

DEPARTMENT OF TRANSPORTATION

DIVISION OF HIGHWAYS

**PROPOSED
HIGHWAY PLANS**

F.A.I. ROUTE 80 (I-80)
SECTION (32-2B)I-1

**BRIDGE REPAIR
DUAL STRUCTURES OVER NETTLE CREEK,
2.5 MILES WEST OF IL 47 AND
DUAL STRUCTURES OVER E. FORK NETTLE CREEK,
1.3 MILES WEST OF IL 47
GRUNDY COUNTY**

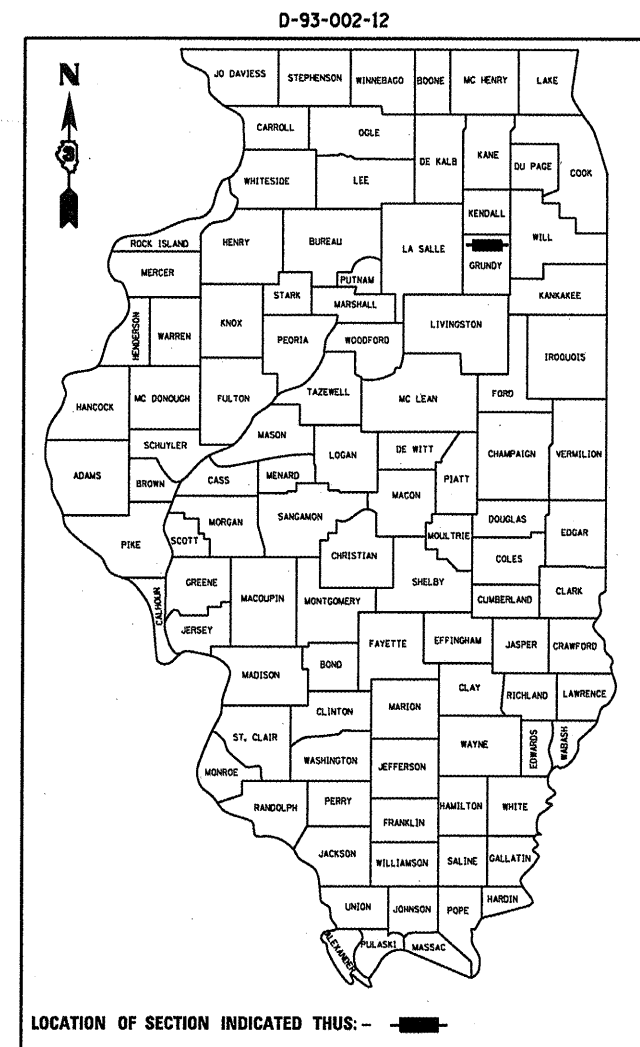
C-93-085.12

F.A.I. SHEET NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	(32-2B)I-1	GRUNDY	27	1
		ILLINOIS	CONTRACT NO. 66C08	

1. COVER SHEET
2. GENERAL NOTES
3. SUMMARY OF QUANTITIES
4. TYPICAL SECTION
5. TRAFFIC CONTROL AND PROTECTION, STANDARD 701400 (SPECIAL)
- 6 - 7. TRAFFIC CONTROL AND PROTECTION, STANDARD 701402 (SPECIAL)
8. TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION
9. TYPICAL PAVEMENT MARKING
10. EXISTING GENERAL PLAN AND ELEVATION FOR STRUCTURE NO. 032-0009 (EB) AND STRUCTURE NO. 032-0010 (WB)
- 11 - 14. STRUCTURE PLANS FOR STRUCTURE NO. 032-0009 (EB)
- 15 - 18. STRUCTURE PLANS FOR STRUCTURE NO. 032-0010 (WB)
19. EXISTING GENERAL PLAN AND ELEVATION FOR STRUCTURE NO. 032-0011 (EB) AND STRUCTURE NO. 032-0012 (WB)
- 20 - 23. STRUCTURE PLANS FOR STRUCTURE NO. 032-0011 (EB)
- 24 - 27. STRUCTURE PLANS FOR STRUCTURE NO. 032-0012 (WB)

STANDARDS

- | | |
|-----------|---|
| 000001-06 | STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS |
| 001001-02 | AREAS OF REINFORCEMENT BARS |
| 001006 | DECIMAL OF AN INCH AND OF A FOOT |
| 701101-02 | OFF-ROAD OPERATIONS MULTILANE, 15' (4.5 m) TO 24' (600 mm) FROM PAVEMENT EDGE |
| 701901-02 | TRAFFIC CONTROL DEVICES |
| 704001-07 | TEMPORARY CONCRETE BARRIER |



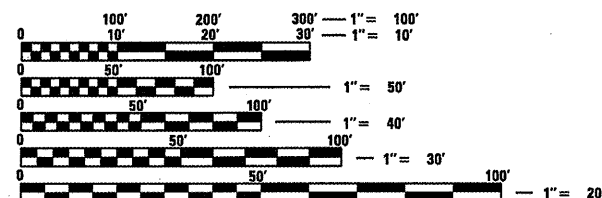
LOCATION OF SECTION INDICATED THUS: - [black rectangle] -

PROJECT LOCATION

STRUCTURE NO. 032-0011 (EB)
STRUCTURE NO. 032-0012 (WB)

PROJECT LOCATION

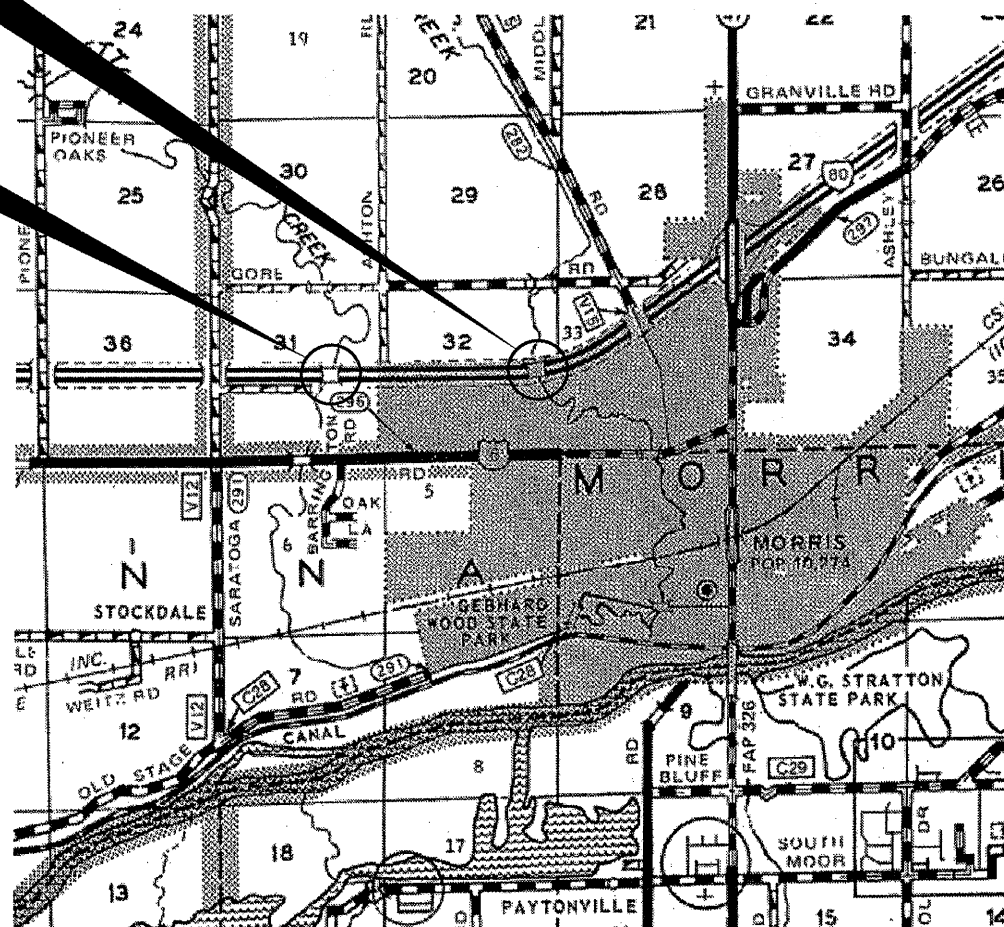
STRUCTURE NO. 032-0009 (EB)
STRUCTURE NO. 032-0010 (WB)



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

J.U.L.I.E.
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION
1-800-892-0123
OR 811

DISTRICT 3 NO. (815) 434-6131
PROJECT ENGINEER: JOE KANNEL, P.E.
UNIT CHIEF: RON WOODSHANK
TOWNSHIP: MORRIS
CONTRACT NO. 66C08



FUNCTIONAL CLASSIFICATION

RURAL INTERSTATE

2011 ADT = 29400

P.V. = 68.13% M.U. = 26.92% S.U. = 4.95%

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED 4/6 20 12
Eric S. Thorsbald
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

May 11 20 12
John D. Baranzelli, P.E.
ENGINEER OF DESIGN AND ENVIRONMENT

May 11 20 12
William R. Freyer
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS

GENERAL NOTES

ANY REFERENCE TO A STANDARD IN THESE PLANS SHALL BE INTERPRETED TO MEAN THE EDITION AS INDICATED BY THE SUBNUMBER SHOWN IN THE LIST OF STANDARDS OR THE COPY INCLUDED IN THESE PLANS.

COMMITMENTS

DATE: 4-6-12

PREPARED BY: Tom Bonvil
DISTRICT STUDIES & PLANS ENGINEER

EXAMINED BY: Herbert K. Jumper
DISTRICT CONSTRUCTION ENGINEER

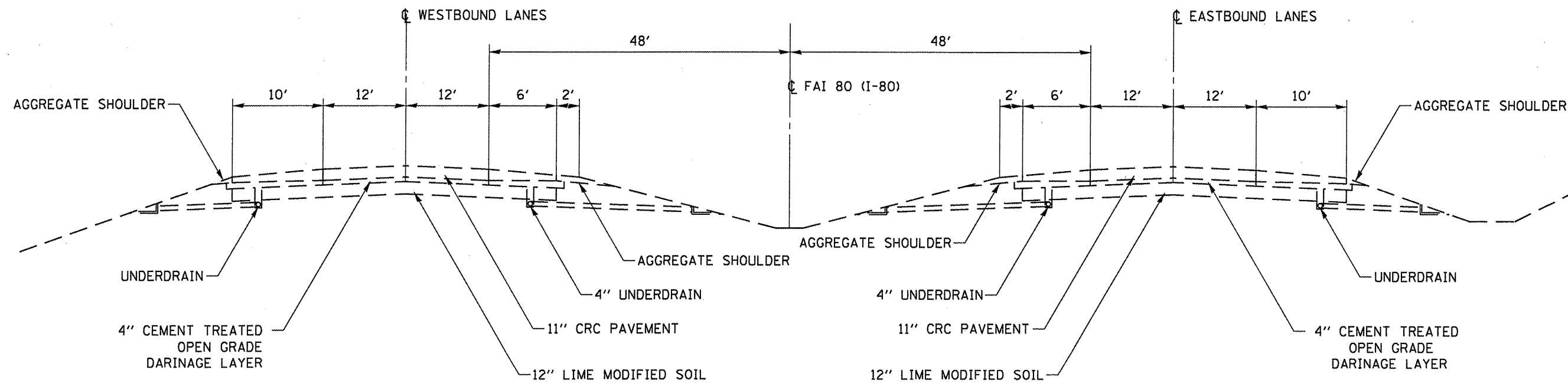
Wayne J. Phillips
DISTRICT MATERIALS ENGINEER

James A. Hunter
DISTRICT OPERATIONS ENGINEER

FILE NAME =	USER NAME = carpentardj	DESIGNED - RLW	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	GENERAL NOTES	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
c:\pwwork\pwwork\carpentardj\d0296082\	0366C08-shr-details.dgn	DRAWN - RLW	REVISED -			80	(32-2B1)-1	GRUNDY	27	2	
PLOT SCALE = 100:10 '1' / in.	CHECKED -	REVISED -	REVISED -			SCALE: SHEET 1 OF 1 SHEETS STA. TO STA.		CONTRACT NO. 66C08			
PLOT DATE = 4/5/2012	DATE -	REVISED -	REVISED -			ILLINOIS FED. AID PROJECT					

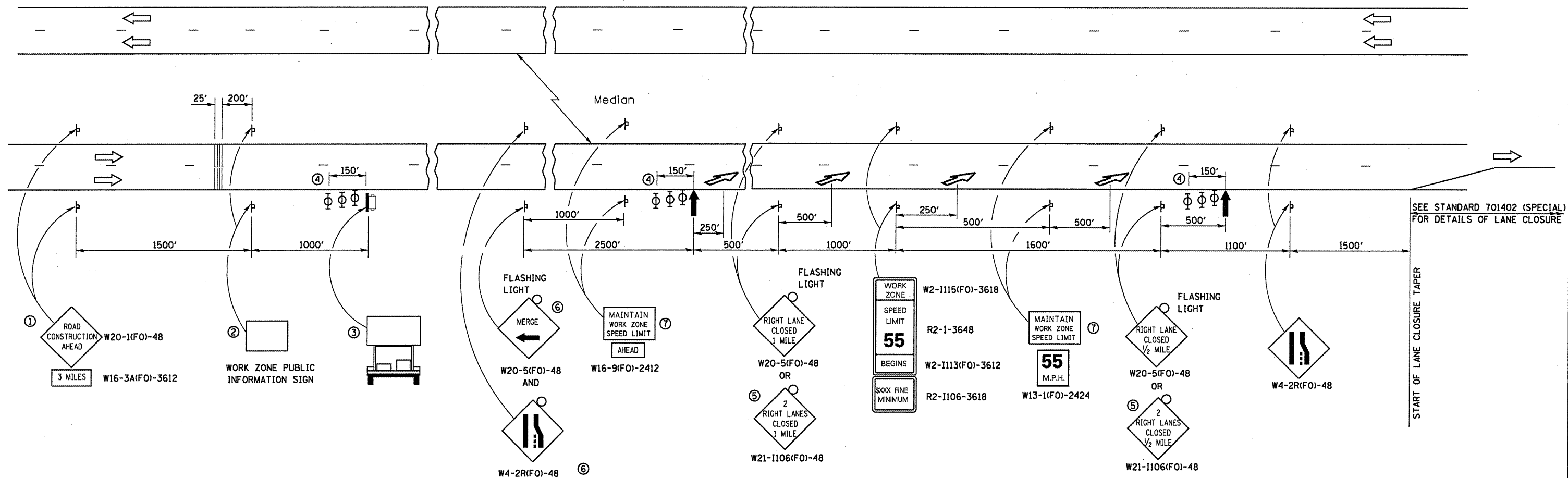
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTR. CODE	
				STATE FUNDS 100% STATE	
				STRUCTURE 0014 RURAL	STRUCTURE 0014 URBAN
50102400	CONCRETE REMOVAL	CU YD	29.6	14.8	14.8
50300255	CONCRETE SUPERSTRUCTURE	CU YD	29.6	14.8	14.8
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	4484	2272	2212
50800515	BAR SPLICERS	EACH	48	24	24
52000110	PREFORMED JOINT STRIP SEAL	FOOT	360	180	180
67100100	MOBILIZATION	L SUM	1	0.5	0.5
70400100	TEMPORARY CONCRETE BARRIER	FOOT	1676	838	838
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	1676	838	838
78009004	MODIFIED URETHANE PAVEMENT MARKING - LINE 4"	FOOT	17344	8672	8672
78009006	MODIFIED URETHANE PAVEMENT MARKING - LINE 6"	FOOT	2168	1084	1084
78300100	PAVEMENT MARKING REMOVAL	SQ FT	6808	3404	3404
X0326867	RADAR SPEED TRAILER	CAL MO	2	1	1
X0326880	MESSAGE BOARD VEHICLE DRIVER	HOUR	360	180	180
X0326907	PORTABLE, VEHICLE MOUNTED, CHANGEABLE MESSAGE SIGN	CAL MO	1	0.5	0.5
X7010208	TRAFFIC CONTROL AND PROTECTION, STANDARD 701402 (SPECIAL)	EACH	2	1	1
X7830050	RAISED REFLECTIVE PAVEMENT MARKER, REFLECTOR REMOVAL	EACH	217	108	109
Z0030250	IMPACT ATTENUATORS, TEMPORARY (NON- REDIRECTIVE), TEST LEVEL 3	EACH	4	2	2
Z0030350	IMPACT ATTENUATORS, RELOCATE (NON- REDIRECTIVE), TEST LEVEL 3	EACH	4	2	2
Z0049100	RAISED PAVEMENT MARKER, REFLECTOR REPLACEMENT	EACH	217	108	109

• SPECIALITY ITEMS



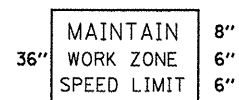
TYPICAL SECTION

FILE NAME =	USER NAME = carpenterdj	DESIGNED - RLW	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TYPICAL ROADWAY SECTION	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
ci:\pwork\p\pidot\carpenterdj\d0295082	1366C08-shd-details.dgn	DRAWN - RLW	REVISED -			80	(32-2B)I-1	GRUNDY	27	4	
	PLOT SCALE = 100:0' / 1"	CHECKED -	REVISED -			SCALE: SHEET 1 OF 1 SHEETS STA. TO STA.		CONTRACT NO. 66C08			
	PLOT DATE = 4/5/2012	DATE -	REVISED -			ILLINOIS FED. AID PROJECT					



- ① THE ROAD CONSTRUCTION AHEAD SIGN SHALL BE LOCATED 3 MILES IN ADVANCE OF THE PROJECT LIMITS.
- ② THE MESSAGE AND SIZE OF THE WORK ZONE PUBLIC INFORMATION SIGN SHALL BE AS SPECIFIED BY THE DEPARTMENT.
- ③ TO BE PLACED IN THE MEDIAN WHEN FEASIBLE. THE MESSAGE BOARD SHALL BE USED TO DISPLAY STATUS OF LANES WITHIN THE PROJECT. THE PRIMARY MESSAGES SHALL BE:
"RIGHT LANE CLOSED" / " x MILES AHEAD"
"LEFT LANE CLOSED" / " x MILES AHEAD"
"ALL LANES OPEN"
- ④ THREE, TYPE II BARRICADES, DRUMS, OR VERTICAL BARRICADES AT 50' CENTERS.
- ⑤ THIS SIGN SHALL BE USED WHEN 2 LANES ARE CLOSED.
- ⑥ WHEN THE LEFT LANE IS CLOSED, SWITCH THESE TWO SIGNS AND THE DIRECTION OF THE MERGE ARROW.

- ⑦ 48"x36" FLUORESCENT ORANGE SIGN WITH BLACK LETTERS, 48"



- ↑ ARROW BOARD
- ☐ PORTABLE CHANGEABLE MESSAGE SIGN
- ⊥ SIGN
- ⊕ TYPE II BARRICADE, DRUM, OR VERTICAL BARRICADE WITH MONODIRECTIONAL FLASHING LIGHT
- ↘ LANE DROP ARROW - SEE STANDARD 780001
- ▨ TEMPORARY THERMOPLASTIC RUMBLE STRIPS

GENERAL NOTE:

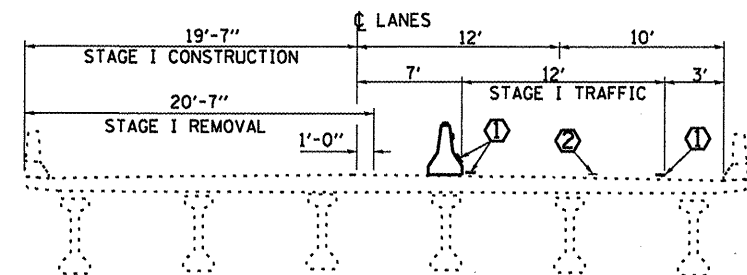
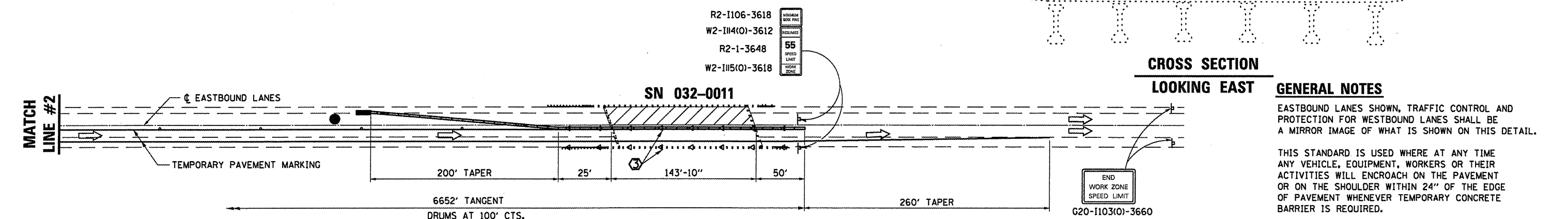
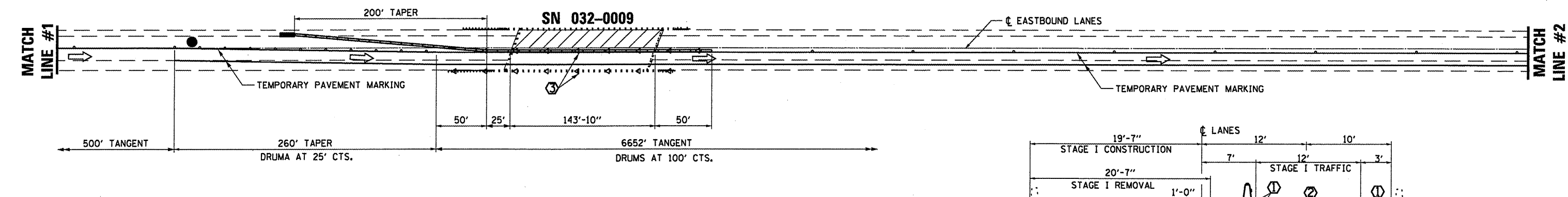
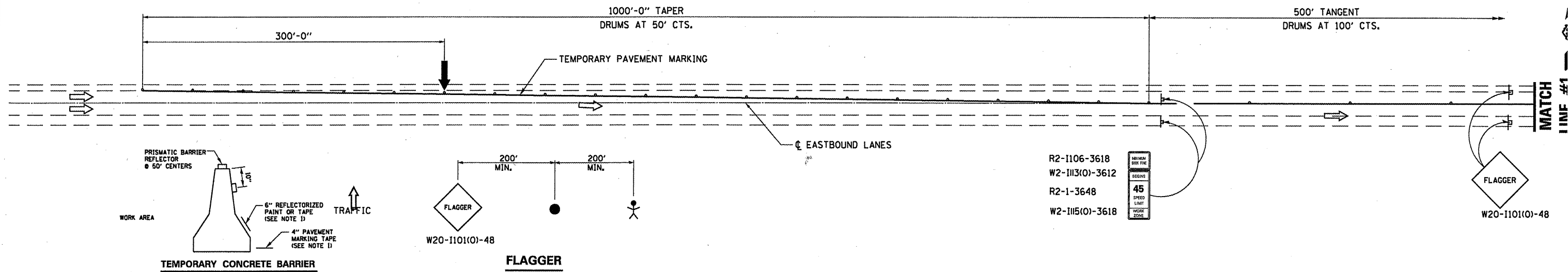
THIS STANDARD IS USED WHERE AT ANY TIME A LANE IS CLOSED ON A FREEWAY/EXPRESSWAY.

WHEN THE LEFT LANE IS CLOSED, LEFT LANE CLOSED SIGNS SHALL BE SUBSTITUTED FOR THE RIGHT LANE CLOSED SIGNS.

THE FIRST TWO SIGNS AND THE MESSAGE BOARD ARE STATIONARY. THE OTHER SIGNS AND ARROWBOARDS SHALL BE MOVED AS NECESSARY TO MAINTAIN THE REQUIRED DISTANCE FROM THE START OF THE LANE CLOSURE TAPER(S).

SEE SPECIAL PROVISIONS.

FILE NAME =	USER NAME = carpentardj	DESIGNED - RLW	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TRAFFIC CONTROL AND PROTECTION STANDARD 701400 (SPECIAL)	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
c:\pwwork\pwwork\carpentardj\d8295082	366C08-shd-details.dgn	DRAWN - RLW	REVISED -			80	(32-2B)I-1	GRUNDY	27	5	
	PLOT SCALE = 100:8 " / in.	CHECKED -	REVISED -			CONTRACT NO. 66C08					
	PLOT DATE = 4/5/2012	DATE -	REVISED -			ILLINOIS FED. AID PROJECT					



**CROSS SECTION
LOOKING EAST**

GENERAL NOTES

EASTBOUND LANES SHOWN, TRAFFIC CONTROL AND PROTECTION FOR WESTBOUND LANES SHALL BE A MIRROR IMAGE OF WHAT IS SHOWN ON THIS DETAIL.

THIS STANDARD IS USED WHERE AT ANY TIME ANY VEHICLE, EQUIPMENT, WORKERS OR THEIR ACTIVITIES WILL ENCROACH ON THE PAVEMENT OR ON THE SHOULDER WITHIN 24" OF THE EDGE OF PAVEMENT WHENEVER TEMPORARY CONCRETE BARRIER IS REQUIRED.

THE WESTBOUND AND EASTBOUND LANES SHALL BE CONSIDERED SEPARATE TRAFFIC CONTROL AND PROTECTION INSTALLATIONS.

THIS STANDARD MUST ALWAYS BE USED IN COMBINATION WITH TRAFFIC CONTROL AND PROTECTION, STANDARD 701400 (SPECIAL).

FLAGGERS AND FLAGGER SIGNS SHALL BE REQUIRED WHENEVER THE TEMPORARY CONCRETE BARRIER IS NOT IN PLACE. FLAGGERS SHALL BE REQUIRED AT EACH PATCHING OPERATION.

TEMPORARY CONCRETE BARRIER SHALL BE ACCORDING TO THE "TEMPORARY CONCRETE BARRIER, FOR STAGE CONSTRUCTION", DETAILS AND TRAFFIC CONTROL AND PROTECTION STANDARD 704001.

WORK ZONE SPEED LIMITS SIGNS SHALL REMAIN IN PLACE AND UNCOVERED FOR THE LENGTH OF THE PROJECT.

- ① REFLECTORIZED TEMPORARY PAVEMENT MARKING TAPE SHALL BE PLACED THROUGHOUT THE TAPER(S) AND ALONGSIDE THE TANGENT SECTION(S) OF BARRIER. THE EDGE LINE SHALL BE WHITE FOR RIGHT LANE CLOSURE AND YELLOW FOR LEFT LANE CLOSURES. TEMPORARY PAVEMENT MARKING SHALL BE INCLUDED IN THE COST OF THE STANDARD.
- ② EXISTING PAVEMENT THAT CONFLICTS WITH REVISED TRAFFIC PATTERNS SHALL BE REMOVED
- ③ BARRIER WALL/GUARDRAIL MARKERS AT 25' CTS. MARKERS ON RIGHT SHALL BE CRYSTAL AND MARKERS ON LEFT SHALL BE AMBER.

SYMBOLS

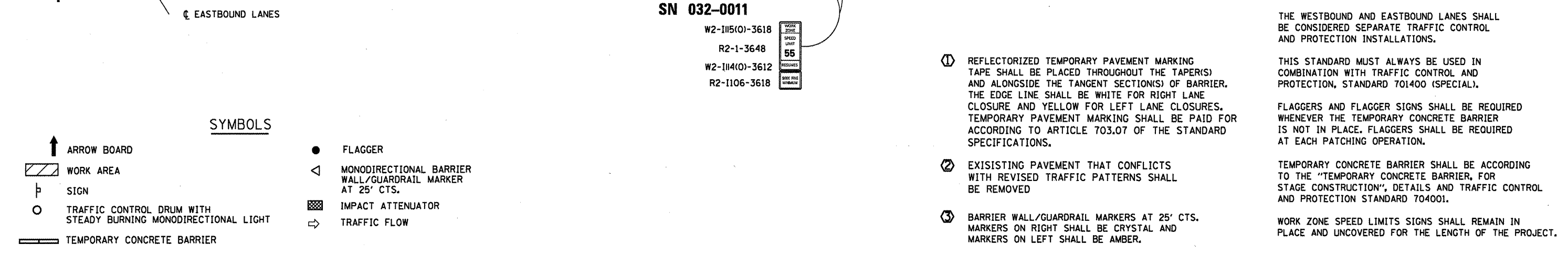
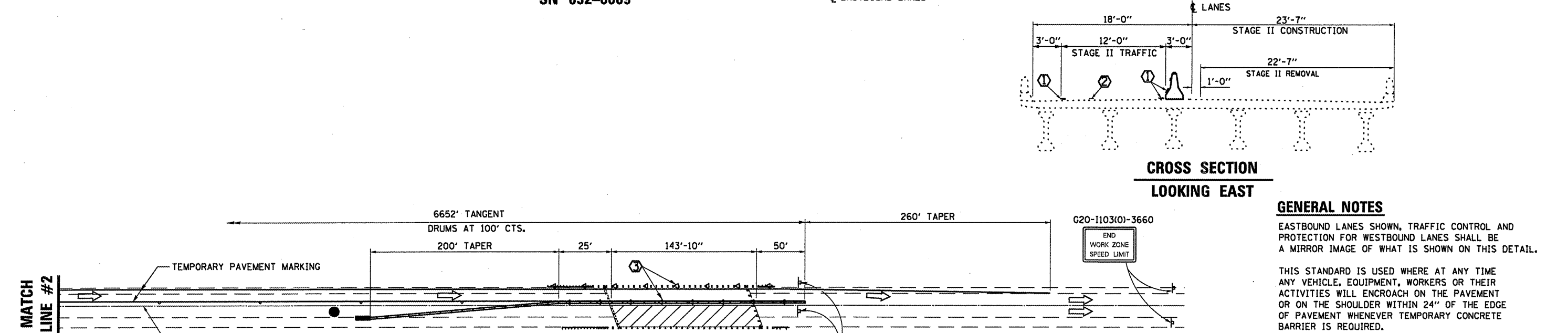
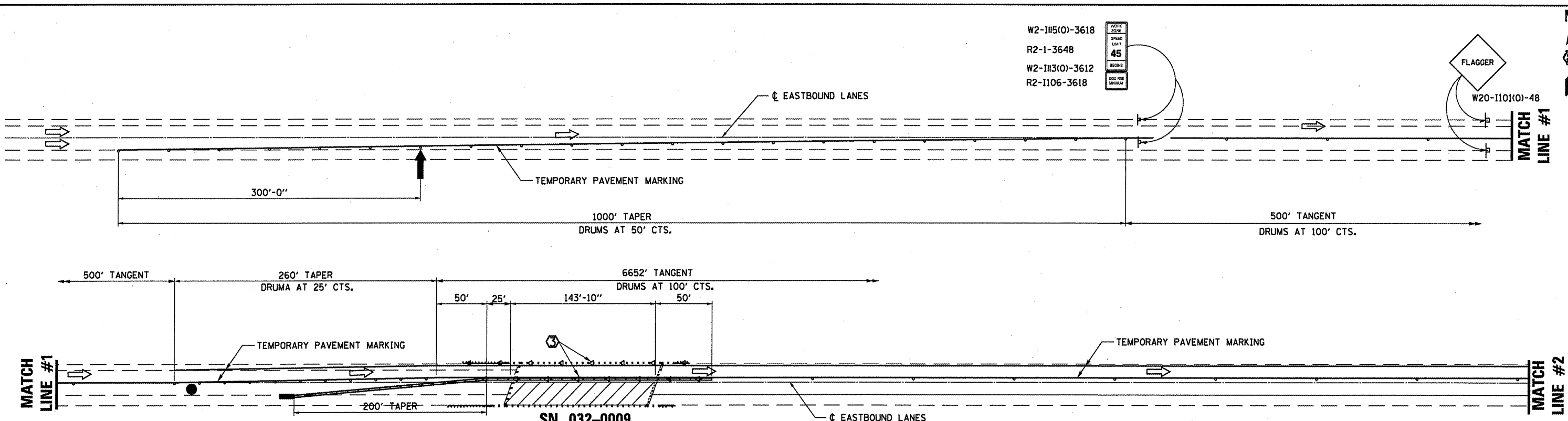
- ↑ ARROW BOARD
- ▨ WORK AREA
- ⊥ SIGN
- TRAFFIC CONTROL DRUM WITH STEADY BURNING MONODIRECTIONAL LIGHT
- ▬ TEMPORARY CONCRETE BARRIER
- FLAGGER
- ◁ MONODIRECTIONAL BARRIER WALL/GUARDRAIL MARKER AT 25' CTS.
- ▩ IMPACT ATTENUATOR
- ⇒ TRAFFIC FLOW

FILE NAME =	USER NAME = carpentardj	DESIGNED - RLW	REVISED -
c:\pw\work\p1do\carpentardj\d0295882\0366C08-sht-details.dgn		DRAWN - RLW	REVISED -
	PLOT SCALE = 98:6 1/2" / in.	CHECKED -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

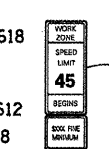
**TRAFFIC CONTROL AND PROTECTION
STANDARD 701402 (SPECIAL) - STAGE I**

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SH N
80	(32-2B)-1	GRUNDY	27	
CONTRACT NO. 66C				



- SYMBOLS**
- ↑ ARROW BOARD
 - ▨ WORK AREA
 - ⊥ SIGN
 - TRAFFIC CONTROL DRUM WITH STEADY BURNING MONODIRECTIONAL LIGHT
 - ▬ TEMPORARY CONCRETE BARRIER
 - FLAGGER
 - ◁ MONODIRECTIONAL BARRIER WALL/GUARDRAIL MARKER AT 25' CTS.
 - ▩ IMPACT ATTENUATOR
 - ⇒ TRAFFIC FLOW

W2-1115(0)-3618
R2-1-3648
W2-1113(0)-3612
R2-1106-3618



G20-1103(0)-3660
END WORK ZONE SPEED LIMIT

W2-1115(0)-3618
R2-1-3648
W2-1114(0)-3612
R2-1106-3618



- ① REFLECTORIZED TEMPORARY PAVEMENT MARKING TAPE SHALL BE PLACED THROUGHOUT THE TAPER(S) AND ALONGSIDE THE TANGENT SECTION(S) OF BARRIER. THE EDGE LINE SHALL BE WHITE FOR RIGHT LANE CLOSURE AND YELLOW FOR LEFT LANE CLOSURES. TEMPORARY PAVEMENT MARKING SHALL BE PAID FOR ACCORDING TO ARTICLE 703.07 OF THE STANDARD SPECIFICATIONS.
- ② EXISTING PAVEMENT THAT CONFLICTS WITH REVISED TRAFFIC PATTERNS SHALL BE REMOVED
- ③ BARRIER WALL/GUARDRAIL MARKERS AT 25' CTS. MARKERS ON RIGHT SHALL BE CRYSTAL AND MARKERS ON LEFT SHALL BE AMBER.

GENERAL NOTES

EASTBOUND LANES SHOWN, TRAFFIC CONTROL AND PROTECTION FOR WESTBOUND LANES SHALL BE A MIRROR IMAGE OF WHAT IS SHOWN ON THIS DETAIL.

THIS STANDARD IS USED WHERE AT ANY TIME ANY VEHICLE, EQUIPMENT, WORKERS OR THEIR ACTIVITIES WILL ENCROACH ON THE PAVEMENT OR ON THE SHOULDER WITHIN 24" OF THE EDGE OF PAVEMENT WHENEVER TEMPORARY CONCRETE BARRIER IS REQUIRED.

THE WESTBOUND AND EASTBOUND LANES SHALL BE CONSIDERED SEPARATE TRAFFIC CONTROL AND PROTECTION INSTALLATIONS.

THIS STANDARD MUST ALWAYS BE USED IN COMBINATION WITH TRAFFIC CONTROL AND PROTECTION, STANDARD 701400 (SPECIAL).

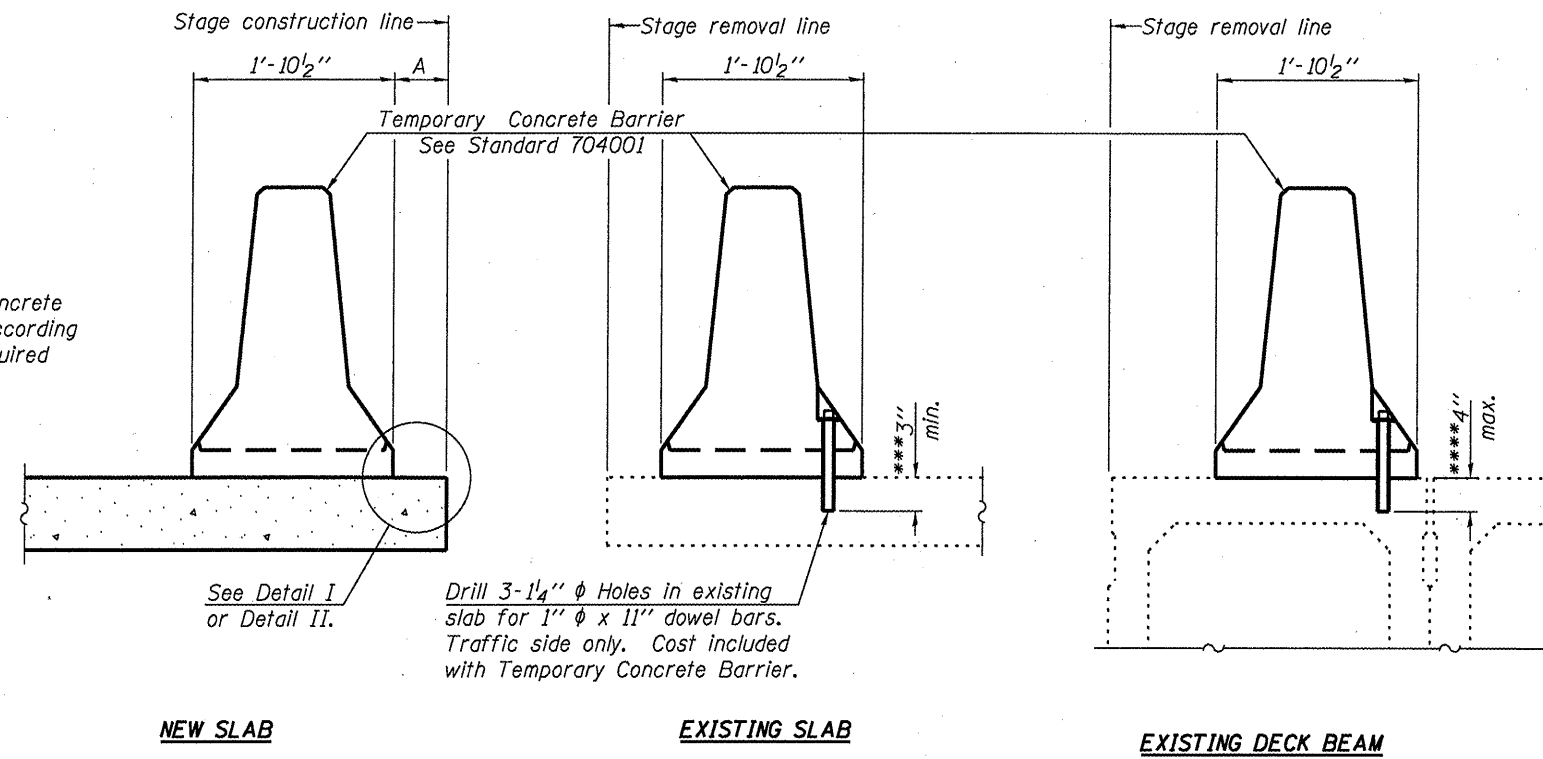
FLAGGERS AND FLAGGER SIGNS SHALL BE REQUIRED WHENEVER THE TEMPORARY CONCRETE BARRIER IS NOT IN PLACE. FLAGGERS SHALL BE REQUIRED AT EACH PATCHING OPERATION.

TEMPORARY CONCRETE BARRIER SHALL BE ACCORDING TO THE "TEMPORARY CONCRETE BARRIER, FOR STAGE CONSTRUCTION", DETAILS AND TRAFFIC CONTROL AND PROTECTION STANDARD 704001.

WORK ZONE SPEED LIMITS SIGNS SHALL REMAIN IN PLACE AND UNCOVERED FOR THE LENGTH OF THE PROJECT.

FILE NAME =	USER NAME = carpenterdj	DESIGNED - RLW	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TRAFFIC CONTROL AND PROTECTION STANDARD 701402 (SPECIAL) - STAGE II	F.A.I. RTE.:	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
ci:\pw\work\pilot\carpenterdj\d0295082\366C08-sh1-detailed.dgn	366C08-sh1-detailed.dgn	DRAWN - RLW	REVISED -			80	(32-2B)1-1	GRUNDY	27	7	
PLOT SCALE = 1/8" = 1' / in.		CHECKED -	REVISED -			CONTRACT NO. 66C08					
PLOT DATE = 4/5/2012		DATE -	REVISED -			ILLINOIS FED. AID PROJECT					

When "A" is 3'-6" or less, the temporary concrete barrier shall be anchored to the new slab according to Detail I or Detail II. No anchorage is required when "A" is greater than 3'-6".



Drill 3-1/4" ϕ Holes in existing slab for 1" ϕ x 11" dowel bars. Traffic side only. Cost included with Temporary Concrete Barrier.

NOTES

Detail I - With Bar Splicer or Couplers:
Connect one (1) 1" x 7" x "W" steel \bar{P} to the top layer of couplers with 2-5/8" ϕ bolts screwed to coupler at approximate \bar{C} of each barrier panel.

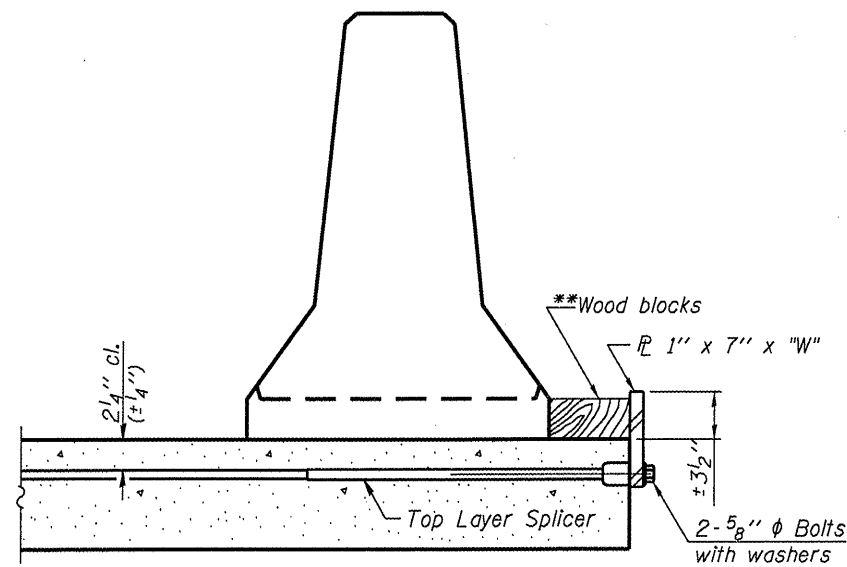
Detail II - With Extended Reinforcement Bars:
Connect one (1) 1" x 7" x "W" steel \bar{P} to the concrete slab or concrete wearing surface with 2-5/8" ϕ Expansion Anchors or cast in place inserts spaced between the top layer of reinforcement at approximate \bar{C} of each barrier panel.

Cost of anchorage is included with Temporary Concrete Barrier. The 1" x 7" x "W" plate shall not be removed until stage II construction forms and all reinforcement bars are in place and the concrete is ready to be placed.

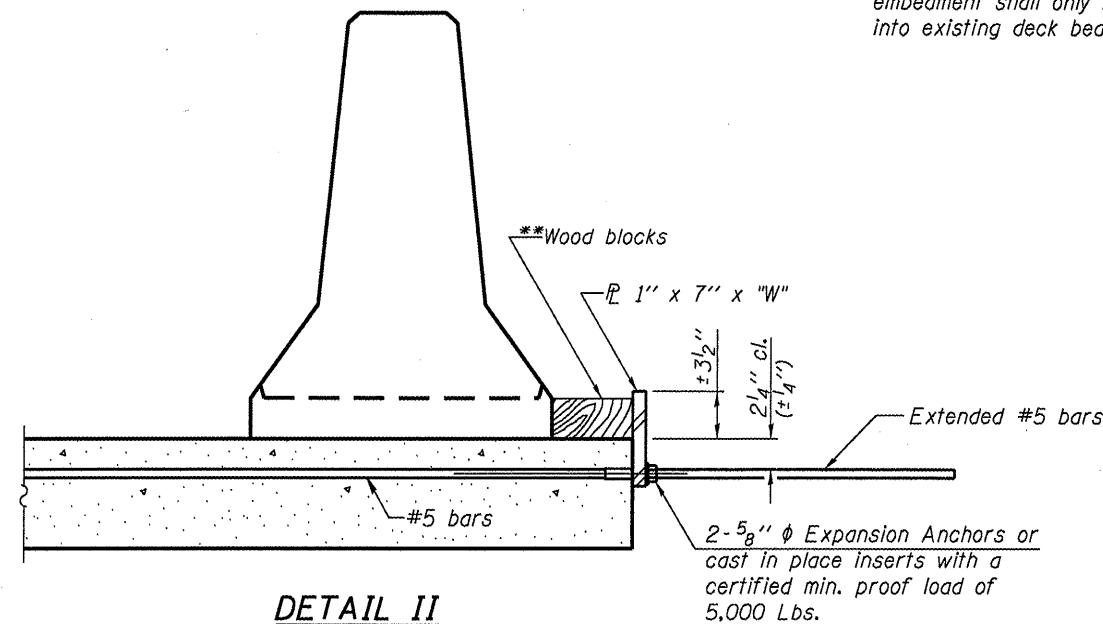
SECTIONS THRU SLAB OR DECK BEAM

*** Dimension shown is minimum required embedment into concrete. If hot-mix asphalt wearing surface is present, minimum embedment shall be in addition to wearing surface depth.

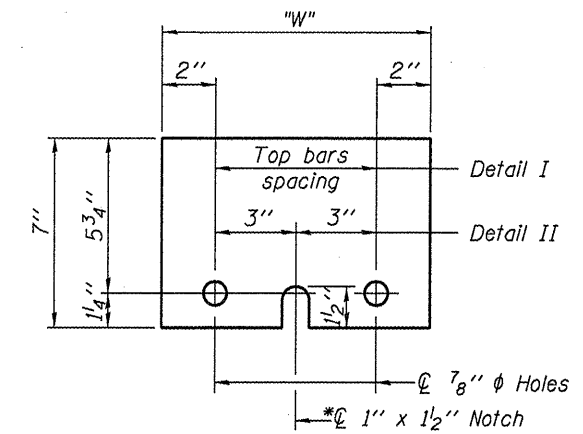
**** If existing deck beam is to remain in place after stage construction, embedment shall only be into wearing surface and not into existing deck beam concrete.



DETAIL I



DETAIL II



STEEL RETAINER \bar{P} 1" x 7" x "W"

* Required only with Detail II

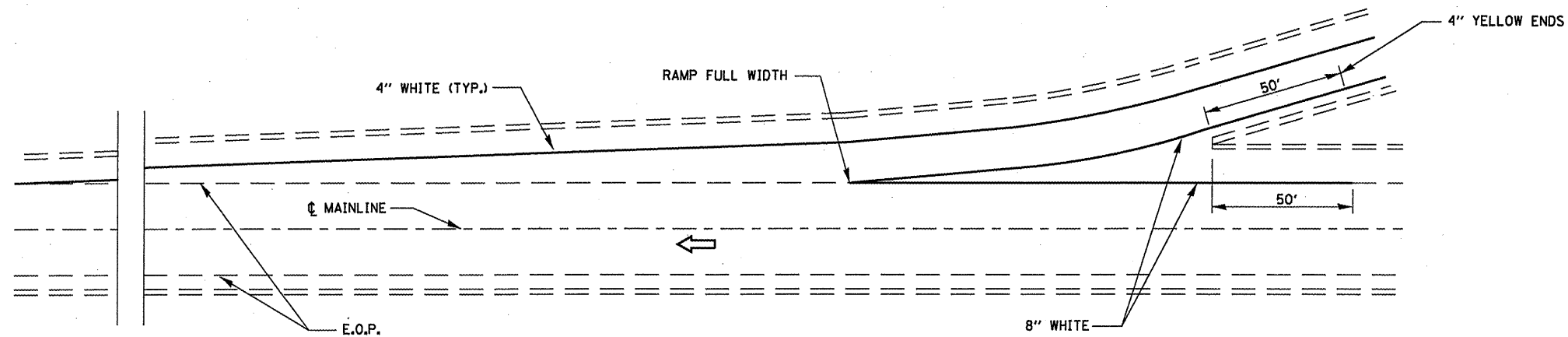
** Wood blocks may be omitted when required to provide minimum stage traffic lane width. When the wood blocks are omitted, the concrete barrier shall be in direct contact with the steel retainer plate.

"W" = Top bars spacing + 4"

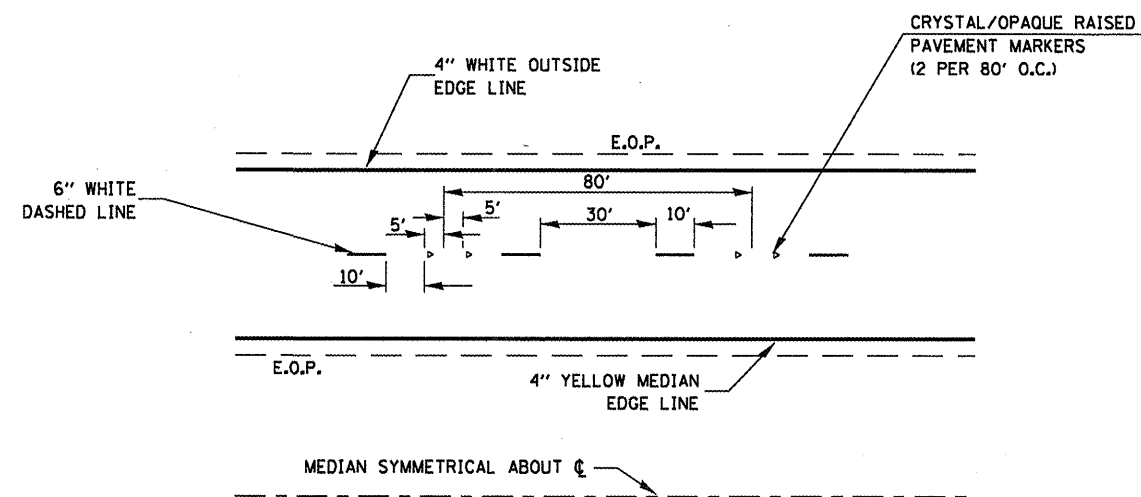
R-27

7-1-10

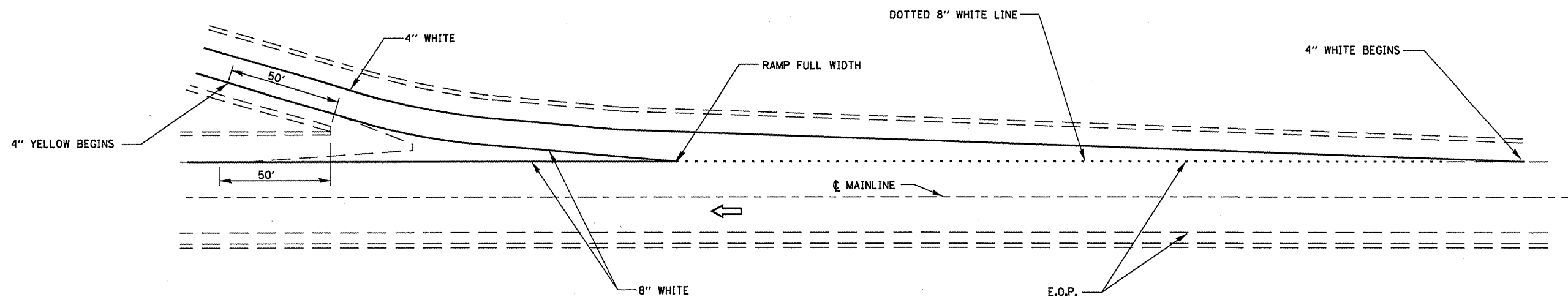
FILE NAME =	USER NAME = carpenterd	DESIGNED - RLW	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ci:\pw\work\p\ridot\carpenterd\0295882\0368C08-sht-details.dgn	DRAWN - RLW	REVISED -	80			(32-2B1)-1	GRUNDY	27	8	
PLOT SCALE = 100:0 1" / 10'	CHECKED -	REVISED -	CONTRACT NO. 66C08							
PLOT DATE = 4/5/2012	DATE -	REVISED -	ILLINOIS FED. AID PROJECT							
					SCALE:	SHEET 1 OF 1 SHEETS STA.		TO STA.		



TYPICAL PAVEMENT MARKING FOR ENTRANCE RAMP TERMINALS

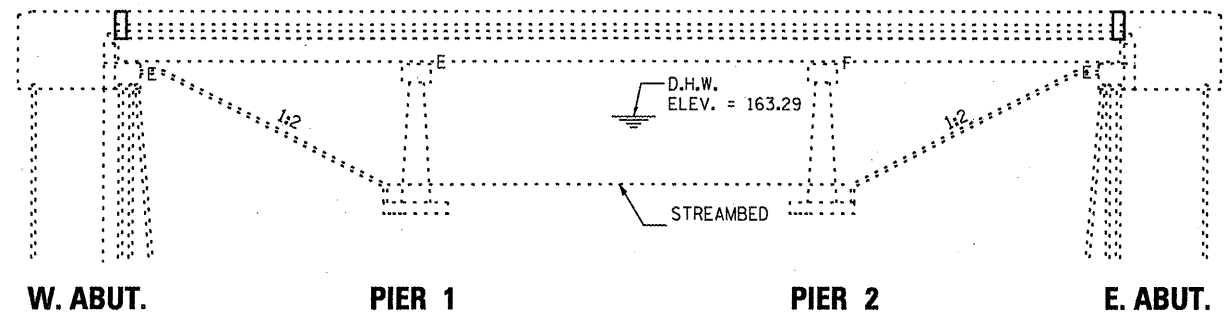


TYPICAL PAVEMENT MARKINGS

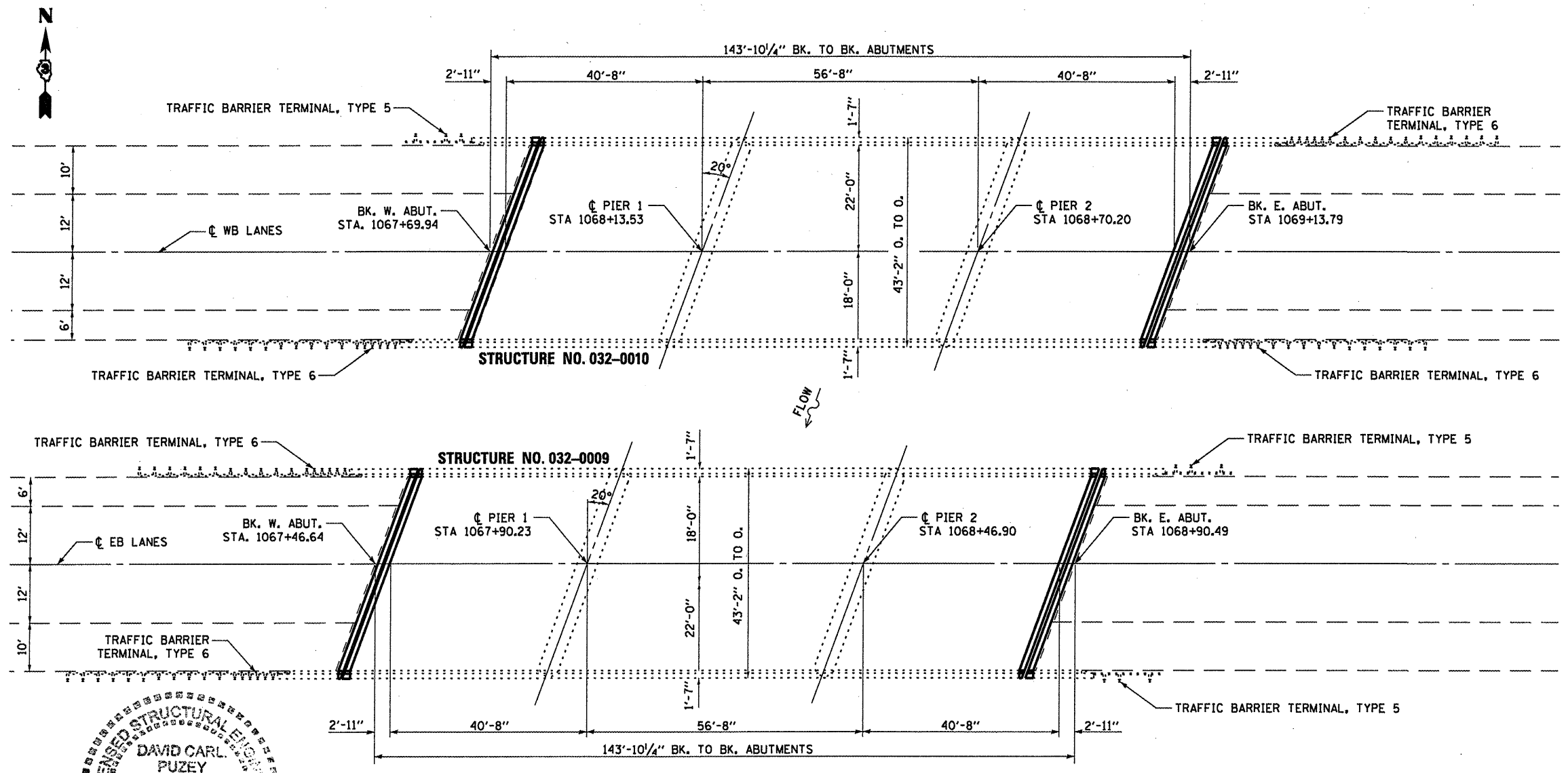


TYPICAL PAVEMENT MARKINGS FOR EXIT RAMP TERMINALS

FILE NAME =	USER NAME = carpentardj	DESIGNED - RLW	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TYPICAL PAVEMENT MARKINGS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ci:\pw_work\pwidot\carpentardj\d0295082\3366C08-ahd-details.dgn	DRAWN - RLW	REVISED -	80			(32-2B)-1	GRUNDY	27	9	
PLOT SCALE = 100:0 '1' / in.	CHECKED -	REVISED -	CONTRACT NO. 66C08							
PLOT DATE = 4/5/2012	DATE -	REVISED -	ILLINOIS FED. AID PROJECT							
					SCALE:	SHEET 1 OF 1 SHEETS		STA.	TO STA.	



ELEVATION



PLAN

GENERAL NOTES

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

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 REPLACED WITH AN APPROVED BAR SPLICER OR ANCHORAGE SYSTEM. COST INCLUDED WITH CONCRETE REMOVAL.

THE CONTRACTOR SHALL USE EXTREME CARE DURING CONCRETE REMOVAL SO AS NOT TO DAMAGE THE PPC I-BEAM.

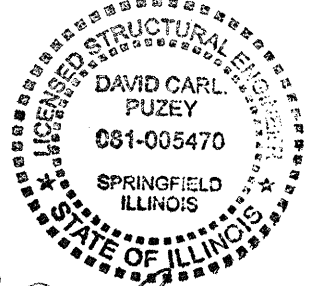
JOINT OPENING SHALL BE ADJUSTED ACCORDING TO ARTICLE 520.04 OF THE STANDARD SPECIFICATIONS WHEN THE DECK IS POURED AT AN AMBIENT TEMPERATURE OTHER THAN 50 DEGREES F.

TOTAL BILL OF MATERIALS FOR STRUCTURE NO. 032-0009 (EB)

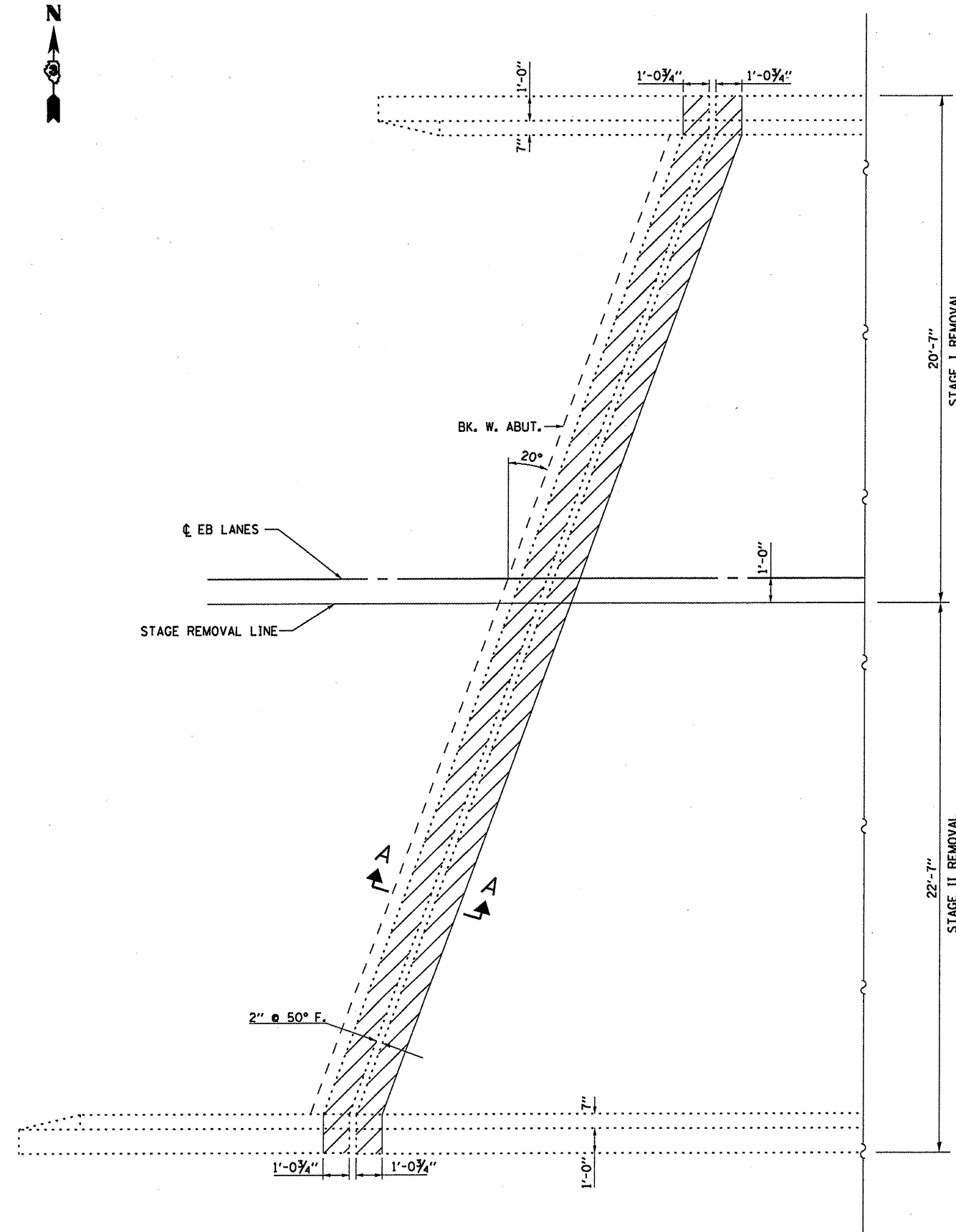
ITEM	UNIT	TOTAL
CONCRETE REMOVAL	CU YD	7.4
CONCRETE SUPERSTRUCTURE	CU YD	7.4
REINFORCEMENT BARS	POUND	1136
EPOXY COATED		
BAR SPLICERS	EACH	12
PREFORMED JOINT STRIP SEAL	FOOT	90

TOTAL BILL OF MATERIALS FOR STRUCTURE NO. 032-0010 (WB)

ITEM	UNIT	TOTAL
CONCRETE REMOVAL	CU YD	7.4
CONCRETE SUPERSTRUCTURE	CU YD	7.4
REINFORCEMENT BARS	POUND	1136
EPOXY COATED		
BAR SPLICERS	EACH	12
PREFORMED JOINT STRIP SEAL	FOOT	90

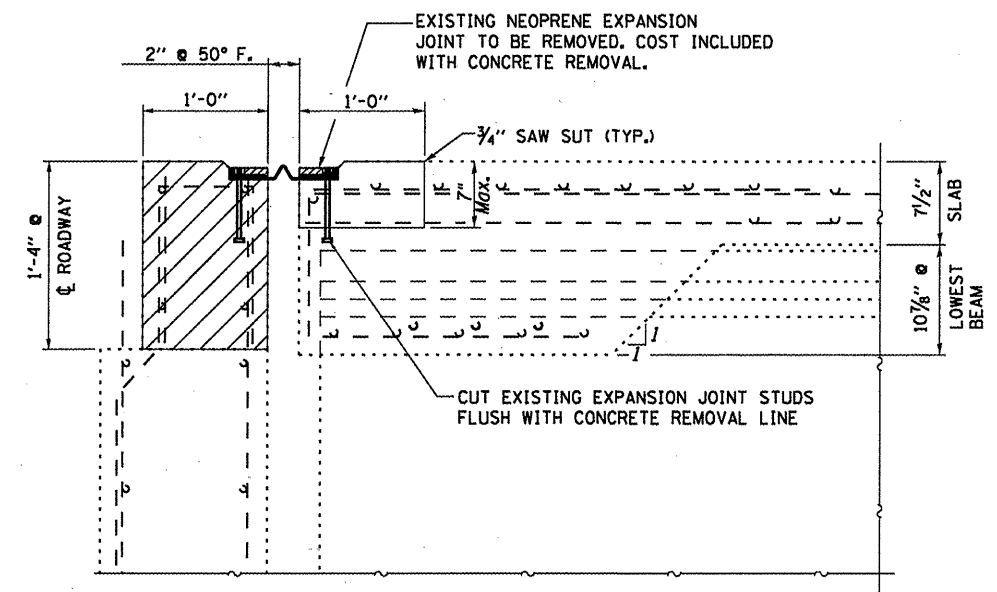


David Carl Puzey 5/3/12
Expires 11/30/12



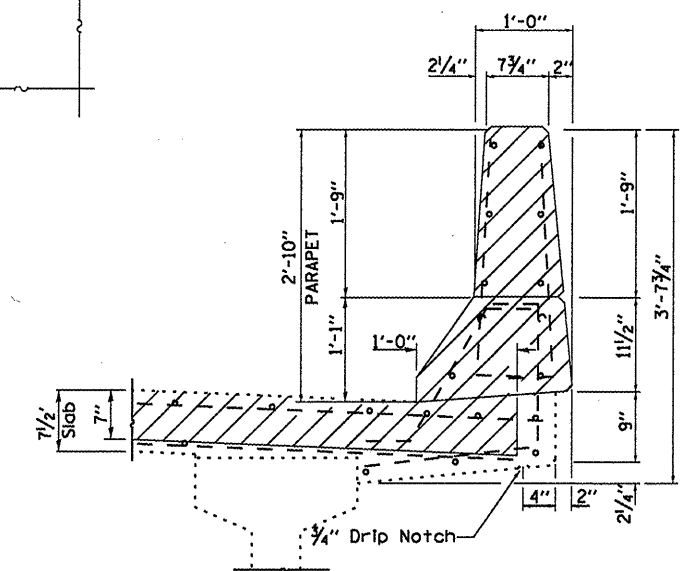
PLAN
WEST ABUTMENT SHOWN
EAST ABUTMENT SIMILAR THRU 180 ROTATION

20'-7" STAGE I REMOVAL
 22'-7" STAGE II REMOVAL

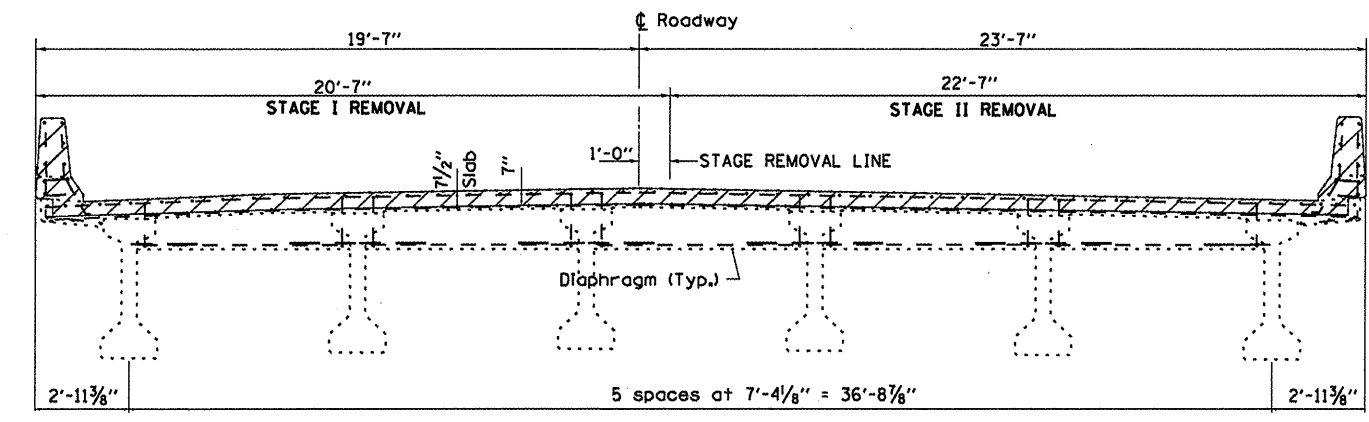


SECTION A-A
Measurements at Right L's

CONCRETE REMOVAL



SECTION THRU PARAPET (TYP.)



CROSS SECTION AT WEST ABUTMENT
LOOKING EAST

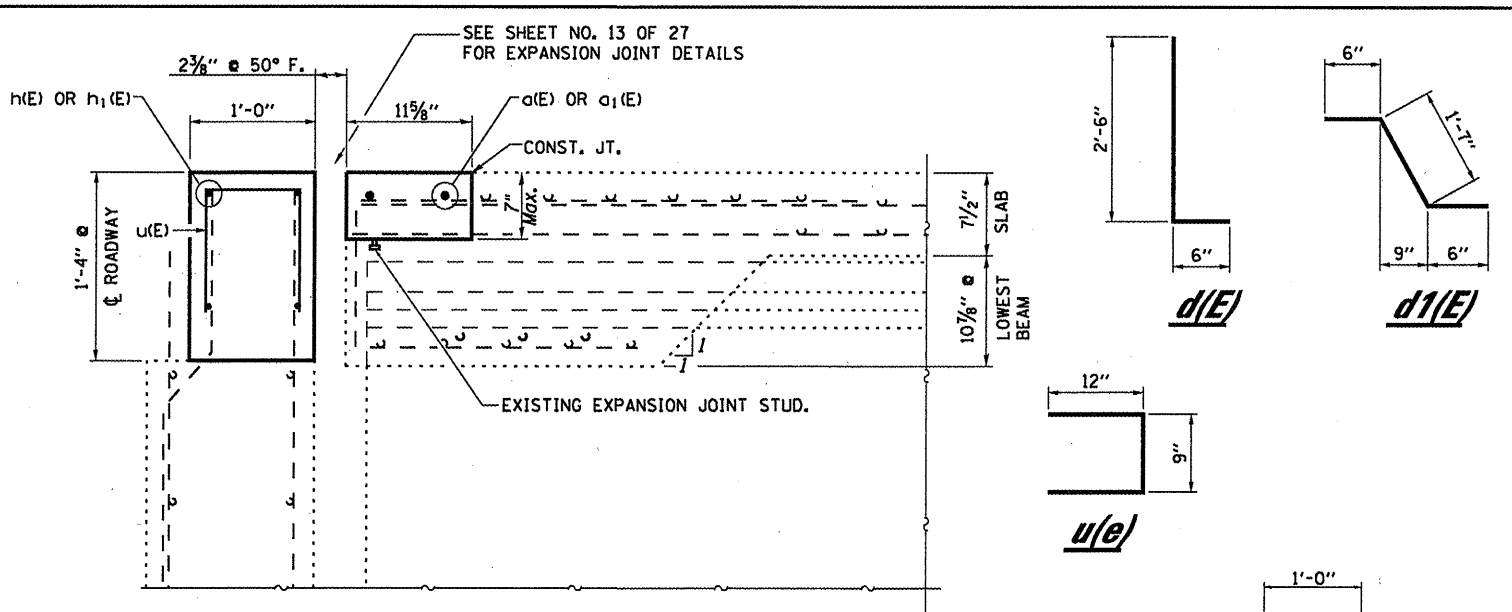
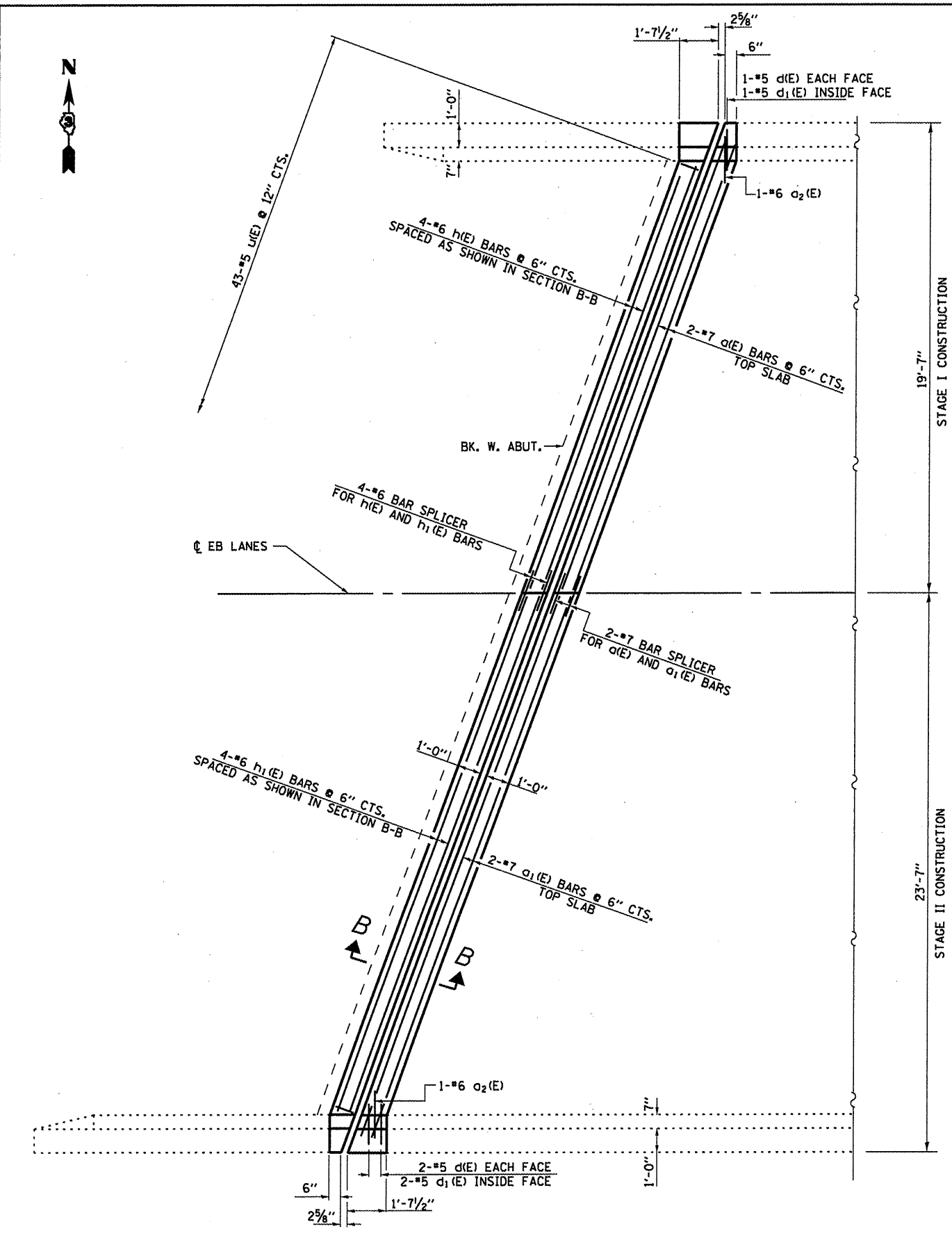
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PLOT SCALE = 1/8" = 1' / in.		CHECKED -	REVISED -
PLOT DATE = 4/5/2012		DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE REMOVAL DETAILS FOR
STRUCTURE NO. 032-0009 (EB)

SCALE: SHEET 2 OF 9 SHEETS STA. 1067+46.64 TO STA. 1068+90.49

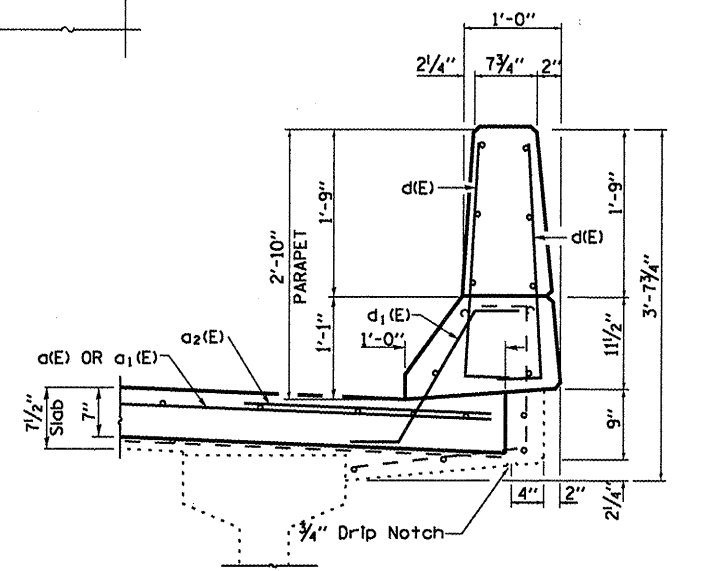
F.A.I. RTE. 80	SECTION (32-2BII-1)	COUNTY GRUNDY	TOTAL SHEETS 27	SHEET NO. 11
			CONTRACT NO. 66C08	
ILLINOIS FED. AID PROJECT				



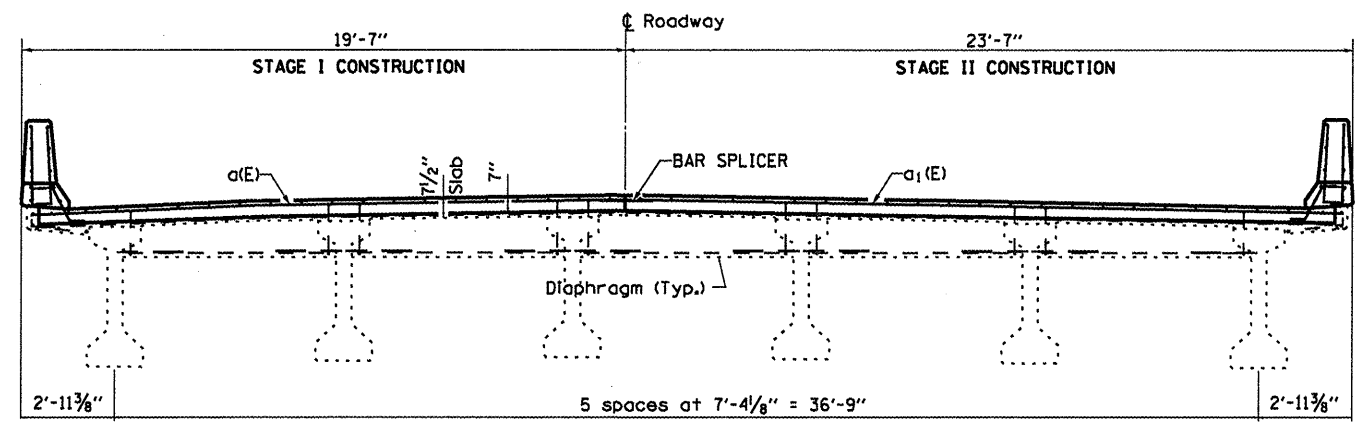
SECTION B-B
Measurements at Right L's

BILL OF MATERIAL
SN 032-0009 (E.B.)

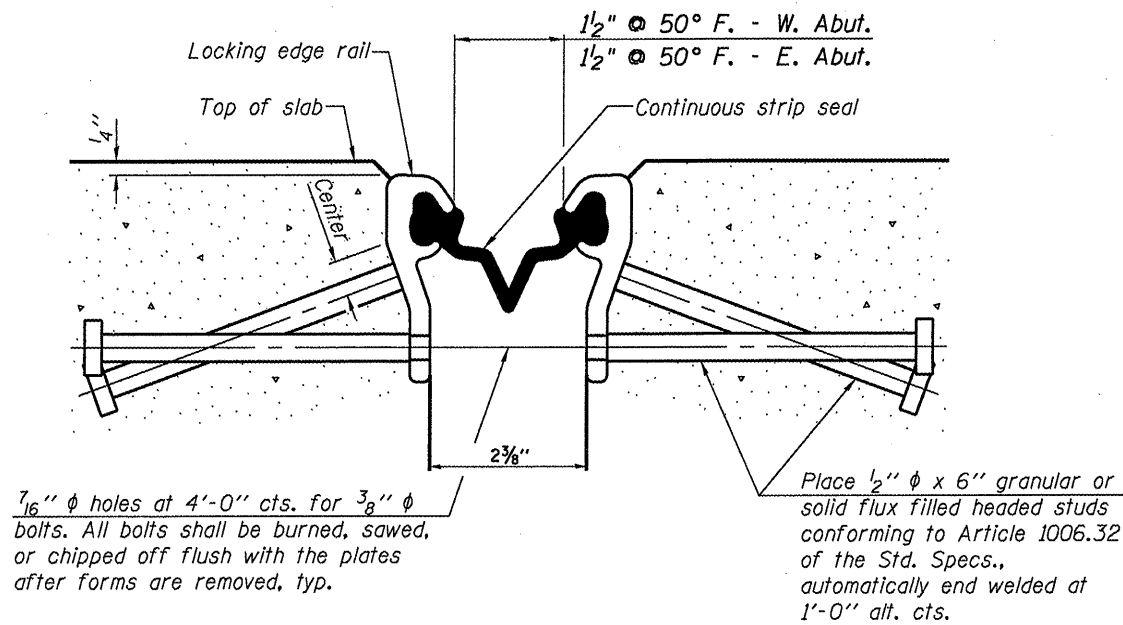
Bar	No.	Size	Length	Shape
a(E)	4	#7	19'-10"	—
a ₁ (E)	4	#7	24'-2"	—
a ₂ (E)	4	#6	4'-0"	—
d(E)	12	#5	3'-0"	┘
d ₁ (E)	6	#5	2'-7"	┘
h(E)	8	#6	18'-10"	—
h ₁ (E)	8	#6	23'-1"	—
u(E)	86	#5	2'-9"	┘
Concrete Removal			Cu. Yd.	7.4
Concrete Superstructure			Cu. Yd.	7.4
Reinforcement Bars			Lbs.	1136
Epoxy Coated				



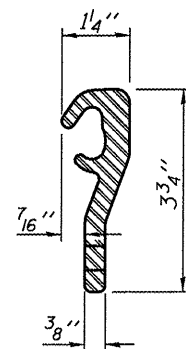
SECTION THRU PARAPET (TYP.)



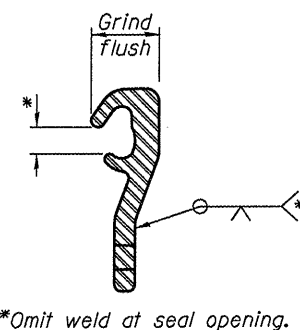
CROSS SECTION AT WEST ABUTMENT
LOOKING EAST



**SECTION THRU STRIP SEAL JOINT
FOR OVERLAY OVER DECK BEAMS**

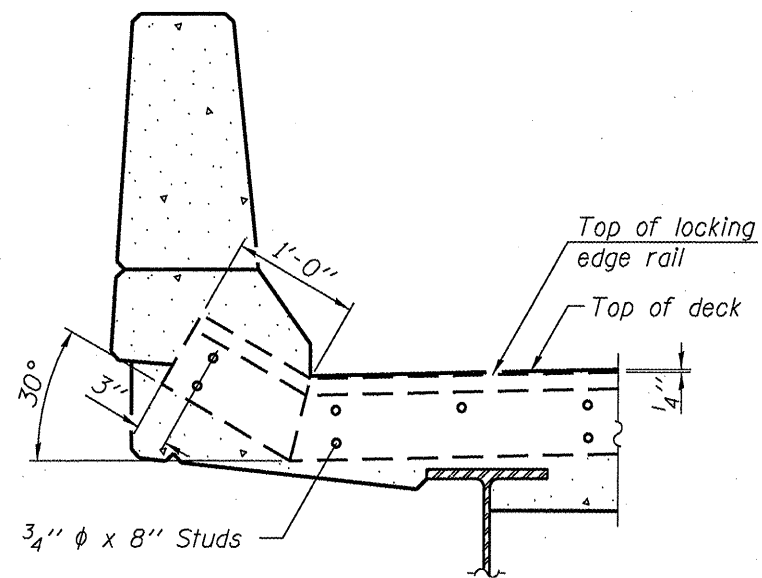


LOCKING EDGE RAIL

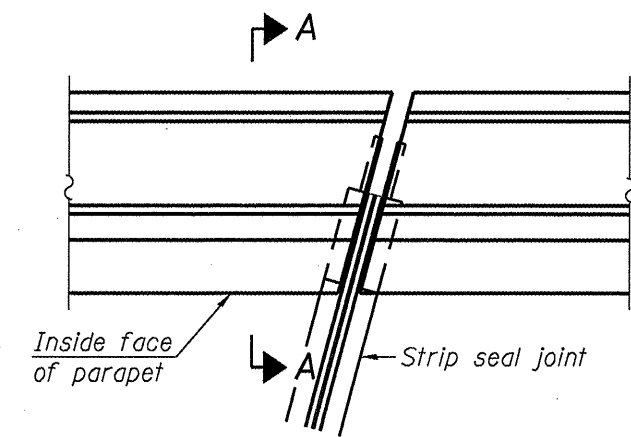


LOCKING EDGE RAIL SPLICE

STRIP SEAL EXPANSION JOINT AT WEST ABUTMENT



SECTION A-A



**PLAN
(For skews \leq 30°)**

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 conceptual only, except for the minimum dimensions shown. The actual configuration of the Locking Edge Rails and matching strip seal may vary from manufacturer to manufacturer. Flanged edge rails will not be allowed. Locking Edge Rails may be spliced at slope discontinuities.

The manufacturer's recommended installation methods shall be followed.

The joint opening and deck dimensions detailed on the superstructure are based on a rolled rail expansion joint. If the Contractor elects to use the welded rail expansion joint, the opening and deck dimensions shall be modified according to the dimensions detailed on this sheet. Required modifications shall be made at no additional cost to the State.

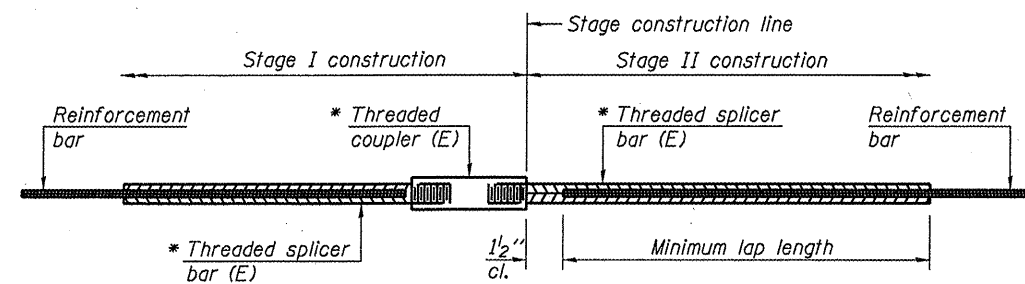
All steel components shall be galvanized after fabrication according to Article 520.03 of the Standard Specifications.

Maximum space between rail segments at stage lines shall be 3/16", sealed with a suitable sealant.

Parapet plates and anchorage studs for skews > 30° included in the cost of Preformed Joint Strip Seal.

**BILL OF MATERIAL
FOR STRUCTURE NO. 032-0009 (EB)**

Item	Unit	Total
Preformed Joint Strip Seal	Foot	90



STANDARD BAR SPLICER ASSEMBLY

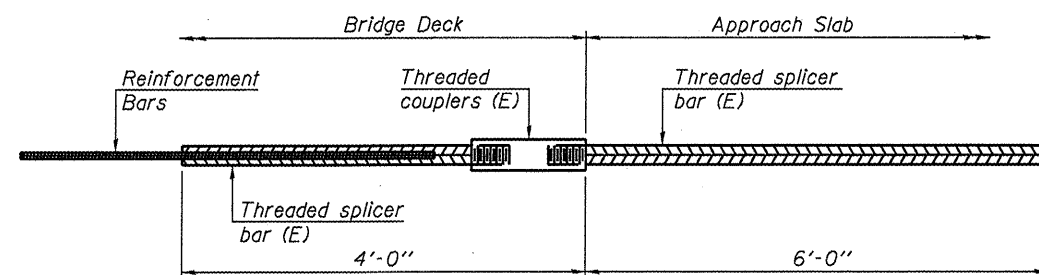
Minimum Lap Lengths					
Bar size to be spliced	Table 1	Table 2	Table 3	Table 4	Table 5
3, 4	1'-5"	1'-11"	2'-1"	2'-4"	2'-3"
5	1'-9"	2'-5"	2'-7"	2'-11"	2'-10"
6	2'-1"	2'-11"	3'-1"	3'-6"	3'-4"
7	2'-9"	3'-10"	4'-2"	4'-8"	4'-6"
8	3'-8"	5'-1"	5'-5"	6'-2"	5'-10"
9	4'-7"	6'-5"	6'-10"	7'-9"	7'-5"

- Table 1: Black bar, 0.8 Class C
- Table 2: Black bar, Top bar lap, 0.8 Class C
- Table 3: Epoxy bar, 0.8 Class C
- Table 4: Epoxy bar, Top bar lap, 0.8 Class C
- Table 5: Epoxy bar, Top bar lap, Class B

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

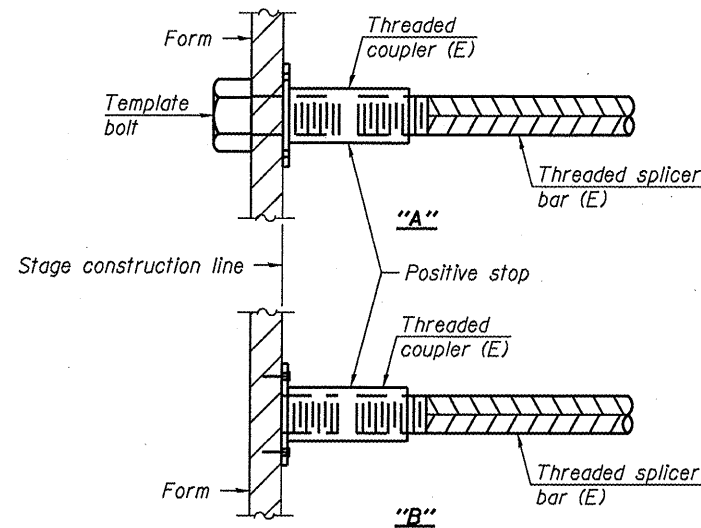
* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Table for minimum lap length
W. Abut. Deck	#7	2	Table 3
W. Abut. Hatch Block	#6	4	Table 3
E. Abut. Deck	#7	2	Table 3
E. Abut. Hatch Block	#6	4	Table 3



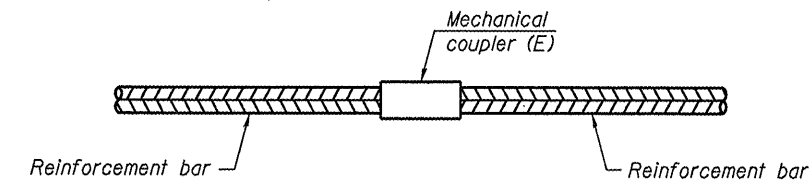
BAR SPLICER ASSEMBLY FOR #5 BAR ON INTEGRAL OR SEMI-INTEGRAL ABUTMENTS

No. required =



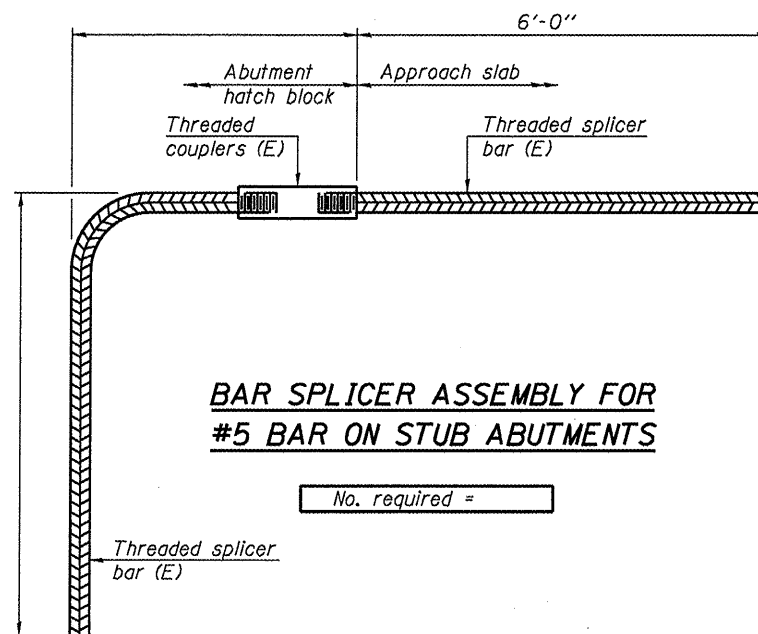
INSTALLATION AND SETTING METHODS

- "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



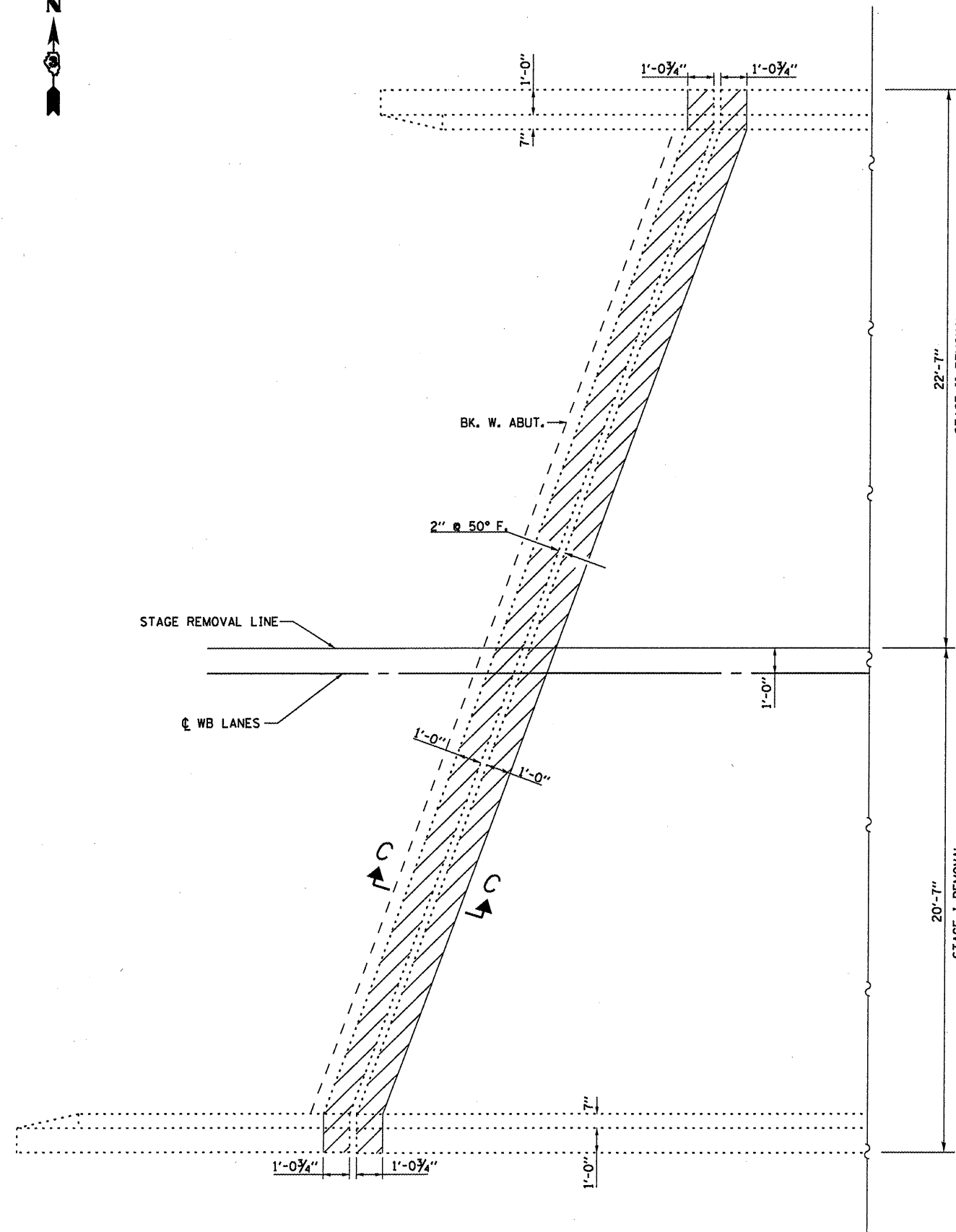
BAR SPLICER ASSEMBLY FOR #5 BAR ON STUB ABUTMENTS

No. required =

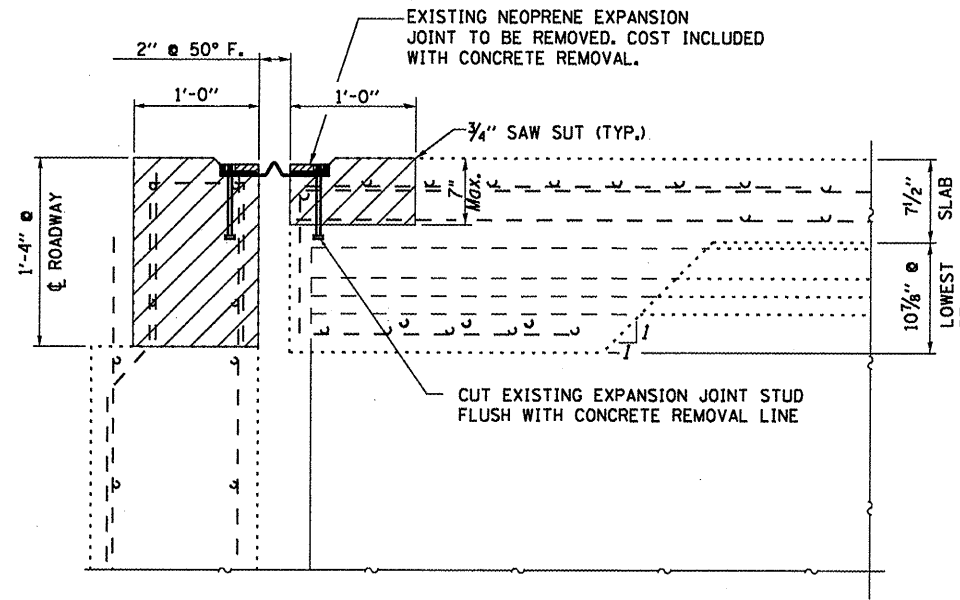
NOTES

- 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 special provision for Mechanical Splicers.
- See approved list of bar splicer assemblies and mechanical splicers for alternatives.

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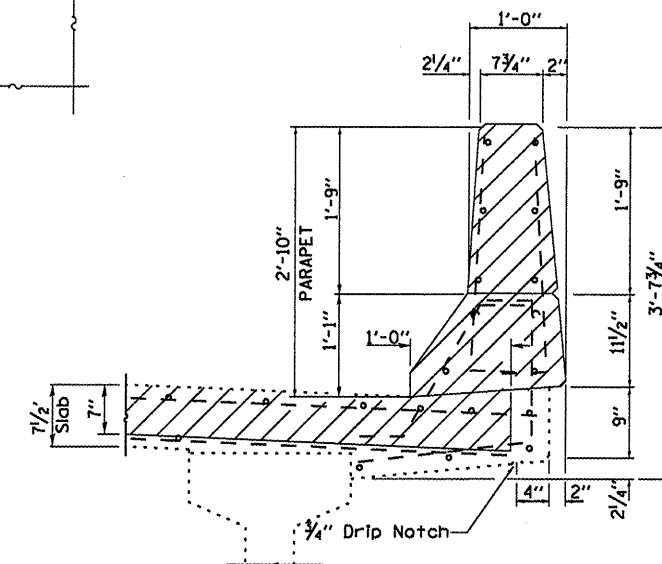


PLAN
WEST ABUTMENT SHOWN
EAST ABUTMENT SIMILAR THRU 180° ROTATION

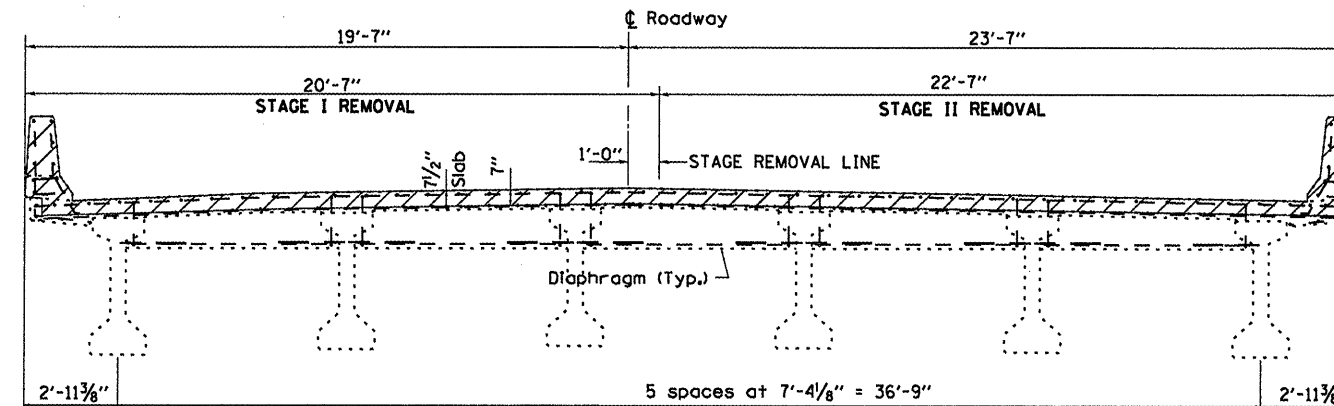


SECTION C-C
Measurements at Right L's

CONCRETE REMOVAL

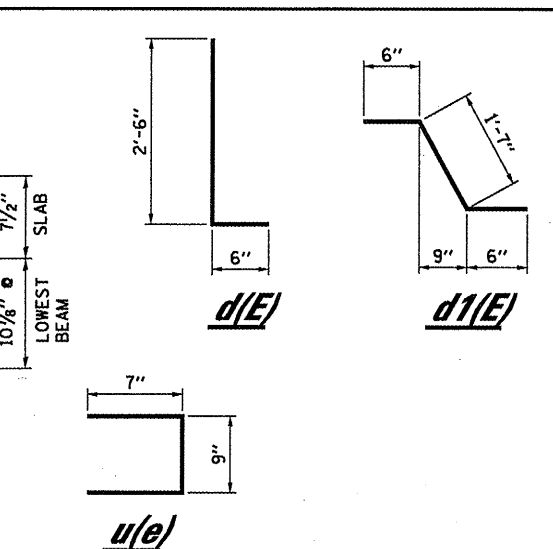
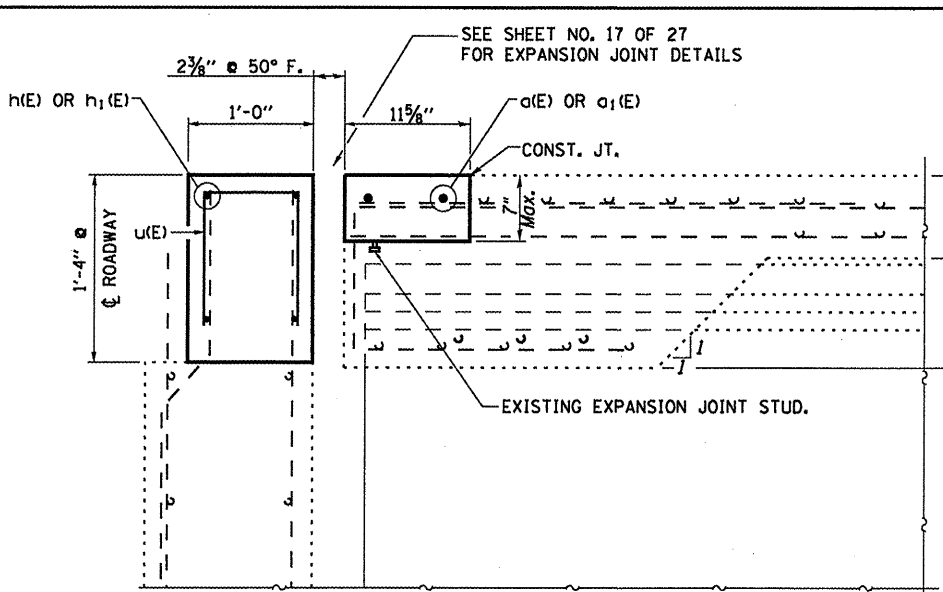
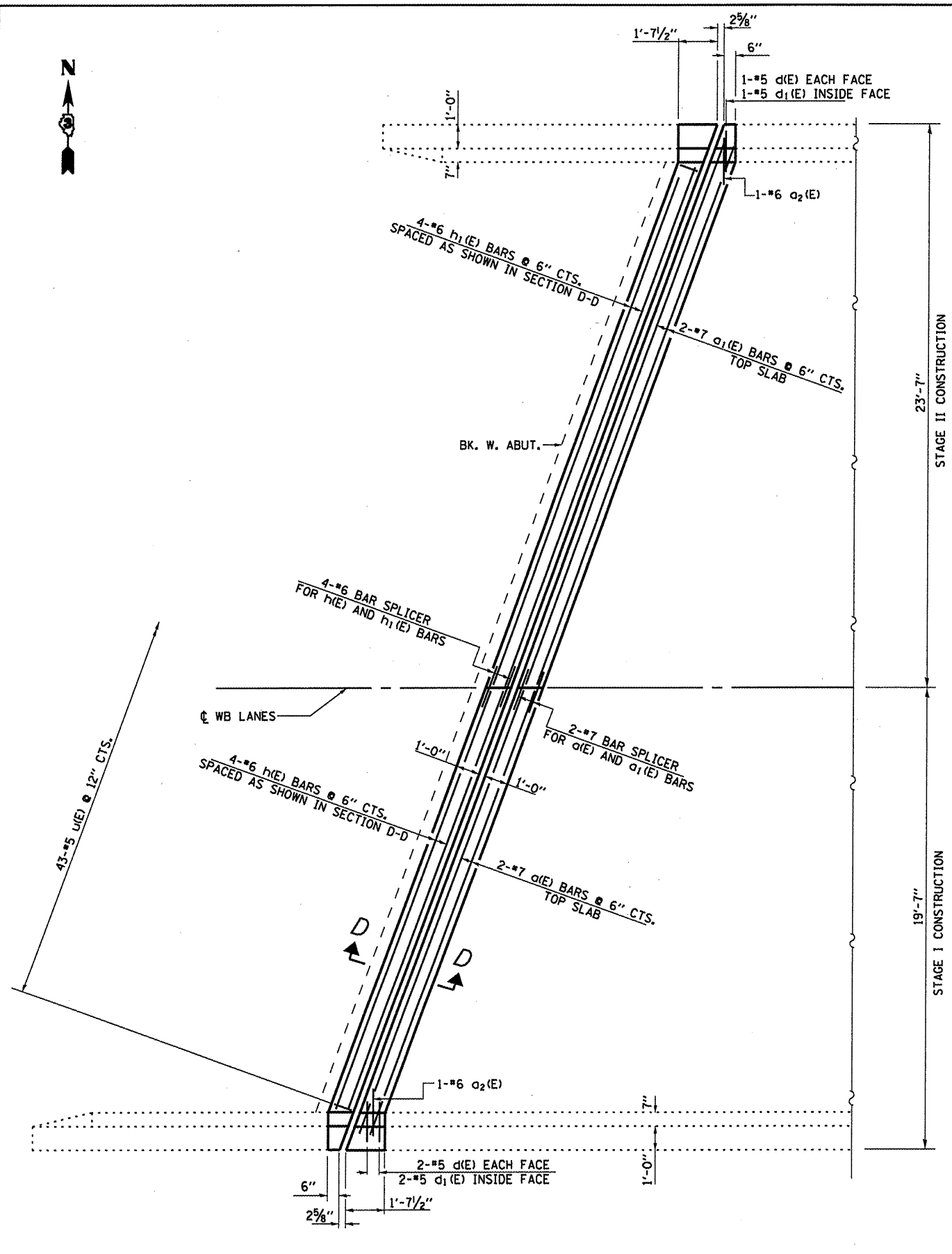


SECTION THRU PARAPET (TYP.)



CROSS SECTION AT WEST ABUTMENT
LOOKING WEST

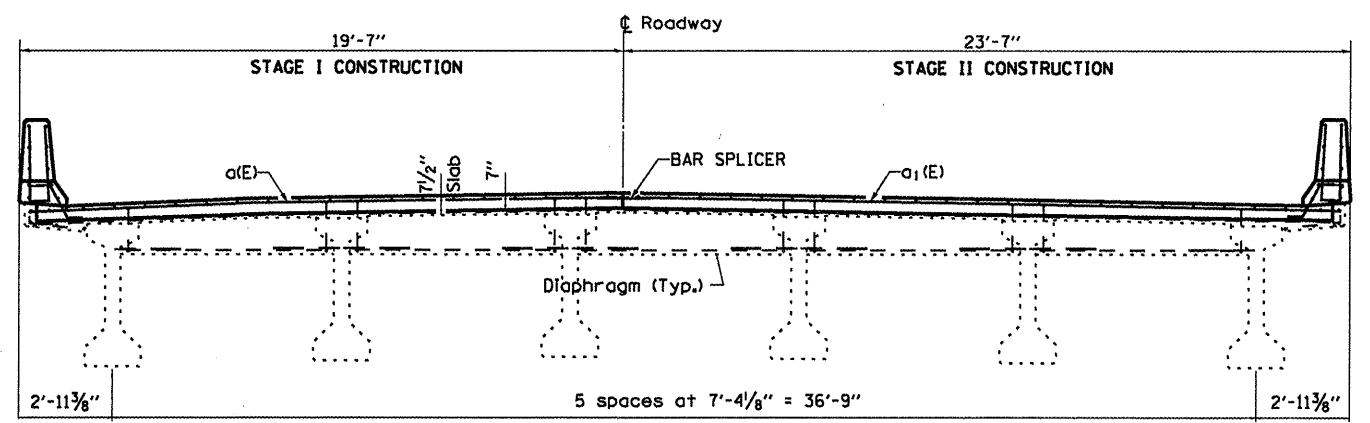
FILE NAME =	USER NAME = carpenterdj	DESIGNED - RLW	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUPERSTRUCTURE REMOVAL DETAILS FOR STRUCTURE NO. 032-0010 (WB)	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ci:\pw_work\pwidot\carpenterdj\d8295882\1366C08-sht-details.dgn	DRAWN - RLW	REVISED -	80			(32-28)I-1	GRUNDY	27	15	
PLOT SCALE = 100:0 1/4" / in.	CHECKED -	REVISED -	CONTRACT NO. 66C08							
PLOT DATE = 4/5/2012	DATE -	REVISED -	ILLINOIS FED. AID PROJECT							
					SCALE:	SHEET 6 OF 9 SHEETS		STA. 1067+69.94 TO STA. 1069+13.79		



SECTION D-D
Measurements at Right L's

BILL OF MATERIAL
SN 032-0010 (W.B.)

Bar	No.	Size	Length	Shape
a(E)	4	#7	19'-10"	—
a1(E)	4	#7	24'-2"	—
a2(E)	4	#6	4'-0"	—
d(E)	12	#5	3'-0"	┌
d1(E)	6	#5	2'-7"	└
h(E)	8	#6	18'-10"	—
h1(E)	8	#6	23'-1"	—
u(E)	86	#5	2'-9"	—
Concrete Removal		Cu. Yd.		7.4
Concrete Superstructure		Cu. Yd.		7.4
Reinforcement Bars		Lbs.		1090
Epoxy Coated				

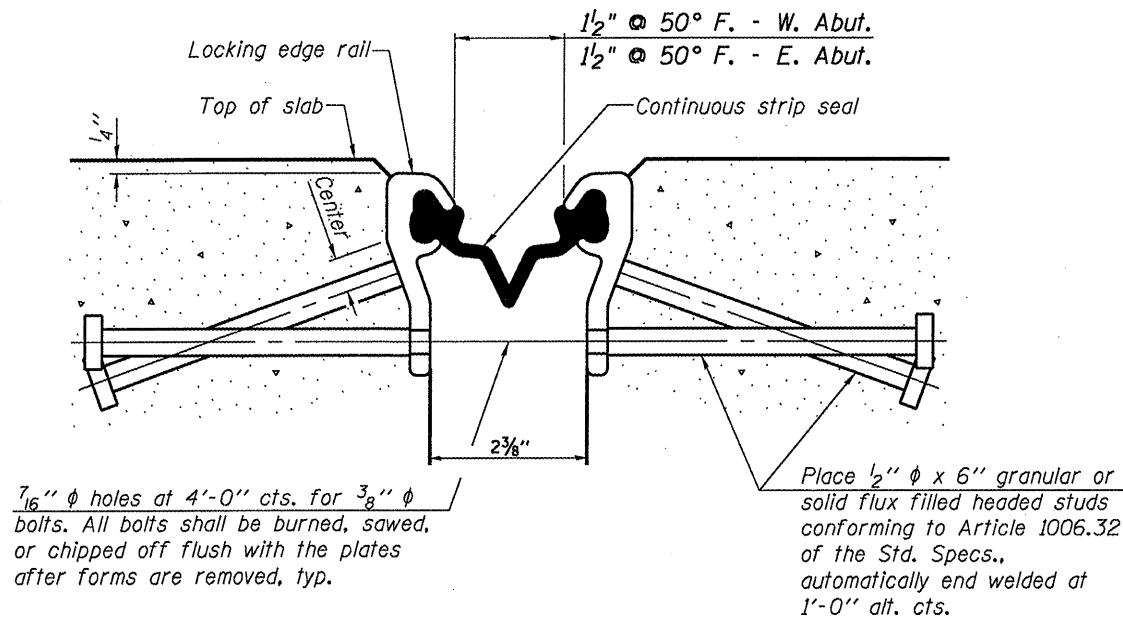


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ct:\pwork\pwidat\carpenterdj\d0295082	3366C08-sht-detail.dgn	DRAWN - RLW	REVISED -
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	PLOT DATE = 4/5/2012	DATE -	REVISED -

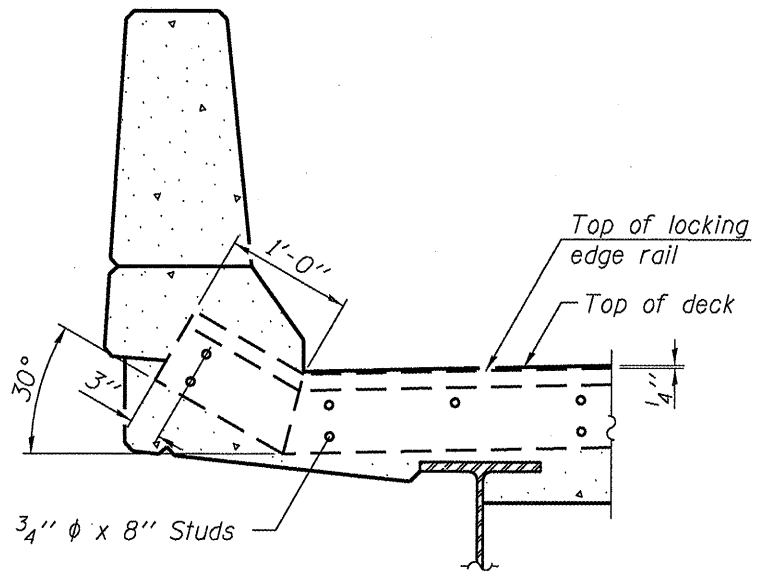
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE CONSTRUCTION DETAILS FOR
STRUCTURE NO. 032-0010 (WB)

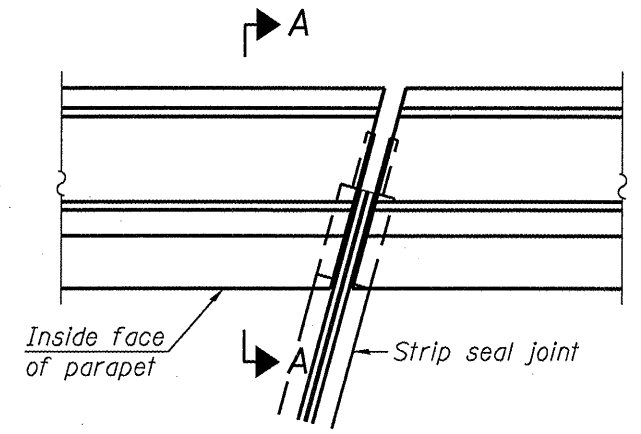
F.A.I. RTE. = 80	SECTION = (32-2B)1-1	COUNTY = GRUNDY	TOTAL SHEETS = 27	SHEET NO. = 16
SCALE: SHEET 7 OF 9 SHEETS STA. 1067+69.94 TO STA. 1069+13.79			CONTRACT NO. 66C08	
ILLINOIS FED. AID PROJECT				



**SECTION THRU STRIP SEAL JOINT
FOR OVERLAY OVER DECK BEAMS**

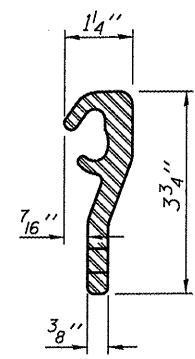


SECTION A-A

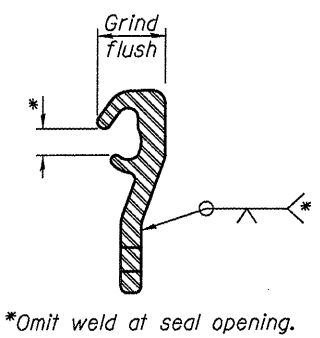


**PLAN
(For skews ≤ 30°)**

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 conceptual only, except for the minimum dimensions shown. The actual configuration of the Locking Edge Rails and matching strip seal may vary from manufacturer to manufacturer. Flanged edge rails will not be allowed. Locking Edge Rails may be spliced at slope discontinuities.
 The manufacturer's recommended installation methods shall be followed.
 The joint opening and deck dimensions detailed on the superstructure are based on a rolled rail expansion joint. If the Contractor elects to use the welded rail expansion joint, the opening and deck dimensions shall be modified according to the dimensions detailed on this sheet. Required modifications shall be made at no additional cost to the State.
 All steel components shall be galvanized after fabrication according to Article 520.03 of the Standard Specifications. Maximum space between rail segments at stage lines shall be 3/16", sealed with a suitable sealant.
 Parapet plates and anchorage studs for skews > 30° included in the cost of Preformed Joint Strip Seal.



LOCKING EDGE RAIL

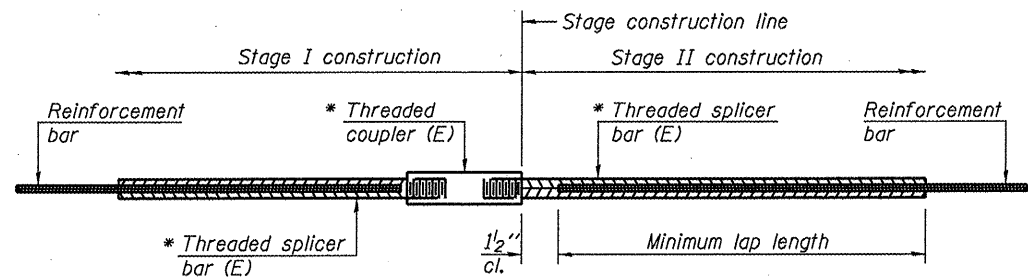


LOCKING EDGE RAIL SPLICE

STRIP SEAL EXPANSION JOINT AT WEST ABUTMENT

**BILL OF MATERIAL
FOR STRUCTURE NO. 032-0010 (WB)**

Item	Unit	Total
Preformed Joint Strip Seal	Foot	90



STANDARD BAR SPLICER ASSEMBLY

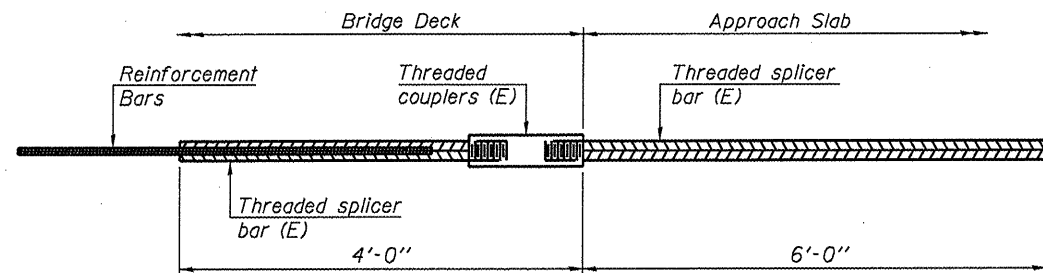
Minimum Lap Lengths					
Bar size to be spliced	Table 1	Table 2	Table 3	Table 4	Table 5
3, 4	1'-5"	1'-11"	2'-1"	2'-4"	2'-3"
5	1'-9"	2'-5"	2'-7"	2'-11"	2'-10"
6	2'-1"	2'-11"	3'-1"	3'-6"	3'-4"
7	2'-9"	3'-10"	4'-2"	4'-8"	4'-6"
8	3'-8"	5'-1"	5'-5"	6'-2"	5'-10"
9	4'-7"	6'-5"	6'-10"	7'-9"	7'-5"

- Table 1: Black bar, 0.8 Class C
- Table 2: Black bar, Top bar lap, 0.8 Class C
- Table 3: Epoxy bar, 0.8 Class C
- Table 4: Epoxy bar, Top bar lap, 0.8 Class C
- Table 5: Epoxy bar, Top bar lap, Class B

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

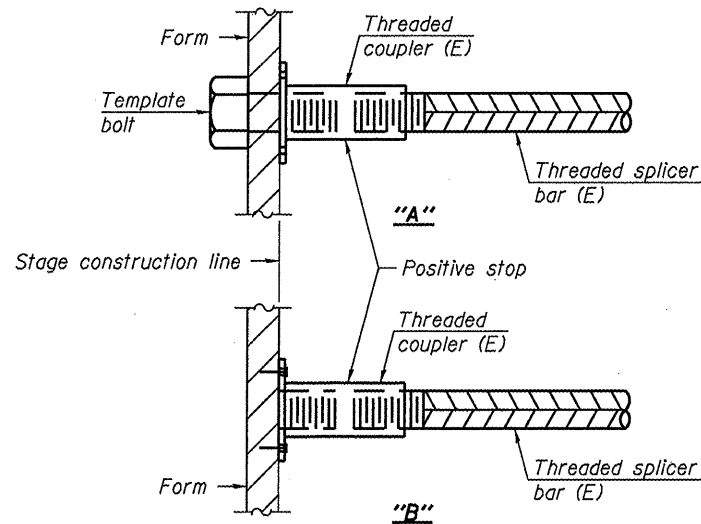
* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Table for minimum lap length
W. Abut. Deck	#7	2	Table 3
W. Abut. Hatch Block	#6	4	Table 3
E. Abut. Deck	#7	2	Table 3
E. Abut. Hatch Block	#6	4	Table 3



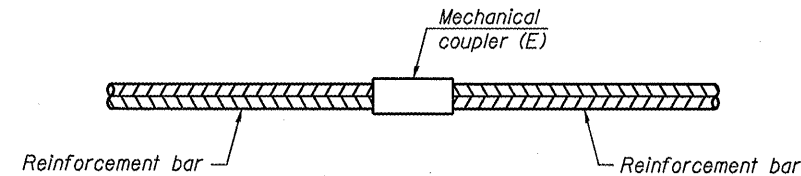
BAR SPLICER ASSEMBLY FOR #5 BAR ON INTEGRAL OR SEMI-INTEGRAL ABUTMENTS

No. required =



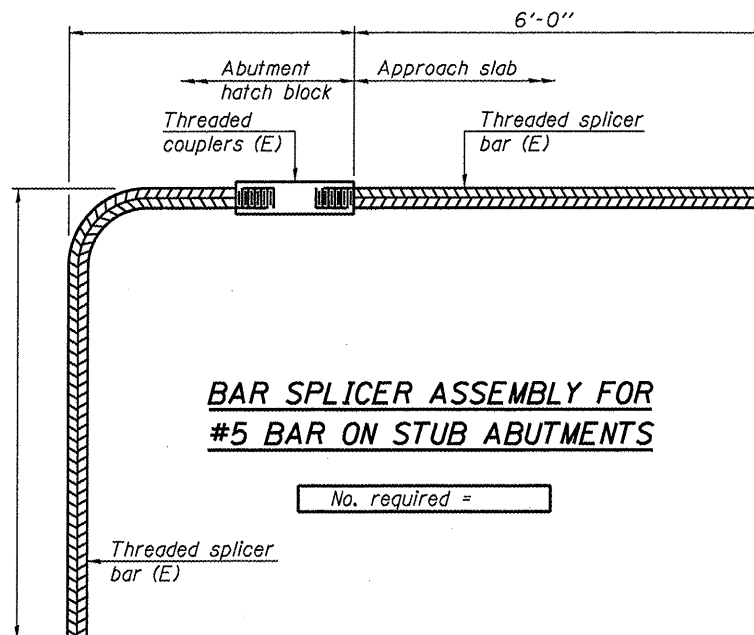
INSTALLATION AND SETTING METHODS

- "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



BAR SPLICER ASSEMBLY FOR #5 BAR ON STUB ABUTMENTS

No. 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 special provision for Mechanical Splicers.
- See approved list of bar splicer assemblies and mechanical splicers for alternatives.

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GENERAL NOTES

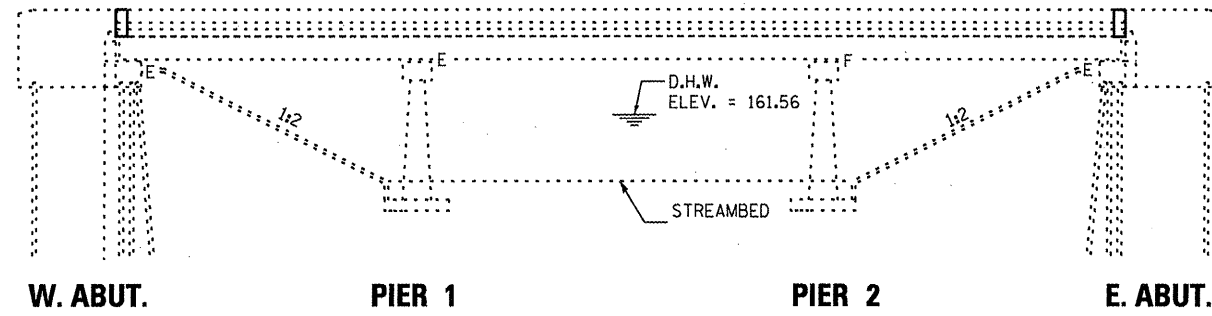
PLAN DIMENSIONS AND DETAILS RELATIVE TO EXISTING PLANS ARE SUBJECT TO NOMINAL CONSTRUCTION VARIATIONS. THE CONTRACTOR SHALL FIELD VERIFY EXISTING DIMENSIONS AND DETAILS AFFECTING NEW CONSTRUCTION AND MAKE NECESSARY APPROVED ADJUSTMENTS PRIOR TO CONSTRUCTION OR ORDERING OF MATERIALS. SUCH VARIATIONS SHALL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

REINFORCEMENT BARS DESIGNATED (E) SHALL BE EPOXY COATED.

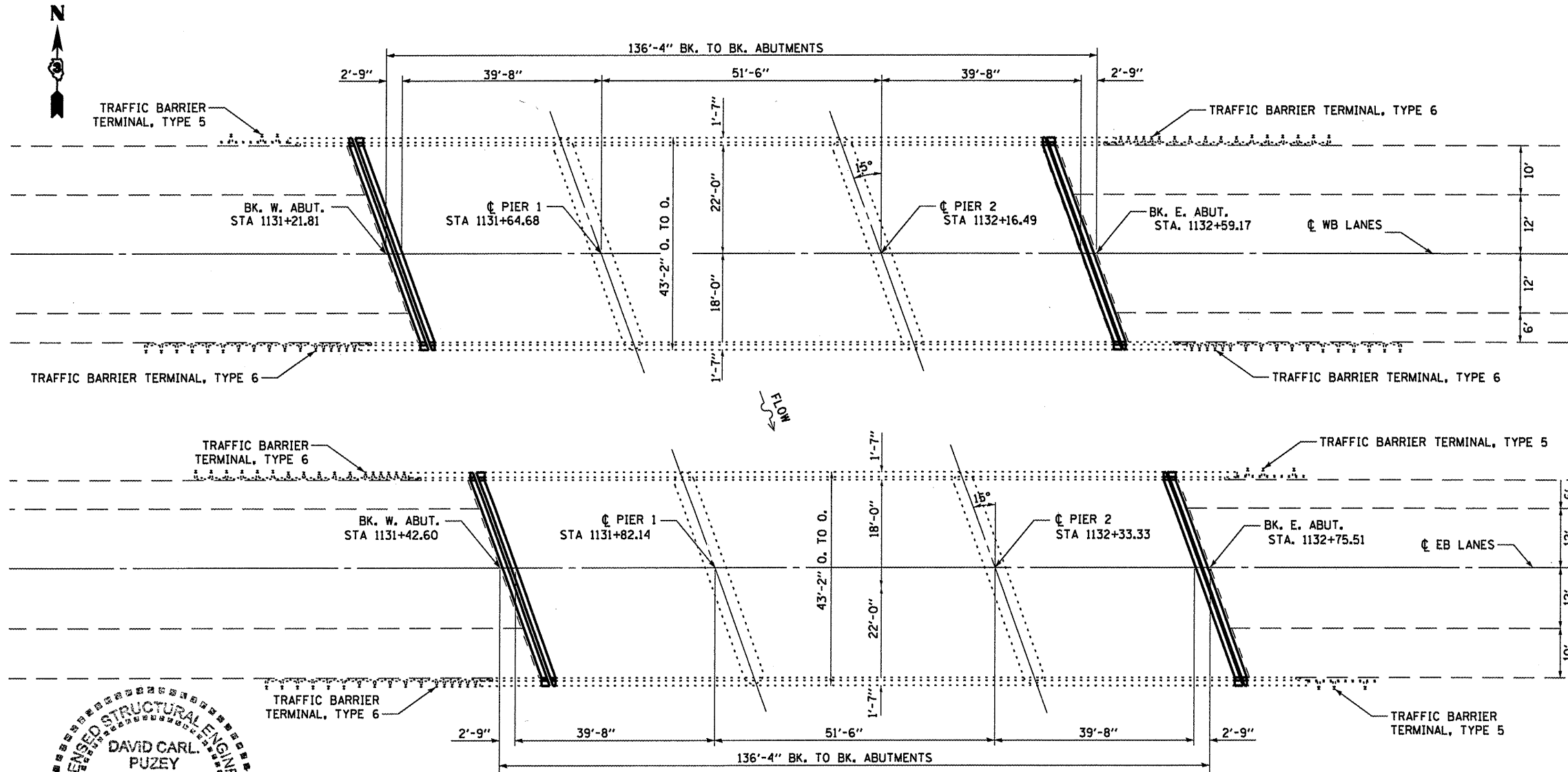
EXISTING REINFORCEMENT BARS EXTENDING INTO THE REMOVAL AREA SHALL BE CLEANED, STRAIGHTENED AND INCORPORATED INTO THE NEW CONSTRUCTION. ANY REINFORCEMENT BARS THAT ARE DAMAGED DURING CONCRETE REMOVAL SHALL BE REPLACED WITH AN APPROVED BAR SPLICER OR ANCHORAGE SYSTEM. COST INCLUDED WITH CONCRETE REMOVAL.

THE CONTRACTOR SHALL USE EXTREME CARE DURING CONCRETE REMOVAL SO AS NOT TO DAMAGE THE PPC I-BEAM.

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



ELEVATION



PLAN

TOTAL BILL OF MATERIALS FOR STRUCTURE NO. 032-0011 (EB)

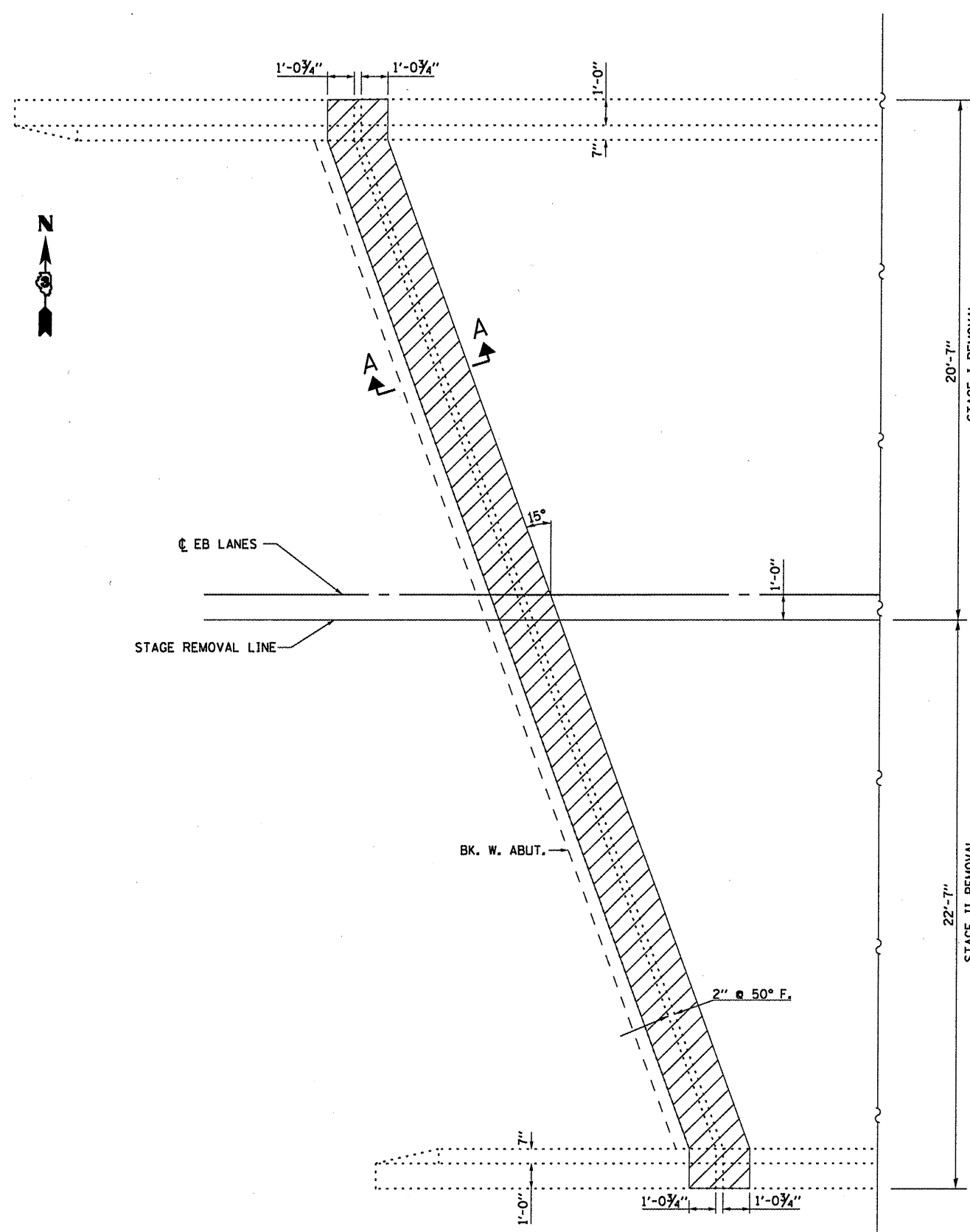
ITEM	UNIT	TOTAL
CONCRETE REMOVAL	CU YD	7.4
CONCRETE SUPERSTRUCTURE	CU YD	7.4
REINFORCEMENT BARS EPOXY COATED	POUND	1106
BAR SPLICERS	EACH	12
PERFORMED JOINT STRIP SEAL	FOOT	90

TOTAL BILL OF MATERIALS FOR STRUCTURE NO. 032-0012 (WB)

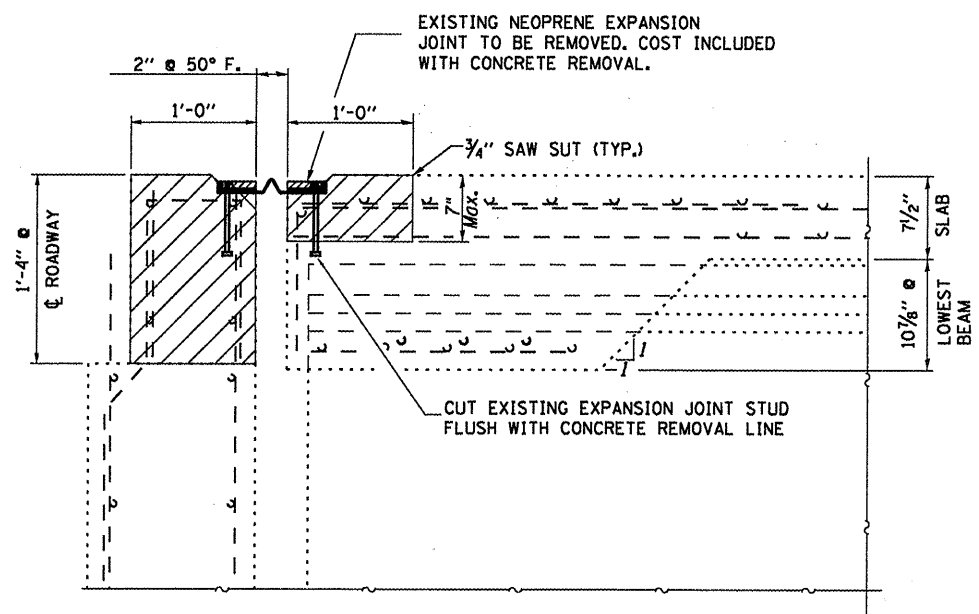
ITEM	UNIT	TOTAL
CONCRETE REMOVAL	CU YD	7.4
CONCRETE SUPERSTRUCTURE	CU YD	7.4
REINFORCEMENT BARS EPOXY COATED	POUND	1106
BAR SPLICERS	EACH	12
PERFORMED JOINT STRIP SEAL	FOOT	90



David Carl Puzey 5/3/12
Expires 1/30/12

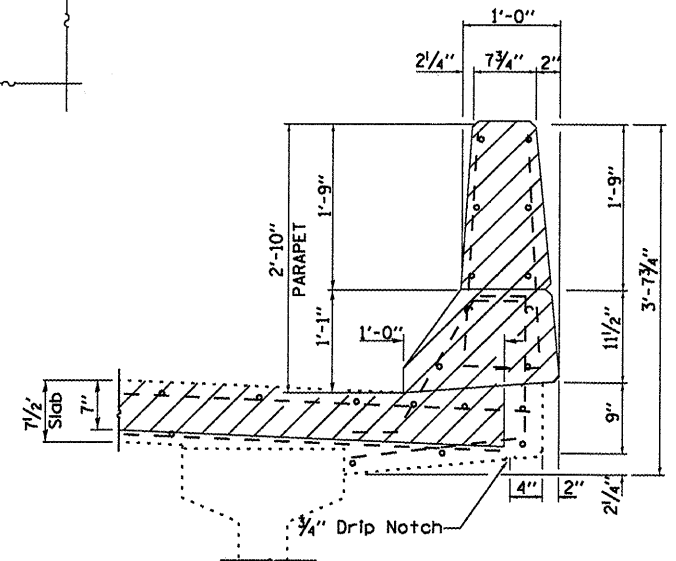


PLAN
WEST ABUTMENT SHOWN
EAST ABUTMENT SIMILAR THRU 180° ROTATION

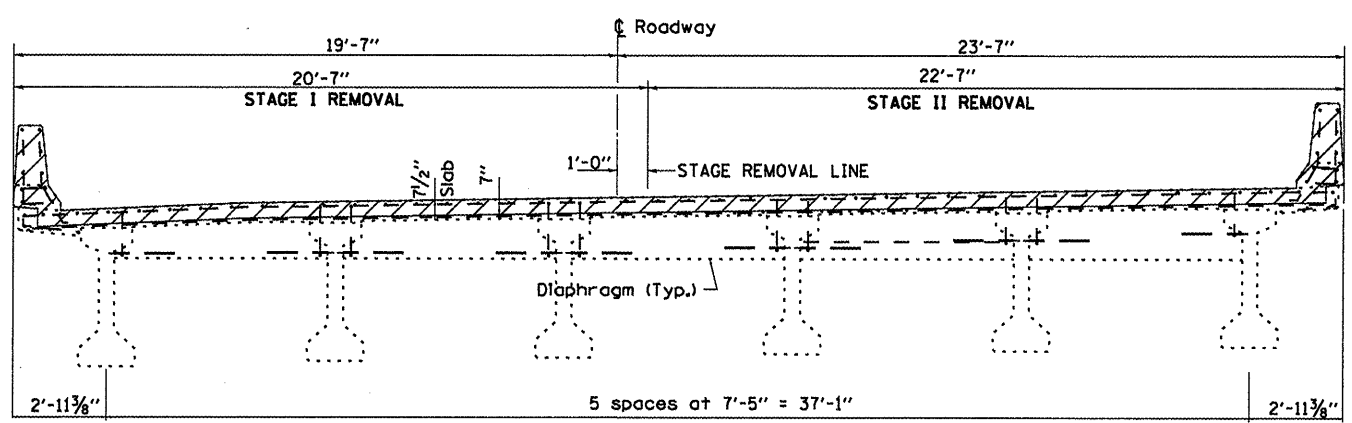


SECTION A-A
Measurements at Right L's

CONCRETE REMOVAL



SECTION THRU PARAPET (TYP.)



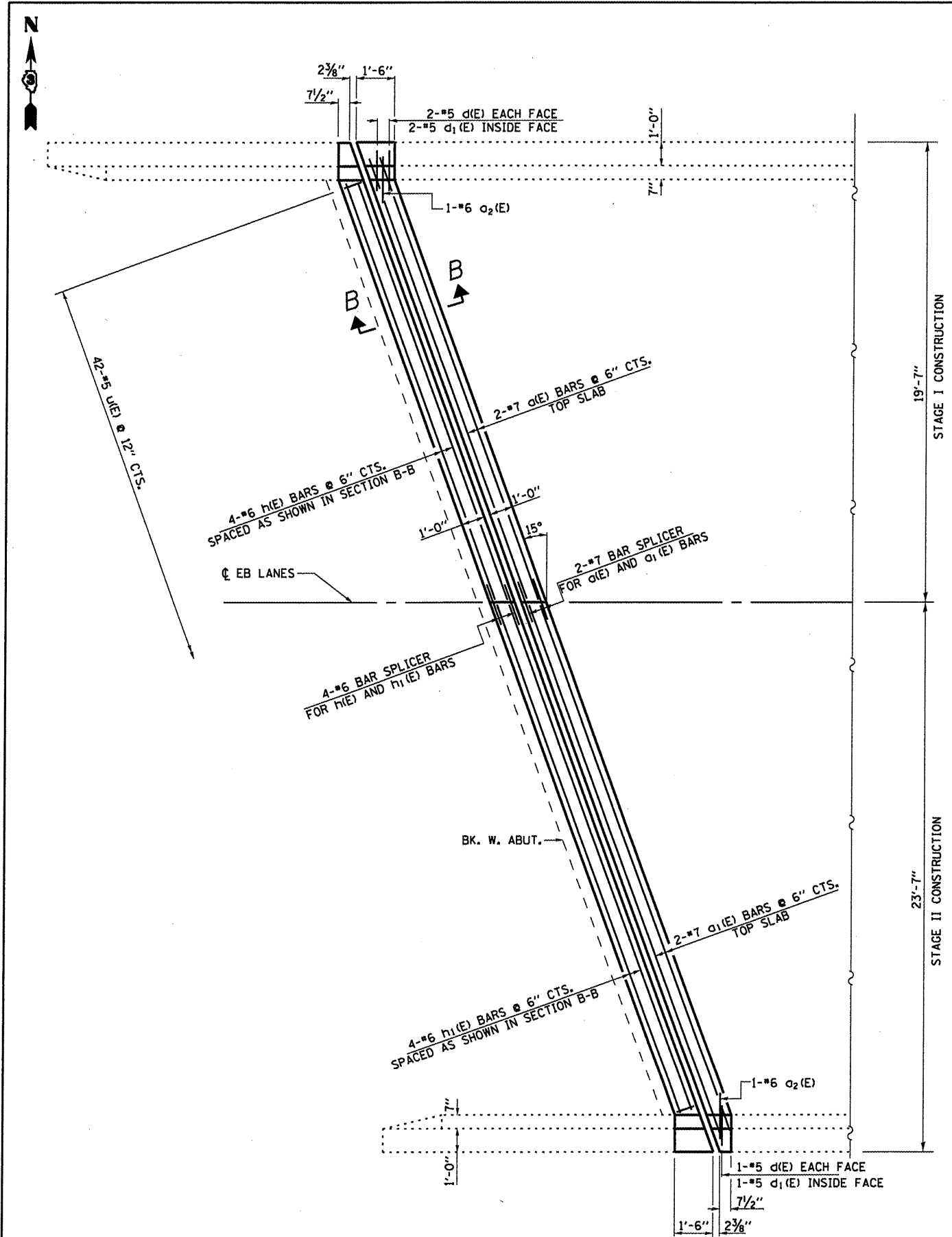
CROSS SECTION AT EXPANSION JOINT
LOOKING EAST

FILE NAME =	USER NAME = carpenterdj	DESIGNED - RLW	REVISED -
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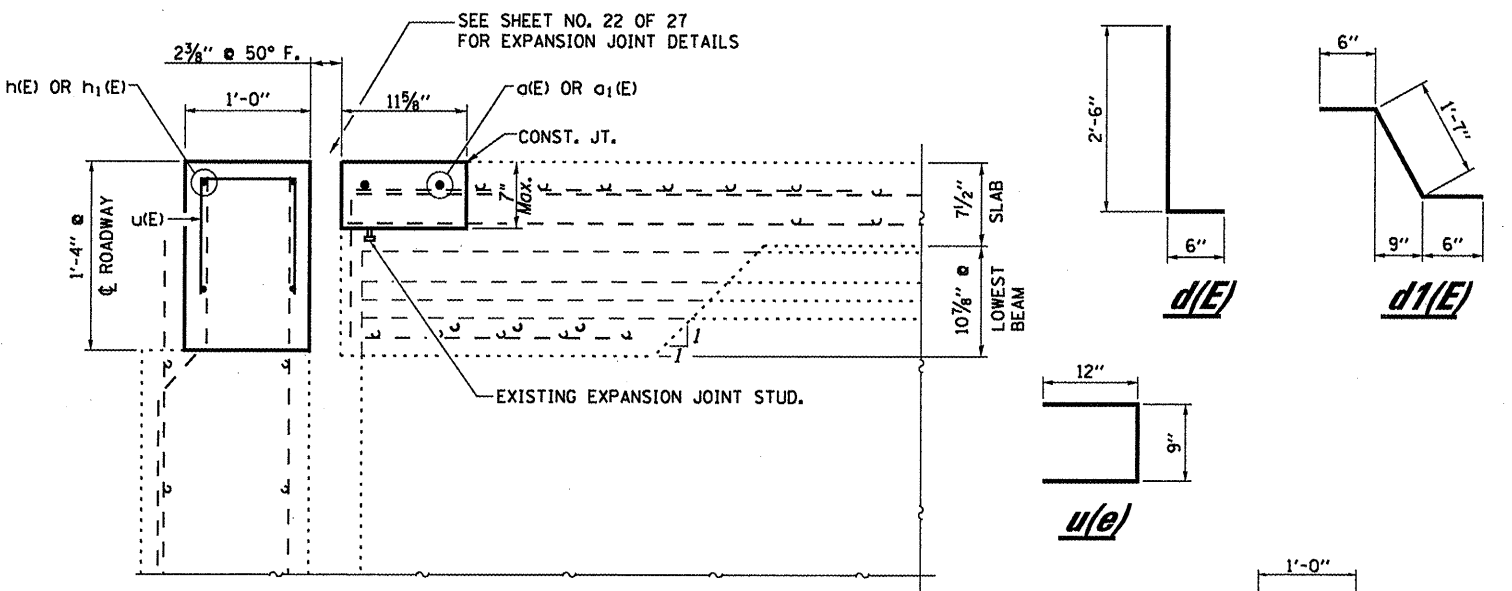
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE REMOVAL DETAILS FOR
STRUCTURE NO. 032-0011 (EB)

F.A.I. RTE. 80	SECTION 032-2B1-1	COUNTY GRUNDY	TOTAL SHEETS 27	SHEET NO. 20
SCALE: SHEET 2 OF 9 SHEETS STA. 1131+21.81 TO STA. 1132+59.17			CONTRACT NO. 66C08	
ILLINOIS FED. AID PROJECT				



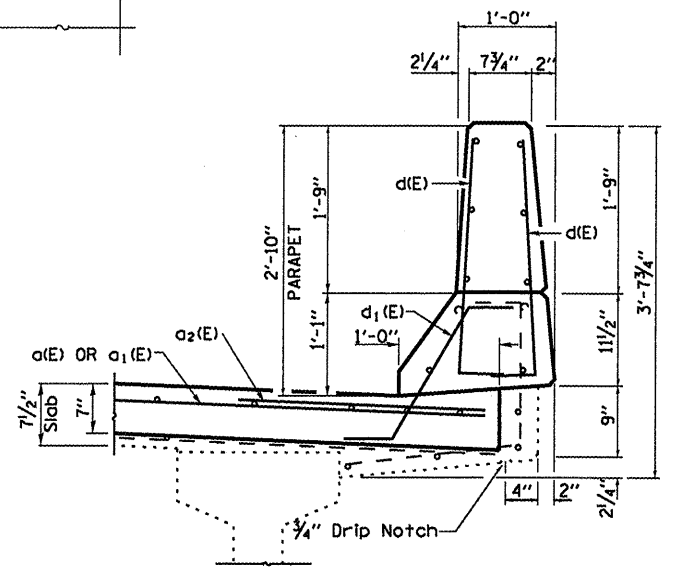
PLAN
WEST ABUTMENT SHOWN
EAST ABUTMENT SIMILAR THRU 180 ROTATION



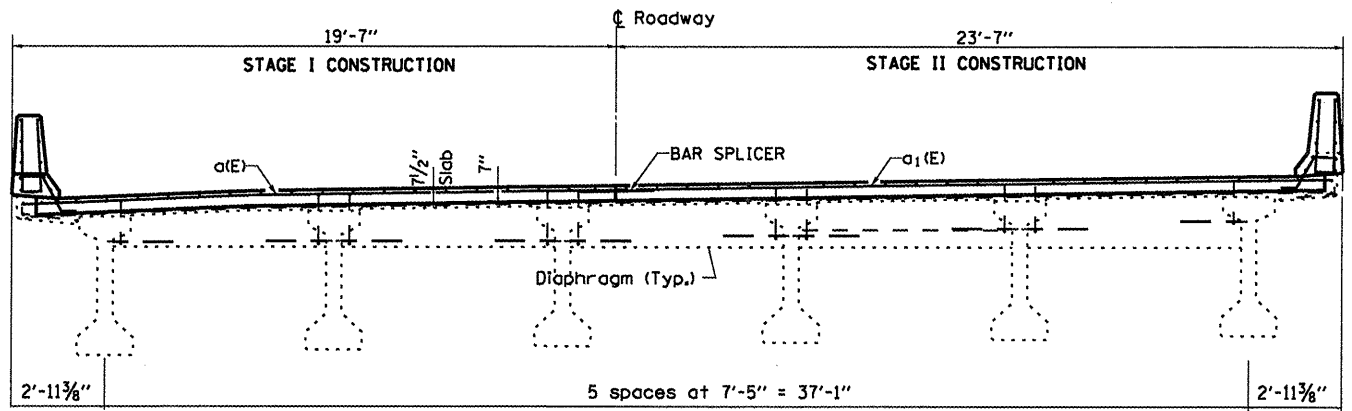
SECTION B-B
Measurements at Right L's

BILL OF MATERIAL
SN 032-0011 (E.B.)

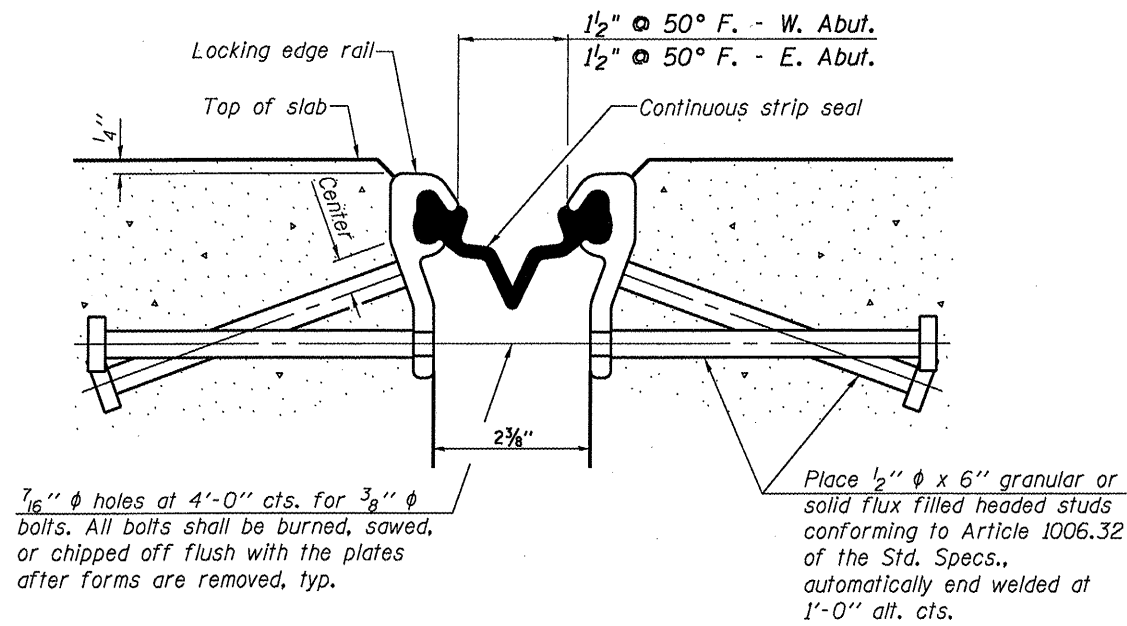
Bar	No.	Size	Length	Shape
a(E)	4	#7	19'-5"	—
a1(E)	4	#7	23'-6"	—
a2(E)	4	#6	4'-0"	—
d(E)	12	#5	3'-0"	┌
d1(E)	6	#5	2'-7"	└
h(E)	8	#6	18'-4"	—
h1(E)	8	#6	22'-6"	—
u(E)	84	#5	2'-9"	—
Concrete Removal		Cu. Yd.	7.4	
Concrete Superstructure		Cu. Yd.	7.4	
Reinforcement Bars		Lbs.	1106	
				Epoxy Coated



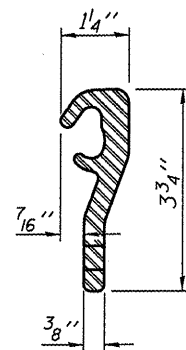
SECTION THRU PARAPET (TYP.)



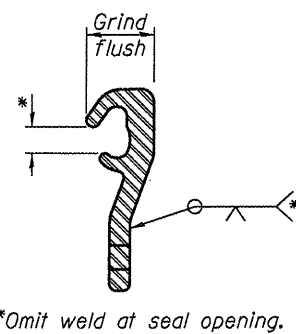
CROSS SECTION AT WEST ABUTMENT
LOOKING EAST



SECTION THRU STRIP SEAL JOINT FOR OVERLAY OVER DECK BEAMS

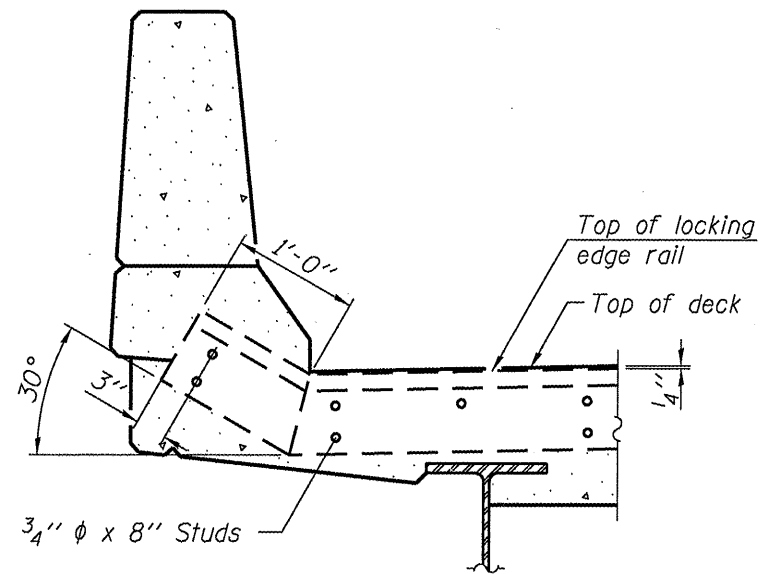


LOCKING EDGE RAIL

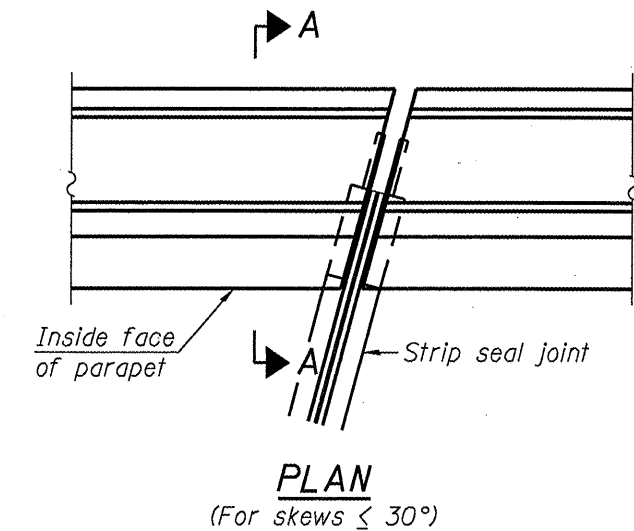


LOCKING EDGE RAIL SPLICE

STRIP SEAL EXPANSION JOINT AT WEST ABUTMENT



SECTION A-A



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 conceptual only, except for the minimum dimensions shown. The actual configuration of the Locking Edge Rails and matching strip seal may vary from manufacturer to manufacturer. Flanged edge rails will not be allowed. Locking Edge Rails may be spliced at slope discontinuities.

The manufacturer's recommended installation methods shall be followed.

The joint opening and deck dimensions detailed on the superstructure are based on a rolled rail expansion joint. If the Contractor elects to use the welded rail expansion joint, the opening and deck dimensions shall be modified according to the dimensions detailed on this sheet. Required modifications shall be made at no additional cost to the State.

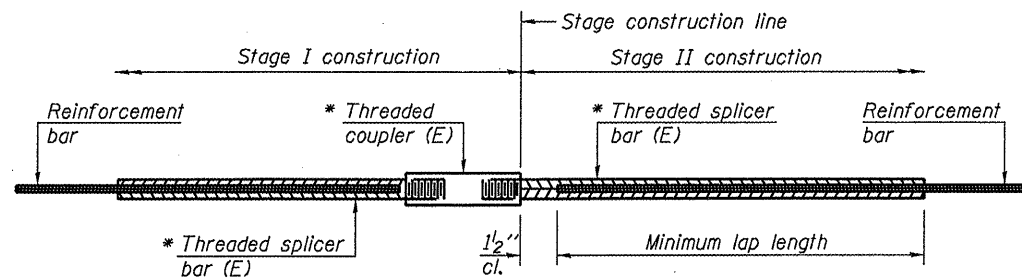
All steel components shall be galvanized after fabrication according to Article 520.03 of the Standard Specifications.

Maximum space between rail segments at stage lines shall be 3/16", sealed with a suitable sealant.

Parapet plates and anchorage studs for skews > 30° included in the cost of Preformed Joint Strip Seal.

BILL OF MATERIAL FOR STRUCTURE NO. 032-0011 (EB)

Item	Unit	Total
Preformed Joint Strip Seal	Foot	90



STANDARD BAR SPLICER ASSEMBLY

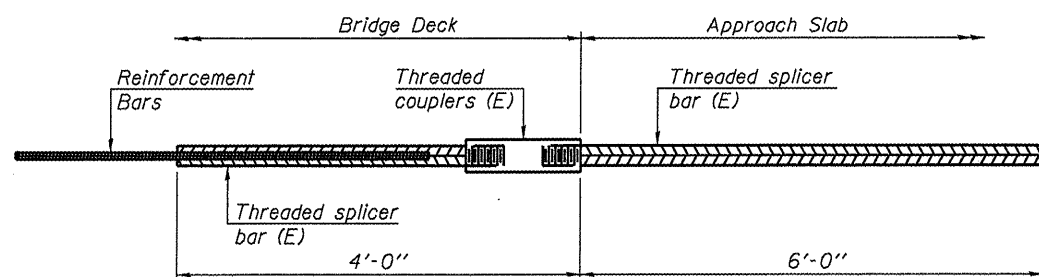
Minimum Lap Lengths					
Bar size to be spliced	Table 1	Table 2	Table 3	Table 4	Table 5
3, 4	1'-5"	1'-11"	2'-1"	2'-4"	2'-3"
5	1'-9"	2'-5"	2'-7"	2'-11"	2'-10"
6	2'-1"	2'-11"	3'-1"	3'-6"	3'-4"
7	2'-9"	3'-10"	4'-2"	4'-8"	4'-6"
8	3'-8"	5'-1"	5'-5"	6'-2"	5'-10"
9	4'-7"	6'-5"	6'-10"	7'-9"	7'-5"

- Table 1: Black bar, 0.8 Class C
- Table 2: Black bar, Top bar lap, 0.8 Class C
- Table 3: Epoxy bar, 0.8 Class C
- Table 4: Epoxy bar, Top bar lap, 0.8 Class C
- Table 5: Epoxy bar, Top bar lap, Class B

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

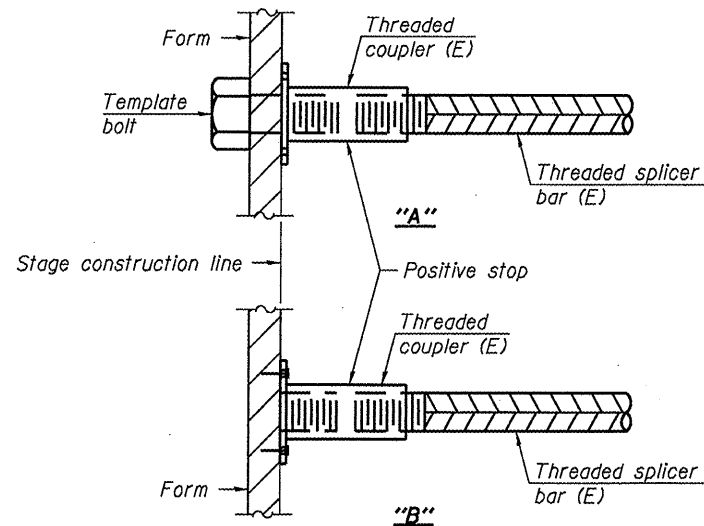
* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Table for minimum lap length
W. Abut. Deck	#7	2	Table 3
W. Abut. Hatch Block	#6	4	Table 3
E. Abut. Deck	#7	2	Table 3
E. Abut. Hatch Block	#6	4	Table 3



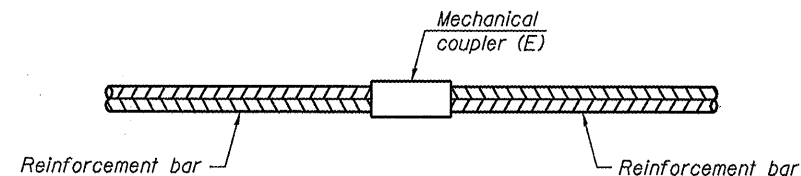
BAR SPLICER ASSEMBLY FOR #5 BAR ON INTEGRAL OR SEMI-INTEGRAL ABUTMENTS

No. required =



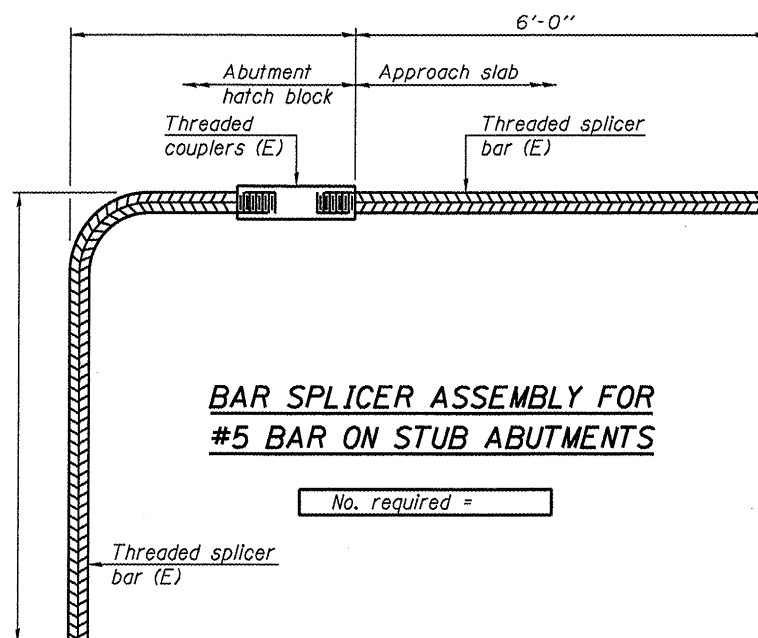
INSTALLATION AND SETTING METHODS

- "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



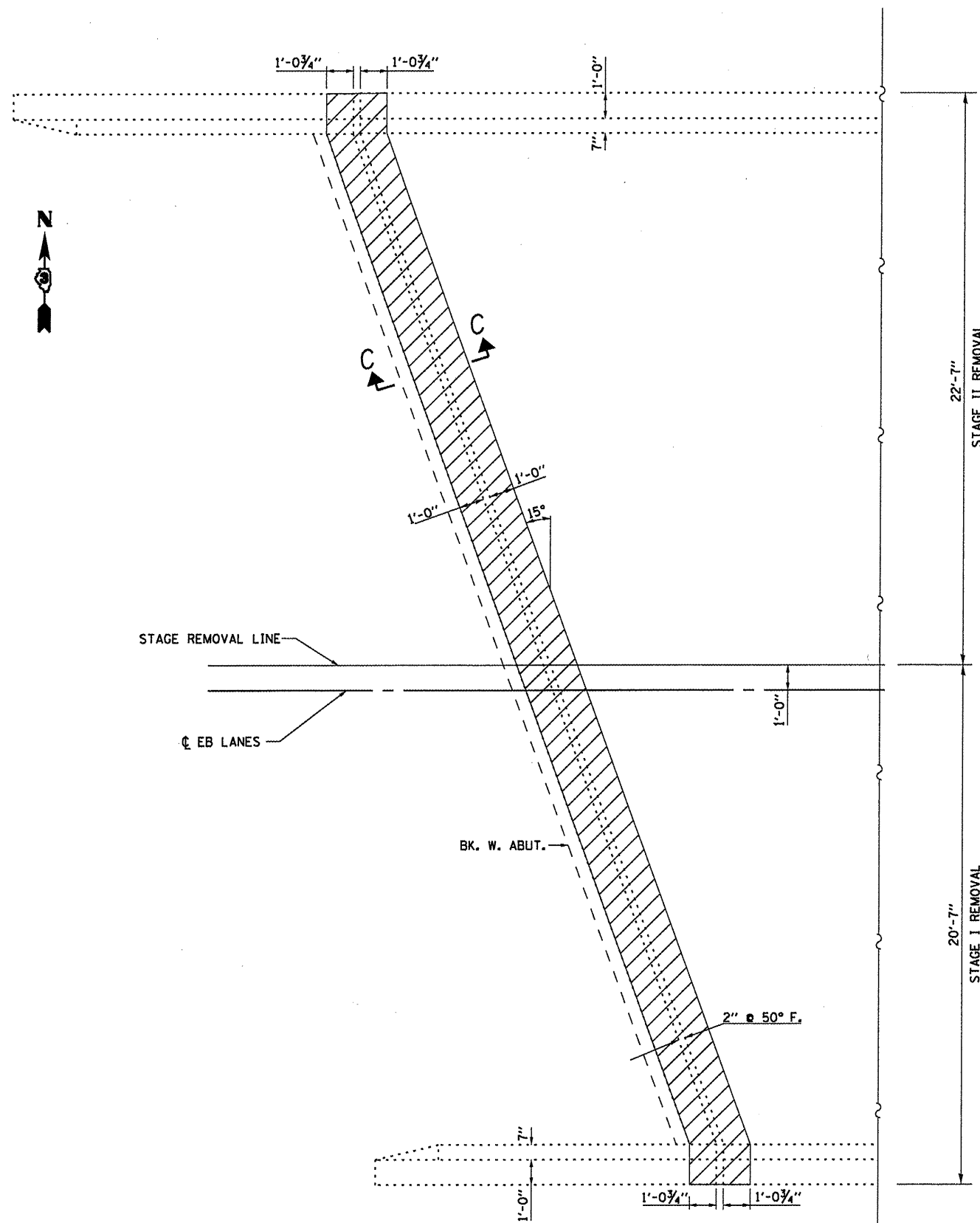
BAR SPLICER ASSEMBLY FOR #5 BAR ON STUB ABUTMENTS

No. required =

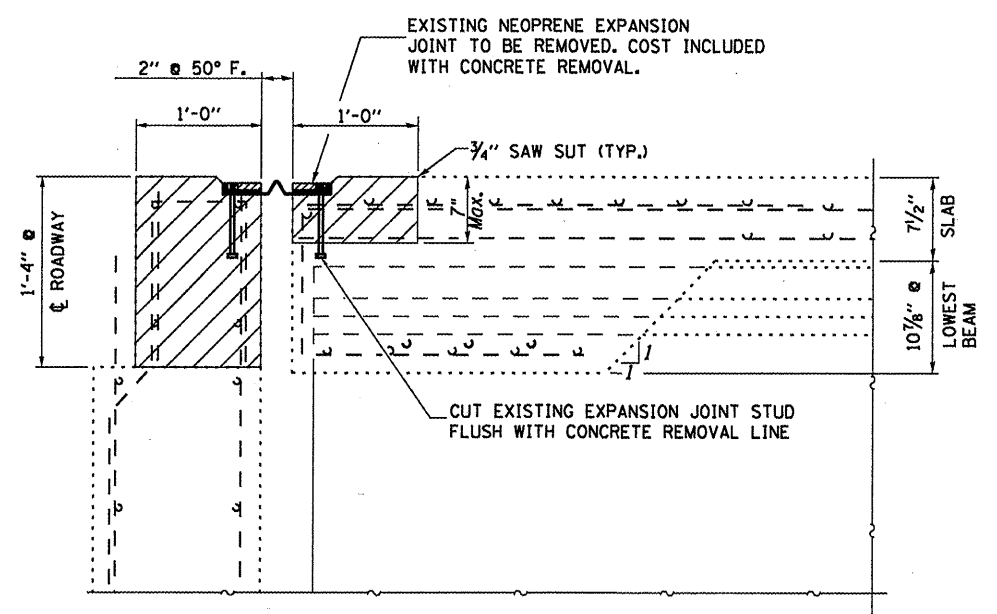
NOTES

- 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 special provision for Mechanical Splicers.
- See approved list of bar splicer assemblies and mechanical splicers for alternatives.

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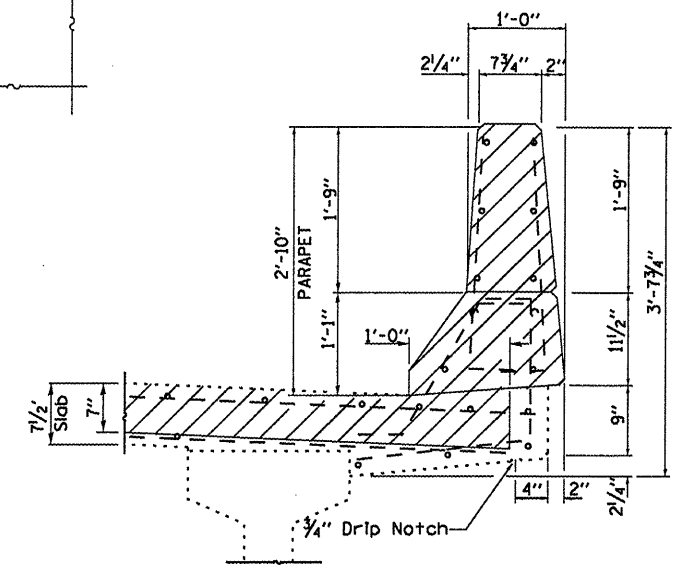


PLAN
WEST ABUTMENT SHOWN
EAST ABUTMENT SIMILAR THRU 180 ROTATION

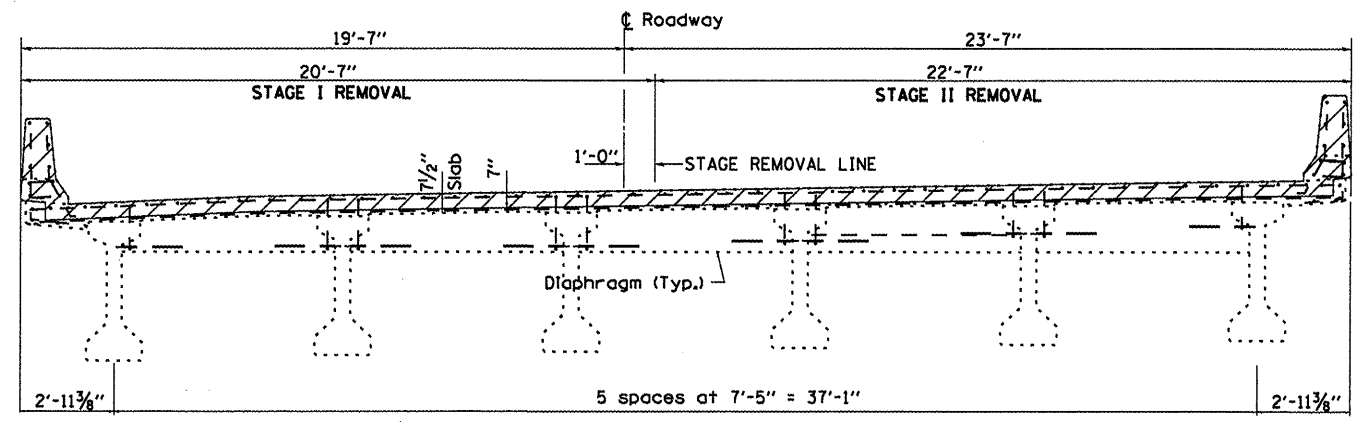


SECTION C-C
Measurements at Right L's

CONCRETE REMOVAL

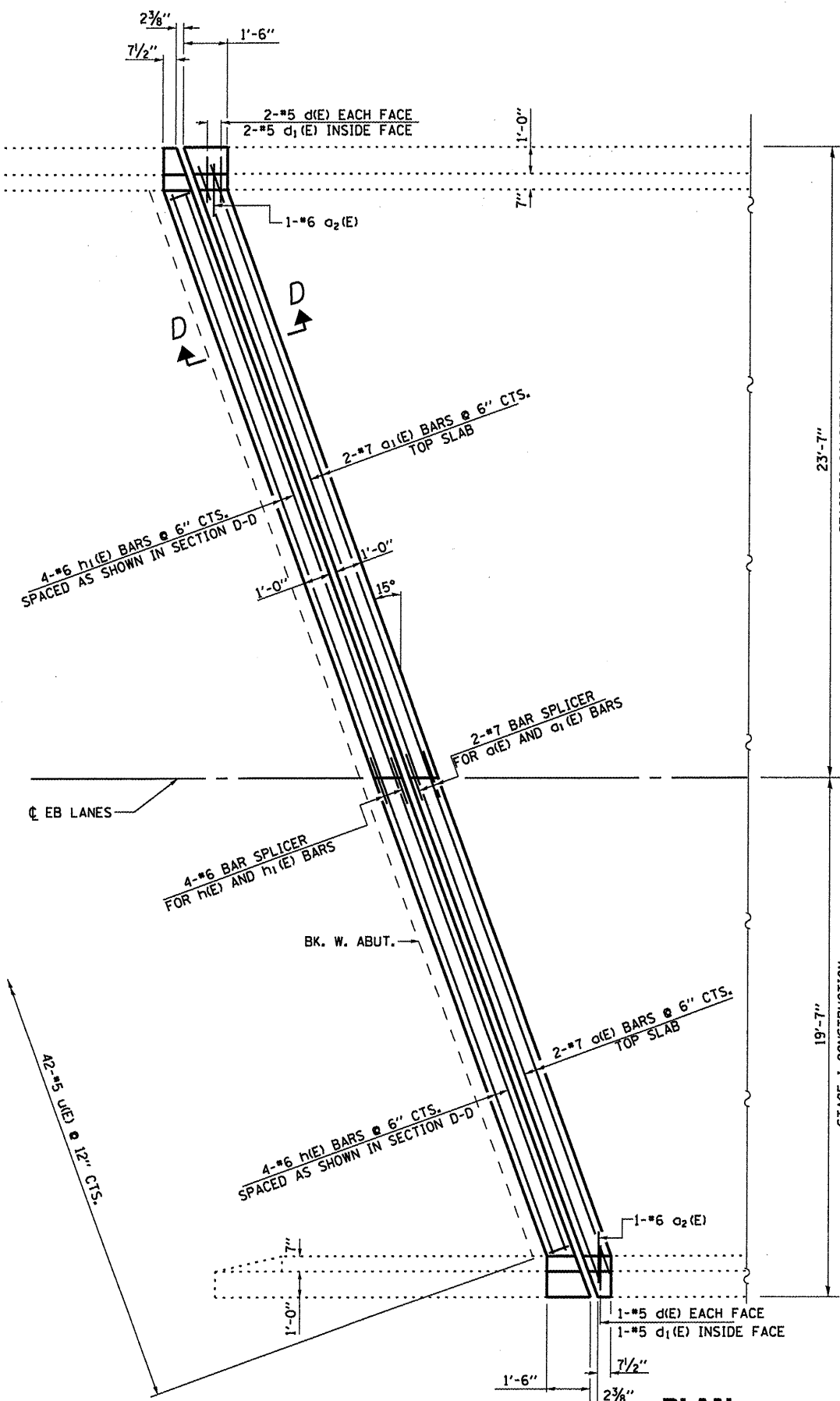


SECTION THRU PARAPET (TYP.)

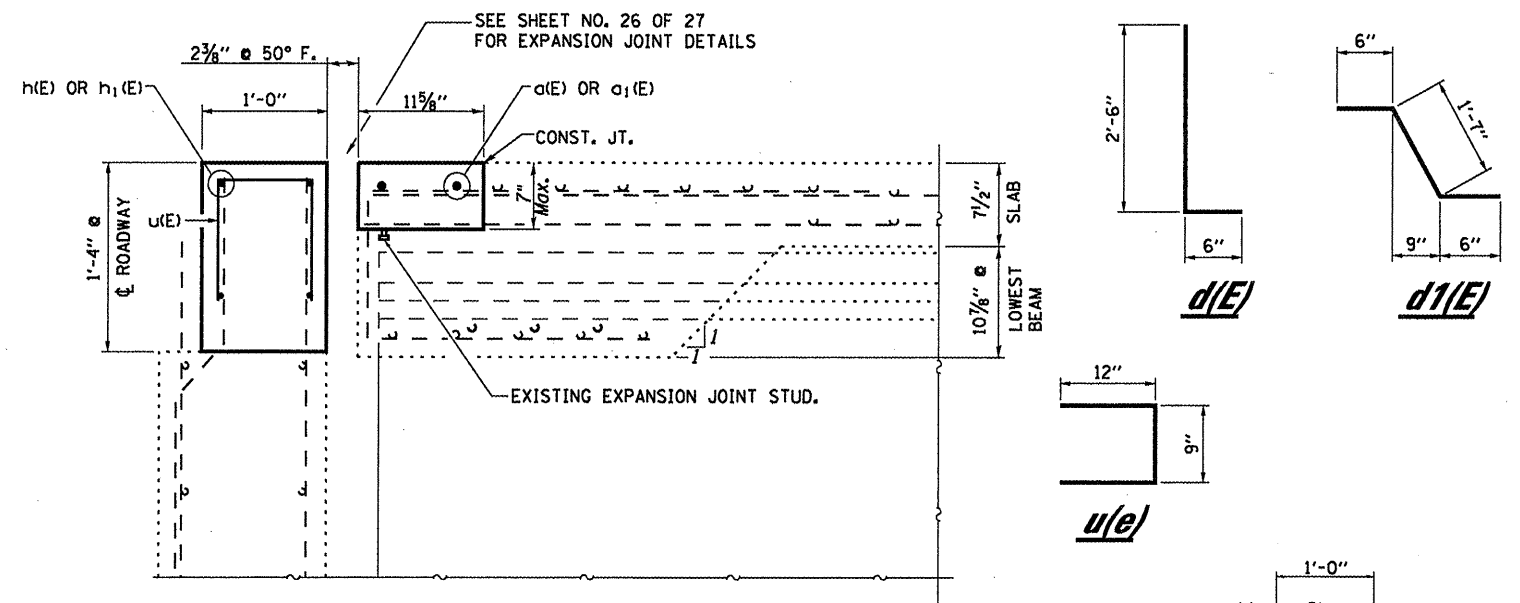


CROSS SECTION AT WEST ABUTMENT
LOOKING WEST

FILE NAME =	USER NAME = carpenterdj	DESIGNED - RLW	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUPERSTRUCTURE REMOVAL DETAILS FOR STRUCTURE NO. 032-0012 (WB)	F.A.I. RTE. 80	SECTION (32-2B)I-1	COUNTY GRUNDY	TOTAL SHEETS 27	SHEET NO. 24	
ca\pwwork\pwwidat\carpenterdj\d0295082\0366C08-sht-details.dgn	DRAWN - RLW	CHECKED -	REVISED -			SCALE:	SHEET 6 OF 9 SHEETS	STA. 1131+42.60	TO STA. 1132+75.51	CONTRACT NO. 66C08	
PLOT SCALE = 1/8" = 1' / in.	DATE -	REVISED -	REVISED -			ILLINOIS FED. AID PROJECT					
PLOT DATE = 4/5/2012	DATE -	REVISED -	REVISED -								



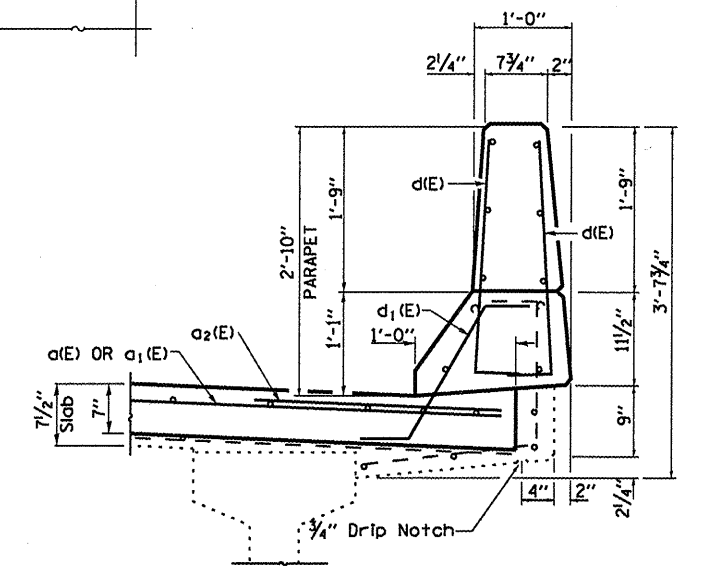
PLAN
WEST ABUTMENT SHOWN
EAST ABUTMENT SIMILAR THRU 180 ROTATION



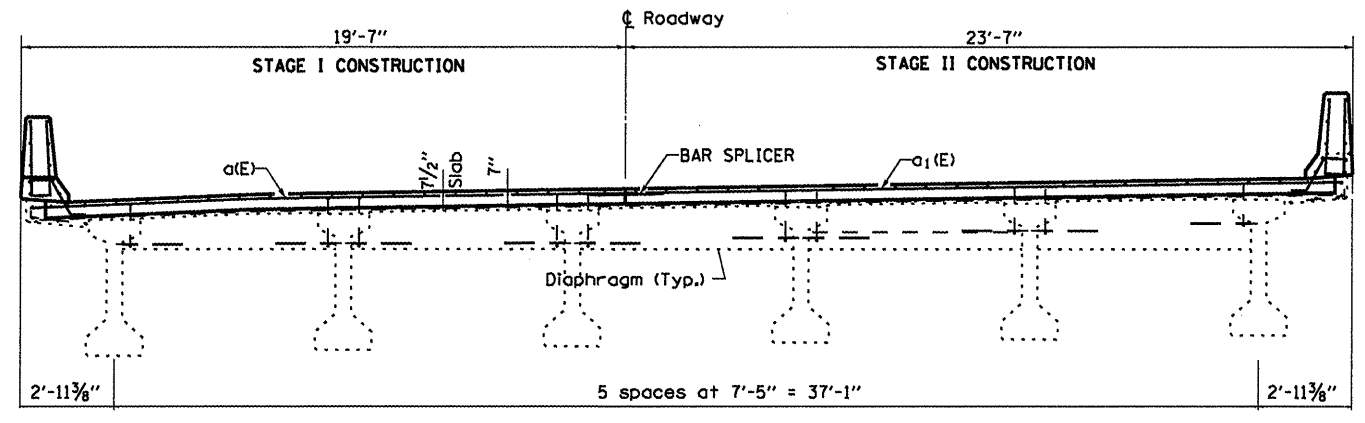
SECTION D-D
Measurements at Right L's

BILL OF MATERIAL
SN 032-0012 (W.B.)

Bar	No.	Size	Length	Shape
a(E)	4	#7	19'-5"	—
a1(E)	4	#7	23'-6"	—
a2(E)	4	#6	4'-0"	—
d(E)	12	#5	3'-0"	┌
d1(E)	6	#5	2'-7"	└
h(E)	8	#6	18'-4"	—
h1(E)	8	#6	22'-6"	—
u(E)	84	#5	2'-9"	—
Concrete Removal		Cu. Yd.	7.4	
Concrete Superstructure		Cu. Yd.	7.4	
Reinforcement Bars		Lbs.	1106	
Epoxy Coated				

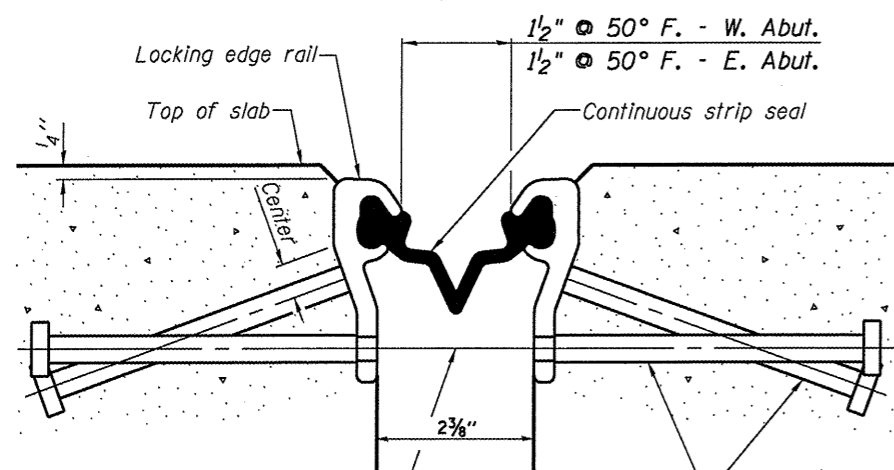


SECTION THRU PARAPET (TYP.)



CROSS SECTION AT WEST ABUTMENT
LOOKING WEST

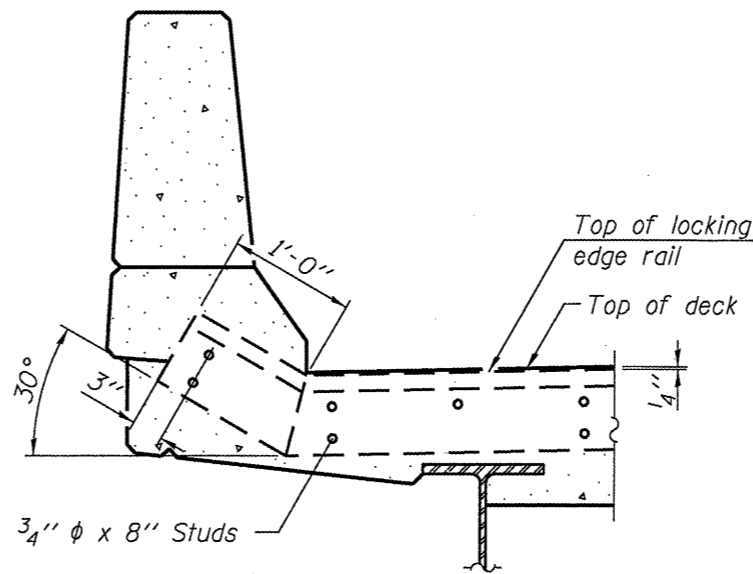
FILE NAME =	USER NAME = oarpenterdj	DESIGNED - RLW	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUPERSTRUCTURE CONSTRUCTION DETAILS FOR STRUCTURE NO. 032-0012 (WB)	F.A.I. RTE. 80	SECTION (32-2BII-1)	COUNTY GRUNDY	TOTAL SHEETS 27	SHEET NO. 25	
o:\pwork\pwork\oarpenterdj\d0295002\0366C08-sht-details.dgn	PLOT SCALE = 1/8" = 1' / in.	DRAWN - RLW	REVISED -			SCALE:	SHEET 7 OF 9 SHEETS	STA. 1131+42.60 TO STA. 1132+75.51	CONTRACT NO. 66C08		ILLINOIS FED. AID PROJECT
	PLOT DATE = 4/5/2012	CHECKED -	REVISED -								
		DATE -	REVISED -								



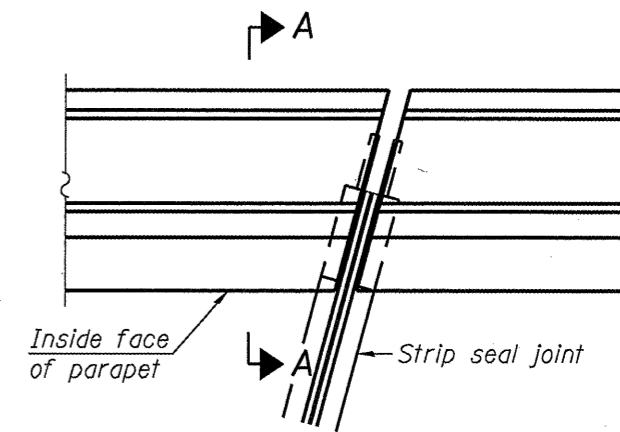
7/16" ϕ holes at 4'-0" cts. for 3/8" ϕ bolts. All bolts shall be burned, sawed, or chipped off flush with the plates after forms are removed, typ.

Place 1/2" ϕ x 6" granular or solid flux filled headed studs conforming to Article 1006.32 of the Std. Specs., automatically end welded at 1'-0" alt. cts.

SECTION THRU STRIP SEAL JOINT FOR OVERLAY OVER DECK BEAMS



SECTION A-A



PLAN
(For skews $\leq 30^\circ$)

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 conceptual only, except for the minimum dimensions shown. The actual configuration of the Locking Edge Rails and matching strip seal may vary from manufacturer to manufacturer. Flanged edge rails will not be allowed. Locking Edge Rails may be spliced at slope discontinuities.

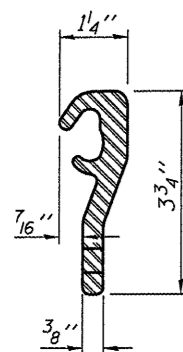
The manufacturer's recommended installation methods shall be followed.

The joint opening and deck dimensions detailed on the superstructure are based on a rolled rail expansion joint. If the Contractor elects to use the welded rail expansion joint, the opening and deck dimensions shall be modified according to the dimensions detailed on this sheet. Required modifications shall be made at no additional cost to the State.

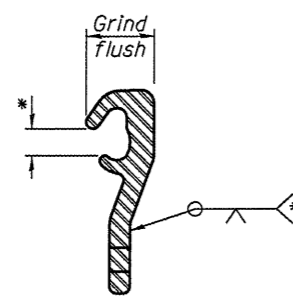
All steel components shall be galvanized after fabrication according to Article 520.03 of the Standard Specifications.

Maximum space between rail segments at stage lines shall be 3/16", sealed with a suitable sealant.

Parapet plates and anchorage studs for skews > 30 degrees included in the cost of Preformed Joint Strip Seal.



LOCKING EDGE RAIL



LOCKING EDGE RAIL SPLICE

*Omit weld at seal opening.

STRIP SEAL EXPANSION JOINT AT WEST ABUTMENT

BILL OF MATERIAL FOR STRUCTURE NO. 032-0012 (WB)

Item	Unit	Total
Preformed Joint Strip Seal	Foot	90

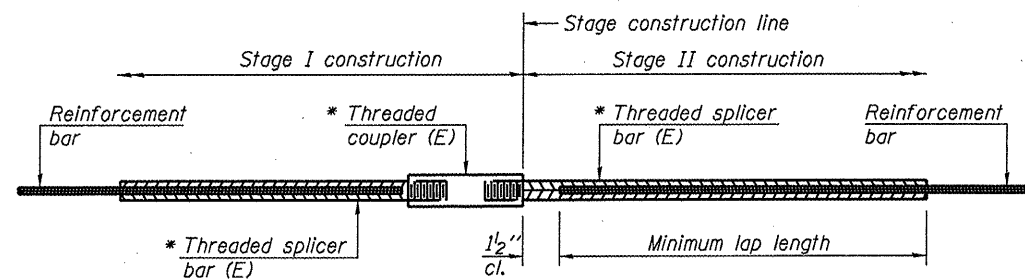
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	PLOT SCALE = 100:0' / 1"	CHECKED -	REVISED -
	PLOT DATE = 4/5/2012	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STRIP SEAL EXPANSION JOINT DETAILS FOR STRUCTURE NO. 032-0012 (WB)

SCALE: SHEET 8 OF 9 SHEETS STA. 1131+42.60 TO STA. 1132+75.51

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	(32-2B)I-1	GRUNDY	27	26
			CONTRACT NO. 66C08	
ILLINOIS FED. AID PROJECT				



STANDARD BAR SPLICER ASSEMBLY

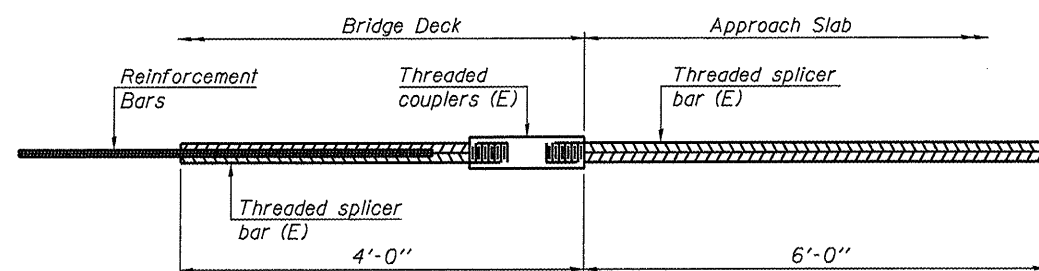
Minimum Lap Lengths					
Bar size to be spliced	Table 1	Table 2	Table 3	Table 4	Table 5
3, 4	1'-5"	1'-11"	2'-1"	2'-4"	2'-3"
5	1'-9"	2'-5"	2'-7"	2'-11"	2'-10"
6	2'-1"	2'-11"	3'-1"	3'-6"	3'-4"
7	2'-9"	3'-10"	4'-2"	4'-8"	4'-6"
8	3'-8"	5'-1"	5'-5"	6'-2"	5'-10"
9	4'-7"	6'-5"	6'-10"	7'-9"	7'-5"

- Table 1: Black bar, 0.8 Class C
- Table 2: Black bar, Top bar lap, 0.8 Class C
- Table 3: Epoxy bar, 0.8 Class C
- Table 4: Epoxy bar, Top bar lap, 0.8 Class C
- Table 5: Epoxy bar, Top bar lap, Class B

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

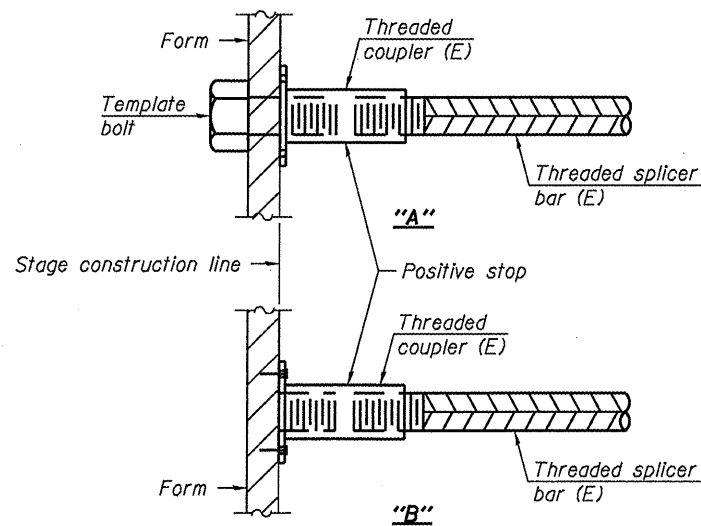
* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Table for minimum lap length
W. Abut. Deck	#7	2	Table 3
W. Abut. Hatch Block	#6	4	Table 3
E. Abut. Deck	#7	2	Table 3
E. Abut. Hatch Block	#6	4 </td <td>Table 3</td>	Table 3



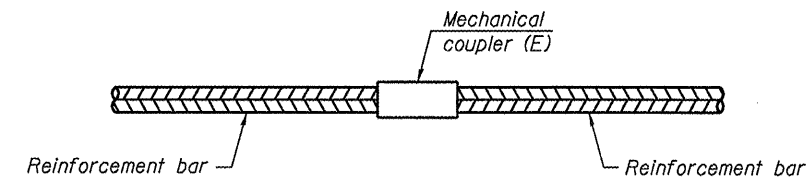
BAR SPLICER ASSEMBLY FOR #5 BAR ON INTEGRAL OR SEMI-INTEGRAL ABUTMENTS

No. required =



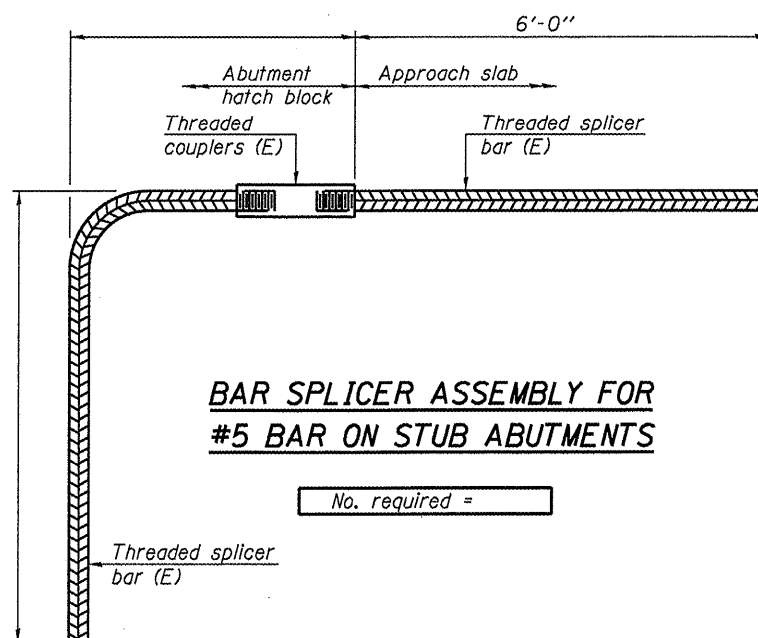
INSTALLATION AND SETTING METHODS

- "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



BAR SPLICER ASSEMBLY FOR #5 BAR ON STUB ABUTMENTS

No. 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 special provision for Mechanical Splicers.
- See approved list of bar splicer assemblies and mechanical splicers for alternatives.

BSD-1 7-1-10