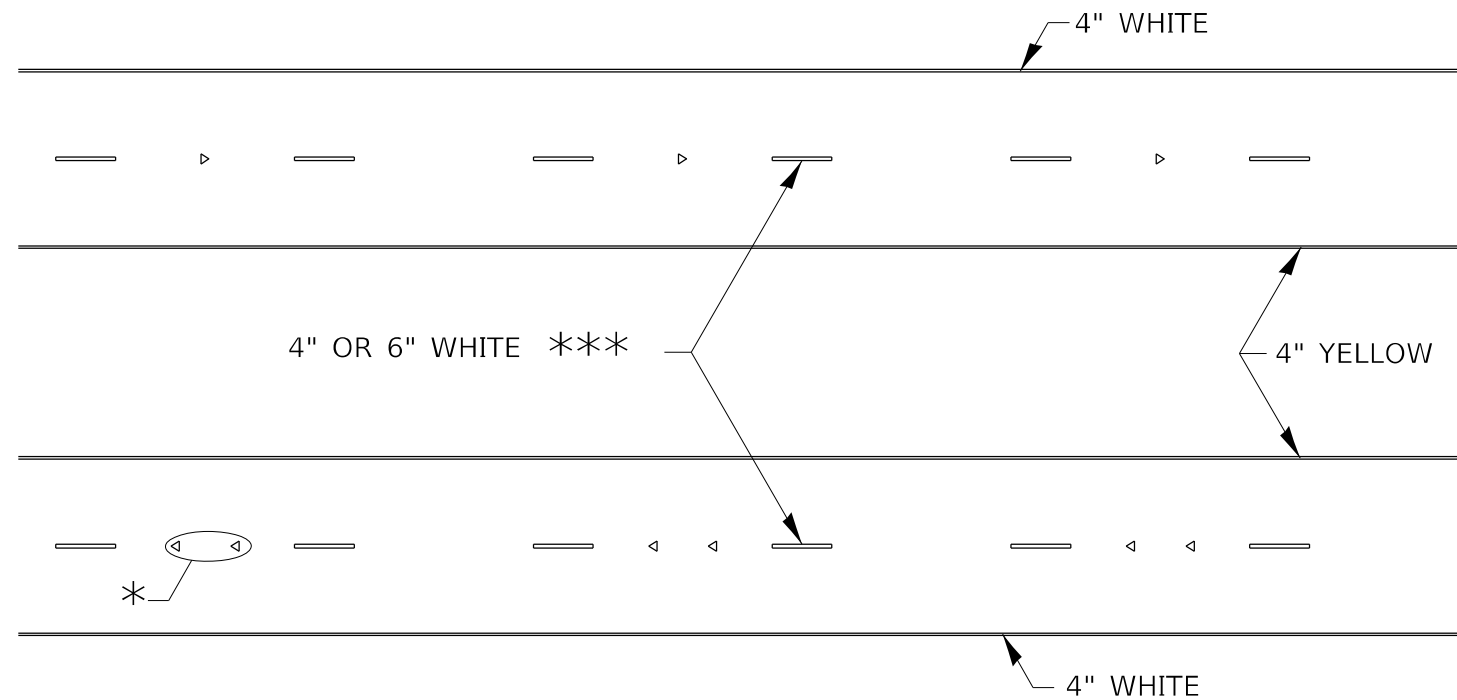
USER NAME = FNeison	DESIGNED -	REVISED - 6-27-14
PLOT SCALE = 2,000' / in.	DRAWN -	REVISED - 3-05-12
PLOT DATE = 1/10/2022	CHECKED -	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

REGION 2 / DISTRICT 2 STANDARD  
SCALE: NONE SHEET 6 OF 8 SHEETS STA. TO STA.

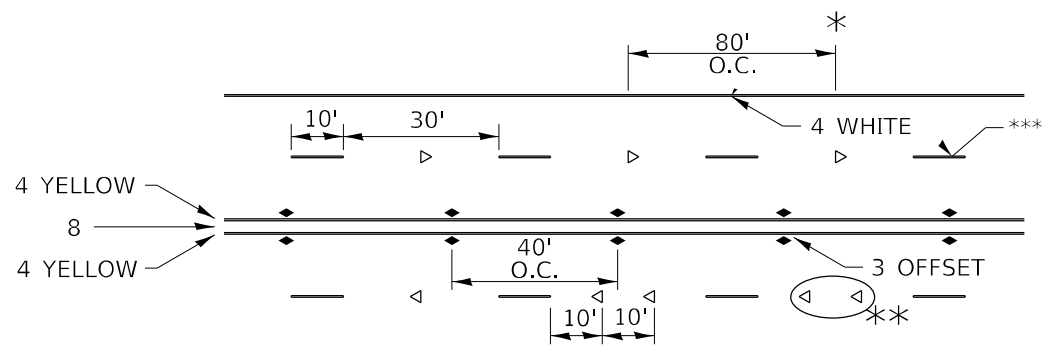
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
39	(201-2HB)BDR	WINNEBAGO	19	16
CONTRACT NO. 64R14				
ILLINOIS FED. AID PROJECT				

# TYPICAL PAVEMENT MARKINGS 41.1



\* SEE HIGHWAY STANDARD 781001 FOR SPACING DETAILS.  
USE DOUBLE MARKERS WHEN ADT ≥ 20,000.

## MULTI-LANE / DIVIDED



\* REDUCE TO 40' O.C. ON CURVES WHERE ADVISORY SPEEDS ARE 10 MPH LOWER THAN POSTED SPEEDS.

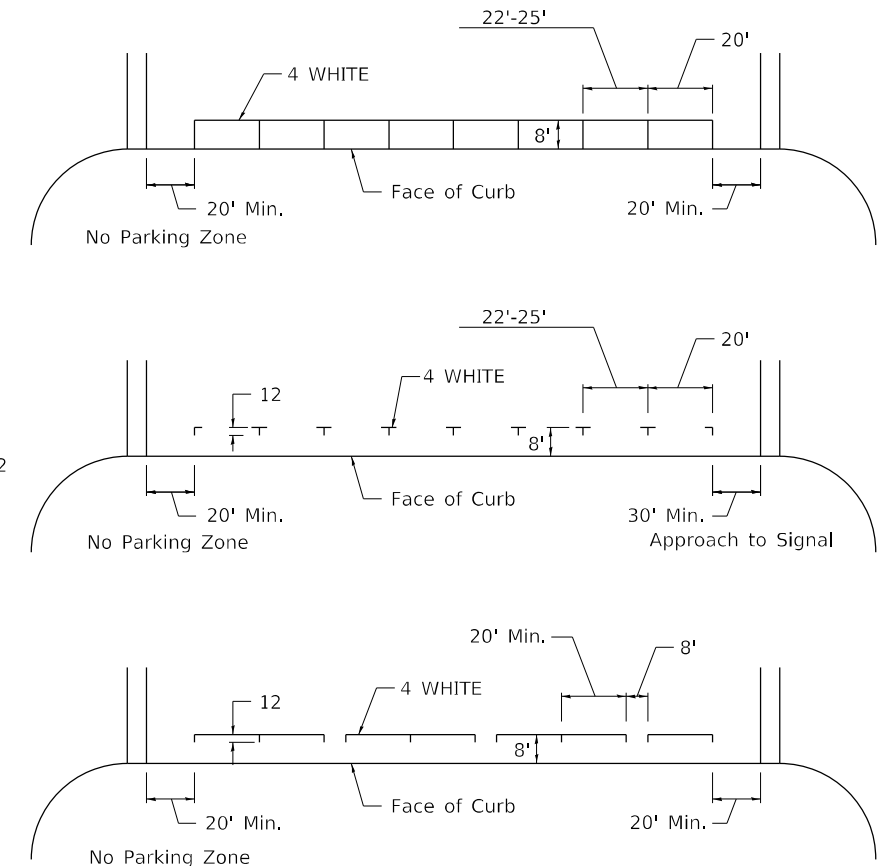
\*\* USE DOUBLE MARKERS WHEN ADT ≥ 20,000

\*\*\* CENTERLINE SKIP DASH PAVEMENT MARKING SPEED LIMIT LESS THAN 40 MPH USE 4" LINE. SPEED LIMIT 40 MPH AND OVER USE 6" LINE.

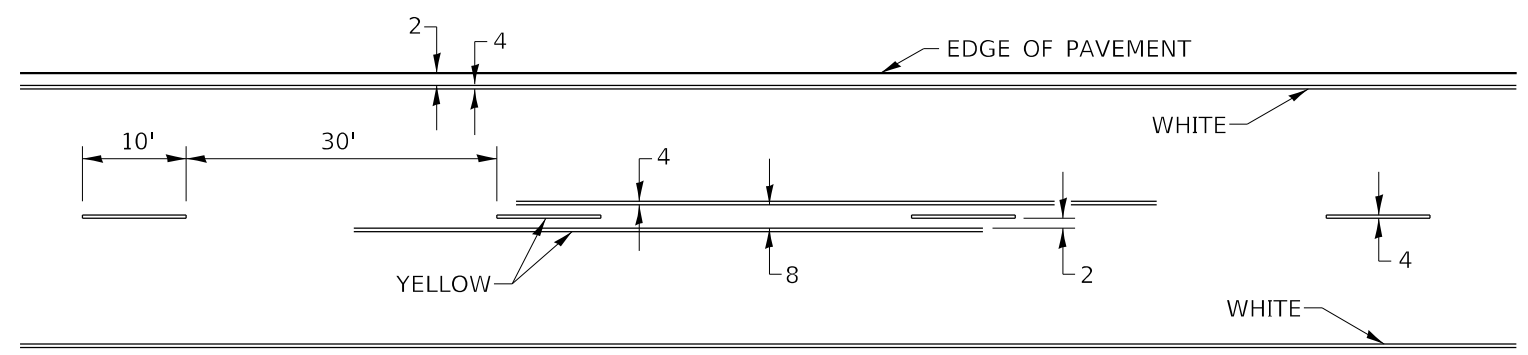
## MULTI-LANE / UNDIVIDED & ONE WAY

(FOR MULTI-LANE UNDIVIDED HIGHWAYS USE THIS DETAIL NOT HIGHWAY STANDARD 781001)

## TYPICAL PARKING SPACING



## TYPICAL PAVEMENT MARKING FOR TWO LANE SECTION - NO PASSING ZONES



## SYMBOLS

MODEL Path.dwg  
FILE NAME: S:\2020\2020\01\070 - PTB 197-18 D2 - KRF - Various Phase II Bridge Rehab\Work Order 5\CAD\BIB\Book\KACADD Specs\02-64R14-14-18-D2\_Standards.dgn



USER NAME = FNeison	DESIGNED -	REVISED - 6-27-14
PLOT SCALE = 2,000' / in.	DRAWN -	REVISED - 8-27-13
PLOT DATE = 1/10/2022	CHECKED -	REVISED - 11-28-12
	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

REGION 2 / DISTRICT 2 STANDARD

SCALE: NONE SHEET 7 OF 8 SHEETS STA. TO STA.

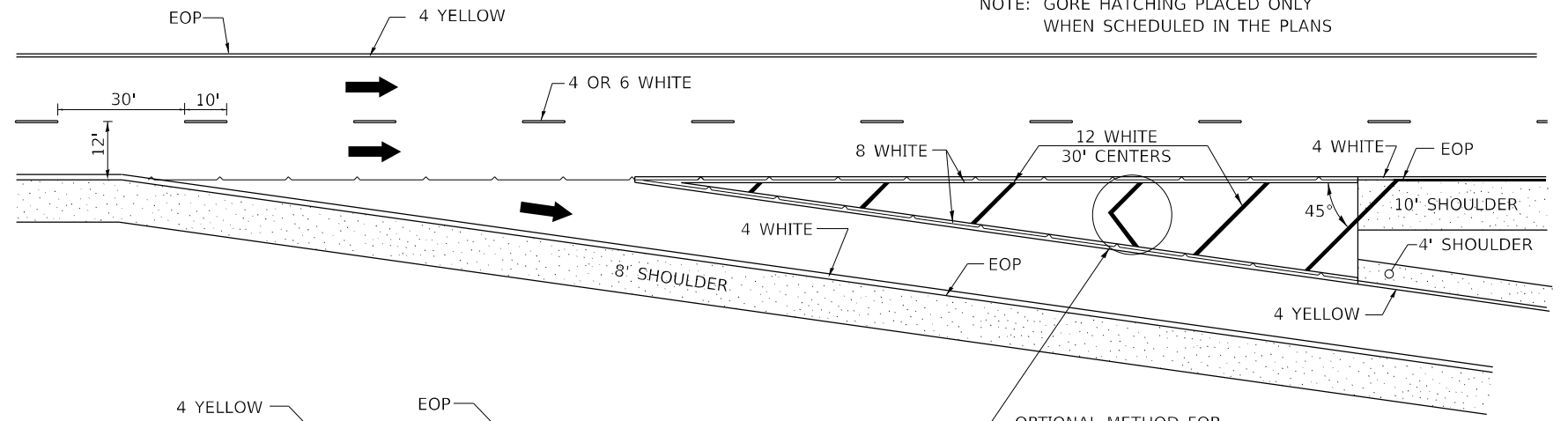
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
39	(201-2HB)BDR	WINNEBAGO	19	17
CONTRACT NO. 64R14				
ILLINOIS FED. AID PROJECT				

# PAINING DETAILS 44.1

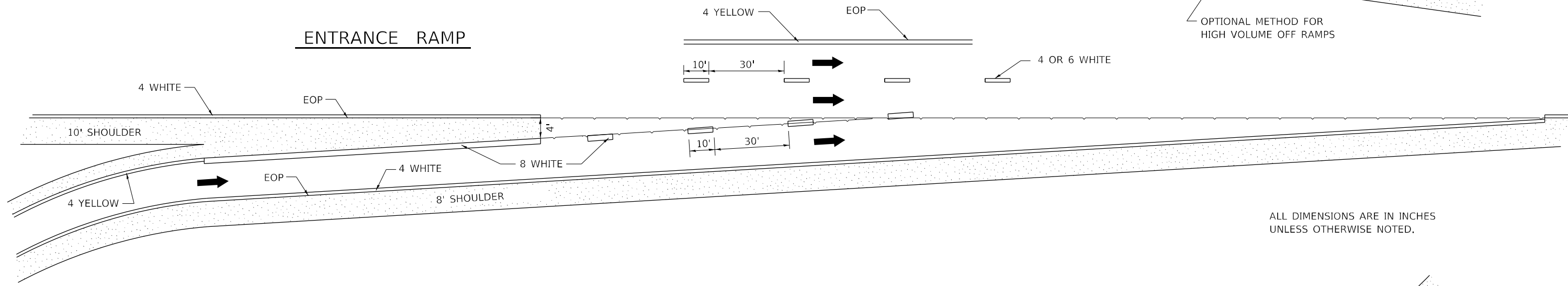
CENTERLINE SKIP DASH PAVEMENT MARKING WIDTH SHALL BE 4" WHEN THE POSTED SPEED LIMIT IS UNDER 40 MPH AND 6" WHEN THE POSTED SPEED LIMIT IS 40 MPH AND OVER.

## EXIT RAMP

NOTE: GORE HATCHING PLACED ONLY WHEN SCHEDULED IN THE PLANS

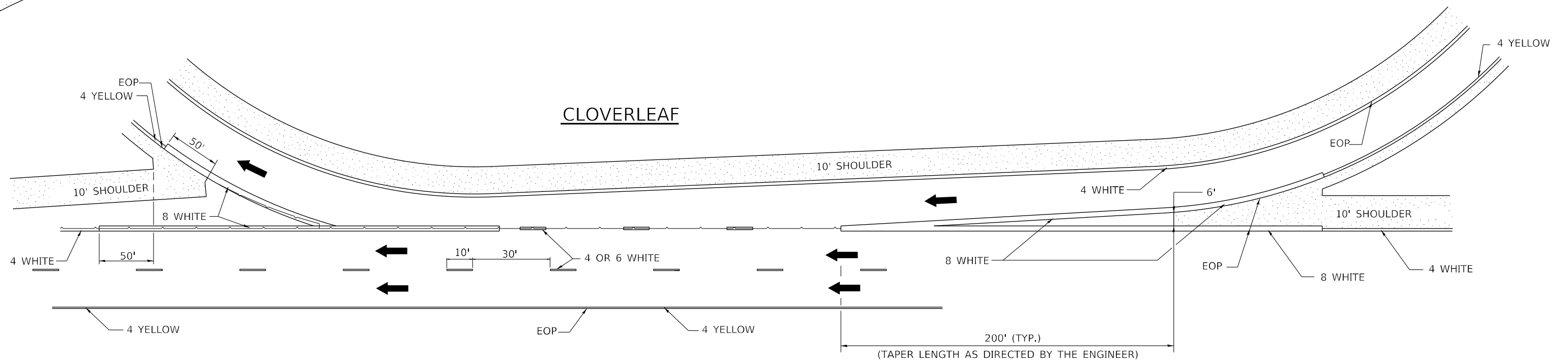


## ENTRANCE RAMP



ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

## CLOVERLEAF



MODEL: D:\p\h\p\... FILE NAME: S:\2020\01\070 - PTB 197-18 D2 - KRF - Virobus Phase II Bridge Rehab\Work Order 5\ICADD\Bldg\h\h\CADD Streets\02-64R\44-1-14-18-D2-Standard.dgn



USER NAME = FNeison	DESIGNED -	REVISED - 8-27-13
PLOT SCALE = 2,000' / in.	DRAWN -	REVISED - 10-18-11
PLOT DATE = 1/10/2022	CHECKED -	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

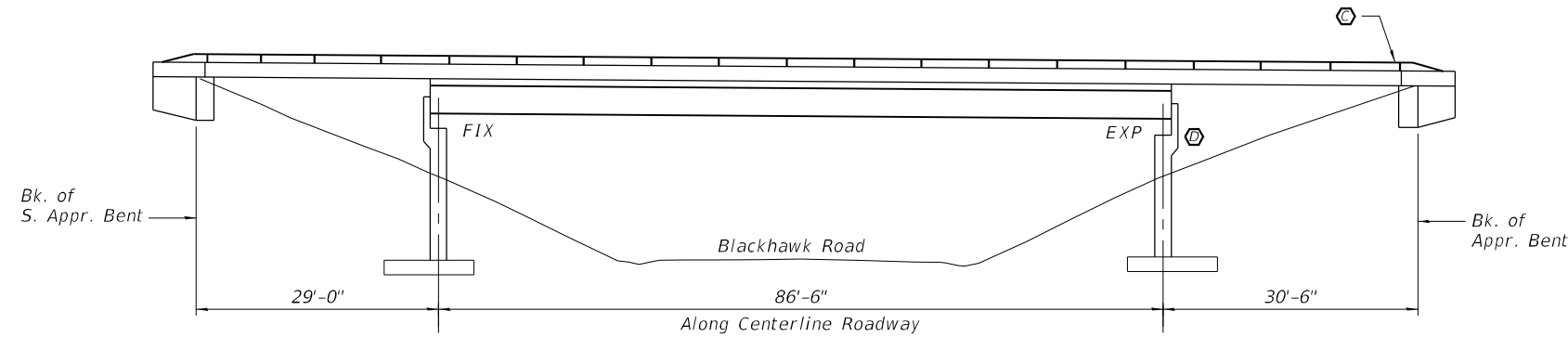
REGION 2 / DISTRICT 2 STANDARD

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

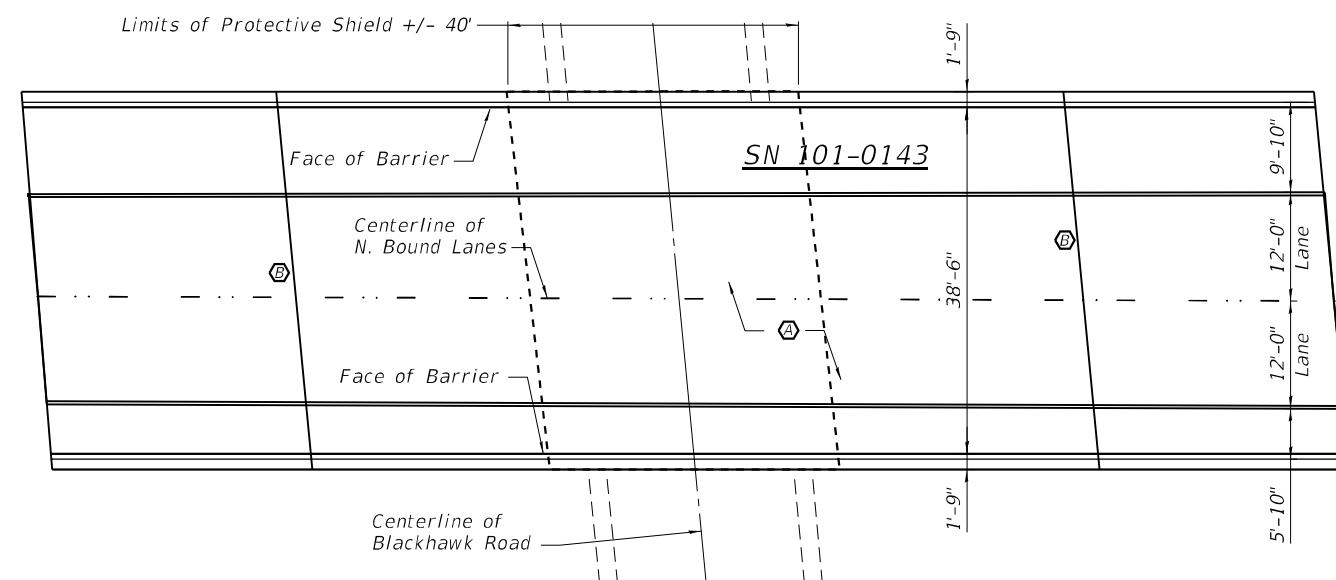
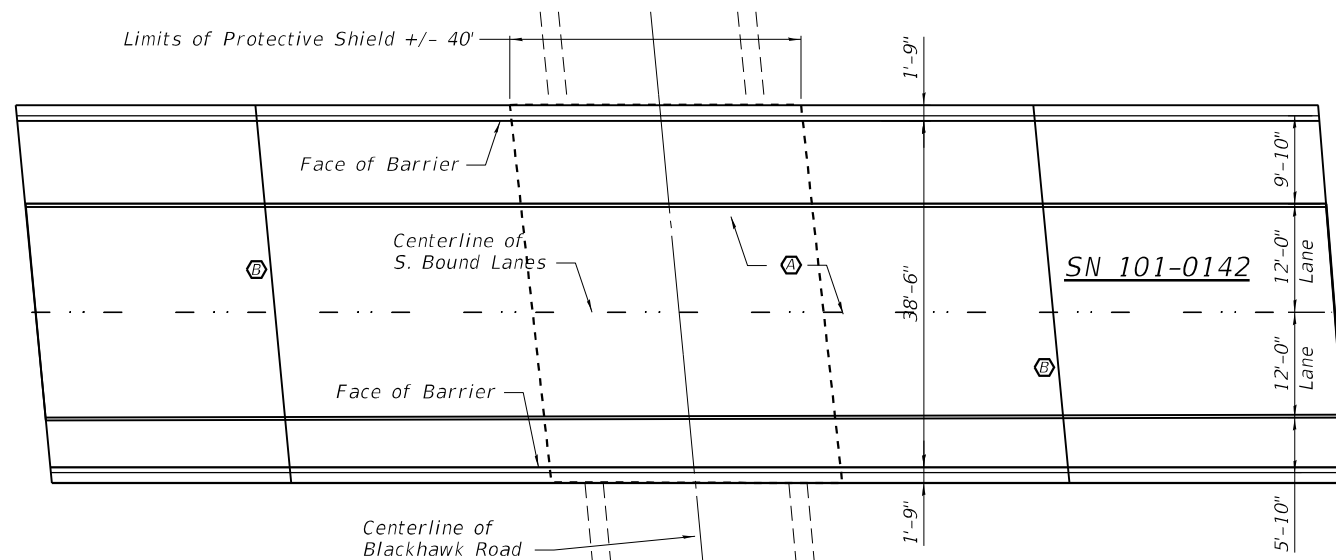
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
39	(201-2HB)BDR	WINNEBAGO	19	18
CONTRACT NO. 64R14				
ILLINOIS FED. AID PROJECT				

**SCOPE OF WORK**

- (A) Scarify Existing Deck 2 1/2", Install New 2 3/4" Microsilica Concrete Overlay and Diamond Grind New Overlay 1/4"
- (B) Remove and Replace Expansion Joints
- (C) Barrier Rail Improvements
- (D) Substructure Repairs



**ELEVATION**



**PLAN**

**TOTAL BILL OF MATERIAL**

ITEM	UNIT	TOTAL
Bridge Deck Microsilica Concrete Overlay 2 3/4"	Sq. Yd.	1249
Concrete Bridge Deck Scarification 2 1/2"	Sq. Yd.	1249
Bridge Deck Grooving (Longitudinal)	Sq. Yd.	779
Diamond Grinding (Bridge Section)	Sq. Yd.	1119
Protective Coat	Sq. Yd.	1249
Concrete Removal	Cu. Yd.	10
Structural Repair of Concrete <= 5 Inches	Cu. Yd.	5
Concrete Superstructures	Cu. Yd.	10
Bar Splicers	Each	24
Reinforcement Bars, Epoxy Coated	Pound	1574
Preformed Joint Strip Seal	Foot	168
Bridge Rail Removal	Foot	584
Retrofit Concrete Parapet	Foot	576
Acrylic Coating	Sq. Yd.	454
Protective Shield	Sq. Yd.	375

\*\* On New Concrete Surfaces of the Deck and Overlay  
\* On Existing Parapet and Parapet Retrofit

**GENERAL NOTES**

Plan dimensions and details relative to the 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 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.

Removal of the existing raised reflectors will be incidental to removal of the existing overlay.

Prior to pouring the new concrete overlay, 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.

Reinforcement bars designated (E) shall be epoxy coated. Existing reinforcement bars extending into the removal area shall be cleaned, straightened and incorporated into the new construction. Any reinforcement bars that are damaged during concrete removal shall be repaired with an approved bar splicer anchorage system. Cost included with Concrete Removal.

Joint openings shall be adjusted according to Article 520.04 of the Standard Specifications when the deck is poured at an ambient temperature other than 50° F.

Traffic will be maintained using staged construction.



EXP. 11-30-22

MODEL: Default  
FILE NAME: \\kpf.com\dfs\Bridges\2100351 (IDOT IVO #5)\SN 101-0142 and 0143 Blackhawk Rd\02\_Design\SN 101-0142 & 0143 20\_Plan and Elev.dgn

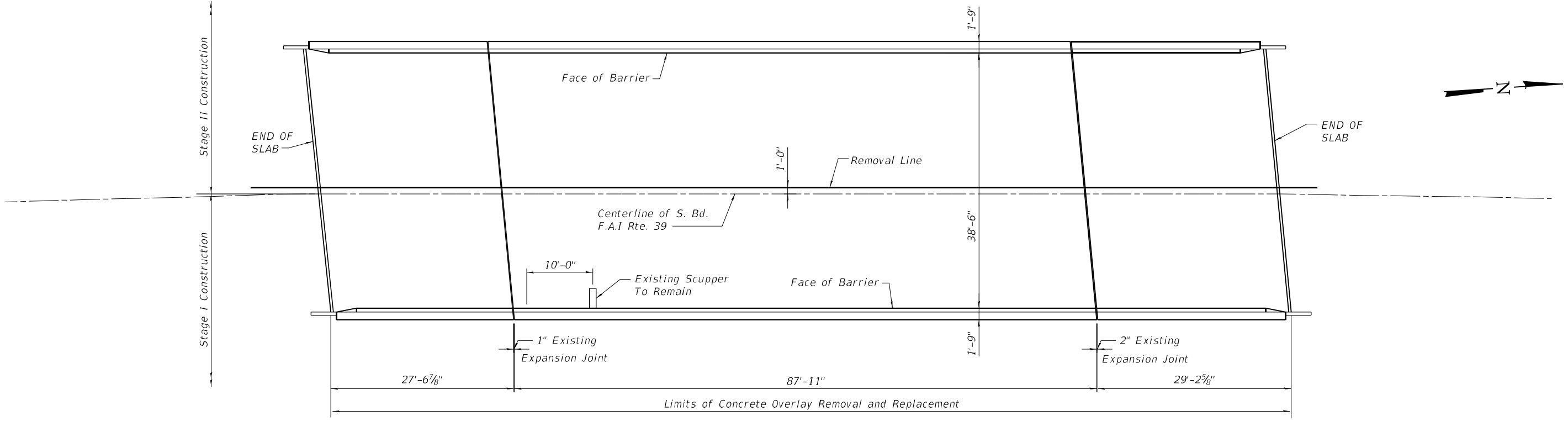


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PLOT SCALE =	DRAWN -	REVISED -
PLOT DATE =	CHECKED -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SN 101-0142 & 0143 FAI 39 OVER BLACKHAWK ROAD  
GENERAL PLAN AND ELEVATION

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
39	(201-2HB)BDR	WINNEBAGO	30	20
CONTRACT NO. 64R14				
ILLINOIS FED. AID PROJECT 75CB(31)				



**DECK PLAN**

MODEL: Default  
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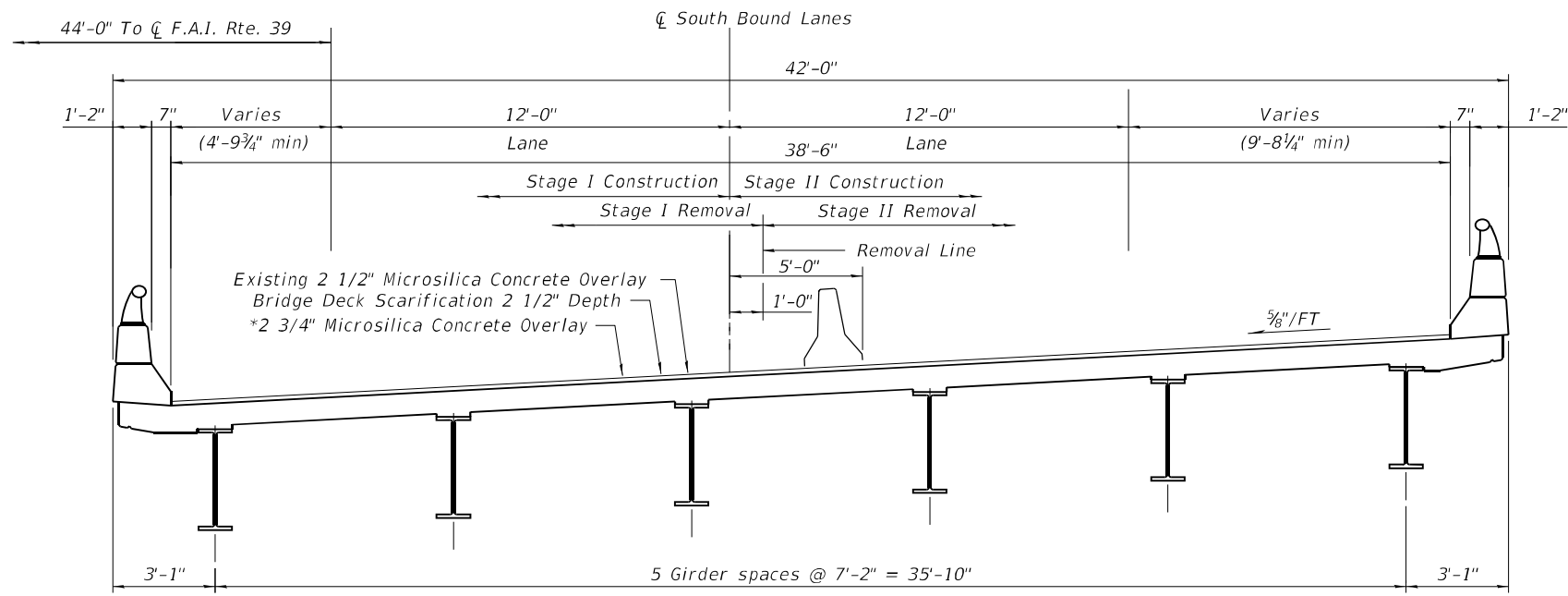
**kpff**  
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 Evanston, IL 60201  
 847-859-7790  
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PLOT DATE =	DRAWN -	REVISED -
	CHECKED -	REVISED -

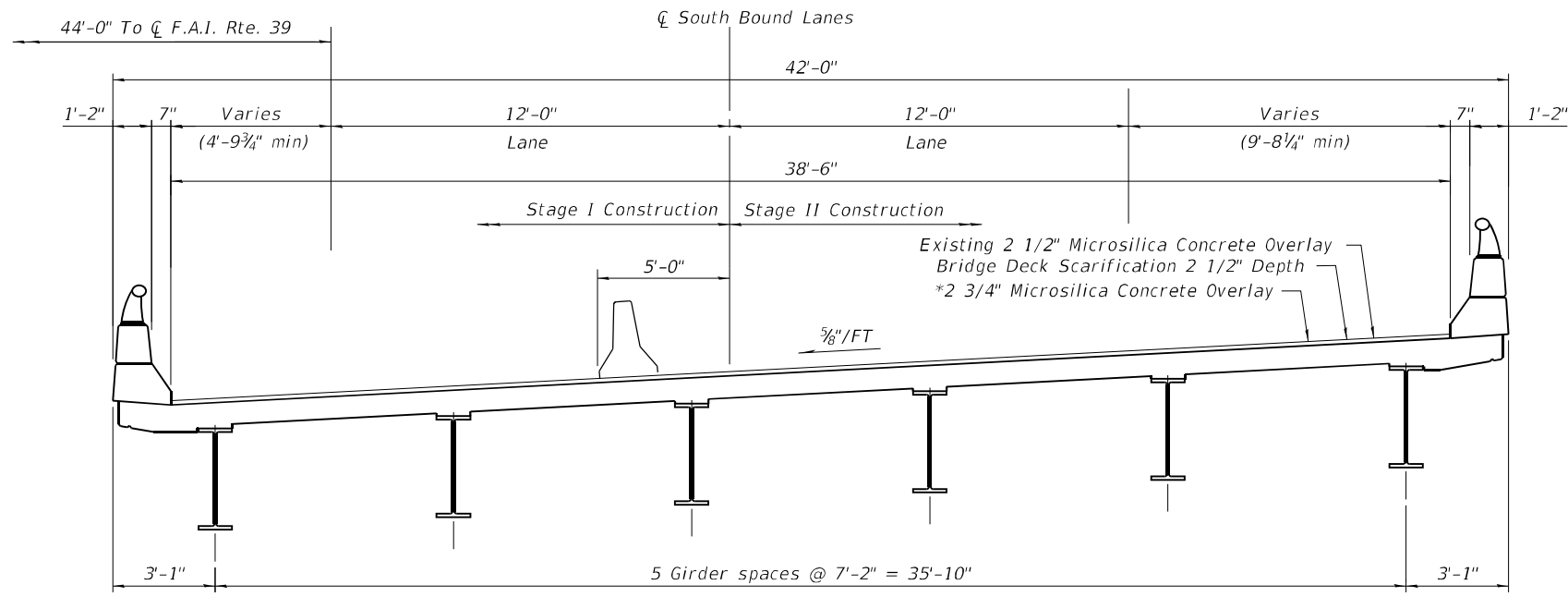
**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**SN 101-0142 & 0143 FAI 39 OVER BLACKHAWK ROAD**  
**DECK PLAN - SN 101-0142**

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
39	(201-2HB)BDR	WINNEBAGO	30	21
CONTRACT NO. 64R14				
ILLINOIS FED. AID PROJECT 75CB(31)				



\* Overlay Thickness Prior to 1/4" Grinding **DECK CROSS SECTION**  
**STAGE I**  
(Looking South)



\* Overlay Thickness Prior to 1/4" Grinding **DECK CROSS SECTION**  
**STAGE II**  
(Looking South)

MODEL: Default  
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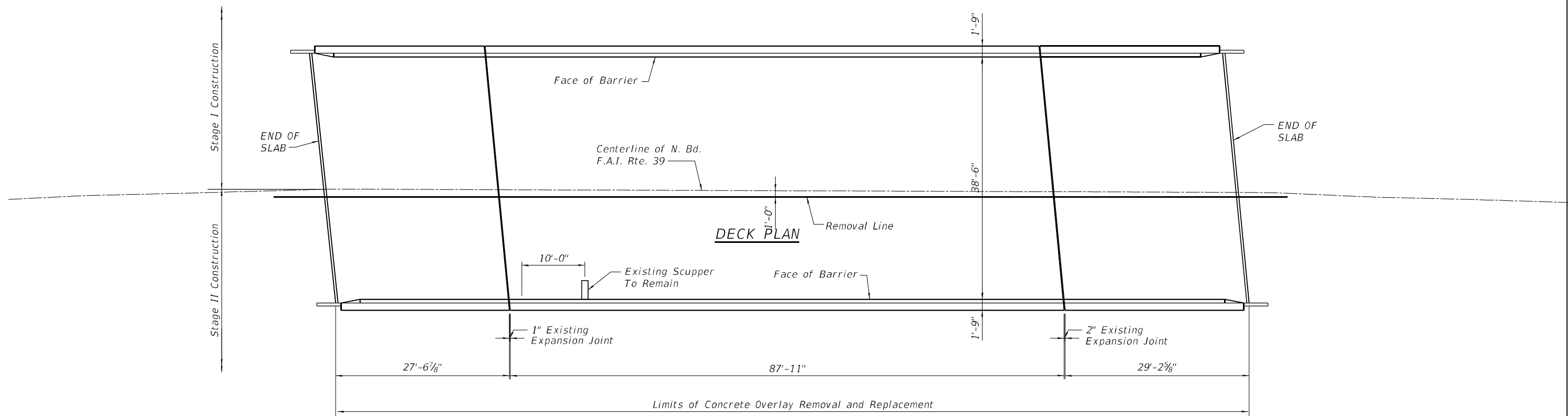
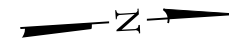


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STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SN 101-0142 & 0143 FAI 39 OVER BLACKHAWK ROAD  
CROSS SECTIONS - SN 101-0142

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
39	(201-2HB)BDR	WINNEBAGO	30	22
CONTRACT NO. 64R14				
ILLINOIS FED. AID PROJECT 75CB(31)				



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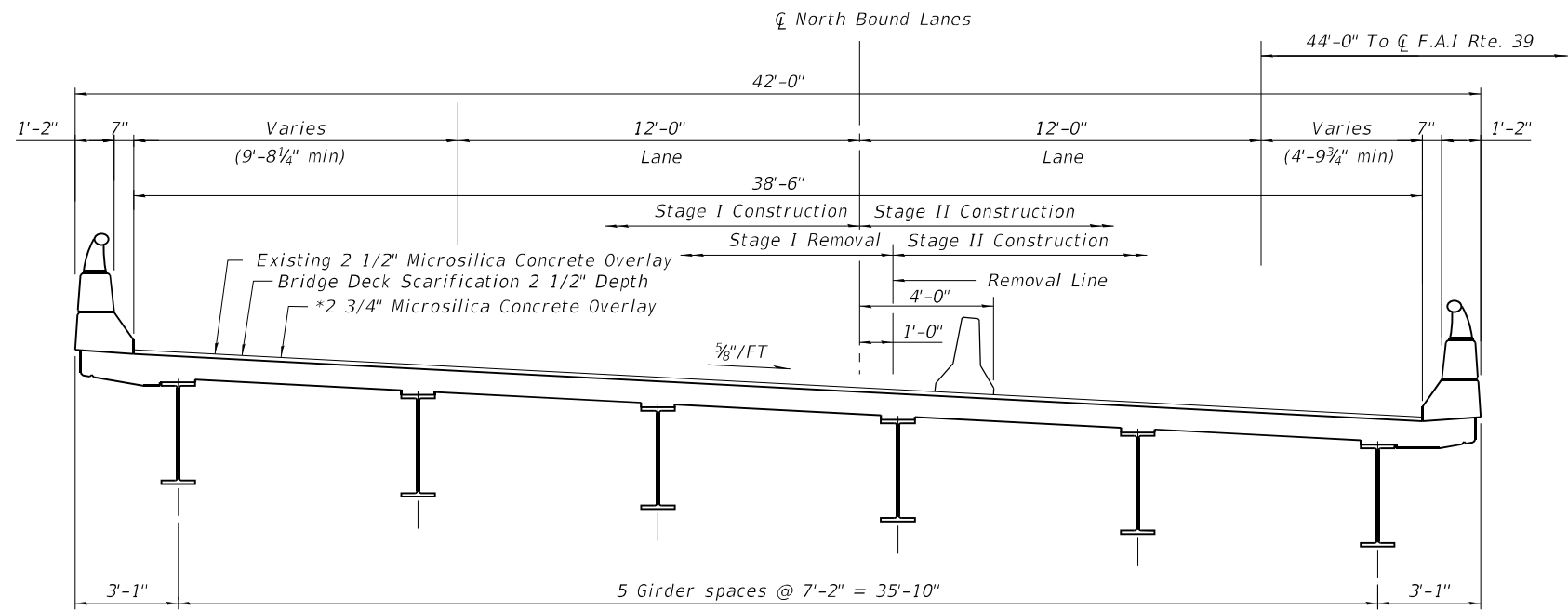
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 847-859-7790  
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STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

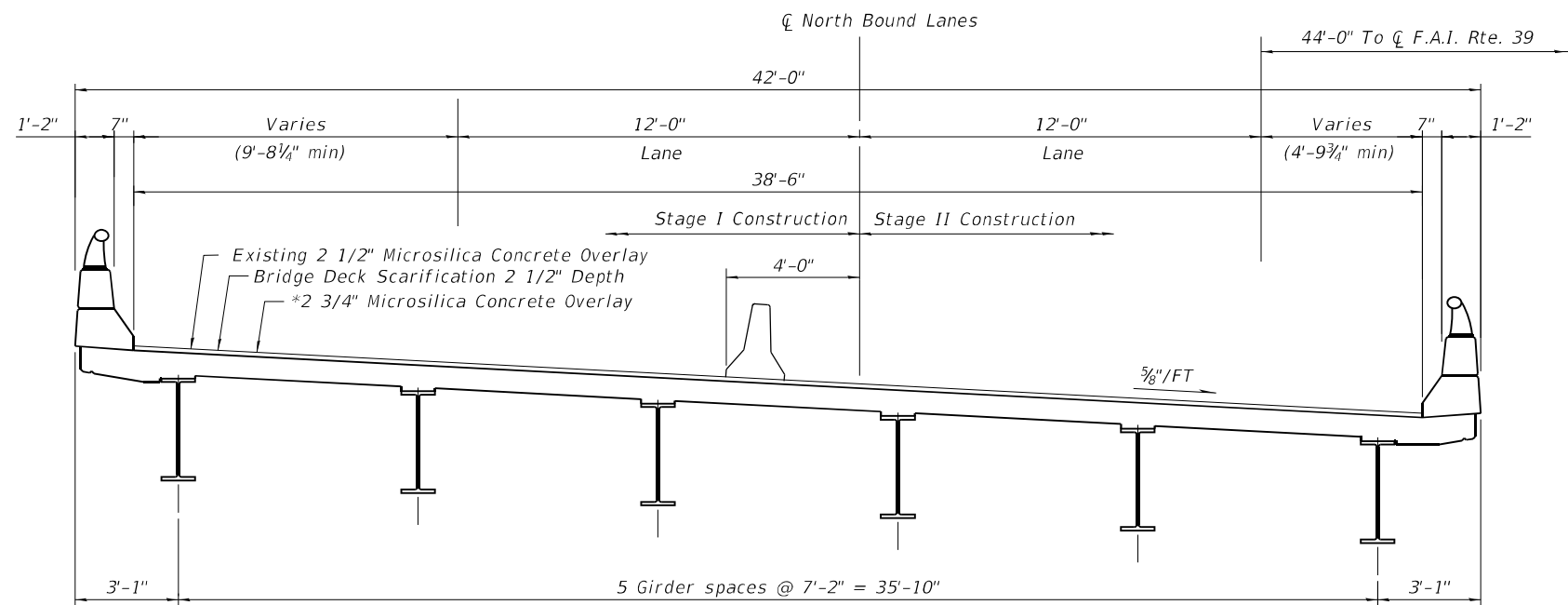
SN 101-0142 & 0143 FAI 39 OVER BLACKHAWK ROAD  
 DECK PLAN SN 101-0143

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
39	(201-2HB)BDR	WINNEBAGO	30	23
CONTRACT NO. 64R14				
ILLINOIS FED. AID PROJECT 75CB(31)				



\* Overlay Thickness Prior to 1/4" Grinding

**DECK CROSS SECTION - STAGE I**  
(Looking North)



\* Overlay Thickness Prior to 1/4" Grinding

**DECK CROSS SECTION - STAGE II**  
(Looking North)

MODEL: Default  
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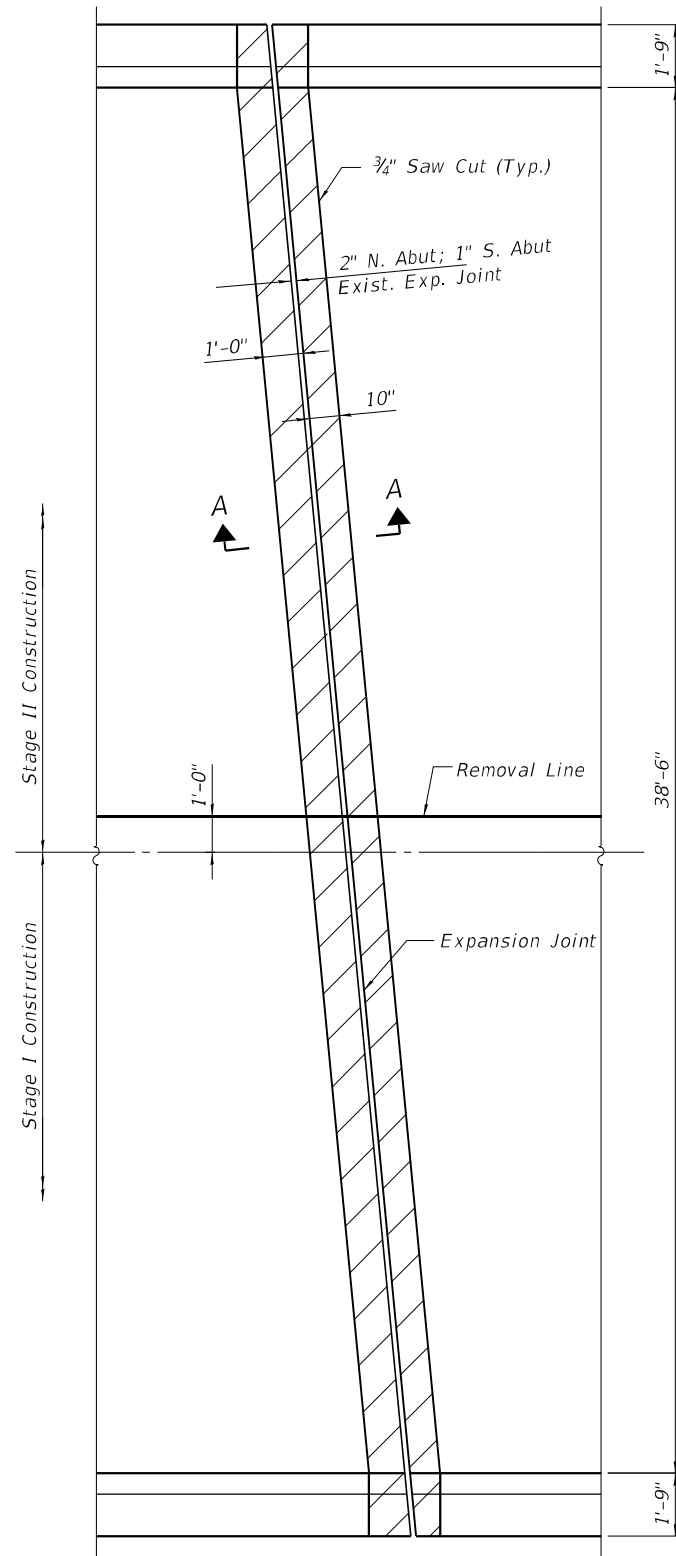
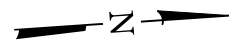
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STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SN 101-0142 & 0143 FAI 39 OVER BLACKHAWK ROAD  
CROSS SECTION SN 101-0143

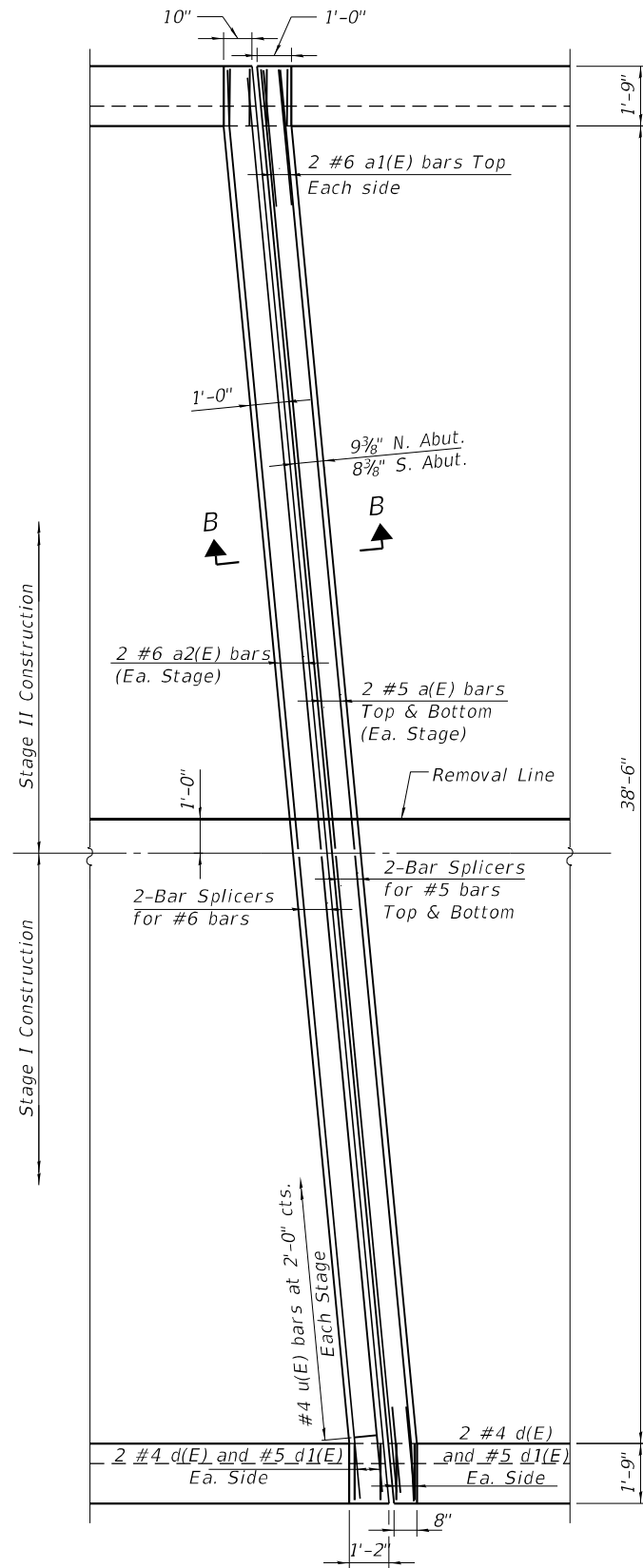
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39	(201-2HB)BDR	WINNEBAGO	30	24
CONTRACT NO. 64R14				
ILLINOIS FED. AID PROJECT 75CB(31)				



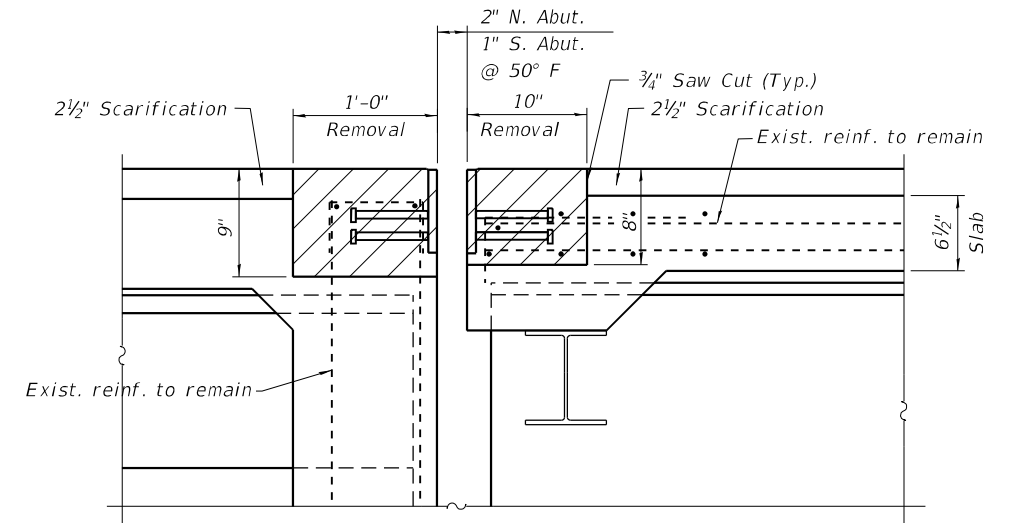


**REMOVAL PLAN**

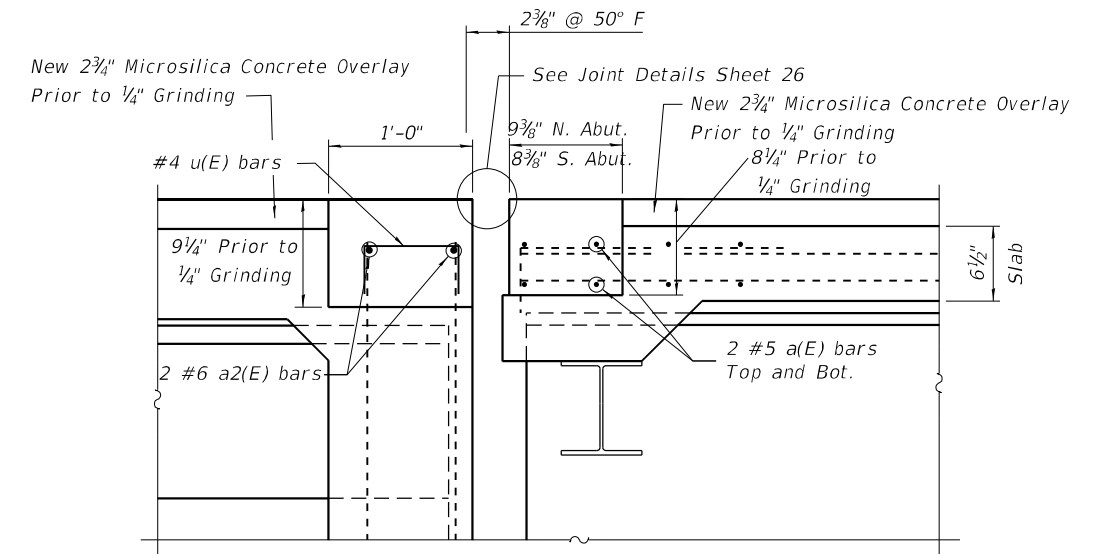
N. B. Roadway, S. Abut. shown, other abutments symmetrical about  $\bar{C}$  pier and  $\bar{C}$  FAI 39



**REPLACEMENT PLAN**



**SECTION A-A**



**SECTION B-B**

MODEL: Default  
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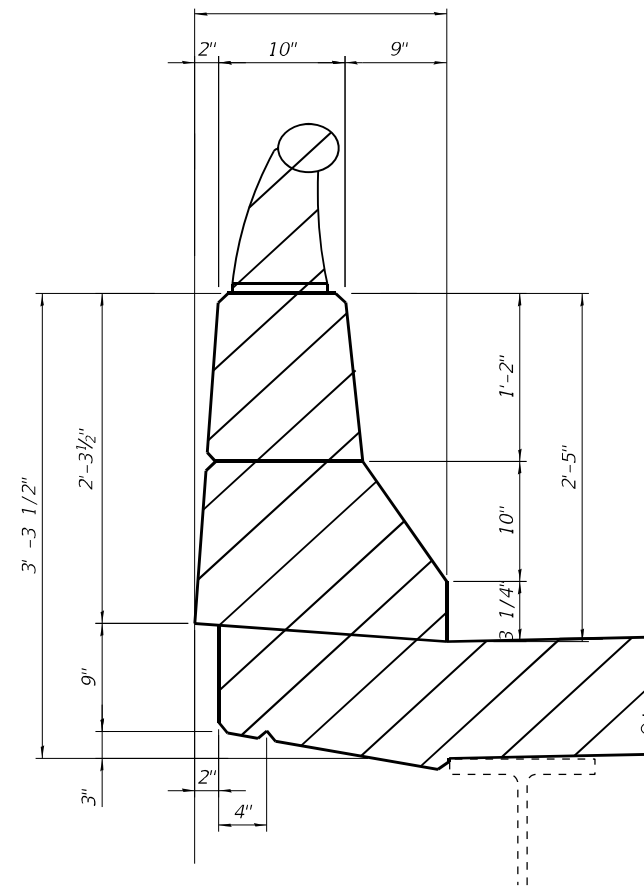
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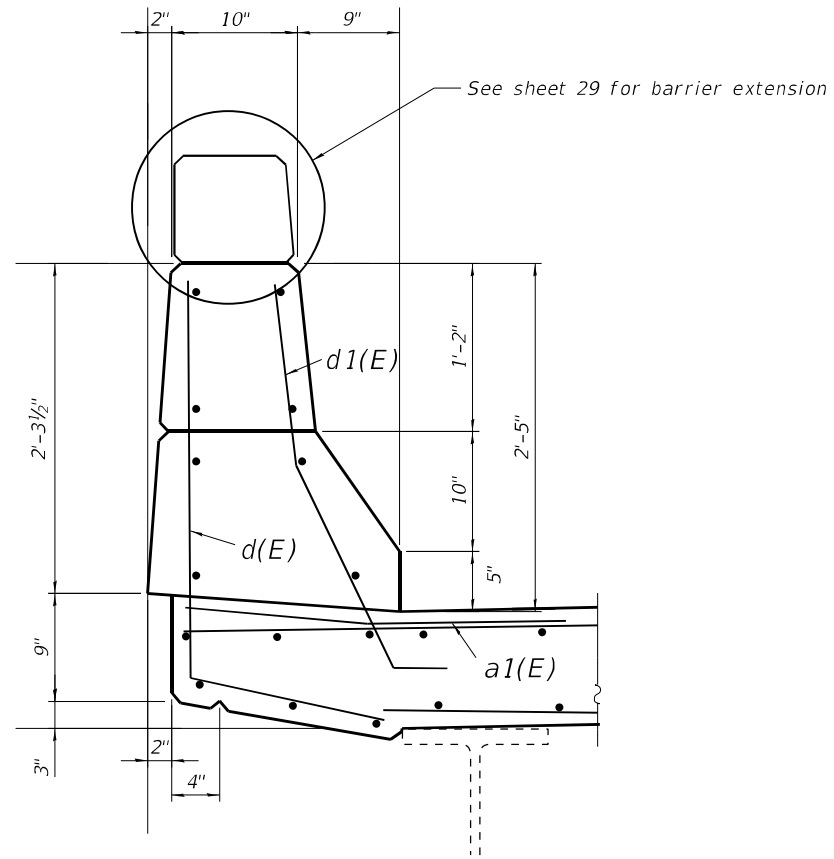
SN 101-0142 & 0143 FAI 39 OVER BLACKHAWK ROAD  
 JOINT DETAILS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 64R14				
ILLINOIS FED. AID PROJECT 75CB(31)				

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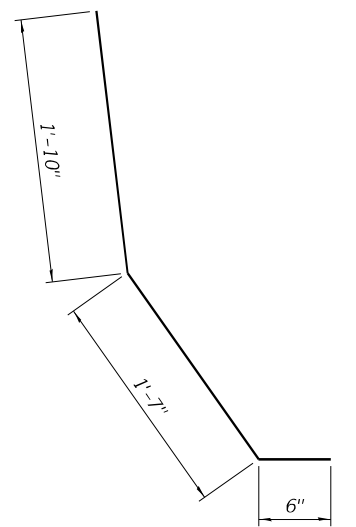
SECTION THOROUGH BRIDGE PARAPET



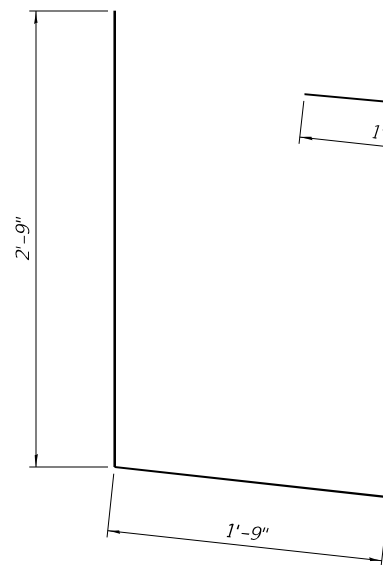
SECTION THRU BRIDGE PARAPET  
 SHOWING REPLACEMENT

BILL OF MATERIAL

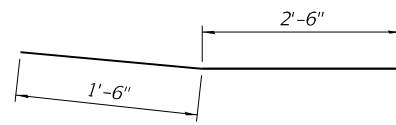
Bar	No.	Size	Length	Shape
a(E)	32	5	20'-6"	—
a1(E)	16	6	4'-0"	—
a2(E)	16	5	20'-6"	—
d(E)	32	4	5'-6"	L
d1(E)	32	5	3'-11"	L
u(E)	80	4	1'-7"	U
Concrete Removal			Cu. Yd	10
Concrete Superstructure			Cu. Yd	10
Bar Splicers			Each	24
Reinforcing Bars, Epoxy Coated			Pound	1574



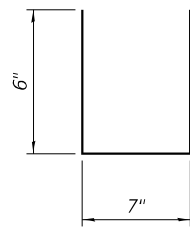
BAR d1(E)



BAR d(E)



BAR a1(E)



BAR u(E)

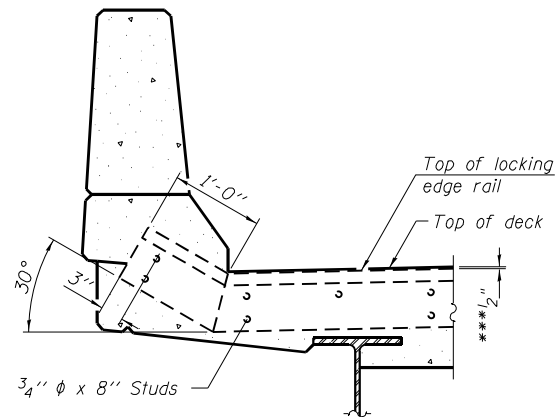
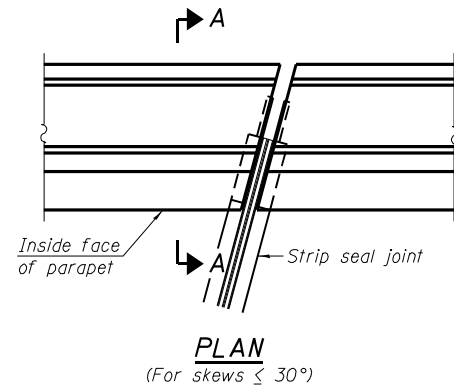


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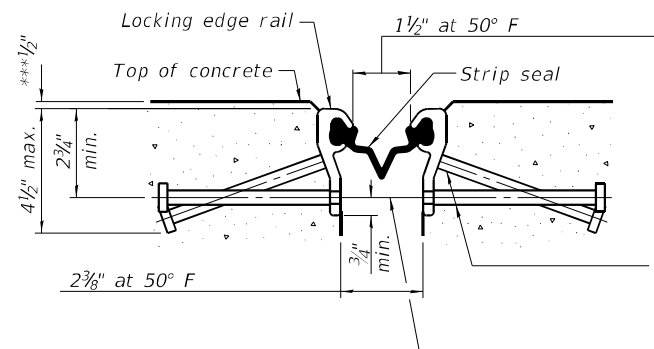
SN 101-0142 & 0143 FAI 39 OVER BLACKHAWK ROAD  
 BARRIER DETAILS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 64R14				
ILLINOIS FED. AID PROJECT 75CB(31)				



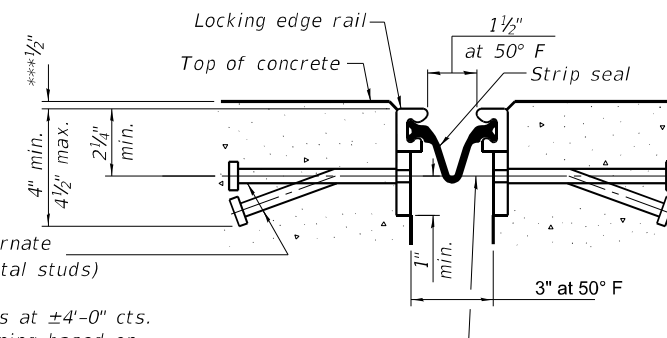
**SECTION A-A**

\*\*\* Prior to 1/4" Grinding



**SHOWING ROLLED RAIL JOINT**

\* 5/8"  $\phi$  x 6" studs @ 6" cts. (alternate angled/bent studs with horizontal studs)  
3/8"  $\phi$  threaded rods in 7/16"  $\phi$  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.



**SHOWING WELDED RAIL JOINT**

**SECTION A-A**

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

**Notes:**

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 4 1/2" maximum depth provided the anchorage system is revised according to the manufacturer's recommendation.

The manufacturer's recommended installation methods shall be followed.

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

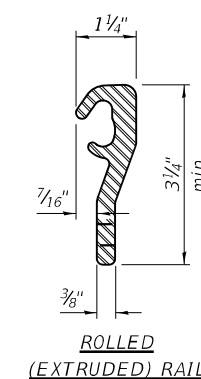
The Maximum space between locking edge rail segments shall be 3/16" and sealed with a suitable sealant; however, any rail joint within 10' measured perpendicular to the face of the curb or parapet shall be welded as shown in the locking edge rail splice detail.

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

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

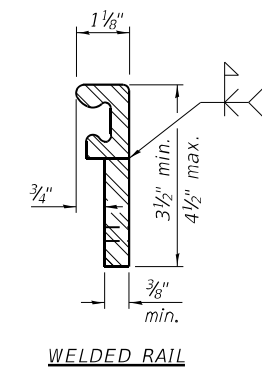
39" constant slope barrier shown, 44" constant slope barrier similar as noted.

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



**LOCKING EDGE RAILS**

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



**LOCKING EDGE RAIL SPLICE**

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
39	(201-2HB)BDR	WINNEBAGO	30	27
CONTRACT NO. 64R14				
ILLINOIS FED. AID PROJECT 75CB(31)				

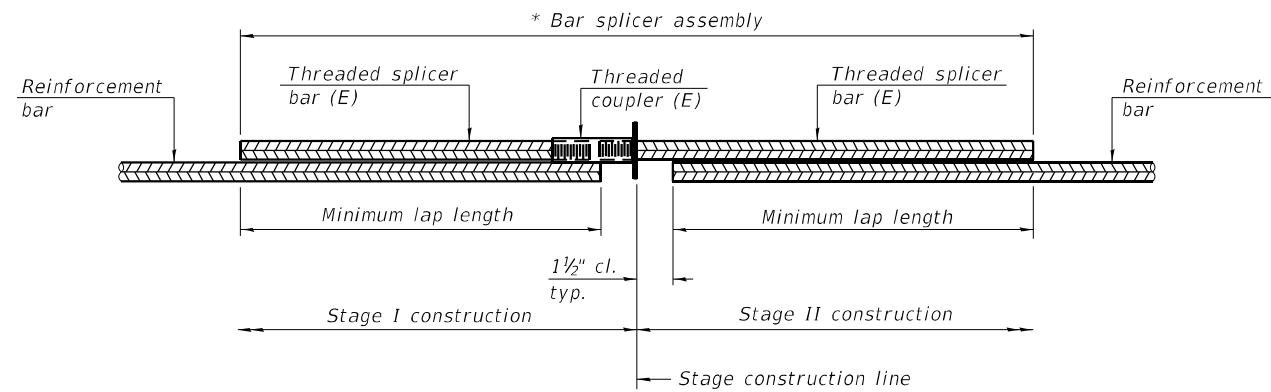
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DEPARTMENT OF TRANSPORTATION

SN 101-0142 & 0143 FAI 39 OVER BLACKHAWK ROAD  
PREFORMED JOINT STRIP SEAL



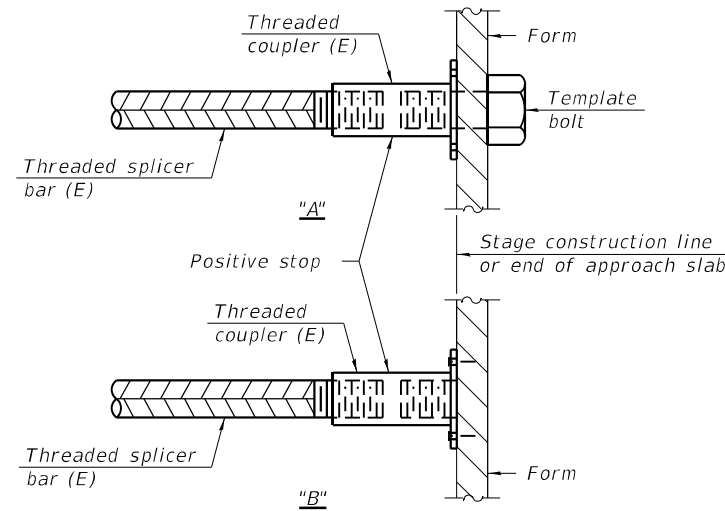
**STANDARD BAR SPLICER ASSEMBLY PLAN**

(All components shall be provided from one supplier)

Threaded splicer bar length = min. lap length + 1 1/2" + thread length

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

Location	Bar size	No. assemblies required	Minimum lap length
Deck	#5	16	3'-6"
Abutment	#6	8	4'-0"

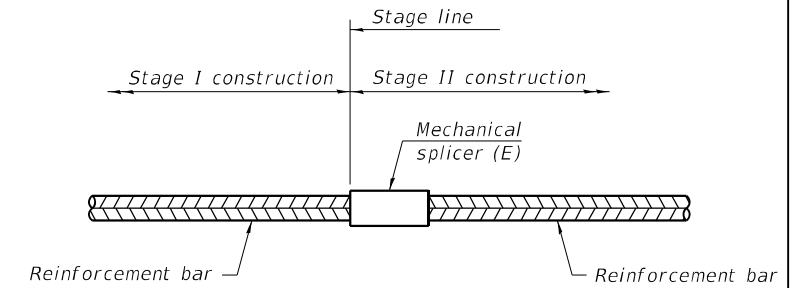


**INSTALLATION AND SETTING METHODS**

"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.

MODEL: Default  
 FILE NAME: \\kpf.com\dfs\Bridges\2100351 (IDOT WO #5)\SN 101-0142 and 0143 Blackhawk Rd\02\_Design\SN 101-0142 & 0143 28\_Bar Splacers.dgn



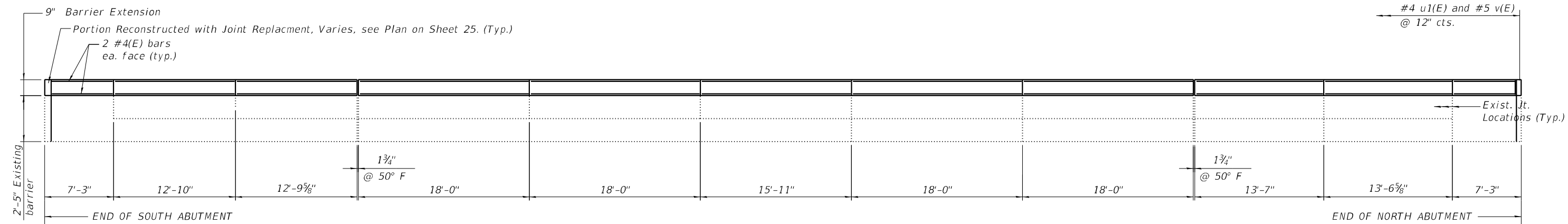
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SN 101-0142 & 0143 FAI 39 OVER BLACKHAWK ROAD  
 BAR SPLICERS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
39	(201-2HB)BDR	WINNEBAGO	30	28
CONTRACT NO. 64R14				
ILLINOIS FED. AID PROJECT 75CB(31)				

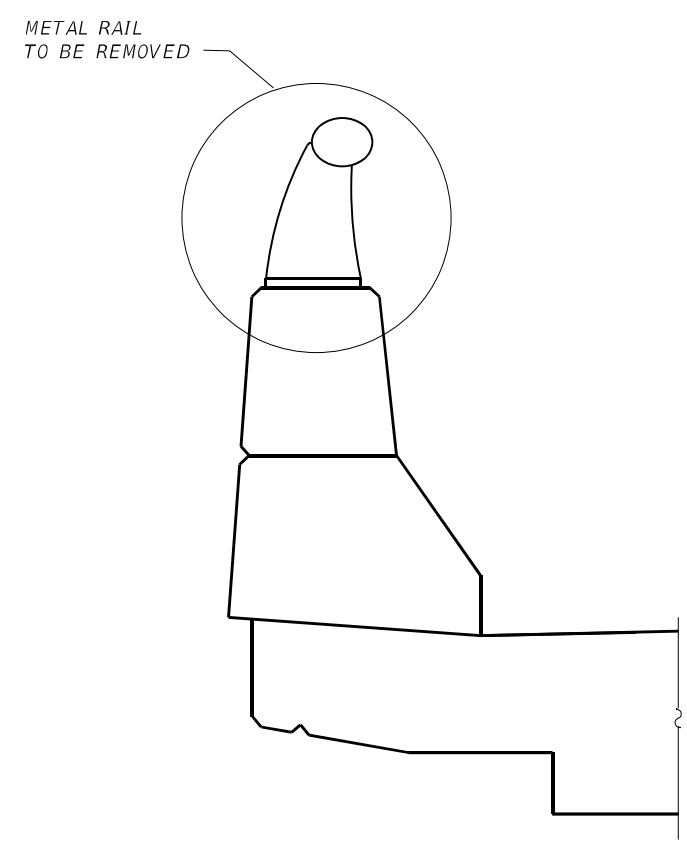


**INSIDE ELEVATION WEST BARRIER  
(EAST SIMILAR)**

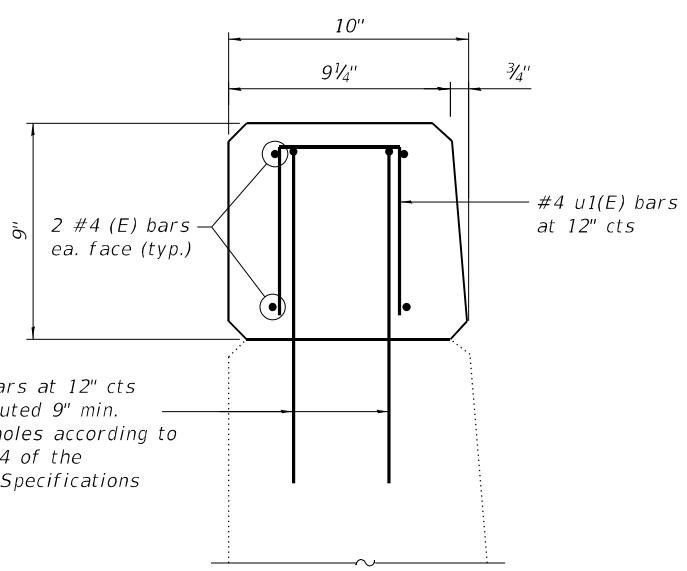
If the anchorage section of the approach guardrail conflicts with the barrier improvements, it shall be removed during rail removal and replaced after the barrier concrete has cured. Cost included with Remove Barrier Rail.

**NOTES**

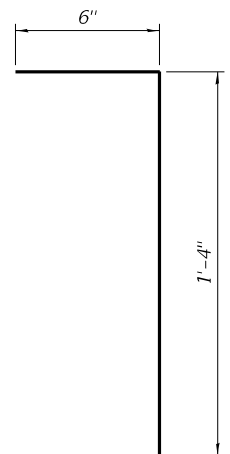
1. All exposed edges shall be chamfered  $\frac{3}{4}$ "
2. Cost of all materials, labor and equipment to complete the work as detailed and specified in the Special Provisions shall be included in the cost of "Retrofit Concrete Parapet" with the exception of Bridge Rail removal and Acrylic Coating.
3. Retrofit Concrete Parapet shall be used on both sides of both structures over the full length of the structures less portions poured with expansion joint replacement.
4. Acrylic Coating to be applied to inside face, outside face and top surface of the existing and reconstructed parapet.



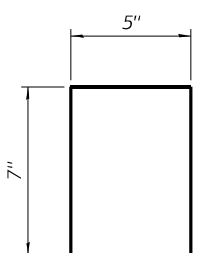
**EXISTING BARRIER SECTION**



**SECTION A-A**



**BAR v(E)**



**BAR u1(E)**

**BILL OF MATERIAL**

ITEM	UNIT	TOTAL
Retrofit Concrete Parapet	Foot	576
Bridge Rail Removal	Foot	584
Acrylic Coating	Sq. Yd.	454

MODEL: Default  
FILE NAME: \\kpff.com\dfs\Bridges\2100351 (DOT WO #5)SN 101-0142 and 0143 Blackhawk Rd\02\_Design\SN 101-0142 & 0143 29\_BARRIER IMPROVEMENTS.dgn

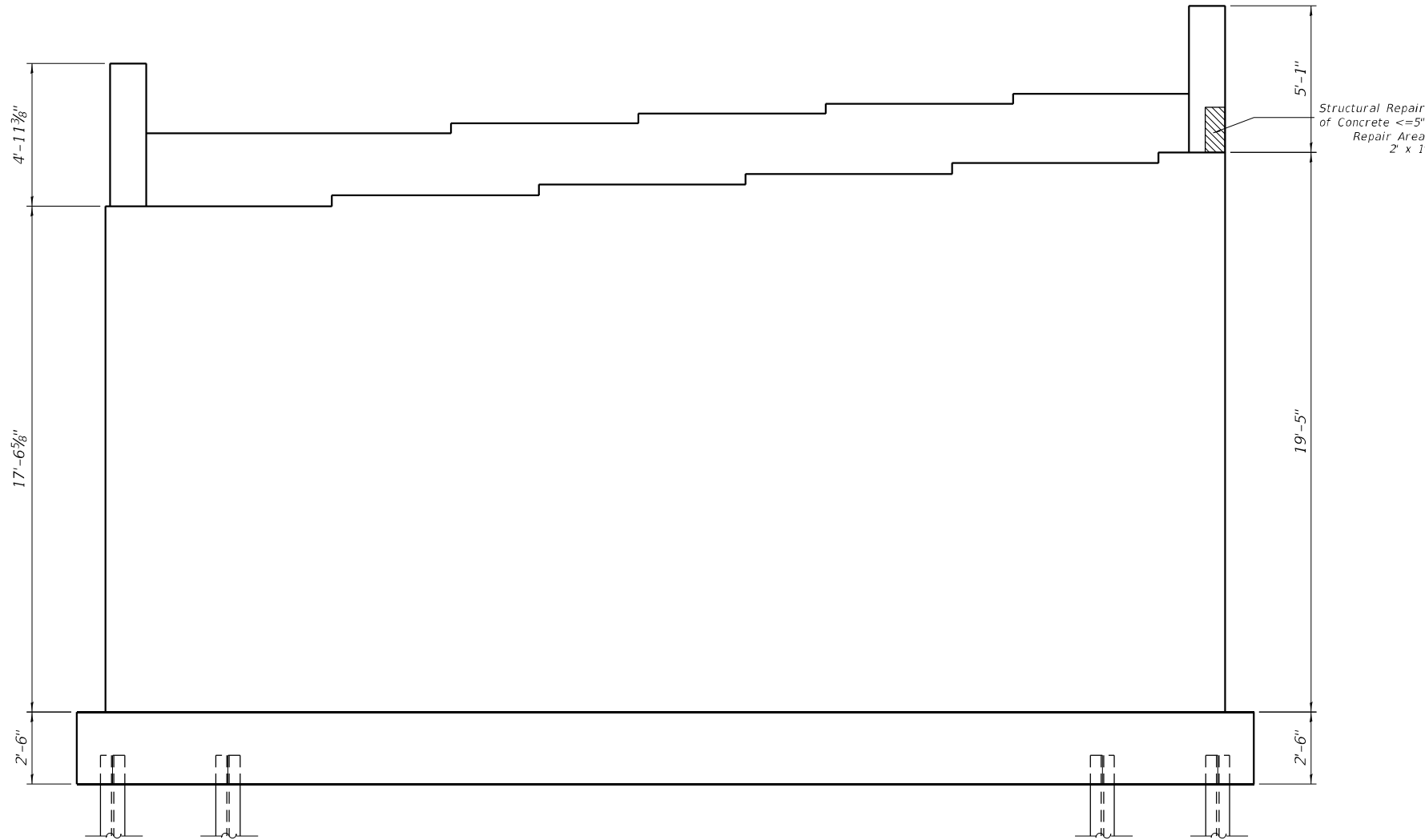


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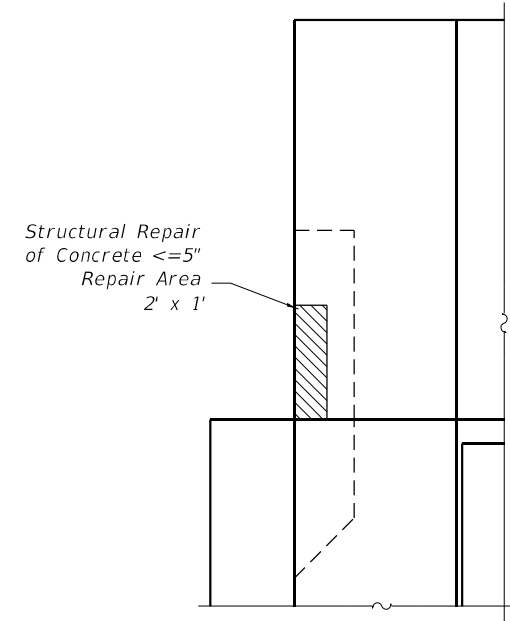
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**SN 101-0142 & 0143 FAI 39 OVER BLACKHAWK ROAD  
BARRIER IMPROVEMENTS**

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
39	(201-2HB)BDR	WINNEBAGO	30	29
CONTRACT NO. 64R14				
ILLINOIS FED. AID PROJECT 75CB(31)				



**SOUTH ELEVATION**  
N. Abut. SN 101-0143



**EAST ELEVATION**  
N. Abut. SN 101-0143

**NOTES:**

Areas of pier repairs estimated by visual inspection. Contractor to notify the Engineer if, during the course of repairs, additional areas of loose or delaminated concrete with exposed reinforcing are discovered.

MODEL: Default  
FILE NAME: \\kpf.com\dfs\Bridges\2100351 (DOT WO #5)\SN 101-0142 & 0143 Blackhawk Rd\02\_Design\SN 101-0142 & 0143 30\_Substructure Repairs.dgn



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

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SN 101-0142 & 0143 FAI 39 OVER BLACKHAWK ROAD  
SUBSTRUCTURE REPAIRS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
39	(201-2HB)BDR	WINNEBAGO	30	30
CONTRACT NO. 64R14				
ILLINOIS FED. AID PROJECT 75CB(31)				