

MISSOURI STATE HIGHWAY DEPARTMENT

35'-35'-35' Simple W Beam Spans (Composite)

ED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.		19	11	

GENERAL NOTES:

Design Specifications: A.A.S.H.O. - 1961

Design Loading:

H15 44 15#/sq. ft. Future Wearing Surface
Earth 120# Equivalent Fluid Pressure 30#

Design Unit Stresses:

Class B Concrete (substructure) $f_c = 1,200$ psi
Class B1 Concrete (superstructure) $f_c = 1,600$ psi
Reinforcing Steel $f_s = 20,000$ psi
Structural Steel (A.S.T.M. A36-63T) $f_s = 20,000$ psi

Surface Seal:

Superstructure deck to be surface sealed.

Fabricated Steel:

Field connections, High Strength Bolts $\frac{3}{4}" \phi$,
holes $\frac{13}{16}" \phi$ except as noted.

FOOTING DATA				
BENT NO.	1	2	3	4
Foundation Material	Rock	Rock	Rock	Rock
Des. Brg. Tons/Sq. Ft.	6.2	4.2	4.2	6.2

ESTIMATED QUANTITIES			
ITEM	SUBSTR.	SUPERSTR.	TOTAL
Class I Excavation for Structures.	Cu. Yd. 125		125
Class B Concrete	Cu. Yd. 72.6		72.6
Class B1 Concrete	Cu. Yd.	35.4	85.4
Reinforcing Steel	Lb. 9,920	22,000	31,920
Fabricated Structural Carbon Steel	Lb.	35,450	35,450
Bridge Rail (Single Tube Type)	Lin. Ft.	193	193

BM #7 El. 979.88 X-on N.W. Cor. w. Hubguard to
Bridge Rt. Sta. 57+27.6

BRIDGE OVER STONEYS BRANCH

STATE ROAD FROM ROUTE N. SOUTH TO ROUTE 66

ABOUT 10.5 MILES N.E. OF CARTHAGE

PROJECT NO. S-892 (2) SBB STA. 57+31.0

JASPER

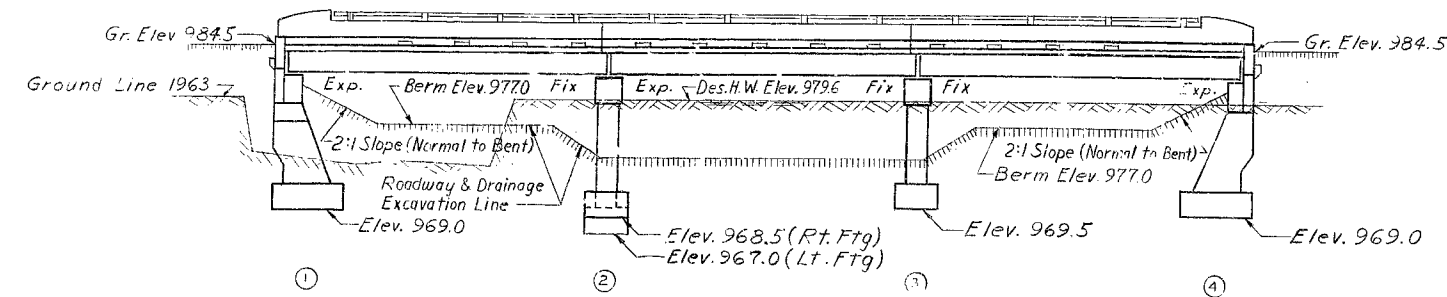
COUNTY

SUBMITTED BY: *D.B. Jenkins* DATE: 2-2-67

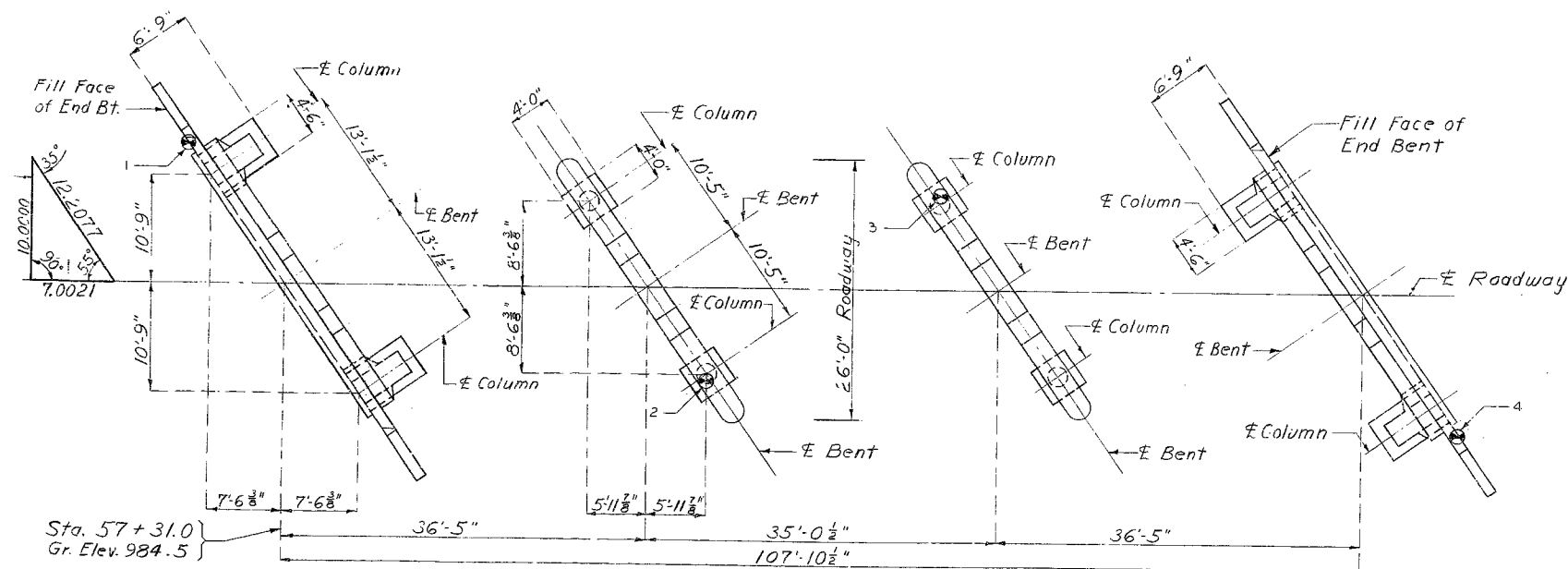
APPROVED BY: *M.L. Jenkins* DATE: 2-2-67

STD. 54.00

A-1884

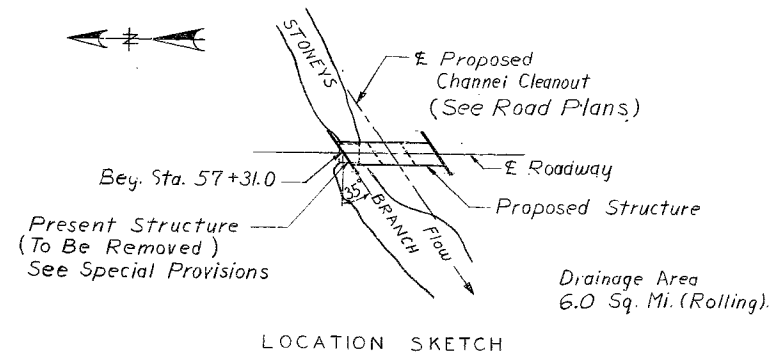


GENERAL ELEVATION



PLAN

Note: For boring data see sheet No. 2 of 7.
⊗ Indicates location of borings



LOCATION SKETCH

DESIGNED AUG. 1966 BY WEBER
DETAILED OCT. 1966 BY WEIMHOLT & LESLIE
CHECKED DEC 1966 BY EPPLE

Note: This drawing is not to scale. Follow dimensions.

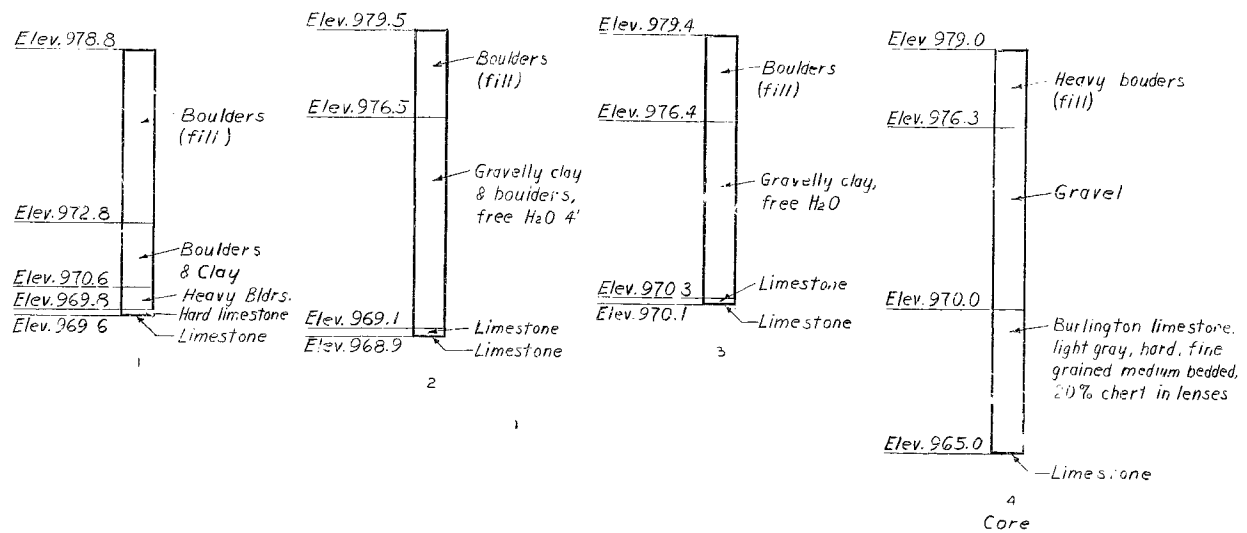
Sheet No. 1 of 7.

SEE FINAL PLANS BROWN LINES

MISSOURI STATE HIGHWAY DEPARTMENT

FED. ROAD ST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.		19	12	

COMPLETE BILL OF REINFORCING STEEL					BENDING SKETCHES & CUTTING DIAGRAMS					SUPERSTRUCTURE				
NO.	SIZE	LENGTH	MARK	LOCATION						NO.	SIZE	LENGTH	MARK	LOCATION
END BENT NO. 1 & 4														
40	#6	3'-0"	D1	Footing	6 1/2" 3'-3 1/4"	5" 6'-1"	5" 5'-10"	8 1/2" 2'-1 1/2"		210	#5	3'-6"	C1	Curb
16	#6	7'-6"	F1	Col. Hch.						4	#6	35'-0"	C2	Curb
17	#6	7'-6"	F2	Col. Hch.						4	#6	34'-9"	C3	Curb
16	#6	9'-6"	F3	Col. Hch.						4	#6	36'-6"	C4	Curb
3	#6	33'-6"	H1	Beam	3'-3 1/4" 5'-11 3/4"	6'-1" 6'-11"	5'-10" 6'-8"	2'-1 1/2" 27'-7 1/2"		8	#5	4'-9"	R1	End Post
4	#6	31'-6"	H2	Beam	6 V2 Cut 12	3 V6 Cut 12	3 V7 Cut 12	37-S2 Cut 74		4	#5	5'-6"	R2	End Post
14	#11	31'-6"	H3	Beam	8 1/2" 2'-2 1/2"	Bend As Shown	Bend As Shown			4	#5	6'-3"	R3	End Post
4	#6	35'-0"	H4	Backwall	2'-2 1/2" 26'-3 1/2"	2'-1" 26'-5"				4	#5	6'-9"	R4	End Post
21	#6	10'-3"	H5	Wing	28'-6"	28'-9"				8	#5	7'-3"	R6	End Post
3	#6	9'-0"	H6	Wing						186	#5	5'-3"	R7	Parapet
4	#6	11'-6"	T1	Wing						26	#5	4'-3"	R8	Parapet
6	#4	10'-3"	U1	Beam						8	#5	35'-0"	R9	Parapet
16	#4	3'-3"	U2	Beam	35 S4 Cut 70	35 S9 Cut 70				8	#5	34'-9"	R10	Parapet
140	#5	3'-0"	V1	Backwall						8	#5	36'-3"	R11	Parapet
12	#4	9'-3"	V2	Wing						2	#4	34'-9"	S1	Slab
4	#4	6'-0"	V3	Wing						14	#5	29'-9"	S2	Slab
24	#6	9'-9"	V4	Column						208	#5	28'-6"	S3	Slab
16	#6	10'-6"	V5	Column						70	#5	28'-6"	S4	Slab
12	#7	13'-0"	V6	Column						116	#4	18'-9"	S5	Slab
12	#3	12'-6"	V7	Column						58	#4	18'-0"	S6	Slab
8	#4	6'-9"	V8	Column						120	#5	18'-9"	S7	Slab
										30	#5	34'-9"	S8	Slab
										70	#5	28'-9"	S9	Slab
										4	#4	33'-0"	S10	Slab
INT. BENT 2														
16	#7	3'-6"	D2	Footing	30'-11" H1	28'-5" H10	10'-8 1/2" H7							
8	#7	5'-6"	H11	Beam										
4	#8	12'-0"	H7	Beam										
2	#6	28'-0"	H8	Beam										
5	#10	28'-0"	H9	Beam										
3	#8	31'-0"	H10	Beam										
18	#3	6'-3"	P1	Column										
29	#4	9'-6"		Beam										
10	#4	3'-3"	U4	Beam										
8	#7	11'-9"	V11	Column										
8	#7	10'-3"	V9	Column										
INT. BENT 3														
16	#7	3'-6"	D2	Footing										
8	#7	5'-6"	H11	Beam										
4	#8	12'-0"	H7	Beam										
2	#6	28'-0"	H8	Beam										
5	#10	28'-0"	H9	Beam										
3	#8	31'-0"	H10	Beam										
14	#3	6'-3"	P1	Column										
29	#4	9'-6"	U3	Beam										
10	#4	3'-3"	U4	Beam										
16	#7	9'-3"	V10	Column										



BORING DATA
Note: See sheet No. 1 of 7 for location of borings

BRIDGE OVER 'STONEYS BRANCH
STATE ROAD FROM ROUTE N SOUTH TO ROUTE 66
ABOUT 10.5 MILES N.E. OF CARTHAGE
PROJECT NO. S-892 (2) SBB STA. 57. + 31.0
JASPER COUNTY

A-1884

DETAILED OCT. 1966 BY WEIMHOLT
CHECKED DEC. 1966 BY Apple

Note: This drawing is not to scale. Follow dimensions.

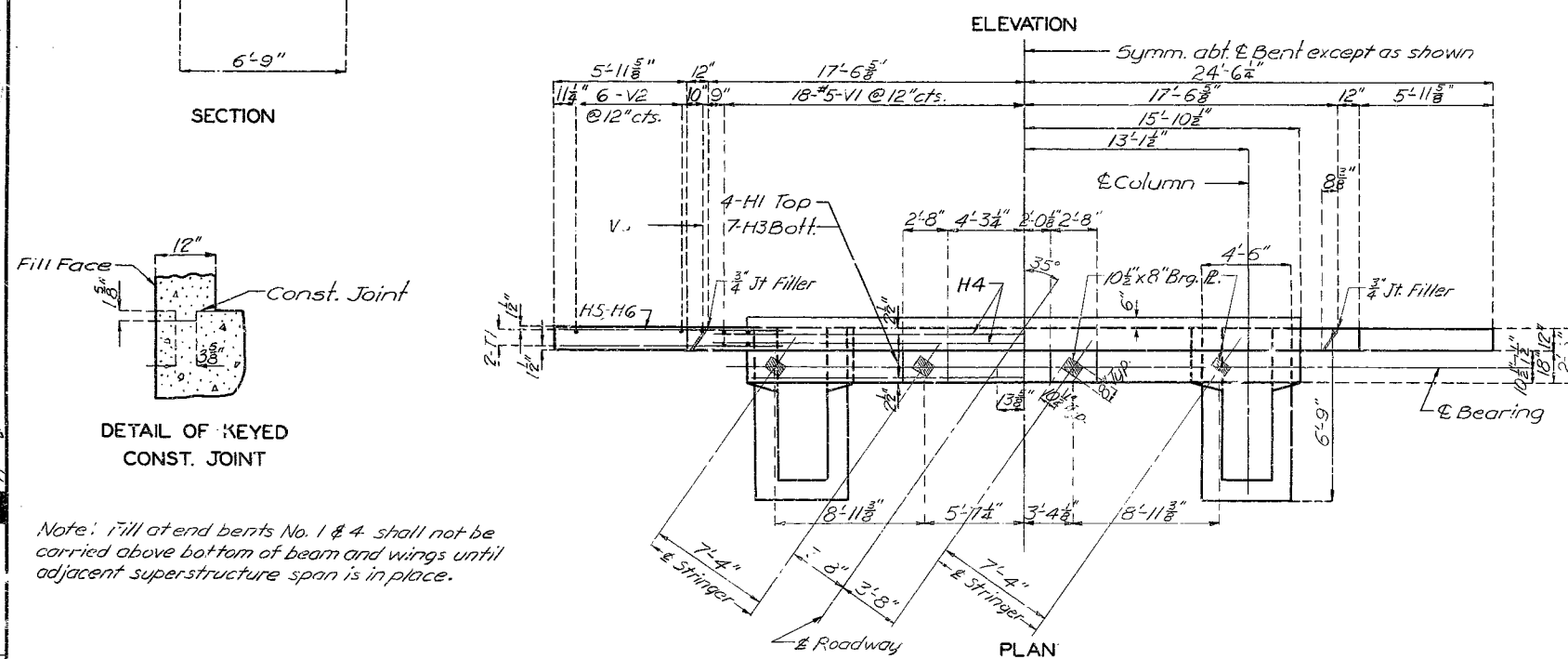
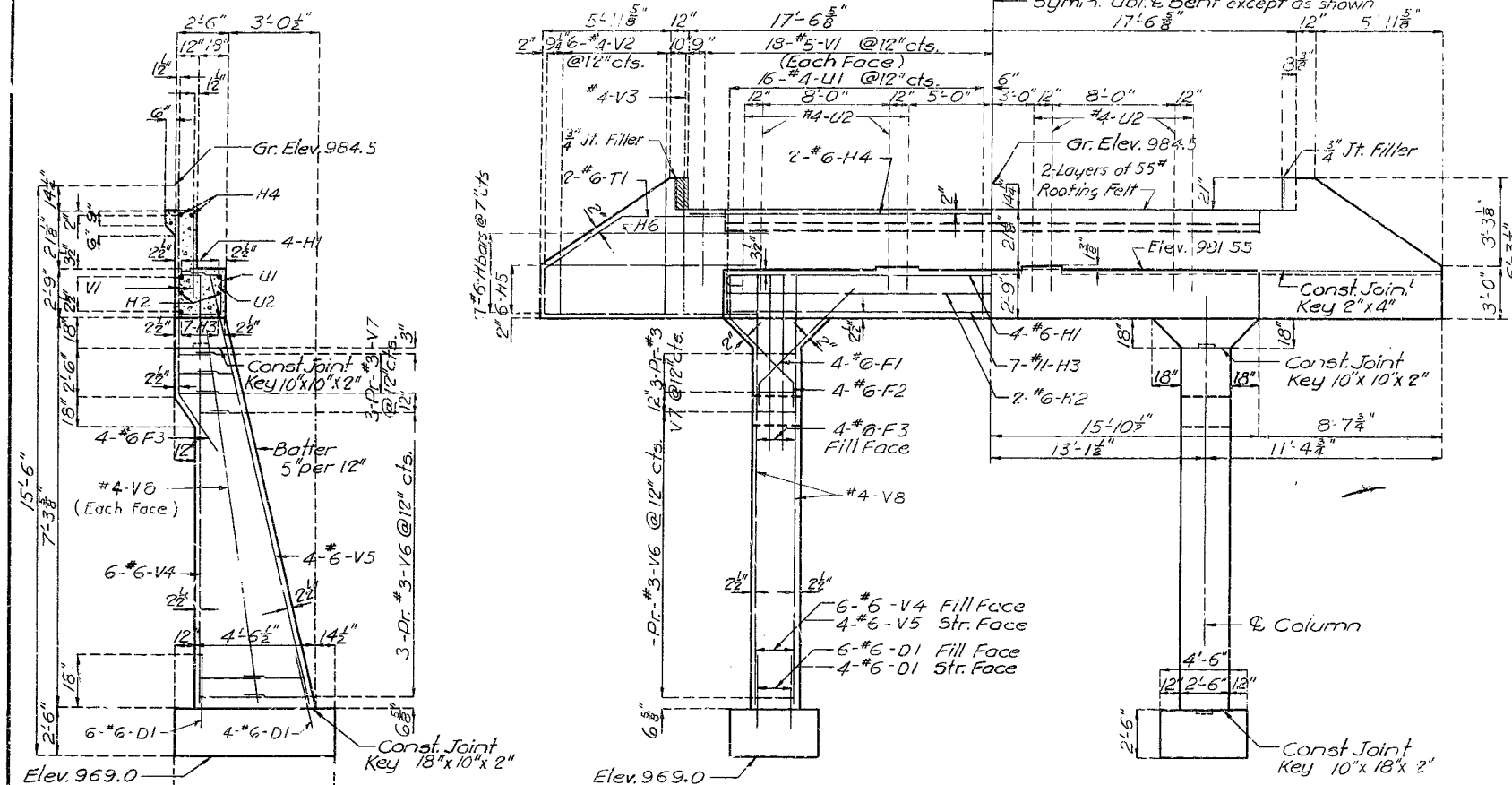
Sheet No. 2 of 7.

86

No. 20.3 Revised
June 1961 Dec. 1966

MISSOURI STATE HIGHWAY DEPARTMENT

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.		19	13	



DETAILS OF END BENTS NO. 1 & 4

Note: Fill at end bents No. 1 & 4 shall not be carried above bottom of beam and wings until adjacent superstructure span is in place.

DETAILED SEPT. 1966 BY LESLIE - WEIMHOLT
CHECKED DEC. 1966 BY EPPL

Note: This drawing is not to scale. Follow dimensions.

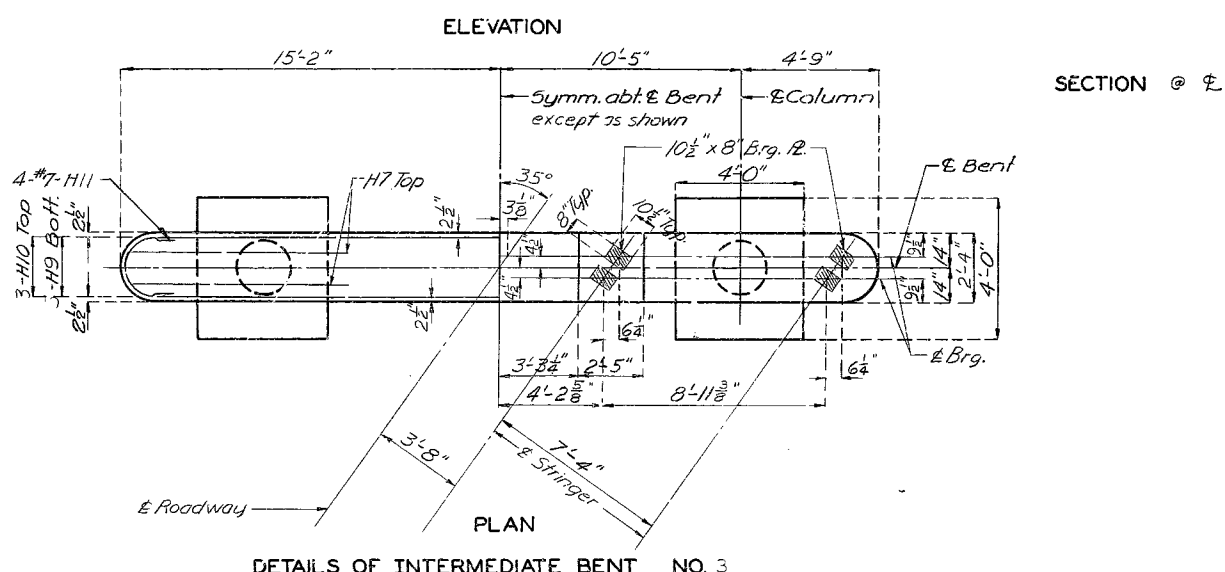
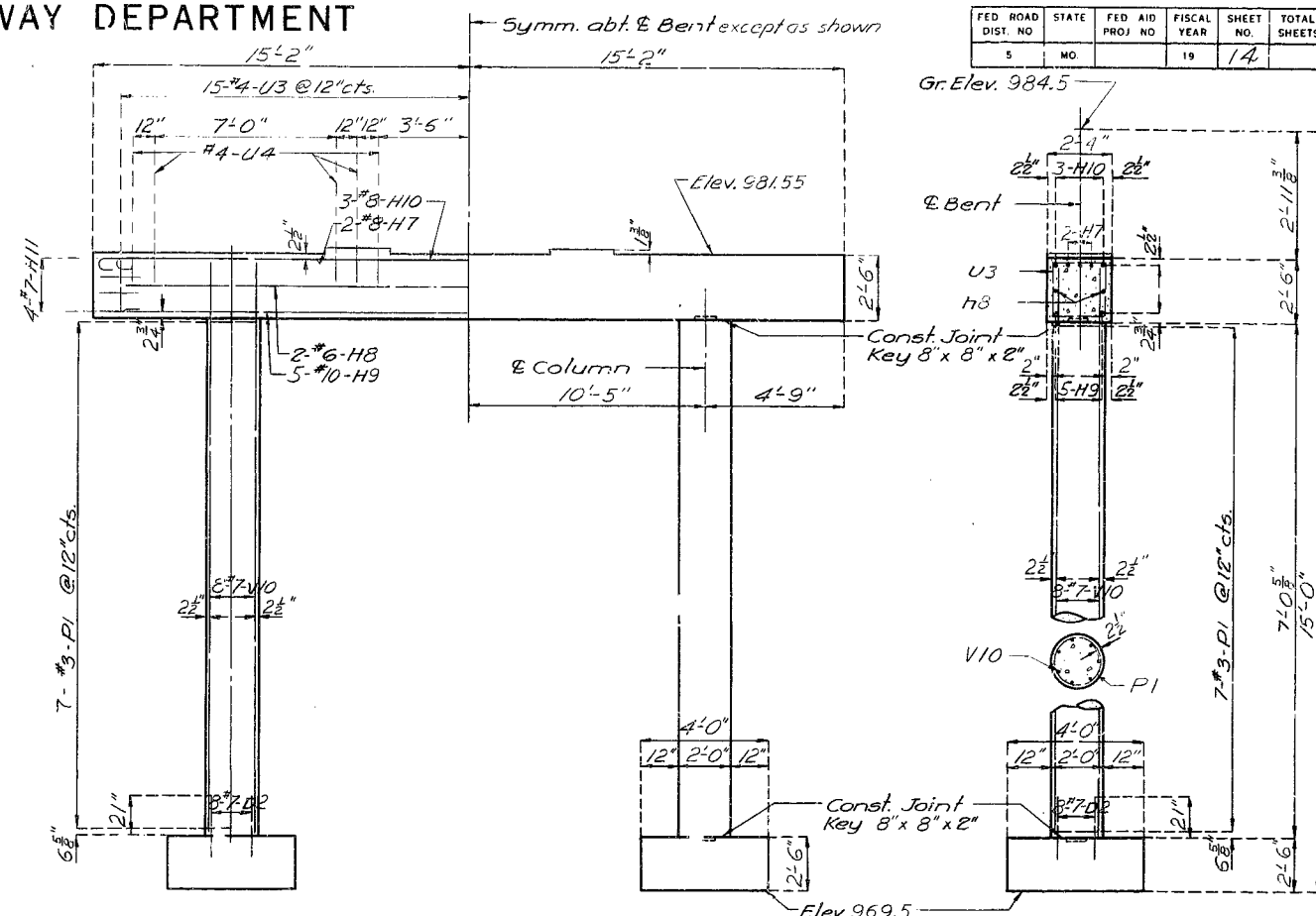
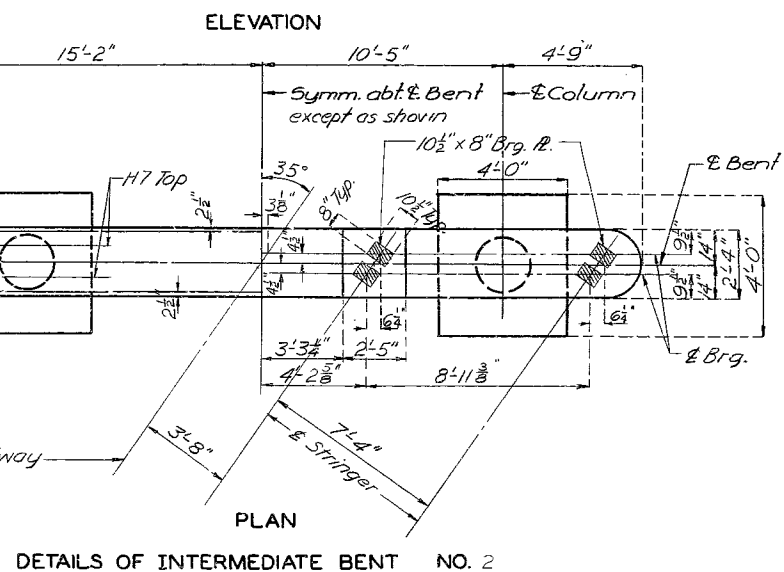
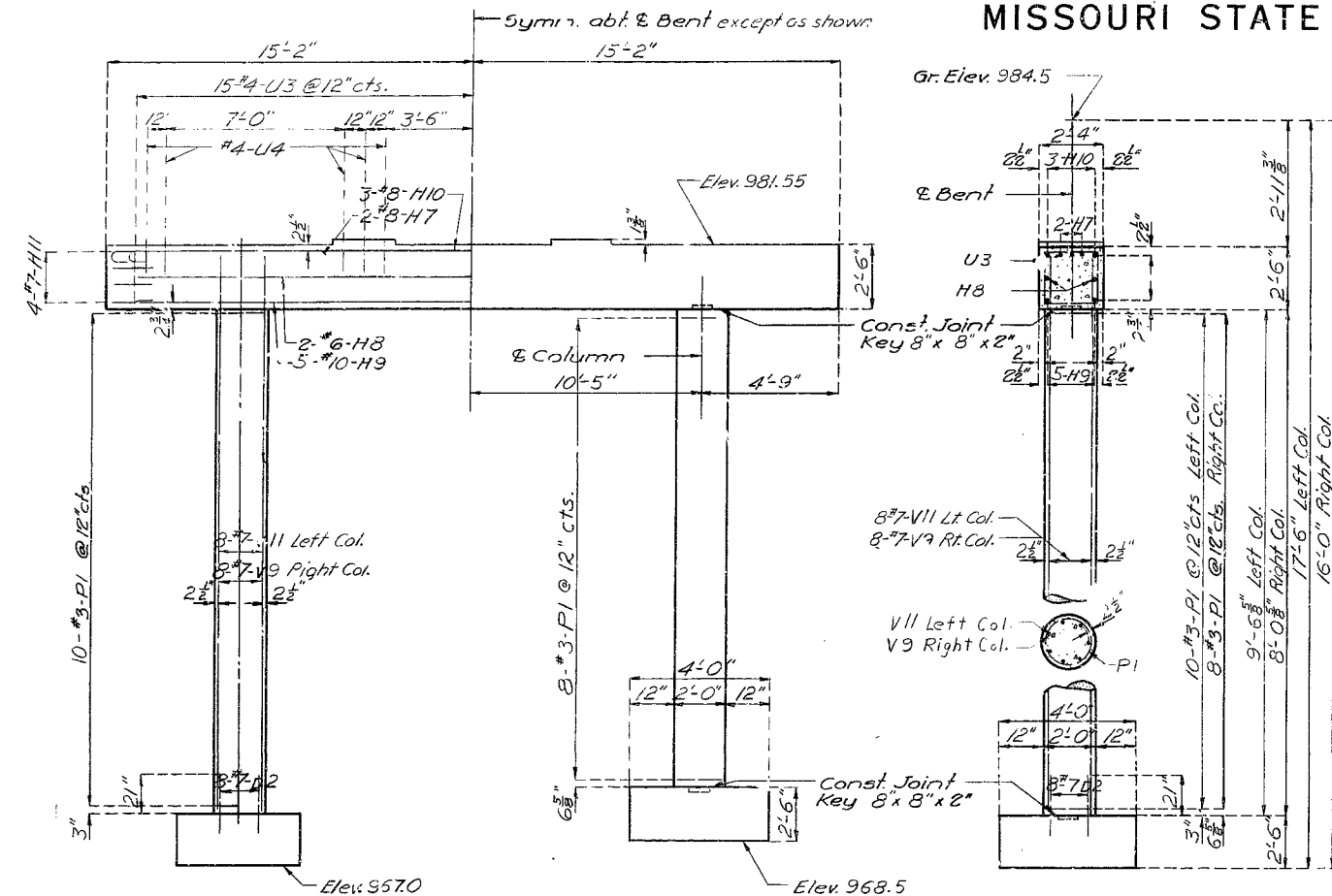
Sheet No. 3 of 7.

BRIDGE OVER STONEYS BRANCH
STATE ROAD FROM ROUTE M SOUTH TO ROUTE 66
ABOUT 10.5 MILE N.E. OF CARTHAGE
PROJECT NO. S-892 2 SBB STA. 57 + 31.0
JASPER COUNTY

A-1834

MISSOURI STATE HIGHWAY DEPARTMENT

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.		19	14	



BRIDGE OVER STONEYS BRANCH
STATE ROAD FROM ROUTE N SOUTH TO ROUTE 66
ABOUT 10.5 MILES N.E. OF CARTHAGE
PROJECT NO. S-892 (2) SBB STA. 57+31.0
JASPER COUNTY

DETAILED SEPT. 1966 BY LESLIE
 CHECKED DEC. 1966 BY EPPLE

Note: This drawing is not to scale. Follow dimensions.

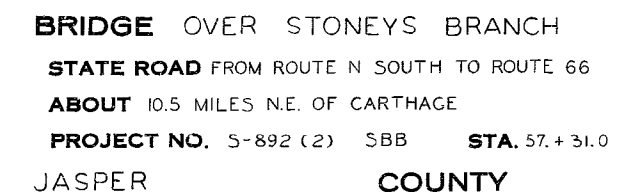
Sheet No. 4 of 7.

A-1884

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CHECKED *Dec* 1966 BY *Epple*

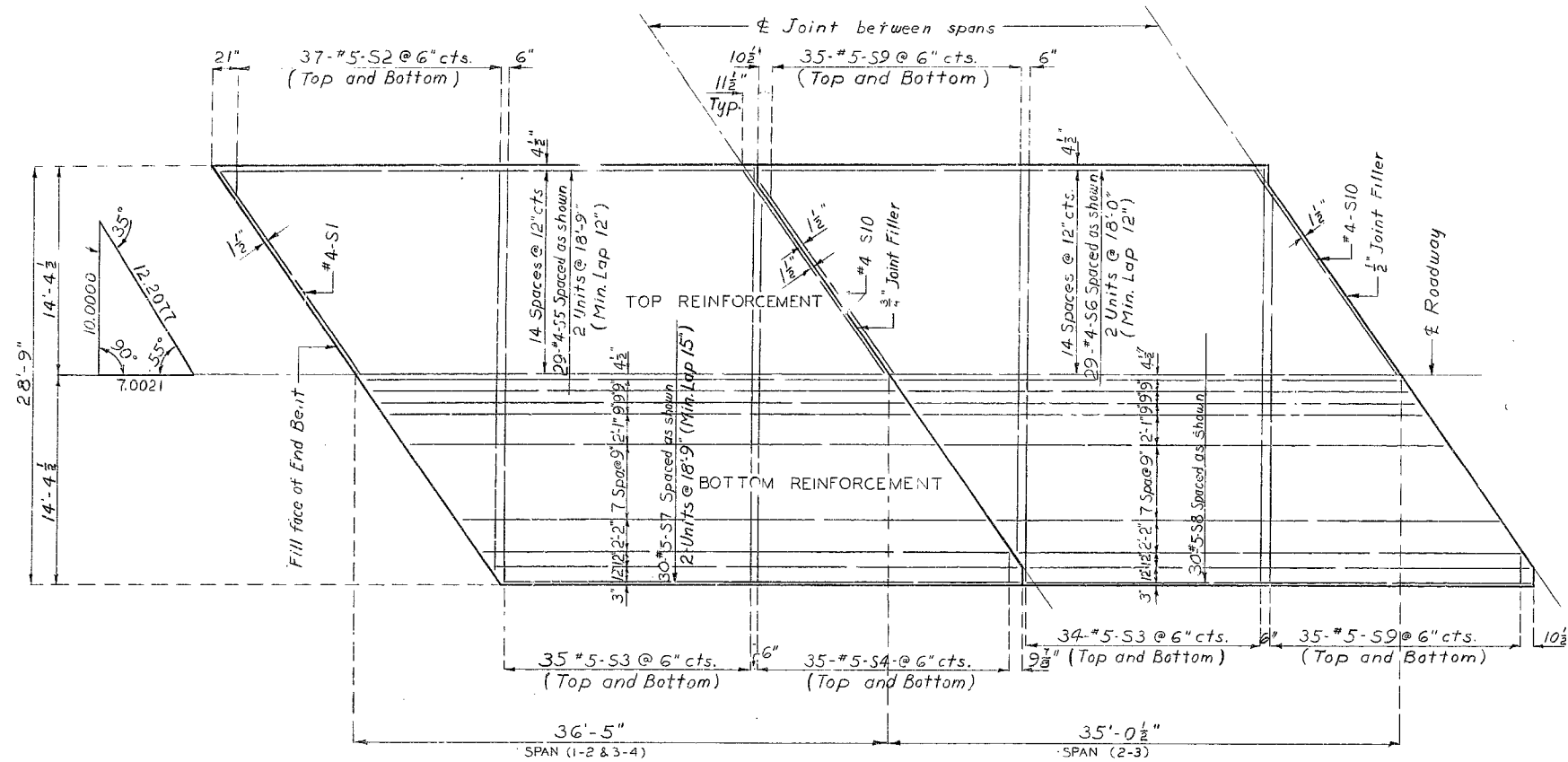
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NO CONFLICTS OF INTEREST

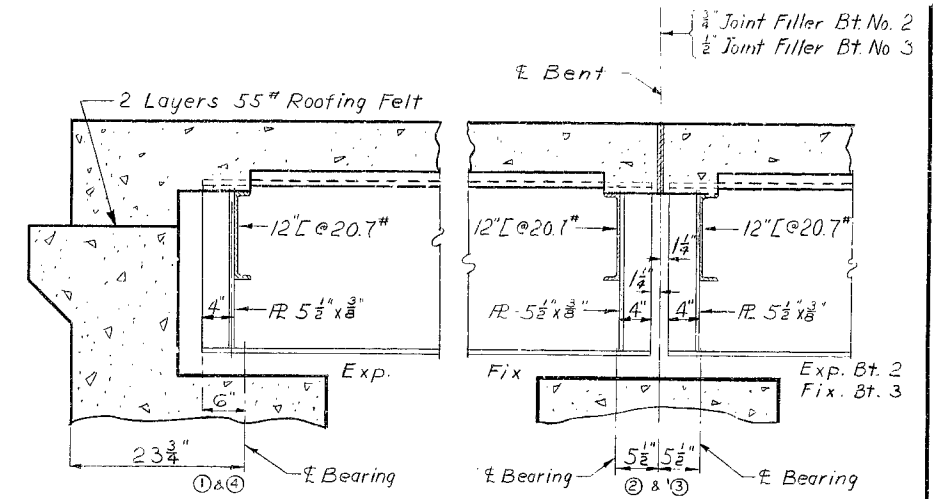


MISSOURI STATE HIGHWAY DEPARTMENT

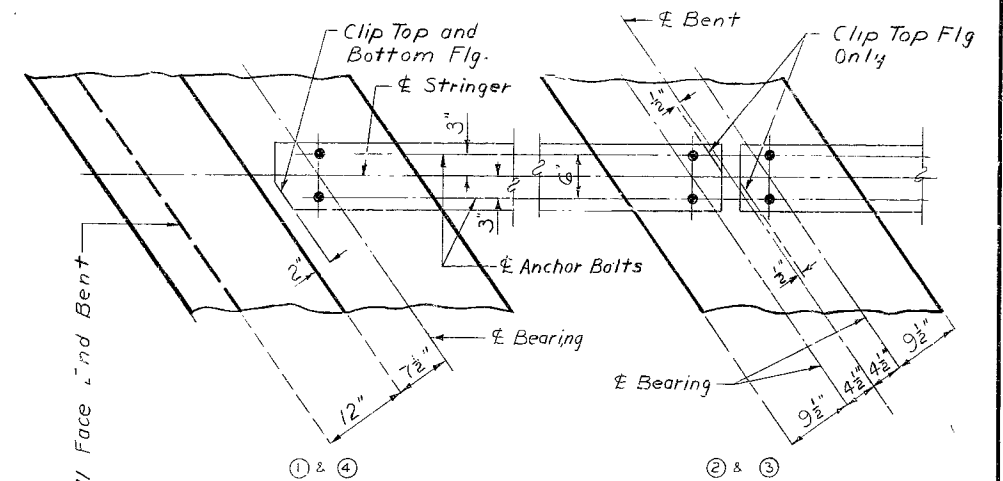
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5	MO.		19	16	



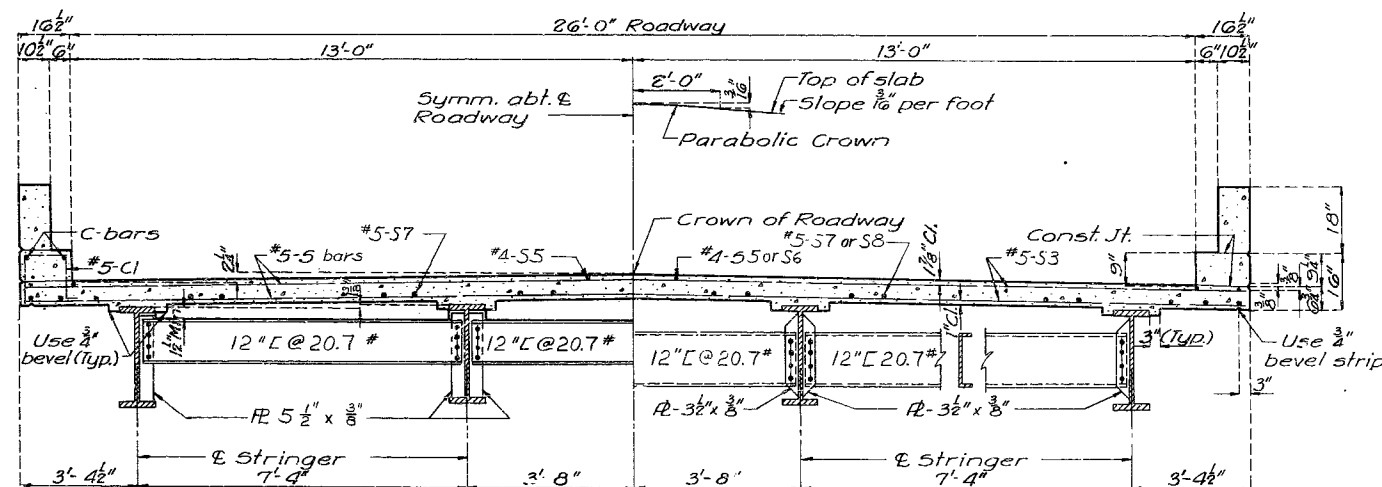
PART PLAN OF SLAB SHOWING REINFORCEMENT



PART LONGITUDINAL SECTION



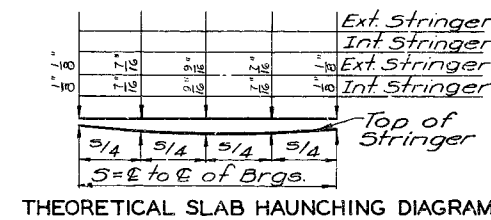
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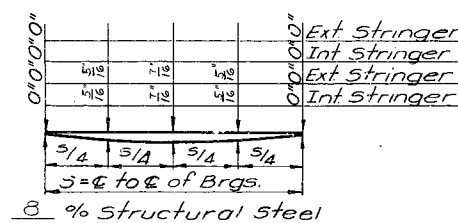
HALF SECTION NEAR END DIAPH.

HALF SECTION NEAR INT DIAPH.

Note: For details and reinforcement of curb and parapet not shown see sheet No. 7 of 7.



THEORETICAL SLAB HAUNCHING DIAGRAM



DEAD LOAD DEFLECTION

BRIDGE OVER STONEYS BRANCH

STATE ROAD FROM ROUTE N SOUTH TO ROUTE 56

ABOUT 10.5 MILES N.E. OF GARTHAGE

PROJECT NO. S-892 (2) SBB STA. 57+31.0

JASPER

COUNTY

A-1884

DETAILED OCT. 1966 BY WEIMHOLT
CHECKED DEC. 1966 BY EPPLE

Note: This drawing is not to scale. Follow dimensions.

Sheet No. 6 of 7.

GENERAL HANDRAIL NOTES

All handrail posts shall be set normal to grade.
Aluminum tube handrail shall be bent to conform to vertical and horizontal alignment of parapet.

Aluminum washer shims between top of para. st and post base may be used for adjusting handrail alignment. Maximum thickness of shims to be 1/8". Where more tilting of post is required for proper alignment, concrete bearing areas shall be ground down. All parts of handrail, except anchor bolts, nuts, washers, and set screws are to be of aluminum material.

The contract unit price per linear foot of "Bridge Rail" shall include furnishing and erecting the handrail complete with anchor bolts, shims and insulating compound.

All fillets 1/4" except as noted.

All drafts 3° except as noted.

Pipe rail to be fabricated in two or three panel lengths unless otherwise approved.

Omit set screw on side adjacent to filled joint in parapet and curb at all expansion posts.

Top of curbs and parapets to be built parallel to grade with curb and parapet joints (except at end posts) normal to grade.

Concrete end posts to be vertical.

All exposed edges of end posts shall have 1/2" bevel.

All exposed edges of curbs and parapets shall have 1/2" radius or 3/8" bevel unless otherwise noted.

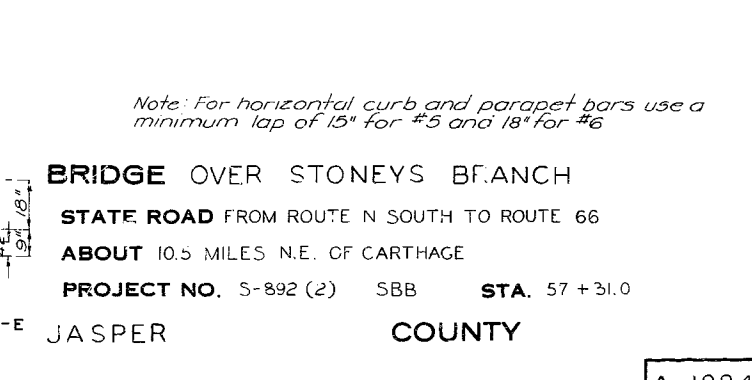
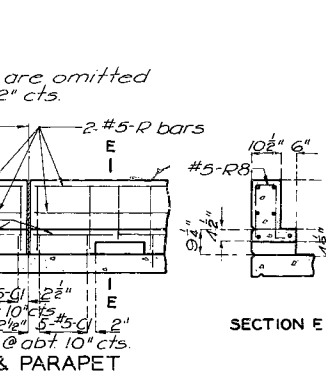
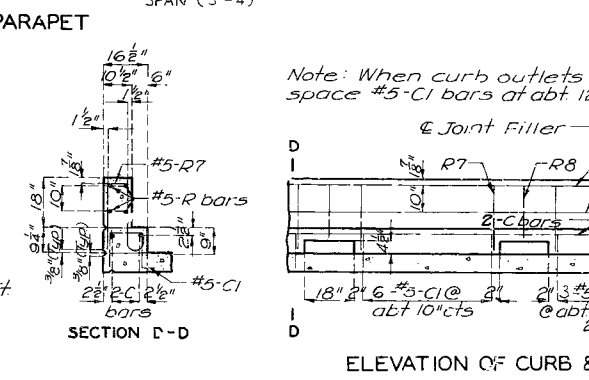
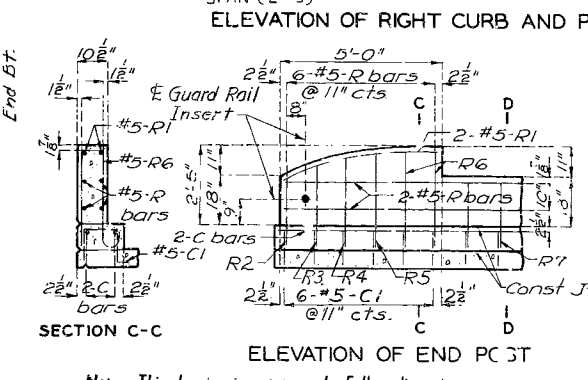
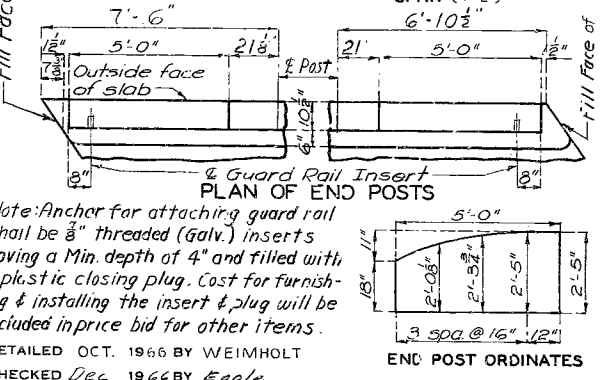
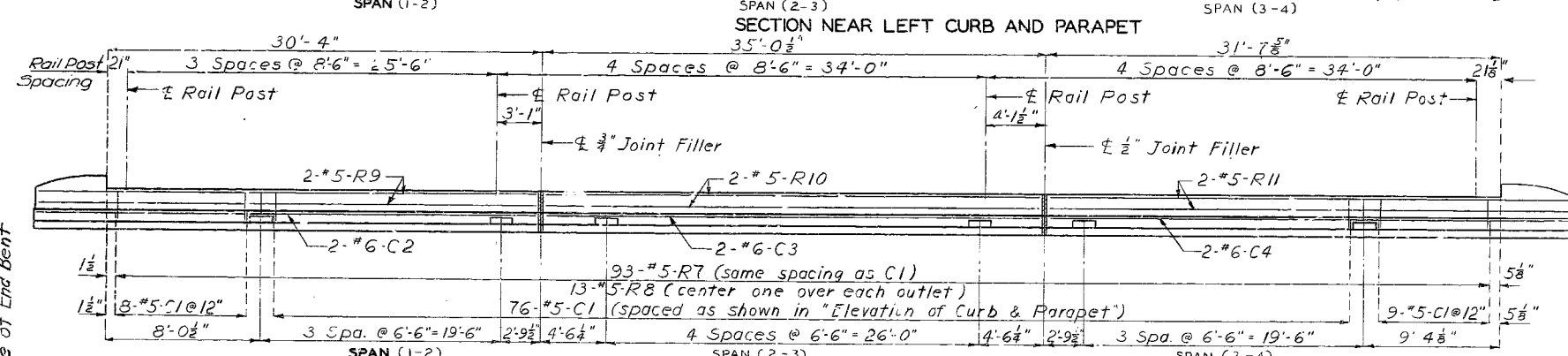
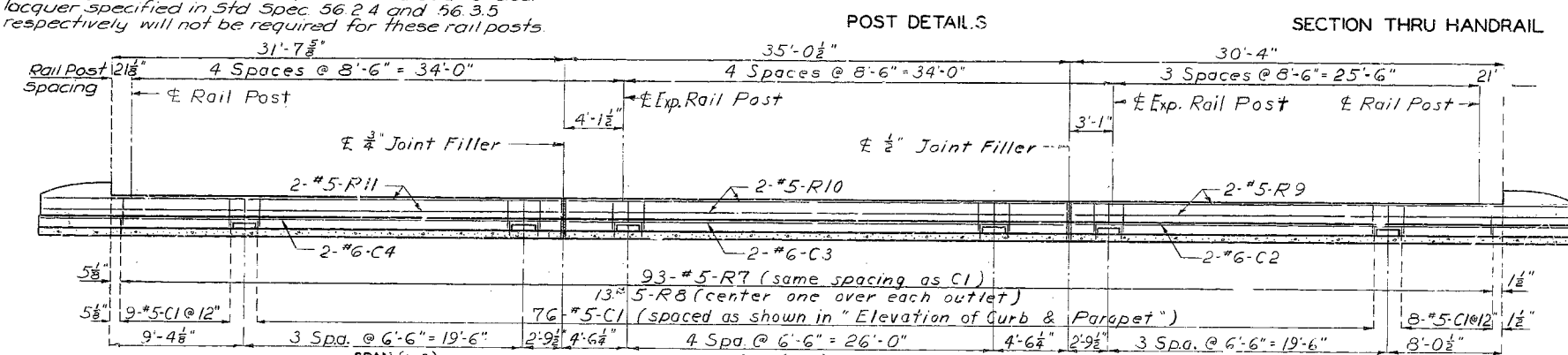
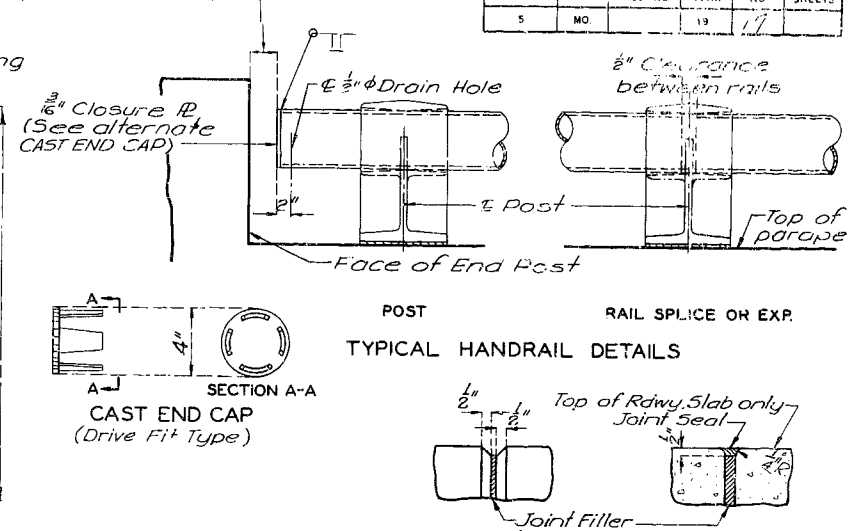
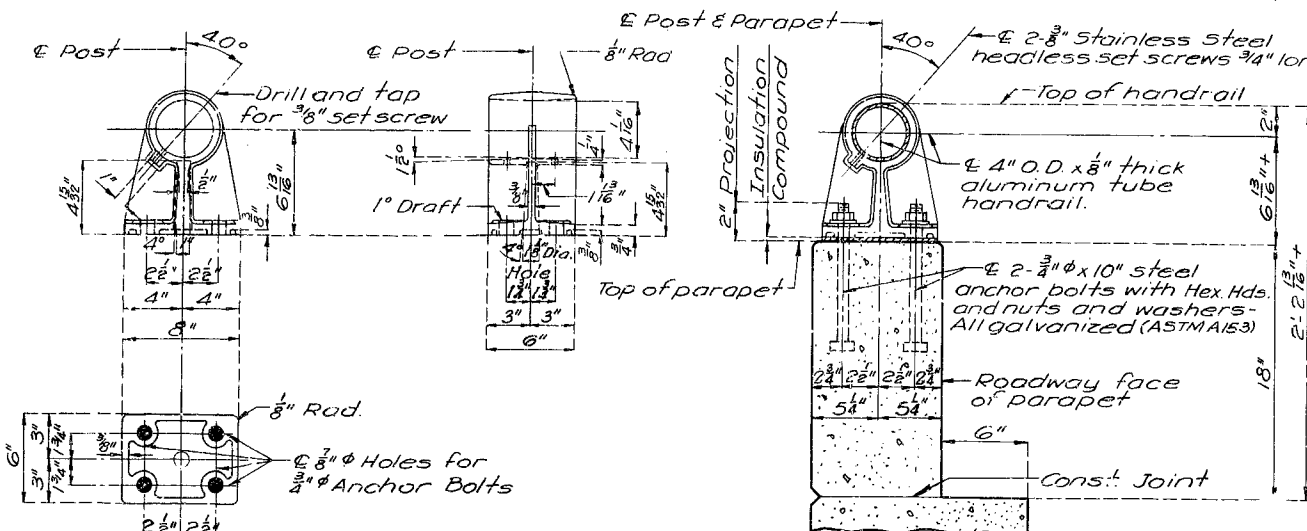
If the contractor desires, he may use drive fit cast aluminum end caps in lieu of welded aluminum closure plates.

Integrally cast test coupons and a coat of clear lacquer specified in Std Spec. 56.2.4 and 56.3.5 respectively will not be required for these rail posts.

MISSOURI STATE HIGHWAY DEPARTMENT

2" Min. except for Exp Gap in parapet use 3" @ 60° F.

FED ROAD DIST. NO.	STATE	FED AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO		19	17	



BRIDGE OVER STONEYS BRANCH
STATE ROAD FROM ROUTE N SOUTH TO ROUTE 66
ABOUT 10.5 MILES N.E. OF CARTHAGE
PROJECT NO. 5-892 (2) SBB STA. 57 + 31.0
JASPER COUNTY

REVISIONS
REVISED JULY 1966
MAR 1964
Note: Anchor for attaching guard rail shall be 3/4" threaded (galv.) inserts having a Min. depth of 4" and filled with a plastic closing plug. Cost for furnishing & installing the insert & plug will be included in price bid for other items.
DETAILED OCT. 1966 BY WEIMHOLT
CHECKED Dec 1966 BY Apple

Note: This drawing is not to scale. Follow dimensions.

Sheet No. 7 of 7.

A-1884

MISSOURI STATE HIGHWAY DEPARTMENT

35'-35'-35' Simple WF Beam Spans (Composite)

ED. ROAD DIS. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO		19	11	

FINAL PLANS

GENERAL NOTES:

Design Specifications: A.A.S.H.O. - 1961

Design Loading:

H15 44 15 #1/sq. ft Future Wearing Surface
Earth 120# Equivalent Fluid Pressure 30#

Design Unit Stresses:

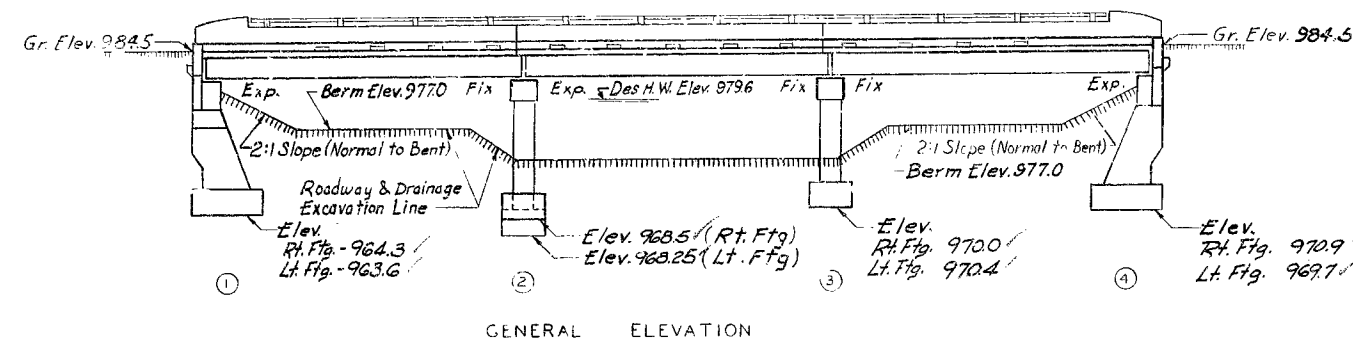
Class B Concrete (substructure) $f_c = 1,200$ psi
Class B1 Concrete (superstructure) $f_c = 1,600$ psi
Reinforcing Steel $f_s = 20,000$ psi
Structural Steel (A.S.T.M. A36-63T) $f_s = 20,000$ psi

Surface Seal:

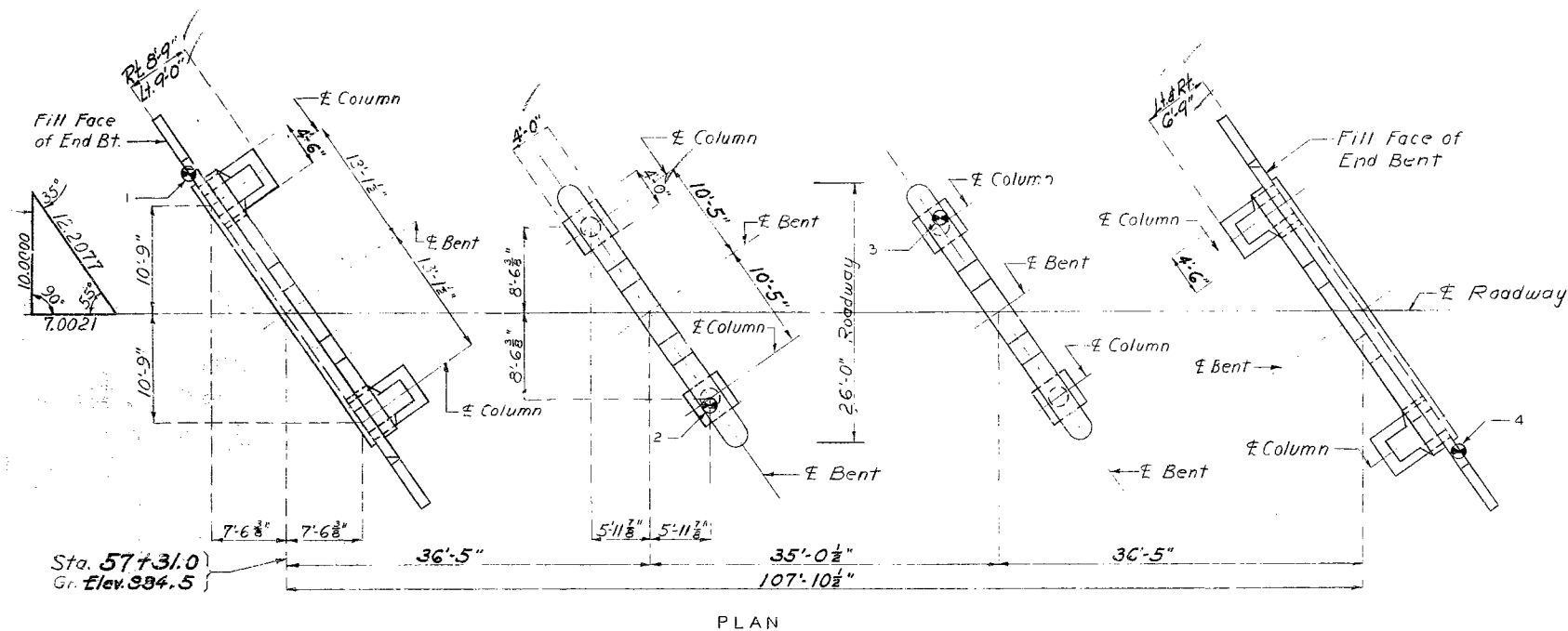
Superstructure deck surface sealed

Fabricated Steel:

Field connections, High Strength Bolts $\frac{3}{4}" \phi$,
holes $\frac{13}{16}" \phi$ except as noted.



GENERAL ELEVATION

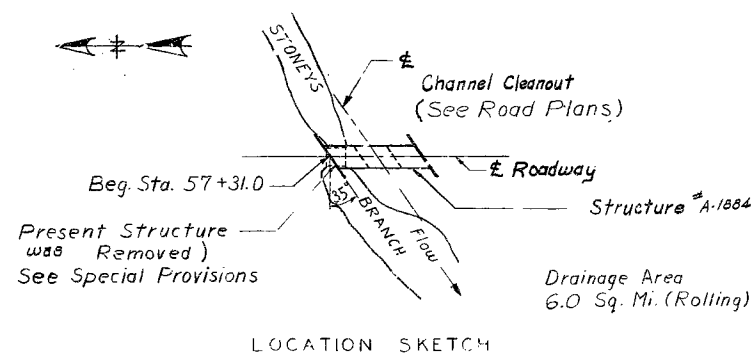


PLAN

Note: For boring data see sheet No. 2 of 7.
⊙ Indicates location of borings

FOOTING DATA				
BENT NO.	1	2	3	4
Foundation Material	Rock	Rock	Rock	Rock
Des. Brg. Tons/Sq. Ft.	6.2	4.2	4.2	6.2

QUANTITIES			
ITEM	SUBSTR.	SUPERSTR.	TOTAL
Class I Excavation for Structures	Cu. Yd. 135.5		135.5
Class I Excavation for Structures Below Plan	Cu. Yd. 33.5		33.5
Class B Concrete	Cu. Yd. 78.3		78.3
Class B1 Concrete	Cu. Yd.	85.4	85.4
Reinforcing Steel	Lb. 10190	22000	32190
Fabricated Structural Carbon Steel	Lb.	35580	35580
Bridge Rail (Single Tube Type)	Lin. Ft.	193	193
Foundation Test Holes	Lin. Ft.	56	56



LOCATION SKETCH

B.M. #7 "X" on SW Wing 15.5' Rt. Sta. 58+48
Elev. 985.06

BRIDGE OVER STONEYS BRANCH

STATE ROAD FROM ROUTE N. SOUTH TO ROUTE 66

ABOUT 10.5 MILES N.E. OF CARTHAGE

PROJECT NO. S-882 (2) SBB STA. 57+31.0

JASPER COUNTY

SUBMITTED BY *D.B. Jenkins* DATE 2-2-67
APPROVED BY *M.J. Smith* DATE 2-2-67

DESIGNED AUG. 1966 BY WEBER
DETAILED OCT. 1966 BY WEIMHOLT & LESLIE
CHECKED DEC. 1966 BY EPPLER

Note: This drawing is not to scale. Follow dimensions.

Sheet No. 1A of 3

FINAL PLANS

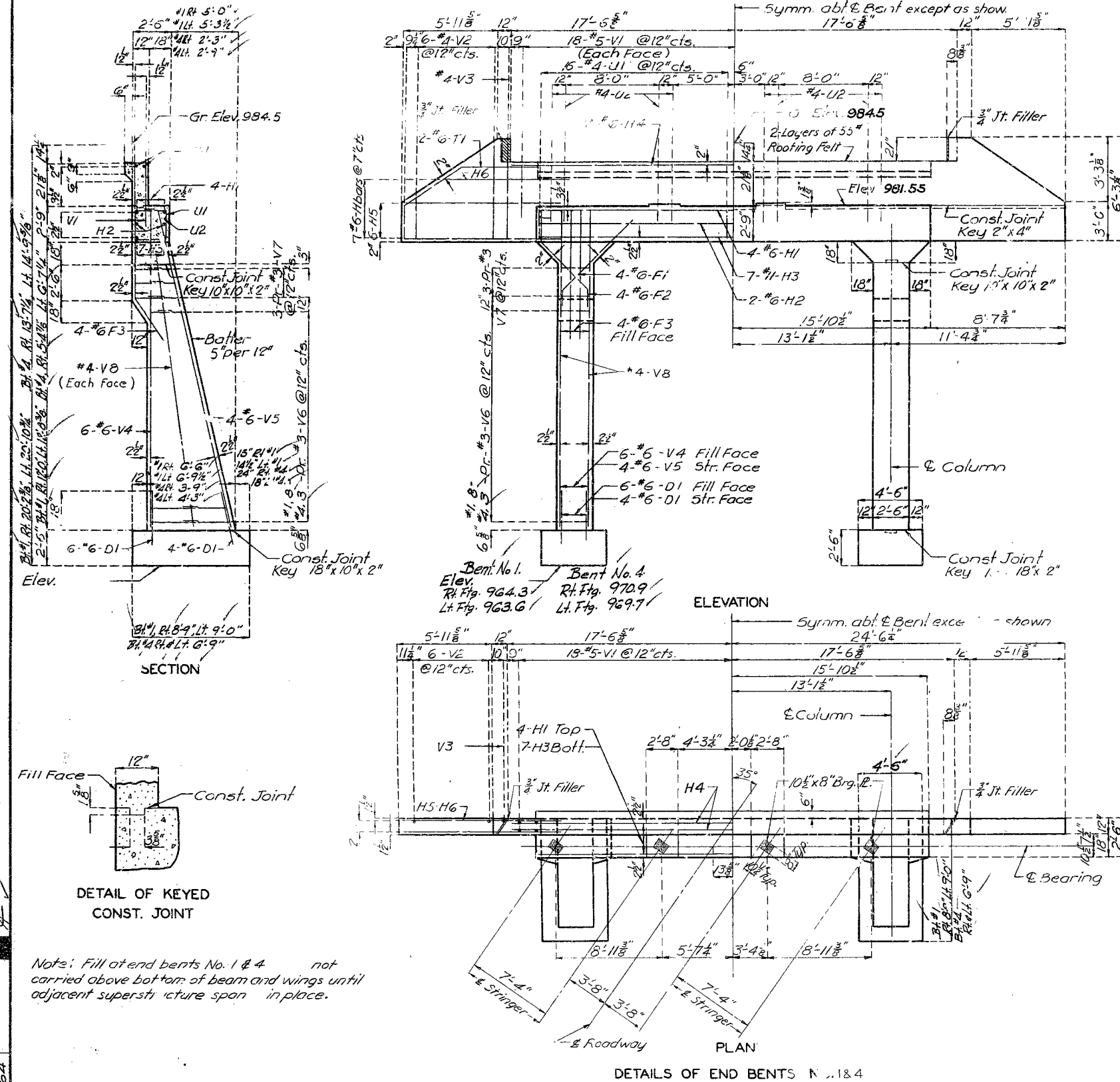
STD. 54 00

A-1884

MISSOURI STATE HIGHWAY DEPARTMENT

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.		19	13	

FINAL PLANS



BRIDGE OVER STONEYS BRANCH
 STATE ROAD FROM ROUTE N SOUTH TO ROUTE 66
 ABOUT 10.5 MILE N.E. OF CARTHAGE
 PROJECT NO. S-892 2 SBB STA. 57 + 31.0
 JASPER COUNTY

Note: Fill at end bents No. 1 & 4 not carried above bottom of beam and wings until adjacent superstructure span in place.

Note: This drawing is not to scale. Follow dimensions.

Sheet No. 3A of 3.

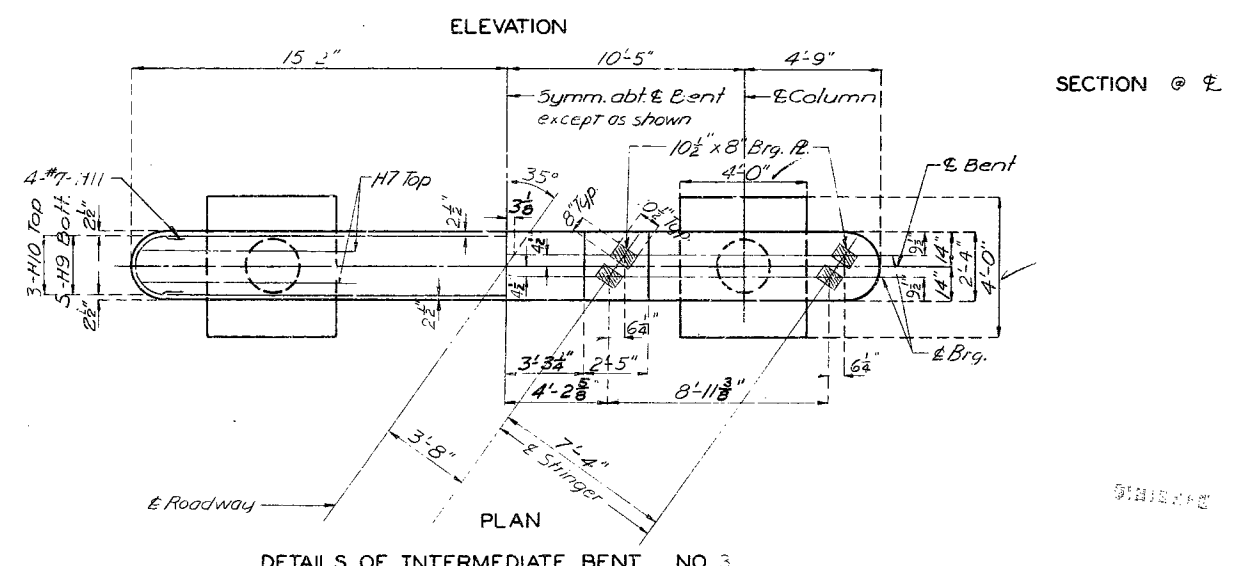
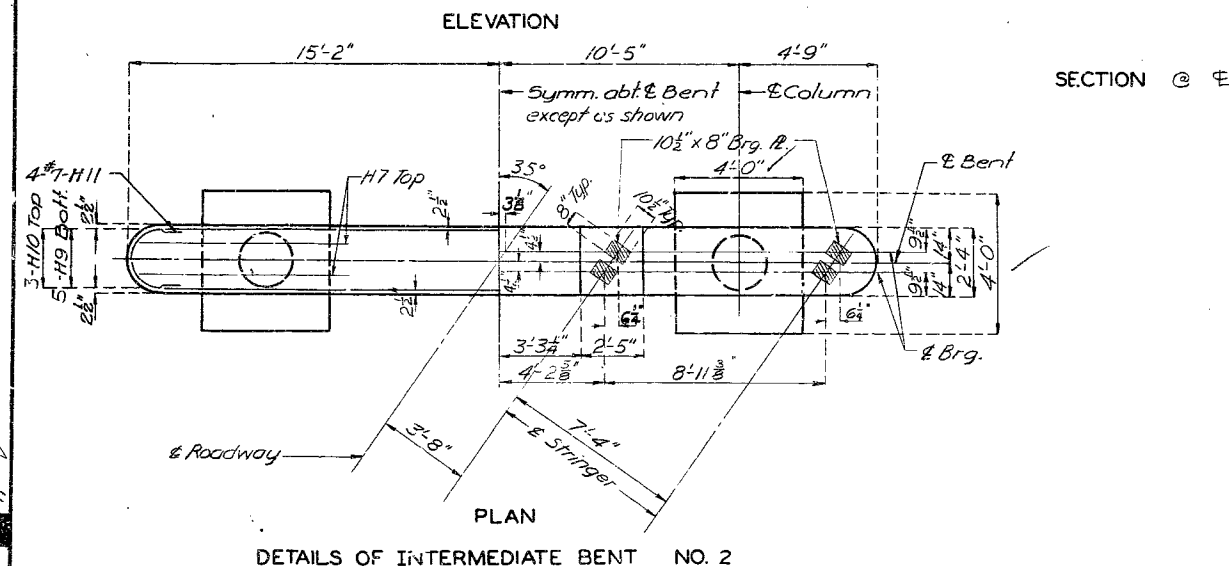
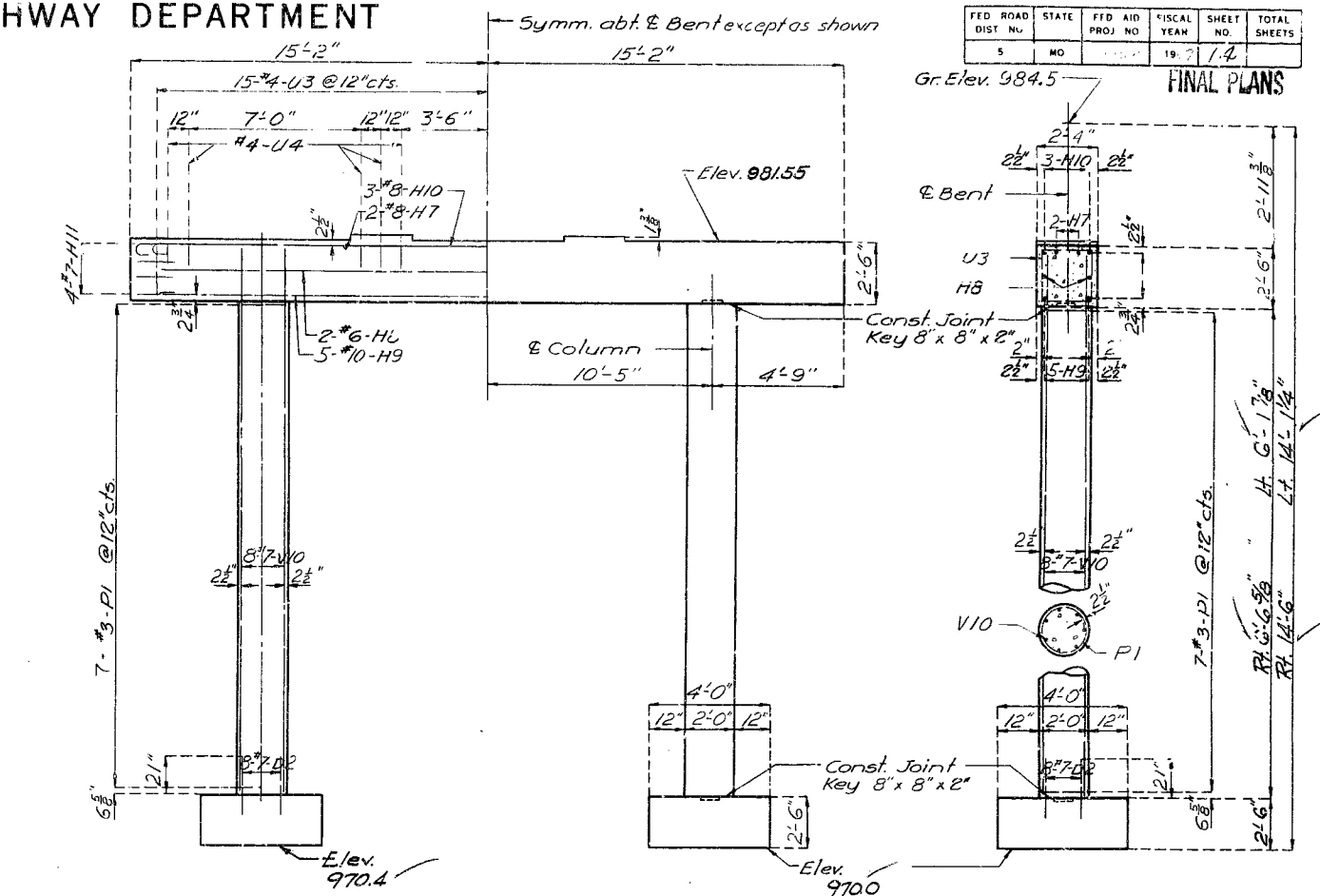
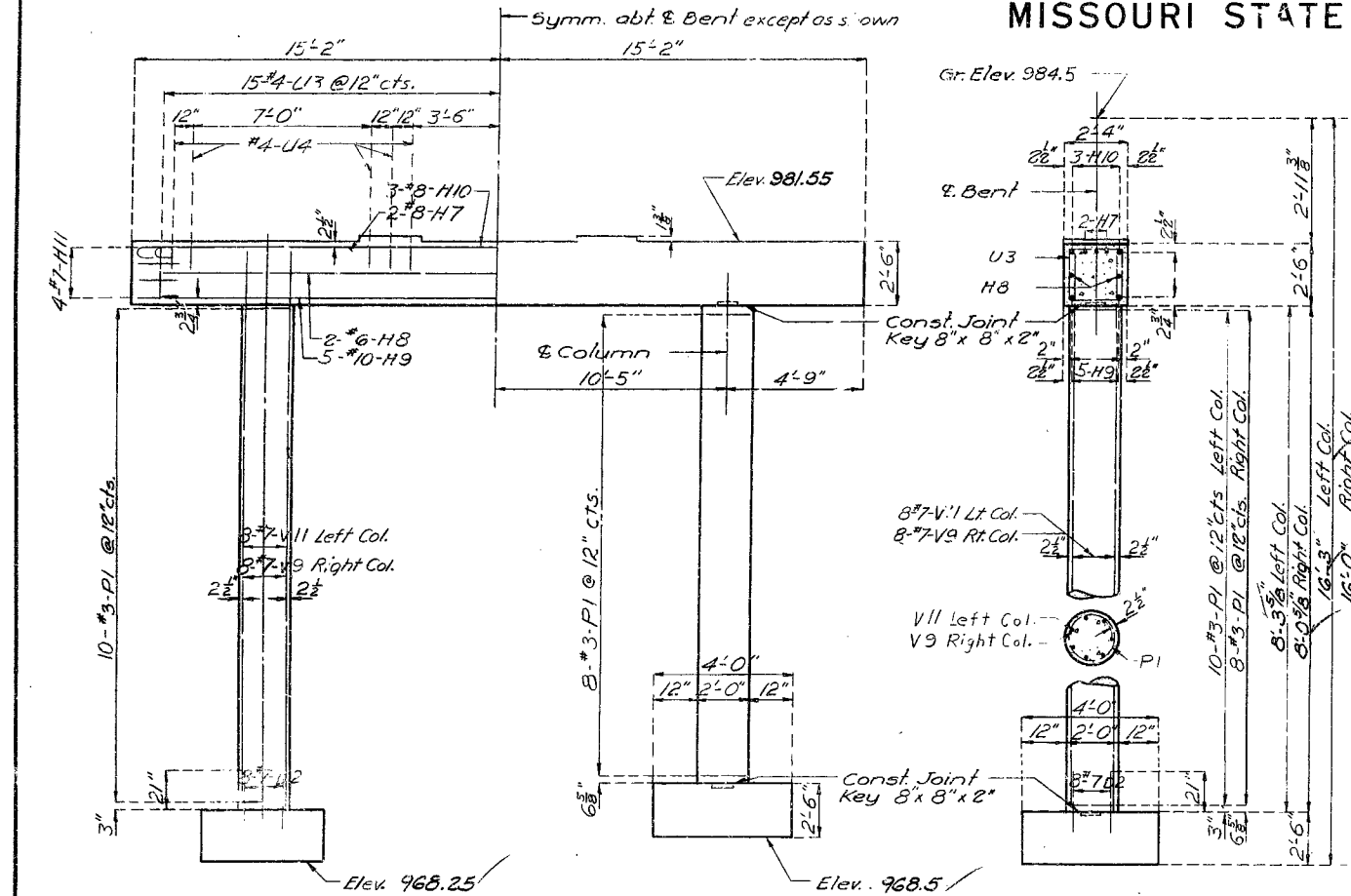
FINAL PLANS

A-1334

MISSOURI STATE HIGHWAY DEPARTMENT

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO		1967	14	

FINAL PLANS



DETAILS OF INTERMEDIATE BENT NO. 2

DETAILS OF INTERMEDIATE BENT NO. 3

BRIDGE OVER STONEYS BRANCH

STATE ROAD FROM ROUTE N SOUTH TO ROUTE 66

ABOUT 10.5 MILES N.E. OF CARTHAGE

PROJECT NO. S-892 (2) SBB STA. 5+31.0

JASPER COUNTY

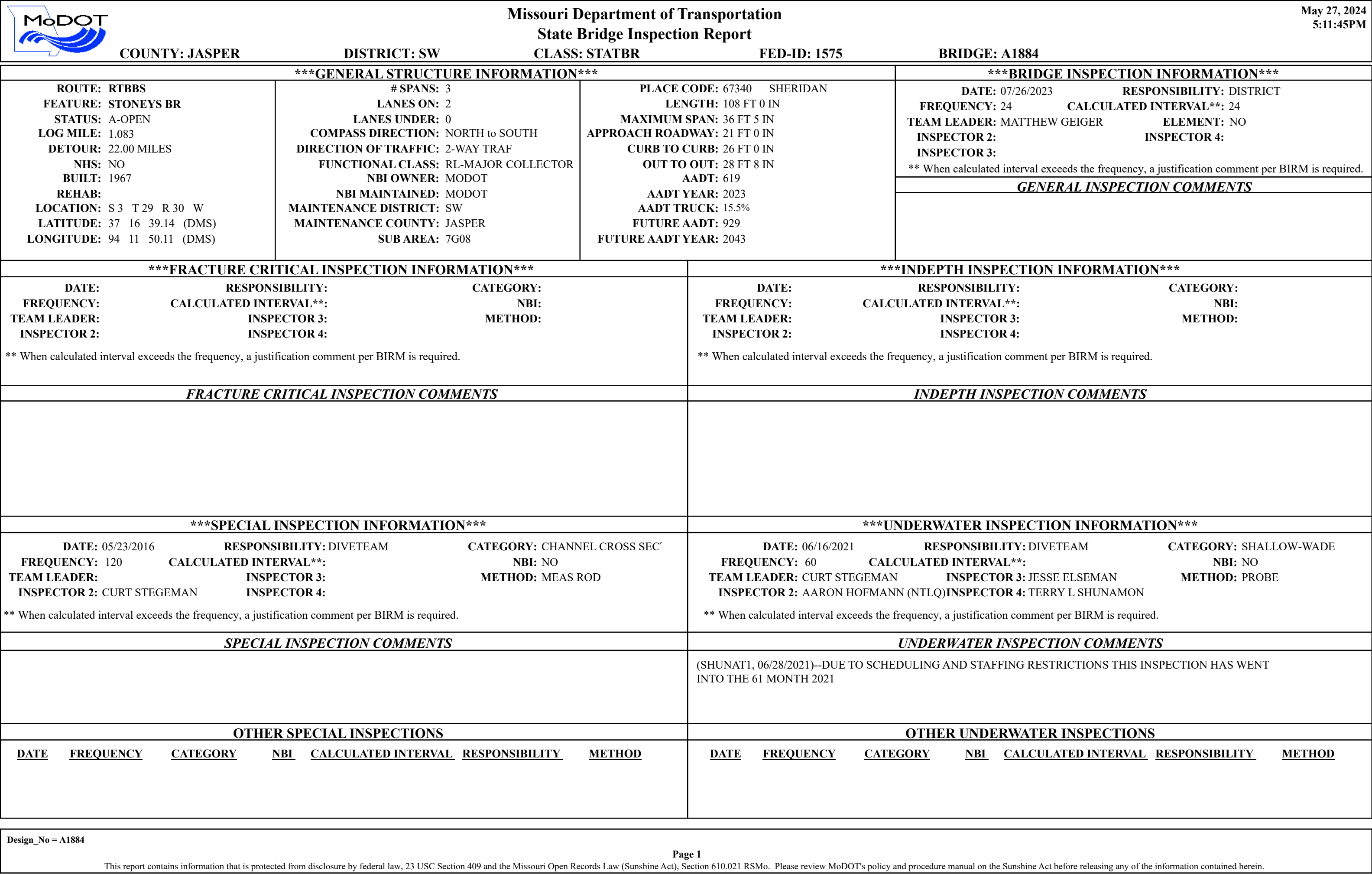
NO. 132 Revised
Mar 1964 Jan 1965
DETAILED SEPT. 1966 BY LESLIE
CHECKED DEC. 1966 BY EPPL


Note: This drawing is not to scale. Follow dimensions.


Sheet No. 4A of 3

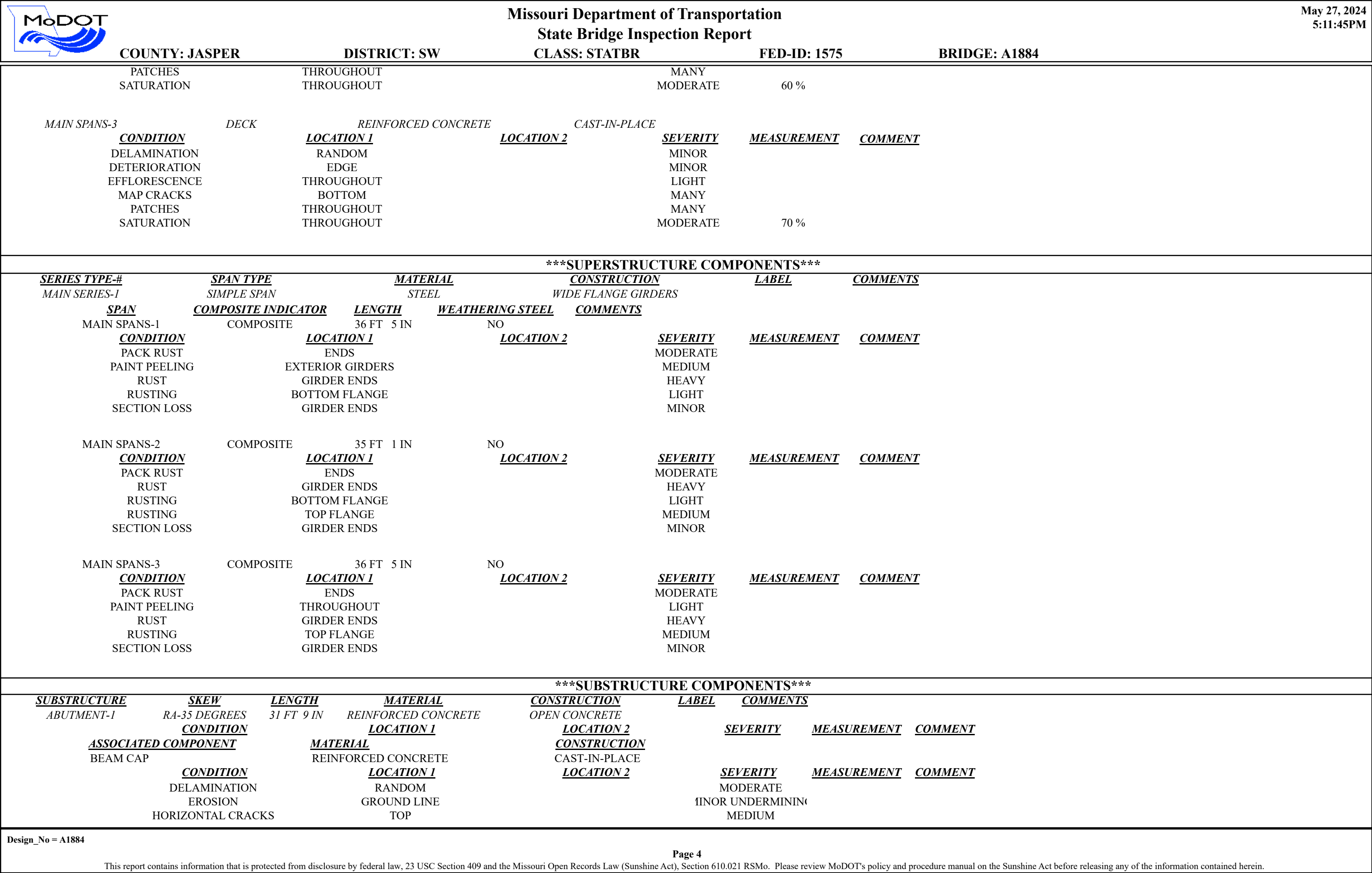
FINAL PLANS

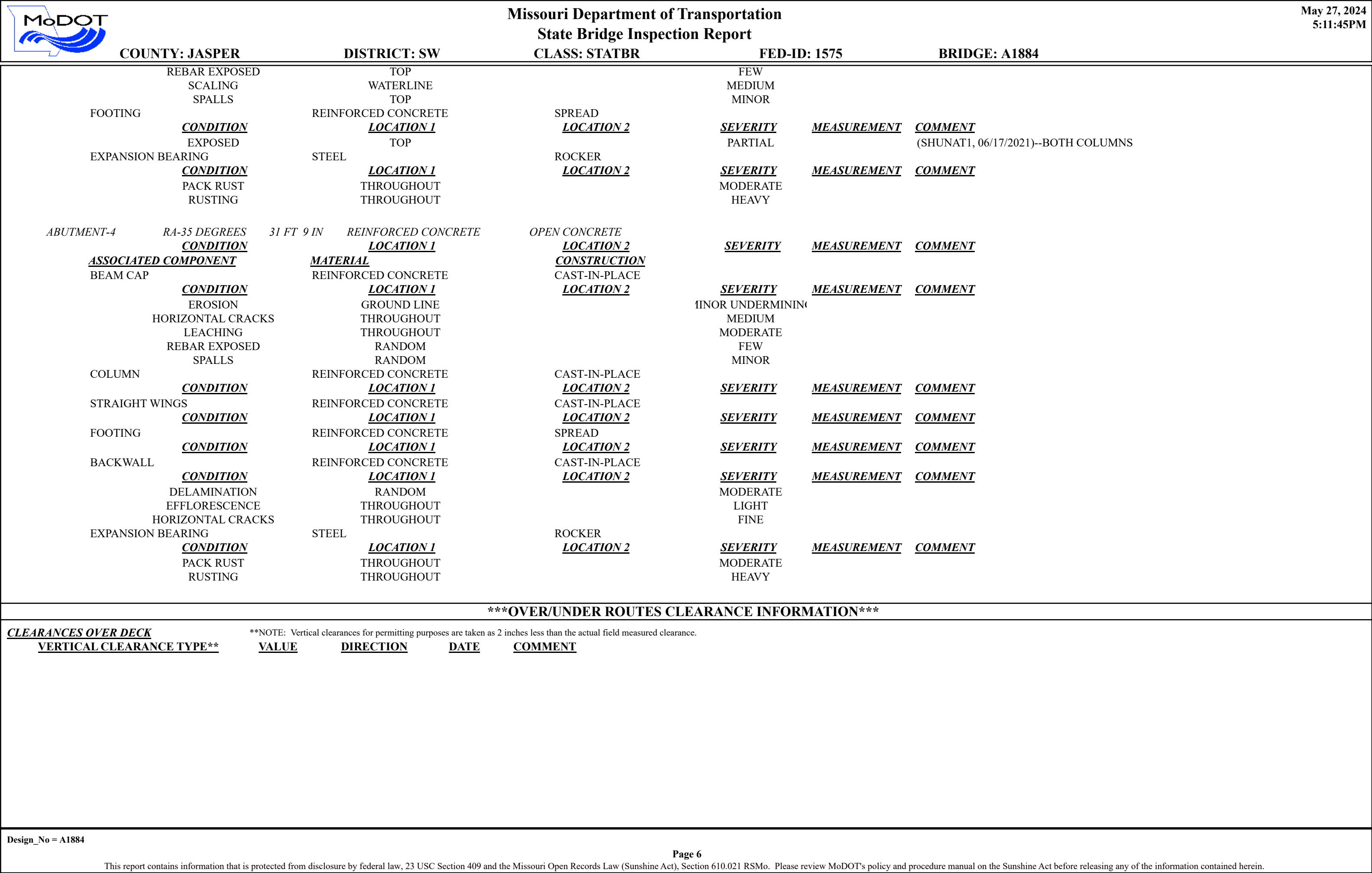
A-1884





		Missouri Department of Transportation			May 27, 2024	
		State Bridge Inspection Report			5:11:45PM	
COUNTY: JASPER		DISTRICT: SW	CLASS: STATBR	FED-ID: 1575	BRIDGE: A1884	
STRUCTURE POSTING						
APPROVED CATEGORY: S-1		NO POSTING REQUIRED				
Ton 1:		Ton 2:		Ton 3:		
COMMENTS:						
FIELD CATEGORY: S-1		NO POSTING REQUIRED				
Ton 1:		Ton 2:		Ton 3:	PROBLEM:	PROBLEM DIRECTION:
COMMENTS:						
GENERAL COMMENTS/MAJOR RATED ITEMS						
GENERAL COMMENTS: (BRITTT1, 08/22/2017)--(36'-35'-36') SMP COMP WF GDR SPANS						
[ITEM 58] DECK: 3-SERIOUS CONDITION			COMMENTS: (NUNNT, 09/01/2023)--60% - 70% SATURATION EACH SPAN.			
RATING : 09/01/2023						
[ITEM 59] SUPER: 5-FAIR CONDITION			COMMENTS: (NUNNT, 09/01/2023)--MINOR GIRDER END SECTION LOSS.			
RATING : 09/01/2023						
[ITEM 60] SUB: 5-FAIR CONDITION			COMMENTS: (NUNNT, 07/23/2019)--BT. 2 & 3 CAPS NEARLY ALL DELAMINATED OR SPALLED.			
RATING : 07/23/2019						
[ITEM 61] BANK/CHANNEL: 7-MINOR DAMAGE			COMMENTS:			
RATING : 05/18/2001						
[ITEM 113] SCOUR: 8-STABLE FOR CALCULATED			COMMENTS:			
RATING : 05/18/2001						
EVALUATION TYPE :						
[ITEM 71] WATERWAY ADEQUACY: DECK ABOVE FLOOD ELEV			COMMENTS:			
RATING : 05/18/2001						
[ITEM 72] APPRRDWY ALIGNMENT: 8-VERYGOOD			COMMENTS:			
RATING : 05/18/2001						
RAILING AND APPROACH PAVEMENT COMPONENTS AND RATINGS						
[ITEM 36A] BRIDGE RAILING RATING: DOESNT MEET CURRNT STND-0			RATING : 10/26/2009		COMMENTS:	
<u>MATERIAL</u>	<u>CONSTRUCTION</u>	<u>DIRECTION</u>	<u>COMMENTS</u>			
REINFORCED CONCRETE	CURB	BOTH				
REINFORCED CONCRETE	PARAPET	BOTH				
ALUMINUM	CIRCULAR TUBE	BOTH				
[ITEM 36B] TRANSITION RAILING RATING: NOT PROVIDED-0			RATING : 05/18/2001		COMMENTS:	
[ITEM 36C] APPROACH RAILING RATING: NOT PROVIDED-0			RATING : 05/18/2001		COMMENTS:	
Design_No = A1884						
Page 2						
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		Missouri Department of Transportation				May 27, 2024	
		State Bridge Inspection Report				5:11:45PM	
COUNTY: JASPER		DISTRICT: SW		CLASS: STATBR		FED-ID: 1575	
				BRIDGE: A1884			
[ITEM 36D] RAIL END TREATMENT RATING: NOT PROVIDED-0				RATING : 05/18/2001		COMMENTS:	
APPROACH PAVEMENT: *Overall condition assigned for each approach pavemenet component is shown below.							
<u>MATERIAL</u>		<u>CONSTRUCTION</u>		<u>DIRECTION</u>		<u>CONDITION*</u>	
ASPHALT		BITUMINOUS MAT		BOTH		FAIR	
DRAINAGE, EXPANSION DEVICES, BANK/SLOPE, AND DECK PROTECTIVE COMPONENTS							
<u>DECK PROTECTIVE COMPONENTS:</u>							
<u>SERIES TYPE-#</u>		<u>COMPONENT</u>		<u>MATERIAL</u>		<u>CONSTRUCTION</u>	
MAIN SERIES-1		WEARING SURFACE		ASPHALT		BITUMINOUS MAT	
						<u>THICKNESS</u>	
						3.5 IN	
						<u>YEAR APPLIED</u>	
						2023	
						<u>MANUFACTURE</u>	
						<u>OVERALL CONDITION</u>	
						GOOD	
<u>COMMENT:</u> (GEIGEM1, 05/10/2024)--1.75" HOT MIX ASPHALT IN 2023 OVER 1" HOT MIX ASPHALT IN 2020 OVER 0.4" 2016 CHIP SEAL OVER 0.4" 2012 CHIP SEAL.							
<u>COMMENT:</u>							
<u>COMMENT:</u>							
<u>DRAINAGE COMPONENTS:</u>							
		<u>COMPONENT</u>		<u>MATERIAL</u>		<u>CONSTRUCTION</u>	
		DRAINAGE		REINFORCED CONCRETE		CURB OUTLET	
						<u>DIRECTION</u>	
						<u>COMMENTS</u>	
<u>EXPANSION DEVICE COMPONENTS:</u>							
<u>SUB UNIT-#</u>		<u>SUB LABEL</u>		<u>COMPONENT</u>		<u>MATERIAL</u>	
						<u>CONSTRUCTION</u>	
						<u>GAP</u>	
						<u>YEAR APPLIED</u>	
						<u>MANUFACTURE</u>	
						<u>OVERALL CONDITION</u>	
<u>COMMENT:</u>							
<u>BANK/SLOPE PROTECTION COMPONENTS:</u>							
		<u>COMPONENT</u>		<u>MATERIAL</u>		<u>CONSTRUCTION</u>	
						<u>DIRECTION</u>	
						<u>COMMENTS</u>	
DECK COMPONENTS							
<u>SPAN TYPE-#</u>		<u>COMPONENT</u>		<u>MATERIAL</u>		<u>CONSTRUCTION</u>	
MAIN SPANS-1		DECK		REINFORCED CONCRETE		CAST-IN-PLACE	
						<u>COMMENTS</u>	
		<u>CONDITION</u>		<u>LOCATION 1</u>		<u>LOCATION 2</u>	
		DELAMINATION		THROUGHOUT		<u>SEVERITY</u>	
		DETERIORATION		EDGE		MODERATE	
		EFFLORESCENCE		THROUGHOUT		MINOR	
		PATCHES		THROUGHOUT		LIGHT	
		SATURATION		THROUGHOUT		MANY	
						MODERATE	
						60 %	
MAIN SPANS-2		DECK		REINFORCED CONCRETE		CAST-IN-PLACE	
						<u>COMMENTS</u>	
		<u>CONDITION</u>		<u>LOCATION 1</u>		<u>LOCATION 2</u>	
		DETERIORATION		EDGE		<u>SEVERITY</u>	
		EFFLORESCENCE		THROUGHOUT		MINOR	
		MAP CRACKS		BOTTOM		LIGHT	
						MANY	
Design_No = A1884							
Page 3							
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		<div>Missouri Department of Transportation</div> <div>State Bridge Inspection Report</div>				<div>May 27, 2024</div> <div>5:11:45PM</div>																	
COUNTY: JASPER		DISTRICT: SW		CLASS: STATBR		FED-ID: 1575		BRIDGE: A1884															
<div><div>CLEARANCES UNDER BRIDGE</div><div>**NOTE: Vertical clearances for permitting purposes are taken as 2 inches less than the actual field measured clearance.</div><table><thead><tr><th>RECORD #</th><th>ROUTE</th><th># LANES</th><th>DIRECTION OF TRAFFIC</th><th>RIGHT LATERAL CLEARANCE</th><th>LEFT LATERAL CLEARANCE</th><th>UR-ID</th></tr></thead><tbody><tr><td>VERTICAL CLEARANCE TYPE**</td><td>VALUE</td><td>DIRECTION</td><td>DATE</td><td>COMMENT</td><td></td><td></td></tr></tbody></table></div>										RECORD #	ROUTE	# LANES	DIRECTION OF TRAFFIC	RIGHT LATERAL CLEARANCE	LEFT LATERAL CLEARANCE	UR-ID	VERTICAL CLEARANCE TYPE**	VALUE	DIRECTION	DATE	COMMENT		
RECORD #	ROUTE	# LANES	DIRECTION OF TRAFFIC	RIGHT LATERAL CLEARANCE	LEFT LATERAL CLEARANCE	UR-ID																	
VERTICAL CLEARANCE TYPE**	VALUE	DIRECTION	DATE	COMMENT																			
STRUCTURE PAINT INFORMATION																							
CONDITION: FAIR		RUST AMOUNT : 7 = .2% OF SURFACE RUSTED			STEEL TONS : 18																		
<u>ORIGINAL PAINT</u>		<u>CONTRACT REPAINT</u>			<u>DEPARTMENT REPAINT</u>																		
PAINT TYPE : NAME : PAINT COLOR : PAINT YEAR : MILS :		PAINT TYPE : NAME : PAINT COLOR : PAINT YEAR : MILS :			PAINT TYPE : S SYSTEM NAME : CAL SULPH/LEAD PAINT PAINT COLOR : GRAY PAINT YEAR : 2001 MILS : 14			MANUFACTURE :WATSON SURFACE PREP :HAND CLEANED															
REQUESTED WORK ITEMS																							
GENERAL WORK COMMENTS:																							
<i>RESPONSIBILITY</i> DISTRICT SPECIAL STIP		<i>LOCATION</i> ROADWAY SURFACE		<i>ITEM</i> REPAIR CONCRETE > 50 SF		<i>CATEGORY</i> DECK REPLACEMENT		<i>PRIORITY</i> 2															
						<i>DATE</i> 07/26/2023 04/10/2024		<i>WORK ITEM COMMENT</i> (NUNNT, 09/01/2023)--55 SF (NUNNT, 09/10/2019)--2026 - POOR DECK AND SUB NOT WORTH RE-USING.															
UTILITY ATTACHMENTS																							
<i>UTILITY</i>		<i>OWNER</i>		<i>METHOD</i>		<i>MEASUREMENT TYPE</i>		<i>VALUE</i>															
								<i>NUMBER</i>															
								<i>UTILITY ATTACHMENT COMMENT</i>															
PROGRAM NOTES INFORMATION																							
<u>YEAR</u>		<u>PROJECT #</u>		<u>MONTH LET</u>		<u>YEAR LET</u>		<u>ITEMS</u>															
								<u>COMMENT</u>															
Design_No = A1884																							
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COMPUTER GENERATED RATINGS AND DEFICIENCY ITEMS						***ADVANCED SIGN INFORMATION***																																														
<div>NOTE: The items listed in this section are updated whenever computer edits are ran on a structure after the inspection updates have been entered in to TMS.</div> <table><tr><td><u>Rated Item</u></td><td><u>Rating</u></td><td><u>Rating Date</u></td></tr><tr><td>[Item 67] Structure Evaluation Rating:</td><td>5-BETTER THAN MINIMUM</td><td>7/23/2019</td></tr><tr><td>[Item 68] Deck Geometry Rating:</td><td>5-BETTER THAN MINIMUM</td><td>3/22/2002</td></tr><tr><td>[Item 69] Underclearance:</td><td>N-NOT APPLICABLE</td><td>5/18/2001</td></tr><tr><td>Sufficiency Rating:</td><td>73.3%</td><td>3/6/2024</td></tr><tr><td>Deficiency:</td><td>STRUCTURAL</td><td>7/23/2019</td></tr><tr><td>Funding Eligibility:</td><td></td><td>----</td></tr><tr><td>Estimated New Structure Length:</td><td></td><td>----</td></tr><tr><td>Estimated Structure Cost:</td><td></td><td>----</td></tr><tr><td>Estimated Total Project Cost:</td><td></td><td>----</td></tr><tr><td>Year of Cost Estimate:</td><td></td><td>----</td></tr></table> <div>NOTE: The above structure length and cost estimates are computer generated using algorithms in the TMS system. These algorithms are generalized to use NBI items to come up with a new structure length and width to calculate a new area which is taken times a representative cost per square foot. The actual structure size and cost may vary significantly from these numbers once site specific engineering is done.</div>						<u>Rated Item</u>	<u>Rating</u>	<u>Rating Date</u>	[Item 67] Structure Evaluation Rating:	5-BETTER THAN MINIMUM	7/23/2019	[Item 68] Deck Geometry Rating:	5-BETTER THAN MINIMUM	3/22/2002	[Item 69] Underclearance:	N-NOT APPLICABLE	5/18/2001	Sufficiency Rating:	73.3%	3/6/2024	Deficiency:	STRUCTURAL	7/23/2019	Funding Eligibility:		----	Estimated New Structure Length:		----	Estimated Structure Cost:		----	Estimated Total Project Cost:		----	Year of Cost Estimate:		----	<table><tr><td>SIGN #</td><td>SIGN TYPE</td><td>PROBLEM</td><td>PROBLEM DIRECTION</td></tr><tr><td>1</td><td>DELINEATOR</td><td></td><td></td></tr></table>						SIGN #	SIGN TYPE	PROBLEM	PROBLEM DIRECTION	1	DELINEATOR		
<u>Rated Item</u>	<u>Rating</u>	<u>Rating Date</u>																																																		
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Missouri Department of Transportation
Bridge Inventory and Inspection System
Structural Inventory & Appraisal Sheet

May 27, 2024
5:09:39pm

COUNTY : JASPER BRIDGE : A1884 REVIEW STATUS : APPROVED NBI STATUS : T
RECORD TYPE : ROUTE CARRIED 'ON' STRUCT RUN DATE : 3/15/2024 SUBMITTAL YEAR : 2024

GENERAL STRUCTURE INFORMATION			ROUTE DESIGNATION INFORMATION		
1	State	MISSOURI	5A	Record Type	ROUTE CARRIED 'ON' STRUCT
2	District	SW	5B	Route Signing Prefix	MO
3	County	JASPER	5C	Designated Level of Service	MAINLINE
8	Federal ID No.	1575	5D	Route Number	000BB
27	Year Built	1967	5E	Directional Suffix	NOT APPLICABLE
106	Year Reconstructed	0	7	Facility Carried	RT BB S
42A	Type of Service On	HIGHWAY	12	Base Hwy. Network	NO
21	Structure Maintenance	STATE HIGHWAY AGENCY	13A	LRS Inventory Route No.	
22	Structure Owner	STATE HIGHWAY AGENCY	13B	Subroute No.	
33	Br. Median Code	NO MEDIAN	20	Toll Status	ON FREE ROAD
37	Historical Significance	NOT ELIGIBLE FOR NR OF HP	26	Functional Classification	07-RURAL MAJOR COLLECTOR
101	Parallel Struc Desg	NONE EXISTS	28A	Lanes on Structure	02
103	Temporary Structure	NOT TEMPORARY	100	STRAHNET Designation	RTE NOT A DEFENSE HWY
112	NBIS Bridge Length	YES	104	National Highway System	NOT ON NHS
			105	Federal Lands Highway	NOT APPLICABLE
			110	Designated Nat. Network	NO
STRUCTURE LOCATION INFORMATION			STRUCTURE TRAFFIC INFORMATION		
4	Place	SHERIDAN	29	AADT	619
	Code	67340	30	AADT Year	2023
9	Location	S 3 T 29 N R 30 W	102	Direction of Traffic	2-WAY TRAFFIC
11	Milepoint	1.09 miles	109	AADT Truck Percent	16%
16	Latitude	37 D 16 M 39 S	114	Future AADT	929
17	Longitude	94 D 11 M 50 S	115	Future AADT Year	2043
UNDERRECORD INFORMATION			STRUCTURE GEOMETRIC INFORMATION		
6	Features Intersected	STONEYS BR	10	Inventory Rte. Vert. Clear	99 Ft. 99 In.
42B	Type of Service Under	WATERWAY	19	By pass Detour Length	21.88 miles
28B	Lanes Under Structure	00	32	Approach Roadway Width	20 Ft. 12 In.
54A	Vert. Clearance Ref.	N/A	34	Skew	35.00 Degrees
54B	Vert. Clearance	0 Ft. 0 In.	35	Struct. Flared	NO
55A	Rt. Lat Clear Ref.	N/A	47	Total Horiz. Clear	25 Ft. 11 In.
55B	Rt. Lat Clearance	0 Ft. 0 In.	48	Maximum Span Length	36 Ft. 5 In.
56	Left Lat Clearance	0 Ft. 0 In.	49	Structure Length	107 Ft. 11 In.
38	Navigation Control	PERMIT NOT REQ	50A	Left Curb/Sidewalk Width	0 Ft. 0 In.
39	Nav Vertical Clear	0 Ft. 0 In.	50B	Right Curb/Sidewalk Width	0 Ft. 0 In.
40	Nav Horizontal Clear	0 Ft. 0 In.	51	Curb to Curb Br. Width	25 Ft. 11 In.
111	Nav. Pier Protection		52	Deck Width (Out-Out)	28 Ft. 7 In.
116	Nav. Cl. Vert. Clear		53	Vert. Clearance Over Deck	99 Ft. 99 In.

Design_No = A1884 and Inventory_Appraisal_Submittal_Year = 2024



Missouri Department of Transportation
Bridge Inventory and Inspection System
Structural Inventory & Appraisal Sheet

May 27, 2024
5:09:39pm

COUNTY : JASPER BRIDGE : A1884 REVIEW STATUS : APPROVED NBI STATUS : T
RECORD TYPE : ROUTE CARRIED 'ON' STRUCT RUN DATE : 3/15/2024 SUBMITTAL YEAR : 2024

LOAD RATING AND POSTING INFORMATION			MATERIAL/CONSTRUCTION INFORMATION		
31	Design Load	H 15	43A	Main Struc. Mat type	STEEL
41	Structure Status	OPEN NO RESTRICTIONS	43B	Main struc Constr. Type	STRINGER/MULTIBEAM - GRD
63	Oper. Rating Meth.	LOAD FACTOR	45	# of Main Spans	3
64	Operating Rating	57 Tons.	44A	Appr Struc. Mat type	000
65	Inventory Rating Meth	LOAD FACTOR	44B	Appr Struc. Cnstr. type	000
66	Inventory Rating	34 Tons.	46	# of Approach Span	0
70	Bridge Posting Code	=>LEGAL LOADS	107	Deck Mat/Constr.	1 CONCRETE CIP
PROPOSED IMPROVEMENT INFORMATION			108A	Wear Surf Mat/Constr.	6 BITUMINOUS
Sufficiency Rating 73.3 Percent			108B	Membrane Mat/Constr.	0 NONE
Deficiency Rating STRUCTURAL			108C	Deck Protect Mat/Constr.	0 NONE
Funding Eligibility PARTIAL			CONDITION RATING INFORMATION		
75A	Proposed Work	REHAB-GENERAL DETERIORAT	58	Deck Cond. Rating	3
75B	Work Done By	Contract	59	Superstructure Cond. Rating	5
76	New Struc Length	137 Ft. 10 In.	60	Substructure Cond. Rating	5
94	Struc Improve Cost	\$ 544,000	61	Channel /Channel Protection Cond. Rating	7
95	Roadway Improve Cost	\$ 54,000	62	Culvert Cond. Rating	N
96	Total Project Cost	\$ 816,000	INSPECTION INFORMATION		
97	Year of Cost Estimates	2024	90	Gen. Insp Date	7 / 23
APPRAISAL RATING INFORMATION			91	Gen. Insp. Frequency	24 Months
36A	Br. Rail App. Rating	DOES NOT MEET ACCEPT STND	92A	Frac. Critical Inspection	N Months
36B	Transition Rail App. Rating	DOES NOT MEET ACCEPT STND	93A	Frac. Critical Insp. Date	
36C	Approach Rail App. Rating	DOES NOT MEET ACCEPT STND	92B	Underwater Inspection	N Months
36D	Rail End Treat. App. Rating	DOES NOT MEET ACCEPT STND	93B	Underwater Insp. Date	
67	Struc Eval App. Rating	5	92C	Special Inspection	N Months
68	Deck Geometry App. Rating	5	93C	Special Inspection Date	
69	Underclearance App. Rating	N	BORDER BRIDGE INFORMATION		
71	Waterway Adeq. App. Rating	8	98	Neighboring State Code	
72	Approach Road App. Rating	8	98B	Neighboring State % Respon	
113	Scour Assess App. Rating	8	99	Neighboring State Struc. No.	
APPROVED POSTING INFORMATION			FIELD POSTING INFORMATION		
Approved Posting Category S-1			Field Posting Category S-1		
Ton1 Ton2 Ton3			Ton1 Ton2 Ton3		
Tonnage Values for Posting Sign			Tonnage Values for Posting Sign		
General Text for Posting Sign			General Text for Posting Sign		
NO POSTING REQUIRED			NO POSTING REQUIRED		

Design_No = A1884 and Inventory_Appraisal_Submittal_Year = 2024

EXHIBIT “I”**SCOPE OF SERVICES**

Job. No.	JSR0137	JSR0142
Scope	Replace A1884	Replace S0834
Preliminary Survey		
Survey	*	*
Prel. Geotech Report		
Foundation Investigation		
Staking of Sounding Locations		
Preliminary Bridge Design	x	x
Final Bridge PSE	x	x
Bridge Load Rating	x	x
Preliminary Roadway Design	x	x
ROW Plans	x	x
Final Roadway PSE	x	x
RR Coordination		
Utility Coordination	x	x
Environmental Services		

*Additional survey work as needed. MoDOT to provide Bridge Survey

The consultant shall perform the following services, all in accordance with the standard practice of the Commission and the following:

AASHTO “A Policy on Geometric Design of Highways and Streets” (latest version)

AASHTO “Roadside Design Guide” (latest version)

AASHTO “LRFD Design methods” (latest version)

AASHTO “Highway Drainage Guidelines” (latest version)

“Manual on Uniform Traffic Control Devices” (latest version)

“Highway Capacity Manual” (latest version)

I Administration

CONSULTANT shall participate in the following as part of the Administration tasks:

1. Attend and document milestone project meetings with MoDOT (CORE Team meetings). Meetings will be held virtually except for the project kick off and final design field check meetings.

2. Correspondence (emails, letters, meeting minutes, phone calls)
3. Set up the project and conduct Kick-Off Meeting.
4. Coordination with subconsultants.
5. Participate in one Public Meeting. Develop handouts and exhibits for meeting.
6. Provide monthly progress reports and invoices and review subconsultants invoices and reports.
7. Provide exhibits, sketches, and back-up data to MoDOT on an as-needed basis.
8. Provide information to support the SW District MoDOT staff in maintaining a public website for the project staff to inform the public and update impacts related to the project including timelines, changes to the project, meetings, comments. The website to be maintained through the construction phase.

II Utility Coordination

The CONSULTANT shall perform the following utility coordination tasks:

1. Obtain maps from utilities of their known locations and adjust survey limits as needed.
2. Coordinate submittal of preliminary plans to utility companies.
3. Coordinate with utility companies on the development of the plan of adjustment and obtain cost estimates for reimbursable utilities for the District Utility Engineer's approval.
4. Show the existing utility facilities and plan of adjustments for proposed utilities facilities in the contract plans. (plans sheets, cross sections, culvert sections)
8. Coordinate with utility owner the relocation of each impacted utility on the project during design and construction.
9. Prepare special utility sheets as necessary (including utility profile and exhibits).
10. Assist District Utility Engineer in the preparation of agreements (includes municipal agreements).
11. Identify locations for power service needs, prepare service request for submittal and coordinate with the power company to obtain estimated costs.
12. Coordinate with MoDOT (PM and District Utility Engineer) and to provide SUE test hole information at critical utility locations.
13. Prepare utility job special provision and information for the preparation of the Utility Status Letter for District Utility Engineer.
14. Provide assistance and answer utility related questions during the construction phase for MoDOT staff and the roadway contractor.

III Preliminary Roadway Design

The CONSULTANT'S attention is directed to Chapter 235 of the MoDOT Engineering Policy Guide (EPG) for general guidelines and requirements for preliminary design. Other chapters may be applicable for preliminary design preparation.

(A) Upon approval of the design criteria memorandum by COMMISSION, the CONSULTANT shall undertake the following to develop the preliminary design phase:

- a. Prepare preliminary plans, as outlined in the MoDOT EPG.

- i. The COMMISSION shall furnish the CONSULTANT traffic information for the construction and design years to be used in the preliminary plans.
 - ii. The COMMISSION shall furnish the CONSULTANT the latest accident data and traffic information used to calculate the project accident rate. The COMMISSION shall furnish the CONSULTANT the “statewide accident rate for a similar class of roadway” and any high hazard locations within the project limits.
 - iii. The CONSULTANT shall submit the preliminary plans to the COMMISSION for review and approval as shown in Exhibit IV.
- b. The preliminary plans shall be prepared in accordance with the applicable sections of the MoDOT EPG, as to what shall be shown thereon, including proposed design features.
 - i. The plan view English scale shall be 1”=50’ horizontal (or different scale as determined by MoDOT Project Manager for clarity) and extend 100 feet beyond project limits.
 - ii. The profile view English scale shall be 1”=50’ horizontal, and 1”=10’ vertical.
- c. The CONSULTANT may have to review preliminary cross sections sufficiently to make a cost comparison between using retaining walls versus acquiring additional right of way for all proposed wall locations.
- d. The CONSULTANT shall prepare the construction estimate. The COMMISSION shall prepare the right of way estimate based on the right of way requirements furnished by the CONSULTANT.
- e. The preliminary plans shall be submitted to the COMMISSION for review and approval. A letter of transmittal shall be provided with the preliminary plan submittal. The COMMISSION shall furnish the template for the letter of transmittal. The construction cost estimate shall also be submitted with the preliminary plans.
- f. The preliminary plans shall include the tentative additional easement and right of way limits, property lines and ownerships, section lines, township and ranges, any U.S. Surveys, city limits, and a general outline of the construction staging, critical design items and other items as outlined in the EPG.
- g. Traffic assignments shall be shown on the respective roadways or on a line sketch of the roadways.
- h. Typical sections shall indicate heavy, medium or light duty pavement for new roadways, along with descriptions of the existing roadway types remaining in place.

(B) A Preliminary Field Check will be arranged by the CONSULTANT with the COMMISSION to discuss design features in the project area.

(C) The CONSULTANT shall provide the COMMISSION with information for proper environmental and cultural clearance including submittal of the preliminary stage

RES, right of way stage RES (if needed) and final stage RES. Items that may need to be addressed include historical buildings, archaeological sites, historic bridges, conversion of farmland, endangered species, wetlands, parklands and historical sites.

- (D) The CONSULTANT shall prepare and submit the Bridge Survey Report, Bridge Survey Sheets, and Bridge Survey Checklist.
- (E) The CONSULTANT shall set horizontal and vertical control for the project and provide the COMMISSION the combined adjustment factor. All control furnished by the CONSULTANT shall use current datums and adjustments.
- (F) The CONSULTANT shall provide all land boundary work and legal descriptions to the COMMISSION for review and approval prior to right of way plans submittal.
- (G) The COMMISSION shall provide the pavement design and general Job Special Provisions related to the project including any special design elements.
- (H) The COMMISSION may hold a public meeting for this project either in person or virtually and the CONSULTANT will be required to attend and coordinate meeting. The CONSULTANT shall provide exhibits for MoDOT public meeting as requested and will refer to the sections of the EPG concerning public involvement.

IV Preliminary Bridge Design

- (A) Perform the geometric analysis at the proposed bridge site necessary to develop type, size and location drawings consisting of a general plan and elevation plan of the structures, typical roadway sections and roadway profiles. This includes preparation of the Bridge Memorandum & Layout (including the itemized preliminary bridge estimate).
- (B) The structure and/or box culvert type and size (if applicable) shall be based on roadway alignments, geometric analysis, hydraulic analysis (if applicable), spill slope requirements, roadway overpass clearances, grades and/or clear zone requirements.
- (C) The superstructure type shall be dependent upon site constraints and a detailed cost analysis comparison.
- (D) All requirements of the Federal Emergency Management Agency's National Flood Insurance Program shall be met.
- (E) Discharges will be estimated using USGS Regression Equations and available stream gauge data (if applicable).
- (F) HEC-RAS shall be used to model of the natural, existing and proposed conditions (if applicable).

- (G) Scour calculations shall be performed in accordance with FHWA Hydraulic Engineering Circular No. 18 (if applicable).
- (H) The results of the hydrologic, hydraulic and scour analysis shall be documented in the Bridge Hydraulic and Scour Report (if applicable).
- (I) All requirements outlined in the MoDOT Engineering Policy Guide (EPG) shall be met. The CONSULTANT shall follow MoDOT's "practical design" philosophy and submit any design exceptions as necessary.
- (J) Develop final detailed design criteria in the form of Bridge Memorandum and Bridge Design Layout documents.

V Section 404 Corps of Engineers Permit (if applicable)

The CONSULTANT shall provide the following information necessary to allow MoDOT staff to apply for any required Section 404 Corps of Engineer Permits. If the permit is required due to bridge construction, the application data shall be submitted no later than with the T.S.&L. drawings. All information should be provided to the MoDOT Project Manager who will forward the information to Central Office Design.

- (A) Provide the amount and type of excavation and material that will be used in streams, lakes, and wetlands below the Corps of Engineers' ordinary high water line (OHL) elevations.
- (B) Provide location and quantities of permanent berms and spill fills below OHL.
 - a. Earth fill, rock blanket (square feet and cubic yards)
 - b. Rock blanket along right descending bank and left descending bank (linear feet)
 - c. Rock ditch (square feet)
- (C) Provide location, excavation and size of pier below OHL.
 - a. Excavation (cubic yards)
 - b. Pier (square feet)
- (D) Provide channel realignment data.
 - a. Existing channel length of section to be modified (feet)
 - b. Average channel width of section to be modified (feet)
 - c. Realigned section, length and width (feet)
- (E) Provide temporary fill amounts in wetlands or below OHL in streams.
 - a. Earth fill (square feet and cubic yards)
 - b. Class C (square feet and cubic yards)
- (F) Provide information about temporary fills and shoring.
 - a. Location of temporary fills and shoring
 - b. Source of material
 - c. Final disposition of removed materials
- (G) Provide information about temporary culverts.

- a. Number of culverts
 - b. Size (inches)
 - c. Length (feet)
- (H) Provide information on channel cleanout – excavation below OHL.
 - a. Cleanout upstream and downstream of structure (linear feet)
 - b. Total quantity of material to be removed below OHL (square feet and cubic yards)
- (I) Provide 8 ½-inch by 11-inch copies of any plan or profile sheets required for the permit application.
- (J) Provide bridge elevation and plan views with OHL indicated.

VI Right of Way Design

- (A) The CONSULTANT shall prepare right of way plans, which may be separate drawings from those used for design and construction details. The right of way plans shall show alignment, geometric design, removal of improvements, drainage facilities, property lines and ownership, sub-division lot lines, other land survey information, street lines and existing right of way and easements. The CONSULTANT should also include any plan details, which will require additional right of way or permanent, temporary or utility easements during the construction phase of the project such as bypasses, temporary erosion control, etc. Right of way plans include title sheet, typical sections, profile sheets, and cross sections of the roadway, entrances and side roads. Areas of new right of way, permanent easements and/or temporary easements required from each individual property owner may be shown in tabular form on the respective sheets.
 - a. The CONSULTANT shall finalize any previous review of the roadway cross sections sufficiently to determine the feasibility of constructing retaining walls versus obtaining additional right of way. This final review shall consist of construction estimates versus right of way estimates.
 - b. Upon completion of the estimates by COMMISSION and CONSULTANT, the CONSULTANT shall recommend to the COMMISSION a choice at the various locations which warrant consideration of the alternate retaining wall versus right of way solutions. The COMMISSION shall make the final determination of purchasing right of way, or constructing retaining walls.
- (B) Right of way plans shall be submitted to the COMMISSION for review and approval. The right of way plans shall be at the same scale as the construction plans. The right of way plans shall include any design details that will control the width of right of way and necessary easements.
 - a. New right of way lines and all easements shall be dimensioned by station and offset distance from the centerline, or crossroad centerlines, if necessary. Bearings and distances on the right of way lines may be required.

- b. The following minimum design features shall be included on the right of way plans:
 - i. Title sheet with appropriate project limits, access note and traffic data completed.
 - ii. Typical Sections
 - iii. Cross sections at 100' intervals, including additional sections at each entrance with new and existing entrance grades.
 - iv. Construction limits (slope lines); drainage facilities; entrances and their reference location, width and type along with their existing and future grade percentage; property owners, with areas of new right of way, easements and remaining property; centerline bearing, ties to legal land corners from centerline stations with notation for corner witness by a registered land surveyor; existing utility locations and easements, including replacement utility easements; horizontal curvature information; and proper right of way symbolization for new right of way (access control) and easements, including areas which may be required to accommodate temporary erosion control.
 - v. Township, Range, Section and/or U.S. Survey information broken down to ¼ ¼ section line level on each plan sheet near the title block or appropriate survey/section line.
- (C) The CONSULTANT shall provide an updated construction estimate for the Right of Way design stage.
- (D) The COMMISSION shall review, approve and certify the right of way plans as completed by the CONSULTANT. The CONSULTANT shall provide one (1) electronic set of fully signed and sealed right of way plans, for the COMMISSION'S use.
- (E) The CONSULTANT shall provide title insurance information for all parcels with new right of way acquisition and the last deed of record for any parcel with easements.
- (F) The COMMISSION will prepare right of way appraisals and secure the necessary right of way by negotiation or condemnation, if necessary, for construction of this project.
- (G) The CONSULTANT shall be responsible for staking and re-staking tentative right of way on individual properties, as required by MoDOT staff, during right of way negotiation and acquisition phase of the project. The CONSULTANT shall also set permanent monuments as shown on the recordable land survey.
- (H) The CONSULTANT shall be responsible for making all revisions to the right of way and construction plans due to negotiations with the property owners in an effort to acquire right of way.

- (I) The CONSULTANT shall write, sign and seal deed descriptions for all right of way acquisitions on MoDOT's approved Exhibit A form and submit to COMMISSION.
- (J) The CONSULTANT will provide the COMMISSION with information for proper environmental and cultural clearance including submittal of the Right of Way stage RES. Items that may need to be addressed include historical buildings, archaeological sites, historic bridges, conversion of farmland, endangered species, wetlands, parklands and historical sites.

VII Final Roadway Design

- (A) The COMMISSION will secure execution of municipal agreements with the cities and/or county agreements. A copy of the executed agreements will be furnished to the CONSULTANT for his information. The CONSULTANT shall conform to all design provisions of these agreements.
- (B) A final design field check shall be held with CONSULTANT and COMMISSION representatives prior to completing final design plan quantities. The CONSULTANT shall make any necessary revisions to the final plans as determined by this design field check.
- (C) The CONSULTANT shall prepare detailed temporary erosion control plans for review and approval before inclusion in the final design plans. The CONSULTANT will submit a Final Plans stage RES and help ensure previous RES items have been addressed.
- (D) The CONSULTANT shall prepare computations for all design plan quantities. All plan quantities shall be shown on the Quantity Sheets, by construction stage, if applicable. The format for these sheets shall be furnished by the COMMISSION. Specialty items may have separate sheets for quantity tabulations.
- (E) The CONSULTANT shall prepare for review and approval by the COMMISSION all General Job Special Provisions, which are to supersede the Missouri Standard Specification for Highway Construction. A brief reason for the deviation from the standard plans and specifications should also be provided. The CONSULTANT shall prepare only Job Special Provisions related to design elements shown in the plans.
- (F) The following list shall be considered the minimum requirements for a complete set of Final Design Plans.
 - a. Title Sheet
 - b. Typical Sections
 - c. Quantity Sheets
 - d. Plan Sheets at 1"=50' horizontal (or different scale as determined by MoDOT Project Manager for clarity). Plan sheets shall include all necessary adjustments to signing and proposed pavement marking.

- e. Profile Sheets at 1"=50' horizontal and 1"=10' vertical
- f. Culvert Sections at 1"=10', if needed
- g. Special Sheets for geometrics, referenced points, grading plan, traffic control plan, temporary erosion control plan and any other sheets for special design features.
- h. Earthwork Quantities, Cross Sections at 25' intervals, 1"=10' (1:100), horizontal and vertical, including entrance sections with existing and proposed grades
- i. Tabulation of Quantity Sheets
- j. Job Special Provisions in electronic format readable in COMMISSION'S current word processor
- k. File with the bid items and quantities as generated by COMMISSION'S Estimate Program
- l. Construction Workday Study
- m. Transportation Management Plan
- n. Final Plans Checklist Form D-12

(G) Additional plans and information may be required to complete the Final Design Plans. With the submittal of the Final Design the CONSULTANT shall also provide the COMMISSION a statement that an internal quality control check has been conducted and to the best of the CONSULTANT'S knowledge the final design plans are free of gross errors, misleading or confusing typos, and includes adequate information to construct the project.

(H) The CONSULTANT shall prepare all plans through the use of a Computer Aided Drafting (CAD) program. The CONSULTANT shall conform to MoDOT's Specifications for Computer Deliverable Contract Plans as referenced in the MoDOT EPG.

(I) The CONSULTANT shall furnish the COMMISSION the following completed sheets and documents, as applicable, for each separate construction project included in this contract, as follows:

- a. Final Design Plans showing profile grades, geometric data, alignment data, etc.
- b. One (1) electronic copy of the location sketch for Commission Approval submitted in electronic format.
- c. Draft copy of the job special provisions related to design elements for review. After corrections, the job special provisions shall be furnished in electronic format utilizing the COMMISSION'S latest word processing program.
- d. One (1) legible electronic copy of engineering calculations and analysis.
- e. One (1) electronic copy of a complete summary of quantities and estimate of construction costs. The estimate shall be prepared using the latest version of MoDOT's ESTIMATE program.
- f. One (1) electronic copy of Electronic Design Data.
- g. One (1) electronic copy of a workday study showing the estimated number of workdays required to construct each project.

- h. The CONSULTANT shall provide a 3D model of the project exported from Geopak Open Roads Designer software for the COMMISSION'S use.

VII Final Bridge Design

Furnish to the COMMISSION fully checked design plans, job special provisions, design computations, quantity computations, final cost estimate, and a construction workday study for the structure(s). The CONSULTANT is expected to make the COMMISSION aware of more economical design alternatives that may become apparent during the preparation of the final design.

- (A) The plans shall be complete and shall cover all parts of the structure they represent. The degree of detail shall be comparable to that furnished on typical plans prepared by the COMMISSION. High resolution final signed and sealed plans, will be submitted in Adobe Acrobat Reader format version 7 or higher. Final signed and sealed plans shall be in pdf full size (34" x 22") format. These deliverables shall use the file naming convention and be in accordance with the "Specifications of Computer Deliverable Contract Plans" requirement outlined in the Commission's Engineering Policy Guide, Section 237.13.3. The electronic plans in Microstation format cannot be signed and sealed. The electronic submittals shall be made in a method suitable to MoDOT.
- (B) All construction changes made to the plans during construction of the project shall also be submitted electronically in Adobe Acrobat and Microstation format.
- (C) The job special provisions shall be complete and describe all design features, construction procedures, or material requirements in the plans that are deviations from the latest edition of the Missouri Standard Plans for Highway Construction. Typical job special provisions that have been developed by MoDOT for previous jobs are posted on MoDOT's website and are available for use and modification as needed. The job special provisions shall include a table of contents sheet that is signed and sealed by a professional engineer registered in Missouri. The signed and sealed job special provisions shall also be submitted in Adobe Acrobat Reader format, version 7 or higher. Job Special Provisions shall also be submitted in Microstation Word format. The submittal letter shall explain the need for each provision.
- (D) The design computations and plans shall be acceptable to and will become the property of the Commission. The CONSULTANT shall submit design computations in Adobe Acrobat Reader version 7.0 format or greater. The files shall be transferred in a manner acceptable to MoDOT. The design computations shall contain an index file, with electronic links to the files contained within. Submittals shall include a set of design computations for each bridge. The design computations shall not be combined with the Microstation or the Adobe Acrobat Reader submittals.
- (E) The final estimate submitted by the CONSULTANT shall include backup material that supports the estimates made for non-standard or lump sum pay items.

- (F) The CONSULTANT shall submit the hours and cost summarizing the design effort for each bridge. The summary shall include separate amounts for: Number of Hours for Bridge Preliminary Design, Cost of Bridge Preliminary Design, Number of Hours for Bridge Final Design, Cost of Bridge Final Design. Generally, the above amounts should include all hours and costs invoiced that are attributable to bridge design and plans preparation up to the point of turning in the signed and sealed plans. It should not include hours attributable to preparing the bridge survey, final construction cost estimate, or workday study.
- (G) Bridge Load Rating: The CONSULTANT shall furnish to the COMMISSION fully checked load ratings for the structure(s) in accordance with EPG Section 753.15. The load rating files shall be acceptable to, and will become the property of, the COMMISSION. The CONSULTANT shall submit the load ratings in an acceptable electronic format (.xml or other approved method) created using AASHTOWare BrR Bridge Rating software version 6.8 or higher. The CONSULTANT shall verify the accuracy of any load rating files provided by the COMMISSION prior to making modifications.

IX Construction Support

- (A) The CONSULTANT shall be available to the COMMISSION to discuss and interpret plans and specifications during the bidding and construction phase of the project as determined necessary by the Engineer.
- (B) The CONSULTANT shall be available to provide Shop Drawing review of CONTRACTOR submittals pertaining to essential structural components and review any contractor's Value Engineering Proposals.
- (C) The CONSULTANT may be required to attend a pre-construction meeting, and a post construction meeting via TEAMS.
- (D) If issues arise during construction, there will be a direct line of communication established between the MoDOT Construction Office and the CONSULTANT. The CONSULTANT will immediately inform the MoDOT Design Division or MoDOT Bridge Division of any recommendations or clarifications made to the Construction Office.

SERVICES PROVIDED BY THE COMMISSION

The Commission will furnish to the Consultant without charge the following information:

- A. General design criteria.
- B. Available standard detail sheets in Microstation format.
- C. Traffic and accident data.
- D. Pavement Design Selection
- E. Foundation Investigation and Preliminary Geotechnical Report
- F. Survey and Data
- G. All necessary environment services identified through the Request for Environmental Services
- H. Right of way and easement acquisition.

The Consultant shall proceed with the final design and detail plans in accordance with the data approved or furnished by the Commission which will meet with the general standards adopted by AASHTO and approved by the Department of Transportation as provided by Title 23, United States Code, Section 109(b).

EXHIBIT IV

PERIOD OF SERVICE

The Consultant shall make submittals in accordance with the schedule described below

Period of Service	JSR0137	JSR0142
End Period of Service	3/31/2027	3/31/2027
Letting	Jan 2026	Jan 2026
PSE	11/12/2025	11/12/2025
100% Review Plans	10/7/2025	10/7/2025
Final RES	9/13/2025	9/13/2025
TSL Bridge Drawings	5/26/2025	5/26/2025
ROW Plans/ROW RES*	4/30/2025	4/30/2025
ROW Review Plans*	4/2/2025	4/2/2025
Public Meeting Exhibits	12/2/2024	12/2/2024
Bridge Memo	12/2/2024	12/2/2024
Preliminary Roadway Plans	12/2/2024	12/2/2024
Preliminary Review Plans	11/4/2024	11/4/2024
Preliminary RES	10/11/2024	10/11/2024

* if required

Construction support as needed post award – Anticipated for 12 months

PERIOD OF SERVICE – The total period of service including construction services is expected to be completed by March 31, 2027.

PROJECT SUMMARY REPORT FOR SR0137 AS OF May 30, 2024

Work District	SOUTHWEST	Status	ACCEPTED	Version	ANNUAL UPDATE	Project Manager	CRAIG SWITZER	Payment Project	N
Award Month/Award Year	2 / 2026	Letting Date	Jan 01, 2026	Estimated Submittal Date	Mar 05, 2024	Let by	CENTRAL OFFICE	Letting Exclusion	N

Primary Route	RT BB S	County	JASPER
Description / Location	Bridge replacement 1 mile south of Rte. N.		
Reason / Remarks	Project involves bridge A1884.		
District Comments	Let in combination with SR0142.		

Project Amounts	Total Estimated Cost for the Project									
Typical Bridge	Major Bridge	Pavement	Safety	Mobility	Capital Improvement	Contingency	Other Non-Contractual	Right of Way Acquisition	Preliminary Engineering	Construction Engineering
986						20	2	2	178	111
Total Bridge	986	Total Contract Estimate			986	Total Construction	1,008		Total Engineering	289
						Total Right of Way and Construction		1,010	Total Project	1,299

Yearly Program Amounts	Amount Programmed by SFY									
	Prior to 2024	2024	2025	2026	2027	2028	2029	Future	Program Total	Project Total
Preliminary Engineering			150	28				0	178	178
Construction Engineering				111				0	111	111
Right of Way Acquisition			2						2	2
Construction				1,008				0	1,008	1,008
Total			152	1,147				0	1,299	1,299

How the District is Funding the Project										
Funding Category										
Asset Management - CN	0	0	0	1,008	0	0	0	0	1,008	1,008
Asset Management - RW	0	0	2	0	0	0	0	0	2	2
Total	0	0	2	1,008	0	0	0	0	1,010	1,010

Funding From Other Sources										
Total	0	0	0	0	0	0	0	0	0	0

Funds Transfer										
Total	0	0	0	0	0	0	0	0	0	0

Total Right of Way and Construction	0	0	2	1,008	0	0	0	0	1,010	1,010
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Engineering	0	0	150	139	0	0	0	0	289	289
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Funding From Other Sources - Engineering										
Total	0	0	0	0	0	0	0	0	0	0

Funds Transer - Engineering										
Total	0	0	0	0	0	0	0	0	0	0

Total Engineering	0	0	150	139	0	0	0	0	289	289
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Total Project	0	0	152	1,147	0	0	0	0	1,299	1,299
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Bridge Count	1	Railroads Impacted	0	Improvement	Action	Detailed Work	Federal Funds Category	Initiatives
Bridges				BRIDGE		BRIDGE REPLACEMENT	NHPP	
A1884 ,								

Route	Begin Log	End Log	Begin County	TMA	Travelway ID	System	Functional Class	NHS	AADT	Conflict of Interest
RT BB S	1.083	1.104	JASPER	N	3,400	SUPPLEMENTARY	MAJOR COLLECTOR	N	323	N
RT BB N	5.541	5.562	JASPER	N	3,401	SUPPLEMENTARY	MAJOR COLLECTOR	N	296	N

Lane Miles	0.042	Centerline Miles	0.021
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PROJECT SUMMARY REPORT FOR SR0137 AS OF May 30, 2024

TIP Number	
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Planning Organization	Federal District	Senate District	House District
HARRY S. TRUMAN COORD COUN	7	32	127

PROJECT SUMMARY REPORT FOR SR0142 AS OF May 30, 2024

Work District	SOUTHWEST	Status	ACCEPTED	Version	ANNUAL UPDATE	Project Manager		Payment Project	N
Award Month/Award Year	2 / 2026	Letting Date	Jan 01, 2026	Estimated Submittal Date	Mar 05, 2024	Let by	CENTRAL OFFICE	Letting Exclusion	N

Primary Route	RT H E	County	JASPER
Description / Location	Bridge replacement over Duval Creek 0.7 mile west of Rte. Y.		
Reason / Remarks	Project involves bridge S0834.		
District Comments	Involves Bridge Number S0834. Combo with SR0137.		

Project Amounts	Total Estimated Cost for the Project									
Typical Bridge	Major Bridge	Pavement	Safety	Mobility	Capital Improvement	Contingency	Other Non-Contractual	Right of Way Acquisition	Preliminary Engineering	Construction Engineering
723						14	2	2	110	98
Total Bridge	723	Total Contract Estimate			723	Total Construction	739		Total Engineering	208
						Total Right of Way and Construction		741	Total Project	949

Yearly Program Amounts	Amount Programmed by SFY									
	Prior to 2024	2024	2025	2026	2027	2028	2029	Future	Program Total	Project Total
Preliminary Engineering			90	20				0	110	110
Construction Engineering				98				0	98	98
Right of Way Acquisition			2						2	2
Construction				739				0	739	739
Total			92	857				0	949	949

How the District is Funding the Project										
Funding Category										
Asset Management - CN	0	0	0	739	0	0	0	0	739	739
Asset Management - RW	0	0	2	0	0	0	0	0	2	2
Total	0	0	2	739	0	0	0	0	741	741

Funding From Other Sources										
Total	0	0	0	0	0	0	0	0	0	0

Funds Transfer										
Total	0	0	0	0	0	0	0	0	0	0

Total Right of Way and Construction	0	0	2	739	0	0	0	0	741	741
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Engineering	0	0	90	118	0	0	0	0	208	208
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Funding From Other Sources - Engineering										
Total	0	0	0	0	0	0	0	0	0	0

Funds Transer - Engineering										
Total	0	0	0	0	0	0	0	0	0	0

Total Engineering	0	0	90	118	0	0	0	0	208	208
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Total Project	0	0	92	857	0	0	0	0	949	949
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Bridge Count	1	Railroads Impacted	0	Improvement	Action	Detailed Work	Federal Funds Category	Initiatives
Bridges				BRIDGE		BRIDGE REPLACEMENT	NHPP	
S0834 ,								

Route	Begin Log	End Log	Begin County	TMA	Travelway ID	System	Functional Class	NHS	AADT	Conflict of Interest
RT H E	10.639	10.661	JASPER	N	3,478	SUPPLEMENTARY	MAJOR COLLECTOR	N	130	N
RT H W	8.474	8.496	JASPER	N	3,479	SUPPLEMENTARY	MAJOR COLLECTOR	N	142	N

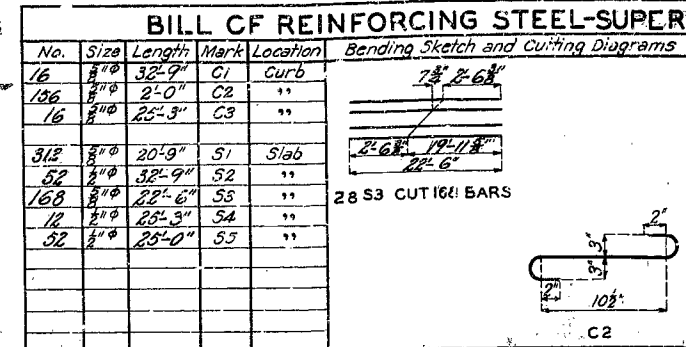
Lane Miles	0.044	Centerline Miles	0.022
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PROJECT SUMMARY REPORT FOR SR0142 AS OF May 30, 2024

TIP Number	
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Planning Organization	Federal District	Senate District	House District
HARRY S. TRUMAN COORD COUN	7	32	127

FED. ROAD DIST. NO.	STATE	FED AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.	NPS 394F(3H)	19		



Note: Dimensions given are along center line of bars and are for computed lengths.

GENERAL NOTES:

GENERAL NOTES:
Loading: One 10 Ton Truck, 80% of weight on rear axle, 30% impact,
14'-0" wheel base, 6'-0" gage, 10" tire.

Exposed edges to be beveled $\frac{3}{4}$ " where no other bevel is noted.
Concrete in slab and curbs to be 1:2:3 $\frac{1}{2}$ mix, Class "X"
All other concrete to be 1:2:4 mix, Class "B"
Bridge excavation in accordance with Section I of
Standard Specifications Issued April 6, 1930.

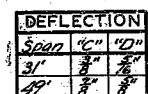
REVISIONS REQUIRED

SEE SHEET NO. 4 OF 4 FOR THE FOLLOWING ITEMS:

- (1) Type of Handrail
- (2) Width of Curb
- (3) Type of Diaphragm

Note: Details on any other sheet conflicting with those shown on sheet No. 4 are VOID.

I-Beams with Fastenings, spacers, handrail, handrail posts with fastenings, and bearings will be paid for as structural steel. Cost of metallic edge moulding will be included in unit bid price for conc. slab.
Rivets $\frac{3}{8}$ " holes $\frac{13}{16}$ " except in handrail where rivets shall be $\frac{5}{8}$ " holes $\frac{1}{2}$ ". Field connections riveted except as noted



DEAD LOAD DEFLECTION DIAGRAM

FINAL QUANT.		ESTIMATED QUANTITIES		
	ITEM	SUBSTR.	SUBSTR.	TOTAL
109	Excavation Class 1 Cu. Yds.		110	110
78	Excavation Class 2 Cu. Yds.		76	76
55.1	Concrete 1:2:4 mix, Class "B" Cu. Yds.		55.6	55.6
57.2	Concrete 1:2:3 1/2 mix, Class "X" Cu. Yds.		57.2	57.2
48.10	Fabricated Structural Steel Lbs.		49,550	49,550
21,350	Reinforcing Steel Lbs.		14,200	7150
46.0	Heating Concrete "A" Cu. Yds.			
7.1	" " "B" Cu. Yds.			
8	Test Holes Lin. Ft.			

Note: Bridge Excavation above Elev. 904.0 will be paid for as Class 1 Bridge Excavation.
Bridge Excavation below Elev. 904.0 will be paid for as Class 2 Bridge Excavation.

Detail shop drawings shall be submitted to the State Highway Department in duplicate and shall be approved before steel is fabricated.

Where rubber compound is specified on plans for use in partition and expansion joints, the pre-moulded joint shall be securely stitched to one face of concrete with copper wire. See Special Provisions in regard to permissible substitution of beams, and basis of payment.

Paint: Shop, none : Field, contact surfaces of bolted field connections one coat of red lead and surfaces inaccessible after erection three coats of red lead. No other paint to be applied by contractor. ~~All paint required will be furnished by the Massman Steel Highway Department. See Special Provisions.~~

B.M. #11 Elev. 916.12 Spike and Nut in root 15" Sycamore 65'
Rt Sta. 522+00.

Sta. 522+00.
BRIDGE OVER DUVAL CREEK

STATE ROAD FROM ROUTE U.S. 71 TO ROUTE S.B.

ABOUT 8 MILES WEST OF JASPER

PROJECT NO. NRS 39.7 (SH) STA 522+45

JASPER COUNTY

SUBMITTED BY W. R. Sack DATE 6/22/33
BRIDGE ENGINEER
APPROVE. BY T. H. Carter DATE 6/22/33
CHIEF ENGINEER

FINISHED

F.A. Sheet No. 1 of 4

S-834

BILL OF REINFORCING STEEL FOR SUBSTRUCTURE

TABLE NO. 2

No.	Size	Length	Mark	Location:
End	Rein.	No. 1 & 4		
20	3/4"	5'-9"	D1	Footings
12	3/4"	7'-6"	F1	Haunch
12	3/4"	7'-9"	F2	"
6	3/4"	13'-0"	H1	Wing
4	3/4"	20'-9"	H2	"
8	3/4"	26'-3"	H3	Beam
4	3/4"	26'-3"	H4	"
16	3/4"	26'-3"	H5	"
2	3/4"	20'-6"	H6	Backwell
6	3/4"	10'-9"	H7	Wings
4	3/4"	16'-0"	H8	"
4	3/4"	13'-0"	T1	"
4	3/4"	25'-9"	T2	Backwell
50	3/4"	9'-0"	U1	Beam
14	3/4"	6'-9"	V1	Wings
12	3/4"	7'-6"	V2	Column
54	3/4"	3'-9"	V3	Backwell
20	3/4"	18'-9"	V4	Column

Joint Details No. 2 & 3

16	3/4"	5'-9"	D1	Footings
20	3/4"	7'-6"	F1	Haunch
32	3/4"	26'-6"	G1	Beam
4	3/4"	24'-6"	G2	"
52	3/4"	8'-8"	U2	"
16	3/4"	18'-0"	P1	Column
44	3/4"	7'-0"	P2	"

Bending Stretches & Cutting Diagrams

Note: Dimensions given are along center line of bars and are for computed lengths. Reinforcing bars 3/4" or over in diameter, which are bent to an angle greater than 90°, shall be of structural grade.

Note: Dimensions given are along center line of bars and are for computed lengths. Reinforcing bars $\frac{3}{4}$ " or over in diameter, which are bent to an angle greater than 90° , shall be of structural grade.

LOCATION SKETCH

Note: This drawing is not to scale.
Follow dimensions:
Clear Out
(See Road Plans)

Duval Creek

Roadway 7

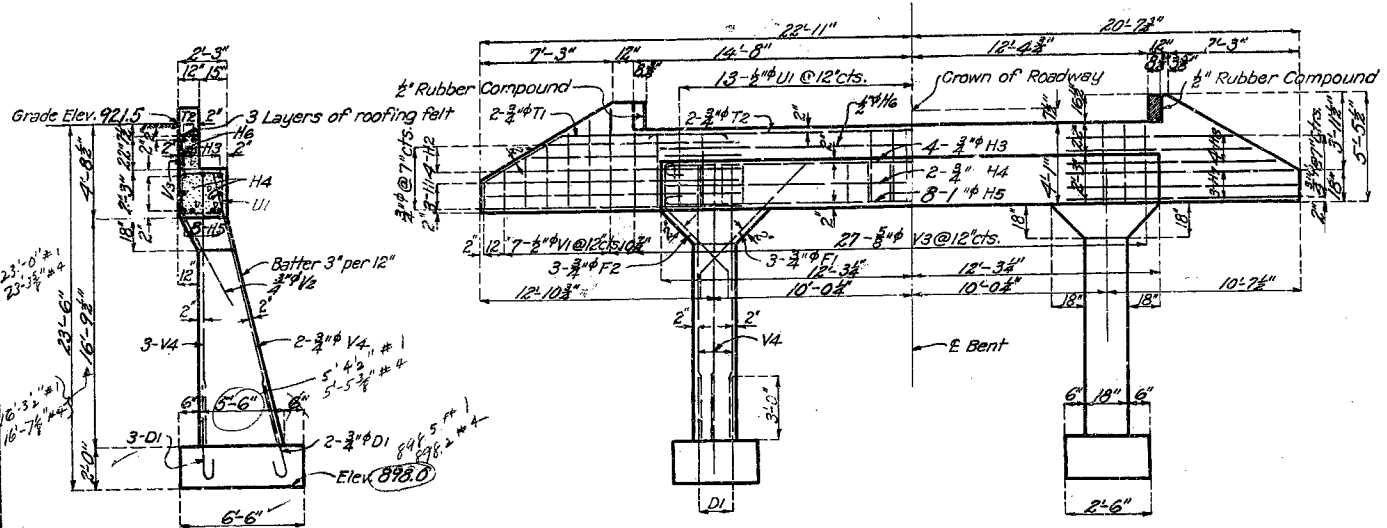
Proposed Bridge

Clear Out
(See Road Plans)

Drawn Jan. 1931 By R.J.G.
Traced Jan. 1931 By R.J.G.
Checked Feb. 1931 By J.H.M.

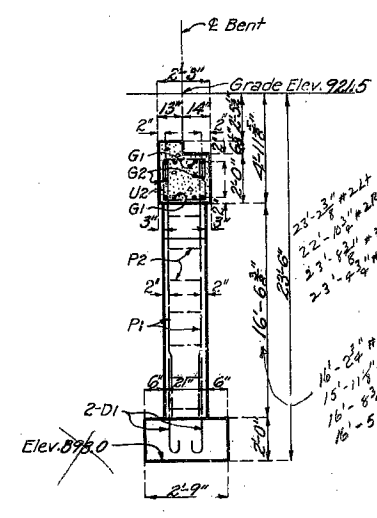
MISSOURI STATE HIGHWAY DEPARTMENT

FED. ROAD ST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.	NRS 344F(SH)	19		

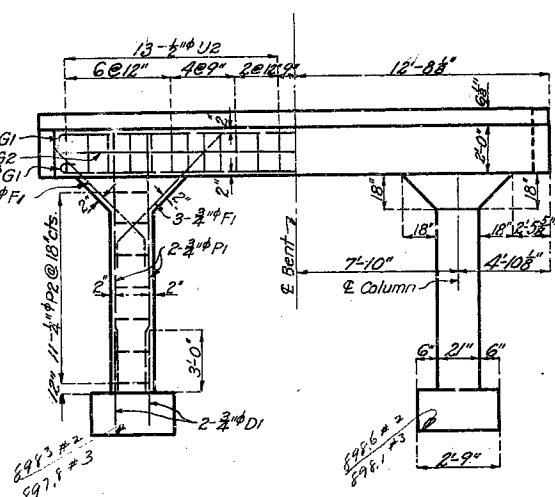


SECTION AT E

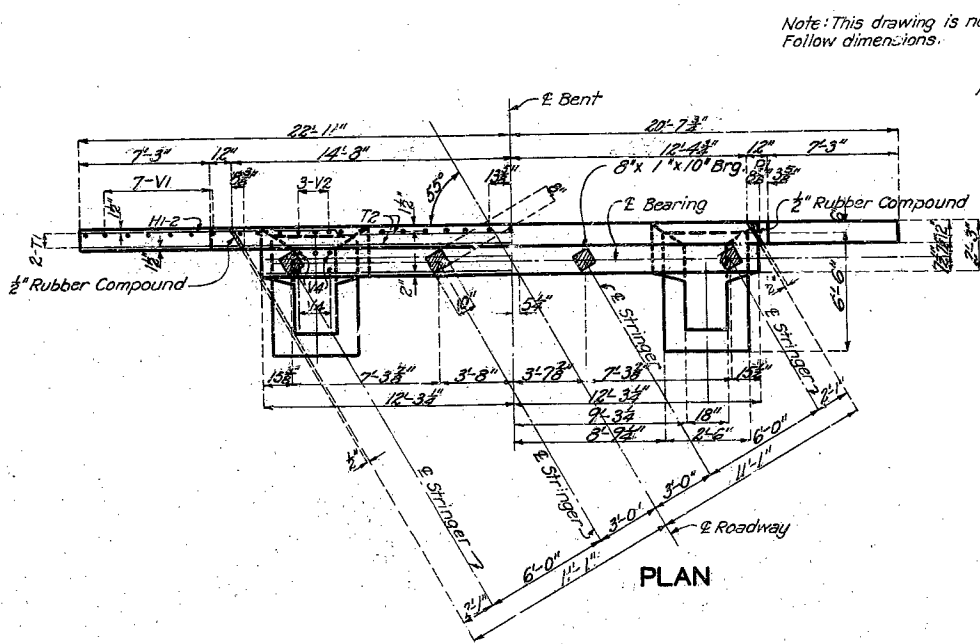
ELEVATION



SECTION AT E



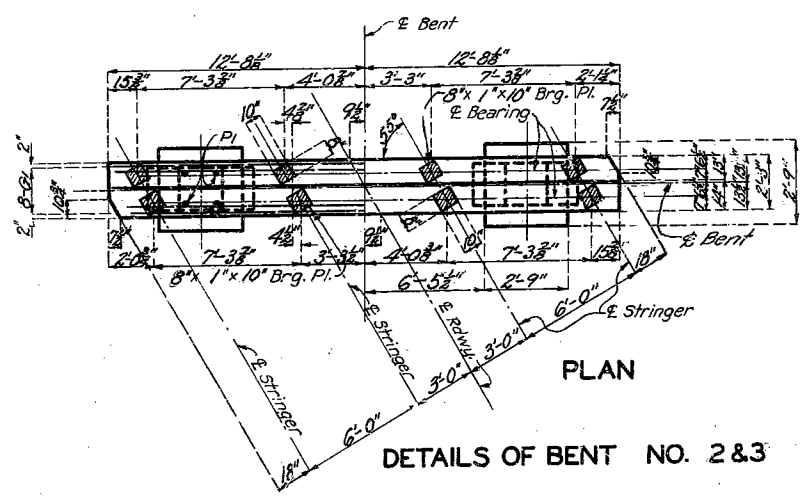
ELEVATION



DETAILS OF END BENT NO. 1 & 4

Note: This drawing is not to scale.
Follow dimensions.

Note: $\frac{1}{8}$ " Grout to be used under all bearing plates.



DETAILS OF BENT NO. 2 & 3

BRIDGE OVER DUVAL CREEK

STATE ROAD FROM ROUTE U.S. 71 TO ROUTE S.B.
ABOUT 8 MILES WEST OF JASPER
PROJECT NO. NRS 344F(SH) STA. 522 + 45
JASPER COUNTY

FA.

S-834

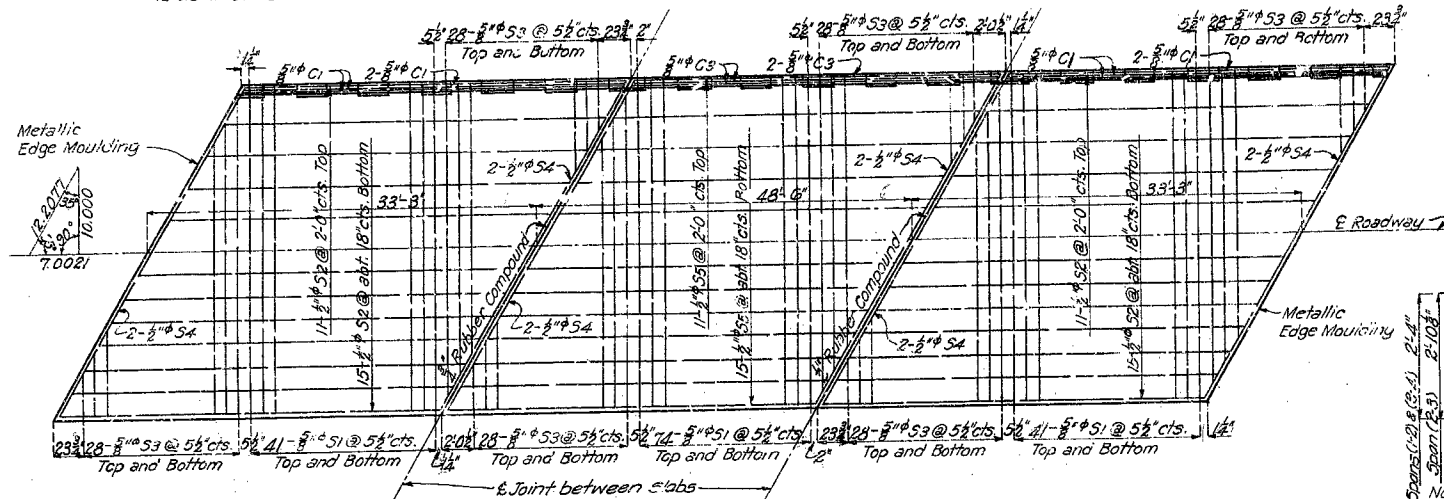
Drawn Sept. 1930 by I.B.
Traced Sept. 1930 by G.W. & R.J.G.
Assembled June 1933 by J.E.B.
Checked June 1933 by L.H.

Sheet No. 2 of 4.

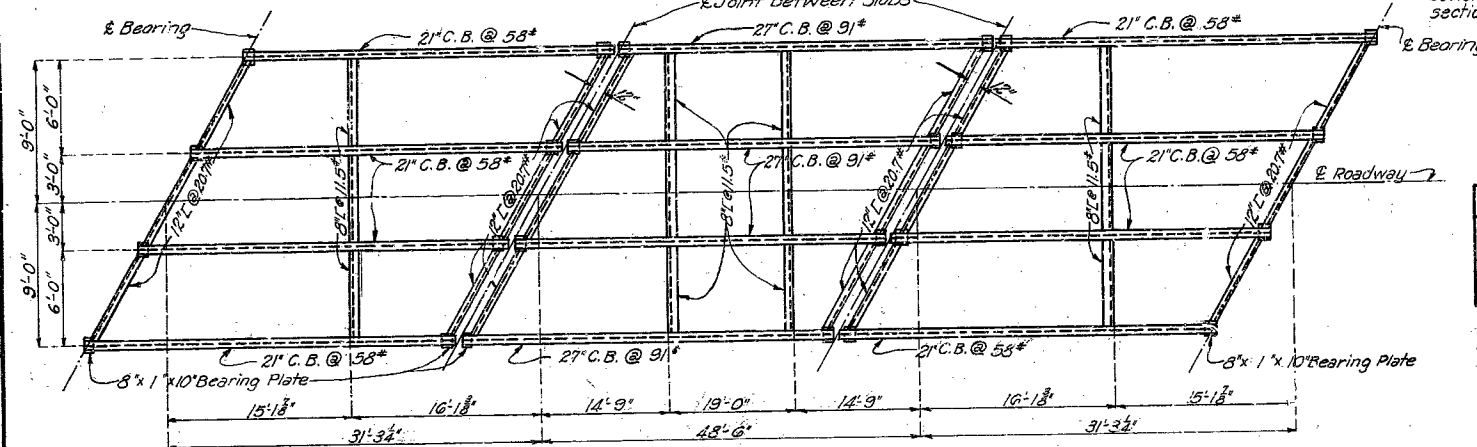
MISSOURI STATE HIGHWAY DEPARTMENT

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.	NRS 394E (SH)	19		

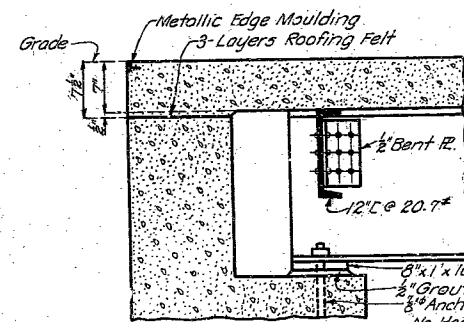
Note: Space dowel bars "C2" at approximately 12 cts. in curbs between outlets and at ends.



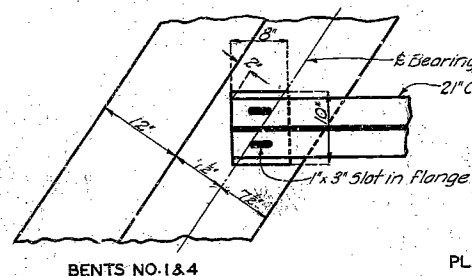
PLAN OF SLAB SHOWING REINFORCING



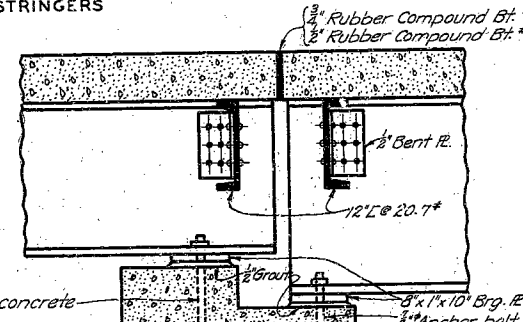
PLAN OF STRINGERS



ELEVATION



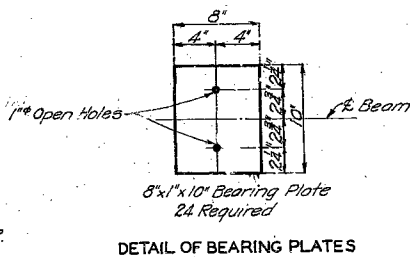
BENTS NO. 1 & 4



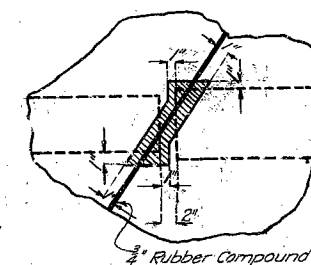
BENTS NO. 2 & 3

DETAILS OF BEARINGS

Note: This drawing is not to scale. Follow dimensions.



DETAIL OF BEARING PLATES

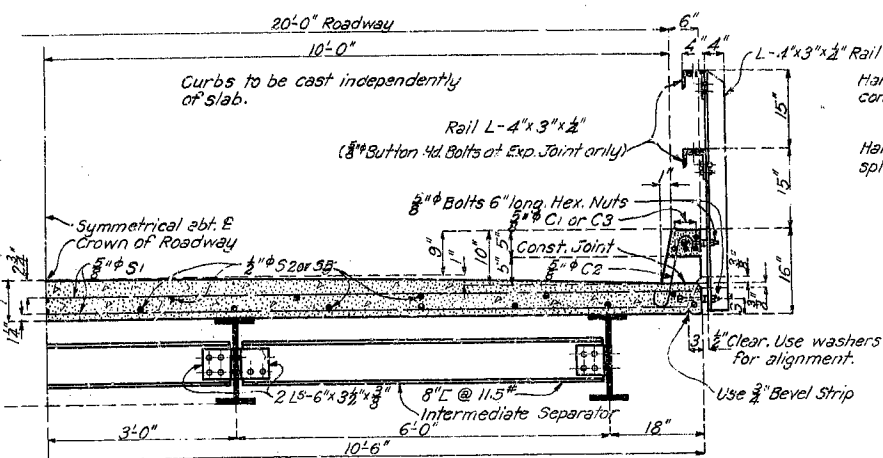


DETAIL OF RUBBER COMPOUND AT END OF STRINGERS BENT NO. 2 ONLY

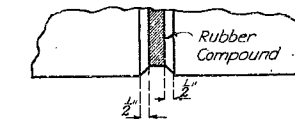
No Substitutions Made.

Span	STANDARD I-BEAMS		BETHLEHEM BEAMS	
	Inside	Outside	Inside	Outside
31'	20" @ 70*	20" @ 65.4*	22" @ 58*	22" @ 55*
49'	24" @ 115*	24" @ 105.9*	28" @ 91*	28" @ 81*

Note: See Special Provisions in regard to permissible beam substitutions and basis of payment.

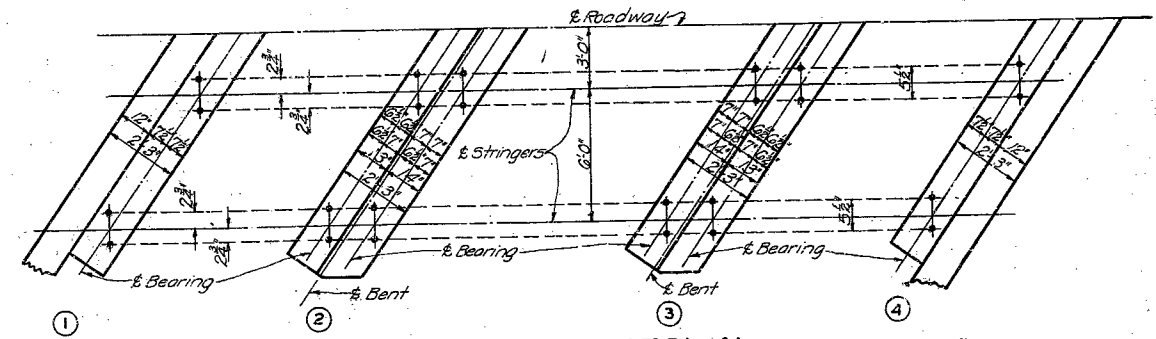


HALF SECTION THRU SPAN



Note: Use bevel as shown for exposed faces of all joints consisting of rubber compound except at top surface of roadway slab. Use edging tool with 1/4" radius at top surface of roadway slab each side of rubber compound joint.

DETAIL OF BEVEL FOR RUBBER COMPOUND JOINTS



HALF ANCHOR BOLT PLAN

BRIDGE OVER DUVAL CREEK

STATE ROAD FROM ROUTE U.S. 71. TO ROUTE S.B.
ABOUT 8 MILES WEST OF JASPER
PROJECT NO. NRS 394E (SH) STA. 522+45


JASPER COUNTY


FA.

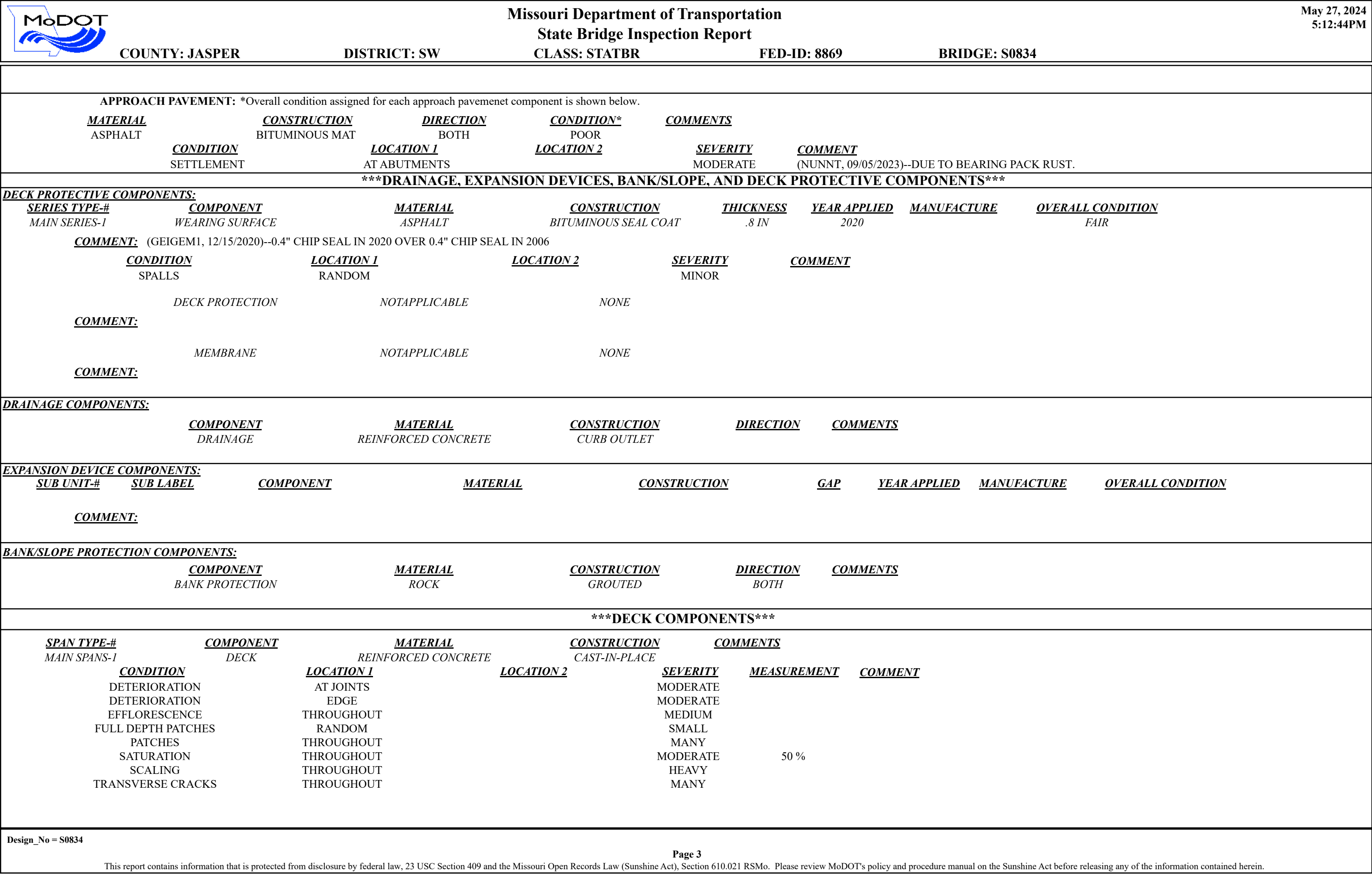
S-834

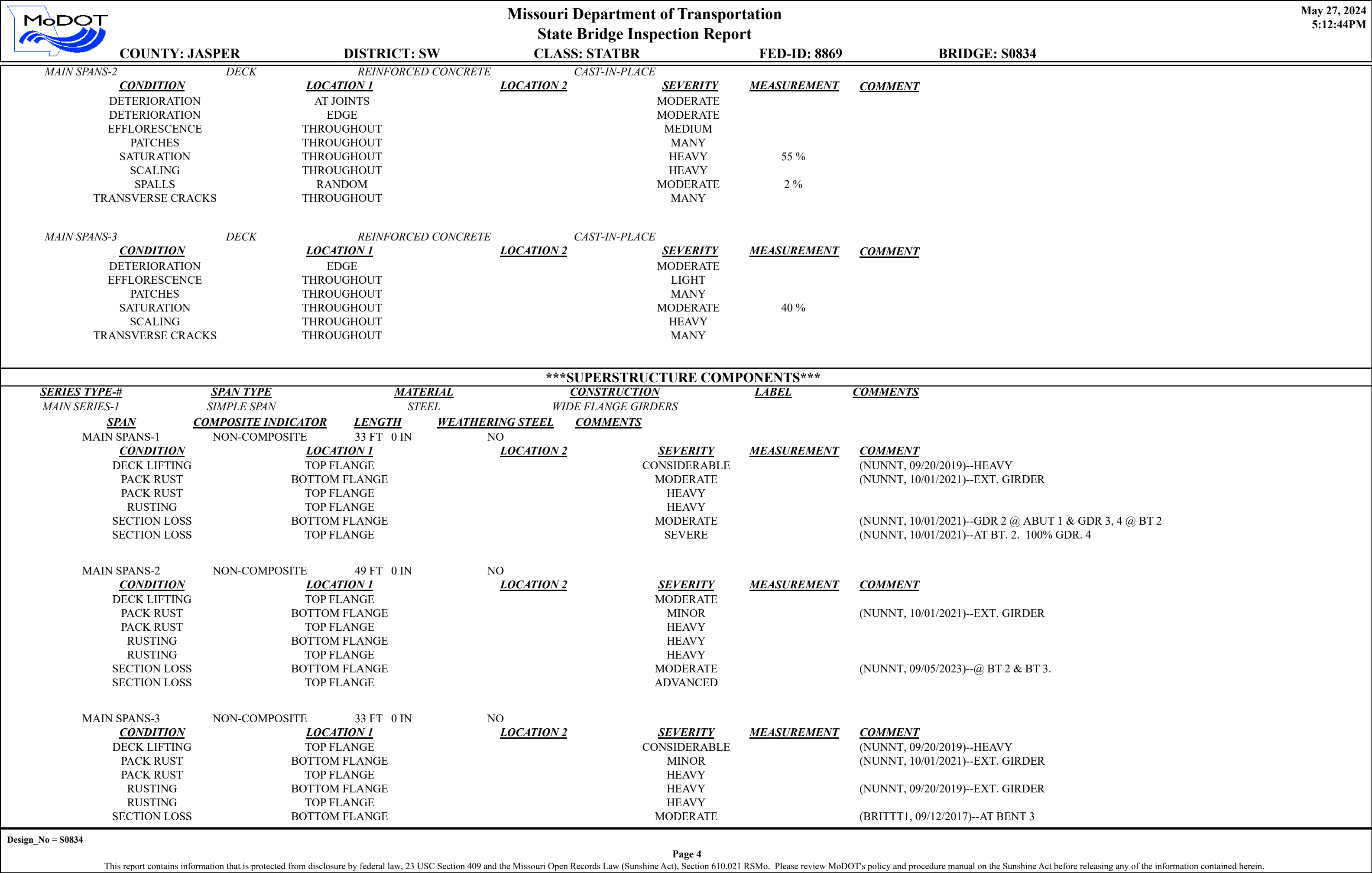
Drawn Jan. 1931 By R.J.G.
Traced Jan. 1931 By R.J.G.
Checked Feb. 1931 By J.E.B.-G.W.
Assembled June 1933 By J.E.B.-G.W.
Checked June 1933 By L.H.

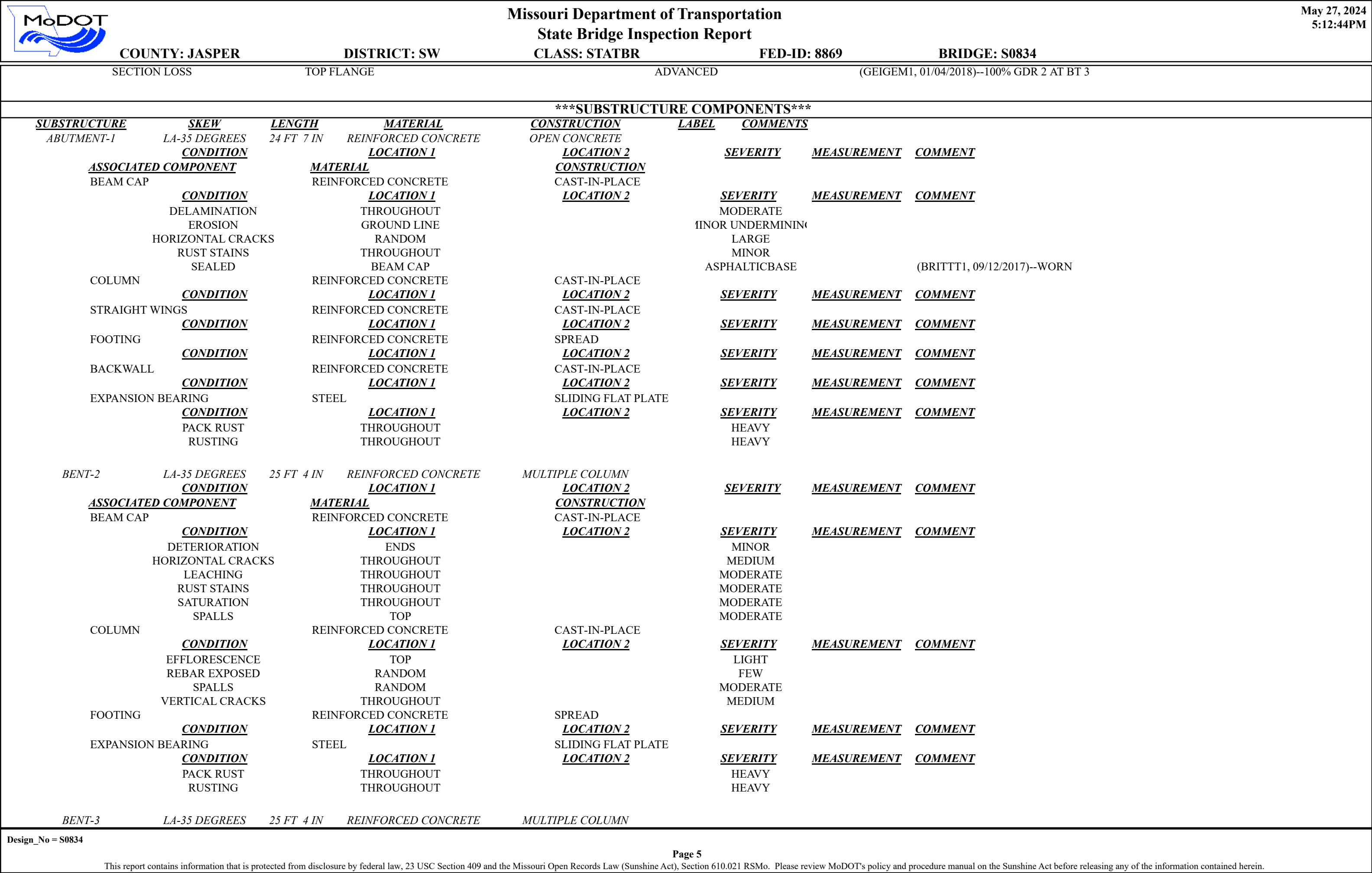
252

		<div>Missouri Department of Transportation</div> <div>State Bridge Inspection Report</div>				<div>May 27, 2024</div> <div>5:12:44PM</div>			
COUNTY: JASPER		DISTRICT: SW		CLASS: STATBR		FED-ID: 8869		BRIDGE: S0834	
GENERAL STRUCTURE INFORMATION							***BRIDGE INSPECTION INFORMATION***		
<div>ROUTE: RTHE</div> <div>FEATURE: DUVAL CR</div> <div>STATUS: P-POSTLOAD</div> <div>LOG MILE: 10.639</div> <div>DETOUR: 16.00 MILES</div> <div>NHS: NO</div> <div>BUILT: 1933</div> <div>REHAB:</div> <div>LOCATION: S 15 T 30 R 32 W</div> <div>LATITUDE: 37 20 35.91 (DMS)</div> <div>LONGITUDE: 94 26 30.04 (DMS)</div>		<div># SPANS: 3</div> <div>LANES ON: 2</div> <div>LANES UNDER: 0</div> <div>COMPASS DIRECTION: WEST to EAST</div> <div>DIRECTION OF TRAFFIC: 2-WAY TRAF</div> <div>FUNCTIONAL CLASS: RL-MAJOR COLLECTOR</div> <div>NBI OWNER: MODOT</div> <div>NBI MAINTAINED: MODOT</div> <div>MAINTENANCE DISTRICT: SW</div> <div>MAINTENANCE COUNTY: JASPER</div> <div>SUB AREA: 7G08</div>		<div>PLACE CODE: 59906 PRESTON</div> <div>LENGTH: 115 FT 0 IN</div> <div>MAXIMUM SPAN: 49 FT 0 IN</div> <div>APPROACH ROADWAY: 19 FT 0 IN</div> <div>CURB TO CURB: 20 FT 0 IN</div> <div>OUT TO OUT: 21 FT 0 IN</div> <div>AADT: 272</div> <div>AADT YEAR: 2023</div> <div>AADT TRUCK: 20.8%</div> <div>FUTURE AADT: 408</div> <div>FUTURE AADT YEAR: 2043</div>		<div>DATE: 07/24/2023</div> <div>RESPONSIBILITY: DISTRICT</div> <div>FREQUENCY: 24</div> <div>CALCULATED INTERVAL**: 24</div> <div>TEAM LEADER: MATTHEW GEIGER</div> <div>ELEMENT: NO</div> <div>INSPECTOR 2: LAURA CAMPBELL</div> <div>INSPECTOR 4:</div> <div>INSPECTOR 3:</div> <div>** When calculated interval exceeds the frequency, a justification comment per BIRM is required.</div>			
						<div>GENERAL INSPECTION COMMENTS</div>			
						<div>(NUNNT, 08/27/2021)--KEEP FREQUENCY AT 24 MONTHS SINCE SECTION LOSS TO FLANGES AT BT. 2 & 3.</div>			
FRACTURE CRITICAL INSPECTION INFORMATION					***INDEPTH INSPECTION INFORMATION***				
<div>DATE:</div> <div>FREQUENCY:</div> <div>TEAM LEADER:</div> <div>INSPECTOR 2:</div> <div>** When calculated interval exceeds the frequency, a justification comment per BIRM is required.</div>					<div>RESPONSIBILITY:</div> <div>CALCULATED INTERVAL**:</div> <div>INSPECTOR 3:</div> <div>INSPECTOR 4:</div> <div>CATEGORY:</div> <div>NBI:</div> <div>METHOD:</div> <div>** When calculated interval exceeds the frequency, a justification comment per BIRM is required.</div>				
FRACTURE CRITICAL INSPECTION COMMENTS					INDEPTH INSPECTION COMMENTS				
SPECIAL INSPECTION INFORMATION					***UNDERWATER INSPECTION INFORMATION***				
<div>DATE: 12/11/2019</div> <div>FREQUENCY: 72</div> <div>TEAM LEADER: OTHER</div> <div>INSPECTOR 2:</div> <div>** When calculated interval exceeds the frequency, a justification comment per BIRM is required.</div>					<div>RESPONSIBILITY: DISTRICT</div> <div>CALCULATED INTERVAL**: 80</div> <div>INSPECTOR 3:</div> <div>INSPECTOR 4:</div> <div>CATEGORY: CHANNEL CROSS SEC</div> <div>NBI: NO</div> <div>METHOD: EMD</div> <div>** When calculated interval exceeds the frequency, a justification comment per BIRM is required.</div>				
SPECIAL INSPECTION COMMENTS					UNDERWATER INSPECTION COMMENTS				
OTHER SPECIAL INSPECTIONS					OTHER UNDERWATER INSPECTIONS				
<div>DATE</div> <div>FREQUENCY</div> <div>CATEGORY</div> <div>NBI</div> <div>CALCULATED INTERVAL</div> <div>RESPONSIBILITY</div> <div>METHOD</div>					<div>DATE</div> <div>FREQUENCY</div> <div>CATEGORY</div> <div>NBI</div> <div>CALCULATED INTERVAL</div> <div>RESPONSIBILITY</div> <div>METHOD</div>				
Design_No = S0834									
<div>Page 1</div> <div>This report contains information that is protected from disclosure by federal law, 23 USC Section 409 and the Missouri Open Records Law (Sunshine Act), Section 610.021 RSMo. Please review MoDOT's policy and procedure manual on the Sunshine Act before releasing any of the information contained herein.</div>									

		Missouri Department of Transportation			May 27, 2024	
		State Bridge Inspection Report			5:12:44PM	
COUNTY: JASPER		DISTRICT: SW		CLASS: STATBR	FED-ID: 8869	BRIDGE: S0834
STRUCTURE POSTING						
APPROVED CATEGORY: S-16		TRKS OVR 14 TNS 15MPH ON BR EXCPT SNGL UNIT TRKS WT LIMIT 19 TNS&ALL OTHR TRKS WT LIMIT 35 TNS.				
Ton 1: 14		Ton 2: 19		Ton 3: 35		
COMMENTS:						
FIELD CATEGORY: S-16		TRKS OVR 14 TNS 15MPH ON BR EXCPT SNGL UNIT TRKS WT LIMIT 19 TNS&ALL OTHR TRKS				
Ton 1: 14		Ton 2: 19		Ton 3: 35		PROBLEM: PROBLEM DIRECTION:
COMMENTS:						
GENERAL COMMENTS/MAJOR RATED ITEMS						
GENERAL COMMENTS: (BOWDEJ1, 06/25/2008)--(33'-49'-33') SMP WF GDR SPANS						
[ITEM 58] DECK: 4-POOR CONDITION		COMMENTS: (NUNNT, 09/05/2023)--40% - 55% SATURATION EACH SPAN.				
RATING : 09/12/2017						
[ITEM 59] SUPER: 4-POOR CONDITION		COMMENTS: (NUNNT, 08/27/2021)--SEVERE TOP FLANGE AND MODERATE BOTTOM FLANGE SECTION LOSS AT GIRDER ENDS AT BT. 2 & 3.				
RATING : 08/27/2021						
[ITEM 60] SUB: 5-FAIR CONDITION		COMMENTS: (NUNNT, 07/23/2019)--MODERATE DETERIORATION BT. 3 CAP END W/MINOR BEARING INFLUENCE.				
RATING : 07/23/2019						
[ITEM 61] BANK/CHANNEL: 5-MAJOR DAMAGE		COMMENTS: (NUNNT, 08/27/2021)--HEAVY EROSION UPSTREAM.				
RATING : 07/23/2019						
[ITEM 113] SCOUR: 8-STABLE FOR CALCULATED		COMMENTS: (NUNNT, 08/27/2021)--MODERATE UNDERMINING OPEN STYLE EAST ABUTMENT.				
RATING : 05/18/2001						
EVALUATION TYPE :						
[ITEM 71] WATERWAY ADEQUACY: DECK ABOVE FLOOD ELEV		COMMENTS:				
RATING : 05/18/2001						
[ITEM 72] APPRRDWY ALIGNMENT: 8-VERYGOOD		COMMENTS:				
RATING : 05/18/2001						
RAILING AND APPROACH PAVEMENT COMPONENTS AND RATINGS						
[ITEM 36A] BRIDGE RAILING RATING: DOESNT MEET CURRNT STND-0		RATING : 10/27/2009		COMMENTS:		
<u>MATERIAL</u>	<u>CONSTRUCTION</u>	<u>DIRECTION</u>	<u>COMMENTS</u>			
STEEL	CHANNEL-DOUBLE	BOTH				
REINFORCED CONCRETE	CURB	BOTH				
[ITEM 36B] TRANSITION RAILING RATING: NOT PROVIDED-0		RATING : 05/18/2001		COMMENTS:		
[ITEM 36C] APPROACH RAILING RATING: NOT PROVIDED-0		RATING : 05/18/2001		COMMENTS:		
[ITEM 36D] RAIL END TREATMENT RATING: NOT PROVIDED-0		RATING : 05/18/2001		COMMENTS:		
Design_No = S0834						
Page 2						
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Missouri Department of Transportation

State Bridge Inspection Report

May 27, 2024
5:12:44PM

COUNTY: JASPER

DISTRICT: SW

CLASS: STATBR

FED-ID: 8869

BRIDGE: S0834

			<u>LOCATION 1</u>	<u>LOCATION 2</u>	<u>SEVERITY</u>	<u>MEASUREMENT</u>	<u>COMMENT</u>
<u>ASSOCIATED COMPONENT</u>	<u>CONDITION</u>	<u>MATERIAL</u>	<u>CONSTRUCTION</u>				
BEAM CAP		REINFORCED CONCRETE	CAST-IN-PLACE				
	<u>CONDITION</u>	<u>LOCATION 1</u>	<u>LOCATION 2</u>	<u>SEVERITY</u>	<u>MEASUREMENT</u>	<u>COMMENT</u>	
	DELAMINATION	THROUGHOUT		MINOR			
	DETERIORATION	ENDS		MODERATE			(NUNNT, 09/20/2019)--CLOSE TO GIRDER 4 BEARING AREA.
	HORIZONTAL CRACKS	THROUGHOUT		LARGE			
	LEACHING	THROUGHOUT		MODERATE			
	RUST STAINS	THROUGHOUT		MODERATE			
	SATURATION	THROUGHOUT		MODERATE			
COLUMN		REINFORCED CONCRETE	CAST-IN-PLACE				
	<u>CONDITION</u>	<u>LOCATION 1</u>	<u>LOCATION 2</u>	<u>SEVERITY</u>	<u>MEASUREMENT</u>	<u>COMMENT</u>	
	DELAMINATION	TOP		MINOR			
	EFFLORESCENCE	RANDOM		LIGHT			
	SCALING	WATERLINE		LIGHT			
	SPALLS	RANDOM		MINOR			
FOOTING		REINFORCED CONCRETE	SPREAD				
	<u>CONDITION</u>	<u>LOCATION 1</u>	<u>LOCATION 2</u>	<u>SEVERITY</u>	<u>MEASUREMENT</u>	<u>COMMENT</u>	
EXPANSION BEARING		STEEL	SLIDING FLAT PLATE				
	<u>CONDITION</u>	<u>LOCATION 1</u>	<u>LOCATION 2</u>	<u>SEVERITY</u>	<u>MEASUREMENT</u>	<u>COMMENT</u>	
	PACK RUST	THROUGHOUT		HEAVY			
	RUSTING	THROUGHOUT		HEAVY			
ABUTMENT-4	LA-35 DEGREES	24 FT 7 IN	REINFORCED CONCRETE	OPEN CONCRETE			
	<u>CONDITION</u>	<u>LOCATION 1</u>	<u>LOCATION 2</u>	<u>SEVERITY</u>	<u>MEASUREMENT</u>	<u>COMMENT</u>	
<u>ASSOCIATED COMPONENT</u>	<u>CONDITION</u>	<u>MATERIAL</u>	<u>CONSTRUCTION</u>				
BEAM CAP		REINFORCED CONCRETE	CAST-IN-PLACE				
	<u>CONDITION</u>	<u>LOCATION 1</u>	<u>LOCATION 2</u>	<u>SEVERITY</u>	<u>MEASUREMENT</u>	<u>COMMENT</u>	
	EROSION	GROUND LINE		MODERATE			(NUNNT, 10/01/2021)--MODERATE UNDERMINING.
	HORIZONTAL CRACKS	RANDOM		FINE			
	SEALED	BEAM CAP		ASPHALTICBASE			
	VERTICAL CRACKS	RANDOM		FINE			
COLUMN		REINFORCED CONCRETE	CAST-IN-PLACE				
	<u>CONDITION</u>	<u>LOCATION 1</u>	<u>LOCATION 2</u>	<u>SEVERITY</u>	<u>MEASUREMENT</u>	<u>COMMENT</u>	
STRAIGHT WINGS		REINFORCED CONCRETE	CAST-IN-PLACE				
	<u>CONDITION</u>	<u>LOCATION 1</u>	<u>LOCATION 2</u>	<u>SEVERITY</u>	<u>MEASUREMENT</u>	<u>COMMENT</u>	
FOOTING		REINFORCED CONCRETE	SPREAD				
	<u>CONDITION</u>	<u>LOCATION 1</u>	<u>LOCATION 2</u>	<u>SEVERITY</u>	<u>MEASUREMENT</u>	<u>COMMENT</u>	
BACKWALL		REINFORCED CONCRETE	CAST-IN-PLACE				
	<u>CONDITION</u>	<u>LOCATION 1</u>	<u>LOCATION 2</u>	<u>SEVERITY</u>	<u>MEASUREMENT</u>	<u>COMMENT</u>	
EXPANSION BEARING		STEEL	SLIDING FLAT PLATE				
	<u>CONDITION</u>	<u>LOCATION 1</u>	<u>LOCATION 2</u>	<u>SEVERITY</u>	<u>MEASUREMENT</u>	<u>COMMENT</u>	
	PACK RUST	THROUGHOUT		HEAVY			
	RUSTING	THROUGHOUT		HEAVY			


OVER/UNDER ROUTES CLEARANCE INFORMATION


CLEARANCES OVER DECK **NOTE: Vertical clearances for permitting purposes are taken as 2 inches less than the actual field measured clearance.

<u>VERTICAL CLEARANCE TYPE**</u>	<u>VALUE</u>	<u>DIRECTION</u>	<u>DATE</u>	<u>COMMENT</u>
---	---------------------	-------------------------	--------------------	-----------------------

Design_No = S0834

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		<div>Missouri Department of Transportation</div> <div>State Bridge Inspection Report</div>				<div>May 27, 2024</div> <div>5:12:44PM</div>			
COUNTY: JASPER		DISTRICT: SW		CLASS: STATBR		FED-ID: 8869		BRIDGE: S0834	
<u>CLEARANCES UNDER BRIDGE</u>		**NOTE: Vertical clearances for permitting purposes are taken as 2 inches less than the actual field measured clearance.							
<u>RECORD #</u>	<u>ROUTE</u>	<u># LANES</u>	<u>DIRECTION OF TRAFFIC</u>	<u>RIGHT LATERAL CLEARANCE</u>	<u>LEFT LATERAL CLEARANCE</u>	<u>UR-ID</u>			
<u>VERTICAL CLEARANCE TYPE**</u>	<u>VALUE</u>	<u>DIRECTION</u>	<u>DATE</u>	<u>COMMENT</u>					
STRUCTURE PAINT INFORMATION									
CONDITION: FAIR		RUST AMOUNT : 5=3.0% OF SURFACE RUSTED			STEEL TONS : 24				
<u>ORIGINAL PAINT</u>		<u>CONTRACT REPAINT</u>			<u>DEPARTMENT REPAINT</u>				
PAINT TYPE :		PAINT TYPE :			PAINT TYPE : C SYSTEM		MANUFACTURE :		
NAME :		NAME :			NAME : INORGANIC ZINC/VINYL		SURFACE PREP :		
PAINT COLOR :		PAINT COLOR :			PAINT COLOR : ALUMINUM				
PAINT YEAR :		PAINT YEAR :			PAINT YEAR : 1992				
MILS :		MILS :			MILS : 8				
REQUESTED WORK ITEMS									
GENERAL WORK COMMENTS:									
<u>RESPONSIBILITY</u>	<u>LOCATION</u>	<u>ITEM</u>	<u>CATEGORY</u>	<u>PRIORITY</u>	<u>DATE</u>	<u>WORK ITEM COMMENT</u>			
REGIONAL	SEE COMMENT	REPAIR GIRDER ENDS	SUPERSTRUCTURE	3	09/23/2013	(BRITTT1, 09/22/2015)--ALL BENTS			
REGIONAL	ABUTMENT-BEARINGS	CLEAN, PAINT, AND RESET	SUBSTRUCTURE	2	07/12/2019				
DISTRICT ROUTINE	SLOPE	CUT BRUSH & TREES	SLOPE	2	07/12/2019	(NUNNT, 09/20/2019)--HEAVY BRUSH GROWING ON TO BRIDGE.			
DISTRICT SPECIAL	ROADWAY SURFACE	REPAIR CONCRETE < 50 SF	DECK	3	07/24/2023	(NUNNT, 09/05/2023)--20 SF			
STIP			REPLACEMENT		04/10/2024	(GEIGEM1, 04/11/2022)--2026			
UTILITY ATTACHMENTS									
<u>UTILITY</u>	<u>OWNER</u>	<u>METHOD</u>	<u>MEASUREMENT TYPE</u>	<u>VALUE</u>	<u>NUMBER</u>	<u>UTILITY ATTACHMENT COMMENT</u>			
PROGRAM NOTES INFORMATION									
<u>YEAR</u>	<u>PROJECT #</u>	<u>MONTH LET</u>	<u>YEAR LET</u>	<u>ITEMS</u>	<u>COMMENT</u>				
Design_No = S0834									
Page 7									
This report contains information that is protected from disclosure by federal law, 23 USC Section 409 and the Missouri Open Records Law (Sunshine Act), Section 610.021 RSMo. Please review MoDOT's policy and procedure manual on the Sunshine Act before releasing any of the information contained herein.									

			Missouri Department of Transportation		May 27, 2024	
			State Bridge Inspection Report		5:12:44PM	
COUNTY: JASPER			DISTRICT: SW		CLASS: STATBR	
			FED-ID: 8869		BRIDGE: S0834	
COMPUTER GENERATED RATINGS AND DEFICIENCY ITEMS					***ADVANCED SIGN INFORMATION***	
NOTE: The items listed in this section are updated whenever computer edits are ran on a structure after the inspection updates have been entered in to TMS.					SIGN #	
					SIGN TYPE	
					PROBLEM	
					PROBLEM DIRECTION	
<u>Rated Item</u>					1	
<u>Rating</u>					DELINEATOR	
<u>Rating Date</u>						
[Item 67] Structure Evaluation Rating: 2-BASICALLY INTOLRBLE REQ 4/1/2003						
[Item 68] Deck Geometry Rating: 4-MEETS MINIMUM TOLERABLE 5/18/2001						
[Item 69] Underclearance: N-NOT APPLICABLE 5/18/2001						
Sufficiency Rating: 16.3% 3/6/2024						
Deficiency: STRUCTURAL 4/1/2003						
Funding Eligibility: ----						
Estimated New Structure Length: ----						
Estimated Structure Cost: ----						
Estimated Total Project Cost: ----						
Year of Cost Estimate: ----						
NOTE: The above structure length and cost estimates are computer generated using algorithms in the TMS system. These algorithms are generalized to use NBI items to come up with a new structure length and width to calculate a new area which is taken times a representative cost per square foot. The actual structure size and cost may vary significantly from these numbers once site specific engineering is done.						
					OUTFALL INSPECTION INFORMATION	
					# OUTFALLS:	
					INSPECTOR:	
					STATUS:	
					DATE:	
					NOTES:	



Missouri Department of Transportation
Bridge Inventory and Inspection System
Structural Inventory & Appraisal Sheet

May 27, 2024
5:10:36pm

COUNTY : JASPER BRIDGE : S0834 REVIEW STATUS : APPROVED NBI STATUS : T
RECORD TYPE : ROUTE CARRIED 'ON' STRUCT RUN DATE : 3/15/2024 SUBMITTAL YEAR : 2024

GENERAL STRUCTURE INFORMATION			ROUTE DESIGNATION INFORMATION		
1	State	MISSOURI	5A	Record Type	ROUTE CARRIED 'ON' STRUCT
2	District	SW	5B	Route Signing Prefix	MO
3	County	JASPER	5C	Designated Level of Service	MAINLINE
8	Federal ID No.	8869	5D	Route Number	0000H
27	Year Built	1933	5E	Directional Suffix	NOT APPLICABLE
106	Year Reconstructed	0	7	Facility Carried	RT H E
42A	Type of Service On	HIGHWAY	12	Base Hwy. Network	NO
21	Structure Maintenance	STATE HIGHWAY AGENCY	13A	LRS Inventory Route No.	
22	Structure Owner	STATE HIGHWAY AGENCY	13B	Subroute No.	
33	Br. Median Code	NO MEDIAN	20	Toll Status	ON FREE ROAD
37	Historical Significance	HISTORICAL SIGNIF UNKNWN	26	Functional Classification	07-RURAL MAJOR COLLECTOR
101	Parallel Struc Desg	NONE EXISTS	28A	Lanes on Structure	02
103	Temporary Structure	NOT TEMPORARY	100	STRAHNET Designation	RTE NOT A DEFENSE HWY
112	NBIS Bridge Length	YES	104	National Highway System	NOT ON NHS
			105	Federal Lands Highway	NOT APPLICABLE
			110	Designated Nat. Network	NO
STRUCTURE LOCATION INFORMATION			STRUCTURE TRAFFIC INFORMATION		
4	Place	PRESTON	29	AADT	272
	Code	59906	30	AADT Year	2023
9	Location	S 15 T 30 N R 32 W	102	Direction of Traffic	2-WAY TRAFFIC
11	Milepoint	10.70 miles	109	AADT Truck Percent	21%
16	Latitude	37 D 20 M 36 S	114	Future AADT	408
17	Longitude	94 D 26 M 30 S	115	Future AADT Year	2043
UNDERRECORD INFORMATION			STRUCTURE GEOMETRIC INFORMATION		
6	Features Intersected	DUVAL CR	10	Inventory Rte. Vert. Clear	99 Ft. 99 In.
42B	Type of Service Under	WATERWAY	19	By pass Detour Length	16.25 miles
28B	Lanes Under Structure	00	32	Approach Roadway Width	19 Ft. 0 In.
54A	Vert. Clearance Ref.	N/A	34	Skew	35.00 Degrees
54B	Vert. Clearance	0 Ft. 0 In.	35	Struct. Flared	NO
55A	Rt. Lat Clear Ref.	N/A	47	Total Horiz. Clear	20 Ft. 0 In.
55B	Rt. Lat Clearance	0 Ft. 0 In.	48	Maximum Span Length	48 Ft. 11 In.
56	Left Lat Clearance	0 Ft. 0 In.	49	Structure Length	115 Ft. 2 In.
38	Navigation Control	PERMIT NOT REQ	50A	Left Curb/Sidewalk Width	0 Ft. 0 In.
39	Nav Vertical Clear	0 Ft. 0 In.	50B	Right Curb/Sidewalk Width	0 Ft. 0 In.
40	Nav Horizontal Clear	0 Ft. 0 In.	51	Curb to Curb Br. Width	20 Ft. 0 In.
111	Nav. Pier Protection		52	Deck Width (Out-Out)	20 Ft. 12 In.
116	Nav. Cl. Vert. Clear		53	Vert. Clearance Over Deck	99 Ft. 99 In.

Design_No = S0834 and Inventory_Appraisal_Submittal_Year = 2024



Missouri Department of Transportation
Bridge Inventory and Inspection System
Structural Inventory & Appraisal Sheet

May 27, 2024
5:10:36pm

COUNTY : JASPER BRIDGE : S0834 REVIEW STATUS : APPROVED NBI STATUS : T
RECORD TYPE : ROUTE CARRIED 'ON' STRUCT RUN DATE : 3/15/2024 SUBMITTAL YEAR : 2024

LOAD RATING AND POSTING INFORMATION			MATERIAL/CONSTRUCTION INFORMATION		
31	Design Load	H 10	43A	Main Struc. Mat type	STEEL
41	Structure Status	POSTED FOR LOAD	43B	Main struc Constr. Type	STRINGER/MULTIBEAM - GRD
63	Oper. Rating Meth.	ALLOWABLE STRESS	45	# of Main Spans	3
64	Operating Rating	19 Tons.	44A	Appr Struc. Mat type	000
65	Inventory Rating Meth	ALLOWABLE STRESS	44B	Appr Struc. Cnstr. type	000
66	Inventory Rating	8 Tons.	46	# of Approach Span	0
70	Bridge Posting Code	30.0-39.9% BELOW	107	Deck Mat/Constr.	1 CONCRETE CIP
PROPOSED IMPROVEMENT INFORMATION			108A	Wear Surf Mat/Constr.	6 BITUMINOUS
Sufficiency Rating 16.3 Percent			108B	Membrane Mat/Constr.	0 NONE
Deficiency Rating STRUCTURAL			108C	Deck Protect Mat/Constr.	0 NONE
Funding Eligibility FULL			CONDITION RATING INFORMATION		
75A	Proposed Work	REPLACEMENT SUBSTND LOAD	58	Deck Cond. Rating	4
75B	Work Done By	Contract	59	Superstructure Cond. Rating	4
76	New Struc Length	144 Ft. 4 In.	60	Substructure Cond. Rating	5
94	Struc Improve Cost	\$ 749,000	61	Channel /Channel Protection Cond. Rating	5
95	Roadway Improve Cost	\$ 75,000	62	Culvert Cond. Rating	N
96	Total Project Cost	\$ 1,123,000	INSPECTION INFORMATION		
97	Year of Cost Estimates	2024	90	Gen. Insp Date	7 / 23
APPRAISAL RATING INFORMATION			91	Gen. Insp. Frequency	24 Months
36A	Br. Rail App. Rating	DOES NOT MEET ACCEPT STND	92A	Frac. Critical Inspection	N Months
36B	Transition Rail App. Rating	DOES NOT MEET ACCEPT STND	93A	Frac. Critical Insp. Date	
36C	Approach Rail App. Rating	DOES NOT MEET ACCEPT STND	92B	Underwater Inspection	N Months
36D	Rail End Treat. App. Rating	DOES NOT MEET ACCEPT STND	93B	Underwater Insp. Date	
67	Struc Eval App. Rating	2	92C	Special Inspection	N Months
68	Deck Geometry App. Rating	4	93C	Special Inspection Date	
69	Underclearance App. Rating	N	BORDER BRIDGE INFORMATION		
71	Waterway Adeq. App. Rating	8	98	Neighboring State Code	
72	Approach Road App. Rating	8	98B	Neighboring State % Respon	
113	Scour Assess App. Rating	8	99	Neighboring State Struc. No.	
APPROVED POSTING INFORMATION			FIELD POSTING INFORMATION		
Approved Posting Category S-16			Field Posting Category S-16		
Ton1 Ton2 Ton3			Ton1 Ton2 Ton3		
Tonnage Values for Posting Sign 14 19 35			Tonnage Values for Posting Sign 14 19 35		
General Text for Posting Sign			General Text for Posting Sign		
TRKS OVR 14 TNS 15MPH ON BR EXCPT SNGLE UNIT TRKS WT LIMIT 19 TNS&ALL OTHR TRKS WT LIMIT 35 TNS.			TRKS OVR 14 TNS 15MPH ON BR EXCPT SNGLE UNIT TRKS WT LIMIT 19 TNS&ALL OTHR TRKS WT LIMIT 35 TNS.		

Design_No = S0834 and Inventory_Appraisal_Submittal_Year = 2024