NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
STRUCTURE MANAGEMENT UNIT

ATTENTION: RED LEAD UNDERCOAT, PAR ISSUED, SALVAGE BEAMS.

Structure Safety Report

Routine Element Inspection

INSPECTION DATE: 02/15/2022

DIVISION: 14 **COUNTY:** JACKSON **STRUCTURE NUMBER:** 490159 **FREQUENCY:** 24 MONTHS

FACILITY CARRIED: SR1336 **MILE POST:**

LOCATION: 100'S.JCT.SR1338

FEATURE INTERSECTED: CULLOWHEE CREEK

LATITUDE: 35° 19' 2.04" **LONGITUDE:** 83° 10' 48.18"

SUPERSTRUCTURE: 4 TOP & 3 SUB. DIA. TIMBER FL00R ON I-BEAMS

SUBSTRUCTURE: YOUNT MASONRY ABUTMENTS

SPANS: 1 SPAN. SEE SPAN PROFILE SHEET FOR SPAN DETAILS

☐ FRACTURE CRITICAL ☐ TEMPORARY SHORING ☐ SCOUR CRITICAL ☐ SCOUR PLAN OF ACTION

GRADES: (Inspector/NBI Coding) **DECK** 7 / 7 **SUPERSTRUCTURE** 7 / 7 **SUBSTRUCTURE** 7 / 7 **CULVERT** N / N

POSTED SV: 38 **POSTED TTST:** Not Posted Legal Gross Weight

OTHER SIGNS PRESENT: DELINEATORS 4

LOOKING NORTH

Sign noticed issued for		Number Required
NO	**WEIGHT LIMIT**	0
NO	**DELINEATORS**	0
NO	**NARROW BRIDGE**	0
NO	**ONE LANE BRIDGE**	0
NO	**LOW CLEARANCE**	0

DIRECTION OF INSPECTION S-N

DIRECTION MATCHES PLANS

INSPECTED BY	SIGNATURE	ASSISTED BY
DAVID SANDERS		J DILLS

NATIONAL BRIDGE INVENTROY ----- STRUCTURE INVENTORY AND APPRAISAL

03/15/2022

IDENTIFICATION

(1) STATE NAME NORTH CAROLINA BRIDGE **490159**
(8) STRUCTURE NUMBER (FEDERAL) **0990159**
(5) INVENTORY ROUTE (ON/UNDER) ON **131013360**
(2) STATE HIGHWAY DEPARTMENT DISTRICT **14**
(3) COUNTY CODE (FEDERAL) **99** (4) PLACE CODE **71600**
(6) FEATURE INTERSECTED **CULLOWHEE CREEK**
(7) FACILITY CARRIED **SR1336**
(9) LOCATION **100'S.JCT.SR1338**
(11) MILEPOINT **0.0**
(12) BASE HIGHWAY NETWORK **0**
(13) LRS INVENTORY ROUTE & SUBROUTE
(16) LATITUDE **35° 19' 2.04"** (17) LONGITUDE **83° 10' 48.18"**
(98) BORDER BRIDGE STATE CODE PERCENT SHARED
(99) BORDER BRIDGE STRUCTURE NUMBER

STRUCTURE TYPE AND MATERIAL

(43) STRUCTURE TYPE MAIN **Steel**
TYPE **Stringer/Multi-beam or girder** CODE **302**
(44) STRUCTURE TYPE APPROACH
TYPE CODE
(45) NUMBER OF SPANS IN MAIN UNIT **1**
(46) NUMBER OF SPANS IN APPROACH **0**
(107) DECK STRUCTURE TYPE CODE **8**
(108)WEARING SURFACE/PROTECTIVE SYSTEM
(A) TYPE OF WEARING SURFACE CODE **6**
(B) TYPE OF MEMBRANE CODE **0**
(C) TYPE OF DECK PROTECTION CODE **0**

AGE AND SERVICE

(27) YEAR BUILT **1975**
(106) YEAR RECONSTRUCTED **0**
(42) TYPE OF SERVICE ON - **Highway**
OFF - **Waterway** CODE **15**
(28) LANES ON STRUCTURE **2** LANES UNDER STRUCTURE **0**
(29) AVERAGE DAILY TRAFFIC **3000**
(30) YEAR OF ADT **2016** (109) TRUCK ADT PCT **7**
(19) BYPASS OR DETOUR LENGTH **99.0**

GEOMETRIC DATA

(48) LENGTH OF MAXIMUM SPAN **29.0**
(49) STRUCTURE LENGTH **33.0**
(50) CURB OR SIDEWALK: LEFT **0.3** RIGHT **0.3**
(51) BRIDGE ROADWAY WIDTH, CURB TO CURB **24.2**
(52) DECK WIDTH OUT TO OUT **25.0**
(32) APPROACH ROADWAY WITH (W/ SHOULDERS) **18.0**
(33) BRIDGE MEDIAN **No median** CODE **0**
(34) SKEW **0** (35) STRUCTURE FLARED **0**
(10) INVENTORY ROUTE MIN VERT CLEAR **999.9**
(47) INVENTORY ROUTE TOTAL HORIZ CLEAR **24.2**
(53) MIN VERT CLEAR OVER BRIDGE RDWY **999.9**
(54) MIN VERT UNDERCLEAR: REFERENCE **0.0**
(55) MIN LAT UNDERCLEARANCE RT: REFERENCE **N** **0.0**
(56) MIN LAT UNDERCLEARANCE LT: **0.0**

NAVIGATION DATA

(38) NAVIGATION CONTROL - CODE **0**
(111) PIER PROTECTION CODE
(39) NAVIGATION VERTICAL CLEARANCE **0.0**
(116) VERT - LIFT BRIDGE NAV MIN VERT CLEAR **0.0**
(40) NAVIGATION HORIZONTAL CLEARANCE **0.0**

SUFFICIENCY RATING **53.92**
STATUS = **Functionally Obsolete**

CLASSIFICATION		CODE
(112) NBIS BRIDGE SYSTEM		YES
(104) HIGHWAY SYSTEM	Inventory Route not on NHS	0
(26) FUNCTIONAL CLASS	Urban Local	19
(100) STRAHNET HIGHWAY	Not a STRAHNET Route	0
(101) PARALLEL STRUCTURE	No parallel structure exists	N
(102) DIRECTION OF TRAFFIC	2-way traffic	2
(103) TEMPORARY STRUCTURE		
(110) DESIGNATED NATIONAL NETWORK -	on national network for trucks	0
(20) TOLL	On Free Road	3
(21) MAINT -		01
(22) OWNER -		01
(37) HISTORICAL SIGNIFICANCE -		5

CONDITION	CODE
(58) DECK	7
(59) SUPERSTRUCTURE	7
(60) SUBSTRUCTURE	7
(61) CHANNEL & CHANNEL PROTECTION	7
(62) CULVERTS	N

LOAD RATING AND POSTING		CODE
(31) DESIGN LOAD	Unknown	0
(63) OPERATING RATING METHOD -	Load Factor	1
(64) OPERATING RATING -	HS-28	51
(65) INVENTORY RATING METHOD -		1
(66) INVENTORY RATING	HS-17	30
(70) BRIDGE POSTING	Posting Required	4
(41) STRUCTURE OPEN, POSTED, OR CLOSED		P
DESCRIPTION	Posted for Load	

APPRAISAL	CODE
(67) STRUCTURAL EVALUATION	6
(68) DECK GEOMETRY	2
(69) UNDERCLEARANCES, VERT & HORIZ	N
(71) WATERWAY ADEQUACY	8
(72) APPROACH ROADWAY ALIGNMENT	6
(36) TRAFFIC SAFETY FEATURES	0000
(113) SCOUR CRITICAL BRIDGES	5

PROPOSED IMPROVEMENTS

(75) TYPE OF WORK CODE
(76) LENGTH OF STRUCTURE IMPROVEMENT
(94) BRIDGE IMPROVEMENT COST
(95) ROADWAY IMPROVEMENT COST
(96) TOTAL PROJECT COST
(97) YEAR OF IMPROVEMENT COST ESTIMATE
(114) FUTURE ADT **6,000** YEAR OF FUTURE ADT **2040**

INSPECTION

(90) INSPECTION DATE **02/22** (91) FREQUENCY **24**
(92) CRITICAL FEATURE INSPECTION (93) CFI DATE
A) FRACTURE CRIT DETAIL A)
B) UNDERWATER INSP B)
C) OTHER SPECIAL INSP C)
SCOUR

Superstructure Build Details

Span Number 1 **Span Length** 32.6700 **Skew** 90.0000

Number of Items	Type of Component	Element Name	Quantity		Protective System Applied	Quantity (Sq Ft)
20	Other Bearing	Other Bearings	20	Each	Unknown	20
2	Timber Rail	Timber Bridge Railing	66	Feet		
1	Asphalt Wearing Surface	Wearing Surface	790	Square Feet		
1	Timber Deck	Timber Deck	817	Square Feet		
10	Plate Girder	Steel Open Girder/Beam	330	Feet	Legacy Red Lead Primer Systems with Various Topcoats	1840

Structure Element Scoring

Structure Number: **490159**

Inspection Date **2/15/2022**

Element Number	Parent Number	Element Name	Location	Total Quantity	Level 1 Quantity	Level 2 Quantity	Level 3 Quantity	Level 4 Quantity
31	0	Timber Deck	Deck	817	817	0	0	0
107	0	Steel Open Girder/Beam	Beam	330	312	16	2	0
515	107	Steel Protective Coating	Beam	1840	1560	280	0	0
217	0	Masonry Abutments	Abutments	60	59	1	0	0
316	0	Other Bearings	Bearing Device	20	19	0	1	0
515	316	Steel Protective Coating	Bearing Device	20	17	0	3	0
332	0	Timber Bridge Railing	Bridge Rail	66	66	0	0	0
510	0	Wearing Surface	Wearing Surfaces	790	690	100	0	0

Summary of Maintenance Needs

Maintenance By Defect

Structure Number: **490159** Inspection Date: **02/15/2022**

MMS Code	Element Name	Defect Name	Recommended Quantity
3314	Steel Open Girder/Beam	Corrosion	2 Feet
3334	Other Bearings	Corrosion	1 Each
3342	Steel Protective Coating	Effectiveness (Steel Protective Coatings)	3 Square Feet

Element Structure Maintenance Quantities

Structure Number: **490159** Inspection Date **02/15/2022**

Location	MMS Code	Description	Maint Quantity	Total Quantity	Severe Quantity	Poor Quantity	Fair Quantity	Good Quantity
Abutments	3350	Maintenance of Concrete Wings and Wall	0	60	0	0	1	59
Beam	3314	Maintenance Steel Superstructure Components	2	330	0	2	16	312
Beam	3342	Clean and Paint Steel	0	1840	0	0	280	1560
Bearing Device	3334	Bridge Bearing	1	20	0	1	0	19
Bearing Device	3342	Clean and Paint Steel	3	20	0	3	0	17
Bridge Rail	3316	Maintenance of Timber Bridge Rail	0	66	0	0	0	66
Deck	3324	Maintenance of Timber Deck Components	0	817	0	0	0	817
Wearing Surfaces	2816	Asphalt Surface Repair	0	790	0	0	100	690

Priority Actions Request

Structure Number **490159**

Span1

3314 **Beam 10** Plate Girder

Priority Level	Defect Type	Quantity	Defect Description
2	Corrosion	2	Span 1 Beam 10: SECTION LOSS TO BOTTOM FLANGE AT ABUTMENT 2, REMAINING THICKNESS IS .0104 DOWN TO KNIFE EDGE, PAR ISSUED

? Priority Action Request (PAR) 1 Assigned Routine Maintenance 2 Assigned Priority Maintenance 3 Assigned Critical Find

Element Condition and Maintenance Data

Structure Number: **490159** Inspection Date: **02/15/2022**

Span 1 — Wearing Surface

Asphalt Wearing Surface

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
510	Wearing Surface	790	690	100	0	0	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
510	**Crack (Wearing Surface)**	**SCATTERED CRACKING THROUGH OUT WEARING SURFACE. CRACKING IS UP TO .0104.**	2	100		Square Feet

General Comments

Span 1 — Beam 1

Plate Girder

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
107	Steel Open Girder/Beam	33	33	0	0	0	Feet
515	Steel Protective Coating	184	154	30	0	0	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
515	Peeling/Bubbling/Cracking (steel Protective Coatings)	PAINT PEELING AND DISCOLARING TO TOP AND BOTTOM FLANGES.	2	30		Square Feet

General Comments

Span 1 — Beam 2

Plate Girder

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
107	Steel Open Girder/Beam	33	25	8	0	0	Feet
515	Steel Protective Coating	184	154	30	0	0	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
107	**Corrosion**	**SURFACE RUST SCATTERED THROUGH OUT TOP AND BOTTOM FLANGES. NO LOSS OF SECTION**	2	8		Feet
515	**Peeling/Bubbling/Cracking (steel Protective Coatings)**	**PAINT PEELING AND DISCOLARING TO TOP AND BOTTOM FLANGES.**	2	30		Square Feet

General Comments

Span 1 — Beam 3

Plate Girder

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
107	Steel Open Girder/Beam	33	33	0	0	0	Feet
515	Steel Protective Coating	184	159	25	0	0	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
515	**Peeling/Bubbling/Cracking (steel Protective Coatings)**	**PAINT PEELING AND DISCOLARING TO TOP AND BOTTOM FLANGES.**	2	25		Square Feet

General Comments

Span 1 Beam 4

Plate Girder

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
107	Steel Open Girder/Beam	33	33	0	0	0	Feet
515	Steel Protective Coating	184	154	30	0	0	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
515	**Peeling/Bubbling/Cracking (steel Protective Coatings)**	**PAINT PEELING AND DISCOLARING TO TOP AND BOTTOM FLANGES.**	2	30		Square Feet

General Comments

Span 1 Beam 5

Plate Girder

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
107	Steel Open Girder/Beam	33	33	0	0	0	Feet
515	Steel Protective Coating	184	159	25	0	0	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
515	**Peeling/Bubbling/Cracking (steel Protective Coatings)**	**PAINT PEELING AND DISCOLARING TO TOP AND BOTTOM FLANGES.**	2	25		Square Feet

General Comments

Span 1 Beam 6

Plate Girder

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
107	Steel Open Girder/Beam	33	33	0	0	0	Feet
515	Steel Protective Coating	184	154	30	0	0	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
515	**Peeling/Bubbling/Cracking (steel Protective Coatings)**	**PAINT PEELING AND DISCOLARING TO TOP AND BOTTOM FLANGES.**	2	30		Square Feet

General Comments

Span 1 Near Bearing

Other Bearing

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
316	Other Bearings	1	0	0	1	0	Each
515	Steel Protective Coating	1	0	0	1	0	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
316	**Corrosion**	**SURFACE CORROSION THROUGH OUT PLATE.**	3	1	1	Each
515	**Effectiveness (Steel Protective Coatings)**	**COATING NO LONGER IN PLACE.**	3	1	1	Square Feet

General Comments

Span 1 Beam 7

Plate Girder

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
107	Steel Open Girder/Beam	33	25	8	0	0	Feet
515	Steel Protective Coating	184	159	25	0	0	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
107	**Corrosion**	**SURFACE RUST SCATTERED THROUGH OUT TOP AND BOTTOM FLANGES. NO LOSS OF SECTION**	2	8		Feet
515	**Peeling/Bubbling/Cracking (steel Protective Coatings)**	**PAINT PEELING AND DISCOLARING TO TOP AND BOTTOM FLANGES.**	2	25		Square Feet

General Comments

Span 1 Beam 8

Plate Girder

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
107	Steel Open Girder/Beam	33	33	0	0	0	Feet
515	Steel Protective Coating	184	154	30	0	0	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
515	**Peeling/Bubbling/Cracking (steel Protective Coatings)**	**PAINT PEELING AND DISCOLARING TO TOP AND BOTTOM FLANGES.**	2	30		Square Feet

General Comments

Span 1 Far Bearing

Other Bearing

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
316	Other Bearings	1	1	0	0	0	Each
515	Steel Protective Coating	1	0	0	1	0	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
515	**Effectiveness (Steel Protective Coatings)**	**COATING NO LONGER IN PLACE.**	3	1	1	Square Feet

General Comments

Span 1 Beam 9

Plate Girder

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
107	Steel Open Girder/Beam	33	33	0	0	0	Feet
515	Steel Protective Coating	184	159	25	0	0	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty

515	**Peeling/Bubbling/Cracking (steel Protective Coatings)**	**PAINT PEELING AND DISCOLARING TO TOP AND BOTTOM FLANGES.**	2	25	Square Feet

General Comments

Span 1 Beam 10

Plate Girder

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
107	Steel Open Girder/Beam	33	31	0	2	0	Feet
515	Steel Protective Coating	184	154	30	0	0	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
107	**Corrosion**	**SECTION LOSS TO BOTTOM FLANGE AT ABUTMENT 2, REMAINING THICKNESS IS .0104 DOWN TO KNIFE EDGE, PAR ISSUED**	3	2	2	Feet
515	**Peeling/Bubbling/Cracking (steel Protective Coatings)**	**PAINT PEELING AND DISCOLARING TO TOP AND BOTTOM FLANGES.**	2	30		Square Feet

General Comments

Span 1 Near Bearing

Other Bearing

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
316	Other Bearings	1	1	0	0	0	Each
515	Steel Protective Coating	1	0	0	1	0	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
515	**Effectiveness (Steel Protective Coatings)**	**COATING NO LONGER IN PLACE.**	3	1	1	Square Feet

General Comments

Bent 1 Abutment

Masonry Abutment

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
217	Masonry Abutments	30	29	1	0	0	Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
217	**Split/Spall (Masonry)**	**1" DEEP X 5" ROUND AREA OF SPALLING UNDER BEAM 6**	2	1		Feet

General Comments

Elements Verfied

Location	Name	Component	Element Name	Amount
Span 1	Beam 2	Plate Girder	Steel Open Girder/Beam	33
Span 1	Beam 3	Plate Girder	Steel Open Girder/Beam	33
Span 1	Beam 4	Plate Girder	Steel Open Girder/Beam	33
Span 1	Beam 5	Plate Girder	Steel Open Girder/Beam	33
Span 1	Beam 6	Plate Girder	Steel Open Girder/Beam	33
Span 1	Beam 7	Plate Girder	Steel Open Girder/Beam	33
Span 1	Beam 8	Plate Girder	Steel Open Girder/Beam	33
Span 1	Beam 9	Plate Girder	Steel Open Girder/Beam	33
Span 1	Beam 10	Plate Girder	Steel Open Girder/Beam	33
Span 1	Left Bridge Rail	Timber Rail	Timber Bridge Railing	33
Span 1	Right Bridge Rail	Timber Rail	Timber Bridge Railing	33
Span 1	Wearing Surface	Asphalt Wearing Surface	Wearing Surface	790
Span 1	Near Bearing	Other Bearing	Other Bearings	1
Span 1	Far Bearing	Other Bearing	Other Bearings	1
Span 1	Near Bearing	Other Bearing	Other Bearings	1
End Bent 1	Abutment	Masonry Abutment	Masonry Abutments	30
End Bent 2	Abutment	Masonry Abutment	Masonry Abutments	30

General Inspection Notes

National Bridge and NC Inspection Items

Structure Number: 490159 **Inspection Date:** 02/15/2022

National Bridge Inventory Items

Item	Grade Scale	Grade
Item 58: Deck	0 - 9 , N	**7**
Item 59: Superstructure	0 - 9 , N	**7**
Item 60: Substructure	0 - 9 , N	**7**
Item 61: Channel and Channel Protection	0 - 9 , N	**7**
Item 62: Culvert	0 - 9 , N	**N**
Item 71: Waterway Adequacy	0 - 9 , N	**8**
Item 72: Approach Roadway Alignment	0 - 9 , N	**6**

Note:

Items 58,59,60,62 reflect this inspection only.

For overall NBI coding grade, see cover sheet.

Note: If NBI Inspection Item is not present, code NBI item with "N"

NC SMU Inspection Items

Item	Grade Scale	Grade	Maint. Qty.	Maint. Code
Deck Debris	G, F, P, or C	**G**	**0**	**3376**
Drainage System	G, F, P, or C	**G**	**0**	**3332**
Utilities	G, F, P, or C			
Slope Protection	G, F, P, or C	**G**	**0**	**3352**
Scour	G, F, P, or C	**G**		
Wingwall	G, F, P, or C			
Field Scour Evaluation		**G**		
Drift	G, F, P, or C	**G**	**0**	**3366**
Fender System	G, F, P, or C			
Movable Span Machinery	G, F, P, or C			
Response to Live Load	G, F, P, or C	**G**		
Superstructure Paint Code		**A**		

Note: If NC SMU Insepction Item is not present, leave NC SMU item blank

Inspection Information

Item	Grade Scale	Grade
Sign Noticed Issued	YES/NO	**N**
Priority Maintenance Request Submitted	YES/NO	**Y**
Inspection Time	Hours	**2.5**
Traffic Control Time	Hours	**0**
Snooper Time	Hours	**0**
Ladder Used	YES/NO	**N**
Bucket Truck Used	YES/NO	**N**
Boat Used	YES/NO	**N**
Other Equipment Used	YES/NO	**N**
Portion of Structure in > 3' of water	YES/NO	**Y**

National Bridge and NC SMU Inspection Item Details

Structure Number: 490159 **Inspection Date:** 02/15/2022

Item	General Comments and Misc Items	**Grade**		**Maint Code**	**Qty.** 0
Details	OLD UTILITY AT ABUTMENT 1 NOT ATTACHED.				

Item	Portion of structure in > 3' of water (Y or N)	**Grade**	Y	**Maint Code**	**Qty.** 0
Details	ABUTMENT 2				

Span 1 Beam 10: SECTION LOSS TO BOTTOM FLANGE AT ABUTMENT 2, REMAINING THICKNESS IS .0104 DOWN TO KNIFE EDGE, PAR ISSUED

Span 1 Beam 2: SURFACE RUST SCATTERED THROUGH OUT TOP AND BOTTOM FLANGES. NO LOSS OF SECTION

Span 1 Beam 7: SURFACE RUST SCATTERED THROUGH OUT TOP AND BOTTOM FLANGES. NO LOSS OF SECTION

Span 1 Wearing Surface: SCATTERED CRACKING THROUGH OUT WEARING SURFACE. CRACKING IS UP TO .0104.

Bent 1 Abutment: 1" DEEP X 5" ROUND AREA OF SPALLING UNDER BEAM 6

Stream Bed Soundings

(Profile diagram on following sheet)

County **JACKSON** Structure Number: **490159** Inspection Date **02/15/2022**

Sounding recorded from: **Top of Bridge Rail**

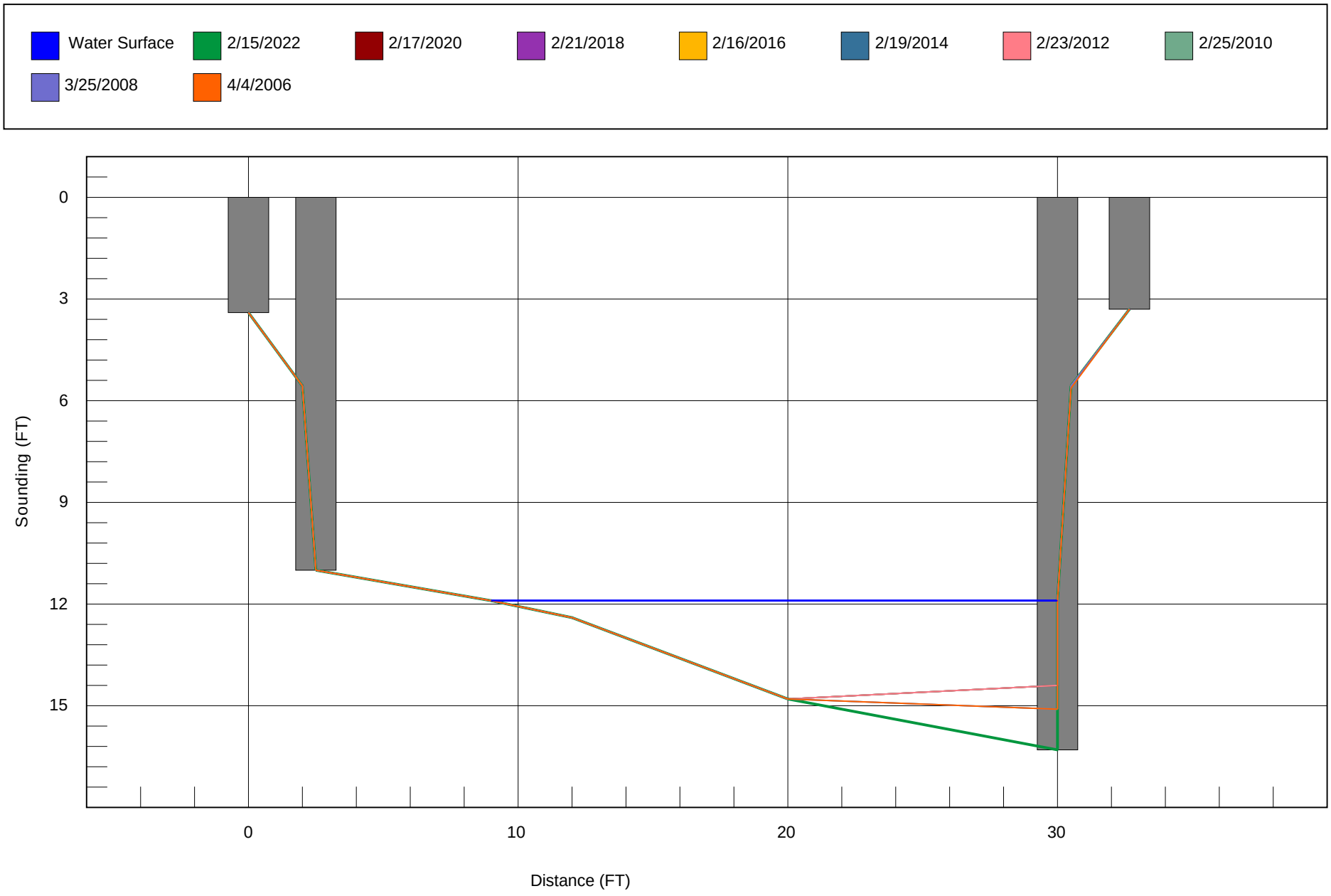
Highwater Mark Distance **10** Location of Highwater Mark **STATION 9**

Distance (Station) ft.	Downstream Sounding ft.	Upstream Sounding ft.	Description
0.000	3.400	3.200	FILL FACE ABUTMENT 1
2.000	5.563	0.000	TOP OF CAP
2.500	11.000	13.500	STREAM FACE ABUTMENT 1
9.000	11.900	0.000	WATER SURFACE/WATER EDGE (WSWE)
12.000	12.400	0.000	
20.000	14.800	0.000	
30.000	11.900	0.000	WATER SURFACE/WATER EDGE (WSWE)
30.000	16.300	13.400	STREAM FACE ABUTMENT 2
30.500	5.563	0.000	TOP OF CAP
32.667	3.300	3.000	FILL FACE ABUTMENT 2

Bridge: 490159 County: JACKSON Date: 02/15/2022

STREAMBED PROFILE (Downstream)

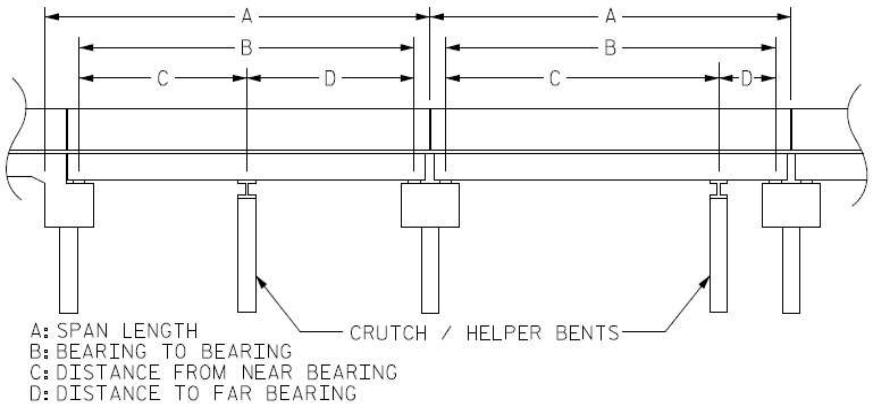
Top of Rail = 0FT (Sounding)



Structure Data Worksheet

Span Profile

County: **JACKSON** Structure Number: **490159**



Span Number	Span Length	Bearing to Bearing	Crutch/ Helper Bent	Distance to Near Bearing	Distance to Far Bearing
1	32.670	29.167			

LOOKING NORTH

UPSTREAM FROM TOP

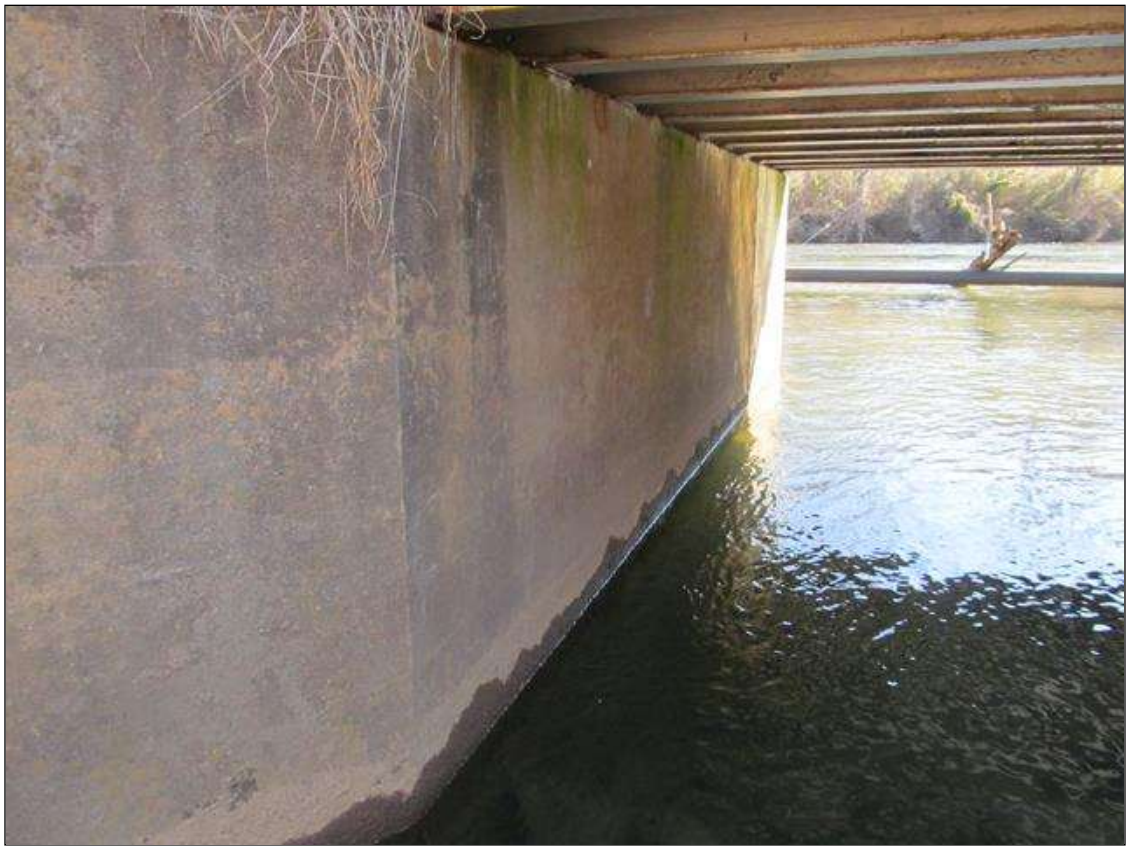
DOWNSTREAM FROM TOP

WEIGHT LIMIT SIGN

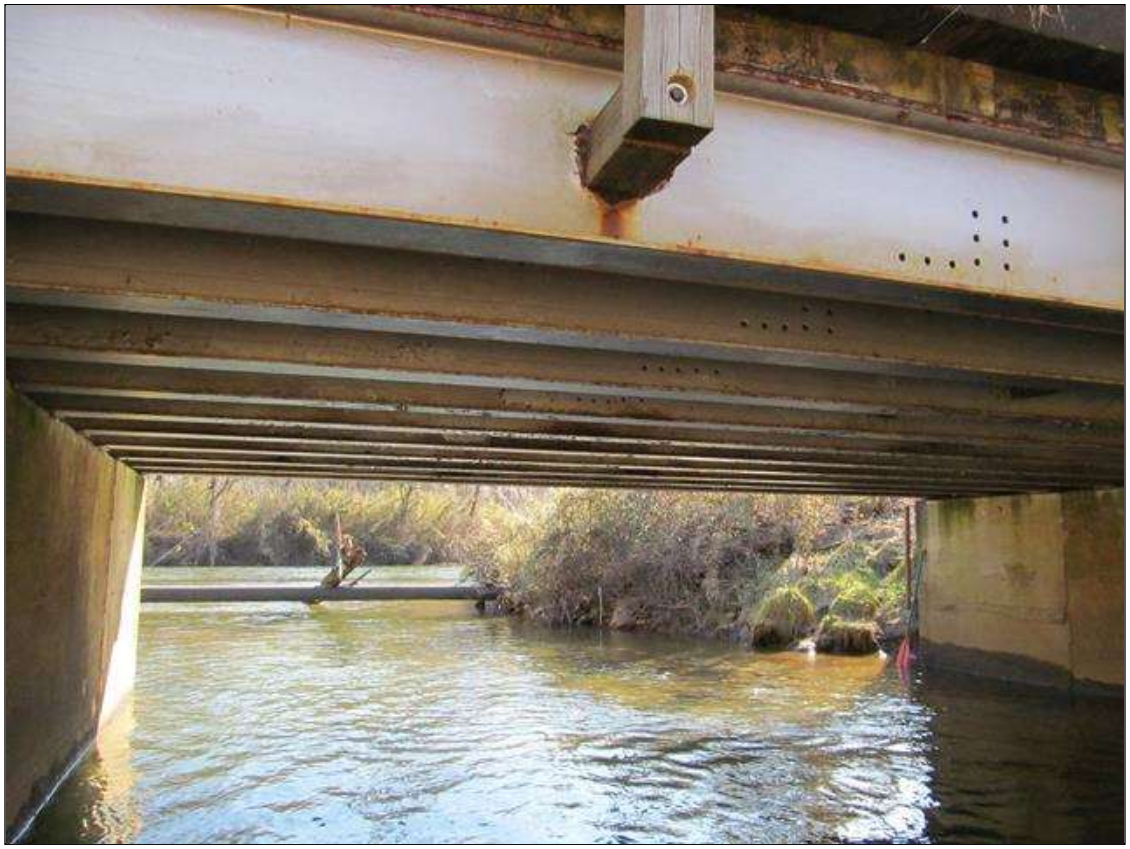
LOOKING SOUTH

UPSTREAM

DOWNSTREAM



ABUTMENT 1 AND 2 PHOTO OF ABUTMENT 2



UNDERSIDE DECK

BEARING

BRIDGE INSPECTOR'S RECOMMENDATION FOR MAINTENANCE REPAIRS

Bridge: 490159 County JACKSON Date:

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

MMS Code	Description of Function	Unit	Quantity	Remarks	Est. Cost
3314	Maintain Steel Superstructure Components	LF	2	Span 1 Beam 10: SECTION LOSS TO BOTTOM FLANGE AT ABUTMENT 2, REMAINING THICKNESS IS .0104 DOWN TO KNIFE EDGE, PAR ISSUED	

Key

Priority Maintenance Item Critical Finding Item Priority Maintenance Level Not Determined

BRIDGE INSPECTOR'S RECOMMENDATION FOR PRIORITY MAINTENANCE REPAIRS

Bridge: 490159 County JACKSON

THE FOLLOWING MAINTENANCE ITEMS HAVE BEEN SUBMITTED IN CONJUNCTION WITH A PRIORITY MAINTENANCE REQUEST

MMS Code	MMS Description	Quantity
3314	Maintain Steel Superstructure Components	2 LF

Location:		
Bent/Span No.		
Priority Level	Status	
	Request Awaiting Assignment	
Submitted Date:	Submitted By:	Assisted By:
02/15/2022	DAVID SANDERS	

Details

Span 1 Beam 10: SECTION LOSS TO BOTTOM FLANGE AT ABUTMENT 2, REMAINING THICKNESS IS .0104 DOWN TO KNIFE EDGE, PAR ISSUED

Bridge Inspection Field Sketch

2/15/22 DES

APPROCH VIEW FROM SOUTH AT 32 FEET

Roadway	18ft Wide	2 Paved Lanes	Looking North
Left Shoulder	2ft Wide		2ft Unpaved
Right Shoulder	2ft Wide		2ft Unpaved
Left Guardrail			
Right Guardrail			

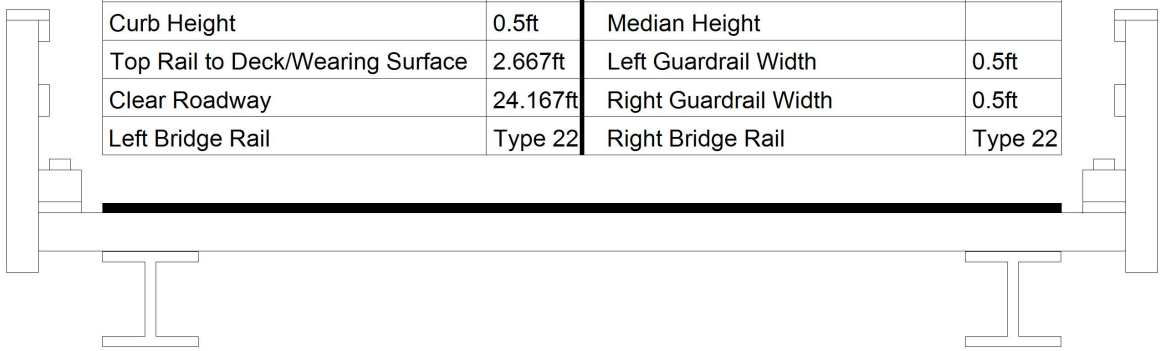
Title	**Description**
APPROACH ROADWAY	APPROACH ROADWAY

Bridge No: 490159	**Drawn By:** DAVID SANDERS	**Date:** 2/16/16	**File Name:** S0118001214

Bridge Inspection Field Sketch

2/15/22 DES

Deck Width/Out to Out	25ft	Wearing Surface	0.333ft
Between Rails	24.833ft	Median Width	
Curb Height	0.5ft	Median Height	
Top Rail to Deck/Wearing Surface	2.667ft	Left Guardrail Width	0.5ft
Clear Roadway	24.167ft	Right Guardrail Width	0.5ft
Left Bridge Rail	Type 22	Right Bridge Rail	Type 22



Measurements for Span #	1		
Deck Thickness	0.542	Left Overhang	0.875
Top of Rail to Bottom of Beam	5.562	Right Overhang	0.875

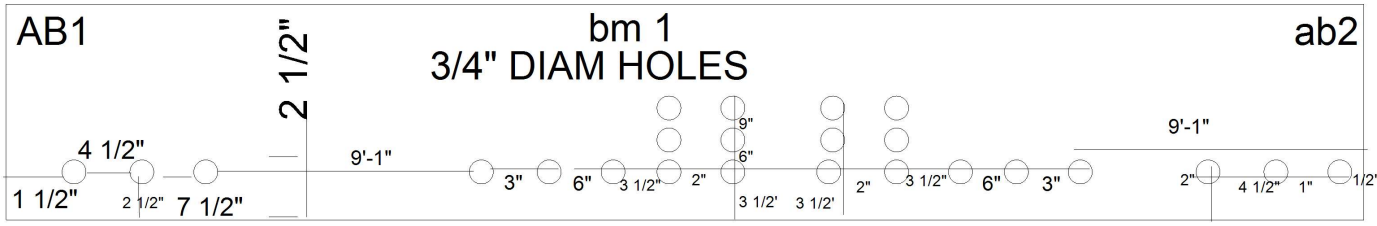
Beam No	Beam Type	Spacing	Comments
1	Steel I Beam	2.5833ft	BEAMS ARE 1.5 HIGH WITH .6250 FLANGE
2	Steel I Beam	2.5833ft	WIDTH AND .0417 FLANGE THICKNESS AND
3	Steel I Beam	2.5833ft	.0313 WEBS. NONTAPERED.
4	Steel I Beam	2.5833ft	
5	Steel I Beam	2.5833ft	DIAPHS. AT MIDSPAN. .3333 FROM BOTTOM
6	Steel I Beam	2.5833ft	OF DIAPHS. TO BOTTOM OF BEAMS.
7	Steel I Beam	2.5833ft	
8	Steel I Beam	2.5833ft	
9	Steel I Beam	2.5833ft	
10	Steel I Beam		

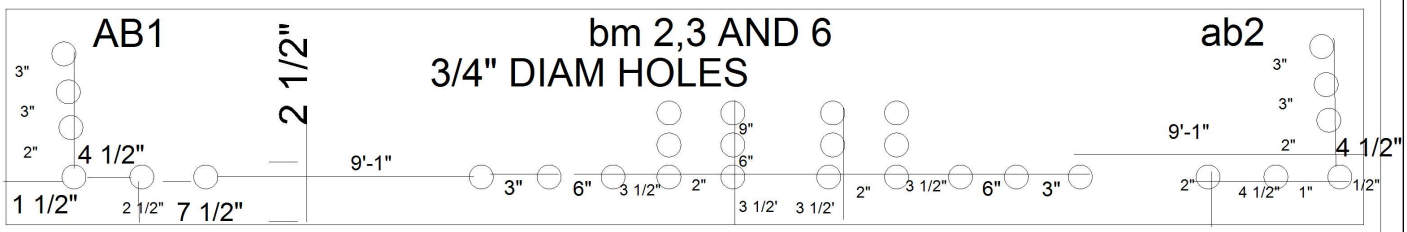
FLOOR IS DOUBLED - TOP LAYER IS .2292 X .6458.
BOTTOM LAYER IS .3125 X .6458.

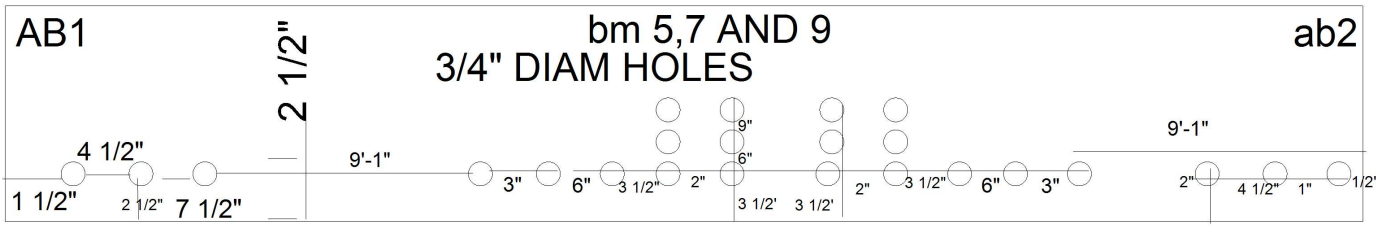
ABUTMENTS ARE YOUNT MASONRY

Title	**Description**		
SUPER	SUPER		
Bridge No: 490159	**Drawn By:** DAVID SANDERS	**Date:** 2/16/16	**File Name:** S0118001215

Bridge Inspection Field Sketch







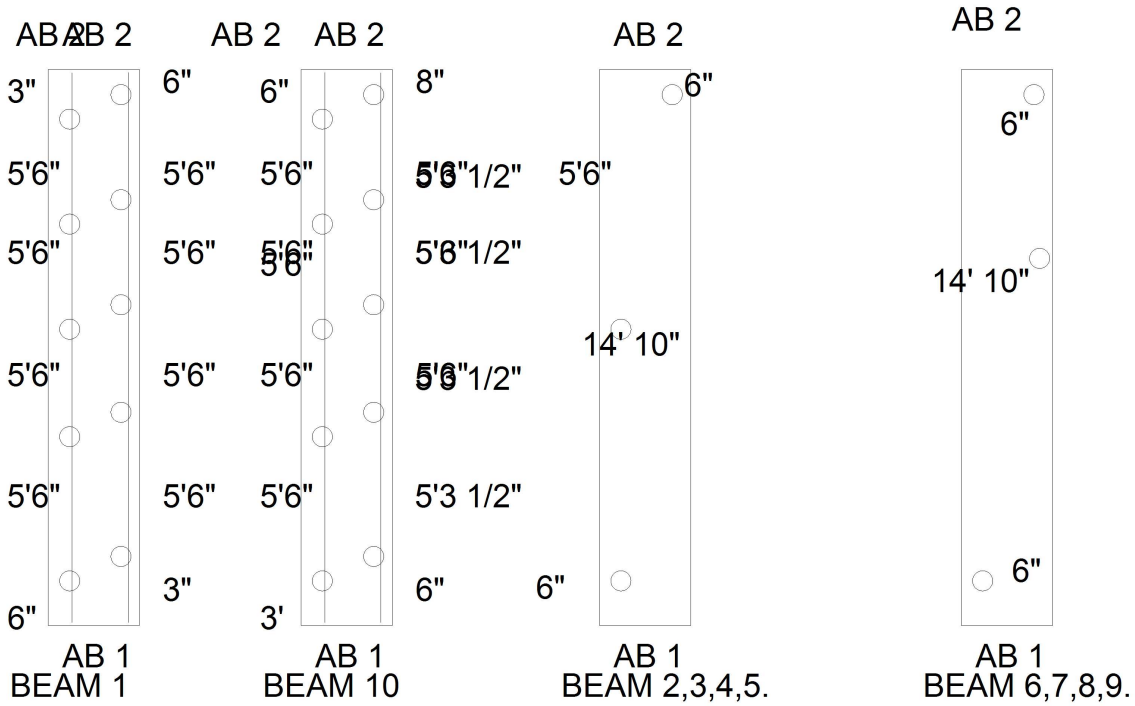
3/4" DIAM. HOLES BEGINNING AT 2' THEN EVERY 5' ACROSS BM.FROM ABUT. 1 BM. END UP 8 1/4" FROM FLG.

2/15/22 DES

Title	Description
holes in beams part 1	details

Bridge No:	Drawn By:	Date:	File Name:
490159	derek rickus	8/17/2016	S0118003062

Bridge Inspection Field Sketch



2/15/22 DES

Title	Description
HOLES IN TOP FLG.	DETAILS

Bridge No:	Drawn By:	Date:	File Name:
490159	DAVID SANDERS	8/17/2016	S0118003063

Bridge Inspection Field Sketch

2/15/22 DES

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.
35.000 ft.	3.000 ft.	10.000 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?

Bent/Abutment #: 1 Similar Bents:

Title	**Description**
ABUTMENT	ABUTMENT

Bridge No: 490159	**Drawn By:** DAVID SANDERS	**Date:** 2/17/2020	**File Name:** S0118003722