



NC DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 BRIDGE MANAGEMENT UNIT

ATTENTION

VERT CLR CHECKED
 NO MAINT

BRIDGE INSPECTION REPORT

INSPECTION TYPE: Routine Inspection

COUNTY GASTON BRIDGE NUMBER 350190 INSPECTION CYCLE 2 YRS
 ROUTE SR2000 ACROSS SCLRR M.P. 0

LOCATION 0.2 MI. S. JCT. SR2012

SUPERSTRUCTURE REINFORCED CONCRETE DECK ON I-BEAMS

SUBSTRUCTURE END BENTS:RC CAPS ON STEEL PILES,INT.BENTS:RC POST & BEAM

SPANS 3@37'0

LONGITUDE 81° 4' 4.07"

LATITUDE 35° 15' 56.18"

INSPECTION DATE 08/05/2014

PRESENT CONDITION GOOD

PRESENT POSTING N NOT POSTED

PROPOSED POSTING _____

OTHER SIGNS PRESENT (4) DELINEATORS



SOUTH APPROACH

Fracture Critical	<u>No</u>
Temporary Shoring	<u>No</u>
Scour Critical	<u>No</u>
Scour POA	<u>No</u>

SIGN NOTICE ISSUED FOR	NUMBERED REQUIRED
<u>No</u> WEIGHT LIMIT	_____
<u>No</u> DELINEATORS	_____
<u>No</u> NARROW BRIDGE	_____
<u>No</u> ONE LANE BRIDGE	_____
<u>No</u> LOW CLEARANCE	_____

IDENTIFICATION				CLASSIFICATION			
(1) STATE NAME -NORTH CAROLINA	BRIDGE	350190		SUFFICIENCY RATING =			72.11
(8) STRUCTURE NUMBER(FEDERAL)		00000000710190		STATUS =	Functionally Obsolete		
(5) INVENTORY ROUTE (ON/UNDER) - ON		31020000					
(2) STATE HIGHWAY DEPARTMENT DISTRICT		1					
(3) COUNTY CODE	71	(4) PLACE CODE	4840	(112)NBIS BRIDGE SYSTEM -			YES
(6) FEATURE INTERSECTED - SCLRR				(104)HIGHWAY SYSTEM	Is not on NHS		0
(7) FACILITY CARRIED SR2000				(26) FUNCTIONAL CLASS -	Minor Arterial		16
(9) LOCATION 0.2 MI. S. JCT. SR2012				(100)STRAHNET HIGHWAY -	Not a STRAHNET Route		0
(11)MILEPOINT		0		(101)PARALLEL STRUCTURE -	No Parallel Structure		N
(16)LAT 35° 15' 56.18"	(17)LONG	81° 4' 4.07"		(102)DIRECTION OF TRAFFIC -	2-way Traffic		2
(98)BORDER BRIDGE STATE CODE		PCT SHARE		(103)TEMPORARY STRUCTURE -			
(99)BORDER BRIDGE STRUCTURE NO				(110)DESIGNATED NATIONAL NETWORK -	Not on the National Network		0
				(20) TOLL	On Free Road		3
				(31) MAINTAIN -	State Highway Agency		01
				(22) OWNER -	State Highway Agency		01
				(37) HISTORICAL SIGNIFICANCE -	Not Eligible		5
STRUCTURE TYPE AND MATERIAL				CONDITION			
(43) STRUCTURE TYPE MAIN: Steel				(58) DECK			6
TYPE - Stringer Mutlibeam or Girder		CODE	302	(59) SUPERSTRUCTURE			7
(44) STRUCTURE TYPE APPR :				(60) SUBSTRUCTURE			7
TYPE -		CODE	000	(61) CHANNEL & CHANNEL PROTECTION			N
(45) NUMBER OF SPANS IN MAIN UNIT			3	(62) CULVERTS			N
(46) NUMBER OF APPROACH SPANS				LOAD RATING AND POSTING			
(107)DECK STRUCTURE TYPE - 1		CODE		(31) DESIGN LOAD	HS 15		3
(108)WEARING SURFACE / PROTECTIVE SYSTEM :				(63) OPERATING RATING METHOD -	Load Factor		1
(A) TYPE OF WEARING SURFACE -		CODE		(64) OPERATING RATING -	HS-28		50
(B) TYPE OF MEMBRANE -		CODE		(65) INVENTORY RATING METHOD -	Load Factor		1
(C) TYPE OF DECK PROTECTION -		CODE		(66) INVENTORY RATING -	HS-17		30
				(70) BRIDGE POSTING -	No Posting Required		5
				(41) STRUCTURE OPEN, POSTED ,OR CLOSED			A
				DESCRIPTION -	Open, No Restriction		
AGE AND SERVICE				APPRAISAL			
(27) YEAR BUILT			1960	(67) STRUCTURAL EVALUATION			6
(106)YEAR RECONSTRUCTED				(68) DECK GEOMETRY			2
(42) TYPE OF SERVICE : ON - Highway				(69) UNDERCLEARANCES,VERTI & HORIZ			6
UNDER - Railroad		CODE	12	(71) WATERWAY ADEQUACY			N
(28) LANES: ON STRUCTURE 2 UNDER STRUCTURE			0	(72) APPROACH ROADWAY ALIGNMENT			6
(29) AVERAGE DAILY TRAFFIC			8800	(36) TRAFFIC SAFETY FEATURES			0000
(30) YEAR OF ADT 2012	(109) TRUCK ADT PCT		6%	(113)SCOUR CRITICAL BRIDGES			N
(19) BYPASS OR DETOUR LENGTH			2 MI	PROPOSED IMPROVEMENTS			
GEOMETRIC DATA				(75) TYPE OF WORK -			CODE
(48) LENGTH OF MAXIMUM SPAN			36 FT	(76) LENGTH OF STRUCTURE IMPROVEMENT			
(49) STRUCTURE LENGTH			111 FT	(94) BRIDGE IMPROVEMENT COST			
(50)CURB OR SIDEWALK: LEFT 1.7 FT RIGHT			1.7 FT	(95) ROADWAY IMPROVEMENT COST			
(51) BRIDGE ROADWAY WIDTH CURB TO CURB			28 FT	(96) TOTAL PROJECT COST			
(52) DECK WIDTH OUT TO OUT			31.5 FT	(97) YEAR OF IMPROVEMENT COST ESTIMATE			
(32) APPROACH ROADWAY WIDTH (W/SHOULDERS)			23 FT	(114)FUTURE ADT	17600	(115) YEAR FUTURE ADT	2025
(33) BRIDGE MEDIAN - No Median		CODE	0	INSPECTIONS			
(34) SKEW 7°	(35) STRUCTURE FLARED		0	(90) INSPECTION DATE			08/05/2014
(10) INVENTORY ROUTE MIN VERT CLEAR			999.9 FT	(92) CRITICAL FEATURE INSPECTION :		(93) CFI DATE	
(47) INVENTORY ROUTE TOTAL HORIZ CLEAR			28 FT	A) FRACTURE CRIT DETAIL -	NO	A)	
(53) MIN VERT CLEAR OVER BRIDGE RDWY			999.9 FT	B) UNDERWATER INSP -	NO	B)	
(54) MIN VERT UNDERCLEAR REF Railroad			22 FT	C) OTHER SPECIAL INSP	NO	C)	
(55) MIN LAT UNDERCLEAR RT REF Railroad			14.67 FT	SCOUR			
(56) MIN LAT UNDERCLEAR LT REF -			000 FT	NAVIGATION DATA			
(38) NAVIGATION CONTROL - Not Applicable		CODE	N	(99) NAVIGATION VERTICAL CLEARANCE			0
(111)PIER PROTECTION -		CODE		(116)VERT - LIFT BRIDGE NAV MIN VERT CLEAR			FT
(39) NAVIGATION VERTICAL CLEARANCE			0	(40) NAVIGATION HORIZONTAL CLEARANCE			0 FT
(116)VERT - LIFT BRIDGE NAV MIN VERT CLEAR			FT				
(40) NAVIGATION HORIZONTAL CLEARANCE			0 FT				

Structure No: 350190

County: GASTON

Run Date:

Span Number	Feature Intersected	Inventory Route	Minimum Maximum Vertical Clearance	Milepoint	Base Highway Network	LRS Inventory Route	Toll	Functional Classification	Nuner of Lanes	Average Daily Traffic	Year of Average Daily Traffic	Total Horizontal Clearance	See Note 1							
													Reference Feature	Minimum Vertical Underclearance	Right Lateral Underclearance	Left Lateral Underclearance	Underclearance Appraisal Grade	STRAHNET Highway Designator	Direction of Traffic	Highway System of Route
	6	5	10	11	12	13	20	26	28	29	30	47	54A	54	55	56	69	100	102	104
1	RR	80000000		0					0	0	0		R	22	14.67		9			

Note 1: Items 54, 55, and 56 are not reported FHWA under route data points but are collected for each under route to determine the minimum value for Underclearance Appraisal Item 69. The under route that generates the lowest Underclearance Appraisal value will be reported on the Facility Carried record.

BRIDGE MANAGEMENT UNIT

DATA ON EXISTING STRUCTURE

Run Date: 09/10/2014

COUNTY : GASTON DIVISION : 12 DISTRICT : 1 STRUCTURE NUMBER : 350190 LENGTH : 111 FEET

ROUTE CARRIED : SR2000 FEATURE INTERSECTED : SCLRR

LOCATED : 0.2 MI. S. JCT. SR2012 BRIDGE NAME : CITY : * BELMO

FUNC. CLASS : 16 SYST.ON : FA SYST.UNDER : NFA ADT & YR : 8800 2012 RAIL TYPE : LT 141 RT 141

BUILT : 1960 BY : SHC PROJ : 8.29313 FED.AID PROJ : S-1311(1) DESIGN LOAD : HS 15

REHAB : BY : PROJ : ALIGNMENT : TAN SKEW : 83 LANES : ON 2 UNDER 0

NAVIGATION : VC 0 FT HC 0 FT HT. CRN. TO BED : 0 FT WATER DEPTH : 0 FT

SUPERSTRUCTURE : REINFORCED CONCRETE DECK ON I-BEAMS

SUBSTRUCTURE : E.BTS:RC CAPS/H-PILES; INT.BTS:RC POST & BEAM

SPANS : 3@37'

BEAMS OR GIRDERS : 4 LINES 27 I-BEAMS @ 8' CENTERS

FLOOR : 7.25 RC/NO AWS ENCROACHMENT : DECK (OUT TO OUT) : 31.5 FT

CLEAR ROADWAY : 28 FT BETWEEN RAILS : 31.33 FT SIDEWALK OR CURB : LT 1.7 FT RT 1.7 FT

VERT.CL.OVER : 999.9 FT

INV.RTG. : HS-17 OPE.RTG. : HS-28 CONTR.MEMBER : Int.Beams POSTED : SV TTST DATE 09/29/2010

SYSTEM : Secondary S.R. Route GREEN LINE ROUTE : Y

UNDER ROUTES AND CLEARANCES

Span	Route Description	Vertical Clearances		Horizontal Clearances		
		MMVC	MVC	Total	Left	Right
1	RR	0	22	00		14.67

Note: All measurements are in feet.

REMARKS :

BRIDGE INSPECTION RECORD AND SUMMARY

INSPECTION TYPE Routine Inspection
 BRIDGE NO. 350190 COUNTY GASTON ROUTE SR2000 OVER SCLRR
 STRUCTURE TYPE REINFORCED CONCRETE DECK ON I-BEAMS
 ROUTE ORIENTATION S - N SPANS 3@37'0

EVALUATION CODES: CRITICAL (C, 0 - 3); POOR (P, 4); FAIR (F, 5, 6); GOOD (G, 7 - 9)

INSPECTION ITEM				ITEM 61				
DECK ITEMS			GRADES					
1. WEARING SURFACE				45. CHANNEL & CHANNEL PROT.	a. WATERWAY			
					b. ALIGNMENT			
					c. SCOUR			
					d. SLOPE PROT., RIP-RAP, DIKES, ETC.			
2. DECK NO. OF EA TYPE SPN GRADE RATES SI & A ITEM 58					50. APPROACH ROADWAY CONDITION			G
3. RAILING	a. CONCRETE		3	G	51. APPROACH SLABS			
	b. TIMBER				52. PAINT SYSTEM			CODE A F
	c. STEEL PLANK				53. UTILITIES			
	d. OPEN GRID				54. RESPONSE TO LIVE LOAD			G
4. CURBS, WHEELGUARDS, PARAPETS, MEDIANS				G	55. ESTIMATED REMAINING LIFE			25
5. WALKWAYS (ON OR ATTACHED TO STRUCTURE)					60. REGULATORY SIGN NOTICE ISSUED			NO
6. DECK EXP JTS. OR DEVICES. NO. OF EACH	a. STEEL PL OR FINGER				61. PROMPT-ACTION NOTICE ISSUED			NO
	b. MISC PREFAB				62. PRESENTLY POSTED			NO
	c. COMPRESSION SEAL				63. TOT. FIELD INSP TIME (INCLUDE WRITE UP)(MAN HR)			5
	d. STANDARD JOINTS		2	G	64. TOTAL SNOOPER INSP. TIME (HRS)			0
	e. OPEN JOINTS				65. TOTAL TRAFFIC CONTROL TIME (MAN HRS)			0
7. DECK DEBRIS (INCLUDES EXCESS SAND/GRAVEL)				G	70. SI&A GENERAL CONDITION RATINGS			
SUPER STR. (FM. 1 (90)B TRUSS) ITEM 59					a. DECK	ITEM 58	6	
10. LONGITUDINAL BEAMS OR GIRDERS				G	b. SUPERSTRUCTURE	ITEM 59	7	
11. LONGITUDINAL JOIST OR STRINGERS					c. SUBSTRUCTURE	ITEM 60	7	
12. INT. DIAP'S, X-FRAMES, BRACING & CONN'S				G	d. CHANNEL & CHANNEL PROT.	ITEM 61		
13. END DIAP'S, CURTAIN WALLS, & CONN'S				G	71. SI&A FIELD APPRAISAL RATINGS			
14. FLOOR BEAMS AND CONNECTIONS					a. WATERWAY ADAQUACY			
15. BEARING ASSEMBLIES (INCLUDING MISALIGN)				G	b. APPR. RDWY. ALIGNMENT			6
16. DRAINAGE SYSTEM (ON STRUCTURE)				G	72. FIELD SCOUR EVALUATION			
17. MOVABLE SPAN MACHINERY								
SUB STR. ITEMS. ITEM 60 (INCLUDE SCOUR)					USE OF INSP. ACCESSIBILITY EQUIPMENT			
35. TIM SUB STR.	a. ABUT. & INT. BENT CAPS & RISERS				SNOOPER (CODE S, 4, OR N)			HRS NO
	b. PILES, POST, SILLS, & BRACING				LADDER			NO
	c. BULKHEADS, WING'S, & TIE BACKS				BUCKET TRUCK			NO
36. CONC SUB STR.	a. ABUT. & INT. BENT CAPS			G	BOAT			NO
	b. ABUT. & BENT COL'S BREASTWALLS			G	OTHER			NO
	c. ABUT. & INT. BENT PILES				SPECIAL INSPECTION REQUESTED FOR			
	d. BACKWALLS, WING'S, RETAIN. WALLS			G				
	e. ABUT. & BENT FOOTINGS & SILLS							
37. STEEL SUB STR.	a. ABUT. & INT. BENT CAPS & RISERS				NOTE			
	b. PILES, BRACING, AND BULKHEADS							
38. FOUNDATION PILES TYPE MATERIAL								
39. SLOPE PROT., RIP-RAP (INCLUDE DRAINAGE)								
40. FENDER SYSTEMS					80. INSPECTED BY:	<i>sdj rd</i>		
41. DRIFT					81. REVIEWED BY:			

Bridge I&A Form 1(82)H State of North Carolina Dept. of Transportation Division of Highways		FIELD INSPECTION REPORT <u>Bridge Inspeccion & Analysis</u>	
Team Leader DEREK RICKUS			
Assisted By EAP			
Item No.	Grade		
2a	G	COARSE AGGREGATE EXPOSED THROUGHOUT TOP OF DECK	
3a	G	SCATTERED H/L CRACKING AND SPALLS.	
6d	G	JOINTS OVER BENTS TAR SEALED	
10	G	SCATTERED SURFACE CORROSION	
10A	NO	NO CURVED GIRDERS	
52	F	SCATTERED SURFACE CORROSION ON BEAMS DUE TO PAINT LOSS	
38		NOT VISIBLE	
39		NO SLOPE PROTECTION	
50	G	NORTH APPROACH AND SOUTH APPROACH ROADWAYS RESURFACED	

BRIDGE INSPECTOR'S RECOMMENDATION FOR MAINTENANCE REPAIRS

Bridge: 350190

County GASTON

Date: 08/05/2014

These Repairs Should Be Made Within Twelve Months From Date Of This Inspection

MMS Code	Description of Function	Unit	Quantity	Remarks	Est. Cost
0	No Maintenance Required	NA	0	NO MAINT	

Key



Priority Maintenance Item



Critical Finding Item



Priority Maintenance Level Not Determined



NORTH APPROACH AND SOUTH APPROACH ROADWAYS RESURFACED



COARSE AGGREGATE EXPOSED THROUGHOUT TOP OF DECK

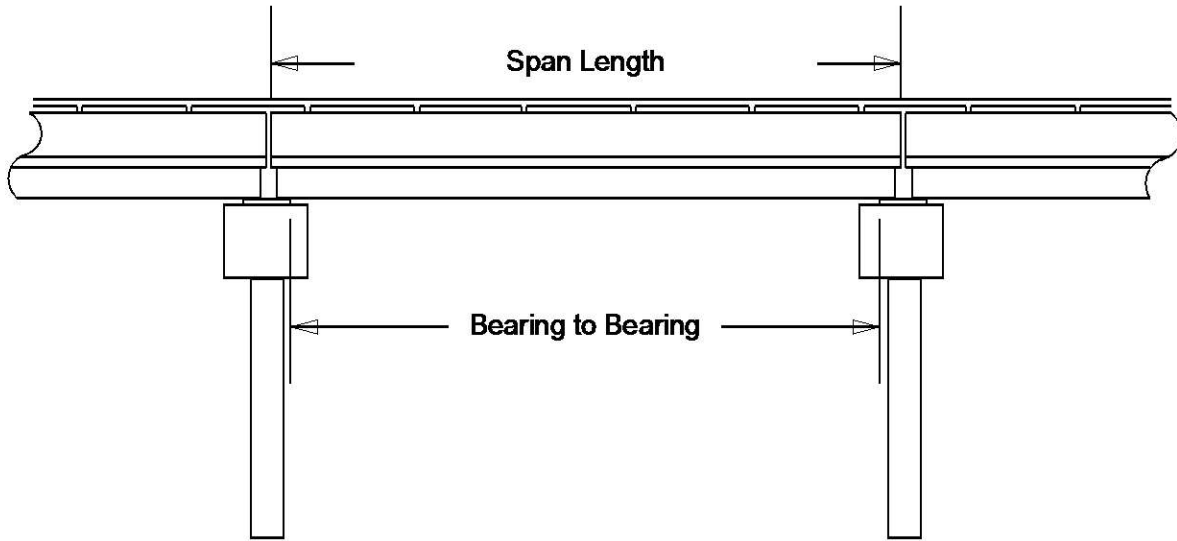


SCATTERED SURFACE CORROSION ON BEAMS

Structure Data Worksheet

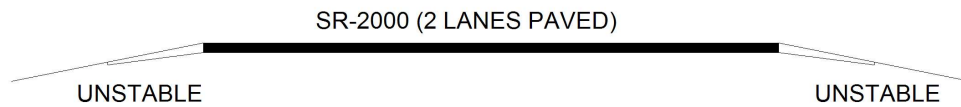
Spans

County: GASTON Structure No: 350190 Date: 08/05/2014 Inspected By: DCR



Span No	Span Length	Bearing to Bearing	Comments
1	37.000'	35.167'	
2	37.000'	35.792'	
3	37.000'	35.167'	NBIS=106.0'

Bridge Inspection Field Sketch



Roadway	23.00ft Wide	2 Paved Lanes	Looking North
Left Shoulder	10ft Wide		10.00ft Unpaved
Right Shoulder	5ft Wide		5.00ft Unpaved
Left Guardrail			
Right Guardrail			

VERIFIED BY DEREK RICKUS ON 8/5/2014

Title

APPROACH ROADWAY WIDTH

Description

LOOKING NORTH

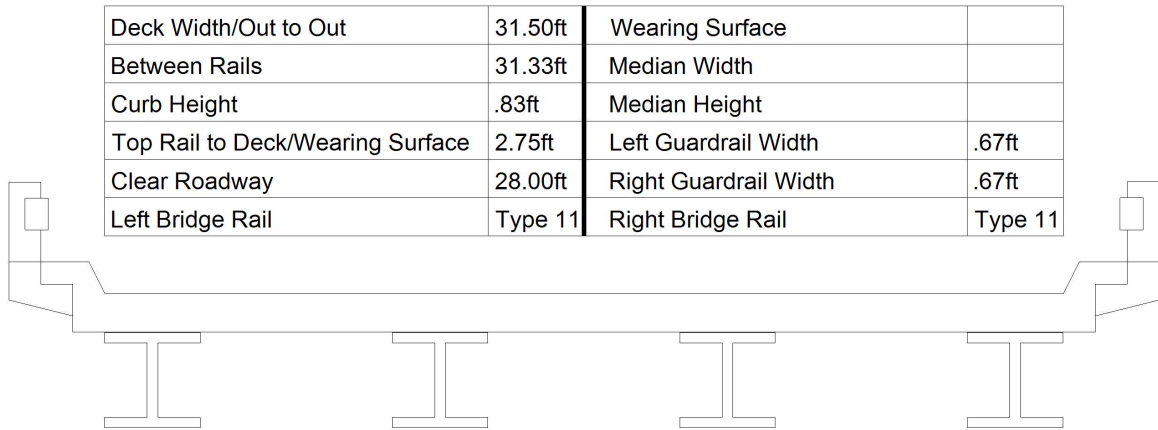
Bridge No: 350190

Drawn By: DJA

Date: 8/18/2008

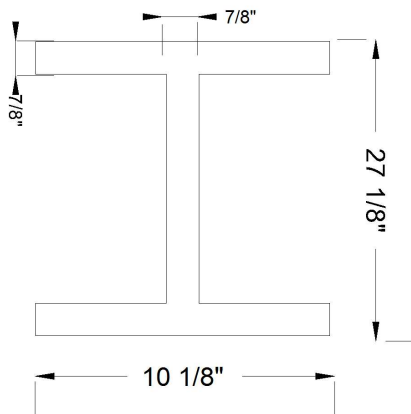
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Bridge Inspection Field Sketch



Measurements for Span #	1	SPANS 2 TO 3 SIMILAR	
Deck Thickness	.60	Left Overhang	3.75
Top of Rail to Bottom of Beam	4.81	Right Overhang	3.75

Beam No	Beam Type	Spacing	Comments
1	Steel I Beam	8.00ft	
2	Steel I Beam	8.00ft	
3	Steel I Beam	8.00ft	
4	Steel I Beam		



VERIFIED BY DEREK RICKUS ON 8/5/2014

Title
DECK DIMENSIONS

Description
TYPICAL SECTION

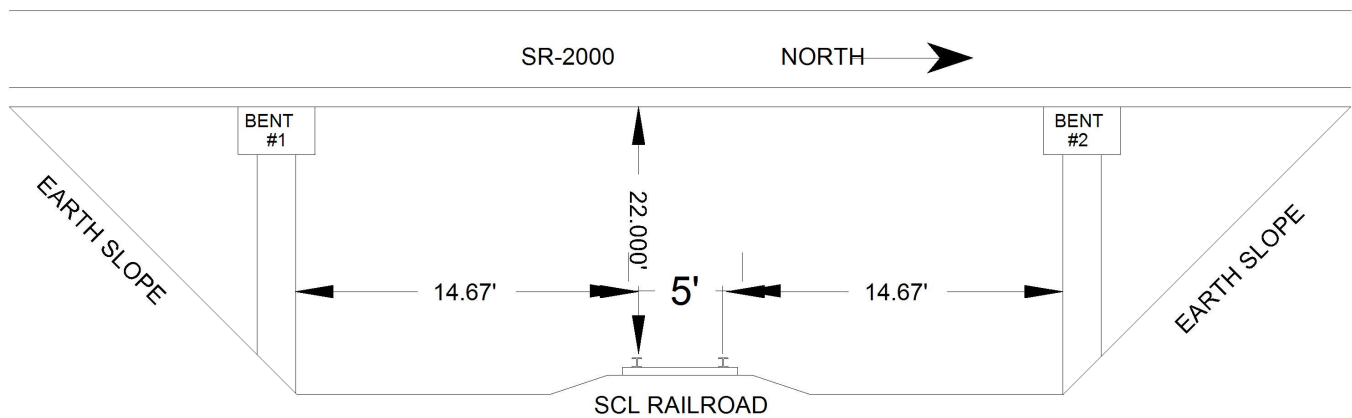
Bridge No: 350190

Drawn By: DJA

Date: 8/18/2008

File Name: S0298000736

Bridge Inspection Field Sketch



Measurements Under Span 1

Rail to Rail	5.00ft	1 set(s) of tracks	Looking: EAST
Vertical Clearance	22.00ft	Measured from rail 1	at Beam # 4
Distance to Left Bent	14.67ft		
Distance to Left Toe of Slope	14.67ft		
Distance to Right Bent	14.67ft		
Distance to Right Toe of Slope	14.67ft		

VERIFIED BY DEREK RICKUS ON 8/5/2014

Title

RAILROAD CLEARANCE

Description

RAILROAD CLEARANCE

Bridge No: 350190

Drawn By: DJA

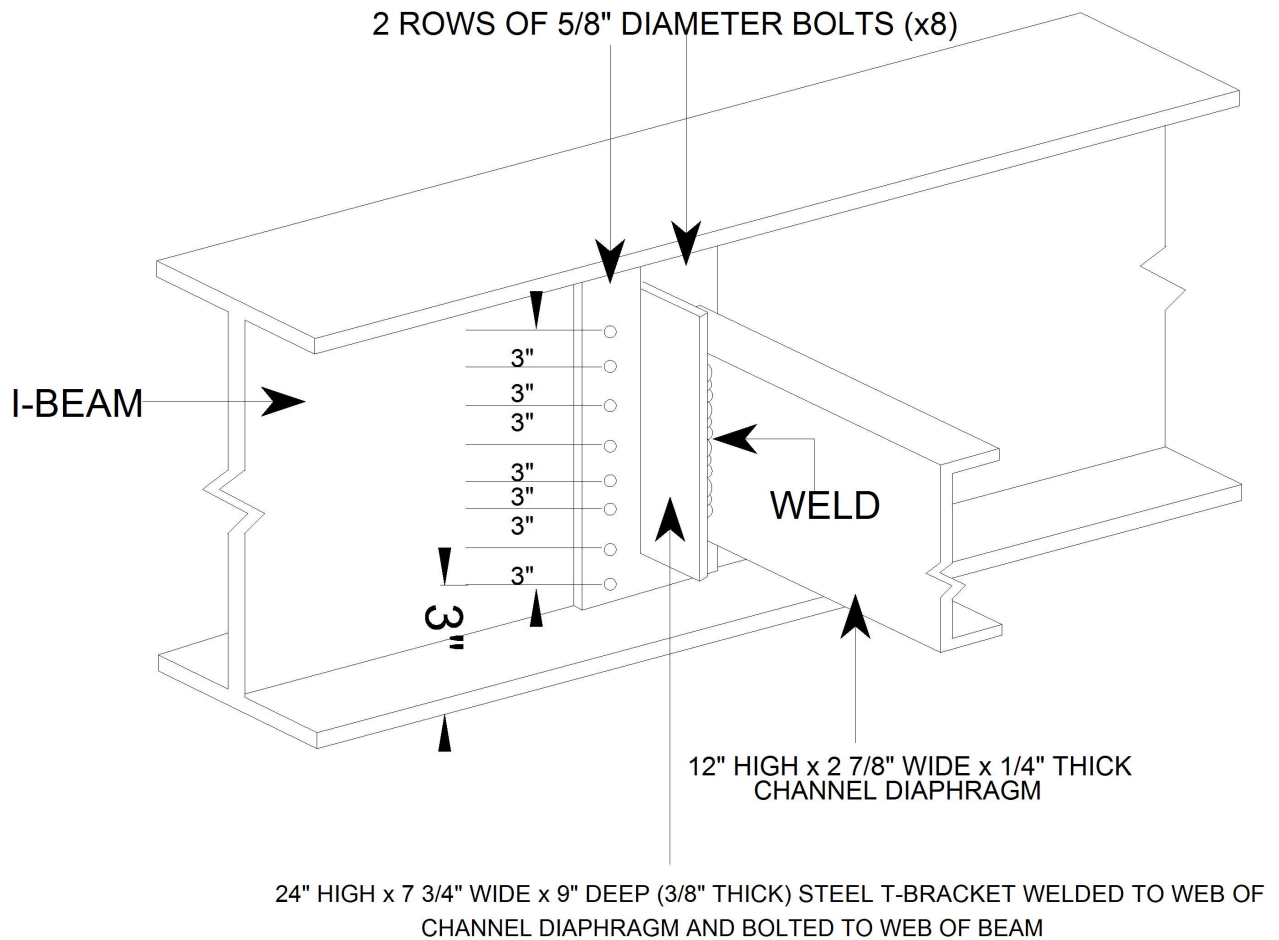
Date: 8/18/2008

File Name: S0298000737

Bridge Inspection Field Sketch

DIAPHRAGM DETAILS

LOCATIONS : MIDPOINTS OF SPANS



VERIFIED BY DEREK RICKUS ON 8/5/2014

Title

INTERMEDIATE DIAPHRAGMS

Description

DIAPHRAGM DETAILS

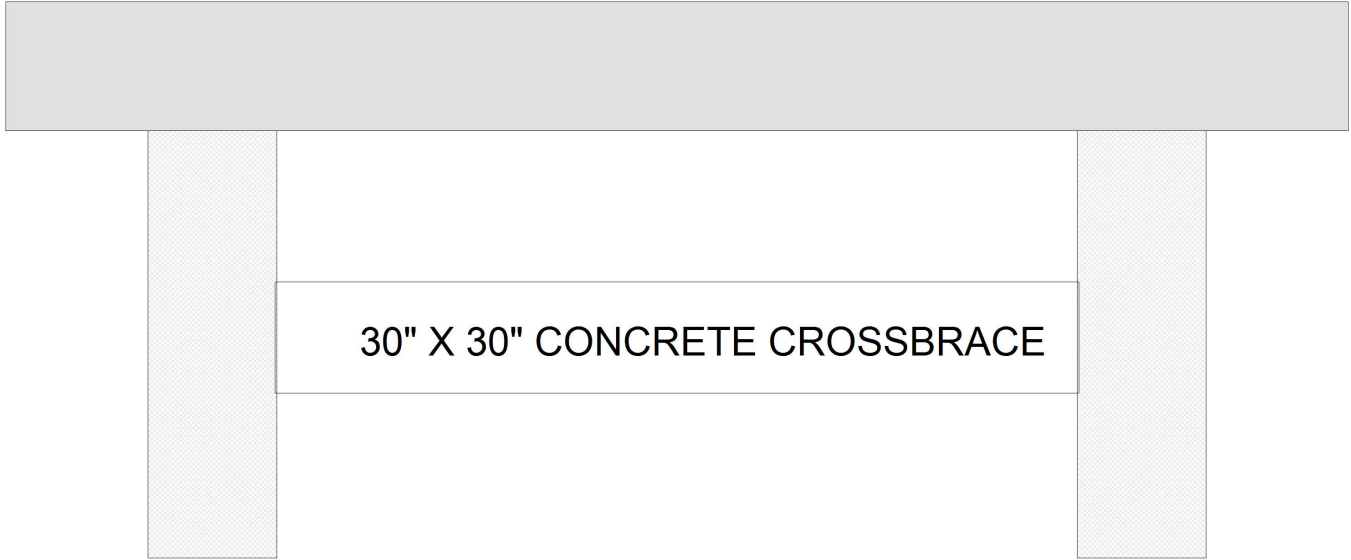
Bridge No: 350190

Drawn By: DELVIN ADAMS

Date: 8/22/2012

File Name: S0146031709

Bridge Inspection Field Sketch

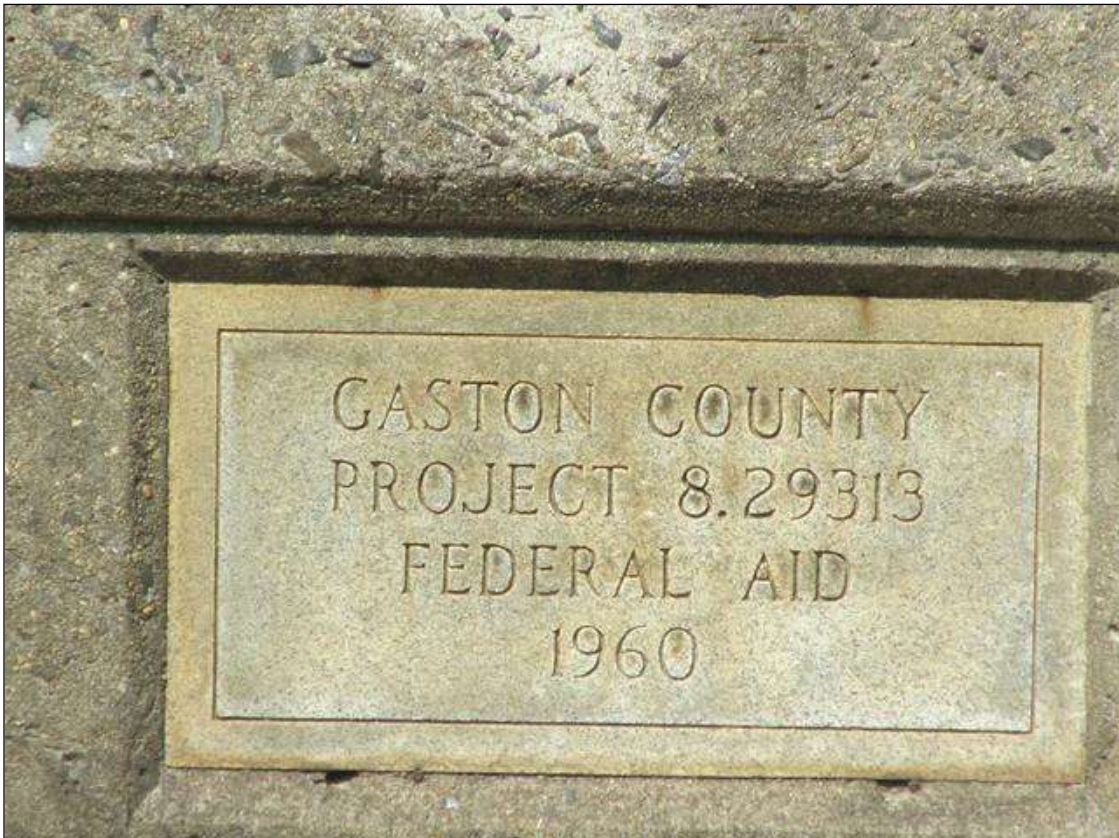


Cap Information			Material Cast-in-Place Concrete							
Length	Width	Height	Left Overhang	Right Overhang	Left Beam to End of Cap.	Right Beam to End of Cap.				
26.000 ft.	2.500 ft.	2.500 ft.	4.000 ft.	4.000 ft.	1.833 ft.	1.833 ft.				
Subcap Information			Material							
Length	Width	Height	Left Overhang	Right Overhang	Left Pile to Splice.					
Sill Information			Material							
Length	Width	Height								
Pile #	Material	Spacing	Width/Dia.	Height	Length	Orientation	Driven?	Replacement?	Removed?	Collar?
1	Concrete	18.000 ft.	2.500 ft.	2.500 ft.		Vertical	No	No	No	No
2	Concrete		2.500 ft.	2.500 ft.		Vertical	No	No	No	No
<p>VERIFIED BY DEREK RICKUS ON 8/5/2014</p>										
Bent/Abutment #: 1			Similar Bents: 2							

Title				Description			
INTERIOR BENTS				SUBSTRUCTURE DETAILS			
Bridge No:	350190	Drawn By:	DELVIN ADAMS	Date:	8/22/2012	File Name:	S0146031710



NORTH APPROACH



DATA PLATE, NORTHWEST CORNER



SOUTH APPROACH



LOOKING WEST



ABUTMENT 1



BENT 1



LOOKING EAST



BENT 2



ABUTMENT 2