

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
39	(50-4B)I-3	LASALLE	18	1
FED. ROAD DIST. NO.		ILLINOIS	NON-FED. AID PROJECT	

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6. EXISTING PLAN & ELEVATION - PIER 14 THRU PIER 21
7. EXISTING PLAN & ELEVATION - PIER 21 THRU PIER 31
8. EXISTING PLAN & ELEVATION - PIER 31 THRU PIER 38
9. EXISTING PLAN & ELEVATION - PIER 38 THRU NORTH ABUTMENT
10. EXISTING TYPICAL SECTIONS
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16. BAR SPLICER ASSEMBLY DETAIL
17. TRAFFIC CONTROL AND PROTRCTION, STANDARD 701402 (SPECIAL)

STANDARDS

- | | |
|-----------|---|
| 000001-04 | STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS |
| 001001 | AREAS OF REINFORCEMENT BARS |
| 001006 | DECIMAL OF AN INCH AND OF A FOOT |
| 635011-01 | REFLECTOR MARKER AND MOUNTING DETAILS |
| 701101-01 | OFF-ROAD OPERATIONS MULTILANE, 4.5 m (15') TO 600 mm (24") FROM PAVEMENT EDGE |
| 701106-01 | OFF-ROAD OPERATIONS, MULTILANE, MORE THAN 4.5 m (15') AWAY |
| 701400-02 | APPROACH TO LANE CLOSURE, FREEWAY/EXPRESSWAY |
| 701402-05 | LANE CLOSURE, FREEWAY/EXPRESSWAY, WITH BARRIER |
| 701411-03 | LANE CLOSURE, MULTILANE, AT ENTRANCE OR EXIT RAMP FOR SPEEDS ≥ 45 MPH |
| 702001-06 | TRAFFIC CONTROL DEVICES |
| 704001-02 | TEMPORARY CONCRETE BARRIER |

MICROFILMED _____
 REEL NUMBER _____
 AWARDED _____
 RESIDENT ENGINEER _____
 AS BUILT CHANGES WERE MADE
 ON THE FOLLOWING SHEETS _____

J.U.L.I.E.
 JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION
 1-800-892-0123

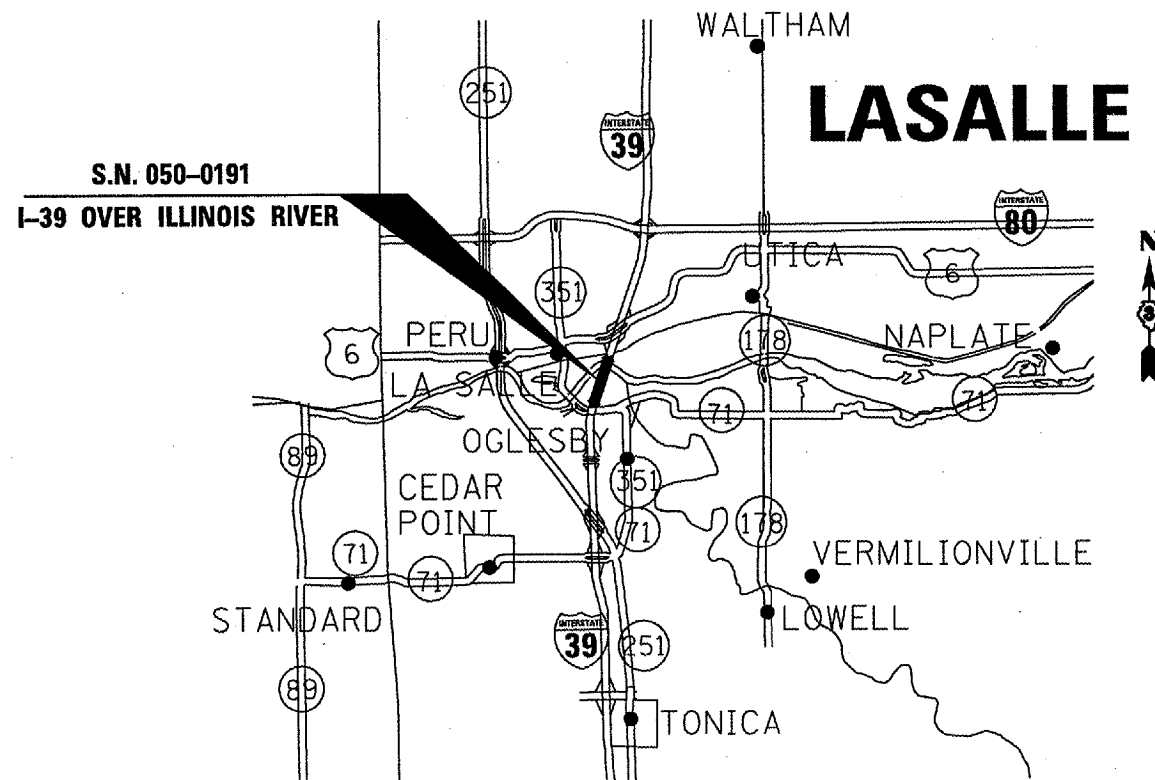
DISTRICT 3 NO. 1-815-434-6131
 PROJECT ENGINEER: JOE KANNEL 1-815-434-8420
 UNIT CHIEF: RON WOODSHANK 1-815-434-8419
 TOWNSHIP: LASALLE

CONTRACT NO. 66678

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

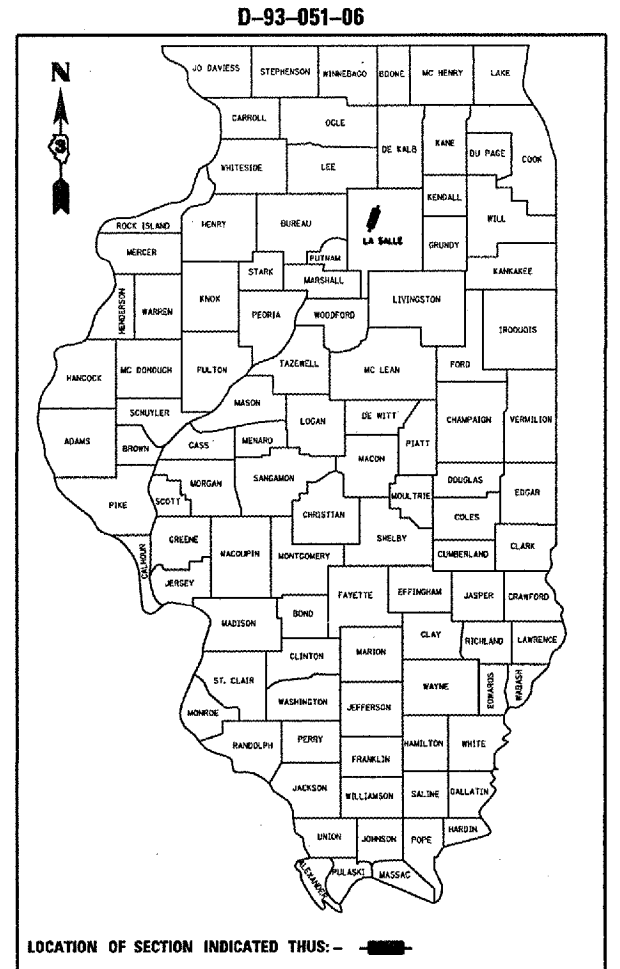
DIVISION OF HIGHWAYS
**PROPOSED
 HIGHWAY PLANS**

FAI ROUTE 39 (I-39)
 SECTION (50-4B)I-4
 LASALLE COUNTY
 C-93-094-06
 BRIDGE REPAIR



**LOCATION MAP
 NOT TO SCALE**

GROSS LENGTH = 7130 FT. = 1.35 MI.
 NET LENGTH = 7130 FT. = 1.35 MI



LOCATION OF SECTION INDICATED THUS: - [black rectangle]

FUNCTIONAL CLASSIFICATION

RURAL: INTERSTATE

FAI I-39

2005 ADT = 22000

P.V = 70.0% M.U. = 25.9% S.U. = 4.1%

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS

SUBMITTED 5/18 20 06
[Signature]
 DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

June 30, 2006
[Signature]
 ENGINEER OF DESIGN AND ENVIRONMENT

June 30, 2006
[Signature]
 DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

**PRINTED BY THE AUTHORITY
 OF THE STATE OF ILLINOIS**

DATE: 05/01/2006
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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
39	(50-4B)I-4	LASALLE	17	2
FED. ROAD DIST. NO.		ILLINOIS	NON-FED. AID PROJECT	

GENERAL NOTES:

Plan dimensions and details relative to the existing roadway and structure have been taken from existing plans and are subject to nominal construction variations. It shall be the contractor's responsibility to verify such dimensions and details in the field and to make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in the scope of the work, however, the contractor will be paid for the quantity actually furnished at the unit price bid for the work.

The contractor shall be responsible for protecting utility property from construction operations as outlined in Article 107.31 of the Standard Specifications. The "Julie" Number is 1-800-892-0123. A minimum of forty-eight (48) hours advance notice is required.

The cost of any saw cuts made to complete the work as described in plan details, unless otherwise noted shall not be paid for separately but shall be included in the various pay items involved.

For stabilization, all Type III barricades shall require a minimum of four sand bags per barricade.

Where section or subsection monuments are encountered, the engineer shall be notified before such monuments are removed. The contractor shall protect and carefully preserve all monuments until an authorized surveyor or agent has witnessed or otherwise referenced their location. The contractor shall be responsible for having an authorized surveyor reestablish any section or subsection monuments destroyed by his operations.

Any reference to a standard in these plans shall be interpreted to mean the edition as indicated by the subnumber listed on the index of sheets or the copy of the standard included in these plans.

Prior to pouring the new concrete deck, all loose rust, loose mill scale, and other loose potentially detrimental foreign material shall be removed from the surfaces of the beams or girders in contact with concrete. The cost of this work will be included in the pay item covering removal of the existing concrete. All heavy rust and other tightly adhered potentially detrimental foreign matter shall also be removed from the surfaces of the beams or girders in contact with concrete. Tightly adhered paint may remain unless otherwise noted. This removal shall be accomplished by methods that will not damage the steel. The cost of this work will be paid for according to Article 109.04 of the Standard Specifications.

New Reinforcement bars shall be Epoxy Coated.

Reinforcement bars that are to remain in place which are damaged during concrete removal operations shall be repaired or replaced using approved bar splicer or anchorage system. Cost included with "Concrete Removal".

Reinforcement bars shall conform to the requirements of AASHTO M 31 or M322 Grade 60.

ULTRA-THIN BONDED WEARING COURSE	
PG GRADE	SBSPG70-22
MIXTURE COMPOSITION	3/8" TYPE B CA/CM13 NOT ALLOWED
FRICITION AGGREGATE	MIXTURE D
WEARING COURSE THICKNESS	APPROXIMATELY 3/4" TYPICALLY 1.5 TO 2 X NOMINAL MAXIMUM AGGREGATE SIZE

PREPARED BY: *Rid Powell*
DISTRICT STUDIES & PLANS ENGINEER

DATE: 5-18-06

EXAMINED BY: *Harold Spang*
DISTRICT CONSTRUCTION ENGINEER

Matt Jacob
DISTRICT MATERIALS ENGINEER

Bruce A. Tucker
DISTRICT OPERATIONS ENGINEER

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

GENERAL NOTES
I-39 OVER THE ILLINOIS RIVER
F.A.I. ROUTE 39
SECTION: (50-4B)I-4
LASALLE COUNTY
S.N. 050-0191

DATE: 05/01/2006
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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
39	(50-4B)-4	LASALLE	18	3
FED. ROAD DIST. NO.		ILLINOIS	NON-FED. AID PROJECT	

SUMMARY OF QUANTITY

CONSTRUCTION CODE: SFTY-2A

CODE NO.	ITEM	UNIT	RURAL 100% STATE TOTAL QUANTITY
50102500	CONCRETE REMOVAL (SPECIAL)	CU YD	60
50300255	CONCRETE SUPERSTRUCTURE	CU YD	60
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	17280
67000400	ENGINEER'S FIELD OFFICE A	CAL MO	3
67100100	MOBILIZATION	L SUM	1
70100420	TRAFFIC CONTROL AND PROTECTION, STANDARD 701411	EACH	3
70101605	TRAFFIC CONTROL AND PROTECTION, STANDARD 701402 (SPECIAL)	EACH	3
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	4340
70400100	TEMPORARY CONCRETE BARRIER	FOOT	18370
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	18370
* 78000200	THERMOPLASTIC PAVEMENT MARKING - LIINE 4"	FOOT	14242
* 78000400	THERMOPLASTIC PAVEMENT MARKING - LIINE 6"	FOOT	1780
* 78005110	EPOXY PAVEMENT MARKING - LINE 4"	FOOT	13151
78300100	PAVEMENT MARKING REMOVAL	SQ FT	4340
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	180
78003135	<i>PREFORMED PLASTIC PAVEMENT MARKING, TYPE B, LINE 6", SPECIAL</i>	FOOT	1,780
▲ Z0030250	IMPACT ATTENUATORS, TEMPORARY (NON- REDIRECTIVE), TEST LEVEL 3	EACH	3
▲ Z0030350	IMPACT ATTENUATORS, RELOCATE (NON- REDIRECTIVE), TEST LEVEL 3	EACH	3
Z0047300	PROTECTIVE SHIELD	SQ YD	1200
X0325518	ULTRA-THIN BONDED WEARING COURSE	SQ YD	28900

▲SFTY 3N *SPECIALTY ITEM

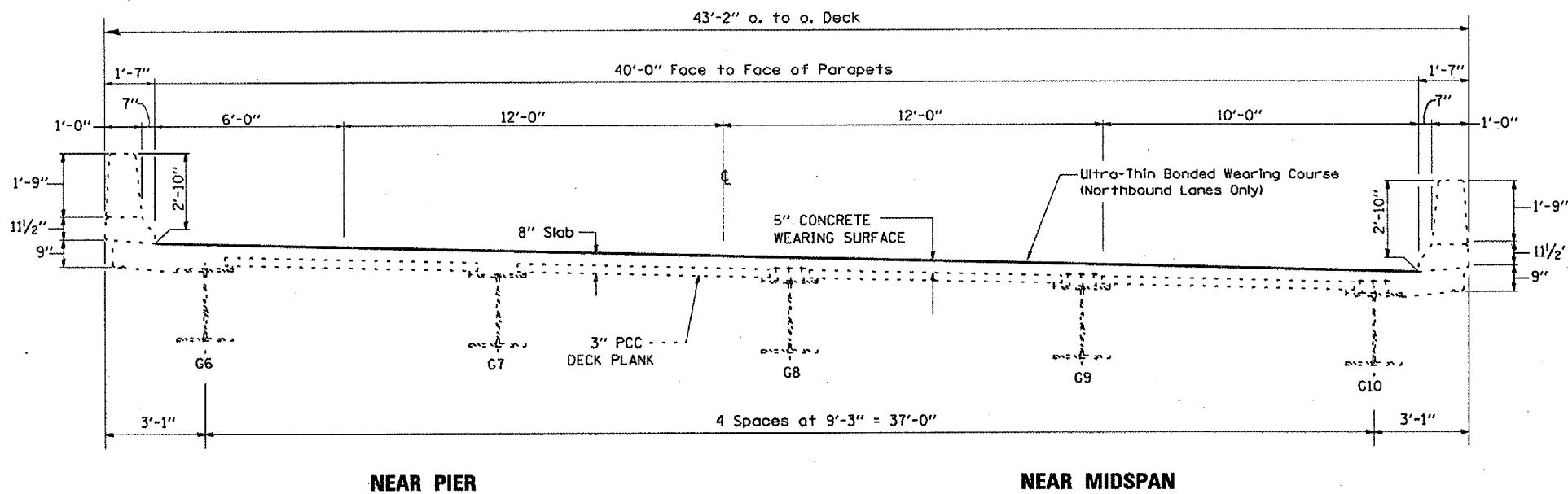
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REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES
I-39 OVER THE ILLINOIS RIVER
F.A.I. ROUTE 39
SECTION: (50-4B)-4
LASALLE COUNTY
S.N. 050-0191

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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FED. ROAD DIST. NO. ILLINOIS NON-FED. AID PROJECT				

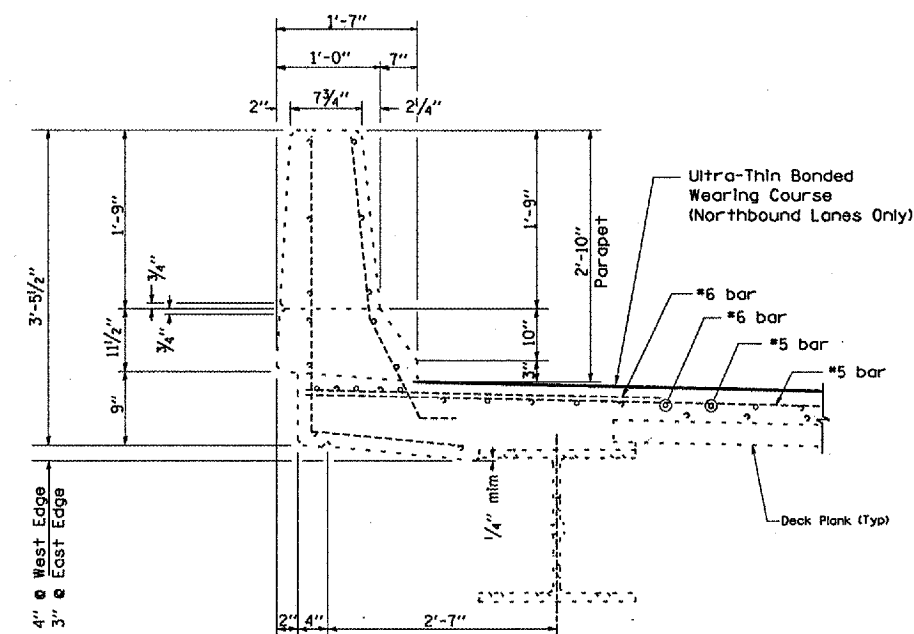


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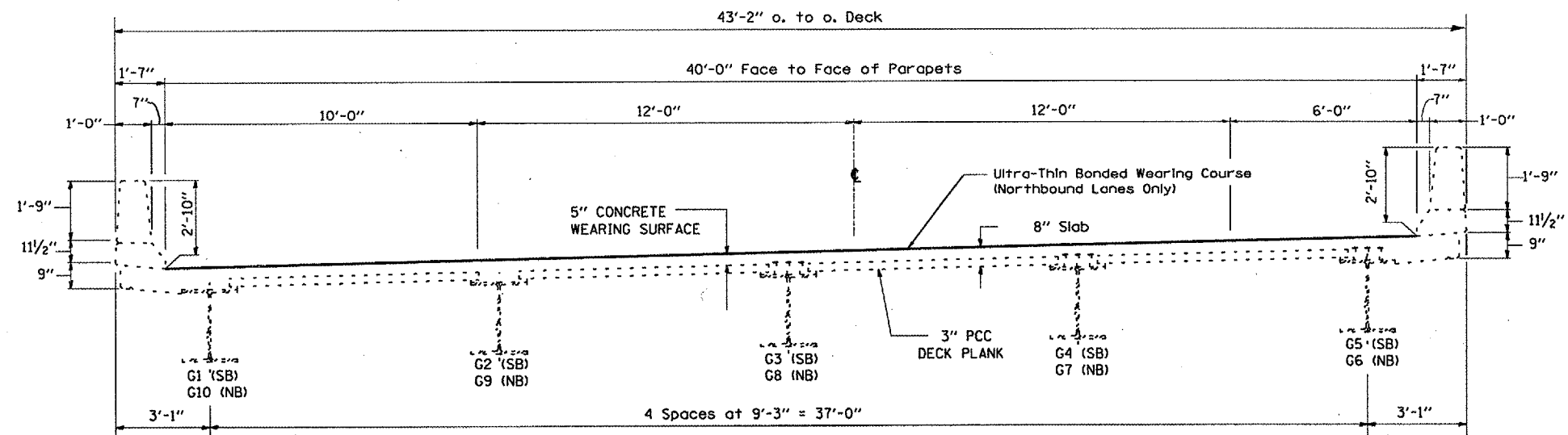
NEAR MIDSPAN

CROSS SECTION

SPANS 1 THRU 10 (NB & SB)
 SPANS 15 THRU 17 (NB)
 SPANS 42 THRU 43 (NB)
 SPAN 44 (NB)



SECTION THRU PARAPET



NEAR PIER

NEAR MIDSPAN

CROSS SECTION

SPANS 11 THRU 14 (NB & SB)
 SPANS 15 THRU 17 (SB)
 SPANS 18 THRU 34 (NB & SB)
 SPANS 36 THRU 41 (NB & SB)
 SPANS 42 THRU 43 (SB)
 SPAN 44 (SB)

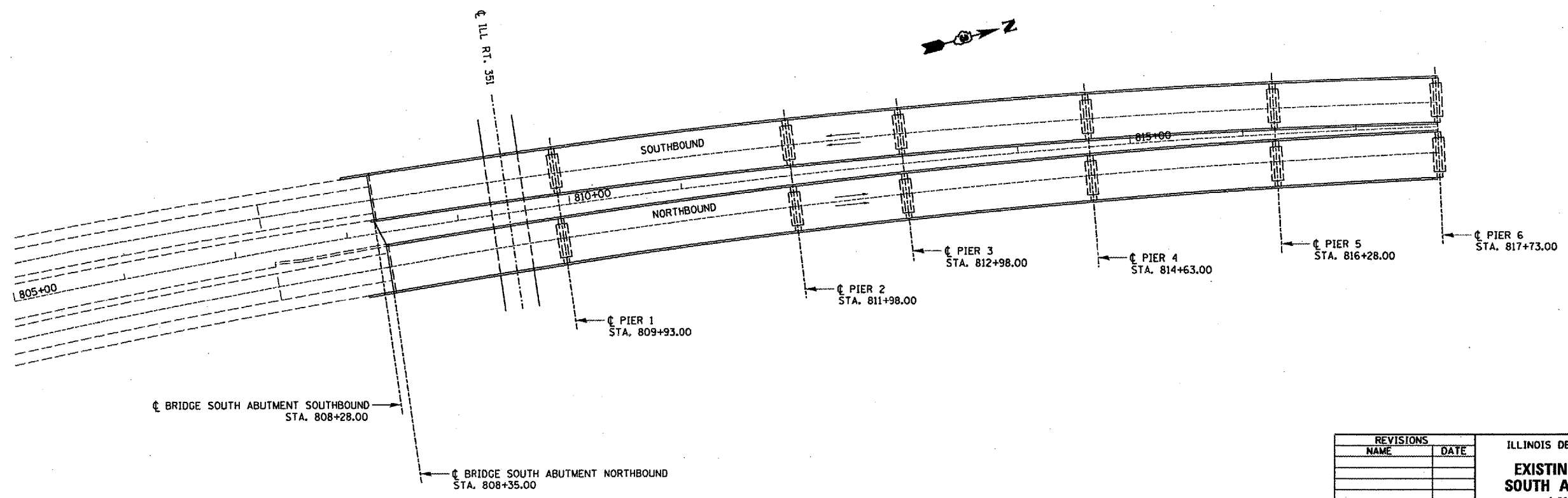
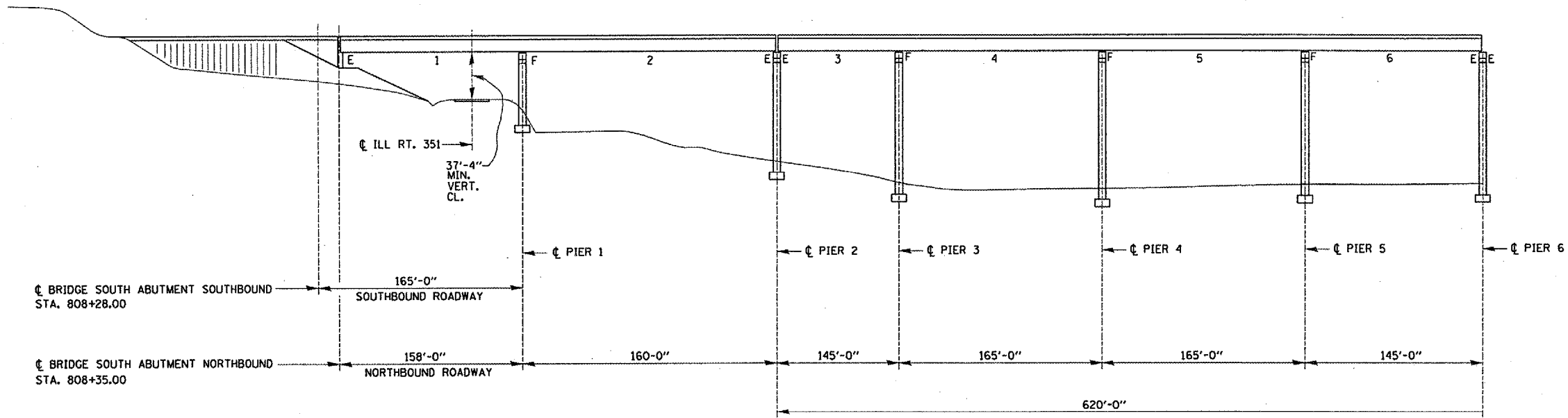
NOTE: LIMITS OF ULTRA-THIN BONDED WEARING COURSE SHALL BE AS FOLLOWS
 WIDTH: FACE OF CURB TO FACE OF CURB
 LENGTH: SOUTH ABUTMENT TO NORTH ABUTMENT ON THE NORTHBOUND LANES ONLY
 EXCLUDING SPAN 35 (ARCH SPAN)

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
TYPICAL SECTIONS
 I-39 OVER THE ILLINOIS RIVER
 F.A.I. ROUTE 39
 SECTION: (50-4B)-4
 LASALLE COUNTY
 S.N. 050-0191

DATE: 05/01/2008 C:\PROJECTS\DESIGN\PLANS\ABE LINCOLN\66678\TYPICALS.DGN

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
39	150-4B1-4	LASALLE	1817	5
FED. ROAD DIST. NO.		ILLINOIS	NON-FED. AID PROJECT	

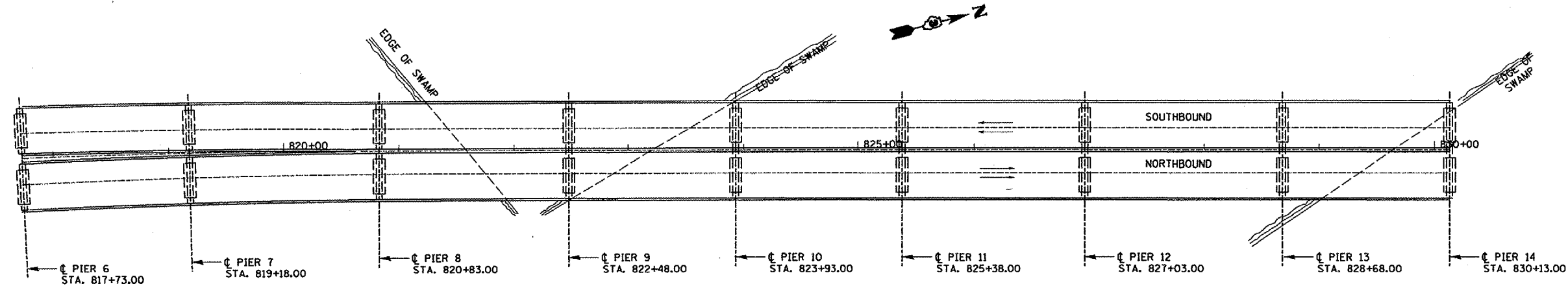
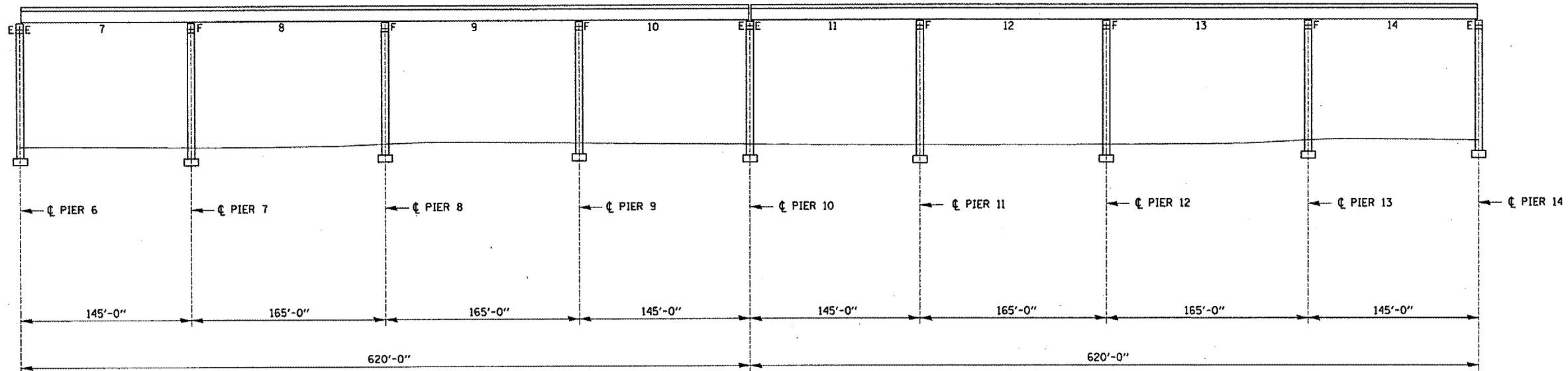


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REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
EXISTING PLAN & ELEVATION
SOUTH ABUTMENT THRU PIER 6
 I-39 OVER THE ILLINOIS RIVER
 F.A.I. ROUTE 39
 SECTION: (50-4B)1-4
 LASALLE COUNTY
 S.N. 050-0191

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
39	(50-4B)1-4	LASALLE	18	6
FED. ROAD DIST. NO. ILLINOIS		NON-FED. AID PROJECT		

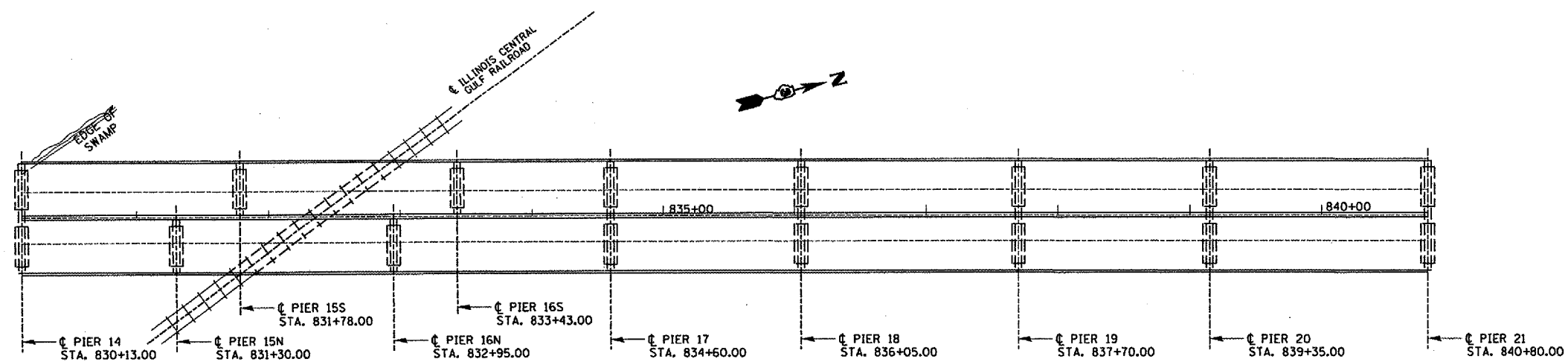
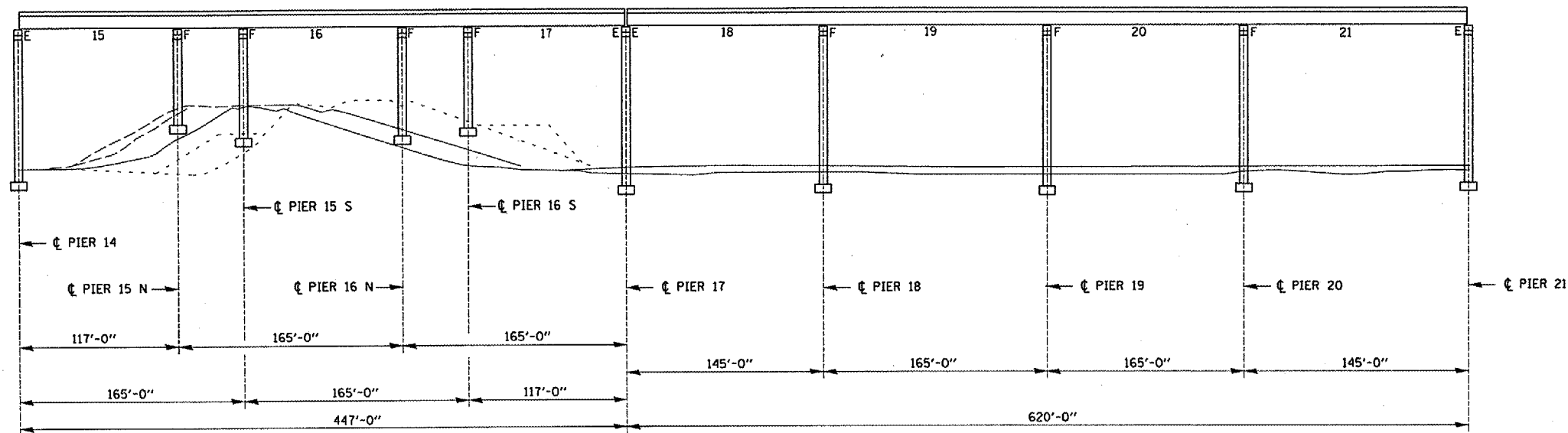


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REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
EXISTING PLAN & ELEVATION
PIER 6 THRU PIER 14
 I-39 OVER THE ILLINOIS RIVER
 F.A.I. ROUTE 39
 SECTION: (50-4B)1-4
 LASALLE COUNTY
 S.N. 050-0191

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
39	(50-4B)1-4	LASALLE	18	7
FED. ROAD DIST. NO. ILLINOIS NON-FED. AID PROJECT				

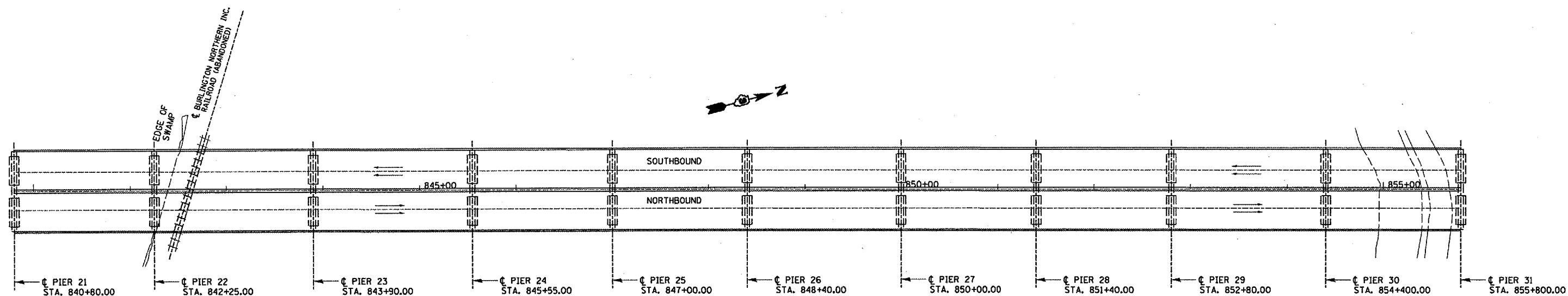
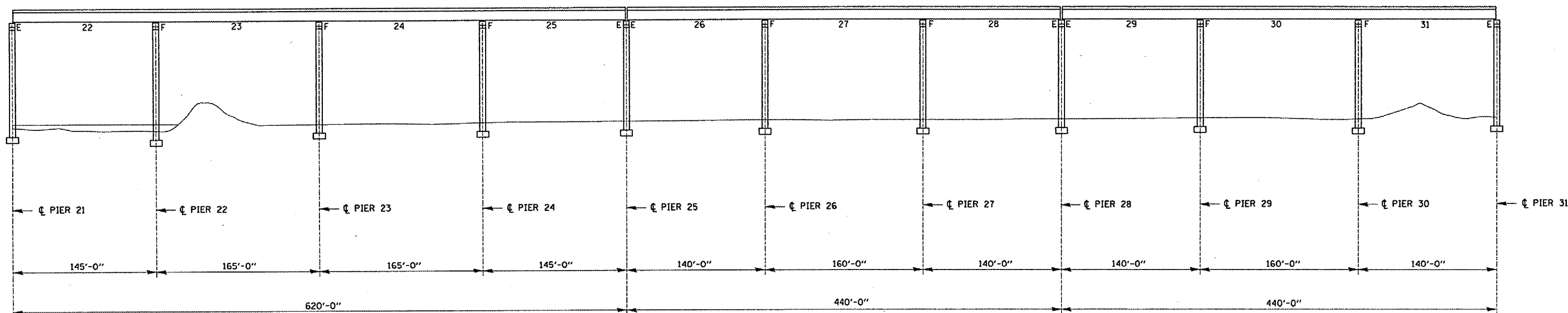


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REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
EXISTING PLAN & ELEVATION
PIER 14 THRU PIER 21
 I-39 OVER THE ILLINOIS RIVER
 F.A.I. ROUTE 39
 SECTION: (50-4B)1-4
 LASALLE COUNTY
 S.N. 050-0191

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
39	(50-4B)I-4	LASALLE	18	8
FED. ROAD DIST. NO.		ILLINOIS NON-FED. AID PROJECT		

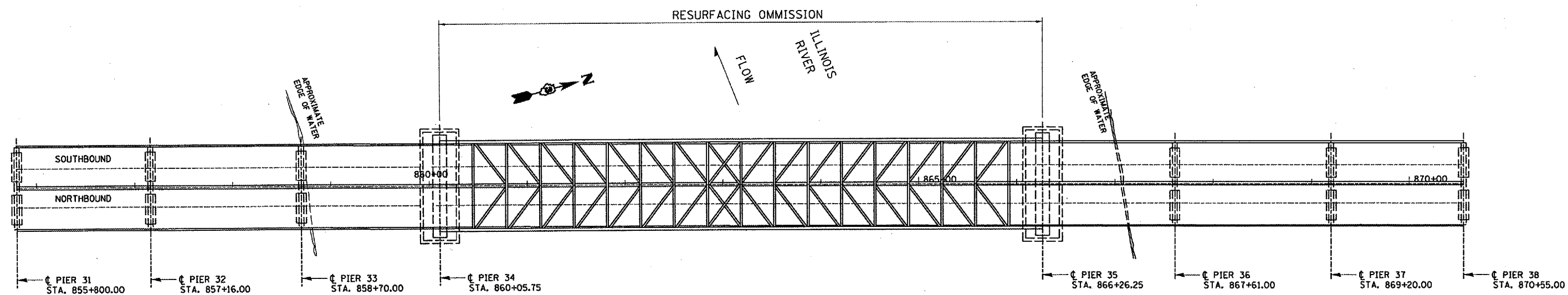
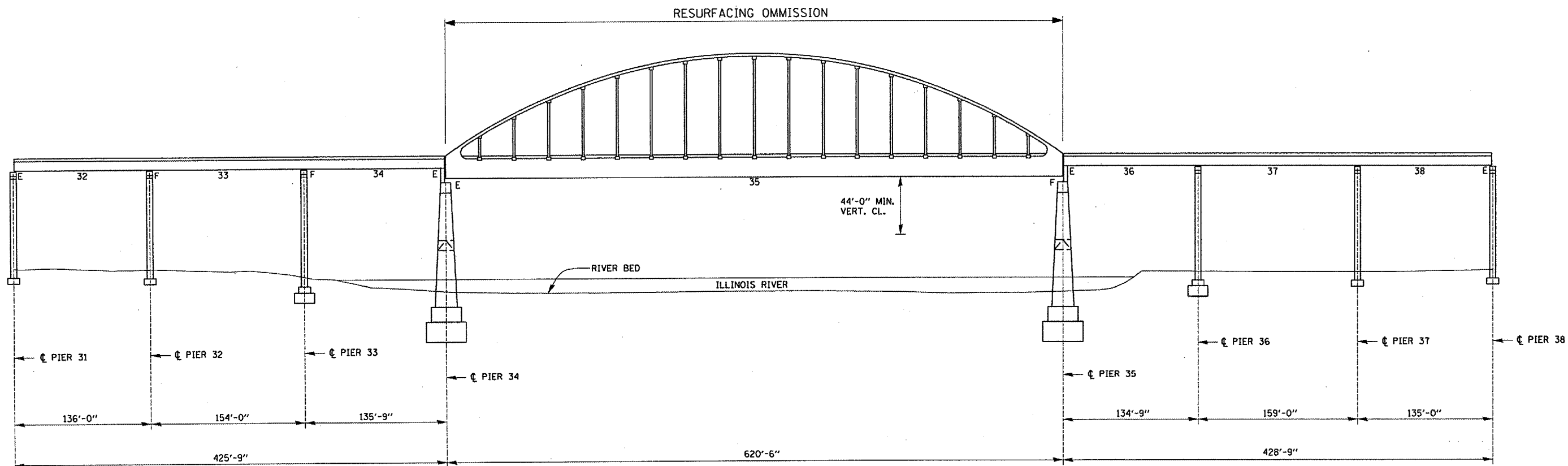


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REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
EXISTING PLAN & ELEVATION
PIER 21 THRU PIER 31
 I-39 OVER THE ILLINOIS RIVER
 F.A.I. ROUTE 39
 SECTION: (50-4B)I-4
 LASALLE COUNTY
 S.N. 050-0191

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
39	(50-4B)I-4	LASALLE	18	9
FED. ROAD DIST. NO. ILLINOIS NON-FED. AID PROJECT				

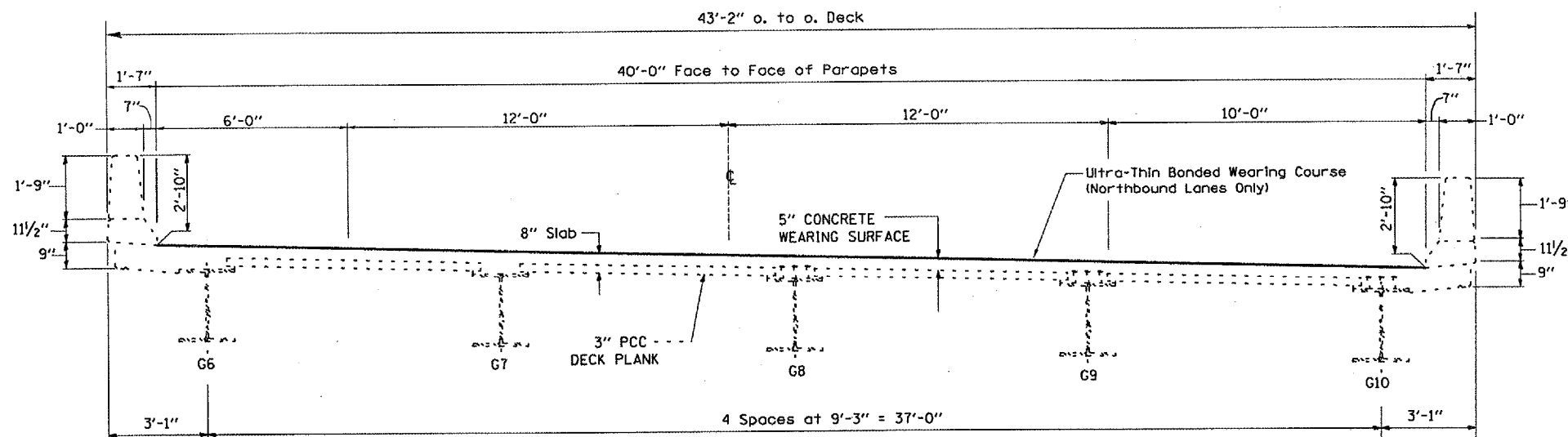


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REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
EXISTING PLAN & ELEVATION
PIER 31 THRU PIER 38
 I-39 OVER THE ILLINOIS RIVER
 F.A.I. ROUTE 39
 SECTION: (50-4B)I-4
 LASALLE COUNTY
 S.N. 050-0191

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
39	(50-4B)1-4	LASALLE	17	10
FED. ROAD DIST. NO. ILLINOIS			NON-FED. AID PROJECT	

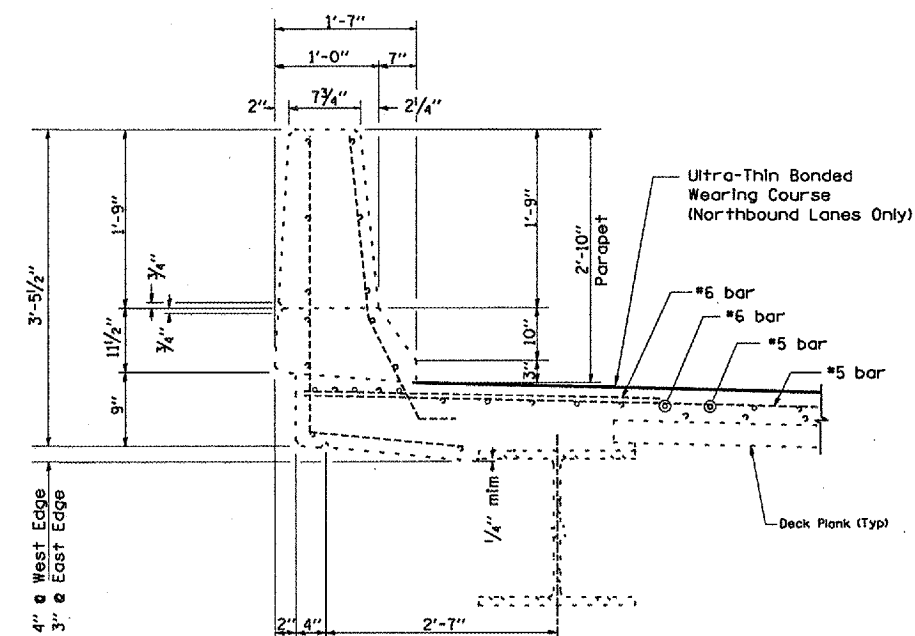


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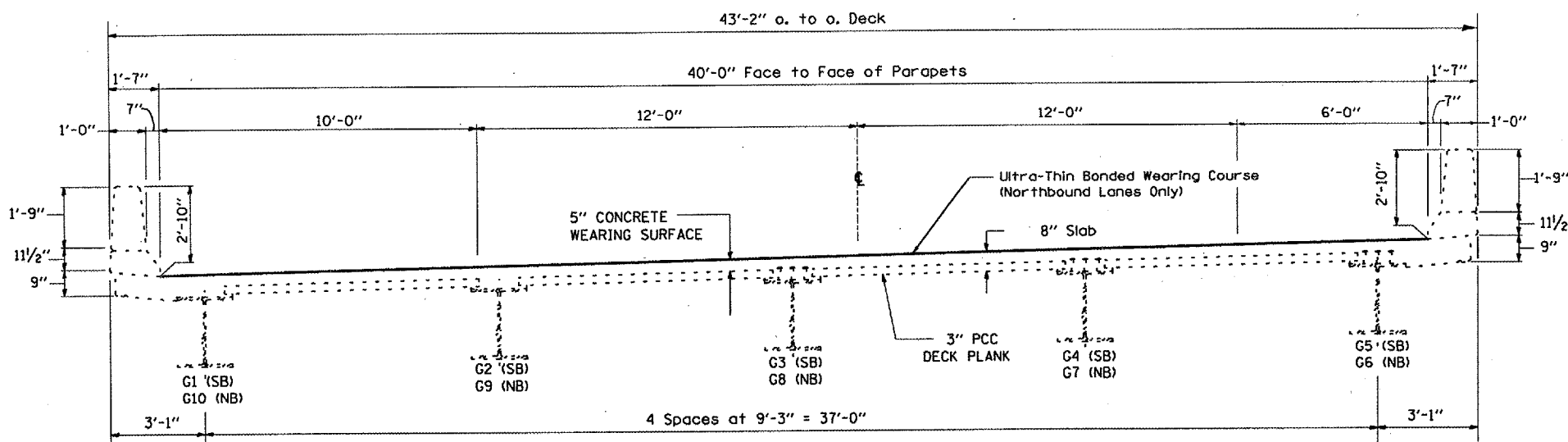
NEAR MIDSPAN

CROSS SECTION

SPANS 1 THRU 10 (NB & SB)
 SPANS 15 THRU 17 (NB)
 SPANS 42 THRU 43 (NB)
 SPAN 44 (NB)



SECTION THRU PARAPET



NEAR PIER

NEAR MIDSPAN

CROSS SECTION

SPANS 11 THRU 14 (NB & SB)
 SPANS 15 THRU 17 (SB)
 SPANS 18 THRU 34 (NB & SB)
 SPANS 36 THRU 41 (NB & SB)
 SPANS 42 THRU 43 (SB)
 SPAN 44 (SB)

NOTE: LIMITS OF ULTRA-THIN BONDED WEARING COURSE SHALL BE AS FOLLOWS
 WIDTH: FACE OF CURB TO FACE OF CURB
 LENGTH: SOUTH ABUTMENT TO NORTH ABUTMENT ON THE NORTHBOUND LANES ONLY
 EXCLUDING SPAN 35 (ARCH SPAN)

REVISIONS	
NAME	DATE

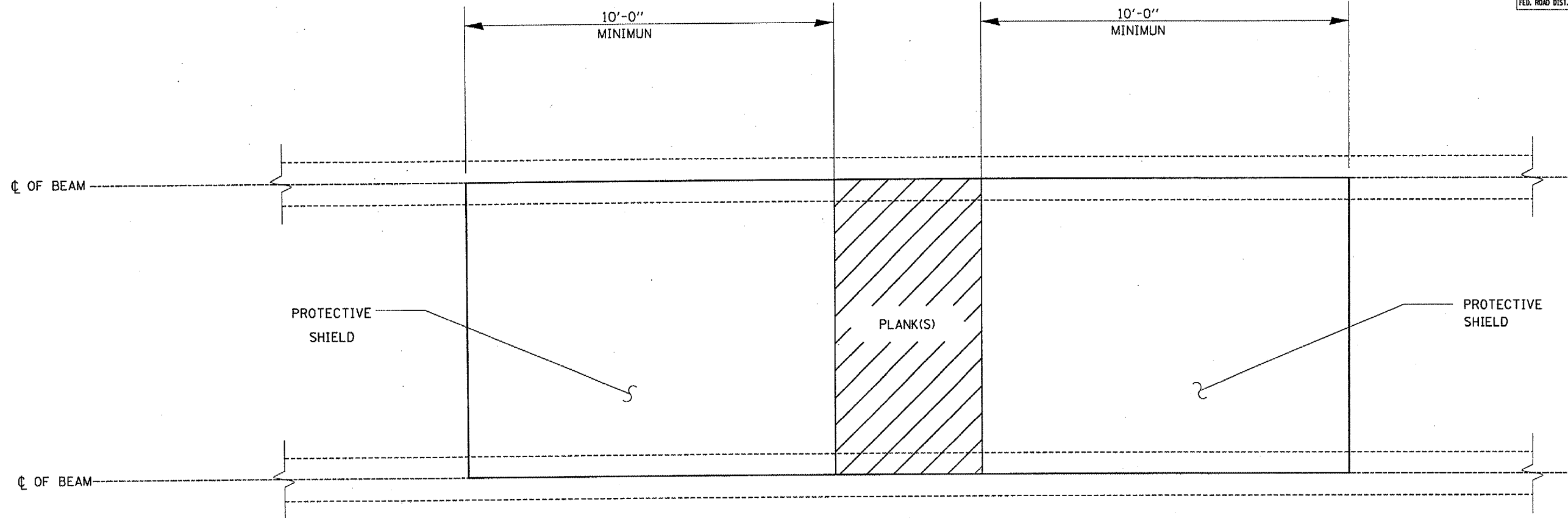
ILLINOIS DEPARTMENT OF TRANSPORTATION

EXISTING TYPICAL SECTIONS

I-39 OVER THE ILLINOIS RIVER
 F.A.I. ROUTE 39
 SECTION: (50-4B)1-4
 LASALLE COUNTY
 S.N. 050-0191

DATE: 05/01/2006 C:\PROJECTS\DESIGN\AN\ABE.LINCOLN\66678\DETAILS.DGN

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
39	(50-4B)1-4	LASALLE	18	11
FED. ROAD DIST. NO. ILLINOIS NON-FED. AID PROJECT				



**PROTECTIVE SHIELD FOR SINGLE OR MULTIPLE PLANKS
(INTERIOR BAYS)**

NOTE: THE CONTRACTOR SHALL SUBMIT DETAILED SHOP DRAWINGS TO THE ENGINEER FOR APPROVAL PRIOR TO CONSTRUCTING THE PROTECTIVE SHIELD.

FOR MULTIPLE PLANK REMOVAL THE PROTECTIVE SHIELD SHALL BE ADJUSTED LENGTH WISE (AS MEASURED PARALLEL TO CENTERLINE OF ROADWAY) TO MAINTAIN A MINIMUM DISTANCE OF TEN (10 FEET) FROM THE OUTER MOST EDGE OF THE REMOVAL AREA.

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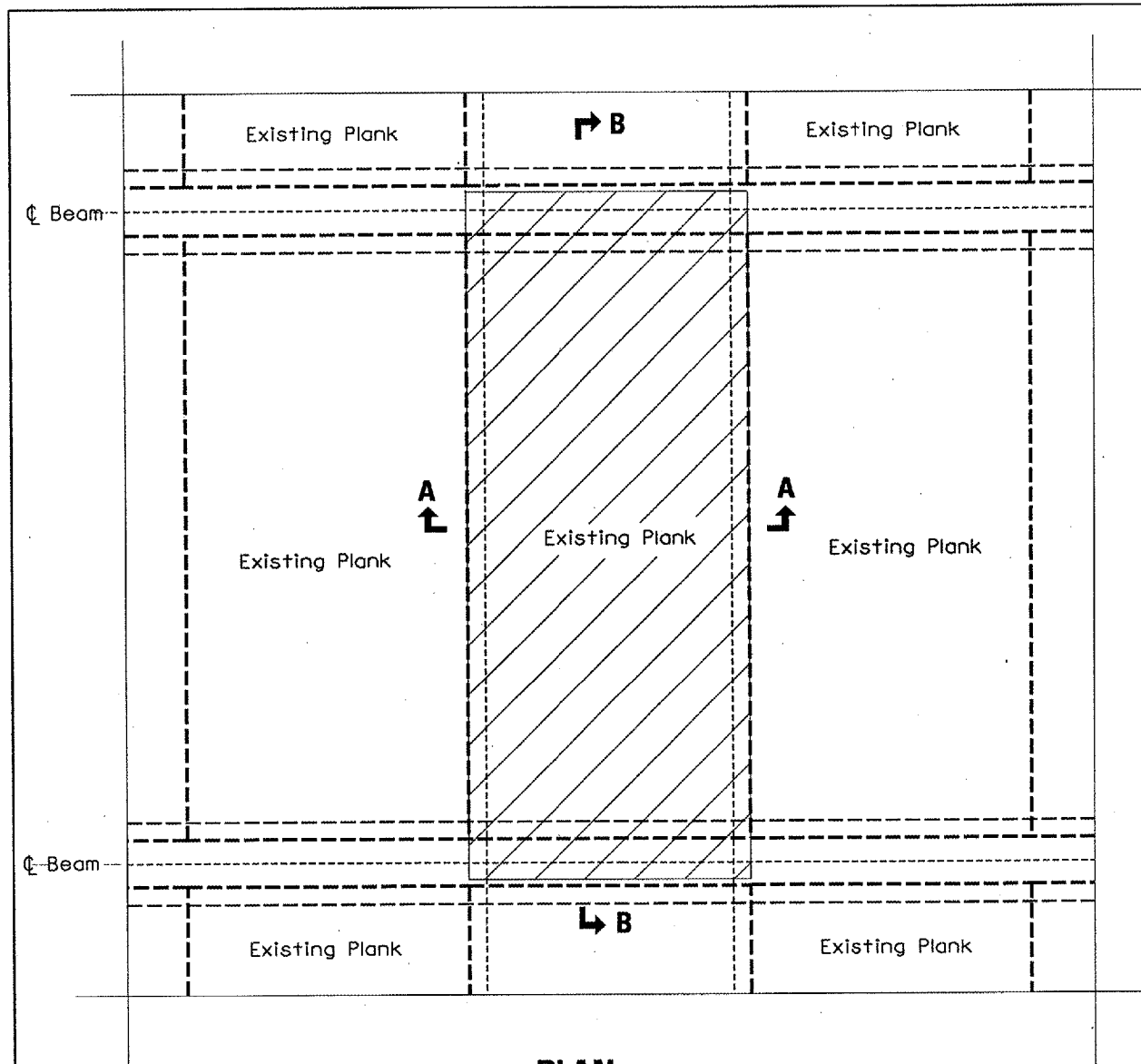
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

PROTECTIVE SHIELD DETAIL

1-39 OVER THE ILLINOIS RIVER
F.A.I. ROUTE 39
SECTION: (50-4B)1-4
LASALLE COUNTY
S.N. 050-0191

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
39	150-4B1-4	LASALLE	18	12
FED. ROAD DIST. NO.			ILLINOIS NON-FED. AID PROJECT	



PLAN

General Notes:

Hatched areas indicate concrete sections to be removed and replaced.

The Contractor shall use extreme care during concrete removal to avoid damaging the adjacent existing PCC Planks that are to remain in place. If the Engineer determines that the existing planks that are to remain **are** damaged due to the Contractor's operations, the damaged planks shall be repaired or replaced at the Contractor's expense.

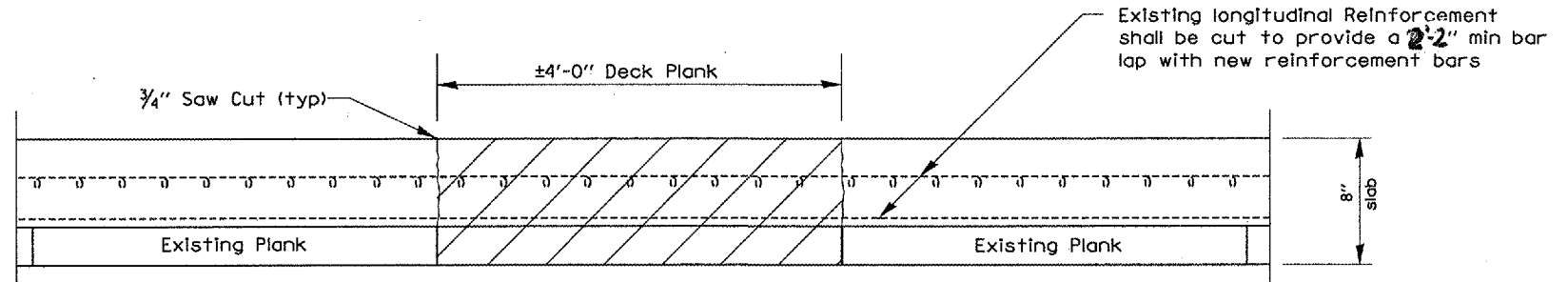
The Contractor shall locate and verify the exact location of the boundaries of the existing PCC Plank being removed prior to saw cutting and removal.

Perimeters of Concrete Removal areas shall be saw cut 3/4" prior to removal of the concrete wearing surface and deck planks.

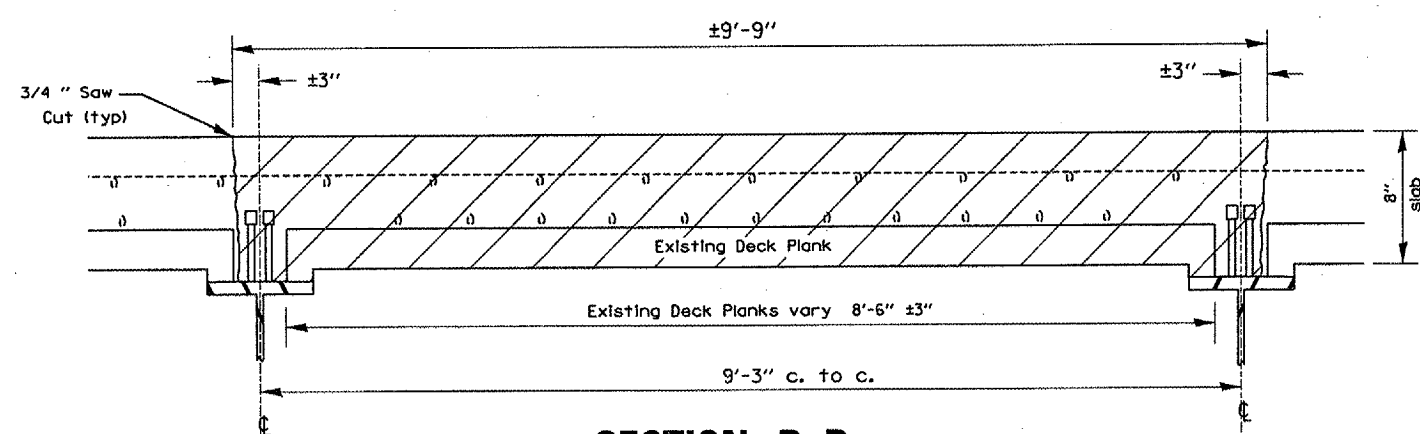
Existing reinforcement extending into concrete removal areas shall be cut, cleaned, straightened and incorporated into the new construction as required to provide minimum bar lap. If the length of removal, as measured parallel to the centerline of roadway, is less than the required bar lap, the existing longitudinal reinforcement bars shall not be cut.

New reinforcement bars shall be epoxy coated.

Top of patch to match top of existing deck.



SECTION A-A



SECTION B-B

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
DECK PLANK REMOVAL DETAIL
CASE I - SINGLE PLANK
 I-39 OVER THE ILLINOIS RIVER
 F.A.I. ROUTE 39
 SECTION: (50-4B)1-4
 LASALLE COUNTY
 S.N. 050-0191

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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
39	(50-4B)1-4	LASALLE	18	13
FED. ROAD DIST. NO.		ILLINOIS NON-FED. AID PROJECT		

General Notes:

Hatched areas indicate concrete sections to be removed and replaced.

The Contractor shall use extreme care during concrete removal to avoid damaging the adjacent existing PCC Planks that are to remain in place. If the Engineer determines that the existing planks that are to remain **are** damaged due to the Contractor's operations, the damaged planks shall be repaired or replaced at the Contractor's expense.

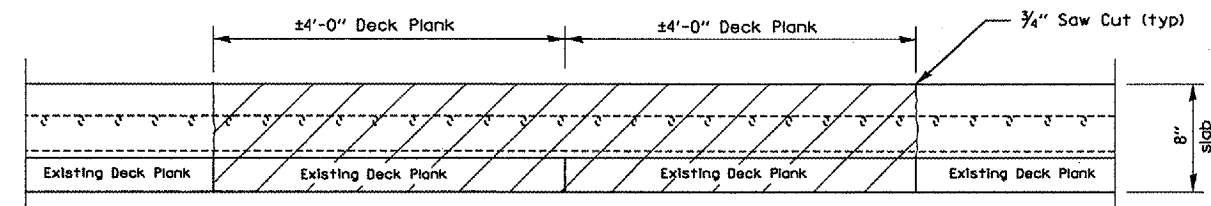
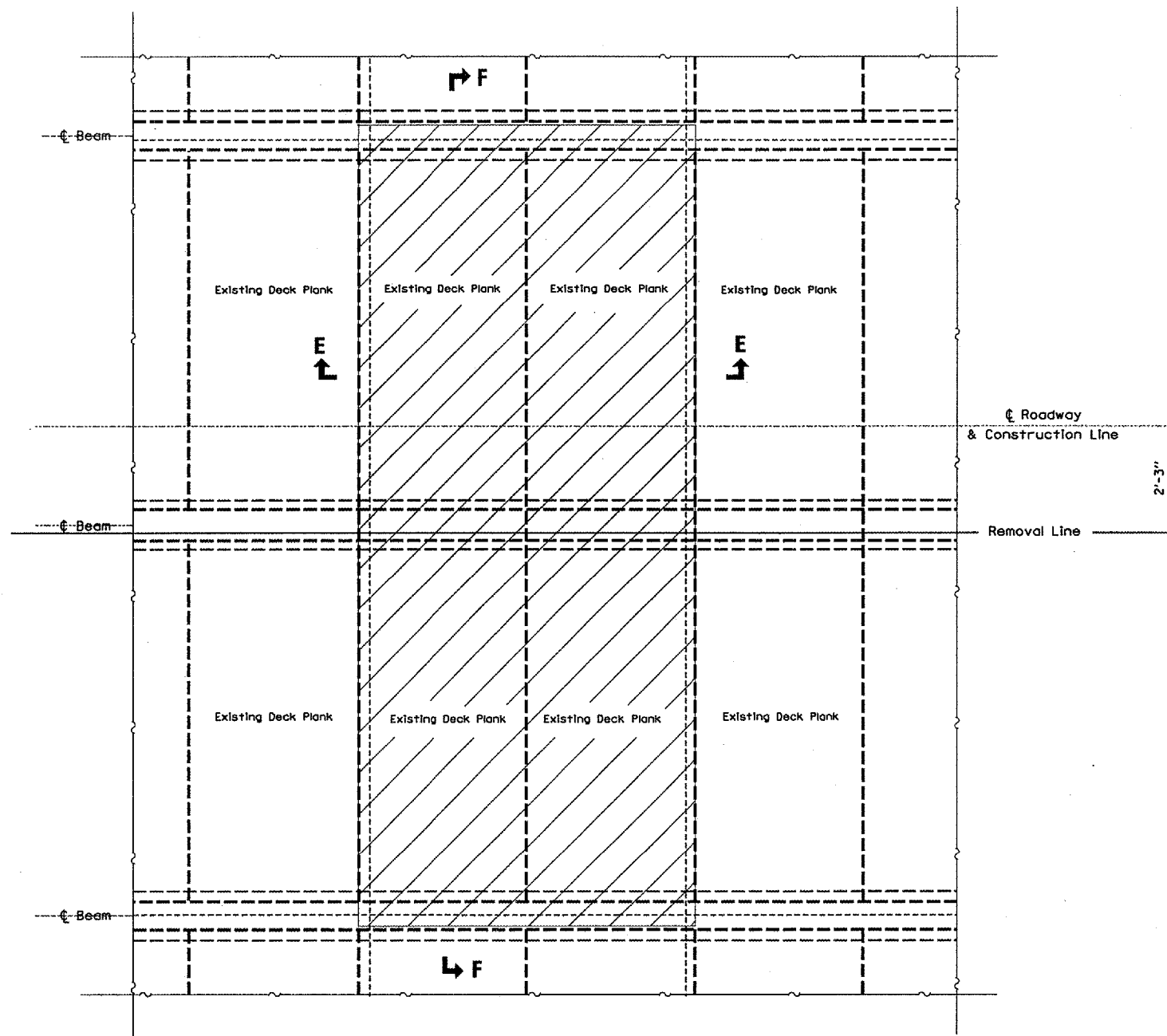
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Perimeters of Concrete Removal areas shall be saw cut 3/4" prior to removal of the concrete wearing surface and deck planks.

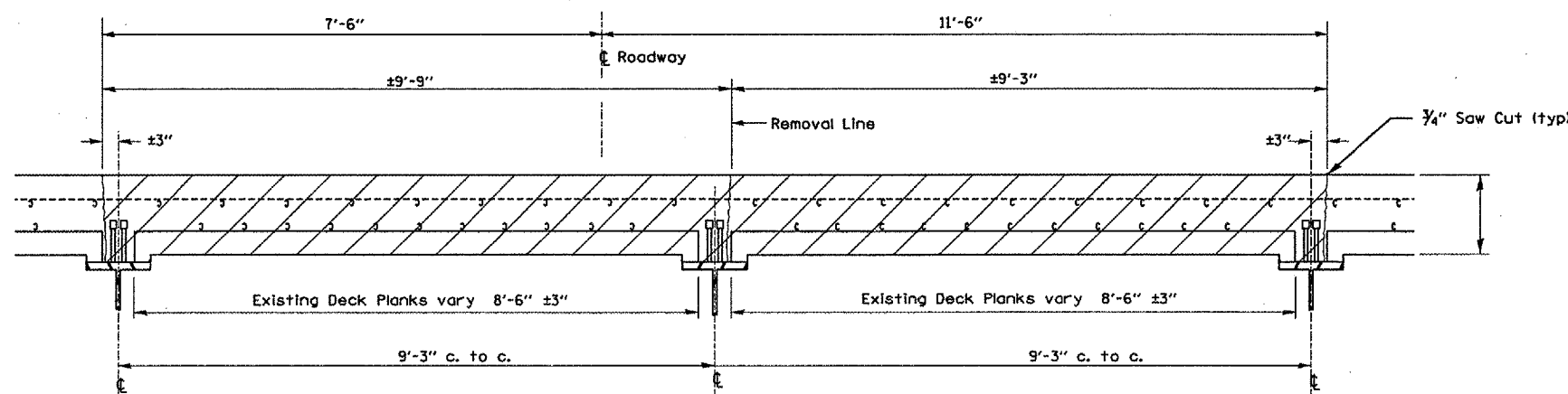
Existing reinforcement extending into concrete removal areas shall be cut, cleaned, straightened and incorporated into the new construction as required to provide minimum bar lap. If the length of removal, as measured parallel to the centerline of roadway, is less than the required bar lap, the existing longitudinal reinforcement bars shall not be cut.

New reinforcement bars shall be epoxy coated.

Top of patch to match top of existing deck.



SECTION E-E



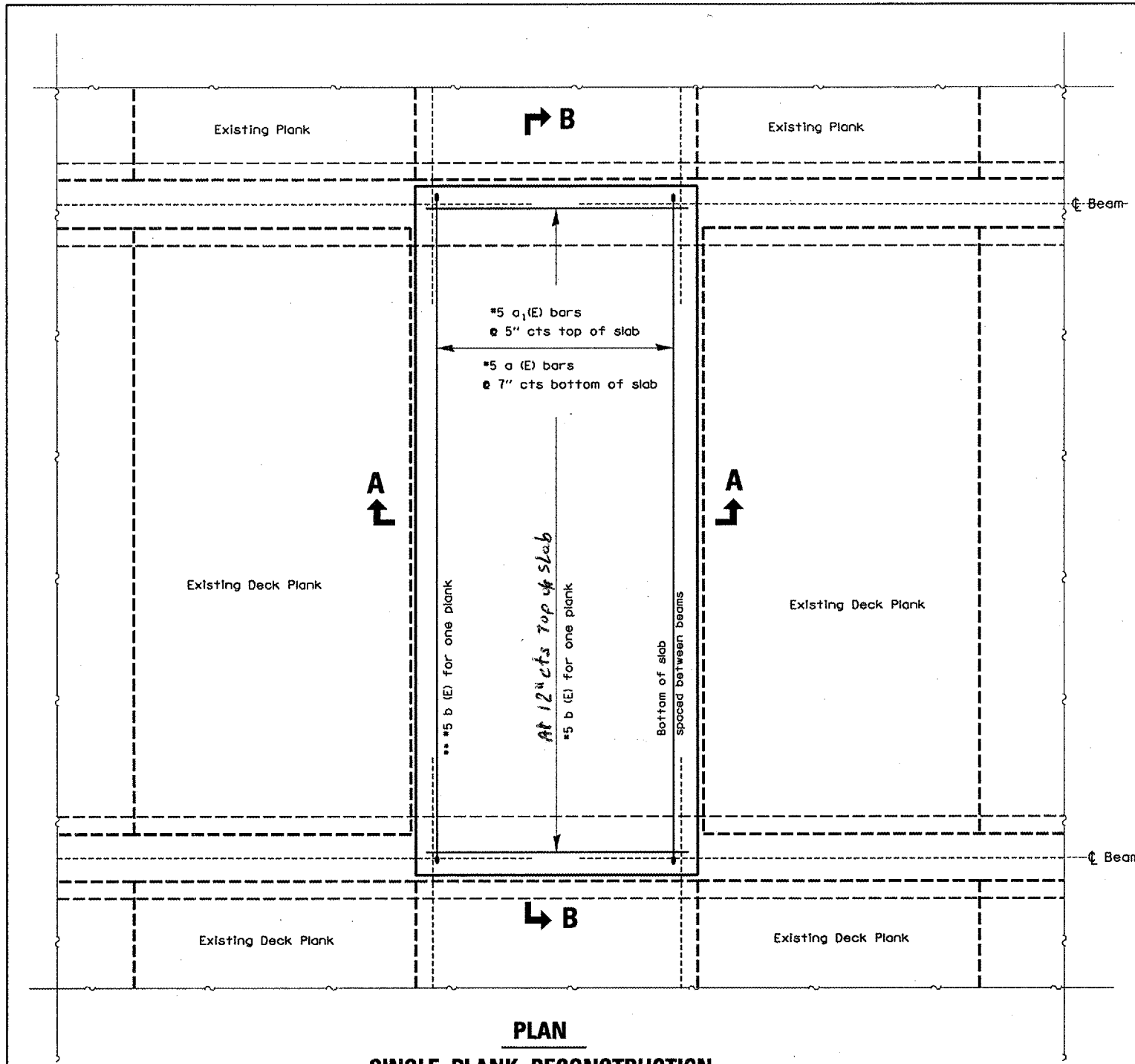
SECTION F-F

REVISIONS	
NAME	DATE

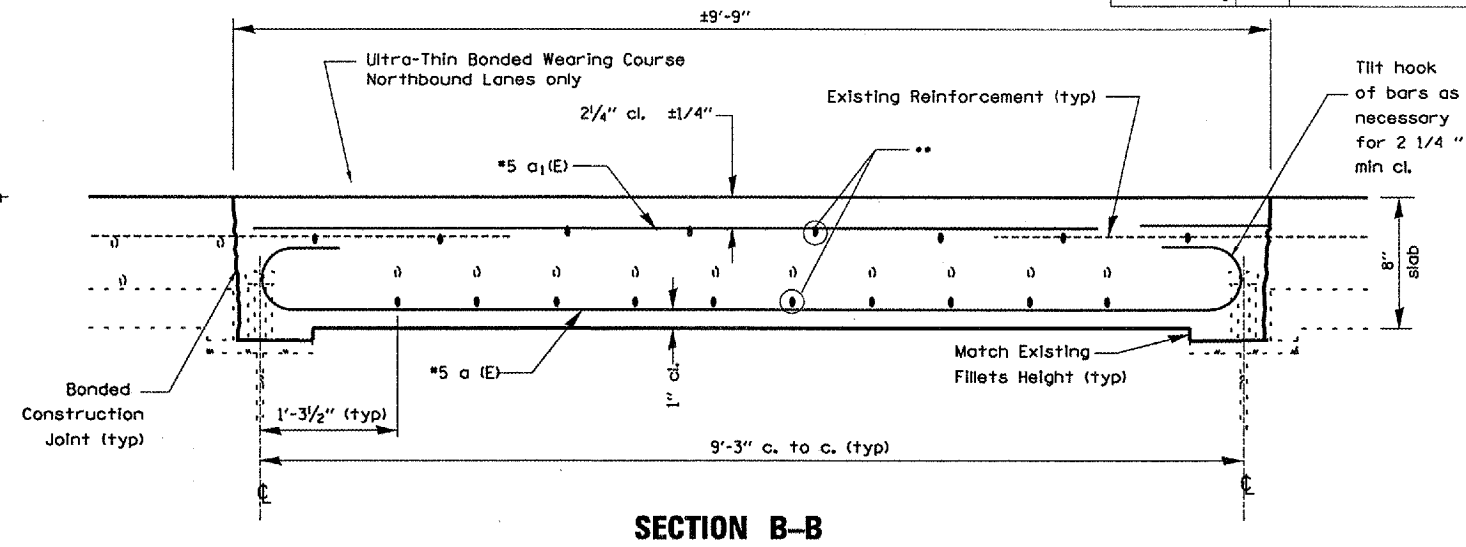
ILLINOIS DEPARTMENT OF TRANSPORTATION
DECK PLANK REMOVAL DETAIL
CASE II - MULTIPLE PLANKS
 I-39 OVER THE ILLINOIS RIVER
 F.A.I. ROUTE 39
 SECTION: (50-4B)1-4
 LASALLE COUNTY
 S.N. 050-0191

DATE: 05/07/2008
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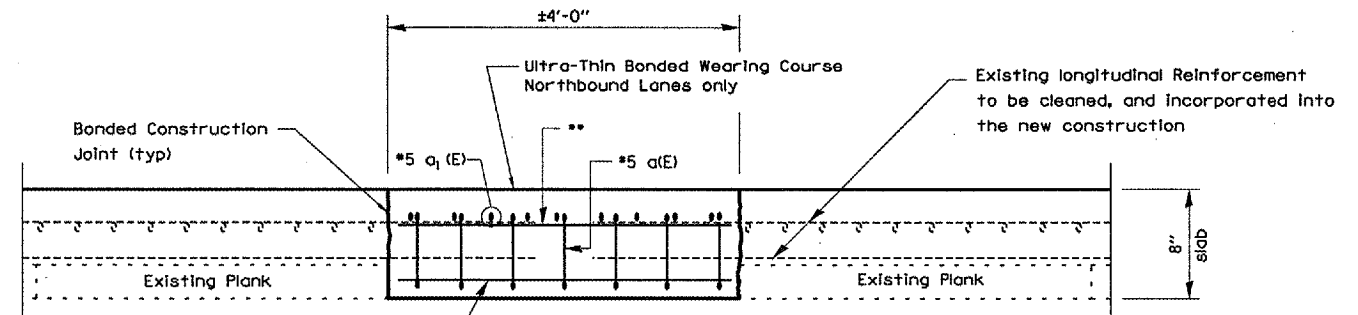
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
39	(50-4B)1-4	LASALLE	18	14
FED. ROAD DIST. NO. ILLINOIS NON-FED. AID PROJECT				



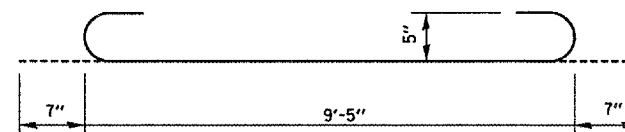
PLAN
SINGLE PLANK RECONSTRUCTION



SECTION B-B



SECTION A-A



#5 a (E)

REINFORCEMENT SCHEDULE

BAR	SIZE	LENGTH	SHAPE
a (E)	5	10'-7"	
a1 (E)	5	9'-5"	
b (E)	5	3'-8"	

MIN BAR LAP

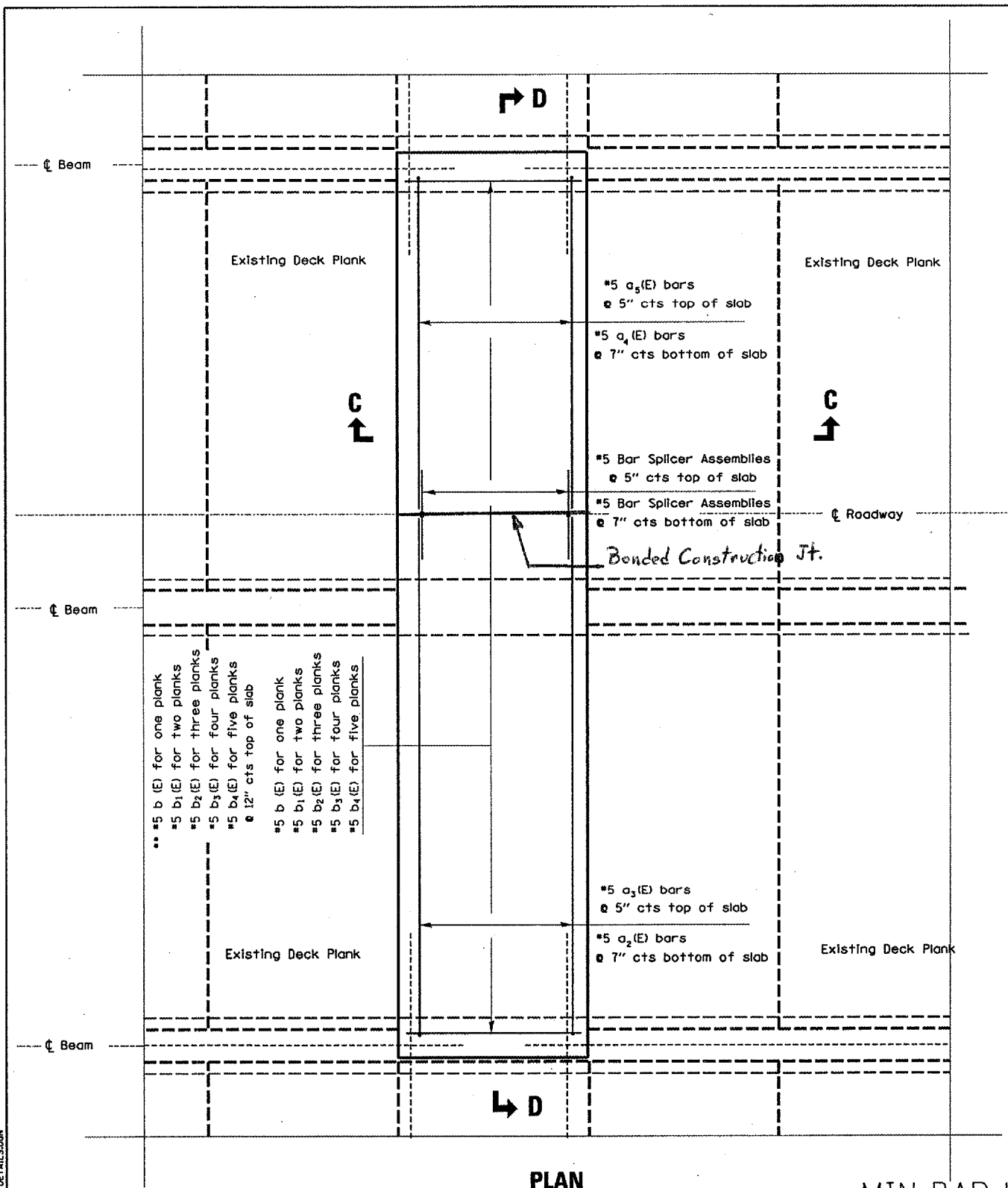
- #4 BAR 1'-8"
- #5 BAR 2'-2"
- #6 BAR 2'-7"
- #8 BAR 4'-6"

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
DECK RECONSTRUCTION DETAIL
CASE I - SINGLE PANEL
I-39 OVER THE ILLINOIS RIVER
F.A.I. ROUTE 39
SECTION: (50-4B)1-4
LASALLE COUNTY
S.N. 050-0191

DATE: 08/01/2008 C:\PROJECTS\DESIGN\AN\ABE LINCOLN\66678\DETAILS.DGN

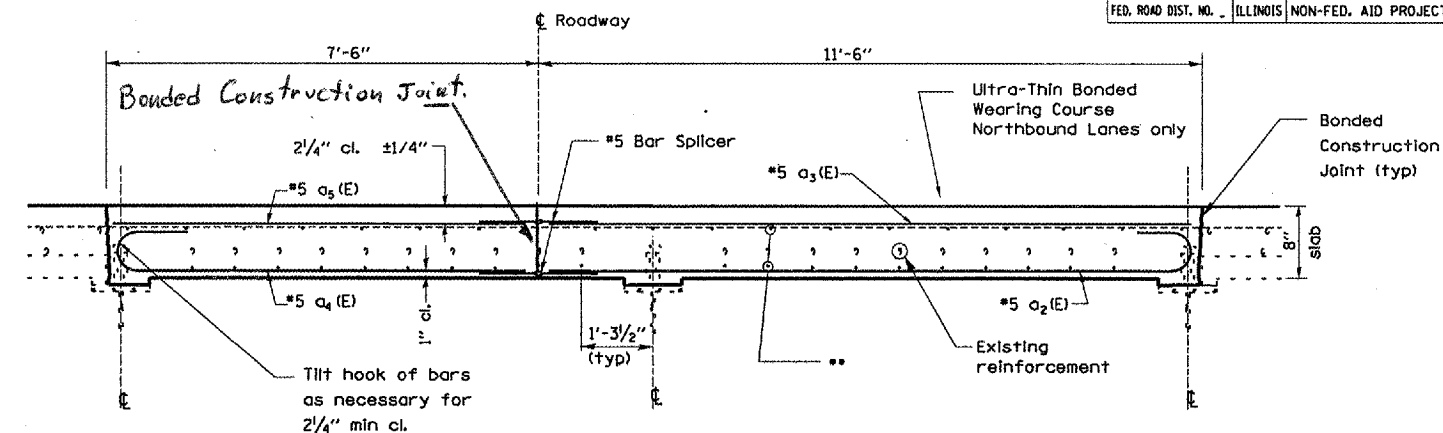
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
39	(50-4B)1-4	LASALLE	18	15
FED. ROAD DIST. NO. ILLINOIS NON-FED. AID PROJECT				



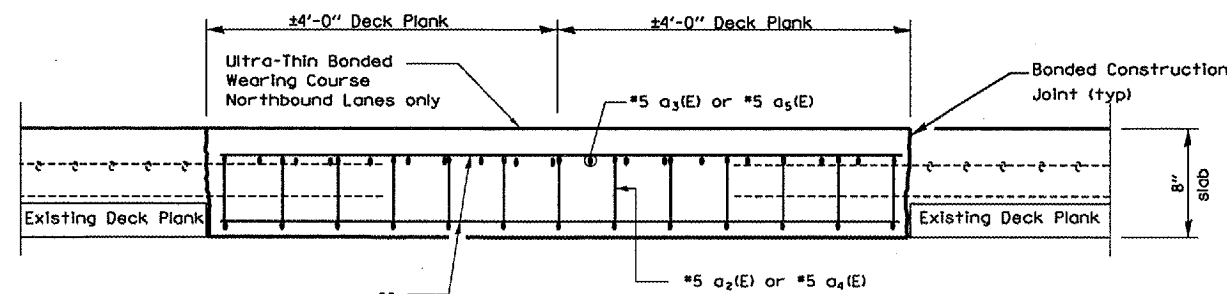
PLAN
MULTIPLE PLANK RECONSTRUCTION

MIN BAR LAP

- #4 BAR 1'-8"
- #5 BAR 2'-2"
- #6 BAR 2'-7"
- #8 BAR 4'-6"

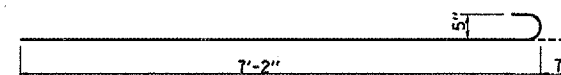


SECTION D-D

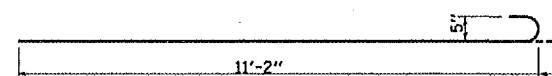


SECTION C-C

REINFORCEMENT SCHEDULE			
BAR	SIZE	LENGTH	SHAPE
a2 (E)	5	11'-9"	U
a3 (E)	5	11'-2"	—
a4 (E)	5	7'-9"	U
a5 (E)	5	7'-2"	—
b (E)	5	3'-8"	—
b1 (E)	5	7'-8"	—
b2 (E)	5	11'-8"	—
b3 (E)	5	15'-8"	—
b4 (E)	5	19'-8"	—



#5 a₄ (E)



#5 a₂ (E)

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
DECK RECONSTRUCTION DETAIL
CASE II - MULTIPLE PANELS
I-39 OVER THE ILLINOIS RIVER
F.A.I. ROUTE 39
SECTION: (50-4B)-4
LASALLE COUNTY
S.N. 050-0191

DATE: 05/01/2006 C:\PROJECTS\DESIGN\PLAN\BE LINCOLN\66678\DETAILS.DWG

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
39	(50-4B)1-4	LASALLE	18	16
FED. ROAD DIST. NO. - ILLINOIS NON-FED. AID PROJECT				

NOTES

Bar splicer assemblies shall be of an approved type and shall develop in tension at least 125 percent of the yield strength of the lapped reinforcement bars.
 Splicer rods shall be of minimum 60 ksi yield strength, threaded or colled full length.
 All reinforcement bars shall be lapped and tied to the splicer rods or dowel bars.
 Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars.

Other systems of similar design may be submitted to the Engineer for approval. Approval shall be based on certified test results from an approved testing laboratory that the proposed bar splicer assembly satisfies the following requirements:

- ① Minimum Capacity = $1.25 \times f_y \times A \dagger$
(Tension in kips)
- ② Minimum *Pull-out Strength = $1.25 \times f_{s_{allow}} \times A \dagger$
(Tension in kips)

Where f_y = Yield strength of lapped reinforcement bars in ksi.
 $f_{s_{allow}}$ = Allowable tensile stress in lapped reinforcement bars in ksi (Service Load)
 $A \dagger$ = Tensile stress area of lapped reinforcement bars.
 * = 28 day concrete

Bar Size to be Spliced	Splicer Rod or Dowel Bar Length	Strength Requirements	
		Min. Capacity kips - tension	Min. Pull-Out Strength kips - tension
*4	1'-8"	14.7	5.9
*5	2'-0"	23.0	9.2
*6	2'-7"	33.1	13.3
*7	3'-5"	45.1	18.0
*8	4'-6"	58.9	23.6
*9	5'-9"	75.0	30.0
*10	7'-3"	95.0	38.0
*11	9'-0"	117.4	46.8

Bar splicer assemblies shall be according to Section 508 of the Standard Specifications, except as noted. The furnishing and installation of bar splicer assemblies will be measured and paid for at the contract unit price each for "BAR SPLICERS."

The diameter of this part is the same as the diameter of the bar spliced.

The diameter of this part is equal or larger than the diameter of bar spliced.

ROLLED THREAD DOWEL BAR

** ONE PIECE

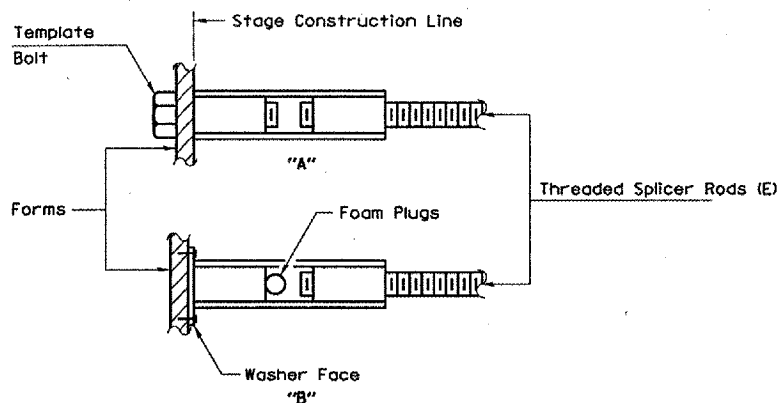
Wire Connector



WELDED SECTIONS

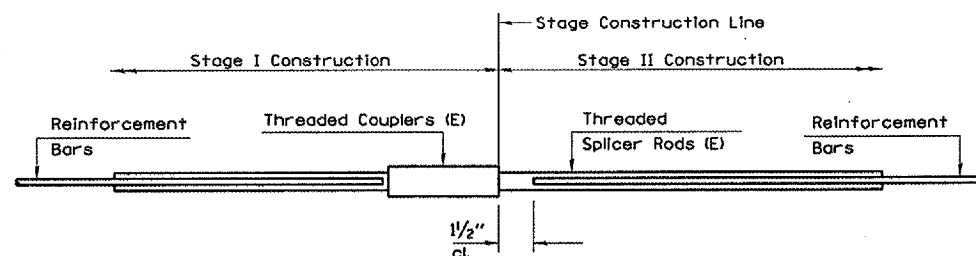
BAR SPLICER ASSEMBLY ALTERNATIVES

** Heavy Hex Nuts conforming to ASTM A 563, Grade C, D or DH may be used.



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

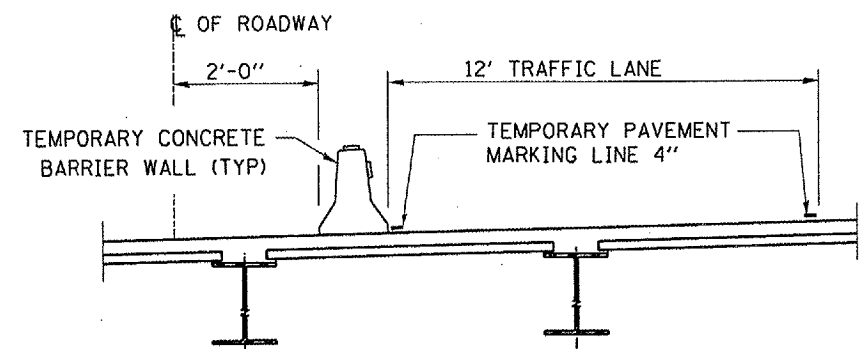
Bar Size	No. Assemblies Required	Location

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
BAR SPLICER ASSEMBLY DETAIL
 I-39 OVER THE ILLINOIS RIVER
 F.A.I. ROUTE 39
 SECTION: (50-4B)1-4
 LASALLE COUNTY
 S.N. 050-0191

DATE: 08/01/2006 C:\PROJECTS\RESUR\AN\BE LINCOLN\66678\DETAILS.DWG

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
39	(50-4B)I-4	LASALLE	18	17
FED. ROAD DIST. NO. _____		ILLINOIS NON-FED. AID PROJECT		



TYPICAL SECTION

THIS DETAIL SHALL BE USED WHICHEVER LANE IS CLOSED FOR STAGE I CONSTRUCTION

- SYMBOLS**
- ↑ Arrow board
 - ▨ Work area
 - ⋈ Worker
 - ⊥ Sign
 - ↑ Direction indicator barricade with steady burn monodirectional light
 - ⊥ Type II barricade, drum, or vertical barricade with steady burn monodirectional light
 - Flagger with traffic control sign

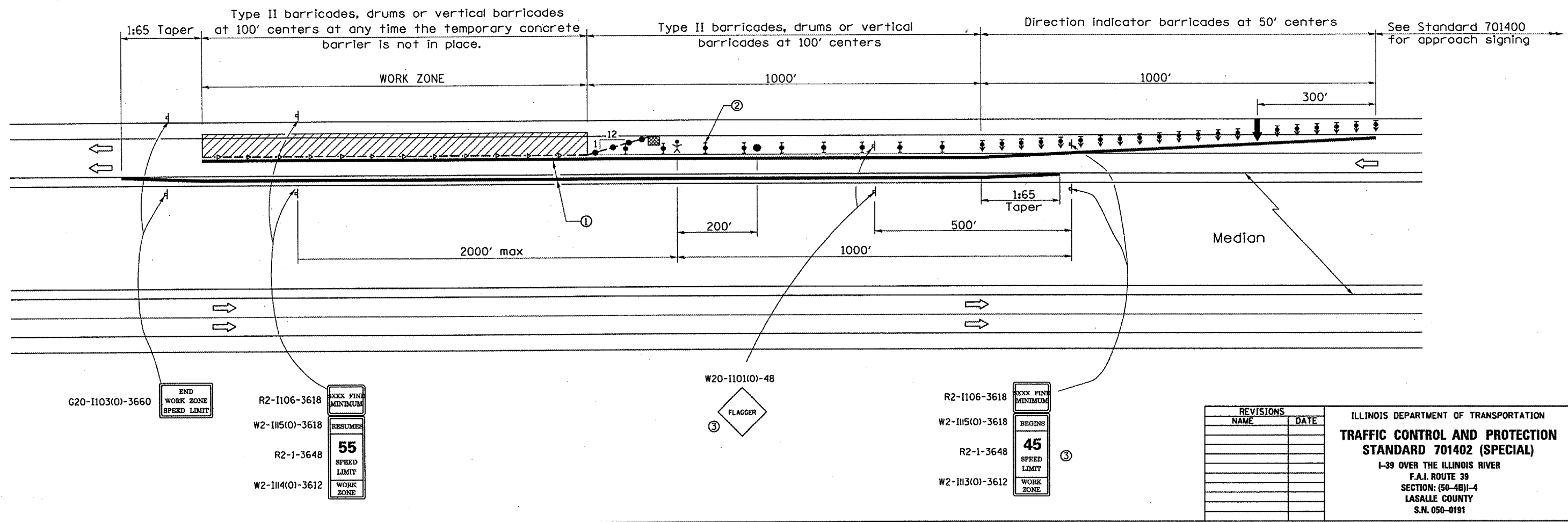
NOTES:

1. THE CONTRACTOR HAS THE OPTION OF USING EITHER THE LINE ON THE TEMPORARY CONCRETE BARRIER OR ON THE PAVEMENT.
2. THE COLOR OF THE REFLECTORS AND PAVEMENT/BARRIER MARKING LINE WILL VARY WITH STAGING AND SHALL MATCH THE EXISTING LINE IN THE WORK AREA.
3. THE COST OF THE REFLECTORS AND THE PAVEMENT/BARRIER MARKING LINE IS INCLUDED IN THE COST OF THE TEMPORARY CONCRETE BARRIER

- ① ReflectORIZED temporary pavement marking tape shall be placed throughout the taper and alongside the work area as shown on this detail when the closure time is greater than fourteen days. The right edge line shall be white and the left edge line shall be yellow.
Temporary raised reflectORIZED pavement markers at 25' centers shall be used to supplement the pavement marking tape.
- ② Type II barricades, drums or vertical barricades shall be placed along side the work area and shall remain in place until the temporary concrete barrier has been placed.
Type II barricades, drums or vertical barricades shall be placed along side the work area prior to the removal of the temporary concrete barrier
- ③ Work Zone speed limit signs and Flagger signs shall be moved as necessary to maintain the required spacing between the signs and the workers during the placing of the temporary concrete barrier.
The Work Zone and Flagger signs shall be removed or covered at the option of the contractor after the temporary concrete barrier has been placed and reinstalled or uncovered prior to the removal of the temporary concrete barrier.

GENERAL NOTES

This Standard is used where at any time any vehicle, equipment, workers or their activities will encroach on the lane adjacent to the shoulder, or on the shoulder within 24" of the edge of pavement.
This Standard must always be used in combination with Standard 701400.
This Standard also applies when work is being performed in the left lane. Under these conditions, the set up would be a mirror image to what is shown.
A check barricade shall be placed in the middle of the closed lane and at the shoulder at 1000' centers.

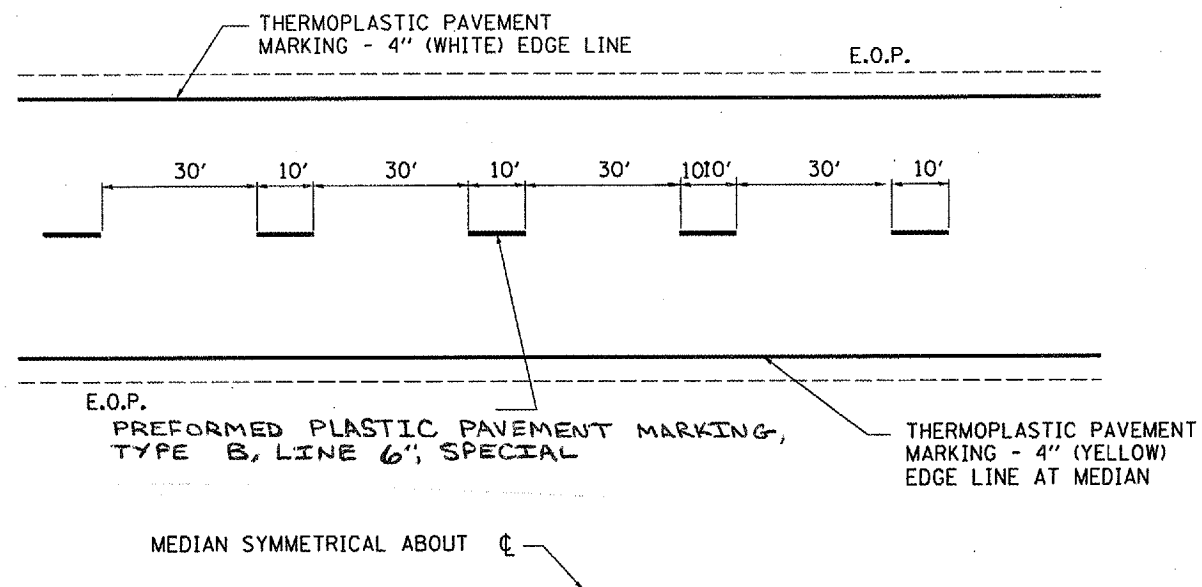


REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
TRAFFIC CONTROL AND PROTECTION
STANDARD 701402 (SPECIAL)
 I-39 OVER THE ILLINOIS RIVER
 F.A.I. ROUTE 39
 SECTION: (50-4B)I-4
 LASALLE COUNTY
 S.N. 050-0191

DATE: 05/01/2006 C:\PROJECTS\DESR\LAY\DE L\INCO\N\66678\DETAIL.S.DWG

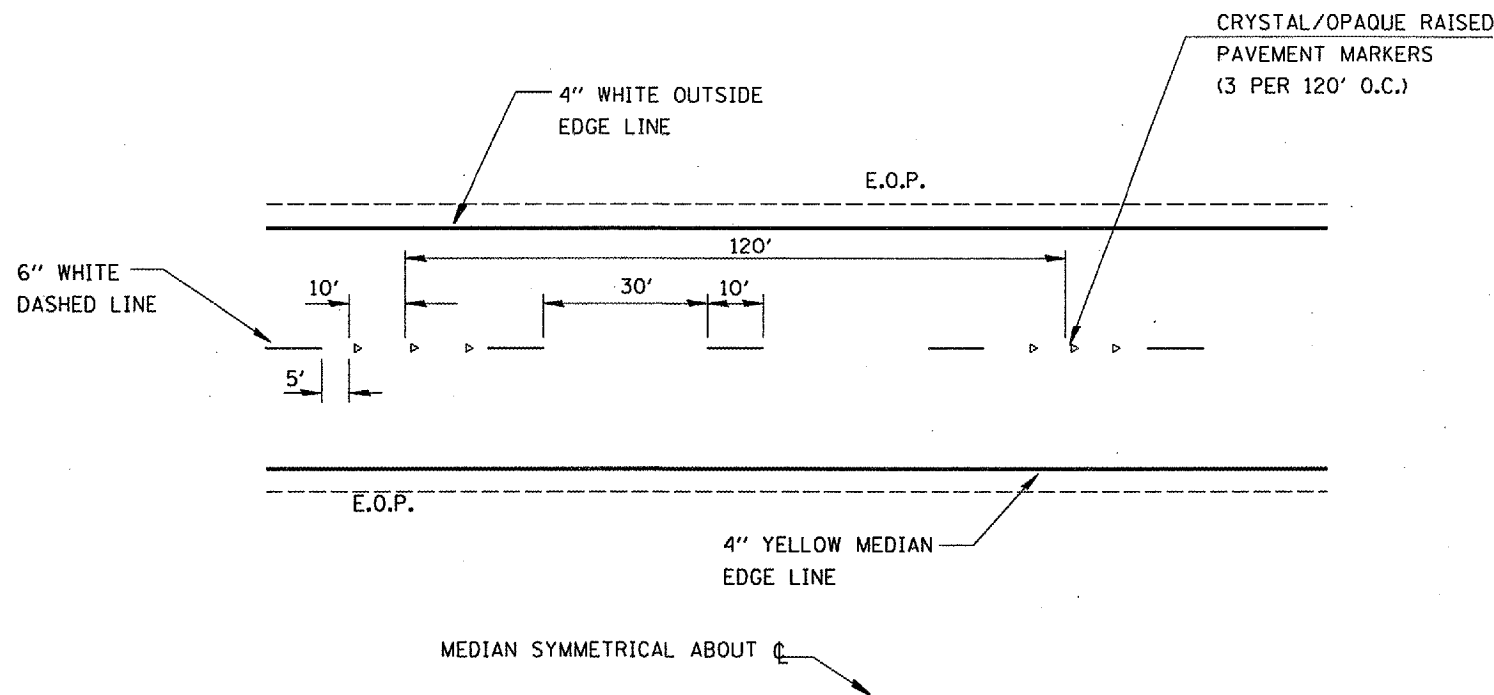
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
39	(50-4B)1-4	LASALLE	18	18
FED. ROAD DIST. NO. ILLINOIS NON-FED. AID PROJECT				



TYPICAL PAVEMENT MARKINGS STRUCTURE

PAVEMENT MARKING SCHEDULE

LOCATION	THERMOPLASTIC PAVEMENT MARKING LINE 4"		PREFORMED PLASTIC PAVEMENT MARKING TYPE B, LINE 6", SPECIAL	
	YELLOW	WHITE	YELLOW	WHITE
N. ABUT TO S. ABUT	7121	7121		1780
TOTAL	14242		1780	



TYPICAL PAVEMENT MARKINGS ROADWAY

NOTE: EXISTING EDGE LINES ON THE ROADWAY THAT ARE REMOVED DUE TO STAGE CONSTRUCTION OPERATIONS SHALL BE REPLACED WITH "EPOXY PAVEMENT MARKINGS"

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
TYPICAL PAVEMENT MARKINGS
I-39 OVER THE ILLINOIS RIVER
F.A.I. ROUTE 39
SECTION: (50-4B)1-4
LASALLE COUNTY
S.N. 050-0191

DATE: 05/01/2008 C:\PROJECTS\DESIGN\ABE LINCOLN\66678\DETAIL.S.DGN