SIGNATURE

INSPECTED BY

H.W. HICKS, JR.

## **Structure Safety Report**

			Routine Eleme	ent Inspection	n - Contract			
STRUCTURE NUMB	BER: 91077	<b>7</b> 5	SAP STRUCTUR	<b>E NO</b> : 0920775	FHWA	STRUCTURE NO:	00000000	1830775
DIVISION: 5	COUNTY:	WAKE		NSPECTION DATE:	06/06/2022	FREQUENCY:	24 MONT	THS
FACILITY CARRIED	: SR2000				MIL	E POST:		
LOCATION: JCT. O	F I540 & S	R2000						
FEATURE INTERSE	CTED:  540	)						
LATITUDE: 35° 53	5 51.95"		LONGIT	<b>UDE</b> : 78° 36' 35.9	91"			
SUPERSTRUCTURE	E: RC DEC	CK ON C	ONT. STL. PL. GDRS	; APPROACH SLA	ABS			
SUBSTRUCTURE:	E.BTS:RC.	CAP ON	H-PILES,BT:RC. P&B	ON H-PILE FTG.				
SPANS: 2 SPAN	S. SEE SP	AN PROF	FILE SHEET FOR SPA	AN DETAILS				
FRACTURE CR	ITICAL	TEMF	PORARY SHORING	SCOUR CRI	TICAL :	SCOUR PLAN OF	ACTION	
GRADES: (Inspecto	r/NBI Coding)	DECK	7/7 SUPERSTRU	JCTURE 8/8	SUBSTRUCTU	RE <u>7/7</u> CUL	VERT N/I	٧
POSTED SV: Not	Posted			POSTED T	TST: Not Posted			
OTHER SIGNS PRES	SENT: NO	NE						
						gn noticed ssued for		Number Required
k.							HT LIMIT	0
					-		IEATORS	0
					-		W BRIDGE	
	1		1		_		-	0
					_		NE BRIDGE	
		WI SERVE				NO LOW CL	EARANCE	
		1						
		1				DIRECTION OF INSPECTION	S-N	
	*	1			and the second	DIRECTION MATCHES PLANS	s	
SOUTH APPROAG	CH LOOKIN	NG NORT	TH .					

Dw: Olo

ASSISTED BY M.W. ROBERTSON

IDENTIFICATION			
(1) STATE NAME NORTH CAROLINA BRIDGE 910	0775	SUFFICIENCY RATING	80.90
(8) STRUCTURE NUMBER (FEDERAL) 1830	0775	STATUS =	
(5) INVENTORY ROUTE (ON/UNDER) ON 131020 (2) STATE HIGHWAY DEPARTMENT DISTRICT	0000 5		CODE
• •	5000	(112) NBIS BRIDGE SYSTEM	YES
(6) FEATURE INTERSECTED <b>I540</b>		(104) HIGHWAY SYSTEM Inventory Route not on NHS	0
(7) FACILITY CARRIED SR2000		(26) FUNCTIONAL CLASS Urban Minor Collector	16
(9) LOCATION JCT. OF I540 & SR2000		(100) STRAHNET HIGHWAY Not a STRAHNET Route	0
(11) MILEPOINT	0.0	(101) PARALLEL STRUCTURE No parallel structure exists	N
(12) BASE HIGHWAY NETWORK (13) LRS INVENTORY ROUTE & SUBROUTE	0	(102) DIRECTION OF TRAFFIC 2-way traffic	2
(16) LATITUDE 35° 53' 51.95" (17) LONGITUDE 78° 36' 35	5.91"	(103) TEMPORARY STRUCTURE	
(98) BORDER BRIDGE STATE CODE PERCENT SHARED		(110) DESIGNATED NATIONAL NETWORK - on national network for trucks	0
(99) BORDER BRIDGE STRUCTURE NUMBER		(20) TOLL On Free Road	3
		(21) MAINT -	01
(43) STRUCTURE TYPE MAIN Steel Continu	uous	(22) OWNER -	01
TYPE Stringer/Multi-beam or girder CODE	402	(37) HISTORICAL SIGNIFICANCE -	5
(44) STRUCTURE TYPE APPROACH			CODE
TYPE CODE		(58) DECK	7
(45) NUMBER OF SPANS IN MAIN UNIT	2	(59) SUPERSTRUCTURE	8
(46) NUMBER OF SPANS IN APPROACH	0	(60) SUBSTRUCTURE	7
(107) DECK STRUCTURE TYPE CODE	1	(61) CHANNEL & CHANNEL PROTECTION	N
(108)WEARING SURFACE/PROTECTIVE SYSTEM	-	(62) CULVERTS	N
(A) TYPE OF WEARING SURFACE CODE	1		CODE
(B) TYPE OF MEMBRANE CODE	0	(31) DESIGN LOAD  (31) DESIGN LOAD  H 20 + Mod	CODE
(C) TYPE OF DECK PROTECTION CODE	1	(63) OPERATING RATING METHOD - Load Factor	1
	·	(64) OPERATING RATING - HS-49	89
AGE AND SERVICE (27) YEAR BUILT 2	2001	(65) INVENTORY RATING METHOD -	1
	0		53
(106) YEAR RECONSTRUCTED		(55) 1112111 5111 1411115	
(42) TYPE OF SERVICE ON - Overpass Struct		(70) BRIDGE POSTING  No Posting Required	5
OFF - Highway CODE	61	(41) STRUCTURE OPEN, POSTED, OR CLOSED	Α
(28) LANES ON STRUCTURE 7 LANES UNDER STRUCTURE (29) AVERAGE DAILY TRAFFIC 45	9 5000	DESCRIPTION Open, no restriction  APPRAISAL	CODE
(30) YEAR OF ADT <b>2018</b> (109) TRUCK ADT PCT	6	(67) STRUCTURAL EVALUATION	7
(19) BYPASS OR DETOUR LENGTH	1.0	(68) DECK GEOMETRY	6
GEOMETRIC DATA		(69) UNDERCLEARANCES, VERT & HORIZ	7
(48) LENGTH OF MAXIMUM SPAN	49.0	(71) WATERWAY ADEQUACY	N
(49) STRUCTURE LENGTH 28	288.0	(72) APPROACH ROADWAY ALIGNMENT	8
(50) CURB OR SIDEWALK: LEFT 0.0 RIGHT	5.0	(36) TRAFFIC SAFETY FEATURES	1111
	98.3 06.0	(113) SCOUR CRITICAL BRIDGES	N
	03.0	PROPOSED IMPROVEMENTS	
(33) BRIDGE MEDIAN No median CODE	0	(75) TYPE OF WORK CODE	
(34) SKEW 12 (35) STRUCTURE FLARED	0	(76) LENGTH OF STRUCTURE IMPROVEMENT	
• •	99.9	(94) BRIDGE IMPROVEMENT COST	
	98.3 99.9	(95) ROADWAY IMPROVEMENT COST	
	17.5	(96) TOTAL PROJECT COST	
	26.0	(97) YEAR OF IMPROVEMENT COST ESTIMATE	
(56) MIN LAT UNDERCLEARANCE LT:	26.7		2040
NAVIGATION DATA		(114) FUTURE ADT 90,000 YEAR OF FUTURE ADT  INSPECTION	2040
(38) NAVIGATION CONTROL - CODE	N	(90) INSPECTION DATE 06/18 (91) FREQUENCY	24
(111) PIER PROTECTION CODE		(92) CRITICAL FEATURE INSPECTION (93) CFI DATI	E
(39) NAVIGATION VERTICAL CLEARANCE	0.0	A) FRACTURE CRIT DETAIL A)	
	0.0	B) UNDERWATER INSP B)	
(40) NAVIGATION HORIZONTAL CLEARANCE	0.0	C) OTHER SPECIAL INSP	
(10) TATALON TION LONDON THE OLEMANIOL	0.0	SCOUR	

			Vertical				ر			raffic	ırance			See /\	lote Be	low			E:	
Span Number	Facility Carried	Inventory Route	Maximum Minimum Ver Clearance	Milepoint	Base Highway	LRS Inventory Route	Functional Classification	Number of Lanes	Average Daily Traffic	Year of Average Daily T	Total Horizontal Clearar	Reference Feature	Minimum Vertical Underclearance	Rigth Lateral Underclearance	Left Lateral Underclearance	Underclearance Appraisal Grade	STRAHNET Highway	Direction of Traffic	National Highway System	National Truck Network
	7	5	10	11	12	13	26	28	29	30	47	54A	54	55	56	69	100	102	104	
	I   I540E	11005400	17.5	0.0	1	10540	11	5	44500	2013	99.9	Н	17.1	43.9	26.8	7		1		
	I I540E	11005400	17.5		1	10540	11	5	46000	2018	99.9	Н	17.1	43.9	26.8	7	1	1		
	2 I540W	11005400	18.4		1	10540	11	4	46000	2018	88.0	Н	17.5	26.0	26.7	7	1	1		
	2 I540W	11005400	18.4	0.0	1	10540	11	4	44500	2013	88.0	Н	17.5	26.0	26.7	7		1		

### **Superstructure Build Details**

Span Number  $\underline{1}$ 

**Span Length** <u>136.8760</u>

**Skew** 78.0000

Number of Items	Type of Component	Element Name	Quantity	Protective System Applied	Quantity (Sq Ft)
1	Reinforced Concrete Deck	Reinforced Concrete Deck	14591 Square F	eet	
14	Pot Bearing	Pot Bearing	14 Each		
28	Pot Bearing	Pot Bearing	28 Each	Galvanized Protective System	0
14	Plate Girder	Steel Open Girder/Beam	3990 Feet	WS with Acrylic Primer and Topcoat	62374
2	Concrete and Metal Railing	Other Bridge Railing	274 Feet		
1	Compression Seal	Compression Joint Seal	100 Feet		

Span Number 2

**Span Length** <u>151.2460</u>

**Skew** 78.0000

Number of Items	Type of Component	Element Name	Quantity	Protective System Applied	Quantity (Sq Ft)
2	Concrete and Metal Railing	Other Bridge Railing	302 Feet		
1	Compression Seal	Compression Joint Seal	100 Feet		
1	Reinforced Concrete Deck	Reinforced Concrete Deck	16123 Square Feet		

## **Structure Element Scoring**

Structure Number: 910775 Inspection Date 6/6/2022

Element Number	Parent Number	Element Name	Location	Total Quantity	Level 1 Quantity	Level 2 Quantity	Level 3 Quantity	Level 4 Quantity
12	О	Reinforced Concrete Deck	Deck	30714	6714	24000	О	О
107	0	Steel Open Girder/Beam	Beam	3990	3990	0	0	0
515	107	Steel Protective Coating	Beam	62374	62374	0	0	0
205	0	Reinforced Concrete Column	Piles and Columns	6	6	0	0	0
215	0	Reinforced Concrete Abutment	Abutments	270	249	21	0	0
220	0	Reinforced Concrete Pile Cap/Footing	Footing	0	0	0	0	0
225	0	Steel Pile	Piles and Columns	64	64	0	0	0
234	0	Reinforced Concrete Pier Cap	Caps	335	311	24	0	0
521	234	Concrete Protective Coating	Caps	1634	1634	0	0	0
302	0	Compression Joint Seal	Expansion Joints	200	83	37	0	80
314	0	Pot Bearing	Bearing Device	42	35	7	0	0
515	314	Steel Protective Coating	Bearing Device	0	0	0	0	0
321	0	Reinforced Concrete Approach Slabs	Approaches	1326	1230	96	0	0
333	0	Other Bridge Railing	Bridge Rail	576	508	68	0	0

## **Summary of Maintenance Needs**

Maintenance By Defect

Structure Number: 910775 Inspection Date: 06/06/2022

MMS Code	Element Name	Defect Name	Recommended Quantity
3326	Reinforced Concrete Deck	Cracking (RC and Other)	24000 Square Feet
3310	Compression Joint Seal	Seal Adhesion	80 Feet
3334	Pot Bearing	Connection	7 Each
3353	Reinforced Concrete Approach Slabs	Cracking (RC and Other)	96 Square Feet

## **Element Structure Maintenance Quantities**

Structure Number: 910775 Inspection Date 06/06/2022

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	270	0	0	21	249
Approaches	3353	Maintenance of Concrete Bridge Approach Slabs	96	1326	О	О	96	1230
Beam	3314	Maintenance Steel Superstructure Components	0	3990	0	О	О	3990
Beam	3342	Clean and Paint Steel	0	62374	О	О	О	62374
Bearing Device	3334	Bridge Bearing	7	42	0	0	7	35
Bearing Device	3342	Clean and Paint Steel	0	О	О	О	О	0
Bridge Rail	3318	Maintenance of Concrete Bridge Rail	0	576	0	О	68	508
Caps	3348	Maintenance of Concrete Substructure	0	335	О	О	24	311
Caps	5603	Partial Cleaning and Painting of Structural Steel	0	1634	О	О	О	1634
Deck	3326	Maintenance of Concrete Deck	24000	30714	О	О	24000	6714
Expansion Joints	3310	Maintenance of Standard Bridge Expansion Joints	80	200	80	О	37	83
Footing	3348	Maintenance of Concrete Substructure	0	0	0	0	0	0
Piles and Columns	3348	Maintenance of Concrete Substructure	0	6	0	0	0	6
Piles and Columns	3354	Maintenance of Steel Substructure Components	0	64	0	0	0	64

### **Element Condition and Maintenance Data**

Structure Number: 910775 Inspection Date: 06/06/2022

Span 1	Deck						
Reinforced Concrete	Deck						
Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
12 Reinford	ced Concrete Deck	14,591	2,591	12,000	0	0 8	Square Feet
Element Number Defect Type	Defect Des	cription		cs	CS Qty	Maint Qty	
12 Cracking (RC and Other)	TOP OF THE DECK AT THE SO SCATTERED ACROSS THE WILL LONGITUDINAL CRACKING TO EMANATES FROM THE JOINT ITANSVERSE CRACKING TO 1 SCATTERED THROUGHOUT; UOVERHANGS, SCATTERED HATRANSVERSE CRACKING WITH EFFLORESCENCE	OTH, 1/64" WIDE HEADER, AND /64" WIDE INDERSIDE OF THE IRLINE	Ē	2	12,000	12,000	Square Feet

Spai	Span 1	Left Bridge Ra	ail							
Con	crete and	Metal Railing								
Elem Num		Element	Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty		
333		Other Bridge Railing		137	131	6	0	0	Feet	
Element Number	Dofoot	Туре	Defect Descript	tion		cs	CS Qty	Maint Qty		
✓ 333	Cracking		EPTH VERTICAL HAIRLI CKING IN BRIDGE RAIL			2	6	-	Feet	

Spa	an 1	Right Bridge Ra	ail					
Ope	411 1	Right Bridge Re	411					
Cor	ncrete and Metal R	ailing						
	ment mber Other Bi	Element Name ridge Railing	Total Qty 137	<b>CS1 Qty</b> 101	<b>CS2</b> <b>Qty</b> 36	<b>CS3 Qty</b> 0	CS4 Qty 0 Feet	
Elemer Numbe	Dofoct Typo	Defect Descriptio	n		cs	CS Qty	Maint Qty	
✓ 333	Cracking	FULL HEIGHT VERTICAL HAIRLINE C RIGHT BRIDGE RAILING IN NEGATIV REGION			2	4	Feet	
✓ 333	Cracking	VERTICAL HAIRLINE TO OPEN (1/32" IN BRIDGE RAILING - SPAN 1 RIGHT MIDSPAN	,		2	17	Feet	
✓ 333	Deterioration (Other)	SCATTERED SCALING UP TO 1/8" DE FACE OF CURB AT NEAR END.	EP ALONG		2	15	Feet	
✓ 333	Cracking	HORIZONTAL HAIRLINE CRACKING ( NEAR END	12' LONG) AT		1	12	Feet	
	General Comments							_

**General Comments** 

Spa	an 1	Expansion	n Joint					
Cor	mpression Seal							
	ment mber	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
302	Compr	ression Joint Seal	100	38	12	0	50 Fee	et
Elemer Numbe	Dofoct Typo	Defect Des	cription		cs	CS Qty	Maint Qty	
✓ 302	Seal Adhesion	50% ADHESION LOSS OF DEC LEAKING AT BAYS 8, 9, 12, 13			4	50	50 F	eet
✓ 302	Adjacent Deck or Header	ADJACENT DECK HEADERS, S THE LENGTH, EDGE CHIPPING X 3/4" DEEP]			2	12	F	Feet
	General Comments							

Span	1	Far Bearing	g				
Pot B	Bearing						
Eleme Numb		Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
314	Po	ot Bearing	1	0	1	0	0 Each
515	St	eel Protective Coating	0	0	0	0	0 Square Feet
Element Number	Defect Typ	pe Defect Desc	ription		cs	CS Qty	Maint Qty
<b>√</b> 314 (	Connection	SPAN 1 BEAM 1 FAR BEARING( CONNECTION NUTS LOOSE [RI			2	1	1 Each

Span 1		Far Bearin	ng				
Pot Bea	aring						
Element Number		Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
314	Pot Bea	aring	1	0	1	0	0 Each
515	Steel P	rotective Coating	0	0	0	0	0 Square Feet
Element Number	Defect Type	Defect Des	scription		cs	CS Qty	Maint Qty
<b>✓ 314</b> Cor	nnection	SPAN 1 BEAM 3 FAR BEARING			2	1	1 Each

General	Comments

**General Comments** 

Span 1	Near Bearing	g				
Pot Bearing						
Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
314	Pot Bearing	1	0	1	0	0 Each
515	Steel Protective Coating	0	0	0	0	0 Square Feet
Element Number Defect T	ype Defect Descri	ption		cs	CS Qty	Maint Qty
✓ 314 Connection	SPAN 1 BEAM 5 NEAR BEARING( BEAM 5 ANCHOR NUTS LOOSE [F	, , ,		2	1	1 Each

Span 1		Far Bea	ring					
Pot Bear	ing							
Element Number		Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
314	Pot Bear	ng	1	0	1	0	0	Each
515	Steel Pro	tective Coating	0	0	0	0	0	Square Feet
Element Number	Defect Type	Defect I	Description		cs	CS Qty	Maint Qty	
<b>√</b> 314 Conr	nection	SPAN 1 BEAM 5 FAR BEARI NUTS LOOSE [REAR]	NG(1) OF (4) ANCHOR		2	1		1 Each

**General Comments** 

Spa	n 1		Far Bearing						
Pot	Bearing								
Elen Nun	nent nber	Element Name	1	otal Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
314		Pot Bearing		1	0	1	0	0	Each
515		Steel Protective Coating		0	0	0	0	0	Square Feet
Elemen Number	Dofoot	Туре	Defect Description			cs	CS Qty	Maint Qty	
✓ 314	Connection		AR BEARING (1) OF (4) TS LOOSE [REAR]			2	1		1 Each

**General Comments** 

Spa	n 1		Near Bearing					
Pot	Bearing							
Elen Nun	nent nber	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
314		Pot Bearing	1	0	1	0	0	Each
515		Steel Protective Coating	0	0	0	0	0	Square Feet
Elemen Number	Dofoot	Туре	Defect Description		cs	CS Qty	Maint Qty	
✓ 314	Connection	SPAN 1 BEAM 10 ANCHOR NUTS L	NEAR BEARING (1) OF (4) OOSE [REAR]		2	1		1 Each

**General Comments** 

Spa	n 1		F	ar Bearing						
Pot	Bearing									
	ment mber		Element Name		Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
314		Pot Bear	ring		1	0	1	0	0	Each
515		Steel Pro	otective Coating		0	0	0	0	0	Square Feet
Elemen Numbe	Dofoo	t Type		Defect Description			cs	CS Qty	Maint Qty	
✓ 314	Connection		SPAN 1 BEAM 13 FA CONNECTION NUTS		4)		2	1		1 Each

Span 2	2	Deck						
Reinfo	orced Concrete	Deck						
Elemei Numbe	• • •	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
12	Reinfor	ced Concrete Deck	16,123	4,123	12,000	0	0 S	Square Feet
Element Number	Defect Type	Defect De	scription		cs	CS Qty	Maint Qty	
	racking (RC and ther)	TOP OF THE DECK AT THE SO SCATTERED ACROSS THE W LONGITUDINAL CRACKING TO EMANATES FROM THE JOINT TRANSVERSE CRACKING TO SCATTERED THROUGHOUT; OVERHANGS, SCATTERED H. TRANSVERSE CRACKING WITEFFLORESCENCE	IDTH, D 1/64" WIDE HEADER, AND 1/64" WIDE UNDERSIDE OF TH AIRLINE	E	2	12,000	12,000	Square Feet

Spa	an 2	Left Bridg	e Rail					
Cor	ncrete and Metal R	tailing						
	ment mber	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
333	Other B	ridge Railing	151	144	7	0	0 Feet	
Elemer Numbe	Dofoot Typo	Defect Des	scription		cs	CS Qty	Maint Qty	
✓ 333	Cracking (RC and Other)	VERTICAL HAIRLINE TO OPEN IN BRIDGE RAILING	I (1/32") CRACKING		2	7	Feet	
	General Comments							

Spa	an 2	Right Bridge	Rail					
Co	ncrete and Metal F	Railing						
	ement Imber Other E	Element Name bridge Railing	<b>Total</b> <b>Qty</b> 151	<b>CS1 Qty</b> 132	<b>CS2</b> <b>Qty</b> 19	CS3 Qty 0	CS4 Qty 0 Feet	
Eleme Numbe	Dofoct Typo	Defect Descrip	otion		cs	CS Qty	Maint Qty	
✓ 333	Cracking (RC and Other)	VERTICAL HAIRLINE TO OPEN (1/3 IN BRIDGE RAILING - SPAN 1 RIGH MIDSPAN	,		2	19	Feet	
<b>√</b> 333	Cracking	FULL HEIGHT VERTICAL HAIRLINE RIGHT BRIDGE RAILING IN NEGAT REGION			1	4	Feet	
✓ 333	Cracking  General Comments	HORIZONTAL HAIRLINE CRACKIN MID-SPAN	G (5' LONG) AT		1	5	Feet	

Span 2		<b>Expansion Joint</b>						
Compre	ession Seal							
Element Number	Element Name		Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
302	Compression Joint Seal		100	45	25	0	30 Feet	
ement umber	Defect Type	Defect Description			cs	CS Qty	Maint Qty	

Structure I	Structure Number: 910775 Inspection Date: 06/06/2022					
✓ 302	Seal Adhesion	SEAL ADHESION FAILURE, SCATTERED LEAKING THROUGHOUT END BENT 2 JOINT.	4	30	30	Feet
<b>√</b> 302	Adjacent Deck or Header	ADJACENT DECK HEADERS, SCATTERED ALONG THE LENGTH, EDGE CHIPPING [UP TO 1" WIDE X 1" DEEP] ALONG END BENT 2 JOINT.	2	25		Feet

#### **General Comments**

Bent 1	İ	Cap 1						
Reinfo	orced Concrete	Pier Cap						
Eleme Number 234	er	Element Name ced Concrete Pier Cap	Total Qty 105	<b>CS1 Qty</b> 91	CS2 Qty 14	<b>CS3 Qty</b> 0	<b>CS4</b> <b>Qty</b> 0 F	eet
Element Number	Defect Type	Defect Desc	ription		cs	CS Qty	Maint Qty	
	racking (RC and other)	CRACKING ON BOTH FACES ON 6, HAIRLINE to 1/64" WIDE CRAC DIAGONAL AND VERTICAL, RUN EDGE DOWN TOWARDS BOTTO HAIRLINE CRACK AT BOTTOM C	CKS ARE INING FROM TOP OM EDGE. MINOR		2	14		Feet

1	Abutment						
orced Concrete	Abutment						
nt er	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
Reinforced Concrete Abutment		135	118	17	0	0 Fe	eet
Defect Type	Defect Desc	cription		cs	CS Qty	Maint Qty	
•		LONGITUDÍNAL		2	17	•	Feet
	nt er Reinfor  Defect Type racking (RC and	Defect Type  racking (RC and ther)  Defect Type  Defect Description (RC and ther)   Defect Type racking (RC and ther)  Defect Type  Reinforced Concrete Abutment  Defect Description  VERTICAL HAIRLINE TO 1/64" WIDE CRACK, FULL HEIGHT IN BAY 3, 9, 10 11 & 12. LONGITUDINAL HAIRLINE CRACK TO 1/64" WIDE IN TOP OF	Defect Type  Total Qty Qty Reinforced Concrete Abutment  Defect Type  Total Qty Qty 118  Defect Type  Defect Description  racking (RC and ther)  VERTICAL HAIRLINE TO 1/64" WIDE CRACK, FULL HEIGHT IN BAY 3, 9, 10 11 & 12. LONGITUDINAL HAIRLINE CRACK TO 1/64" WIDE IN TOP OF	proced Concrete Abutment  Inter Element Name Qty Qty Qty Reinforced Concrete Abutment 135 118 17  Defect Type Defect Description CS  racking (RC and the Interior Int	Defect Type  Defect Type  Defect Description  Defect Type  Defect Description  VERTICAL HAIRLINE TO 1/64" WIDE CRACK, FULL HEIGHT IN BAY 3, 9, 10 11 & 12. LONGITUDINAL HAIRLINE CRACK TO 1/64" WIDE IN TOP OF  Defect Type  Defect Description  CS CS Qty  17	Defect Type  Defect Type  Defect Description  Total Qty	

Ben Rei	_	d Concrete	C <i>F</i> Pier Cap	<b>ΛP</b>					
	ment nber		Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
234	234 Reinforced Concrete Pier Cap		ed Concrete Pier Cap	115	105	10	0	0	Feet
521		Concrete Protective Coating		1,634	1,634	0	0	0	Square Feet
Elemen Numbe		Defect Type	D	Defect Description		cs	CS Qty	Maint Qty	
<b>√</b> 234	Cracki Other)	ng (RC and	(10) SCATTERED VEF UP TO 1' HIGH.	RTICAL HAIRLINE CRACKS		2	10		Feet

Bei	nt 2	Abutment						
Rei	inforced Concrete	Abutment						
	ement mber	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
215	Reinfor	ced Concrete Abutment	135	131	4	0	0 Feet	
Eleme	Dofoot Typo	Defect Descr	iption		CS	CS Qty	Maint Qty	
<b>√</b> 215	Cracking (RC and Other)	2 DIAGONAL HAIRLINE CRACKS LEFT AND RIGHT SIDE ABUTMEI FULL HEIGHT VERTICAL AND DIA HAIRLINE CRACKS	NT EXTENSIONS,		2	4	Fe	et
	General Comments							

•	roach 1 nforced Concrete	Approach Slab					
Elen Nun 321		Element Name ced Concrete Approach Slabs	Total Qty 663	<b>CS1 Qty</b> 615	<b>CS2</b> <b>Qty</b> 48	CS3 Qty 0	CS4 Qty 0 Square Feet
Elemen Number	Dofoot Typo	Defect Descrip	tion		cs	CS Qty	Maint Qty
321	Cracking (RC and Other)	SCATTERED ACROSS THE WIDTH LONGITUDINAL CRACKING TO 1/3	,		2	48	48 Square Feet

**General Comments** 

App	roach 2							
Rei	nforced Concrete	Approach Slab						
	nent nber	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
321	Reinfor	Reinforced Concrete Approach Slabs		615	48	0	0 8	Square Feet
Elemen Numbe	Dofoot Typo	Defect Descrip	otion		cs	CS Qty	Maint Qty	
321	Cracking (RC and Other)	SCATTERED ACROSS THE WIDTH LONGITUDINAL CRACKING TO 1/3	,		2	48	48	Square Feet

### **Elements Verfied**

Location	Name	Component	Element Name	Amount
Span 1	Deck	Reinforced Concrete Deck	Reinforced Concrete Deck	14591
Span 1	Beam 1	Plate Girder	Steel Open Girder/Beam	285
Span 1	Beam 2	Plate Girder	Steel Open Girder/Beam	285
Span 1	Beam 3	Plate Girder	Steel Open Girder/Beam	285
Span 1	Beam 4	Plate Girder	Steel Open Girder/Beam	285
Span 1	Beam 5	Plate Girder	Steel Open Girder/Beam	285
Span 1	Beam 6	Plate Girder	Steel Open Girder/Beam	285
Span 1	Beam 7	Plate Girder	Steel Open Girder/Beam	285
Span 1	Beam 8	Plate Girder	Steel Open Girder/Beam	285
Span 1	Beam 9	Plate Girder	Steel Open Girder/Beam	285
Span 1	Beam 10	Plate Girder	Steel Open Girder/Beam	285
Span 1	Beam 11	Plate Girder	Steel Open Girder/Beam	285
Span 1	Beam 12	Plate Girder	Steel Open Girder/Beam	285
Span 1	Beam 13	Plate Girder	Steel Open Girder/Beam	285
Span 1	Beam 14	Plate Girder	Steel Open Girder/Beam	285
Span 1	Left Bridge Rail	Concrete and Metal Railing	Other Bridge Railing	137
Span 1	Right Bridge Rail	Concrete and Metal Railing	Other Bridge Railing	137
Span 1	Expansion Joint	Compression Seal	Compression Joint Seal	100
Span 1	Far Bearing	Pot Bearing	Pot Bearing	1
Span 1	Intermediate Bearing	Pot Bearing	Pot Bearing	1
Span 1	Near Bearing	Pot Bearing	Pot Bearing	1
Span 1	Near Bearing	Pot Bearing	Pot Bearing	1
Span 1	Intermediate Bearing	Pot Bearing	Pot Bearing	1
Span 1	Far Bearing	Pot Bearing	Pot Bearing	1
Span 1	Far Bearing	Pot Bearing	Pot Bearing	1
Span 1	Intermediate Bearing	Pot Bearing	Pot Bearing	1
Span 1	Near Bearing	Pot Bearing	Pot Bearing	1
Span 1	Near Bearing	Pot Bearing	Pot Bearing	1
Span 1	Intermediate Bearing	Pot Bearing	Pot Bearing	1
Span 1	Far Bearing	Pot Bearing	Pot Bearing	1
Span 1	Far Bearing	Pot Bearing	Pot Bearing	1
Span 1	Intermediate Bearing	Pot Bearing	Pot Bearing	1
Span 1	Near Bearing	Pot Bearing	Pot Bearing	1
Span 1	Near Bearing	Pot Bearing	Pot Bearing	1
Span 1	Intermediate Bearing	Pot Bearing	Pot Bearing	1
Span 1	Far Bearing	Pot Bearing	Pot Bearing	1
Span 1	Far Bearing	Pot Bearing	Pot Bearing	1
Span 1	Intermediate Bearing	Pot Bearing	Pot Bearing	1
Span 1	Near Bearing	Pot Bearing	Pot Bearing	1
Span 1	Near Bearing	Pot Bearing	Pot Bearing	1
Span 1	Intermediate Bearing	Pot Bearing	Pot Bearing	1
Span 1	Far Bearing	Pot Bearing	Pot Bearing	1
Span 1	Far Bearing	Pot Bearing	Pot Bearing	1
Span 1	Intermediate Bearing	Pot Bearing	Pot Bearing	1
Span 1	Near Bearing	Pot Bearing	Pot Bearing	1

### **Elements Verfied**

Location	Name	Component	Element Name	Amount
Span 1	Near Bearing	Pot Bearing	Pot Bearing	1
Span 1	Intermediate Bearing	Pot Bearing	Pot Bearing	1
Span 1	Far Bearing	Pot Bearing	Pot Bearing	1
Span 1	Far Bearing	Pot Bearing	Pot Bearing	1
Span 1	Intermediate Bearing	Pot Bearing	Pot Bearing	1
Span 1	Near Bearing	Pot Bearing	Pot Bearing	1
Span 1	Near Bearing	Pot Bearing	Pot Bearing	1
Span 1	Intermediate Bearing	Pot Bearing	Pot Bearing	1
Span 1	Far Bearing	Pot Bearing	Pot Bearing	1
Span 1	Far Bearing	Pot Bearing	Pot Bearing	1
Span 1	Intermediate Bearing	Pot Bearing	Pot Bearing	1
Span 1	Near Bearing	Pot Bearing	Pot Bearing	1
Span 1	Near Bearing	Pot Bearing	Pot Bearing	1
Span 1	Intermediate Bearing	Pot Bearing	Pot Bearing	1
Span 1	Far Bearing	Pot Bearing	Pot Bearing	1
Span 2	Deck	Reinforced Concrete Deck	Reinforced Concrete Deck	16123
Span 2	Left Bridge Rail	Concrete and Metal Railing	Other Bridge Railing	151
Span 2	Right Bridge Rail	Concrete and Metal Railing	Other Bridge Railing	151
Span 2	Expansion Joint	Compression Seal	Compression Joint Seal	100
Bent 1	Cap 1	Reinforced Concrete Pier Cap	Reinforced Concrete Pier Cap	105
Bent 1	Pile 1	Reinforced Concrete Column	Reinforced Concrete Column	1
Bent 1	Pile 2	Reinforced Concrete Column	Reinforced Concrete Column	1
Bent 1	Pile 3	Reinforced Concrete Column	Reinforced Concrete Column	1
Bent 1	Pile 4	Reinforced Concrete Column	Reinforced Concrete Column	1
Bent 1	Pile 5	Reinforced Concrete Column	Reinforced Concrete Column	1
Bent 1	Pile 6	Reinforced Concrete Column	Reinforced Concrete Column	1
End Bent 1	Cap 1	Reinforced Concrete Pier Cap	Reinforced Concrete Pier Cap	115
End Bent 1	Abutment	Reinforced Concrete Abutment	Reinforced Concrete Abutment	135
End Bent 2	CAP	Reinforced Concrete Pier Cap	Reinforced Concrete Pier Cap	115
End Bent 2	Abutment	Reinforced Concrete Abutment	Reinforced Concrete Abutment	135
Approach1		Reinforced Concrete Approach Slab	Reinforced Concrete Approach Slabs	663
Approach2		Reinforced Concrete Approach Slab	Reinforced Concrete Approach Slabs	663

## **General Inspection Notes**

## **National Bridge and NC Inspection Items**

Structure Number: 910775 Inspection Date: 06/06/2022

#### **National Bridge Inventory Items**

Item	Grade Scale	Grade	
Item 58: Deck	0 - 9 , N	7	Note:
Item 59: Superstructure	0 - 9 , N	8	Items 58,59,60,62 reflect this
Item 60: Substructure	0 - 9 , N	7	inspection only.
Item 61: Channel and Channel Protection	0 - 9 , N	N	For overall NBI coding grade, see cover sheet.
Item 62: Culvert	0 - 9 , N	N	
Item 71: Waterway Adequacy	0 - 9 , N	N	
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**

ltem	Grade Scale	Grade	Maint. Qty.	Maint. Code
Deck Debris	G, F, P, or C	F	29528	3376
Drainage System	G, F, P, or C	F	0	3332
Utilities	G, F, P, or C	G		
Slope Protection	G, F, P, or C	G	0	3352
Scour	G, F, P, or C			
Wingwall	G, F, P, or C			
Field Scour Evaluation				
Drift	G, F, P, or C			
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		х		

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	4
Traffic Control Time	Hours	0
Snooper Time	Hours	0
Ladder Used	YES/NO	Υ
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: 910775 Inspection Date: 06/06/2022

Item Deck Debris Grade F Maint Code 3376 Qty. 29528

Details DECK DEBRIS UP TO 4" WIDE X 1" DEEP ALONG BOTH SHOULDERS

ItemDrainage SystemGradeFMaint Code3332Qty.0

**Details** SEE DECK DEBRIS



DECK DEBRIS UP TO 4" WIDE X 1" DEEP ALONG BOTH SHOULDERS



Approach 1 : SCATTERED ACROSS THE WIDTH, FULL LENGTH LONGITUDINAL CRACKING TO 1/32" WIDE



Span 1 Expansion Joint: 50% ADHESION LOSS OF DECK JOINT. JOINT LEAKING AT BAYS 8, 9, 12, 13 AT END BENT 1.



Span 1 Right Bridge Rail: SCATTERED SCALING UP TO 1/8" DEEP ALONG FACE OF CURB AT NEAR END.



Span 1 Right Bridge Rail: FULL HEIGHT VERTICAL HAIRLINE CRACKING IN RIGHT BRIDGE RAILING IN NEGATIVE MOMENT REGION



Span 1 Deck: TOP OF THE DECK AT THE SOUTH END, SCATTERED ACROSS THE WIDTH, LONGITUDINAL CRACKING TO 1/64" WIDE EMANATES FROM THE JOINT HEADER, AND TRANSVERSE CRACKING TO 1/64" WIDE SCATTERED THROUGHOUT; UNDERSIDE OF THE OVERHANGS, SCATTERED HAIRLINE TRANSVERSE CRACKING WITH SOME EFFLORESCENCE



Span 1 Left Bridge Rail: PARTIAL DEPTH VERTICAL HAIRLINE TO OPEN (1/32") CRACKING IN BRIDGE RAILING. FULL HEIGHT VERTICAL HAIRLINE CRACKS WITH LIGHT EFFLORESCENCE IN NEGATIVE MOMENT REGION, 4 TOTAL



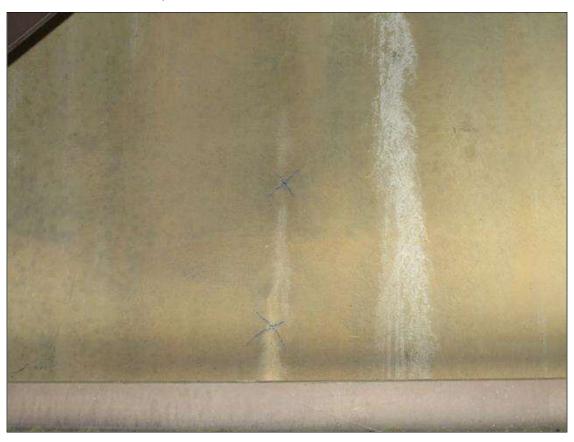
Span 2 Expansion Joint: SEAL ADHESION FAILURE, SCATTERED LEAKING THROUGHOUT END BENT 2 JOINT.



Span 2 Expansion Joint: ADJACENT DECK HEADERS, SCATTERED ALONG THE LENGTH, EDGE CHIPPING [UP TO 1" WIDE X 1" DEEP] ALONG END BENT 2 JOINT.



Span 2 Deck: TOP OF THE DECK AT THE SOUTH END, SCATTERED ACROSS THE WIDTH, LONGITUDINAL CRACKING TO 1/64" WIDE EMANATES FROM THE JOINT HEADER, AND TRANSVERSE CRACKING TO 1/64" WIDE SCATTERED THROUGHOUT; UNDERSIDE OF THE OVERHANGS, SCATTERED HAIRLINE TRANSVERSE CRACKING WITH SOME EFFLORESCENCE



End Bent 1 Abutment: VERTICAL HAIRLINE TO 1/64" WIDE CRACK, FULL HEIGHT IN BAY 3, 9, 10 11 & 12. LONGITUDINAL HAIRLINE CRACK TO 1/64" WIDE IN TOP OF BACKWALL (12 TOTAL)



Span 1 Beam 5 - Near Bearing: (1) OF (4) SPAN 1 BEAM 5 NEAR ANCHOR NUTS LOOSE [REAR]



Span 1 Beam 10 - Near Bearing: SPAN 1 BEAM 10 (1) OF (4) ANCHOR NUTS LOOSE [REAR]



Bent 1 Cap 1: CRACKING ON BOTH FACES OVER COLUMN 1 & 6, HAIRLINE to 1/64" WIDE CRACKS ARE DIAGONAL AND VERTICAL, RUNNING FROM TOP EDGE DOWN TOWARDS BOTTOM EDGE. MINOR HAIRLINE CRACK AT BOTTOM OF CAP BETWEEN COLUMNS 5 & 6



Span 1 Deck: TOP OF THE DECK AT THE SOUTH END, SCATTERED ACROSS THE WIDTH, LONGITUDINAL CRACKING TO 1/64" WIDE EMANATES FROM THE JOINT HEADER, AND TRANSVERSE CRACKING TO 1/64" WIDE SCATTERED THROUGHOUT; UNDERSIDE OF THE OVERHANGS, SCATTERED HAIRLINE TRANSVERSE CRACKING WITH SOME EFFLORESCENCE



Span 1 Beam 3 - Far Bearing: SPAN 1 BEAM 3 FAR BEARING(1) OF (4) CONNECTION NUTS LOOSE [REAR]



Span 1 Beam 9 - Far Bearing: SPAN 1 BEAM 9 FAR BEARING (1) OF (4) CONNECTION NUTS LOOSE [REAR]



Span 1 Beam 13 - Far Bearing: SPAN 1 BEAM 13 FAR BEARING (1) OF (4) CONNECTION NUTS LOOSE [NEAR]



Span 1 Far Bearing: SPAN 1 BEAM 5 FAR BEARING(1) OF (4) ANCHOR NUTS LOOSE [REAR]



End Bent 2 Abutment: 2 DIAGONAL HAIRLINE CRACKS (2' EACH) AT LEFT AND RIGHT SIDE ABUTMENT EXTENSIONS, FULL HEIGHT VERTICAL AND DIAGONAL HAIRLINE CRACKS

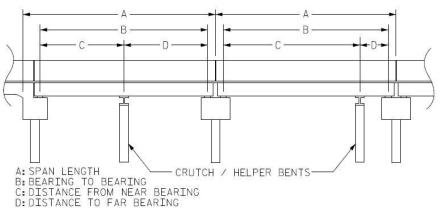


End Bent 2 CAP: (10) SCATTERED VERTICAL HAIRLINE CRACKS UP TO 1' HIGH.

#### **Structure Data Worksheet**

#### **Span Profile**





Span Number	Span Length	Bearing to Bearing	Crutch/ Helper Bent	Distance to Near Bearing	Distance to Far Bearing
1	136.876	134.662			
2	151.246	149.032			

Structure Number: 910775 Span: 1 Route Name: I540E



SPAN 1 OPENING LOOKING EAST

Route Number: 110054	400	Route Na	ıme: l	540E	Reference Feature:	Н			
Minimum Vertical Clearance 17.080 feet				Maximum Minimum Vertical Clearance 17.500 feet					
Total Horizontal Clearar	0 feet	Latera	Lateral Clearances: Left: 26.800 feet Right 43.900 feet						
✓ Base Highway Netwo	LRS Inv	entory R	Route, Sub Route Num	lber 10540					
Milepost: 0.000	Number	of Lanes:	5	<b>ADT</b> : 44500	Year of ADT: 2013	Percentage of Trucks:	16		
✓ National Highway System STRAHNET Highway Designator									
Functional Classification 11 Local Principal Arterial - Interstate Direction of Traffic: 1 1 - way traffic									

Structure Number: 910775 Span: 2 Route Name: I540W

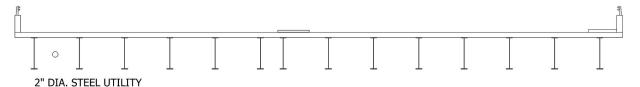


SPAN 2 OPENING LOOKING WEST

Route Number: 110054	400	Route Name: I540W					Reference Feature:	Н
Minimum Vertical Clearance 17.500 feet			Maximum Minimum Vertical Clearance 18.400 feet					
Total Horizontal Clearar	0 feet	Lateral Clearances: Left: 26.700 feet Right 26.000				feet		
<b>✓</b> Base Highway Network LRS Inv			entory F	Route, Sub Route Num	<b>ber</b> 10540	)		
Milepost: 0.000	Number	r of Lanes: 4 ADT: 44500			Year of A	ADT: 2013	Percentage of Trucks:	16
✓ National Highway System STRAHNET Highway Designator								
Functional Classification 11 Local Principal Arterial - Interstate Direction of Traffic: 1 1 - way traffic								

# Bridge Inspection Field Sketch

Dook Width Out to Out	106ft	Datus	Between Rails			
Deck Width/Out to Out	1001	Between	1 Kalls			103.33ft
Clear Roadway 98.33ft		Wearing				
Median Width	edian Width 4ft		Median Height			0.5ft
Curb Height	Left	Right 0.5ft		t		
Sidewalk Width	Left		Right	5ft		
Clear Roadway (Rail to Median)	Left	45.333ft	Right	50ft		
Guardrail Width	Left	1.167ft	Right	1.167ft		
Top of Rail to Deck/Wearing Surfa	Left	4.5ft	Right	4.5ft		
Bridge Rail Type	Left	Type 70	Right	Тур	e 70	



Measurements for Span #	1		
Deck Thickness	11in	Left Overhang	3.375ft
Top of Rail to Bottom of Beam (Avg)	10.953ft	Right Overhang	3.375ft

Beam #	Beam Type	Width	Height	Spacing	From
1	Plate Girder	13.5in	66.43in	3.375ft	Left Edge of Deck
2	Plate Girder	13.5in	66.43in	7.938ft	Beam 1
3	Plate Girder	13.5in	66.43in	7.938ft	Beam 2
4	Plate Girder	13.5in	66.43in	7.938ft	Beam 3
5	Plate Girder	13.5in	66.43in	7.938ft	Beam 4
6	Plate Girder	13.5in	66.43in	7.938ft	Beam 5
7	Plate Girder	13.5in	66.43in	4ft	Beam 6
8	Plate Girder	13.5in	66.43in	7.938ft	Beam 7
9	Plate Girder	13.5in	66.43in	7.938ft	Beam 8
10	Plate Girder	13.5in	66.43in	7.938ft	Beam 9
11	Plate Girder	13.5in	66.43in	7.938ft	Beam 10
12	Plate Girder	13.5in	66.43in	7.938ft	Beam 11
13	Plate Girder	13.5in	66.43in	7.938ft	Beam 12
14	Plate Girder	13.5in	66.43in	7.938ft	Beam 13

WEB THICKNESS: .500" FLANGE THICKESS: 1.25"

Title SUPERSTRUCTURE				Description LOOKING NORTH				
Structure No: 910775	Drawn By:	H.W. HICKS, JR.		Date:	6/6/2022	Filename:	S000954000023.wes	

## Bridge Inspection Field Sketch

SR 2000

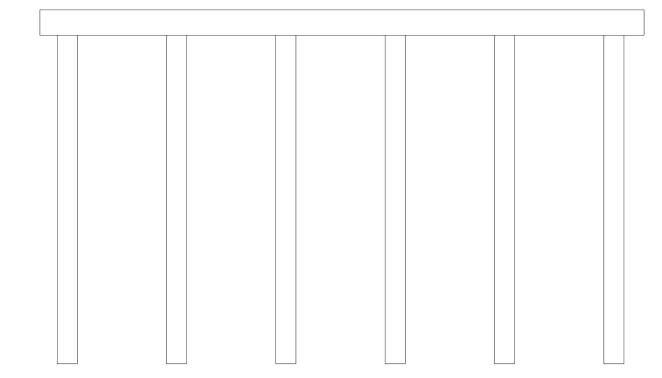
## MEASUREMENTS TAKEN 25' FROM SOUTH END

## Left Lanes

Roadway	39.83ft Wide	3 Paved Lanes	South Bound					
Right Shoulder	9.83ft Wide	9.83ft Paved						
Left Shoulder								
Right Guardrail	9.83ft from road							
Left Guardrail								
Median	4ft Wide	0.5ft High						
Right Lanes								
Roadway	44.67ft Wide	3 Paved Lanes	North Bound					
Left Shoulder								
Right Shoulder	4.5ft Wide	4.5ft Paved						
Left Guardrail								
Right Guardrail	4.5ft from road							

Title APPROACH ROADWAY	Description APPROACH							
Structure No: 910775	Drawn By:	H.W. HICKS, JR.		Date:	6/6/2022	Filename:	S000954000024.wes	

## Bridge Inspection Field Sketch



Caps												
#	Name Type Le		ength Width		Height	Left Beam to End of Cap		Right Beam to End of Cap				
1	1 Cap 1 Reinforced Concrete Pier Cap		10	05ft 48in		i	53in	4.75ft		4.75ft		
Pil	Piles											
#	# Name		Туре		Spacing		From		Height/Diam	Width	Length	
1	Pile 1		Reinforced Concrete Colum	oncrete Column   4.75ft   Left End of Bent			42in		18ft			
2	Pile 2		Reinforced Concrete Colum	n	19ft		Pile 1	8		42in		18ft
3	Pile 3		Reinforced Concrete Colum	n	19ft		Pile 2	<u> </u>		42in		18ft
4	Pile 4		Reinforced Concrete Colum	n	19ft		Pile 3	3		42in		18ft
5	Pile 5		Reinforced Concrete Colum	n	19ft		Pile 4			42in		18ft
6	Pile 6		Reinforced Concrete Colum	nn	19ft		Pile 5	5		42in		18ft

Title SUBSTRUCTURE			Descriptio BENT 1						
Structure No: 910775	Drawn By:	H.W. HICKS, JR.		Date:	6/6/2022	Filename:	S000954000025.wes		



TERMINAL GUARDRAIL END



GUARDRAIL POST SPACING 6.25'



SOUTH APPROACH LOOKING NORTH



SOUTH APPROACH LOOKING SOUTH



GUARDRAIL POST SPACING 1.55' AT BRIDGE



**GUARDRAIL CONNECTION** 



**GUARDRAIL TRANSITION** 



END BENT 1 JOINT



LEFT RAIL SIMILAR RIGHT RAIL



LOOKING EAST FROM TOP



NORTH APPRAOCH LOOKING NORTH



LOOKING WEST FROM TOP



END BENT 2 JOINT



NORTH APPROACH LOOKING SOUTH



SOUTHWEST RAMP



NORTHWEST RAMP



BEAM OVER CAP AT BENT 1



LOOKING EAST



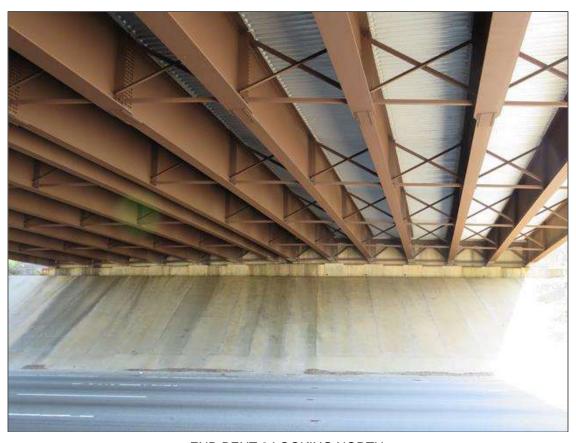
SPAN 1 OPENING LOOKING EAST



LOOKING WEST



SPAN 2 OPENING LOOKING WEST



**END BENT 2 LOOKING NORTH** 



SUPERSTRUCTURE SPAN 2



END BENT 1 LOOKING SOUTH



SUPERSTRUCTURE SPAN 1



TYPICAL SPLICE PLATE



UTILITY BAY 1 1.5" STEEL PIPE



BENT 1 LOOKING SOUTH



TYPICAL INTERMEDIATE BEARING