

DIVISION OF HIGHWAYS

NC DEPARTMENT OF TRANSPORTATION

Structure Safety Report

**Routine Element Inspection - Contract** 

INSPECTION DATE: 03/15/2018

DIVISION: 10	COUNTY:	CABARRUS	STRUCT	URE NUMBER:	120109	FRE	QUENCY:	24 MONTHS	
FACILITY CARRIED	: SR1706					MILE POST	:		
LOCATION: 0.8 MI.	E. JCT. US	529A							
FEATURE INTERSE	CTED: US2	29							
LATITUDE: 35° 29	9' 33.51"	L	ONGITUDE:	80° 36' 39.68"					
SUPERSTRUCTURE	E: REINFO	DRCED CONCRETE DE	CK ON I-BE	AMS					
SUBSTRUCTURE:	END&INTB	TS:RC CAPS & STL.PIL	ES,INTBTS:	FULL CONCRE	ETE ENCA	SED			
SPANS: 4 SPAN	S. SEE SP	AN PROFILE SHEET FO	OR SPAN DE	TAILS					
FRACTURE CR	ITICAL	TEMPORARY SHOP		SCOUR CRITIC	CAL		R PLAN OF	ACTION	
GRADES: DECH	< <u>4</u>		SUBST	RUCTURE 5	CUL	VERT N	_		
POSTED SV: 15				POSTED TTS	T: <u>18</u>				

#### OTHER SIGNS PRESENT: (4) DELINEATORS



S i	ign notice issued for	d	۱ R	lumber equired
	NO	WEIGHT LIMIT		0
	NO	DELINEATORS		0
_	NO	NARROW BRIDGE	_	0
	NO	ONE LANE BRIDGE		0
	NO	LOW CLEARANCE		0



MATCHES PLANS

West Approach Looking East

INSPECTED BY	SIGNATURE	0.0.1	ASSISTED BY	GEORGE TEAGUE
JASON ROLFSMEYER		() E-10-		

# Structure Element Scoring

#### Structure Number: 120109

# Inspection Date 3/15/2018

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	7284	4701	2240	343	0
107	0	Steel Open Girder/Beam	Beam	950	0	815	135	0
515	107	Steel Protective Coating	Beam	8570	0	84	6156	2330
205	0	Reinforced Concrete Column	Piles and Columns	6	6	0	0	0
215	0	Reinforced Concrete Abutment	Abutments	84	67	17	0	0
225	0	Steel Pile	Piles and Columns	14	14	0	0	0
515	225	Steel Protective Coating	Piles and Columns	2793	2793	0	0	0
227	0	Reinforced Concrete Pile	Piles and Columns	18	12	1	5	0
234	0	Reinforced Concrete Pier Cap	Caps	185	156	15	14	0
300	0	Strip Seal Expansion Joint	Expansion Joints	84	53	0	31	0
311	0	Movable Bearing	Bearing Device	20	0	0	20	0
515	311	Steel Protective Coating	Bearing Device	20	0	0	1	19
313	0	Fixed Bearing	Bearing Device	20	0	0	20	0
515	313	Steel Protective Coating	Bearing Device	20	0	0	0	20
331	0	Reinforced Concrete Bridge Railing	Bridge Rail	380	374	5	1	0

# Summary of Maintenance Needs

Maintenance By Defect

#### Structure Number: 120109

Inspection Date: 03/15/2018

MMS Code	Element Name	Defect Name	Recommended Quantity
3326	Reinforced Concrete Deck	Delamination/Spall	64 Square Feet
3326	Reinforced Concrete Deck	Cracking (RC and Other)	280 Square Feet
3314	Steel Open Girder/Beam	Damage	4 Feet
3314	Steel Open Girder/Beam	Corrosion	124 Feet
3348	Reinforced Concrete Pile	Delamination/Spall	6 Each
3348	Reinforced Concrete Pile	Cracking (RC and Other)	5 Each
3348	Reinforced Concrete Pier Cap	Cracking (RC and Other)	6 Feet
3348	Reinforced Concrete Pier Cap	Delamination/Spall	14 Feet
3310	Strip Seal Expansion Joint	Seal Damage	31 Feet
3334	Movable Bearing	Corrosion	20 Each
3334	Fixed Bearing	Corrosion	20 Each
3318	Reinforced Concrete Bridge Railing	Delamination/Spall	1 Feet
3342	Steel Protective Coating	Oxide Film Degradation Color/Texture Adherence (Steel Protect	1 Square Feet
3342	Steel Protective Coating	Effectiveness (Steel Protective Coatings)	8609 Square Feet

# Element Structure Maintenance Quantities

Structure Number: 1	<u>20109</u>				Ir	nspection D	Date <u>03/15/</u>	<u>2018</u>
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	17	67
Beam	3314	Maintenance Steel Superstructure Components	128	950	0	135	815	0
Beam	3342	Clean and Paint Steel	8570	8570	2330	6156	84	0
Bearing Device	3334	Bridge Bearing	40	40	0	40	0	0
Bearing Device	3342	Clean and Paint Steel	40	40	39	1	0	0
Bridge Rail	3318	Maintenance of Concrete Bridge Rail	1	380	0	1	5	374
Caps	3348	Maintenance of Concrete Substructure	20	185	0	14	15	156
Deck	3326	Maintenance of Concrete Deck	344	7284	0	343	2240	4701
Expansion Joints	3310	Maintenance of Standard Bridge Expansion Joints	31	84	0	31	0	53
Piles and Columns	3342	Clean and Paint Steel	0	2793	0	0	0	2793
Piles and Columns	3348	Maintenance of Concrete Substructure	11	24	0	5	1	18
Piles and Columns	3354	Maintenance of Steel Substructure Components	0	14	0	0	0	14

# Element Condition and Maintenance Data

Structure Number: 120109 Inspection Date: 03/15/2018 Deck Span 1 **Reinforced Concrete Deck** Element Total CS1 CS2 CS3 CS4 Number Element Name Qty Qty Qty Qty Qty 12 **Reinforced Concrete Deck** 1,725 943 701 81 0 Square Feet Element Maint cs CS Qty Defect Type **Defect Description** Number Qty 12 Cracking (RC and deck surface: transverse cracks up to 1/16" wide. 3 70 70 Square Feet Other) Span 1 Deck surface at Bent 1 joint near c/l, spall with alligator 12 Delamination/Spall 3 3 3 Square Feet cracks and loose concrete 2' x 18" x 1". 8 12 Delamination/Spall underside of deck in right overhang beginning at Bent 1, spall in 3 8 Square Feet buildup 8' x 6" x 4". 12 Abrasion/Wear deck surface: coarse aggregate exposed and intact in concrete. 2 700 Square Feet (PSC/RC) 12 Patched Areas Deck surface at Bent 1 joint near c/l, sound patch 12" diameter. 2 1 Square Feet General Comments Span 1 Left Bridge Rail **Concrete Railing** CS4 Element Total CS1 CS2 CS3 Qty Number Element Name Qty Qty Qty Qty 0 Feet 331 Reinforced Concrete Bridge Railing 45 45 0 0 Element Maint **Defect Description** CS CS Qty Defect Type Number Qty General Comments COARSE AGGREGATE EXPOSED IN TOP OF RAIL Span 1 **Right Bridge Rail Concrete Railing** Element Total CS1 CS2 CS3 CS4 Number Element Name Qty Qty Qty Qty Qty 331 Reinforced Concrete Bridge Railing 0 0 Feet 45 45 0 Element Maint Defect Type **Defect Description** CS CS Qty Number Qty General Comments COARSE AGGREGATE EXPOSED IN TOP OF RAIL Span 1 Beam 1 Plate Girder Element CS1 CS2 CS3 CS4 Total Number Element Name Qty Qty Qty Qty Qty 107 Steel Open Girder/Beam 45 0 44 1 0 Feet 515 Steel Protective Coating 405 0 0 405 0 Square Feet Maint Flement Defect Type **Defect Description** CS CS Qty Number Qty 107 Corrosion end of Beam at Bent 1, Section Loss in the web below the 3 1 1 Feet diaphragm 1/4" Remaining 1" x 10". Freckled Rust / Surface Corrosion in web and flanges along 2 107 Corrosion 44 Feet

length of beam.

3

#### 515 Effectiveness (Steel Failing Corrosion initiated Protective Coatings) General Comments

Temporary Repair, 3/8" thick Plates welded to Beam 1 both sides of Web and bottom flange at Bent 1,

Spa	ın 1			Near Bearing						
Fixe	ed Bearing									
Elei	ment		Element Name		Total	CS1	CS2	CS3	CS4	
313	libei	Fixed Be	aring		1	0	0	1	0 E	ach
515		Steel Pro	tective Coating		1	0	0	0	1 S	quare Feet
Elemen	nt Defect	Туре		Defect Description			CS	CS Otv	Maint	
Numbe 313	Corrosion	.)po	Bearing Assembly s	eat 1 at End Bent 1, Ac	tive Corrosic	n and	3	1	Qty 1	Each
515	Effectiveness	s (Steel	Section Loss <25% Failed No Protection	in the plates.			4	1	1	Square Feet
	Protective Co General Com	oatings) ments								
Spa	ın 1			Far Bearing						
Мол	/able Beari	ng								
Elei	ment		_		Total	CS1	CS2	CS3	CS4	
Nur 311	nber	Movable	Element Name Bearing		Qty 1	Qty 0	Qty 0	Qty 1	Qty 0 E	ach
515		Steel Pro	tective Coating		1	0	0	0	1 S	quare Feet
Elemen		Tuno		Defect Description				CS Otv	Maint	
Numbe 311	Corrosion	туре	at Bent 1, Active Co	rrosion & Section Loss	<25% in the	plates,	3	03 Qiy 1	Qty 1	Each
515	Effectiveness	s (Steel	fasteners 1/4" Rema Failed No Protection	aining.			4	1	1	Square Feet
0.0	Protective Co	patings)					•	•		
	General Com	ments								
Spa	ın 1			Beam 2						
Plat	e Girder									
Elei	ment				Total	CS1	CS2	CS3	CS4	
Nur 107	nber	Steel Op	Element Name en Girder/Beam		Qty 45	Qty 0	Qty 34	Qty 11	Qty 0 F	eet
515		Steel Pro	tective Coating		405	0	25	380	0 S	quare Feet
Elemen	nt Defect	Turne		Defect Description			<u> </u>	00.04	Maint	
Numbe 107	Corrosion	гуре	at Bent 1. Section I	Defect Description	ragm 5/16"		3	CS Qty	Qty	Feet
-			Remaining 1" x 1'; lo Surface Corrosion in painted.	ower 3" web 3/8" Rema hitiated since beam has	ining 12" long been cleane	g. ed and	-			
107	Corrosion		beginning 5' from en Section Loss in lowe	d of beam at Bent 1, R er web and bottom fland	ust and Scal	e no	3	6	6	Feet
107	Corrosion		PRIORITY MAINTEI end of beam, Active 3/8" Remaining 3" x left bottom flange 11	NANCE: Span 1 Beam Corrosion & Section Lo 3' ; Active Corrosion & /16" Remaining 3" x 3'.	2 at Bent 1, 2 oss in the lov Section Loss	2' from ver web s in the	3	3	3	Feet
107	Corrosion		Freckled Rust / Surfa	ace Corrosion in web a	nd flanges a	long	2	34		Feet
515	Effectiveness Protective Co	s (Steel patings)	Failing Corrosion init	tiated			3	380	380	Square Feet
515	Effectiveness Protective Co	s (Steel patings)	Substantially Effective	ve Freckled Rust			2	25	25	Square Feet

Spa	in 1			Near Bearing						
Fixe	ed Bearing									
Ele	ment				Total	CS1	CS2	CS3	CS4	
Nur 313	nber	Fixed Be	Element Name		Qty 1	Qty 0	Qty 0	Qty 1	Qty 0 E	ach
515		Steel Pro	tective Coating		1	0	0	0	1 S	quare Feet
Flemer	nt								Maint	
Numbe	r Defect	Туре		Defect Description			CS	CS Qty	Qty	
313	Corrosion		Bearing Assembly s Section Loss <25%	eat 2 at End Bent 1, Ao in the plates.	ctive Corrosio	n and	3	1	1	Each
515	Effectiveness Protective Co	(Steel	Failed No Protection	1			4	1	1	Square Feet
	General Com	ments								
Spa	in 1			Far Bearing						
Мо	able Beari	ng								
Ele	ment				Total	CS1	CS2	CS3	CS4	
Nur 311	nber	Movable	Element Name		Qty 1	Qty	Qty	Qty 1	Qty	ach
515		Steel Pro	tective Coating		1	0	0	1	0 5	auare Feet
<b>5</b> 10									Maint	
Numbe	Pr Defect	Туре		Defect Description			CS	CS Qty	Qty	
311	Corrosion		Section Loss <25% Surface Corrosion ir	in plates, 1/4" Remaini nitiated.	ing in fastene	r,	3	1	1	Each
515	Effectiveness	(Steel	Failing Corrosion ini	tiated			3	1	1	Square Feet
	General Com	ments								
Spa	ın 1			Beam 3						
Plat	e Girder									
Ele	ment				Total	CS1	CS2	CS3	CS4	
Nur 107	nber	Steel On	Element Name		Qty 45	Qty	Qty 41	Qty 4	Qty	oot
515		Steel Pro	tective Coating		405	0	25	380	0 5	eet
			g			•			Maint	
Numbe	Defect	Туре		Defect Description			CS	CS Qty	Qty	
107	Corrosion		at Bent 1, Section Le Remaining 2" x 1'; lo Freckled Rust/ Surf been cleaned and p	oss in web below diaph ower 2" of web 7/16" Re ace Corrosion initiated ainted.	nragm 5/16" emaining x 3' since beam I	has	3	4	4	Feet
107	Corrosion		Freckled Rust / Surf	ace Corrosion in web a	and flanges al	long	2	41		Feet
515	Effectiveness	(Steel	Failing Corrosion ini	tiated			3	380	380	Square Feet
515	Effectiveness	(Steel	Substantially Effective	ve Freckled Rust			2	25	25	Square Feet
	General Com	ments								

Inspection Date: 03/15/2018

# Span 1

Fixe	d Bearing						
Elen Num	nent nber	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
313	Fixed Be	earing	1	0	0	1	0 Each
515	Steel Pr	otective Coating	1	0	0	0	1 Square Feet
Elemen Number	t n Defect Type	Defect Desc	cription		CS	CS Qty	Maint Qty
313	Corrosion	Bearing Assembly seat 3 at End Be Section Loss <25% in the plates.	ent 1, Active Corrosio	n and	3	1	1 Each
515	Effectiveness (Steel Protective Coatings)	Failed No Protection			4	1	1 Square Feet
-	Conorol Commonto						

General Comments

# Span 1

## Far Bearing

Near Bearing

### Movable Bearing

	-							
Elen Num	nent nber	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
311	Movabl	e Bearing	1	0	0	1	0 E	lach
515	Steel P	rotective Coating	1	0	0	0	1 5	Square Feet
Elemen	t Defect Type	Defect Des	cription		CS	CS Qty	Maint Qty	
311	Corrosion	Active Corrosion and Section Loss	<25% in the plates.		3	1	1	Each
515	Effectiveness (Steel Protective Coatings)	Failed No Protection			4	1	1	Square Feet
	<u> </u>							

General Comments

# Span 1

### Beam 4

#### Plate Girder

Eler Nun 107	nent nber Steel	Element Name Open Girder/Beam	Total Qty 45	CS1 Qty 0	CS2 Qty 44	CS3 Qty 1	CS4 Qty 0 F	eet
515	Steel	Protective Coating	405	0	25	380	0 S	quare Feet
Elemen Numbe	t r Defect Type	Defect Descrip	tion		CS	CS Qty	Maint Qty	
107	Corrosion	PRIORITY MAINTENANCE: Span 1 E Corrosion & Section Loss in web belov Remaining 5" x 2" with 5" x 1" of comp web at bottom flange from end of beau Section Loss 3/8" Remaining 2" x 12".	Beam 4 at Bent 1, / w diaphragm, 1/8" blete Section Loss; m, Active Corrosio	Active to 1/16" ; lower on &	3	1	1	Feet
107	Damage	Span 1 RC end diaphragm in bay 4 ac crack up to 1/4" wide.	djacent beam 5, ve	ertical	3		1	Feet
107	Corrosion	Freckled Rust / Surface Corrosion in v length of beam.	web and flanges al	long	2	44		Feet
515	Effectiveness (Stee Protective Coatings	el Failing Corrosion initiated			3	380	380	Square Feet
515	Effectiveness (Stee Protective Coatings	Substantially Effective Freckled Rust			2	25	25	Square Feet

Inspection Date: 03/15/2018

# Span 1

Fixed	Bearin	C
11/10/0	Douini	2

-						
nent iber	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
Fixed Be	earing	1	0	0	1	0 Each
Steel Pro	ptective Coating	1	0	0	0	1 Square Feet
Defect Type	Defect Desci	iption		CS	CS Qty	Maint Qty
Corrosion	Bearing Assembly seat 4 at End Be Section Loss <25% in the plates.	nt 1, Active Corrosic	on and	3	1	1 Each
Effectiveness (Steel Protective Coatings)	Failed No Protection			4	1	1 Square Feet
	t Defect Type Corrosion	hent her Element Name Fixed Bearing Steel Protective Coating t Defect Type Defect Descr Corrosion Bearing Assembly seat 4 at End Be Section Loss <25% in the plates. Effectiveness (Steel Failed No Protection Protective Coatings)	hent Element Name Total Qty Fixed Bearing 1 Steel Protective Coating 1 t Defect Type Defect Description Corrosion Bearing Assembly seat 4 at End Bent 1, Active Corrosid Section Loss <25% in the plates. Effectiveness (Steel Failed No Protection	hent ber Element Name Fixed Bearing Steel Protective Coating t Defect Type Corrosion Element Name Total Qty Qty Qty 1 0 1 0 Defect Description Corrosion Bearing Assembly seat 4 at End Bent 1, Active Corrosion and Section Loss <25% in the plates. Effectiveness (Steel Failed No Protection	hent ber Element Name Fixed Bearing Steel Protective Coating t Defect Type Corrosion Effectiveness (Steel Failed No Protection Defect Description Effectiveness (Steel Failed No Protection CS Corrosion CS Corrosion CS Corrosion CS Corrosion CS Corrosion CS Corrosion CS Corrosion CS Corrosion CS Corrosion CS CS Corrosion CS Corrosion CS CS Corrosion CS CS Corrosion CS CS Corrosion CS CS Corrosion CS CS Corrosion CS CS Corrosion CS CS COrrosion CS CS Corrosion CS CS CS CO CS CO CS CS CO CS CS CO CS CO CS CS CO CS CS CO CS CS CO CS CS CO CS CS CO CS CS CO CS CS CO CS CS CO CS CS CO CS CS CO CS CS CO CS CO CS CS CS CO CS CS CS CS CS CS CS CS CS CS	Total ber     CS1 Qty     CS2 Qty     CS3 Qty       Fixed Bearing Steel Protective Coating     1     0     0     1       Steel Protective Coating     1     0     0     0       t     Defect Type     Defect Description     CS     CS Qty       Corrosion     Bearing Assembly seat 4 at End Bent 1, Active Corrosion and Section Loss <25% in the plates.

General Comments

## Span 1

Far Bearing

Near Bearing

### Movable Bearing

#### CS4 Element Total CS1 CS2 CS3 Number Element Name Qty Qty Qty Qty Qty 311 Movable Bearing 0 Each 1 0 0 1 515 Steel Protective Coating 1 0 0 0 1 Square Feet Element Maint Defect Type **Defect Description** CS CS Qty Number Qty Active Corrosion and Section Loss <25% in the plates. 3 311 Corrosion 1 1 Each Effectiveness (Steel Protective Coatings) 515 Failed No Protection 4 1 1 Square Feet

**General Comments** 

#### Span 1

#### Beam 5

Plate Girder

Elen Num	nent iber	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
107	Steel	Open Girder/Beam	45	0	39	6	0 F	eet
515	Steel I	Protective Coating	405	0	0	395	10 S	quare Feet
Element Number	t Defect Type	Defect Description	l		CS	CS Qty	Maint Qty	
107	Corrosion	at Bent 1, left side, in front of bearing, Sec flange 1/4" to 9/16" Remaining 5" x 2', Sec of web, 3/16" Remaining 2' long. Surface 0 Rust initiated since beam cleaned and pai	tion Loss in b ction Loss in I Corrosion/ Fre nted.	oottom ower 3" eckled	3	2	2	Feet
107	Corrosion	at Bent 1, Repair plate welded to right side Corrosion and Section Loss in lower web, 3'. Repair plate original thickness is 3/8".	e of web has 5/16" Remain	Active hing 2" x	3		3	Feet
107	Corrosion	end of beam at Bent 1, Section Loss in we 1/4" Remaining 1" x 8", rust hole 2" x 1".	eb below diap	hragm	3	1	1	Feet
107	Corrosion	PRIORITY MAINTENANCE: at 3' from end left bottom flange has Active Corrosion an 1/2" Remaining 5" x 3'; lower web left side Section Loss 3/16" Remaining 3" x 3', 3/8" welded to right side of web and bottom flan	d of beam at d Section Los Active Corro thick repair p nge.	Bent 1, ss 3/8" to sion & blate	3	3	3	Feet
107	Corrosion	Temporary Repair, 3/8" thick Plates welde Web at Bent 1,	ed to Beam 1	right side	2	39		Feet
515	Effectiveness (Steel Protective Coatings)	Failed No Protection			4	10	10	Square Feet
515	Effectiveness (Steel Protective Coatings)	Failing Corrosion initiated			3	395	395	Square Feet

Temporary Repair, 3/8" thick Plates welded to Beam 1 right side Web at Bent 1,

Spa	ın 1	Near Bearir	ng					
Fixe	ed Bearing							
Eler Nur	ment nber	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
313	Fixed Be	earing	1	0	0	1	0	Each
515	Steel Pr	otective Coating	1	0	0	0	1	Square Feet
Elemen Numbe	nt Pr Defect Type	Defect Desc	ription		CS	CS Qty	Maint Qty	
313	Corrosion	Bearing Assembly seat 5 at End Be Section Loss <25% in the plates.	ent 1, Active Corrosio	on and	3	1		I Each
515	Effectiveness (Steel Protective Coatings)	Failed No Protection			4	1		Square Feet
	General Comments							

Spa	n 1	Far Bearin	g					
Mov	able Bearing							
Eler Nun	nent nber	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
311	Movable	Bearing	1	0	0	1	0	Each
515	Steel Pr	otective Coating	1	0	0	0	1	Square Feet
Elemen Numbe	t r Defect Type	Defect Des	cription		CS	CS Qty	Maint Qty	
311	Corrosion	Active Corrosion and Section Loss	<25% in the plates.		3	1		1 Each
515	Effectiveness (Steel Protective Coatings)	Failed No Protection			4	1		1 Square Feet
-	General Comments							

## Span 2

Deck

#### **Reinforced Concrete Deck**

Elerr Num	nent Iber	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
12	Reinfor	ced Concrete Deck	1,917	1,081	750	86	0 S	quare Feet
Element Number	Defect Type	Defect Description	n		CS	CS Qty	Maint Qty	
12	Cracking (RC and Other)	deck surface: transverse cracks up to 1/1	6" wide		3	70	70	Square Feet
12	Delamination/Spall	Deck underside at mid-Span in bay 2 alor exposed steel, 3' x up to 8" x 3/4".	ng beam 2, s	pall no	3	3	3	Square Feet
12	Delamination/Spall	Deck underside beginning at Bent 1 in rig exposed steel in build-up along beam 5,	ght overhang, 12' x 6" x 4".	spall no	3	12	12	Square Feet
12	Delamination/Spall	Steel H-Pile supporting Span 2 Deck left loose bolt thru top right flange with spall 1 underside of Deck.	overhang at 11" x 11" x 1"	Bent 1, , in	3	1	1	Square Feet
12	Abrasion/Wear (PSC/RC)	deck surface: coarse aggregate exposed	and intact in	concrete.	2	700		Square Feet
12	Patched Areas	Deck underside in left overhang, spall in l beam 1, with patching covering steel rein length x 6".	build up adja forcement, fu	cent to Ill span	2	50		Square Feet

General Comments

Temporary shoring: Steel H-Pile crutch supporting Deck left overhang/ rail and sidewalk.

Spa	n 2	Left Bridge R	ail					
Con	crete Railing	Ū.						
Eler	ment		Total	CS1	CS2	CS3	CS4	
Nun	nber	Element Name	Qty	Qty	Qty	Qty	Qty	
331	Rein	forced Concrete Bridge Railing	50	45	5	0	0	Feet
lemen	t r Defect Type	Defect Descrip	tion		CS	CS Qty	Maint	
331	Patched Area	near mid-Span, sound repair 5' long.			2	5	Qty	Square Feet
-	General Comments	3						
	COARSE AGG	REGATE EXPOSED IN TOP OF RAIL						
Spa	in 2	Right Bridge	Rail					
Con	crete Railing							
Flor	ment		Total	CS1	652	653	CS4	
Nun	nber	Element Name	Qty	Qty	Qty	Qty	Qty	
331	Rein	forced Concrete Bridge Railing	50	50	0	0	0	Feet
lemen	t Defect To		4: e .e		00		Maint	
lumbe	r Defect Type	Defect Descrip	tion		CS	CS Qty	Qty	
-	General Comments							
	COARSE AGG	REGATE EXPOSED IN TOP OF RAIL						
Spa	n 2	Beam 1						
opu		Dodin i						
Dlat	o Cirdor							
Plat	e Girder							
Plat Eler	e Girder nent	Element Name	Total Otv	CS1 Otv	CS2 Otv	CS3 Otv	CS4 Otv	
Plat Eler Nun 107	e Girder nent nber Stee	Element Name I Open Girder/Beam	Total Qty 50	CS1 Qty 0	CS2 Qty 10	CS3 Qty 40	CS4 Qty 0	Feet
Plat Eler Nun 107 515	e Girder nent nber Stee Stee	Element Name I Open Girder/Beam I Protective Coating	Total Qty 50 452	CS1 Qty 0 0	CS2 Qty 10 0	CS3 Qty 40 232	CS4 Qty 0 220	Feet Square Feet
Plat Eler Nun 107 515	e Girder nent nber Stee Stee	Element Name I Open Girder/Beam I Protective Coating	Total Qty 50 452	CS1 Qty 0 0	CS2 Qty 10 0	CS3 Qty 40 232	CS4 Qty 0 220	Feet Square Feet
Plat Eler Nun 107 515 Ilemen Iumbe	e Girder nent nber Stee Stee t r Defect Type	Element Name I Open Girder/Beam I Protective Coating Defect Descrip	Total Qty 50 452 tion	CS1 Qty 0 0	CS2 Qty 10 0 CS	CS3 Qty 40 232 CS Qty 29	CS4 Qty 0 220 Maint Qty	Feet Square Feet
Plat Eler Nun 107 515 Iemen Iumbe 107	e Girder nent nber Stee Stee t r Defect Type Corrosion	Element Name I Open Girder/Beam I Protective Coating Defect Descrip Active Corrosion and Section Loss in t full width, Rust and Scale no Section L bottom flange scattered, Surface Corro along length of beam.	Total Qty 50 452 tion cop flange 3/4" Re coss in lower web posion / Freckled F	CS1 Qty 0 0 emaining and Rust,	CS2 Qty 10 0 CS 3	CS3 Qty 40 232 CS Qty 29	CS4 Qty 0 220 Maint Qty 29	Feet Square Feet Feet
Plat Eler Nun 107 515 Iemen Iumbe 107	e Girder nent nber Stee Stee t r Defect Type Corrosion	Element Name I Open Girder/Beam I Protective Coating Defect Descrip Active Corrosion and Section Loss in t full width, Rust and Scale no Section L bottom flange scattered, Surface Corro along length of beam. at Bent 2, end of beam right side, Sec Remaining 7" x 2' and bottom flange 3	Total Qty 50 452 tion cop flange 3/4" Re oss in lower web osion / Freckled F tion Loss in web 5 /4" Remaining 1'	CS1 Qty 0 0 emaining and Rust, 5/16" x 11-	CS2 Qty 10 0 CS 3	CS3 Qty 40 232 CS Qty 29 2	CS4 Qty 0 220 Maint Qty 25	Feet Square Feet 9 Feet 2 Feet
Plat Eler Nun 107 515 Ilemen Jumbe 107	e Girder nent nber Stee Stee t r Defect Type Corrosion	Element Name I Open Girder/Beam I Protective Coating Defect Descrip Active Corrosion and Section Loss in t full width, Rust and Scale no Section L bottom flange scattered, Surface Corro along length of beam. at Bent 2, end of beam right side, Sec Remaining 7" x 2' and bottom flange 3 1/2", Surface Corrosion/ Freckled Rus was cleaned and painted.	Total Qty 50 452 tion cop flange 3/4" Re coss in lower web osion / Freckled R tion Loss in web 5 //4" Remaining 1' t initiated since be	CS1 Qty 0 0 emaining and Rust, 5/16" x 11- eam end	CS2 Qty 10 0 CS 3	CS3 Qty 40 232 CS Qty 29 2	CS4 Qty 0 220 Maint Qty 25	Feet Square Feet 9 Feet 2 Feet
Plat Eler Nun 107 515 Ilemen Jumbe 107 107	e Girder ment nber Stee Stee t Corrosion Corrosion	Element Name I Open Girder/Beam I Protective Coating Defect Descrip Active Corrosion and Section Loss in t full width, Rust and Scale no Section L bottom flange scattered, Surface Corro along length of beam. at Bent 2, end of beam right side, Sec Remaining 7" x 2' and bottom flange 3 1/2", Surface Corrosion/ Freckled Rus was cleaned and painted. end of Beam at Bent 1, Section Loss i diaphragm 1/4" Remaining 2" x 8". Be cleaned and painted	Total Qty 50 452 tion top flange 3/4" Re oss in lower web osion / Freckled F tion Loss in web 5 /4" Remaining 1' t initiated since be n the web below to am end has beer	CS1 Qty 0 0 emaining and Rust, 5/16" x 11- eam end the n initiated	CS2 Qty 10 0 CS 3 3	CS3 Qty 40 232 CS Qty 29 2 2 1	CS4 Qty 0 220 Maint Qty 2 2 2	Feet Square Feet 9 Feet 2 Feet Feet
Plat Eler Nun 107 515 Ilemen Jumbe 107 107 107	e Girder nent nber Stee Stee t Corrosion Corrosion Corrosion	Element Name I Open Girder/Beam I Protective Coating Defect Descrip Active Corrosion and Section Loss in t full width, Rust and Scale no Section L bottom flange scattered, Surface Corro along length of beam. at Bent 2, end of beam right side, Sect Remaining 7" x 2' and bottom flange 3 1/2", Surface Corrosion/ Freckled Rus was cleaned and painted. end of Beam at Bent 1, Section Loss in diaphragm 1/4" Remaining 2" x 8". Be cleaned and painted, Freckled Rust/S PRIORITY MAINTENANCE: Span 2 B beam at Bent 2, Active Corrosion and	Total Qty 50 452 tion top flange 3/4" Re coss in lower web posion / Freckled F tion Loss in web 5 /4" Remaining 1' t initiated since be n the web below t eam end has beer surface Corrosion seam 1 at 2' from Section Loss in lo	CS1 Qty 0 0 emaining and Rust, 5/16" x 11- eam end the n initiated. end of ower	CS2 Qty 10 0 CS 3 3 3 3	CS3 Qty 40 232 CS Qty 29 2 2 1 3	CS4 Qty 0 220 Maint Qty 29 2 2	Feet Square Feet 9 Feet 2 Feet Feet 3 Feet
Plat Eler Nun 107 515 Iemen Iumbe 107 107 107	e Girder ment nber Stee Stee t Corrosion Corrosion Corrosion	Element Name I Open Girder/Beam I Protective Coating Defect Descrip Active Corrosion and Section Loss in t full width, Rust and Scale no Section L bottom flange scattered, Surface Corro along length of beam. at Bent 2, end of beam right side, Sec Remaining 7" x 2' and bottom flange 3 1/2", Surface Corrosion/ Freckled Rus was cleaned and painted. end of Beam at Bent 1, Section Loss in diaphragm 1/4" Remaining 2" x 8". Be cleaned and painted, Freckled Rust/ S PRIORITY MAINTENANCE: Span 2 B beam at Bent 2, Active Corrosion and web 3/8" Remaining 3" x 3'; bottom fla Section Loss 3/4" Remaining 3' x 11-1	Total Qty 50 452 tion top flange 3/4" Re oss in lower web osion / Freckled F tion Loss in web 5 /4" Remaining 1' t initiated since be wam end has been surface Corrosion seam 1 at 2' from Section Loss in lo nge Active Corros /2".	CS1 Qty 0 0 emaining and Rust, 5/16" x 11- eam end the n initiated. end of ower sion &	CS2 Qty 10 0 CS 3 3 3 3	CS3 Qty 40 232 CS Qty 29 2 2 1 3	CS4 Qty 0 220 2 Maint Qty 22 2 2 1	Feet Square Feet 9 Feet 2 Feet Feet 3 Feet
Plat Eler Nun 107 515 Iemen lumbe 107 107 107 107	e Girder ment nber Stee Stee t Corrosion Corrosion Corrosion Corrosion Corrosion	Element Name I Open Girder/Beam I Protective Coating Defect Descrip Active Corrosion and Section Loss in t full width, Rust and Scale no Section L bottom flange scattered, Surface Corro along length of beam. at Bent 2, end of beam right side, Sect Remaining 7" x 2' and bottom flange 3 1/2", Surface Corrosion/ Freckled Rus was cleaned and painted. end of Beam at Bent 1, Section Loss in diaphragm 1/4" Remaining 2" x 8". Be cleaned and painted, Freckled Rust/ S PRIORITY MAINTENANCE: Span 2 B beam at Bent 2, Active Corrosion and web 3/8" Remaining 3" x 3'; bottom fla Section Loss 3/4" Remaining 3' x 11-1 PRIORITY MAINTENANCE: Span 2 b end of beam, Active Corrosion & Secti 3/8" to 5/16" Remaining 4" x 5'; Active in bottom flange 1/2" Remaining 10" x	Total Qty 50 452 tion top flange 3/4" Re oss in lower web osion / Freckled F tion Loss in web 5 /4" Remaining 1' t initiated since be n the web below t am end has beer furface Corrosion beam 1 at 2' from Section Loss in k nge Active Corros /2". eam 1 at Bent 1, ion Loss in the low Corrosion & Sect 3'.	CS1 Qty 0 0 emaining and Rust, 5/16" x 11- eam end the n initiated. end of ower sion & 1' from wer web tion Loss	CS2 Qty 10 0 CS 3 3 3 3 3	CS3 Qty 40 232 CS Qty 29 2 2 1 3 3 5	CS4 Qty 0 220 2 Maint Qty 22 2 1 3 3 5	Feet Square Feet 9 Feet 2 Feet 3 Feet 3 Feet 5 Feet
Plat Eler Nun 107 515 Iemen lumbe 107 107 107 107	e Girder ment nber Stee Stee t Corrosion Corrosion Corrosion Corrosion Corrosion Damage	Element Name I Open Girder/Beam I Protective Coating Defect Descrip Active Corrosion and Section Loss in t full width, Rust and Scale no Section L bottom flange scattered, Surface Corro along length of beam. at Bent 2, end of beam right side, Sec Remaining 7" x 2' and bottom flange 3 1/2", Surface Corrosion/ Freckled Rus was cleaned and painted. end of Beam at Bent 1, Section Loss in diaphragm 1/4" Remaining 2" x 8". Be cleaned and painted, Freckled Rust/S PRIORITY MAINTENANCE: Span 2 B beam at Bent 2, Active Corrosion and web 3/8" Remaining 3" x 3'; bottom fla Section Loss 3/4" Remaining 3' x 11-1 PRIORITY MAINTENANCE: Span 2 b end of beam, Active Corrosion & Secti 3/8" to 5/16" Remaining 4" x 5'; Active in bottom flange 1/2" Remaining 10" x RC end diaphragm at Bent 1 bay 1, 1/ efflorescence buildup; RC end diaphra diagonal crack 1/8" wide and Delamina	Total Qty 50 452 tion top flange 3/4" Re oss in lower web osion / Freckled F tion Loss in web 5 /4" Remaining 1' t initiated since be n the web below t am end has beer ourface Corrosion eam 1 at 2' from Section Loss in k nge Active Corros /2". eam 1 at Bent 1, ion Loss in the low Corrosion & Sect 3'. 84" cracks with agm at Bent 2 in b ation.	CS1 Qty 0 0 emaining and Rust, 5/16" x 11- eam end the n initiated. end of ower sion & 1' from wer web tion Loss	CS2 Qty 10 0 CS 3 3 3 3 3 3 3	CS3 Qty 40 232 CS Qty 29 2 2 1 3 3 5	CS4 Qty 0 220 2 Maint Qty 2 2 2 1 3 3 5 5	Feet Square Feet 9 Feet 2 Feet 3 Feet 3 Feet 5 Feet 2 Feet
Plat Eler Nun 107 515 Ilemen Iumbe 107 107 107 107 107	e Girder ment nber Stee Stee t Corrosion Corrosion Corrosion Corrosion Corrosion Damage Distortion	Element Name I Open Girder/Beam I Protective Coating Defect Descrip Active Corrosion and Section Loss in t full width, Rust and Scale no Section L bottom flange scattered, Surface Corro along length of beam. at Bent 2, end of beam right side, Sect Remaining 7" x 2' and bottom flange 3 1/2", Surface Corrosion/ Freckled Rus was cleaned and painted. end of Beam at Bent 1, Section Loss in diaphragm 1/4" Remaining 2" x 8". Be cleaned and painted, Freckled Rust/ S PRIORITY MAINTENANCE: Span 2 B beam at Bent 2, Active Corrosion and web 3/8" Remaining 3" x 3'; bottom fla Section Loss 3/4" Remaining 3' x 11-1 PRIORITY MAINTENANCE: Span 2 b end of beam, Active Corrosion & Secti 3/8" to 5/16" Remaining 4" x 5'; Active in bottom flange 1/2" Remaining 10" x RC end diaphragm at Bent 1 bay 1, 1/ efflorescence buildup; RC end diaphra diagonal crack 1/8" wide and Delamin: Beam 1 above Right South bound land previously straightened/repaired.	Total Qty 50 452 tion top flange 3/4" Re- oss in lower web osion / Freckled F tion Loss in web § /4" Remaining 1' t initiated since be weather the second state of the second state second state of the second second state of the second corrosion & Sect 3'. 84" cracks with agm at Bent 2 in b ation.	CS1 Qty 0 0 emaining and Rust, 5/16" x 11- eam end the n initiated. end of ower sion & 1' from wer web tion Loss oay 1	CS2 Qty 10 0 CS 3 3 3 3 3 3 3 2	CS3 Qty 40 232 CS Qty 29 2 2 1 3 5 5	CS4 Qty 0 220 2 Maint Qty 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	Feet Square Feet 9 Feet 2 Feet 3 Feet 3 Feet 2 Feet 2 Feet 5 Feet 5 Feet
Plat Eler Nun 107 515 Ilemen Jumbe 107 107 107 107 107 107 107 515	e Girder ment nber Stee Stee t r Defect Type Corrosion Corrosion Corrosion Corrosion Corrosion Damage Distortion Effectiveness (Stee Protective Coating	Element Name I Open Girder/Beam I Protective Coating Defect Descrip Active Corrosion and Section Loss in t full width, Rust and Scale no Section L bottom flange scattered, Surface Corro along length of beam. at Bent 2, end of beam right side, Sec Remaining 7" x 2' and bottom flange 3 1/2", Surface Corrosion/ Freckled Rus was cleaned and painted. end of Beam at Bent 1, Section Loss in diaphragm 1/4" Remaining 2" x 8". Be cleaned and painted, Freckled Rust/S PRIORITY MAINTENANCE: Span 2 B beam at Bent 2, Active Corrosion and web 3/8" Remaining 3" x 3'; bottom fla Section Loss 3/4" Remaining 3' x 11-1 PRIORITY MAINTENANCE: Span 2 b end of beam, Active Corrosion & Secti 3/8" to 5/16" Remaining 4" x 5'; Active in bottom flange 1/2" Remaining 10" x RC end diaphragm at Bent 1 bay 1, 1/ efflorescence buildup; RC end diaphra diagonal crack 1/8" wide and Delamina Beam 1 above Right South bound land previously straightened/repaired.	Total Qty 50 452 tion top flange 3/4" Re- coss in lower web osion / Freckled F tion Loss in web 5 /4" Remaining 1' t initiated since be to the web below to eam end has beer Surface Corrosion team end has beer Surface Corrosion team 1 at 2' from Section Loss in lo inge Active Corros /2". eam 1 at Bent 1, ion Loss in the low Corrosion & Sect 3'. 84" cracks with agm at Bent 2 in b ation. e, impact damage	CS1 Qty 0 0 emaining and Rust, 5/16" x 11- eam end the n initiated. end of ower sion & 1' from wer web tion Loss pay 1	CS2 Qty 10 0 CS 3 3 3 3 3 3 3 3 2 4	CS Qty 232 CS Qty 29 2 2 1 3 5 5	CS4 Qty 0 220 = 2 Maint Qty 2 2 1 3 5 5 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	Feet Square Feet 9 Feet 2 Feet 3 Feet 3 Feet 5 Feet 5 Feet 5 Feet 5 Feet 5 Square Feet

Spa	an 2		Near B	earing						
Fixe	ed Bearin	g								
Elei Nur	ment nber		Element Name	٢	Γotal Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
313		Fixed Be	aring		1	0	0	1	0	Each
515		Steel Pro	ptective Coating		1	0	0	0	1	Square Feet
Elemer Numbe	nt er Defeo	ct Type	Defect	Description			CS	CS Qty	Maint Qty	
313	Corrosion		at Bent 1, Active Corrosion & fasteners 1/4" Remaining.	Section Loss <25	% in the	plates,	3	1		1 Each
515	Effectivene Protective	ess (Steel Coatings)	Failed No Protection				4	1		1 Square Feet
	General Co	mments								

Spa	n 2	Far	Bearing						
Mov	able Bearing								
Elen Num	nent nber	Element Name	Tota Qty	 /	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
311	Movable	Bearing	1		0	0	1	0	Each
515	Steel Pro	otective Coating	1		0	0	0	1	Square Feet
Elemen Number	t r Defect Type	De	fect Description			CS	CS Qty	Maint Qty	
311	Corrosion	Active Corrosion & Section fasteners.	on Loss <25% in the plates	s and		3	1		I Each
515	Effectiveness (Steel Protective Coatings)	Failed No Protection				4	1		Square Feet
-	General Comments								

Span 2

#### Beam 2

Plate Girder

Elen Num	nent nber	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
107	Steel O	pen Girder/Beam	50	0	48	2	0 F	eet
515	Steel Pr	rotective Coating	452	0	0	284	168 S	quare Feet
Elemen Number	t n Defect Type	Defect Description	n		CS	CS Qty	Maint Qty	
107	Corrosion	at Bent 1, Section Loss in web below diap Remaining 1" x 9". Surface Corrosion in been cleaned and painted.	phragm 5/16" itiated since be	eam has	3	1	1	Feet
107	Corrosion	at Bent 2, end of beam below diaphragm web 5/16" Remaining 1" x 10", Surface C initiated since beam was cleaned and pai	has Section L corrosion/Freck inted.	oss in ded Rust	3	1	1	Feet
107	Corrosion	Surface Corrosion/ Freckled Rust in flang length of beam	ges and web al	long	2	48		Feet
515	Effectiveness (Steel Protective Coatings)	Failed No Protection			4	168	168	Square Feet
515	Effectiveness (Steel Protective Coatings)	Failing Corrosion initiated			3	284	284	Square Feet

Span	2

Near Bearing

Fixe	d Bearing							
Elen Num	nent nber	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
313	Fixed B	earing	1	0	0	1	0	Each
515	Steel P	rotective Coating	1	0	0	0	1	Square Feet
Element Number	t Defect Type	Defect Description			CS	CS Qty	Maint Qty	
313	Corrosion	Section Loss <25% corrosion initiated.			3	1		1 Each
515	Effectiveness (Steel Protective Coatings)	Failed No Protection			4	1		1 Square Feet
7	Conoral Commonte							

General Comments

#### Span 2

#### Far Bearing

## Movable Bearing

#### CS4 Element Total CS1 CS2 CS3 Number Element Name Qty Qty Qty Qty Qty 311 Movable Bearing 0 Each 0 0 1 1 515 Steel Protective Coating 0 0 0 1 Square Feet 1 Element Maint CS Qty Defect Type **Defect Description** CS Number Qty Active Corrosion & Section Loss <25% in the plates and 3 1 1 Each 311 Corrosion fasteners. 515 Effectiveness (Steel Failed No Protection 4 1 1 Square Feet Protective Coatings) **General Comments**

### Span 2

#### Beam 3

Plate Girder

Eler Nun 107	nent hber Steel Or	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty 2	CS4 Qty	eet
515	Steel Pro	otective Coating	452	0	40	284	168 S	quare Feet
Elemen Numbe	t Defect Type	Defect Description			CS	CS Qty	Maint Qty	
107	Corrosion	at Bent 1, Section Loss in web below diaph Remaining 1" x 9"; Freckled Rust/ Surface since beam has been cleaned and painted	nragm 5/16" ≱ Corrosion ir I.	nitiated	3	1	1	Feet
107	Corrosion	at Bent 2, end of beam has Section Loss ir diaphragm 5/16" Remaining 1" x 10"; Surfa Freckled Rust initiated since beam was cle	ו the web bel ace Corrosior aned and pa	ow n/ inted.	3	1	1	Feet
107	Corrosion	Surface Corrosion/ Freckled Rust in flange length of beam	s and web al	ong	2	48		Feet
515	Effectiveness (Steel Protective Coatings)	Failed No Protection			4	168	168	Square Feet
515	Effectiveness (Steel Protective Coatings)	Failing Corrosion initiated			3	284	284	Square Feet
	General Comments							

Near Bearing

#### Span 2 Fixed Bearing

TIXE	u bearing							
Elen Num	nent hber	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
313	Fixed Be	earing	1	0	0	1	0 E	ach
515	Steel Pr	otective Coating	1	0	0	0	1 5	Square Feet
Element Number	t Defect Type	Defect Des	cription		CS	CS Qty	Maint Qty	
313	Corrosion	Active Corrosion & Section Loss < fasteners.	25% in the plates and		3	1	1	Each
515	Effectiveness (Steel Protective Coatings)	Failed No Protection			4	1	1	Square Feet
_	Concerct Comments							

General Comments

#### Span 2

Far Bearing

#### Movable Bearing

#### Element Total CS1 CS2 CS3 CS4 Number Element Name Qty Qty Qty Qty Qty 0 Each 311 Movable Bearing 1 0 0 1 515 Steel Protective Coating 0 0 1 0 1 Square Feet Element Maint Defect Type **Defect Description** CS CS Qty Number Qty 311 Corrosion Active Corrosion & Section Loss <25% in the plates and 3 1 1 Each fasteners. Effectiveness (Steel Failed No Protection 515 4 1 1 Square Feet Protective Coatings) General Comments

#### Span 2 Beam 4 Plate Girder Element Total CS1 CS2 CS3 CS4 Element Name Number Qty Qty Qty Qty Qty 0 Feet 107 Steel Open Girder/Beam 50 0 46 4 515 Steel Protective Coating 452 0 0 284 168 Square Feet Element Maint Defect Type **Defect Description** CS CS Qty Number Qty 107 Corrosion at Bent 1, end of beam has Section Loss in the web below 3 3 3 Feet diaphragm 5/16" Remaining 1" x 10"; lower web 3/8" Remaining 1" x 3'. Surface Corrosion/ Freckled Rust initiated since beam was cleaned and painted. at Bent 2 original beam end, web has Section Loss 5/16" 107 Corrosion 3 1 1 Feet Remaining 1" x 1', (2) plates 1/4"x 7"x14" bolted to web over Section Loss. 107 Corrosion Surface Corrosion/ Freckled Rust in flanges and web along 2 46 Feet length of beam Failed No Protection 515 Effectiveness (Steel 4 168 168 Square Feet Protective Coatings) 515 Effectiveness (Steel Failing Corrosion initiated 3 284 284 Square Feet Protective Coatings) **General Comments**

Near Bearing

## Span 2 Fixed Bearing

nt er Fixed Be	Element Name earing	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qtv	
Fixed Be	earing	1					
		1	0	0	1	0	Each
Steel Pro	otective Coating	1	0	0	0	1	Square Feet
Defect Type	Defect Descr	iption		CS	CS Qty	Maint Qty	
orrosion	Active Corrosion & Section Loss <25 fasteners.	5% in the plates and		3	1		1 Each
ffectiveness (Steel rotective Coatings)	Failed No Protection			4	1		1 Square Feet
c ff	Defect Type prrosion fectiveness (Steel otective Coatings)	Defect Type     Defect Descr       prrosion     Active Corrosion & Section Loss <25 fasteners.	Defect Type     Defect Description       prrosion     Active Corrosion & Section Loss <25% in the plates and fasteners.	Defect Type     Defect Description       prrosion     Active Corrosion & Section Loss <25% in the plates and fasteners.	Defect Type     Defect Description     CS       prrosion     Active Corrosion & Section Loss <25% in the plates and fasteners.	Defect TypeDefect DescriptionCSCS QtyprrosionActive Corrosion & Section Loss <25% in the plates and fasteners.31rectiveness (Steel otective Coatings)Failed No Protection41	Defect Type     Defect Description     CS     CS Qty     Maint Qty       prrosion     Active Corrosion & Section Loss <25% in the plates and fasteners.     3     1       rectiveness (Steel otective Coatings)     Failed No Protection     4     1

**General Comments** 

# Span 2

## Far Bearing

# Movable Bearing

Elerr Num	nent iber	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
311	Movable	Bearing	1	0	0	1	0	Each
515	Steel Pr	otective Coating	1	0	0	0	1	Square Feet
Element Number	Defect Type	Defect Descripti	on		CS	CS Qty	Maint Qty	
311	Corrosion	Active Corrosion & Section Loss <25% fasteners.	in the plates and		3	1		1 Each
515	Effectiveness (Steel Protective Coatings)	Failed No Protection			4	1		1 Square Feet
Ū	General Comments							

5	par	12	

#### Beam 5

Plate Girder						
Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
107	Steel Open Girder/Beam	50	0	42	8	0 Feet
515	Steel Protective Coating	452	0	0	284	168 Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
107	Corrosion	at Bent 1, Section Loss in web below diaphragm 1/4" Remaining 1" x 10", Section Loss in lower web 5/16" Remaining 10" to 4" x 4'. Surface Corrosion/ Freckled Rust initiated since beam was cleaned and painted.	3	4	4	Feet
107	Corrosion	at Bent 2, original beam: Section Loss in web below diaphragm $3/16$ " to $1/16$ " Remaining with rust holes 7" x 1', lower 2" of web $3/16$ " Remaining x 3'; Temporary Repair to Section Loss, $1/4$ " thick plates bolted on both sides of beam in web 42" long x full height and on bottom flange full width x 32" long.	3	4		Feet
107	Corrosion	Surface Corrosion/ Freckled Rust in flanges and web along length of beam	2	42		Feet
515	Effectiveness (Steel Protective Coatings)	Failed No Protection	4	168	168	Square Feet
515	Effectiveness (Steel Protective Coatings)	Failing Corrosion initiated	3	284	284	Square Feet

### Span 2 Fixed Bearing

TINC	u bearing									
Elen Num	nent nber		Element Name		Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
313		Fixed Be	aring		1	0	0	1	0	Each
515		Steel Pro	tective Coating		1	0	0	0	1	Square Feet
Elemen Number	t r Defect T	уре		Defect Description			CS	CS Qty	Maint Qty	
313	Corrosion		Active Corrosion & Se fasteners.	ction Loss <25% in the	e plates and		3	1		1 Each
515	Oxide Film Degradation Color/Texture Adherence (Si Protective Coa	teel atings)	Failed No Protection				4	1		1 Square Feet
-	General Comm	nents								

Near Bearing

Spa	n 2	Far Bearin	g					
Mov	able Bearing							
Elen Nun 311 515	nent hber Movable Steel Pro	Element Name Bearing otective Coating	Total Qty 1	CS1 Qty 0 0	CS2 Qty 0	CS3 Qty 1 0	CS4 Qty 0 1	Each Square Feet
Elemen Number	t r Defect Type	Defect Des	cription		CS	CS Qty	Maint Qty	
311	Corrosion	Active Corrosion & Section Loss < fasteners.	25% in the plates and		3	1	1	I Each
515	Effectiveness (Steel Protective Coatings)	Failed No Protection			4	1	ſ	Square Feet
	General Comments							

Span	2	Expansio	n Joint					
Strip	SEal							
Eleme Numb 300	ent oer Strip Se	Element Name eal Expansion Joint	Total Qty 28	CS1 Qty 19	CS2 Qty 0	CS3 Qty 9	CS4 Qty 0 Feet	
Element Number	Defect Type	Defect Des	scription		CS	CS Qty	Maint Qty	
300 \$	Seal Damage	Bent 1 joint pourable seal pulled on near c/l and at curbs.	out exposing backer m	aterial	3	9	9 Feet	

General Comments

# Span 3

Deck

## Reinforced Concrete Deck

Elem Num 12	nent iber Reinford	Element Name ed Concrete Deck	Total Qty 1,917	CS1 Qty 1,408	CS2 Qty 428	CS3 Qty 81	CS4 Qty 0 Square Feet
Element Number	Defect Type	Defect Descripti	on		CS	CS Qty	Maint Qty
12	Cracking (RC and Other)	deck surface: transverse cracks up to 1	/16" wide.		3	70	70 Square Feet
12	Delamination/Spall	Deck surface at Bent 2 joint near right of Delamination 4' x 1'.	urb, 1/16" crac	ks and	3	4	4 Square Feet

Structure	e Number: <u>120109</u>			Inspe	ction Date: 03/15/2018
12	Delamination/Spall	PRIORITY MAINTENANCE: Span 3 RC Deck underside left overhang at Bent 3, Delamination in build up 7' long x 6" x 4".	3	7	7 Square Feet
12	Abrasion/Wear (PSC/RC)	deck surface: coarse aggregate exposed and intact in concrete.	2	400	Square Feet
12	Efflorescence/Rust Staining	Deck underside at Bent 2, 1/32" map cracks with surface efflorescence in bays 2 thru 4.	2	20	Square Feet
12	Patched Areas	Span 3 Deck surface near Bent 2 joint at $c/l$ , (2) sound patches to spalls, 3' x 2', and 18" x 12".	2	8	Square Feet

•	2								
Spa	an 3		Left Bridge Rail						
Cor	ncrete Railing								
Ele Nui 331	ment mber Re	Element Name	ailing	Total Qty 50	CS1 Qty 50	CS2 Qty 0	CS3 Qty 0	CS4 Qty 0 F	eet
Elemer Numbe	nt Defect Typ	e	Defect Description			CS	CS Qty	Maint Qty	
	General Commer COARSE AG	ts GREGATE EXPOSED IN T	OP OF RAIL						
Span 3 Right Bridge Rail									
Concrete Railing									
ElementTotalCS1CS2CS3CS4NumberElement NameQtyQtyQtyQtyQtyQtyQty331Reinforced Concrete Bridge Railing5050000Feet									
Elemer Numbe	nt Defect Typ	e	Defect Description			CS	CS Qty	Maint Qty	
General Comments COARSE AGGREGATE EXPOSED IN TOP OF RAIL									
Spa	an 3		Beam 1						
Pla	te Girder								
Ele Nui	ment mber	Element Name		Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	1
515	Ste	el Open Girden/Beam		50	0	33	204		eel
515	316			402	0	0	204	100 3	quare reet
Elemer	nt Pr Defect Typ	e	Defect Description			CS	CS Qty	Maint Qtv	
Number         Defect Type         Defect Description           107         Corrosion         at Bent 2, end of beam below end diaphragm, Section Loss in web 5/16" Remaining 1" x 10", lower web in front of bearing, Section Loss 5/16" Remaining 8" to 4" x 10'; at 3' from end of beam right bottom flange Section Loss 3/8" to 1/2" Remaining 2' x 5".Surface Corrosion/ Freckled Rust initiated since beam end				Loss in aring, end of naining 2' eam end	3	10	10	Feet	
107	Corrosion	at Bent 3, original be Remaining 5" x 7'-6" Remaining x 2'; Ten plates bolted on both height and on botton	eam: Section Loss in lov with rust holes, upper nporary Repair to Section n sides of beam in web n flange full width x 6' lo	wer web 1/8 2" of web 7 on Loss, 1/4 7'-6" long x ong.	" to 1/16" /16" 4" thick full	3	7	7	Feet
107	Corrosion	Surface Corrosion/ F	reckled Rust in the wel	b and flange	es along	2	33		Feet
515	Effectiveness (St Protective Coatin	eel Failed No Protection				4	168	168	Square Feet
515	Effectiveness (St Protective Coatin	eel Failing Corrosion init gs)	tiated			3	284	284	Square Feet

Spa	an 3			Near Bearing						
Eiv										
LIX	eu beanny									
Ele Nu	ment mber		Element Name		Total Qtv	CS1 Qtv	CS2 Qtv	CS3 Qtv	CS4 Qtv	
313		Fixed Be	aring		1	0	0	1	0 Ea	ch
515		Steel Pro	tective Coating		1	0	0	0	1 Sq	uare Feet
Elemer	nt Defect	Туре		Defect Description			CS	CS Qty	Maint Otv	
313	Corrosion		Active Corrosion &	Section Loss <25% in t	the plates and		3	1	1	Each
515	Effectiveness Protective Co	s (Steel batings)	Failed No Protection	n			4	1	1 \$	Square Feet
	General Com	ments								
Spa	an 3			Far Bearing						
Mov	Movable Bearing									
Ele	ment				Total	CS1	CS2	CS3	CS4	
Nu	mber	Mayabla	Element Name		Qty	Qty	Qty	Qty	Qty	- h
311		Novable	Bearing		1	0	0	1	0 Ea	cn _
515		Steel Pro	tective Coating		1	0	0	0	1 Sq	uare Feet
Elemer	nt Defect	Туре		Defect Description			CS	CS Qtv	Maint	
311	Corrosion	71 -	Active Corrosion &	Section Loss <25% in t	the plates and		3	1	Qiy 1	Each
			fasteners.							
515	Effectiveness Protective Co	s (Steel patings)	Failed No Protection	n			4	1	1 5	Square Feet
	General Com	ments								
Spa	an 3			Beam 2						
, Diat	ta Girdar									
1 Ia	le Onder									
Ele Nur	ment mber		Element Name		Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
107		Steel Op	en Girder/Beam		50	0	48	2	0 Fe	et
515		Steel Pro	tective Coating		452	0	0	284	168 Sq	uare Feet
Elemer Numbe	er Defect	Туре		Defect Description			CS	CS Qty	Maint Qty	
107	Corrosion		at Bent 2, end of be web 5/16" Remaining initiated since beam	am below diaphragm h ng 1" x 10", Surface Co n was cleaned and pain	nas Section Lo prrosion/Frecklented.	ss in ed Rust	3	1	1	Feet
107	Corrosion		at Bent 3, end of be web 3/8" Remaining initiated since beam	am below diaphragm h g 1" x 10", Surface Corr n was cleaned and pain	nas Section Lo rosion/Freckle nted.	ss in d Rust	3	1	1	Feet
107	Corrosion		Surface Corrosion/ length of beam.	Freckled Rust in the we	eb and flanges	s along	2	48	I	Feet
515	Effectiveness Protective Co	s (Steel batings)	Failed No Protection	n			4	168	168	Square Feet
515	Effectiveness Protective Co	s (Steel batings)	Failing Corrosion in	itiated			3	284	284	Square Feet

Near Bearing

# Fixed Bearing

Span 3

1 1/10	a Doarnig						
Elen Num	nent nber	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
313	Fixed Be	earing	1	0	0	1	0 Each
515	Steel Pr	otective Coating	1	0	0	0	1 Square Feet
Element Number	t Defect Type	Defect Descr	iption		CS	CS Qty	Maint Qty
313	Corrosion	Active Corrosion & Section Loss <2 fasteners.	5% in the plates and		3	1	1 Each
515	Effectiveness (Steel Protective Coatings)	Failed No Protection			4	1	1 Square Feet
-	Concernel Commente						

General Comments

#### Span 3

#### Far Bearing

#### Movable Bearing

Elen Num	nent nber	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
311	Movable	Bearing	1	0	0	1	0	Each
515	Steel Pr	otective Coating	1	0	0	0	1	Square Feet
Elemen	t Defect Type	Defect Descript	ion		CS	CS Qty	Maint Qty	
311	Corrosion	Active Corrosion & Section Loss <25% fasteners.	in the plates and		3	1	-	1 Each
515	Effectiveness (Steel Protective Coatings)	Failed No Protection			4	1		1 Square Feet
(	General Comments							

#### Span 3 Beam 3 Plate Girder Element Total CS1 CS2 CS3 CS4 Number Element Name Qty Qty Qty Qty Qty 107 Steel Open Girder/Beam 50 0 48 2 0 Feet 515 Steel Protective Coating 452 0 0 284 168 Square Feet Element Maint Defect Type **Defect Description** CS CS Qty Number Qty 107 Corrosion at Bent 2, end of beam has Section Loss in the web below 3 1 1 Feet diaphragm 5/16" Remaining 1" x 10"; Surface Corrosion/ Freckled Rust initiated since beam was cleaned and painted. at Bent 3, end of beam below diaphragm has Section Loss in web 3/8" Remaining 1" x 10", Freckled Rust initiated since 107 Corrosion 3 1 1 Feet beam was cleaned and painted. Surface Corrosion/ Freckled Rust in the web and flanges along 107 Corrosion 2 48 Feet length of beam. 515 Effectiveness (Steel Failed No Protection 4 168 168 Square Feet

3

284

284 Square Feet

Protective Coatings) General Comments

515

Protective Coatings) Effectiveness (Steel

Failing Corrosion initiated

Near Bearing

# Span 3 Fixed Bearing

1 1/10	a Doarnig						
Elen Num	nent nber	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
313	Fixed Be	earing	1	0	0	1	0 Each
515	Steel Pr	otective Coating	1	0	0	0	1 Square Feet
Element Number	t Defect Type	Defect Descr	iption		CS	CS Qty	Maint Qty
313	Corrosion	Active Corrosion & Section Loss <2 fasteners.	5% in the plates and		3	1	1 Each
515	Effectiveness (Steel Protective Coatings)	Failed No Protection			4	1	1 Square Feet
-	Concernel Commente						

**General Comments** 

# Span 3

Far Bearing

## Movable Bearing

Ele Nur	ment mber	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
311	Movable	Bearing	1	0	0	1	0	Each
515	Steel Pr	otective Coating	1	0	0	0	1	Square Feet
Elemer Numbe	nt Defect Type	Defect Description			CS	CS Qty	Maint Qty	
311	Corrosion	Active Corrosion & Section Loss <25% in t fasteners.	he plates and		3	1		1 Each
515	Effectiveness (Steel Protective Coatings)	Failed No Protection			4	1		1 Square Feet
	General Comments							

Span 3	Beam 4						
Plate Girder							
Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
107	Steel Open Girder/Beam	50	0	48	2	0	Feet
515	Steel Protective Coating	452	0	0	284	168	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
107	Corrosion	at Bent 2, end of beam has Section Loss in the web below diaphragm 3/16" to 5/16" Remaining 1" x 10"; Surface Corrosion/ Freckled Rust initiated since beam was cleaned and painted.	3	1	1	Feet
107	Corrosion	at Bent 3, end of beam has Section Loss in the web below diaphragm 5/16" Remaining 1" x 10"; Freckled Rust initiated since beam was cleaned and painted.	3	1	1	Feet
107	Corrosion	Surface Corrosion/ Freckled Rust in the web and flanges along length of beam.	2	48		Feet
515	Effectiveness (Steel Protective Coatings)	Failed No Protection	4	168	168	Square Feet
515	Effectiveness (Steel Protective Coatings)	Failing Corrosion initiated	3	284	284	Square Feet
(	General Comments					

### Span 3 Fixed Bearing

3							
nent nber	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
Fixed Be	earing	1	0	0	1	0	Each
Steel Pre	otective Coating	1	0	0	0	1	Square Feet
t r Defect Type	Defect Des	scription		CS	CS Qty	Maint Qty	
Corrosion	Active Corrosion & Section Loss - fasteners.	<25% in the plates and		3	1		1 Each
Effectiveness (Steel Protective Coatings)	Failed No Protection			4	1		1 Square Feet
	nent hber Fixed Be Steel Pro t r Defect Type Corrosion Effectiveness (Steel Protective Coatings)	nent hber Element Name Fixed Bearing Steel Protective Coating t r Defect Type Defect Des Corrosion Active Corrosion & Section Loss - fasteners. Effectiveness (Steel Failed No Protection Protective Coatings)	nent hber Element Name Qty Fixed Bearing 1 Steel Protective Coating 1 t r Defect Type Defect Description Corrosion Active Corrosion & Section Loss <25% in the plates and fasteners. Effectiveness (Steel Failed No Protection Protective Coatings)	nent hber Element Name Qty Qty Fixed Bearing 1 0 Steel Protective Coating 1 0 t r Defect Type Defect Description Corrosion Active Corrosion & Section Loss <25% in the plates and fasteners. Effectiveness (Steel Failed No Protection Protective Coatings)	nent hber Element Name Fixed Bearing Steel Protective Coating t r Defect Type Defect Description CS Corrosion Active Corrosion & Section Loss <25% in the plates and fasteners. Effectiveness (Steel Failed No Protection 4	nent hber Element Name Fixed Bearing Steel Protective Coating t r Defect Type Defect Description CS CS Qty Corrosion Active Corrosion & Section Loss <25% in the plates and fasteners. Effectiveness (Steel Failed No Protection 4 1	nent hber Element Name Fixed Bearing Steel Protective Coating t r Defect Type Defect Description Corrosion Active Corrosion & Section Loss <25% in the plates and fasteners. Effectiveness (Steel Failed No Protection Protective Coatings)

General Comments

### Span 3

Far Bearing

Near Bearing

#### Movable Bearing

Elen Num	nent Iber	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
311	Movable	Bearing	1	0	0	1	0	Each
515	Steel Pro	otective Coating	1	0	0	0	1	Square Feet
Element Number	Defect Type	Defect Description	I		CS	CS Qty	Maint Qty	
311	Corrosion	Active Corrosion & Section Loss <25% in fasteners.	the plates and		3	1		I Each
515	Effectiveness (Steel Protective Coatings)	Failed No Protection			4	1		Square Feet
(	General Comments							

#### Span 3 Beam 5 Plate Girder Element Total CS1 CS2 CS3 CS4 Element Name Number Qty Qty Qty Qty Qty 107 Steel Open Girder/Beam 50 0 40 10 0 Feet 515 Steel Protective Coating 452 0 0 284 168 Square Feet Element Maint CS Qty Defect Type **Defect Description** CS Number Qty at Bent 2, original beam: Section Loss in web below diaphragm 107 Corrosion 3 4 Feet 3/16" Remaining 6" x 1', lower 2" of web 3/16" Remaining x 3'; Temporary Repair to Section Loss, 1/4" thick plates bolted on both sides of beam in web 42" long x full height and on bottom flange full width x 32" long. 107 Corrosion at Bent 3, original beam: Section Loss in lower web 1/8" 3 6 6 Feet

		Remaining 4" x 5', bottom flange $3/4$ " Remaining x 5'; Temporary Repair to Section Loss, $1/4$ " thick plates bolted on both sides of beam in web 6'-6" long x full height and on bottom flange full width x 5' long.			
107	Corrosion	Surface Corrosion/ Freckled Rust in the web and flanges along length of beam.	2	40	Feet
515	Effectiveness (Steel Protective Coatings)	Failed No Protection	4	168	168 Square Feet
515	Effectiveness (Steel Protective Coatings)	Failing Corrosion initiated	3	284	284 Square Feet
	<u> </u>				

# Span 3

Fixe	d Bearing							
Elen Num	nent Iber	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
313	Fixed B	earing	1	0	0	1	0	Each
515	Steel Pr	rotective Coating	1	0	0	0	1	Square Feet
Element Number	Defect Type	Defect Descr	ption		CS	CS Qty	Maint Qty	
313	Corrosion	Active Corrosion & Section Loss <25 fasteners.	i% in the plates and		3	1		1 Each
515	Effectiveness (Steel Protective Coatings)	Failed No Protection			4	1		1 Square Feet
	0							

**General Comments** 

### Span 3

#### Far Bearing

Near Bearing

#### Movable Bearing

Elen Num	nent iber	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
311	Movable	Bearing	1	0	0	1	0 E	ach
515	Steel Pro	otective Coating	1	0	0	0	1 S	Square Feet
Element Number	t Defect Type	Defect Description			CS	CS Qty	Maint Qty	
311	Corrosion	Active Corrosion and Section Loss in plates anchor rods down to 3/8" Remaining.	s, Section Lo	oss in	3	1	1	Each
515	Effectiveness (Steel Protective Coatings)	Failed No Protection			4	1	1	Square Feet
(	General Comments							

#### Span 3 **Expansion Joint** Strip SEal CS1 CS2 CS3 CS4 Element Total Number Qty Element Name Qty Qty Qty Qty 300 Strip Seal Expansion Joint 0 0 Feet 28 16 12 Element Maint CS Qty Defect Type **Defect Description** CS Number Qty pourable joint seal partially pulled out exposing backing material. 300 Seal Damage 3 12 12 Feet **General Comments**

#### Span 4

#### Deck

#### Reinforced Concrete Deck

Ken		Deck						
Elen Num	nent iber	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	-
12	Reinfor	ced Concrete Deck	1,725	1,269	361	95	0 5	quare Feet
Element Number	t Defect Type	Defect Desc	cription		CS	CS Qty	Maint Qty	
12	Cracking (RC and Other)	deck surface: transverse cracks up	o to 1/16" wide.		3	70	70	Square Feet
12	Delamination/Spall	Deck underside in right overhang, x 6" x 4", in build-up adjacent to be	beginning at Bent 3 am 5.	, spall 10'	3	10	10	Square Feet
12	Delamination/Spall	Deck underside in right overhang, Delamination 10' x 6" x 4", in build-	beginning at End Be up adjacent to bear	ent 2, n 5.	3	10	10	Square Feet
12	Delamination/Spall	RC Deck underside left overhang a	at Bent 3, Delaminat	tion in	3	5	5	Square Feet

Structure	Number: <u>120109</u>			Inspe	ction Date: 03/15/2018
		build up 5' long x 6" x 4".			
12	Abrasion/Wear (PSC/RC)	deck surface: coarse aggregate exposed and intact in the concrete.	2	360	Square Feet
12	Delamination/Spall	Deck underside left overhang 6' from Abutment 2, Spall with Exposed Steel 5" x 3" x 1".	2	1	1 Square Feet

Spa	n 4			Expansion Joint							
Stri	p SEal										
Elei Nur 300	ment nber	Strip Se	Element Name al Expansion Joint		Total Qty 28	CS1 Qty 18	CS2 Qty 0	CS3 Qty 10	CS4 Qty 0	Feet	
Elemen Numbe 300	nt De er De Seal Da General	efect Type mage Comments	pourable joint seal p material.	Defect Description artially pulled out expo	osing backing		CS 3	CS Qty 10	Maint Qty 1(	) Feet	
Spa Cor	in 4 Increte F	Railing		Left Bridge Rail							
Eler Nur 331	ment nber	Reinford	Element Name ced Concrete Bridge R	ailing	Total Qty 45	CS1 Qty 44	CS2 Qty 0	CS3 Qty 1	CS4 Qty 0	Feet	
Elemen Numbe 331	nt Delamir Delamir General	efect Type hation/Spall Comments	left RC sidewalk at I flare, 1'x 1' x 8".	Defect Description End Bent 2, Spall with	Exposed Stee	l at curb	CS 3	CS Qty 1	Maint Qty	I Feet	
	CO	ARSE AGGRE	GATE EXPOSED IN	OP OF RAIL							
Spa Cor	nn 4 Norete F	Railing		Right Bridge Rai	I						
Eler Nur 331	ment nber	Reinford	Element Name ced Concrete Bridge R	ailing	Total Qty 45	CS1 Qty 45	CS2 Qty 0	CS3 Qty 0	CS4 Qty 0	Feet	
Elemen Numbe	nt De	efect Type		Defect Description			CS	CS Qty	Maint Qty		
	General CO/	Comments ARSE AGGRE	GATE EXPOSED IN	TOP OF RAIL							
Spa Plat	in 4 :e Girde	er		Beam 1							
Eler Nur 107	ment nber	Steel O	Element Name ben Girder/Beam		Total Qty 45	CS1 Qty 0	CS2 Qty 39	CS3 Qty 6	CS4 Qty 0	Feet	
515		Steel Pi	otective Coating		405	0	9	296	100	Square Feet	
Numbe	r De Corrosio	efect Type	at Bent 3, original be Remaining x 3' with in bottom flange 7/1 Section Loss, 1/4" th web 4' long x full he long.	Defect Description eam: Section Loss in lo rust holes below diaph 6" Remaining x 3'; Te nick plates bolted on bo ght and on bottom flar	ower web 3/16 magm, Section mporary Repa oth sides of be nge full width x	" ir to eam in : 3'	CS 3	CS Qty 4	Qty	Feet	

Structure	Number: <u>120109</u>			Inspe	ction Da	ate: 03/15/2018
107	Corrosion	PRIORITY MAINTENANCE: Span 4 Beam 1 right side at End Bent 2, bottom flange has Active Corrosion and Section Loss, 5/8" to 1/2" Remaining 3" x 18"; Lower web has Section Loss 5/16" Remaining 3" x 2', with corrosion initiated. Beam end has been painted since previous inspection.	3	2	2	Feet
107	Corrosion	at End Bent 2, Section Loss in top and bottom flanges 11/16" Remaining up to 11-1/2" x 1', lower 3" of web 7/16" Remaining 1' long. corrosion arrested. No change since previous inspection.	2	1		Feet
107	Corrosion	Surface Corrosion/ Freckled Rust in the flanges and web along length of beam.	2	38		Feet
515	Effectiveness (Steel Protective Coatings)	Failed No Protection	4	100	100	Square Feet
515	Effectiveness (Steel Protective Coatings)	Failing Corrosion initiated	3	296	296	Square Feet
515	Effectiveness (Steel Protective Coatings)	Substantially Effective Freckled Rust	2	9	9	Square Feet
	General Comments					

Spa	n 4			Near Bearing						
Mov	able	e Bearing								
Elen Num 311	nent iber	Movable	Element Name Bearing		Total Qty 1	CS1 Qty 0	CS2 Qty 0	CS3 Qty 1	CS4 Qty 0	Each
515		Steel Pro	otective Coating		1	0	0	0	1	Square Feet
Elemen	t	Defect Type		Defect Description			CS	CS Qty	Maint Qty	
311	Cori	rosion	Active Corrosion an anchor rods down to	d Section Loss in plates, o 3/8" Remaining.	Section	Loss in	3	1		I Each
515	Effe Prot	ctiveness (Steel ective Coatings)	Failed No Protection	ſ			4	1		Square Feet
(	Gene	ral Comments								

n 4	Far Bearing	]					
ed Bearing							
nent nber	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
Fixed Be	earing	1	0	0	1	0	Each
Steel Pre	otective Coating	1	0	0	0	1	Square Feet
t r Defect Type	Defect Desc	ription		CS	CS Qty	Maint Qty	
Corrosion	Bearing Assembly seat 1 at End Be Section Loss <25% in the plates.	nt 2: Active Corrosi	on and	3	1	-	1 Each
Effectiveness (Steel Protective Coatings)	Failed No Protection			4	1		1 Square Feet
	n 4 ed Bearing nent nber Fixed Be Steel Pro t Corrosion Effectiveness (Steel Protective Coatings)	n 4 Far Bearing ed Bearing nent her Element Name Fixed Bearing Steel Protective Coating t Corrosion Bearing Assembly seat 1 at End Be Section Loss <25% in the plates. Effectiveness (Steel Failed No Protection Protective Coatings)	n 4 Far Bearing ed Bearing nent hber Element Name Qty Fixed Bearing 1 Steel Protective Coating 1 t r Defect Type Defect Description Corrosion Bearing Assembly seat 1 at End Bent 2: Active Corrosia Section Loss <25% in the plates. Effectiveness (Steel Failed No Protection Protective Coatings)	n 4 Far Bearing ed Bearing nent hber Element Name Total CS1 Qty Qty Fixed Bearing 1 0 Steel Protective Coating 1 0 t r Defect Type Defect Description Corrosion Bearing Assembly seat 1 at End Bent 2: Active Corrosion and Section Loss <25% in the plates. Effectiveness (Steel Failed No Protection Protective Coatings)	n 4 Far Bearing ad Bearing ment mber Element Name Fixed Bearing Steel Protective Coating t r Defect Type Defect Description CS Corrosion Bearing Assembly seat 1 at End Bent 2: Active Corrosion and Section Loss <25% in the plates. Effectiveness (Steel Protective Coatings) Failed No Protection 4	n 4 Far Bearing ad Bearing nent hber Element Name Fixed Bearing Steel Protective Coating t Defect Type Defect Description CS CS Qty Corrosion Bearing Assembly seat 1 at End Bent 2: Active Corrosion and Section Loss <25% in the plates. Effectiveness (Steel Protective Coating) Failed No Protection 4 1	n 4 Far Bearing ad Bearing Total CS1 CS2 CS3 CS4 Adty Qty Qty Qty Qty Qty Qty Qty Qty Fixed Bearing 1 0 0 1 0 Steel Protective Coating 1 0 0 0 1 t Defect Type Defect Description CS CS Qty Qty Corrosion Bearing Assembly seat 1 at End Bent 2: Active Corrosion and 3 1 Effectiveness (Steel Failed No Protection 4 1

General	Comments	

Spa	n 4		I	Beam 2							
Plat	e Girder										
Elen Num	nent nber		Element Name		Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty		
107		Steel C	Open Girder/Beam		45	0	44	1	0	Feet	
515		Steel F	Protective Coating		405	0	0	283	122	Square Feet	
Elemen	t Defe	ect Type		Defect Description			CS	CS Qty	Maint Qty		
107	Corrosion		at Bent 3, end of bea	m below diaphragm h	as Section L	oss in	3	1		1 Feet	

Structure	Number: <u>120109</u>			Inspe	ection Date: 03/15/2018
		web 3/8" Remaining 1" x 10", Surface Corrosion/Freckled Rust initiated since beam was cleaned and painted.			
107	Corrosion	Surface Corrosion/ Freckled Rust in the flanges and web along length of beam.	2	44	Feet
515	Effectiveness (Steel Protective Coatings)	Failed No Protection	4	122	122 Square Feet
515	Effectiveness (Steel Protective Coatings)	Failing Corrosion initiated	3	283	283 Square Feet
	Constal Commente				

# Span 4

Near Bearing

# Movable Bearing

Elen Num	nent hber	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
311	Movable	Bearing	1	0	0	1	0 Each
515	Steel Pr	otective Coating	1	0	0	0	1 Square Feet
Element Number	t Defect Type	Defect Descrip	otion		CS	CS Qty	Maint Qty
311	Corrosion	Active Corrosion & Section Loss <256 fasteners.	% in the plates and		3	1	1 Each
515	Effectiveness (Steel Protective Coatings)	Failed No Protection			4	1	1 Square Feet
Ī	General Comments						

Span 4

# Far Bearing

Fixe	ed Bearing							
Elen Num	nent nber	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
313	Fixed B	earing	1	0	0	1	0	Each
515	Steel Pr	otective Coating	1	0	0	0	1	Square Feet
Elemen Number	t r Defect Type	Defect Descri	ption		CS	CS Qty	Maint Qty	
313	Corrosion	Bearing Assembly seat 2 at End Ben Section Loss <25% in the plates.	t 2: Active Corrosio	on and	3	1	-	1 Each
515	Effectiveness (Steel Protective Coatings)	Failed No Protection			4	1		1 Square Feet
-	General Comments							

Span 4

Beam 3

# Plate Girder

Elen Num	nent iber Staal Or	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	at .
107	Sleer Op	en Giluei/Beam	45	0	41	4	U Fee	ει
515	Steel Pro	otective Coating	405	0	0	283	122 Sq	uare Feet
Elemen Number	t Defect Type	Defect Descrip	tion		CS	CS Qty	Maint Qty	
107	Corrosion	at Bent 3, end of beam below diaphrag web 1/4" Remaining 1" x 10", Section Remaining x 3', bottom flange 11/16"	gm has Section Lo Loss in lower 3" w Remaining x 3'.	oss in veb 3/8"	3	4	4 F	Feet
107	Corrosion	Surface Corrosion/ Freckled Rust in the length of beam.	e flanges and wel	b along	2	41	F	Feet
515	Effectiveness (Steel Protective Coatings)	Failed No Protection			4	122	122 \$	Square Feet
515	Effectiveness (Steel Protective Coatings)	Failing Corrosion initiated			3	283	283 \$	Square Feet

-									
Spa	in 4		Near Bearing						
Мол	able Bearing								
Ele	ment			Total	CS1	CS2	CS3	CS4	
311 Movable Bearing		Element Name able Bearing		Qty 1	Qty 0	Qty 0	Qty 1	Qty 0 Ea	ich
515 Steel Protective Coating				1	0	0	0	1 Sq	uare Feet
Elemer	nt							Maint	
Numbe	r Defect Type		Defect Descript	ion		CS	CS Qty	Qty	
311 Corrosion Active Corrosion fasteners.			Section Loss <25%	in the plates and		3	1	1	Each
515	Effectiveness (Ste Protective Coating	el Failed No Protection s)	٦			4	1	1	Square Feet
	General Comment	S							
Spa	in 4		Far Bearing						
Fixe	ed Bearing								
Ele	ment			Total	CS1	CS2	CS3	CS4	
313	nber Fixe	d Bearing		Qty 1	Qty 0	Qty 0	Qty 1	0 Ea	ich
515	Stee	I Protective Coating		1	0	0	0	1 Sq	uare Feet
Elemer	nt							Maint	
Number Defect Type			Defect Descript	ion		CS	CS Qty	Qty	<b>F h</b>
313 Corrosion Bearing Assembly Section Loss <259		Section Loss <25%	in the plates.	2: Active Corrosion	n and	3	1	1	Each
515	Effectiveness (Ste Protective Coating	el Failed No Protection s)	٦			4	1	1	Square Feet
	General Comment	S							
Spa	in 4		Beam 4						
Plat	e Girder								
Ele	ment			Total	CS1	CS2	CS3	CS4	
Nur 107	nber Stee	Element Name		Qty 45	Qty 0	Qty 44	Qty 1	Qty 0 Fe	et
515	Stee	Protective Coating		405	0	0	283	122 Sq	uare Feet
Elemer			Defect Descript	ion		<u> </u>	CS 044	Maint	
Numbe	r Derect Type	at Pant 2 halow dia	Delect Descript			2		Qty 1	Foot
107	CUTUSIUIT	Remaining 1" x 10" 4" x 11-1/2". Surfa beam was cleaned	Section Loss botto ce Corrosion/Freck and painted.	om flange 5/8" Rei led Rust initiated	maining since	Э	I	I	
107	Damage	Span 4 RC interme cracks up to 1/8" wi	diate diaphragm at de with efflorescen	Bent 3 in bay 4, D ce.	iagonal	3		1	Feet
107	Corrosion	Surface Corrosion/	Freckled Rust in the	e flanges and web	along	2	44		Feet
515	Effectiveness (Ste	el Failed No Protection	ı			4	122	122	Square Feet
515	Effectiveness (Ste	el Failing Corrosion in	itiated			3	283	283	Square Feet
	General Comment	<i>७।</i> ९							

Span 4

# Movable Bearing

	<b>J</b>						
Elen Num	nent 1ber	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
311	Movable Bearing		1	0	0	1	0 Each
515	Steel Pr	otective Coating	1	0	0	0	1 Square Feet
Elemen Number	t Defect Type	Defect Desci	ription		CS	CS Qty	Maint Qty
311	Corrosion	Active Corrosion & Section Loss <25% in the plates and fasteners.			3	1	1 Each
515	Effectiveness (Steel Failed No Protection Protective Coatings)				4	1	1 Square Feet
-	Conorol Commonto						

General Comments

### Span 4

Far Bearing

#### **Fixed Bearing** Element Total CS1 Element Name Number Qty Qty 313 **Fixed Bearing** 1 0 515 Steel Protective Coating 0 1 Element Defect Type **Defect Description** Number

 313
 Corrosion
 Bearing Assembly seat 4 at End Bent 2: Active Corrosion and Section Loss <25% in the plates.</td>
 3
 1
 1
 Each

 515
 Effectiveness (Steel Protective Coatings)
 Failed No Protection
 4
 1
 1
 Square Feet

 General Comments
 General Comments

CS2

Qty

0

0

CS

CS3

Qty

1

0

CS Qty

CS4

Qty

Maint

Qty

0 Each

1 Square Feet

#### Span 4 Beam 5 Plate Girder Element Total CS1 CS2 CS3 CS4 Element Name Number Qty Qty Qty Qty Qty 107 Steel Open Girder/Beam 45 0 34 11 0 Feet 515 Steel Protective Coating 405 0 0 283 122 Square Feet Element Maint

Number	Defect Type	Defect Description	CS	CS Qty	Qty	
107	Corrosion	at 5' from Bent 3, Section Loss in lower web 5/16" to 7/16" Remaining 3" x 5'.	3	5	5	Feet
107	Corrosion	at Bent 3, original beam: Section Loss in web around diaphragm and along bottom flange 1/4" Remaining 3" x 5' with rust holes at end of beam. Temporary Repair to Section Loss, 1/4" thick plates bolted on both sides of beam in web 5' long x full height and on bottom flange full width x 4' long.	3	5	5	Feet
107	Corrosion	PRIORITY MAINTENANCE: Span 4 Beam 5 at End Bent 2, bottom flange in front of bearing, Active Corrosion and Section Loss 9/16" Remaining 4" x 11-1/2". Beam end painted since previous inspection.	3	1	1	Feet
107	Corrosion	Surface Corrosion/ Freckled Rust in the flanges and web along length of beam.	2	34		Feet
515	Effectiveness (Steel Protective Coatings)	Failed No Protection	4	122	122	Square Feet
515	Effectiveness (Steel Protective Coatings)	Failing Corrosion initiated	3	283	283	Square Feet
-	<b>New Arrest Ore</b>					

## Movable Bearing

Span 4

Elen Num	nent nber	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
311	Movable Bearing		1	0	0	1	0 Each
515	Steel Pr	otective Coating	1	0	0	0	1 Square Feet
Elemen Number	t Defect Type	Defect Desc	ription		CS	CS Qty	Maint Qty
311	Corrosion	rosion Active Corrosion & Section Loss <25% in the plates and fasteners.			3	1	1 Each
515	Effectiveness (Steel Failed No Protection Protective Coatings)				4	1	1 Square Feet
_	Concernel Commente						

General Comments

### Span 4

Far Bearing

#### **Fixed Bearing**

#### Element Total CS1 CS2 CS3 CS4 Number Element Name Qty Qty Qty Qty Qty 313 **Fixed Bearing** 1 0 0 1 0 Each 515 Steel Protective Coating 0 0 1 Square Feet 1 0 Element Maint Defect Type **Defect Description** CS CS Qty Number Qty 313 Corrosion Bearing Assembly seat 5 at End Bent 2: Active Corrosion and 3 1 1 Each Section Loss <25% in the plates. 515 Effectiveness (Steel Failed No Protection 1 1 Square Feet 4 Protective Coatings) General Comments

End Bent 1 Cap 1 **Reinforced Concrete Pier Cap** Element Total CS1 CS2 CS3 CS4 Number Element Name Qty Qty Qty Qty Qty 234 Reinforced Concrete Pier Cap 40 32 0 8 0 Feet Element Maint Defect Type **Defect Description** CS CS Qty Number Qty 234 Delamination/Spall Cap below right overhang near brace pile, Spall with Exposed 3 2 2 Feet Steel 22" x 10" x 2". Delamination/Spall in bay 4, Spall with Exposed Steel 22" x 10" x 2" and 3 6 6 Feet 234 Delamination with cracks 4' x 10".

**General Comments** 

#### Bent 1

#### Cap 1

#### **Reinforced Concrete Pier Cap**

Elem	nent	Element Name	Total	CS1	CS2	CS3	CS4	
Nu11					Qiy	Qiy	Qiy	<b>F</b>
234	Reinfor	ced Concrete Pier Cap	35	34	1	0	0	Feet
521	Concre	te Protective Coating	438	438	0	0	0	Square Feet
Element	Defect Type	Defect Descri	ption		CS	CS Qty	Maint Qty	
234	Patched Area	right end, sound patches full height x	6" x 8".		2	1		Feet

							_
End Bent 1	Abutment						
Reinforced Concre	ete Abutment						
Element Number 215 Reii	Element Name forced Concrete Abutment	Total Qty 42	CS1 Qty 37	CS2 Qty 5	CS3 Qty 0	CS4 Qty 0 Feet	
Element Number Defect Type 215 Cracking (RC and	Defect Descriptio	n 32" cracks.		CS 2	CS Qty 5	Maint Qty Feet	
Other) General Comment	S						
Bent 2 Reinforced Concre	Cap 1 ete Pier Cap						
Element Number 234 Reiu	Element Name nforced Concrete Pier Cap	Total Qty 35	CS1 Qty 23	CS2 Qty 6	CS3 Qty 6	CS4 Qty 0 Feet	
521 Cor	crete Protective Coating	438	438	0	0	0 Square Feet	
Element Number Defect Type	Defect Descriptio	n	-dia al	CS	CS Qty	Maint Qty	
234 Cracking (RC and Other) 234 Patched Area	crack and Delamination 6' x 5" x 3". East side below bay 2, sound patch to Sp	o 4, 1/8 longitu	ed Steel	2	6	6 Feet	
General Comment	S						
Bent 2	Pile 6						
Reinforced Concre	ete Pile						
Element Number 227 Reir	Element Name nforced Concrete Pile	Total Qty 1	CS1 Qty -4	CS2 Qty 0	CS3 Qty 5	CS4 Qty 0 Each	
Element Number Defect Type 227 Cracking (RC and	Defect Descriptio Southeast Corner vertical crack up to 3/1	n 6" wide with		CS 3	CS Qty 5	Maint Qty 5 Each	
General Comment	S Delamination 3 x 3 x 5.						
End Bent 2	Abutment						
Reinforced Concre	ete Abutment						
Element Number 215 Reir	Element Name nforced Concrete Abutment	Total Qty 42	CS1 Qty 30	CS2 Qty 12	CS3 Qty 0	CS4 Qty 0 Feet	
Element Number Defect Type	Defect Descriptio	n		CS	CS Qty	Maint Qty	

2

12

Feet

215 Cracking (RC and Abutment 2 in bay 4 and below right overhang 1/32" cracks. Other)

	120100					Ins	spection L	ale. <u>05/15/2010</u>
Bent	t 3	Cap 1						
Rein	forced Concrete	Pier Cap						
Elem Num 234	nent hber Reinford	Element Name ced Concrete Pier Cap	Total Qty 35	CS1 Qty 27	CS2 Qty 8	CS3 Qty 0	CS4 Qty 0 F	eet
521 Concret		te Protective Coating	438	438	0	0	0 5	Square Feet
Element Number	t Defect Type	Defect Descri	ption		CS	CS Qty	Maint Qty	
234	Cracking (RC and Other)	right end has up to 1/32" map crack	S.		2	2	,	Feet
234	Delamination/Spall	west face bottom corner at column 3	1/8" crack and		2	6	6	Foot
_	Delamination opan	Delamination 2" x 6'.			2	Ũ	0	
Ċ	General Comments	Delamination 2" x 6'.						
Bent	General Comments	Delamination 2" x 6'. Pile 3						
G Bent Rein	General Comments t 3 iforced Concrete	Pile 3			2			
Bent Rein Elerr Num	General Comments t 3 iforced Concrete	Pile 3 Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
Bent Rein Elerr Num 227	General Comments t 3 aforced Concrete nent aber Reinford	Pile 3 Element Name ced Concrete Pile	Total Qty 1	CS1 Qty 0	CS2 Qty 1	CS3 Qty 0	CS4 Qty 0 E	Each
Bent Rein Eler Num 227 Element Number	General Comments t 3 forced Concrete nent ber Reinford t Defect Type	Pile 3 Element Name ced Concrete Pile Defect Descri	Total Qty 1 ption	CS1 Qty 0	CS2 Qty 1 CS	CS3 Qty 0 CS Qty	CS4 Qty 0 E Maint Qty	ach

# **Elements Verfied**

Location	Name	Component	Element Name	Amount
Span 1	Deck	Reinforced Concrete Deck	Reinforced Concrete Deck	1725
Span 1	Beam 1	Plate Girder	Steel Open Girder/Beam	45
Span 1	Beam 2	Plate Girder	Steel Open Girder/Beam	45
Span 1	Beam 3	Plate Girder	Steel Open Girder/Beam	45
Span 1	Beam 4	Plate Girder	Steel Open Girder/Beam	45
Span 1	Beam 5	Plate Girder	Steel Open Girder/Beam	45
Span 1	Left Bridge Rail	Concrete Railing	Reinforced Concrete Bridge Railing	45
Span 1	Right Bridge Rail	Concrete Railing	Reinforced Concrete Bridge Railing	45
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	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 2	Deck	Reinforced Concrete Deck	Reinforced Concrete Deck	1917
Span 2	Beam 1	Plate Girder	Steel Open Girder/Beam	50
Span 2	Beam 2	Plate Girder	Steel Open Girder/Beam	50
Span 2	Beam 3	Plate Girder	Steel Open Girder/Beam	50
Span 2	Beam 4	Plate Girder	Steel Open Girder/Beam	50
Span 2	Beam 5	Plate Girder	Steel Open Girder/Beam	50
Span 2	Left Bridge Rail	Concrete Railing	Reinforced Concrete Bridge Railing	50
Span 2	Right Bridge Rail	Concrete Railing	Reinforced Concrete Bridge Railing	50
Span 2	Expansion Joint	Strip SEal	Strip Seal Expansion Joint	28
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	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	Far Bearing	Movable Bearing	Movable Bearing	1
Span 2	Near Bearing	Fixed Bearing	Fixed Bearing	1
Span 3	Deck	Reinforced Concrete Deck	Reinforced Concrete Deck	1917
Span 3	Beam 1	Plate Girder	Steel Open Girder/Beam	50
Span 3	Beam 2	Plate Girder	Steel Open Girder/Beam	50
Span 3	Beam 3	Plate Girder	Steel Open Girder/Beam	50
Span 3	Beam 4	Plate Girder	Steel Open Girder/Beam	50
Span 3	Beam 5	Plate Girder	Steel Open Girder/Beam	50
Span 3	Left Bridge Rail	Concrete Railing	Reinforced Concrete Bridge Railing	50
Span 3	Right Bridge Rail	Concrete Railing	Reinforced Concrete Bridge Railing	50

# **Elements Verfied**

Location	Name	Component	Element Name	Amount
Span 3	Expansion Joint	Strip SEal	Strip Seal Expansion Joint	28
Span 3	Far Bearing	Movable Bearing	Movable Bearing	1
Span 3	Near Bearing	Fixed Bearing	Fixed Bearing	1
Span 3	Near Bearing	Fixed Bearing	Fixed Bearing	1
Span 3	Far Bearing	Movable Bearing	Movable Bearing	1
Span 3	Far Bearing	Movable Bearing	Movable Bearing	1
Span 3	Near Bearing	Fixed Bearing	Fixed Bearing	1
Span 3	Near Bearing	Fixed Bearing	Fixed Bearing	1
Span 3	Far Bearing	Movable Bearing	Movable Bearing	1
Span 3	Far Bearing	Movable Bearing	Movable Bearing	1
Span 3	Near Bearing	Fixed Bearing	Fixed Bearing	1
Span 4	Deck	Reinforced Concrete Deck	Reinforced Concrete Deck	1725
Span 4	Beam 1	Plate Girder	Steel Open Girder/Beam	45
Span 4	Beam 2	Plate Girder	Steel Open Girder/Beam	45
Span 4	Beam 3	Plate Girder	Steel Open Girder/Beam	45
Span 4	Beam 4	Plate Girder	Steel Open Girder/Beam	45
Span 4	Beam 5	Plate Girder	Steel Open Girder/Beam	45
Span 4	Left Bridge Rail	Concrete Railing	Reinforced Concrete Bridge Railing	45
Span 4	Right Bridge Rail	Concrete Railing	Reinforced Concrete Bridge Railing	45
Span 4	Expansion Joint	Strip SEal	Strip Seal Expansion Joint	28
Span 4	Near Bearing	Movable Bearing	Movable Bearing	1
Span 4	Far Bearing	Fixed Bearing	Fixed Bearing	1
Span 4	Far Bearing	Fixed Bearing	Fixed Bearing	1
Span 4	Near Bearing	Movable Bearing	Movable Bearing	1
Span 4	Near Bearing	Movable Bearing	Movable Bearing	1
Span 4	Far Bearing	Fixed Bearing	Fixed Bearing	1
Span 4	Far Bearing	Fixed Bearing	Fixed Bearing	1
Span 4	Near Bearing	Movable Bearing	Movable Bearing	1
Span 4	Near Bearing	Movable Bearing	Movable Bearing	1
Span 4	Far Bearing	Fixed Bearing	Fixed Bearing	1
Bent 1	Cap 1	Reinforced Concrete Pier Cap	Reinforced Concrete Pier Cap	35
Bent 1	Pile 1	Reinforced Concrete Pile	Reinforced Concrete Pile	1
Bent 1	Pile 2	Reinforced Concrete Pile	Reinforced Concrete Pile	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
Bent 1	Pile 7	Reinforced Concrete Column	Reinforced Concrete Column	1
Bent 1	Pile 8	Reinforced Concrete Column	Reinforced Concrete Column	1
End Bent 1	Cap 1	Reinforced Concrete Pier Cap	Reinforced Concrete Pier Cap	40
End Bent 1	Abutment	Reinforced Concrete Abutment	Reinforced Concrete Abutment	42
Bent 2	Cap 1	Reinforced Concrete Pier Cap	Reinforced Concrete Pier Cap	35
Bent 2	Pile 1	Reinforced Concrete Pile	Reinforced Concrete Pile	1
Bent 2	Pile 2	Reinforced Concrete Pile	Reinforced Concrete Pile	1
Bent 2	Pile 3	Reinforced Concrete Pile	Reinforced Concrete Pile	1

# **Elements Verfied**

Location	Name	Component	Element Name	Amount
Bent 2	Pile 4	Reinforced Concrete Pile	Reinforced Concrete Pile	1
Bent 2	Pile 5	Reinforced Concrete Pile	Reinforced Concrete Pile	1
Bent 2	Pile 6	Reinforced Concrete Pile	Reinforced Concrete Pile	1
Bent 2	Pile 7	Reinforced Concrete Pile	Reinforced Concrete Pile	1
Bent 2	Pile 8	Reinforced Concrete Pile	Reinforced Concrete Pile	1
End Bent 2	Cap 1	Reinforced Concrete Pier Cap	Reinforced Concrete Pier Cap	40
End Bent 2	Abutment	Reinforced Concrete Abutment	Reinforced Concrete Abutment	42
Bent 3	Cap 1	Reinforced Concrete Pier Cap	Reinforced Concrete Pier Cap	35
Bent 3	Pile 1	Reinforced Concrete Pile	Reinforced Concrete Pile	1
Bent 3	Pile 2	Reinforced Concrete Pile	Reinforced Concrete Pile	1
Bent 3	Pile 3	Reinforced Concrete Pile	Reinforced Concrete Pile	1
Bent 3	Pile 4	Reinforced Concrete Pile	Reinforced Concrete Pile	1
Bent 3	Pile 5	Reinforced Concrete Pile	Reinforced Concrete Pile	1
Bent 3	Pile 6	Reinforced Concrete Pile	Reinforced Concrete Pile	1
Bent 3	Pile 7	Reinforced Concrete Pile	Reinforced Concrete Pile	1
Bent 3	Pile 8	Reinforced Concrete Pile	Reinforced Concrete Pile	1

# **General Inspection Notes**

Span 1 Left Bridge Rail COARSE AGGREGATE EXPOSED IN TOP OF RAIL **Right Bridge Rail** Span 1 COARSE AGGREGATE EXPOSED IN TOP OF RAIL Span 2 **Right Bridge Rail** COARSE AGGREGATE EXPOSED IN TOP OF RAIL Span 3 Left Bridge Rail COARSE AGGREGATE EXPOSED IN TOP OF RAIL Span 3 **Right Bridge Rail** COARSE AGGREGATE EXPOSED IN TOP OF RAIL Span 4 **Right Bridge Rail** COARSE AGGREGATE EXPOSED IN TOP OF RAIL

# National Bridge and NC Inspection Items

Structure Number: 120109

Inspection Date: 03/15/2018

#### National Bridge Inventory Items

Item	Grade Scale	Grade
Item 58: Deck	0 - 9 , N	4
Item 59: Superstructure	0 - 9 , N	4
Item 60: Substructure	0 - 9 , N	5
Item 61: Channel and Channel Protection	0 - 9 , N	Ν
Item 62: Culvert	0 - 9 , N	Ν
Item 71: Waterway Adequacy	0 - 9 , N	Ν
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	G	0	3350
Field Scour Evaluation				
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	7		
Superstructure Paint Code		U		

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	Ν
Priority Maintenance Request Submitted	YES/NO	Y
Inspection Time	Hours	12
Traffic Control Time	Hours	0
Snooper Time	Hours	0
Ladder Used	YES/NO	Y
Bucket Truck Used	YES/NO	Ν
Boat Used	YES/NO	Ν
Other Equipment Used	YES/NO	N

# National Bridge and NC SMU Inspection Item Details

ltem	Deck - Item 58	Grada 1		Maint Code	Otv	0		
Details	*** A Priority maintenance has been issue	ed for the following:***			cety.	U		
	PRIORITY MAINTENANCE: Span 3 RC I	Deck underside left overhan	g at Ber	nt 3, Delamination	in build up 7	' long x 6"	x 4'	
	Span 1 Deck surface at Bent 1 joint near	c/l, sound patch and spall w	ith alliga	ator cracks, loose	concrete.			
	Span 2 Deck underside in left overhang, spall in build up adjacent to beam 1, with patching covering steel reinforcement,							
	Temporary Repair: Span 2 Deck left over Span 2 Deck left overhang at Bent 1, loos Span 2 Deck underside at mid-Span in ba in right overhang, spall no exposed steel	hang supported by Steel H-l se bolt thru top right flange w ay 2 along beam 2, spall no in build-up along beam 5.	Pile crut vith spal exposed	ch from bents 1 to I in underside of E d steel. Deck und	9 2. Steel H- Deck. erside begini	Pile suppo ning at Bei	orting nt 1	
	Span 3 Deck surface near Bent 2 joint at joint near right curb, 1/16" cracks and Del efflorescence in bays 2 thru 4.	c/l, (2) sound patches to spa amination. Deck underside	alls, 3' x at Bent	2', and 18" x 12". 2, 1/32" map crac	Deck surfac	e at Bent : ice	2	
	Span 4 Deck underside left overhang 6' fr beginning at End Bent 2, Delamination in Bent 3, spall in build-up adjacent to beam x 6" $x 4$ ".	rom Abutment 2, Spall with B build-up adjacent to beam 5 5. RC Deck underside left	Exposec 5; Deck overhar	d Steel; Deck unde underside in right ng at Bent 3, Dela	erside in right overhang, b mination in b	t overhang eginning a uild up 5' l	j, at ong	
Item	Superstructure - Item 59	Grade 4		Maint Code	Qty.	0		
Details	*** A priority maintenance has been issue	ed for the following:***						
	PRIORITY MAINTENANCE: Span 4 Bear Loss, 5/8" to 1/2" Remaining 3" x 18"; Low end has been painted since previous insp	m 1 right side at End Bent 2 wer web has Section Loss 5, vection.	, bottom /16" Rer	i flange has Active maining 3" x 2', wi	Corrosion a	nd Sectior initiated. B	n Jean	
	PRIORITY MAINTENANCE: Span 4 Bear Loss 9/16" Remaining 4" x 11-1/2". Bean	m 5 at End Bent 2, bottom fl n end painted since previous	ange in s inspec	front of bearing, A tion.	ctive Corros	ion and Se	ectio	
	PRIORITY MAINTENANCE: Span 2 bear web 3/8" to 5/16" Remaining 4" x 5'; Activ	n 1 at Bent 1, 1' from end of e Corrosion & Section Loss	beam, in botto	Active Corrosion & m flange 1/2" Rer	& Section Los naining 10" x	ss in the lo 3'.	we	
	PRIORITY MAINTENANCE: Span 1 Bear web 3/8" Remaining 3" x 3' ; Active Corro	m 2 at Bent 1, 2' from end of sion & Section Loss in the le	f beam, eft botto	Active Corrosion a m flange 11/16" R	& Section Lo emaining 3"	ss in the lo x 3'.	owe	
	PRIORITY MAINTENANCE: Span 1 Bear 1/16" Remaining 5" x 2" with 5" x 1" of co Corrosion & Section Loss 3/8" Remaining	m 4 at Bent 1, Active Corros mplete Section Loss; lower 1 2" x 12".	ion & Se web at b	ection Loss in web pottom flange from	below diaph end of bear	nragm, 1/8 n, Active	" to	
	PRIORITY MAINTENANCE: Span 1 Bear Section Loss 3/8" to 1/2" Remaining 5" x 3/8" thick repair plate welded to right side	m 5 at 3' from end of beam a 3'; lower web left side Active of web and bottom flange.	at Bent ' e Corros	1, left bottom flang ion & Section Los	je has Active s 3/16" Rem	Corrosior aining 3" x	۱ an ۲ 3',	
	PRIORITY MAINTENANCE: Span 2 Bear web 3/8" Remaining 3" x 3'; bottom flange	m 1 at 2' from end of beam a Active Corrosion & Sectior	at Bent 2 n Loss 3	2, Active Corrosion /4" Remaining 3' >	n and Section (11-1/2".	n Loss in le	owe	
	All beam ends have Section Loss at bents	s 1, 2, and 3. Beam ends cl	eaned a	and painted since	previous insp	pection wit	h	
	Ganade Contraion/ Frechieu Musi Inilialeu	•						

Span 1 Beam 5 at Bent 1, Temporary Repair, Plates welded to Beam 1 right side of Web

Span 2 Beam 1 above Right South bound lane, impact damage previously straightened/repaired. Span 2 Beam 2 above Right South Bound lane, impact scrapes to bottom flange.

Span 2 Beam 4 at Bent 2 original beam end, web has Section Loss 5/16" Remaining 1" x 1', Temporary Repair (2) plates 1/4"x 7"x14" bolted to web over Section Loss.
Span 2 Beam 5 at Bent 2, original beam: Section Loss in web below diaphragm 3/16" to 1/16" Remaining with rust holes 7" x 1', lower 2" of web 3/16" Remaining x 3'; Temporary Repair to Section Loss, 1/4" thick plates bolted on both sides of beam in web 42" long x full height and on bottom flange full width x 32" long.

Span 3 Beam 5 at Bent 2, original beam: Section Loss in web below diaphragm 3/16" Remaining 6" x 1', lower 2" of web 3/16" Remaining x 3'; Temporary Repair to Section Loss, 1/4" thick plates bolted on both sides of beam in web 42" long x full height and on bottom flange full width x 32" long.

Span 3 Beam 1 at Bent 3, original beam: Section Loss in lower web 1/8" to 1/16" Remaining  $5" \times 7'-6"$  with rust holes, upper 2" of web 7/16" Remaining x 2'; Temporary Repair to Section Loss, 1/4" thick plates bolted on both sides of beam in web 7'-6" long x full height and on bottom flange full width x 6' long.

Span 4 Beam 1 at Bent 3, original beam: Section Loss in lower web 3/16" Remaining x 3' with rust holes below diaphragm, Section Loss in bottom flange 7/16" Remaining x 3'; Temporary Repair to Section Loss, 1/4" thick plates bolted on both sides of beam in web 4' long x full height and on bottom flange full width x 3' long.

Span 3 Beam 5 at Bent 3, original beam: Section Loss in lower web 1/8" Remaining 4" x 5', bottom flange 3/4" Remaining x 5'; Temporary Repair to Section Loss, 1/4" thick plates bolted on both sides of beam in web 6'-6" long x full height and on bottom flange full width x 5' long.

Span 4 Beam 5 at Bent 3, original beam: Section Loss in web around diaphragm and along bottom flange 1/4" Remaining 3" x 5' with rust holes at end of beam. Temporary Repair to Section Loss, 1/4" thick plates bolted on both sides of beam in web 5' long x full height and on bottom flange full width x 4' long.

Item Substructure - Item 60 Grade 5 Maint Code Qty. 0

Details End Bent 1 Cap below right overhang near brace pile, Spall with Exposed Steel. End Bent 1 Cap in bay 4, Spall with Exposed Steel and Delamination with cracks.

Bent 2 Cap west side bottom corner from column 3 to 4, 1/8" longitudinal crack and Delamination.

Bent 2 RC Column 6 Southeast Corner vertical crack up to 3/16" wide with Delamination 3" x 3" x 5'.

Bent 2 RC cap East side below bay 2, sound patch to Spall with Exposed Steel 5' x 2'.

ltem	Presently Posted	Grade Y	Maint Code	Qty.	0
Details	S.V.15, T.T.S.T. 18				
Item	General Comments and Misc Items	Grade	Maint Code	Qty.	0
Details	West Approach payement at bridge has transverse cracks up to 1/8" wide full width of roadway				

East Approach Pavement at bridge has transverse cracks up to 1/8" wide, full width of foadway. East Approach Pavement at bridge settled up to 1" with transverse cracks 1/8" to 1/2" wide.

pm: Guardrail end treatment at ne has impact damage: cable disconnected, end treatment pushed and leaning over 1'.

Date: 03/15/2018

**Condition Photos** 



West Approach pavement at bridge has transverse cracks up to 1/8" wide, full width of roadway.



Span 1 RC Deck surface near End Bent 1 has transverse cracks 1/16" wide, abrasion/wear with coarse aggregate exposed and intact in the concrete.

Date: 03/15/2018





Span 1 Deck surface at Bent 1 joint near c/l, sound patch and spall with alligator cracks, loose concrete.



Bent 1 joint pourable seal pulled out exposing backer material near c/l and at curbs.

County: CABARRUS

Date: 03/15/2018



Span 2 left RC rail near mid-Span, sound repair.



Span 3 Deck surface near Bent 2 joint at c/l, (2) sound patches to spalls.

Date: 03/15/2018



Span 3 Deck surface at Bent 2 joint near right curb, 1/16" cracks and Delamination.



East Approach Pavement at bridge settled up to 1" with transverse cracks 1/8" to 1/2" wide.

County: CABARRUS

Date: 03/15/2018

**Condition Photos** 



left RC sidewalk at End Bent 2, Spall with Exposed Steel, curb flare at Northeast Corner settled 8".



PRIORITY MAINTENANCE: Guardrail end treatment at Northeast Corner has impact damage: cable disconnected, end treatment pushed and leaning over 1'.

County: CABARRUS

Date: 03/15/2018



Span 4 Deck underside left overhang 6' from End Bent 2, Spall with Exposed Steel.



Span 4 Beam 1 Surface Corrosion and peeling paint along length of beam.

Date: 03/15/2018

## **Condition Photos**



PRIORITY MAINTENANCE: Span 4 Beam 1 right side at End Bent 2, bottom flange has Active Corrosion and scale with Section Loss, Lower web has Section Loss with corrosion initiated.



Span 4 Bearing Assembly seat 1 at End Bent 2: Active Corrosion and Section Loss <25% in the plates.

Date: 03/15/2018

**Condition Photos** 



Span 4 Bearing Assembly seat 2 at End Bent 2: Active Corrosion and Section Loss <25% in the plates.



PRIORITY MAINTENANCE: Span 4 Beam 5 at End Bent 2, bottom flange in front of bearing, Active Corrosion and Section Loss.

Date: 03/15/2018

**Condition Photos** 



Abutment 2 in bay 4, 1/32" cracks.



Span 4 Deck underside in right overhang, beginning at End Bent 2, Delamination in build-up adjacent to beam 5.

Date: 03/15/2018

**Condition Photos** 



Span 4 Deck underside in right overhang, beginning at Bent 3, spall in build-up adjacent to beam 5.



Span 3 Deck underside at Bent 2, 1/32" map cracks with surface efflorescence in bays 2 thru 4.

Date: 03/15/2018

**Condition Photos** 

County: CABARRUS

Structure: 120109

Temporary Repair: Span 2 Deck left overhang supported by steel H-Pile crutch from bents 1 to 2.



Span 2 Beam 1 above Right South bound lane, impact damage previously straightened/repaired.



Span 2 Beam 1 above Right South bound lane, impact damage previously straightened/repaired.



Span 2 Beam 2 above Right South Bound lane, impact scrapes to bottom flange.

Date: 03/15/2018

#### **Condition Photos**



Span 2 Deck underside at mid-Span in bay 2 along beam 2, spall no exposed steel.



Span 2 Deck underside at Bent 1 in right overhang, spall no exposed steel in build-up along beam 5.

Date: 03/15/2018

**Condition Photos** 



End Bent 1 Cap below right overhang near brace pile, Spall with Exposed Steel.



Span 1 Bearing Assembly seat 5 at End Bent 1, Active Corrosion and Section Loss <25% in the plates.

County: CABARRUS

Date: 03/15/2018



End Bent 1 Cap in bay 4, Spall with Exposed Steel and Delamination with cracks.



Span 1 Beam 5 Freckled Rust /Surface Corrosion in the flanges and web.

Date: 03/15/2018

# **Condition Photos**



Abutment 1 in left overhang has up to 1/32" cracks.



Steel H-Pile supporting Span 2 Deck left overhang at Bent 1, loose bolt thru top right flange with spall in underside of Deck.

County: CABARRUS

Date: 03/15/2018

**Condition Photos** 



Temporary Repair Plate welded to Beam 1 right side Web and bottom flange at Bent 1.



Spans 1 and 2 ends of Beam 1 at Bent 1, Section Loss in the web below the diaphragms, Freckled Rust/ surface corrosion initiated.

Date: 03/15/2018

## **Condition Photos**



Spans 1 & 2 Bearing Assembly seat 1 at Bent 1, Active Corrosion & Section Loss <25% in the plates, fasteners 1/4" Remaining.



PRIORITY MAINTENANCE: Span 2 beam 1 at Bent 1, Active Corrosion & Section Loss in the lower web and bottom flange.

Date: 03/15/2018

#### **Condition Photos**



Span 2 RC end diaphragm at Bent 1 bay 1, 1/84" cracks with efflorescence buildup.



PRIORITY MAINTENANCE: Span 1 Beam 2 near Bent 1, Active Corrosion & Section Loss in the lower web and bottom flange.

Date: 03/15/2018

#### **Condition Photos**



Spans 1 and 2 end of beam 2 at Bent 1, Section Loss in web below diaphragm, Surface Corrosion initiated.



Spans 1 & 2 ends of beam 3 at Bent 1, Section Loss in the web below diaphragm, Freckled Rust/Surface Corrosion initiated since beam was cleaned and painted.

Date: 03/15/2018



PRIORITY MAINTENANCE: Span 1 Beam 4 at Bent 1, Active Corrosion and Section Loss below end diaphragm and in lower web at bottom flange.



Span 1 RC end diaphragm in bay 4 adjacent beam 5, vertical crack up to 1/4" wide.

Date: 03/15/2018

# **Condition Photos**



Span 1 Beam 5 at Bent 1, left side, Section Loss in bottom flange and lower web, Surface Corrosion/ Freckled Rust initiated since beam cleaned and painted.



Spans 1 and 2, beam 5 at Bent 1 Section Loss in the web at diaphragm and along bottom flange.

Date: 03/15/2018



PRIORITY MAINTENANCE: Span 1 Beam 5 at 3' from end of beam at Bent 1, left bottom flange has Active Corrosion and Section Loss.



Span 1 Beam 5 at Bent 1, Temporary repair, plates welded to right side of web

Date: 03/15/2018

#### **Condition Photos**



Span 1 Beam 5 at Bent 1, Repair plate welded to right side of web has Active Corrosion and Section Loss in lower web.



Span 2 Beam 5 at Bent 1, Section Loss in lower web and bottom flange, Surface Corrosion/Freckled Rust initiated since beam was cleaned and painted.

County: CABARRUS

Date: 03/15/2018



Bent 1 cap right end, sound patches.



Span 2 RC end diaphragm at Bent 2 in bay 1 diagonal crack 1/8" wide and Delamination.

Date: 03/15/2018

**Condition Photos** 



Span 2 Beam 1 at Bent 2, right side, Section Loss in web and bottom flange, Surface Corrosion/ Freckled Rust initiated since beam end was cleaned and painted.



Span 3 Beam 1 at Bent 2, Section Loss in web below diaphragm, Section Loss in lower web along bottom flange.

County: CABARRUS

Date: 03/15/2018

**Condition Photos** 



PRIORITY MAINTENANCE: Span 2 Beam 1 at 2' from Bent 2, Active Corrosion and Section Loss in lower web and bottom flange.



Spans 2 and 3 Beam 2 at Bent 2, end of beams below diaphragm has Section Loss, Surface Corrosion/Freckled Rust initiated since beam was cleaned and painted.

Date: 03/15/2018

## **Condition Photos**



Bent 2 Cap west side bottom corner from column 3 to 4, 1/8" longitudinal crack and Delamination.



Bent 2 Cap west side bottom corner from column 3 to 4, 1/8" longitudinal crack and Delamination.

Date: 03/15/2018

#### **Condition Photos**



Span 2 Beam 4 at Bent 2, Temporary repair, 1/4" x 7" x 14" plates bolted to web at end of beam, both sides.



Spans 2 and 3 Beam 3 at Bent 2, end of beams below diaphragm has Section Loss, Surface Corrosion/Freckled Rust initiated since beam was cleaned and painted.

Date: 03/15/2018



Spans 2 and 3 Beam 5 at Bent 2, Temporary Repair to Section Loss, 1/4" thick plates bolted on both sides of beam in web and bottom flange.



Bent 2 RC column 6 Southeast Corner vertical crack up to 3/16" wide with Delamination

County: CABARRUS

Date: 03/15/2018

**Condition Photos** 



Bent 2 cap East side below bay 2, sound patch.



Span 4 Beam 1 at Bent 3, Temporary Repair to Section Loss, 1/4" thick plates bolted to both sides of web and bottom flange.

Date: 03/15/2018

**Condition Photos** 



Span 3 Beam 1 at Bent 3, Temporary Repair to Section Loss, 1/4" thick plates bolted to both sides of web and bottom flange.



Spans 3 and 4 Bearing Assembly seat 1 at Bent 3, Active Corrosion and Section Loss in plates, Section Loss in anchor rods down to 3/8" Remaining.

Date: 03/15/2018

**Condition Photos** 



PRIORITY MAINTENANCE: Span 3 RC Deck underside left overhang at Bent 3, Delamination in build up 7' long x 6" x 4".



Span 4 RC Deck underside left overhang at Bent 3, Delamination in build up 5' long x 6" x 4".

Date: 03/15/2018

## **Condition Photos**



Span 4 steel intermediate diaphragm in bay 1 near Bent 3 weld connection to beam 1.



Spans 3 and 4 Beam 2 at Bent 3, end of beams Section Loss in the web below diaphragm, Freckled Rust initiated since beam was painted.

Date: 03/15/2018



Spans 3 and 4 Beam 3 at Bent 3, end of beams Section Loss in the web below diaphragm, Freckled Rust initiated since beam was painted.



Span 4 Beam 4 at Bent 3 Section Loss in the web below diaphragm and in bottom flange in front of bearing.
Date: 03/15/2018

**Condition Photos** 



Span 3 Beam 4 at Bent 3 Section Loss in the web below diaphragm, Freckled Rust initiated since beam was cleaned and painted.



Span 3 Beam 5 at Bent 3, Temporary Repair to Section Loss, 1/4" thick plates bolted to web and bottom flange.

Date: 03/15/2018

#### **Condition Photos**



Span 4 Beam 5 at Bent 3, Temporary Repair to Section Loss, 1/4" thick plates bolted to web and bottom flange.



Span 4 RC intermediate diaphragm at Bent 3 in bay 4, Diagonal cracks up to 1/8" wide with efflorescence.

<image>

Span 1 Beam 1 at Bent 1, left side, Temporary Repair to Section Loss, 3/8" thick plates welded to web.

Date: 03/15/2018

#### Structure Photos



North bound US 29 vertical clearance sign at 450' south of structure



North bound US 29 vertical clearance sign at 200' south of structure

Date: 03/15/2018

Structure Photos



South Bound US 29 vertical clearance signs at 675' north of structure



Guardrail end Southwest Corner

Structure: 120109

County: CABARRUS

Date: 03/15/2018

Structure Photos



West Approach Looking East



West Posting

Structure: 120109

County: CABARRUS

Date: 03/15/2018

#### Structure Photos



Southwest Corner Transition



Guardrail connection at Southwest Corner

Date: 03/15/2018

#### Structure Photos



Right rail



Northwest Corner Transition

Structure: 120109

County: CABARRUS

Date: 03/15/2018

Structure Photos



left rail



West Approach

Date: 03/15/2018

#### Structure Photos



South Ramps



East Approach

Structure: 120109

County: CABARRUS

Date: 03/15/2018

Structure Photos



Southeast Corner Transition



Northeast Corner Transition

Date: 03/15/2018

Structure Photos



East Approach Looking West



East Posting

Date: 03/15/2018

Structure Photos



Span 4 Beam 1 left side, Interior Diaphragm riveted connection.



End Bent 2

Structure: 120109

County: CABARRUS

Date: 03/15/2018

Structure Photos



Bent 3



Span 4 intermediate diaphragm in bay 1



Looking North South Profile



Superstructure Span 4



Bent 2 east side



Looking North Span 3

Date: 03/15/2018

#### Structure Photos



Looking South Span 2



Bent 1 east side

Date: 03/15/2018

Structure Photos



End Bent 1



Span 4 intermediate diaphragm in bay 4 near Bent 3, welded connection to beam 5.



Looking South North Profile

# Structure Data Worksheet



Span Number	Span Length	Bearing to Bearing	Crutch/ Helper Bent	Distance to Near Bearing	Distance to Far Bearing
1	45.000	42.700			
2	50.000	48.200			
3	50.000	48.200			
4	45.000	42.700			

SCOUR

SUFFICIENCY RATING =

STATUS = Structurally Deficient

IDENTIFICATION	
(1) STATE NAME -NORTH CAROLINA BRIDO	GE 120109
(8) STRUCTURE NUMBER(FEDERAL)	00000000250109
(5) INVENTORY ROUTE (ON/UNDER) - ON	31017060
(2) STATE HIGHWAY DEPARTMENT DISTRICT	1
(3) COUNTY CODE 25 (4) PLACE CODE	35200
(6) FEATURE INTERSECTED - US29	
(7) FACILITY CARRIED SR1706	
(9) LOCATION 0.8 MI. E. JCT. US29A	
(11)MILEPOINT	0
(16)LAT 35° 29' 33.51" (17)LONG 80'	° 36' 39.68"
(98)BORDER BRIDGE STATE CODE PC	T SHARE
(99)BORDER BRIDGE STRUCTURE NO	
STRUCTURE TYPE AND MATERIA	AL
(43) STRUCTURE TYPE MAIN: Steel	
TYPE - Stringer Mutlibeam or Girder	CODE 302
(44) STRUCTURE TYPE APPR :	
TYPE -	CODE 000
(45) NUMBER OF SPANS IN MAIN UNIT	4
(46) NUMBER OF APPROACH SPANS	
(107)DECK STRUCTURE TYPE - 1	CODE
(108)WEARING SURFACE / PROTECTIVE SYSTEM :	
(A) TYPE OF WEARING SURFACE -	CODE
(B) TYPE OF MEMBRANE -	CODE
(C) TYPE OF DECK PROTECTION -	CODE
AGE AND SERVICE	1050
	1953
(106)YEAR RECONSTRUCTED	
(42) TYPE OF SERVICE : ON - Highway - Pedesthan	0005 54
(28) LANES: ON STRUCTURE 2 UNDER STRUCTURE	E 4
	OT 70/
(30) YEAR OF ADT 2012 (109) TRUCK ADT P	
	0 IVII
	48 FT
	40 FT
(50)CLIRB OR SIDEWALK: LEFT 275 ET RIGH	130 FT
	2.75TT
	2011 38 33 FT
	20 FT
(32) REIDGE MEDIAN - No Median	
(34) SKEW 23° (35) STRUCTURE FL	
(10) INVENTORY ROLITE MIN VERTICI FAR	999 9 FT
	28 FT
(53) MIN VERT CLEAR OVER BRIDGE RDWY	999 9 FT
(54) MIN VERT LINDERCI FAR REF Highway	14.4 FT
	14.4 FT 8 33 FT
(56) MIN LAT UNDERCIEAR IT REF -	12.5 FT
(or min en onderoelan et net -	12.3 F I
NAVIGATION DATA	
(38) NAVIGATION CONTROL - Not Applicable	CODE N
(111)PIER PROTECTION -	CODE
(39) NAVIGATION VERTICAL CLEARANCE	0
(116)VERT - LIFT BRIDGE NAV MIN VERT CLEAR	FT
(40) NAVIGATION HORIZONTAL CLEARANCE	0 FT

CLASSIFICATION -- CODE YES (112)NBIS BRIDGE SYSTEM -(104)HIGHWAY SYSTEM Is not on NHS 0 (26) FUNCTIONAL CLASS - Collector 17 (100)STRAHNET HIGHWAY - Not a STRAHNET Route 0 (101) PARALLEL STRUCTURE - No Parallel Structure Ν (102)DIRECTION OF TRAFFIC - 2-way Traffic 2 (103) TEMPORARY STRUCTURE - Temporary Structure/Conditions Т (110)DESIGNATED NATIONAL NETWORK - Not on the National Network 0 (20) TOLL On Free Road 3 (31) MAINTAIN -State Highway Agency 01 (22) OWNER -State Highway Agency 01 (37) HISTORICAL SIGNIFICANCE -Not Eligible 5 - CONDITION -- CODE · (58) DECK 4 (59) SUPERSTRUCTURE 3 (60) SUBSTRUCTURE 5 (61) CHANNEL & CHANNEL PROTECTION Ν (62) CULVERTS Ν LOAD RATING AND POSTING — - CODE · (31) DESIGN LOAD HS 15 3 (63) OPERATING RATING METHOD -Load Factor 1 (64) OPERATING RATING -HS-11 19 (65) INVENTORY RATING METHOD - Load Factor 1 (66) INVENTORY RATING - HS-6 11 (70) BRIDGE POSTING -Posting Required 0 (41) STRUCTURE OPEN, POSTED , OR CLOSED Ρ DESCRIPTION - Posted for Load - CODE APPRAISAL -(67) STRUCTURAL EVALUATION 3 (68) DECK GEOMETRY 4 (69) UNDERCLEARANCES, VERTI & HORIZ 4 (71) WATERWAY ADEQUACY Ν (72) APPROACH ROADWAY ALIGNMENT 8 (36) TRAFFIC SAFETY FEATURES 0111 (113)SCOUR CRITICAL BRIDGES Ν 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 7000 (115) YEAR FUTURE ADT 2025 **INSPECTIONS** (90) INSPECTION DATE 03/15/2018 (93) CFI DATE (92) CRITICAL FEATURE INSPECTION : A) FRACTURE CRIT DETAIL -NO A) B) UNDERWATER INSP -NO B) C) OTHER SPECIAL INSP NO C)

19

Structure No: 120109

### County: CABARRUS

Run Date:

			ertical		~			u			Traffic	ance		See Not	e 1					ute
Span Number	Feature Intersected	Inventory Route	Minimum Maximum Ve Clearance	Milepoint	Base Highway Networl	LRS Inventory Route	Toll	Functional Classificatic	Numer of Lanes	Average Daily Traffic	Year of Average Daily	Total Horizontal Clears	Reference Feature	Minimum Vertical Underclearance	Right Lateral Underclearance	Left Lateral Underclearance	Underclearance Appraisal Grade	STRAHNET Highway	Direction of Traffic	Highway System of Ro
	6	5	10	11	12	13	20	26	28	29	30	47	54A	54	55	56	69	100	102	104
2	US29S	21000290	14.8		1	20029		14	2	10500	2012	32.18	Н	14.4	8.33	12.5	9	0	1	1
3	US29N	21000290	16.4		1	20029		14	2	10500	2012	33.8	Н	16	10.2	10	9	0	1	1

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

#### BRIDGE MANAGEMENT UNIT

					DAT			NG STRU	CTURE	: I	Run Dat	e: 08/0	2/2018		
	ITY : ABARRUS			DIVISIO 1	ON : 0	DIS	TRICT: 1	STRU	JCTURE 1	NUMBER 20109	:		LENG	ГН : 190	FEET
ROUT	E CARRIED :	SR1706	6			F	EATURE	INTERSEC	CTED :	US29					
LOCA	TED : 0.8 MI. E	E. JCT. U	S29A			BRI	IDGE NAM	1E :			CIT	Y : KAN	INAPOLI	S	
FUNC	. CLASS : 17	SYS <sup>.</sup>	T.ON : FA	SYS	ST.UND	ER :	NFA	ADT	& YR : 3500	2012		RA LT	IL TYPE 311	: RT 3 <sup>,</sup>	11
BUILT 1	953	BY :	SHPWC	P	PROJ :	6752	2	FE	D.AID P	ROJ :		DESIGN	I LOAD :	HS 15	
REHA	В:	BY :		PROJ :			ALIGNME	NT : TAN	SKE	EW : 67	LA	NES : ON	2	UNDER	4
NAVIO	GATION : VC 0	) FT	-	HC 0	)	FT	HT. CR	N. TO BEE	D : 0	FT	W	ATER D	EPTH : 0		FT
SUPE	RSTRUCTURE	E: RE	EINFORCE	ED CONC	CRETE	DECK	ON I-BEA	MS							
SUBS	TRUCTURE :	E١	ID&INTBT	S:RC CA	APS & S	STL.PIL	ES,INTB	rs:Full C	ONCRE	TE ENCAS	ED				
SPAN	S :	1@	245'0 ,2@	50'0 ,1@	45'0										
BEAM	S OR GIRDER	S :	5 LINES	S OF I-BE	EAMS @	D 7'0 C	CTS,SP#18	&4:W33X1	30,SP#2	&3:W33X1	41				
FLOO	R : 6 3/4 RC	SLAB		ENCRO	DACHM	ENT :			DEG	CK (OUT T	O OUT)	: 38.33	FT		
CLEA	R ROADWAY :			BETWEE	EN RAIL	_S :			SI	DEWALK (	OR CURE	3 :			
	2	28 FT					33.5 FT	-			LT	2.7	5 FT	RT	2.75 FT
VERT 99	.CL.OVER: 9.9 FT														
INV.R	TG. : HS-6	OP	E.RTG. : HS	S-11	CONT	R.ME	MBER : Ext.b 5SpE	om# 3	POST SV	ED : 15 <sup>-</sup>	TTST	18	DATE	05/23/2	2016
SYSTI Prima	EM : ary S.R. Route									GR	REEN LIN	ie rou	TE :	N	
UNDE	R ROUTES AN	ID CLEA	RANCES												
			Vertical C	Clearanc	es I	Horizo	ntal Clear	ances							
Span 2	KOUTE DESC US29S	ription	14.80	MVC 0 14	, I 4.40	0tal 32.18	Left 12.50	Right 8.33							

33.80 10

10.20

16

Note: All measurements are in feet.

16.40

US29N

3

Bridge: 120109

County CABARRUS

Date: 03/15/2018

	These Repairs	Should Be Mad	le Within Twelve	Months From Date Of This Inspection	
MMS Code	Description of Function	Unit	Quantity	Remarks	Est. Cost
<b>%</b> 3314	Maintain Steel Superstructure Components	LF	1	PRIORITY MAINTENANCE: Span 1 Beam 4 at Bent 1, Active Corrosion & Section Loss in web below diaphragm, 1/8" to 1/16" Remaining 5" x 2" with 5" x 1" of complete Section Loss; lower web at bottom flange from end of beam, Active Corrosion & Section Loss 3/8" Remaining 2" x 12".	
3314	Maintain Steel Superstructure Components	LF	5	PRIORITY MAINTENANCE: Span 2 beam 1 at Bent 1, 1' from end of beam, Active Corrosion & Section Loss in the lower web 3/8" to 5/16" Remaining 4" x 5'; Active Corrosion & Section Loss in bottom flange 1/2" Remaining 10" x 3'.	
戦 3314	Maintain Steel Superstructure Components	LF	3	PRIORITY MAINTENANCE: Span 2 Beam 1 at 2' from end of beam at Bent 2, Active Corrosion and Section Loss in lower web 3/8" Remaining 3" x 3'; bottom flange Active Corrosion & Section Loss 3/4" Remaining 3' x 11-1/2".	
3314	Maintain Steel Superstructure Components	LF	3	PRIORITY MAINTENANCE: Span 1 Beam 2 at Bent 1, 2' from end of beam, Active Corrosion & Section Loss in the lower web 3/8" Remaining 3" x 3'; Active Corrosion & Section Loss in the left bottom flange 11/16" Remaining 3" x 3'.	
3314	Maintain Steel Superstructure Components	LF	3	PRIORITY MAINTENANCE: at 3' from end of beam at Bent 1, left bottom flange has Active Corrosion and Section Loss 3/8" to 1/2" Remaining 5" x 3'; lower web left side Active Corrosion & Section Loss 3/16" Remaining 3" x 3', 3/8" thick repair plate welded to right side of web and bottom flange.	
3314	Maintain Steel Superstructure Components	LF	2	PRIORITY MAINTENANCE: Span 4 Beam 1 right side at End Bent 2, bottom flange has Active Corrosion and Section Loss, 5/8" to 1/2" Remaining 3" x 18"; Lower web has Section Loss 5/16" Remaining 3" x 2', with corrosion initiated. Beam end has been painted since previous inspection.	
3314	Maintain Steel Superstructure Components	LF	1	PRIORITY MAINTENANCE: Span 4 Beam 5 at End Bent 2, bottom flange in front of bearing, Active Corrosion and Section Loss 9/16" Remaining 4" x 11-1/2". Beam end painted since previous inspection.	

Bridge: 120109

County CABARRUS

Date: 03/15/2018

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

MMS Code	Description of Function	Unit	Quantity	Remarks	Est. Cost
3326	Maintain Concrete Deck	SF	7	PRIORITY MAINTENANCE: Span 3 RC Deck underside left overhang at Bent 3, Delamination in build up 7' long x 6" x 4".	



Bridge: 120109 County CABARRUS

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

MMS Code	MN	/MS Description Quantity								
3314	Mai	ntain Stee	I Superstructure Components		1	LF				
Location:										
	Bent/Span No.									
Priority Level Status										
Priority Mair	ntenan	ice	Division Bridge Maintenance Noti	fication Received						
Submitted D	oate:	Submitte	d By:	Assisted By:						
03/21/2018		JASON	ROLFSMEYER							
Details										
PRIORITY N 1/8" to 1/16" Active Corrc	JAINT ' Rema osion &	ENANCE: aining 5" x Section I	Span 1 Beam 4 at Bent 1, Active 0 2" with 5" x 1" of complete Section _oss 3/8" Remaining 2" x 12".	Corrosion & Section Loss in web belo Loss; lower web at bottom flange fro	w diaphragr	n, eam,				

MMS Code	MM	S Descrip	otion		Quantity				
3314	Main	itain Steel	Superstructure Components		5	LF			
Location:									
	Bent/Span No.								
Priority Leve	1								
Priority Main	tenanc	ce .	Division Bridge Maintenance Noti	fication Received					
Submitted Da	ate:	Submitte	d By:	Assisted By:					
03/21/2018 JASON ROLFSMEYER									
Details									

PRIORITY MAINTENANCE: Span 2 beam 1 at Bent 1, 1' from end of beam, Active Corrosion & Section Loss in the lower web 3/8" to 5/16" Remaining 4" x 5'; Active Corrosion & Section Loss in bottom flange 1/2" Remaining 10" x 3'.

Bridge: 120109

County CABARRUS

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

MMS Code	MM	IS Descrip	otion		Quantity					
3314	Mair	ntain Steel	I Superstructure Components		3	LF				
Location:	Location:									
Bent/Span No.										
Priority Level Status										
Priority Main	ntenan	се	Division Bridge Maintenance Notif	fication Received						
Submitted D	ate:	Submitte	d By:	Assisted By:						
03/21/2018		JASON	ROLFSMEYER							
Details										
PRIORITY N lower web 3,	/AINT /8" Re	ENANCE: maining 3'	Span 2 Beam 1 at 2' from end of b " x 3'; bottom flange Active Corrosic	eam at Bent 2, Active Corrosion and on & Section Loss 3/4" Remaining 3'	Section Los x 11-1/2".	s in				

S Descrip	tion		Quantity					
ain Steel	Superstructure Components		3	LF				
Location:								
Bent/Span No.								
	Status	Status						
	Routine Maintenance							
Submitte	d By:	Assisted By:						
JASON	ROLFSMEYER							
	3 Descrip ain Steel Submittee	Bent/Span No. Bent/Span No. Status Routine Maintenance Submitted By: JASON ROLFSMEYER	Bescription ain Steel Superstructure Components Bent/Span No. Bent/Span No. Status Routine Maintenance Submitted By: Assisted By: JASON ROLFSMEYER	B Description Quantity   ain Steel Superstructure Components 3     Bent/Span No.   Bent/Span No.   Status   Routine Maintenance     Submitted By:   JASON ROLFSMEYER				

PRIORITY MAINTENANCE: Span 1 Beam 2 at Bent 1, 2' from end of beam, Active Corrosion & Section Loss in the lower web 3/8" Remaining 3" x 3'; Active Corrosion & Section Loss in the left bottom flange 11/16" Remaining 3" x 3'.

Bridge: 120109 Co

County CABARRUS

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

MMS Code	MN	/IS Descrip	otion		Quantity				
3314	Mair	ntain Steel		3	LF				
Location:									
	Bent/Span No.								
Priority Leve	3]		Status						
Recommend	bec		Routine Maintenance						
Submitted D	ate:	Submitte	d By:	Assisted By:					
03/21/2018		JASON	ROLFSMEYER						
Details									
PRIORITY M Loss 3/8" to thick repair p	/AINT 1/2" R ρlate ν	ENANCE: temaining velded to r	at 3' from end of beam at Bent 1, le 5" x 3'; lower web left side Active C ight side of web and bottom flange.	eft bottom flange has Active Corrosic corrosion & Section Loss 3/16" Rema	in and Section ining 3" x 3"	on , 3/8"			

Descrip	tion		Quantity				
3314 Maintain Steel Superstructure Components							
Location:							
Bent/Span No.							
	Status						
	Routine Maintenance						
Ibmittee	d By:						
ASON	ROLFSMEYER						
r	Descrip	Description In Steel Superstructure Components Bent/Span No. Status Routine Maintenance bmitted By: ASON ROLFSMEYER	Description  A Steel Superstructure Components Bent/Span No. Bent/Span No. Status Routine Maintenance bmitted By: ASON ROLFSMEYER	Description Quantity   n Steel Superstructure Components 2     Bent/Span No.   Bent/Span No.   Status   Routine Maintenance     bmitted By:   Assisted By:     ASON ROLFSMEYER			

PRIORITY MAINTENANCE: Span 4 Beam 1 right side at End Bent 2, bottom flange has Active Corrosion and Section Loss, 5/8" to 1/2" Remaining 3" x 18"; Lower web has Section Loss 5/16" Remaining 3" x 2', with corrosion initiated. Beam end has been painted since previous inspection.

Bridge: 120109

County CABARRUS

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

MMS Code	MN	MMS Description			Quantity	
3314	Mai	ntain Stee	I Superstructure Components		1	LF
Location:						
			Bent/Span No.			
Priority Leve	iority Level Status					
Recommend	ecommended Routine Maintenance					
Submitted D	Date: Submitted By: Assisted By:					
03/21/2018	3/21/2018 JASON RO		ROLFSMEYER			
Details						
PRIORITY MAINTENANCE: Span 4 Beam 5 at End Bent 2, bottom flange in front of bearing, Active Corrosion and Section Loss 9/16" Remaining 4" x 11-1/2". Beam end painted since previous inspection.						

MMS Code	ode MMS Description			Quantity				
3326	3326 Maintain Concrete Deck				7	SF		
Location:	Location:							
	Bent/Span No.							
Priority Leve	ority Level Status							
Recommended			Routine Maintenance					
Submitted D	ate:	Submitte	d By:	Assisted By:				
03/21/2018		JASON	ROLFSMEYER					
Details								

PRIORITY MAINTENANCE: Span 3 RC Deck underside left overhang at Bent 3, Delamination in build up 7' long x 6" x 4".

Structure 120109

County CABARRUS

**Condition Photos** 



BRIDGE POSTED

# **Bridge Inspection Field Sketch**

Roadway	25.5ft Wide	2 Paved Lanes	Looking East
Left Shoulder	3.3ft Wide	1ft Paved	2.3ft Unpaved
Right Shoulder	4 2ft Wide	2 5ft Paved	1 7ft Unpaved
	2.2ft from road		
Left Guardrall	3.3π from road		
Right Guardrail	4.2ft from road		

MEASUREMENTS TAKEN APPROX 10' BACK FROM STRUCTURE AT WEST APPROACH

MEASUREMENTS V	ERIFIED 03/	15/2018 GLT
----------------	-------------	-------------

Title			Description		
APPROACH RDWY		SHEET 1			
Bridge No: 120109	Drawn By: STEVE AUSTIN		Date:03/25/2010	File Name:S0078000111	







	Bridge Inspect	ion Field Sket	ch
		<b>\</b>	
		CX.	
		1×	
		, Si	
		$\checkmark$	
		•	
	$\mathbf{\nabla}^{\star}$		
		<b>Description</b>	
		DELEIED	File Name COOPOOO119
- 120109	- STEVE AUSTIN	03/23/2010	0002002110


		Rri	due l	nen	ectiv	on Fie	Id S	ketch		
			ayeı	nəp				NGLUI		
Cap Inf Lengtł	n Width	Height	Material Left Over	Cast-in-l rhang	Place Conc Right Ove	rete rhang Left B	eam to Er	nd of Cap. F	Right Beam to Er	nd of Cap.
35.000 f	ft. 2.500 ft.	2.500 ft.	1.750	) ft.	1.750	t. 2. <sup>-</sup>	100 ft.		2.100 ft.	
Subcap Length	h Width	Height	Material Left Over	hang	Right Ove	rhang Left P	ile to Splie	ce.		
Sill Info	n Width	Height	Material							
Dilo #	Matorial	Spacing	Width/Dia	Hoight	Longth	Oriontation	Drivon?	Poplacomo	nt? Domovod?	Collar?
1	Concrete	4.5 ft.	1.67 ft.	1.67 ft.	Longui	Vertical	Driven:	No		Conar :
2	Concrete					vertical	No	INU	NO	No
2		4.5 ft.	1.67 ft.	1.67 ft.		Vertical	No No	No	No	No No
3	Concrete	4.5 ft. 4.5 ft.	1.67 ft. 1.67 ft.	1.67 ft. 1.67 ft.		Vertical Vertical	No No No	No	No No No	No No No
3 4	Concrete Concrete	4.5 ft. 4.5 ft. 4.5 ft.	1.67 ft. 1.67 ft. 1.67 ft.	1.67 ft. 1.67 ft. 1.67 ft.		Vertical Vertical Vertical Vertical	No No No No	No No No	No No No	No No No
3 4 5	Concrete Concrete	4.5 ft. 4.5 ft. 4.5 ft. 4.5 ft.	1.67 ft. 1.67 ft. 1.67 ft. 1.67 ft.	1.67 ft. 1.67 ft. 1.67 ft. 1.67 ft.		Vertical Vertical Vertical Vertical Vertical	No No No No	No No No No	No No No No No	No No No No
3 4 5 6	Concrete Concrete Concrete Concrete	<ul> <li>4.5 ft.</li> <li>4.5 ft.</li> <li>4.5 ft.</li> <li>4.5 ft.</li> <li>4.5 ft.</li> </ul>	1.67 ft. 1.67 ft. 1.67 ft. 1.67 ft. 1.67 ft.	1.67 ft. 1.67 ft. 1.67 ft. 1.67 ft. 1.67 ft.		Vertical Vertical Vertical Vertical Vertical Vertical Vertical Vertical	No No No No No	No No No No No	No No No No No No	No No No No No
3 4 5 6 7	Concrete Concrete Concrete Concrete Concrete	<ul> <li>4.5 ft.</li> <li>4.5 ft.</li> <li>4.5 ft.</li> <li>4.5 ft.</li> <li>4.5 ft.</li> <li>4.5 ft.</li> </ul>	1.67 ft.	1.67 ft. 1.67 ft. 1.67 ft. 1.67 ft. 1.67 ft. 1.67 ft.		Vertical Vertical Vertical Vertical Vertical Vertical	No No No No No No	No No No No No	No No No No No No No	No No No No No No
3 4 5 6 7 8	Concrete Concrete Concrete Concrete Concrete	<ul> <li>4.5 ft.</li> <li>4.5 ft.</li> <li>4.5 ft.</li> <li>4.5 ft.</li> <li>4.5 ft.</li> <li>4.5 ft.</li> </ul>	1.67 ft.         1.67 ft.	1.67 ft. 1.67 ft. 1.67 ft. 1.67 ft. 1.67 ft. 1.67 ft. 1.67 ft.		Vertical Vertical Vertical Vertical Vertical Vertical Vertical Vertical	No No No No No No No	No No No No No No	No No No No No No No	No No No No No No
3 4 5 6 7 8	Concrete Concrete Concrete Concrete Concrete	<ul> <li>4.5 ft.</li> </ul>	1.67 ft. 1.67 ft. 1.67 ft. 1.67 ft. 1.67 ft. 1.67 ft. 1.67 ft.	1.67 ft. 1.67 ft. 1.67 ft. 1.67 ft. 1.67 ft. 1.67 ft. 1.67 ft.		Vertical Vertical Vertical Vertical Vertical Vertical Vertical Vertical	No No No No No No No	No No No No No No	No No No No No No	No No No No No No
3 4 5 6 7 8	Concrete Concrete Concrete Concrete Concrete	4.5 ft. 4.5 ft. 4.5 ft. 4.5 ft. 4.5 ft. 4.5 ft.	1.67 ft. 1.67 ft. 1.67 ft. 1.67 ft. 1.67 ft. 1.67 ft. 1.67 ft.	1.67 ft. 1.67 ft. 1.67 ft. 1.67 ft. 1.67 ft. 1.67 ft.		Vertical Vertical Vertical Vertical Vertical Vertical Vertical Vertical	No No No No No No	No No No No No No	No No No No No No	No No No No No No
3 4 5 6 7 8	Concrete Concrete Concrete Concrete Concrete	4.5 ft. 4.5 ft. 4.5 ft. 4.5 ft. 4.5 ft. 4.5 ft.	1.67 ft. 1.67 ft. 1.67 ft. 1.67 ft. 1.67 ft. 1.67 ft. 1.67 ft.	1.67 ft. 1.67 ft. 1.67 ft. 1.67 ft. 1.67 ft. 1.67 ft.		Vertical	No No No No No No	No No No No No	No No No No No No	No No No No No
3 4 5 6 7 8	Concrete Concrete Concrete Concrete Concrete	4.5 ft. 4.5 ft. 4.5 ft. 4.5 ft. 4.5 ft. 4.5 ft.	1.67 ft. 1.67 ft. 1.67 ft. 1.67 ft. 1.67 ft. 1.67 ft. 1.67 ft.	1.67 ft. 1.67 ft. 1.67 ft. 1.67 ft. 1.67 ft. 1.67 ft.		Vertical Vertical Vertical Vertical Vertical Vertical Vertical	No No No No No No	No No No No No	No No No No No No	No No No No No
3 4 5 6 7 8 8 MEAS	Concrete Concrete Concrete Concrete Concrete Concrete	4.5 ft. 4.5 ft. 4.5 ft. 4.5 ft. 4.5 ft. 4.5 ft.	1.67 ft. 1.67 ft. 1.67 ft. 1.67 ft. 1.67 ft. 1.67 ft. 1.67 ft. 0.03/15/20	1.67 ft. 1.67 ft. 1.67 ft. 1.67 ft. 1.67 ft. 1.67 ft. 1.67 ft. 1.67 ft.	2.3	Vertical Vertical Vertical Vertical Vertical Vertical Vertical	No No No No No	No No No No No	No No No No No No	No No No No No
4 5 6 7 8 8 MEAS Bent/At	Concrete Concrete Concrete Concrete Concrete Concrete	4.5 ft. 4.5 ft. 4.5 ft. 4.5 ft. 4.5 ft. 4.5 ft.	1.67 ft. 1.67 ft. 1.67 ft. 1.67 ft. 1.67 ft. 1.67 ft. 1.67 ft. D 03/15/20	1.67 ft. 1.67 ft. 1.67 ft. 1.67 ft. 1.67 ft. 1.67 ft. 1.67 ft. 1.87 ft.	2.3	Vertical	No No No No No No	NO NO NO NO NO	No No No No No No	No No No No No
3 4 5 6 7 8 8 MEAS Bent/At	Concrete Concrete Concrete Concrete Concrete	4.5 ft. 4.5 ft. 4.5 ft. 4.5 ft. 4.5 ft. 4.5 ft.	1.67 ft. 1.67 ft. 1.67 ft. 1.67 ft. 1.67 ft. 1.67 ft. 1.67 ft.	1.67 ft. 1.67 ft. 1.67 ft. 1.67 ft. 1.67 ft. 1.67 ft. 1.67 ft. 1.67 ft.	2.3	Vertical Vertical Vertical Vertical Vertical Vertical Vertical Vertical Description	No No No No No No	No No No No No	No No No No No No	No No No No No