NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
STRUCTURE MANAGEMENT UNIT

ATTENTION:

Structure Safety Report

Routine Element Inspection

INSPECTION DATE: 07/15/2021

DIVISION: 13 **COUNTY:** YANCEY **STRUCTURE NUMBER:** 990097 **FREQUENCY:** 24 MONTHS

FACILITY CARRIED: SR1152 **MILE POST:**

LOCATION: .02 MI.S.JCT.SR1201

FEATURE INTERSECTED: SOUTH TOE RIVER

LATITUDE: 35° 52' 16.4" **LONGITUDE:** 82° 11' 48.47"

SUPERSTRUCTURE:

SUBSTRUCTURE:

SPANS: 3 SPANS. 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: Not Posted **POSTED TTST:** Not Posted

OTHER SIGNS PRESENT: NONE

SOUTH APPROACH 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
Joseph Huntsinger	Joseph Huntsinger	Dennis Wilson

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

08/11/2021

IDENTIFICATION

(1) STATE NAME NORTH CAROLINA BRIDGE **990097**
(8) STRUCTURE NUMBER (FEDERAL) **1990097**
(5) INVENTORY ROUTE (ON/UNDER) ON **131011520**
(2) STATE HIGHWAY DEPARTMENT DISTRICT **13**
(3) COUNTY CODE (FEDERAL) **199** (4) PLACE CODE **00000**
(6) FEATURE INTERSECTED **SOUTH TOE RIVER**
(7) FACILITY CARRIED **SR1152**
(9) LOCATION **.02 MI.S.JCT.SR1201**
(11) MILEPOINT **0.0**
(12) BASE HIGHWAY NETWORK **0**
(13) LRS INVENTORY ROUTE & SUBROUTE
(16) LATITUDE **35° 52' 16.4"** (17) LONGITUDE **82° 11' 48.47"**
(98) BORDER BRIDGE STATE CODE PERCENT SHARED
(99) BORDER BRIDGE STRUCTURE NUMBER

STRUCTURE TYPE AND MATERIAL

(43) STRUCTURE TYPE MAIN **Prestressed Concrete**
TYPE **Stringer/Multi-beam or girder** CODE **502**
(44) STRUCTURE TYPE APPROACH
TYPE CODE
(45) NUMBER OF SPANS IN MAIN UNIT **3**
(46) NUMBER OF SPANS IN APPROACH **0**
(107) DECK STRUCTURE TYPE CODE **1**
(108)WEARING SURFACE/PROTECTIVE SYSTEM
(A) TYPE OF WEARING SURFACE CODE **1**
(B) TYPE OF MEMBRANE CODE **0**
(C) TYPE OF DECK PROTECTION CODE **0**

AGE AND SERVICE

(27) YEAR BUILT **1981**
(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 **480**
(30) YEAR OF ADT **2012** (109) TRUCK ADT PCT **6**
(19) BYPASS OR DETOUR LENGTH **9.0**

GEOMETRIC DATA

(48) LENGTH OF MAXIMUM SPAN **59.0**
(49) STRUCTURE LENGTH **160.0**
(50) CURB OR SIDEWALK: LEFT **0.0** RIGHT **0.0**
(51) BRIDGE ROADWAY WIDTH, CURB TO CURB **30.0**
(52) DECK WIDTH OUT TO OUT **32.8**
(32) APPROACH ROADWAY WITH (W/ SHOULDERS) **21.0**
(33) BRIDGE MEDIAN **No median** CODE **0**
(34) SKEW **8** (35) STRUCTURE FLARED **1**
(10) INVENTORY ROUTE MIN VERT CLEAR **999.9**
(47) INVENTORY ROUTE TOTAL HORIZ CLEAR **29.3**
(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 **98.67**
STATUS =

CLASSIFICATION — CODE

(112) NBIS BRIDGE SYSTEM **YES**
(104) HIGHWAY SYSTEM **Inventory Route not on NHS** **0**
(26) FUNCTIONAL CLASS **Rural Minor Collector** **08**
(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 **H 20 + Mod** **6**
(63) OPERATING RATING METHOD - **Load Factor** **1**
(64) OPERATING RATING - **HS-55** **99**
(65) INVENTORY RATING METHOD - **1**
(66) INVENTORY RATING **HS-28** **50**
(70) BRIDGE POSTING **No Posting Required** **5**
(41) STRUCTURE OPEN, POSTED, OR CLOSED **A**
DESCRIPTION **Open, no restriction**

APPRAISAL — CODE

(67) STRUCTURAL EVALUATION **7**
(68) DECK GEOMETRY **5**
(69) UNDERCLEARANCES, VERT & HORIZ **N**
(71) WATERWAY ADEQUACY **7**
(72) APPROACH ROADWAY ALIGNMENT **5**
(36) TRAFFIC SAFETY FEATURES **1111**
(113) SCOUR CRITICAL BRIDGES **8**

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 **960** YEAR OF FUTURE ADT **2040**

INSPECTION

(90) INSPECTION DATE **07/21** (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** 60.0000 **Skew** 81.0000

Number of Items	Type of Component	Element Name	Quantity	Protective System Applied	Quantity (Sq Ft)
1	Reinforced Concrete Deck	Reinforced Concrete Deck	1314 Square Feet		
5	Prestressed Concrete Girder	Prestressed Concrete Open Girder/Beam	200 Feet		
10	Elastomeric Bearing Pad	Elastomeric Bearing	10 Each		
2	Concrete Railing	Reinforced Concrete Bridge Railing	120 Feet		

Span Number 2 **Span Length** 60.0000 **Skew** 81.0000

Number of Items	Type of Component	Element Name	Quantity	Protective System Applied	Quantity (Sq Ft)
2	Concrete Railing	Reinforced Concrete Bridge Railing	120 Feet		
1	Standard Joint	Pourable Joint Seal	32 Feet		
5	Prestressed Concrete Girder	Prestressed Concrete Open Girder/Beam	300 Feet		
1	Reinforced Concrete Deck	Reinforced Concrete Deck	1970 Square Feet		
10	Elastomeric Bearing Pad	Elastomeric Bearing	10 Each		

Span Number 3 **Span Length** 40.0000 **Skew** 81.0000

Number of Items	Type of Component	Element Name	Quantity	Protective System Applied	Quantity (Sq Ft)
10	Elastomeric Bearing Pad	Elastomeric Bearing	10 Each		
2	Concrete Railing	Reinforced Concrete Bridge Railing	80 Feet		
5	Prestressed Concrete Girder	Prestressed Concrete Open Girder/Beam	302 Feet		
1	Reinforced Concrete Deck	Reinforced Concrete Deck	1554 Square Feet		
1	Standard Joint	Pourable Joint Seal	32 Feet		

Structure Element Scoring

Structure Number: **990097**

Inspection Date **7/15/2021**

Element Number	Parent Number	Element Name	Location	Total Quantity	Level 1 Quantity	Level 2 Quantity	Level 3 Quantity	Level 4 Quantity
12	0	Reinforced Concrete Deck	Deck	4838	4746	92	0	0
109	0	Prestressed Concrete Open Girder/Beam	Beam	802	802	0	0	0
205	0	Reinforced Concrete Column	Piles and Columns	2	1	0	1	0
215	0	Reinforced Concrete Abutment	Abutments	95	95	0	0	0
220	0	Reinforced Concrete Pile Cap/Footing	Footing	34	17	17	0	0
225	0	Steel Pile	Piles and Columns	14	14	0	0	0
234	0	Reinforced Concrete Pier Cap	Caps	140	140	0	0	0
521	234	Concrete Protective Coating	Caps	290	290	0	0	0
301	0	Pourable Joint Seal	Expansion Joints	64	64	0	0	0
310	0	Elastomeric Bearing	Bearing Device	30	30	0	0	0
331	0	Reinforced Concrete Bridge Railing	Bridge Rail	320	319	0	1	0

Summary of Maintenance Needs

Maintenance By Defect

Structure Number: **990097** Inspection Date: **07/15/2021**

MMS Code	Element Name	Defect Name	Recommended Quantity
3326	Reinforced Concrete Deck	Cracking (RC and Other)	38 Square Feet
3348	Reinforced Concrete Column	Scour	1 Each
3348	Reinforced Concrete Pile Cap/Footing	Scour	17 Feet
3318	Reinforced Concrete Bridge Railing	Damage	1 Feet

Element Structure Maintenance Quantities

Structure Number: **990097** Inspection Date **07/15/2021**

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	95	0	0	0	95
Beam	3306	Maintenance Concrete Superstructure Components	0	802	0	0	0	802
Bearing Device	3334	Bridge Bearing	0	30	0	0	0	30
Bridge Rail	3318	Maintenance of Concrete Bridge Rail	1	320	0	1	0	319
Caps	3348	Maintenance of Concrete Substructure	0	140	0	0	0	140
Caps	5603	Partial Cleaning and Painting of Structural Steel	0	290	0	0	0	290
Deck	3326	Maintenance of Concrete Deck	38	4838	0	0	92	4746
Expansion Joints	3310	Maintenance of Standard Bridge Expansion Joints	0	64	0	0	0	64
Footing	3348	Maintenance of Concrete Substructure	17	34	0	0	17	17
Piles and Columns	3348	Maintenance of Concrete Substructure	1	2	0	1	0	1
Piles and Columns	3354	Maintenance of Steel Substructure Components	0	14	0	0	0	14

Element Condition and Maintenance Data

Structure Number: **990097** Inspection Date: **07/15/2021**

Span 1 — Deck

Reinforced Concrete Deck

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
12	Reinforced Concrete Deck	1,314	1,280	34	0	0	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
12	Patched Areas	SOUND PATCHES MADE ALONG THE FAR JOINT AS REPAIRS TO PREVIOUS PRIORITY MAINTENANCE.	2	34		Square Feet

General Comments

Span 2 — Deck

Reinforced Concrete Deck

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
12	Reinforced Concrete Deck	1,970	1,950	20	0	0	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
12	Patched Areas	SOUND PATCHES MADE ALONG THE FAR JOINT AS REPAIRS TO PREVIOUS PRIORITY MAINTENANCE.	2	20		Square Feet

General Comments

Span 3 — Deck

Reinforced Concrete Deck

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
12	Reinforced Concrete Deck	1,554	1,516	38	0	0	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
12	Cracking (RC and Other)	HAIRLINE LONGITUDINAL CRACK, 8 FT LONG, IN MIDDLE OF RIGHT LANE STARTING AT BENT 2.	2	8	8	Square Feet
12	Cracking (RC and Other)	SIX (6) UP TO 1/16 IN WIDE LONGITUDINAL CRACKS X 5 FT LONG, WITH 1 FT SPACING, IN RIGHT LANE 7 FT FROM BENT 1 DECK JOINT.	2	30	30	Square Feet

General Comments

Span 3 — Left Bridge Rail

Concrete Railing

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
331	Reinforced Concrete Bridge Railing	40	39	0	1	0	Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
331	Damage	HEAVY IMPACT DAMAGE ALONG GUARDRAIL TRANSITION AT NORTHWEST CORNER.	3	1	1	Feet

General Comments

Bent 1 — Footing

Reinforced Concrete Footing

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
220	Reinforced Concrete Pile Cap/Footing	17	0	17	0	0	Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
220	**Scour**	**17 FT LONG X UP TO 2 FT HIGH VERTICAL EXPOSURE IN NORTH FACE, UP TO 4 FT LONG X 1.3 FT HIGH VERTICAL EXPOSURE IN SOUTH FACE, 4 FT LONG X 1.8 FT VERTICAL EXPOSURE IN WEST FACE.**	2	17	17	Feet

General Comments

Bent 2 — Pile 1

Reinforced Concrete Column

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
205	Reinforced Concrete Column	1	0	0	1	0	Each

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
205	**Scour**	**SCOUR HOLE, APPROXIMATELY 5 FT DEEP X 5 ALL AROUND THE COLUMN.**	3	1	1	Each

General Comments

Elements Verfied

Location	Name	Component	Element Name	Amount
Span 1	Deck	Reinforced Concrete Deck	Reinforced Concrete Deck	1314
Span 1	Beam 1	Prestressed Concrete Girder	Prestressed Concrete Open Girder/Beam	40
Span 1	Beam 2	Prestressed Concrete Girder	Prestressed Concrete Open Girder/Beam	40
Span 1	Beam 3	Prestressed Concrete Girder	Prestressed Concrete Open Girder/Beam	40
Span 1	Beam 4	Prestressed Concrete Girder	Prestressed Concrete Open Girder/Beam	40
Span 1	Beam 5	Prestressed Concrete Girder	Prestressed Concrete Open Girder/Beam	40
Span 1	Left Bridge Rail	Concrete Railing	Reinforced Concrete Bridge Railing	60
Span 1	Right Bridge Rail	Concrete Railing	Reinforced Concrete Bridge Railing	60
Span 1	Near Bearing	Elastomeric Bearing Pad	Elastomeric Bearing	1
Span 1	Far Bearing	Elastomeric Bearing Pad	Elastomeric Bearing	1
Span 1	Far Bearing	Elastomeric Bearing Pad	Elastomeric Bearing	1
Span 1	Near Bearing	Elastomeric Bearing Pad	Elastomeric Bearing	1
Span 1	Near Bearing	Elastomeric Bearing Pad	Elastomeric Bearing	1
Span 1	Far Bearing	Elastomeric Bearing Pad	Elastomeric Bearing	1
Span 1	Far Bearing	Elastomeric Bearing Pad	Elastomeric Bearing	1
Span 1	Near Bearing	Elastomeric Bearing Pad	Elastomeric Bearing	1
Span 1	Near Bearing	Elastomeric Bearing Pad	Elastomeric Bearing	1
Span 1	Far Bearing	Elastomeric Bearing Pad	Elastomeric Bearing	1
Span 2	Deck	Reinforced Concrete Deck	Reinforced Concrete Deck	1970
Span 2	Beam 1	Prestressed Concrete Girder	Prestressed Concrete Open Girder/Beam	60
Span 2	Beam 2	Prestressed Concrete Girder	Prestressed Concrete Open Girder/Beam	60
Span 2	Beam 3	Prestressed Concrete Girder	Prestressed Concrete Open Girder/Beam	60
Span 2	Beam 4	Prestressed Concrete Girder	Prestressed Concrete Open Girder/Beam	60
Span 2	Beam 5	Prestressed Concrete Girder	Prestressed Concrete Open Girder/Beam	60
Span 2	Left Bridge Rail	Concrete Railing	Reinforced Concrete Bridge Railing	60
Span 2	Right Bridge Rail	Concrete Railing	Reinforced Concrete Bridge Railing	60
Span 2	Expansion Joint	Standard Joint	Pourable Joint Seal	32
Span 2	Far Bearing	Elastomeric Bearing Pad	Elastomeric Bearing	1
Span 2	Near Bearing	Elastomeric Bearing Pad	Elastomeric Bearing	1
Span 2	Near Bearing	Elastomeric Bearing Pad	Elastomeric Bearing	1
Span 2	Far Bearing	Elastomeric Bearing Pad	Elastomeric Bearing	1
Span 2	Far Bearing	Elastomeric Bearing Pad	Elastomeric Bearing	1
Span 2	Near Bearing	Elastomeric Bearing Pad	Elastomeric Bearing	1
Span 2	Near Bearing	Elastomeric Bearing Pad	Elastomeric Bearing	1
Span 2	Far Bearing	Elastomeric Bearing Pad	Elastomeric Bearing	1
Span 2	Far Bearing	Elastomeric Bearing Pad	Elastomeric Bearing	1
Span 2	Near Bearing	Elastomeric Bearing Pad	Elastomeric Bearing	1
Span 3	Deck	Reinforced Concrete Deck	Reinforced Concrete Deck	1554
Span 3	Beam 1	Prestressed Concrete Girder	Prestressed Concrete Open Girder/Beam	61
Span 3	Beam 2	Prestressed Concrete Girder	Prestressed Concrete Open Girder/Beam	61
Span 3	Beam 3	Prestressed Concrete Girder	Prestressed Concrete Open Girder/Beam	60
Span 3	Beam 4	Prestressed Concrete Girder	Prestressed Concrete Open Girder/Beam	60
Span 3	Beam 5	Prestressed Concrete Girder	Prestressed Concrete Open Girder/Beam	60
Span 3	Left Bridge Rail	Concrete Railing	Reinforced Concrete Bridge Railing	40
Span 3	Right Bridge Rail	Concrete Railing	Reinforced Concrete Bridge Railing	40

Elements Verfied

Location	Name	Component	Element Name	Amount
Span 3	Expansion Joint	Standard Joint	Pourable Joint Seal	32
Span 3	Far Bearing	Elastomeric Bearing Pad	Elastomeric Bearing	1
Span 3	Near Bearing	Elastomeric Bearing Pad	Elastomeric Bearing	1
Span 3	Near Bearing	Elastomeric Bearing Pad	Elastomeric Bearing	1
Span 3	Far Bearing	Elastomeric Bearing Pad	Elastomeric Bearing	1
Span 3	Far Bearing	Elastomeric Bearing Pad	Elastomeric Bearing	1
Span 3	Near Bearing	Elastomeric Bearing Pad	Elastomeric Bearing	1
Span 3	Near Bearing	Elastomeric Bearing Pad	Elastomeric Bearing	1
Span 3	Far Bearing	Elastomeric Bearing Pad	Elastomeric Bearing	1
Span 3	Far Bearing	Elastomeric Bearing Pad	Elastomeric Bearing	1
Span 3	Near Bearing	Elastomeric Bearing Pad	Elastomeric Bearing	1
Bent 1	Cap 1	Reinforced Concrete Pier Cap	Reinforced Concrete Pier Cap	31
Bent 1	Pile 1	Reinforced Concrete Column	Reinforced Concrete Column	1
Bent 1	Footing	Reinforced Concrete Footing	Reinforced Concrete Pile Cap/Footing	17
End Bent 1	Cap 1	Reinforced Concrete Pier Cap	Reinforced Concrete Pier Cap	36
End Bent 1	Abutment	Reinforced Concrete Abutment	Reinforced Concrete Abutment	45
Bent 2	Cap 1	Reinforced Concrete Pier Cap	Reinforced Concrete Pier Cap	31
Bent 2	Pile 1	Reinforced Concrete Column	Reinforced Concrete Column	1
End Bent 2	Cap 1	Reinforced Concrete Pier Cap	Reinforced Concrete Pier Cap	42
End Bent 2	Abutment	Reinforced Concrete Abutment	Reinforced Concrete Abutment	50

General Inspection Notes

Bent 1 Pile 1

END BENT PILES ARE NOT VISIBLE

National Bridge and NC Inspection Items

Structure Number: 990097 **Inspection Date:** 07/15/2021

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	**7**
Item 72: Approach Roadway Alignment	0 - 9 , N	**8**

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		**0**	**3350**
Field Scour Evaluation		**L**		
Drift	G, F, P, or C	**F**	**18**	**3366**
Fender System	G, F, P, or C		**0**	**3364**
Movable Span Machinery	G, F, P, or C			
Response to Live Load	G, F, P, or C	**G**		
Superstructure Paint Code				

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	**N**
Inspection Time	Hours	**2**
Traffic Control Time	Hours	
Snooper Time	Hours	
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	**N**

National Bridge and NC SMU Inspection Item Details

Structure Number: 990097 **Inspection Date:** 07/15/2021

Item	Drift	**Grade**	F	**Maint Code**	3366	**Qty.**	18

Details DRIFT 25' WIDE X 5' HIGH X 10' DEEP LODGED AGAINST BENT 2.

Item	General Comments and Misc Items	**Grade**		**Maint Code**		**Qty.**	0

Details SOUTH APPROACH: SETTLEMENT AND TRANSVERSE CRACKING IN THE APPROACH WEARING SURFACE FOR 8' LONG BEGINNING AT THE FILL FACE.

NORTH WEST GUARD RAIL CONNECTION: SCRAPE DAMAGE 10' LONG BEGINNING AT ATTACHMENT TO BRIDGE WITH ONE RAIL POST DISPLACED.

DRIFT 25' WIDE X 5' HIGH X 10' DEEP LODGED AGAINST BENT 2.

SOUTH APPROACH: SETTLEMENT AND TRANSVERSE CRACKING IN THE APPROACH WEARING SURFACE FOR 8' LONG BEGINNING AT THE FILL FACE.

NORTH WEST GUARD RAIL CONNECTION: SCRAPE DAMAGE 10' LONG BEGINNING AT ATTACHMENT TO BRIDGE WITH ONE RAIL POST DISPLACED.

Stream Bed Soundings

(Profile diagram on following sheet)

County **YANCEY** Structure Number: **990097** Inspection Date **07/15/2021**

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

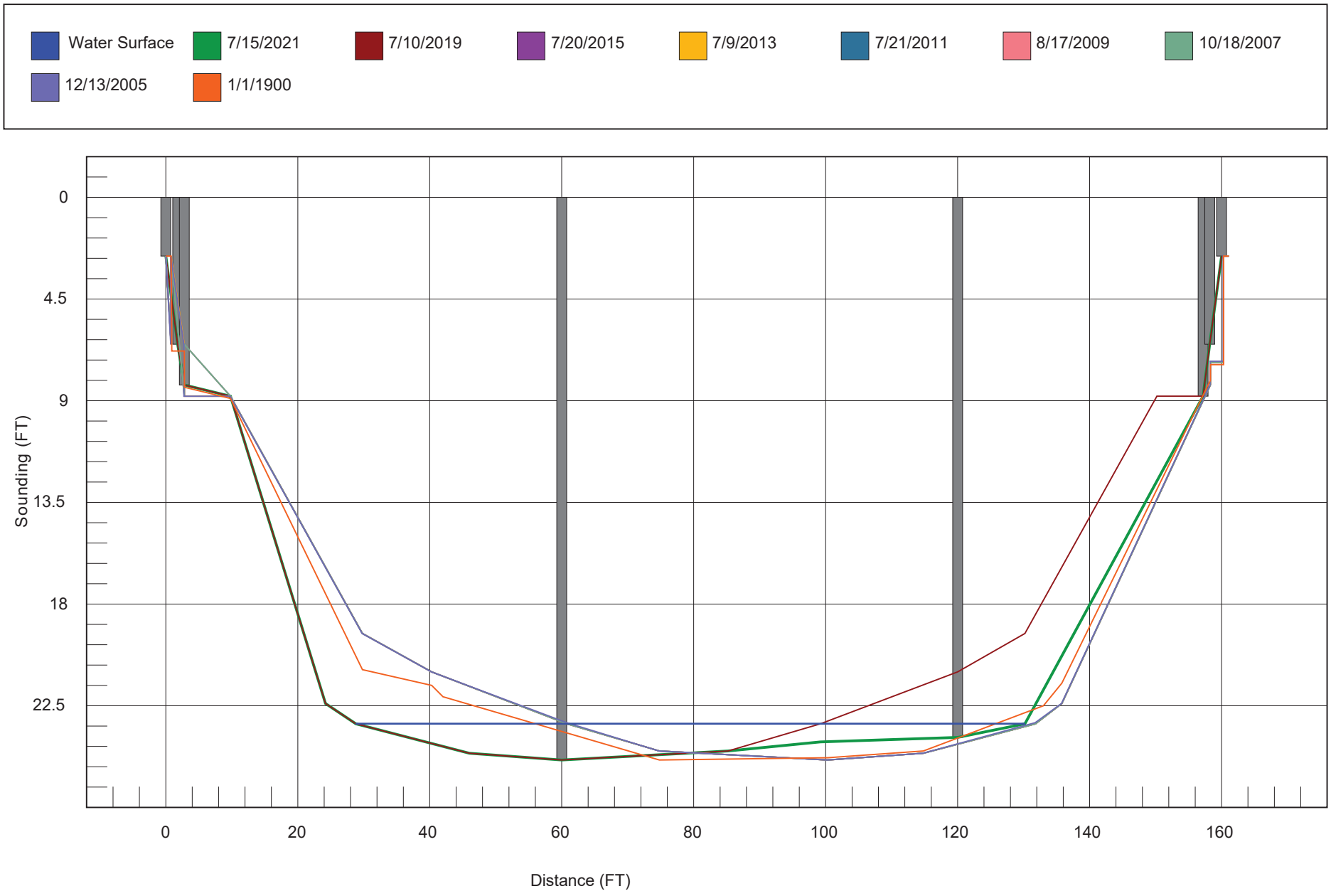
Highwater Mark Distance Location of Highwater Mark

Distance (Station) ft.	Downstream Sounding ft.	Upstream Sounding ft.	Description
0.000	2.600	0.000	FF END BENT 1
1.800	6.500	0.000	TOP OF CAP END BENT 1
2.800	8.300	7.900	SF END BENT 1
9.800	8.800	0.000	
24.200	22.400	0.000	
28.800	23.300	0.000	WSWE
46.000	24.600	0.000	
60.000	24.900	23.900	BENT 1
85.200	24.500	0.000	
99.200	24.100	0.000	
120.000	23.900	23.600	BENT 2
130.200	23.300	0.000	WSWE
157.200	8.800	8.300	SF END BENT 2
158.200	6.500	0.000	TOP OF CAP END BENT 2
160.000	2.600	0.000	FF END BENT 2

Bridge: 990097 County: YANCEY Date: 07/15/2021

STREAMBED PROFILE (Downstream)

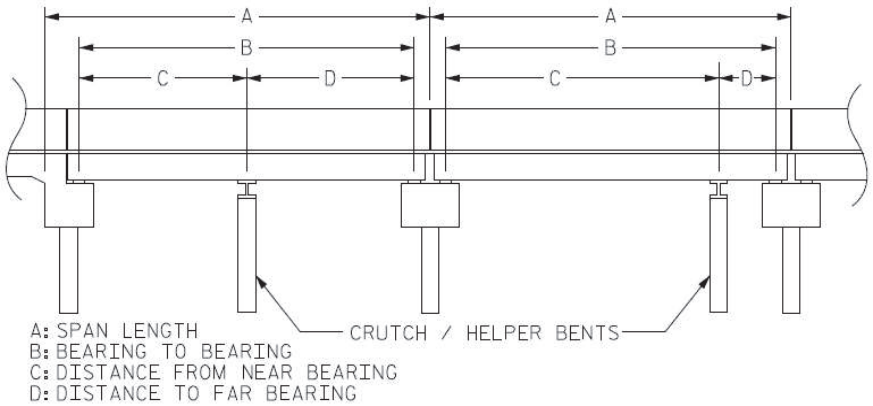
Top of Rail = 0FT (Sounding)



Structure Data Worksheet

Span Profile

County: **YANCEY** Structure Number: **990097**



Span Number	Span Length	Bearing to Bearing	Crutch/ Helper Bent	Distance to Near Bearing	Distance to Far Bearing
1	60.000	56.000			
2	60.000	58.500			
3	40.000	36.917			

TYPICAL GUARDRAIL END TREATMENT AND POST SPACING

SOUTH APPROACH LOOKING NORTH

TYPICAL GUARDRAIL CONNECTION

UPSTREAM PROFILE

END BENT 1

DECK UNDERSIDE

BENT 1

BENT 2

DOWNSTREAM PROFILE

LOOKING SOUTH AT APPROACH GUARDRAIL

LOOKING DOWNSTREAM

LOOKING UPSTREAM

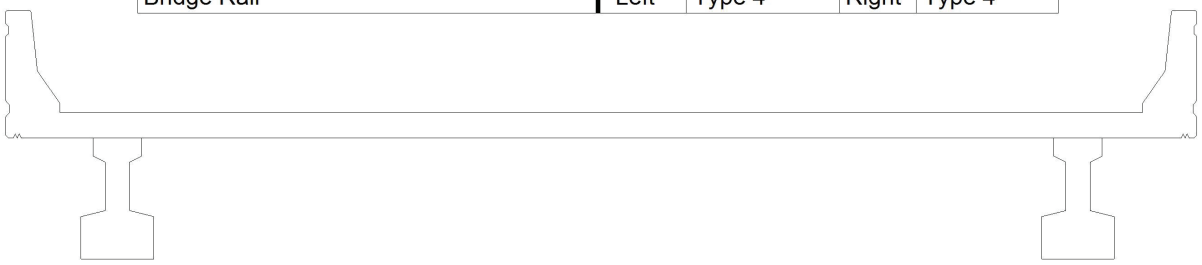
LOOKING NORTH AT APPROACH GUARDRAIL

NORTH APPROACH LOOKING SOUTH

END BENT 2

Bridge Inspection Field Sketch

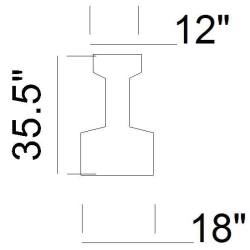
Deck Width/Out to Out	32.833ft	Between Rails				30ft
Clear Roadway	29.333ft	Wearing Surface				0ft
Median Width		Median Height				
Curb Height		Left	0ft	Right	0ft	
Sidewalk Width		Left		Right		
Clear Roadway (Rail to Median)		Left		Right		
Guardrail Width		Left	1.417ft	Right	1.417ft	
Top of Rail to Deck/Wearing Surface		Left	2.667ft	Right	2.667ft	
Bridge Rail		Left	Type 4	Right	Type 4	



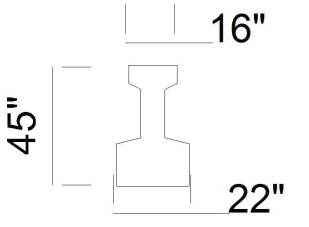
Measurements for Span #	1		
Deck Thickness	0.708	Left Overhang	3.083
Top of Rail to Bottom of Beam	6.500	Right Overhang	3.083

Beam Number	Beam Type	Spacing
1 thru 5	PPC Girder	6.667ft

SPAN 1



SPANS 2 AND 3



7/15/21 - J.C.HUNTSINGER

Title	**Description**		
Typical Section	Data Worksheet		
Bridge No: 990097	**Drawn By:** Roy W. Shook	**Date:** 10/18/2007	**File Name:** S0106000674

Bridge Inspection Field Sketch

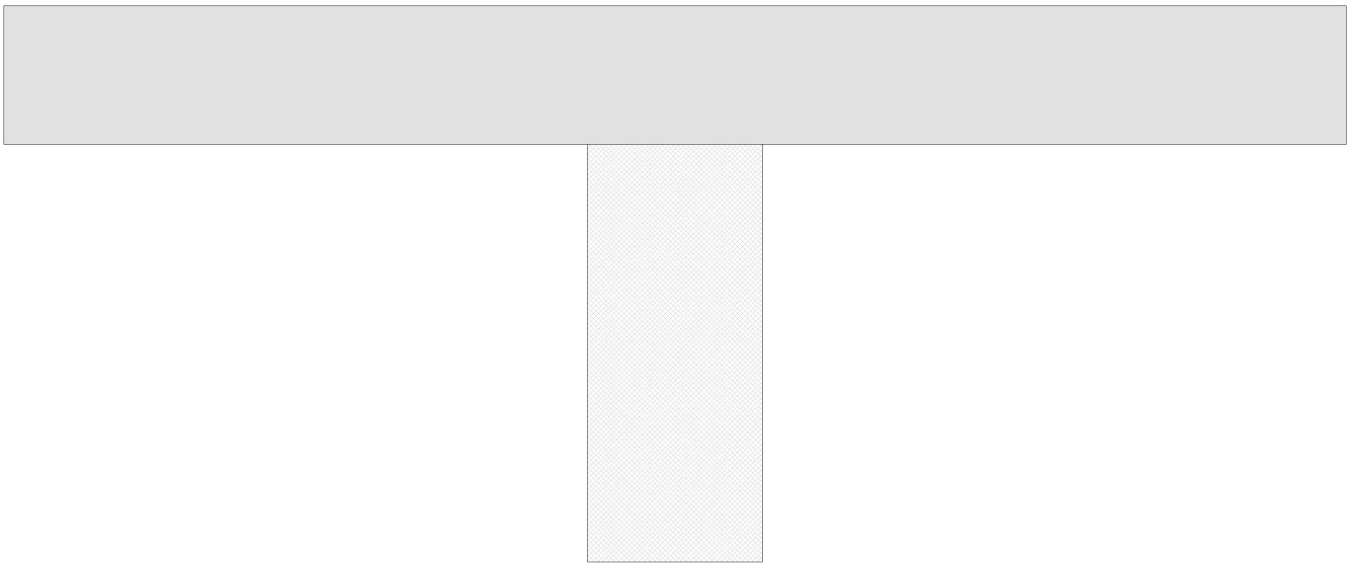
150' SOUTH OF BRIDGE

Roadway	20.167ft Wide	2 Paved Lanes	Looking North
Left Shoulder	0.5ft Wide	0.5ft Paved	
Right Shoulder	0.5ft Wide	0.5ft Paved	
Left Guardrail			
Right Guardrail			

7/15/21 - J.C.HUNTSINGER

Title	**Description**		
Approach Roadway	Data Worksheet		
Bridge No: 990097	**Drawn By:** JOE C HUNTSINGER	**Date:** 07/09/2013	**File Name:** S0106000673

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.
30.667 ft.	4.000 ft.	3.167 ft.	15.333 ft.	15.333 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		4 ft.	4 ft.		Vertical	No	No	No	No

Bent/Abutment #: 1 Similar Bents: 2

Title		Description
INTERIOR BENTS	7/15/21 - J.C.HUNTSINGER	SUBSTRUCTURE DETAILS

Bridge No:	Drawn By:	Date:	File Name:
990097	JOE C HUNTSINGER	7/9/2013	S0106001656