F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
676	(9-1)BJR	MCLEAN	17 ✱	1
FED. ROAD DIST. NO.	ILLINOIS	CONTRACT NO. 70731		

✱ 17+1=18

4-24-09 Letting, Item 126

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PROPOSED HIGHWAY PLANS

F.A.P. ROUTE 676 (US 150)
SECTION (9-1)BJR
MCLEAN COUNTY

BRIDGE JOINT REPAIR

OVER NSRR & WHITE OAK RD 2.9 MI N OF IL 9

C-95-020-08

FOR INDEX OF SHEETS, SEE SHEET NO. 2

FOR SUMMARY OF QUANTITIES, SEE SHEET NO. 4 - 4A

AS-BUILT PLANS

Resident: ANDREW HESS

Contractor: STARK EXCAVATING

Date Started: 8/21/2009

Date Completed: 12/04/2009

CURRENT TRAFFIC DATA

2008 ADT	=	3800
2028 ADT	=	4550
PV + PC %	=	87.7
SU %	=	5.9
MU %	=	6.4

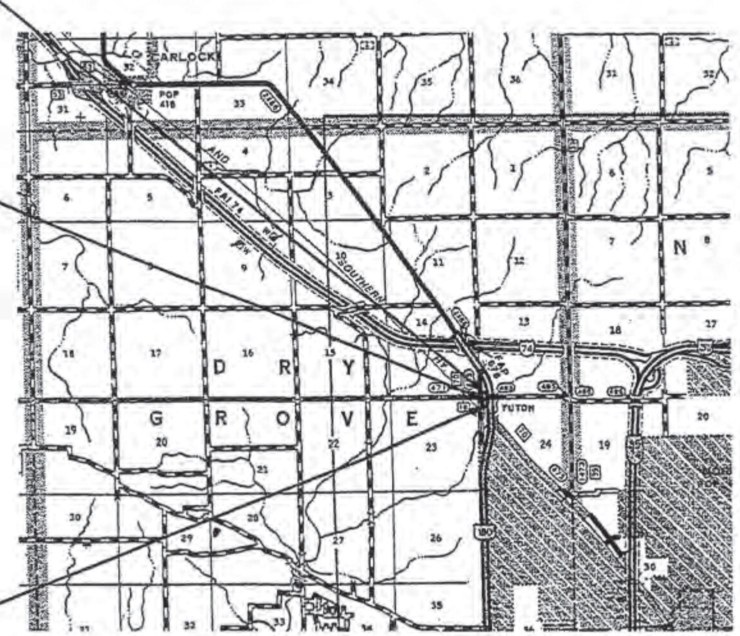
DESIGN DESIGNATION

O.P.A.

PROJECT ENDS
STATION 196+46.00

S.N. 057-0202
STA. 191+11.72 TO STA. 195+20.66
EXISTING 3 SPAN, STEEL PLATE GIRDER
BRIDGE 89' 2" WIDE X 406-5" LONG

PROJECT BEGINS
STATION 189+90.00



N

0 1 2 3 4 5 MILES
0 5000 10000 15000 20000 25000 FEET

D-95-020-08

LOCATION OF SECTION INDICATED THUS:-

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

PROJECT ENGINEER: KEVIN TRAPP
SQUAD LEADER: JEFF M. SHERER
DESIGNER: JEFF M. SHERER
PHONE: (217)465-4181
CONTRACT NO. 70731

GROSS LENGTH = 657.0 FEET = 0.124 MILES
NET LENGTH = 657.0 FEET = 0.124 MILES

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED 1/28 2009
Joseph E. Crowe
DEPUTY DIRECTOR OF HIGHWAYS, REGION THREE ENGINEER

March 27, 2009
Charles J. Ingersoll PE
ENGINEER OF DESIGN AND ENVIRONMENT

March 27, 2009
Christine M. Reed PE
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

PLOT DATE = 1/28/2009
FILE NAME = c:\pw_work\pwidot\sherer jm\dms03928\70731Cover.dgn
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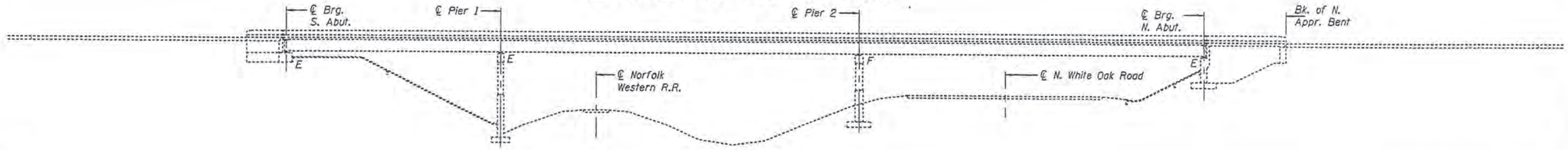
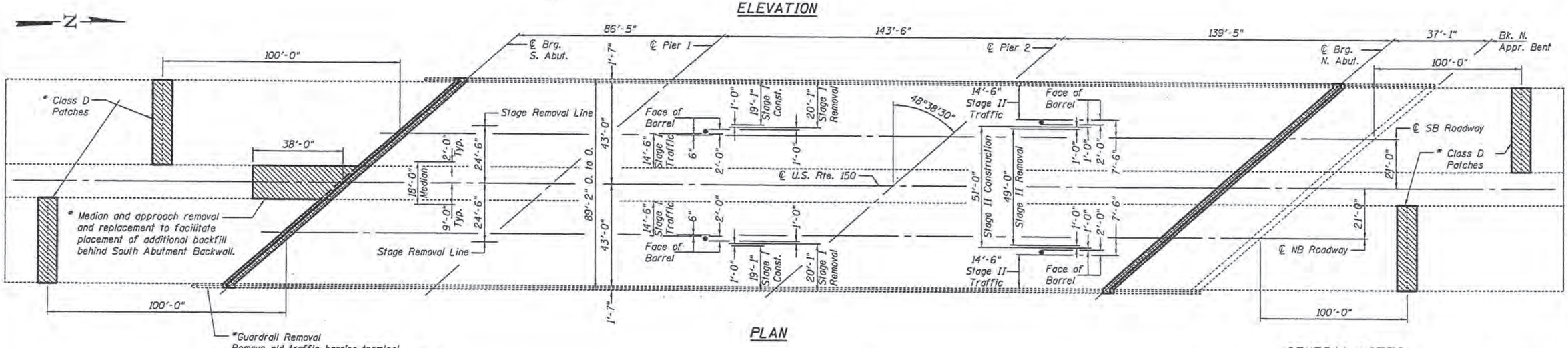
USER NAME = sherer jm

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



ELEVATION



PLAN

* Removal for Class D patches on the roadway shall be completed prior to deck end and hatch block removal at the bridge. See Roadway plans for details and guardrails.

GENERAL NOTES

Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60. See Special Provisions.

Reinforcement bars designated (E) shall be epoxy coated.

Prior to pouring the new concrete deck, all heavy or loose rust, loose mill scale, and other loose or potentially detrimental foreign material shall be removed from the surfaces in contact with concrete. Tightly adhered paint may remain unless otherwise noted. Removal shall be accomplished by methods that will not damage the steel and the cost will be included in the pay item covering removal of the existing concrete.

Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.

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.

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

The deck surface shall have its final finish tined according to Article 420.09(e)(1) of the Standard Specifications. Cost included with Concrete Superstructure.

PROPOSED IMPROVEMENTS

1. Removal of neoprene expansion joints and replacement with preformed joint strip seals at both abutments.
2. Remove and replace expansion joint at south abutment stage line.
3. Structural repair of concrete at North abutment and South pier (South face)
4. Repair South median settlement: remove and replace median surface curb and gutter and fill void with sand backfill.
5. Place HMA expansion patches at bridge approach pavement ends.

TOTAL BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Concrete Removal	Cu. Yd.	31.9
Concrete Superstructure	Cu. Yd.	32.3
Preformed Joint Strip Seal	Foot	269
Geocomposite Wall Drain	Sq. Yd.	2.0
Reinforcement Bars, Epoxy Coated	Pound	3,150
Structural Repair of Concrete ≤ 5 inches	Sq. Ft.	657
Bar Splicers	Each	42

STATE OF ILLINOIS
RALPH E. ANDERSON
081-004625
SPRINGFIELD
LICENSED STRUCTURAL ENGINEER

DESIGNED	R E Anderson	
CHECKED	Adrian T. Halloway	March 9, 2009
DRAWN		
CHECKED	RE ATH	

EXAMINED — ENGINEER OF STRUCTURAL SERVICES
PASSED — ENGINEER OF BRIDGES AND STRUCTURES

Expires: November 30, 2010

SLT-95-001-08

PLAN AND ELEVATION
SN 057-0202

SHEET NO.	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1	676	(9-1)BJR	McLEAN	17	12
6 SHEETS			CONTRACT NO. 70731		
	FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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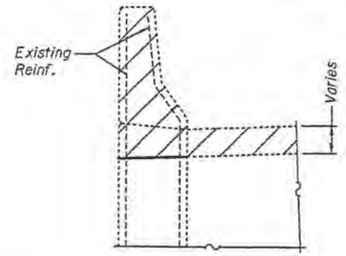
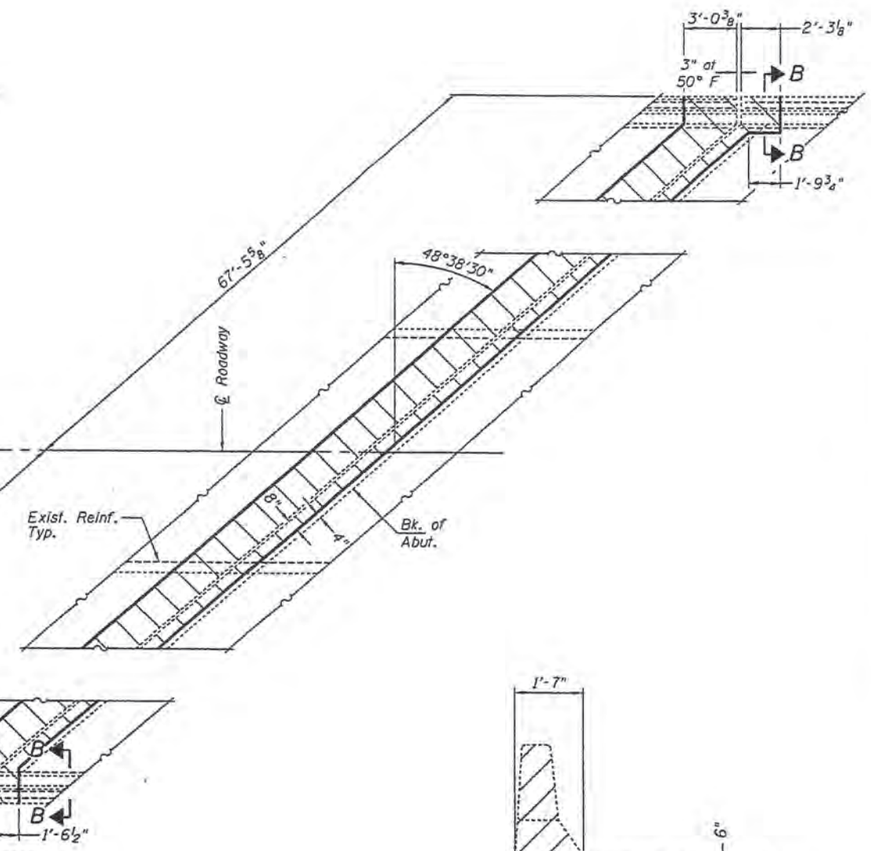
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



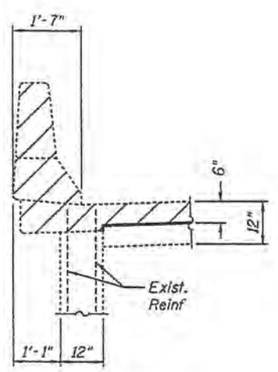
SECTION A-A

SOUTH ABUTMENT
PARTIAL REMOVAL PLAN

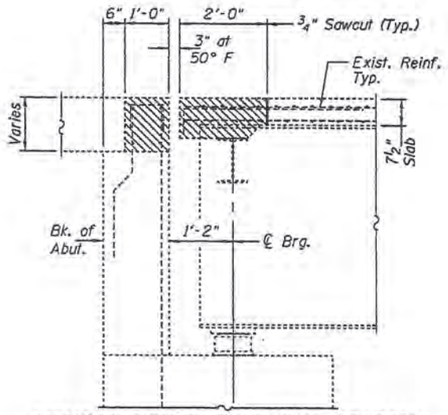
Hatched area indicates area of concrete removal.
See Sheet 1 of 6 for staging.



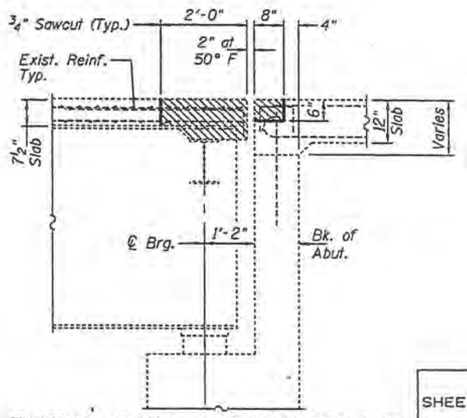
NORTH ABUTMENT
PARTIAL REMOVAL PLAN



SECTION B-B



TYPICAL SOUTH ABUTMENT SECTION
(Dimensions shown at Rt. L to backwall)



TYPICAL NORTH ABUTMENT SECTION
(Dimensions shown at Rt. L to backwall)

DESIGNED	G.G.E.
CHECKED	A.T.H.
DRAWN	Drew Christopher
CHECKED	G.G.E. A.T.H.

March 9, 2009
EXAMINED — ENGINEER OF STRUCTURAL SERVICES
PASSED — ENGINEER OF BRIDGES AND STRUCTURES

SLAB REMOVAL DETAILS
SN 057-0202

SHEET NO. 2	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6 SHEETS	676	(9-I)BJR	McLEAN	17	13
			CONTRACT NO. 70731		
	FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

SLT-95-001-08

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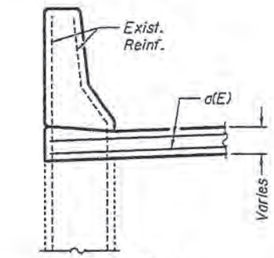
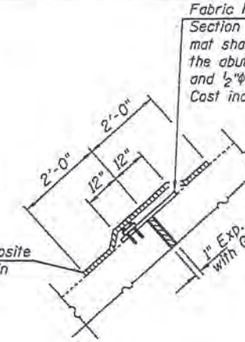
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

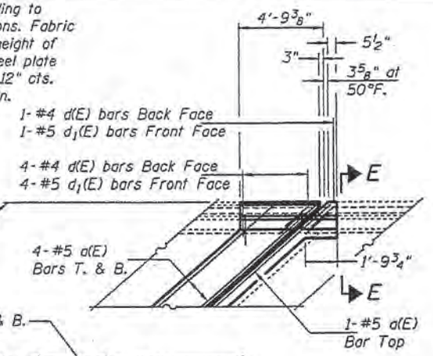


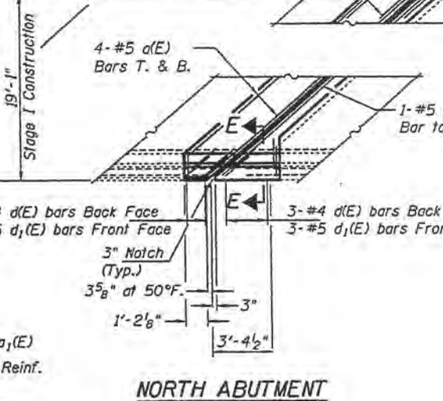
SECTION D-D

SOUTH ABUTMENT PARTIAL PLAN

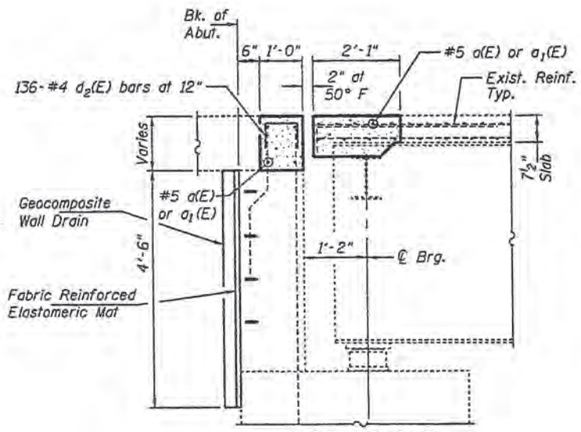
Dimensions for South Abutment are based on a rolled rail strip seal joint. If the contractor elects to use the welded rail strip seal join, deck dimensions may require adjustments to satisfy the details on base sheet EJ-SSJ.





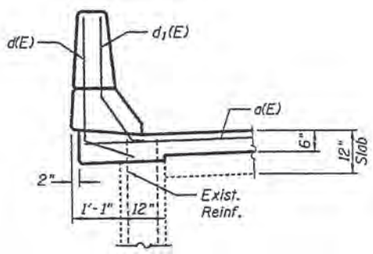


NORTH ABUTMENT PARTIAL PLAN



SECTION C-C

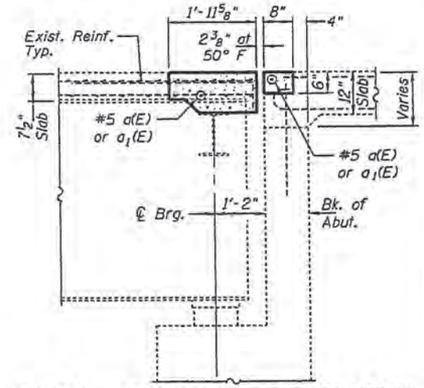
(Dimensions shown at Rt. L to backwall)
(Median not shown)



SECTION E-E

MIN. BAR LAPS

#5 = 2'-2"



TYPICAL NORTH ABUTMENT SECTION

(Dimensions shown at Rt. L to backwall)
(Median not shown)

DETAILS
SN 057-0202

DESIGNED	G.G.E.
CHECKED	A.T.H.
DRAWN	Drew Christopher
CHECKED	G.G.E. A.T.H.

March 9, 2009

EXAMINED _____ ENGINEER OF STRUCTURAL SERVICES

PASSED _____ ENGINEER OF BRIDGES AND STRUCTURES

SHEET NO. 3	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6 SHEETS	676	(9-I)BJR	McLEAN	17	14
			CONTRACT NO. 70731		
	FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

SLT-95-001-08

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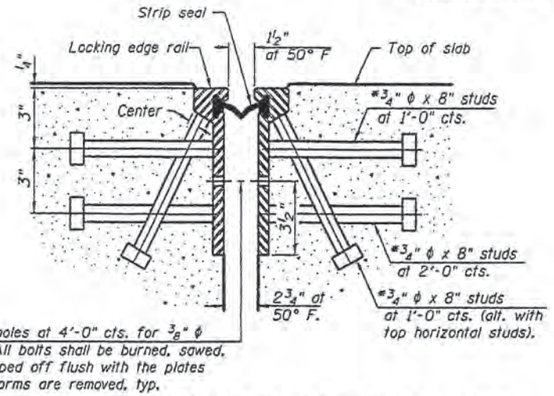
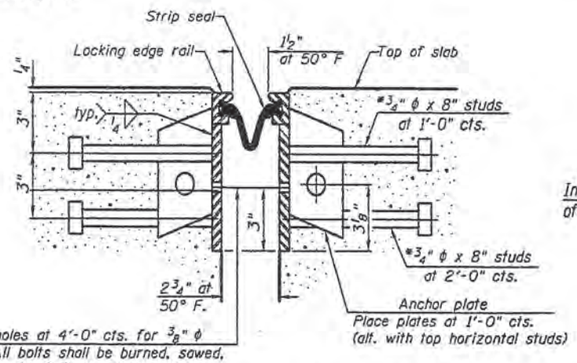
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

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

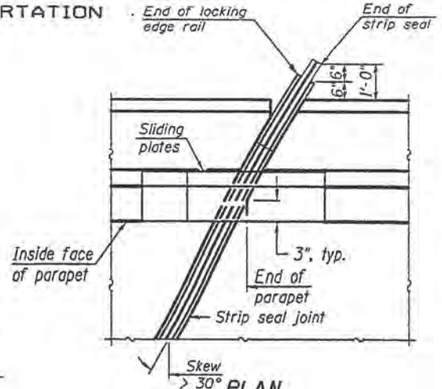
Notes:
Locking edge rails are to be placed $\frac{1}{4}$" below the deck elevation through the median. Stop raised median 3" short of deck ends and 3" short of face of abutments.
See median details for reinforcement required.



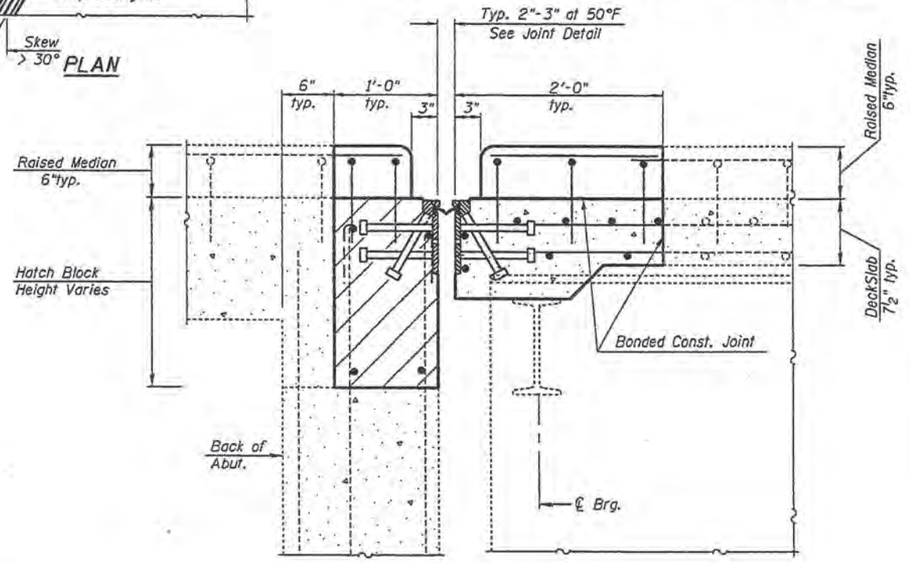
SECTION THRU ROLLED RAIL JOINT AT SOUTH ABUTMENT



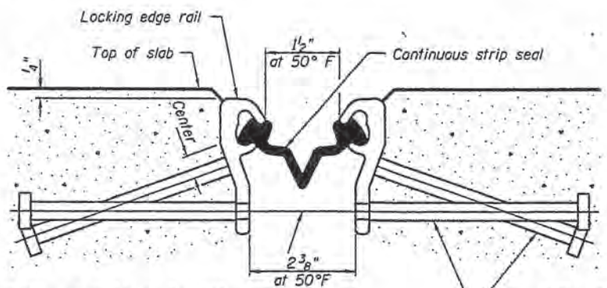
SECTION THRU WELDED RAIL JOINT AT SOUTH ABUTMENT



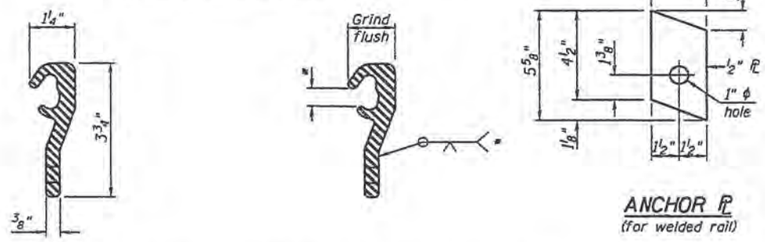
Notes:
The strip seal shall be made continuous and shall have a minimum thickness of ¼". The configuration of the strip seal shall match the configuration of the permitted. The gland shall be sized for a maximum rated movement of 4 inches.
The height and thickness of the Locking Edge Rails shown are minimum dimensions. 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 and stage construction joints.
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.
Locking Edge Rails. Open or "webbed" strip seal gland configurations are not
The inside of the Locking Edge Rail groove shall be free of weld residue.



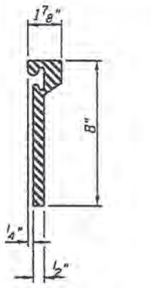
* Omit weld at seal opening.



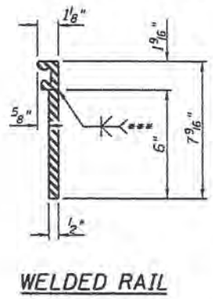
SECTION THRU STRIP SEAL JOINT AT NORTH ABUTMENT

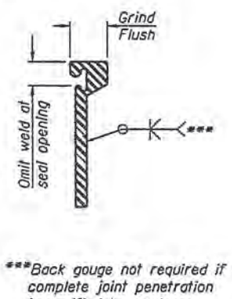


ANCHOR ℄
(for welded rail)



WELDED RAIL



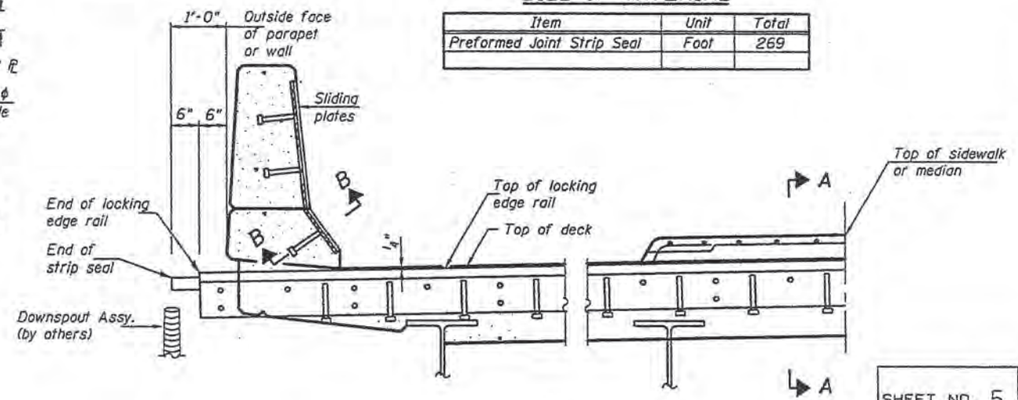


***Back gouge not required if complete joint penetration is verified by mock-up.

ROLLED EXTRUDED RAIL

LOCKING EDGE RAIL SPLICE
The inside of the locking edge rail groove shall be free of weld residue.

LOCKING EDGE RAILS

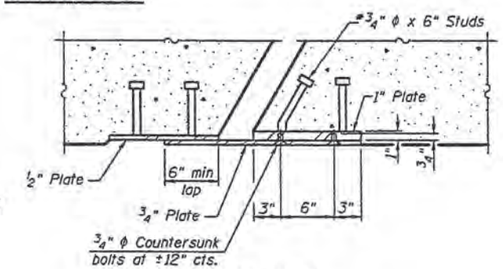


TYPICAL PARTIAL DECK CROSS SECTION

BILL OF MATERIAL

Item	Unit	Total
Preformed Joint Strip Seal	Foot	269

SECTION A-A



SECTION B-B

PREFORMED JOINT STRIP SEAL DETAILS SN 057-0202

LOCKING EDGE RAIL

LOCKING EDGE RAIL SPLICE

DESIGNED	G.G.E.
CHECKED	A.T.H.
DRAWN	Drew Christopher
CHECKED	G.G.E. A.T.H.

March 9, 2009
EXAMINED D. Carl Puzey, ENGINEER OF STRUCTURAL SERVICES
PASSED Ralph E. Anderson, ENGINEER OF BRIDGES AND STRUCTURES

SHEET NO. 5	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6 SHEETS	676	(9-1)BJR	McLEAN	17	16
			CONTRACT NO. 70731		
	FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

SLT-95-001-08