NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
STRUCTURE MANAGEMENT UNIT

ATTENTION: PRIORITY MAINTENANCE, SHORED

Structure Safety Report

Routine Element Inspection - Contract

INSPECTION DATE: 03/15/2018

DIVISION: 10 COUNTY: CABARRUS STRUCTURE NUMBER: 120109 FREQUENCY: 24 MONTHS

FACILITY CARRIED: SR1706 MILE POST:

LOCATION: 0.8 MI. E. JCT. US29A

FEATURE INTERSECTED: US29

LATITUDE: 35° 29' 33.51" LONGITUDE: 80° 36' 39.68"

SUPERSTRUCTURE: REINFORCED CONCRETE DECK ON I-BEAMS

SUBSTRUCTURE: END&INTBTS:RC CAPS & STL.PILES,INTBTS:FULL CONCRETE ENCASED

SPANS: 4 SPANS. SEE SPAN PROFILE SHEET FOR SPAN DETAILS

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

GRADES: DECK 4 SUPERSTRUCTURE 4 SUBSTRUCTURE 5 CULVERT N

POSTED SV: 15 POSTED TTST: 18

OTHER SIGNS PRESENT: (4) DELINEATORS

West Approach Looking East

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

DIRECTION OF INSPECTION: W-E

DIRECTION MATCHES PLANS:

INSPECTED BY	SIGNATURE	ASSISTED BY
JASON ROLFSMEYER		GEORGE TEAGUE

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 Protec	1 Square Feet
3342	Steel Protective Coating	Effectiveness (Steel Protective Coatings)	8609 Square Feet

Element Structure Maintenance Quantities

Structure Number: 120109 Inspection Date 03/15/2018

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

Span 1 Deck

Reinforced Concrete Deck

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
12	Reinforced Concrete Deck	1,725	943	701	81	0	Square Feet

Element Number	Defect Type	Defect Description	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	Span 1 Deck surface at Bent 1 joint near c/l, spall with alligator cracks and loose concrete 2' x 18" x 1".	3	3	3	Square Feet
12	Delamination/Spall	underside of deck in right overhang beginning at Bent 1, spall in buildup 8' x 6" x 4".	3	8	8	Square Feet
12	Abrasion/Wear (PSC/RC)	deck surface: coarse aggregate exposed and intact in concrete.	2	700		Square Feet
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

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
331	Reinforced Concrete Bridge Railing	45	45	0	0	0	Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty

General Comments

COARSE AGGREGATE EXPOSED IN TOP OF RAIL

Span 1 Right Bridge Rail

Concrete Railing

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
331	Reinforced Concrete Bridge Railing	45	45	0	0	0	Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty

General Comments

COARSE AGGREGATE EXPOSED IN TOP OF RAIL

Span 1 Beam 1

Plate Girder

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
107	Steel Open Girder/Beam	45	0	44	1	0	Feet
515	Steel Protective Coating	405	0	0	405	0	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
107	Corrosion	end of Beam at Bent 1, Section Loss in the web below the diaphragm 1/4" Remaining 1" x 10".	3	1	1	Feet
107	Corrosion	Freckled Rust / Surface Corrosion in web and flanges along length of beam.	2	44		Feet

515	Effectiveness (Steel Protective Coatings)	Failing Corrosion initiated	3	405	405	Square Feet

General Comments

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

Span 1 Near Bearing

Fixed Bearing

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
313	Fixed Bearing	1	0	0	1	0	Each
515	Steel Protective Coating	1	0	0	0	1	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
313	Corrosion	Bearing Assembly seat 1 at End Bent 1, 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 1 Far Bearing

Movable Bearing

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
311	Movable Bearing	1	0	0	1	0	Each
515	Steel Protective Coating	1	0	0	0	1	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
311	Corrosion	at Bent 1, Active Corrosion & Section Loss <25% in the plates, fasteners 1/4" Remaining.	3	1	1	Each
515	Effectiveness (Steel Protective Coatings)	Failed No Protection	4	1	1	Square Feet

General Comments

Span 1 Beam 2

Plate Girder

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
107	Steel Open Girder/Beam	45	0	34	11	0	Feet
515	Steel Protective Coating	405	0	25	380	0	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
107	Corrosion	at Bent 1, Section Loss in web below diaphragm 5/16" Remaining 1" x 1'; lower 3" web 3/8" Remaining 12" long. Surface Corrosion initiated since beam has been cleaned and painted.	3	2		Feet
107	Corrosion	beginning 5' from end of beam at Bent 1, Rust and Scale no Section Loss in lower web and bottom flange.	3	6	6	Feet
107	Corrosion	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'.	3	3	3	Feet
107	Corrosion	Freckled Rust / Surface Corrosion in web and flanges along length of beam.	2	34		Feet
515	Effectiveness (Steel Protective Coatings)	Failing Corrosion initiated	3	380	380	Square Feet
515	Effectiveness (Steel Protective Coatings)	Substantially Effective Freckled Rust	2	25	25	Square Feet

General Comments

Span 1 Near Bearing

Fixed Bearing

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
313	Fixed Bearing	1	0	0	1	0	Each
515	Steel Protective Coating	1	0	0	0	1	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
313	Corrosion	Bearing Assembly seat 2 at End Bent 1, 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 1 Far Bearing

Movable Bearing

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
311	Movable Bearing	1	0	0	1	0	Each
515	Steel Protective Coating	1	0	0	1	0	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
311	Corrosion	Section Loss <25% in plates, 1/4" Remaining in fastener, Surface Corrosion initiated.	3	1	1	Each
515	Effectiveness (Steel Protective Coatings)	Failing Corrosion initiated	3	1	1	Square Feet

General Comments

Span 1 Beam 3

Plate Girder

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
107	Steel Open Girder/Beam	45	0	41	4	0	Feet
515	Steel Protective Coating	405	0	25	380	0	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
107	Corrosion	at Bent 1, Section Loss in web below diaphragm 5/16" Remaining 2" x 1'; lower 2" of web 7/16" Remaining x 3'. Freckled Rust/ Surface Corrosion initiated since beam has been cleaned and painted.	3	4	4	Feet
107	Corrosion	Freckled Rust / Surface Corrosion in web and flanges along length of beam.	2	41		Feet
515	Effectiveness (Steel Protective Coatings)	Failing Corrosion initiated	3	380	380	Square Feet
515	Effectiveness (Steel Protective Coatings)	Substantially Effective Freckled Rust	2	25	25	Square Feet

General Comments

Span 1 Near Bearing

Fixed Bearing

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
313	Fixed Bearing	1	0	0	1	0	Each
515	Steel Protective Coating	1	0	0	0	1	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
313	Corrosion	Bearing Assembly seat 3 at End Bent 1, 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 1 Far Bearing

Movable Bearing

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
311	Movable Bearing	1	0	0	1	0	Each
515	Steel Protective Coating	1	0	0	0	1	Square Feet

Element Number	Defect Type	Defect Description	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 1 Beam 4

Plate Girder

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
107	Steel Open Girder/Beam	45	0	44	1	0	Feet
515	Steel Protective Coating	405	0	25	380	0	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
107	Corrosion	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".	3	1	1	Feet
107	Damage	Span 1 RC end diaphragm in bay 4 adjacent beam 5, vertical crack up to 1/4" wide.	3		1	Feet
107	Corrosion	Freckled Rust / Surface Corrosion in web and flanges along length of beam.	2	44		Feet
515	Effectiveness (Steel Protective Coatings)	Failing Corrosion initiated	3	380	380	Square Feet
515	Effectiveness (Steel Protective Coatings)	Substantially Effective Freckled Rust	2	25	25	Square Feet

General Comments

Structure Number: 120109 Inspection Date: 03/15/2018

Span 1 Near Bearing

Fixed Bearing

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
313	Fixed Bearing	1	0	0	1	0	Each
515	Steel Protective Coating	1	0	0	0	1	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
313	Corrosion	Bearing Assembly seat 4 at End Bent 1, 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 1 Far Bearing

Movable Bearing

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
311	Movable Bearing	1	0	0	1	0	Each
515	Steel Protective Coating	1	0	0	0	1	Square Feet

Element Number	Defect Type	Defect Description	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 1 Beam 5

Plate Girder

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
107	Steel Open Girder/Beam	45	0	39	6	0	Feet
515	Steel Protective Coating	405	0	0	395	10	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
107	Corrosion	at Bent 1, left side, in front of bearing, Section Loss in bottom flange 1/4" to 9/16" Remaining 5" x 2', Section Loss in lower 3" of web, 3/16" Remaining 2' long. Surface Corrosion/ Freckled Rust initiated since beam cleaned and painted.	3	2	2	Feet
107	Corrosion	at Bent 1, Repair plate welded to right side of web has Active Corrosion and Section Loss in lower web, 5/16" Remaining 2" x 3'. Repair plate original thickness is 3/8".	3		3	Feet
107	Corrosion	end of beam at Bent 1, Section Loss in web below diaphragm 1/4" Remaining 1" x 8", rust hole 2" x 1".	3	1	1	Feet
107	Corrosion	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.	3	3	3	Feet
107	Corrosion	Temporary Repair, 3/8" thick Plates welded to Beam 1 right side Web at Bent 1,	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

General Comments

Structure Number: 120109 Inspection Date: 03/15/2018

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

Span 1 Near Bearing

Fixed Bearing

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
313	Fixed Bearing	1	0	0	1	0	Each
515	Steel Protective Coating	1	0	0	0	1	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
313	Corrosion	Bearing Assembly seat 5 at End Bent 1, 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 1 Far Bearing

Movable Bearing

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
311	Movable Bearing	1	0	0	1	0	Each
515	Steel Protective Coating	1	0	0	0	1	Square Feet

Element Number	Defect Type	Defect Description	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

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
12	Reinforced Concrete Deck	1,917	1,081	750	86	0	Square Feet

Element Number	Defect Type	Defect Description	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 underside at mid-Span in bay 2 along beam 2, spall no exposed steel, 3' x up to 8" x 3/4".	3	3	3	Square Feet
12	Delamination/Spall	Deck underside beginning at Bent 1 in right overhang, spall no exposed steel in build-up along beam 5, 12' x 6" x 4".	3	12	12	Square Feet
12	Delamination/Spall	Steel H-Pile supporting Span 2 Deck left overhang at Bent 1, loose bolt thru top right flange with spall 11" x 11" x 1", in underside of Deck.	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 build up adjacent to beam 1, with patching covering steel reinforcement, full span length x 6".	2	50		Square Feet

General Comments

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

Span 2 Left Bridge Rail

Concrete Railing

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
331	Reinforced Concrete Bridge Railing	50	45	5	0	0	Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
331	Patched Area	near mid-Span, sound repair 5' long.	2	5		Square Feet

General Comments

COARSE AGGREGATE EXPOSED IN TOP OF RAIL

Span 2 Right Bridge Rail

Concrete Railing

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
331	Reinforced Concrete Bridge Railing	50	50	0	0	0	Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty

General Comments

COARSE AGGREGATE EXPOSED IN TOP OF RAIL

Span 2 Beam 1

Plate Girder

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
107	Steel Open Girder/Beam	50	0	10	40	0	Feet
515	Steel Protective Coating	452	0	0	232	220	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
107	Corrosion	Active Corrosion and Section Loss in top flange 3/4" Remaining full width, Rust and Scale no Section Loss in lower web and bottom flange scattered, Surface Corrosion / Freckled Rust, along length of beam.	3	29	29	Feet
107	Corrosion	at Bent 2, end of beam right side, Section Loss in web 5/16" Remaining 7" x 2' and bottom flange 3/4" Remaining 1' x 11-1/2", Surface Corrosion/ Freckled Rust initiated since beam end was cleaned and painted.	3	2	2	Feet
107	Corrosion	end of Beam at Bent 1, Section Loss in the web below the diaphragm 1/4" Remaining 2" x 8". Beam end has been cleaned and painted, Freckled Rust/ Surface Corrosion initiated.	3	1	1	Feet
107	Corrosion	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".	3	3	3	Feet
107	Corrosion	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'.	3	5	5	Feet
107	Damage	RC end diaphragm at Bent 1 bay 1, 1/84" cracks with efflorescence buildup; RC end diaphragm at Bent 2 in bay 1 diagonal crack 1/8" wide and Delamination.	3		2	Feet
107	Distortion	Beam 1 above Right South bound lane, impact damage previously straightened/repaired.	2	10		Feet
515	Effectiveness (Steel Protective Coatings)	Failed No Protection	4	220	220	Square Feet
515	Effectiveness (Steel Protective Coatings)	Failing Corrosion initiated	3	232	232	Square Feet

General Comments

Structure Number: 120109 Inspection Date: 03/15/2018

Span 2 Near Bearing

Fixed Bearing

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
313	Fixed Bearing	1	0	0	1	0	Each
515	Steel Protective Coating	1	0	0	0	1	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
313	Corrosion	at Bent 1, Active Corrosion & Section Loss <25% in the plates, fasteners 1/4" Remaining.	3	1	1	Each
515	Effectiveness (Steel Protective Coatings)	Failed No Protection	4	1	1	Square Feet

General Comments

Span 2 Far Bearing

Movable Bearing

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
311	Movable Bearing	1	0	0	1	0	Each
515	Steel Protective Coating	1	0	0	0	1	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
311	Corrosion	Active Corrosion & Section Loss <25% in the plates and fasteners.	3	1	1	Each
515	Effectiveness (Steel Protective Coatings)	Failed No Protection	4	1	1	Square Feet

General Comments

Span 2 Beam 2

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 1, Section Loss in web below diaphragm 5/16" Remaining 1" x 9". Surface Corrosion initiated since beam has been cleaned and painted.	3	1	1	Feet
107	Corrosion	at Bent 2, end of beam below diaphragm has Section Loss in web 5/16" Remaining 1" x 10", Surface Corrosion/Freckled Rust initiated since beam was cleaned and painted.	3	1	1	Feet
107	Corrosion	Surface Corrosion/ Freckled Rust in flanges and web 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 2 Near Bearing

Fixed Bearing

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
313	Fixed Bearing	1	0	0	1	0	Each
515	Steel Protective Coating	1	0	0	0	1	Square Feet

Element Number	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

General Comments

Span 2 Far Bearing

Movable Bearing

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
311	Movable Bearing	1	0	0	1	0	Each
515	Steel Protective Coating	1	0	0	0	1	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
311	Corrosion	Active Corrosion & Section Loss <25% in the plates and fasteners.	3	1	1	Each
515	Effectiveness (Steel Protective Coatings)	Failed No Protection	4	1	1	Square Feet

General Comments

Span 2 Beam 3

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 1, Section Loss in web below diaphragm 5/16" Remaining 1" x 9"; Freckled Rust/ Surface Corrosion initiated since beam has been cleaned and painted.	3	1	1	Feet
107	Corrosion	at Bent 2, end of beam has Section Loss in the web below diaphragm 5/16" Remaining 1" x 10"; Surface Corrosion/ Freckled Rust initiated since beam was cleaned and painted.	3	1	1	Feet
107	Corrosion	Surface Corrosion/ Freckled Rust in flanges and web 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

Structure Number: 120109 Inspection Date: 03/15/2018

Span 2 Near Bearing

Fixed Bearing

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
313	Fixed Bearing	1	0	0	1	0	Each
515	Steel Protective Coating	1	0	0	0	1	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
313	Corrosion	Active Corrosion & Section Loss <25% in the plates and fasteners.	3	1	1	Each
515	Effectiveness (Steel Protective Coatings)	Failed No Protection	4	1	1	Square Feet

General Comments

Span 2 Far Bearing

Movable Bearing

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
311	Movable Bearing	1	0	0	1	0	Each
515	Steel Protective Coating	1	0	0	0	1	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
311	Corrosion	Active Corrosion & Section Loss <25% in the plates and fasteners.	3	1	1	Each
515	Effectiveness (Steel Protective Coatings)	Failed No Protection	4	1	1	Square Feet

General Comments

Span 2 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	46	4	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, end of beam has Section Loss in the web below 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.	3	3	3	Feet
107	Corrosion	at Bent 2 original beam end, web has Section Loss 5/16" Remaining 1" x 1', (2) plates 1/4"x 7"x14" bolted to web over Section Loss.	3	1	1	Feet
107	Corrosion	Surface Corrosion/ Freckled Rust in flanges and web along length of beam	2	46		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 2 Near Bearing

Fixed Bearing

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
313	Fixed Bearing	1	0	0	1	0	Each
515	Steel Protective Coating	1	0	0	0	1	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
313	Corrosion	Active Corrosion & Section Loss <25% in the plates and fasteners.	3	1	1	Each
515	Effectiveness (Steel Protective Coatings)	Failed No Protection	4	1	1	Square Feet

General Comments

Span 2 Far Bearing

Movable Bearing

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
311	Movable Bearing	1	0	0	1	0	Each
515	Steel Protective Coating	1	0	0	0	1	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
311	Corrosion	Active Corrosion & Section Loss <25% in the plates and fasteners.	3	1	1	Each
515	Effectiveness (Steel Protective Coatings)	Failed No Protection	4	1	1	Square Feet

General Comments

Span 2 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

General Comments

Span 2 Near Bearing

Fixed Bearing

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
313	Fixed Bearing	1	0	0	1	0	Each
515	Steel Protective Coating	1	0	0	0	1	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
313	Corrosion	Active Corrosion & Section Loss <25% in the plates and fasteners.	3	1	1	Each
515	Oxide Film Degradation Color/Texture Adherence (Steel Protective Coatings)	Failed No Protection	4	1	1	Square Feet

General Comments

Span 2 Far Bearing

Movable Bearing

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
311	Movable Bearing	1	0	0	1	0	Each
515	Steel Protective Coating	1	0	0	0	1	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
311	Corrosion	Active Corrosion & Section Loss <25% in the plates and fasteners.	3	1	1	Each
515	Effectiveness (Steel Protective Coatings)	Failed No Protection	4	1	1	Square Feet

General Comments

Span 2 Expansion Joint

Strip SEal

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
300	Strip Seal Expansion Joint	28	19	0	9	0	Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
300	Seal Damage	Bent 1 joint pourable seal pulled out exposing backer material near c/l and at curbs.	3	9	9	Feet

General Comments

Span 3 Deck

Reinforced Concrete Deck

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
12	Reinforced Concrete Deck	1,917	1,408	428	81	0	Square Feet

Element Number	Defect Type	Defect Description	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 curb, 1/16" cracks and Delamination 4' x 1'.	3	4	4	Square Feet

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

General Comments

Span 3 Left Bridge Rail

Concrete Railing

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
331	Reinforced Concrete Bridge Railing	50	50	0	0	0	Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty

General Comments

COARSE AGGREGATE EXPOSED IN TOP OF RAIL

Span 3 Right Bridge Rail

Concrete Railing

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
331	Reinforced Concrete Bridge Railing	50	50	0	0	0	Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty

General Comments

COARSE AGGREGATE EXPOSED IN TOP OF RAIL

Span 3 Beam 1

Plate Girder

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
107	Steel Open Girder/Beam	50	0	33	17	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 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 was cleaned and painted.	3	10	10	Feet
107	Corrosion	at Bent 3, original beam: Section Loss in lower web 1/8" to 1/16" Remaining 5" x 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.	3	7	7	Feet
107	Corrosion	Surface Corrosion/ Freckled Rust in the web and flanges along length of beam.	2	33		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 Near Bearing

Fixed Bearing

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
313	Fixed Bearing	1	0	0	1	0	Each
515	Steel Protective Coating	1	0	0	0	1	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
313	Corrosion	Active Corrosion & Section Loss <25% in the plates and fasteners.	3	1	1	Each
515	Effectiveness (Steel Protective Coatings)	Failed No Protection	4	1	1	Square Feet

General Comments

Span 3 Far Bearing

Movable Bearing

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
311	Movable Bearing	1	0	0	1	0	Each
515	Steel Protective Coating	1	0	0	0	1	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
311	Corrosion	Active Corrosion & Section Loss <25% in the plates and fasteners.	3	1	1	Each
515	Effectiveness (Steel Protective Coatings)	Failed No Protection	4	1	1	Square Feet

General Comments

Span 3 Beam 2

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 below diaphragm has Section Loss in web 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 below diaphragm has Section Loss in web 3/8" Remaining 1" x 10", Surface Corrosion/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 Near Bearing

Fixed Bearing

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
313	Fixed Bearing	1	0	0	1	0	Each
515	Steel Protective Coating	1	0	0	0	1	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
313	Corrosion	Active Corrosion & Section Loss <25% in the plates and fasteners.	3	1	1	Each
515	Effectiveness (Steel Protective Coatings)	Failed No Protection	4	1	1	Square Feet

General Comments

Span 3 Far Bearing

Movable Bearing

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
311	Movable Bearing	1	0	0	1	0	Each
515	Steel Protective Coating	1	0	0	0	1	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
311	Corrosion	Active Corrosion & Section Loss <25% in the plates and fasteners.	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 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 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 below diaphragm has Section Loss in web 3/8" 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 Near Bearing

Fixed Bearing

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
313	Fixed Bearing	1	0	0	1	0	Each
515	Steel Protective Coating	1	0	0	0	1	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
313	Corrosion	Active Corrosion & Section Loss <25% in the plates and fasteners.	3	1	1	Each
515	Effectiveness (Steel Protective Coatings)	Failed No Protection	4	1	1	Square Feet

General Comments

Span 3 Far Bearing

Movable Bearing

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
311	Movable Bearing	1	0	0	1	0	Each
515	Steel Protective Coating	1	0	0	0	1	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
311	Corrosion	Active Corrosion & Section Loss <25% in the plates and fasteners.	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 Near Bearing

Fixed Bearing

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
313	Fixed Bearing	1	0	0	1	0	Each
515	Steel Protective Coating	1	0	0	0	1	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
313	Corrosion	Active Corrosion & Section Loss <25% in the plates and fasteners.	3	1	1	Each
515	Effectiveness (Steel Protective Coatings)	Failed No Protection	4	1	1	Square Feet

General Comments

Span 3 Far Bearing

Movable Bearing

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
311	Movable Bearing	1	0	0	1	0	Each
515	Steel Protective Coating	1	0	0	0	1	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
311	Corrosion	Active Corrosion & Section Loss <25% in the plates and fasteners.	3	1	1	Each
515	Effectiveness (Steel Protective Coatings)	Failed No Protection	4	1	1	Square Feet

General Comments

Span 3 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	40	10	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, 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.	3	4		Feet
107	Corrosion	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.	3	6	6	Feet
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

General Comments

Span 3 Near Bearing

Fixed Bearing

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
313	Fixed Bearing	1	0	0	1	0	Each
515	Steel Protective Coating	1	0	0	0	1	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
313	Corrosion	Active Corrosion & Section Loss <25% in the plates and fasteners.	3	1	1	Each
515	Effectiveness (Steel Protective Coatings)	Failed No Protection	4	1	1	Square Feet

General Comments

Span 3 Far Bearing

Movable Bearing

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
311	Movable Bearing	1	0	0	1	0	Each
515	Steel Protective Coating	1	0	0	0	1	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
311	Corrosion	Active Corrosion and Section Loss in plates, Section Loss in anchor rods down to 3/8" Remaining.	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

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
300	Strip Seal Expansion Joint	28	16	0	12	0	Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
300	Seal Damage	pourable joint seal partially pulled out exposing backing material.	3	12	12	Feet

General Comments

Span 4 Deck

Reinforced Concrete Deck

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
12	Reinforced Concrete Deck	1,725	1,269	361	95	0	Square Feet

Element Number	Defect Type	Defect Description	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 underside in right overhang, beginning at Bent 3, spall 10' x 6" x 4", in build-up adjacent to beam 5.	3	10	10	Square Feet
12	Delamination/Spall	Deck underside in right overhang, beginning at End Bent 2, Delamination 10' x 6" x 4", in build-up adjacent to beam 5.	3	10	10	Square Feet
12	Delamination/Spall	RC Deck underside left overhang at Bent 3, Delamination in	3	5	5	Square Feet

		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

General Comments

Span 4 Expansion Joint

Strip SEal

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
300	Strip Seal Expansion Joint	28	18	0	10	0	Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
300	Seal Damage	pourable joint seal partially pulled out exposing backing material.	3	10	10	Feet

General Comments

Span 4 Left Bridge Rail

Concrete Railing

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
331	Reinforced Concrete Bridge Railing	45	44	0	1	0	Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
331	Delamination/Spall	left RC sidewalk at End Bent 2, Spall with Exposed Steel at curb flare, 1'x 1' x 8".	3	1	1	Feet

General Comments

COARSE AGGREGATE EXPOSED IN TOP OF RAIL

Span 4 Right Bridge Rail

Concrete Railing

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
331	Reinforced Concrete Bridge Railing	45	45	0	0	0	Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty

General Comments

COARSE AGGREGATE EXPOSED IN TOP OF RAIL

Span 4 Beam 1

Plate Girder

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
107	Steel Open Girder/Beam	45	0	39	6	0	Feet
515	Steel Protective Coating	405	0	9	296	100	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
107	Corrosion	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.	3	4		Feet

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

Span 4 Near Bearing

Movable Bearing

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
311	Movable Bearing	1	0	0	1	0	Each
515	Steel Protective Coating	1	0	0	0	1	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
311	Corrosion	Active Corrosion and Section Loss in plates, Section Loss in anchor rods down to 3/8" Remaining.	3	1	1	Each
515	Effectiveness (Steel Protective Coatings)	Failed No Protection	4	1	1	Square Feet

General Comments

Span 4 Far Bearing

Fixed Bearing

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
313	Fixed Bearing	1	0	0	1	0	Each
515	Steel Protective Coating	1	0	0	0	1	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
313	Corrosion	Bearing Assembly seat 1 at End Bent 2: 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 4 Beam 2

Plate Girder

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
107	Steel Open Girder/Beam	45	0	44	1	0	Feet
515	Steel Protective Coating	405	0	0	283	122	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
107	Corrosion	at Bent 3, end of beam below diaphragm has Section Loss in	3	1	1	Feet

		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

General Comments

Span 4 Near Bearing

Movable Bearing

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
311	Movable Bearing	1	0	0	1	0	Each
515	Steel Protective Coating	1	0	0	0	1	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
311	Corrosion	Active Corrosion & Section Loss <25% in the plates and fasteners.	3	1	1	Each
515	Effectiveness (Steel Protective Coatings)	Failed No Protection	4	1	1	Square Feet

General Comments

Span 4 Far Bearing

Fixed Bearing

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
313	Fixed Bearing	1	0	0	1	0	Each
515	Steel Protective Coating	1	0	0	0	1	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
313	Corrosion	Bearing Assembly seat 2 at End Bent 2: 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 4 Beam 3

Plate Girder

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
107	Steel Open Girder/Beam	45	0	41	4	0	Feet
515	Steel Protective Coating	405	0	0	283	122	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
107	Corrosion	at Bent 3, end of beam below diaphragm has Section Loss in web 1/4" Remaining 1" x 10", Section Loss in lower 3" web 3/8" Remaining x 3', bottom flange 11/16" Remaining x 3'.	3	4	4	Feet
107	Corrosion	Surface Corrosion/ Freckled Rust in the flanges and web along length of beam.	2	41		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

General Comments

Span 4 Near Bearing

Movable Bearing

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
311	Movable Bearing	1	0	0	1	0	Each
515	Steel Protective Coating	1	0	0	0	1	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
311	Corrosion	Active Corrosion & Section Loss <25% in the plates and fasteners.	3	1	1	Each
515	Effectiveness (Steel Protective Coatings)	Failed No Protection	4	1	1	Square Feet

General Comments

Span 4 Far Bearing

Fixed Bearing

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
313	Fixed Bearing	1	0	0	1	0	Each
515	Steel Protective Coating	1	0	0	0	1	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
313	Corrosion	Bearing Assembly seat 3 at End Bent 2: 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 4 Beam 4

Plate Girder

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
107	Steel Open Girder/Beam	45	0	44	1	0	Feet
515	Steel Protective Coating	405	0	0	283	122	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
107	Corrosion	at Bent 3, below diaphragm Section Loss in web 5/16" Remaining 1" x 10", Section Loss bottom flange 5/8" Remaining 4" x 11-1/2". Surface Corrosion/Freckled Rust initiated since beam was cleaned and painted.	3	1	1	Feet
107	Damage	Span 4 RC intermediate diaphragm at Bent 3 in bay 4, Diagonal cracks up to 1/8" wide with efflorescence.	3		1	Feet
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

General Comments

Span 4 Near Bearing

Movable Bearing

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
311	Movable Bearing	1	0	0	1	0	Each
515	Steel Protective Coating	1	0	0	0	1	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
311	Corrosion	Active Corrosion & Section Loss <25% in the plates and fasteners.	3	1	1	Each
515	Effectiveness (Steel Protective Coatings)	Failed No Protection	4	1	1	Square Feet

General Comments

Span 4 Far Bearing

Fixed Bearing

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
313	Fixed Bearing	1	0	0	1	0	Each
515	Steel Protective Coating	1	0	0	0	1	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
313	Corrosion	Bearing Assembly seat 4 at End Bent 2: 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 4 Beam 5

Plate Girder

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

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint 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

General Comments

Span 4 Near Bearing

Movable Bearing

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
311	Movable Bearing	1	0	0	1	0	Each
515	Steel Protective Coating	1	0	0	0	1	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
311	Corrosion	Active Corrosion & Section Loss <25% in the plates and fasteners.	3	1	1	Each
515	Effectiveness (Steel Protective Coatings)	Failed No Protection	4	1	1	Square Feet

General Comments

Span 4 Far Bearing

Fixed Bearing

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
313	Fixed Bearing	1	0	0	1	0	Each
515	Steel Protective Coating	1	0	0	0	1	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
313	Corrosion	Bearing Assembly seat 5 at End Bent 2: 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

End Bent 1 Cap 1

Reinforced Concrete Pier Cap

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
234	Reinforced Concrete Pier Cap	40	32	0	8	0	Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
234	Delamination/Spall	Cap below right overhang near brace pile, Spall with Exposed Steel 22" x 10" x 2".	3	2	2	Feet
234	Delamination/Spall	in bay 4, Spall with Exposed Steel 22" x 10" x 2" and Delamination with cracks 4' x 10".	3	6	6	Feet

General Comments

Bent 1 Cap 1

Reinforced Concrete Pier Cap

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
234	Reinforced Concrete Pier Cap	35	34	1	0	0	Feet
521	Concrete Protective Coating	438	438	0	0	0	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
234	Patched Area	right end, sound patches full height x 6" x 8".	2	1		Feet

General Comments

Structure Number: 120109 Inspection Date: 03/15/2018

End Bent 1 Abutment

Reinforced Concrete Abutment

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
215	Reinforced Concrete Abutment	42	37	5	0	0	Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
215	Cracking (RC and Other)	Abutment 1 in left overhang has up to 1/32" cracks.	2	5		Feet

General Comments

Bent 2 Cap 1

Reinforced Concrete Pier Cap

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
234	Reinforced Concrete Pier Cap	35	23	6	6	0	Feet
521	Concrete Protective Coating	438	438	0	0	0	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
234	Cracking (RC and Other)	west side bottom corner from column 3 to 4, 1/8" longitudinal crack and Delamination 6' x 5" x 3".	3	6	6	Feet
234	Patched Area	East side below bay 2, sound patch to Spall with Exposed Steel 6' x 2'.	2	6		Feet

General Comments

Bent 2 Pile 6

Reinforced Concrete Pile

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
227	Reinforced Concrete Pile	1	-4	0	5	0	Each

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
227	Cracking (RC and Other)	Southeast Corner vertical crack up to 3/16" wide with Delamination 3" x 3" x 5'.	3	5	5	Each

General Comments

End Bent 2 Abutment

Reinforced Concrete Abutment

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
215	Reinforced Concrete Abutment	42	30	12	0	0	Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
215	Cracking (RC and Other)	Abutment 2 in bay 4 and below right overhang 1/32" cracks.	2	12		Feet

General Comments

Structure Number: 120109 Inspection Date: 03/15/2018

Bent 3 Cap 1

Reinforced Concrete Pier Cap

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
234	Reinforced Concrete Pier Cap	35	27	8	0	0	Feet
521	Concrete Protective Coating	438	438	0	0	0	Square Feet

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
234	Cracking (RC and Other)	right end has up to 1/32" map cracks.	2	2		Feet
234	Delamination/Spall	west face bottom corner at column 3, 1/8" crack and Delamination 2" x 6'.	2	6	6	Feet

General Comments

Bent 3 Pile 3

Reinforced Concrete Pile

Element Number	Element Name	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty	
227	Reinforced Concrete Pile	1	0	1	0	0	Each

Element Number	Defect Type	Defect Description	CS	CS Qty	Maint Qty	
227	Delamination/Spall	1/32" cracks and Delamination 6 sq. ft. 6' from pavement.	2	1	6	Each

General Comments

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

Span 1 Right Bridge Rail

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	N
Item 62: Culvert	0 - 9 , N	N
Item 71: Waterway Adequacy	0 - 9 , N	N
Item 72: Approach Roadway Alignment	0 - 9 , N	8

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

NC SMU Inspection Items

Item	Grade Scale	Grade	Maint. Qty.	Maint. Code
Deck Debris	G, F, P, or C	G	0	3376
Drainage System	G, F, P, or C	G	0	3332
Utilities	G, F, P, or C			
Slope Protection	G, F, P, or C		0	3352
Scour	G, F, P, or C			
Wingwall	G, F, P, or C	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	N
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	N
Boat Used	YES/NO	N
Other Equipment Used	YES/NO	N

National Bridge and NC SMU Inspection Item Details

Structure Number: 120109 Inspection Date: 03/15/2018

Item Deck - Item 58 Grade 4 Maint Code Qty. 0

Details *** A Priority maintenance has been issued for the following:***

PRIORITY MAINTENANCE: Span 3 RC Deck underside left overhang at Bent 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 with alligator cracks, loose concrete.

Span 2 Deck underside in left overhang, spall in build up adjacent to beam 1, with patching covering steel reinforcement, full span length x 6".
Temporary Repair: Span 2 Deck left overhang supported by Steel H-Pile crutch from bents 1 to 2. Steel H-Pile supporting Span 2 Deck left overhang at Bent 1, loose bolt thru top right flange with spall in underside of Deck.
Span 2 Deck underside at mid-Span in bay 2 along beam 2, spall no exposed steel. Deck underside beginning at Bent 1 in right overhang, spall no exposed steel in build-up along beam 5.

Span 3 Deck surface near Bent 2 joint at c/l, (2) sound patches to spalls, 3' x 2', and 18" x 12". Deck surface at Bent 2 joint near right curb, 1/16" cracks and Delamination. Deck underside at Bent 2, 1/32" map cracks with surface efflorescence in bays 2 thru 4.

Span 4 Deck underside left overhang 6' from Abutment 2, Spall with Exposed Steel; Deck underside in right overhang, beginning at End Bent 2, Delamination in build-up adjacent to beam 5; Deck underside in right overhang, beginning at Bent 3, spall in build-up adjacent to beam 5. RC Deck underside left overhang at Bent 3, Delamination in build up 5' long x 6" x 4".

Item Superstructure - Item 59 Grade 4 Maint Code Qty. 0

Details *** A priority maintenance has been issued for the following:***

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.

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.

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'.

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'.

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".

PRIORITY MAINTENANCE: Span 1 Beam 5 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.

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".

All beam ends have Section Loss at bents 1, 2, and 3. Beam ends cleaned and painted since previous inspection with Surface Corrosion/ Freckled Rust intiated.

Span 1 Beam 1 at Bent 1, Temporary Repair, Plates welded to Beam 1 both sides of Web and bottom flange.

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" x 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'.

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

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.

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.

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.

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.

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'.

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.

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.

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.

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.

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.

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.

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.

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.

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.

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.

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.

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.

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

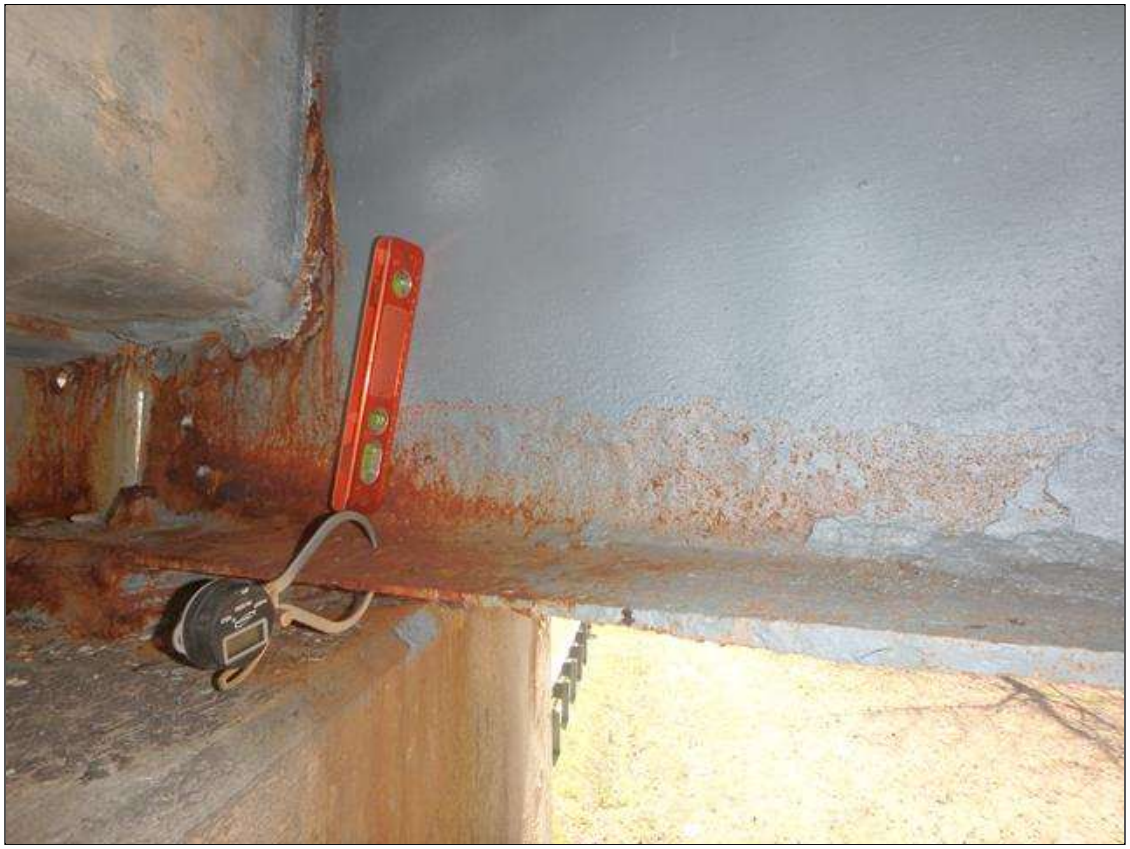
PRIORITY MAINTENANCE: Span 1 Beam 2 near Bent 1, Active Corrosion & Section Loss in the lower web and bottom flange.

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.

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.



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.

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

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.

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.

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.

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.

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.

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.

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

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.

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.

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".

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.

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.

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.

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.

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

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

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

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

Guardrail end Southwest Corner

West Approach Looking East

West Posting

Southwest Corner Transition

Guardrail connection at Southwest Corner

Right rail

Northwest Corner Transition

left rail

West Approach

South Ramps

East Approach

Southeast Corner Transition

Northeast Corner Transition

East Approach Looking West

East Posting

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

End Bent 2

Bent 3

Span 4 intermediate diaphragm in bay 1

Looking North South Profile

Superstructure Span 4

Bent 2 east side

Looking North Span 3

Looking South Span 2

Bent 1 east side

End Bent 1

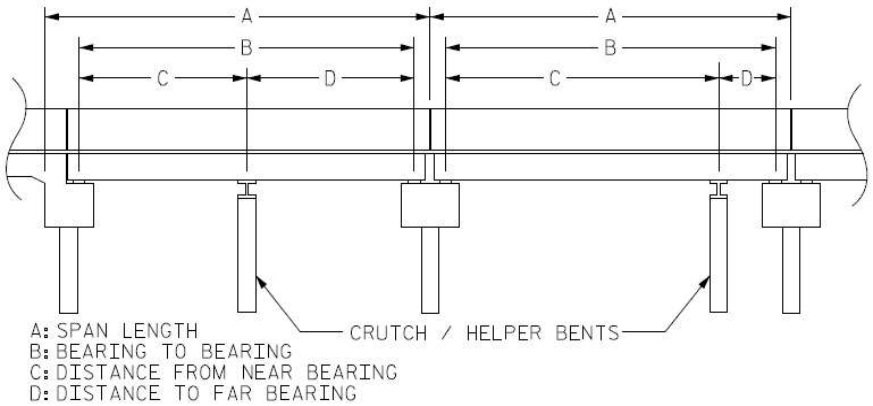
Span 4 intermediate diaphragm in bay 4 near Bent 3, welded connection to beam 5.

Looking South North Profile

Structure Data Worksheet

Span Profile

County: CABARRUS Structure Number: 120109



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			

IDENTIFICATION

(1) STATE NAME -NORTH CAROLINA BRIDGE 120109
(8) STRUCTURE NUMBER(FEDERAL) 000000000250109
(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 PCT SHARE
(99)BORDER BRIDGE STRUCTURE NO

STRUCTURE TYPE AND MATERIAL

(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

(27) YEAR BUILT 1953
(106)YEAR RECONSTRUCTED
(42) TYPE OF SERVICE : ON - Highway - Pedestrian
UNDER - Highway CODE 51
(28) LANES: ON STRUCTURE 2 UNDER STRUCTURE 4
(29) AVERAGE DAILY TRAFFIC 3500
(30) YEAR OF ADT 2012 (109) TRUCK ADT PCT 7%
(19) BYPASS OR DETOUR LENGTH 0 MI

GEOMETRIC DATA

(48) LENGTH OF MAXIMUM SPAN 48 FT
(49) STRUCTURE LENGTH 190 FT
(50)CURB OR SIDEWALK: LEFT 2.75 FT RIGHT 2.75 FT
(51) BRIDGE ROADWAY WIDTH CURB TO CURB 28 FT
(52) DECK WIDTH OUT TO OUT 38.33 FT
(32) APPROACH ROADWAY WIDTH (W/SHOULDERS) 29 FT
(33) BRIDGE MEDIAN - No Median CODE 0
(34) SKEW 23° (35) STRUCTURE FLARED 0
(10) INVENTORY ROUTE MIN VERT CLEAR 999.9 FT
(47) INVENTORY ROUTE TOTAL HORIZ CLEAR 28 FT
(53) MIN VERT CLEAR OVER BRIDGE RDWY 999.9 FT
(54) MIN VERT UNDERCLEAR REF Highway 14.4 FT
(55) MIN LAT UNDERCLEAR RT REF Highway 8.33 FT
(56) MIN LAT UNDERCLEAR LT REF - 12.5 FT

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

SUFFICIENCY RATING = 19
STATUS = Structurally Deficient

CLASSIFICATION CODE

(112)NBIS BRIDGE SYSTEM - YES
(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 N
(102)DIRECTION OF TRAFFIC - 2-way Traffic 2
(103)TEMPORARY STRUCTURE - Temporary Structure/Conditions T
(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 N
(62) CULVERTS N

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 P
DESCRIPTION - Posted for Load

APPRAISAL CODE

(67) STRUCTURAL EVALUATION 3
(68) DECK GEOMETRY 4
(69) UNDERCLEARANCES,VERTI & HORIZ 4
(71) WATERWAY ADEQUACY N
(72) APPROACH ROADWAY ALIGNMENT 8
(36) TRAFFIC SAFETY FEATURES 0111
(113)SCOUR CRITICAL BRIDGES N

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
(92) CRITICAL FEATURE INSPECTION : (93) CFI DATE
A) FRACTURE CRIT DETAIL - NO A)
B) UNDERWATER INSP - NO B)
C) OTHER SPECIAL INSP NO C)
SCOUR

Structure No: 120109 County: CABARRUS Run Date:

Span Number	Feature Intersected	Inventory Route	Minimum Maximum Vertical Clearance	Milepoint	Base Highway Network	LRS Inventory Route	Toll	Functional Classification	Numer of Lanes	Average Daily Traffic	Year of Average Daily Traffic	Total Horizontal Clearance	See Note 1					STRAHNET Highway Designator	Direction of Traffic	Highway System of Route
													Reference Feature	Minimum Vertical Underclearance	Right Lateral Underclearance	Left Lateral Underclearance	Underclearance Appraisal Grade			
	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	H	14.4	8.33	12.5	9	0	1	1
3	US29N	21000290	16.4		1	20029		14	2	10500	2012	33.8	H	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

DATA ON EXISTING STRUCTURE Run Date: 08/02/2018

COUNTY : CABARRUS | DIVISION : 10 | DISTRICT: 1 | STRUCTURE NUMBER : 120109 | LENGTH : 190 FEET

ROUTE CARRIED : SR1706 | FEATURE INTERSECTED : US29

LOCATED : 0.8 MI. E. JCT. US29A | BRIDGE NAME : | CITY : KANNAPOLIS

FUNC. CLASS : 17 | SYST.ON : FA | SYST.UNDER : NFA | ADT & YR : 3500 2012 | RAIL TYPE : LT 311 RT 311

BUILT : 1953 | BY : SHPWC | PROJ : 6752 | FED.AID PROJ : | DESIGN LOAD : HS 15

REHAB : | BY : | PROJ : | ALIGNMENT : TAN | SKEW : 67 | LANES : ON 2 UNDER 4

NAVIGATION : VC 0 FT HC 0 FT | HT. CRN. TO BED : 0 FT | WATER DEPTH : 0 FT

SUPERSTRUCTURE : REINFORCED CONCRETE DECK ON I-BEAMS

SUBSTRUCTURE : END&INTBTS:RC CAPS & STL.PILES,INTBTS:FULL CONCRETE ENCASED

SPANS : 1@45'0 ,2@50'0 ,1@45'0

BEAMS OR GIRDERS : 5 LINES OF I-BEAMS @ 7'0 CTS,SP#1&4:W33X130,SP#2&3:W33X141

FLOOR : 6 3/4 RC SLAB | ENCROACHMENT : | DECK (OUT TO OUT) : 38.33 FT

CLEAR ROADWAY : 28 FT | BETWEEN RAILS : 33.5 FT | SIDEWALK OR CURB : LT 2.75 FT RT 2.75 FT

VERT.CL.OVER : 999.9 FT

INV.RTG. : HS-6 | OPE.RTG. : HS-11 | CONTR.MEMBER : Ext.bm# 5SpB | POSTED : SV 15 TTST 18 DATE 05/23/2016

SYSTEM : Primary S.R. Route | GREEN LINE ROUTE : N

UNDER ROUTES AND CLEARANCES

Span	Route Description	Vertical Clearances		Horizontal Clearances		
		MMVC	MVC	Total	Left	Right
2	US29S	14.80	14.40	32.18	12.50	8.33
3	US29N	16.40	16	33.80	10	10.20

Note: All measurements are in feet.

REMARKS :

BRIDGE INSPECTOR'S RECOMMENDATION FOR MAINTENANCE REPAIRS

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
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'.	
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.	

Key

Priority Maintenance Item Critical Finding Item Priority Maintenance Level Not Determined

BRIDGE INSPECTOR'S RECOMMENDATION FOR MAINTENANCE REPAIRS

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".	

Key

Priority Maintenance Item Critical Finding Item Priority Maintenance Level Not Determined

BRIDGE INSPECTOR'S RECOMMENDATION FOR PRIORITY MAINTENANCE REPAIRS

Bridge: 120109 County CABARRUS

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

MMS Code	MMS Description	Quantity
3314	Maintain Steel Superstructure Components	1 LF

Location:
Bent/Span No.

Priority Level	Status
Priority Maintenance	Division Bridge Maintenance Notification Received

Submitted Date:	Submitted By:	Assisted By:
03/21/2018	JASON ROLFSMEYER	

Details
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".

MMS Code	MMS Description	Quantity
3314	Maintain Steel Superstructure Components	5 LF

Location:
Bent/Span No.

Priority Level	Status
Priority Maintenance	Division Bridge Maintenance Notification Received

Submitted Date:	Submitted 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 INSPECTOR'S RECOMMENDATION FOR PRIORITY MAINTENANCE REPAIRS

Bridge: 120109 County CABARRUS

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

MMS Code	MMS Description	Quantity
3314	Maintain Steel Superstructure Components	3 LF

Location:
Bent/Span No.

Priority Level	Status
Priority Maintenance	Division Bridge Maintenance Notification Received

Submitted Date:	Submitted By:	Assisted By:
03/21/2018	JASON ROLFSMEYER	

Details
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".

MMS Code	MMS Description	Quantity
3314	Maintain Steel Superstructure Components	3 LF

Location:
Bent/Span No.

Priority Level	Status
Recommended	Routine Maintenance

Submitted Date:	Submitted By:	Assisted By:
03/21/2018	JASON ROLFSMEYER	

Details
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 INSPECTOR'S RECOMMENDATION FOR PRIORITY MAINTENANCE REPAIRS

Bridge: 120109 County CABARRUS

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

MMS Code	MMS Description	Quantity
3314	Maintain Steel Superstructure Components	3 LF

Location:
Bent/Span No.

Priority Level	Status
Recommended	Routine Maintenance

Submitted Date:	Submitted By:	Assisted By:
03/21/2018	JASON ROLFSMEYER	

Details

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.

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

Location:
Bent/Span No.

Priority Level	Status
Recommended	Routine Maintenance

Submitted Date:	Submitted By:	Assisted By:
03/21/2018	JASON ROLFSMEYER	

Details

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 INSPECTOR'S RECOMMENDATION FOR PRIORITY MAINTENANCE REPAIRS

Bridge: 120109 County CABARRUS

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

MMS Code	MMS Description	Quantity
3314	Maintain Steel Superstructure Components	1 LF

Location:		
Bent/Span No.		
Priority Level	Status	
Recommended	Routine Maintenance	
Submitted Date:	Submitted By:	Assisted By:
03/21/2018	JASON 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	MMS Description	Quantity
3326	Maintain Concrete Deck	7 SF

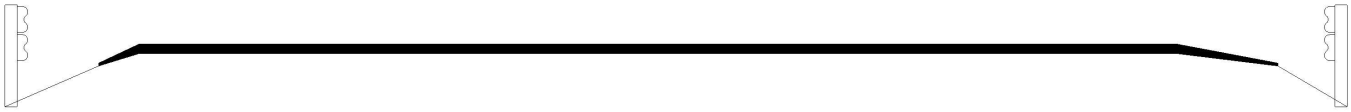
Location:		
Bent/Span No.		
Priority Level	Status	
Recommended	Routine Maintenance	
Submitted Date:	Submitted By:	Assisted By:
03/21/2018	JASON ROLFSMEYER	

Details

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

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
Left Guardrail	3.3ft from road		
Right Guardrail	4.2ft from road		

MEASUREMENTS TAKEN APPROX 10' BACK FROM STRUCTURE AT WEST APPROACH

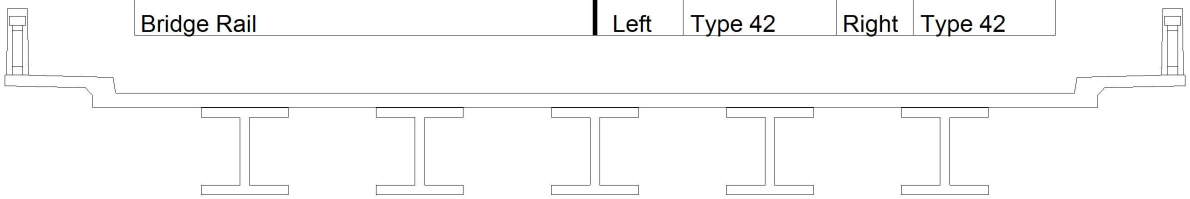
MEASUREMENTS VERIFIED 03/15/2018 GLT

Title	**Description**
APPROACH RDWY	SHEET 1

Bridge No:	**Drawn By:**	**Date:**	**File Name:**
120109	STEVE AUSTIN	03/25/2010	S0078000111

Bridge Inspection Field Sketch

Deck Width/Out to Out	38.33ft	Between Rails				33.5ft
Clear Roadway	28ft	Wearing Surface				
Median Width		Median Height				
Curb Height		Left	0.83ft	Right	0.83ft	
Sidewalk Width		Left	4.33ft	Right	4.33ft	
Clear Roadway (Rail to Median)		Left		Right		
Guardrail Width		Left	0.75ft	Right	0.75ft	
Top of Rail to Deck/Wearing Surface		Left	3.75ft	Right	3.75ft	
Bridge Rail		Left	Type 42	Right	Type 42	

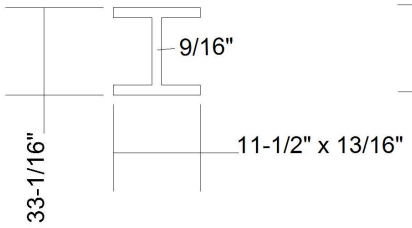


Measurements for Span #	1		
Deck Thickness	0.417	Left Overhang	5.167
Top of Rail to Bottom of Beam	6.917	Right Overhang	5.167

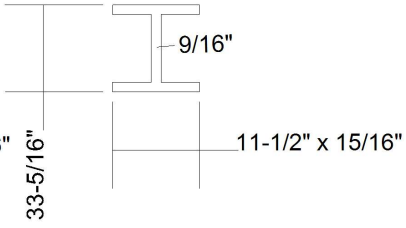
Beam Number	Beam Type	Spacing	Comments
1	Steel I Beam	7ft	SPANS 1 AND 4 - W33 X 130
2	Steel I Beam	7ft	SPANS 2 AND 3 - W33 X 141
3	Steel I Beam	7ft	SPANS 2, 3 AND 4 SIMILAR
4	Steel I Beam	7ft	
5	Steel I Beam	ft	

END BENT DETAILS = RC CAPS & STL. PILES

BEAM DETAILS: SPANS 1 AND 4
W33 X 130



SPANS 2 AND 3
W33 X 141



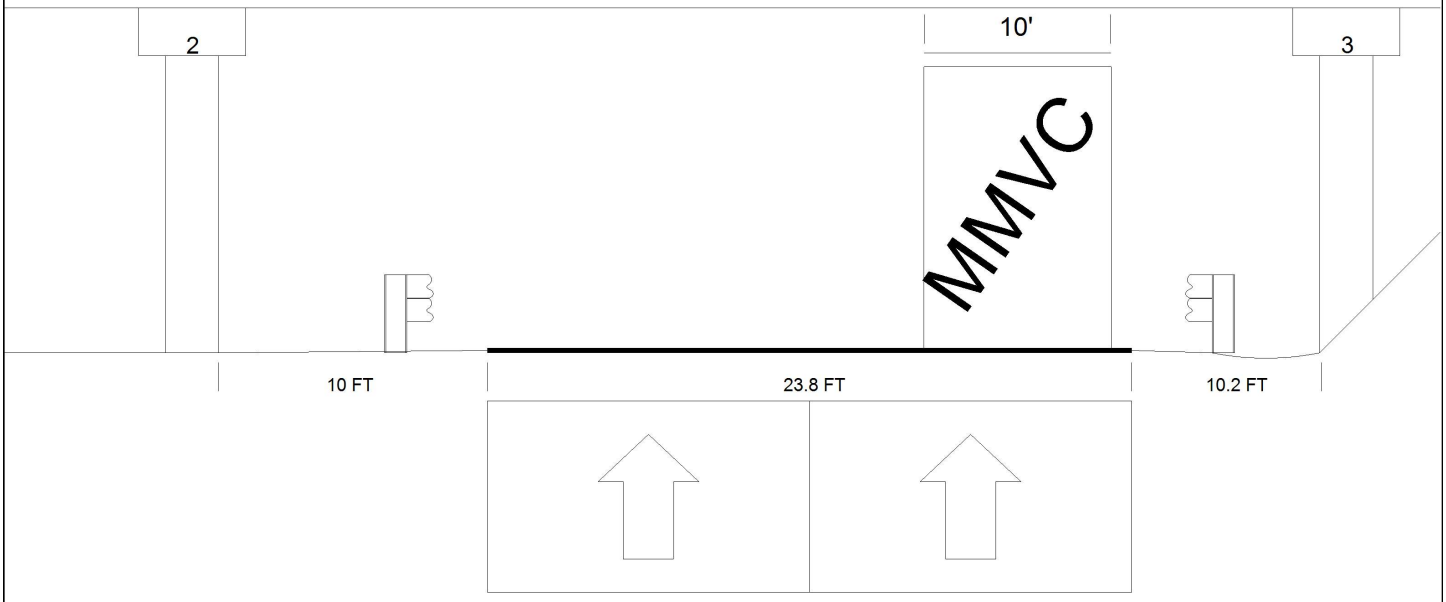
MEASUREMENTS VERIFIED 03/15/2018 GLT

Title	Description
TYPICAL SECTION	SHEET 2

Bridge No:	Drawn By:	Date:	File Name:
120109	STEVE AUSTIN	03/25/2010	S0078000112

Bridge Inspection Field Sketch

Span 3



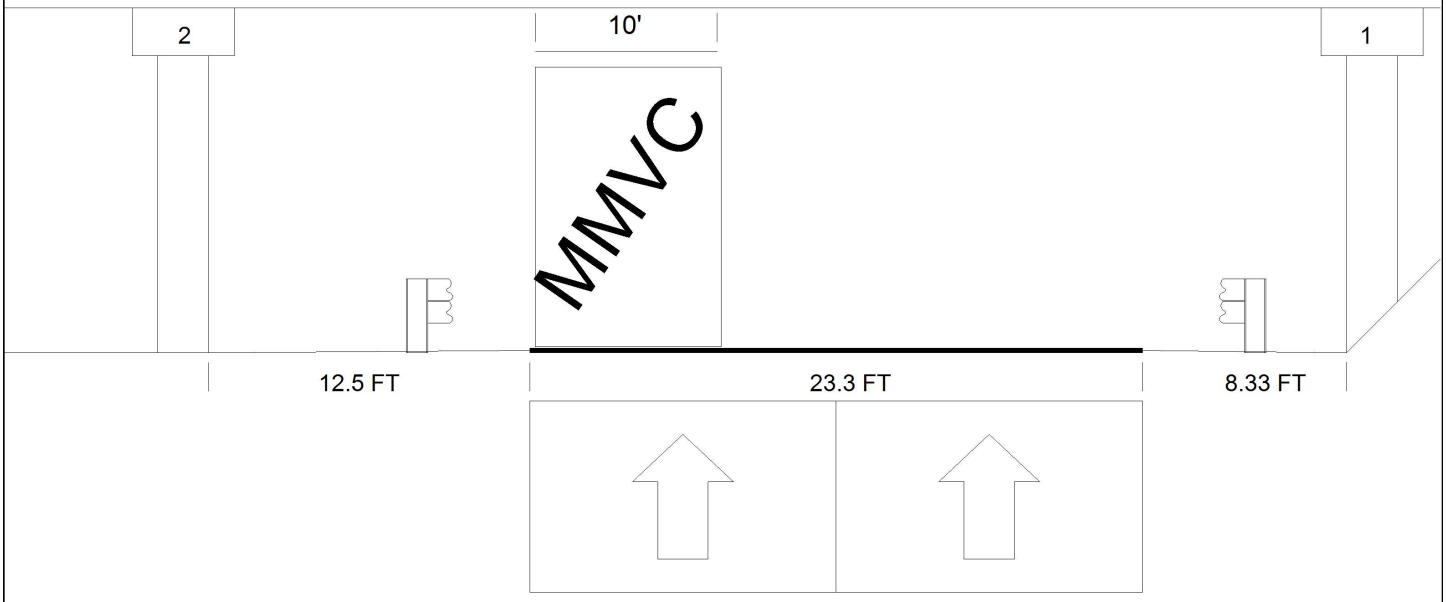
Roadway 1		Direction of Traffic	North
Distance to Left Rail	4FT	Distance to Right Rail	6FT
Distance to Left Toe of Slope		Distance to Left Bent	10FT
Distance to Right Toe of Slope		Distance to Right Bent	10.2FT
MMVC	16.4 Ft at Beam 1, 10 FT from RIGHT EDGE OF RDWY		
MVC	16 Ft at Beam 1, 0 FT from LEFT EDGE OF RDWY		

MEASUREMENTS VERIFIED 03/15/2018 GLT

Title	**Description**		
UNDERCLEARANCE SPAN 3	SHEET 3		
Bridge No: 120109	**Drawn By:** STEVE AUSTIN	**Date:** 03/25/2010	**File Name:** S0078000113

Bridge Inspection Field Sketch

Span 2



Roadway 1		Direction of Traffic	South
Distance to Left Rail	4.3FT	Distance to Right Rail	4.58FT
Distance to Left Toe of Slope		Distance to Left Bent	12.5FT
Distance to Right Toe of Slope		Distance to Right Bent	8.33FT
MMVC	14.8 Ft at Beam 1, 10 FT from LEFT EDGE OF RDWY		
MVC	14.4 Ft at Beam 1, 0 FT from RIGHT EDGE OF RDWY		

MEASUREMENTS VERIFIED 03/15/2018 GLT

Title	**Description**		
UNDERCLEARANCE SPAN 2	SHEET 4		
Bridge No: 120109	**Drawn By:** STEVE AUSTIN	**Date:** 03/25/2010	**File Name:** S0078000114

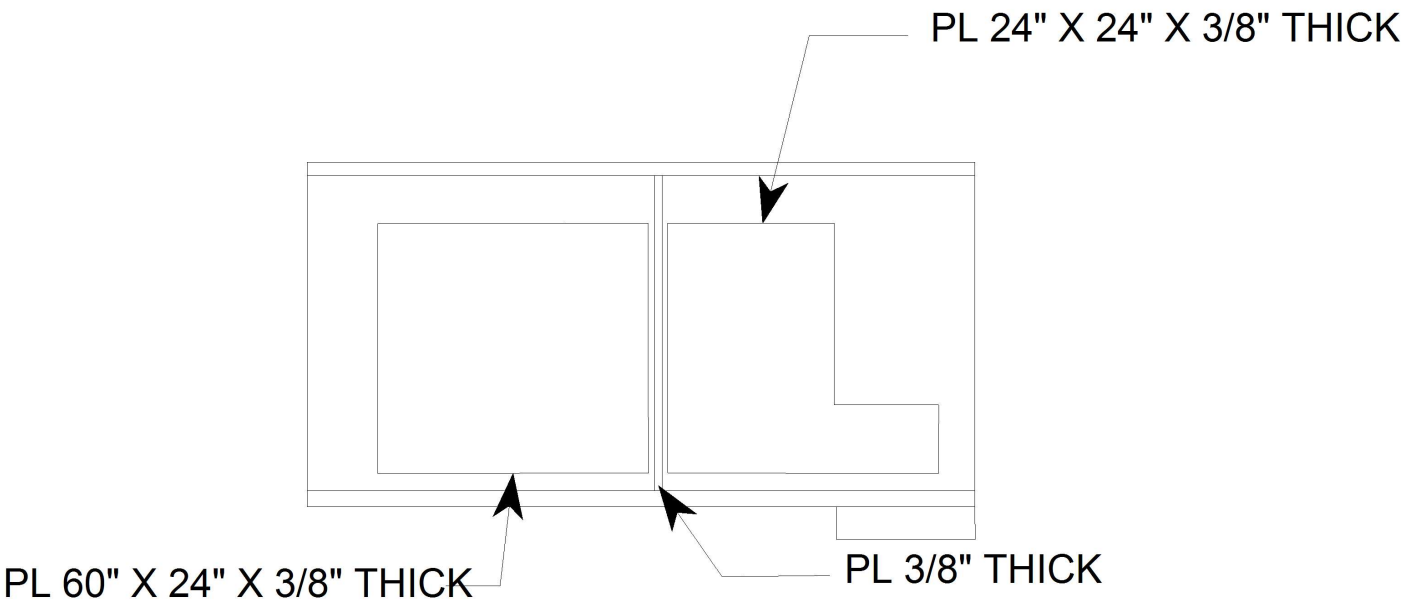
Bridge Inspection Field Sketch

DELETE SKETCH

Title	Description
DELETE SKETCH	DELETED

Bridge No:	Drawn By:	Date:	File Name:
120109	STEVE AUSTIN	03/25/2010	S0082002118

Bridge Inspection Field Sketch



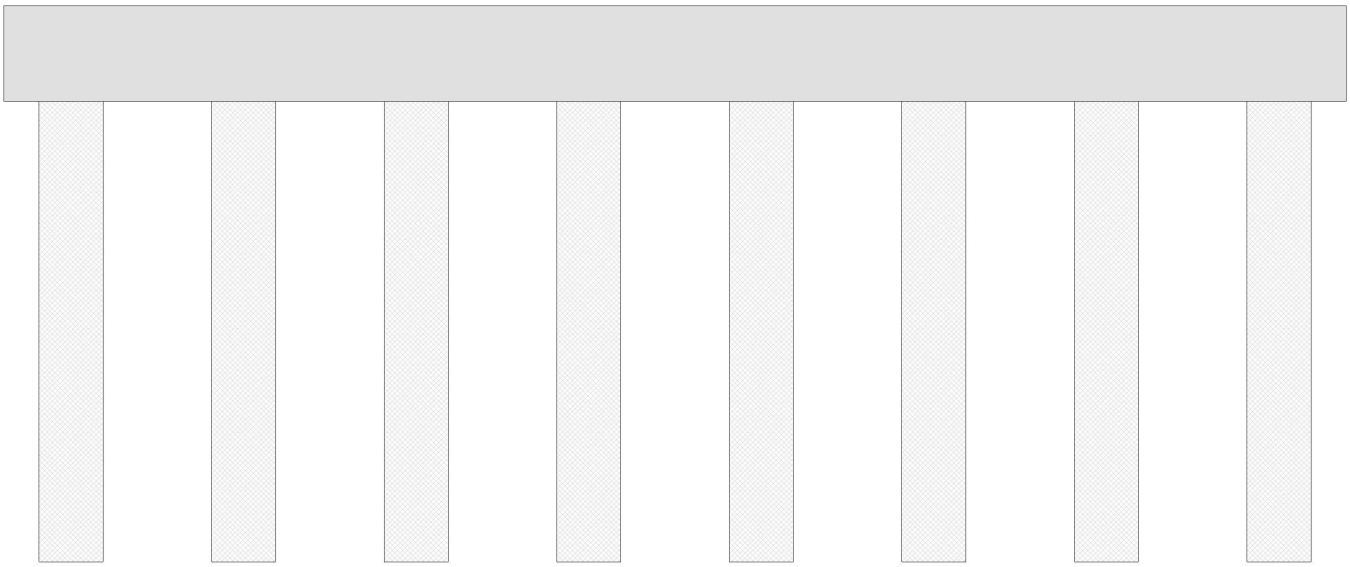
BEAM 1 AT PIER 1 SPAN 1 SIDE (INTERIOR AND EXTERIOR FACE)
BEAM 5 AT PIER 1 SPAN 1 SIDE (EXTERIOR FACE)

MEASUREMENTS VERIFIED 03/15/2018 JER

Title	Description
BEAM REPAIRS	SHEET 6

Bridge No:	Drawn By:	Date:	File Name:
120109	DAVID WAGNER	3/21/2012	S0430000089

Bridge Inspection Field Sketch



Cap Information			Material Cast-in-Place Concrete			
Length	Width	Height	Left Overhang	Right Overhang	Left Beam to End of Cap.	Right Beam to End of Cap.
35.000 ft.	2.500 ft.	2.500 ft.	1.750 ft.	1.750 ft.	2.100 ft.	2.100 ft.

Subcap Information			Material		
Length	Width	Height	Left Overhang	Right Overhang	Left Pile to Splice.

Sill Information			Material
Length	Width	Height	

Pile #	Material	Spacing	Width/Dia.	Height	Length	Orientation	Driven?	Replacement?	Removed?	Collar?
1	Concrete	4.5 ft.	1.67 ft.	1.67 ft.		Vertical	No	No	No	No
2	Concrete	4.5 ft.	1.67 ft.	1.67 ft.		Vertical	No	No	No	No
3	Concrete	4.5 ft.	1.67 ft.	1.67 ft.		Vertical	No	No	No	No
4	Concrete	4.5 ft.	1.67 ft.	1.67 ft.		Vertical	No	No	No	No
5	Concrete	4.5 ft.	1.67 ft.	1.67 ft.		Vertical	No	No	No	No
6	Concrete	4.5 ft.	1.67 ft.	1.67 ft.		Vertical	No	No	No	No
7	Concrete	4.5 ft.	1.67 ft.	1.67 ft.		Vertical	No	No	No	No
8	Concrete		1.67 ft.	1.67 ft.		Vertical	No	No	No	No

MEASUREMENTS VERIFIED 03/15/2018 GLT

Bent/Abutment #: 1 Similar Bents: 2,3

Title	**Description**
BENT 1	SHEET 7

Bridge No: 120109	**Drawn By:** DAVID WAGNER	**Date:** 3/25/2014	**File Name:** S0430000177