SCDOT BRIDGE INSPECTION FORM

(008) BRIDGE ID:	3210002600400	(005) ROUTE:	LEXINGTON I-26
(420) ASSET NO:	3022	(006) CROSSING:	SALUDA RIVER
(419) RAMP NO:		(009) LOCATION:	3MI W OF COLA
(026) FUNCTIONAL CLASS:	11	(016) LAT: 34d 1m 25.46s	(017) LON: 81d 6m 13.04s

GENERAL BRIDGE DATA

	EXISTING	REVISED
(027) Year Built	1959	
(106) Year Recon	1985	
(031) Design Load	5	
(36A) Railings	1	
(36B) Transitions	1	
(36C) Appr Guard	1	
(36D) Appr Guard End	1	
(037) History	5	
(319) Last Paint Date		

	EXISTING			REVISED
(042) Type Serv; On(A) Und(B)	1		5	
(028) Lanes; On(A) Und(B)	6		0	
(107) Deck Struct		1		
(108) Wear Surf/Membrane/Prot	1	8	8	
	MAT-SUP-SUB			MAT-SUP-SUB
(043) Main Original (A)	5	2	1	
Main Reconst (B)	5	02	1	
(044) Appr Orginal (A)	0	00	0	
Appr Reconst (B)	0	00	0	

GEOMETRIC DATA

	EXISTING	REVISED
(032) Appr Rdway	132	
(033) Bridge Median	2	
(034) Skew	45	
(035) Flared	0	
(045) # Main Spans	10	
(046) # Appr Spans	0	
(048) Max Span Lgth	70	
(308) Appr Span Lgth	0	
(049) Struct Length	702	
(47A) Horz Clear Right	42	
(47B) Horz Clear Left	42	
(47UA) Horz Clear Right	0	0
(47UB) Horz Clear Left	0	0
(50B) Sidewalk Right	0	
(50A) Sidewalk Left	0	
(051) Curb to Curb	138	
(052) Deck Out-Out	148	

	EXISTING		REVISED	
	FT	IN	FT	IN
(053) Vert Clr Above Deck	99	99		
(54A) Vert Clear Ref	N			
(54B) Vert Clear Right	0	0	0	0
(54C) Vert Clear Left	0	0	0	0
(10A) Great Min Clr Over/Und	99	99		
(10B) Great Min Right	99	99		
(10C) Great Min Left	99	99		
(55A) Lat Clear Ref	N			
(55B) Lat Clear Right	99.90			
(55C) Lat Clear Left	0			
(038) Navigation Cont	0			
(039) Nav Vert Clear	0			
(040) Nav Horz Clear	0			
(111) Nav Pier Port				

RATINGS DATA

	EXISTING	REVISED
(58) Deck	7	
(59) Super Str	6	
(60) Sub Str	6	7
(061) Channel	8	
(062) Culv Ret	N	
(071) Water Adeq	9	
(072) Appr Rdway	8	
(113) Scour Critical	5	
(067) Structure	6	
(068) Deck Geom	9	
(069) Underclear	N	
(070) Bridge Post	5	

	EXISTING	REVISED
(041) Traffic Status	A	
(063) Rating Method	1	
(064) Operating Method	76	
(065) Rating Method	1	
(066) Inventory Rating	56	
(411) Date Rated		
(418) Conditions During Rating		

	Freq	Mth/Year	Freq	Mth/Year
(091, 090) Routine Insp	24	11/2017	24	11/2019
(92A, 93A) Fracture Critical	N			
(92B, 93B) Underwater Insp	Y60	10/2017		
(92C, 93C) Special Insp	N			

Inspection Leader:	BOZARD JAMES B	Reviewed By:	POINTER WILLIAM D
Date:		Date:	12/3/2019

Bridge Element Group Textual Data

Bridge ID: 32-1-00026-0-04-00

03 Dec 2019

Abutments and/or Headwalls:

Water seeping through construction joints between top of cap and bottom of headwall. Minor erosion at abutment and under cap bent 11, EBL, East end, right side. Minor spall with rust in wingwall, East end, right side.

Bents and/or Piers:

Hairline to 0.04" cracks several with efflorescence and minor/moderate/large spalls, several with rust in caps, (see sketch sheet, photos). Diagional hairline cracks with efflorescence in web walls. Dirt and debris on caps.

Bearings:

Heavy corrosion on bearings at beams 1-10 in headwalls,(see photo), and on sole plates throughout structure, elastomeric bearings at all other beams throughout structure.

Girders/Floor Beams/Stringers and/or Beams:

Hairline cracks and minor/moderate spalls with rust end of beams at bearing area in filler area, (see sketch sheet, photo). Minor smoke damage to beam 15, span 10. Hairline cracks and minor spalls with rust in diaphragms.

Truss Members:

Expansion Joints:

Expansion material pulled loose/missing, with armor plates pulling loose, (see photo).

Decks and/or Slabs:

Hairline to 0.04" transverse, longitudinal, diagonal, and map cracking, minor/moderate spalls with exposed rebar, minor abrasions, and minor delamination on deck, (see photo). Hairline longitudinal and diagonal cracks several with efflorescence on underside of deck between beams 10 and 11.

Curbs:

Bridge Railing/Parapets and/or Median Barriers:

Bridge and approach rail in place. Large spall with exposed rebar from collision damage in WBL of I-26, East end, at construction joint, (see photo). Hairline cracks with eff. in parapet walls. 2ea concrete median barriers separating traffic on structure. Moderate collision damage to approach rail, West end, right side with traffic.

Paint Systems:

Waterway and Scour:

See scour sheet.

Fender System:

Roadway Alignment:

Traffic Signs:

2ea bridge end signs in place.

Encroachments:

6-4" telephone ducts attached to underside of deck between beams 9 and 10.
2-2" metal pipes on right side, attached to parapet wall.

Miscellaneous Notes:

I-26 M/M 108. 'Walter P. Rawl Bridge' memorial plaques on both approaching ends of bridge, right side with traffic.

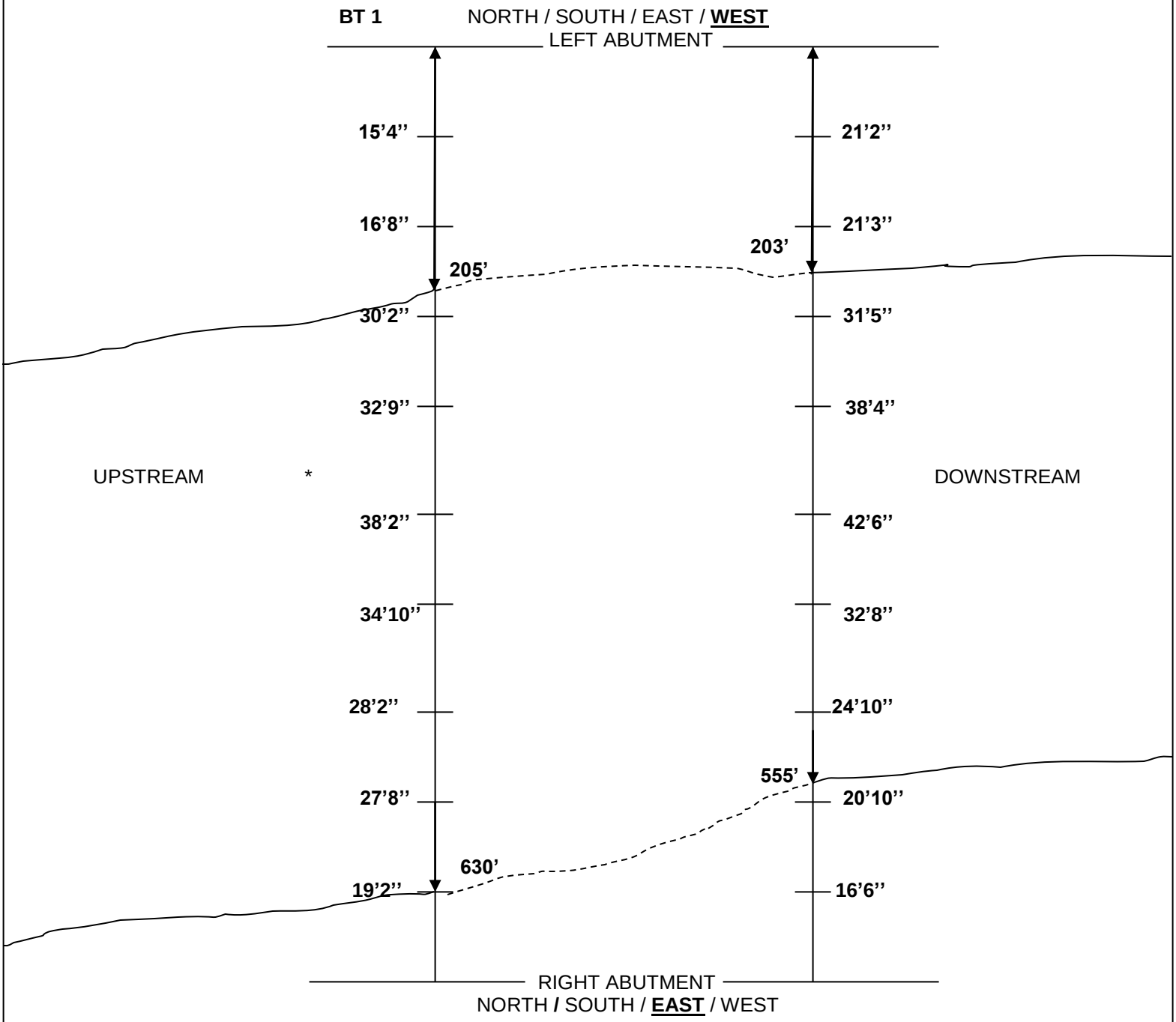
Bridge Element Level Data

03 Dec 2019

					Quantity in Each Condition State				
Element No	**Element Name/Description**	**Units**	**Env**	**Defect**	**1**	**2**	**3**	**4**	**Total Qty**
109	Prestressed Concrete Open Girder/Beam	feet	4	Yes					
109	Delamination/Spall/Patched Area	feet	4	1080	0	18	0	0	18
109	Exposed Prestressing	feet	4	1100	0	35	0	0	35
109	Cracking (PSC)	feet	4	1110	0	510	0	0	510
109	Prestressed Concrete Open Girder/Beam	feet	4	Yes	12775	563	0	0	13338
12	Reinforced Concrete Deck	sq feet	4	Yes					
12	Delamination/Spall/Patched Area	sq feet	4	1080	0	463	0	0	463
12	Exposed Rebar	sq feet	4	1090	0	15	0	0	15
12	Efflorescence/Rust Staining	sq feet	4	1120	0	104	0	0	104
12	Cracking (RC and Other)	sq feet	4	1130	6257	464	0	0	6721
12	Reinforced Concrete Deck	sq feet	4	Yes	102850	1046	0	0	103896
205	Reinforced Concrete Column	each	4	No	54	0	0	0	54
234	Reinforced Concrete Pier Cap	feet	4	Yes					
234	Delamination/Spall/Patched Area	feet	4	1080	0	1	0	0	1
234	Exposed Rebar	feet	4	1090	0	2	13	0	15
234	Efflorescence/Rust Staining	feet	4	1120	0	52	0	0	52
234	Cracking (RC and Other)	feet	4	1130	60	0	0	0	60
234	Reinforced Concrete Pier Cap	feet	4	Yes	2231	55	13	0	2299
301	Pourable Joint Seal	feet	3	Yes					
301	Seal Damage	feet	3	2330	0	0	320	0	320
301	Pourable Joint Seal	feet	3	Yes	439	0	320	0	759
302	Compression Joint Seal	feet	3	Yes					
302	Seal Adhesion	feet	3	2320	0	0	80	0	80
302	Compression Joint Seal	feet	3	Yes	1162	0	80	0	1242
310	Elastormeric Bearing	each	3	No	360	0	0	0	360
313	Fixed Bearing	each	3	Yes					
313	Corrosion	each	3	1000	0	0	20	0	20
313	Fixed Bearing	each	3	Yes	0	0	20	0	20
321	Reinforced Concrete Approach Slab	sq feet	2	Yes					
321	Delamination/Spall/Patched Area	sq feet	2	1080	0	19	0	0	19

321	Cracking (RC and Other)	sq feet	2	1130	360	0	0	0	360
321	Reinforced Concrete Approach Slab	sq feet	2	Yes	5901	19	0	0	5920
331	Reinforced Concrete Bridge Railing	feet	2	Yes					
331	Delamination/Spall/Patched Area	feet	2	1080	0	23	3	0	26
331	Efflorescence/Rust Staining	feet	2	1120	0	280	0	0	280
331	Cracking (RC and Other)	feet	2	1130	63	0	0	0	63
331	Reinforced Concrete Bridge Railing	feet	2	Yes	2502	303	3	0	2808

BRIDGE INSPECTION STREAM / GROUND PROFILE	BRIDGE NUMBER **3210002600400**
COMMENTS: **Strong Current**	ROAD NUMBER **I-26**
TOP OF WATER **Upstream *21'2**	CROSSING: **Saluda River**
BOTTOM OF CHANNEL **Upstream*35'1"**	TOP OF WATER TO **Top** OF **Parapet**
TOP OF WATER **Downstream *22'6"**	HORIZONTAL BLOCKAGE % _____ TO_____
BOTTOM OF CHANNEL **Downstream *42'11"**	VERTICAL BLOCKAGE % _____



PBC
MEASUREMENT BY

20 Nov 2019
DATE MEASURED

MEASUREMENTS ARE FROM **Top** OF **Parapet** TO GROUND LINE.

Sketch Sheet

DATE __20 Nov 2019_____

STRUCTURE NUMBER _3210002600400__ ROAD NUMBER __I-26_____
COUNTY __Lexington__ CROSSING _Saluda River_____
RESTRICTION _____

Caps
(see photo)

Cap bt 1 has a 2' long h/l crack under bm 7.
Cap bt 2 has:

Hairline cracks at construction joints.
1' diag. h/l crack cap build-up under beam 1, West side.
1' long. h/l crack w/rust under beam 1, West side.
Moderate spall w/rust under bm 2, West side, 1'x1'.
Moderate spall w/rust between beams 1 & 2, West side, 1'x6".
1' long. h/l crack w/eff. under beam 5, East side.
2ea 4' vert. h/l cracks w/eff. under beam 5, both sides.
4' vert. h/l crack w/eff. under beam 6, both sides.
Minor spall at construction joint between beams 10 & 11, West side.

Cap bt 3 has:

Hairline cracks at construction joints.
1' vert. h/l crack cap build-up under beam 1, West side.
1' long. h/l crack w/eff. cap build-up under beam 2, West side.
1' diag. h/l crack w/eff. cap build-up under beam 3, West side.
4' vert. h/l crack w/eff. under beam 5, both sides.
Hairline map cracking under beam 10, both sides.
1' long. h/l crack under beam 15, West side.
1' long. h/l crack w/eff. under beam 19, West side.

Cap bt 4 has:

Hairline cracks at construction joints.
6" vert. h/l crack cap build-up under beam 3, West side.
Minor spall w/rust cap build-up under beam 4, West side, 3"x3".
6" vert. h/l crack w/eff. cap build-up under beam 5, West side.
4' vert. h/l crack w/eff. under beam 6, West side.

Cap bt 8 has a:

1' long. h/l crack between beams 1 & 2, East side.
4' vert. h/l crack under beam 5, East side.
6" diag. h/l crack cap build-up under beam 5, East side.
Hairline map cracking under beam 6, East side.
1' long. h/l crack under beam 8, East side.

Cap bt 9 has a:

4' vert. h/l crack under beam 5, East side.
2' long. h/l crack between beams 5 & 6, East side.
4' vert. h/l crack under beam 6, East side.
6" diag. h/l crack cap build-up under beam 6, East side.
Minor spall w/rust under beam 9, East side, 3"x3".
4' vert. h/l crack under beam 15, East side.

Sketch Sheet

DATE __20 Nov 2019_____

STRUCTURE NUMBER _3210002600400__ ROAD NUMBER __I-26_____
COUNTY __Lexington__ CROSSING _Saluda River_____
RESTRICTION _____

Caps
(see photo)

Cap bt 10 has:

Hairline cracks at construction joints.
2ea moderate spalls w/rust under beam 2, West side, 1'x2" & 2'x2'.
4' vert. h/l crack w/eff. between beams 2 & 3, East side.
1' diag. h/l crackw/eff. under beam 3, West side.
2ea. 4' vert. h/l cracks w/eff. under beam 5, West side.
4' vert. h/l crack under beam 5, East side.
2ea 4' vert. h/l cracks w/eff. under beam 5, both sides.
6" vert. h/l crack cap build-up under beam 5, West side.
4' vert. h/l crack under beam 6, East side.
1' diag. h/l crack w/eff. under beam 6, both sides.
4' vert. 0.04" crack w/eff. under bm 6, West side.
4' vert. h/l crack under beam 8, East side.
Large spall w/rust under beam 19, East side, 3'x3'.

Cap bt 11 has:

5' long. 0.05" crack w/rust under beam 2.
3' long. h/l crack w/rust between beams 2 & 3.
1' long. h/l crack under beam 4.
4' long. h/l crack w/rust between beams 4 & 5.
1' long. h/l crack under beam 5.
Hairline map cracking under beam 8.
2' diag. h/l crack under beam 10.

Sketch Sheet

DATE **20 Nov 2019**

STRUCTURE NUMBER **3210002600400** ROAD NUMBER **I-26**
COUNTY **Lexington** CROSSING **Saluda River**
RESTRICTION _____

Beams
(see photo)

Beam 2, bent 2, span 2 has 2ea. 6” h/l cracks w/eff. in top flange near end of beam.
Beam 2, bent 2, span 2 has a minor spall at bearing area.
Beam 1, bent 9, span 9 has minor spalls w/rust at bearing area.
Beam 3, bent 9, span 9 has a 6” long. h/l crack bottom at bearing area.
Beam 10, bent 10, span 9 has a 6” long. h/l crack bottom at bearing area.
Beam 1, bent 10, span 10 has minor spalls w/rust at bearing area

20 Nov 2019: Top view of bridge from East approach. (1)

20 Nov 2019: Top view of bridge from West approach. (33)

20 Nov 2019: View of upstream from bridge. (85)

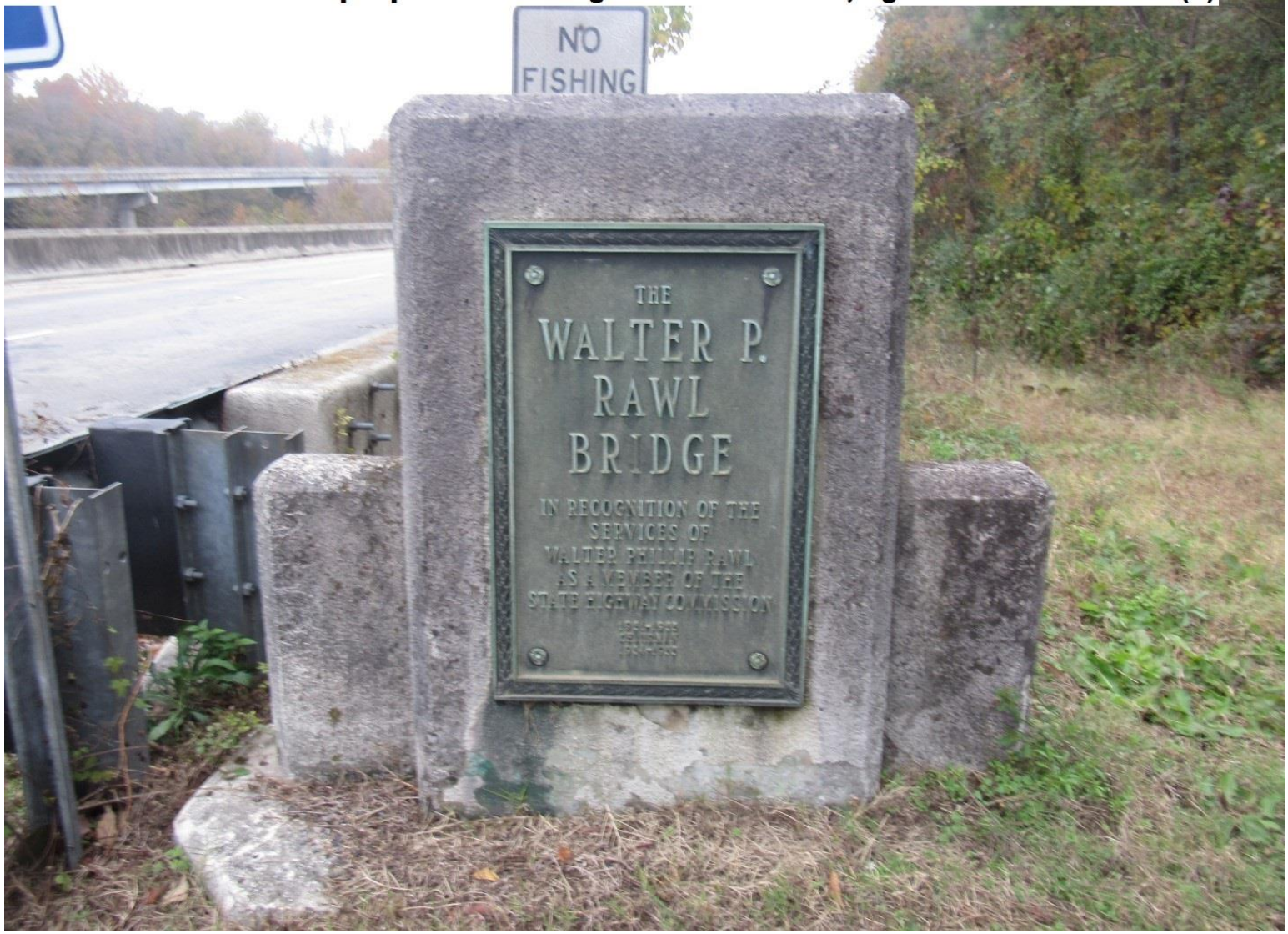
20 Nov 2019: View of downstream from bridge. (51)

20 Nov 2019: View of left elevation of bridge. (8)

20 Nov 2019: View of right elevation of bridge. (31)

20 Nov 2019: View of super/sub structure of bridge. (22)

20 Nov 2019: Memorial plaque behind wingwall on both ends, right side with traffic. (6)



20 Nov 2019: Large spall with rust from collision damage in WBL of I-26, East end. (82)

20 Nov 2019: Moderate collision damage to approach rail in WBL of I-26, West end, right side with traffic. (49)

20 Nov 2019: Expansion material is pulled loose and missing, typical. (74)

20 Nov 2019: Armor plates are pulling loose, typical. (68)

20 Nov 2019: Minor delaminations and moderate spalls with rust on deck, typical. (66)

20 Nov 2019: Moderate settlement on East approach, WBL of I-26, right side with traffic. (3)

20 Nov 2019: Minor spall with rust in wingwall, East end, right side. (26)

20 Nov 2019: Beam 1, bent 9, span 9 has minor spalls w/rust at end of beam, left side. (55)

20 Nov 2019: Beam 1, bent 10, span 10 has minor spalls w/rust at end of beam, left side. (58)

20 Nov 2019: Heavy rust on bearings at beams 1-10 in headwalls, typical. (20)

20 Nov 2019: Bent 2 has minor spalls with rust between beams 1 & 2, West side. (34)

20 Nov 2019: Bent 10 has moderate spalls with rust under beam 2, West side. (25)

20 Nov 2019: Bent 10 has a moderate spall with rust under beam 19, East side. (64)

SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION
HIGHWAY MAINTENANCE MANAGEMENT SYSTEM

Bridge Deficiency Report

District	Work County	Type	Route	Aux	Off Sys	Asset ID	Priority	Activity	Status	Work Inspection From Date	Work Inspection To Date
1	**LEXINGTON**	**I**	**26**			**3022**	**C**		**INCOMPLETE**		

Structure	Type	Route	Aux	Milepoint	Direction	Off System Description
3022 - 10002600400-SALUDA RIVER	**I**	**26**	**00**	**108.32**	**E**	

Insp.Date	Activity	Priority	Comp.Date	Org.Unit	Work Insp.Date	Cleared	Name Of Inspector
11/20/2019	**805**	**C**				**N**	

Deficiency Comment

(301,302) REPLACE EXPANSION MATERIAL, (SEE PHOTO).
(301,302) REPAIR ARMOR PLATES, (SEE PHOTO).

District: **1 - ONE**

Work County: **LEXINGTON**

SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION
HIGHWAY MAINTENANCE MANAGEMENT SYSTEM

Bridge Deficiency Report

District	Work County	Type	Route	Aux	Off Sys	Asset ID	Priority	Activity	Status	Work Inspection From Date	Work Inspection To Date
1	**LEXINGTON**	**I**	**26**			**3022**	**D**		**INCOMPLETE**		

District: **1 - ONE**

Work County: **LEXINGTON**

3022 - 10002600400-SALUDA RIVER I 26 00 108.32 E

11/07/2017 801 D N

(12) PATCH SPALLS ON DECK, (SEE PHOTO).

3022 - 10002600400-SALUDA RIVER I 26 00 108.32 E

01/15/2004 802 D N

(331) PATCH SPALLS IN CONCRETE PARAPET WALL, (SEE PHOTO).

3022 - 10002600400-SALUDA RIVER I 26 00 108.32 E

01/15/2004 803 D N

(109) PATCH SPALLS IN BEAMS AT BEARING AREA, AND IN CONCRETE DIAPHRAGMS, (SEE SKETCH SHEET, PHOTO).

3022 - 10002600400-SALUDA RIVER I 26 00 108.32 E

01/15/2004 807 D N

(234) PATCH SPALLS IN CAPS, AND CAP BUILD-UPS, (SEE SKETCH SHEET, PHOTOS).

3022 - 10002600400-SALUDA RIVER I 26 00 108.32 E

01/10/2006 203 D N

CLEAN OUT APPROACH DRAIN.

3022 - 10002600400-SALUDA RIVER I 26 00 108.32 E

01/15/2004 806 D N

(313) REMOVE RUST AND REPAINT BEARINGS, (SEE PHOTO).

SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION
HIGHWAY MAINTENANCE MANAGEMENT SYSTEM

Bridge Deficiency Report

District	Work County	Type	Route	Aux	Off Sys	Asset ID	Priority	Activity	Status	Work Inspection From Date	Work Inspection To Date
1	**LEXINGTON**	**I**	**26**			**3022**	**D**		**INCOMPLETE**		

Structure	Type	Route	Aux	Milepoint	Direction	Off System Description
3022 - 10002600400-SALUDA RIVER	**I**	**26**	**00**	**108.32**	**E**	

Insp.Date	Activity	Priority	Comp.Date	Org.Unit	Work Insp.Date	Cleared	Name Of Inspector
11/07/2017	**202**	**D**				**N**	

Deficiency Comment

REPAIR WASH ON FILL IN AREA OF APPROACH DRAIN, AND WASHING UNDER CAP BENT 11, EAST BOUND LANE, EAST END, RIGHT SIDE, (SEE PHOTO).