ATTENTION: CLEARANCES CHECKED

## Structure Safety Report

### Routine Element Inspection

COUNTY: HAYWOOD STRU	JCTURE NUMBER: 43	0249 F	REQUENCY:	24 MONTHS	
FACILITY CARRIED: 140 WB			MILE POST:	33	
LOCATION: 4.8 MI.E.JCT.SR1660					
FEATURE INTERSECTED: SR1613					
LATITUDE: 35° 33' 20.96"	LONGITUE	DE: 82° 49' 51.28"			
REINFORCED CO SUPERSTRUCTURE: REINFORCED CO		I-BEAMS(LATEX MODIFIED  I I-BEAMS(LAYTEX MODIFIE		•	
SUBSTRUCTURE: E.BTS:RC CAPS/H-PI	LES;INT.BTS:RCP&B,	/PILE FTG.			
SPANS: 1 @ 51'-4.5;1 @ 57'5;1 @ 55'-	9.12				
FRACTURE CRITICAL TEMPO	DRARY SHORING	SCOUR CRITICAL		PLAN OF ACTION	
PRESENT CONDITION: Fair		INSPECTION DATE: 04/25/2	2017		
POSTED SV: Not Posted Not	Posted	POSTED TTST: Not Pos	ted	Not Posted	
OTHER SIGNS PRESENT: NONE					
EAST APPROACH LOOKING WEST			NO DIRECT INSPE	WEIGHT LIMIT DELINEATORS NARROW BRIDGE ONE LANE BRIDGE LOW CLEARANCE TION OF W-E ECTION ES PLANS	Number Required  0 0 0 0 0
INSPECTED BY JOSEPH HUNTSINGER	SIGNATURE	Joseph Hwater	ASSISTED BY	DELVIN ADAMS	

## Structure Element Scoring

Structure Number: <u>430249</u> Inspection Date <u>4/25/2017</u>

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	5160	5160	О	О	0
107	0	Steel Open Girder/Beam	Beam	656	0	656	0	0
515	107	Steel Protective Coating	Beam	5472	0	5144	328	0
205	0	Reinforced Concrete Column	Piles and Columns	4	3	1	0	0
215	0	Reinforced Concrete Abutment	Abutments	84	84	0	0	0
220	0	Reinforced Concrete Pile Cap/Footing	Footing	22	22	0	0	0
225	0	Steel Pile	Piles and Columns	12	12	0	0	0
234	0	Reinforced Concrete Pier Cap	Caps	133	93	40	0	0
302	0	Compression Joint Seal	Expansion Joints	120	120	0	0	0
311	0	Movable Bearing	Bearing Device	12	0	12	0	0
515	311	Steel Protective Coating	Bearing Device	36	0	36	0	0
313	0	Fixed Bearing	Bearing Device	12	0	12	0	0
515	313	Steel Protective Coating	Bearing Device	36	0	36	0	0
321	0	Reinforced Concrete Approach Slabs	Approaches	560	395	165	0	0
333	0	Other Bridge Railing	Bridge Rail	332	304	28	0	0
515	333	Steel Protective Coating	Bridge Rail	332	304	28	0	0
510	0	Wearing Surface	Wearing Surfaces	4599	3399	1200	0	0

## Summary of Maintenance Needs

### Maintenance By Defect

Structure Number: 430249 Inspection Date: 04/25/2017

MMS Code	Element Name	Defect Name	Recommended Quantity
3348	Reinforced Concrete Column	Patched Area	1 Each
3353	Reinforced Concrete Approach Slabs	Cracking (RC and Other)	125 Square Feet
3318	Other Bridge Railing	Damage	28 Feet
2816	Wearing Surface	Crack (Wearing Surface)	1200 Square Feet
3342	Steel Protective Coating	Effectiveness (Steel Protective Coatings)	5572 Square Feet

### **Element Structure Maintenance Quantities**

Structure Number: 430249 Inspection Date 04/25/2017

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	84	0	0	0	84
Approaches	3353	Maintenance of Concrete Bridge Approach Slabs	125	560	0	0	165	395
Beam	3314	Maintenance Steel Superstructure Components	0	656	0	0	656	0
Beam	3342	Clean and Paint Steel	5472	5472	0	328	5144	0
Bearing Device	3334	Bridge Bearing	0	24	0	0	24	0
Bearing Device	3342	Clean and Paint Steel	72	72	0	0	72	0
Bridge Rail	3318	Maintenance of Concrete Bridge Rail	28	332	0	0	28	304
Bridge Rail	3342	Clean and Paint Steel	28	332	0	0	28	304
Caps	3348	Maintenance of Concrete Substructure	0	133	0	0	40	93
Deck	3326	Maintenance of Concrete Deck	0	5160	0	0	0	5160
Expansion Joints	3310	Maintenance of Standard Bridge Expansion Joints	0	120	0	0	0	120
Footing	3348	Maintenance of Concrete Substructure	0	22	0	0	0	22
Piles and Columns	3348	Maintenance of Concrete Substructure	1	4	0	0	1	3
Piles and Columns	3354	Maintenance of Steel Substructure Components	0	12	0	0	0	12
Wearing Surfaces	2816	Asphalt Surface Repair	1200	4599	0	0	1200	3399
		1	+	t	1	1	1	1

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

Structure Number: 430249 Inspection Date: 04/25/2017

Otractare	14d11b01: <u>+002+0</u>					1110	pootion D	atc. <u>0-7/20/2011</u>
Spa	an 1	Beam 1						
Pla	te Girder							
	ment mber	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
107	Steel Op	en Girder/Beam	51	0	51	0	0 F	eet
515	Steel Pro	otective Coating	476	0	425	51	0 S	Square Feet
Elemer Numbe	Dofoot Typo	Defect Description	n		CS	CS Qty	Maint Qty	
107	Corrosion	TOP FACE OF THE EXTERIOR HALF O FLANGE HAS CORROSION WITH UP T PITTING IN RANDOM AREAS.		M	2	51		Feet
515	Effectiveness (Steel Protective Coatings)	PROTECTIVE SYSTEM DETERIORATE HALF OF THE BOTTOM FLANGE, RESI CORROSION.		ΓERIOR	3	51	51	Square Feet
515	Effectiveness (Steel Protective Coatings)	PROTECTIVE SYSTEM IS BEGINNING ALLOWING FRECKLED RUST TO FORI FLANGES.			2	425	425	Square Feet
	General Comments							

Spa	an 1	Beam 2					
Plat	te Girder						
Nur 107	·	Element Name pen Girder/Beam	Total Qty 51	CS1 Qty 0	CS2 Qty 51	CS3 Qty 0	CS4 Qty 0 Feet
515	Steel Pr	otective Coating	476	0	476	0	0 Square Feet
Elemen Numbe	Dofoct Typo	Defect Descr	iption		CS	CS Qty	Maint Qty
107	Corrosion	PROTECTIVE SYSTEM IS BEGINN ALLOWING FRECKLED RUST TO FLANGES.		,	2	51	Feet
515	Effectiveness (Steel Protective Coatings)	PROTECTIVE SYSTEM IS BEGINN ALLOWING FRECKLED RUST TO FLANGES.		,	2	476	476 Square Feet
	General Comments						

Total Qty 51 476	CS1 Qty 0	CS2 Qty 51	CS3 Qty 0	CS4 Qty 0 F	Feet
Qty 51	Qty 0	Qty	Qty	Qty	Feet
Qty 51	Qty 0	Qty	Qty	Qty	Feet
	•	51	0	0 H	Feet
476	0				
	0	476	0	0 \$	Square Feet
otion		CS	CS Qty	Maint Qty	
	,	2	51		Feet
	,	2	476	476	Square Feet
	NG TO DETERIO DRM ON THE WE	tion NG TO DETERIORATE, DRM ON THE WEB AND NG TO DETERIORATE, DRM ON THE WEB AND	NG TO DETERIORATE, 2 DRM ON THE WEB AND NG TO DETERIORATE, 2	NG TO DETERIORATE, 2 51 DRM ON THE WEB AND  NG TO DETERIORATE, 2 476	tion CS CS Qty <sub>Qty</sub> NG TO DETERIORATE, 2 51 DRM ON THE WEB AND NG TO DETERIORATE, 2 476 476

Spa	n 1		Beam 4						
Plat	te Girder								
	ment mber	Element Name		Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
107	St	eel Open Girder/Beam		51	0	51	0	0 F	eet
515	St	eel Protective Coating		476	0	425	51	0 \$	Square Feet
Elemer Numbe	Dofoct Tyr	oe	Defect Description			CS	CS Qty	Maint Qty	
107	Corrosion		EXTERIOR HALF OF T ROSION WITH UP TO 1 DM AREAS.		DM	2	51		Feet
515	Effectiveness (S Protective Coati		TEM DETERIORATED C TOM FLANGE, RESULT		TERIOR	3	51	51	Square Feet
515	Effectiveness (S Protective Coati		TEM IS BEGINNING TO LLED RUST TO FORM C			2	425	425	Square Feet
	General Comme	nts							

Spa	an 1	Right Bridg	je Rail					
Cor	ncrete and Metal R	ailing						
Nur	ment mber	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
333	Other Br	idge Railing	52	38	14	0	0 Fe	eet
515	Steel Pro	otective Coating	52	38	14	0	0 S	quare Feet
Elemer Numbe	Dofoct Typo	Defect Desc	ription		CS	CS Qty	Maint Qty	
333	Damage	14' LONG SCRAPE DAMAGE AT I SPAN.	THE NEAR END OF	THE	2	14	14	Feet
515	Effectiveness (Steel Protective Coatings)	PROTECTIVE SYSTEM IS DAMAC DAMAGE.	GED FROM THE SC	RAPE	2	14	14	Square Feet

Spa	an 1	Near Beari	ing					
Fix	ed Bearing							
	ment mber	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
313	Fixed	d Bearing	1	0	1	0	0	Each
515	Stee	I Protective Coating	3	0	3	0	0	Square Feet
Elemer Numbe	Dofoot Typo	Defect Des	cription		CS	CS Qty	Maint Qty	
313	Corrosion	PROTECTIVE SYSTEM IS BEGIN ALLOWING FRECKLED RUST	NNING TO DETERIOR	RATE,	2	1		Each
515	Effectiveness (Stee Protective Coating		NNING TO DETERIOR	RATE,	2	3	3	S Square Feet
	General Comments	3						

Spa	an 1		Far Bea	ring					
Mov	vable Beari	ng							
	ment mber		Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
311		Movable	Bearing	1	0	1	0	0	Each
515		Steel Pro	otective Coating	3	0	3	0	0	Square Feet
Elemen Numbe	Dofoot	Туре	Defect D	Description		CS	CS Qty	Maint Qty	
311	Corrosion		PROTECTIVE SYSTEM IS BE ALLOWING FRECKLED RUST		IORATE,	2	1		Each
515	Effectiveness Protective Co		PROTECTIVE SYSTEM IS BE ALLOWING FRECKLED RUST		IORATE,	2	3	:	3 Square Feet
	General Com	ments							

Spa	an 1	Near Beari	ng					
Fixe	ed Bearing							
	ment mber	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
313	Fixed B	earing	1	0	1	0	0	Each
515	Steel Pr	otective Coating	3	0	3	0	0	Square Feet
Elemen Numbe	Dofoct Typo	Defect Desc	cription		CS	CS Qty	Maint Qty	
313	Corrosion	PROTECTIVE SYSTEM IS BEGIN ALLOWING FRECKLED RUST	NING TO DETERIO	RATE,	2	1		Each
515	Effectiveness (Steel Protective Coatings)	PROTECTIVE SYSTEM IS BEGIN ALLOWING FRECKLED RUST	NING TO DETERIO	RATE,	2	3	3	3 Square Feet
	General Comments							

Spar	n 1	Far Bearin	g					
Mov	able Bearing							
Elen Num		Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
311	Movable	Bearing	1	0	1	0	0 Each	
515	Steel Pr	otective Coating	3	0	3	0	0 Square Feet	
Element Number	Dofoct Typo	Defect Des	cription		CS	CS Qty	Maint Qty	
311	Corrosion	PROTECTIVE SYSTEM IS BEGIN ALLOWING FRECKLED RUST	INING TO DETERIOR	RATE,	2	1	Each	
515 -	Effectiveness (Steel Protective Coatings)	PROTECTIVE SYSTEM IS BEGIN ALLOWING FRECKLED RUST	INING TO DETERIOR	RATE,	2	3	3 Square Fe	∍et -
(	General Comments							

Span 1		Near Beari	ing					
Fixed Bea	aring							
Element Number		Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
313	Fixed E	searing	1	0	1	0	0	Each
515	Steel P	rotective Coating	3	0	3	0	0	Square Feet
lement lumber	Defect Type	Defect Desc	cription		CS	CS Qty	Maint Qty	
313 Corro	sion	PROTECTIVE SYSTEM IS BEGIN	INING TO DETERIO	RATE,	2	1		Each

3 Square Feet

PROTECTIVE SYSTEM IS BEGINNING TO DETERIORATE,

Protective Coatings) ALLOWING FRECKLED RUST

General Comments

Effectiveness (Steel

Span	n 1	Far Bearir	ng					
Mova	able Bearing							
Eleme Numb		Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
311	Movable	Bearing	1	0	1	0	0 E	ach
515	Steel Pro	otective Coating	3	0	3	0	0 8	Square Feet
Element Number	Defect Type	Defect Des	cription		CS	CS Qty	Maint Qty	
311 (	11 Corrosion PROTECTIVE SYS ALLOWING FRECH		NNING TO DETERIOR	RATE,	2	1		Each
	Effectiveness (Steel Protective Coatings)	PROTECTIVE SYSTEM IS BEGII ALLOWING FRECKLED RUST	NNING TO DETERIOR	RATE,	2	3	3	Square Feet
G	Seneral Comments							

Spai	n 1	Near Bear	ing					
Fixe	d Bearing							
Elen Num	nber	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
313	Fixed B	earing	1	0	1	0	0	Each
515	Steel P	rotective Coating	3	0	3	0	0	Square Feet
Element Number	Dofoct Typo	Defect Des	cription		CS	CS Qty	Maint Qty	
313	13 Corrosion PROTECTIVE SYST ALLOWING FRECK		NNING TO DETERIO	RATE,	2	1		Each
515	Effectiveness (Steel Protective Coatings)				2	3	;	3 Square Feet
(	General Comments							

Spa	an 1	Far Bearin	g					
Mov	vable Bearing							
	ment mber Movable	Element Name	Total Qty 1	CS1 Qty 0	CS2 Qty 1	CS3 Qty 0	CS4 Qty 0	Each
515		otective Coating	3	0	3	0		Square Feet
Elemer Numbe	Dofoot Typo	Defect Desc	cription		CS	CS Qty	Maint Qty	
311	Corrosion	PROTECTIVE SYSTEM IS BEGIN ALLOWING FRECKLED RUST	NING TO DETERIOR	RATE,	2	1		Each
515	Effectiveness (Steel Protective Coatings)	PROTECTIVE SYSTEM IS BEGIN ALLOWING FRECKLED RUST	NING TO DETERIOF	RATE,	2	3	3	3 Square Feet
	General Comments							

Inspection Date: <u>04/25/2017</u> Structure Number: 430249

Spar	n 1	Wearing St	urface					
Con	crete Wearing Su	rface						
Elem Num 510	ber	Element Name Surface	Total Qty 1.439	CS1 Qty 1.039	CS2 Qty 400	CS3 Qty 0	CS4 Qty 0 Sc	quare Feet
Element	t Defect Type	Defect Desc		1,000	CS	CS Qty	Maint	
Number 510	umber		•	JGHOUT	2	400	Qty 400	Square Feet
(	General Comments							

Spa	an 2	Beam 1						
Plat	te Girder							
	ment mber Ste	Element Name el Open Girder/Beam	Total Qty 57	CS1 Qty 0	CS2 Qty 57	CS3 Qty 0	CS4 Qty 0 F	eet
515	Ste	el Protective Coating	476	0	419	57	0 S	Square Feet
Elemer Numbe	Dofoct Type	e Defect Descr	ription		CS	CS Qty	Maint Qty	
107	Corrosion	TOP FACE OF THE EXTERIOR HA FLANGE HAS CORROSION WITH PITTING IN RANDOM AREAS.		M	2	57		Feet
515	Effectiveness (Ste Protective Coating			TERIOR	3	57	57	Square Feet
515	Effectiveness (Ste Protective Coating			,	2	419	419	Square Feet
	General Commen	ts						

Spa	ın 2	Beam 2						
Plat	e Girder							
		Element Name pen Girder/Beam rotective Coating	Total Qty 57 476	CS1 Qty 0	CS2 Qty 57 476	CS3 Qty 0	-	Feet Square Feet
Elemen Numbe	Dofoct Typo	Defect Des	cription		CS	CS Qty	Maint Qty	
107	Corrosion	PROTECTIVE SYSTEM IS BEGING ALLOWING FRECKLED RUST TO FLANGES.		,	2	57		Feet
515	Effectiveness (Steel Protective Coatings)	PROTECTIVE SYSTEM IS BEGING ALLOWING FRECKLED RUST TO FLANGES.			2	476	476	Square Feet
	General Comments							

Spa	an 2	Beam 3						
Plat	te Girder							
	ment mber Steel O	Element Name pen Girder/Beam	Total Qty 57	CS1 Qty 0	CS2 Qty 57	CS3 Qty 0	CS4 Qty 0 F	eet
515	Steel Pi	rotective Coating	476	0	476	0	0 S	Square Feet
Elemer Numbe	Dofoct Typo	Defect Des	cription		CS	CS Qty	Maint Qty	
107	Corrosion	PROTECTIVE SYSTEM IS BEGIN ALLOWING FRECKLED RUST TO FLANGES.		,	2	57		Feet
515	Effectiveness (Steel Protective Coatings)	PROTECTIVE SYSTEM IS BEGIN ALLOWING FRECKLED RUST TO FLANGES.			2	476	476	Square Feet
	General Comments							

Span 2	2	Beam 4						
Plate 0	Girder							
Elemer Numbe	er	Element Name en Girder/Beam	Total Qty 57	CS1 Qty 0	CS2 Qty 57	CS3 Qty 0	CS4 Qty 0 F	eet
515		tective Coating	476	0	419	57	-	quare Feet
Element Number	Defect Type	Defect Descri	ption		CS	CS Qty	Maint Qty	
107 Co	orrosion	TOP FACE OF THE EXTERIOR HAL FLANGE HAS CORROSION WITH L PITTING IN RANDOM AREAS.		M	2	57		Feet
	ffectiveness (Steel rotective Coatings)	PROTECTIVE SYSTEM DETERIOR. HALF OF THE BOTTOM FLANGE, F CORROSION.		TERIOR	3	57	57	Square Feet
	ffectiveness (Steel rotective Coatings)	· · · · · · · · · · · · · · · · · · ·			2	419	419	Square Feet
Gei	neral Comments							

Spa	n 2	Rigl	ht Bridge Rail					
Cor	ncrete and Metal R	ailing						
	ment mber Other Br	Element Name idge Railing	Tota Qty 58	Qty	CS2 Qty 14	CS3 Qty 0	CS4 Qty 0 F	eet
515	Steel Pro	otective Coating	58	3 44	14	0	0 S	quare Feet
Elemer Numbe	Dofoot Typo	De	fect Description		CS	CS Qty	Maint Qty	
333	Damage	14' LONG LIGHT SCRAP	PE DAMAGE.		2	14	14	Feet
515	Effectiveness (Steel Protective Coatings)	PROTECTIVE SYSTEM I DAMAGE.	DAMAGED FROM SCRAI	PE	2	14	14	Square Feet
	General Comments							

Spa	Span 2		ring					
Fixe	ed Bearing							
	ment mber	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
313	Fix	ked Bearing	1	0	1	0	0 Each	
515	Sto	eel Protective Coating	3	0	3	0	0 Square Feet	
Elemen Numbe	Dofoct Tur	pe Defect De	escription		CS	CS Qty	Maint Qty	
313	Corrosion	PROTECTIVE SYSTEM IS BEG ALLOWING FRECKLED RUST	INNING TO DETERIO	RATE,	2	1	Each	
515	5 Effectiveness (Steel PROTECTIVE SYSTEM IS Protective Coatings) ALLOWING FRECKLED RI		INNING TO DETERIO	RATE,	2	3	3 Square Fee	et
	General Comme	nts						

Spa	an 2	Far Bearing	g							
Movable Bearing										
	ment mber	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty			
311	Movable	e Bearing	1	0	1	0	0	Each		
515	Steel Pr	otective Coating	3	0	3	0	0	Square Feet		
Elemen Numbe	Dofoct Typo	Defect Desc	ription		CS	CS Qty	Maint Qty			
311	Corrosion	PROTECTIVE SYSTEM IS BEGIN ALLOWING FRECKLED RUST	NING TO DETERIOR	RATE,	2	1		Each		
515	Effectiveness (Steel Protective Coatings)	PROTECTIVE SYSTEM IS BEGIN ALLOWING FRECKLED RUST	NING TO DETERIOR	RATE,	2	3	3	3 Square Feet		
	General Comments									

Spa	an 2		Near Bearing						
Fixe	ed Bearing								
	ment mber	Element Nan	ne	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
313	F	ixed Bearing		1	0	1	0	0 1	Each
515	S	teel Protective Coating		3	0	3	0	0 \$	Square Feet
Elemer Numbe	Dofoct Tu	pe	Defect Description			CS	CS Qty	Maint Qty	
313	Corrosion	PROTECTIVE S ALLOWING FRE	YSTEM IS BEGINNING TO CKLED RUST	DETERIO	RATE,	2	1		Each
515	Effectiveness (\$ Protective Coat		YSTEM IS BEGINNING TO CKLED RUST	DETERIO	RATE,	2	3	3	S Square Feet
	General Comme	ents							

Span 2		Far Bearin	g				
Movabl	e Bearing						
Element Number		Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
311	Movabl	e Bearing	1	0	1	0	0 Each
515	Steel P	rotective Coating	3	0	3	0	0 Square Feet
lement lumber	Defect Type	Defect Des	cription		CS	CS Qty	Maint Qty
311 Cor	rosion	PROTECTIVE SYSTEM IS BEGIN	NNING TO DETERIO	RATE,	2	1	Each

3 Square Feet

PROTECTIVE SYSTEM IS BEGINNING TO DETERIORATE,

Protective Coatings) ALLOWING FRECKLED RUST

General Comments

Effectiveness (Steel

Span 2 Near Bearing Fixed Bearing Element Total CS1 CS2 CS3 CS4 Element Name Number Qty Qty Qty Qty Qty 313 **Fixed Bearing** 0 0 0 Each 515 Steel Protective Coating 3 0 3 0 0 Square Feet Element Maint Defect Type **Defect Description** CS CS Qty Number Qty 313 Corrosion PROTECTIVE SYSTEM IS BEGINNING TO DETERIORATE, 2 Each ALLOWING FRECKLED RUST PROTECTIVE SYSTEM IS BEGINNING TO DETERIORATE, Effectiveness (Steel 3 Square Feet 515 2 3 Protective Coatings) ALLOWING FRECKLED RUST General Comments

Spa	n 2	Far Bearing	9							
Movable Bearing										
	ment nber Movable	Element Name	Total Qty 1	CS1 Qty 0	CS2 Qty 1	CS3 Qty 0	CS4 Qty 0 E	Each		
515	Steel Pr	otective Coating	3	0	3	0	0 8	Square Feet		
Elemen Numbe	Dofoot Typo	Defect Desc	ription		CS	CS Qty	Maint Qty			
311	311 Corrosion PROTECTIVE SYS ALLOWING FRECH		STEM IS BEGINNING TO DETERIORATE, KLED RUST		2	1		Each		
515	515 Effectiveness (Steel PROTECTIVE SYS Protective Coatings) ALLOWING FRECI		NING TO DETERIOF	RATE,	2	3	3	Square Feet		
-	General Comments									

Spa	an 2			Near Bearing						
Fixe	ed Bearing									
	ment mber	Fixed Be	Element Name		Total Qty 1	CS1 Qty 0	CS2 Qty 1	CS3 Qty 0	CS4 Qty 0	Each
515			otective Coating		3	0	3	0	0	Square Feet
Elemer Numbe	Dofoot	Туре		Defect Description			CS	CS Qty	Maint Qty	
313	Corrosion		PROTECTIVE SYSTALLOWING FRECK	TEM IS BEGINNING TO LED RUST	) DETERIO	RATE,	2	1		Each
515	515 Effectiveness (Steel PROTECTIVE SYS Protective Coatings) ALLOWING FRECI		TEM IS BEGINNING TO LED RUST	) DETERIO	RATE,	2	3	3	3 Square Feet	
	General Com	ments								

Span	n 2	Far Bearin	g					
Mova	able Bearing							
Elem Num		Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
311	Movable	Bearing	1	0	1	0	0	Each
515	Steel Pro	otective Coating	3	0	3	0	0	Square Feet
Element Number	Dofoct Typo	Defect Desc	cription		CS	CS Qty	Maint Qty	
311	Corrosion	PROTECTIVE SYSTEM IS BEGIN ALLOWING FRECKLED RUST	NING TO DETERIOR	RATE,	2	1		Each
	515 Effectiveness (Steel PROTECTIVE SYS Protective Coatings) ALLOWING FREC		NING TO DETERIOR	RATE,	2	3	3	3 Square Feet
G	General Comments							

Spar	n 2	Wearing S	Surface					
Con	crete Wearing Su	rface						
Elem Num 510	ber	Element Name Surface	Total Qty 1,598	CS1 Qty 1,198	CS2 Qty 400	CS3 Qty 0	CS4 Qty 0 S	quare Feet
 Element Number	Dofoct Typo	Defect Des	cription		CS	CS Qty	Maint Qty	
510	Crack (Wearing Surface)	MULTIPLE HAIRLINE CRACKS S THE WEARING SURFACE.	SCATTERED THROU	JGHOUT	2	400	400	Square Feet
(	General Comments							

Spa	ın 3	Beam 1						
Plat	e Girder							
Nur	ment mber	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
107	Steel Op	oen Girder/Beam	56	0	56	0	0 F	eet
515	Steel Pr	otective Coating	416	0	360	56	0 5	Square Feet
Elemen Numbe	Dofoct Typo	Defect Descrip	tion		CS	CS Qty	Maint Qty	
107	Corrosion	TOP FACE OF THE EXTERIOR HALF FLANGE HAS CORROSION WITH UF PITTING IN RANDOM AREAS.			2	56		Feet
515	Effectiveness (Steel Protective Coatings)	PROTECTIVE SYSTEM DETERIORA HALF OF THE BOTTOM FLANGE, RECORROSION.		TERIOR	3	56	56	Square Feet
515	Effectiveness (Steel Protective Coatings)	PROTECTIVE SYSTEM IS BEGINNIN ALLOWING FRECKLED RUST TO FO FLANGES.		,	2	360	360	Square Feet
	General Comments							

Span 3		Beam 2						
Plate Gird	ler							
Element Number	Elemen	: Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
107	Steel Open Girder/Be	am	56	0	56	0	0	Feet
515	Steel Protective Coati	ng	416	0	416	0	0	Square Feet
lement lumber	Defect Type	Defect Descript	ion		CS	CS Qty	Maint Qty	
107 Corros	sion PROTECTI	VE SYSTEM IS BEGINNING	G TO DETERIO	RATE,	2	56	•	Feet

2

416

416 Square Feet

ALLOWING FRECKLED RUST TO FORM ON THE WEB AND

515

Effectiveness (Steel Protective Coatings) PROTECTIVE SYSTEM IS BEGINNING TO DETERIORATE, ALLOWING FRECKLED RUST TO FORM ON THE WEB AND

FLANGES.

Spar	n 3	Beam 3						
Plate	e Girder							
Elem Num 107	nber	Element Name en Girder/Beam	Total Qty 56	CS1 Qty 0	CS2 Qty 56	CS3 Qty 0	CS4 Qty 0 F	eet
515	Steel Pro	otective Coating	416	0	416	0	0 S	Square Feet
lement lumber	Defect Type	Defect Des	scription		CS	CS Qty	Maint Qty	
107	Corrosion	PROTECTIVE SYSTEM IS BEGI ALLOWING FRECKLED RUST T FLANGES.		,	2	56	·	Feet
	Effectiveness (Steel Protective Coatings)	PROTECTIVE SYSTEM IS BEGI ALLOWING FRECKLED RUST T FLANGES.		,	2	416	416	Square Feet
-	General Comments							

Spa	an 3	Beam 4						
Pla	te Girder							
	ment mber Steel O	Element Name pen Girder/Beam	Total Qty 56	CS1 Qty 0	CS2 Qty 56	CS3 Qty 0	CS4 Qty 0 F	- eet
515	Steel P	rotective Coating	416	0	360	56	0 8	Square Feet
Elemer Numbe	Dofoct Typo	Defect Descript	ion		CS	CS Qty	Maint Qty	
107	Corrosion	TOP FACE OF THE EXTERIOR HALF FLANGE HAS CORROSION WITH UP PITTING IN RANDOM AREAS.		M	2	56		Feet
515	Effectiveness (Steel Protective Coatings)	PROTECTIVE SYSTEM DETERIORATED HALF OF THE BOTTOM FLANGE, RECORROSION.		TERIOR	3	56	56	Square Feet
515	Effectiveness (Steel Protective Coatings)	PROTECTIVE SYSTEM IS BEGINNIN ALLOWING FRECKLED RUST TO FO FLANGES.		,	2	360	360	Square Feet
General Comments								

Spa	an 3	Near Bear	ing								
Mov	Movable Bearing										
	ment mber Movab	Element Name le Bearing	Total Qty	CS1 Qty 0	CS2 Qty	CS3 Qty 0	CS4 Qty 0 F	≣ach			
515		rotective Coating	3	0	3	0	-	Square Feet			
Elemer Numbe	Dofoct Typo	Defect Des	scription		CS	CS Qty	Maint Qty				
311	Corrosion	PROTECTIVE SYSTEM IS BEGI ALLOWING FRECKLED RUST	NNING TO DETERIOR	RATE,	2	1		Each			
515	515 Effectiveness (Steel PROTECTIVE SYS Protective Coatings) ALLOWING FREC		NNING TO DETERIOR	RATE,	2	3	3	Square Feet			
	General Comments							<u>_</u>			

Spa	an 3			Far Bearing						
Fixe	ed Bearing									
	ment mber		Element Name		Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
313		Fixed Be	aring		1	0	1	0	0 1	Each
515		Steel Pro	otective Coating		3	0	3	0	0 :	Square Feet
Elemen Numbe	Dofoct	Туре		Defect Description			CS	CS Qty	Maint Qty	
313	Corrosion		PROTECTIVE SYST ALLOWING FRECKL	EM IS BEGINNING TO LED RUST	) DETERIC	PRATE,	2	1		Each
515			PROTECTIVE SYST ALLOWING FRECKL	EM IS BEGINNING TO LED RUST	DETERIO	PRATE,	2	3	3	Square Feet
	General Com									

Spa	Span 3		ing				
Mov	able Bearing						
	nent nber	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
311	Movable	e Bearing	1	0	1	0	0 Each
515	Steel Pr	otective Coating	3	0	3	0	0 Square Feet
Elemen Numbe	Dofoot Typo	Defect Des	cription		CS	CS Qty	Maint Qty
311	Corrosion	PROTECTIVE SYSTEM IS BEGIN ALLOWING FRECKLED RUST	NNING TO DETERIO	RATE,	2	1	Each
		PROTECTIVE SYSTEM IS BEGIN ALLOWING FRECKLED RUST	NNING TO DETERIO	RATE,	2	3	3 Square Feet

Spa	an 3	Far Bearin	g					
Fixe	ed Bearing							
	ment mber	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
313	Fixed B	earing	1	0	1	0	0 [	Each
515	Steel P	rotective Coating	3	0	3	0	0 \$	Square Feet
Elemen Numbe	Dofoct Typo	Defect Des	cription		CS	CS Qty	Maint Qty	
313	Corrosion	PROTECTIVE SYSTEM IS BEGIN ALLOWING FRECKLED RUST	NING TO DETERIOR	RATE,	2	1		Each
515	Effectiveness (Steel Protective Coatings)	PROTECTIVE SYSTEM IS BEGIN ALLOWING FRECKLED RUST	NING TO DETERIOR	RATE,	2	3	3	Square Feet
	General Comments							

Span 3		Near Beari	ng					
Movable B	earing							
Element Number	Eleme	ent Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
311	Movable Bearing		1	0	1	0	0	Each
515	Steel Protective Co	ating	3	0	3	0	0	Square Feet
lement lumber De	efect Type	Defect Des	cription		CS	CS Qty	Maint Qty	
311 Corrosi	on PROTEC	TIVE SYSTEM IS BEGIN	INING TO DETERIOR	RATE,	2	1	•	Each

Inspection Date: <u>04/25/2017</u> Structure Number: 430249

ALLOWING FRECKLED RUST

Effectiveness (Steel Protective Coatings) PROTECTIVE SYSTEM IS BEGINNING TO DETERIORATE, 2 3 Square Feet 515

ALLOWING FRECKLED RUST

Spa	an 3	Far Be	aring					
Fixe	ed Bearing							
	ment mber	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
313	Fi	xed Bearing	1	0	1	0	0 E	ach
515	St	eel Protective Coating	3	0	3	0	0 5	Square Feet
Elemer Numbe	Dofoct Tur	pe Defect	Description		CS	CS Qty	Maint Qty	
313	313 Corrosion PROTECTIVE SYS ALLOWING FRECH		STEM IS BEGINNING TO DETERIORATE, KLED RUST		2	1		Each
515	515 Effectiveness (Steel PROTECTIVE SYS Protective Coatings) ALLOWING FRECK		EGINNING TO DETERIO	DRATE,	2	3	3	Square Feet
General Comments								

Spa	an 3	Near Beari	ng					
Mov	vable Bearing							
	ment mber Movabl	Element Name e Bearing	Total Qty 1	CS1 Qty 0	CS2 Qty 1	CS3 Qty 0	CS4 Qty 0	Each
515	Steel P	rotective Coating	3	0	3	0	0	Square Feet
Elemen Numbe	Dofoct Typo	Defect Desc	cription		CS	CS Qty	Maint Qty	
311	Corrosion	PROTECTIVE SYSTEM IS BEGIN ALLOWING FRECKLED RUST	STEM IS BEGINNING TO DETERIORATE, KLED RUST		2	1		Each
515	515 Effectiveness (Steel PROTECTIVE SYS Protective Coatings) ALLOWING FRECH		INING TO DETERIOR	RATE,	2	3		Square Feet
General Comments								

Spa	Span 3		Far B	Bearing						
Fixe	ed Bearing									
	ment mber		Element Name		Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
313		Fixed Be	earing		1	0	1	0	0	Each
515		Steel Pr	otective Coating		3	0	3	0	0	Square Feet
Elemer Numbe	Dofoct	Туре	Defe	ct Description			CS	CS Qty	Maint Qty	
313	Corrosion		PROTECTIVE SYSTEM IS ALLOWING FRECKLED R		ETERIO	RATE,	2	1		Each
515	\ \ \		PROTECTIVE SYSTEM IS ALLOWING FRECKLED R		ETERIO	RATE,	2	3	3	3 Square Feet
General Comments										

Wearing Su	ırface				
urface					
Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
g Surface	1,562	1,162	400	0	0 Square Feet
Defect Desc	ription		CS	CS Qty	Maint Qty
MULTIPLE HAIRLINE CRACKS SO THE WEARING SURFACE.	CATTERED THRO	UGHOUT	2	400	400 Square Fee
	Element Name  g Surface  Defect Desc  MULTIPLE HAIRLINE CRACKS SO	Element Name Qty  ng Surface 1,562  Defect Description  MULTIPLE HAIRLINE CRACKS SCATTERED THRO	Element Name Qty Qty og Surface 1,562 1,162  Defect Description  MULTIPLE HAIRLINE CRACKS SCATTERED THROUGHOUT	Total	Total

General Comments

End Be	nt 1	Steel	Pile 1					
Steel Pi	le							
Element Number 225		Element Name	Total Qty 1	CS1 Qty 1	CS2 Qty 0	CS3 Qty 0	CS4 Qty 0 Each	
Element Number	Defect Type	Defec	t Description		CS	CS Qty	Maint Qty	

General Comments

END BENT FOUNDATION PILES ARE NOT VISIBLE.

Bent 1 Reinforced Concrete Pier Cap 1							
Reinforce	ed Concrete	Pier Cap					
Element Number 234	Reinfor	Element Name ced Concrete Pier Cap	Total Qty 30	CS1 Qty 16	CS2 Qty 14	CS3 Qty 0	CS4 Qty 0 Feet
Number	Defect Type	Defect Des	•		CS 2	CS Qty	Maint Qty Feet

General Comments

Ben	nt 1	Reinforce	d Concrete Colur	nn 2				
Rei	nforced Concrete	Column						
	ment mber	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
205	Reinfor	ced Concrete Column	1	0	1	0	0 Each	
Elemen Numbe	Dofoct Typo	Defect Des	scription		CS	CS Qty	Maint Qty	_
205 Patched Area SOUND PA		SOUND PATCHED AREAS AT T COLUMN	HE CORNERS OF TH	E	2	1	1 Each	

Bent 2		Reinforced Concr	ete Pier	Cap 1				
Reinfor	ced Concrete Pier Cap							
Element Number			Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
234	Reinforced Concrete Pier Cap	)	30	18	12	0	0 Feet	
Element Number	Defect Type	Defect Description			CS	CS Qty	Maint Qty	

234 Patched Area MULTIPLE SOUND PATCHED AREAS 2 12 Feet

**General Comments** 

End Be	nt 2	Reinforced	Concrete Pier	Cap 1				
Reinfor	ced Concrete	Pier Cap						
Element Number		Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
234	Reinford	ced Concrete Pier Cap	37	23	14	0	0 Feet	
Element Number	Defect Type	Defect Desc	ription		CS	CS Qty	Maint Qty	
234 Pat	ched Area	MULTIPLE SOUND PATCHES.			2	14	Feet	

General Comments

End Be	ent 2	Steel Pile 1						
Steel P	ile							
Element Number 225		Element Name	Total Qty 1	CS1 Qty 1	CS2 Qty 0	CS3 Qty 0	CS4 Qty 0 Each	
Element Number	Defect Type	Defect Desc	ription		CS C	S Qty	Maint Qty	

General Comments

END BENT FOUNDATION PILES ARE NOT VISIBLE.

Appr	oach 1	Reinforced (	Concrete Appr	roach S	lab 1			
Reinf	forced Concrete	Approach Slab						
Elem	ent		Total	CS1	CS2	CS3	CS4	
Numb	ber	Element Name	Qty	Qty	Qty	Qty	Qty	
321 Reinforced Concrete Approac		ced Concrete Approach Slabs	280	210	70	0	0 S	quare Feet
Element Number	Defect Type	Defect Descri	otion		CS	CS Qty	Maint Qty	
	Cracking (RC and MULTIPLE HAIRLINE CRACKS THROUGHOUT THE SLAB. Other)		SLAB.	2	50	50	Square Feet	
321 I	Patched Area	SOUND PATCHES ALONG THE ED	GE OF THE SLAE	3	2	20		Square Feet
G	General Comments							

Appr	oach 2	Reinforced C						
Reinf	forced Concrete	Approach Slab						
Elem Numb		Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
321 Reinforced Concrete Approach		rced Concrete Approach Slabs	280	185	95	0	0	Square Feet
Element Number	Defect Type	Defect Descrip	otion		CS	CS Qty	Maint Qty	
	Cracking (RC and Other)	DIAGONAL AND LONGITUDINAL CF	ONAL AND LONGITUDINAL CRACKS THROUGHOUT				75	Square Feet
321 I	Patched Area	SOUND PATHCES ALONG THE ED	ALONG THE EDGE OF THE SLAB.					Square Feet
G	eneral Comments							

### **Elements Verfied**

Location	Name	Component	Element Name	Amount
Span 1	Deck	Reinforced Concrete Deck	Reinforced Concrete Deck	1615
Span 1	Beam 1	Plate Girder	Steel Open Girder/Beam	51
Span 1	Beam 2	Plate Girder	Steel Open Girder/Beam	51
Span 1	Beam 3	Plate Girder	Steel Open Girder/Beam	51
Span 1	Beam 4	Plate Girder	Steel Open Girder/Beam	51
Span 1	Left Bridge Rail	Concrete and Metal Railing	Other Bridge Railing	52
Span 1	Right Bridge Rail	Concrete and Metal Railing	Other Bridge Railing	52
Span 1	Expansion Joint	Compression Seal	Compression Joint Seal	30
Span 1	Wearing Surface	Concrete Wearing Surface	Wearing Surface	1439
Span 1	Far Bearing	Movable Bearing	Movable Bearing	1
Span 1	Near Bearing	Fixed Bearing	Fixed Bearing	1
Span 1	Near Bearing	Fixed Bearing	Fixed Bearing	1
Span 1	Far Bearing	Movable Bearing	Movable Bearing	1
Span 1	Far Bearing	Movable Bearing	Movable Bearing	1
Span 1	Near Bearing	Fixed Bearing	Fixed Bearing	1
Span 1	Far Bearing	Movable Bearing	Movable Bearing	1
Span 1	Near Bearing	Fixed Bearing	Fixed Bearing	1
Span 2	Deck	Reinforced Concrete Deck	Reinforced Concrete Deck	1793
Span 2	Beam 1	Plate Girder	Steel Open Girder/Beam	57
Span 2	Beam 2	Plate Girder	Steel Open Girder/Beam	57
Span 2	Beam 3	Plate Girder	Steel Open Girder/Beam	57
Span 2	Beam 4	Plate Girder	Steel Open Girder/Beam	57
Span 2	Left Bridge Rail	Concrete and Metal Railing	Other Bridge Railing	58
Span 2	Right Bridge Rail	Concrete and Metal Railing	Other Bridge Railing	58
Span 2	Expansion Joint	Compression Seal	Compression Joint Seal	30
Span 2	Wearing Surface	Concrete Wearing Surface	Wearing Surface	1598
Span 2	Far Bearing	Movable Bearing	Movable Bearing	1
Span 2	Near Bearing	Fixed Bearing	Fixed Bearing	1
Span 2	Far Bearing	Movable Bearing	Movable Bearing	1
Span 2	Near Bearing	Fixed Bearing	Fixed Bearing	1
Span 2	Near Bearing	Fixed Bearing	Fixed Bearing	1
Span 2	Far Bearing	Movable Bearing	Movable Bearing	1
Span 2	Near Bearing	Fixed Bearing	Fixed Bearing	1
Span 2	Far Bearing	Movable Bearing	Movable Bearing	1
Span 3	Deck	Reinforced Concrete Deck	Reinforced Concrete Deck	1752
Span 3	Beam 1	Plate Girder	Steel Open Girder/Beam	56
Span 3	Beam 2	Plate Girder	Steel Open Girder/Beam	56
Span 3	Beam 3	Plate Girder	Steel Open Girder/Beam	56
Span 3	Beam 4	Plate Girder	Steel Open Girder/Beam	56
Span 3	Left Bridge Rail	Concrete and Metal Railing	Other Bridge Railing	56
Span 3	Right Bridge Rail	Concrete and Metal Railing	Other Bridge Railing	56
Span 3	Expansion Joint	Compression Seal	Compression Joint Seal	30
Span 3	Expansion Joint	Compression Seal	Compression Joint Seal	30
Span 3	Wearing Surface	Concrete Wearing Surface	Wearing Surface	1562
Span 3	Far Bearing	Fixed Bearing	Fixed Bearing	1

### **Elements Verfied**

Location	Name	Component	Element Name	Amount
Span 3	Near Bearing	Movable Bearing	Movable Bearing	1
Span 3	Far Bearing	Fixed Bearing	Fixed Bearing	1
Span 3	Near Bearing	Movable Bearing	Movable Bearing	1
Span 3	Near Bearing	aring Movable Bearing Movable Bearing		1
Span 3	Far Bearing Fixed Bearing Fixed Bearing		Fixed Bearing	1
Span 3	Near Bearing	Movable Bearing	Movable Bearing	1
Span 3	Far Bearing	Fixed Bearing	Fixed Bearing	1
Bent 1		Reinforced Concrete Pier Cap	Reinforced Concrete Pier Cap	30
Bent 1		Reinforced Concrete Column	Reinforced Concrete Column	1
Bent 1		Reinforced Concrete Column	Reinforced Concrete Column	1
End Bent 1		Reinforced Concrete Pier Cap	Reinforced Concrete Pier Cap	36
End Bent 1		Reinforced Concrete Abutment	Reinforced Concrete Abutment	42
Bent 2		Reinforced Concrete Pier Cap	Reinforced Concrete Pier Cap	30
Bent 2		Reinforced Concrete Column	Reinforced Concrete Column	1
Bent 2		Reinforced Concrete Column	Reinforced Concrete Column	1
End Bent 2		Reinforced Concrete Pier Cap	Reinforced Concrete Pier Cap	37
End Bent 2		Reinforced Concrete Abutment	Reinforced Concrete Abutment	42

## **General Inspection Notes**

#### Bent 1

END BENT FOUNDATION PILES ARE NOT VISIBLE.

### Bent 2

END BENT FOUNDATION PILES ARE NOT VISIBLE.

## National Bridge and NC Inspection Items

Structure Number: 430249 Inspection Date: 04/25/2017

#### National Bridge Inventory Items

Item	Grade Scale	Grade
Item 58: Deck	0 - 9 , N	7
Item 59: Superstructure	0 - 9 , N	6
Item 60: Substructure	0 - 9 , N	6
Item 61: Channel and Channel Protection	0 - 9 , N	N
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

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		0	3352
Scour	G, F, P, or C			
Wingwall	G, F, P, or C		0	3350
Field Scour Evaluation		N		
Drift	G, F, P, or C		0	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		
Estimated Remaining Life	0 - 100 Years	30		
Superstructure Paint Code		А		

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

#### Inspection Information

Item	Grade Scale	Grade
Regulatory Sign Noticed Issued	YES/NO	N
Priority Maintenance Request Submitted	YES/NO	N
Inspection Time	Hours	6
Traffic Control Time	Hours	
Snooper Time	Hours	
Ladder Used	YES/NO	Y
Bucket Truck Used	YES/NO	N
Boat Used	YES/NO	N
Other Equipment Used	YES/NO	N

## National Bridge and NC SMU Inspection Item Details

Structure Number: 430249 Inspection Date: 04/25/2017

Item Grade Maint Code Qty.

Details

Structure: 430249 County: HAYWOOD Date: 04/25/2017 Condition Photos



Bent 1 Cap 1: MULTIPLE PATCHED AREAS THAT ARE SOUND.



Bent 2 Cap 1: MULTIPLE SOUND PATCHED AREAS

Structure: 430249 County: HAYWOOD Date: 04/25/2017 Condition Photos



Approach 2: DIAGONAL AND LONGITUDINAL CRACKS THROUGHOUT



Span 3 Wearing Surface: MULTIPLE HAIRLINE CRACKS SCATTERED THROUGHOUT THE WEARING SURFACE.

Structure: 430249 County: HAYWOOD Date: 04/25/2017 Condition Photos



Span 1 Right Bridge Rail: 14' LONG SCRAPE DAMAGE AT THE NEAR END OF THE SPAN.



Approach 1: SOUND PATCHES ALONG THE EDGE OF THE SLAB



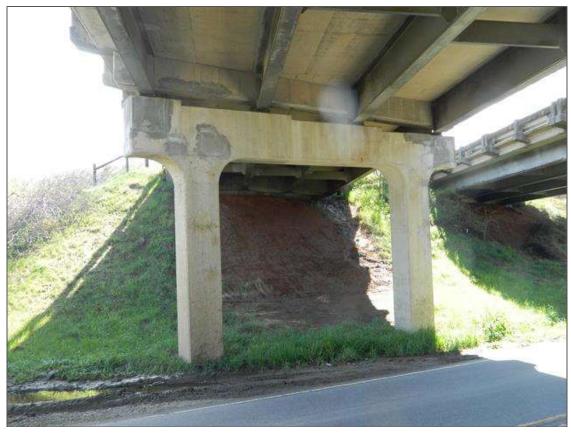
INSPECTION LADDER



TYPICAL BEARING



BENT 1



BENT 2



DECK UNDERSIDE



**END BENT 1** 



SOUTH PROFILE



END BENT 2



STUCTURE INFO PLATE AT THE NORTH WEST CORNER.



RETROFIT RAIL BASE



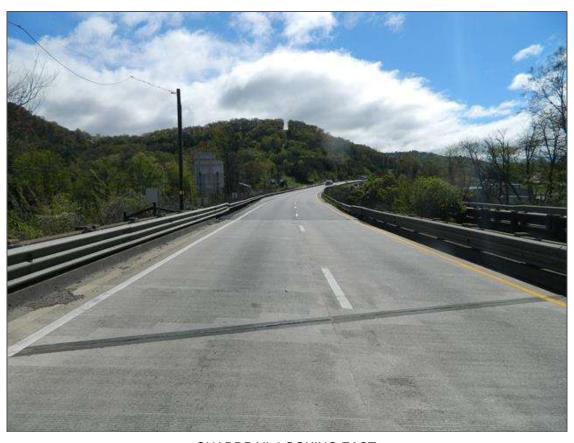
EAST APPROACH LOOKING WEST



RETROFIT RAIL IS CONTINUOUS WITH APPROACH RAIL.



LOOKING NORTH FROM TOP OF STRUCTURE



**GUARDRAIL LOOKING EAST** 



**GUARDRAIL LOOKING WEST** 



LOOKING SOUTH FROM TOP OF STRUCTURE



WEST APPROACH LOOKING EAST

IDENTIFICATION			
(1) STATE NAME -NORTH CAROLINA BRIDGE	430249	SUFFICIENCY RATING =	76.54
(8) STRUCTURE NUMBER(FEDERAL) 000	0000000870249	STATUS = Functionally Obsolete	
(5) INVENTORY ROUTE (ON/UNDER) - ON	11000400		
(2) STATE HIGHWAY DEPARTMENT DISTRICT	2		- CODE
(3) COUNTY CODE 87 (4) PLACE CODE	0	(112)NBIS BRIDGE SYSTEM -	YES
(6) FEATURE INTERSECTED - SR1613		(104)HIGHWAY SYSTEM Is on the NHS	1
(7) FACILITY CARRIED 140 WB		(26) FUNCTIONAL CLASS - Arterial - Interstate	01
(9) LOCATION 4.8 MI.E.JCT.SR1660		(100)STRAHNET HIGHWAY - Interstate STRAHNET Route	1
(11)MILEPOINT	33	(101)PARALLEL STRUCTURE - Left Parallel Structure	L
(16)LAT 35° 33' 20.96" (17)LONG 82° 49' 51	1.28"	(102)DIRECTION OF TRAFFIC - 1-way Traffic	1
(98)BORDER BRIDGE STATE CODE PCT SHA	RE	(103)TEMPORARY STRUCTURE -	
(99)BORDER BRIDGE STRUCTURE NO		(110)DESIGNATED NATIONAL NETWORK - On the National Network	1
		(20) TOLL On Free Road	3
STRUCTURE TYPE AND MATERIAL —		(31) MAINTAIN - State Highway Agency	01
(43) STRUCTURE TYPE MAIN: Steel		(22) OWNER - State Highway Agency	01
TYPE - Stringer Mutlibeam or Girder	CODE 302	(37) HISTORICAL SIGNIFICANCE - Not Eligible	5
(44) STRUCTURE TYPE APPR :			
TYPE -	CODE 000		- CODE
(45) NUMBER OF SPANS IN MAIN UNIT	3	(58) DECK	7
(46) NUMBER OF APPROACH SPANS		(59) SUPERSTRUCTURE	6
(107)DECK STRUCTURE TYPE - 1	CODE	(60) SUBSTRUCTURE	6
(108)WEARING SURFACE / PROTECTIVE SYSTEM:		(61) CHANNEL & CHANNEL PROTECTION	N
(A) TYPE OF WEARING SURFACE -	CODE	(62) CULVERTS	N
(B) TYPE OF MEMBRANE -	CODE	LOAD RATING AND POSTING	- CODE ·
(C) TYPE OF DECK PROTECTION -	CODE	(31) DESIGN LOAD HS 20 + MOD	6
		(63) OPERATING RATING METHOD - Load Factor	1
AGE AND SERVICE		(64) OPERATING RATING - HS-50	90
(27) YEAR BUILT	1961	(65) INVENTORY RATING METHOD - Load Factor	1
(106)YEAR RECONSTRUCTED	2011	(66) INVENTORY RATING - HS-30	54
(42) TYPE OF SERVICE : ON - Highway		(70) BRIDGE POSTING - No Posting Required	5
UNDER - Highway	CODE 11	(41) STRUCTURE OPEN, POSTED ,OR CLOSED	А
(28) LANES: ON STRUCTURE 2 UNDER STRUCTURE	2	DESCRIPTION - Open, No Restriction	
(29) AVERAGE DAILY TRAFFIC	25500		CODE
(30) YEAR OF ADT 2015 (109) TRUCK ADT PCT	23%	(67) STRUCTURAL EVALUATION	6
(19) BYPASS OR DETOUR LENGTH	1 MI	(68) DECK GEOMETRY	2
GEOMETRIC DATA		(69) UNDERCLEARANCES, VERTI & HORIZ	6
(48) LENGTH OF MAXIMUM SPAN	56 FT	(71) WATERWAY ADEQUACY	N
(49) STRUCTURE LENGTH	164 FT	(72) APPROACH ROADWAY ALIGNMENT	8
(50)CURB OR SIDEWALK: LEFT 0 FT RIGHT	0 FT	(36) TRAFFIC SAFETY FEATURES	1011
(51) BRIDGE ROADWAY WIDTH CURB TO CURB	28 FT	(113)SCOUR CRITICAL BRIDGES	N
(52) DECK WIDTH OUT TO OUT	31.417 FT	PROPOSED IMPROVEMENTS	
(32) APPROACH ROADWAY WIDTH (W/SHOULDERS)	39 FT	(75) TYPE OF WORK - CODE	
(33) BRIDGE MEDIAN - No Median	CODE 1	(76) LENGTH OF STRUCTURE IMPROVEMENT	
(34) SKEW 22° (35) STRUCTURE FLARED	0	(94) BRIDGE IMPROVEMENT COST	
(10) INVENTORY ROUTE MIN VERT CLEAR	999.9 FT	(95) ROADWAY IMPROVEMENT COST	
(47) INVENTORY ROUTE TOTAL HORIZ CLEAR	28 FT	(96) TOTAL PROJECT COST	
(53) MIN VERT CLEAR OVER BRIDGE RDWY	999.9 FT	(97) YEAR OF IMPROVEMENT COST ESTIMATE	
(54) MIN VERT UNDERCLEAR REF Highway	15.25 FT	(114)FUTURE ADT 51000 (115) YEAR FUTURE ADT	2025
(55) MIN LAT UNDERCLEAR RT REF Highway	12 FT		
(56) MIN LAT UNDERCLEAR LT REF -	0 FT		04/25/2017
NAVIGATION DATA		(24) 071 7 17	
(38) NAVIGATION CONTROL - Not Applicable	CODE N	(92) CRITICAL FEATURE INSPECTION : (93) CFI DAT  A) FRACTURE CRIT DETAIL - NO A)	<b>L</b>
(111)PIER PROTECTION -	CODE	•	
(39) NAVIGATION VERTICAL CLEARANCE	0	B) UNDERWATER INSP - NO B)	
(116)VERT - LIFT BRIDGE NAV MIN VERT CLEAR	FT	C) OTHER SPECIAL INSP NO C)	
(40) NAVIGATION HORIZONTAL CLEARANCE	0 FT	SCOUR	

0 FT

(40) NAVIGATION HORIZONTAL CLEARANCE

Structure No: 430249 County: HAYWOOD Run Date:

			ırtical		~			L			Traffic	ance	5	See Not	e 1					Route
Span Number	Feature Intersected	Inventory Route	Minimum Maximum Ve Clearance	Milepoint	Base Highway Network	LRS Inventory Route	Toll	Functional Classification	Numer of Lanes	Average Daily Traffic	Year of Average Daily	Total Horizontal Clear	Reference Feature	Minimum Vertical Underclearance	Right Lateral Underclearance	Left Lateral Underclearance		STRAHNET Designator	Direction of Traffic	Highway System of
	6	5	10	11	12	13	20	26	28	29	30	47	54A	54	55	56	69	100	102	104
2	SR 1613	31016130	15.52		0			9	2	2400	2014	49	Н	15.25	12		9	0	2	0

#### **BRIDGE MANAGEMENT UNIT**

DATA ON EXISTING STRUCTURE Run Date: 10/23/2017

COUNTY: DIVISION: DISTRICT: STRUCTURE NUMBER: LENGTH:

HAYWOOD 14 2 430249 164 FEET

ROUTE CARRIED : FEATURE INTERSECTED :

I40 WB SR1613

LOCATED : BRIDGE NAME :

4.8 MI.E.JCT.SR1660 CITY:

FUNC. CLASS: SYST.ON: SYST.UNDER: ADT & YR: RAIL TYPE:

01 FA NFA 25500 2015 LT 333 RT 333

BUILT: BY: PROJ: FED.AID PROJ: DESIGN LOAD:

1961 SHC 8.19431 I-40-1(8)3 HS 20 + MOD

REHAB: BY: PROJ: ALIGNMENT: SKEW: LANES:

2011 DOH 8.1940205 RT 68 ON 2 UNDER 2

NAVIGATION: HT. CRN. TO BED: WATER DEPTH:

VC 0 FT HC 0 FT 0 FT 0 FT

SUPERSTRUCTURE: REINFORCED CONCRETE FLOOR ON I-BEAMS(LAYTEX MODIFIED CONC.OVERLAY)

SUBSTRUCTURE: E.BTS:RC CAPS/H-PILES;INT.BTS:RCP&B/PILE FTG.

SPANS: 1 @ 51'-4.5;1 @ 57'-.5;1 @ 55'-9.12

BEAMS OR GIRDERS: 4 LINES 33 I-BEAMS @ 8'CENTERS

FLOOR: ENCROACHMENT: DECK (OUT TO OUT): 9 RC/NO AWS 31.417 FT

CLEAR ROADWAY: BETWEEN RAILS: SIDEWALK OR CURB:

VERT.CL.OVER: 999.9 FT

INV.RTG.: OPE.RTG.: CONTR.MEMBER: POSTED:

HS-30 HS-50 int bm c SV TTST DATE

SYSTEM: GREEN LINE ROUTE:

Primary Interstate Y

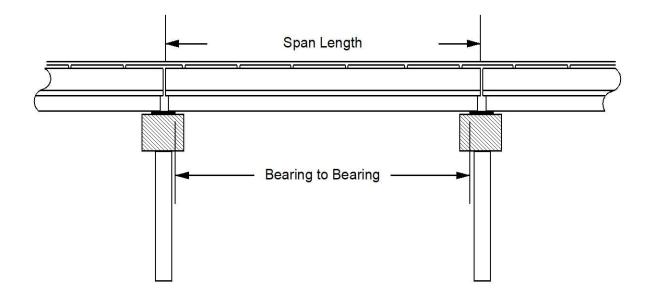
#### UNDER ROUTES AND CLEARANCES

		Vertical C	learances	Horizontal Clearances				
Span	Route Description	MMVC	MVC	Total	Left	Right		
2	SR 1613	15.5170	15.25	49	0	12		

Note: All measurements are in feet.

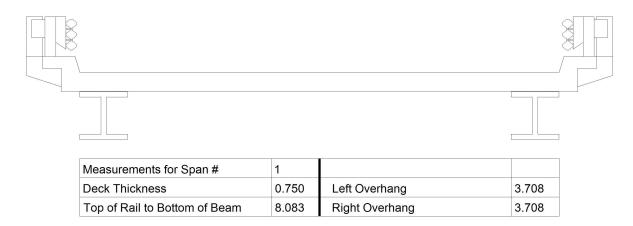
### Structure Data Worksheet

County: HAYWOOD Structure No: 430249 Date: 04/25/2017 Inspected By: JCH



Span No	Span Length	Bearing to Bearing	Comments
0	0	0	
1	51'- 4 1/2"	49' 7"	
2	57'- 0 1/2"	55' 8"	
3	55'- 9 1/8"	53' 9"	NBIS = 158' 2"

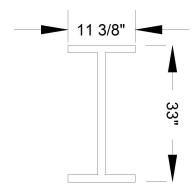
Deck Width/Out to Out	31.417ft	Wearing Surface	
Between Rails	28.000ft	Median Width	
Curb Height	0.750ft	Median Height	
Top Rail to Deck/Wearing Surface	2.667ft	Left Guardrail Width	
Clear Roadway	28.000ft	Right Guardrail Width	
Left Bridge Rail	Type 33	Right Bridge Rail	Type 33



Beam No	Beam Type	Spacing			
1 thru 4	Steel I Beam	8.000ft			

## **BEAMS**

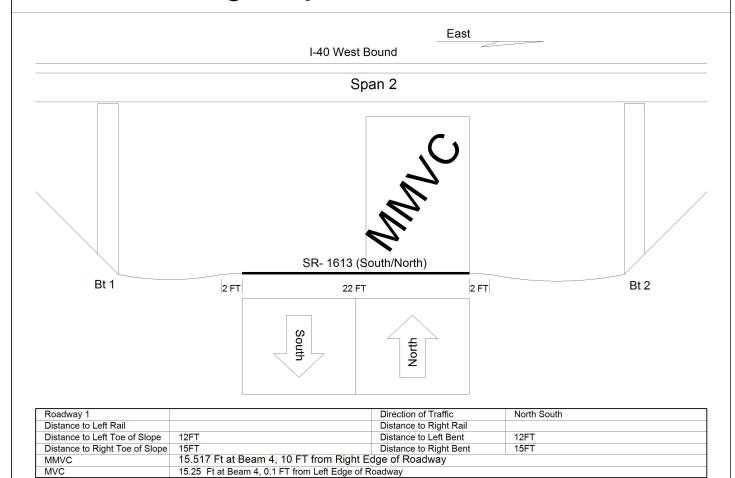
(NON-TAPERED FLANGES)



FLANGES = 7/8" WEB = 5/8"

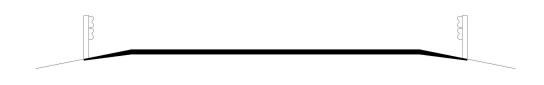
Title	Description
Typical Section	Data Worksheet

Bridge No:	430249	Drawn By: Roy W. Shook	Date: 07/29/2005	File Name:S0106000225



### **CLEARANCES CHANGED 4-22-2013**

Title		Description				
Underclearance		Data Worksheet				
Bridge No: 430249	Drawn By: Roy W. Shook		Date: 07/29/2005	File Name: \$0106000228		



Roadway	24ft Wide	2 Paved Lanes	Looking West
Left Shoulder	6ft Wide	4.0ft Paved	2.0ft Unpaved
Right Shoulder	12ft Wide	11.3ft Paved	0.7ft Unpaved
Left Guardrail	6.0ft from road		
Right Guardrail	12.0ft from road		

Title		Description				
Approach Roadway		Data Worksheet				
Bridge No: 430249	Drawn By: Roy W. Shook		Date: 07/29/2005	File Name:S0106000224		

Cap Information Material Cast-in-Place Concrete												
Lengt		Height	Left Over	hang	Right Ove	rhang	Left Be	eam to Er	nd of Cap.	Righ	t Beam to En	nd of Cap.
29.833	ft. 3.000 ft.	3.000 ft.	4.500	ft.	4.500	ft.	1.8	333 ft.		1	.833 ft.	
Subcap Information Material												
Lengt		Height	Left Over	hang	Right Ove	rhang	Left Pi	le to Spli	ce.			
Sill Info	ormation		Material									
Lengt		Height										
Pile#	Material	Spacing	Width/Dia.	Height	Length	Orie	entation	Driven?	Replacem	ent?	Removed?	Collar?
1	Concrete	20.833 ft.	3 ft.	3 ft.		Verl	tical	No	No		No	No
2	Concrete		3 ft.	3 ft.		Verl	tical	No	No		No	No
Dont/A			Circiler I	Ponto								
	butment #:	1 Chiniton	Similar E	<u>Bents:</u>	2	_						
Γitle	4/25/17 - J.C	J.HUN I SIN	GEK			Desc	ription	ľ				

Drawn By: JOE C. HUNTSINGER

SUBSTRUCTURE DETAILS

Date: 4/22/2013

File Name: \$0106001611

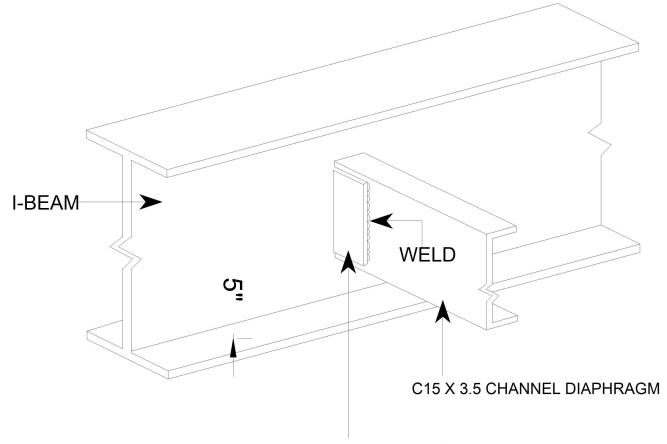
**INTERIOR BENTS** 

430249

Bridge No:

## **DIAPHRAGM DETAILS**

### LOCATED AT THE 1/3 POINTS OF ALL SPANS



29" X 10" STEEL PLATE WELDED TO WEB OF CHANNEL DIAPHRAGM AND TO WEB OF BEAM

Title		Description				
INTERMEDIATE DIAPHRAGMS			SUPERSTRUCTURE DETAILS			
Bridge No: 430249 Drawn By: JOE C. HUNTSINGER			Date: 4/22/2013	File Name: S0106001612		